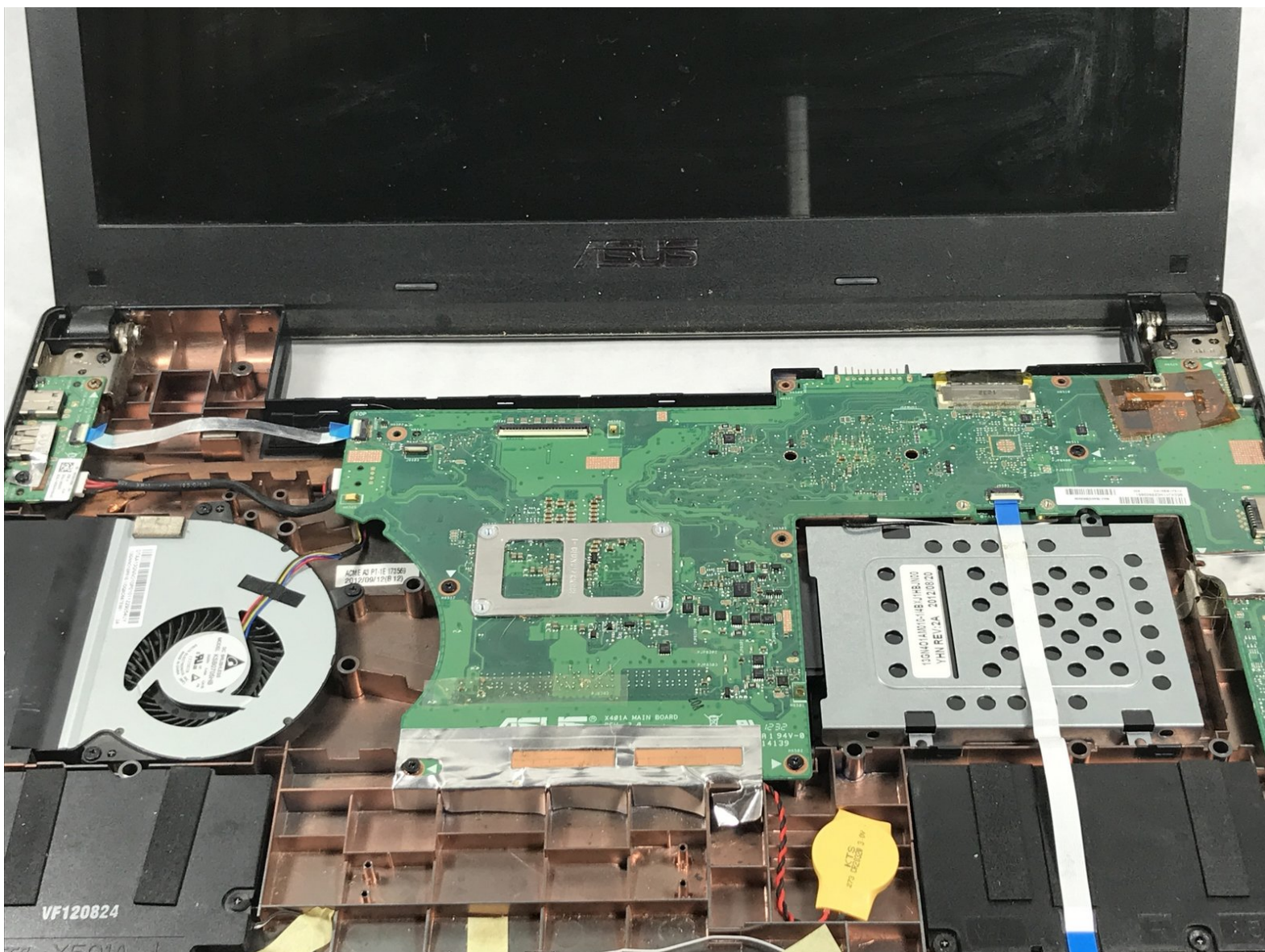# Asus X501A-RH31 Motherboard Replacement

How to replace the Asus X501A-RH31 Motherboard.

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INTRODUCTION

This guide will show how to remove and replace the motherboard. Please note the motherboard is a very fragile component of the laptop and can break easily.

🔧 TOOLS:

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

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Step 1 — Battery

- Turn the laptop over so that the back is facing upwards.
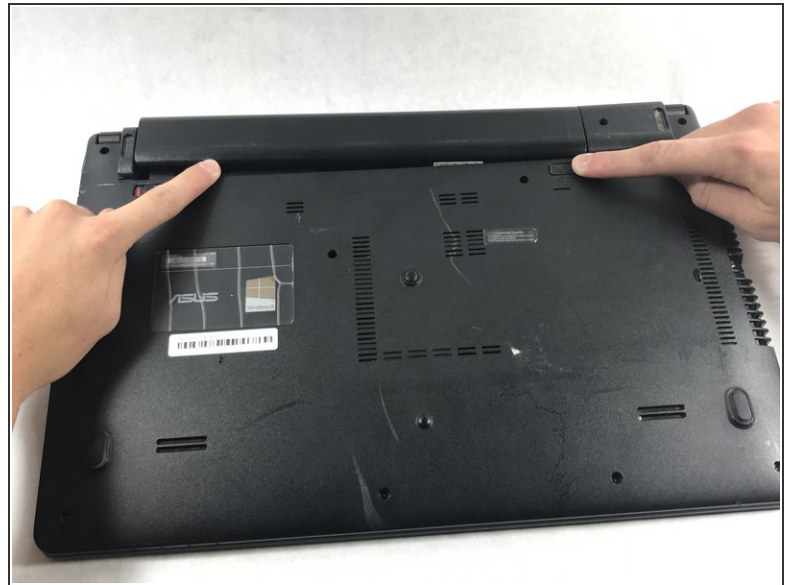
Step 2

- 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.

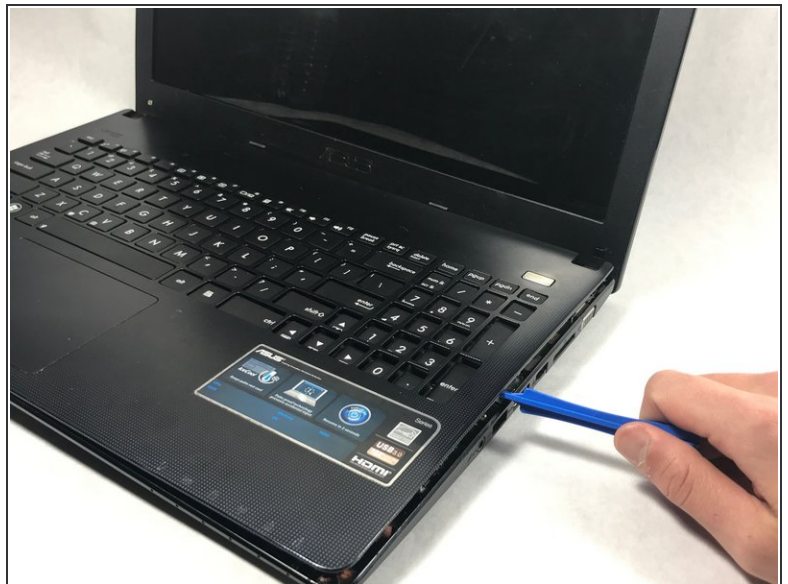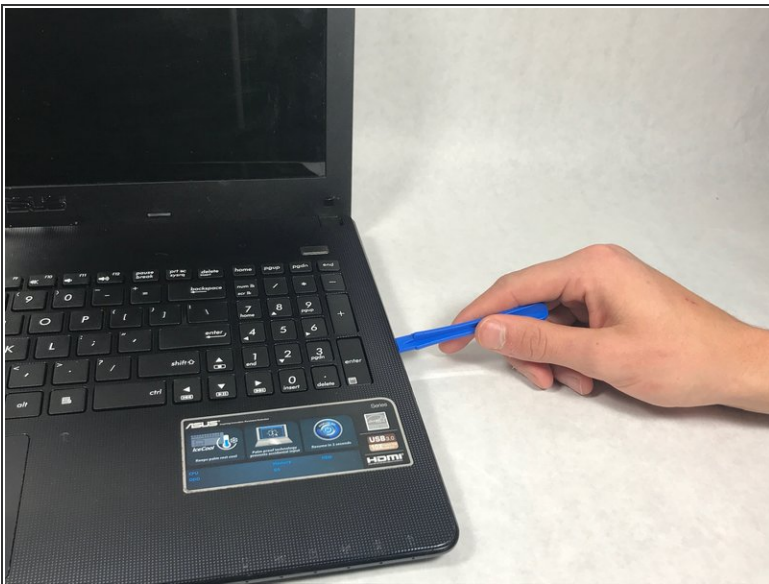- Push the battery out with the other hand.

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.

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Step 5

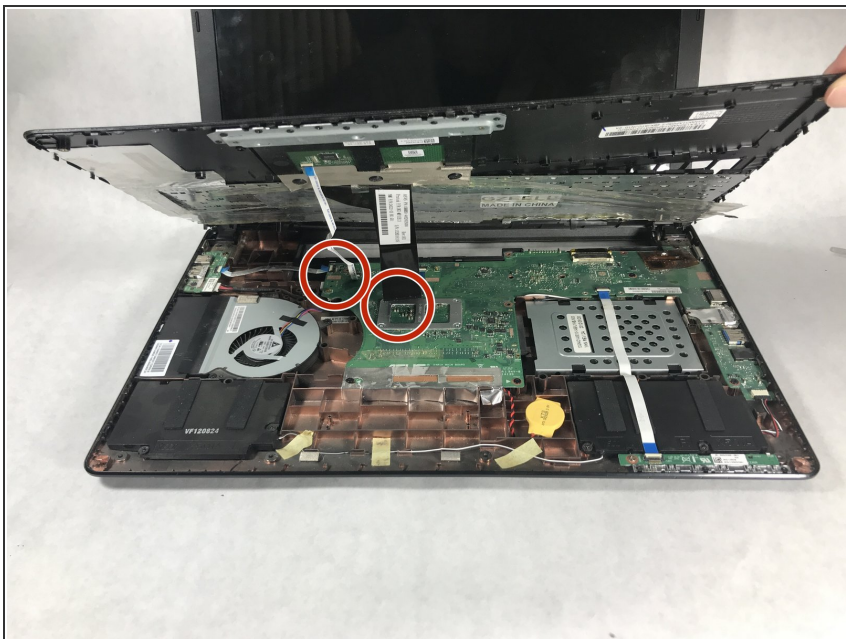- Turn the laptop over and open the top so the keyboard is facing you.

Step 6

- Pry off the keyboard cover on the edge using the plastic opening tool.

- Start from one side. Once it is lose, 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.

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Step 7

- Slowly lift the keyboard upward, but do not remove completely.

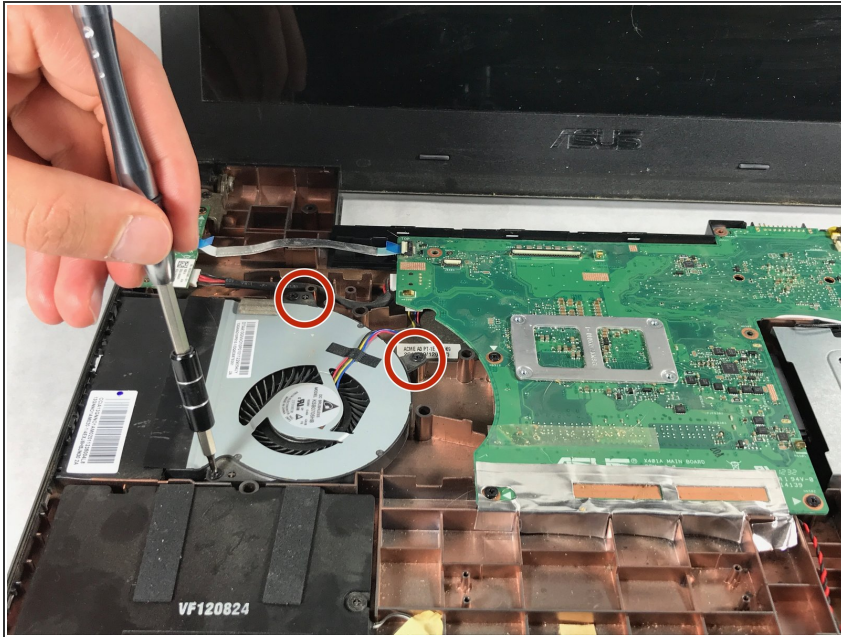- Remove the two data cables that attach the keyboard to the motherboard.

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.

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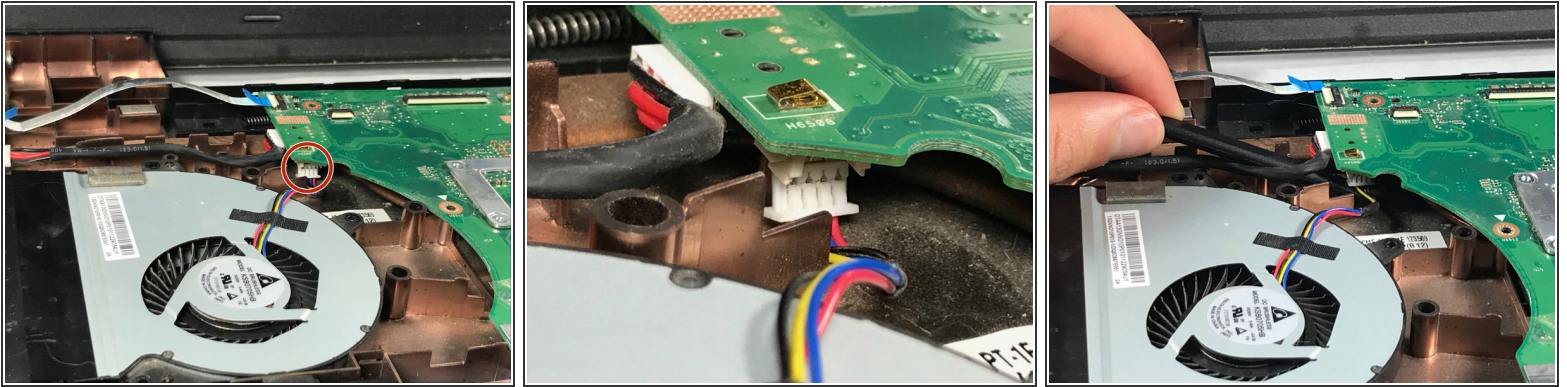
Step 9 — Fan

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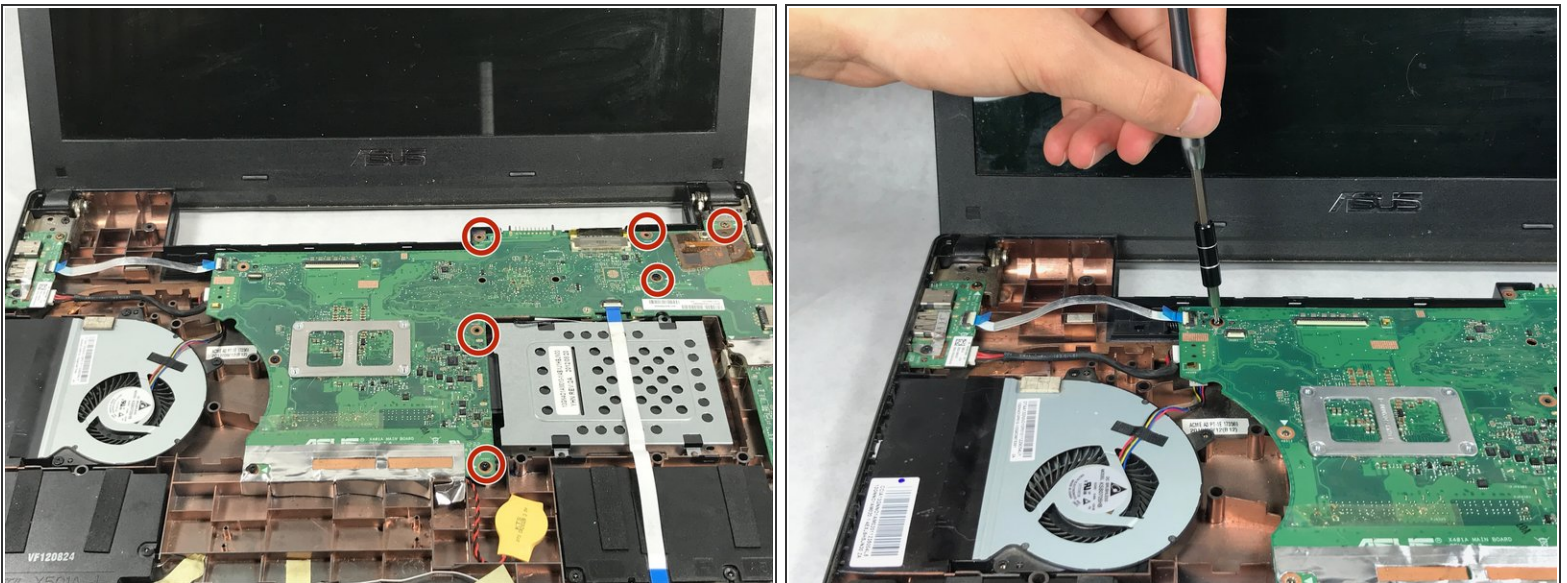 - ⓘ The three screws are 5 mm in length, 4.2 mm in diameter.

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.
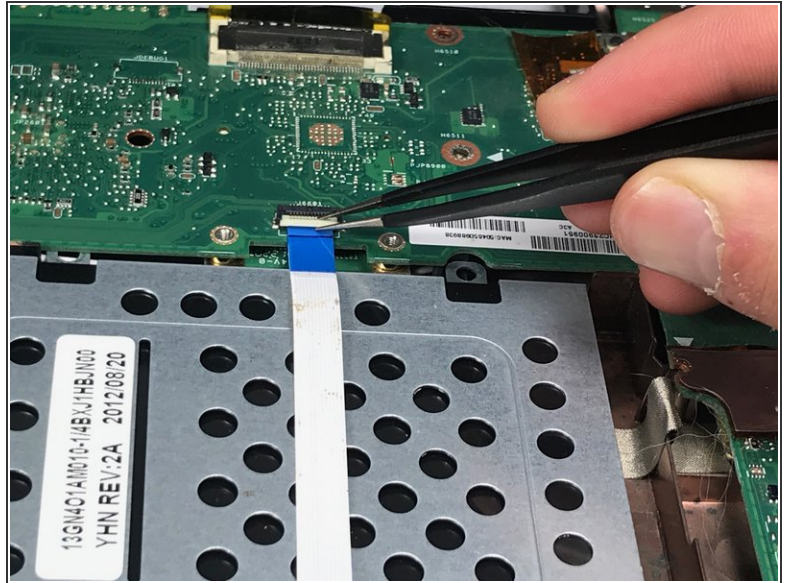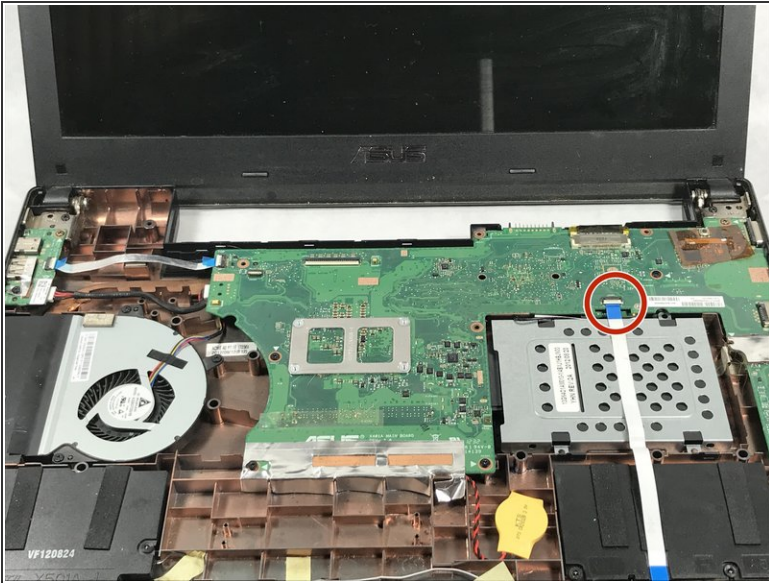
Step 12 — Motherboard

- Unscrew the six screws that hold the motherboard to the bottom of the laptop using a Phillips #00 screwdriver.

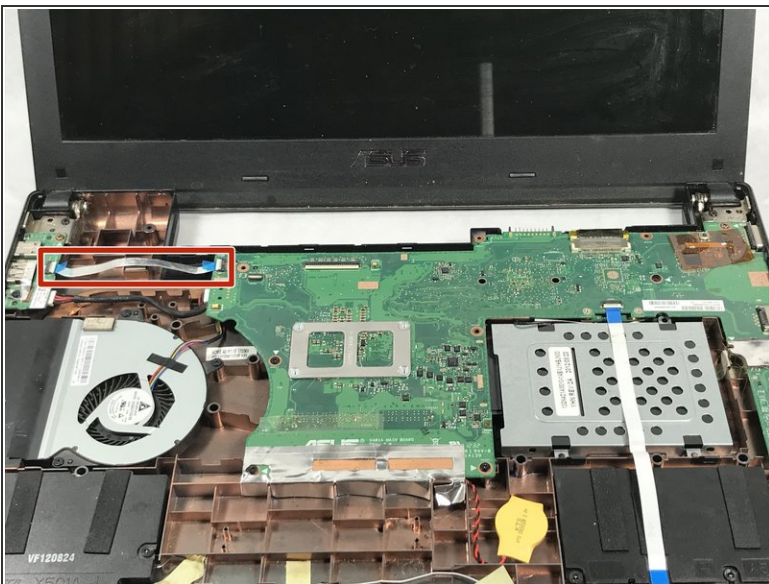 - (i) The six screws are 4.2 mm long, 5 mm in diameter.

Step 13

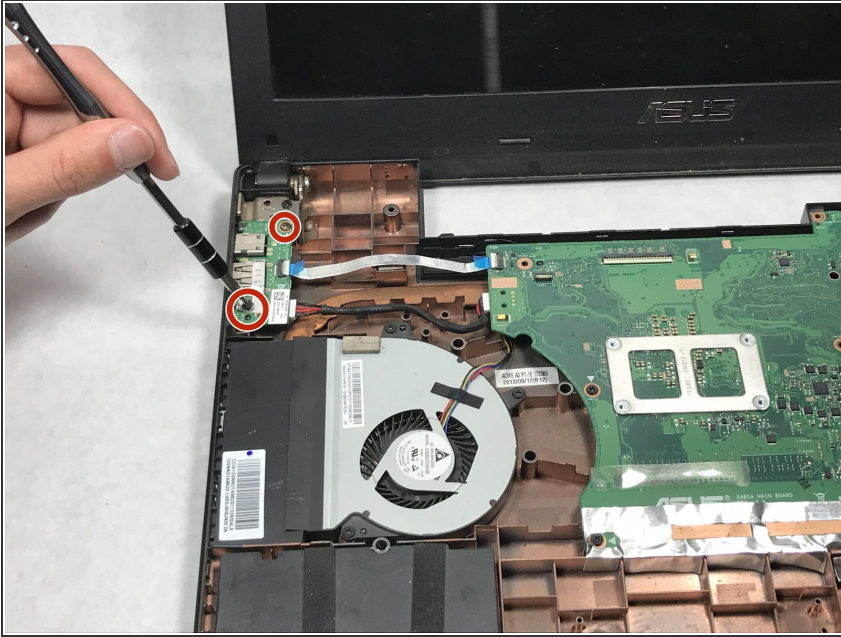- Unlatch the data cable by using tweezers to lift the white tab and release the cable.

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.

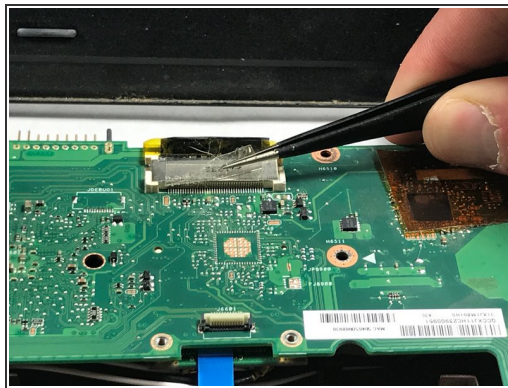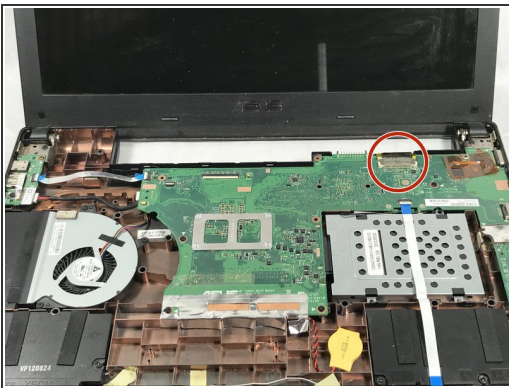This document was generated on 2019-10-26 12:27:41 AM (MST).

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.
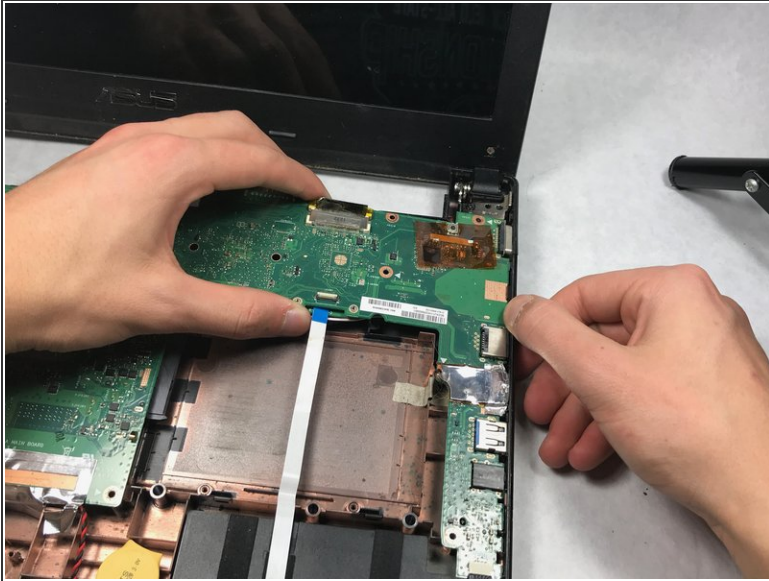 - (i) The two screws are 6 mm long, 4.2 mm in diameter.

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.

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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.

  - (i) These screws are 3 mm in length, 3.5 mm in diameter.

- Pull the connector downwards and out.

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