

Working Instructions

- mechanical -



Xperia XZ2 Compact
H8314, H8324 (Dual SIM)

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General Notes

For general information about mechanical repair related issues, refer to 000154064: Generic Repair Manual - mechanical (in RE4250: Repair - Mechanical - Repair instructions).

Always firstly disconnect the Battery FPC BtoB connector to cut off power supply when the Plate Display is disassembled.

Always finally connect the Battery FPC BtoB connector before the Plate Display is reassembled.

After repairing/reassembling the unit, calibration by CS-Everest, and flashing software Customize by Emma is required.

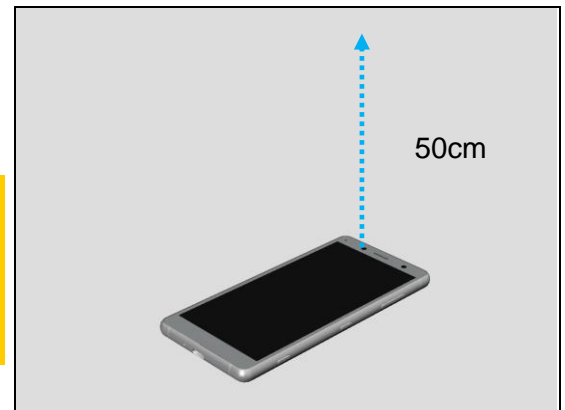
Calibration tool "CS-Everest 1309-7255" is available at Repair Information (in RE4251: Repair - Mechanical - Tools and Equipment (including Repair Software)).

When perform calibration, put the unit on a stable place, facing up, and no objects within 50cm.

Note!

Remove the protection film if sensor window is covered by it.

The sensor window shouldn't be covered by any materials for proximity sensor calibration.



Flashing Customize or Refurbish in Emma must be performed when replace Loudspeaker and/or Speaker Box.

Aged Battery Reset in Emma must be performed when Battery is replaced (installed brand new Battery) in order to delete battery log data.

Camera (both Main Camera and Front Camera) is sensitive for the dust.

Don't touch the lens area of the camera during repairing.

1 Exterior Views

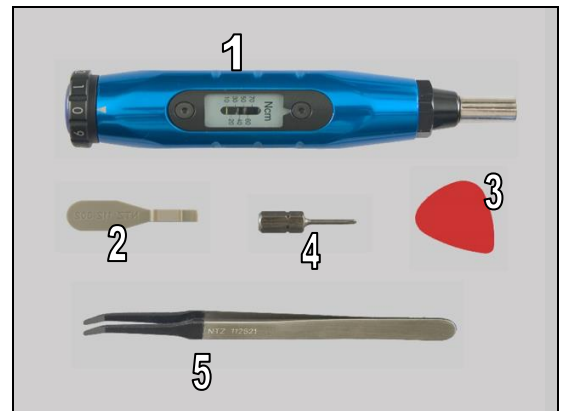
H8314, H8324



2 Tools

2.1 Special tools

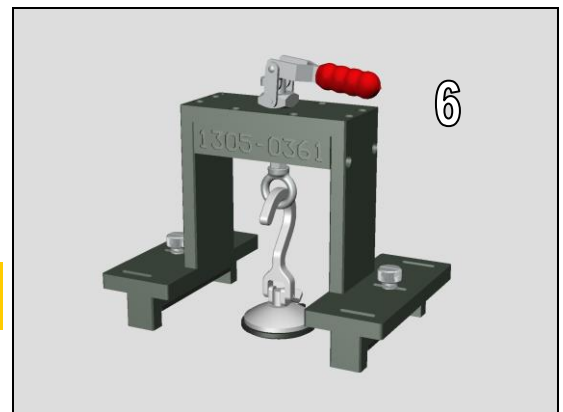
1. Torque Screwdriver 2-30Ncm (1233-2284)
2. Front Opening Tool (NTZ 112 302/2)
3. Guitar Pick (NTZ 112 590)
4. Bits (JCIS No 0) (NTZ 112 1052)
5. Flex Film Assembly Tool (NTZ 112 521)



6. Panel Disassembly Tool (1305-0361)
(Including Vacuum Cup for Tool 1305-7901.)

For disassembling Display

Refer to 2.2 Tool Modification before first use for this model.

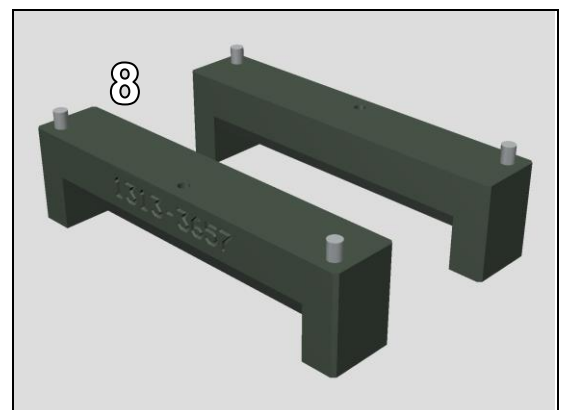


7. Vacuum Cup for Tool (1305-7901)
(Maintenance parts for Panel Disassembly Tool 1305-0361.)



8. Adapter for Panel Disassembly Tool (1313-3657)
(Including 2 pcs.)

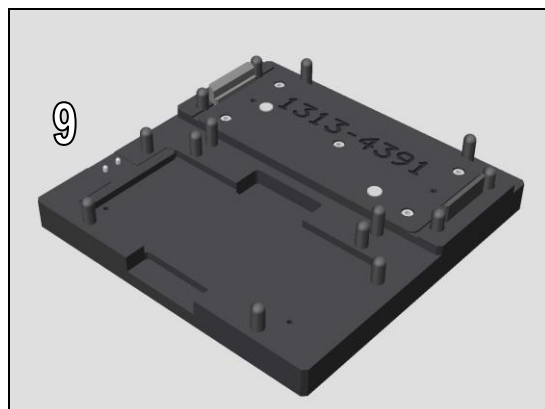
To use Panel Disassembly Tool (1305-0361) for this model, the original feet of Panel Disassembly Tool need to be replaced with this tool. Refer to 2.2 Tool Modification.



Tools

9. Positioning Tool (1313-4391)

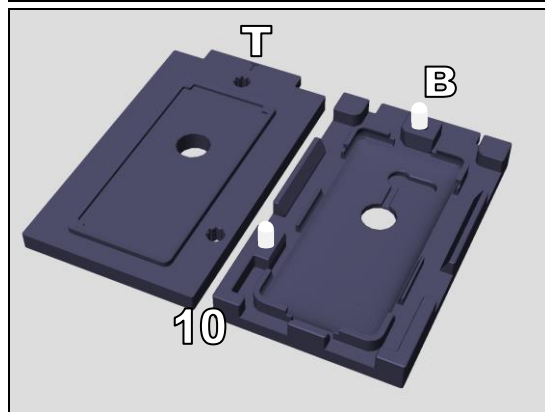
For pasting Adhesive Display and Sheet Mesh Top SPK



10. Press Rubber Inlay (1313-4390) (Including both top side (T) and bottom side (B).)

For pressing Display.

This tool is to be used together with Generic Wheel Press Tool (1311-1952).



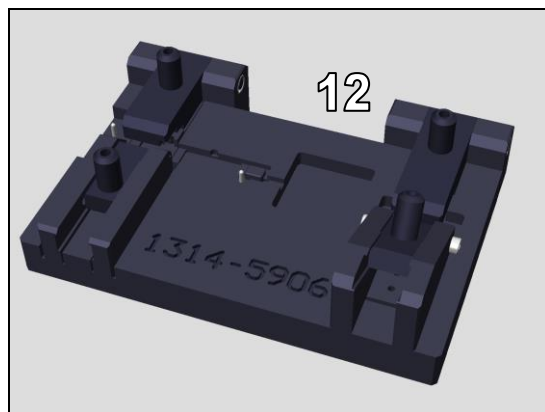
11. Generic Wheel Press Tool (1311-1952)

For pressing Display and Battery.



12. Press Tool for Bending Camera FPCs (1314-5906)

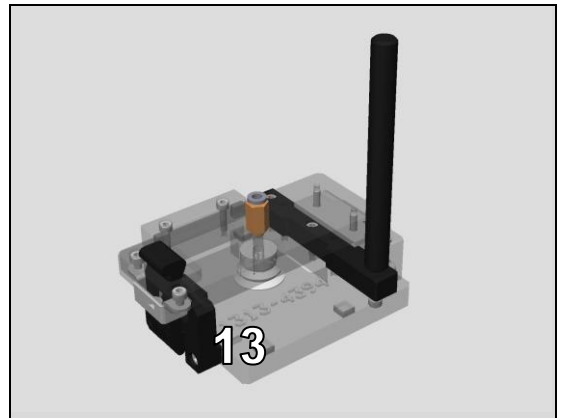
For pressing FPC of Main Camera and Front Camera.



Tools

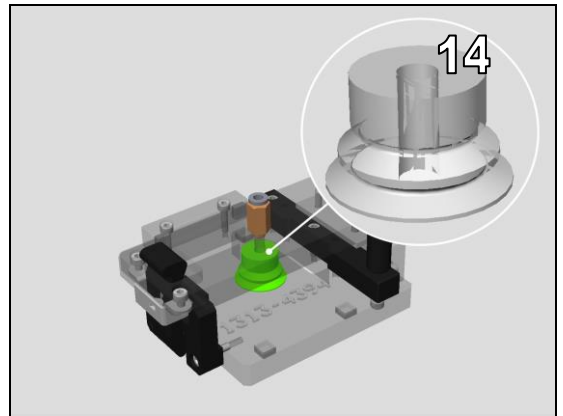
13. WRT Fixture (1313-4394)
(Including Suction Pad for WRT Fixture (1313-3667))

For Water Resistance test.



14. Suction Pad for WRT Fixture (1313-3667)
(Maintenance parts for WRT Fixture.)

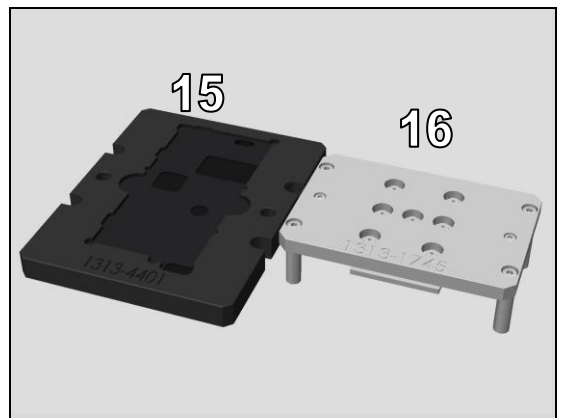
A hex key wrench (3 mm) is needed for replacement.



15. Battery Press Tool Bottom (1313-4401)
16. Press Battery Inlay (1313-1745)

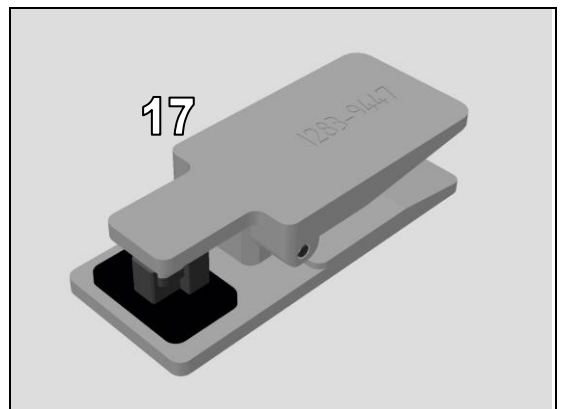
For pressing Battery.

These tools are to be used together with Generic Wheel Press Tool (1311-1952).



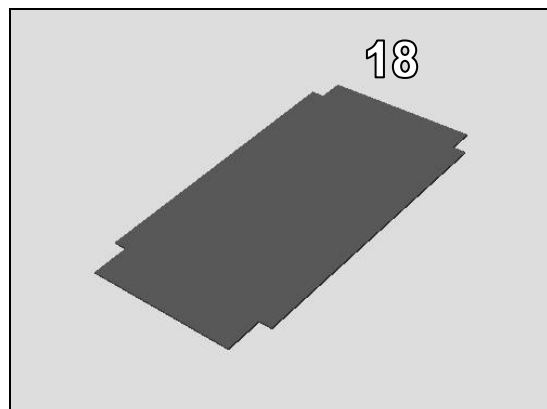
17. Earspeaker/Loudspeaker Top Press Tool (1283-9447)

For pressing Loudspeaker.



18. Disassembly Sheet (1295-5578)

For disassembling Display.



19. Media Cable TypeC Cable (Black) (1302-1935)

For charging and data communication.



20. Audio USB conversion cable (1310-9805)

For Audio Jack test. Refer to Test Instructions.



OPTIONAL TOOLS

1. Vacuum Cup for Tool (L) (1313-3658)

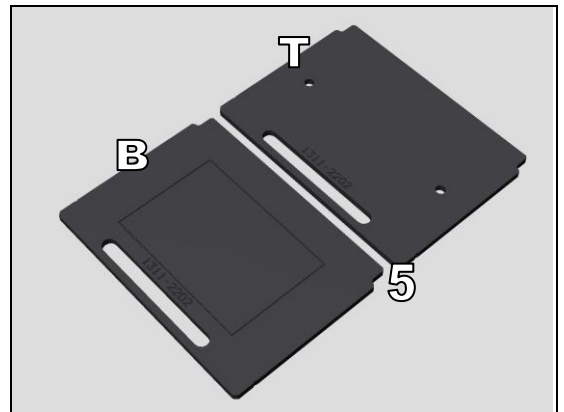
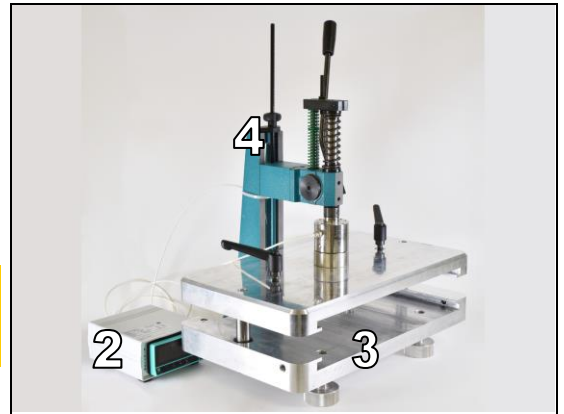
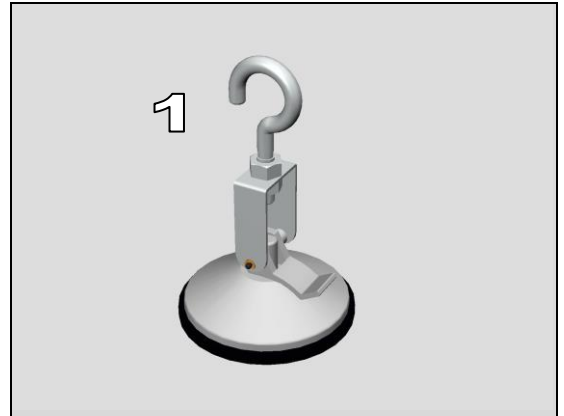
This tool has stronger holding force than Vacuum Cup for Tool (1305-7901).

Generic Press Tool

2. Load cell measurement kit (1274-3895)
3. Generic Fixture for Press Tool (1273-4413)
4. Toothed Rack Press (1281-2676)

A combination of Generic Press Tool and Inlay adapter can be used for this model instead of Generic Wheel Press Tool.

5. Inlay adapter (1311-2202)
(Including both top side (T) and bottom side (B).)



2.2 Tool Modification

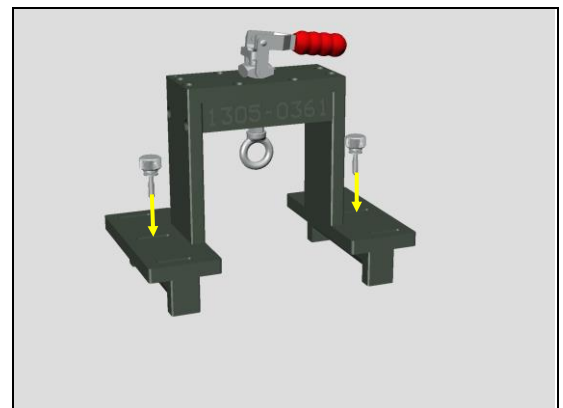
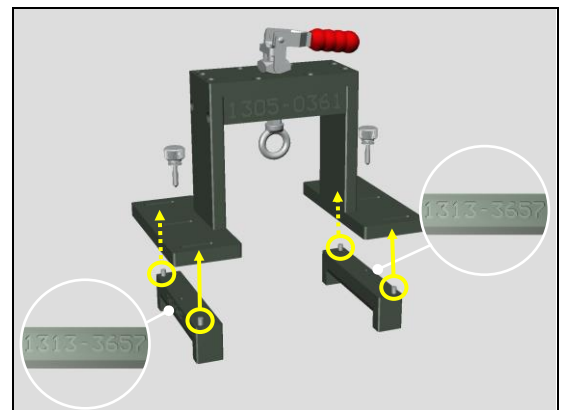
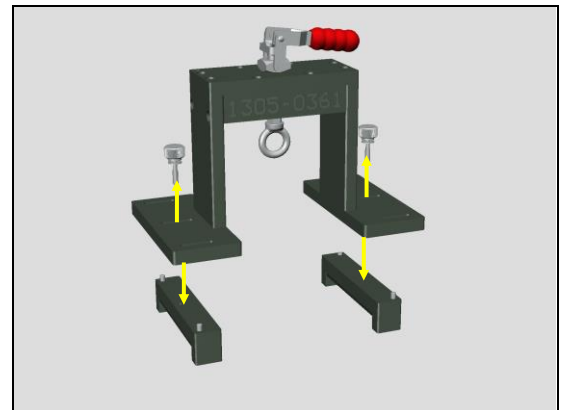
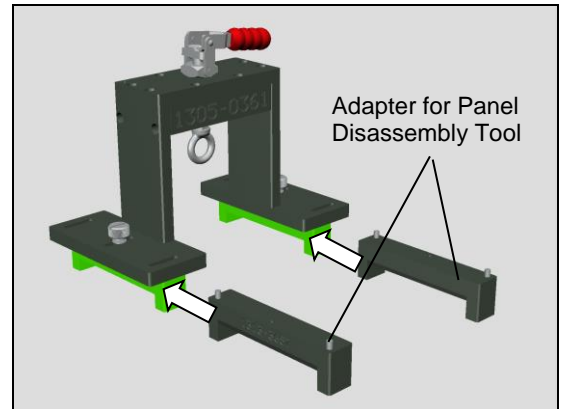
Before first use of the Panel Disassembly Tool (1305-0361) for this model, replace the original feet with the Adapter for Panel Disassembly Tool (1313-3657).

Follow below instruction for replacement.

Loosen the screws and remove the feet of Panel Disassembly Tool.

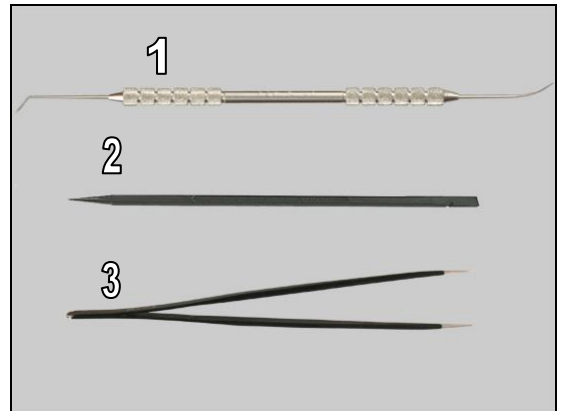
Install the Adapter for Panel Disassembly Tool.

Tighten the screws.

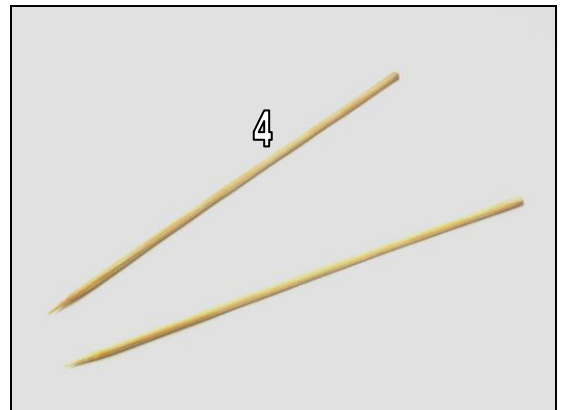


2.3 Standard tools

1. Dentist Hook
2. Nylon Pointer
3. Tweezers (2A)



4. Bamboo Skewer



5. Screwdriver PH0 x 100



6. Tweezers (Curved Tip)



Refer to the 1003-9107 Tools Catalogue for detail of standard tools (RE4251).

3 Mandatory Replacement Parts List

The Mandatory Replacement Parts List is embedded.
Doubleclick the icon to open the file.



Targeted replacement parts are listed

Mandatory replacement part	Product Id	Top Tray	Display	Loudspeaker (Top)	Front Camera	FPC NFC	Battery	Main Camera	PBA Main	FPC USB	SPK Box module (Bottom)	FPC Mic 1 (Bottom)	Frame WiFi Main Ant	FPC Mic 2 (Top)	FPC Key	Key Volume	Key Power	Key Camera	FP Sensor	Cover R	Refurbish
Cap Tray Assy SS Black	1313-0940																				
Cap Tray Assy SS Green	1313-0962																				
Cap Tray Assy SS Pink	1313-0972																				
Cap Tray Assy SS Silver	1313-0955																				
Cap Tray Assy DS Black	1313-0973																				
Cap Tray Assy DS Green	1313-0975																				
Cap Tray Assy DS Pink	1313-0976																				
Cap Tray Assy DS Silver	1313-0974																				
Display Assy Black	1313-0914																				
Display Assy Green	1313-0918																				
Display Assy Pink	1313-0920																				
Display Assy Silver	1313-0917																				
Adhesive Display	1310-1639																				
Sheet Mesh Top SPK Black	1310-1627																				
Sheet Mesh Top SPK Green	1311-5402																				
Sheet Mesh Top SPK Pink	1311-5403																				
Sheet Mesh Top SPK Silver	1311-5401																				
Screw M1.2x2.9	1313-3372																				
Screw M1.2x3.3	1313-1473																				
Loudspeaker	1310-6904																				
Adhesive Top SPK	1310-1608																				
Front Camera	1309-8266																				
Sheet Spacer BloB Chat Cam	1313-2091																				
FPC NFC	1312-9275																				
Sheet Insulation PBA Bottom	1311-7625																				
Battery	1310-1071																				
Adhesive Battery	1310-1603																				
Adhesive Adn Battery	1310-3944																				
FICTIVE Main Camera	1301-8332																				
PBA Main	1307-9072																				
Label MoP	1310-6201																				
Holder PBA Bottom	1309-8693																				
FPC USB	1310-6897																				
SPK Box module	1309-8681																				
FPC Mic1	1310-1656																				
Gasket Mic	1310-1658																				
Plate Mic	1310-1918																				
Frame WiFi Main Ant	1309-8685																				
FPC Mic2	1313-3006																				
Sheet Spacer BloB FPC Mic2	1309-8677																				
FPC Key	1310-1567																				
Sheet Guide MOP	1313-1478																				
Screw M1.2x2.0	1311-7085																				
Adhesive FPC Key Panel Rear	1311-7083																				
Adhesive FPC Key Holder Rear	1310-3951																				
Adhesive FPC Key Rear	1310-1575																				
Key Volume Black	1311-5399																				
Key Volume Green	1311-5400																				
Key Volume Pink	1311-5398																				
Key Volume Silver	1310-4872																				
Adhesive Key Vol																					

Number in the cells indicates parts
require replacing for target part.

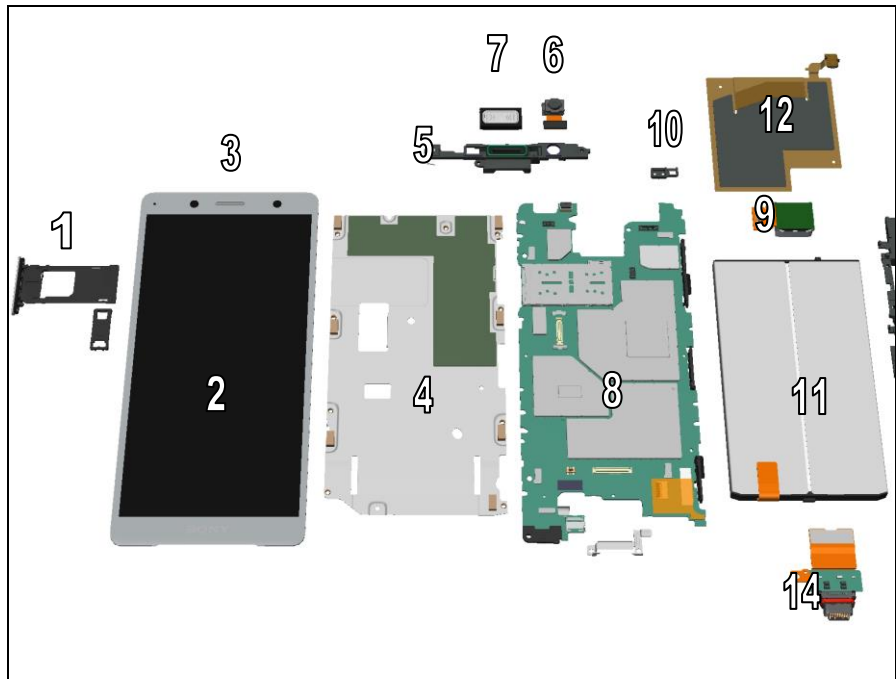
Mandatory replacement parts for refurbishment.

Parts that is required to replace in addition to
target replacement parts.

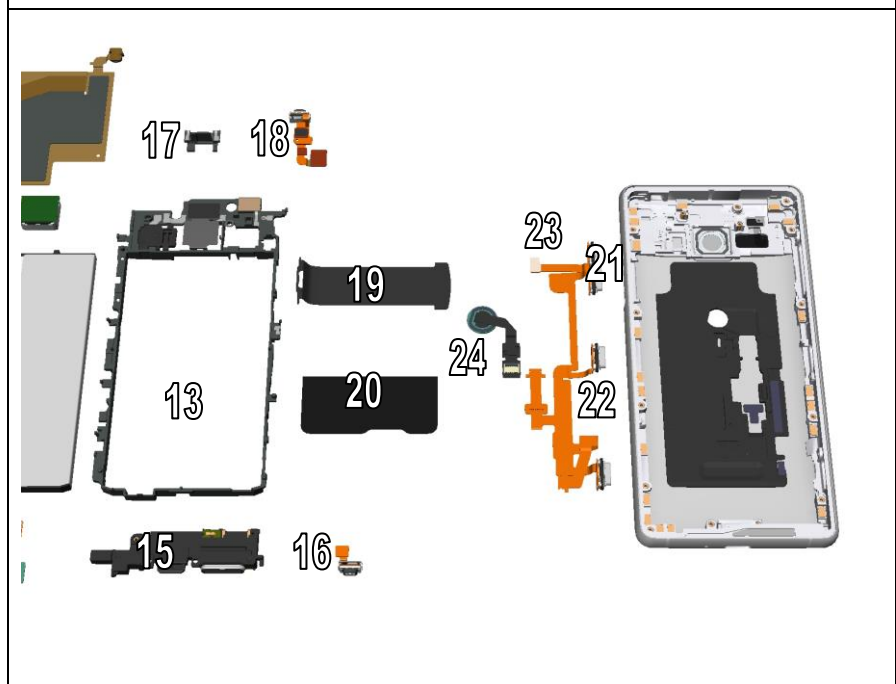
4 Disassembly

The disassembly is done in the following order:

- 1 Cap Tray
- 2 Display
- 3 Sheet Mesh Top SPK
- 4 Plate Display
- 5 Holder Top SPK
- 6 Front Camera
- 7 Loudspeaker
- 8 PBA Main
- 9 Main Camera
- 10 Holder Sensor
- 11 Battery
- 12 FPC NFC
- 13 Frame Rear

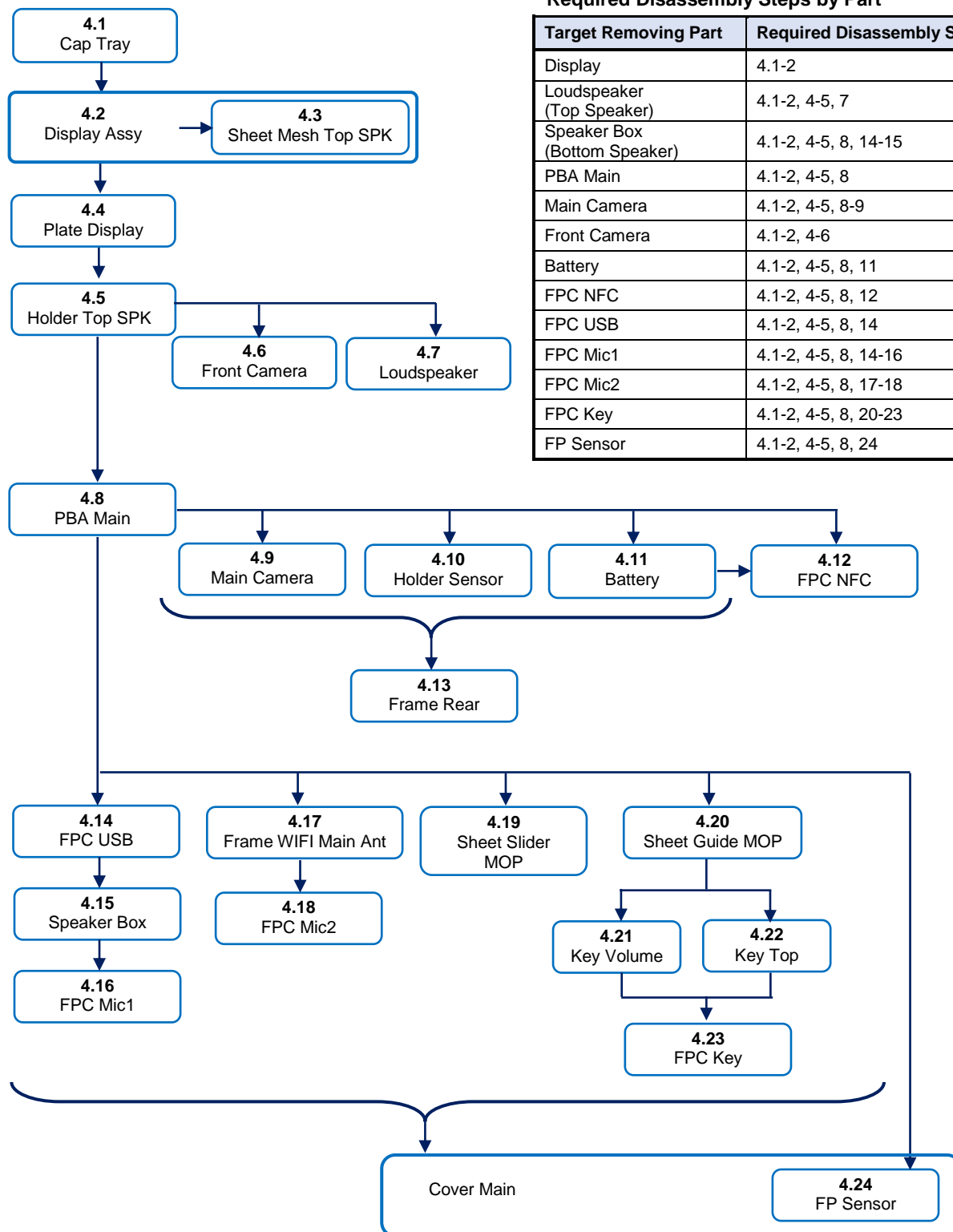


- 14 FPC USB
- 15 Speaker Box
- 16 FPC Mic1
- 17 Frame WIFI Main Ant
- 18 FPC Mic2
- 19 Sheet Slider MOP
- 20 Sheet Guide MOP
- 21 Key Volume
- 22 Key Top
- 23 FPC Key
- 24 FP Sensor



Disassembly

Quick Reference for Disassembling

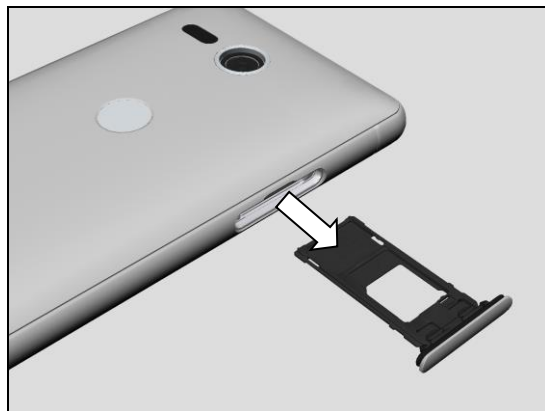


Required Disassembly Steps by Part

Target Removing Part	Required Disassembly Steps
Display	4.1-2
Loudspeaker (Top Speaker)	4.1-2, 4-5, 7
Speaker Box (Bottom Speaker)	4.1-2, 4-5, 8, 14-15
PBA Main	4.1-2, 4-5, 8
Main Camera	4.1-2, 4-5, 8-9
Front Camera	4.1-2, 4-6
Battery	4.1-2, 4-5, 8, 11
FPC NFC	4.1-2, 4-5, 8, 12
FPC USB	4.1-2, 4-5, 8, 14
FPC Mic1	4.1-2, 4-5, 8, 14-16
FPC Mic2	4.1-2, 4-5, 8, 17-18
FPC Key	4.1-2, 4-5, 8, 20-23
FP Sensor	4.1-2, 4-5, 8, 24

4.1 Cap Tray

Remove the Cap Tray.



4.2 Display

STEP1: TOOL PREPARATION

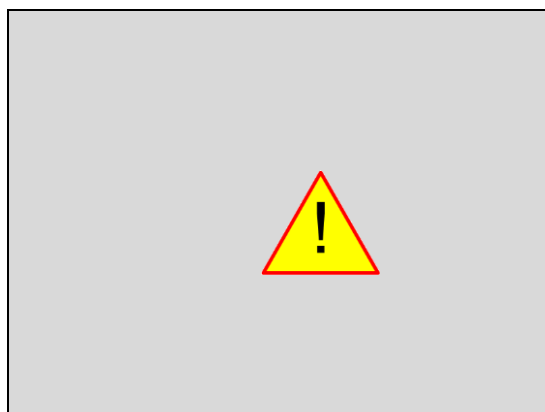
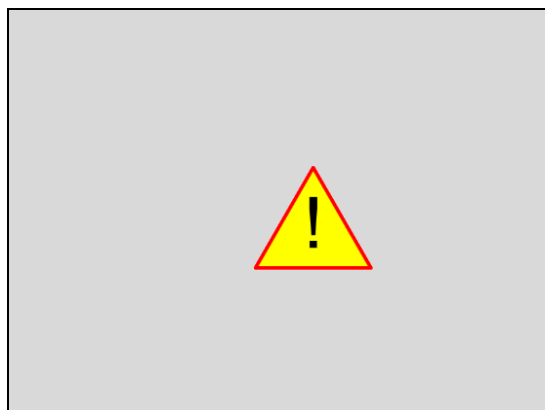
Follow 2.2 Tool Modification.

STEP2: MAKING A GAP

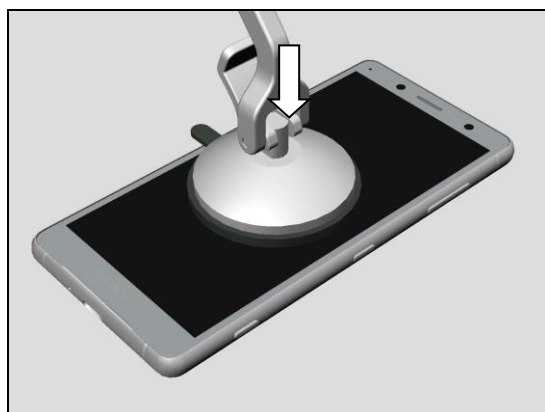
Note! In order to shorten the time to make a gap, applying heat to the unit might be effected.

If you intend to apply heat to the unit, satisfy the following conditions to ensure battery and other electric parts safety.

1. **Temperature:** No higher than 50 degrees Celsius
2. **Duration:** No more than 1 hour
3. **No foreign objects on the unit surface**

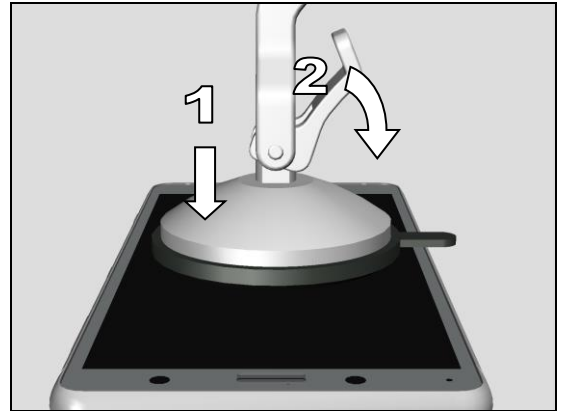


Place the Vacuum Cup for Tool on the center of the Display.

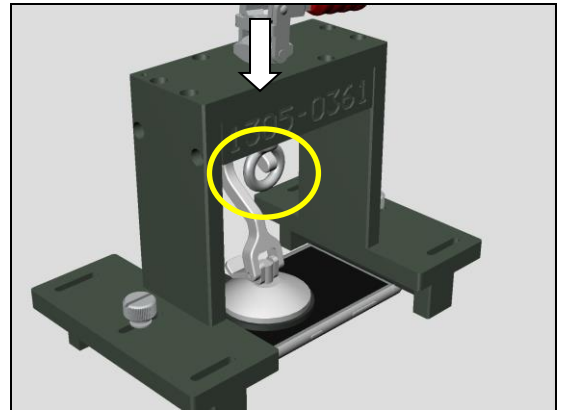


Disassembly

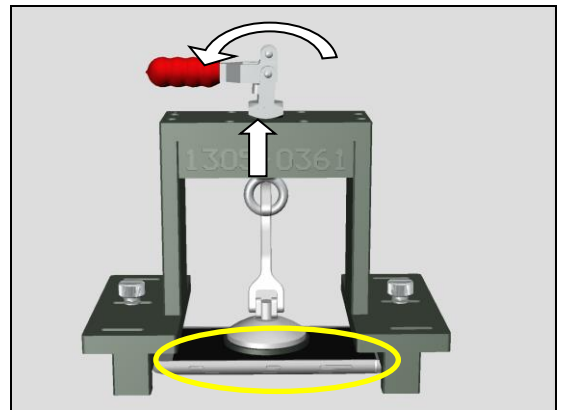
Push the cup and lock it by the flap.



Place the Panel Disassembly Tool over the unit.
Hang the hook on the ring.



Pull the lever and wait as the Display begins to open.



If the Vacuum Cup for Tool comes off during the operation,

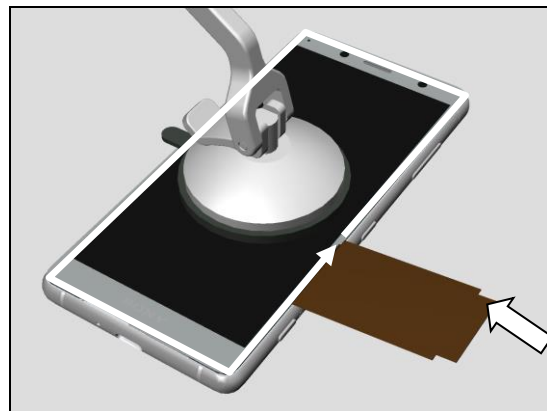
- 1. Wash the black cup and try again.**
- 2. Use Vacuum Cup for Tool (L) which has stronger holding force.**



Disassembly

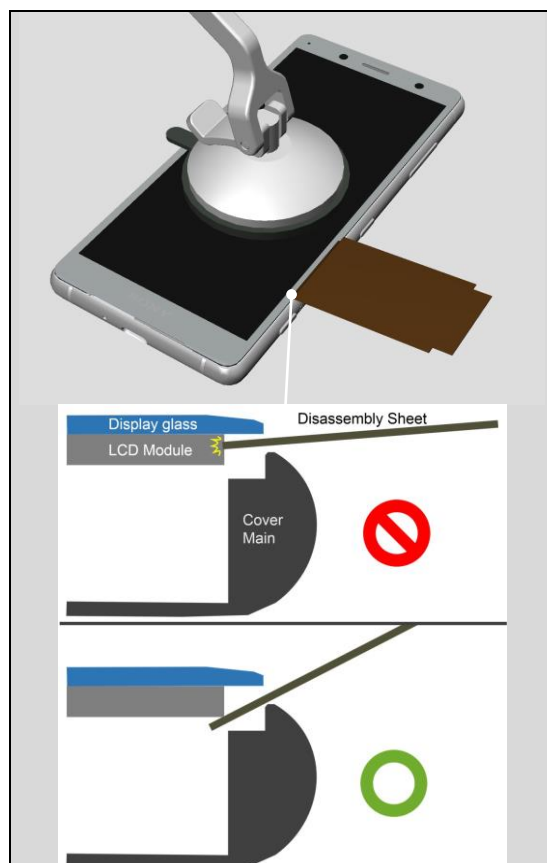
STEP3: CUT ADHESIVE

Insert the Disassembly Sheet and slide to cut the Adhesive Display by following the notes.



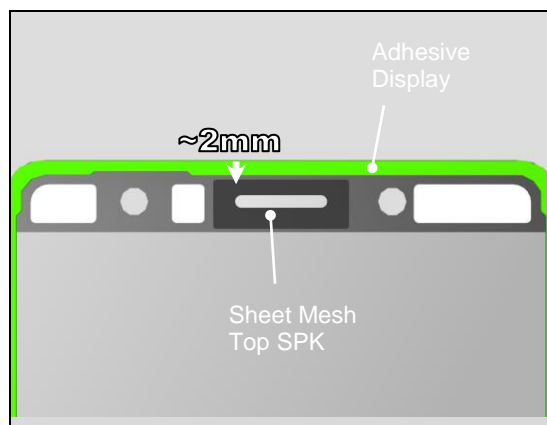
NOTE1 INSERT AND RIGHT/LEFT AREA

Do not hit the LCD module on the flip side of the Display when inserting and sliding the Disassembly Sheet.



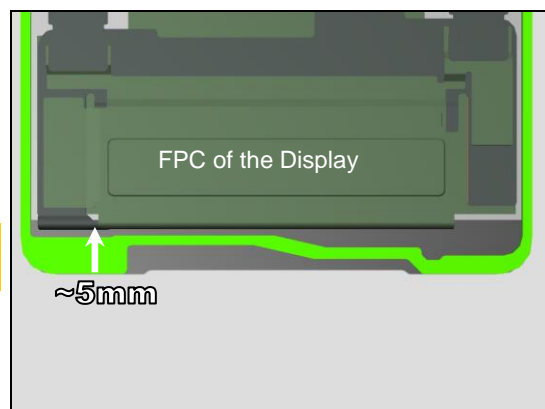
NOTE2 TOP AREA

Do not insert the Disassembly Sheet more than 2mm not to damage the Sheet Mesh Top SPK.

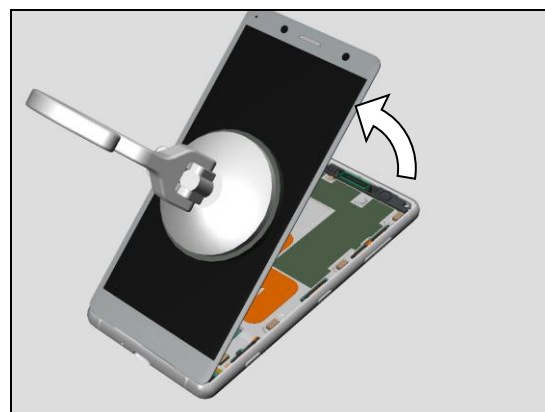


NOTE3 BOTTOM AREA

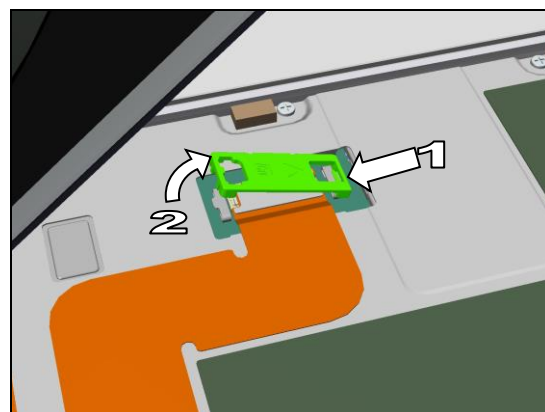
Do not insert the Disassembly Sheet more than 5mm not to damage the FPC of the Display.



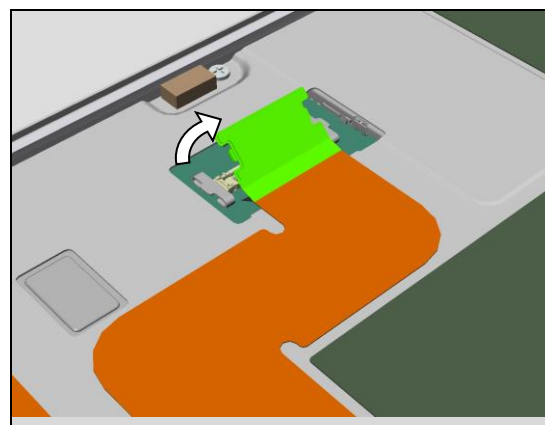
Carefully open the Display.



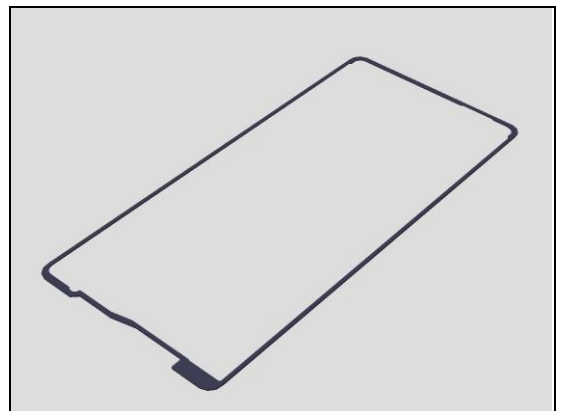
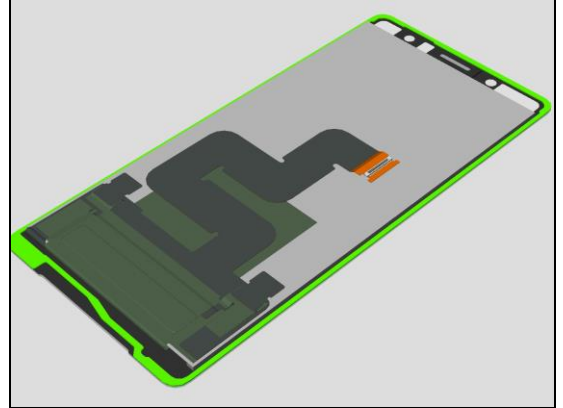
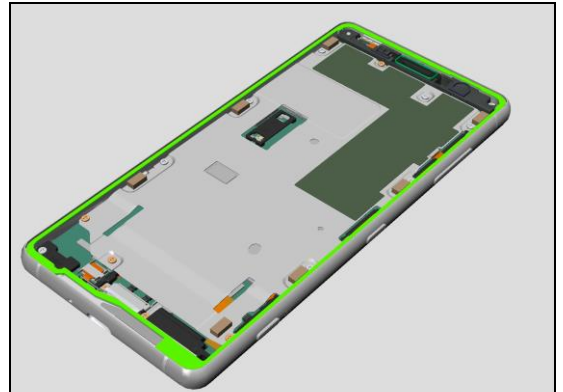
Remove the Holder LCD BtB pushing from the top side.



Disconnect the BtoB connector of the Display.



Remove all residues of the Adhesive Display on the Display and Cover Main (Green Highlighted Area) with the Bamboo Skewer.



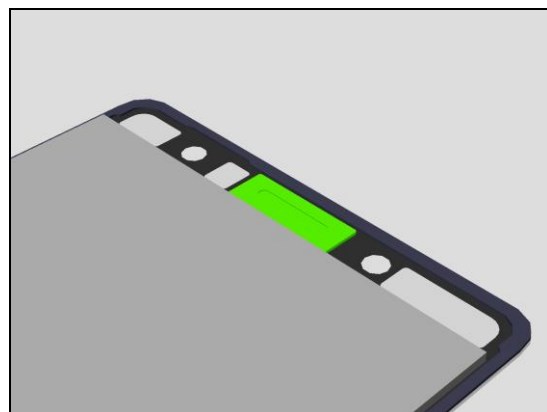
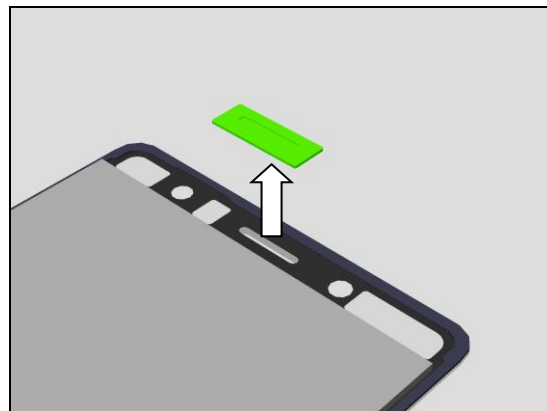
Scrap! Do not reuse Adhesive Display.

4.3 Sheet Mesh Top SPK

Remove the Sheet Mesh Top SPK.

Remove all residues of the Sheet Mesh Top SPK with the Bamboo Skewer.

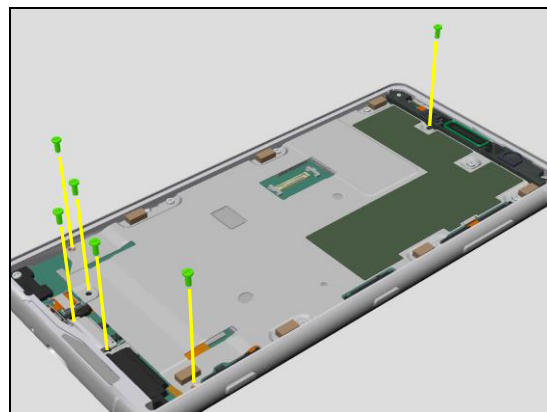
Scrap! Do not reuse Sheet Mesh Top SPK.



4.4 Plate Display

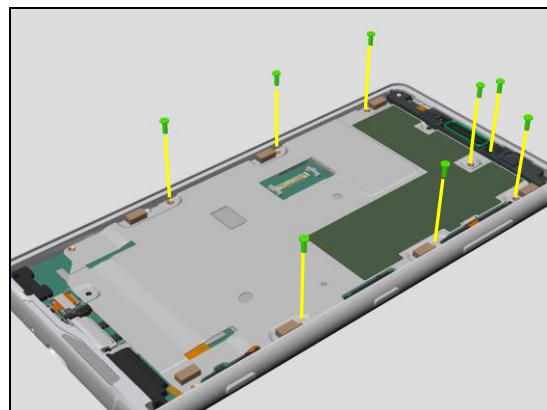
Remove the 6 pcs of Screw M1.2x2.9. (JCIS No 0)

Scrap! Do not reuse the screws.



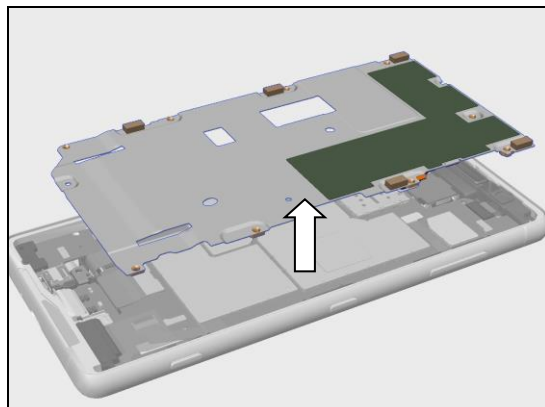
Remove the 6 pcs of Screw M1.2x3.3. (JCIS No 0)

Scrap! Do not reuse the screws.

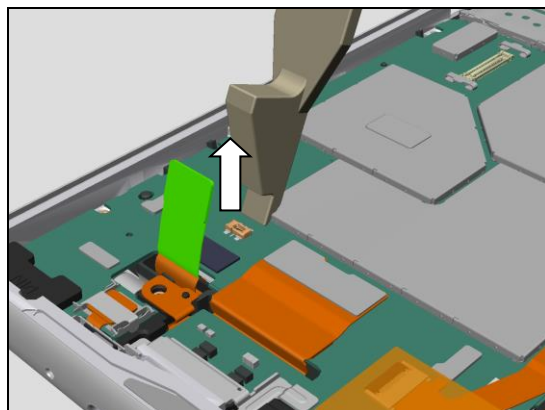


Disassembly

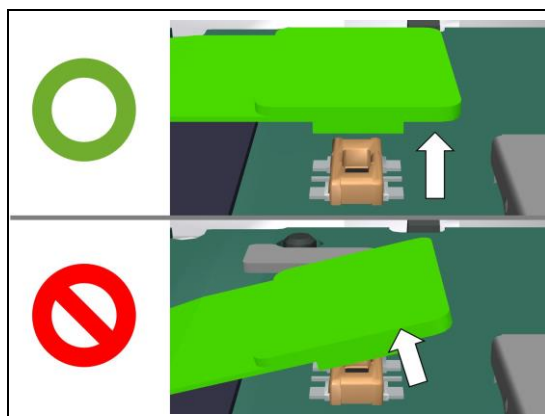
Remove the Plate Display.



Disconnect the BtoB connector of the Battery.



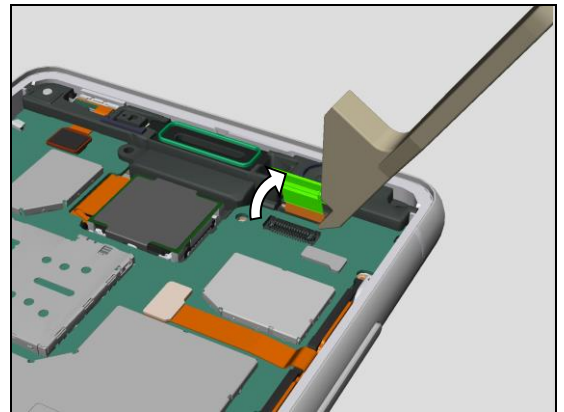
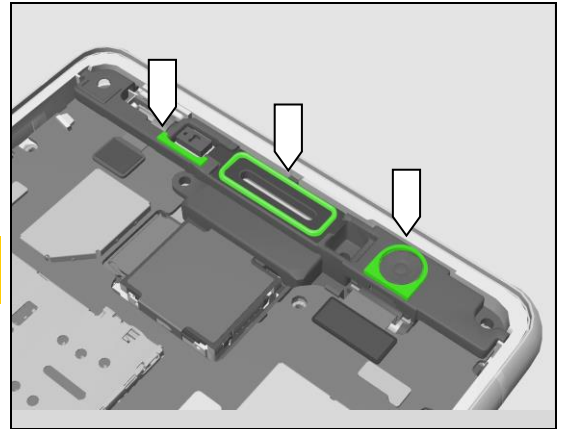
Lift the BtoB connector straight upward.
Lifting at an angle may damage the connector of Battery and PBA Main.



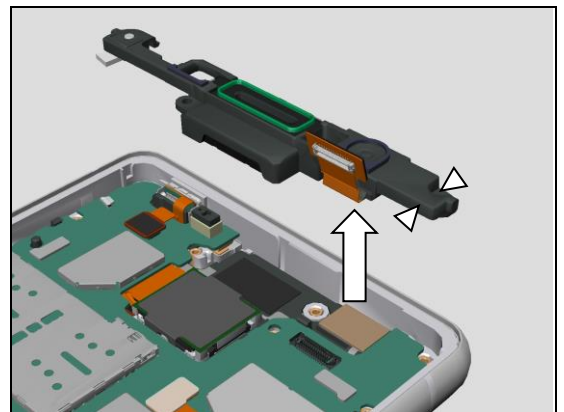
4.5 Holder Top SPK

Note! Do not touch or rub cushions on the Holder Top SPK and the gasket area of Gasket Top SPK.

Disconnect the BtoB connector of the Front Camera.

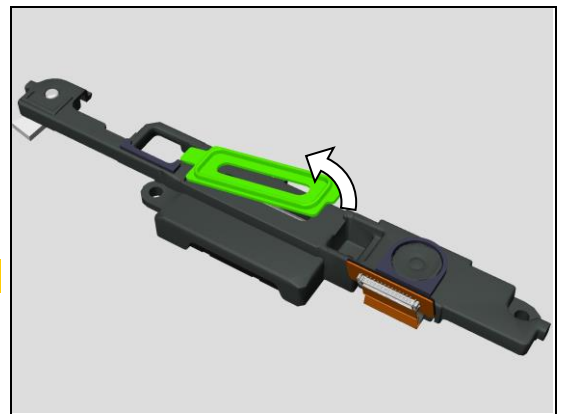


Pinch the right end of the Holder Top SPK and remove it along with the Front Camera.



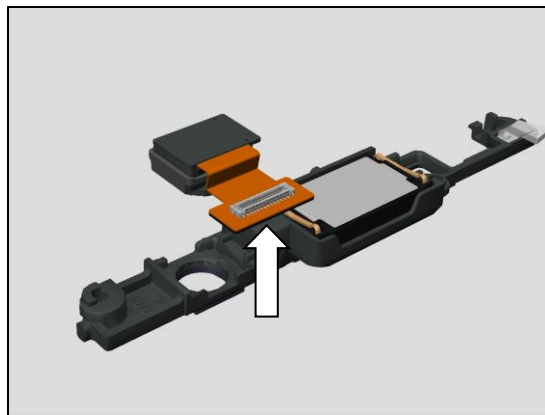
If replacing Gasket Top SPK, remove the Gasket Top SPK. Remove all adhesive residues with the Bamboo Skewer.

Scrap! Do not reuse Gasket Top SPK.



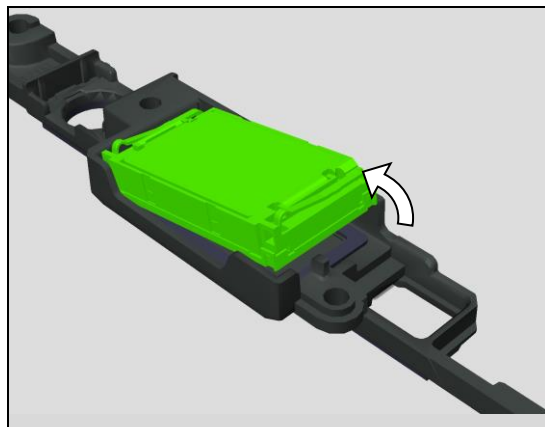
4.6 Front Camera

Remove the Front Camera.



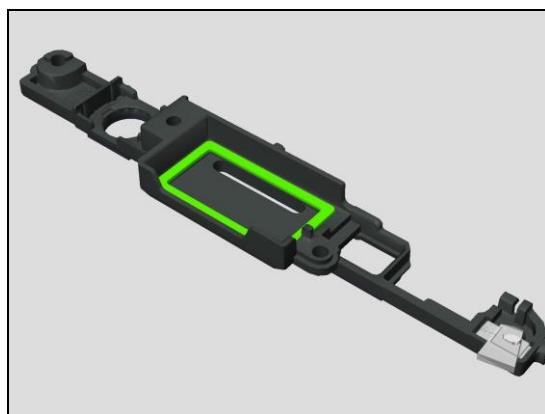
4.7 Loudspeaker

Remove the Loudspeaker.



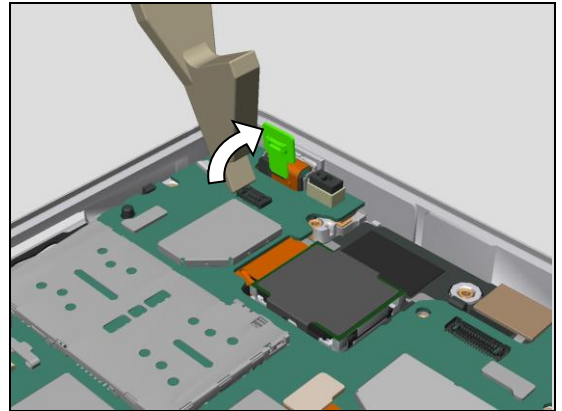
Remove the Adhesive Top SPK with the Bamboo Skewer.

Scrap! Do not reuse Loudspeaker and Adhesive Top SPK.

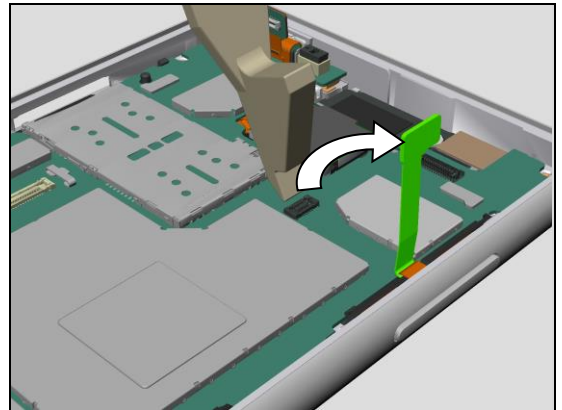


4.8 PBA Main

Disconnect the BtoB connector of the FPC Mic2.

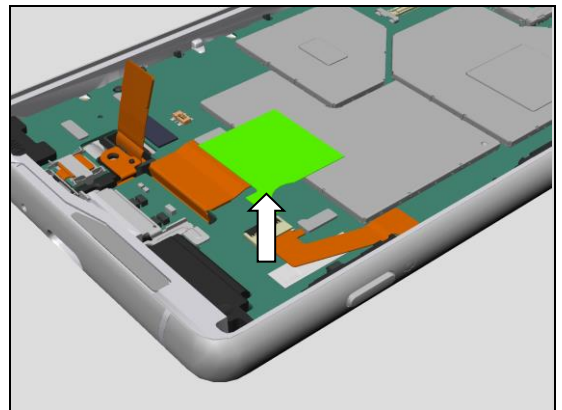


Disconnect the BtoB connector (Top side) of the FPC Key.

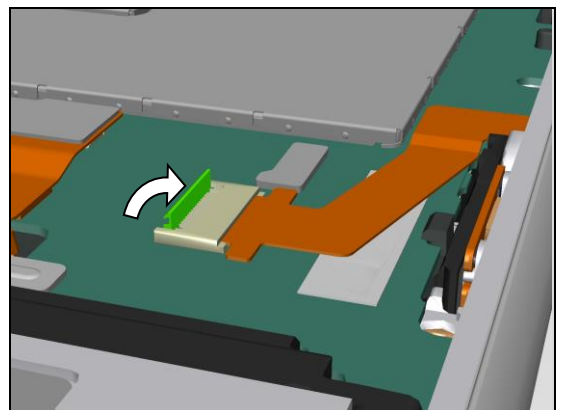


Remove the Sheet Insulation PBA Bottom.

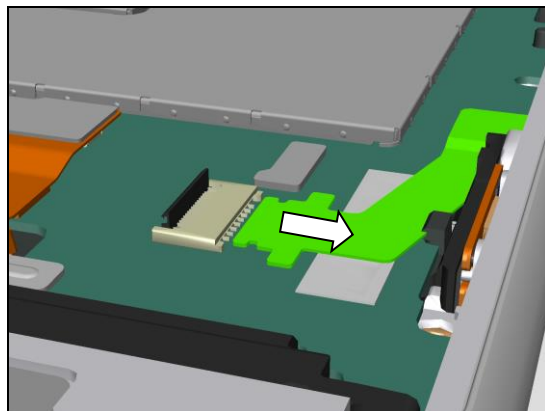
Scrap! Do not reuse Sheet Insulation PBA Bottom.



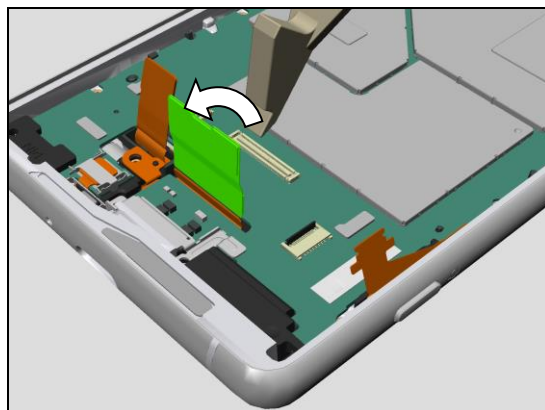
Release the ZIF connector on the PBA Main.



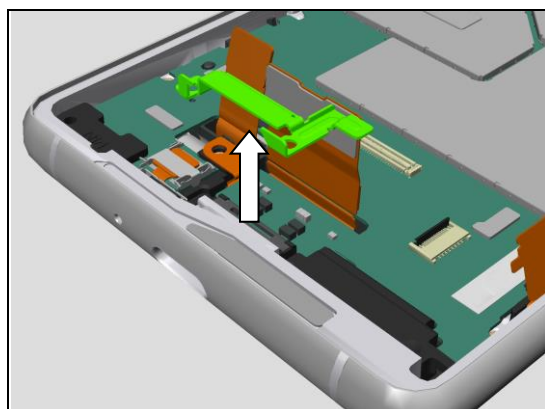
Disconnect the bottom end of the FPC Key.



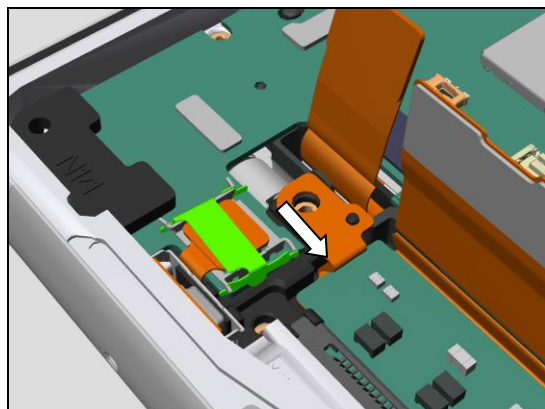
Disconnect the BtoB connector of the FPC USB.



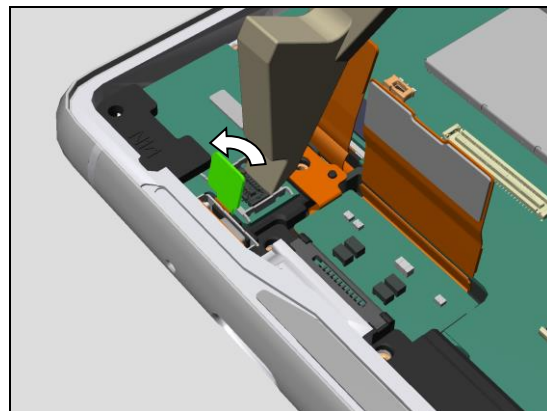
Remove the Plate USB.



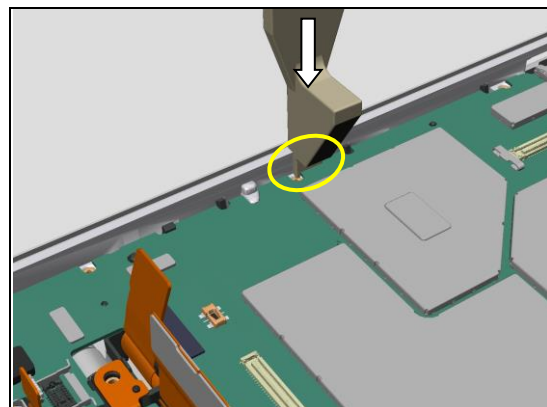
Remove the Plate holder BtoB unhooking the right top part first.



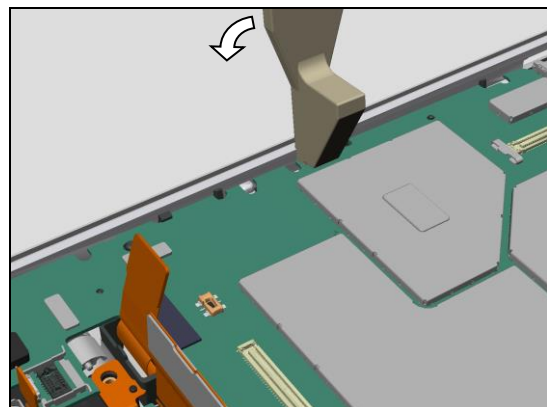
Disconnect the BtoB connector of the FPC Mic1.



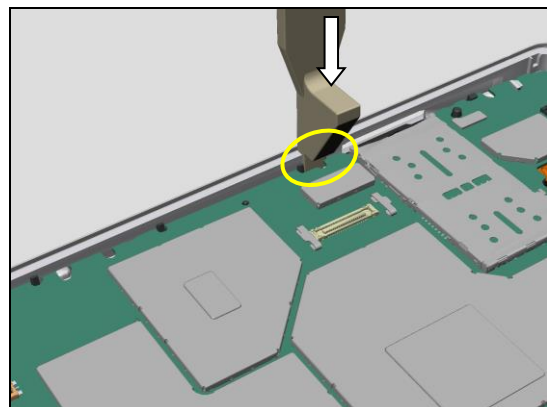
Insert the Front Opening Tool into the gap between the PBA Main and Cover Main.



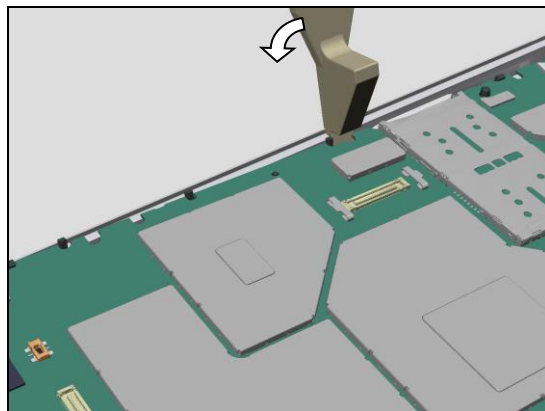
Tilt the Front Opening Tool to unhook the PBA Main.
Hold the PBA to secure the unhooked state.



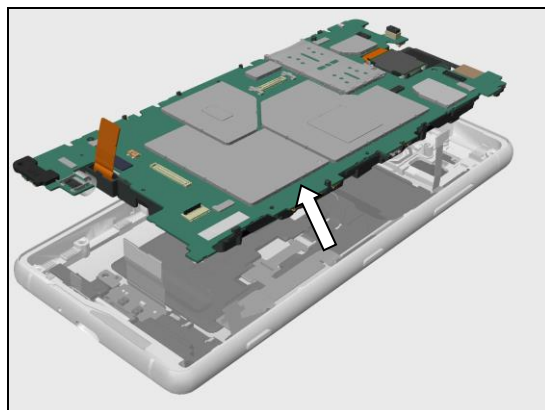
Insert the Front Opening Tool into the gap between the PBA Main and Cover Main near the SIM connector.



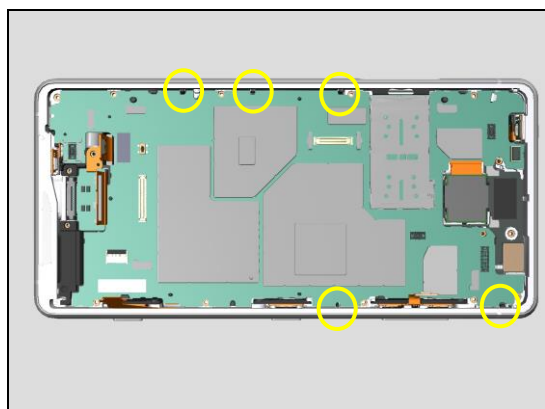
Tilt the Front Opening Tool to unhook the PBA Main.



Lift up the PBA Main.

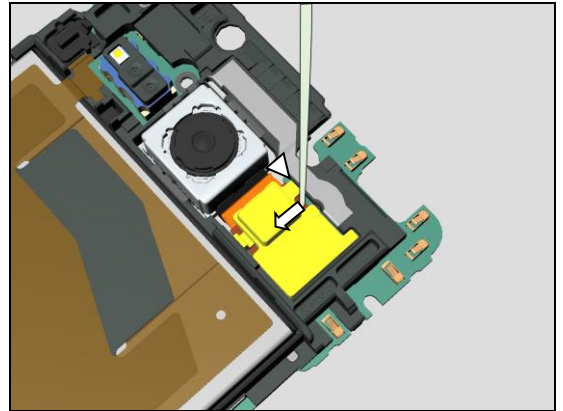


Hook position

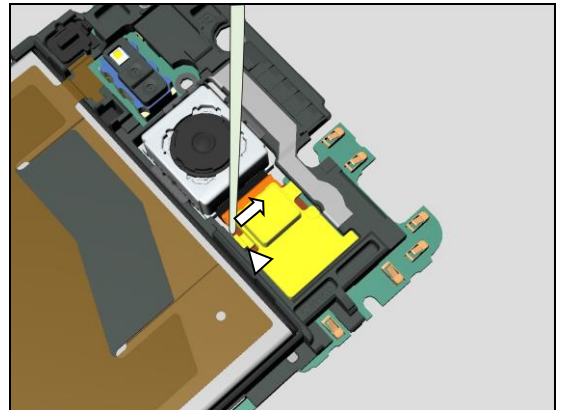


4.9 Main Camera

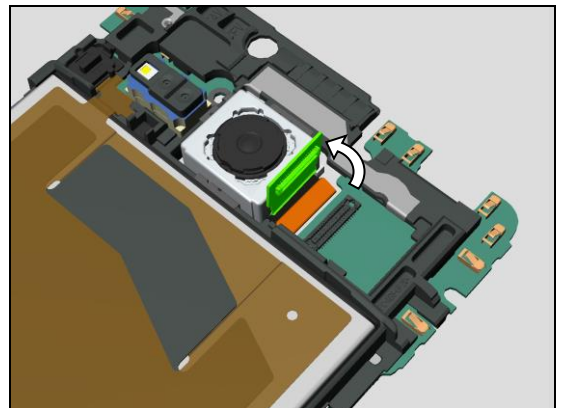
Insert the Bamboo Skewer into the shown area to unhook the top side of the Holder Main Cam BtB.



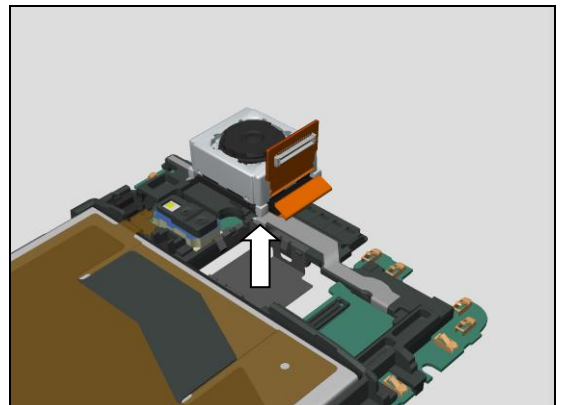
Insert the Bamboo Skewer into the shown area to unhook and remove the Holder Main Cam BtB.



Disconnect the BtoB connector of Main Camera.

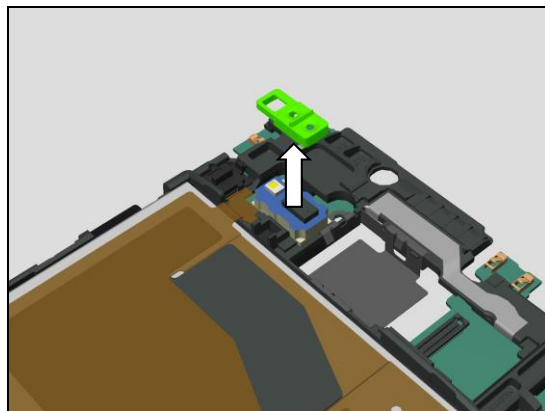


Remove the Main Camera.



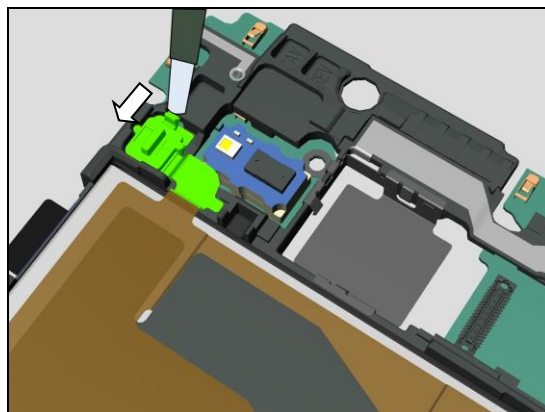
4.10 Holder Sensor

Remove the Holder Sensor.

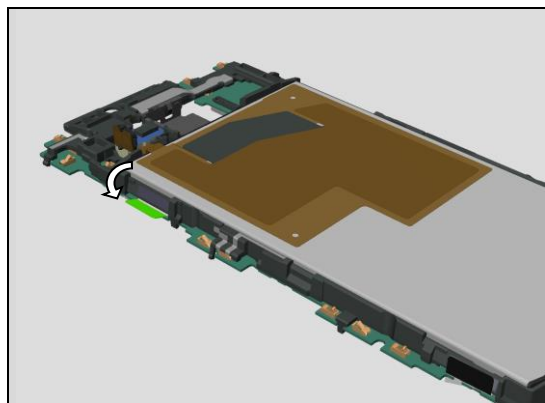


4.11 Battery

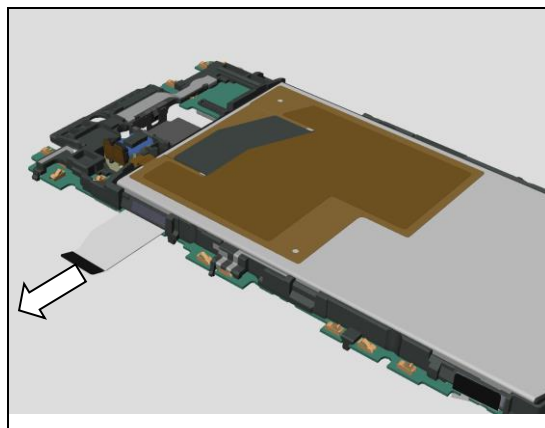
Insert the Tweezers (2A) into the shown area to unhook the BtoB connector of the FPC NFC.



Pinch the pull tab of the Adhesive Battery (top side).

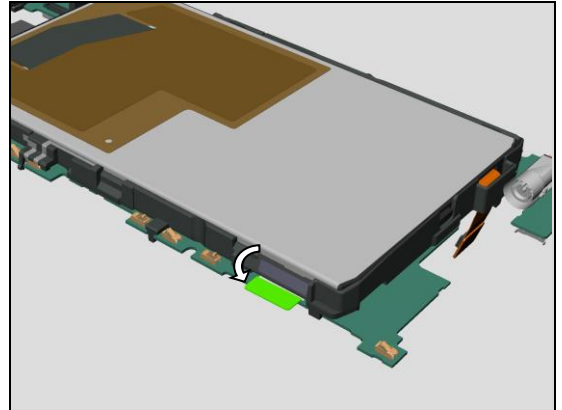


Pull out the Adhesive Battery (top side) slowly and horizontally.

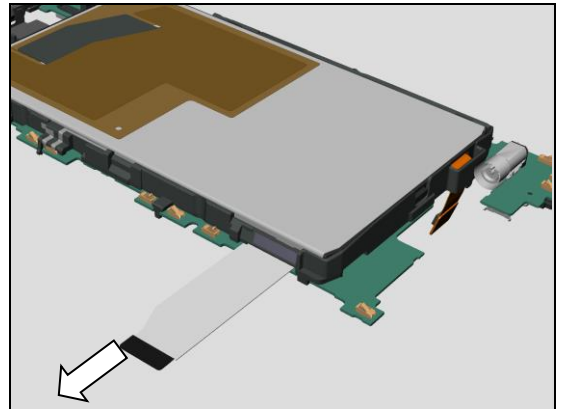


Disassembly

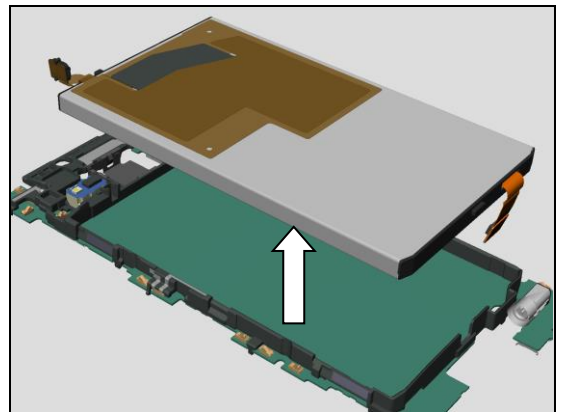
Pinch the pull tab of the Adhesive Battery (bottom side)



Pull out the Adhesive Battery (bottom side) slowly and horizontally.

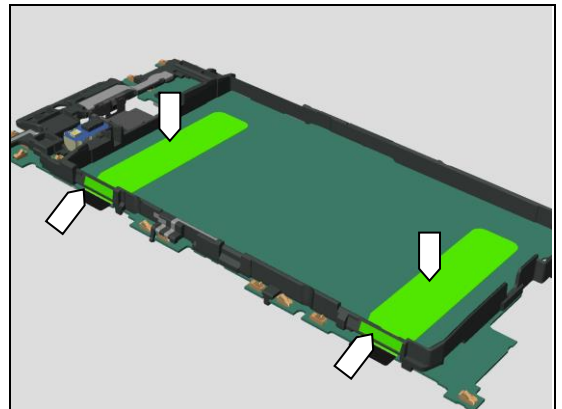


Remove the Battery.



Remove all residues of the Adhesive Battery and Adhesive Adh Battery.

Scrap! Do not reuse Adhesive Battery and Adhesive Adh Battery.

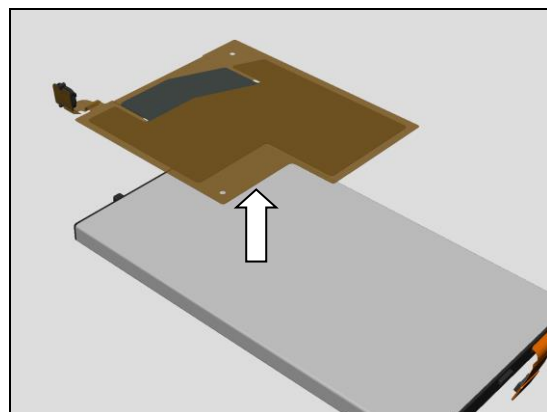
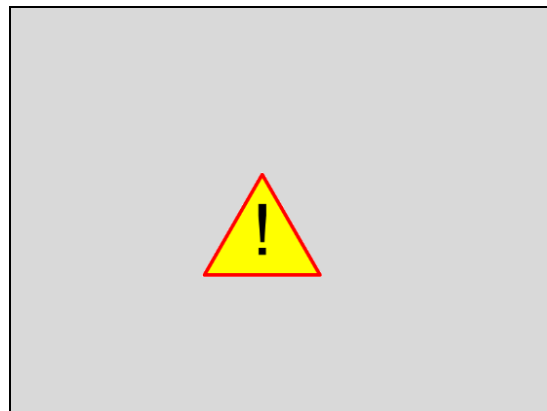


Follow 6. Battery Reuse Instruction.

4.12 FPC NFC

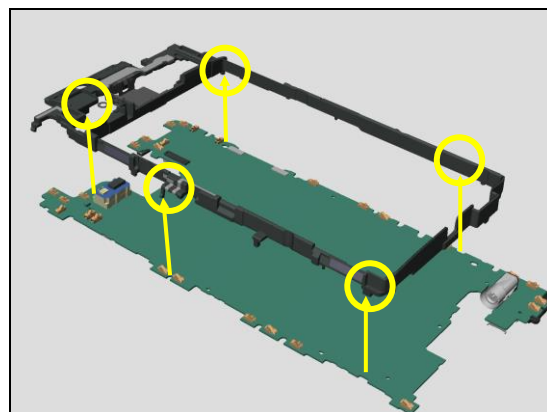
Remove the FPC NFC.

Scrap! Do not reuse FPC NFC.



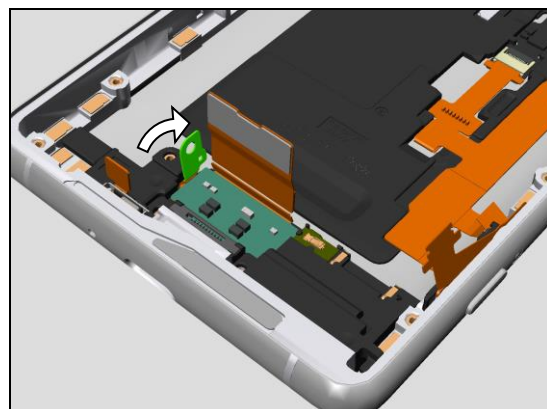
4.13 Frame Rear

Unhook the 5 hooks to remove the Frame Rear.

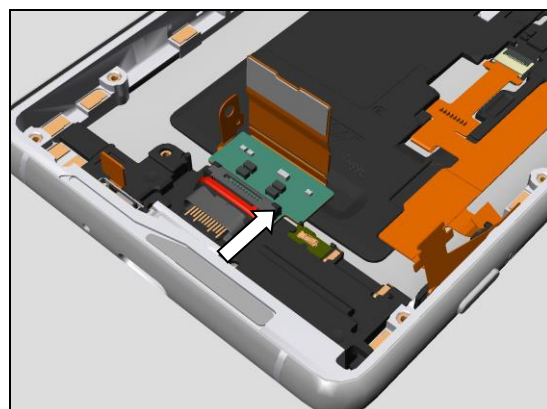


4.14 FPC USB

Release the tab of the FPC USB.

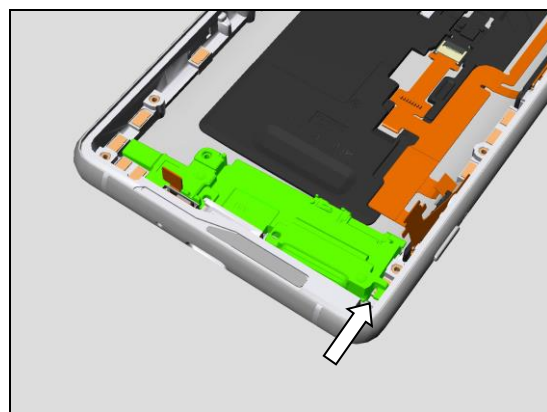


Remove the FPC USB.

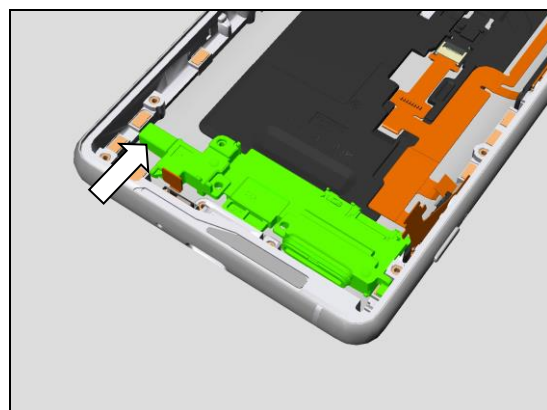


4.15 Speaker Box

Push the Speaker Box from the arrowed area.

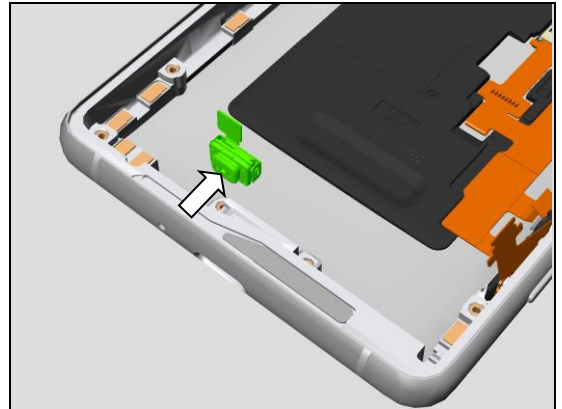


Push the other end of the Speaker Box to remove.



4.16 FPC Mic1

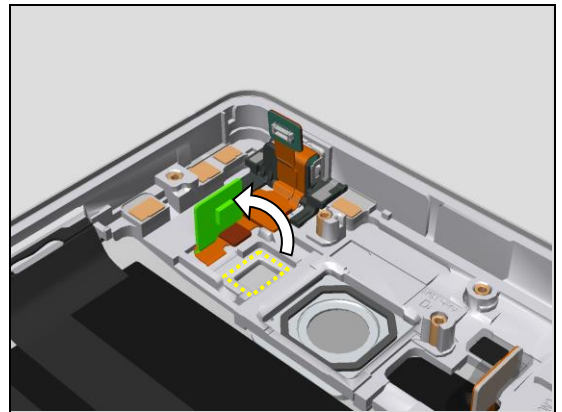
Remove the FPC Mic1.



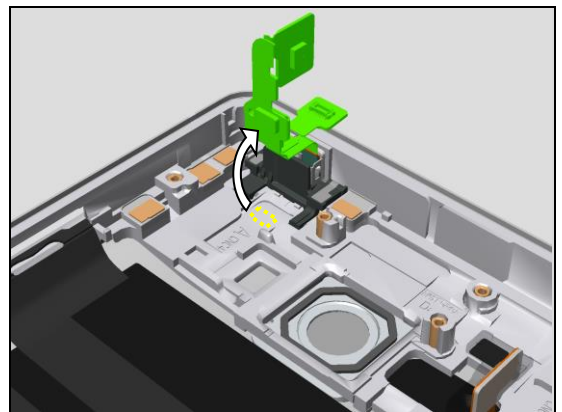
4.17 Frame WIFI Main Ant

Detach the sensor area of the FPC Mic2.

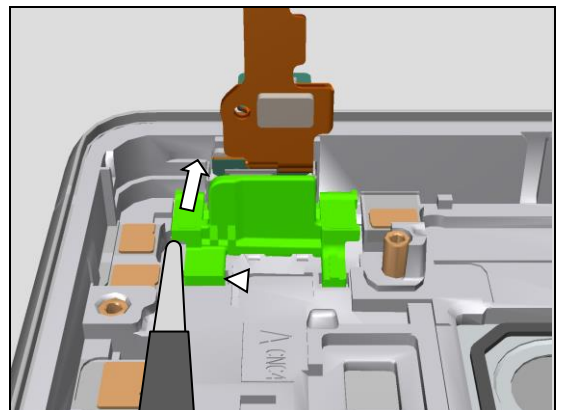
Scrap! Do not reuse Adhesive FPC Mic2 RGB-IR.



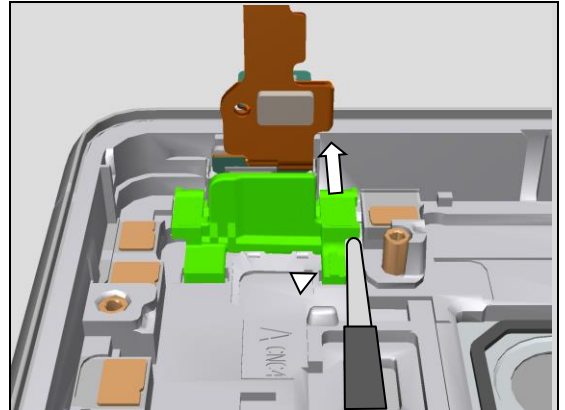
Detach the middle area of the FPC Mic2.



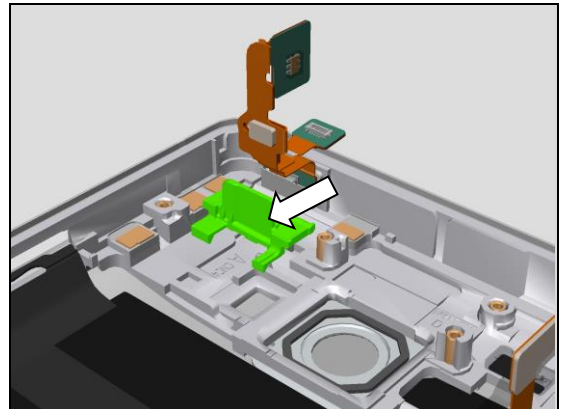
Insert the Tweezers (2A) into the shown area to unhook the left side of the Frame WIFI Main Ant.



Insert the Tweezers (2A) into the shown area to unhook the right side of the Frame WIFI Main Ant.

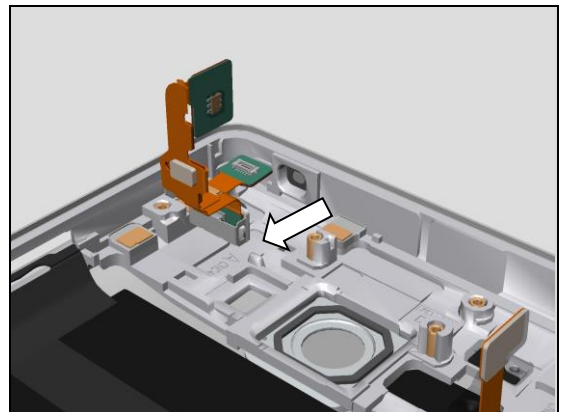


Remove the Frame WIFI Main Ant.



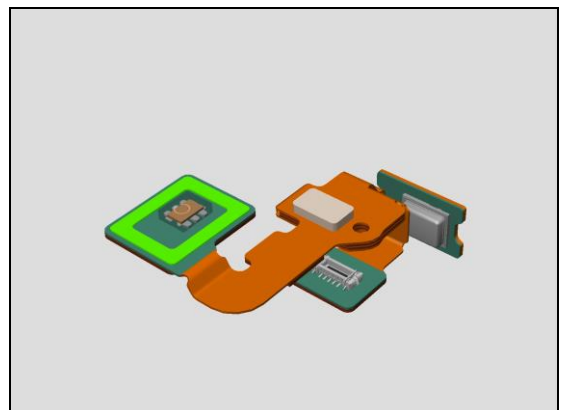
4.18 FPC Mic2

Remove the FPC Mic2.



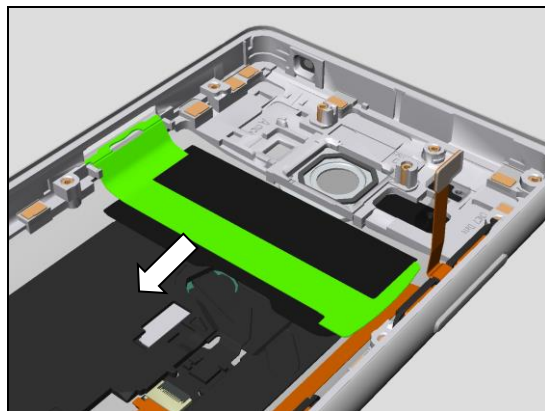
Remove the Adhesive FPC Mic2 RGB-IR with the Bamboo Skewer.

Scrap! Do not reuse Adhesive FPC Mic2 RGB-IR.



4.19 Sheet Slider MOP

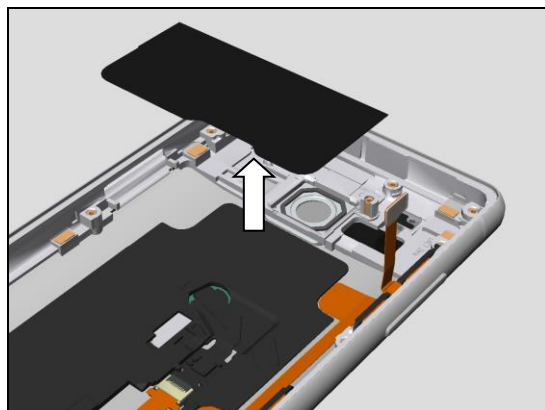
Slide the Sheet Slider MOP downwards to remove.



4.20 Sheet Guide MOP

Remove the Sheet Guide MOP.

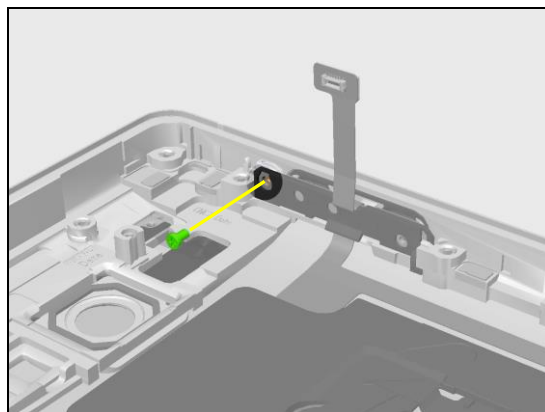
Scrap! Do not reuse Sheet Guide MOP.



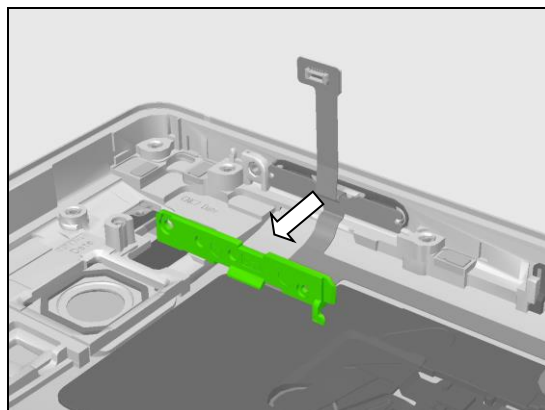
4.21 Key Volume

Remove the Screw M1.2x2.0 with Screwdriver PH0 x 100.

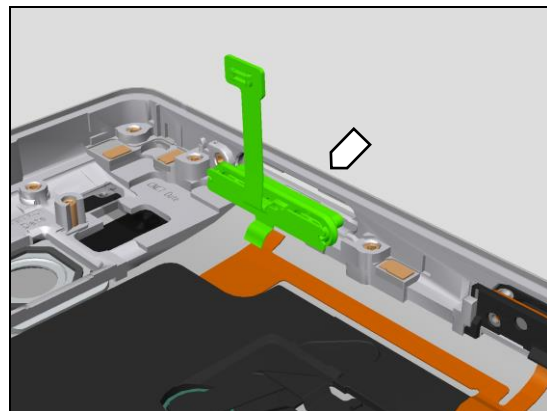
Scrap! Do not reuse screws.



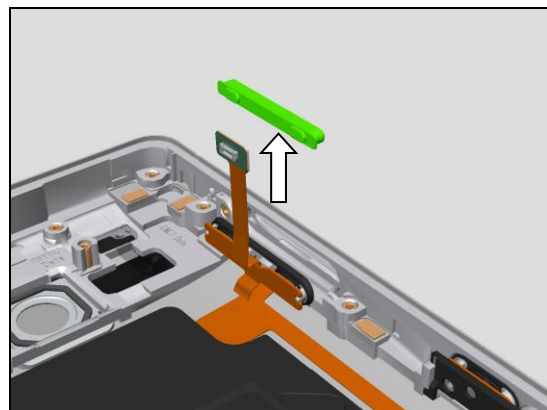
Remove the Holder Key Vol.



Push the Key Volume from outside.



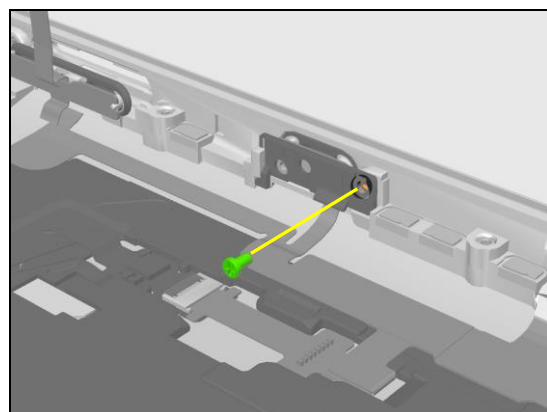
Remove the Key Volume.



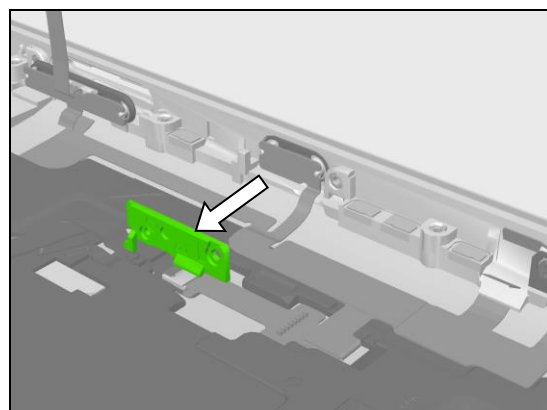
4.22 Key Top

Remove the Screw M1.2x2.0 with Screwdriver PH0 x 100.

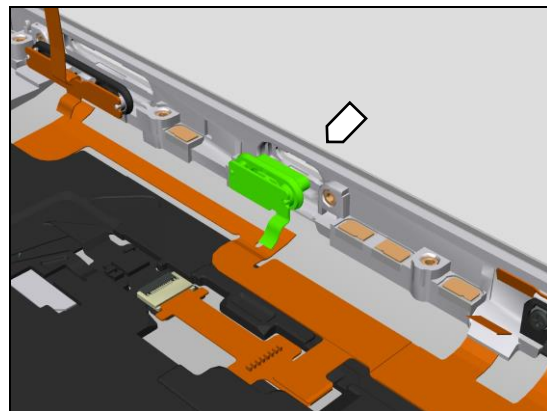
Scrap! Do not reuse screws.



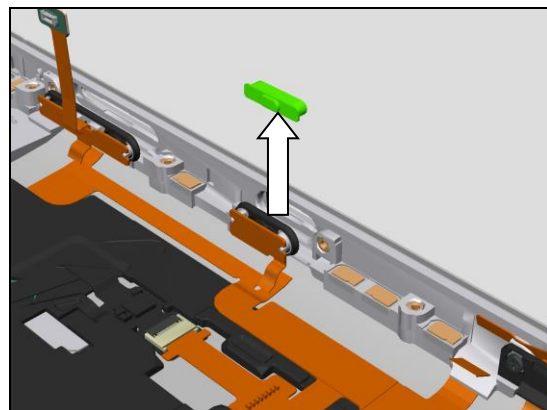
Remove the Holder Key PW.



Push the Key Top from outside.

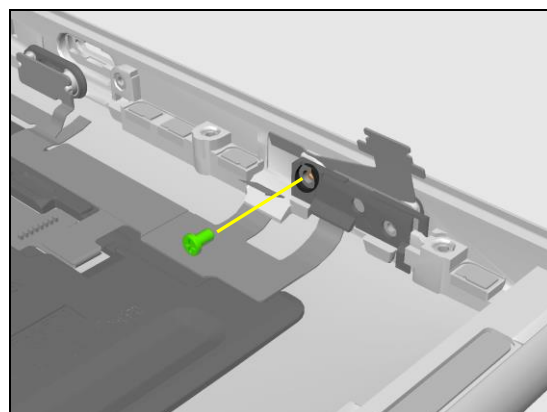


Remove the Key Top.

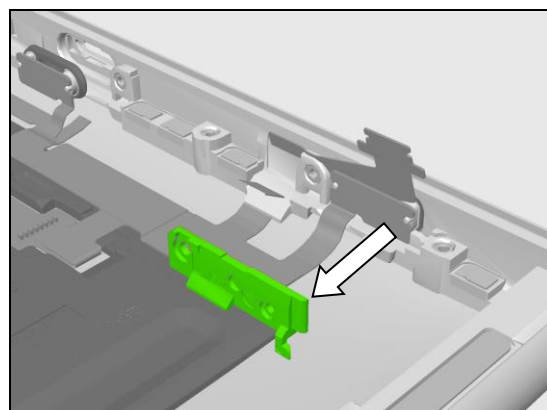


Remove the Screw M1.2x2.0 with Screwdriver PH0 x 100.

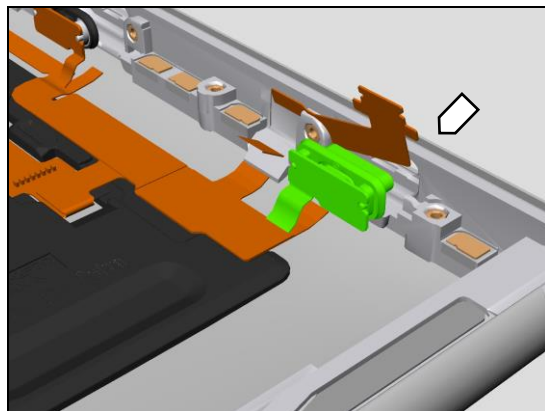
Scrap! Do not reuse screws.



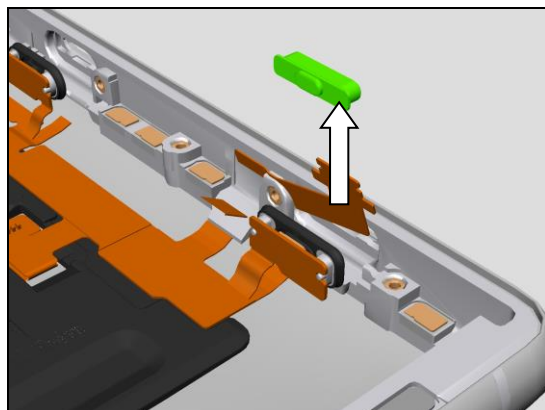
Remove the Holder Key Cam.



Push the Key Top from outside.

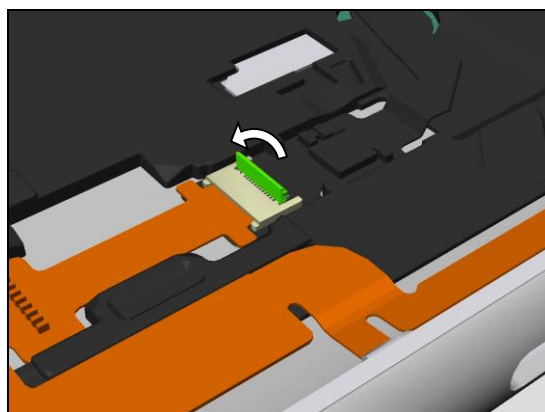


Remove the Key Top.

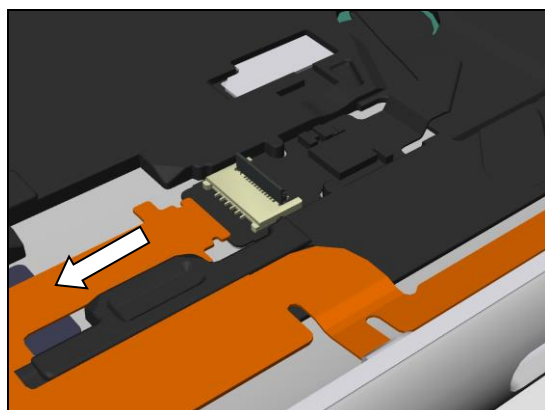


4.23 FPC Key

Release the ZIF connector of the FP Sensor.

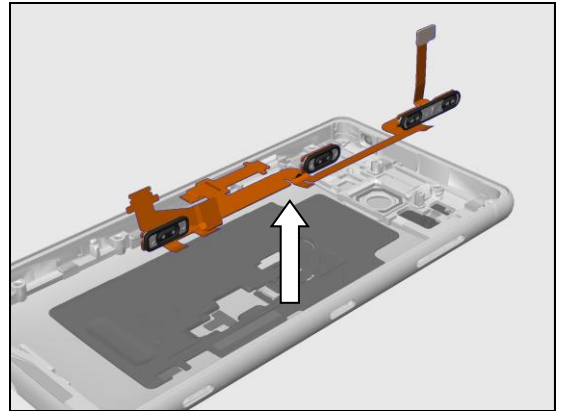


Disconnect the FPC Key.



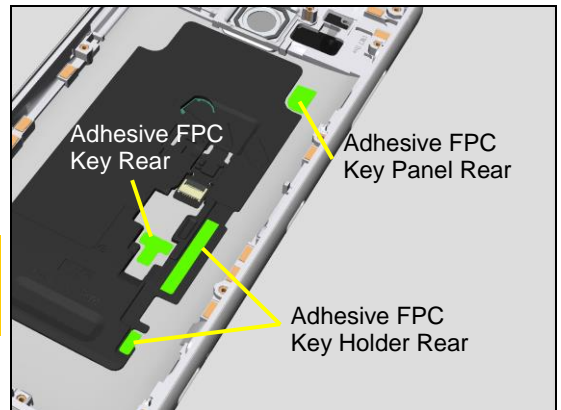
Disassembly

Remove the FPC Key.



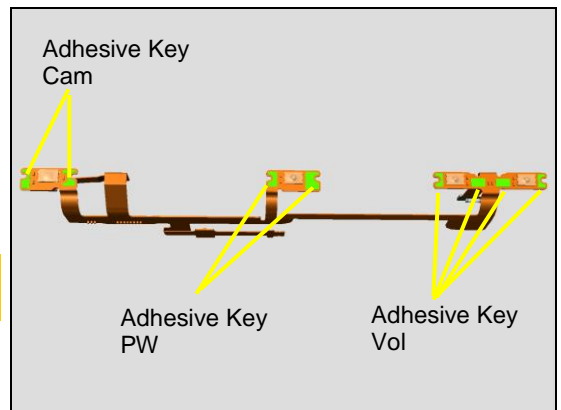
Remove the Adhesive FPC Key Holder Rear, Adhesive FPC Key Panel Rear and Adhesive FPC Key Rear with the Bamboo Skewer.

Scrap! Do not reuse Adhesive FPC Key Holder Rear, Adhesive FPC Key Panel Rear and Adhesive FPC Key Rear.



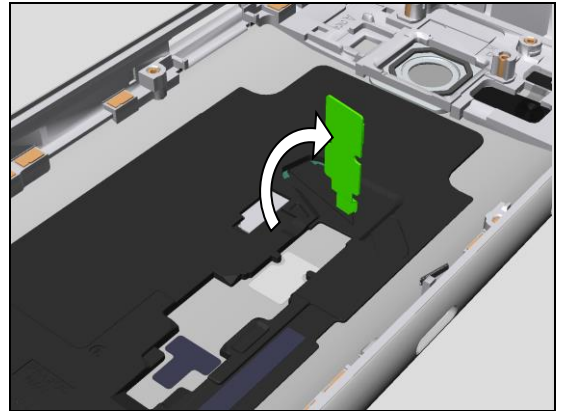
When removing the Gasket Key Cam, Gasket Key PW or Gasket Key Vol, remove the Adhesive Key Cam, Adhesive Key PW or Adhesive Key Vol.

Scrap! Do not reuse Adhesive Key Cam, Adhesive Key PW and Adhesive Key Vol.

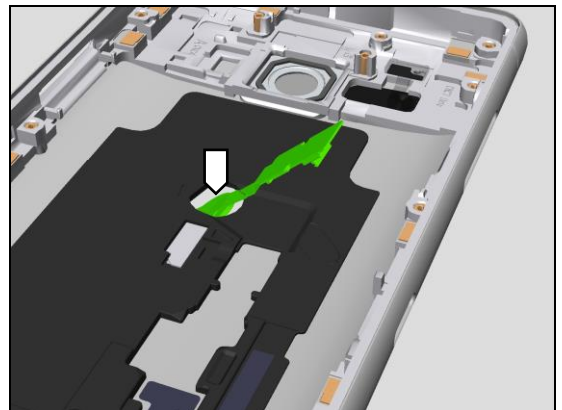


4.24 FP Sensor

Remove the ZIF connector area of the FP Sensor.



Push the root of FPC to remove the FP Sensor.



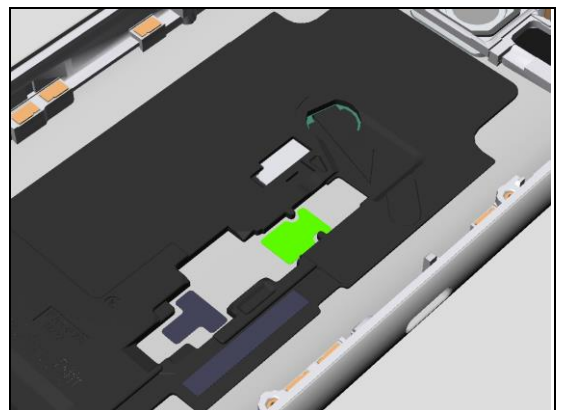
Remove the Adhesive WR FP Sensor with the Bamboo Skewer.

Scrap! Do not reuse Adhesive WR FP Sensor.



Remove the Adhesive FPC FP sensor with the Bamboo Skewer.

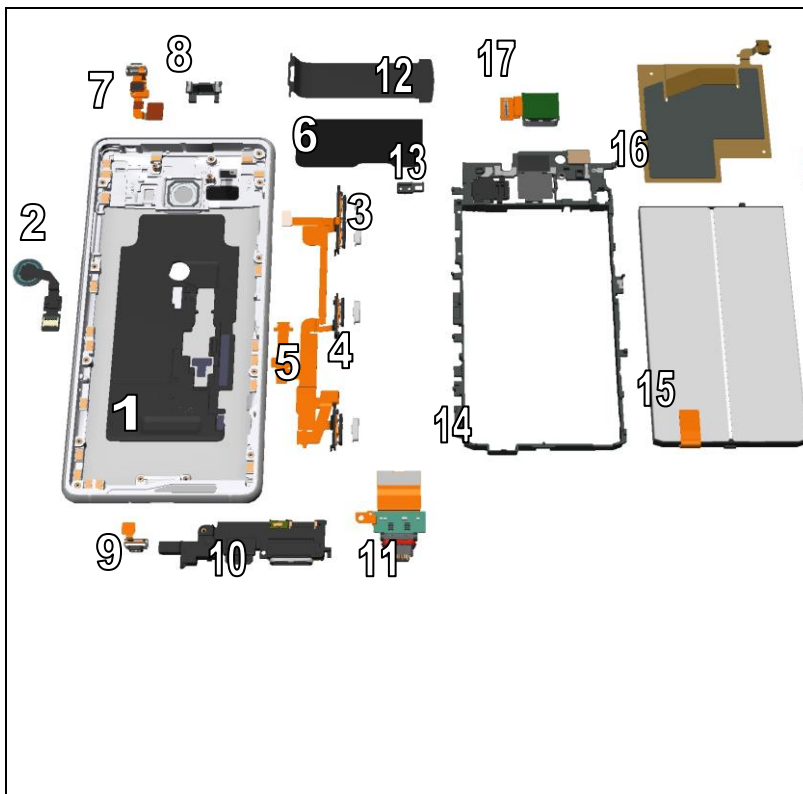
Scrap! Do not reuse Adhesive FPC FP sensor.



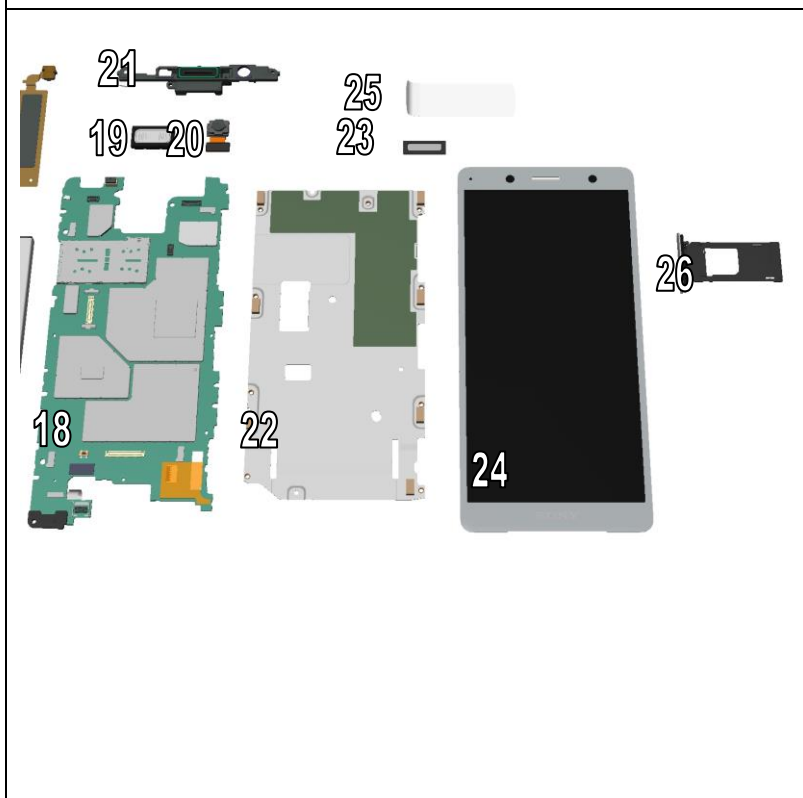
5 Reassembly

The reassembly is done in the following order:

- 1 Cover Main
- 2 FP Sensor
- 3 Key Volume
- 4 Key Top
- 5 FPC Key
- 6 Sheet Guide MOP
- 7 FPC Mic2
- 8 Frame WIFI Main Ant
- 9 FPC Mic1
- 10 Speaker Box
- 11 FPC USB
- 12 Sheet Slider MOP
- 13 Holder Sensor
- 14 Frame Rear
- 15 Battery
- 16 FPC NFC
- 17 Main Camera

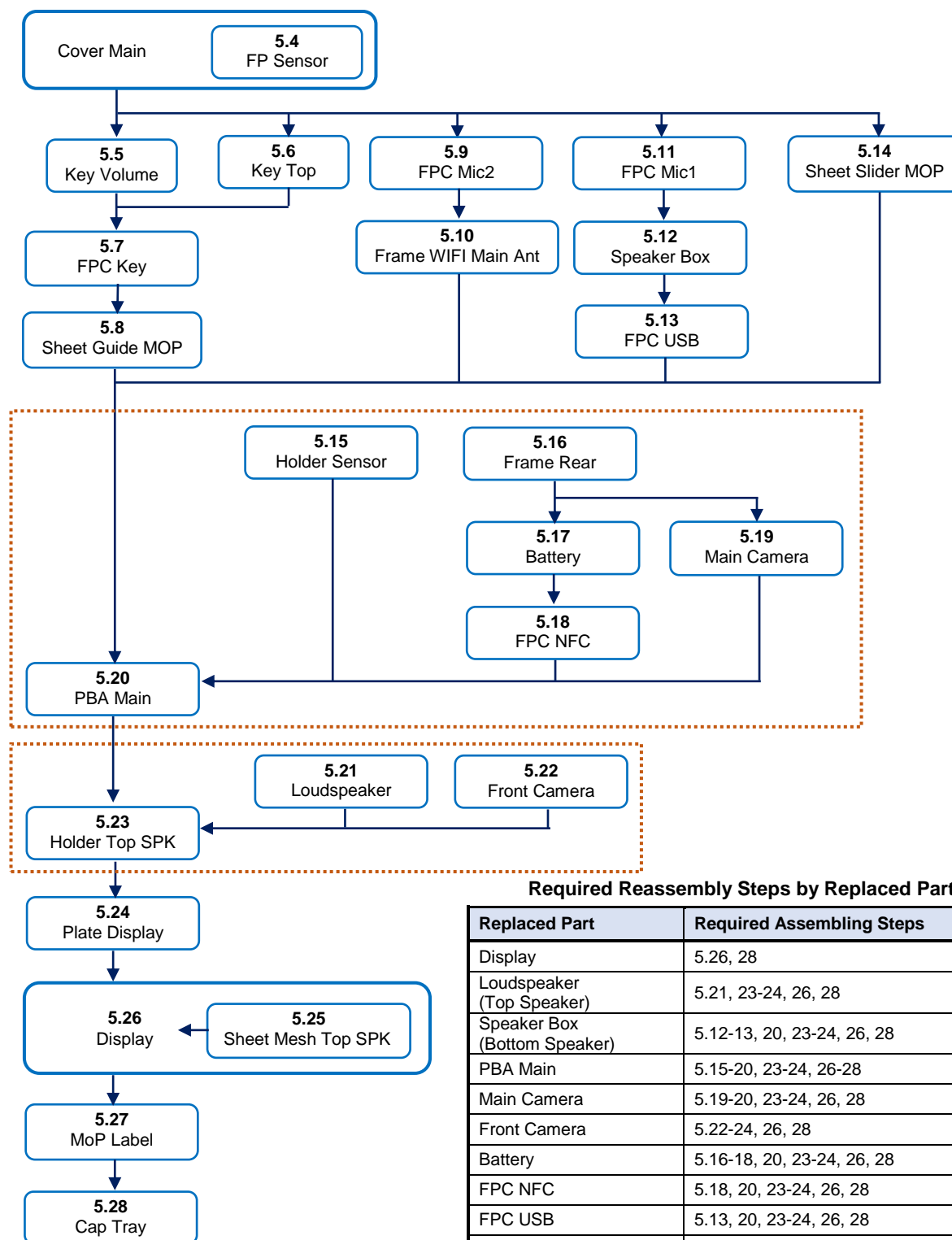


- 18 PBA Main
- 19 Loudspeaker
- 20 Front Camera
- 21 Holder Top SPK
- 22 Plate Display
- 23 Sheet Mesh Top SPK
- 24 Display
- 25 Label MoP
- 26 Cap Tray



Reassembly

Quick Reference for Reassembling

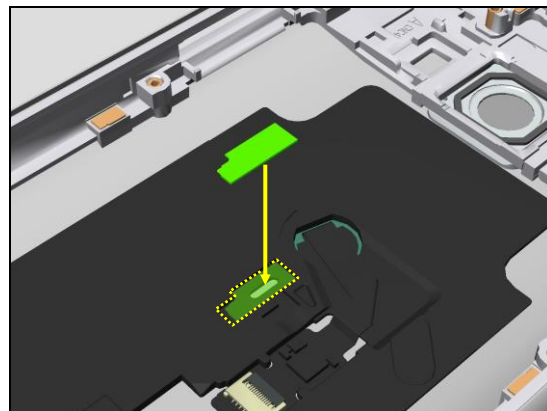


Required Reassembly Steps by Replaced Part

Replaced Part	Required Assembling Steps
Display	5.26, 28
Loudspeaker (Top Speaker)	5.21, 23-24, 26, 28
Speaker Box (Bottom Speaker)	5.12-13, 20, 23-24, 26, 28
PBA Main	5.15-20, 23-24, 26-28
Main Camera	5.19-20, 23-24, 26, 28
Front Camera	5.22-24, 26, 28
Battery	5.16-18, 20, 23-24, 26, 28
FPC NFC	5.18, 20, 23-24, 26, 28
FPC USB	5.13, 20, 23-24, 26, 28
FPC Mic1	5.11-13, 20, 23-24, 26, 28
FPC Mic2	5.9-10, 20, 23-24, 26, 28
FPC Key	5.7-8, 20, 23-24, 26, 28
FP Sensor	5.4, 20, 23-24, 26, 28

5.1 Sheet WR Test

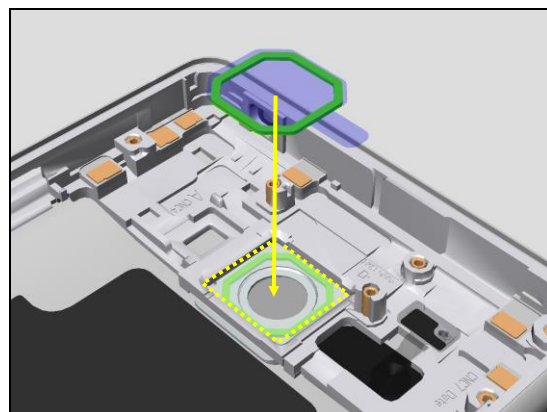
Paste the Sheet WR Test on the Cover Main.



5.2 Cushion Main Cam

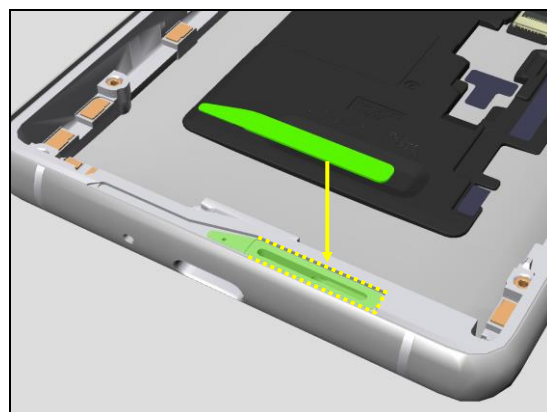
Paste the Cushion Main Cam on the Cover Main.

Do not cover the camera window.



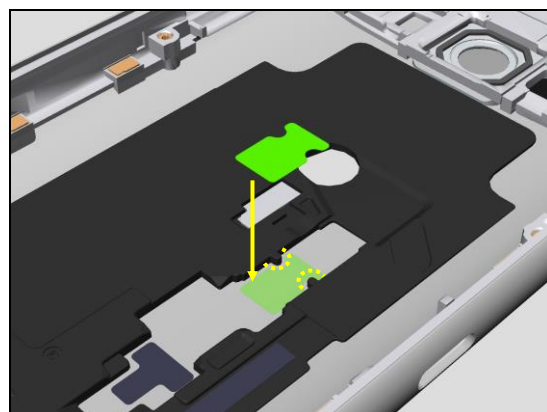
5.3 Mesh Bottom SPK Black

Paste the Mesh Bottom SPK Black on the Cover Main.



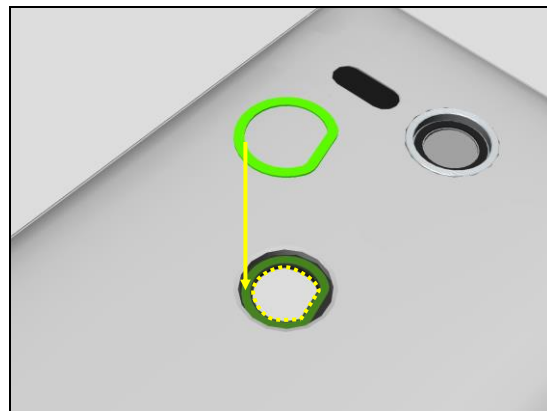
5.4 FP Sensor

Paste the Adhesive FPC FP sensor on the Cover Main.

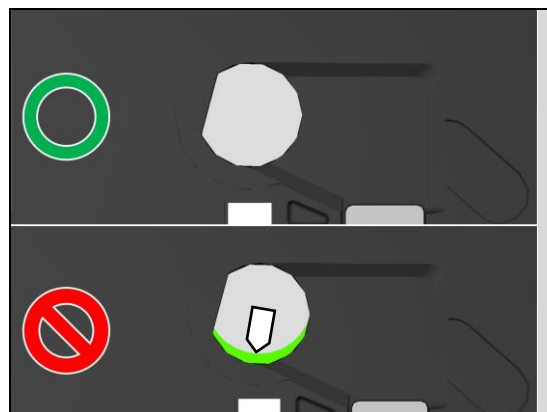


Reassembly

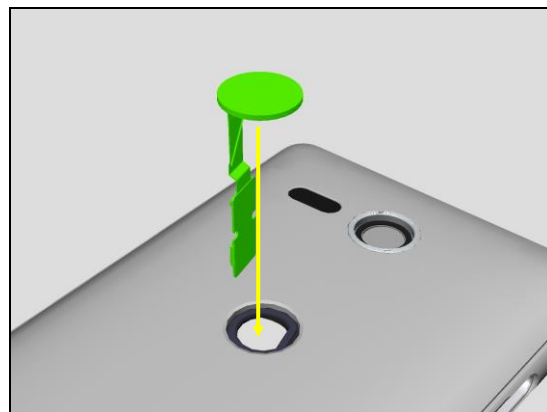
Paste the Adhesive WR FP Sensor on the Cover Main.



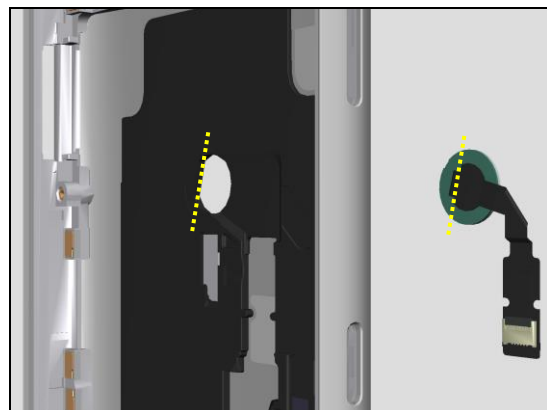
Make sure the adhesive is not visible from inside.



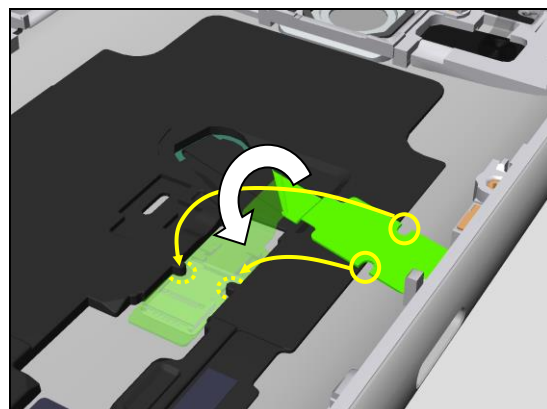
Pass the FPC of the FP Sensor through the hole.



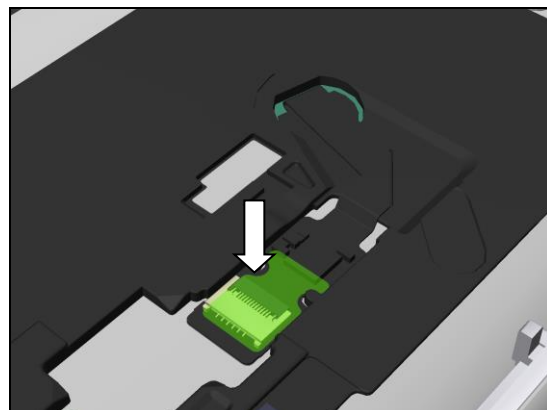
Adjust the angle of the FP Sensor by slanted edge.



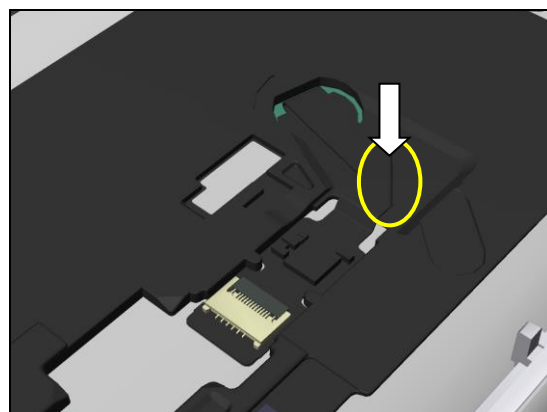
Turn and paste the FPC of the FP Sensor.



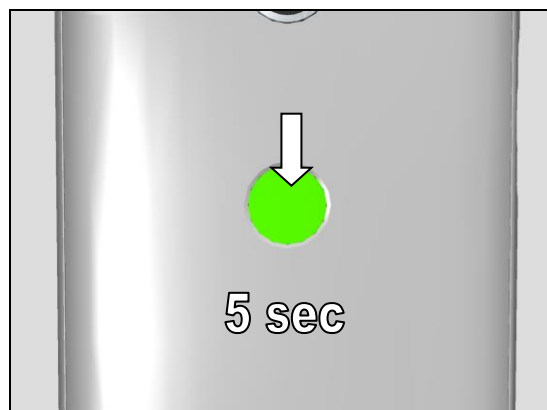
Press the adhesive area with a finger.



After pressing, fold the FPC with a finger.

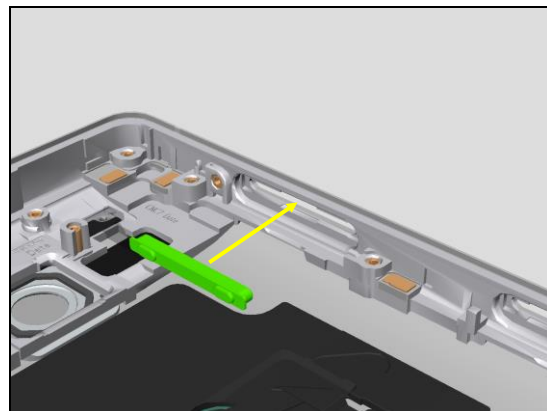


Press the sensor area from outside with a finger for 5 sec.



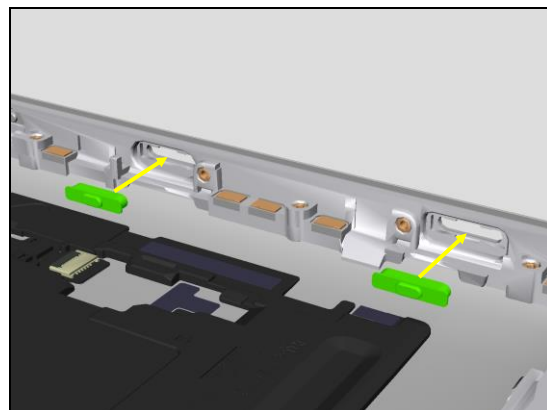
5.5 Key Volume

Place the Key Volume into the cavity.



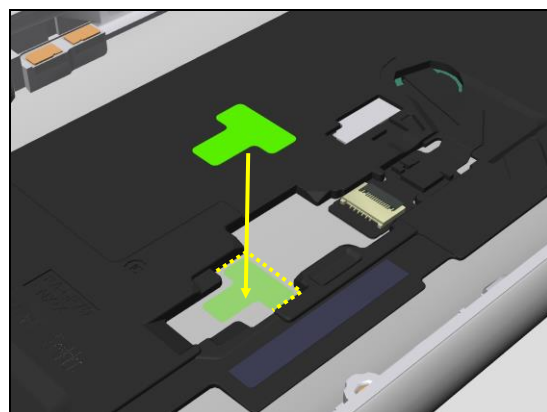
5.6 Key Top

Place the Key Top (Power key and Camera key) into the cavity.

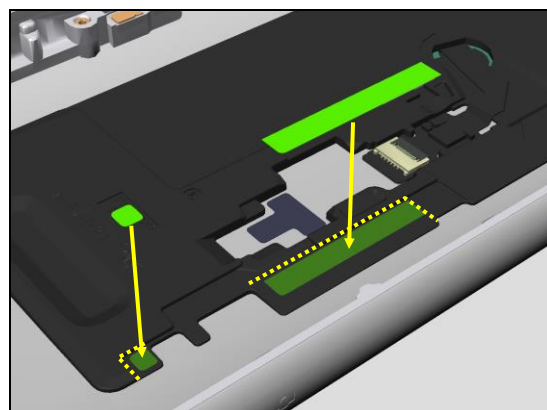


5.7 FPC Key

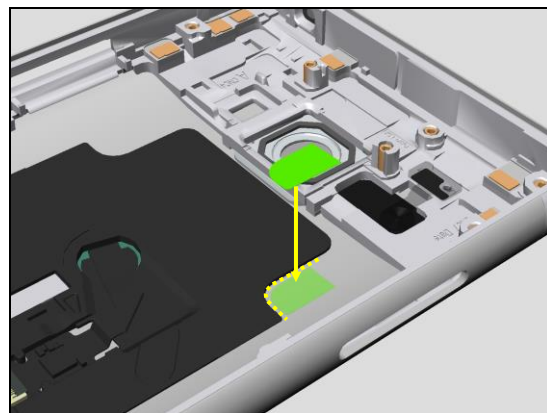
Paste the Adhesive FPC Key Rear.



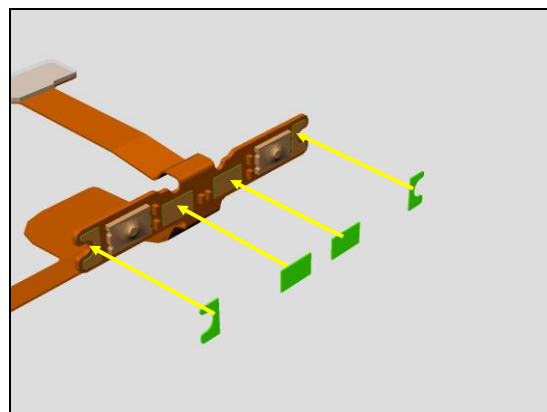
Paste the Adhesive FPC Key Holder Rear.



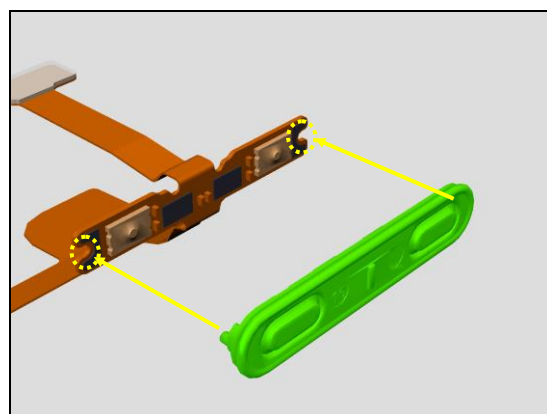
Paste the Adhesive FPC Key Panel Rear.



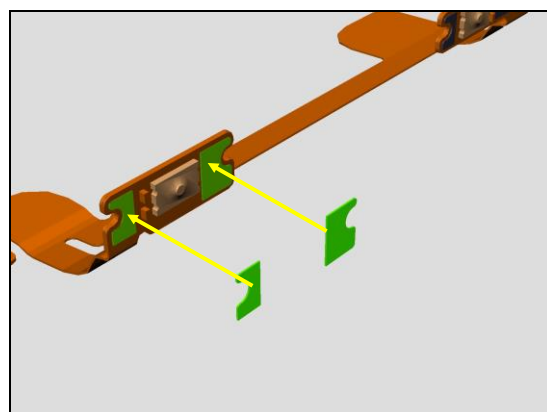
Paste the Adhesive Key Vol.



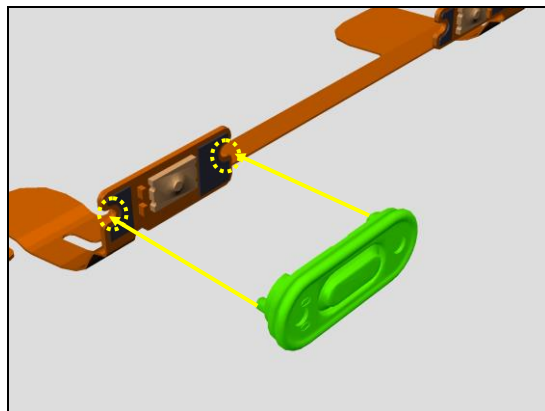
Paste the Gasket Key Vol.



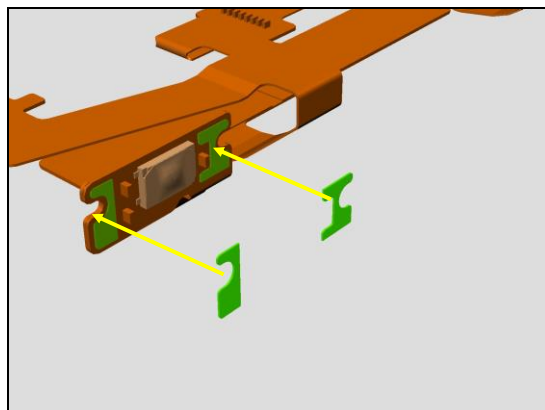
Paste the Adhesive Key PW.



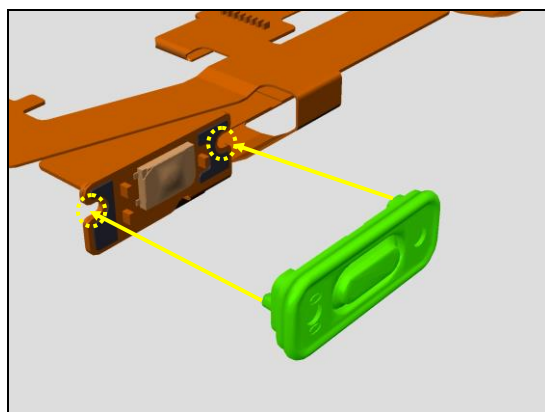
Paste the Gasket Key PW.



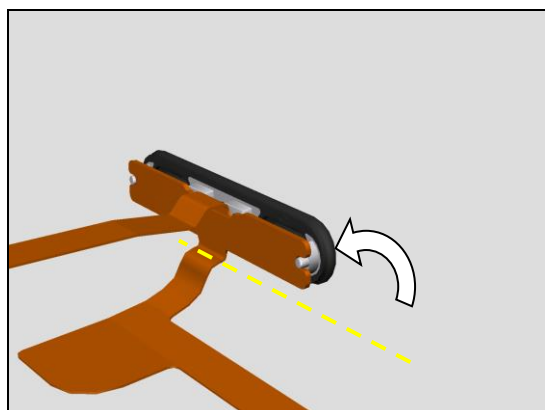
Paste the Adhesive Key Cam.



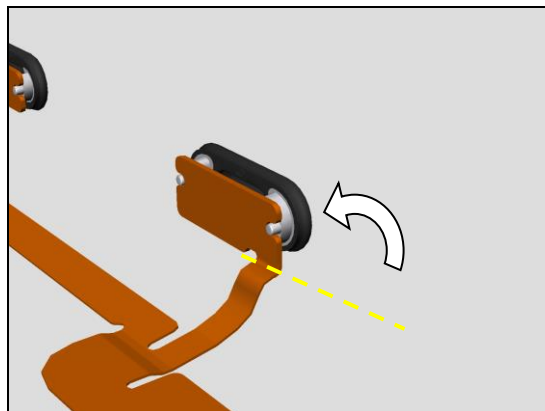
Paste the Gasket Key Cam.



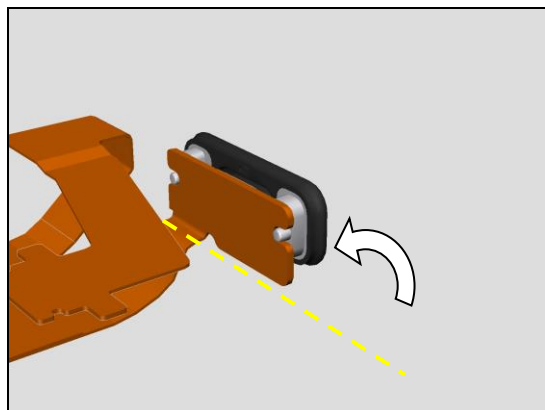
Fold the FPC near the volume key at 90 degree.



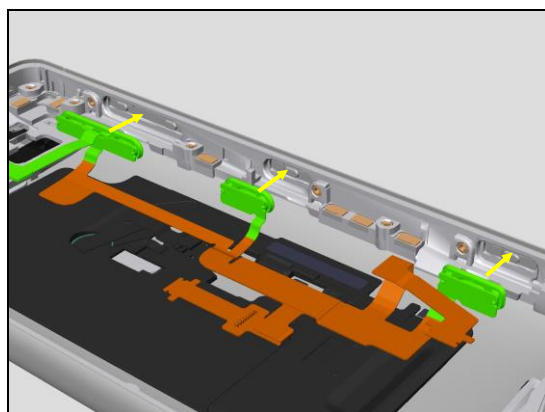
Fold the FPC near the power key at 90 degree.



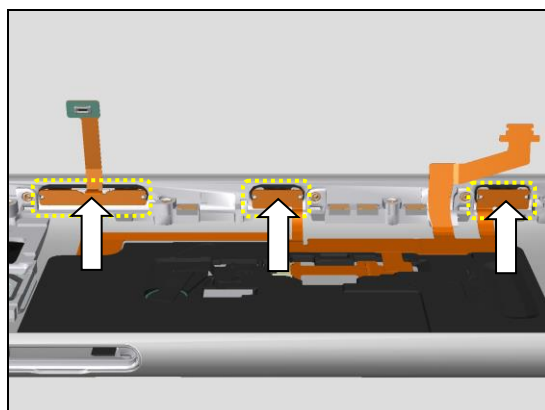
Fold the FPC near the camera key at 90 degree.



Attach the FPC (key areas) and gaskets.

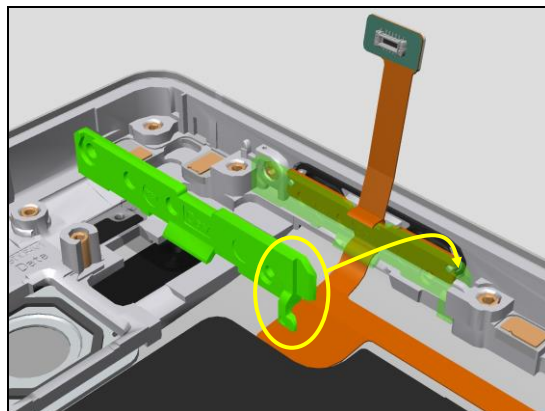


Press the FPC (key areas) with a finger.

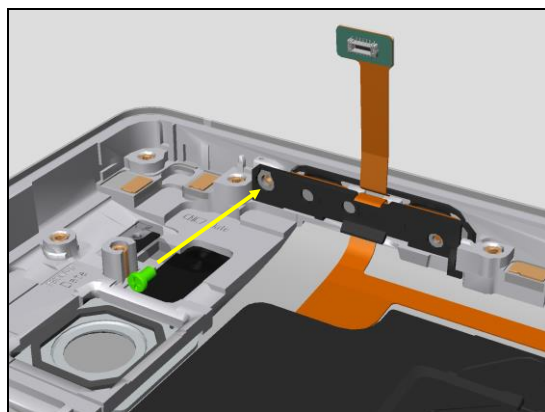


Reassembly

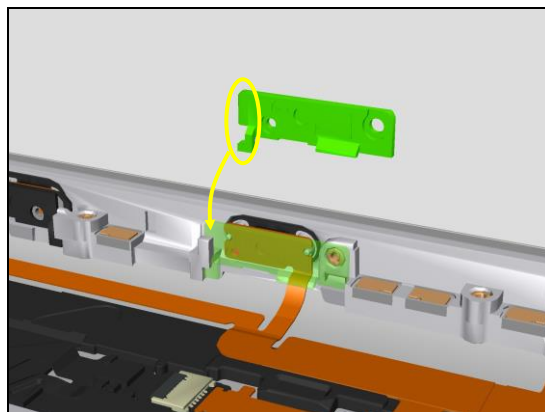
Attach the Holder Key Vol.



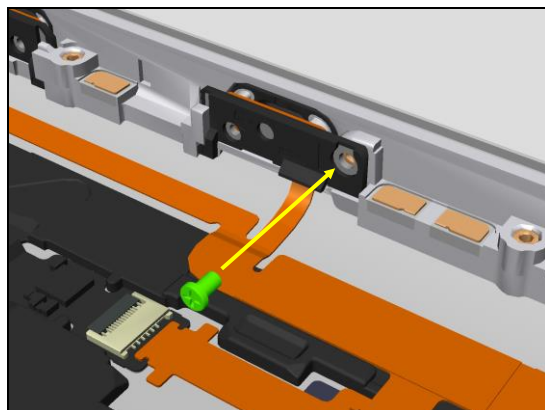
Tighten the Screw M1.2x2.0 with Screwdriver PH0 x 100.
Torque : 8 ± 1 Ncm



Attach the Holder Key PW.

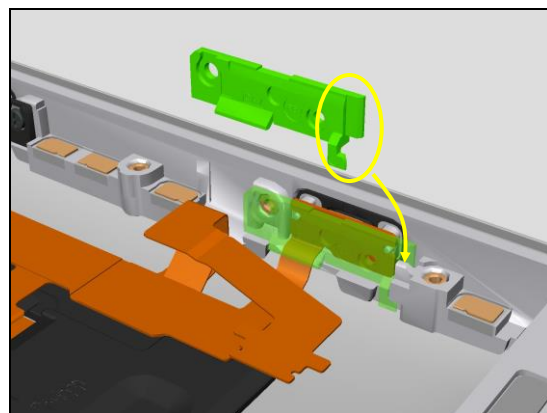


Tighten the Screw M1.2x2.0 with Screwdriver PH0 x 100.
Torque : 8 ± 1 Ncm

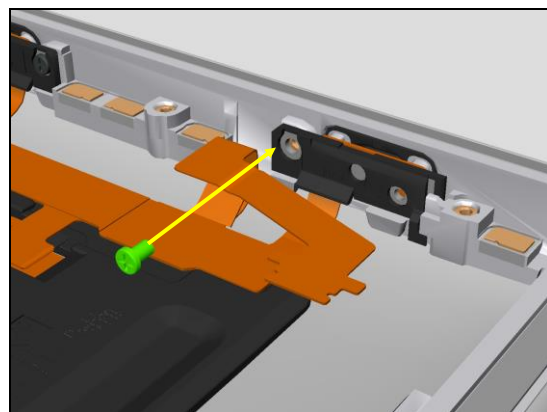


Reassembly

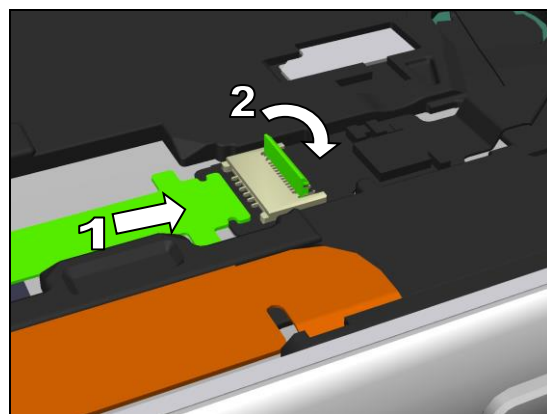
Attach the Holder Key Cam.



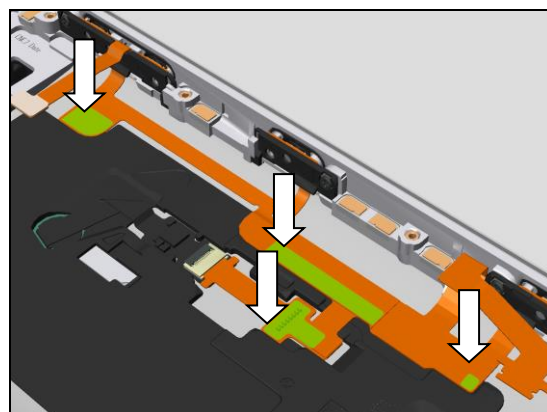
Tighten the Screw M1.2x2.0 with Screwdriver PH0 x 100.
Torque : 8 ± 1 Ncm



Connect the FPC to the ZIF connector of the FP Sensor.
Lock the flap of the ZIF connector.

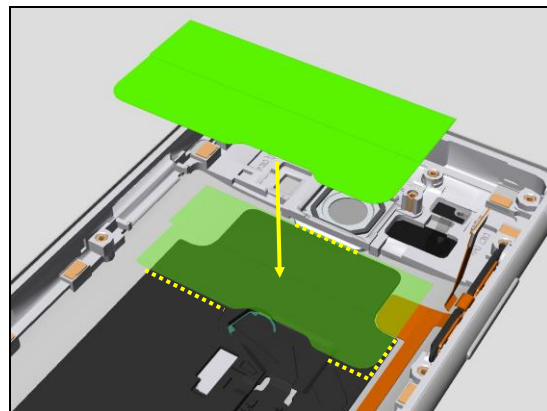


Paste and press the adhesive areas with a finger.



5.8 Sheet Guide MOP

Paste the Sheet Guide MOP.

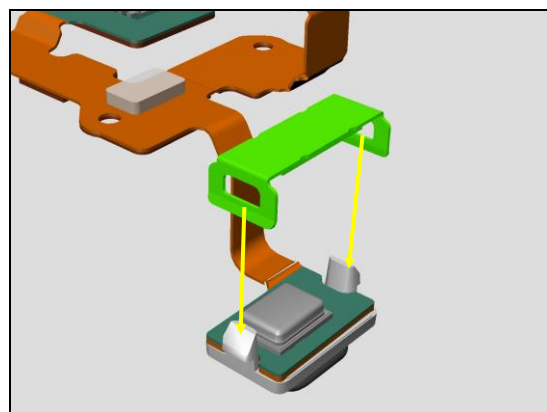


5.9 FPC Mic2

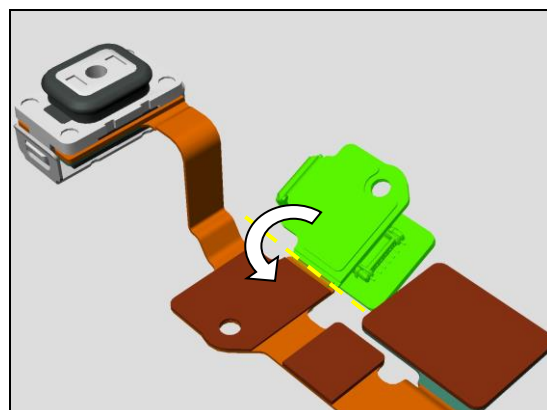
Attach the Gasket Mic to the FPC Mic2.



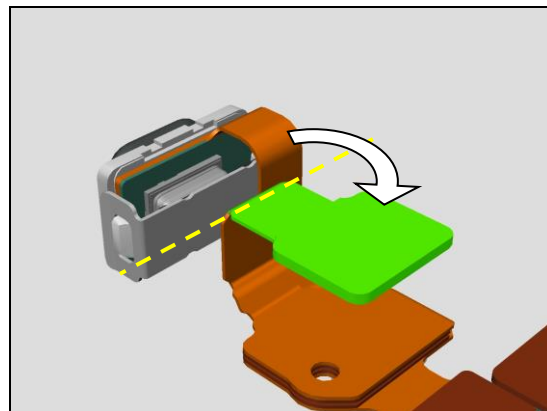
Attach the Plate Mic to the Gasket Mic by 2 hooks.



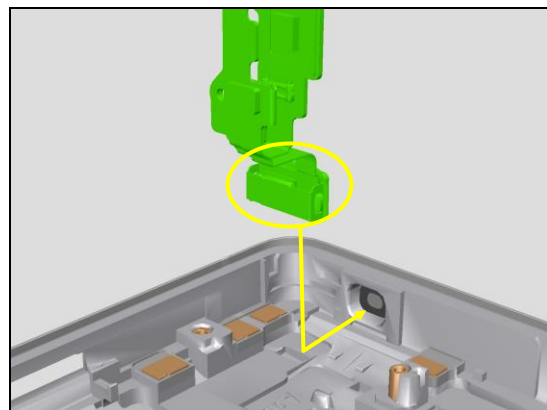
Fold and paste the FPC (BtoB connector end).



Fold the FPC (BtoB connector end) at 90 degree.

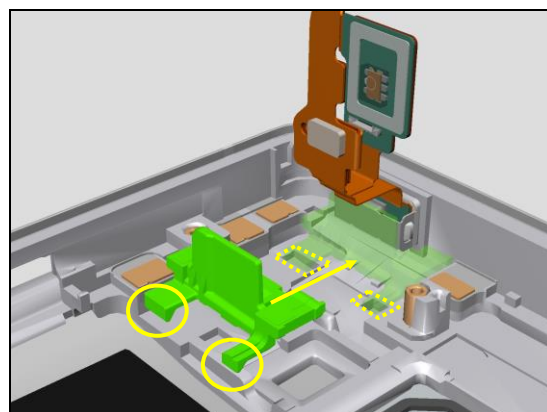


Attach the FPC Mic2

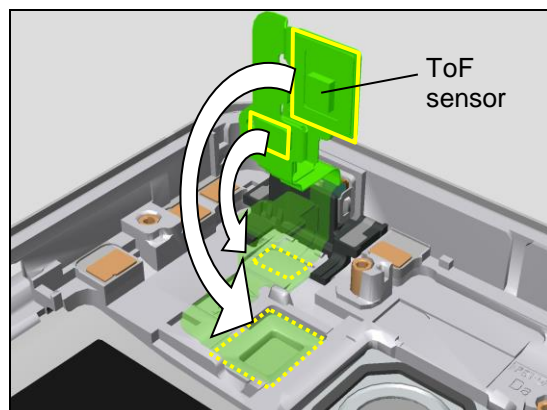


5.10 Frame WIFI Main Ant

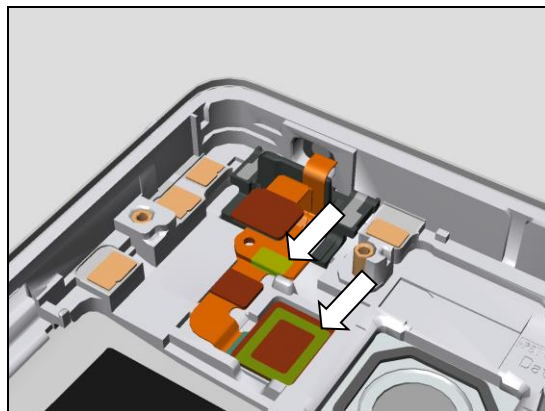
Attach the Frame WIFI Main Ant by 2 hooks.



Paste the middle area and ToF sensor area of the FPC Mic2.

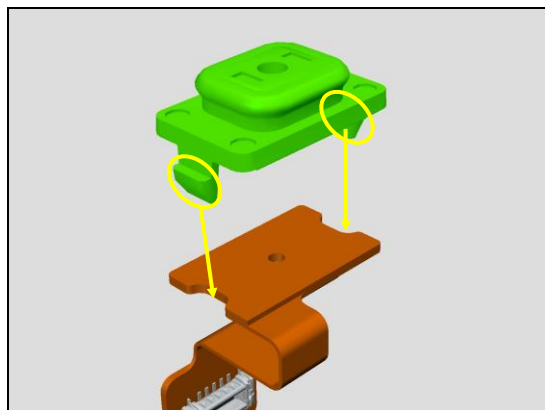


Press the adhesive areas with a finger.

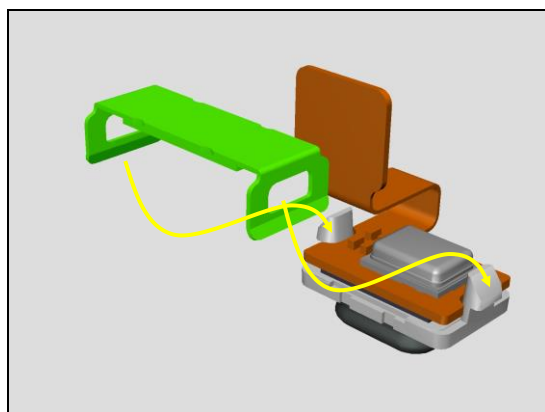


5.11 FPC Mic1

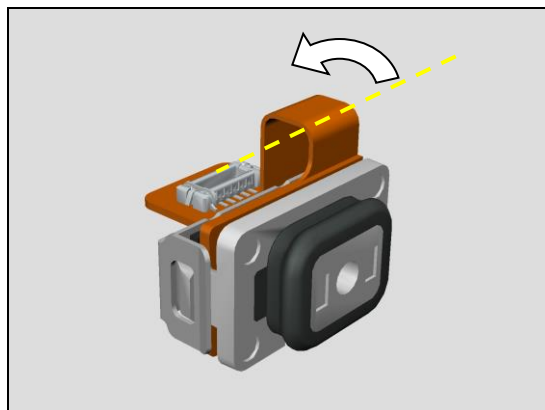
Attach the Gasket Mic to the FPC Mic1.



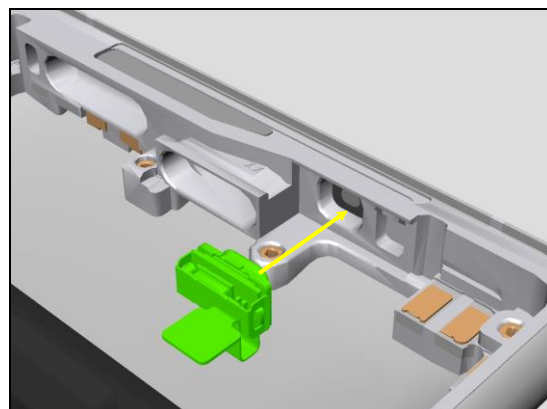
Attach the Plate Mic to the Gasket Mic by 2 hooks.



Fold the FPC at 90 degree.

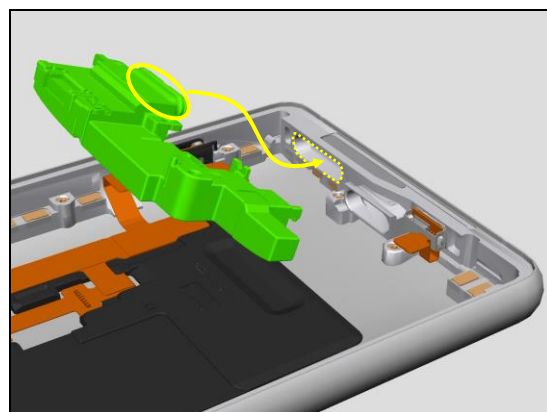


Attach the FPC Mic1.

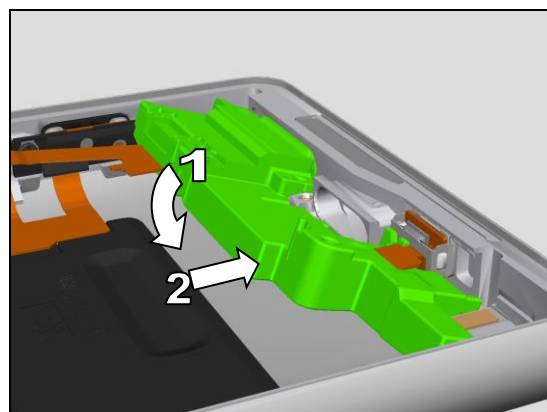


5.12 Speaker Box

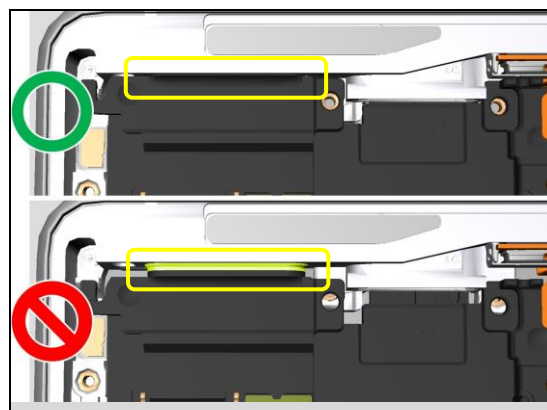
Insert the gasket area of Speaker Box at an angle.



Attach the Speaker Box.

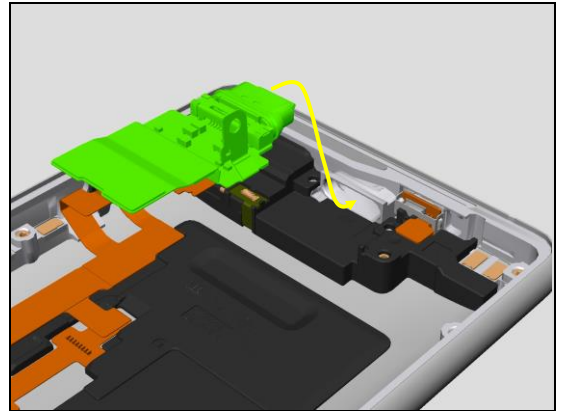


Make sure the yellow gasket is not visible.

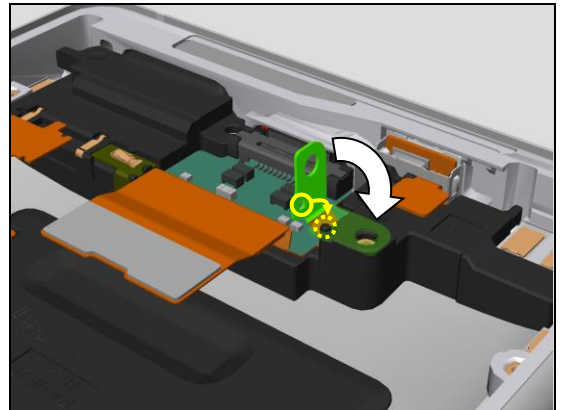


5.13 FPC USB

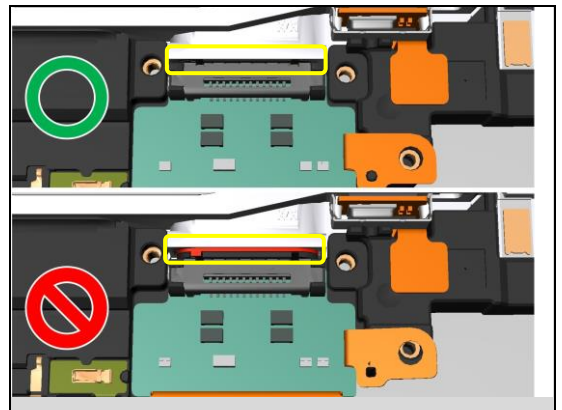
Attach the FPC USB.



Attach the tab of the FPC USB on the Speaker Box by guide pin.

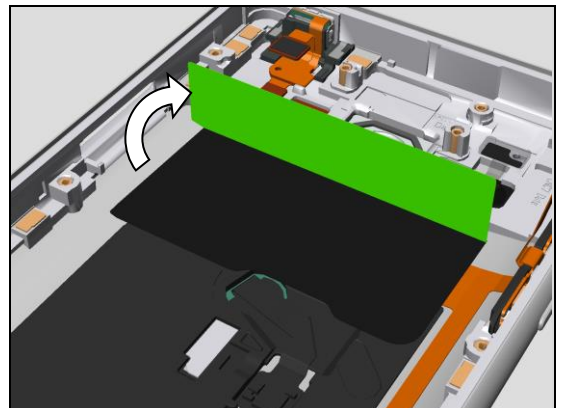


Make sure the red gasket is not visible.

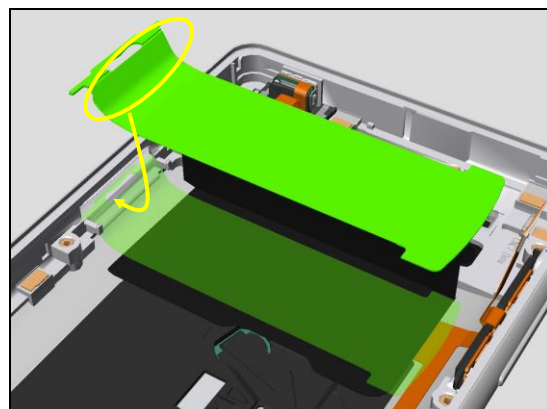


5.14 Sheet Slider MOP

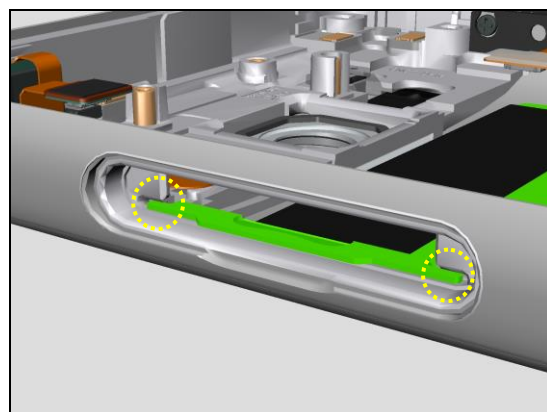
Open the Sheet Guide MOP (non-adhesive area).



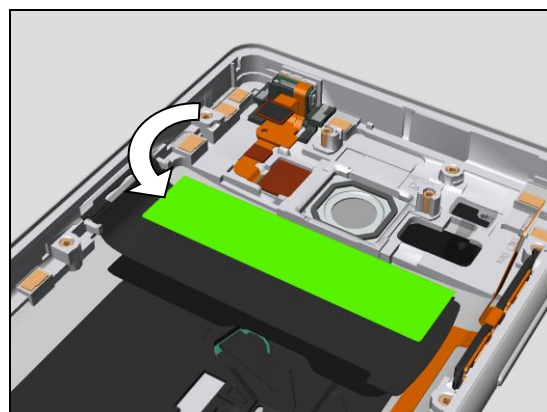
Attach the Sheet Slider MOP.



Make sure it is accessible from outside of the cap hole.

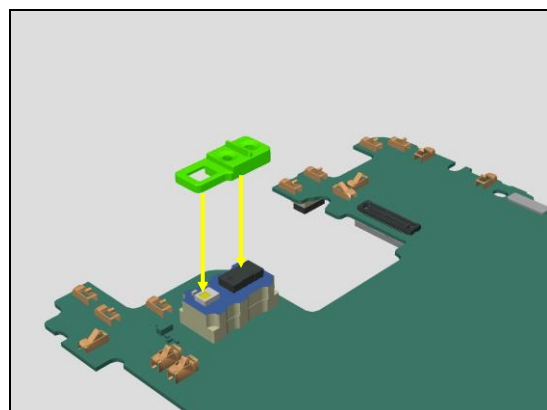


Close the Sheet Guide MOP (non-adhesive area).



5.15 Holder Sensor

Attach the Holder Sensor on the PBA Main.



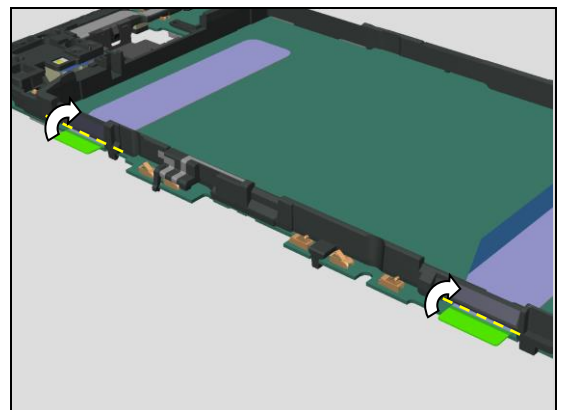
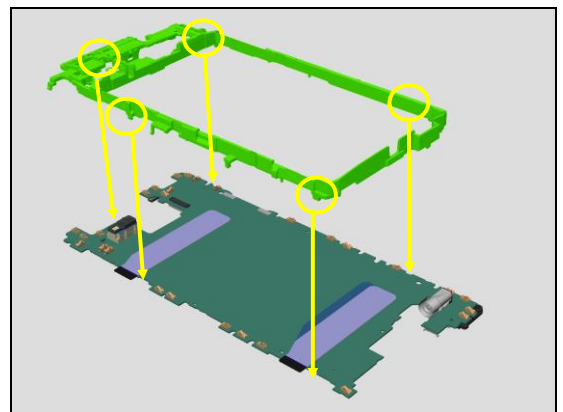
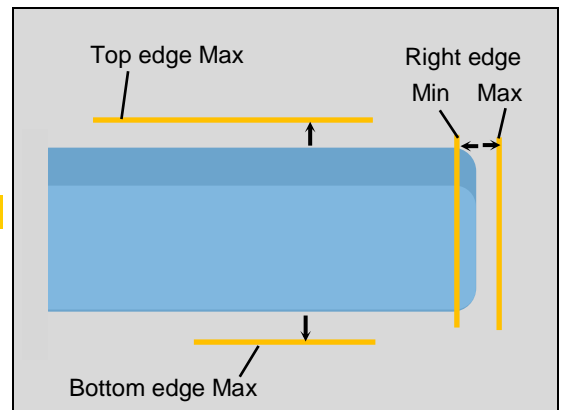
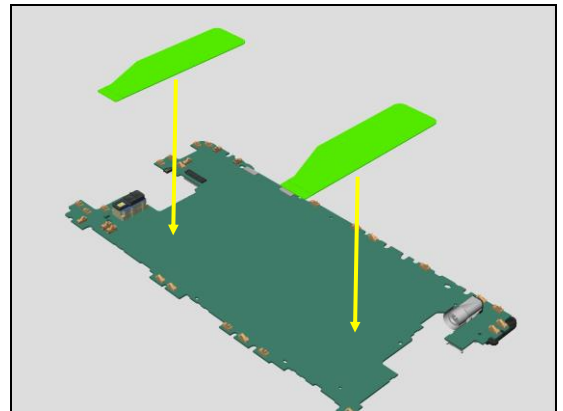
5.16 Frame Rear

Paste 2 pcs of the Adhesive Battery.

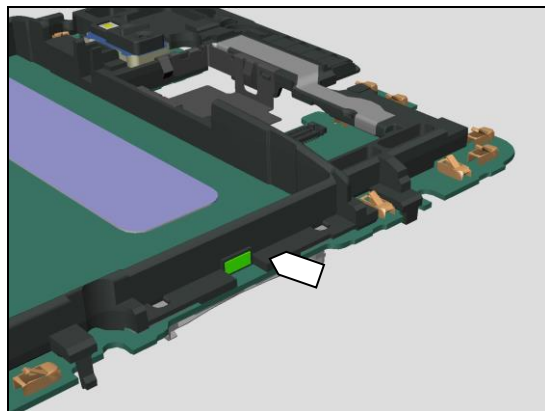
Paste within the guidelines on the PBA Main.

Attach the Frame Rear by 5 hooks.

Fold and paste the tab of the Adhesive Battery on the Adhesive Adh Battery.



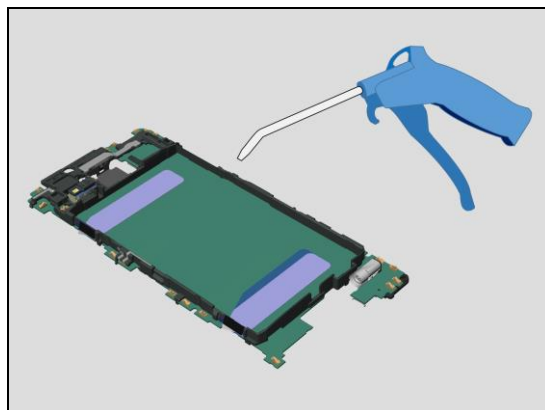
If replacing the Liquid indicator, paste it.



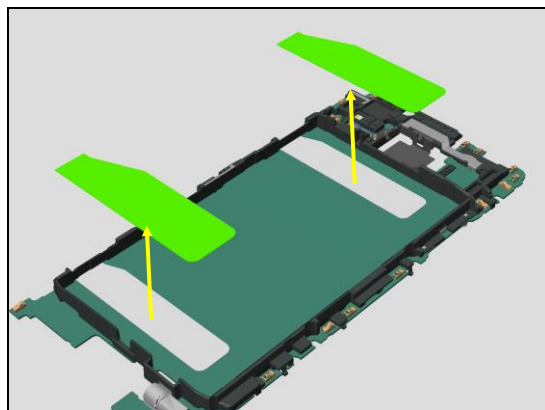
5.17 Battery

STEP1: ASSEMBLE

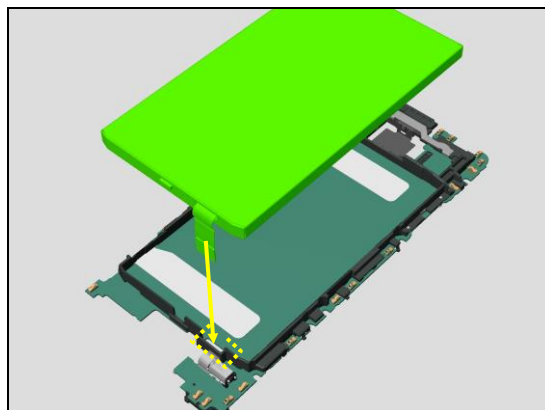
Note! Clean the battery compartment by pressure air using an air duster spray can or ionized air blower. Make sure no foreign materials on the battery compartment of the unit. Any foreign materials put into between battery and unit will be the cause of battery damages.



Remove 2 release films of the Adhesive Battery.

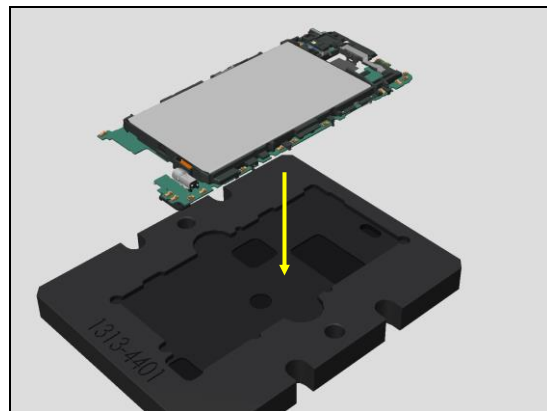


Pass the FPC of the Battery through the hole and paste the Battery on the Adhesive Battery.

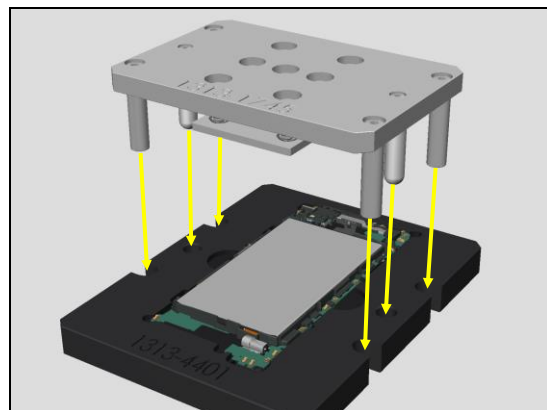


STEP2: PRESS

Place the workpiece on the Battery Press Tool Bottom.



Place the Press Battery Inlay.

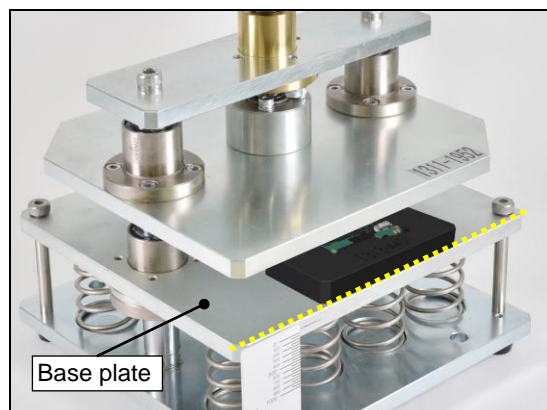


OPTION A. PRESS WITH GENERIC WHEEL PRESS TOOL

Insert the workpiece to the Generic Wheel Press Tool.



Align with the edge of the base plate of the Generic Wheel Press Tool.



Turn the wheel clockwise and press.

200 N, 10 sec

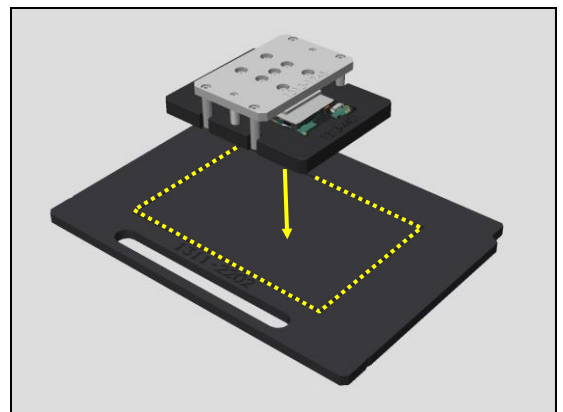


Turn the wheel counterclockwise.
Take out the workpiece.



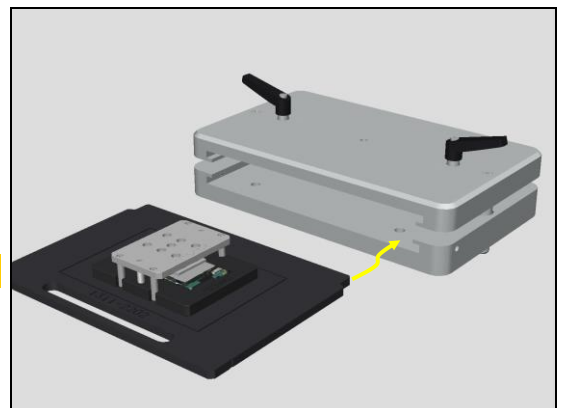
OPTION B. PRESS WITH GENERIC PRESS TOOL

If using the Generic Press Tool, place the workpiece within the rectangle line of the Inlay Adaptor (B).



Insert the Inlay Adaptor (B) to the bottom slit of Generic Fixture for Press Tool.

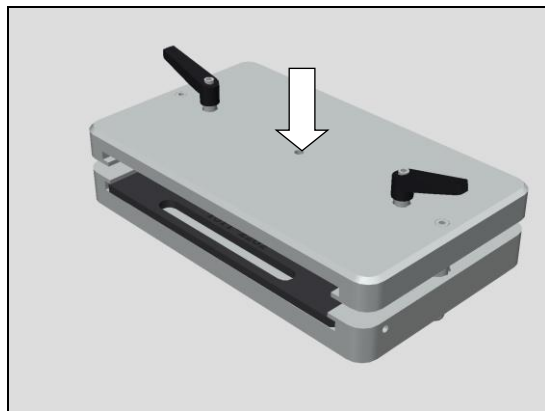
Do not use the Inlay Adaptor (T).



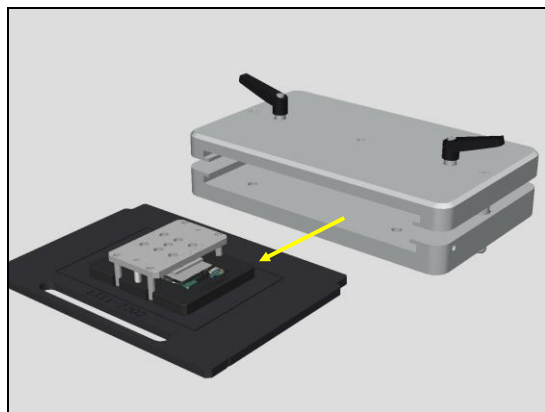
Reassembly

Press the battery.

200 N, 10 sec

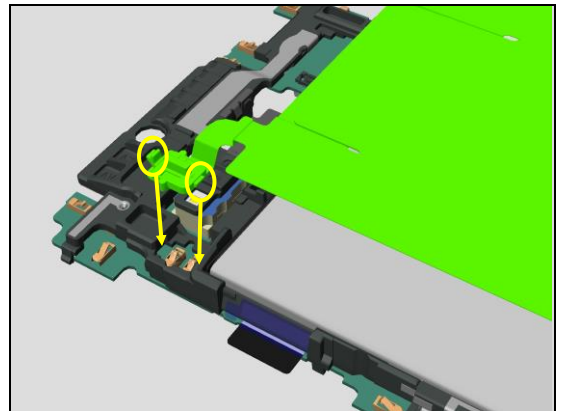


Take out the workpiece.



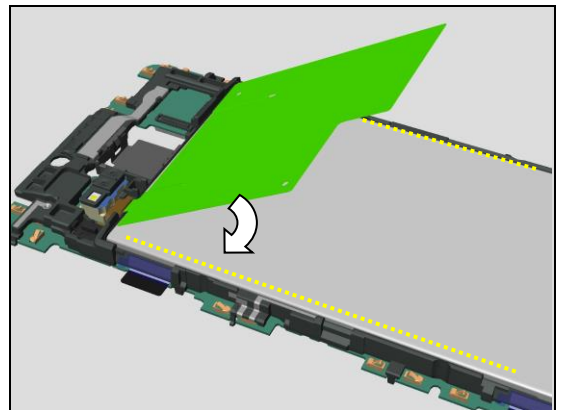
5.18 FPC NFC

Attach the connector of the FPC NFC by 2 hooks.



Paste the antenna area of the FPC NFC on the Battery.

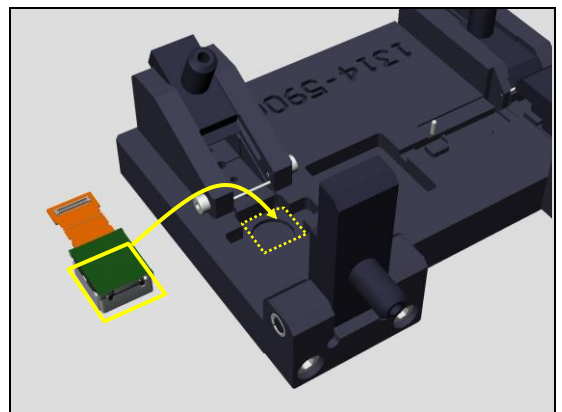
Paste within the top surface of the battery.



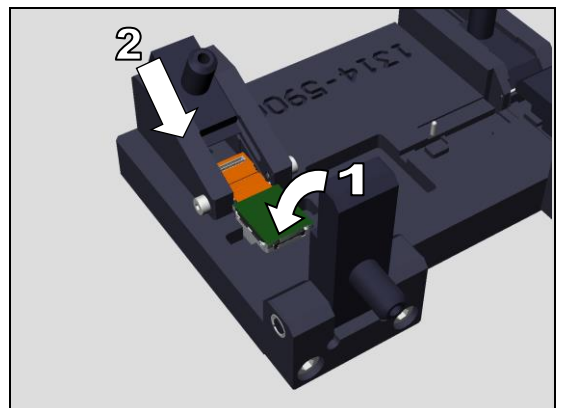
5.19 Main Camera

STEP1: BENDING FPC (FOR BRAND NEW MAIN CAMERA)

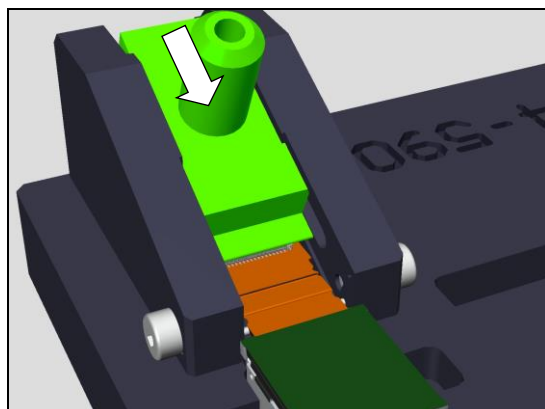
Place the Main Camera on the Press Tool for Bending Camera FPCs.



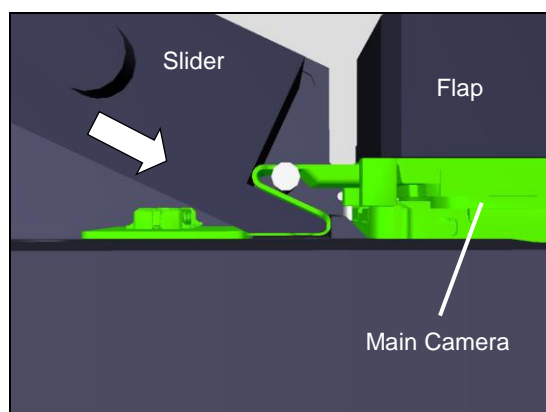
Close the flap to hold the Main Camera body.
Slide the slider until the end to bend the FPC.



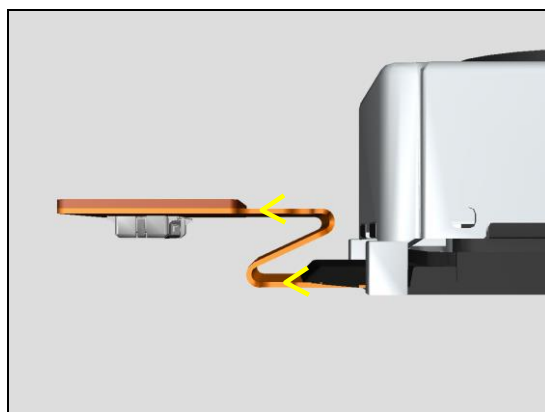
Make sure the slider goes over the FPC.



Cross section view

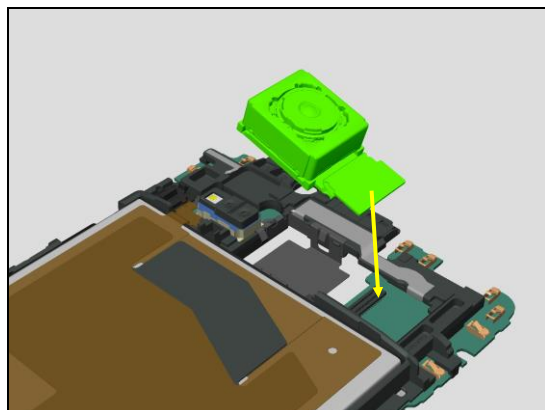


Make sure the FPC keeps parallel Z-shape in idle state.

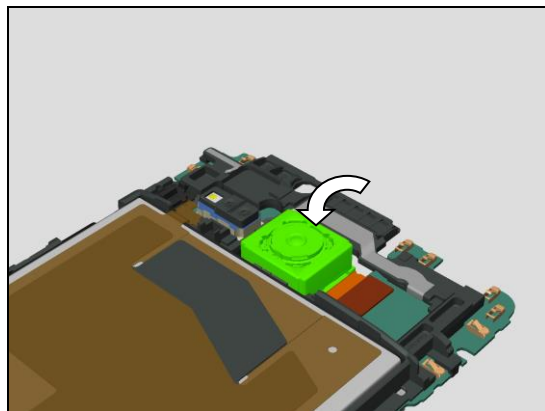


STEP2: ASSEMBLY

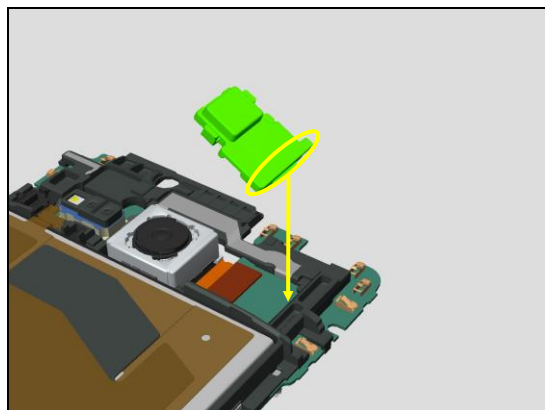
Connect the BtoB connector of Main Camera on the PBA Main.



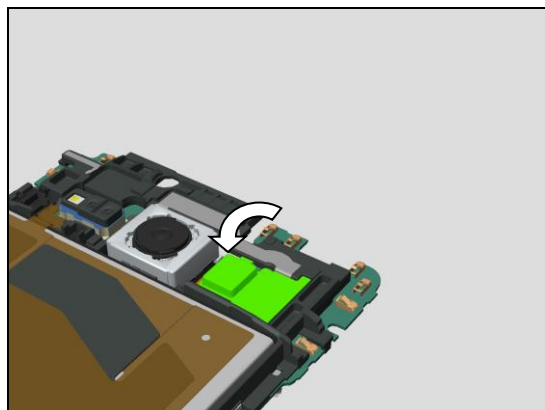
Attach the Main Camera in the Frame Main.



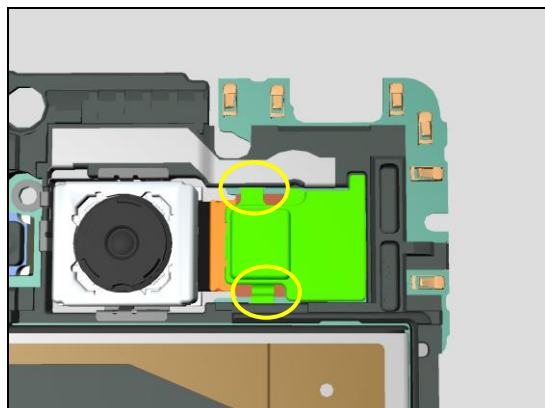
Place the right side of the Holder Main Cam BtB.



Attach the Holder Main Cam BtB by 2 hooks.



Hook position



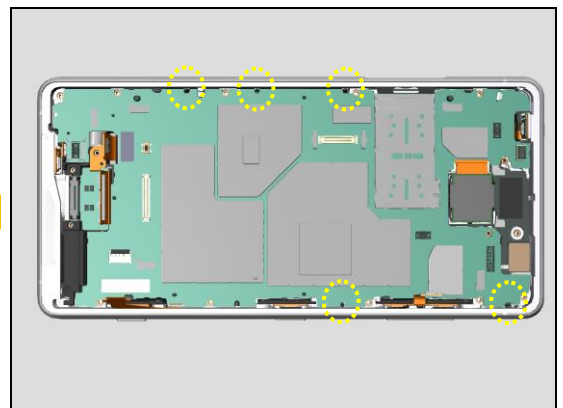
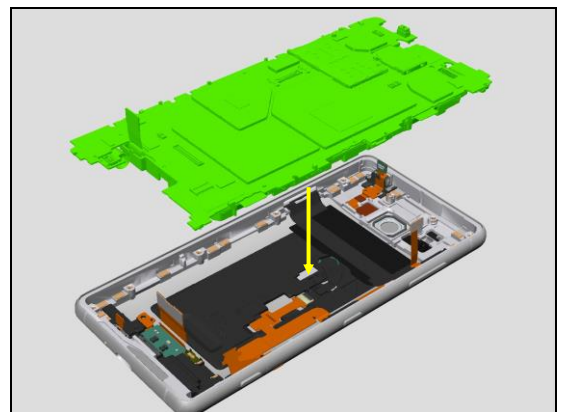
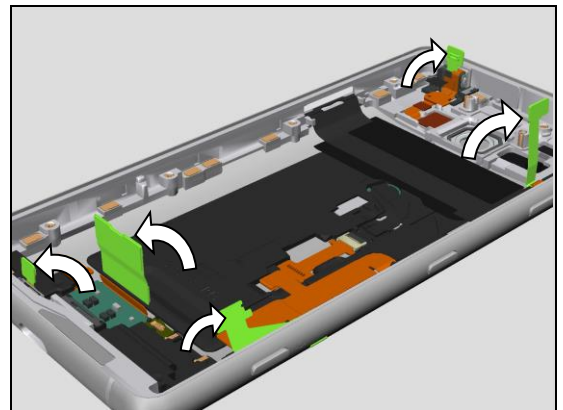
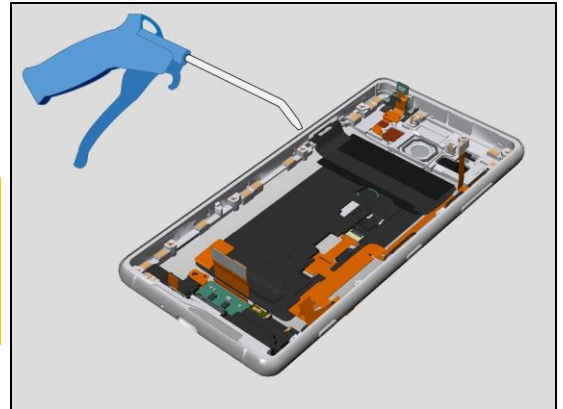
5.20 PBA Main

Note! Clean the Cover Main by pressure air using an air duster spray can or ionized air blower. Make sure no foreign materials on the Cover Main. Any foreign materials put into between battery and unit will be the cause of battery damages.

Stand all FPCs up.

Attach the PBA Main by 5 hooks.

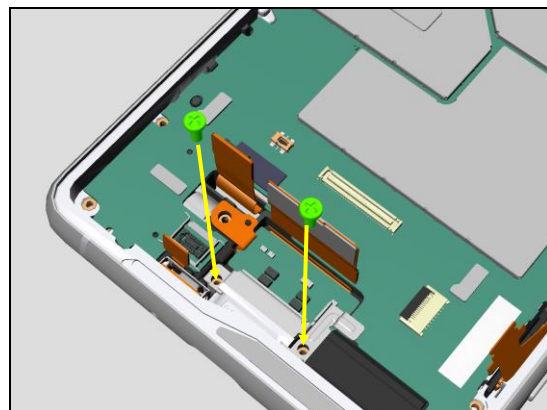
Hook position



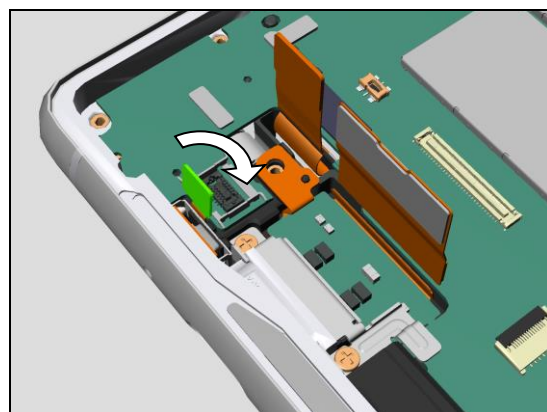
Attach the Plate USB.



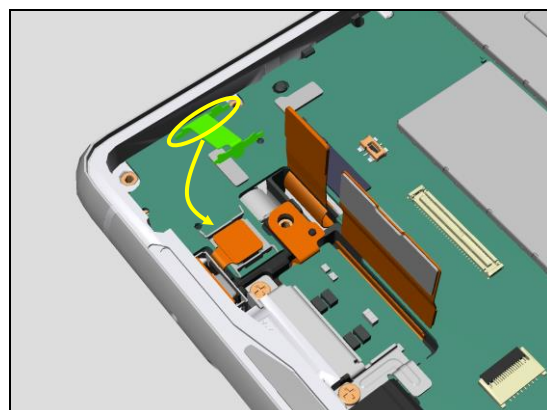
Tighten 2 pcs of Screw M1.2x2.9. (JCIS No 0)
Torque : 8 ± 1 Ncm



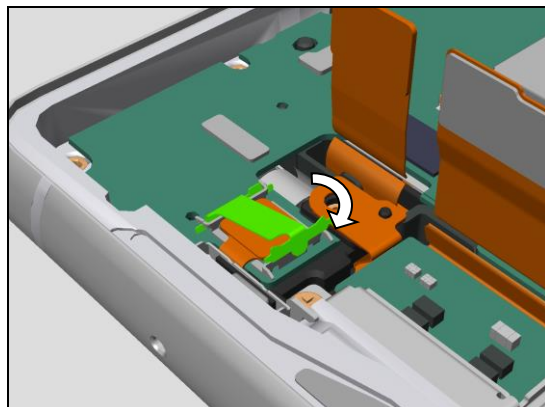
Connect the BtoB connector of the FPC Mic1.



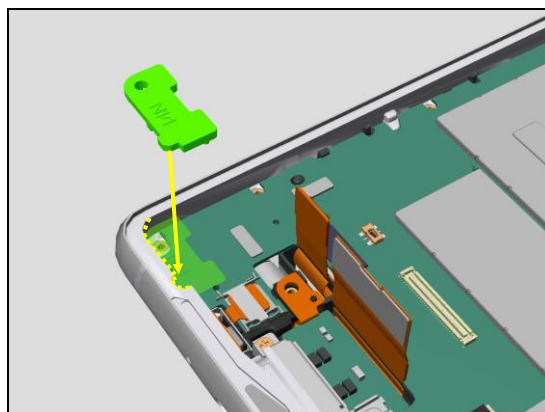
Attach the left side of the Plate holder BtoB.



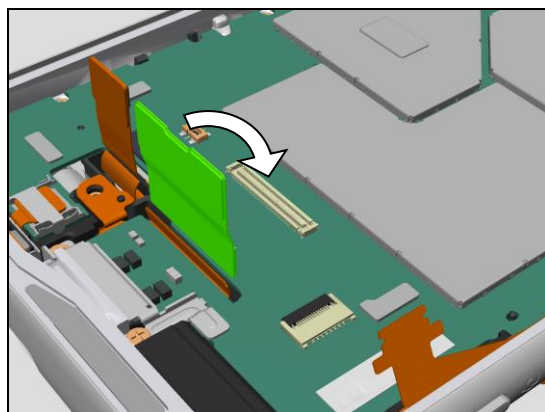
Attach the right side of the Plate holder BtoB.



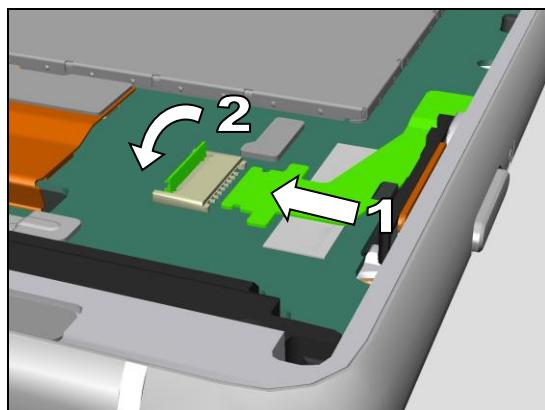
Paste the Holder PBA Bottom.



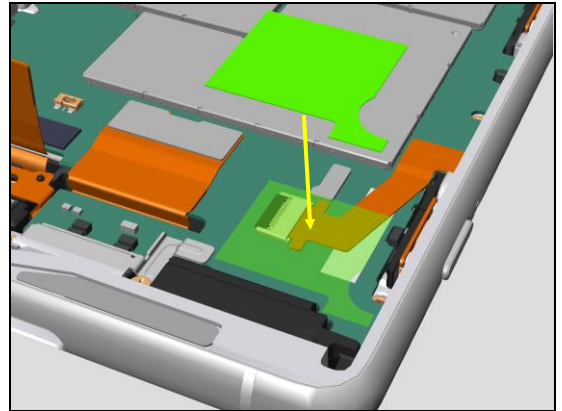
Connect the BtoB connector of the FPC USB.



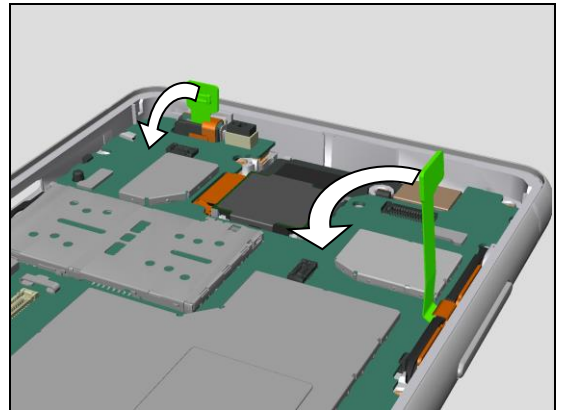
Connect the ZIF connector of the FPC Key.
Lock the ZIF connector of PBA Main.



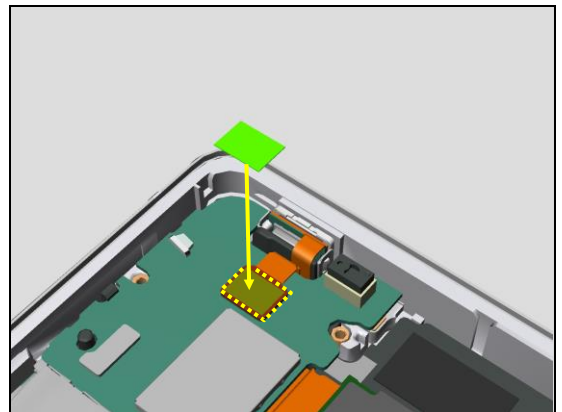
Paste the Sheet Insulation PBA Bottom.



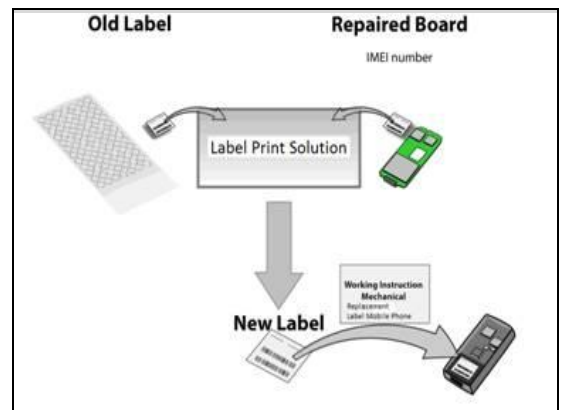
Connect the BtoB connector of the FPC Mic2 and FPC Key.



Paste the Sheet Spacer BtoB FPC Mic2 on the BtoB connector.

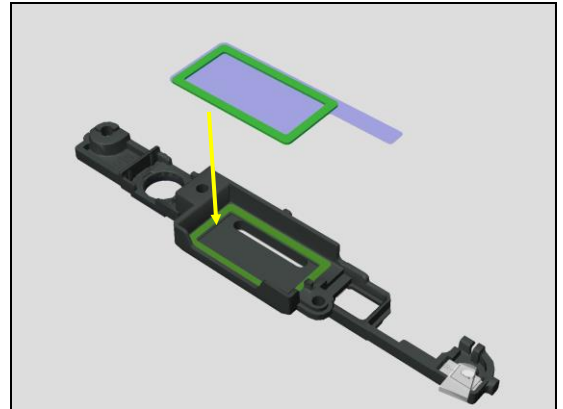


When replacing PBA Main, replace the MoP Label.



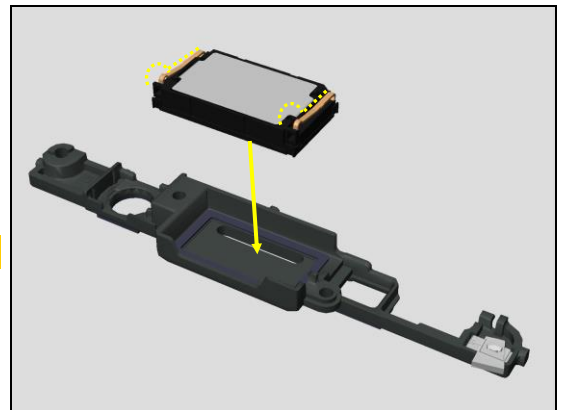
5.21 Loudspeaker

Paste the Adhesive Top SPK on the Holder Top SPK.

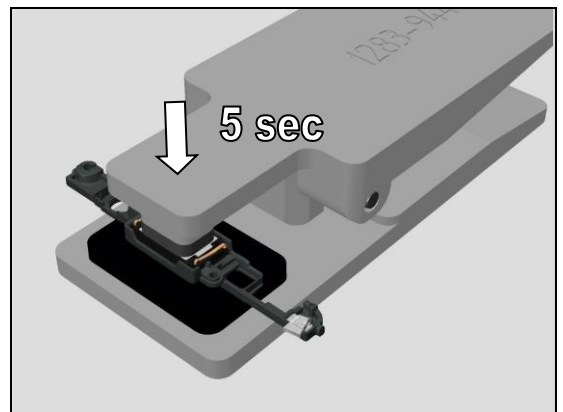


Paste the Loudspeaker.

Make sure the contact pin direction.



Press the Loudspeaker with the Earspeaker/Loudspeaker Top Press Tool for 5 sec.



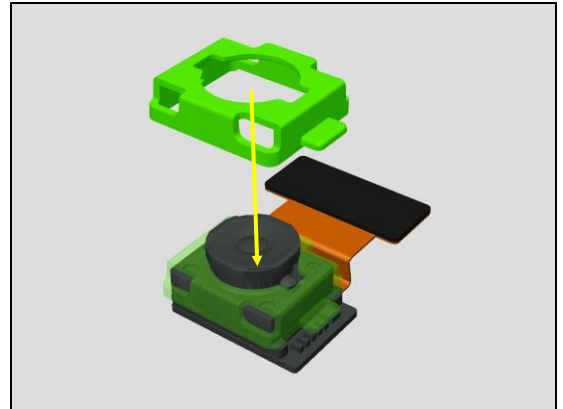
Take out the Holder Top SPK.



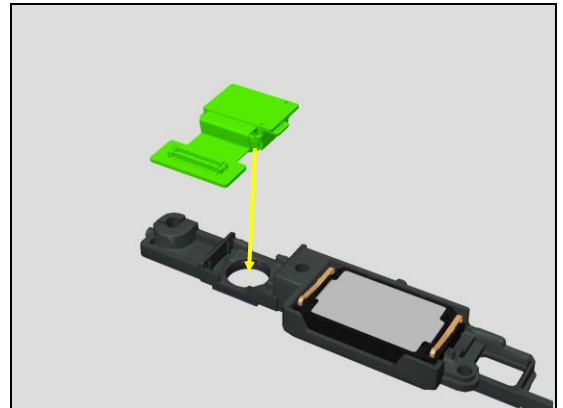
5.22 Front Camera

STEP1: ASSEMBLY TO HOLDER TOP SPK

Attach the Holder Sub Cam on the Front Camera.

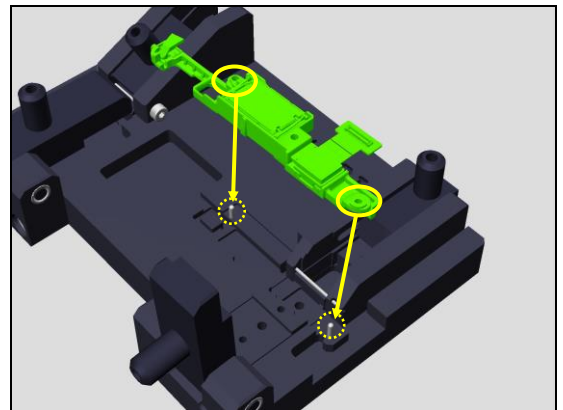


Attach the Front Camera to the Holder Top SPK.



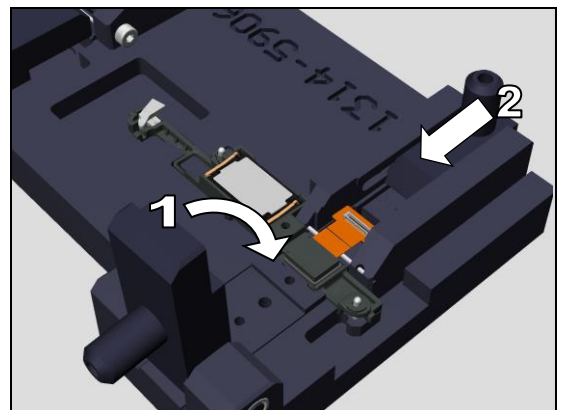
STEP2: BENDING FPC (FOR BRAND NEW FRONT CAMERA)

Place the Front Camera and Holder Top SPK on the Press Tool for Bending Camera FPCs.

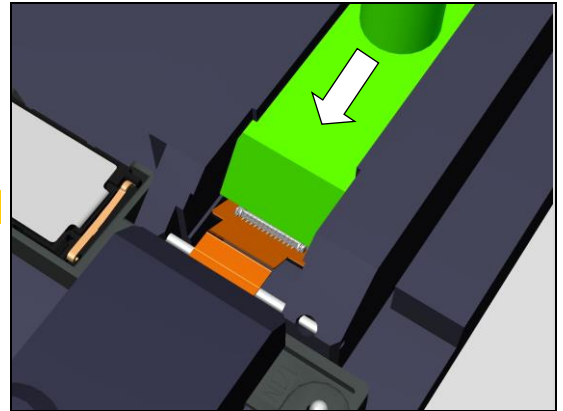


Close the flap to hold the Front Camera and Holder Top SPK.

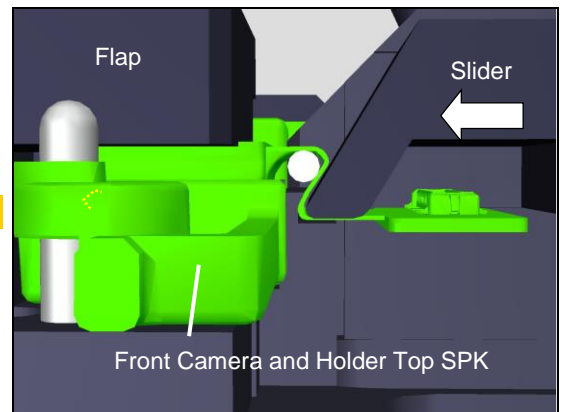
Slide the slider until the end to bend the FPC.



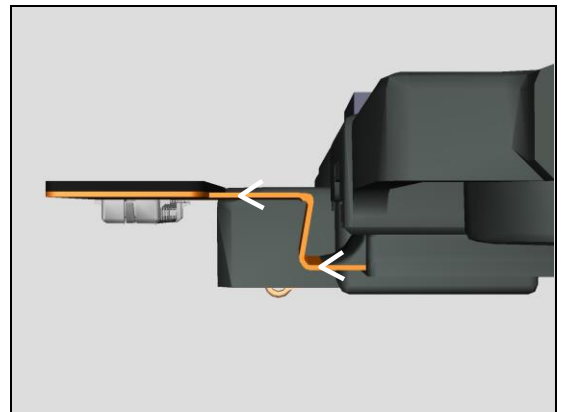
Make sure the slider goes over the FPC.



Cross section view

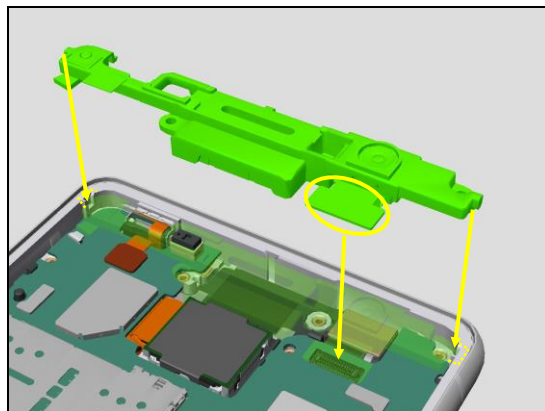


Make sure the FPC keeps parallel Z-shape in idle state.



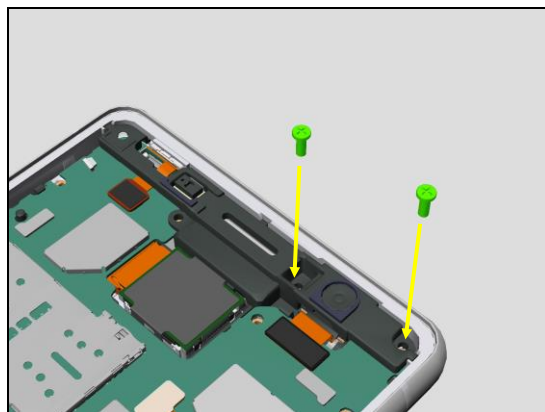
5.23 Holder Top SPK

Attach the Holder Top SPK on the unit.
Connect the BtoB connector of the Front Camera.



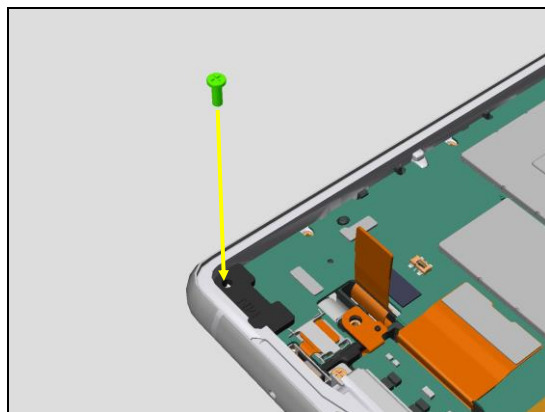
Tighten 2 pcs of the Screw M1.2x3.3 to the Holder Top SPK.
(JCIS No 0)

Torque : 8 ± 1 Ncm

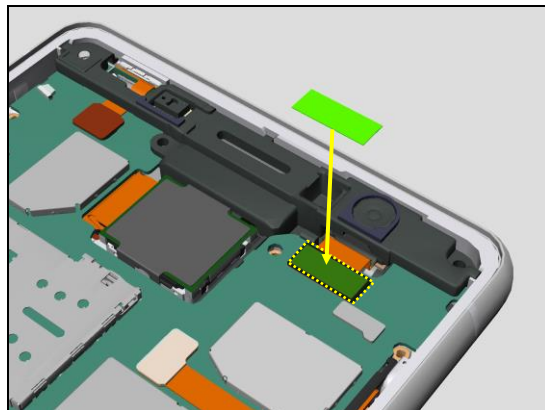


Tighten the Screw M1.2x3.3 to the Holder PBA Bottom.
(JCIS No 0)

Torque : 8 ± 1 Ncm



Paste the Sheet Spacer BtoB Chat Cam on the BtoB connector of the Front Camera.



5.24 Plate Display

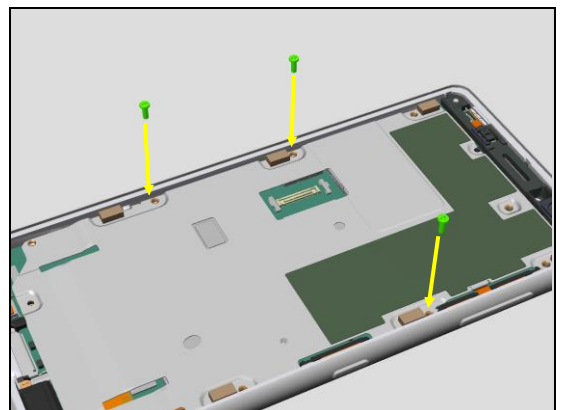
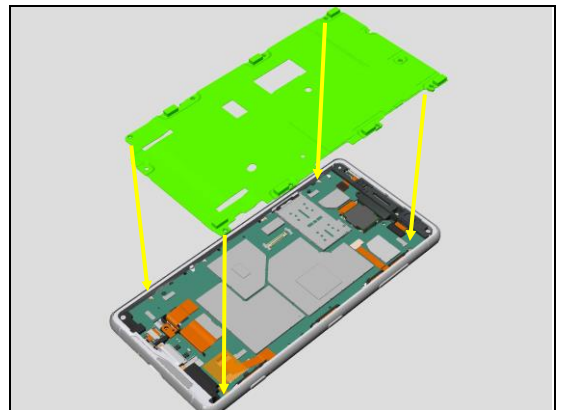
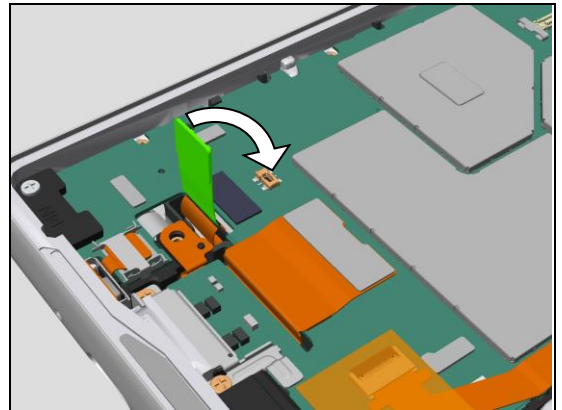
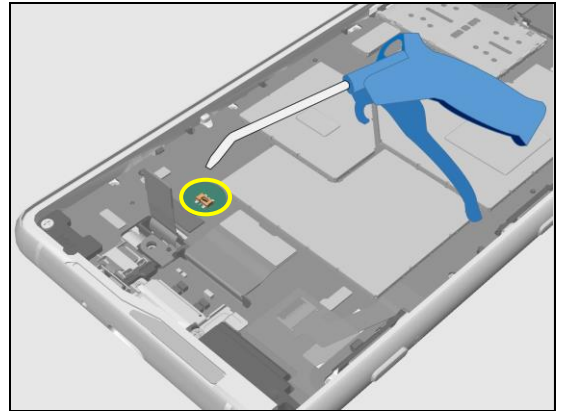
Note! Clean the BtoB connector by pressure air using an air duster spray can or ionized air blower. Make sure no foreign materials on the BtoB connector.

Connect the BtoB connector of the Battery.

Attach the Plate Display.

Tighten 3 pcs of the Screw M1.2x3.3. (JCIS No 0)

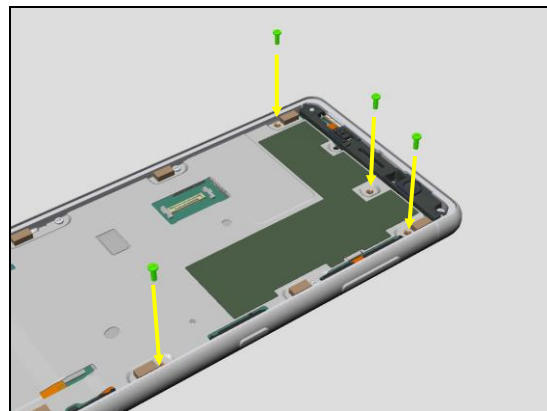
Torque : 8 ± 1 Ncm



Reassembly

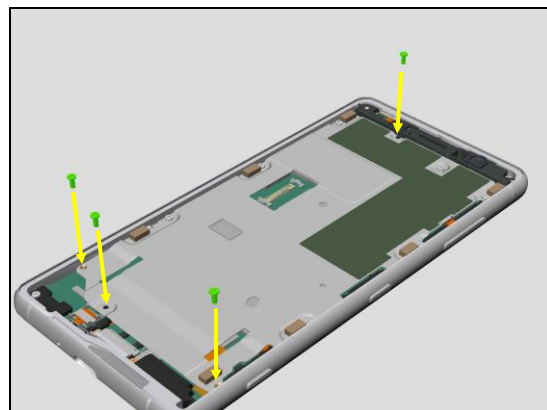
Tighten 4 pcs of the Screw M1.2x3.3. (JCIS No 0)

Torque : 8 ± 1 Ncm

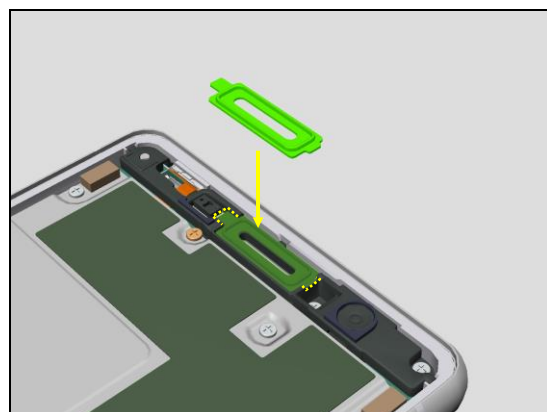


Tighten 4 pcs of the Screw M1.2x2.9. (JCIS No 0)

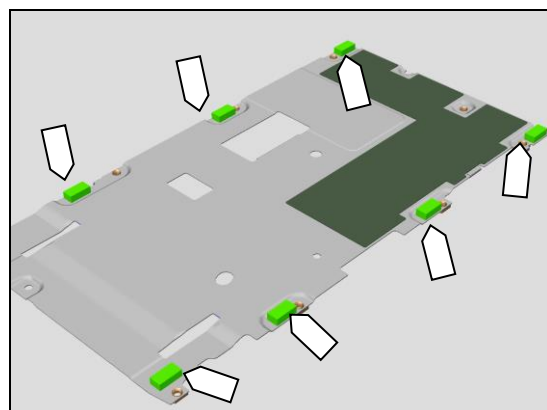
Torque : 8 ± 1 Ncm



Paste the Gasket Top SPK on the Holder Top SPK.

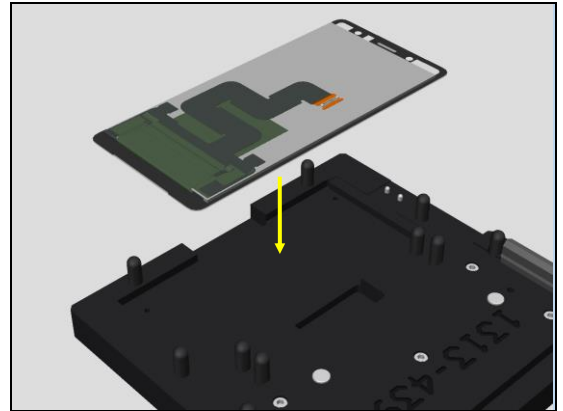


If the Sheet Gasket Plate Display are missing or broken during repair, paste it.

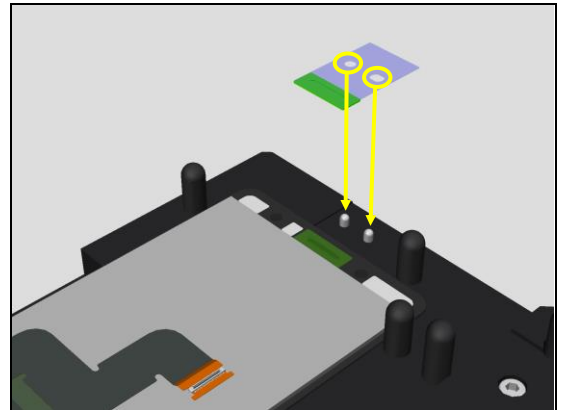


5.25 Sheet Mesh Top SPK

Place the Display on the Positioning Tool.

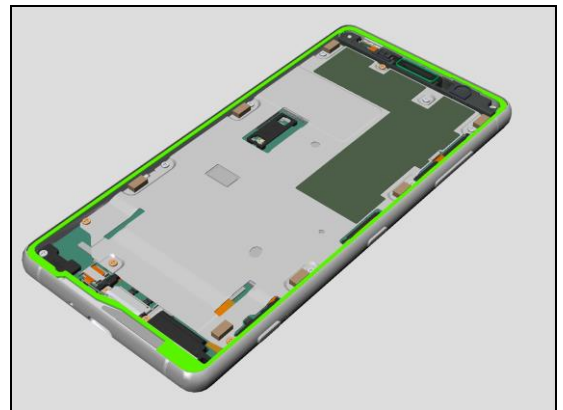


Attach the Sheet Mesh Top SPK by guide pins.

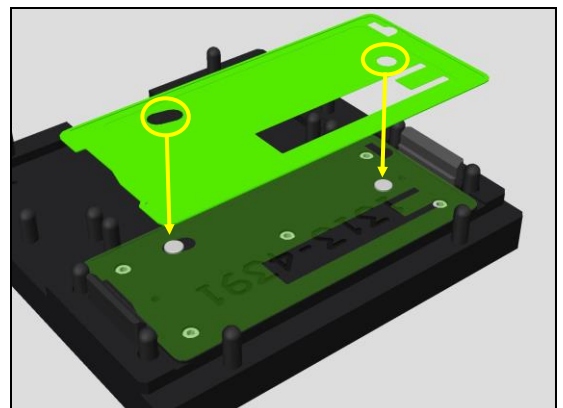


5.26 Display

Wipe the Cover Main clean. (Adhesive Display area).

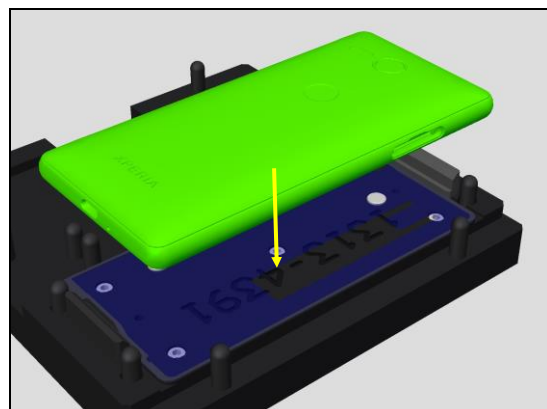


Place the Adhesive Display on the Positioning Tool.



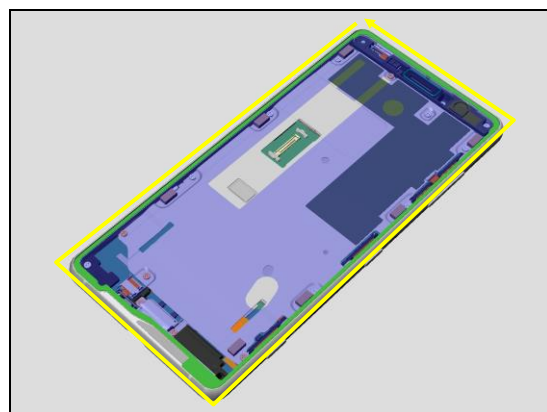
Reassembly

Paste the unit on the Adhesive Display.

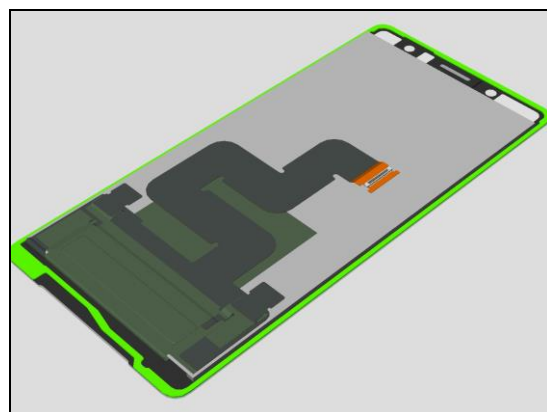


Press the adhesive over the release film with a finger.

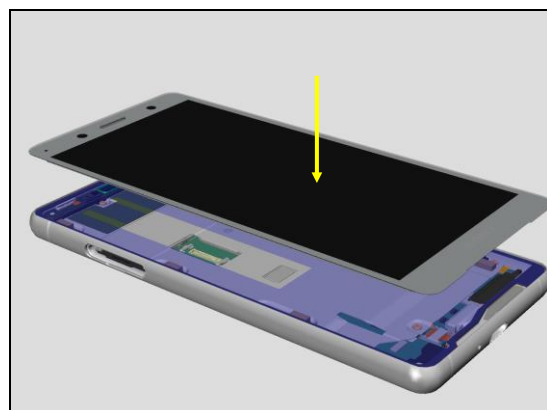
Keep the release film until the Holder LCD BtB is assembled.



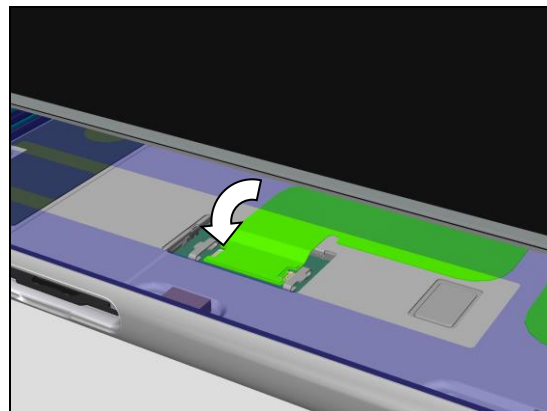
Wipe the Display clean. (Adhesive Display area).



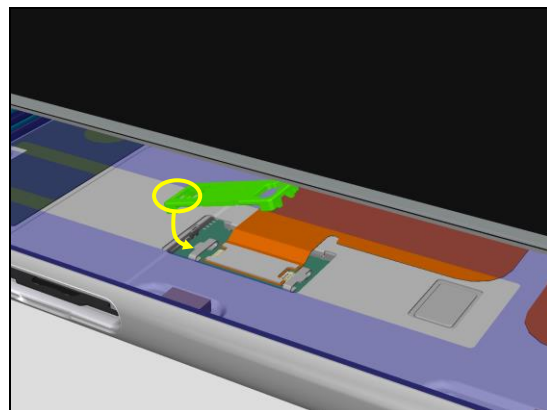
Put the Display close to the Cover Main.



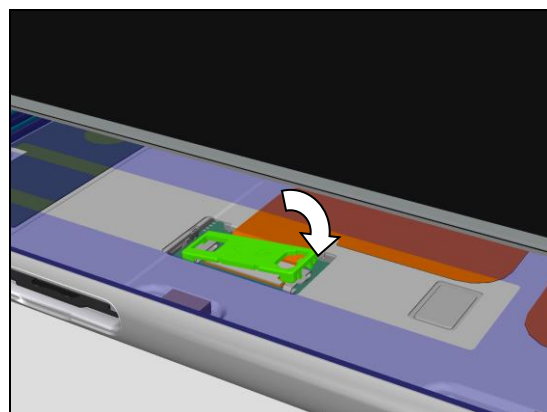
Connect the BtoB connector of the Display.



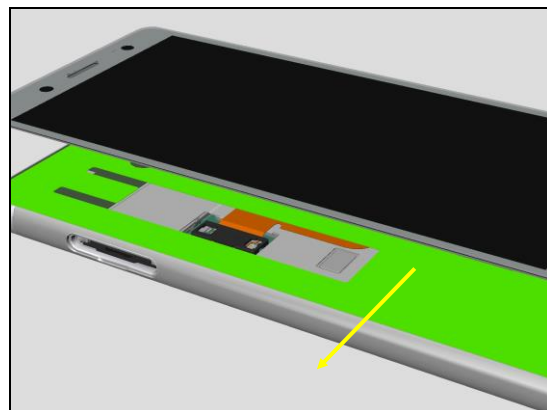
Place the Holder LCD BtB on the PBA Main.



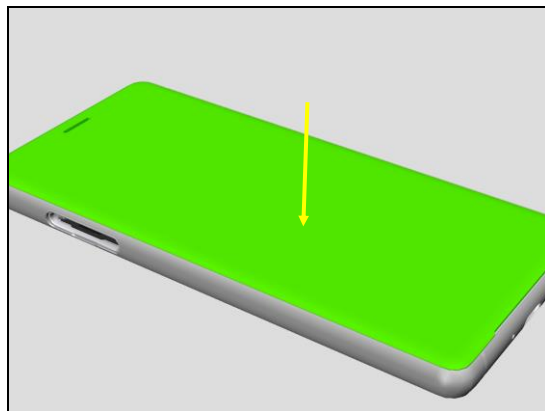
Attach the Holder LCD BtB by hook.



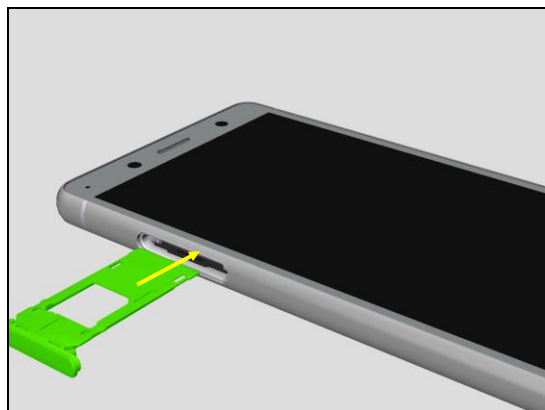
Rip and remove the release film of the Adhesive Display.



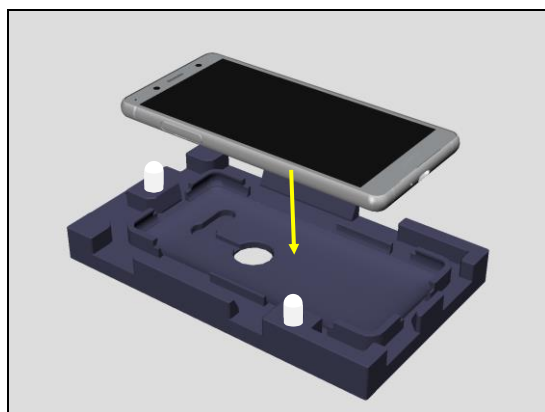
Paste the Display.



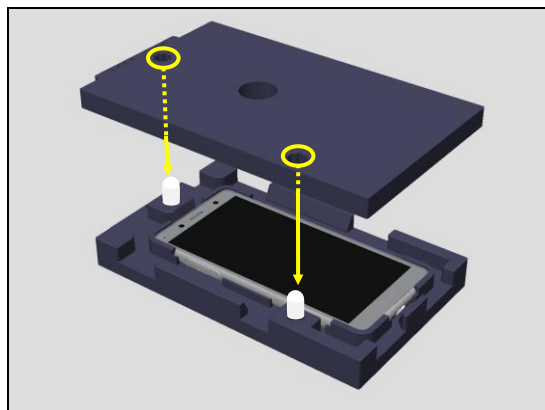
Insert the Cap Tray.



Place the unit on the Press Rubber Inlay (B).



Place the Press Rubber Inlay (T).



OPTION A. PRESS WITH GENERIC WHEEL PRESS TOOL

Insert the Press Rubber Inlay to the Generic Wheel Press Tool.



Align with the edge of the base plate of the Generic Wheel Press Tool.



Turn the wheel clockwise and press the unit twice.

1st press: 1000 N, 20 sec

2nd press: 1000 N, 20 sec

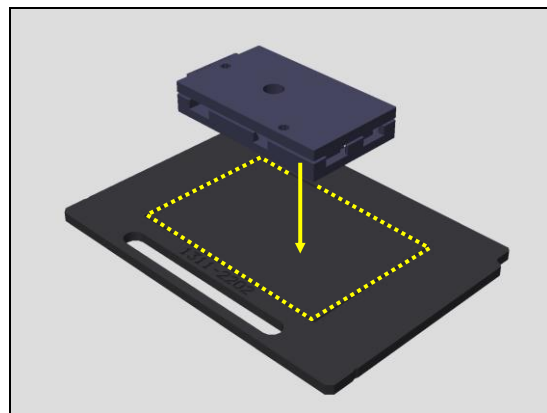


Take out the unit.

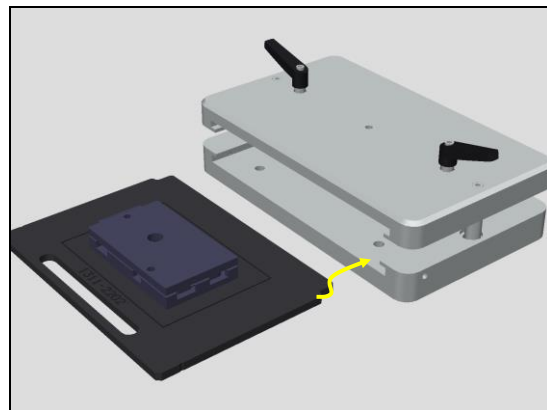


OPTION B. PRESS WITH GENERIC PRESS TOOL

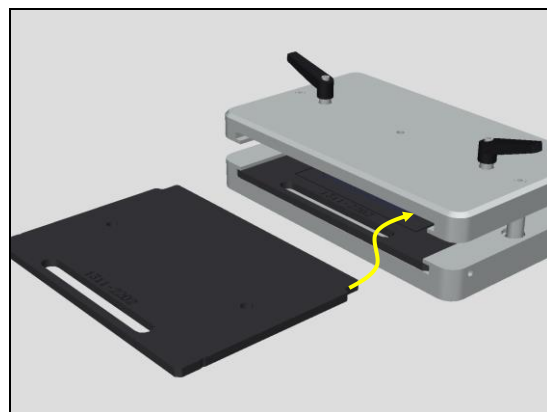
If using the Generic Press Tool, place the Press Rubber Inlay within the rectangle line of the Inlay Adaptor (B).



Insert the Inlay Adaptor (B) and the Press Rubber Inlay to the bottom slit of the Generic fixture for Presstool.



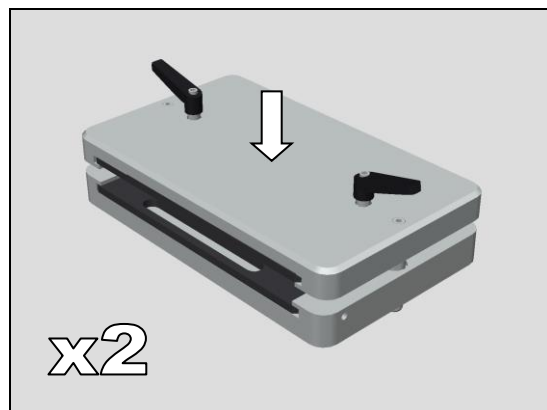
Insert the Inlay Adaptor (T) to the top slit of the Generic fixture for Presstool.



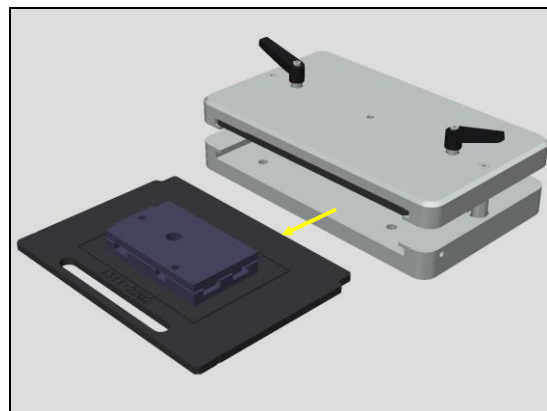
Press the unit twice.

1st press: 1000 N, 20 sec

2nd press: 1000 N, 20 sec

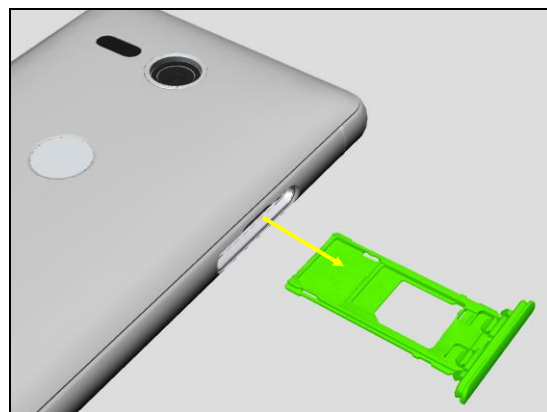


Take out the unit.



5.27 Label MoP

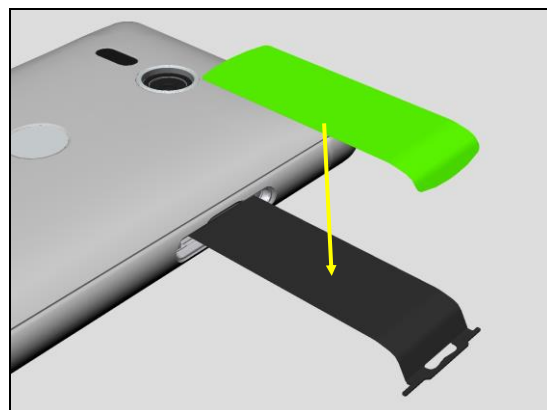
Remove the Cap Tray.



Pull out the Sheet Slider MOP.

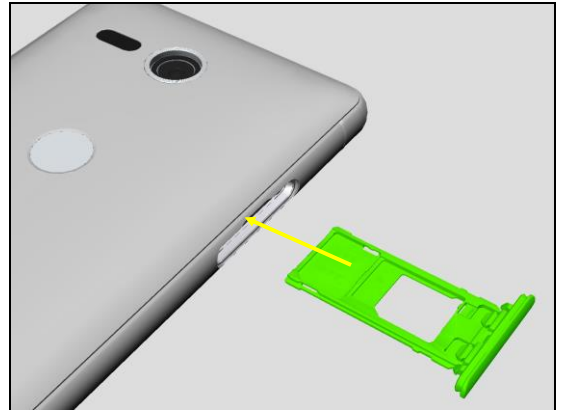


Paste the printed Label MoP on the Sheet Slider MOP.
Insert the Sheet Slider MOP into the unit.



5.28 Cap Tray

Insert the Cap Tray.



6 Battery Reuse Instruction

**If you intend to reuse the Battery, carefully follow the Battery Reuse Instruction.
If it is failed, don't reuse the Battery, and scrap it.**

6.1 Battery Handling Notices

1. Don't damage the Battery foil with sharp objects.
2. Don't twist or deform the Battery.
3. If the Battery is dropped, don't reuse, and scrap.
4. Hold the Battery at the frame edges of the Battery (green circled portion).



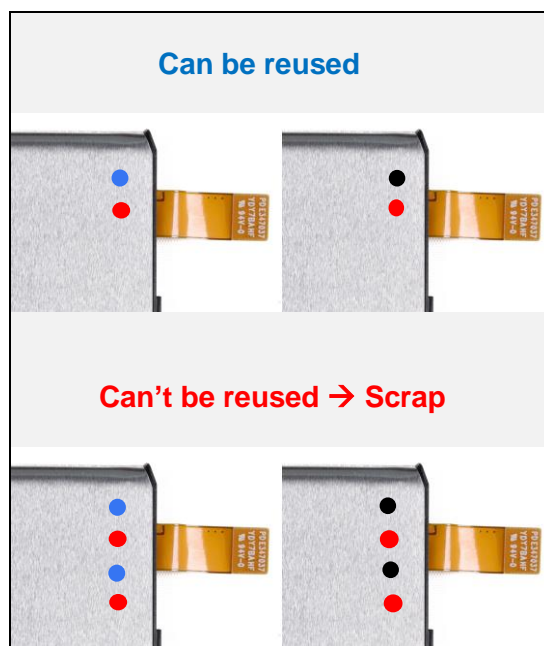
6.2 Dot Mark Check

Check if the Battery (which has been removed from the unit) has blue/red or black/red dots marking.

Do not reuse, if the Battery has 2 red dots marking, and scrap it.

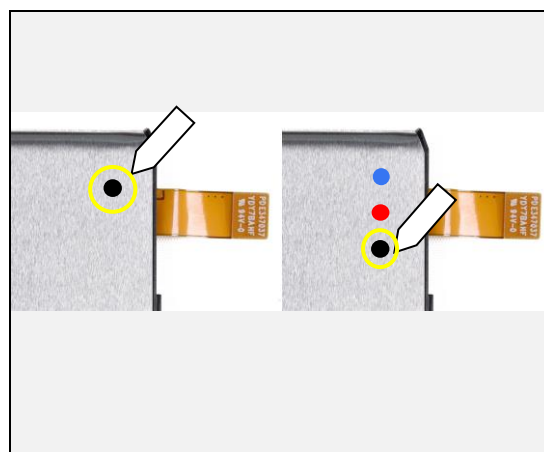
Blue and black dot indicates Battery had been removed from the unit, and red dot indicates Battery had been reinstalled (reused).

Scrap! If the battery has 2 red dots marking, it can't be reused for third times.



6.3 Dot Marking 1

If the number of red dot is less than 2, put a black dot marking with permanent pen.



Battery Reuse Instruction

6.4 Appearance Check

Check if any damages on the battery such as Winkle, Bubble, Dent, Floating up the AL sheet, Twist, and/ or Line.

If it is out of below specification, do not reuse, and scrap the battery.

Item of Damage	Limit of size	Limit of quantity
Winkle	Length $\leq 5\text{mm}$	1 wrinkle per Al sheet
Mark	No mark is allowed.	
Bubble	Diameter $\leq \Phi 2\text{mm}$	3 bubble per Al sheet
Dent	Diameter $\leq \Phi 2\text{mm}$	3 dents per surface
Scratch	Scratch is allowed as far as printed characters are visible.	
Lift up Al Sheet	No lifting up of the Al sheet is allowed.	
Twist	Twist line is allowed.	
Line	No line is allowed.	

Definition of Damages and Sample Pictures

Wrinkle:

A slight line or fold on label or tape of the battery.



Mark:

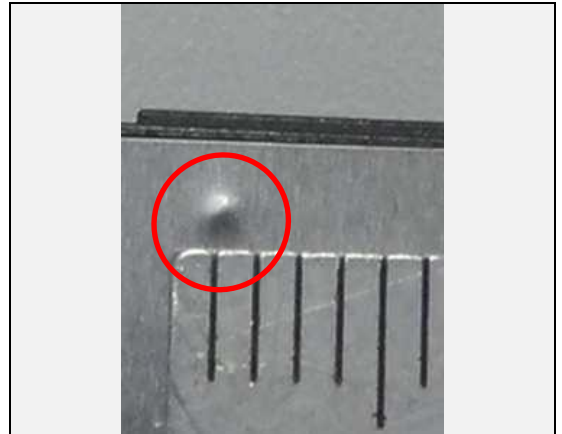
Surface is bulged as lined by foreign material is located between Al sheet and battery cell housing.



Battery Reuse Instruction

Bubble:

Surface is bulged as pointed by foreign material is located between Al sheet and battery cell housing.



Dent:

It is caused that is stuck by sharp pointed objects.



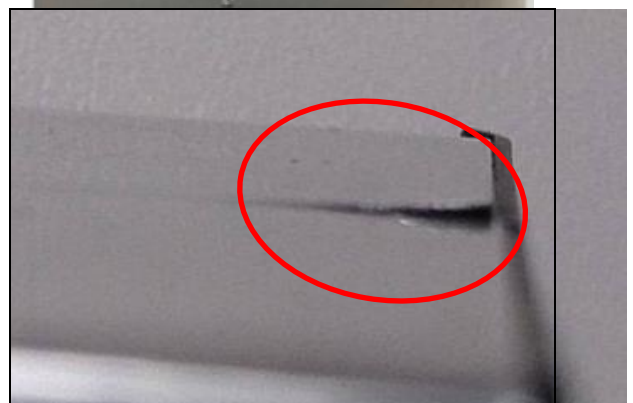
Scratch:

It is caused that scratched by sharp edge/pointed objects.



Lift up Al Sheet:

The edge of Al sheet is lifted caused by improper handling.



Battery Reuse Instruction

Twist:

Twisting line locates at the corner of battery pack that is created during Al sheet wrapping.



Line:

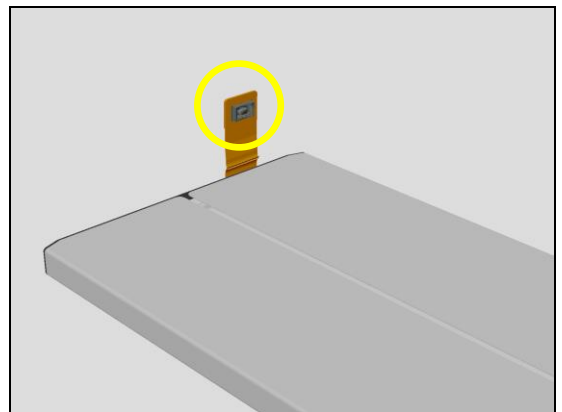
A slight line located at the border of battery cell and frame.



6.5 BtoB Connector Check

Check if BtoB connector has damages.

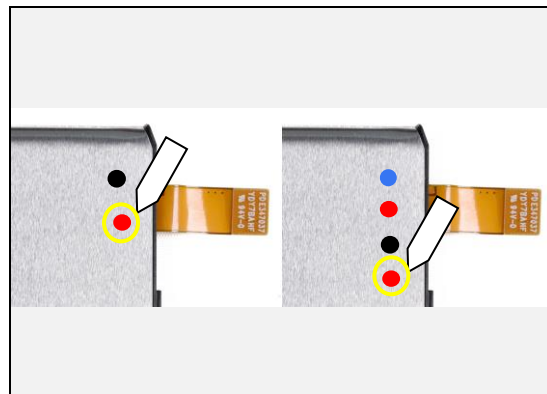
If any damages on the BtoB connector, do not reuse, and scrap the battery.



Battery Reuse Instruction

6.6 Dot Marking 2

If no failure has been detected by above appearance check, put a red dot marking on the Battery with permanent pen for reinstalling (reuse).



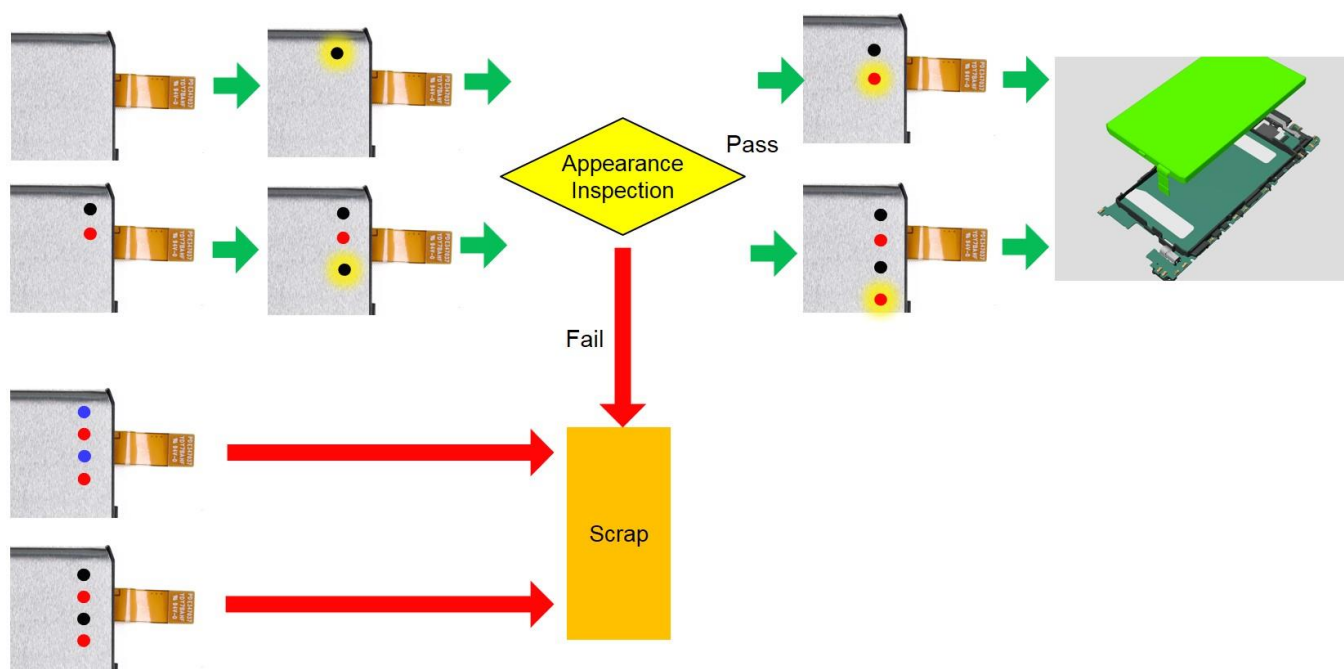
Overall procedure for Battery Reusing

Check if battery has dots marking.

Put black dot.

Put red dot.

Install on the unit.



7 Revision History

Rev.	Date	Changes / Comments
1	2018-03-09	Initial release