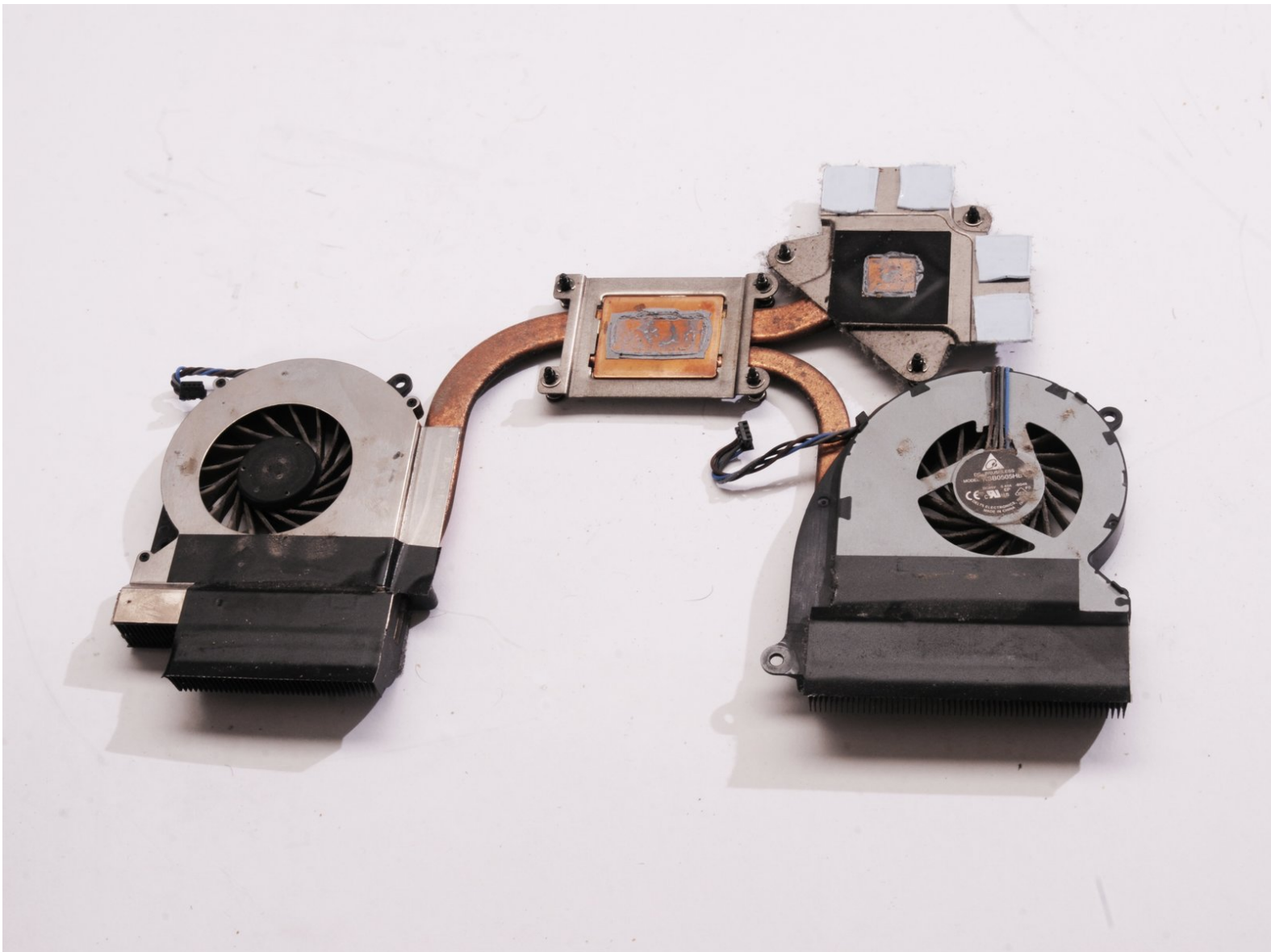# HP Envy 17-3070NR Fan Assembly Replacement

In this guide, we will show you how to remove the fan assembly from the system board of your HP Envy 17-3070NR.
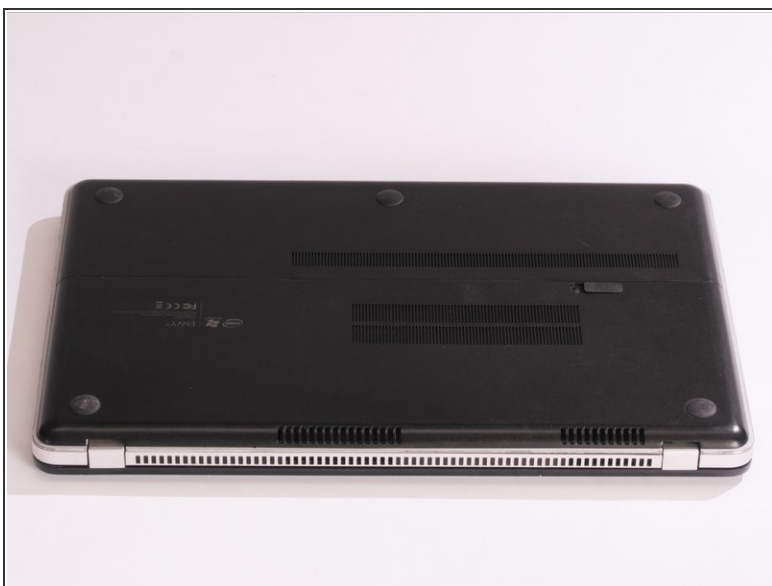
Written By: Jasper Lewin

INTRODUCTION

Follow this guide if you would like to replace the fan of your HP Envy 17-3070NR. Overheating is the cause of a lot of computer problem. This guide will take you through steps to replace the fan assembly, should fans fail.

🔧 TOOLS:

- Spudger (1)
- T8 Torx Screwdriver (1)
- Phillips #2 Screwdriver (1)
- Arctic Silver Thermal Paste (1)

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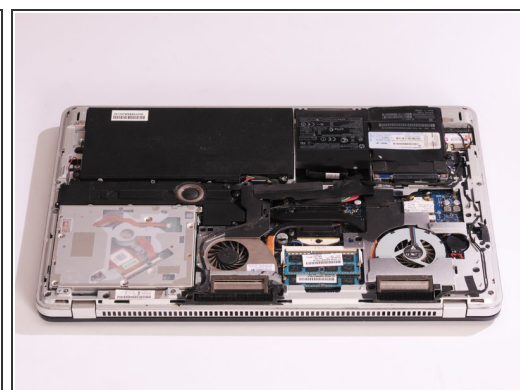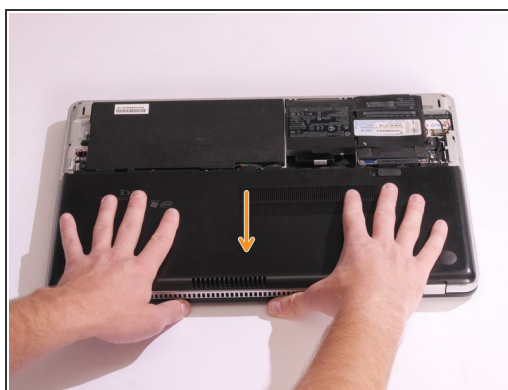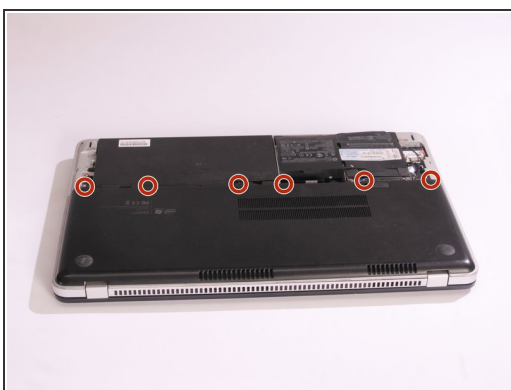
　　　　　　　　www.iFixit.com

Step 1 — Back Cover

⚠️ Before you begin taking apart the computer, make sure that it is completely powered off.
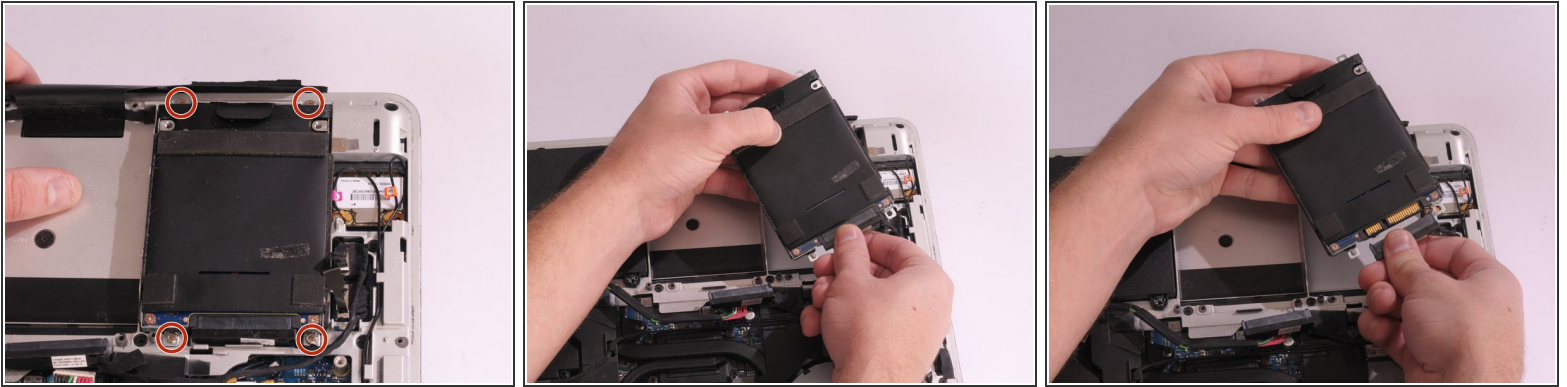
- Slide the release latch away from the nearest edge.

- Slide the back cover off of the computer.
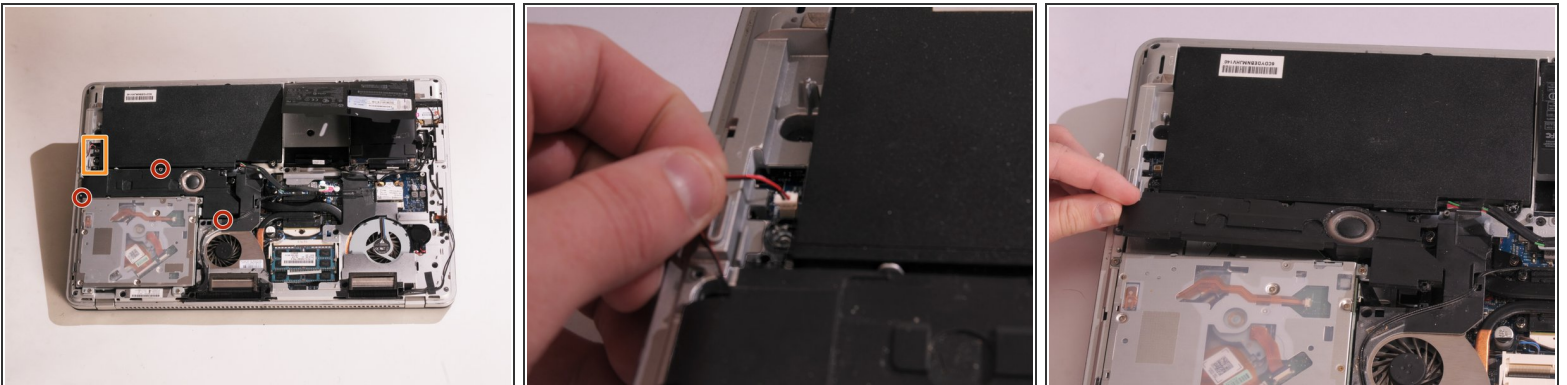
Step 2

- Remove the six 3.7mm Phillips screws.

- Slide the back cover until it clicks, then lift it straight off.

Step 3 — Hard Drive

- Remove the four 3.7mm Phillips screws that hold the hard drive onto the computer.

- Remove the hard drive by lifting it out of its cavity.

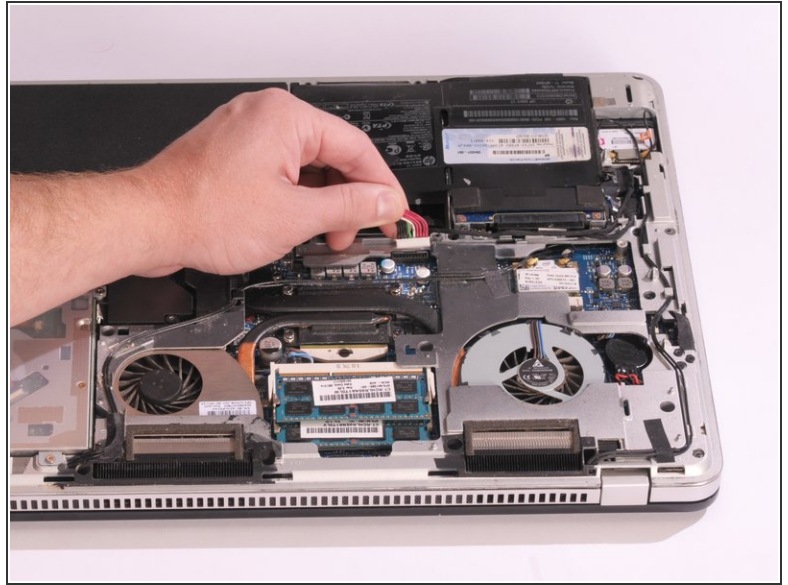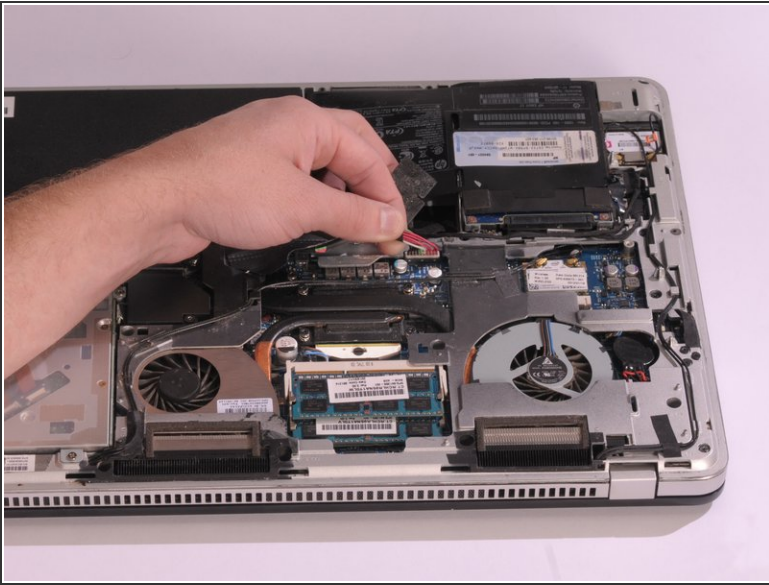- Unplug the hard drive cable that connects it to the main assembly.

Step 4 — Subwoofer

- Unscrew the three 6.5mm Phillips shoulder screws that connect the subwoofer to the computer.

- Disconnect the red and black subwoofer cable from the system board by pulling it upwards.

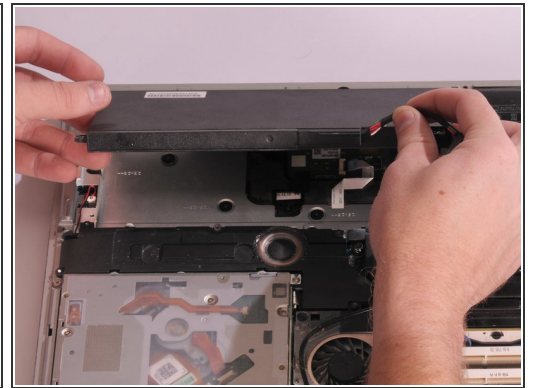- Remove the subwoofer by pulling straight up from the main assembly.
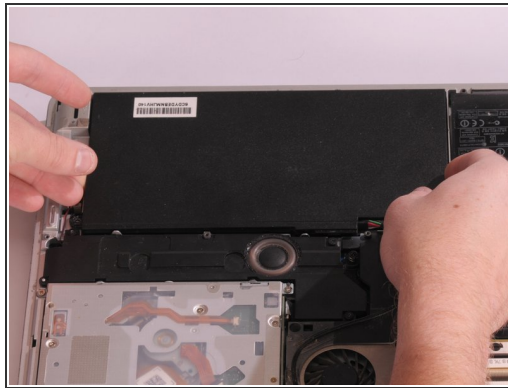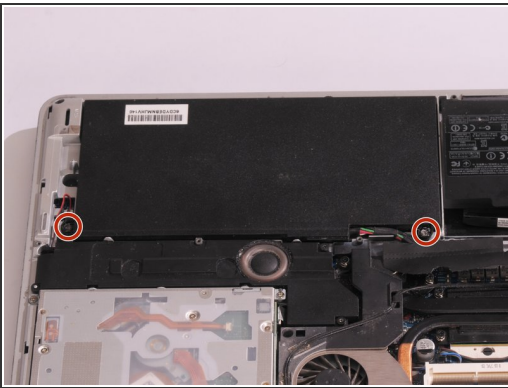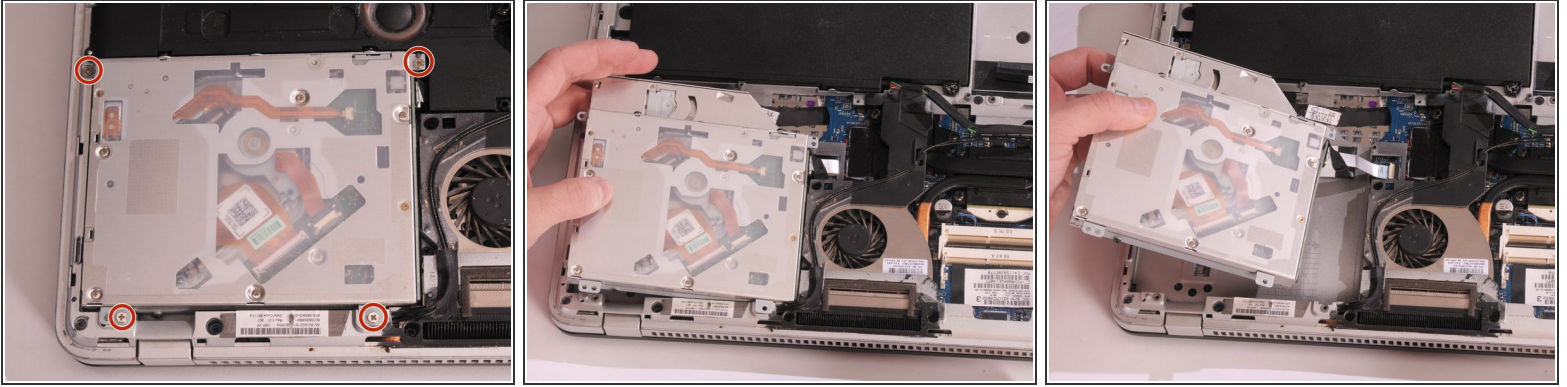
Step 5 — Battery

- Disconnect the multi-colored battery cable from the main assembly by gently pulling upward on it.

Step 6

- Remove the two 3.8 mm Torx screws using M8 Torx screwdriver.

- Remove the battery by pulling it straight out away from the computer.

- (i) It is much easier to use the battery cable to carefully lift the battery off than to try to pry it off with tools.

Step 7 — Optical Drive

- Remove the four 3.7mm Phillips screws that secure the optical drive to the computer.

- Slowly lift the optical drive away from the computer ensuring that you don't put stress on the connecting cable.

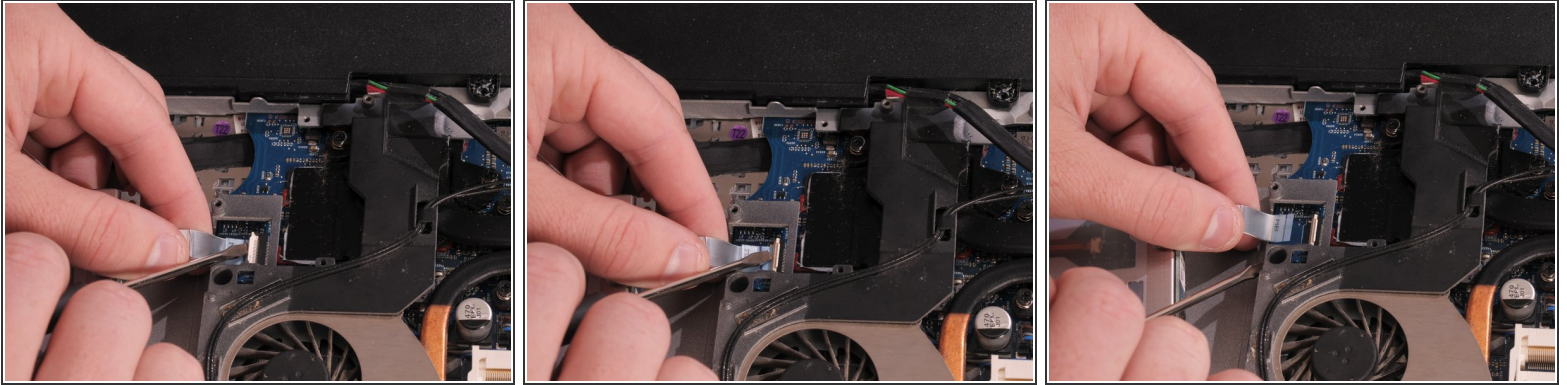⚠ Do not fully lift off the optical drive as there is still a cable that connects it to the motherboard.

Step 8

- Remove Sub Speaker assembly first in order to remove Optical drive. Carefully disconnect speaker connector.

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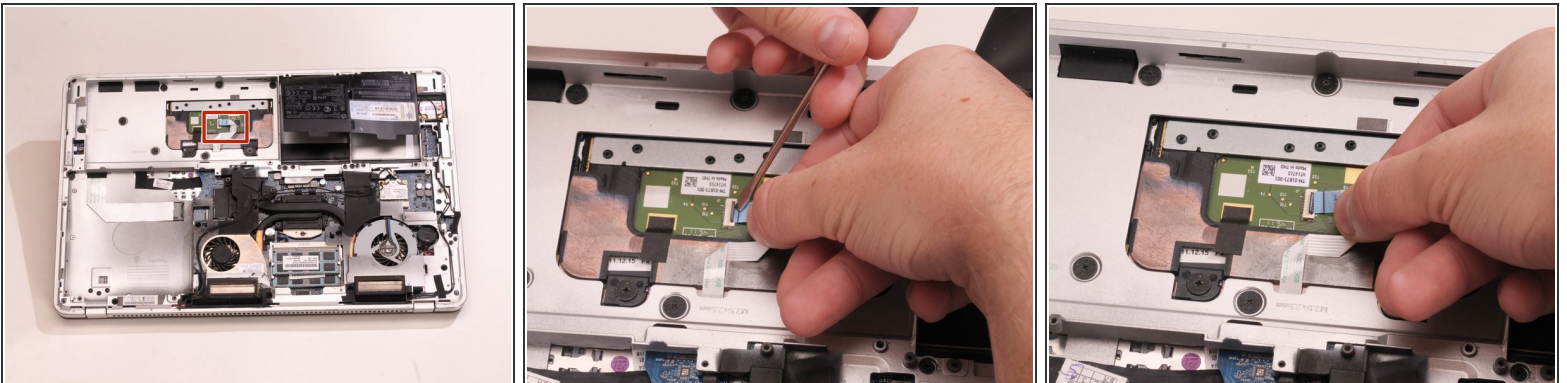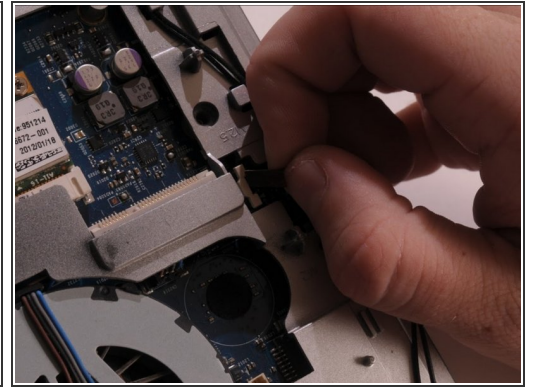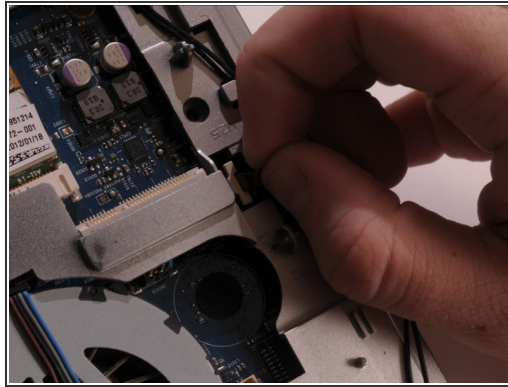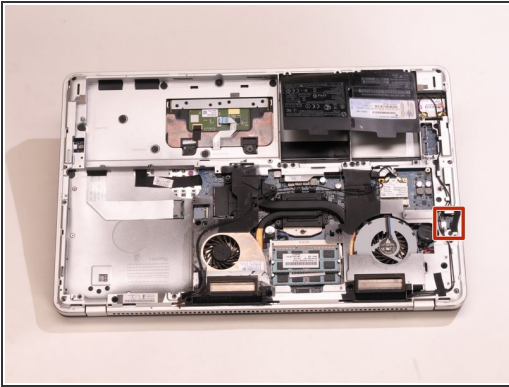
Step 9

- Carefully disconnect the connecting cable by lifting the white clamp with a Flathead screwdriver and pulling on the blue tab away from connector.
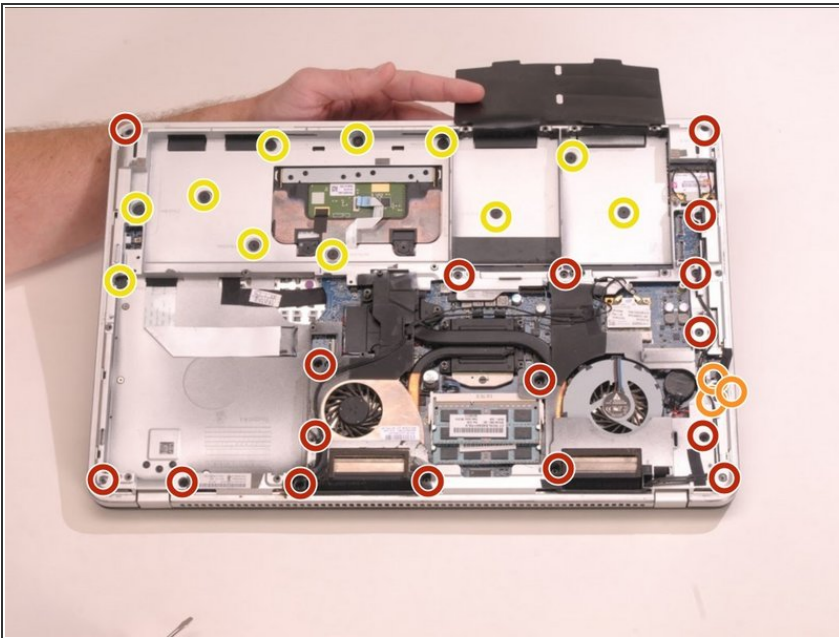
Step 10 — Top Cover

- Remove the first connector by lifting the white clamp with a Flathead screwdriver and pulling the connector to your right.

Step 11

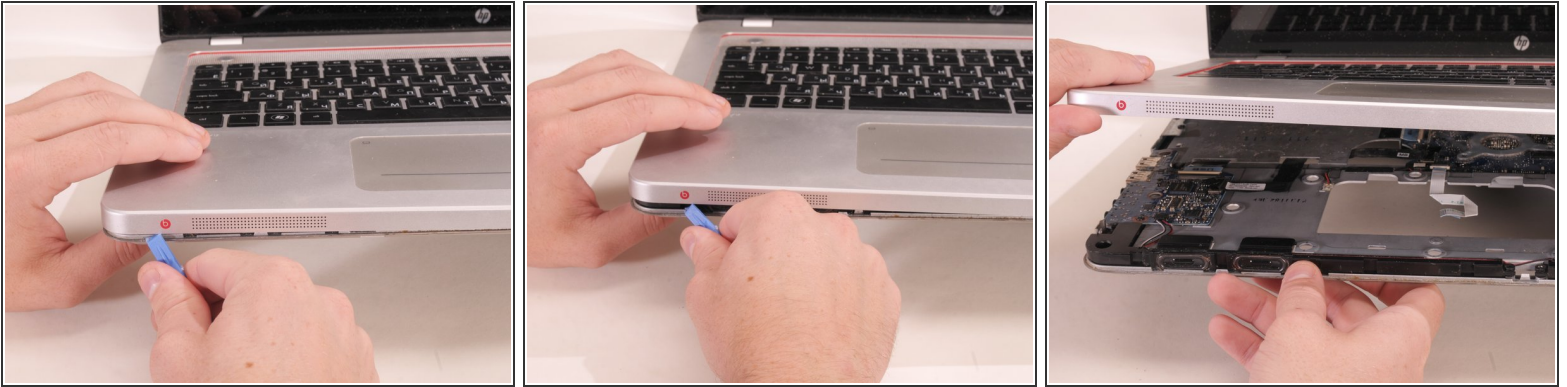- Remove the second connector by gently pulling upward.

Step 12

- Remove the seventeen 6.6mm Phillips screws.

- Remove the three 3.6 mm Phillips screws.

- Remove the eleven 3.2mm Phillips screws

  - ⓘ Three of the 3.2mm Phillips screws are located underneath the black hard drive flap.

- ⓘ Make sure that you keep the screws organized so that you keep track of all of the different sizes and locations.
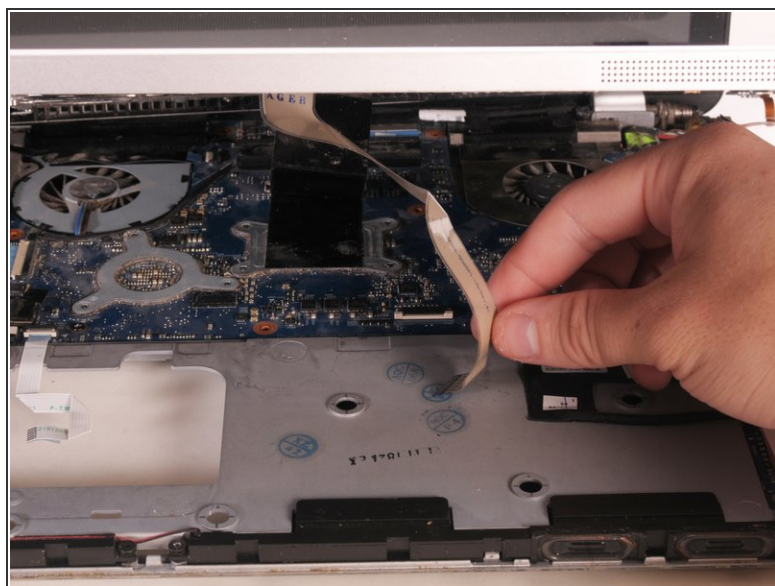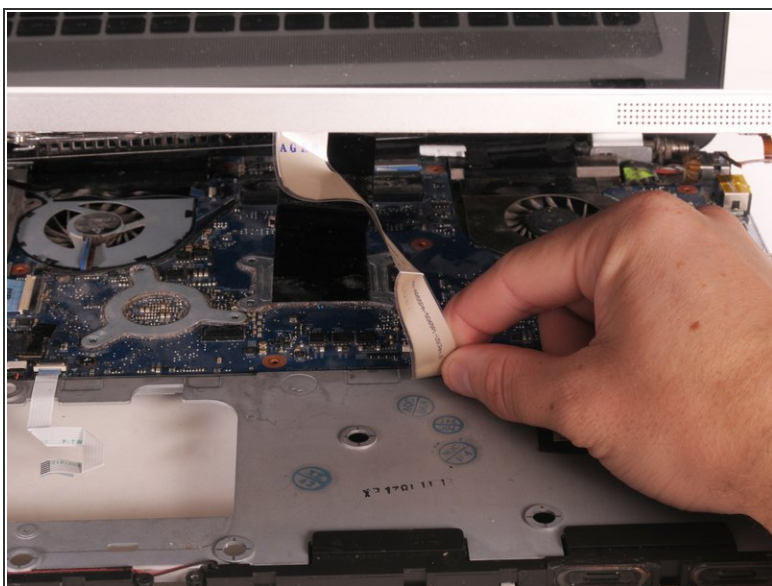
Step 13

- Flip the laptop over.

- Use a Plastic Opening tool to carefully pry all around the top cover up off of the remaining assembly.

  - ⓘ Starting location for prying does not matter as long as you pry all around the frame before lifting it off.

⚠ Do not fully lift the top cover because there are cables that will need to be disconnected before removal.

Step 14

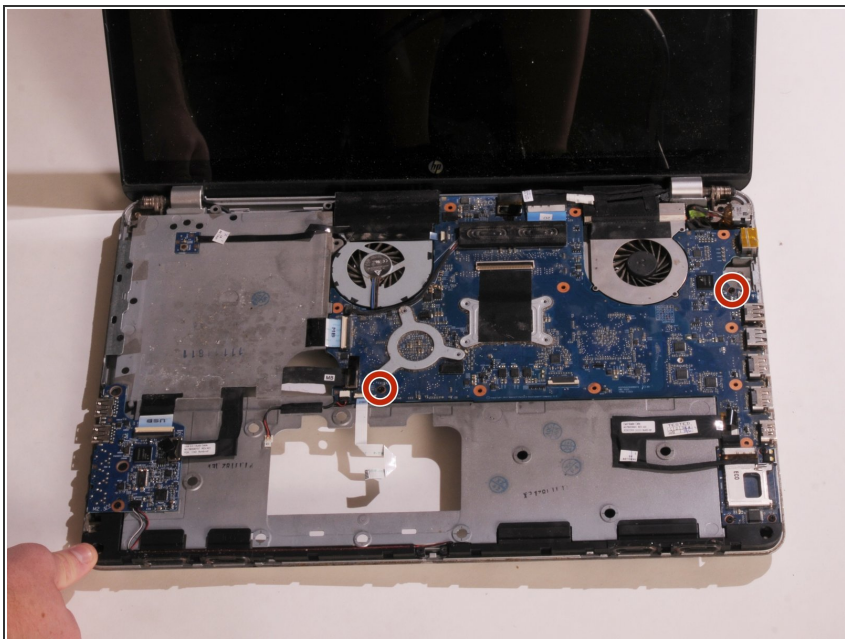- Gently pull the white connector shown in the picture towards you to disconnect it from the system board.

Step 15

- Gently pull the black connector towards you to disconnect the top cover from the main assembly.

- Once both connectors are disconnected, lift the top cover off of the main assembly.
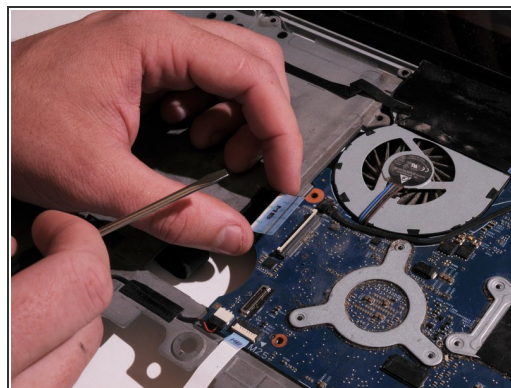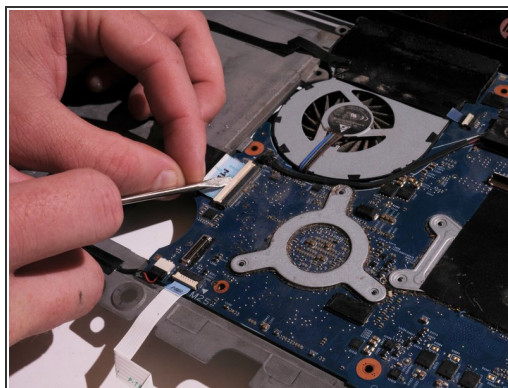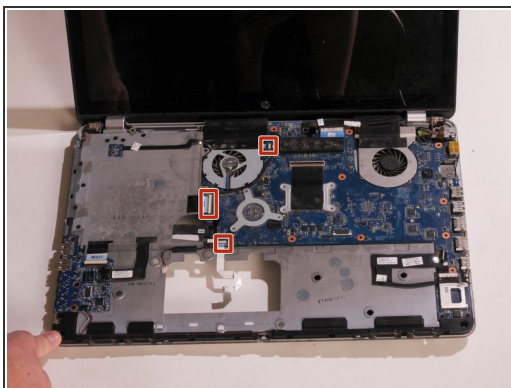
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Step 16 — Disassembling HP Envy 17-3070NR Motherboard Assembly

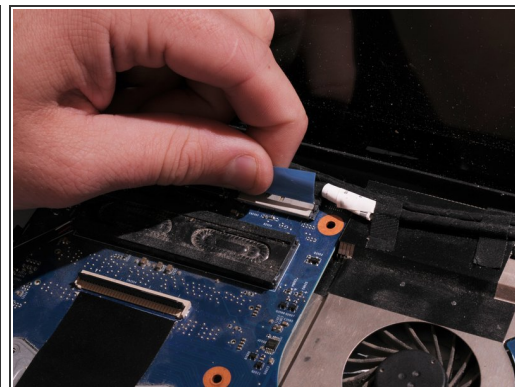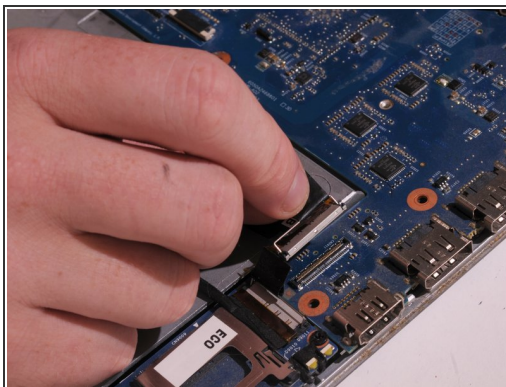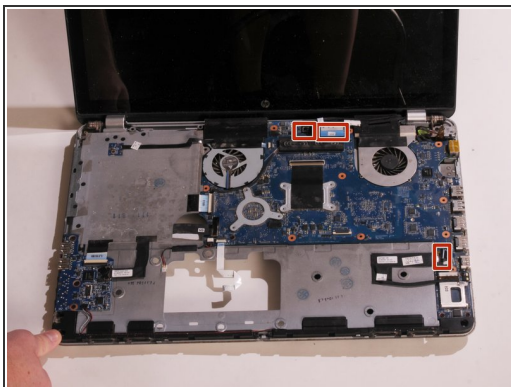- Remove the two 4.5mm Phillips screws from the system board

Step 17

- Disconnect three cables by lifting a white clamp with a Flathead screwdriver and pulling on the blue tab.

Step 18

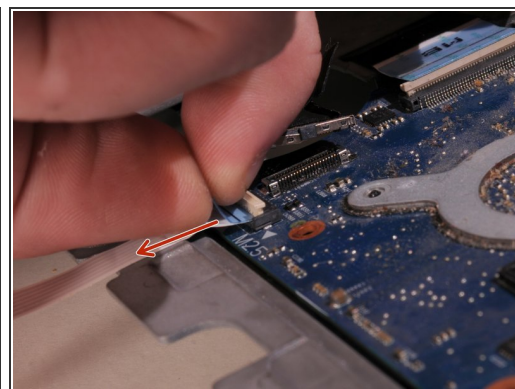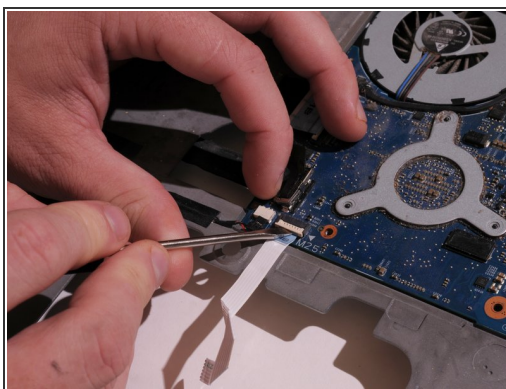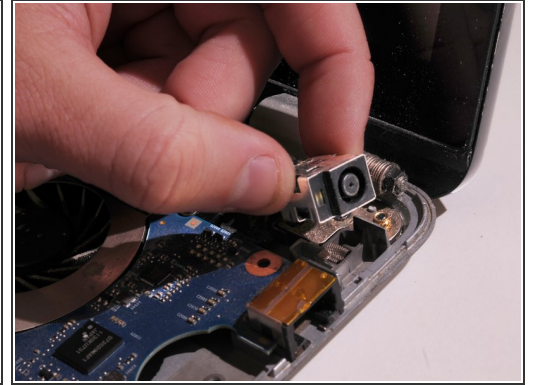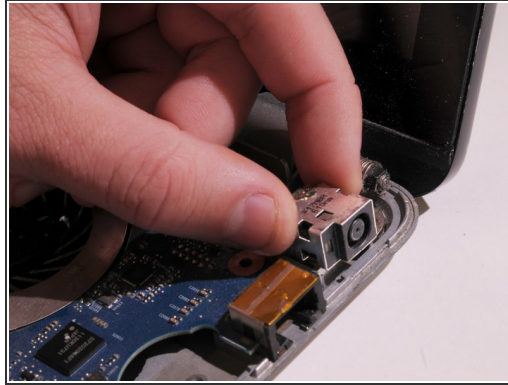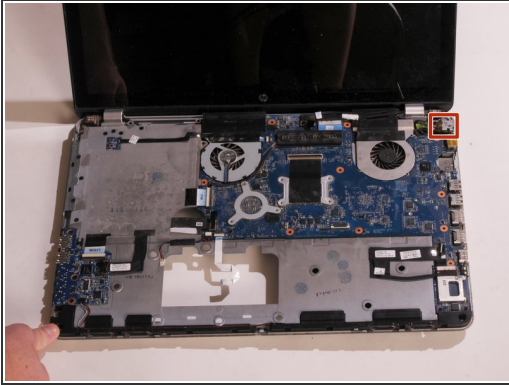- Disconnect three cables by pulling upward on black or blue tabs connected to them.
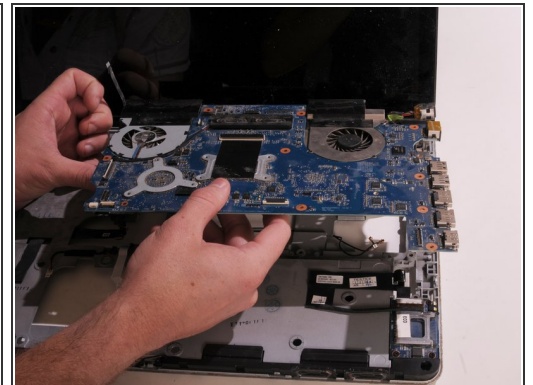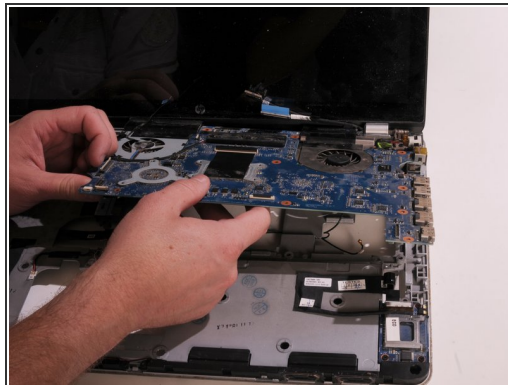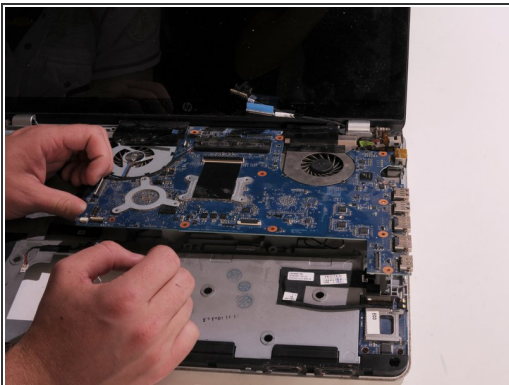
Step 19

- Disconnect cable by using a Flathead screwdriver to gently pry it off the black connector towards you.

Step 20
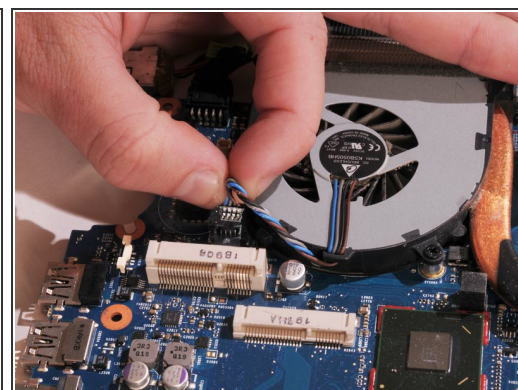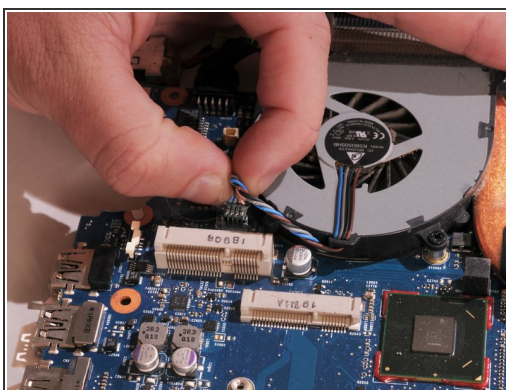

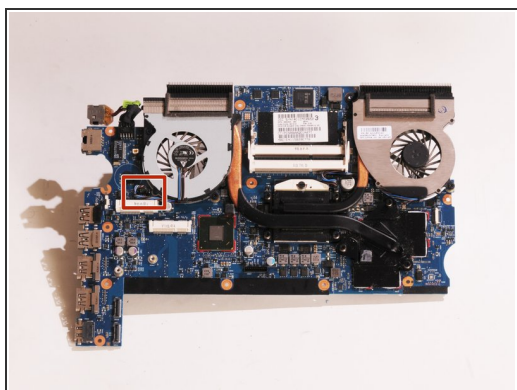- Lift up the power connector from the clip.

Step 21

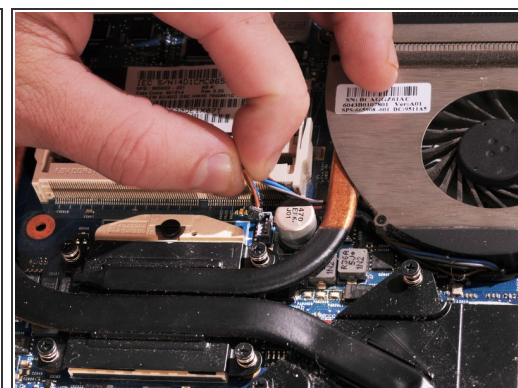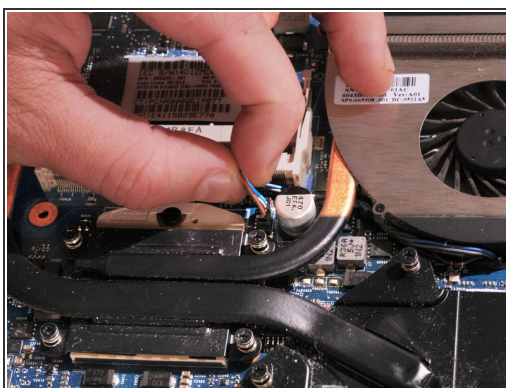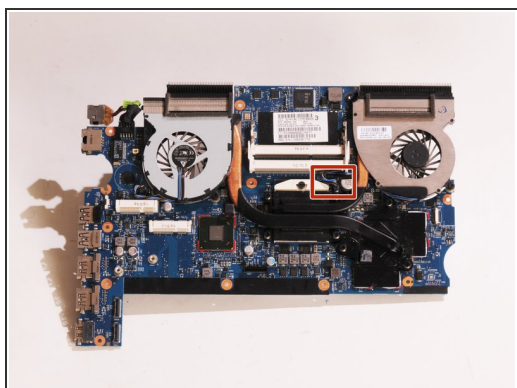- Carefully lift up motherboard from the main assembly.

Step 22 — Fan Assembly

- Flip the system board over.

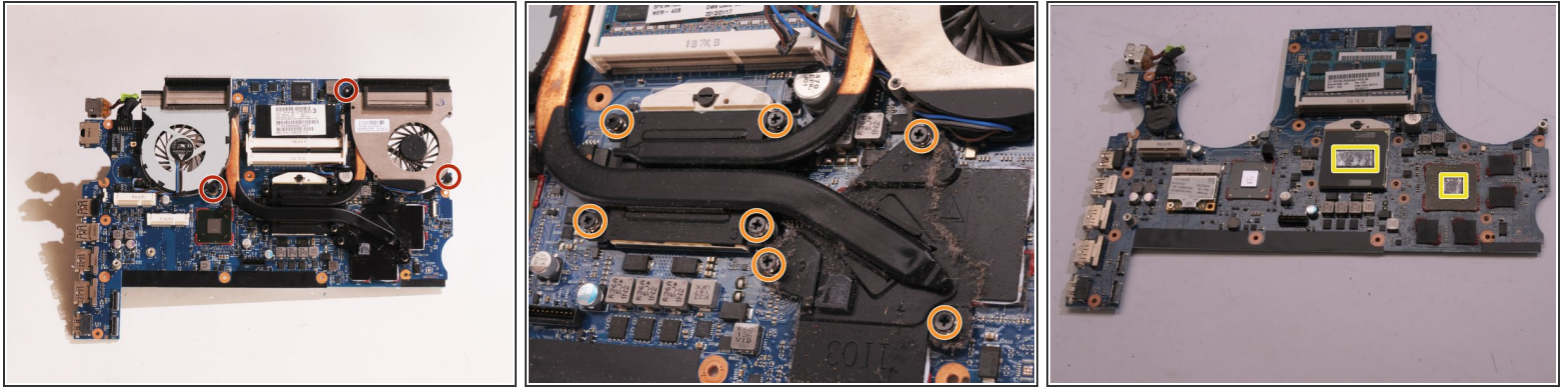- Unplug the first fan assembly cable by carefully pulling it upwards.

Step 23

- Unplug the second fan assembly cable by carefully pulling it upwards.

Step 24

- ● Remove the three 4.5mm Phillips screws on the fan assembly.

- ● Loosen the seven captive Phillips screws in the ascending numerical order (1-7). Numbers are printed next to each screw on the housing.

  - ⓘ Screws will not fully come off the assembly. You need to only loosen them.

- ● Remove the fan assembly from the system board by lifting it straight up.

- ⓘ For reassembly, you will need to clean the old thermal paste off of areas highlighted in yellow as well as matching parts on the fan assembly. Following that, you would need to reapply thermal paste before putting back the fan assembly. Small amount of the size of the rice grain should be enough for each plate.

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