

Dell Chromebook 11

CC11260

Service Manual

Notes, cautions, and warnings

 **NOTE:** A NOTE indicates important information that helps you make better use of your product.

 **CAUTION:** A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

 **WARNING:** A WARNING indicates a potential for property damage, personal injury, or death.

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Working inside your computer


Safety instructions

Use the following safety guidelines to protect your computer from potential damage and to ensure your personal safety. Unless otherwise noted, each procedure in this document assumes that you have read the safety information that shipped with your computer.



-  **WARNING:** Before working inside your computer, read the safety information that is shipped with your computer. For more safety best practices, see [Dell Regulatory Compliance Home Page](#).
-  **WARNING:** Disconnect your computer from all power sources before opening the computer cover or panels. After you finish working inside the computer, replace all covers, panels, and screws before connecting your computer to an electrical outlet.
-  **WARNING:** For laptops, discharge the battery completely before removing it. Disconnect the AC power adapter from the computer and operate the computer solely on battery power—the battery is fully discharged when the computer no longer turns on when the power button is pressed.
-  **CAUTION:** To avoid damaging the computer, ensure that the work surface is flat, dry, and clean.
-  **CAUTION:** You should only perform troubleshooting and repairs as authorized or directed by the Dell technical support team. Damage due to servicing that is not authorized by Dell is not covered by your warranty.
-  **CAUTION:** Before touching anything inside your computer, ground yourself by touching an unpainted metal surface, such as the metal at the back of the computer. While you work, periodically touch an unpainted metal surface to dissipate static electricity which could harm internal components.
-  **CAUTION:** To avoid damaging the components and cards, handle them by their edges, and avoid touching the pins and the contacts.
-  **CAUTION:** When you disconnect a cable, pull it by its connector or its pull tab, not the cable itself. Some cables have connectors with locking tabs or thumbscrews that you must disengage before disconnecting the cable. When disconnecting cables, keep them evenly aligned to avoid bending the connector pins. When connecting cables, ensure that the connector on the cable is correctly oriented and aligned with the port.
-  **CAUTION:** Press and eject any installed card from the media-card reader.

Before working inside your computer

About this task

 **NOTE:** The images in this document may differ from your computer depending on the configuration you ordered.

Steps

1. Save and close all open files and exit all open applications.
2. Shut down your computer. For Windows operating system, click **Start** >  **Power** > **Shut down**.
 -  **NOTE:** If you are using a different operating system, see the documentation of your operating system for shut-down instructions.
3. Turn off all the attached peripherals.
4. Disconnect your computer from the electrical outlet.

5. Disconnect all attached network devices and peripherals, such as keyboard, mouse, and monitor from your computer.

 **CAUTION: To disconnect a network cable, unplug the cable from your computer.**

6. Remove any media card and optical disc from your computer, if applicable.

Safety precautions

This section details the primary steps to be followed before disassembling any device or component.

Observe the following safety precautions before any installation or break-fix procedures involving disassembly or reassembly:

- Turn off the computer and all attached peripherals.
- Disconnect the computer from AC power.
- Disconnect all network cables and peripherals from the computer.
- Use an ESD field service kit when working inside your computer to avoid electrostatic discharge (ESD) damage.
- Place the removed component on an anti-static mat after removing it from the computer.
- Press and hold the power button for 15 seconds to discharge the residual power in the system board.

Bonding

Bonding is a method for connecting two or more grounding conductors to the same electrical potential. This is done by using a field service electrostatic discharge (ESD) kit. When connecting a bonding wire, ensure that it is connected to bare metal and never to a painted or nonmetal surface. Ensure that the wrist strap is secure and in full contact with your skin. Remove all jewelry, watches, bracelets, or rings before grounding yourself and the equipment.

Electrostatic discharge—ESD protection

ESD is a major concern when you handle electronic components, especially sensitive components such as expansion cards, processors, memory modules, and system boards. A slight charge can damage circuits in ways that may not be obvious, such as intermittent problems or a shortened product life span. As the industry pushes for lower power requirements and increased density, ESD protection is an increasing concern.


Two recognized types of ESD damage are catastrophic and intermittent failures.

- **Catastrophic** – Catastrophic failures represent approximately 20 percent of ESD-related failures. The damage causes an immediate and complete loss of device functionality. An example of catastrophic failure is a memory module that has received a static shock and immediately generates a "No POST/No Video" symptom with a beep code that is emitted for missing or nonfunctional memory.
- **Intermittent** – Intermittent failures represent approximately 80 percent of ESD-related failures. The high rate of intermittent failures means that most of the time when damage occurs, it is not immediately recognizable. The memory module receives a static shock, but the tracing is merely weakened and does not immediately produce outward symptoms that are related to the damage. The weakened trace may take weeks or months to melt, and in the meantime may cause degradation of memory integrity, intermittent memory errors, and so on.

Intermittent failures that are also called latent or "walking wounded" are difficult to detect and troubleshoot.

Perform the following steps to prevent ESD damage:

- Use a wired ESD wrist strap that is properly grounded. Wireless anti-static straps do not provide adequate protection. Touching the chassis before handling parts does not ensure adequate ESD protection on parts with increased sensitivity to ESD damage.
- Handle all static-sensitive components in a static-safe area. If possible, use anti-static floor pads and workbench pads.
- When unpacking a static-sensitive component from its shipping carton, do not remove the component from the anti-static packing material until you are ready to install the component. Before unwrapping the anti-static packaging, use the anti-static wrist strap to discharge the static electricity from your body.


 **NOTE:** You can protect against ESD and discharge static electricity from your body by touching a metal-grounded object before you interact with anything electronic, for example, an unpainted metal surface on your computer's I/O panel. When connecting a peripheral (including handheld digital assistants) to your computer, you should always ground both yourself and the peripheral before connecting it to the computer. In addition, as you work inside the computer, periodically touch a metal-grounded object to remove any static charge that your body may have accumulated.

For more information about the wrist strap and ESD wrist strap tester, see [Components of an ESD Field Service Kit](#).

- Before transporting a static-sensitive component, place it in an anti-static container or packaging.

ESD Field Service kit

The unmonitored field service kit is the most commonly used service kit. Each Field Service kit includes three main components: anti-static mat, wrist strap, and bonding wire.

 **CAUTION:** It is critical to keep ESD-sensitive devices away from internal parts that are insulated and often highly charged, such as plastic heat sink casings.

Working environment

. For example, deploying the kit for a server environment is different than for a desktop or laptop environment. Servers are typically installed in a rack within a data center; desktops or laptops are typically placed on office desks or cubicles. Always look for a large open flat work area that is free of clutter and large enough to deploy the ESD kit with additional space to accommodate the type of computer that is being repaired. The workspace should also be free of insulators that can cause an ESD event. On the work area, insulators such as styrofoam and other plastics should always be moved at least 12 inches or 30 centimeters away from sensitive parts before physically handling any hardware components.


ESD packaging

All ESD-sensitive devices must be shipped and received in static-safe packaging. Metal, static-shielded bags are preferred. However, you should always return the damaged component using the same ESD bag and packaging that the new part arrived in. The ESD bag should be folded over and taped shut and all the same foam packing material should be used in the original box that the new part arrived in. ESD-sensitive devices should be removed from packaging only at an ESD-protected work surface, and parts should never be placed on top of the ESD bag because only the inside of the bag is shielded. Always place parts in your hand, on the anti-static mat, in the computer, or inside an ESD bag.

Components of an ESD Field Service kit

The components of an ESD Field Service kit are:

- **Anti-Static Mat** – The anti-static mat is dissipative and parts can be placed on it during service procedures. When using an anti-static mat, your wrist strap should be snug and the bonding wire should be connected to the anti-static mat and to any bare metal on the computer being worked on. Once deployed properly, service parts can be removed from the ESD bag and placed directly on the anti-static mat. ESD-sensitive items are safe in your hand, on the anti-static mat, in the computer, or inside an ESD bag.
- **Wrist Strap and Bonding Wire** – If an anti-static mat is not being used, the wrist strap and bonding wire should be connected directly between your wrist and an exposed metal part of the hardware. If you are using an anti-static mat, connect the wrist strap and bonding wire to the anti-static mat to ensure protection for any hardware placed on the mat. The physical connection of the wrist strap and bonding wire between your skin, the anti-static mat, and the hardware is known as bonding. Use only Field Service kits with a wrist strap, anti-static mat, and bonding wire. Never use wireless wrist straps. Always be cautious that the internal wires of a wrist strap are prone to damage from normal wear and tear, and must be checked regularly with a wrist strap tester in order to avoid accidental ESD hardware damage. It is recommended to test the wrist strap and bonding wire at least once per week.
- **ESD Wrist Strap Tester** – The wires inside an ESD strap are prone to damage over time. When using an unmonitored ESD kit, it is recommended to test the wrist strap regularly—ideally before each service session, and at a minimum, once per week. The most reliable method for testing is with a wrist strap tester. To perform the test, connect the bonding wire of the wrist strap to the tester while wearing the strap. Press the test button to initiate the check. A green LED indicates a successful test, while a red LED and audible alarm signal a failure.


 **NOTE:** It is recommended to always use the traditional wired ESD grounding wrist strap and protective anti-static mat when servicing Dell products. In addition, it is critical to keep sensitive parts separate from all insulator parts while servicing the computer.

Transporting sensitive components

When transporting ESD sensitive components such as replacement parts or parts to be returned to Dell, it is critical to place these parts in anti-static bags for safe transport.

After working inside your computer

About this task

 **CAUTION:** Leaving stray or loose screws inside your computer may severely damage your computer.

Steps

1. Replace all screws and ensure that no stray screws remain inside your computer.
2. Connect any external devices, peripherals, or cables you removed before working on your computer.
3. Replace any media cards, discs, or any other components that you removed before working on your computer.
4. Connect your computer and all attached devices to their electrical outlets.
5. Turn on your computer.

Recommended tools

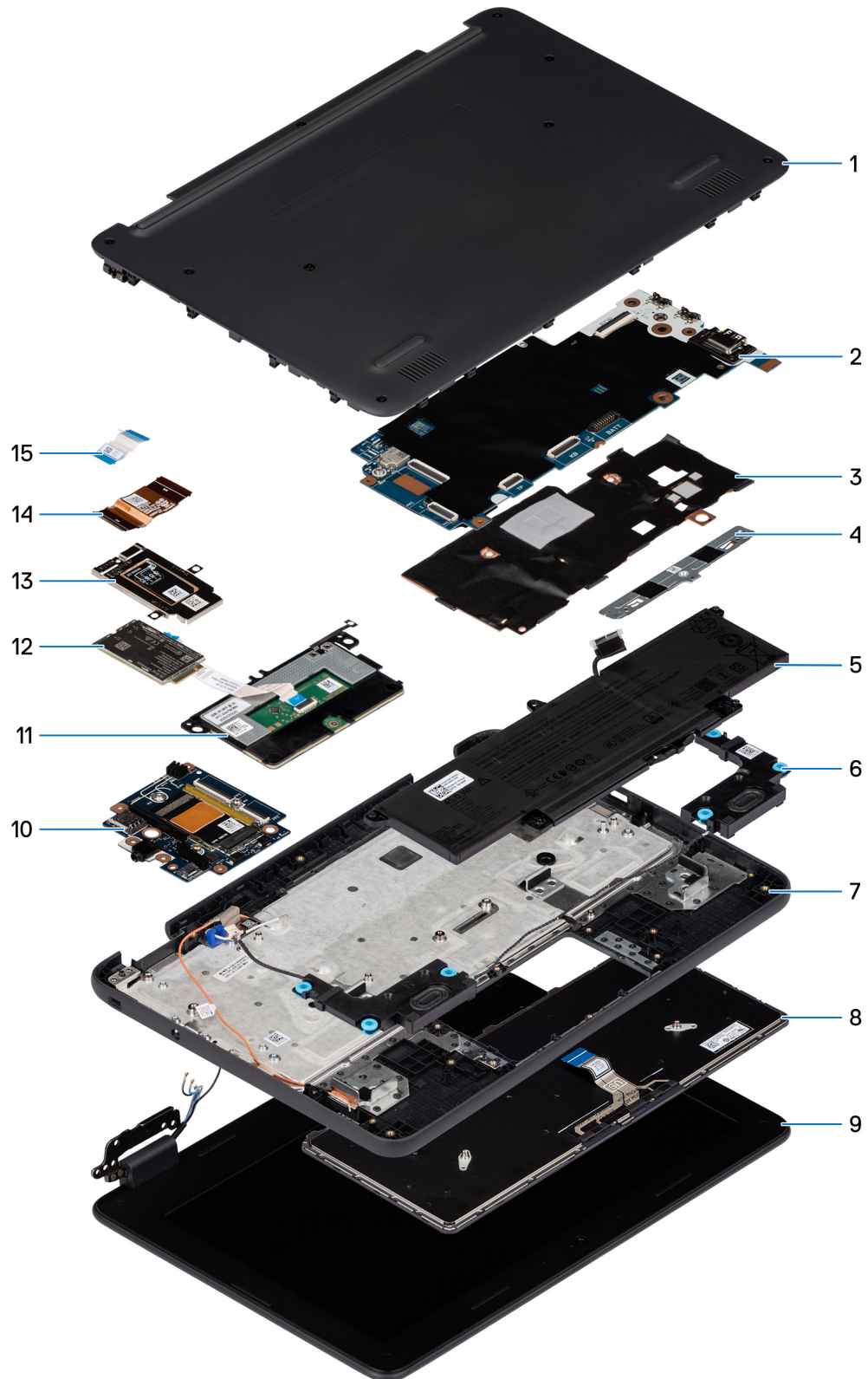
The procedures in this document may require the following tools:

- Phillips screwdriver #0
- Phillips screwdriver #1
- Torx #6 screwdriver
- Plastic scribe

Major components of Dell Chromebook 11 CC11260

The following image shows the major components of Dell Chromebook 11 CC11260.

Figure 1. Major components of your



system

- 1. Base cover
- 2. System board
- 3. Thermal plate
- 4. Touchpad bracket
- 5. Battery

6. Speaker
7. Palm-rest assembly
8. Keyboard
9. Display assembly
10. WWAN I/O board
11. Touchpad
12. WWAN card
13. WWAN-card thermal shield
14. WWAN I/O board cable
15. Audio I/O board cable

NOTE: Dell provides a list of components and their part numbers for the original computer configuration purchased. These parts are available depending on the warranty coverage selected at the time of purchase. Components from upsell or upgraded variants may not be covered under the standard system warranty. For more details or to explore purchase options, contact your Dell sales representative.

Screw list

NOTE: When removing screws from a component, it is recommended to note the screw type and the quantity of screws, and then place them in a screw storage box. This is to ensure that the correct number of screws and correct screw type is restored when the component is replaced.

NOTE: Some computers have magnetic surfaces. Ensure that the screws are not left attached to such surfaces when replacing a component.

NOTE: Screw color may vary depending on the configuration ordered.

Table 1. Screw list




















Component	Screw type	Quantity	Screw image
Base cover (for models without WWAN)	Captive (Phillips #1) screws	9	
Base cover (for models with WWAN)	Captive (Torx 6) screws	9	
Battery	Captive screws	4	
Battery	M2x4	1	
Audio I/O board (for models without WWAN)	M2x4	2	
Speakers	M1.6x1.5	2	
Touchpad	M2x2.3	6	
Touchpad	M1.6x1.4	1	
System board	M2x4	5	
WLAN bracket	M2x3	1	

Table 1. Screw list (continued)

Component	Screw type	Quantity	Screw image
Display-cable bracket	M2.5x5	1	
Type-C bracket (for models with a single USB Type-C port)	M2x4	1	
Type-C bracket (for models with two USB Type-C ports)	M2x4	2	
Thermal plate	M2x3	2	
WWAN-card bracket	M2x3	3	
Audio jack bracket (for models with WWAN)	M2x4	2	
WWAN I/O board	M2x2.5	3	
Left hinge	M2.5x5	3	
Right hinge	M2.5x5	3	

Customer Replaceable Units (CRUs) and Field Replaceable Units (FRUs) list

The replaceable components in Dell Chromebook 11 CC11260 are either Customer Replaceable Units (CRUs) or Field Replaceable Units (FRUs).

⚠ CAUTION: To avoid any potential damage to the component or loss of data, ensure that an authorized service technician replaces the Field Replaceable Units (FRUs). Customers can replace only the Customer Replaceable Units (CRUs) following the safety precautions and replacement procedures.

Table 2. CRU and FRU list

Customer Replaceable Unit (CRU)	Field Replaceable Unit (FRU)
Base cover (for models without WWAN)	Base cover (for models with WWAN)
Battery (for models without WWAN)	Battery (for models with WWAN)
Battery cable (for models without WWAN)	Battery cable (for models with WWAN)
I/O-board cable (for models without WWAN)	SIM-card tray (for models with WWAN)
Audio I/O board (for models without WWAN)	Keyboard
Speaker (for models without WWAN)	I/O-board cable (for models with WWAN)
	WWAN I/O board cable (for models with WWAN)
	Speaker (for models with WWAN)
	Touchpad
	System board
	Thermal plate


Table 2. CRU and FRU list (continued)

Customer Replaceable Unit (CRU)	Field Replaceable Unit (FRU)
	WWAN card (for models with WWAN)
	WWAN I/O board (for models with WWAN)
	Display assembly
	Palm-rest assembly

Removing and installing Customer Replaceable Units (CRUs)

The replaceable components in this chapter are Customer Replaceable Units (CRUs).

 **CAUTION:** Customers can replace only the Customer Replaceable Units (CRUs) following the safety precautions and replacement procedures.

 **NOTE:** The images in this document may differ from your computer depending on the configuration you ordered.

Base cover

Removing the base cover (for models without WWAN)

Prerequisites

Follow the procedure in [Before working inside your computer](#).

About this task

The following images indicate the location of the base cover and provide a visual representation of the removal procedure.



9x



Figure 2. Loosening the base cover screws

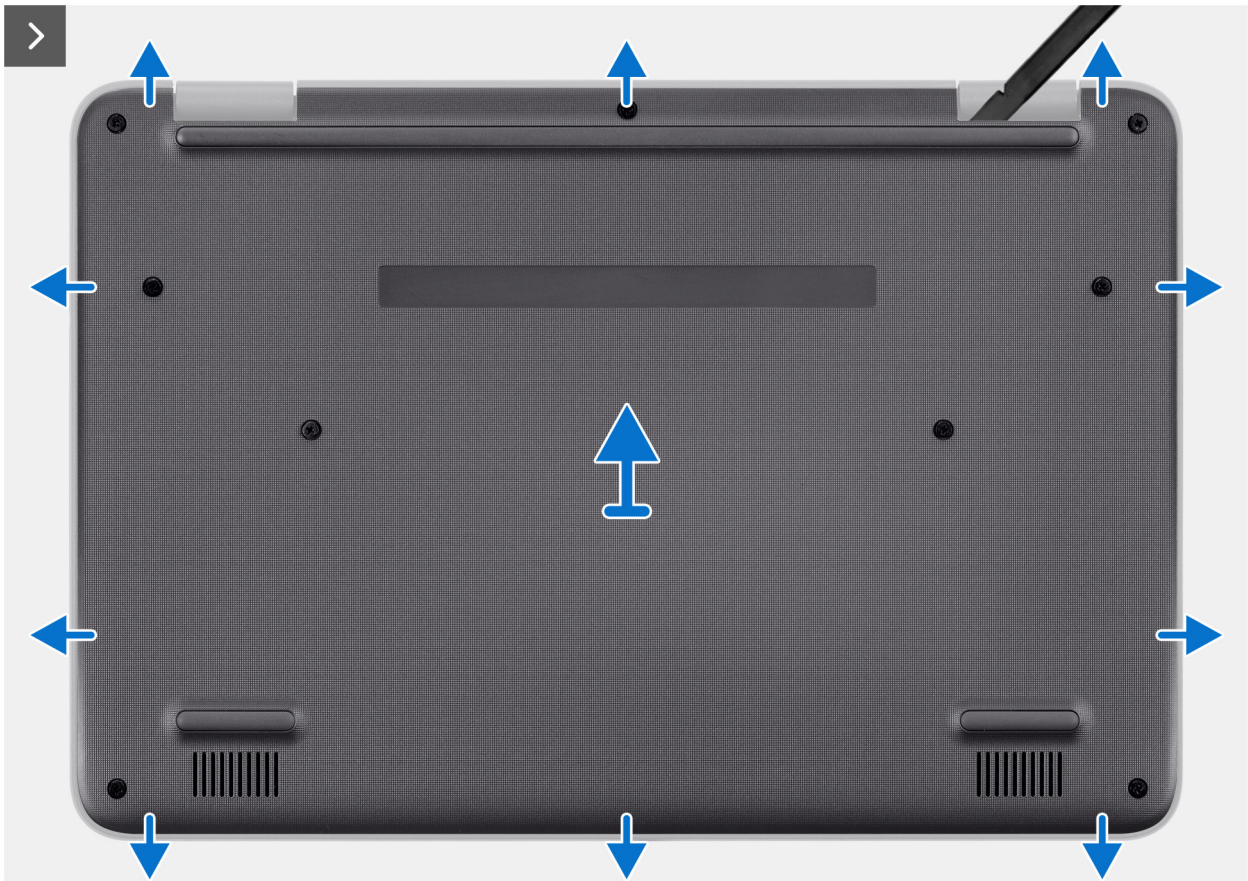


Figure 3. Prying the base cover

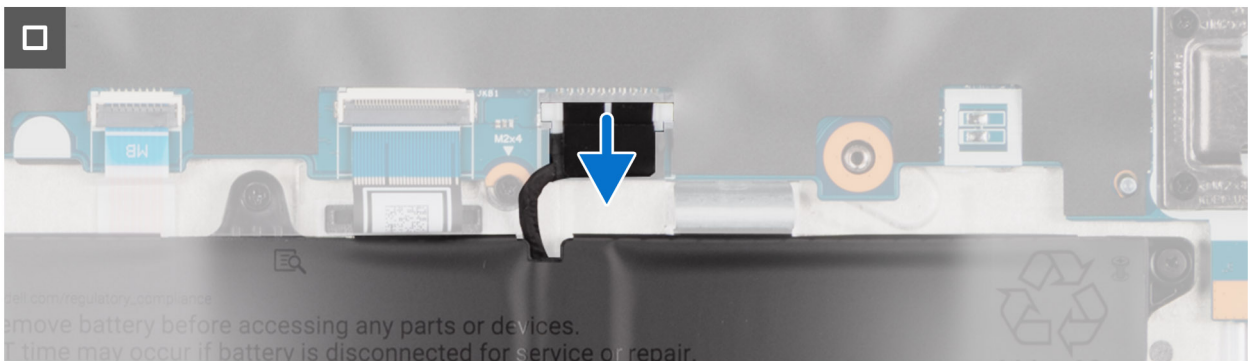
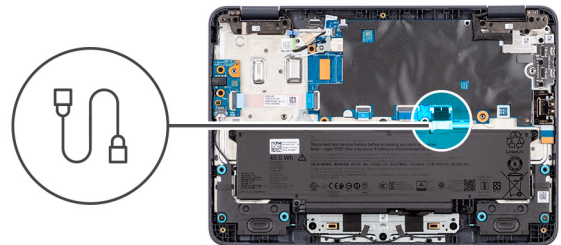


Figure 4. Disconnecting the battery cable

Steps

1. Loosen the nine captive (Phillips #1) screws that secure the base cover to the palm-rest assembly.
2. Using a plastic scribe, pry the base cover from the U-shaped indents at the top and continue working on the sides to open the base cover.

3. Lift and remove the base cover off the palm-rest assembly.
4. Use the pull tab to disconnect the battery cable from the connector (BATT) on the system board.

Installing the base cover (for models without WWAN)

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following images indicate the location of the base cover and provide a visual representation of the installation procedure.

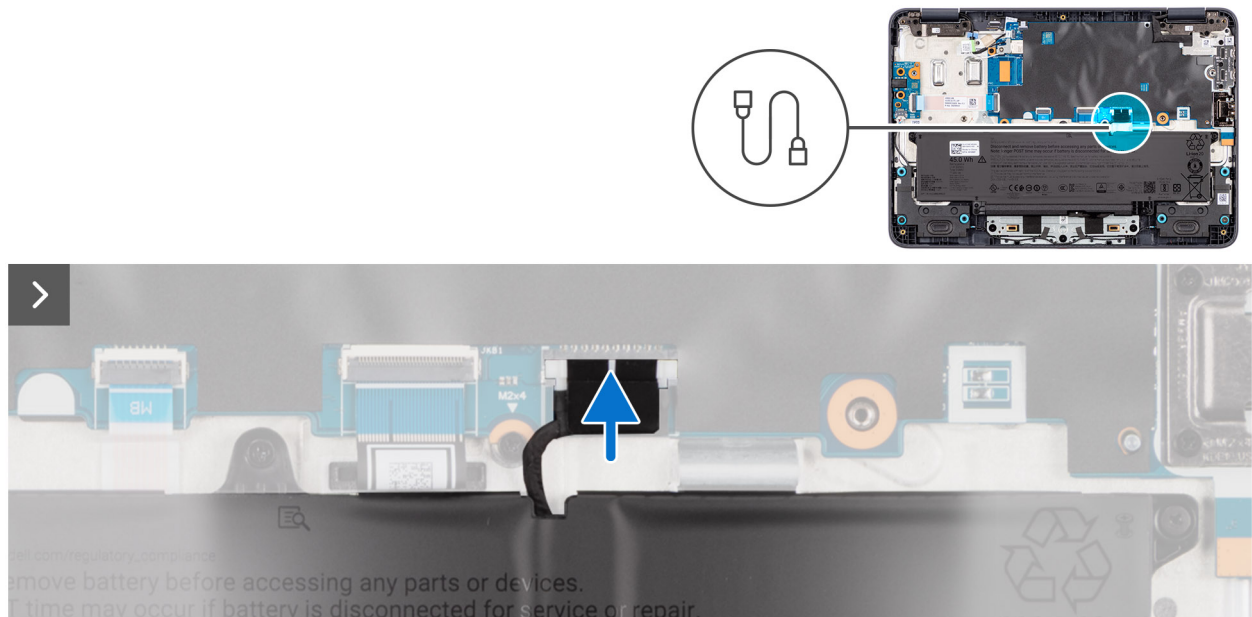


Figure 5. Connecting the battery cable

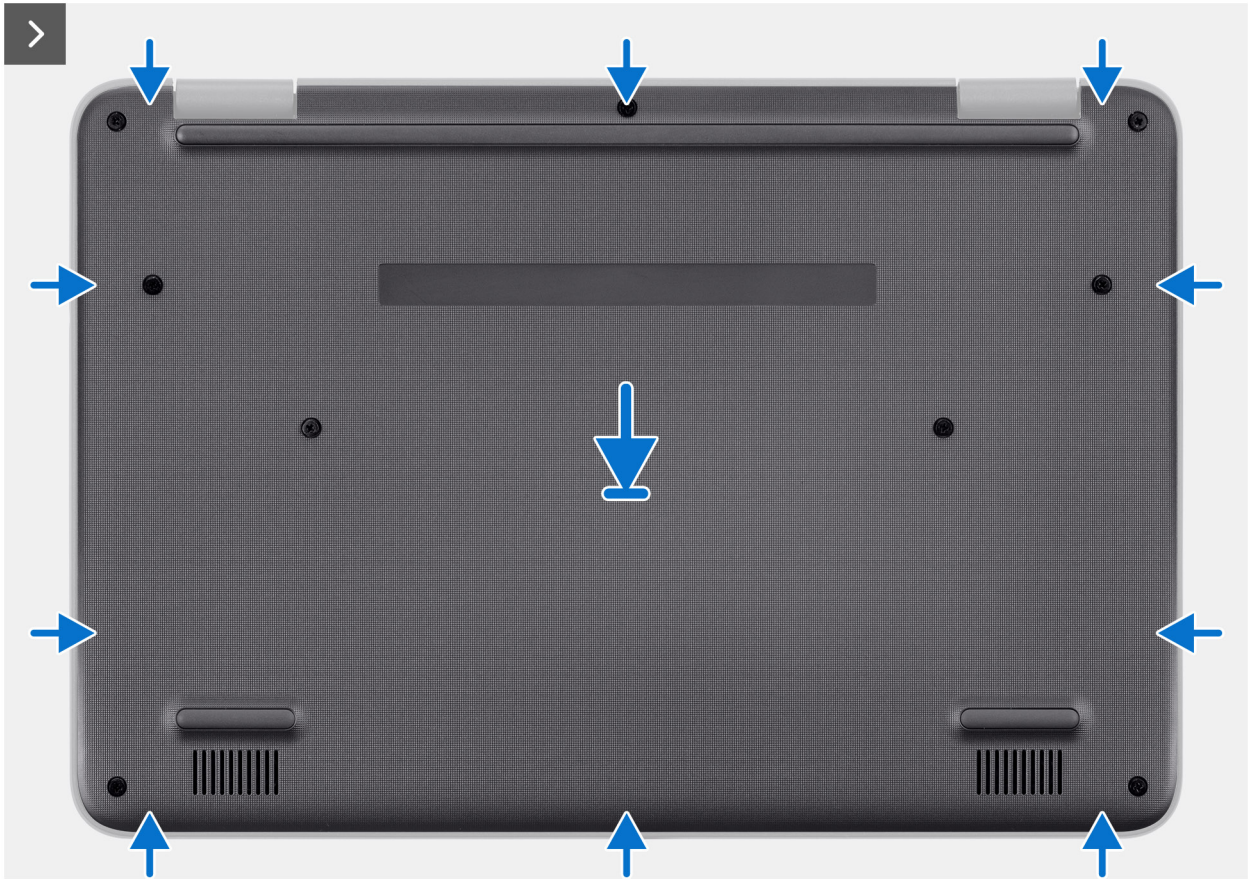


Figure 6. Snapping the base cover into place



9x



Figure 7. Tightening the base cover screws

Steps

1. Connect the battery cable to the connector (BATT) on the system board.
2. Place the base cover on top of the palm-rest assembly.
3. Align the screw holes on the base cover with the screw holes on the palm-rest assembly, and snap the base cover into place.
4. Tighten the nine captive (Phillips #1) screws to secure the base cover to the palm-rest assembly.

Next steps

Follow the procedure in [After working inside your computer](#).

Battery (for models without WWAN)

Removing the battery (for models without WWAN)

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).

About this task

The following images indicate the location of the battery and provide a visual representation of the removal procedure.



Figure 8. Removing the battery

Steps

1. Loosen the four captive screws and remove the screw (M2x4) that secures the battery to the palm-rest assembly.
2. Lift the battery off the palm-rest assembly.

Installing the battery (for models without WWAN)

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following images indicate the location of the battery and provide a visual representation of the installation procedure.

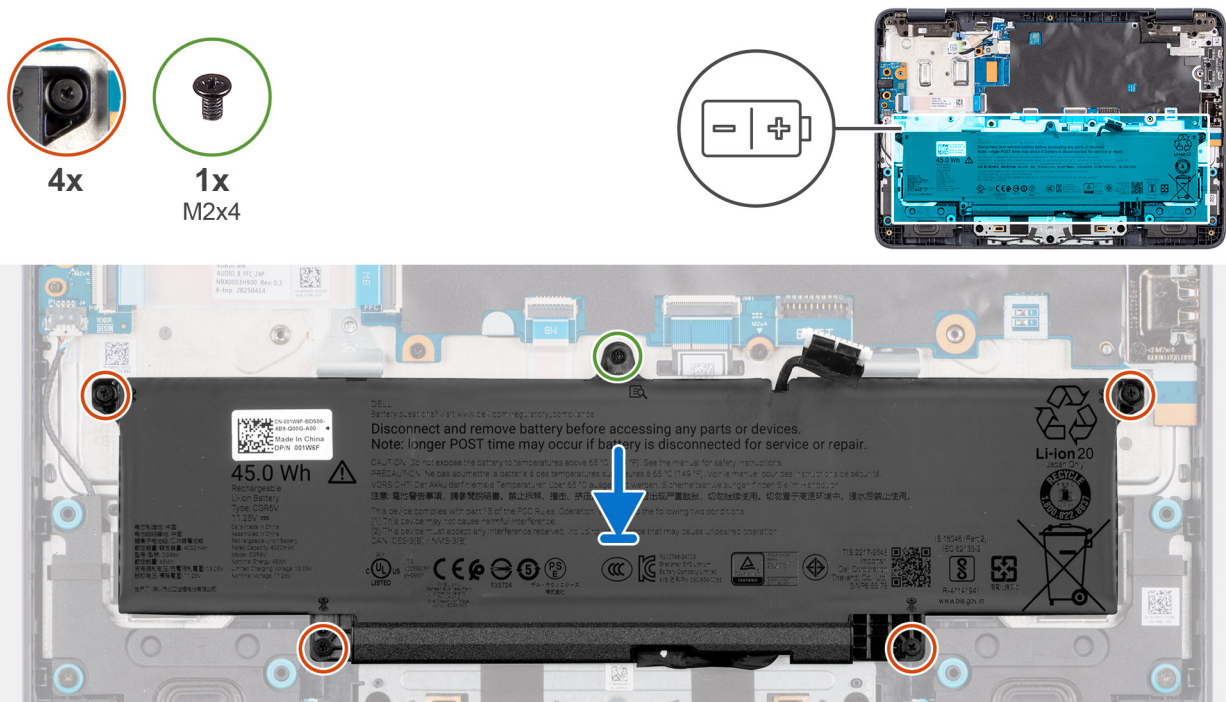


Figure 9. Installing the battery

Steps

1. Align and place the battery in the slot on the palm-rest assembly.
2. Replace the single screw (M2x4) and tighten the four captive screws to secure the battery to the palm-rest assembly.

Next steps

1. Install the [base cover](#).
2. Follow the procedure in [After working inside your computer](#).

Battery cable (for models without WWAN)

Removing the battery cable (for models without WWAN)

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).
3. Remove the [battery](#).

About this task

The following image indicates the location of the battery cable and provides a visual representation of the removal procedure.

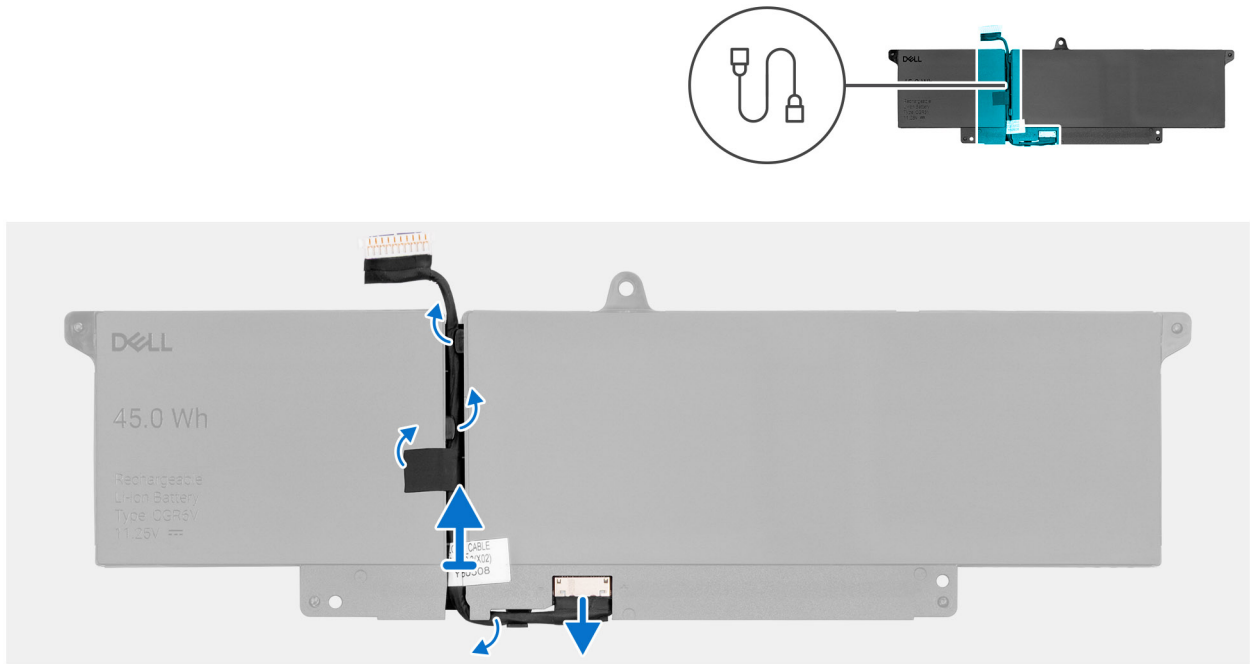


Figure 10. Removing the battery cable

Steps

Disconnect the battery cable from the connector on the battery.

Installing the battery cable (for models without WWAN)

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following image indicates the location of the battery cable and provides a visual representation of the installation procedure.

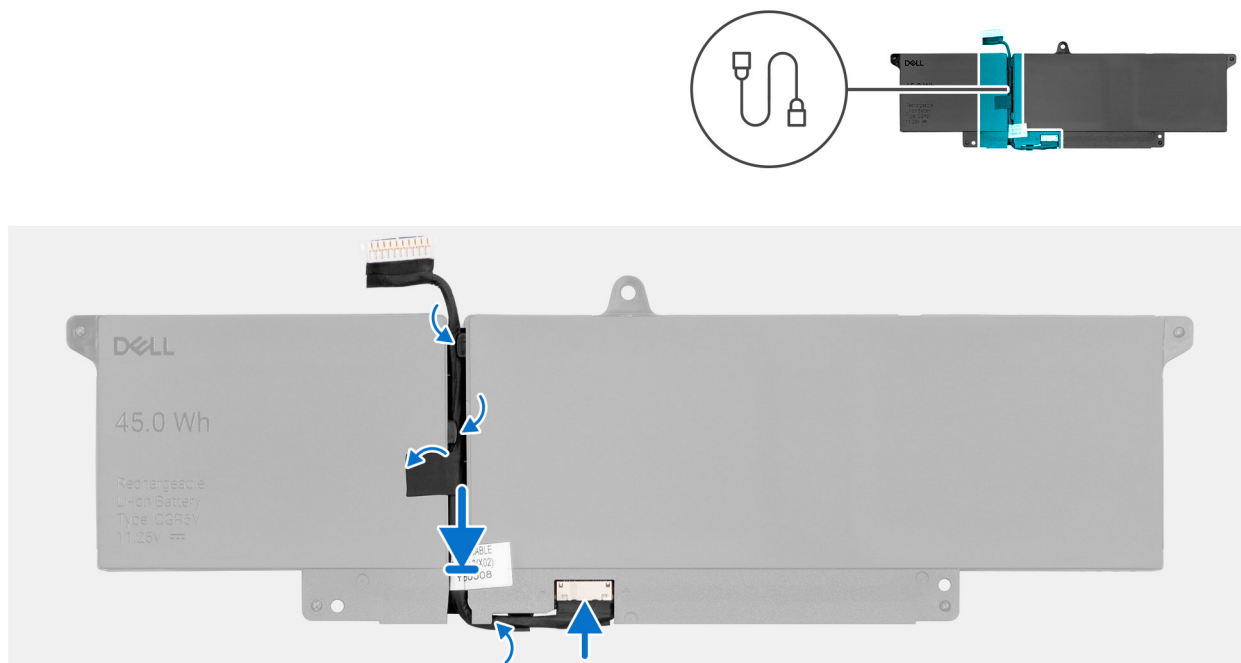


Figure 11. Installing the battery cable

Steps

Connect the battery cable to the connector on the battery.

Next steps

1. Install the [battery](#).
2. Install the [base cover](#).
3. Follow the procedure in [After working inside your computer](#).

I/O-board cable

Removing the I/O board cable (for models without WWAN)

CAUTION: The information in this removal section is intended for authorized service technicians only.

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).

About this task

The following images indicate the location of the I/O board cable and provide a visual representation of the removal procedure.



Figure 12. Removing the I/O board cable

Steps

1. Disconnect the I/O board cable from the I/O board and system board.
2. Gently peel and remove the I/O board cable from the computer.

Installing the I/O board cable (for models without WWAN)

CAUTION: The information in this installation section is intended for authorized service technicians only.

Prerequisites

If you are replacing a component, remove the existing component before performing the installation process.

About this task

The following images indicate the location of the I/O board cable and provide a visual representation of the installation procedure.



Figure 13. Installing the I/O board cable

Steps

1. Carefully align and press the I/O board cable onto its place.
2. Plug the ends of the I/O board cable into the corresponding connectors on the I/O board and the system board, ensuring secure connections.

Next steps

1. Install the [base cover](#).
2. Follow the procedure in [After working inside your computer](#).

Audio I/O board

Removing the audio I/O board (for models without WWAN)

⚠ CAUTION: The information in this removal section is intended for authorized service technicians only.

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).

About this task

The following images indicate the location of the audio I/O board and provide a visual representation of the removal procedure.



2x
M2x4

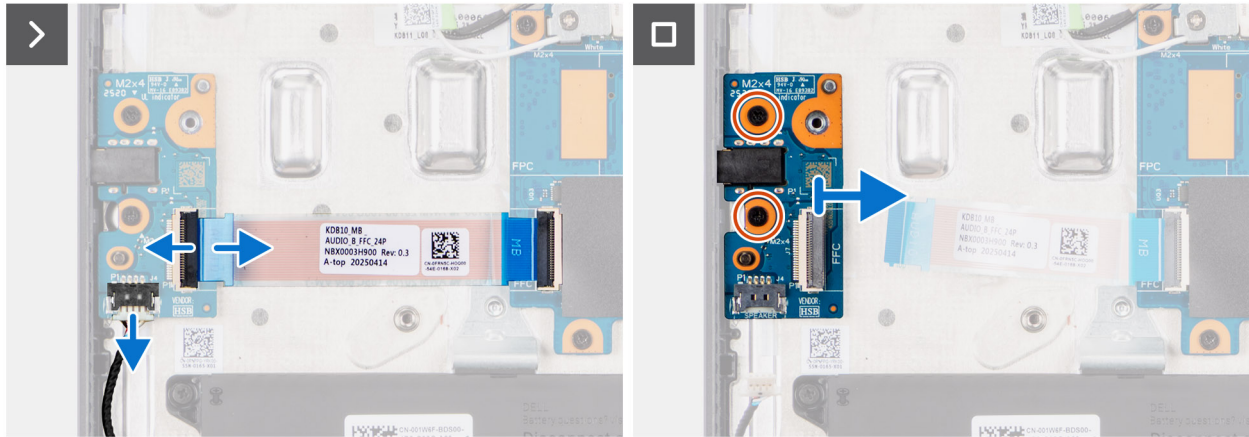


Figure 14. Removing the audio I/O board

Steps

1. Disconnect the speaker cable and audio I/O-board cable from the audio I/O board.
2. Remove the two screws (M2x4) securing the audio I/O board in place.
3. Remove the audio I/O board from the computer.

Installing the audio I/O board (for models without WWAN)

CAUTION: The information in this installation section is intended for authorized service technicians only.

Prerequisites

If you are replacing a component, remove the existing component before performing the installation process.

About this task

The following images indicate the location of the audio I/O board and provide a visual representation of the installation procedure.



2x
M2x4

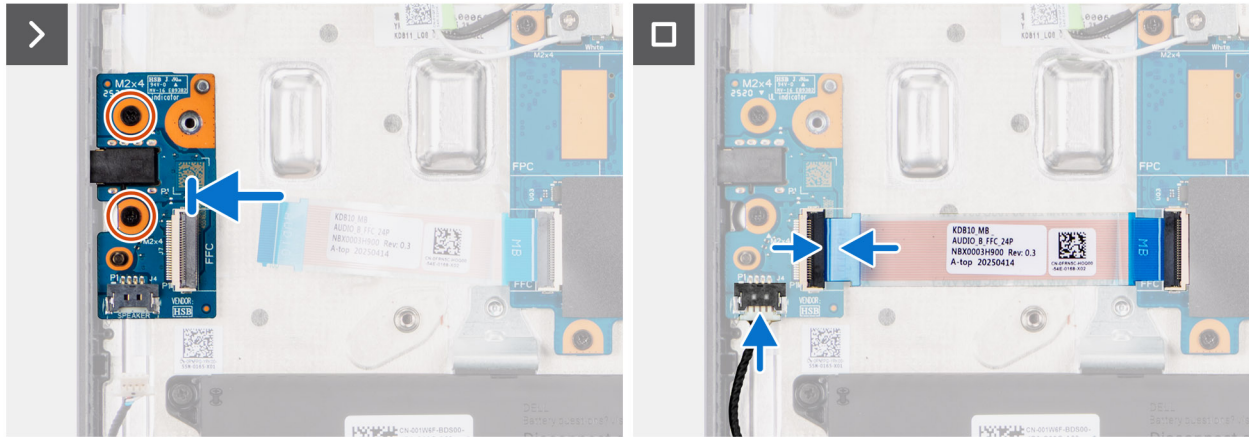


Figure 15. Installing the audio I/O board

Steps

1. Carefully align and place the audio I/O board onto the computer.
2. Replace the two screws (M2x4) securing the audio I/O board in place.
3. Connect the audio I/O-board cable and speaker cable to the audio I/O board.

Next steps

1. Install the [base cover](#).
2. Follow the procedure in [After working inside your computer](#).

Speaker

Removing the speakers (for models without WWAN)

CAUTION: The information in this removal section is intended for authorized service technicians only.

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).

About this task

The following images indicate the location of the speakers and provide a visual representation of the removal procedure.

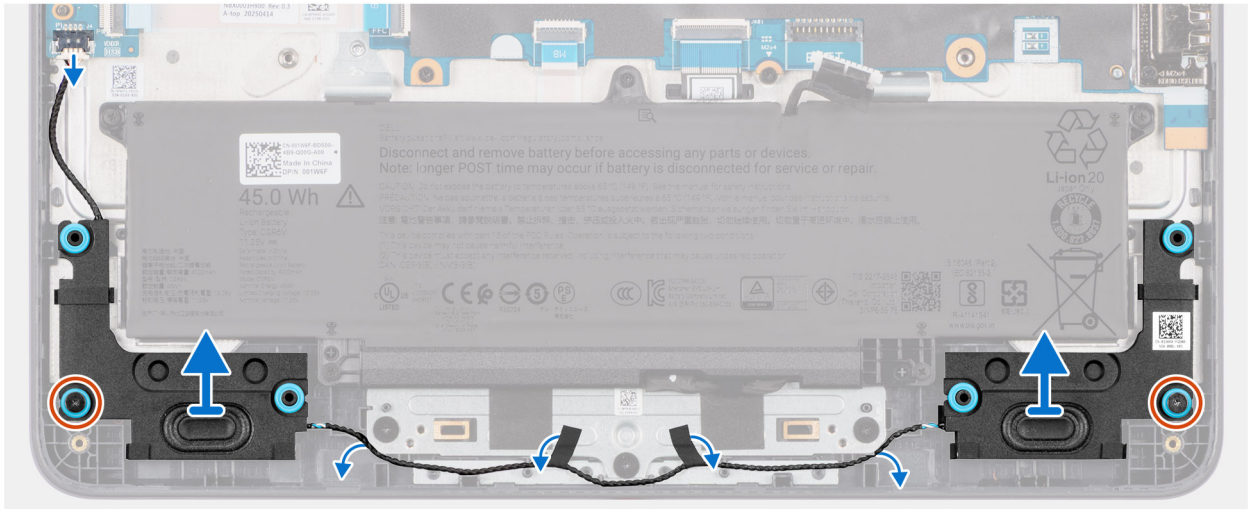
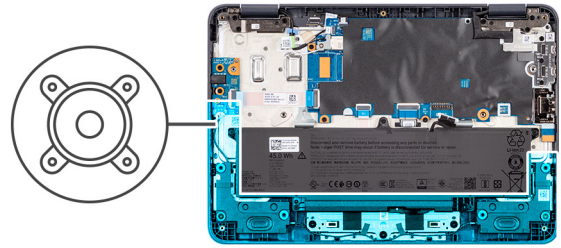


Figure 16. Removing the speakers

Steps

1. Disconnect the speaker cable from the connector (SPEAKER) on the I/O board.
2. Remove the two screws (M1.6x1.5) that secure the speakers to the palm-rest assembly.
3. Remove the speaker cable from the routing guides on the palm-rest assembly.
4. Release the speakers from the rubber grommets and lift the speakers off the palm-rest assembly.

Installing the speakers (for models without WWAN)

CAUTION: The information in this installation section is intended for authorized service technicians only.

Prerequisites

If you are replacing a component, remove the existing component before performing the installation process.

About this task

The following images indicate the location of the speakers and provide a visual representation of the installation procedure.



2x
M1.6x1.5

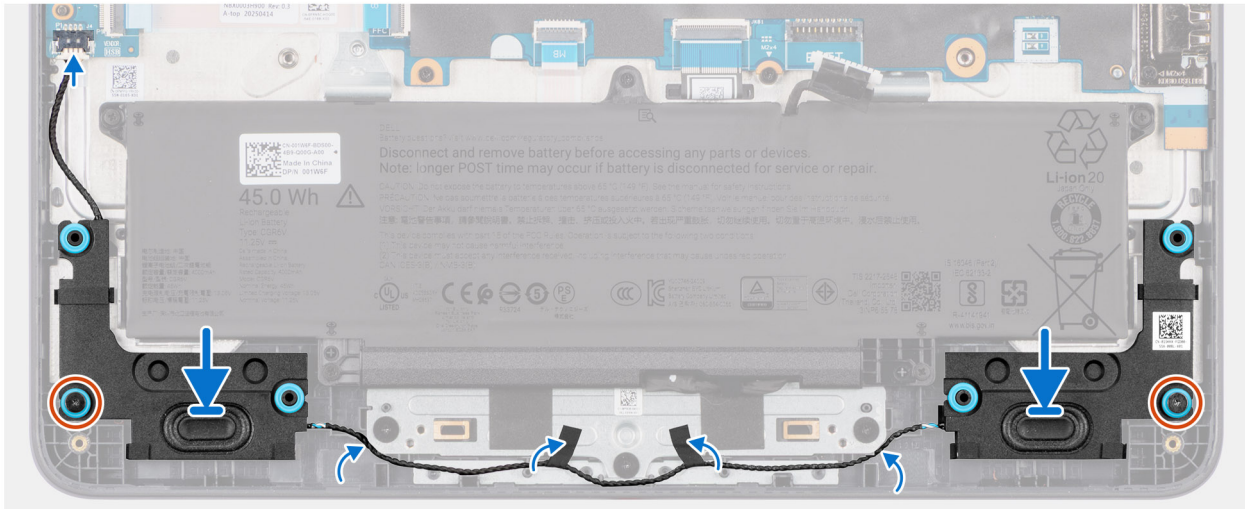
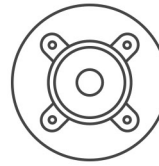


Figure 17. Installing the speakers

Steps

1. Using the alignment posts, place the left and right speakers into their slots on the palm-rest assembly.
NOTE: Ensure that the rubber grommets are seated into the slot and installed on the speakers properly.
2. Route the speaker cable through the routing guides on the palm-rest assembly.
3. Replace the two screws (M1.6x1.5) that secure the speakers to the palm-rest assembly.
4. Connect the speaker cable to the connector on the I/O board.

Next steps

1. Install the [base cover](#).
2. Follow the procedure in [After working inside your computer](#).

Removing and installing Field Replaceable Units (FRUs)

The replaceable components in this chapter are Field Replaceable Units (FRUs).

CAUTION: The information in this section is intended for authorized service technicians only.

CAUTION: To avoid any potential damage to the component or loss of data, ensure that an authorized service technician replaces the Field Replaceable Units (FRUs).

CAUTION: Dell Technologies recommends that these procedures be performed by trained technical repair specialists.

CAUTION: Your warranty does not cover damages that may occur during FRU repairs that are not authorized by Dell Technologies.

NOTE: The images in this document may differ from your computer depending on the configuration you ordered.

Base cover

Removing the base cover (for models with WWAN)

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).

About this task

The following images indicate the location of the base cover and provide a visual representation of the removal procedure.



9x



Figure 18. Removing the base cover

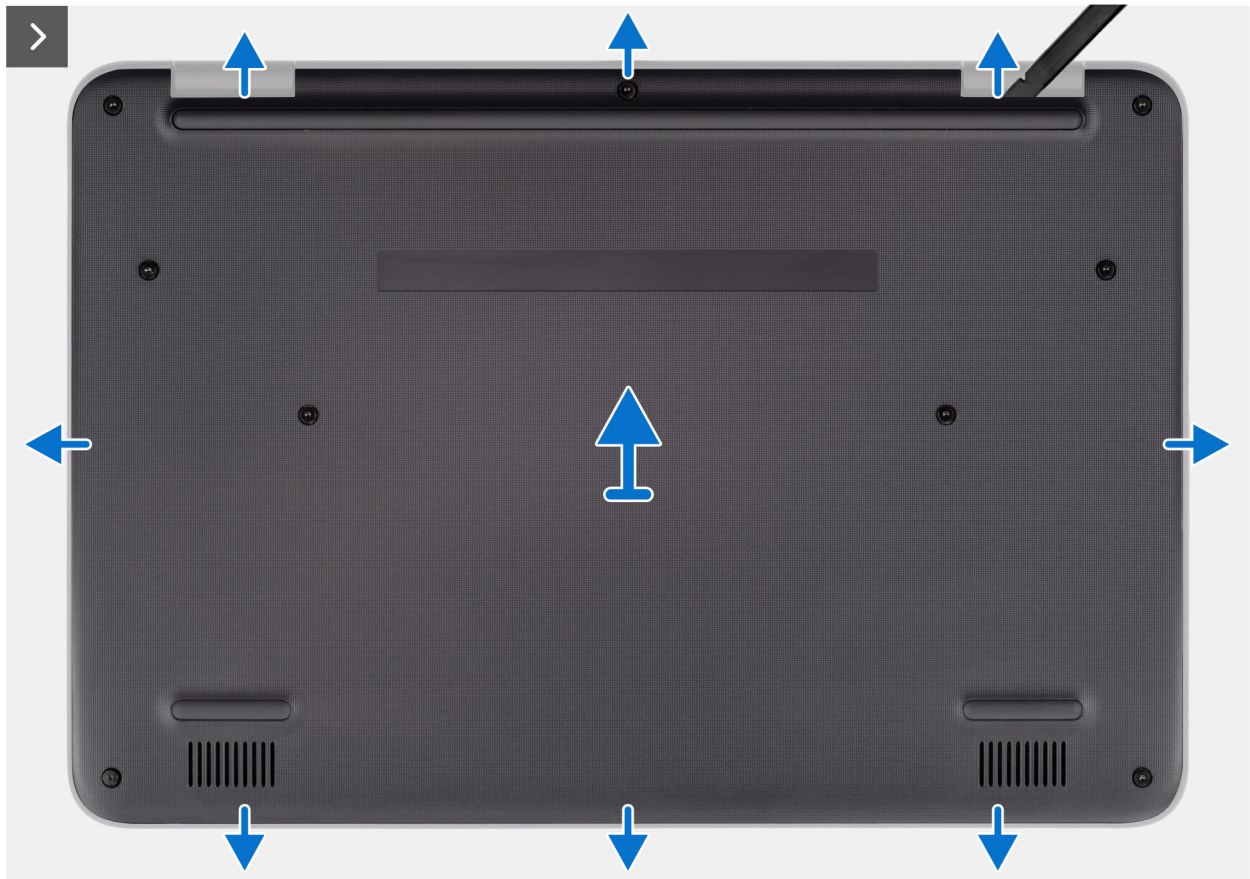


Figure 19. Removing the base cover

Steps

1. Loosen the nine captive screws (Torx 6) that secure the base cover to the palm-rest assembly.
2. Using a plastic scribe, pry the base cover from the U-shaped indents at the top and continue working on the sides to open the base cover.
3. Lift and remove the base cover off the palm-rest assembly.

Installing the base cover (for models with WWAN)

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following images indicate the location of the base cover and provide a visual representation of the installation procedure.

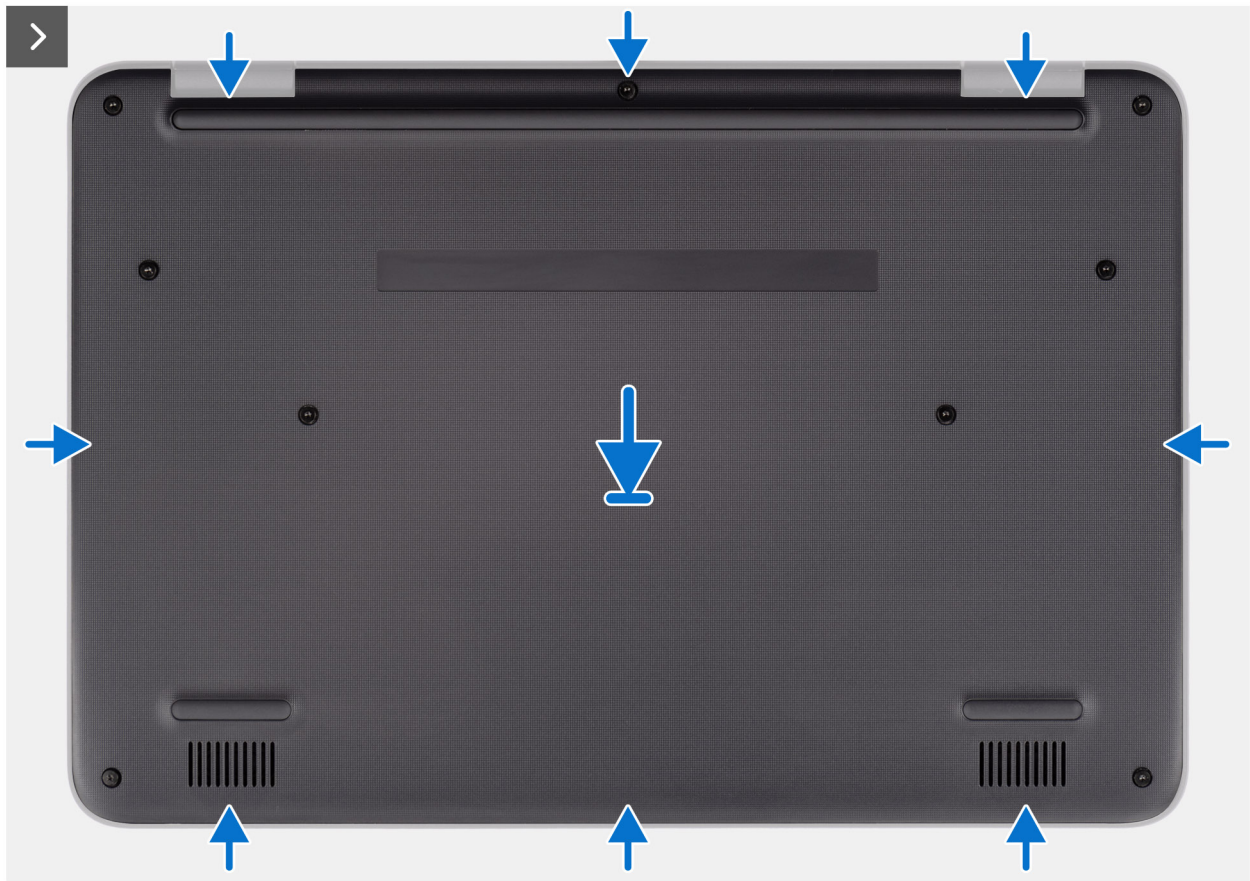


Figure 20. Installing the base cover



9x



Figure 21. Installing the base cover

Steps

1. Place the base cover on top of the palm-rest assembly.
2. Align the screw holes on the base cover with the screw holes on the palm-rest assembly, and snap the base cover into place.
3. Tighten the nine captive screws (Torx 6) to secure the base cover to the palm-rest assembly.

Next steps

1. Follow the procedure in [After working inside your computer](#).

SIM-card tray (optional)

Removing the SIM card

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).

About this task

NOTE: The following steps are applicable only for computers that are shipped with WWAN antennas.

The following image indicates the location of the SIM card and provides a visual representation of the removal procedure.

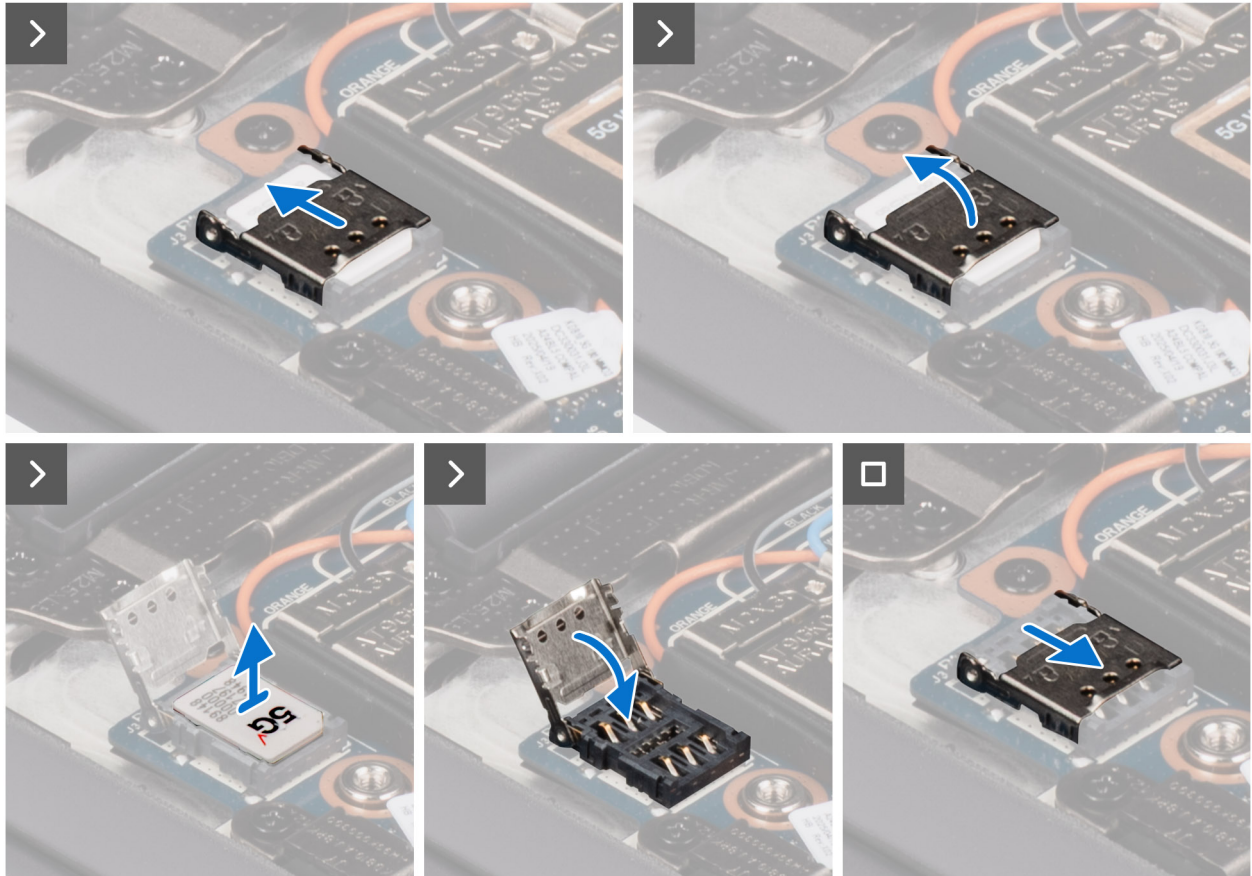


Figure 22. Removing the SIM card

Steps

1. Slide the SIM card cover upwards to unlock it.
2. Flip open the SIM card cover from the bottom side.
3. Remove the SIM card from the system and close the SIM card cover again.

Installing the SIM card

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

NOTE: The following steps are applicable only for computers that are shipped with WWAN antennas.

The following image indicates the location of the SIM card and provides a visual representation of the installation procedure.

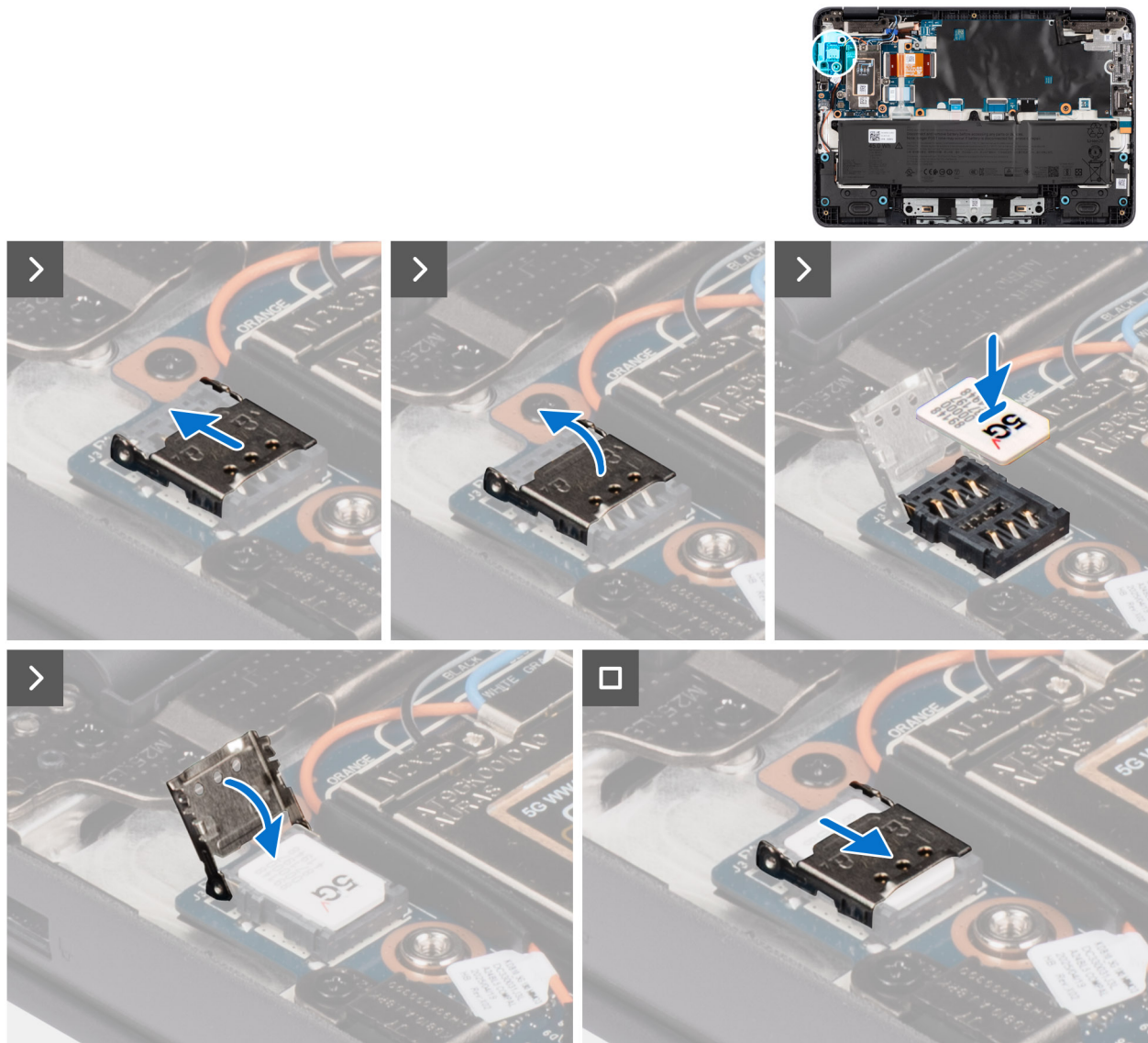


Figure 23. Installing the SIM card

Steps

1. Flip open the SIM card cover from the bottom side.
2. Align and slide the SIM card into its designated slot.
3. Flip the SIM card cover down to secure the SIM card in place.
4. Gently slide the cover until it clicks or locks into position, ensuring the SIM card is held firmly.

Next steps

1. Install the [base cover](#).
2. Follow the procedure in [After working inside your computer](#).

Battery

Rechargeable Li-ion battery precautions

 **WARNING:**

- Exercise caution when handling rechargeable Li-ion batteries.
- Discharge the battery completely before removing it. Disconnect the AC power adapter from the computer and operate the computer solely on battery power—the battery is fully discharged when the computer no longer turns on when the power button is pressed.
- Do not crush, drop, mutilate, or penetrate the battery with foreign objects.
- Do not expose the battery to high temperatures, or disassemble battery packs and cells.
- Do not apply pressure to the surface of the battery.
- Do not bend the battery.
- Do not use tools of any kind to pry on or against the battery.
- To prevent accidental puncture or damage to the battery and other components, ensure that no screws are lost or misplaced during the servicing of the computer.
- Always purchase genuine batteries from [Dell Site](#) or authorized Dell partners and resellers.
- Swollen batteries should not be used and should be replaced and disposed properly. For guidelines on how to handle and replace swollen rechargeable Li-ion batteries, see [Handling swollen rechargeable Li-ion batteries](#).

Removing the battery (for models with WWAN)

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).

About this task

The following images indicate the location of the battery and provide a visual representation of the removal procedure.

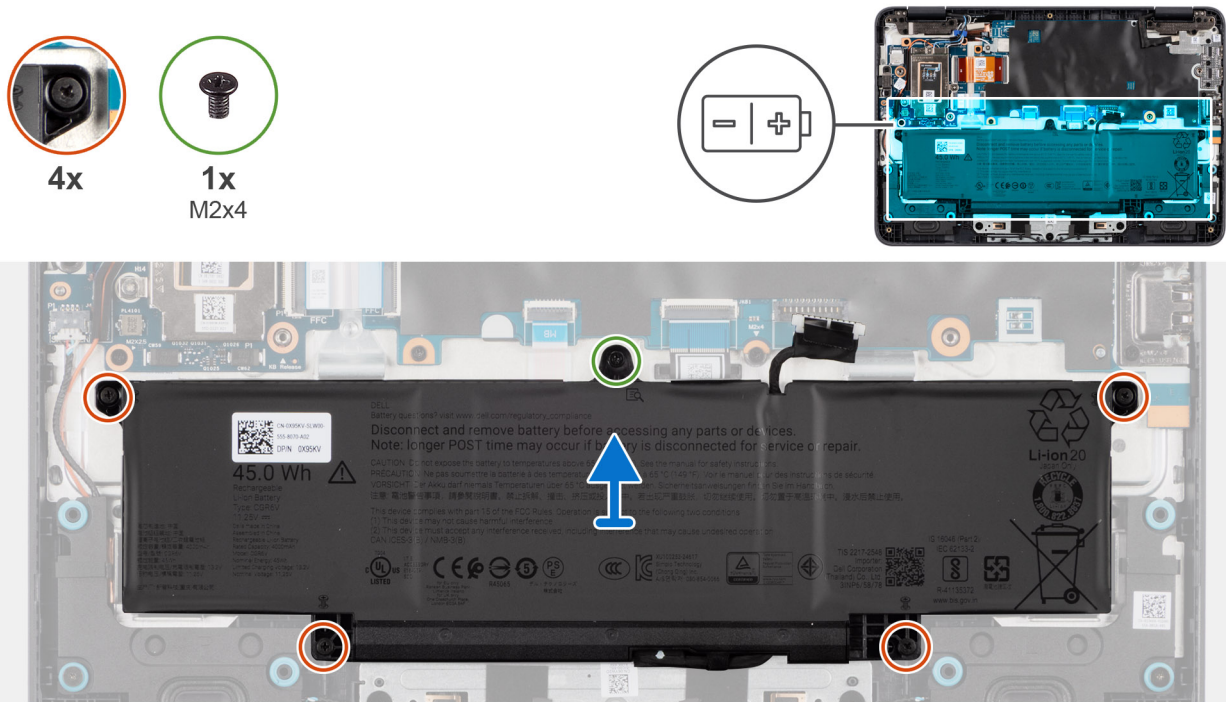


Figure 24. Removing the battery

Steps

1. Loosen the four captive screws and remove the screw (M2x4) that secures the battery to the palm-rest assembly.
2. Lift the battery off the palm-rest assembly.

Installing the battery (for models with WWAN)

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following images indicate the location of the battery and provide a visual representation of the installation procedure.

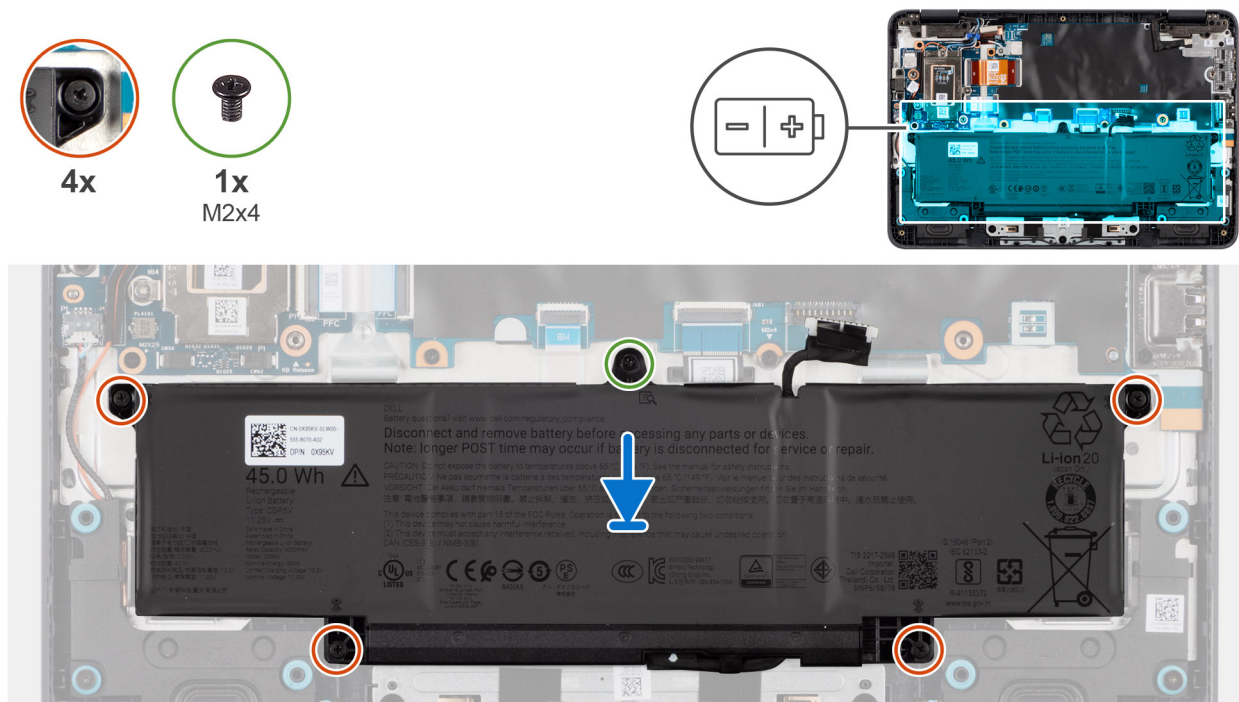


Figure 25. Installing the battery

Steps

1. Align and place the battery in the slot on the palm-rest assembly.
2. Replace the single screw (M2x4) and tighten the four captive screws to secure the battery to the palm-rest assembly.

Next steps

1. Install the [base cover](#).
2. Follow the procedure in [After working inside your computer](#).

Battery cable

Removing the battery cable (for models with WWAN)

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).
3. Remove the [battery](#).

About this task

The following image indicates the location of the battery cable and provides a visual representation of the removal procedure.

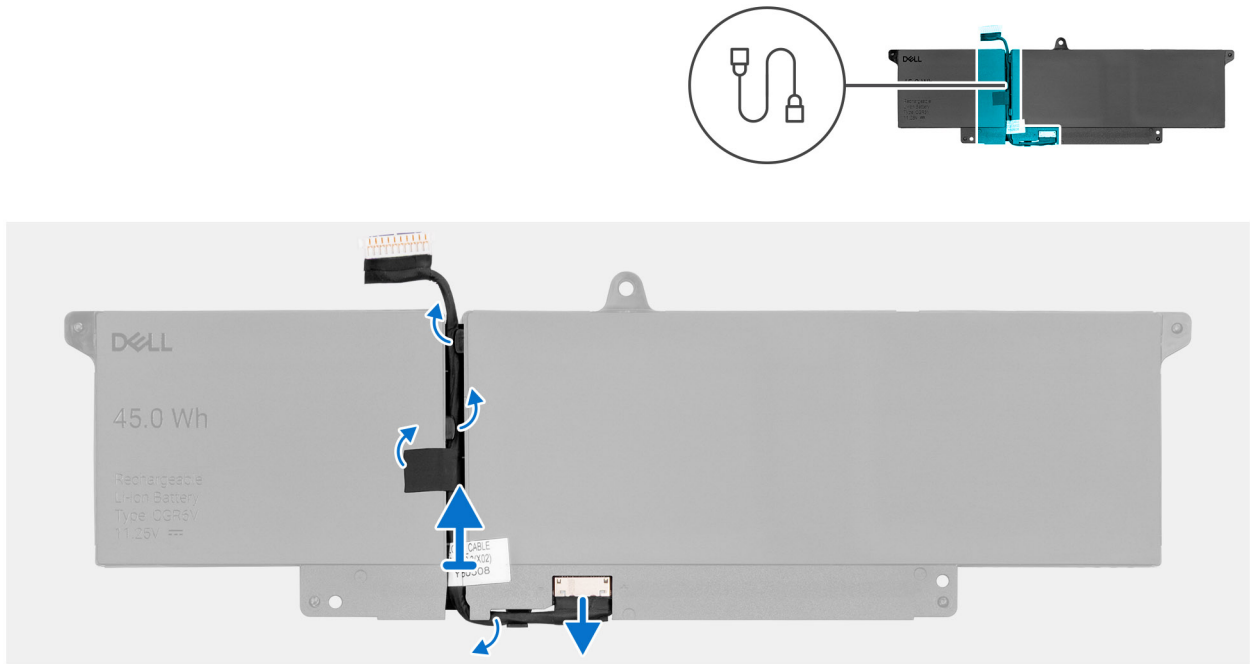


Figure 26. Removing the battery cable

Steps

Disconnect the battery cable from the connector on the battery.

Installing the battery cable (for models with WWAN)

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following image indicates the location of the battery cable and provides a visual representation of the installation procedure.

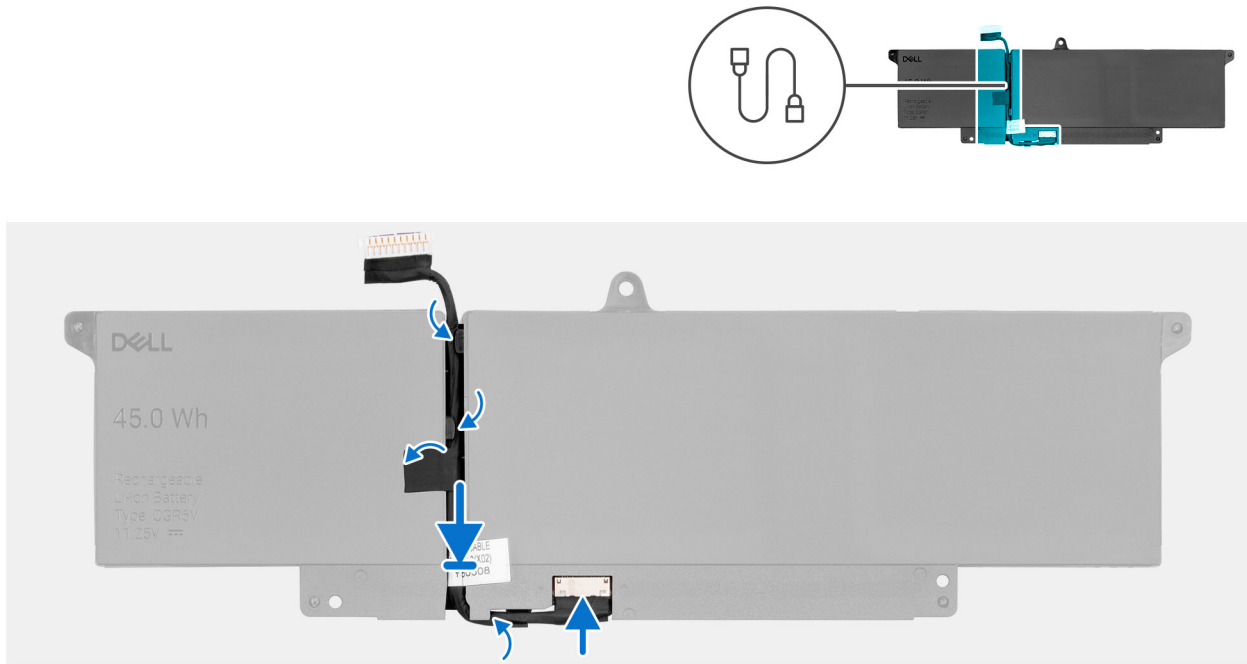


Figure 27. Installing the battery cable

Steps

Connect the battery cable to the connector on the battery.

Next steps

1. Install the [battery](#).
2. Install the [base cover](#).
3. Follow the procedure in [After working inside your computer](#).

Keyboard

Removing the keyboard

CAUTION: The information in this removal section is intended for authorized service technicians only.

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).

About this task

The following images indicate the location of the keyboard and provide a visual representation of the removal procedure.

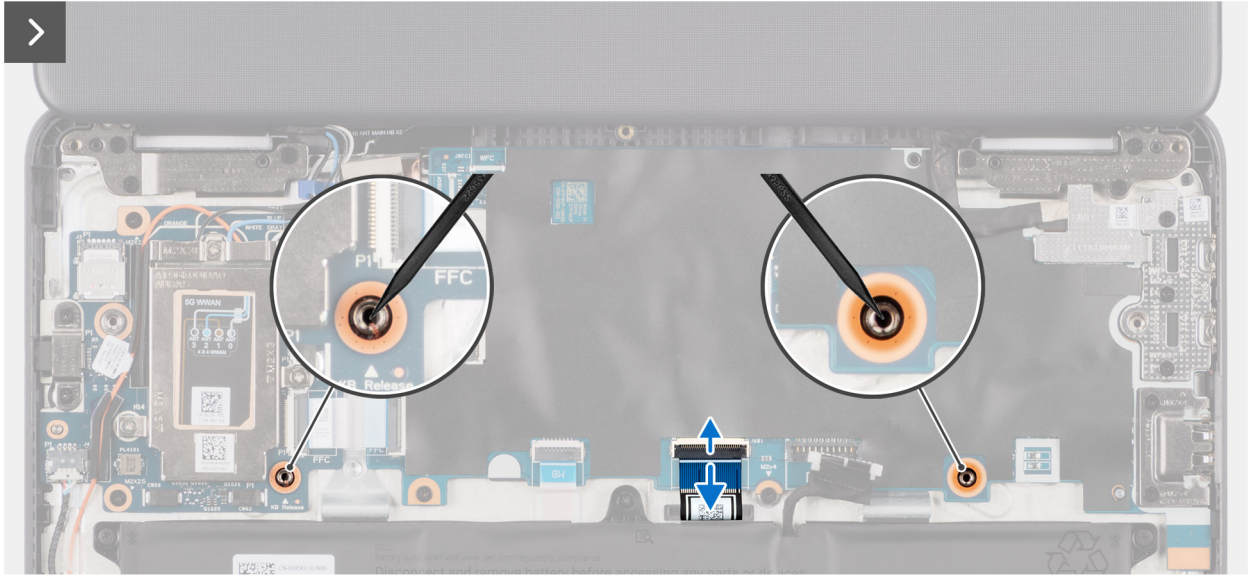


Figure 28. Disconnecting the keyboard cable



Figure 29. Releasing the keyboard with a scribe



Figure 30. Removing the keyboard

Steps

1. Disconnect the keyboard cable from the connector (KB) on the system board and push the KB release with a scribe..
2. Turn the computer over and open the display to an angle of 180 degrees with the keyboard facing up.
3. Using the scribe, carefully pry the keyboard from the latches in the palm-rest assembly to release the keyboard from the palm-rest assembly.
4. Lift the keyboard off the palm-rest assembly while carefully pulling the keyboard cable through the opening on the palm-rest assembly.

Installing the keyboard

CAUTION: The information in this installation section is intended for authorized service technicians only.

Prerequisites

If you are replacing a component, remove the existing component before performing the installation process.

About this task

The following images indicate the location of the keyboard and provide a visual representation of the installation procedure.



Figure 31. Inserting the keyboard cable through the opening on the palm-rest assembly and placing the keyboard on it



Figure 32. Installing the keyboard

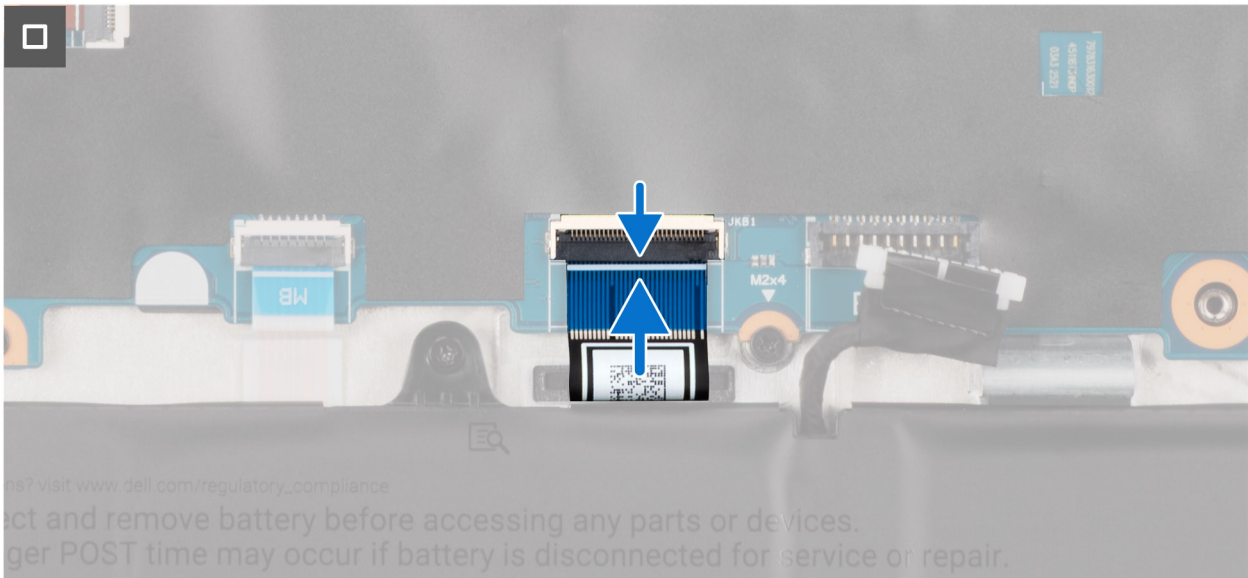


Figure 33. Connecting the keyboard cable

Steps

1. Carefully insert the keyboard cable through the opening on the palm-rest assembly.
2. Align and place the keyboard on the palm-rest assembly.
3. Lower the keyboard into position and press gently until it snaps into the latches on the palm-rest assembly.
4. Gently close the display and turn your computer.
5. Carefully connect the keyboard cable to the system board.

Next steps

1. Install the [base cover](#).

2. Follow the procedure in [After working inside your computer](#).

I/O-board cable

Removing the I/O board cable (for models with WWAN)

CAUTION: The information in this removal section is intended for authorized service technicians only.

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).

About this task

The following images indicate the location of the I/O board cable and provide a visual representation of the removal procedure.

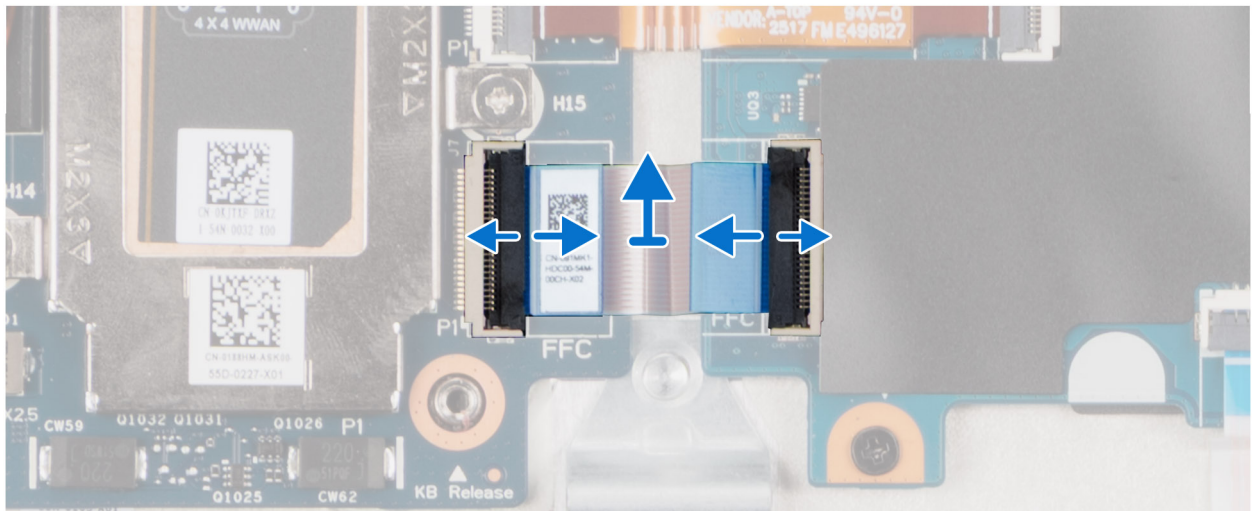


Figure 34. Removing the I/O board cable

Steps

1. Disconnect the I/O board cable from the I/O board and system board.
2. Gently peel and remove the 24-pin I/O board cable from the computer.

Installing the I/O board cable (for models with WWAN)

CAUTION: The information in this installation section is intended for authorized service technicians only.

Prerequisites

If you are replacing a component, remove the existing component before performing the installation process.

About this task

The following images indicate the location of the I/O board cable and provide a visual representation of the installation procedure.

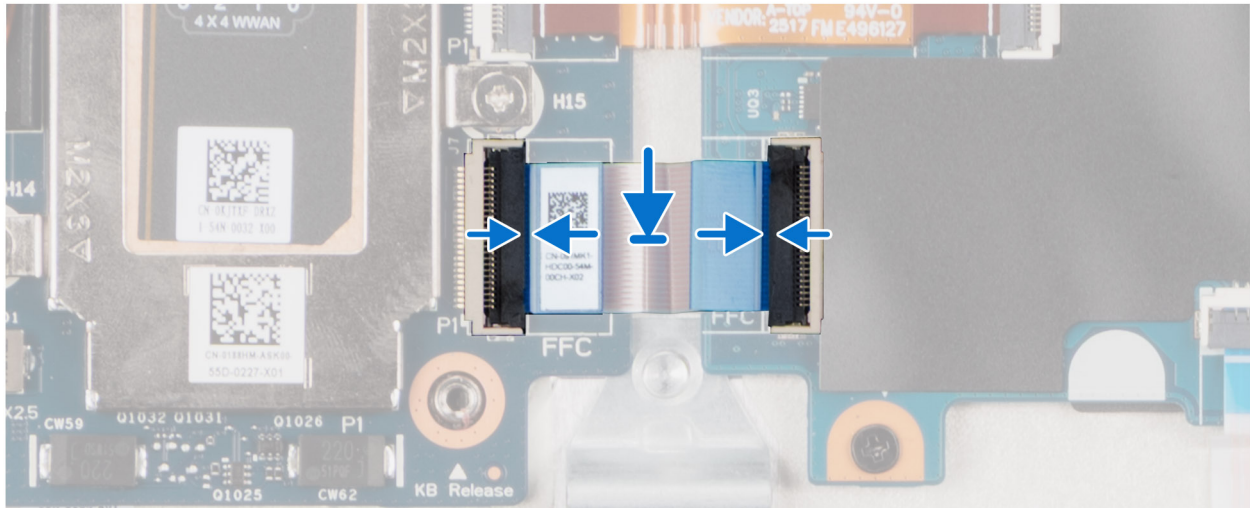


Figure 35. Installing the I/O board cable

Steps

1. Carefully align and press the 24-pin I/O board cable onto its place.
2. Plug the ends of the I/O board cable into the corresponding connectors on the I/O board and the system board, ensuring secure connections.

Next steps

1. Install the [base cover](#).
2. Follow the procedure in [After working inside your computer](#).

WWAN I/O board cable

Removing the WWAN I/O board cable (for models with WWAN)

CAUTION: The information in this removal section is intended for authorized service technicians only.

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).

About this task

The following images indicate the location of the WWAN I/O board cable and provide a visual representation of the removal procedure.

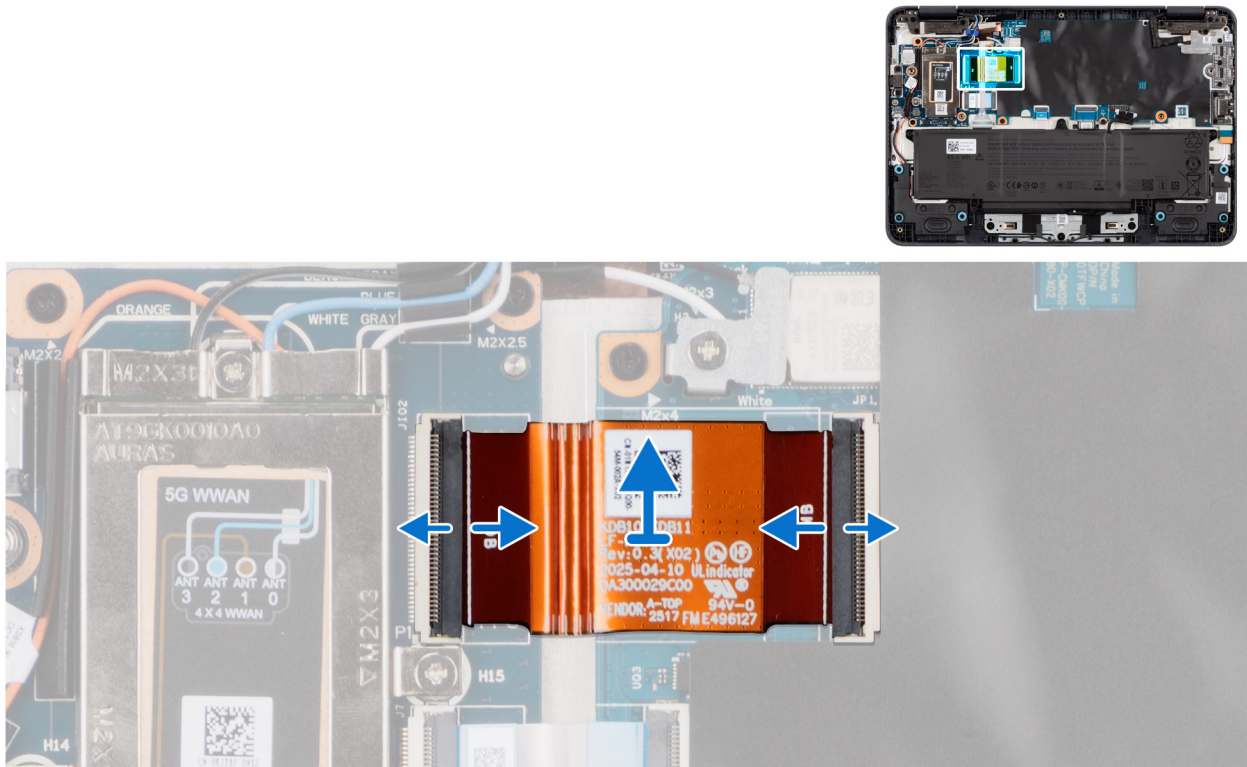


Figure 36. Removing the WWAN I/O board cable

Steps

1. Disconnect the 40-pin I/O board cable from the audio I/O board and system board.
2. Gently peel and remove the 40-pin I/O board cable from the computer.

Installing the WWAN I/O board cable (for models with WWAN)

CAUTION: The information in this installation section is intended for authorized service technicians only.

Prerequisites

If you are replacing a component, remove the existing component before performing the installation process.

About this task

The following images indicate the location of the WWAN I/O board cable and provide a visual representation of the installation procedure.

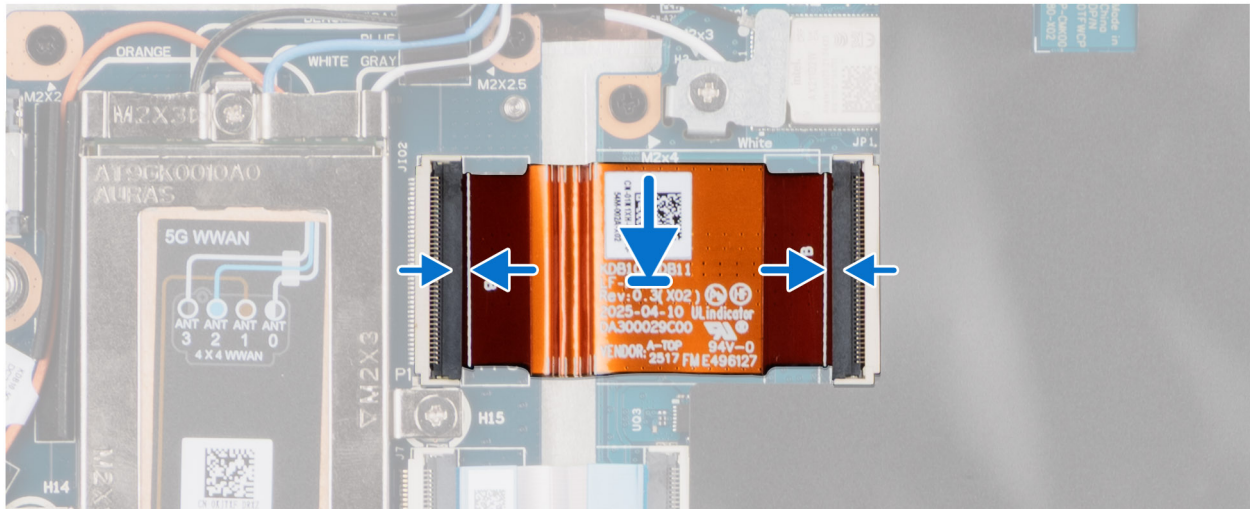


Figure 37. Installing the WWAN I/O board cable

Steps

1. Carefully align and press the 40-pin I/O board cable onto its place.
2. Plug the ends of the WWAN I/O-board cable into the corresponding connectors on the audio I/O board and the system board, ensuring secure connections.

Next steps

1. Install the [base cover](#).
2. Follow the procedure in [After working inside your computer](#).

Speaker

Removing the speakers (for models with WWAN)

⚠ CAUTION: The information in this removal section is intended for authorized service technicians only.

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).

About this task

The following images indicate the location of the speakers and provide a visual representation of the removal procedure.



2x
M1.6x1.5

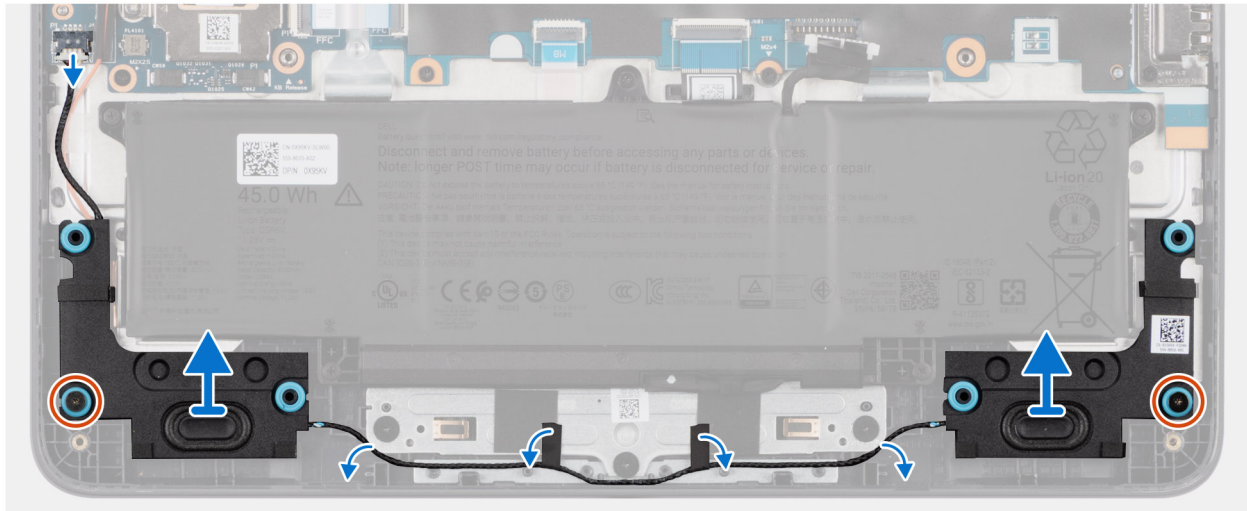
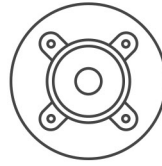


Figure 38. Removing the speakers

Steps

1. Disconnect the speaker cable from the connector (SPEAKER) on the I/O board.
2. Remove the two screws (M1.6x1.5) that secure the speakers to the palm-rest assembly.
3. Remove the speaker cable from the routing guides on the palm-rest assembly.
4. Release the speakers from the rubber grommets and lift the speakers off the palm-rest assembly.

Installing the speakers (for models with WWAN)

CAUTION: The information in this installation section is intended for authorized service technicians only.

Prerequisites

If you are replacing a component, remove the existing component before performing the installation process.

About this task

The following images indicate the location of the speakers and provide a visual representation of the installation procedure.



2x
M1.6x1.5

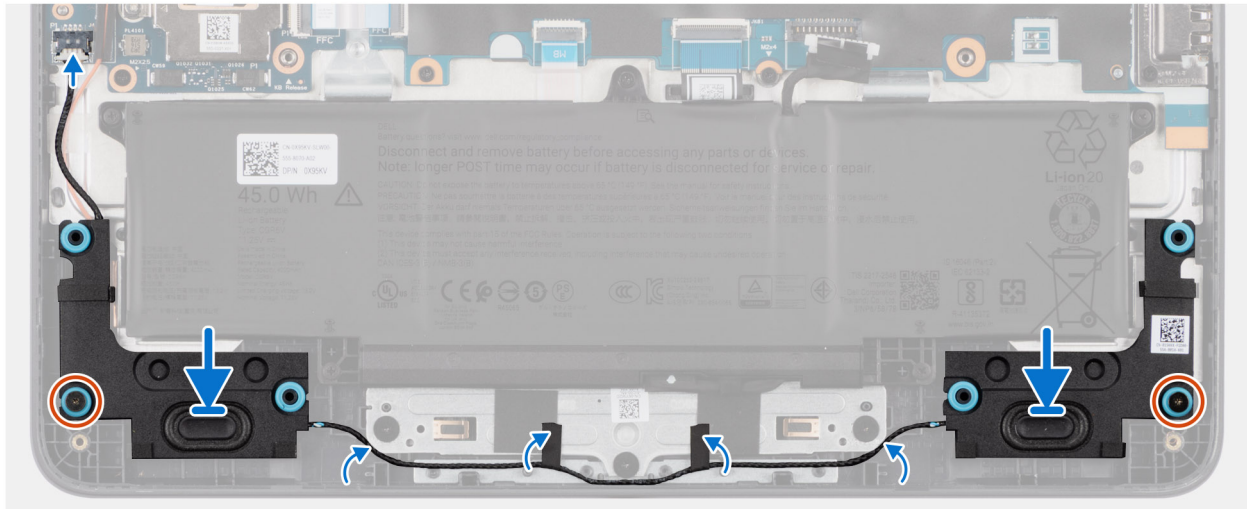
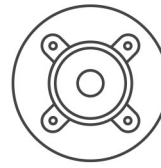


Figure 39. Installing the speakers

Steps

1. Using the alignment posts, place the left and right speakers into their slots on the palm-rest assembly.
NOTE: Ensure that the rubber grommets are seated into the slot and installed on the speakers properly.
2. Route the speaker cable through the routing guides on the palm-rest assembly.
3. Replace the two screws (M1.6x1.5) that secure the speakers to the palm-rest assembly.
4. Connect the speaker cable to the connector on the I/O board.

Next steps

1. Install the [base cover](#).
2. Follow the procedure in [After working inside your computer](#).

Touchpad

Removing the touchpad

CAUTION: The information in this removal section is intended for authorized service technicians only.

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).
3. Remove the [battery](#).

About this task

The following images indicate the location of the touchpad and provide a visual representation of the removal procedure.

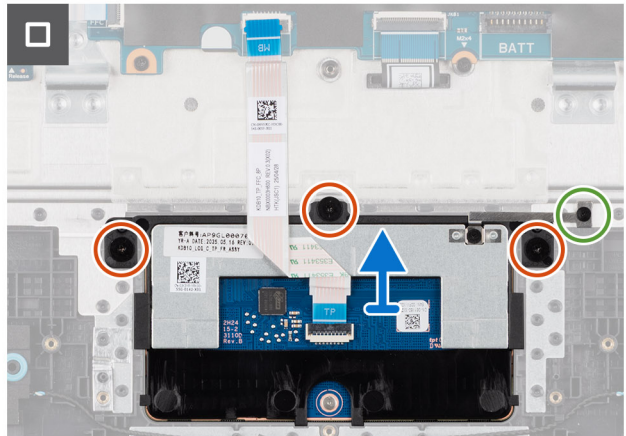
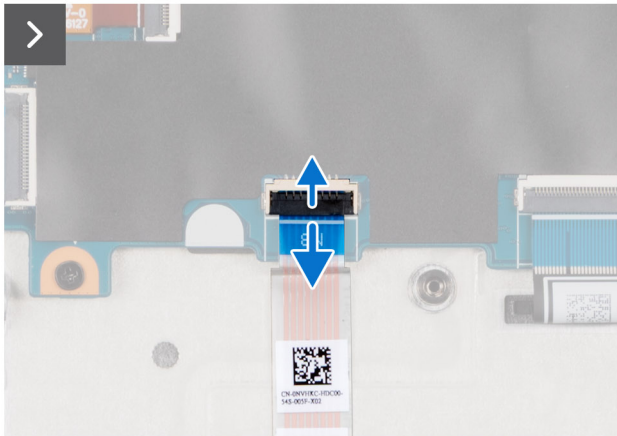
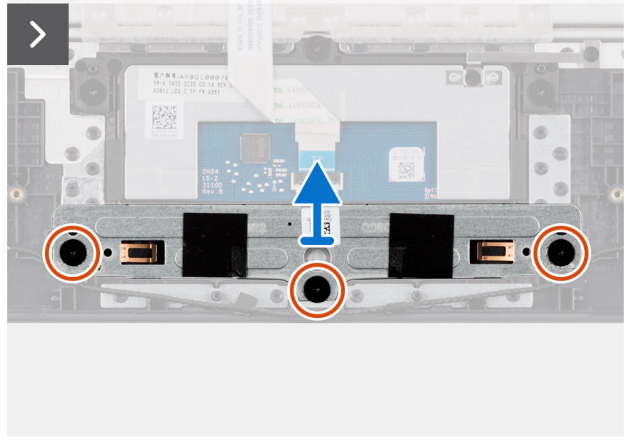
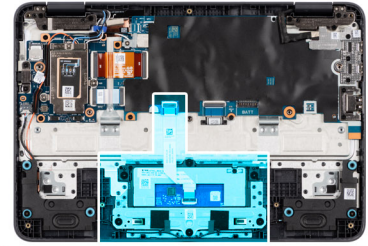
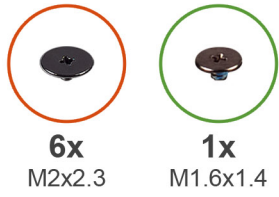


Figure 40. Removing the touchpad

Steps

1. Peel the tape and unroute the speaker cable from your computer.
2. Remove the three screws (M2x2.3) that secure the touchpad bracket in place.
3. Remove the touchpad bracket from the computer.
4. Disconnect the touchpad cable from the connector on the system board.
5. Remove the three screws (M2x2.3) and single screw (M1.6x1.4) that secure the touchpad in place.
6. Remove the touchpad from the computer.

Installing the touchpad

CAUTION: The information in this installation section is intended for authorized service technicians only.

Prerequisites

If you are replacing a component, remove the existing component before performing the installation process.

About this task

The following images indicate the location of the touchpad and provide a visual representation of the installation procedure.

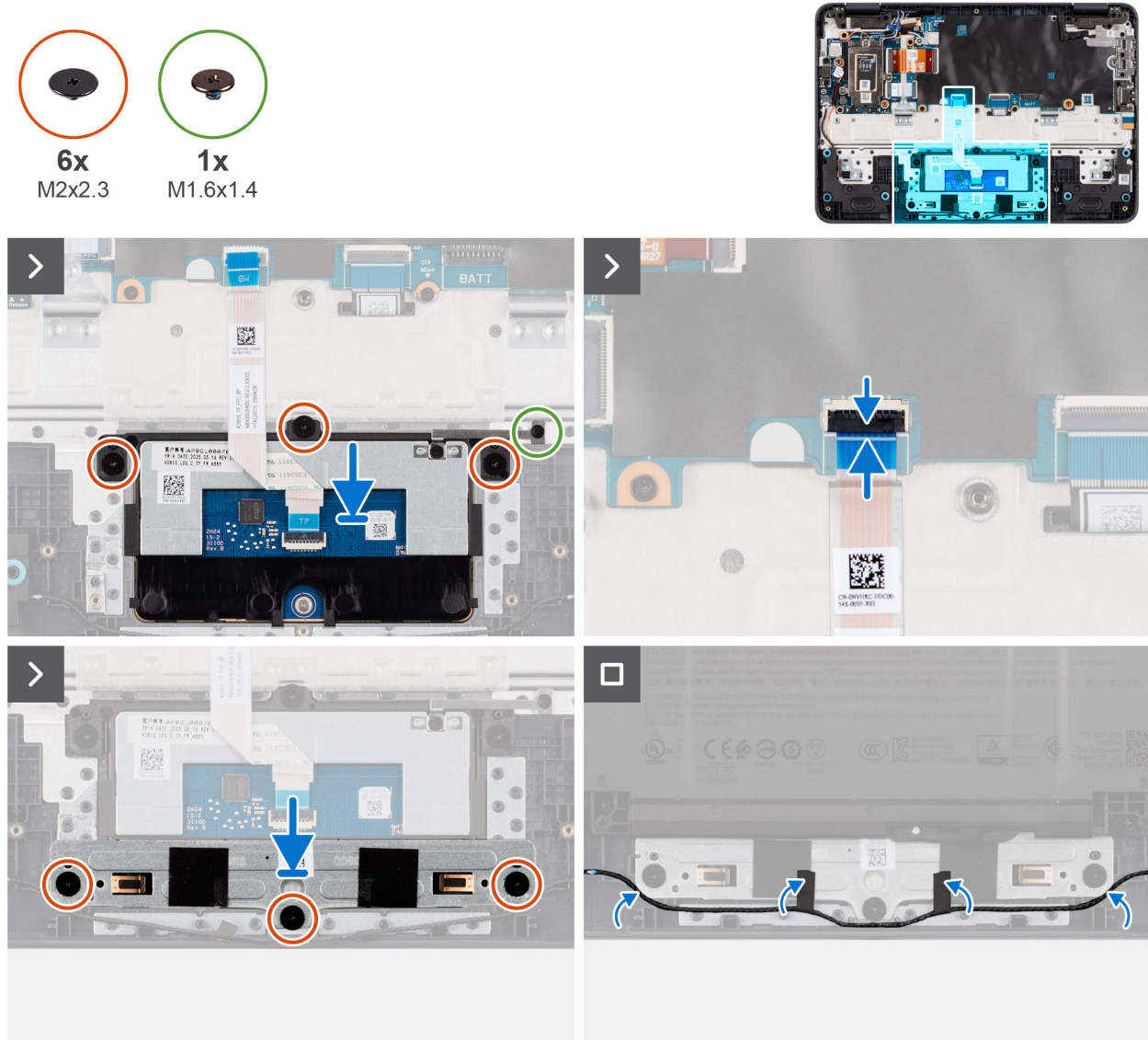


Figure 41. Installing the touchpad

Steps

1. Align and place the touchpad onto the system.
2. Replace the three screws (M2x2.3) and single screw (M1.6x1.4) to secure the touchpad in place.
3. Place the touchpad bracket above the touchpad and align the screw holes in the bracket with the screw holes in the computer.
4. Replace the three screws (M2x2.3) to secure the touchpad bracket in place.
5. Connect the touchpad cable to the connector on the system board.
6. Route the speaker cable and adhere the tapes in the touchpad bracket.

Next steps

1. Install the [battery](#).
2. Install the [base cover](#).
3. Follow the procedure in [After working inside your computer](#).

System board

Removing the system board

CAUTION: The information in this removal section is intended for authorized service technicians only.

NOTE: Do not remove the USB Type-A bracket from the system board. The USB Type-A bracket is assembled together with the replacement system board.

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).
3. Remove the [battery](#).

About this task

The following image indicates the connectors and components on your system board.

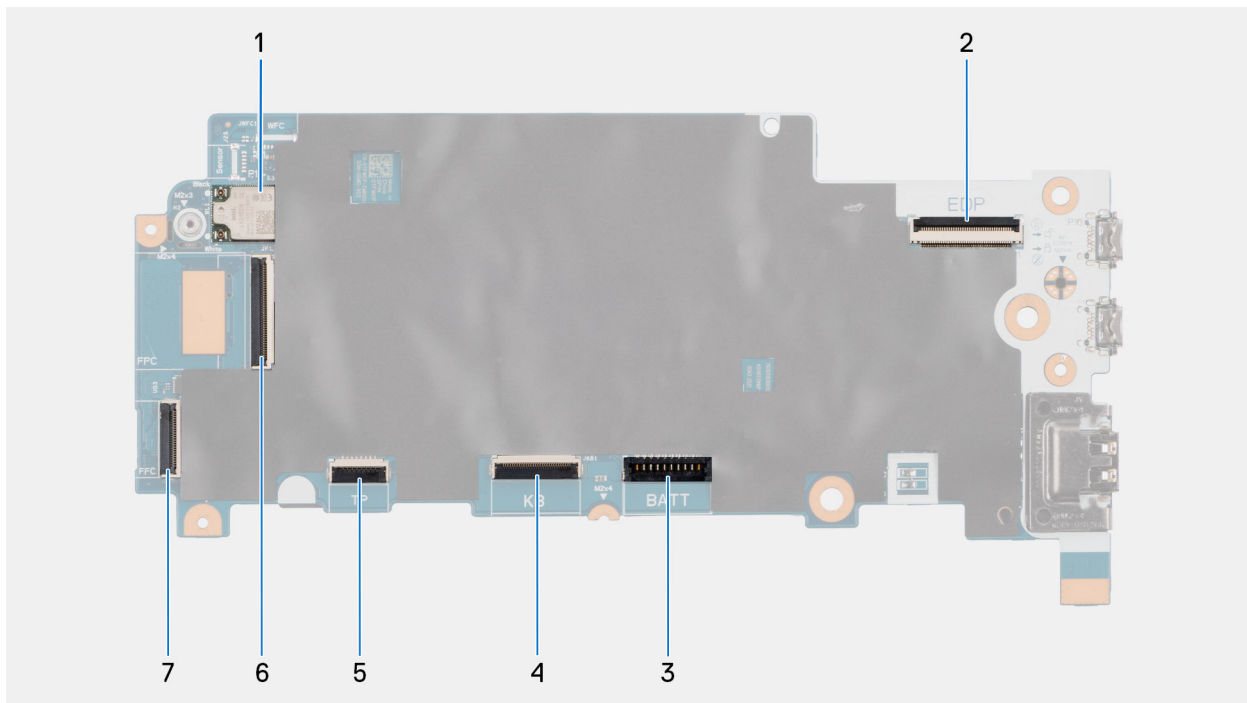


Figure 42. System-board connectors

- | | |
|-----------------------------------|----------------------------------|
| 1. WLAN card (WL1) connector | 2. Display cable (EDP) connector |
| 3. Battery cable (BATT) connector | 4. Keyboard cable (KB) connector |
| 5. Touchpad cable (TP) connector | 6. 40-pin I/O-board connector |
| 7. 24-pin I/O-board connector | |

The following images indicate the location of the system board and provide a visual representation of the removal procedure.

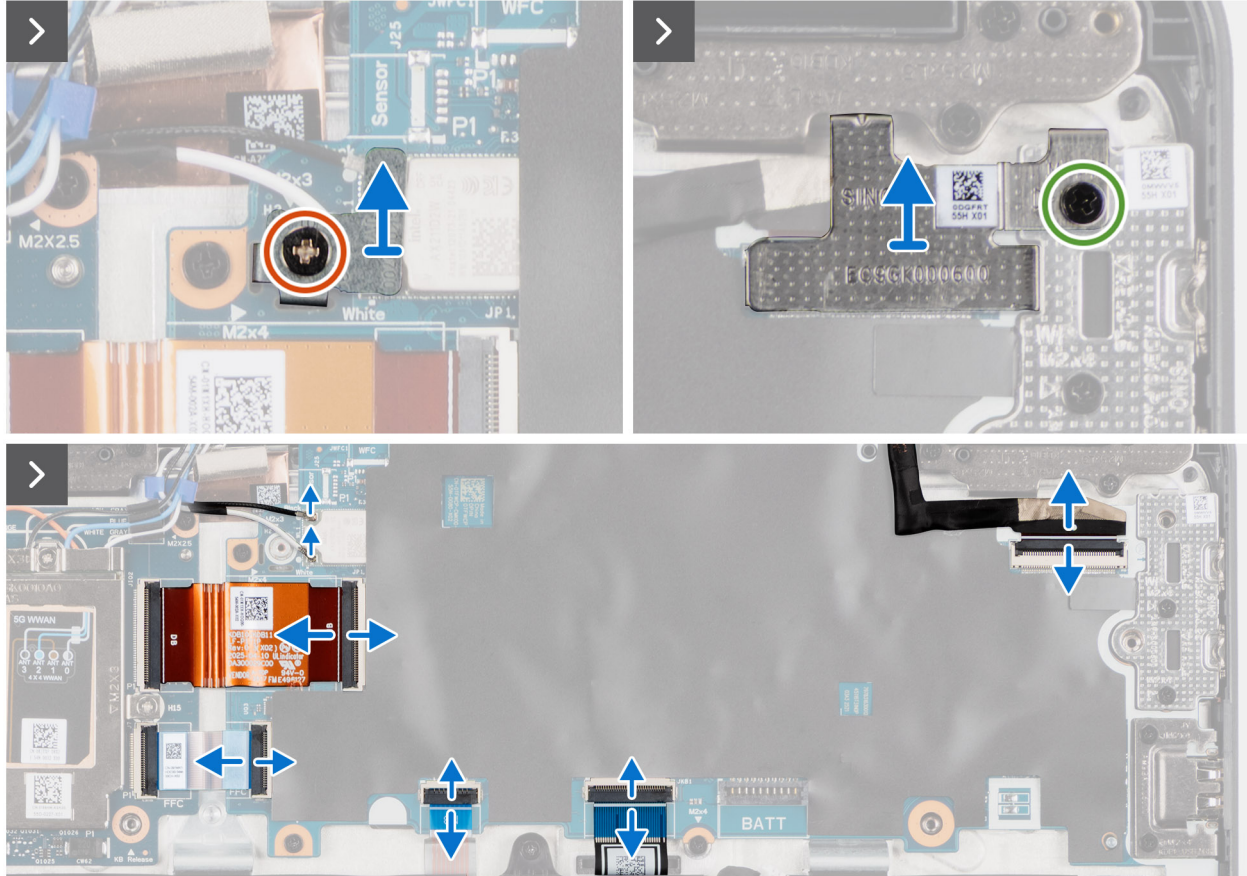


Figure 43. Removing the system board

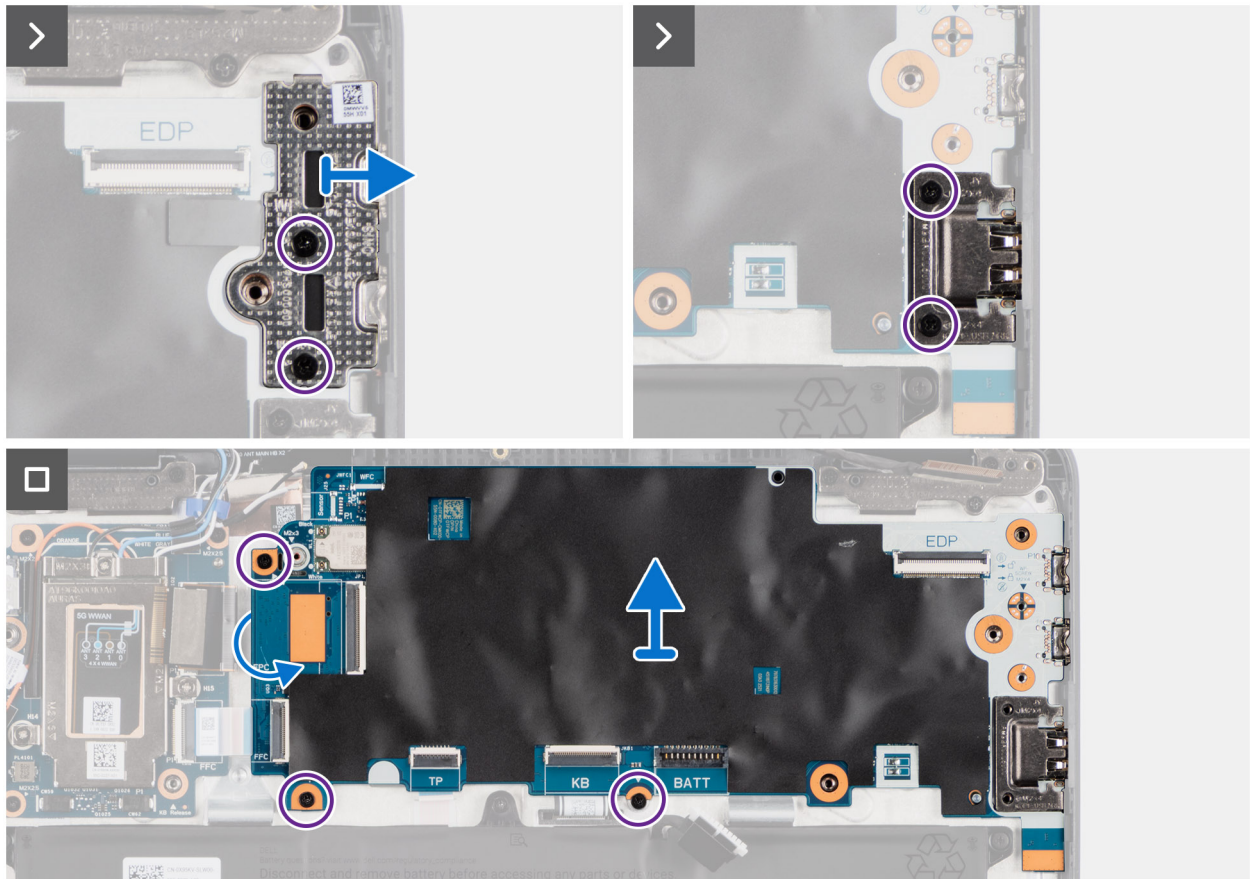


Figure 44. Removing the system board

Steps

1. Remove the screw (M2x3) that secures the WLAN bracket to the palm-rest assembly.
2. Remove the WLAN bracket off the palm-rest assembly.
3. Disconnect the WLAN antenna cables from the WLAN module on the system board.
4. Remove the screw(M2.5x5) that secure the display-cable bracket to the palm-rest assembly.
5. Lift the display-cable bracket off the palm-rest assembly.
6. Disconnect the display cable, world-facing camera cable (for models shipped with a world-facing camera), touchpad cable, and I/O-board cable from the connectors on the system board.
7. Peel back the display cable from the computer.
8. For models with a single USB Type-C port, remove the screw (M2x4) securing the Type-C bracket in place. For models with two USB Type-C port, remove the two screws (M2x4) securing the Type-C bracket in place and remove the two screws (M2x4) securing the Type-A bracket in place.
9. Remove the Type-C bracket from the system.
10. Remove the three screws securing the system board in place.
11. Carefully lift the system board off the palm-rest assembly.

Installing the system board

CAUTION: The information in this installation section is intended for authorized service technicians only.

Prerequisites

If you are replacing a component, remove the existing component before performing the installation process.

About this task

The following image indicates the connectors and components on your system board.

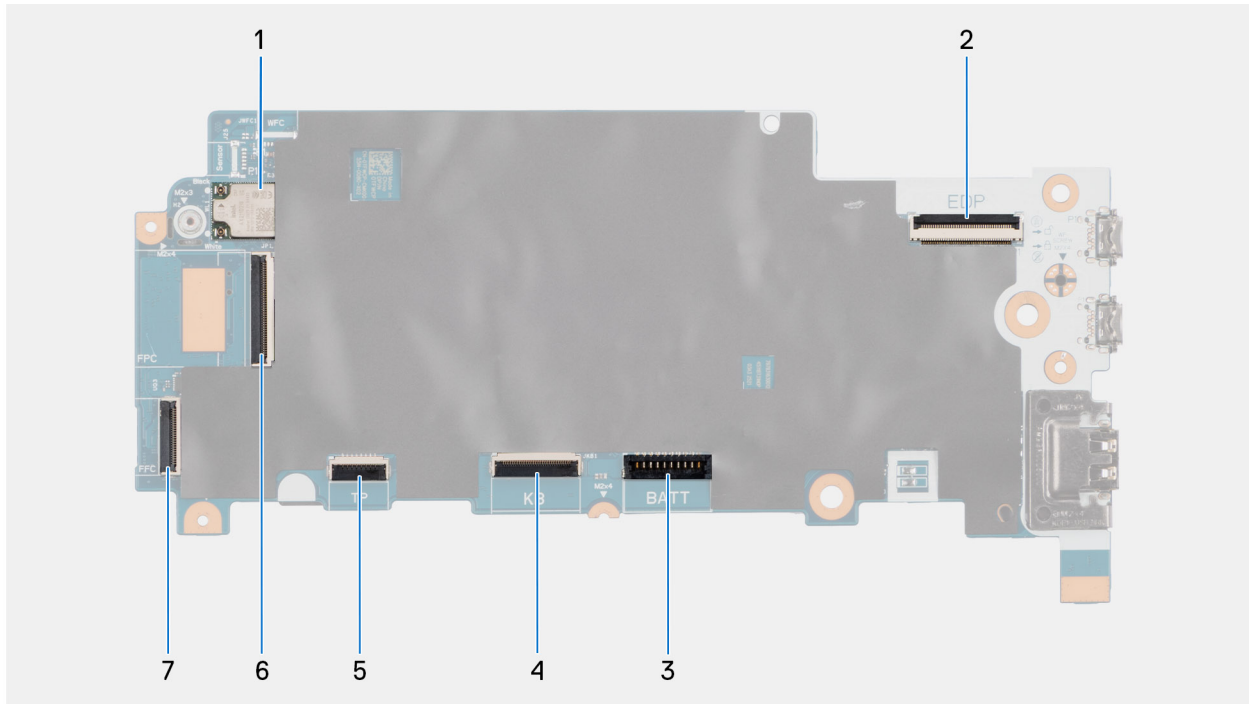


Figure 45. System-board connectors

- | | |
|-----------------------------------|----------------------------------|
| 1. WLAN card (WL1) connector | 2. Display cable (EDP) connector |
| 3. Battery cable (BATT) connector | 4. Keyboard cable (KB) connector |
| 5. Touchpad cable (TP) connector | 6. 40-pin I/O-board connector |
| 7. 24-pin I/O-board connector | |

The following images indicate the location of the system board and provide a visual representation of the installation procedure.



Figure 46. Installing the system board

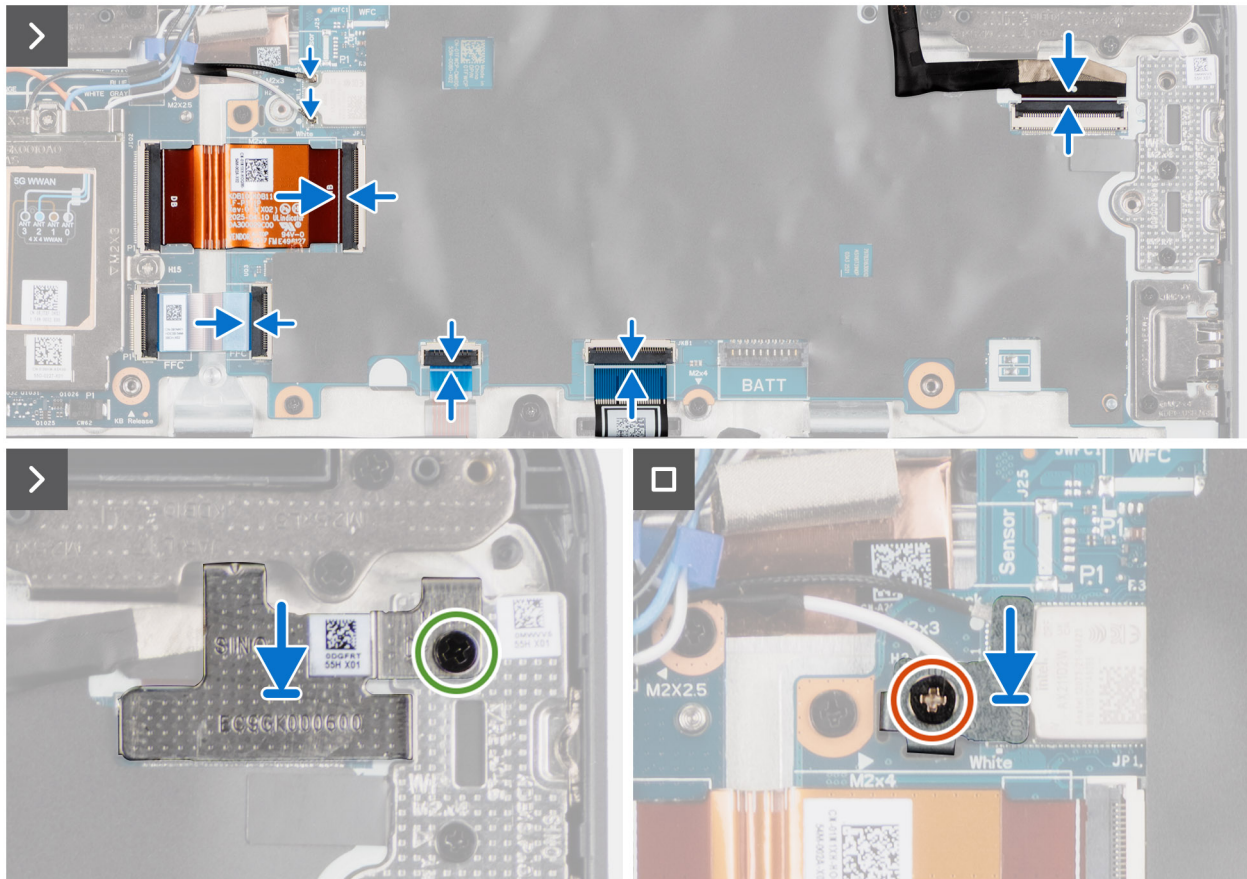


Figure 47. Installing the system board

Steps

1. Carefully align and place the system board into its slot on the palm-rest assembly.
2. Fasten the three screws to secure the system board in place.
3. For models with a single USB Type-C port, secure the bracket with one screw (M2x4). For models with two USB Type-C ports, secure the bracket with two screws (M2x4) and secure the Type-A bracket with two screws (M2x4).
4. Carefully position and press the display cable onto the computer.
5. Attach the following cables to their respective connectors on the system board: display cable, world-facing camera cable (for models shipped with a world-facing camera), touchpad cable, and I/O-board cable.
6. Place the display-cable bracket onto the palm-rest assembly and secure it with the screw (M2.5x5).
7. Attach the WLAN antenna cables to the WLAN module on the system board.
8. Position the WLAN bracket on the palm-rest assembly and secure it with the screw (M2x3).

Next steps

1. Install the [battery](#).
2. Install the [base cover](#).
3. Follow the procedure in [After working inside your computer](#).

Thermal plate

Removing the thermal plate

⚠ CAUTION: The information in this removal section is intended for authorized service technicians only.

Prerequisites

1. Follow the procedure in [Before working inside your computer.](#)
2. Remove the [base cover.](#)
3. Remove the [system board.](#)

About this task

The following images indicate the location of the thermal plate and provide a visual representation of the removal procedure.

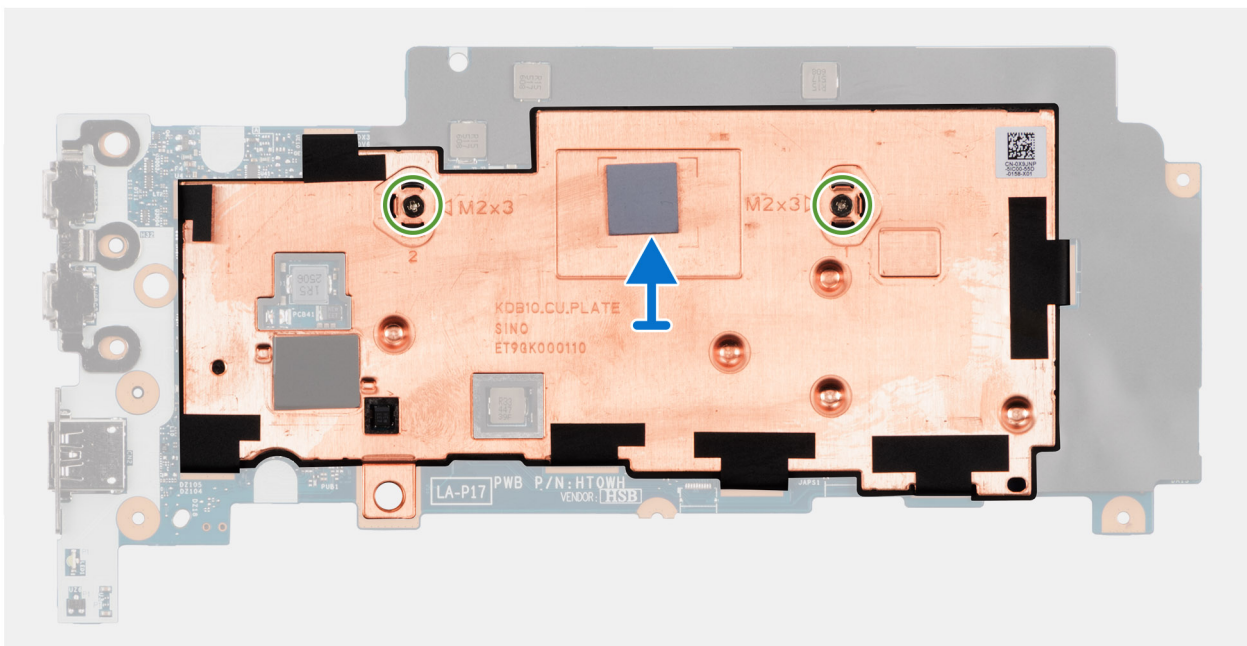


Figure 48. Removing the thermal plate

Steps

1. Remove the two screws (M2x3) that secure the thermal plate in place.
2. Remove the thermal plate from the system board.

Installing the thermal plate

CAUTION: The information in this installation section is intended for authorized service technicians only.

Prerequisites

If you are replacing a component, remove the existing component before performing the installation process.

About this task

The following images indicate the location of the thermal plate and provide a visual representation of the installation procedure.



2x
M2x3

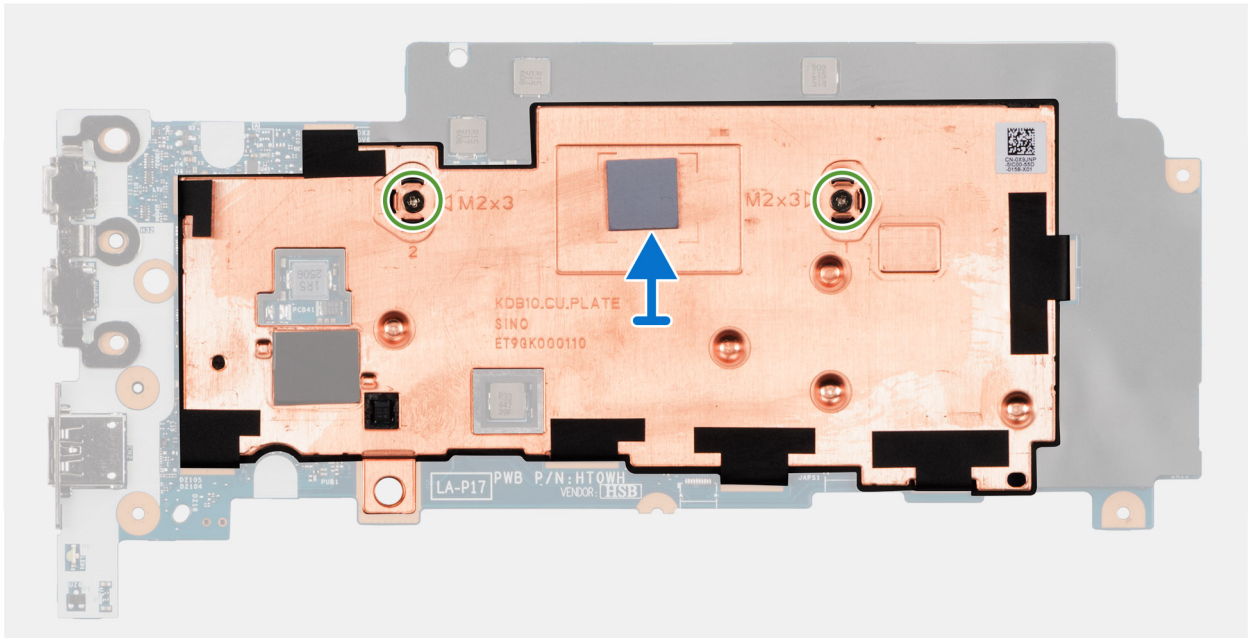


Figure 49. Installing the thermal plate

Steps

1. Carefully align and place the thermal plate onto the system board.
2. Replace the two screws (M2x3) to secure the thermal plate in place.

Next steps

1. Install the [system board](#).
2. Install the [base cover](#).
3. Follow the procedure in [After working inside your computer](#).


Wireless Wide Area Network (WWAN) card

Removing the WWAN card

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).

About this task

 **NOTE:** The following steps are applicable only for computers that are shipped with a WWAN card.

The following image indicates the location of the WWAN card and provides a visual representation of the removal procedure.



3x
M2x3

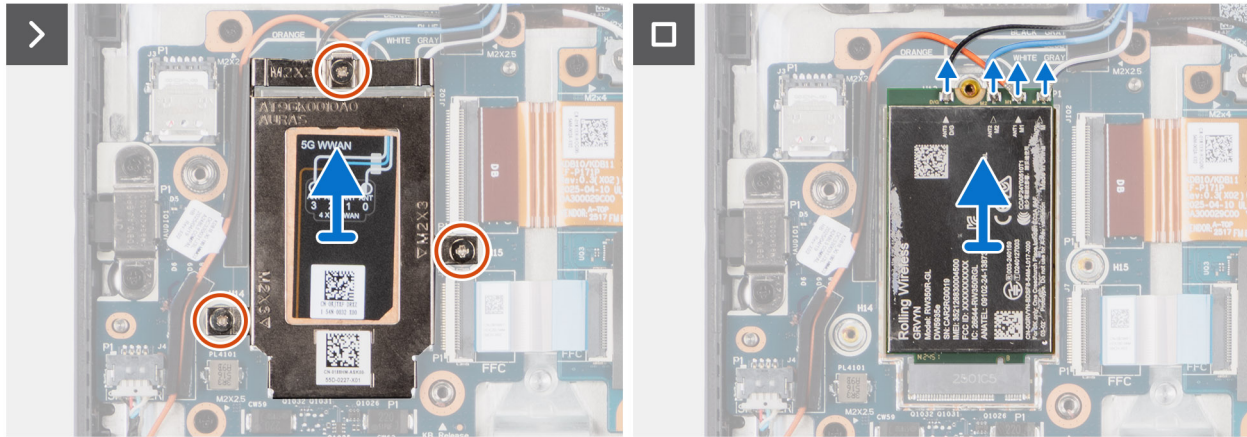


Figure 50. Removing the WWAN card

Steps


1. Remove the three screws (M2x3) that secure the WWAN-card bracket to the WWAN card on the system board.
2. Remove the WWAN-card bracket from the WWAN card.
3. Disconnect the WWAN antenna cables from the connectors on the WWAN card.
4. Slide and remove the WWAN card from the WWAN-card slot on the system board.

Installing the WWAN card

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

 **NOTE:** The following steps are applicable only for computers that are shipped with a WWAN card.

The following image indicates the location of the WWAN card and provides a visual representation of the installation procedure.



3x
M2x3

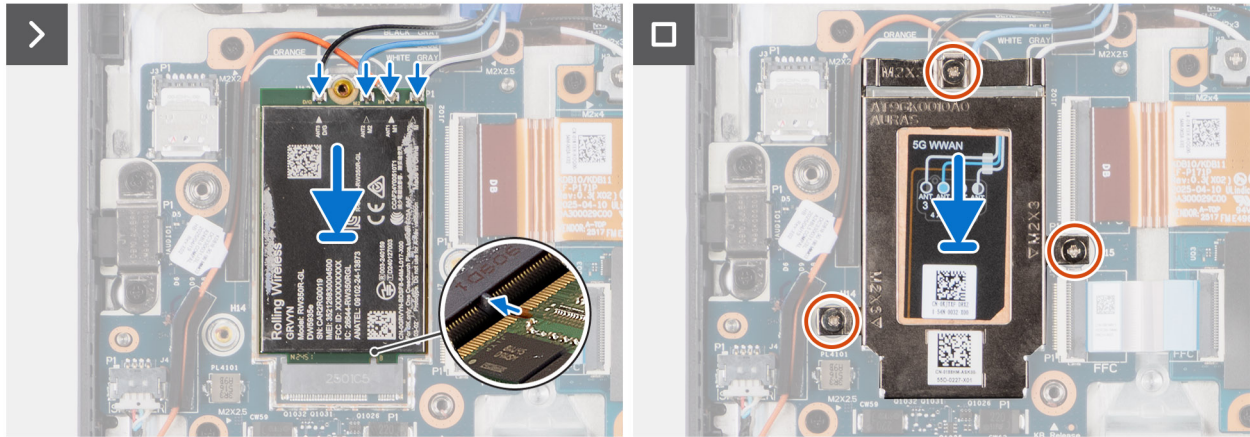


Figure 51. Installing the WWAN card

Steps

1. Align the notch on the WWAN card with the tab on the WWAN-card slot.
2. Slide the WWAN card at an angle into the WWAN-card slot.
3. Connect the WWAN antenna cables to the connectors on the WWAN card.
4. Align and place the WWAN-card bracket on the system board.
5. Replace the three screws (M2x3) to secure the WWAN card and WWAN-card bracket to the system board.

Next steps

1. Install the [base cover](#).
2. Follow the procedure in [After working inside your computer](#).

WWAN I/O board

Removing the WWAN I/O board (for models with WWAN)

CAUTION: The information in this removal section is intended for authorized service technicians only.

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).
3. Remove the [SIM card](#).
4. Remove the [WWAN card](#) (for computers that are shipped with a WWAN card).

About this task

The following images indicate the location of the WWAN I/O board and provide a visual representation of the removal procedure.

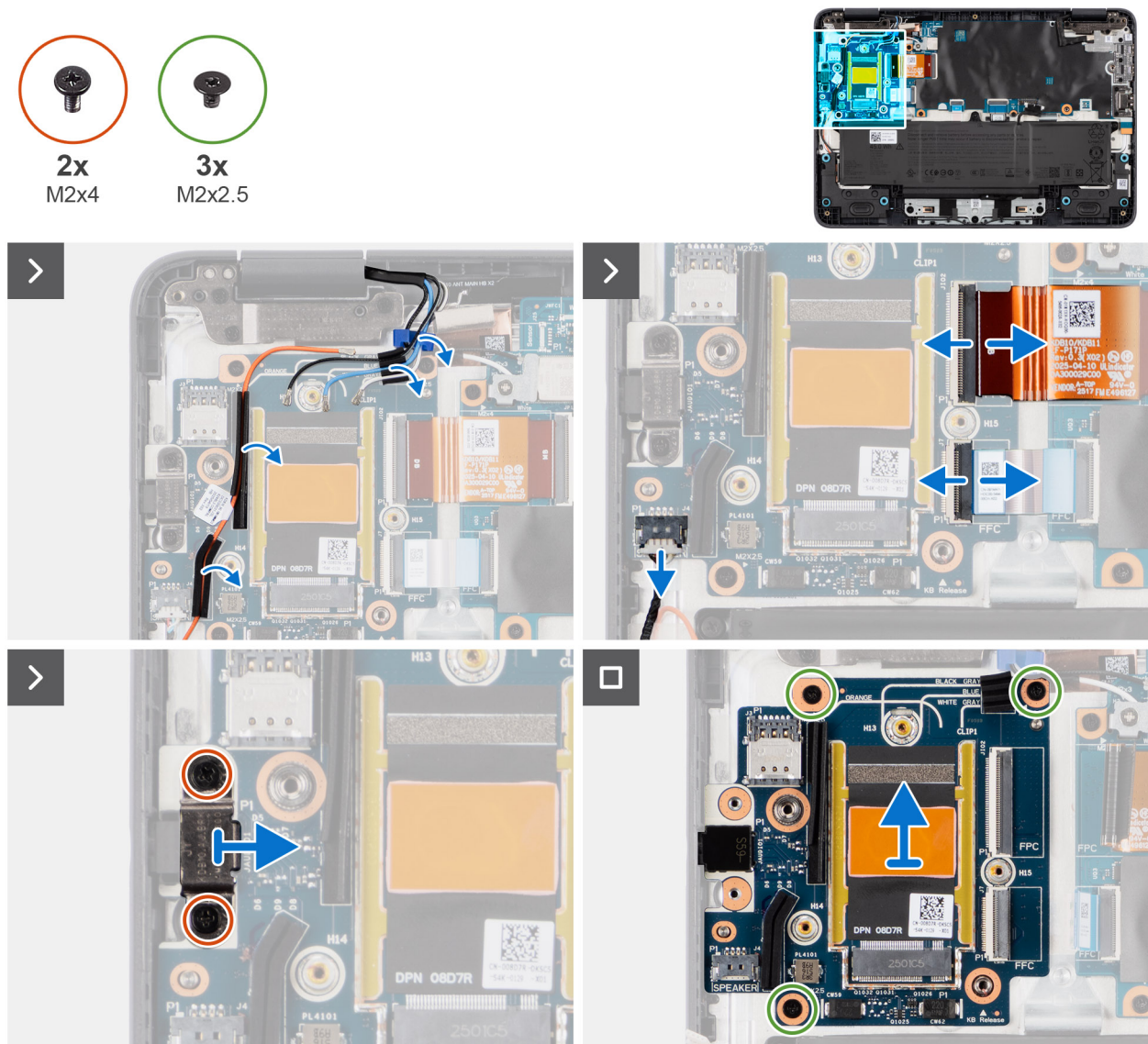


Figure 52. Removing the WWAN I/O board

Steps

1. Unroute the antenna cables from the routing guides on the WWAN I/O board.
2. Disconnect the speaker cable, I/O-board cable, and WWAN I/O board cable from the WWAN I/O board.
3. Remove the two screws (M2x4) that secure the audio jack bracket in place.
4. Remove the audio jack bracket from the computer.
5. Remove the three screws (M2x2.5) securing the WWAN I/O board in place.
6. Lift the WWAN I/O board and remove it from the computer.

Installing the WWAN I/O board (for models with WWAN)

CAUTION: The information in this installation section is intended for authorized service technicians only.

Prerequisites

If you are replacing a component, remove the existing component before performing the installation process.

About this task

The following images indicate the location of the WWAN I/O board and provide a visual representation of the installation procedure.

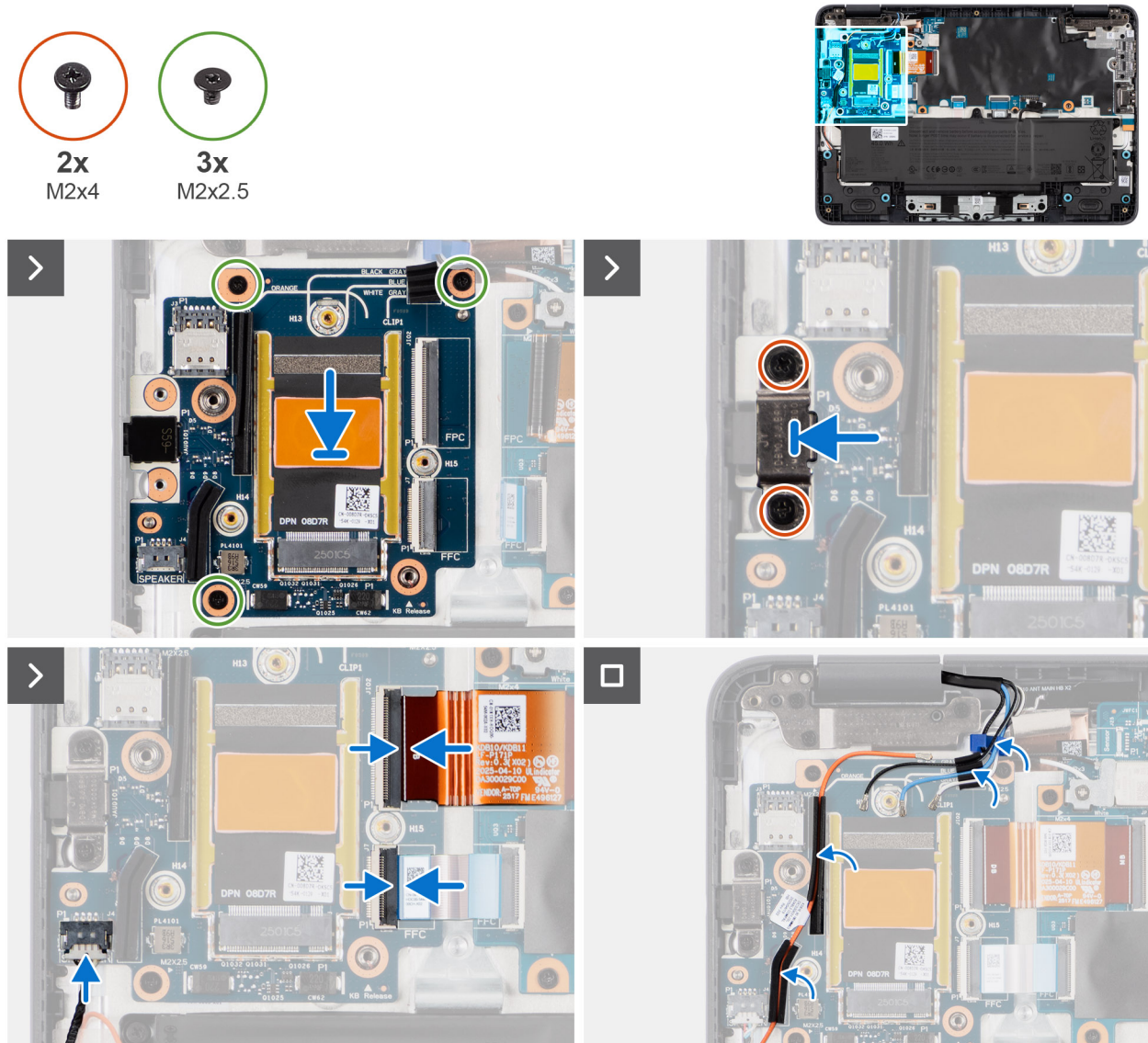


Figure 53. Installing the WWAN I/O board

Steps

1. Place the WWAN I/O board into its slot, aligning it with the connectors on the system board.
2. Replace the three screws (M2x2.5) to secure the WWAN I/O board.
3. Install the audio jack bracket into its position.
4. Replace the two screws (M2x4) to secure the audio jack bracket.
5. Reconnect the WWAN I/O-board cable, I/O-board cable, and speaker cable to the WWAN I/O board

The following table provides the antenna-cable color scheme for the WWAN card that is supported on your computer.

Table 3. Antenna-cable color scheme for WWAN card

Connectors on the WWAN card	Antenna-cable color
D/G	Black with a thin gray stripe
M2	Blue

Table 3. Antenna-cable color scheme for WWAN card (continued)

Connectors on the WWAN card	Antenna-cable color
M1	Orange
M	White with a thin gray stripe

Next steps

1. Install the [WWAN card](#) (for computers that are shipped with a WWAN card).
2. Install the [SIM card](#).
3. Install the [base cover](#).
4. Follow the procedure in [After working inside your computer](#).

Display assembly

Removing the display assembly

 **CAUTION:** The information in this removal section is intended for authorized service technicians only.

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).
3. Remove the [WWAN card](#) (for computers that are shipped with a WWAN card).

About this task

The following images indicate the location of the display assembly and provide a visual representation of the removal procedure.

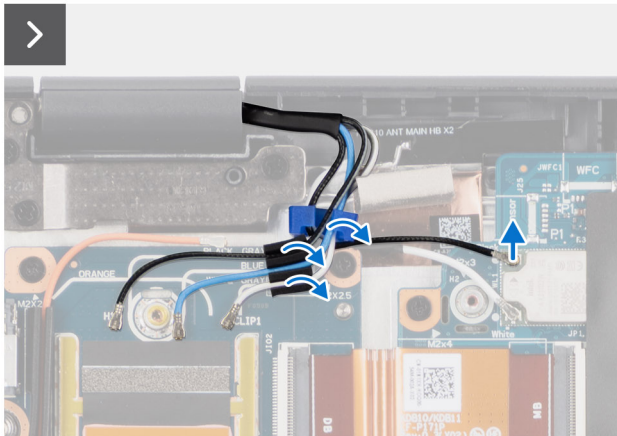
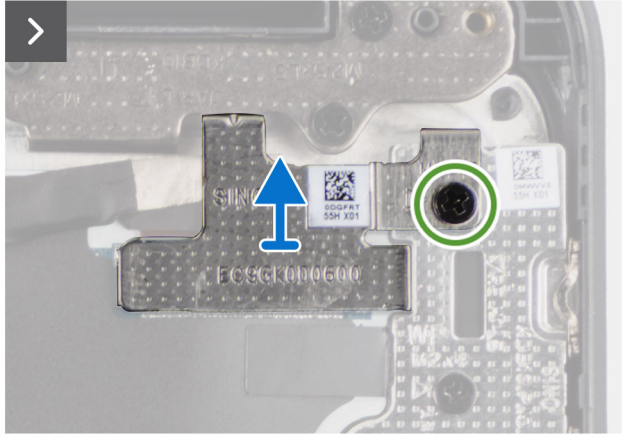
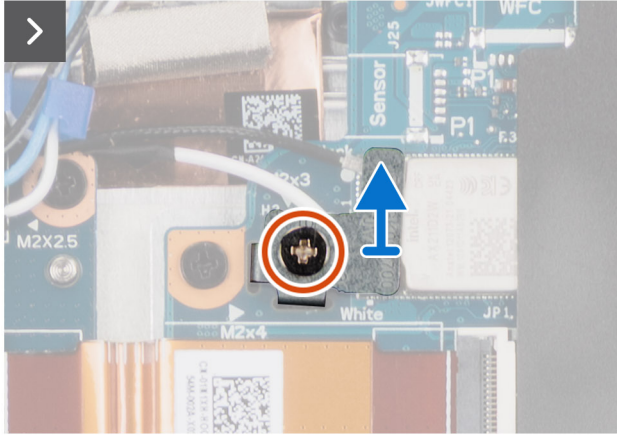
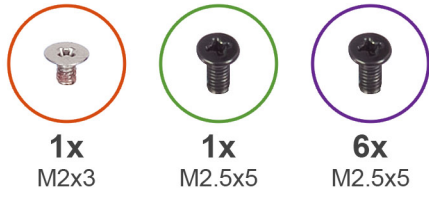


Figure 54. Removing the display assembly



Figure 55. Removing the display assembly

Steps

1. Remove the screw (M2x3) that secures the WLAN bracket to the palm-rest assembly.
2. Remove the WLAN bracket off the palm-rest assembly.
3. Disconnect the WLAN antenna cables from the WLAN module on the system board.
4. Remove the screw(M2.5x5) that secure the display-cable bracket to the palm-rest assembly.
5. Lift the display-cable bracket off the palm-rest assembly.
6. Lift the display-cable bracket off the palm-rest assembly, and disconnect and peel back the display cable from the system board.
7. Open the display to a 270-degree angle and place the computer at the edge of a flat table.
8. Remove the six screws (M2.5x5) that secure the left and right hinges of the display assembly to the system board and palm-rest assembly.
9. Lift the display assembly off the palm-rest assembly.
10. After performing all the above steps, you are left with the display assembly.

i NOTE: The display assembly is a Hinge-Up Design (HUD) assembly and cannot be further disassembled once it is removed from the palm-rest assembly. If any components in the display assembly are malfunctioning and must be replaced, replace the entire display assembly.



Figure 56. Display assembly

Installing the display assembly

CAUTION: The information in this installation section is intended for authorized service technicians only.

Prerequisites

If you are replacing a component, remove the existing component before performing the installation process.

About this task

The following images indicate the location of the display assembly and provide a visual representation of the removal procedure.

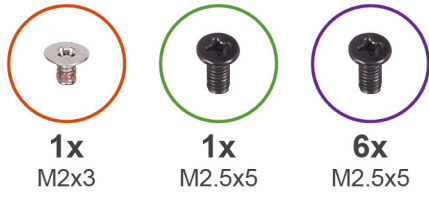


Figure 57. Installing the display assembly

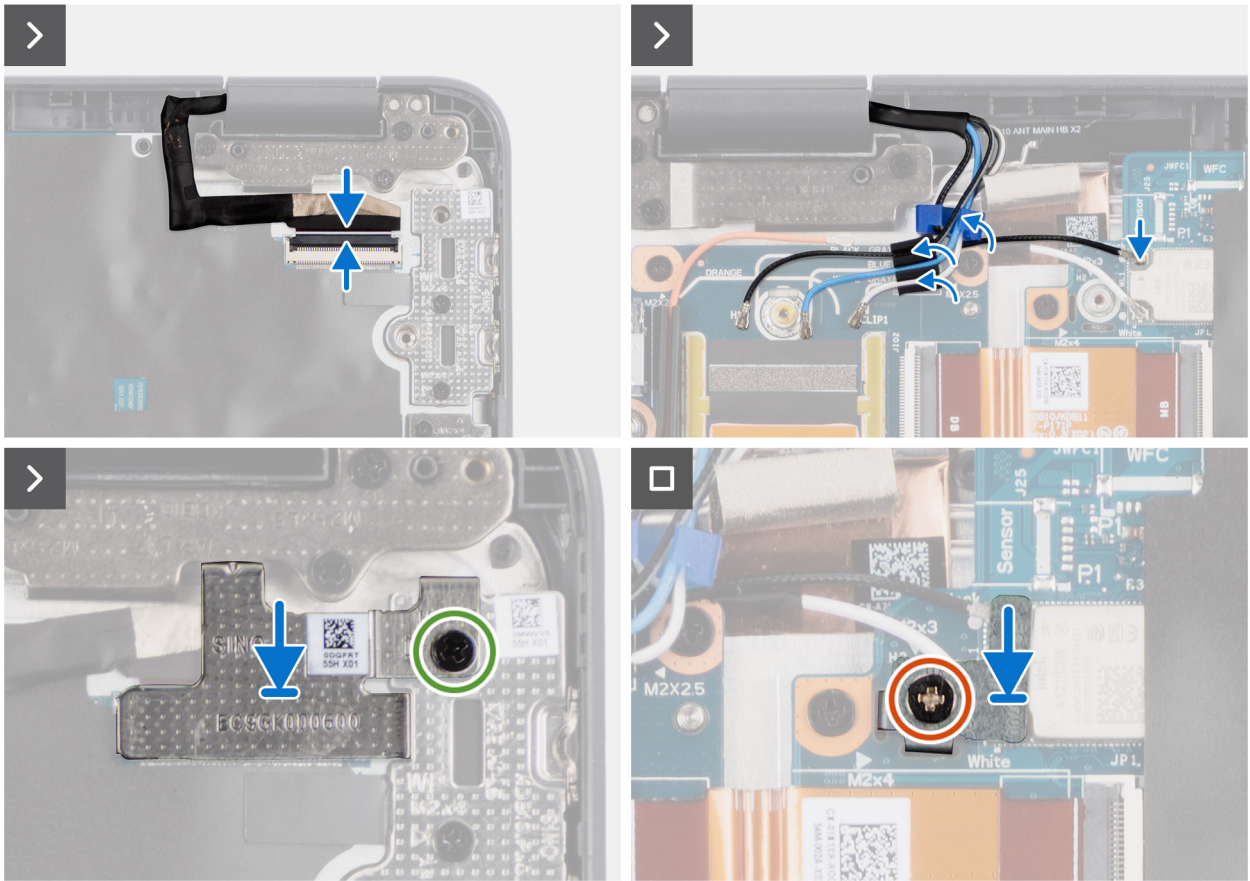


Figure 58. Installing the display assembly

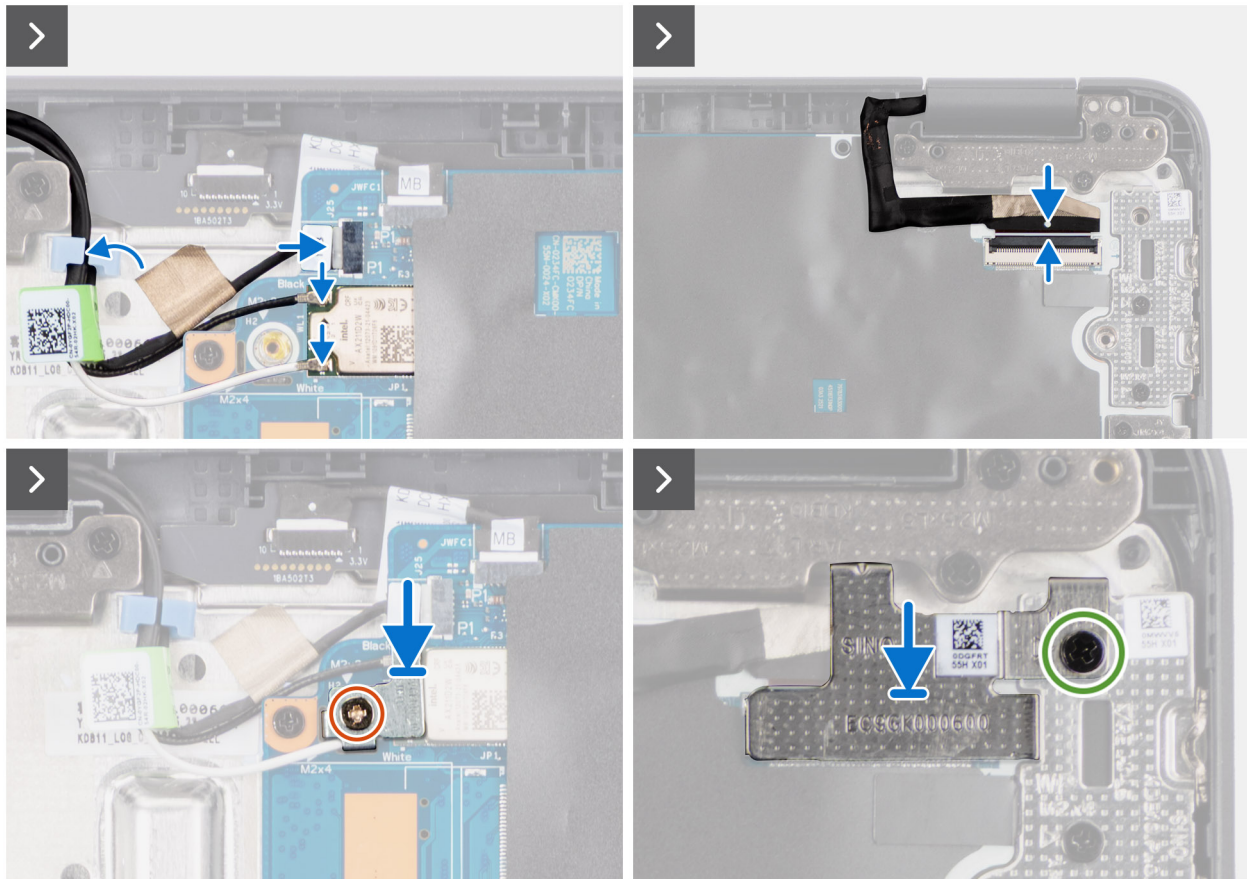


Figure 59. Installing the display assembly

Steps

1. Place the palm-rest assembly at the edge of a flat table.
2. Align the screw holes of the palm-rest assembly with the screw holes on the hinges of the display assembly.
3. Replace the six screws (M2.5x5) that secure the left and right hinges of the display assembly to the system board and palm-rest assembly.
4. Close the display assembly, turn the computer over, and place it on the flat surface.
5. Carefully position the display cable and connect it to the system board.
6. Place the display-cable bracket onto the palm-rest assembly. Secure it with the screw (M2.5x5).
7. Attach the WLAN antenna cables to the WLAN module on the system board.
8. Position the WLAN bracket on the palm-rest assembly. Secure it with the screw (M2x3).

Next steps

1. Install the [WWAN card](#) (for computers that are shipped with a WWAN card).
2. Install the [base cover](#).
3. Follow the procedure in [After working inside your computer](#).

Palm-rest assembly

Removing the palm-rest assembly

Prerequisites

1. Follow the procedure in [Before working inside your computer](#).
2. Remove the [base cover](#).

3. Remove the [WWAN card](#) (for computers that are shipped with a WWAN card).
4. Remove the [battery](#).
5. Remove the [battery cable](#).
6. Remove the [keyboard](#).
7. Remove the [I/O-board cable](#).
8. Remove the [audio I/O board](#).
9. Remove the [display assembly](#).
10. Remove the [system board](#).

i NOTE: The system board can be removed and installed along with the thermal plate, when you replace the palm-rest assembly. This simplifies the removal and installation procedure and prevents damage to the thermal bond between the system board and thermal plate.

11. Remove the [speakers](#).

About this task

The following image shows the palm-rest assembly after all the components in the prerequisite steps have been removed.

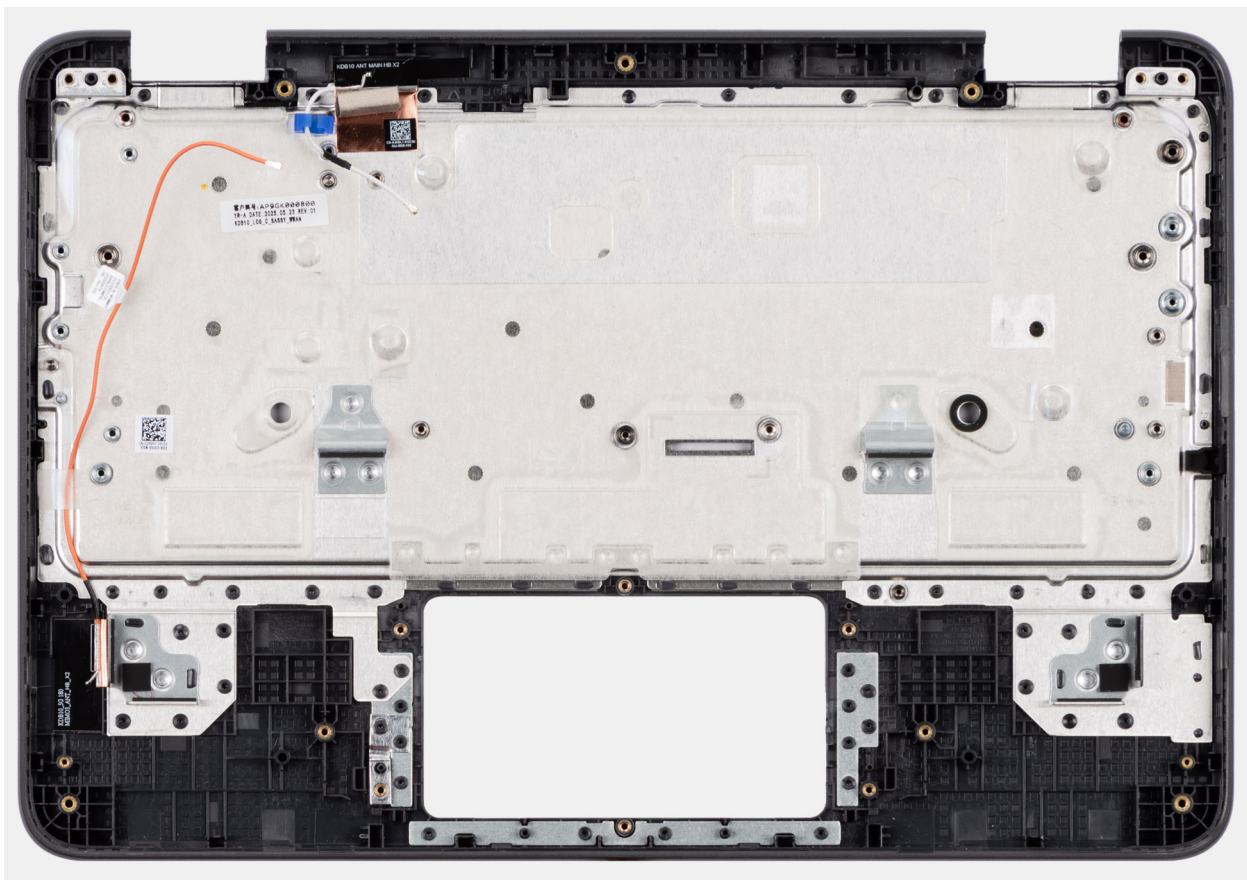


Figure 60. Removing the palm-rest assembly for models shipped with WWAN

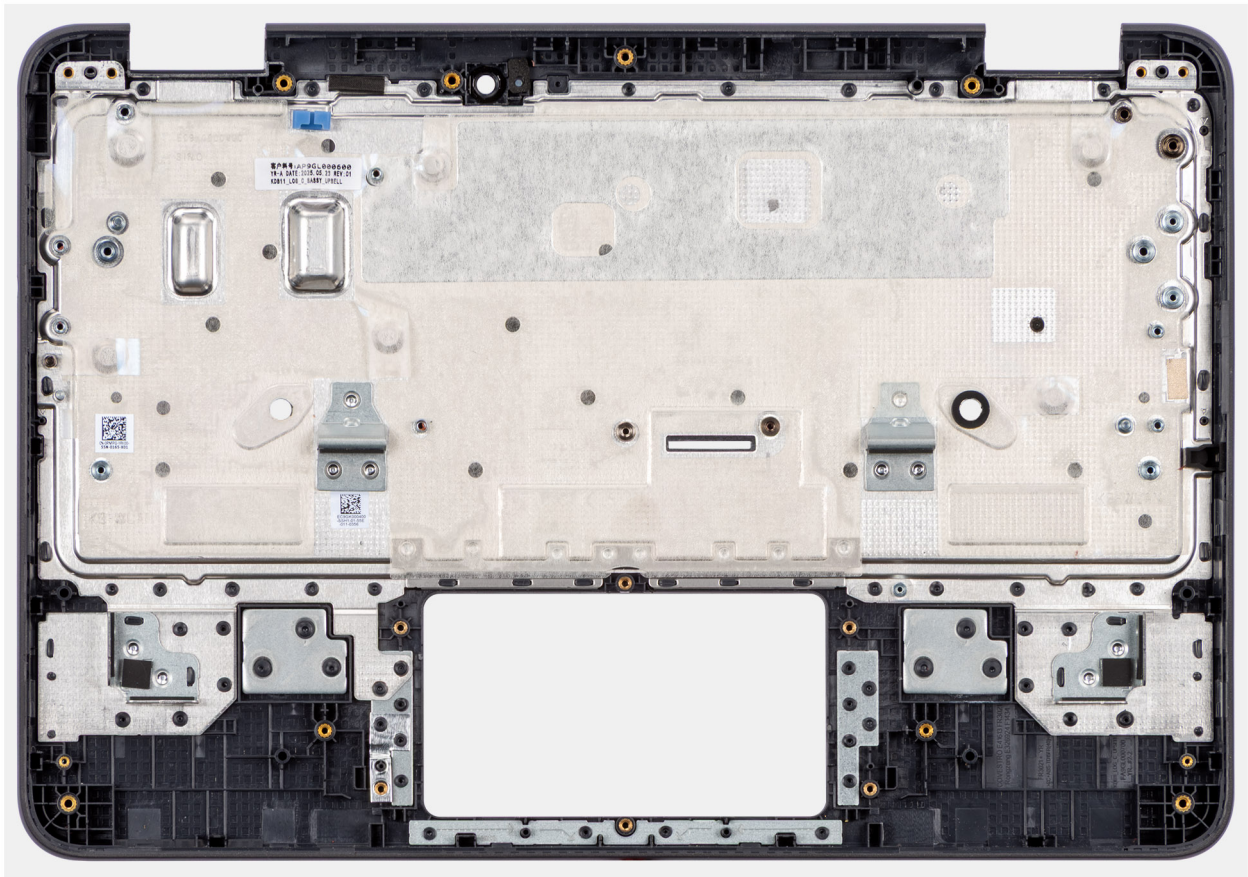


Figure 61. Removing the palm-rest assembly for models shipped without WWAN

NOTE: The palm-rest assembly cannot be further disassembled once all the pre-removal parts procedures are completed. If the touchpad frame, touchpad support bracket, touchpad mylar, touchpad module, touchpad cable, conductive tape, or thermal pad are malfunctioning and requires to be replaced, replace the entire palm-rest assembly.

Steps

After performing the **Prerequisites**, you are left with the palm-rest assembly.

Installing the palm-rest assembly

Prerequisites

If you are replacing a component, remove the existing component before performing the installation procedure.

About this task

The following image indicates the location of the palm-rest assembly.

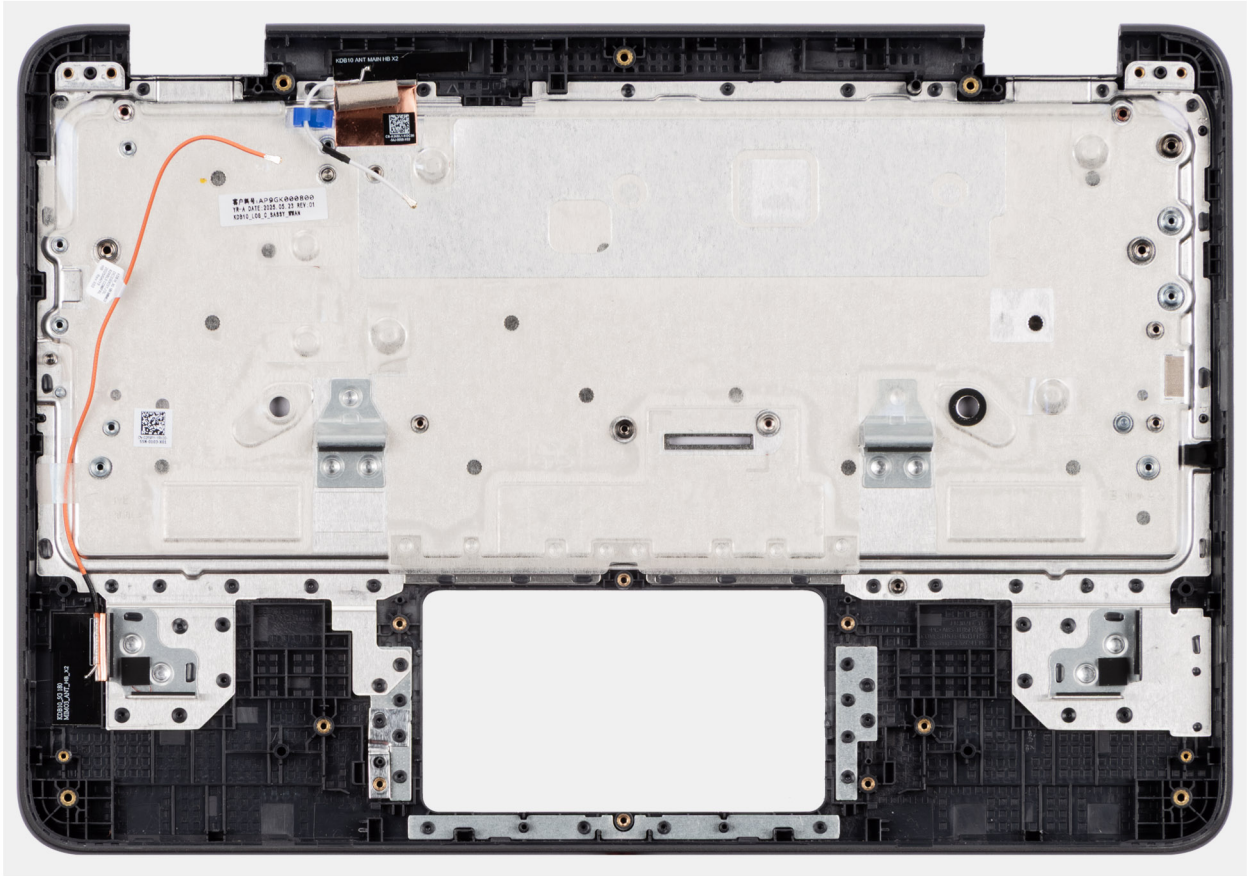


Figure 62. Installing the palm-rest assembly for models shipped with WWAN

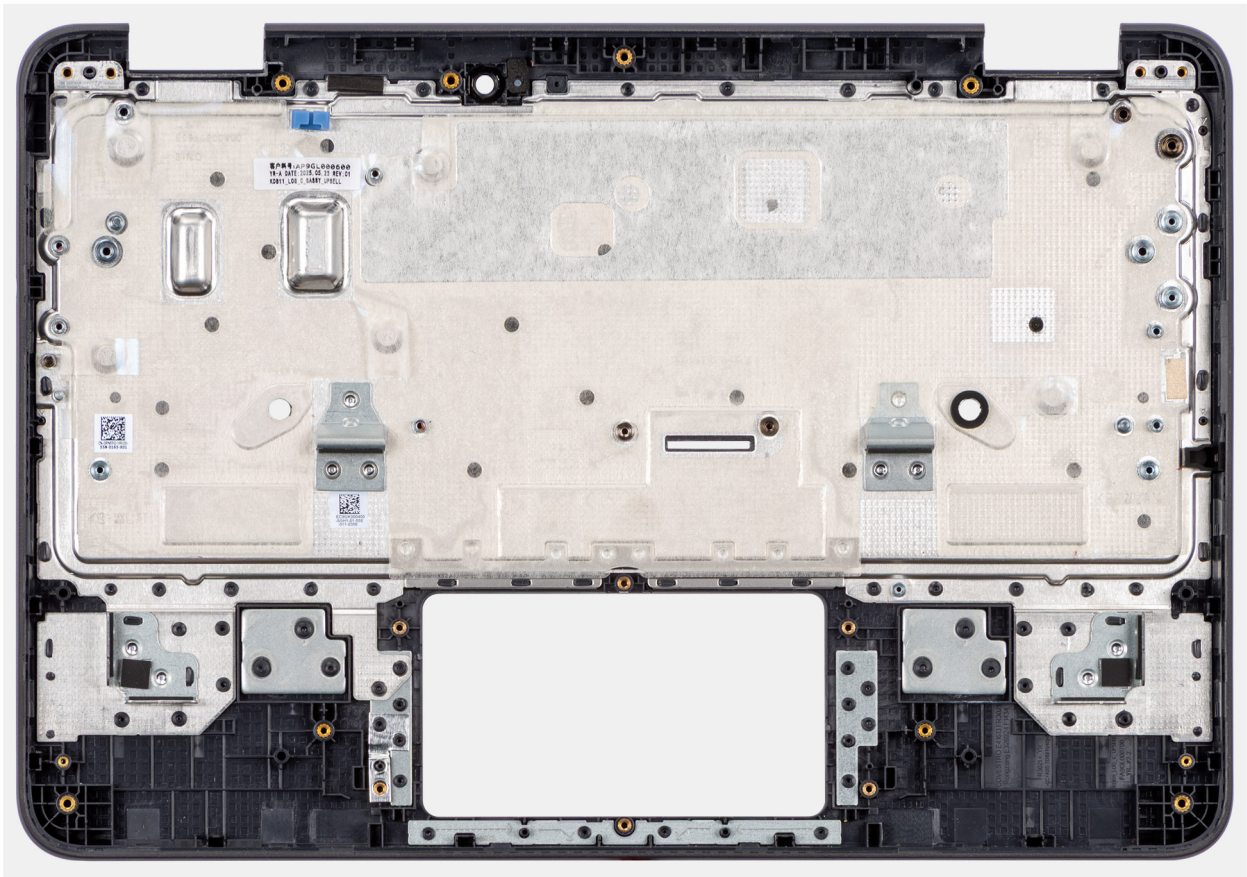


Figure 63. Installing the palm-rest assembly for models shipped without WWAN

Steps

Place the palm-rest assembly on a flat surface and install the components that are listed in **Next steps** to complete the palm-rest installation.

Next steps

1. Install the [speakers](#).
2. Install the [system board](#).
3. Install the [display assembly](#).
4. Install the [audio I/O board](#).
5. Install the [I/O-board cable](#).
6. Install the [keyboard](#).
7. Install the [battery cable](#).
8. Install the [battery](#).
9. Install the [WWAN card](#) (for computers that are shipped with a WWAN card).
10. Install the [base cover](#).
11. Follow the procedure in [After working inside your computer](#).

Software

This chapter details the supported operating systems along with instructions on how to install the drivers.

Operating system

Your Dell Chromebook 11 CC11260 supports the following operating system:

ChromeOS

Drivers and downloads

When troubleshooting, downloading, or installing drivers, it is recommended that you read the [Dell Knowledge Base article Drivers and Downloads FAQs](#).

Troubleshooting

Handling swollen rechargeable Li-ion batteries

Like most laptops, Dell laptops use Lithium-ion batteries. One type of Lithium-ion battery is the rechargeable Li-ion battery. Rechargeable Li-ion batteries have increased in popularity in recent years and have become a standard in the electronics industry due to customer preferences for a slim form factor (especially with newer ultra-thin laptops) and long battery life. Inherent to rechargeable Li-ion battery technology is the potential for swelling of the battery cells.

A swollen battery may impact the performance of the laptop. To prevent possible further damage to the device enclosure or internal components leading to malfunction, discontinue the use of the laptop and discharge it by disconnecting the AC adapter and letting the battery drain.

Swollen batteries should not be used and must be replaced and disposed of properly. We recommend contacting Dell Support for options to replace a swollen battery under the terms of the applicable warranty or service contract, including options for replacement by a Dell authorized service technician.

The guidelines for handling and replacing rechargeable Li-ion batteries are as follows:

- Exercise caution when handling rechargeable Li-ion batteries.
- Discharge the battery before removing it from the laptop. To discharge the battery, unplug the AC adapter from the computer and operate the computer only on battery power. The battery is fully discharged when the computer no longer turns on when the power button is pressed.
- Do not crush, drop, mutilate, or penetrate the battery with foreign objects.
- Do not expose the battery to high temperatures, or disassemble battery packs and cells.
- Do not apply pressure to the surface of the battery.
- Do not bend the battery.
- Do not use tools of any type to pry on or against the battery.
- If a battery gets stuck in a device as a result of swelling, do not try to free it as puncturing, bending, or crushing a battery can be dangerous.
- Do not attempt to reassemble a damaged or swollen battery into a laptop.
- Swollen batteries that are covered under warranty should be returned to Dell in an approved shipping container (provided by Dell)—this is to comply with transportation regulations. Swollen batteries that are not covered under warranty should be disposed of at an approved recycling center. Contact Dell Support at [Dell Support Site](#) for assistance and further instructions.
- Using a non-Dell or incompatible battery may increase the risk of fire or explosion. Replace the battery only with a compatible battery purchased from Dell that is designed to work with your Dell computer. Do not use a battery from other computers with your computer. Always purchase genuine batteries from [Dell Site](#) or otherwise directly from Dell.

Rechargeable Li-ion batteries can swell for various reasons such as age, number of charge cycles, or exposure to high heat. For more information about how to improve the performance and lifespan of the laptop battery and to minimize the possibility of occurrence of the issue, search Dell laptop battery at [Dell Support Site](#).

Locating the Service Tag or Express Service Code of your Dell computer

Your Dell computer is uniquely identified with a Service Tag or Express Service Code. To view relevant support resources for your Dell computer, we recommend entering the Service Tag or Express Service Code at [Dell Support Site](#).

For more information about how to find the Service Tag for your computer, see [Instructions on how to find your Service Tag or Serial Number](#).

Chromebook storage

Overview

Dell Technologies recommends that customers prepare their Chromebooks for long-term storage (or summer break). This best practice eliminates the possibility of battery issues when Chromebooks are put back into service.

The following are a few steps to prepare your Chromebooks for long-term storage:

1. Update to the latest version of the ChromeOS.
2. Charge your Chromebooks so that the battery is at least 80% full. This ensures that even when the battery discharges while unplugged over the summer, power is not fully depleted.
3. DO NOT physically remove the battery from the Chromebook for storage.

i **NOTE:** Failure to follow these steps could cause your batteries to reach a critically low charge when the Chromebook is stored for long periods of time, and can result in permanent failure of the battery. Dell provides a standard 1-year warranty on batteries. Batteries are a consumable item. All batteries degrade with time and use. For more information, see <https://www.dell.com/support/>.

Battery management

Chromebook batteries, after the first power-up will slowly discharge even after the computer is turned off. If the battery is allowed to discharge below 1%, it may enter a permanent failure mode rendering it useless.

Simultaneously, do not keep Chromebooks plugged into a cart or charger if they are in storage for months. This reduces battery life and can lead to other issues. If you are storing Chromebooks for a long time, charge them to at least 80% and unplug them from a battery source.

Dell Technologies recommends that customers properly prepare their Chromebooks for long-term storage. This best practice should eliminate or reduce the possibility of premature battery failure.

Chromebook battery long-term storage - best practices

The following suggestions are provided depending on your long-term storage usage to mitigate the number of Chromebooks that need to be put into storage mode:

Classroom storage:

If the Chromebooks are being stored in the classroom such as on a cart or other storage means, if possible (depending on the age of the student), have the teacher walk through the step with the students on the last day of use. Otherwise depending on the size of the class, have the teacher or maybe a teacher's aid follow the process.

Student takes the the system home for summer break:

Provide the process to the student who will take the Chromebook home. Suggest a letter that can be sent home with the student advising of the process.

1. If the student is going to use the Chromebook over the summer, this would not be a concern.
2. If the student is going to store the Chromebook at home over the summer, it is best to be put in storage mode.

IT department storage (student turns in Chromebook):

If the students turn the Chromebook into the IT dept or lab, you could do the following to avoid additional work load on the IT staff:


1. Have the teacher assist with putting Chromebooks into storage mode before turning them in (similar to Classroom storage), or have the IT team provide steps to put the Chromebook into storage mode.
2. IT team can later press the power button to ensure it is in storage mode.

Preparing the Chromebook for long-term storage

Prerequisites

Update your Chromebook to the latest version of the ChromeOS and charge so that the battery is at least 80% full. This ensures that even when the battery discharges while unplugged over the summer, power is not fully depleted.


In order to slow the discharge rate during storage, use the same process that the factory uses before they ship devices.


 **NOTE:** DO NOT physically remove the battery from the Chromebook for storage, but instead perform the following steps:

Steps

1. Connect the device to the power adapter and power on.
2. With the power adapter connected to the device, put the device in Battery cut-off mode.
3. Press and hold the Refresh + Power keys simultaneously at least for 3 seconds.
4. While holding these keys, remove the power cable from the device, and then release the keys. The device should shut down and remain off.
5. Attempt to power the unit on using the power button.
6. If the computer does not power on, you have completed the steps and can safely store the computer.
7. If the unit powers on, repeat steps 1 to 5.
8. Store it in a cool, dry place at 25°C (78 °F).

This is the ideal way to store devices, as it reduces battery discharge to a minimal rate. It prevents constant charge or discharge from reducing the battery life and keeps the Chromebook in a stable, powered-off state.

 **NOTE:** If you cannot put your Chromebook into the battery disconnect state as described above, charge the battery to at least 80%, turn off the Chromebook, unplug it from a power source, and store it in a cool, dry place.

 **NOTE:** If combo keys do not work with your model, charging with a higher socket level is the only alternative from Google.


Getting your Chromebook ready

About this task

Perform the following steps to get your Chromebook ready for school:

Steps

1. Connect the Chromebook to a charger and a power source to get the computer out of the battery disconnect state.
2. Power up your device.
3. Connect your Chromebook to Wi-Fi and update them to the latest ChromeOS release.

 **NOTE:** This step can take time as multiple ChromeOS versions may have been released since the last time the device was updated.

Recovering the operating system

If your Chromebook operating system is malfunctioning, you can recover it by reinstalling the operating system.


To know how to recover your Chromebook operating system, see [Recover your Chromebook](#) at [Chromebook Help](#) page.

Network power cycle

About this task

If your computer is unable to access the Internet due to network connectivity issues, reset your network devices by performing the following steps:

Steps

1. Turn off the computer.
2. Turn off the modem.
 **NOTE:** Some Internet service providers (ISPs) provide a modem and router combo device.
3. Turn off the wireless router.
4. Wait for 30 seconds.
5. Turn on the wireless router.
6. Turn on the modem.
7. Turn on the computer.

Drain flea power (perform hard reset)

About this task

Flea power is the residual static electricity that remains in the computer even after it has been powered off and the battery is removed.


For your safety, and to protect the sensitive electronic components in your computer, you must drain residual flea power before removing or replacing any components in your computer.

Draining flea power, also known as performing a "hard reset," is also a common troubleshooting step if your computer does not turn on or boot into the operating system.


Perform the following steps to drain the flea power:

Steps

1. Turn off the computer.
2. Disconnect the power adapter from the computer.
3. Remove the base cover.
4. Remove the battery.

 **CAUTION: The battery is a Field Replaceable Unit (FRU) and the removal and installation procedures are intended for authorized service technicians only.**

5. Press and hold the power button for 20 seconds to drain the flea power.
6. Install the battery.
7. Install the base cover.
8. Connect the power adapter to the computer.
9. Turn on the computer.

 **NOTE:** For more information about performing a hard reset, go to [Dell Support Site](#). On the menu bar at the top of the Support page, select Support > Support Library. In the Search field on the Support Library page, type the keyword, topic, or model number, and then click or tap the search icon to view the related articles.

Getting help and contacting Dell

Self-help resources


You can get information and help on Dell products and services using these self-help resources:


Table 4. Self-help resources

Self-help resources	Resource location
Information about Dell products and services	Dell Site
Online help for operating system	For support on your Chromebook, see ChromeOS Support .
Access top solutions, diagnostics, drivers and downloads, and learn more about your computer through videos, manuals, and documents.	Your Dell computer is uniquely identified using a Service Tag or Express Service Code. To view relevant support resources for your Dell computer, enter the Service Tag or Express Service Code at Dell Support Site . For more information about how to find the Service Tag for your computer, see Instructions on how to find your Service Tag or Serial Number .
Dell knowledge base articles	<ol style="list-style-type: none"> 1. Go to Dell Support Site. 2. On the menu bar at the top of the Support page, select Support > Support Library. 3. In the Search field on the Support Library page, type the keyword, topic, or model number, and then click or tap the search icon to view the related articles.

Contacting Dell

To contact Dell for sales, technical support, or customer service issues, see [Contact Support at Dell Support Site](#).

 **NOTE:** Availability of the services may vary depending on the country or region, and product.

 **NOTE:** If you do not have an active Internet connection, you can find contact information about your purchase invoice, packing slip, bill, or Dell product catalog.

Revision history

Tracks all updates that are made to the document. It typically includes the date of change, version number, and a brief description of the modification. This log helps maintain transparency, accountability, and a clear timeline of progress.

Table 5. Revision history

Revision	Date	Description
A00	10-16-2025	Original publish date.