# Product End-of-Life Disassembly Instructions

**Product Category:** Personal Computers

**Marketing Name / Model**

[List multiple models if applicable.]

HP Compaq dc5850 Microtower 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>2 to 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, 6, or 7 in P/S</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>MAIN BEZEL</td>
<td>P_MAINBEZEL</td>
<td>165 g</td>
<td>&gt;ABS&lt;</td>
<td></td>
</tr>
<tr>
<td>Fan duct</td>
<td>P_FAN_DUCT_01</td>
<td>99.3 g</td>
<td>&gt;PC+ABS FR(40)&lt;</td>
<td></td>
</tr>
<tr>
<td>FAN DUCT</td>
<td>P_FAN_DUCT_02</td>
<td>51</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>
</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, loosen the captive thumbscrew (1) that secures the access panel to the computer chassis, slide the access panel back (2) about 1.3 cm (1/2 inch), and then lift it off the unit. (see Figure 1).
2. To remove the front bezel, press outward on the two latches on the right side of the bezel and the single latch on the left side of the bezel (1) to release the bottom of the bezel, then swing the bottom of the bezel away from the chassis (2) to release the top of the bezel. (see Figure 2).
3. Remove or cut all expansion cards, cables, and any other devices from the system board.
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 3):
   Lift the battery out of the holder.
   TYPE 2 BATTERY HOLDER (see Figure 4):
   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 5):
   Pull back on the clip that holds the battery in place, and then remove the battery.
5. To remove the system board (see Figure 6):
   a. Remove all expansion boards.
   b. Disconnect all cables connected to the system board.
   c. 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.
   b. Remove the seven screws that secure the system board to the chassis.
   c. Slide the system board toward the front of the computer, and then lift the board up to remove it.
6. To remove the power supply:
   a. Remove the four screws that secure the power supply to the chassis (see Figure 7).
   b. Press the tab in front of the power supply that holds it in place (1).
   c. Slide the power supply toward the front of the computer (2), rotate toward the fan so the power supply clears the lip on the top of the chassis (3), and then lift the power supply out of the chassis (4) (see Figure 8).

   HP uses five different power supply vendors. See the instructions below to disassemble and remove required power supply components:
   POWER SUPPLY 1:
   a. Using dikes, cut the two plastic clamps that secure the wires to the power supply cover (see Figure 9).
   b. Using a phillips screwdriver, remove the six screws that secure the cover to the power supply chassis - two screws on top, two screws on the bottom, two screws on the left side (see Figures 10 & 11).
   NOTE: You do not need to remove the screws from the fan guard or the power connector.
c. Slide the cover off the power supply.
d. Using dikes, cut all cables connecting the PCA to the power supply.
e. From the bottom of the power supply, remove the three screws that secure the power supply PCA to the chassis (see Figure 12).
f. Remove the power supply PCA from the power supply chassis.
g. Cut the small PCA from the large power supply PCA (see Figure 13).
h. Cut two capacitors from the PCA, as shown in Figure 13.

POWER SUPPLY 2:

a. Using dikes, cut the plastic clamp that secures the wires to the power supply cover (see Figure 14).
b. Using a phillips screwdriver, remove the six screws that secure the cover to the power supply chassis - all six screws are on top (see Figure 15).
   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. Using dikes, cut all cables connecting the PCA to the power supply.
e. From the inside, remove the four screws that secure the power supply PCA to the chassis (see Figure 16).
f. Remove the PCA from the power supply chassis.
g. Cut the small PCA from the large power supply PCA (see Figure 16)
h. Cut four capacitors from the PCA, as shown in Figure 16.

POWER SUPPLY 3:

a. Using dikes, cut the plastic clamp that secures the wires to the power supply cover (see Figure 17).
b. Using a phillips screwdriver, remove the four screws that secure the cover to the power supply chassis - two screws on top, two screws on the bottom (see Figure 17 & 18).
   NOTE: You do not need to remove the screws from the fan guard or the power connector.
c. Slide the cover off the power supply.
d. Using dikes, cut all cables connecting the PCA to the power supply.
e. From the outside, remove the four screws that secure the power supply PCA to the chassis (see Figure 19).
f. Remove the two screws that secure the PCA to the top of the power supply chassis (see Figure 20).
g. Remove the power supply PCA from the power supply chassis.
h. Cut seven capacitors from the PCA, as shown in Figure 21.

POWER SUPPLY 4:

a. Using dikes, cut the plastic clamp that secures the wires to the power supply cover (see Figure 22).
b. Using a phillips screwdriver, remove the six screws that secure the cover to the power supply chassis - all six screws are on top (see Figure 23).
   NOTE: You do not need to remove the screws from the fan guard or the power connector.
c. Slide the cover off the power supply.
d. Remove the two screws that secure the top PCA to the power supply (see Figure 24).
e. Using dikes, cut all cables connecting the PCA to the power supply.
f. From the outside, remove the four screws that secure the power supply PCA to the chassis (see Figure 25).
h. Remove the large PCA from the power supply chassis.
i. Cut six capacitors from the PCA, as shown in Figure 26.

POWER SUPPLY 5:

a. Using dikes, cut the plastic clamp that secures the wires to the power supply cover (see Figure 27).
b. Using a phillips screwdriver, remove the five screws that secure the cover to the power supply chassis - three screws are on top, two are on the bottom (see Figure 28 & 29).
   NOTE: You do not need to remove the screws from the fan guard or the power connector.
c. Slide the cover off the power supply.
d. Using dikes, cut all cables connecting the PCA to the power supply.
e. From the outside, remove the four screws that secure the power supply PCA to the chassis (see Figure 30).
f. Remove the large PCA from the power supply chassis.
g. Cut the small PCA from the large power supply PCA (see Figure 31)
h. Cut six capacitors from the PCA, as shown in Figure 31.
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 – screw locations
FIGURE 7: Power supply screw locations

FIGURE 8: Removing the power supply – tab location
FIGURE 9: POWER SUPPLY 1: Plastic tie locations

FIGURE 10: POWER SUPPLY 1: Screw locations

FIGURE 11: POWER SUPPLY 1: Screw locations (screws on bottom not visible)
FIGURE 12: POWER SUPPLY 1: Large PCA screw locations

FIGURE 13: POWER SUPPLY 1: Capacitors and small PCA to cut
FIGURE 14: POWER SUPPLY 2: Plastic tie location

FIGURE 15: POWER SUPPLY 2: Screw locations

FIGURE 16: POWER SUPPLY 2: Large PCA screw locations; Capacitors and small PCA to cut
FIGURE 17: POWER SUPPLY 3: Screw and plastic tie locations

FIGURE 18: POWER SUPPLY 3: Screw locations

FIGURE 19: POWER SUPPLY 3: Large PCA screw locations
FIGURE 20: POWER SUPPLY 3: Small PCA screw locations

FIGURE 21: POWER SUPPLY 3: Capacitors to cut
FIGURE 25: POWER SUPPLY 4: Large PCA screw locations

FIGURE 26: POWER SUPPLY 4: Capacitors to cut
FIGURE 27: POWER SUPPLY 5: Plastic tie location

FIGURE 28: POWER SUPPLY 5: Screw locations

FIGURE 29: POWER SUPPLY 5: Screw locations
FIGURE 30: POWER SUPPLY 5: PCA screw locations

FIGURE 31: POWER SUPPLY 5: Small PCA and capacitor locations