



Dell Inspiron 15-3521 Motherboard Replacement

This guide will instruct users on how replace the heat sink in their Dell Inspiron 15-3521 laptop.

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TOOLS:

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

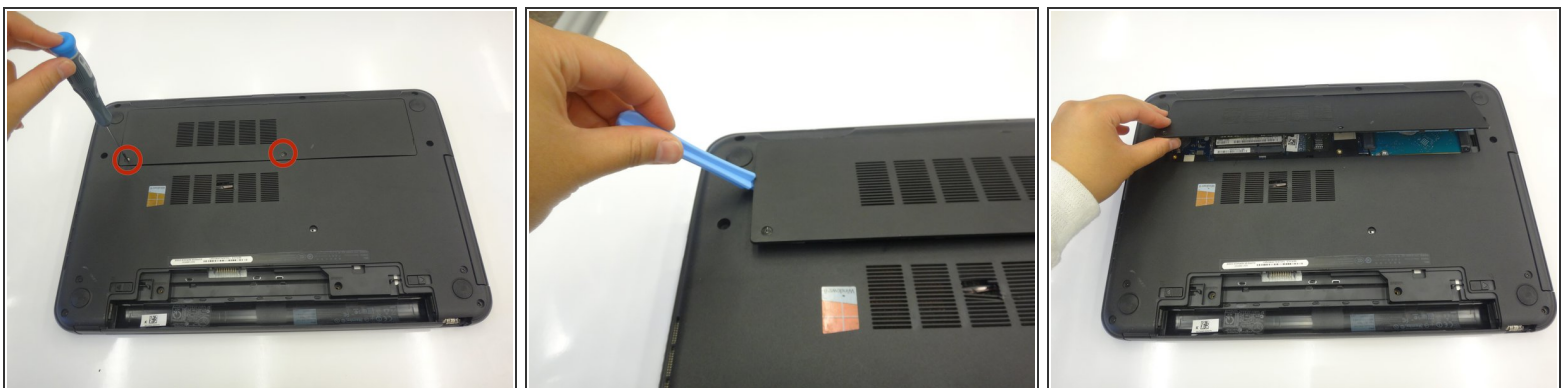
Step 1 — Remove the battery



 We are removing the battery to avoid the possibility of an electrical discharge when working with this system.

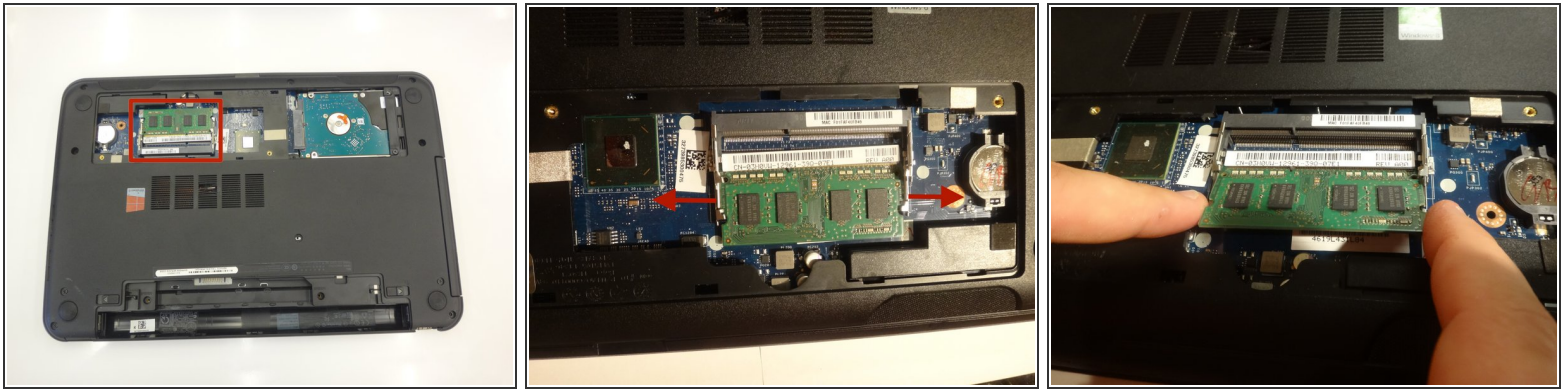
- Flip the laptop over.
- Slide the latches toward the outside of the laptop to unlock the battery.
- Lift the battery out of the laptop.

Step 2 — Remove access door



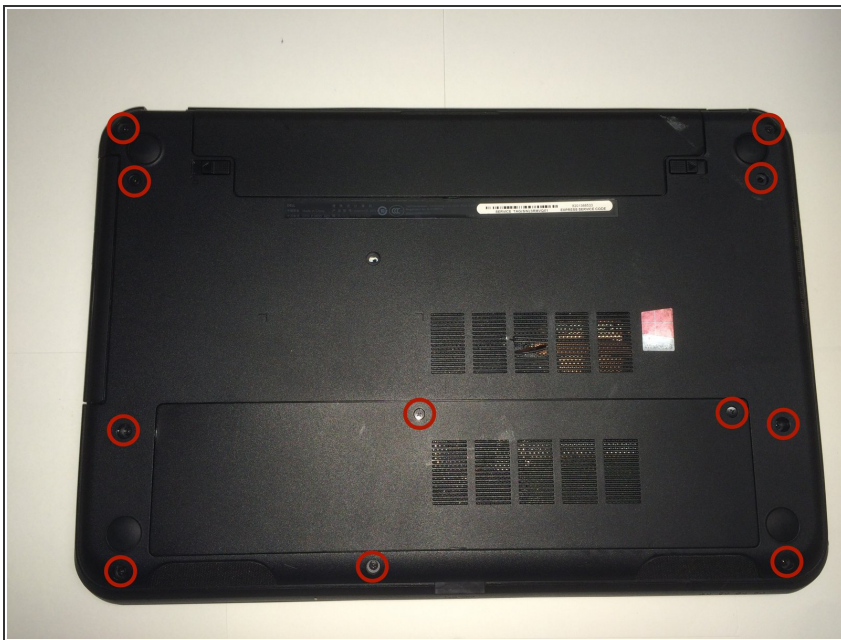
- Loosen the two screws attaching the access door to the laptop body
- Using a spudger, pry open the access door from the laptop
- Using your fingers, open and remove the access door from the laptop, exposing the memory cards underneath.

Step 3 — Memory Card Removal/Replacement



- To access the memory cards, push out the latches on the left and right of the memory cards
- To remove the memory card, pull it out of the tray with the latches still stretched out
- Insert a new memory card in to the memory card tray, depressing until side latches engage with a click.

Step 4 — Removing Underside Screws



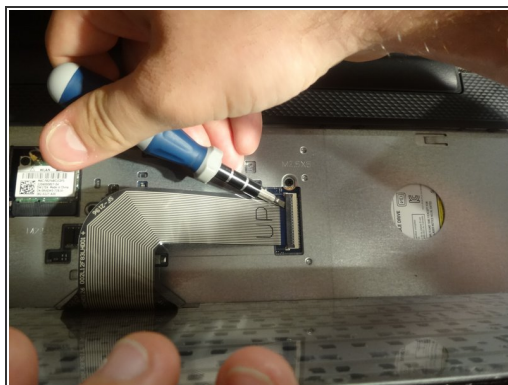
- Before flipping the laptop right-side up, remove screws holding the back plate to the laptop frame
- Remove the backplate screws using a phillips head PH0 screwdriver (11).
- Remove the screws located underneath the battery and access panel using the same phillips head PH0 screwdriver (3).

Step 5 — Removing the Keyboard



- Flip the laptop right-side-up
- Using a spudger, separate the keyboard from the laptop frame.
- Using fingers to remove the keyboard from the laptop frame, be careful not to damage the keyboard cable.

Step 6 — Disconnecting the Keyboard Cable



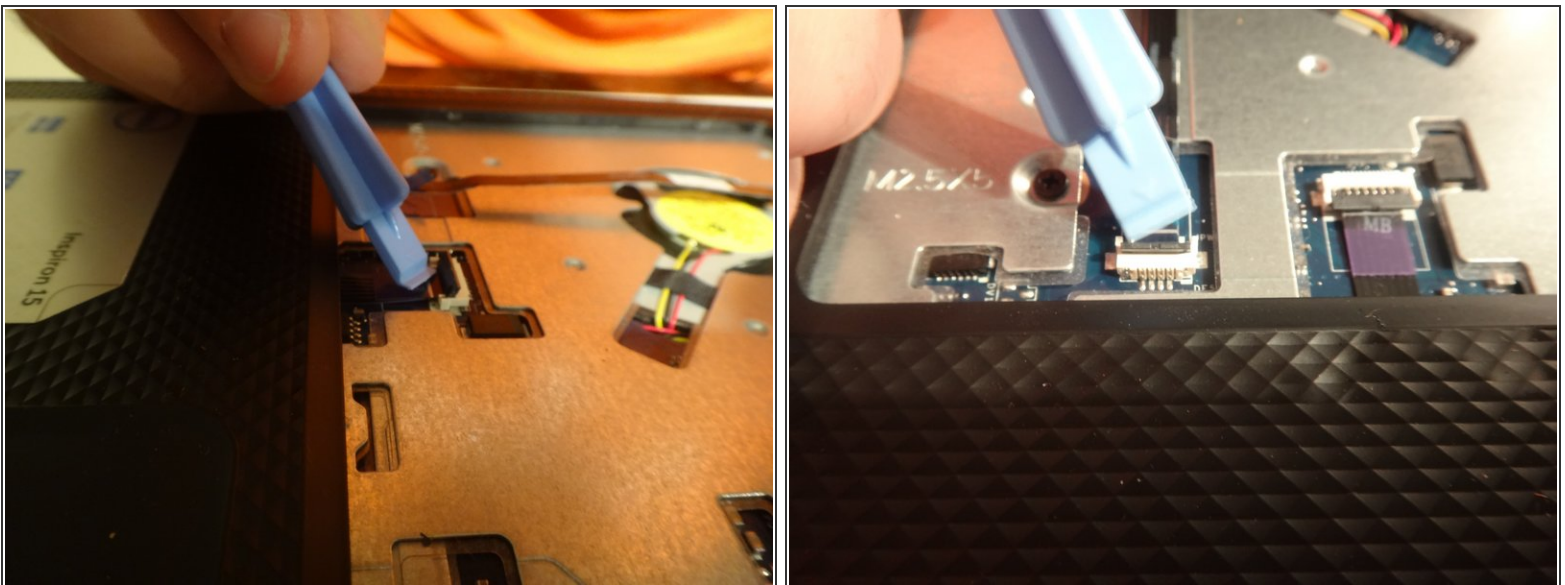
- To disconnect the keyboard, locate the keyboard cable locking mechanism.
- Open the locking mechanism by gently pulling up.
- Slide out the keyboard cable from the interface to separate the keyboard from the laptop.

Step 7 — Underneath the Keyboard



- Locate the wireless card location underneath the removed keyboard.
- Disengage the antenna cables connecting the laptop to the wireless card.
- Using a phillips head PH0 screwdriver, unscrew the single screw holding the wireless card to the laptop frame.
- Remove the wireless card.

Step 8 — Disconnect the Palmrest Cables



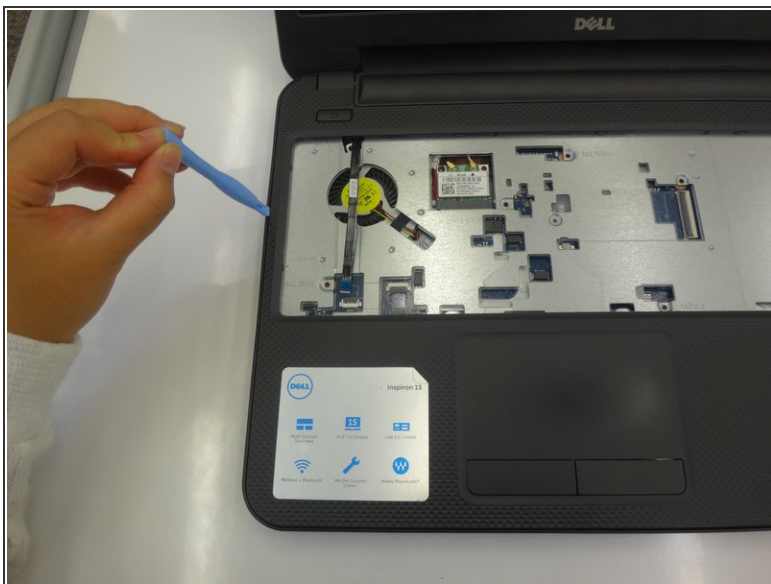
- Unplug the palmrest cables, which are denoted by a blue and a purple marking.
- To remove, lift up the locking tab and pull the cables from their laptop interface.

Step 9 — Removing Palmrest Screws



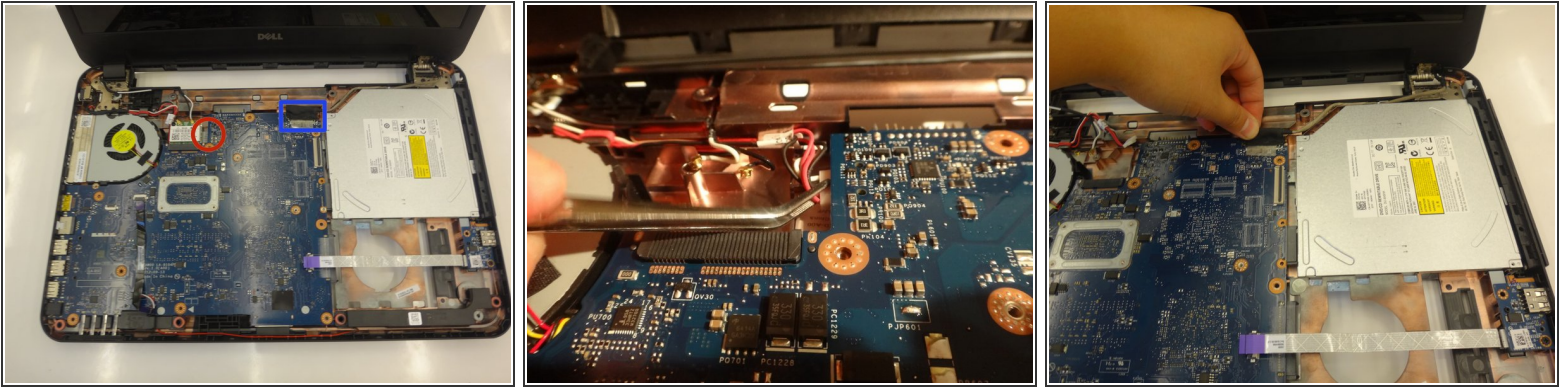
- Remove the four 2.5 mm by 5 mm screws underneath the keyboard plate using a phillips head PH0 screwdriver.
- Remove the three 2 mm by 3 mm screws underneath the keyboard plate using a phillips head PH0 screwdriver.

Step 10 — Disconnecting the Palmrest



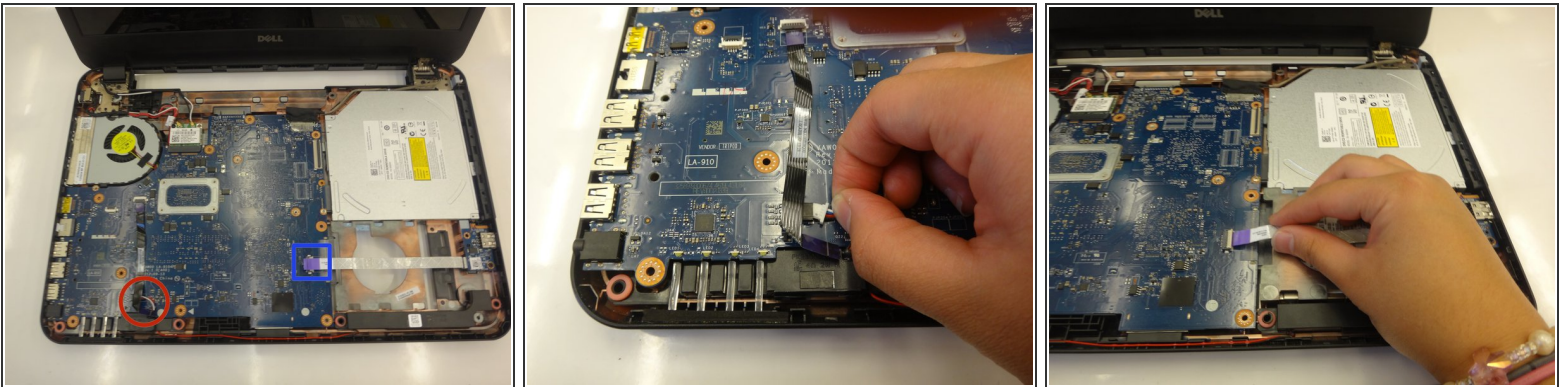
- Using a spudger, separate the palmrest from the base of the laptop. This interface is located around the equator of the laptop.
- Use your fingers to completely remove the palmrest from the laptop base.

Step 11 — Cables to Separate from the Motherboard 1



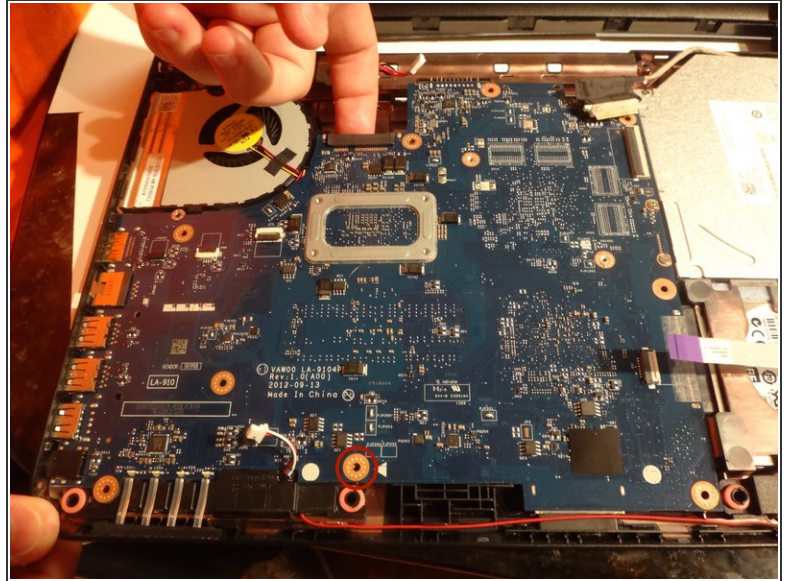
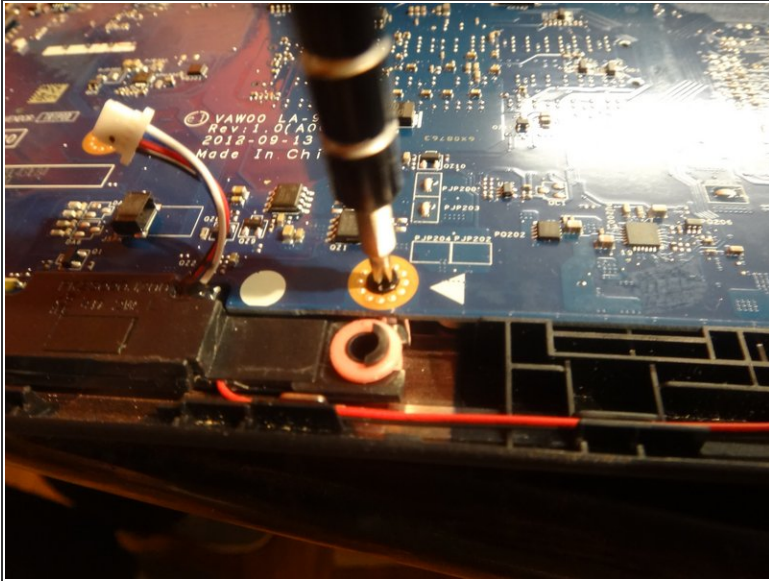
- First, remove the power cable, located in the upper left hand side of the laptop. This can be removed using forceps or using your fingers.
- Second, remove the LCD cable located in the upper center of the laptop. This cable must be removed using the same unlocking procedure as the palmrest cables used in step 6.
- ⓘ The first image shown has the wireless card still connected, however, for removal of the power cable, removing the wireless card is necessary in revealing the power cable. *See second image.*

Step 12 — Cables to Separate from the Motherboard 2



- Third, unplug the speaker cables using forceps or by using your fingers.
- Fourth, unplug the final cable, denoted by a purple plastic flag. This cable uses the same locking mechanism as the palmrest cables seen in step 6.
- ⓘ The final cable is shown detached in the first image.

Step 13 — Remove the motherboard



- Unscrew the motherboard from the laptop frame using a phillips head PH0 screwdriver.
- Then, use your fingers to remove the motherboard from the laptop.

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