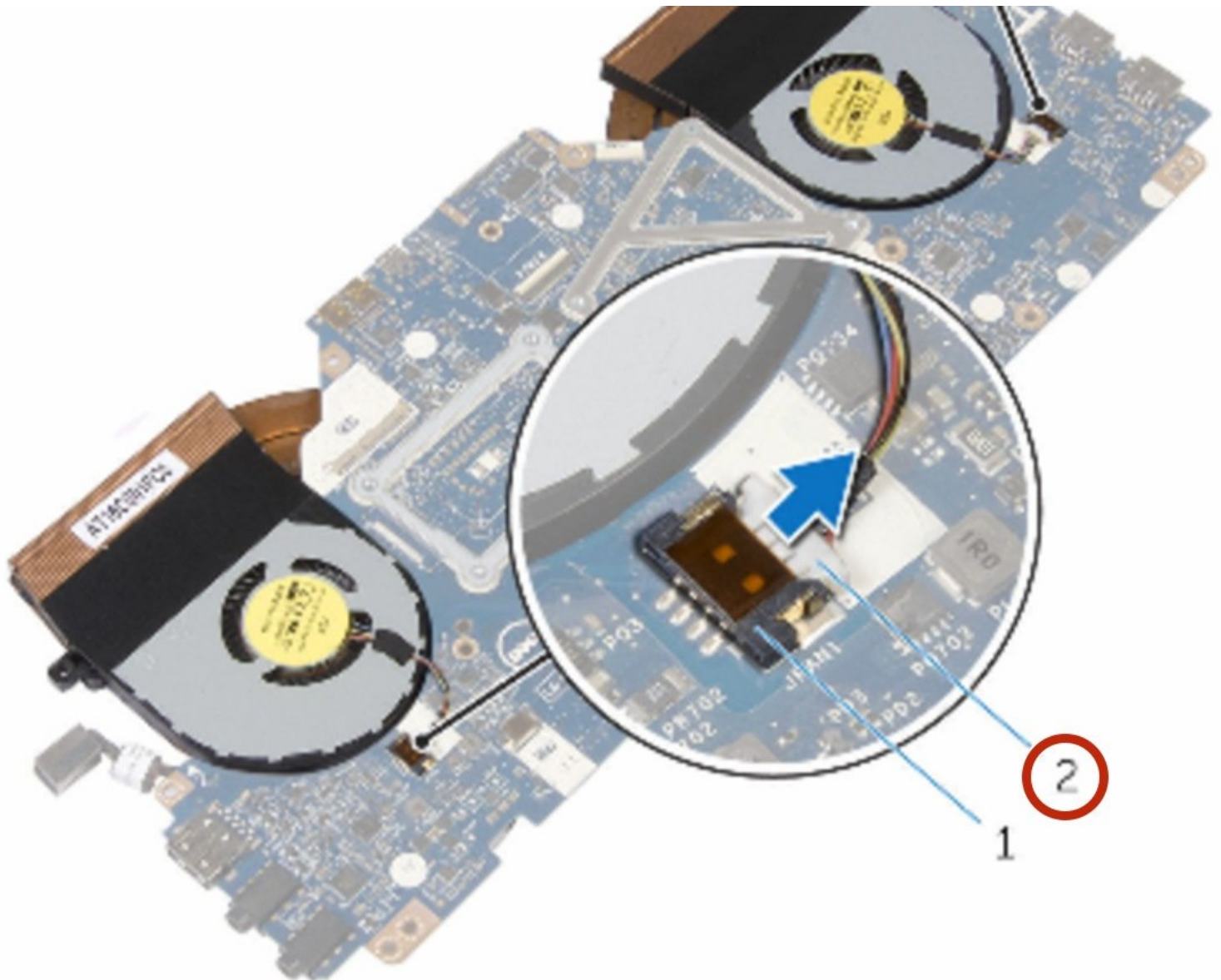




Dell Alienware 13 R2 Heat-Sink Assembly Replacement

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Written By: Terrence15



INTRODUCTION

In this guide, we will be showing you how to replace the Heat-Sink Assembly.



TOOLS:

- [Pro Tech Toolkit](#) (1)
-

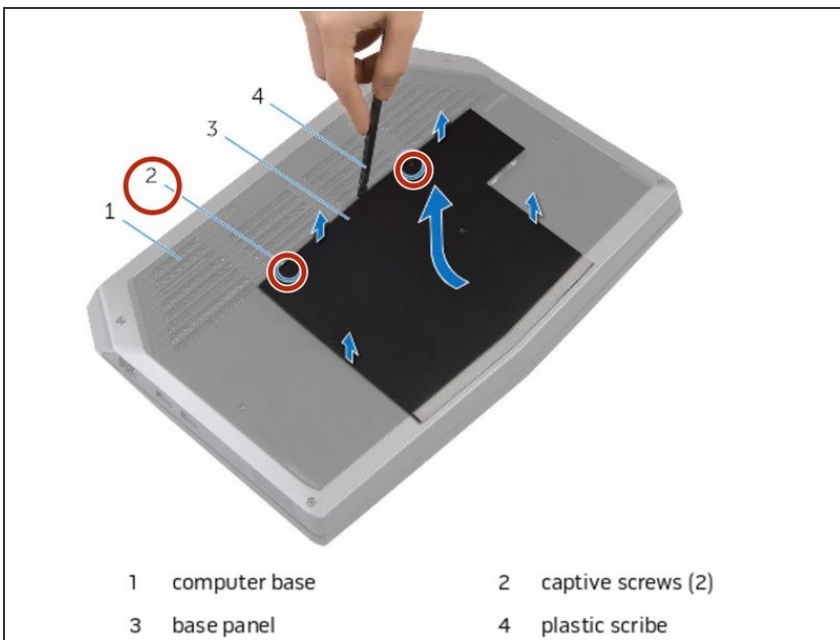
Step 1 — Turning Over the PC



⚠ 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](#). For more safety best practices, see the regulatory compliance home page.

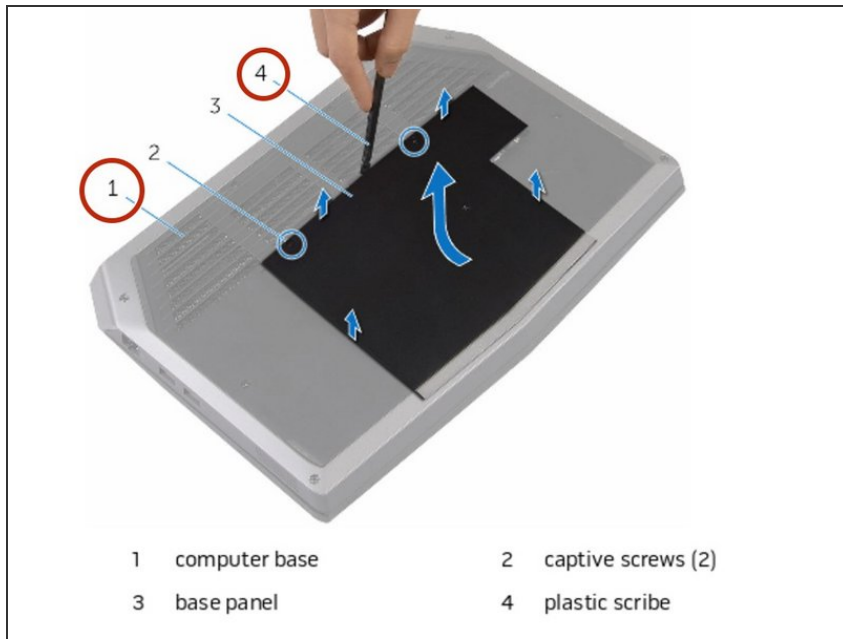
- Close the display and turn the computer over.

Step 2 — Loosen the screws



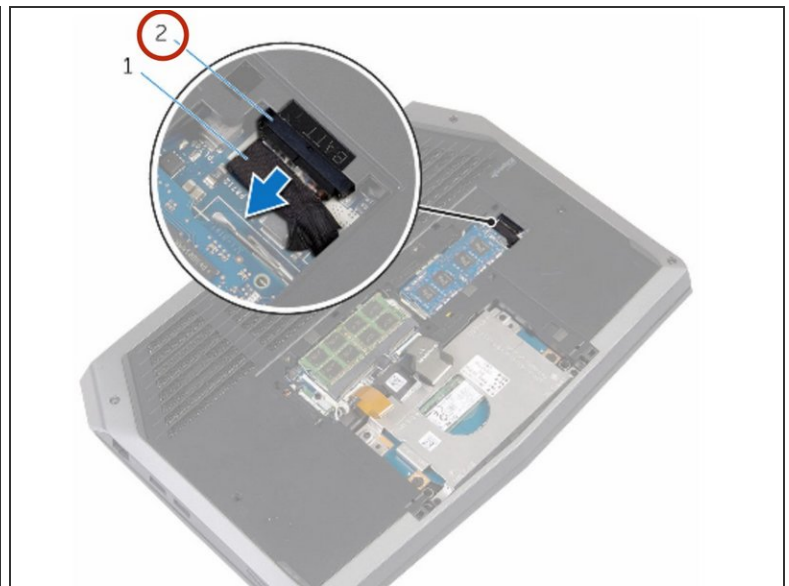
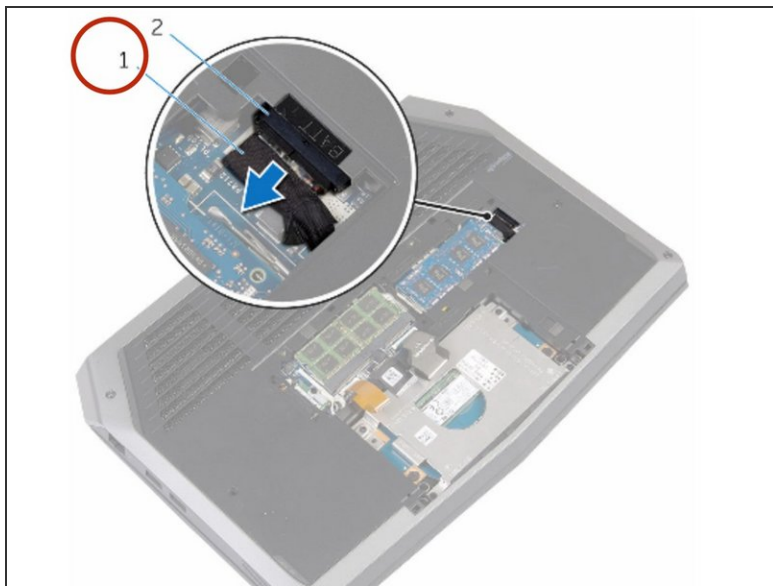
- Loosen the captive screws that secure the base panel to the computer base.

Step 3 — Releasing the Tabs



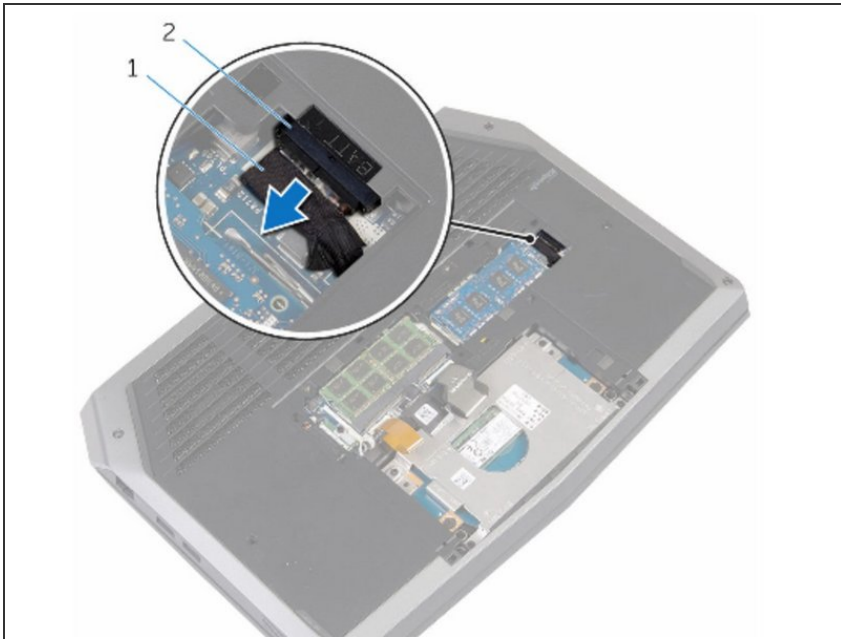
- Using a plastic scribe, gently release the tabs that secure the base panel to the computer base.

Step 4 — Disconnecting the Battery Cable



- Disconnect the battery cable from the battery-cable connector.
- Turn the computer over.

Step 5 — Power Button



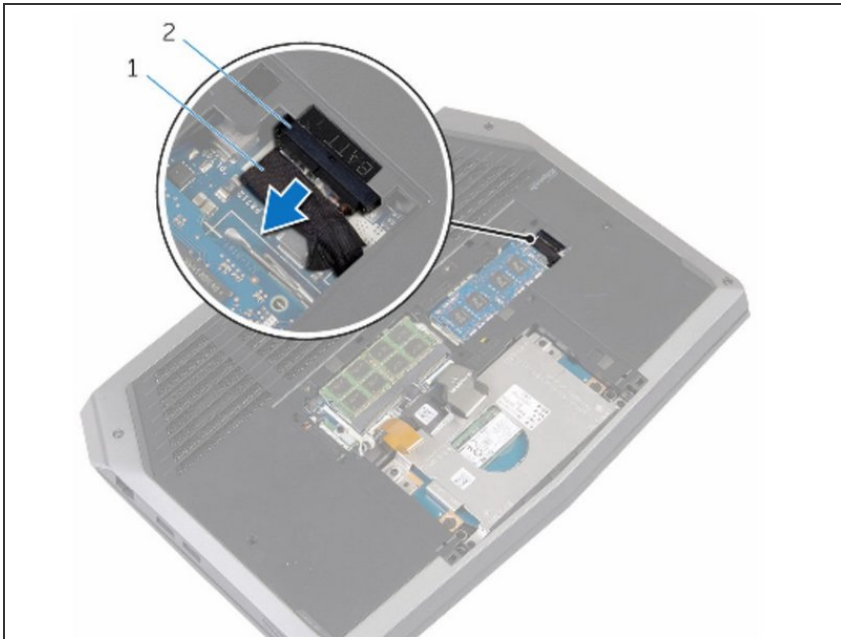
- Press and hold the power button for 5 seconds to ground the system board.

Step 6 — Connect the Battery Cable



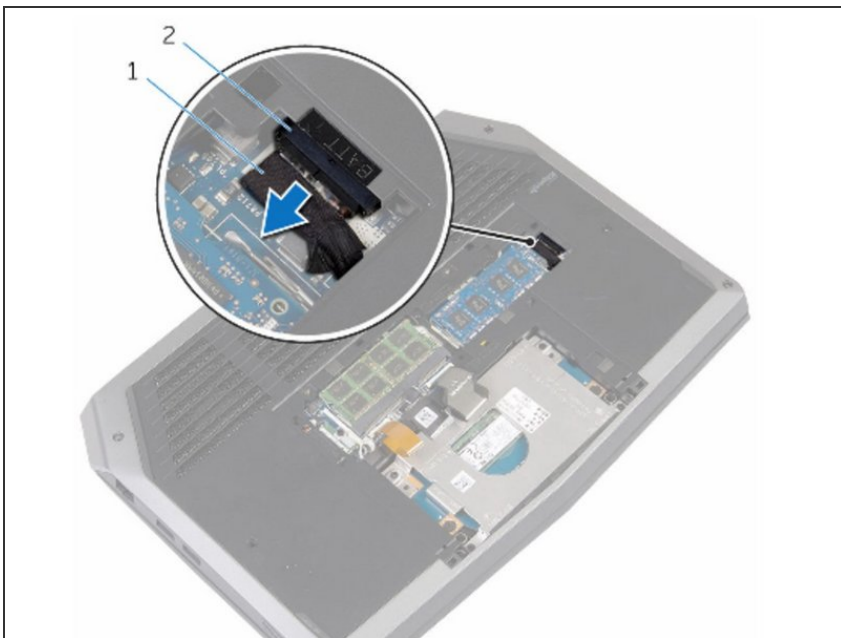
- Connect the battery cable to the battery-cable connector.

Step 7 — Aligning the tabs



- Align the tabs on the base panel with the slots on the computer base and snap the base panel into place.

Step 8 — Tighten the screws



- Tighten the captive screws that secure the base panel to the computer base.

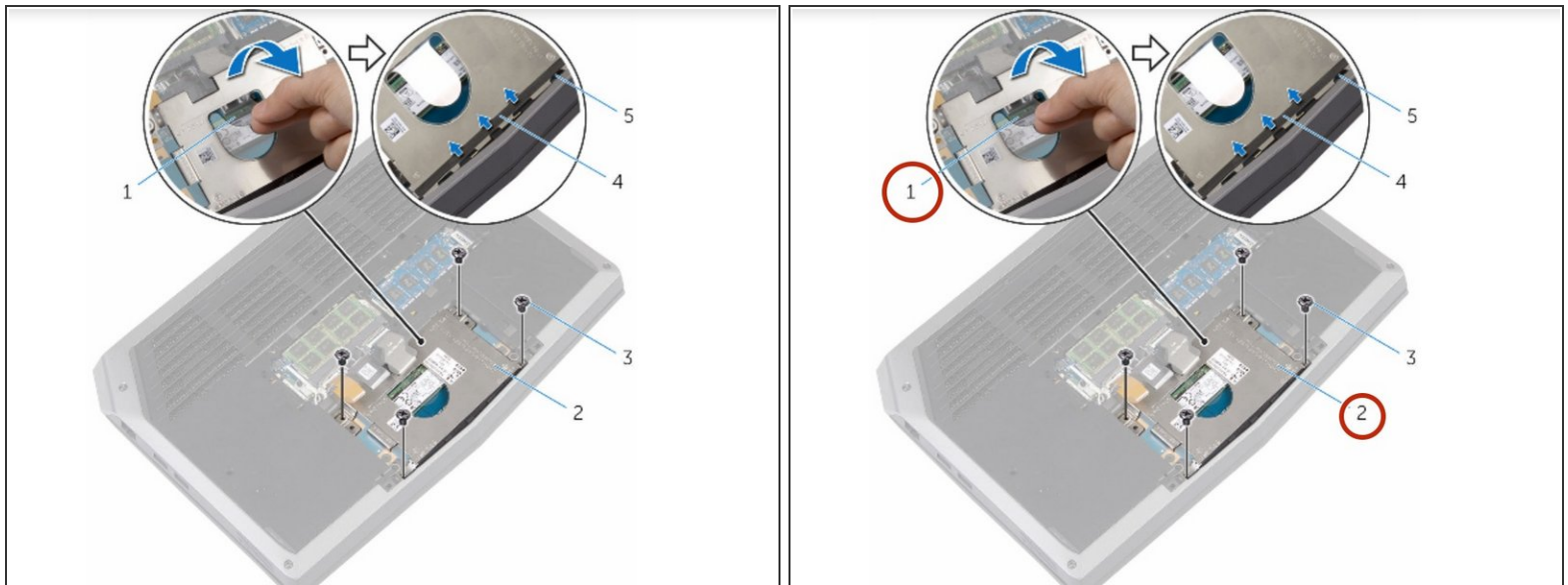
Step 9 — Removing the Screws



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- Remove the screws that secure the solid-state drive bracket to the solid-state drive assembly.

Step 10 — Peel off Computer Base Tabs



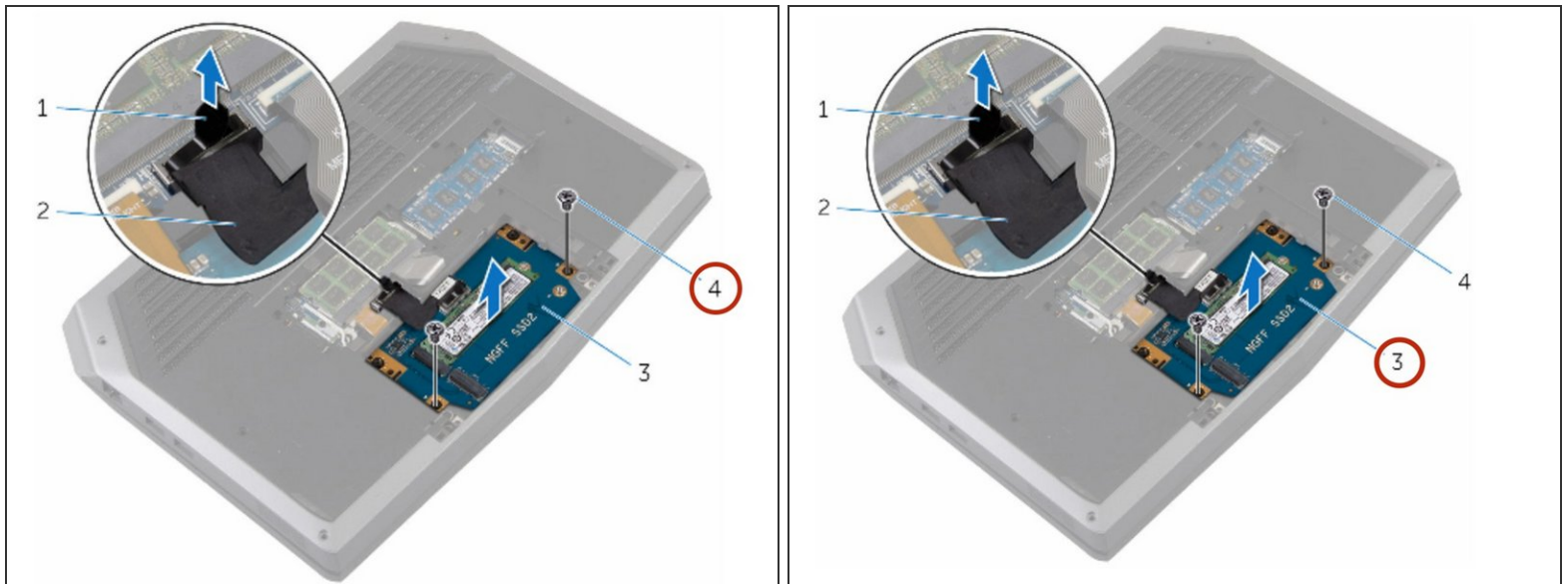
- Using the pull tab, pivot the solid-state drive bracket and peel off the bracket from the tabs on the computer base.

Step 11 — Disconnecting the Solid-State Drive Cable



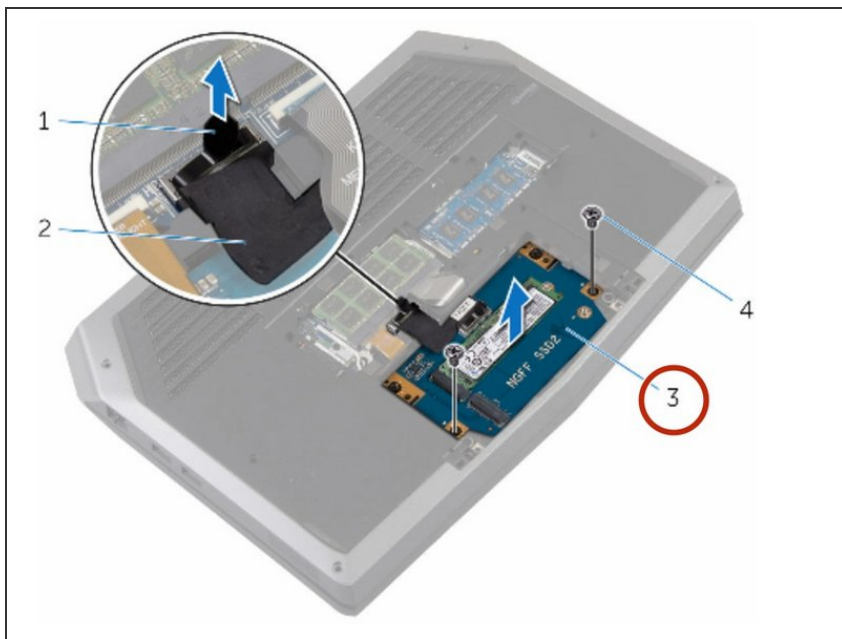
- Using the pull tab, disconnect the solid-state drive cable from the system board.

Step 12 — Removing the Solid-State Drive



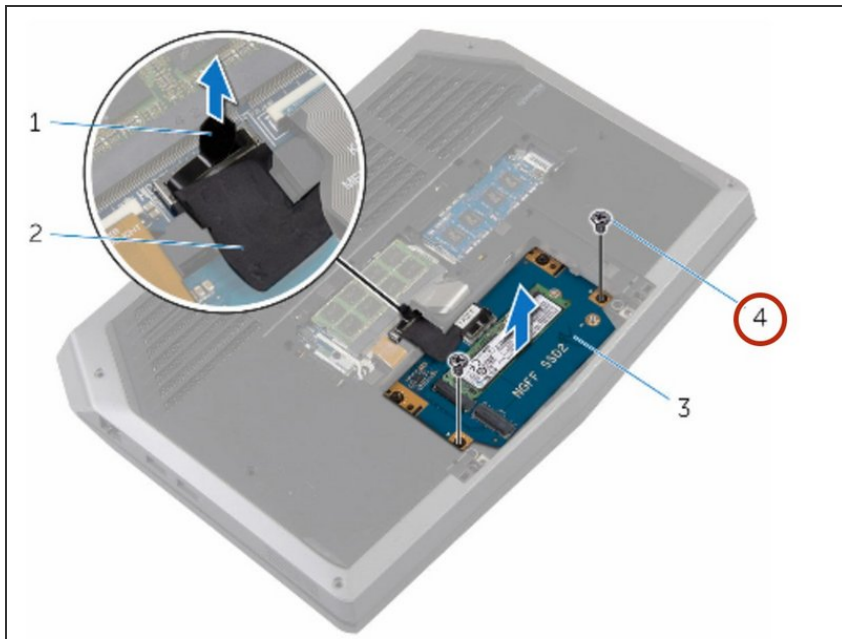
- Remove the screws that secure the solid-state drive assembly to the computer base.

Step 13 — Lifting the Solid-State Assembly



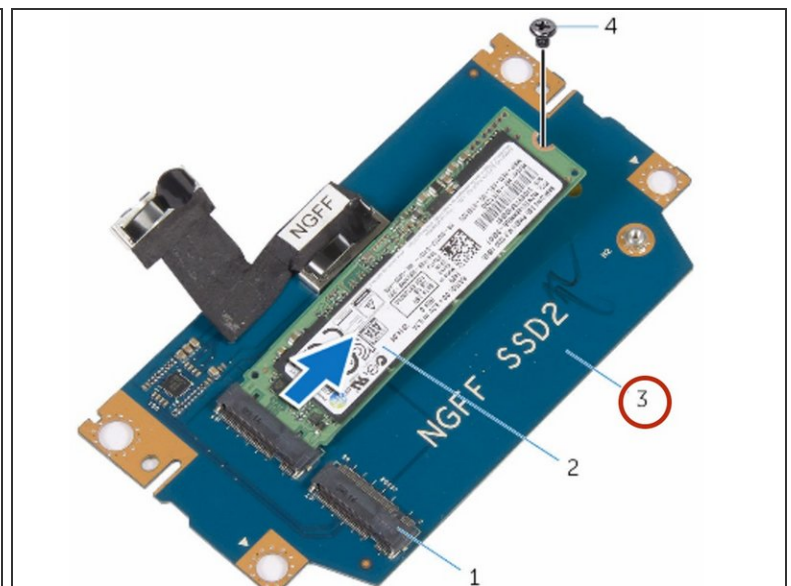
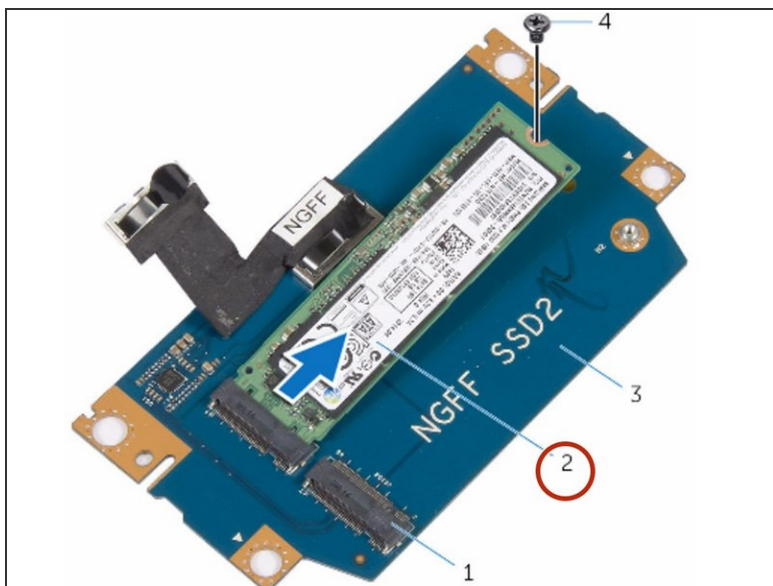
- Lift the solid-state drive assembly off the computer base.

Step 14 — Remove the Screw



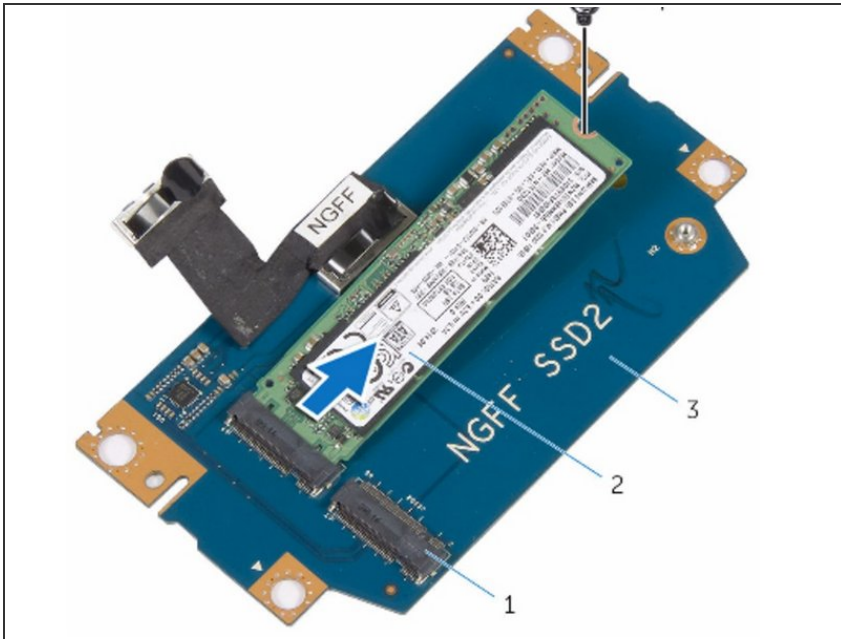
- Remove the screw that secures the solid-state drive to the solid-state drive assembly.

Step 15 — Lift the Solid-State Assembly.



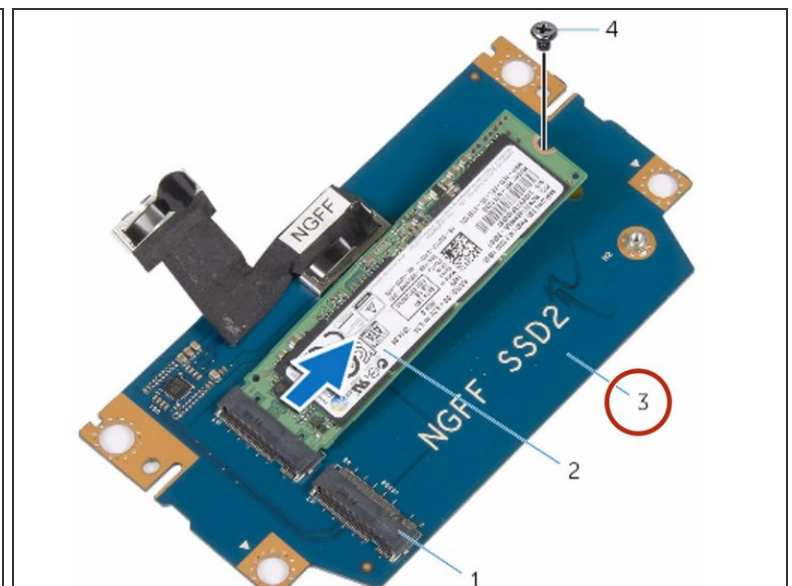
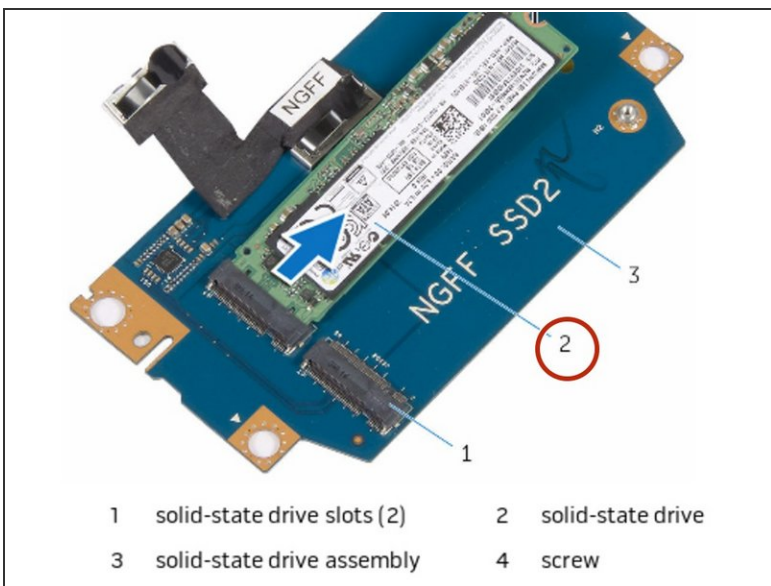
- Slide and lift the solid-state drive off the solid-state drive assembly.

Step 16 — The New Solid-State Drive



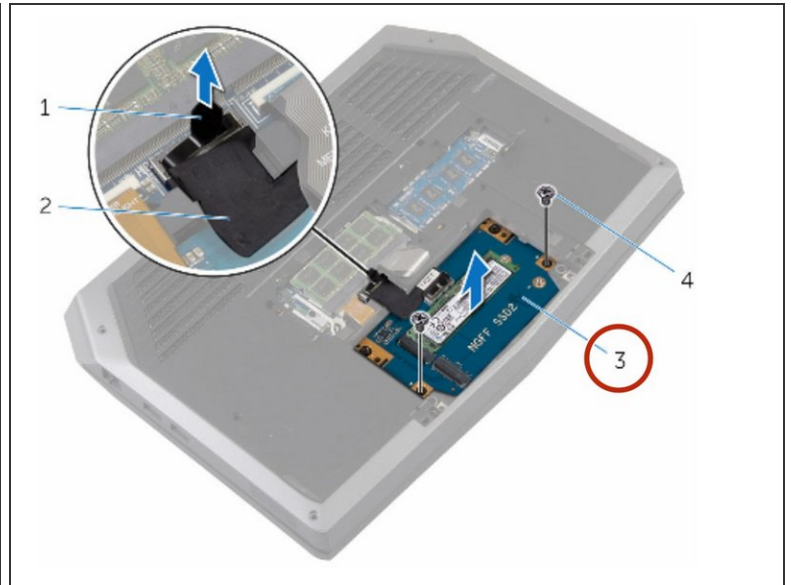
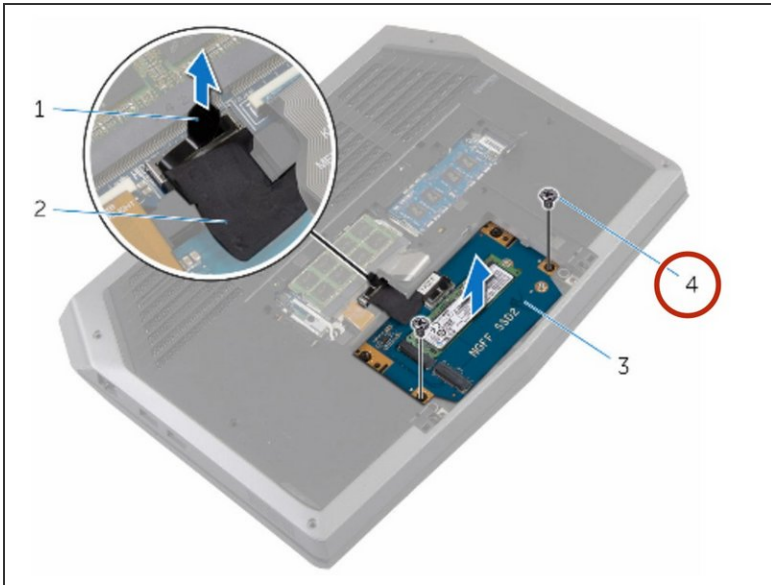
- Slide the **NEW** solid-state drive into the slot on the solid-state drive assembly.

Step 17 — Screw Replacement



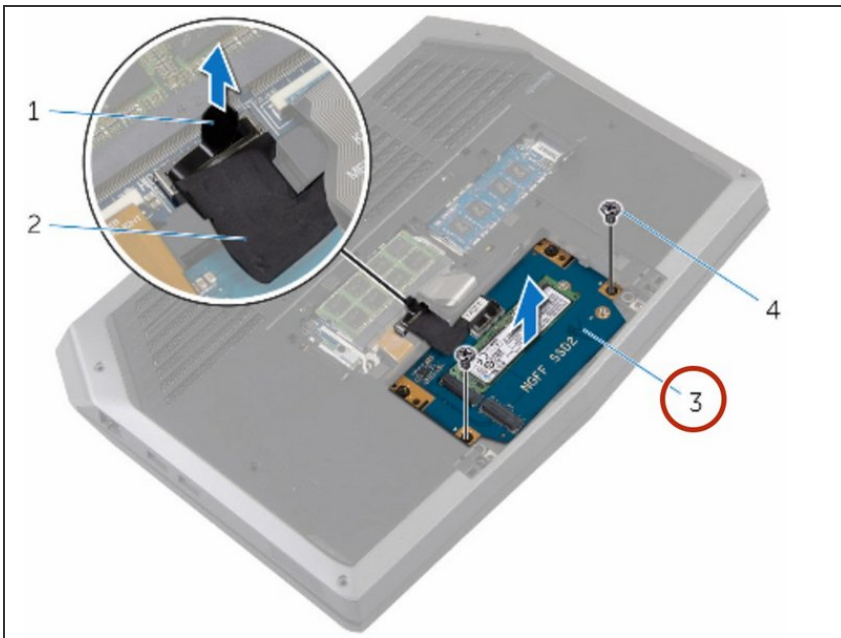
- Replace the screw that secures the solid-state drive to the solid-state drive assembly.

Step 18 — Align the Screws



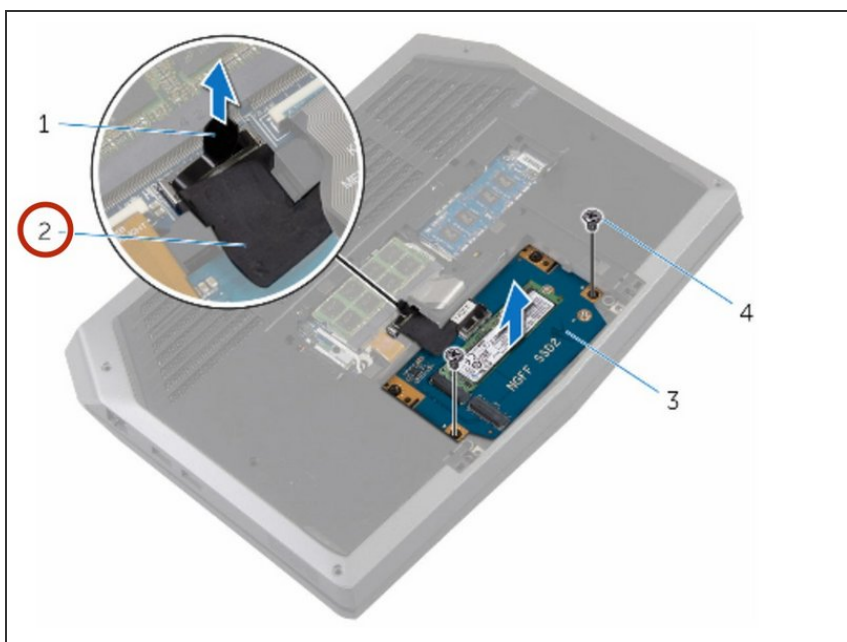
- Align the screw holes on the solid-state drive assembly with the screw holes on the computer base.

Step 19 — Replace the Screws



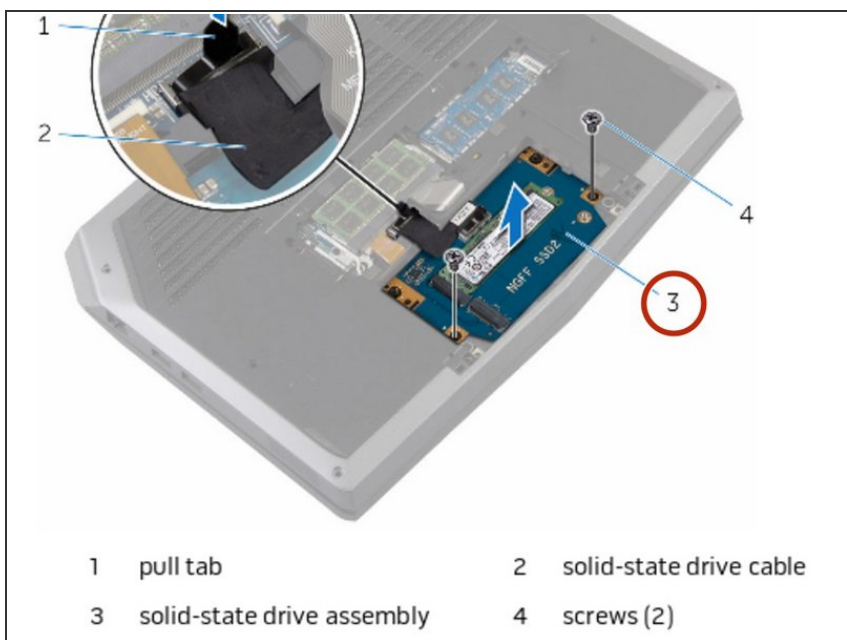
- Replace the screws that secure the solid-state drive assembly to the computer base.

Step 20 — Connect the Cable to the System Board



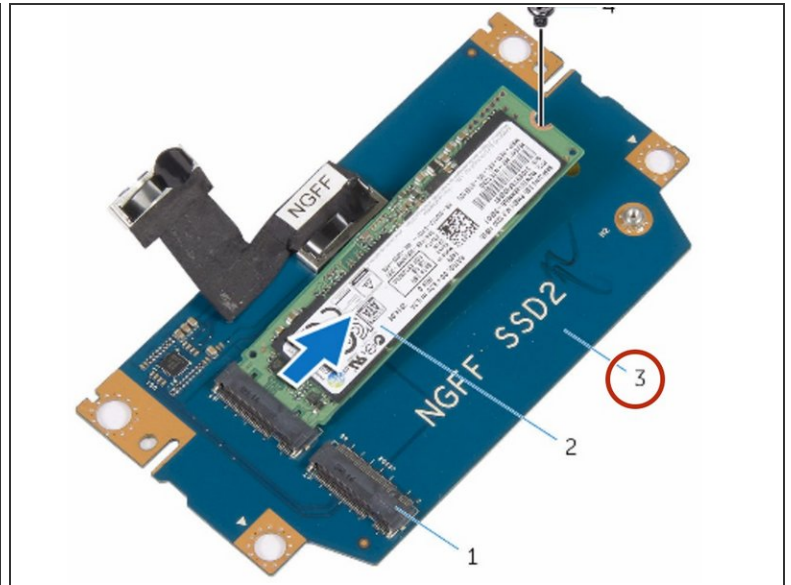
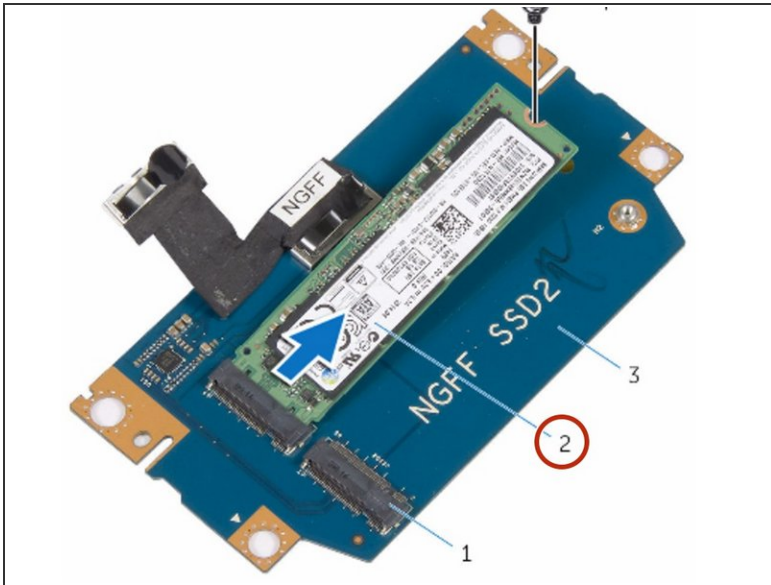
- Connect the solid-state drive cable to the system board.

Step 21 — Align the Screw Holes



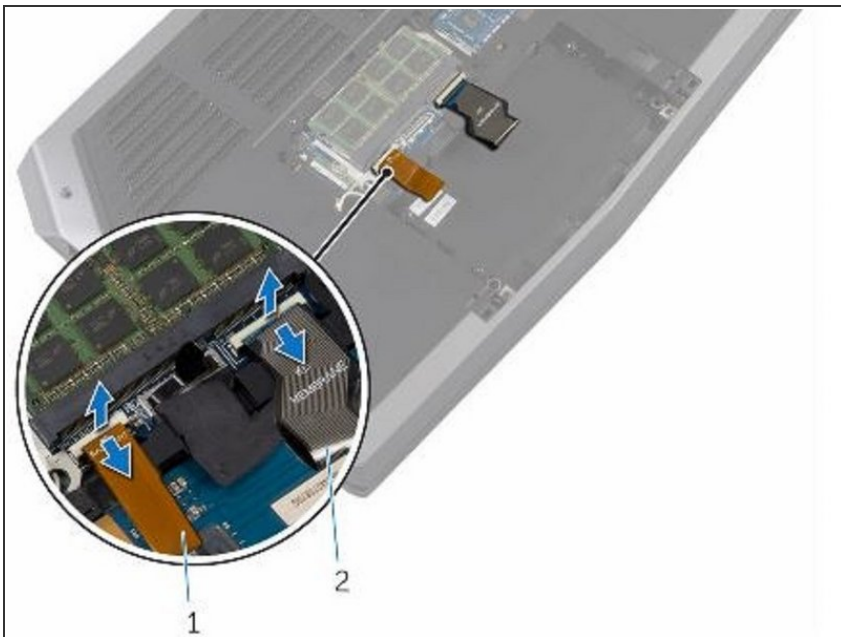
- Align the screw holes on the solid-state drive bracket with the screw holes on the solid-state drive assembly.

Step 22 — Replace the Screws



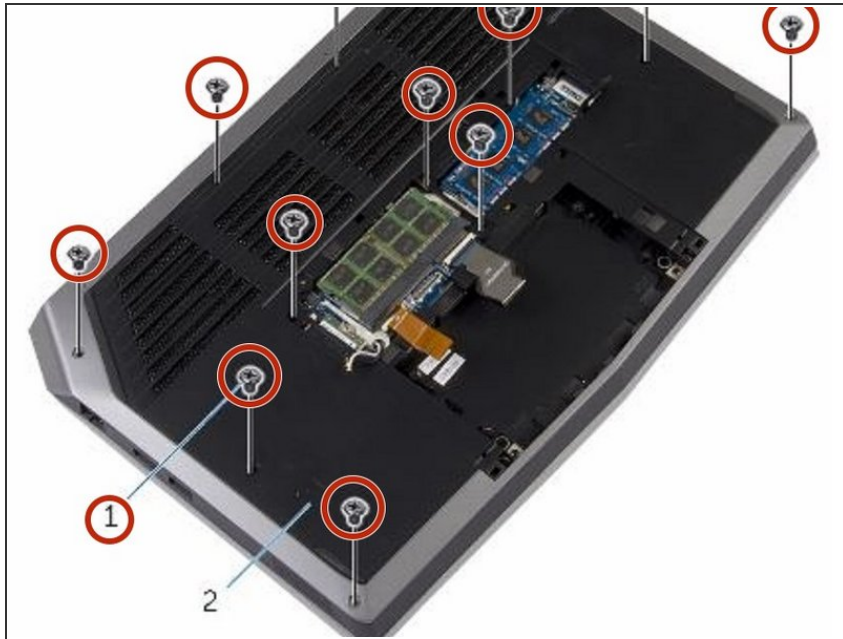
- Replace the screws that secure the solid-state drive bracket to the solid-state drive assembly.

Step 23 — Lifting the Latches



- Lift the latches and disconnect the keyboard and keyboard-backlight cables from the system board.

Step 24 — Remove the Screws



- Remove the screws that secure the palm-rest assembly to the computer base.

Step 25 — Lift the Computer Base



- Lift the computer base slightly and push the release tabs on the palm-rest assembly until it pops out.

Step 26 — Turning the Computer Over



- Turn the computer over and open the display as far as possible.

Step 27 — Prying the Palm-Rest Assembly



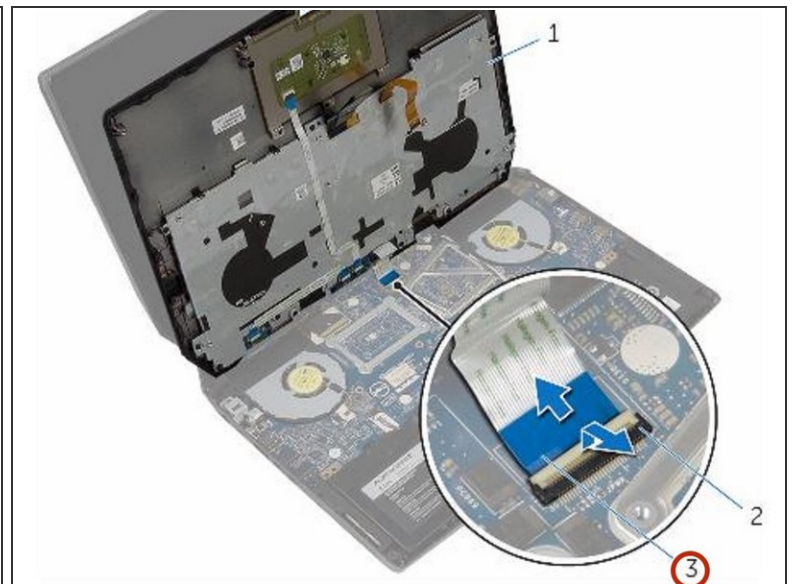
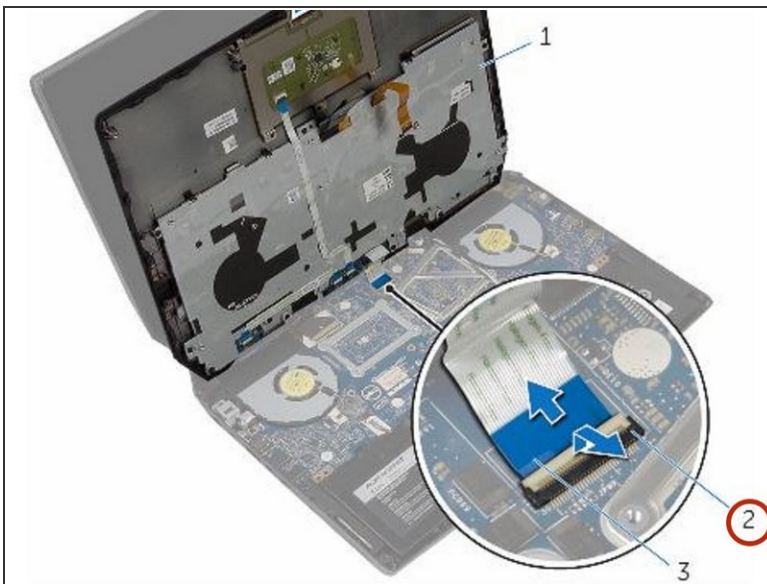
- Using a plastic scribe, pry up along the edges of the palm-rest assembly.

Step 28 — Lift the Palm-Rest Assembly



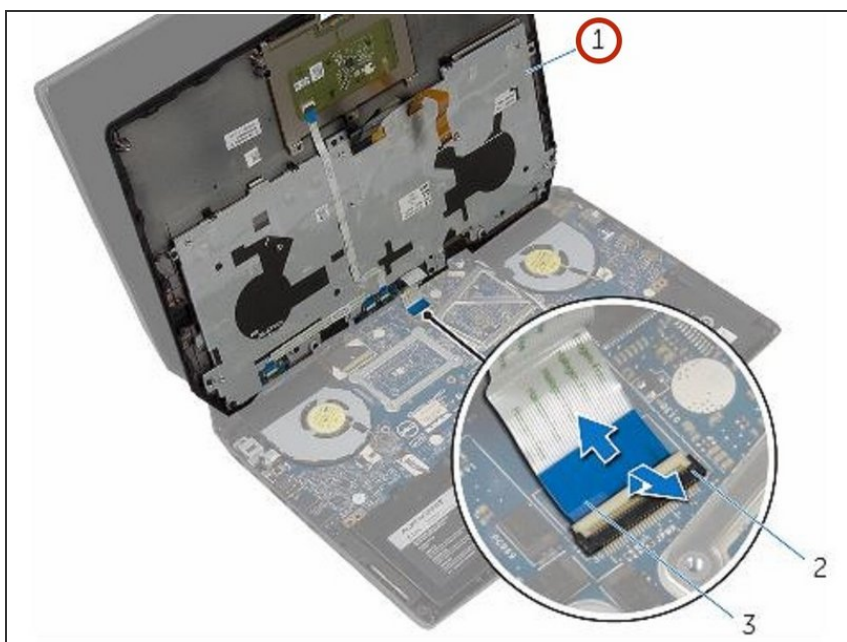
- Gently lift the palm-rest assembly and turn it over.

Step 29 — Lift the Connector Latch



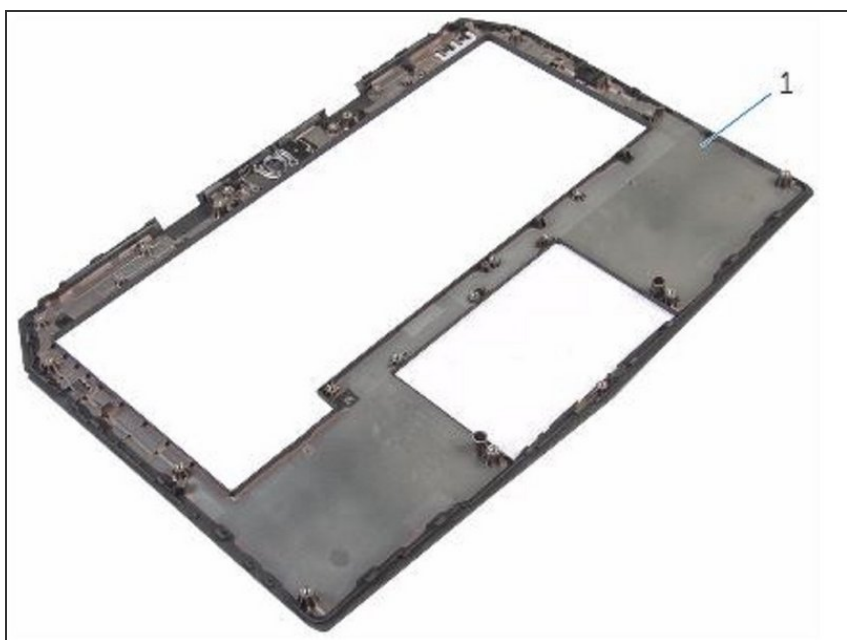
- Lift the connector latch and disconnect the power-button board cable from the system board.

Step 30 — Lift the Palm-Rest Assembly



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

Step 31 — Removing



- Remove the keyboard.
- Remove the power-button board.
- Remove the status-light board.
- Remove the Touchpad.

Step 32 — Replacement



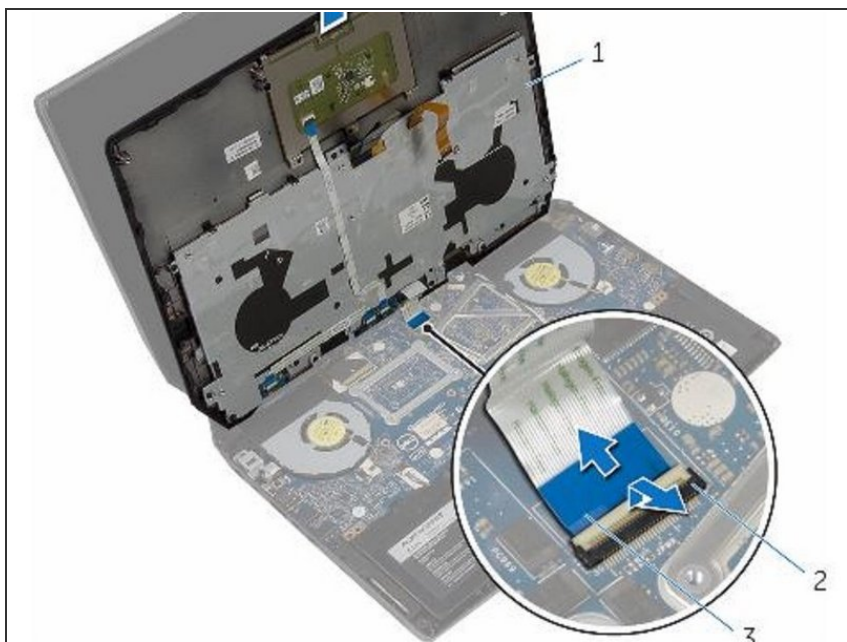
- Replace the touchpad.
- Replace the status-light board.
- Replace the power-button board.
- Replace the keyboard.

Step 33 — Connecting the Power-Button Board Cable



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

Step 34 — Align the Palm-Rest Assembly



- Align the palm-rest assembly on the computer base and snap it into place.

Step 35 — Close the Display



- Close the display and turn the computer over.

Step 36 — Replace the Screws



- Replace the screws that secure the palm-rest assembly to the computer base.

Step 37 — Connect the Keyboard Cable



- Connect the keyboard cable and the keyboard-backlight cable to the system board.

Step 38 — Open the Display



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- Open the display as far as possible.

Step 39 — Remove the Screws



- Remove the screws that secure the hinge caps to the display hinges.

Step 40 — Lifting the Hinge Caps



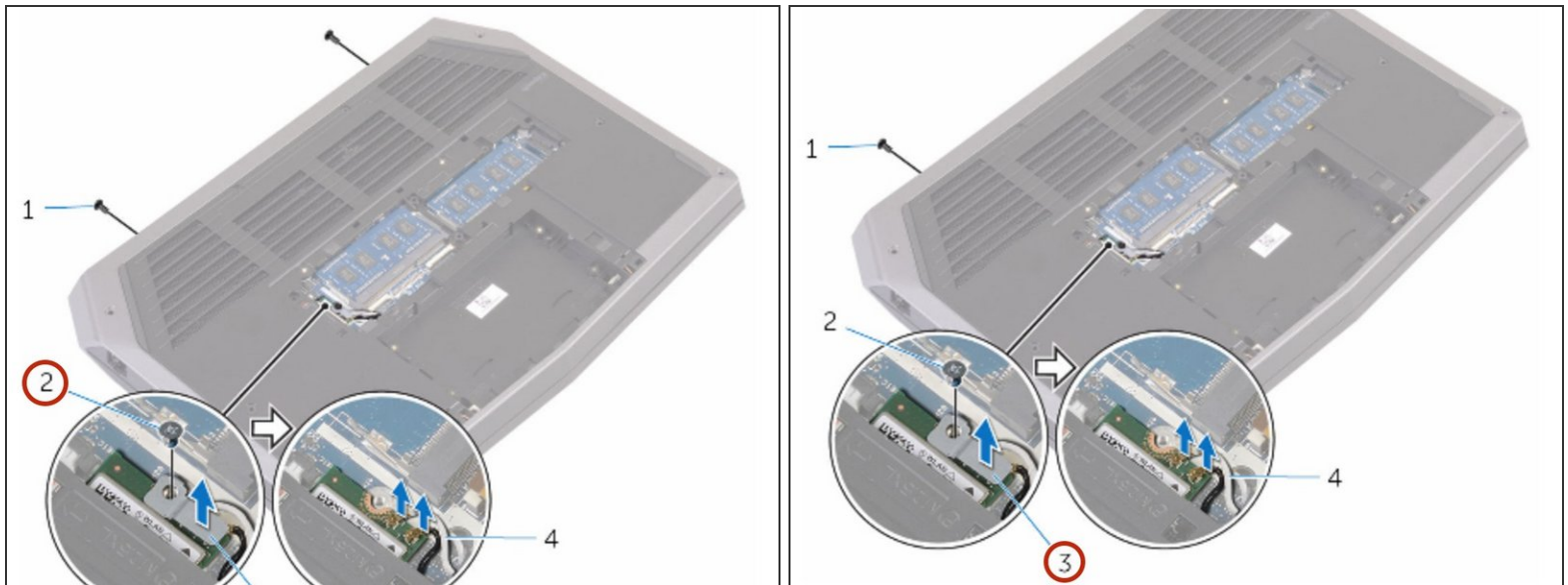
- Slide and lift the hinge caps off the display hinges.

Step 41 — Close the Display



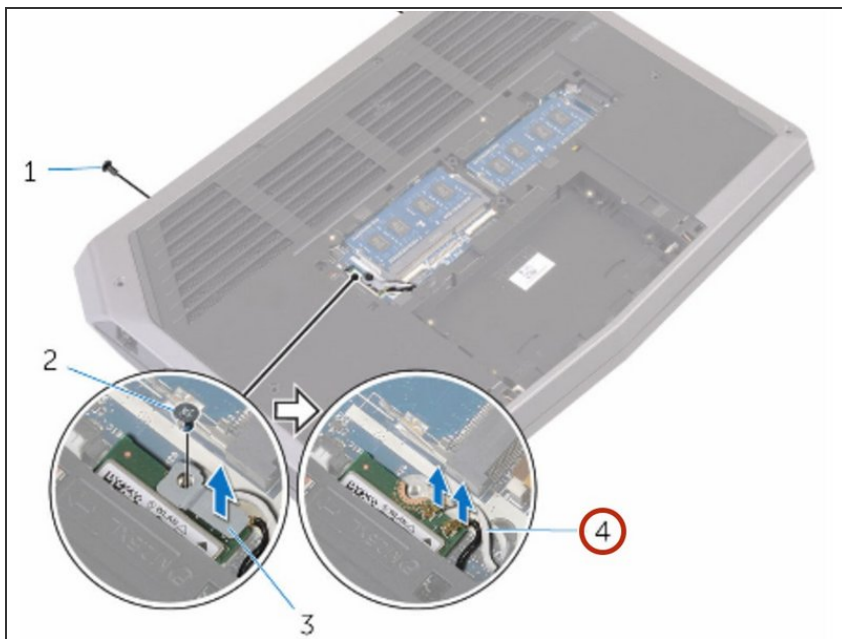
- Close the display and turn the computer over.

Step 42 — Remove the Screw



- Remove the screw that secures the wireless-card bracket to the wireless card.

Step 43 — Disconnect the Antenna Cables



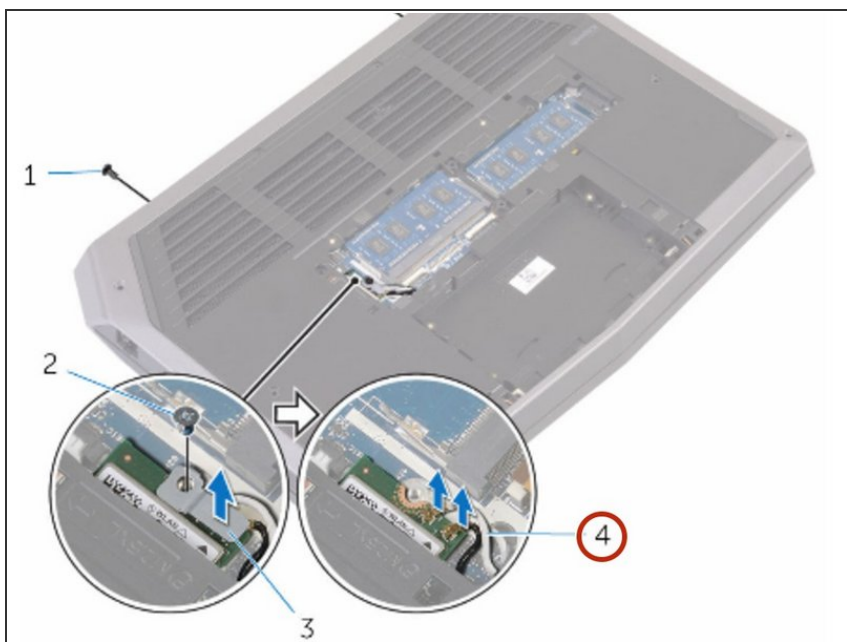
- Disconnect the antenna cables from the wireless card.

Step 44 — Turn the Computer Over



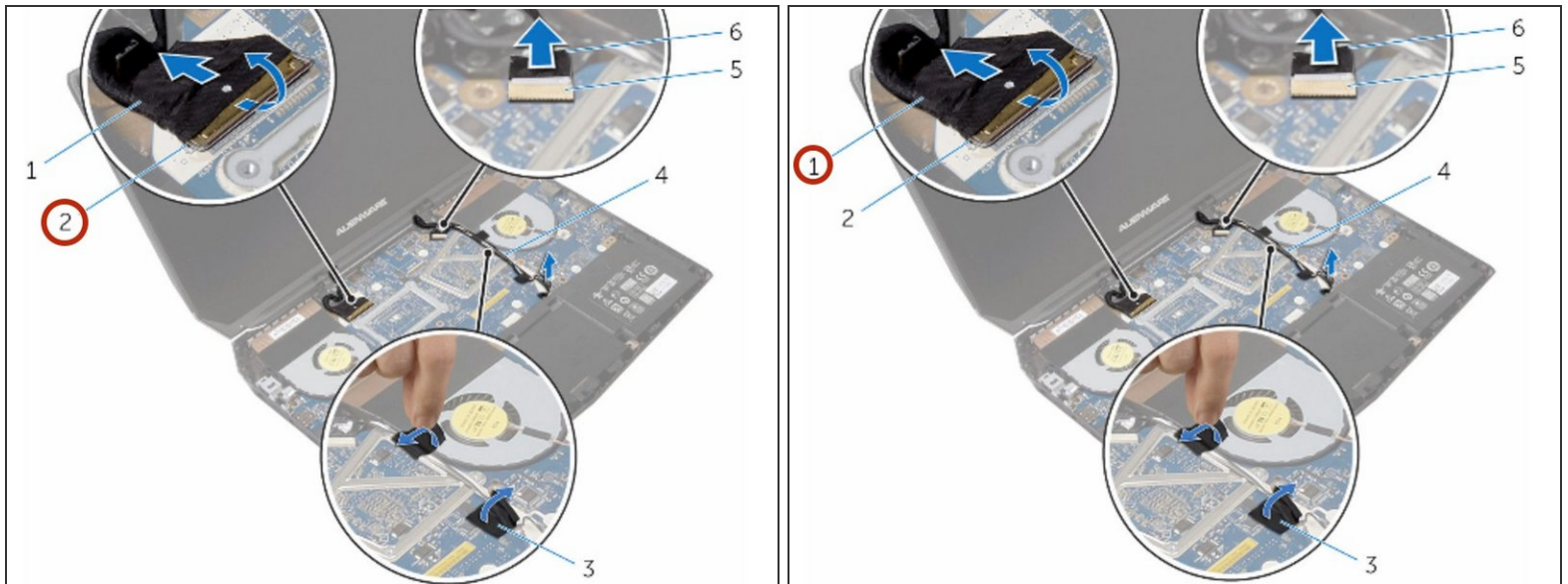
- Turn the computer over and open the display.

Step 45 — Remove the Antenna Cables



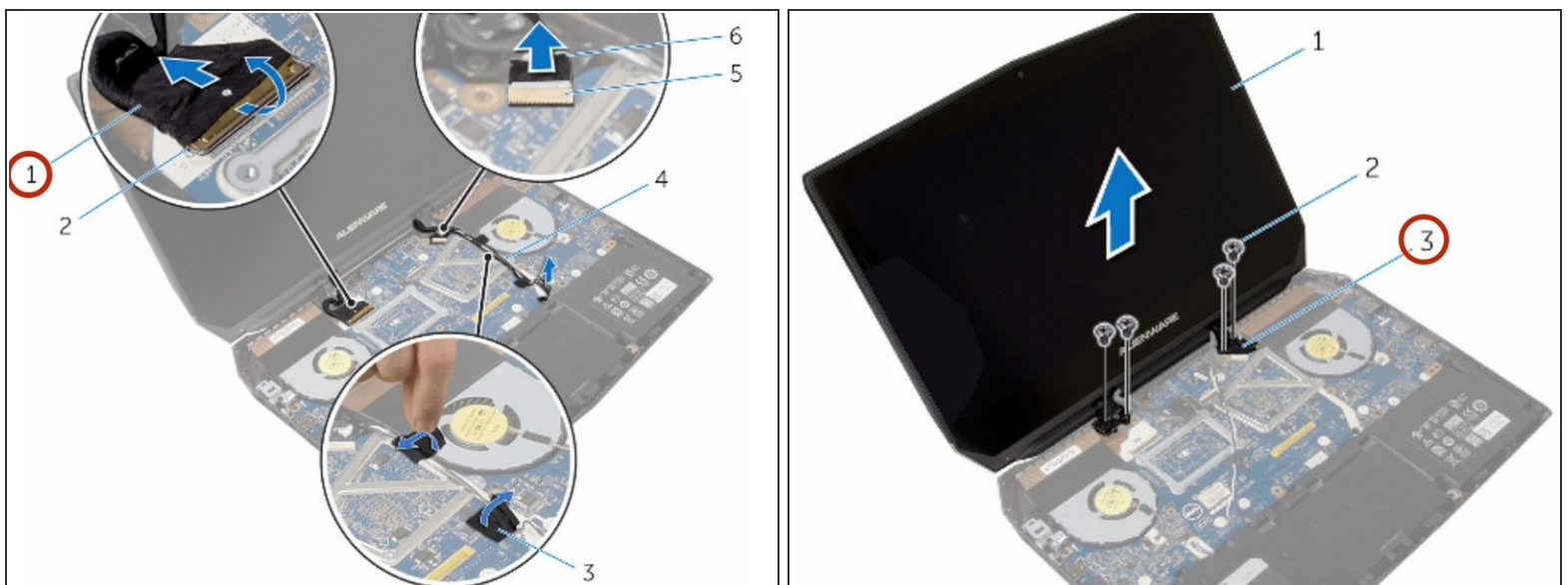
- Remove the antenna cables from the routing guides on the display hinges.

Step 46 — Disconnect the Display Cable



- Lift the connector latch and disconnect the display cable from the system board.

Step 47 — Remove the Display Cable



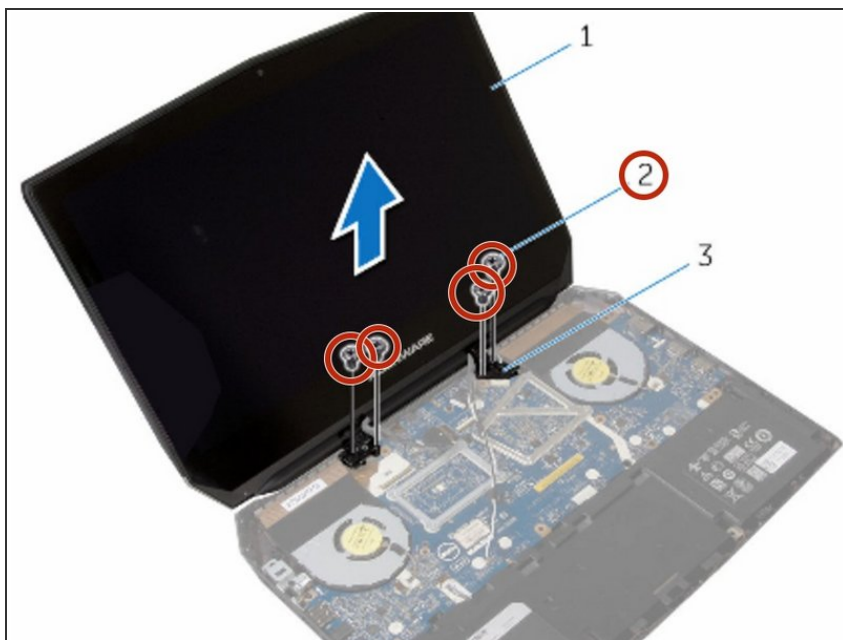
- Remove the display cable from the routing guides on the display hinges.

Step 48 — Disconnect the Logo-Board Cable



- Disconnect the logo-board cable from the system board and remove it from the routing guides on the display hinges.

Step 49 — Remove the Screws



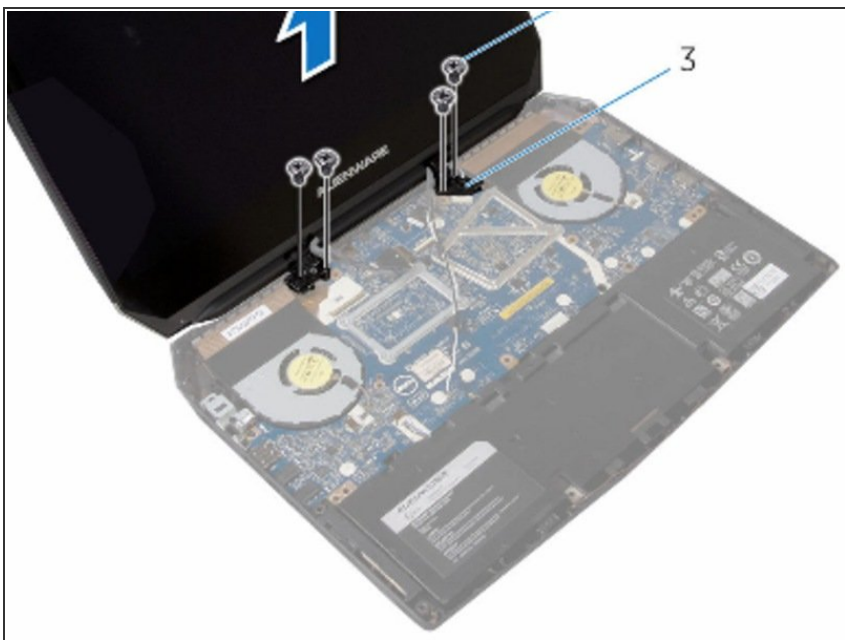
- Remove the screws that secure the display assembly to the computer base.

Step 50 — Lifting the Display Assembly



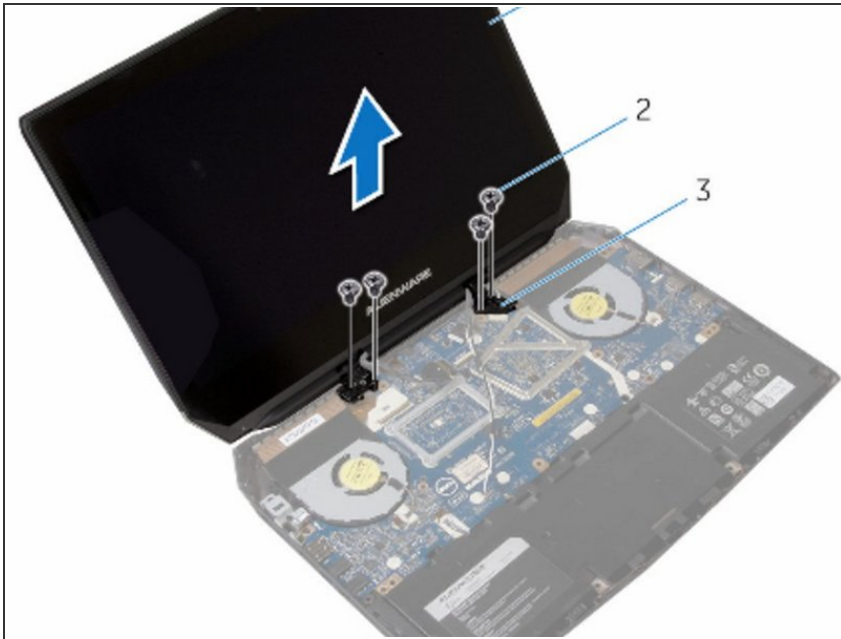
- Lift the display assembly off the computer base.

Step 51 — Align the Screw Holes



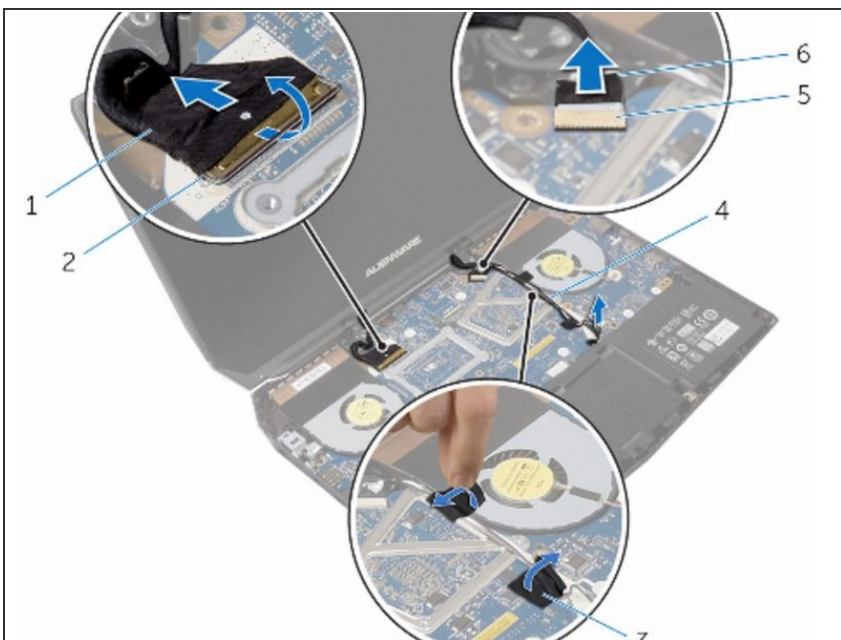
- Align the screw holes on the display hinges with the screw holes on the computer base.

Step 52 — Replace the Screws



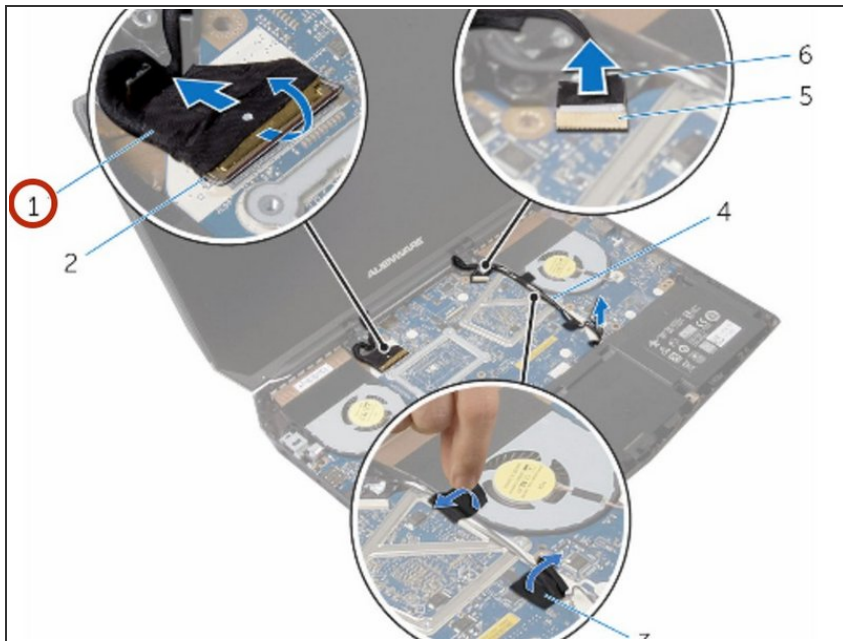
- Replace the screws that secure the display hinges to the computer base.

Step 53 — Routing the Logo-Board Cable



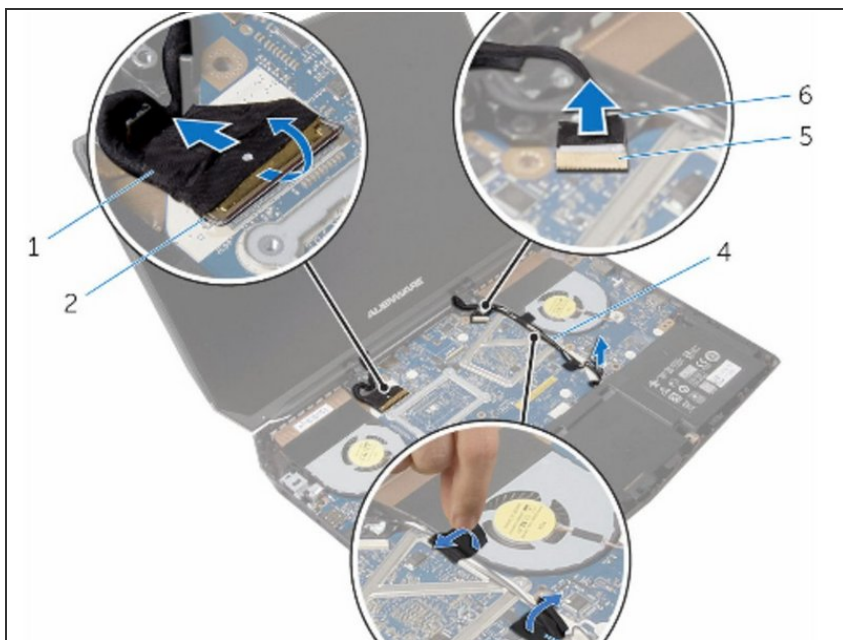
- Route the logo-board cable through the routing guides on the display hinge and connect the logo-board cable to the system board.

Step 54 — Route the Cable



- Route the display cable through the routing guides on the display hinge.

Step 55 — Slide the Display Cable



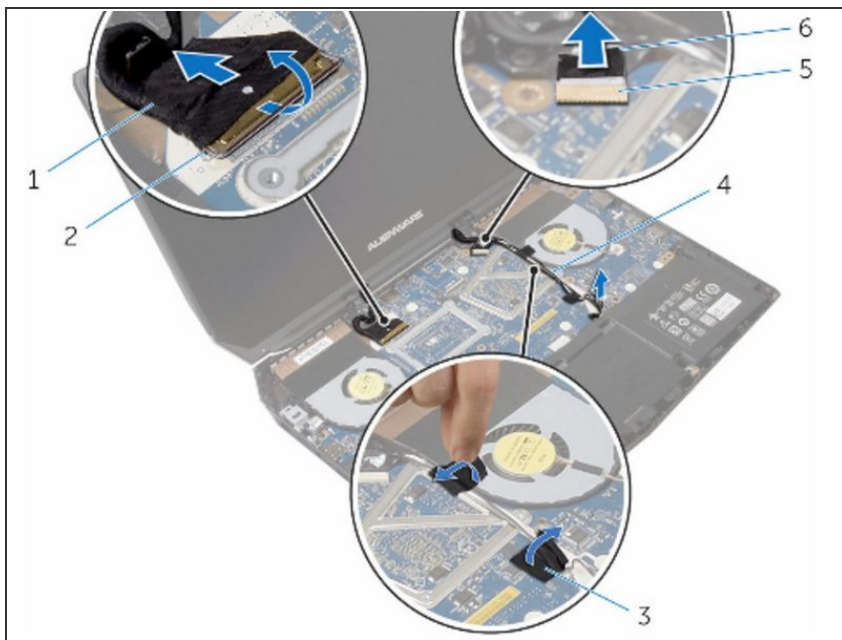
- Slide the display cable into the connector on the system board and press down the latch to secure the cable.

Step 56 — Route the Antenna Cables



- Route the antenna cables through the routing guides on the display hinges.

Step 57 — Adhere the Adhesive Tapes



- Adhere the adhesive tapes that secure the antenna cables to the system board.

Step 58 — Close the Display



- Close the display and turn the computer over.

Step 59 — Connect the Antenna Cables



- Connect the antenna cables to the wireless card.

Step 60 — Replace the Screw



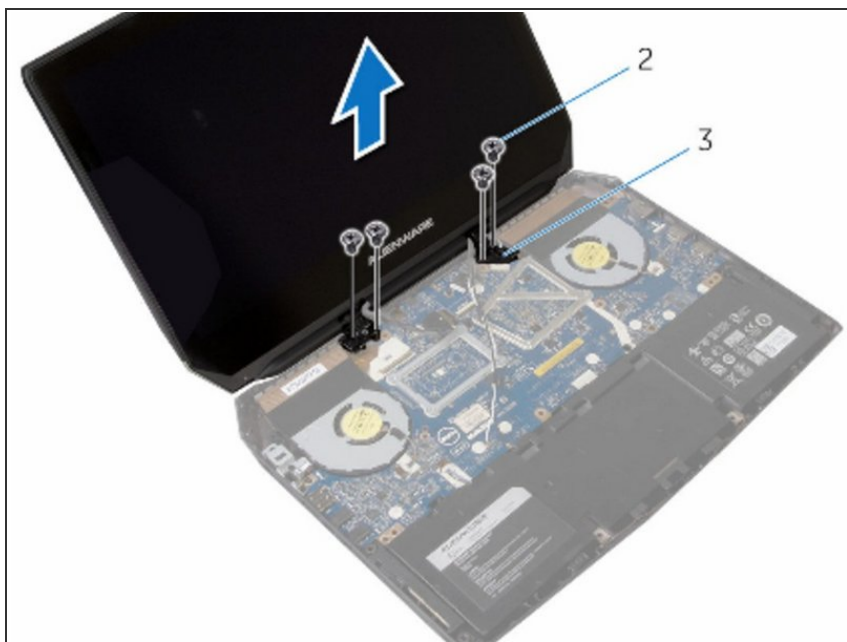
- Replace the screw that secures the wireless-card bracket to the wireless card.

Step 61 — Open the Display



- Turn the computer over and open the display.

Step 62 — Align the Screw Holes



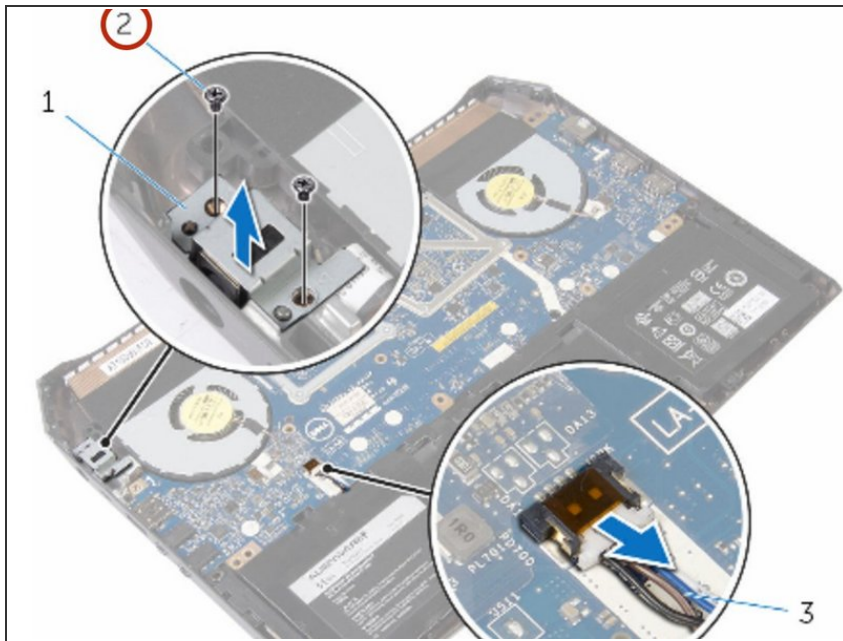
- Align the screw holes on the hinge caps with the screw holes on the display hinges.

Step 63 — Replace the Screws



- Replace the screws that secure the hinge caps to the display hinges.

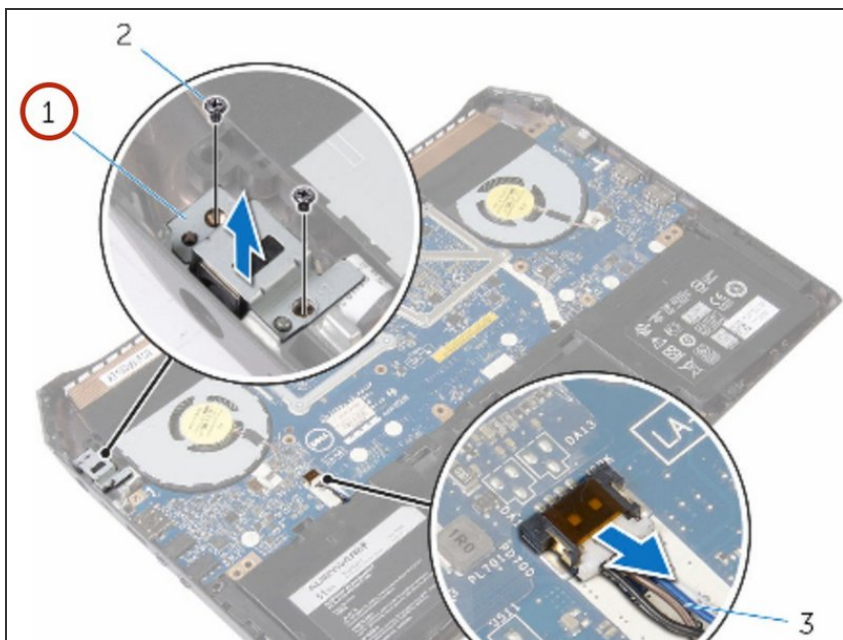
Step 64 — Remove the Screw



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- Remove the screw that secures the power-adapter port bracket to the power-adapter port.

Step 65 — Lifting the Power-Adapter



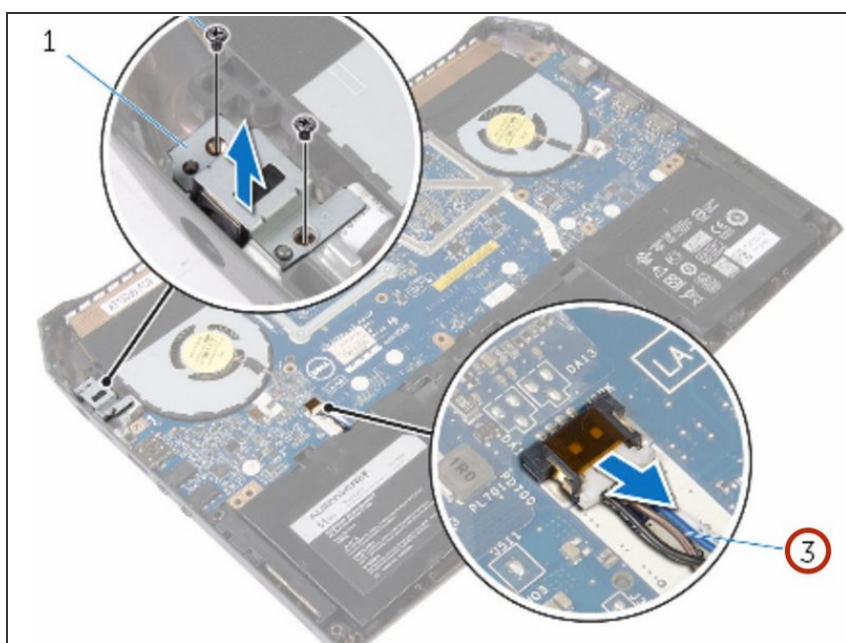
- Lift the power-adapter port bracket off the power-adapter port.

Step 66 — Release the Power-Adapter Port



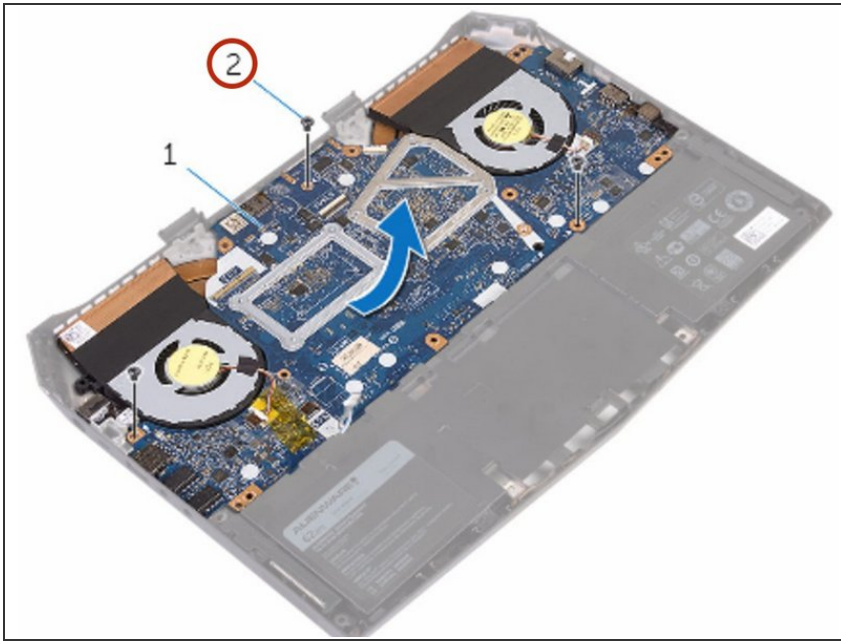
- Release the power-adapter port from the computer base.

Step 67 — Disconnecting the Speaker Cable



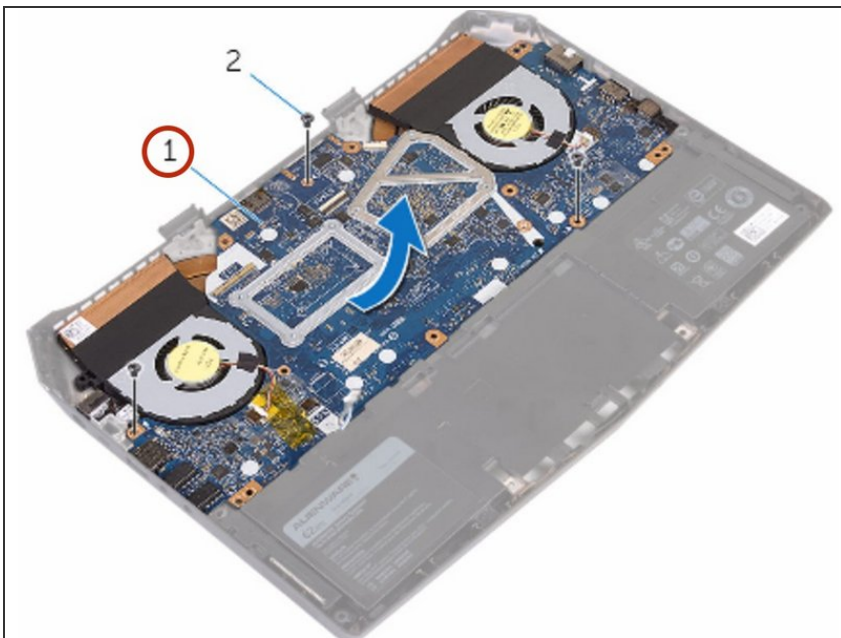
- Disconnect the speaker cable from the system board.

Step 68 — Remove the Screws



- Remove the screws that secure the system board to the computer base.

Step 69 — Lifting the System Board Assembly



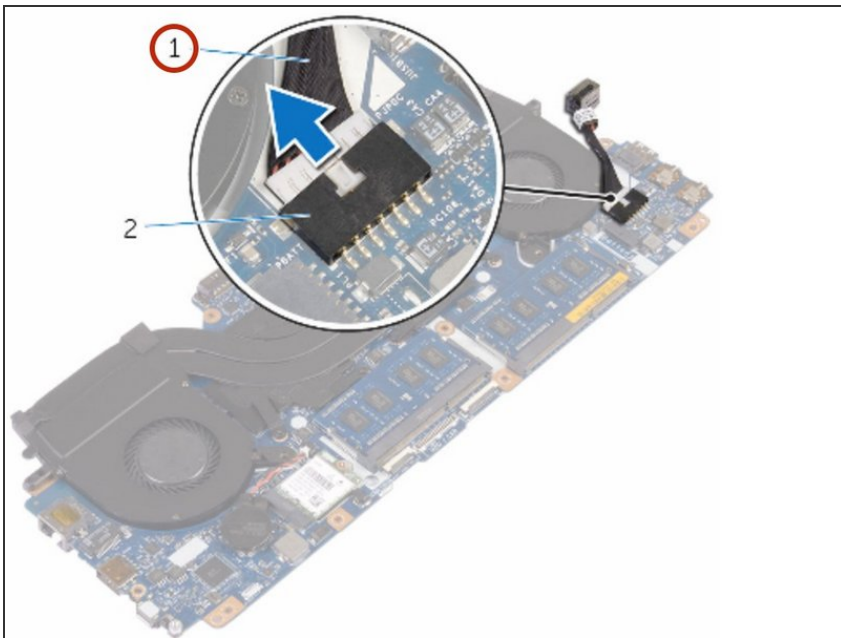
- Slide and lift the system-board assembly.

Step 70 — Turning Over the System-Board Assembly



- Turn the system-board assembly over.

Step 71 — Disconnecting the Power-Adapter Port



- Disconnect the power-adaptor port cable and remove the power-adaptor port from the system board.

Step 72 — Connecting the Power-Adapter Port Cable



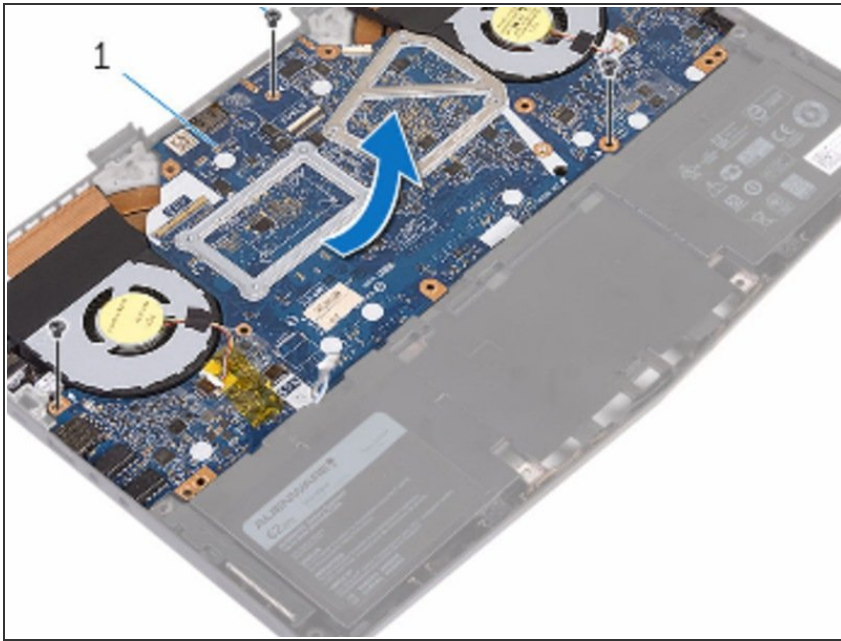
- Connect the power-adapter port cable to the system board.

Step 73 — Turn the System Board Over



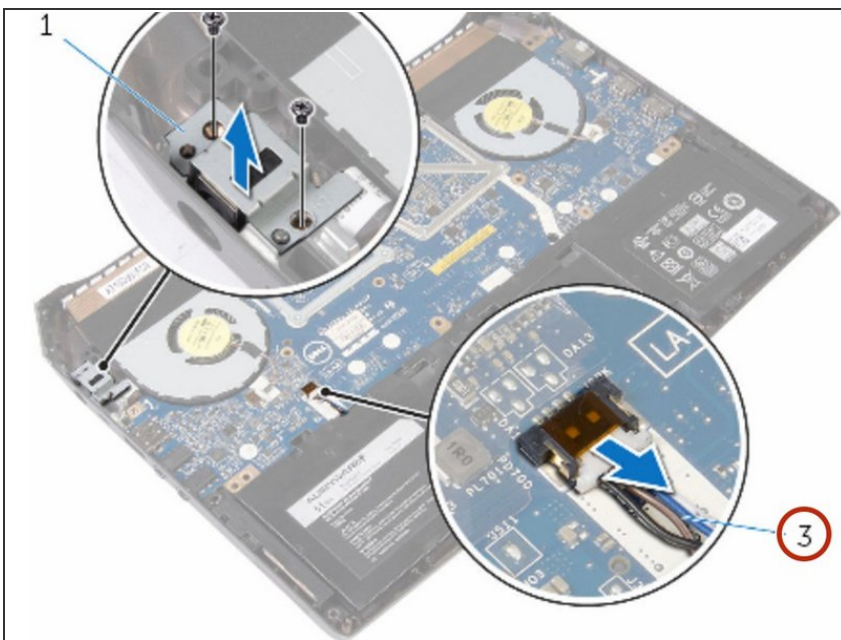
- Turn the system board over.

Step 74 — Replace the Screws



- Replace the screws that secure the system board to the computer base.

Step 75 — Connecting the Speaker Cable



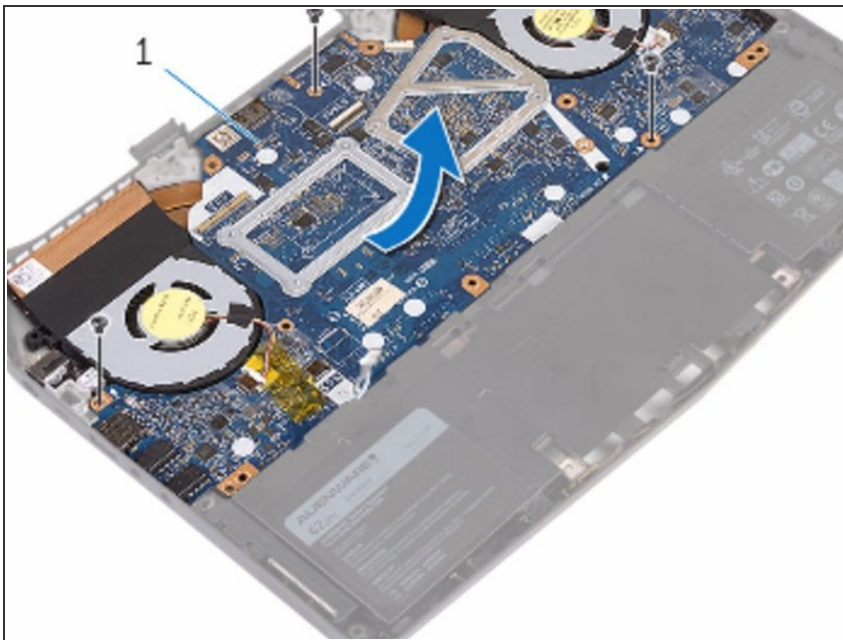
- Connect the speaker cable to the connector on the system board.

Step 76 — Align the Power-Adapter



- Align the power-adapter port to the computer base.

Step 77 — Align the Screw Hole



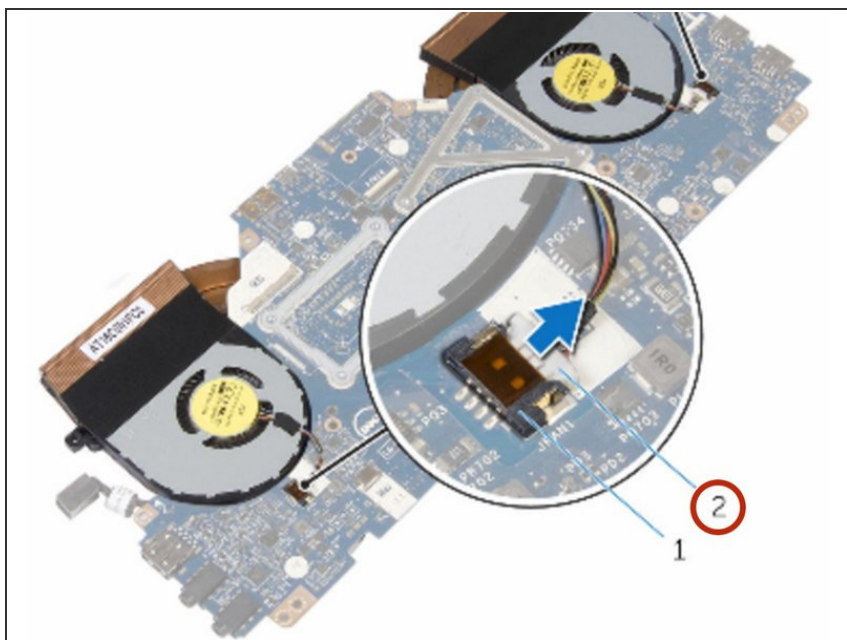
- Align the screw hole on the power-adapter port bracket with the screw hole on the power-adapter port.

Step 78 — Replace the Screw



- Replace the screw that secures the power-adaptor port bracket to the power-adaptor port.

Step 79 — Disconnect the Fan Cables



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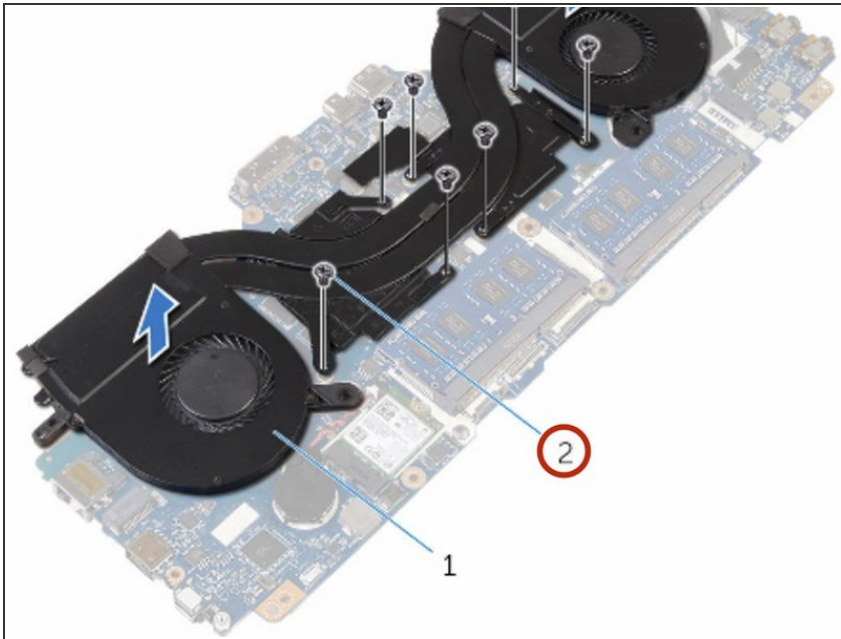
- Disconnect the fan cables from the connectors on the system board.

Step 80 — Turn the System Board Over



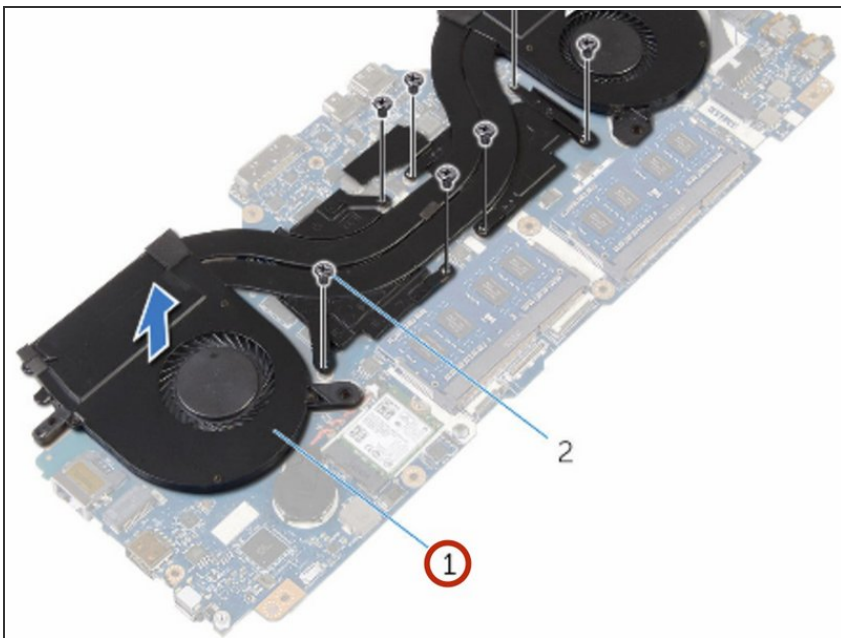
- Turn the system board over.

Step 81 — Remove the Screws



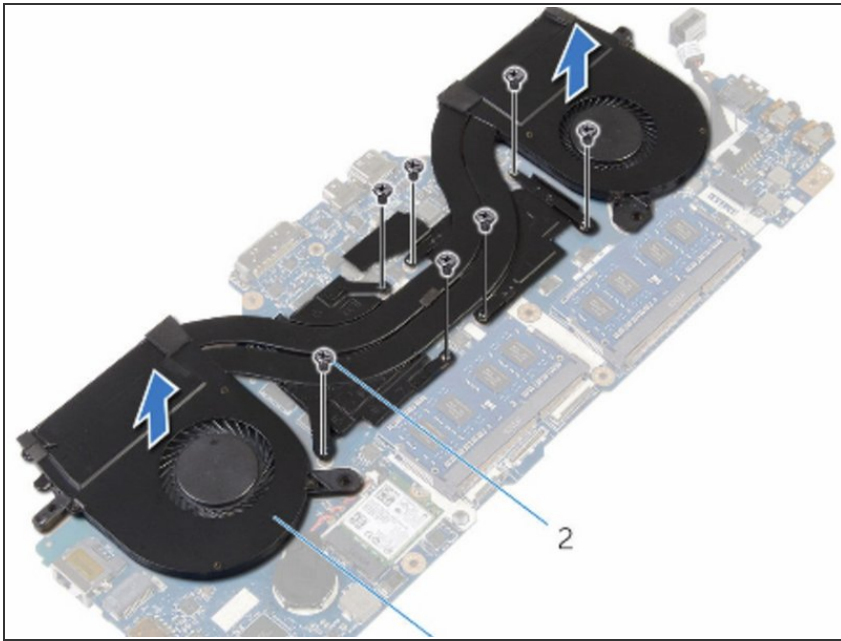
- Remove the screws that secure the heat-sink assembly to the system board.

Step 82 — Lifting the Heat-Sink Assembly



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

Step 83 — Align the Screw Holes



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

Step 84 — Replace the Screws



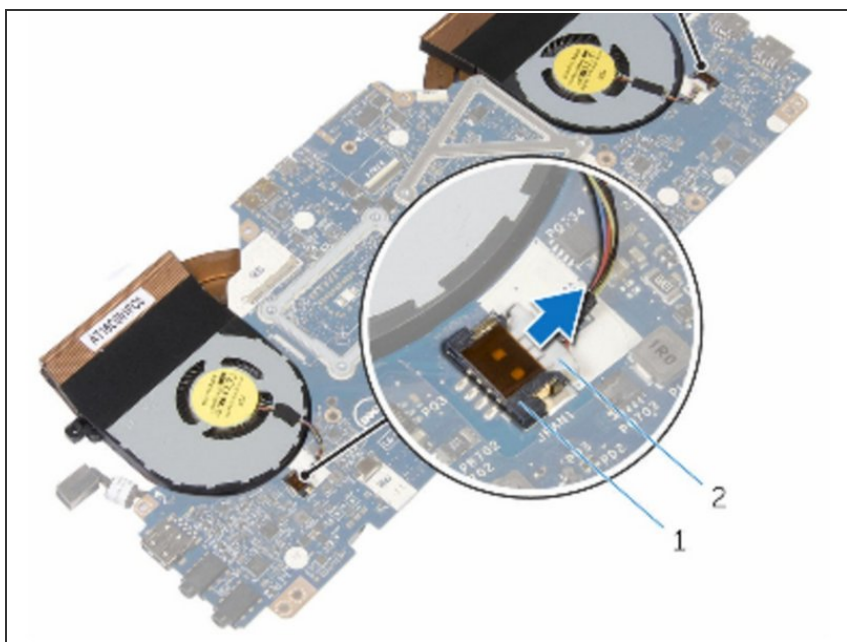
- Replace the screws that secure the heat-sink assembly to the system board.

Step 85 — Turn the System Board Over



- Turn the system board over.

Step 86 — Connect the fan Cables



- Connect the fan cables to the connectors on the system board.

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