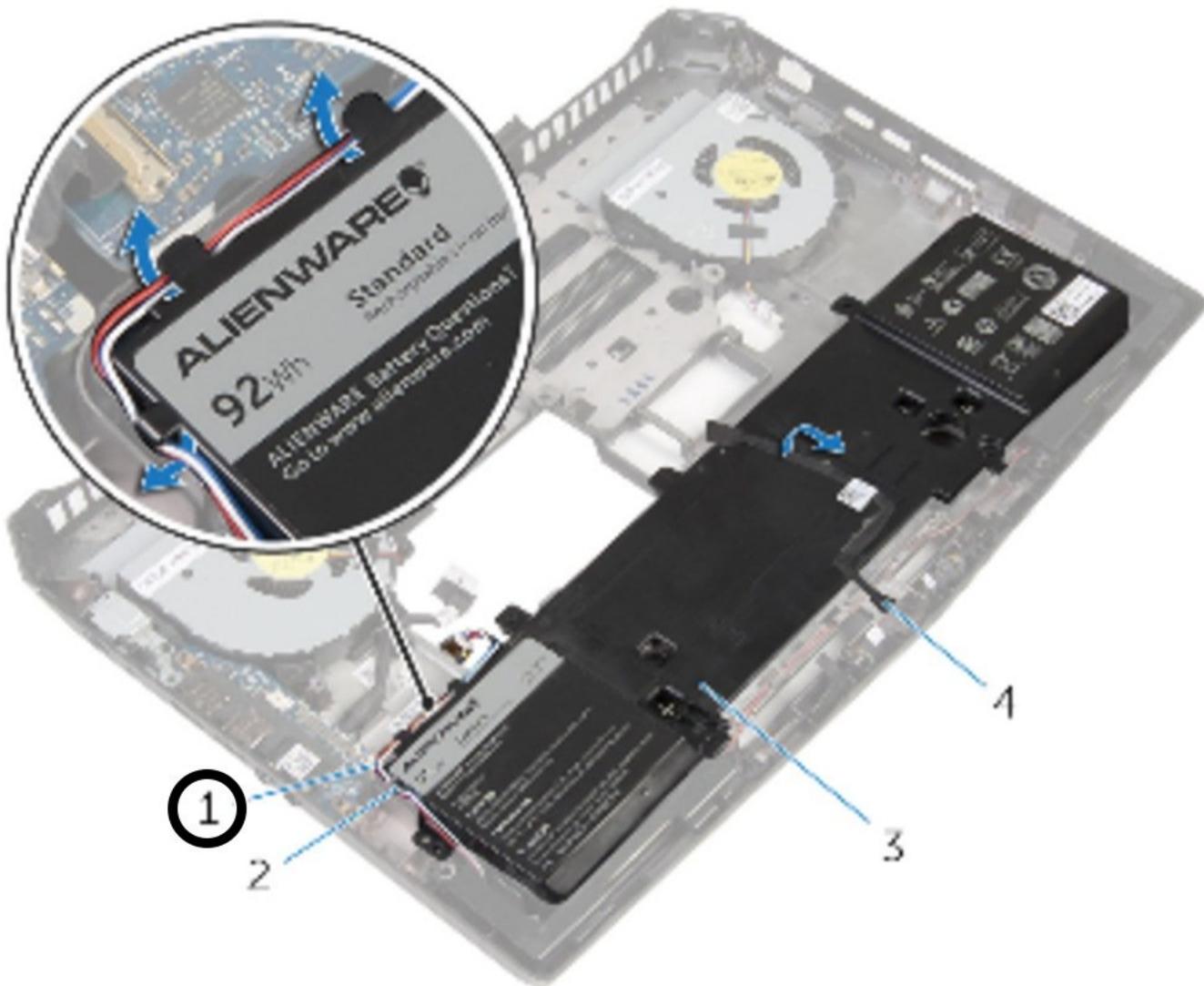




# Dell Alienware 15 Battery Replacement

Removing the battery by removing the solid state disks, the memory, and the palm rest/keyboard assembly.

Written By: Johnathan Hammond



## INTRODUCTION

**WARNING :** Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before working inside your computer](#). After working inside your computer, follow the instructions in [After working inside your computer](#).

Replacing the battery of an Alienware 15 involves removing the memory, solid state drives, and palm rest.

**For your safety, discharge your battery below 25% before disassembling your device.** This reduces the risk of a dangerous thermal event if the battery is accidentally damaged during the repair. If your battery is swollen, [take appropriate precautions](#).

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### TOOLS:

- Spudger (1)
- Phillips #0 Screwdriver (1)

### PARTS:

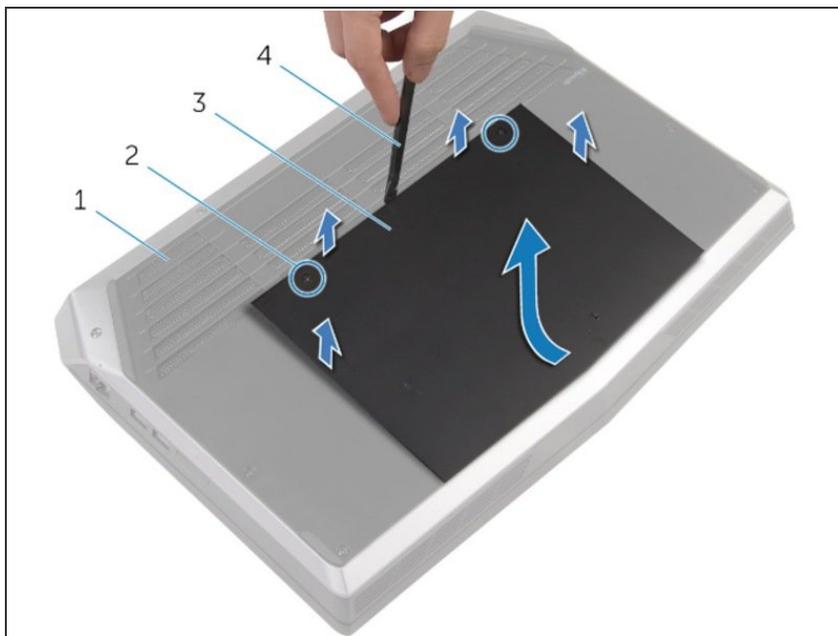
- Dell Alienware 15 R1 & R2 Battery (1)

## Step 1 — Turn Off and Turn Over the Computer



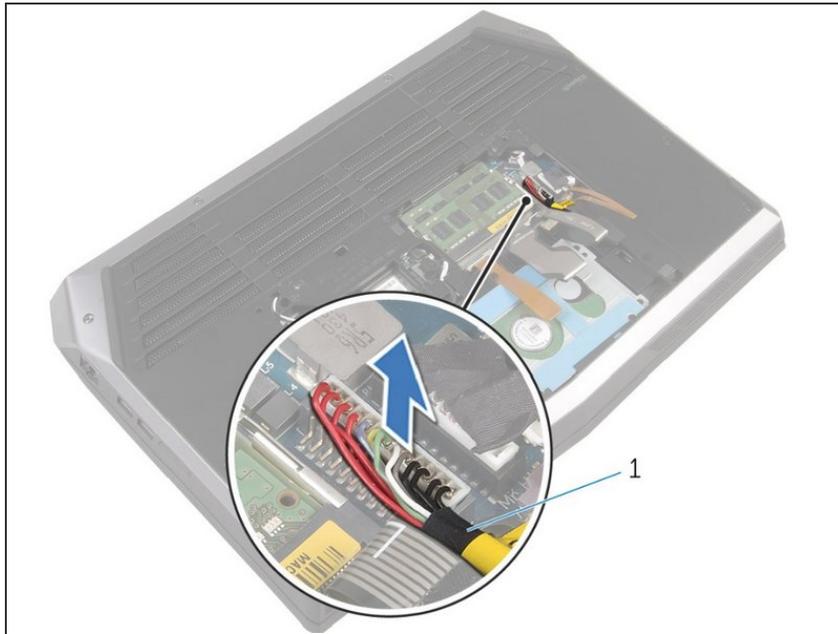
- After turning the computer off, close the display and turn the computer over.

## Step 2 — Remove the Back Panel Screws and Lift



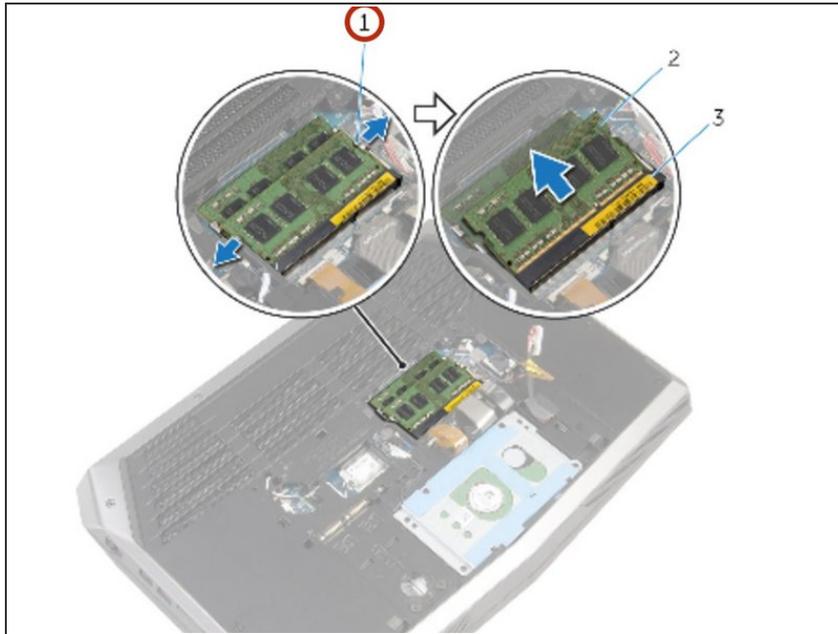
- After the computer base (#1) is facing up, use a Philips screwdriver to remove the two captive screws (#2) which hold the base panel (#3) down.
- Then, use a spudger (#4) to lift up the panel. You can also use your fingernail to lift it as well.
- After the front has been lifted up a bit, the non-screw side of the panel will need to be slid forward a little to finish lifting out the base panel from the computer.

### Step 3 — Optional: Disconnect the Battery



- i** You don't need to disconnect the laptop's battery if you are only replacing the back panel: only perform this step if you will be handling or replacing the electrical components of the computer.
- Disconnect the battery cable from the system board by pulling up on the battery connector (#1).
- Turn the computer back over and open the display to the point where you can press the power button.
- Press and hold the power button for 4 seconds to ground the system board so that you can safely remove components such as the RAM.

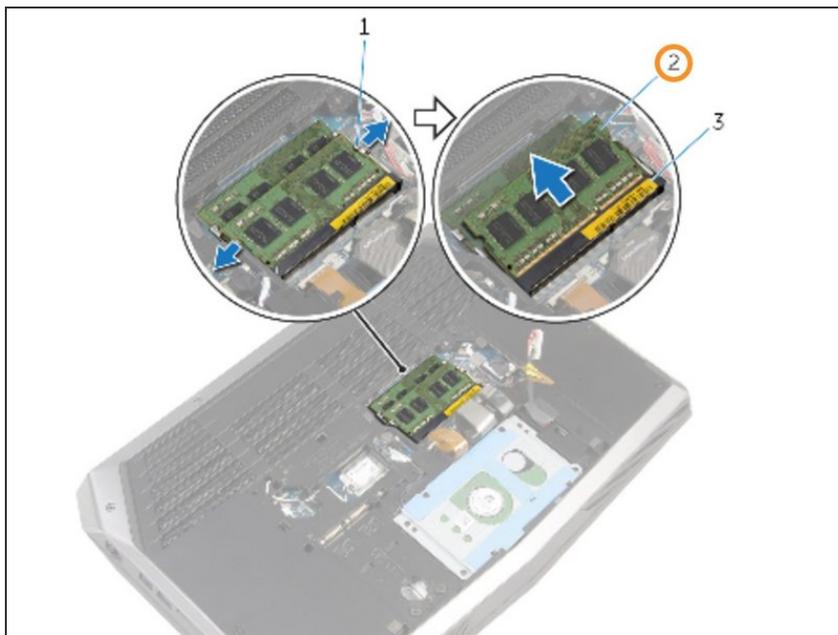
## Step 4 — Memory Securing Clips



**⚠ WARNING:** Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before Working Inside Your Computer](#). After working inside your computer, follow the instructions in [After Working Inside Your Computer](#).

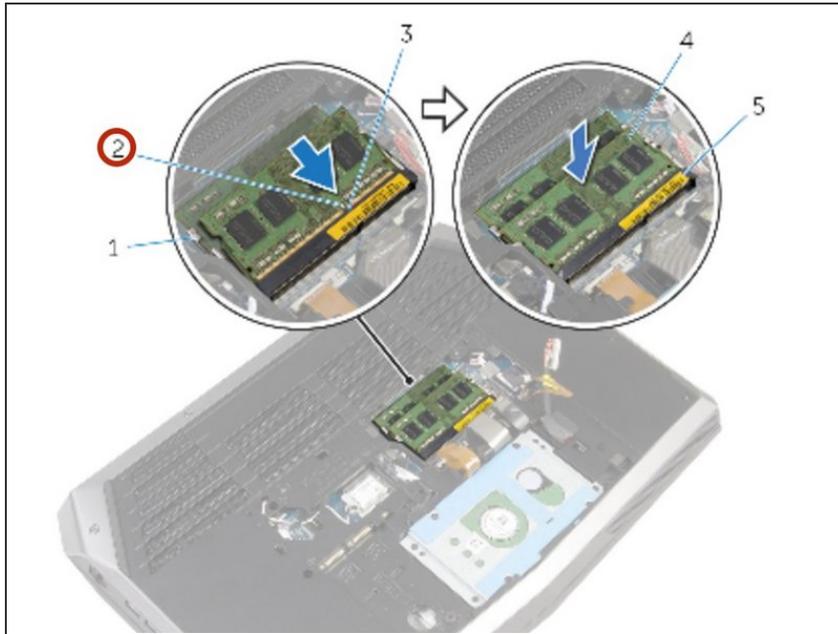
- Using your fingertips, carefully spread apart the securing clips on each end of the memory-module slot until the memory module pops up.

## Step 5 — Remove Memory Module



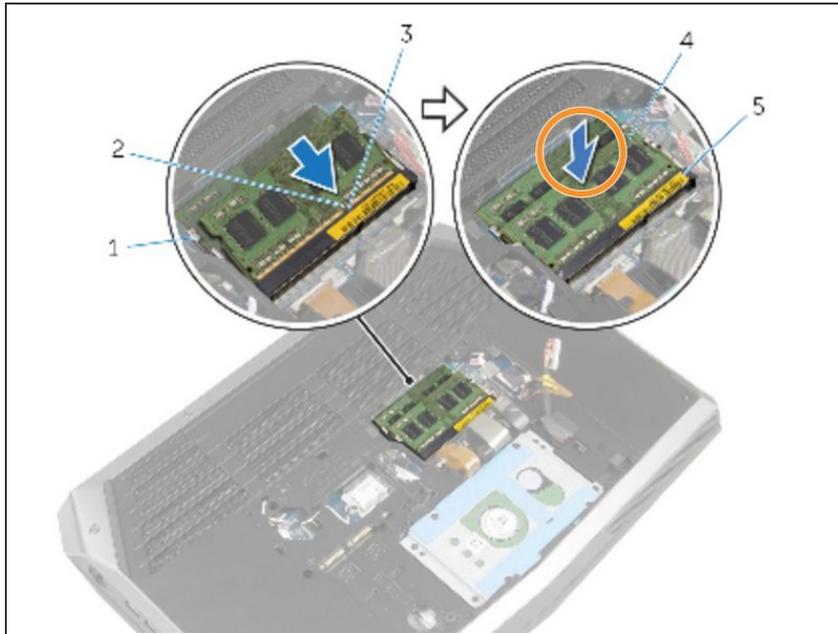
- Slide and remove the memory module from any memory-module slots that you would like to repopulate.

## Step 6 — Adding New Memory Module



- Align the notch on the **New** memory module with the tab on the memory-module slot.

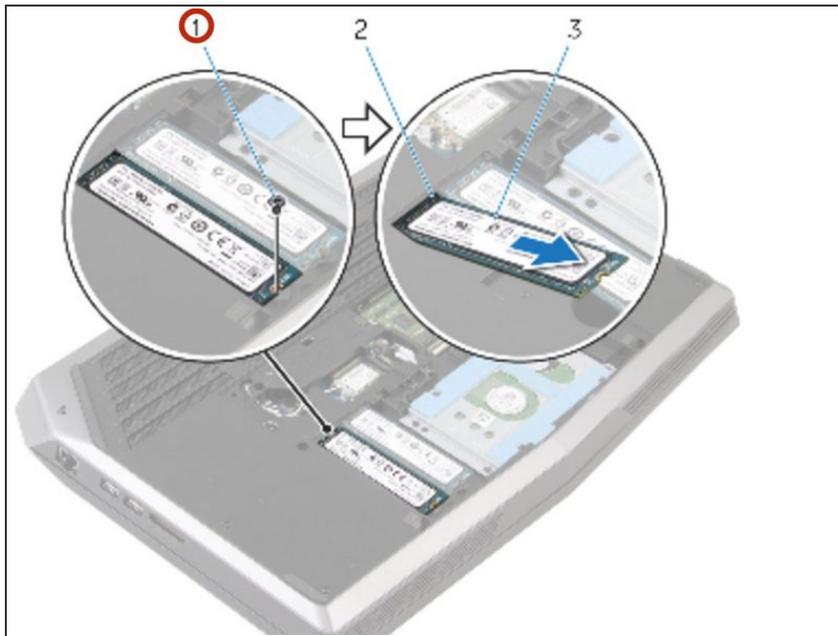
## Step 7 — Firmly Press the Memory Module Down.



- Slide the memory module firmly into the slot at an angle and press the memory module down until it clicks into place. Do this individually for each memory module that is replaced.

ⓘ NOTE : If you do not hear the click, remove the memory module and reinstall it.

## Step 8 — Remove Solid-State screw



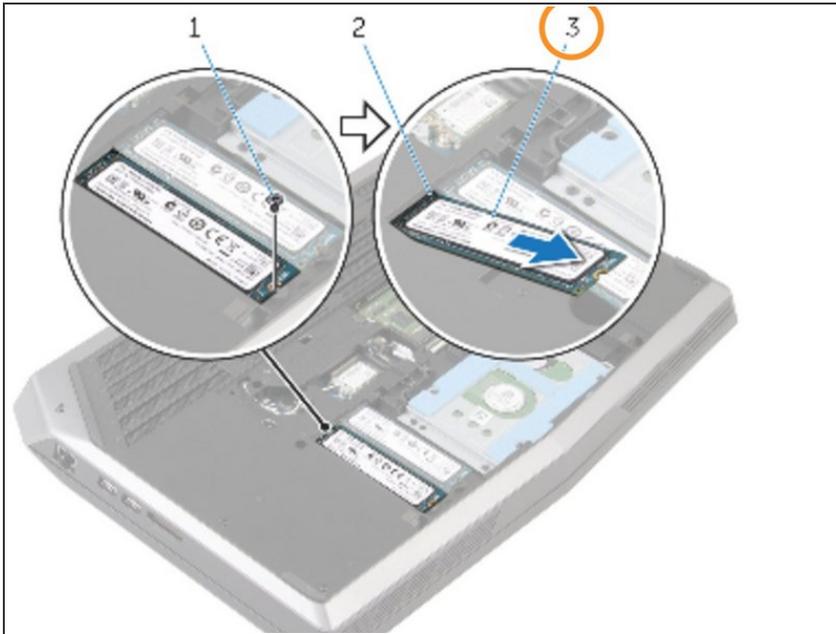
**⚠ WARNING:** Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before Working Inside Your Computer](#). After working inside your computer, follow the instructions in [After Working Inside Your Computer](#).

**⚠ CAUTION :** Solid-state drives are fragile. Exercise care when handling the solid-state drives, and avoid touching the gold contact pins.

**⚠ CAUTION :** To avoid data loss, do not remove the solid-state drive while the computer is in sleep or on state.

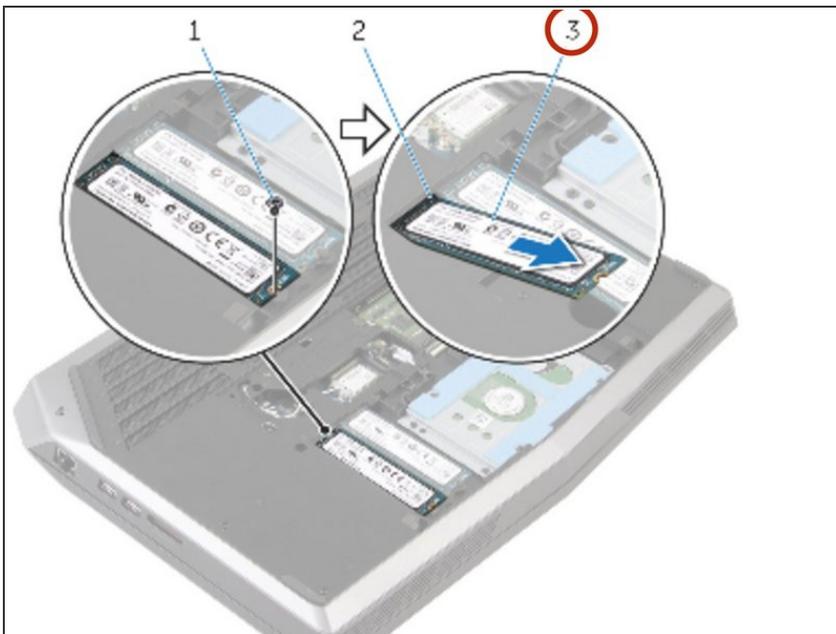
- Remove the screw that secures the solid-state drive to the computer base.

## Step 9 — Slide the Solid-State Drive



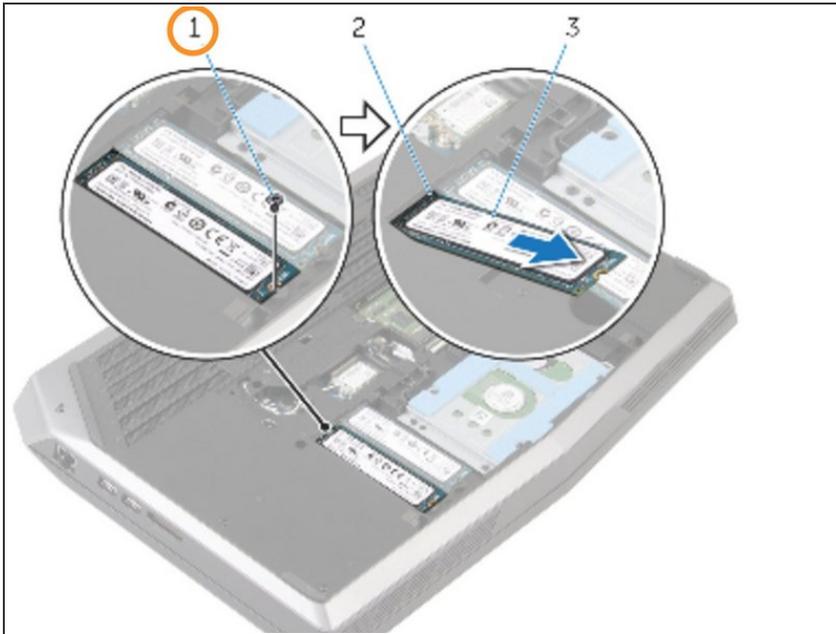
- Slide and remove the solid-state drive from the solid-state drive slot.

## Step 10 — Slide the Solid-state Drive



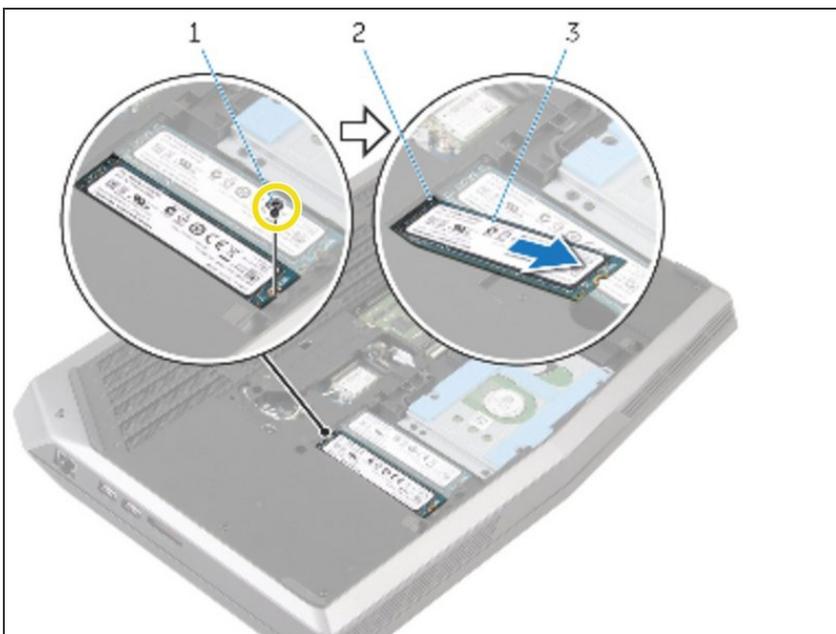
- Slide the solid-state drive into the solid-state drive slot.

## Step 11 — Align the screw



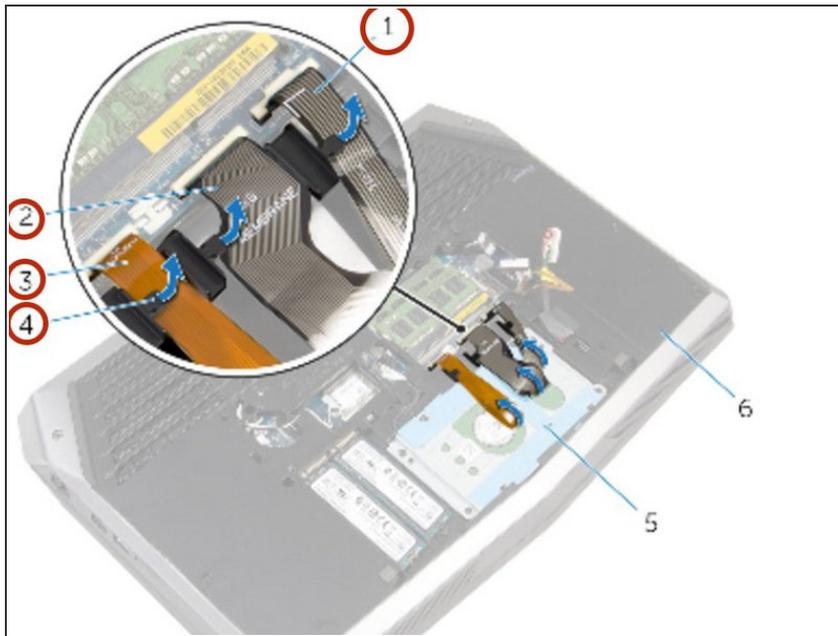
- Align the screw hole on the solid-state drive with the screw hole on the computer base.

## Step 12 — Replace the Screw



- Replace the screw that secures the solid-state drive to the computer base.

## Step 13 — Preparations for Removing Cables

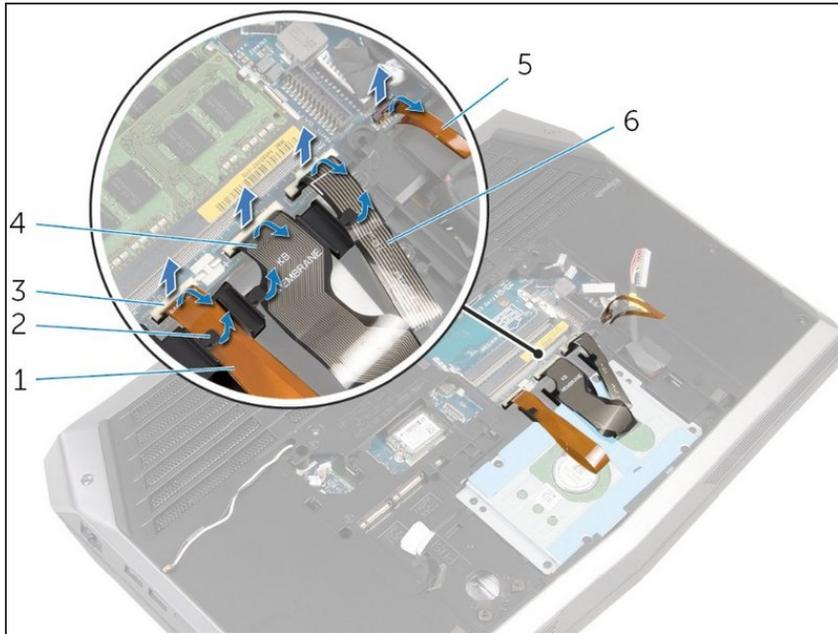


- Remove the keyboard-backlight cable, keyboard cable, and macro-keys cable from the routing guides (the small plastic tabs) on the computer base.

**⚠** Do not force the cables out of the system board without lifting up the latches that hold them down first. Forcing out cables could result in them snapping or tearing, rendering them unusable.

**i** You do not need to remove the hard drive to remove the battery, but it is advisable that you do so if you are concerned about dropping the computer while removing the battery.

## Step 14 — Lift Cable Latches and Remove



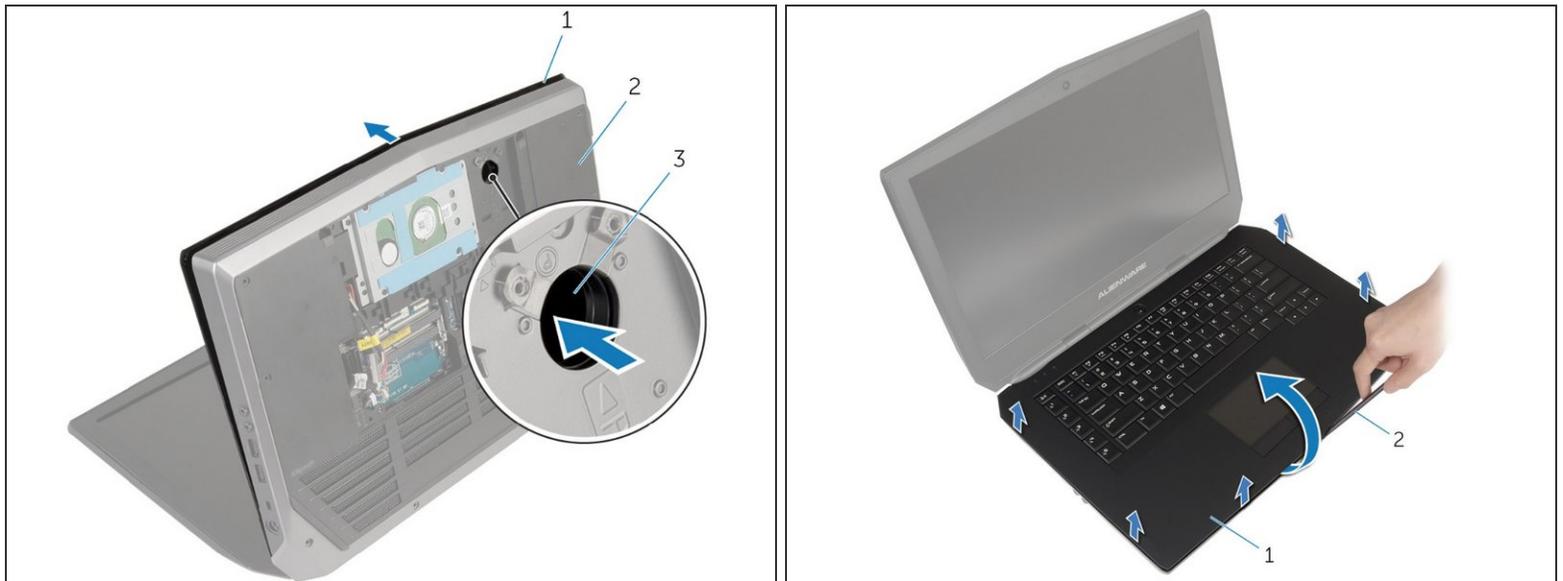
- Carefully lift the white latches (like #3) and remove all 4 of the keyboard and macro-key cables from their sockets.
- Don't forget to lift the smaller black latch and remove the macro-key backlight cable (#5) to the right of the other cables!

## Step 15 — Unscrewing the Computer Base



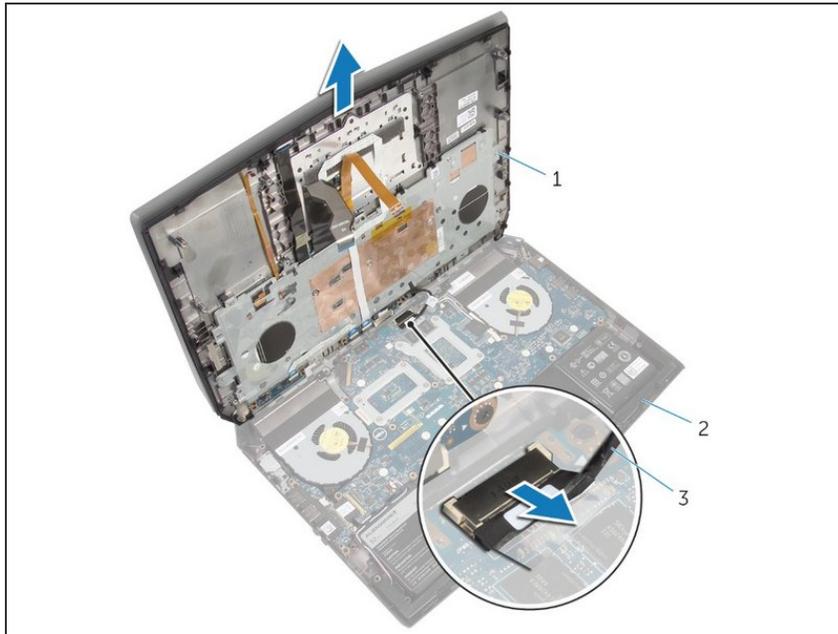
- Remove all 15 screws which hold down the computer base. Two screws are located near the RAM slot, while the others are situated mostly around the outside of the computer.

## Step 16 — Press to Remove Palm Rest



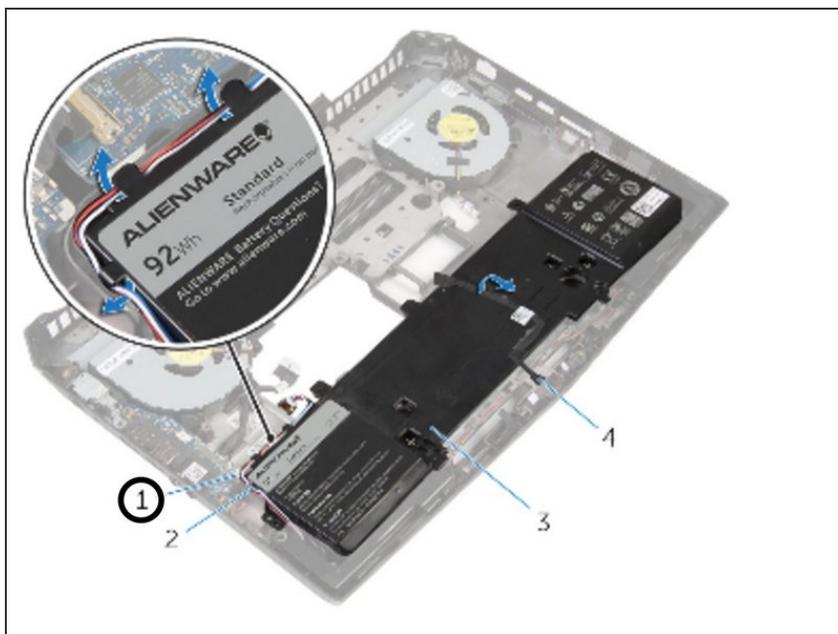
- Open the computer's display and lay the computer down on the back of its open display.
  - Using your finger or a screwdriver, push inside the palm rest release hole (#3 in image 1) to release the palm rest from the tabs that hold it down.
  - Using a plastic scribe, pry up along the edges of the palm-rest assembly. After the palm rest is no longer attached to the computer via any tabs, try lifting up the palm-rest assembly.
- i** Make sure that no cables or other fragile objects are still attached to the palm-rest assembly as you pull it out.

## Step 17 — Ready for Battery Removal



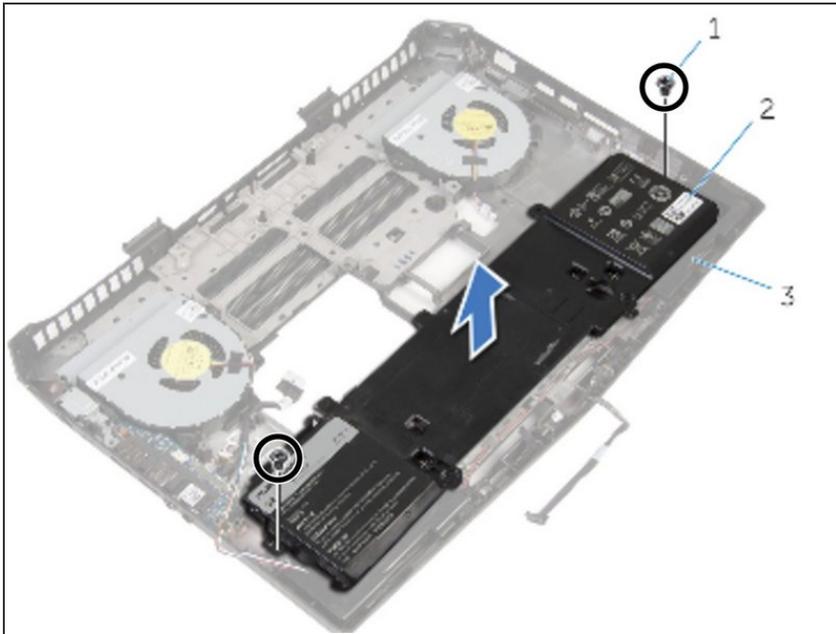
- ⓘ If you are only replacing the battery, you do not need to perform this step.
- Pull the power-button cable horizontally to remove it from the palm rest assembly.

## Step 18 — Remove Speaker Cable



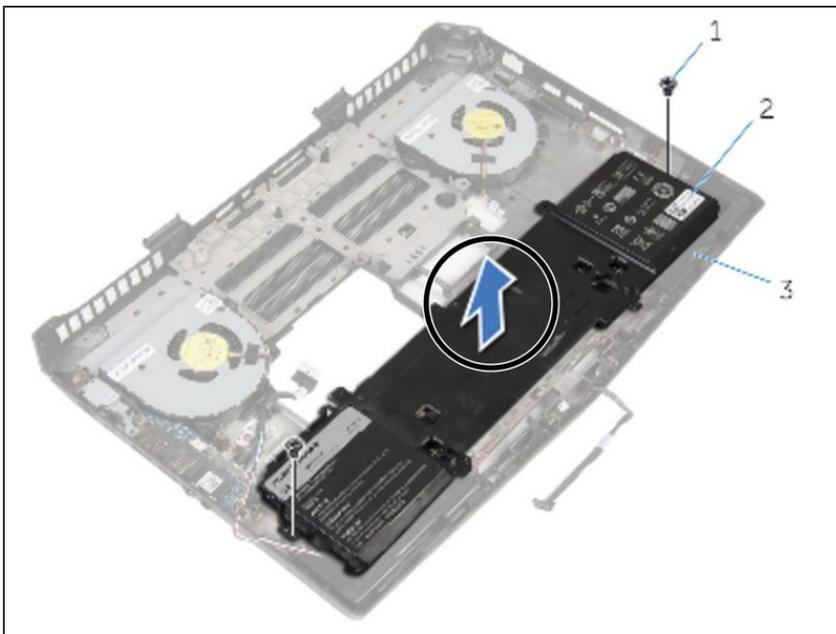
- Remove the speaker cable from the routing guides on the battery.
- ⓘ Note the front AlienFX LED cable routing and peel off the cable from the battery.

## Step 19 — Remove Batter Screws



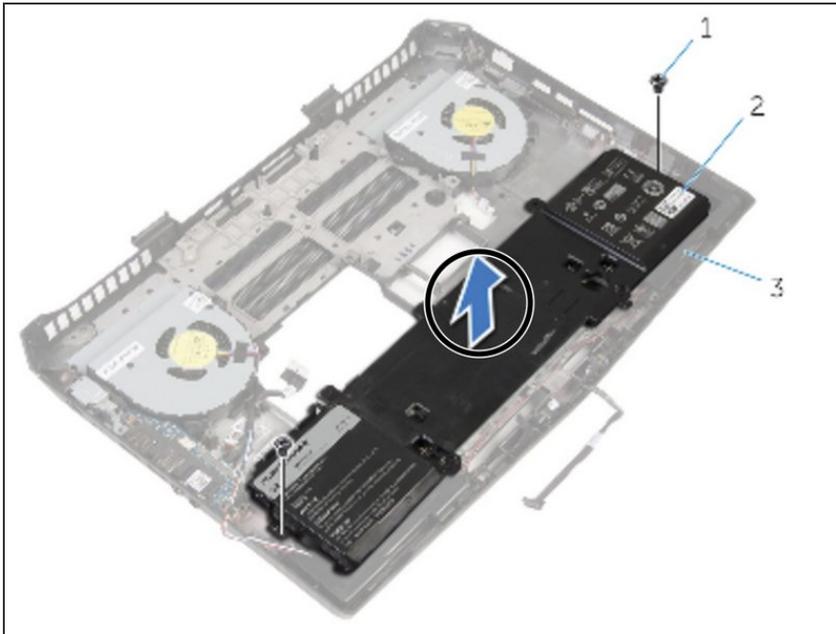
- Remove the screws that secure the battery to the computer base.

## Step 20 — Remove Battery



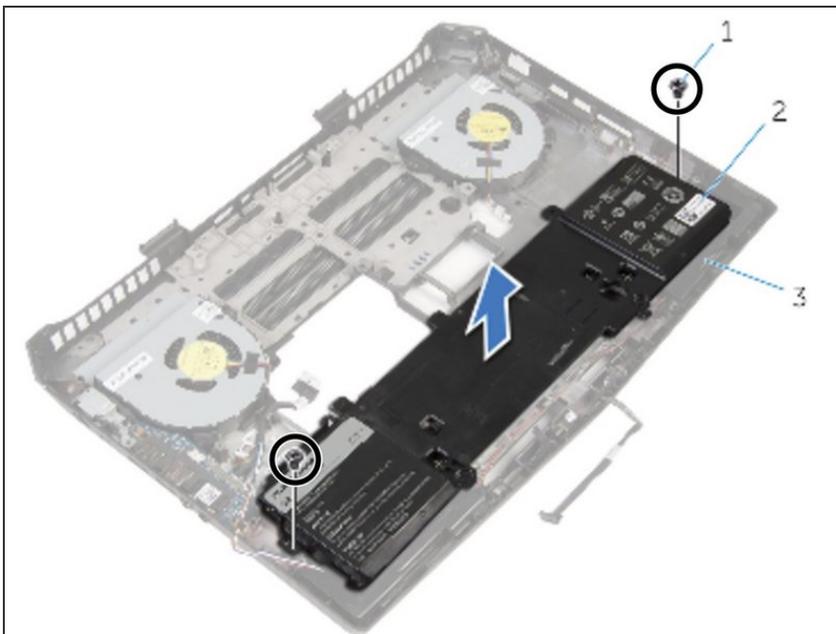
- Lift the battery off the computer base.

## Step 21 — Align Batter With Screw Holes



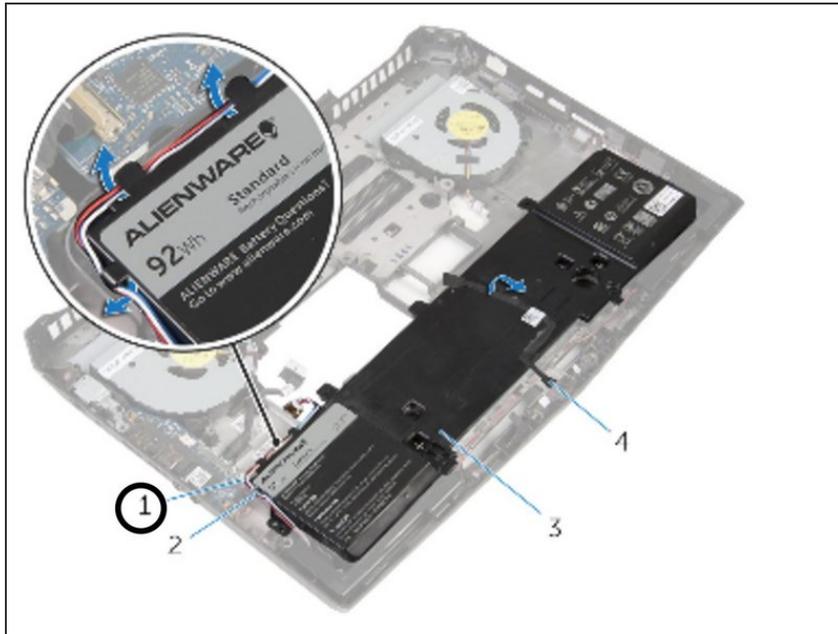
- Align the screw holes on the battery with the screw holes on the computer base.

## Step 22 — Replace Screws



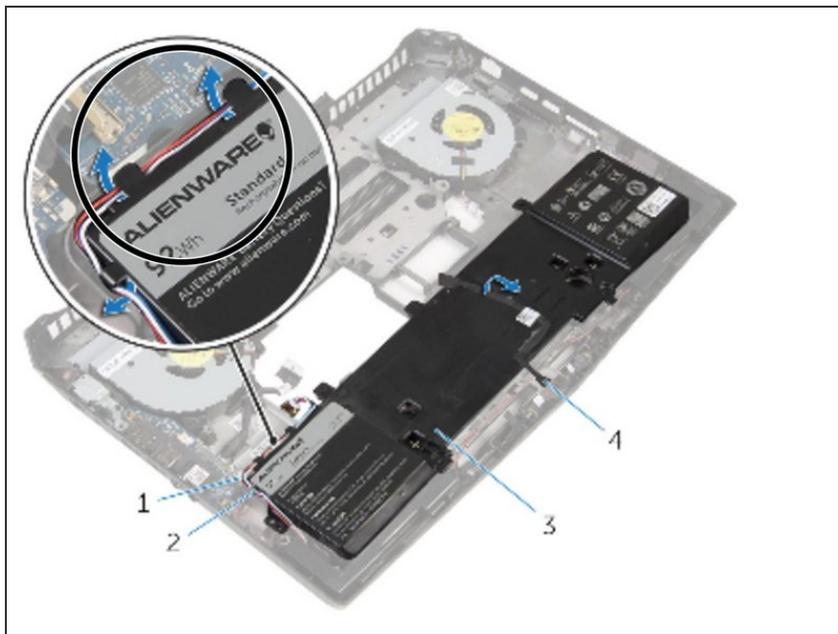
- Replace the screws that secure the battery to the computer base.

## Step 23 — Adhere LED Cable



- Adhere the front AlienFX LED cable to the battery.

## Step 24 — Route the speaker Cable



- Route the speaker cable through the routing guides on the battery.

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