

Working Instructions

- mechanical -



Xperia™ X Performance
F8131, F8132 (Dual SIM)

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***For general information about mechanical repair related issues, refer to
1220-1333: Generic Repair Manual - mechanical***

Always firstly disconnect the Battery FPC BtB connector to cut off power supply when the Panel Rear Sub Assy is disassembled.

Always finally connect the Battery FPC BtB connector before the Panel Rear Sub Assy is reassembled.

Note: Proximity Calibration always must be performed when Front Assy and Main PBA reassembly, or Front Assy replacement, or Board Swap, or proximity malfunctions; 1289-2983 Sony Mobile Repair Application-mechanical.

Note: Noise Cancelling Calibration always must be performed when FPC Top Module Assy replacement or Board Swap; 1289-2983 Sony Mobile Repair Application-mechanical.

Note: Gyroscope and Accelerometer Calibration always must be performed when Main PBA reassembly, or Board Swap, or wrong Gyroscope or Accelerometer readouts; 1289-2983 Sony Mobile Repair Application-mechanical.

Note: Color ID Flashing always must be performed when Board Swap is implemented; 1289-2983 Sony Mobile Repair Application-mechanical.

Note: Flashing Customize or Refurbish or SUCE script (SU script cannot be used!) in Emma must be performed when replace Top Speaker and/or Bottom Speaker.

Note: Aged Battery Reset in EMMA must be performed when replaced the Battery 2700 mAh to delete Battery log data.

1 Exterior Views

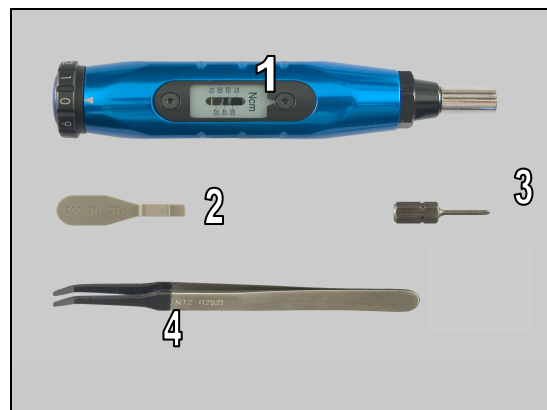
1.1 F8131, F8132



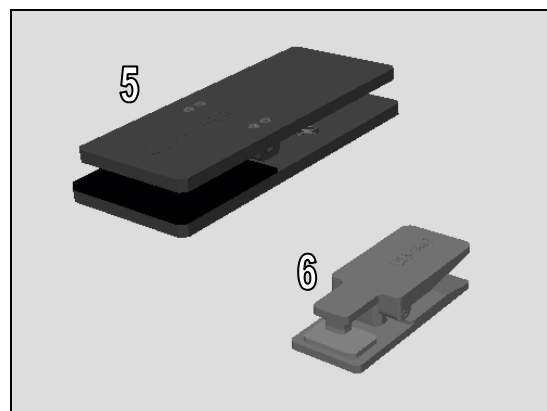
2 Tools

SPECIAL TOOLS

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



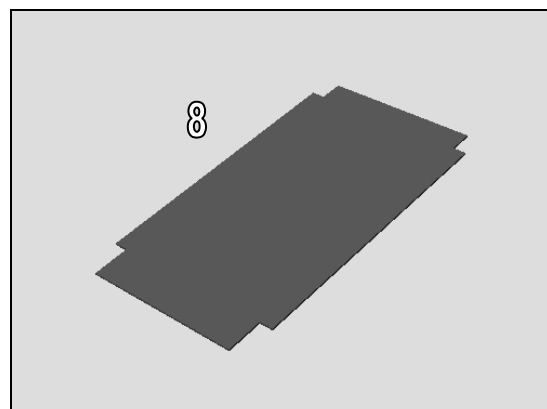
5. Press Clamp (1302-3698)
6. Earspeaker/Loudspeaker Top Press Tool (1283-9447)



7. FP Sensor Press Tool (1303-0508)



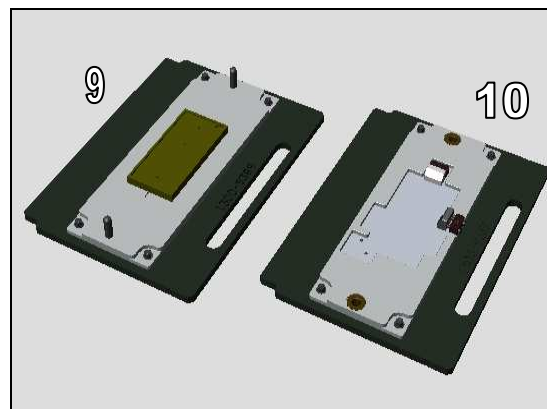
8. Disassembly Sheet (1295-5578)



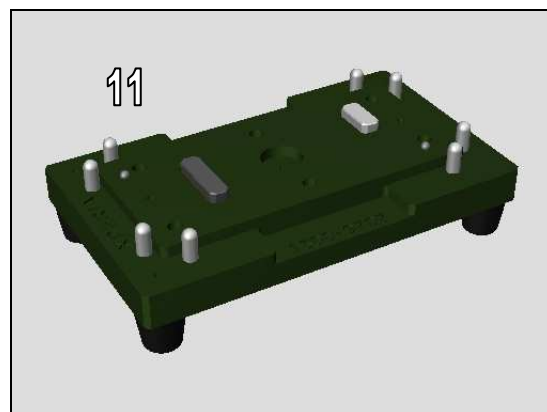
Tools

9. Rear Panel Press Top Inlay (1300-9389)

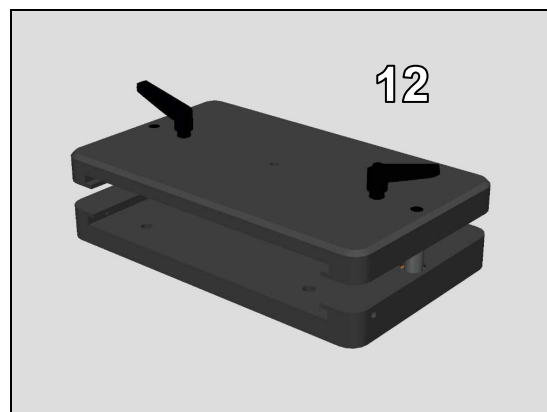
10. Bottom Press Inlay (1300-9237)



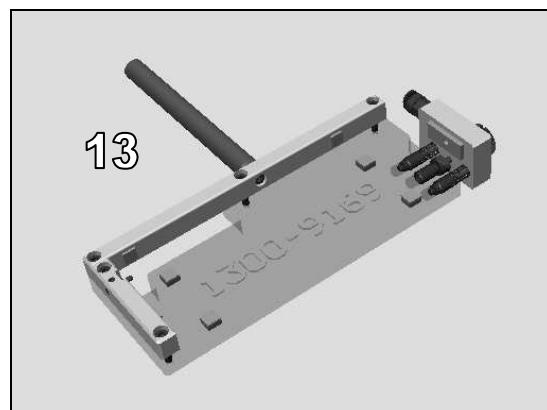
11. Rear Panel Adhesive Alignment Fixture (1300-9707)



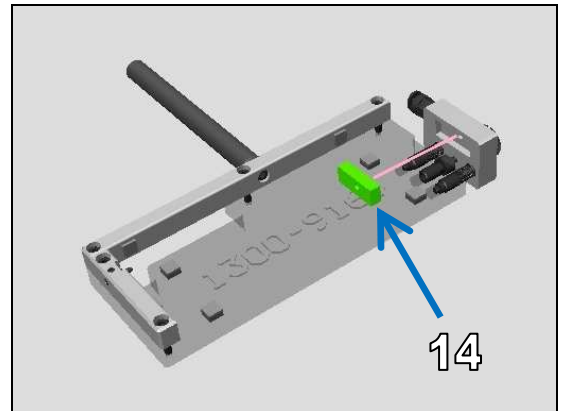
12. Generic Fixture for Presstool (1273-4413)



13. WRT Fixture (1300-9169)
(Including Silicon Suction Cup 1302-8023)

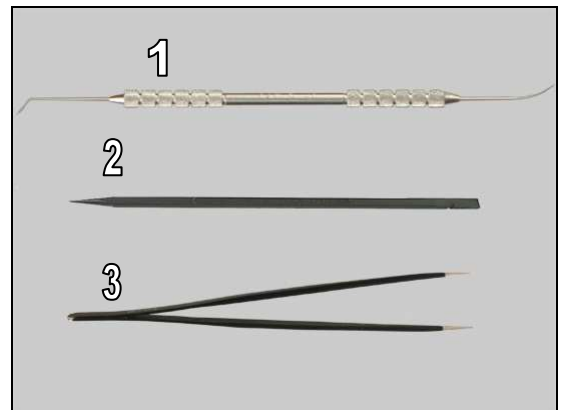


14. Silicon Suction Cup (1302-8023)
(Maintenance parts for WRT Fixture 1300-9169.)

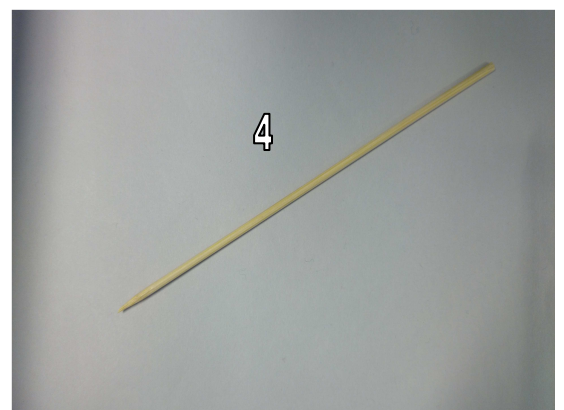


STANDARD TOOLS

1. Dentist Hook
2. Nylon Pointer
3. Tweezers



4. Bamboo Skewer



3 Mandatory Replacement Parts List

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



Targeted replacement parts are listed

Mandatory replacement part	SPACE	Refurbish	Target replacement part												
			Battery 700 mAh	Fingerprint Sensor Module Assy	FPC Key Module	FPC Top Module (Audio Jack)	FPC USB Assy	Front Assy	Loud Speaker (Bottom)	Loud Speaker (Top)	FICTIVE Front Camera (Front)	Panel Rear Sub Assy	PBA Complete	PBA Sub	FICTIVE Camera 24.5M (Main Indicator Camera)
Adhesive Battery	1300-0000	2	2	2	2	2	2	2	2	2					
Adhesive Plate SPK	1301-3647	1		1	1			1	1	1					
Adhesive WR Audio Jack	1301-1016	1				1		1							
Adhesive WR FPC Speaker	1300-0050	1		1	1	1	1	1	1	1			1	1	
Adhesive WR Holder Speaker	1300-0054	1		1	1	1	1	1	1	1			1	1	
Adhesive WR Light Guide LED	1300-0021	1						1		1					
Adhesive WR Panel Rear	1300-0089	1		1	1	1	1	1	1	1	1	1	1	1	1
Adhesive WR Speaker (Top speaker)	1300-0041	1						1		1					
Adhesive WR Speaker (Bottom Speaker)	1303-0558	1						1	1						
Battery 2700 mAh	1300-3513		1												
== F8131 ==															
Cap Tray Assy Black	1302-3708														
Cap Tray Assy White	1302-3709														
Cap Tray Assy Lime	1302-3710														
Cap Tray Assy Rose	1302-3711														
== F8132 ==															
Cap Tray Assy DS Black	1302-3713														
Cap Tray Assy DS White	1302-3714														
Cap Tray Assy DS Lime	1302-3715														
Cap Tray Assy DS Rose	1302-3716														
Cushion Assy	1292-8894	1								1					
Cushion PBA Mic 1st	1300-0047												1		
Cushion PBA Mic 2nd	1300-0046												1		
Cushion PBA USB	1301-1688														
FICTIVE Camera 24.5M (Main Camera)	1299-8229														1
FICTIVE Front Camera (Front Camera)	1299-4015										1				
FP Sensor Assy	1302-3718	1		1			1								
FPC Assembly USB	1298-3862	1													
FPC Key Module Assy	1299-3690				1										
FPC Top Module Assy (Audio Jack)	1299-3691	1				1									
Front Assy Black	1302-3671														
Front Assy White	1302-3675							1							
Front Assy Lime	1302-3683	1													
Front Assy Rose	1303-3686														
Label MoP	1298-7879	1											1		
Label NFC	1299-6084	1						1							
Liquid Indicator	1275-3307	1					1								1
Loudspeaker (Top Speaker)	1297-3024	1					0	1	0	1					
Panel Rear Sub Assy Black	1300-1415														
Panel Rear Sub Assy White	1300-1416														
Panel Rear Sub Assy Lime	1301-3311	1										1			
Panel Rear Sub Assy Rose	1301-3312														
PBA Complete													1		
Plate Holder Key Ant	1300-0020				1										
Plate Jk	1300-0050	1		1	1			1	1						
Plate Speaker	1300-0061	1			1				1						
Screw M1.2X2.5	1301-5369	1		1	1	1	1	1	1	1			1	1	1
Screw M1.4X3.2	1292-4308	5	5	5	5	5	5	5	5	5	5		5	5	5
Sheet Guide MoP	1298-2303	1													
Sheet Spacer RF	1300-0048												1		
Sheet WRT Test	1300-0067							1							
Speaker (Bottom Speaker)	1277-7135	1						1	1						
Sub PBA	1299-7823													1	
TGF Applying		1						1					1		

Mandatory replacement parts for refurbishment.

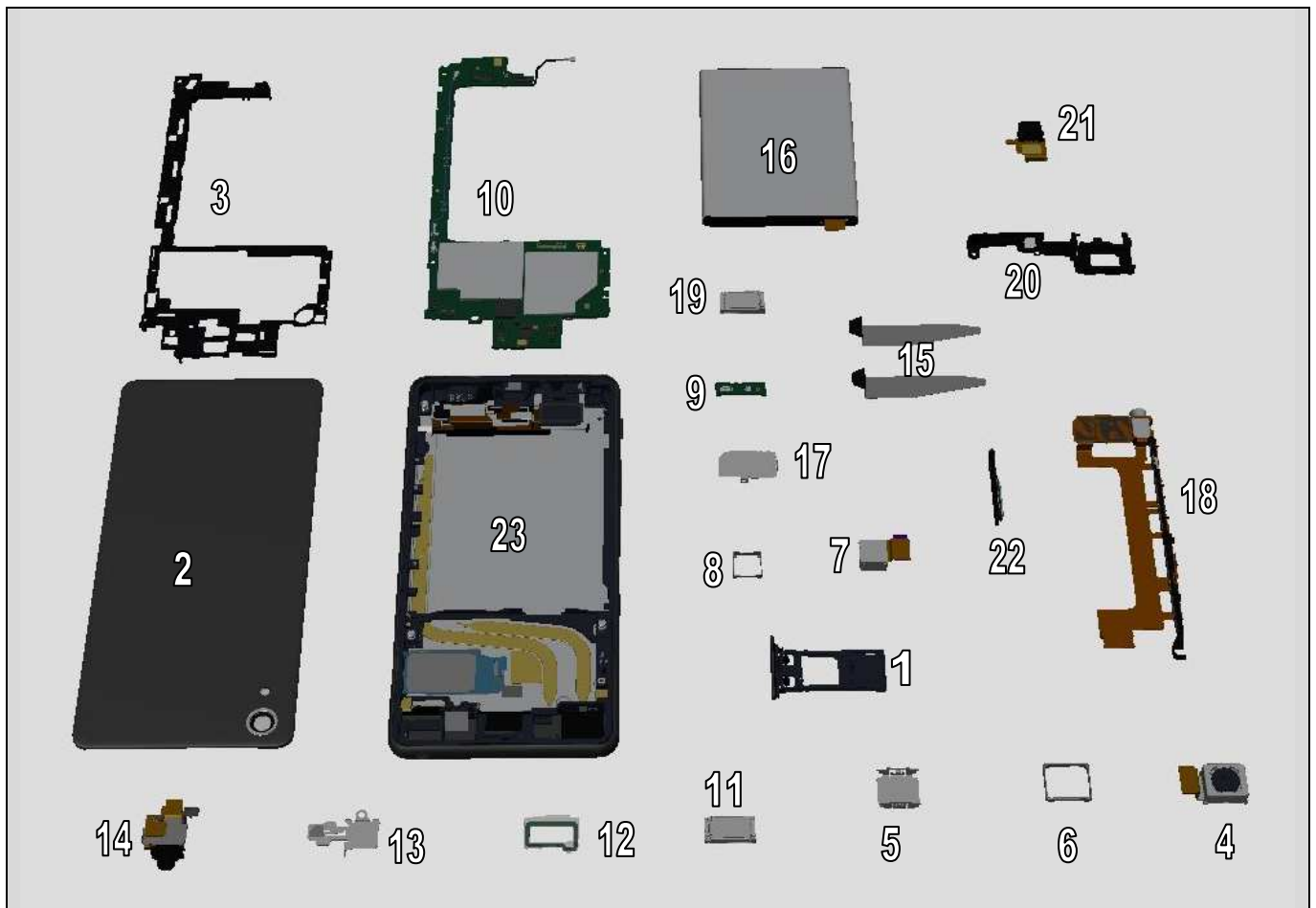
Parts that is required to replace in addition to target replacement parts.

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

4 Disassembly

The disassembly is done in the following order:

1. Cap Tray Assy
2. Panel Rear Sub Assy
3. Holder Back Sub Assy
4. Main Camera
5. Plate Shield Camera
6. Holder Main Camera
7. Front Camera
8. Holder Camera Front
9. Sub PBA
10. Main PBA
11. Top Speaker
12. Light Guide LED Sub Assy
13. Plate Jk
14. FPC Top Module Assy
15. Adhesive Battery
16. Battery 2700 mAh
17. Plate Speaker
18. FPC Key Module Assy
19. Bottom Speaker
20. Holder Speaker Sub Assy
21. FPC Assembly USB
22. FP Sensor Assy
23. Front Assy



4.1 Cap Tray Assy

Remove Cap Tray Assy.

Note! Remove the Cap Tray Assy to keep rear side up. Otherwise, SIM card and (or) micro SD card will be fallen down.



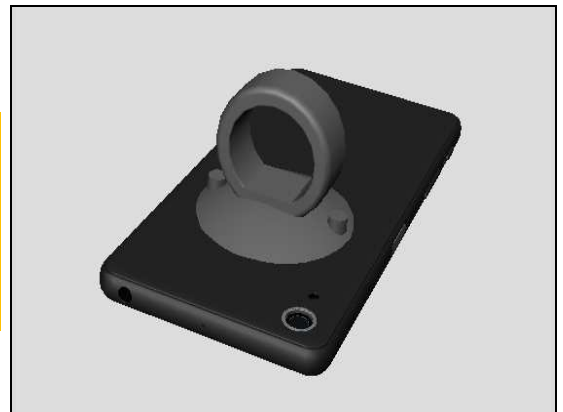
4.2 Panel Rear Sub Assy

Note! Before disassemble the Panel Rear Sub Assy, Check if it has any damages such as dimple/dent.

Due to dimple/dent of the Panel Rear Sub Assy, the battery might be damaged.

Check the Battery condition to follow the 4.16 Disassembly instructions.

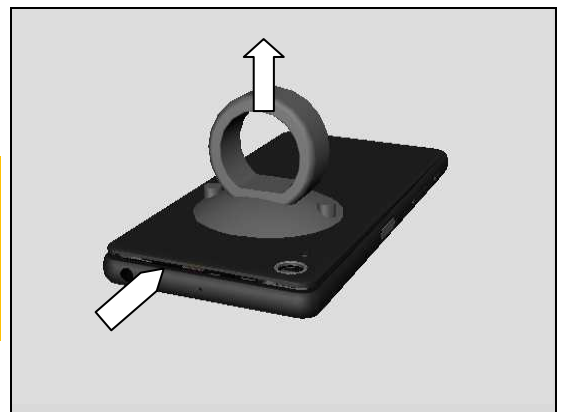
Place the suction cap on the Panel Rear Sub Assy.



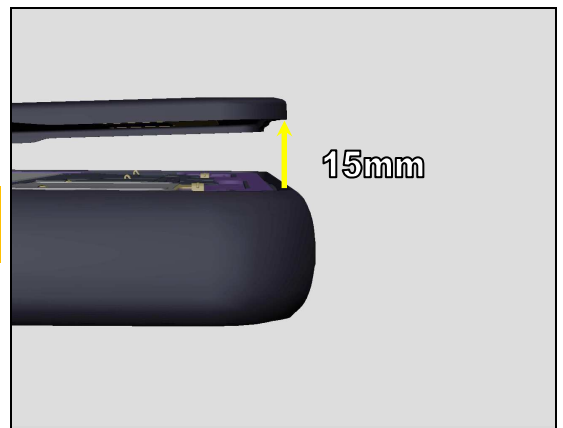
Pull the suction cap to make the gap between Panel Rear Sub Assy and main body of the unit.

Picture indicates to make gap at the top side of the phone.

But, if it has difficulty to make gap, try another sides of the phone.



Note! Don't pull the suction cap more than 15mm. Otherwise, Panel Rear Sub Assy will be wound.

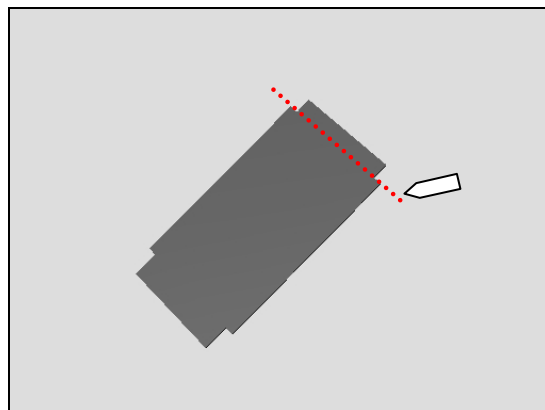
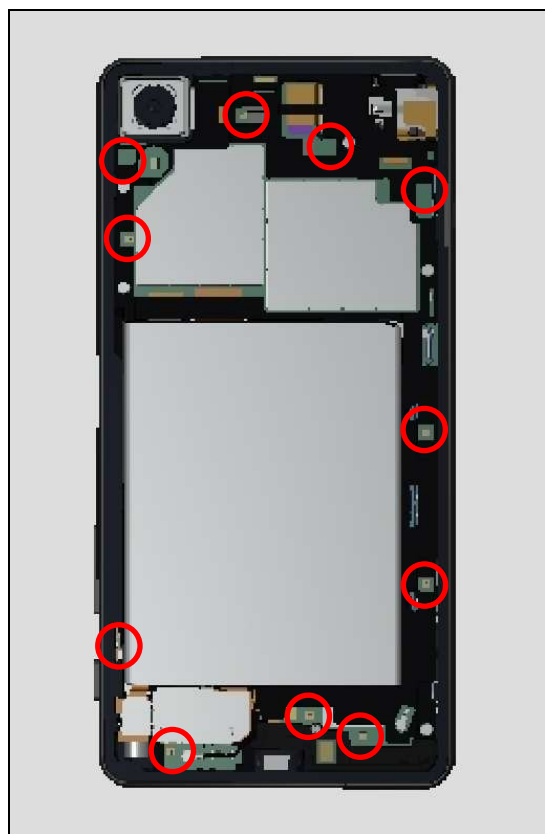
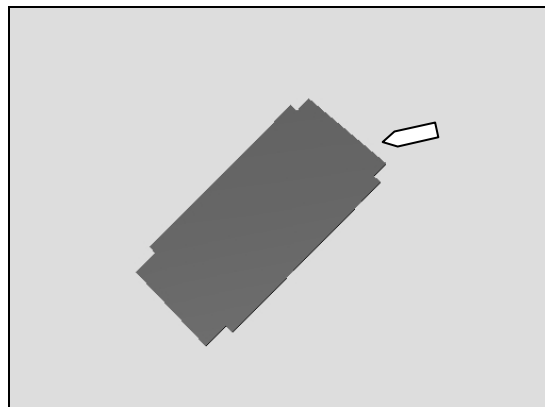


Disassembly

Provide Disassembly Sheet to cut the Adhesive WR Panel Rear that is fixing the Panel Rear Sub Assy and unit.
Use short side of the Disassembly Sheet to cut the Adhesive WR Panel Rear.

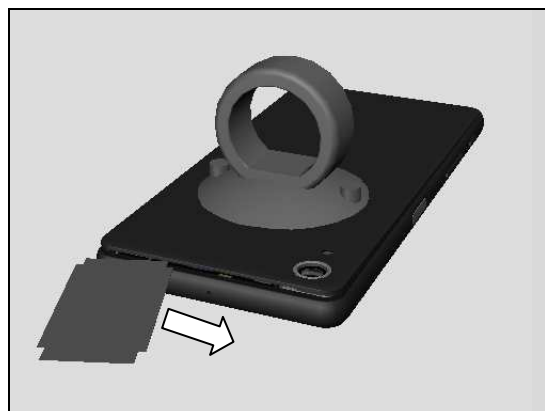
Under the Panel Rear Sub Assy, Spring pins are located where marked by red circle.

Note! Don't insert the Disassembly Sheet into the unit beyond red dotted line to prevent damage of the spring pins.

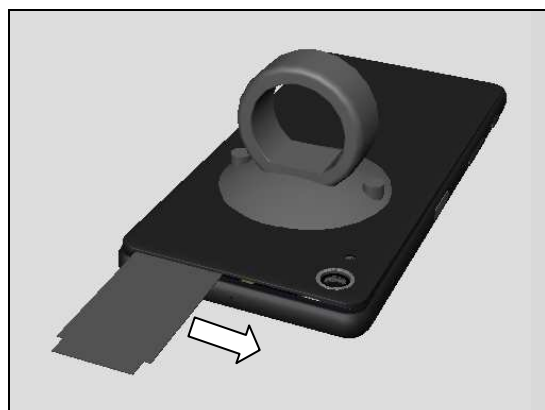


Disassembly

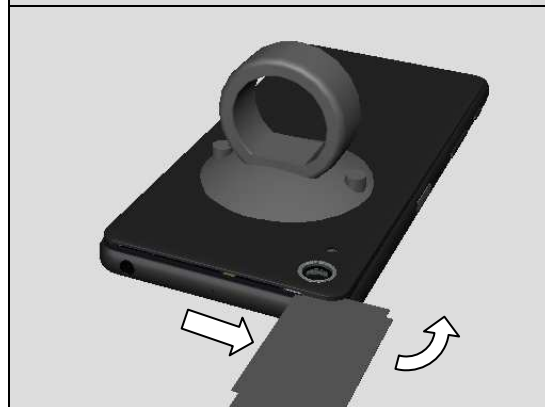
Insert the Disassembly Sheet into the gap.



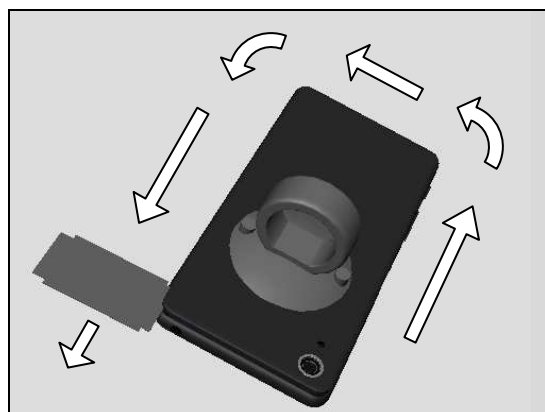
Gently slide the Disassembly Sheet to cut the Adhesive WR Panel Rear.



Note! Don't insert the Disassembly Sheet into the unit beyond red dotted line to prevent damage of the spring .



Continue to slide the Disassembly Sheet along with each sides of the unit.

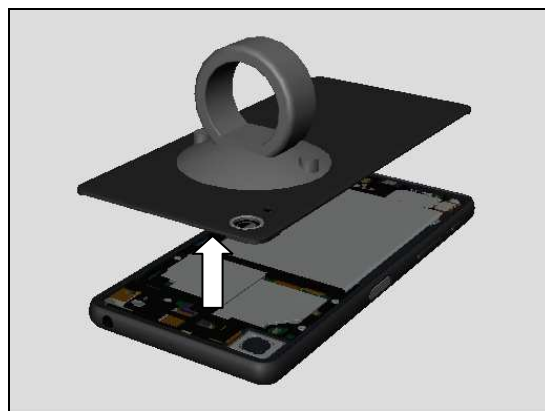


Disassembly

Remove the Panel Rear Sub Assy.

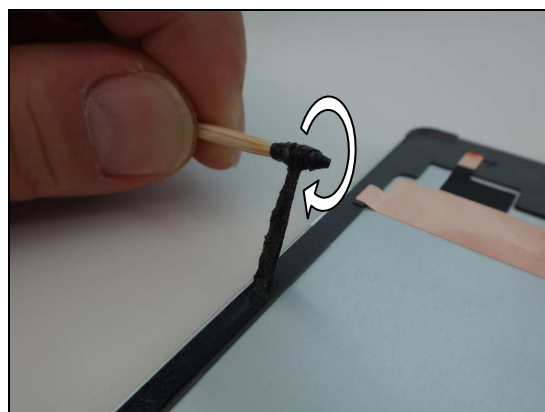
Note! Panel Rear Sub Assy is flexible, and may have damages during disassembling.

Scrap! If the Panel Rear Sub Assembly is bent or warped more than 0.2mm out of its normal



Remove the Adhesive WR Panel Rear to use Bamboo Skewer.

Rotate the Bamboo Skewer to take up the Adhesive WR Panel Rear.



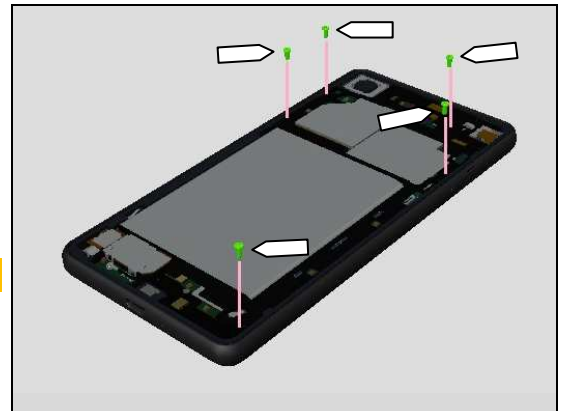
Note! Make sure to remove all residues of the Adhesive WR Panel Rear completely from both Panel Rear Sub Assy and unit (Green Highlighted Area).



4.3 Holder Back Sub Assy

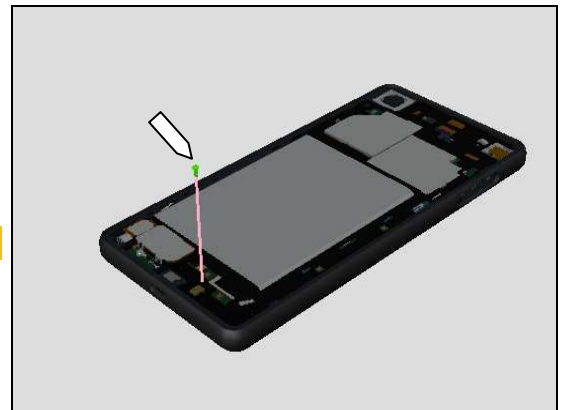
Remove the 5 of Screw M1.4 x 3.2 by using a screwdriver with Bits (JCIS No 0).

Scrap! Don't reuse the screws!

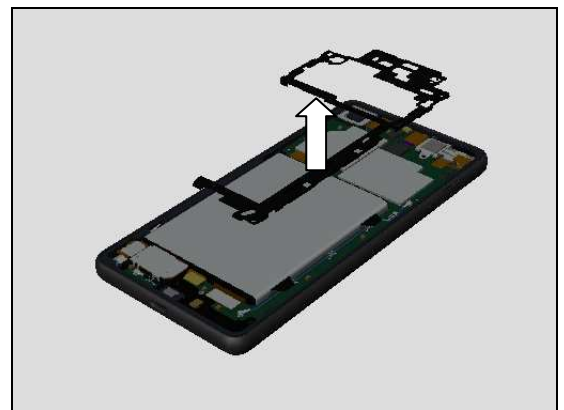


Remove the 5 of Screw M1.2 x 2.5 by using a screwdriver with Bits (JCIS No 0).

Scrap! Don't reuse the screw!

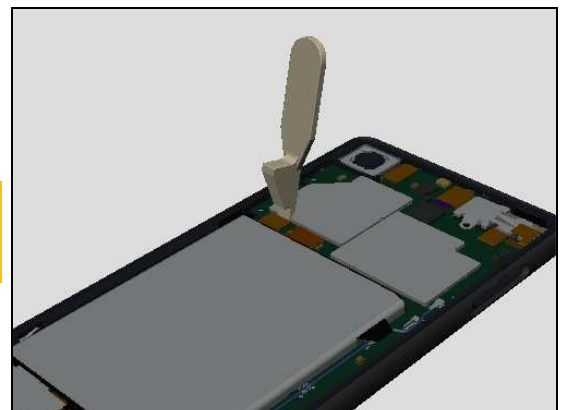


Remove the Holder Back Sub Assy with finger.



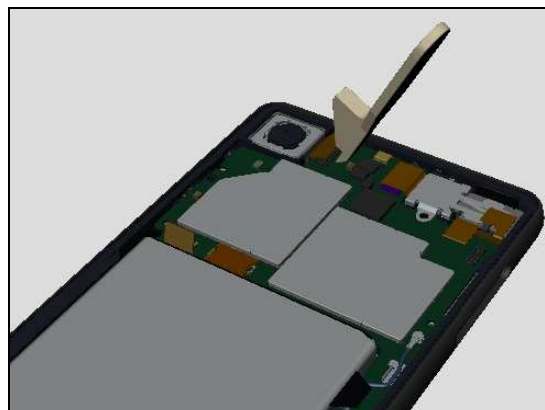
Disconnect the battery B to B connector with Opening Tool.

Note! Make sure to disconnect the battery B to B connector to proceed disassembling beyond this stage to cut the power supply to the unit.

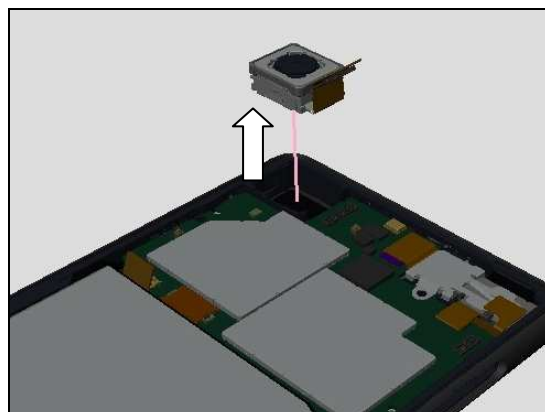


4.4 Main Camera

Disconnect Main Camera B to B connector with Opening Tool

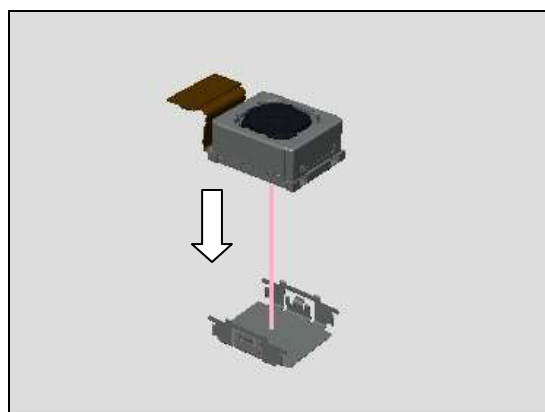


Remove Main Camera with Flex Film Assembly Tool.



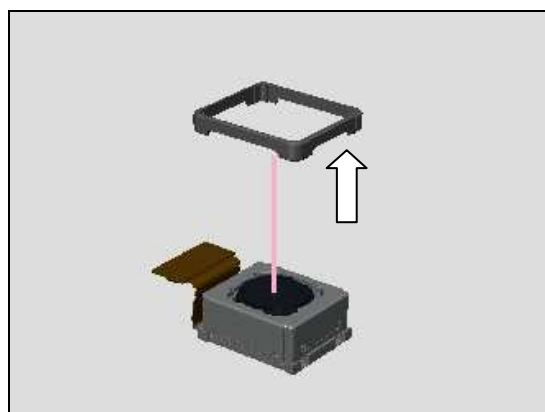
4.5 Plate Shield Camera

Remove the Plate Shield Camera with Flex Film Assembly Tool.



4.6 Holder Main Camera

Remove the Holder Main Camera with Flex Film Assembly Tool.

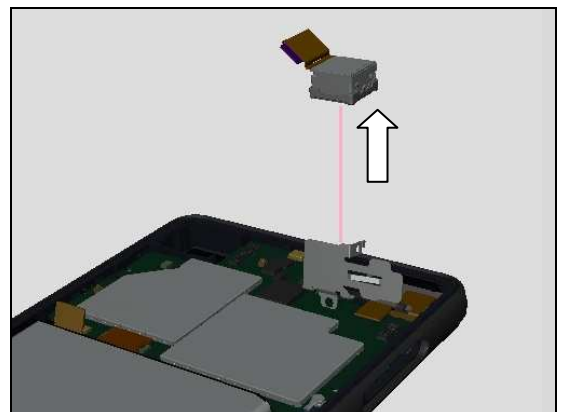
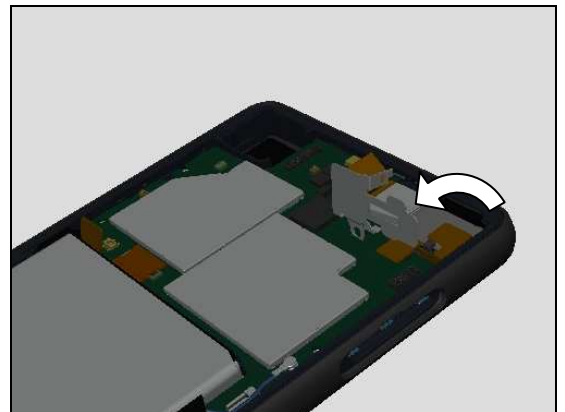
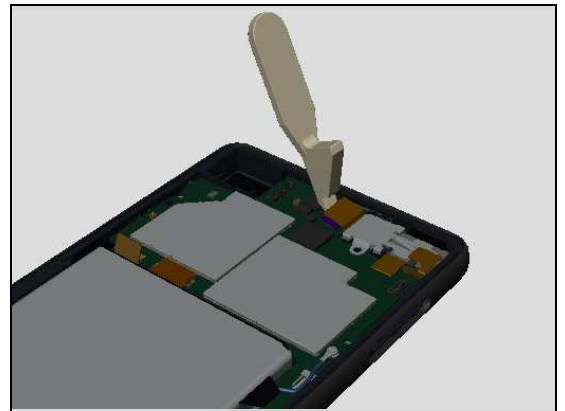


4.7 Front Camera

Disconnect Front Camera B to B connector with Opening Tool.

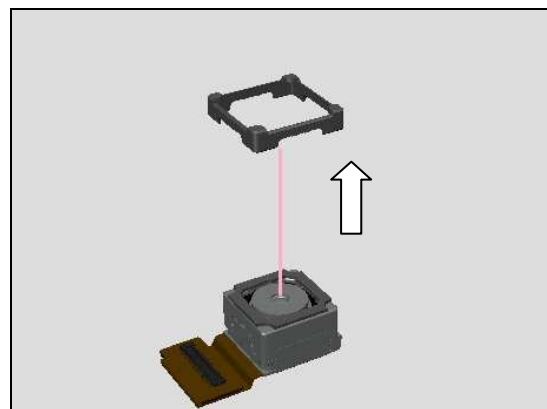
Flip up the Plate Jk.

Remove the Front Camera with Flex Film Assembly Tool.



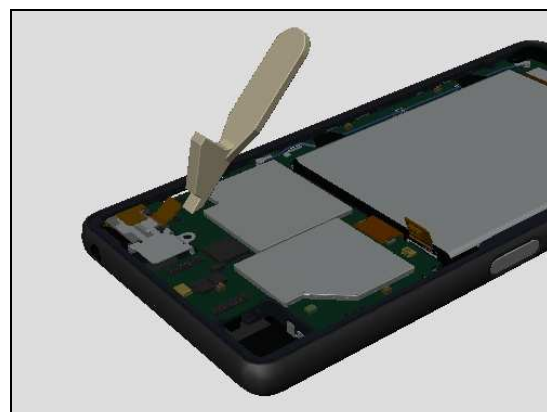
4.8 Holder Camera Front

Remove the Holder Camera Front with Flex Film Assembly Tool.

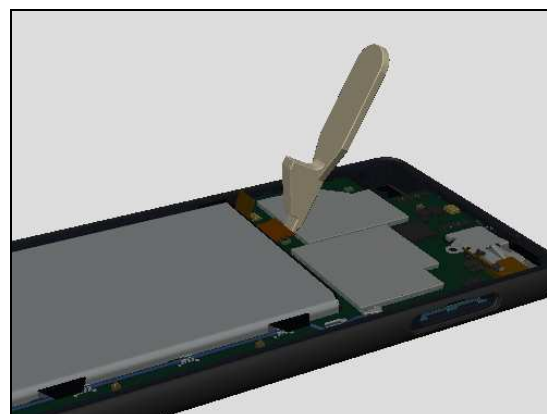


4.9 Sub PBA

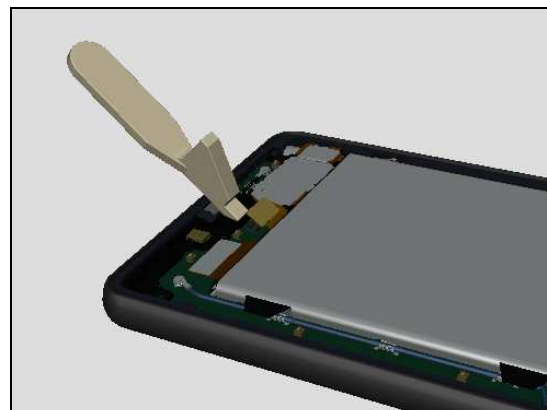
Disconnect the FPC Top Module (Audio Jack) B to B connector with Opening Tool.



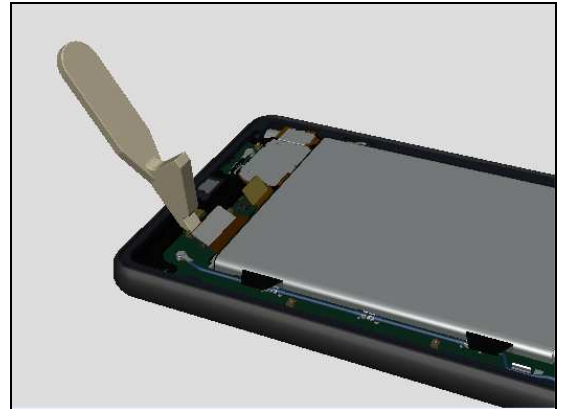
Disconnect the FPC Key Module Assy B to B connector with Opening Tool.



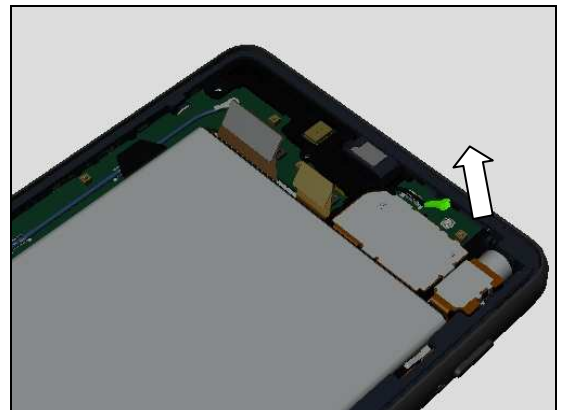
Disconnect the FPC Assembly USB B to B connector with Opening Tool.



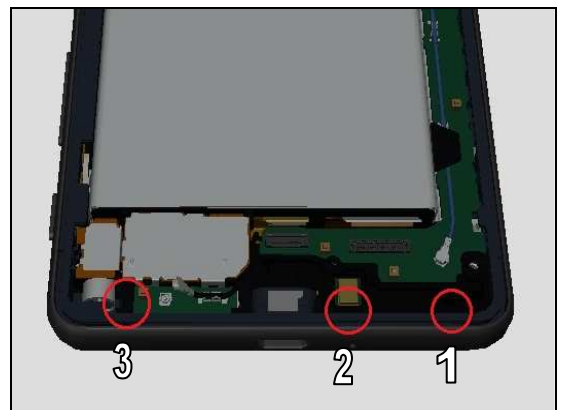
Disconnect the LCD B to B connector with Opening Tool.



Disconnect the RF Cable connector with Opening Tool.



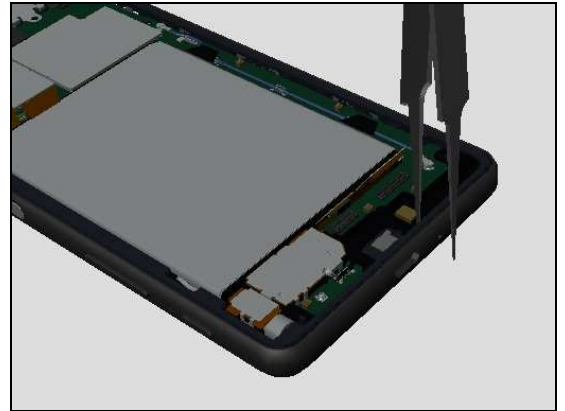
Holder Speaker Sub Assy is fixed by 3 hooks on the frame where is marked by red circle.



Unlock the hook to insert the tweezers.
(Portion 1)



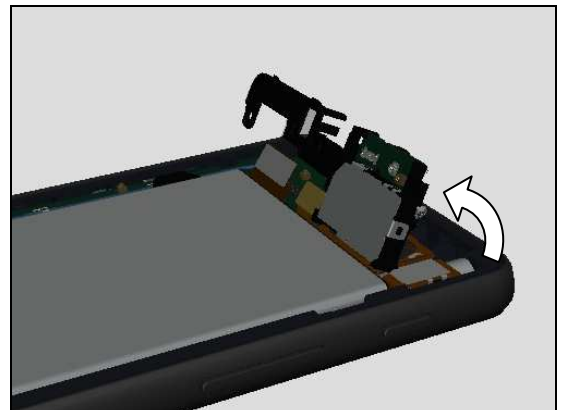
Unlock the hook to insert the tweezers.
(Portion 2)



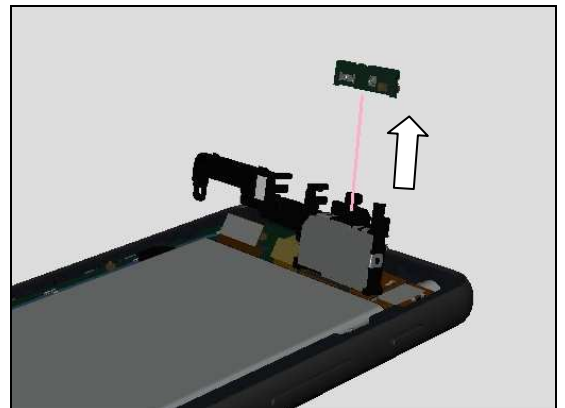
Unlock the hook to insert the tweezers.
(Portion 3)
Repeat insertion of the tweezers to the portion 1, 2, and 3 accordingly.



Flip up the Holder Speaker Sub Assy.

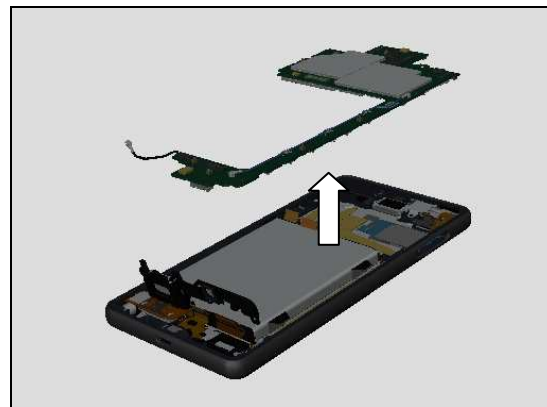


Remove the Sub PBA with Flex Film Assembly Tool.



4.10 Main PBA

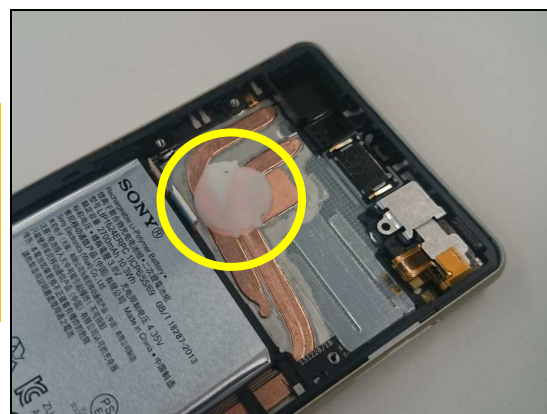
Remove the Main PBA with fingers.



Note! If you intend to replace the Main PBA, remove the Thermal Gap Filler.

Make sure to remove all residues of the Thermal Gap Filler.

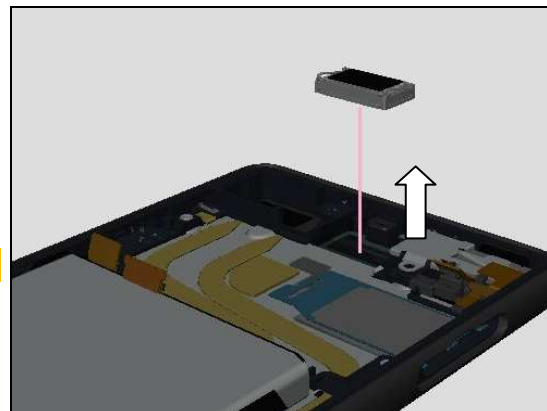
If you intend to reuse the Main PBM, remain the Thermal Gap Filler, and pay attention to apply no damages.



4.11 Top Speaker

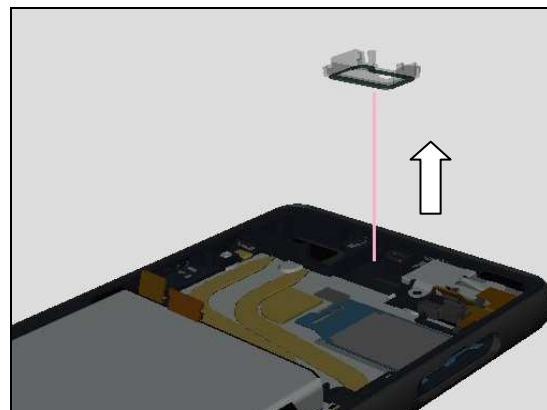
Remove the Top Speaker with Tweezers.

Scrap! Don't reuse the Top Speaker!



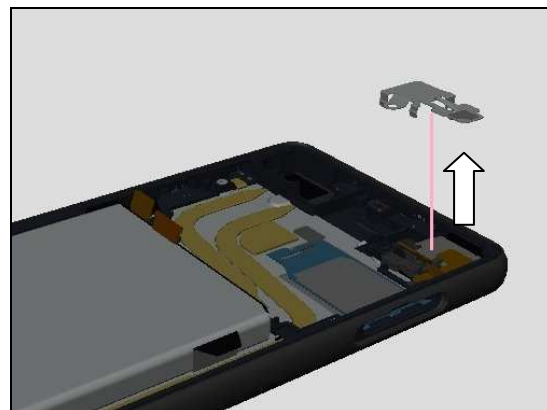
4.12 Light Guide LED Sub Assy

Remove the Light Guide LED Sub Assy with Tweezers.



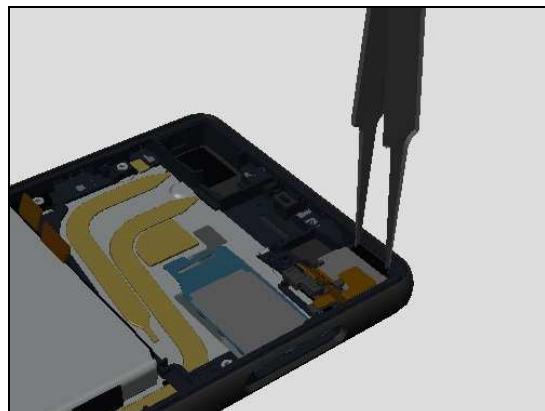
4.13 Plate Jk

Remove the Plate Jk with Tweezers.

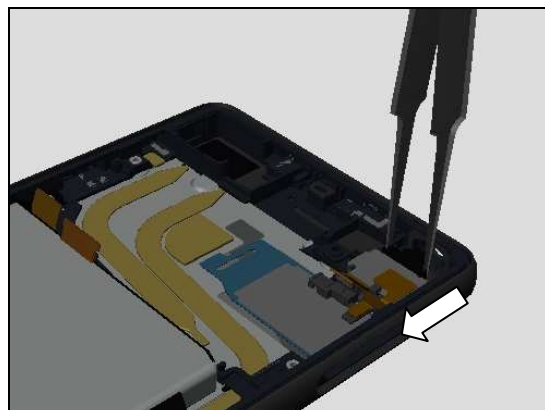


4.14 FPC Top Module Assy

Insert the Tweezers, and pinch the FPC Top Module Assy.



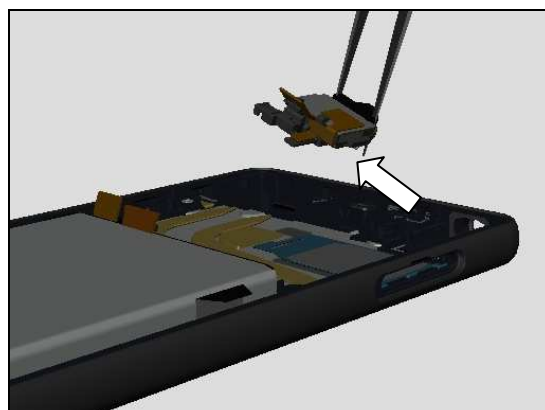
Slide the FPC Top Module Assy.



Tilt the FPC Top Module Assy.



Remove the FPC Top Module Assy.



4.15 Adhesive Battery

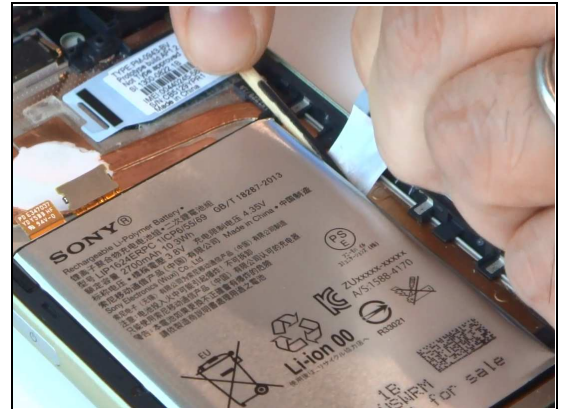
Place the Bamboo Skewer on the Adhesive Battery.
Pick the Adhesive Battery with fingers.

Refer to the 1.2 Removing Adhesive Battery of the Repair Movies 1304-1446.

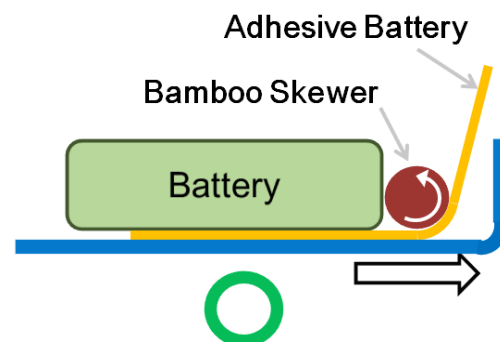
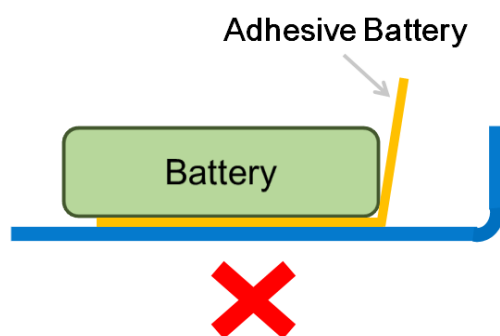
Pull the Adhesive Battery gently, and rotate the Bamboo Skewer simultaneously.

Hold the battery with finger to prevent moving the battery during pulling out the Adhesive Battery.

Scrap! Don't reuse the Adhesive Battery!



Note! To avoid snapping of the Adhesive Battery, don't pull to up-right direction. Apply Bamboo Skewer and rotate in order to pull the Battery Adhesive as horizontally from Battery.

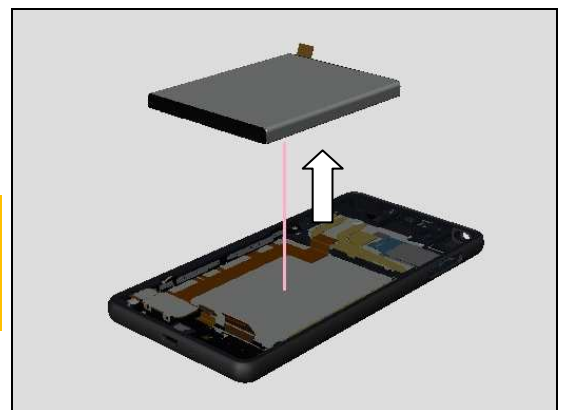


4.16 Battery 2700 mAh

Remove the Battery 2700mAh with fingers.

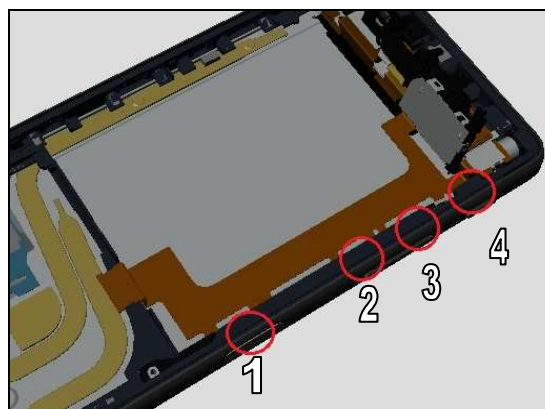
Note!

If you reuse the battery, follow the 7. Battery Reuse Instruction before installing the battery.

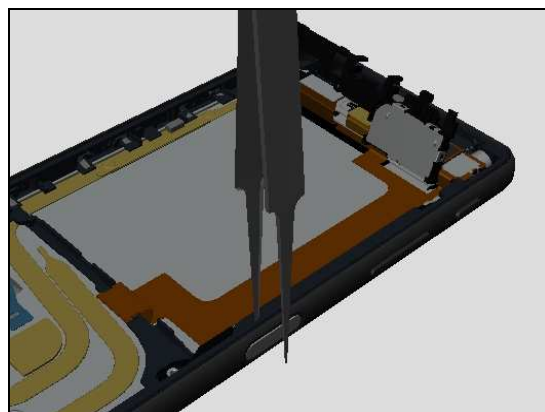


4.17 Plate Speaker

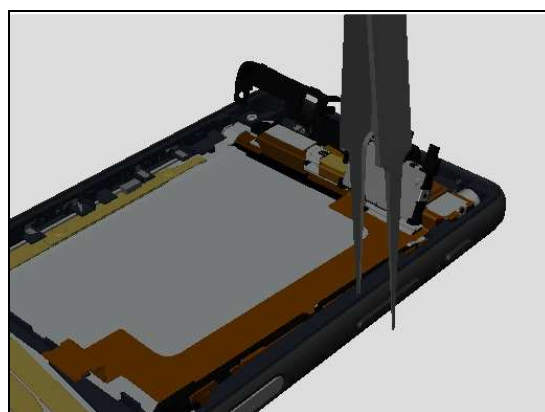
FPC Key Module Assy is fixed by 4 hooks where is indicated by red circle.



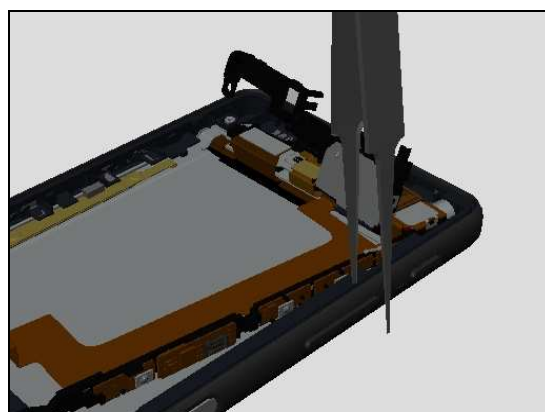
Unlock the hook to insert the tweezers.
(Portion 1)



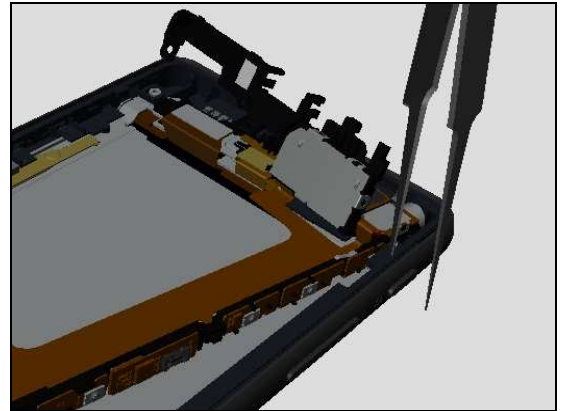
Unlock the hook to insert the tweezers.
(Portion 2)



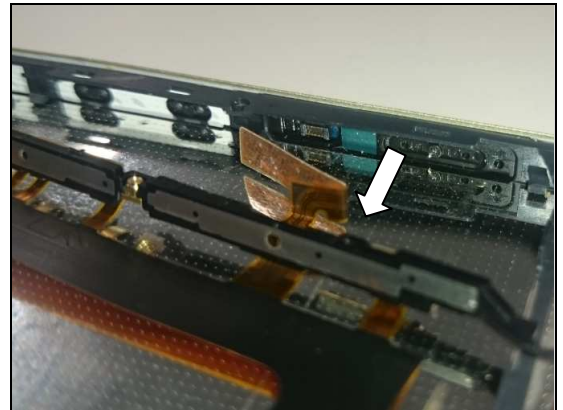
Unlock the hook to insert the tweezers.
(Portion 3)



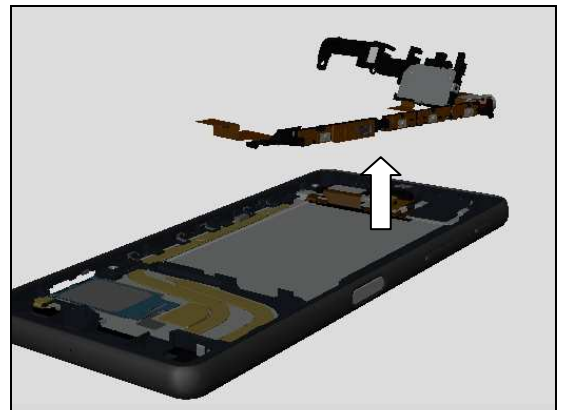
Unlock the hook to insert the tweezers.
(Portion 4)



Disconnect B to B Connector.

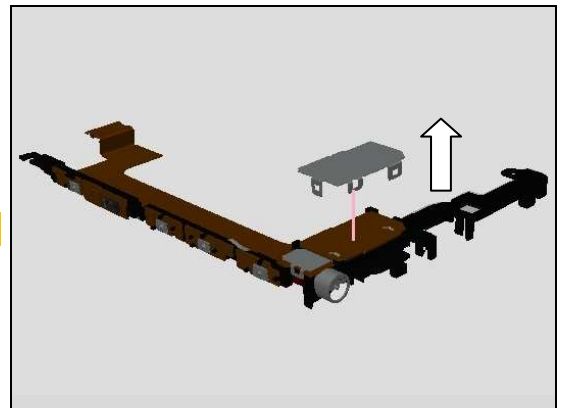


Remove the FPC Key Module Assy



Remove the Plate Speaker.

Scrap! Don't reuse the Plate Speaker!

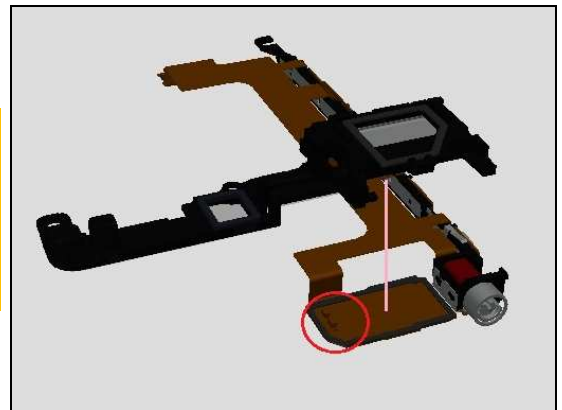
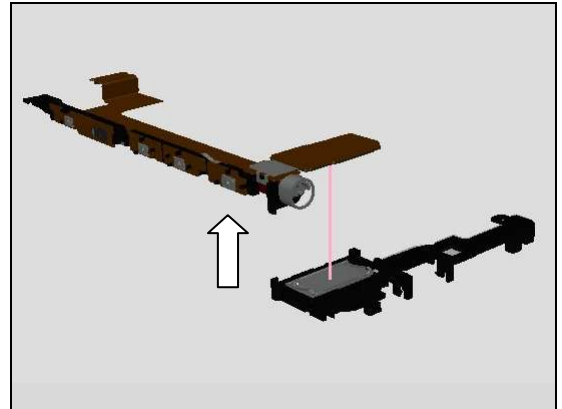


4.18 FPC Key Module Assy

Remove the FPC Key Module Assy from the Holder Speaker Sub Assy.

Note!

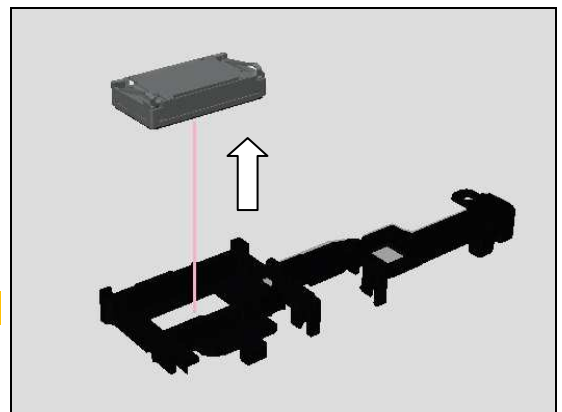
FPC Key Module Assy and Holder Speaker Sub Assy is fixed by adhesive. Few pieces of electrical components are mounted on the FPC Key Module Assy (red circle area). Don't apply any force to there to prevent damage of electrical components when disassembling.



4.19 Bottom Speaker & Holder Speaker Sub Assy

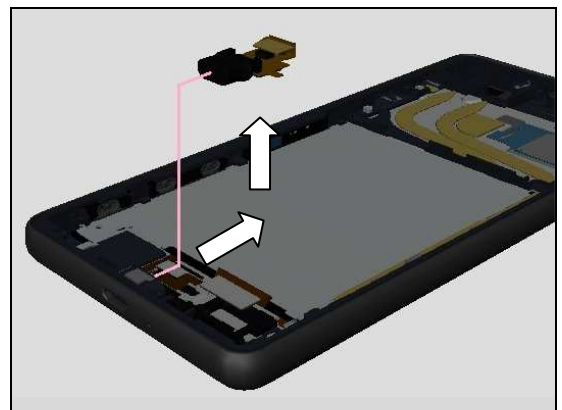
Remove the Bottom Speaker from the Holder Speaker Sub Assy

Scrap! Don't reuse the Bottom Speaker!



4.20 FPC Assembly USB

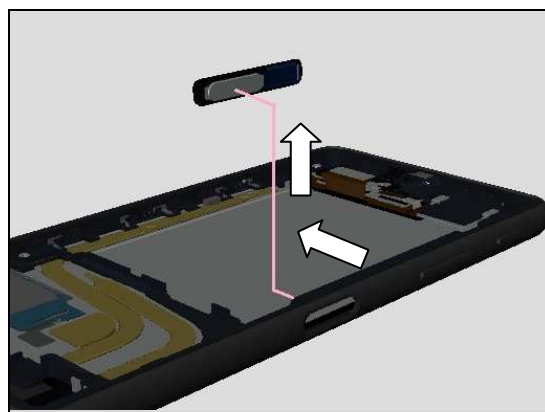
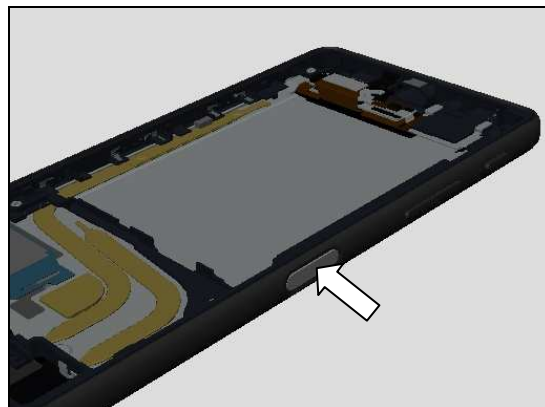
Remove the FPC Assembly USB.



4.21 FP Sensor Assy

Push the FP Sensor Assy from outside of the unit by finger.

Remove the FP Sensor Assy.



5 Replacement

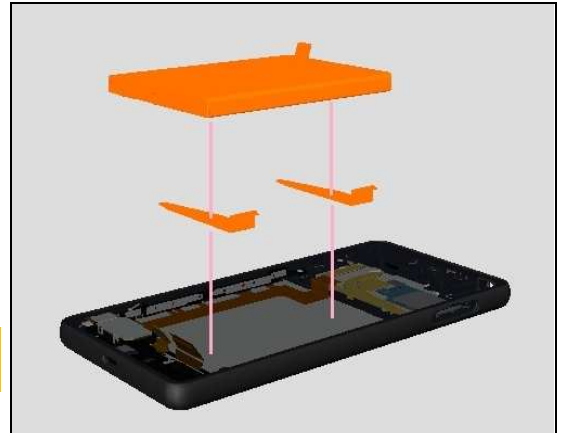
5.1 Battery 2700 mAh and Adhesive Battery

Follow the 4.1 – 4.4, 4.7, 4.9, 4.10, 4.15, and 4.16 Disassembly instructions!

Prepare the new Battery 2700 mAh and Adhesive Battery.

Follow the 6.9 – 6.11, 6.14, and 6.18 – 6.23 Reassembly instructions!

Note: Aged Battery Reset in EMMA must be performed when replaced the Battery 2700 mAh to delete Battery log data.



5.2 Cushion PBA Mic 1st

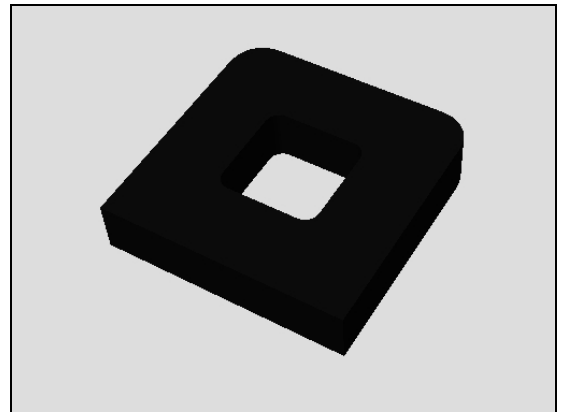
Follow the 4.1 – 4.4, 4.7, 4.9, and 4.10 Disassembly instructions!

Carry out the Removal as describe below.

Prepare the new Cushion PBA Mic 1st

Carry out the Installation as describe below.

Follow the 6.9 – 6.11, 6.14, 6.18, and 6.21-6.23 Reassembly instructions!



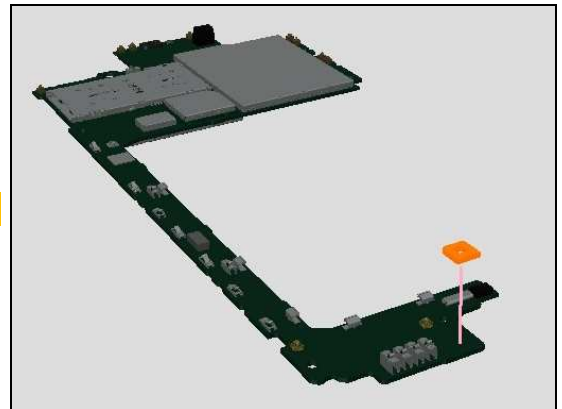
REMOVAL

Remove the Cushion PBA Mic 1st.

Scrap! Don't reuse the Cushion PBA Mic 1st!

INSTALLATION

Install the Cushion PBA Mic 1st with Tweezers.



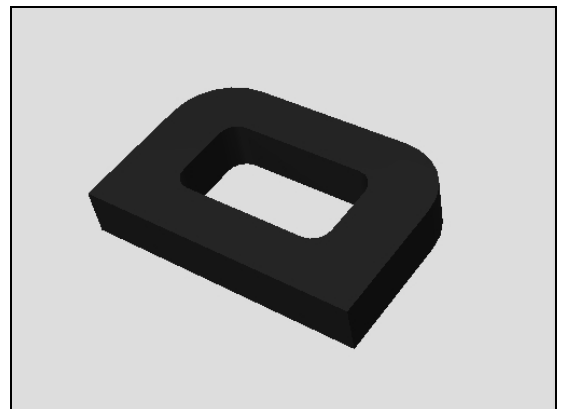
5.3 Cushion PBA Mic 2nd

Follow the 4.1 – 4.4, 4.7, 4.9, and 4.10 Disassembly instructions!

Carry out the Removal as describe below.

Prepare the new Cushion PBA 2nd.

Follow the 6.9 – 6.11, 6.14, 6.18, and 6.21 – 6.23 Reassembly instructions!



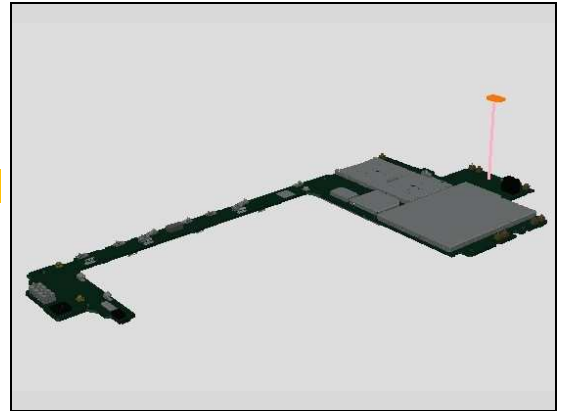
REMOVAL

Remove the Cushion PBA Mic 2nd.

Scrap! Don't reuse the Cushion PBA Mic 2nd!

INSTALLATION

Install the Cushion PBA Mic 2nd with Tweezers



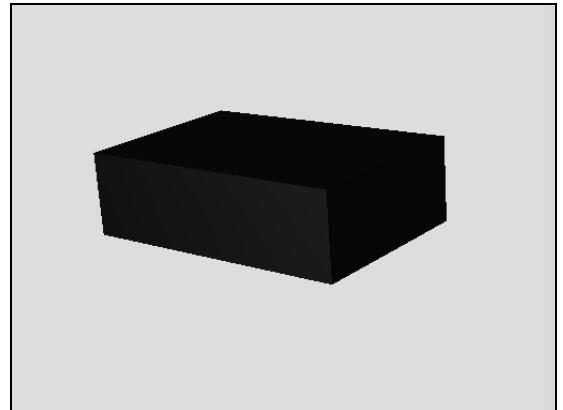
5.4 Cushion PBA USB

Follow the 4.1 – 4.4, 4.7, 4.9, and 4.10 Disassembly instructions!

Carry out the Removal as describe below.

Prepare the new Cushion PBA USB.

Follow the 6.9 – 6.11, 6.14, 6.18, and 6.21-6.23 Reassembly instructions!



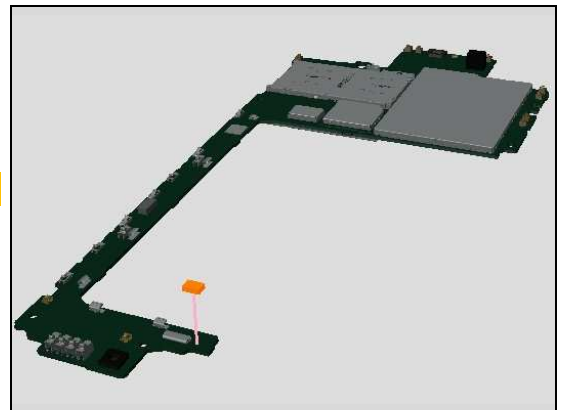
REMOVAL

Remove the Cushion PBA USB.

Scrap! Don't reuse the Cushion PBA USB!

INSTALLATION

Install the Cushion PBA USB with Tweezers

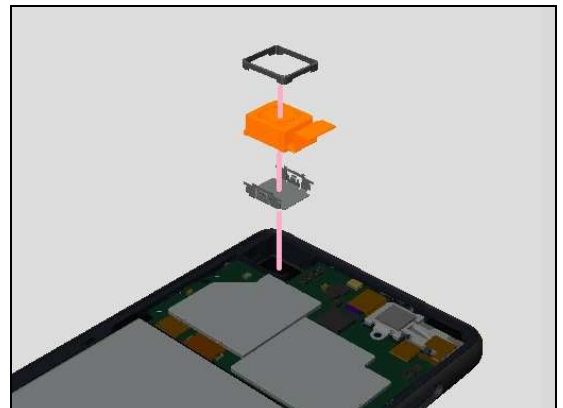


5.5 FICTIVE Camera 24.5M (Main Camera)

Follow the 4.1 – 4.6 Disassembly instructions!

Prepare the new Main Camera.

Follow the 6.16 – 6.18, and 6.21 – 6.23 Reassembly instructions!

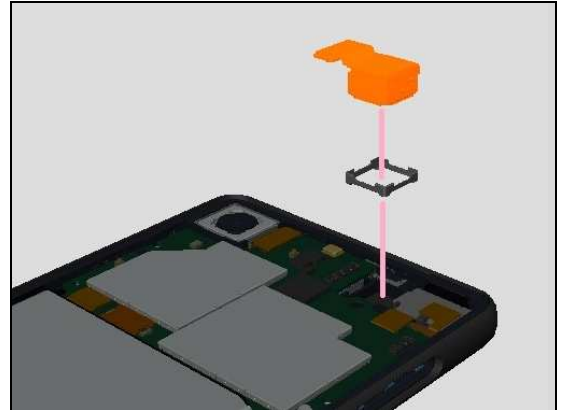


5.6 FICTIVE Front Camera (Front Camera)

Follow the 4.1 – 4.3, 4.7, and 4.8 Disassembly instructions!

Prepare the new Front Camera.

Follow the 6.14, 6.15, and 6.21 – 6.23 Reassembly instructions!

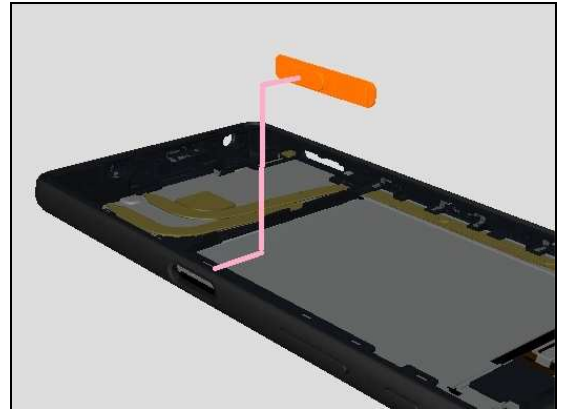


5.7 FP Sensor Assy

Follow the 4.1 – 4.4, 4.7, 4.9, 4.10, 4.15, 4.16, 4.18, and 4.21 Disassembly instructions!

Prepare the new FP Sensor Assy.

Follow the 6.1 - 6.4, 6.9 - 6.11, 6.14, and 6.18 – 6.23 Reassembly instructions!

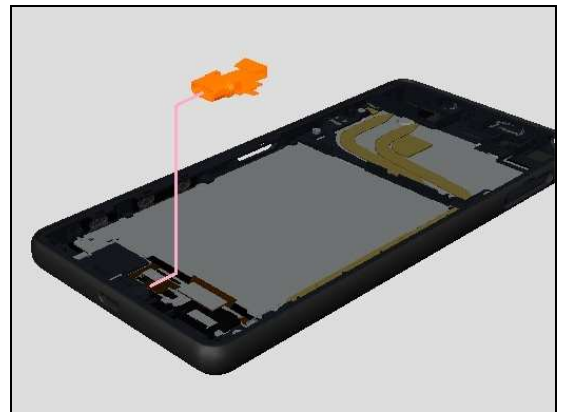


5.8 FPC Assembly USB

Follow the 4.1 – 4.4, 4.7, 4.9, 4.10, 4.15, 4.16, and 4.20 Disassembly instructions!

Prepare the new FPC Assembly USB.

Follow the 6.2, 6.9 – 6.11, 6.14, and 6.18 – 6.23 Reassembly instructions!



5.9 FPC Key Module Assy

Follow the 4.1 – 4.4, 4.7, 4.9, 4.10, and 4.15 – 4.18 Disassembly instructions!

Scrap! Don't reuse the Plate Holder Key Ant.

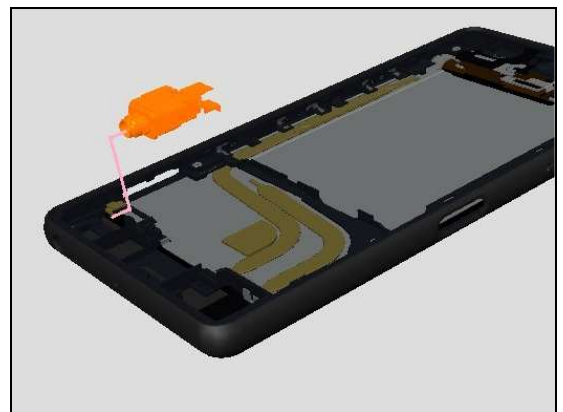
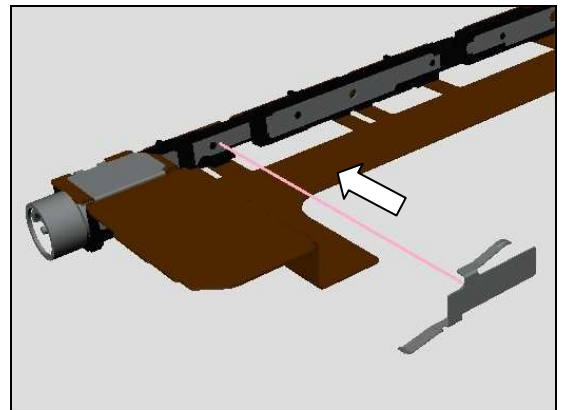
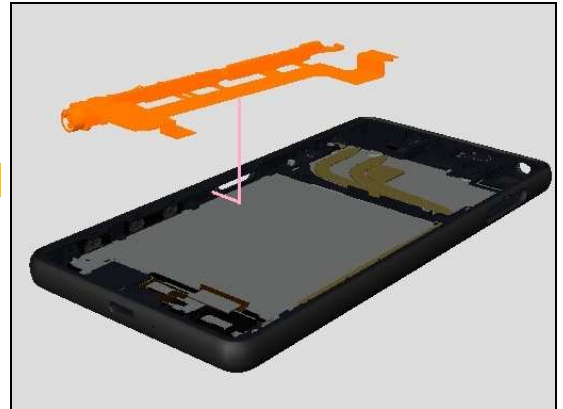
Prepare the new FPC Key Module Assy, and Plate Holder Key Ant.

Carry out the Installation as describe below.

Follow the 6.3, 6.4, 6.9 – 6.11, 6.14, and, 6.18 – 6.23 Reassembly instructions!

INSTALLATION

Install the Plate Holder Key Ant on the FPC Key Module Assy.



5.10 FPC Top Module Assy (Audio Jack)

Follow the 4.1 – 4.4, 4.7, 4.9, 4.10, 4.13, and 4.14 Disassembly instructions!

Prepare the new FPC Top Module Assy.

Follow the 6.5, 6.9 – 6.11, 6.14, 6.15, and, 6.21 – 6.23 Reassembly instructions!

5.11 Front Assy

Follow the 4.1 – 4.23 Disassembly instructions!

Prepare the new Front Assy.

Follow the 6.1 – 6.23 Reassembly instructions!

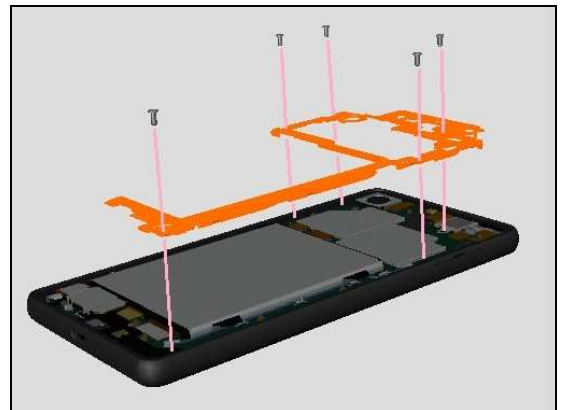


5.12 Holder Back Sub Assy

Follow the 4.2, and 4.3 Disassembly instructions!

Prepare the new Holder Back Sub Assy.

Follow the 6.21, and 6.22 Reassembly instructions!

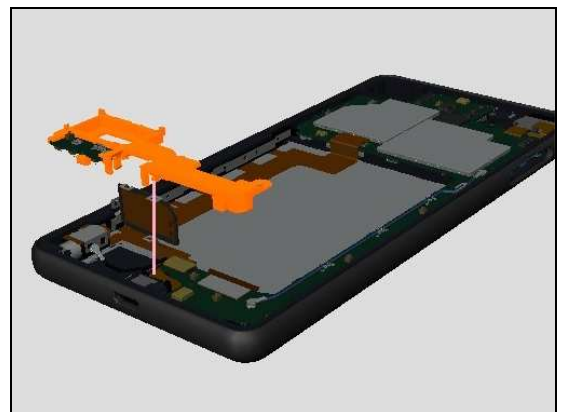


5.13 Holder Speaker Sub Assy

Follow the 4.1 – 4.4, 4.7, 4.9, 4.10, 4.15 – 4.19 Disassembly instructions!

Prepare the new Holder Speaker Sub Assy.

Follow the 6.3, 6.4, 6.9 – 6.11, 6.14, 6.15, and 6.18 – 6.23 Reassembly instructions!



5.14 Label MoP

Follow the 4.1 Disassembly instructions!

Carry out the Removal as describe below.

Prepare the new Labe MoP.

Carry out the Installation as describe below.

Follow the 6.23 Reassembly instructions!

REMOVAL

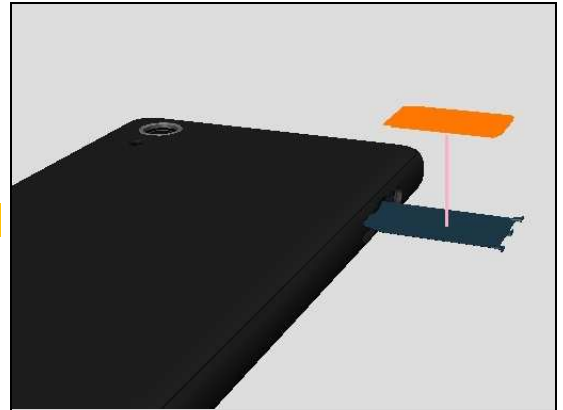
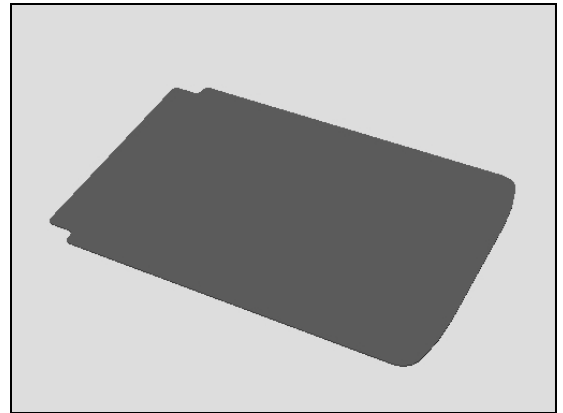
Pull out the Sheet Slider MoP.

Remove the Label MoP.

Scrap! Don't reuse the Label MoP!

INSTALLATION

Affix the Label MoP on the Sheet Slider MoP.



5.15 Liquid Indicator

Follow the 4.2, and 4.3 Disassembly instructions!

Carry out the Removal as describe below.

Prepare the new Liquid Indicator.

Carry out the Installation as describe below.

Follow the 6.21, and 6.22 Reassembly instructions!

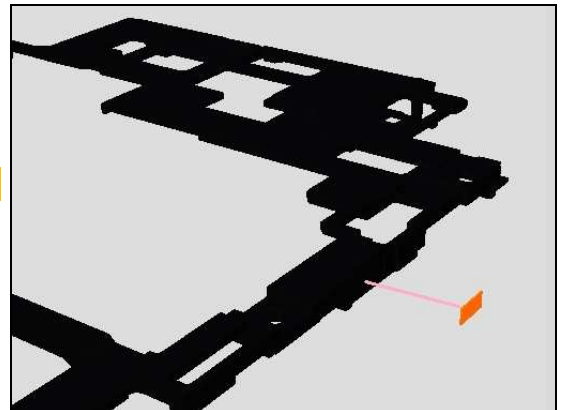
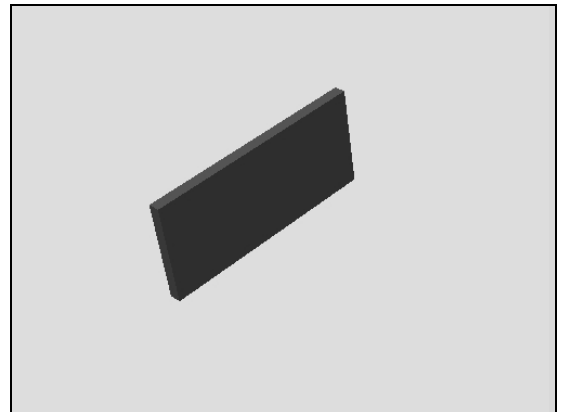
REMOVAL

Remove the Liquid Indicator.

Scrap! Don't reuse the Liquid Indicator!

INSTALLATION

Affix the Liquid Indicator on the Holder Back Sub Assy.



Replacement

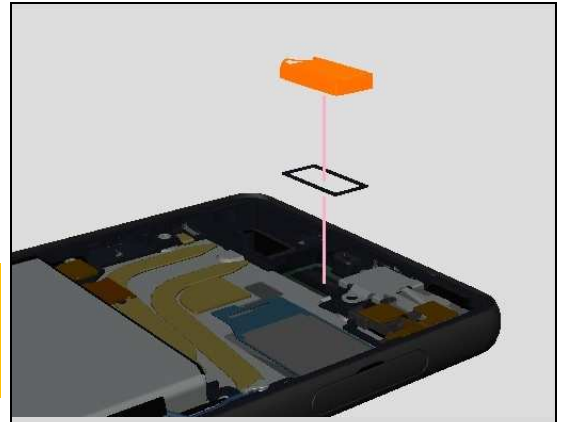
5.16 Top Speaker

Follow the 4.1 – 4.4, 4.7, and 4.9 – 4.11 Disassembly instructions!

Prepare the new Top Speaker.

Follow the 6.7, 6.9 – 6.11, 6.14, 6.18, and 6.21 – 6.23 Reassembly instructions!

Important! When you replace Top Speaker, flashing Customize or Refurbish or SUCE script (SU script cannot be used!) in Emma before returning the unit to customer.



5.17 RF Cable Ant Main 1st

Follow the 4.1 – 4.4, 4.7, 4.9, and 4.10 Disassembly instructions!

Carry out the Removal as describe below.

Prepare the new RF Cable Ant Main 1st.

Carry out the Installation as describe below.

Follow the 6.9 – 6.11, 6.14, 6.18, and 6.21 – 6.23 Reassembly instructions!

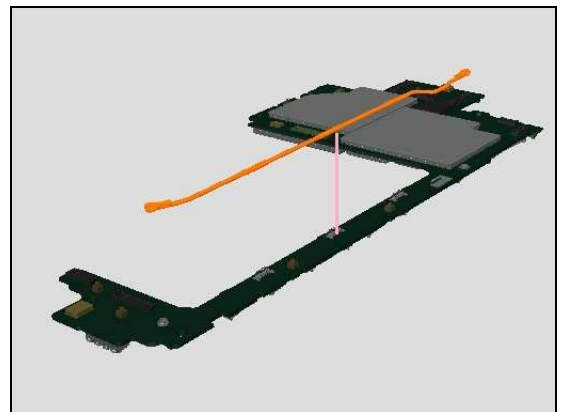


REMOVAL

Remove the RF Cable Ant Main 1st.

INSTALLATION

Install the RF Cable Ant Main 1st.



5.18 RF Cable Ant Main 2nd

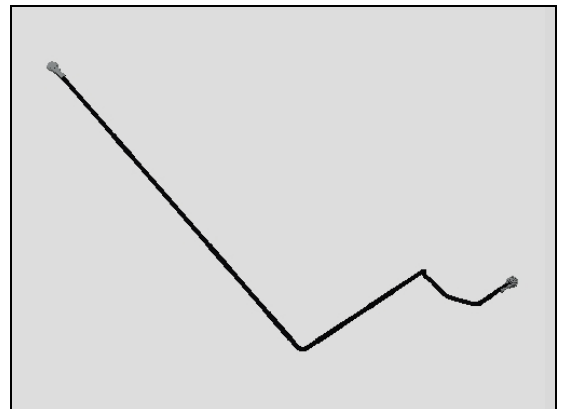
Follow the 4.1 – 4.4, 4.7, 4.9, and 4.10 Disassembly instructions!

Carry out the Removal as describe below.

Prepare the new RF Cable Ant Main 2nd.

Carry out the Installation as describe below.

Follow the 6.9 – 6.11, 6.14, 6.18, and 6.21 – 6.23 Reassembly instructions!

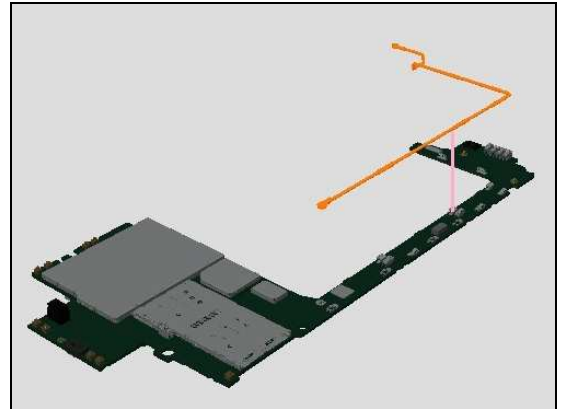


REMOVAL

Remove the RF Cable Ant Main 2nd.

INSTALLATION

Install the RF Cable Ant Main 2nd.



5.19 Sheet Guide MoP / Sheet Slider MoP

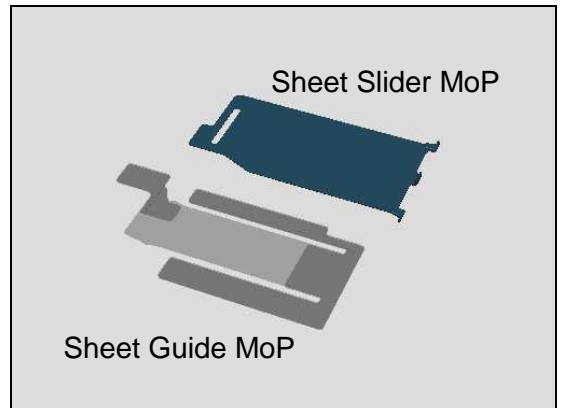
Follow the 4.1 – 4.4, 4.7, 4.9, and 4.10 Disassembly instructions!

Carry out the Removal as describe below.

Prepare the new Sheet Guide MoP / Sheet Slider MoP.

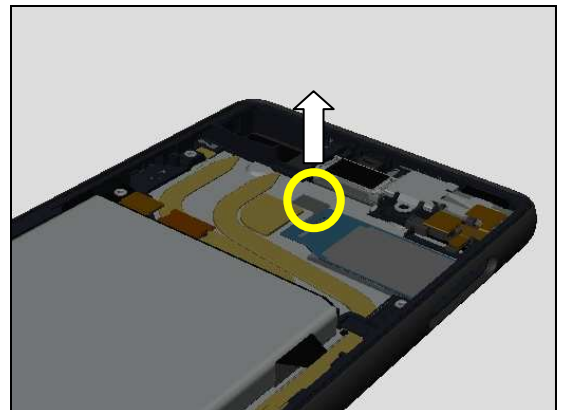
Carry out the Installation as describe below.

Follow the 6.9 – 6.11, 6.14, 6.18, and 6.21 – 6.23 Reassembly instructions!

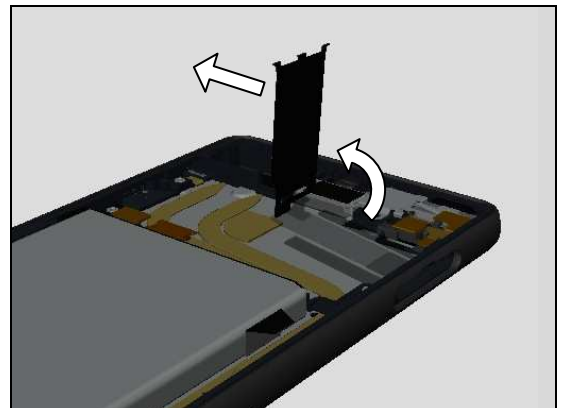


REMOVAL

Lift up yellow circle area of Sheet Guide MoP.



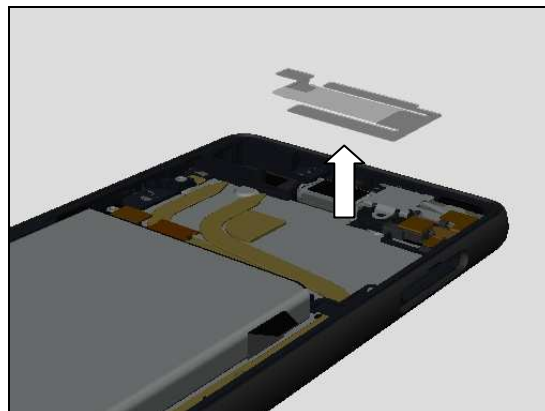
Remove Sheet Slider MoP.



Replacement

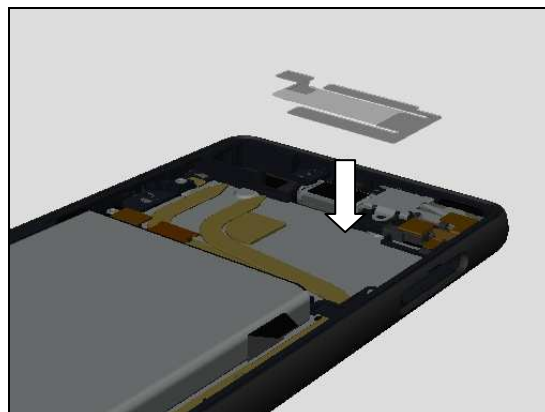
Remove the Sheet Guide MoP.

Scrap! Don't reuse the Sheet Guide MoP!

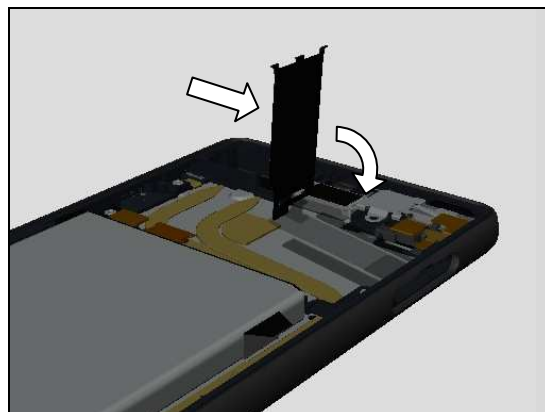


INSTALLATION

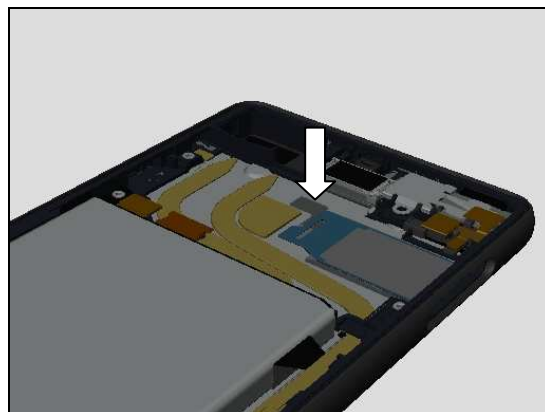
Place the Sheet Guide MoP, and press it with fingers.



Install the Sheet Slider MoP.



Affix the Sheet Guide MoP



5.20 Sheet Spacer RF

Follow the 4.1 – 4.4, 4.7, 4.9, and 4.10 Disassembly instructions!

Carry out the Removal as describe below.

Prepare the new Sheet Spacer RF.

Carry out the Installation as describe below.

Follow the 6.9 – 6.11, 6.14, 6.18, and 6.21 – 6.23 Reassembly instructions!

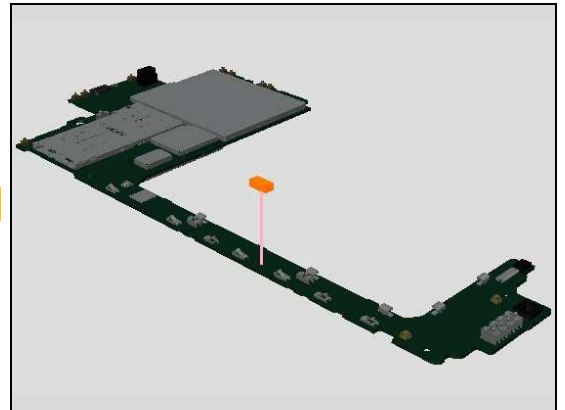
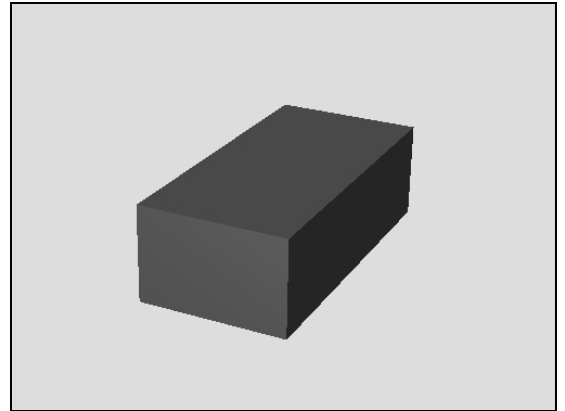
REMOVAL

Remove the Sheet Spacer RF.

Scrap! Don't reuse the Sheet Spacer RF!

INSTALLATION

Affix the Liquid Indicator on the Sheet Spacer RF.



5.21 Sheet Thermal Chat Camera

Follow the 4.2, and 4.3 Disassembly instructions!

Carry out the Removal as describe below.

Prepare the new Sheet Thermal Chat Camera.

Carry out the Installation as describe below.

Follow the 6.21, and 6.22 Reassembly instructions!

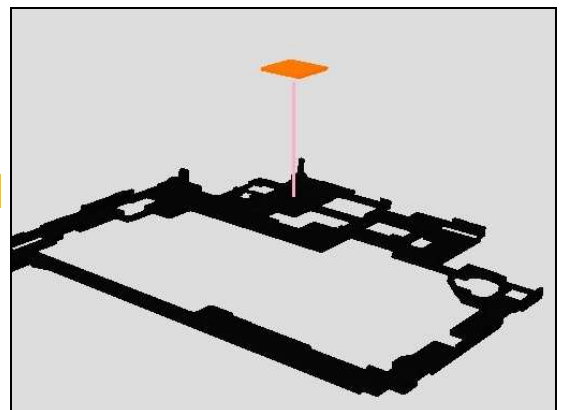
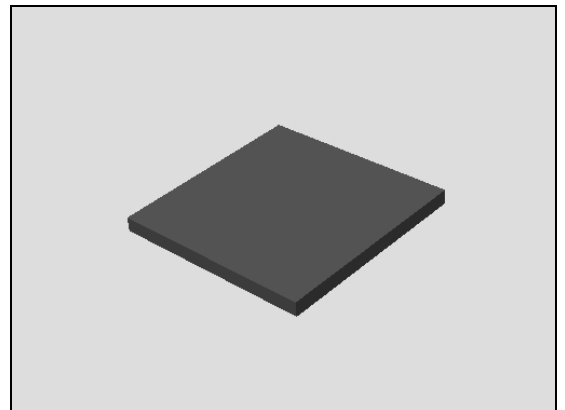
REMOVAL

Remove the Sheet Thermal Chat Camera.

Scrap! Don't reuse the Sheet Thermal Chat Camera!

INSTALLATION

Affix the Sheet Thermal Chat Camera on the Holder Back Sub Assy.



5.22 Sheet WR Test

Follow the 4.2 Disassembly instructions!

Carry out the Removal as describe below.

Prepare the new Sheet WR Test.

Carry out the Installation as describe below.

Follow the 6.22 Reassembly instructions!

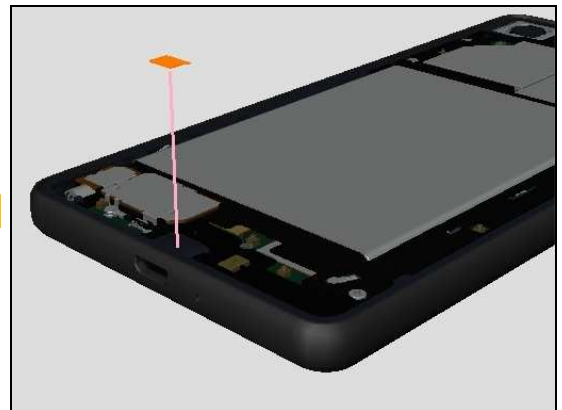
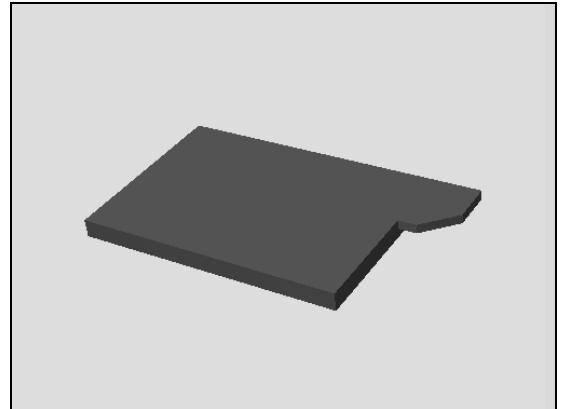
REMOVAL

Remove the Sheet WR Test

Scrap! Don't reuse the Sheet WR Test!

INSTALLATION

Affix the Sheet WR Test.



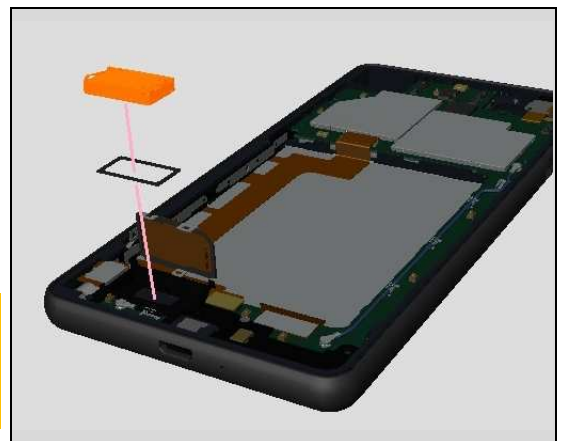
5.23 Bottom Speaker

Follow the 4.1 – 4.4, 4.7, 4.9, 4.10, 4.15 – 4.19 Disassembly instructions!

Prepare the new Bottom Speaker.

Follow the 6.3, 6.4, 6.9 – 6.12, 6.14, 6.15, and 6.18 – 6.23 Reassembly instructions!

Important! When you replace Bottom Speaker, flashing Customize or Refurbish or SUCE script (SU script cannot be used!) in Emma before returning the unit to customer.

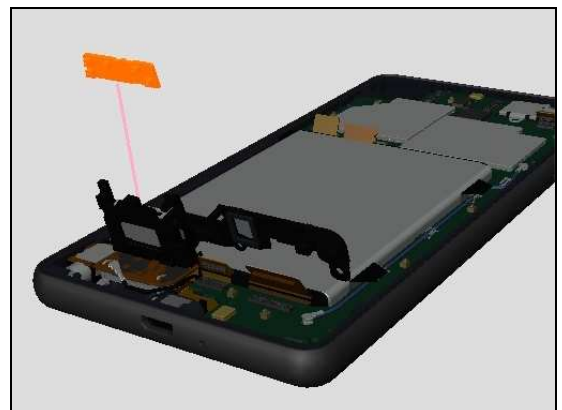


5.24 Sub PBA

Follow the 4.1 – 4.4, 4.7, and 4.9 Disassembly instructions!

Prepare the new Bottom Speaker.

Follow the 6.10, 6.18, and 6.21 – 6.23 Reassembly instructions!



Replacement

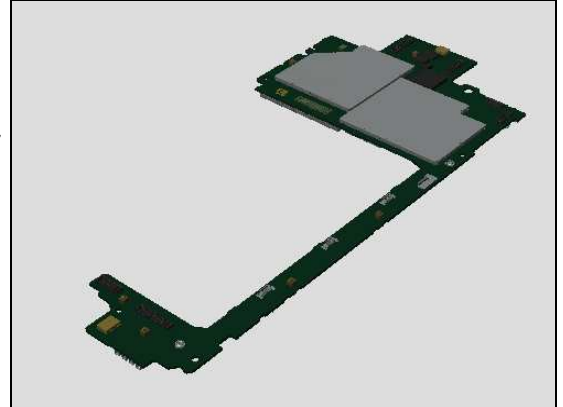
5.25 Board Swap - Replacement

Follow the 4.1 – 4.4, 4.7, and 4.9 Disassembly instructions!

Prepare the new Main PBA.

Follow the 5.2 – 5.4, 5.17, 5.18, and 5.20 INSTALLATION of Replacement instructions!

Follow the 6.8 – 6.11, 6.14, 6.18, and 6.21 – 6.23 Reassembly instructions!

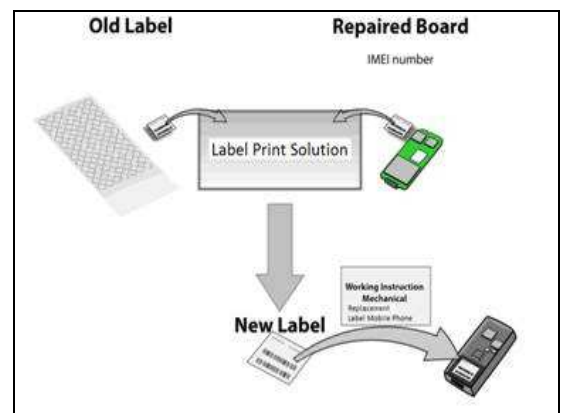


Accelerometer, Gyroscope, Noise cancelling, Proximity sensor Calibration, and Color Code flashing must be done to follow the calibrations in Sony Mobile Repair Application 1289-2983 –mechanical.

5.26 Board Swap – Change label

CHANGE LABEL

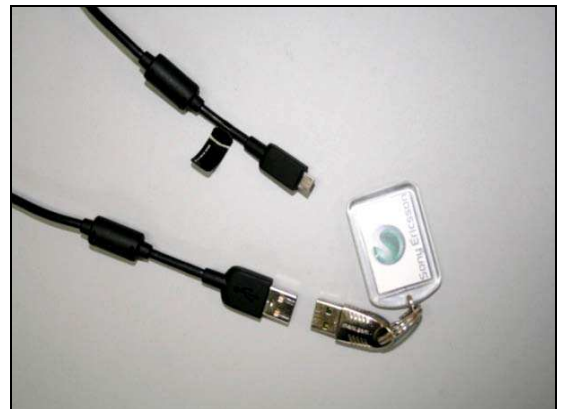
Follow the instructions in the Generic Repair Manual – Build swap for change of label.



5.27 Board Swap – Customize of Software

CUSTOMIZE OF SOFTWARE

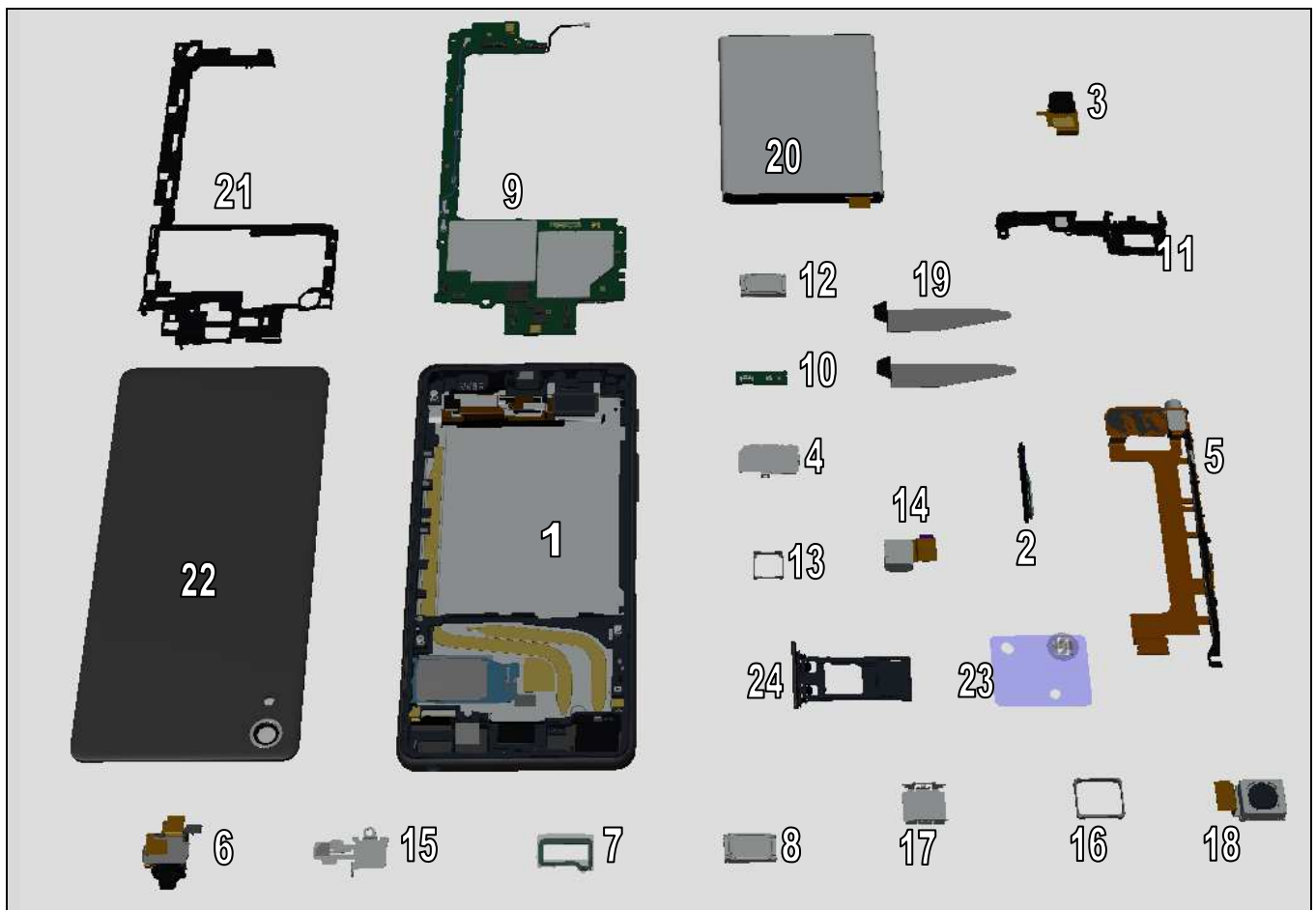
Follow the instructions in the Generic Repair Manual – Build swap for customization of the software.



6 Reassembly

The reassembly is done in the following order:

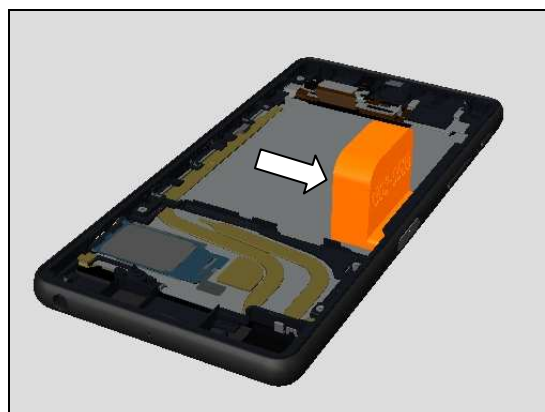
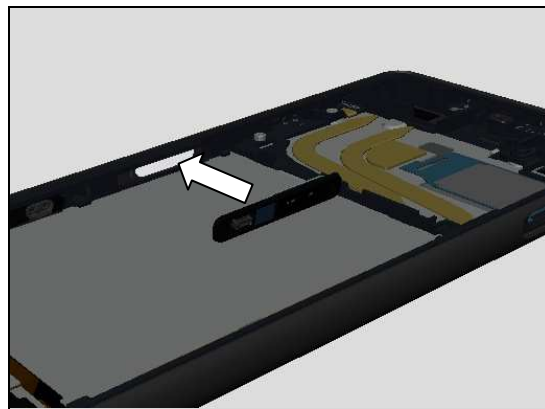
1. Front Assy
2. FP Sensor Assy
3. FPC Assembly USB
4. Plate Speaker
5. FPC Key Module Assy
6. FPC Top Module Assy
7. Light Guide LED Sub Assy
8. Top Speaker
9. Main PBA
10. Sub PBA
11. Holder Speaker Sub Assy
12. Bottom Speaker
13. Holder Camera Front
14. Front Camera
15. Plate Jk
16. Holder Main Camera
17. Plate Shield Camera
18. Main Camera
19. Adhesive Battery
20. Battery 2700 mAh
21. Holder Back Sub Assy
22. Panel Rear Sub Assy
23. Label NFC
24. Cap Tray Assy



6.1 FP Sensor Assy

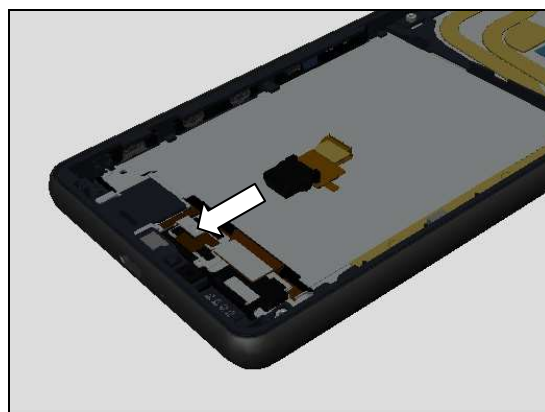
Install the FP Sensor Assy on the Front Assy.

Press the FP Sensor Assy 5 seconds to using with FP Sensor Press Tool.



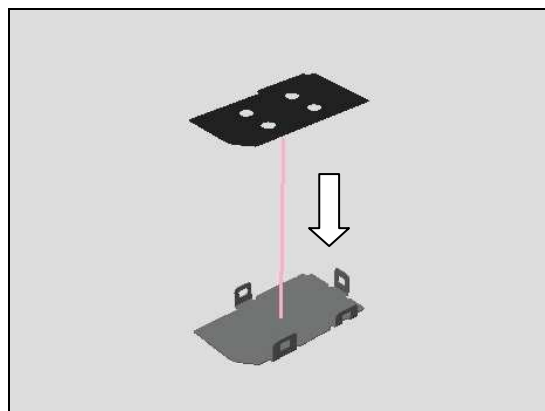
6.2 FPC Assembly USB

Install the FPC Assembly USB on the Front Assy.
Press 5 sec. with finger to ensure installation.

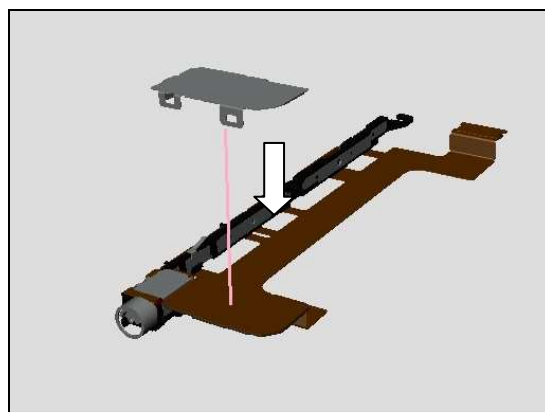


6.3 Plate Speaker

Affix the Adhesive Plate SPK on the Plate Speaker.

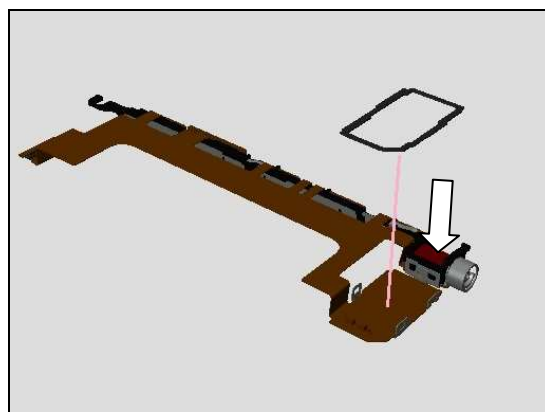


Put the Plate Speaker on the FPC Key Assy.



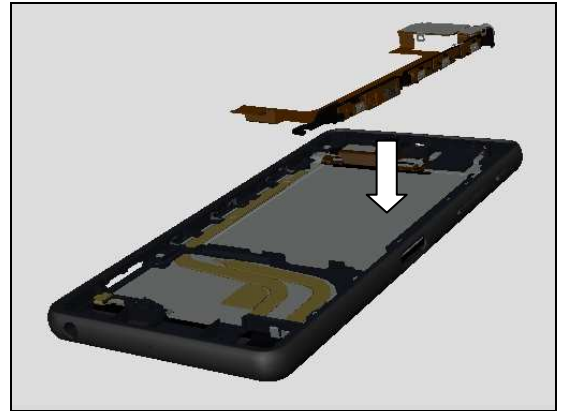
6.4 Adhesive WR FPC Speaker

Affix the Adhesive WR FPC Speaker on the FPC Key Module Assy.



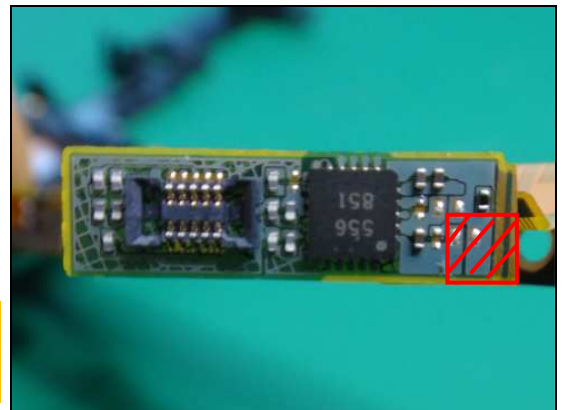
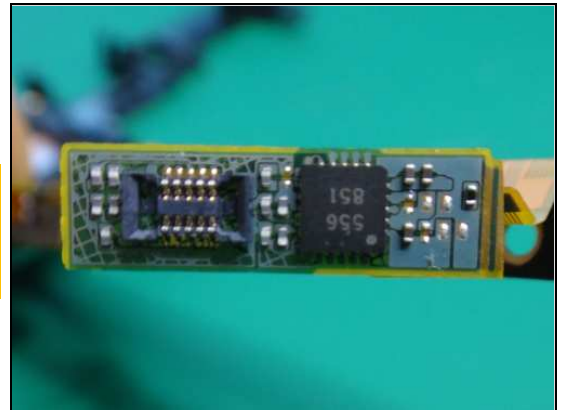
6.5 FPC Key Module Assy

Place FPC Key Module Assy on the unit.

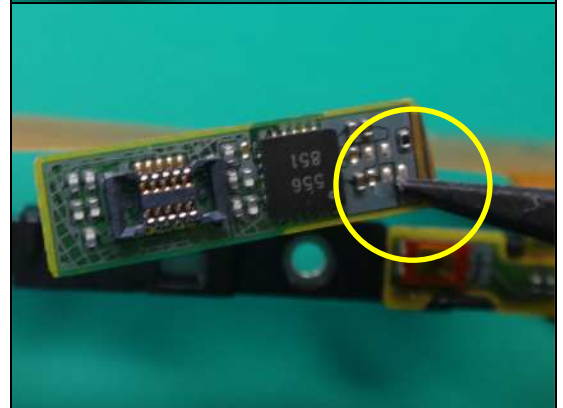


Connect B to B connector to FP Sensor Assy.

Note! Around B to B connect of FPC Key Module Assy, there are some components are mounted, and make sure to no apply damages to the components when installing the FPC Key Module Assy.



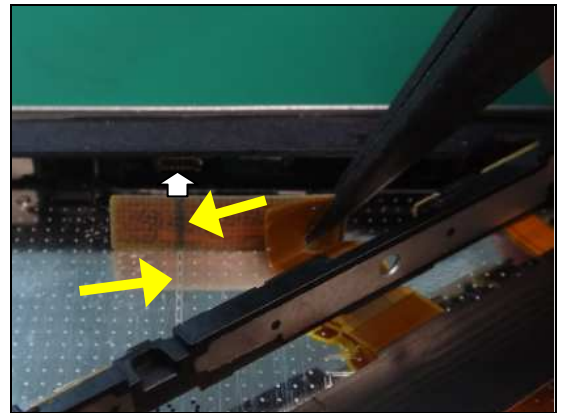
Note! Pinch FPC Key Module Assy by tweezers only hatched portion to avoid damages to components on the Key FPC Module Assy.



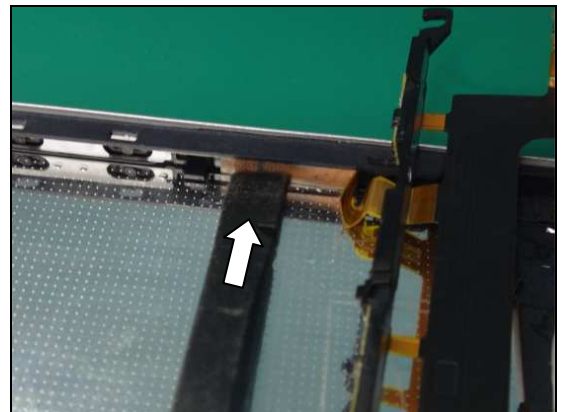
Reassembly

Make sure to align the guide lines on the plate display and FPC Key Module Assy.

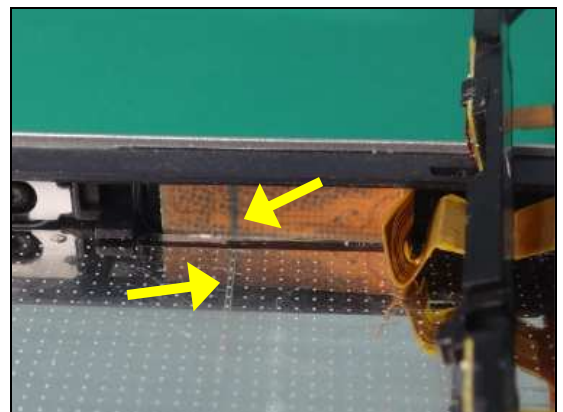
And then, connect the B to B connector to FP Sensor Assy.



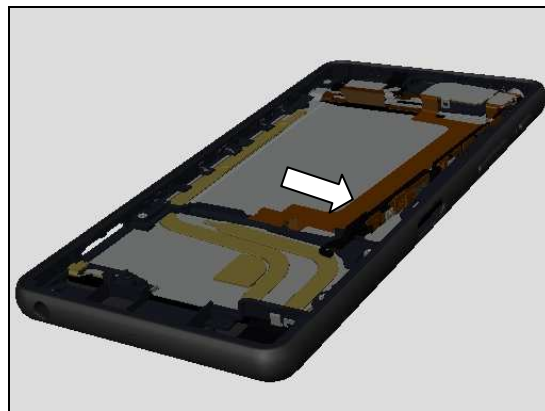
Press the B to B connector using with flat side of Nylon Pointer.



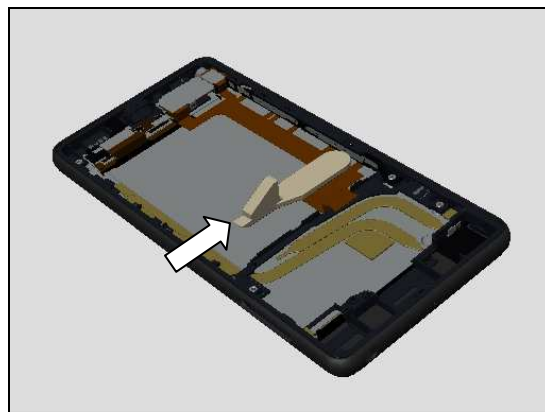
Check if B to B connector is connected on the right position.
The guide lines must be aligned.



Install the FPC Key Module Assy on the unit.

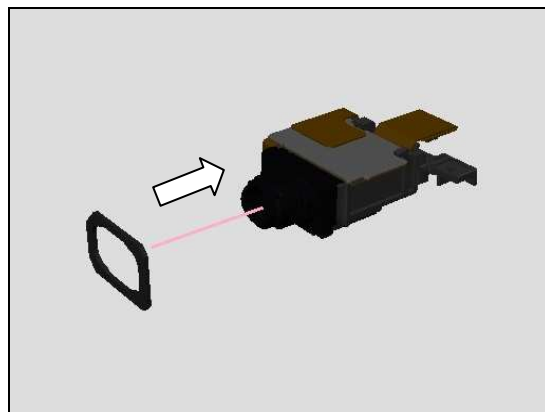


Push FPC Key Module Assy with Opening Tool.

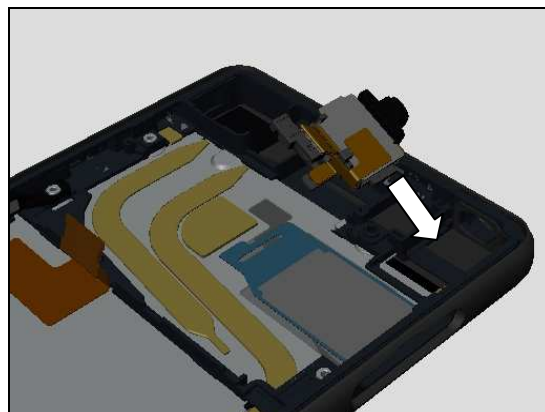


6.6 FPC Top Module Assy

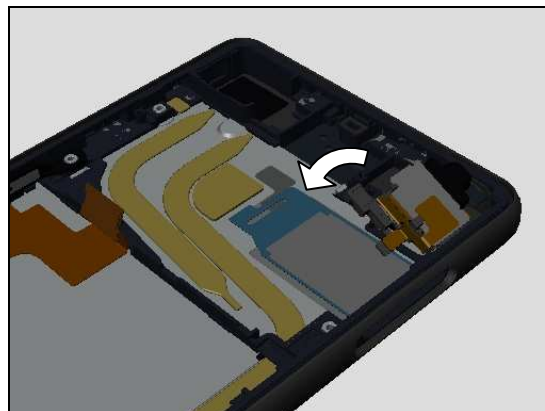
Affix the Adhesive WR Audio Jack on the FPC Top Module Assy



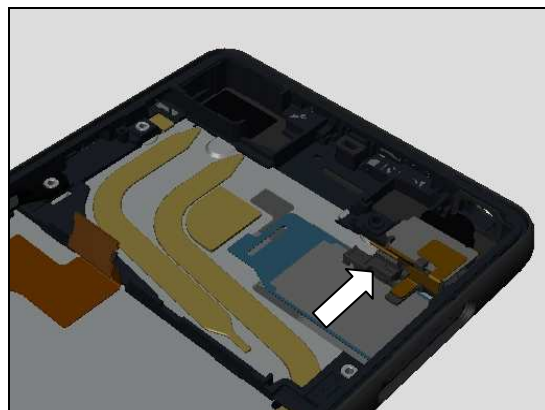
Install the FPC Top Module Assy on the unit.



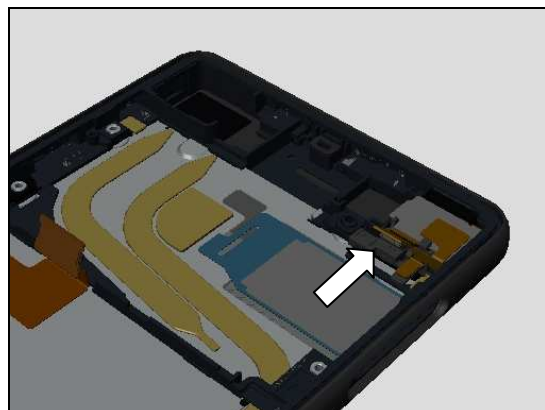
Tilt down the FPC Top Module Assy.



Slide the FPC Top Module Assy toward the panel.



Press the FPC Top Module Assy 10 seconds with finger.

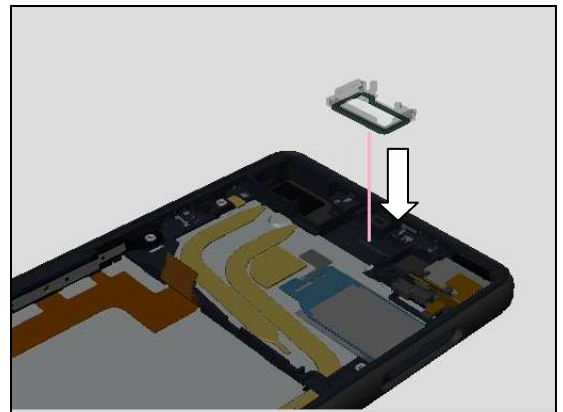
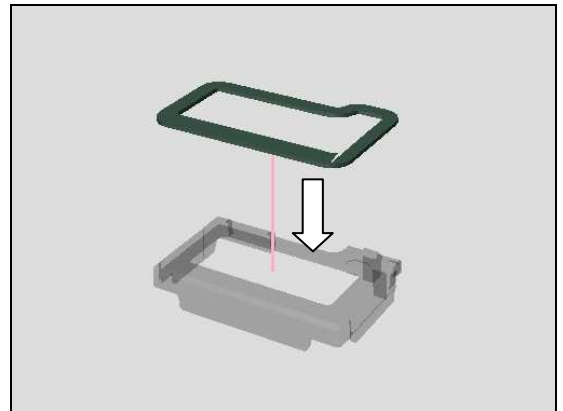


6.7 Light Guide LED Assy

In case of reuse the Light Guide LED Assy, Affix the Adhesive WR Light Guide LED on the Light Guide LED Assy.

A new part of Light Guide LED Assy comes with the Adhesive WR Light Guide LED.

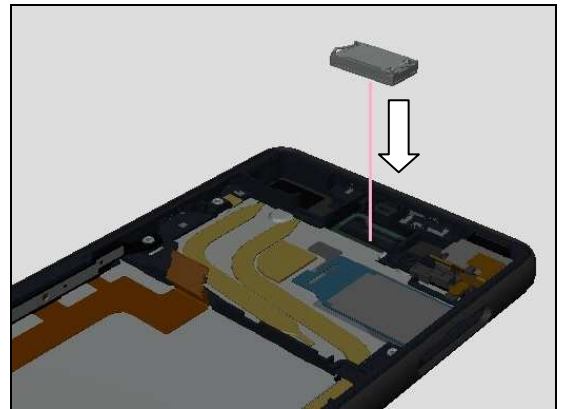
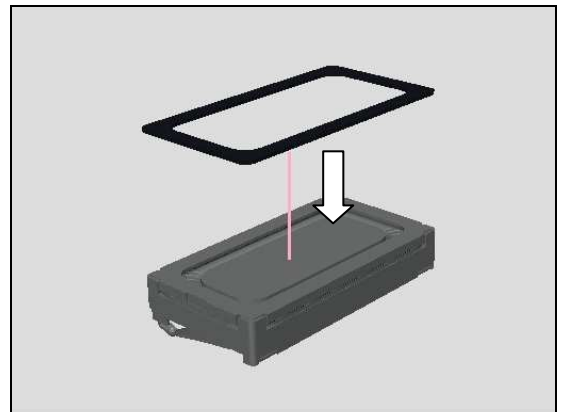
Install the Light Guide LED Assy to using with Tweezers, and press with fingers.



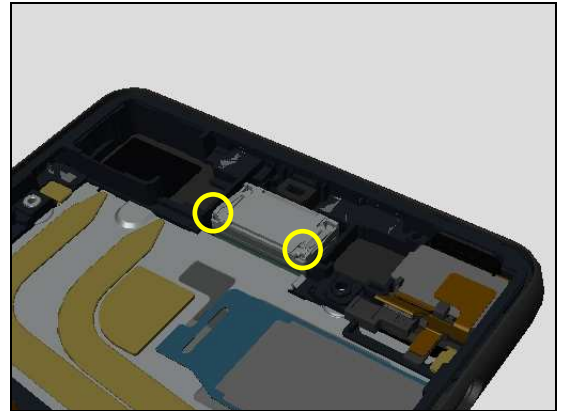
6.8 Top Speaker

Affix the Adhesive WR Speaker on the Top Speaker.

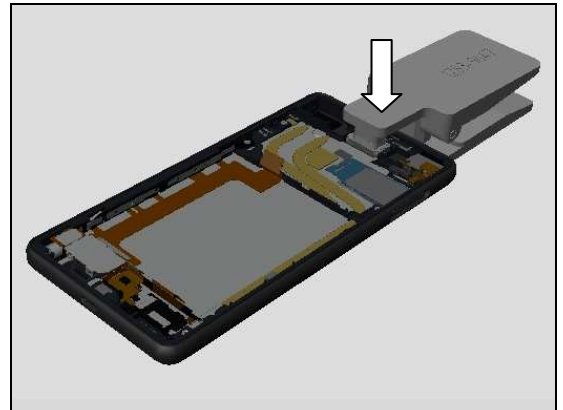
Install Top Speaker on the unit with Flex Film Assembly Tool.



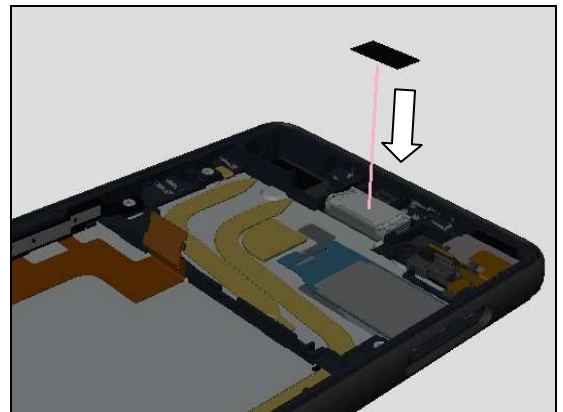
Make sure the position of contact pins.



Press the Top Speaker using with the Earspeaker/Loudspeaker Top Press Tool for 5 seconds.



Place the Cushion ACO on the Speaker Top.



6.9 Thermal Gap Filler

Prepare the new Thermal Gap Filler Syringe and Thermal Gap Filler Tube.



Open the embedded Thermal Gap Filler instruction in attachment, and make sure to go through it prior to use!



Confirm the expiration date that is stamped at the Thermal Gap Filler Tube end.

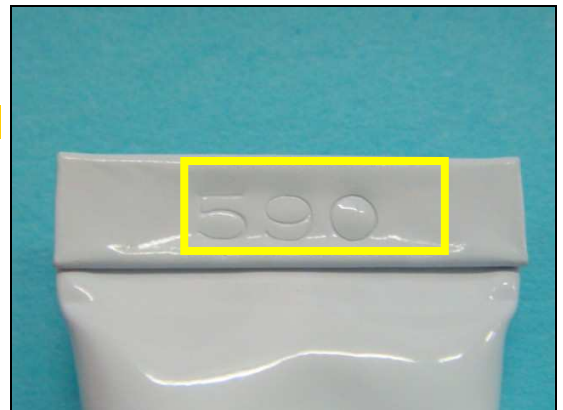
Life is 6 month after manufacturing.

X: Manufacturing Year (201X)

Y: Manufacturing Month (1,2,,,9, A, B, C)

Z: Manufacturing Date (1,2,,,9, A, B,,,V)

Ex) Lot.590 = Manufacturing date is September 24th , 2015.



Open the tube with cap head

**Material will start to set once it is exposed to air.
Scrap! Thermal Gap Filler Tube cannot be used in 24h after opening.**



Reassembly

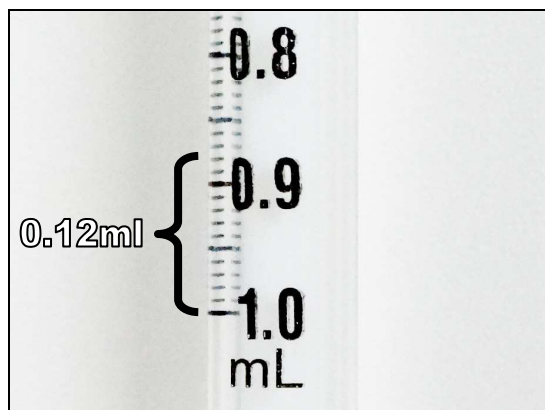
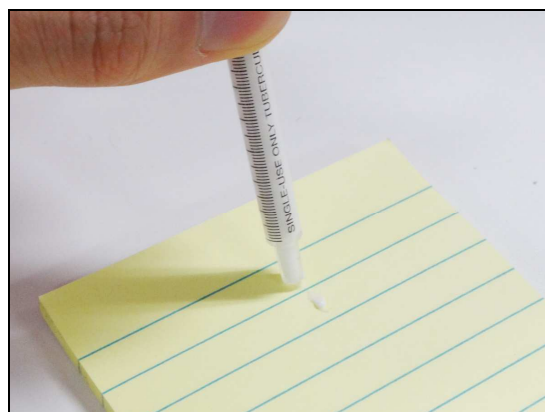
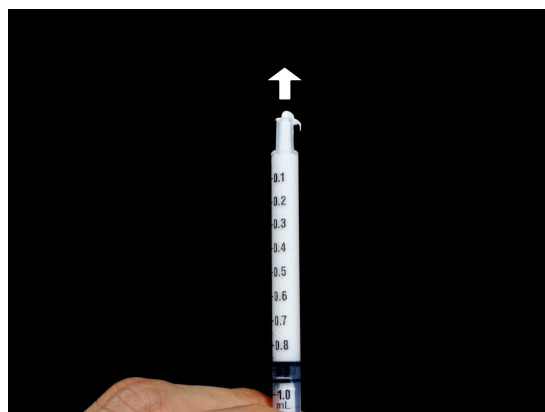
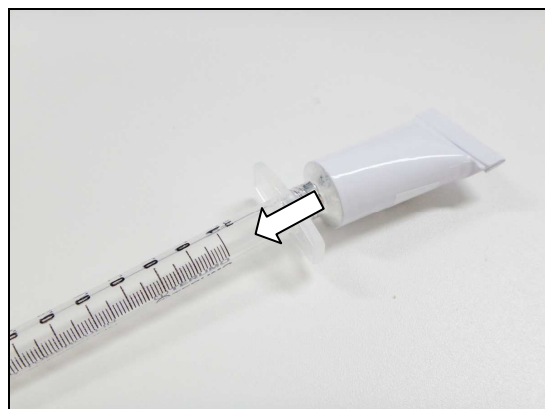
Fill the contents of the tube in to the syringe from the end of the syringe.

**Once filled in the syringe, must use within 1 hour.
Scrap! Thermal Gap Filler Syringe cannot be used 1 hour
after filling.**

Make sure the contents reach up to the tip of the syringe
and a small amount of the contents flows out as air is
released.

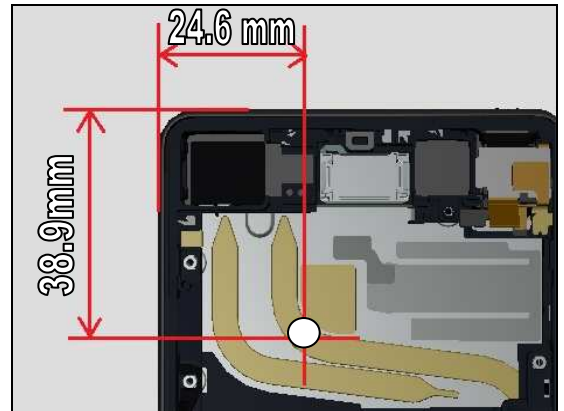
Wipe off the tip before using.

Applying volume for one unit is 0.12 ml.



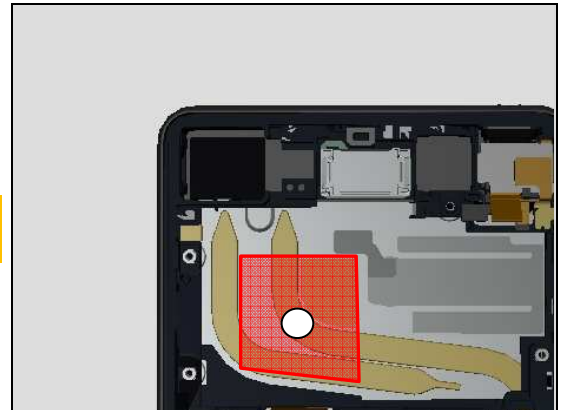
Reassembly

Carefully apply the Thermal Gap Filler to the unit as shown in the picture.



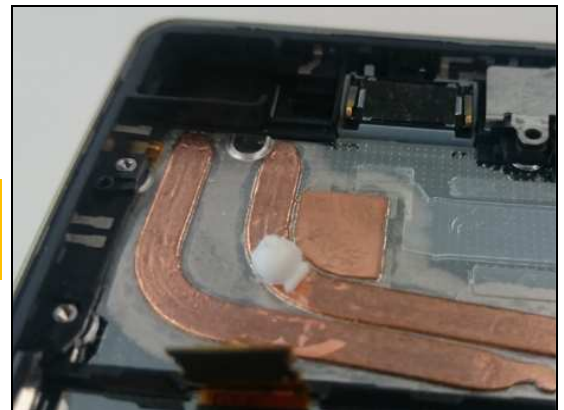
Thermal Gap Filler must be in the shaded area.

Main PBA installing must be done immediately after applied Thermal Gap Filler (within 5 minutes).



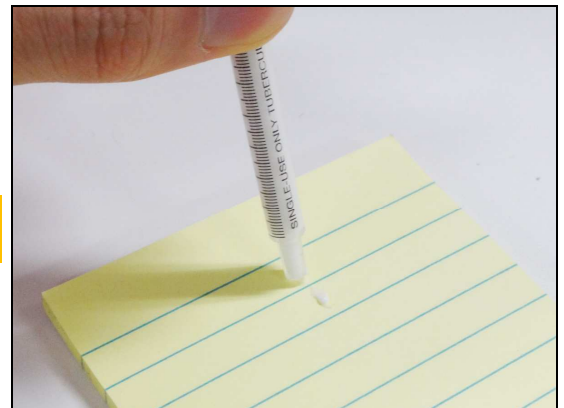
Sample Picture

Note! If the position or amount is not correct, wipe it off with a cotton swab, and apply another fresh Thermal Gap Filler.



Wipe off the tip of the syringe until next repair.

Scrap! Don't refill the Thermal Gap Filler to the used syringe.



Next time you use, let a small amount of contents flow out and wipe off the tip again.

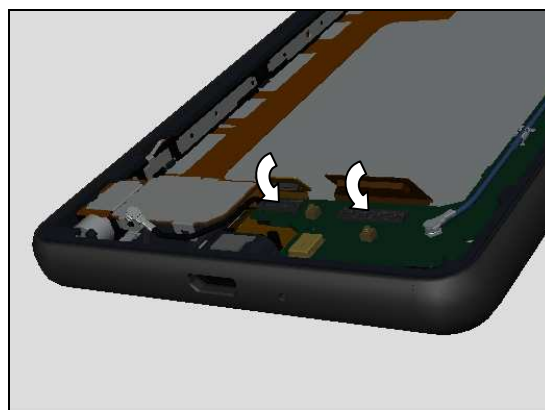
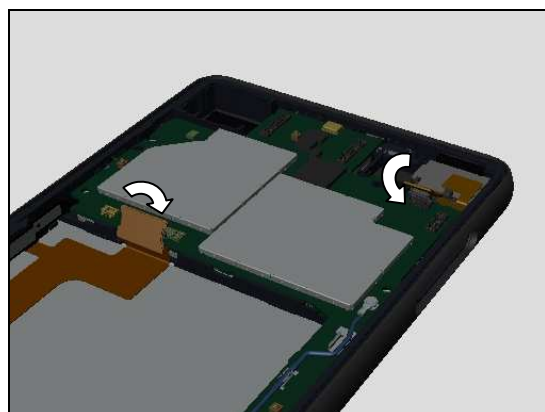
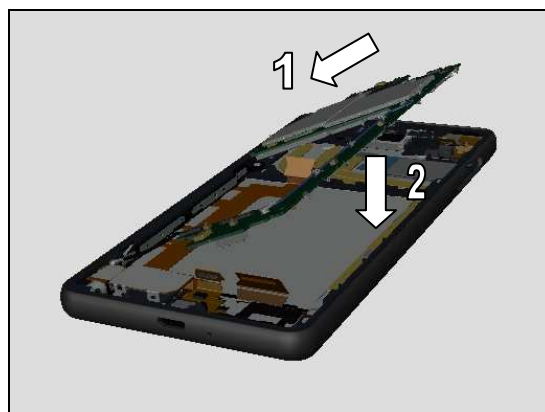
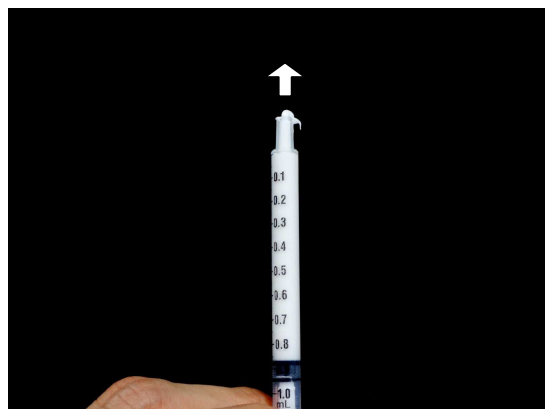
6.10 Main PBA

Install the Main PBA.

Main PBA installing must be done immediately after applied Thermal Gap Filler (within 5 minutes).

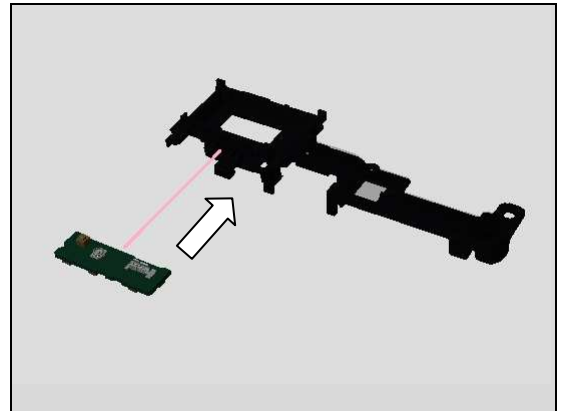
Connect B to B connectors (FPC Key Module Assy and FPC Top Module Assy).

Connect B to B connectors (LCD and FPC Assembly USB).



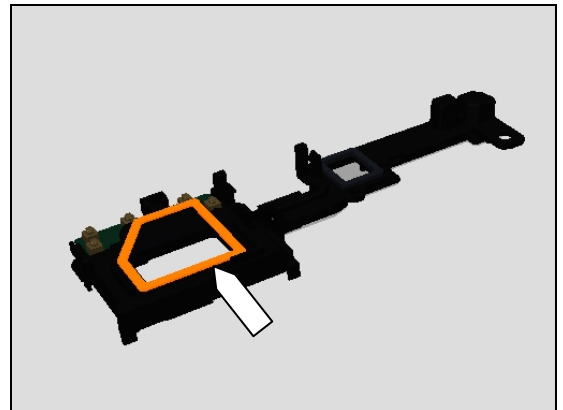
6.11 Sub PBA

Install the Sub PBA on the Holder Speaker Sub Assy.

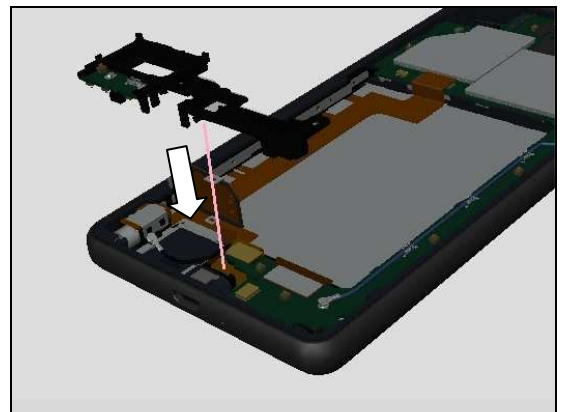


6.12 Holder Speaker Sub Assy

In case of reuse the Holder Speaker Sub Assy, affix the Adhesive WR Holder Speaker on the Holder Speaker Sub Assy.



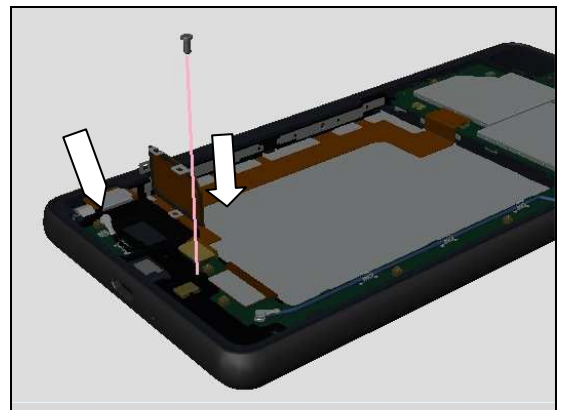
Install the Holder Speaker Sub Assy on the unit, and press it with fingers for 10 seconds.



Tighten Screw M1.2 x 2.5 by using a screwdriver with Bits (JCIS No 0).

Torque : 13 Ncm

Connect the RF Connector.



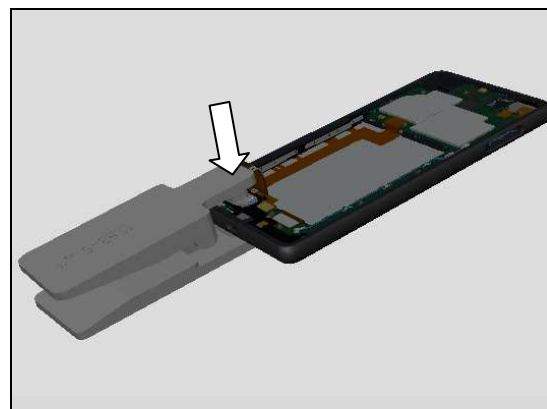
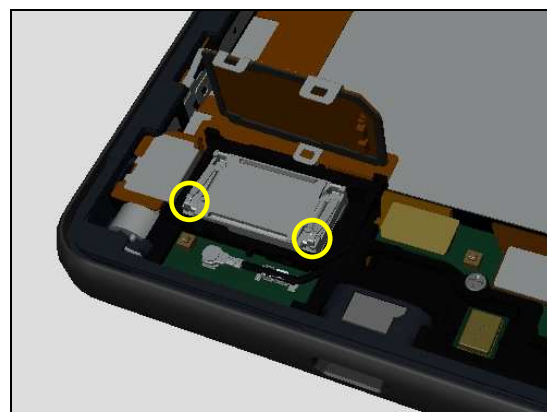
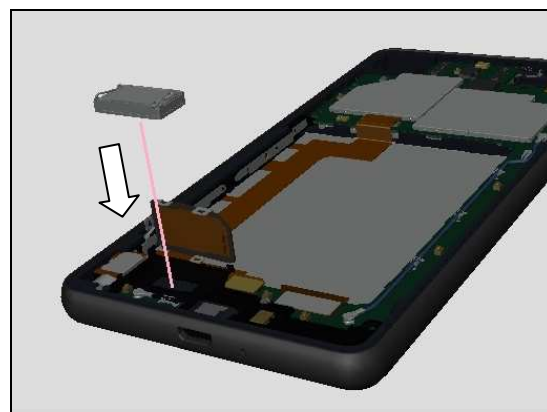
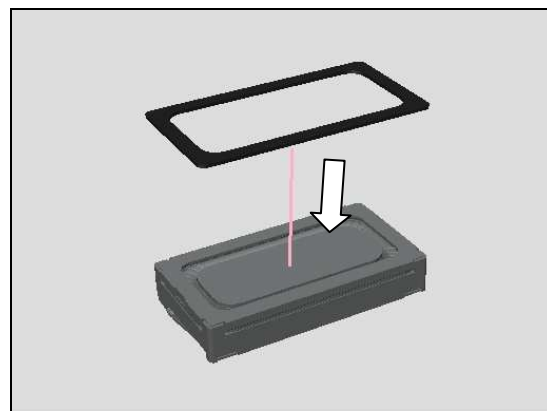
6.13 Bottom Speaker

Affix the Adhesive WR Speaker on the Bottom Speaker.

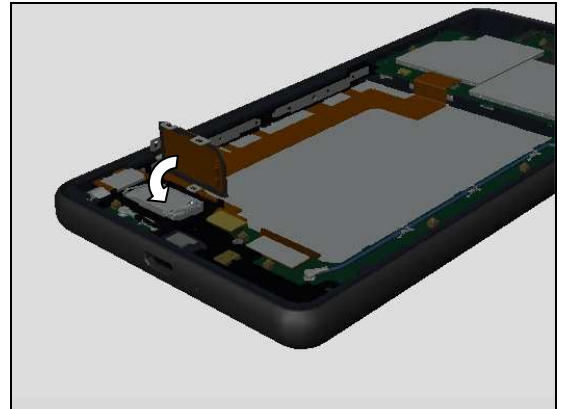
Install Bottom Speaker on the unit with Flex Film Assembly Tool.

Make sure the position of contact pins.

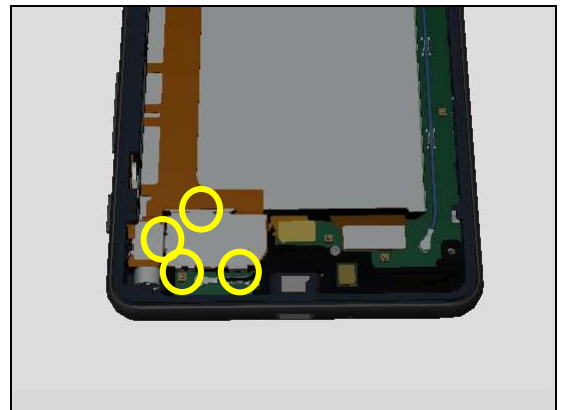
Press the Bottom Speaker using with the Earspeaker/Loudspeaker Top Press Tool for 10 seconds.



Place FPC Key Assy.



Make sure 4 hooks are fixed.

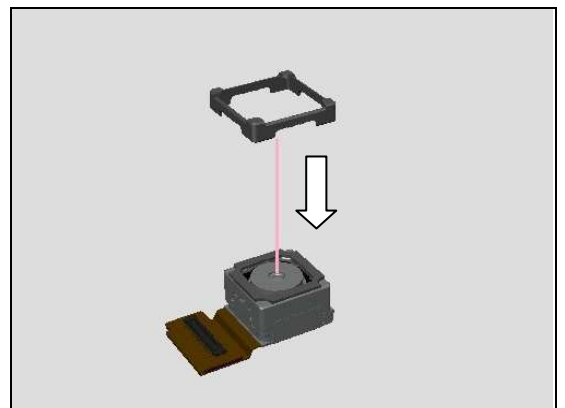


Press red marked portion (adhesive area) for 5 seconds with finger.



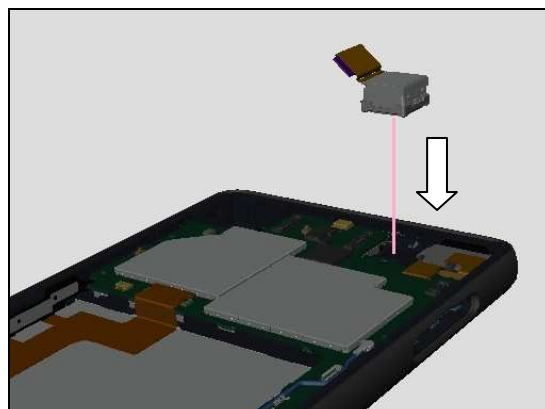
6.14 Holder Camera Front

Install the Holder Camera Front on the Sub Camera.

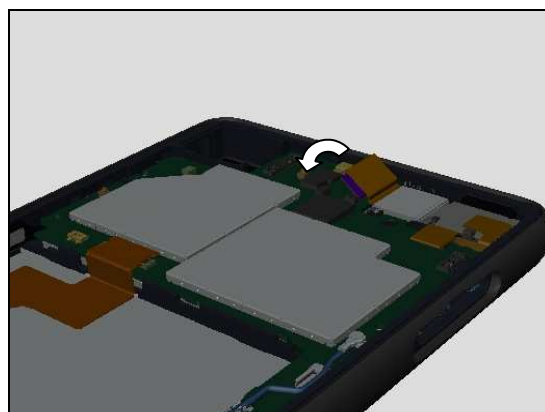


6.15 Front Camera

Install the Front Camera on the unit Flex Film Assembly Tool.

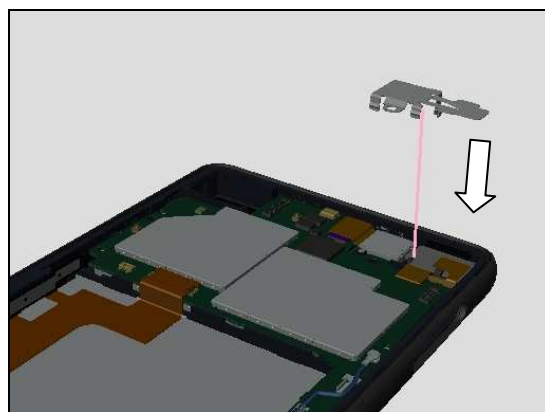


Connect B to B Connector.

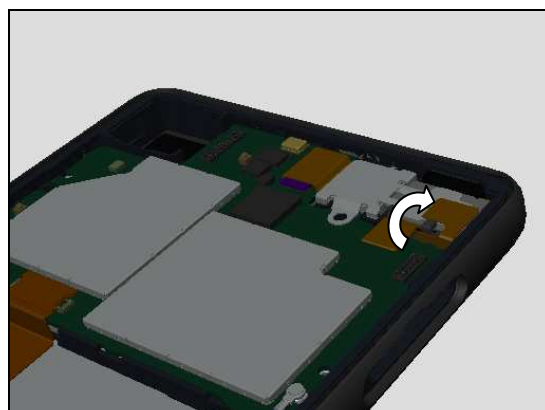


6.16 Plate Jk

Place the Plate Jk.

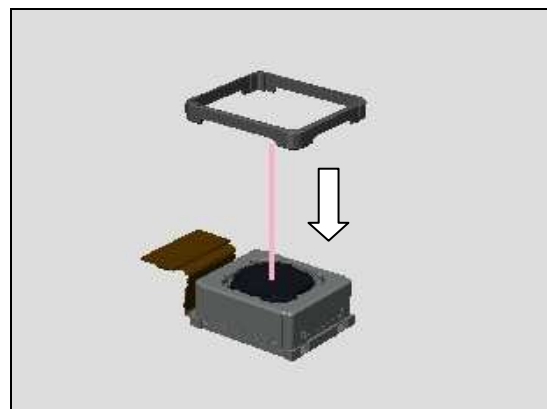


Put the FPC on the Plate Jk



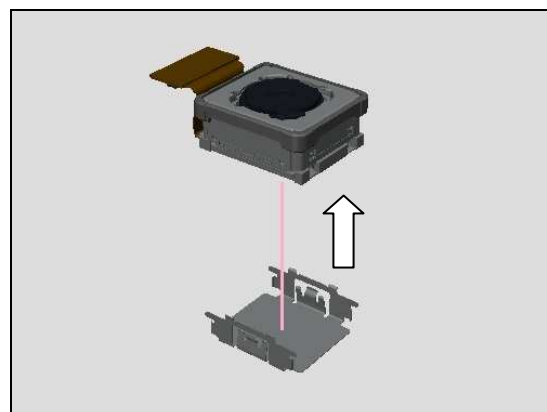
6.17 Holder Main Camera

Install Holder Main Camera on the Main Camera.



6.18 Plate Shield Camera

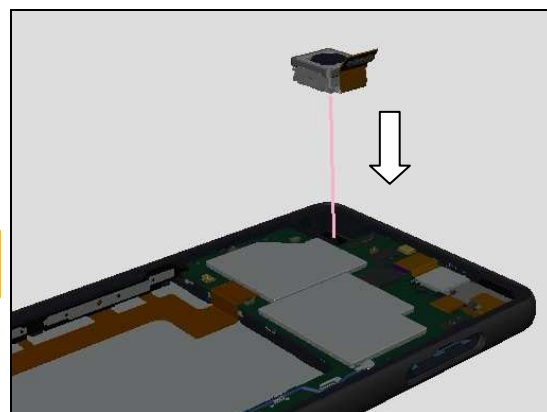
Install the Plate Shield Camera on the Main Camera.



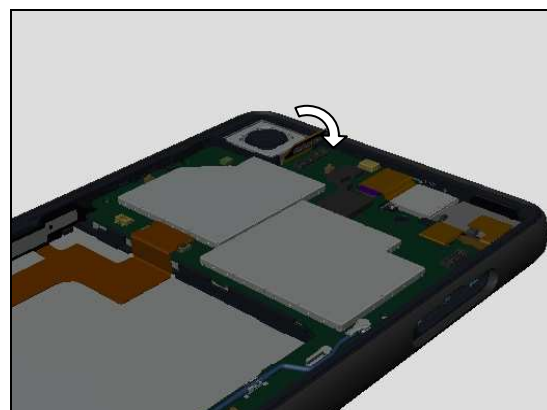
6.19 Main Camera

Install the Main Camera with Flex Film Assembly Tool.

Note! Make sure no dust, no foreign materials in the camera cavity.

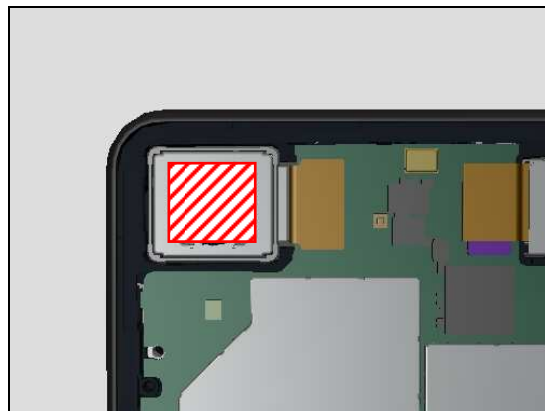


Connect Main Camera B to B Connector.



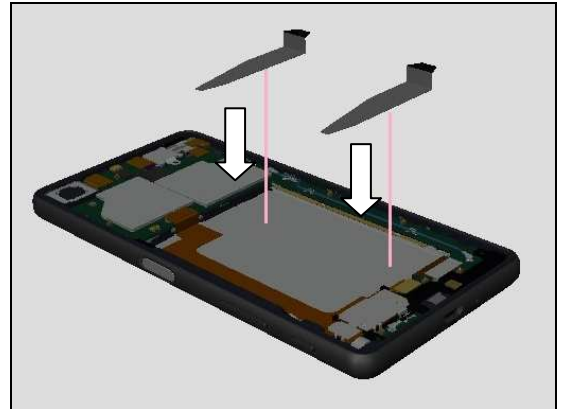
Note!

Do not push the lens module of the Main Camera (hatched by red) during installing of the Main Camera on the unit.



6.20 Adhesive Battery

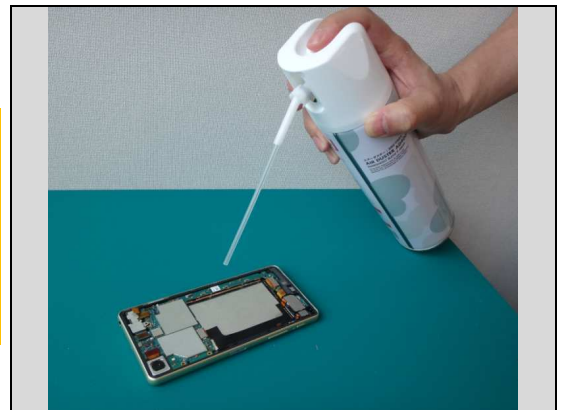
Affix the Adhesive Battery on the unit along the guide line.



6.21 Battery 2700 mAh

Note!

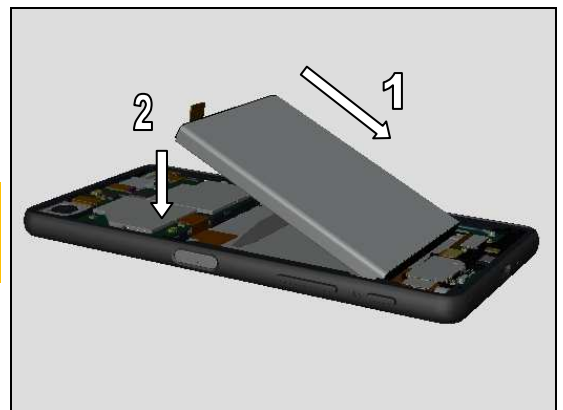
Clean the battery compartment by pressure air using with air duster spray can or ionized air blower. And, make sure to no foreign materials on the battery compartment of the unit. Any foreign materials put into between battery and unit will be cause of battery damages.



Install the Battery 2700 mAh on the unit.

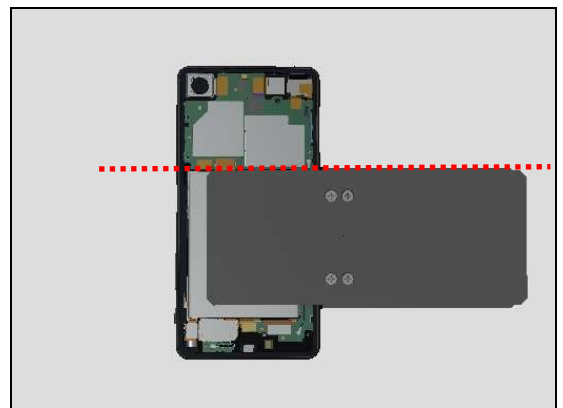
Note!

If you reuse the battery, follow the 7. Battery Reuse Instruction before installing the battery.



Set the Press Clamp on the unit.

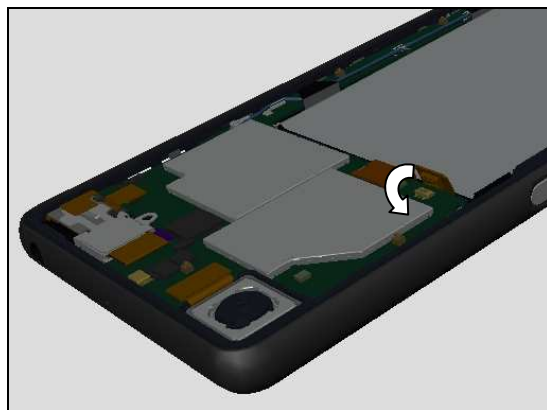
Align the Press Clamp with topside of the battery.



Press Battery to using with Press Clamp for 5 seconds.

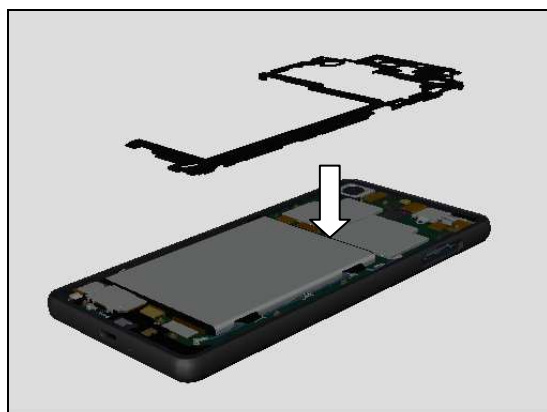


Connect Battery B to B Connector.

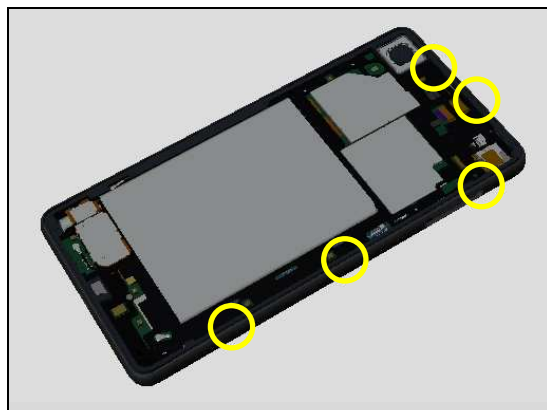


6.22 Holder Back Sub Assy

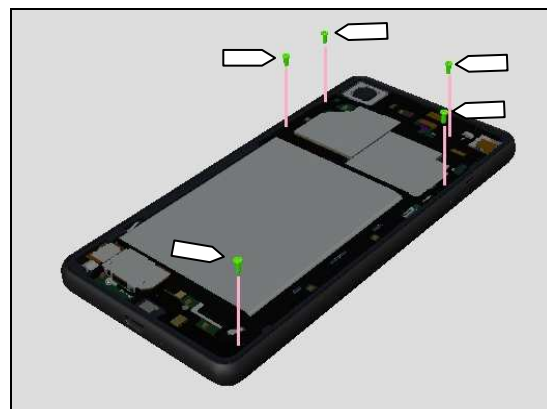
Place the Holder Back Sub Assy on the unit.



Check if hooks are fixed.

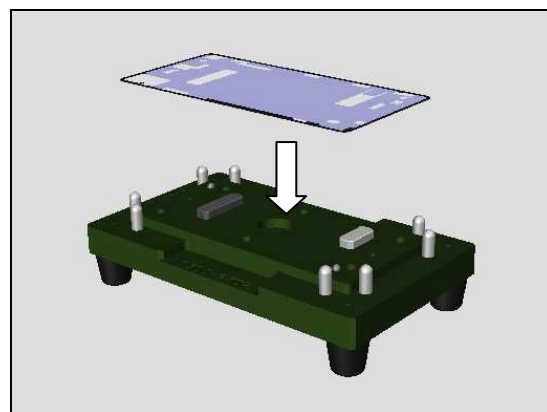


Tighten the Screw M1.4 x 3.2 by using a screwdriver with Bits (JCIS No 0).
Torque : 13 Ncm

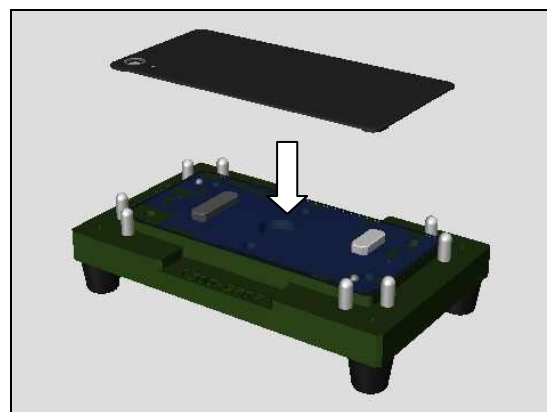


6.23 Panel Rear Sub Assy

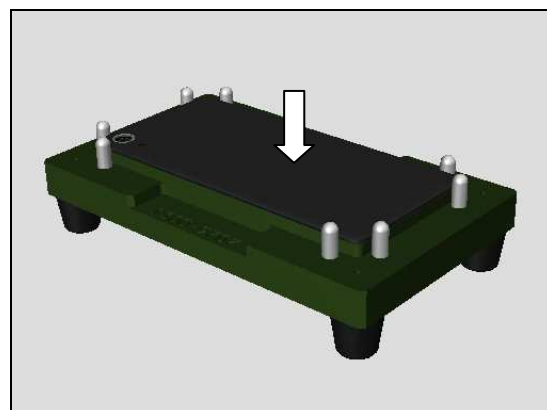
Remove the release paper of the Adhesive WR Panel Rear, and place on the Rear Panel Adhesive Alignment Fixture.



Place the Panel Rear Sub Assy on the Rear Panel Adhesive Alignment Fixture.



Press the Panel Rear Sub Assy with fingers to paste the Adhesive WR Panel Rear.

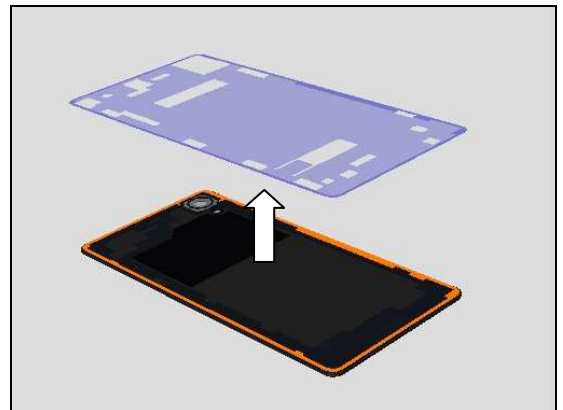


Reassembly

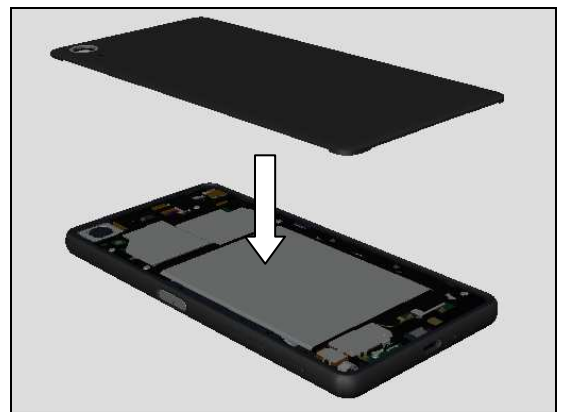
Take out the Panel Rear Assy from the Rear Panel Adhesive Alignment Fixture.
Press the area of adhesive with fingers, and make sure that adhesive is affixed on the correct position.



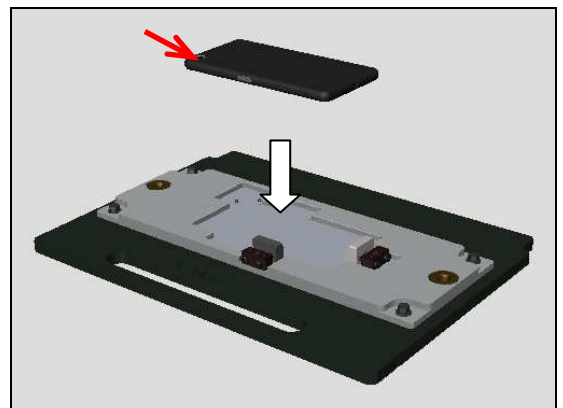
Remove the separator sheet, and make sure that adhesive is affixed on the correct position.



Place the Panel Rear Sub Assy on the unit, and make sure that Panel Rear Sub Assy is located on correct position.
Press the Panel Rear Sub Assy with fingers

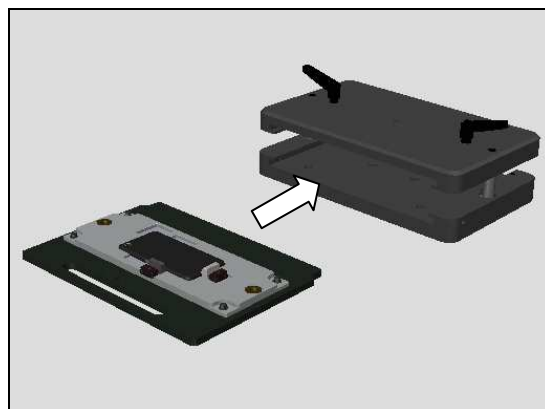


Place the unit on the Bottom Press Inlay.
The rear side up and main camera is located at left / bottom of the Bottom Press Inlay (refer to red arrow).

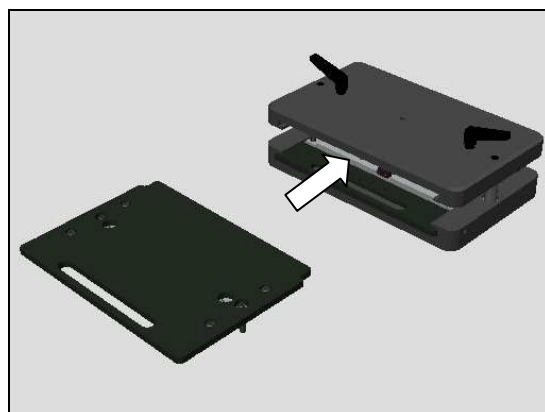


Reassembly

Insert the Bottom Press Inlay to the Generic Press Tool.



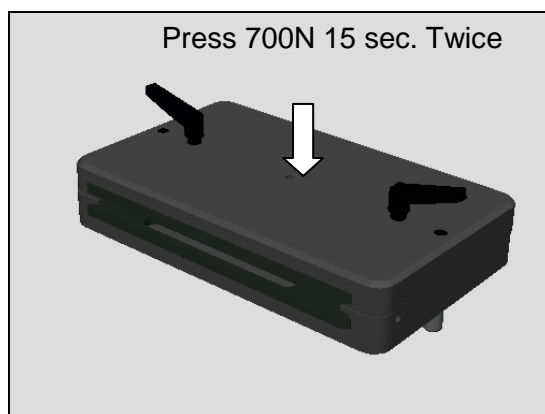
Inset the Rear Panel Press Top Inlay to the Generic Press Tool.



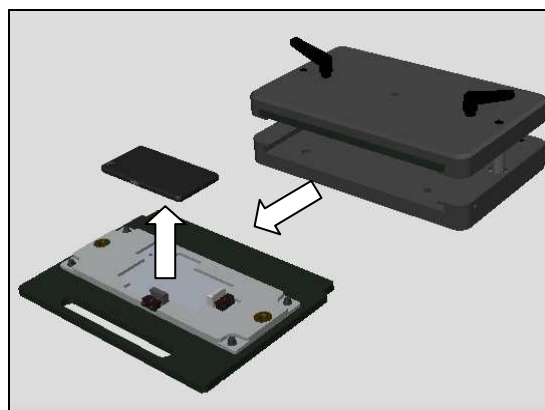
Press it with pressure value of 700N (+/- 50N) for 15 second **twice**.

Follow the instruction in 1003-9107 Tool Catalogue – mechanical and document Toothed Rack Press Instruction for use.

Press 700N 15 sec. Twice

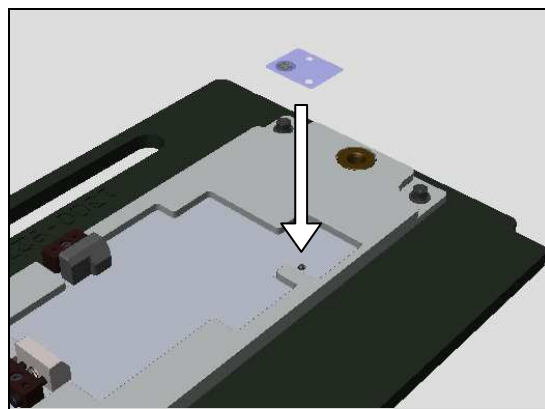


Remove the Rear Panel Press Top Inlay, and take out the unit.

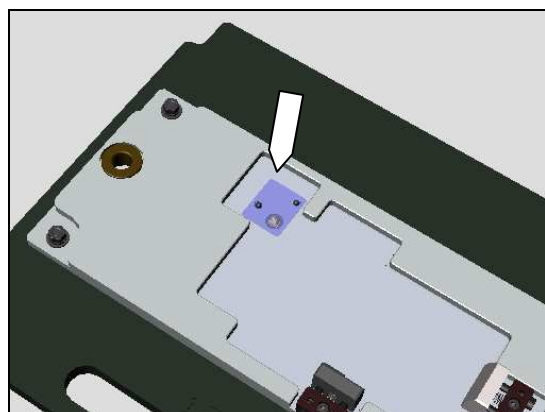


6.24 Label NFC

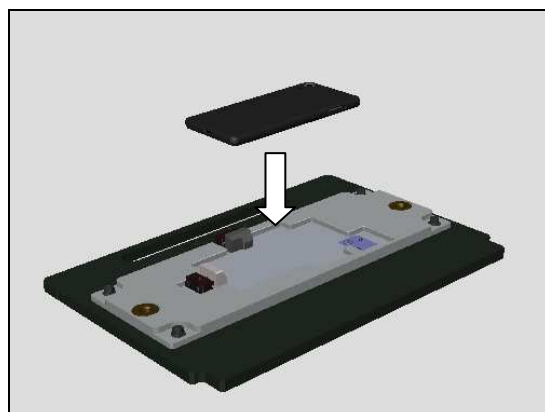
Remove the release sheet of the Label NFC and, place on the Bottom Press Inlay.



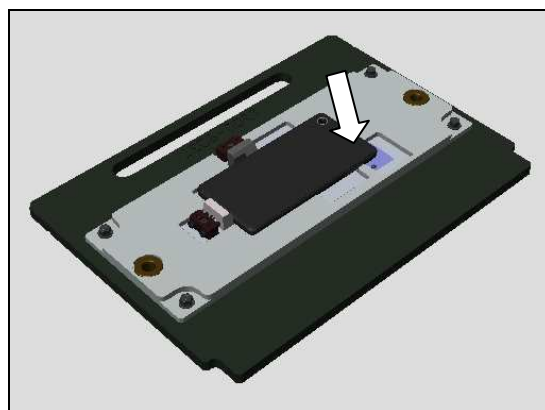
Make sure that Label NFC is placed on the correct position.



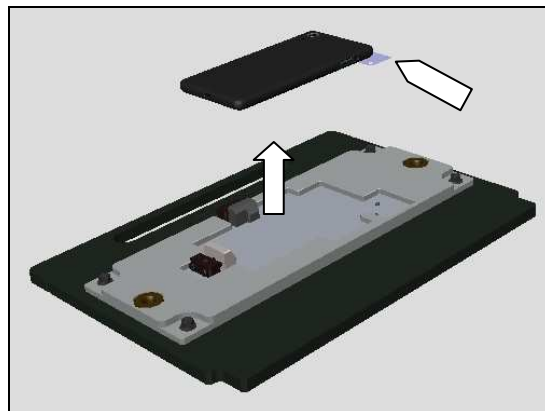
Place the unit on the Bottom Press Inlay.



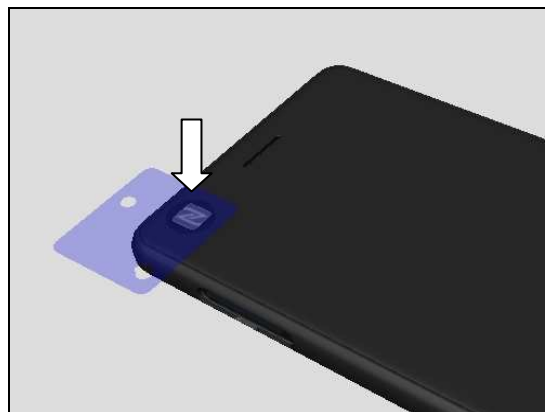
Press the unit to paste the Label NFC.



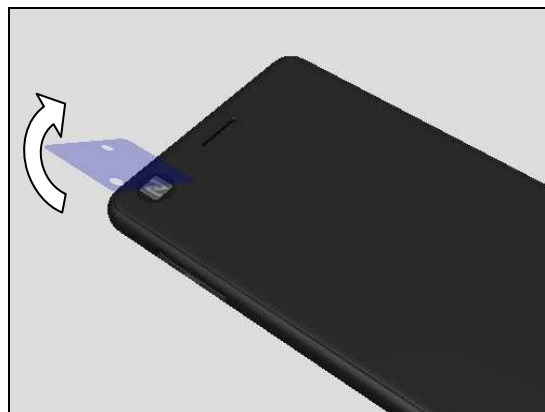
Take out the unit from Bottom Press Inlay, and make sure to affix the Label NFC.



Press the Label NFC with fingers to paste.



Remove the separator sheet.



6.25 Cap Tray Assy

Insert the Cap Tray Assy to the unit.



7 Battery Reuse Instruction

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

7.1 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 battery (green circled portion).



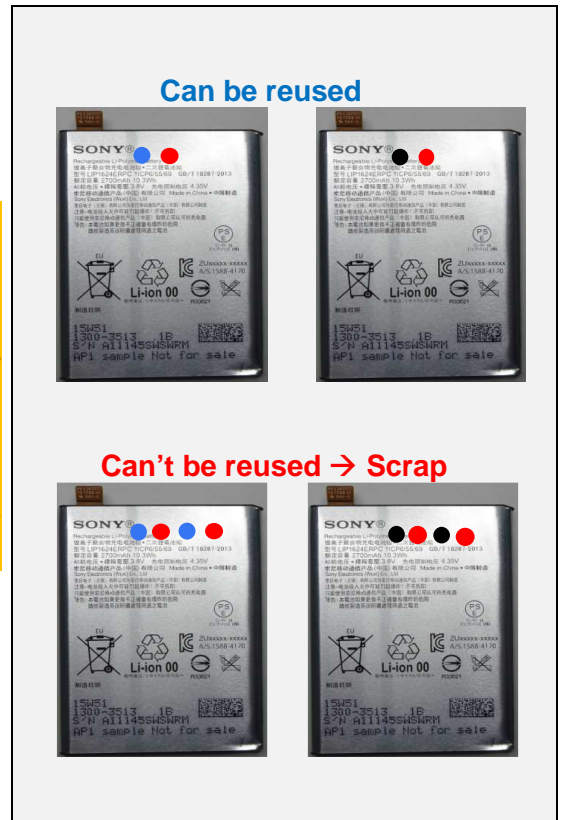
7.2 Dot Mark Check

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 two (2) red dots marking, and scrap it.

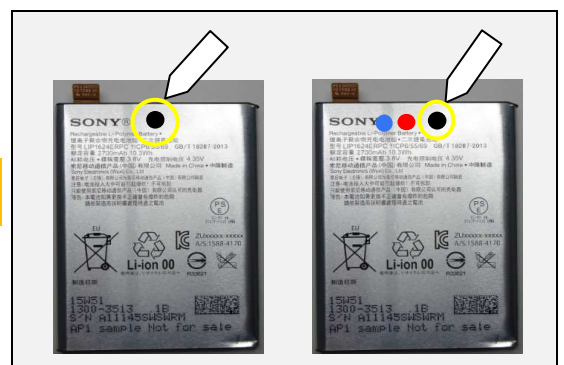
Blue and black dot indicates Battery had been removed from the unit, and red dot indicates Battery had been reinstalled (reused).

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



7.3 Dot Marking 1

If no dot marking on the Battery, put black dot marking with permanent pen.



Battery Reuse Instruction

7.4 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:

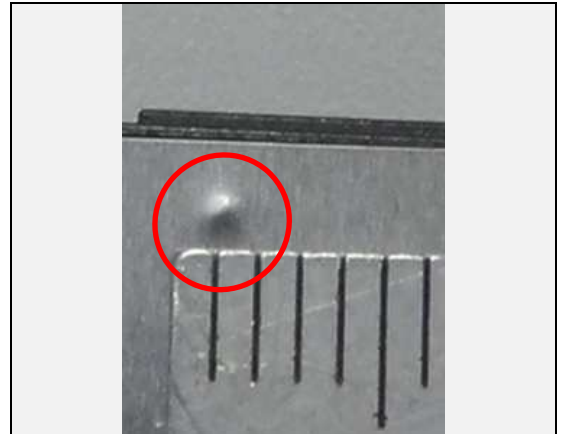
Surface is bulged as lined by foreign material is located between Al sheet and battery cell housing.



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:

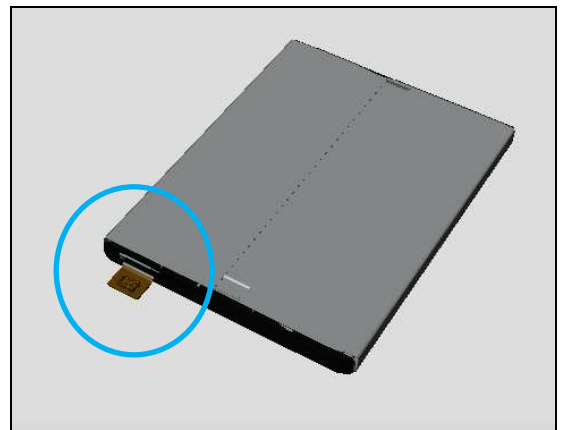
A slight line located at the border of battery cell and frame.



7.5 BtB Connector Check

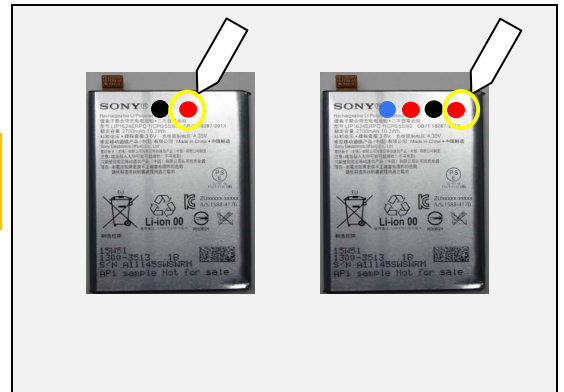
Check if BtB connector has damages.

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

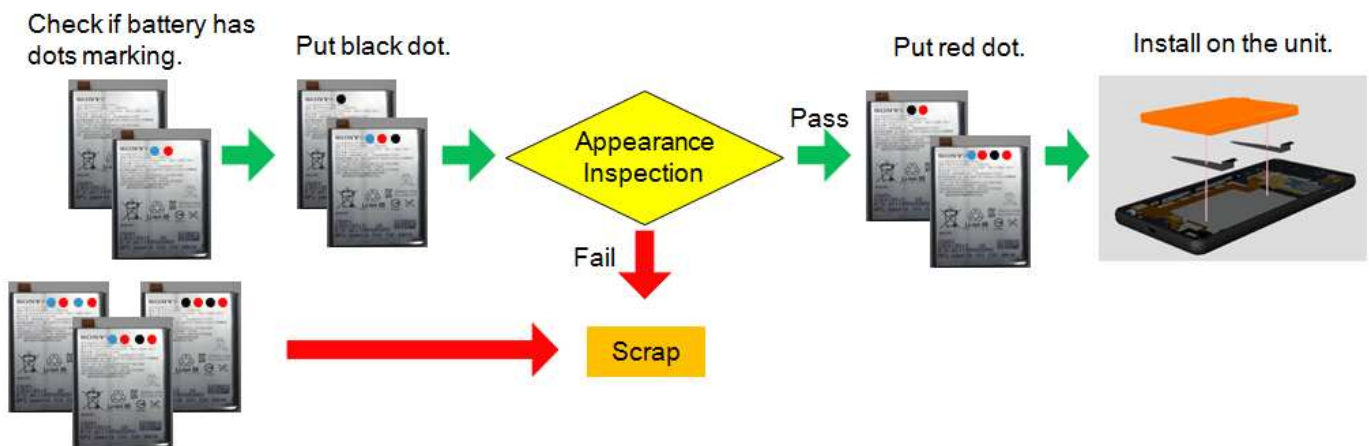


7.6 Dot Marking 2

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



Overall procedure for Battery Reusing



8 Revision History

Rev.	Date	Changes / Comments
1	2016-Jun-03	Initial release
2	2016-Jun-14	Added supplementary instruction on 6.5 Reassembly
3	2016-Aug-17	Update Battery Reuse Instruction
4	2016-Aug-30	Update Mandatory Replacement Parts List