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>10</td>
</tr>
<tr>
<td>Batteries</td>
<td>All types including standard alkaline and lithium coin or button style batteries</td>
<td>9</td>
</tr>
<tr>
<td>Mercury-containing components</td>
<td>For example, mercury in lamps, display backlights, scanner lamps, switches, batteries</td>
<td>4</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>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>fans</td>
<td>2</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>
</tbody>
</table>
Components, parts and materials containing refractory ceramic fibers: 0

Components, parts and materials containing radioactive substances: 0

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>HP WHITNEY REAR FRAME</td>
<td>Rear Frame</td>
<td>211.7</td>
<td>&gt; ABS &lt;</td>
<td></td>
</tr>
<tr>
<td>HP WHITNEY FRONT BEZEL</td>
<td>Front Bezel</td>
<td>159.1</td>
<td>&gt; ABS &lt;</td>
<td></td>
</tr>
<tr>
<td>Whitney_rear_bucket_rt</td>
<td>rear bucket right</td>
<td>146</td>
<td>&gt; ABS &lt;</td>
<td></td>
</tr>
<tr>
<td>Whitney_rear_bucket_lf</td>
<td>rear bucket left</td>
<td>146</td>
<td>&gt; ABS &lt;</td>
<td></td>
</tr>
<tr>
<td>HP WHITNEY CHIN</td>
<td>chin</td>
<td>90.1</td>
<td>&gt; ABS &lt;</td>
<td></td>
</tr>
<tr>
<td>HP WHITNEY REAR PANEL MID</td>
<td>rear panel middle</td>
<td>75.1</td>
<td>&gt; ABS &lt;</td>
<td></td>
</tr>
<tr>
<td>HP WHITNEY REAR PANEL BTM</td>
<td>rear panel bottom</td>
<td>73.1</td>
<td>&gt; ABS &lt;</td>
<td></td>
</tr>
<tr>
<td>STAND COVER</td>
<td>stand cover</td>
<td>58.33</td>
<td>&gt; ABS &lt;</td>
<td></td>
</tr>
<tr>
<td>STAND TRIM</td>
<td>stand trim</td>
<td>52.15</td>
<td>&gt; PMMA &lt;</td>
<td></td>
</tr>
<tr>
<td>HP WHITNEY FRONT INNER BEZEL</td>
<td>inner bezel</td>
<td>52.1</td>
<td>&gt; ABS &lt;</td>
<td></td>
</tr>
<tr>
<td>HP WHITNEY_90<em>90</em>25_FAN_DUCT</td>
<td>fan duct</td>
<td>25.8</td>
<td>&gt; PC &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>Philips screw driver</td>
<td></td>
</tr>
<tr>
<td>Hex wrench</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.
2.
3.
4.
5.
6.
7.
8.

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: Mechanical parts disassembly

1) Place the system

Put down unit on shuttle car and let stand upside

2) Trim

Tape R/L trim off. Notice: no broken hook.

Confirm R/L trim with no distortion, no albatism, hook with no broken.
3) Rear Cover

1. Remove 2 screws by electrical screw driver with torque force of 5+-0.5, put screws to the temporary stock area.

2. Disassemble right rear cover by pulling it right toward. Notice no damage hook, pull right rear cover to temporary stock area.

3. Disassemble left rear cover by pulling it left toward. Put it to temporary stock area. Notice no damage hook.
4) Top Cover & Back IO Cover & Stand

Disassemble HP cover by pulling it top toward. Notice: no damage hook, put HP cover to temporary stock area.

Disassemble IO cover by pulling it down toward. Notice: no damage hook.

1. Remove 4 screws in turn as pic show by electrical screw driver with torque force of 5.0 +/- 0.3, put screw to the temporary stock area.
Notice: No collide on other component.

5) R/L Foot

Remove 2 screws by electrical screw driver with torque force of 5 +/- 0.5. Put screws and foot to the temporary stock area.

6) Rear Frame

Remove 6 screws on rear frame by electrical screw driver with torque force of 5 +/- 0.5. Put screws at temporary stock area.

Loose hook on rear frame, disassemble it. Notice: no damage hook.

PSG instructions for this template are available at EL-MF877-01
7) R/L Side Cap

Remove 3 screws on right side cap as pic shows by electrical screw driver with torque force of 5+/0.5, put screws to temporary stock area.

1. Remove R/L side cape.
2. unplug power switch cable&ODD&HDD LED cable from left side cap. Notice: no scratch no cable when unplug cable.

8) RIO 2

Remove 3 screws on left side cap as pic shows by electrical screw driver with torque force of 5+/0.5, put screws to temporary stock area.

1. remove right side cap
2. unplug cable from right side cap
Notice: no scratch cable
9) B Case-card

As pic shows, hold both sides of B-case card, push it upward, take it off.

10) Crossbar

Remove 10 screws vertically by electrical screw driver with torque force of 5+/-0.5. put screws to temporary stock area. Disassemble crossbar and put it to temporary stock area.

unplug B-case cable from TV card. Take it off. Notice: no damage card and cable, no damage connectors.
11) CPU H/S & RIO 1

Remove 4 screws vertically as pic shows by electrical screw driver with torque force of 5+-0.5. Take CPU H/S off.

Take RIO1 card from basepan as pic show. Notice: no collide on other component.

12) USB Dongle

Put USB dongle to temporary stock area.

13) HDD

Route SATA cable cut, hold HDD and take it out.
14) ODD & BT

Remove one screw vertically by electrical screw driver with torque force of 5+/−0.5.

push ODD right toward, disassemble it. Notice: no damage cable and ODD.

Unplug BT cable from BT. Notice: no damage cable

15) MXM H/S & CPU Fan

Take 2pcs rubble off and confirm it with no damage, put it to temporary stock area. Notice: no collide on other component.

Take 3 screws off in turn. Notice: no collide on other component.

16) Inverter

Remove 3 screws off on inverter. Notice: no collide on other component.

Unplug inverter cable&power 6pin cable from inverter. Notice: no collide on other component.

PSG instructions for this template are available at EL-MF877-01
17) Unplug cable & TV card

1. Remove 2 screws on TV card with electrical screw driver, Take it out from TV slot.
2. Unplug Tuner AV input cable from TV card.
   Notice: no collide on other component.

18) MIC & WLAN

Unplug MIC2 cable from MIC1, take MIC1 from unit.
Notice: no pull cable when unplug cable.

Remove one screw on MIC2 vertically with electrical screw driver, take MIC2 out from unit. Route MIC2 cable out from the hole on basepan.
Notice: no scratch cable.

Remove 2 screws on wlan card with electrical screw driver in turn as pic shows.
Notice: no collide on other component.
19) Antenna & Webcam

Unplug webcam cable from connector on MB as pic shows.
Notice: no collide on other component.

Remove 2 screws on webcam with electrical screw driver in turn as pic show.

20) Power

Unplug power cable from MB as pic show.
Notice: no collide on other component, no damage cable.

Take power out of unit as pic show.
Notice: no collide on other component.

21) Unplug Cables

Remove 1 & 2 black tape.
Unplug side USB cable, card reader cable, IR LED cable, side audio cable, R-speaker cable, L-speaker cable out of MB from left to right.
Notice: no drag cable during cable routing.
22) M/B

Unplug USB touch cable on TS card as pics. Notice: no damage cable, no collide on other component.

Check USB touch screen cable with no copper leakage, no jam on connector, every pin be ok.

Take MB from basepan, hold way is as pic show.

Put MB on jig, rip black tape on LVDS cable off.

Take LVDS cable out from MB.

Loose hook of DDR slot. Take 2pcs DDR out from MB in specified angle.

Take CPU from MB with absorbing pen, put CPU to temporary stock area.
23) Speaker & Card Reader

1. Remove 4 screws vertically with electrical screw driver, no scratch on speaker.

2. Take R-speaker from unit. No touch on drum of speaker.
2. Route L-speaker cable out from the hole on basepan as pic show. No scratch on cable.

Disassemble card reader, unplug card reader cable & side audio cable.

24) Side IO (USB & Chin)

1. Take side USB hook form the slot on basepan. Route side USB cable out from left hole of basepan
2. Notice: no damage cable during operation.

Remove one screw of TORX M3X5L with electrical screw driver.
1. Route hot start cable from the hold on basepan.
2. Lift basepan slightly. Route LVDS cable and 4pcs inverter cable out as pic show.
   Notice: no damage cable during cable routing, no folding LVDS cable.

25) Unplug LVDS cable

Rip off the black tape off for fixing LVD cable.

Confirm LVDS cable with no damage, no copper leakage, no dirt and missing for the pin in each connector. Label with no damage, no broken.
26) Light bar board, light pipe & IR module.

1. Routing out the IR cable through under the basepan, geting the below hook out of the basepan.
2. Put the two polarization on the holder through the corresponding polarization hole. Notice: 1. Don't damage the hook. 2. Don't damage the cable.

- Verticality in proper order according to the pic.2. Press the position as the pic. Shows when you loosening the screws.

- Get off the two hook of the lightpipe from the corresponding hooks on the basepan, and get off the 2pcs lightbar from the lightpipe.

- Remove 2pcs white screw of torx M3*5L in turn with electrical screw driver.

- Take short lightpipe from basepan.
Figure 2: Touch panel kit disassembly

1) Front bezel

1. Put TPK on rotating jig with top side down. Then use seal bag to cover TPC cable to protect it.

2. Remove acetic tape which is used for fixing FPC cable from left to right. Then route FPC cable outside of bezel. Notice: No damage FPC cable when removing tapes.

3. Remove 4 screws for fixing TOP bracket in turn as pic. Then take TOP bracket off.

4. Remove 4 screws for fixing front bezel and R/L bracket in turn. Disassemble bezel and TPK.

5. Put TPK on rotating jig after disassembling it. Notice: Camera kit needs to hang in the air without any pressure. Then remove screws for locking L/R bracket, take R/L bracket off.

2) Camera kit

1. Put TPK spacers and disassemble 4 metal clips with teflon gauge pushed on the edge of camera as the Pic.

Note: Don’t crash camera or scratch camera during the repair process.

2. Power on the bank, set the temperature at 45°C.

3. When the bank temperature reaches 45°C put TPK in the bank for 10min and make the TPK spacers. Close the bank door and record the time.

4. Put TPK on the ESD sheet also cut from camera kit cutting camera 1 (see the left pic). Move the teflon gauge away from the real line position (please don’t separate the top camera kit position.) Then separate camera kit from TPK.

Note: Please don’t with much strength when cutting and removing to avoid scratching camera kit and gage.

5. Remove the camera kit from TPK with as the Pic. Note: Before removal, make sure the FPC cable free, the strength should be the same during the process. Don’t touch camera kit or FPC.

6. Remove Camera 2 by the same way as Camera 1. Note: Before removal, make sure the FPC cable free, the strength should be the same during the process. Don’t touch camera kit or FPC.

PSG instructions for this template are available at EL-MF877-01
3) Glass

1. Put the TSPK upwards on the table. Cut TSGP from the 30 degree. The cutting depth is 3-5mm.

2. Hold the TSGP and cut TSGP from the top to bottom. Pull the knife by 30 degree and the left side of TSGP will be separated.

3. Rotate the TPK 90 degree by contrary clock wise. Put knife from the right-top corner and cut the TSGP.

4. Hold the TSGP and cut the bottom side. Pull the knife by 30 degree. The 4 sides for TSGP will all be separated by this way.

5. After making sure all the 4 sides of TPK are all cut, separate TS glass&panel.
   Note: Don’t pull with much strength or break glass when separating.

6. Compare the Camera Kit S/N with DSP S/N and make sure the S/N are the same.
   Note: FFC should be protected with ESD bag when putting in the material box as the Pic.

PSG instructions for this template are available at EL-MF877-01
Figure 3: CCLFs Remove from Panel

Step 1: Unfix the Screw (3 Point)  
Remove the cover shield

Step 2: Dismantle the case top (down)

Step 3: Dismantle the case top (Left/Right)

Step 4: Separate case top (push the case top because of damages on COF)

Step 5: Separate board ass'y

Step 6: Separate wires from the tape (2 Point)

Step 7: Pull lamp housing with tool & hands (Be careful not to break the Lamp)

Step 8: Pull lamp housing with hands normal to LCM

Step 9: Separated lamp ass'y (UP)
Figure 4: Remove molded-in NUT from Chin

1) Use a metal pin, diameter is 2.5mm.

2) Metal pin aim at NUT.

3) Insert the metal pin into NUT around 3~4mm.

4) Press metal pin until NUT depart from plastic.

5) Remove NUT fully.

PSG instructions for this template are available at EL-MF877-01
Figure 5: Remove Battery from MB, Remote Control, KB & Mouse.