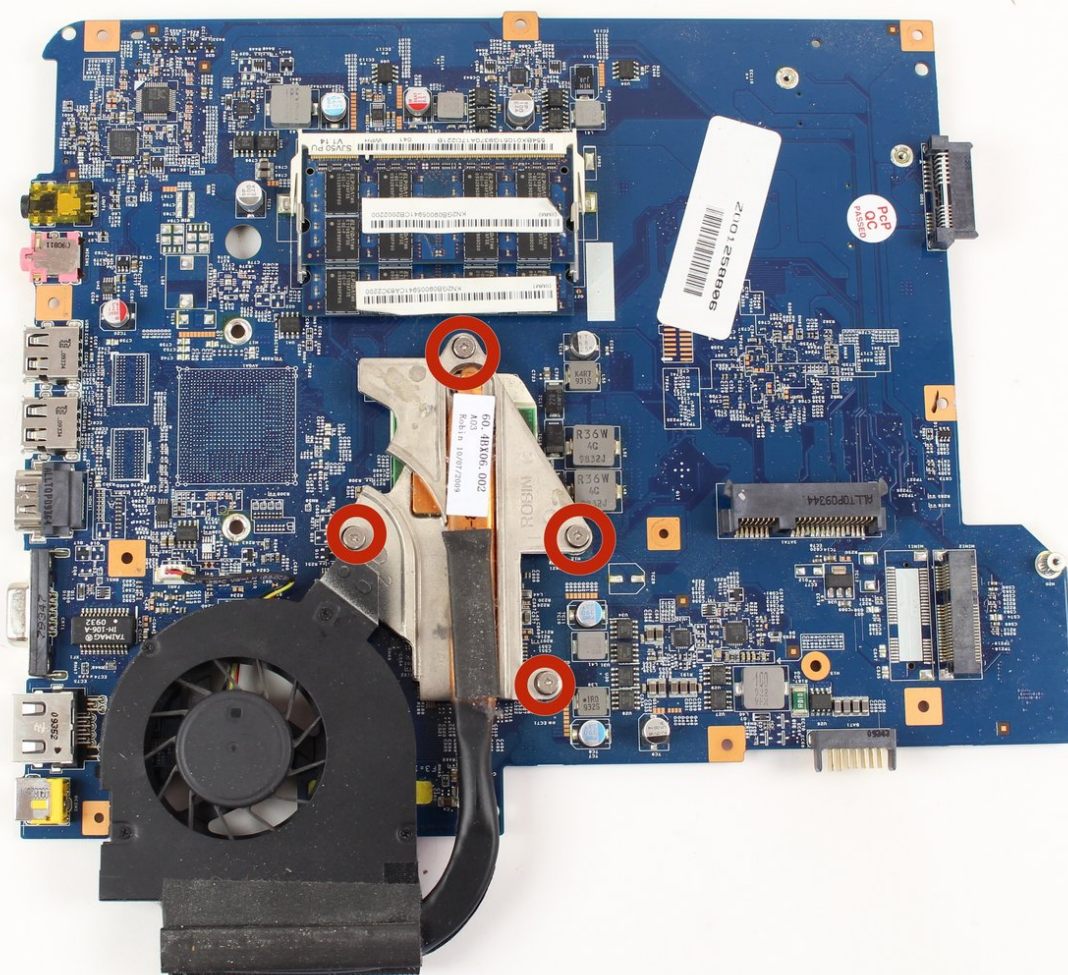# Gateway NV52 Cooling Fan Replacement

Use this guide to replace the cooling fan for the Gateway NV52.

Written By: Ruben

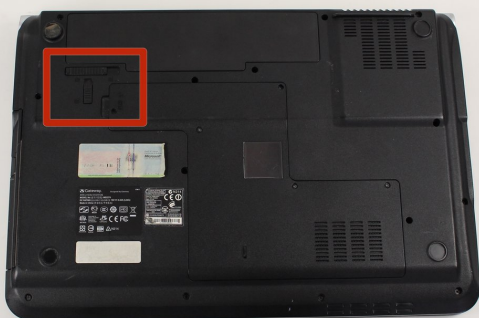This document was generated on 2020-11-28 03:18:46 AM (MST).

INTRODUCTION

There will be prerequisites that you need to be complete before displacing the cooling fan.

🔧 TOOLS:

- Phillips #0 Screwdriver (1)
- Spudger (1)
- Heavy-Duty Spudger (1)
- Tweezers (1)

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Step 1 — Battery

- Turn the laptop on its backside with the stickers and barcode facing you.

- Locate the latches on the top left corner.

Step 2

- In order to unlock the battery, slide the vertical latch downward where it indicates the unlocking icon.

Step 3

- Slide the horizontal latch to the right to pop open the battery pack.

Step 4 — Motherboard

- Remove the five identical 3/16" Phillips #0 screws that secure the hard drive and memory cover.

Step 5

- Lift up the base cover from the the top with your hands to a 90 degree angle.

- Remove the base cover.

Step 6

- Remove the 1/4" Phillips #0 screw located at the top right of the hard drive.

Step 7

- Remove the hard drive component from its compartment. To do so, slide the component downward away from the battery pack.

- Lift the hard drive to a 90 degree angle and out of its slot.

Step 8

- Remove the 3/16" Phillips #0 screw located at the bottom left corner of the WiFi card.

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Step 9

- Locate the black and white cables attached to the WiFi card.

- Gently wiggle the black cable until it detaches from the WiFi card.

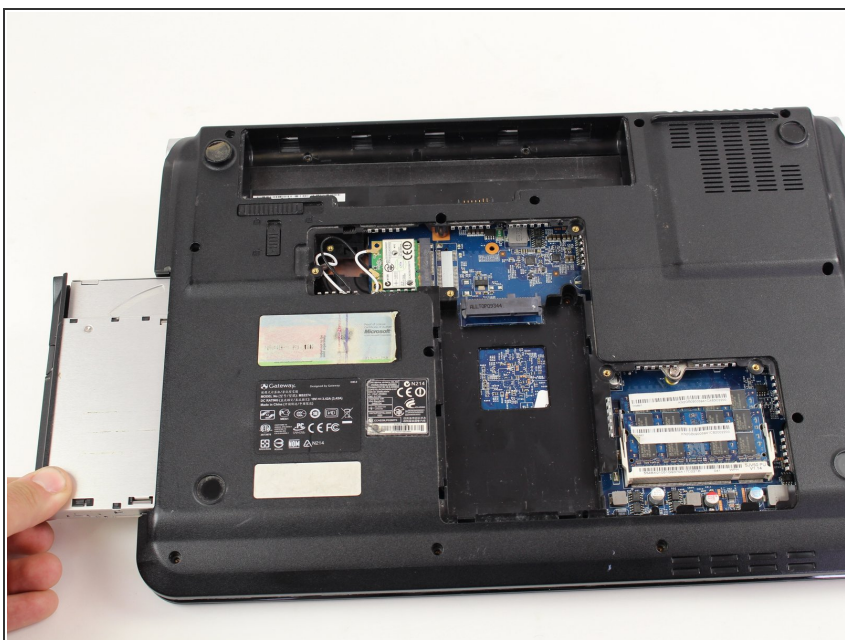- Repeat the previous step for the white cable.

Step 10

- Gently, remove the Wifi card from its slot, and place it in a dry and safe place.

- Turn the laptop with the keyboard compartment facing up.

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Step 11

- Remove the five identical 9/32" Phillips #0 screws located under the battery and both upper corners.

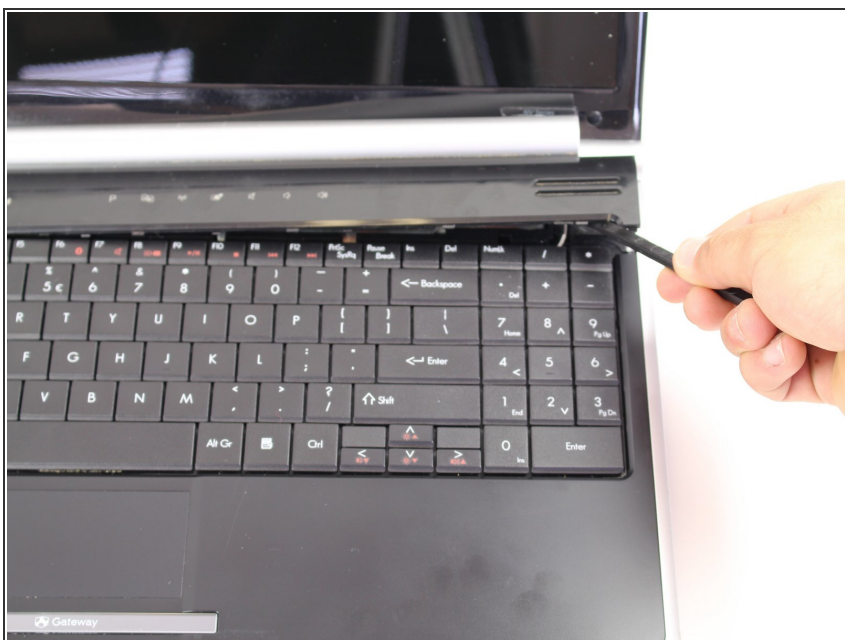- Remove the 9/32" Phillips #0 screw fastening the optical disc drive.

Step 12

- Using your hands, gently slide the optical drive out of the slot.

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Step 13

- Flip the device so the keyboard and display screen are faced upright.

- Lift up the media button board cover using the heavy duty spudger. Apply a minimum amount of upward force to the media button board cover at the right bottom corner. Starting from the right, continuously lift the cover to the left edge until completely separated.

⚠️ Do not lift up the media button board cover too much, it's still connected to the motherboard. Set the media button board cover upside down on the keyboard.

Step 14

- Disconnect the dark colored locking tab by pulling at a 90 degree angle, and then slightly pull away the ribbon from the locking tab.

Step 15

- Lift up the keyboard with the spudger. Rotate the keyboard until its face down on top of its base.

- ⚠️ The keyboard is still connected to the access keyboard connector, so do not attempt to detach the keyboard from the laptop, yet.

Step 16

- Disconnect the brown-colored locking tab by pulling at a 90 degree angle and slightly pulling away from the locking tab.

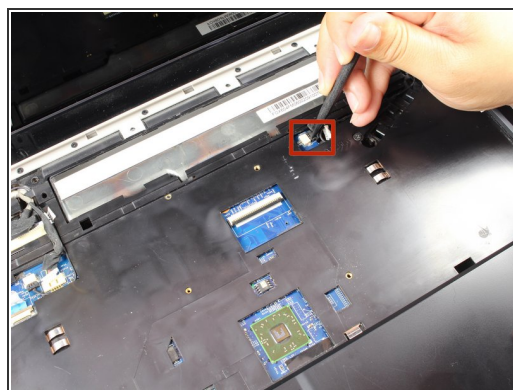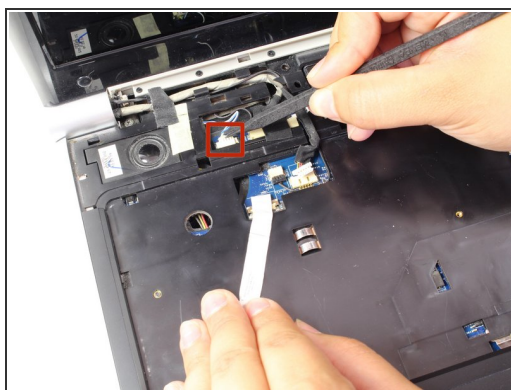- ⚠️ Do not apply too much force to the locking tab, because a damaged connector will disable the keyboard.

- Remove the keyboard.

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Step 17
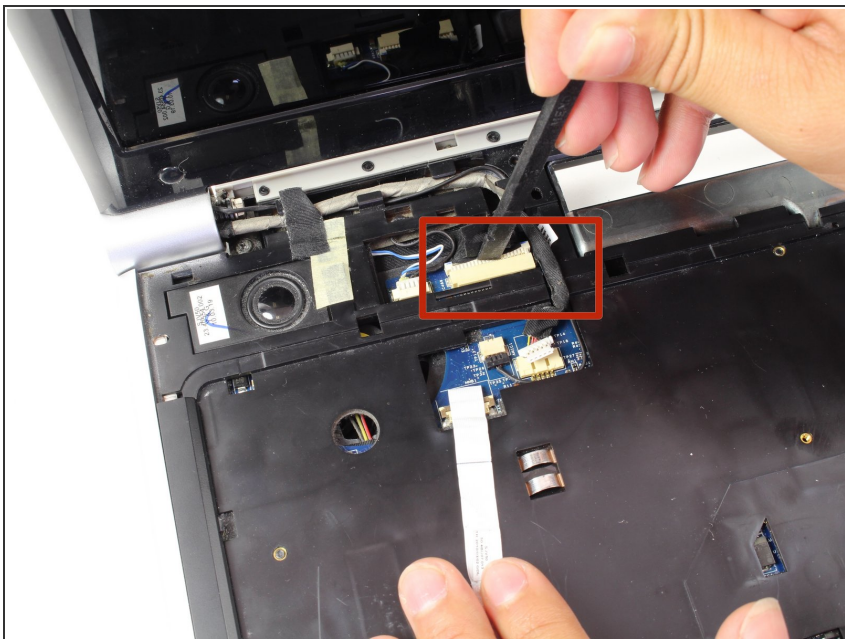

- Locate the three LCD connectors.

Step 18

- Use the pointy end of the spudger to gently pry each side of the LCD connector until they are detached from their respective ports.

⚠️ Do not pull with excessive force, since it could damage the LCD cable plug-in.
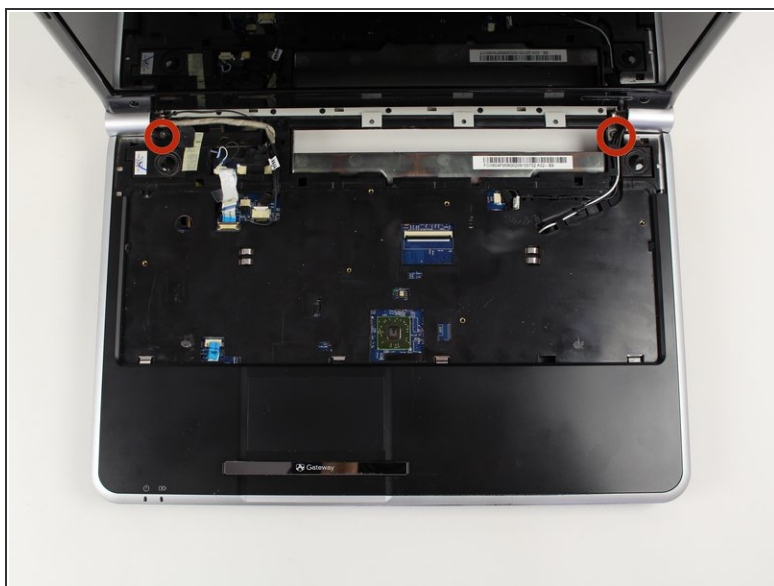
Step 19

- Using the flat edge of the spudger, disconnect the big white LCD cable connector by slightly pulling on it until it's detached from its respective port.

Step 20

- Using the tweezers, pull out the black and white cables located at the right side of the laptop.
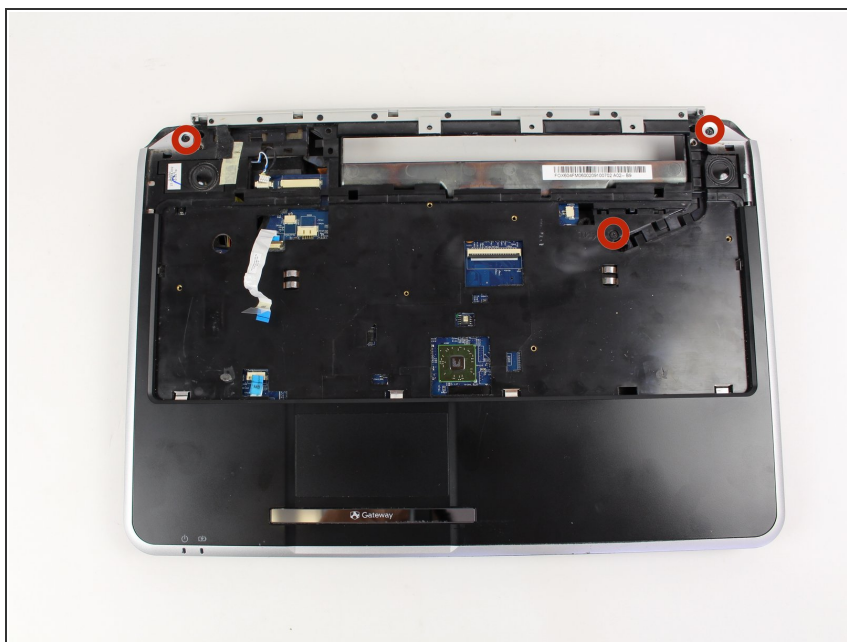
Step 21

- Remove the two 9/32" Phillips #0 screws on the top left and right corners.

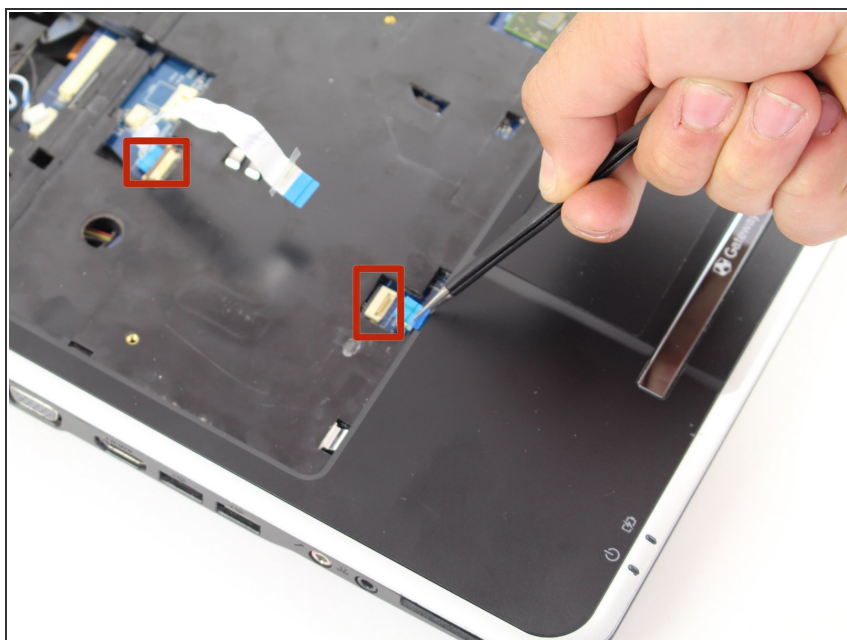- Lift the entire display screen straight up using both hands.

Step 22

- Turn the laptop upside down.

- Remove ten 9/32" screws with a Phillips #0 Screwdriver.

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Step 23

- Flip the laptop over.

- Remove the three 9/32"screws that secures the top cover with a Phillips #0 screwdriver.

Step 24

- Gently disconnect the two ribbons from the motherboard using the black tweezers.

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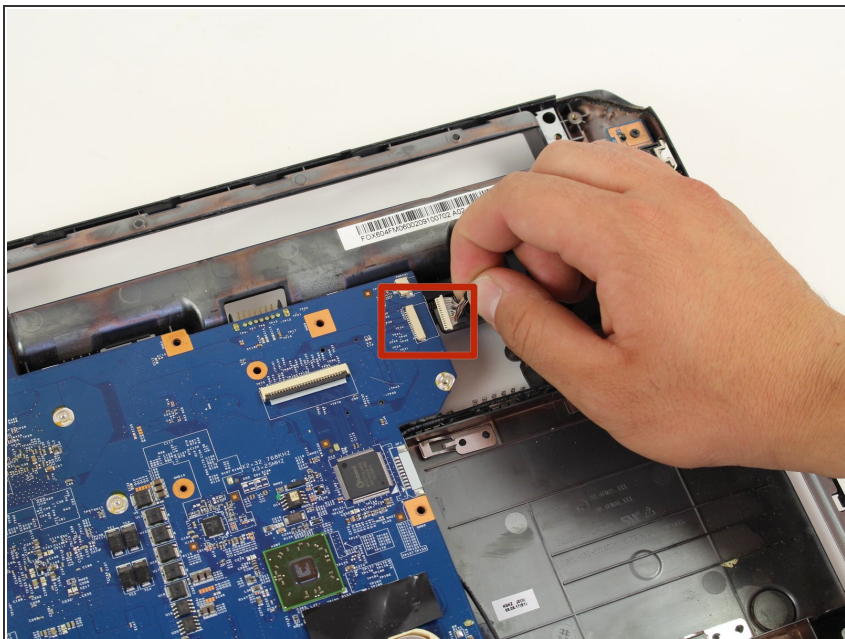www.iFixit.com

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Step 25

- Separate the top cover from the base using the heavy duty spudger. Insert the spudger in between the keyboard base and the base of the laptop with a minimum amount of force to separate them. Follow this procedure around the perimeter until the parts are separated.

Step 26

- Remove the 3/16" screw securing the motherboard with a Phillips #0 screwdriver.

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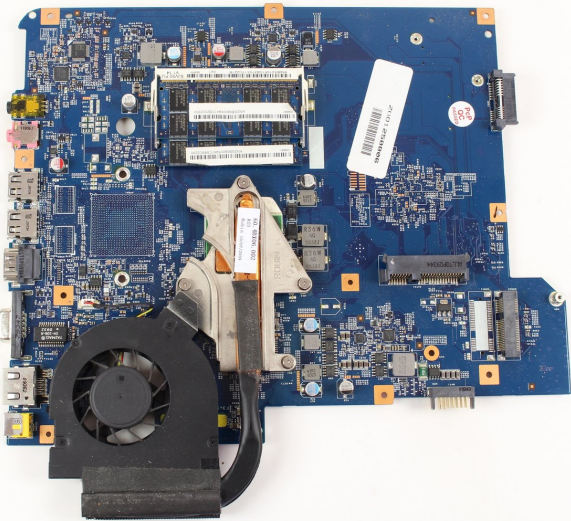www.iFixit.com

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Step 27

- Cautiously disconnect the USB board cable that is situated on the top right corner of the motherboard.

Step 28

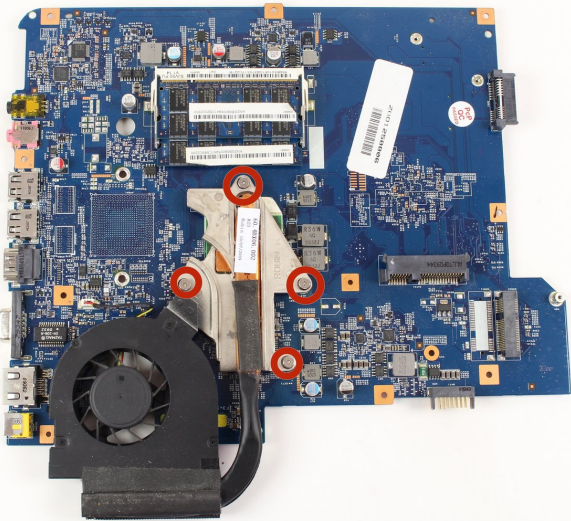- Disconnect the modem cable located at the bottom right of the motherboard.

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Step 29

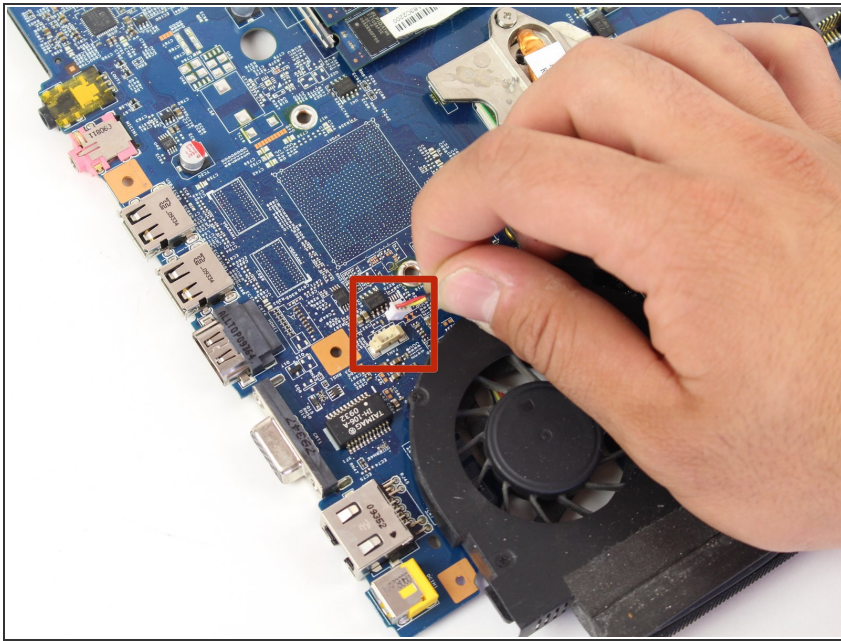

- Cautiously remove the motherboard and lie it down.

Step 30 — Cooling Fan

- Loosen the four 13/32" screws that connects the cooling fan to the motherboard using the Phillips #0 Screwdriver.

⚠️ The four 13/32" Phillip screws do not come off the metal fan support. Do not force to take the screws off, else the screw attachment can get damaged.
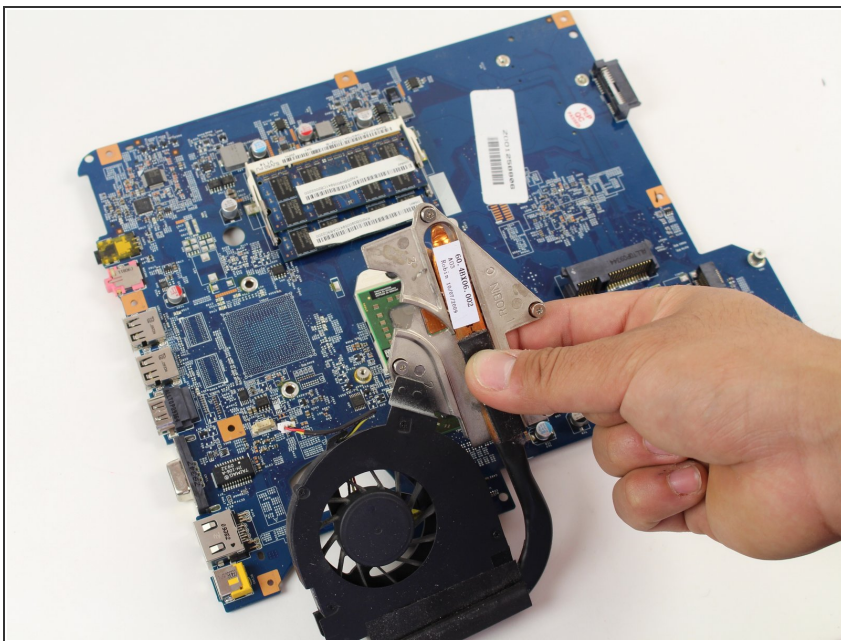
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Step 31

- Disconnect the fan cable from the motherboard.

⚠ Do not pull on the fan cable will excessive force. It will result with a non-working cooling fan and a damaged wire.

Step 32

- Carefully lift up and remove the cooling fan using your hands, and place it in a dry and safe zone.

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

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