



Asus ROG Strix GL702VM-BHI7N09 Motherboard Replacement

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Written By: Gunnar Hudson



INTRODUCTION

The motherboard is a critical part of any computer, housing the central processor unit that data flows through. The Asus ROG Strix GL702VM-BHI7N09 gaming laptop is no exception and cannot function without a working motherboard. The guide below displays how to properly replace this component. Before starting the replacement of the motherboard, it is important to have some prior background knowledge about the components of a gaming laptop. It is also vital to power off the device, remove it from any external charging cable and disconnect or remove the battery prior to beginning the repair.



TOOLS:

- [iFixit Opening Tool](#) (1)
 - [Phillips #1 Screwdriver](#) (1)
 - [Small Chain Nose Pliers](#) (1)
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Step 1 — Back Panel



- Flip the laptop over to the back panel, with the serial numbers facing up.
- Using a Phillips #1 screwdriver, remove the ten 12 mm screws from the back panel.

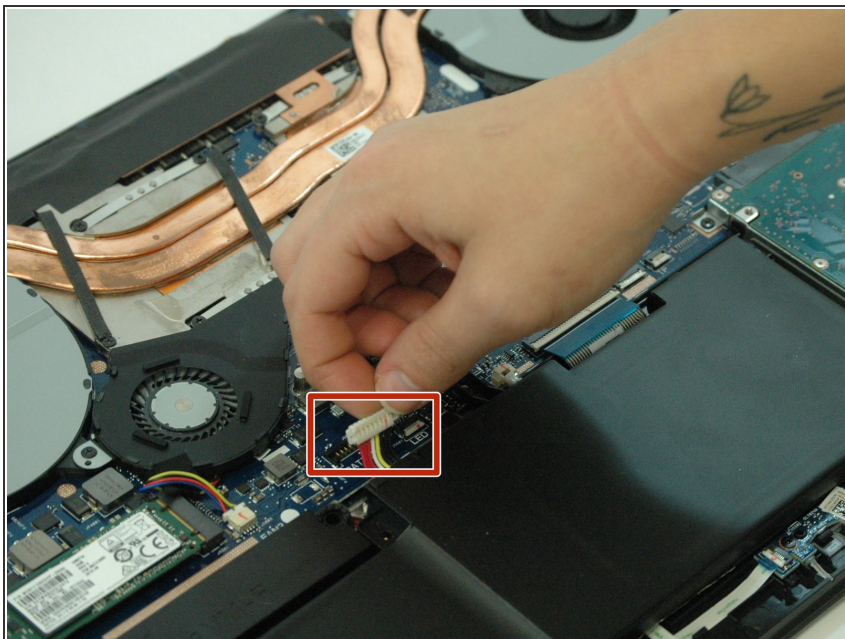
Step 2



⚠ The snap seals don't need a lot of pressure to open, and may break if forced. Be gentle with the opening tool.

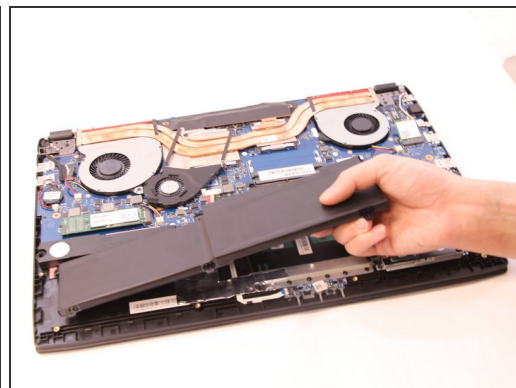
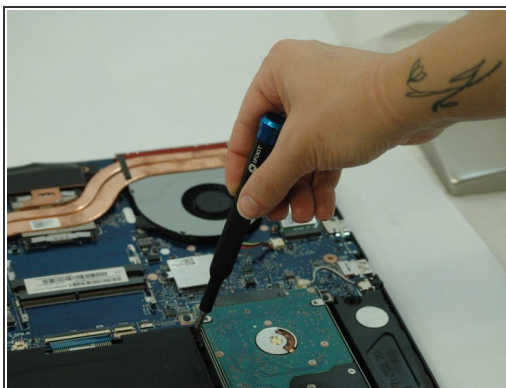
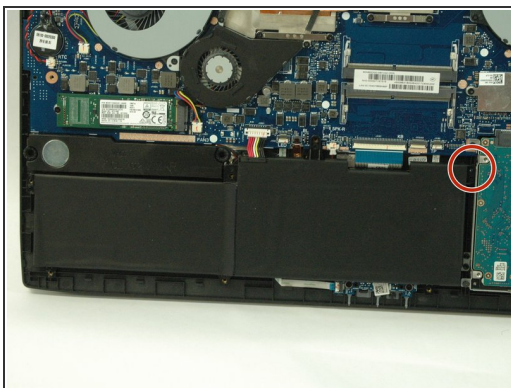
- Wedge the sharp edge of the plastic opening tool into the seam between the back panel and the rest of the laptop, then gently pry the panel up.
- ⓘ There will be a snapping sound as you remove the back panel, but that is just the seal loosening.
- Continue breaking the seals by sliding the plastic opening tool around the entire laptop under the seam until the back panel is free.
- Once you have broken all the seals, carefully lift the panel off.

Step 3 — Battery



- Unplug the battery from the motherboard.

Step 4



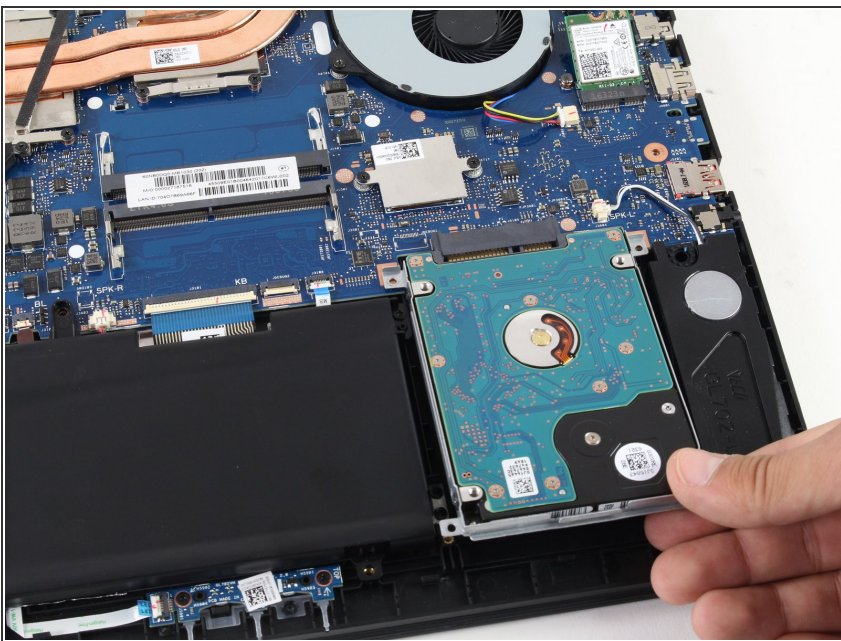
- Unscrew the 3.8 mm Phillips #1 screw on the top right hand corner of the battery.
- Lift battery from laptop frame.

Step 5 — Hard Drive



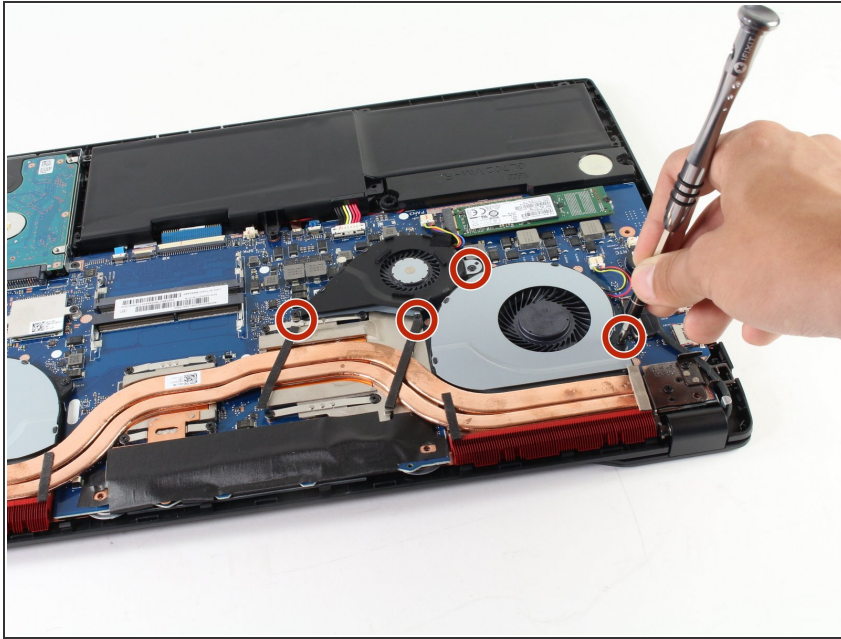
- Using a Phillips #1 screwdriver, remove the four 4 mm screws holding the hard drive.

Step 6



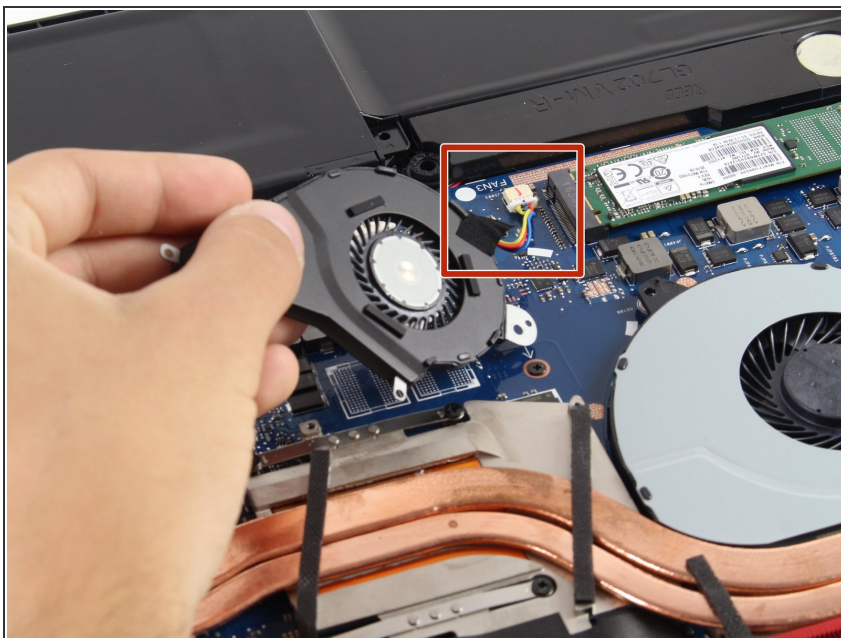
- Pull the hard drive directly away from the fan just above it.
- ⓘ The connecting pins should slide out easily, but you might have to move the hard drive around a bit to loosen the pins.

Step 7 — Fan



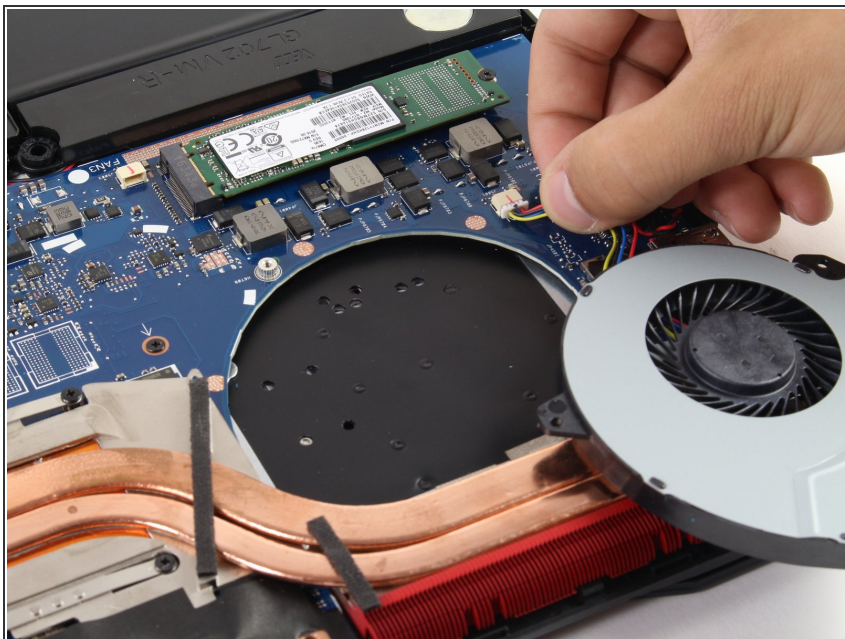
- Using a Phillips #1 screwdriver, remove the four indicated 4 mm screws that hold the black fan and the silver one adjacent to it.

Step 8



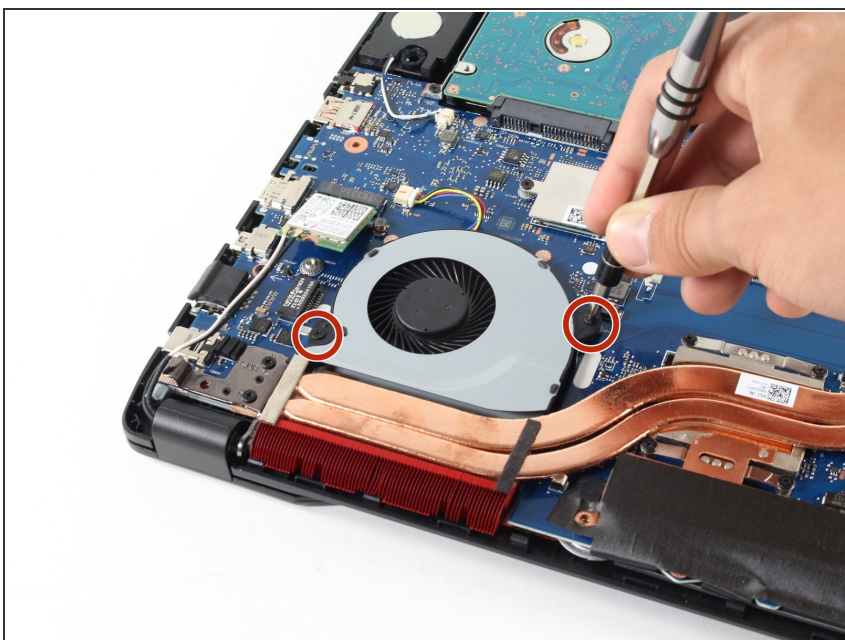
- ⓘ The smaller black fan must be removed before the larger gray fan on the right can be taken out.
- To remove the black fan, pull gently on the connecting cables outlined.

Step 9



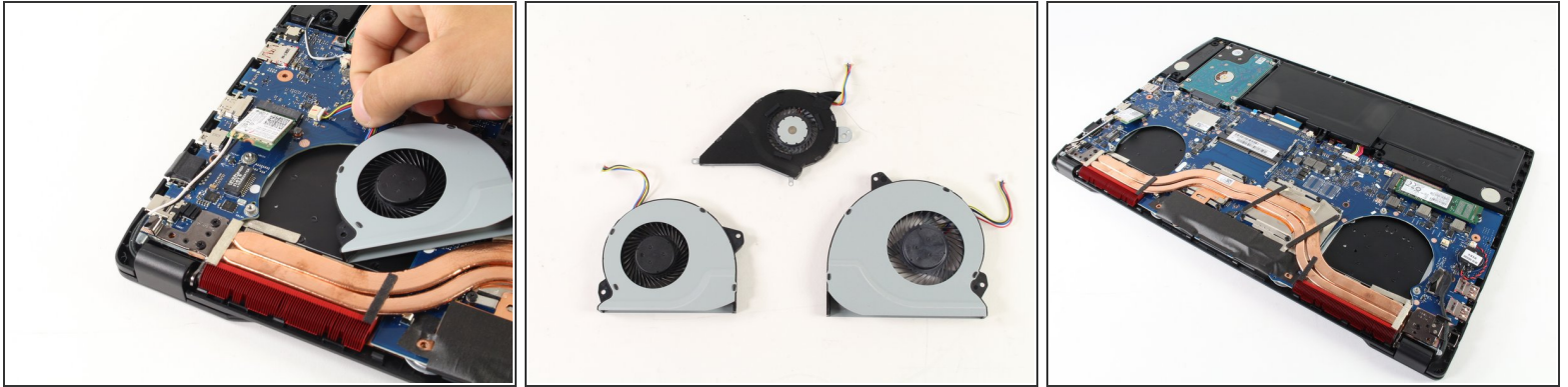
- Unplug the white connector by gently pulling the cables.
- Lift off the gray fan.

Step 10



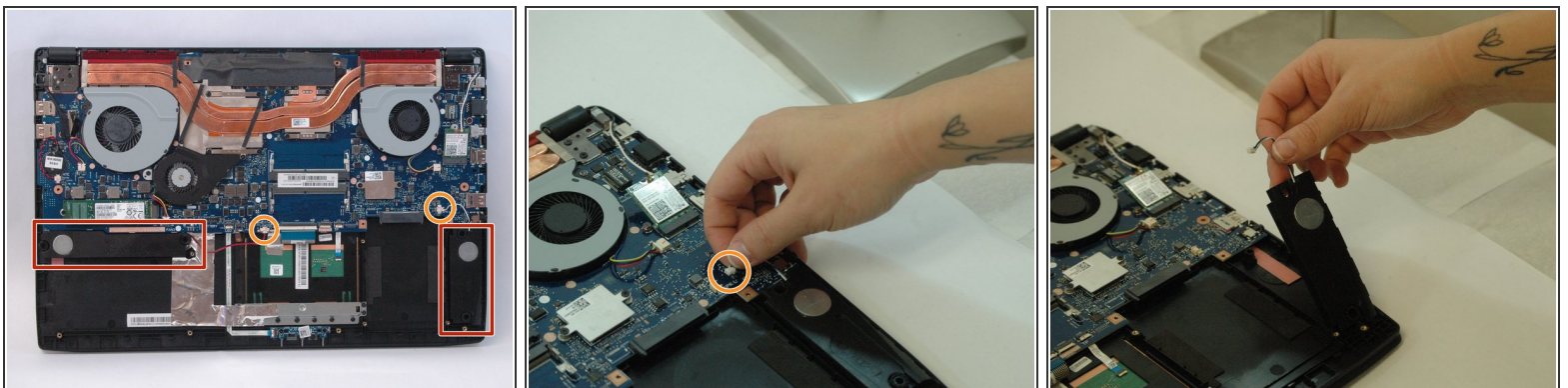
- Using a Phillips #1 screwdriver, remove the two indicated 4 mm screws from the other gray fan.

Step 11



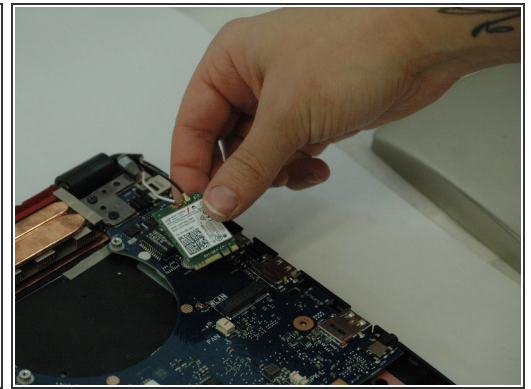
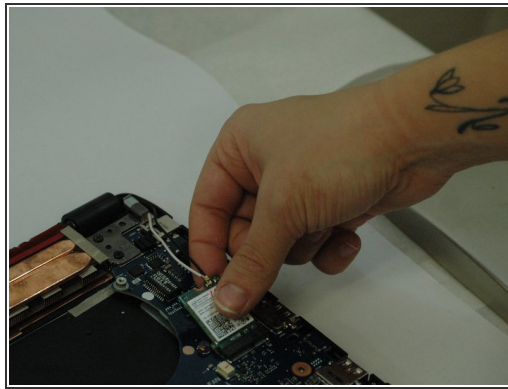
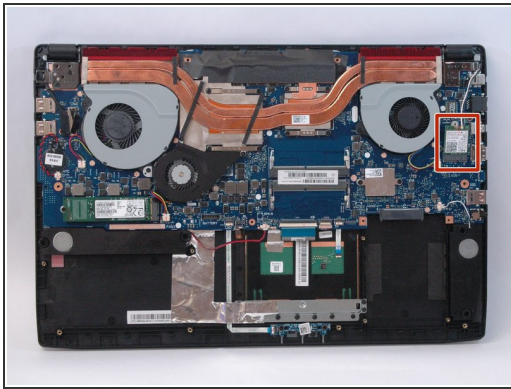
- Unplug the white connector by gently pulling it towards the center of the computer.
- Lift the fan out of the body of the laptop to remove it.

Step 12 — Motherboard



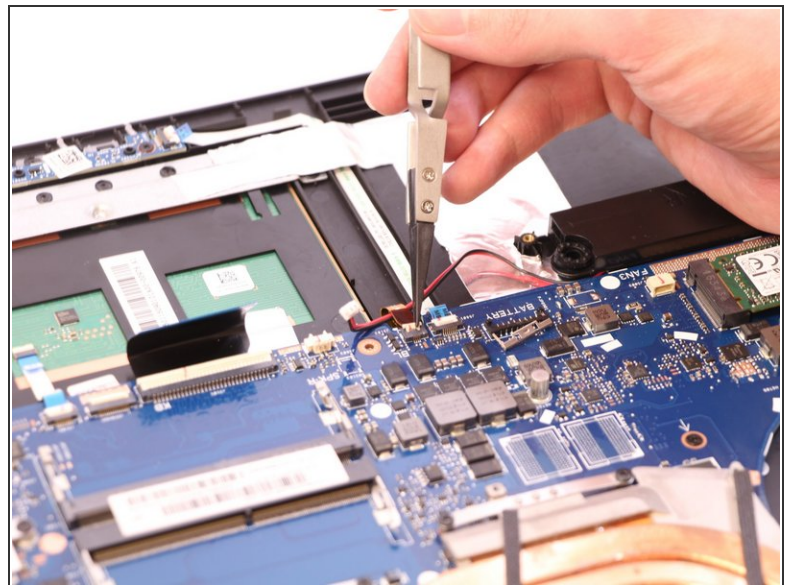
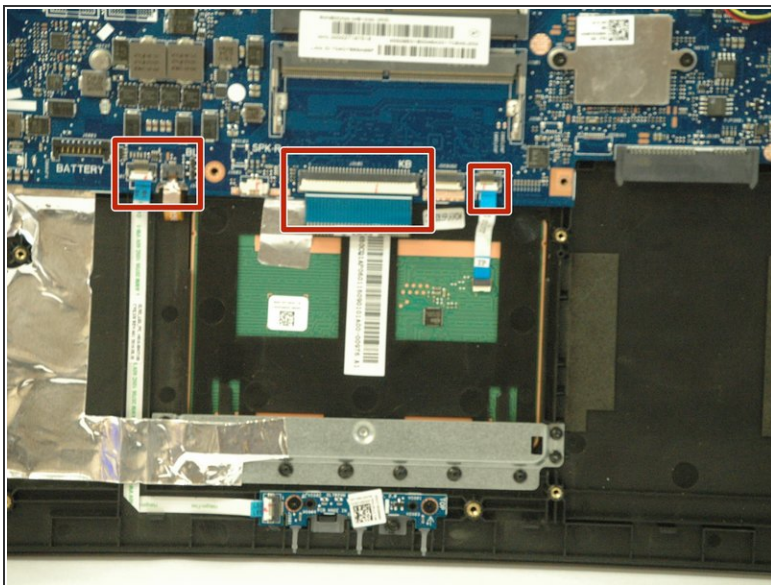
- Disconnect the speakers connectors located in each of the bottom corners.
- Gently pull the wire up from the motherboard.
- Once the wire is disconnected, pull the speaker out.

Step 13



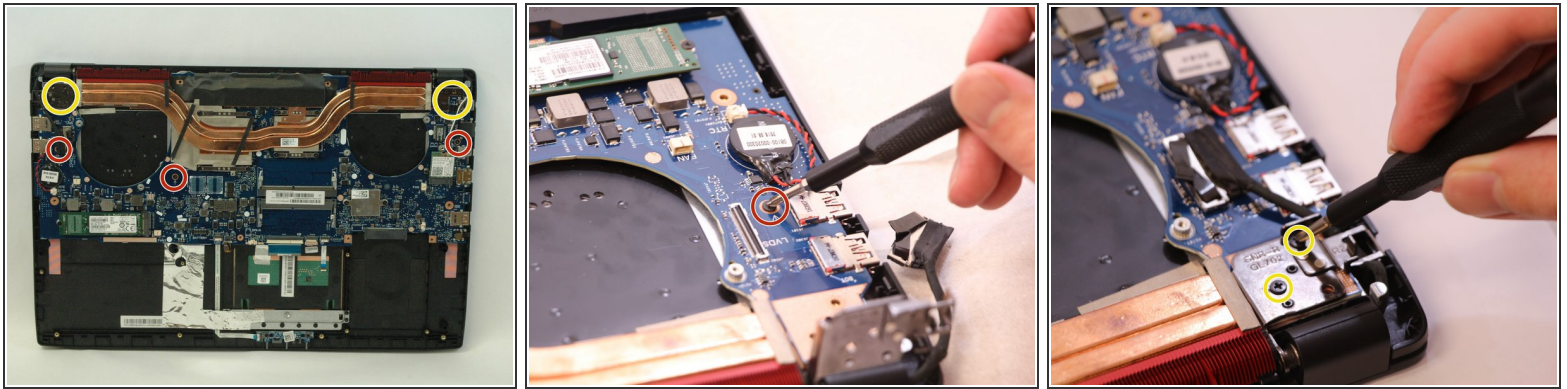
- Gently lift the graphics card from the motherboard.

Step 14



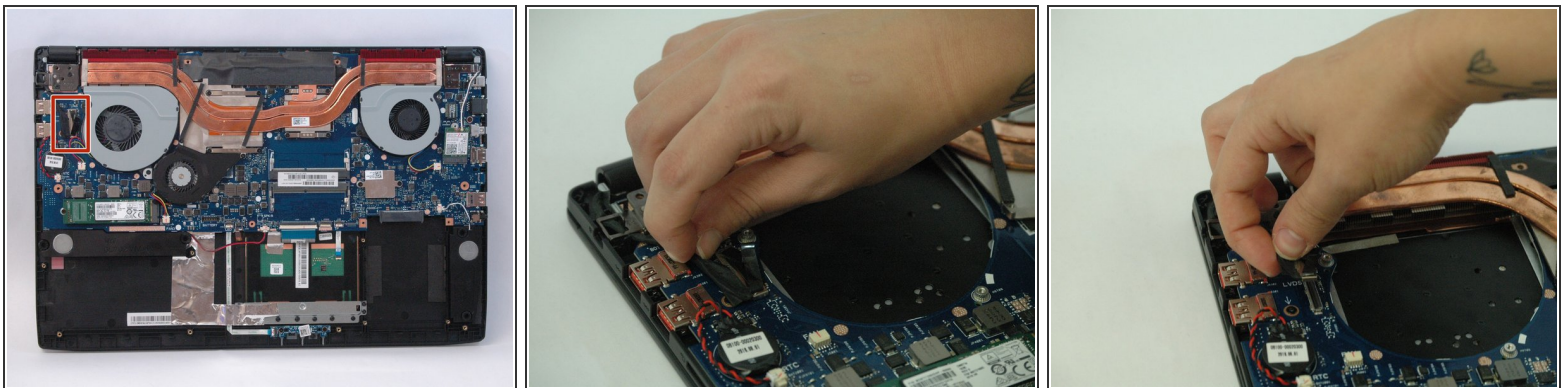
- Use reverse pliers to detach ribbon connectors from the motherboard.

Step 15



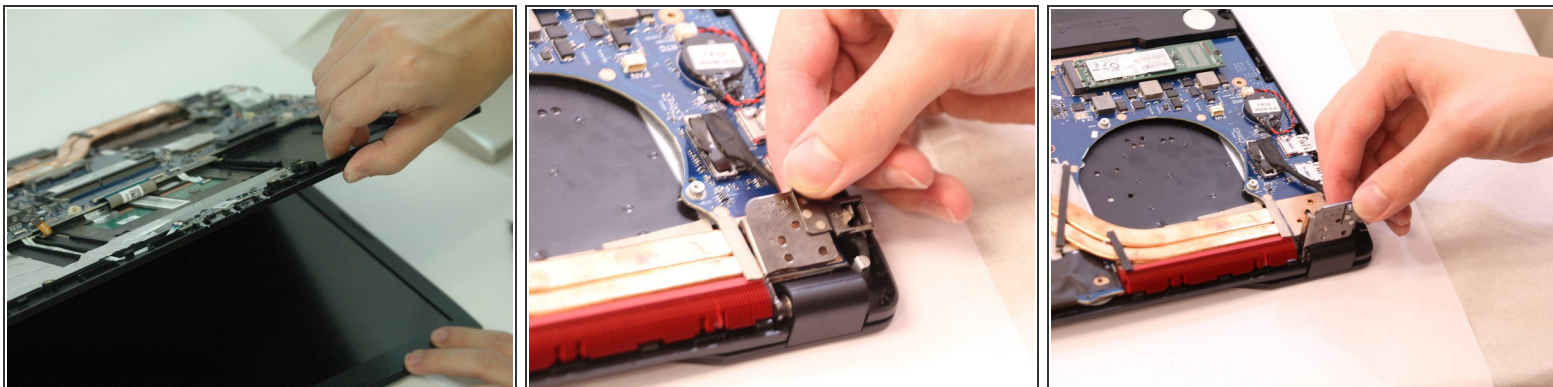
- Remove each of the 4.7 mm Phillips #1 screws marked by a white arrow on the motherboard.
- Remove the 6.7 mm Phillips #1 screws from the metal latches on the hinge-side corners.
- ⓘ The 4.7 mm Phillips #1 screw on the far left of the motherboard is covered by the black connecting wire in Step 5.

Step 16



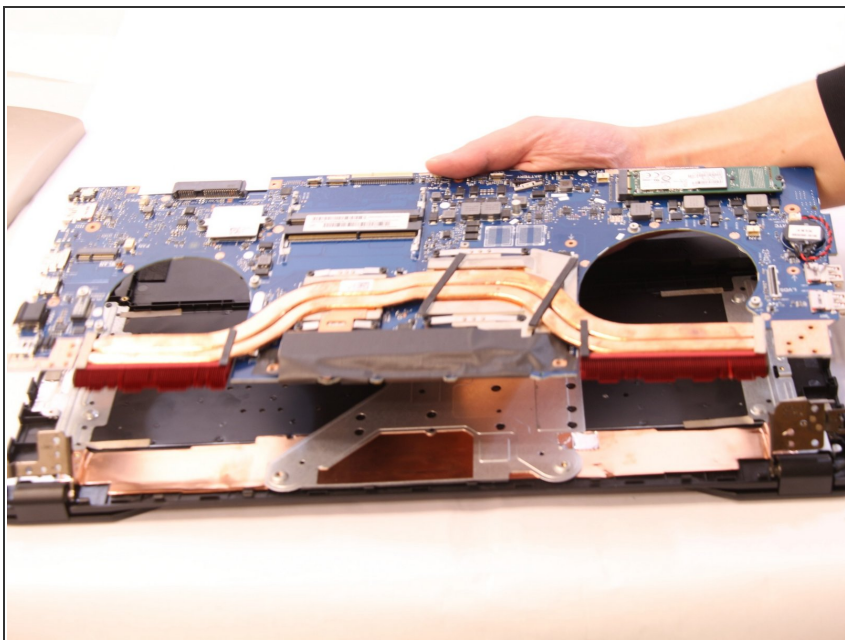
- Gently pull on black connecting wire to disconnect the monitor screen from the motherboard.
- ⓘ This will uncover the far left 4.7 mm Phillips #1 screw.

Step 17



- Lift the metal latches on both sides.
- This can be easily done by opening the laptop after the metal latch screws have been removed.

Step 18



- Remove the motherboard from the laptop frame.

i You will need to pull the motherboard to the side as well as lifting it to free its various ports from the sides of the laptop case.

⚠ There is adhesive attaching the final ribbon connector to the bottom of the motherboard. This will need to be removed.

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