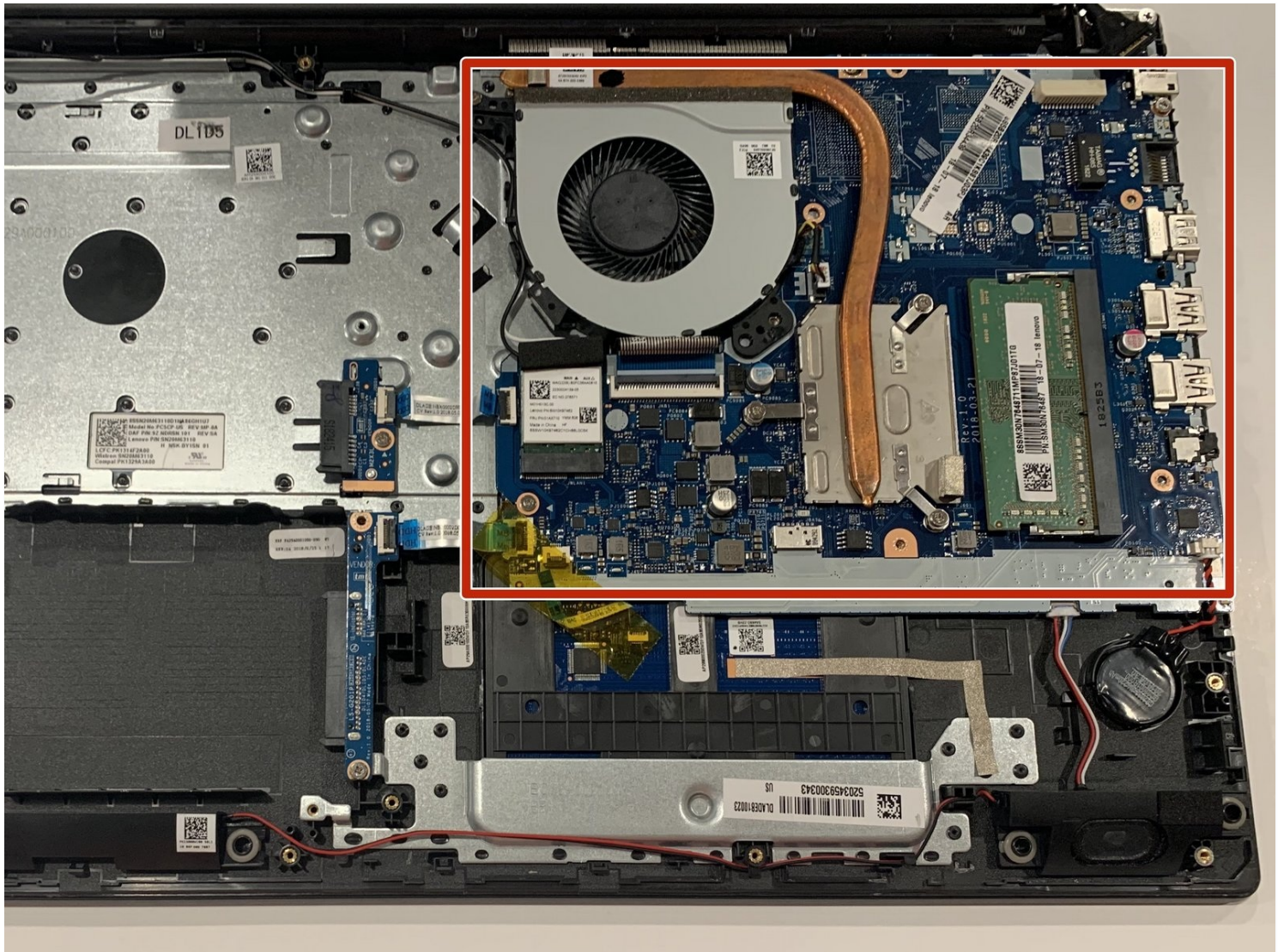




Replacement

Use this guide to remove the Motherboard from...

Written By: Keith Machado



INTRODUCTION

Use this guide to remove the Motherboard from the Lenovo IdeaPad 130-15AST. The motherboard of your computer is a giant circuit board inside of your desktop or laptop computer. Between all the components run silver lines of conductive metal, "wires" fused directly to the motherboard's insulating plastic. The conductors sometimes break or melt; or a component that cannot be easily removed burns out. This could happen as a result of a power surge due, a lightning strike, or because of a manufacturing defect. With those results you will need to replace your motherboard. Follow the steps in the Replacement Guide carefully to remove the motherboard safely and efficiently.

Source: [Reasons why to replace your Motherboard](#)



TOOLS:

Phillips #00 Screwdriver (1)
Phillips #0 Screwdriver (1)
Jimmy (1)
Prying and Opening Tool Assortment (1)
Tweezers (1)



PARTS:

Lenovo IdeaPad 130-15 Motherboard (1)

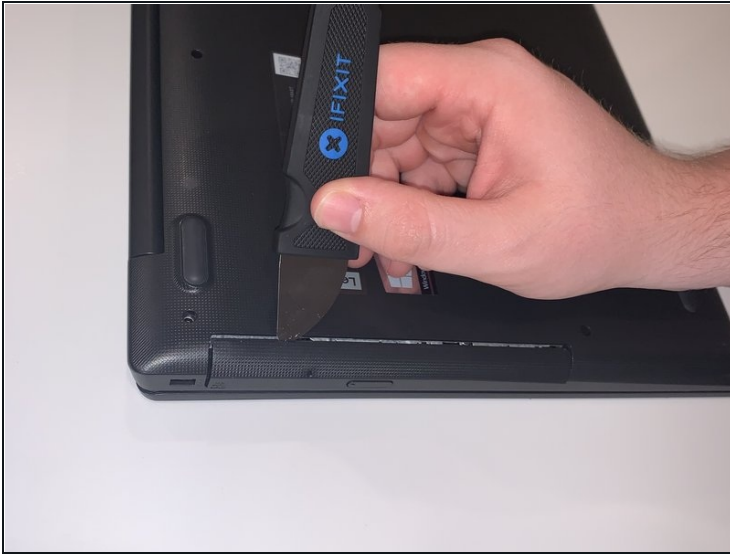
Step 1 — DVD/CD Optical Drive



⚠ Verify that the DVD/CD Tray is free of DVD's and CD's.

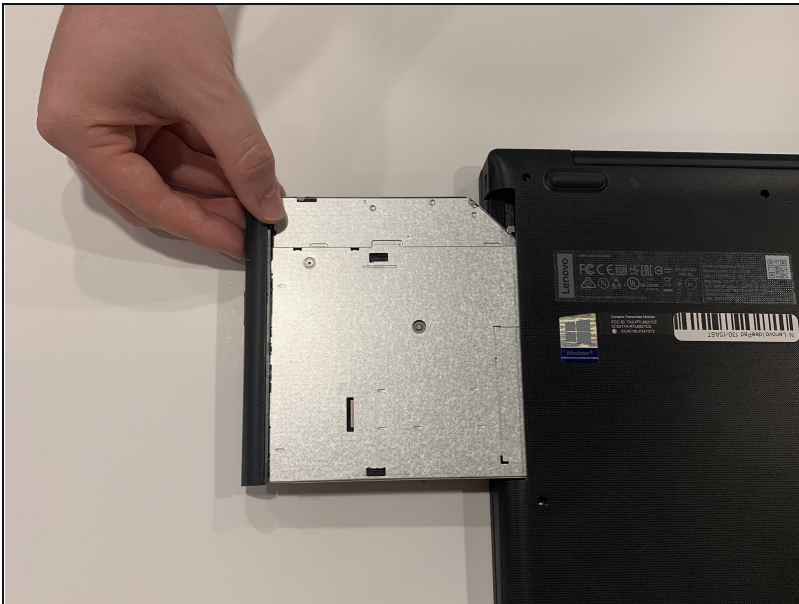
- Using a Phillips #00 screwdriver, remove one of the 6.0mm screws.

Step 2



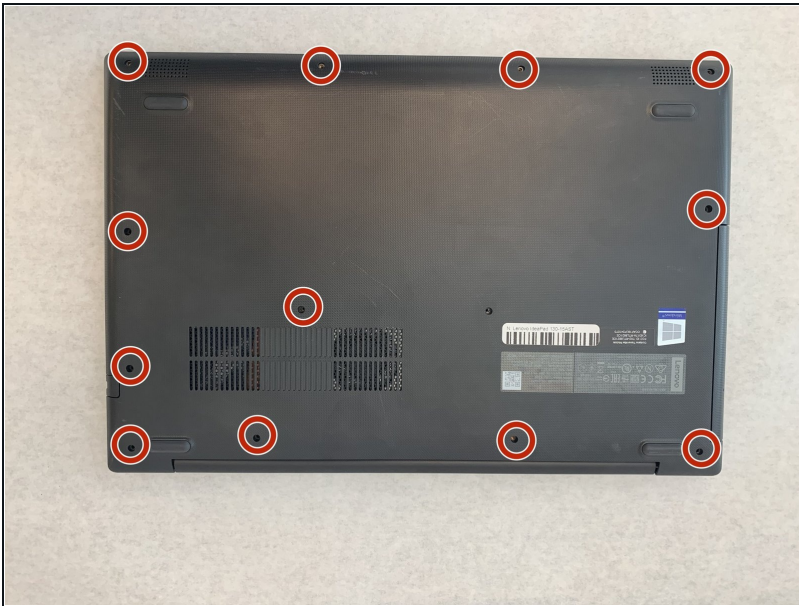
- Using the Jimmy Tool, gently pry the DVD/CD Drive away from the case of the laptop.

Step 3



- Gently slide the DVD/CD Drive out of the laptop.

Step 4 — Battery



⚠ Before proceeding, make sure the computer is turned off and it is not connected to any power source.

- Using a Phillips #00 screwdriver, remove twelve of the 6.0mm screws.

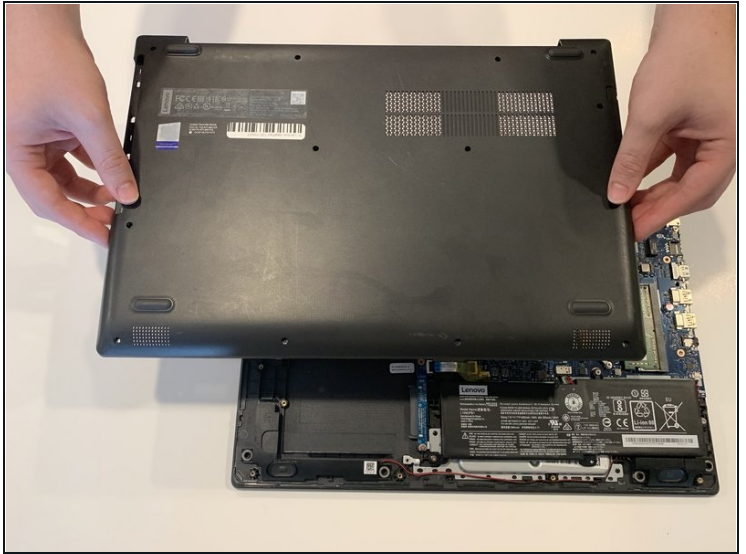
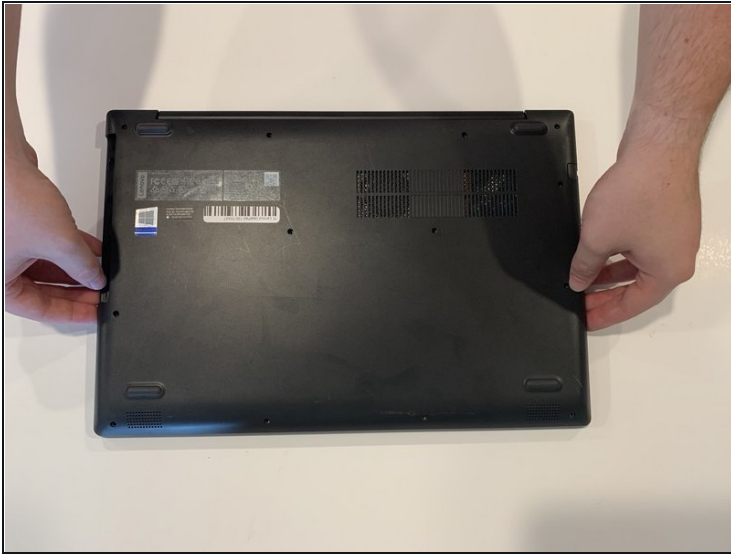
Step 5



ⓘ Do not try to completely remove this case without ensuring the entire case is free of connection points as this could crack or damage the case.

- Use a thin, flat edge to gently break the seal of the case.

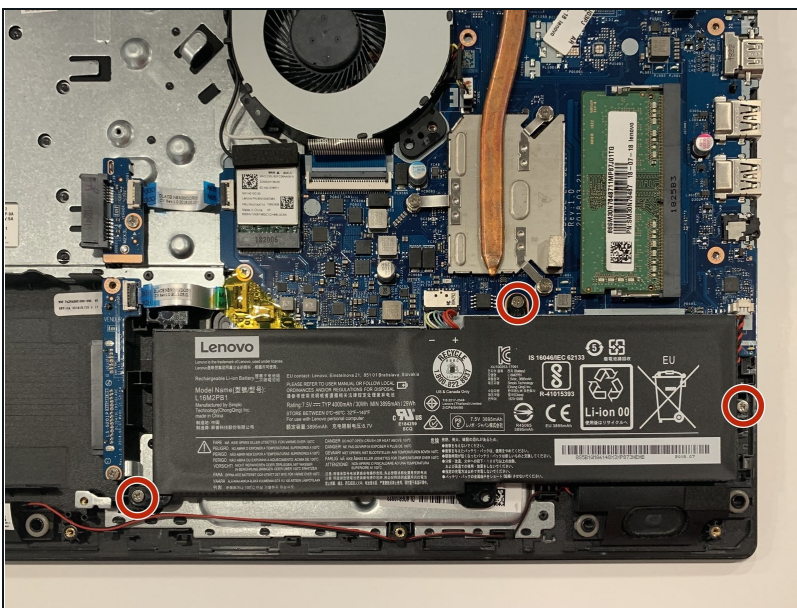
Step 6



① Make sure that the back panel is completely free from the laptop.

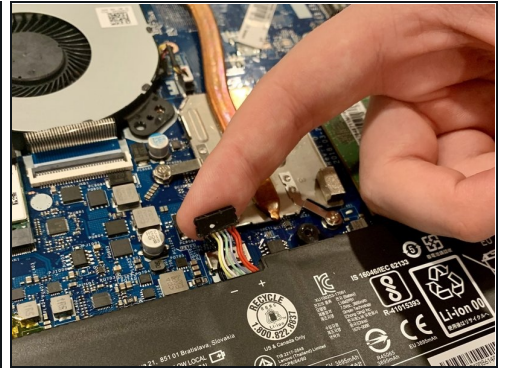
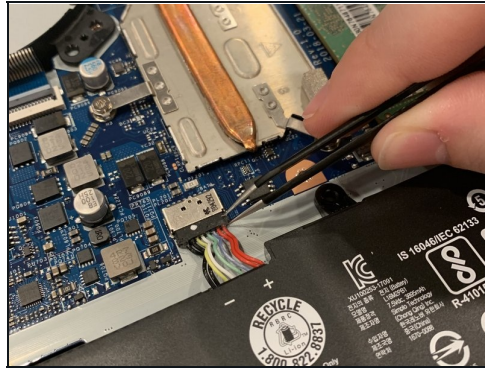
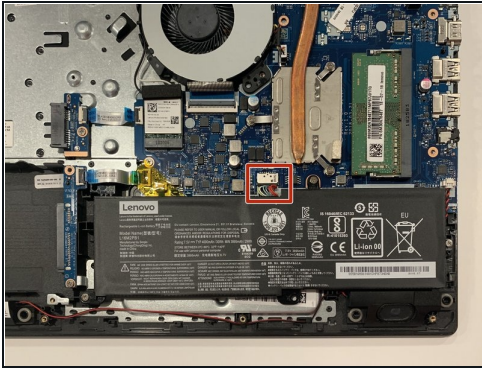
- Grab the sides of the back panel of the laptop with two hands. Then separate the panel from the laptop by lifting up.

Step 7



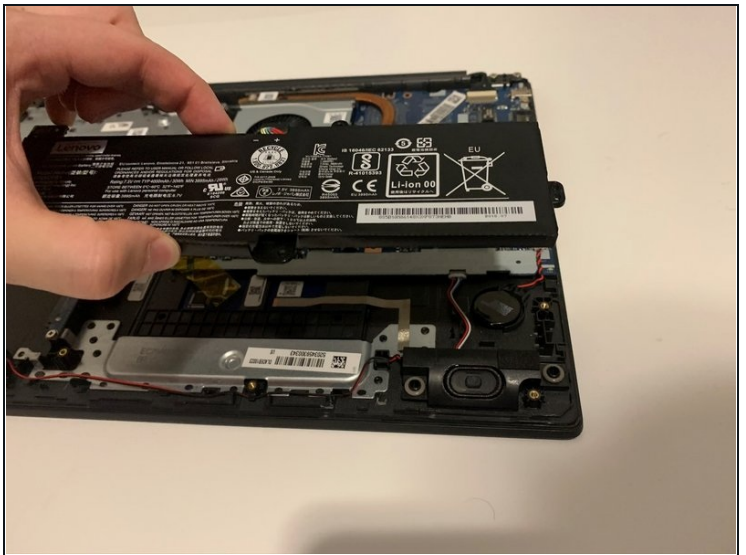
- Using a Phillips #0 screwdriver, remove three 6.0mm screws.

Step 8



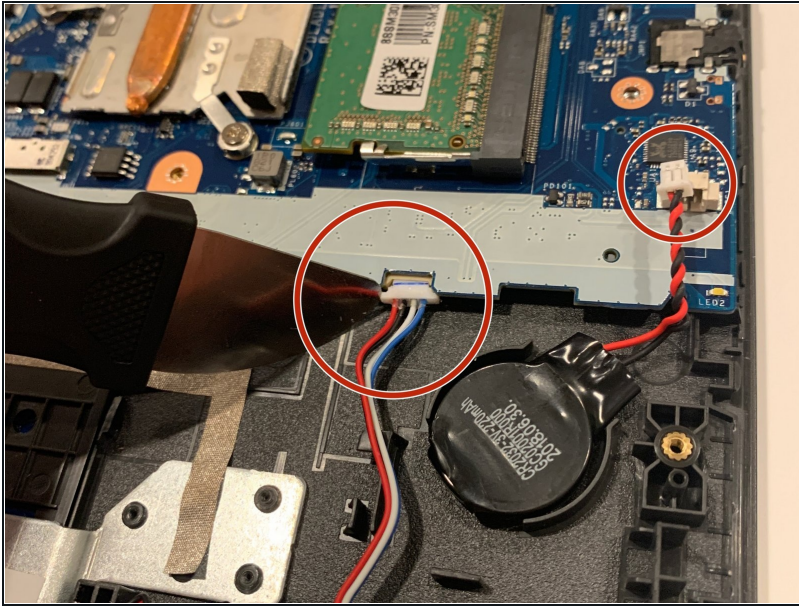
- Using a pair of tweezers, remove the black plug which includes 8 wires.

Step 9



- Grabbing the sides of the battery with one hand, remove the battery from the laptop.

Step 10 — Speaker



- Using a prying tool, remove the white plug (which includes 4 different colored wires) from the motherboard. Repeat the same step for the other plug.

⚠ This plug is small and fragile. You should not use a lot of force to separate the plastic connection from the motherboard.

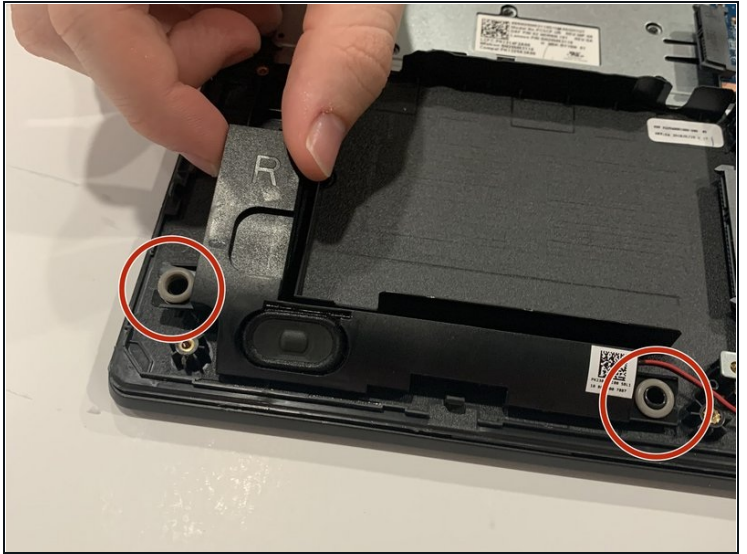
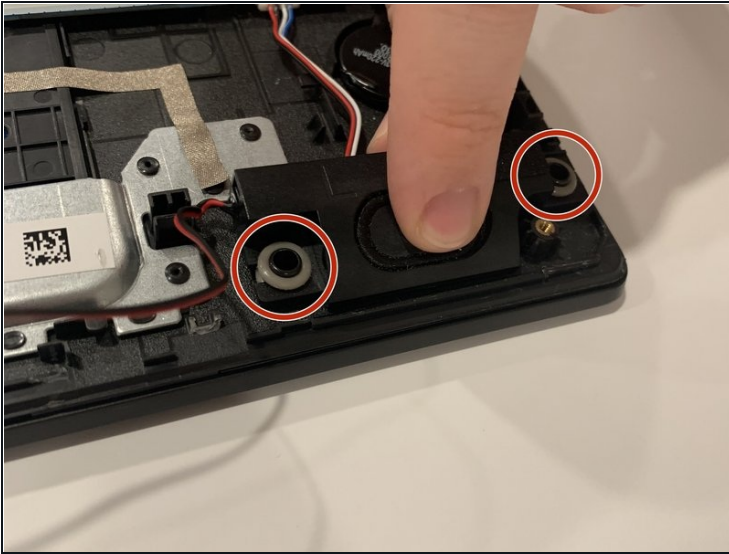
Step 11



- Disconnect the speaker wires from their connection tabs along the front of the computer.

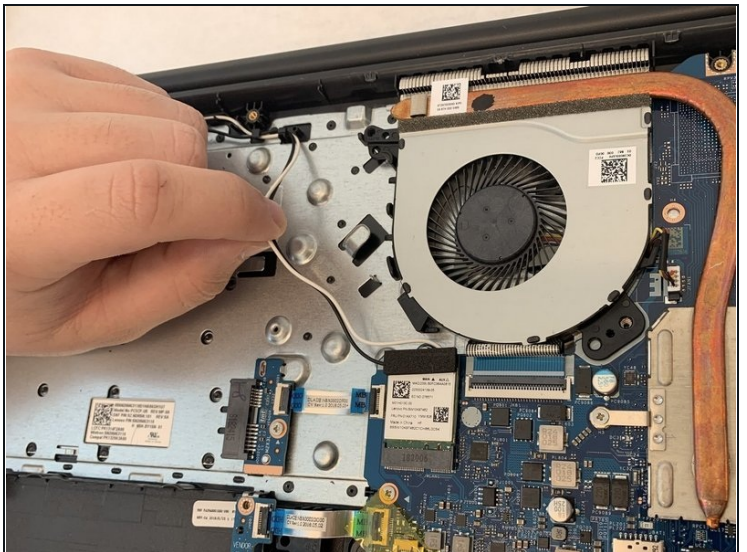
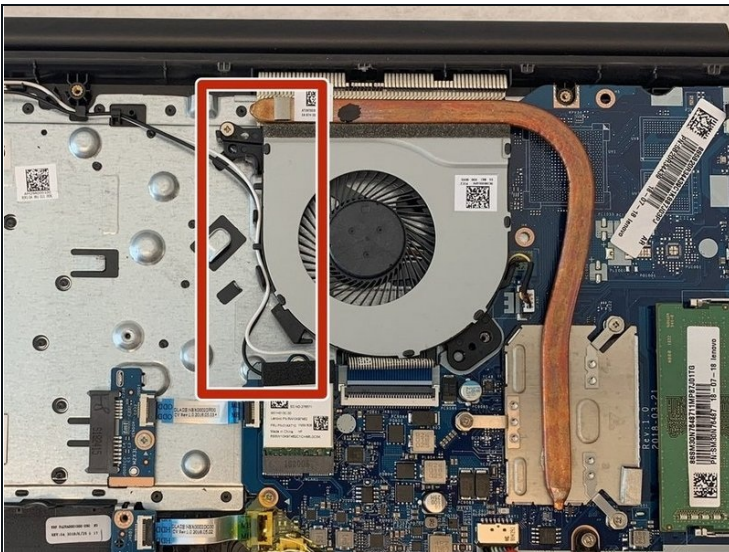
ⓘ These wires are not connected to anything internally. They connect the speakers from the power supply to each other.

Step 12



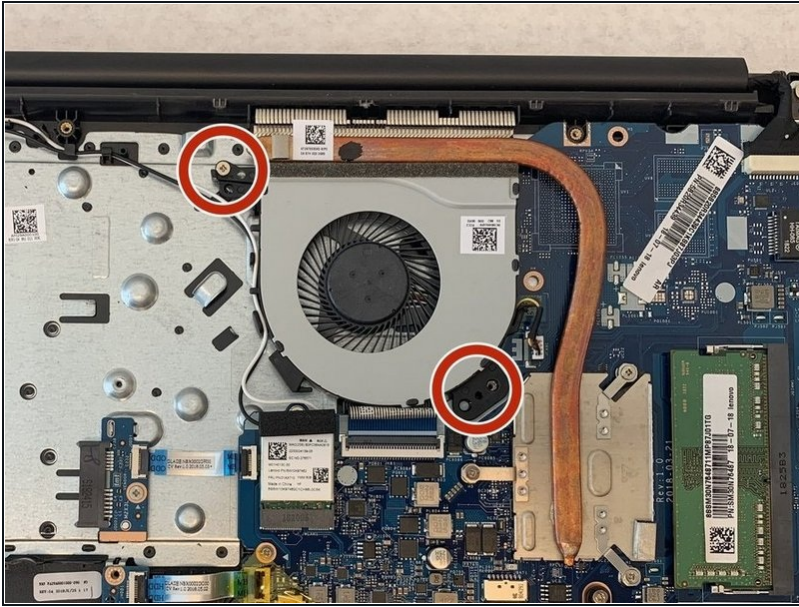
- To remove the speakers, pinch the inside edge and lift upwards.
- ⓘ These speakers are held in by O-rings. Be sure not to lose these, as new speakers do not come with new O-rings.

Step 13 — Motherboard



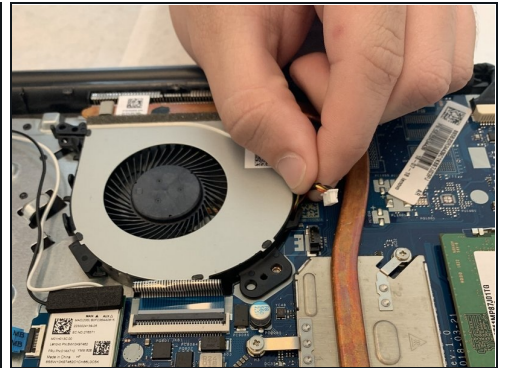
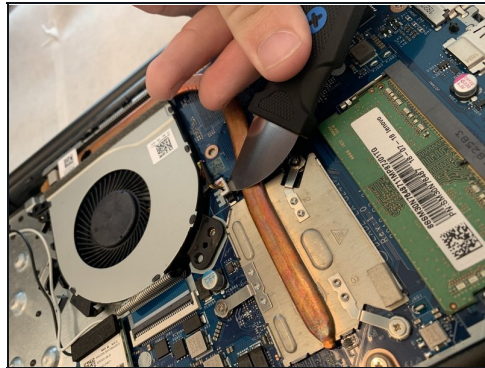
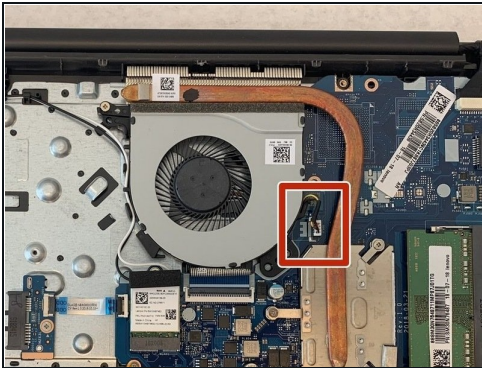
- Gently move the wires wrapped around the fan that run along the left side of the cooling fan.
- ⓘ These wires are not connected directly to the fan and should not be removed but simply displaced from their original location.

Step 14



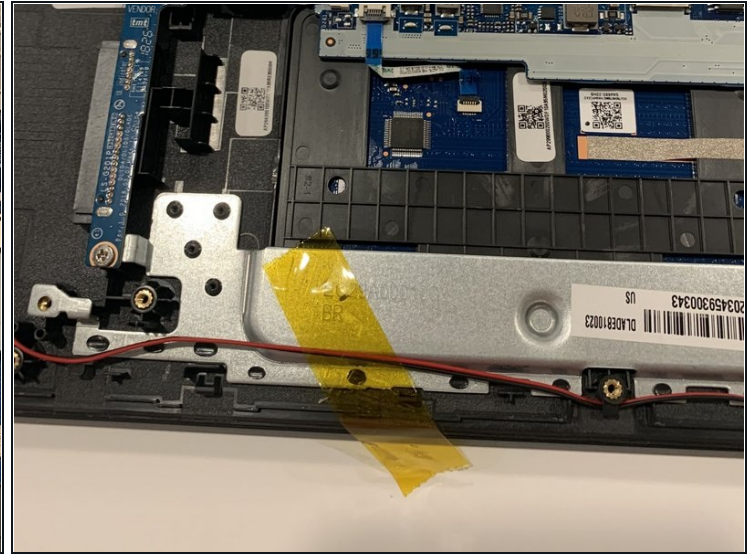
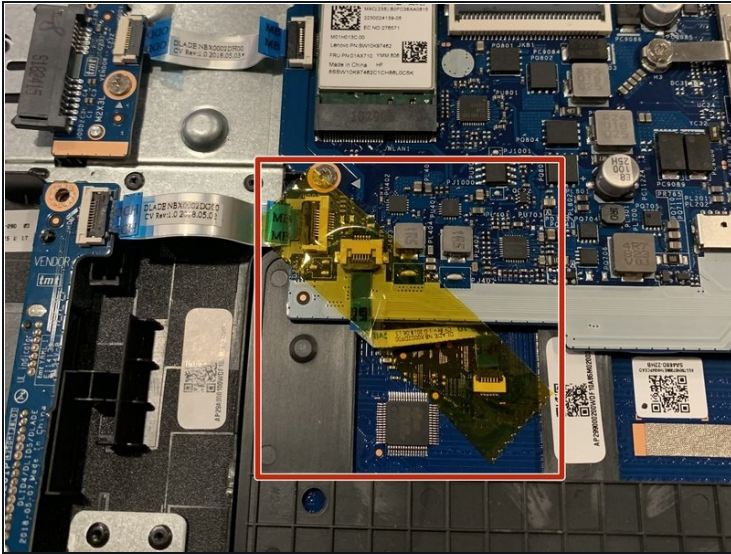
- Using the Phillips #0 screwdriver, remove two 4.0mm screws.

Step 15



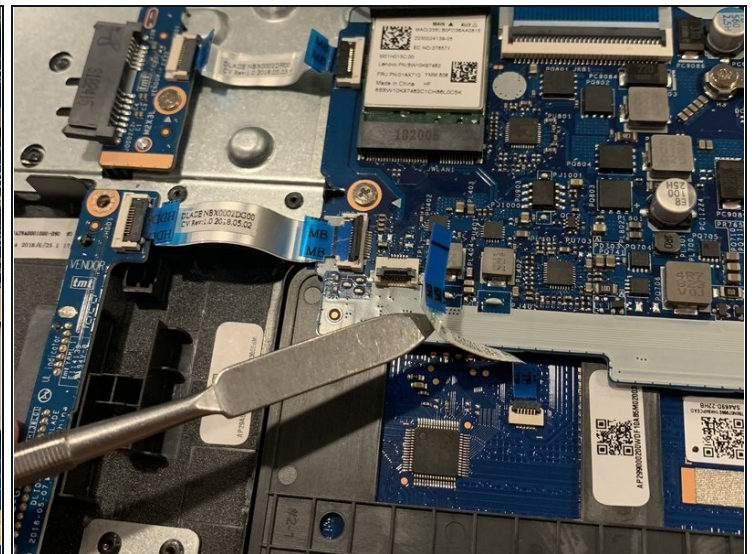
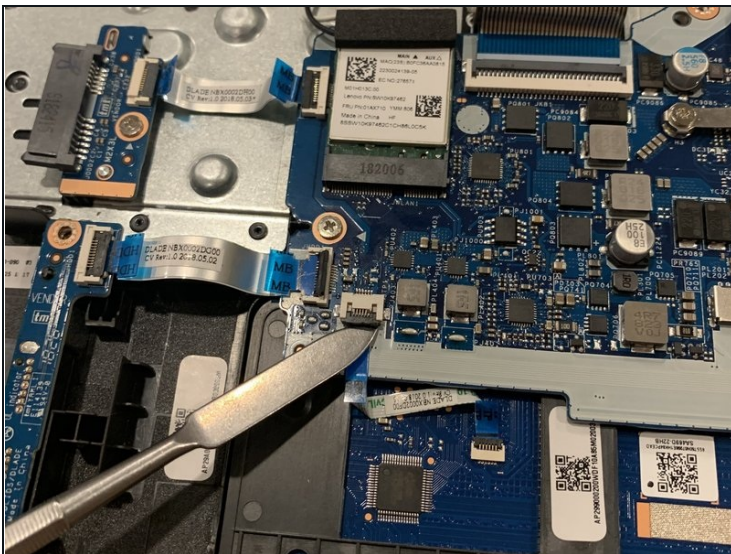
- Gently use a prying tool to disconnect the cooling fan from the motherboard.
- The fan is connected to the motherboard via a clip. To remove this, push on the white clips and pull upwards.

Step 16



- Remove the yellow tape from the motherboard to ensure freedom of movement upon removal.

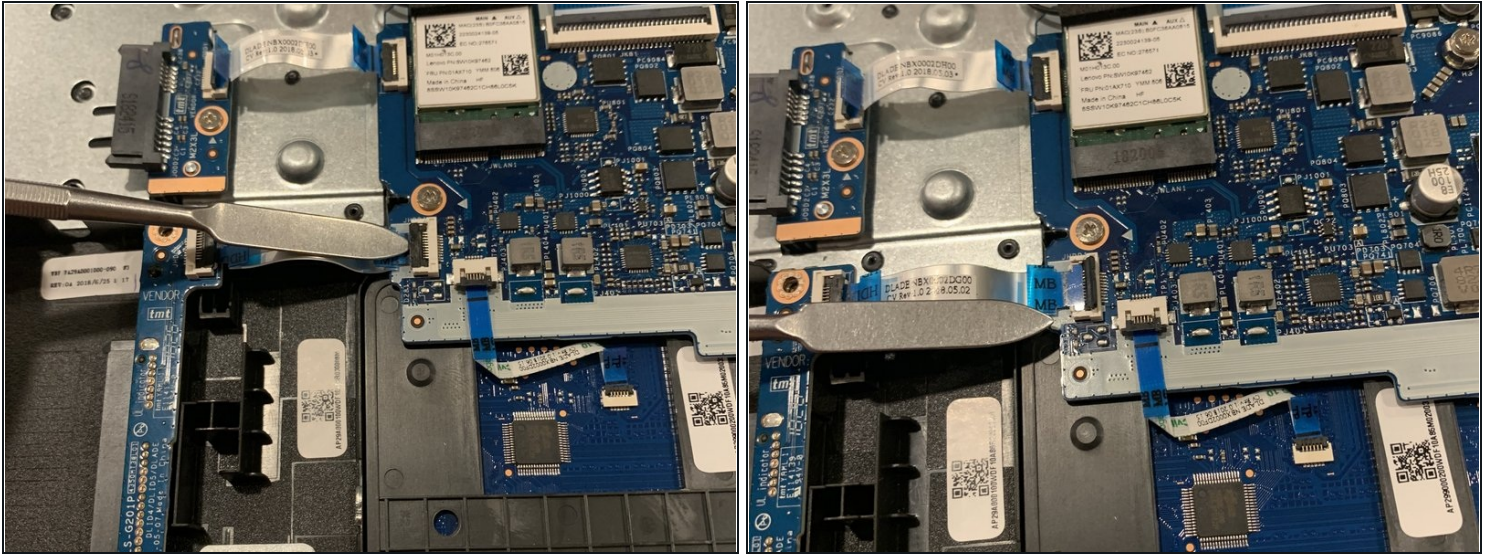
Step 17



- Using a spudger, lift the black tab to remove the blue tab from the Motherboard.

⚠ Although the image shows the metal spudger, you should use the nylon spudger or the plastic opening tools for this step. The metal spudger may cause irreparable damage to the user and/or the device if used improperly.

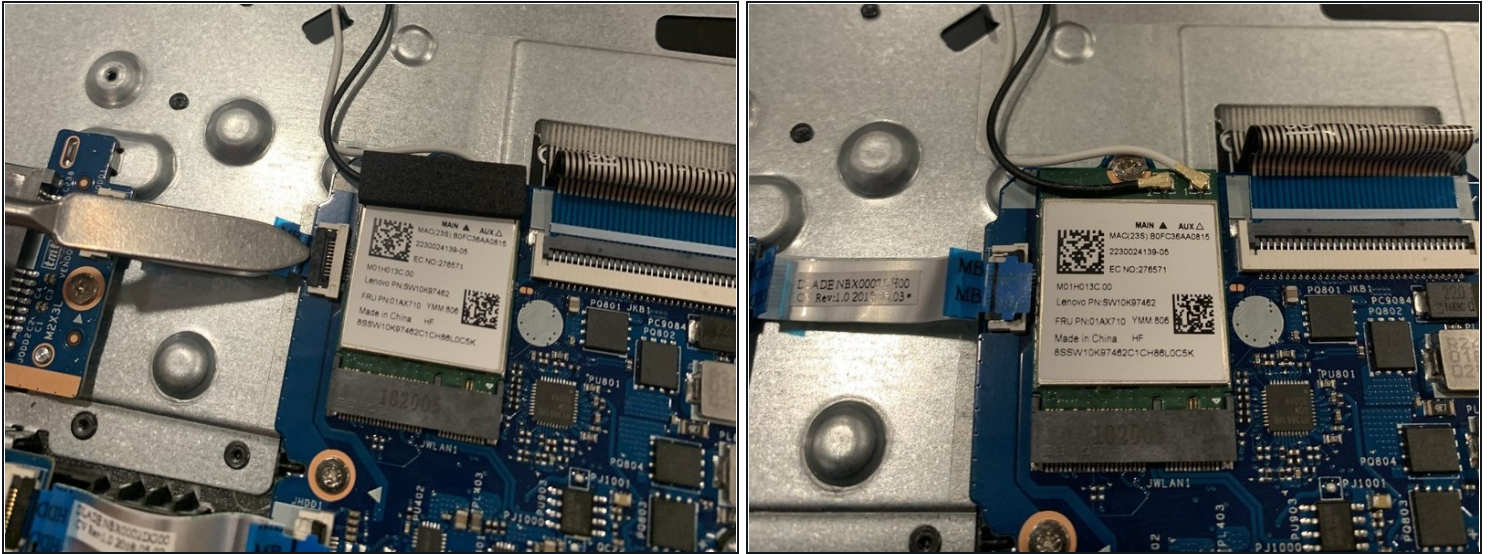
Step 18



- Using a plastic opening tool, lift the black tab to remove the blue tab from the Motherboard.

⚠ Although the image shows the metal spudger, you should use the nylon spudger or the plastic opening tools for this step. The metal spudger may cause irreparable damage to the user and/or the device if used improperly.

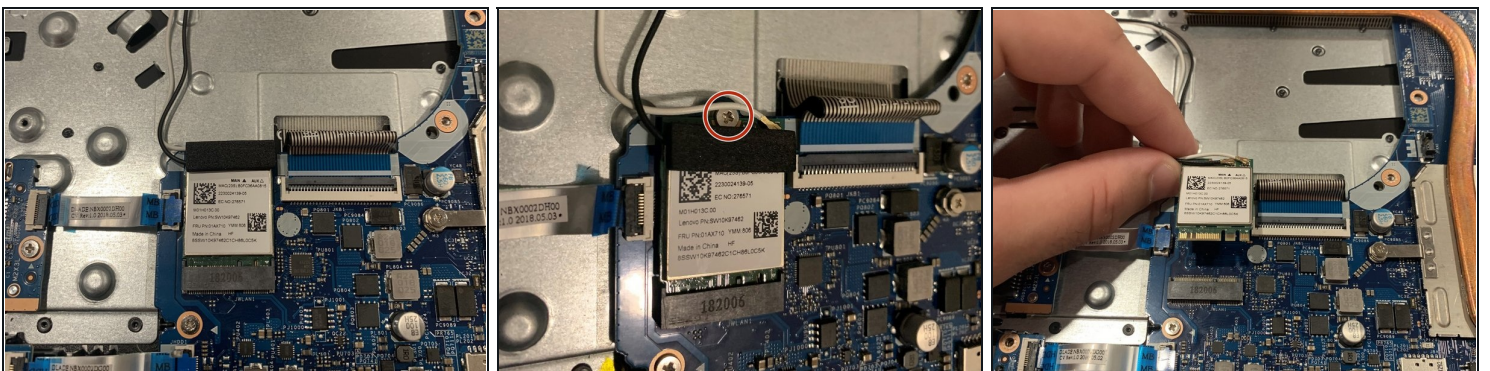
Step 19



- Using a plastic opening tool, lift the black tab to remove the blue tab from the Motherboard.

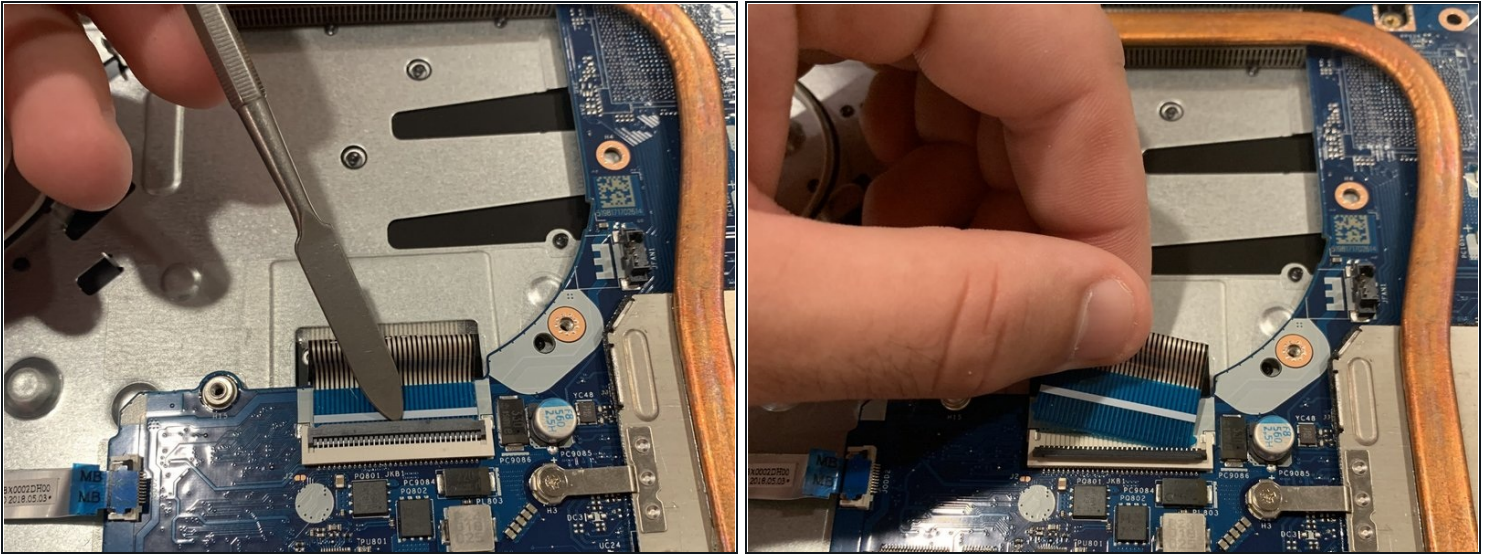
⚠ Although the image shows the metal spudger, you should use the nylon spudger or the plastic opening tools for this step. The metal spudger may cause irreparable damage to the user and/or the device if used improperly.

Step 20



- Using a Phillips #0 screwdriver, remove a single 6.0mm screw.
- After removing the screw, remove the card from the motherboard.

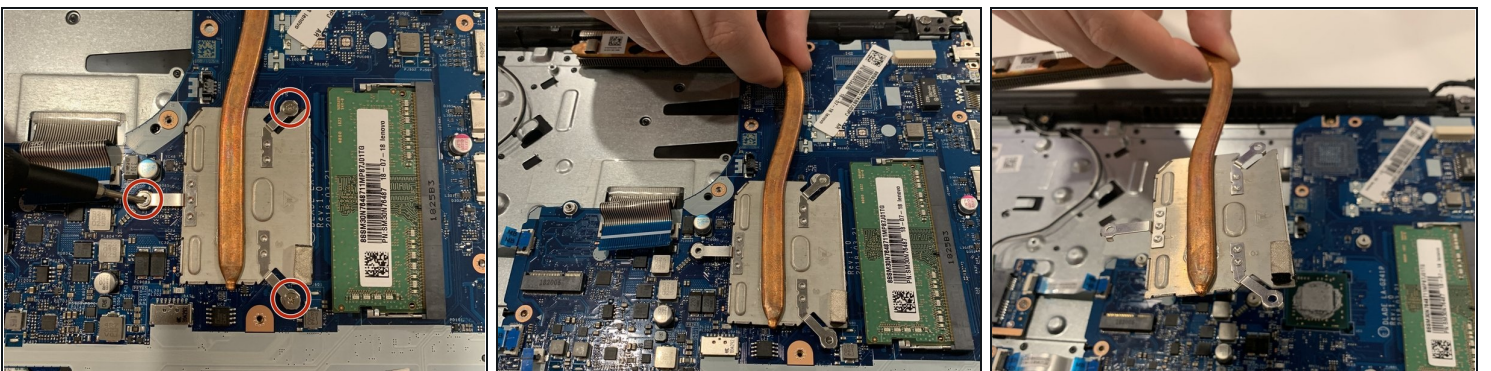
Step 21



- Using a plastic opening tool, lift the black tab to remove the blue tab from the Motherboard.

⚠ Although the image shows the metal spudger, you should use the nylon spudger or the plastic opening tools for this step. The metal spudger may cause irreparable damage to the user and/or the device if used improperly.

Step 22



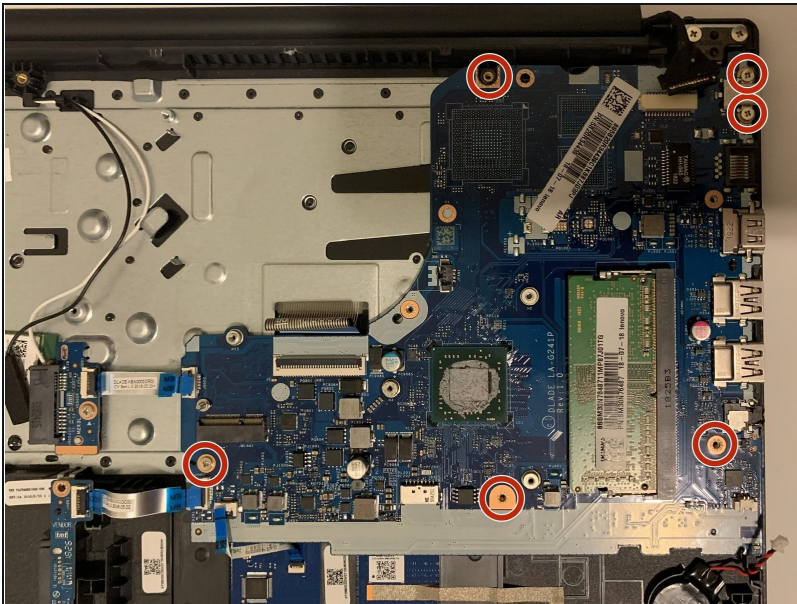
- Using a Phillips #0 screwdriver, remove three 6.0mm screws.
- After removing the screws, remove the copper from the laptop.

Step 23



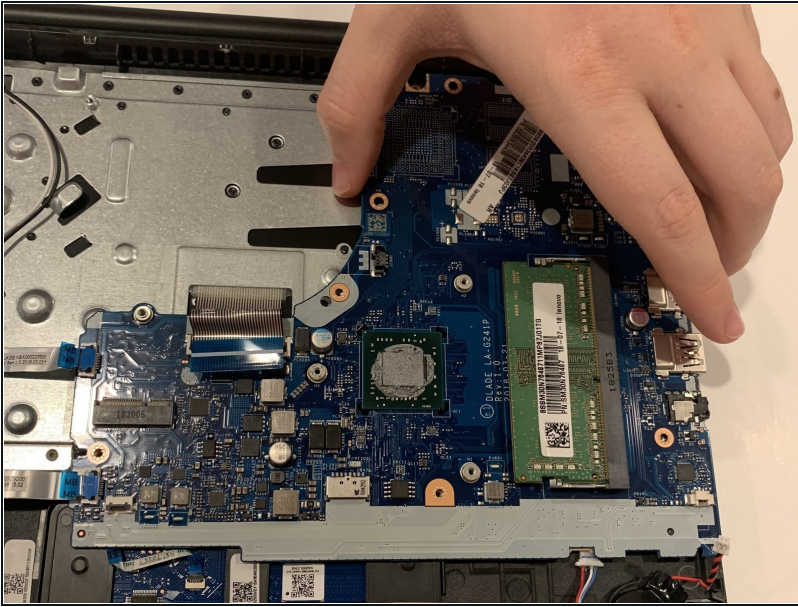
- Using a pair of tweezers, remove the plug from the motherboard.

Step 24



- Using a Phillips #0 screwdriver, remove six 6.0mm screws.

Step 25



- Lift up and remove the motherboard from the device.

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