Product End-of-Life Disassembly Instructions

Product Category: Networking Equipment

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

HPE Altoline 6960 32QSFP28 x86 ONIE AC Front-to-Back Switch (JL279A)
HPE Altoline 6960 32QSFP28 x86 ONIE AC Back-to-Front Switch (JL280A)

**Purpose:** The document is intended for use by end-of-life recyclers or treatment facilities. It provides the basic instructions for the disassembly of HPE products to remove components and materials requiring selective treatment, as defined by EU directive 2002/96/EC, Waste Electrical and Electronic Equipment (WEEE).

1. **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>6</td>
</tr>
<tr>
<td>Batteries</td>
<td>All types including standard alkaline and lithium coin or button style batteries</td>
<td>0</td>
</tr>
<tr>
<td>Mercury-containing components</td>
<td>For example, mercury in lamps, display backlights, scanner lamps, switches, batteries</td>
<td>0</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>0</td>
</tr>
<tr>
<td>Cathode Ray Tubes (CRT)</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Capacitors / condensers (Containing PCB/PCT)</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Electrolytic Capacitors / Condensers measuring greater than 2.5 cm in diameter or height</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>External electrical cables and cords</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Gas Discharge Lamps</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Plastics containing Brominated Flame Retardants weighing &gt; 25 grams (not including PCBs or PCAs already listed as a separate item above)</td>
<td></td>
<td>0</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>0</td>
</tr>
<tr>
<td>Components and waste containing asbestos</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Components, parts and materials containing refractory ceramic fibers</td>
<td></td>
<td>0</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>Phillips screwdriver</td>
<td>various sizes</td>
</tr>
<tr>
<td>Flat-blade screwdriver</td>
<td>various sizes</td>
</tr>
<tr>
<td>Small adjustable wrench</td>
<td></td>
</tr>
<tr>
<td>Needle nose pliers</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. Remove the chassis lid
   1. Using a Phillips screwdriver, remove the screws (qty 11)
   2. Slide the lid off the chassis
2. Remove the two power supplies
   1. Locate the power supplies on either side of the back of the chassis
   2. While pressing the release lever toward the handle, pull a power supply out of the chassis
   3. Repeat for the other power supply
3. Remove the six fan assemblies
   1. Locate the fan assemblies in the middle of the back of the chassis
   2. Either by hand or using a flat-blade screwdriver, loosen the set screw for each fan assembly
   3. Using the fan assembly handle, pull out a fan assembly
   4. Repeat for the remaining five fan assemblies
4. Remove the center PCA assembly
   1. Using a Phillips screwdriver, remove the two screws at the back corners of the center PCA assembly
   2. Using a small adjustable wrench, remove the two nuts at the front corners of the center PCA assembly
   3. Slowly remove the center PCA assembly from the chassis, taking into account the connector under the bottom left corner
5. Remove the two DIMMs from the center PCA assembly
   1. Gently spread the retaining levers away from the top DIMM
   2. Remove the top DIMM
   3. Repeat for the bottom DIMM
6. Remove the heatsink from the center PCA assembly
   1. Locate the heatsink fasteners on the underside of the PCA, opposite the heatsink
   2. Use needle nose pliers to pinch the heat sink fasteners while removing the heat sinks from the center PCA assembly
7. Remove the two auxiliary PCAs from the center PCA assembly
   1. Using a Phillips screwdriver, remove the screw securing the smaller PCA
   2. Remove the smaller PCA, taking into account the connector under the right side
   3. Using a Phillips screwdriver, remove the two screws securing the larger PCA
   4. Remove the larger PCA
8. Remove the fan assembly PCA
   1. Remove both ends of the ribbon cable attaching the fan assembly PCA to the main PCA
   2. Using a Phillips screwdriver, remove the six screws attaching the fan assembly PCA to the chassis
3. Remove the fan assembly PCA
9. Remove the main PCA
   1. Using a Phillips screwdriver, remove the four screws securing the sheet metal air flow guide from the left side of the main PCA
   2. Remove the sheet metal air flow guide
   3. Repeat the above steps for the sheet metal air flow guide on the right side of the main PCA
   4. Using a small adjustable wrench, remove the three hexagonal studs near the heat sink
   5. Using a Phillips screwdriver, remove the six screws holding down the main PCA
10. Using a Phillips screwdriver, loosen the four heat sink screws and remove the heat sink

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).