

**Dynabook Personal Computer**  
**PORTÉGÉ X30W-J/X30W-K**  
**dynabook V\*/VZ\*/VC\* Series**  
**Maintenance Manual**

**Dynabook Inc.**

**File Number (960-941)**

*[CONFIDENTIAL]*

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## Preface

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This maintenance manual describes how to perform hardware service maintenance for the computer.

The procedures described in this manual are intended to help service technicians isolate faulty Field Replaceable Units (FRUs) and replace them in the field.

### SAFETY PRECAUTIONS

Four types of messages are used in this manual to bring important information to your attention. Each of these messages will be italicized and identified as shown below.

***DANGER:*** “Danger” indicates the existence of a hazard that could result in death or serious bodily injury, if the safety instruction is not observed.

***WARNING:*** “Warning” indicates the existence of a hazard that could result in bodily injury, if the safety instruction is not observed.

***CAUTION:*** “Caution” indicates the existence of a hazard that could result in property damage, if the safety instruction is not observed.

***NOTE:*** “Note” contains general information that relates to your safe maintenance service.

Improper repair of the computer may result in safety hazards. Dynabook requires service technicians and authorized dealers or service providers to ensure the following safety precautions are adhered to strictly.

- ❑ Be sure to fasten screws securely with the right screwdriver. If a screw is not fully fastened, it could come loose, creating a danger of a short circuit, which could cause overheating, smoke or fire.
- ❑ If you replace the battery pack or RTC battery, be sure to use only the same model battery or an equivalent battery recommended by Dynabook. Installation of the wrong battery can cause the battery to explode.

## Safety Precautions

Please read the following safety instructions before disassembling the computer and always follow the instructions while working on the computer.

- DANGER:**
- 1) *Always use the genuine battery that is authorized by our company or compatible with the unit. Since other BATTERY PACKs have different specifications, they may be incompatible with the unit, and may burst or explode.  
Never heat or disassemble the BATTERY PACK, as that could cause leakage of alkaline solution. Never throw the BATTERY PACK into a fire, as that could cause the BATTERY PACK to explode.*
  - 2) *The power supply and other components carry high voltages. If you need to turn on the power of a partially disassembled computer to check its operation, be very careful not to touch connectors or components, in order to avoid the risk of electric shock.  
Also, do not disassemble individual components in first-level maintenance.*

- WARNING:**
- 1) *Turn off the power and disconnect the AC adaptor from the power source, to avoid exposure to electric shock.*
  - 2) *Batteries in the computer retain an electrical charge, so there is danger of electrical shock even when the computer is disconnected from an AC power source. Remove any metal jewelry or accessories such as necklaces, bracelets or rings, in order to reduce the risk of electric shock. Never work with wet or damp hands.*
  - 3) *Be careful of edges and corners as these may cut.*

- CAUTION:**
- 1) *When you change a component, be sure the replacement component meets the required specifications. Never use foreign parts, to avoid any risk of damage to the computer.*
  - 2) *To avoid any risk of short-circuit, fire or other internal damage, never allow any metal objects such as screws or paper clips to fall into the unit. Be sure to replace screws with the same size as those removed. Make sure all screws are securely fastened. Loose screws can cause short circuits, resulting in heat, smoke or fire.*
  - 3) *Before lifting out an FRU or other component, make sure all cables to the component have been disconnected, in order to reduce the risk of accidental electric shock.*
  - 4) *If you use AC power, be sure to use the cable that came with the computer or one recommended by our company.*
  - 5) *Make sure that all replacement components meet the specifications for the computer and that all cables and connectors are securely fastened, in order to avoid the risk of electric shock.*
  - 6) *Some parts inside the computer, such as the CPU and cooling module, become very hot during operation. Conduct repair work after they have cooled. Be careful around the CPU and cooling module to avoid burns.*

## Before You Begin

Take note of the following points before starting work. Always remove the AC adapter and BATTERY PACK before commencing any of the procedures. The procedure for removing the BATTERY PACK is described in section “4.5 BATTERY PACK”.

1. Do not disassemble the computer unless it is operating abnormally.
2. Use the designated tools.
3. Ensure that the environment for working on and storing parts does not contain any of the following.
  - Dust or dirt
  - Static electricity
  - Extremely hot, cold, or humid conditions
4. Perform the diagnostic tests described in Chapter 2 to determine which FRU is the cause of the fault.
5. Do not perform any unnecessary work. Always work in accordance with the disassembly and re-assembly procedures in this manual.
6. Keep parts removed from the computer in a safe place away from the computer where they will not be damaged or interfere with your work.
7. Disassembling requires the removal of a large number of screws. Keep removed screws in a safe place such that you can determine which screws belong to which part.
8. When re-assembling, ensure that you use the correct screws and fit parts in the correct position. Screw sizes are noted in the text and figures.
9. As all parts have sharp edges and corners, take care not to cut yourself.
10. When disassembling, ensure that not to put the excessive power to avoid breaking the parts and latches.
11. Be careful that not to break the computer casing and harnesses by the removed parts.
12. After replacing an FRU, check that the computer and replaced part operate correctly.



## Disassembly Procedures

Four main types of cable connector are used.

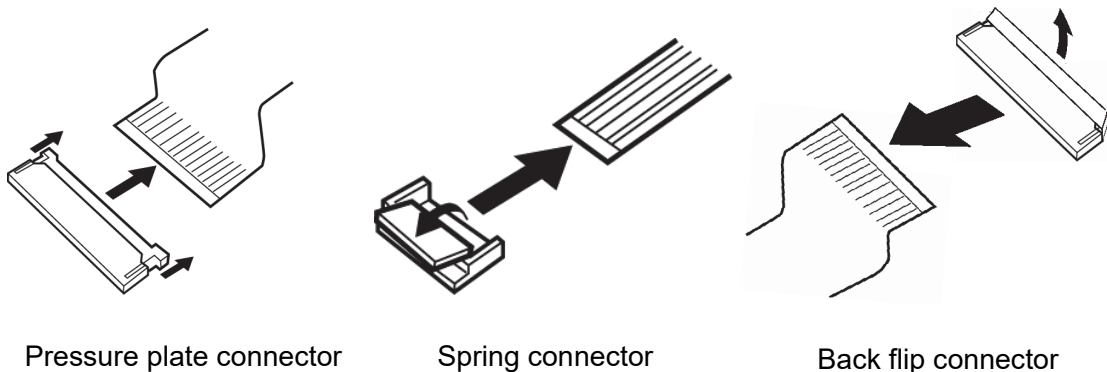
- Pressure plate connector
- Spring connector
- Back flip connector
- Normal pin connector

For pressure plate connectors, slide the pressure plate holding tags on both sides of the plastic pressure plate on the connector and pull the cable out from the connector. When reconnecting the cable to the pressure plate connector, slide the pressure plate holding tags on both sides of the plastic pressure plate on the connector and insert the cable into the connector. Push both tags of the pressure plate such that the cable is fixed in the correct position. Pull the cable to ensure that it is securely connected.

For spring connectors, lift up the stopper frees the cable and allow it to be pulled out. To reconnect, hold the stopper in the up position and insert the cable, then lower the stopper to secure the cable. Pull the cable to ensure that it is securely connected.

For back flip connectors, lift up the flip plate frees the cable and allow it to be pulled out. To reconnect, hold the flip plate in the up position and insert the cable, then lower the flip plate to secure the cable. Pull the cable to ensure that it is securely connected.

Normal pin connectors are used for all other cables. Simply pull out or push in these connectors to disconnect or reconnect.



**Assembly Procedures**

After the computer has been disassembled and the part that caused the fault has been repaired or replaced, the computer must be reassembled.

Take note of the following general points when assembling the computer.

- Take your time and follow the instructions carefully. Hurrying the assembly work will only introduce new problems.
- Check that all cables and connectors are securely connected.
- Before fastening FRUs or other parts in place, ensure that no cables are caught on screws or the FRU.
- Check that all latches are securely closed.
- When re-assembling, ensure that not to put the excessive power to avoid breaking the pins and latches.
- Ensure that you have installed all FRUs correctly and do not have any screws left over. Using an incorrect screw may damage the thread or screw head and result in the FRU not being securely fastened in place.
- When re-assembling, ensure that not to break the computer casing and harnesses by the tools and equipment.
- When checking the computer moved correctly, do not put the excessive power on the hinges and computer itself.

After installing FRUs, check that the computer operates correctly.

## Tools and Equipment

The use of Electrostatic Discharge (ESD) equipment is very important for your safety and the safety of those around you. Proper use of these devices will increase the success rate of your repairs and lower the cost for damaged or destroyed parts. The following equipment is necessary to disassemble and reassemble the computer:

- One Philips screwdriver with type 00 bit (for S-THIN HEAD screws removing/fixing the KEYBOARD)
- One Philips screwdriver with type 0 bit (for S-THIN HEAD screws)
- One Philips screwdriver with type 1 bit (for screws other than above)
- Tweezers (for lifting screws)
- ESD mats (lay on work table or floor)
- An ESD wrist strap and heel grounder
- Anti-static carpet or flooring
- Air-ionizers in highly static sensitive areas
- Antenna coaxial cable disconnecter
- One T8-size torx screwdriver (star screwdriver) corresponding to tamper-proof pin (only for JP 5G/LTE model) (for TORX HEAD screws removing/fixing the BASE ASSY)

## Screw Tightening Torque

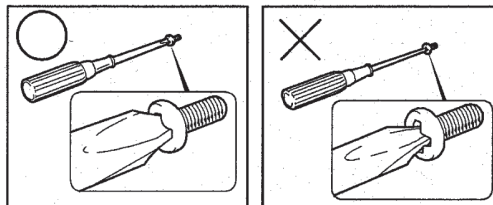
When you fasten screws, be sure to follow the torque list below.

**CAUTION:** Overtightening can damage components and screws; undertightening can result in electrical shorts or other damage if screws or components come loose.

**NOTE:** Our company recommends that you use an electric screwdriver for quick and easy operations.

- M1.2 (1.2mm) 0.0245 N·m (0.25 kgf·cm)
- M2 (2mm) 0.167 N·m (1.7 kgf·cm)
- M2.5 (2.5mm) 0.294 N·m (3.0 kgf·cm)

**NOTE:** To prevent damage to *THIN HEAD* screws, use type 0 bit philips screwdriver. Press along the axis of the screwdriver while turning the screw. This is because the contact area between the screw and driver is less than for a pan head screw (standard pan-shaped screw head).



## Grip Color

Some screws have a colored grip area.

[Nylok screw]

- Grip color : Blue (The seven screws fixing the HINGE ASSY are Yellow)



## Screw Notation

To make maintenance of the computer easier, markings of the kinds of the screws including the types and lengths of the screws are indicated on the computer body.

Format:

**Screw type + Screw length (mm)**

Screw shape

- B: Bind screw
- F: Flat head screw
- S: Super thin head screw
- T: Tapping screw
- U: Other screws (Unique screws: pan head, stud, etc.)

Example: **B6** ... 6mm BIND screw

Screw color/material

- B: Black/Nickel
- C: Silver/Non-Hexavalent Chromate
- U: Other screws (Unique screws: such as stud, etc.)

## 4.2 SIM Card

### Removing the SIM Card

To remove the SIM Card, follow the steps below and refer to Figure 4-1.

**CAUTION:** Before you remove the SIM card, refer to the card's documentation and to your operating system documentation for proper procedures and precautions.

1. Insert a **slender object** (about 0.8mm) such as a straightened paper clip into the eject hole and pull the **SIM card tray**.
2. Remove the **SIM card** from the SIM card tray.

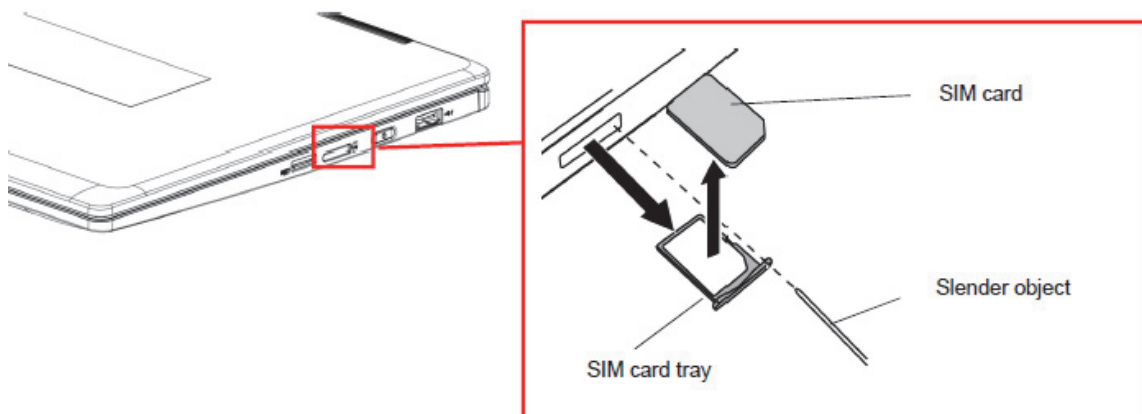


Figure 4-1 Removing the SIM card

### Installing the SIM Card

To install the SIM Card, follow the steps below and refer to Figure 4-1.

1. Set the **SIM card** on the SIM card tray.
2. Set the **SIM card tray** (with the SIM card) into the SIM card slot.

## 4.3 Micro SD Card

### Removing the Micro SD Card

To remove the Micro SD Card, follow the steps below and refer to Figure 4-2.

**CAUTION:** Before you remove the Micro SD card, refer to the card's documentation and to your operating system documentation for proper procedures and precautions.

3. Push the **Micro SD card**. It will pop out partly, so pull out the card.

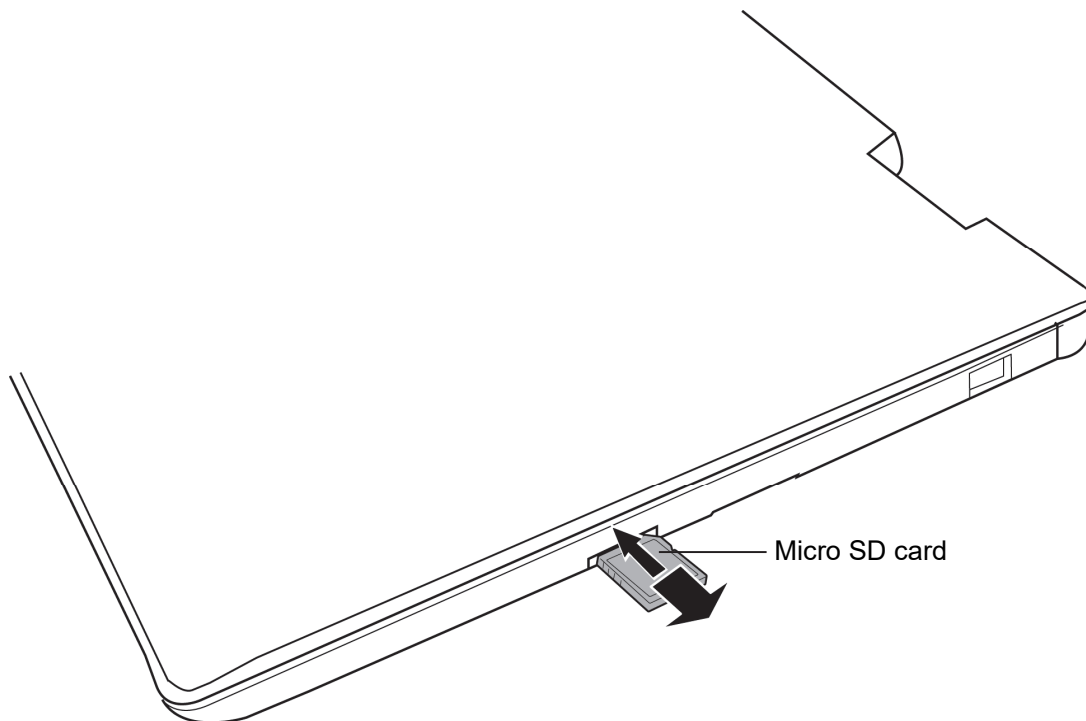


Figure 4-2 Removing the Micro SD card

### Installing the Micro SD Card

To install the Micro SD Card, follow the steps below and refer to Figure 4-2.

3. Insert the **Micro SD card** into the slot and push it carefully to ensure a firm connection.

## 4.4 BASE ASSY

### Removing the BASE ASSY

To remove the BASE ASSY or BASE LTE ASSY, follow the steps below and refer to Figure 4-3 and 4-4.

1. Click “Start” – “Power” and then click “Shut down” while holding down the SHIFT key to turn off the power of the computer.
2. Disconnect the AC adapter and other external devices from the computer.
3. Turn over the computer.
4. Remove the following **screws** securing the BASE ASSY or BASE LTE ASSY.

< non 5G/LTE model >

- M2.5×4B FLAT HEAD screw ×4 (Described as “4” in the Figure 4-3)
- M2.5×6B FLAT HEAD screw ×8 (Described as “6” in the Figure 4-3)

< 5G/LTE (JP) model >

- M2.5×4B TORX HEAD screw ×2 (Described as “4” in the Figure 4-4)
- M2.5×6B FLAT HEAD screw ×8 (Described as “6” in the Figure 4-4)

< 5G/LTE (US, UK) model >

- M2.5×4B FLAT HEAD screw ×2 (Described as “4” in the Figure 4-4)
- M2.5×6B FLAT HEAD screw ×8 (Described as “6” in the Figure 4-4)

**NOTE:** When the color of the computer is dark blue, fix the BASE ASSY or BASE LTE ASSY with the dark blue electrodeposition coating screws.  
When the color of the computer is black, fix the BASE ASSY or BASE LTE ASSY with the black nickel screws.

5. Remove the **BASE ASSY** or BASE LTE ASSY while releasing the latches.



< non 5G/LTE model >

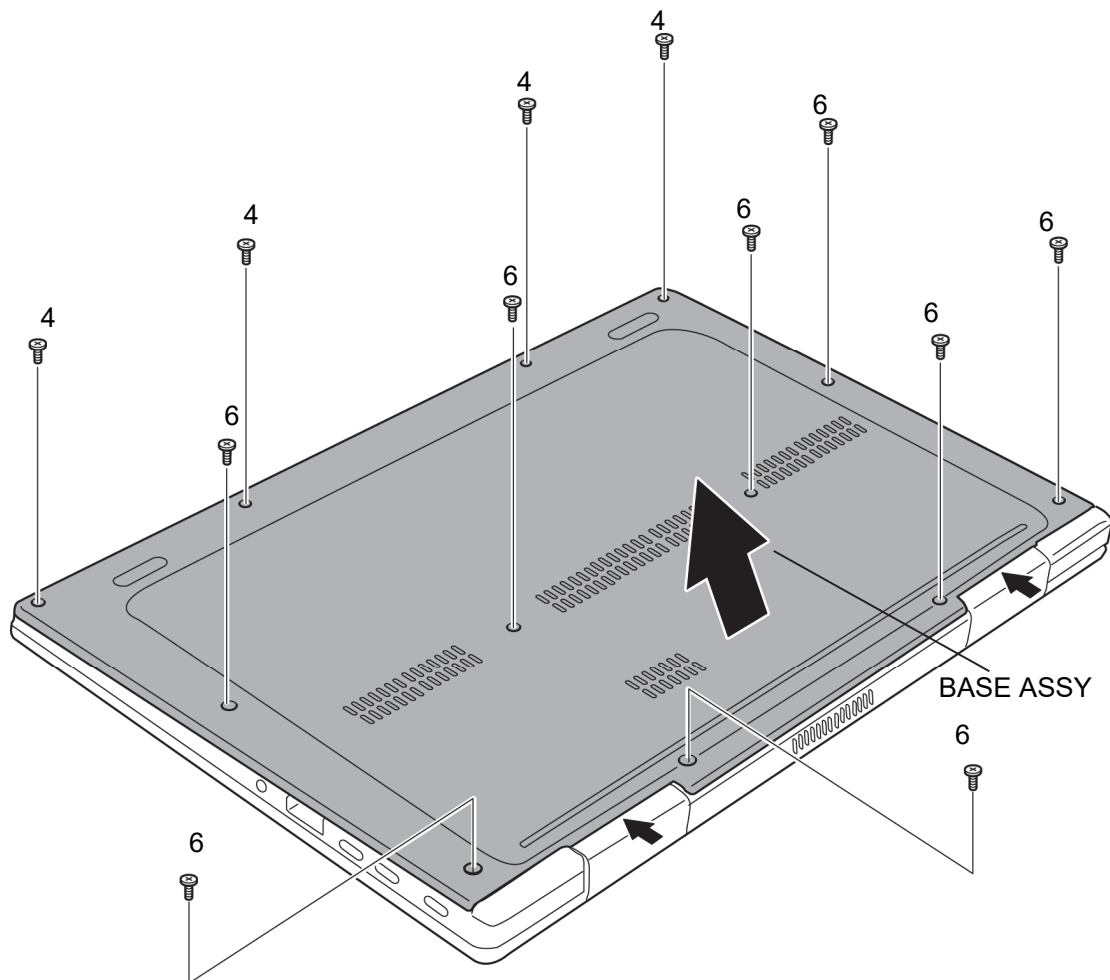


Figure 4-3 Removing the BASE ASSY (1)

< 5G/LTE model >

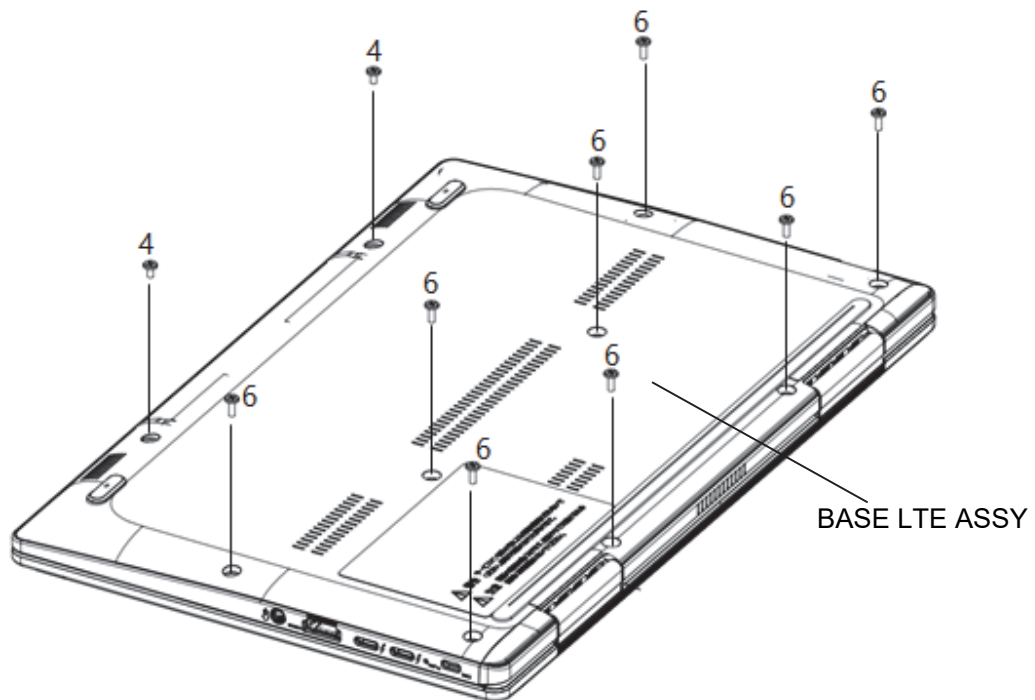
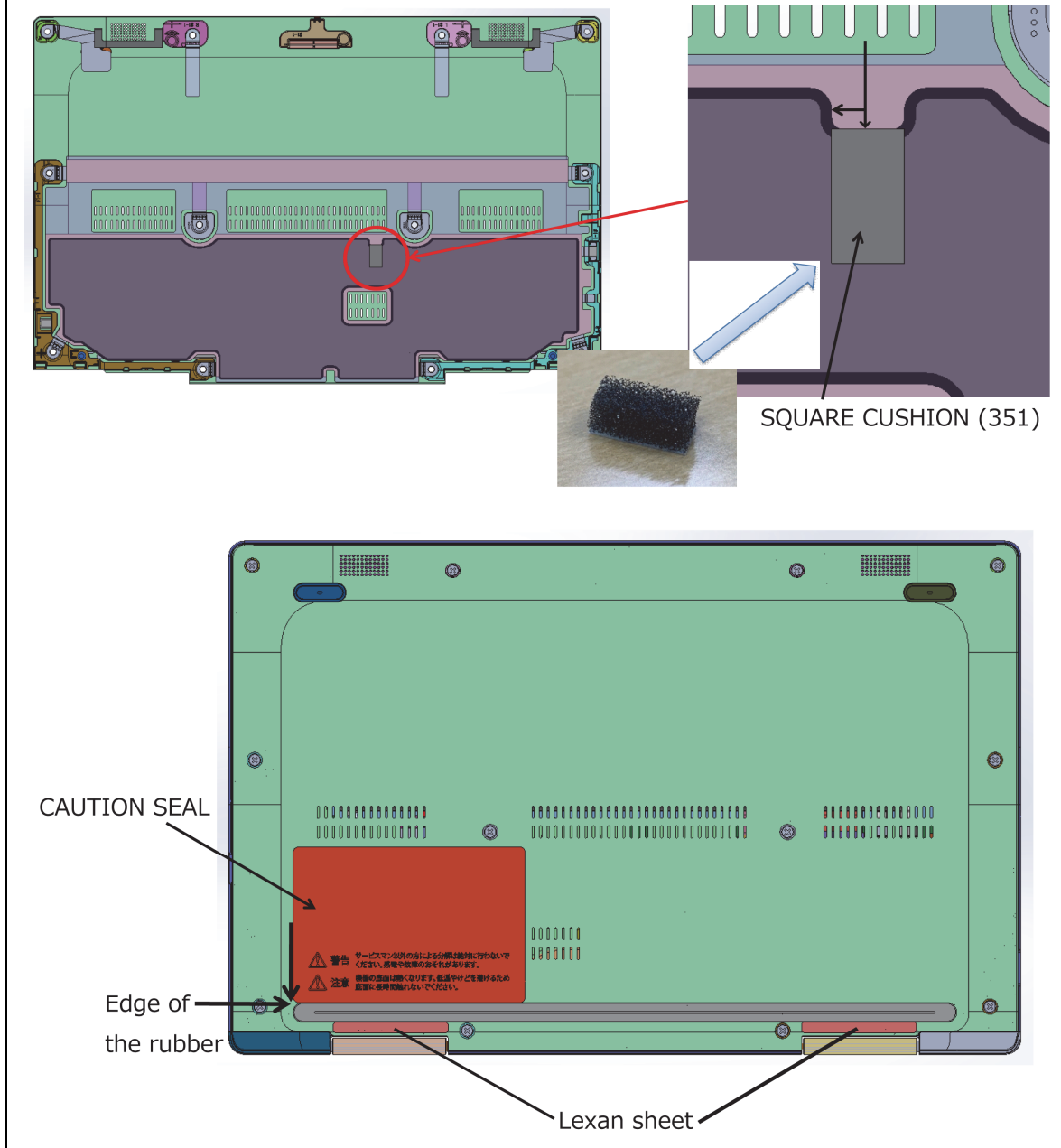


Figure 4-4 Removing the BASE ASSY (2)

### Installing the BASE ASSY

To install the BASE ASSY or BASE LTE ASSY, follow the steps below and refer to Figure 4-3 and 4-4.

**NOTE:** When replacing the BASE ASSY or BASE LTE ASSY with a new one, stick new **SQUARE CUSHION (351)** and **CAUTION SEAL** to the BASE ASSY or BASE LTE ASSY in place.



1. Set the **BASE ASSY** or BASE LTE ASSY to the COVER ASSY and secure it with the following **screws**.

< non 5G/LTE model >

- M2.5×4B FLAT HEAD screw ×4 (Described as “4” in the Figure 4-3)
- M2.5×6B FLAT HEAD screw ×8 (Described as “6” in the Figure 4-3)

< 5G/LTE (JP) model >

- M2.5×4B TORX HEAD screw ×2 (Described as “4” in the Figure 4-4)
- M2.5×6B FLAT HEAD screw ×8 (Described as “6” in the Figure 4-4)

< 5G/LTE (US, UK) model >

- M2.5×4B FLAT HEAD screw ×2 (Described as “4” in the Figure 4-4)
- M2.5×6B FLAT HEAD screw ×8 (Described as “6” in the Figure 4-4)

Prepare required parts in advance, when replacing the following items.

ITEM	Parts List ITEM No	PART NAME	Quantity			
			Non 5G/LTE (PDA1*)	LTE	5G	Non 5G/LTE (PDA3*)
BASE ASSY	40	BASE ASSY (for PDA1*)	1	0	0	0
		BASE ASSY (for PDA3*)	0	0	0	1
		BASE LTE ASSY	0	1	1	0
		SQUARE CUSHION (351)	1	1	1	1
	90,91	CAUTION SEAL	1	1	1	1

## 4.5 BATTERY PACK

### Removing the BATTERY PACK

To remove the BATTERY PACK, follow the steps below and refer to Figure 4-5.

**CAUTION:** *When handling the BATTERY PACK, be careful not to short circuit the terminals. Also do not drop, hit, apply impact, scratch, break, twist or bend the BATTERY PACK.*

1. Peel off the **INSU SQUARE**.
2. Disconnect the **BATTERY HARNESS** from the connector **CN8021** on the SYSTEM BOARD.
3. Remove the following screws and the **BATTERY PACK**.
  - M2×4C S-THIN HEAD screw ×2

**CAUTION:** *The replaced battery must be disposed according to the laws and ordinances of your local authority.*

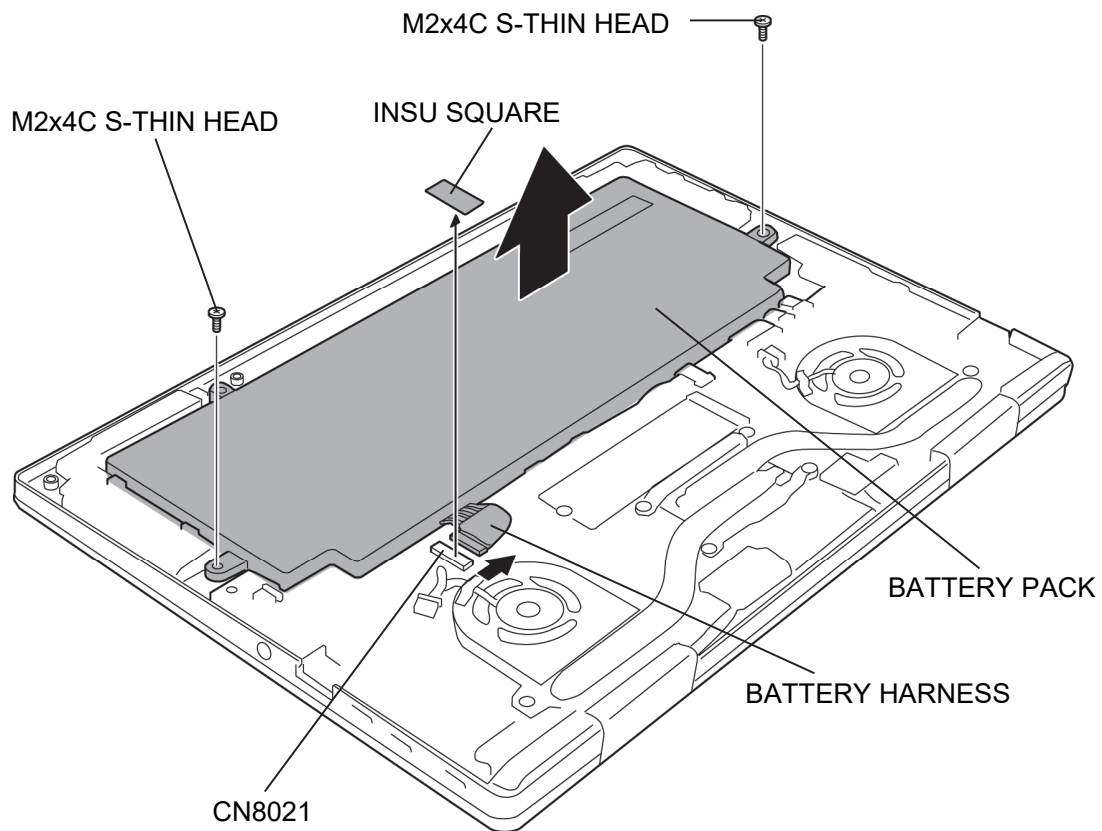


Figure 4-5 Removing the BATTERY PACK

**Installing the BATTERY PACK**

To install the BATTERY PACK, follow the steps below and refer to Figure 4-5.

**CAUTION:** *The BATTERY PACK is a lithium ion battery, which can explode if not properly replaced, used, handled or disposed of. For environmental reasons, collect the spent BATTERY PACKs. Use only batteries recommended by our company for replacements.*

1. Set the **BATTERY PACK** to the COVER ASSY and secure it with the following screws.
  - M2×4C S-THIN HEAD screw ×2
2. Connect the **BATTERY HARNESS** to the connector **CN8021** on the SYSTEM BOARD.
3. Stick the **INSU SQUARE** in place.

## 4.6 SPEAKER

### Removing the SPEAKER

To remove the SPEAKER, follow the steps below and refer to Figure 4-6 to 4-8.

1. Disconnect the **FP FFC** (fingerprint sensor model) and **CPAD FFC** from the connectors on the CLICK PAD.
2. Disconnect the **FP FFC** (fingerprint sensor model) and **CPAD FFC** from the connectors **CN9550** and **CN9510** on the SYSTEM BOARD.

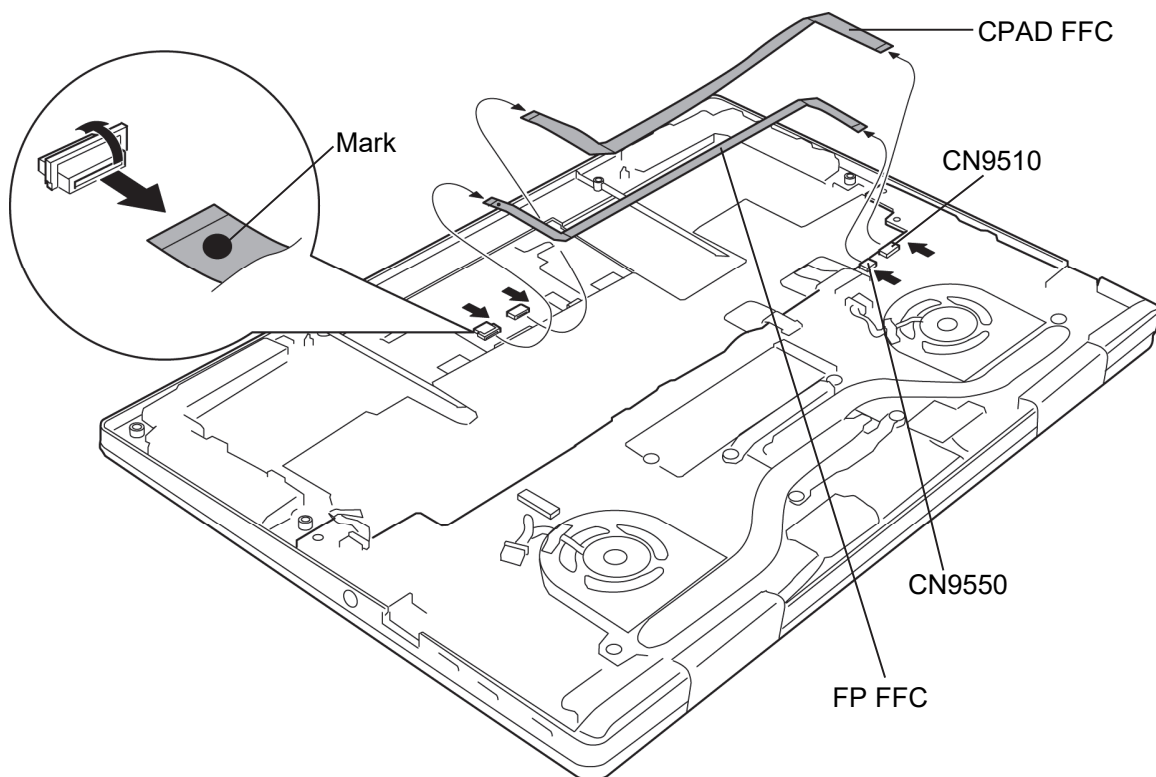


Figure 4-6 Removing the SPEAKER (1)



3. Open the **INSU KB LOW** or **INSU KB LOW 5G**.

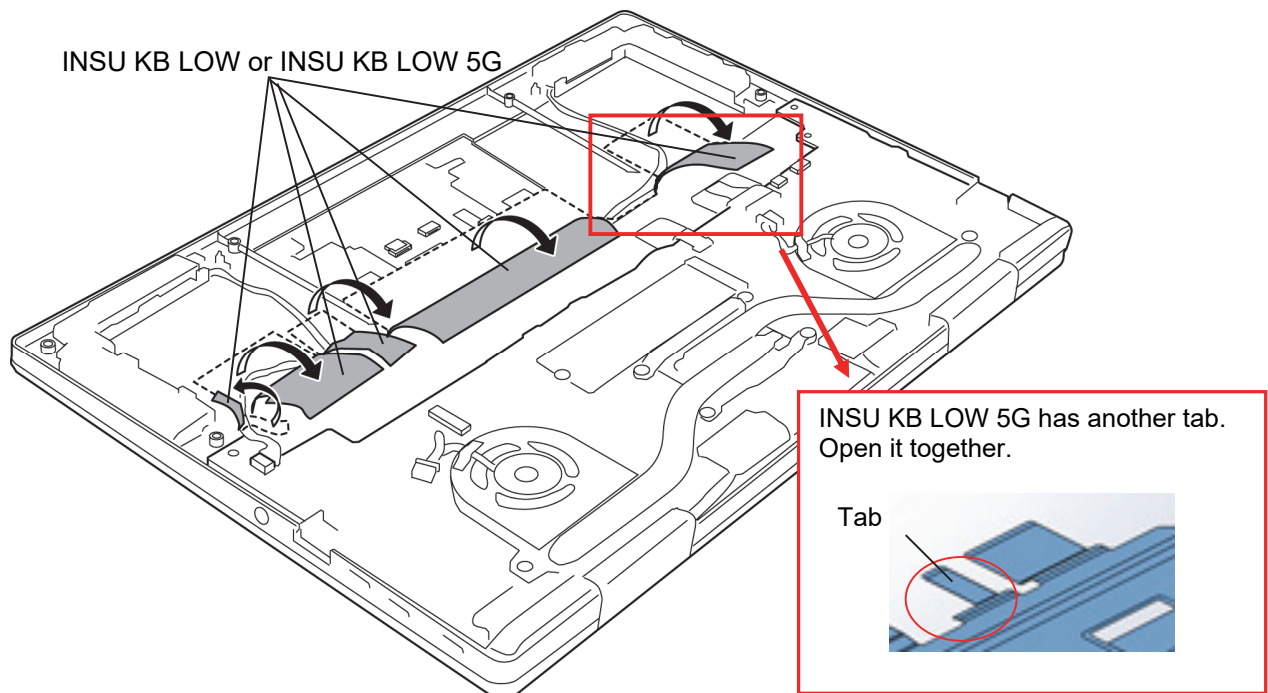


Figure 4-7 Removing the SPEAKER (2)

4. Disconnect the **SPEAKER HARNESS** from the connector **CN6290** on the **SYSTEM BOARD**.
5. Remove the **SPEAKER** or **SPEAKER 5G** (left and right) from the slots of the **COVER ASSY**.

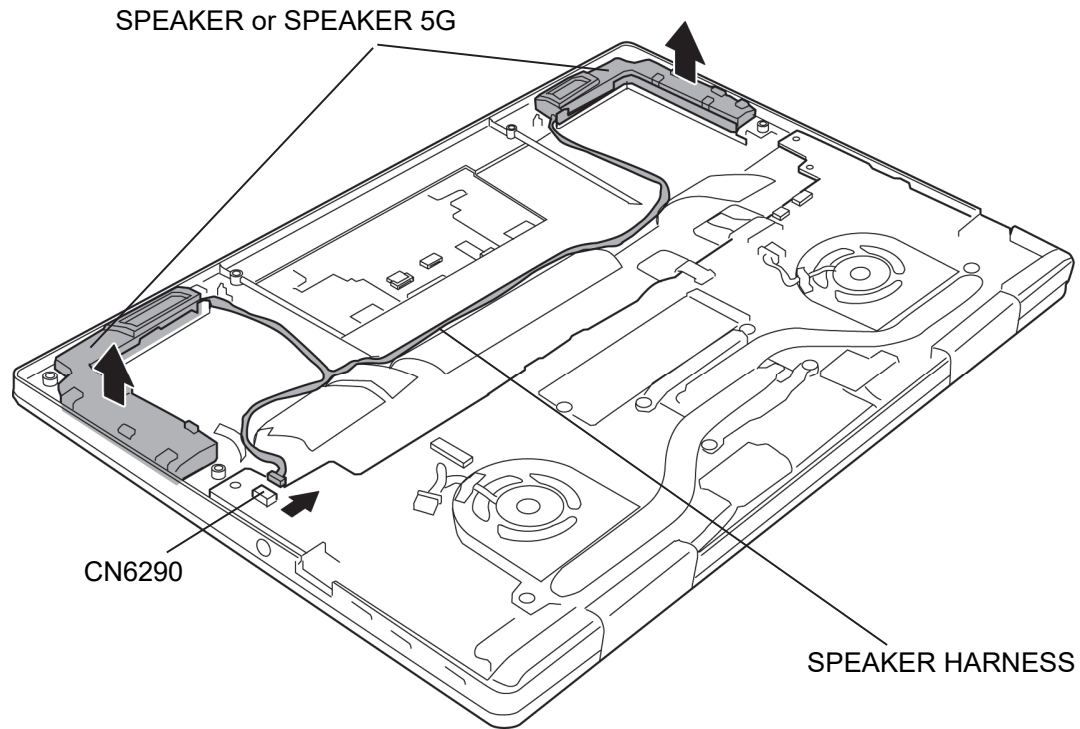
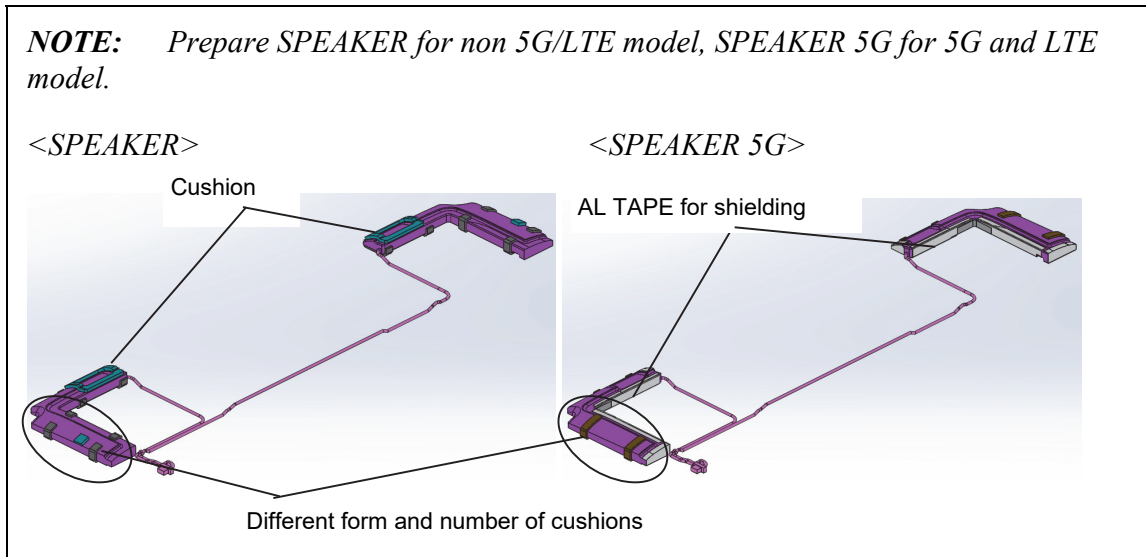


Figure 4-8 Removing the **SPEAKER** (3)

## Installing the SPEAKER

To install the SPEAKER, follow the steps below and refer to 4-6 to 4-8.



1. Set the **SPEAKER** or **SPEAKER 5G** (left and right) to the slots of the **COVER ASSY**.
2. Arrange the **SPEAKER HARNESS** in place and fix it with the **INSU KB LOW** or **INSU KB LOW 5G**.
3. Connect the **SPEAKER HARNESS** to the connector **CN6290** on the **SYSTEM BOARD**.
4. Connect the **FP FFC** (fingerprint sensor model) and **CPAD FFC** to the connectors **CN9550** and **CN9510** on the **SYSTEM BOARD**.
5. Connect the marked side of the **FP FFC** (fingerprint sensor model) and **CPAD FFC** to the connectors on the **CLICK PAD**.

## 4.7 5G/LTE MODULE

### Removing the 5G/LTE MODULE

To remove the 5G/LTE MODULE, follow the steps below and refer to Figure 4-9.

1. Peel off the **INSU SQUARE** on the **5G MODULE** or **LTE MODULE**.
2. Disconnect the **ANTENNA CABLEs** (4 cables for 5G model, 2 cables for LTE model) from the connectors on the **5G MODULE** or **LTE MODULE**.
3. Remove the following screw and disconnect **5G MODULE** from the connector **CN2610** or **LTE MODULE** from the connector **CN2600** on the SYSTEM BOARD.
  - M2×2.3C S-THIN HEAD screw      ×1

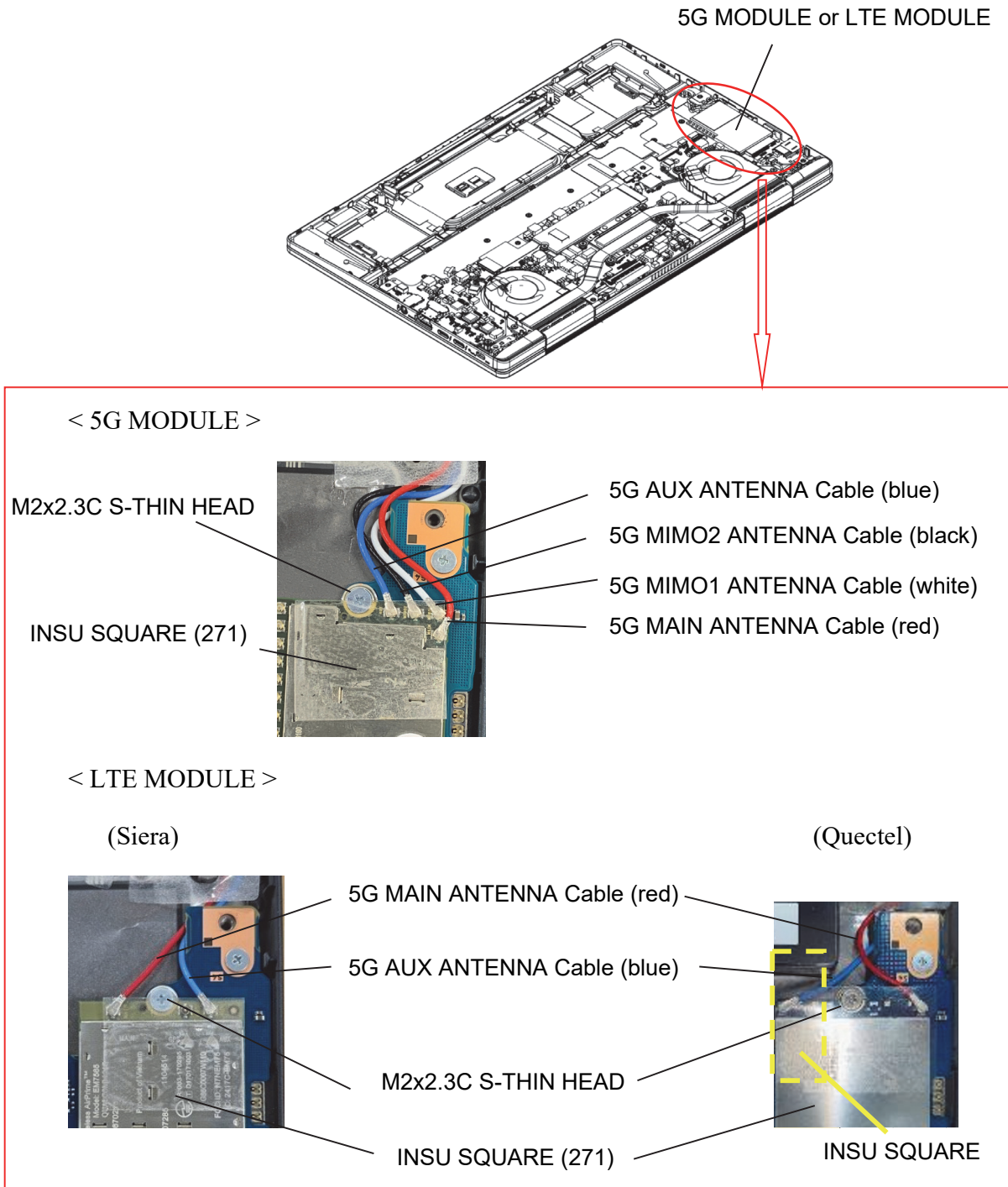


Figure 4-9 Removing the 5G/LTE MODULE

## Installing the 5G/LTE MODULE

To install the 5G/LTE MODULE, follow the steps below and refer to Figure 4-9.

1. Connect the **5G MODULE** to the connector **CN2610** or **LTE MODULE** to the connector **CN2600** on the SYSTEM BOARD and secure it with the following screw.

- M2×2.3C S-THIN HEAD screw ×1

2. Connect the **ANTENNA CABLES** (4 cables for 5G model, 2 cables for LTE model) to the connectors on the **5G MODULE** or **LTE MODULE**

**NOTE:** Connect the cables according to the following order and steps;  
< 5G model >

AUX → MIMO2 → MIMO1 → MAIN



### • Detailed steps

① Connect the AUX cable (blue) to the AUX connector on the 5G module.

② Pass the AUX cable (blue) under the System board corner first. Then hook it to the boss.

③ Stick the AUX cable (blue) to the INSU. To make the space for MIMO1 and MIMO2 cables, stick it to the KB side.

System board

① Connect the MIMO2 cable (black) to the MIMO2 connector on the 5G module.

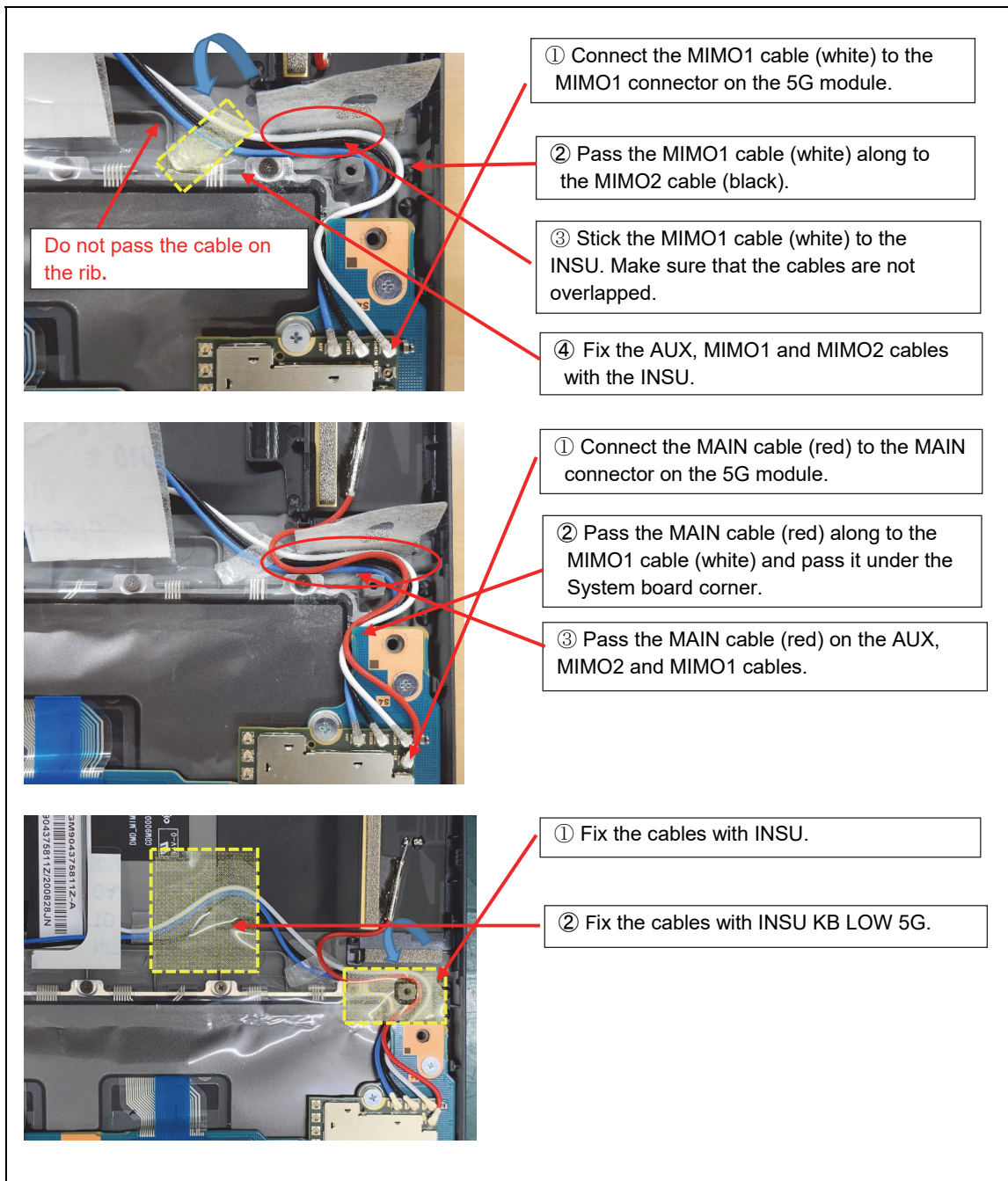
② Pass the MIMO2 cable (black) along to the AUX cable (blue).

③ Stick the MIMO2 cable (black) to the INSU. To make the space for MIMO1 cable, stick it along to the AUX cable (blue).

Do not pass the cable on the rib.

Do not pass the cable on the rib.





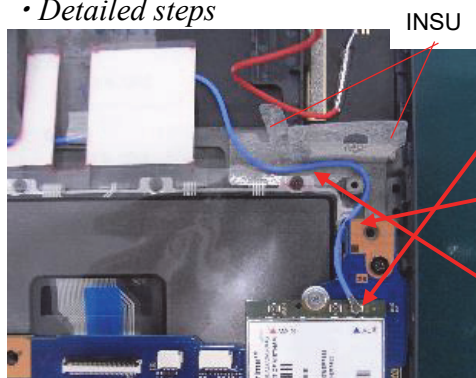
< LTE model >

(Siera)

AUX → MAIN



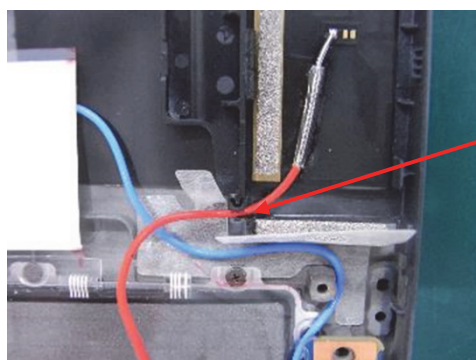
• Detailed steps



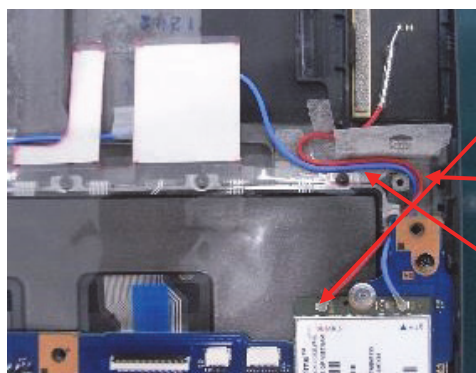
① Connect the AUX cable (blue) to the AUX connector on the LTE module.

② Pass the AUX cable (blue) under the System board corner first. Then hook it to the boss.

③ Stick the AUX cable (blue) to the INSU.



Pass the MAIN cable (red) in the rib.

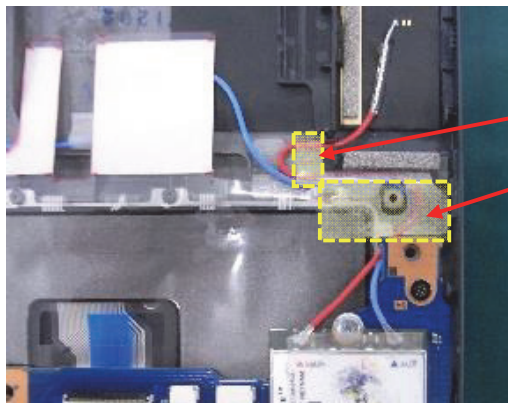


① Connect the MAIN cable (red) to the MAIN connector on the LTE module.

② Pass the MAIN cable (red) under the System board corner first. Then hook it to the boss.

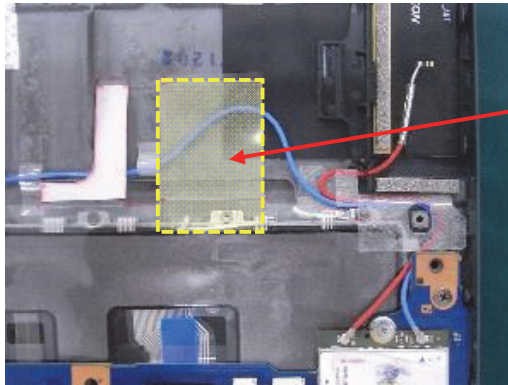
③ Stick the MAIN cable (red) to the INSU.





① Fix the cables with the INSU.

② Fix the cables with the INSU.

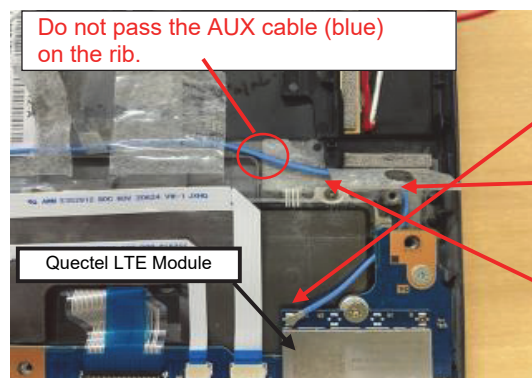


Fix the cable with INSU KB LOW 5G.

(Quectel)  
AUX → MAIN



#### • Detailed steps



Do not pass the AUX cable (blue) on the rib.

Quectel LTE Module

① Connect the AUX cable (blue) to the AUX connector on the LTE module.

② Pass the AUX cable (blue) under the System board corner first. Then hook it to the boss.

③ Stick the AUX cable (blue) to the INSU.

INSU SQUARE (10x35)

2D barcode

Stick INSU SQUARE (10x35) aligning to the left side of shield plate on Quectel LTE Module and the lower edge of 2D barcode printed on the module.

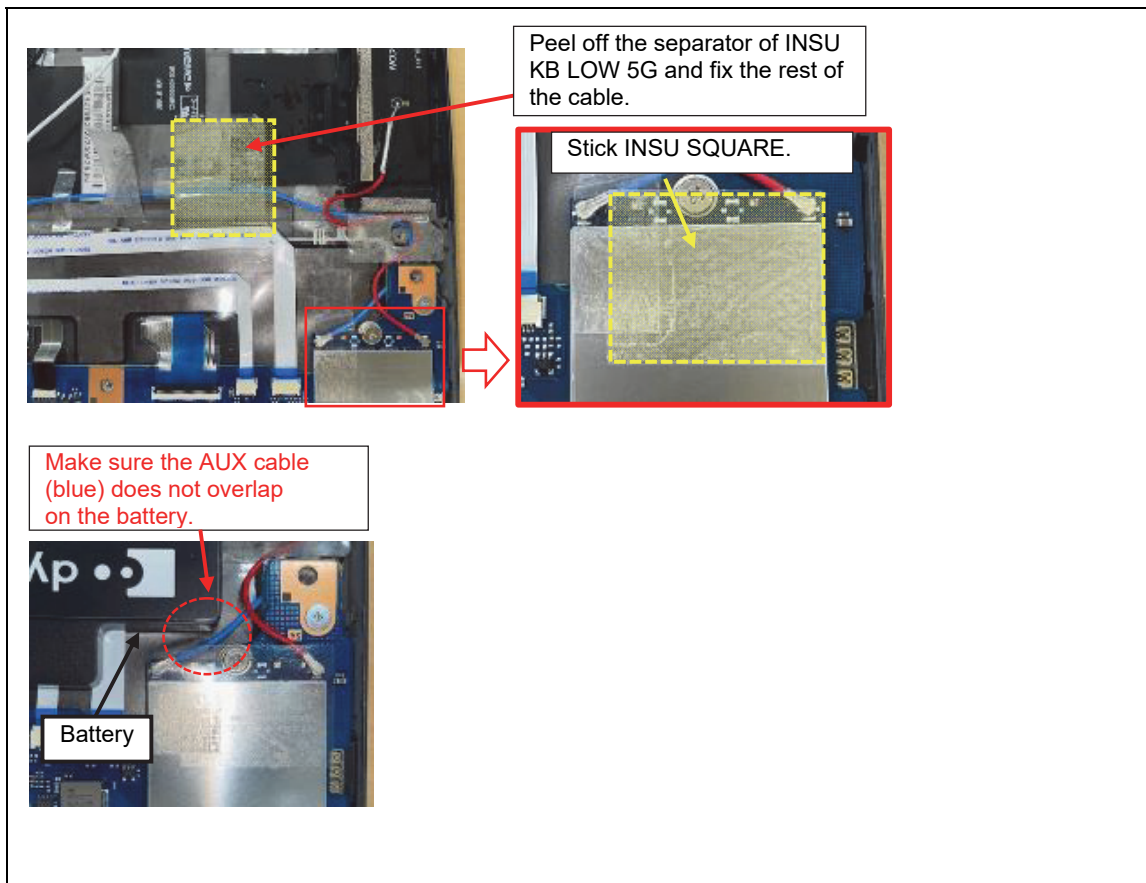
**Note**

Stick INSU SQUARE (10x35) after getting close the AUX cable (blue) to the module with fingers.

Insert the MAIN cable (red) to the rib.

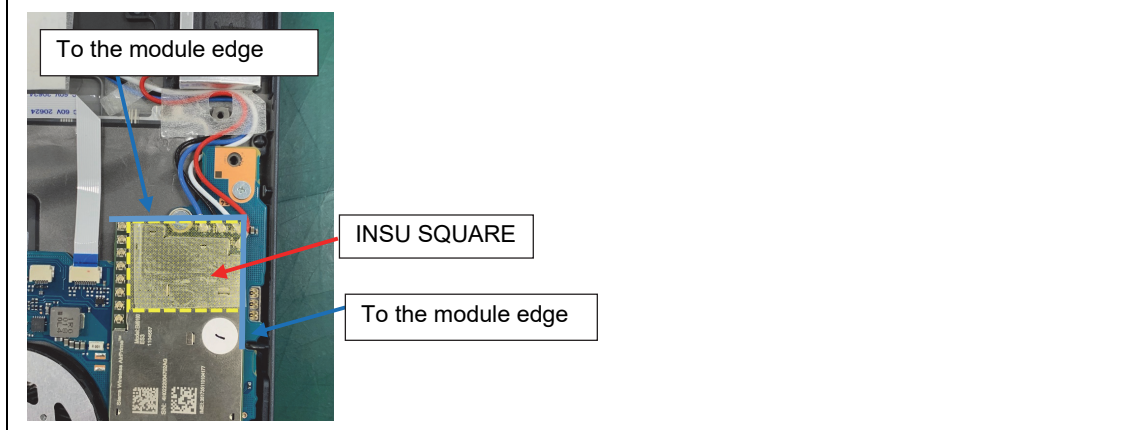
- ① Connect the MAIN cable (red) to the MAIN connector on the LTE module.
- ② Pass the MAIN cable (red) under the System board corner first. Then hook it to the boss.
- ③ Stick the MAIN cable (red) to the INSU.

- ① Fix the cables with the INSU.
- ② Fix the cables with the INSU.



### 3. Stick the **INSU SQUARE** to the **5G MODULE** or **LTE MODULE**

**NOTE:** (5G model) Stick the **INSU SQUARE** as shown below;



## 4.8 5G/LTE ANTENNA

### Removing the 5G/LTE ANTENNA

To remove the 5G/LTE ANTENNA, follow the steps below and refer to Figure 4-10 to 4-12.

1. Press the latch to the arrow direction to release.
2. Pull up the **GASKET HOLDER**.
3. Release the latch and remove the **GASKET HOLDER**.

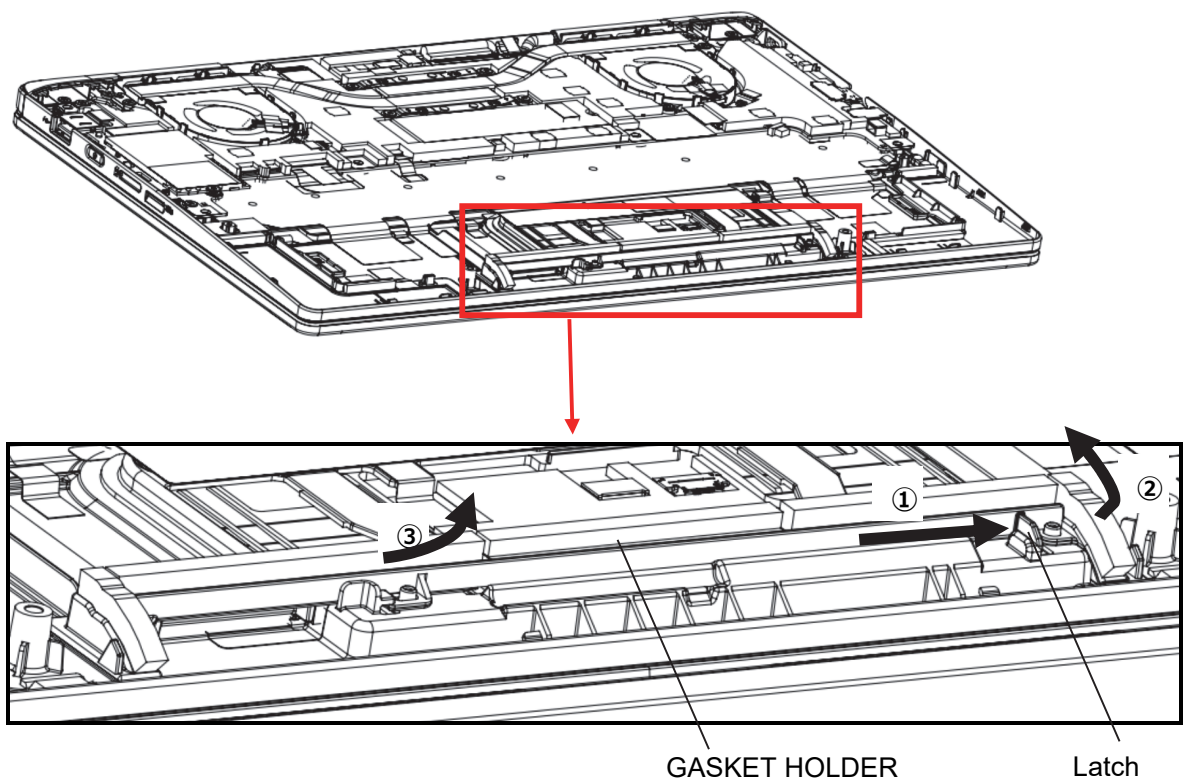


Figure 4-10 Removing the 5G/LTE ANTENNA (1)



4. Remove the **5G ANTENNA SPACERS** and the **INSU SQUAREs**. Turn up the **INSU ANT HOLD**.

**NOTE:** Do not reuse the removed **INSU SQUAREs**. Be sure to use new ones.

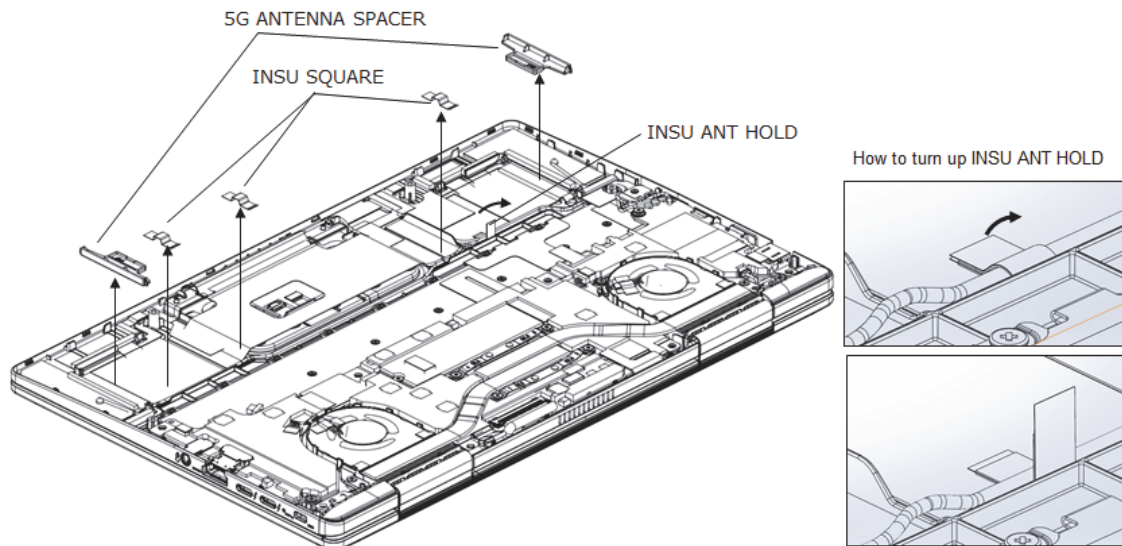
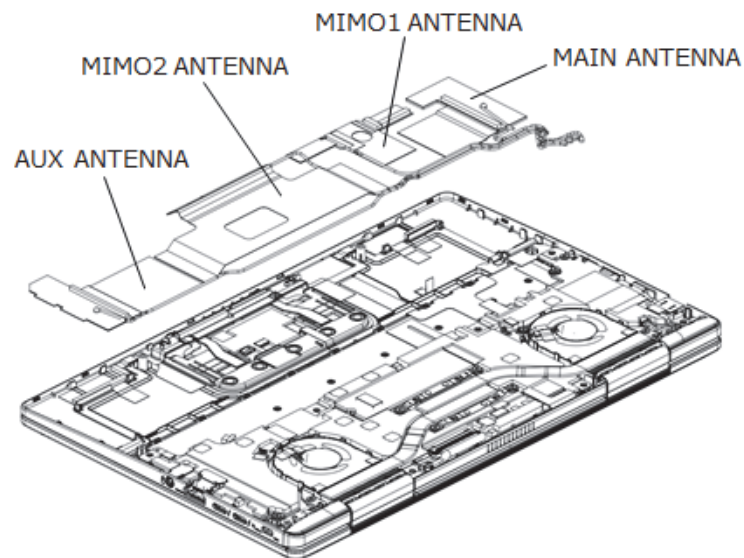


Figure 4-11 Removing the 5G/LTE ANTENNA (2)

5. (5G model) Remove the **MAIN ANTENNA**, **AUX ANTENNA**, **MIMO1 ANTENNA** and **MIMO2 ANTENNA**.  
(LTE model) Remove the **MAIN ANTENNA** and **AUX ANTENNA**.

**NOTE:** Do not reuse the removed ANTENNAS. Be sure to use new ones.

< 5G model >



< LTE model >

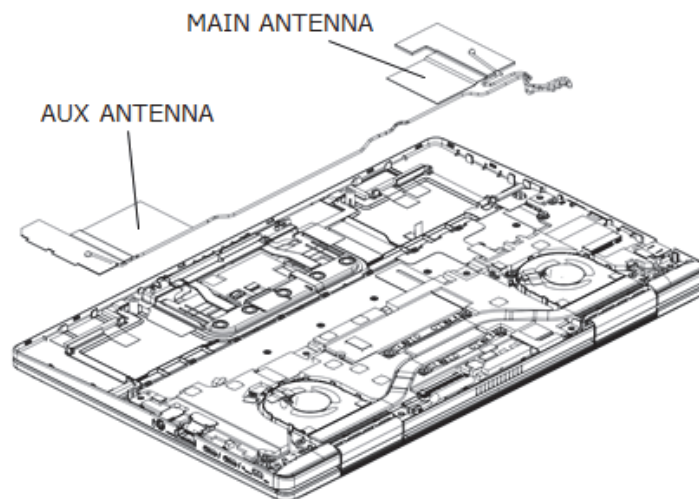


Figure 4-12 Removing the 5G/LTE ANTENNA (3)

**Installing the 5G/LTE MODULE**

To install the 5G/LTE MODULE, follow the steps below and refer to Figure 4-10 to 4-12.

1. (5G model) Stick the **MAIN ANTENNA**, **AUX ANTENNA**, **MIMO1 ANTENNA** and **MIMO2 ANTENNA** to the **COVER ASSY** and arrange the cables in place.

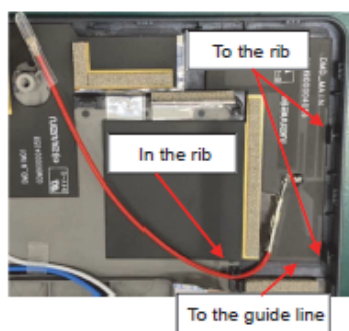
(LTE model) Stick the **MAIN ANTENNA** and **AUX ANTENNA** to the **COVER ASSY** in place and arrange the cables in place.

2. Stick the **5G ANTENNA SPACERS** and the **INSU SQUAREs** in place. Close the **INSU ANT HOLD**.

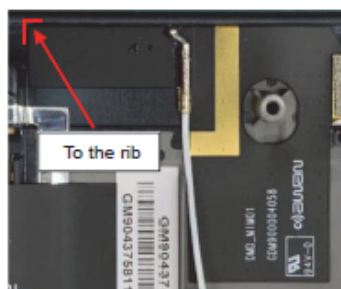
**NOTE:** Stick the ANTENNAS and arrange the cables according to the order and the steps below;

< 5G model >

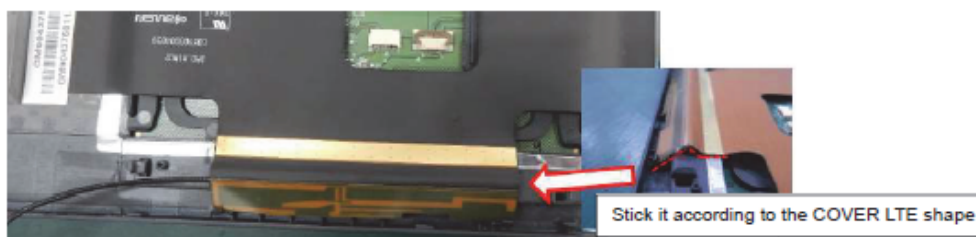
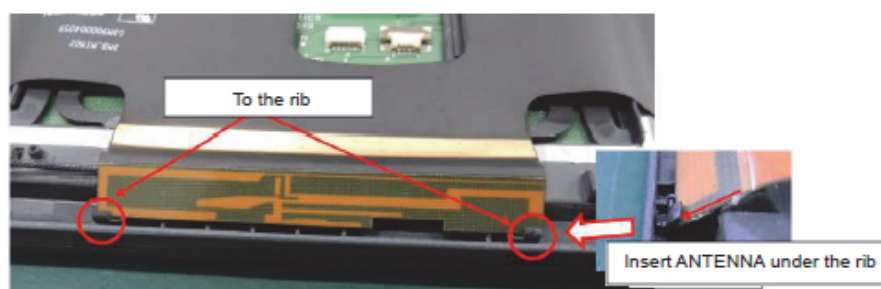
(1) MAIN ANTENNA



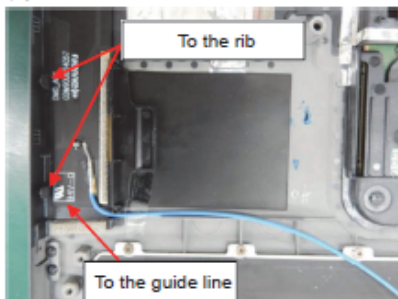
(2) MIMO1 ANTENNA



(3) MIMO2 ANTENNA

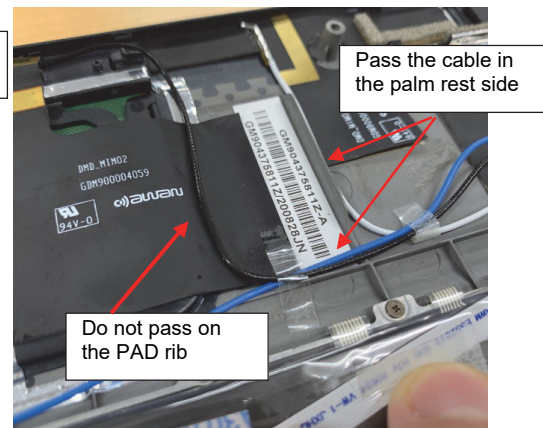
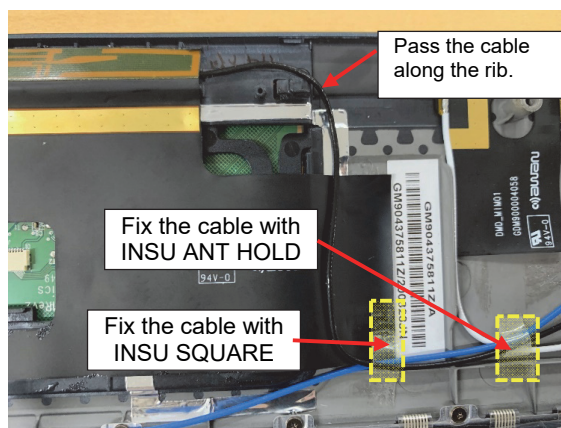
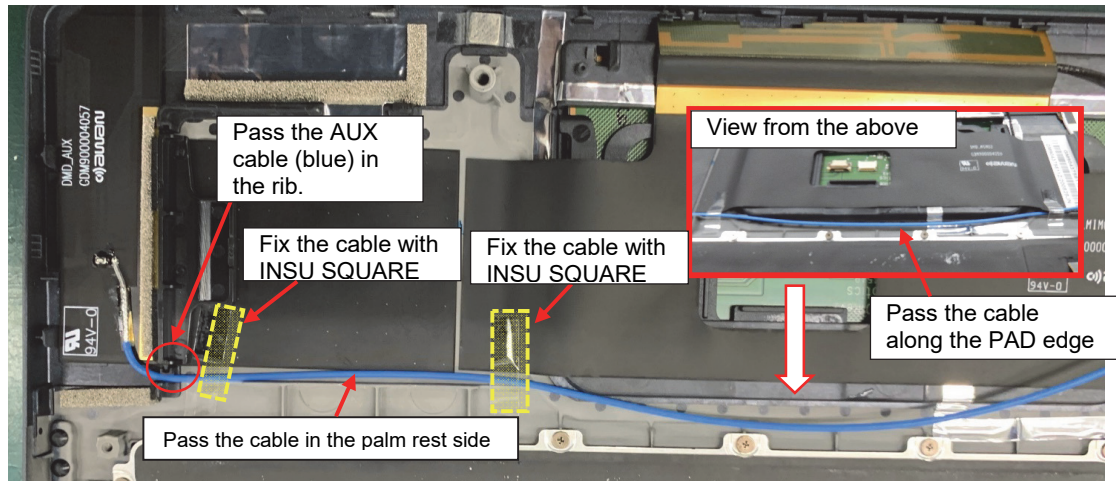


(4) AUX ANTENNA



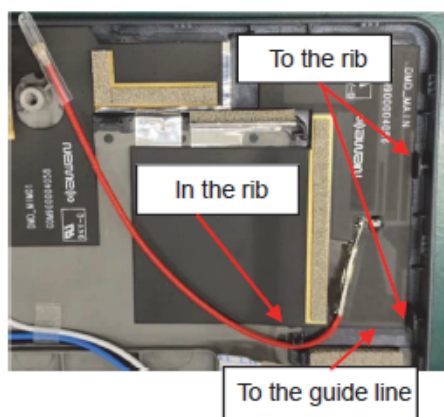


• Arrangement of ANTENNA cables

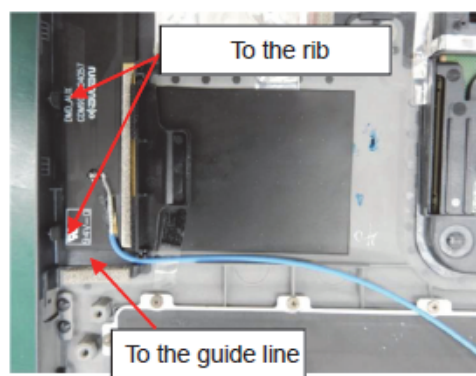


&lt; LTE model &gt;

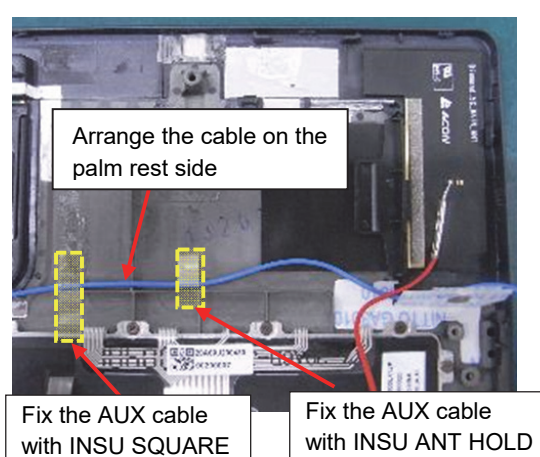
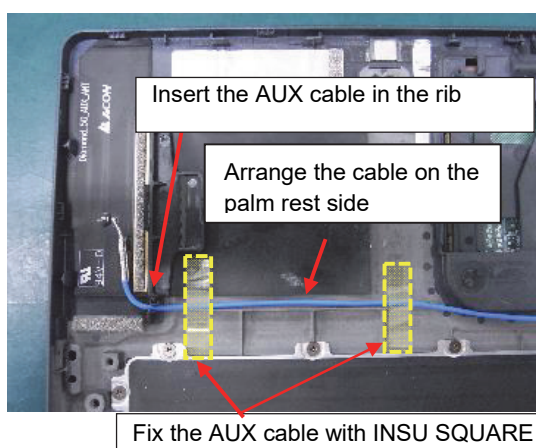
## (1) MAIN ANTENNA



## (2) AUX ANTENNA



## • Arrangement of ANTENNA cables

3. Set the **GASKET HOLDER** in place firmly.

Prepare required parts in advance, when replacing the following items.

ITEM	Parts List ITEM No	PART NAME	Quantity			
			Non 5G/LTE (PDA1*)	LTE	5G	Non 5G/LTE (PDA3*)
5G/LTE ANTENNA		MAIN ANTENNA	0	1	1	0
		AUX ANTENNA	0	1	1	0
		MIMO1 ANTENNA	0	0	1	0
		MIMO2 ANTENNA	0	0	1	0
		INSU SQUARE(111)	0	3	3	0

## 4.9 FAN

### Removing the FAN

To remove the FAN, follow the steps below and refer to Figure 4-13.

1. Disconnect the **FAN R HARNESS** from the connector **CN3380** on the SYSTEM BOARD.
2. Remove the following **screws** and the **FAN R**.
  - M2×4C S-THIN HEAD screw ×2
3. Disconnect the **FAN L HARNESS** from the connector **CN3390** on the SYSTEM BOARD.
4. Remove the following **screws** and the **FAN L**.
  - M2×4C S-THIN HEAD screw ×2

**NOTE:** Do not touch the center portion of the FANs.

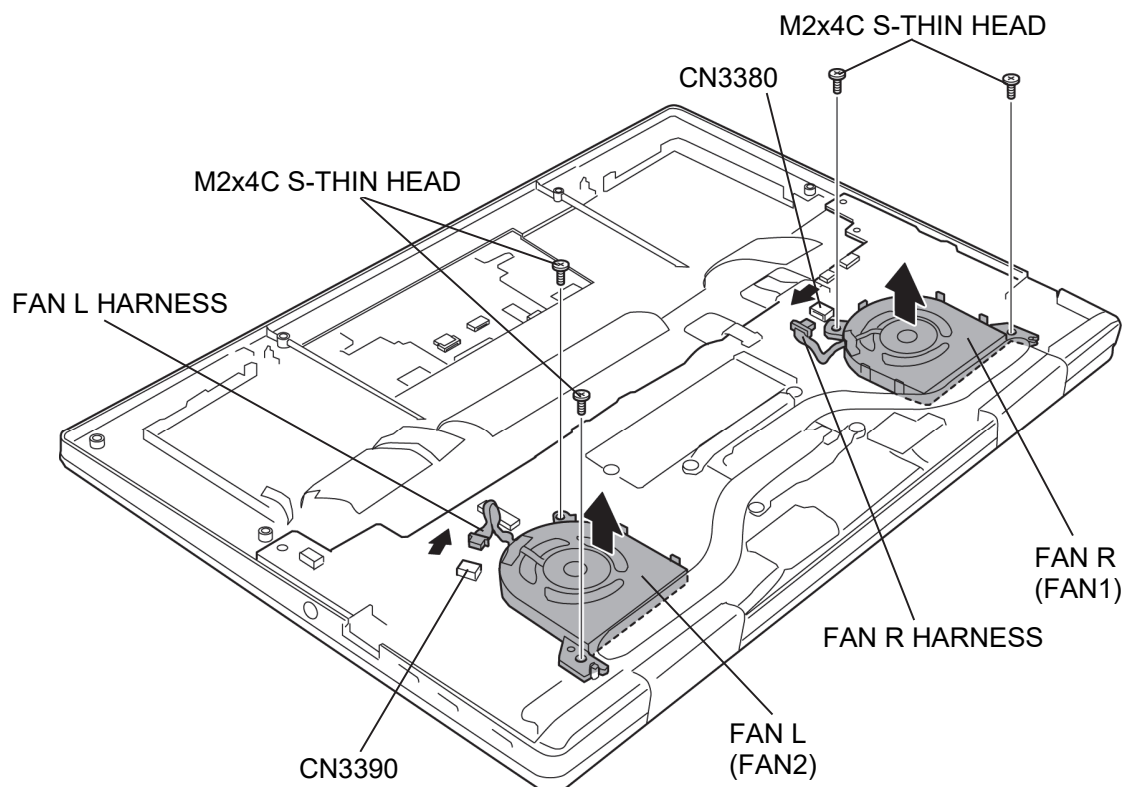


Figure 4-13 Removing the FAN

## Installing the FAN

To install the FAN, follow the steps below and refer to Figure 4-13.

4. Set the **FAN R** to the COVER ASSY and secure it with the following **screws**.
  - M2×4C S-THIN HEAD screw ×2
3. Connect the **FAN R HARNESS** to the connector **CN3380** on the SYSTEM BOARD.
4. Set the **FAN L** to the COVER ASSY and secure it with the following **screws**.
  - M2×4C S-THIN HEAD screw ×2
4. Connect the **FAN L HARNESS** to the connector **CN3390** on the SYSTEM BOARD.

## 4.10 SSD

**CAUTION:** Take care not to press on the top or bottom of the SSD. Pressure may cause data loss or damage to the device.

### Removing the SSD

To remove the SSD, follow the steps below and refer to Figure 4-14.

1. Remove the following **screw** and disconnect the **SSD** from the connector **CN1900** on the SYSTEM BOARD.

- M2×2.5 FLAT HEAD DANTUKI screw ×1

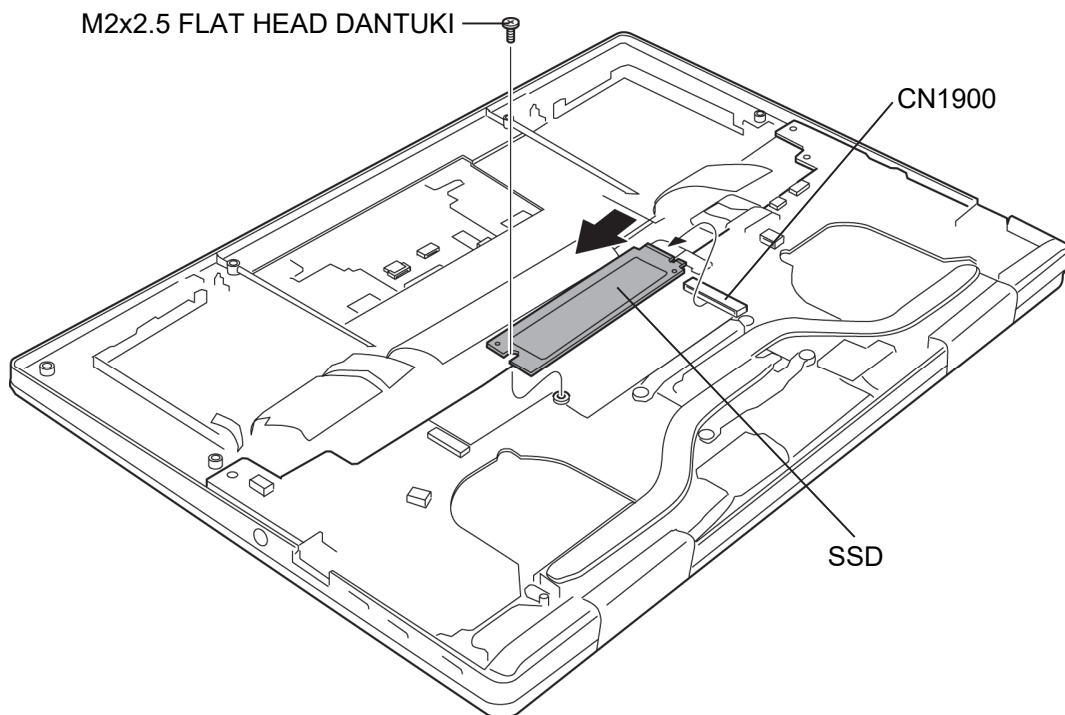


Figure 4-14 Removing the SSD

### Installing the SSD

To install the SSD, follow the steps below and refer to Figure 4-14.

1. Insert the **SSD** to the connector **CN1900** on the SYSTEM BOARD.
2. Secure the SSD with the following **screw**.
  - M2×2.5    FLAT HEAD DANTUKI screw                      ×1

## 4.11 HEAT SINK

### Removing the HEAT SINK

To remove the HEAT SINK, follow the steps below and refer to Figure 4-15.

1. Remove the following **screws** and the **HEAT SINK**.

- M2×2.3C S-THIN HEAD screw ×4

**NOTE:** When removing the HEAT SINK, be sure to remove the screws in the reverse order of the number marked on the HEAT SINK.

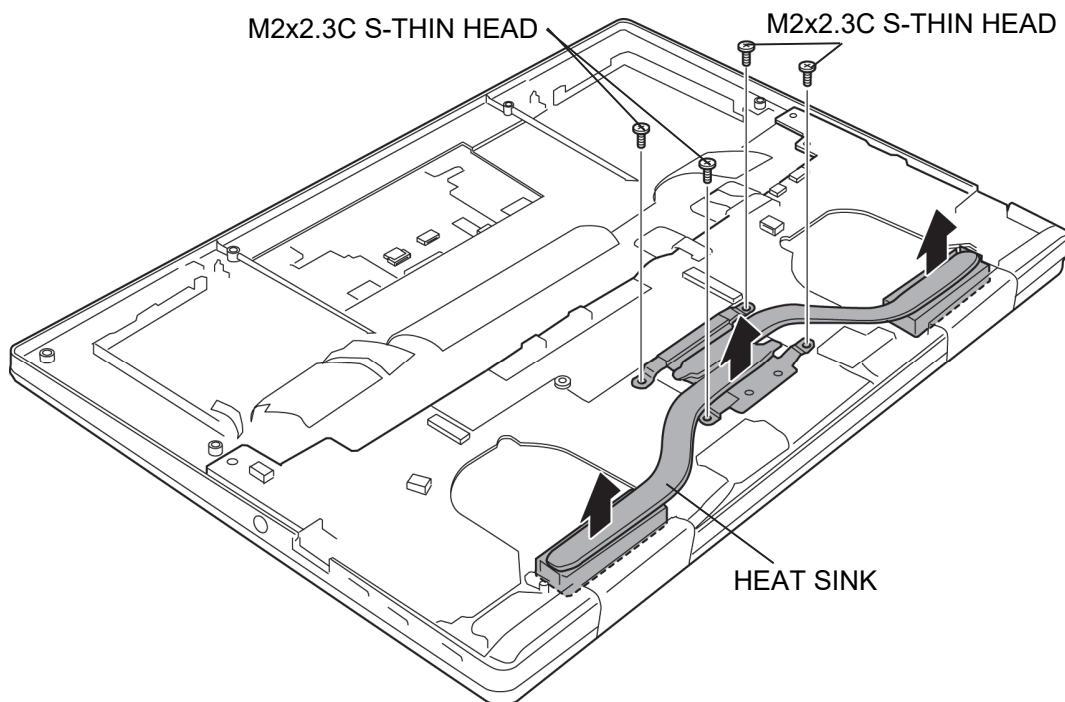


Figure 4-15 Removing the HEAT SINK



### Installing the HEAT SINK

To install the HEAT SINK, follow the steps below and refer to Figure 4-15.

1. When silicon grease is already applied to the CPU or HEAT SINK, wipe them off with a cloth in advance.
2. Apply new **silicon grease** (Shin-Etsu Chemical Co. X-23-7921-5) on the CPU using a special syringe.

**NOTE:** Apply new silicon grease as shown in the figure below.



3. Set the **HEAT SINK** in place and secure it with the following **screws**.

- M2×2.3C S-THIN HEAD screw ×4

**NOTE:** When securing the HEAT SINK, be sure to secure the screws in the order of the number marked on the HEAT SINK.



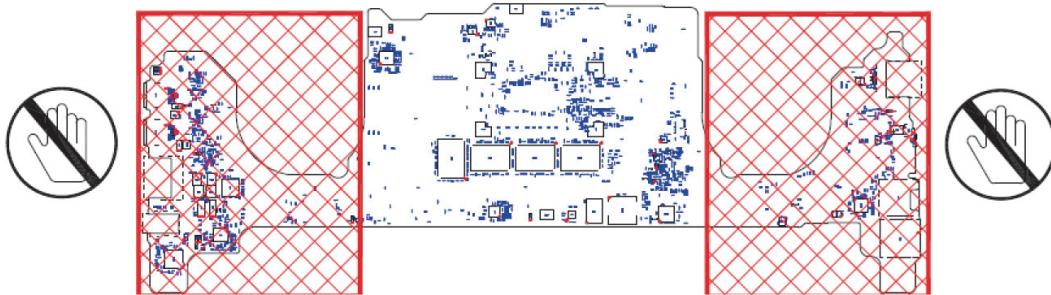
## 4.12 SYSTEM BOARD

- CAUTION:**
1. If replacing with a new SYSTEM BOARD, update the DMI information as described in Chapter 3 “Test Program”. Also update with the latest BIOS and EC/KBC as described in Appendix G and in Appendix H.
  2. When replacing the SYSTEM board with a new one, use the sensor calibration tool to adjust the sensors.
  3. When replacing the SYSTEM BOARD with a new one, the ProductKey (MBR-DPK) must be written on the SYSTEM BOARD.
  4. When removing/installing the SYSTEM BOARD, handle with both hands and do not handle with the handling prohibition area (refer to the figure below).



Handling prohibition area

FRONT



## Removing the SYSTEM BOARD

To remove the SYSTEM BOARD, follow the steps below and refer to Figure 4-16 and 4-17.

1. Peel off the **INSU SQUARE** (back light KB model). Disconnect the **KB BL FPC** (back light KB model), **KB MEMBRANE** and **LID HARNESS** from the connector **CN3270**, **CN3260** and **CN3290** on the SYSTEM BOARD.
2. Turn up the **INSUs** and disconnect the **CAMERA HARNESS** from the connector **CN9540** on the SYSTEM BOARD.
3. Disconnect the **W-LAN ANTENNA CABLEs** from the connectors on the W-LAN MODULE. (white cable from “▲MAIN 2” and black cable from “△AUX 1”)
4. Release the **lock bar** and disconnect the **LCD HARNESS** from the connector **CN5390** on the SYSTEM BOARD.
5. Disconnect the **REAR CAMERA FPC** from the connector **CN9560** on the SYSTEM BOARD.

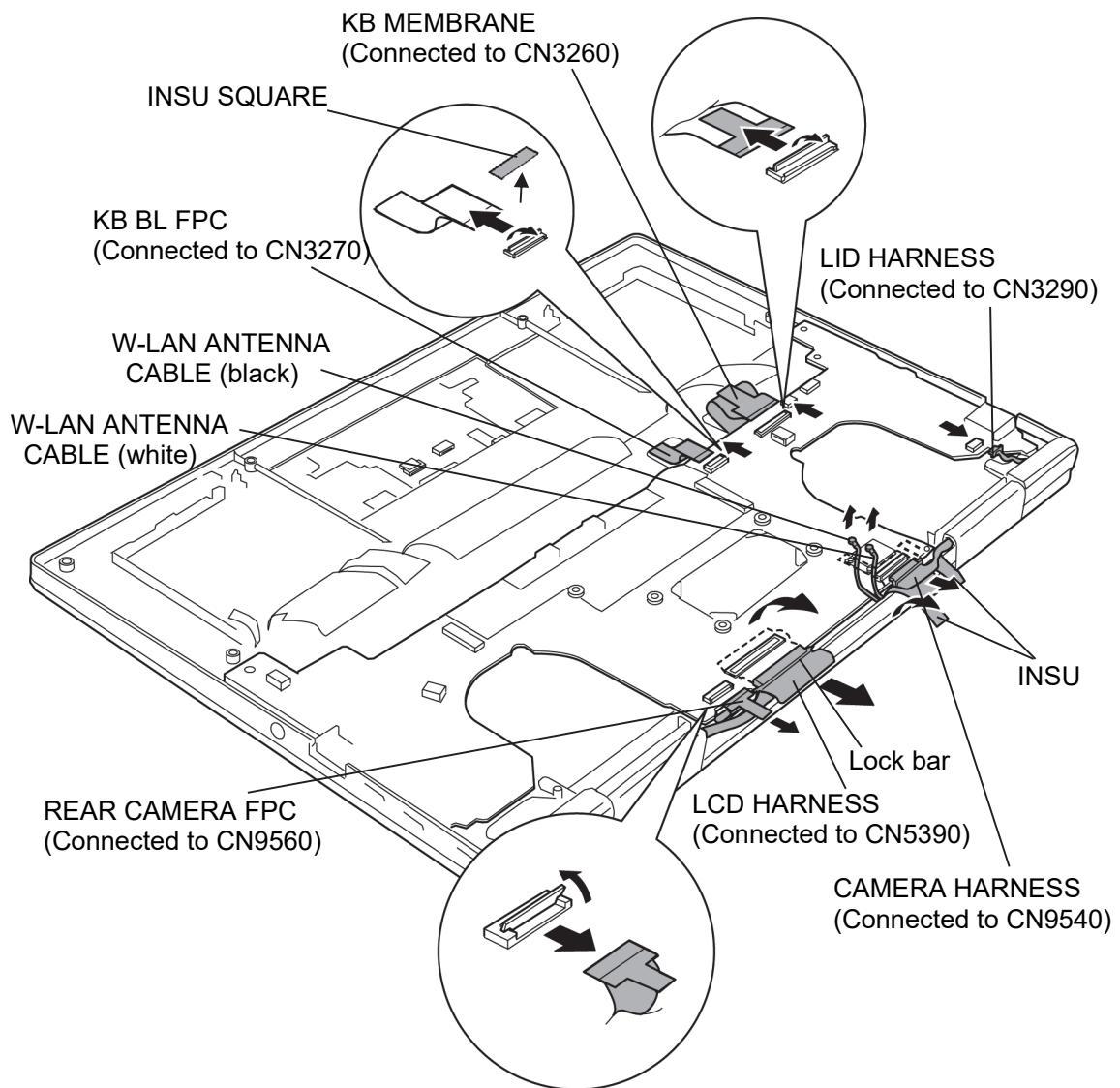


Figure 4-16 Removing the SYSTEM BOARD (1)

6. Remove the following **screws** and the **SYSTEM BOARD**.

- M2x4C S-THIN HEAD screw ×2

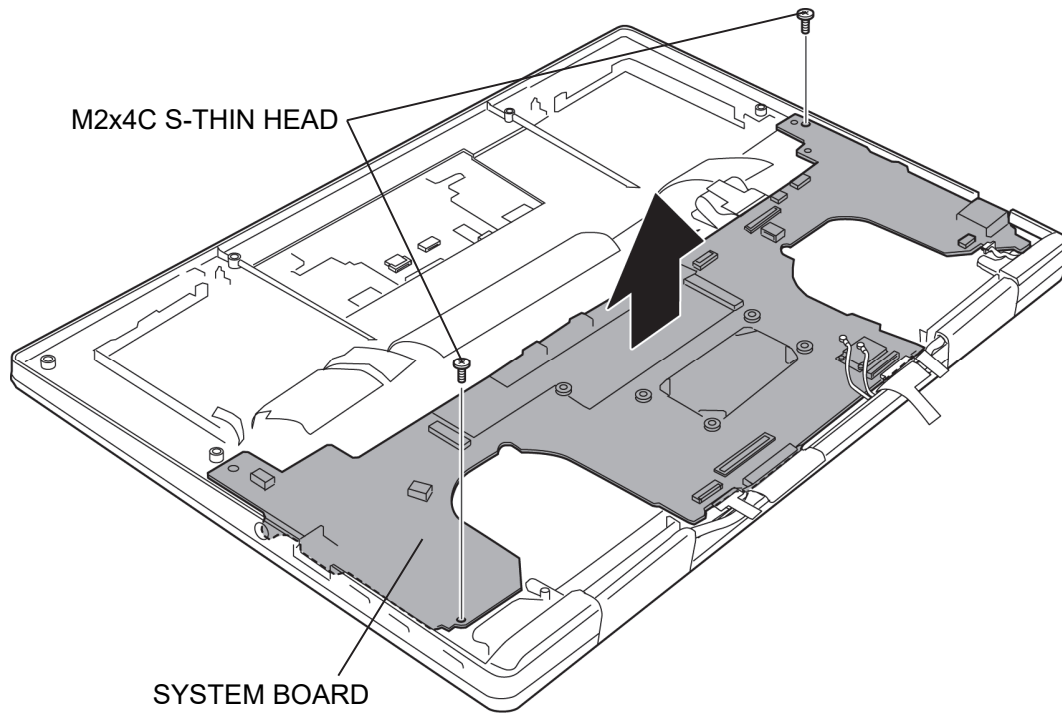


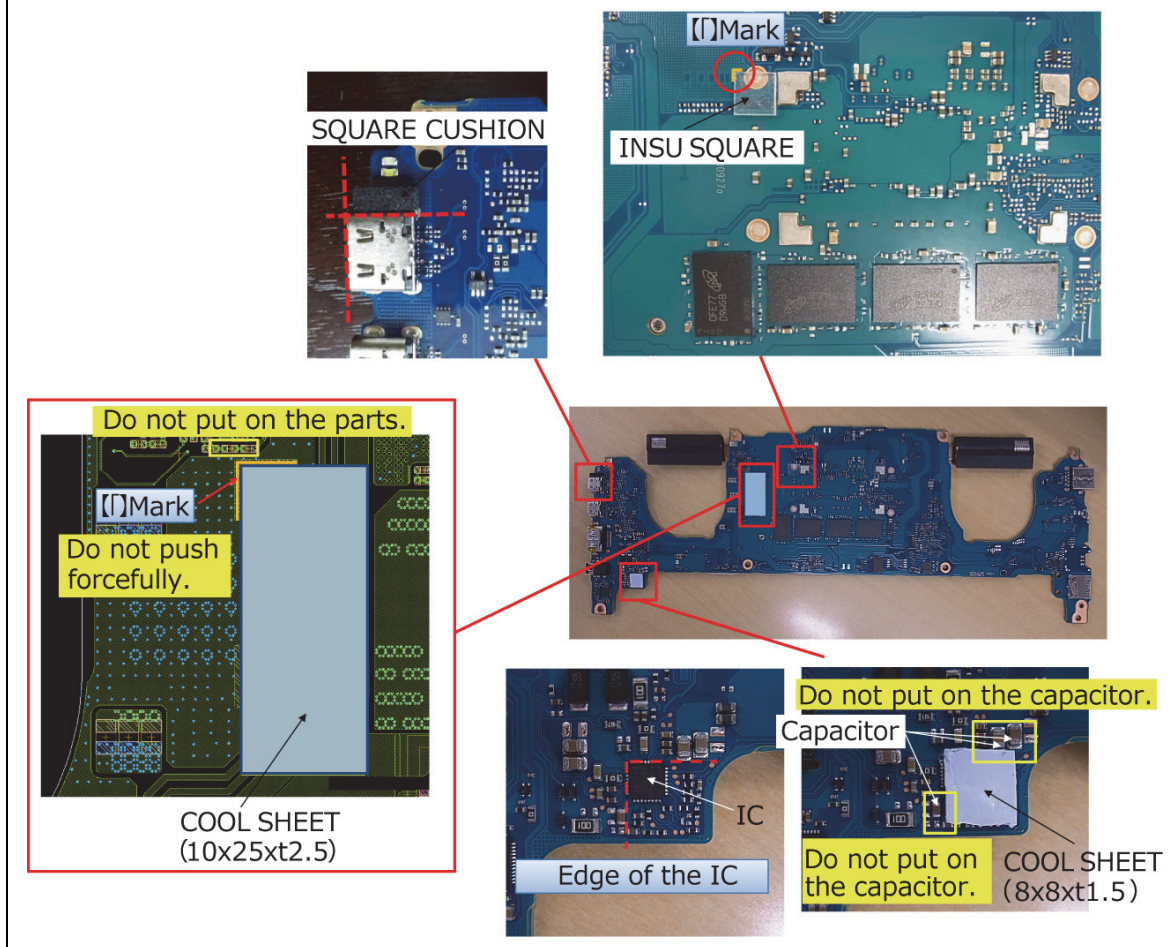
Figure 4-17 Removing the SYSTEM BOARD (2)

## Installing the SYSTEM BOARD

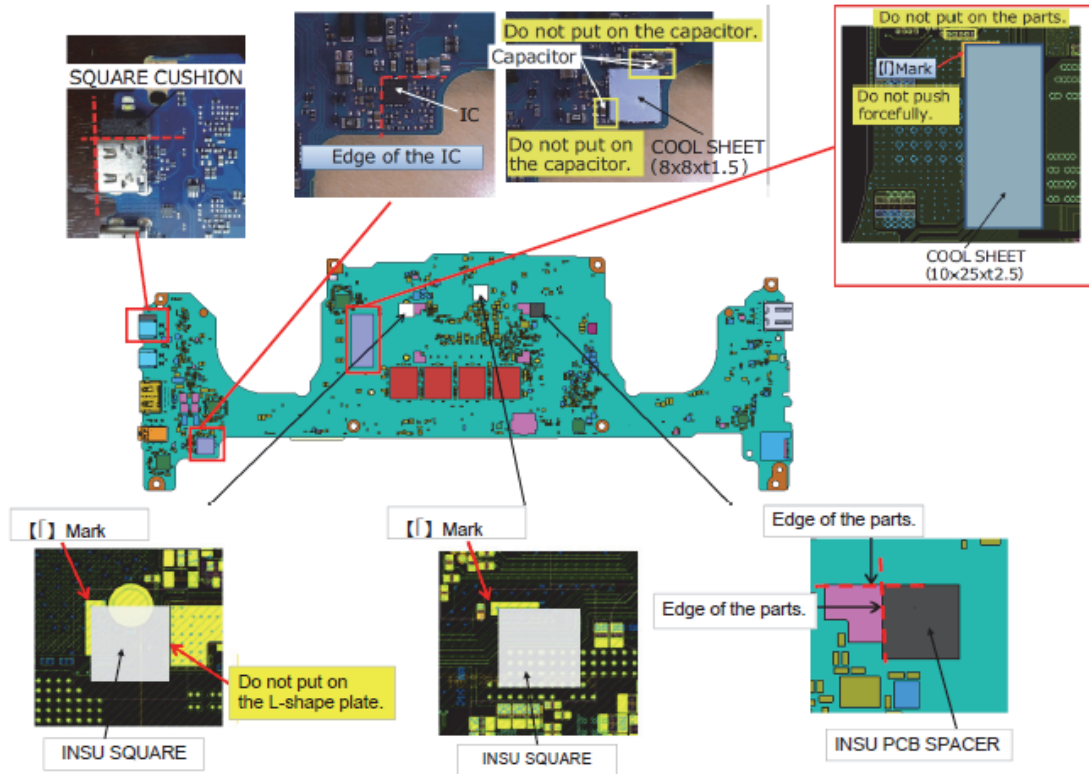
To install the SYSTEM BOARD, follow the steps below and refer to Figure 4-16 and 4-17.

### NOTE:

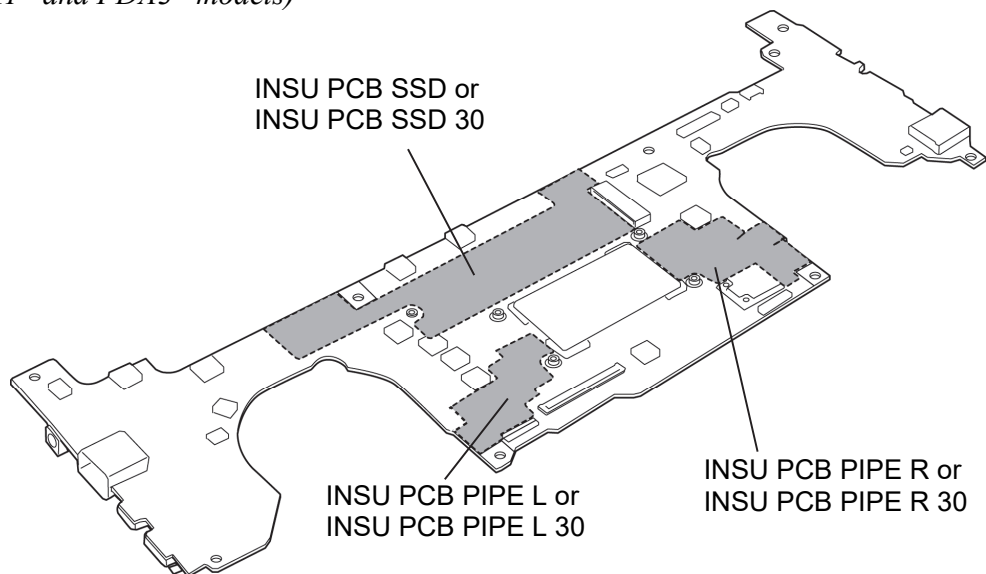
(PDA1\* model) When replacing the SYSTEM BOARD with a new one, stick the INSU SQUARE (321), COOL SHEET (H10), COOL SHEET (J10), SQUARE CUSHION (161), INSU PCB SSD, INSU PCB PIPE L and INSU PCB PIPE R to the SYSTEM BOARD in place.



(PDA3\* model) When replacing the SYSTEM BOARD with a new one, stick two INSU SQUAREs (421), INSU PCB SPACER, COOL SHEET (H10), COOL SHEET (J10), SQUARE CUSHION (161), INSU PCB SSD 30, INSU PCB PIPE L 30 and INSU PCB PIPE R 30 to the SYSTEM BOARD in place.

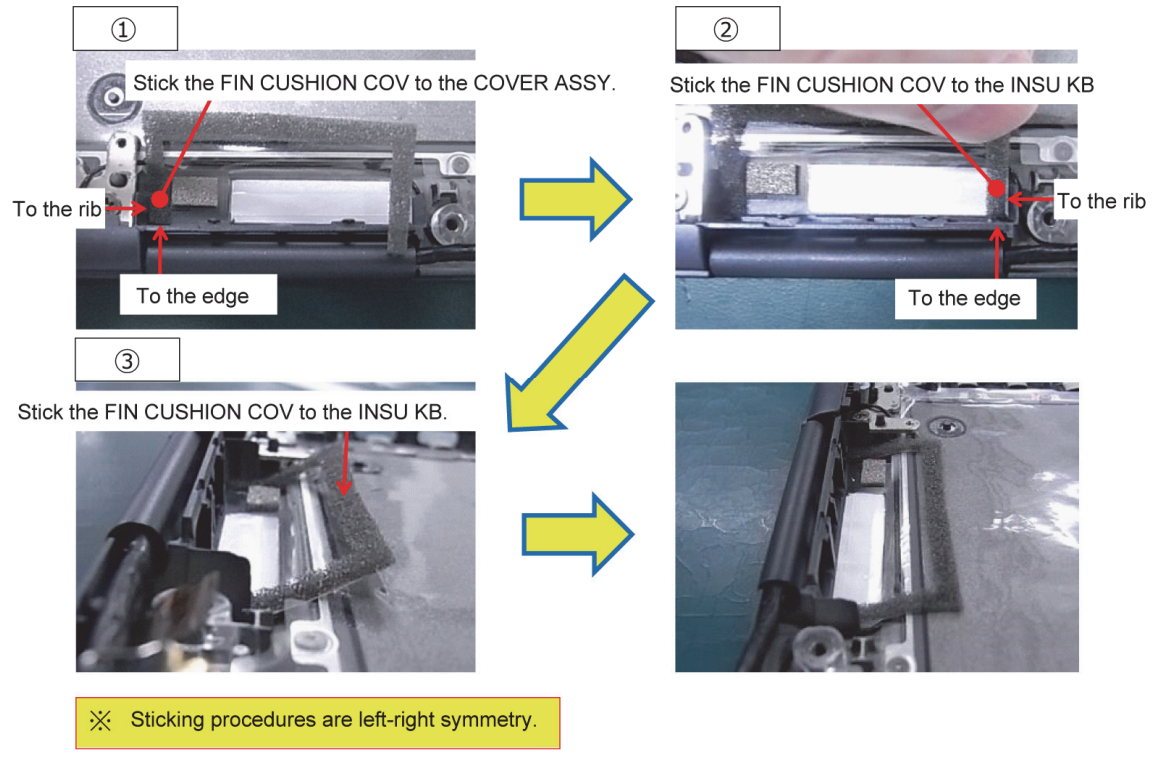


(PDA1\* and PDA3\* models)





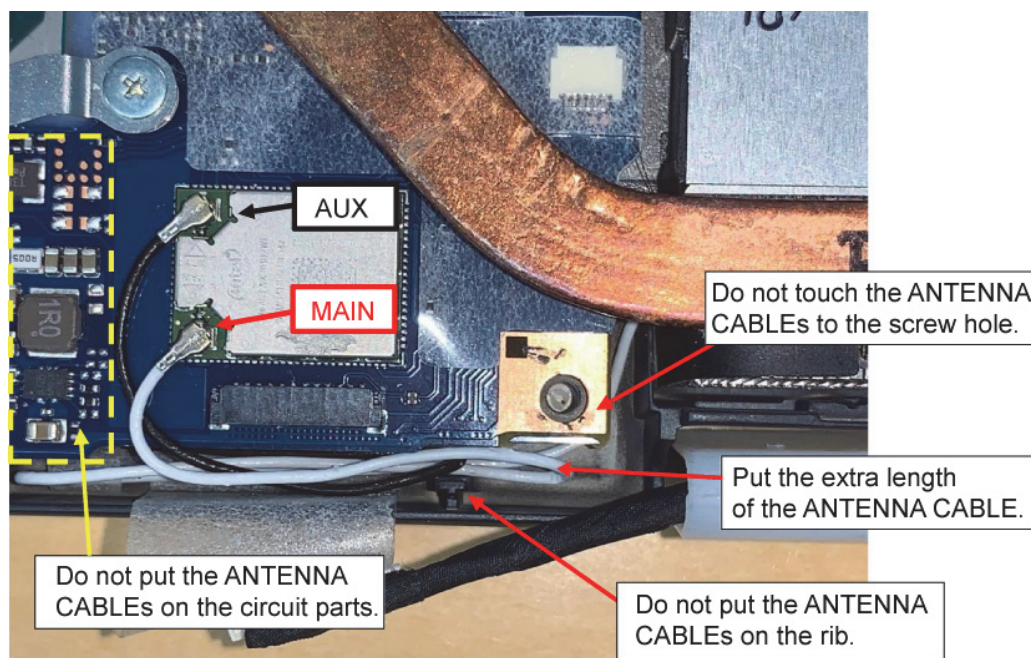
**NOTE:** When replacing the INSU KB LOW or INSU KB LOW 5G with a new one, stick new FIN CUSHION COVs to the INSU KB LOW or INSU KB LOW 5G in place before setting the SYSTEM BOARD. (Please note that “INSU KB” in the following pictures indicates INSU KB LOW or INSU KB LOW 5G.)



1. Set the **SYSTEM BOARD** to the COVER ASSY in place and secure it with the following screws.
  - M2×4C      S-THIN HEAD screw      ×2
2. Connect the **REAR CAMERA FPC** to the connector **CN9560** on the SYSTEM BOARD.
3. Connect the **LCD HARNESS** to the connector **CN5390** on the SYSTEM BOARD and fix it with the **lock bar**.

4. Connect the **W-LAN ANTENNA CABLES** to the connectors on the W-LAN MODULE. (white cable to “▲MAIN 2” and black cable to “△AUX 1”)

**NOTE:** Arrange the W-LAN ANTENNA CABLES as shown in the figure below.



5. Connect the **CAMERA HARNESS** to the connector **CN9540** on the SYSTEM BOARD.
6. Close the **INSU**.
7. Connect the **KB BL FPC** (back light KB model) and stick the **INSU SQUARE** (back light KB model) on it. Connect **KB MEMBRANE** and **LID HARNESS** to the connector **CN3270**, **CN3260** and **CN3290** on the SYSTEM BOARD.

Prepare required parts in advance, when replacing the following items.

ITEM	Parts List ITEM No	PART NAME	Quantity			
			Non 5G/LTE (PDA1*)	LTE	5G	Non 5G/LTE (PDA3*)
SYSTEM BOARD (MOTHER BOARD ASSY)	01	MOTHER BOARD ASSY	1	1	1	1
	68	SQUARE CUSHION (161)	1	1	1	1
	66	COOL SHEET(H10)	1	1	1	1
	67	COOL SHEET(J10)	1	1	1	1



## 4.13 CLICK PAD

### Removing the CLICK PAD

To remove the CLICK PAD, follow the steps below and refer to Figure 4-18.

**NOTE:** (5G model) Remove MIMO2 ANTENNA first before removing the CLICK PAD.

Rev.03

**NOTE:** (Fingerprint sensor model) Before replacing the CLICK PAD, confirm that the user has deleted all the registered fingerprint data. If any fingerprint data remains, OS recovery will be needed after the replacement to clear the data inconsistency.

1. Peel off the **AL TAPE**.
2. Peel off the **CLICK PAD** from the COVER ASSY.

**NOTE:** Do not reuse the removed AL TAPE and CLICK PAD. Be sure to use new ones.

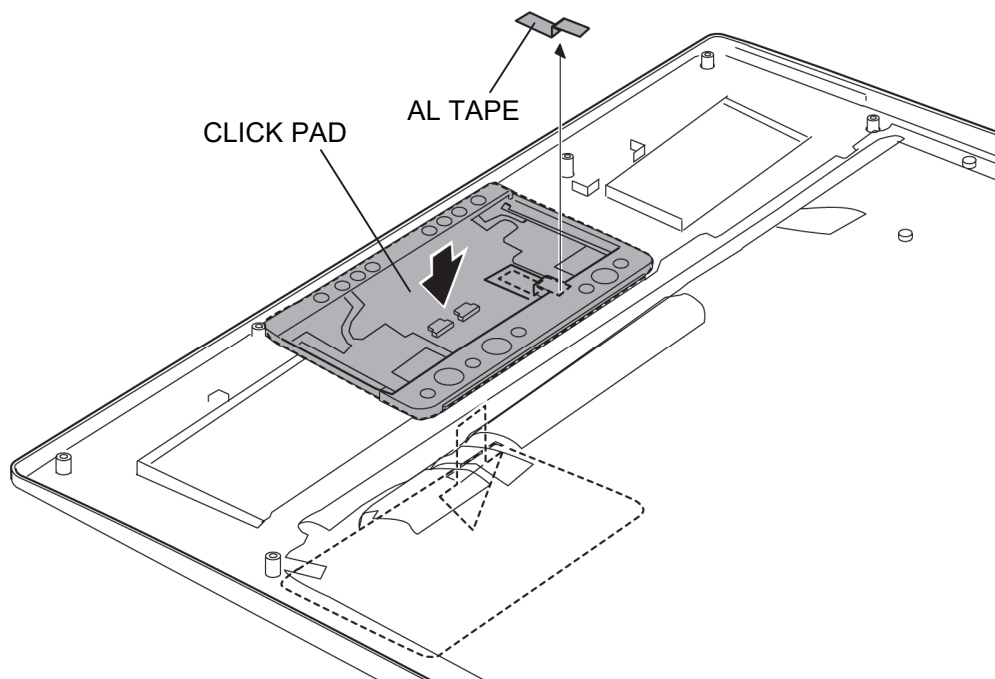


Figure 4-18 Removing the CLICK PAD

## Installing the CLICK PAD

To install the CLICK PAD, follow the steps below and refer to Figure 4-18.

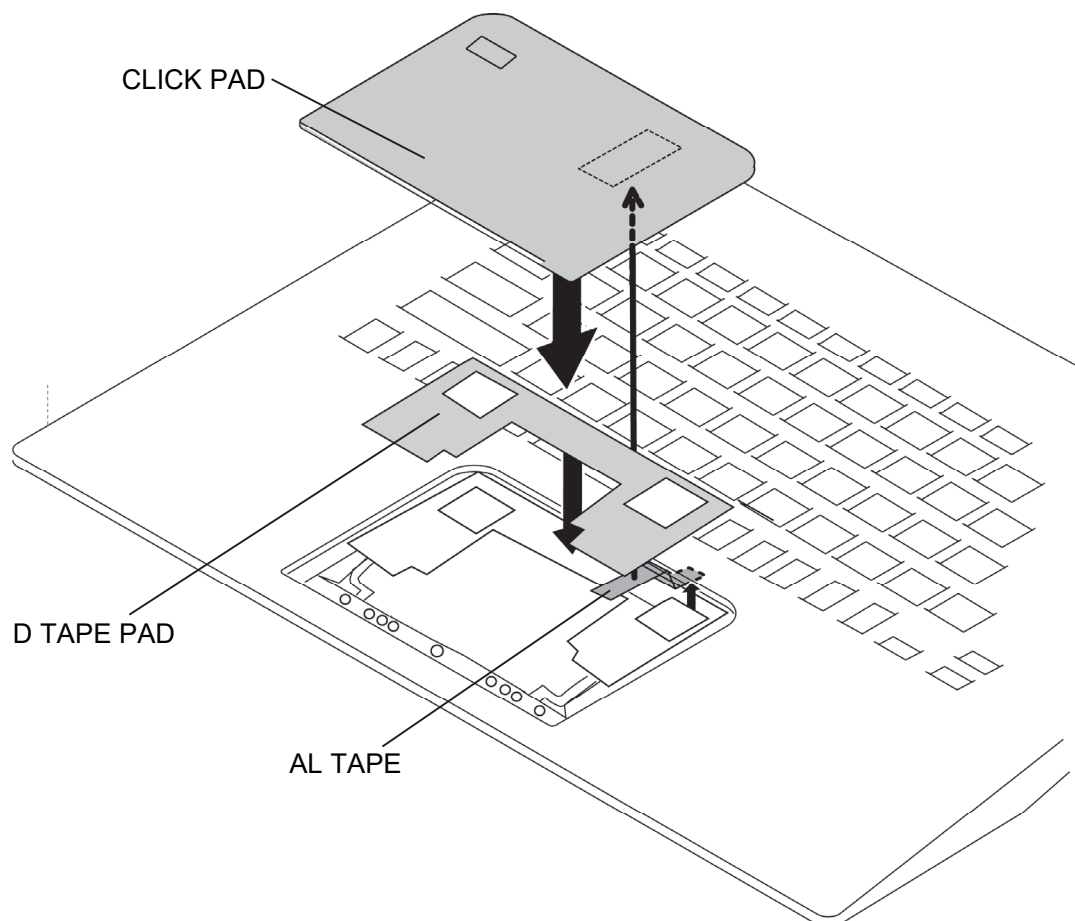
Rev.03

**NOTE:** (Fingerprint sensor model) When replacing the CLICK PAD, be sure to use the same vendor's new one.

1. Stick a new **CLICK PAD** to the COVER ASSY.
2. Turn over the COVER ASSY and stick a new **AL TAPE** in place.

**NOTE:**

1. When replacing the CLICK PAD with a new one, replace the D TAPE PAD on the COVER ASSY with a new one in place.



2. (5G model) Stick a new MIMO2 ANTENNA in place.

**NOTE:** (Fingerprint sensor model) After replacing the CLICK PAD, be sure to run the test program for maintenance described in Chapter 3.

Prepare required parts in advance, when replacing the following items.

ITEM	Parts List ITEM No	PART NAME	Quantity			
			Non 5G/LTE (PDA1*)	LTE	5G	Non 5G/LTE (PDA3*)
CLICK PAD		CLICK PAD	1	1	1	1
	77	AL TAPE	1	1	1	1
		D TAPE PAD	1	1	1	1
		MIMO2 ANTENNA	0	0	1	0

## 4.14 W-LAN ANTENNA

### Removing the W-LAN ANTENNA

To remove the W-LAN ANTENNA, follow the steps below and refer to Figure 4-19 and 4-20.

1. Open the **INSUs** and release the **W-LAN ANTENNA CABLEs**.
2. Remove the following **screw** to remove the **CORNER CAP R** (W-LAN MAIN ANTENNA (white cable)).
  - M2x4C S-THIN HEAD screw ×1
3. Peel off the **W-LAN MAIN ANTENNA** (white cable) from the CORNER CAP R.

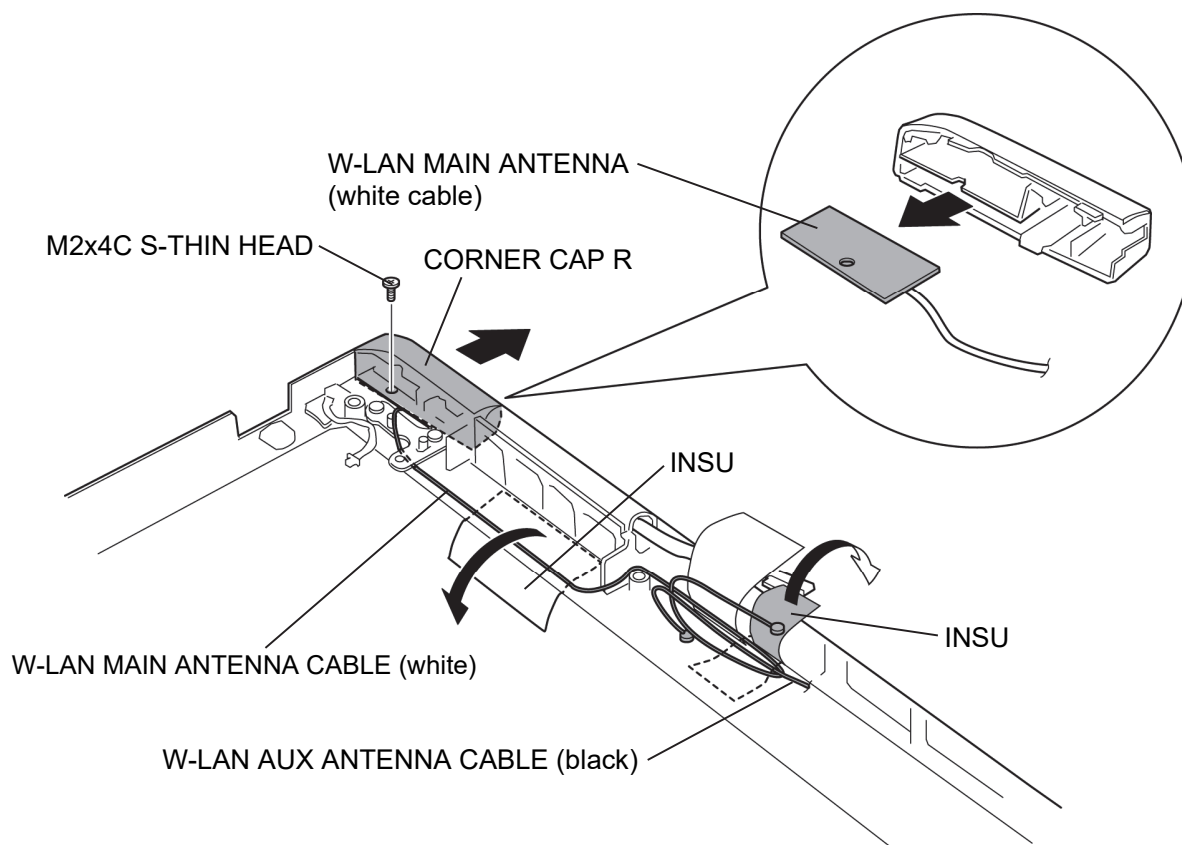


Figure 4-19 Removing the W-LAN ANTENNA (1)

4. Open the **INSUs** and release the **W-LAN AUX ANTENNA CABLE** (black).
5. Remove the following **screw** to remove the **CORNER CAP L** (W-LAN AUX ANTENNA (black cable)).
  - M2×4C      S-THIN HEAD screw      ×1
6. Peel off the **W-LAN AUX ANTENNA** (black cable) from the **CORNER CAP L**.

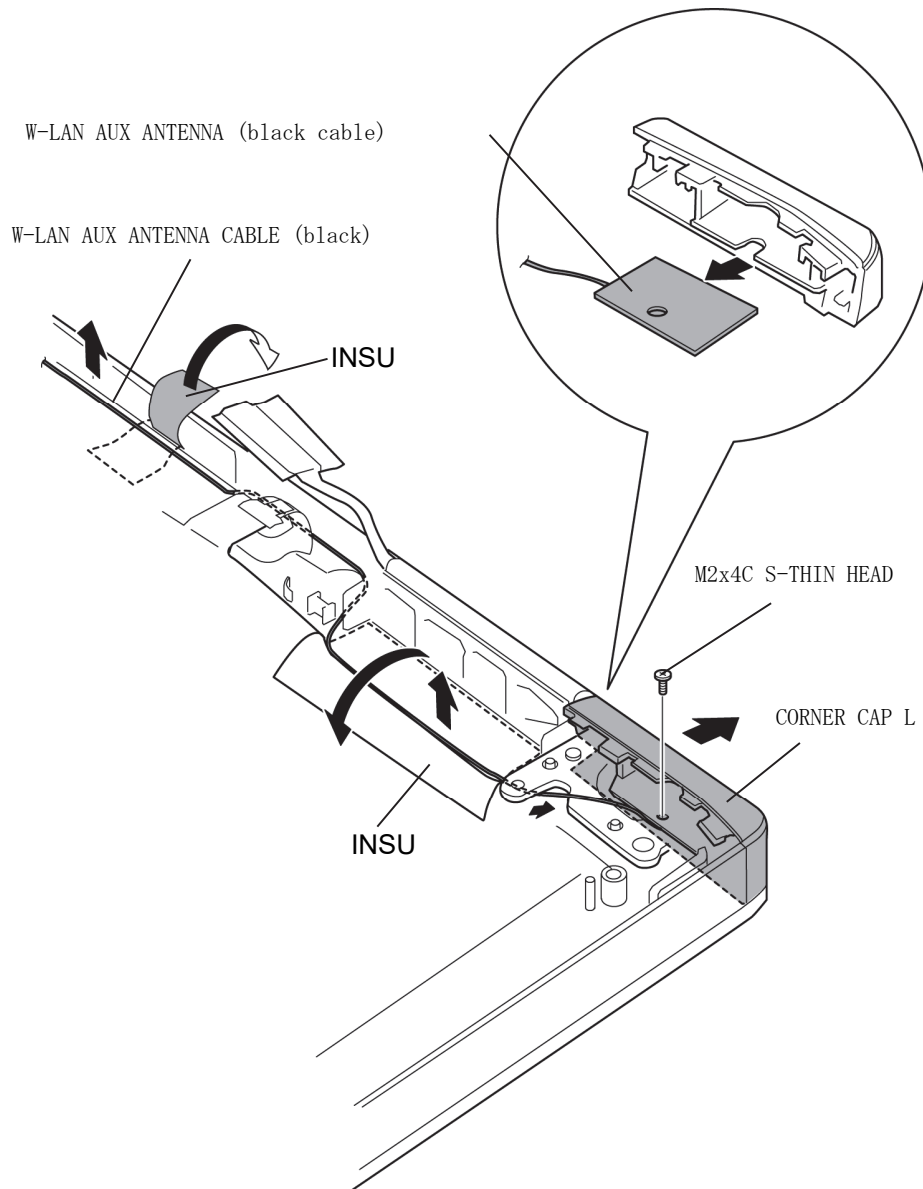


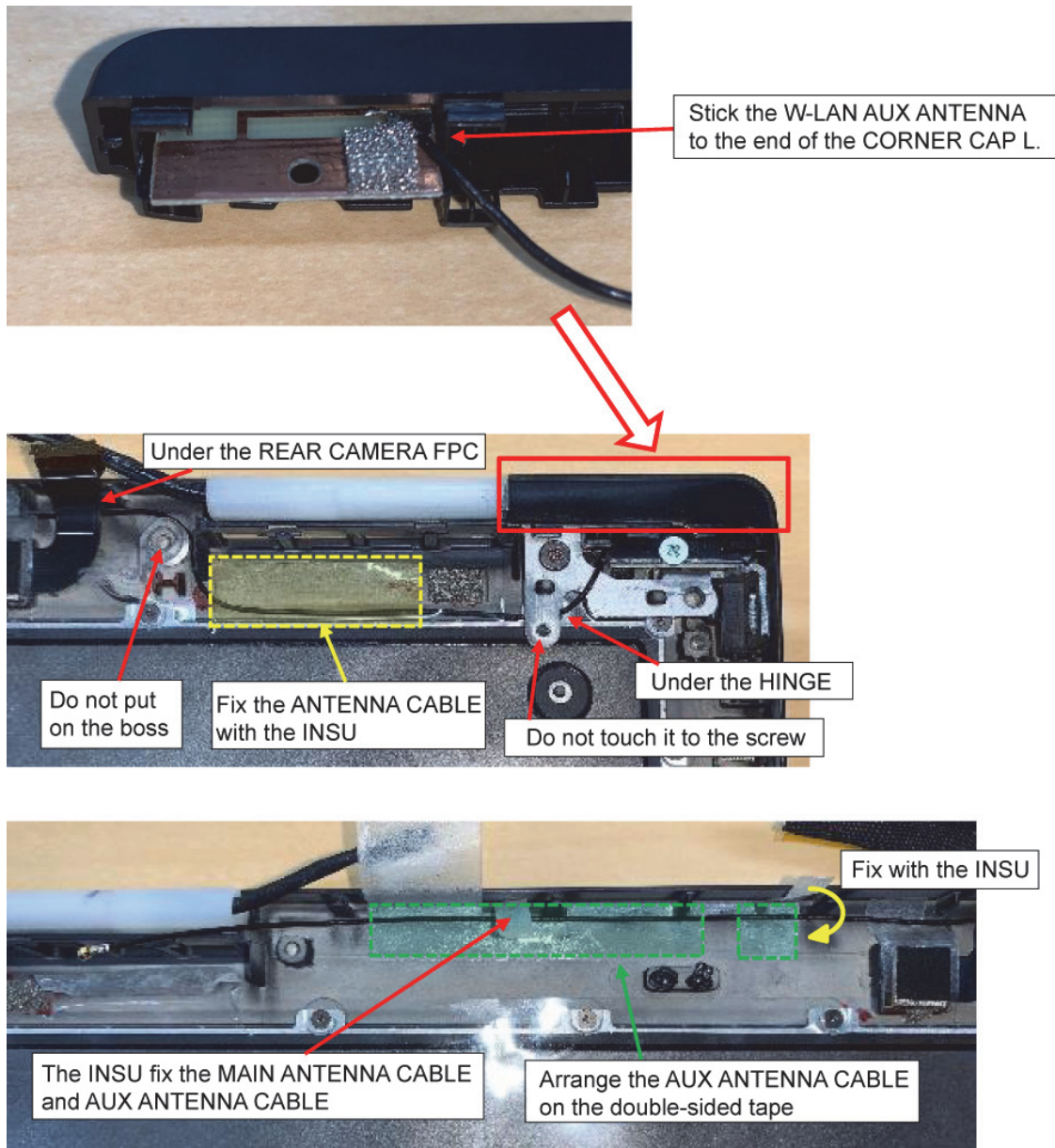
Figure 4-20 Removing the W-LAN ANTENNA (2)

**Installing the W-LAN ANTENNA**

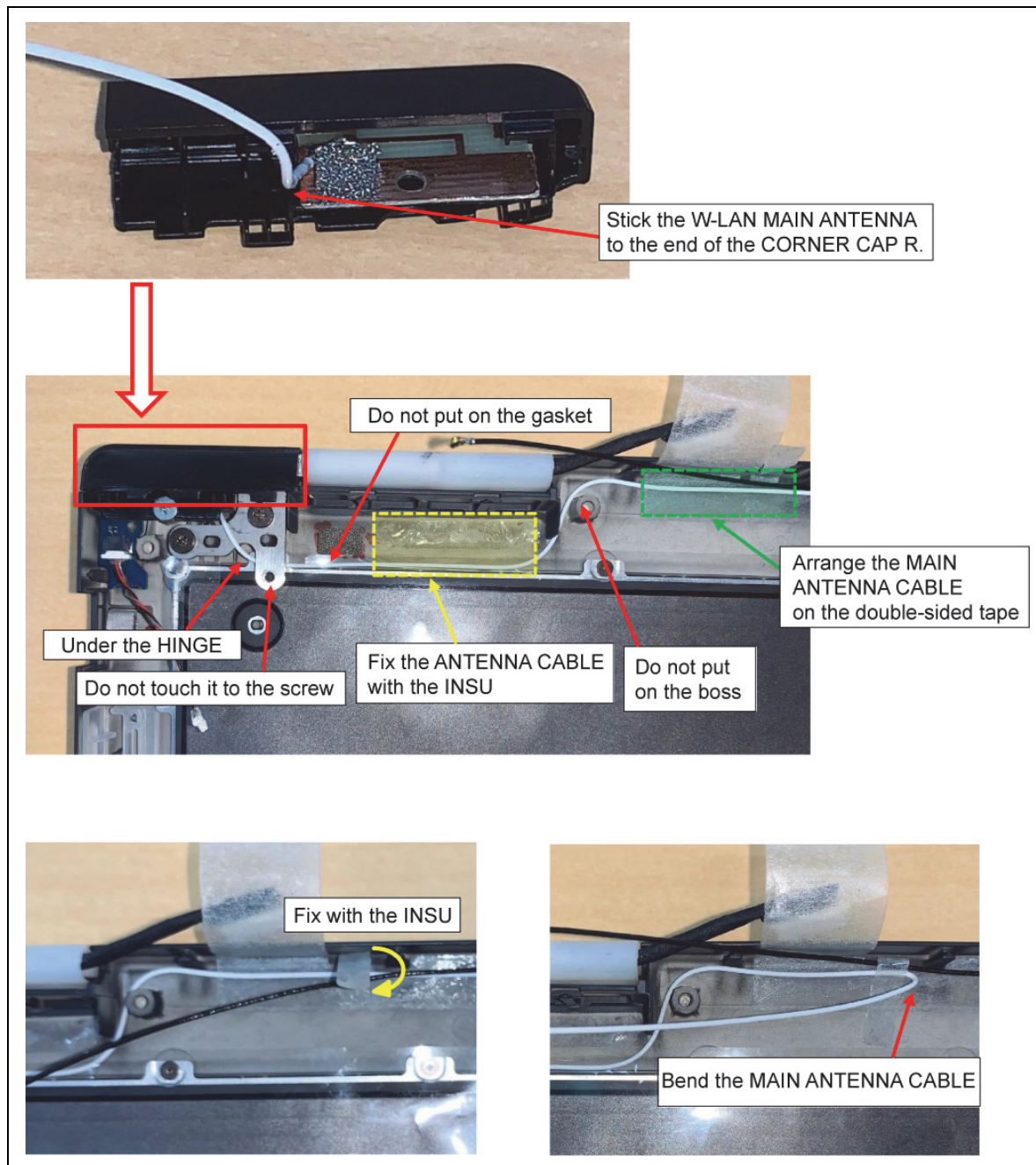
To install the W-LAN ANTENNA, follow the steps below and refer to Figure 4-19 and 4-20.

1. Stick the **W-LAN AUX ANTENNA** (black cable) to the **CORNER CAP L**.
2. Set the **CORNER CAP L** (W-LAN AUX ANTENNA (black cable)) to the COVER ASSY and secure it with the following **screw**.
  - M2×4C      S-THIN HEAD screw      ×1
3. Stick the **W-LAN MAIN ANTENNA** (white cable) to the **CORNER CAP R**.
4. Set the **CORNER CAP R** (W-LAN MAIN ANTENNA (white cable)) to the COVER ASSY and secure it with the following **screw**.
  - M2×4C      S-THIN HEAD screw      ×1
5. Arrange the **W-LAN ANTENNA CABLEs** in place.
6. Close the **INSUs**.

**NOTE:** Arrange the W-LAN ANTENNA CABLEs as shown in the figure below.









## 4.15 LID BOARD

### Removing the LID BOARD

To remove the LID BOARD, follow the steps below and refer to Figure 4-21.

1. Peel off the **LID BOARD** from the **guides** of the COVER ASSY.
2. Disconnect the **LID HARNESS** from the connector **CN3291** on the LID BOARD.

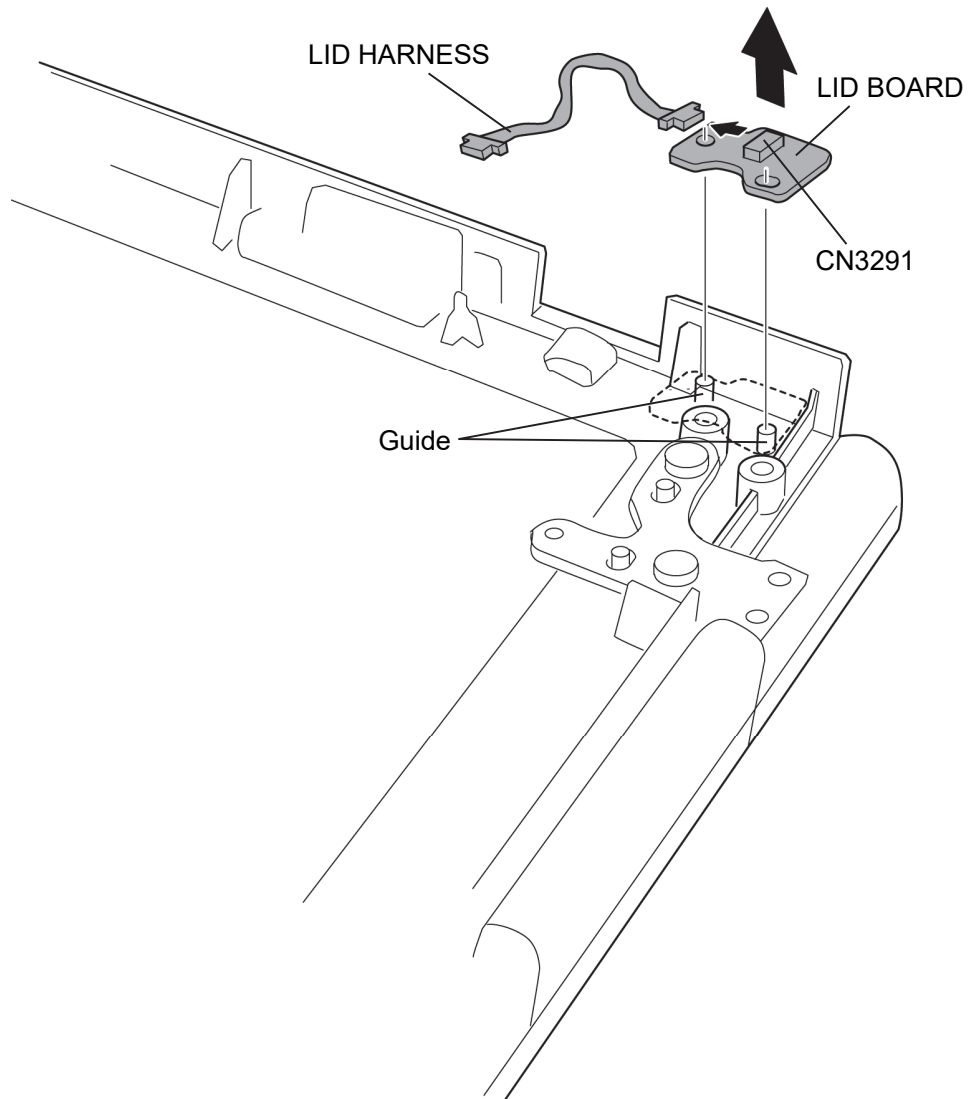
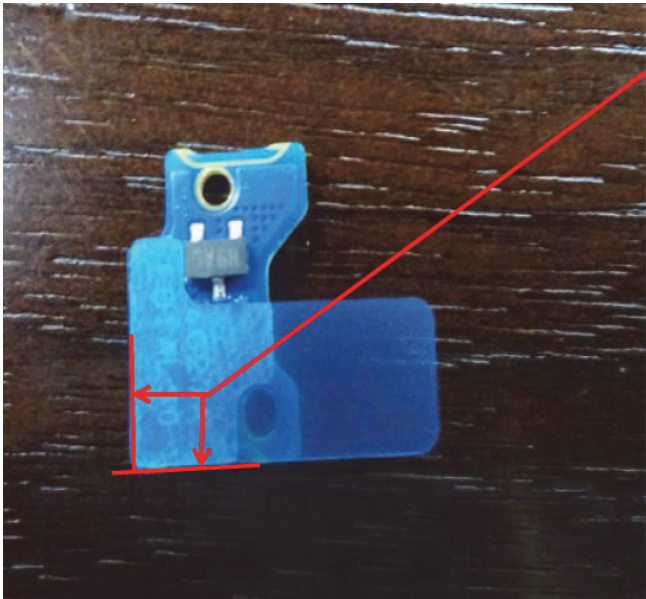


Figure 4-21 Removing the LID BOARD

Installing the LID BOARD

To install the LID BOARD, follow the steps below and refer to Figure 4-21.

**NOTE:** When replacing the LID BOARD with a new one, replace the D TAPE PCB LID on the LID BOARD with a new one in place.



- 1. Connect the **LID HARNESS** to the connector **CN3291** on the LID BOARD.
- 2. Set the **LID BOARD** to the **guides** of the COVER ASSY.

Prepare required parts in advance, when replacing the following items.

ITEM	Parts List ITEM No	PART NAME	Quantity			
			Non 5G/LTE (PDA1*)	LTE	5G	Non 5G/LTE (PDA3*)
LID BOARD	82	LID BOARD	1	1	1	1
	64	D TAPE PCB LID	1	1	1	1

## 4.16 REAR CAMERA MODULE

### Removing the REAR CAMERA MODULE

To remove the REAR CAMERA MODULE, follow the steps below and refer to Figure 4-22.

1. Open the **INSU**.
2. Remove the **REAR CAMERA MODULE** from the slot of the COVER ASSY.

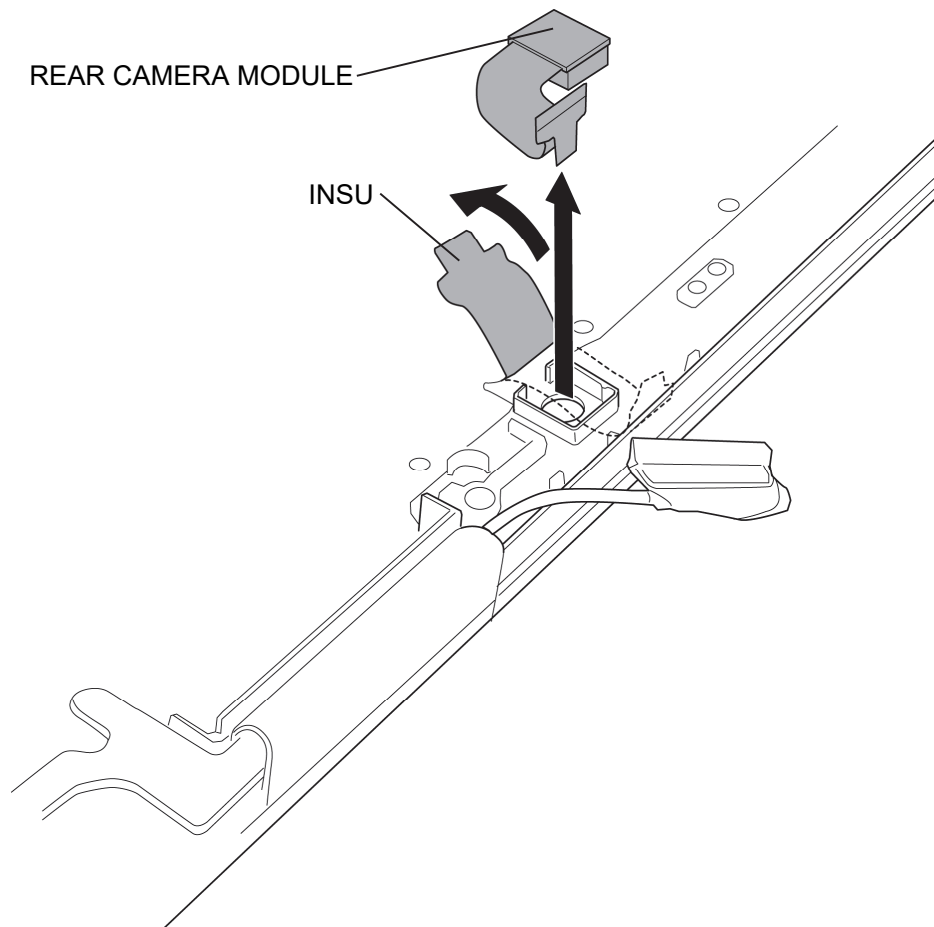


Figure 4-22 Removing the REAR CAMERA MODULE

**Installing the REAR CAMERA MODULE**

To install the REAR CAMERA MODULE, follow the steps below and refer to Figure 4-22.

1. Set the **REAR CAMERA MODULE** to slot of the COVER ASSY.
2. Close the **INSU**.

## 4.17 LCD FAT ASSY/COVER ASSY

### Removing the LCD FAT ASSY/COVER ASSY

To remove the LCD FAT ASSY/COVER ASSY, follow the steps below and refer to Figure 4-23.

1. Remove the following **screws** and separate the **LCD FAT ASSY** and **COVER ASSY**.

- M2.5×4B FLAT HEAD screw ×3

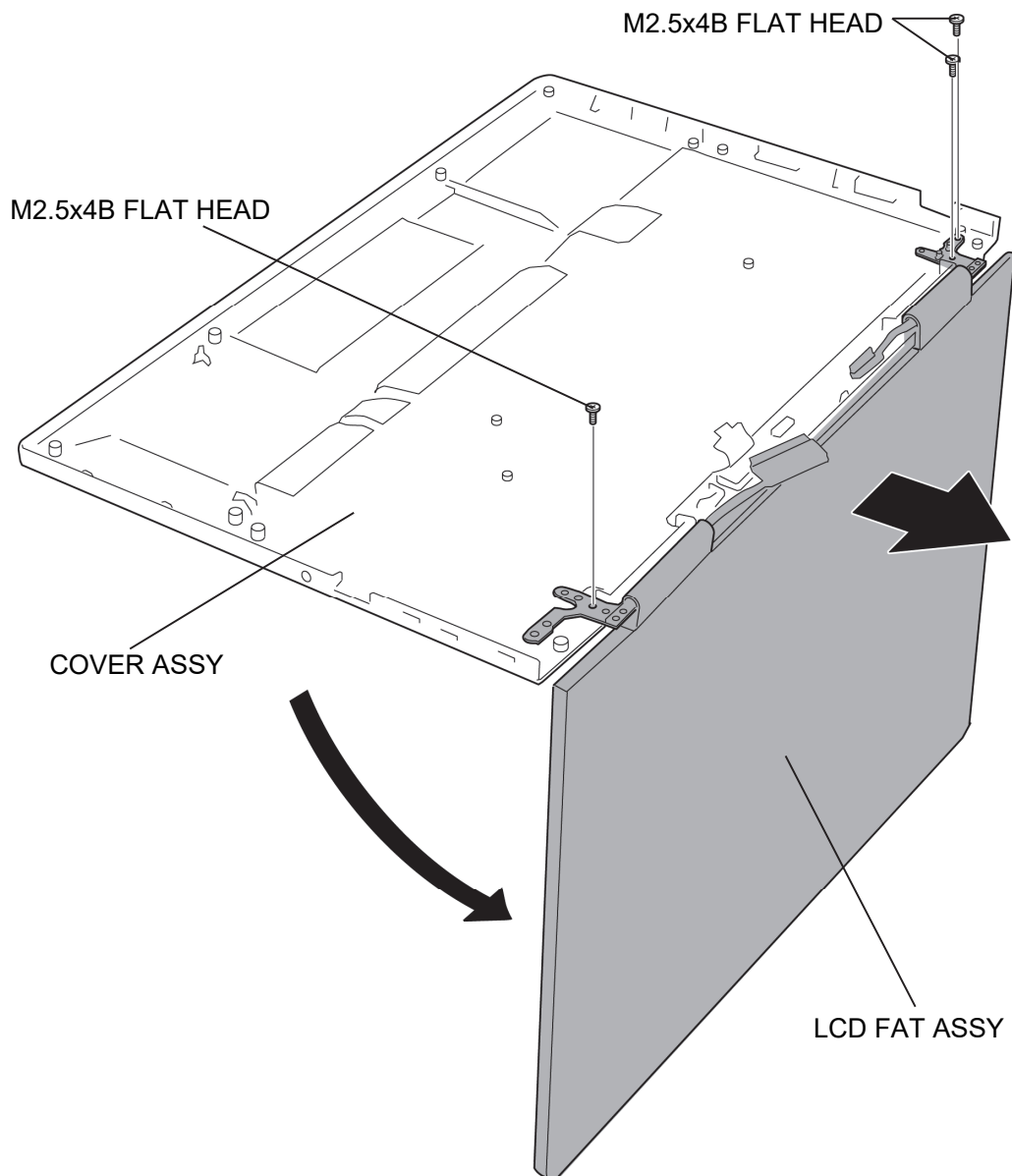
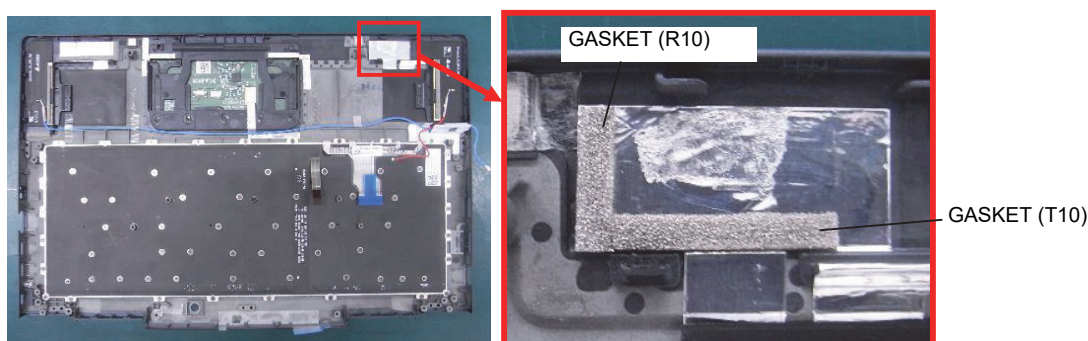


Figure 4-23 Removing the LCD FAT ASSY/COVER ASSY

### Installing the LCD FAT ASSY/COVER ASSY

To install the LCD FAT ASSY/COVER ASSY, follow the steps below and refer to Figure 4-23.

**NOTE:** (LTE model) Stick the GASKETs in place beforehand.



1. Set the **LCD FAT ASSY** to the **COVER ASSY** and secure it with the following screws.

- M2.5×4B FLAT HEAD screw ×3

Prepare the required parts in advance, when replacing the following items.

ITEM	Parts List ITEM No	PART NAME	Quantity			
			Non 5G/LTE (PDA1*)	LTE	5G	Non 5G/LTE (PDA3*)
COVER ASSY	60	COVER ASSY (for PDA1*)	1	0	0	0
		COVER ASSY (for PDA3*) (Note)	0	0	0	1
		COVER LTE ASSY	0	1	1	0
	77	AL TAPE	1	1	1	1
		CLICK PAD	1	1	1	1
		GASKET(R10)	0	1	0	0
		GASKET(T10)	0	1	0	0
	61	INSU KB LOW	1	0	0	1
		INSU KB LOW 5G	0	1	1	0
		FIN CUSHION COV	2	2	2	2

(Note) COVER ASSY (for PDA3\*) will be used to Non 5G/LTE (PDA1\*) model.

## 4.18 KEYBOARD

### Removing the KEYBOARD

To remove the KEYBOARD, follow the steps below and refer to Figure 4-24 and 4-25.

1. Peel off the **INSU KB LOW** or **INSU KB LOW 5G**.

**NOTE:** Do not reuse the removed **INSU KB LOW** or **INSU KB LOW 5G**. Be sure to use a new one.

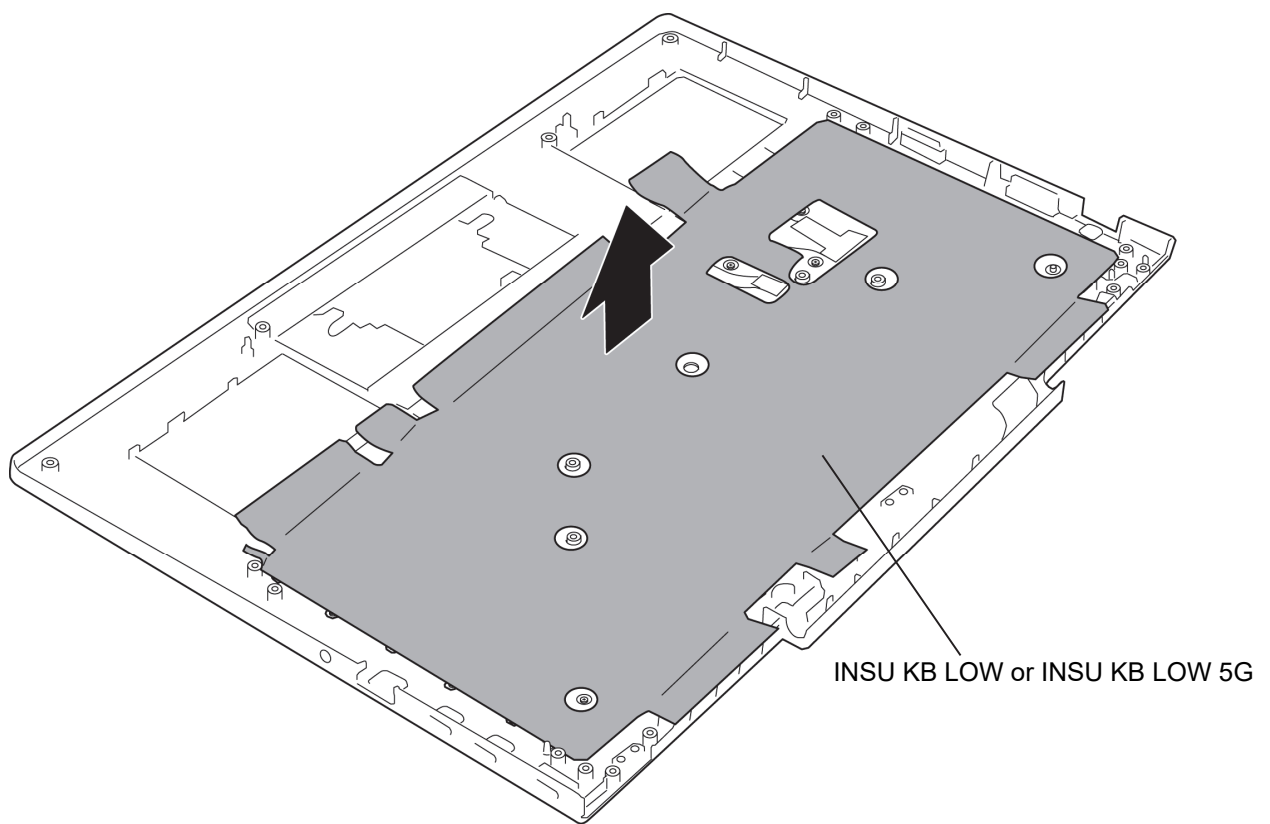


Figure 4-24 Removing the KEYBOARD (1)

2. Remove the following **screw** securing the KEYBOARD.

- M1.2×1.1B S-THIN HEAD screw ×63

3. Remove the **KEYBOARD**.

**NOTE:** The KEYBOARD is very thin, so be careful of handling.

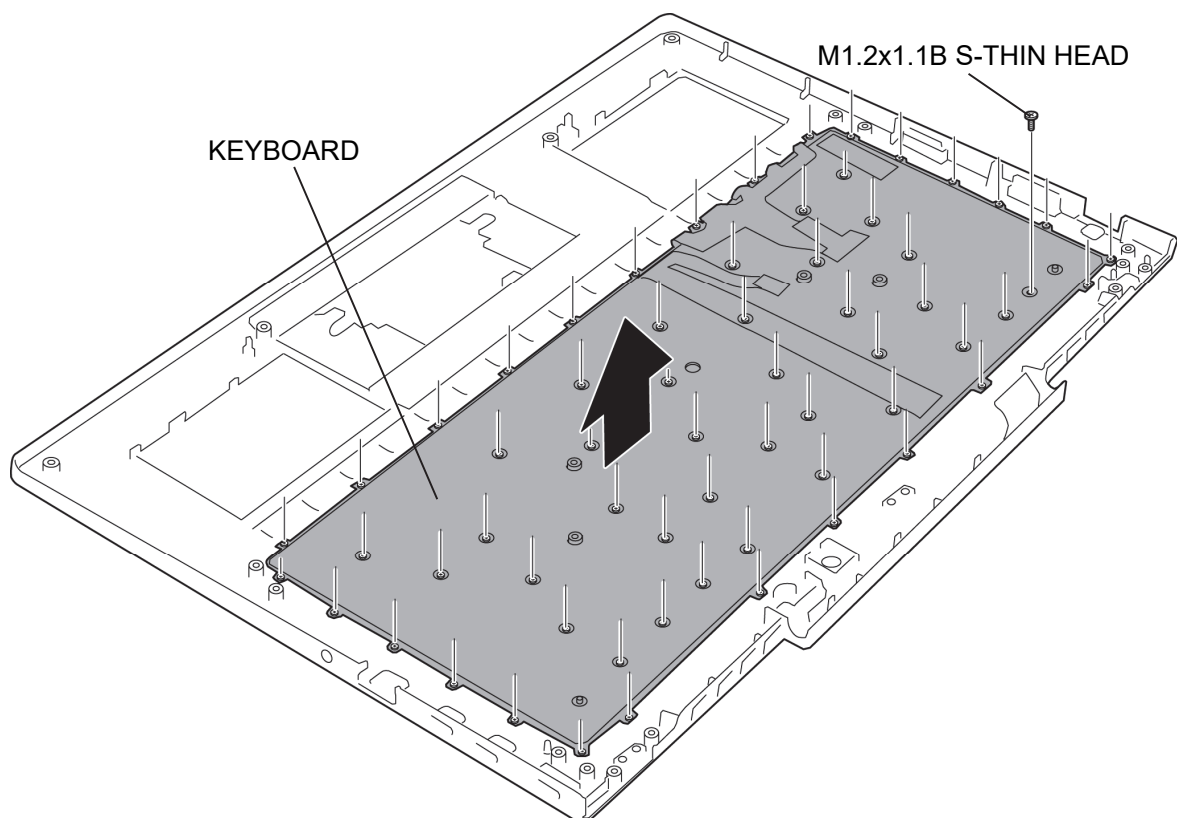
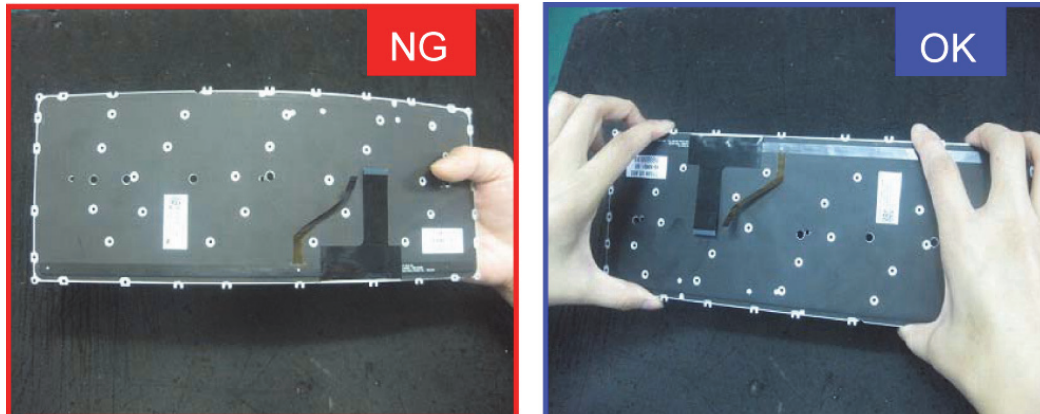


Figure 4-25 Removing the KEYBOARD (2)



### Installing the KEYBOARD

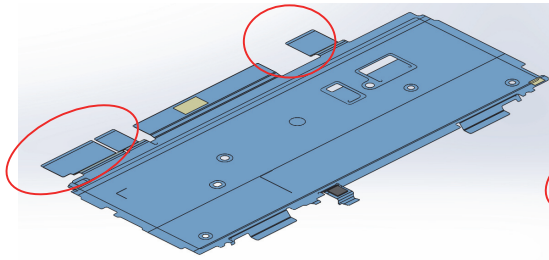
To install the KEYBOARD, follow the steps below and refer to Figure 4-24 and 4-25.

1. Set the **KEYBOARD** to the COVER ASSY in place and secure it with the following screws.
  - M1.2×1.1B S-THIN HEAD screw ×63
2. Stick a new **INSU KB LOW** or **INSU KB LOW 5G** to the COVER ASSY in place.

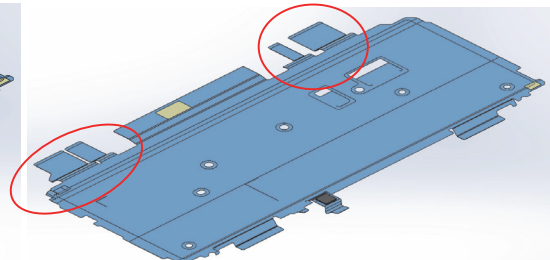
**NOTE:**

1. Prepare *INSU KB LOW* for non 5G/LTE model, *INSU KB LOW 5G* for 5G and LTE model.

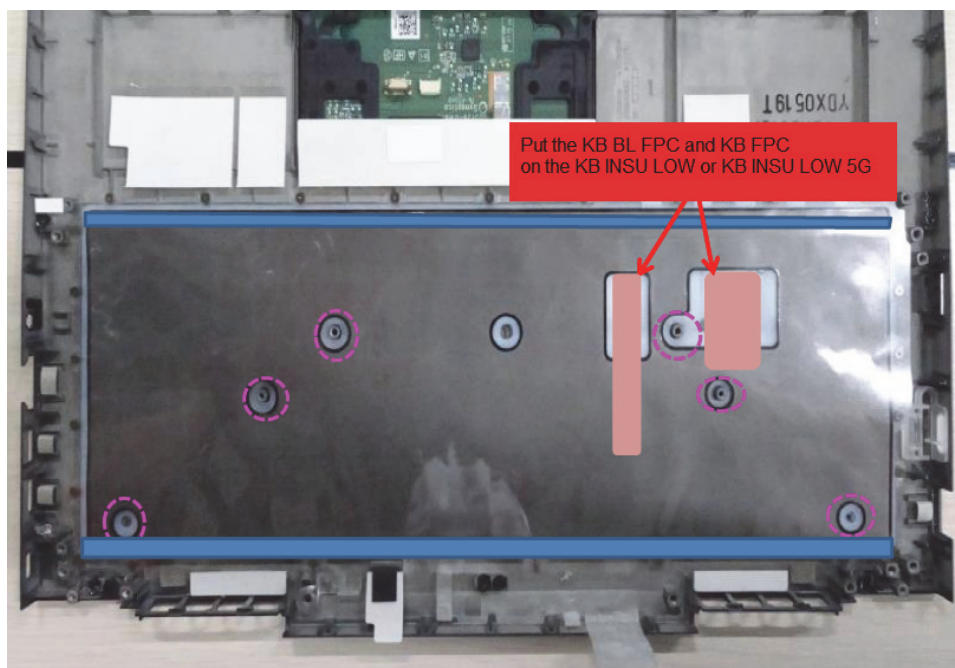
< *INSU KB LOW* >



< *INSU KB LOW 5G* >



2. Stick the INSU KB LOW or INSU KB LOW 5G to the COVER ASSY as shown in the figure below.



Prepare the required parts in advance, when replacing the following items.

ITEM	Parts List ITEM No	PART NAME	Quantity			
			Non 5G/LTE (PDA1*)	LTE	5G	Non 5G/LTE (PDA3*)
KEYBOARD	11	KEYBOARD	1	1	1	1
	61	INSU KB LOW	1	0	0	1
		INSU KB LOW 5G	0	1	1	0
		FIN CUSHION COV	2	2	2	2

## 4.19 LCD/CAMERA MODULE

### Removing the LCD/CAMERA MODULE

To remove the LCD/CAMERA MODULE, follow the steps below and refer to Figure 4-26 to 4-31.

**NOTE:** *Handle with care of removing/installing the LCD UNIT.  
Refer to [LCD unit\_remove.mp4] file for the details of removing the LCD UNIT.*

1. Release the **latches** and remove the **LCD LOW CAP ASSY**.
2. Release the **latches** and peel off the **HINGE CAP L ASSY** and **HINGE CAP R ASSY** from the LCD COVER ASSY.

**NOTE:** *Do not reuse the removed HINGE CAP L ASSY and HINGE CAP R ASSY, be sure to use new ones.*

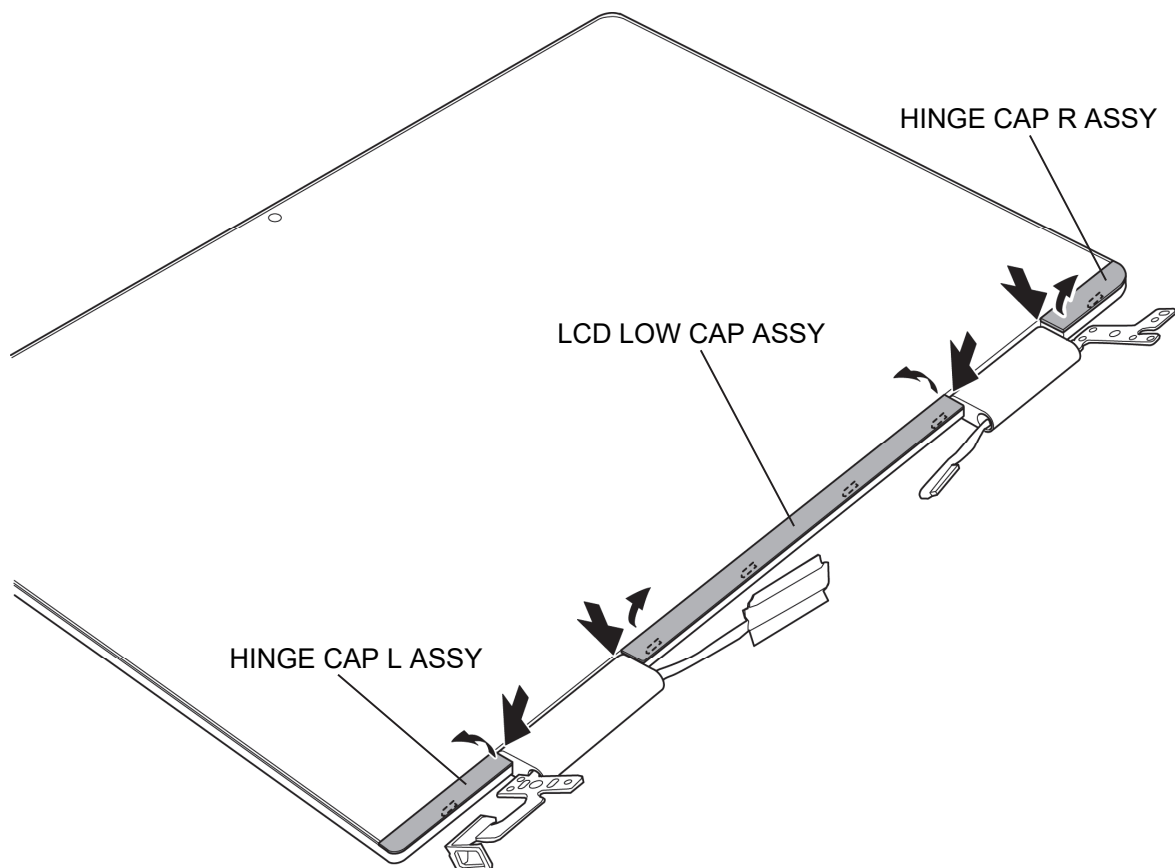
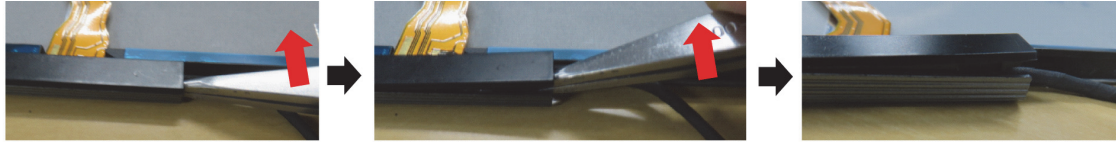


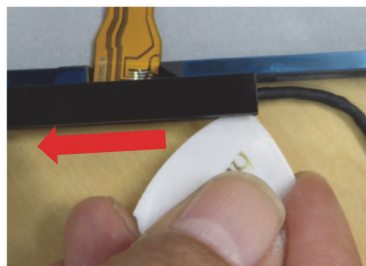
Figure 4-26 Removing the LCD (1)

**NOTE:** Remove the HINGE CAP L ASSY, LCD LOW CAP ASSY and HINGE CAP R ASSY as shown in the figure below.



Insert the tweezers and lift it up to release the latches.

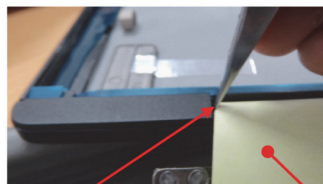
LCD LOW CAP ASSY



Slide the pick to release the latches.



Open the HINGE more than 180°



Insert the tweezers between the HINGE CAP and HINGE CASE.



For scratch-prevention



Slide the pick to release the latches.



3. Remove the following **screws** and the **HINGE L/R ASSY** from the LCD COVER ASSY
  - M2.5x2.5C S-THIN HEAD screw ×4
4. Release the **LCD HARNESS** and **CAMERA HARNESS** from the HINGE L/R ASSY.

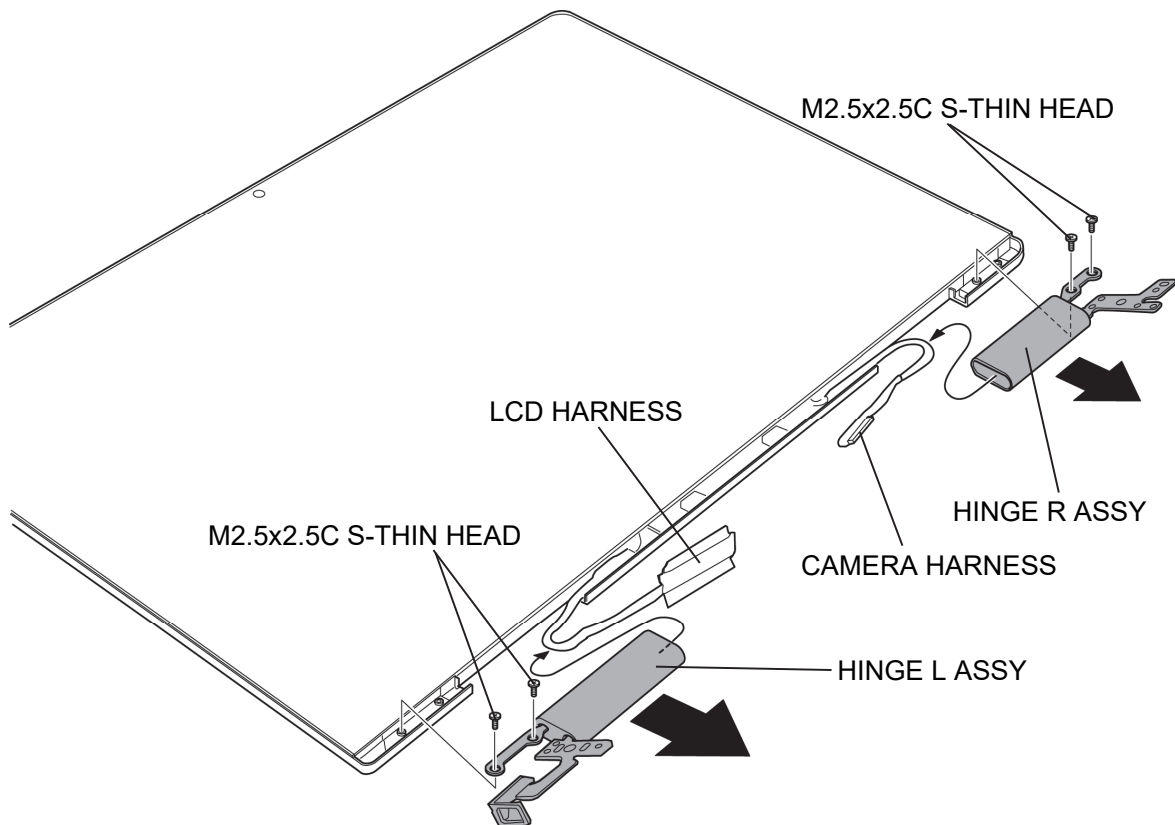
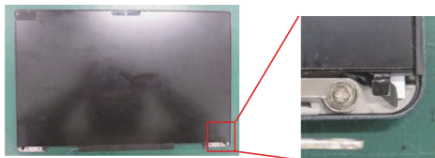


Figure 4-27 Removing the LCD (2)

5. Pull the **D TAPE TP LS R**, **D TAPE TP LOW R** and **D TAPE TP SIDE R** to the arrow pointing.
6. Pull the **D TAPE TP LS L**, **D TAPE TP LOW L** and **D TAPE TP SIDE L** to the arrow pointing.
7. Pull the **D TAPE TP L CE** to the arrow pointing.
8. Peel the **3AXIS SENSOR BOARD**.
9. Close the **SHUTTER SWITCH**.
10. Peel the **LCD UNIT** slowly.

**NOTE:** Remove the LCD UNIT as shown in the figure below.

Peel off the D TAPES



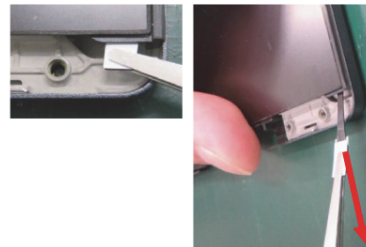
①D TAPE TP LS R  
Pull toward the  
arrow pointing



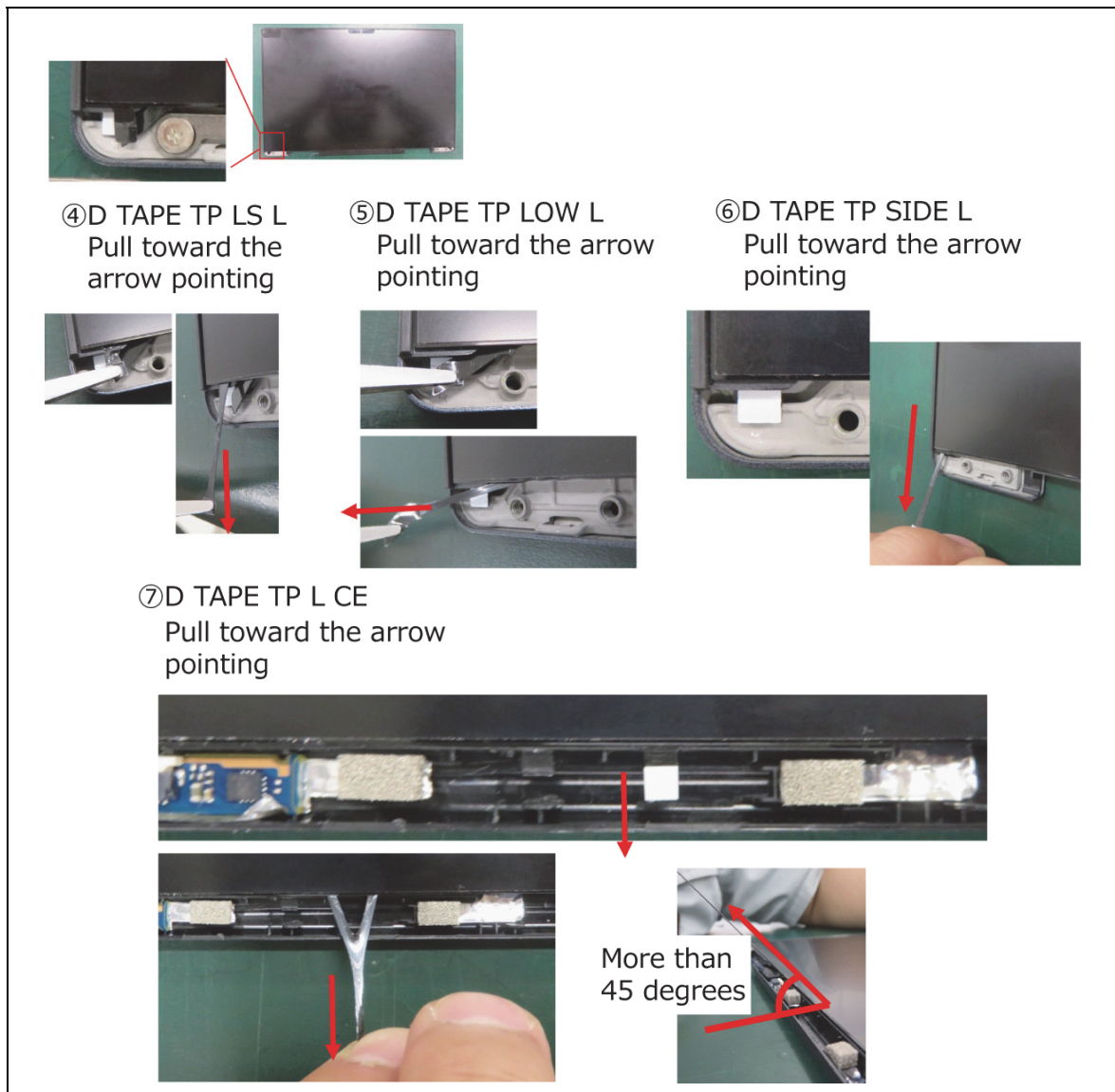
②D TAPE TP LOW R  
Pull toward the arrow  
pointing



③D TAPE TP SIDE R  
Pull toward the  
arrow pointing







## Peel off the LCD UNIT

- ① Peel the 3AXIS SENSOR BOARD  
(Do not touch the IC portion  
of the 3AXIS SENSOR BOARD.)



- ② Close the SHUTTER SWITCH



- ③ Put your fingers under the  
LCD UNIT until the double-sided  
tapes are peeled.



- ④ When the double-sided tapes (D TAPE SEPA) start peeling, Peel off the LCD UNIT toward the arrow pointing slowly.



- ⑤ Peel off the double-sided tape  
on the back of the LCD UNIT.



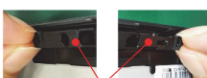
- ※1 If the MAGNETs stick to the double-sided tape, peel off the MAGNET and set it to the LCD COV ASSY. (Stick the D-STICK TAPE side of the MAGNET to the LCD COV ASSY)



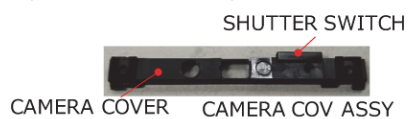
Adhesive  
side



- ※2 If the SHUTTER SWITCH is removed, remove the CAMERA COVER and set the SHUTTER SWITCH to the CAMERA COVER.



CAMERA COVER



CAMERA COVER

SHUTTER SWITCH

CAMERA COV ASSY



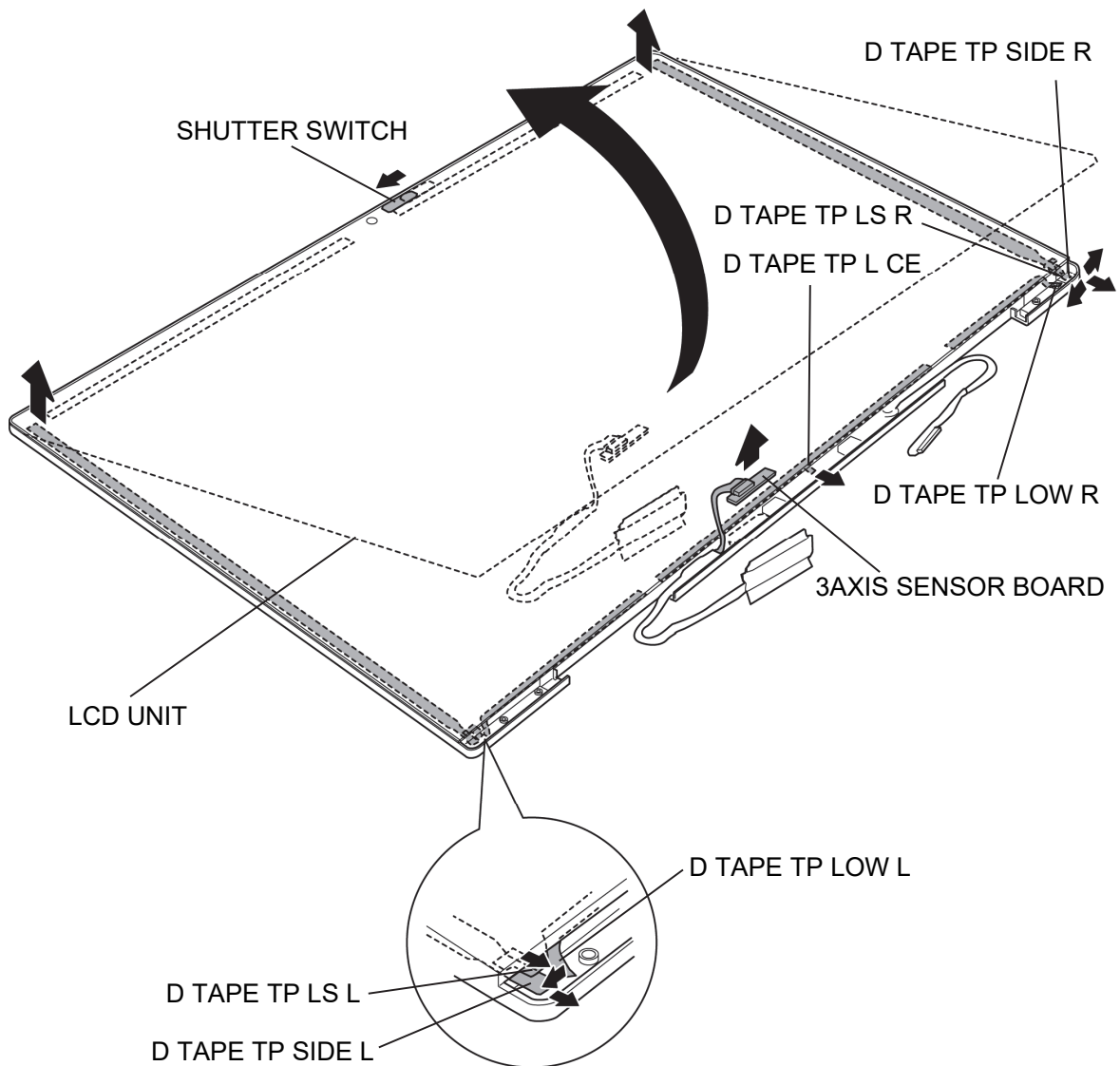


Figure 4-28 Removing the LCD (3)

11. Peel off the **INSU SQUARE**.
12. Release the **lock bar** and disconnect the **LCD HARNESS** from the connector on the LCD UNIT.
13. Disconnect the **TOUCH PANEL HARNESS** from the connector on the TOUCH PANEL.
14. Disconnect the **SENSOR HARNESS** from the connector **CN9860** on the 3AXIS SENSOR BOARD.

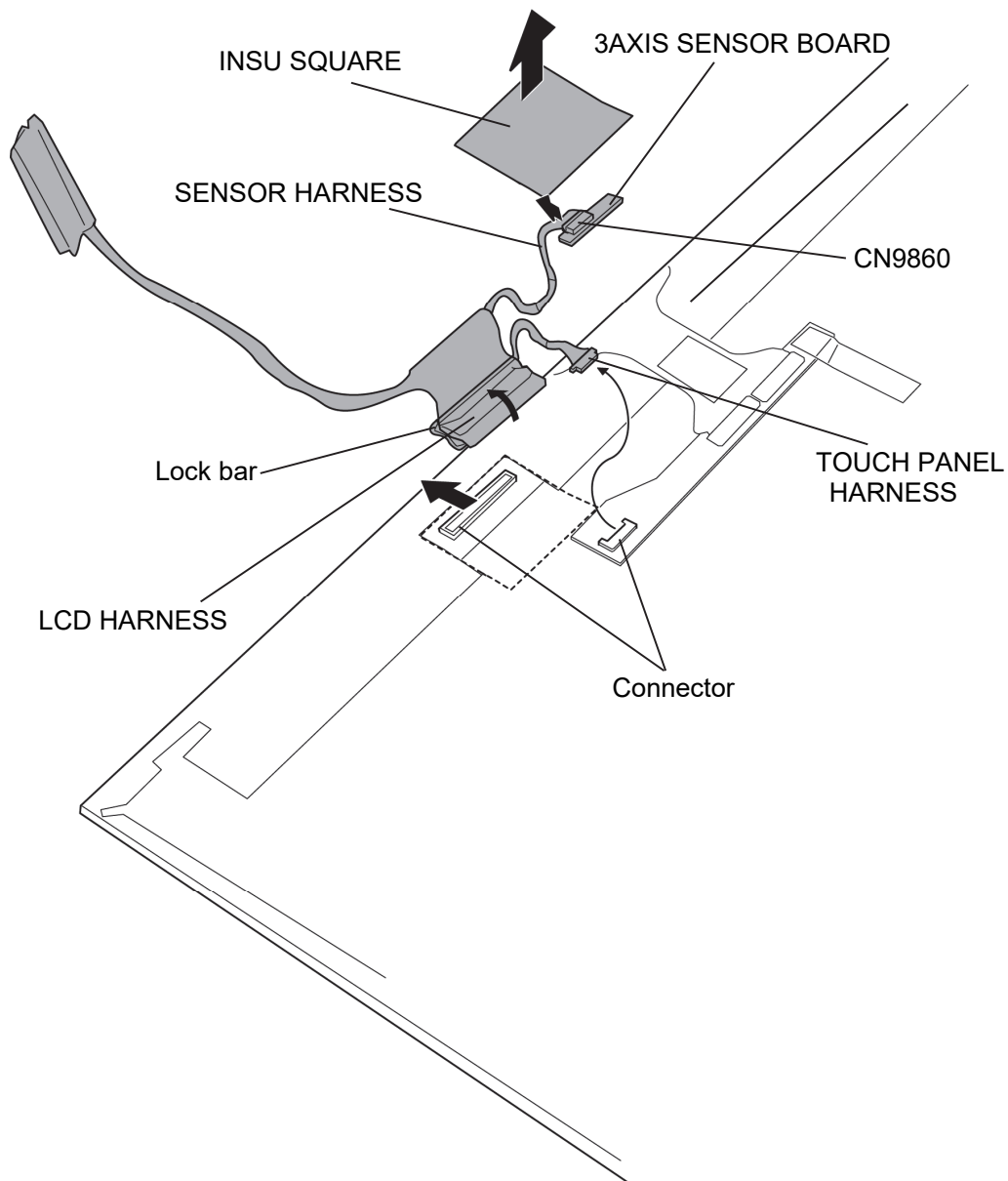


Figure 4-29 Removing the LCD (4)

15. Disconnect the **CAMERA HARNESS** (FPC portion) from the connector on the **CAMERA MODULE**.
16. Remove the **CAMERA COV ASSY** from the LCD COVER ASSY.
17. Remove the **SHUTTER SWITCH** from the **CAMERA COV ASSY**.
18. Remove the **CAMERA MODULE** from the LCD COVER ASSY.
19. Peel off the **SQUARE CUSHION** (PDA3\* model).

**NOTE:** Do not reuse the removed **SQUARE CUSHION (431)**. Be sure to use new one.

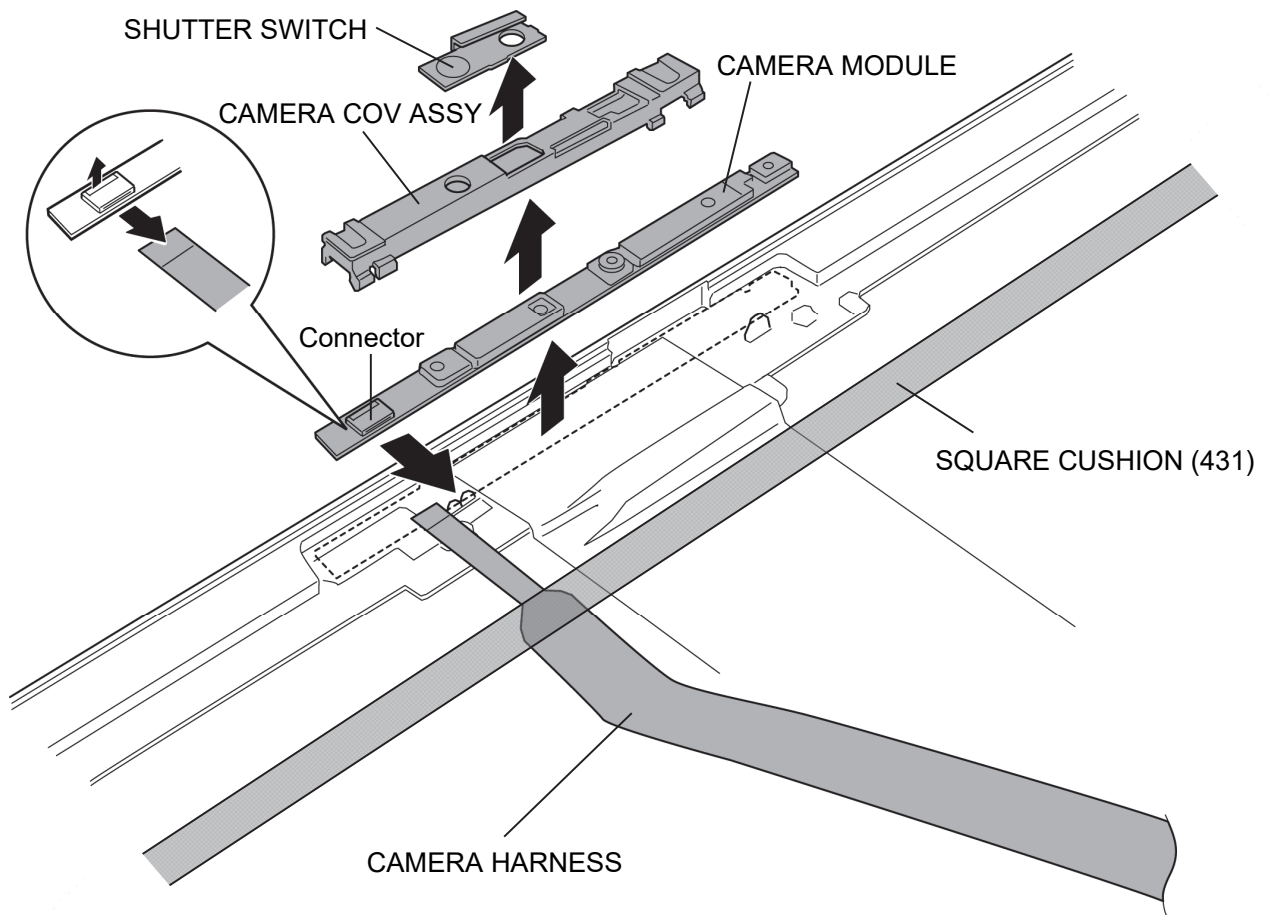


Figure 4-30 Removing the CAMERA MODULE (1)

20. Remove the **SQUARE CUSHION** and the **CAMERA HARNESS** (FPC portion) from the LCD COVER ASSY.

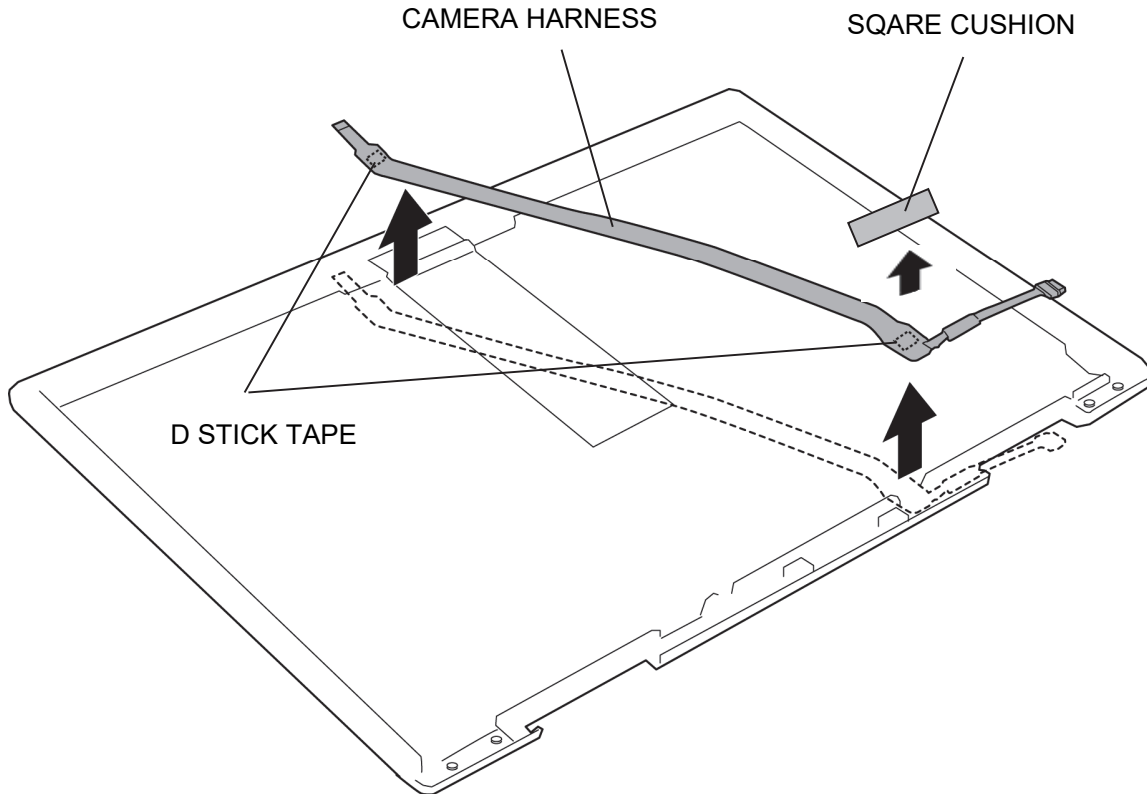
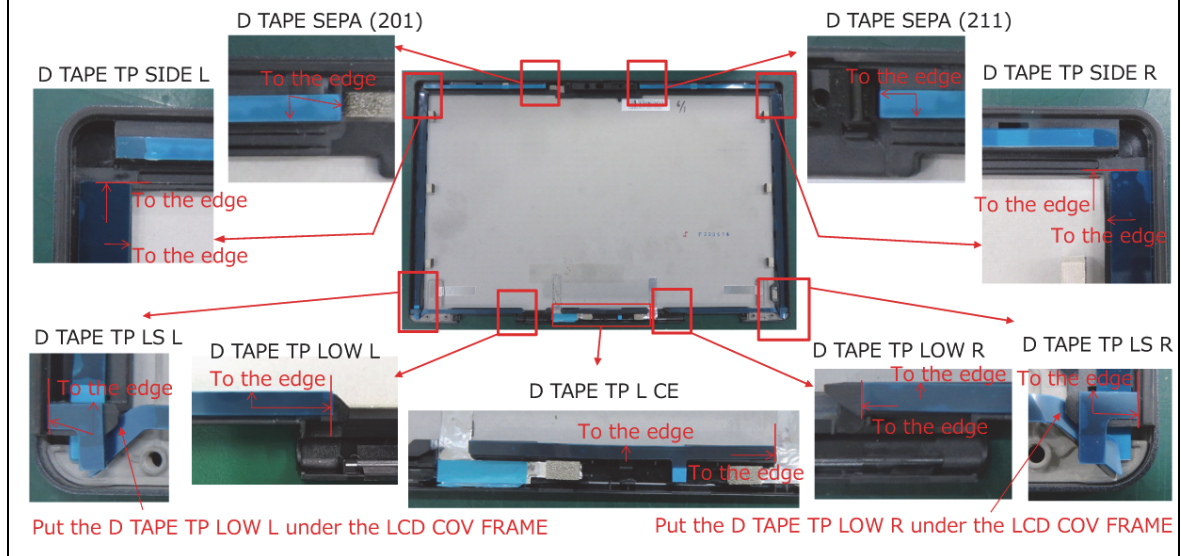


Figure 4-31 Removing the CAMERA MODULE (2)

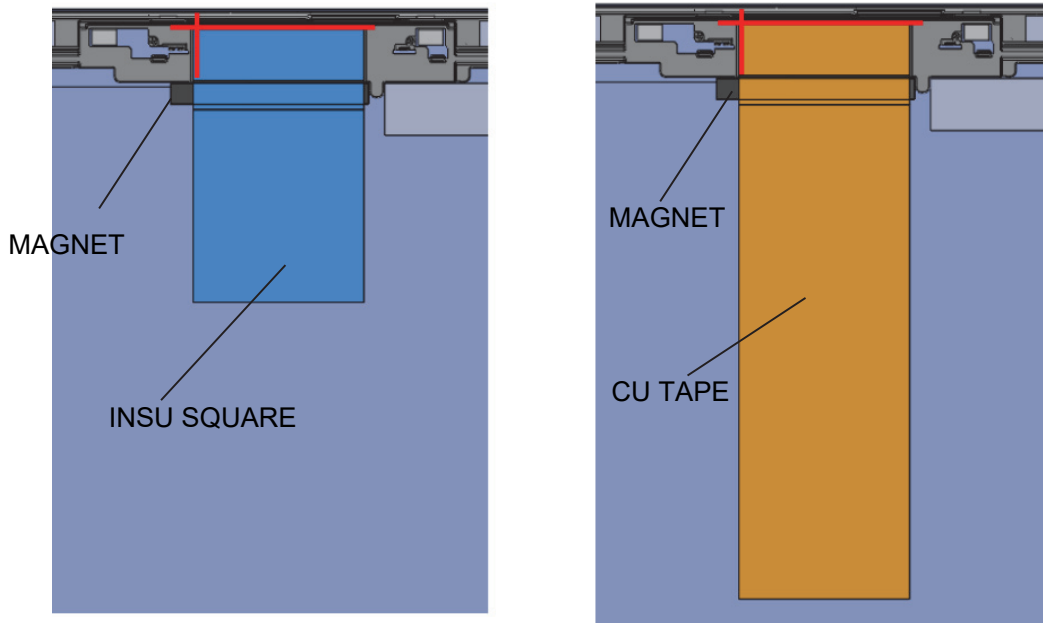
## Installing the LCD/CAMERA MODULE

To install the LCD/CAMERA MODULE, follow the steps below and refer to Figure 4-26 to 4-31.

**NOTE:** When replacing the LCD COVER ASSY with a new one, stick new D TAPE SEPA (201/211), D TAPE TP SIDE L, D TAPE TP LS L, D TAPE TP LOW L, D TAPE TP SIDE R, D TAPE LS R, D TAPE TP LOW R and D TAPE TP L CE to the LCD COVER ASSY in place.

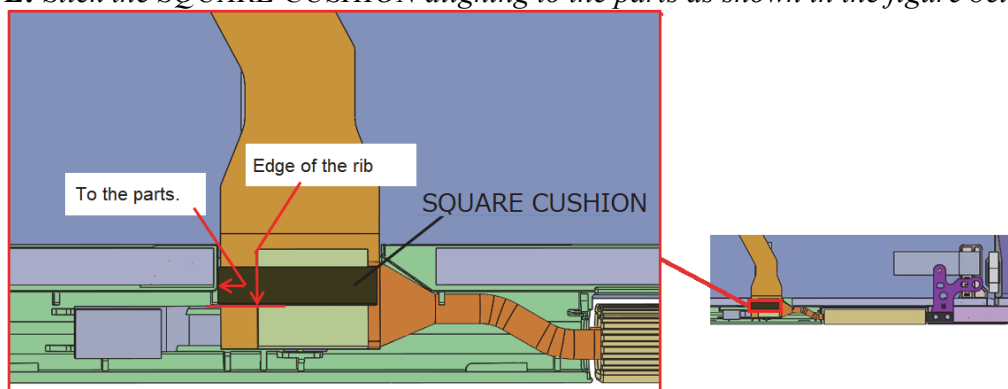


**NOTE:** When replacing the LCD COVER ASSY with a new one, stick new INSU SQUARE (061) (PDA1\* HD camera model, PDA3\* model) or CU TAPE (PDA1\* FA camera model), MAGNET (310) (non 5G/LTE model) and MAGNET (410) (5G/LTE model) to the LCD COVER ASSY in place.



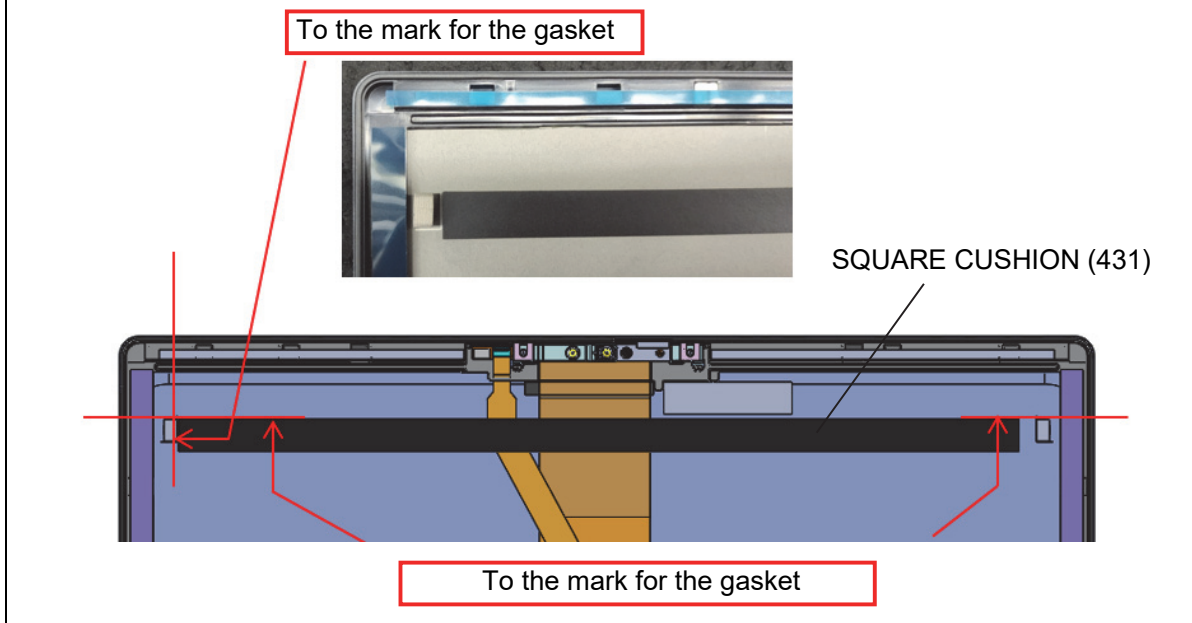
1. Stick the **CAMERA MODULE** to the LCD COVER ASSY in place.
2. Connect the **CAMERA HARNESS** (FPC portion) to the connector on the CAMERA MODULE.
3. Arrange the **CAMERA HARNESS** (FPC portion) to the LCD COVER ASSY and stick the SQUARE CUSHION in place.

**NOTE:** Stick the SQUARE CUSHION aligning to the parts as shown in the figure below.



4. Stick the **SQUARE CUSHION** (PDA3\* model).

**NOTE:** Stick the **SQUARE CUSHION** (431) aligning to the marks for gasket as shown in the figure below.



5. Set the **SHUTTER SWITCH** to the CAMERA COV ASSY.
6. Set the **CAMERA COV ASSY** to the LCD COVER ASSY.
7. Stick new **D TAPE SEPA** (131/141), **D TAPE TP SIDE L**, **D TAPE TP LS L**, **D TAPE TP LOW L**, **D TAPE TP SIDE R**, **D TAPE LS R**, **D TAPE TP LOW R** and **D TAPE TP L CE** to the LCD COVER ASSY in place.
8. Connect the **LCD HARNESS** to the connector on the LCD UNIT and lay down the **lock bar** to engage.
9. Connect the **TOUCH PANEL HARNESS** to the connector on the TOUCH PANEL.
10. Stick the **INSU SQUARE** in place.
11. Set the **LCD UNIT** on the LCD COVER ASSY in place.
12. Connect the **SENSOR HARNESS** to the connector **CN9860** on the 3AXIS SENSOR BOARD.
13. Set the **3AXIS SENSOR BOARD** to the LCD COVER ASSY in place.



**NOTE:** When setting the 3AXIS SENSOR BOARD, do not touch the IC portion of the 3AXIS SENSOR BOARD.

14. Confirm that the SHUTTER SWITCH moves properly and move it open position.
15. Set the **LCD LOW CAP ASSY** to the LCD COVER ASSY while engaging the latches.
16. Insert the **LCD HARNESS** into the HINGE L ASSY.
17. Set the **HINGE L ASSY** to the LCD COVER ASSY and secure it with the following screws.
  - M2.5×2.5C      S-THIN HEAD screw      ×2
18. Insert the **CAMERA HARNESS** into the HINGE R ASSY.
19. Set the **HINGE R ASSY** to the LCD COVER ASSY and secure it with the following screws.
  - M2.5×2.5C      S-THIN HEAD screw      ×2
20. Peel off the separator and set the **HINGE CAP L ASSY** to the LCD COVER ASSY while engaging the latches.
21. Peel off the separator and set the **HINGE CAP R ASSY** to the LCD COVER ASSY while engaging the latches.

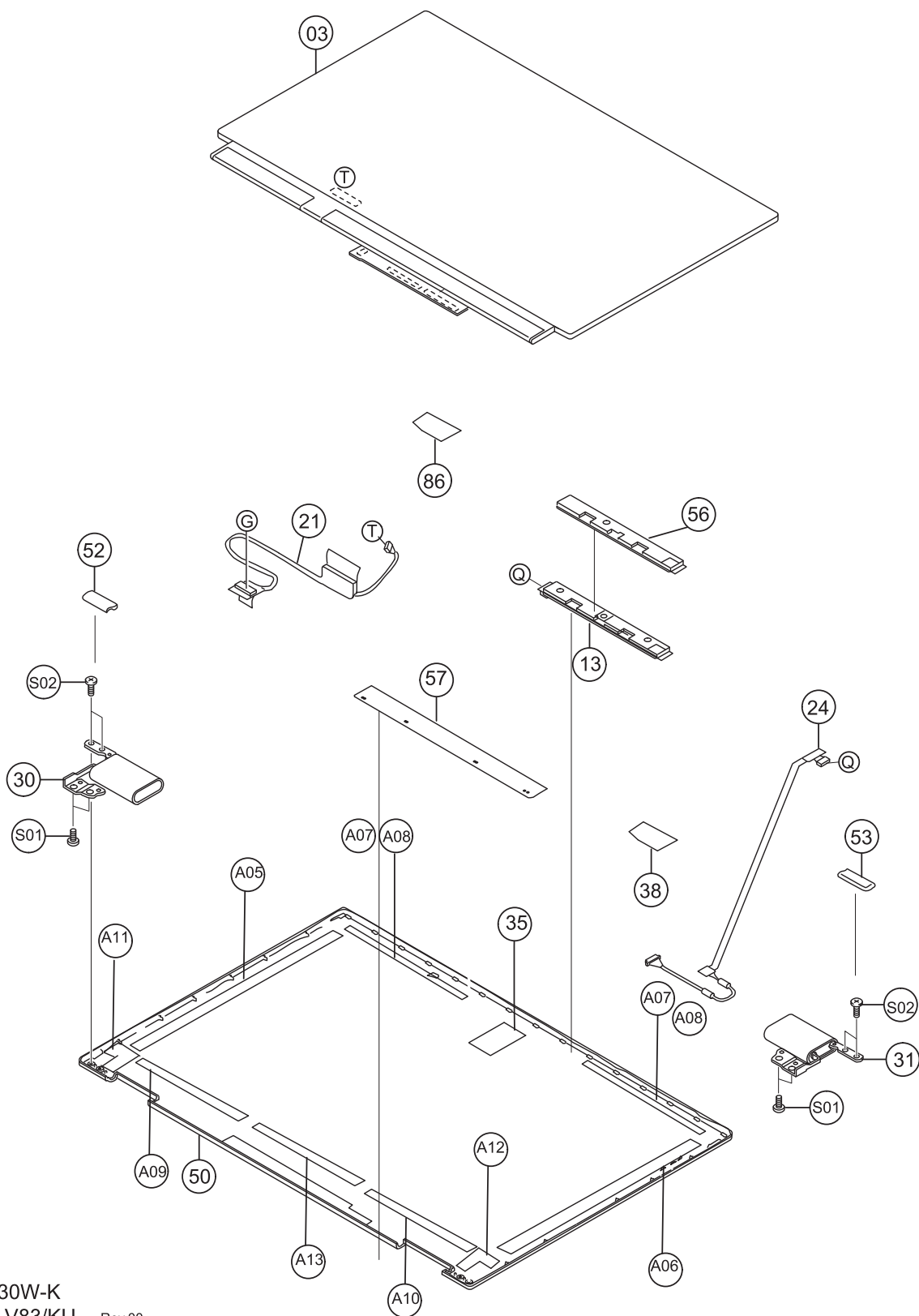
Prepare required parts in advance, when replacing the following items.

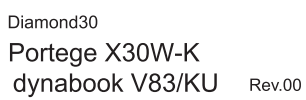
ITEM	Parts List ITEM No	PART NAME	Quantity			
			Non 5G/LTE (PDA1*)	LTE	5G	Non 5G/LTE (PDA3*)
LCD COVER ASSY	50	LCD COVER ASSY	1	1	1	1
	52	HINGE CAP L ASSY	1	1	1	1
	53	HINGE CAP R ASSY	1	1	1	1
		INSU SQUARE (061) (HD camera model)	1	1	1	1
		INSU SQUARE (061) (FA camera model)	0	0	0	1
	35	CU TAPE (FA camera model) (Note)	1	1	1	0
	75	MAGNET (310)	1	0	0	1
		MAGNET (410)	0	1	1	0
		SQUARE CUSHION (431)	0	0	0	1

(Note) CU TAPE will be replaced to INSU SQUARE (061) when used-up.

ITEM	Parts List ITEM No	PART NAME	Quantity			
			Non 5G/LTE (PDA1*)	LTE	5G	Non 5G/LTE (PDA3*)
LCD UNIT/CAMERA	03,13,14	LCD UNIT/CAMERA	1	1	1	1
	52	HINGE CAP L ASSY	1	1	1	1
	53	HINGE CAP R ASSY	1	1	1	1
	A07	D TAPR SEPA (201)	1	1	1	1
	A08	D TAPR SEPA (211)	1	1	1	1
	A05	D TAPE TP SIDE L	1	1	1	1
	A11	D TAPE TP LS L	1	1	1	1
	A09	D TAPE TP LOW L	1	1	1	1
	A06	D TAPE TP SIDE R	1	1	1	1
	A12	D TAPE TP LS R	1	1	1	1
	A10	D TAPE TP LOW R	1	1	1	1
	A13	D TAPE TP L CE	1	1	1	1







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# Appendices

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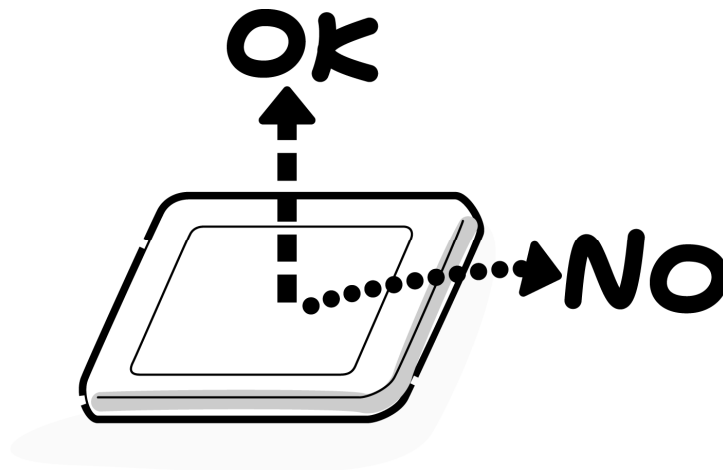
## Appendix A Handling the LCD Module

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### Precautions for handling the LCD module

The LCD module can be easily damaged during assembly or disassembly. Observe the following precautions when handling the LCD module:

1. When installing the LCD module in the LCD cover, be sure to seat it so that it is properly aligned and maximum visibility of the display is maintained.



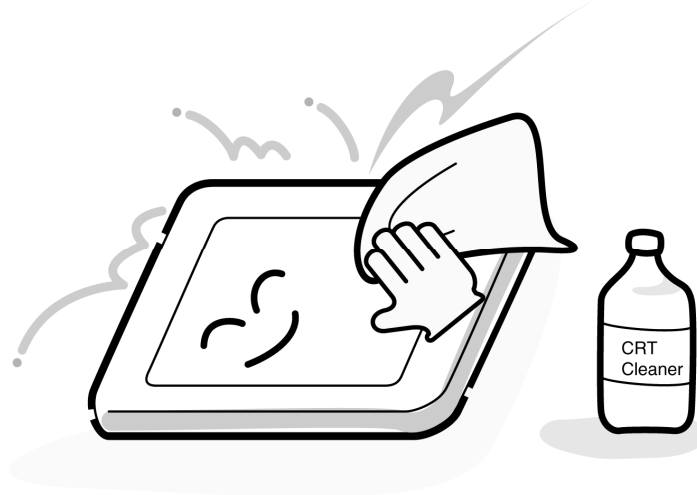
2. Be careful to align the holes at the four corners of the LCD module with the corresponding holes in the LCD cover before securing the module with screws. Do not force the module into place, because stress can affect its performance.

Also, the panel's polarized surface is easily scarred, so be careful when handling it.

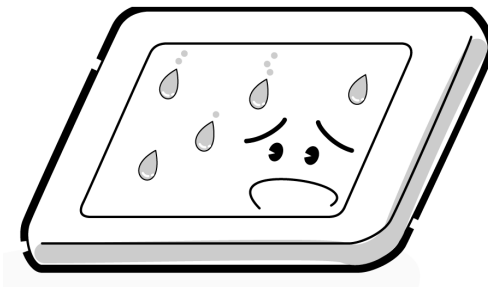


3. If the panel's surface gets dirty, wipe it with cotton or a soft cloth. If it is still dirty, try breathing on the surface to create a light condensate and wipe it again.

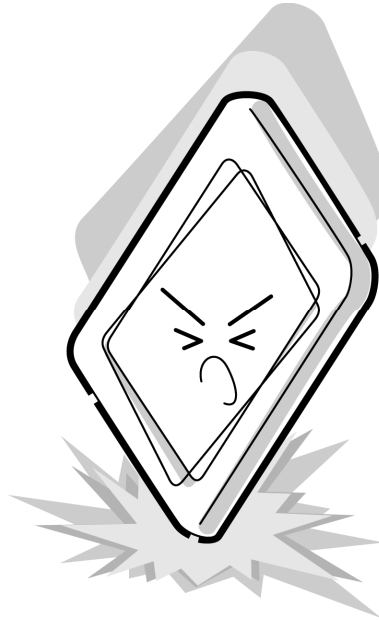
If the surface is very dirty, we recommend a CRT cleaning agent. Apply the agent to a cloth and then wipe the panel's surface. Do not apply cleanser directly to the panel.



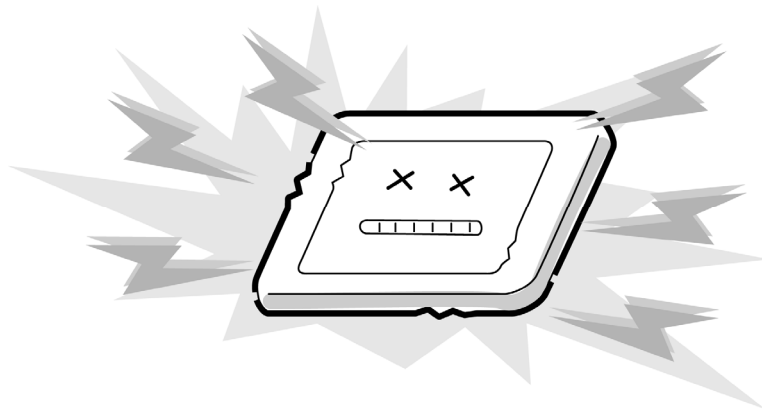
4. If water or other liquid is left on the panel's surface for a long period, it can change the screen's tint or stain it. Be sure to quickly wipe off any liquid.



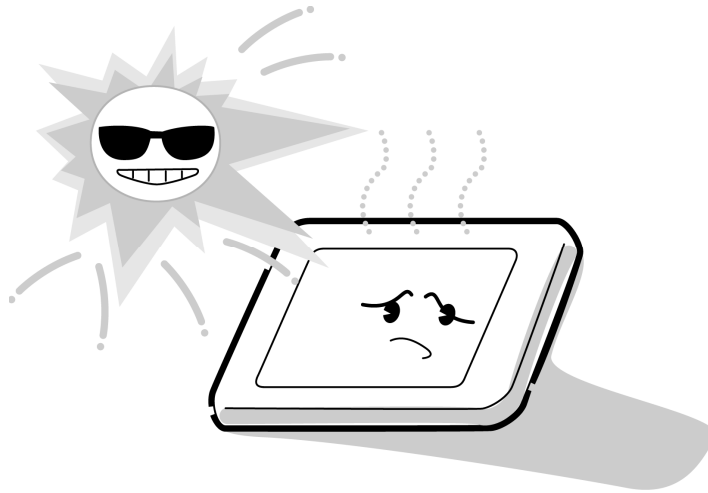
5. Glass is used in the panel, so be careful not to drop it or let it strike a hard object, which could cause breakage or cracks.



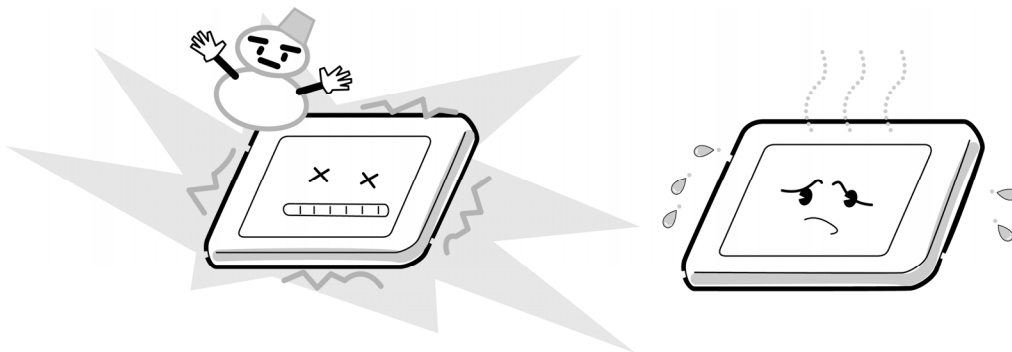
6. CMOS-LSI circuits are used in the module, so guard against damage from electrostatic discharge. Be sure to wear a wrist or ankle ground when handling the module.



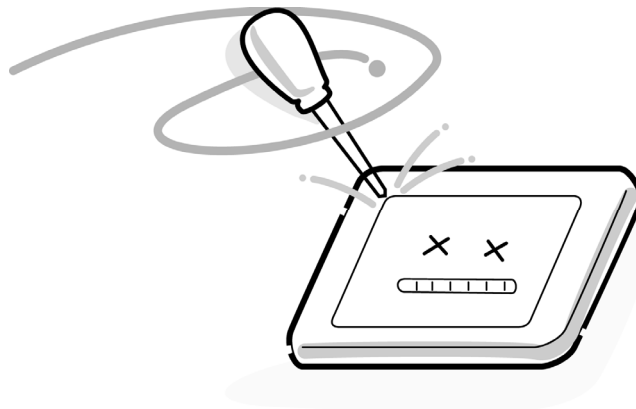
7. Do not expose the module to direct sunlight or strong ultraviolet rays for long periods.



8. Do not store the module at temperatures below specifications. Cold can cause the liquid crystals to freeze, lose their elasticity or otherwise suffer damage.



9. Do not disassemble the LCD module. Disassembly can cause malfunctions.



10. If you transport the module, do not use packing material that contains epoxy resin (amine) or silicon glue (alcohol or oxide). These materials can release gas that can damage the panel's polarization.

