Disassembling HP Elitebook 840 G1

This guide performs a full disassembly of an HP Elitebook 840 G1, with the exception of the LCD.

Written By: thiswaywardmind
INTRODUCTION

This guide performs a full disassembly of an HP Elitebook 840 G1, with the exception of the LCD.

TOOLS:

- Essential Electronics Toolkit (1)
Step 1 — Lay the computer on a flat surface, with the LCD facing down and the basecover facing up.

- You need to be able to see the latch and screws to disassemble.

Step 2 — Unlock the bottom cover by sliding the latch (circled in red) to the left.

- The bottom cover will then slide towards the bottom of the picture, and can be removed.
Step 3 — Remove the bottom cover and undo the two battery latches. The battery can then be removed.

- One of the latches is spring-loaded, and will need to be held in the unlocked position.

Step 4 — You can then unlatch and remove both the HDD and RAM modules.

- The HDD is held in by four Philips screws, while the RAM module has two spring-loaded arms.
- The RAM's spring-loaded arms just need to be pushed away from the RAM module, and the module will then pop up and can be slid out.
Step 5 — Remove the wireless card.

- The two red circles indicate where antennas plugged in. They simply pop upwards.
- The card is then held in by a single screw.

Step 6 — Remove the TORQ screws that are holding the basecover onto the chassis.

- There is also a screw in the bottom right corner, which isn't pictured.
Step 7 — Loosen the keyboard screws, and pop the keyboard out for removal in the next step.

- The two screws are spring-loaded and won't come all the way out. They just need to be loose.
- There is a gap next to the unit's fan (circled in red) large enough for a screwdriver to pop the keyboard loose. Simply push down.
- You might have more success if you open the unit and stand it on its side prior to popping the keyboard loose.

Step 8 — Now open the unit, and unlatch the keyboard from above.

- You should pull the top edge loose, and slide the keyboard upward.
Step 9 — The keyboard is held on by three ribbon cables. They should be detached.

- The cable on the left can be removed from either the keyboard or the systemboard.
- Ribbon cables are held onto their connectors by a small plastic locking latch. Those latches lift up, and the cable slides out.

Step 10 — Once the keyboard is removed, disconnect the two ribbon cables that are connected to the systemboard from the top cover.

- There is one on the left, and one on the right. Both are partially pictured, but were cut from the image during cropping.
Step 11 — Flip the unit back over, and complete removing the base cover's screws.

- These are Philips-head, and have been circled in red.

Step 12 — The base cover can then be vertically lifted.

- I find it easiest to lift from the bottom left.
Step 13 — The unit's systemboard should now be exposed.

- If you're repairing a user-damaged machine, this would be a great place to look for spill damage.
- You'll notice that the top of this unit has spill damage to the systemboard, speakers, and top cover.

Step 14 — Remove the three systemboard screws.

- They're circled in red.
Step 15 — Detach the unit’s wireless cables from the systemboard.

- I recommend pulling the tape and plastic protectors (circled at the bottom) off and setting them someplace safe. The tape isn't easy to replace if damaged or folded.

- The plug in the top left is actually for the speakers, not the wireless card, but is wedging the wireless cables into their plastic guide.

Step 16 — Detach the fan, power board cable, and LCD cable.

- The fan is also held by a screw in the bottom right. This was partially cut off in the image.
Step 17 — Remove the heat sink, and unlatch the left end of the last remaining ribbon cable.

- The ribbon cable doesn't need to fully be removed. Only the left side is needed to get the system board out.

Step 18 — The system board can now be removed. While holding the ribbon cable back, lift the board - starting on the right side.

- If there is any resistance you should double-check that all cables and screws have been removed or disconnected.
Step 19 — The system has then been disassembled, aside from a few minor and self-explanatory parts, and is ready to be rebuilt.

- The cable on the bottom left goes to a thumbprint scanner, while the cables on the right belong to the unit's SC Reader.
- The power board in the top left is also removable, but normally doesn't need replacement, and the two hinges can be loosened to pull the LCD assembly off of this top cover.

To reassemble your device, follow these instructions in reverse order.