Asus X550ZA-SA100603E Cooling Fan Replacement
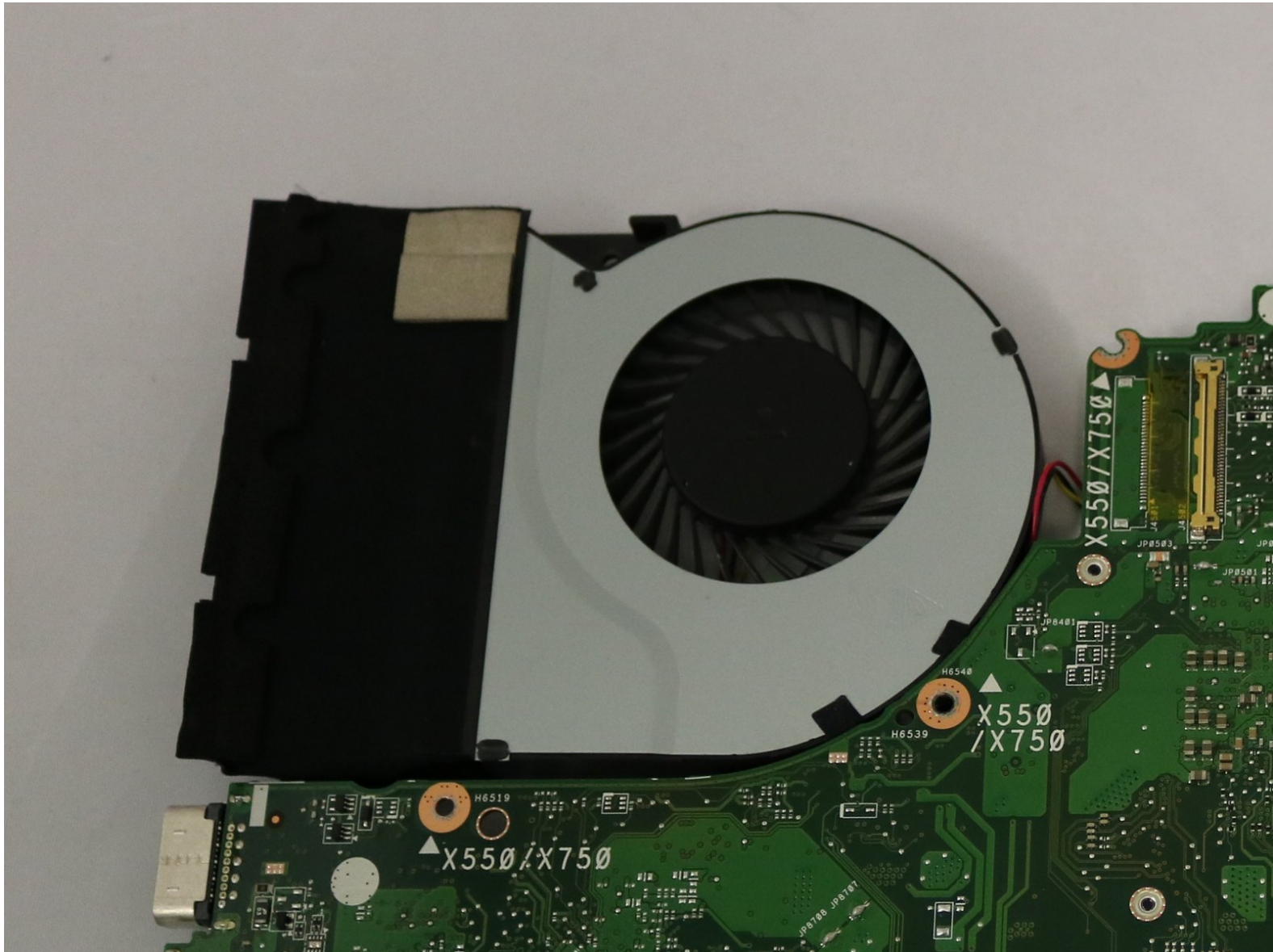
In case of overheating, you may need to replace your laptop's cooling fan.

Written By: Tim Linton

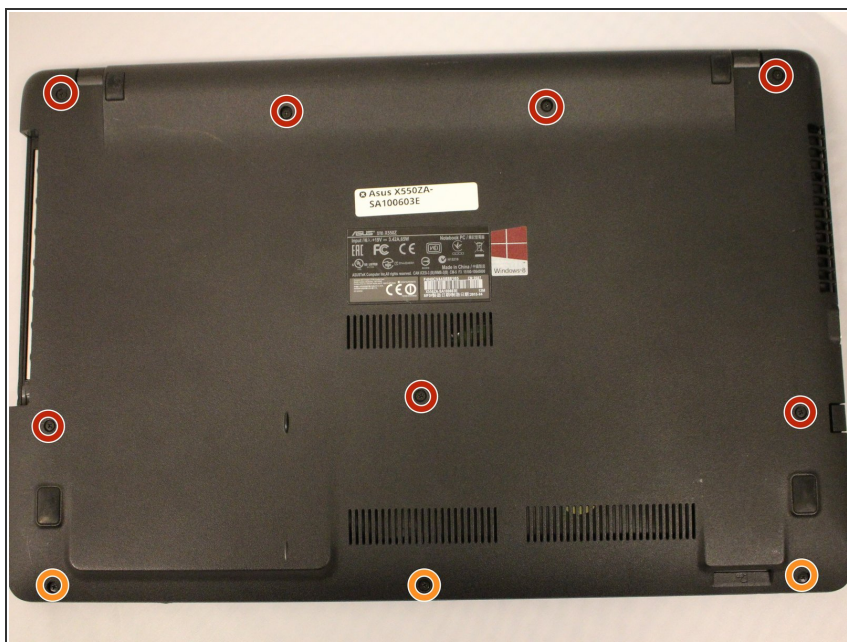This document was generated on 2020-11-27 11:36:03 AM (MST).

INTRODUCTION

A damaged or broken fan can cause your laptop to overheat. This guide will show you how to separate the cooling fan from the motherboard. Before removing the cooling fan, you must first remove the motherboard from the laptop.
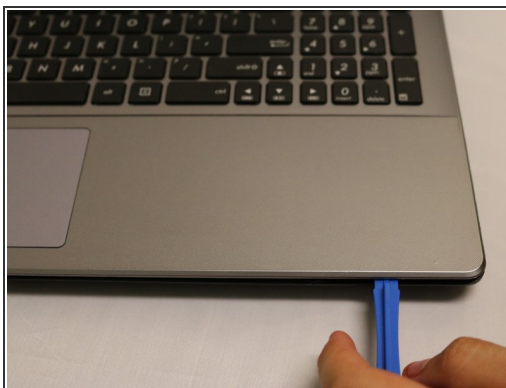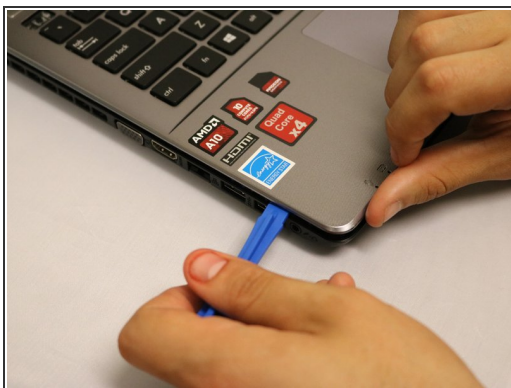
🔧 TOOLS:

- iFixit Opening Tools (1)
- Phillips #0 Screwdriver (1)

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Step 1 — Keyboard

- Using the Phillips #0 screwdriver, remove the seven 14 mm screws on the bottom of the laptop.

- Then use the Phillips #0 to remove the three 4 mm screws on the bottom of the laptop.
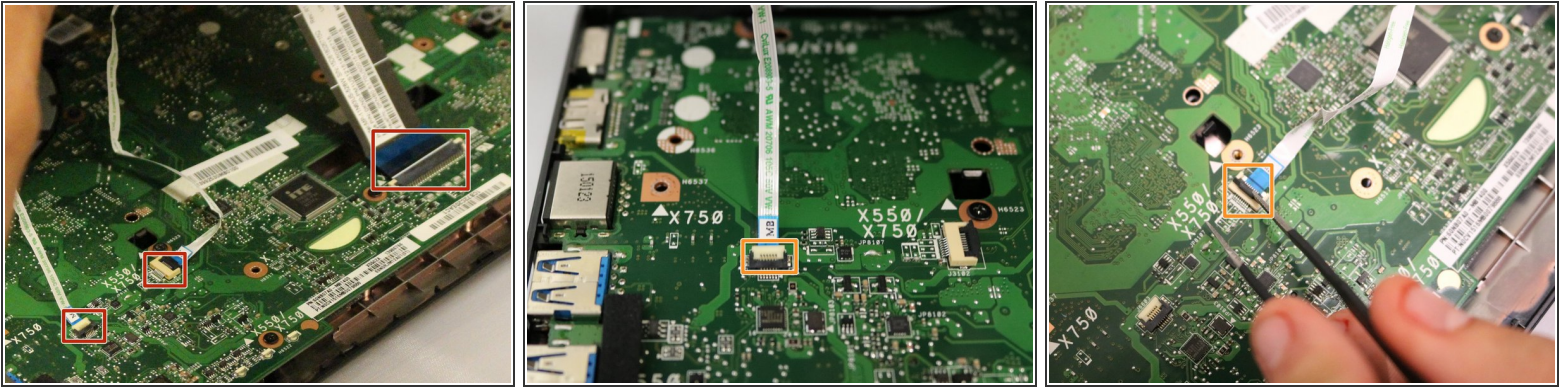
Step 2

- Insert a plastic opening tool between the keyboard and base of the laptop to pry the keyboard away from the base. Do this around the entire perimeter of the laptop.

- This disconnects the face of the keyboard. Gently lift the keyboard up to expose the motherboard.
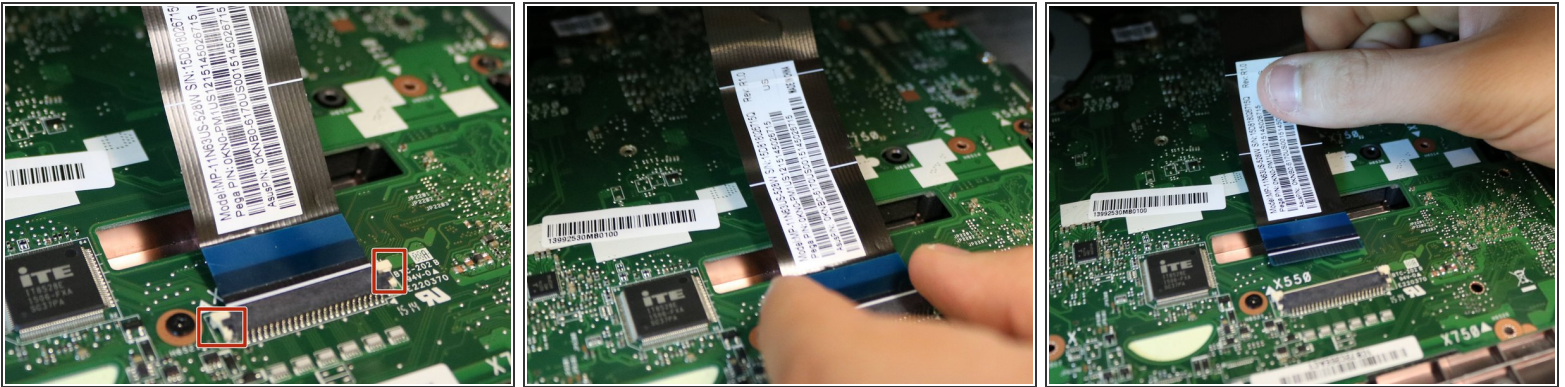
- ⚠ There are still ribbon cables connecting the keyboard face to the motherboard. Do not pull the keyboard away roughly.

Step 3

- Gently lift the keyboard to access the three ribbon cables connected to the motherboard

- Using precision tweezers, flip up the white and black retaining flaps on the ZIF connectors that hold the two smaller ribbon cables in place.

- Gently pull the ribbon cables from their sockets on the motherboard.
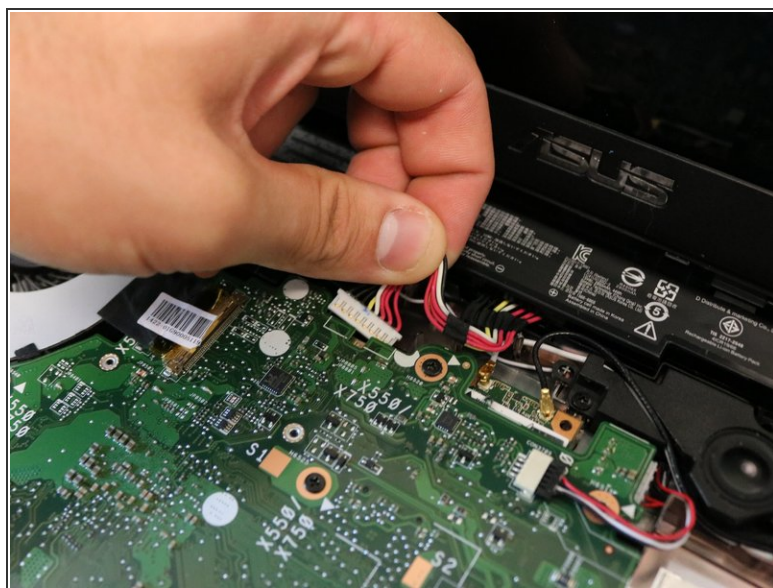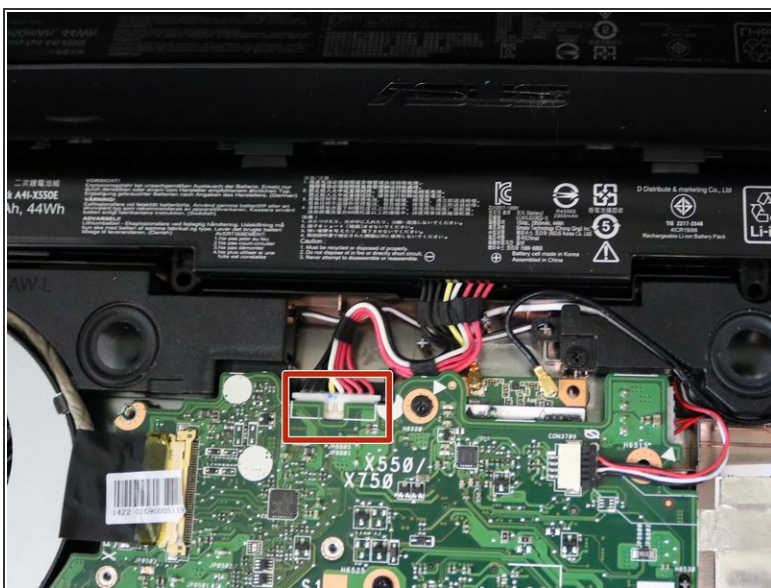
Step 4

- Push the two white clamps on the large ZIF connector towards the screen.

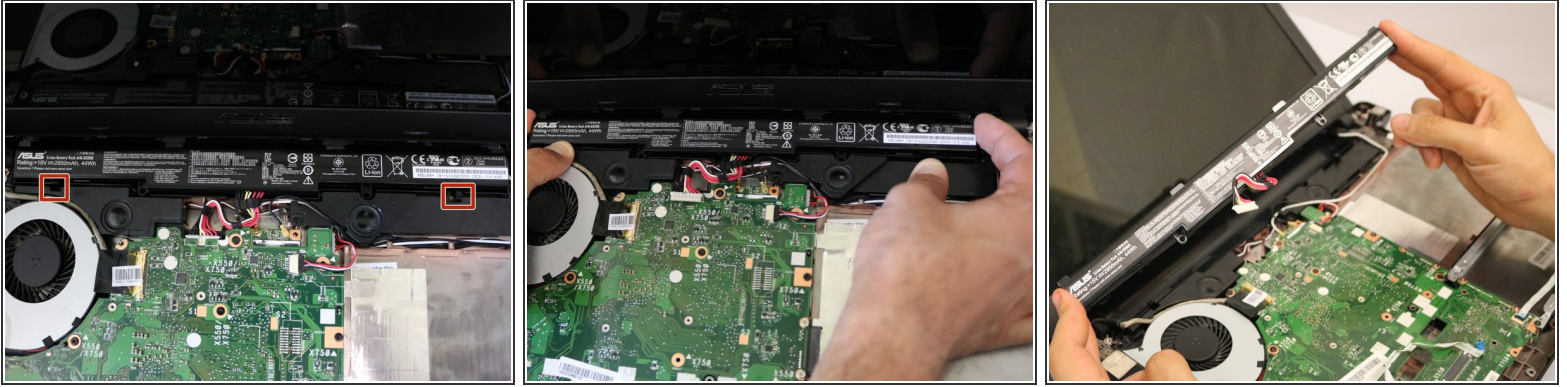- Gently remove the track pad ribbon cable from its connector.

Step 5

- Remove the keyboard.

Step 6 — Battery

- Disconnect the multi-wire battery plug from the motherboard.

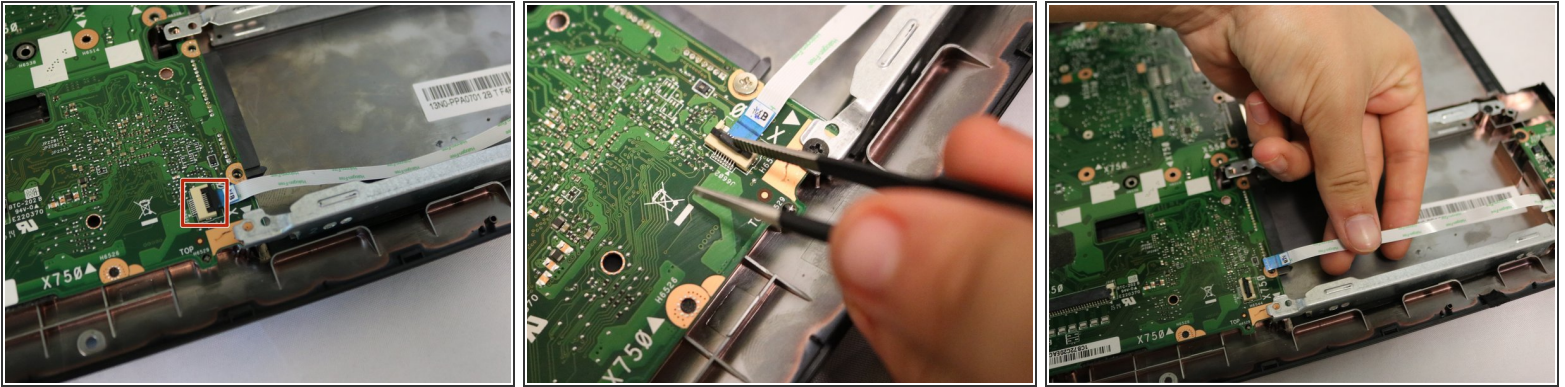This document was generated on 2020-11-27 11:36:03 AM (MST).

Step 7

- Pull the two tabs holding the battery in place and lift the battery up. It should remove easily.
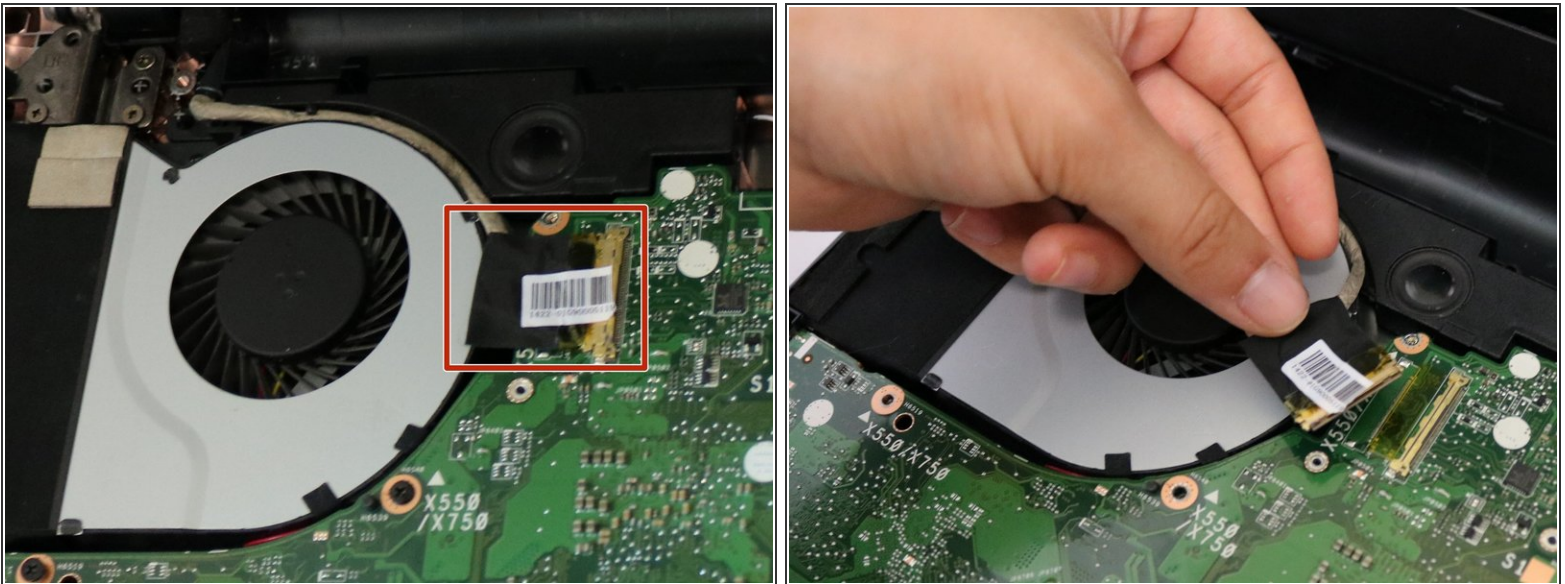
Step 8 — Motherboard

- Use a Phillips #0 screwdriver to remove the thirteen black 4 mm screws from the face of the motherboard.

- Use a Phillips #0 head screwdiver to remove the four silver 4 mm screws from the face of the motherboard

- Use a Phillips #0 head screwdriver to remove the one black 4 mm screw from the indented area above the fan.

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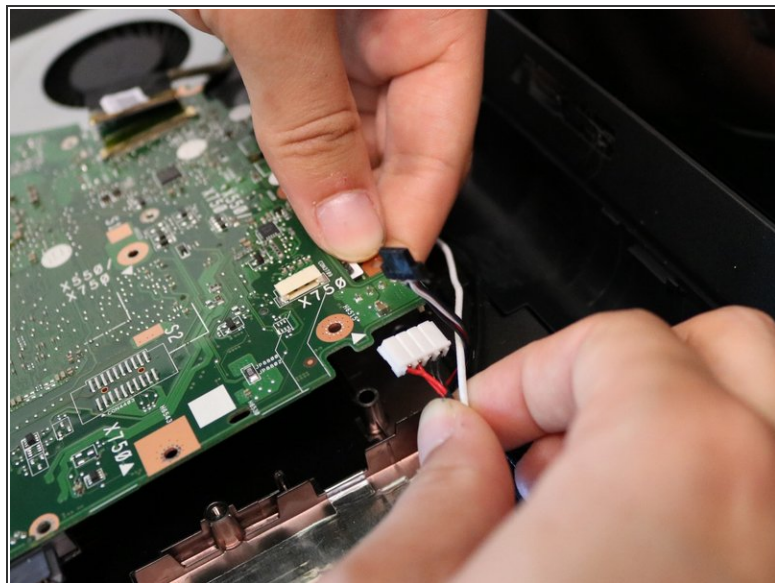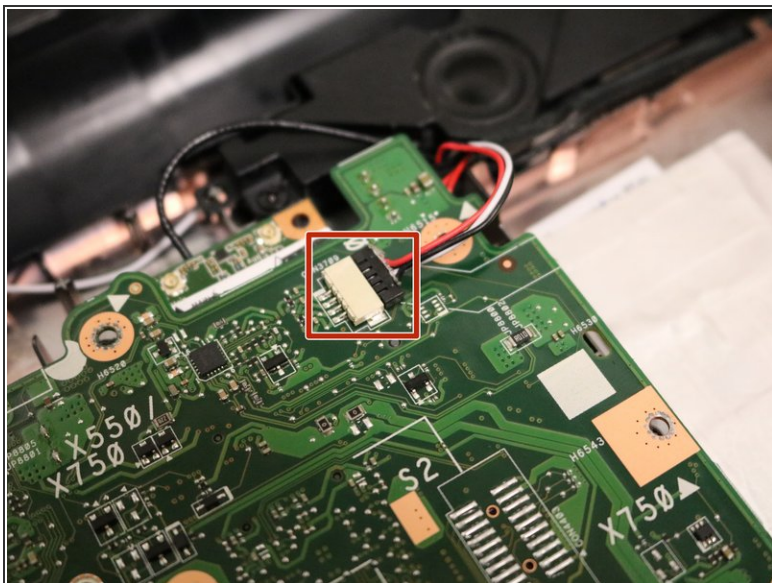
Step 9

- Use the precision tweezers to flip the black switch holding the film connected to the USB port.

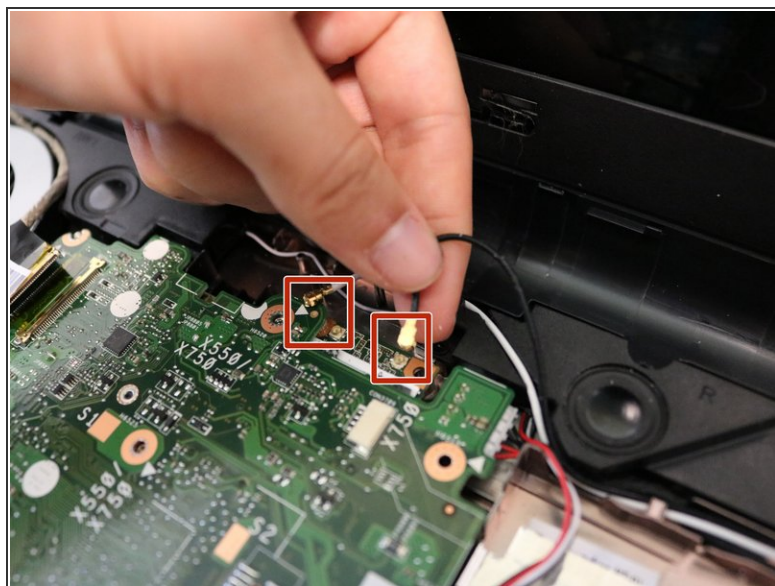- Gently remove the film from it's connection to the motherboard.

Step 10

- Gently pull the thick wire in between the fan and the motherboard. To release the wire connected to the motherboard, gently pull towards the cooling fan.

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Step 11

- Gently pull the red, black, and white wire found on the top right-hand corner of the motherboard.

Step 12

- Lift the black and white wires out of their ports at the top of the motherboard.

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Step 13

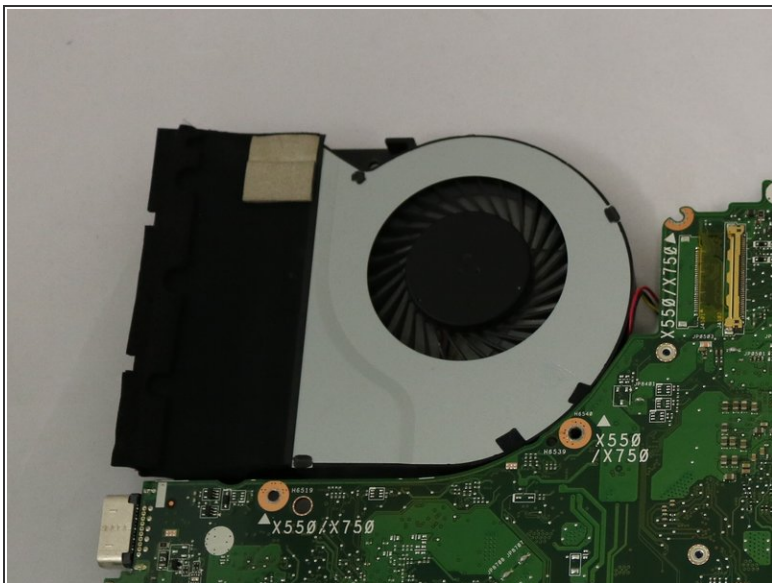

- Lift the top right corner of the motherboard to access the final wire.

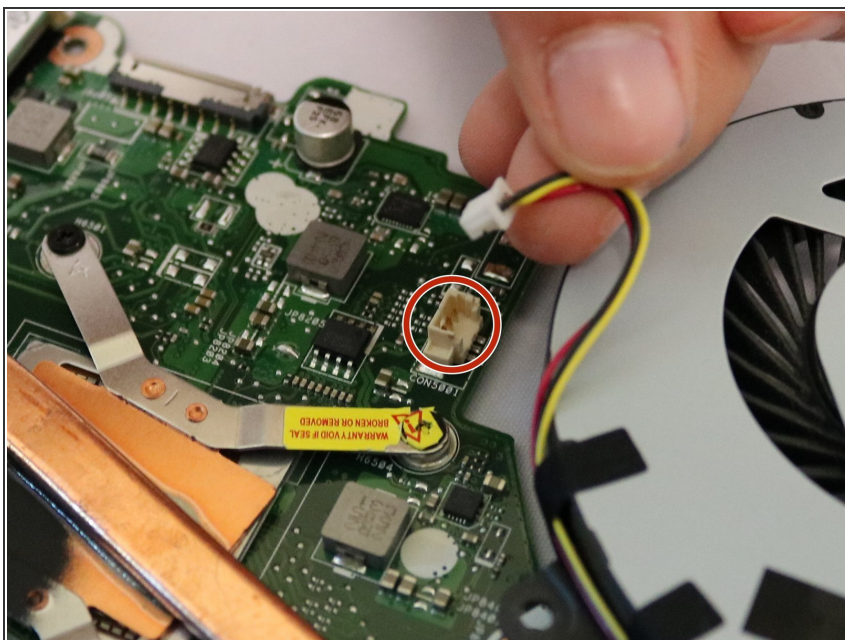- Gently remove the wire from the port connecting it to the motherboard.

Step 14

- Remove the motherboard from the laptop.

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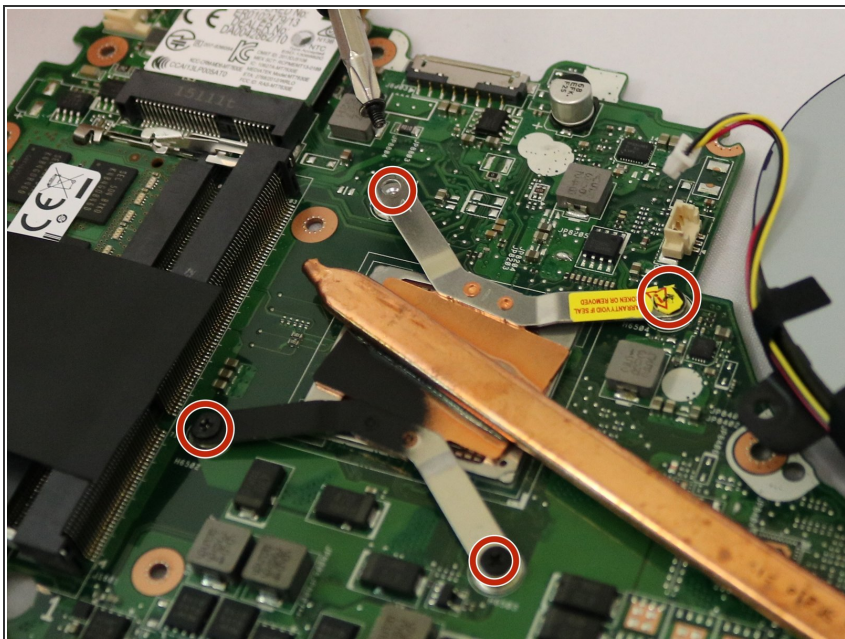
Step 15 — Cooling Fan

- Turn the motherboard over so that the copper heat sink and fan pin connections are facing towards you.
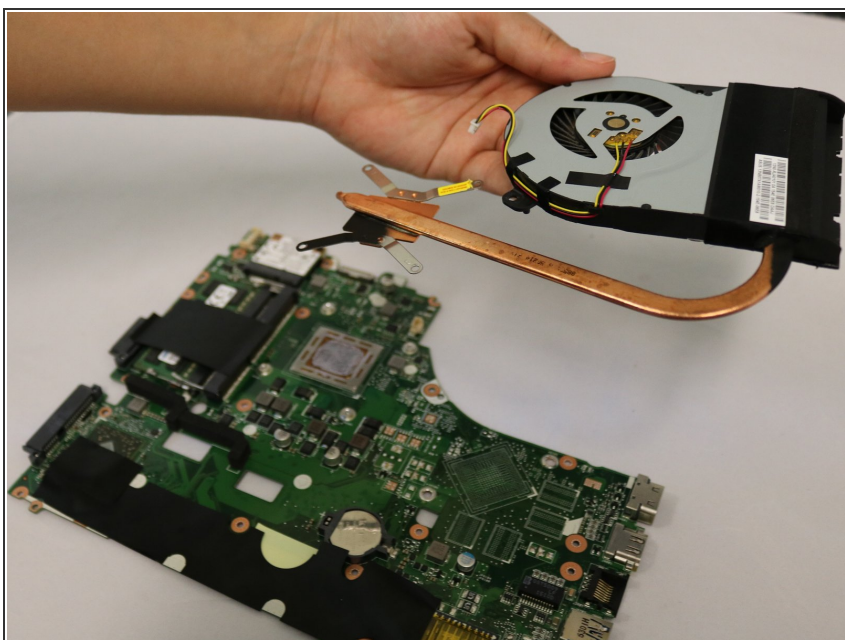
Step 16

- Pull the red, black, and yellow wire from out of its connection port.

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Step 17

- Remove the four 4mm Phillips #0 screws that are binding the copper heat sink to the motherboard.

Step 18

- Remove the fan assembly from the motherboard.

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

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