

First Edition / September 2021

# Customer Self Repair (CSR)

Maintenance and Service Guide



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# Disclaimer

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

## Safety precautions

- Keep liquids or moisture away from your Notebook PC before installing or removing any components.
- Place your Notebook PC on a stable surface before installing or removing any components.
- Detach the clip or flap before removing the signal cables to prevent damage.
- Disconnect the power plug by pulling the plug evenly to avoid damage. Ensure to connect the signal cables in the correct orientation.
- Disconnect all power cables and remove the battery pack (if applicable) before cleaning your Notebook PC with liquid detergent to avoid risk of electric shock.
- Disconnect all power cables and remove the battery pack (if applicable) before installing or removing any components. Be sure to thoroughly read and follow the instructions in the manual.
- To avoid Electrostatic Discharge (ESD) damage the electric components inside your computer, before handling components, use a grounded wrist strap or touch a safely grounded object to prevent electric products damaged by the electrostatic discharge. [Please refer to Electrostatic Discharge \(ESD\) Protection Notes.](#)
- Keep liquids or moisture away from your Notebook PC to avoid short circuiting.
- Hold components by the edges to avoid touching the Integrated Circuits (ICs).
- Before re-connecting the AC power, ensure all components are properly installed.
- Reduce the risk of fire or explosion by avoiding incompatible power adapters or batteries. Use only certified power adapters or batteries supplied by ASUS or authorized retailers.
- Ensure the correct screw models are re-installed to your Notebook PC to prevent damage.

## Protection of Stored Data

For Your important data, please make periodic back-up copies of all the data stored on the hard disk or other storage devices as a precaution against possible failures, alteration, or loss of the data.

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# Installation tools

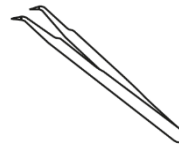


#1

Screwdriver



Non-conductive pry tool



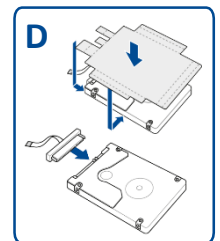
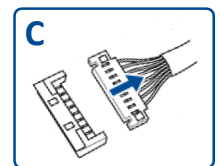
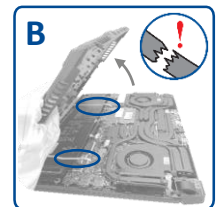
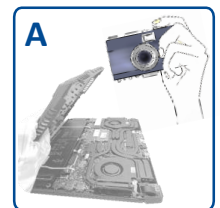
Tweezers



Anti-static gloves

## Before disassembly

- A. Before your disassembly, we strongly recommend that you prepare a smartphone or other handheld camera. During disassembly, use your camera to take photos to help you remember the order of assembly and location of parts.
- B. When lifting the base cover off, slowly and carefully open so the angle is as small as possible. To avoid damaging the cables, please confirm they are disconnected before opening the base cover completely.
- C. After you open the base cover, be sure to disconnect the battery cable first.
- D. When replacing components, if any materials, cables, tapes and others were touched or moved, please return it to its original location before proceeding.
- E. Avoid using too much force when fastening screws to prevent hardware damage.

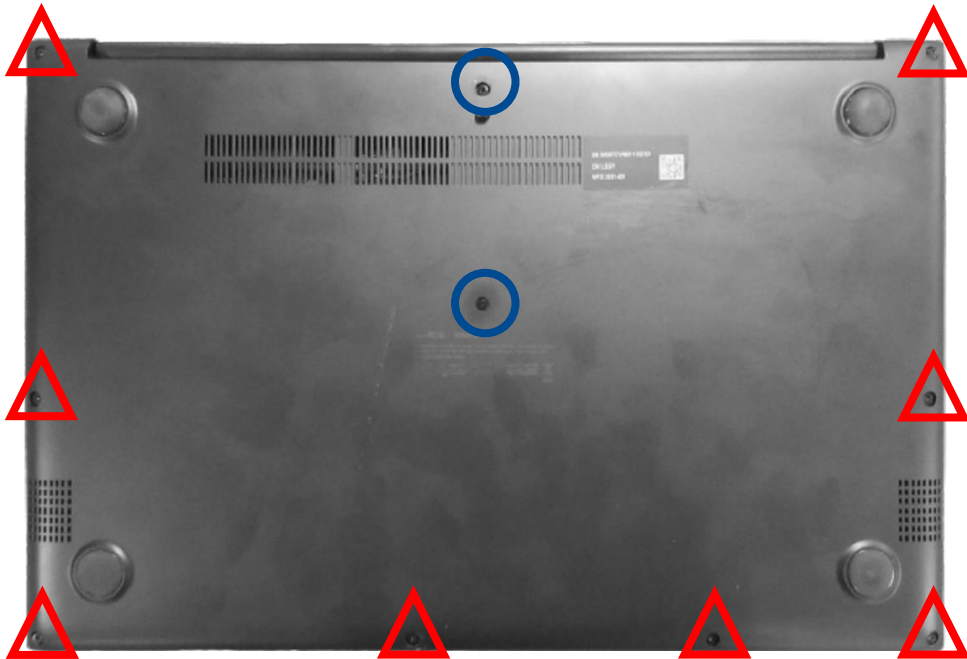


# Removing the base cover

## Disassembly Notice

**NOTE :** The appearance of your Notebook PC's bottom view may vary per model.

- A. Remove the screw(s) from the Notebook PC's base cover.

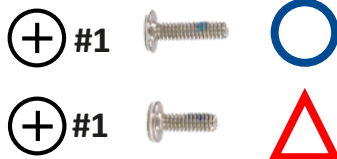


## Assembly Notice

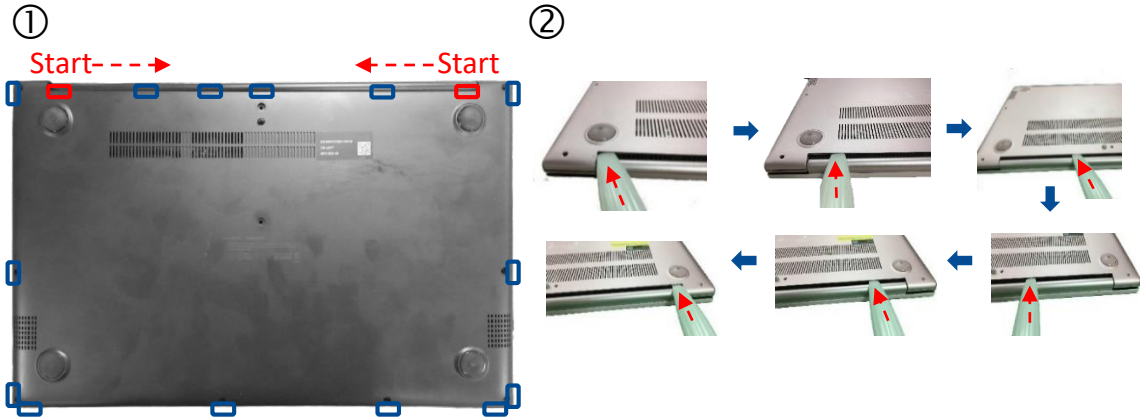
Righty - Tighty



Lefty - Loosey



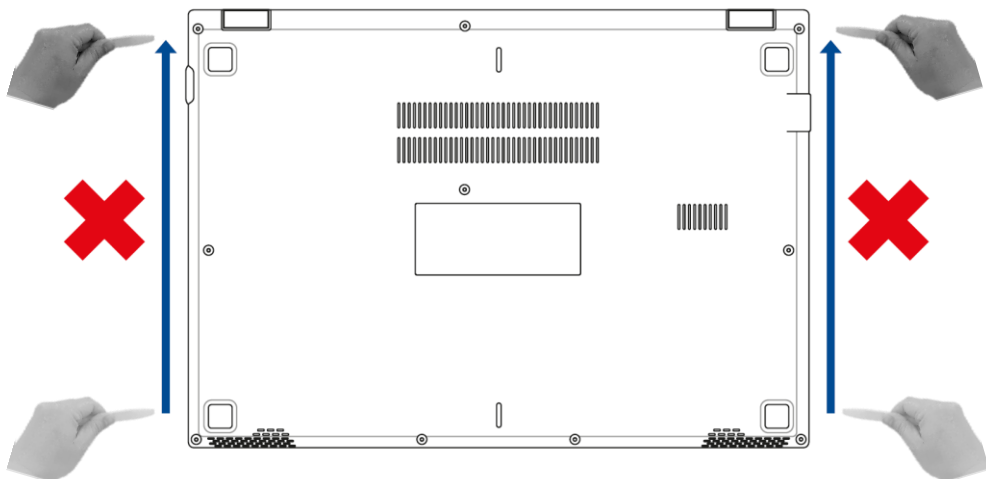
- B. Insert the non-conductive pry tool at the “Start” positions of the notebook and slightly pry up on the base cover. Follow the figure ② to insert the non-conductive pry tool and pry up the base cover. **The appearance may vary due to different models; however, the assembly and disassembly process would be the same as the steps described below.**



Disassembly steps:



**IMPORTANT!** Avoid sliding the non-conductive pry tool along the side of your Notebook PC to prevent damage.



C. Pull out the base cover and remove it completely from your Notebook PC.





# Installing a RAM module

Upgrade the memory capacity of your Notebook PC by installing a RAM (Random Access Memory) module in the memory module compartment. The following steps show you how to install a RAM module into your Notebook PC:

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**WARNING!** Disconnect all the connected peripherals, any telephone or telecommunication lines and power connector (such as external power supply, battery pack, etc.) before removing the base cover.

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**IMPORTANT!** Visit an authorized service center or retailer for information on RAM module upgrades for your Notebook PC. Only purchase RAM modules from authorized retailers of this Notebook PC to ensure maximum compatibility and reliability.

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**NOTE :**

- The appearance of your Notebook PC's bottom view and RAM module may vary per model but the RAM module installation remains the same.
  - It is recommended that you install the RAM module under professional supervision. You may also visit an authorized service center for further assistance.
-

## Disassembly Notice

**A. Before handling components, wear anti-static gloves to avoid damaging them due to static electricity.**

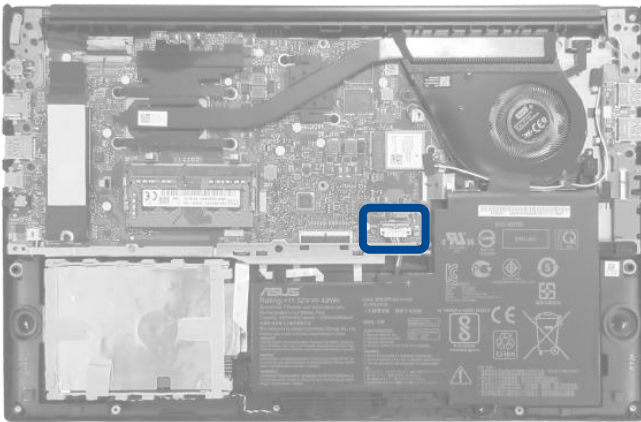
B. Remove the base cover.

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**NOTE :** For more details, refer to the removing the *base cover* section in this manual.

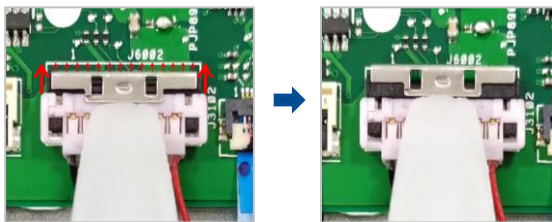
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C. Disconnect the cable from the battery connector.

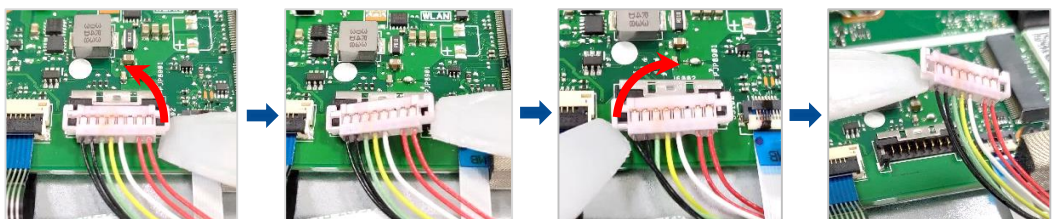


Disassembly steps:

1. Use the non-conductive pry tool to push iron sheet.



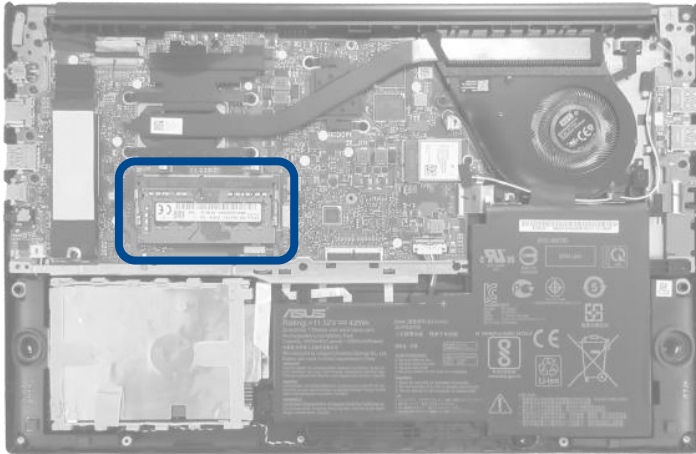
2. Use the non-conductive pry tool to disconnect battery connector.



## Disassembly Notice

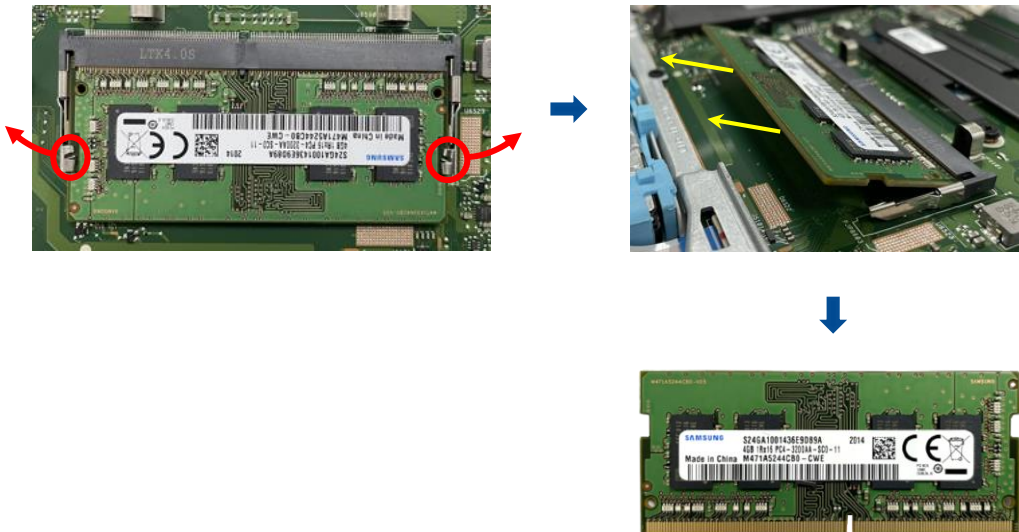
### D. Remove the RAM module.

**NOTE :** If there is material pasted on the RAM, when you replace RAM, please paste the material on the new RAM. (Not included specification label.)



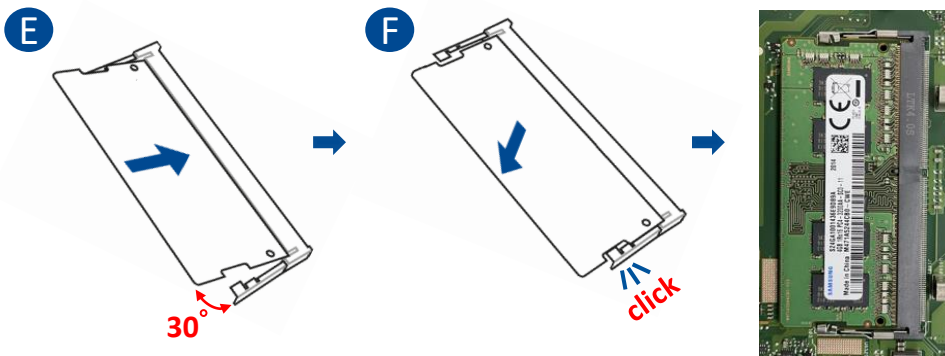
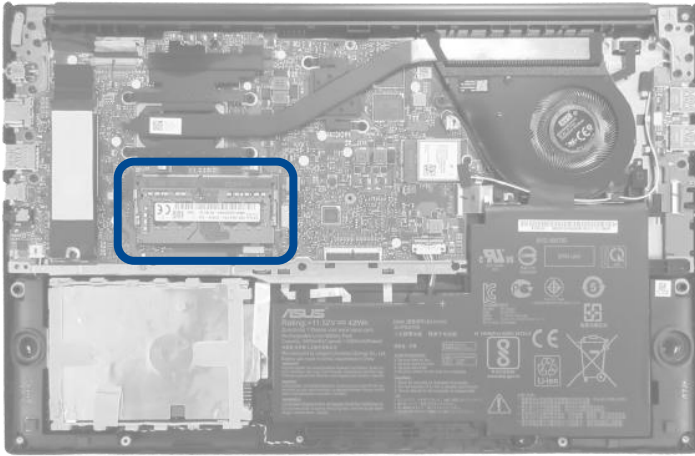
Disassembly steps:

#### 1. Unlock and remove the RAM module.

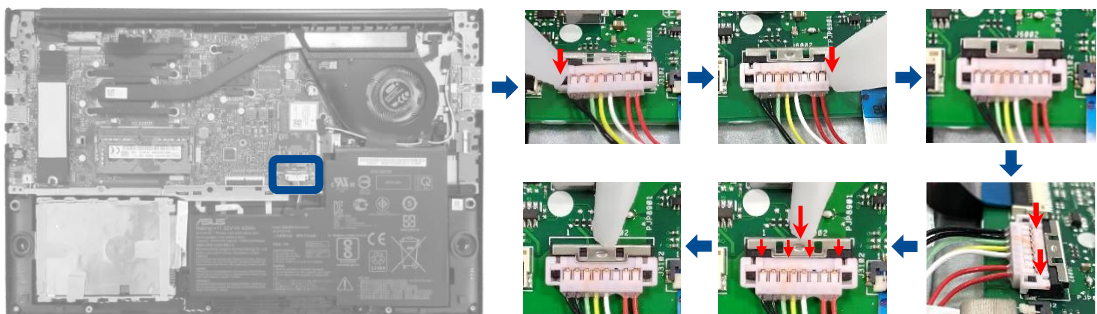


## Assembly Notice

- E. Align and insert the new RAM module at 30° into the memory slot.
- F. Once properly inserted, push down the RAM module until it clicks in place.



- G. Please follow the below steps to attach the battery connector.

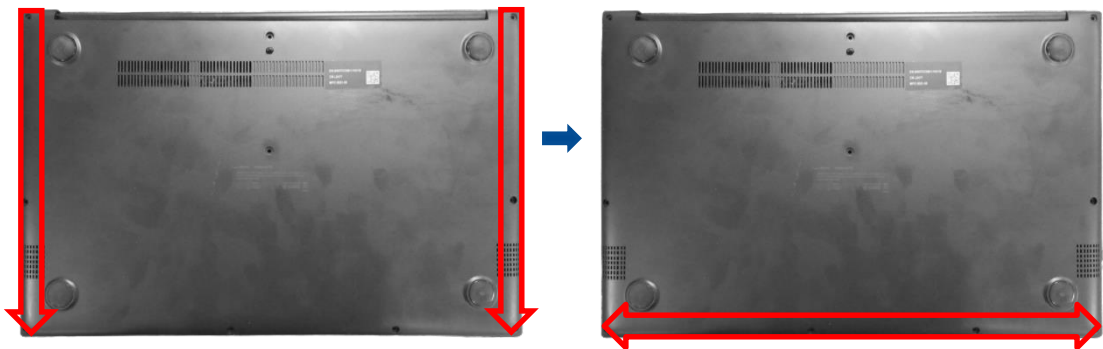


## Assembly Notice

- H. Install the base cover at a slight tilt at upper side first, and then press the upper side of base cover to fix from right to left.



- I. Put the base cover down slowly, and then press left and right side of base cover to fix, and press lower side of base cover to fix.



- J. Secure the base cover in place using the screws.



# Installing an M.2 card (SSD)

Refer to the following steps when installing a compatible M.2 card (SSD) in your Notebook PC:

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**IMPORTANT!** Purchase your M.2 card from authorized retailers of this Notebook PC to ensure maximum compatibility and reliability.

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**WARNING!** Disconnect all the connected peripherals, any telephone or telecommunication lines and power connector (such as external power supply, battery pack, etc.) before removing the base cover.

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**NOTE :**

- The appearance of your Notebook PC's bottom view and M.2 card may vary per model but the module installation remains the same.
  - It is recommended that you install the M.2 card under professional supervision. You may also visit an authorized service center for further assistance.
-



## Disassembly Notice

**A. Before handling components, wear anti-static gloves to avoid damaging them due to static electricity.**

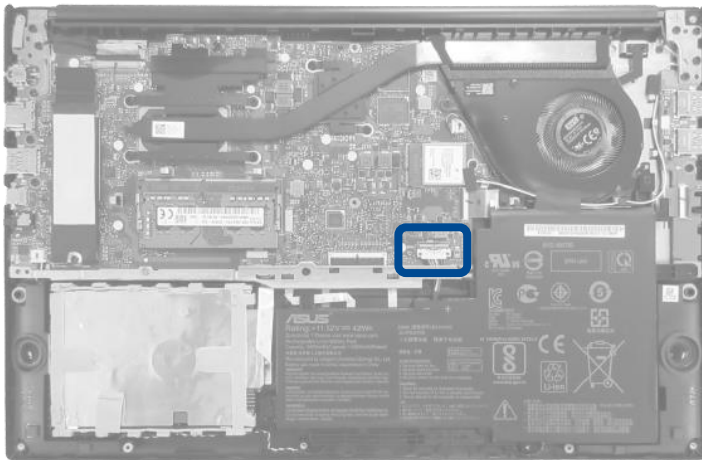
B. Remove the base cover.

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**NOTE :** For more details, refer to the removing the *base cover* section in this manual.

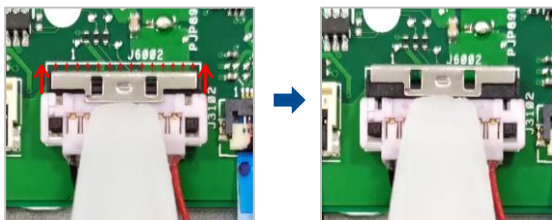
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C. Disconnect the cable from the battery connector.

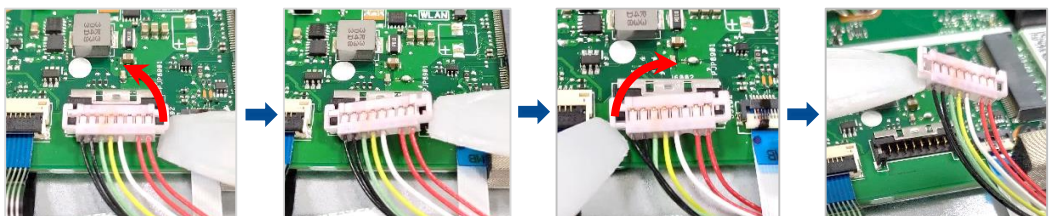


Disassembly steps:

1. Use the non-conductive pry tool to push iron sheet.



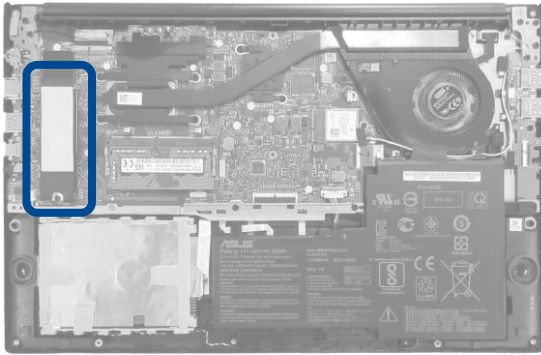
2. Use the non-conductive pry tool to disconnect battery connector.



## Disassembly Notice

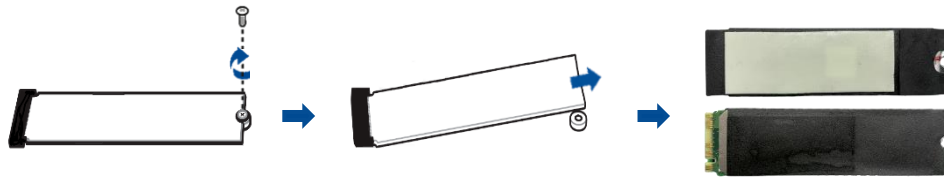
### D. Remove the M.2 card (SSD).

**NOTE :** If there is material pasted on the M.2 card (SSD), when you replace M.2 card (SSD), please paste the material on the new M.2 card (SSD). (Not included specification label.)

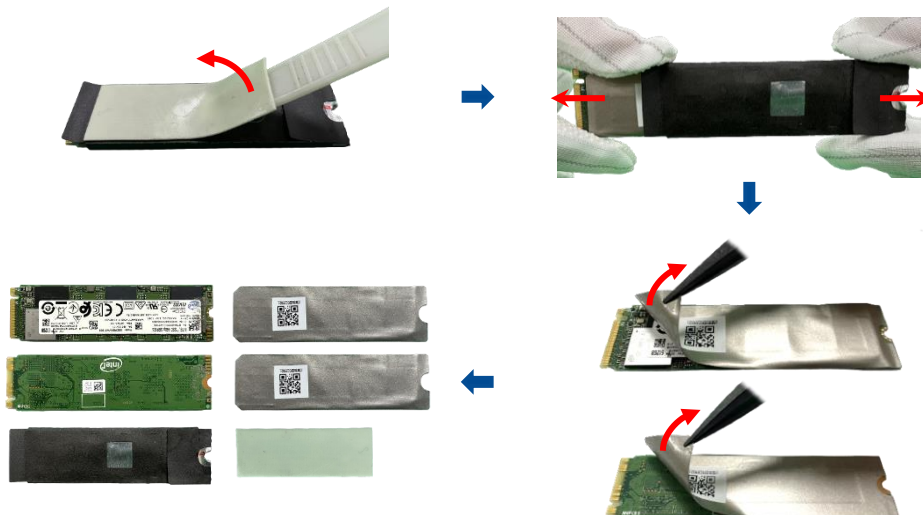


Disassembly steps:

1. Remove the screw\*1pc and M.2 card (SSD).



2. Remove the THERMAL PAD and the AL MYLAR, tear off the two ABSORBERS from M.2 card (SSD) front and back side. Please keep these parts, it will be reused for new SSD installation.

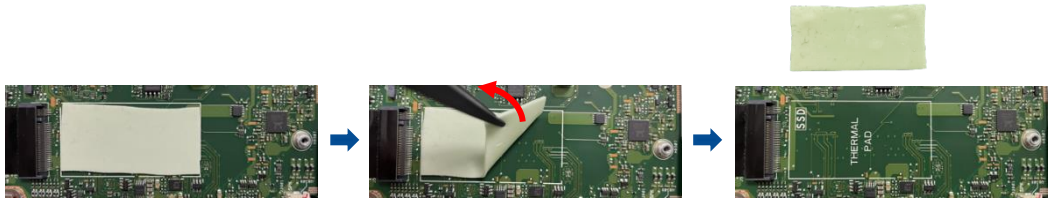




## Disassembly Notice

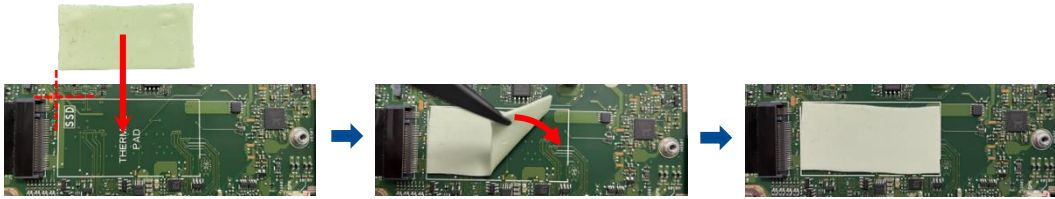
Disassembly steps:

3. Remove the THERMAL PAD from motherboard. Please keep this part, it will be reused for new SSD installation.

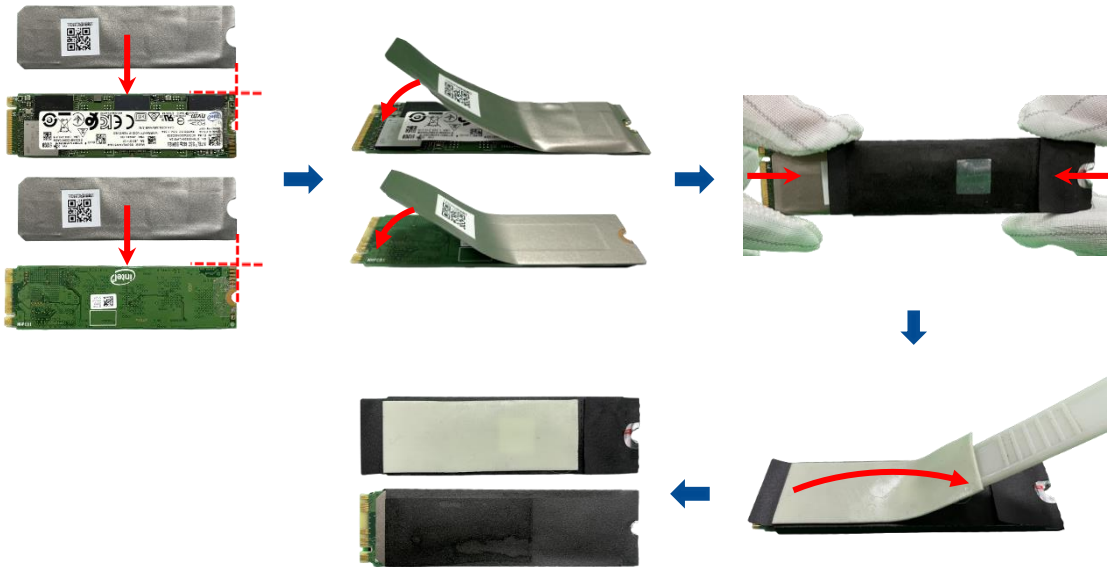


## Assembly Notice

- E. Paste the THERMAL PAD on the motherboard.



- F. Paste the two ABSORBERS to the new M.2 card (SSD) front and back side, and assembly AL MYLAR\*1pc, then paste the THERMAL PAD\*1pc.



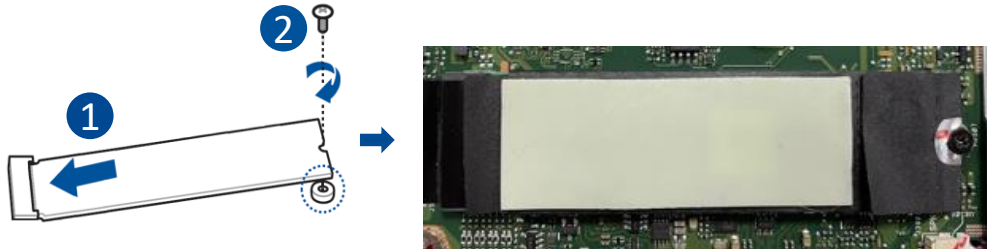
- G. Assembly the M.2 card (SSD).



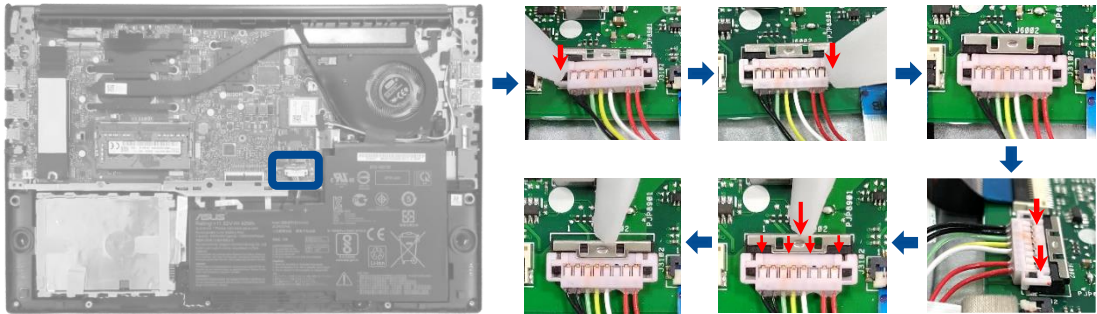
## Assembly Notice

Assembly steps:

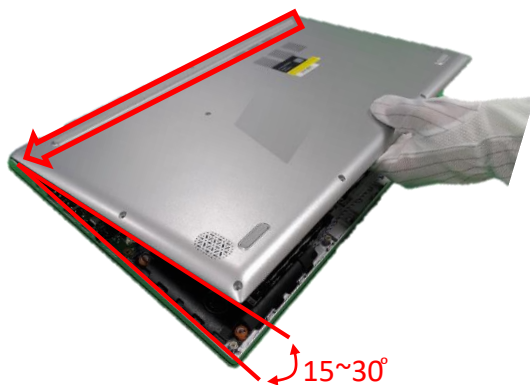
1. Align and insert the new M.2 card into the module slot.
2. Secure the M.2 card in place by fastening the screw.



H. Please follow the below steps to attach the battery connector.

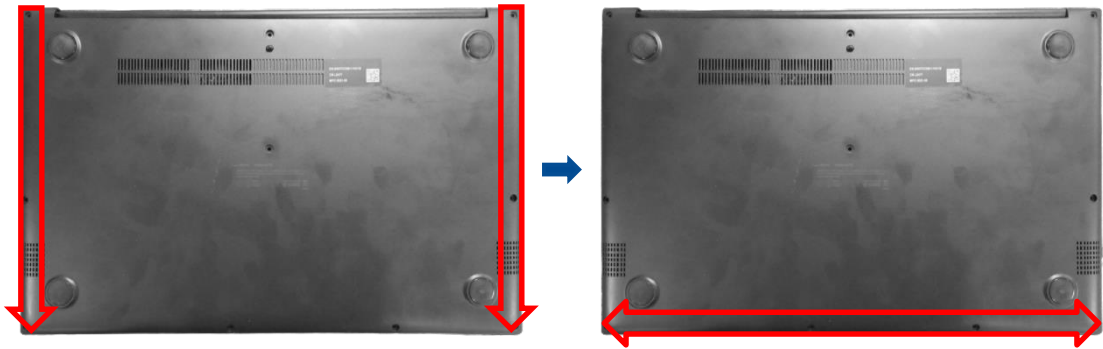


I. Install the base cover at a slight tilt at upper side first, and then press the upper side of base cover to fix from right to left.



## Assembly Notice

- J. Put the base cover down slowly, and then press left and right side of base cover to fix, and press lower side of base cover to fix.



- K. Secure the base cover in place using the screws.



# Installing the Hard Disk Drive (HDD)

Refer to the following steps if you need to install a new Hard Disk Drive (HDD) to your Notebook PC:

---

**IMPORTANT!** Only purchase an HDD from authorized retailers of this Notebook PC to ensure maximum compatibility and reliability.

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**WARNING!** Disconnect all the connected peripherals, any telephone or telecommunication lines and power connector (such as external power supply, battery pack, etc.) before removing the base cover.

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**NOTE :**

- The appearance of your Notebook PC's bottom view and HDD may vary per model but the HDD installation remains the same.
  - It is recommended that you replace the HDD under professional supervision. You may also visit an authorized service center for further assistance.
-

## Disassembly Notice

**A. Before handling components, wear anti-static gloves to avoid damaging them due to static electricity.**

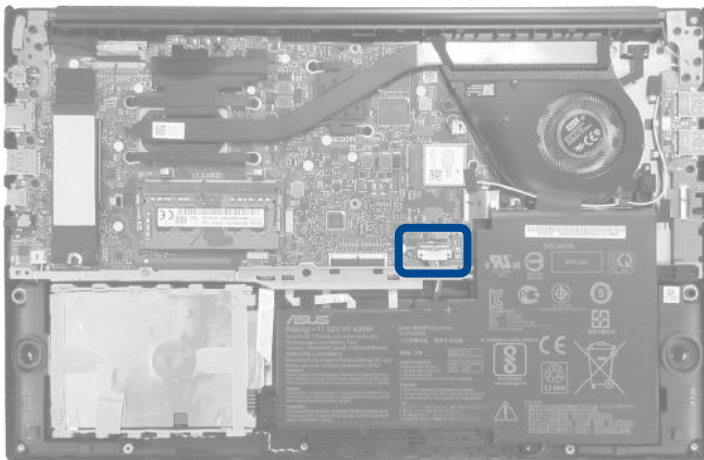
B. Remove the base cover.

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**NOTE :** For more details, refer to the removing the *base cover* section in this manual.

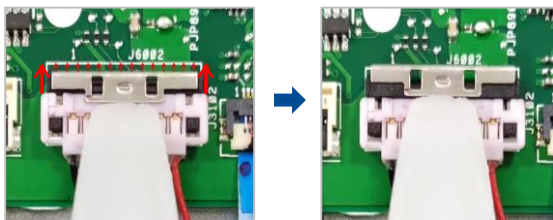
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C. Disconnect the cable from the battery connector.

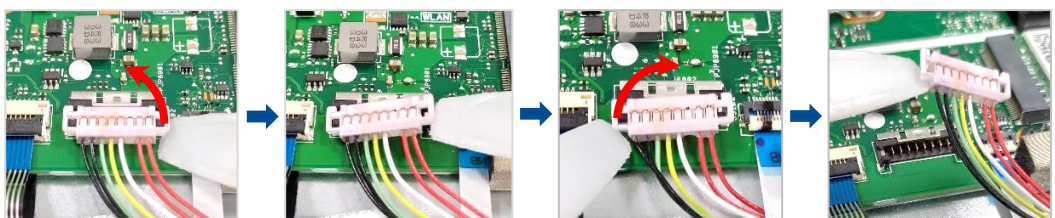


Disassembly steps:

1. Use the non-conductive pry tool to push iron sheet.



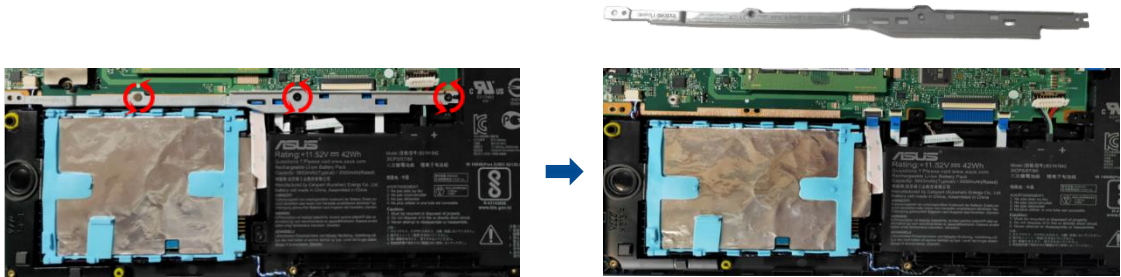
2. Use the non-conductive pry tool to disconnect battery connector.





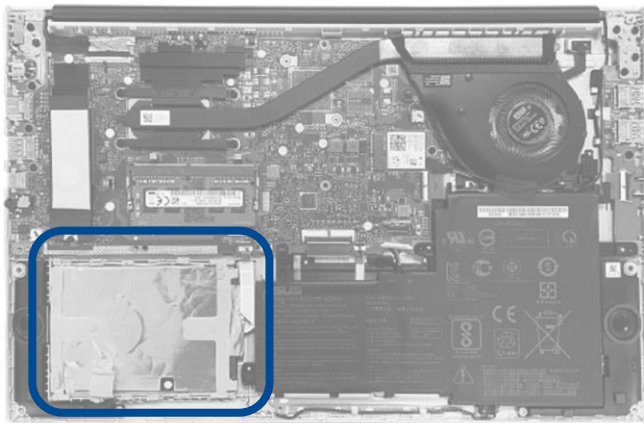
## Disassembly Notice

- D. Remove the screws\*3pcs and take away the support bracket.



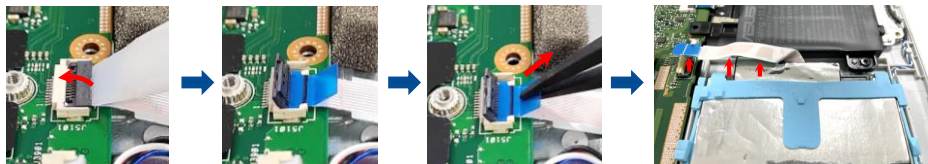
- E. Remove the Hard Disk Drive (HDD).

**NOTE :** If there is material pasted on the Hard Disk Drive (HDD), when you replace Hard Disk Drive (HDD), please paste the material on the new Hard Disk Drive (HDD). (Not included specification label.)



Disassembly steps:

1. Disconnect the HDD FFC connector.



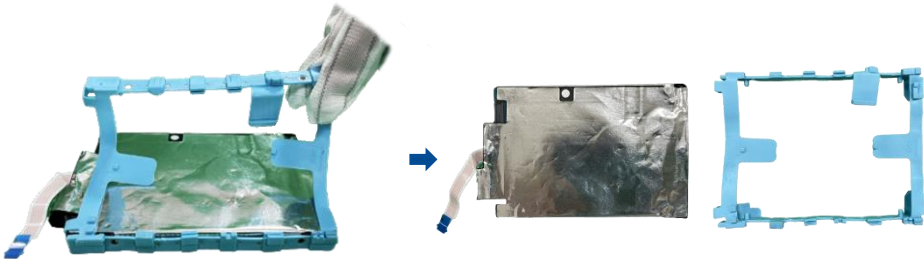
## Disassembly Notice

Disassembly steps:

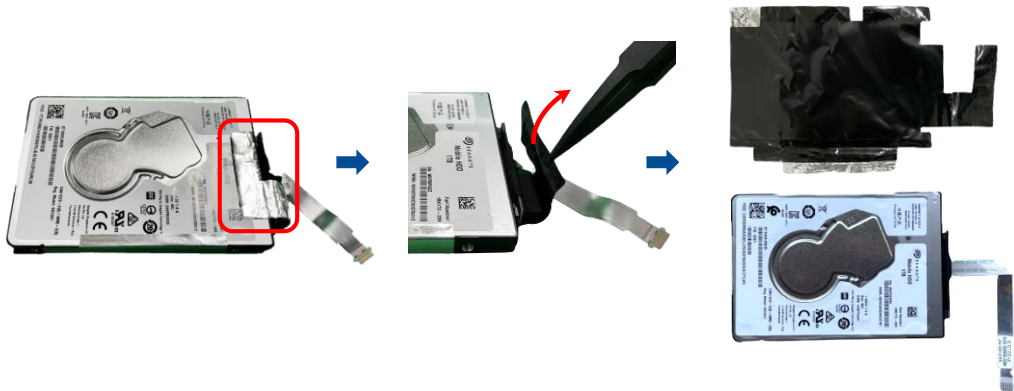
2. Pull the rubber sleeve and remove the HDD.



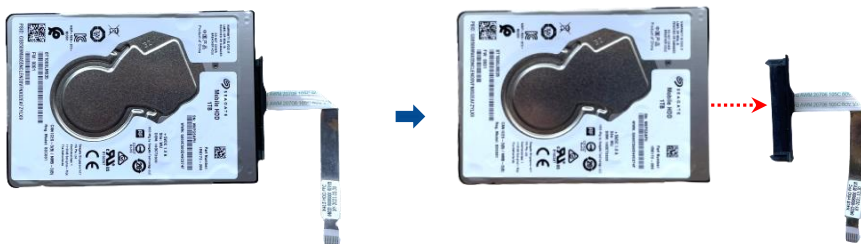
3. Remove the rubber sleeve from the HDD. Please keep this part, it will be reused for new HDD installation.



4. Tear off the AL Foil mylar from the HDD. Please keep this part, it will be reused for new HDD installation.



5. Disconnect the FFC connector from the HDD. Please keep this part, it will be reused for new HDD installation.





## Assembly Notice

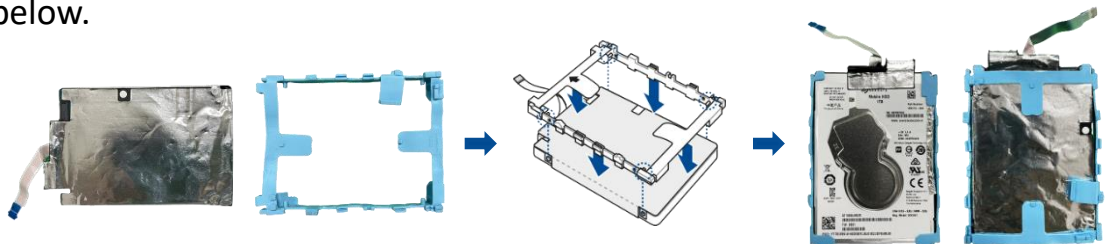
F. Connect the FFC connector to new HDD.



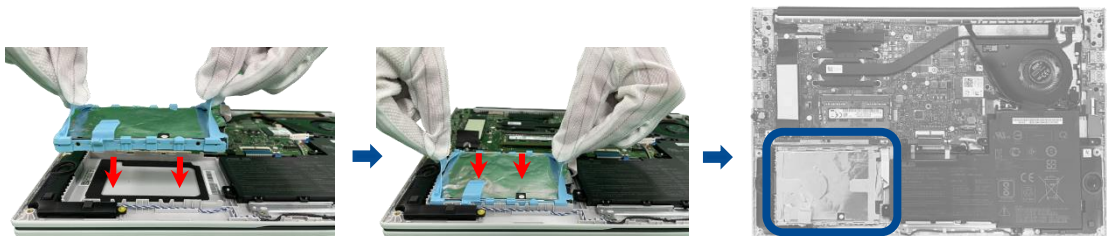
G. Align and wrap the AL Foil mylar around the HDD as shown in the illustration below.



H. Align and place the rubber sleeve on the HDD as shown in the illustration below.

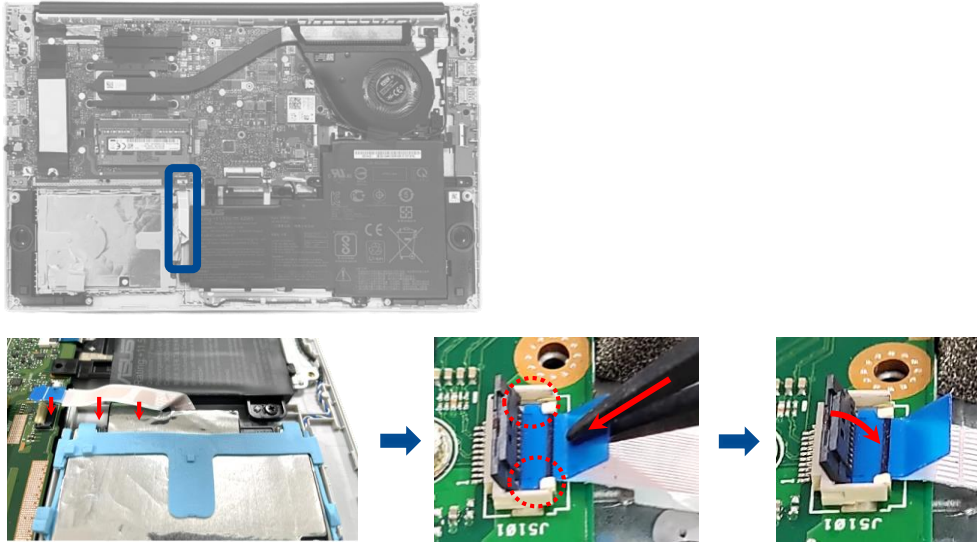


I. Place the HDD in the compartment.

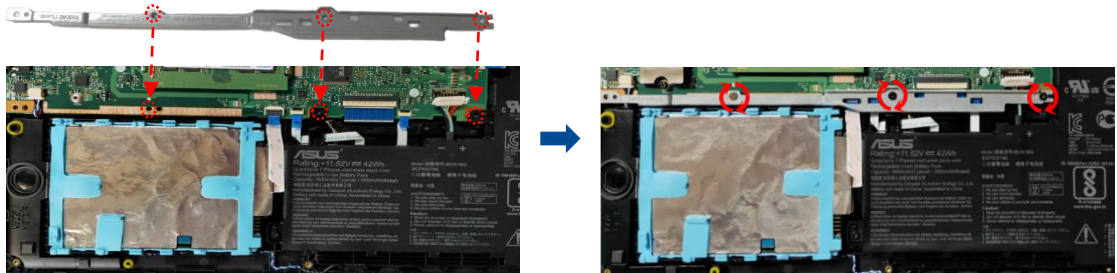


## Assembly Notice

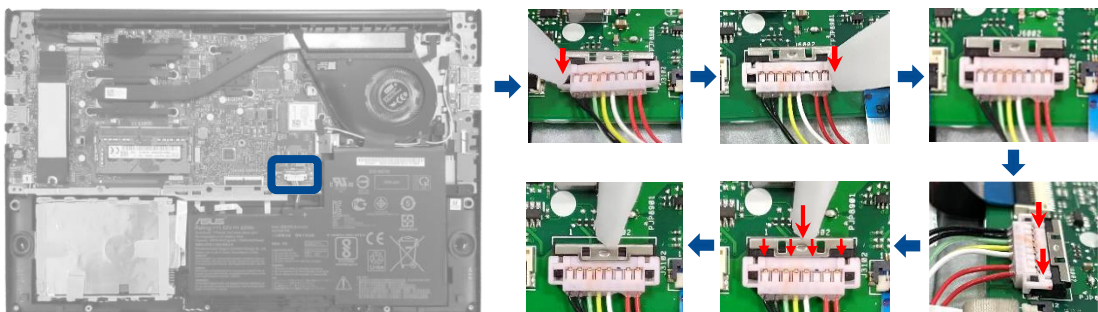
- J. Connect the cable to the motherboard, then push down the flap on the connector to secure the cable.



- K. Align the screw holes and put the support bracket, tighten the screws\*3pcs.



- L. Please follow the below steps to attach the battery connector.

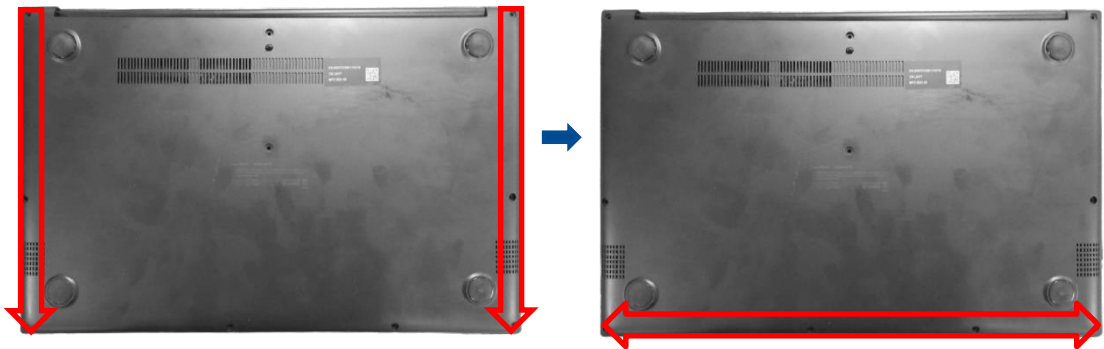


## Assembly Notice

- M. Install the base cover at a slight tilt at upper side first, and then press the upper side of base cover to fix from right to left.



- N. Put the base cover down slowly, and then press left and right side of base cover to fix, and press lower side of base cover to fix.



- O. Secure the base cover in place using the screws.



