



Appendix 3 Product End-of-Life Disassembly instructions

Product Identification:

Marketing Name / Model	Description
HP Business Desktop dx5150 Series	Microtower, ATX board

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.

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	Qty in product.
Printed Circuit Boards (PCB) or Printed Circuit Assemblies (PCA)	With a surface greater than 10 square cm	2 (sys board & P/S board)
Batteries	All types including standard alkaline and lithium coin or button style batteries	1
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 square 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		2 (2 in P/S)
External electrical cables and cords		0
Gas Discharge Lamps		0
Plastics containing Brominated Flame Retardants		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)
Torx Screw Driver	
Dikes	See Figure 13

3.0 Product Disassembly Process

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

SYSTEM BOARD	
1	To remove the access panel (see Figure 1 below): a. Loosen the captive thumbscrew that secures the access panel to the computer chassis. b. Slide the access panel back about 2.5 cm (1 inch), and then lift it off the unit.
2	Unplug all cables from the system board (see Figure 2 below).
3	To remove the heatsink (see Figure 3 & 4 below): a. Disconnect the heatsink fan cable from the system board. b. Loosen the two screws that secure the heatsink to the processor. c. Twist the heatsink to break the bond between it and the processor. d. Lift the heatsink from the processor.
4	To remove the processor (see Figure 5 below): a. Rotate the socket handle to its fully open position. b. Lift the processor from the system board.
5	To remove the system board (see Figures 6 & 7 below): a. Remove the eight screws that secure the system board to the chassis. b. Slide the system board toward the front of the computer until the rear I/O connectors clear the chassis, and then lift the system board out of the chassis.
POWER SUPPLY PCA	
1	To remove the power supply (see Figure 8 below): a. Disconnect all power cables from all devices. b. Remove the screws that connect the power supply to the chassis. c. Slide the power supply toward the front of the computer, and then lift it out of the computer.
2	Remove the cover from the power supply by removing the screws from the power supply surface, and then lifting the cover off of the power supply (see Figure 9 below)
3	Unplug all cables and remove all screws inside of the power supply.
4	Cut the four cables (two each) connected to the Switch and the Inlet (see Figure 10 below).



POWER SUPPLY PCA (continued)	
5	Remove the power supply PCA from the power supply (see Figure 11 below)
6	Cut the two capacitors (C4, C5) (see Figure 12 below) solder joint using dikes (see Figure 13 below), and then remove the capacitors.
BATTERY	
1	Locate the battery and battery holder on the system board.
2	Depending on the type of battery holder on your system board, complete the following instructions to replace the battery:
	Type 1 Battery Holder (see Figure 14 below)
-	Lift the battery out of the holder.
	Type 2 Battery Holder (see Figure 15 below)
-	To release the battery from the holder, squeeze the metal clamp that extends above one edge of the battery. When the battery pops up, lift it out.
	Type 3 Battery Holder (see Figure 16 below)
-	To release the battery from the holder, press back the lever that extends above one edge of the battery. When the battery pops up, lift it out.

3.2 Illustrations

FIGURE 1: Removing the access panel



FIGURE 2: System board



FIGURE 3: Removing the heatsink assembly

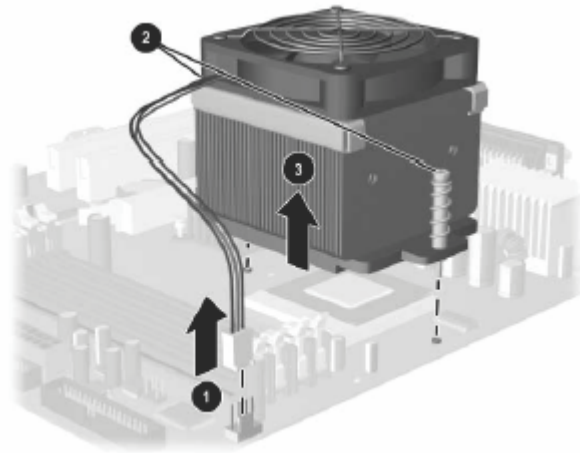


FIGURE 4: Heatsink screw locations

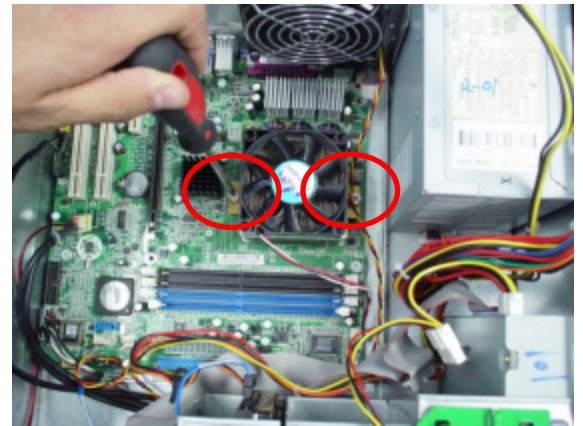


FIGURE 5: Removing the processor

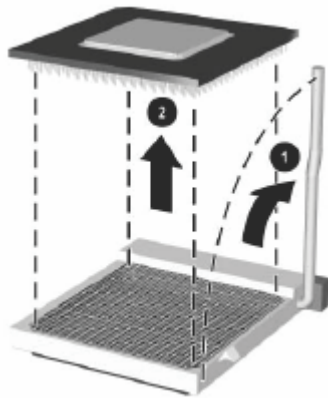


FIGURE 6: Removing the system board

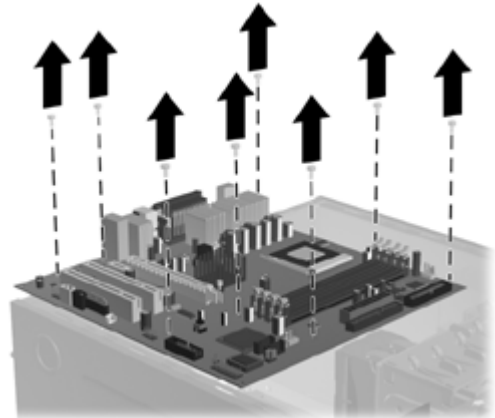


FIGURE 7: System board screw locations

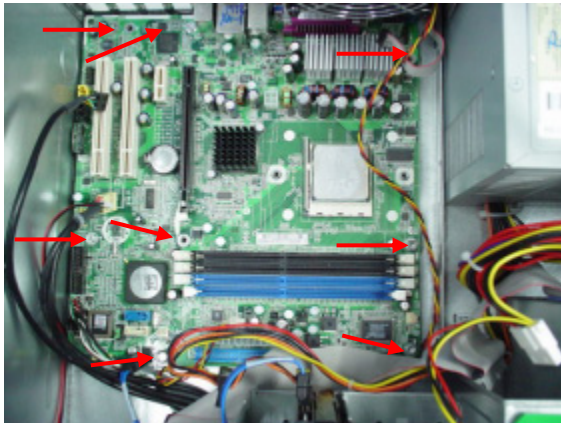


FIGURE 8: Removing the power supply

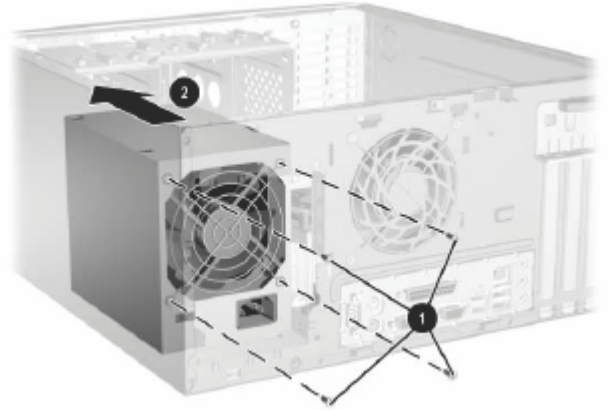


FIGURE 9: Power supply with cover removed

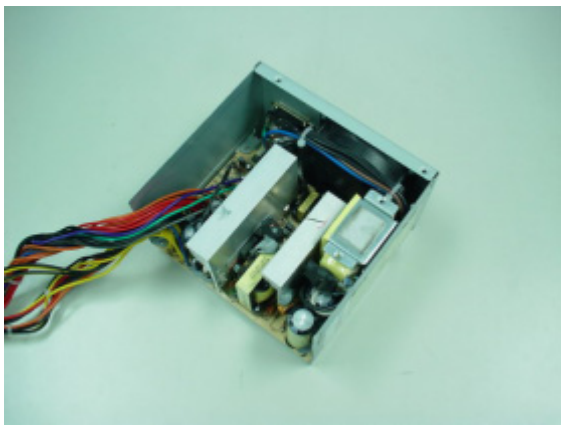


FIGURE 10: Switch and Inlet cables

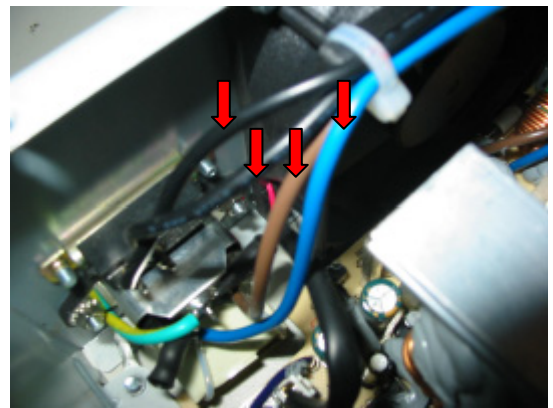


FIGURE 11: Power supply PCA

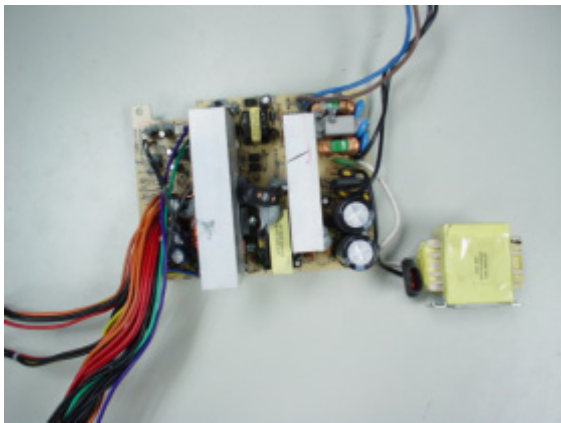


FIGURE 12: Capacitors C4 and C5

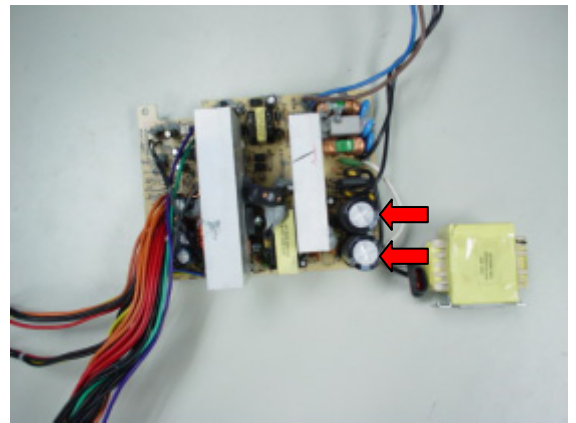


FIGURE 13: Dikes



FIGURE 14: Type 1 battery holder

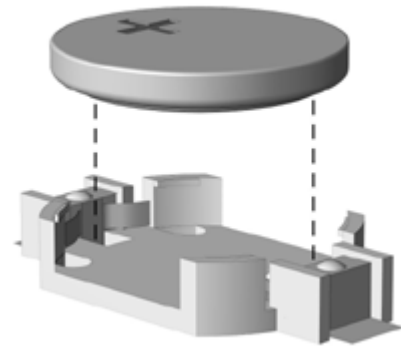


FIGURE 15: Type 2 battery holder



FIGURE 16: Type 3 battery holder

