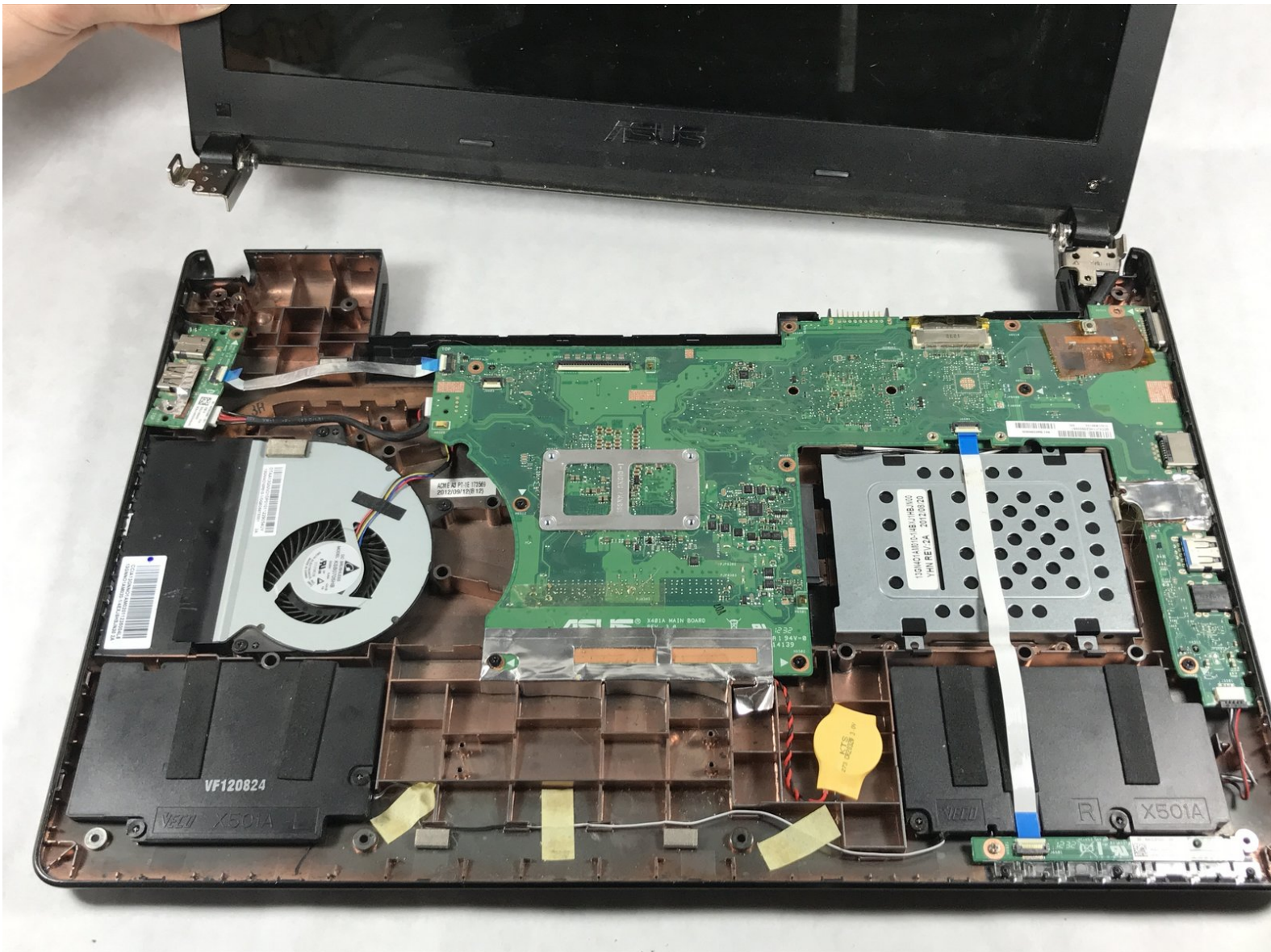




Written By: Christopher



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INTRODUCTION

This guide will demonstrate how to successfully replace the hinges in the Asus X501A-RH31 laptop. Please note there are small pieces of the motherboard connected to the hinges so execute caution when removing the hinges.



TOOLS:

- [Spudger](#) (1)
 - [iFixit Opening Tools](#) (1)
 - [Tweezers](#) (1)
 - [Phillips #00 Screwdriver](#) (1)
-

Step 1 — Battery



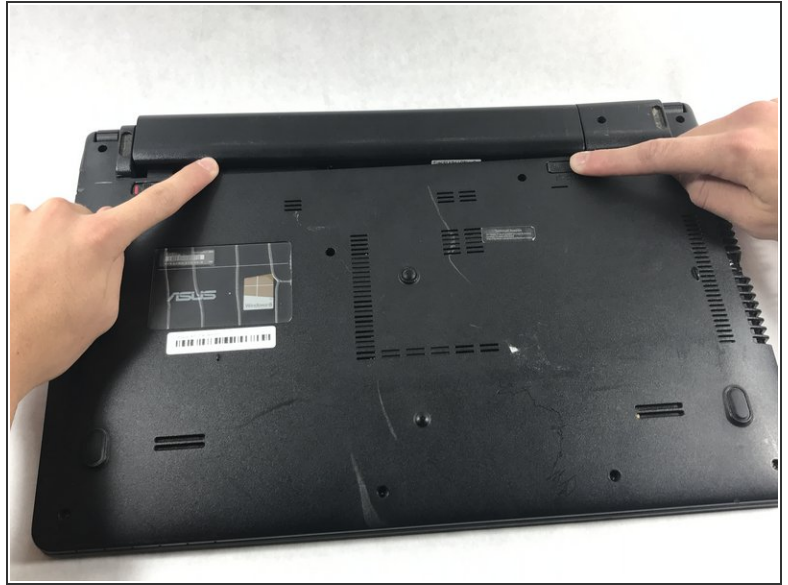
- Turn the laptop over so that the back is facing upwards.

Step 2



- To unlock the left tab, make sure the tab on the left has red showing.

Step 3



- To unlock the right tab, push the right slider to the left with one hand.
- Push the battery out with the other hand.

Step 4 — Keyboard



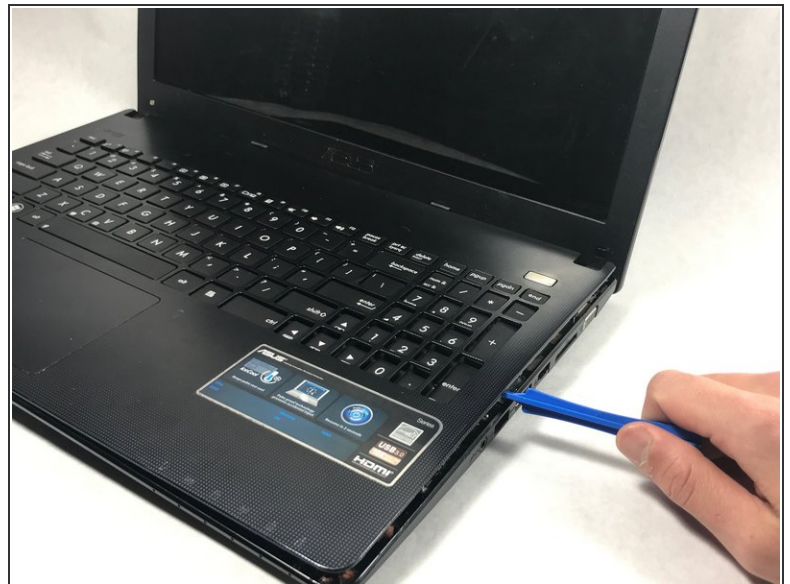
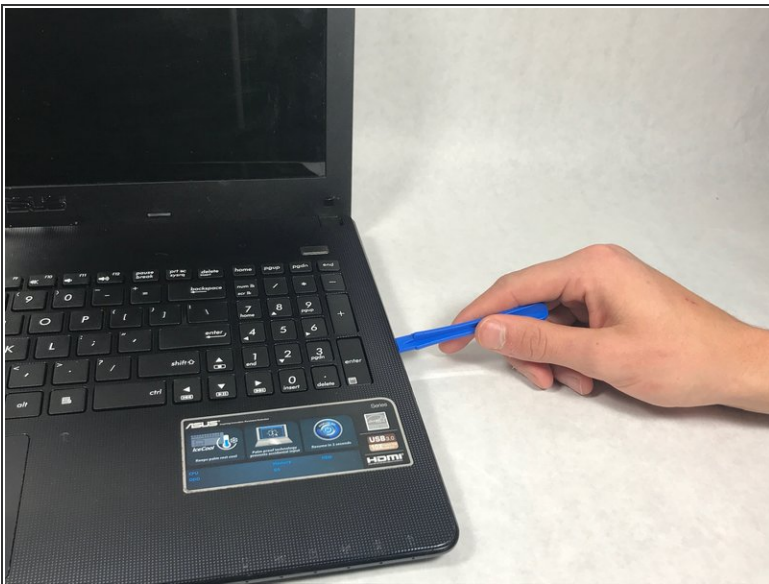
- Using the Phillips #00 screwdriver unscrew all nine screws from the bottom of the laptop.
- ⓘ The nine screws are 7 mm long, 4.5 mm in diameter.

Step 5




- Turn the laptop over and open the top so the keyboard is facing you.

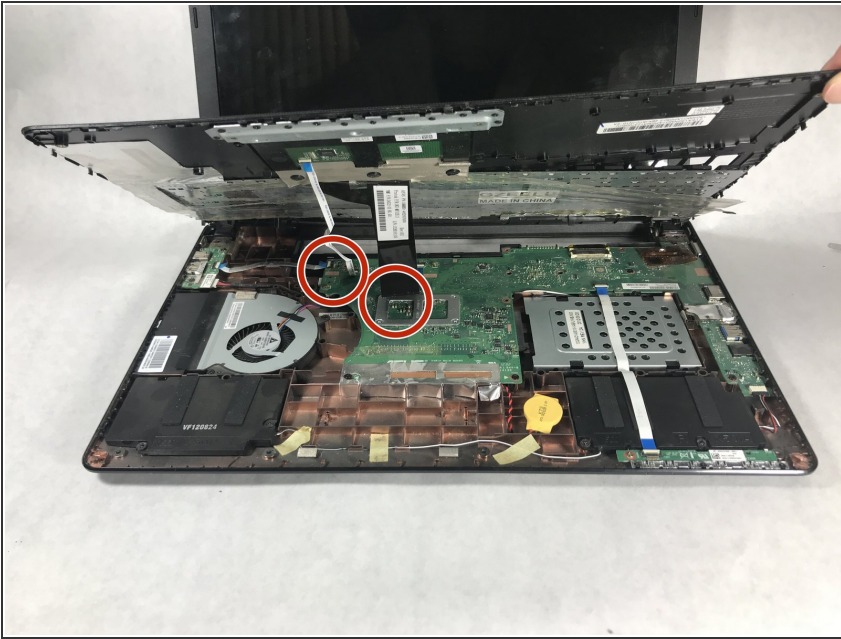
Step 6



- Pry off the keyboard cover on the edge using the plastic opening tool.
- Start from one side. Once it is loose, carry out the same procedure on the front and other side.

 Only do little sections at a time as the keyboard may break if you attempt to take the whole thing off from a single point.

Step 7



- Slowly lift the keyboard upward, but do not remove completely.
- Remove the two data cables that attach the keyboard to the motherboard.

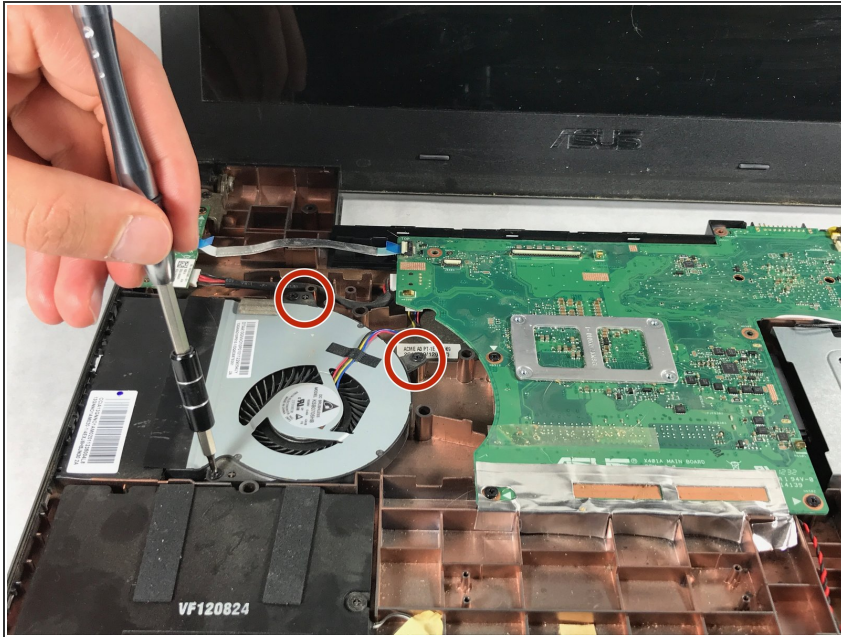
Step 8



- Use tweezers to pull the white plastic piece up that is attached to the data cable.
- Repeat this process for the big black cable as well.

⚠ Use caution when unlatching the data cables from the motherboard. The cables are extremely delicate and can break.

Step 9 — Fan



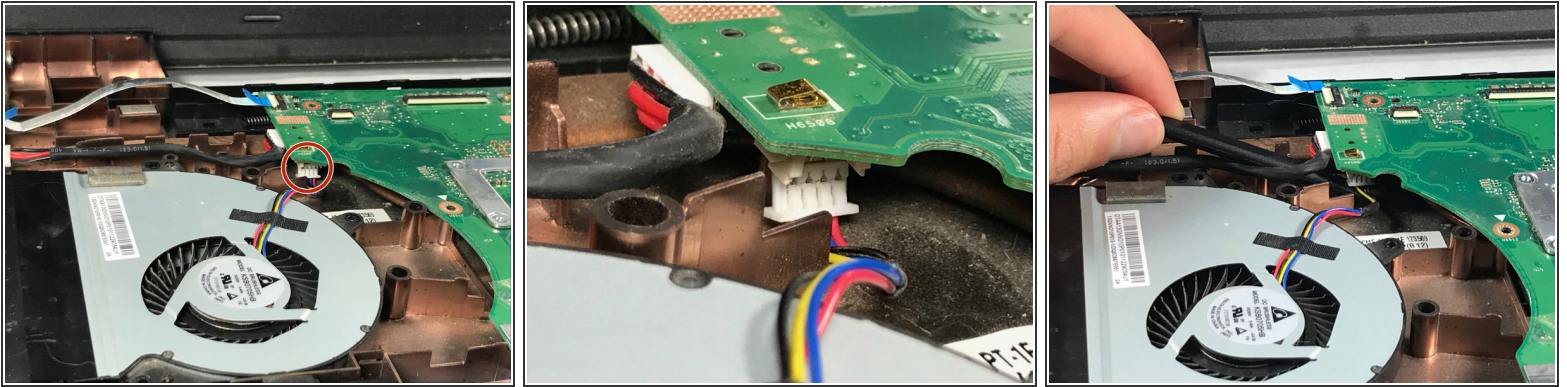
- Unscrew the three screws using the Phillips #00 screwdriver.
- ⓘ The three screws are 5 mm in length, 4.2 mm in diameter.

Step 10



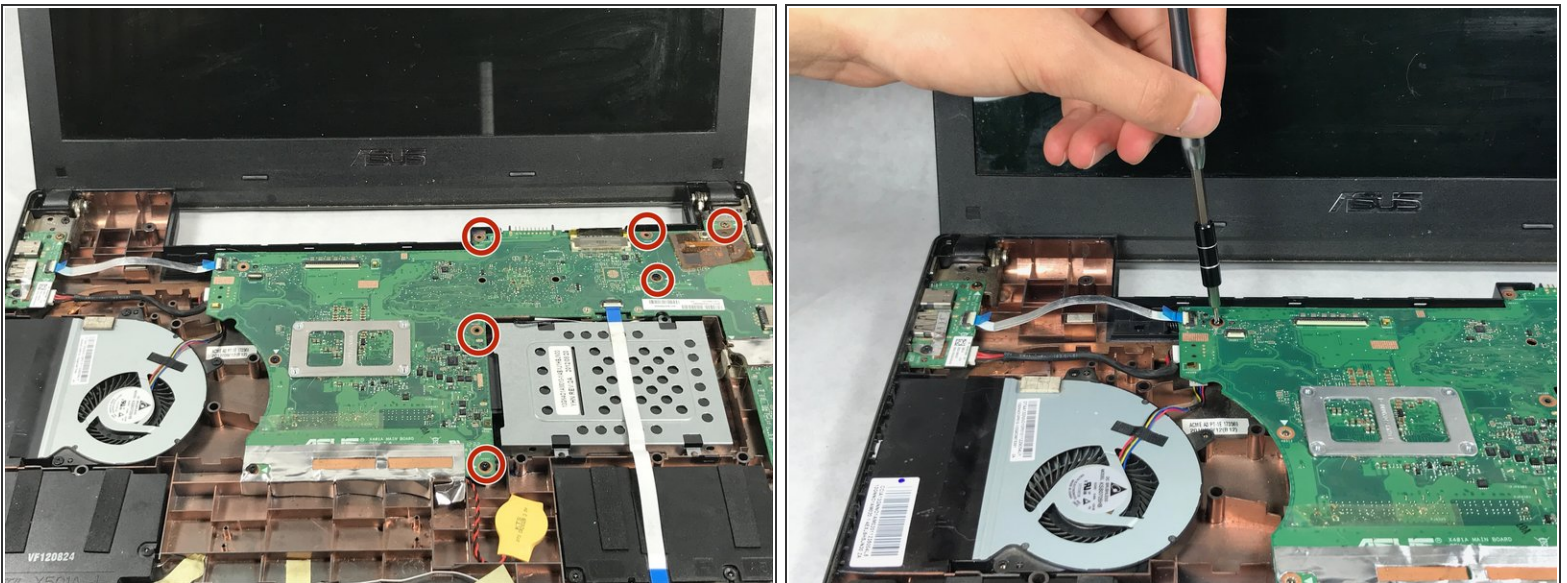
- Unscrew the three screws on the left hand side of the big motherboard.
- This will loosen the motherboard, which will allow for better access to the cables in the next step.
- ⓘ The three screws are 5 mm in length, 4.2 mm in diameter and Phillips head screws.

Step 11



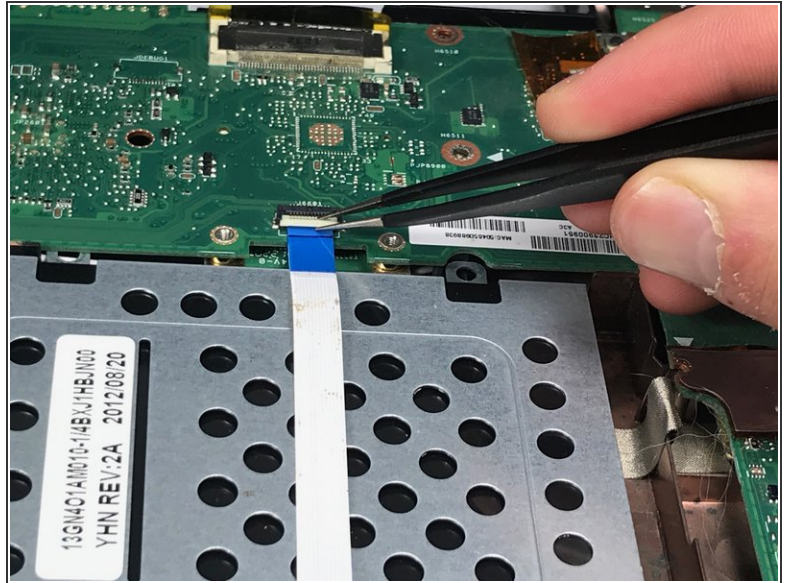
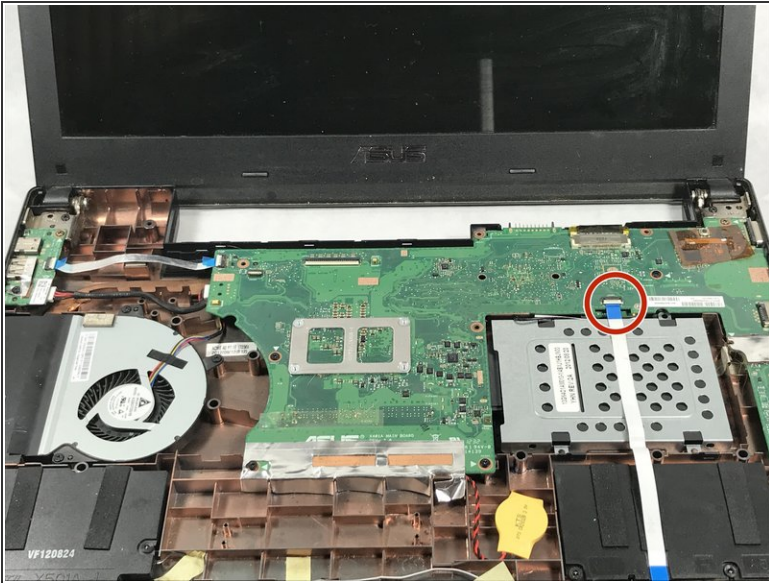
- Remove the connector cable attached to the bottom of the motherboard.
- Take the black plastic spudger and press down on the lower half of the white plastic piece to remove the connector cable.

Step 12 — Motherboard



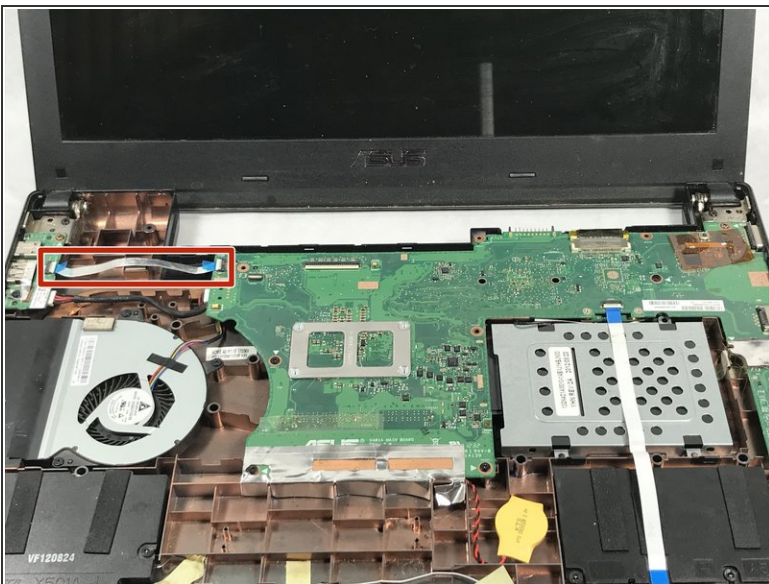
- Unscrew the six screws that hold the motherboard to the bottom of the laptop using a Phillips #00 screwdriver.
- ⓘ The six screws are 4.2 mm long, 5 mm in diameter.

Step 13



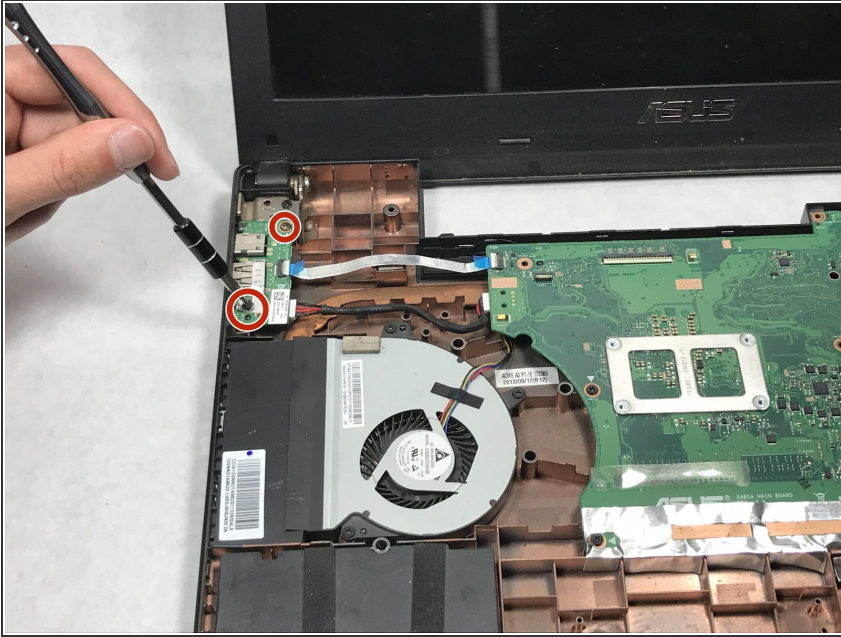
- Unlatch the data cable by using tweezers to lift the white tab and release the cable.

Step 14



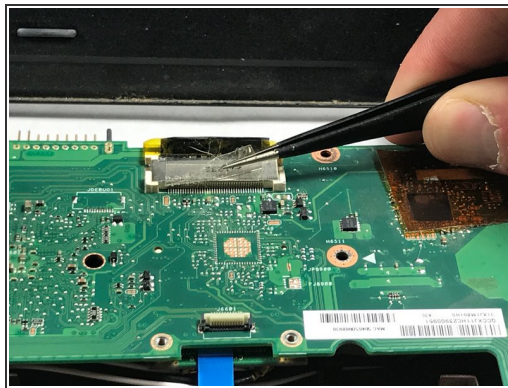
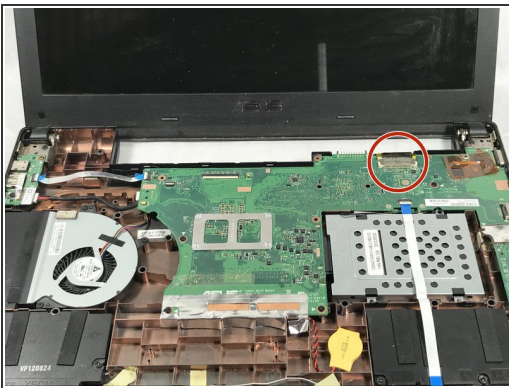
- Remove the cable on the left side of the motherboard.
- Use tweezers to pull the white tab up in order to release this cable.

Step 15



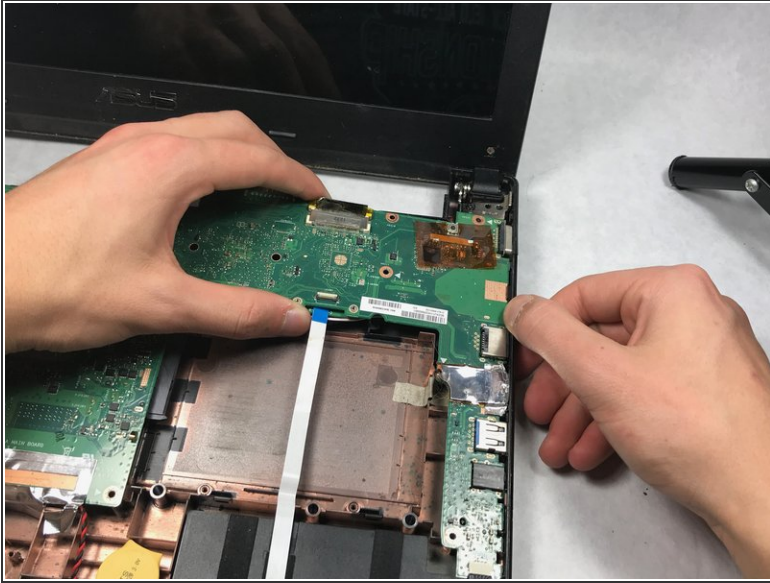
- On the left side is a small piece of the motherboard. Unscrew the two screws holding this piece down with the Phillips #00 screwdriver.
- ⓘ The two screws are 6 mm long, 4.2 mm in diameter.

Step 16



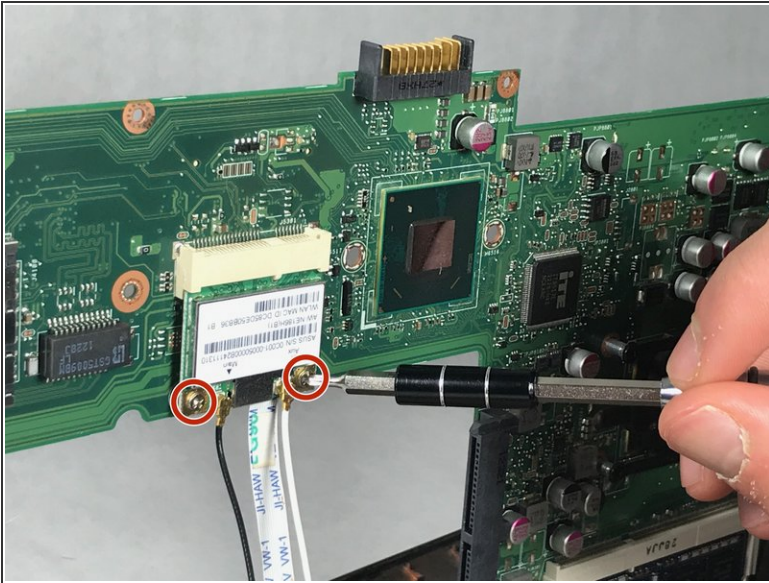
- Release the connector cable on the back right side of the motherboard.
- Peel off the tape with tweezers so that the cable can be released.
- Using the black plastic spudger, push the back half of the cable towards the screen.

Step 17



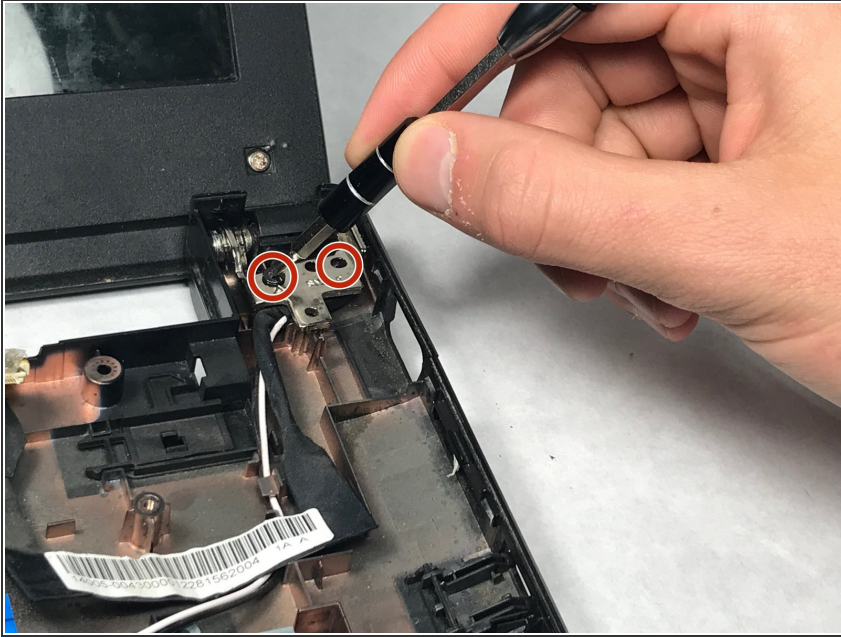
- Grip the motherboard firmly and pull the board leftward and upwards so that the ports on the right side escape their frames.

Step 18



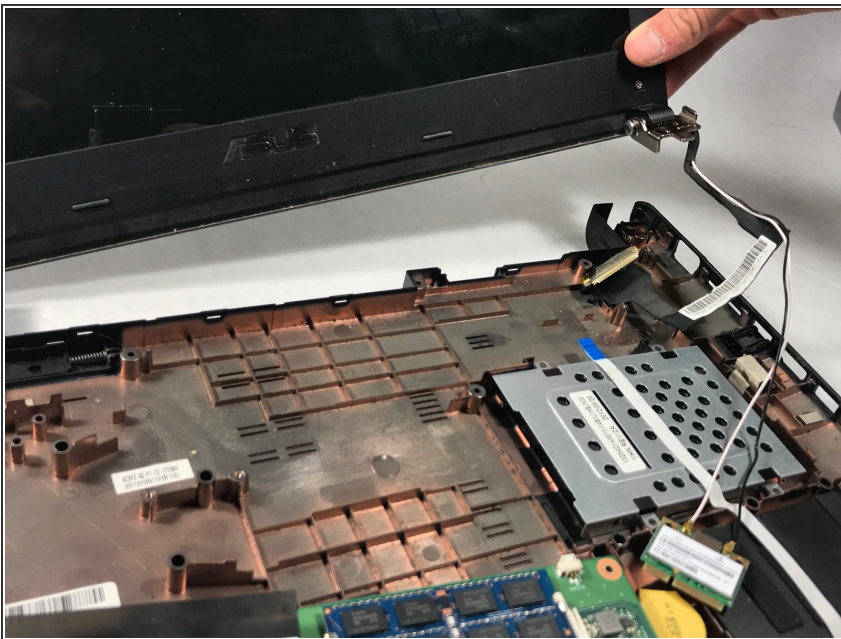
- On the back of the motherboard there are two screws that attach the LCD connector to the motherboard.
- Unscrew the two screws using the Phillips #00 screwdriver.
 - ⓘ These screws are 3 mm in length, 3.5 mm in diameter.
- Pull the connector downwards and out.

Step 19 — Hinges



- To detach the hinges, use the Phillips #00 screwdriver to unscrew the two top screws on both the left and right hinges.
- ⓘ The four screws are all the same. They are 6.2 mm in length, 4 mm in diameter.

Step 20



- Once both sides of the laptop are unscrewed, gently pull the upper half of the laptop off of the bottom half.

Step 21



- Use the black plastic spudger to pry off the black squares on the bottom of the laptop screen, this reveals two screws.

⚠ Take caution when removing these squares as they will bend and crease.

Step 22




- Use the Phillips #00 screwdriver to unscrew the two screws at the bottom of the laptop screen.
- ⓘ The two screws are 6 mm long, 4mm in diameter.

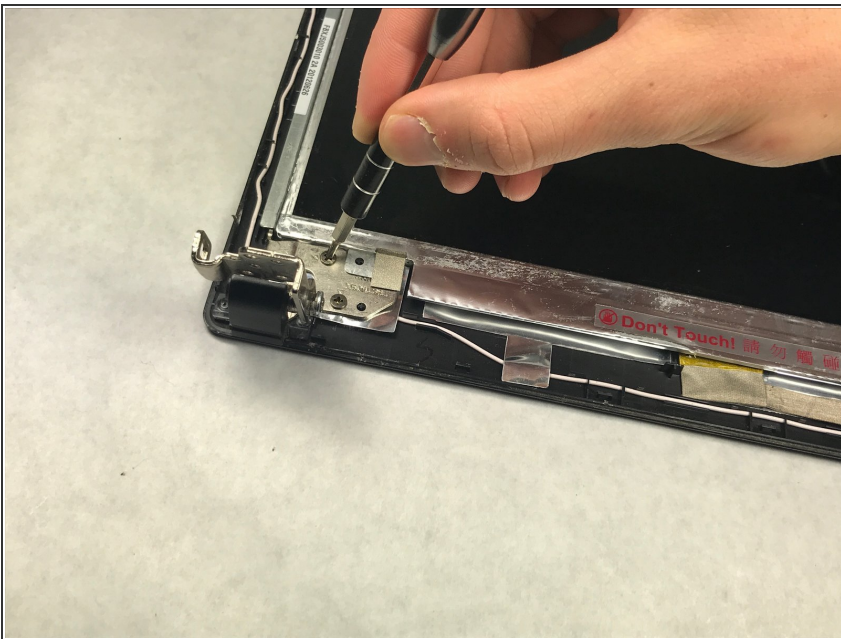
Step 23



- Place the black plastic spudger between the top cover of the screen and the bottom of the laptop frame that rests on the table.
- Push down on the black plastic spudger to pry the top cover off the screen of the laptop.

 The screen is fragile and too much pressure applied will damage the screen.

Step 24



- At the bottom of the screen there are two screws on each hinge.
- Unscrew the four screws using the Phillips #00 screwdriver.
- ⓘ The four screws are 3.5 mm long, 4.5 mm in diameter.

Step 25



- At the top of the screen there are two screws on the left side and two screws on the right side of the laptop.
- Using the Phillips head #00 screwdriver, unscrew the inside screw and then the outside screw.
- ❗ All four screws are the same size. They are 4 mm in length, 4.2 mm in diameter.

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