



# Product End-of-Life Disassembly Instructions

**Product Category: Personal Computers**

**Marketing Name / Model**

[List multiple models if applicable.]

Name / Model #1: HP BladeSystem PC Blade Enclosure

Name / Model #2

Name / Model #3

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	9 total (2 on each of the 2 power supplies) (2 mid-plane PCA assys) (1 fan quad assy), 1 switch, 1 daughter card on switch
Batteries	All types including standard alkaline and lithium coin or button style batteries	1 (Switch assy)
Mercury-containing components	For example, mercury in lamps, display backlights, scanner lamps, switches, batteries	
Liquid Crystal Displays (LCD) with a surface greater than 100 sq cm	Includes background illuminated displays with gas discharge lamps	
Cathode Ray Tubes (CRT)		
Capacitors / condensers (Containing PCB/PCT)		
Electrolytic Capacitors / Condensers measuring greater than 2.5 cm in diameter or height		2
External electrical cables and cords		6 (2 standard PSU cables, 2 PDU cables, Fan assembly cable, enclosure status assembly cable)
Gas Discharge Lamps		
Plastics containing Brominated Flame Retardants		
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.	

Item Description	Notes	Quantity of items included in product
Components and waste containing asbestos		
Components, parts and materials containing refractory ceramic fibers		
Components, parts and materials containing radioactive substances		
<b>2.0 Tools Required</b>		

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)
Description #1 Phillips, flat blade, torx (T15) screwdriver	Torx: T-15
Description #2 Dikes	
Description #3 3/16-inch nut driver	3/16-inch
<b>3.0 Product Disassembly Process</b>	

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

**ENCLOSURE ASSEMBLY NOTE:** You must remove the major components in the order shown here. Failure to do so will prohibit access to the remainder of the components. See the related disassembly instructions in the sections that follow.

- 1 Remove the two power supplies.
- 2 Remove the quad fan cage assembly.
- 3 Remove the switch assembly.
- 4 Remove the mid-plane assembly.

### POWER SUPPLY

- 1 Press the port wine-colored latch to release the hot-plug power supply 1 (see Figure 1 below).
  - 2 Rotate the handle toward the outside of the enclosure 2 (see Figure 1 below).
  - 3 Slide the power supply out of the enclosure 3 (see Figure 1 below).
  - 4 Remove all of the screws that connect the cover panels to the power supply and lift off the panels.
- NOTE: You must remove screws from three different surfaces (see Figures 2 & 3 below).
- 5 With a pair of diagonal cutters (dikes), cut the three cables that connect the two sides of the power supply together. It may be necessary to pull the power supply halves apart to easily access the cables (see Figure 4 below).
  - 6 Pull the two power supply pieces apart.
  - 7 For the smaller part of the power supply, remove the four screws that secure the printed circuit board to the metal frame and remove the printed circuit board (see Figure 5 below).
  - 8 For the larger part of the power supply, clip any cables that connect the printed circuit board to the metal housing, and then remove the five screws that secure the printed circuit board to the housing and remove the printed circuit board (see Figure 6 below).

### FAN ASSEMBLY

- 1 Press down on the port wine-colored lever of the fan assembly (see Figure 7 below).

- 2 Pull the fan cage assembly out by its handle until it is stopped by the safety catch on the top of the fan assembly (see Figure 8 below).
- 3 Press down on the safety catch that secures the fan cage assembly in the enclosure (see Figure 8 below).
- 4 Pull the fan cage assembly out of the enclosure. As the cage comes out, it will disconnect the interconnect cable from the mid-plane.
- 5 From the side of the assembly, grasp the port wine-colored finger pulls on each of the fans and pull the fan straight out of the housing (see Figure 9 below). Remove all four fans from the housing.
- 6 From the rear of the housing, unscrew the thumbscrew that holds the printed circuit board in place (see Figure 10 below).
- 7 Pull the printed circuit board (see Figure 11 below) straight out of the housing.

## SWITCH ASSEMBLY

- 1 Reach into the cavities on either side of the enclosure and press the interconnect release levers 1 (see Figure 12 below).
- 2 Pull the blue ejector levers towards the rear of the enclosure 2 (see Figure 12 below)
- 3 Pull the switch assembly out of the enclosure.

See the switch assy document for disassembly instructions

## MID-PLANE ASSEMBLY

- 1 Unlock the release levers with the key the came in the bag attached to the assembly. NOTE: If the key is unavailable, you can use a small flat blade screwdriver to open the lock.
- 2 From the top of the enclosure pull the two release levers (see Figure 13 below) toward the back of the enclosure and rotate the access panel to its open position.
- 3 Unplug the cable from the front LED board.
- 4 Unscrew the two thumbscrews that secure the mid-plane panel in the enclosure (see Figure 14 below).
- 5 Pull the mid-plane panel up and out of the enclosure. The mid-plane panel has a plastic cover around it. There are screws that secure the cover to the panel, as well as screws under the cover that secure the two pieces of the panel together. You must first remove the outer screws secure the cover, remove the cover, then remove the screws that hold the panel together.
- 6 Using a T15 driver, remove the screws that secure the plastic cover to the front of the mid-plane (see Figure 16 below).
- 7 Using a T15 driver, remove the screws that secure the plastic cover to the back of the mid-plane (see Figure 17 below).
- 8 Using a T15 driver, remove the screws that secure the two printed circuit boards to the metal frame (one printed circuit board on each side of the frame) and remove the printed circuit boards (see Figures 18 & 19 below). The disassembled mid-plane is shown in Figure 20 below.

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: Removing the power supply

FIGURE 2: Power supply screw locations

FIGURE 3: Power supply screw locations

FIGURE 4: Cut power supply cables

FIGURE 5: Printed circuit board screw locations

FIGURE 6: Clip cable and remove screws

FIGURE 7: Fan assembly lever

FIGURE 8: Fan cage safety catch

FIGURE 9: Fan assembly finger pulls

FIGURE 10: Thumbscrew for printed circuit board

FIGURE 11: Fan assembly printed circuit board

FIGURE 12: Press release levers

FIGURE 13: Mid-plane assembly release levers

FIGURE 14: Mid-plane thumbscrews

FIGURE 16: Mid-plane printed circuit board with cover and screw locations

FIGURE 17: Mid-plane printed circuit board with cover and screw locations

FIGURE 18: Mid-plane printed circuit board screw locations

FIGURE 19: Mid-plane printed circuit board screw locations

FIGURE 20: Disassembled mid-plane

