November 1th, 2022

Dynabook Laptop Components Classified as Requiring Selective Treatment

Dynabook would like to communicate the method of identifying and removing components contained in Dynabook notebook products, including but not limited to the **Satellite C40-K** model, that requires selective treatment based on the European WEEE Directive, Directive 2012/19/EU of the European Parliament and of the Council on waste electrical and electronic equipment (WEEE).

All of the instructions provided within this letter can be reviewed in greater detail within the **Satellite C40-K** Series Maintenance Manual.

Tools Required

In order to remove internal components of the **Satellite C40-K** some tools from the list below may be required located in **Chapter 4 Replacement Procedures** of the **Dynabook Maintenance Manua**l.

For your safety and that of other people in the working environment, it is strongly recommended that you use electrostatic discharge (ESD) equipment. The proper use of this equipment will ensure successful repair work and reduce the costs for repairing damaged components.
The equipment and tools required for disassembly and reassembly are:

- One 2 mm Phillips screwdriver
- One 4 mm flat-blade screwdriver
- Torx screw driver
- Tweezers (for pulling out screws)
- ESD mats (for the floor and work desks)
- An ESD wrist strap or heel grounder
- Anti-static carpets or flooring
- Air ionizers (for highly electrostatic sensitive areas)
- A plastic card (in credit card size)
- A smooth stick (0.43mm, for example: a Pick or PC Mylar)
- SIM card tray eject pin tool

Table of Contents

1. Removing the Lithium Ion Battery (Main Battery, No coin cell battery)

Please refer to the information below for instructions regarding the identification and removal of the Lithium ion battery.
Further maintenance instructions can be found in section of the **Satellite C40-K Maintenance Manual**.
Some tools are required in order to remove this component. Once removed, these components should be recycled as per local requirements.

To remove the battery, the base assembly must be removed first:

4.2 Base cover

Removing the base cover

Remove the base cover according to the following procedures and Figure 4.2-1.

1. Turn the laptop upside down so that the bottom is facing up.
2. Remove the six M2x5 screws □,1 and four M2x5 screws □,2. (This four screws have angle to fix D cover)
3. Press the cover-edge and pry up the base cover from the inner edges, starting from the top□,3, then along the sides□,4 and then the bottom□,5.
4. Slightly shake the base cover to release the center snap on base cover□,6.
5. Remove the base cover □,7 as shown in Figure 4.2-1.

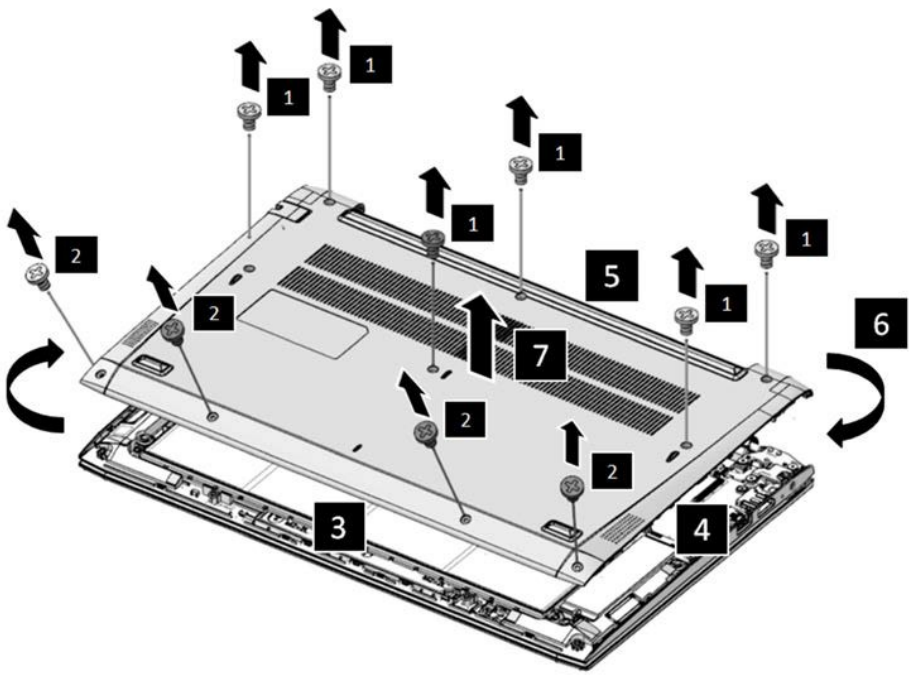


Figure 4.2-1 Removing the Base Cover

4.3 Battery Pack

Removing the battery pack

Remove the battery pack according to the following procedures and. Figure 4.3-1

CAUTION: *When handling the battery pack, use cares not to short circuit the terminals. Do not drop, hit, twist or bend the battery pack. Do not scratch or break up their casing.*

1. Remove the battery cable □,1.
2. Remove the four M2x3 screws □,2.
3. Remove the battery pack □,3.

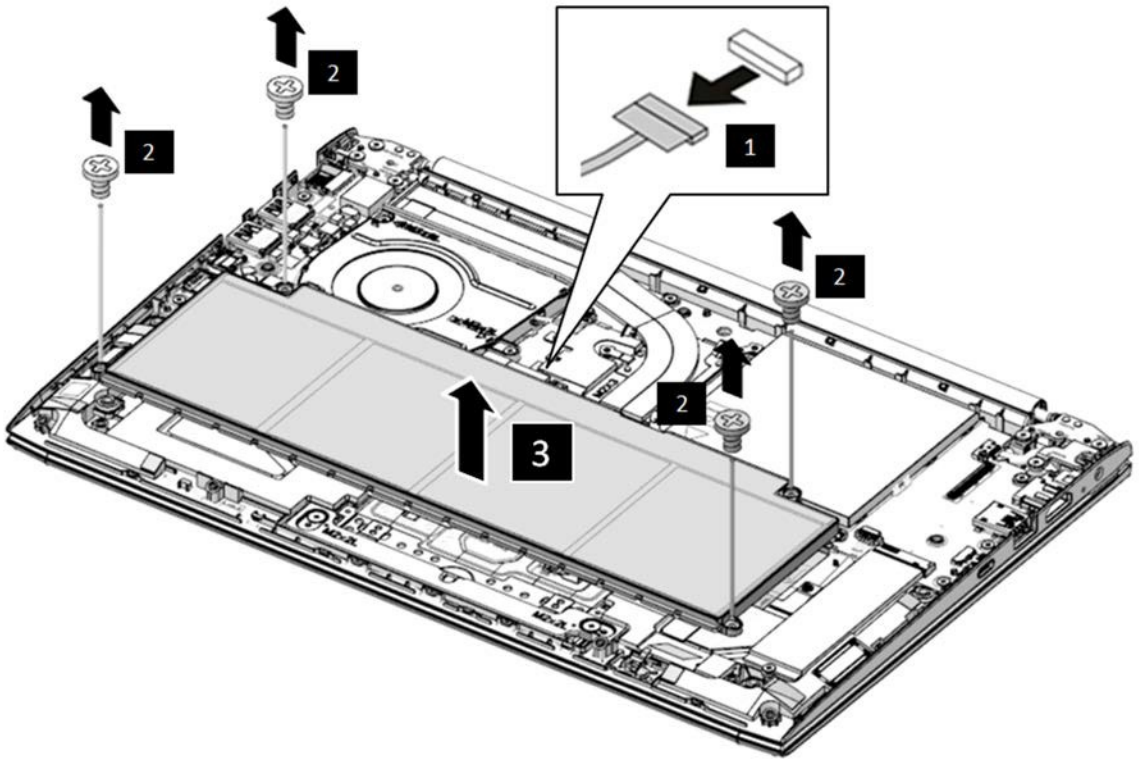


Figure 4.3-1 Removing the Battery Pack

2. Removing the SSD

4.5 SSD Card

Removing the SSD Card

Remove the SSD Card assembly according to the following procedures and Figure 4.5-1

1. Remove the one M2x3 screw and SSD card from the motherboard □,3□,4.

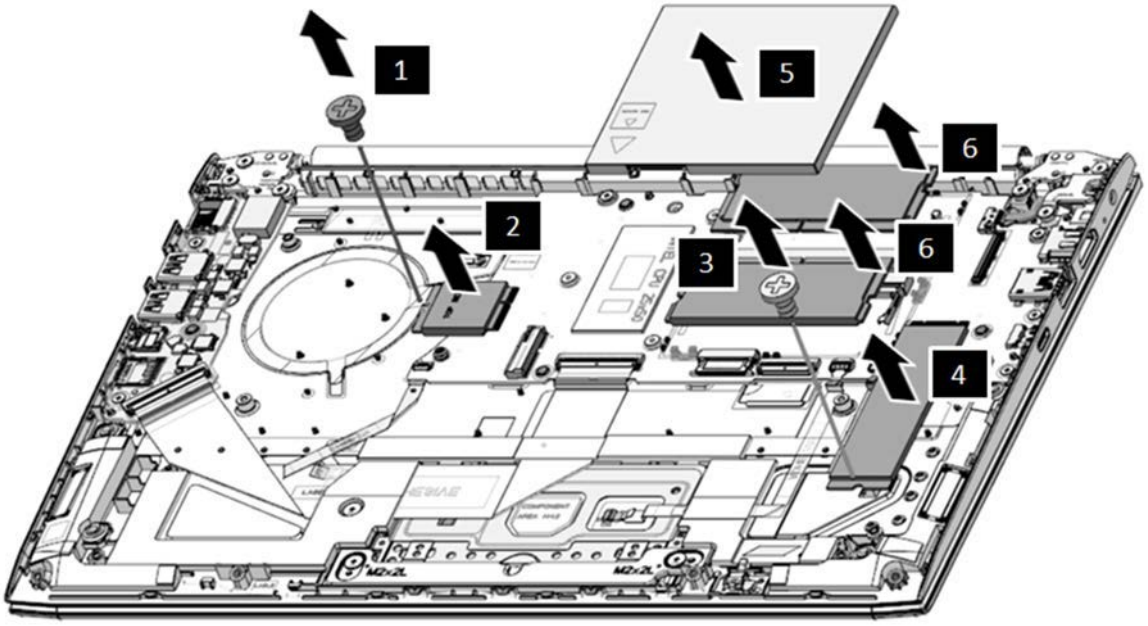


Figure 4.5-1 Removing the SSD Card/WLAN Card/DIMM

3. Removing LCD, Printed Circuit / Wiring Boards (PCB/ PWB system board)

Beside the LCD and the main PCB, there are further **small PCBs and components** which are in the scope of the WEEE Directive. The removal of these components is described in detail in the **chapter 4** of the associated maintenance manual.

Replacement Procedures

4.2 Base cover

Removing the base cover

Remove the base cover according to the following procedures and Figure 4.2-1.

1. Turn the laptop upside down so that the bottom is facing up.
2. Remove the six M2x5 screws ☐,1 and four M2x5 screws ☐,2 (This four screws have angle to fix D cover)
3. Press the cover-edge and pry up the base cover from the inner edges, starting from the top ☐,3, then along the sides ☐,4 and then the bottom ☐,5.
4. Slightly shake the base cover to release the center snap on base cover ☐,6.
5. Remove the base cover ☐,7 as shown in Figure 4.2-1.

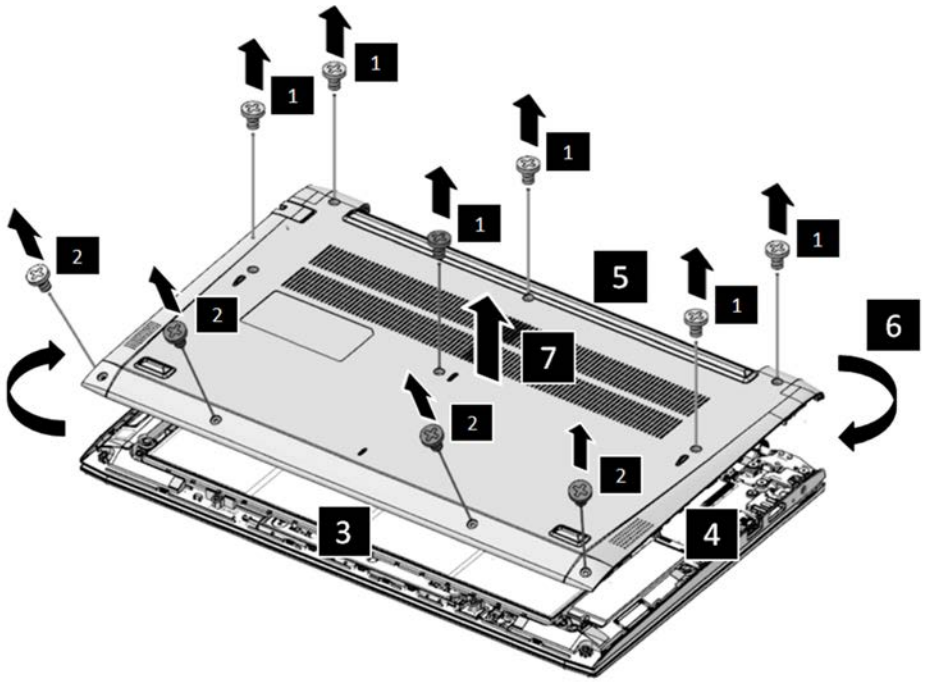


Figure 4.2-1 Removing the Base Cover

Installing the Base Cover

Install the base cover according to the following procedures:

1. Align the base cover with the snaps on the logic upper assembly, and gently press downward the edges of the base cover until clicks are heard. Make sure all the snaps are latched and secured.

2. Tighten the six M2×5 screws ☐,1 and four M2x5 screws ☐,2 to secure the base cover to the logic upper assembly as show in Figure 4.2-1

BIT# of Screw driver	Screw (quantity)	Color	Torque
#1	M2 x 5 mm, flat-head, nylon-coated (10)	Black / Silver	0.181 Nm (1.85 kgf-cm)

4.3 Battery Pack

Removing the battery pack

Remove the battery pack according to the following procedures and. Figure 4.3-1

> ***CAUTION:***
>
> *When handling the battery pack, use cares not to short circuit the terminals. Do not drop, hit, twist or bend the battery pack. Do not scratch or break up their casing.*

1. Remove the battery cable ☐,1 .
2. Remove the four M2x3 screws ☐,2 .
3. Remove the battery pack ☐,3 .

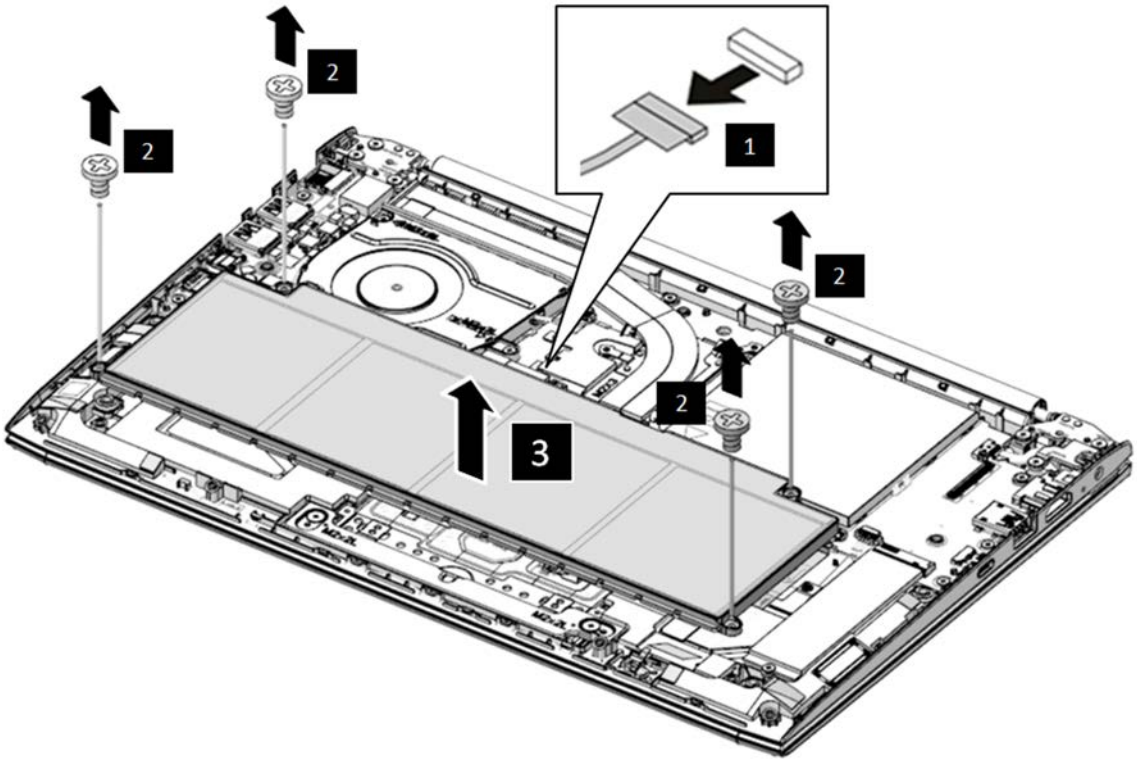


Figure 4.3-1 Removing the Battery Pack

Installing the Battery Pack

Install the battery pack according to the following procedures:

1. Seat the battery pack in the correct position on the logic upper assembly and press the battery connector. ☐,1 ☐,3

2. Tighten four M2x3 screws to secure the battery pack to the logic upper assembly. ☐,2

BIT# of Screw driver	Screw (quantity)	Color	Torque
#1	M2 x 3 mm, flat-head, nylon-coated (4)	Black	0.181 Nm (1.85 kgf-cm)

4.4 Fan and Thermal Module

Removing the Fan and Thermal module

Remove the fan and thermal module according to the following procedures and Figure 4.4-1 & *Figure 4.4-2*

> ***CAUTION:***
>
> *When removing the thermal module, keep the following in mind:*
>
> *1. The thermal module can become very hot during operation. Be sure to let it cool down before starting the repair work.*

1. Peel off the W-LAN Mylar securing the cable connector in place ☐,1 and disconnect the two W-LAN antennas (White/Black color) from motherboard ☐,2 as shown in Figure 4.4-1
2. Gently pull up the W-LAN antennas out of the routing channels on fan ☐,3.
3. Disconnect the Fan cable from the motherboard ☐,4.
4. Remove the two M2x3 screws and fan ☐,5.
5. Remove the three M2x3 screws according to the number sequence (6->7->8) indicated in *Figure 4.4-2*
6. Remove the thermal module.

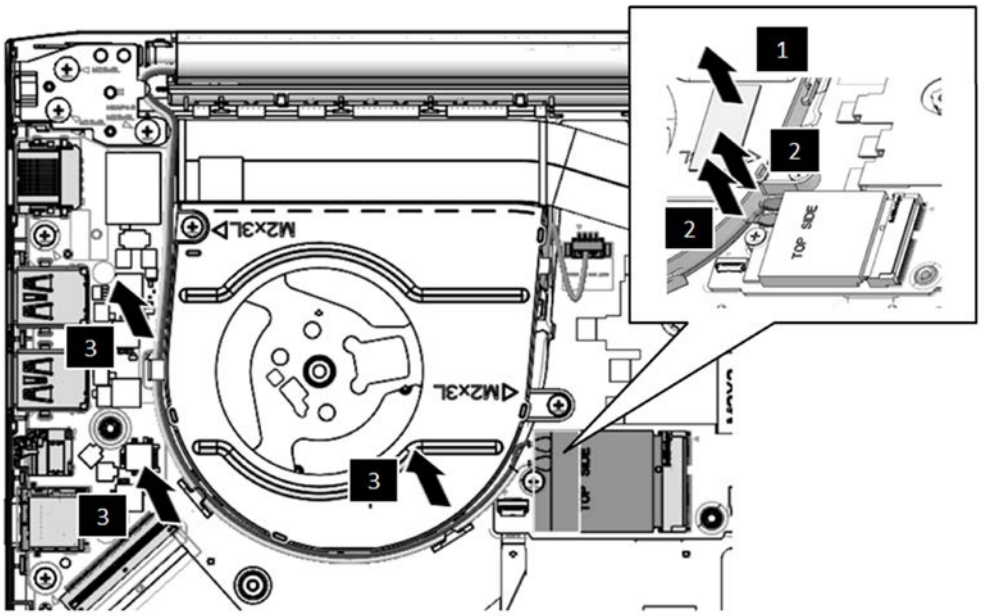


Figure 4.4-1 Removing the Thermal Cu-Plate

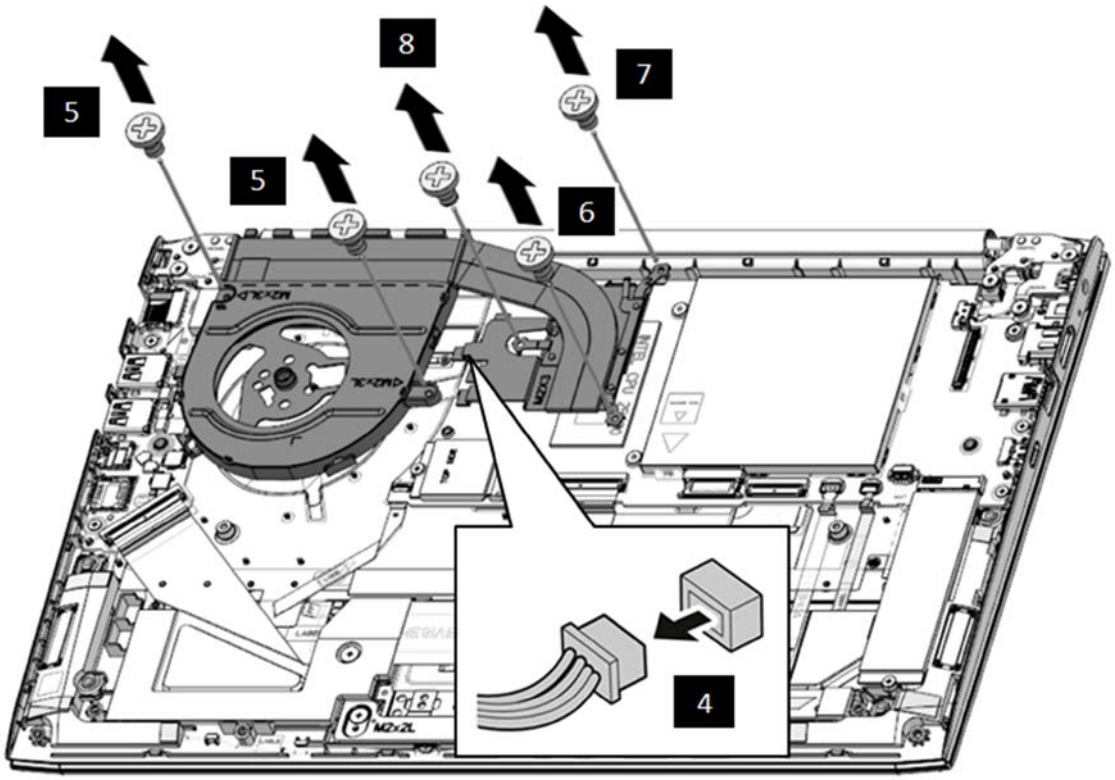


Figure 4.4-2 Removing the Thermal Cu-Plate

Installing the thermal module

Install the thermal Cu-plate according to the following procedures:

1. Seat the fan in the correct position on the logic upper assembly and insert the fan connector ☐,1 and tuck the fan cable into the fan hook ☐,2. as shown in *Figure 4.4-3*

2. Tighten the two M2 x 3 screws to secure the fan to the logic upper assembly in *Figure 4.4-2* ☐,5

3. Check thermal pad is attached on the thermal module as shown in Figure 4.4-4 or *Figure 4.4-5*

4. Place the thermal module in the correct position on the motherboard.

5. Tighten the three M2 x 3 screws according to the number sequence (8->7->6) indicated in *Figure 4.4-2* to secure the thermal module to the motherboard.

6. For the W-LAN cable routing, tuck the W-LAN cable into the fan hook ☐,3, and W-LAN cable connector insert the W-LAN card ☐,4. Finally, paste W-LAN mylar on the W-LAN module ☐,5 as shown in *Figure 4.4-3*

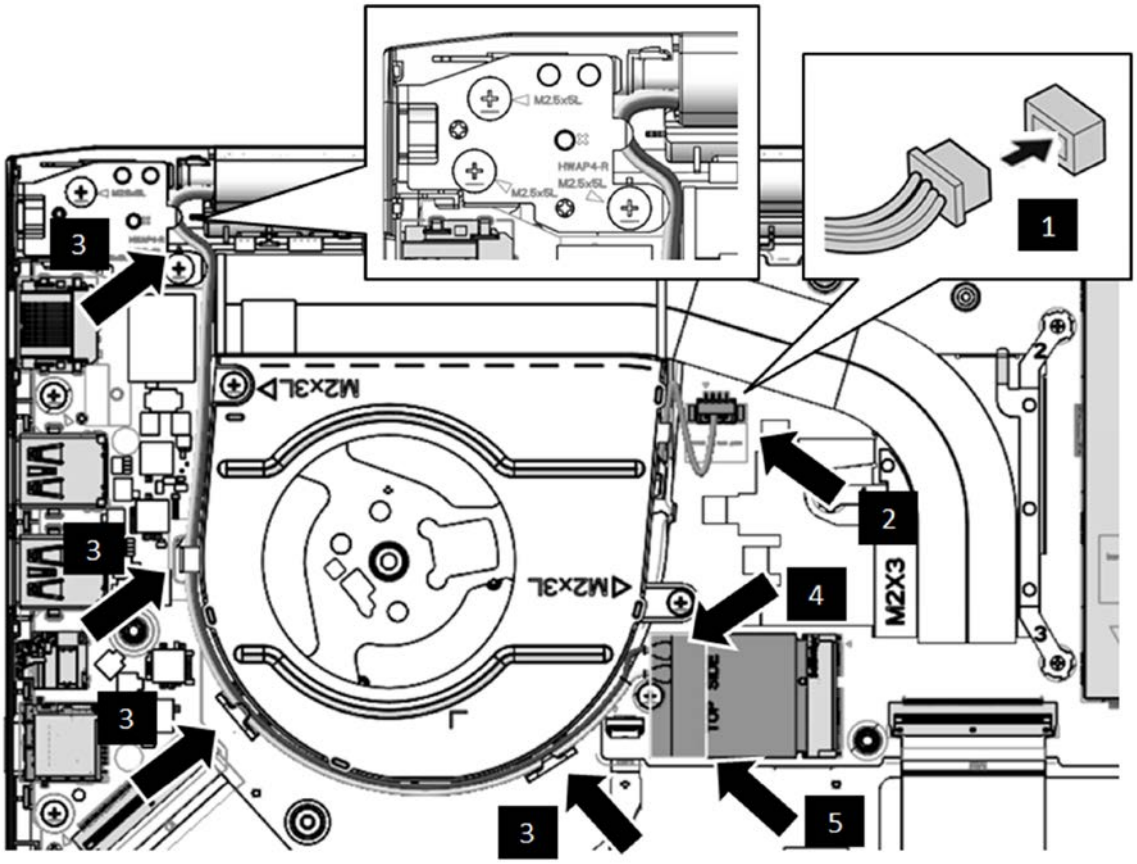
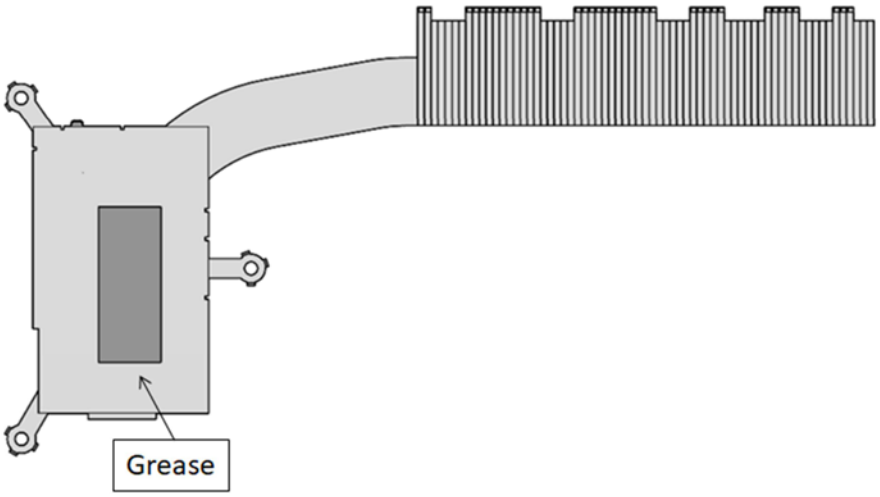


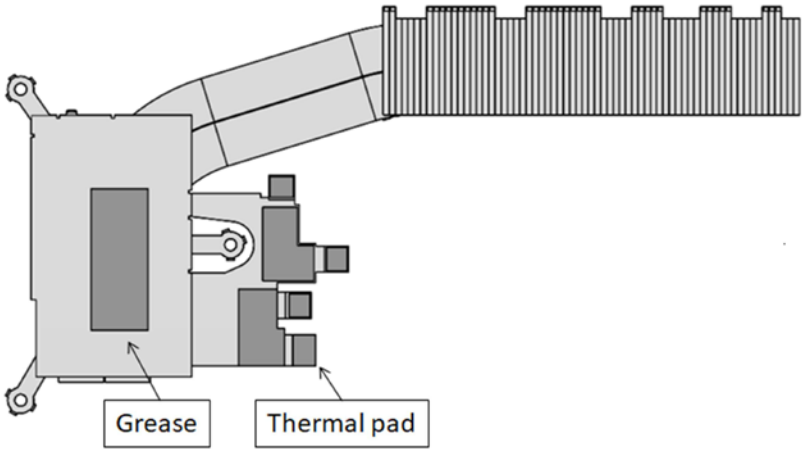
Figure 4.4-3 Fan Cable and WLAN Cable Routing



Syrah 10M 15W – Grease only

K000897480	71NLU212014	THERMAL MODULE 15W

Figure 4.4-4 Checking the Thermal Grease on Thermal Cu-Plate



Syrah 10M 28W – Grease & Thermal pads

K000897490	71NLU212015	THERMAL MODULE 28W
K000903730	71NLU312336	THERMAL PAD-CHOKE
K000903730	71NLU312337	THERMAL PAD-MOS

Large one is THERMAL PAD-CHOKE (usage : 2 pcs)
Small one is THERMAL PAD-MOS (usage : 4 pcs)

Figure 4.4-5 Checking the Thermal Pad on Thermal Cu-Plate

BIT# of Screw driver	Screw (quantity)	Color	Torque
#1	M2 x 3 mm, flat-head, nylon-coated (5)	Black	0.181 Nm (1.85 kgf-cm)

4.5 SSD Card/WLAN Card/DIMM

Removing the SSD Card/WLAN Card/DIMM

Remove the SSD Card/WLAN Card/DIMM assembly according to the following procedures and Figure 4.5-1

1. Remove the one M2x3 screw and WLAN card from the motherboard ☐,1☐,2.
2. Remove the one M2x3 screw and SSD card from the motherboard ☐,3☐,4.
3. Remove the DDR shielding and DIMM from the motherboard ☐,5☐,6.

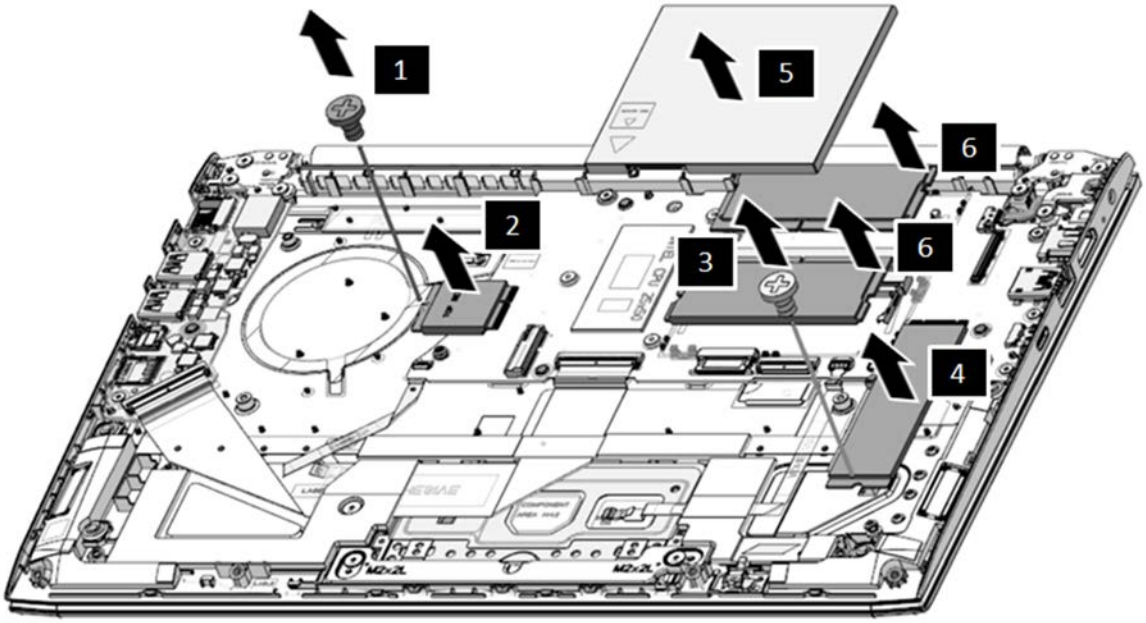


Figure 4.5-1 Removing the SSD Card/WLAN Card/DIMM

Installing the SSD Card/WLAN Card/DIMM

Install the SSD Card/WLAN Card/DIMM according to the following procedures:

1. Seat the WLAN in the correct position and tighten the one M2x3 screws to secure the WLAN to the motherboard assembly. ☐,1 ☐,2

2. Seat the SSD in the correct position and tighten the one M2x3 screws to secure the WLAN to the motherboard assembly. ☐,3 ☐,4

3. Seat the DIMM in the correct position and seat the shielding cover to the motherboard. ☐,5 ☐,6

4.6 Speakers

Removing the Speakers

Remove the speaker assembly according to the following procedures and Figure 4.6-1

1. Disconnect the speaker cable from the motherboard ☐,1.
2. Gently pull up the speaker assembly and the speaker cable out of the routing channels (2->3->4).

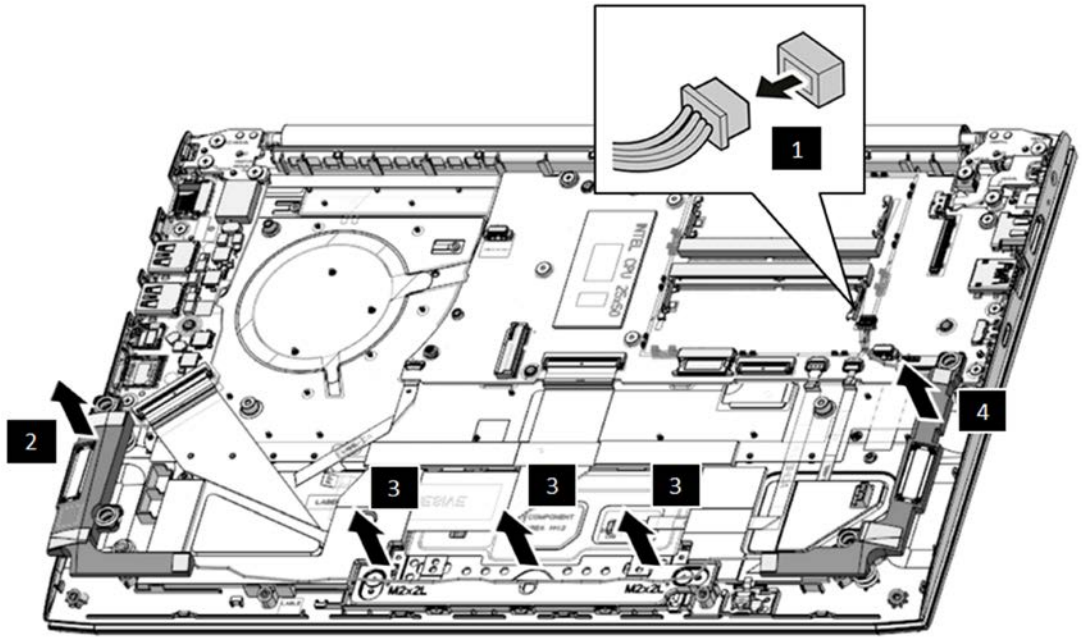


Figure 4.6-1 Removing the speakers

Installing the Speakers

Install the speakers according to the following procedures:

> ***NOTE:*** *Take care not to pinch the cables. Make sure the routing positions of the cables are correct and do not block any components, such as screw holes.*

1. Seat the speakers in the correct position and secure it in place on the logic upper assembly (2->3->4) as shown in Figure 4.6-1

2. Route and secure the speaker cable in the routing channels as shown in Figure 4.6-2

3. Connect the speaker cable to the motherboard as shown in Figure 4.6-1 ☐,1

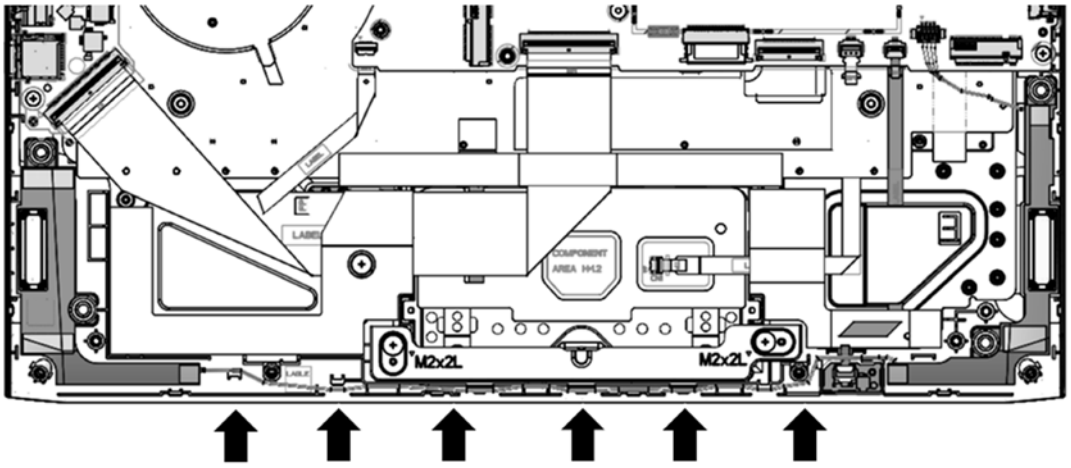


Figure 4.6-2 Speaker Cable routing channels on upper

4.7 IO Board

Removing the IO Board

Remove the IO board according to the following procedures and Figure 4.7-1

1. Disconnect the IO board FFC ☐,1 ☐,2.
2. Remove two M2x3 screws ☐,3.
3. Gently lift up the right edge of the IO board and remove it from the logic upper assembly ☐,4.

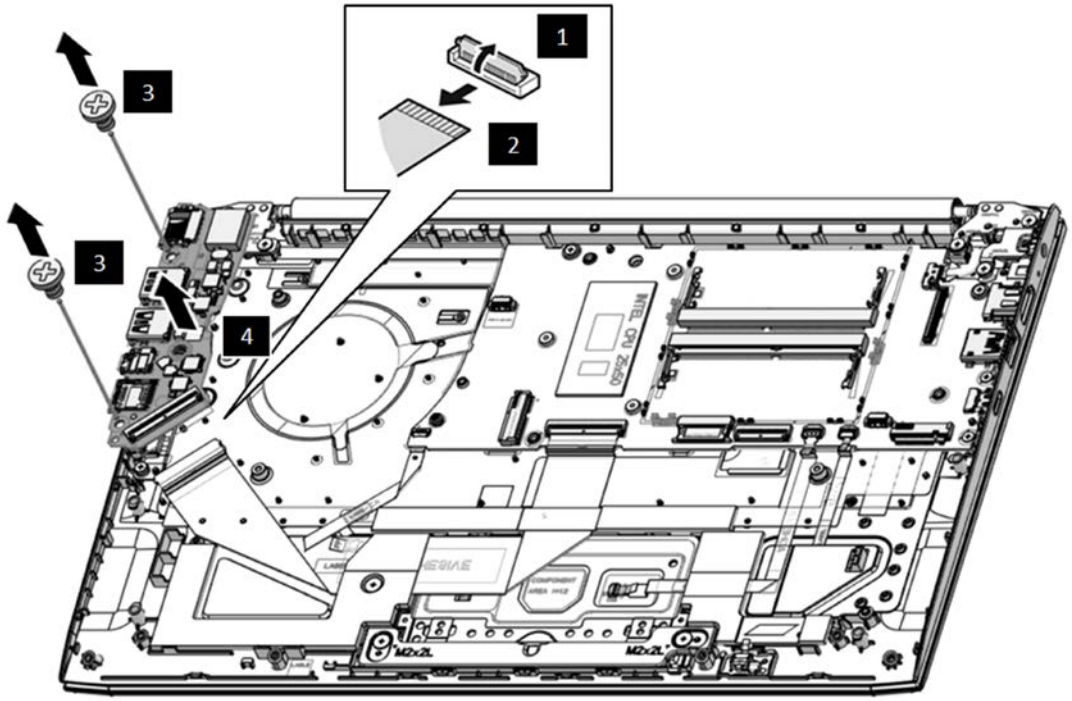


Figure 4.7-1 Removing the IO Board

Installing the IO Board

Install the IO board according to the following procedures:

1. Seat the IO board in the correct position on the logic upper assembly. ☐,4

2. Tighten three M2×3 screw to secure the IO board to the logic upper assembly. ☐,3

3. Connect the IO board FFC to the IO board. Make sure the FFC are properly engaged and firmly secured. ☐,2 ☐,1

BIT# of Screw driver	Screw (quantity)	Color	Torque
#1	M2 x 3 mm, flat-head, nylon-coated (2)	Black	0.181 Nm (1.85 kgf-cm)

4.8 Sensor Board

Removing the Sensor Board

Remove the Sensor board according to the following procedures and Figure 4.8-1

1. Disconnect the sensor board FFC ☐,1 ☐,2.

2. Gently pry up the sensor board from the adhesive and remove it from the Upper cover ☐,3.

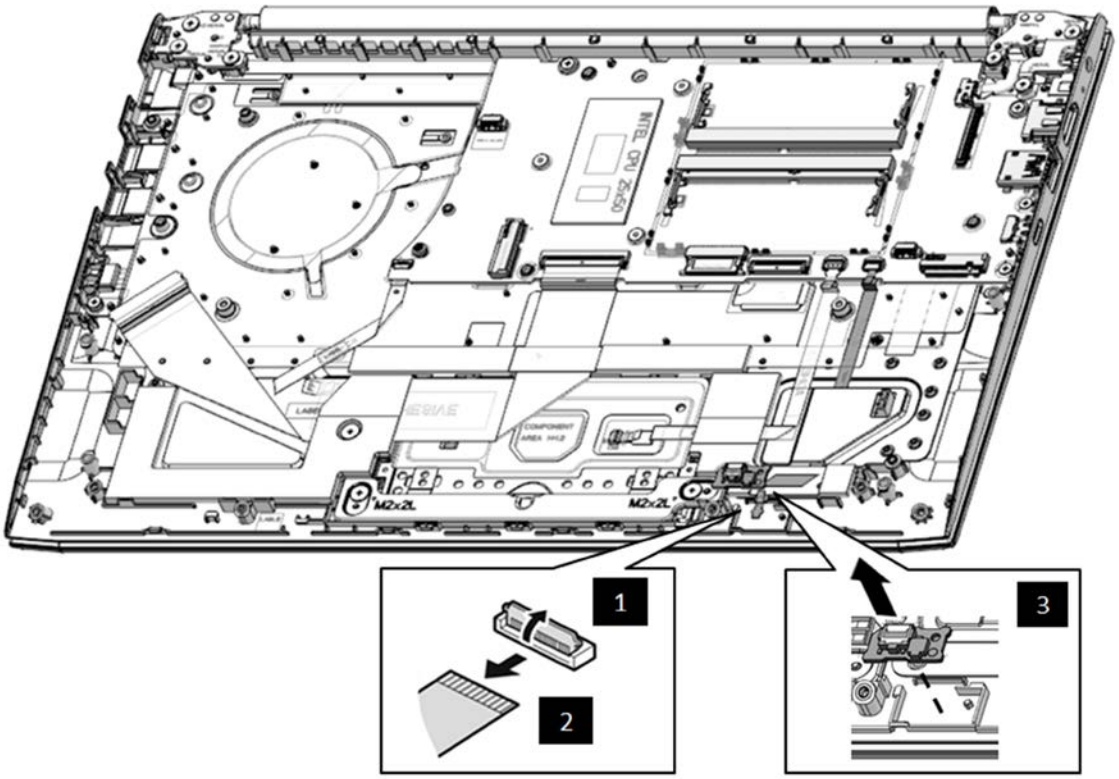


Figure 4.8-1 Removing the Sensor Board

Installing the Sensor Board

Install the Sensor board according to the following procedures:

1. S eat the sensor board in the correct position and secure it in place with adhesives on the upper cover as shown in Figure 4.8-2

2. Connect the sensor board FFC to the sensor board. Make sure the FFC are properly engaged and firmly secured. □,3 □,2 □,1

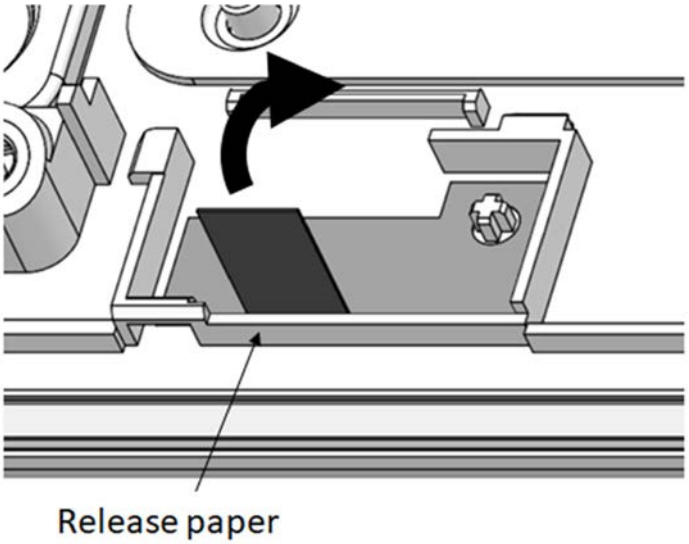


Figure 4.8-2 *Removing the release paper of sensor board adhesive*

4.9 Motherboard

Removing the Motherboard

Remove the motherboard according to the following procedures and Figure 4.9-1

1. Disconnect the FP FFC ☐,1☐,2 / IO FFC ☐,3☐,4 / Keyboard FPC ☐,5☐,6/TP FFC ☐,7☐,8 / Sensor FFC ☐,9☐,10 / EDP cable ☐,11 / DCIN cable ☐,12 from the motherboard as shown in Figure 4.9-1
2. Remove four M2x3 screws ☐,13 securing the motherboard to the logic upper assembly
3. Gently lift the left edge of the motherboard and remove the motherboard from the logic upper assembly ☐,14.

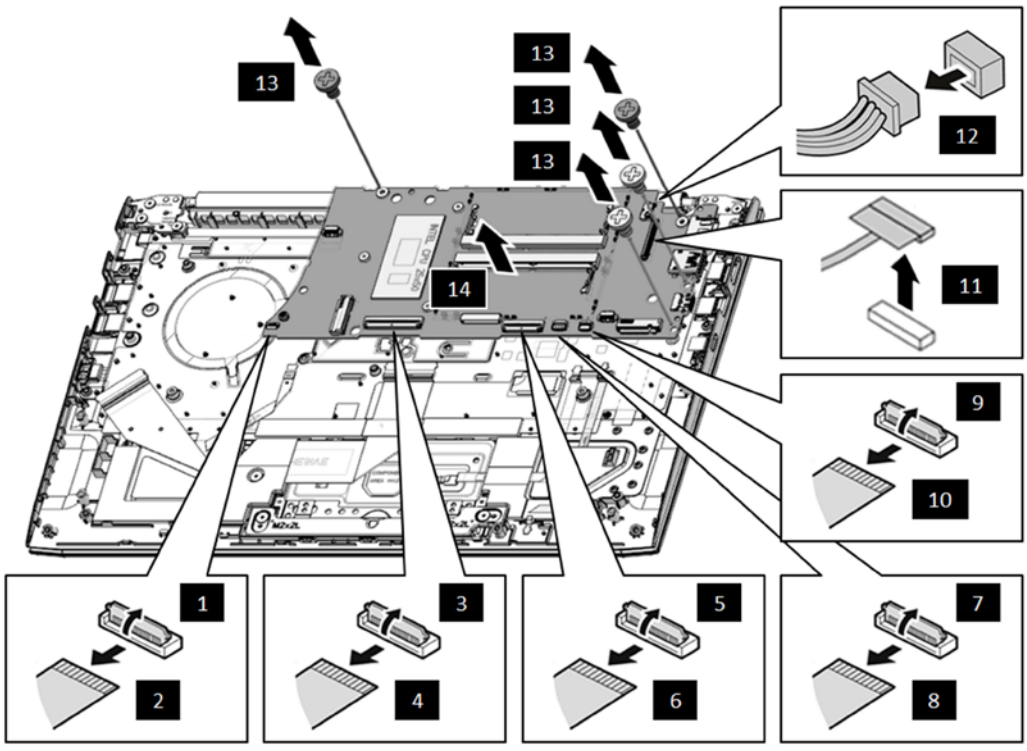


Figure 4.9-1 Removing the Motherboard

Installing the Motherboard

Install the motherboard according to the following procedures:

1. Seat the motherboard in the correct position on the logic upper assembly. ☐,14

2. Tighten four M2x3 screws to secure the motherboard to logic upper assembly as shown in Figure 4.9-1 ☐,13

3. Connect the EDP cable ☐,11 / DCIN cable ☐,12 / sensor board FFC ☐,9☐,10 / TP FFC ☐,7☐,8 / Keyboard FPC ☐,5☐,6 / IO FFC ☐,3☐,4 / FP FFC ☐,1☐,2 to the motherboard as shown in Figure 4.9-1 . Make sure the FPC and the connectors are properly engaged and firmly secured.

BIT# of Screw driver	Screw (quantity)	Color	Torque
#1	M2 x 3 mm, flat-head, nylon-coated (4)	Black	0.181 Nm (1.85 kgf-cm)

4.10 Finger Print Module

Removing the Finger Print Module

Remove the finger print assembly according to the following procedures and Figure 4.10-1

1. Disconnect the finger print FFC from finger print module ☐,1 ☐,2.

2. Remove the one M2x2 screw securing the finger print bracket to the logic upper assembly. ☐,3

3. Remove finger print bracket ☐,4 from the logic upper.

4. Gently push the finger print module away from the logic upper assembly ☐,5.

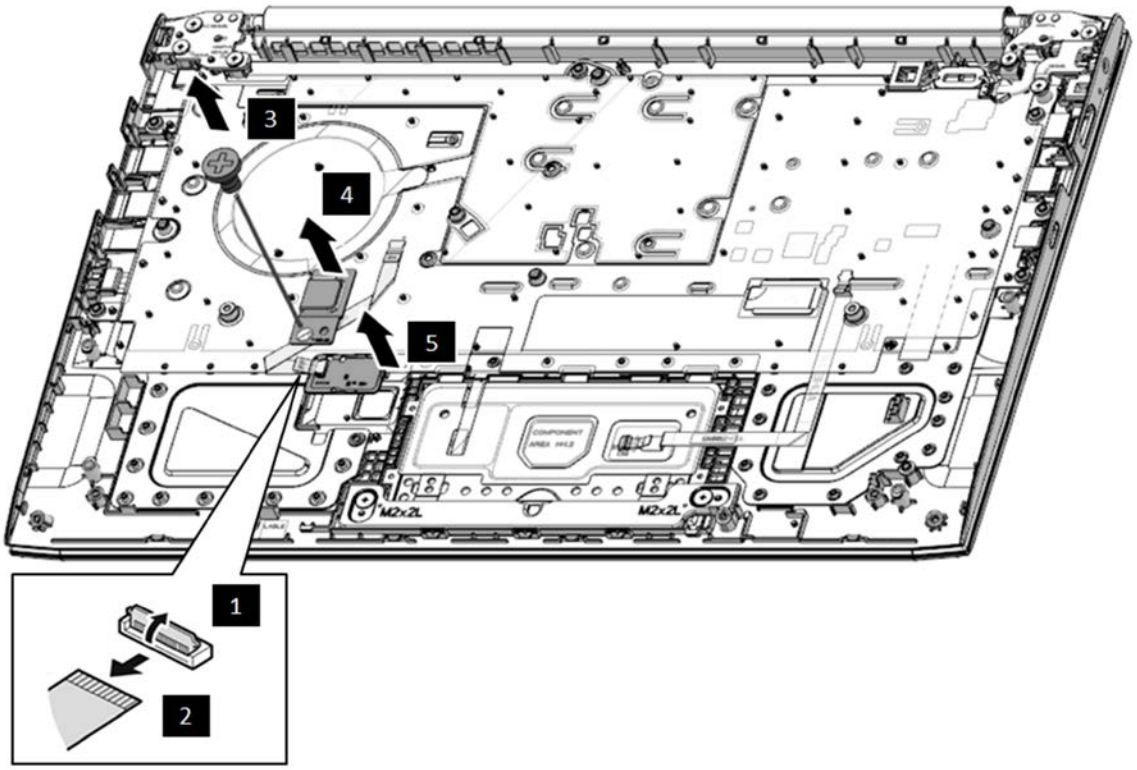


Figure 4.10-1 Removing the Finger print Module

Installing the Finger Print Module

Install the finger print module according to the following procedures:

1. Seat the finger print in the correct position on the logic upper assembly ☐,5.

2. Place the finger print bracket on the logic upper assembly ☐,4.

3. Tighten one M2×2 screw to secure the finger print bracket to the logic upper assembly ☐,3.

Connect the finger print FFC to the finger print ☐,1 ☐,2.

BIT# of Screw driver	Screw (quantity)	Color	Torque
#1	M2 x 2 mm, flat-head, nylon-coated (1)	Black	0.181 Nm (1.85 kgf-cm)

4.11 Touch Pad Module

Removing the Touch Pad Module

Remove the touch pad assembly according to the following procedures and Figure 4.11-1 and Figure 4.11-2

1. Disconnect the finger print FFC from finger print module ☐,1 ☐,2.
2. Peel away the conductive tape ☐,6 on logic upper assembly from touch pad.
3. Remove the two M2x2 screws securing the TP support bracket to the logic upper assembly ☐,3.
4. Remove TP support bracket ☐,4 from the logic upper.
5. Gently push the touch pad away from the logic upper assembly ☐,5.

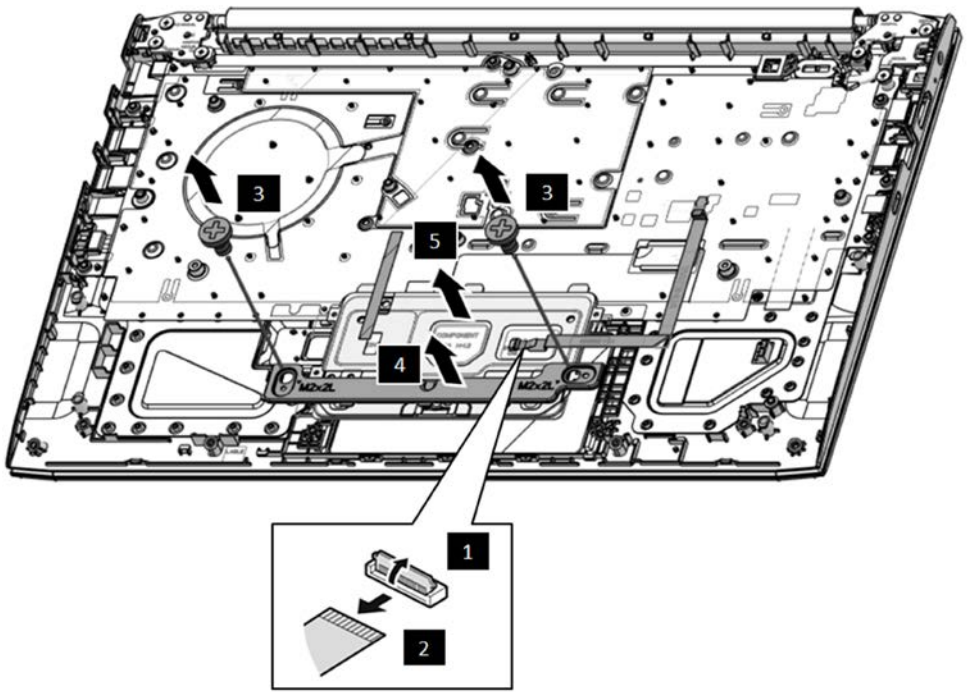


Figure 4.11-1 Removing the Touch Pad Module

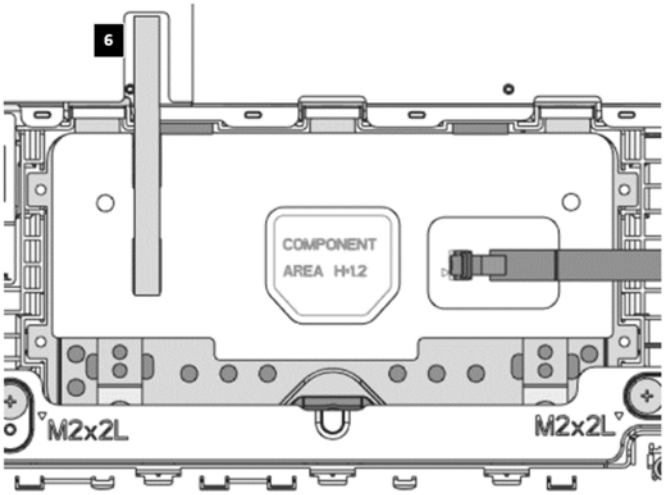


Figure 4.11-2 Location of Electronic tape & Conductive tape

Installing the Touch Pad Module

Install the touch pad module according to the following procedures:

1. Seat the touch pad in the correct position on the logic upper assembly. ☐,5

2. Seat the TP support bracket in the correct position on the logic upper assembly ☐,4 and tighten two M2×2 screws to secure the tp support bracket to the logic upper assembly. ☐,3

3. Connect the touch pad FPC to the touch pad. ☐,2 ☐,1

4. Adhere the conductive tape over the touch pad and logic upper assembly as shown in Figure 4.11-2 ☐,6

BIT# of Screw driver	Screw (quantity)	Color	Torque
#1	M2 x 2 mm, flat-head, nylon-coated (2)	Black	0.181 Nm (1.85 kgf-cm)

4.12 LCD Assembly

Removing the LCD Assembly

Remove the LCD assembly according to the following procedures and Figure 4.12-1and Figure 4.12-2

1. Pull the W-LAN cables and EDP cable out of the routing channels as shown in Figure 4.12-1 ☐,1 ☐,2
2. Remove the six M2x5 screws ☐,3 securing the LCD assembly as shown in Figure 4.12-2
3. Make sure all cables are moved away from the logic upper assembly to avoid damaging the system when removing the LCD assembly. Lift away the LCD assembly from the logic upper assembly as the arrow ☐,4 indicates in Figure 4.12-2

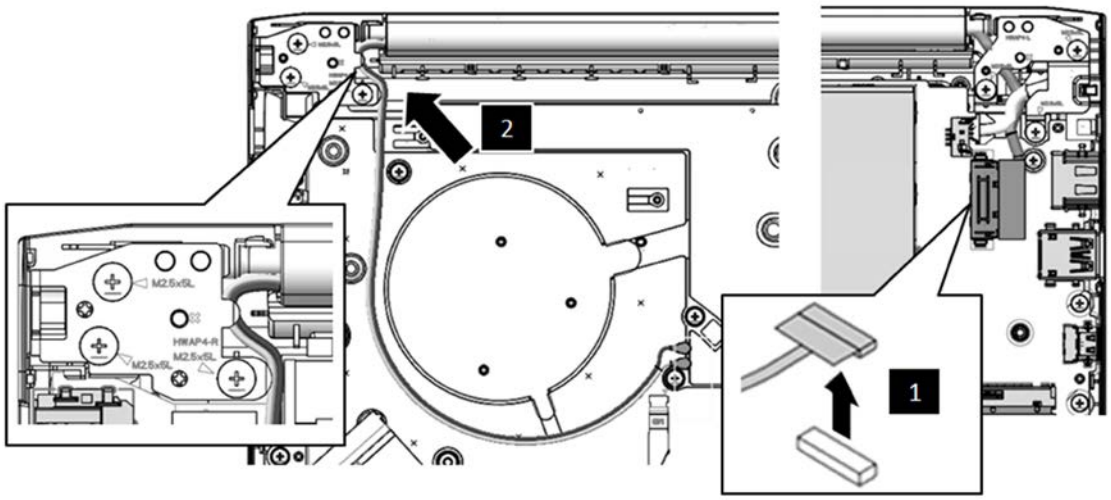


Figure 4.12-1 W-LAN / EDP Cables Routing Channels

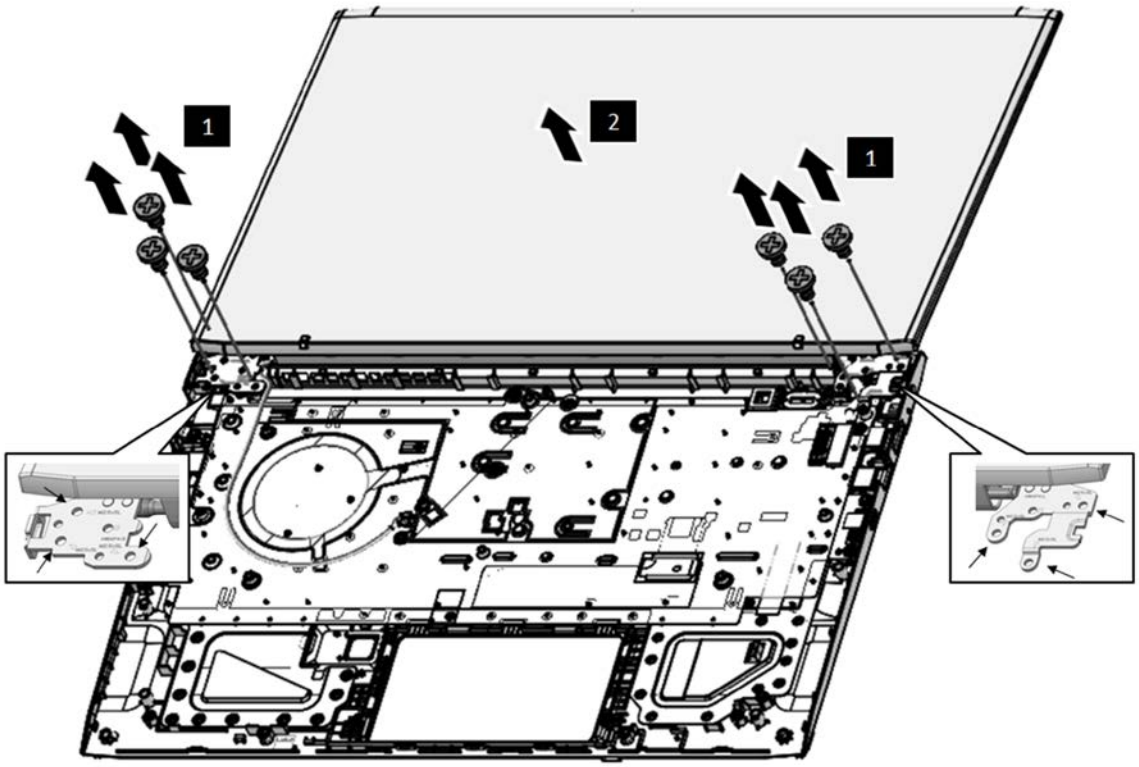


Figure 4.12-2 Removing the LCD Assembly

Installing the LCD Assembly

> ***NOTE:*** *Take care not to pinch the antenna cables. Make sure the routing positions of the antennas are correct and do not block any components, such as screw holes.*

Install the LCD assembly according to the following procedures:

1. Place the logic upper assembly upside down so that the bottom is facing up.

2. Rotate the LCD hinges to a 180-degree angle and seat the LCD assembly in the correct position on the logic upper assembly, and the cables must be placed inside the hook of hinge bracket.

   □,4

3. Tighten the six M2.5×5 screws to secure the LCD assembly to the logic upper assembly as shown in Figure 4.12-2□,3

   Route and secure the W-LAN and EDP cable in the routing channels on the logic upper assembly as shown in Figure 4.12-1□,2□,1

BIT# of Screw driver	Screw (quantity)	Color	Torque
#1	M2.5 x 5 mm, flat-head, nylon-coated (6)	Silver	0.294 Nm (3.0 kgf-cm)

4.13 Bezel

Removing the Bezel

Remove the Bezel according to the following procedures and Figure 4.13-1

1. Place the LCD assembly right-side up so that the top is facing up.
2. Insert a smooth, flat instrument into the gap between the Bezel and the LCD cover as shown in Figure 4.13-1 and then gently twist the instrument to pry up the Bezel from the LCD cover ☐,1.

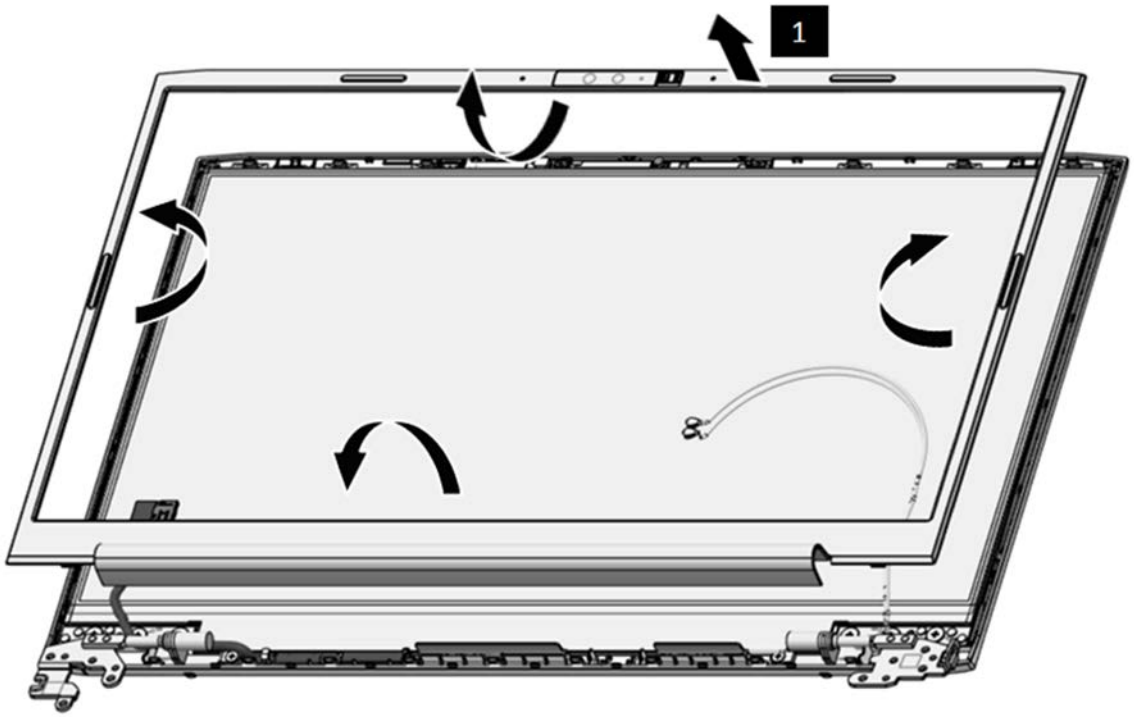


Figure 4.13-1 Removing the Bezel

Installing the Bezel

Install the Bezel according to the following procedures:

1. Place the Bezel on the LCD cover assembly. Make sure the tabs on the back of the Bezel align with the slots in the LCD cover assembly.

2. Gently press down edges around the Bezel until clicks are heard. Make sure all the snaps are latched and secured.

4.14 Panel Assembly

Removing the Panel Assembly

Remove the panel Assembly according to the following procedures and Figure 4.14-1 and Figure 4.14-2 and Figure 4.14-3

1. Pull up the tape from LCD cover ☐,1 as shown in Figure 4.14-1

2. Carefully lift up and rotate the panel from the LCD assembly as the arrow ☐,2 indicates in Figure 4.14-1

3. Place the panel on a protective surface, such as a foam pad as shown in Figure 4.14-2

4. Peel the conductive tape ☐,3 on EDP cable connector so that the connector are visible as shown in Figure 4.14-3

5. Pull the lock bar outward and disconnect the EDP cable from the touch glass panel ☐,4 as shown in Figure 4.14-2

6. Disconnect the EDP cable FFC from Camera FPC (5->6->7) and Gently pry up the Camera FPC ☐,8 as shown in Figure 4.14-3

7. Peel away the EDP cable ☐,9 on LCD cover assembly in Figure 4.14-3

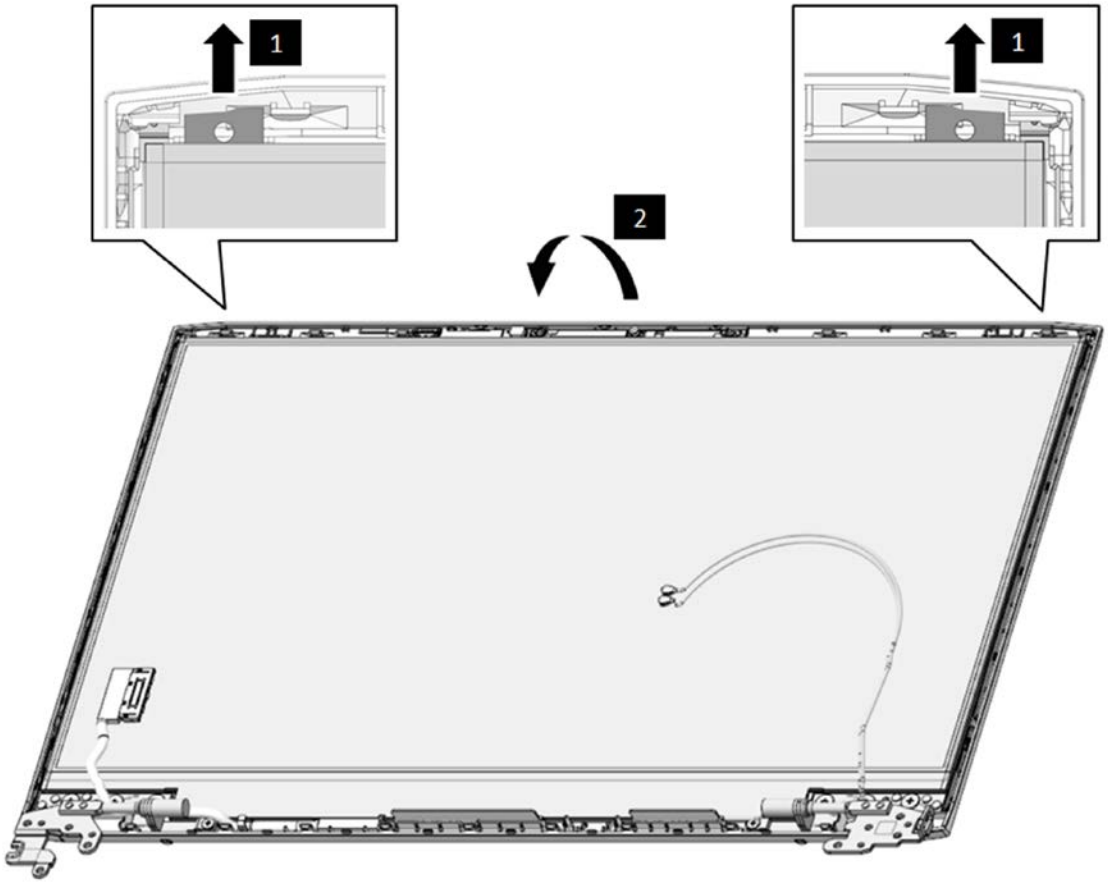


Figure 4.14-1 Removing the Securing tape

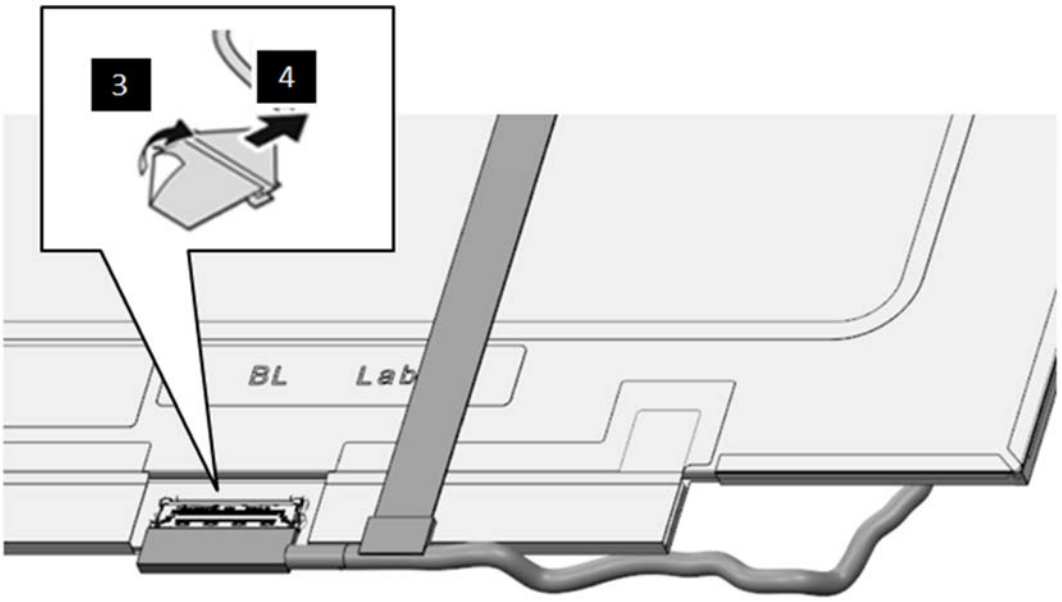


Figure 4.14-2 Disconnecting the Cable from Panel Assembly

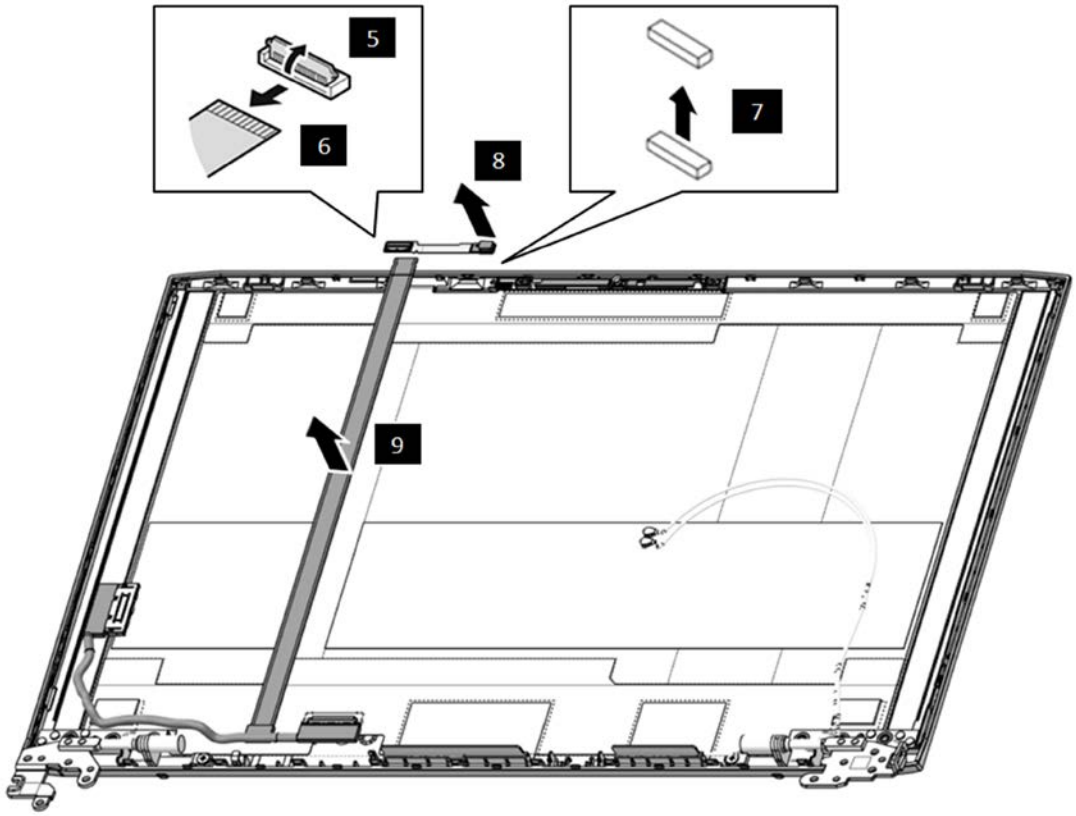


Figure 4.14-3 Disconnecting the Edp Cable FFC from Camera FPC Assembly

Installing the Panel Assembly

Install the panel assembly according to the following procedures:

1. Place the panel assembly upside down so that the bottom is facing up.

2. Connect the EDP cable to the panel connector and lock it with lock bar, then adhere the mylar over the connector to secure it in place as shown in Figure 4.14-2 ☐,3 ☐,4

3. Connect the EDP cable FFC to the camera FPC board connector as shown in Figure 4.14-3 (9->8->7->6->5)

4. Pull up the blue release paper of Panel Adhesive from LCD cover as shown in Figure 4.14-4 ☐,1

5. Rotate the panel right-side up and use 0.5mm Mylar between LCD cover and Panel to seat it in the correct position as shown in *Figure 4.14-5* ☐,2

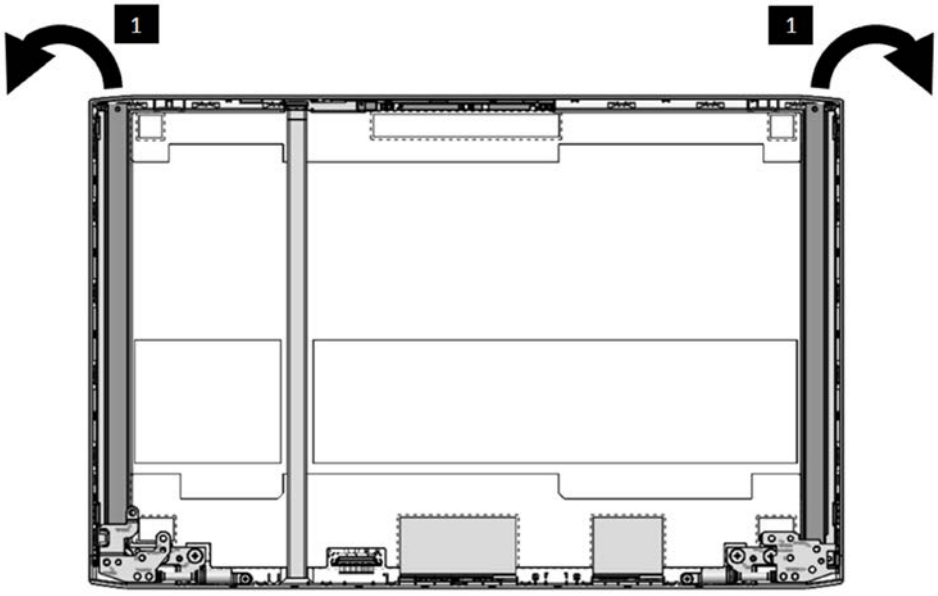


Figure 4.14-4 Removing the Release Paper of Panel Adhesive

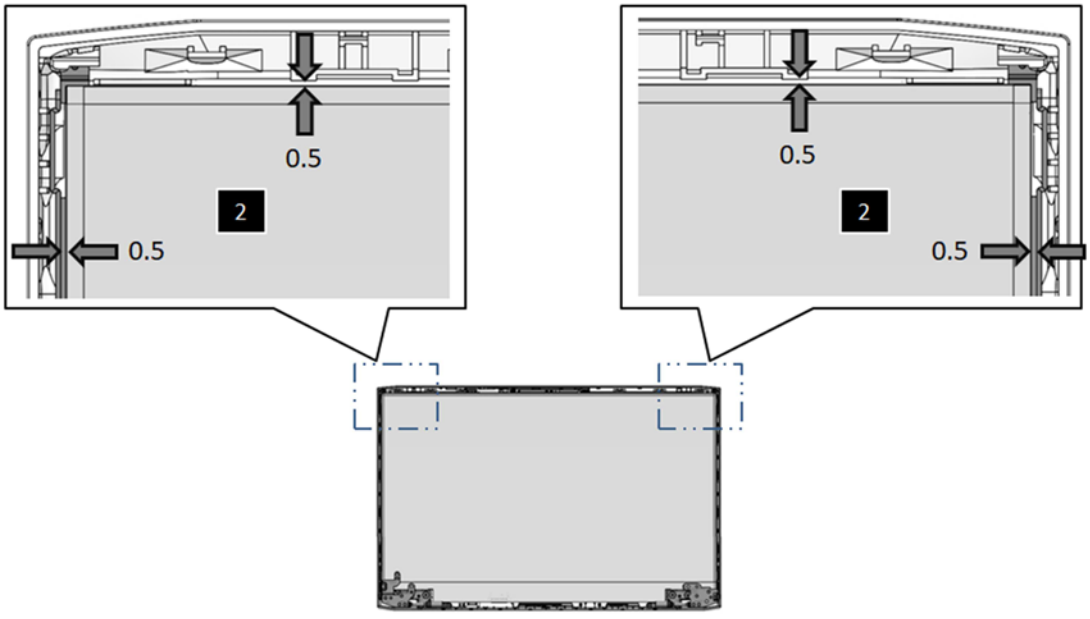


Figure 4.14-5 Panel assembly explanation

4.15 Antenna module Assembly

Removing the Antenna module

NOTE: Antenna module *is fastened by adhesives. Remove it slowly and carefully.*

Remove the Antenna module according to the following procedures and Figure 4.15-1

1. Removing the Antenna cable from the adhesive and remove it from the Hinge ☐,1
2. Gently pry up the Cu-Foil from the adhesive and remove it from the LCD cover ☐,2.
3. Removing the Antenna module from the adhesive and remove it from the LCD cover ☐,3
4. Removing the Antenna module cable from the LCD cover ☐,4
5. Gently pry up the Cu-Foil from the adhesive and remove it from the LCD cover ☐,5.
6. Removing the Antenna module from the adhesive and remove it from the LCD cover ☐,6

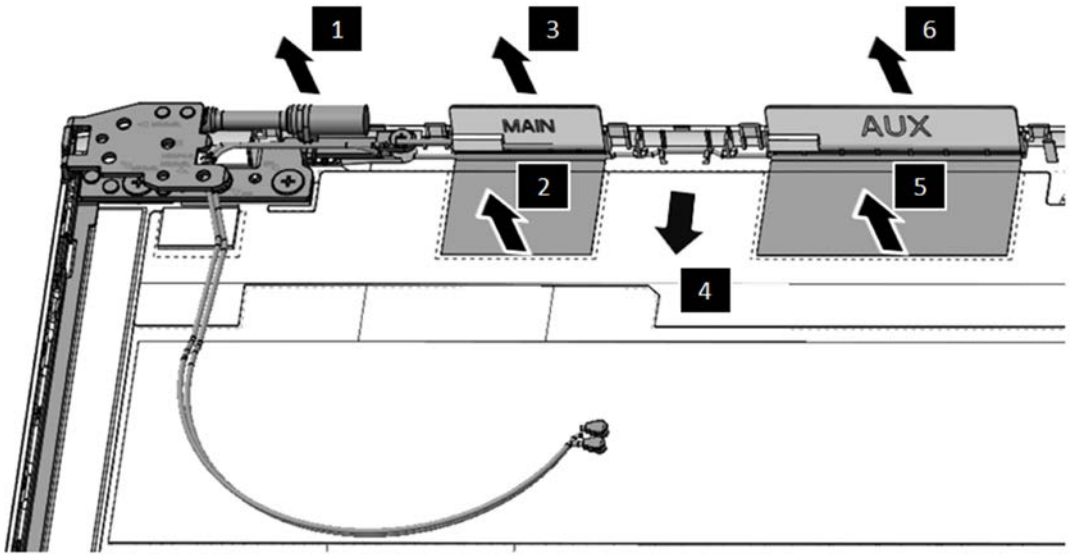


Figure 4.15-1 Removing the Antenna module

Installing the Antenna Module

Install the Antenna module according to the following procedure:

1. Seat the Antenna module-Aux in the correct position and secure it in place with adhesives behind it. ☐,6
2. Pasting the module-Aux Cu-Foil in the correct position. ☐,5
3. Seat the Antenna cable in the correct position and secure it in place. ☐,4
4. Seat the Antenna module-Main in the correct position and secure it in place with adhesives behind it. ☐,3
5. Pasting the module-Main Cu-Foil in the correct position. ☐,2
6. Seat the Antenna cable in the correct position and secure it in place with adhesives behind it. ☐,1

4.16 Camera module Assembly

Removing the Camera Module

> ***NOTE:*** *Camera module is fastened by adhesives. Remove it slowly and carefully.*

Remove the camera module according to the following procedures and Figure 4.16-1

1. Gently pry up the camera module and remove it from the LCD cover ☐,1.
2. Remove Mic rubber ☐,2 from the camera module.

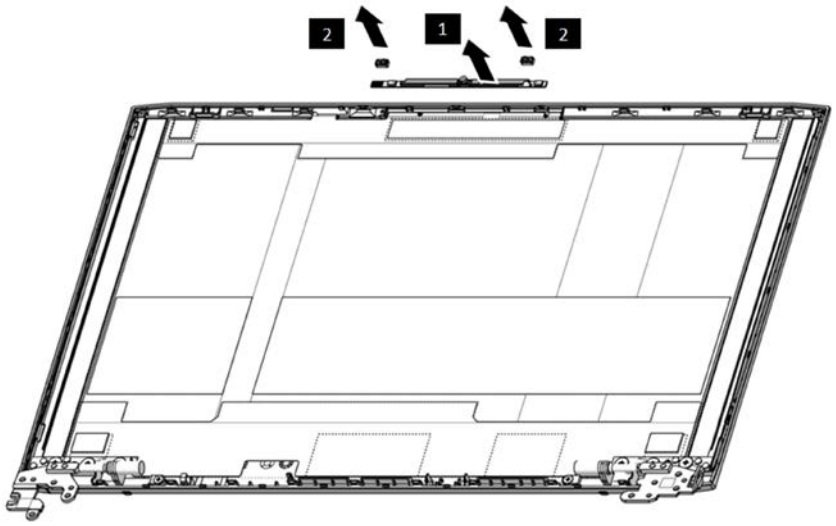


Figure 4.16-1 Removing the Camera Module

Installing the Camera Module

Install the camera module according to the following procedure:

1. Seat the mic rubber in the correct position and secure it in place with adhesives behind it. ☐,2
2. Seat the camera module in the correct position and secure it in place with adhesives behind it.☐,1

4.17 LCD Hinge

Removing the LCD Hinges

Remove the LCD hinges according to the following procedures and Figure 4.17-1

1. Remove the six M2x2.5 screws securing the LCD hinges ☐,1.
2. Remove the two M2x3 screws securing the LCD hinges ☐,2.
3. Remove the LCD hinge ☐,3.

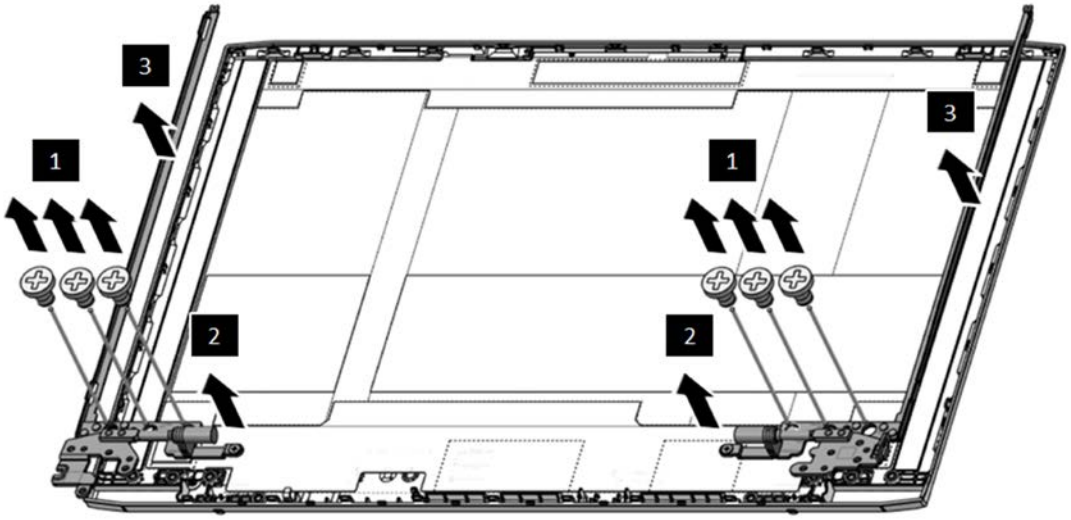


Figure 4.17-1 Removing the LCD Hinge

Installing the LCD Hinge

Install the LCD Hinge according to the following procedures:

1. Seat the LCD hinge in the correct position on the LCD cover assembly. ☐,3

2. Tighten the six M2x2.5 screws to secure the LCD hinges to the hinge cover assembly. ☐,1

3. Tighten the two M2x3 screws to secure the LCD hinges to the hinge cover assembly. ☐,2

BIT# of Screw driver	Screw (quantity)	Color	Torque
#1	M2 x 2.5 mm, flat-head, nylon-coated (6)	Black	0.181 Nm (1.85 kgf-cm)
#1	M2 x 3 mm, flat-head, nylon-coated (2)	Black	0.181 Nm (1.85 kgf-cm)

Installing the Panel Assembly

Install the panel assembly according to the following procedures:

1. Seat and adhere the Hinges in the correct position on the LCD cover assembly as shown in Figure 4.17-1 (Tighten the six M2×2.5 screws).

2. Seat and adhere the antennas in the correct position on the LCD cover assembly as shown in Figure 4.17-1 (. (Tighten the two M2×3.0 screws)

3. Seat and adhere the Camera in the correct position on the LCD cover assembly as shown in Figure 4.16-1

4. Seat and adhere the Antenna module in the correct position on the LCD cover assembly as shown in Figure 4.15-1

5. Place the panel assembly upside down so that the bottom is facing up.

6. Connect the EDP cable to the panel connector and lock it with lock bar, then adhere the mylar over the connector to secure it in place as shown in Figure 4.14-2

7. Connect the EDP cable FFC to the camera FPC board connector as shown in Figure 4.14-3

8. Pull up the blue release paper of Panel Adhesive from LCD cover as shown in Figure 4.14-4

9. Rotate the panel right-side up and use 0.5mm Mylar between LCD cover and Panel to seat it in the correct position as shown in *Figure 4.14-5*

AC Adapter, External cables provided with the AC adapter and USB cables

The AC adapter as well as all external cables provided with the notebook including the AC adapter cables and USB cables should be segregated and sent for shredding.

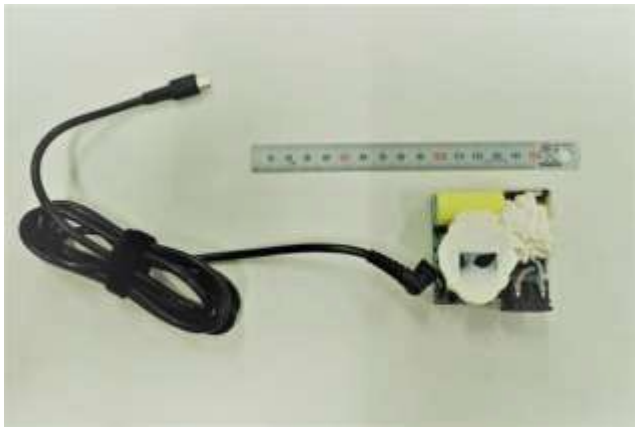
The following components contained within the AC adapter potentially contain hazardous substances and require special handling:

- Printed Circuit Board >10 cm^2
- Capacitor >25 mm in height

Photos of the AC adapter and the components noted above are included below.
The notebook has one of two types of AC adapter.

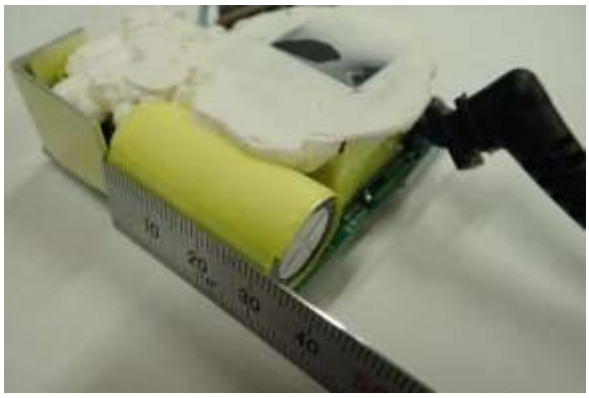
USB connection type

AC adapter



AC Adapter with casing removed

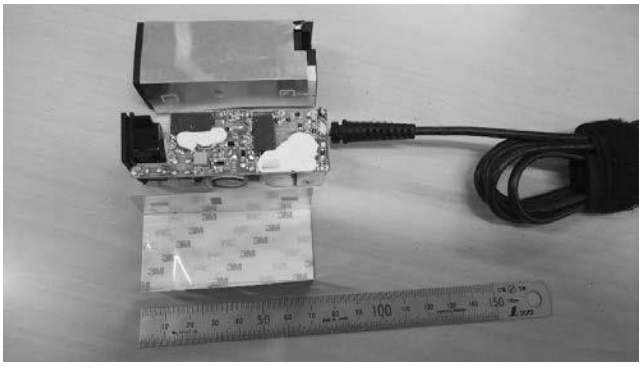
AC Adapter printed circuit board



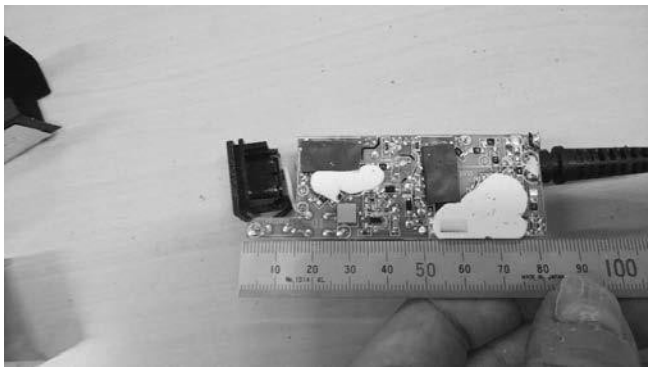
AC adapter capacitor

Conventional type

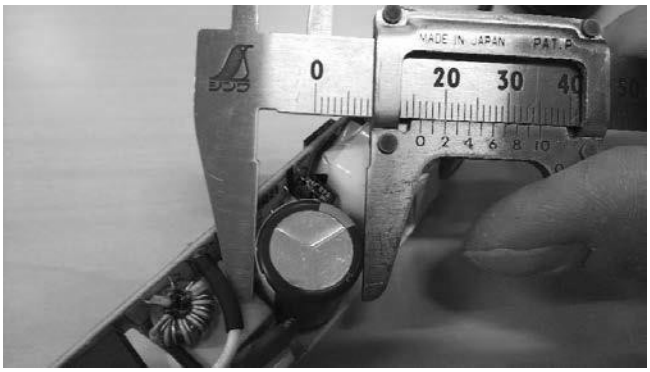
AC adapter



AC Adapter with casing removed



AC adapter printed circuit board



AC adapter capacitor