

E22698

First Edition / November 2023

# IN SEARCH OF INCREDIBLE



Service Manual



## **COPYRIGHT INFORMATION**

No part of this manual, including the products and software described in it, may be reproduced, transmitted, transcribed, stored in a retrieval system, or translated into any language in any form or by any means, except documentation kept by the purchaser for backup purposes, without the express written permission of ASUSTeK COMPUTER INC. ("ASUS").

ASUS PROVIDES THIS MANUAL "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL ASUS, ITS DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING DAMAGES FOR LOSS OF PROFITS, LOSS OF BUSINESS, LOSS OF USE OR DATA, INTERRUPTION OF BUSINESS AND THE LIKE), EVEN IF ASUS HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES ARISING FROM ANY DEFECT OR ERROR IN THIS MANUAL OR PRODUCT.

Products and corporate names appearing in this manual may or may not be registered trademarks or copyrights of their respective companies, and are used only for identification or explanation and to the owners' benefit, without intent to infringe.

SPECIFICATIONS AND INFORMATION CONTAINED IN THIS MANUAL ARE FURNISHED FOR INFORMATIONAL USE ONLY, AND ARE SUBJECT TO CHANGE AT ANY TIME WITHOUT NOTICE, AND SHOULD NOT BE CONSTRUED AS A COMMITMENT BY ASUS. ASUS ASSUMES NO RESPONSIBILITY OR LIABILITY FOR ANY ERRORS OR INACCURACIES THAT MAY APPEAR IN THIS MANUAL, INCLUDING THE PRODUCTS AND SOFTWARE DESCRIBED IN IT.

Copyright © 2023 ASUSTeK COMPUTER INC. All Rights Reserved.

## **LIMITATION OF LIABILITY**

Circumstances may arise where because of a default on ASUS' part or other liability, you are entitled to recover damages from ASUS. In each such instance, regardless of the basis on which you are entitled to claim damages from ASUS, ASUS is liable for no more than damages for bodily injury (including death) and damage to real property and tangible personal property; or any other actual and direct damages resulted from omission or failure of performing legal duties under this Warranty Statement, up to the listed contract price of each product.

ASUS will only be responsible for or indemnify you for loss, damages or claims based in contract, tort or infringement under this Warranty Statement.

This limit also applies to ASUS' suppliers and its reseller. It is the maximum for which ASUS, its suppliers, and your reseller are collectively responsible.

UNDER NO CIRCUMSTANCES IS ASUS LIABLE FOR ANY OF THE FOLLOWING: (1) THIRD-PARTY CLAIMS AGAINST YOU FOR DAMAGES; (2) LOSS OF, OR DAMAGE TO, YOUR RECORDS OR DATA; OR (3) SPECIAL, INCIDENTAL, OR INDIRECT DAMAGES OR FOR ANY ECONOMIC CONSEQUENTIAL DAMAGES (INCLUDING LOST PROFITS OR SAVINGS), EVEN IF ASUS, ITS SUPPLIERS OR YOUR RESELLER IS INFORMED OF THEIR POSSIBILITY.

## **SERVICE AND SUPPORT**

Visit our multi-language website at <https://www.asus.com/support/>

# Table of Contents

## Chapter 1: Introduction

Disclaimer .....	8
Safety precautions.....	8
Pre-repair checklist .....	10
Installation tools.....	11
Major components.....	12

## Chapter 2: Service Procedures

Bottom cover.....	16
Removal .....	17
Installation .....	19
Battery .....	20
Removal .....	21
Installation .....	24
M.2 SSD module.....	27
Removal .....	28
Installation .....	30
I/O board.....	32
Removal .....	33
Installation .....	35
Fan module .....	37
Removal .....	38
Installation .....	39

Heat sink .....	40
Removal .....	41
Installation .....	42
Touchpad .....	43
Removal .....	44
Installation .....	46
Speakers .....	48
Removal .....	49
Installation .....	50
WLAN module .....	51
Removal .....	52
Installation .....	53
Fingerprint sensor .....	54
Removal .....	55
Installation .....	56
Stylus charger .....	57
Removal .....	58
Installation .....	59
Motherboard .....	60
Removal .....	61
Installation .....	65
Keyboard module .....	69
Removal .....	70
Installation .....	73

Display panel module .....	76
Removal .....	77
Installation .....	80
Display bezel .....	82
Removal .....	83
Installation .....	84
Display panel .....	85
Removal .....	86
Installation .....	91
Touch screen board .....	95
Removal .....	96
Installation .....	97
Camera module.....	98
Removal .....	99
Installation .....	102
Top cover .....	105
Removal .....	106
Installation .....	107

## **Appendix**

Wiring and connection diagrams .....	110
--------------------------------------	-----

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

# ***Chapter 1:***

## ***Introduction***

# Disclaimer

ASUS is not responsible for direct, indirect, intentional or unintentional damages resulting from improper installation and operation.

## Safety precautions

- Before handling components, use a grounded wrist strap or touch a safely grounded object to avoid damaging them due to static electricity.
- Keep liquids or moisture away from your device to avoid short circuits.
- Remove rings, watches, and any other metal objects from your hands.
- Hold components by the edges to avoid touching the ICs.
- Properly install all components before connecting the AC power.
- Do not use power adapters or batteries from other devices to reduce the risk of injury to persons due to fire or explosion. Use only certified power adapters or batteries supplied by the manufacturer or authorized retailers.
- Detach all clips or flaps before removing cables to prevent damage.



- Disconnect cables, connectors, and power plugs by pulling the plug evenly to avoid damage.
- Use the correct screw models on your device to prevent damage.
- Confirm that the cable orientation is correct before connecting any cables.
- Fully remove all adhesive residue after removing and before installing any components.
- Photograph the appearance of cables, cable routing, connectors, and screws for later reference before proceeding with each step.

## Pre-repair checklist

- Read the entire manual before starting any service procedures and follow all instructions.
  - Back up the data on your device.
  - Place your device on a clean and stable surface.
  - Turn off your device.
  - Disconnect all connected peripherals and cables.
  - Disconnect all power cables and remove the battery pack (if applicable).
- 

### **IMPORTANT!**

- If you are uncertain about performing the described service procedures, stop and contact an authorized service center for assistance.
  - Purchase replacement components from authorized retailers of this device to ensure maximum compatibility and reliability.
- 

### **NOTE:**

- The illustrations are for reference only.
  - The service procedures described in this manual depend on the model configuration and may not reflect the entire servicing process. To service components that are not covered in this manual, please visit an authorized service center for further assistance.
  - Keep all adhesive tape, insulating materials, screws, and other removable items in a safe place until the service procedure is completed, as they may be needed during installation.
-

# Installation tools



**Screwdriver**



**Plastic blade**

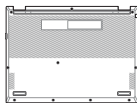


**Tweezers**

# Major components



**Top cover**



**Bottom cover**



**Display bezel**



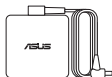
**Display panel**



**Keyboard module**



**Motherboard**



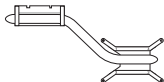
**Power adapter**



**Battery**



**Camera module**



**Heat sink**



**Fan**



**I/O board**



**Touchpad**



**Display hinges**



**Speakers**



**FFC cables**



**Antenna cables**



**eDP cable**



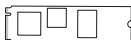
**Stylus charger\***



**WLAN module**



**Touch screen board**



**M.2 SSD module**



**Fingerprint sensor\***

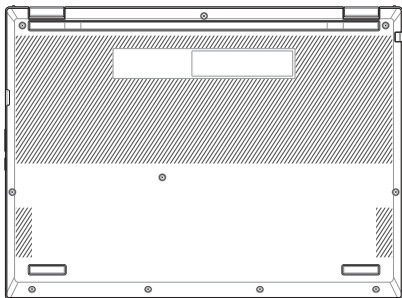
*\* On selected models*

This image shows a single page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

## ***Chapter 2:***

## ***Service Procedures***

## Bottom cover



### Before you begin

Read the **Safety Precautions** and complete the **Pre-repair Checklist**.

### Screw list

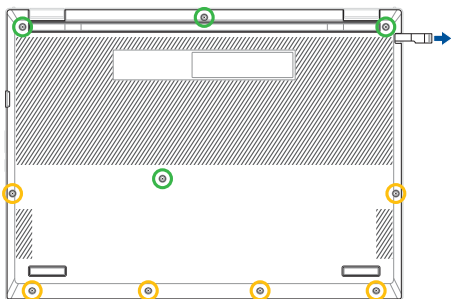
● ⊕ M2.0 X 7.0L (4pcs)

● ⊕ M2.0 X 3.5L (6pcs)



## Removal

1. Remove the stylus pen from the stylus storage slot (if available).
2. Remove the screw(s) from the bottom cover.



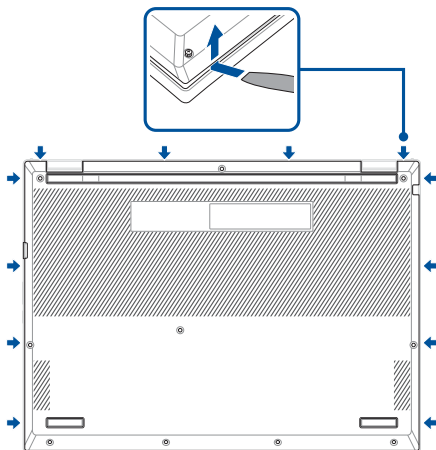
3. Use the plastic blade to pry open the indicated area of the bottom cover as shown in the illustration below.

---

**IMPORTANT!** Avoid sliding the plastic blade along the side of your device or air vents to prevent damage.

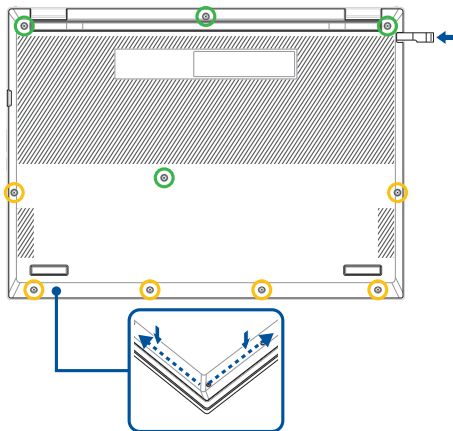
---

4. Remove the bottom cover.

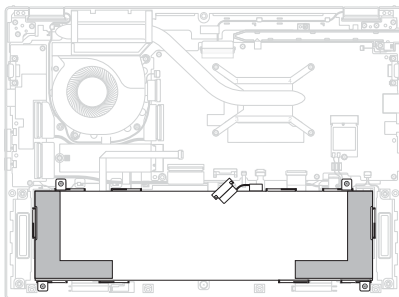


## Installation

1. Install the bottom cover.
2. Gently press down on the bottom cover until it clicks into place.
3. Secure the bottom cover using the screw(s) you removed earlier.
4. Insert the stylus pen into the stylus storage slot (if available).



# Battery



## Before you begin

1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover

## Screw list

- ⊕ M2.0 X 3.0L (4pcs)

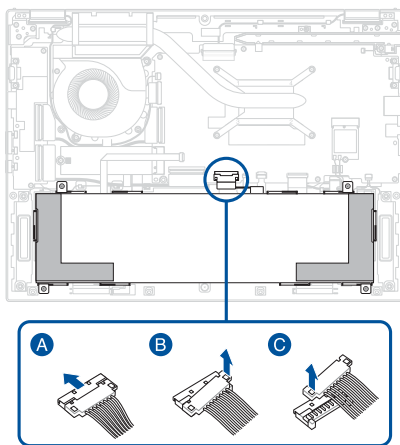
## Removal

1. Disconnect the battery power cable.

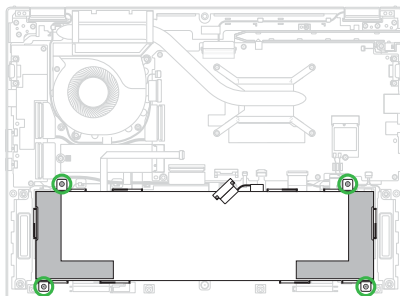
---

### IMPORTANT!

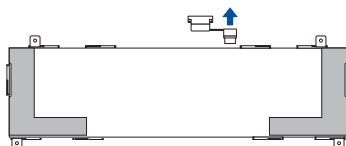
- Disconnect the battery power cable by lifting the side with the red wires first.
  - Serious risk of fire or explosion may occur if the battery is punctured. If you are uncertain about proceeding, stop and contact an authorized service center for assistance.
- 



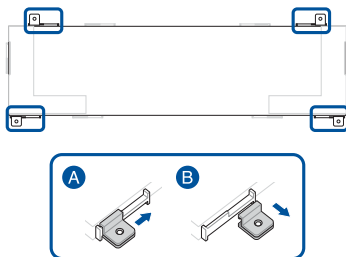
2. Remove the screw(s) from the battery, then remove the battery.



3. Remove the battery power cable.

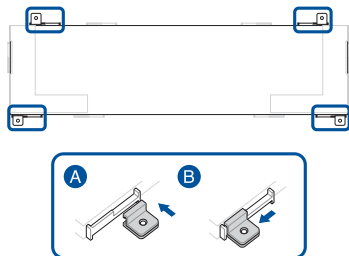


4. Remove the battery brackets from the battery.



## Installation

1. Attach the battery brackets to the battery.

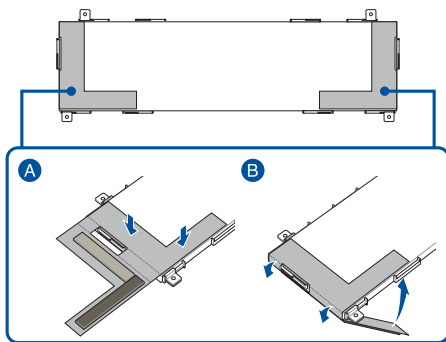


2. Attach the polyester film to the battery.

---

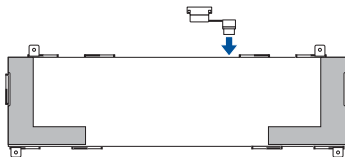
**NOTE:** This step is only required when you are replacing the existing component with a new one.

---

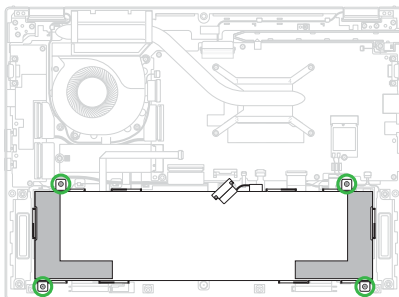




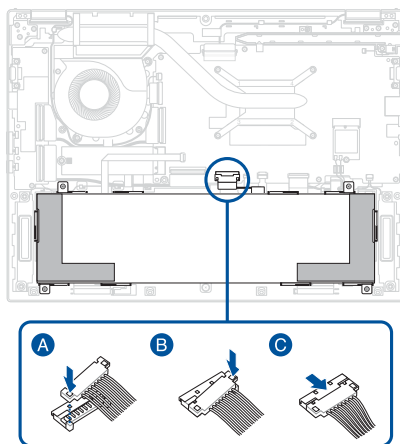
3. Connect the battery power cable to the battery.



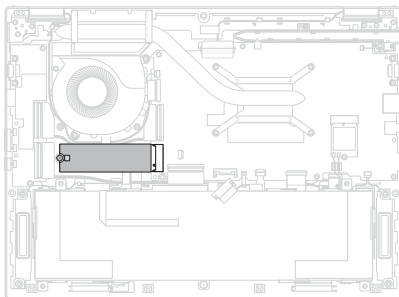
4. Install the battery, then secure the battery using the screw(s) you removed earlier.



5. Reconnect the battery power cable.
6. Install the components you removed in the *Before you begin* section.



## M.2 SSD module



### Before you begin

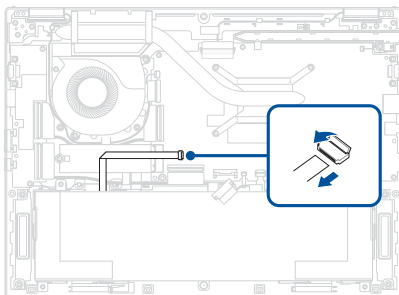
1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery

### Screw list

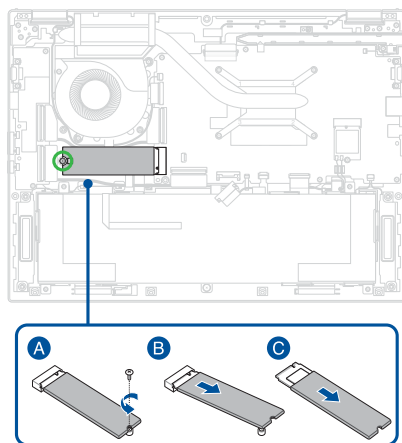
- ⊕ M2.0 X 3.0L (1pc)

## Removal

1. Disconnect the cable (if available).

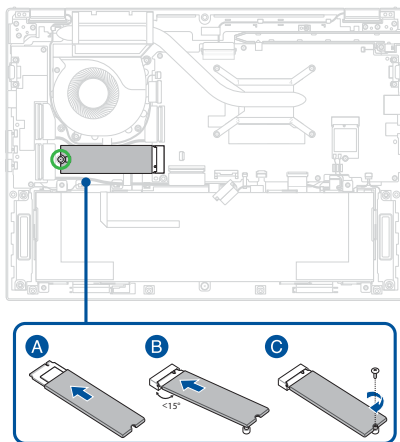


2. Remove the screw, then remove the M.2 SSD module from the motherboard and remove the cover from the M.2 SSD module.

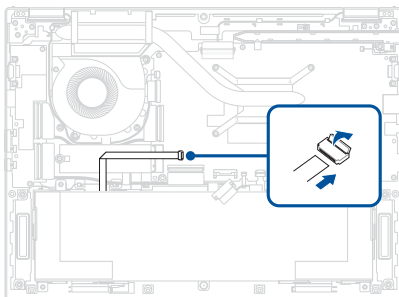


## Installation

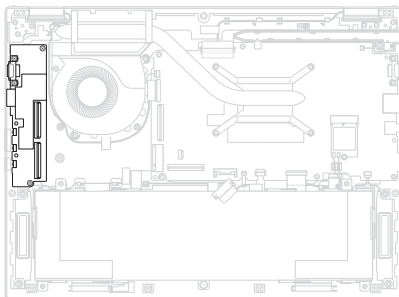
1. Place the M.2 SSD module inside the cover, then align and insert the M.2 SSD module into the M.2 connector on the motherboard and secure the M.2 SSD module using the screw you removed earlier.



2. Reconnect the cable (if available).
3. Install the components you removed in the *Before you begin* section.



# I/O board



## Before you begin

1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery
  - M.2 SSD module

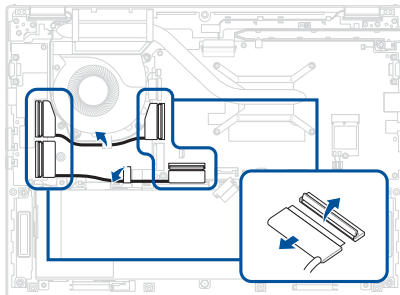
## Screw list

- ⊕ M2.0 X 3.5L (2pcs)
- ⊕ M2.0 X 3.0L (2pcs)

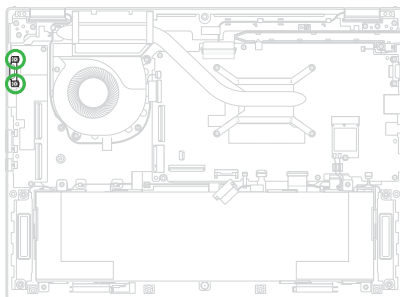


## Removal

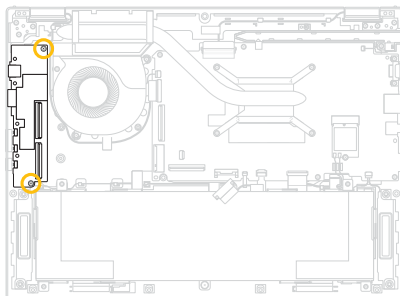
1. Remove the tape, then disconnect the cable(s).



2. Remove the screw(s), then remove the bracket.

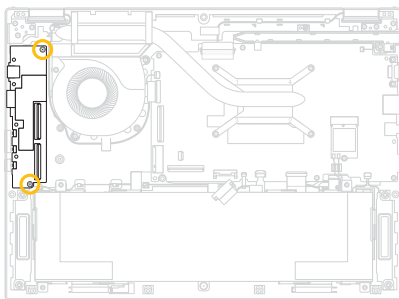


3. Remove the screw(s), then remove the I/O board.

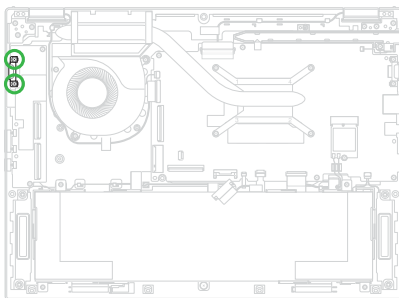


## Installation

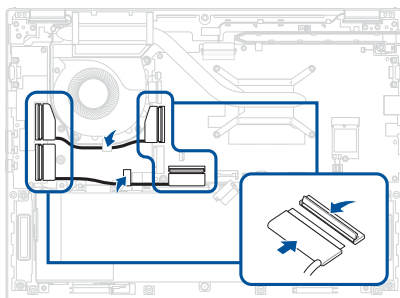
1. Install the I/O board, then secure the I/O board using the screw(s) you removed earlier.



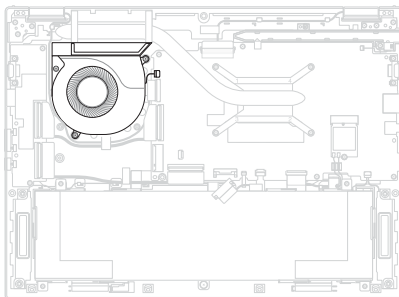
2. Install the bracket, then secure the bracket using the screw(s) you removed earlier.



3. Reconnect the cable(s), then reattach the tape.
4. Install the components you removed in the *Before you begin* section.



# Fan module



## Before you begin

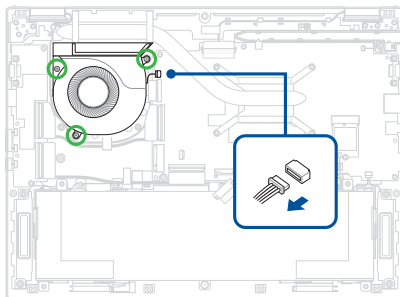
1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery

## Screw list

- ⊕ M2.0 X 4.5L (3pcs)

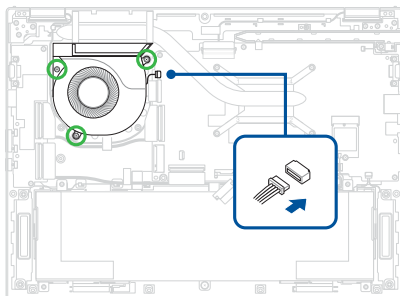
## Removal

1. Disconnect the fan connector.
2. Remove the screw(s).
3. Remove the fan.

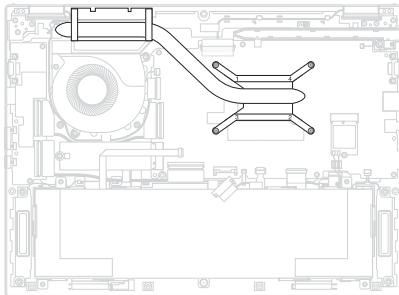


## Installation

1. Install the fan.
2. Secure the fan using the screw(s) you removed earlier.
3. Reconnect the fan connector.
4. Install the components you removed in the *Before you begin* section.



# Heat sink



## Before you begin

---

**IMPORTANT!** Thermal paste, thermal pads, liquid metal, or other thermal interface materials must be thoroughly removed and replaced if this component is removed. Ensure that replacement materials are available before proceeding, or contact an authorized service center for assistance.

---

1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery

## Screw list

- ⊕ M2.0 X 3.0L (4pcs)



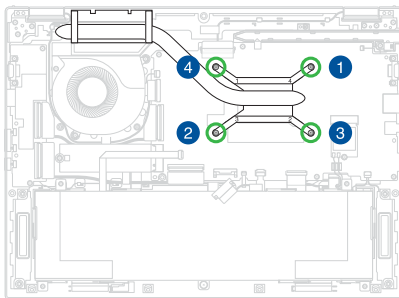
## Removal

Remove the heat sink screw(s) one by one in the sequence shown in the illustration below, then remove the heat sink.

---

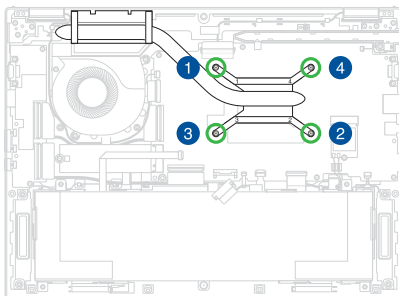
**IMPORTANT!** Vertically lift the heat sink using the right side of the heat sink to prevent damage.

---

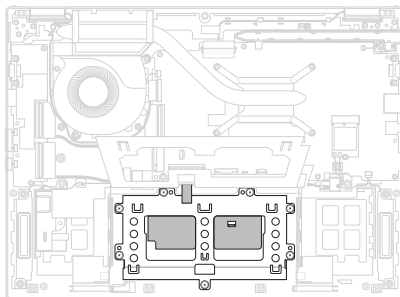


## Installation

1. Install the heat sink, then secure the heat sink screw(s) one by one in the sequence shown in the illustration below.
2. Install the components you removed in the *Before you begin* section.



# Touchpad



## Before you begin

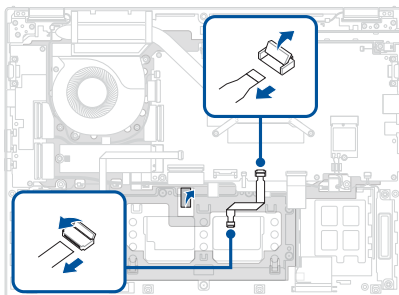
1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery

## Screw list

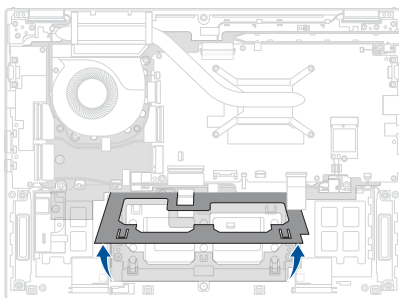
- ⊕ M2.0 X 2.0L (7pcs)

## Removal

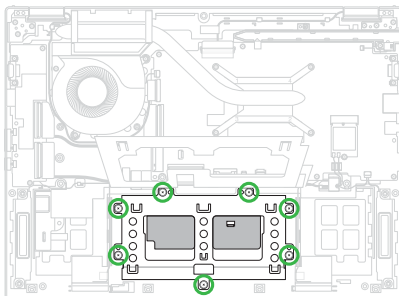
1. Disconnect the cable and remove the tape.



2. Partially peel off the polyester film.

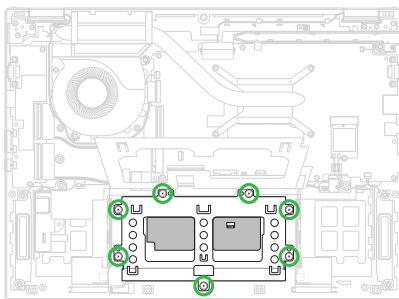


3. Remove the screw(s), then remove the touchpad.

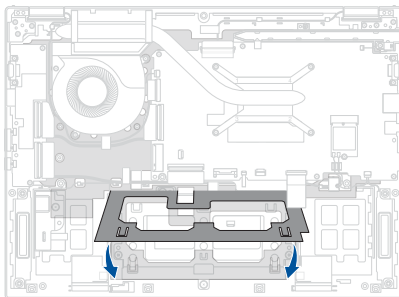


## Installation

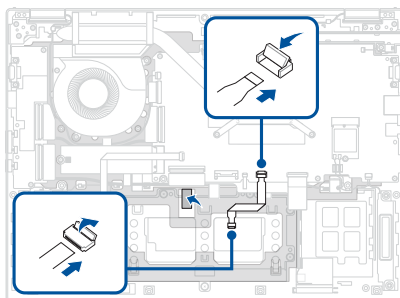
1. Install the touchpad, then secure the touchpad using the screw(s) you removed earlier.



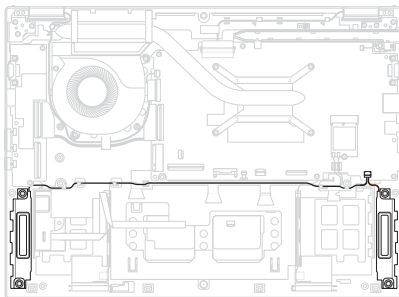
2. Reattach the polyester film.



3. Reconnect the cable and reattach the tape.
4. Install the components you removed in the *Before you begin* section.



# Speakers



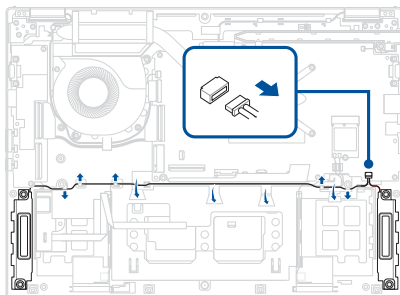
## Before you begin

1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery
  - M.2 SSD module



## Removal

Disconnect the speaker connector and remove the speakers.



## Installation

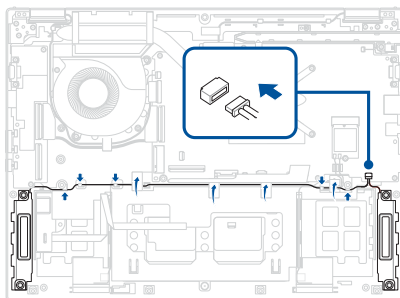
1. Install the speakers.
2. Route the speaker cable through the cable guide(s).

---

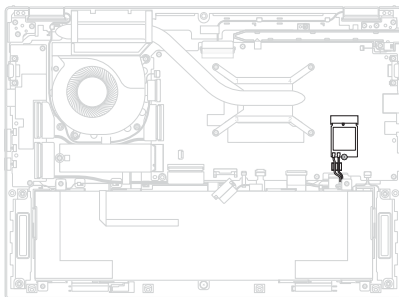
**IMPORTANT!** Damage may occur if cables are not properly routed through the cable guides. Confirm that all cables are routed through each of the indicated cable guides before proceeding.

---

3. Reconnect the speaker connector.
4. Install the components you removed in the *Before you begin* section.



# WLAN module



## Before you begin

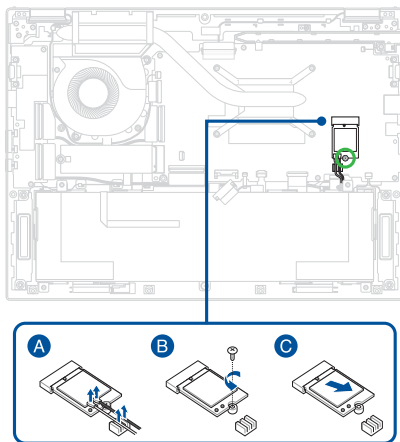
1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery

## Screw list

- ⊕ M2.0 X 3.0L (1pc)

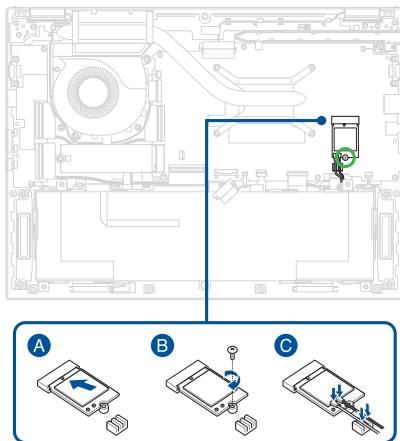
## Removal

Disconnect the antenna cable(s), then remove the screw and remove the WLAN module.

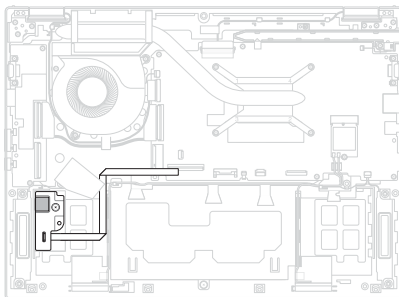


## Installation

1. Install the WLAN module and secure the WLAN module using the screw you removed earlier, then reconnect the antenna cable(s).
2. Install the components you removed in the *Before you begin* section.



# Fingerprint sensor



## Before you begin

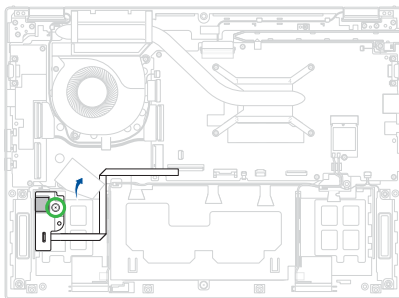
1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery
  - M.2 SSD module

## Screw list

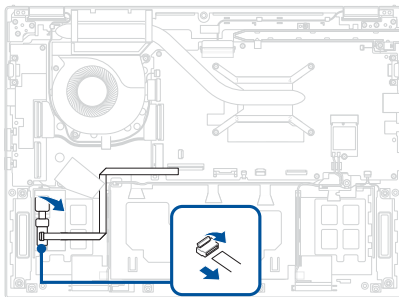
- ⊕ M2.0 X 2.0L (1pc)

## Removal

1. Partially peel off the polyester film, then remove the screw and remove the bracket.

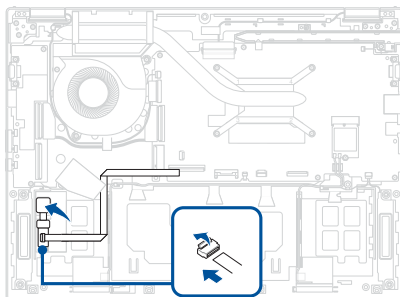


2. Disconnect the cable, then remove the fingerprint sensor.

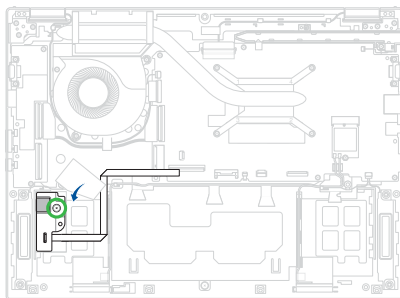


## Installation

1. Install the fingerprint sensor, then reconnect the cable.

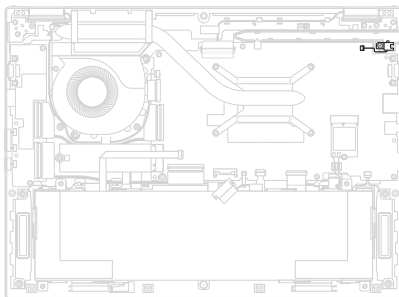


2. Install the bracket, then secure the bracket using the screw you removed earlier and reattach the polyester film.
3. Install the components you removed in the *Before you begin* section.





# Stylus charger



## Before you begin

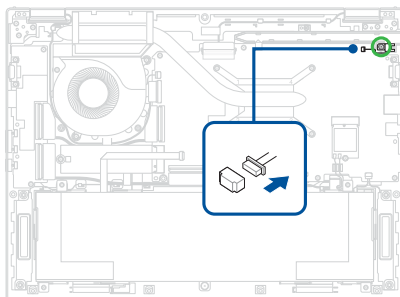
1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery

## Screw list

- ⊕ M2.0 X 3.5L (1pc)

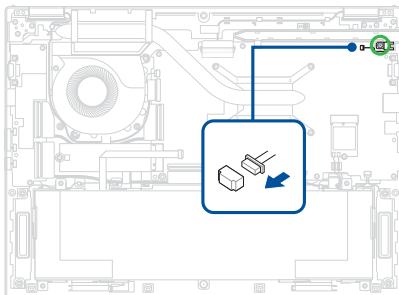
## Removal

Remove the screw, then disconnect the cable and remove the stylus charger.

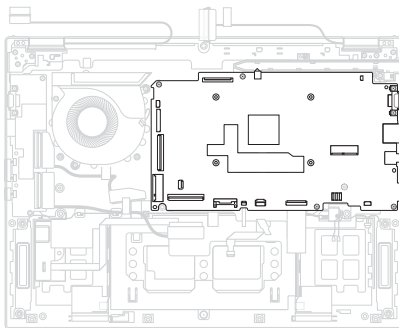


## Installation

1. Install the stylus charger, then secure the stylus charger using the screw you removed earlier and reconnect the cable.
2. Install the components you removed in the *Before you begin* section.



# Motherboard



## Before you begin

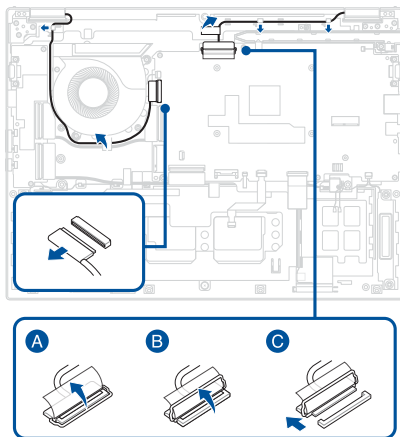
1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery
  - M.2 SSD module
  - Heat sink
  - WLAN module
  - Stylus charger

## Screw list

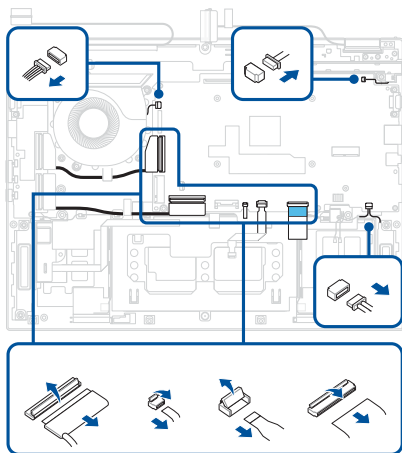
- ⊕ M2.0 X 3.5L (2pcs)
- ⊕ M2.0 X 3.0L (4pcs)

## Removal

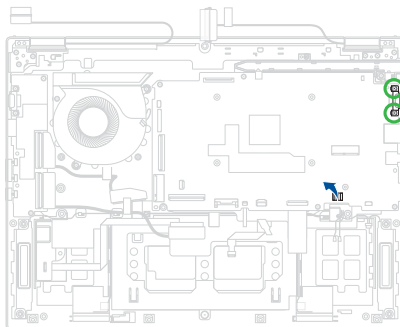
1. Remove the tape, then disconnect the cable(s).



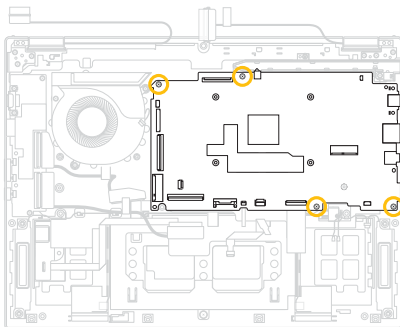
2. Disconnect the cable(s) from the motherboard.



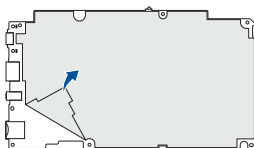
3. Remove the screw(s), then remove the bracket.
4. Remove the cable guide.



5. Remove the screw(s), then remove the motherboard from the chassis.



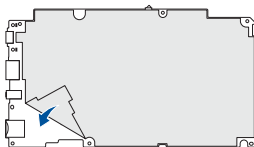
6. Remove the polyester film from the bottom of the motherboard.



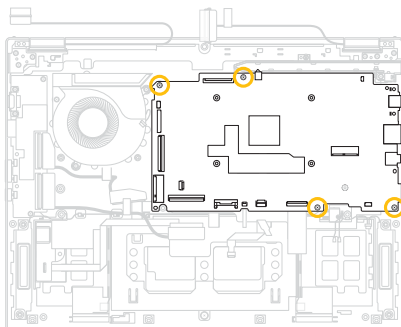


## Installation

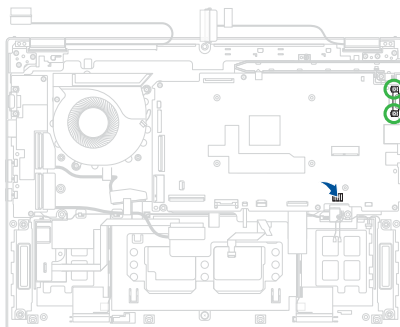
1. Attach the polyester film to the bottom of the motherboard.



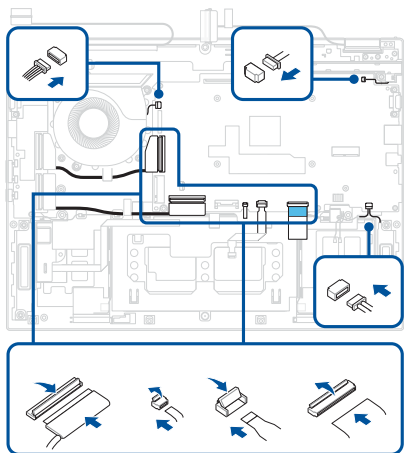
2. Flip the motherboard over, then install the motherboard and secure the motherboard using the screw(s) you removed earlier.



3. Install the cable guide.
4. Install the bracket, then secure the bracket using the screw(s) you removed earlier.



5. Reconnect the cable(s) to the motherboard.



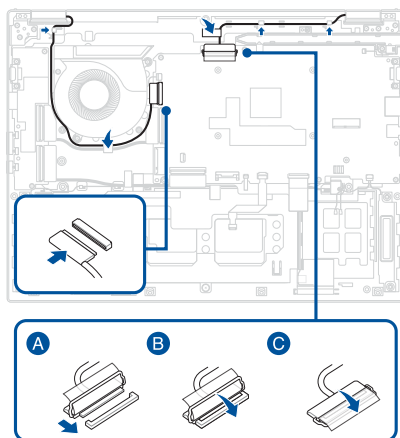
6. Route the cable(s) through the cable guide(s) and reconnect the cable(s).

---

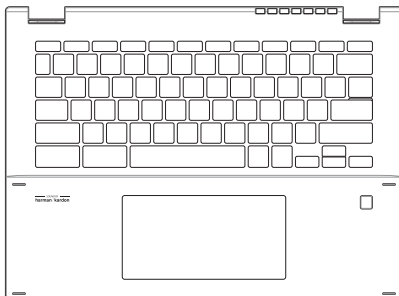
**IMPORTANT!** Damage may occur if cables are not properly routed through the cable guides. Confirm that all cables are routed through each of the indicated cable guides before proceeding.

---

7. Install the components you removed in the *Before you begin* section.



# Keyboard module



## Before you begin

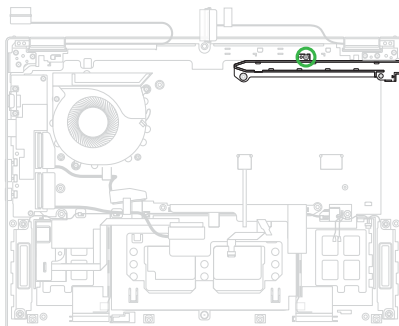
1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery
  - M.2 SSD module
  - I/O board
  - Fan module
  - Touchpad
  - Speakers
  - WLAN module
  - Fingerprint sensor
  - Stylus charger
  - Motherboard

## Screw list

- ⊕ M2.0 X 3.5L (1pc)

## Removal

1. Remove the screw, then remove the stylus storage slot.

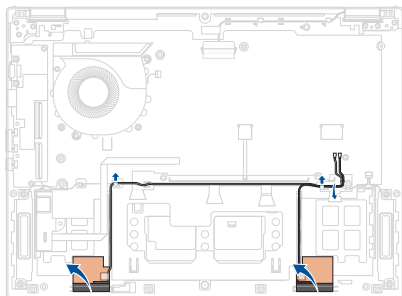


2. Remove the antenna cable(s).

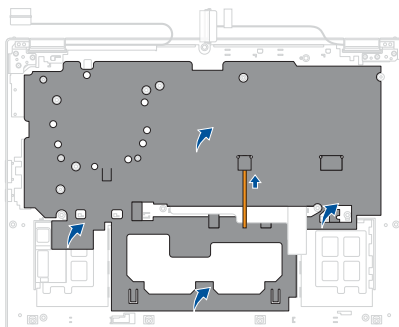
---

**IMPORTANT!** The antenna cable(s) cannot be reused once removed.

---



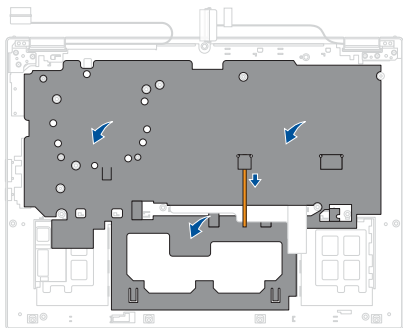
3. Remove the polyester film.





## Installation

1. Thread the cable through the hole in the polyester film.
2. Attach the polyester film.

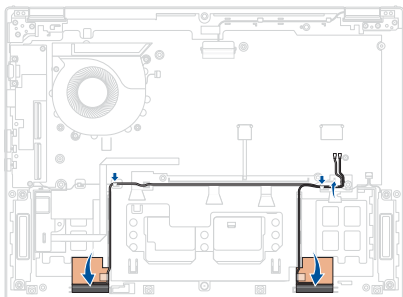


3. Install the antenna cable(s) and route the antenna cable(s) through the cable guide(s).

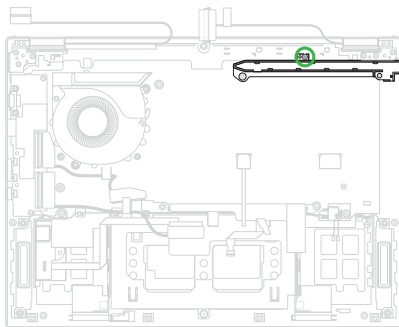
---

**IMPORTANT!** Damage may occur if cables are not properly routed through the cable guides. Confirm that all cables are routed through each of the indicated cable guides before proceeding.

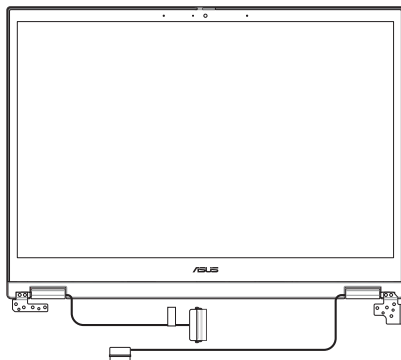
---



4. Install the stylus storage slot, then secure the stylus storage slot using the screw you removed earlier.
5. Install the components you removed in the *Before you begin* section.



# Display panel module



## Before you begin

---

**IMPORTANT!** Do not bend the display panel in any way to avoid risk of display panel leakage.

---

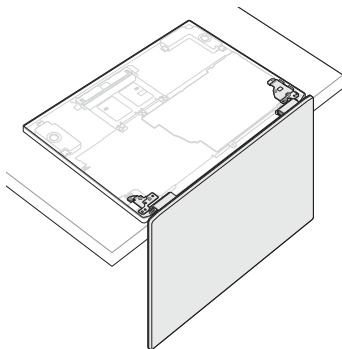
1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery

## Screw list

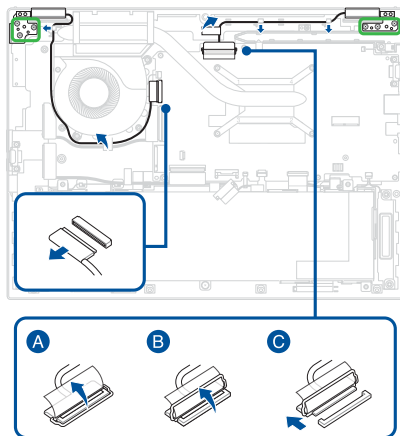
- ⊕ M2.0 X 4.5L (6pcs)

## Removal

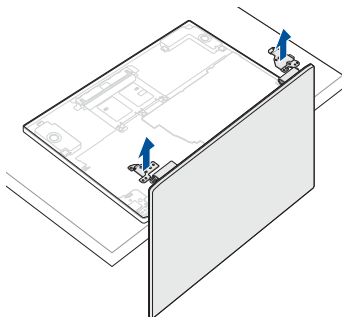
1. Place your device with the display panel hanging over the edge of the workspace as shown in the illustration below.



2. Remove the tape, then disconnect the cable(s).
3. Remove the screw(s).

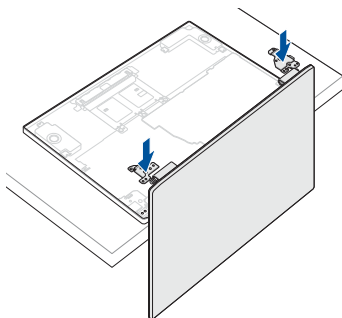


4. Remove the display panel module.



## Installation

1. In the orientation shown, align and place the hinges of the display panel module on the screw holes.





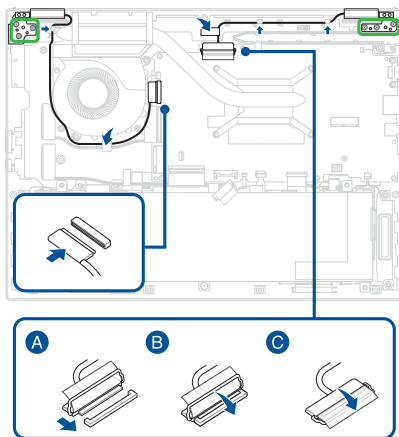
2. Secure the hinges using the screw(s) you removed earlier.
3. Route the cable(s) through the cable guide(s), then reconnect the cable(s).

---

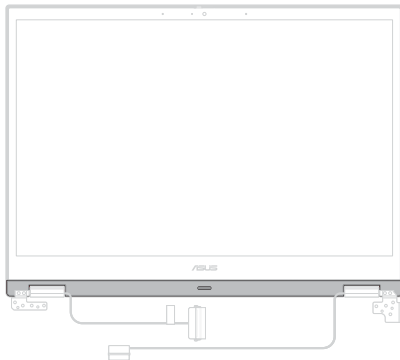
**IMPORTANT!** Damage may occur if cables are not properly routed through the cable guides. Confirm that all cables are routed through each of the indicated cable guides before proceeding.

---

4. Install the components you removed in the *Before you begin* section.



# Display bezel



## Before you begin

---

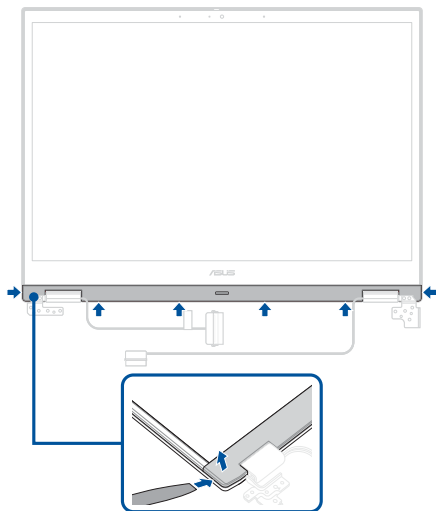
**IMPORTANT!** This component is fragile. Damage may occur if the service procedure is performed incorrectly. If you are uncertain about proceeding, stop and contact an authorized service center for assistance.

---

1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery
  - Display panel module

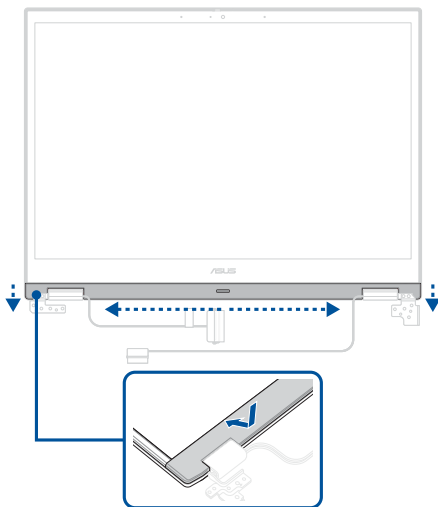
## Removal

Carefully pry the bezel loose, then remove the bezel.

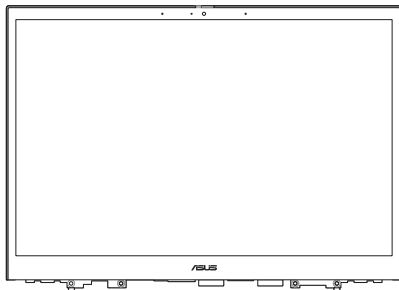


## Installation

1. Align and install the bezel.
2. Install the components you removed in the *Before you begin* section.



# Display panel



## Before you begin

---

### IMPORTANT!

- This component is fragile. Damage may occur if the service procedure is performed incorrectly. If you are uncertain about proceeding, stop and contact an authorized service center for assistance.
  - Do not bend the display panel in any way to avoid risk of display panel leakage.
- 

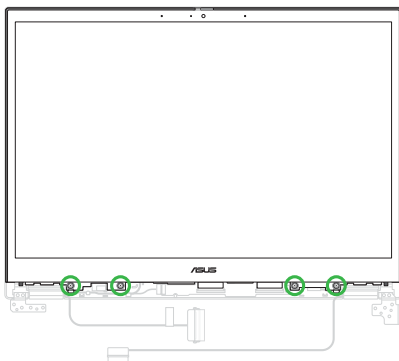
1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery
  - Display panel module
  - Display bezel

## Screw list

- ⊕ M1.6 X 3.0L (4pcs)

## Removal

1. Remove the screw(s).

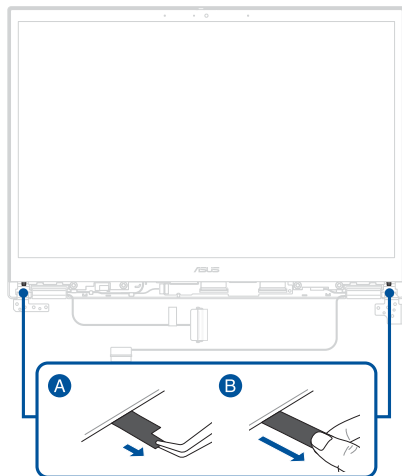


2. Locate the tip of the stretch release tape, then carefully pull out the stretch release tape as shown in the illustration below.

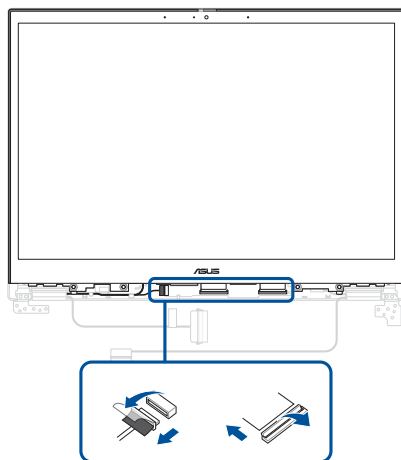
---

**IMPORTANT!** Maintain a flat angle and constant speed when pulling the stretch release tape. Excessive force may damage the stretch release tape and prevent removal of the display panel.

---



3. Disconnect the cable(s).



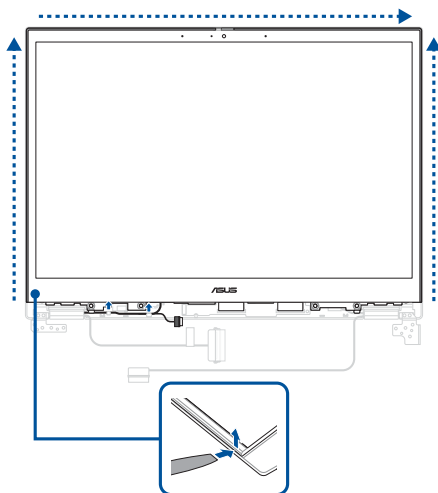


4. Remove the cable from the cable guide(s).
5. Use the plastic blade to pry open the indicated area of the display panel as shown in the illustration below.

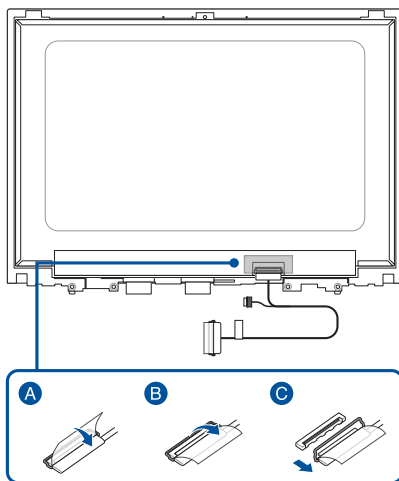
---

**IMPORTANT!** Avoid sliding the plastic blade along the side of your device or air vents to prevent damage.

---

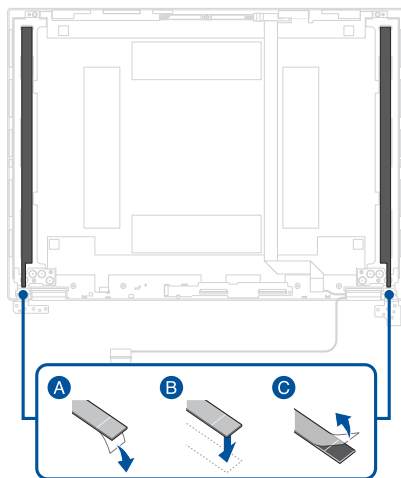


6. Disconnect the cable from the rear side of the display panel.

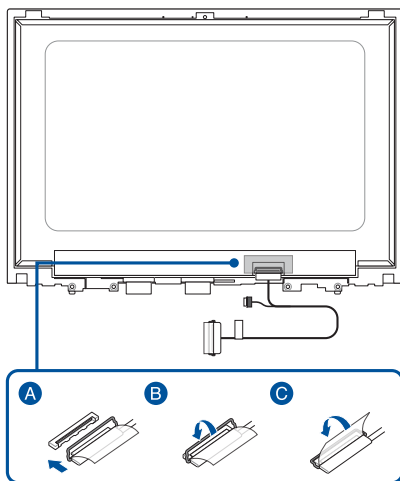


# Installation

1. Remove the release liner(s) from the bottom side of the stretch release tape.
2. Align and attach the stretch release tape to the top cover.
3. Remove the release liner(s) from the top side of the stretch release tape.



4. Reconnect the cable to the rear side of the display panel.

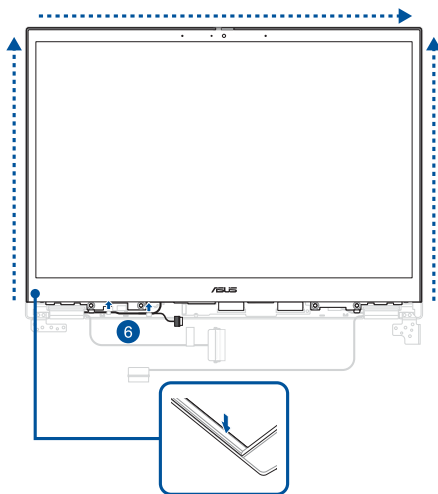


5. Flip the display panel over, then align the display panel with the chassis and gently press down on the display panel until it clicks into place.
6. Route the cable(s) through the cable guide(s).

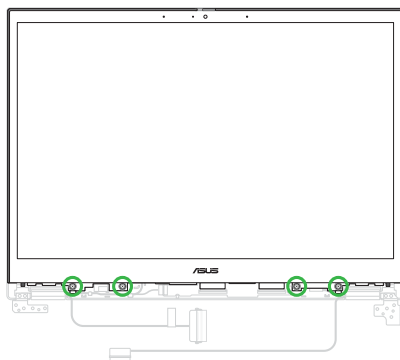
---

**IMPORTANT!** Damage may occur if cables are not properly routed through the cable guides. Confirm that all cables are routed through each of the indicated cable guides before proceeding.

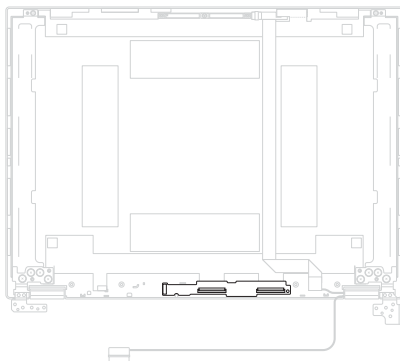
---



7. Secure the display panel using the screw(s) you removed earlier.
8. Install the components you removed in the *Before you begin* section.



# Touch screen board

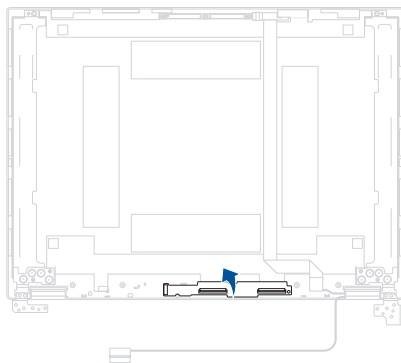


## Before you begin

1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery
  - Display panel module
  - Display bezel
  - Display panel

## Removal

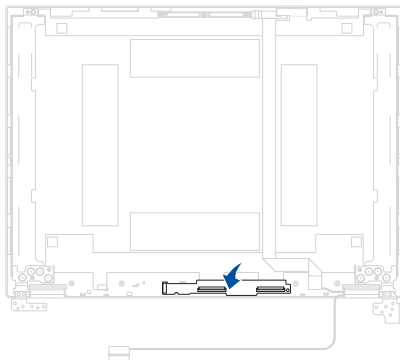
Remove the touch screen board.



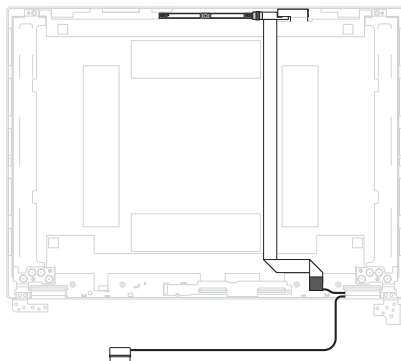


## Installation

1. Install the touch screen board.
2. Install the components you removed in the *Before you begin* section.



# Camera module



## Before you begin

---

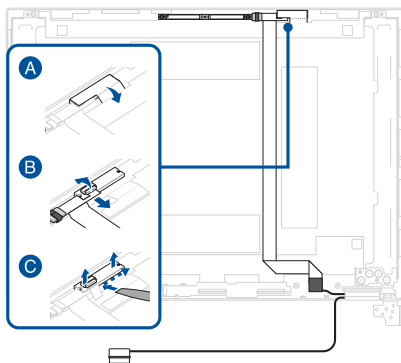
**IMPORTANT!** This component is fragile. Damage may occur if the service procedure is performed incorrectly. If you are uncertain about proceeding, stop and contact an authorized service center for assistance.

---

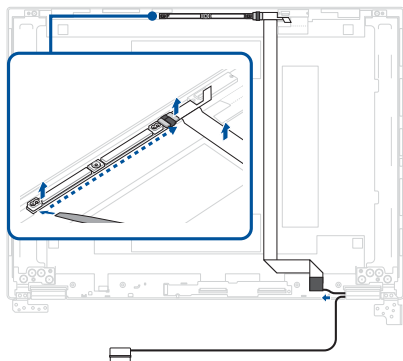
1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery
  - Display panel module
  - Display bezel
  - Display panel

## Removal

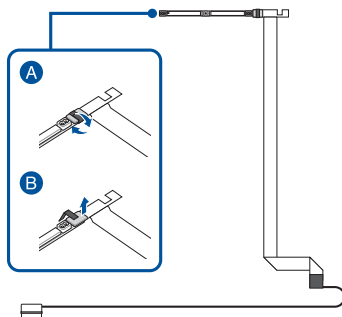
1. Partially peel off the foil, then disconnect the cable and remove the proximity sensor.



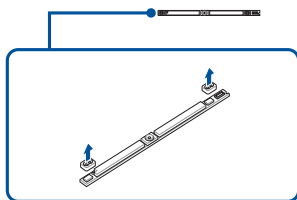
2. Carefully remove the camera module.



3. Remove the tape, then disconnect the cable from the camera module.

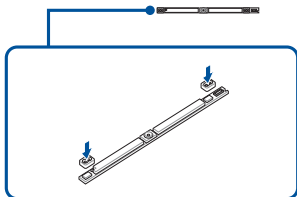


4. Remove the rubber caps from the camera module.

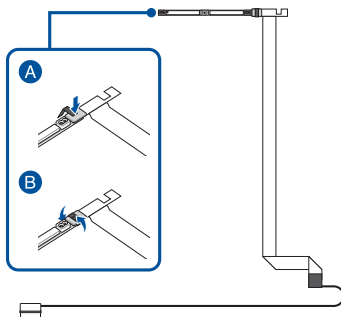


## Installation

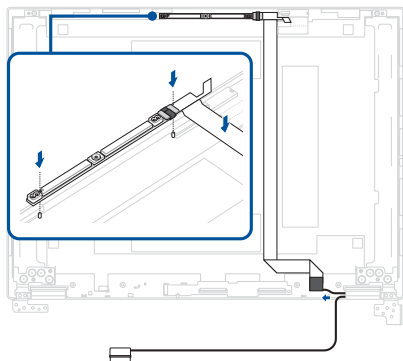
1. Attach the rubber caps to the camera module.



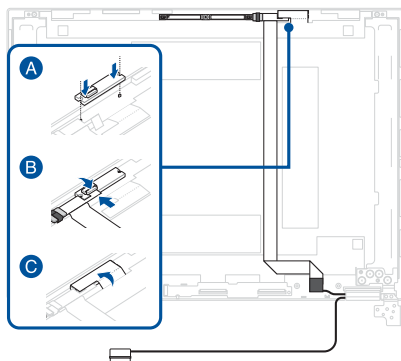
2. Reconnect the cable to the camera module, then reattach the tape.



3. Install the camera module.

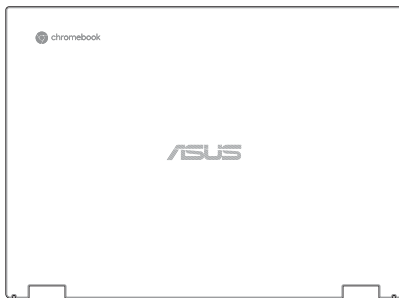


4. Install the proximity sensor, then reconnect the cable and reattach the foil.
5. Install the components you removed in the *Before you begin* section.





# Top cover



## Before you begin

1. Read the **Safety Precautions** and **Pre-repair Checklist**.
2. Remove the following components:
  - Bottom cover
  - Battery
  - Display panel module
  - Display bezel
  - Display panel
  - Touch screen board
  - Camera module

## Screw list

- ⊕ M2.0 X 2.5L, 4.5D (2pcs)
- ⊕ M2.0 X 2.5L, 7.0D (8pcs)

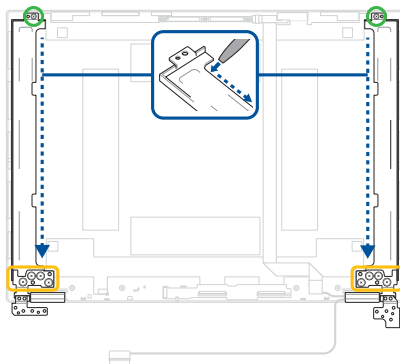
## Removal

Remove the screw(s), then remove the hinges.

---

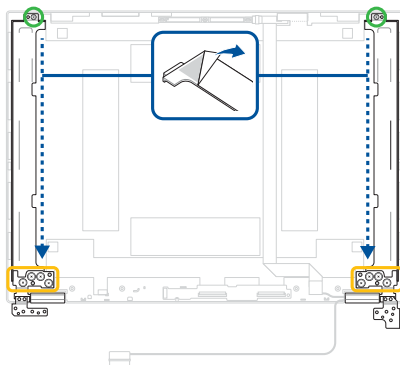
**IMPORTANT!** The hinges cannot be reused once removed.

---



## Installation

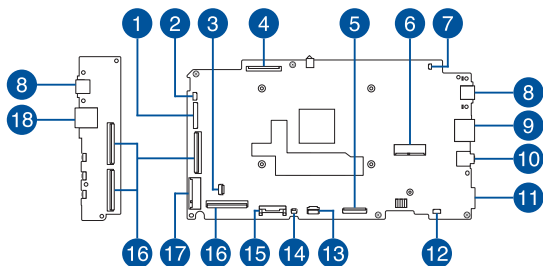
1. Remove the release liners from the hinges, then install the hinges and secure the hinges using the screw(s) you removed earlier.
2. Install the components you removed in the *Before you begin* section.



This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

# ***Appendix***

# Wiring and connection diagrams



- |                                  |                                  |
|----------------------------------|----------------------------------|
| 1. Camera connector              | 10. Audio connector              |
| 2. Fan connector                 | 11. microSD card slot            |
| 3. Fingerprint sensor connector* | 12. Speaker connector            |
| 4. eDP connector                 | 13. Touchpad connector           |
| 5. Keyboard connector            | 14. Keyboard backlight connector |
| 6. WLAN module connector         | 15. Battery connector            |
| 7. Stylus charger connector      | 16. I/O board FPC connector      |
| 8. USB Type-C® connector         | 17. M.2 SSD connector            |
| 9. HDMI connector                | 18. USB Type-A connector         |