HP ProBook 455 G1 Cooling Fan Replacement

This guide is designed to help you safely and properly remove the cooling fan in your HP ProBook 455 G1.

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INTRODUCTION

The cooling fan functions to ensure that your laptop does not overheat. Since the fan runs whenever the computer is on, it is possible that it will need to be replaced or repaired at some point in time.

🔧 TOOLS:

- Phillips #0 Screwdriver (1)
- iFixit Opening Tools (1)
- Tweezers (1)
- T8 Torx Screwdriver (1)

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Step 1 — Battery

- Turn the computer upside down on a flat side, so that you are seeing the underside of the laptop.

- ⚠ Before removing the battery, make sure that the computer is turned off and that the power cord is not plugged into the computer.

Step 2

- Slide the two battery release latches towards the center of the laptop to release the battery.

Step 3

- Tilt the battery upward.

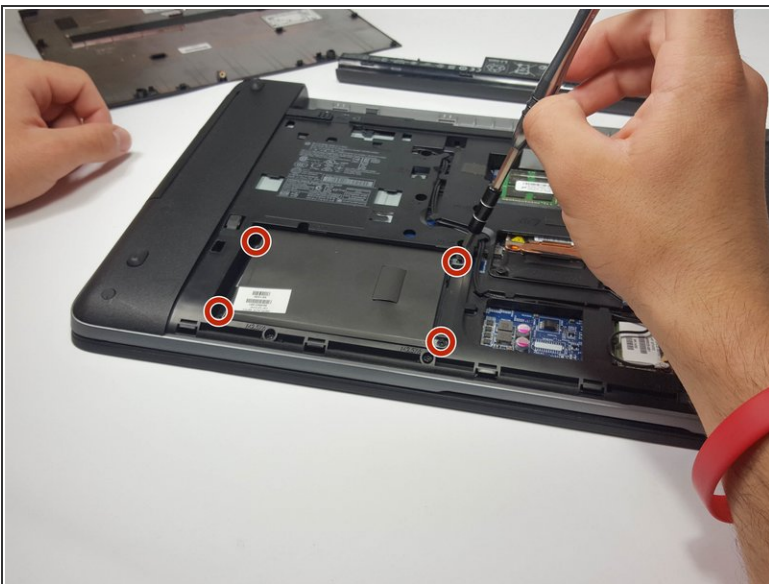- Remove it from the laptop.

Step 4 — Service Panel

- Slide the two release latches that were mentioned in the battery removal process to release the service panel.

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Step 5

- Slide the service panel toward you using your thumbs.

- Lift it to remove the panel and reveal inner components of the computer.

Step 6 — Hard Drive

- Using a Phillips #0 Screwdriver, remove the four Phillips 3 mm screws that secure the hard drive into the computer.

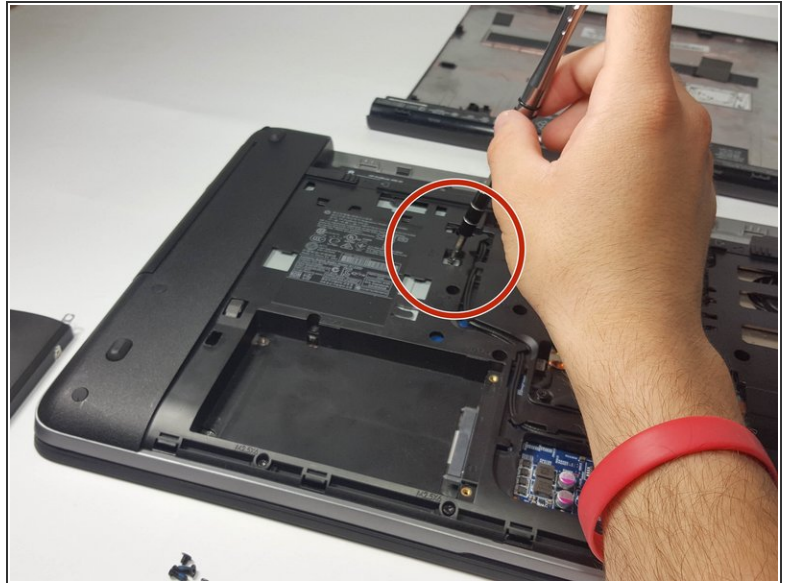This document was generated on 2020-11-15 04:01:46 PM (MST).

Step 7

- Pull the hard drive cover tab to the left in order to disconnect the hard drive from the computer.

Step 8

- Finally, using the same tab, lift the hard drive out of the hard drive port.

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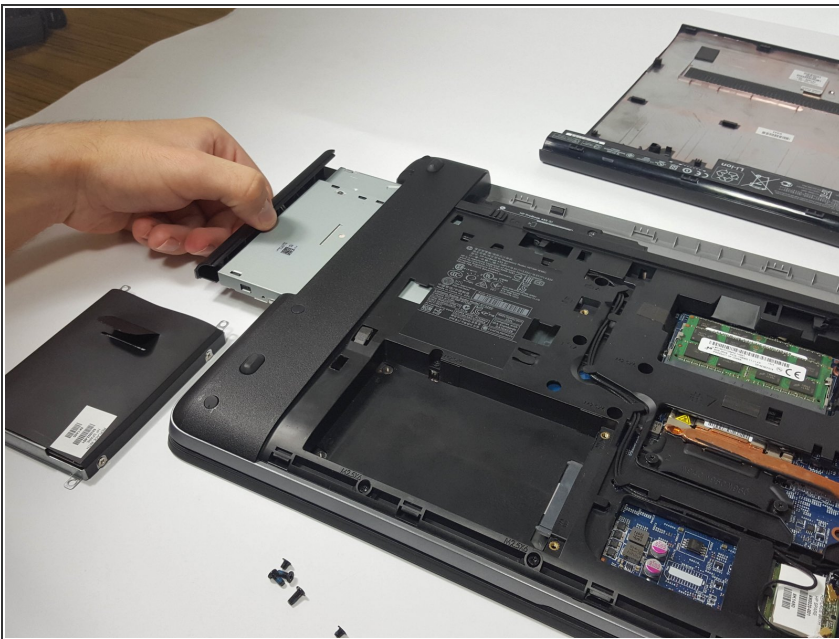
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Step 9 — DVD/CD Drive

- Using a Phillips P0 Screwdriver, remove the 6 millimeter screw that secures the DVD/CD drive to the computer.

- ⓘ It will be located in the upper left section of the computer, housed in a small square hole in the computer frame.

- ⓘ The Phillips head screwdriver is the screwdriver with a "+" shaped tip. P0 refers to the name/size of this particular Phillips head screwdriver.
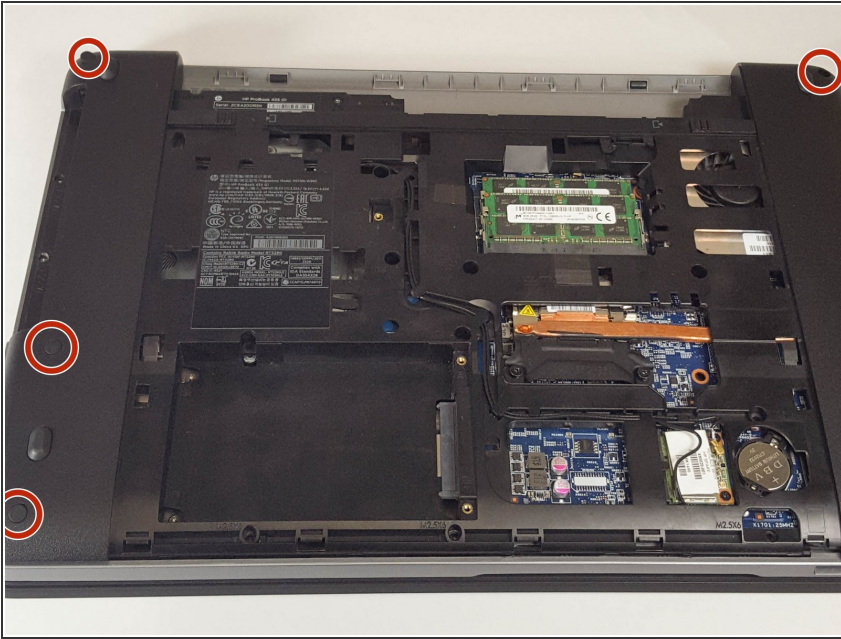
Step 10

- Using the screwdriver, gently push the silver tab that the screw secured to the left to release the DVD/CD drive from the computer.
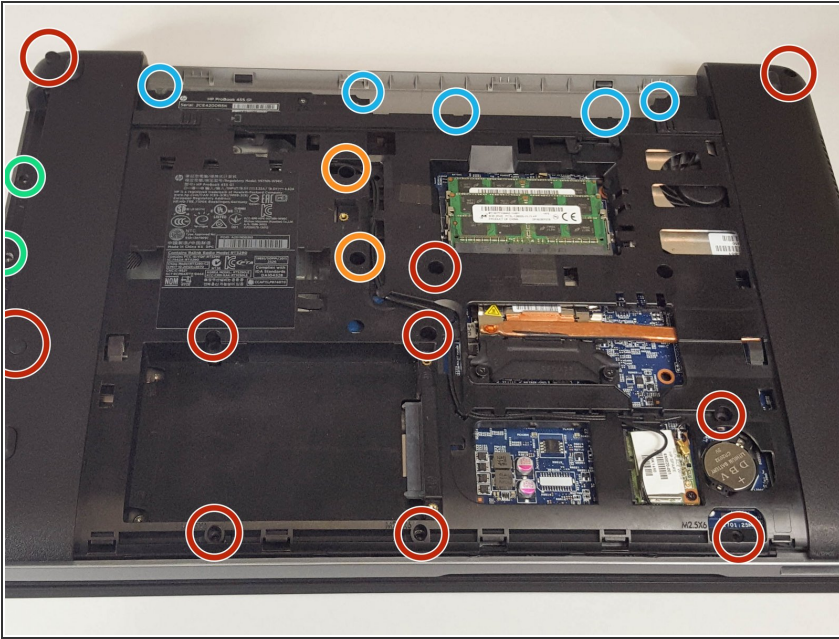
Step 11

- The DVD/CD drive will be extended from the side of the laptop. Slowly remove it from the computer.

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Step 12 — Motherboard

- Use the tweezers to remove the six rubber stops on the side edges of the laptop.

- ⓘ These stops are covering six additional screws that need to be removed.

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Step 13

- Using the Torx T8 screwdriver, remove the 13 Torx 6 millimeter screws on the bottom frame of the laptop.

- Using the Phillips P0 screwdriver, remove the 2 Phillips 6 millimeter screws on the bottom frame of the laptop.

- (i) The 2 Phillips 6 millimeter screws can be identified by the small keyboard logo nearby.

- Remove the 2 Phillips 3 millimeter screws from the edge of the frame where the optical drive was previously located.

- Remove the 5 Phillips 3 millimeter screws from the area where the battery was previously located.

- (i) The Torx screwdriver is the screwdriver with a six-pointed star shaped tip. T8 refers to the name/size of this particular Torx head screwdriver.

- (i) The Phillips head screwdriver is the screwdriver with a "+" shaped tip. P0 refers to the name/size of this particular Phillips head screwdriver.
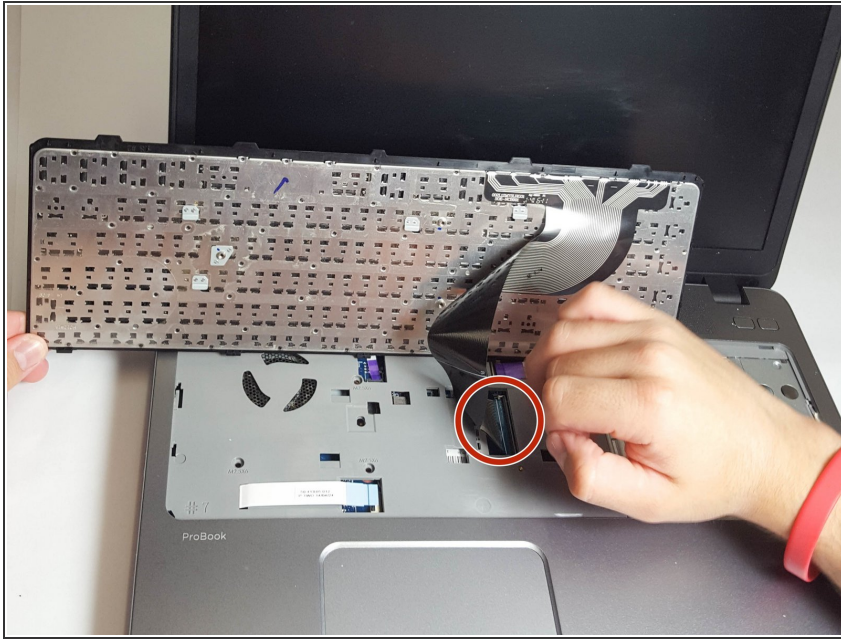
Step 14

- Reposition the computer so that it is upright and opened toward you.

- Take the keyboard and slide it slightly towards you so it is disengaged from the top cover.
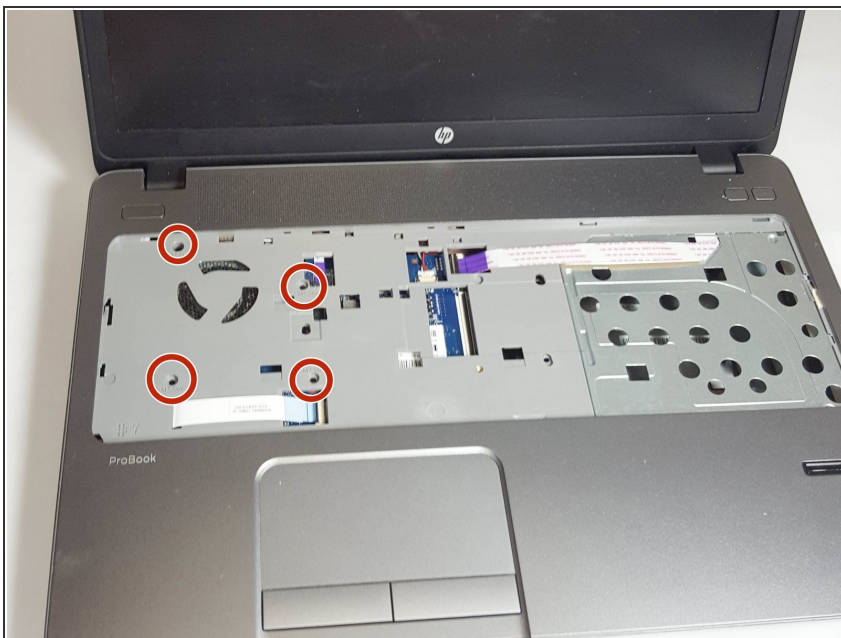
Step 15

- Lift the keyboard slowly, at an angle.

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Step 16

● Disconnect the keyboard ribbon by carefully lifting the thin, black connector latch and separating the keyboard from the rest of the laptop.

Step 17

● Using the Torx T8 screwdriver, remove the 4 Torx 6 millimeter screws that are underneath the keyboard.

ⓘ The Torx screwdriver is the screwdriver with a six-pointed star shaped tip. T8 refers to the name/size of this particular Torx head screwdriver.

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Step 18

- Disconnect the 3 ribbons from the motherboard by carefully lifting the thin, black connector latches and taking the cable out of its connecting slot.

- Disconnect the small connector from the motherboard by sliding it out of it's port.

- (i) The ribbons are the strips of thin material with either blue or purple ends.

Step 19

● Using a plastic opening tool, slowly and carefully detach the top cover from the bottom frame.

⚠ Do not do this step too fast or forcefully as there is a hidden cable connected between the two frames.

⭐ Make sure all of the screws mentioned in the previous steps have been removed. If some screws remain, the frames will not separate.

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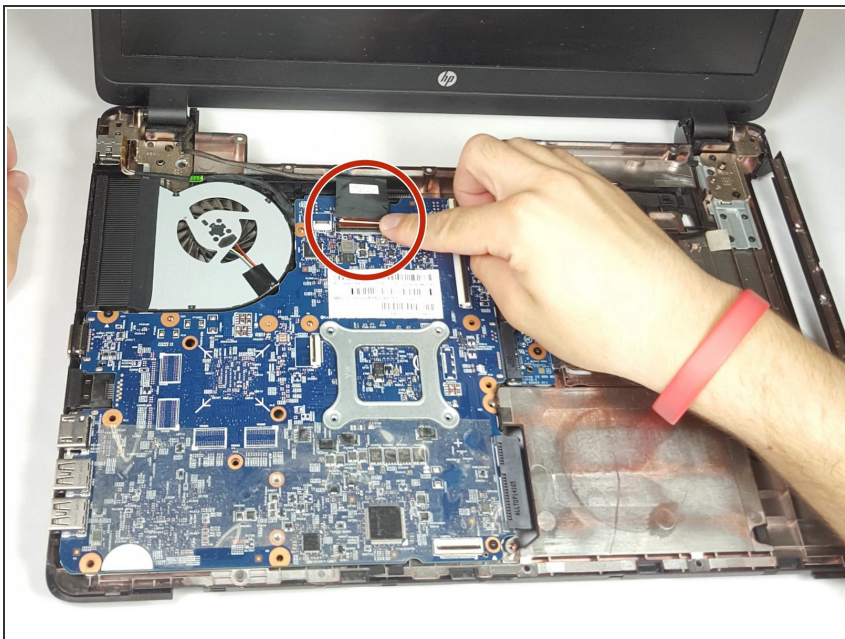
Step 20

- Carefully disconnect that hidden ribbon from the motherboard.

- After the ribbon is disconnected, fully separate the the two pieces and position the laptop upright, in front of you again.
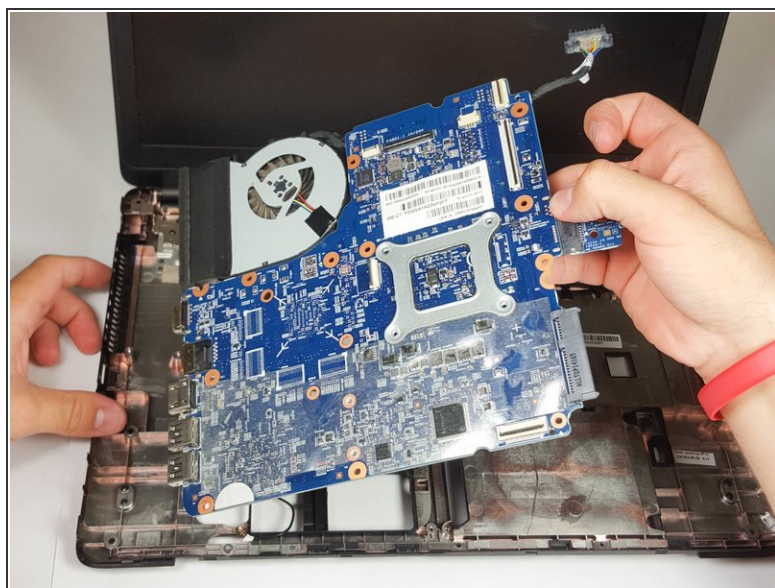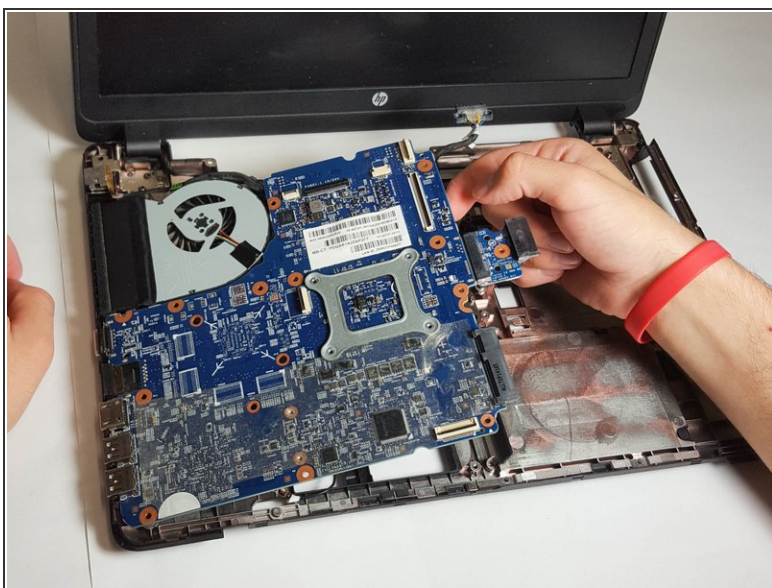
Step 21

- Remove the 3 Phillips 4 millimeter screws that secure the motherboard and DVD/CD drive extension board to the laptop frame.

- Remove the 2 Phillips 4 millimeter screws that secure the battery connecting port to the laptop frame.

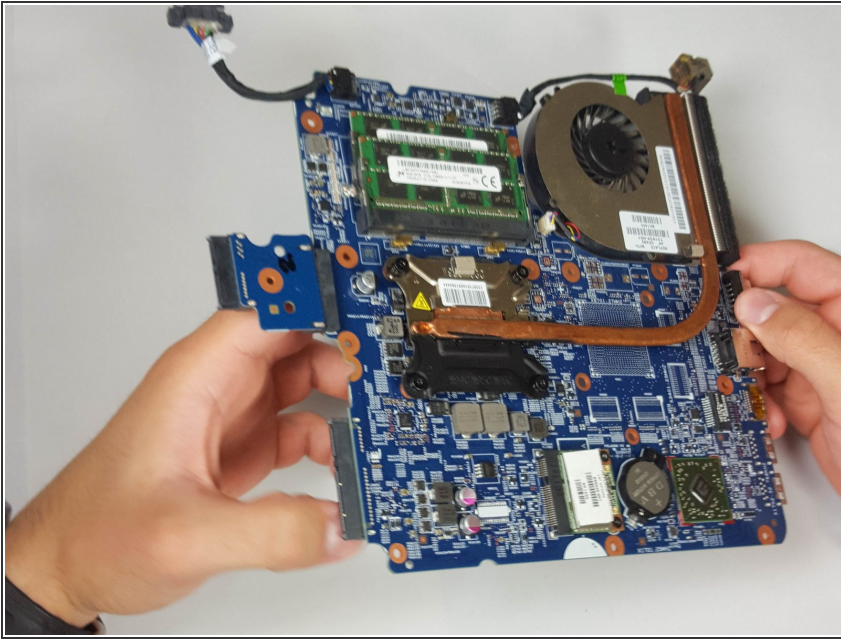- ⓘ The Phillips head screwdriver is the screwdriver with a "+" shaped tip.

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Step 22

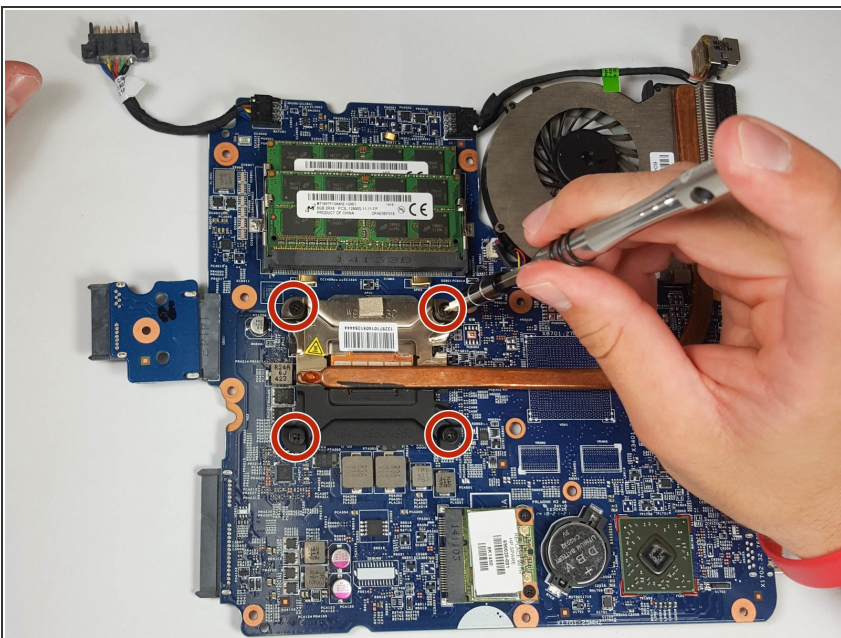● Disconnect the ribbon attached to the motherboard

Step 23

● Lift the right side of the motherboard up at an angle.

● Continue to pull the motherboard up and toward the right to fully separate it from the laptop.

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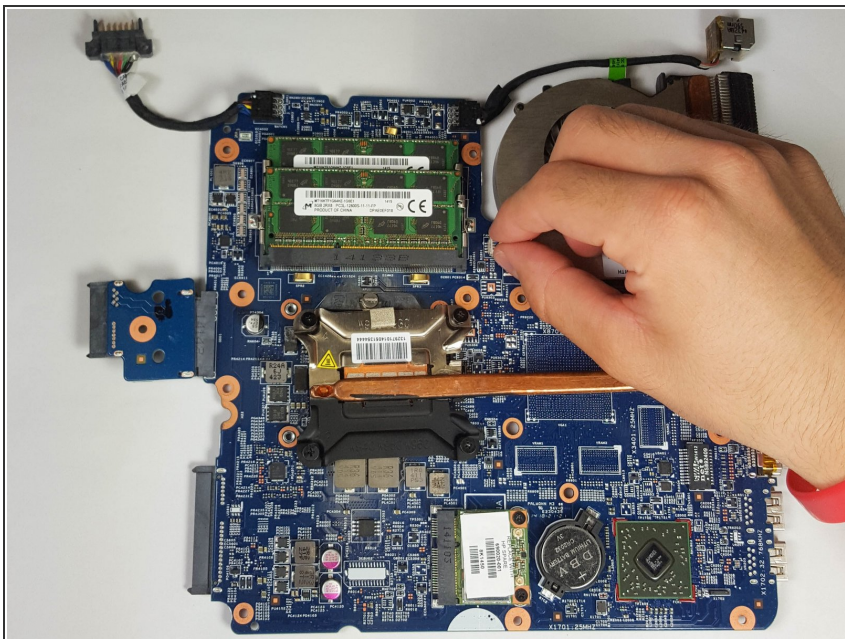
Step 24 — Cooling Fan

- Turn the motherboard over and lay it flat so that the copper "L" is visible.
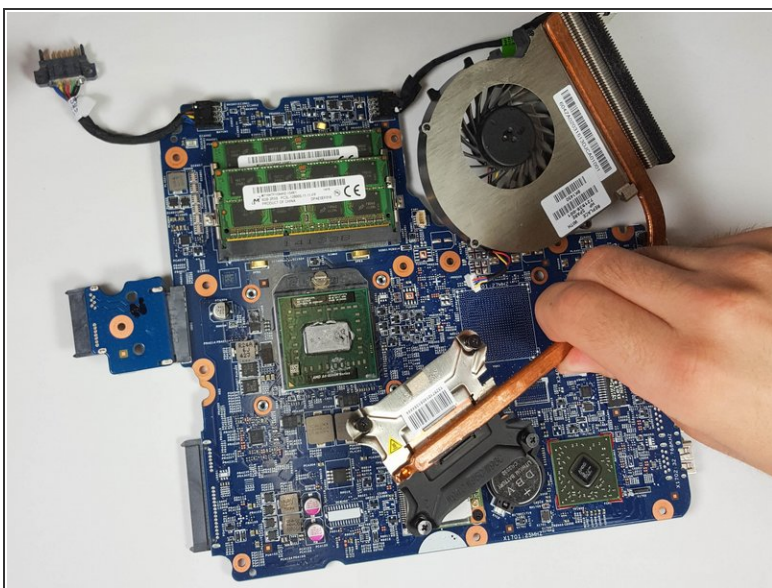
Step 25

- Loosen the 4 Phillips 5.5 millimeter screws that secure the cooling fan system from the motherboard.

- (i) These screws cannot be completely removed from the cooling fan component. Unscrew them enough so that the cooling fan component detaches from the motherboard.

- (i) The Phillips head screwdriver is the screwdriver with a "+" shaped tip.

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Step 26

- Disconnect the small cable that connects the fan to the motherboard.

Step 27

- Lift the fan from the motherboard to fully remove it.

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

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