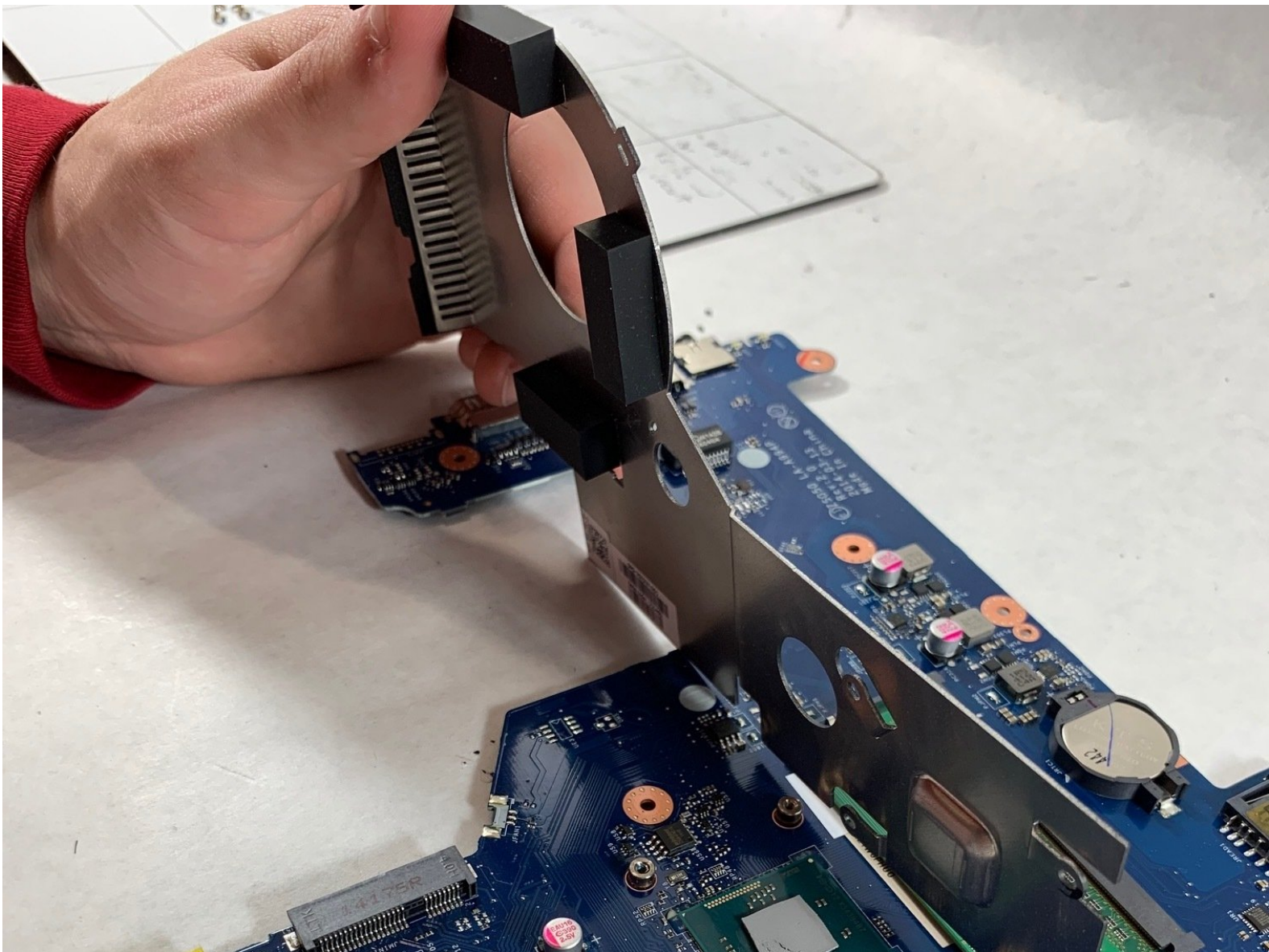




HP 15-R011DX Cooling Fan Replacement

This guide will help you with replacing and cleaning out your cooling fan in your device.

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INTRODUCTION

The cooling fan of any laptop or home computer ensures that the internal parts of the device do not overheat. For this reason it is important to make sure that your cooling fan is in working order and clean of dust. As with all disassembly guides, don't forget to create a back up of your device's hard drive.



TOOLS:

- [Metal Spudger](#) (1)
 - [Spudger](#) (1)
 - [Phillips #1 Screwdriver](#) (1)
-

Step 1 — Battery



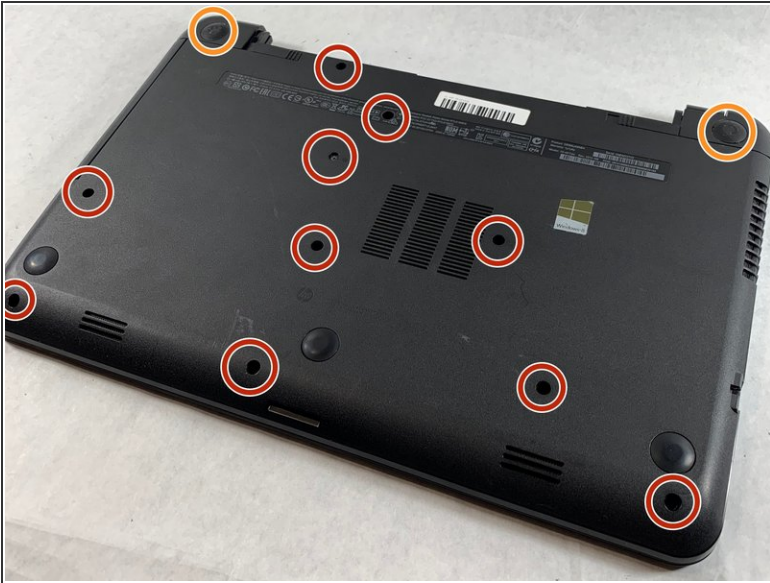
- Slide the lock mechanism on the left side of the laptop to the right.

Step 2



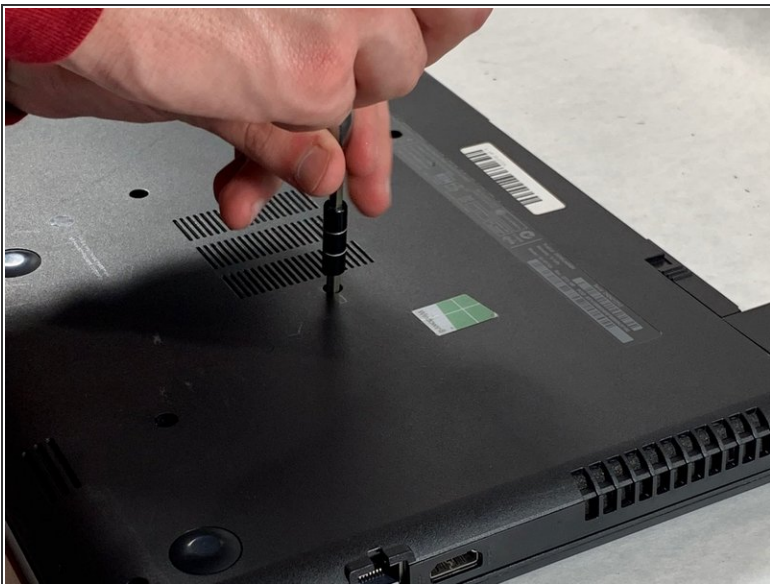
- While holding the right slide mechanism, remove the battery from the laptop.
- ⓘ The battery is not pictured here because it is missing from this particular device.

Step 3 — How to Access the Internal Components of an HP 15-R011DX



- Flip the laptop over to reveal screw locations.
- Use a metal spudger to remove the two rear rubber feet. There are screws hidden underneath them.

Step 4



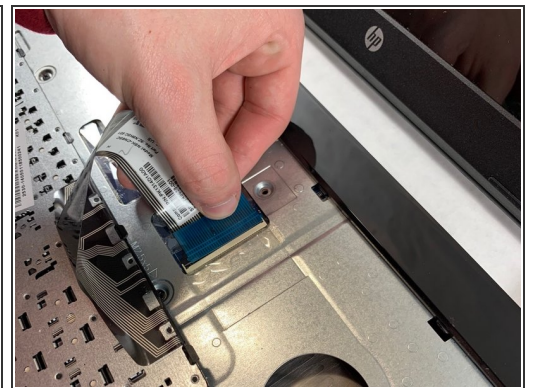
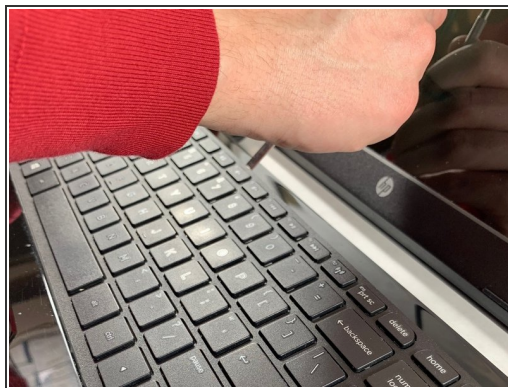
- Remove the twelve 5mm Phillips #1 screws on the back of the laptop.

Step 5



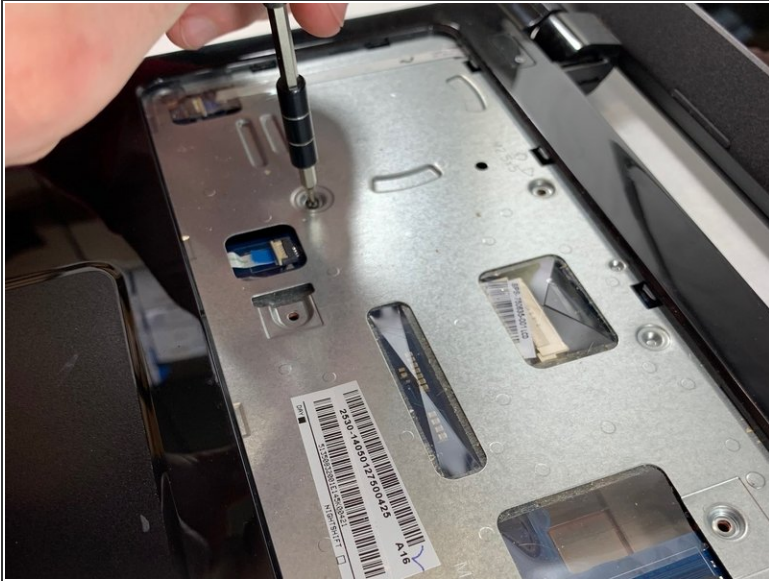
- Remove the DVD drive from the laptop.
- Remove the two 3 mm Phillips #1 screws underneath the DVD drive.

Step 6



- Flip the laptop and open.
- Detach the keyboard by prying it free from the laptop using a spudger.
 - ⚠ Do not completely remove the keyboard yet. It is still attached by a ribbon cable.
- Disconnect the keyboard ribbon cable.

Step 7



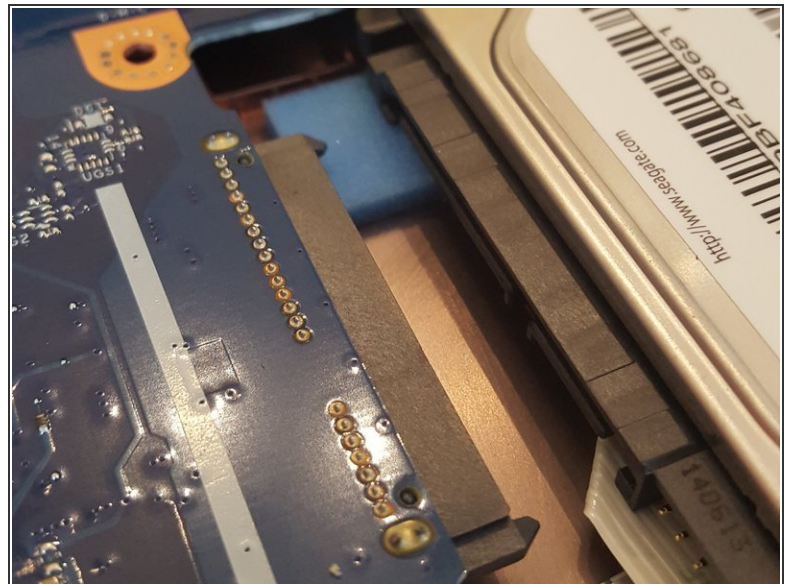
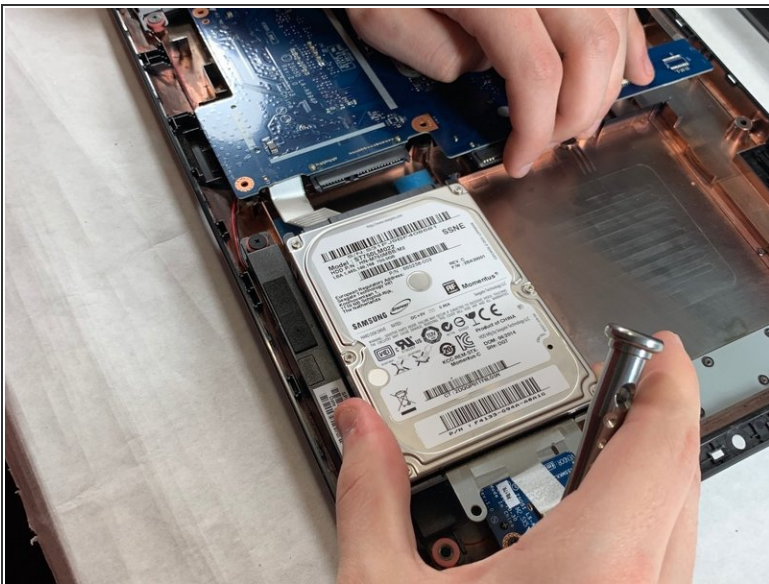
- Disconnect the two narrow ribbon cables to the left of the keyboard connection.
 - Remove five 4 mm Phillips #1 screws from the metal tray for the keyboard.
 - Pry open the plastic casing using a spudger.
- ⚠ If struggling to remove the plastic case, check that all screws have been removed.

Step 8 — Hard Drive



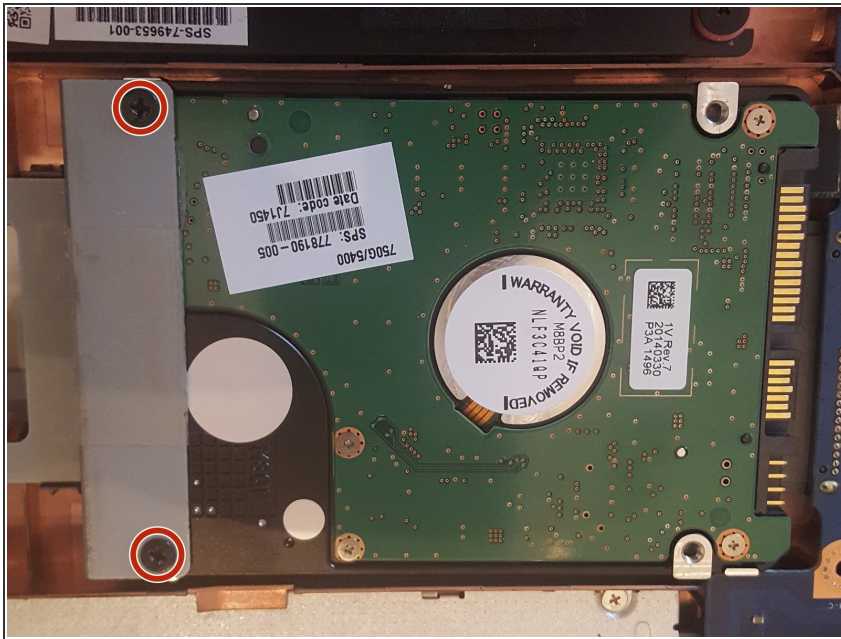
- Remove two 5 mm Phillips #1 screws located at the base of the hard drive.

Step 9



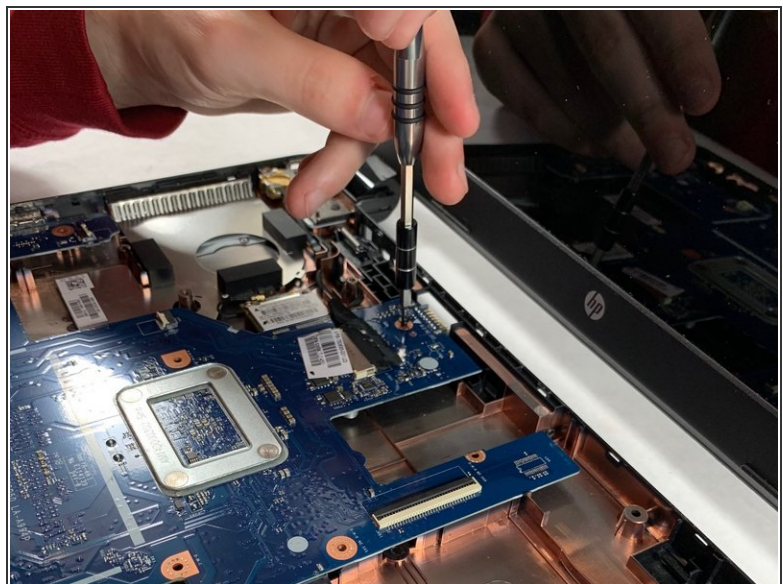
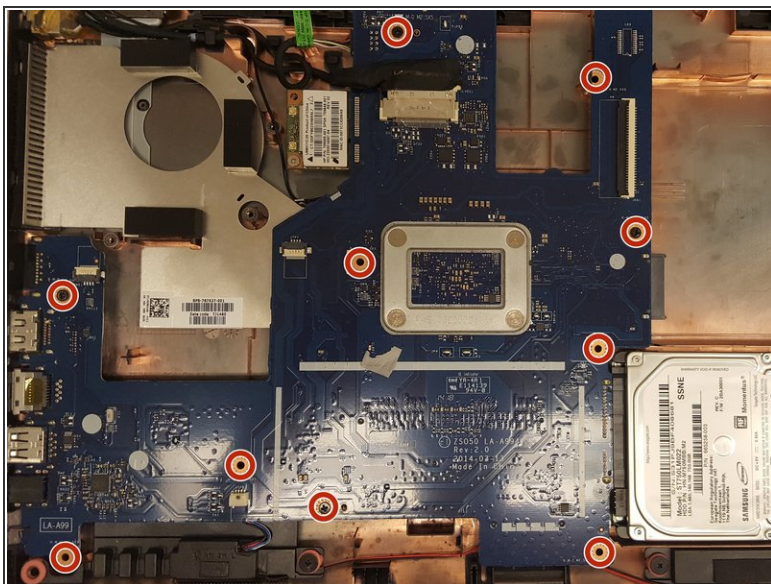
- Pull the hard drive upwards and away from the laptop.
- The hard drive should disconnect from its port on the motherboard as shown in the second image.

Step 10



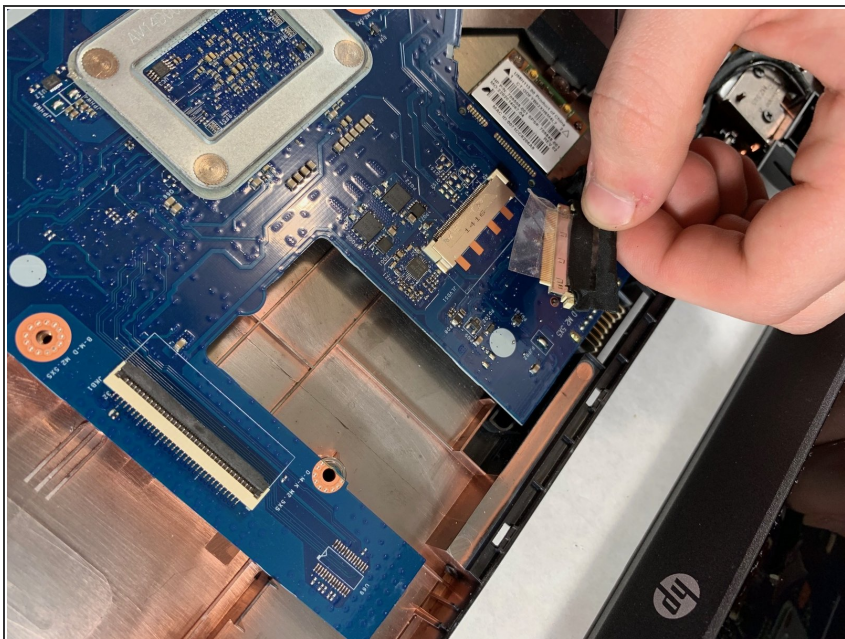
- Flip the hard drive over.
- Remove the two 4 mm Phillips #1 screws from the base of the hard drive.
- Remove the mounting brace (silver bracket) from the hard drive.

Step 11 — Motherboard



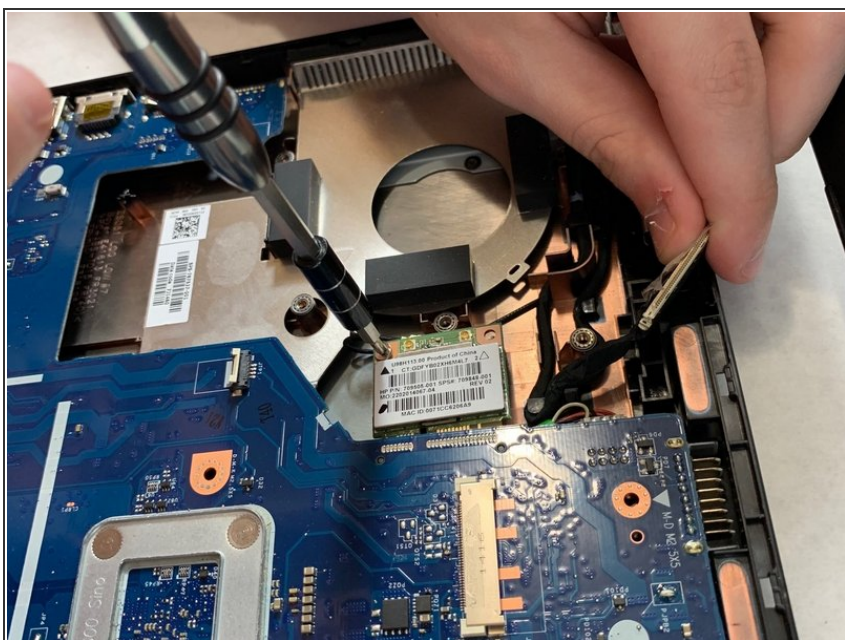
- Remove ten 5 mm Philips #1 screws from the motherboard.

Step 12



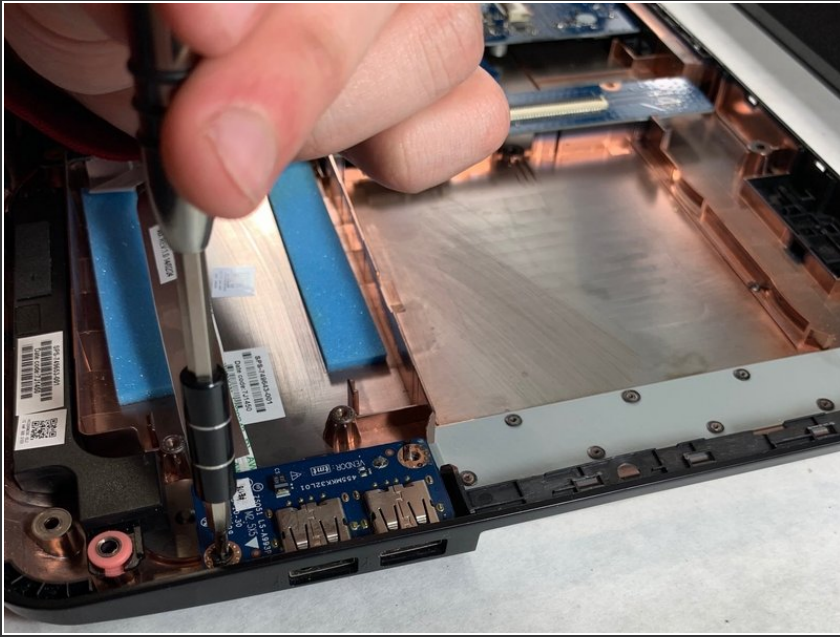
- Remove the tape from the display connector attached to the motherboard.
- Disconnect the display connector from the motherboard.

Step 13



- Remove one 4 mm Phillips #1 screw from the wireless chip.
- Remove the wireless chip from the motherboard.

Step 14



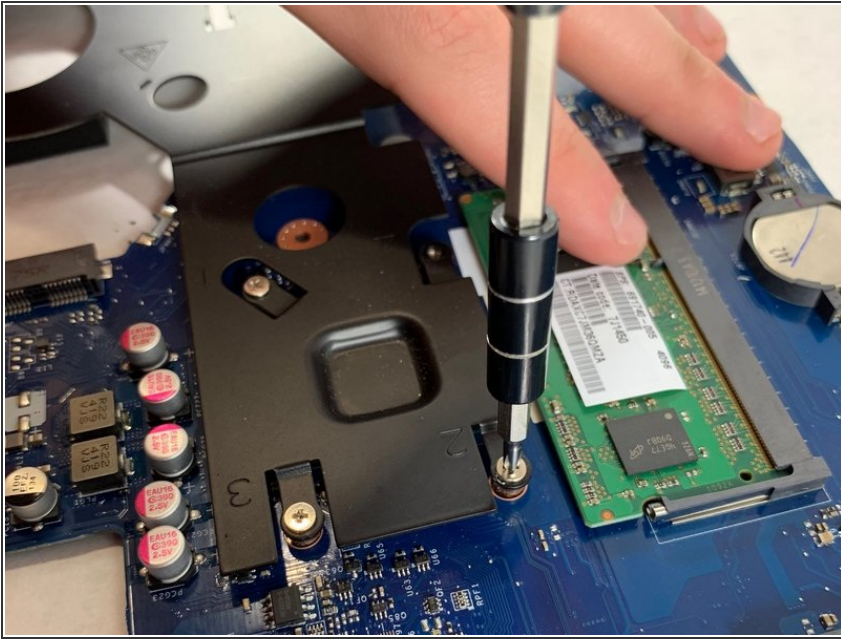
- Remove two 5 mm Phillips #1 screws from the USB component connected to the motherboard.
- Lift the USB component until the band connecting it to the motherboard lifts off of the laptop.

Step 15



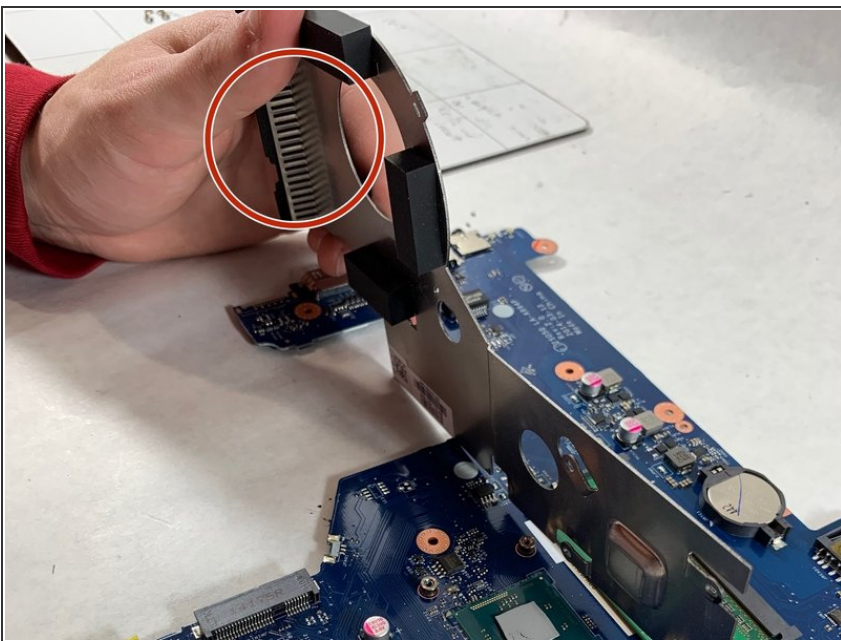
- Slowly lift the motherboard out of the computer.
- ⚠ **Be sure that the I/O ports on the left side of the motherboard are not stuck on the laptop frame.**
- Disconnect the power connector from the motherboard as shown in the image.

Step 16 — Cooling Fan



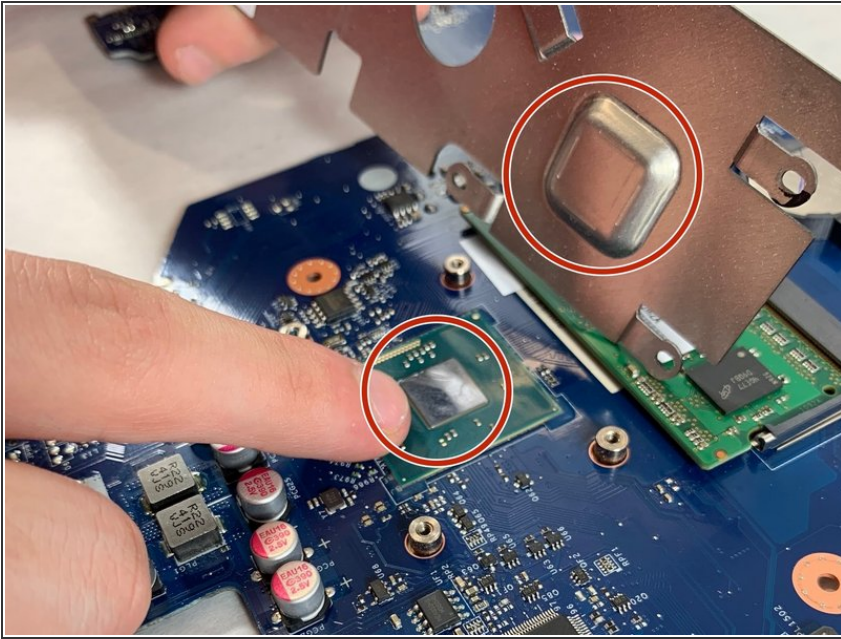
- ① The cooling fan assembly is located on the underside of the motherboard.
- Using a Phillips #1 screwdriver, remove the three 5mm screws that secure the cooling fan assembly to the motherboard.

Step 17



- Separate the cooling fan assembly from the motherboard and proceed to use the canned air to clean the inner pieces of the fan.
- ① You can now clean the inner parts of the fan assembly or replace with a new assembly.

Step 18



- ✦ Before reconnecting the cooling fan assembly, make sure to [properly apply thermal paste](#) and touch the two connectors together when reassembling your laptop.

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