



# Acer E5-571-54FL Motherboard Replacement

The motherboard is like the central nervous...

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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.

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## TOOLS:

Phillips #0 Screwdriver (1)

iFixit Opening Tool (1)

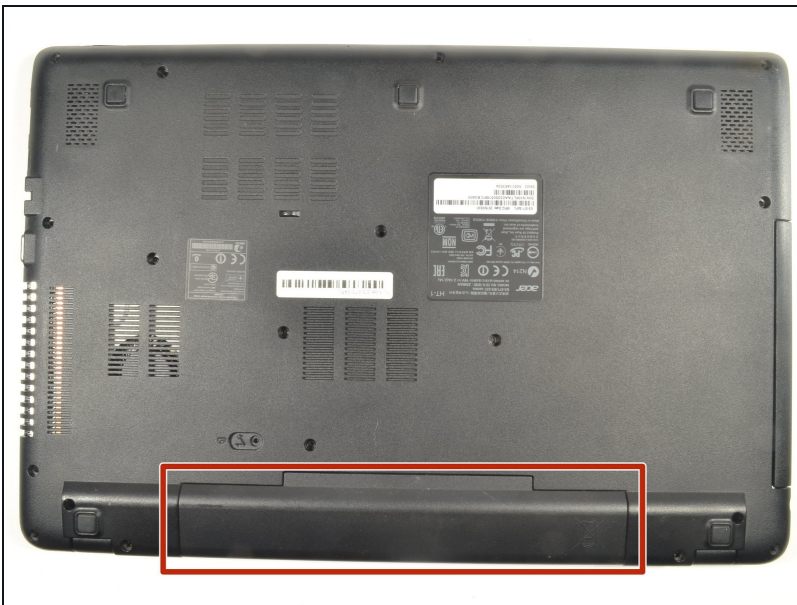
Metal Spudger Set (1)

ESD Safe Blunt Nose Tweezers (1)

Tweezers (1)

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## Step 1 — Battery



- Power down the laptop prior to beginning.
- Turn the laptop over with the battery closest to your body.

## Step 2



- Insert the pointed end of a spudger into the battery release.
  - Slide the release gently all the way to the left.
- ❗ You should hear a sound after the slide is all the way left. This lets you know the battery has disengaged.

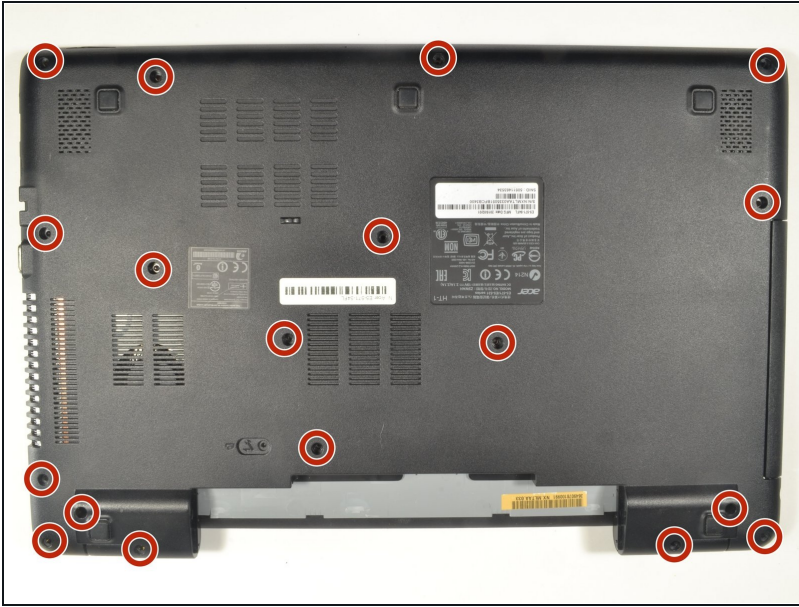
## Step 3



- Place your hands on each end of the battery.
- Pull the battery towards your body to remove it.



## 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.

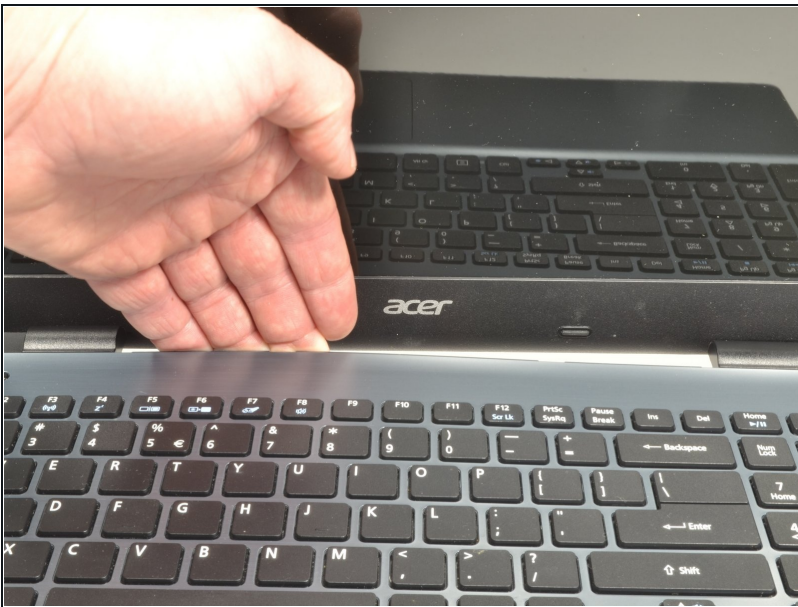


## Step 6



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

## Step 7



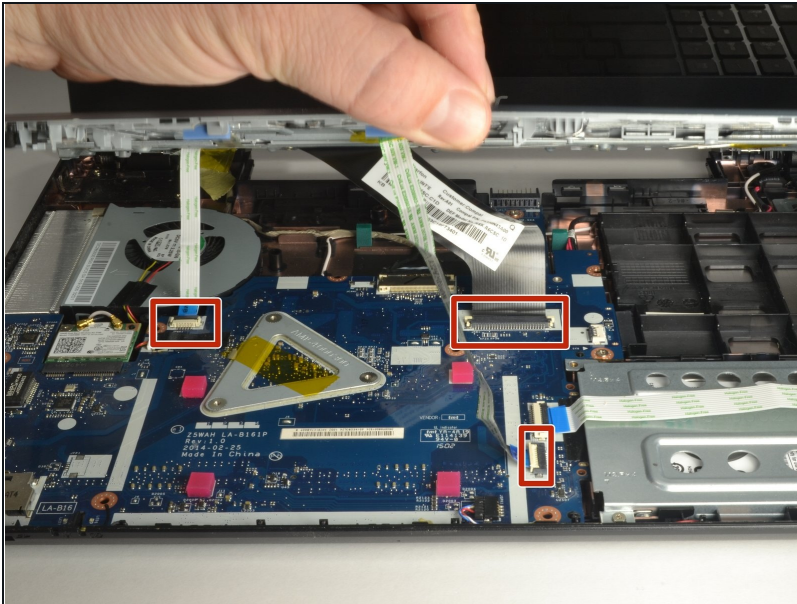
- Put your fingers under the top of the keyboard assembly directly below the Acer logo.
- Carefully pull up on the center until you hear the tabs disengage from the bottom.

## Step 8



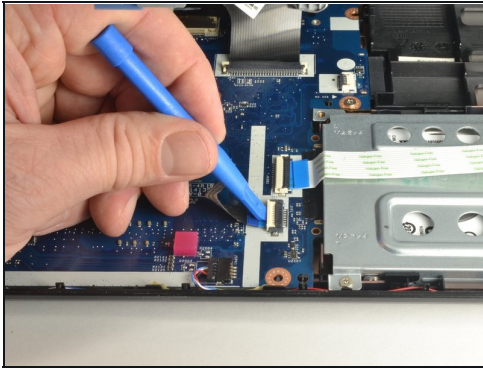
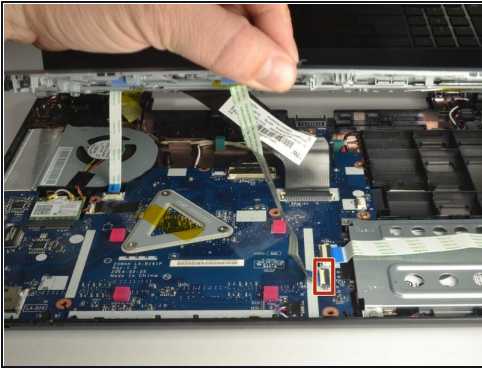
- Work your way around the seam with the plastic opening tool carefully prying the base and top cover apart.
- ① If you have difficulty with the plastic opening tool, use a metal spudger **but be more cautious** to not damage or mar your laptop case.

## Step 9



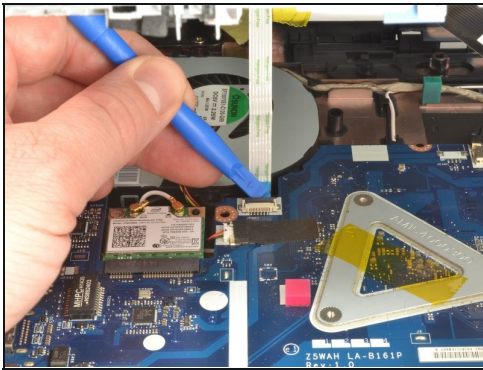
- When the two halves are separated, carefully lift up the front of the keyboard and touchpad assembly.
- You will see three ribbon cables attached to the motherboard.

## 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.

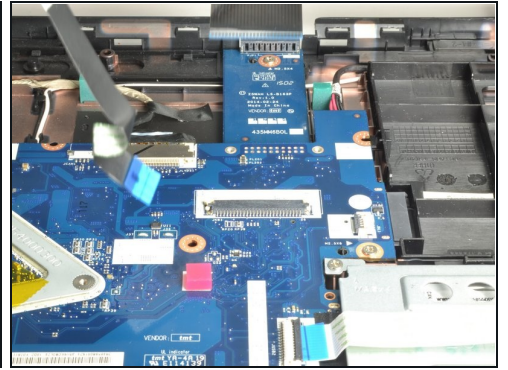
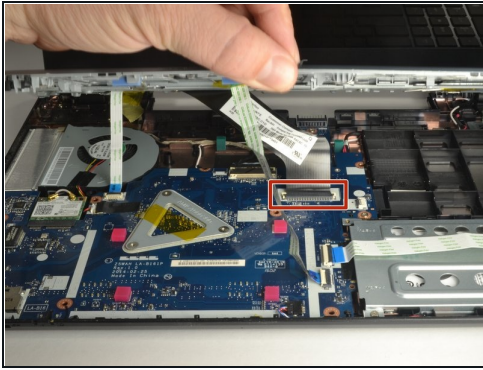
## Step 11



- 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.

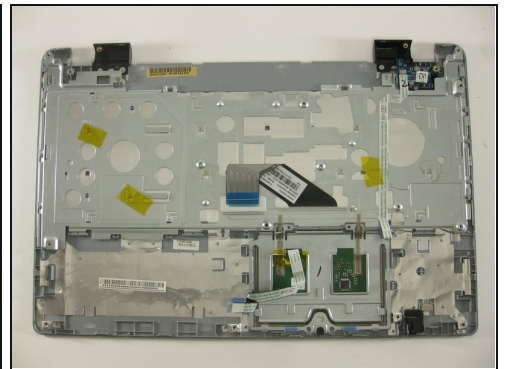


## Step 12



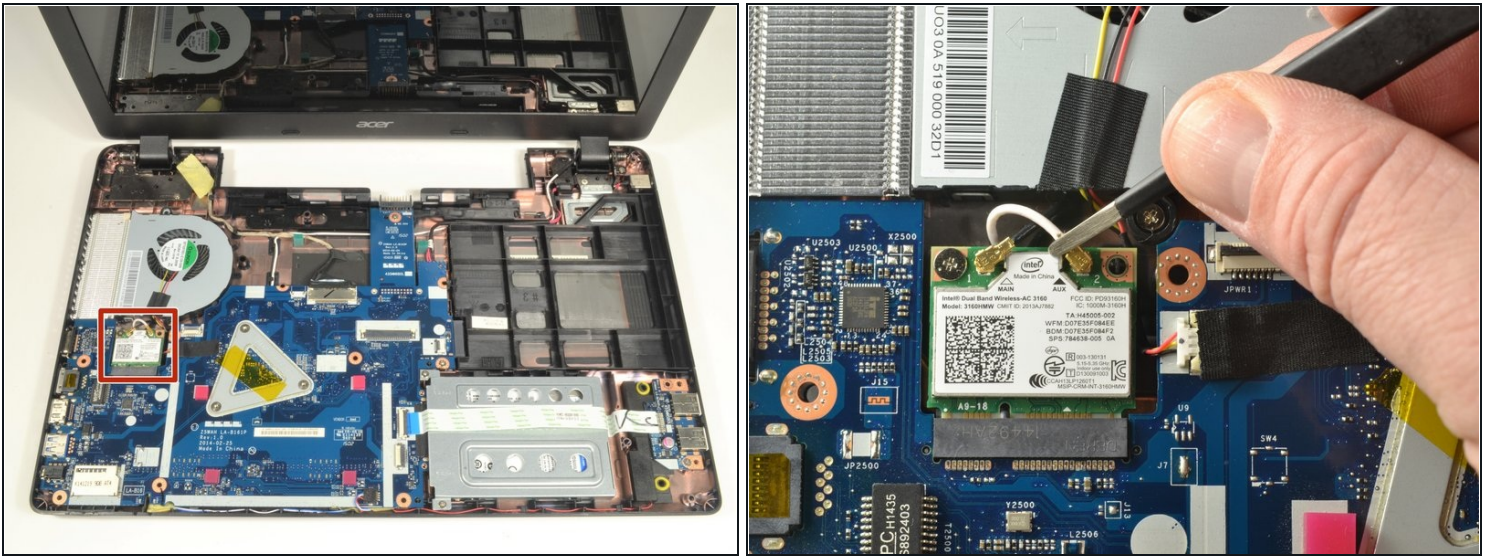
- On each side of the large connector there are two white tabs.
- Carefully push away from you with the plastic opening tool on each white tab to release the cable. (Picture 2)
- Remove the ribbon cable from the connector.

## Step 13



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

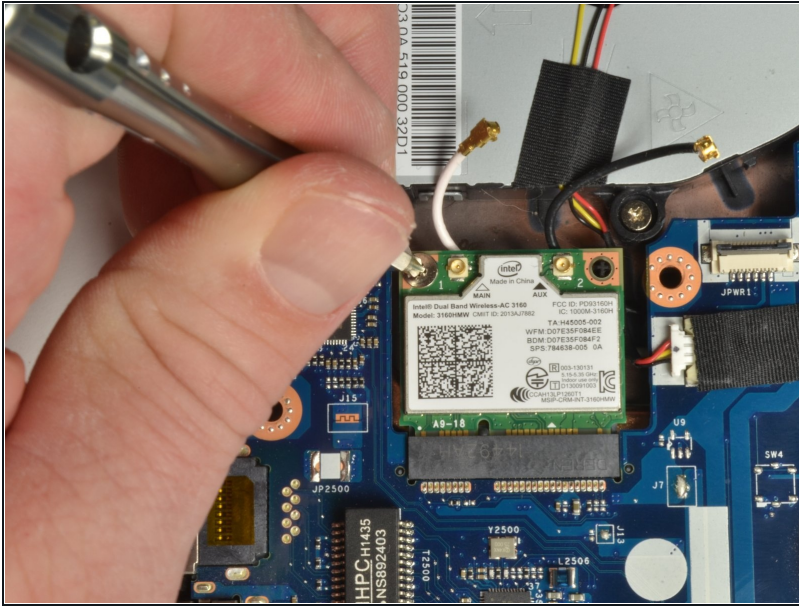
## Step 14 — WiFi Card



- Locate the WiFi card. It is just below the fan and has a white coaxial cable and a black coaxial cable attached to it.
- Grab the section of the white coaxial cable behind the brass connection using ESD safe blunt nose metal tweezers.
- Carefully lift the white coaxial cable up and forward to disconnect the it from the WiFi card.
- Repeat the previous two bullet points to disconnect the black coaxial cable from the WiFi card.

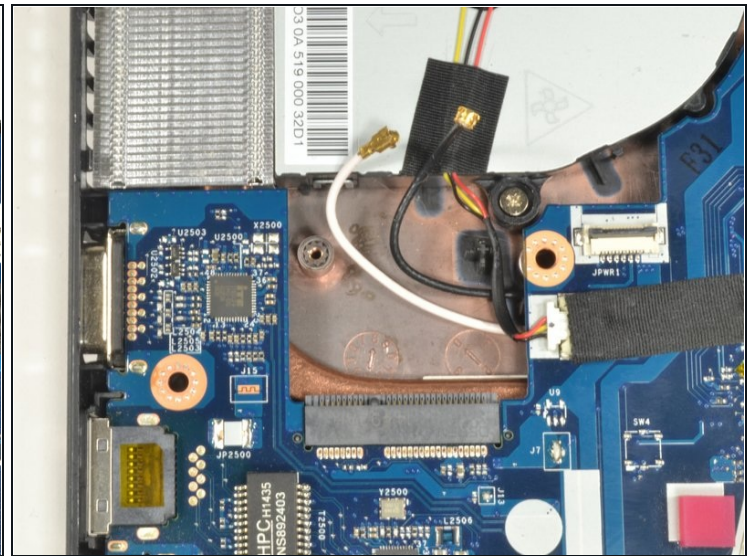
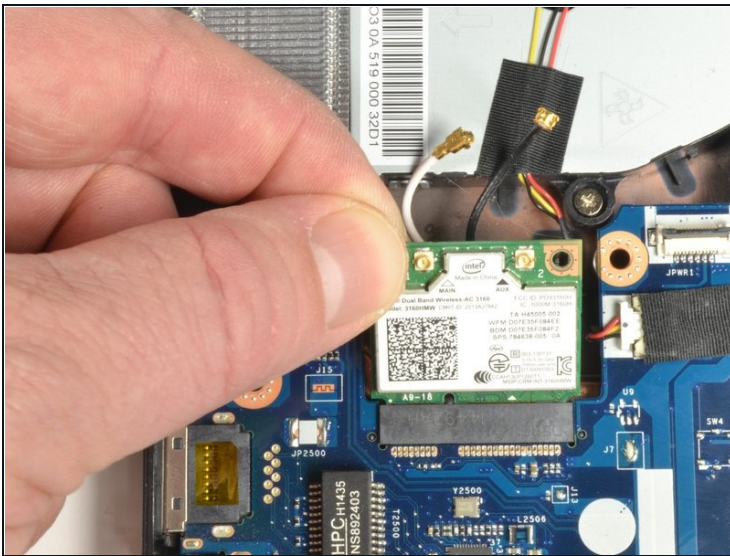


## Step 15



- Use a #0 Phillips screwdriver to remove the 3 mm screw from the upper left corner of the WiFi card.
- ❗ The edge of WiFi card will lift up as the screw is removed.

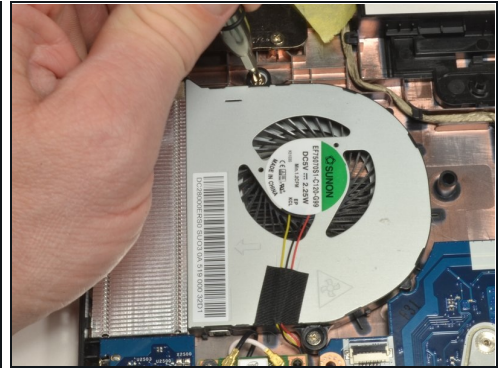
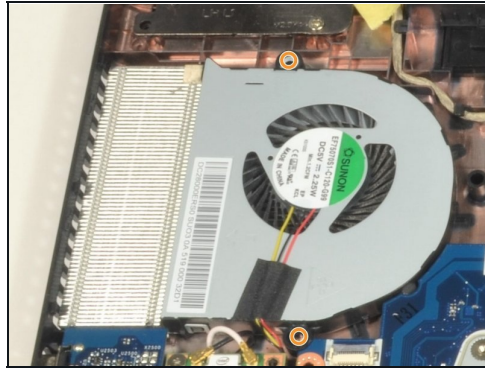
## Step 16



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

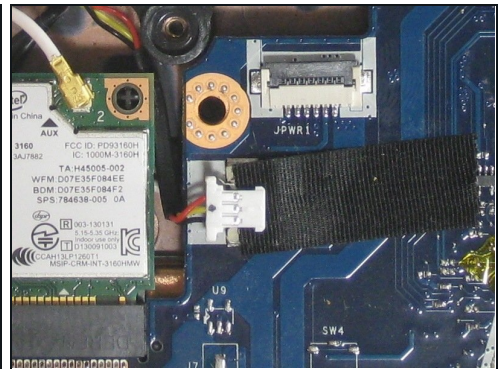
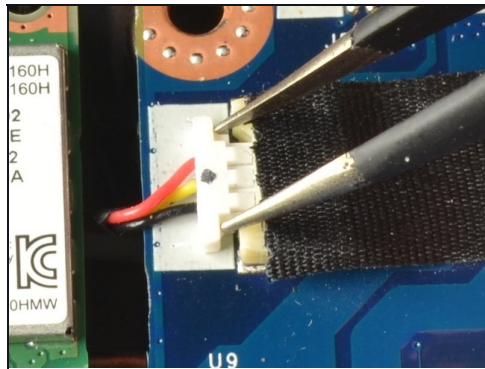
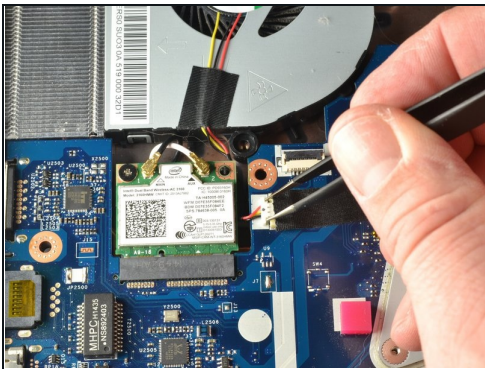


## Step 17 — Cooling Fan



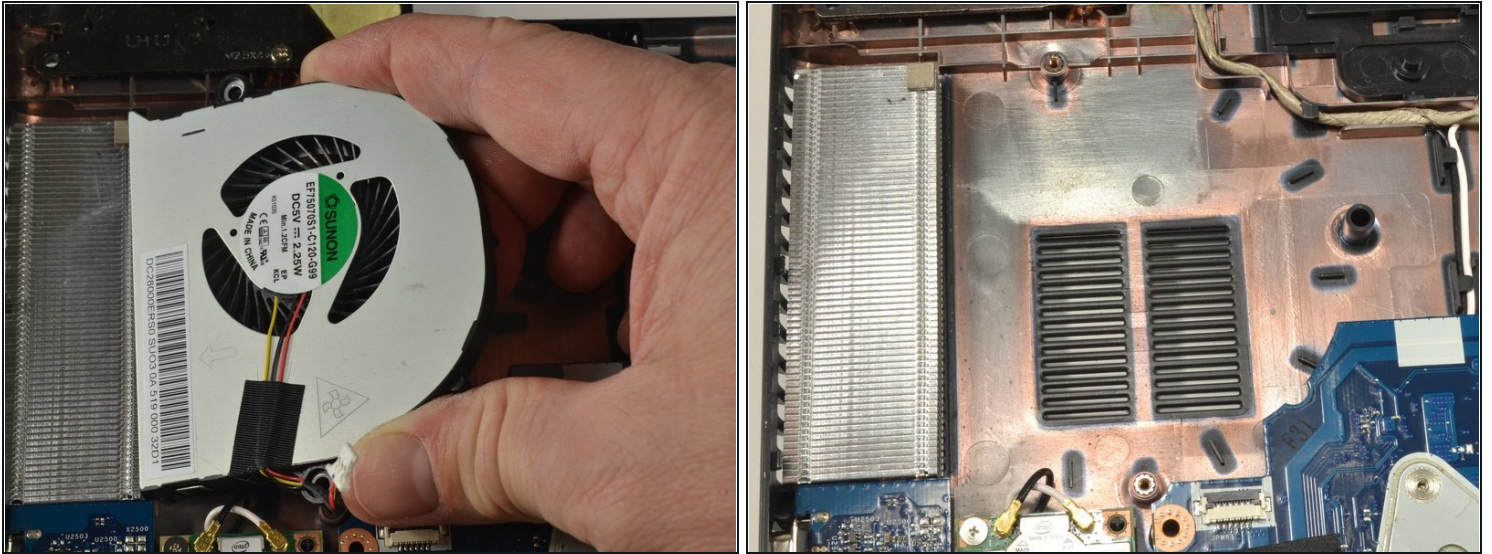
- Locate the CPU cooling fan in the upper left corner of the laptop.
- Using a #0 Phillips screwdriver, remove the two 4.5 mm screws that secure the fan to the case.

## Step 18



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

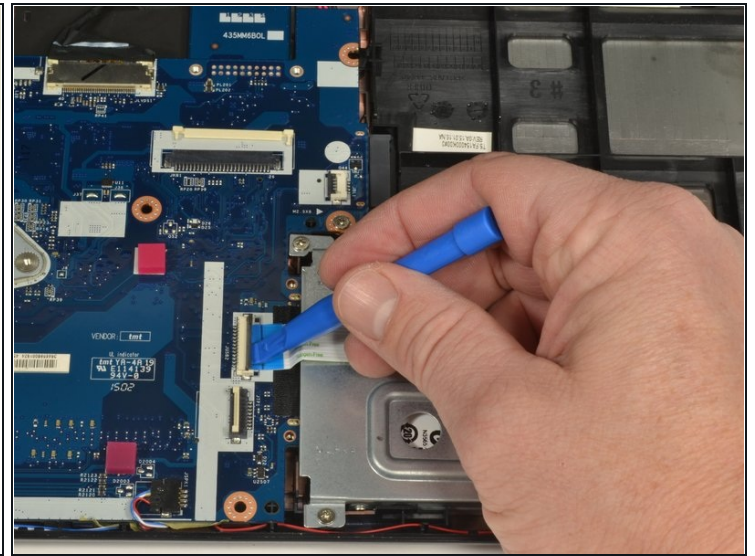
## Step 19



- Lift the curved end of the fan by about 30 degrees.
  - Use your hand to lift the fan up and to the right until it is clear of the case.
- ⓘ If you feel resistance, check if the fan connector and wires are stuck under the motherboard or under the WiFi card. If the connector or wires are stuck, gently free them.

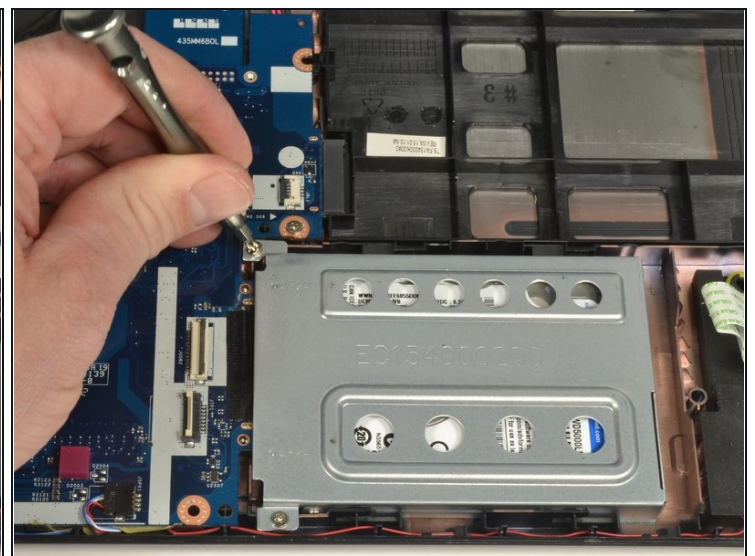
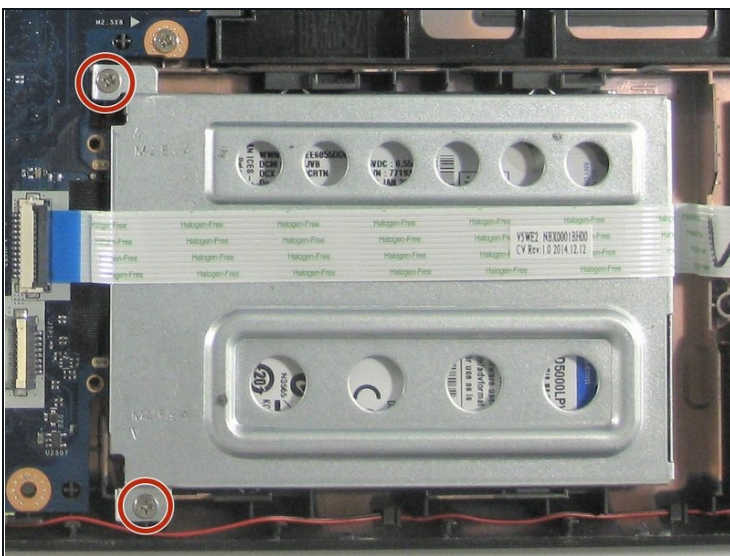


## Step 20 — Hard drive



- Locate the hard drive and its carriage at the lower right corner of the laptop.
- Release the USB port ribbon cable by using the plastic opening tool to carefully lift up the black locking tab of the ZIF connector.
- Move the USB port ribbon cable to the side.

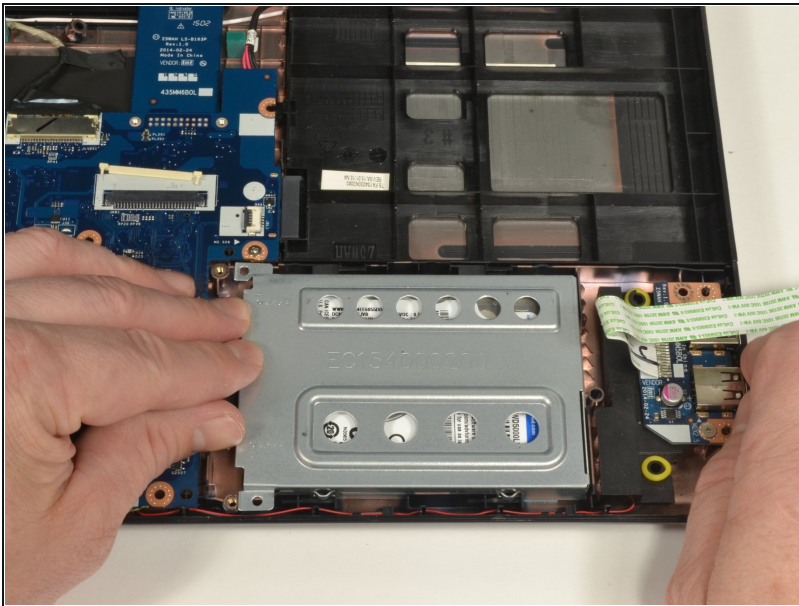
## Step 21



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

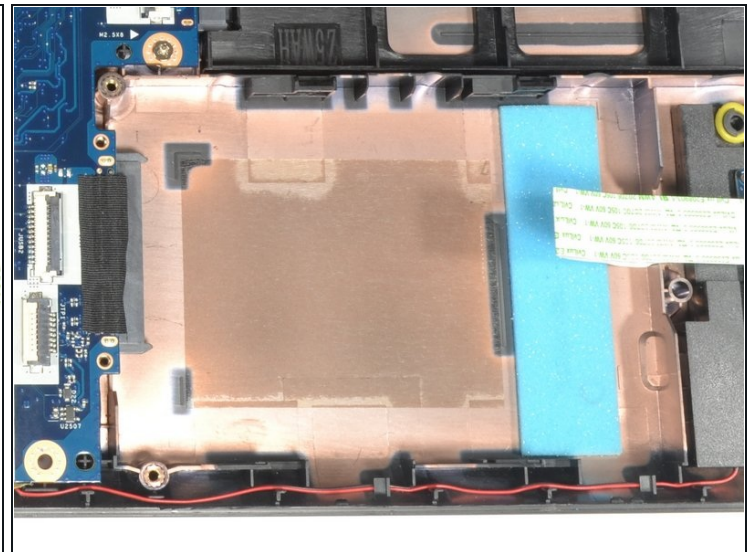
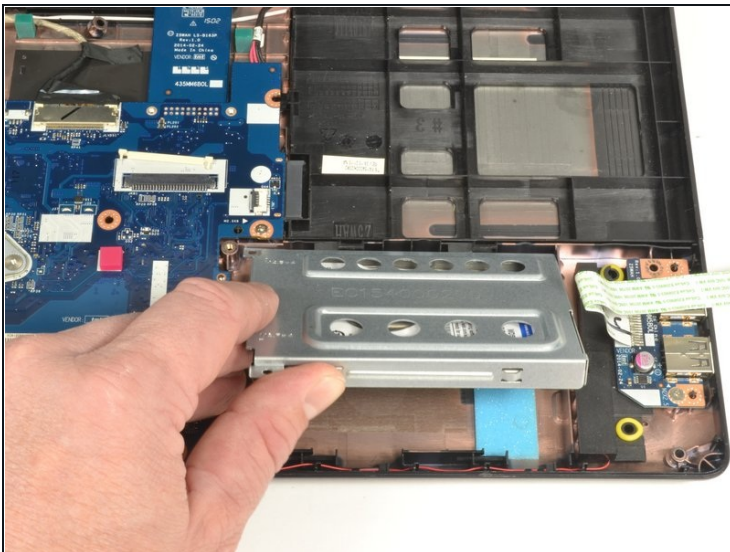


## Step 22



- 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.
- ⓘ This procedure may require more force than other procedures.

## Step 23



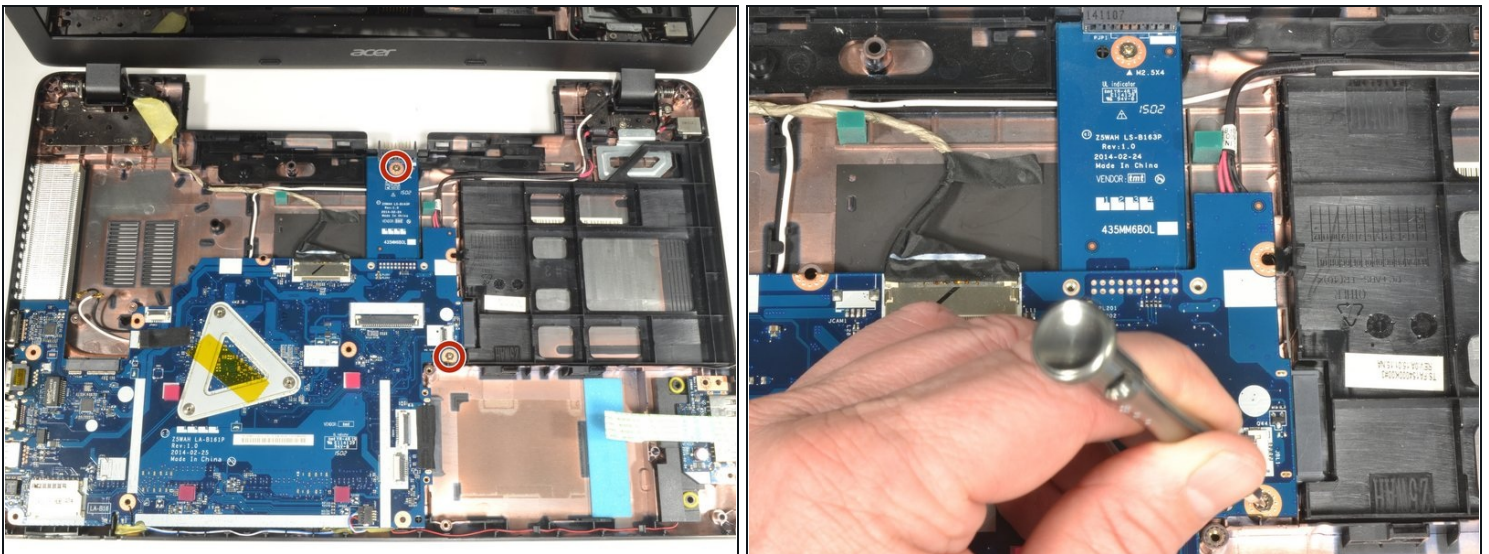
- Lift up the hard drive carriage on the edge closest to your body to remove it.
- ⓘ If doing the motherboard replacement guide, skip the next step.

## Step 24



- Locate the two 3 mm Phillips screws holding the hard drive into the carriage. There is one screw on each 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 3 mm screw to release the side of the hard drive from the carriage.
- Repeat the two previous bullet marks to remove the second 3 mm Phillips screw. This should also free the hard drive from the carriage.

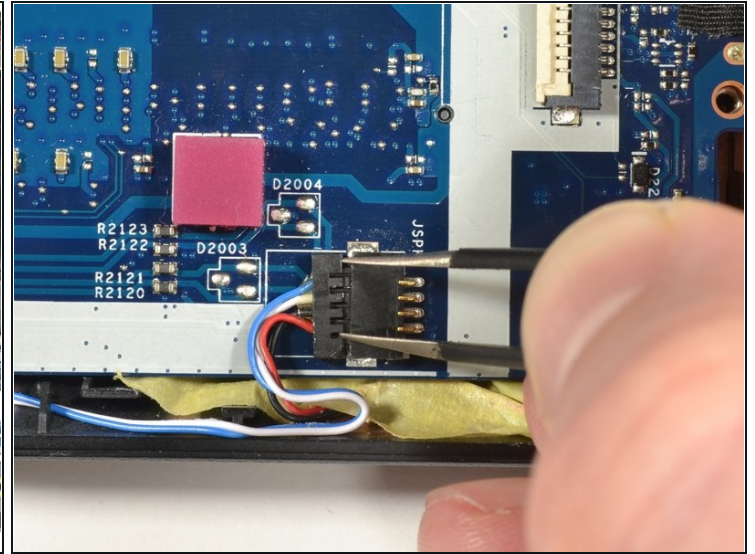
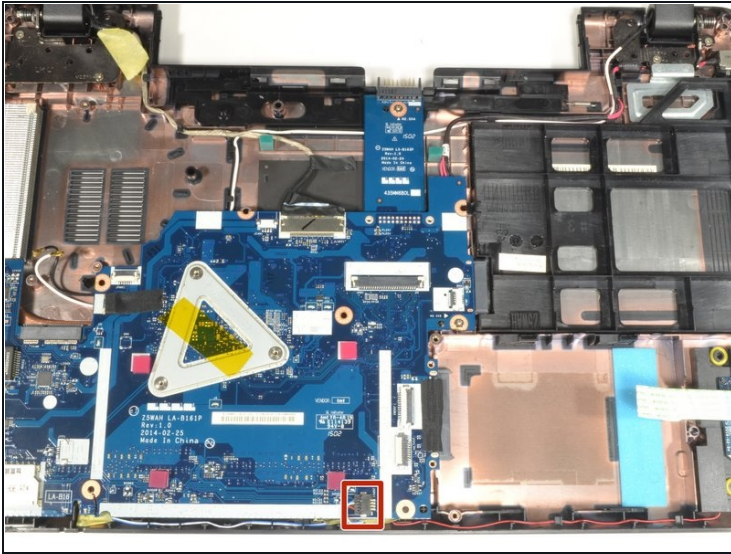
## Step 25 — Motherboard



- Use a #0 Phillips screwdriver to remove the two pictured 4 mm screws.



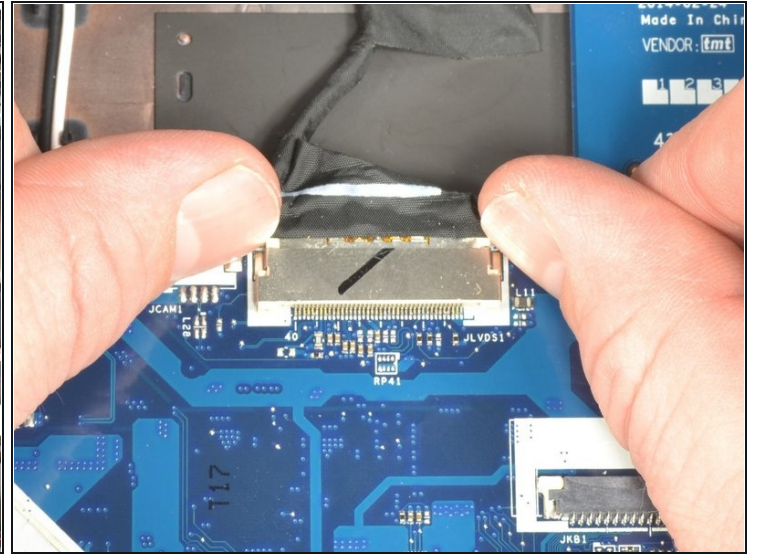
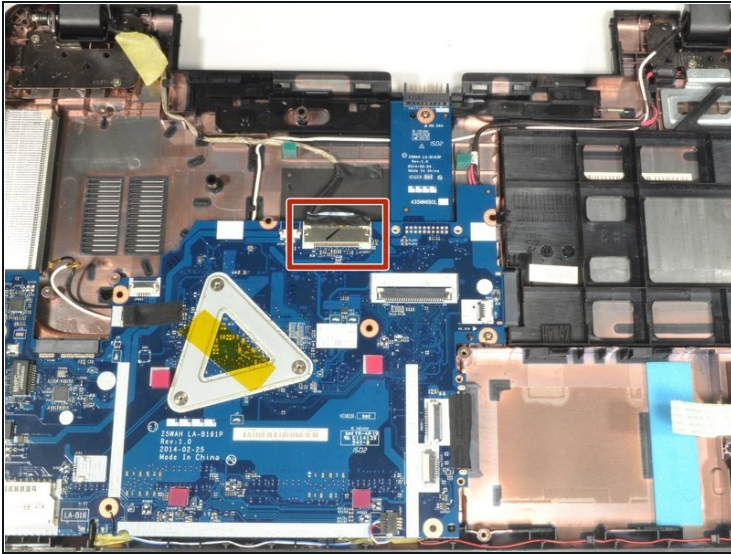
## Step 26



- Locate the three wire speaker connection. It 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 the socket of the speaker connection.
- Gently push left to disconnect the speaker plug.

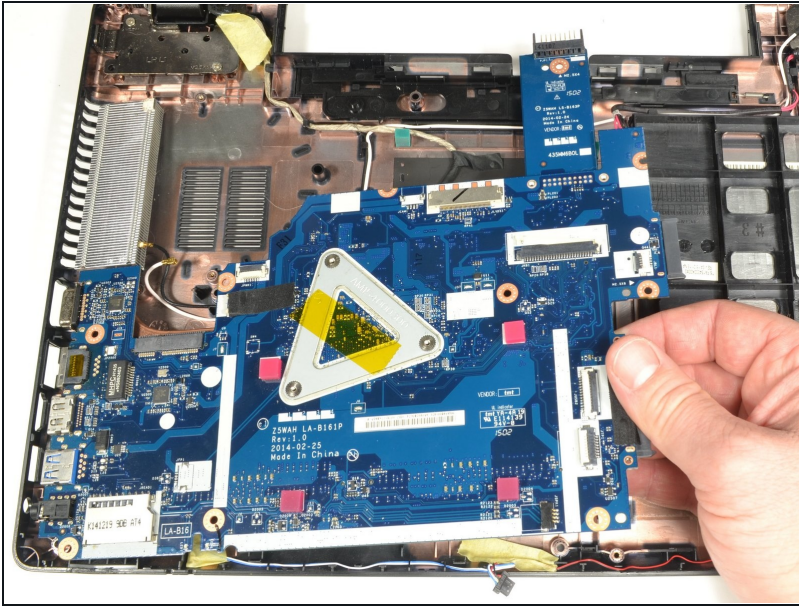


## Step 27



- Locate the screen connection. It is centered on the side of the motherboard furthest from your body.
- Place your fingernails on each side of the screen connection plug. Gently push away from your body to disconnect the plug.

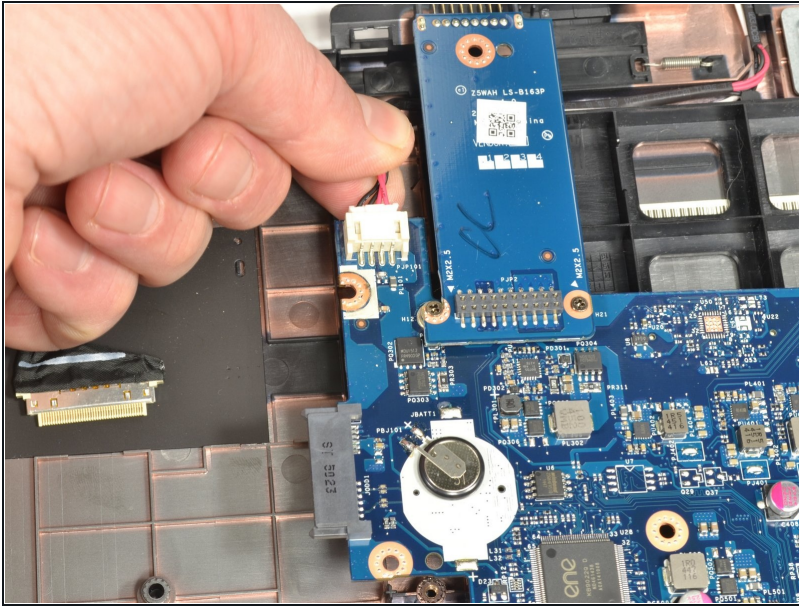
## Step 28



- 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.
- ① 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 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.