# Product End-of-Life Disassembly Instructions

**Product Category:** Notebooks and Tablet PCs

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

HP Spectre x2 12 Detachable PC

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**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 M/B, Touch-Pad-PCB</td>
<td>2</td>
</tr>
<tr>
<td>Batteries</td>
<td>All types including standard alkaline and lithium coin or button style batteries  Main Battery</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>1</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></td>
<td></td>
</tr>
<tr>
<td>External electrical cables and cords</td>
<td>power cord</td>
<td>1</td>
</tr>
<tr>
<td>Gas Discharge Lamps</td>
<td></td>
<td></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></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>
</tbody>
</table>

PSG instructions for this template are available at [EL-MF877-01](#).
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 Screwdriver</td>
<td>#1, #0</td>
</tr>
<tr>
<td>Description #2</td>
<td></td>
</tr>
<tr>
<td>Description #3</td>
<td></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. Remove LCD bezel frame adhesive
2. Pull out LCD cable
3. Remove LCD Bezel assy
4. Dis-fasten battery screw*6
5. Remove battery
6. Dis-fasten LCD bezel frame screw*13
7. Remove LCD bezel frame
8. Pull out LCD FPC and Touch FPC and pogo pin cable
9. Remove LCD FPC and Touch FPC
10. Dis-fasten usb type c bracket screw*1 and volume FPC module screw*1
11. Remove usb type c bracket and volume FPC module
12. Dis-fasten FAN module screw*3
13. Remove FAN module
14. Pull out speaker box R cable and power FPC
15. Remove speaker box R and power FPC
16. Dis-fasten thermal heatsink screw*6
17. Remove thermal heatsink
18. Dis-fasten SSD board screw*1
19. Remove SSD board
20. Pull out camera module and MIC module and Antenna cable
21. Dis-fasten MB screw*1
22. Remove MB

END

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).

3.21 Total

PSG instructions for this template are available at EL-MF877-01
3.22 Remove bezel adhesive

3.23 Remove LCD Bezel Assy
3.24 Remove Battery

3.25 Remove LCD bezel frame

3.26 Remove LCD FPC and Touch FPC
3.27 Remove usb type c bracket :L and R

3.28 Remove Volume FPC assy

3.29 Remove FAN module
3.30 Remove Speaker box R assy: speaker L and power FPC

3.31 Remove thermal heatsink

3.32 Remove SSD board
3.33 Remove camera and MIC FPC: front camera/ rear camera/ IR camera/ MIC FPC L/ MIC FPC R

3.34 Remove Mother Board & daughter board (DB)

END.