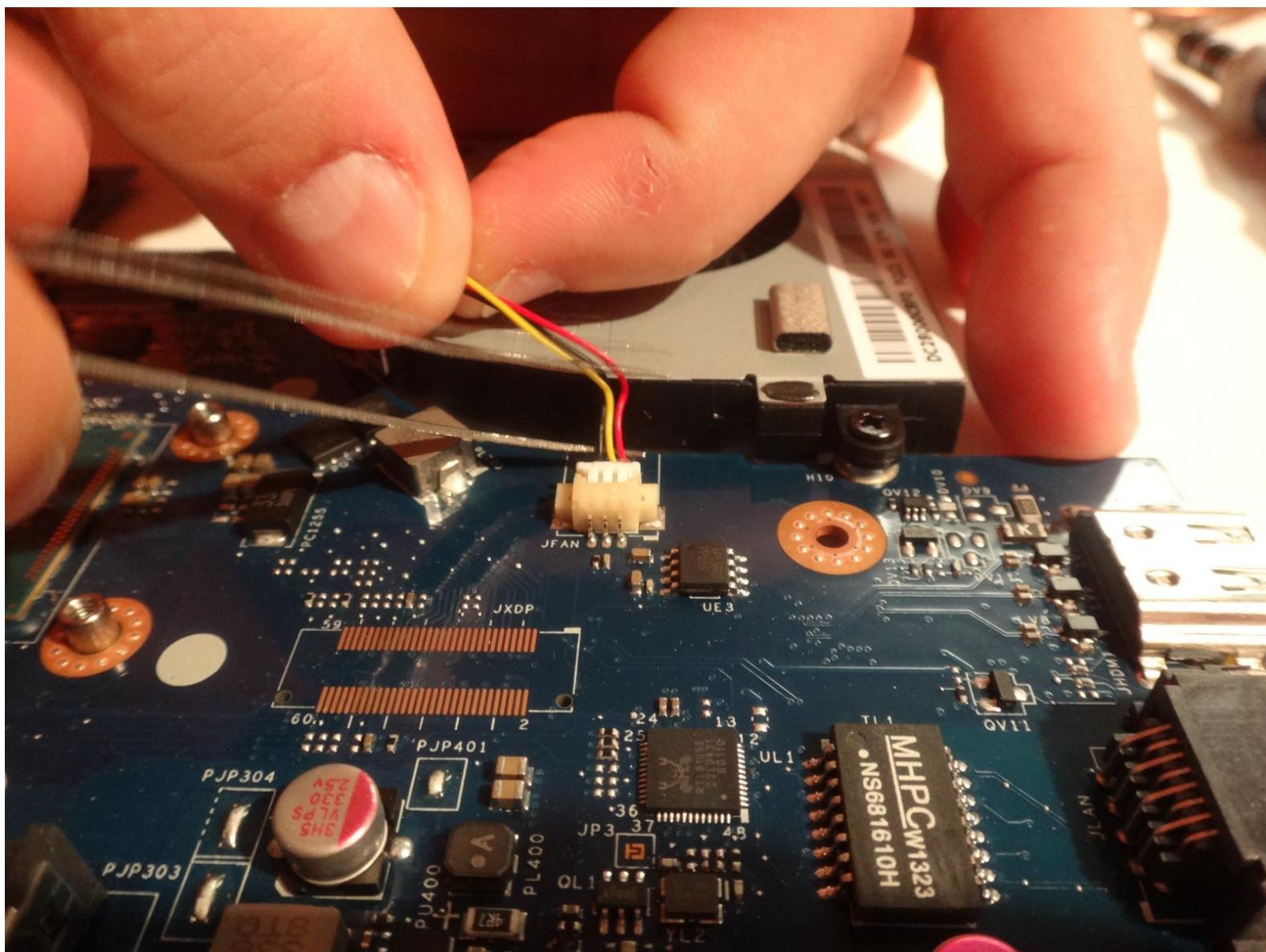




Dell Inspiron 15-3521 Motherboard Ventilation Fan Replacement

Written By: Andrew Dippre



 **TOOLS:**

- [Phillips #00 Screwdriver](#) (1)
- [Spudger](#) (1)
- [Phillips #0 Screwdriver](#) (1)

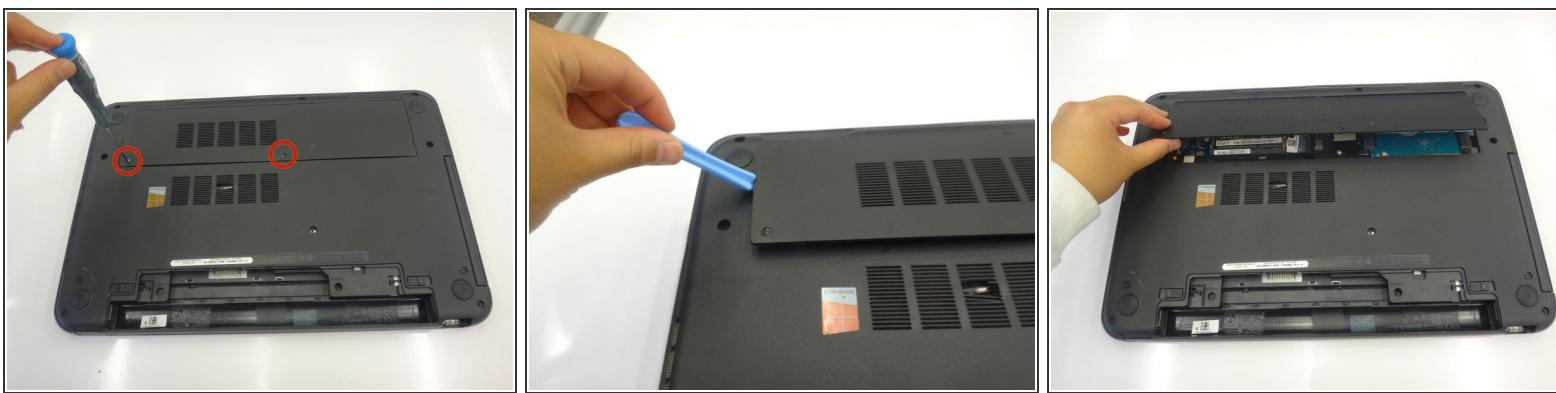
Step 1 — Remove the battery



! We are removing the battery to avoid the possibility of an electrical discharge when working with this system.

- Flip the laptop over.
- Slide the latches toward the outside of the laptop to unlock the battery.
- Lift the battery out of the laptop.

Step 2 — Remove access door



- Loosen the two screws attaching the access door to the laptop body
- Using a spudger, pry open the access door from the laptop
- Using your fingers, open and remove the access door from the laptop, exposing the memory cards underneath.

Step 3 — Memory Card Removal/Replacement



- To access the memory cards, push out the latches on the left and right of the memory cards
- To remove the memory card, pull it out of the tray with the latches still stretched out
- Insert a new memory card in to the memory card tray, depressing until side latches engage with a click.

Step 4 — Removing Underside Screws



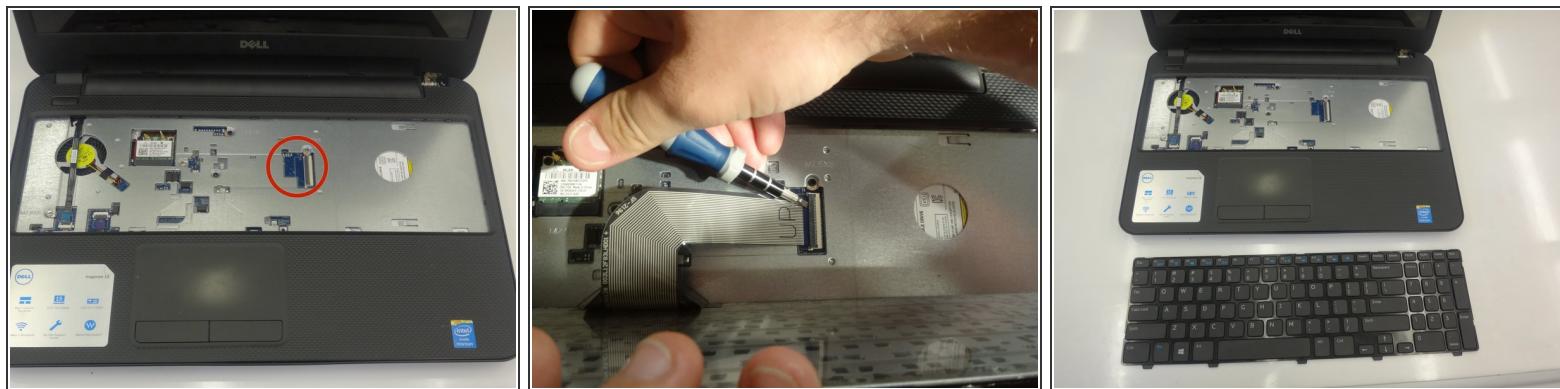
- Before flipping the laptop right-side up, remove screws holding the back plate to the laptop frame
- Remove the backplate screws using a phillips head PH0 screwdriver (11).
- Remove the screws located underneath the battery and access panel using the same phillips head PH0 screwdriver (3).

Step 5 — Removing the Keyboard



- Flip the laptop right-side-up
- Using a spudger, separate the keyboard from the laptop frame.
- Using fingers to remove the keyboard from the laptop frame, be careful not to damage the keyboard cable.

Step 6 — Disconnecting the Keyboard Cable



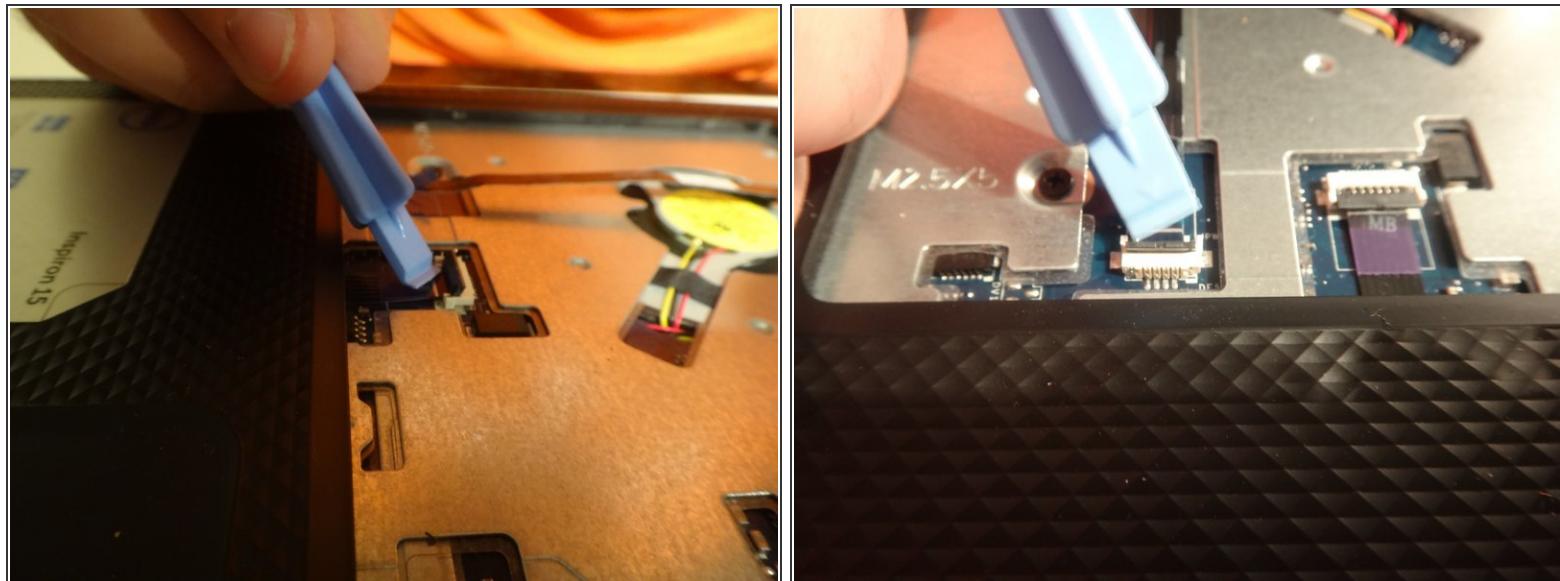
- To disconnect the keyboard, locate the keyboard cable locking mechanism.
- Open the locking mechanism by gently pulling up.
- Slide out the keyboard cable from the interface to separate the keyboard from the laptop.

Step 7 — Underneath the Keyboard



- Locate the wireless card location underneath the removed keyboard.
- Disengage the antenna cables connecting the laptop to the wireless card.
- Using a phillips head PH0 screwdriver, unscrew the single screw holding the wireless card to the laptop frame.
- Remove the wireless card.

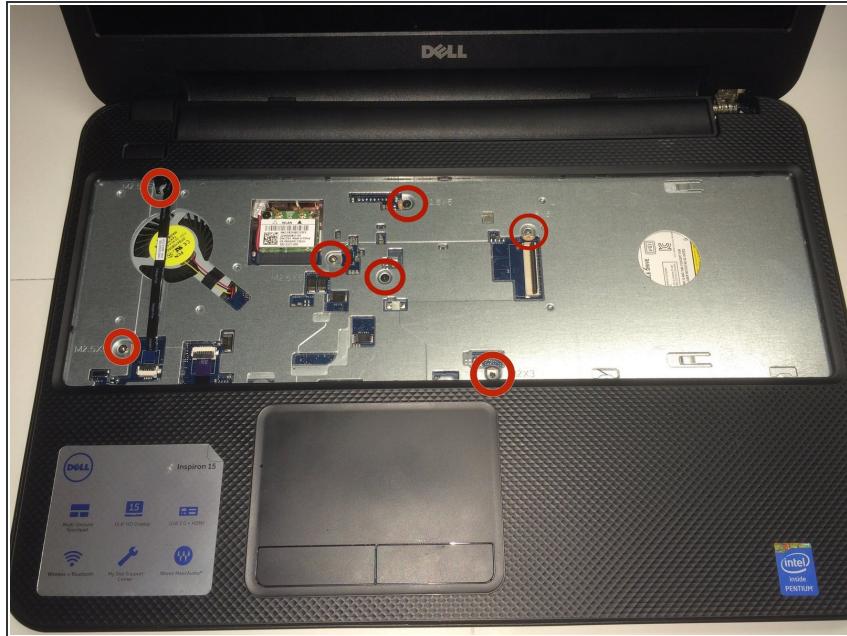
Step 8 — Disconnect the Palmrest Cables



- Unplug the palmrest cables, which are denoted by a blue and a purple marking.
- To remove, lift up the locking tab and pull the cables from their laptop interface.

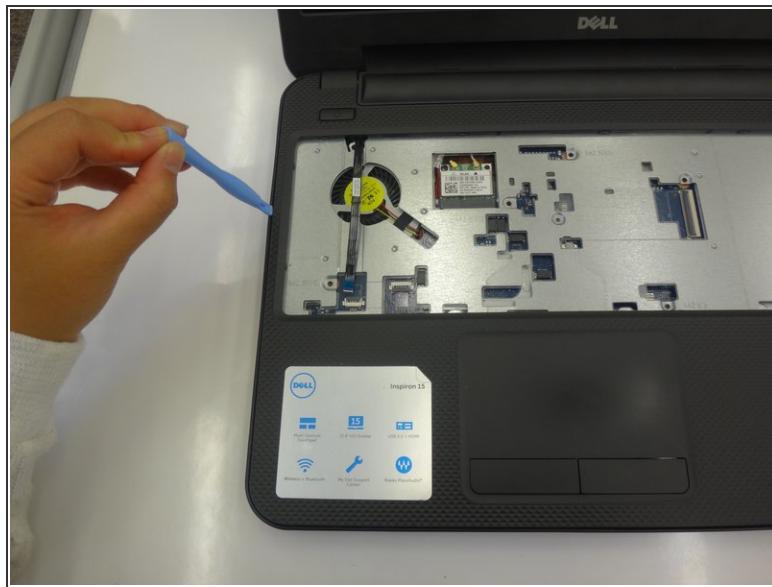
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Step 9 — Removing Palmrest Screws



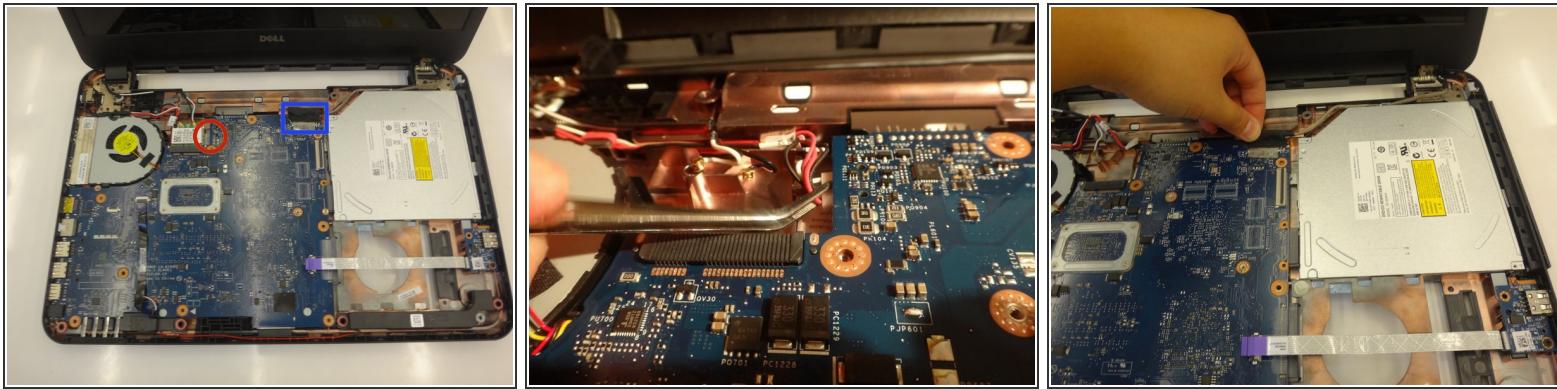
- Remove the four 2.5 mm by 5 mm screws underneath the keyboard plate using a phillips head PH0 screwdriver.
- Remove the three 2 mm by 3 mm screws underneath the keyboard plate using a phillips head PH0 screwdriver.

Step 10 — Disconnecting the Palmrest



- Using a spudger, separate the palmrest from the base of the laptop. This interface is located around the equator of the laptop.
- Use your fingers to completely remove the palmrest from the laptop base.

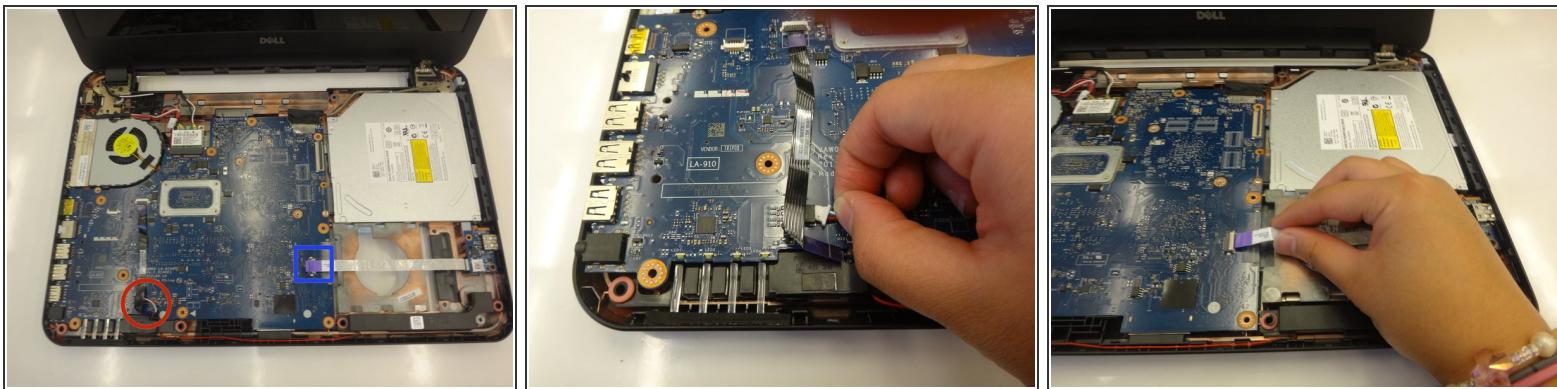
Step 11 — Cables to Separate from the Motherboard 1



- First, remove the power cable, located in the upper left hand side of the laptop. This can be removed using forceps or using your fingers.
- Second, remove the LCD cable located in the upper center of the laptop. This cable must be removed using the same unlocking procedure as the palmrest cables used in step 6.

(i) The first image shown has the wireless card still connected, however, for removal of the power cable, removing the wireless card is necessary in revealing the power cable. See *second image*.

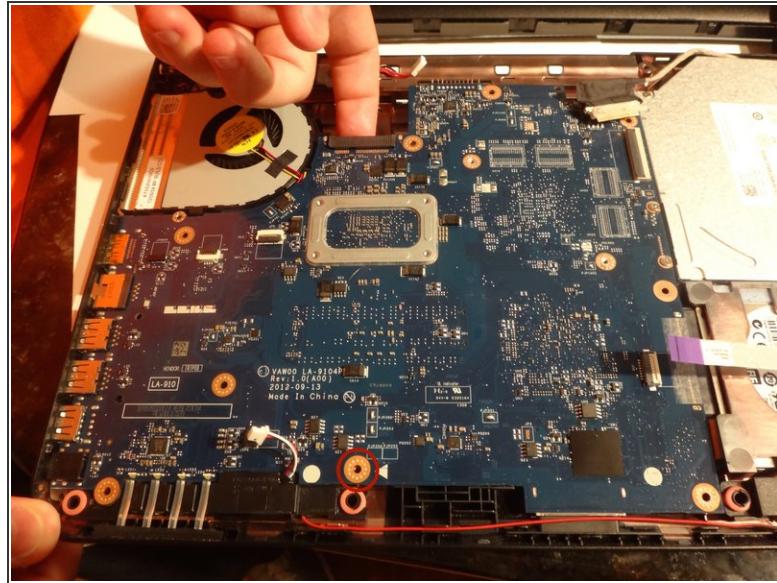
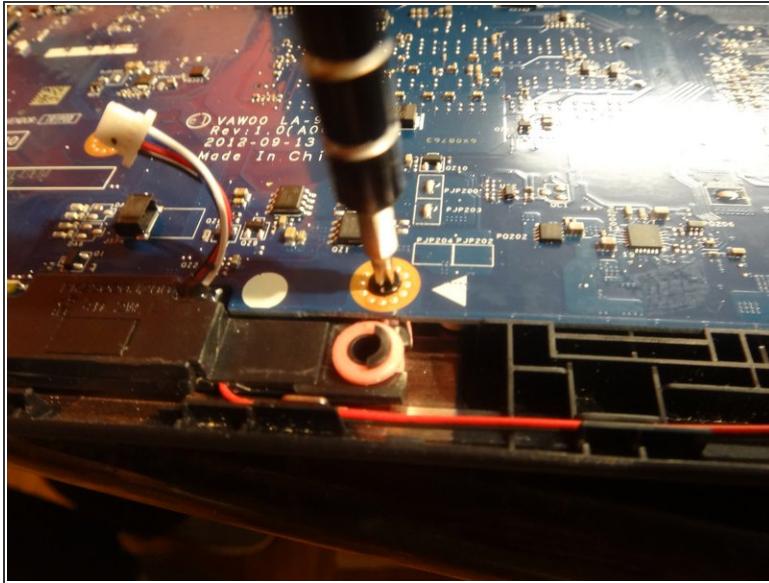
Step 12 — Cables to Separate from the Motherboard 2



- Third, unplug the speaker cables using forceps or by using your fingers.
- Fourth, unplug the final cable, denoted by a purple plastic flag. This cable uses the same locking mechanism as the palmrest cables seen in step 6.

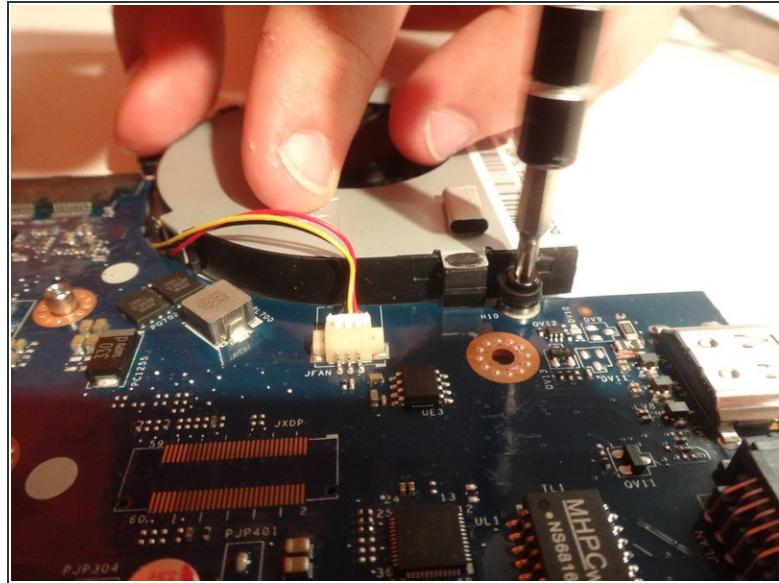
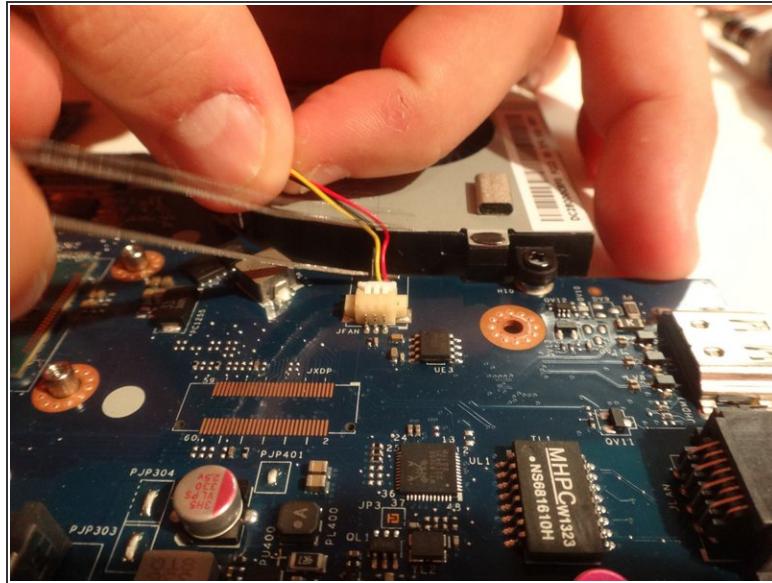
(i) The final cable is shown detached in the first image.

Step 13 — Remove the motherboard



- Unscrew the motherboard from the laptop frame using a phillips head PH0 screwdriver.
- Then, use your fingers to remove the motherboard from the laptop.

Step 14 — Disconnecting the Fan



- Turn over the separated motherboard.
- Disconnect the fan power cable.
- Using a phillips head screwdriver, remove the screw attaching the fan to the motherboard.
- Replace fan.

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