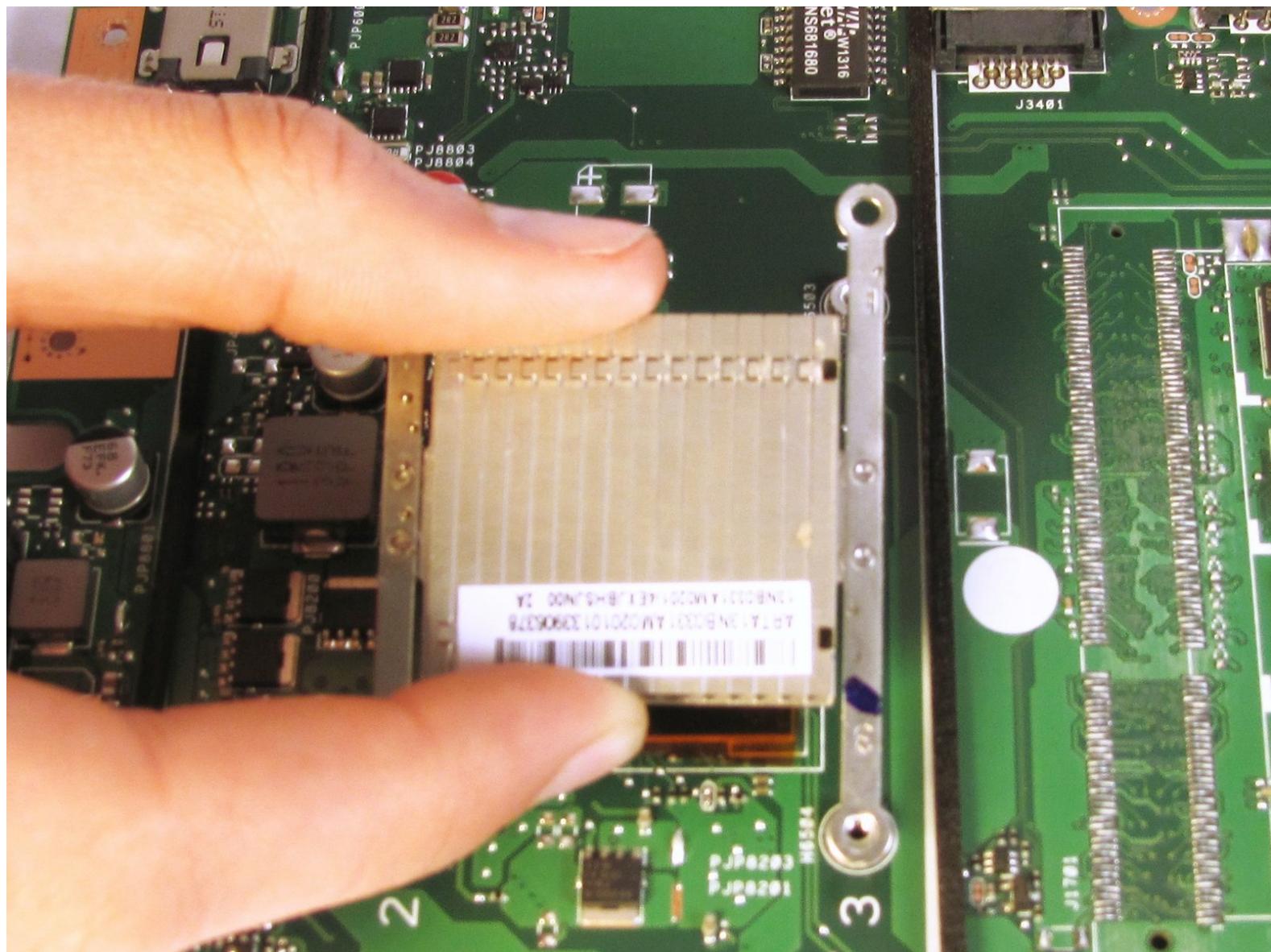




Asus X551CA Heat Sink Replacement

This guide will teach you how to replace the Asus X551CA heat sink.

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INTRODUCTION

The Asus X551CA heat sink is attached to the motherboard and helps keep the laptop cool.

TOOLS:

- [Phillips #0 Screwdriver \(1\)](#)
- [iFixit Opening Tools \(1\)](#)

Step 1 — Keyboard Plate Cover



 Power off and unplug your laptop before you begin.

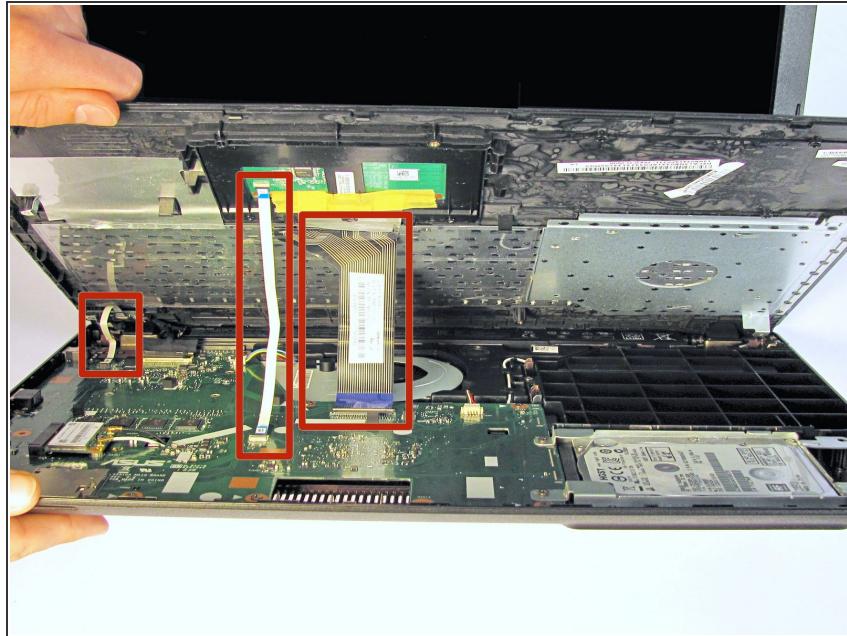
- Turn the laptop upside-down and remove the following screws using a Phillips #0 driver:
 - Two 9.5 mm screws in the middle of the back edge, and one 9.5 mm screw in the right edge
 - Two 4.3 mm screws in the back corners
- One 17.5 mm screw at the left edge near the optical drive
- Three 4.3 mm screws in the front edge

Step 2



- Use the plastic opening tool to separate the keyboard plate cover from the bottom cover. In order to do this, insert the plastic opening tool in between the keyboard plate cover and the bottom cover, then slide along edges to pry open.

Step 3



- Locate the three ribbons connecting the keyboard plate cover to the bottom cover.

Step 4



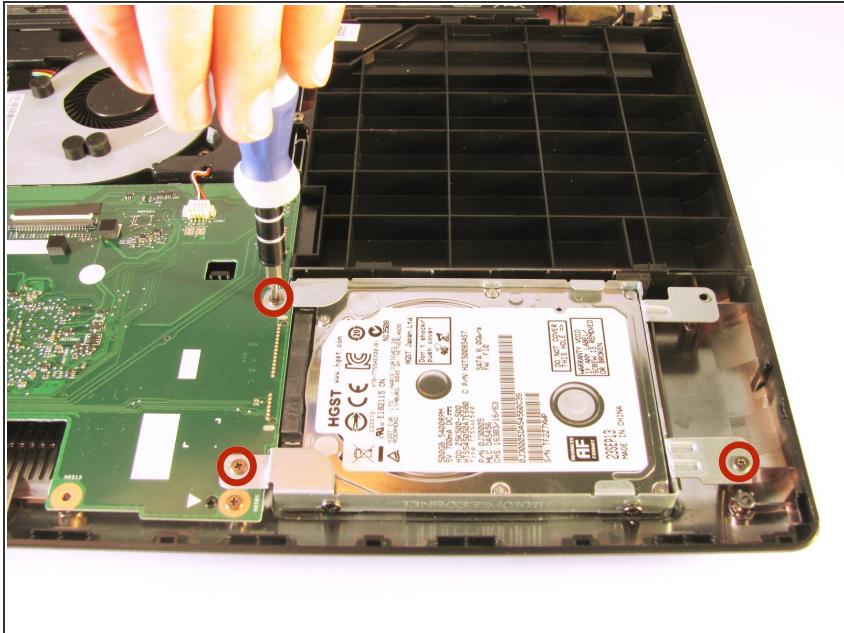
- Invert the laptop in order to gain access to the ribbons.
- Remove each ribbon by flipping the small white plastic flap up and gently pulling on the ribbon.

Step 5



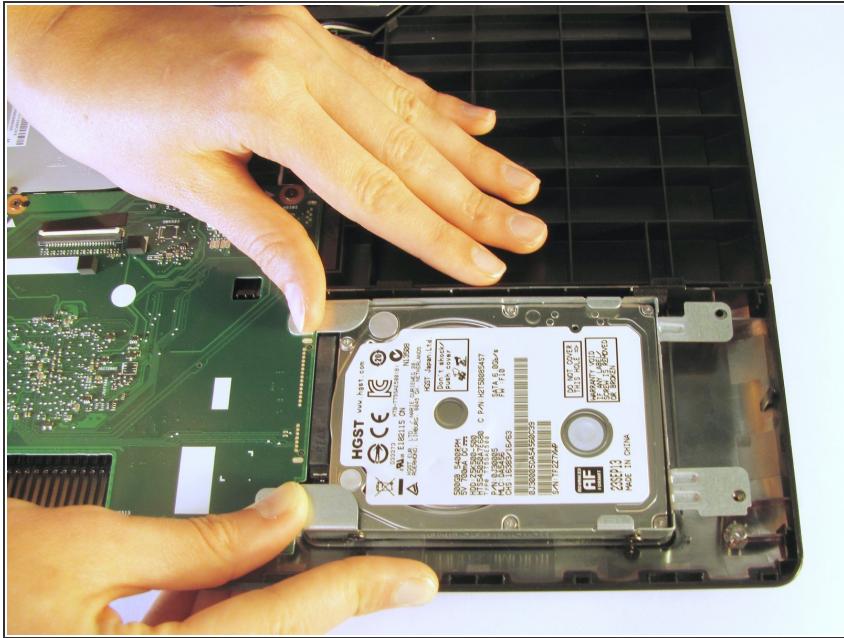
- Now that the ribbons have been detached from the bottom cover, carefully remove the keyboard plate cover. Once it has been removed, place it in a safe and moisture free area so it does not get damaged.

Step 6 — Hard Drive



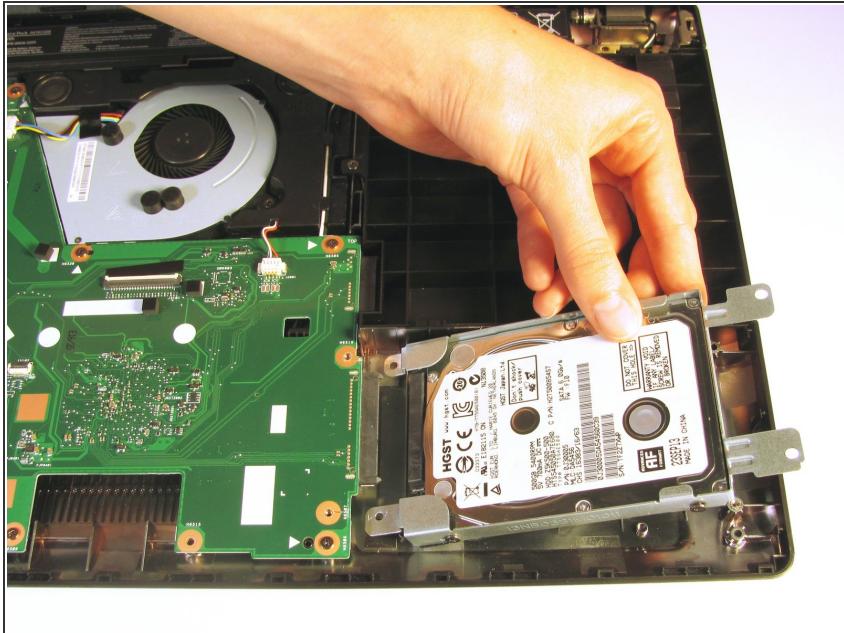
- Unscrew the three 5.5 mm Phillips #0 screws with the Phillips #0 Screwdriver.

Step 7



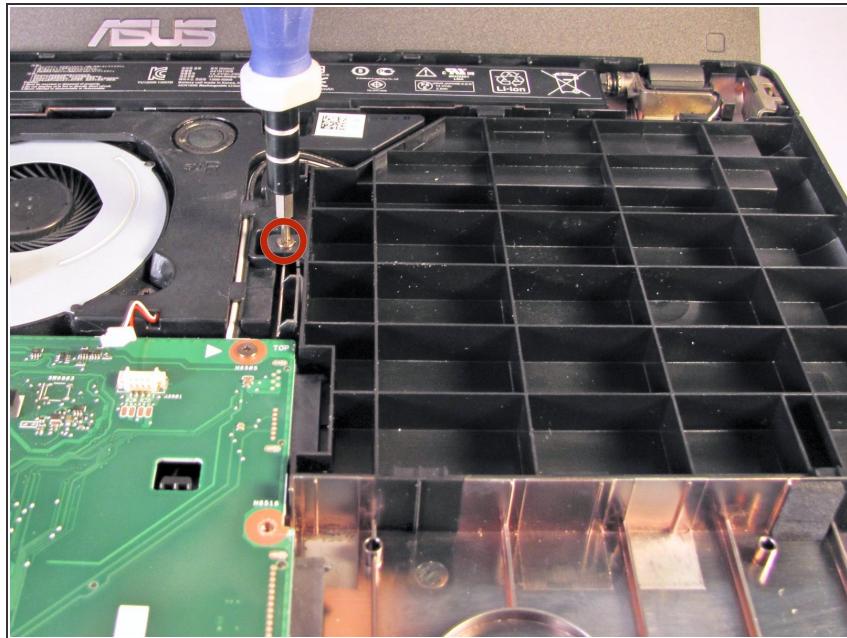
- Once the screws have been removed, place your fingers on the left corners and push the hard drive towards the right edge of the laptop (relative to the picture).

Step 8



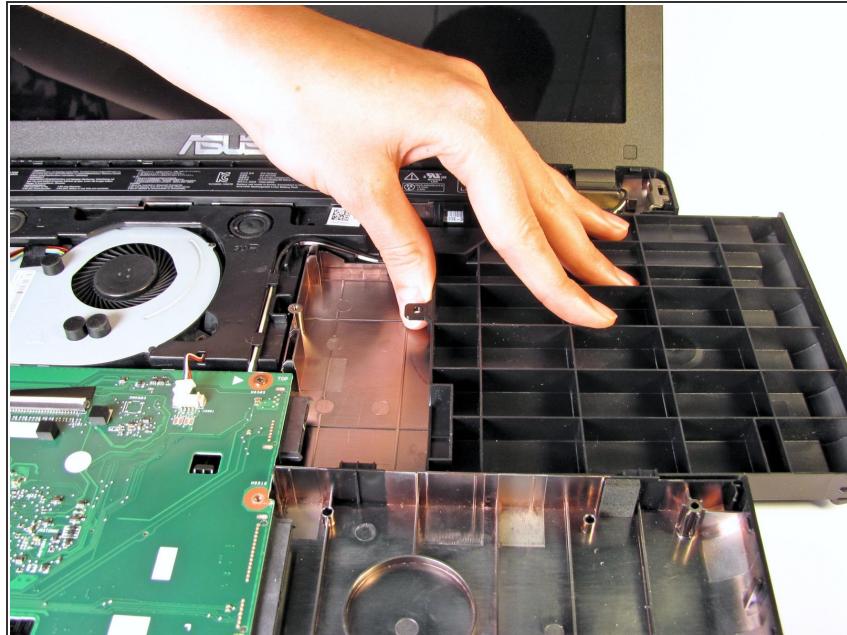
- Once it is free, remove the hard drive from its internal cavity.

Step 9 — Spacer



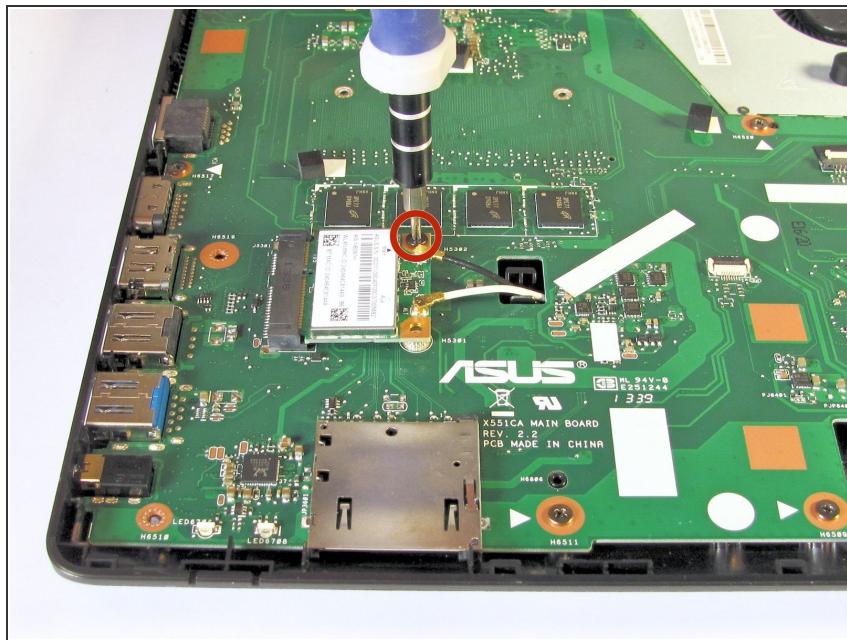
- Using the Phillips #0 Screwdriver, unscrew the 5.5 mm Phillips #0 screw that holds the spacer in place.

Step 10



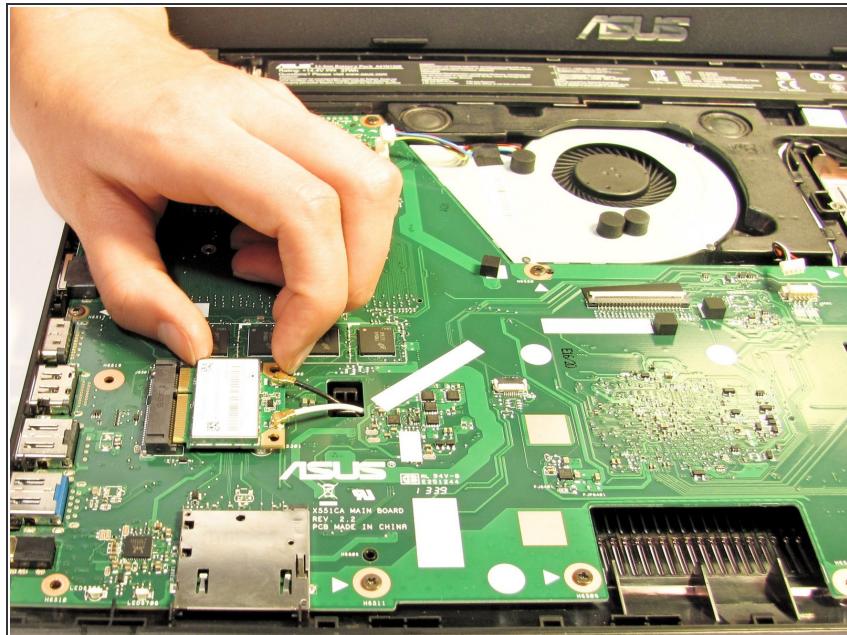
- Remove the spacer from the laptop by gently sliding it towards the right edge of the laptop.

Step 11 — WiFi Card



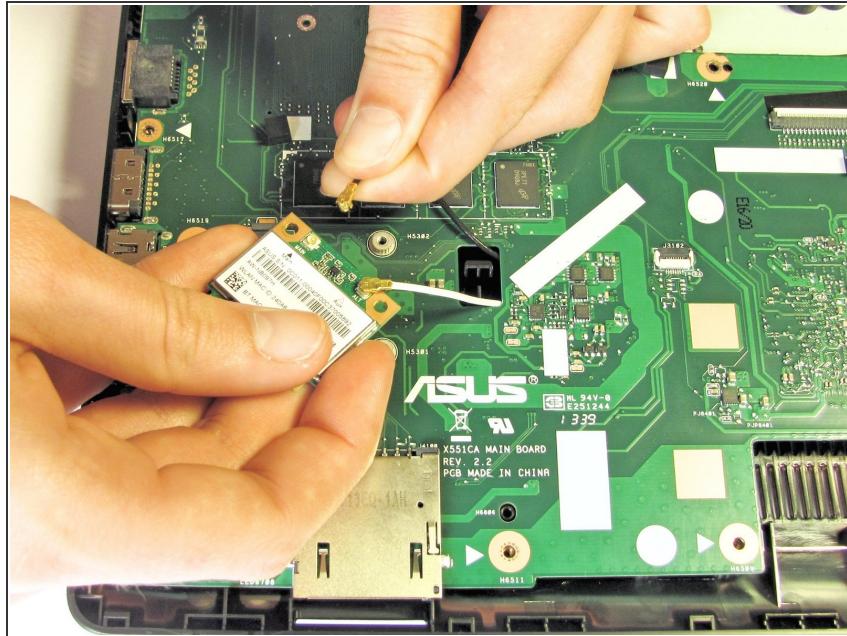
- Use the Phillips #0 Screwdriver to unscrew the 3.2 mm Phillips #0 screw which attaches the WiFi card to the motherboard.

Step 12



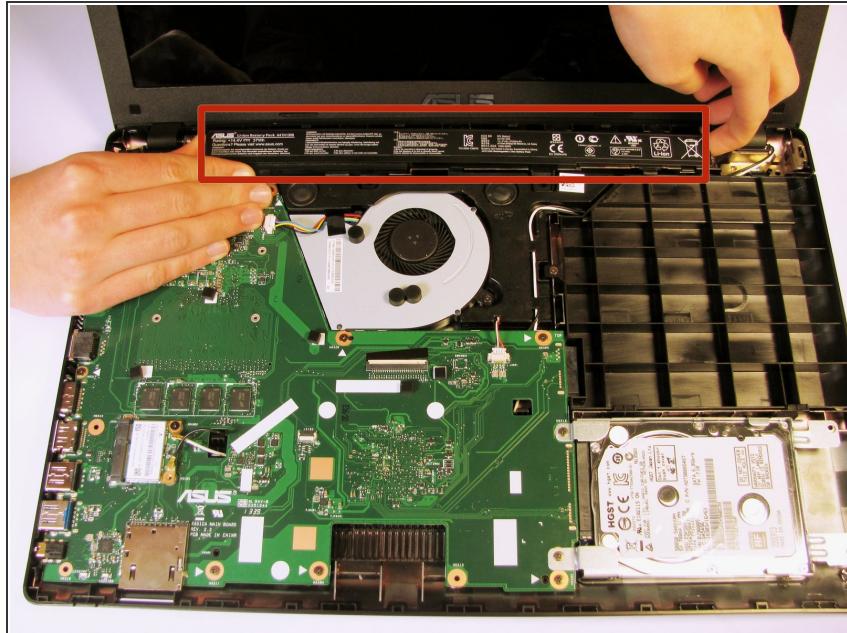
- Disconnect the WiFi card from the motherboard by gently sliding it towards the right edge of the laptop.

Step 13



- Remove each of the two small antenna connections by disconnecting one wire at a time. Each wire should easily unsnap from the WiFi card.

Step 14 — Battery



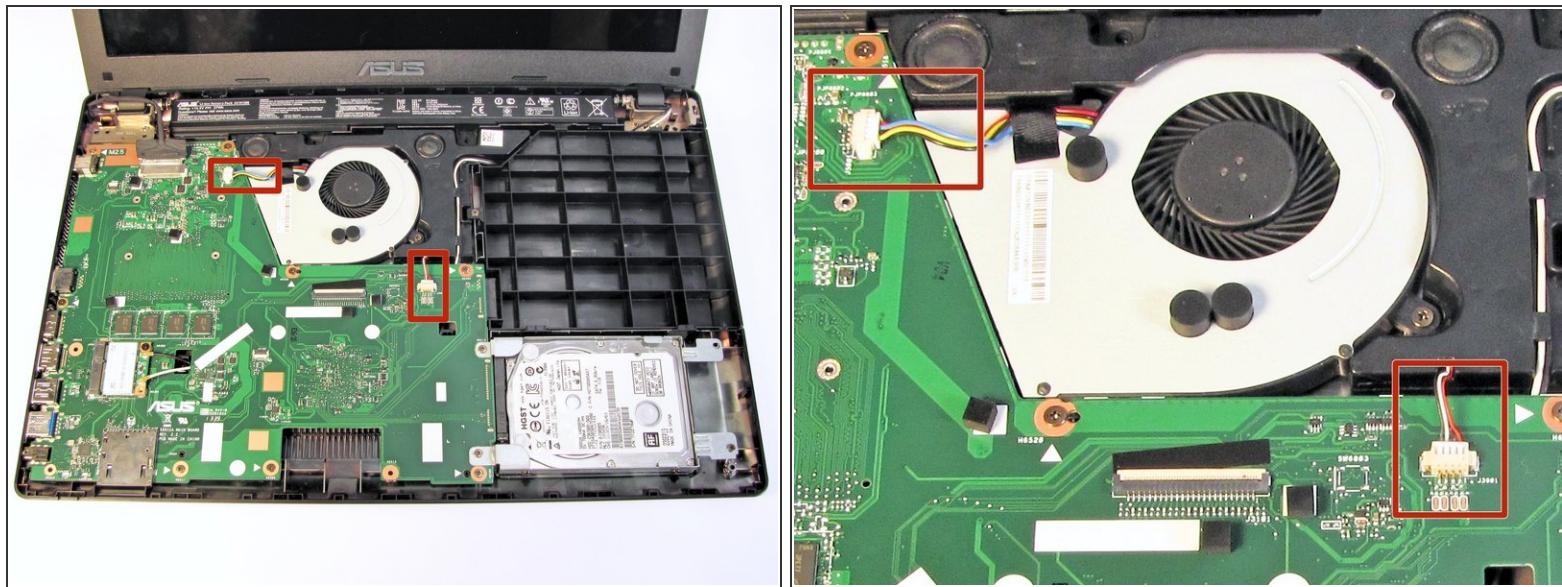
- Remove the battery from the laptop by applying pressure on both ends and lifting it out of the case.

Step 15 — Motherboard



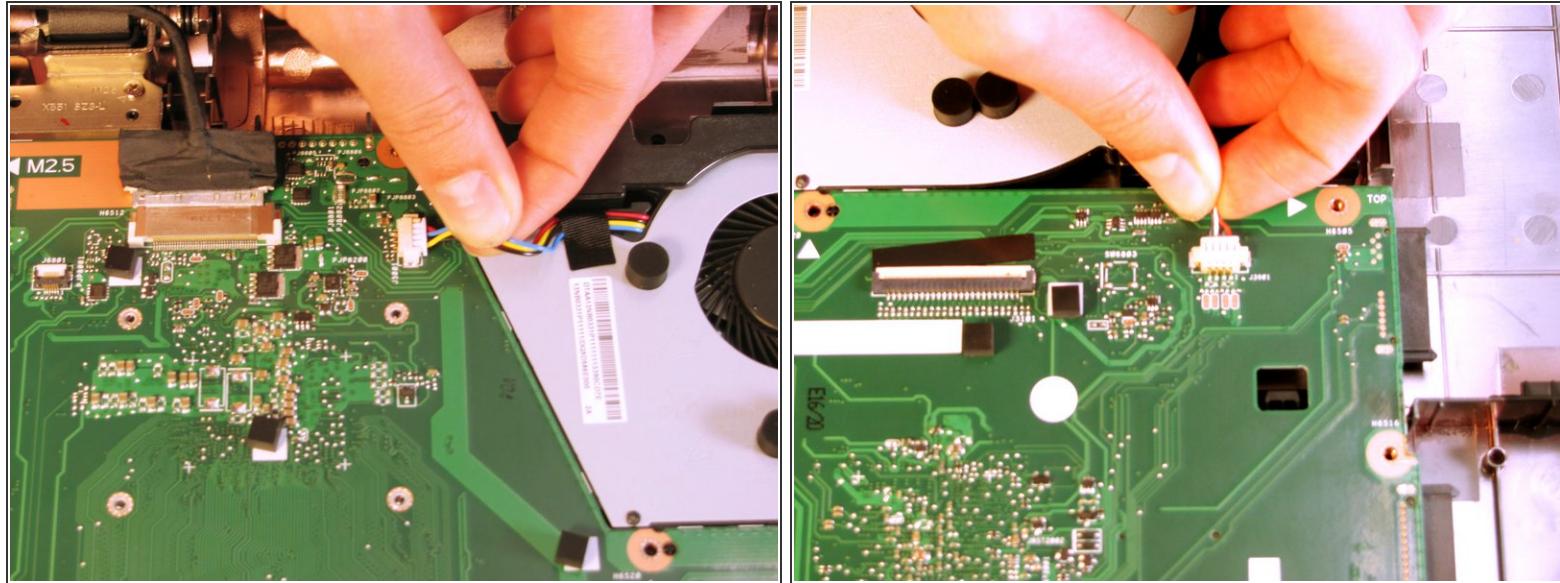
- With the Phillips #0 Screwdriver, remove the nine 5.5 mm Phillips #0 screws which hold the motherboard in place.

Step 16



- Now, locate the two wires connected to the motherboard.

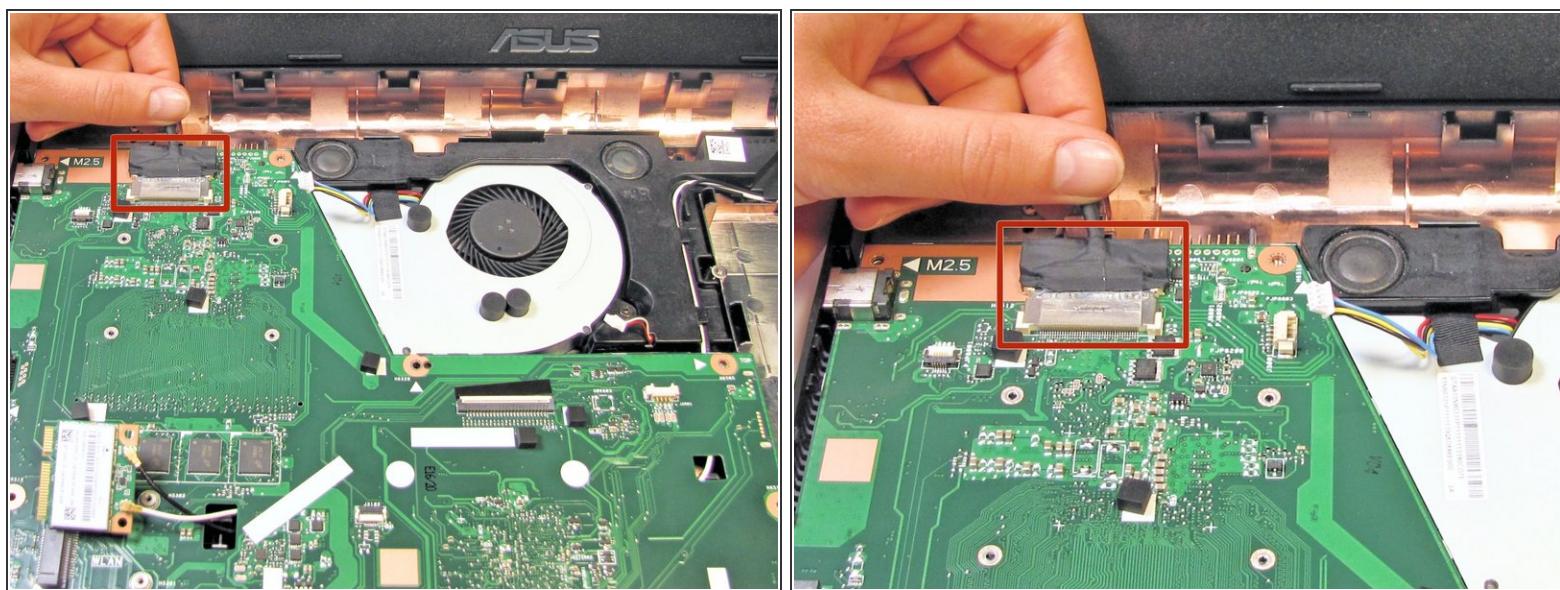
Step 17



- Remove the wires by easily pulling them parallel to the motherboard's surface.

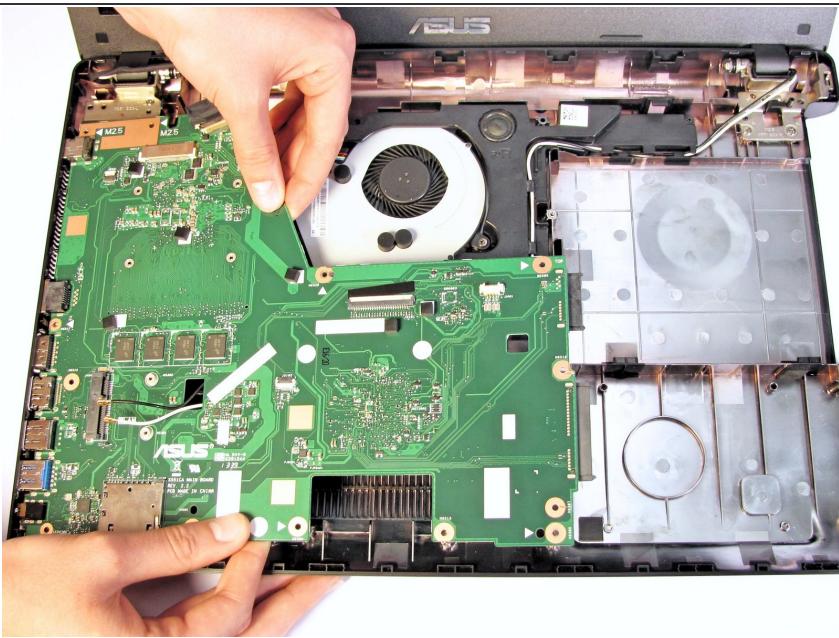
⚠ The wires are very fragile. Be sure to pull carefully so that they do not break!

Step 18



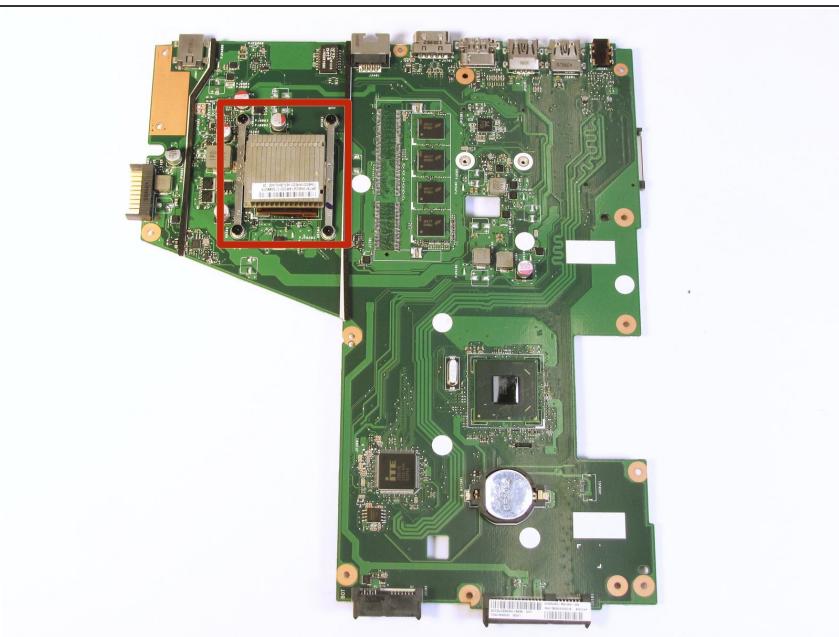
- Remove the LCD display connection by gently pulling on the attached wire.
- Gently lift any tape that may be holding the connection.

Step 19



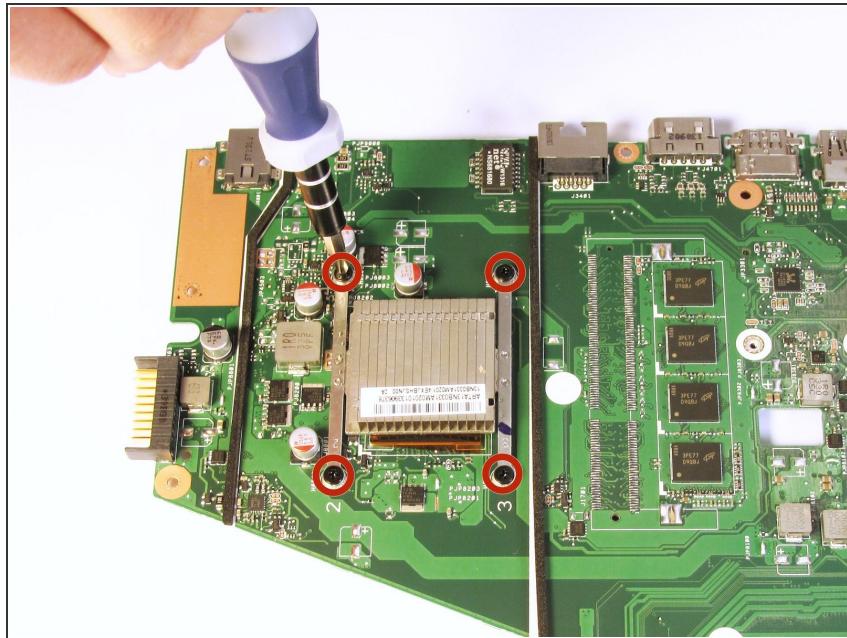
- Remove the motherboard from the case by gently lifting it upward.

Step 20 — Heat Sink



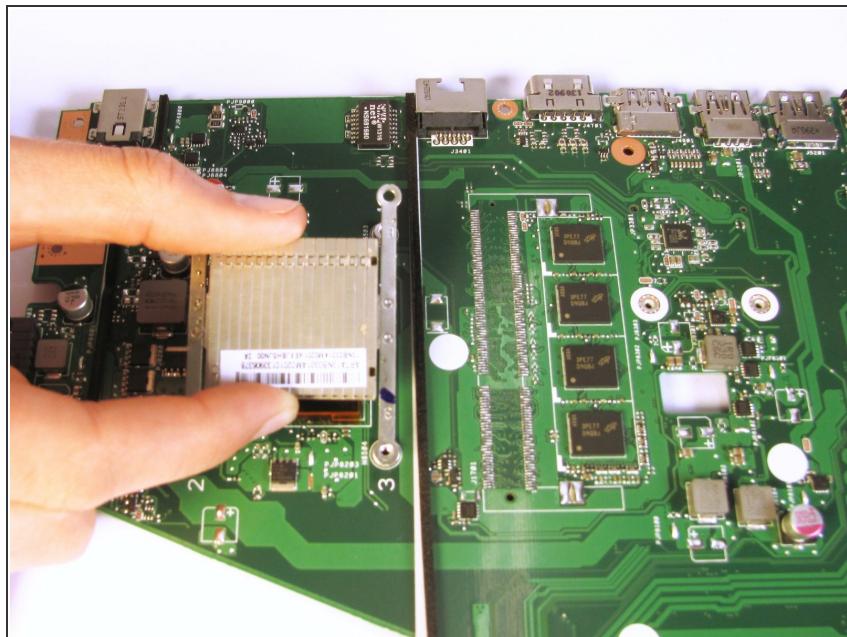
- Flip the motherboard over and locate the heat sink.

Step 21



- Remove the four 3.2 mm Phillips #0 screws holding the heat sink in place using the Phillips #0 Screwdriver.

Step 22



- Finally, remove the heat sink by lifting it off the motherboard.

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