First Edition / September 2021

Customer Self Repair (CSR)

Maintenance and Service Guide

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 © 2020 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

Disclaimer....4
Safety precautions....4
Installation tools....5
Before disassembly....5
Removing the base cover....6
Installing a RAM module....9
Installing an M.2 card (SSD)....14
Installing the Hard Disk Drive (HDD)....19

Disclaimer

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

Safety precautions

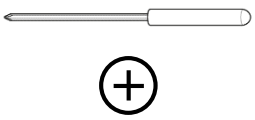
- Keep liquids or moisture away from your Notebook PC before installing or removing any components.
- Place your Notebook PC on a stable surface before installing or removing any components.
- Detach the clip or flap before removing the signal cables to prevent damage.
- Disconnect the power plug by 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 to 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

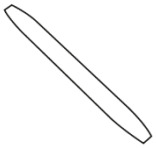
For Your important data, please make periodic back-up copies of all the data stored on the hard disk or other storage devices as a precaution against possible failures, alteration, or loss of the data.

ASUS AND ITS AFFILIATES WILL NOT BE HELD LIABLE FOR ANY OF YOUR CONFIDENTIAL, PROPRIETARY OR PERSONAL DATA NOR ANY LOST OR CORRUPTED DATA, PROGRAMS OR SOFTWARE. IF YOUR DATA IS ALTERED OR LOST DUE TO ANY TROUBLE, FAILURE OR MALFUNCTION OF THE PRODUCT AND THE DATA CANNOT BE RECOVERED, WE SHALL NOT BE LIABLE FOR ANY DAMAGE OR LOSS TO DATA, SYSTEM, NETWORK, OR ANY OTHER DAMAGE RESULTING THEREFROM. WHEN COPYING OR TRANSFERRING YOUR DATA, PLEASE BE SURE TO CONFIRM WHETHER THE DATA HAS BEEN SUCCESSFULLY COPIED OR TRANSFERRED PRIOR TO PROVISIONING OF SERVICES BY US. WE DISCLAIM ANY LIABILITY FOR THE FAILURE TO COPY OR TRANSFER THE DATA CORRECTLY AND WILL HAVE NO LIABILITY FOR ANY ACTS OR OMISSIONS, INCLUDING NEGLIGENCE, BY ASUS OR A THIRD-PARTY SERVICE PROVIDER.

Installation tools



#1
Screwdriver



Non-conductive pry tool



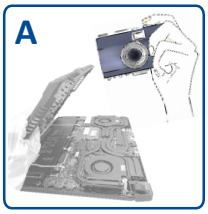
Tweezers



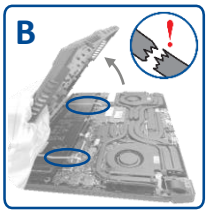
Anti-static gloves

Before disassembly

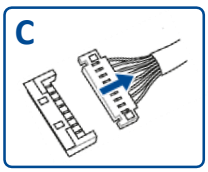
A. Before your disassembly, we strongly recommend that you prepare a smartphone or other handheld camera. During disassembly, use your camera to take photos to help you remember the order of assembly and location of parts.



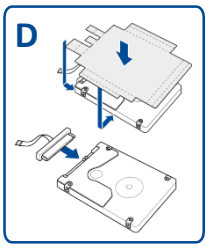
B. When lifting the base cover off, slowly and carefully open so the angle is as small as possible. To avoid damaging the cables, please confirm they are disconnected before opening the base cover completely.



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

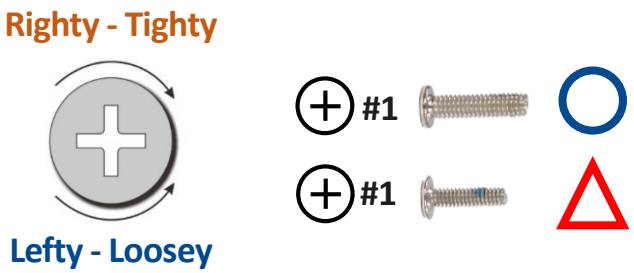
Disassembly Notice

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



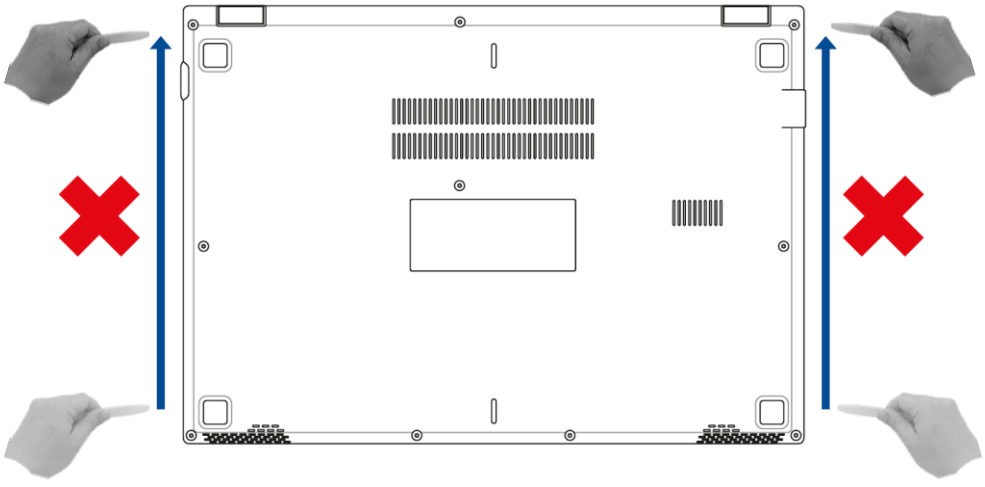
B. Use the non-conductive pry tool to lift open the indicated area of the base cover as shown in the illustration.



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:

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.

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.

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.

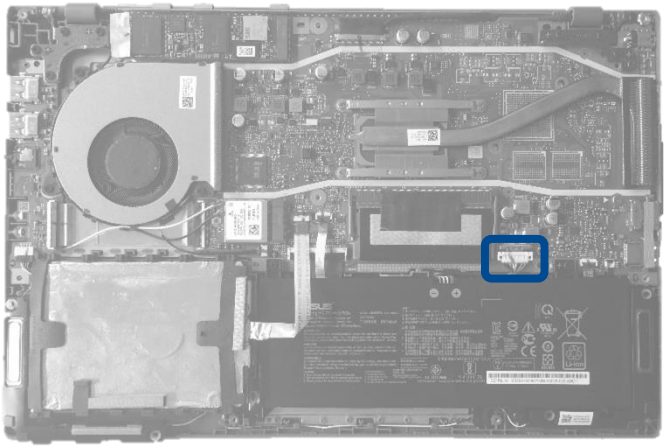
Disassembly Notice

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

B. Remove the base cover.

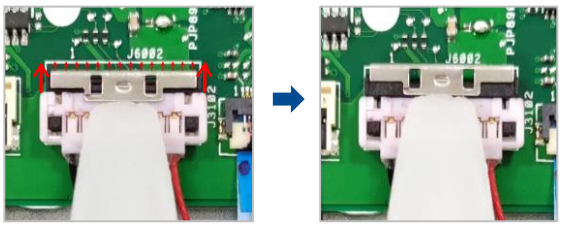
NOTE : For more details, refer to the removing the *base cover* section in this manual.

C. Disconnect the cable from the battery connector.

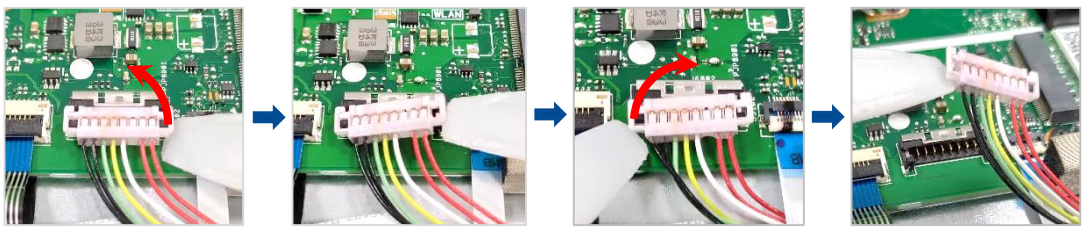


Disassembly steps:

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

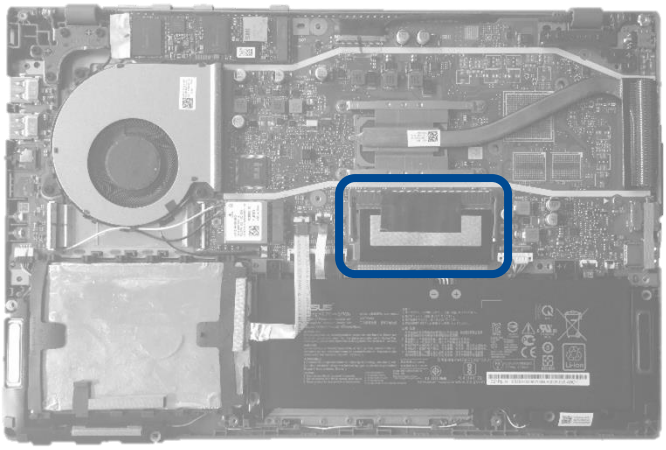


2. Use the non-conductive pry tool to disconnect battery connector.



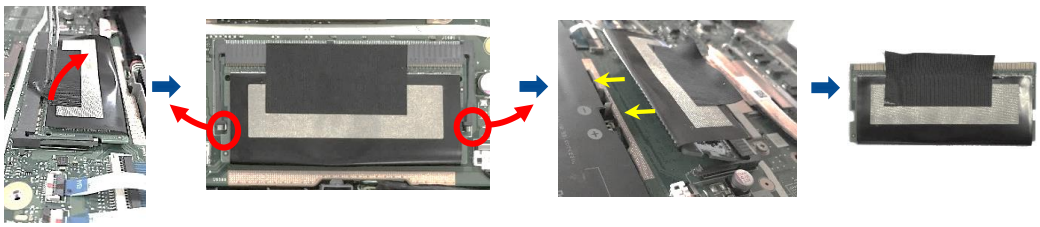
D. Remove the RAM module.

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.)

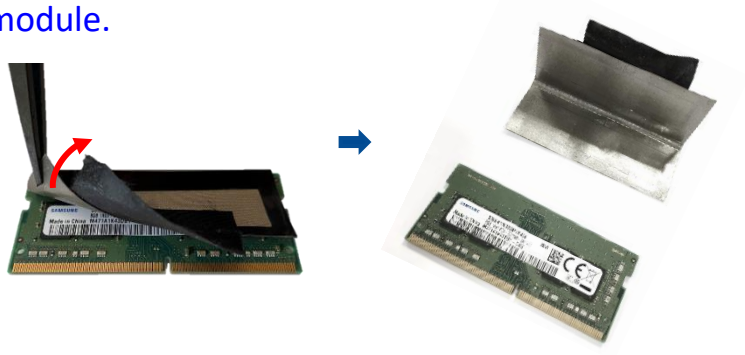


Disassembly steps:

1. Tear off the DIMM Acid tape, and unlock and remove the RAM module.

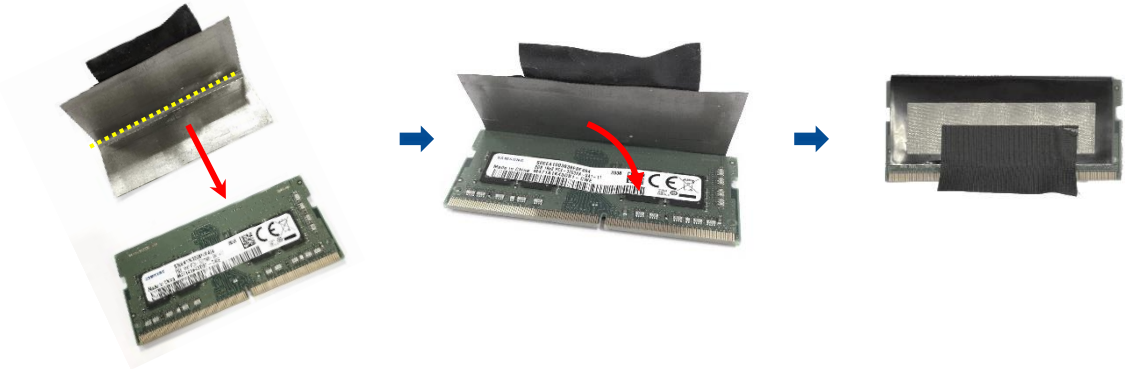


2. Tear off the ABSORBER from RAM. Please keep the DIMM Acid tape and ABSORBER, as that will be reused when installing the new RAM module.



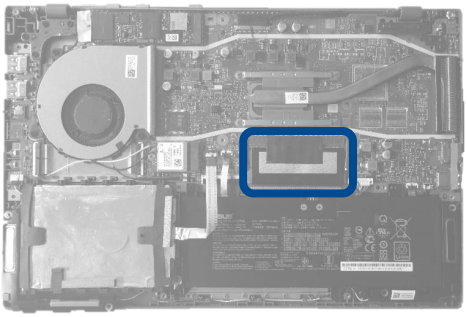
Assembly Notice

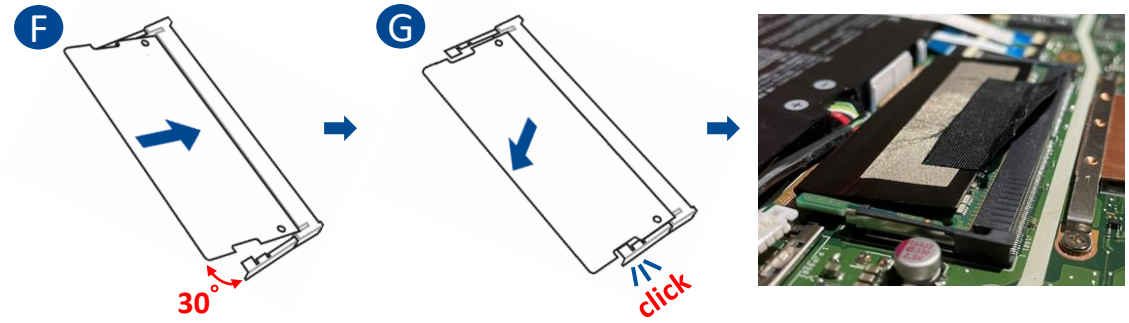
E. Paste the ABSORBER to RAM.



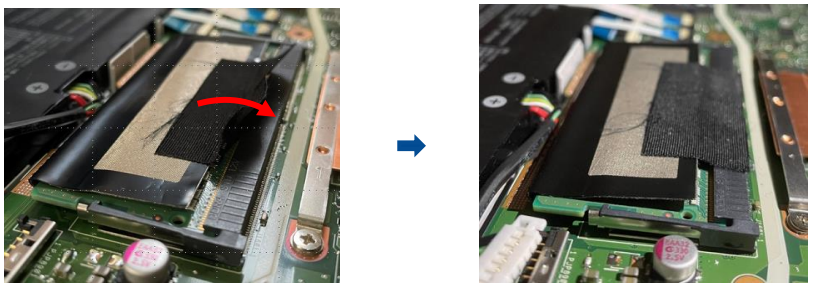
F. Align and insert the new RAM module at 30° into the memory slot.

G. Once properly inserted, push down the RAM module until it clicks in place.



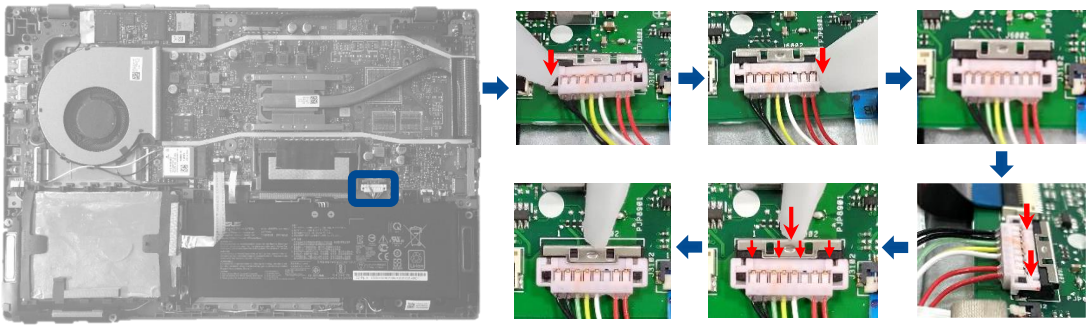


H. Paste the DIMM Acid tape to RMA slot.



Assembly Notice

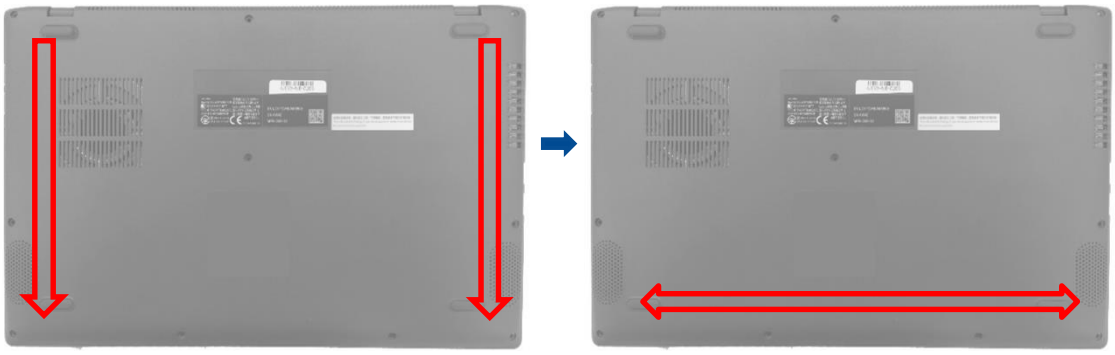
I. Please follow the below steps to attach the battery connector.



J. 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.



K. 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.



Assembly Notice

L. 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:

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

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.

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.

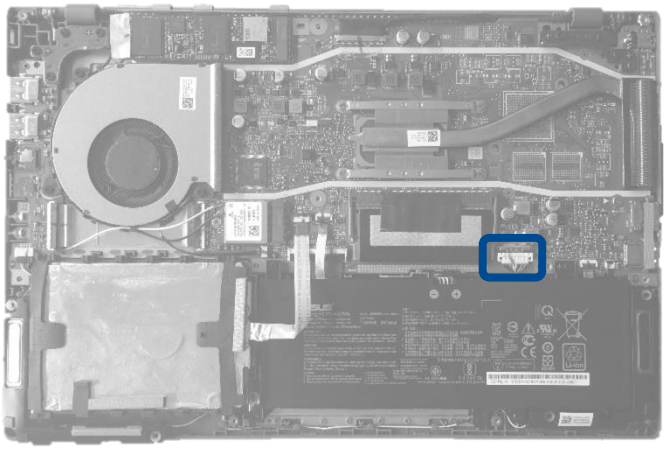
Disassembly Notice

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

B. Remove the base cover.

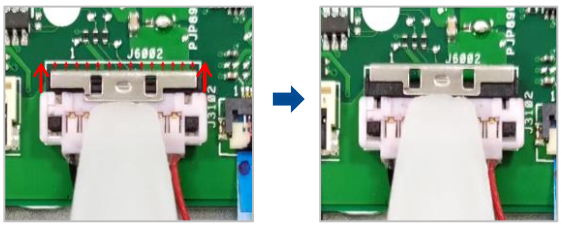
NOTE : For more details, refer to the removing the *base cover* section in this manual.

C. Disconnect the cable from the battery connector.

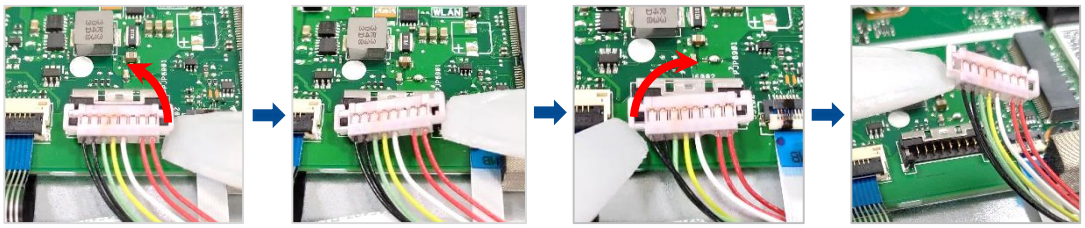


Disassembly steps:

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

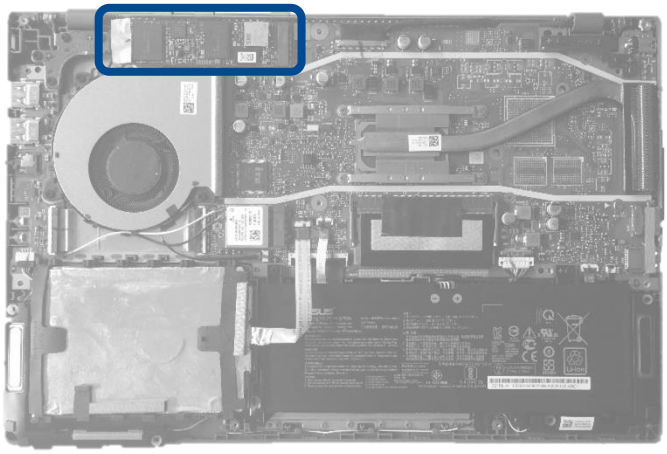


2. Use the non-conductive pry tool to disconnect battery connector.



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.)

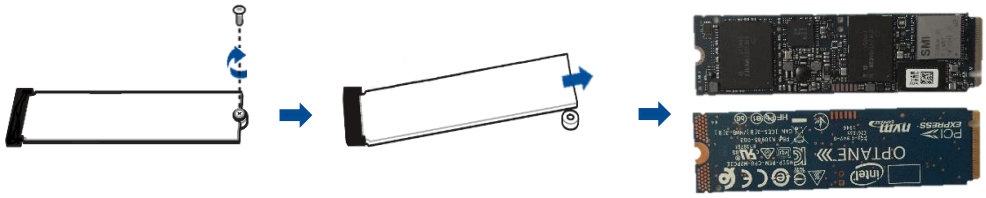


Disassembly steps:

1. Tear off the SSD tape from M.2 card (SSD). Please keep the SSD tape, as it will be reused when installing the new SSD module.

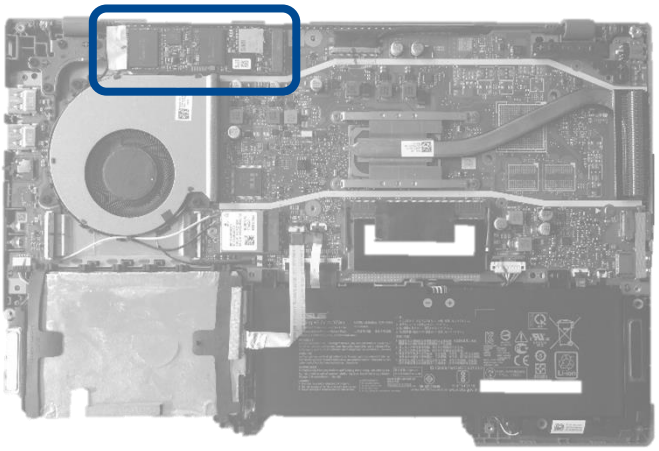


2. Remove the screw*1pc and M.2 card (SSD).



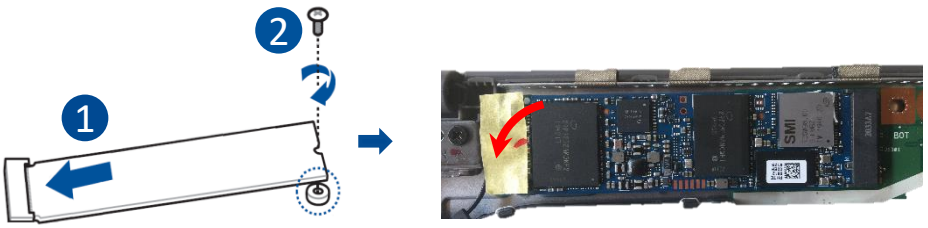
Assembly Notice

E. Assembly the M.2 card (SSD).

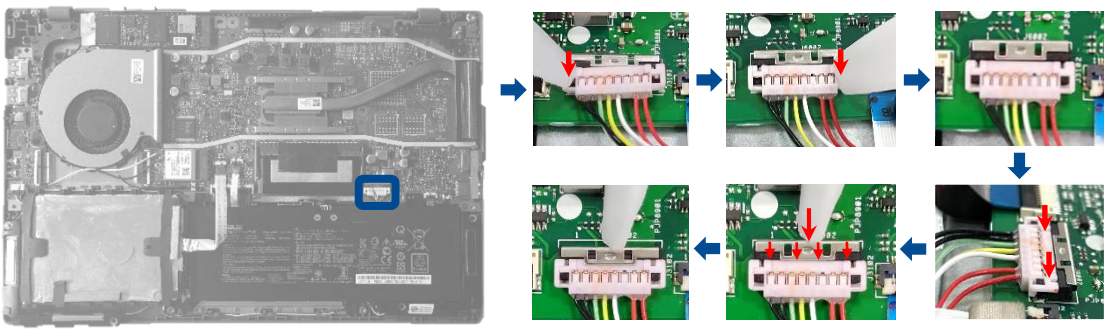


Assembly steps:

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.
3. Paste the SSD tape on the M.2 card (SSD).



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

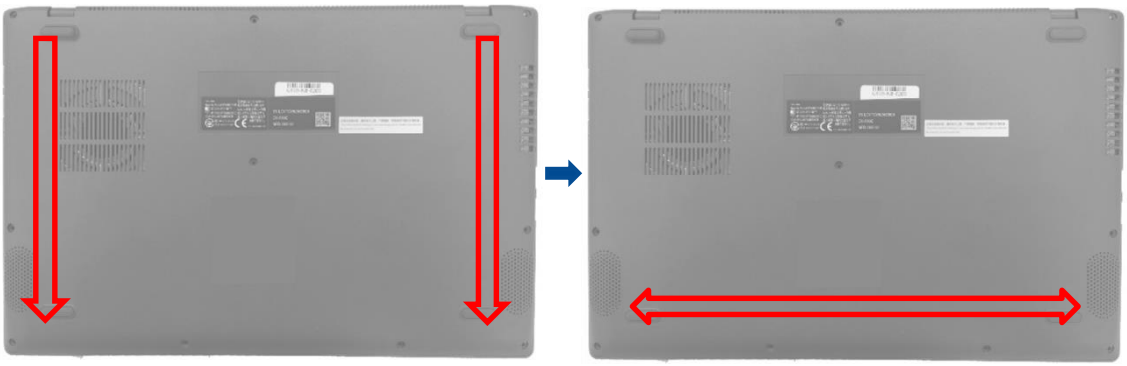


Assembly Notice

G. 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.



H. 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.



I. 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.

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.

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.

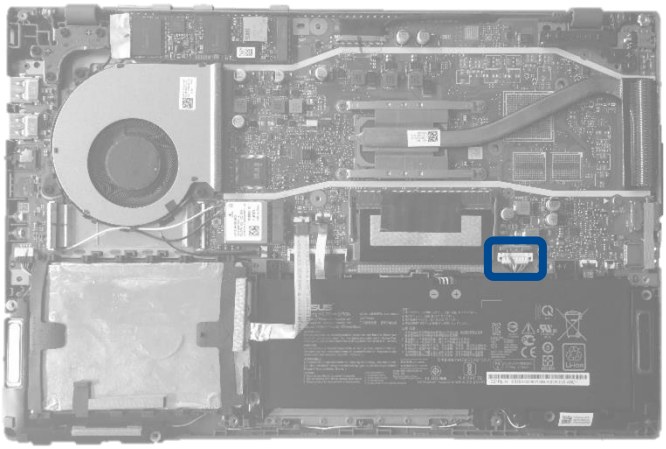
Disassembly Notice

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

B. Remove the base cover.

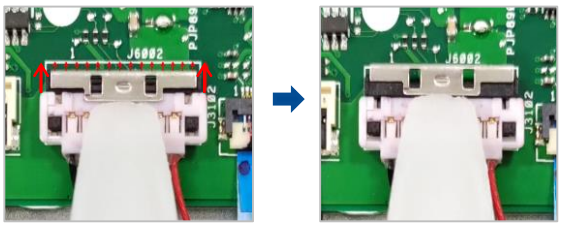
NOTE : For more details, refer to the removing the *base cover* section in this manual.

C. Disconnect the cable from the battery connector.

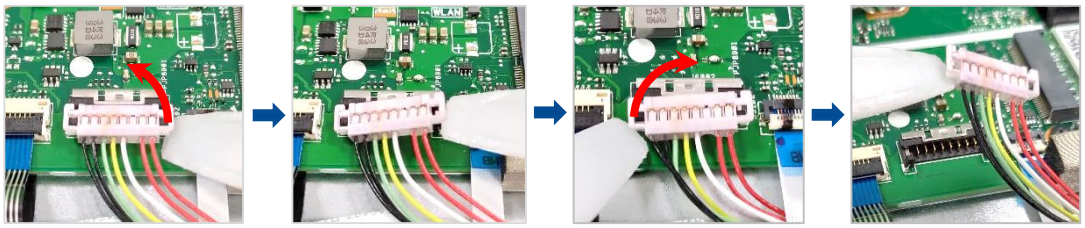


Disassembly steps:

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

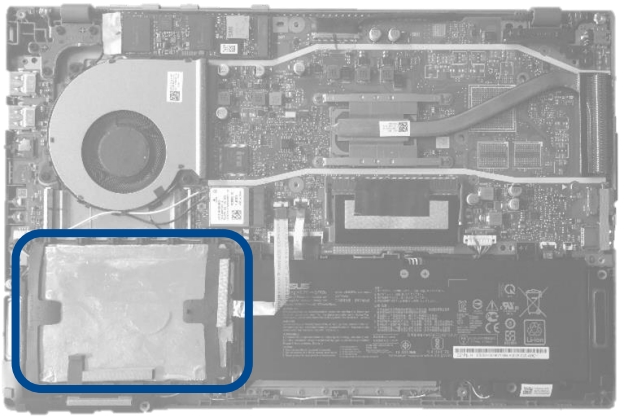


2. Use the non-conductive pry tool to disconnect battery connector.



D. 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.)

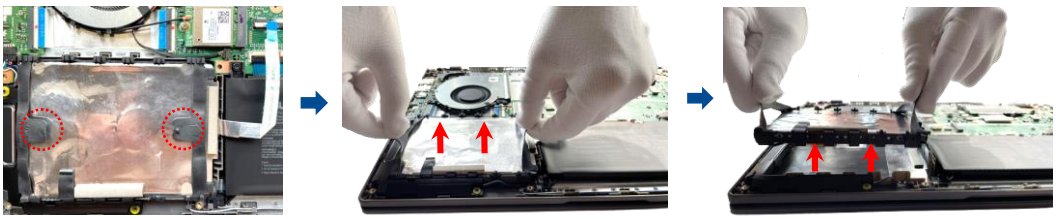


Disassembly steps:

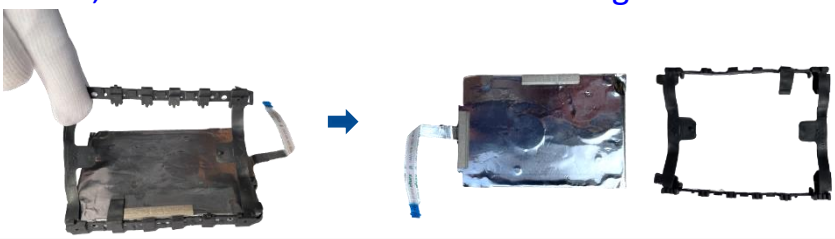
1. Disconnect the HDD FFC connector.



2. Pull the rubber sleeve and remove the HDD.



3. Remove the rubber sleeve from the HDD. Please keep the rubber sleeve, as it will be reused when installing the new HDD module.



Disassembly Notice

Disassembly steps:

4. Tear off the AL Foil mylar from the HDD. Please keep the AL Foil mylar, as it will be reused when installing the new HDD module.

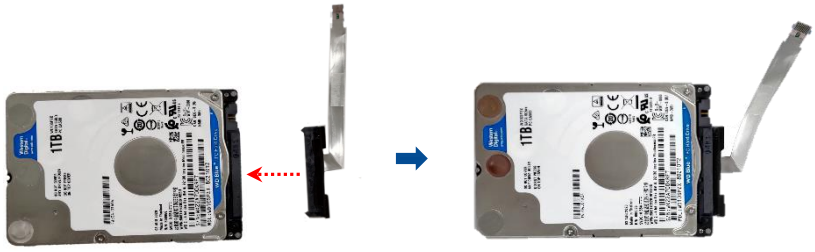


5. Disconnect the FFC connector from the HDD. Please keep the FFC connector as it will be reused when installing the new HDD module.

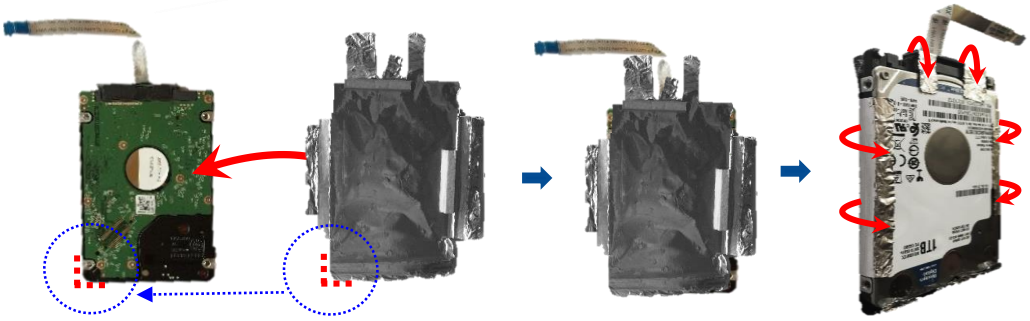


Assembly Notice

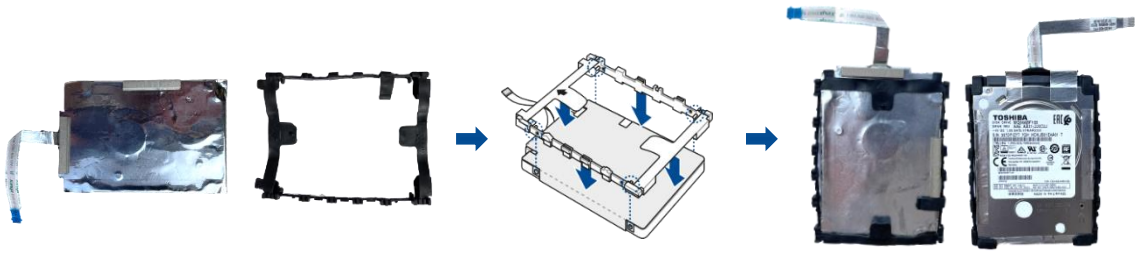
E. Connect the FFC connector to new HDD.



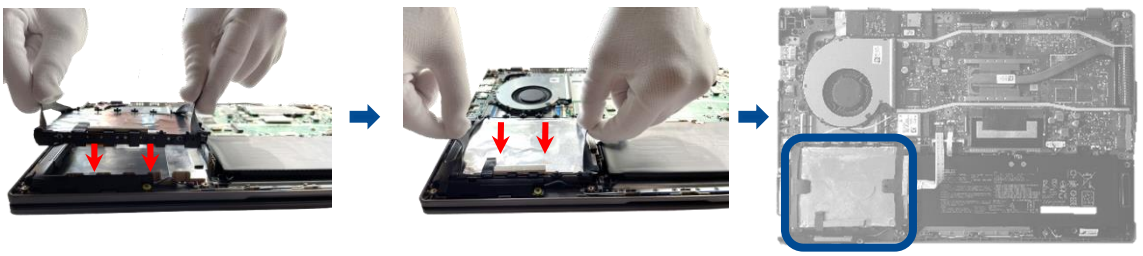
F. Align and wrap the AL Foil mylar around the HDD as shown in the illustration below.



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

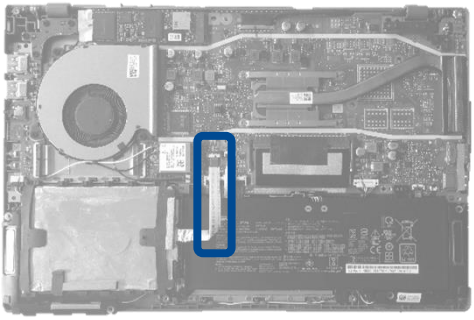


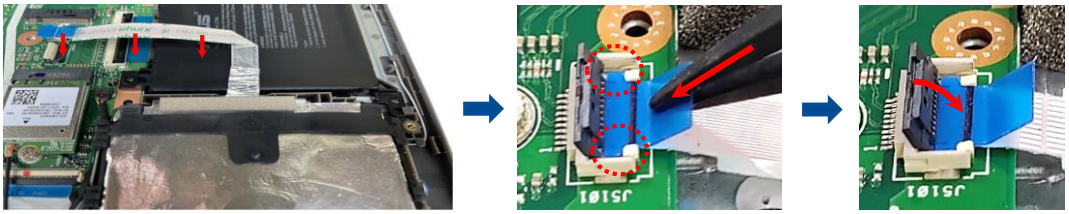
H. Place the HDD in the compartment.



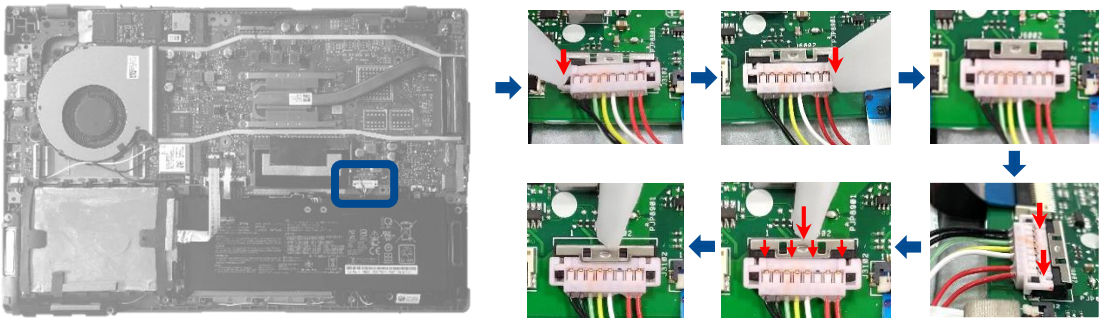
Assembly Notice

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





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

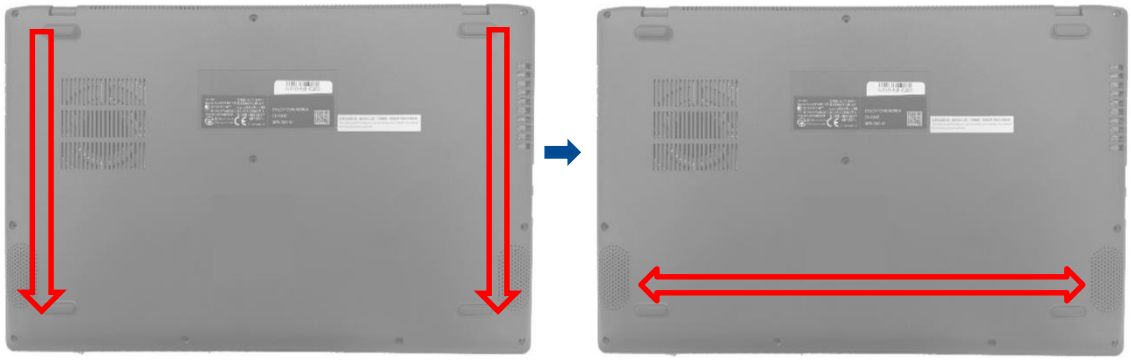


K. Install the base cover at a slight tilt at upper side first, and then press the upper side of base cover to fix from right to left.



Assembly Notice

L. 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.



M. Secure the base cover in place using the screws.

