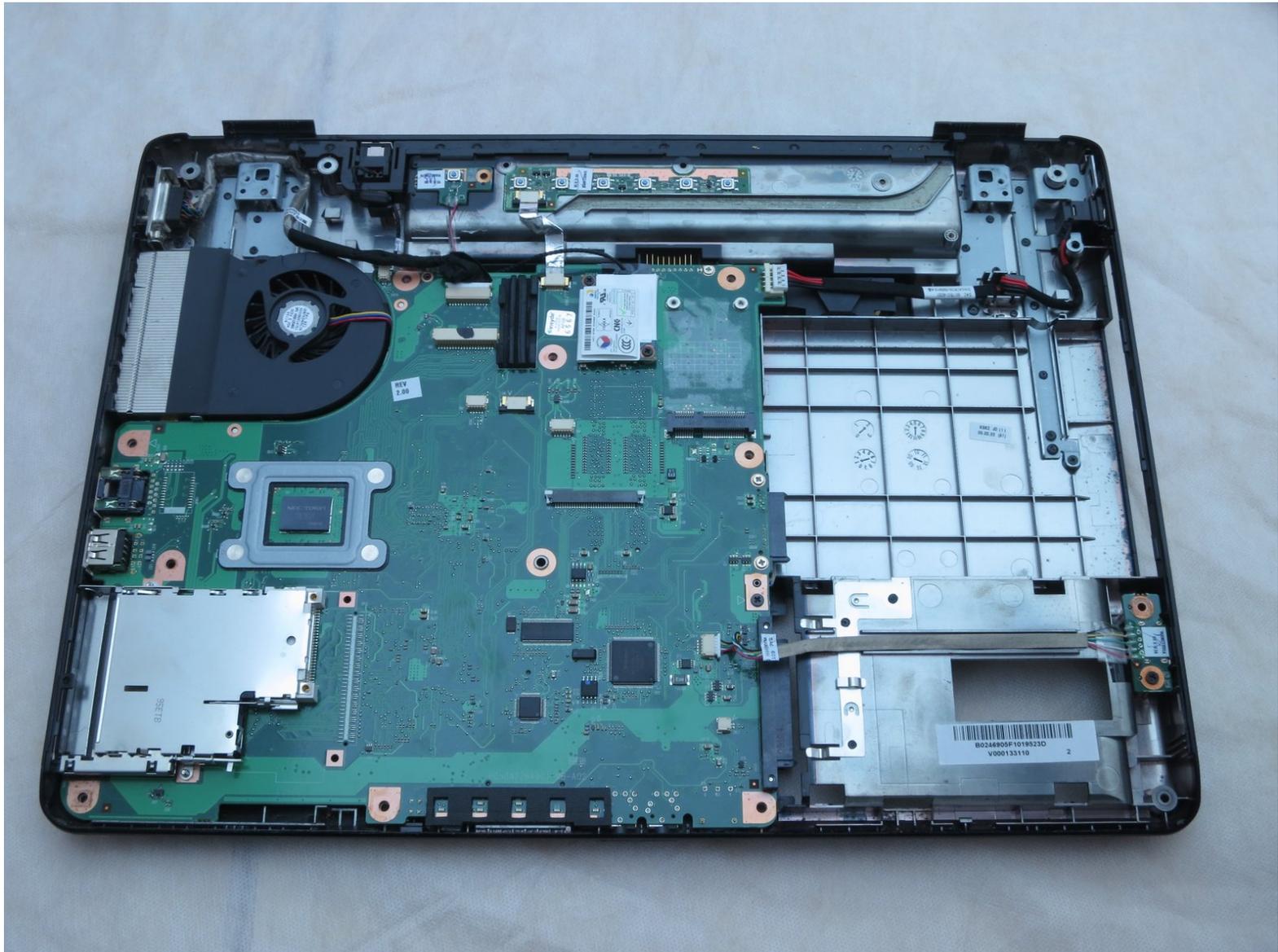




# Toshiba Satellite L305-S5946 Motherboard Replacement

Remove the motherboard in your Toshiba Satellite L305-S5946.

Written By: Michael Erberich



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## INTRODUCTION

Use this guide to remove or install a motherboard on your Toshiba Satellite L305-S5946. It will be necessary to remove the motherboard to replace the GPU. This guide also acts as a prerequisite for the processor and cooling fan installation guides.

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### TOOLS:

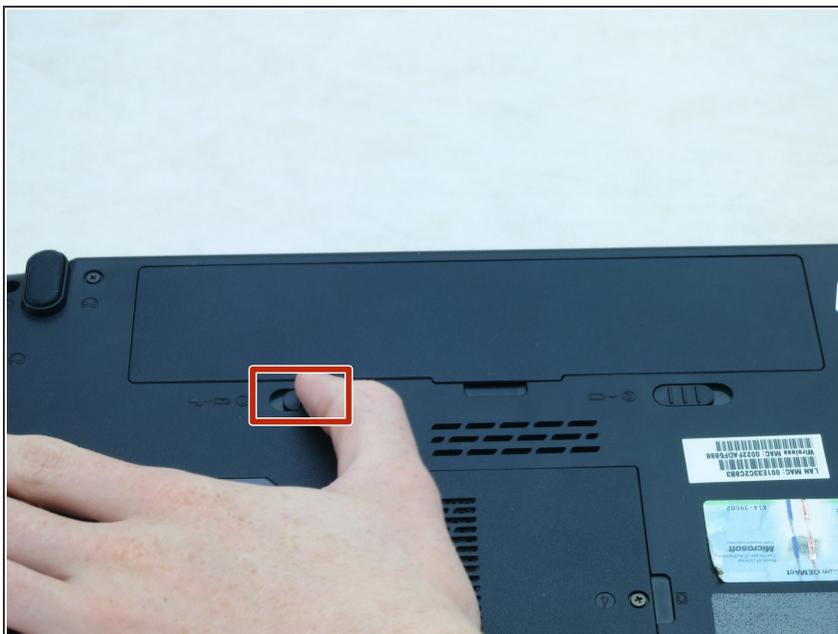
- [iFixit Opening Tools](#) (1)
  - [Phillips #00 Screwdriver](#) (1)
  - [Phillips #1 Screwdriver](#) (1)
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## Step 1 — Battery



- Turn the laptop upside-down.
- Position the laptop so that the display hinges are facing away from you.

## Step 2



- Slide the left battery bay latch to the left.

### Step 3



- Slide the right battery bay latch to the right and hold.
- While holding onto the latch, use a plastic opening tool to lift and remove the battery bay cover.
- Remove the battery.

### Step 4 — Hard Drive



- Use a Phillips #1 screwdriver to loosen the two screws on the bottom left-hand side of the hard drive cover.
- Turn each screw until you hear a click.
- ⓘ These are captive panel screws and remain with the cover.

## Step 5



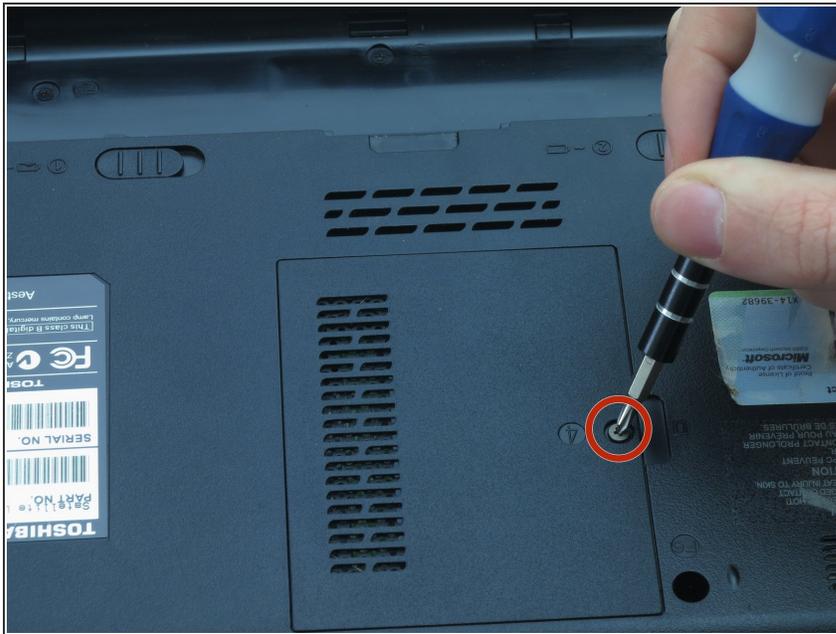
- Lift the hard drive cover using a non-marring plastic opening tool.
- ⓘ This will expose the hard drive.

## Step 6



- Slide the hard drive to the left using your fingers.
- Insert a plastic opening tool under the right side of the hard drive.
- Carefully lift and remove the hard drive.

## Step 7 — RAM



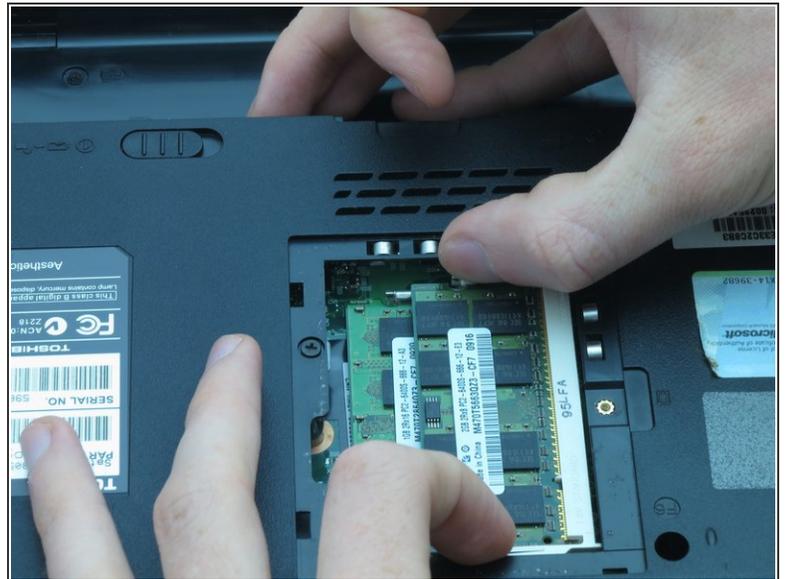
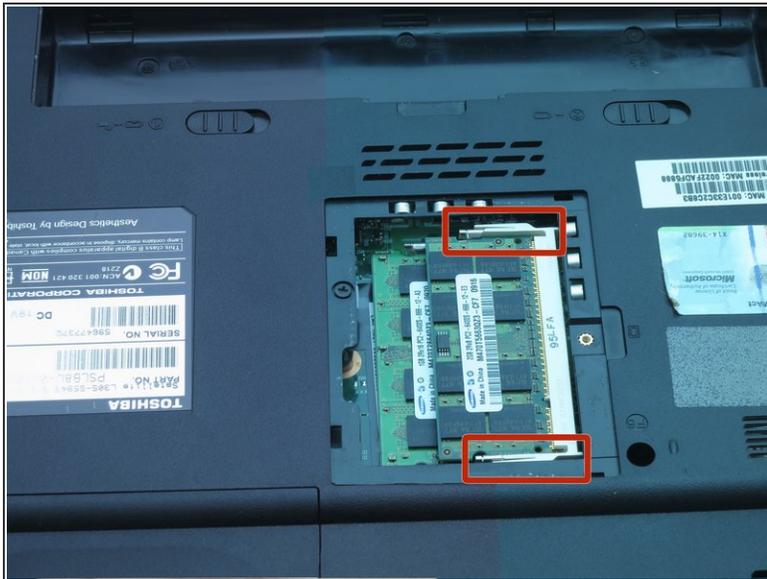
- Use a Phillips #1 screwdriver to turn the screw on the RAM cover.
- Turn the screw until you hear a click.
- ⓘ This is a captive panel screw and remains with the cover.

## Step 8



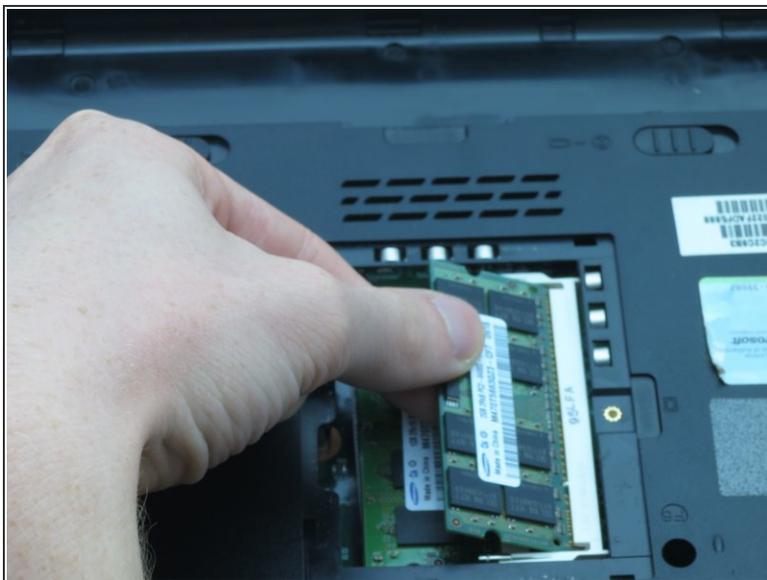
- Insert the plastic opening tool into the indent and lift to remove the RAM cover.
- ⓘ This is a captive panel screw and remains with the cover.

## Step 9



- Use your fingernails to push the white and silver retaining clips away from each side of the RAM card.
- ⓘ The RAM card should pop up at an angle.

## Step 10



- Use your fingers to gently pull the RAM card away from the computer.
- Repeat step 9 to remove the other RAM card that may be installed.

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## Step 11 — Keyboard



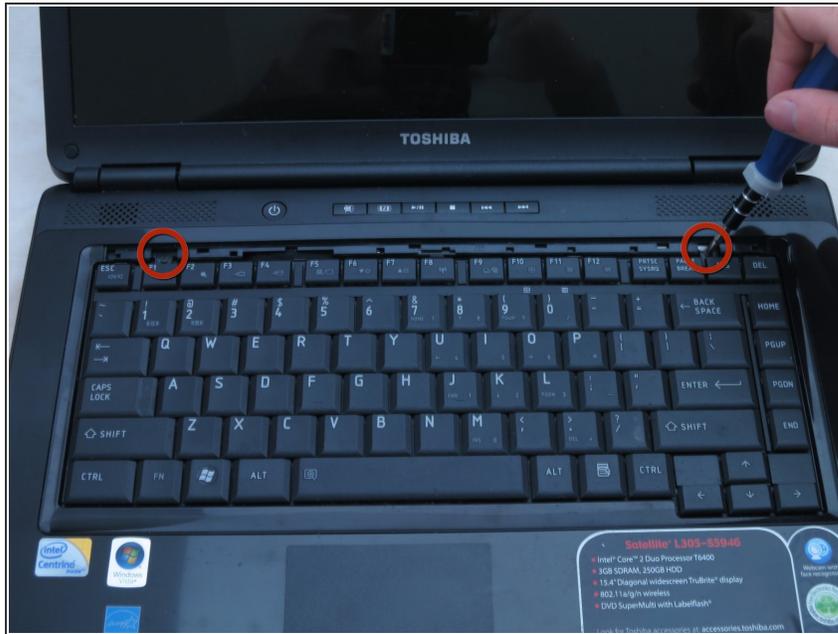
- Turn the laptop right-side up.
- Lift open the laptop so that the screen faces you.

## Step 12



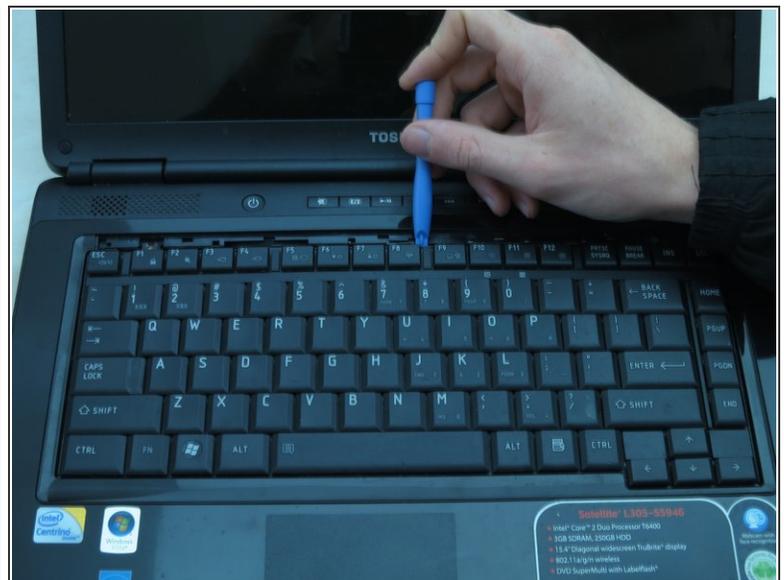
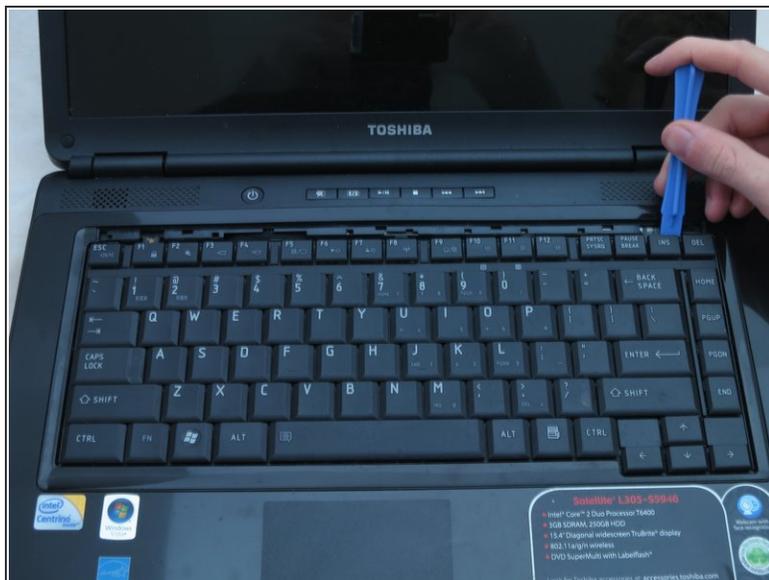
- Remove the strip of plastic at the right furthest edge of the keyboard using a plastic opening tool.
- Insert the plastic opening tool at either end of the strip. Lift upwards and proceed to the other end while repeating this lifting process every one to two inches.

## Step 13



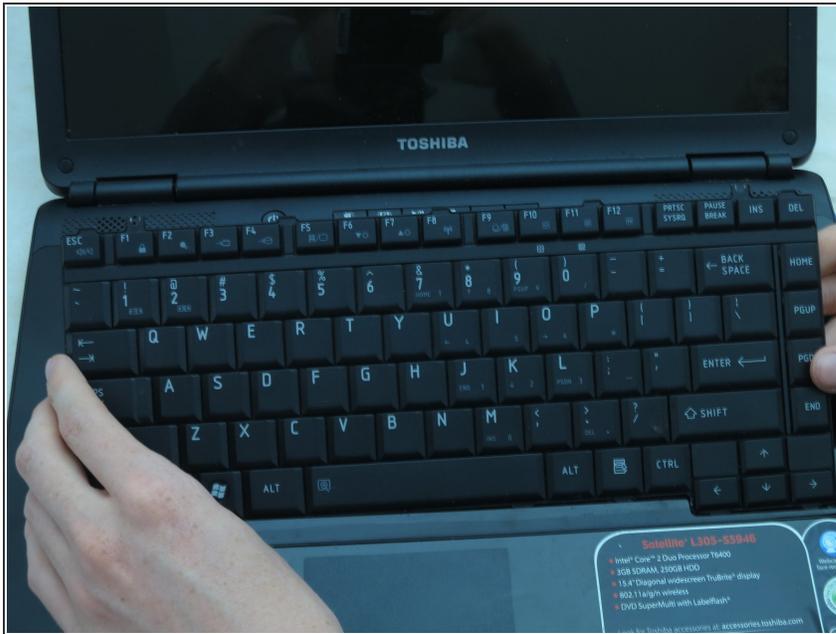
- Use a Philips #00 screwdriver to loosen and remove the two 3-mm screws at the top edge of the keyboard.
- ⓘ These are not captive panel screws and, once loosened, will be free to move about the assembly.
- ⚠ Be careful not to allow either fastener into the CPU fan and duct (not shown).

## Step 14



- Use a plastic opening tool to pry the top of the keyboard loose from its casing.

## Step 15



- Gently grasp the top of the keyboard. Pull it up and toward the screen.
- ⚠ Avoid pulling hard and damaging the black ribbon cable under the keyboard.

## Step 16



- Gently push the two tabs locking the black ribbon cable.
- Slide the keyboard toward the screen to remove the black ribbon cable from the motherboard.
- You may now safely separate the keyboard from the laptop.

## Step 17 — Base Housing



- Turn the laptop upside-down with its hinges facing away from you.

## Step 18



- Use a Phillips #1 screwdriver to remove the twelve 6-mm screws that border the bottom of the laptop.
- ⓘ Start with the three screws on the top right corner and work clockwise. This will minimize the chances missing some of the screws.
- Use a Phillips #1 screwdriver to remove a 6-mm screw that is located in the lower middle, as shown.
- Use a Phillips #1 screwdriver to remove the three 3-mm screws located in the battery bay.
- Use a Phillips #1 screwdriver to remove the one 4-mm screw located near the RAM.

## Step 19



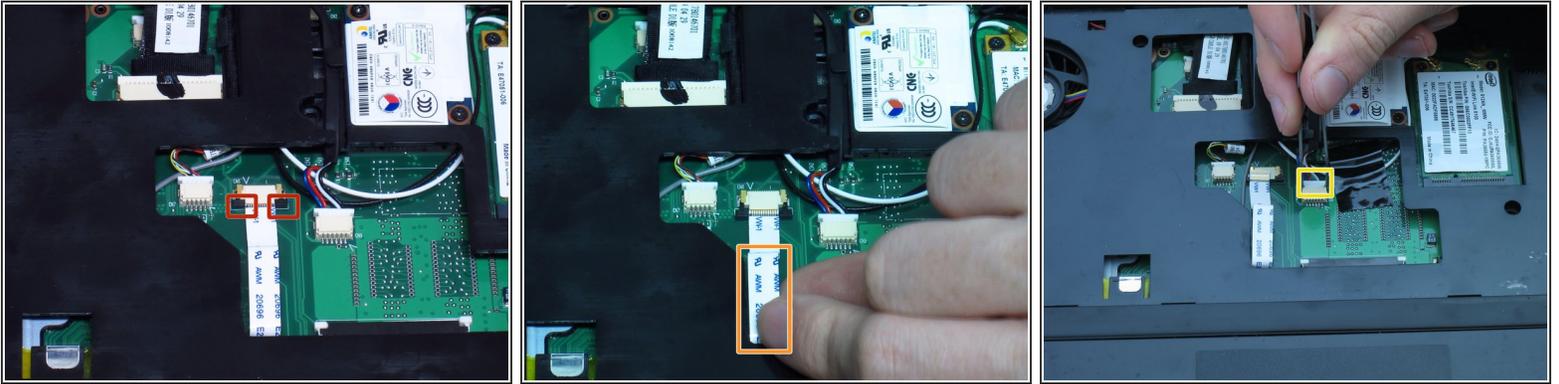
- Turn the laptop right-side up.
- Flip open the laptop so that the screen faces you.

## Step 20



- Use a Phillips #1 screwdriver to remove the five 6-mm screws in the keyboard slot.
- ⓘ These are not captive panel screws and, once loosened, will be free to move about the assembly.
- ⚠ Be careful not to allow loosened fasteners into the CPU fan and duct (located in the upper left).

## Step 21



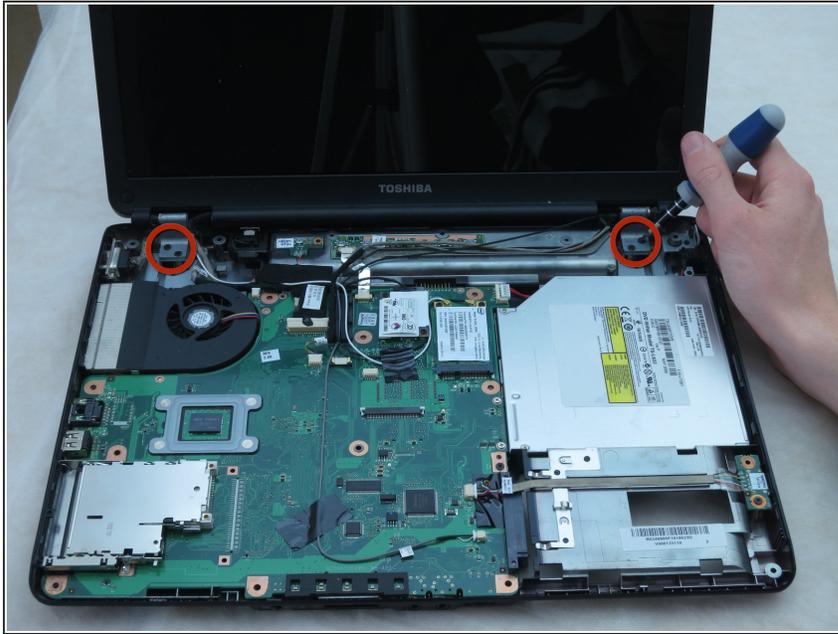
- Gently pull on the two black tabs locking the white ribbon cable in place.
- Pull the white ribbon cable towards you to remove it.
- Use tweezers to remove the connector that has the blue, red, black, and white wires.

## Step 22



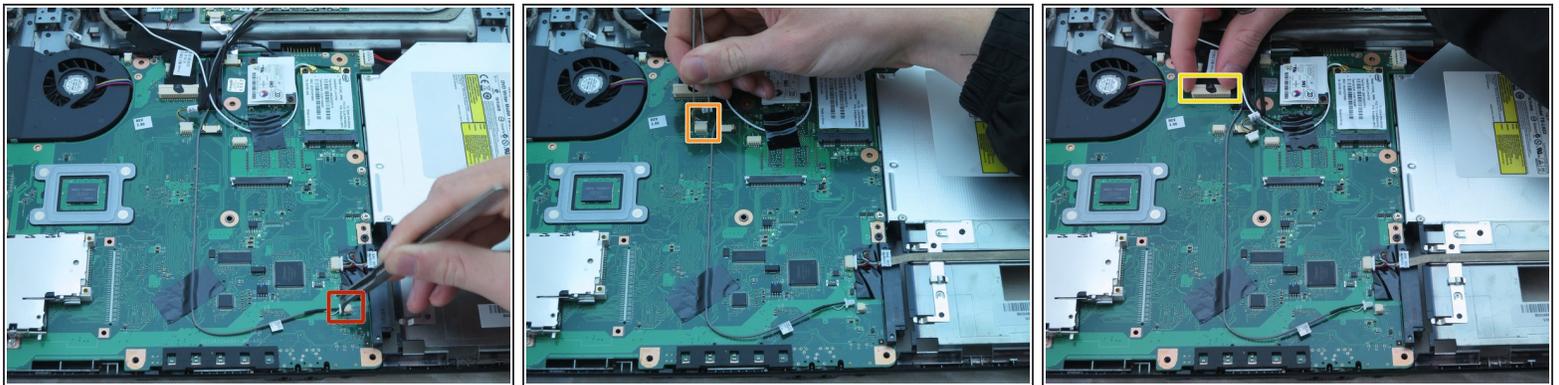
- Use a plastic opening tool to pry the laptop's upper casing off of its lower casing. Move the opening tool around the sides of the case to help separate them.

## Step 23 — Motherboard



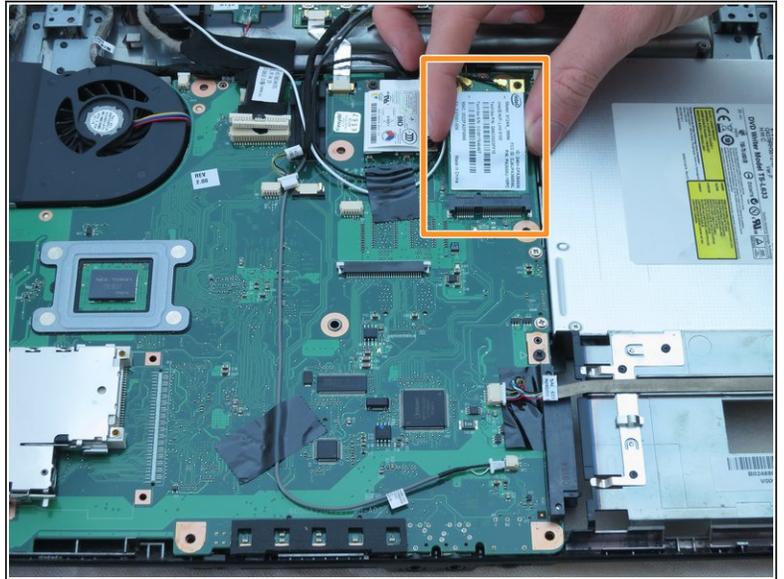
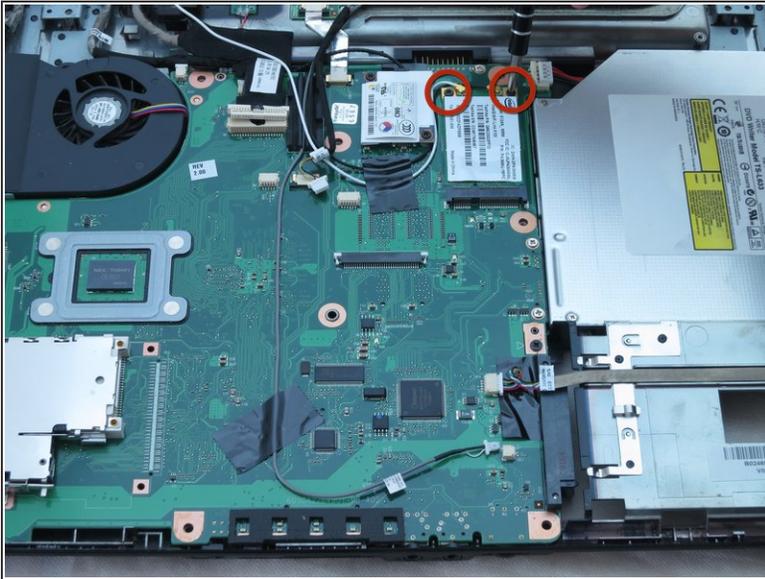
- Use a Phillips #1 screwdriver to remove the four 6-mm screws from the two hinge pads that secure the display assembly to the lower laptop section.

## Step 24



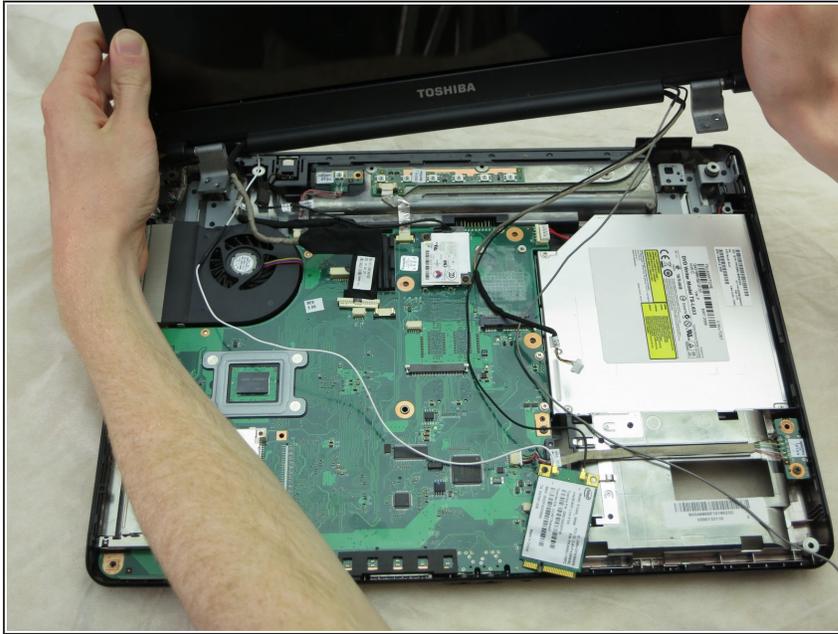
- Use tweezers to remove the following two connectors:
  - One of the connectors has one black and one white wire.
  - The other connector has black, green, red, yellow, and white wires.
- Use your fingers to remove the following connector:
  - The connector is large and is located at the top right corner of the motherboard, as shown.

## Step 25



- Using the Phillips #1 or Phillips #00 screwdriver, remove the two 3-mm screws from the card with black and white wires coming off of it.
- ⓘ These are not captive panel screws and once loosened will be free to move about the assembly.
- ⚠ Be careful not to allow either fastener into the CPU fan and duct (located in the upper left).
- ⓘ The card should pop up.
- Gently remove the card with your fingers.

## Step 26



- Remove the display assembly and put it aside.

## Step 27



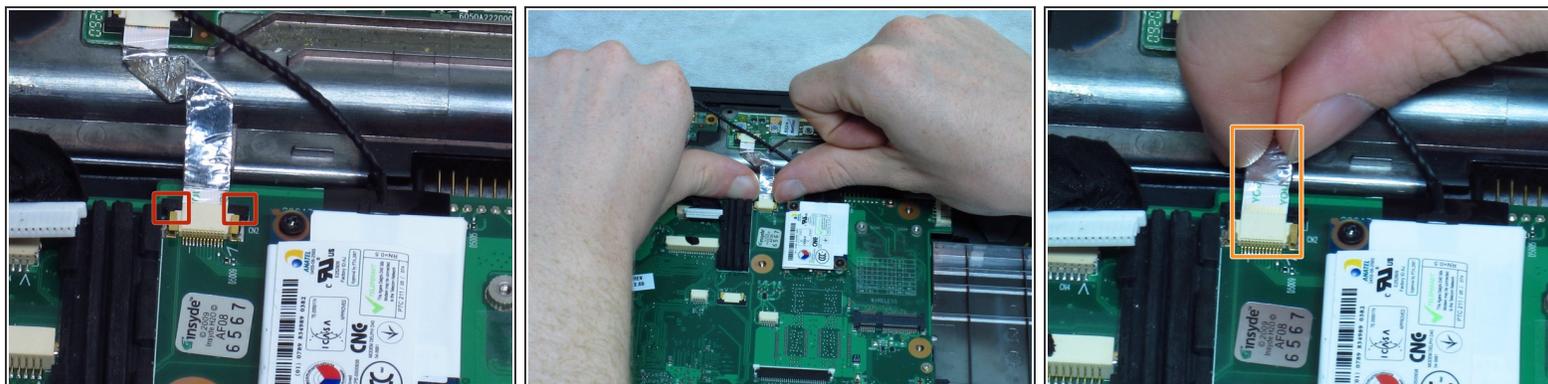
- Slide the DVD out of the opening on the right using your fingers, as shown.

## Step 28



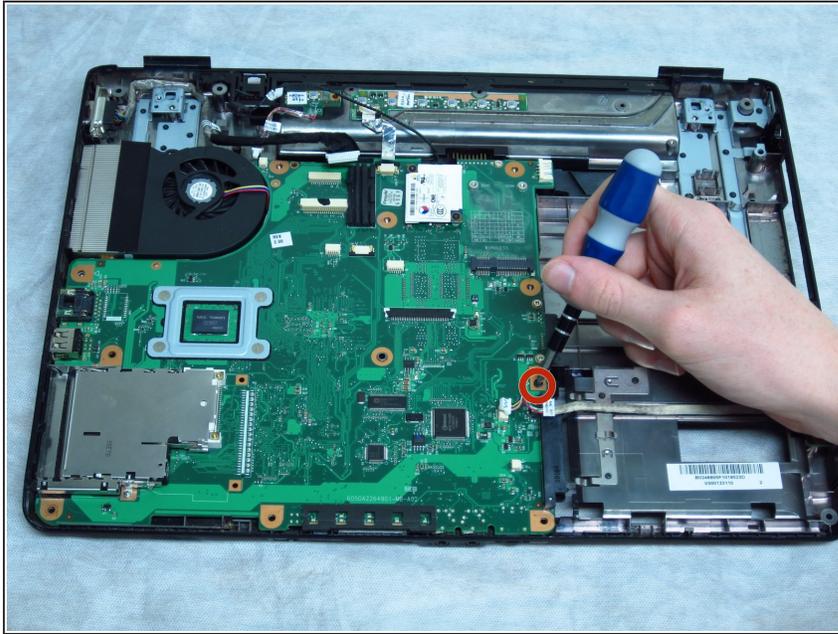
- Remove the power jack connector.
- Remove the connector that has one red wire and one black wire.
  - ⓘ This connector may be hidden underneath a cooling fan wire.
- Remove the connector with red, yellow, green, white, and black wires.
  - ⓘ This connector is located on the bottom-right of the board.
- Remove the large connector near the fan.
- Gently pull the power jack cable and socket out of its housing. It should come out entirely.

## Step 29



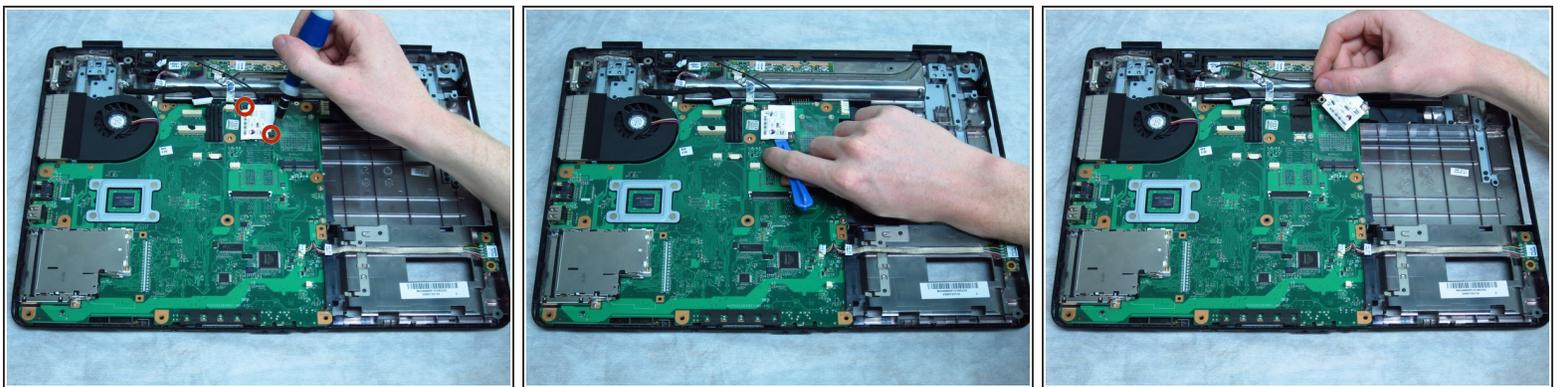
- Gently push the two black tabs until they stop moving.
- Gently pull the silver ribbon cable out of the connectors.

## Step 30



- Use a Phillips #1 screwdriver to remove the 6-mm screw near the hard drive.
- ⓘ This is not a captive screw and, once loosened, will be free to move about the assembly.
- ⚠ Be careful not to allow either fastener into the CPU fan and duct (located in the upper left).

## Step 31



- Use a Phillips #00 screwdriver to remove the two 3-mm screws from the card connected to a black wire.
- ⓘ These are not captive screws and, once loosened, will be free to move about the assembly.
- ⚠ Be careful not to allow either fastener into the CPU fan and duct (located in the upper left).

## Step 32



- Use your hands to gently lift the top right side of the motherboard. Then, pull it upwards to the right and away from you.

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