# 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 (1 sys board, 1 or 2 P/S PCAs)</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></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>
</tr>
<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>2, 4, 7, 8, or 5</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 refractory ceramic fibers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Components, parts and materials containing radioactive substances</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## 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>
</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, press the buttons on the left and right sides of the computer (1), slide the access panel back until it stops, and then lift it up and off the chassis (2) (see Figure 1).
2. To remove the front bezel, lift up the green latch behind the upper right side of the bezel (1), pull the right side of the bezel off the chassis (2), and then remove the bezel from the chassis (see Figure 2).
3. Remove or cut all expansion cards, cables, and any other devices from the system board.
   4. To remove the system board (see Figure 3):
      a. Remove the fan shroud from the chassis.
      b. Rotate the drive cage to its upright position.
      c. Rotate the power supply to its full upright position.
      d. Disconnect all data and power cables from the system board.
      e. Disconnect the serial port from the system board.
      f. Remove the heatsink from the system board by loosening the four captive screws that secure the heatsink to the system board, and then lifting the heatsink from the system board.
      g. Remove the eight screws that secure the system board to the chassis (1).
      h. Lift up the front of the system board (2), and then pull the system board forward, up, and out of the chassis (3).
4. 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 4): Lift the battery out of the holder.
   TYPE 2 BATTERY HOLDER (see Figure 5): 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 6): Pull back on the clip that holds the battery in place, and then remove the battery.
6. To remove the power supply (see Figure 7):
   a. Rotate the drive cage up and disconnect the power cables from all of the drives.
   b. Disconnect the power cables from the system board.
   c. Release the power supply cables from the cable retaining clips on the bottom of the chassis and under the drive cage.
   d. Rotate the power supply to its full upright position (1), pull the power supply forward (2), and then lift the power supply straight up and out of the chassis (3).
7. HP uses four different power supply vendors. See the instructions below to disassemble and remove required power supply components:
   a. Using dikes, cut the two plastic clamps that secure the wires to the power supply covers (see Figure 9).
   b. Using a Phillips screwdriver, remove the eight screws that secure the cover to the power supply chassis - two screws on back, four screws on the top, and two screws on the back (see Figures 8 & 9).

NOTE: You do not need to remove the screws from the fan guard or the power connector.
c. Lift the cover off the power supply. The cover you remove is in two pieces, and hinges connect the covers to the power supply chassis.
  
  d. Using dikes, cut all cables connected to the PCA in the power supply.
  
  e. Remove the three screws that secure the power supply PCA to the chassis (see Figure 10).
  
  f. Remove the power supply PCA from the power supply chassis.
  
  g. Cut two capacitors from the PCA, as shown in Figure 10.

POWER SUPPLY 2:

  a. Using dikes, cut the plastic clamp that secures the wires to the power supply cover (see Figure 12).
  
  b. Using a phillips screwdriver, remove the eight screws that secure the cover to the power supply chassis - two screws on back, four screws on the top, and two screws on the back (see Figures 11 & 12).

  NOTE: You do not need to remove the screws from the fan guard or the power connector.
  
  c. Lift the cover off the power supply. The cover you remove is in two pieces, and hinges connect the covers to the power supply chassis.
  
  d. Using dikes, cut all cables connected to the PCA in the power supply.
  
  e. Remove the four screws that secure the power supply PCA to the chassis (see Figure 13).
  
  f. Remove the power supply PCA from the power supply chassis.
  
  g. Cut the small PCA from the large PCA (see Figure 14)
  
  h. Cut 4 capacitors from the PCA, as shown in Figure 14.

POWER SUPPLY 3:

  a. Using dikes, cut the plastic clamp that secures the wires to the power supply cover (see Figure 16).
  
  b. Using a phillips screwdriver, remove the eight screws that secure the cover to the power supply chassis - two screws on back, four screws on the top, and two screws on the back (see Figures 15 & 16).

  NOTE: You do not need to remove the screws from the fan guard or the power connector.
  
  c. Lift the cover off the power supply. The cover you remove is in two pieces, and hinges connect the covers to the power supply chassis.
  
  d. Using dikes, cut all cables connected to the PCA in the power supply.
  
  e. Remove the three screws that secure the power supply PCA to the chassis (see Figure 17).
  
  f. Remove the power supply PCA from the power supply chassis.
  
  g. Cut 7 capacitors from the PCA, as shown in Figure 18.

POWER SUPPLY 4:

  a. Using dikes, cut the plastic clamp that secures the wires to the power supply cover (see Figure 20).
  
  b. Using a phillips screwdriver, remove the eight screws that secure the cover to the power supply chassis - two screws on back, four screws on the top, and two screws on the back (see Figures 19 & 20).

  NOTE: You do not need to remove the screws from the fan guard or the power connector.
c. Lift the cover off the power supply. The cover you remove is in two pieces, and hinges connect the covers to the power supply chassis.

d. Using dikes, cut all cables connected to the PCA in the power supply.

e. Remove the three screws that secure the power supply PCA to the chassis (see Figure 21).

f. Remove the power supply PCA from the power supply chassis.

g. Cut the small PCA from the large power supply PCA (see Figure 21).

h. Cut 5 capacitors from the PCA, as shown in Figure 22.

**POWER SUPPLY 5:**

a. Using dikes, cut the plastic clamp that secures the wires to the power supply cover (see Figure 24).

b. Using a phillips screwdriver, remove the eight screws that secure the cover to the power supply chassis - two screws on back, four screws on the top, and two screws on the back (see Figures 23 & 24).

   NOTE: You do not need to remove the screws from the fan guard or the power connector.

c. Lift the cover off the power supply. The cover you remove is in two pieces, and hinges connect the covers to the power supply chassis.

d. Using dikes, cut all cables connected to the PCA in the power supply.

e. Remove the four screws that secure the power supply PCA to the chassis (see Figure 25).

f. Remove the power supply PCA from the power supply chassis.

g. Cut 5 capacitors from the PCA, as shown in Figure 25.

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 front bezel.

FIGURE 3: Type 1 battery holder.
FIGURE 4: Type 2 battery holder

FIGURE 5: Type 3 battery holder

FIGURE 6: Removing the system board
FIGURE 10: POWER SUPPLY 1: ECA screw locations and capacitors (2) to remove

FIGURE 11: POWER SUPPLY 2: Screw locations

FIGURE 12: POWER SUPPLY 2: Screw and plastic tie locations
FIGURE 13: POWER SUPPLY 2: Power supply PCA screw locations

FIGURE 14: POWER SUPPLY 2: Small PCA and capacitors (4) to cut
FIGURE 21: POWER SUPPLY 4: Cover screw and plastic tie locations

FIGURE 22: POWER SUPPLY 4: Capacitors (3) and small PCA to cut
FIGURE 23 POWER SUPPLY 5: Screw locations

FIGURE 24 POWER SUPPLY 5: Screw and plastic tie locations

FIGURE 25 POWER SUPPLY 5: PCA screw locations and capacitors (5) to cut