



Acer E5-571-54FL Motherboard Replacement

This guide will aide you in replacing the motherboard. It will also be used in other repair guides.

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INTRODUCTION

The motherboard is like the central nervous system of your computer. If you have issues with your hardware, a faulty motherboard or a loose connection may be the problem.

TOOLS:

- [Phillips #0 Screwdriver \(1\)](#)
- [iFixit Opening Tools \(1\)](#)
- [Metal Spudger Set \(1\)](#)
- [ESD Safe Tweezers Blunt Nose \(1\)](#)
- [Tweezers \(1\)](#)

Step 1 — Battery



! Ensure the laptop is powered down prior to beginning.

- Turn the laptop over with the battery closest to your body.
- The battery release is just above the left side of the battery.

Step 2



- Insert a small tipped screwdriver or similar tool into the release.
- Gently slide the release all the way to the left.

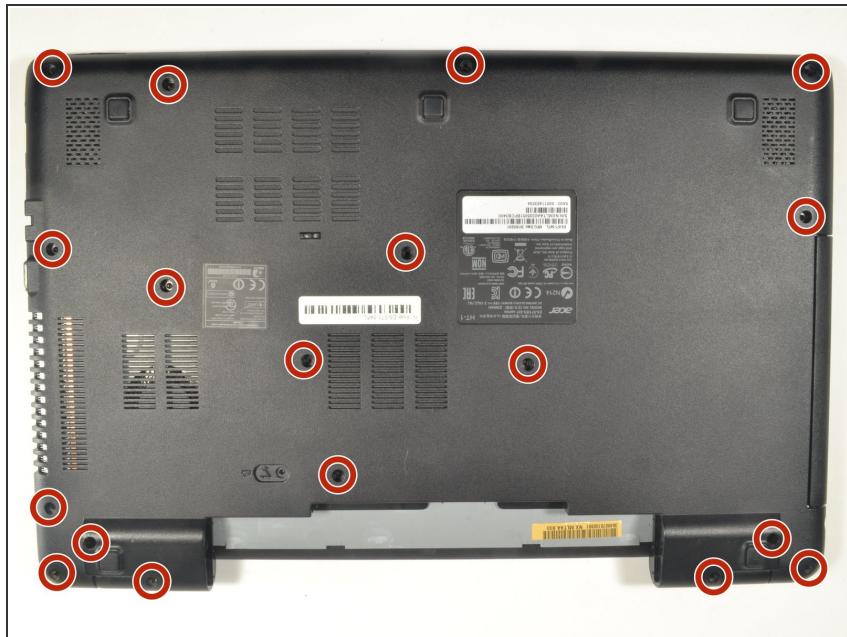
(i) You should hear a sound after the slide is all the way left. This lets you know the battery has disengaged.

Step 3



- With your hands on each end of the battery, carefully pull towards your body to remove.

Step 4 — Keyboard



- Using a #0 Phillips screwdriver, remove a total of eighteen identical 8mm Phillips screws and set them aside.

Step 5



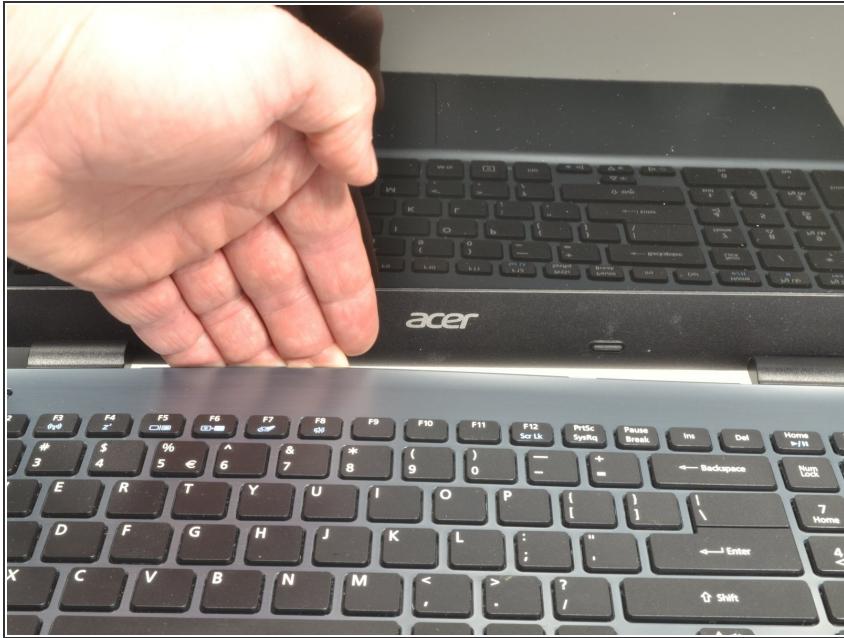
- Rotate the laptop 180 degrees so that the battery compartment is now furthest away from your body.

Step 6



- Turn the laptop over so that you can easily open the screen to a vertical position.

Step 7



- Put your fingers under the top of the keyboard assembly directly below the Acer logo.
- Carefully pull up on the center until you hear the tabs disengage from the bottom.

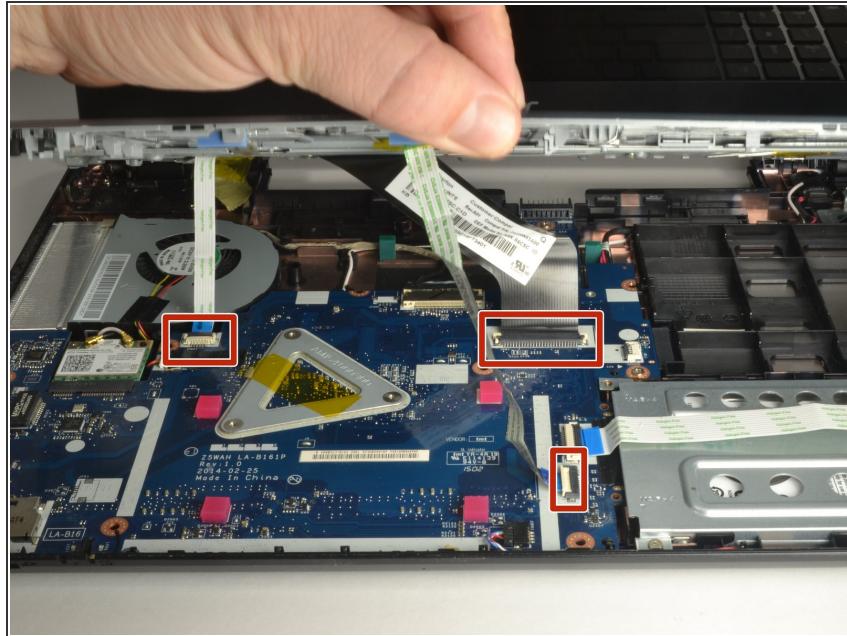
Step 8



- Work your way around the seam with the plastic opening tool carefully prying the base and top cover apart.

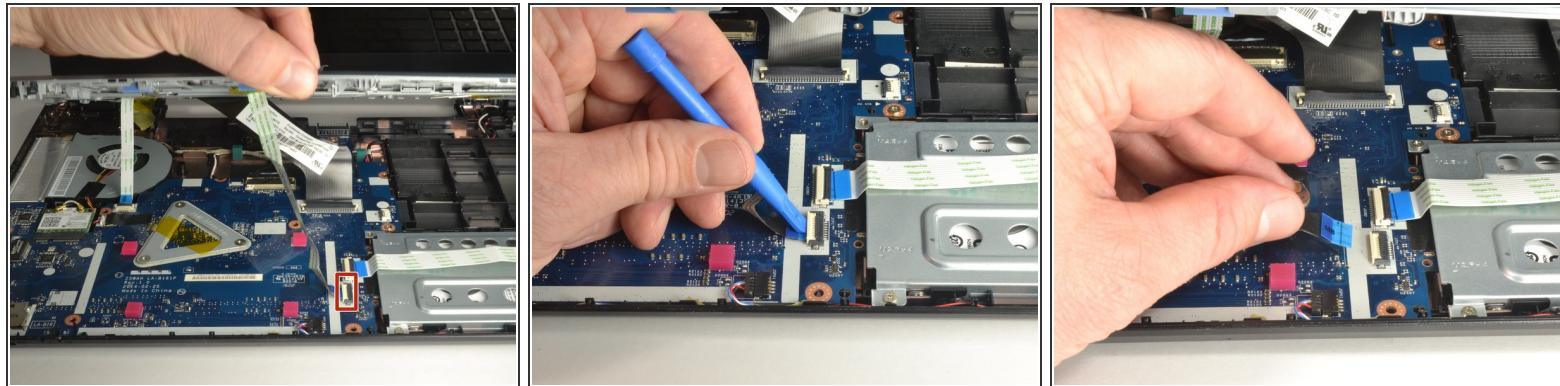
(i) If you have difficulty with the plastic opening tool, use a metal spudger ***but be more cautious*** to not damage or mar your laptop case.

Step 9



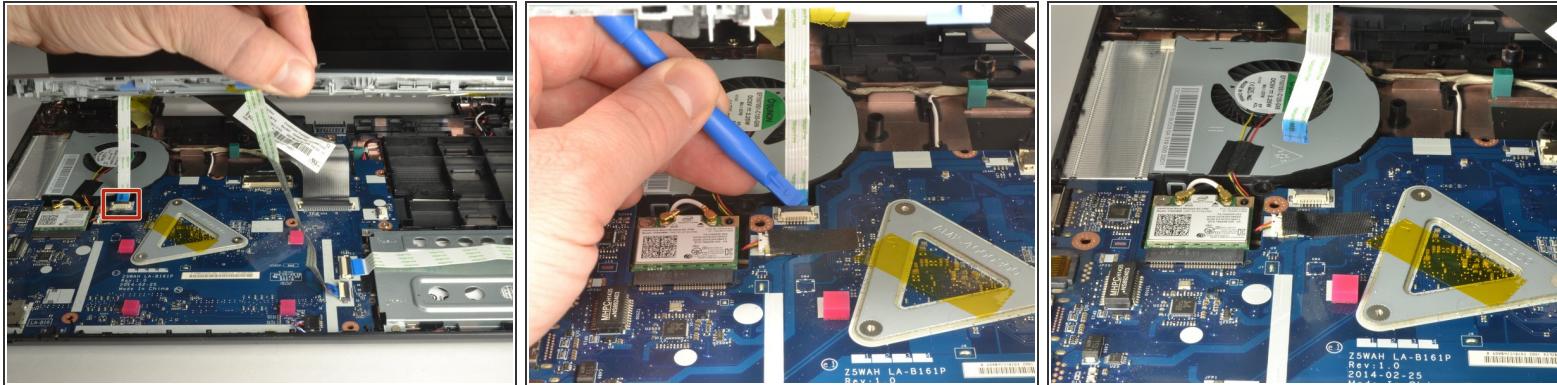
- When the two halves are separated, carefully lift up the front of the keyboard and touchpad assembly.
- You will see three ribbon cables attached to the motherboard.

Step 10



- Closest to the ribbon cable on the zero insertion force (ZIF) connector is a **white** locking tab.
- Carefully lift up on the locking tab with the plastic opening tool to release the ribbon cable. (Picture 2)
- Remove the ribbon cable from the connector.

Step 11



- Closest to the ribbon cable on the ZIF connector is a **black** locking tab.
- Carefully lift up on the locking tab with the plastic opening tool to release the ribbon cable. (Picture 2)
- Remove the ribbon cable from the connector.

Step 12



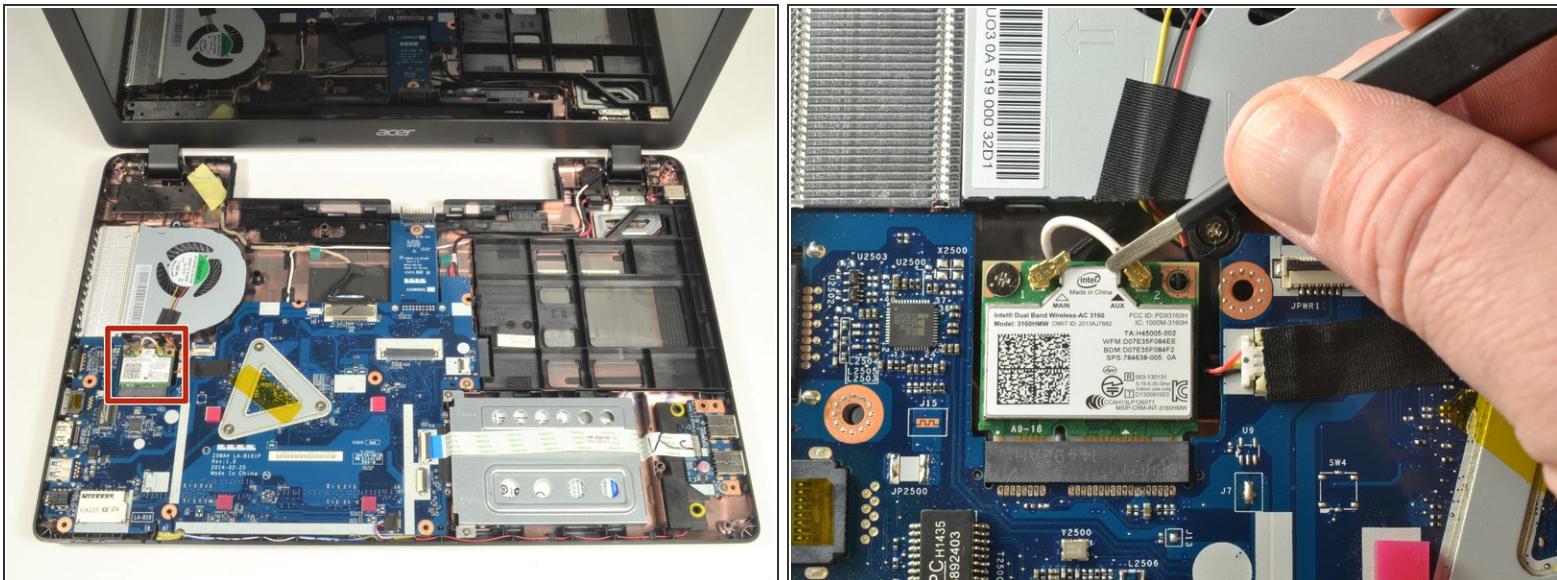
- On each side of the large connector there are two white tabs.
- Carefully push away from you with the plastic opening tool on each white tab to release the cable. (Picture 2)
- Remove the ribbon cable from the connector.

Step 13



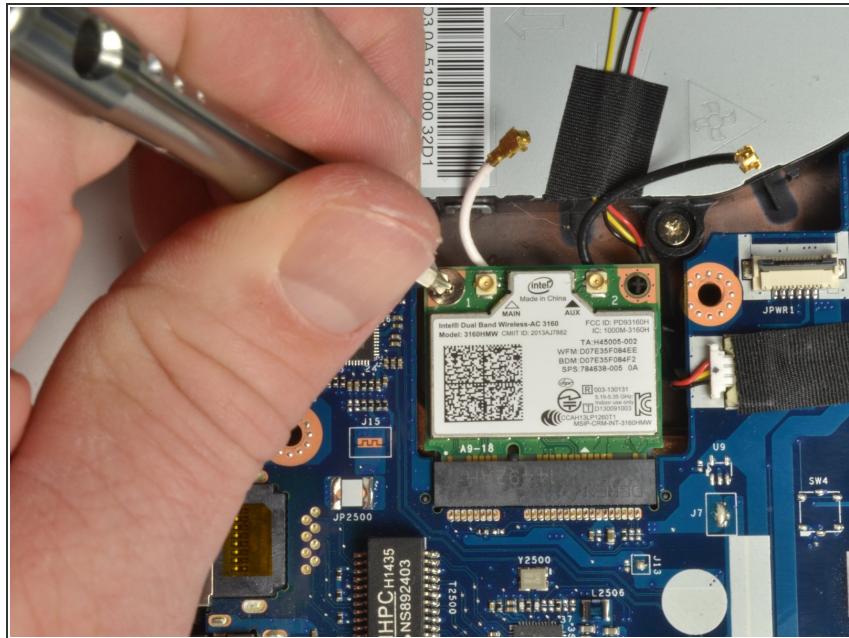
- Once all three ribbon cables are disconnected, lift off the top cover with the keyboard and touchpad.

Step 14 — WiFi Card



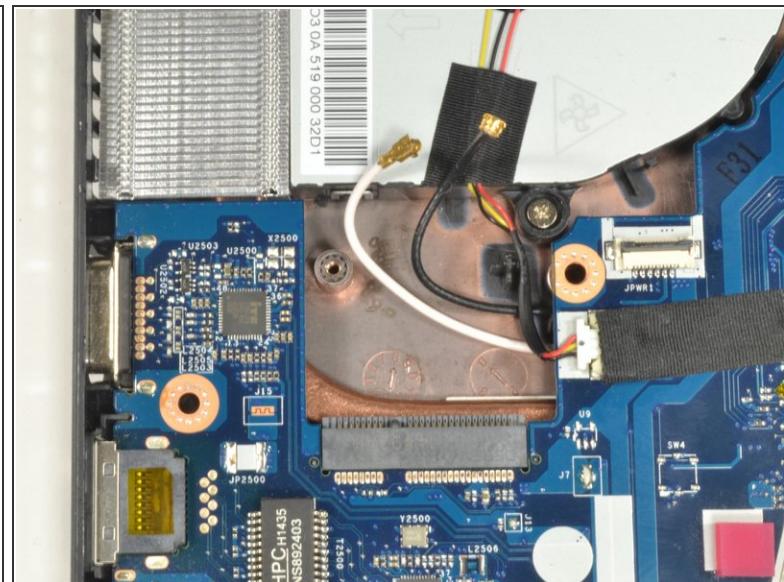
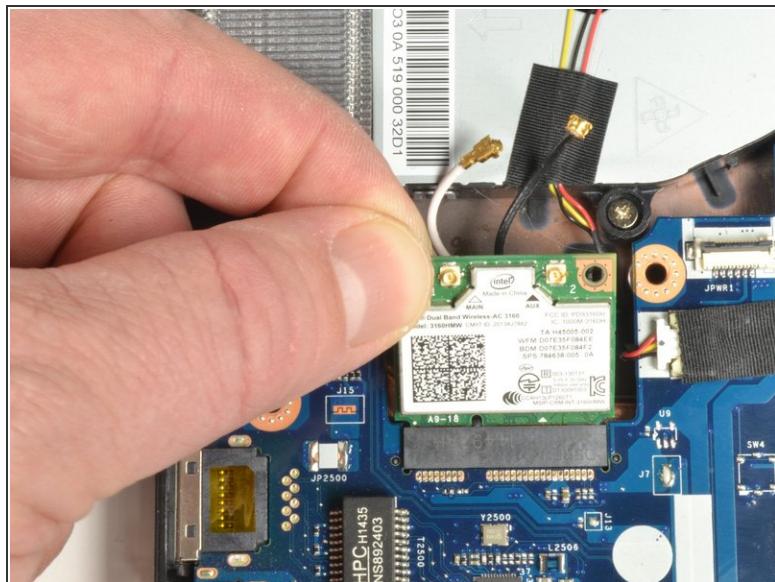
- The WiFi card is just below the fan with a white coaxial cable and a black coaxial cable attached.
- Using ESD safe blunt nose metal tweezers, grab just behind the brass connection on the white coaxial cable attached to the WiFi card.
- Carefully lift up and forward to disconnect the wire.
- Repeat both procedure one and two to remove the black coaxial cable.

Step 15



- Using a #0 Phillips screwdriver, remove the 3mm screw from the upper left corner of the WiFi card.
- *(i)* The edge of WiFi card will lift up as the screw is removed.

Step 16



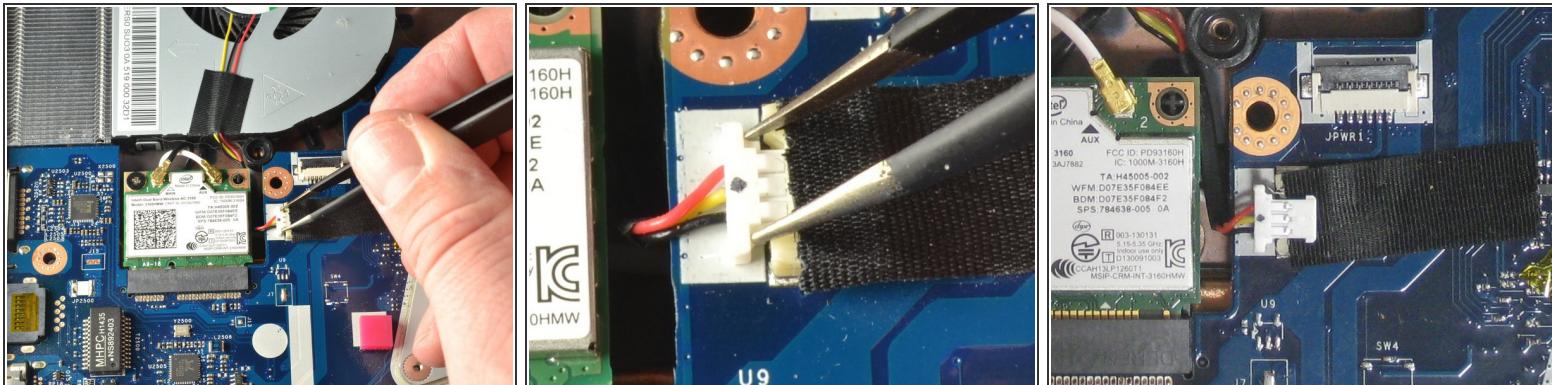
- Grab the upper left corner of the WiFi card with your fingers.
- Gently pull the WiFi card away from the socket.

Step 17 — Cooling Fan



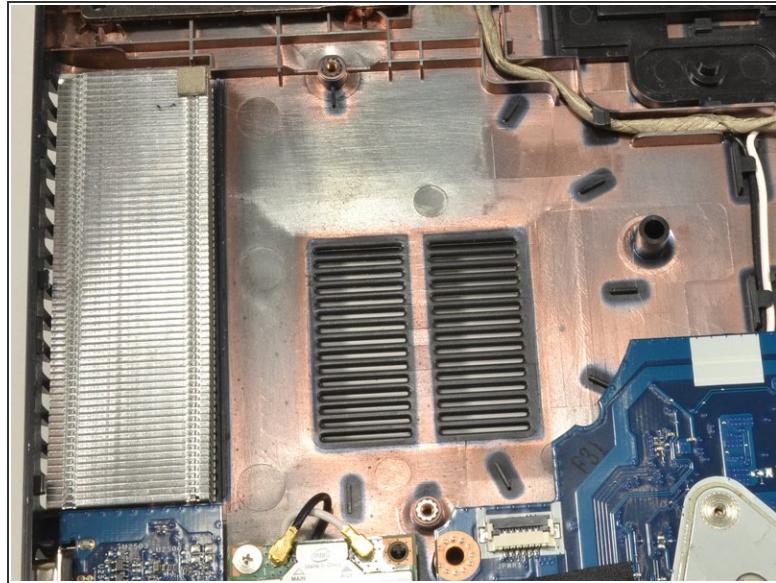
- The CPU Cooling Fan is in the upper left corner of the laptop.
- Using a #0 Phillips screwdriver, remove the two 4.5mm screws holding the fan to the case.

Step 18



- Place the tips of the ESD safe pointed tweezers between the plug and socket of the fan connection.
- Gently push left to disconnect the fan plug.
- Move the fan connector and wires free of the motherboard and WiFi card.

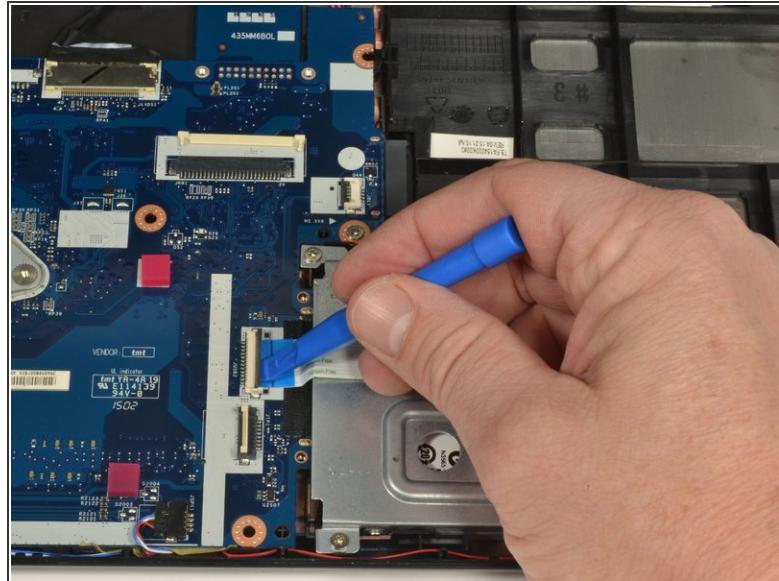
Step 19



- Lift the curved end of the fan about 30 degrees.
- Remove the fan by moving your hand up and to the right until it is clear of the case.

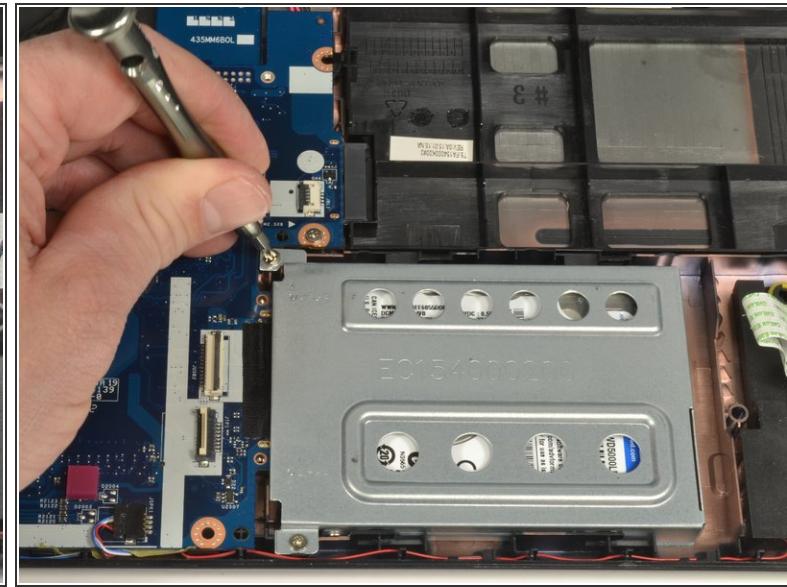
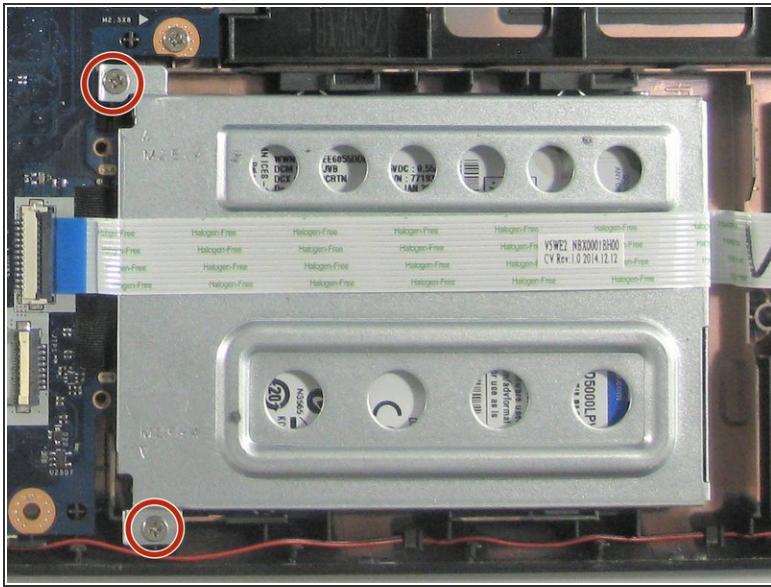
(i) If you feel resistance, check to be sure the fan connector and wires are not stuck under the motherboard or WiFi card.

Step 20 — Hard drive



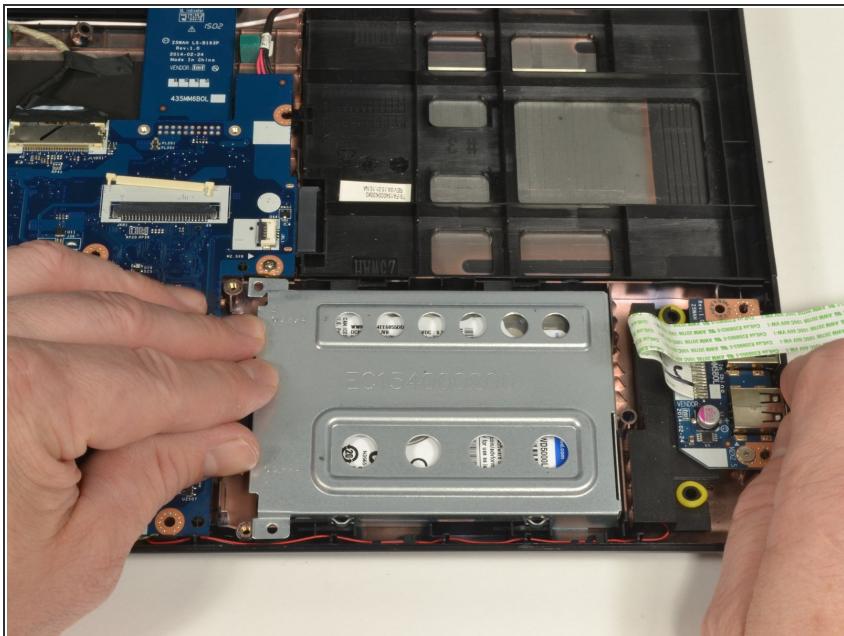
- The hard drive and carriage are at the lower right of the laptop.
- Using the plastic opening tool, carefully lift up on the **black** locking tab of the ZIF connector to release the USB port ribbon cable.
- Move the USB port ribbon cable out of the way

Step 21



- Using a #0 Phillips screwdriver, remove the two 4mm screws securing the hard drive carriage in place.

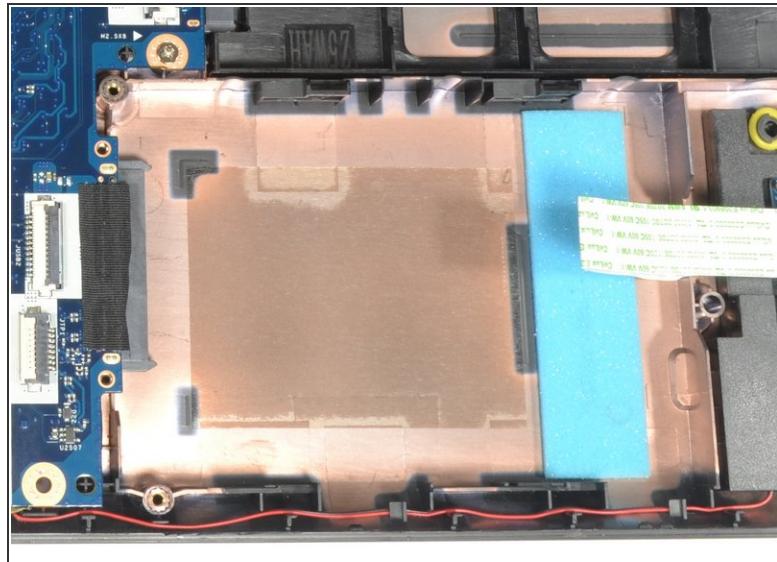
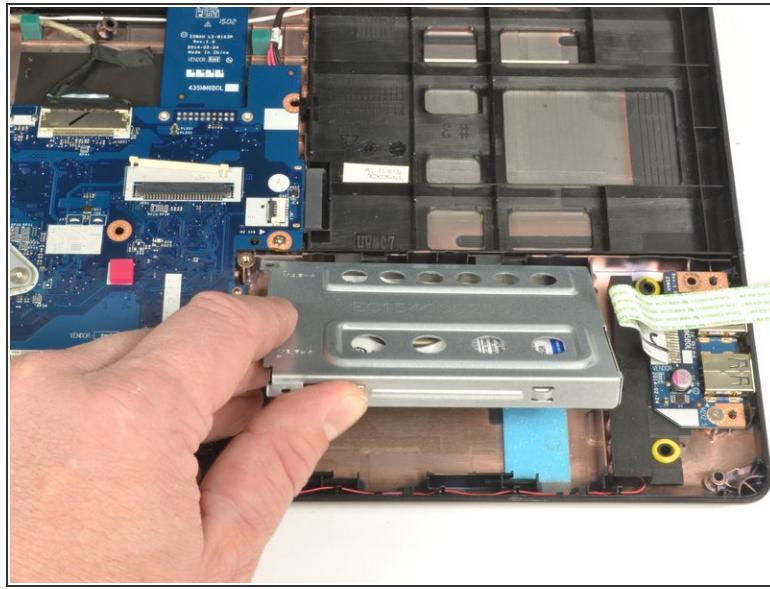
Step 22



- Hold the right side of the laptop in place with your right hand.
- Put the fingers of your left hand along the top edge of the hard drive carriage.
- Push the hard drive carriage towards your right hand to disconnect it from the motherboard.

i This procedure may require more force than other procedures.

Step 23



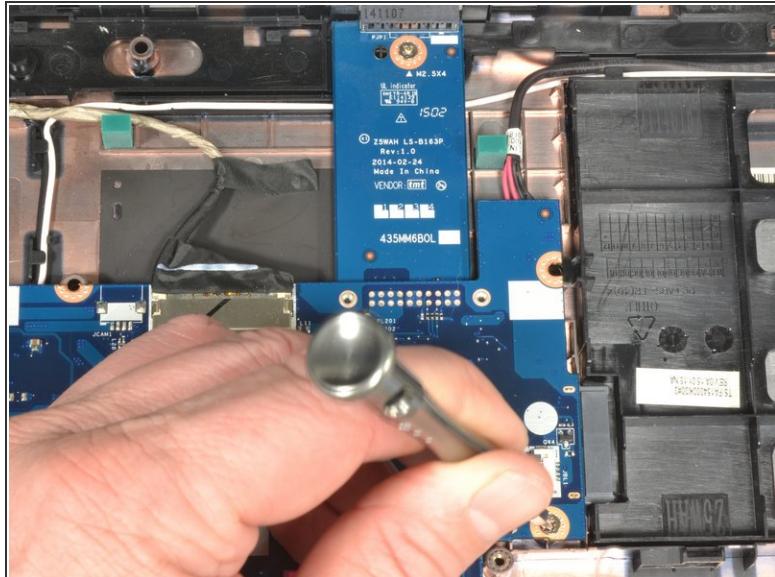
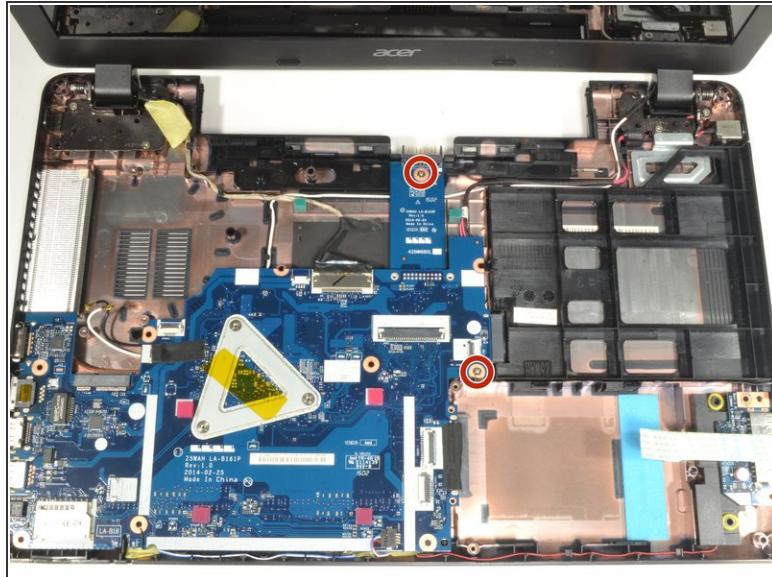
- Lift up on the edge of the hard drive carriage closest to your body to remove the carriage.
- ⓘ If doing the motherboard replacement guide, skip the next step.

Step 24



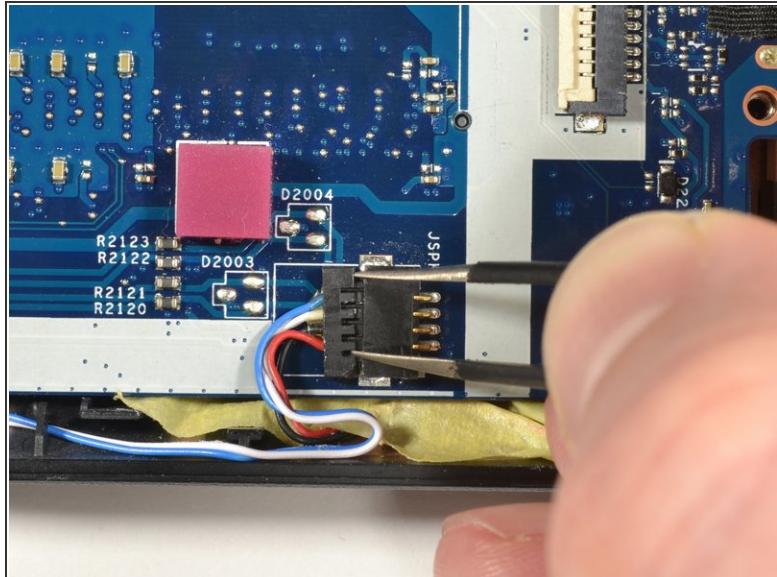
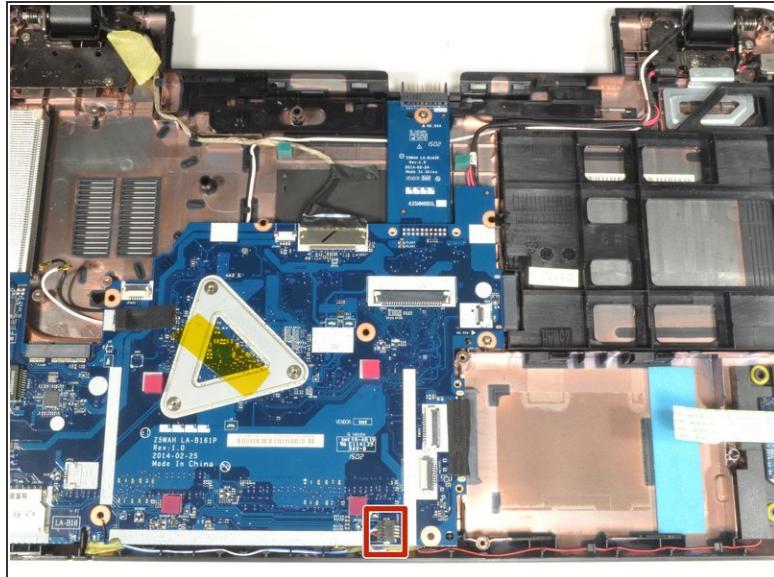
- There are two 3mm Phillips screws holding the hard drive into the carriage. One on either side of the carriage.
- Hold the hard drive carriage with your non-dominant hand along one side. Ensure one of the Phillips screws is visible.
- Using a #0 Phillips screwdriver, remove the 3mm screw to release the side of the hard drive from the carriage.
- Repeat the two previous procedures to remove the second 3mm Phillips screw freeing the hard drive from the carriage.

Step 25 — Motherboard



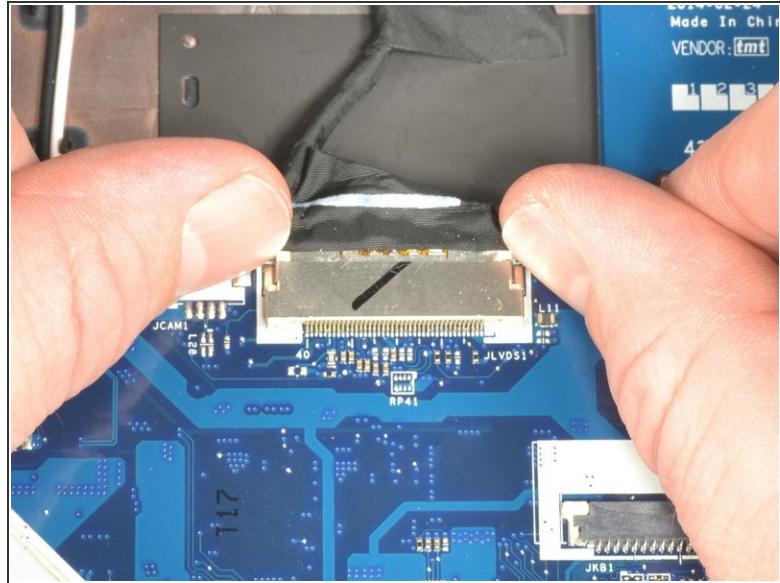
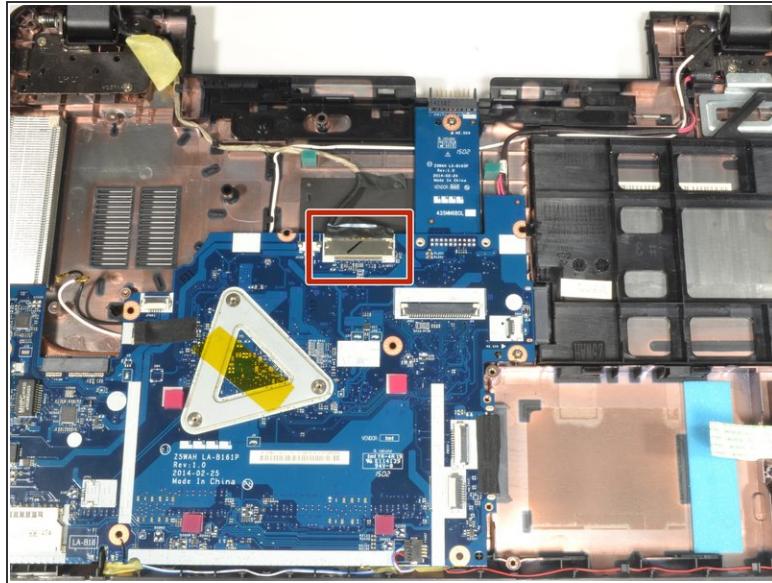
- Using a #0 Phillips screwdriver, remove the two 4mm screws and set them aside.

Step 26



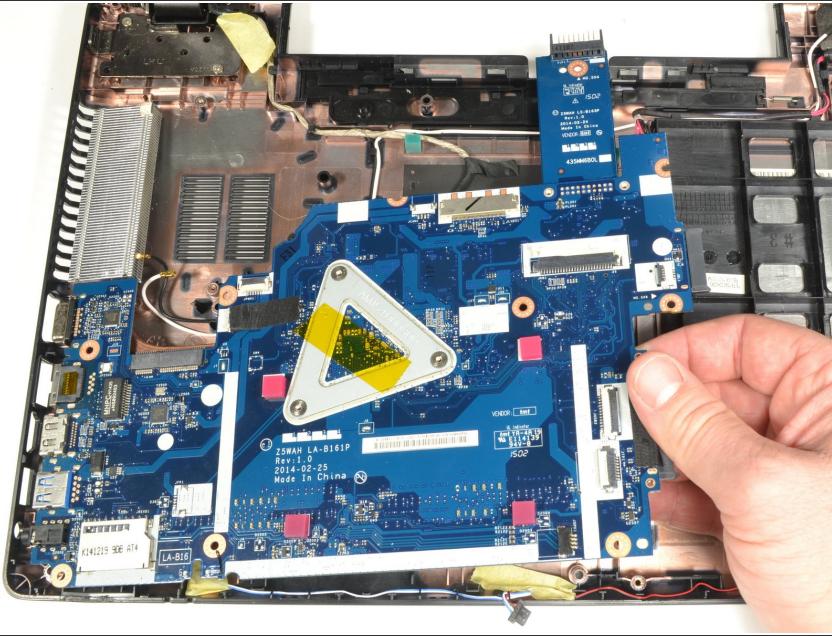
- The three wire speaker connection is centered at the edge of the motherboard closest to your body.
- Place the tips of the ESD safe pointed tweezers between the plug and socket of the speaker connection.
- Gently push left to disconnect the speaker plug.

Step 27



- The screen connection is centered on the motherboard furthest from your body.
- With your fingernails on each side of the plug, gently push away from your body to disconnect it.

Step 28

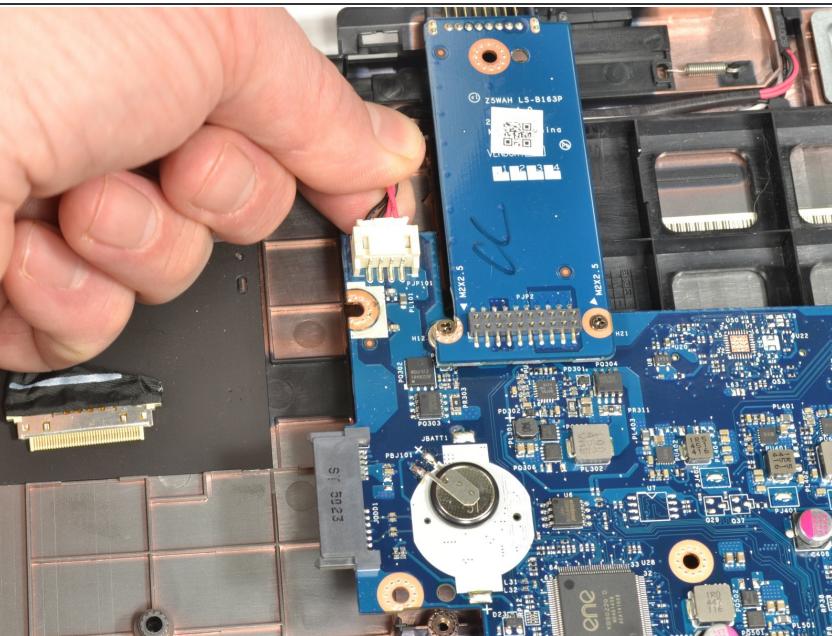


- Carefully lift up on the right edge of the motherboard near the hard drive connector.
- With minimal force, pull the motherboard to the right freeing the ports on the left from the case.
- Put down the right side and allow the motherboard to rest in the case.

i There is still one connection to be removed which lies underneath the motherboard.

- Lift the left side of the motherboard up and turn it over so the ports are now facing right.

Step 29



- Grip the bottom edge of the motherboard closest to your body with your non-dominant hand.
- Grip the power connection wires with your dominant hand and gently pull away from your body to disconnect.

Step 30



- Lift the motherboard out of the case.

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