Product End-of-Life Disassembly Instructions

**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.

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Notes</th>
<th>Quantity of items included in product</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printed Circuit Boards (PCB) or Printed Circuit Assemblies (PCA)</td>
<td>With a surface greater than 10 sq cm</td>
<td>2 or 3 (main sys bd, 1 or 2 power supply)</td>
</tr>
<tr>
<td>Batteries</td>
<td>All types including standard alkaline and lithium coin or button style batteries</td>
<td>1</td>
</tr>
<tr>
<td>Mercury-containing components</td>
<td>For example, mercury in lamps, display backlights, scanner lamps, switches, batteries</td>
<td>1</td>
</tr>
<tr>
<td>Liquid Crystal Displays (LCD) with a surface greater than 100 sq cm</td>
<td>Includes background illuminated displays with gas discharge lamps</td>
<td></td>
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<tr>
<td>Cathode Ray Tubes (CRT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacitors / condensers (Containing PCB/PCT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electrolytic Capacitors / Condensers measuring greater than 2.5 cm in diameter or height</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>External electrical cables and cords</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gas Discharge Lamps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plastics containing Brominated Flame Retardants</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Components and parts containing toner and ink, including liquids, semi-liquids (gel/paste) and toner</td>
<td>Include the cartridges, print heads, tubes, vent chambers, and service stations.</td>
<td></td>
</tr>
<tr>
<td>Components and waste containing asbestos</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Components, parts and materials containing asbestos</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
refractory ceramic fibers
Components, parts and materials containing radioactive substances

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.

<table>
<thead>
<tr>
<th>Tool Description</th>
<th>Tool Size (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description #1 Phillips screwdriver</td>
<td></td>
</tr>
<tr>
<td>Description #2 Dikes</td>
<td></td>
</tr>
<tr>
<td>Description #3 Torx screwdriver</td>
<td>T-15</td>
</tr>
<tr>
<td>Description #4</td>
<td></td>
</tr>
<tr>
<td>Description #5</td>
<td></td>
</tr>
</tbody>
</table>

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. To remove the access panel (see Figure 1):
   a. Loosen the captive thumbscrew (1) that secures the access panel to the computer chassis.
   b. Slide the top access panel back about 1.3 cm, (1/2 inch), then lift it off the unit (2).

2. To remove the system board:
   a. Remove the optical drive by disconnecting the flat ribbon cable from the back of the drive, and then pushing the release latch on the side of the optical drive toward the outside of the computer (1), and sliding the drive out of the computer through the front bezel (2). (see Figure 2)
   b. Disconnect or cut all cables from the system board.
   c. Remove the front panel assembly by lifting up on the two green locking levers on the left and right sides of the chassis. This will unlatch the front panel assembly and push it about 1.3 cm (1/2 inch) out of the chassis. The assembly will automatically stop at that distance. Then lift the two levers again (1) and pull the front panel assembly straight out of the chassis (2). (see Figure 3)
   d. Note this computer supports two different expansion card cages. Remove the expansion card cage by rotating the bail handle on the expansion card cage (1) and lifting the cage straight up (2). (see Figure 4 for example of a PCI Expansion Card cage)
   e. Remove the hard drive by pulling the drive release lever away from the hard drive (1), and then lifting the cable-end of the drive up (2) and pulling it toward the center of the chassis (3) to remove it from the drive cage (see Figure 5)
   f. If necessary, remove the heatsink by unscrewing the four screws that secure the heatsink to the system board (2), and then lifting the heatsink with the shroud from the system board (3).
   g. Remove the power supply by sliding the power supply toward the front of the chassis (1) about 1.3 cm (1/2 inch) then sliding it toward the center of the chassis and rotating it up (2) to access the main cable connection beneath it. Remove the power supply from the chassis (see Figure 6).
   h. Remove the thumbscrew that secures the system board to the chassis (1) (see Figure 7).
   i. Slide the system board toward the front of the chassis (2), making sure that all keyhole retainers are clear before lifting the system board from the chassis (see Figure 7).

3. To remove the battery:
   Locate the battery and battery holder on the system board. Depending on the type of battery holder on the system board, complete the following instructions to remove the battery
   TYPE 1 BATTERY HOLDER (see Figure 8):
   Lift the battery out of the holder.
   TYPE 2 BATTERY HOLDER (see Figure 9):
   To release the battery from its 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 10):
   Pull back on the clip that holds the battery in place, and then remove the battery

4. To remove the power supply PCA:
   HP uses two different power supplies from two different vendors in these computers. Use the following steps to determine which power supply you have and its required disassembly procedures.
POWER SUPPLY 1:
a. Remove the five screws from the top of the power supply (see Figure 11).
b. Remove one screw from the side of the power supply (see Figure 11).
c. Remove one screw from the back of the power supply (see Figure 12).
d. Cut the two plastic ties that secure the wires to the power supply cover (see Figure 12).
e. Remove the cover by moving the wires aside so they do not block cover removal, then rotating the cover outward, and then sliding the cover toward the front of the power supply so the two tabs slide out of the chassis. Lift the cover off the power supply.
f. Cut the wires from the PCA.
g. Remove the three screws that secure the power supply PCA to the power supply (see Figure 13).
h. Remove the power supply PCA from the power supply.
i. Remove one capacitor as shown in Figure 13.

POWER SUPPLY 2:
a. Remove the three screws from the top of the power supply (see Figure 14).
b. Remove one screw from the front of the power supply (see Figure 15)
c. Cut the two plastic ties that secure the wires to the power supply cover (see Figure 15).
d. Remove the cover by prying/lifting the lift side of the cover (over the fan), moving the wires so they do not block cover removal, and then rotating and lifting the cover from the power supply.
e. Cut the wires from the PCA.
f. Remove the three screws that secure the large power supply PCA to the power supply (see Figure 16).
g. Remove the large power supply PCA.
h. Cut one capacitor from the PCA as shown in Figure 17.
i. Cut the small PCA from the large power supply PCA, as shown in Figure 17.

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 access panel.

FIGURE 2: Removing the optical drive.

FIGURE 3: Removing the front panel assembly.
FIGURE 4: Removing the expansion card cage

FIGURE 5: Removing the hard drive

FIGURE 6: Removing the power supply
FIGURE 7: Removing the power supply

FIGURE 8: Type 1 battery holder

FIGURE 9: Type 2 battery holder
FIGURE 10: Type 3 battery holder

FIGURE 11: Power supply 1- cover screw locations
FIGURE 12: Power supply 1 – cover screw and plastic tie locations

FIGURE 13: Power supply 1 – PCA screw and capacitor location
FIGURE 14: Power supply 2 – Cover screw locations

FIGURE 15: Power supply 2 – Cover screw and plastic tie locations
FIGURE 16: Power supply 2 – Large PCA screw locations

FIGURE 17: Power supply 2 – Capacitor and small PCA location