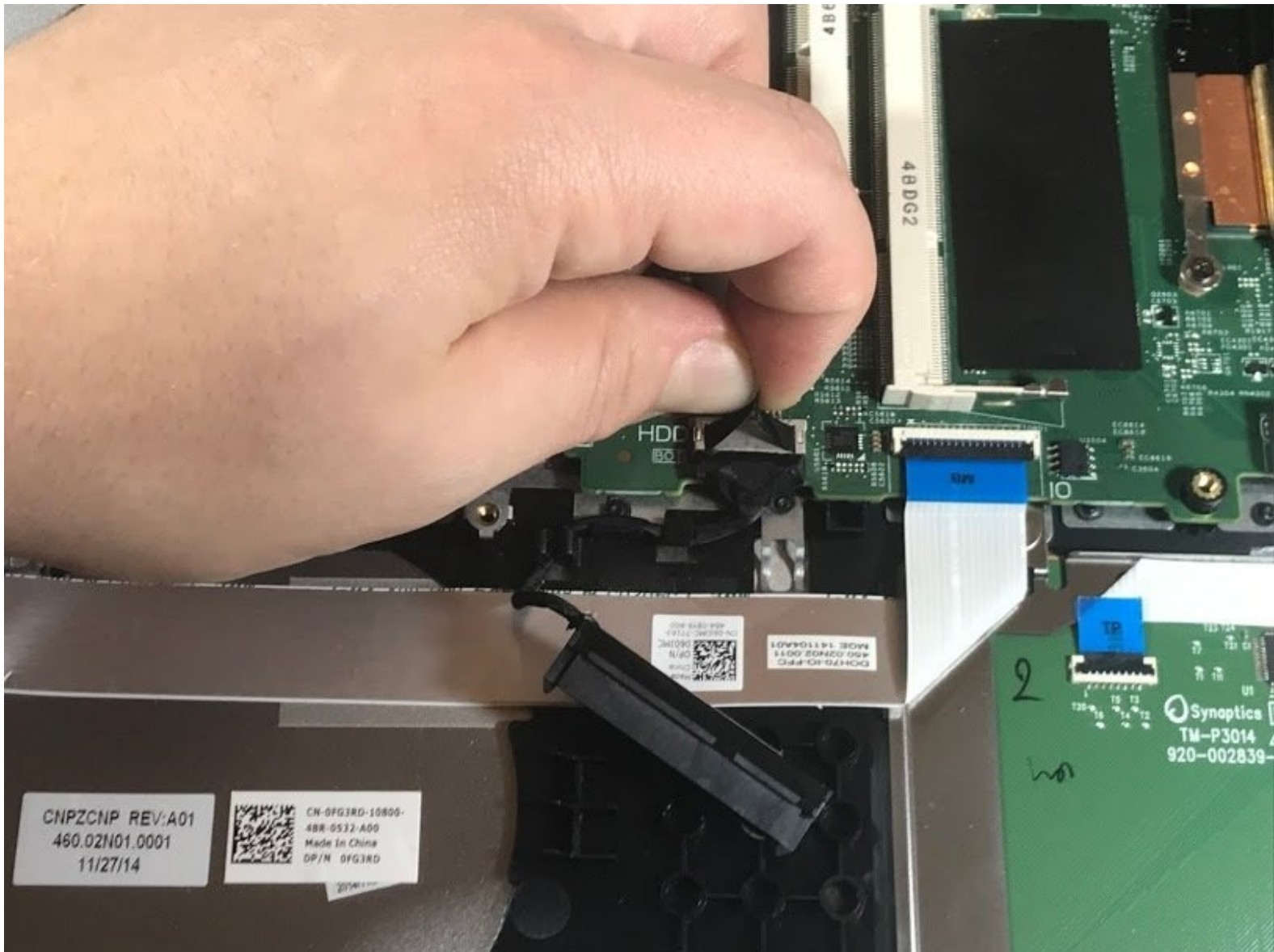# Dell Inspiron 17-7746 Video Card/Motherboard Replacement

This guide will show how to properly replace the Video Card/Motherboard in the Dell Inspiron 17-7746

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INTRODUCTION

This model of computer has an integrated video card embedded in the Motherboard. If the computer seems to have the issues with a failing video card and it is not the drivers then the whole motherboard must be replaced.

TOOLS:

- Jimmy (1)
- Phillips #1 Screwdriver (1)

PARTS:

- Dell Inspiron 17-7746 14.8V Li-ion Laptop Battery (3900mAh / 58Wh) (1)
- Dell Inspiron 1707745 Wireless (1)
- Dell OEM Inspiron 5559 1 x Dell Inspiron 17-7746 System Board Integrated Intel Motherboard 88XGN (1)

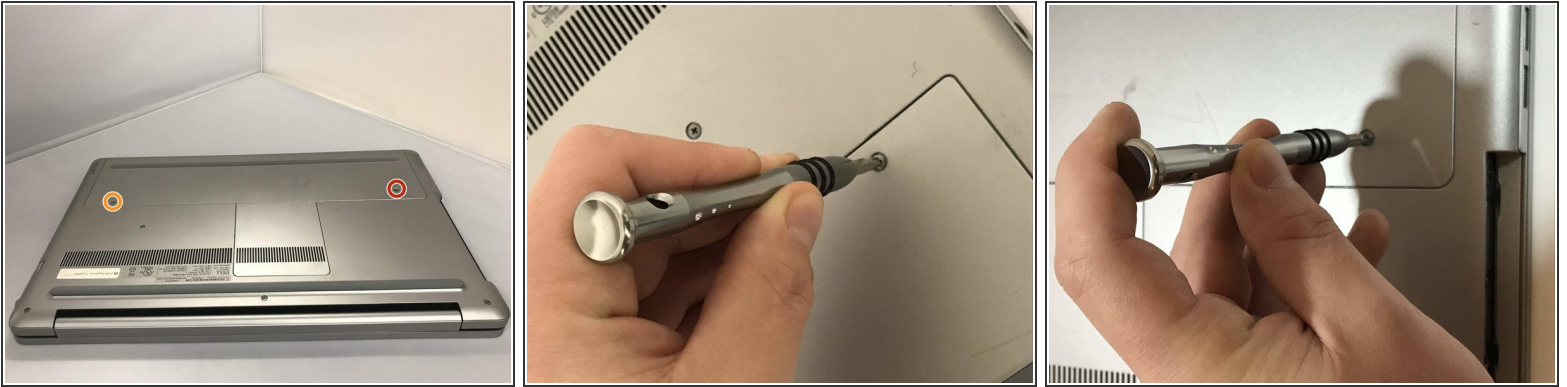This document was generated on 2020-11-28 07:00:31 AM (MST).

Step 1 — Battery

- Disconnect the laptop from the AC adapter and turn off the laptop.

Step 2

- Place the laptop so the bottom faces up.

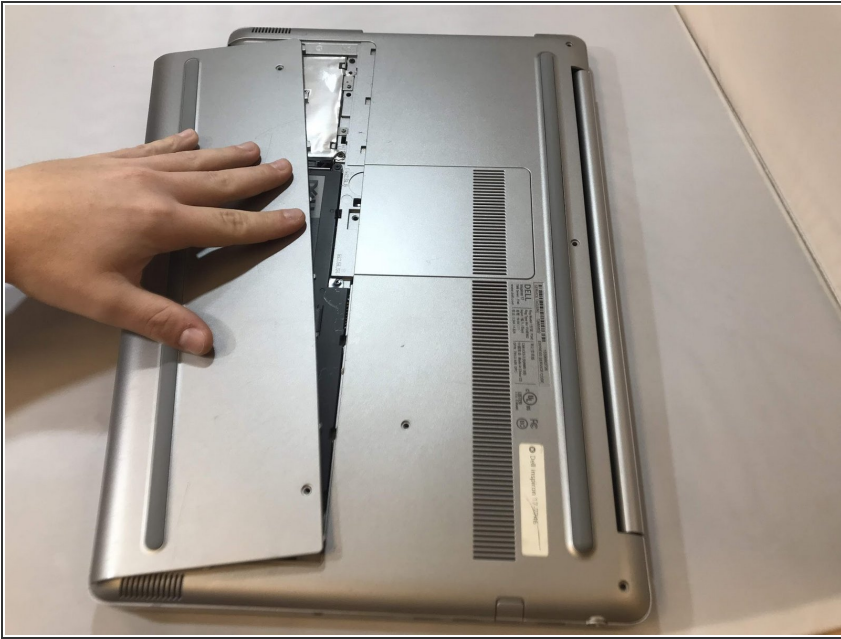This document was generated on 2020-11-28 07:00:31 AM (MST).

Step 3

- Remove the silver 15mm PH 1 screw that holds the plastic cover in place over the battery.

- Remove the 8mm PH 1 screw that holds the plastic cover in place over the battery.

- 📌 Keep the screws together because the length of the screws will matter when you reassemble.

Step 4

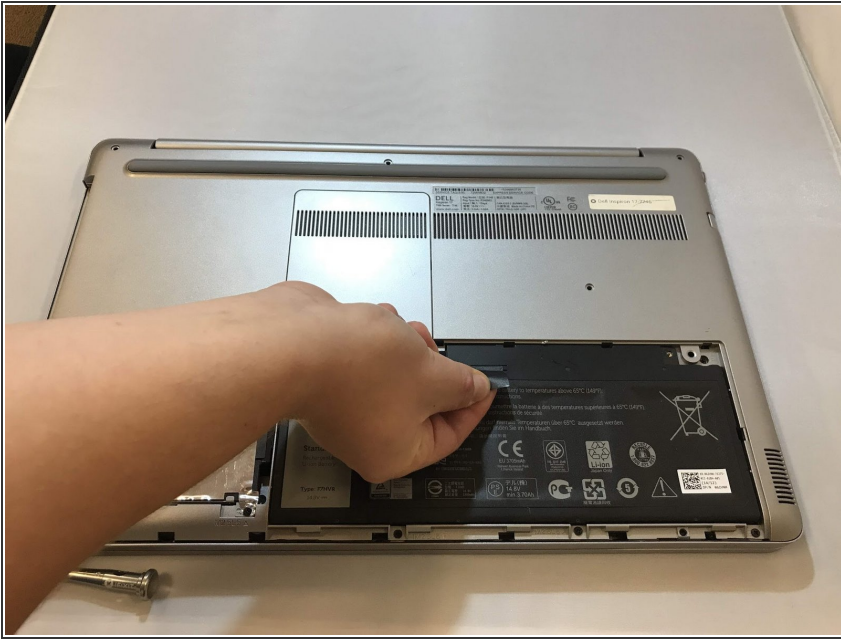- Using the metal jimmy, pry up the first half of the cover.

Step 5

- Apply pressure with your fingertips on top of the cover and drag toward the front of the laptop. This will make the plate slide off exposing the hard drive.

Step 6

- Remove the two black PH1 6mm screws that anchor the battery.

Step 7

- Grab the black tab on the battery with index finger and thumb.

- (i) If the Tab is broken or missing, use the plastic spudger to pry the battery out far enough to grab the battery by hand.

- ⚠ Avoid applying too much pressure on the battery with the plastic spudger. It might puncture the battery.
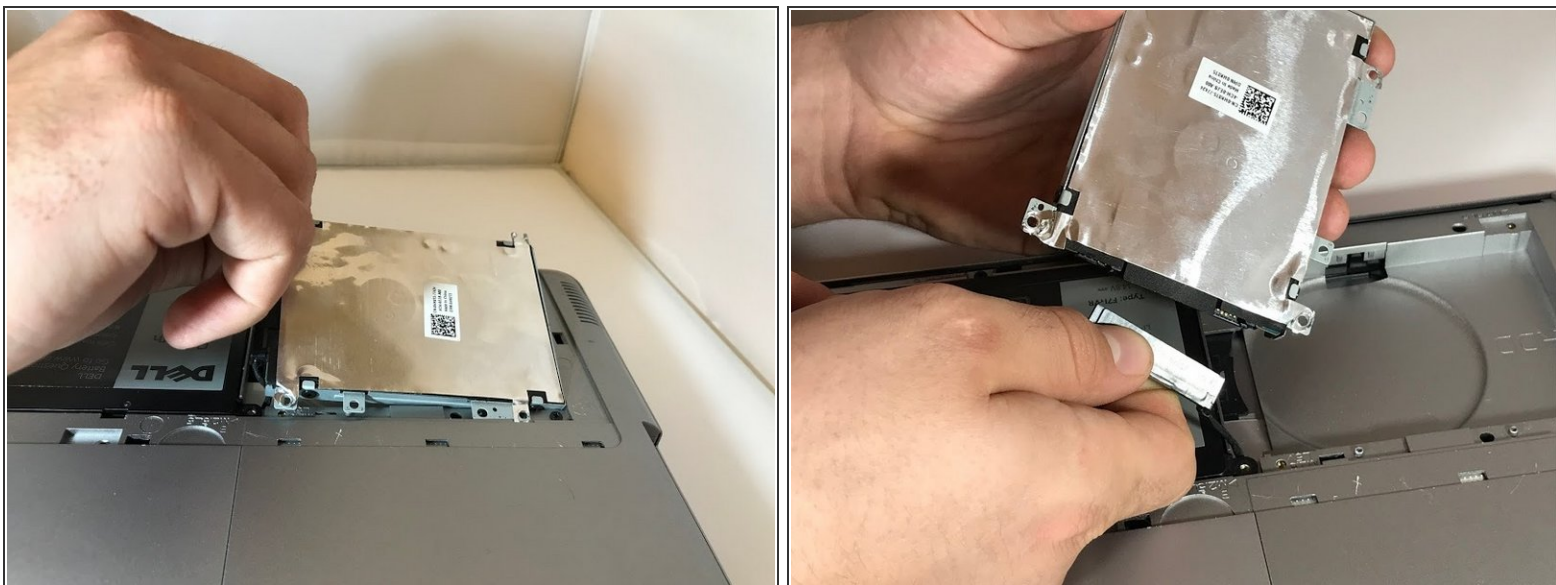
Step 8

- Pull upwards, removing the battery from the laptop.

  - (i) Ensure replacement battery has no bulging or has no cracks and lies flat in its location.

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Step 9 — Wireless Card

- Remove the three black 6mm PH1 screws that anchor the hard drive.

- This screw hole will be empty because the 15mm silver screw that holds the plastic cover will anchor the hard drive down when completely reassembled.
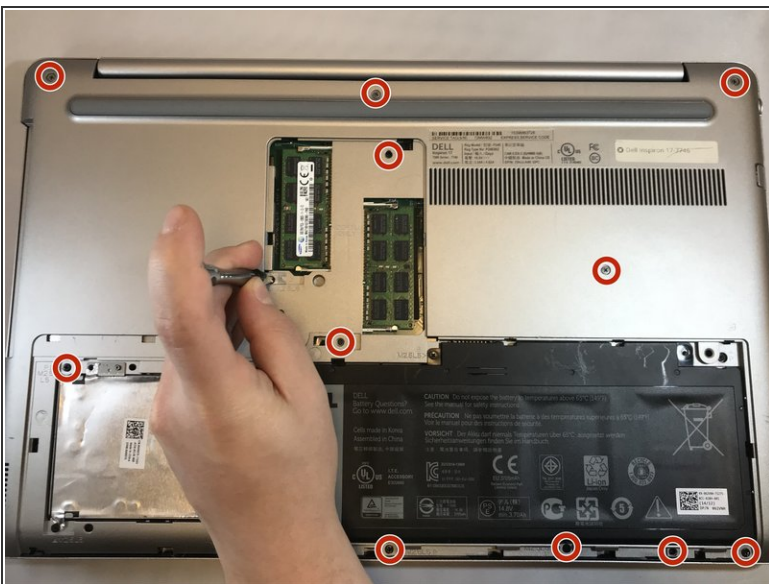
Step 10

- Using your hands, gently lift the hard drive out of its slot.

- Disconnect the Seta Cable attaching the hard drive to the laptop by gently wiggling loose the connector from the hard drive using your hands.
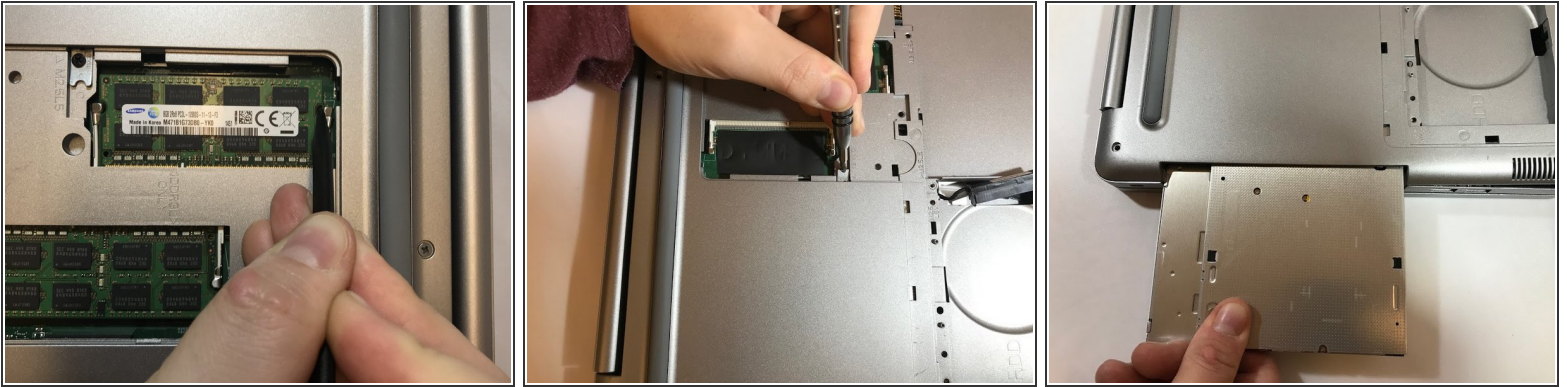
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Step 11

- Pry up the plate covering the RAM, using the metal jimmy.

Step 12
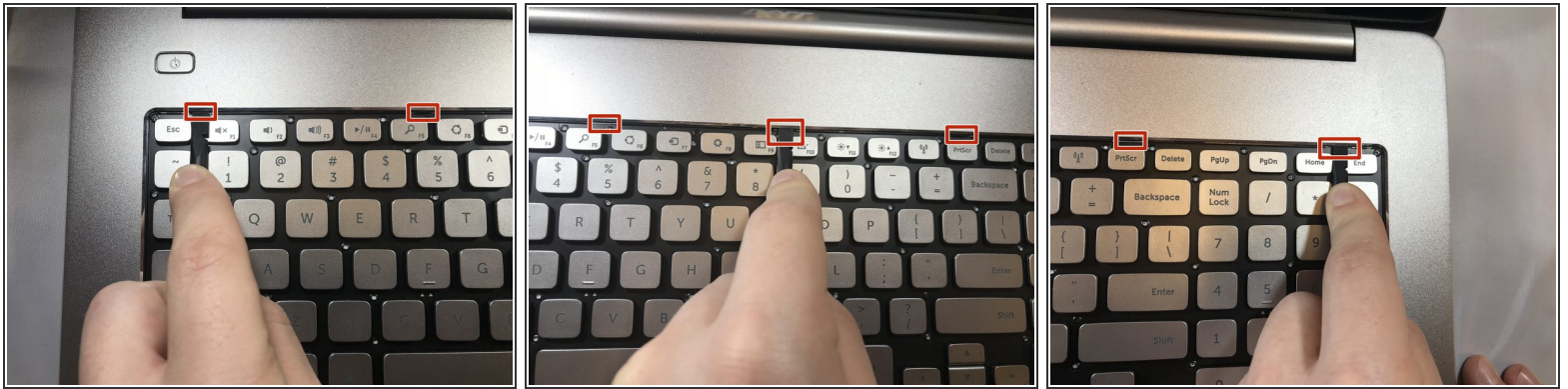

- Remove all eleven (11) PH1 screws.

Step 13

(i) As part of removing all screws the CD ROM screw is also removed using the plastic spudger.

● Using the tip of the plastic spudger, push the metal tab towards the outer edge of the laptop. This pushes the CD ROM out.

● Using your fingers, pull out the CD ROM.
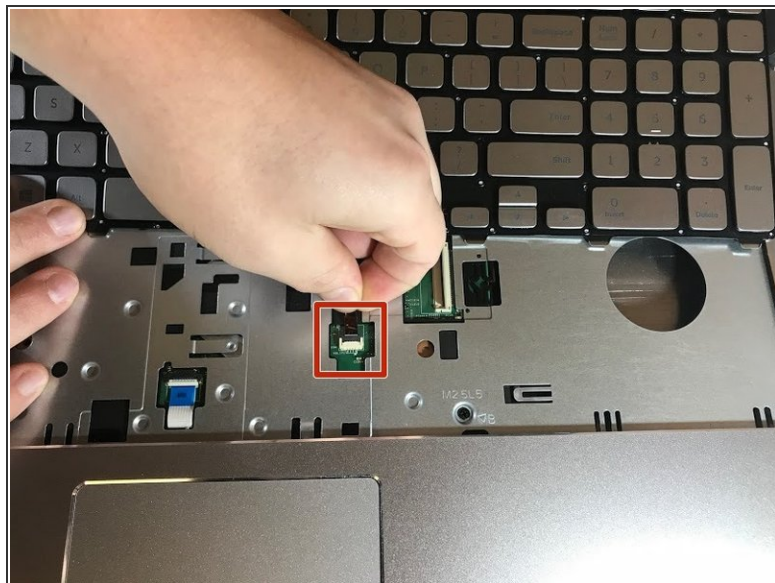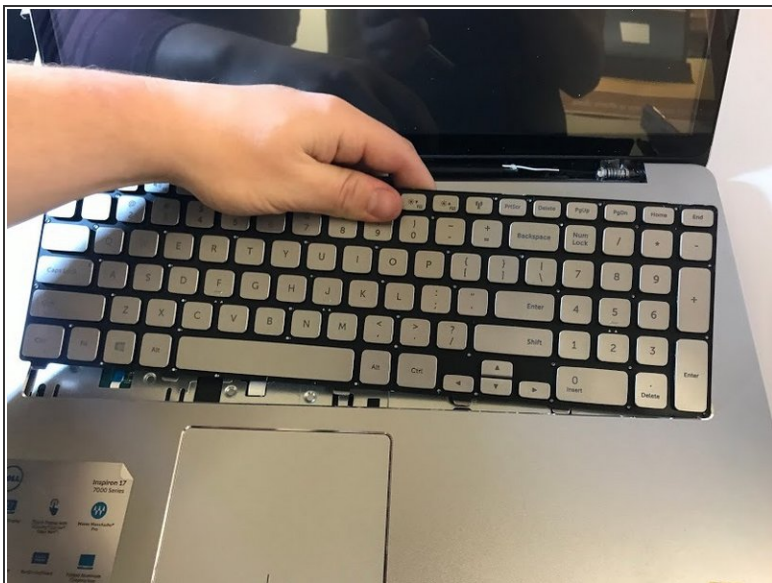
Step 14

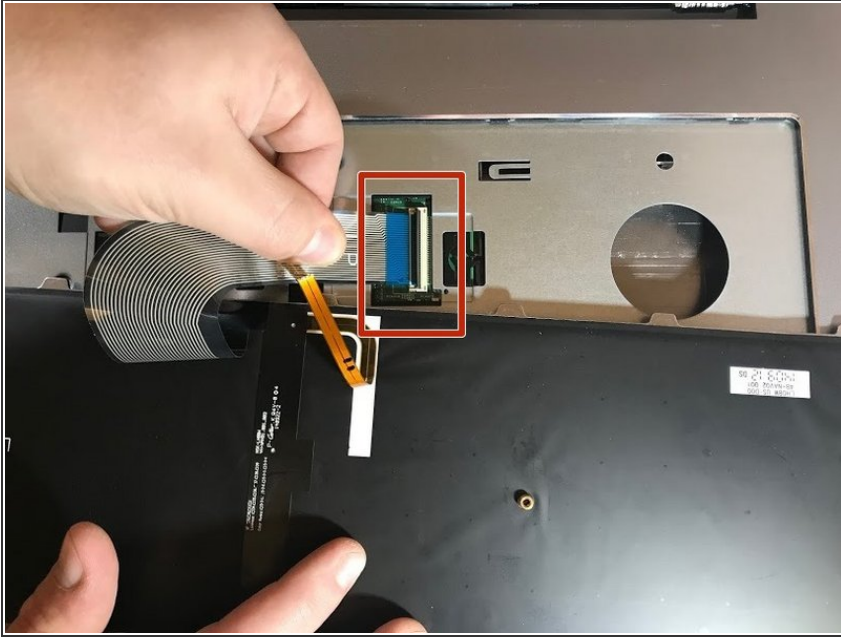● Turn the laptop over and open it up, exposing the keyboard.

Step 15

- Using the plastic spudger tool, place the tip of the spudger into the small notches at the top of the keyboard and push in the notch to release the top portion of the keyboard. Repeat on all notches.

- Push all five tabs back to lift the keyboard.

- ⓘ Starting from the left to right makes it easier to remove the keyboard.
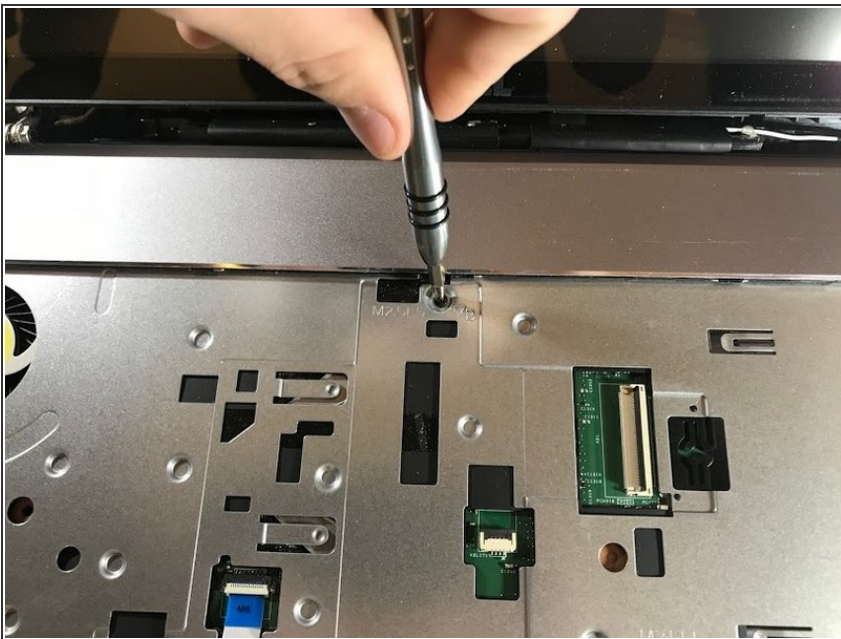
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Step 16

- Using the plastic spudger, lift the top part of the keyboard and gently lift the keyboard out.

- (i) Top of the keyboard is where the clips were holding the keyboard in place of the laptop.

- ⚠ There are flat ribbon cables that connect the keyboard, avoid breaking these cables.

- Using your hands, gently remove the narrow flat ribbon cable from the motherboard port by gently pulling the cable.

Step 17

- Using your hands, gently remove the wide flat ribbon cable from the motherboard port by gently pulling the cable.

Step 18

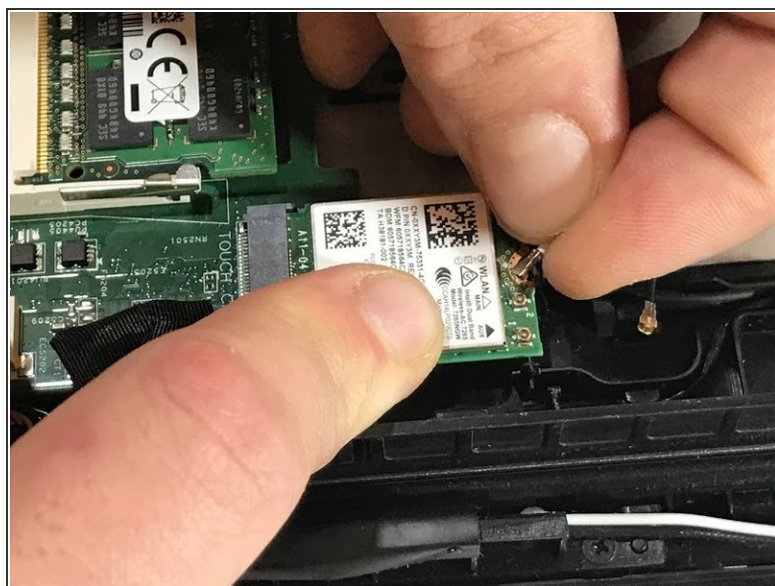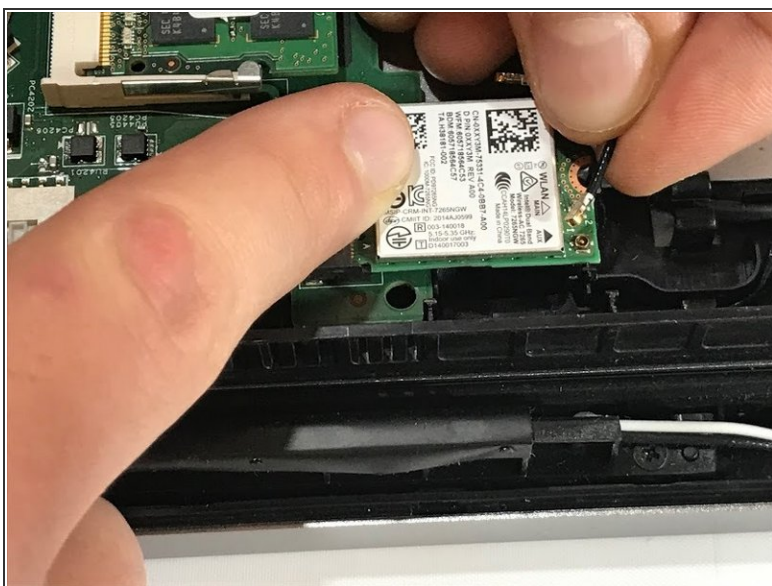- Remove the 15mm PH 1 screw holding the bottom plate in place.

Step 19

- Close the laptop and flip it over exposing the bottom surface. Use the metal jimmy and blue opening tool, gently pry the bottom cover off. Repeat this process around the entire perimeter of the laptop.

Step 20

- Gently pick up the bottom cover, exposing all other components of the device.

- ⓘ If the cover is not coming off easily or seems to not be lifting off. Look for any screws you may have missed.

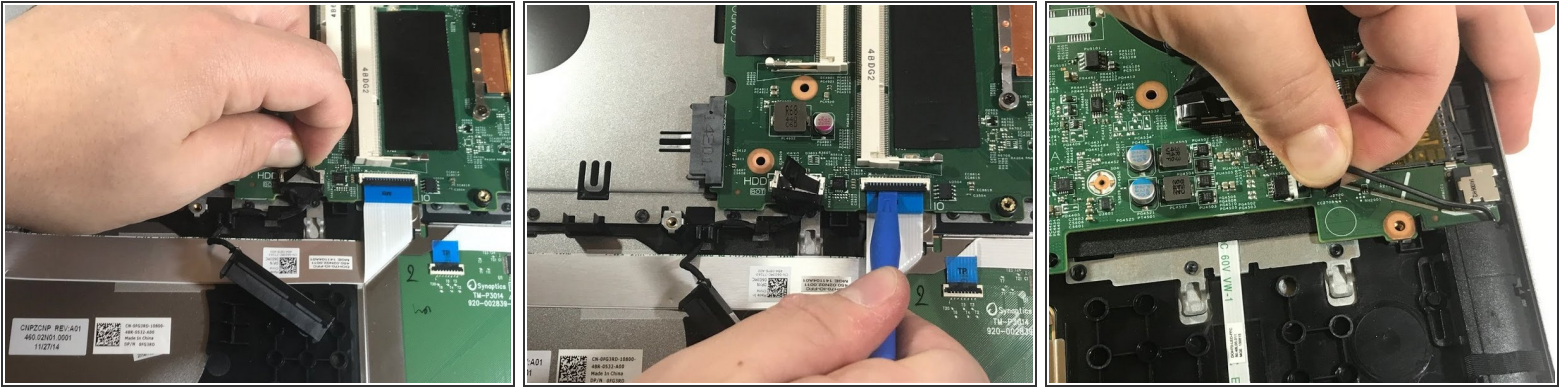This document was generated on 2020-11-28 07:00:31 AM (MST).

Step 21

- The wireless card is near the left hinge of the laptop and has two little connectors attached to it. Gently lift the left black connector off the board and then lift the board out of the laptop.

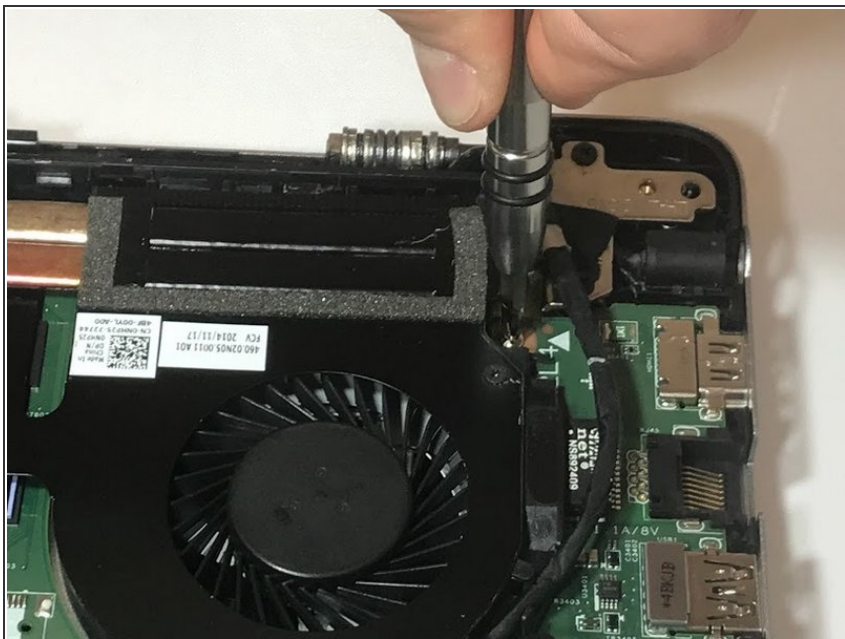- Repeat the same process with the white connector.

Step 22

- Replace the wireless card and reconnect the black and white cables.

- Black cable goes to the connector on the wireless card labeled as "1."

- White cable goes to the connector on the wireless card labeled as "2."

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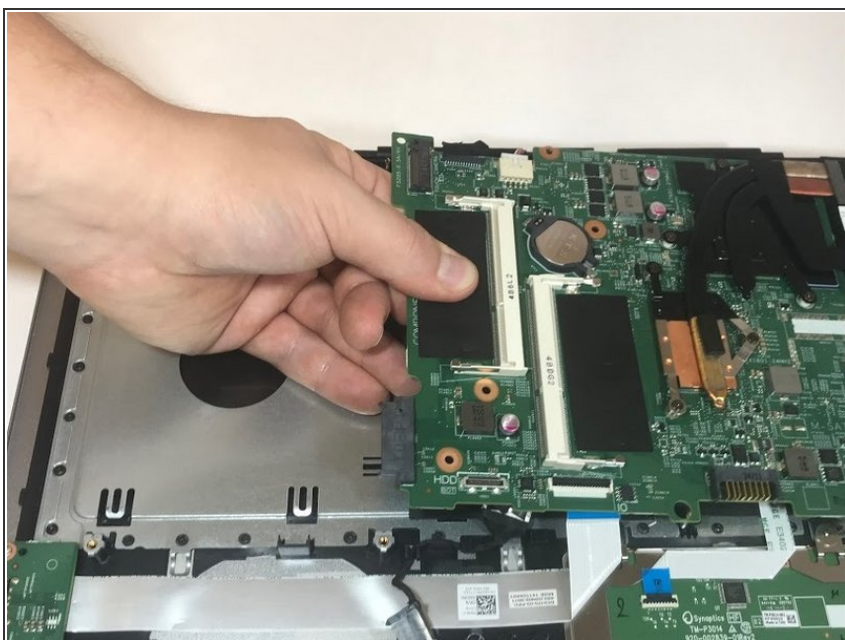
Step 23 — Video Card/Motherboard

- Remove all wires and ribbon cables attached to the motherboard.

  - Some Wires have small black tabs on top of them. Meaning one must grab the tab and pull directly upward, gently.

  - Some ribbon cables may require the blue opening tool to release the cable's connectors before pulling it out.

  - Finally, some cables have a plastic head with small notches on the side. Use your hand to gently wiggle this cable side to side to remove.

⚠ The blue opening tool is recommended to avoid damaging the cables.

ⓘ There should be a total of 8 wires/cables that must be removed from the motherboard.

Step 24

- Remove the 6mm PH1 screw from the motherboard.

Step 25

- Grab the board near where the RAM was, and gently pull and lift.
  - ⚠ If the board does not move, do not force it. This may mean you forgot to remove a screw or one of the cables.
- Go ahead and replace the motherboard at this time.

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

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