

TOOLS:

Phillips #00 Screwdriver (1)

iFixit Opening Tool (1)

Tweezers (1)

Magnetic Project Mat (1)

Step 1 — Battery



- Turn the laptop over.

Step 2



- "Unlock" your battery by moving the switch as shown so that an unlocked lock on a red background is shown.

Step 3



- Next move the other switch, while the unlocked symbol is still showing. The battery should pop up, and no longer be flush with the bottom of the laptop.

Step 4



- Now remove the battery by lifting it out of the laptop by the side closest to the switches.

Step 5



- You have successfully removed the battery. Congratulations!

Step 6 — Back Cover Panel



- Now, locate the two screws that hold the back cover panel onto the laptop.

Step 7



- Unscrew both of the screws that are holding the back panel in place with the Philips #00 head.
- ⓘ The screws are 3/8" in length and have a 1/4" head.

Step 8



- Once both screws have been removed use a plastic opening tool to lift the panel up. Starting with the indented notch, and moving left and right from there.

Step 9



- After the panel has been loosened by the plastic opening tool, take your finger, place it in the gap, and remove the panel from the laptop.

Step 10 — Keyboard



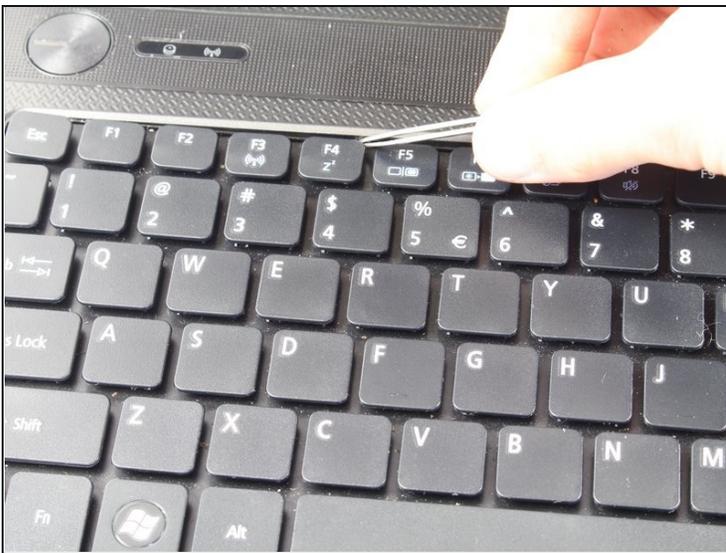
- Fling your laptop over and open it as shown in the image.

Step 11



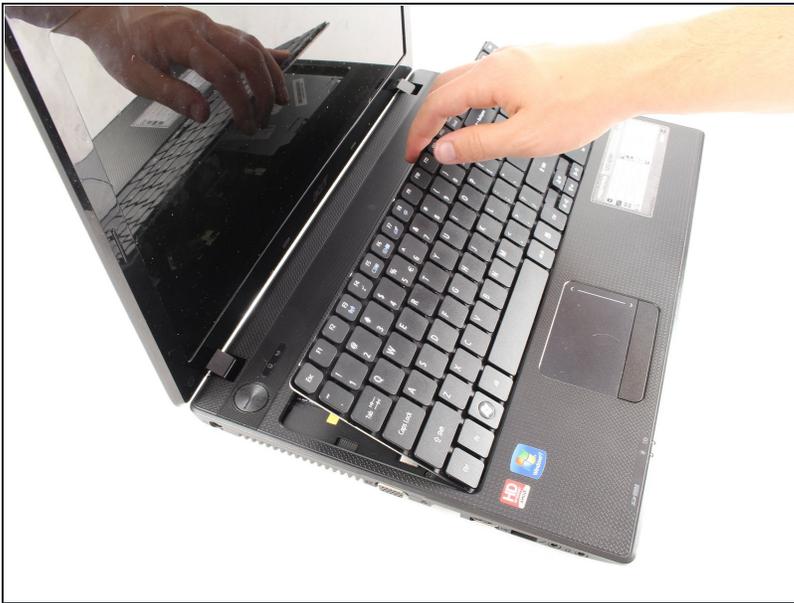
- Locate the tabs keeping the keyboard in place.

Step 12



- Using thin tweezers push the tabs in the keyboard in and pull up on the edge of the keyboard.
- ⓘ The keyboard will bend and it will seem like its breaking, but don't worry this is OK!

Step 13



- Once the keyboard begins popping out of place use your hand to keep the part that has been detached from the laptop in the air.
- Continue pushing in tabs and lifting up the keyboard as described above.

Step 14



- Once the keyboard has been separated from the body of the laptop carefully lift the keyboard up and tilt it forward, leaving it to rest on the laptop as shown.
- ⓘ Do not pull the keyboard up with too much force because you may cause damage to your laptop!

Step 15



- Using tweezers pull the white tab down on both sides. This will release the blue and black connector.

Step 16



- Pull the blue and black connector out of its socket.
- ⓘ Make sure it comes off easily or you may rip it.

Step 17



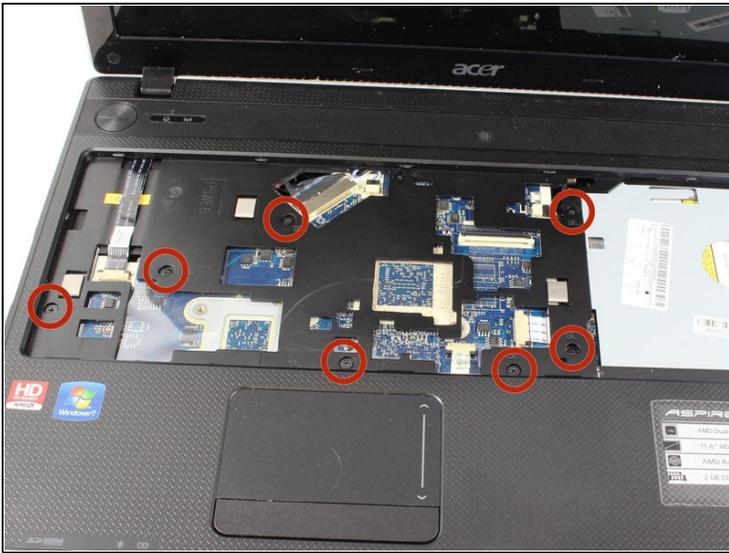
- Now you can pull the keyboard away from the laptop.

Step 18 — Fan



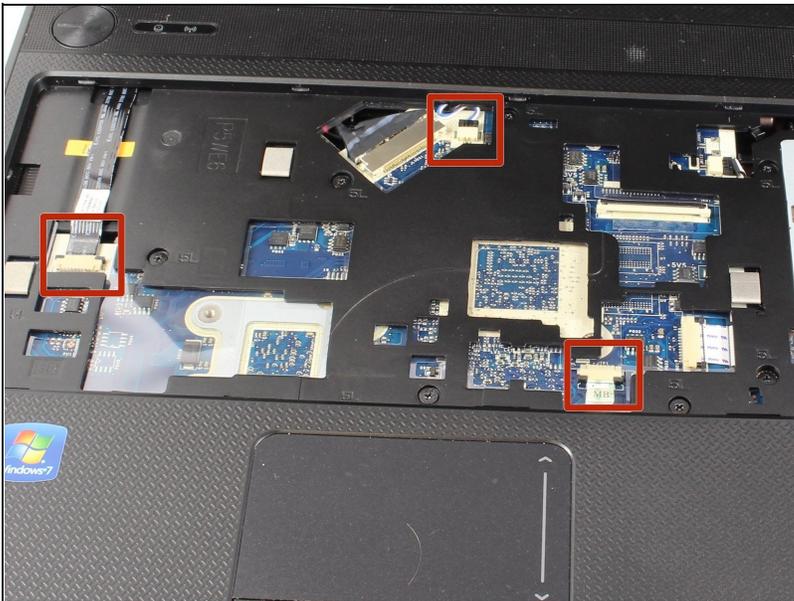
- After you have removed all of the prerequisites its time to unscrew a few more screws. Flip your laptop over and first remove all the screw highlighted in red with the Phillips #00 screwdriver. These are 1/4" head diameter by 3/8" screw length screws.
- Now remove the screws highlighted in orange with the Phillips #00 screwdriver. These are 5/32" head diameter by 5/32" screw length screws. Keep these separate from the other screws.

Step 19



- Flip the Laptop back over, and unscrew the 1/4" diameter head 7/32" length screws indicated in the picture.

Step 20



- The indicated spots show where different components are attached to the motherboard (such as the power button and the track pad). You will have to remove these connections the same way you undid the keyboard using the tweezers.

Step 21



- Here is a close-up of all of the connectors. Remember to use tweezers on the black part and carefully pull out both sides. Once it has been moved back slightly, pull the connector out just like the keyboard.
- The third picture shows the connector to the speakers which can just be pulled straight out by tweezers.

Step 22



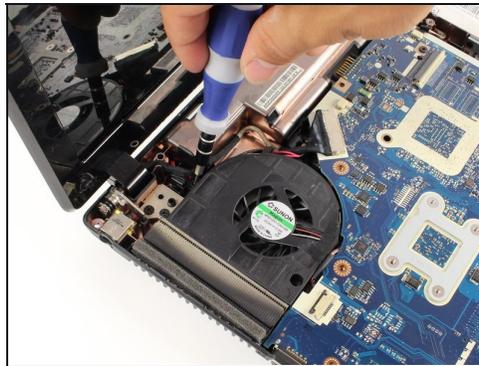
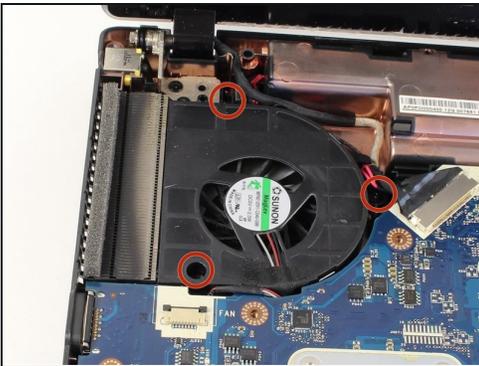
- Use a plastic opening tool or your hands to carefully lift up the corner of the top panel of the laptop.
- Once it starts coming off continue to lift it with the opening tool, or your hand, until it lifts off completely.

Step 23



- With the top panel off the laptop will look like this. Locate the fan.

Step 24



- Once you manage to locate the fan use the screwdriver to unscrew the three screws highlighted.

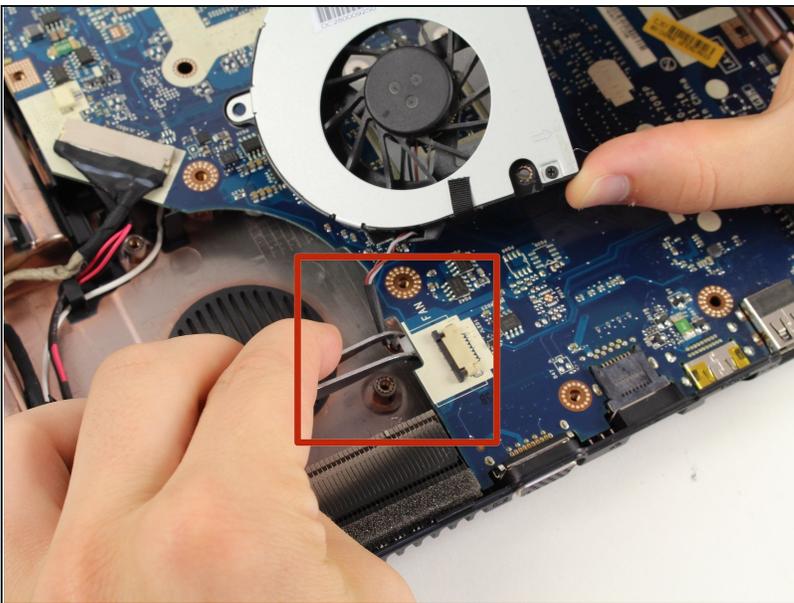
⚠ Notice that one of the screws is directly beneath a set of wires. Be careful not to cut those wires as you remove the screws.

Step 25



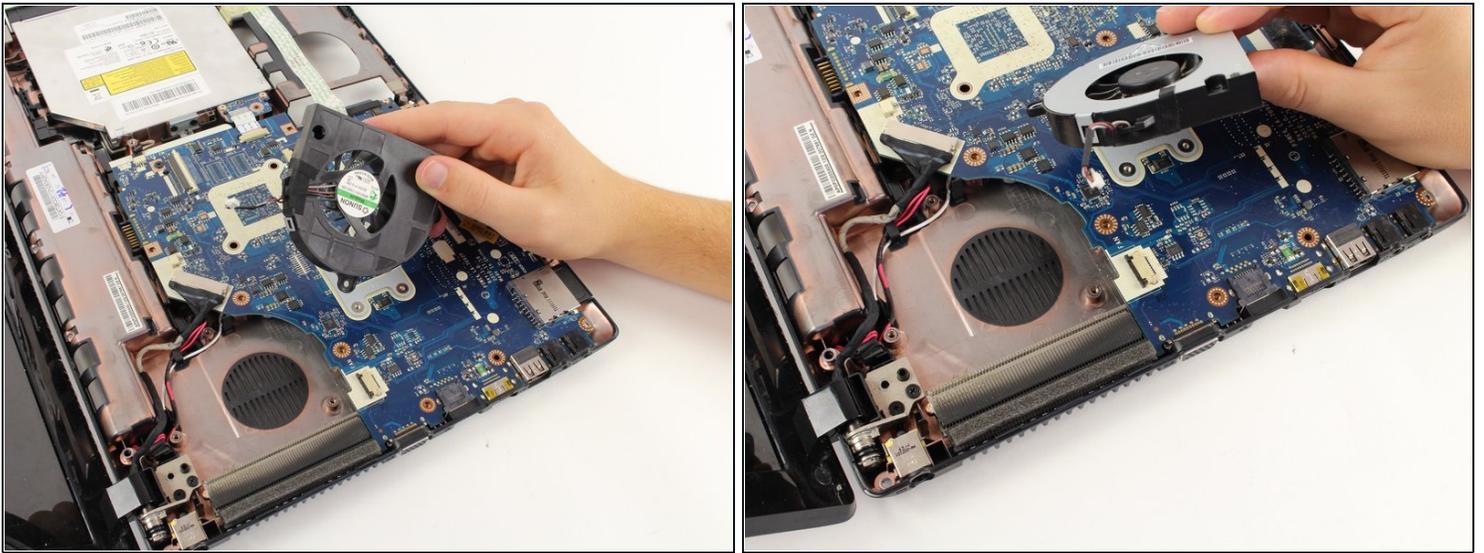
- Carefully lift the fan out of place.

Step 26



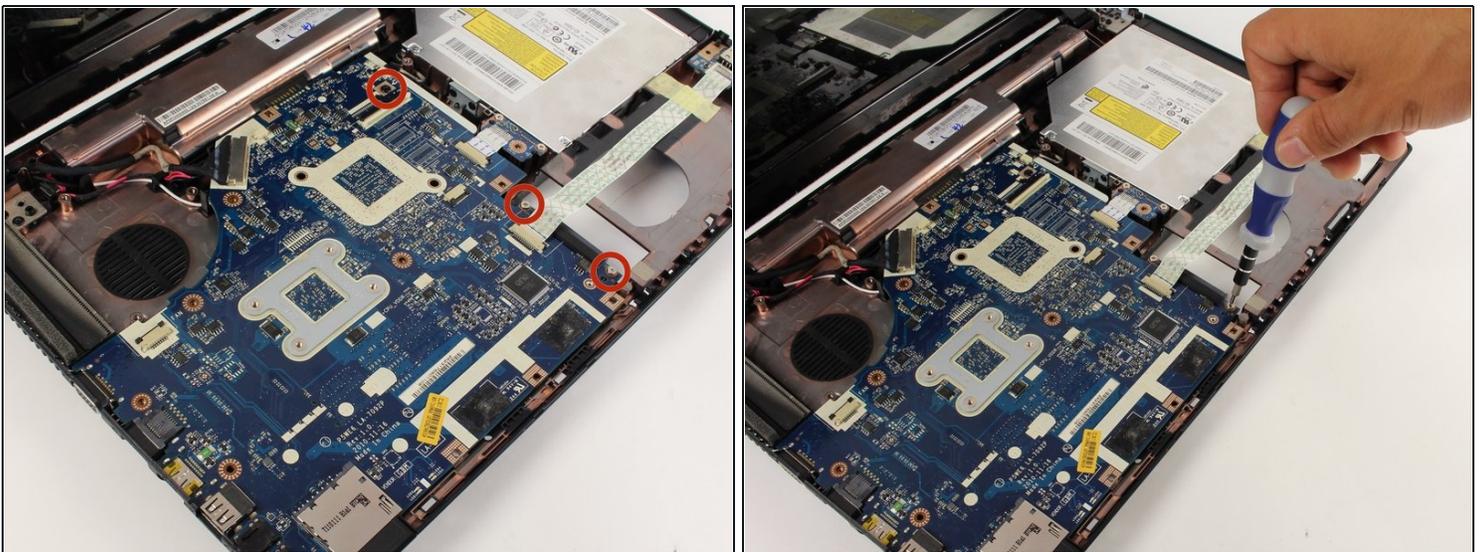
- Use tweezers to disconnect the wires connecting the fan to the laptop.

Step 27



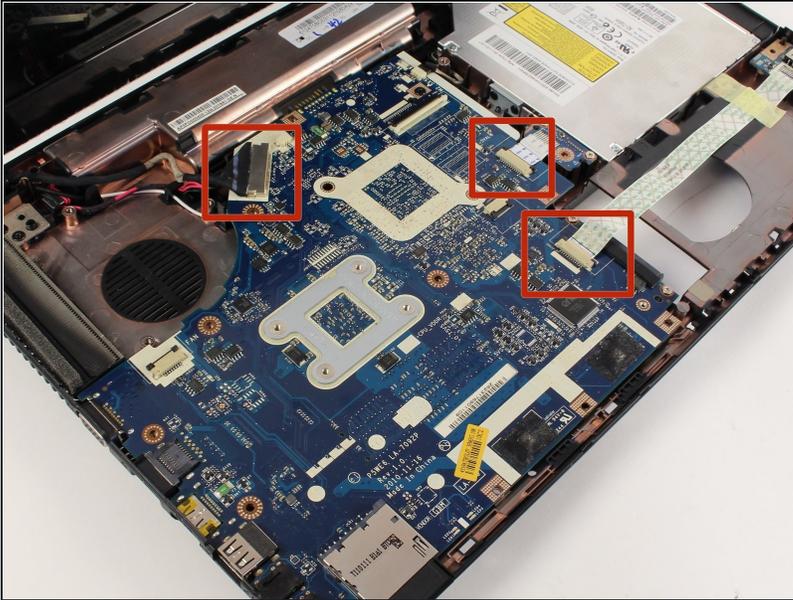
- Now the fan is fully disconnected and you can pull it away from the laptop.

Step 28 — Motherboard



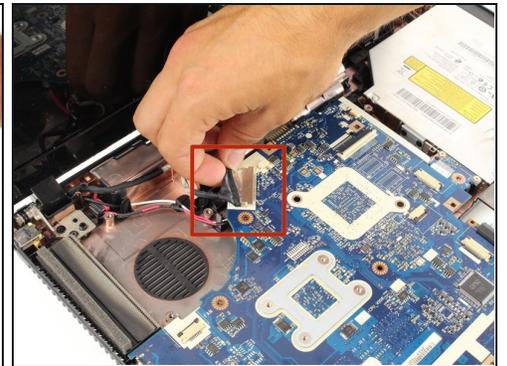
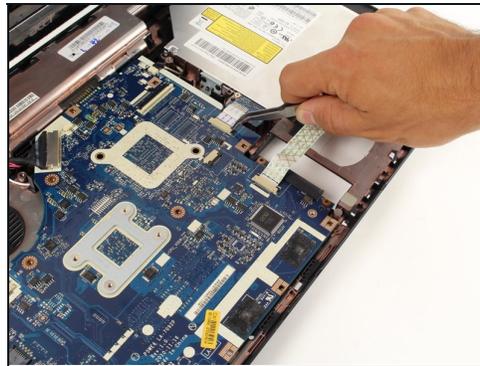
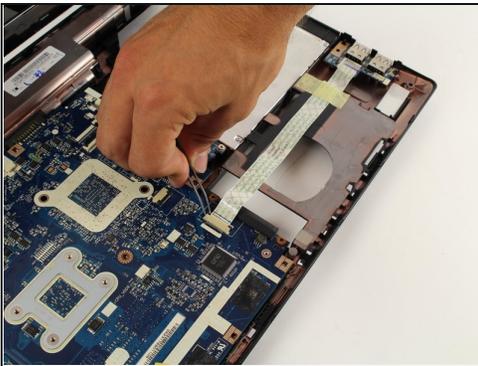
- Now locate the three 1/4" diameter head and 7/32" length screws shown in the picture, and remove them with a #00 Phillips screwdriver.

Step 29



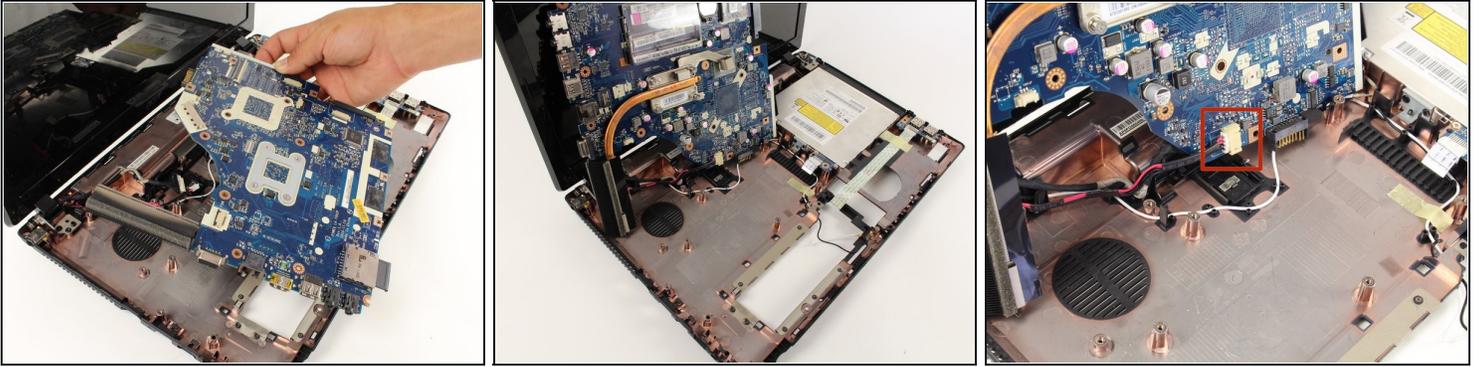
- Locate the two strips and the wire bundle that are connected to the motherboard from other components.

Step 30



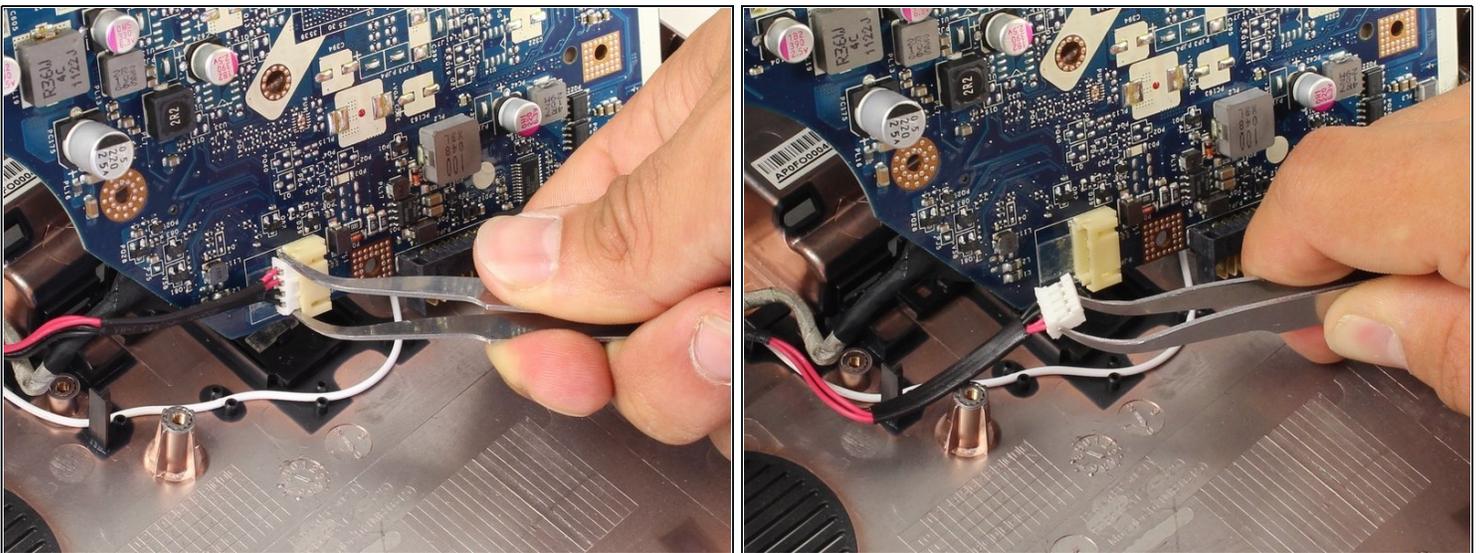
- Carefully remove the connections, as done previously for the keyboard.
- The third type of connector, highlighted in red, can simply be removed by pulling gently on one of its sides with your hand until it comes free.

Step 31



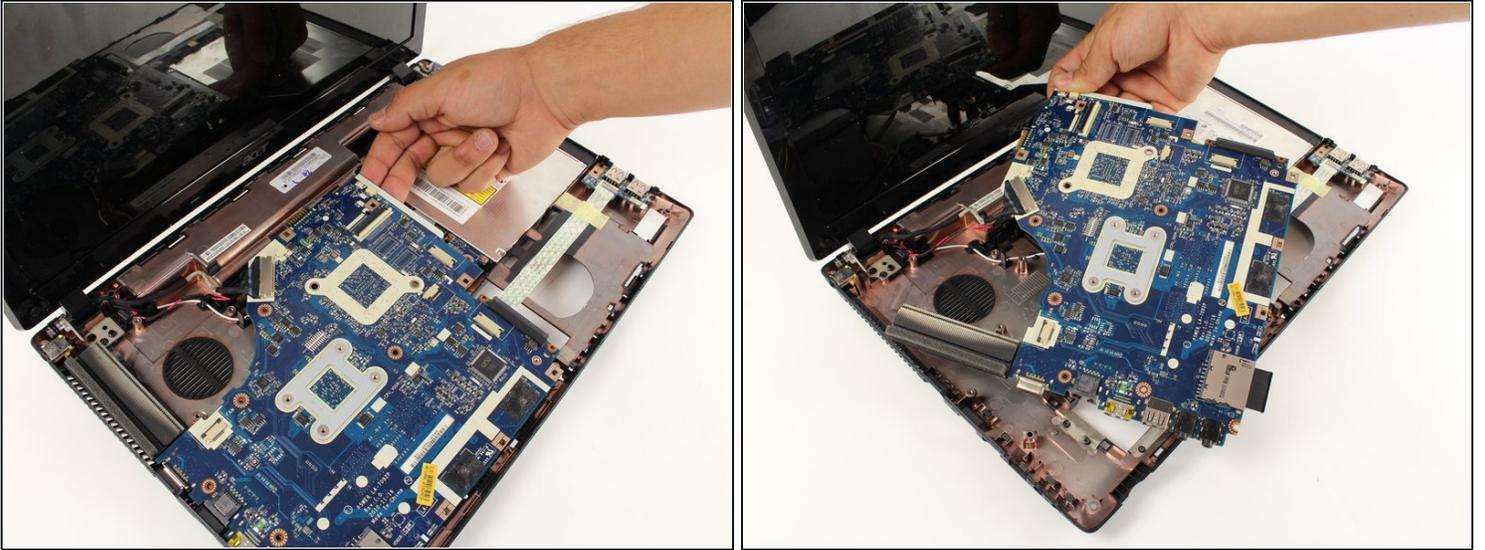
- Lift the motherboard carefully, and locate the last wire bundle that needs to be removed.

Step 32



- As done previously, carefully pull it out with the tweezers.

Step 33



- The motherboard should now be completely free of connections and easily removed.

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