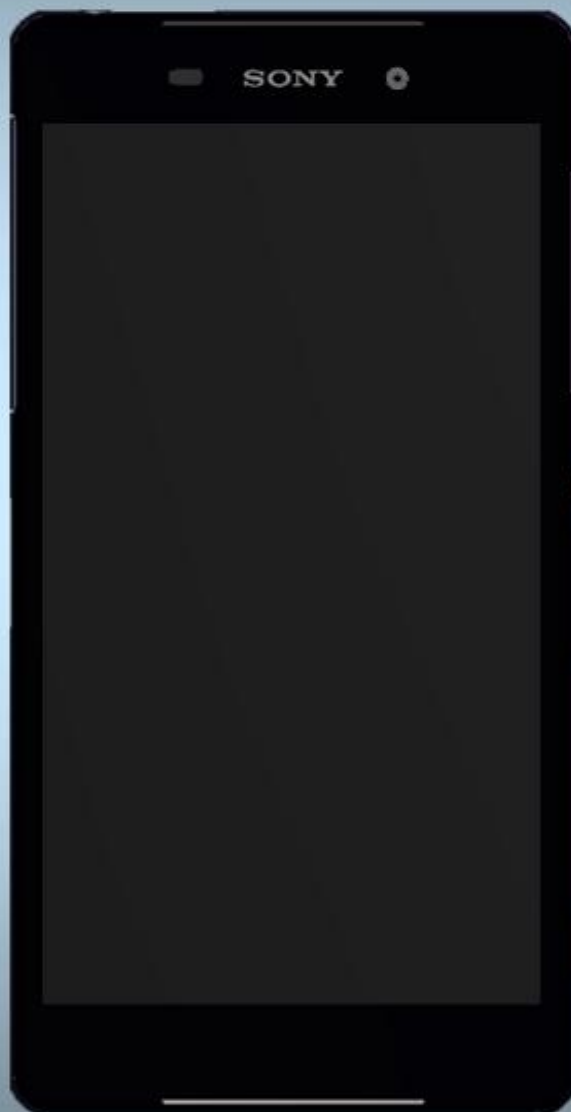


SONY

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Working Instructions

- mechanical -



Xperia™ Z2a

D6563

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

1 Exterior Views

1.1 D6563



2 Tools

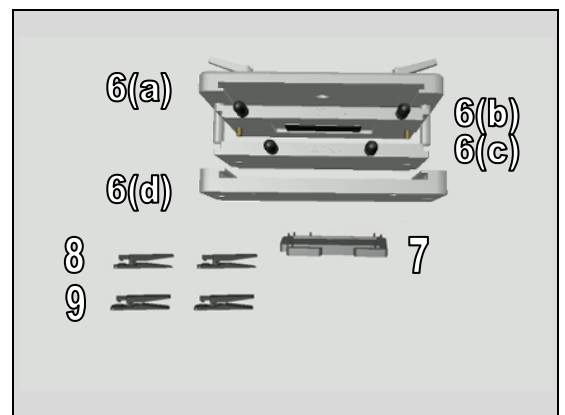
SPECIAL TOOLS

1. Torque Screwdriver
2. Front Opening Tool
3. Bits (JCIS No 0)
4. Flex Film Assembly Tool
5. Guitar Pick



- 6a & d. Top and Bottom Press
- 6b & c. Press inlay

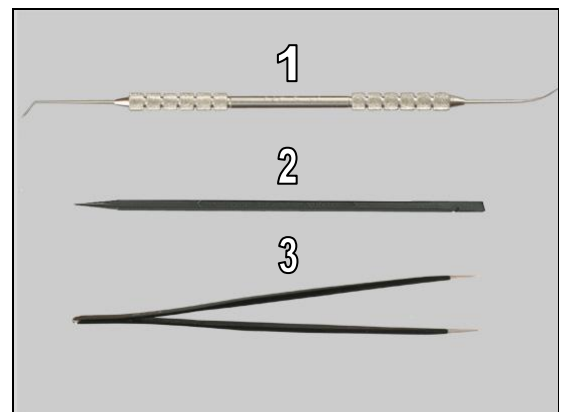
7. Rear Panel Adhesive Align Fixture
8. Earspeaker/Loudspeaker Press tool
9. Holder Receiver/Speaker Press tool



For part no's on the tools above, refer to the 'Tools Catalogue/Matrix'.

STANDARD TOOLS

1. Dentist Hook
2. Nylon Pointer
3. Tweezers



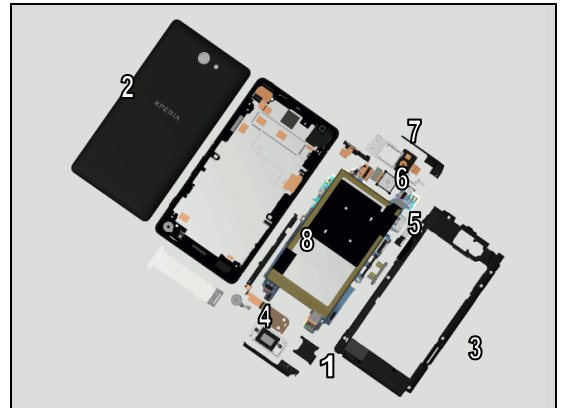
4. Suction Cup



3 Disassembly

The disassembly is done in the following order:

1. SIM Tray
2. Back Panel
3. Holder Battery
4. FPC Key & Holder Speaker
5. Spacer USB & Plate USB
6. Camera & Holder Receiver
7. Top FPC
8. Main PBA with Battery



3.1 SIM Tray

Open the Cap SIM and remove the SIM Tray.



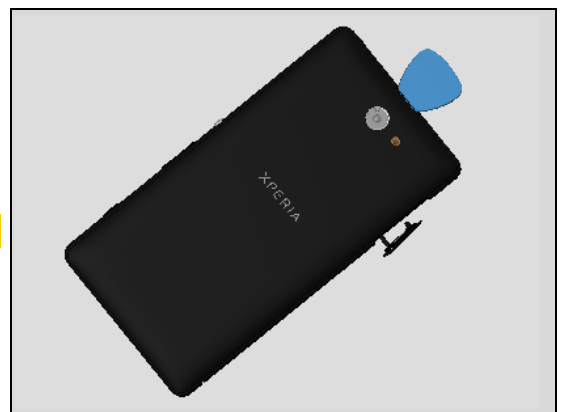
3.2 Back Panel

Open the Cap USB, and insert 2mm of the Guitar Pick.



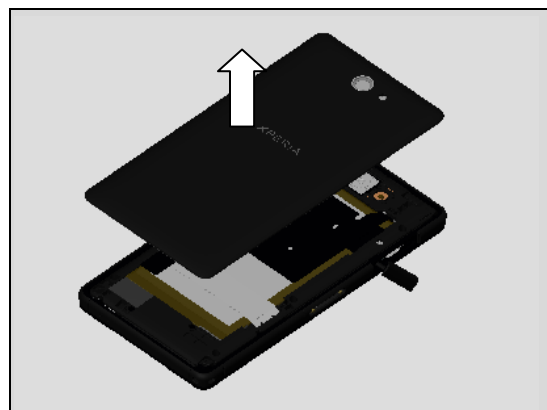
Slide along all sides.

Be careful not to damage the camera!



Disassembly

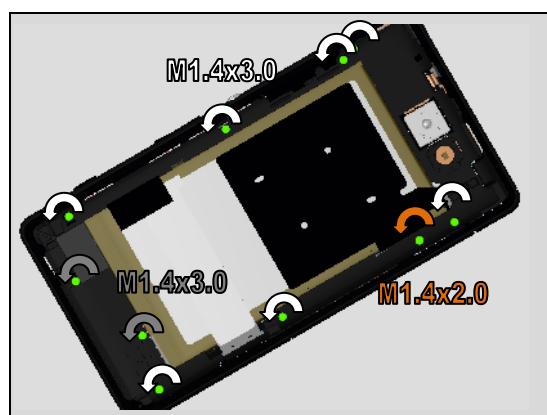
Remove the Back Panel.



3.3 Holder Battery

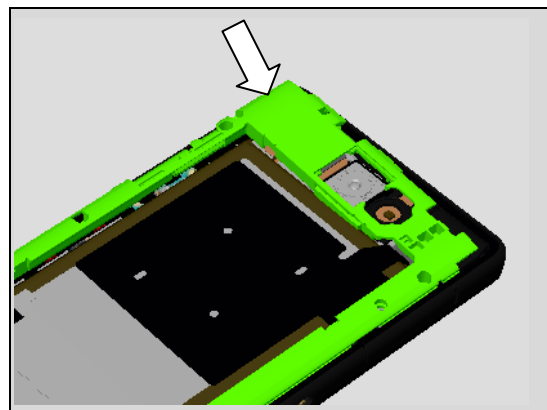
Remove 10 Screws by using a screwdriver with Bits (JCIS No 0).

Scrap! Not to be reused!



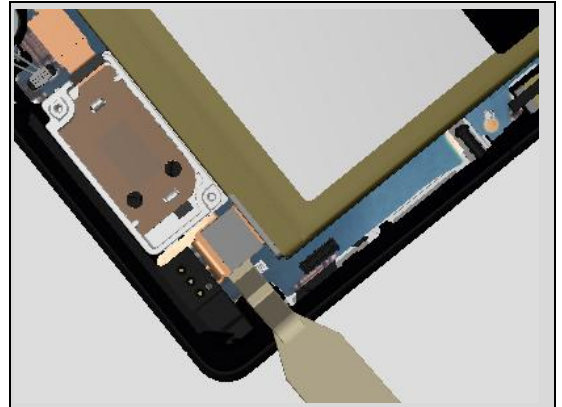
Remove the Holder Battery by lifting up the upper-left corner.

Make sure not to deform the Holder Battery!



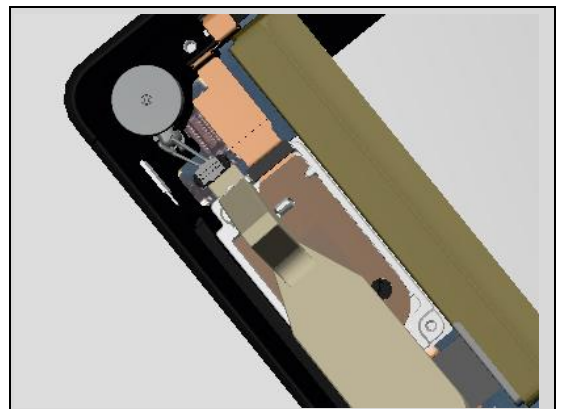
3.4 Battery (connector)

Unsnap the Battery connector.



3.5 Vibrator

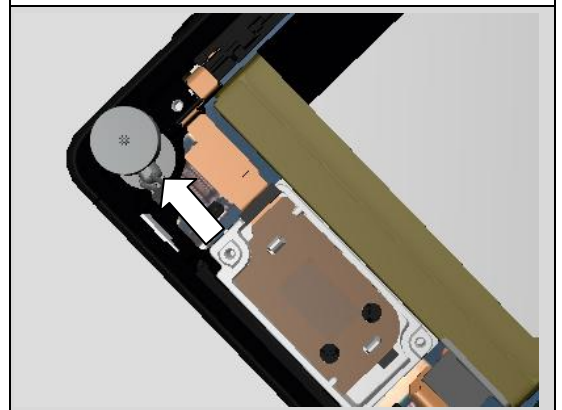
Unsnap the Vibrator connector.



Remove the Vibrator hooking the connector joint.

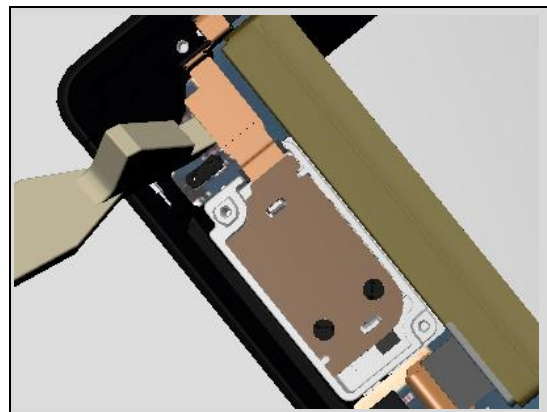
Scrap! Not to be reused.

If there is no problem with the Vibrator, you don't need to remove it!

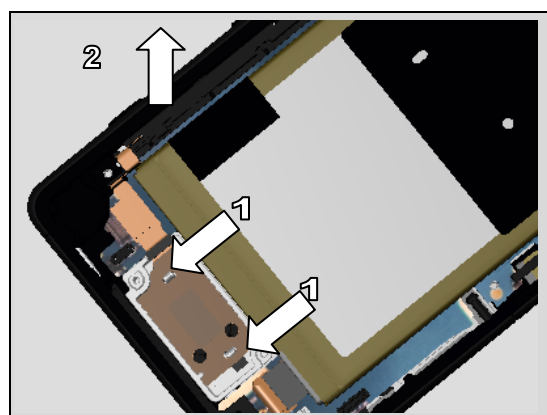


3.6 FPC Key

Unsnap the FPC Key Connector.

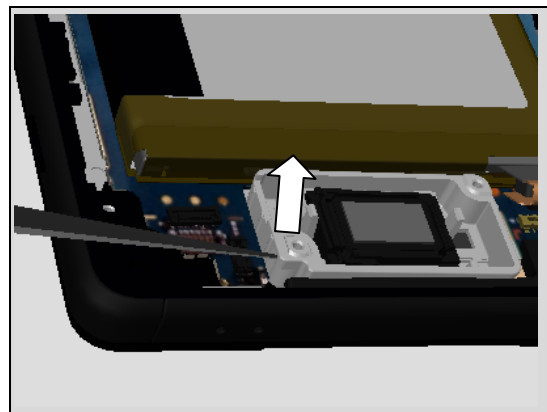


Unsnap the two hooks from the Holder Speaker.
Lift up the FPC Key from the position as shown in the picture.



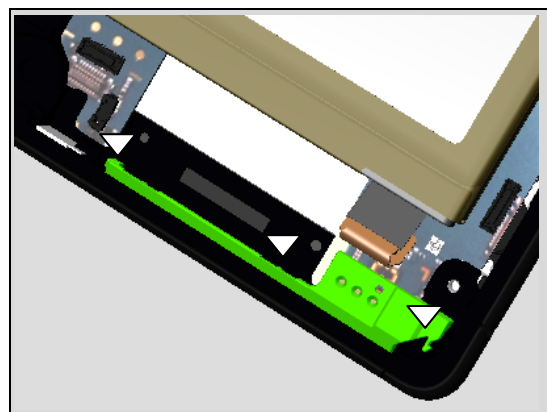
3.7 Holder Speaker

Remove the Holder Speaker by pulling upwards from the ditch on the left side using Nylon Pointer.



3.8 Main Antenna

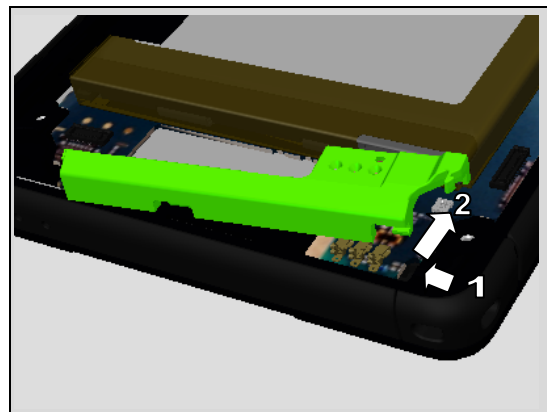
There are three hooks securing the Main Antenna as shown.



Disassembly

Remove the Main Antenna following the steps shown in the picture.

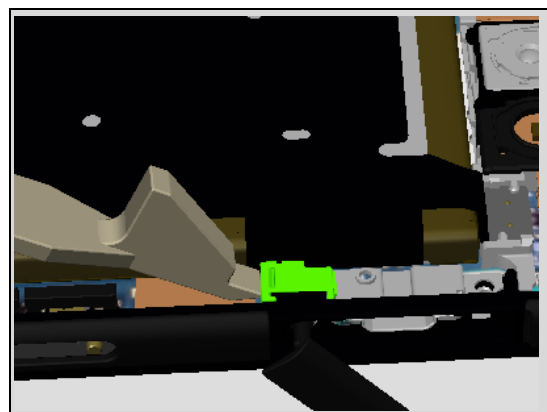
Do not scratch the silver print line!



3.9 Spacer USB

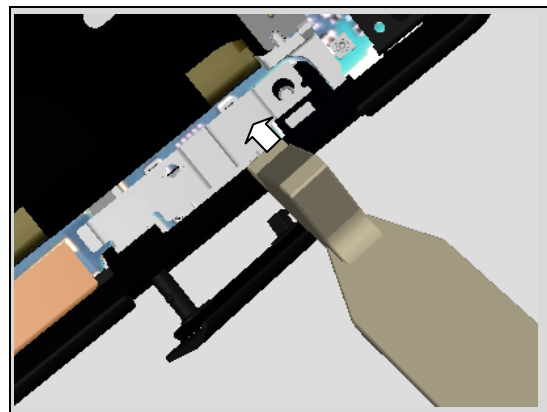
Detach to remove the Spacer USB from the Plate USB

Scrap! Not to be reused.



3.10 Plate USB

Remove the Plate USB.



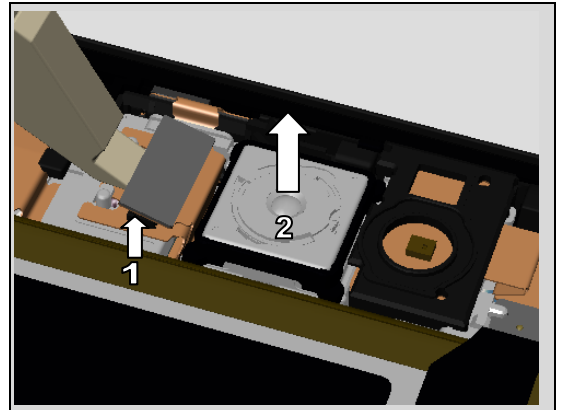
Disassembly

3.11 Camera & Holder Main Camera

Unsnap the connector of Camera.

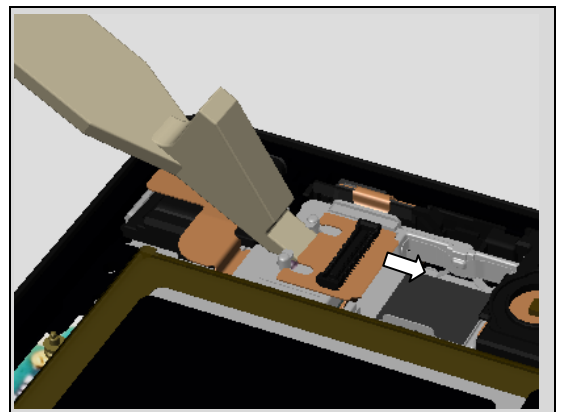
Remove the Camera with Holder Main Camera.

Do not touch the lens!

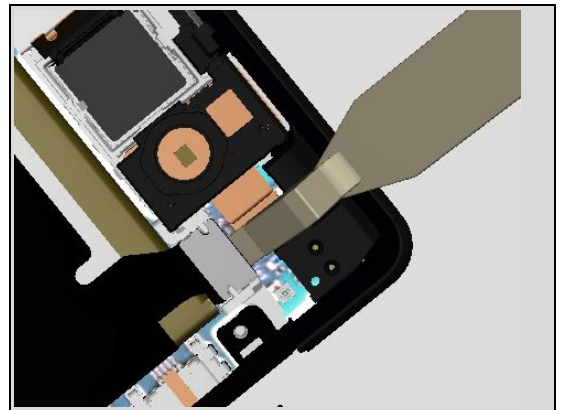


3.12 Holder Receiver

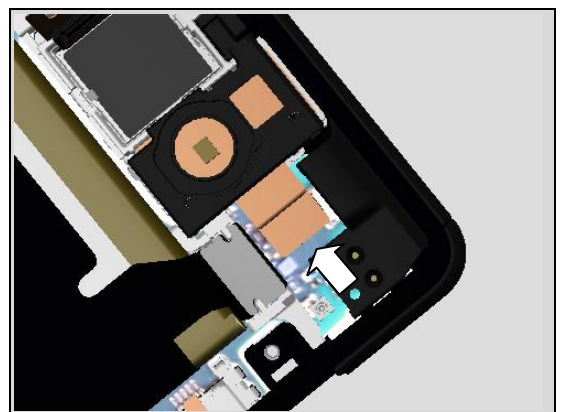
Push to release the FPC CAM Relay as shown direction.



Unsnap the connector of NFC Antenna.



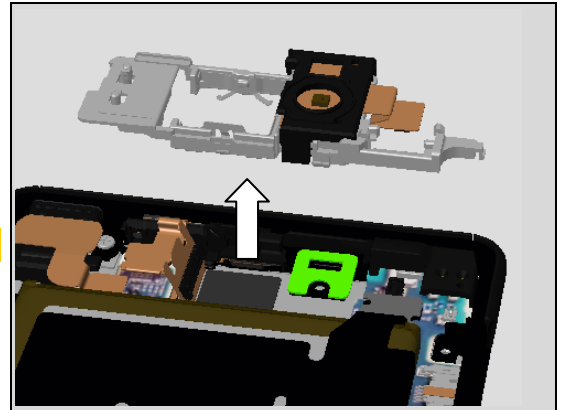
Unsnap the connector of FPC RCV



Disassembly

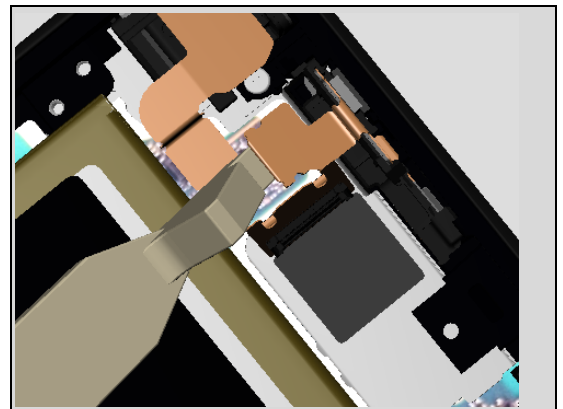
Remove the Holder Receiver.
Adhesive area is shown in green.

Scrap! Not to be reused.



3.13 FPC Top

Unsnap the connector of FPC Top.



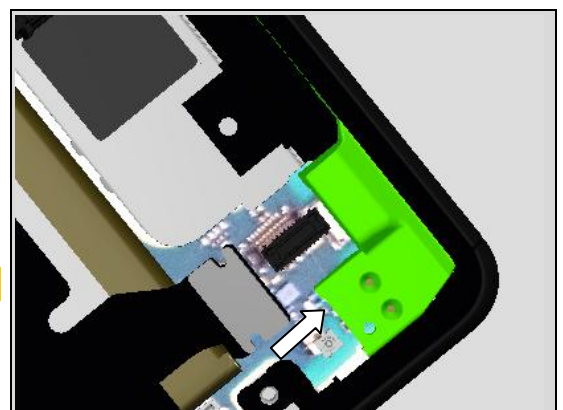
Remove the FPC Top from the right side.



3.14 Sub Antenna

Remove the Sub Antenna by fingers.

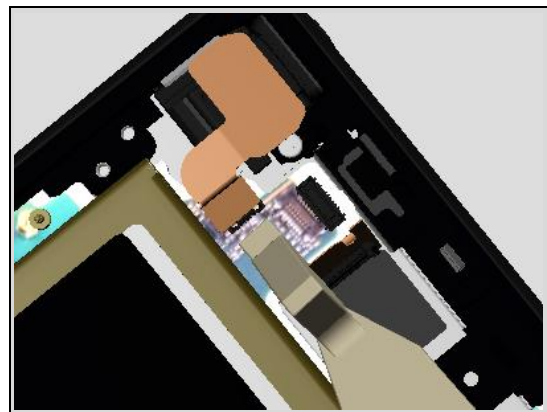
Do not scratch the Sub Antenna Surface!



Disassembly

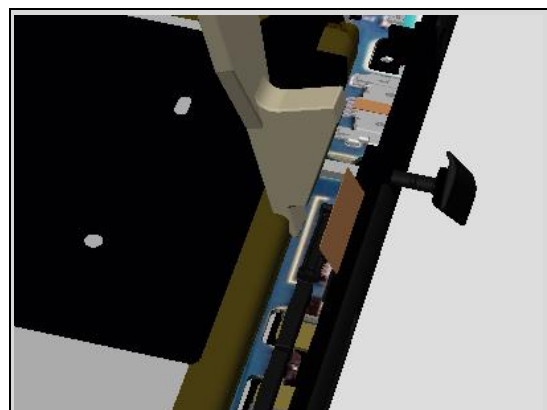
3.15 Main PBA

Unsnap the connector of FPC Audio Jack (Part of Cover Front).



Unsnap the connector of FPC LCD (Part of Cover Front).

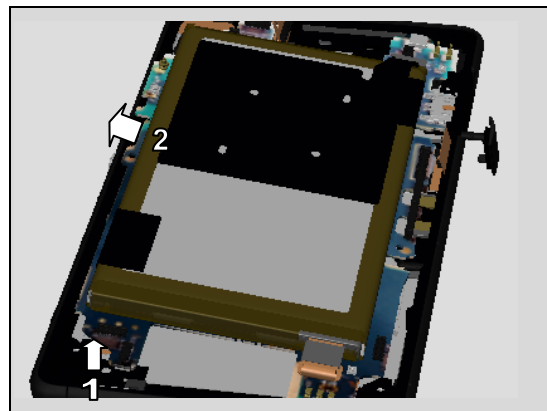
Do not damage the Battery!



Lift up the left side of the Main PBA together with the Battery.

Remove the Main PBA gently.

Do not damage the Battery!



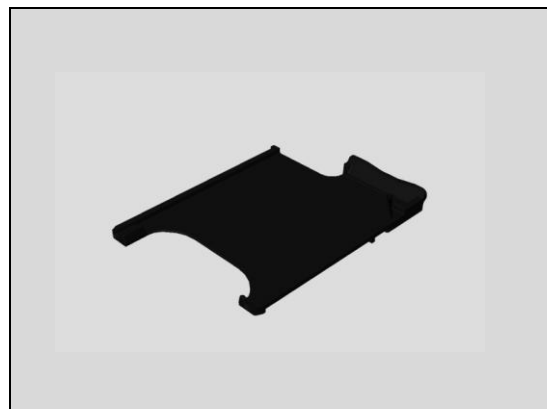
4 Replacement

4.1 SIM Tray

Follow the 3.1 Disassembly instructions!

Prepare the new SIM Tray.

Follow the 5.16 Reassembly instructions!



4.2 Back Panel & Adhesive Panel Back

Follow the 3.1 – 3.2 Disassembly instructions!

Prepare the new Back Panel with Adhesive Panel Back.

Follow the 5.15 – 5.16 Reassembly instructions!

Scrap! Do not reuse the Adhesive Panel Back.



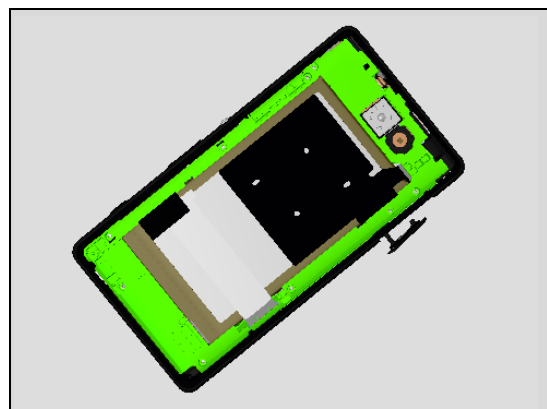
4.3 Holder Battery

Follow the 3.1 – 3.3 Disassembly instructions!

Prepare the new Screws.

Follow the 5.14 – 5.16 Reassembly instructions!

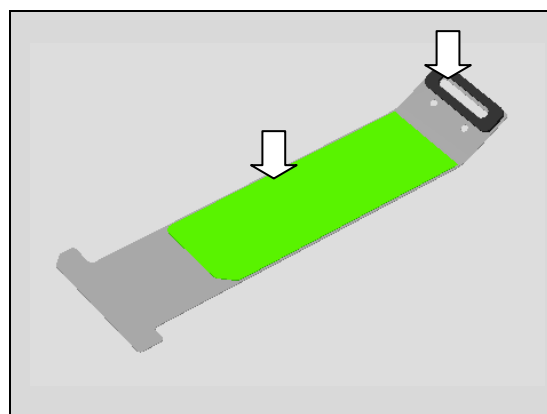
Scrap! Do not reuse the Screws.



4.4 Tray Label & Stopper Tray & Label MoP

Follow the 3.1 – 3.3 Disassembly instructions!

Prepare the new Tray Label & Stopper Tray & Label MoP.



Replacement

Insert into the Holder Battery.

Follow the 5.14 – 5.16 Reassembly instructions!

4.5 WLAN Antenna

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below.

Prepare the new Antenna WLAN.

Carry out the Installation as described below.

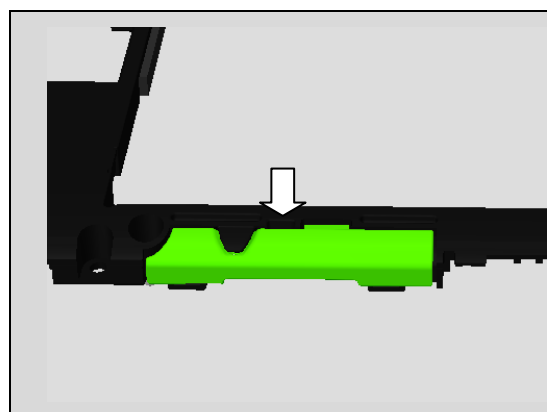
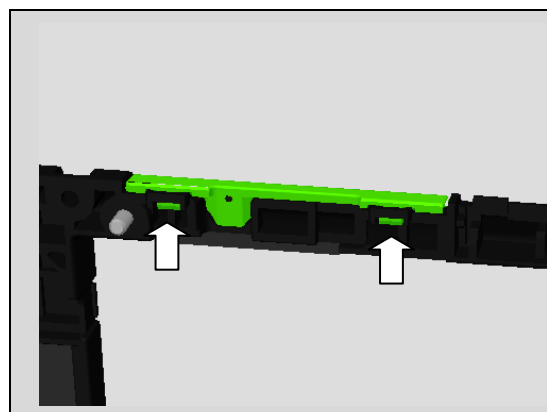
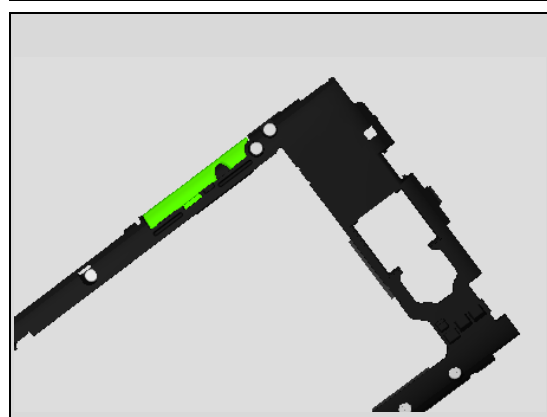
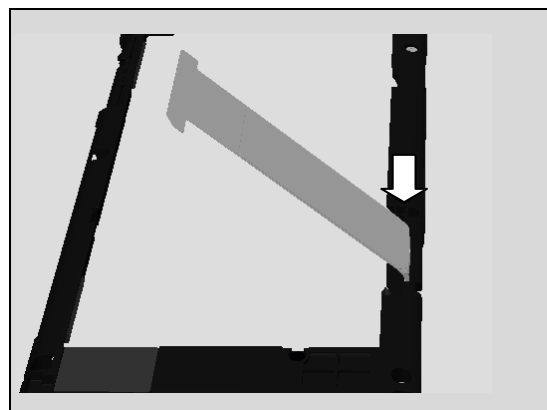
Follow the 5.14 – 5.16 Reassembly instructions!

REMOVAL

Unsnap the two claws.

Push the cavity shown by the arrow.

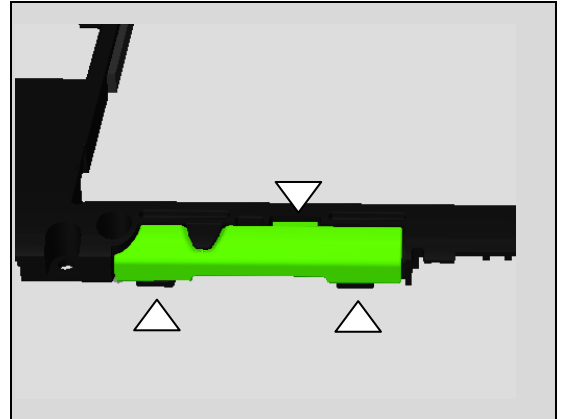
Do not scratch the silver print line.



Replacement

INSTALLATION

Attach the three claws.



4.6 Vibrator

Follow the 3.1 – 3.5 Disassembly instructions!

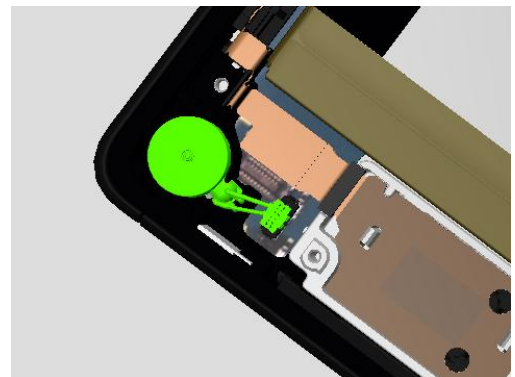
Remove the old adhesive.

Prepare the new Vibrator & Adhesive Vibrator.

Place the new adhesive to the cavity without any wrinkle.

Follow the 5.12 – 5.16 Reassembly instructions!

Scrap! Do not reuse the Vibrator.



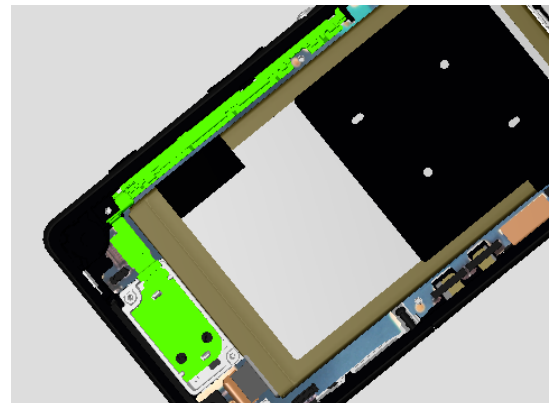
4.7 FPC Key

Follow the 3.1 – 3.4 & 3.6 Disassembly instructions!

Prepare the new FPC Key.

Follow the 5.11 & 5.13 – 5.16 Reassembly instructions!

Scrap! Do not reuse the FPC Key.



4.8 Holder Speaker & Bottom Speaker

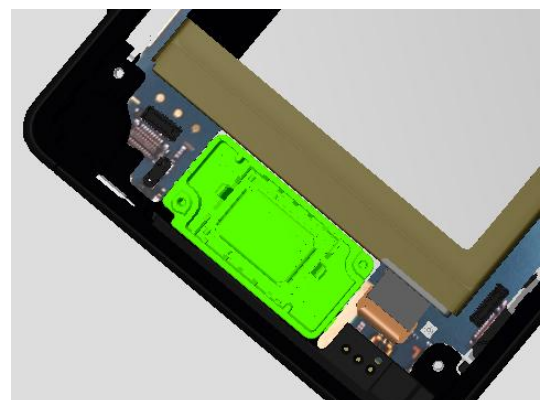
Follow the 3.1 – 3.4 & 3.6 – 3.7 Disassembly instructions!

Carry out the Removal as described below.

Carry out the Installation as described below.

Follow the 5.14 – 5.16 Reassembly instructions!

This operation affects the water resistant performance.

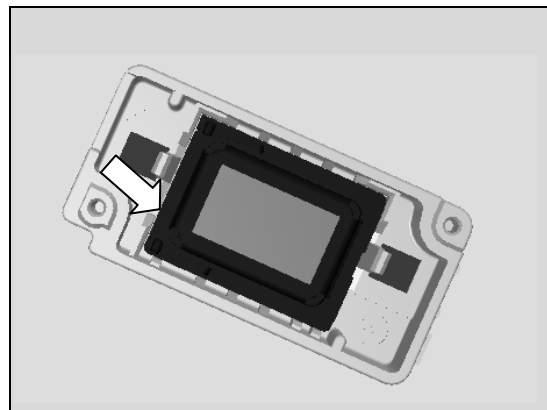


Replacement

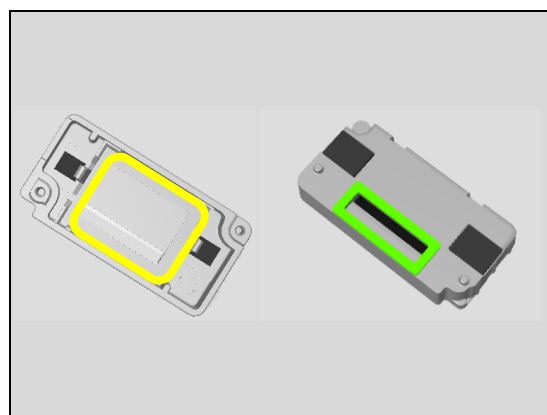
REMOVAL

Remove the old Bottom Speaker from the pointed area.

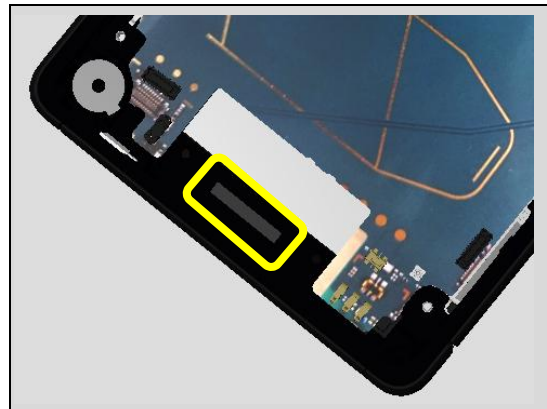
Scrap! Do not reuse the Bottom Speaker & Cushion Speaker.



Cleanup carefully all the remains and old Adhesive Speaker and Adhesive Holder Speaker.



Clean carefully opposite area on the Cover Front.



INSTALLATION

Prepare the new Adhesive Holder Speaker & Holder Speaker & Adhesive Speaker & Bottom Speaker & Cushion Speaker.

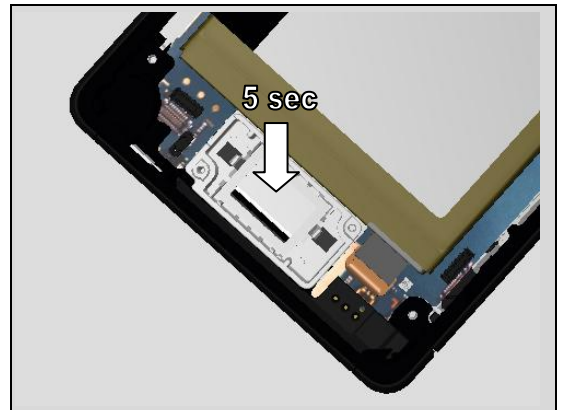
Replacement:

Place the new Adhesive Holder Speaker to the Cover Front without any wrinkle.

Place the new Adhesive Speaker to the Holder Speaker without any wrinkle.

Place the Holder Speaker.

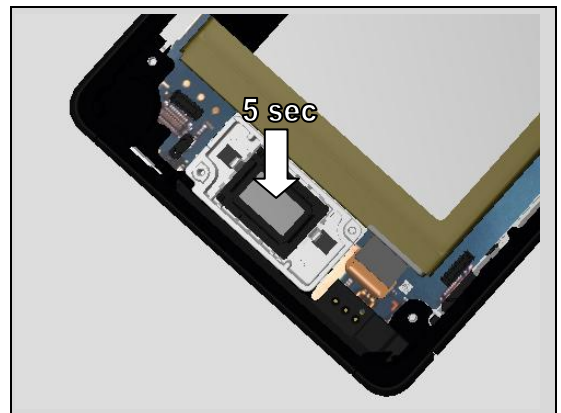
Press 5 sec using Press Tool Holder Speaker.



Place the new Bottom Speaker to the Holder Speaker.

Place the new Cushion Speaker to the Bottom Speaker.

Press 5 sec using Press Tool Loud Speaker.

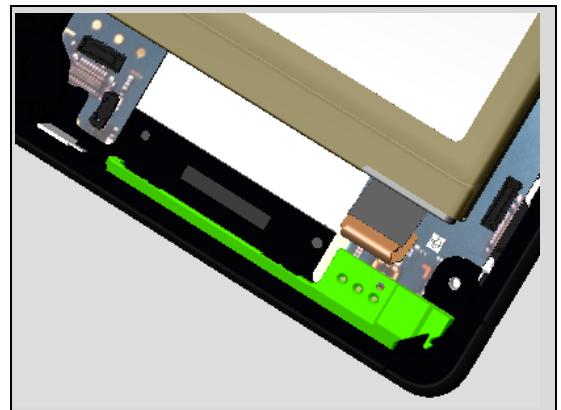


4.9 Main Antenna

Follow the 3.1 – 3.4 & 3.6 – 3.8 Disassembly instructions!

Prepare the new Main Antenna.

Follow the 5.9 - 11 & 5.13 – 5.16 Reassembly instructions!



4.10 Spacer USB & Plate USB

Follow the 3.1 – 3.4 & 3.9 – 3.10 Disassembly instructions!

Prepare the new Spacer USB & Plate USB.

Follow the 5.7 - 8 & 5.13 – 5.16 Reassembly instructions!



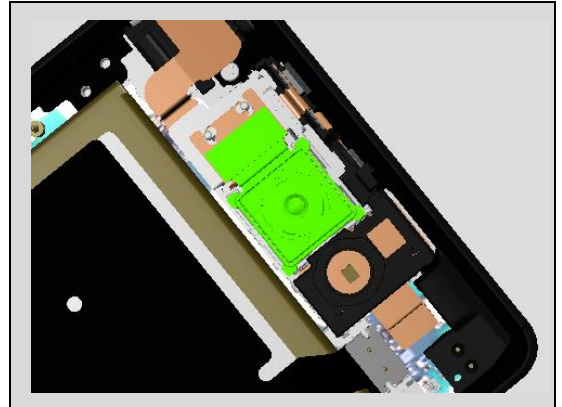
Replacement

4.11 Camera

Follow the 3.1 – 3.4 & 3.11 Disassembly instructions!

Prepare the new Holder Main Camera & Main Camera.

Follow the 5.5 & 5.13 – 5.16 Reassembly instructions!



4.12 Holder Receiver & Holder Top & Top Speaker

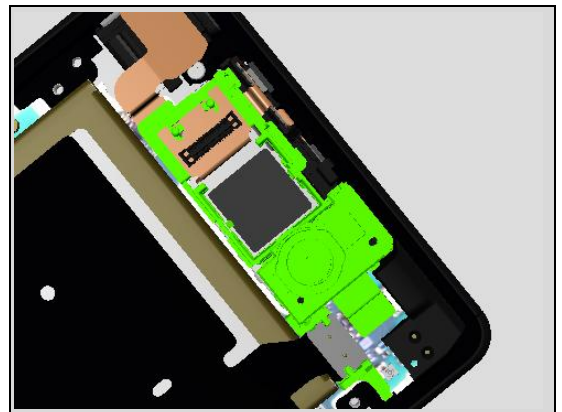
Follow the 3.1 – 3.4 & 3.11 – 3.12 Disassembly instructions!

Carry out the Removal as described below.

Carry out the Installation as described below.

Follow the 5.4 – 5.6 & 5.13 – 5.16 Reassembly instructions!

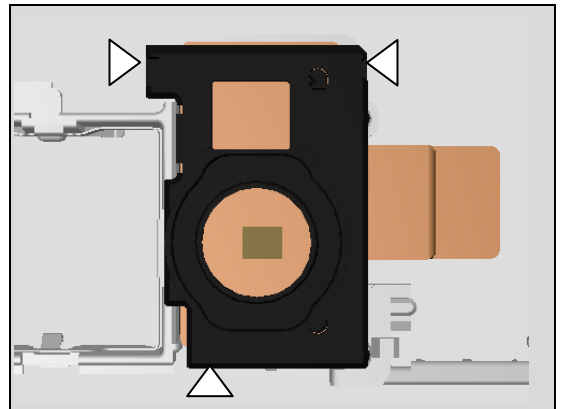
This operation affects the water resistant performance.



REMOVAL

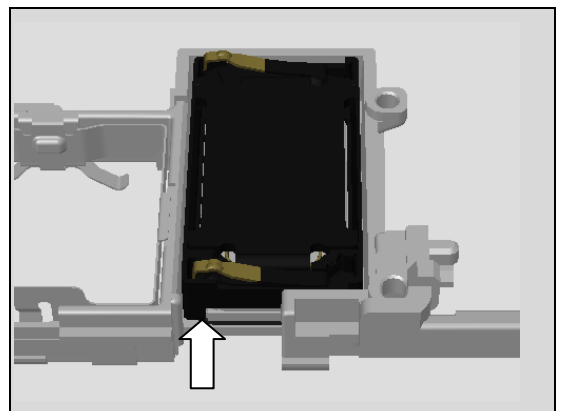
Unsnap three claws carefully.

Remove the Holder Top.



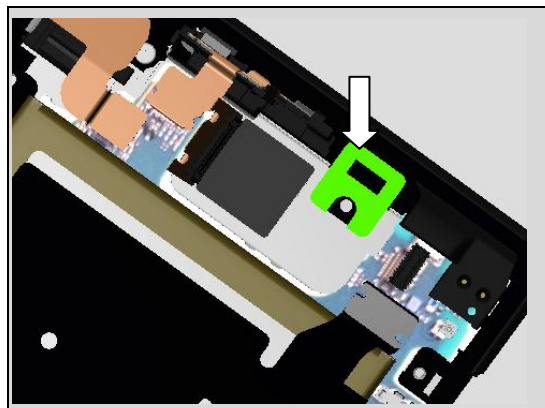
Remove the Top Speaker from the pointed area.

Scrap! Do not reuse the Top Speaker.



Replacement:

Cleanup carefully all the adhesive remains on Cover Front.



INSTALLATION

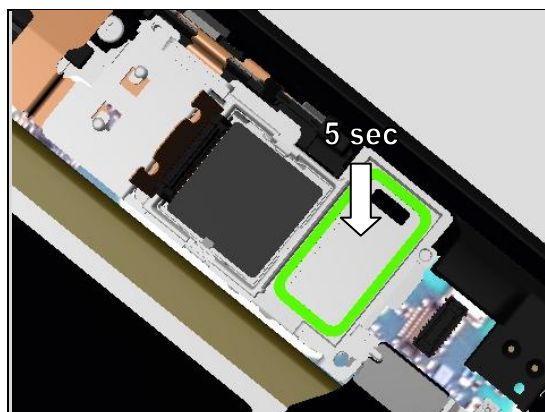
Prepare the new Holder Receiver & Adhesive Holder Receiver & Top Speaker & Adhesive Receiver & Cushion Speaker.

Place the new Adhesive Holder Receiver to the Cover Front without any wrinkle.

Place the new Adhesive Receiver to the new Holder Receiver without any wrinkle.

Place the Holder Receiver.

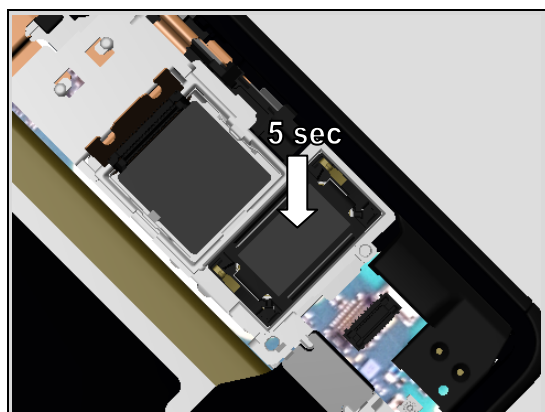
Press 5 sec using Press Tool Holder Receiver.



Place the new Top Speaker to the Holder Receiver.

Place the new Cushion Speaker to the Top Speaker.

Press 5 sec using Press Tool Ear Speaker.



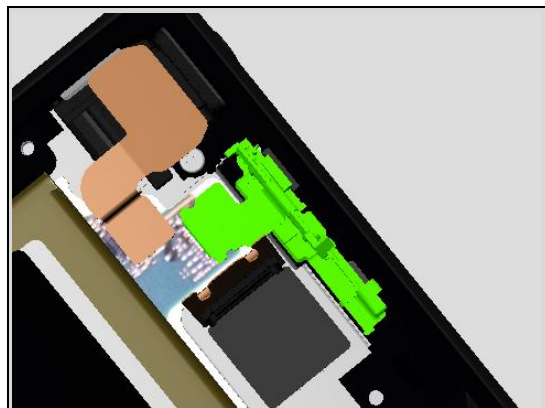
Replacement

4.13 FPC Top

Follow the 3.1 – 3.4 & 3.12 – 3.13 Disassembly instructions!

Prepare the new FPC Top.

Follow the 5.3 – 5.6 & 5.13 – 5.16 Reassembly instructions!



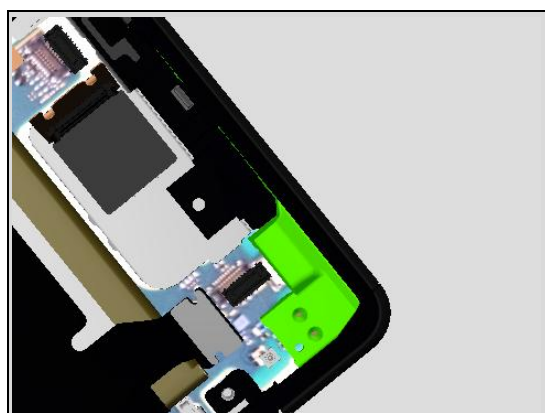
4.14 Sub Antenna

Follow the 3.1 – 3.4 & 3.12 – 3.14 Disassembly instructions!

Prepare the new Adhesive Sub Antenna.

Carry out the Installation as described below.

Follow the 5.2 – 5.6 & 5.13 – 5.16 Reassembly instructions!



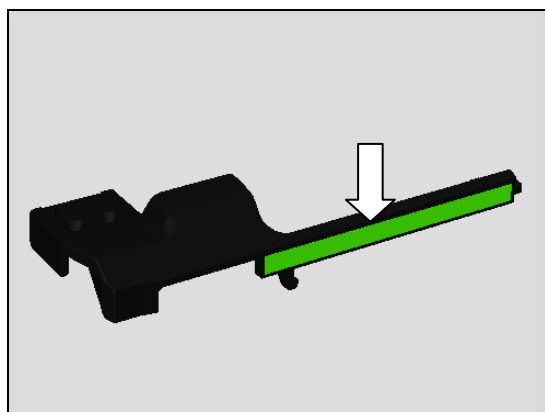
INSTALLATION

Cleanup the old adhesive carefully.

Place the new Adhesive Sub Antenna to Sub Antenna without any wrinkle.

Do not scratch the silver print line!

If you take new Sub Antenna, you don't need to change the Adhesive Sub Antenna!

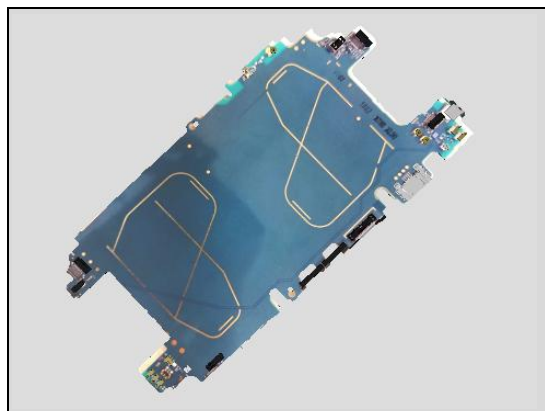


4.15 Main PBA

Follow the 3.1 – 3.4 & 3.6 – 3.8 & 3.11 – 3.15 Disassembly instructions!

Carry out the Removal as described below.

Carry out the Installation as described below.

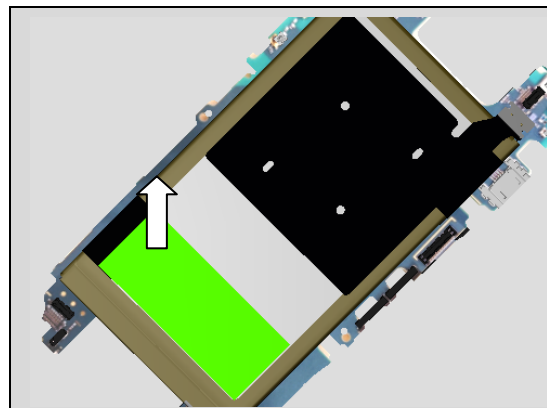


Replacement

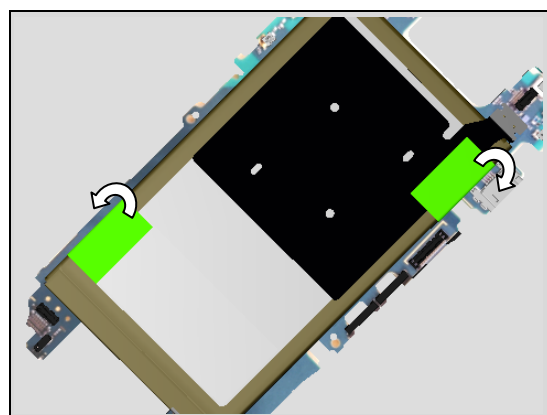
REMOVAL

Peel off the Sheet Tab.

Scrap! Do not reuse the Sheet Tab.

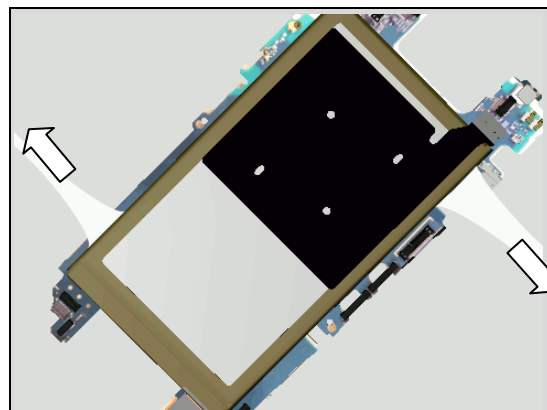


Turn over the tag area of the Adhesive Battery.

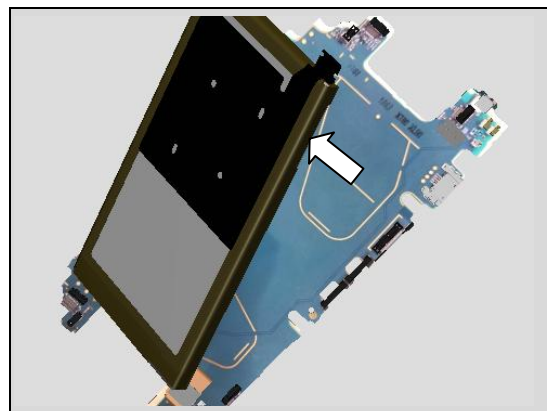


Pull out the Adhesive Battery in horizontal direction very slowly, very carefully.

Make sure to keep horizontal direction!



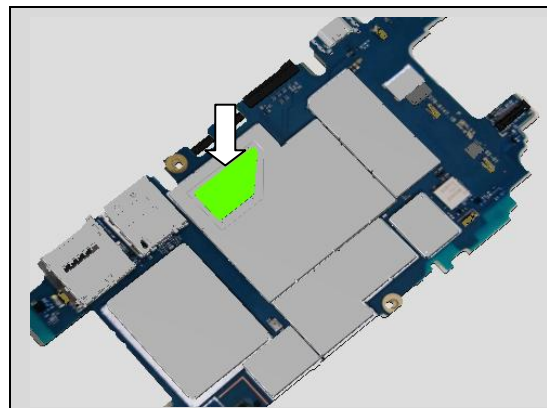
After pulling out the entire adhesive, the Battery is removable.



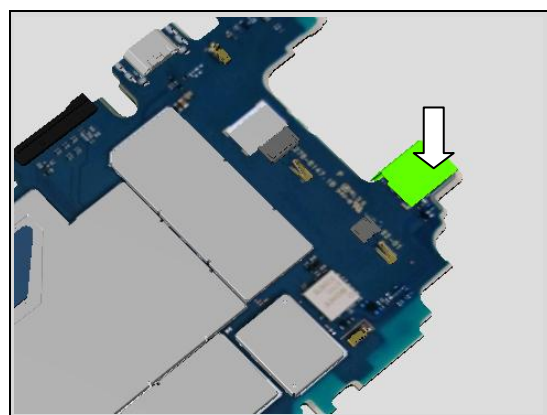
Replacement

INSTALLATION

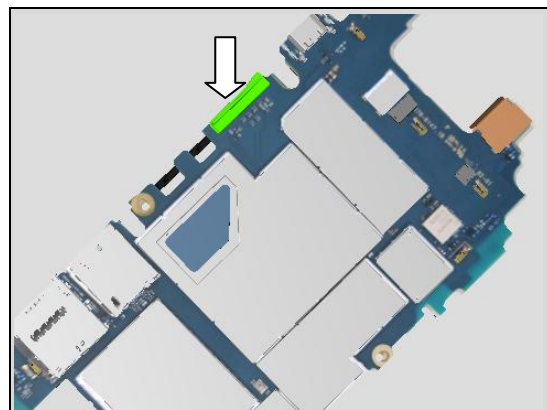
Prepare the new Main PBA.
Place the new Sheet Thermal MSM



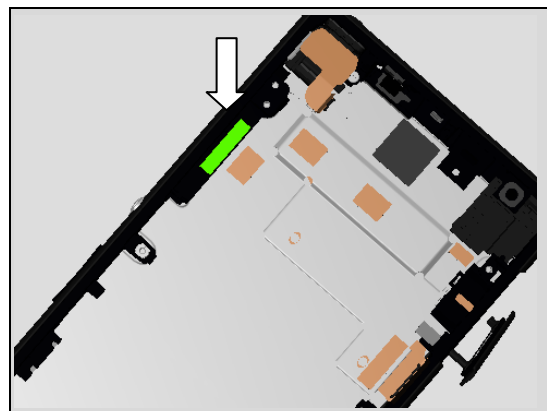
Connect the connector of the FPC CAM Relay.



Place the new Spacer B to B LCD.

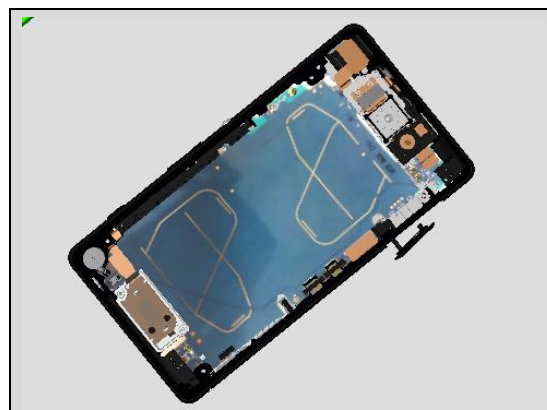


Cleanup the old Adhesive PBA Main carefully.
Place the new Adhesive PBA Main.

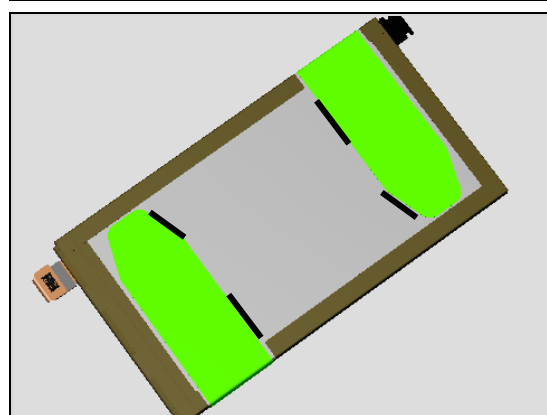


Replacement

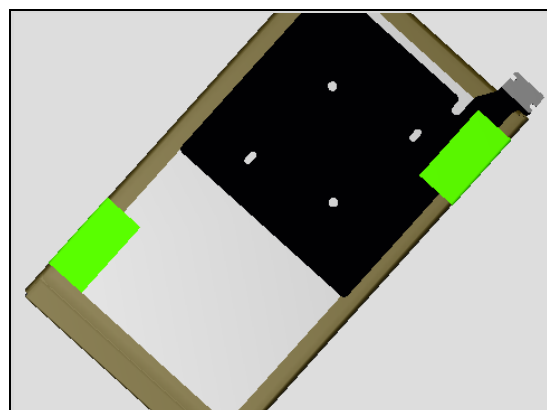
Follow the 5.1 – 5.12 Reassembly instructions without the Battery!



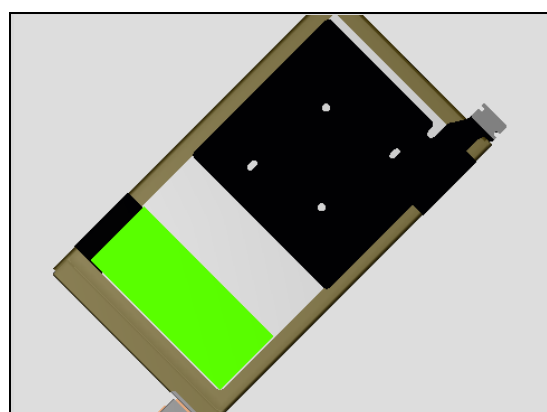
Place the new Adhesive Battery along the guide line.



Turn over the tab of the Adhesive Battery.

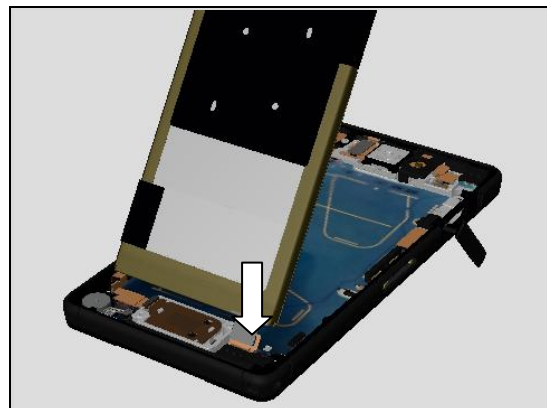


Place the New Sheet Tab on the silver area of the Battery.

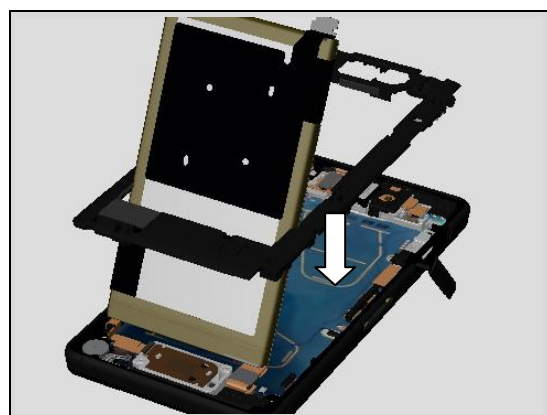


Replacement

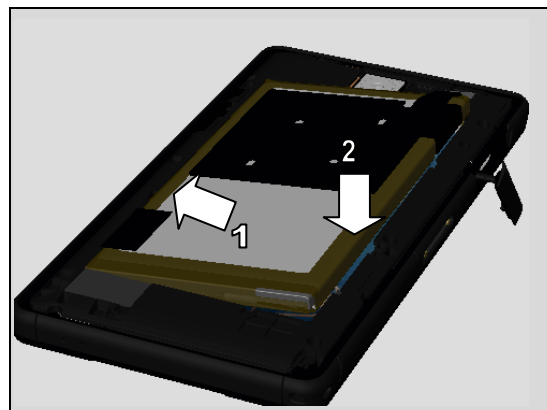
Peel off the release paper of the Adhesive Battery.
Connect the Battery connector.



Let the Holder Battery go through.
Place the Holder Battery.



Place the Battery in sequence.
Remove the Holder Battery.



Connect the NFC connector.
Follow the 5.14 – 5.16 Reassembly instructions!



Replacement

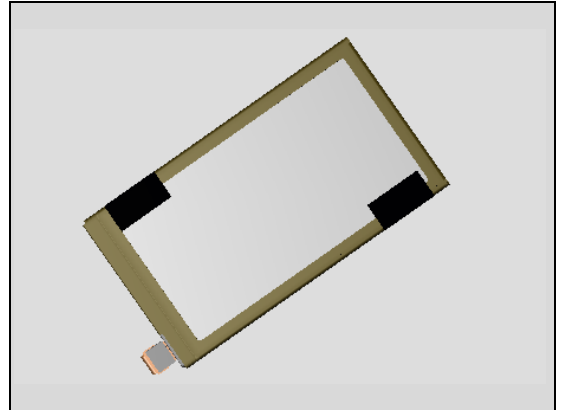
4.16 Battery

Follow the 3.2 – 3.4 & 3.6 – 3.8 & 3.11 – 3.15 Disassembly instructions!

Carry out the Removal in 4.16 Main PBA.

Prepare the new Battery.

Carry out the Installation in 4.16 Main PBA.



4.17 Magnetic charger connector

Follow the 3.2 – 3.4 & 3.6 – 3.8 & 3.11 – 3.15 Disassembly instructions!

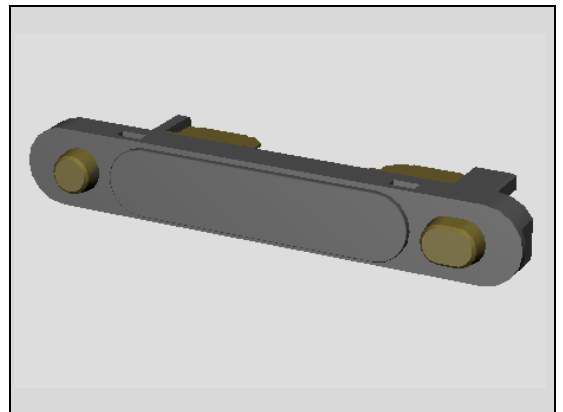
Carry out the Removal as described below.

Prepare the new Magnetic charger connector.

Carry out the Installation as described below.

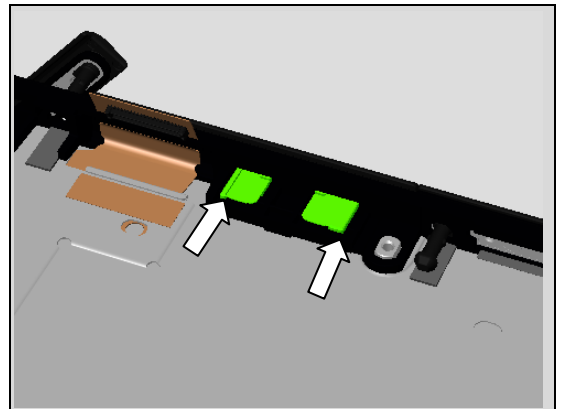
Follow the 5.1 – 5.6 & 5.13 – 5.16 Reassembly instructions!

This operation affects the water resistant performance!



REMOVAL

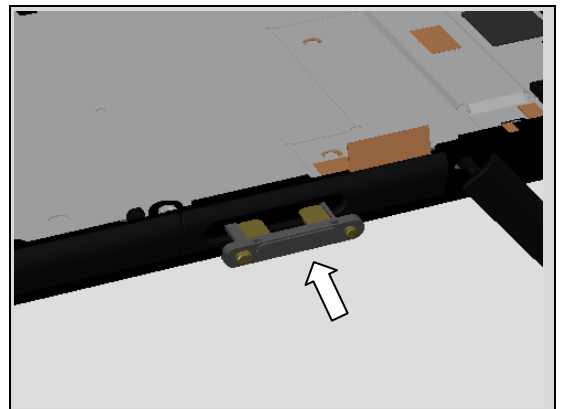
Remove the Magnetic charger connector pushing it from inner side.



INSTALLATION

Place the new Magnetic charger connector.

Press 10 sec firmly.

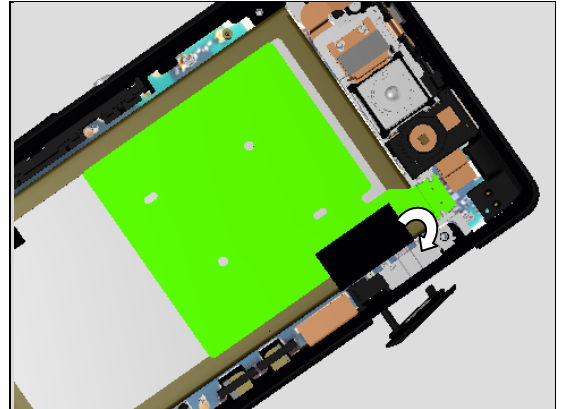


Replacement:

4.18 NFC Antenna

Follow the 3.2 – 3.4 Disassembly instructions!

Turn over the tag of the Adhesive Battery and remove the old NFC Antenna.

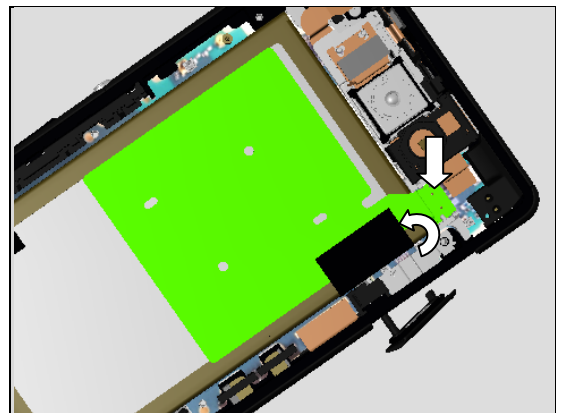


Prepare the new NFC Antenna.

Place the new NFC Antenna on the Battery without any wrinkle and connect.

Turn over the tag of Adhesive Battery.

Follow the 5.13 – 5.16 Reassembly instructions!



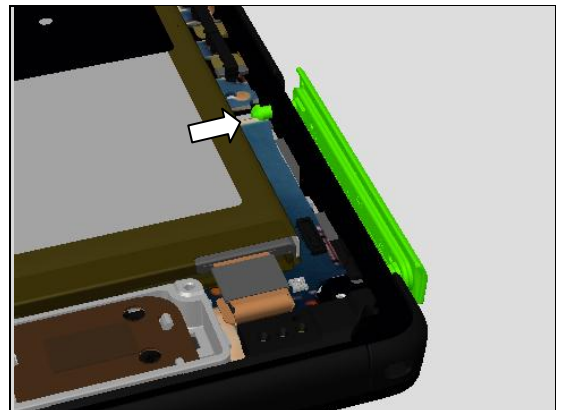
4.19 Cap SIM

Follow the 3.2 – 3.4 Disassembly instructions!

Remove the old Cap SIM from the hole of the Cover Front.

Prepare the new Cap SIM and connect.

Follow the 5.13 – 5.14 Reassembly instructions!



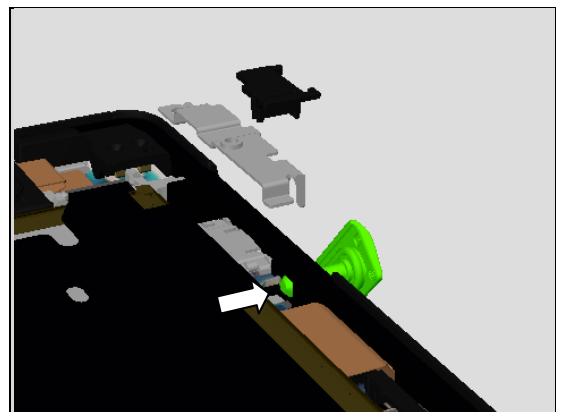
4.20 Cap USB

Follow the 3.1 – 3.4 & 3.9 – 3.10 Disassembly instructions!

Remove the old Cap USB from the hole of the Cover Front.

Prepare the new Cap USB and connect.

Follow the 5.6 – 5.7 & 5.12 – 5.15 Reassembly instructions!



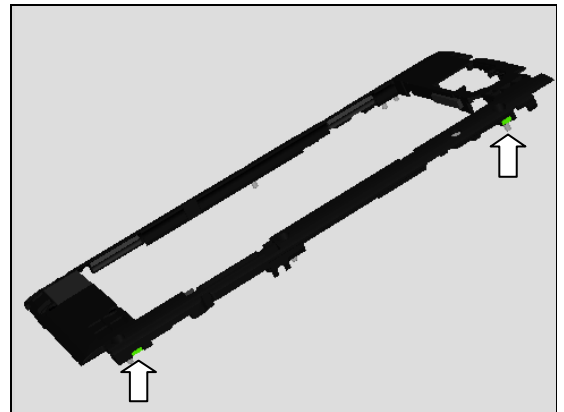
Replacement

4.21 Liquid Indicator

Follow the 3.2 – 3.4 Disassembly instructions!

Remove the old Liquid Indicator from the Battery Cover.
Prepare the new Liquid Indicator and place.

Follow the 5.13 – 5.14 Reassembly instructions!

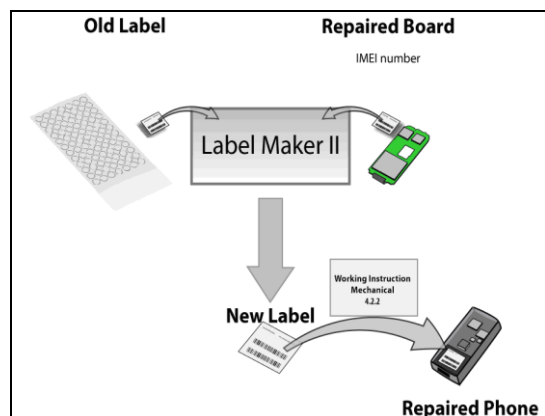


Replacement

4.22 Board Swap – Change Label

CHANGE LABEL

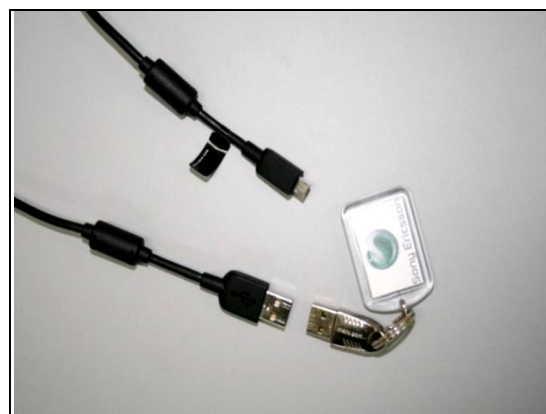
Follow the instructions in the Generic Repair Manual –
Build swap for change of label.



4.23 Board Swap – Customize of Software

CUSTOMIZE OF SOFTWARE

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



5 Reassembly

The disassembly is done in the following order:

1. Cover Front & Main PBA & Battery
2. Sub Antenna(a) & FPC Top(b)
3. Holder Receive & Holder Top
4. Main Camera & Holder Main Camera
5. Plate USB & Spacer USB
7. Main Antenna
8. Holder Speaker(a) & FPC Key(b)
9. Holder Battery(a) & Back Panel
10. SIM Tray

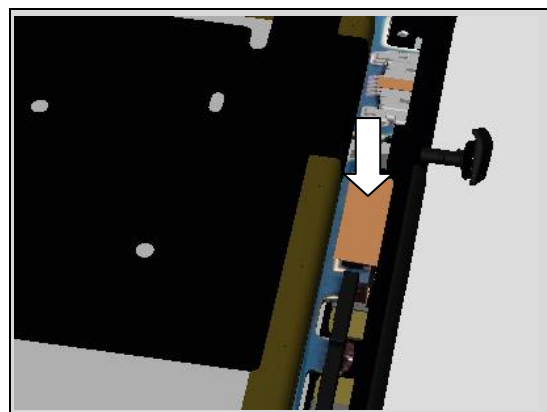
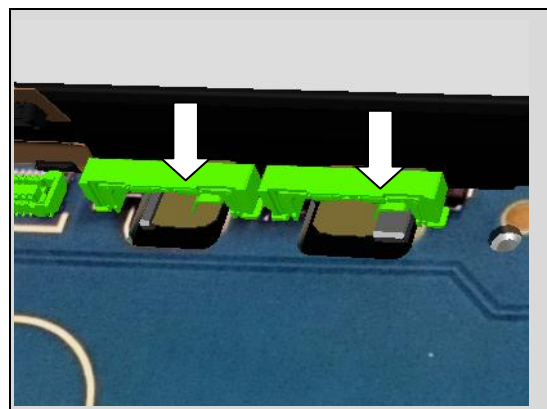
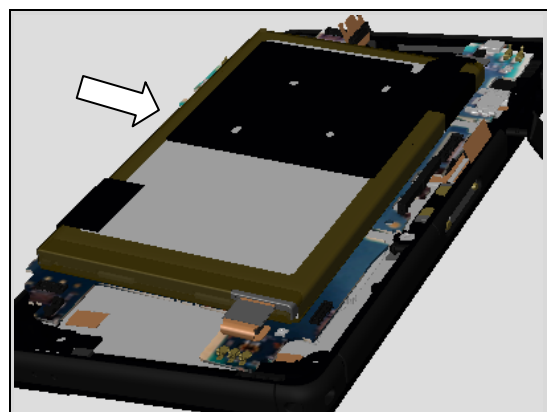
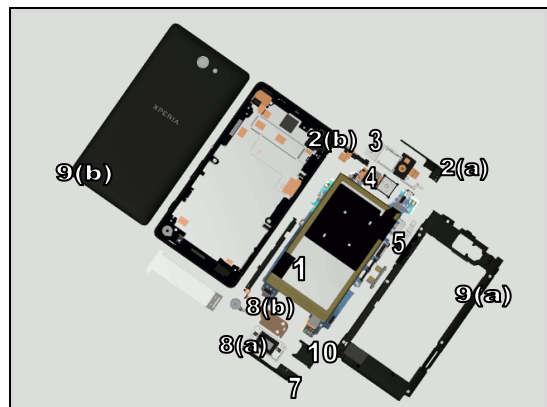
5.1 Cover Front & Main PBA & Battery

Insert the Main PBA with Battery into the Cover Front as shown direction by inserting the USB connector first.

Take a new Adhesive PBA Main!

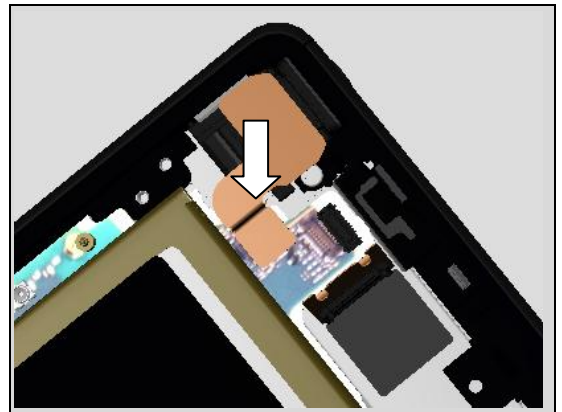
Make sure the metal contact touches Magnetic Charger Connector!

Connect the FPC LCD (Part of Cover Front).



Reassembly

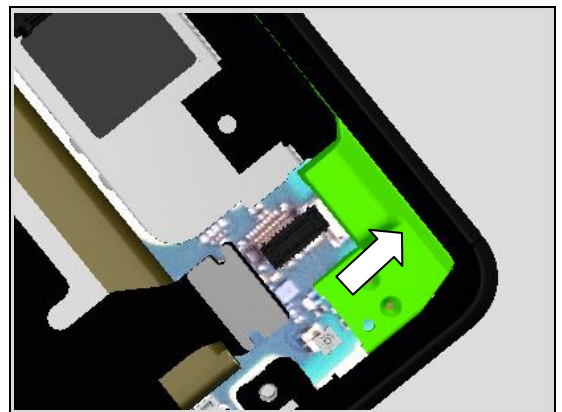
Connect the FPC Audio Jack (Part of Cover Front).



5.2 Sub Antenna

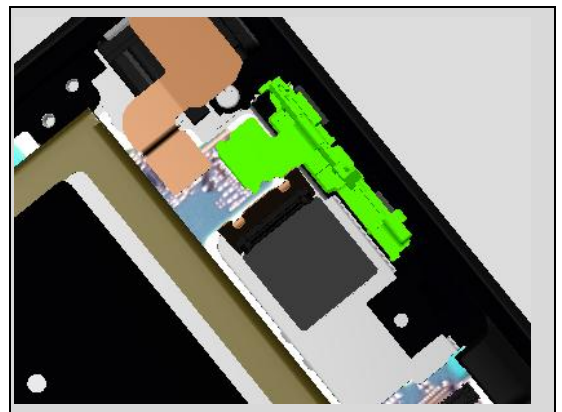
Place the Sub Antenna as shown in picture.

Take a new Adhesive Sub Antenna!



5.3 FPC Top

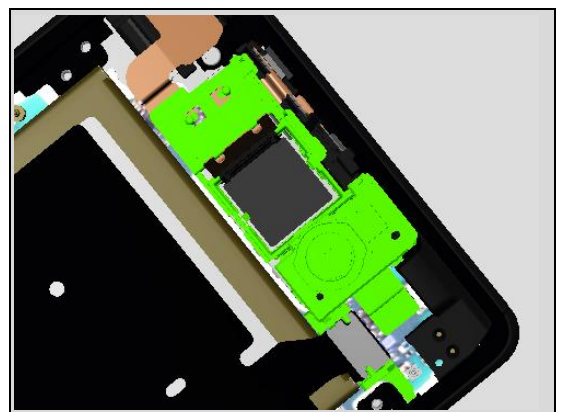
Place the FPC Top into the cavity and press the BtB connector of the FPC Top.



5.4 Holder Receiver

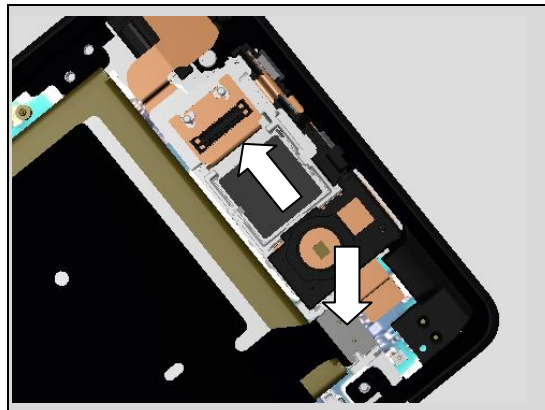
Place the Holder Receiver.

Take a new Adhesive Holder Receiver!



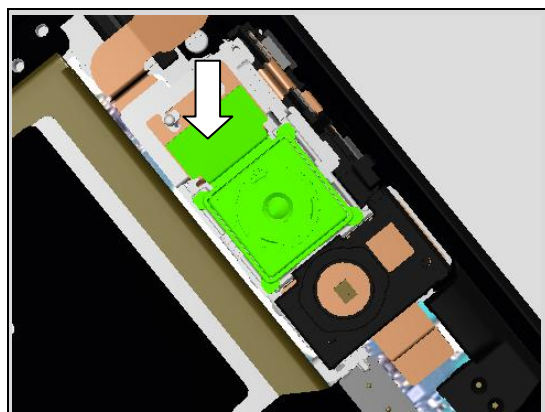
Reassembly

Connect the NFC Antenna and FPC CAM Relay.



5.5 Main Camera & Holder Main Camera

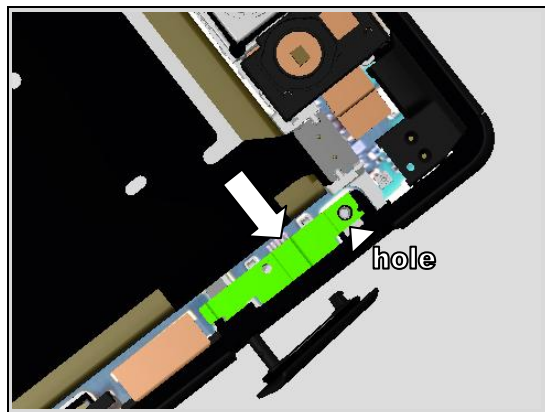
Place the Main Camera & Holder Main Camera and press to snap the BtB connector.



5.6 Plate USB

Place the Plate USB.

Make sure to align the hole!

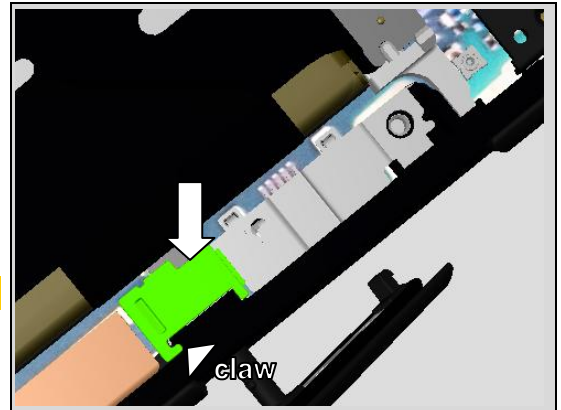


Reassembly

5.7 Spacer USB

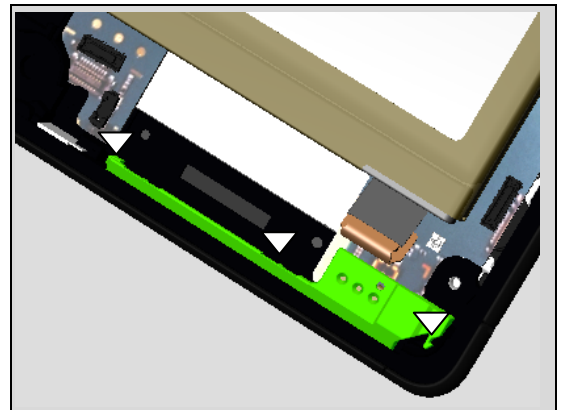
Place the Spacer USB on the Plate USB and press to secure its attachment.

Be careful not to unsnap the FPC LCD!



5.8 Main Antenna

Place the Main Antenna.
Make sure that 3 hooks are snapped.



5.9 Holder Speaker

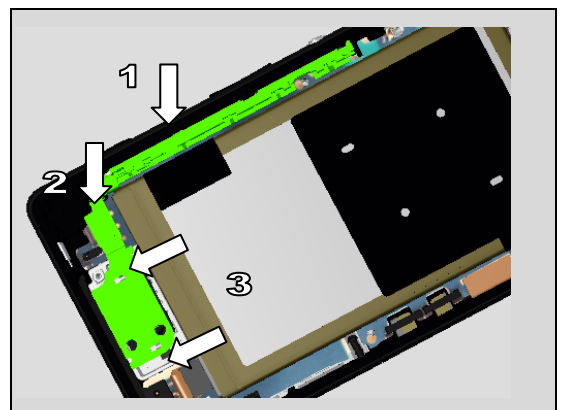
Place the Holder Speaker.

Take a new Adhesive Speaker.



5.10 FPC Key

1. Place the key part of the FPC Key into the cavity between outer edge and Main PBA.
2. Connect the connector of the FPC Key.
3. Press to snap the 2 hooks on the Holder Speaker.



Reassembly

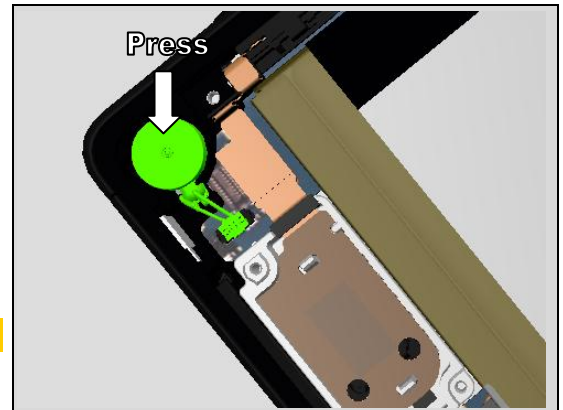
5.11 Vibrator

Place the Vibrator.

Press 5 sec gently with your finger on the Vibrator to secure the position.

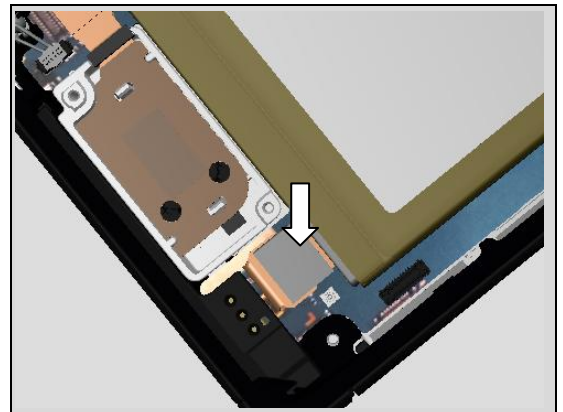
Connect the connector of the Vibrator.

Take a new Adhesive Vibrator.



5.12 Battery (connector)

Connect the Battery connector.

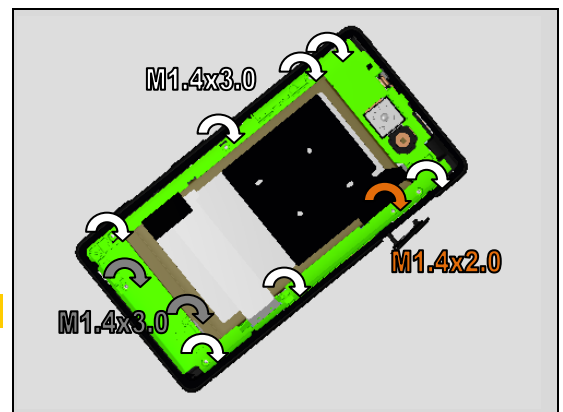


5.13 Holder Battery

Place the Holder Battery in place.

Wind up screws.

Take new Screws!



5.14 Back Panel

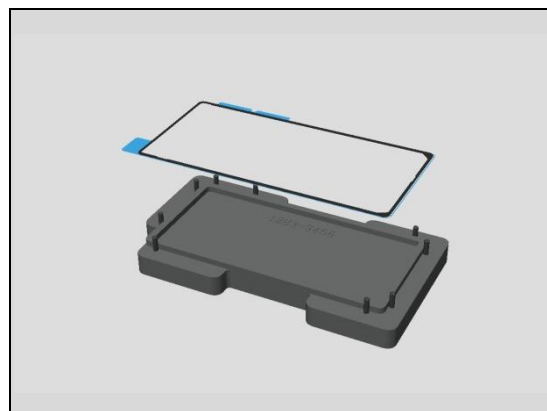
Remove the old Adhesive Panel Back and all remains of the Adhesive residue.

Clean the edges of the Back Panel carefully with alcohol before the new Adhesive Panel Back is mounted. This action is done to secure the water resistant of the unit.

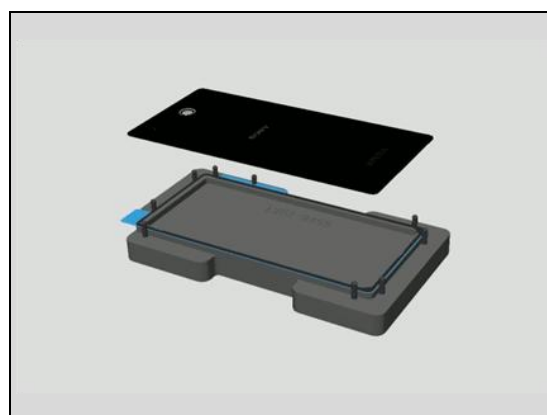


Reassembly

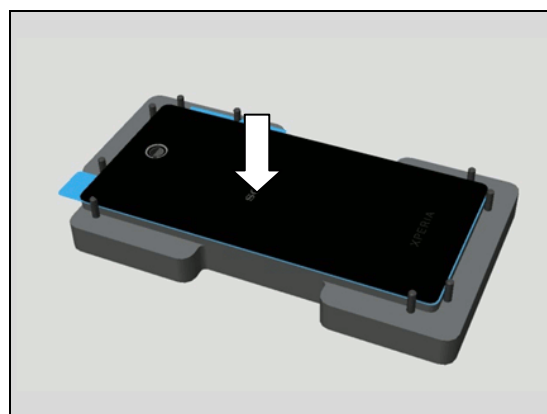
Place the new Adhesive in the Rear Panel Adhesive Align Fixture.



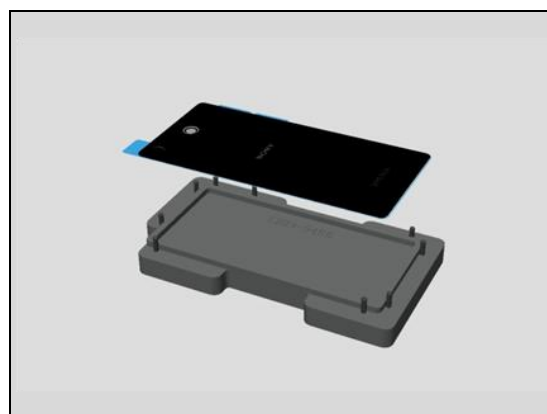
Place the Back Panel in a correct position.



Press to secure the attachment.

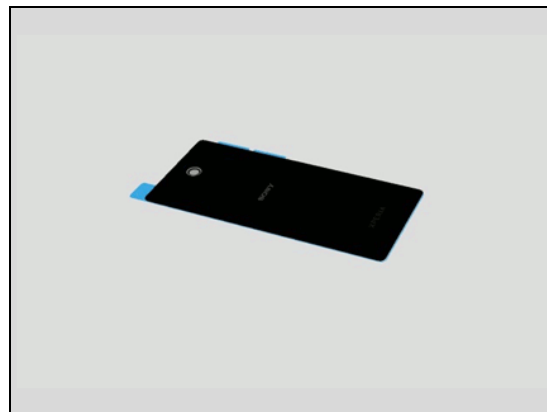


Lift up the Back Panel with the new Adhesive.

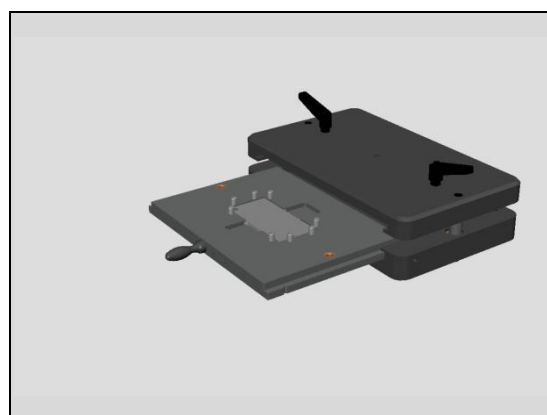


Reassembly

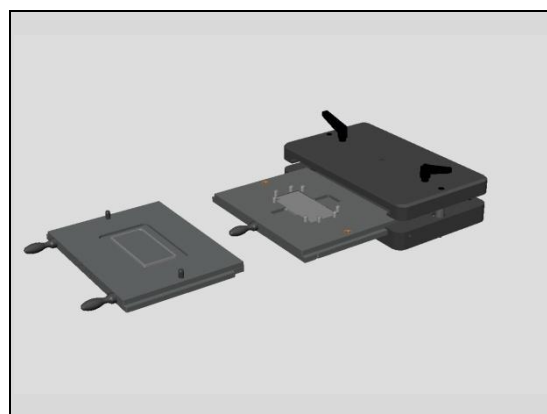
The Back Panel is ready to be assembled.



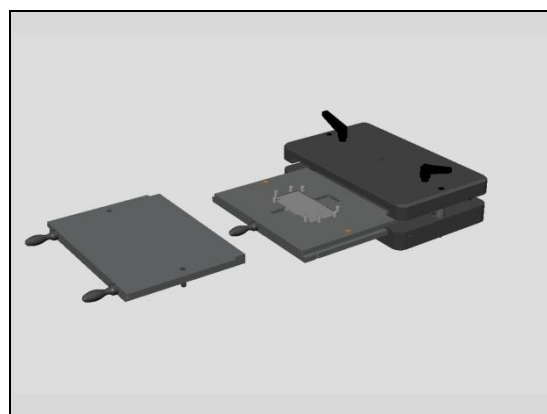
Insert the bottom press inlay.



Prepare top press inlay.

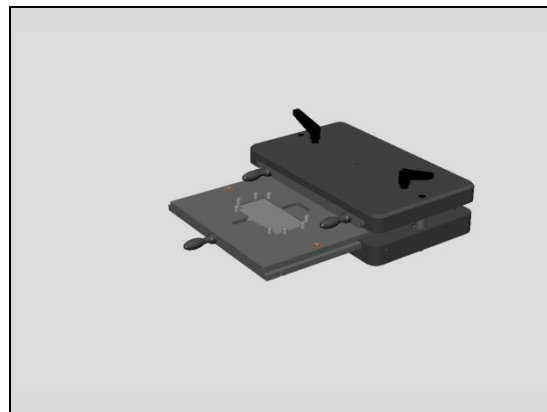


Turn around the top press inlay and insert it.



Reassembly

Secure that the top press is in correct position.

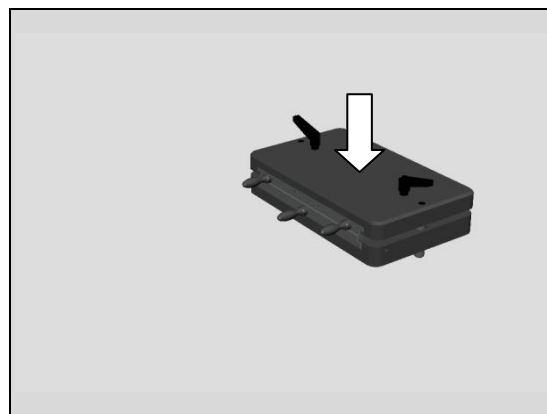


Place the unit with the back Panel upwards in the bottom inlay.
Follow the instruction in 1003 - 9107 Tool Catalogue - mechanical and document Toothed Rack Press Instruction.



Insert the bottom press.

Press with 450 ± 45 N for 10 seconds
(the pressure value is adjusted for 600N because of the weight of the pressure fixture)



5.15 SIM Tray

Insert the SIM Tray.



6 Revision History

Rev.	Date	Changes / Comments
1	2014-July-2	Initial release