Dell Inspiron 1521 Central Processing Unit (CPU) Replacement

A CPU or central processing unit is the hardware within computers that carries out the calculations and functions neccesary for basic functions.

Written By: Joana Sanchez

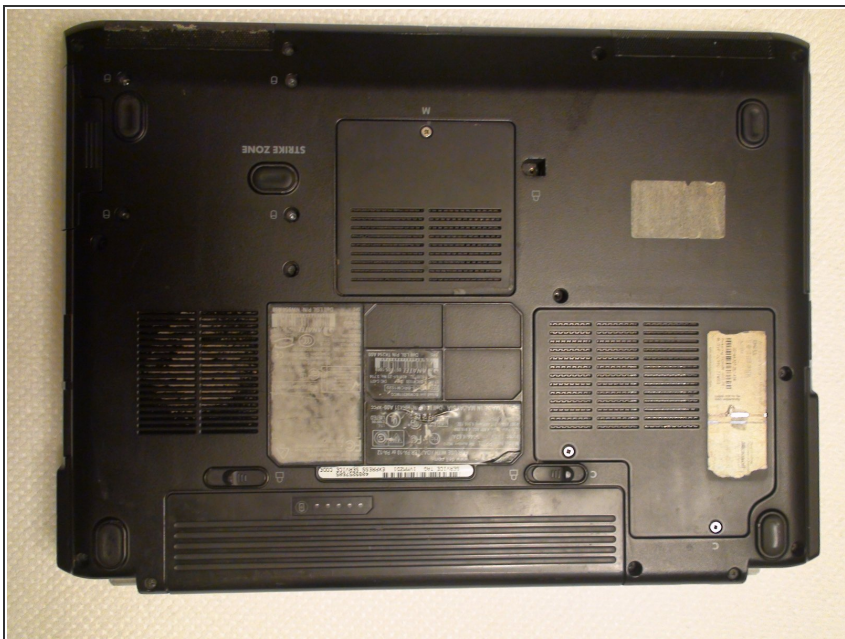This document was generated on 2020-11-28 02:41:42 AM (MST).

INTRODUCTION

This guide will show you how to remove a few components of your laptop in order to gain access to the CPU.

🔧 TOOLS:

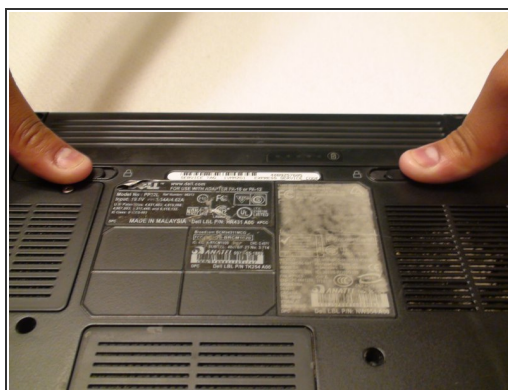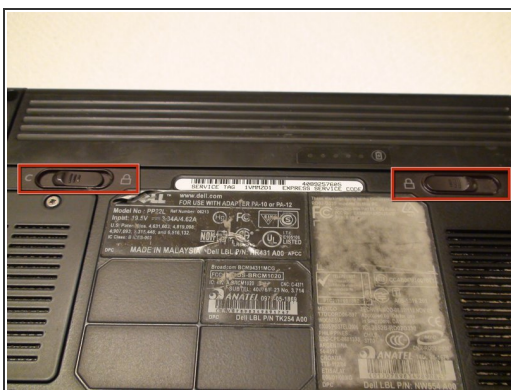- Phillips #1 Screwdriver (1)
- iFixit Opening Tools (1)
- Flathead 3/32" or 2.5 mm Screwdriver (1)

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Step 1 — Battery

- Rotate the laptop so its bottom is facing up.

Step 2

- Identify the lock mechanisms holding the battery in place.

- Slide each button outward with your fingers to disengage the battery.

- Pull the battery off with your hand to separate it from the laptop.

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Step 3 — Keyboard

- Find the two small indentations of the sides of the panel covering the power button.

- Pry up both sides of the panel by sticking the plastic opener tool in each indentation and prying up.
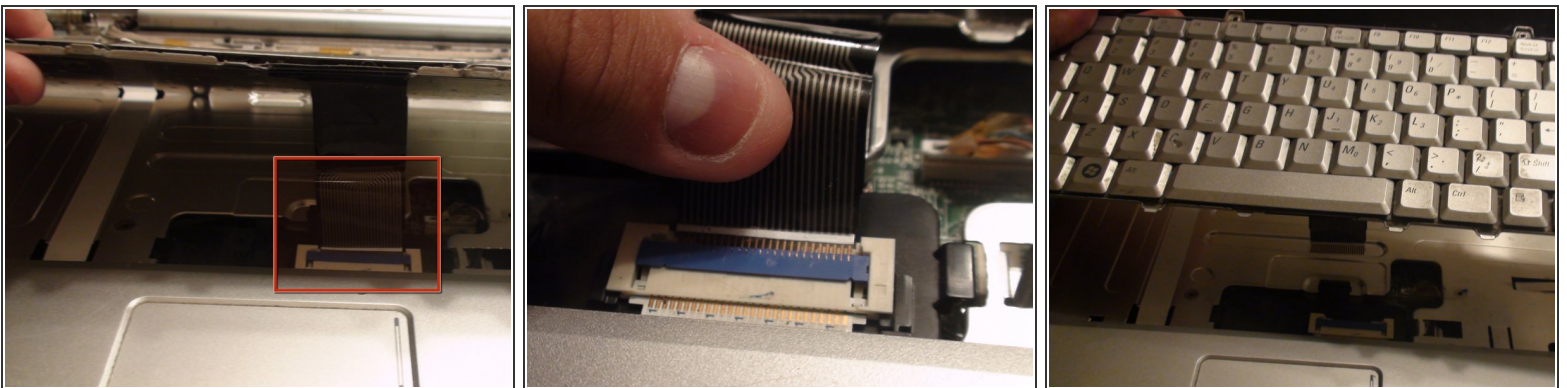
Step 4

- Now that the panel is loose simply pull the panel off with your hand.

Step 5

- Locate the two 5 mm Phillips #1 screws holding down the keyboard that were underneath the panel.

- Remove these screws with a Phillips #1 screwdriver.

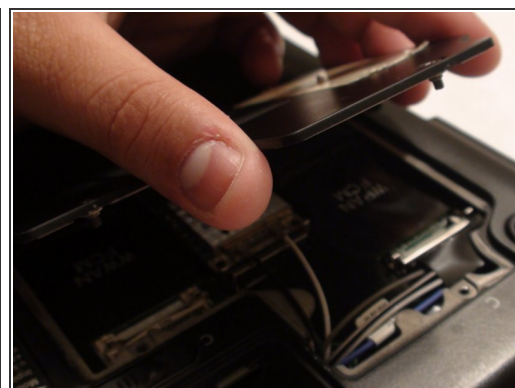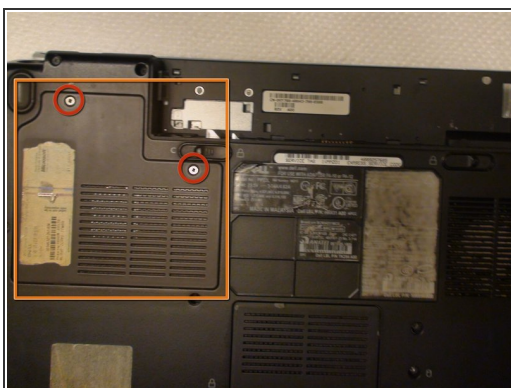- With the screws removed pull the keyboard up with your hand.

Step 6

- Locate the connector that links the keyboard to the laptop.

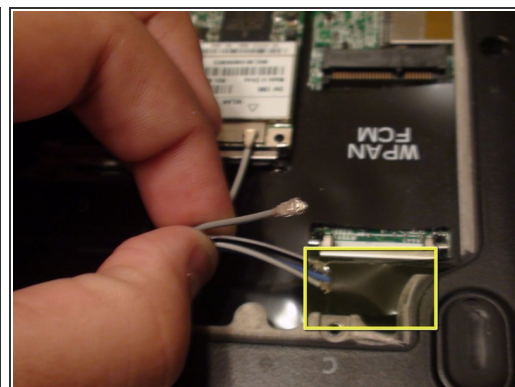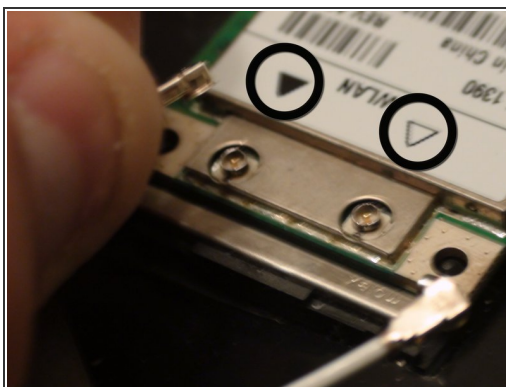- Gently pull the connector toward the screen of the laptop with your figers to disconnect it.
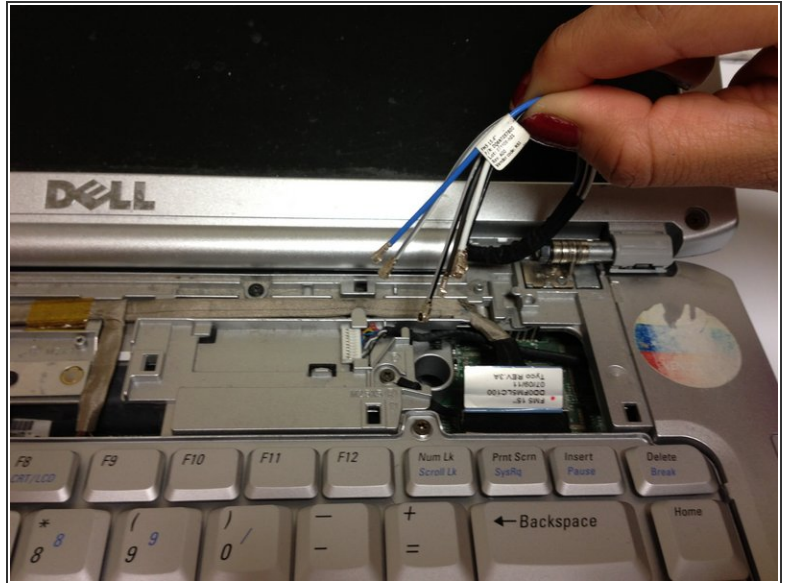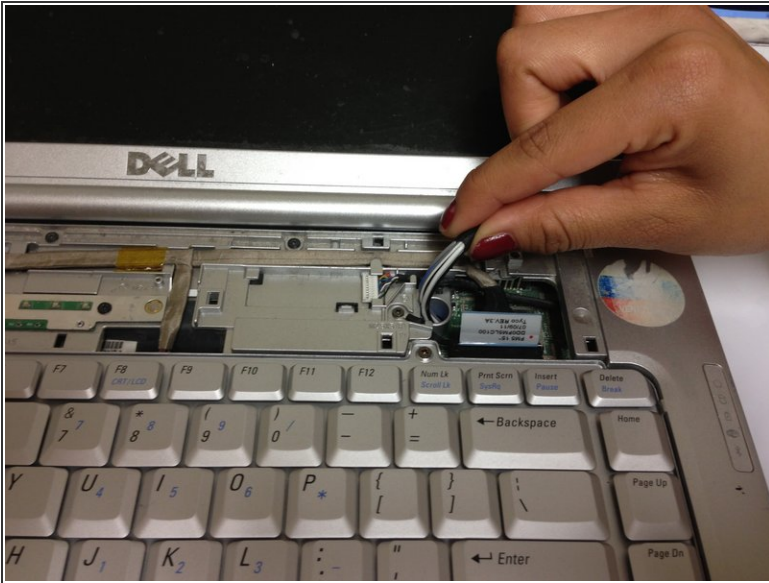
Step 7 — Display Assembly

- Locate the two Phillips #1 screws holding the Wireless Local Area Network (WLAN) panel in place.

- Remove these two screws with a Phillips #1 screwdriver.

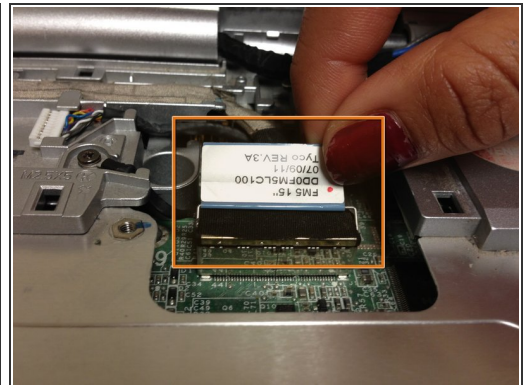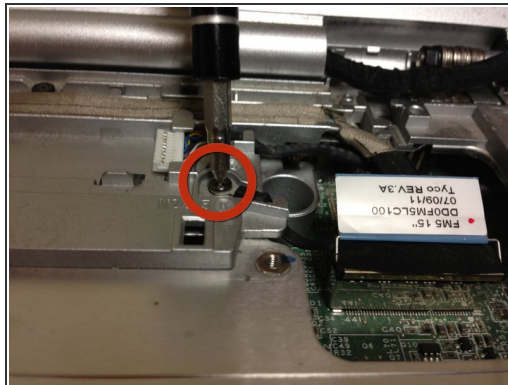- Remove the WLAN panel by pulling it up with your hand.

Step 8

- Disconnect the black and white wires attached to the WLAN card by pulling up on the connectors with your fingers.

- During reassembly, the black and white wires reconnect to the WLAN card near the black and white triangles, respectively.

- Remove the remaining wires from their protective sleeve by hand.

- The wires in the sleeve are only used in other Dell laptop models. During reassembly they do not connect to anything so just place them back into the sleeve.

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Step 9

- Pull the wires that you disconnected in the previous step through the hole in the top of the laptop.
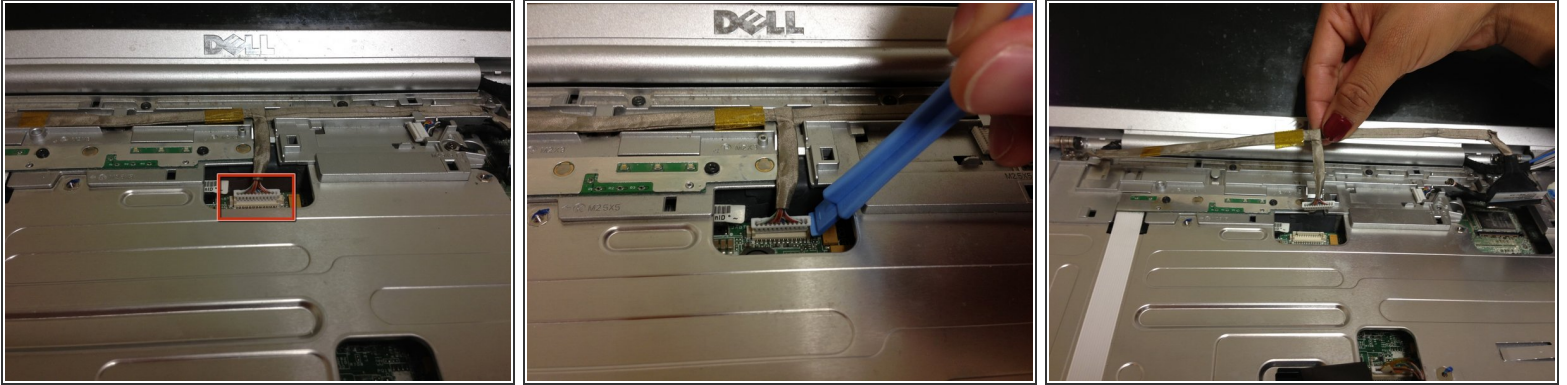
Step 10

- Detach the Phillips #1 grounding screw with a Phillips #1 screwdriver.

- Disconnect the display cable by pulling up on the rectangular tab with your fingers.
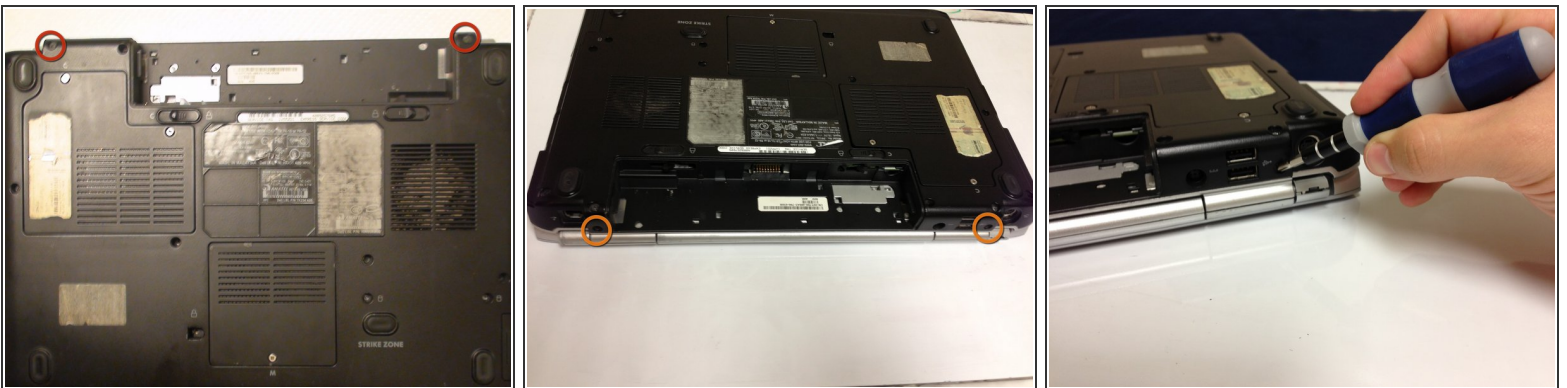
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Step 11

⚠️ When disconnecting the camera/microphone cable, pull up by the white plug. Pulling on the cable itself can damage it.

- Disconnect the camera/microphone cable by prying it upward with the plastic opener tool.

- Separate the camera/microphone cable from the case by pulling it up with your fingers.
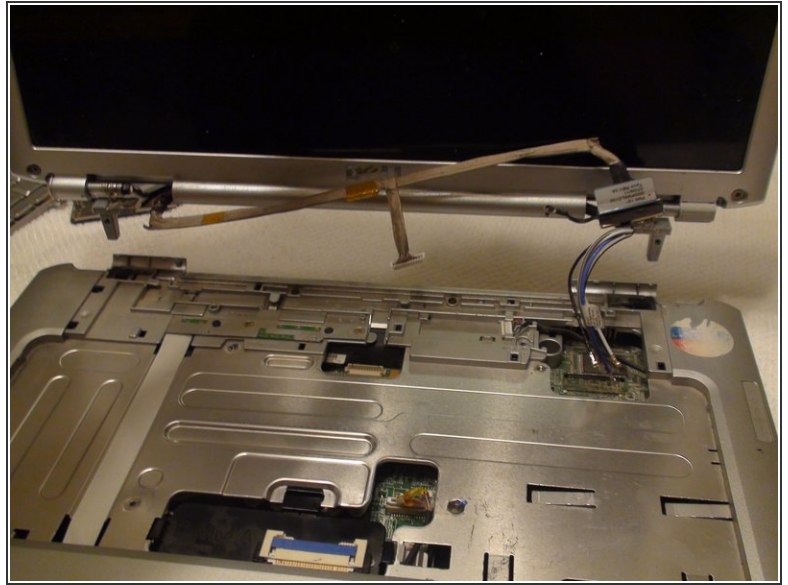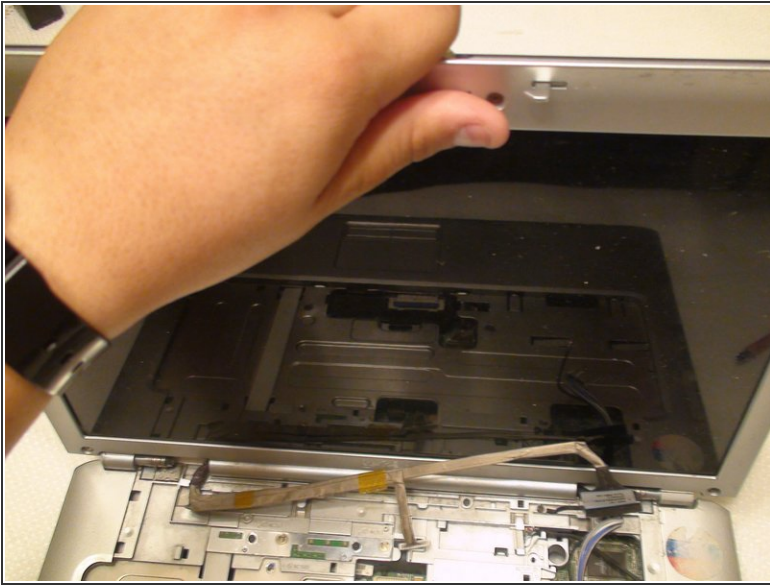
Step 12

- Remove the two 10 mm Phillips #1 screws from the bottom of the laptop that attach the lid assembly to the laptop with a Phillips #1 screwdriver.

- Remove the two 10 mm Phillips #1 screws from the back of the laptop that also attach the lid assembly to the laptop with a Phillips #1 screwdriver.
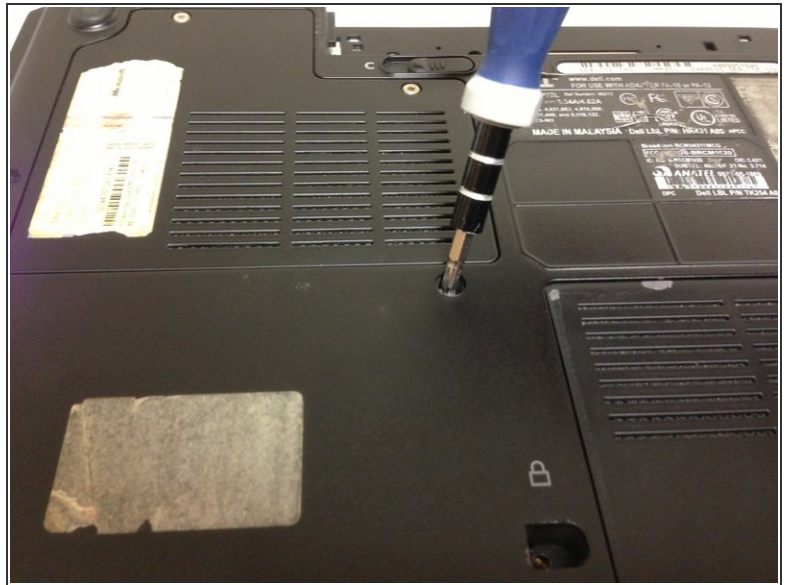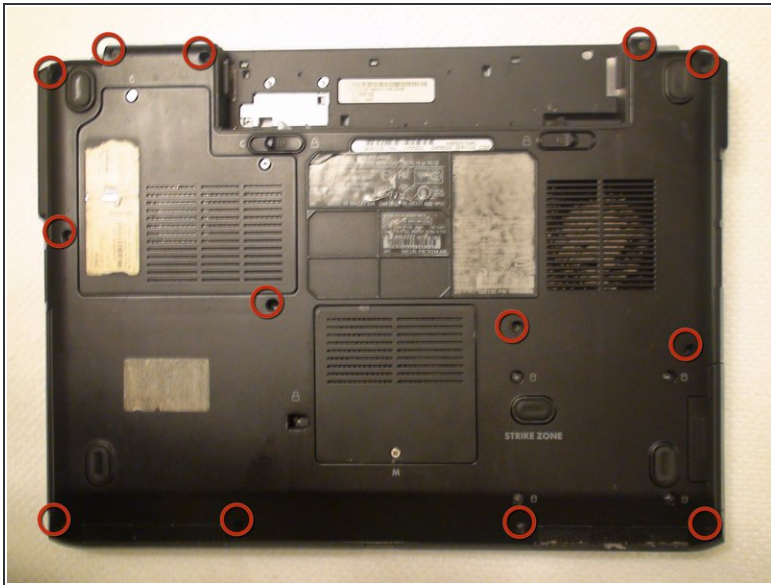
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Step 13

⚠ There is a risk of dropping the lid or base of the laptop, or damaging cables. Make sure no cables are still attached.

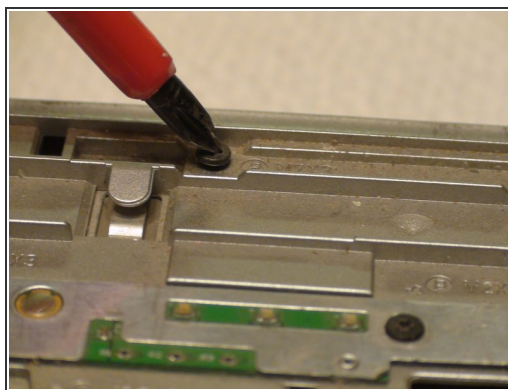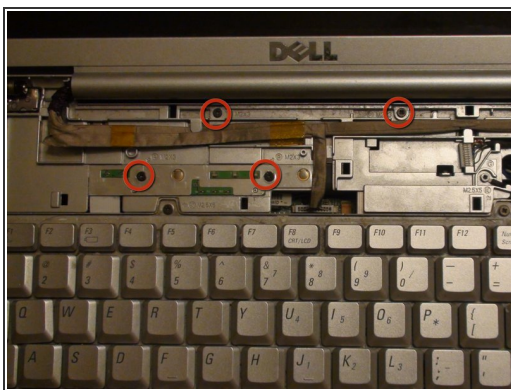● Remove the lid by pulling it up from the base of the laptop with both hands.

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Step 14 — Bottom Panel

- Locate the thirteen 10 mm Phillips #1 screws securing the bottom panel of the laptop.

- Remove the thirteen indicated screws with a Phillips #1 screwdriver.

- (i) With the screws removed you can now remove the panel underneath keyboard.
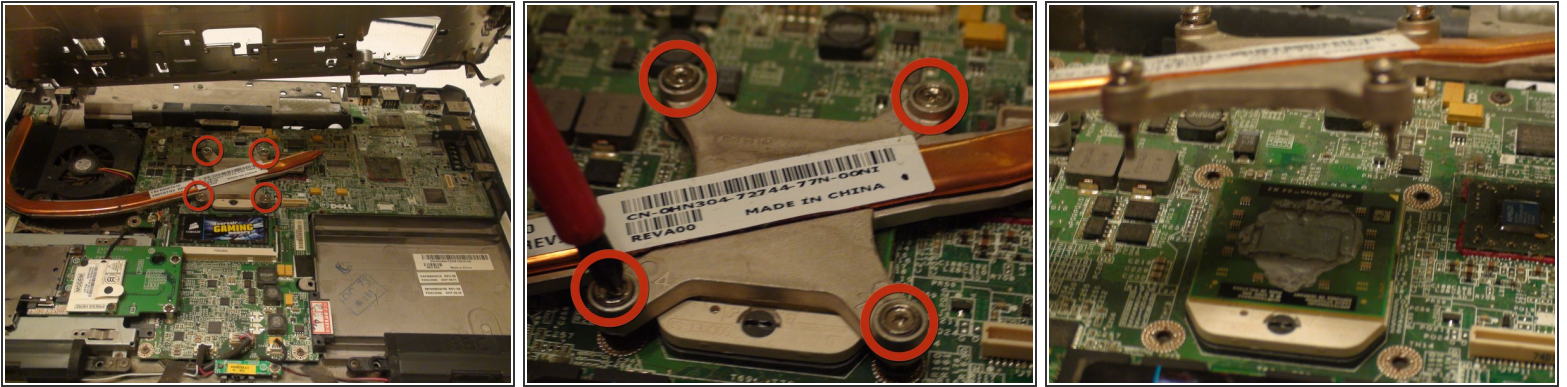
Step 15 — Central Processing Unit (CPU)

- Locate the four 4 mm Phillips #1 screws securing the panel underneath the keyboard.

- Remove the four screws with a Phillips #1 screwdriver.

- Gently lift panel underneath the keyboard with both hands, thus removing it from the laptop.

Step 16

ⓘ The screws that hold the CPU heat sink in place are attached to the heat sink with springs and washers. They should only be loosened enough to detach the heat sink. Do not try to remove the screws from the heat sink itself.

● Locate the four Phillips #1 screws securing the heatsink over the CPU.

● Remove the screws securing the heat sink with a Phillips #1 screwdriver.

● Lift the heat sink off of the CPU upwards with your fingers.

Step 17

● Remove the one Flathead #2.5 screw securing the CPU with a Flathead #2.5 screwdriver.

Step 18

⚠ The CPU has many small pins on the underside which can easily be bent. Bending CPU pins will permanently damage the CPU. Handle with extreme care to avoid bending any pins.

● Carefully lift the CPU off of the board with your fingers.

📌 If you want to add a new CPU don't forget to clean and apply fresh thermal paste to the new processor.

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

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