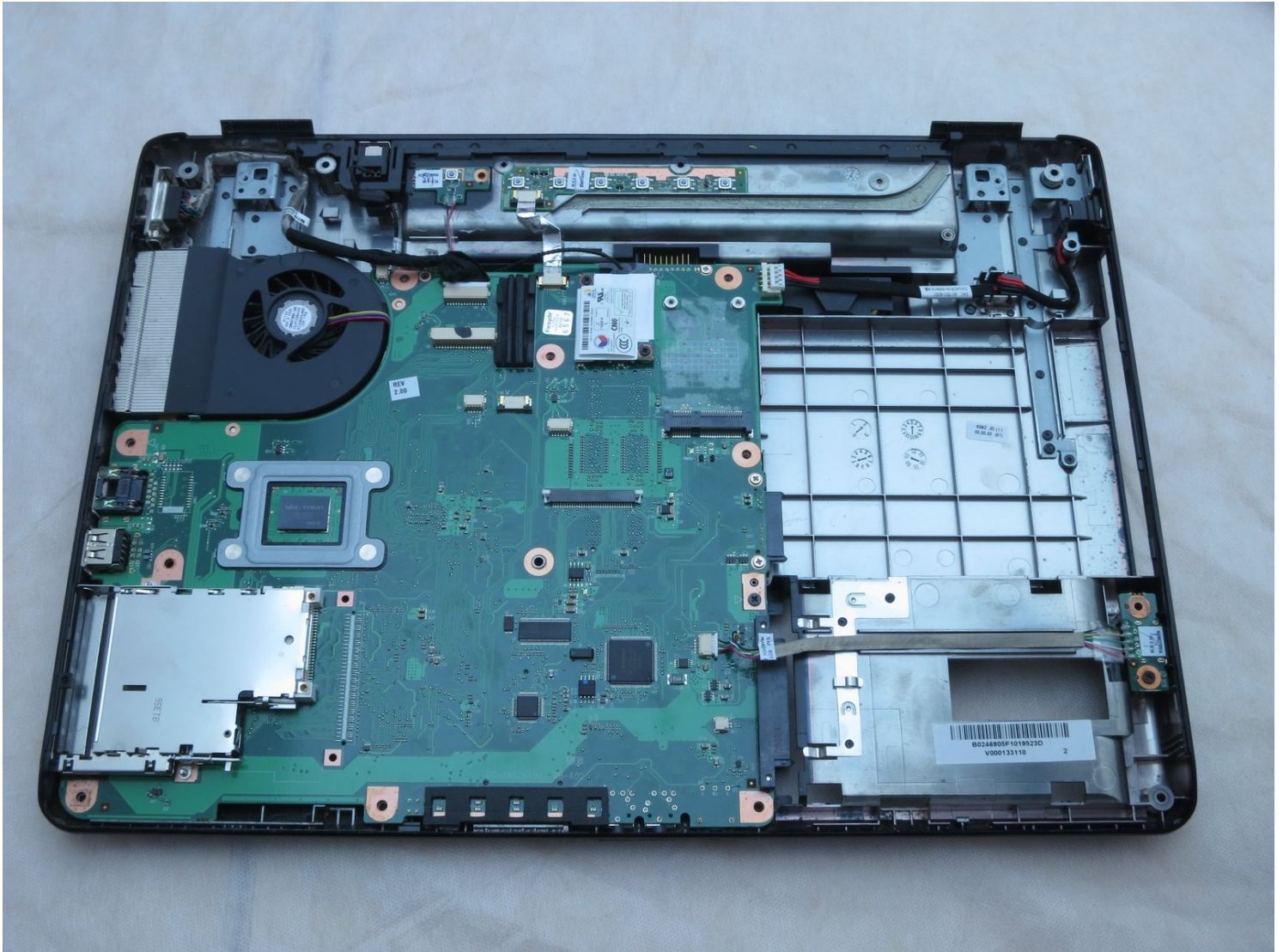




Toshiba Satellite L305-S5946 Motherboard Replacement

Use this guide to remove or install a...

Written By: Michael Erberich



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.

TOOLS:

[iFixit Opening Tool](#) (1)

[Phillips #00 Screwdriver](#) (1)

[Phillips #1 Screwdriver](#) (1)

Step 1 — Battery



- Place the laptop upside-down with the display hinges facing away from you.

Step 2



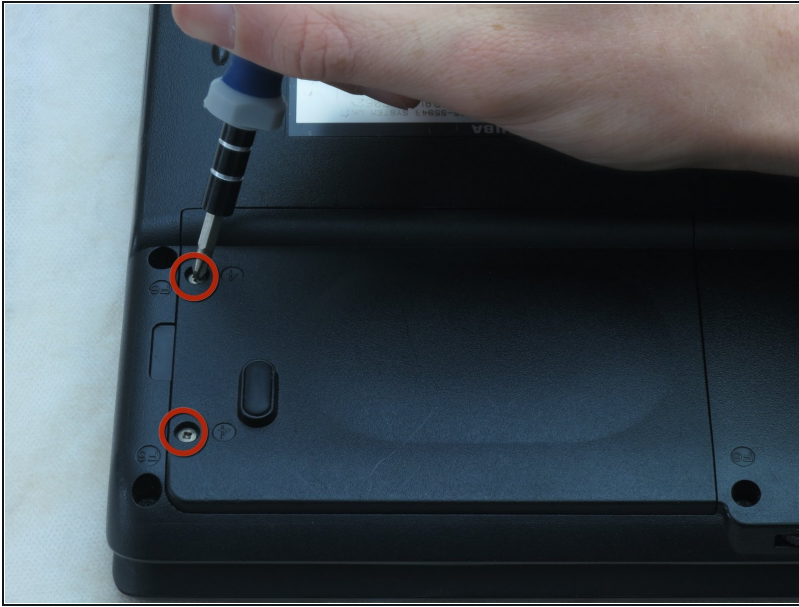
- Slide the latch for the left battery bay to the left.

Step 3



- Slide the latch for the right battery bay to the right and hold.
- Continue to hold the latch while using a plastic opening tool to lift and remove the battery bay cover.
- Remove the battery.

Step 4 — Hard Drive



- Loosen the two captive screws on the bottom left corner of the hard drive using a Phillips #1 screwdriver until you hear a click.

Step 5



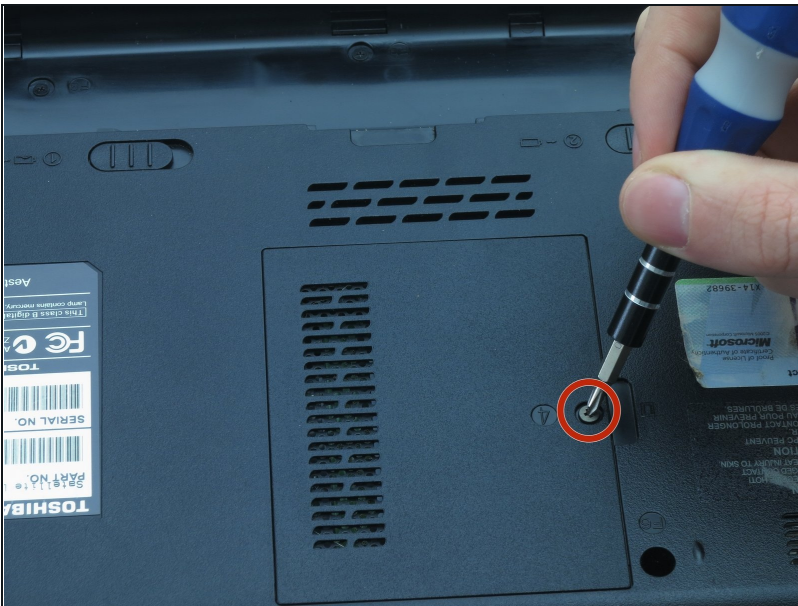
- Lift the hard drive cover using a non-marring iFixit opening tool.
 - ⓘ This will expose the hard drive.

Step 6



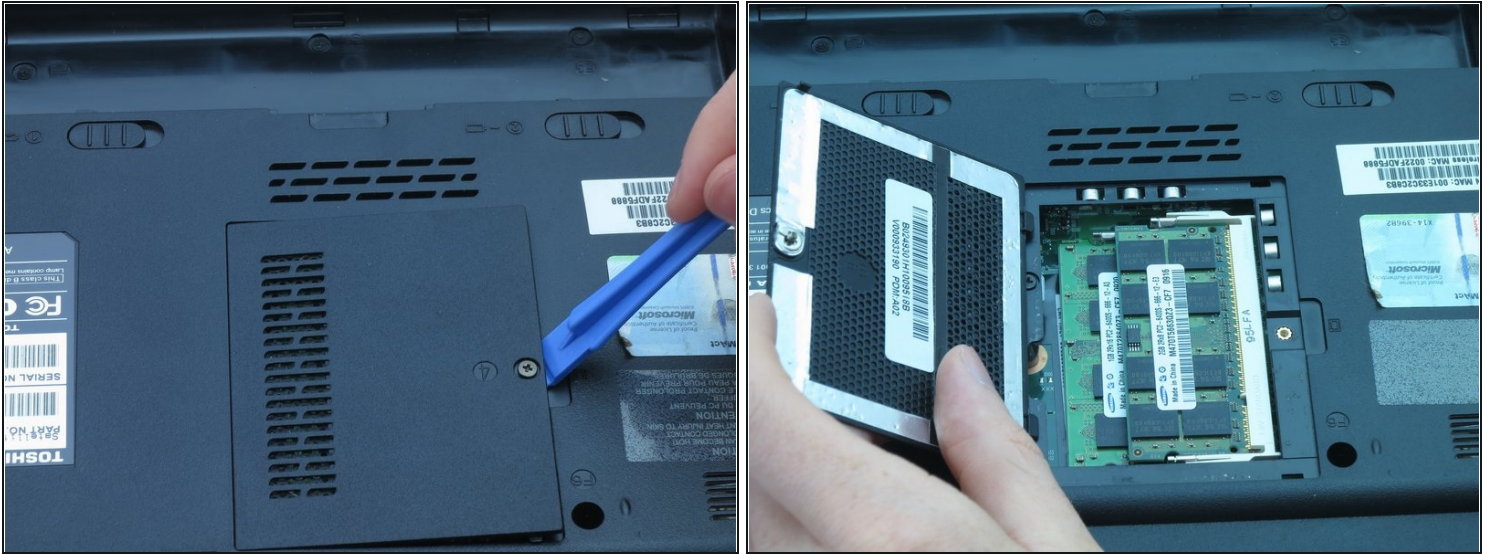
- Slide the hard drive to the left using your fingers.
- Remove the hard drive by inserting an iFixit opening tool under the right side of the hard drive and carefully lifting it out.

Step 7 — RAM



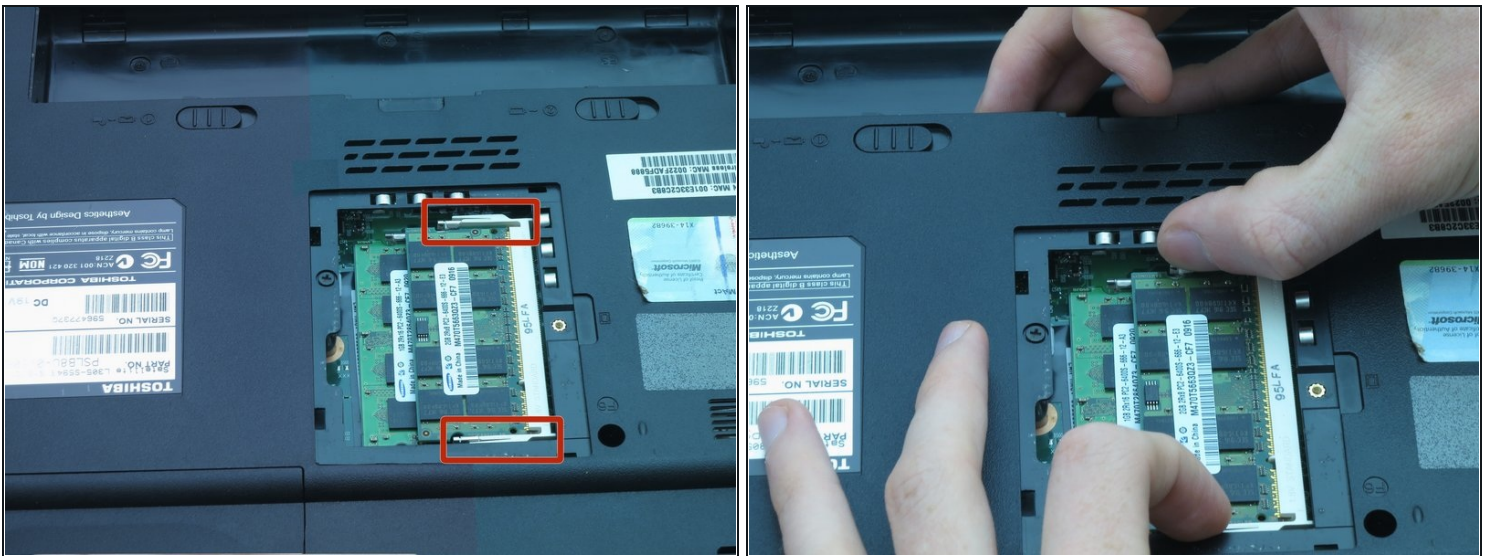
- Using a Phillips #1 screwdriver, turn the screw on the RAM cover until you hear a click.
- ① This is a captive panel screw and remains with the cover.

Step 8



- Remove the RAM cover by inserting the plastic opening tool into the indent and lifting.

Step 9



- Push the white and silver retaining clips away from each side of the RAM card using your fingernails.
 - ① The RAM card should pop up at an angle.

Step 10



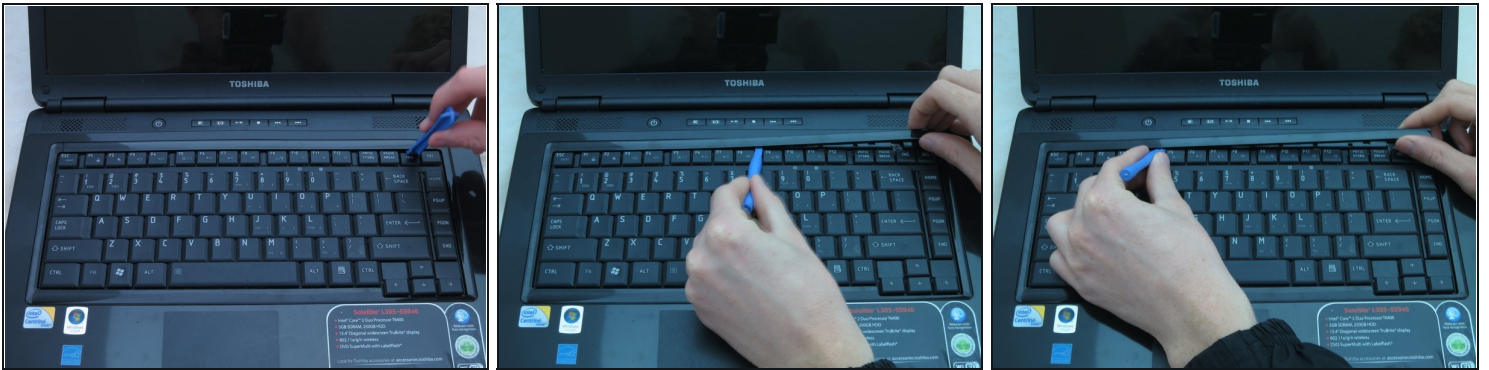
- Pull the RAM card away from the computer.
- Repeat Steps 6 and 7 to remove the other RAM card that may be installed.

Step 11 — Keyboard



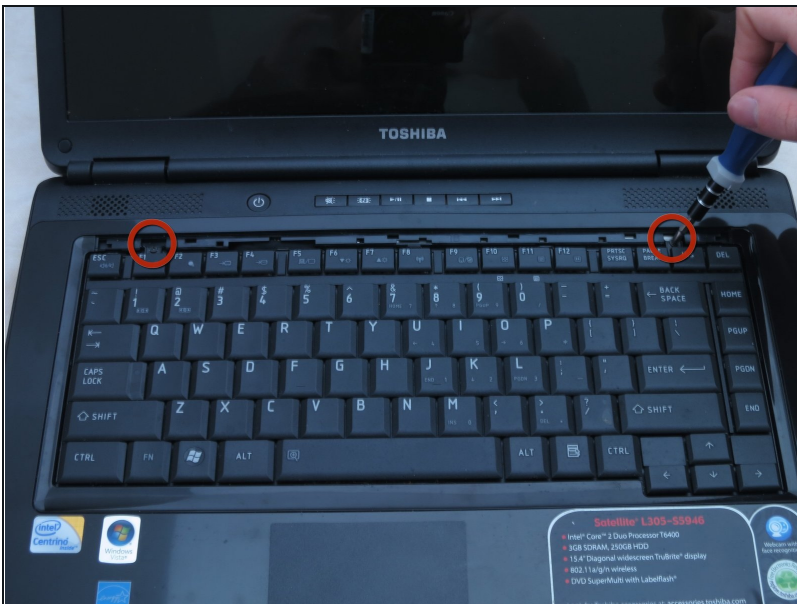
- Place the laptop right-side-up so the screen faces you.

Step 12



- Remove the strip of plastic at the right furthestmost 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.

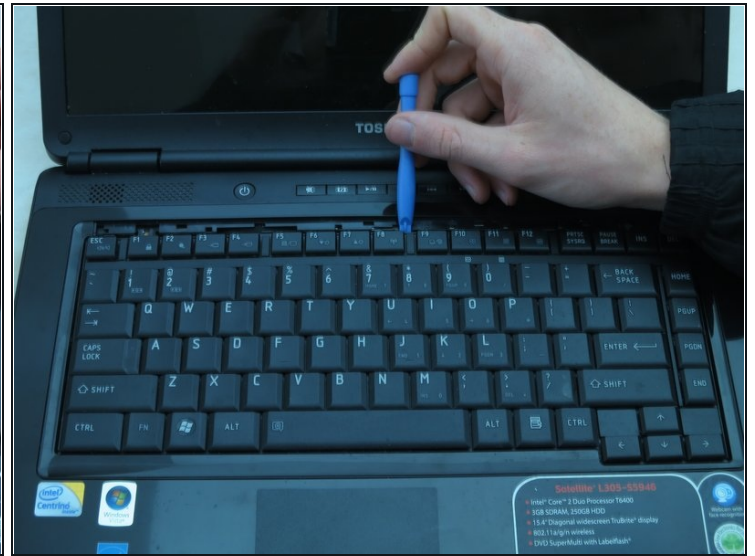
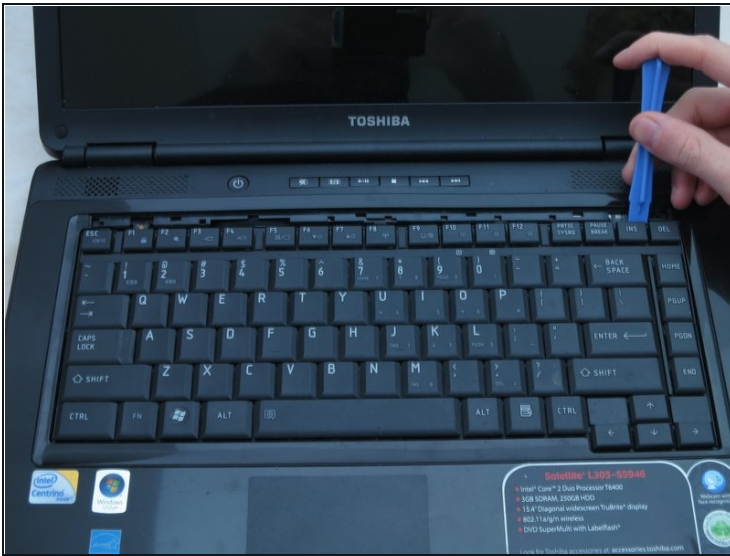
Step 13



⚠ CAUTION: do not allow hardware or debris into the CPU fan and duct.

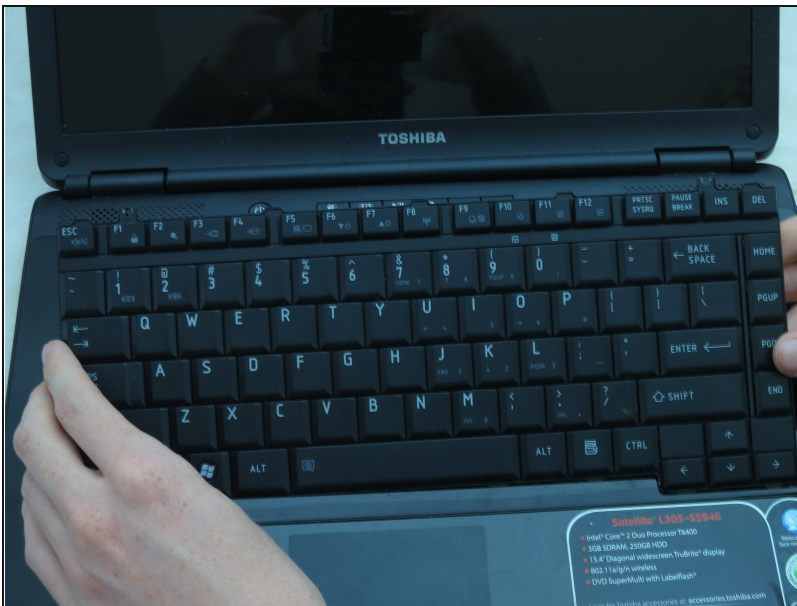
- Remove the two 3-mm screws at the top edge of the keyboard using a Phillips #00 screwdriver.
- ① These are not captive panel screws and, once loosened, will be free to move about the assembly.

Step 14



- Pry the top of the keyboard loose from its casing using a plastic opening tool.

Step 15



- Gently grasp the top of the keyboard and pull it up and toward the screen.

⚠ CAUTION: Pulling too hard could damage the black ribbon cable under the keyboard.

Step 16



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

Step 17 — Base Housing



- Place the laptop upside-down with the display hinges facing away from you.

Step 18



- For the following steps, use a Phillips #1 screwdriver.
- Remove the twelve 6-mm screws that border the bottom of the laptop.
- Remove the 6-mm screw located in the lower middle of the device.
- Remove the three 3-mm screws located in the battery bay.
- Remove the one 4-mm screw located near the RAM.

Step 19



- Place the laptop right-side-up so the screen faces you.

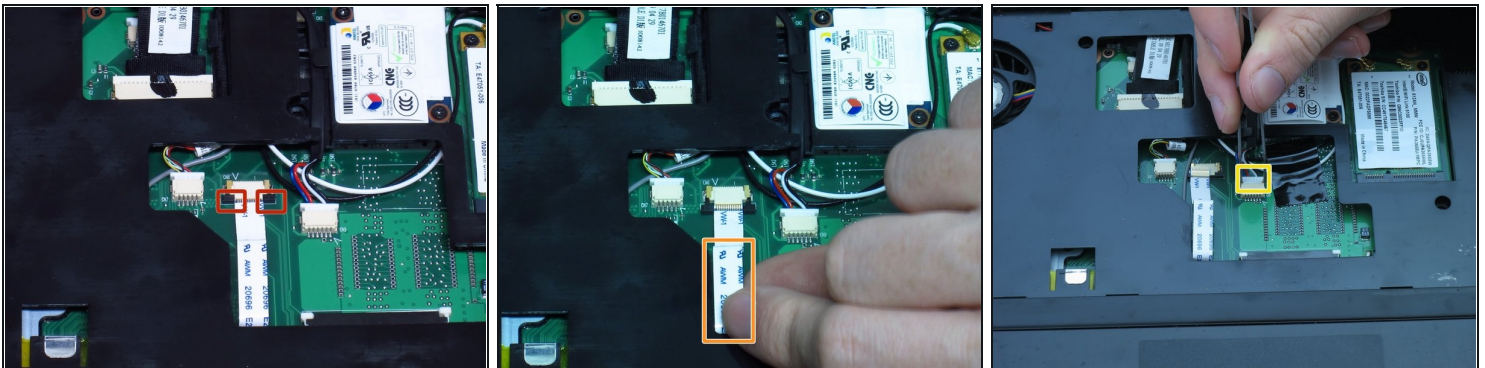
Step 20



⚠ CAUTION: do not allow hardware or debris into the CPU fan and duct.

- 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.

Step 21



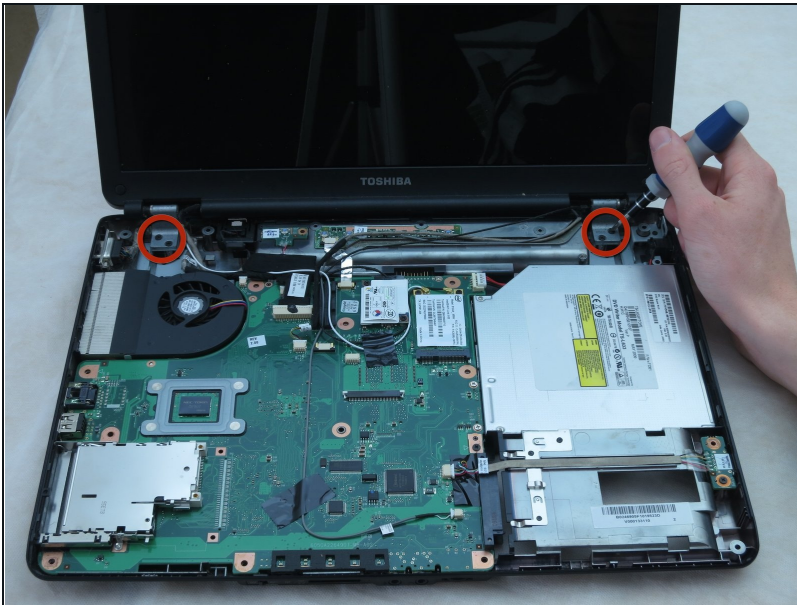
- Lock the white ribbon cable into place by gently pulling on the two black tabs.
- Remove the white ribbon cable by pulling it towards you.
- Remove the connector that has the blue, red, black, and white wires using [tweezers](#).

Step 22



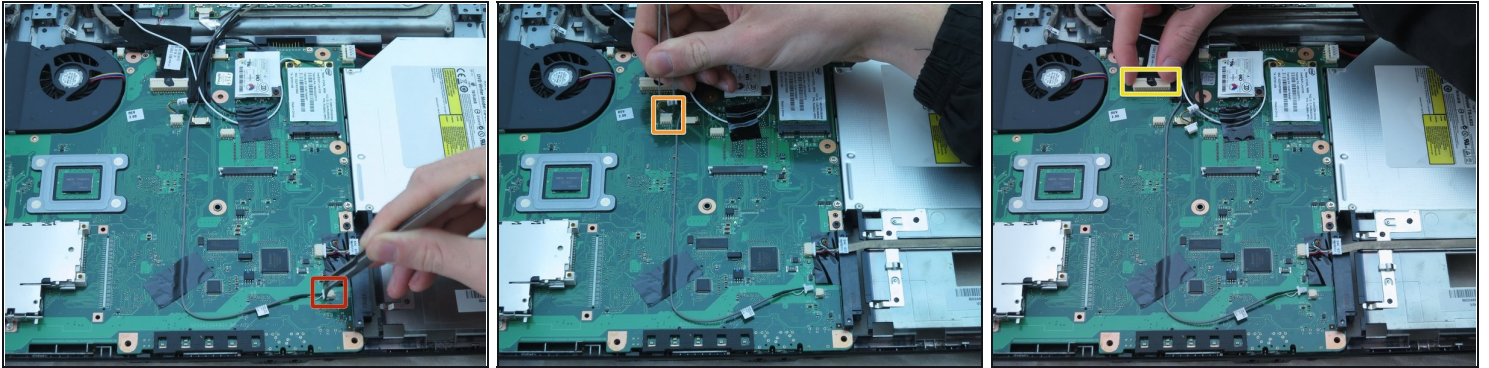
- Separate the laptop upper casing from the lower casing by using an opening tool around the sides of the case to pry it apart.

Step 23 — Motherboard



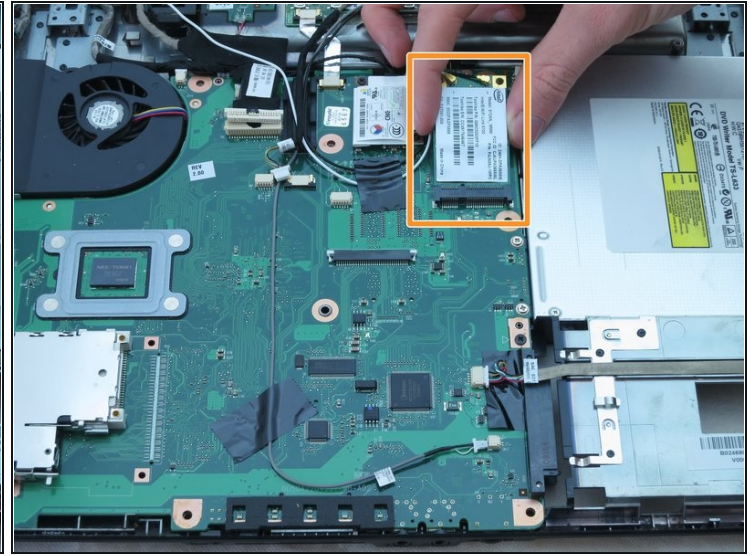
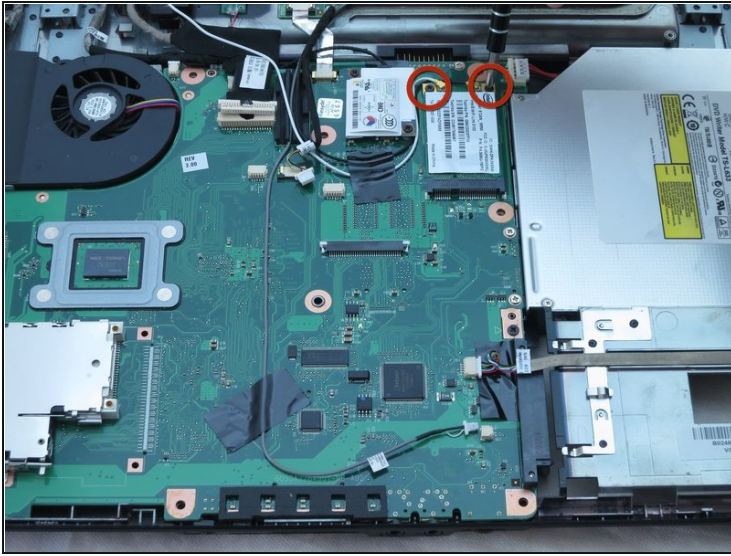
- Remove the four 6-mm screws from the two hinge pads using a Phillips #1 screwdriver.

Step 24



- For the following steps, use [tweezers](#):
 - Remove the connector equipped with the black and white wire.
 - Remove the connector equipped with the black, green, red, yellow, and white wires.
- Using your fingers, remove the large connector located at the top right corner of the motherboard, as shown.

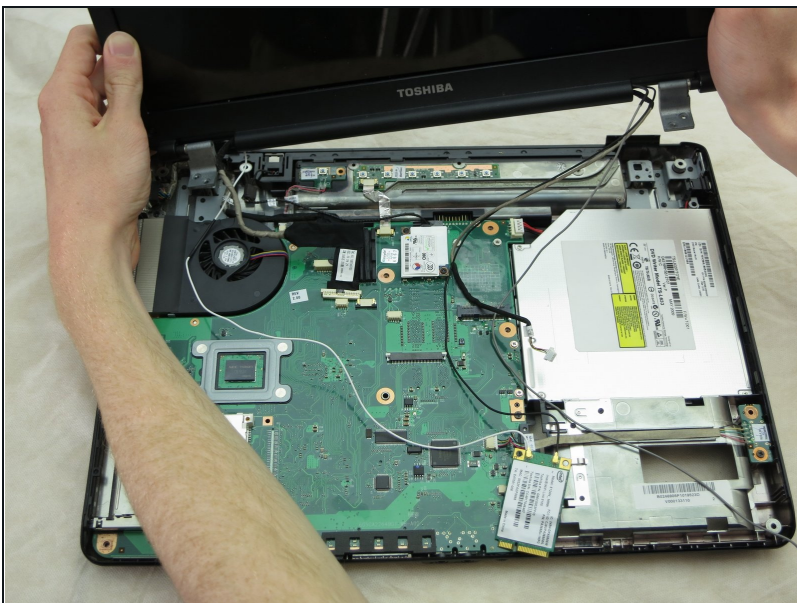
Step 25



⚠ CAUTION: do not allow hardware or debris into the CPU fan and duct.

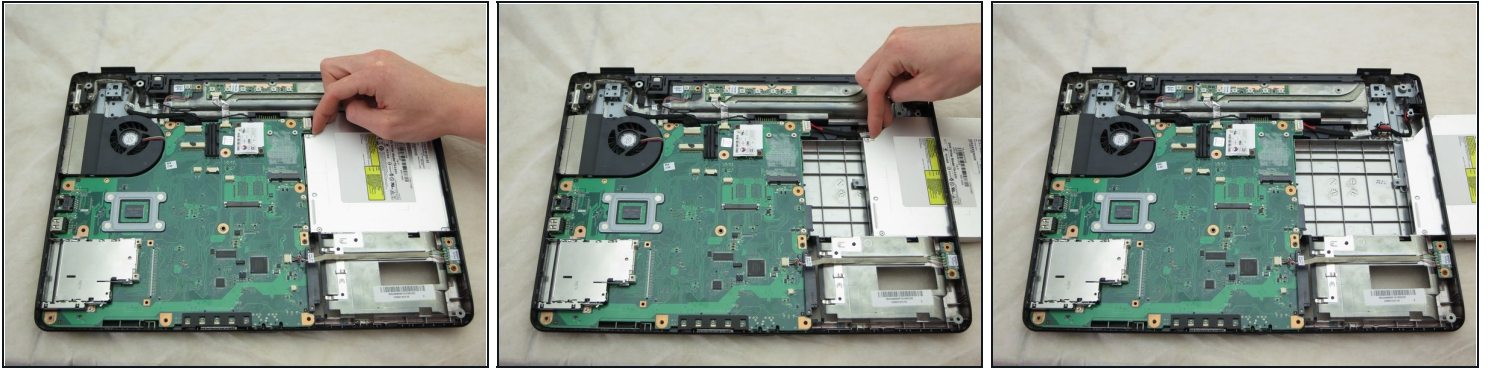
- Remove the two 3-mm screws from the card equipped with black and white wires by using a Phillips #00 or Phillips #1 screwdriver.
- ⓘ These are not captive panel screws and once loosened will be free to move about the assembly.
- Gently remove the card with your fingers.

Step 26



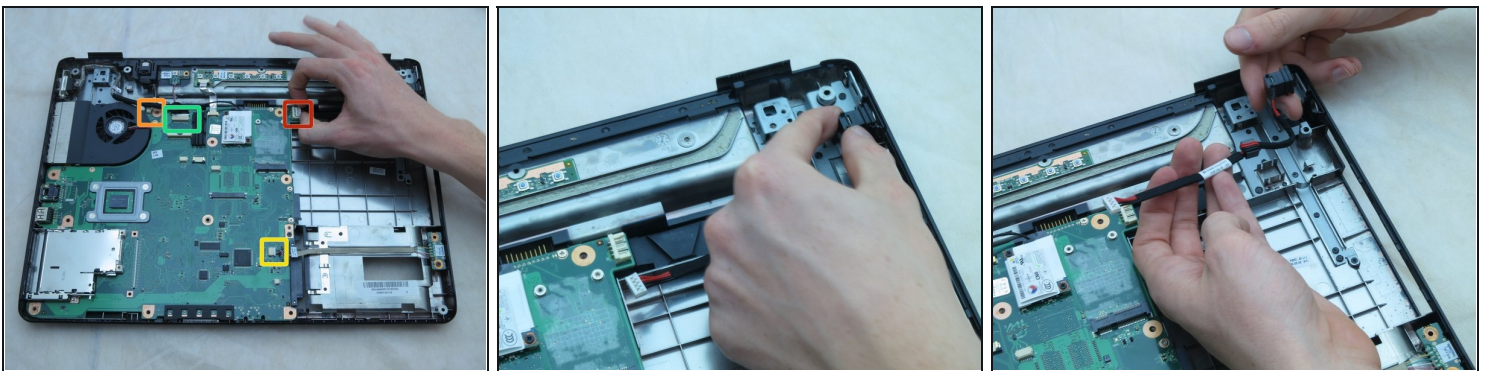
- Remove the display assembly and put it aside.

Step 27



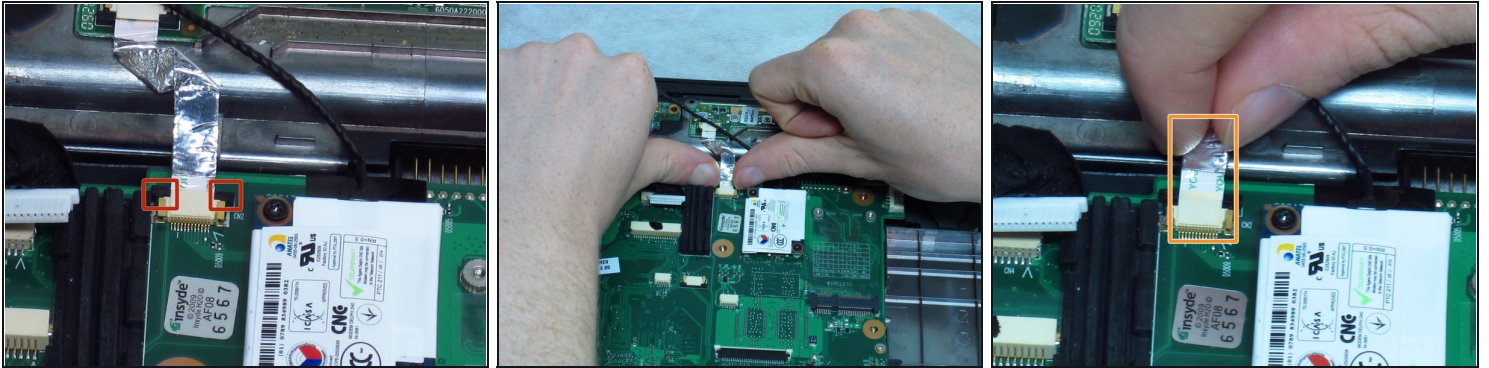
- Slide the DVD out of the opening on the right using your fingers.

Step 28



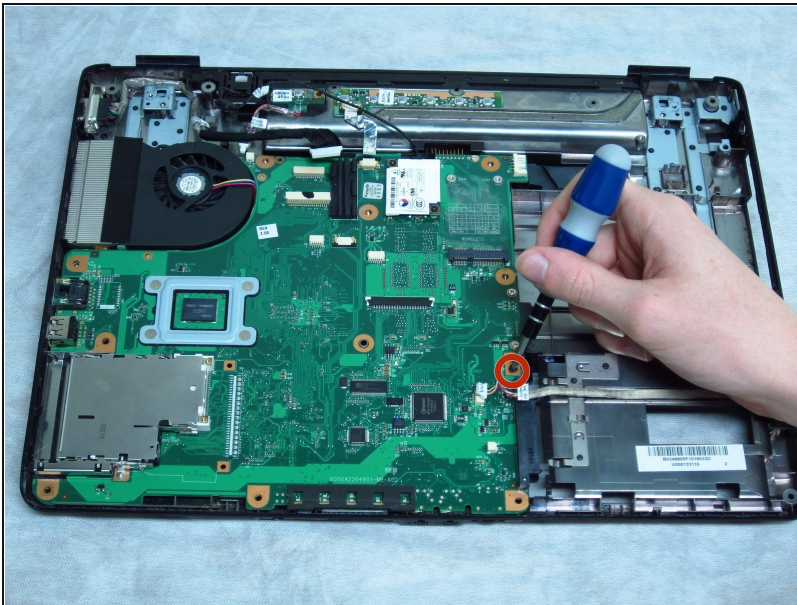
- Remove the power jack connector.
- Remove the connector equipped with one red wire and one black wire.
 - ⓘ This connector may be hidden beneath a cooling fan wire.
- Remove the connector equipped with red, yellow, green, white, and black wires.
- Remove the large connector near the fan.
- Remove the power jack cable and socket from its housing by pulling gently.

Step 29



- Gently push the two black tabs until they stop moving.
- Remove the silver ribbon cable from the connectors by pulling gently.

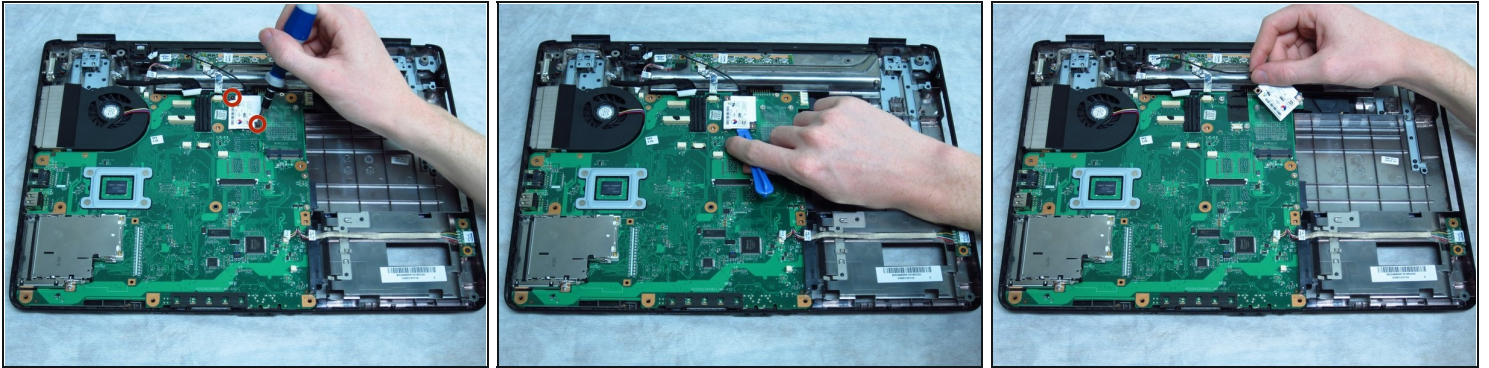
Step 30



⚠ CAUTION: do not allow hardware or debris into the CPU fan and duct.

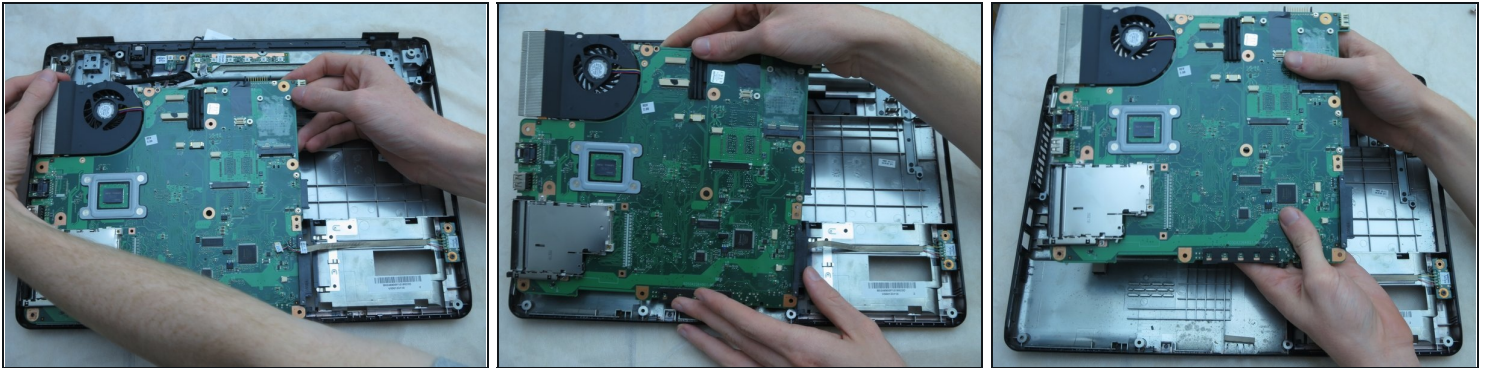
- Remove the 6-mm screw near the hard drive using a Phillips #1 screwdriver.
- ① This is not a captive screw and, once loosened, will be free to move about the assembly.

Step 31



- Remove the two 3-mm screws from the card connected to the black wire using a Phillips #00 screwdriver.
- ① These are not captive screws and, once loosened, will be free to move about the assembly.

Step 32



- Gently lift the top right side of the motherboard. Pull it upwards to the right and away from you.

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