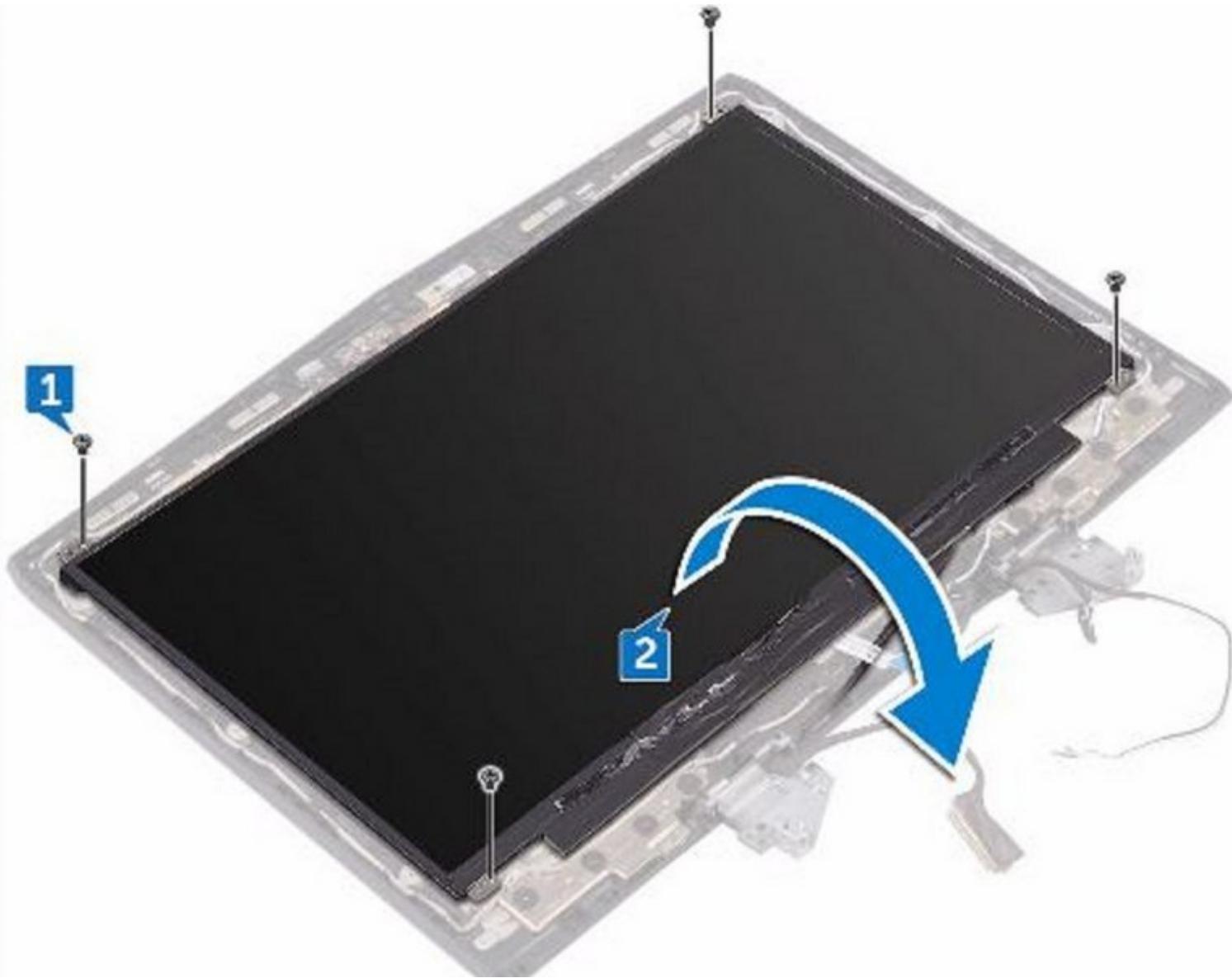




Dell Alienware 13 R3 Display Panel Replacement

Display panel replacement for the Dell Alienware 13 R3.

Written By: Terrence15



INTRODUCTION

In this guide, we will show you how to remove and replace the Display Panel.

TOOLS:

- Pro Tech Toolkit (1)

Step 1 — Loosen the Screws



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](#).

- Loosen the five captive screws that secure the base cover to the computer base.

Step 2 — Pry the Base Cover



- Using a plastic scribe, gently pry the base cover to release the tabs on the base cover from the slots on the computer base.

Step 3 — Lift the Base Cover



- Lift the base cover off the computer base.

Step 4 — Disconnect the Battery Cable



- Using a plastic scribe, disconnect the battery cable from the system board.

Step 5 — Press and Hold the Power-Button



- Press and hold the power button for five seconds to ground the system board.

Step 6 — Connect the Battery Cable



- Connect the battery cable to the system board.

Step 7 — Slide the Tabs



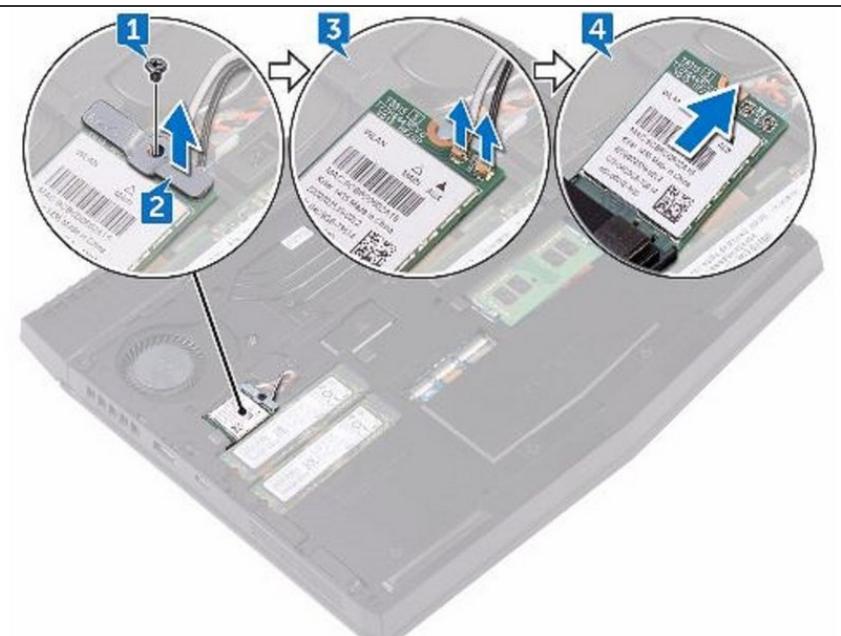
- Slide the tabs on the **NEW** base cover into the slots on the computer base and snap the base cover into place

Step 8 — Tighten the Five Captive Screws



- Tighten the five captive screws that secure the base cover to the computer base.

Step 9 — Align the Notch

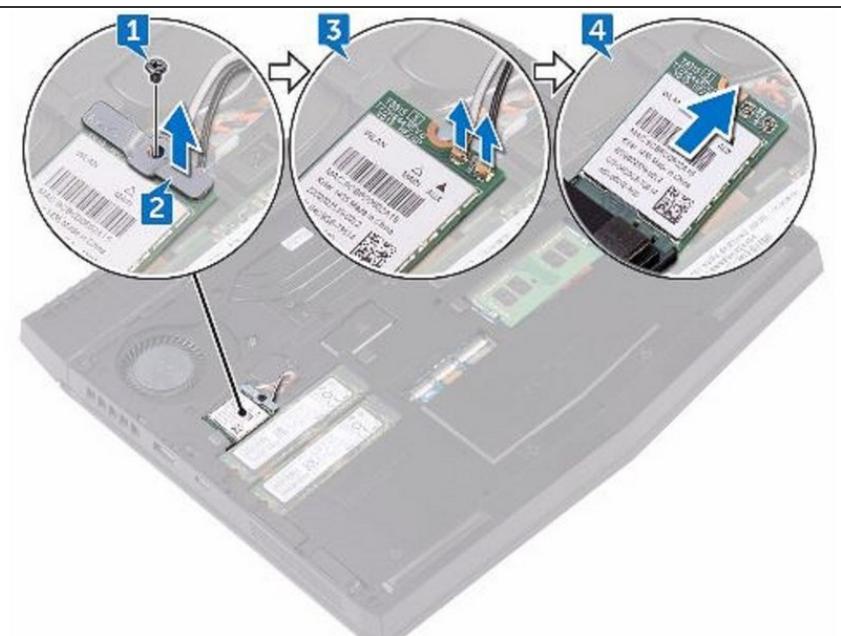


⚠️ **WARNING:** Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before Working Inside Your Computer](#). After working inside your computer, follow the instructions in [After Working Inside Your Computer](#).

⚠️ **CAUTION:** To avoid damaging the wireless card, do not place any cables under it.

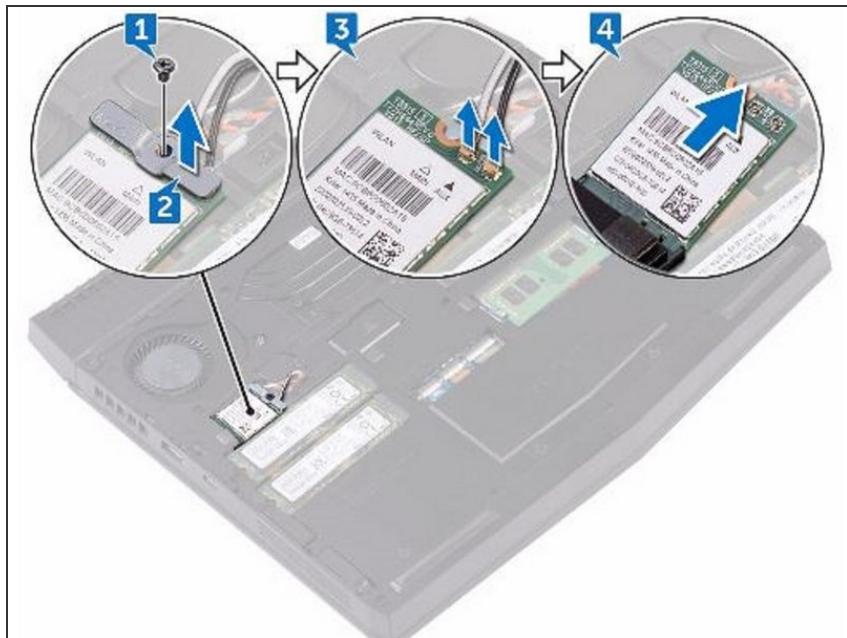
- Remove the screw (M2x3) that secures the wireless card and bracket to the computer base.

Step 10 — Lift the Wireless-Card Bracket



- Lift the wireless-card bracket off the wireless card.

Step 11 — Disconnecting the Antenna Cables



- Disconnect the antenna cables from the wireless card.

Step 12 — Align the Notch



⚠ CAUTION: To avoid damaging the wireless card, do not place any cables under it.

- Align the notch on the wireless card with the tab on the wireless-card slot.

Step 13 — Slide the Wireless Card



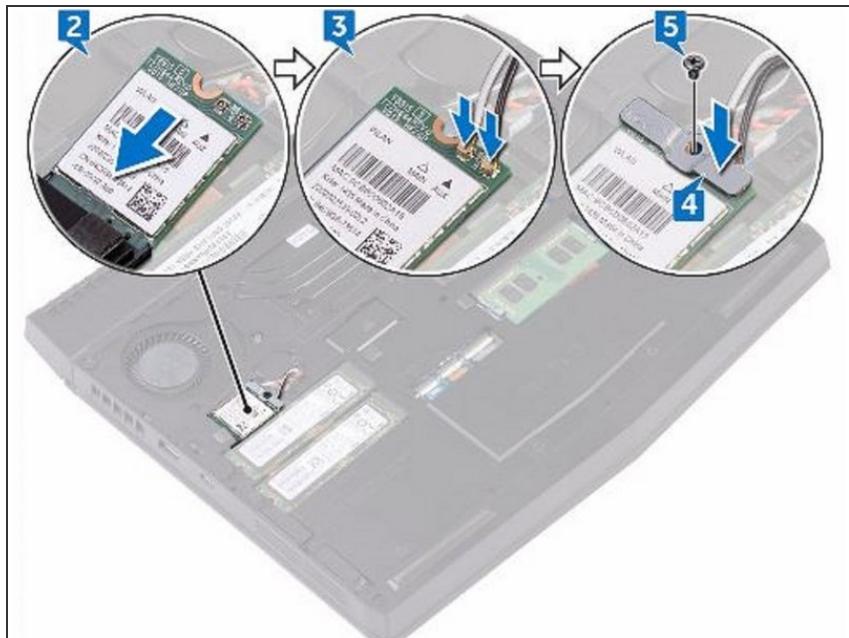
- Slide the **NEW** wireless card at an angle into the wireless-card slot.

Step 14 — Connect the Antenna Cables



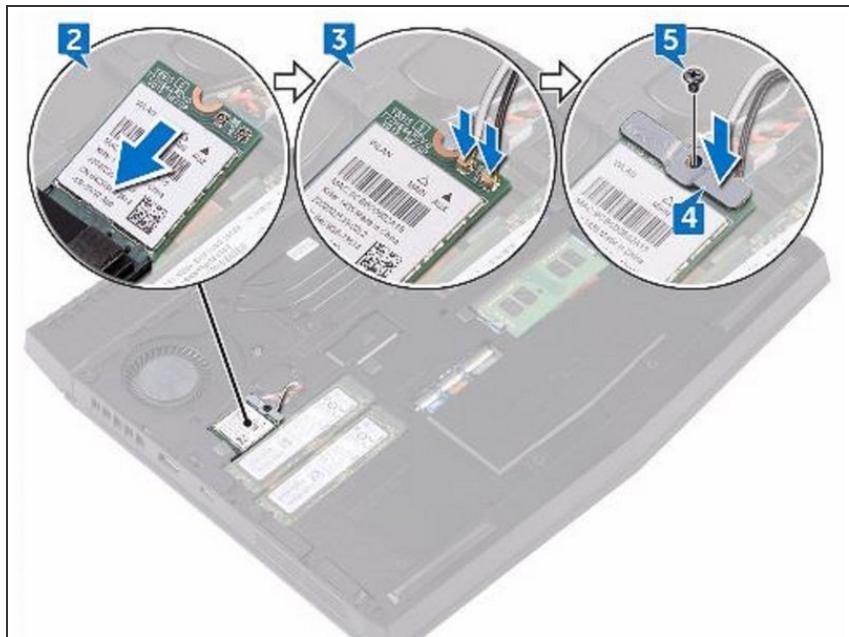
- Connect the antenna cables to the wireless card.

Step 15 — Align the Screw Hole



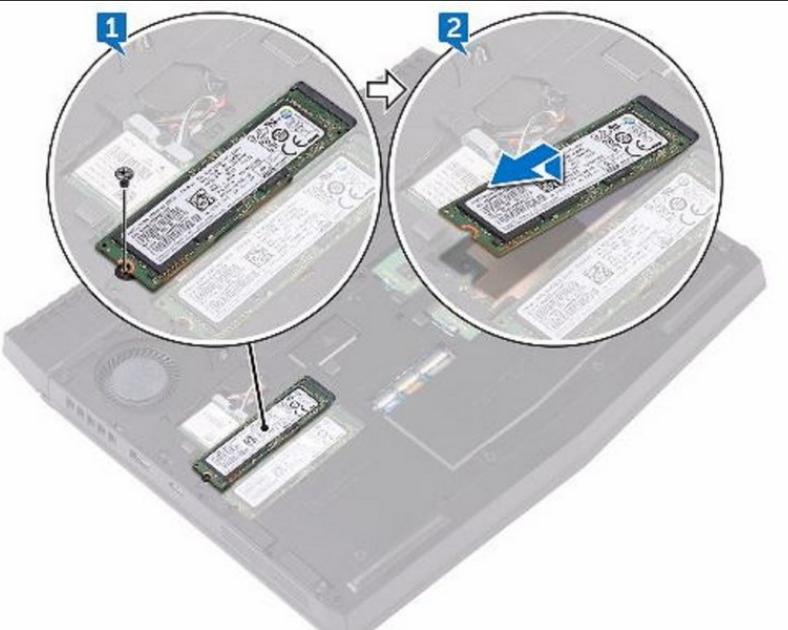
- Align the screw hole on the wireless-card bracket with the screw hole on the wireless card and the computer base.

Step 16 — Replace the Screw



- Replace the screw (M2x3) that secures the wireless-card bracket to the wireless card and the computer base.

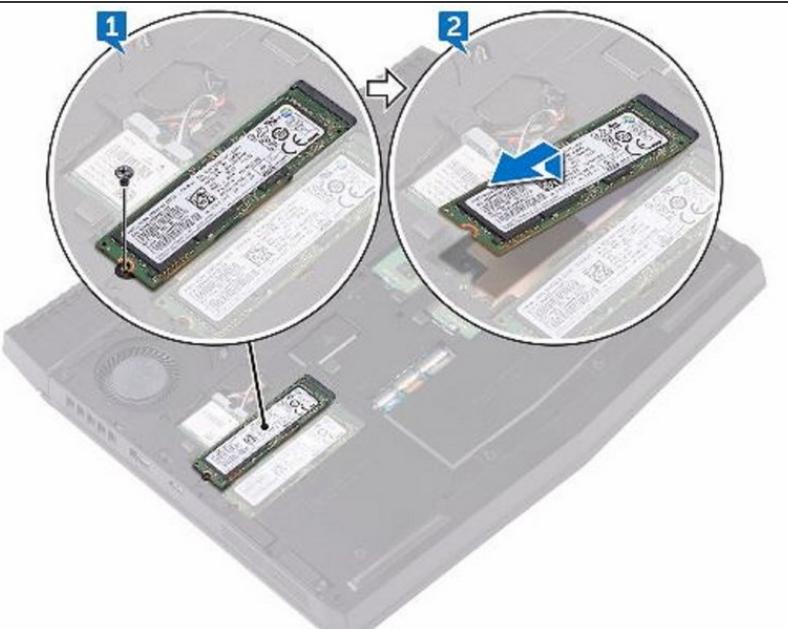
Step 17 — Remove the Screw



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- Remove the screw (M2x3) that secures the solid-state drive to the computer base.

Step 18 — Lift and Slide the Solid-State Drive



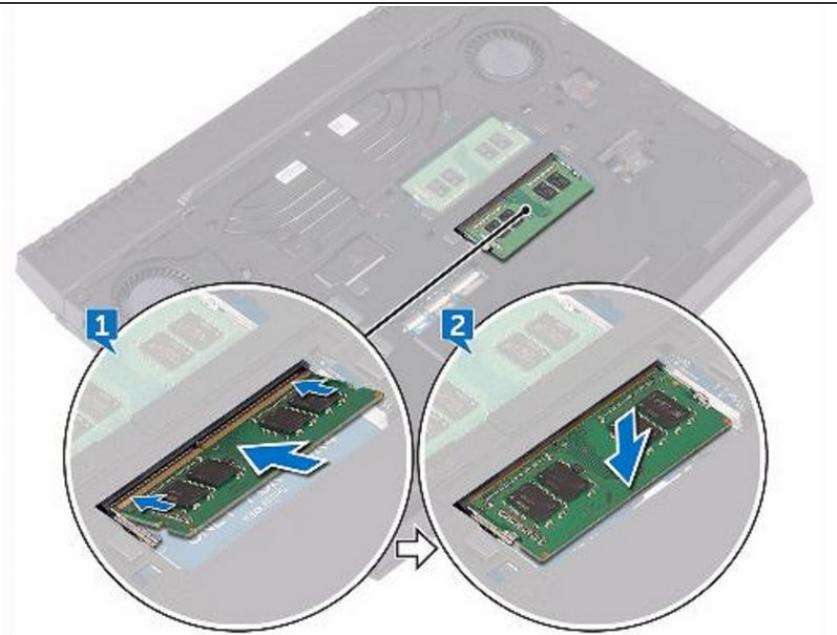
- Lift and slide the solid-state drive from the solid-state drive slot.

Step 19 — Align the Notch



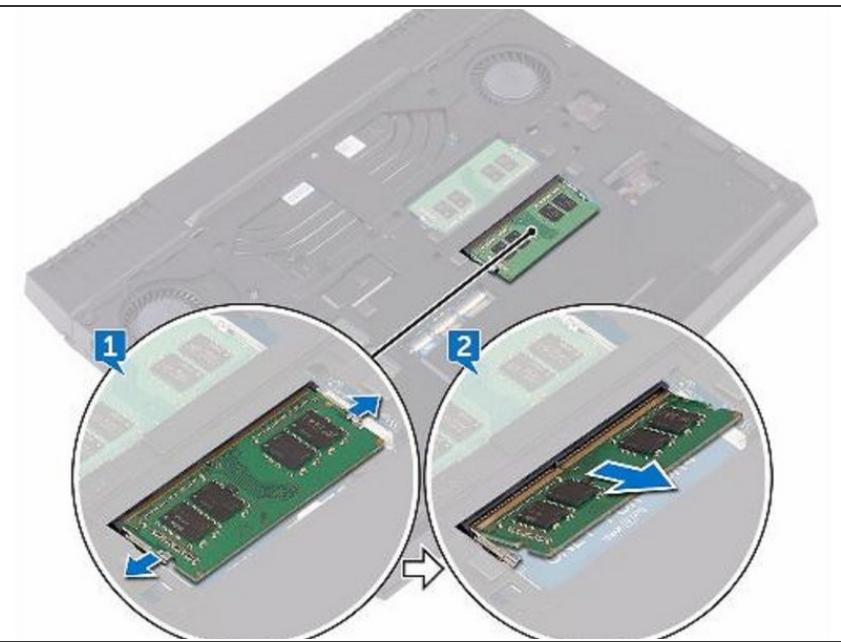
- Align the notch on the **NEW** solid-state drive with the tab on the solid-state drive slot and slide the solid-state drive into the solid-state drive slot.

Step 20 — Press the Memory Module



- Press the memory module down until it clicks into place.

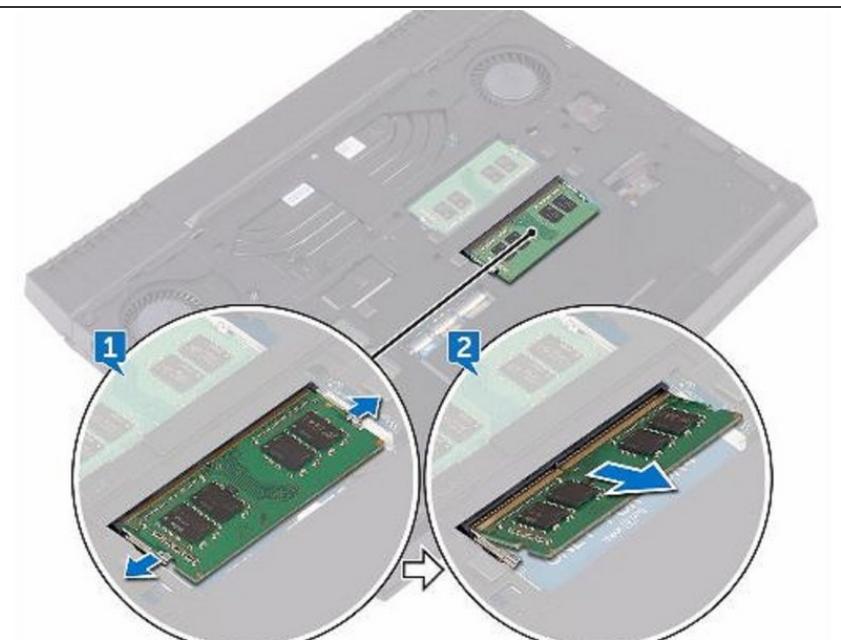
Step 21 — Popping up the Memory Module



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

Step 22 — Remove the Memory Module



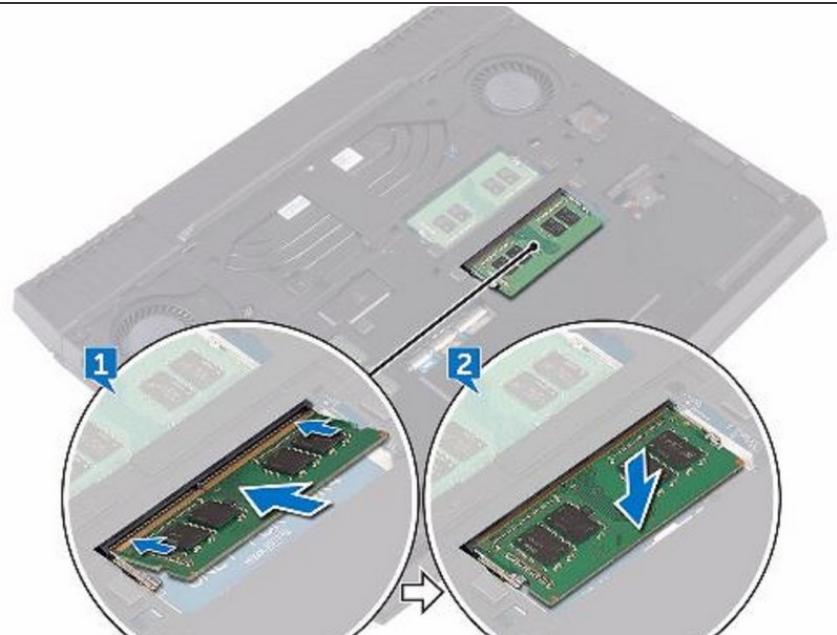
- Slide and remove the memory module from the memory-module slot.

Step 23 — Align the Notch



- Align the notch on the **NEW** memory module with the tab on the memory-module slot and slide the memory module firmly into the slot at an angle.

Step 24 — Press the Memory Module Down



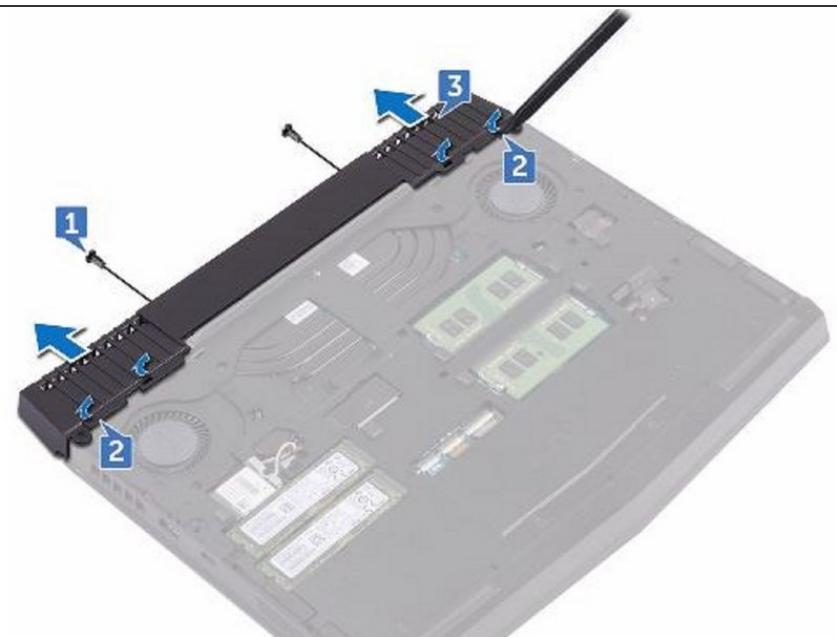
- Press the memory module down until it clicks into place.

Step 25 — Remove the Screws



- Remove the two screws (M2.5x6L) that secure the rear-I/O cover to the palm-rest assembly.

Step 26 — Using a Plastic Scribe



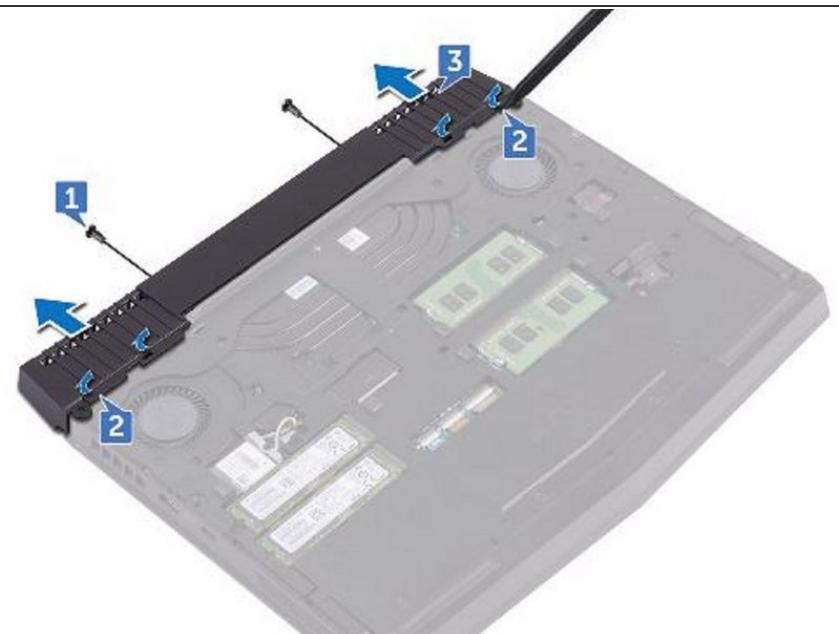
- Using a plastic scribe, gently release the tabs that secure rear-I/O cover to the computer base.

Step 27 — Removing the Rear-I/O



- Slide and remove the rear-I/O cover from the computer base.

Step 28 — Sliding the Rear-I/O



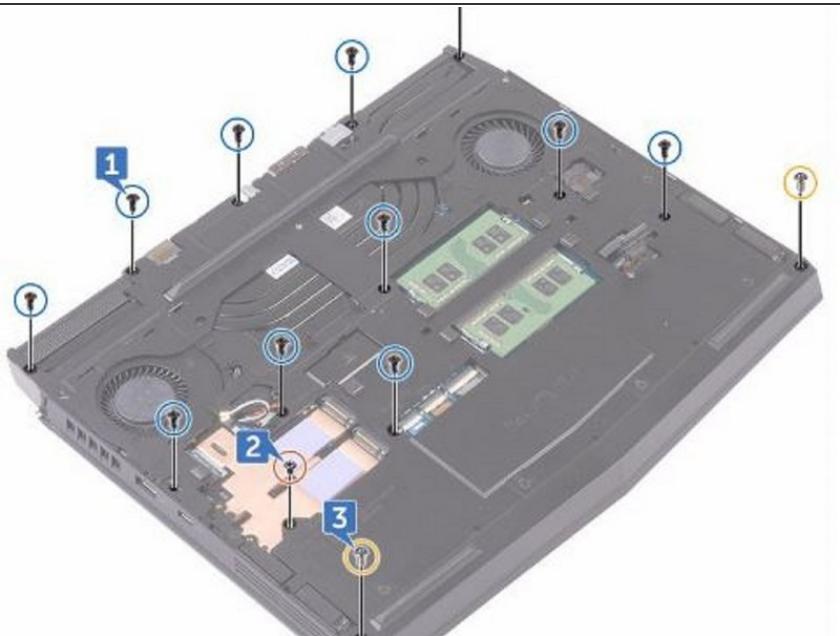
- Slide the **NEW** rear-I/O cover into the slots on the computer base and snap the rear-I/O cover into place.

Step 29 — Replace the two Screws



- Replace the two screws (M2.5x6L) that secure the rear-I/O cover to the palm-rest assembly.

Step 30 — Remove the Screws

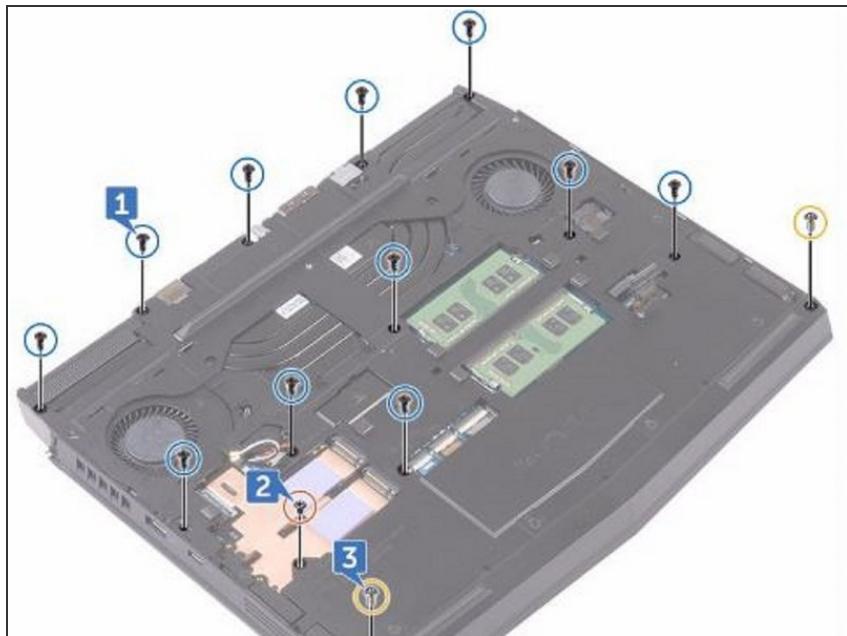


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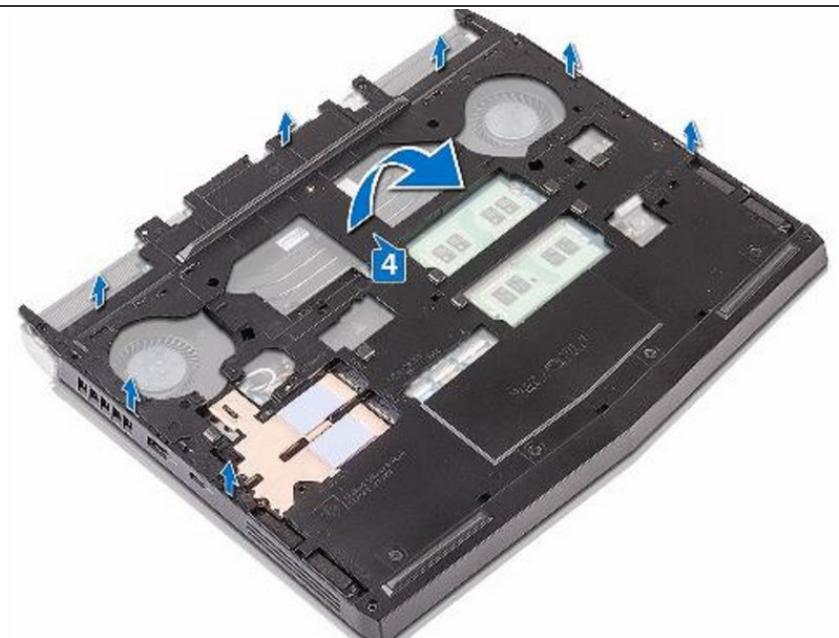
- Remove the eleven (M2.5x6L) screws that secure the computer base to the palm-rest assembly.

Step 31 — Remove the Screw



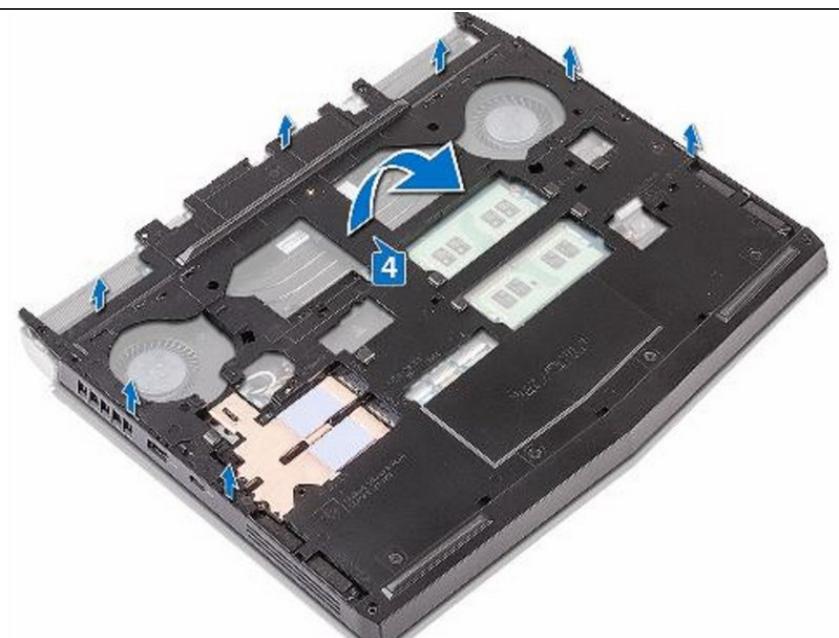
- Remove the (M2x3) screw that secures the computer base to the palm-rest assembly.

Step 32 — Remove the Two Screws



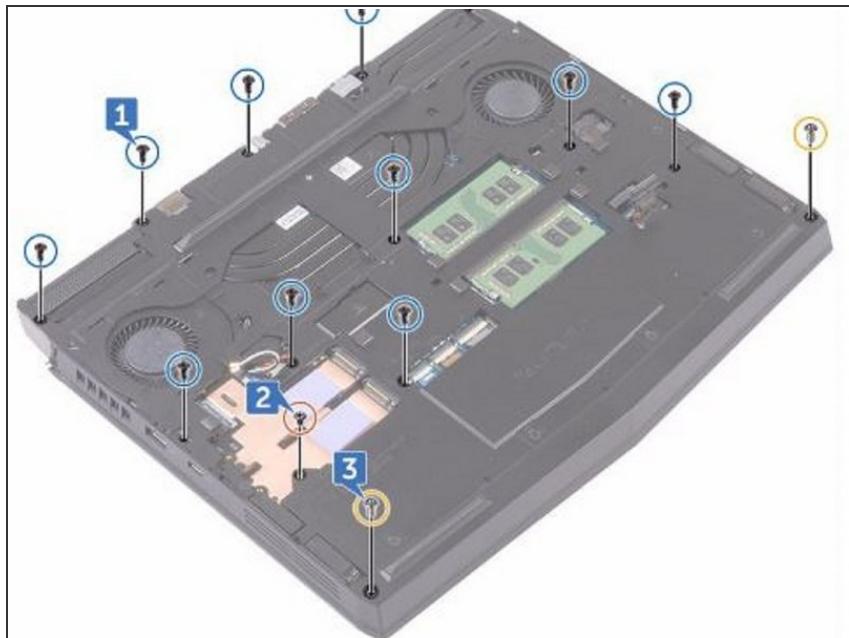
- Remove the two (M2.5x6L) screws that secure the computer base to the palm-rest assembly.

Step 33 — Lift the Computer Base



- Lift the computer base from the palm-rest assembly.

Step 34 — Align the Screw Holes



- Align the screw holes on the **NEW** computer base with the screw holes on the palm-rest assembly.

Step 35 — Replace the Screws



- Replace the two (M2.5x6L) screws that secure the computer base to the palm-rest assembly.

Step 36 — Replace the Screw



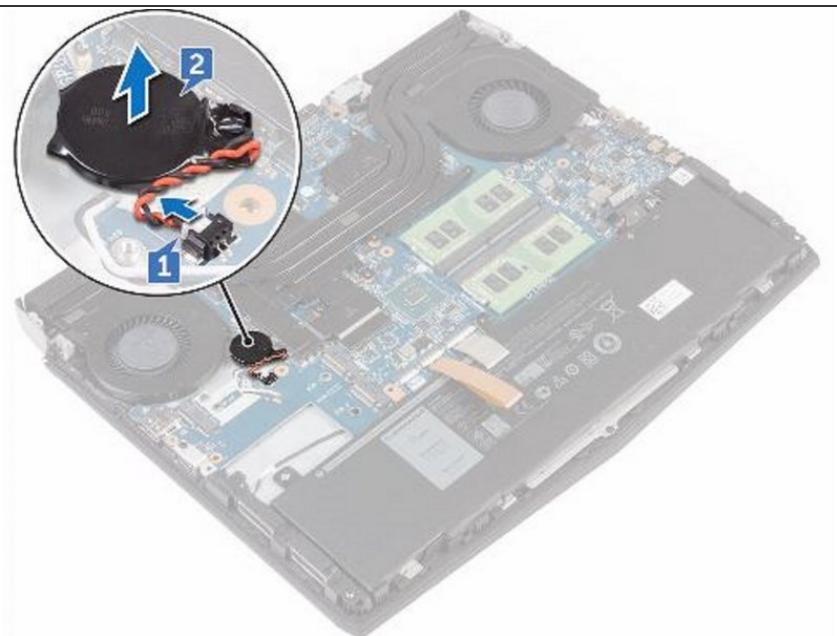
- Replace the (M2x3) screw that secures the computer base to the palm-rest assembly.

Step 37 — Replace the Eleven Screws



- Replace the eleven (M2.5x6L) screws that secure the computer base to the palm-rest assembly.

Step 38 — Disconnecting the Coin-Cell Battery

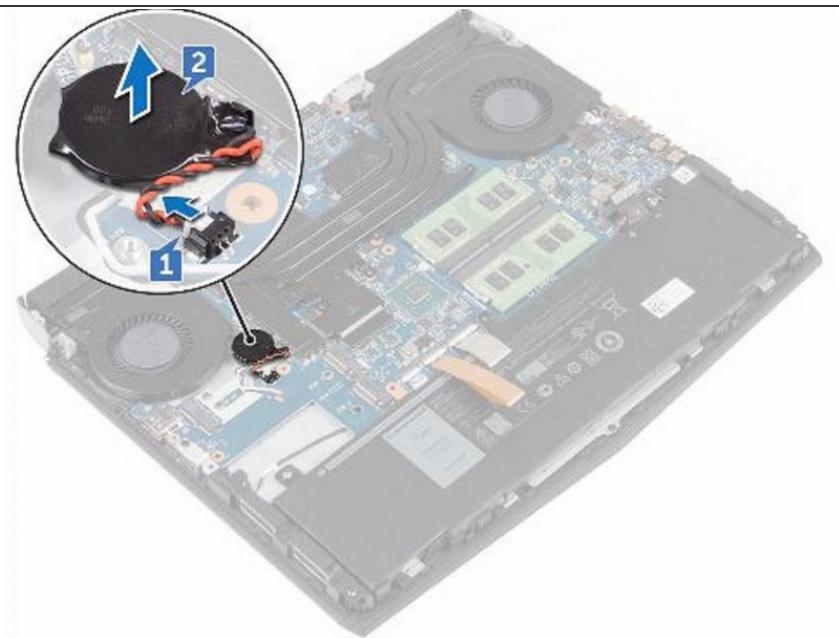


⚠ **WARNING:** Before working inside your computer, read the safety information that shipped with your computer and follow the steps in [Before Working Inside Your Computer](#). After working inside your computer, follow the instructions in [After Working Inside Your Computer](#).

⚠ **CAUTION:** Removing the coin-cell battery resets the BIOS setup program's settings to default. It is recommended that you note the BIOS setup program's settings before removing the coin-cell battery.

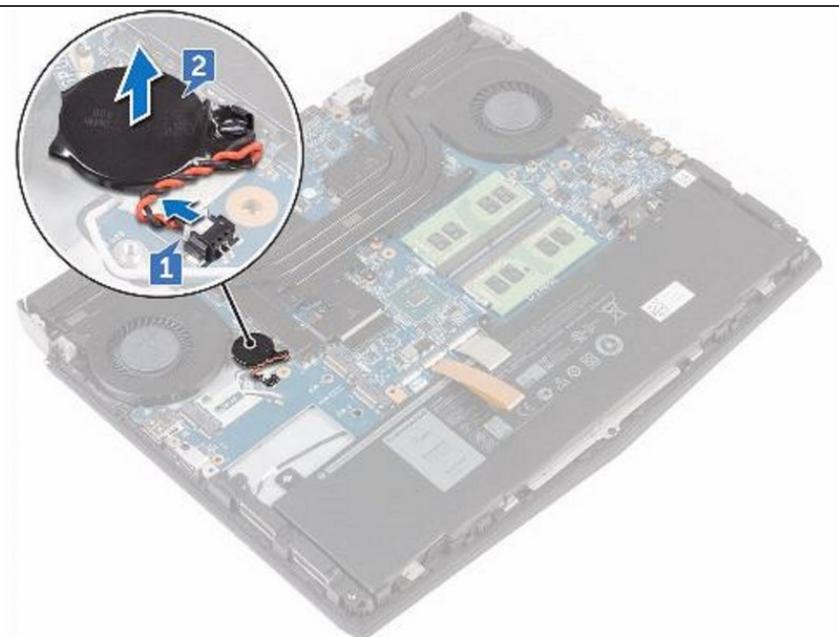
- Disconnect the coin-cell battery cable from the system board.

Step 39 — Peeling the Coin-Cell Battery



- Gently peel off the coin-cell battery along with its cable off the palm-rest assembly.

Step 40 — Adhere the Coin-Cell Battery



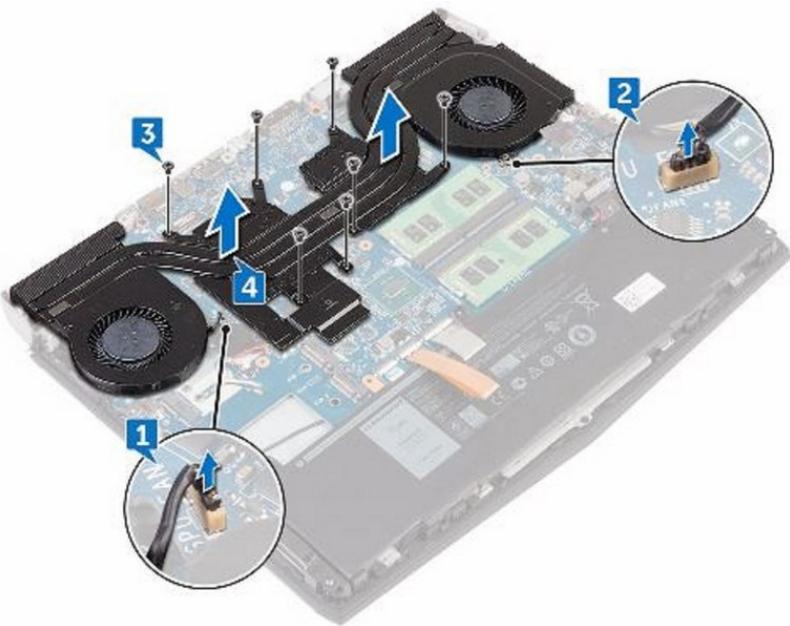
- Adhere the **NEW** coin-cell battery to the palm-rest assembly.

Step 41 — Connect the Coin-Cell Battery



- Connect the coin-cell battery cable to the system board.

Step 42 — Disconnect the Left-Fan Cable



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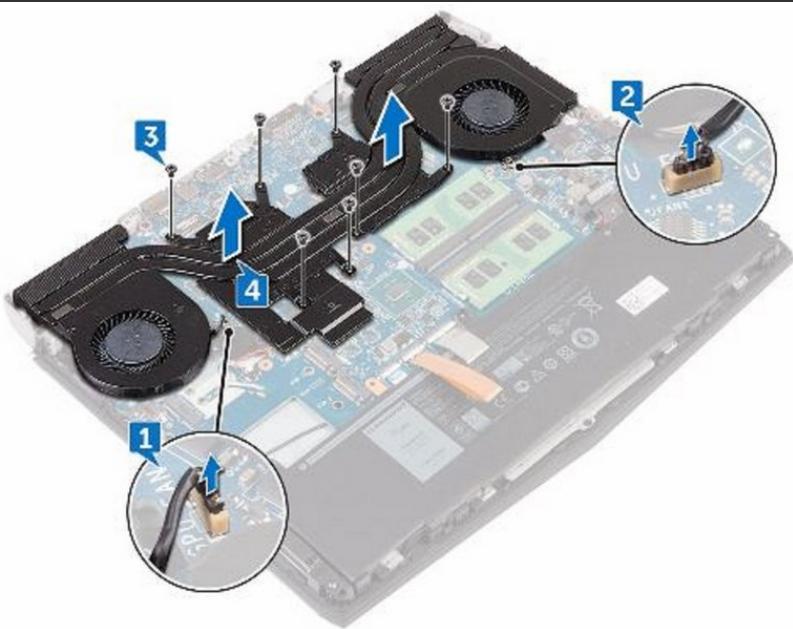
computer, follow the instructions in [After Working Inside Your Computer](#).

 **WARNING:** The heat sink may become hot during normal operation. Allow sufficient time for the heat sink to cool before you touch it.

 **CAUTION:** For maximum cooling of the processor, do not touch the heat transfer areas on the heat sink. The oils in your skin can reduce the heat transfer capability of the thermal grease.

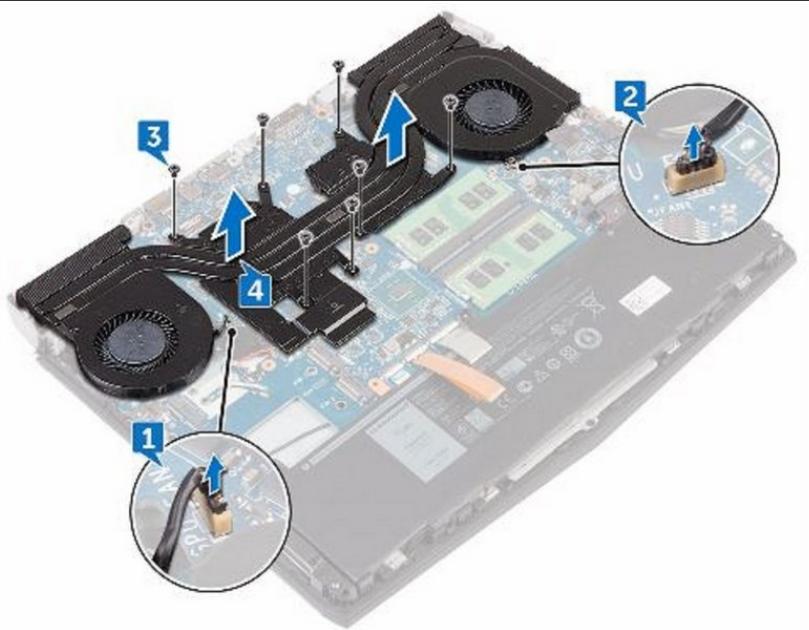
- Disconnect the left-fan cable from the system board.

Step 43 — Disconnecting the Right-Fan Cable



- Disconnect the right-fan cable from the system board.

Step 44 — Remove the Seven Screws



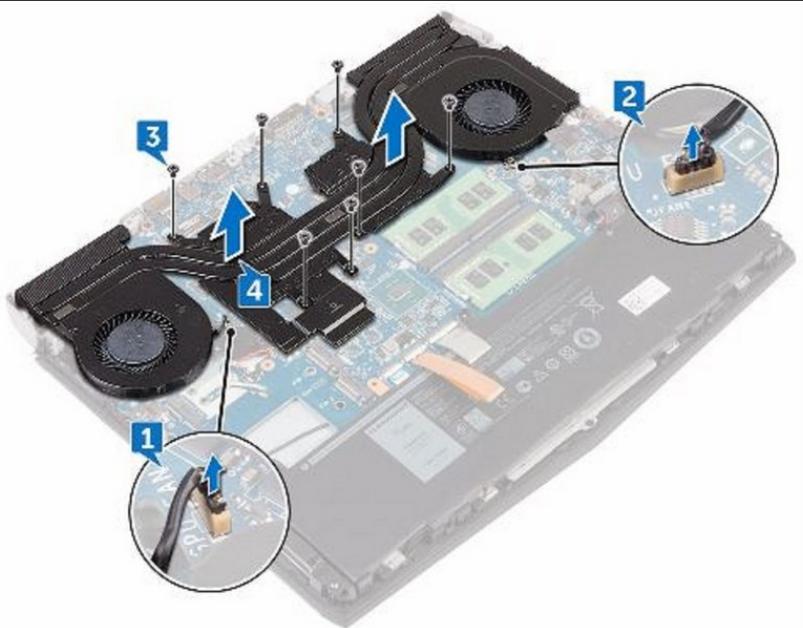
- In sequential order (as indicated on the heat-sink assembly), remove the seven screws (M2x3) that secure the heat-sink assembly to the system board.

Step 45 — Lifting the Heat-Sink Assembly



- Lift the heat-sink assembly off the system board.

Step 46 — Align the Screw Holes



! CAUTION: Incorrect alignment of the heat sink can damage the system board and processor.

i NOTE: The original thermal grease can be reused if the original system board and fan are reinstalled together. If either the system board or the fan is replaced, use the thermal pad provided in the kit to ensure that thermal conductivity is achieved.

- Align the screw holes on the **NEW** heat-sink assembly with the screw holes on the system board.

Step 47 — Replace the Screws



- In sequential order (indicated on the heat-sink assembly), replace the seven screws (M2x3) that secure the heat-sink assembly to the system board.

Step 48 — Connecting the Right-Fan Cable



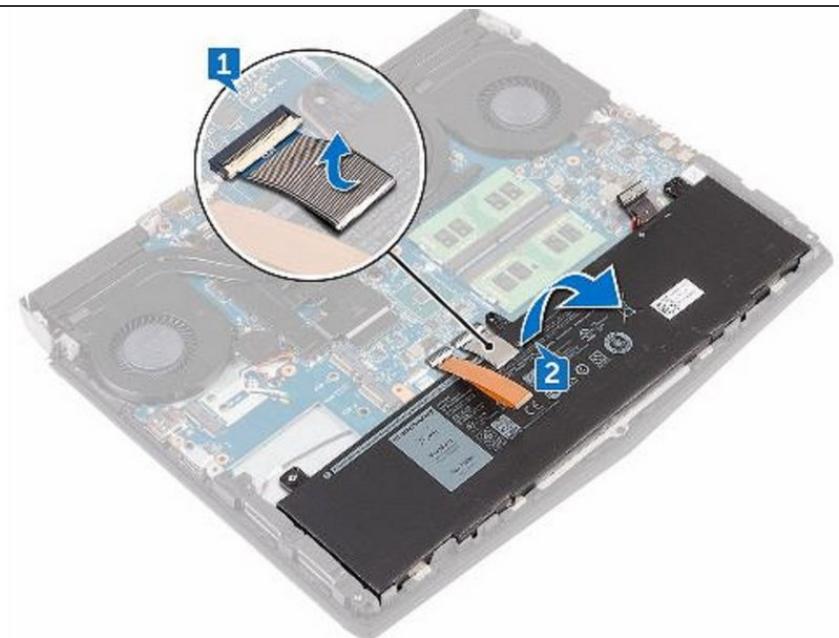
- Connect the right-fan cable to the respective connector on the system board.

Step 49 — Connecting the Left-Fan Cable



- Connect the left-fan cable to the respective connector on the system board.

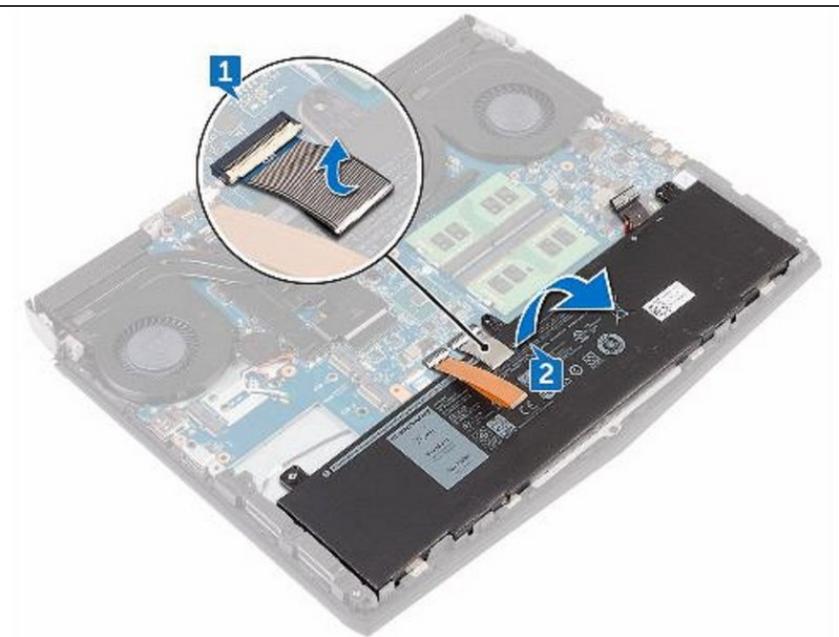
Step 50 — Peeling the Keyboard Connector



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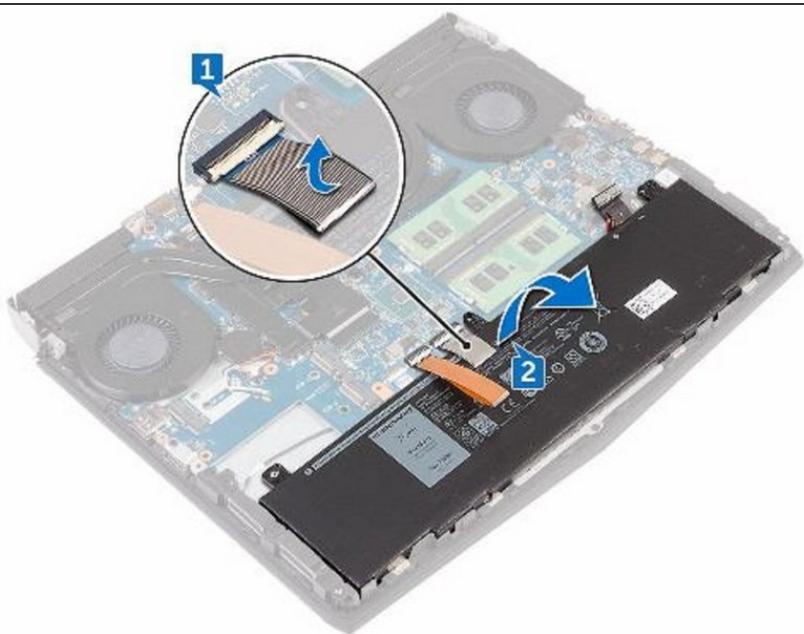
- Peel off the keyboard connector from the battery.

Step 51 — Lifting the Battery



- Lift the battery off the palm-rest assembly.

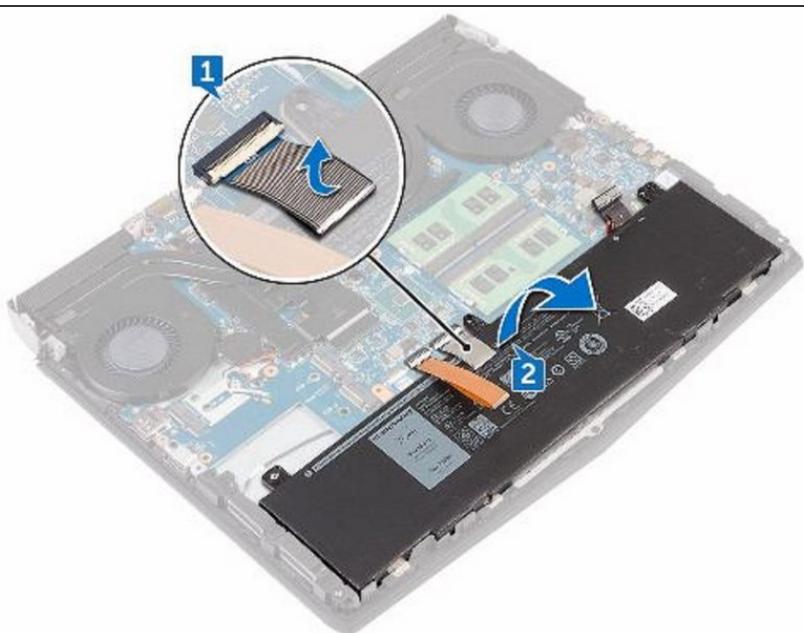
Step 52 — Placing the New Battery



⚠ CAUTION: Ensure the keyboard and keyboard-backlit cables are not under the battery.

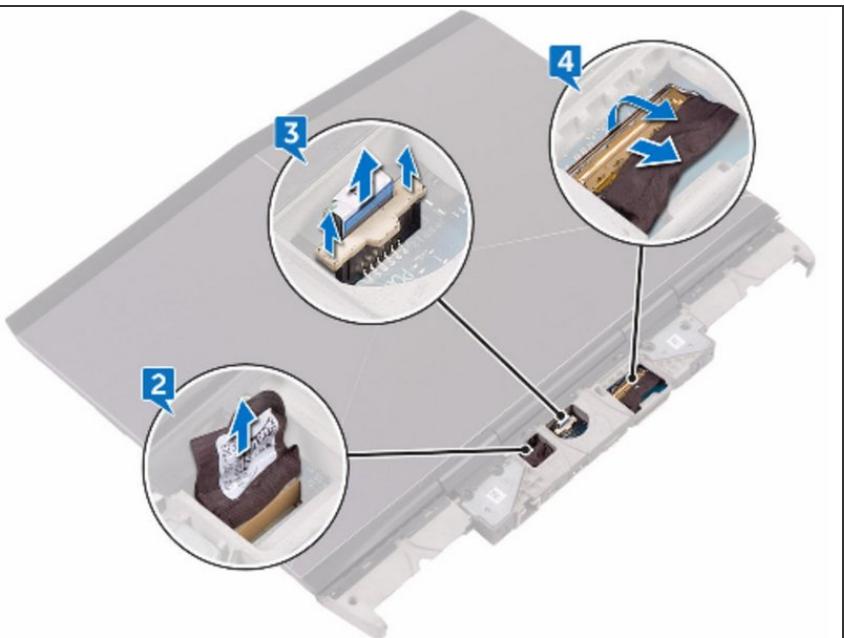
- Using the alignment post, place the **NEW** battery on the palm-rest assembly.

Step 53 — Adhering the Keyboard



- Adhere the keyboard connector that secures the battery to the palm-rest assembly.

Step 54 — Turn the Computer Over



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ⓘ **NOTE:** Your computer's Service Tag is stored in the system board. You must enter the Service Tag in the BIOS setup program after you replace the system board.

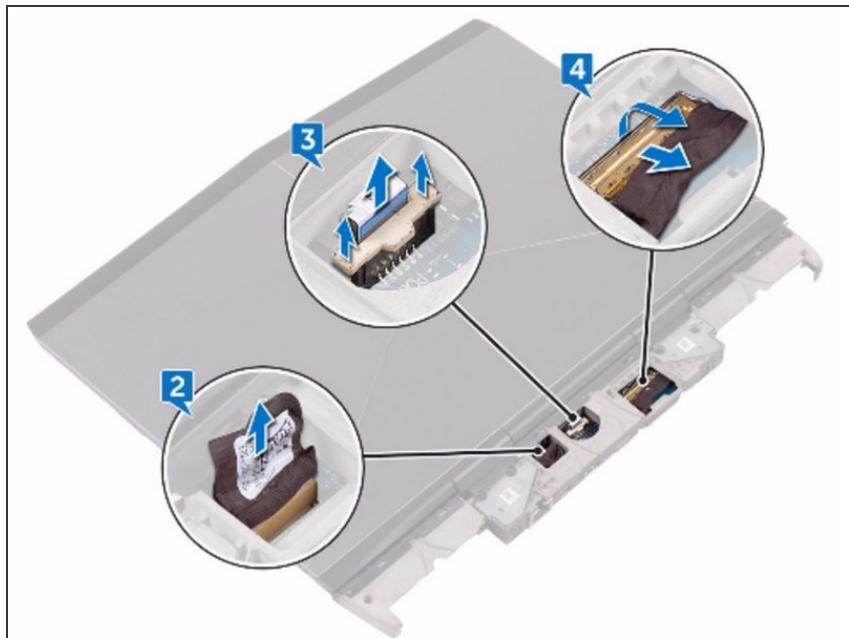
ⓘ **NOTE:** Replacing the system board removes any changes you have made to the BIOS using the BIOS setup program. You must make the appropriate changes again after you replace the system board.

ⓘ **NOTE:** Before disconnecting the cables from the system board, note the location of the connectors so that you can reconnect the cables correctly after you replace the system board.

⚠ **CAUTION:** Place the computer on a clean, flat surface.

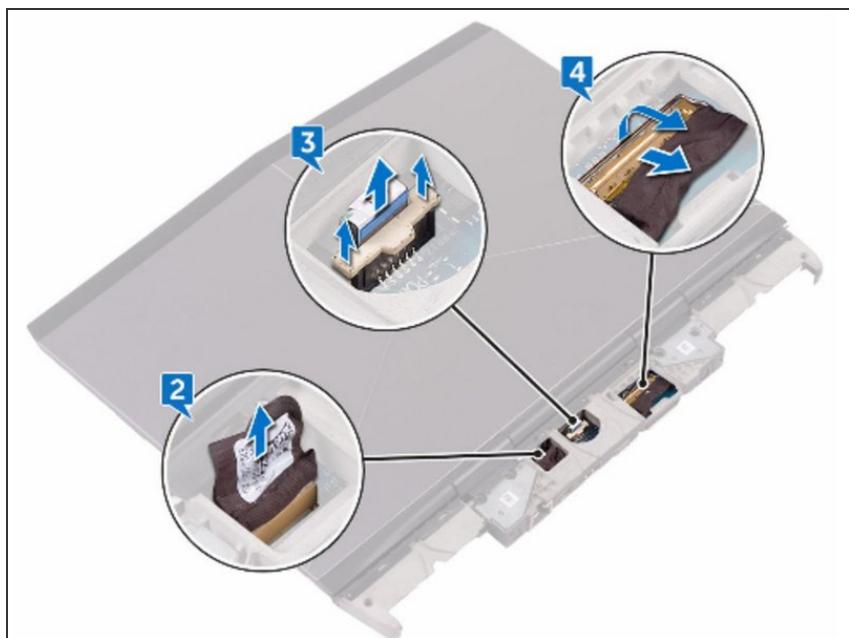
- Turn the computer over.

Step 55 — Disconnecting the Logo-Board Cable



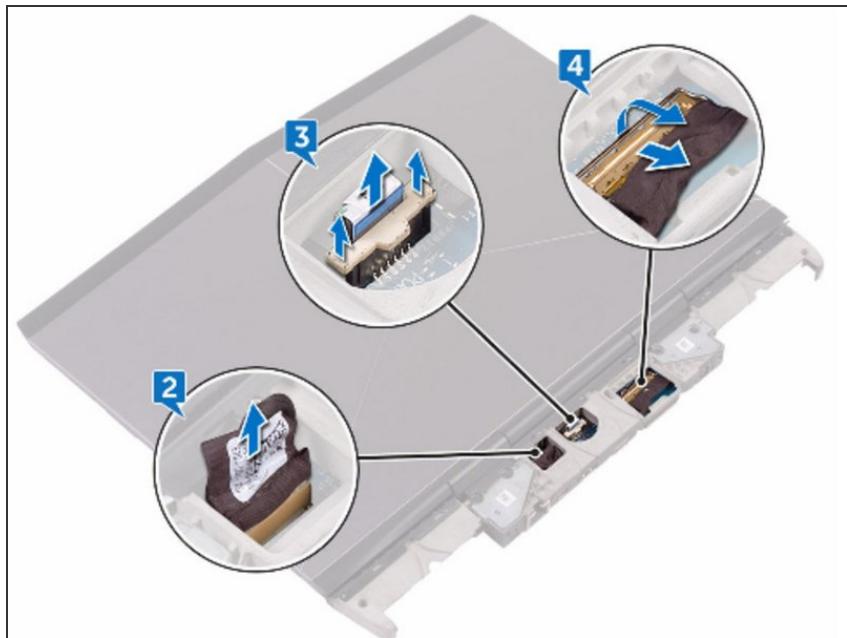
- Disconnect the logo-board cable from the system board.

Step 56 — Disconnecting the Power-Button Board Cable



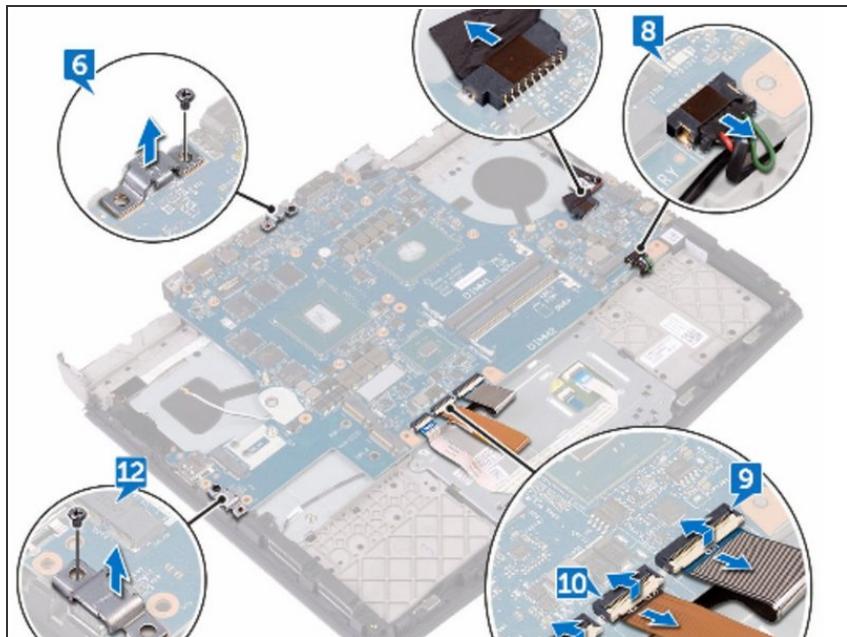
- Using the pull-tab, disconnect the power-button board cable from the system board.

Step 57 — Open the Latch



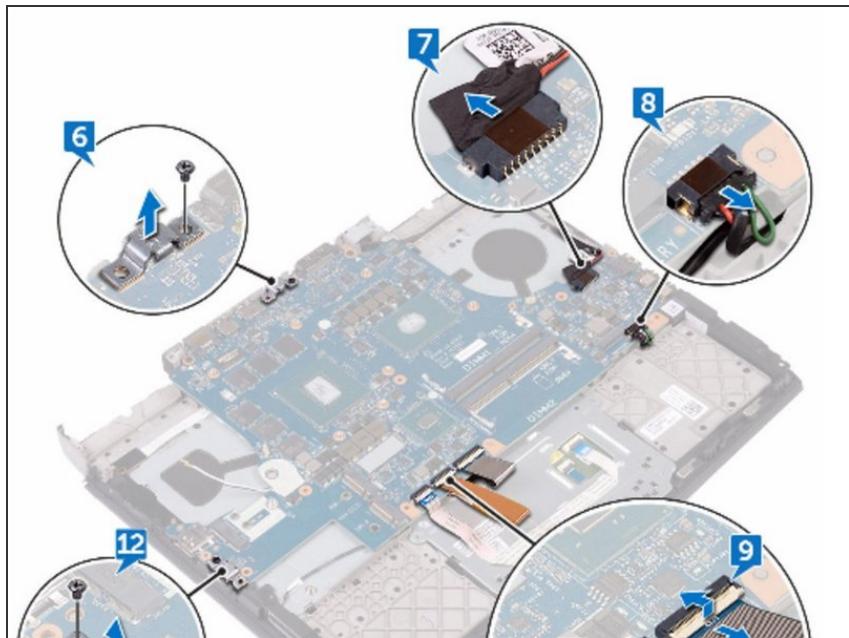
- Open the latch and disconnect the display cable from the system board.

Step 58 — Turn the Computer Over



- Turn the computer over.

Step 59 — Remove the Screw



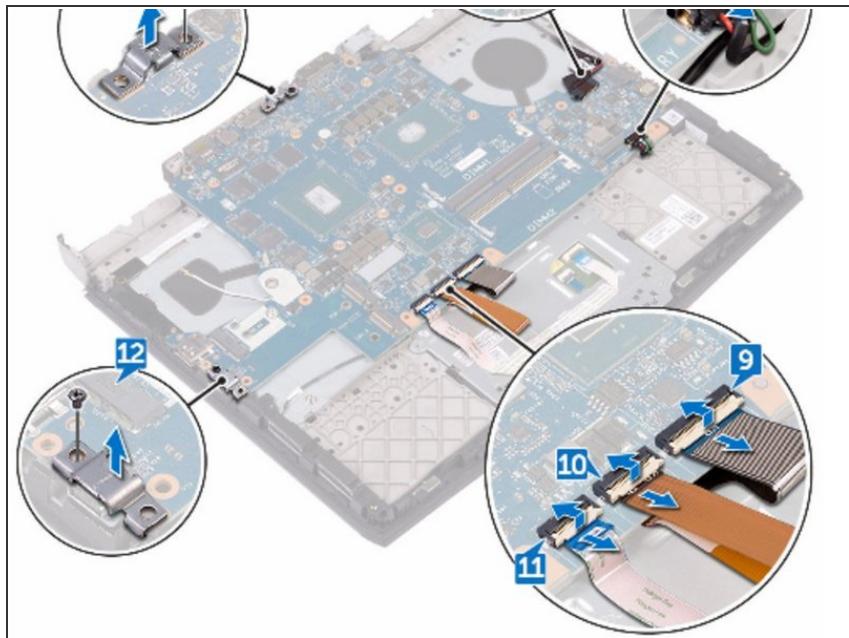
- Remove the screw (M2.5x6L) that secures the USB Type-C port bracket to the system board and lift the USB Type-C port bracket off the system board.

Step 60 — Disconnecting the Power-Adapter Port



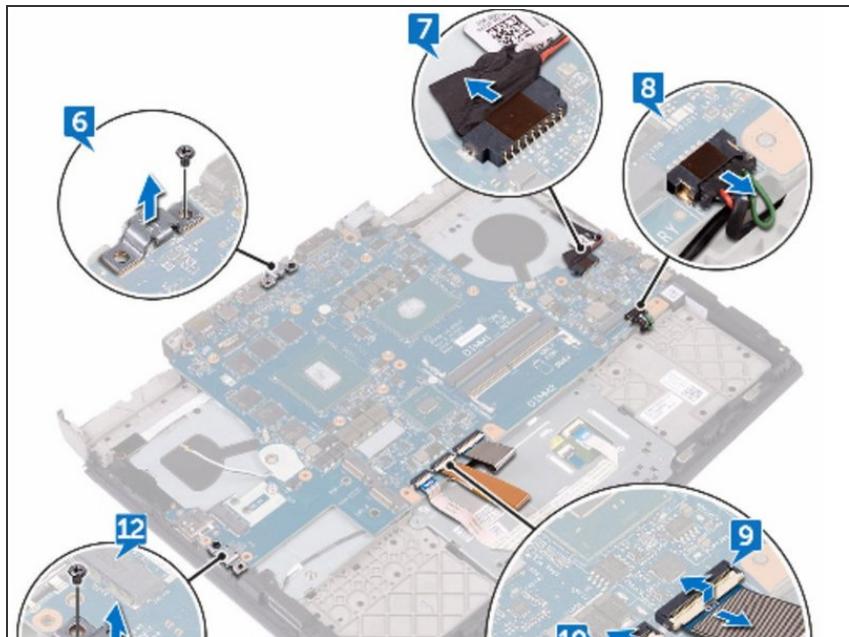
- Disconnect the power-adapter port cable from the system board.

Step 61 — Disconnect the Speaker Cable



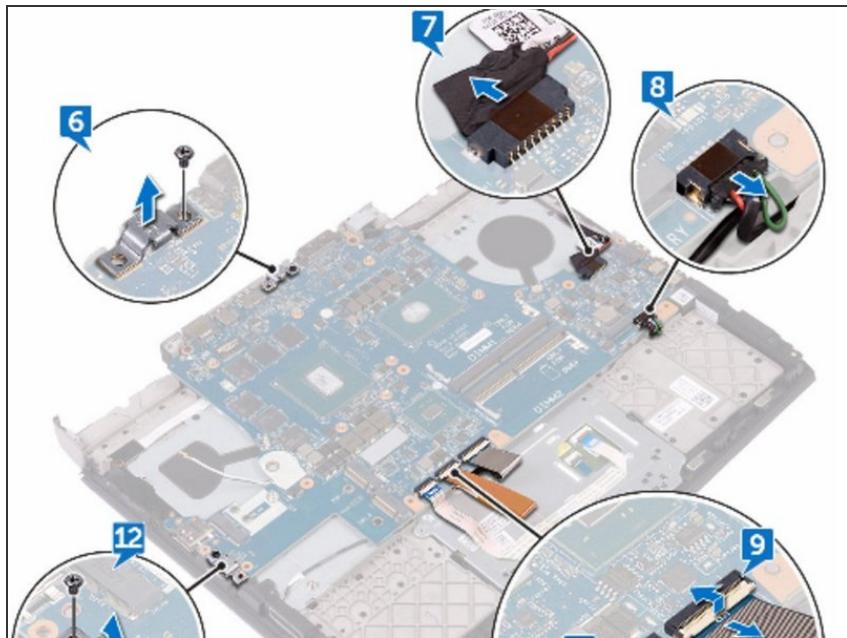
- Disconnect the speaker cable from the system board.

Step 62 — Open the Latch



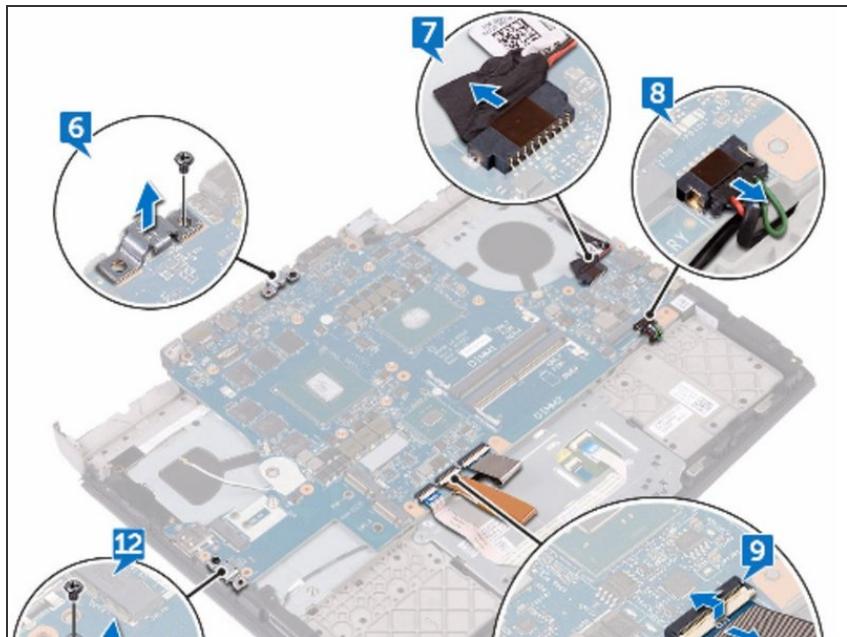
- Open the latch and disconnect the keyboard cable from the system board.

Step 63 — Open the Latch



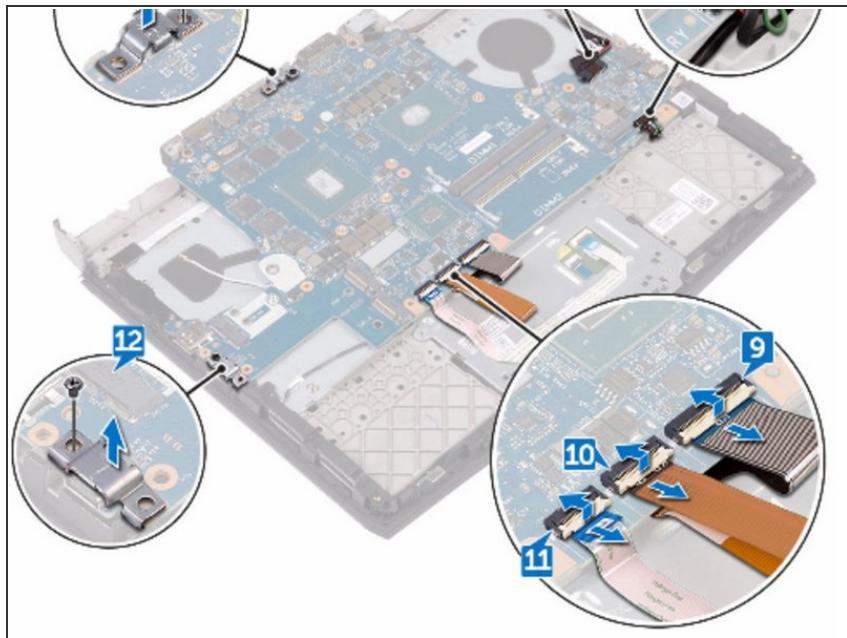
- Open the latch and disconnect the keyboard-backlight cable from the system board.

Step 64 — Disconnect the Touch-Pad Cable



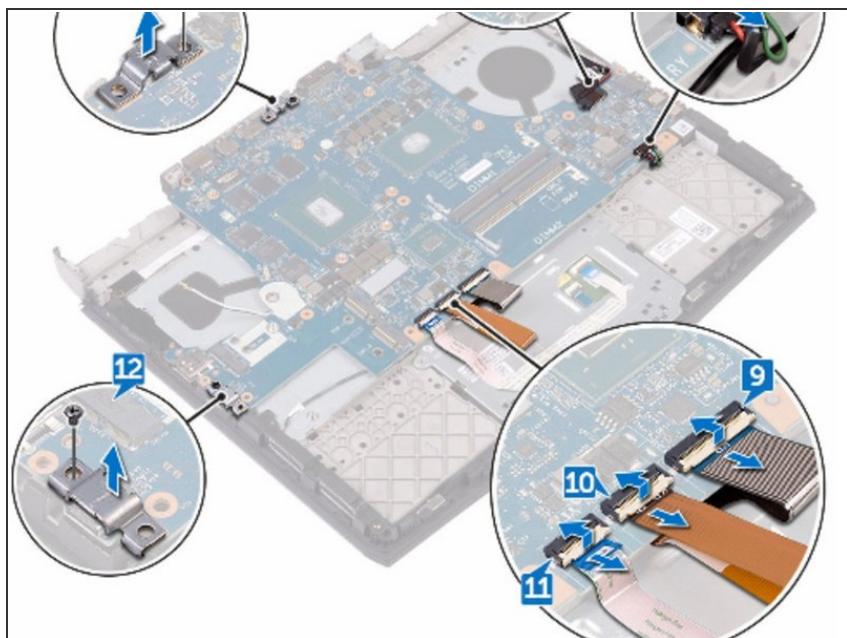
- Open the latch and disconnect the touch-pad cable from the system board.

Step 65 — Remove the Screw



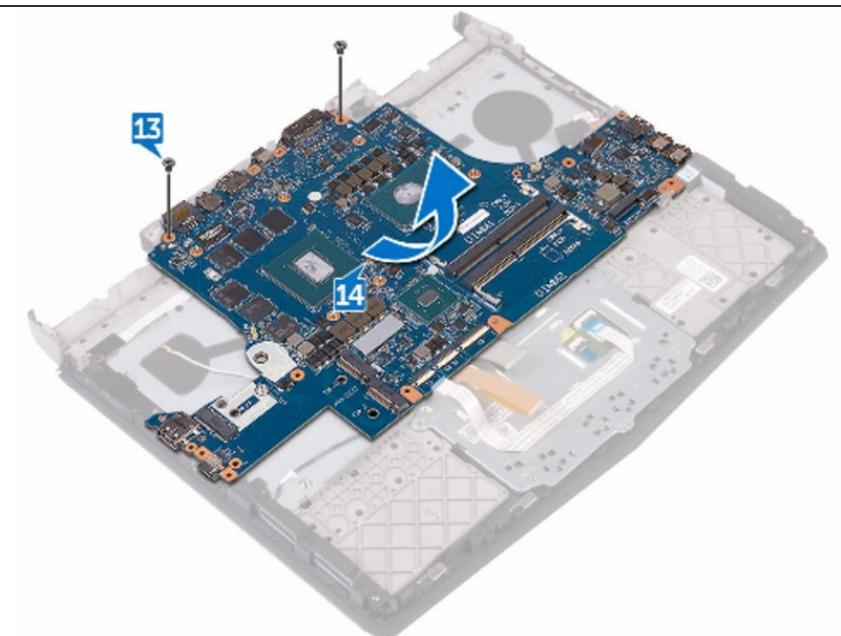
- Remove the screw (M2.5x6L) that secures the USB Type-C port bracket to the system board and lift the USB Type-C port bracket off the system board.

Step 66 — Remove the two Screws



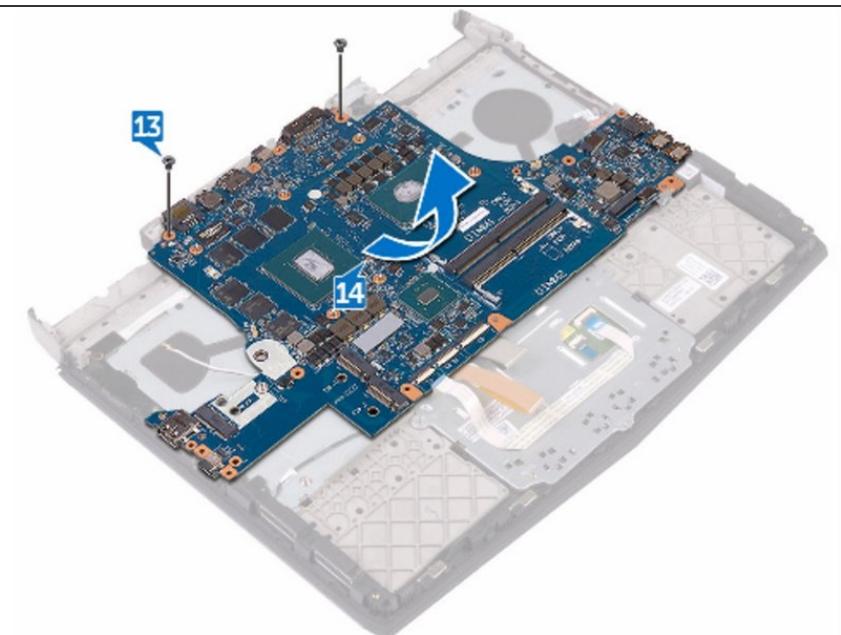
- Remove the two screws (M2.5x6L) that secure the system board to the palm-rest assembly.

Step 67 — Lift the System Board



- Lift the system board off the palm-rest assembly.

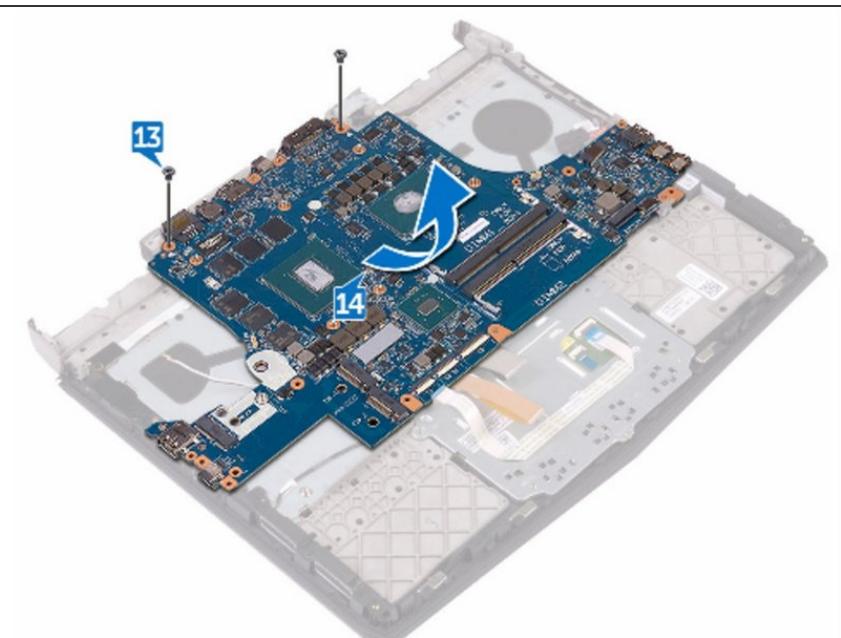
Step 68 — Align the Screw Holes



 CAUTION: Ensure that no cables are under the system board.

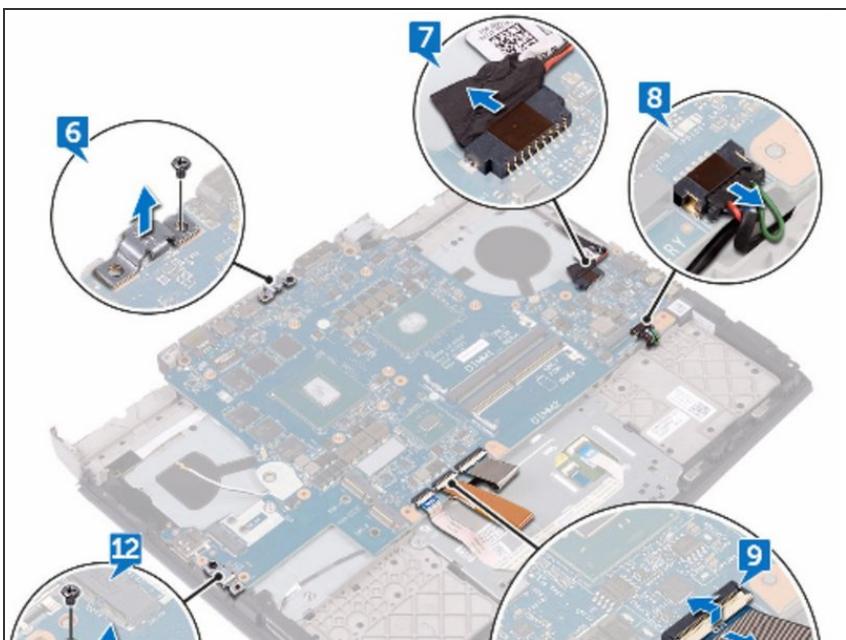
- Align the screw holes on the **NEW** system board with the screw holes on the palm- rest assembly.

Step 69 — Replace the Two Screws



- Replace the two screws (M2.5x6L) that secure the system-board to the palm- rest assembly.

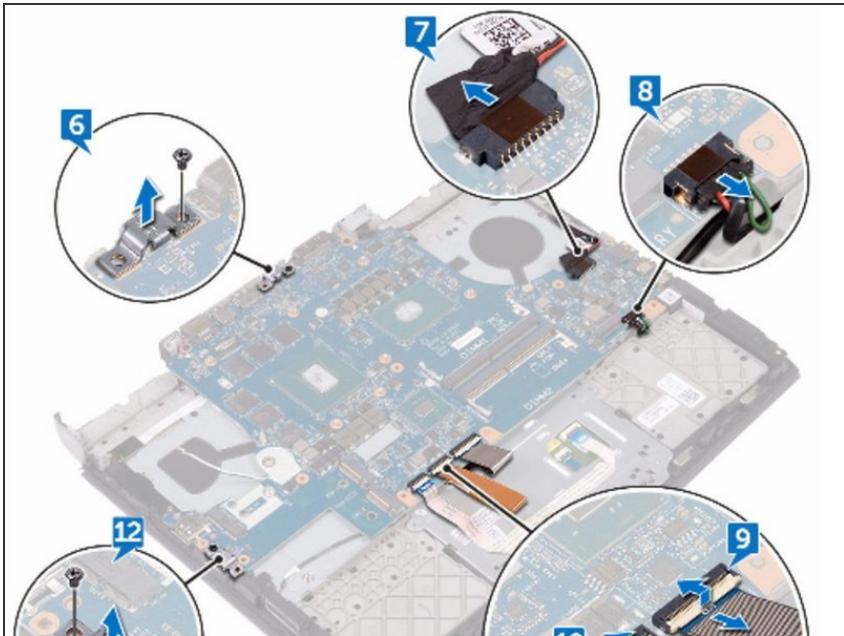
Step 70 — Align the Screw Hole



- Align the screw hole on the USB Type-C port bracket with the screw hole on the system board on the

back and right side of your computer.

Step 71 — Replace the Screw



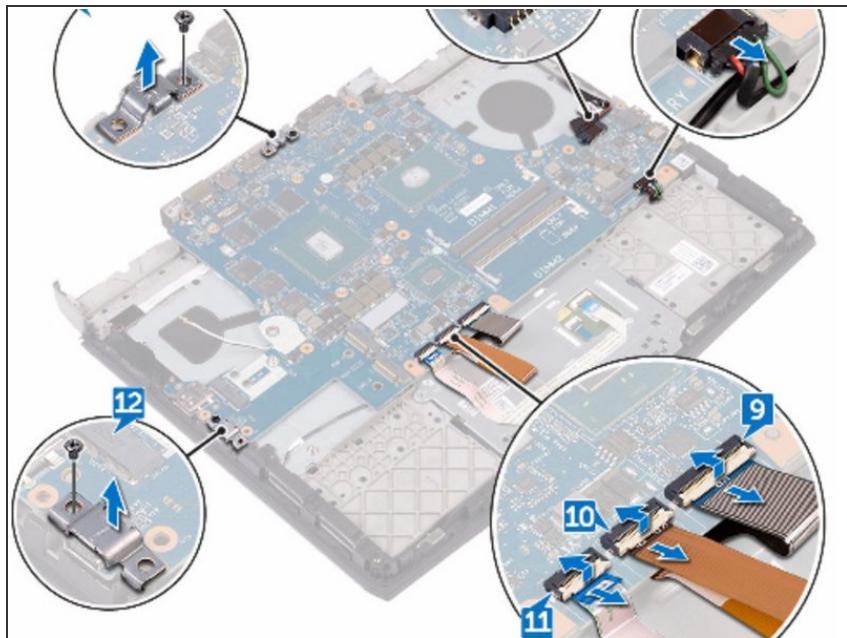
- Replace the screw (M2.5x6L) that secures the USB Type-C port bracket to the system board on the back and right side of your computer.

Step 72 — Slide the Touch-Pad Cable



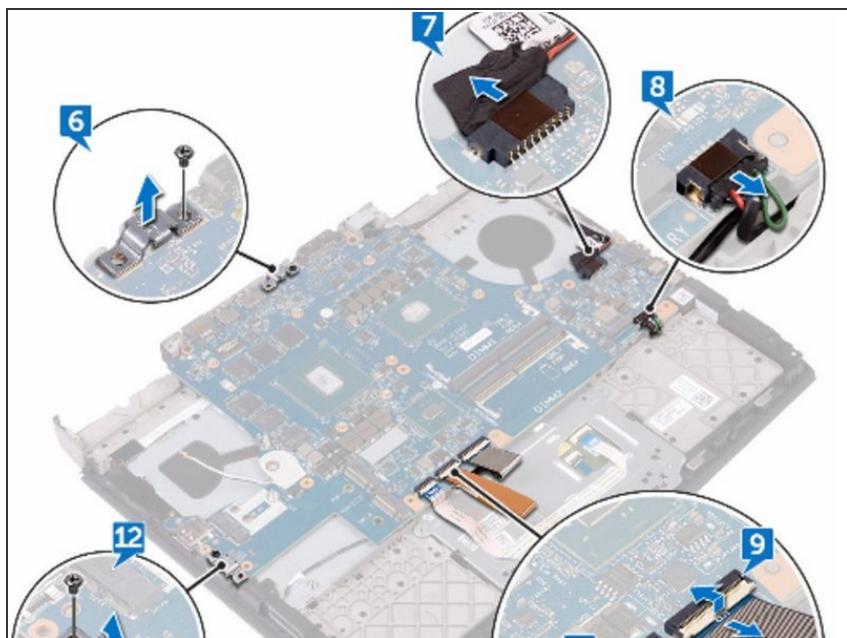
- Slide the touch-pad cable into the connector on the system board and close the latch to secure the cable.

Step 73 — Sliding the Keyboard-Backlight



- Slide the keyboard-backlight cable into the connector on the system board and close the latch to secure the cable.

Step 74 — Slide the Keyboard Cable



- Slide the keyboard cable into the connector on the system board and close the latch to secure the cable.

Step 75 — Connect the Speaker Cable



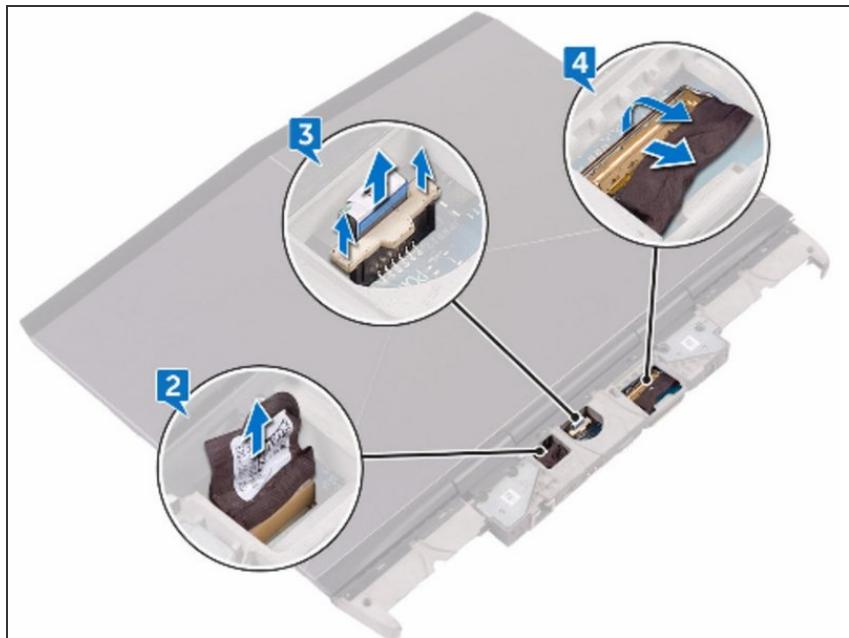
- Connect the speaker cable to the system board.

Step 76 — Connect the Power-Adapter



- Connect the power-adapter port cable to the system board.

Step 77 — Turn the Computer Over



- Turn the computer over.

Step 78 — Slide the Display Cable



- Slide the display cable into the connector on the system board and close the latch to secure the cable.

Step 79 — Connect the Power-Button Board Cable



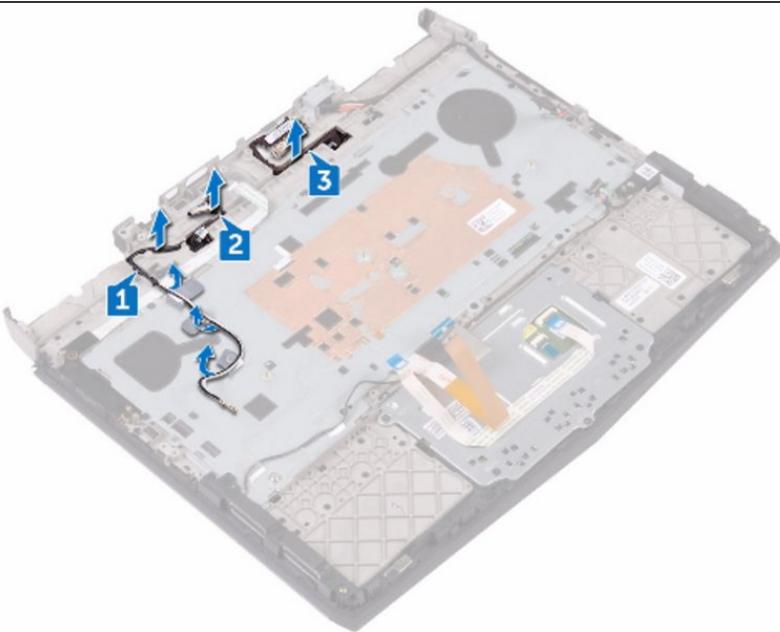
- Connect the power-button board cable to the system board.

Step 80 — Connect the Logo-Board Cable



- Connect the logo-board cable to the system board.

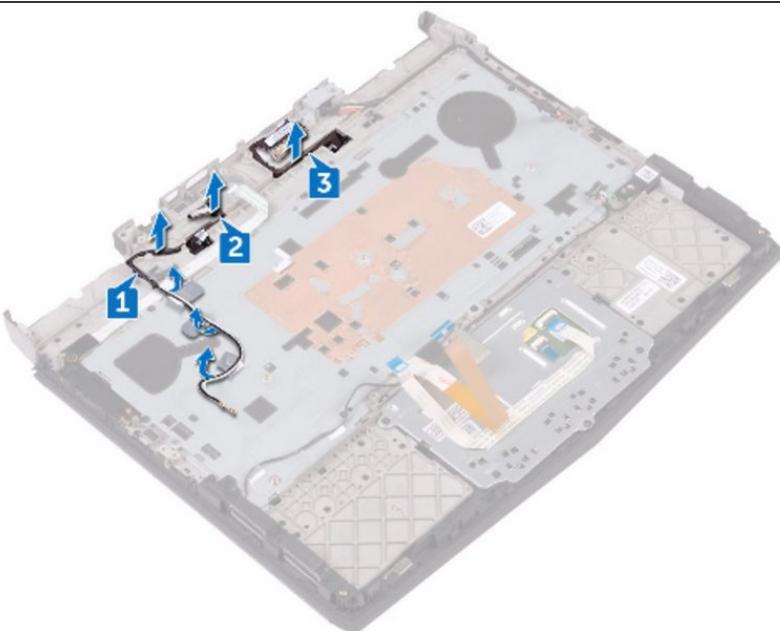
Step 81 — Remove the Antenna Cables



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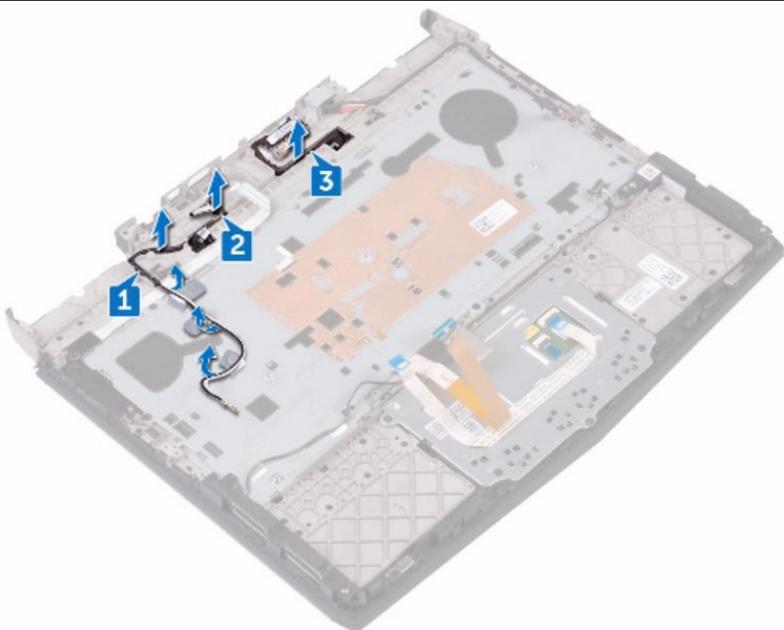
- Remove the antenna cables from the routing guides on the palm-rest assembly.

Step 82 — Remove the Logo-Board Cable



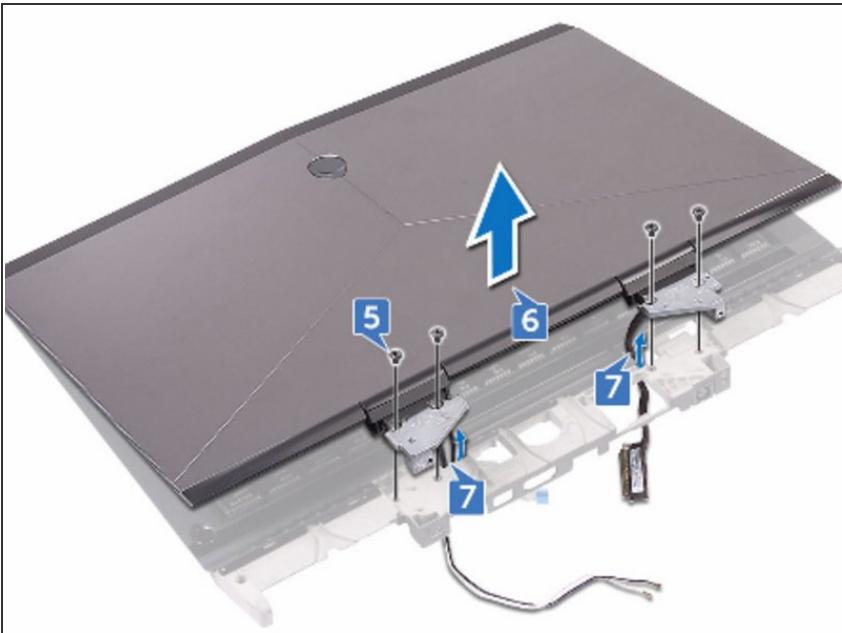
- Remove the logo-board cable from the routing guides on the palm-rest assembly.

Step 83 — Remove the Display Cable



- Remove the display cable from the routing guides on the palm-rest assembly.

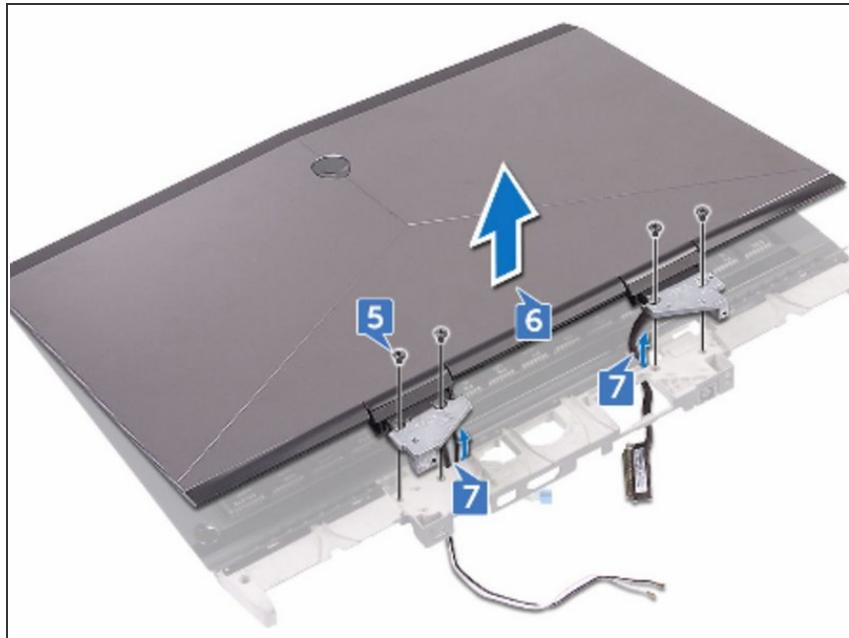
Step 84 — Turn the Computer Over



 CAUTION: Place the computer on a clean, flat surface.

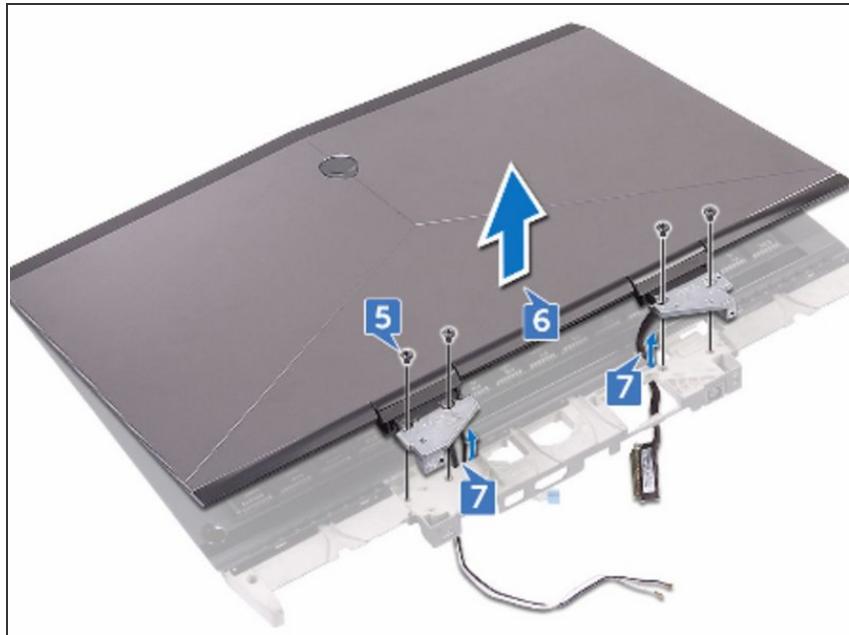
- Turn the computer over.

Step 85 — Remove the Four Screws



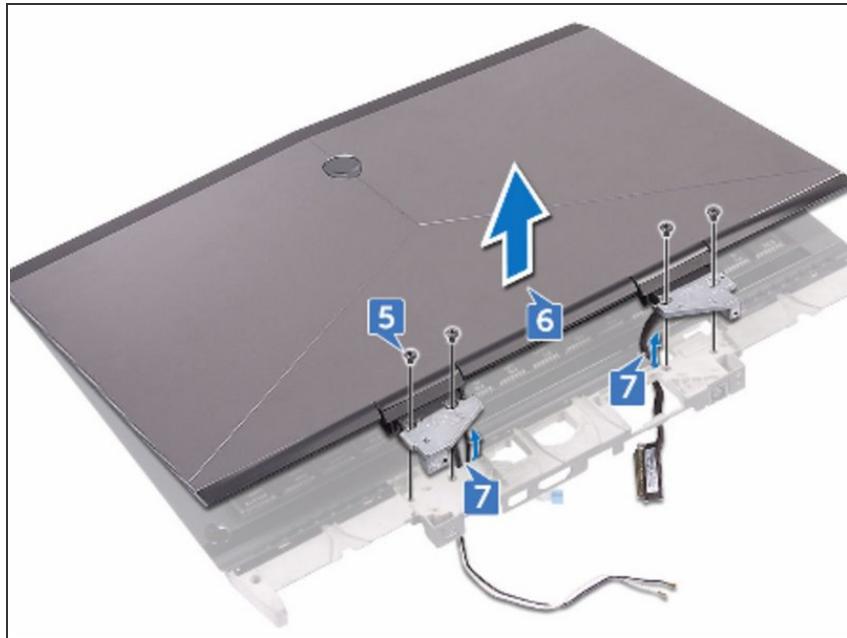
- Remove the four screws (M2.5x6L) that secure the display assembly to the palm-rest assembly.

Step 86 — Lifting the Display Assembly



- Lift the display assembly off the palm-rest assembly.

Step 87 — Remove the Cables



- Remove the cables from the routing holes on the palm-rest assembly.

Step 88 — Placing the Display



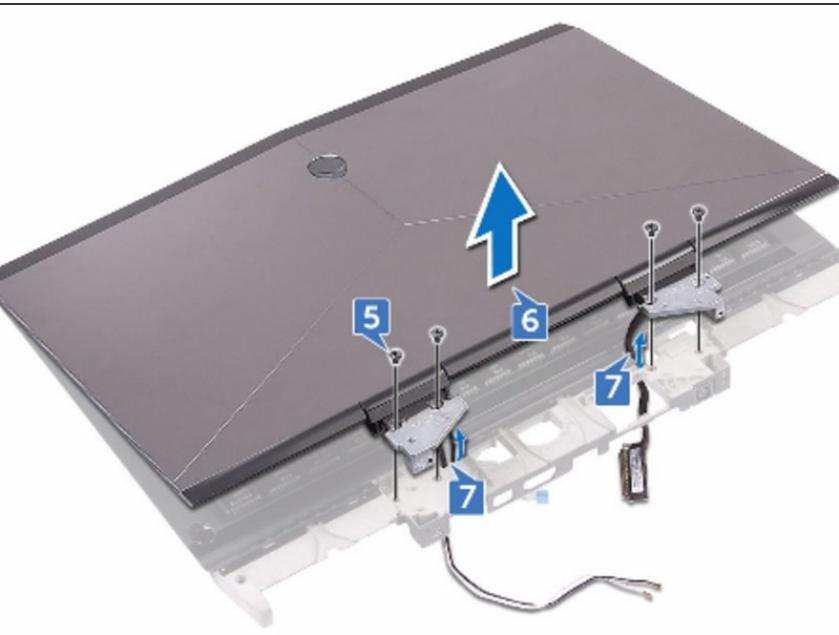
- Place the display assembly on a clean, flat surface.

Step 89 — Route the Cables



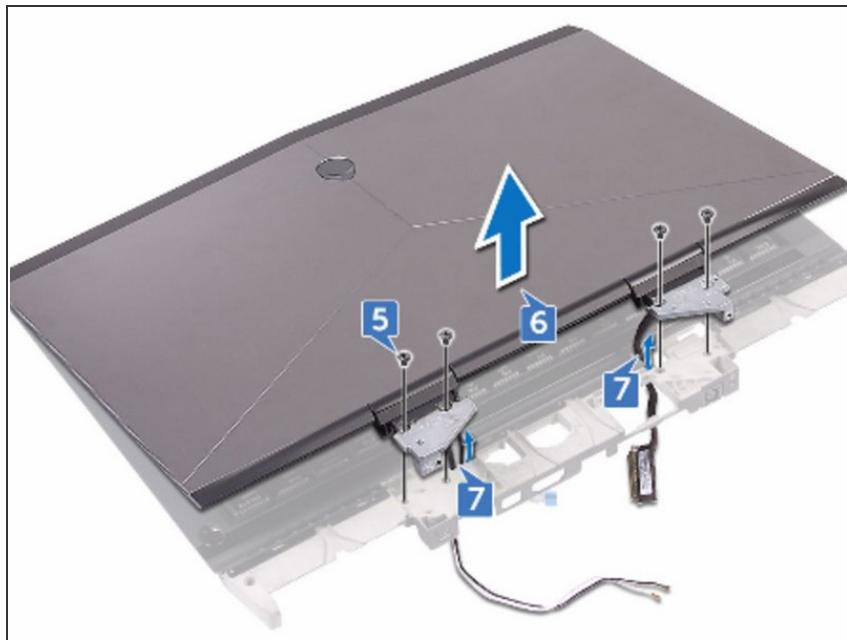
- Route the cables through the routing holes on the palm-rest assembly.

Step 90 — Align the Screw Holes



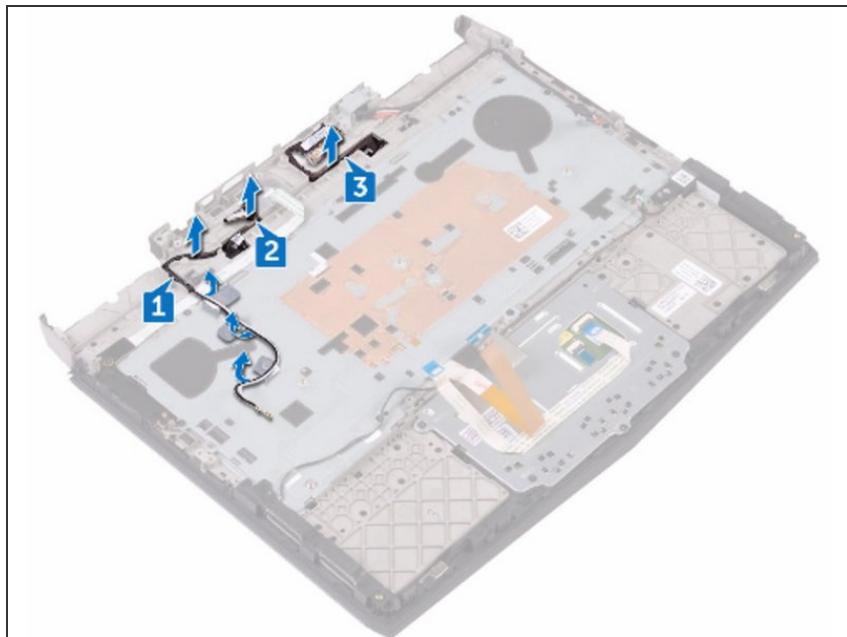
- Align the screw holes on the display hinges with the screw holes on the palm-rest assembly.

Step 91 — Replace the Four Screws



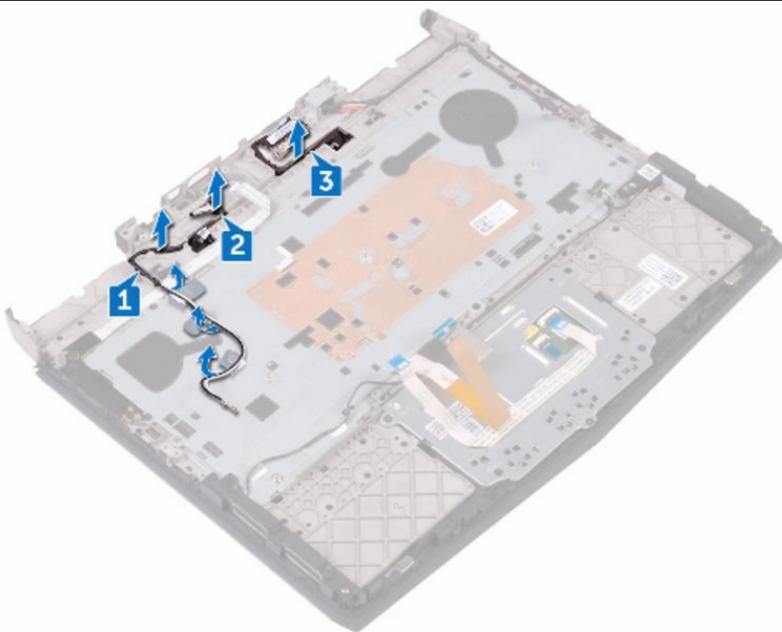
- Replace the four screws (M2.5x6L) that secure the display assembly to the palm-rest assembly.

Step 92 — Turn the Computer Over



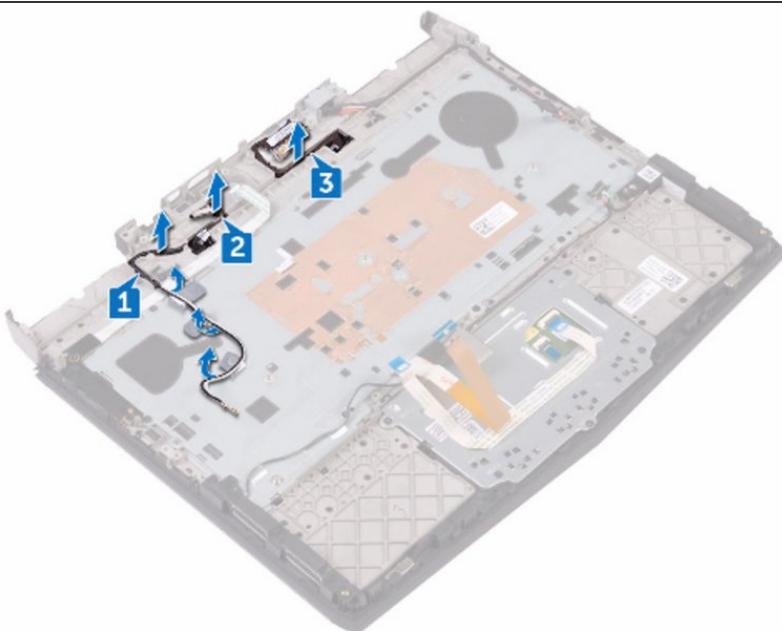
- Turn the computer over.

Step 93 — Route the Logo-Board Cable



- Route the logo-board cable through the routing guides on the palm-rest assembly.

Step 94 — Route the Antenna Cables



- Route the antenna cables through the routing guides on the palm-rest assembly.

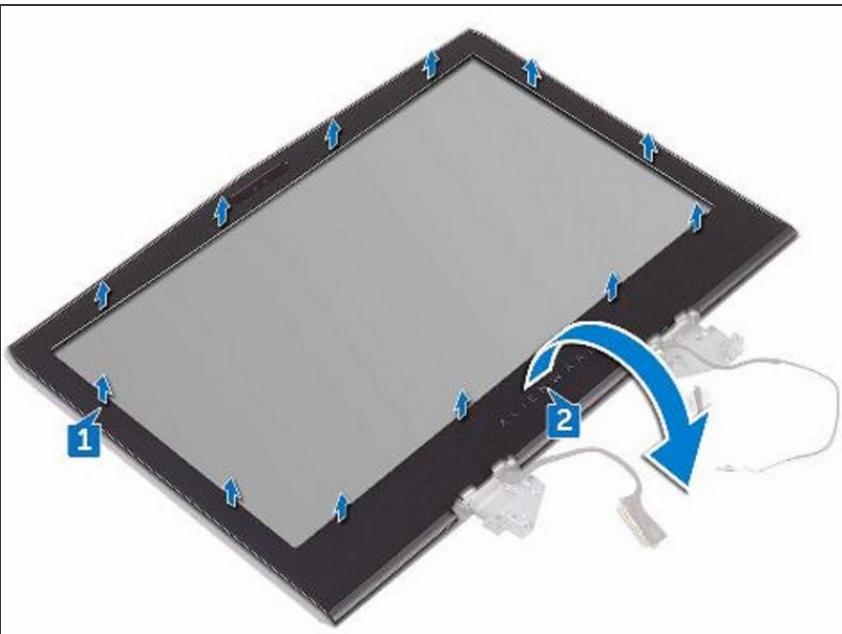
Step 95 — Prying the Inside Edges



⚠ **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](#).

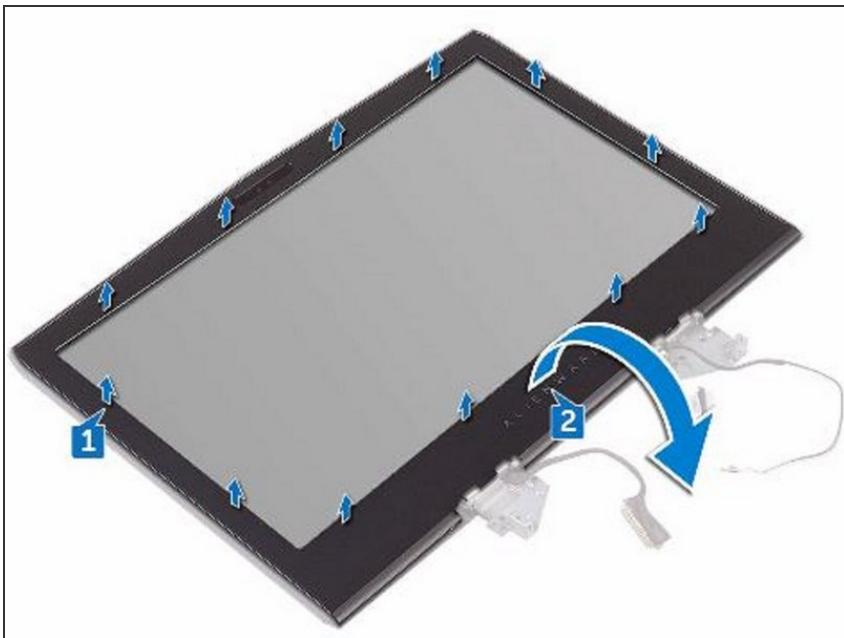
- Using your fingertips, carefully pry up the inside edges of the display bezel.

Step 96 — Lift the Display Bezel



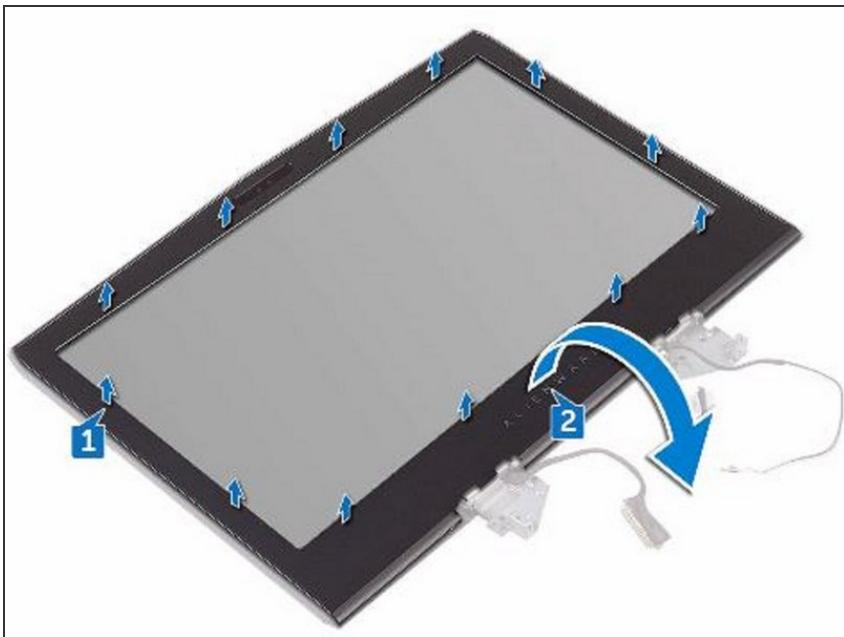
- Carefully lift the display bezel and turn it over.

Step 97 — Disconnect the Alien Head Logo



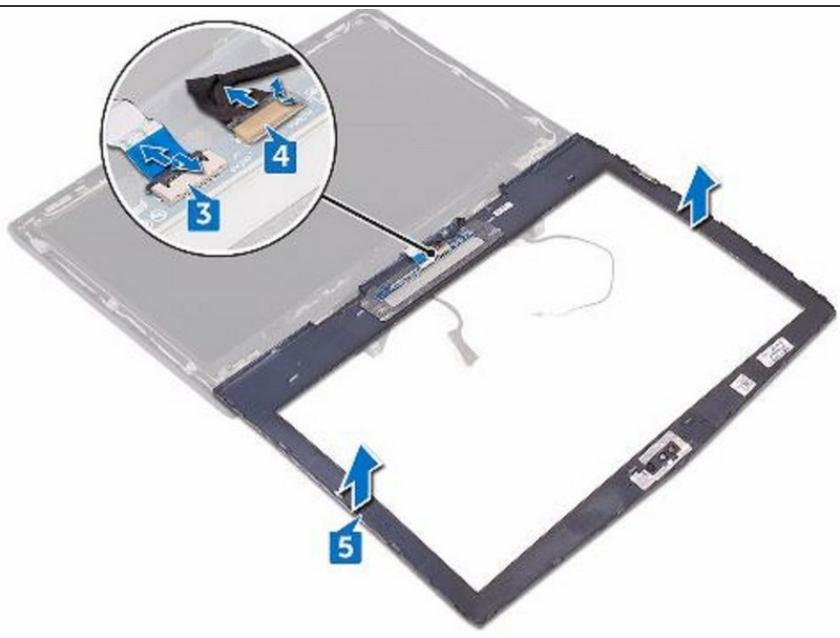
- Open the latch and disconnect the alien head logo-board cable from the logo board.

Step 98 — Peeling the Tape



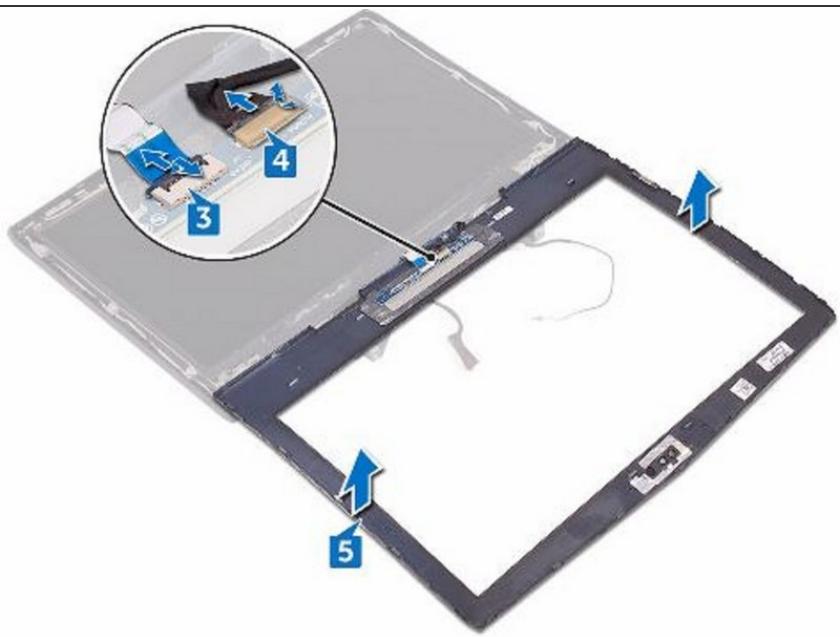
- Peel off the tape that secures the logo-board cable to the logo board and disconnect the logo-board cable from the logo board.

Step 99 — Lift the Display Bezel



- Lift the display bezel off the display assembly.

Step 100 — Place the Display Assembly



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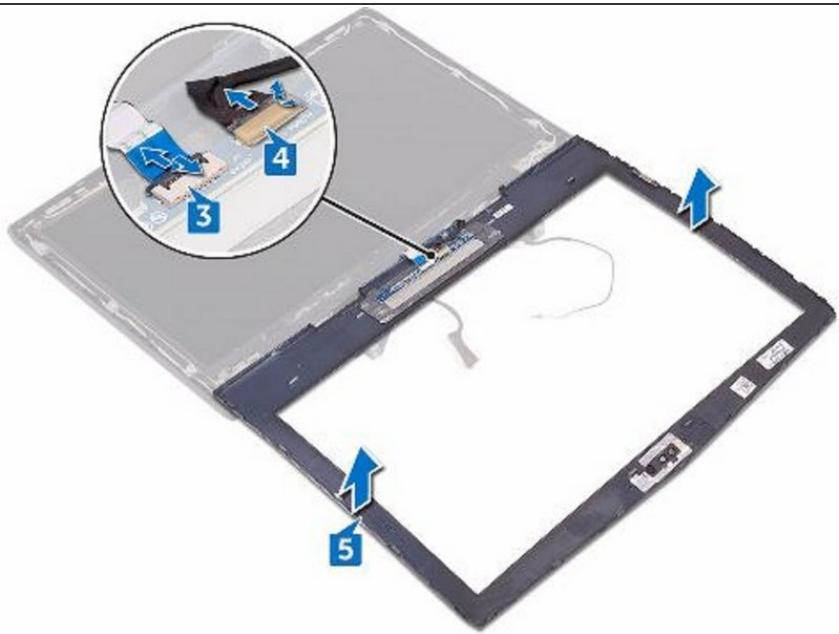
- Place the display assembly on a clean and flat surface.

Step 101 — Connect the Logo-Board



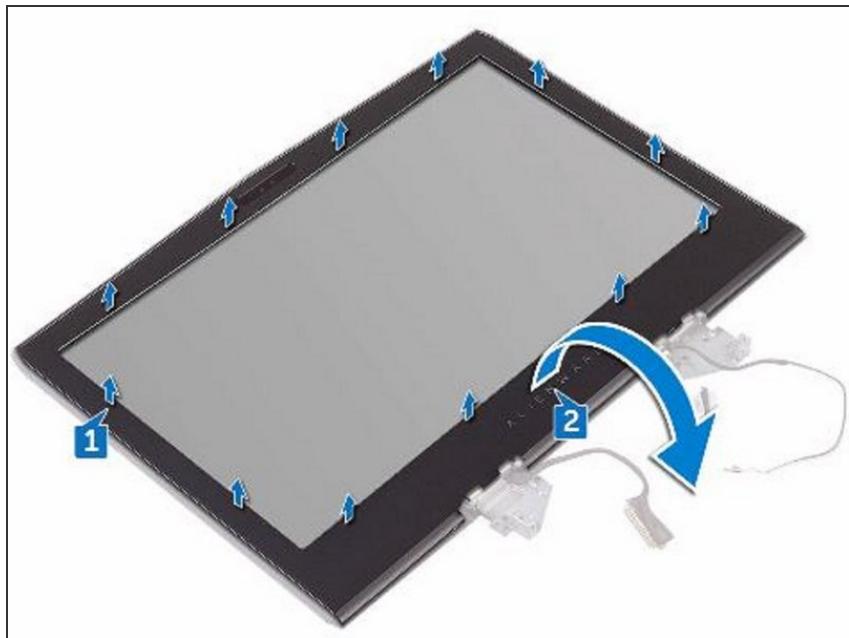
- Connect the logo-board cable to the logo board.

Step 102 — Adhering the Tape



- Adhere the tape that secures the logo-board cable to the logo board.

Step 103 — Slide the Logo Board Cable



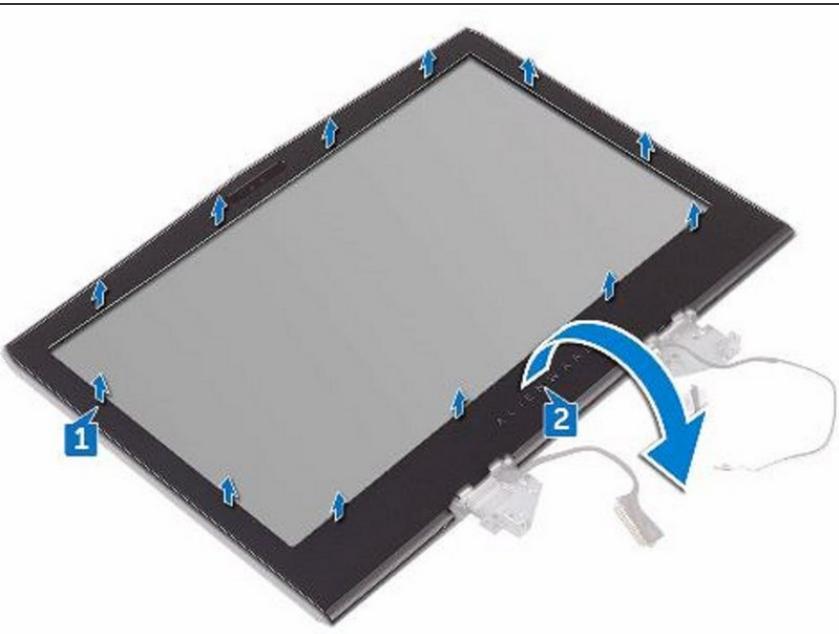
- Slide the alien head logo-board cable into the logo board and close the latch to secure the cable.

Step 104 — Turn the Display Bezel Over



- Carefully turn the display bezel over.

Step 105 — Align the Bezel



- Align the display bezel with the display back-cover and antenna assembly and gently snap the display bezel into place.

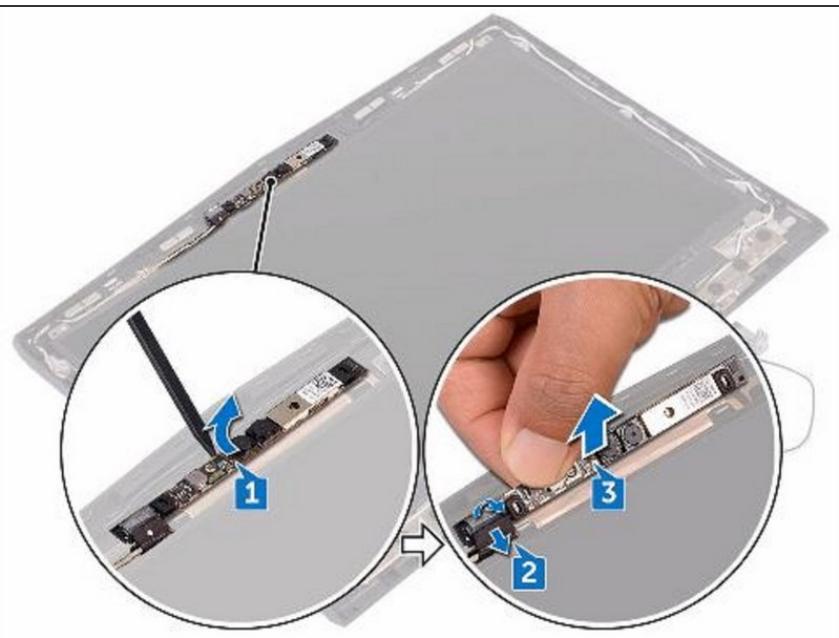
Step 106 — Pry the Camera Module



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- Using a plastic scribe, pry the camera module from the display back-cover and antenna assembly.

Step 107 — Peel the Tape



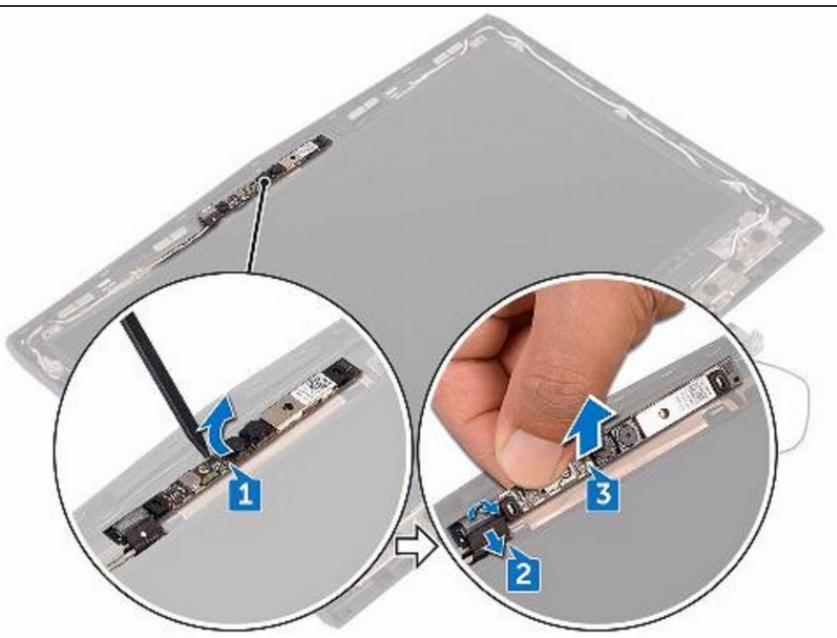
- Peel the tape that secures the camera cable to the camera module and disconnect the camera cable from the camera module.

Step 108 — Lift the Camera Module



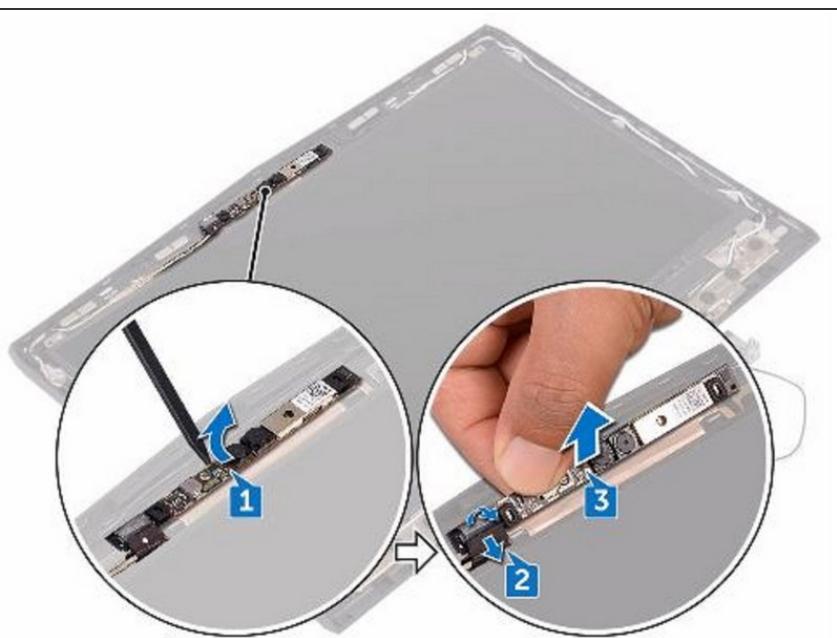
- Lift the camera module from the display back-cover and antenna assembly.

Step 109 — Adhere the Camera Module



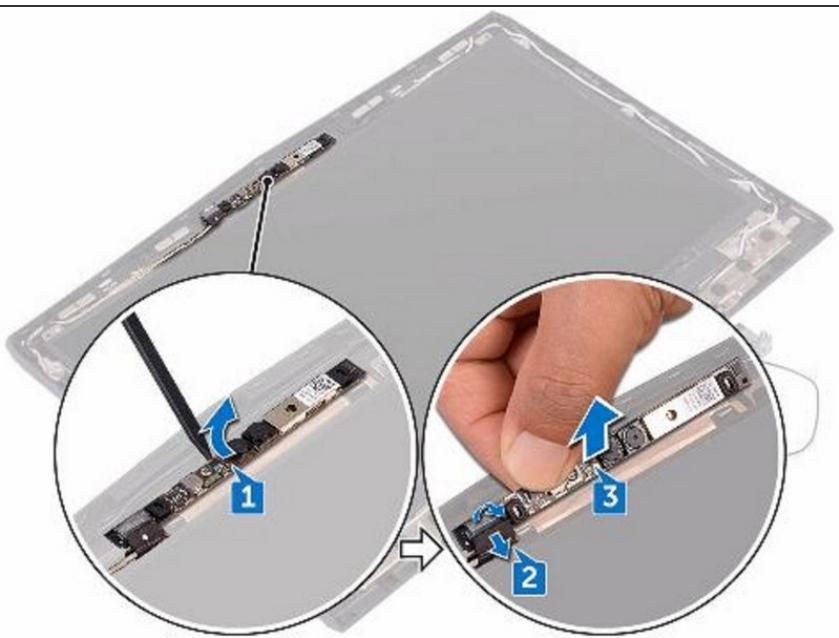
- Using the alignment posts, adhere the **NEW** camera module to the display back-cover and antenna assembly.

Step 110 — Connect the Camera Cable



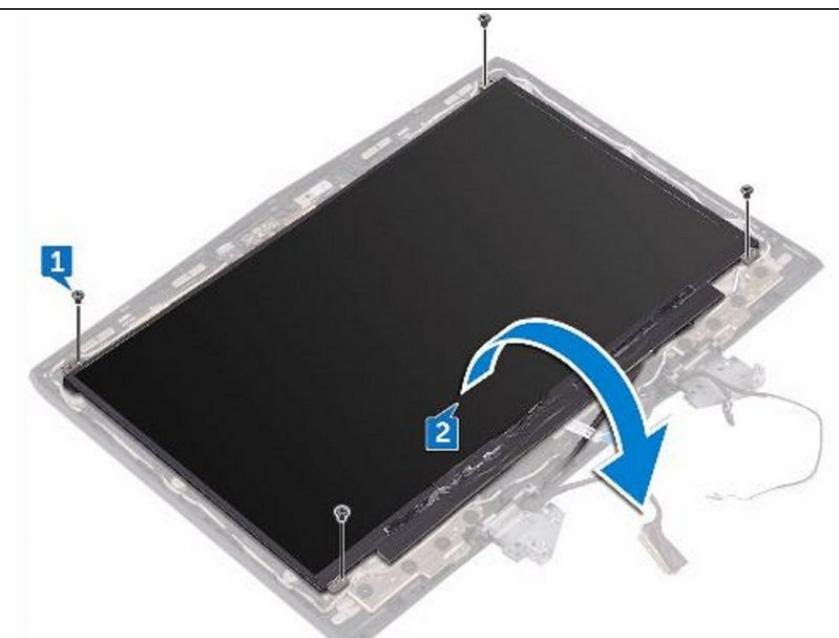
- Connect the camera cable to the camera module.

Step 111 — Adhere the Tape



- Adhere the tape that secures the camera cable to the camera module.

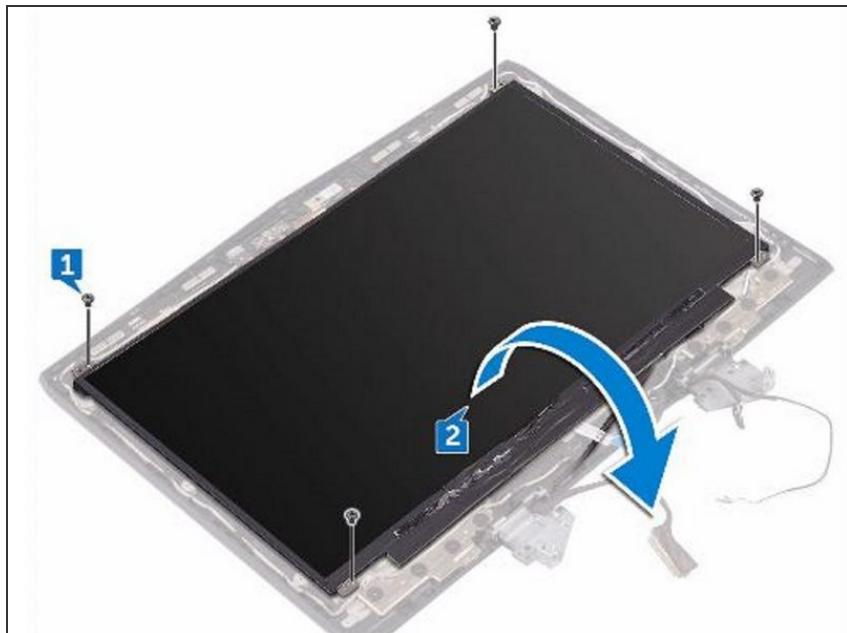
Step 112 — Remove the Screws



 **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](#).

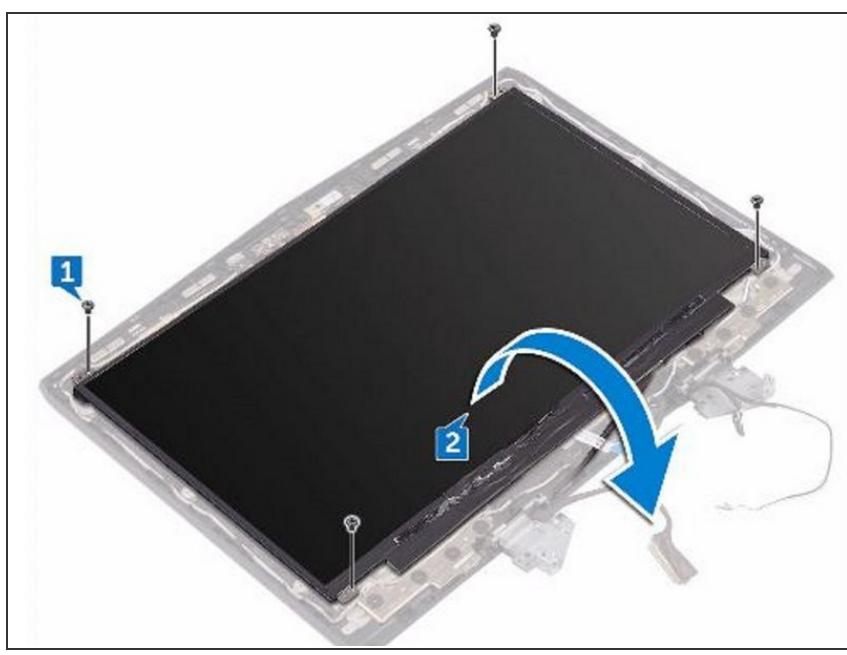
- Remove the four screws (M1.6x2) that secure the display panel to the display back-cover and antenna assembly.

Step 113 — Lift the Display Panel



- Gently lift the display panel and turn it over.

Step 114 — Peel the Tape



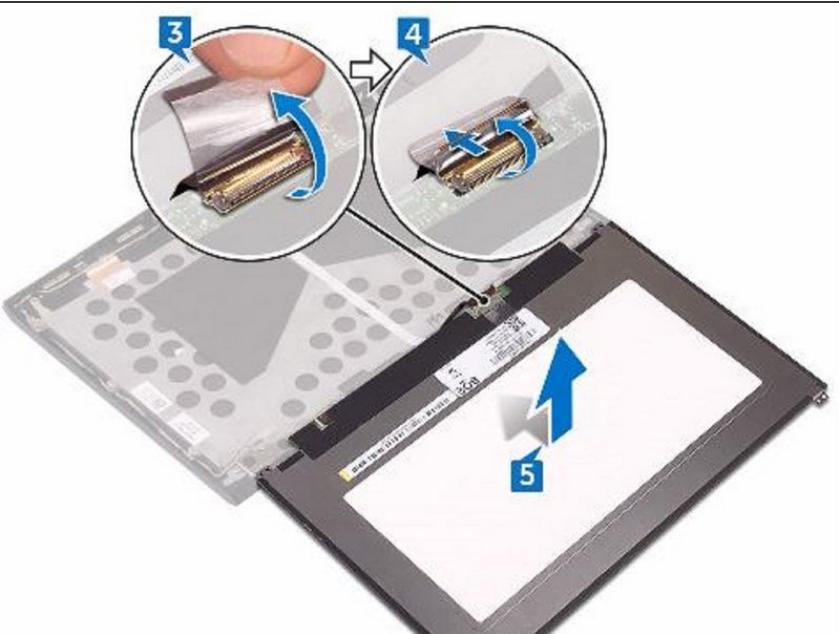
- Peel the tape that secures the display cable to the display panel.

Step 115 — Open the Latch



- Open the latch and disconnect the display cable from the display panel.

Step 116



- Lift the display panel off the display back-cover.

Step 117 — Slide the Display Cable



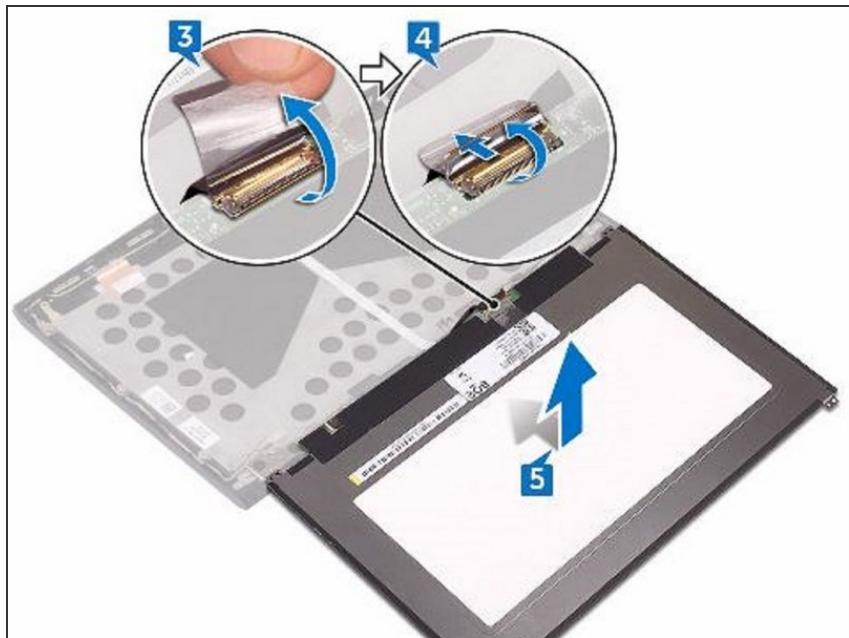
- Slide the display cable into the connector on the **NEW** display panel and close the latch to secure the cable.

Step 118



- Adhere the tape that secures the display cable to the display panel.

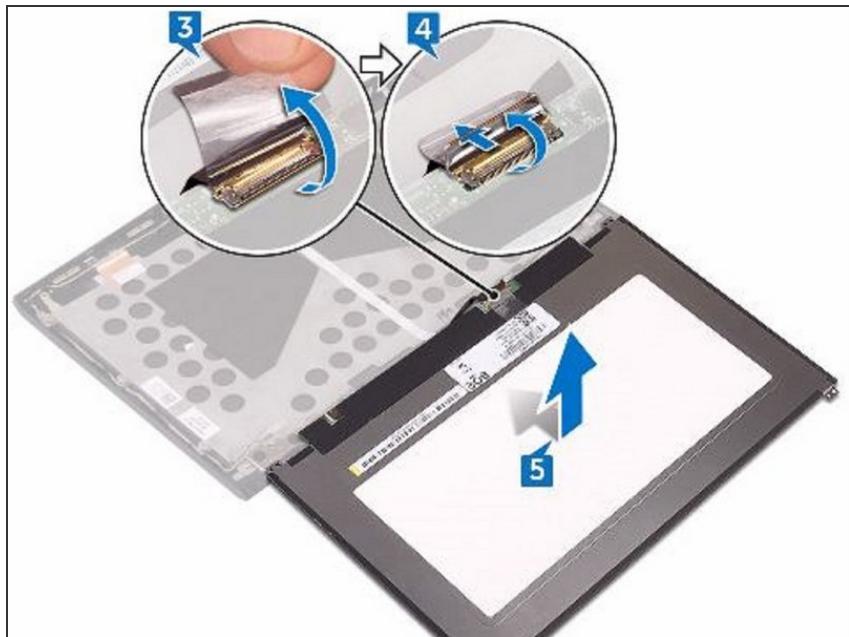
Step 119 — Turn the Display Panel Over



- Turn the display panel over and gently place it on the display back-cover.

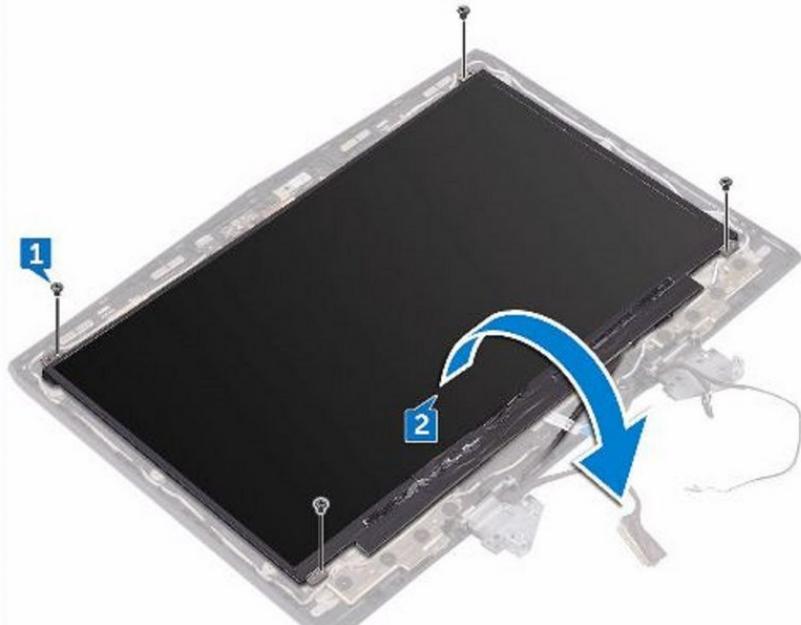
 CAUTION: Ensure that no cables are under the display panel.

Step 120 — Align the Screw Holes



- Align the screw holes on the display panel with the screw holes on the display back-cover and antenna assembly.

Step 121 — Replace the Four Screws



- Replace the four screws (M1.6x2) that secure the display panel to the display back-cover and antenna assembly.

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