Product End-of-Life Disassembly Instructions

Product Category: Personal Computers

Marketing Name / Model
[List multiple models if applicable.]

HP Compaq dx2810 Small Form Factor Business PC

Name / Model #2

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>3 (1 sys bd, 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>6 (P/S board)</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>
### 1.3 Markings for plastic parts greater than 25 grams

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SFF Main Bezel</td>
<td>Main front bezel piece</td>
<td>72</td>
<td>&gt;ABS&lt;</td>
<td></td>
</tr>
<tr>
<td>SFF Bezel Frame</td>
<td>Front bezel frame</td>
<td>54</td>
<td>&gt;ABS&lt;</td>
<td></td>
</tr>
<tr>
<td>SFF CPU Cooler Fan Duct</td>
<td>Duct for CPU fan</td>
<td>30</td>
<td>&gt;PC+ABS FR(40)&lt;</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>
<tr>
<td>Description #4 Soldering iron</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:
   a. Remove the two screws that secure the access panel to the computer chassis (see Figure 1).
   b. Slide the access panel back about 1.3 cm (1/2 inch), then lift it away from and off the unit (see Figure 2).
2. Remove the front bezel, pull up on each of the three tabs on the top of the bezel to release them, then rotate the bezel down and off the chassis (see Figure 3):
   a. Release the three front bezel latches on the top side of the bezel.
   b. Rotate the and remove the bezel.
3. Remove or cut all expansion cards, cables, and any other devices from the system board.
4. To remove the heatsink from the system board (see Figure 4):
   a. Loosen the four captive screws that secure the heatsink to the system board.
   b. Lift the heatsink from atop the processor and set it aside.
5. To remove the system board (see Figure 5):
   a. Remove the 8 screws that secure the system board to the chassis.
   b. Lift the system board and slide it toward the front of the chassis and up to remove it.
   NOTE: System board appearance may vary.
6. To remove the power supply:
   a. Remove the four Phillips screws that secure the power supply to the chassis (see Figure 6).
   b. Slide the power supply toward the front of the computer, rotate toward the fan so the power supply clears the lip on the top of the chassis, and then lift the power supply out of the chassis.
   Disassemble and remove required power supply components:
   a. Using a Phillips screwdriver, remove the four screws that secure the cover to the power supply chassis (see Figures 7 & 8).
   b. Using dikes, cut the plastic clamp that secures the wires to the power supply cover (see Figure 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.
   d. Disconnect two control cables from the PSU PCA (see Figure 10)
   e. Using dikes, cut all cables connecting the PCA to the power supply.
   f. Remove the three screws that secure the power supply PCA to the chassis (see Figure 11).
   g. Using diagonal cutters (dikes), cut all cables connected to the PCA and release the screw.(2 to switch, 2 to PC inlet) (see Figure 12)
   h. Remove the power supply PCA from the power supply chassis.
   i. Cut or remove the capacitors as shown in Figure 13, 14, & 15.
7. 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 16):
Lift the battery out of the holder.
TYPE 2 BATTERY HOLDER (see Figure 17):
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 18):
Pull back on the clip that holds the battery in place, and then remove the battery.

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 two screws

FIGURE 2: Remove the access panel

FIGURE 3: Remove the front bezel
FIGURE 4: Remove the heat sink

FIGURE 5: Remove the system board

FIGURE 6: Power supply screw locations on the chassis

FIGURE 7: Power supply cover screw locations on the top side
FIGURE 8: Power supply cover screw locations on the bottom side

FIGURE 9: Cut the plastic cable clamp

FIGURE 10: Disconnect two control cables
FIGURE 11: Power supply PCA screw location

FIGURE 12: Cut all cables connected to the board and release the screw

FIGURE 13: Electrolytic Capacitors location
FIGURE 14: Heat the solder of Electrolytic Capacitors

FIGURE 15: Remove the Electrolytic Capacitors

FIGURE 16: Type 1 battery holder
FIGURE 17: Type 2 battery holder

FIGURE 18: Type 3 battery holder