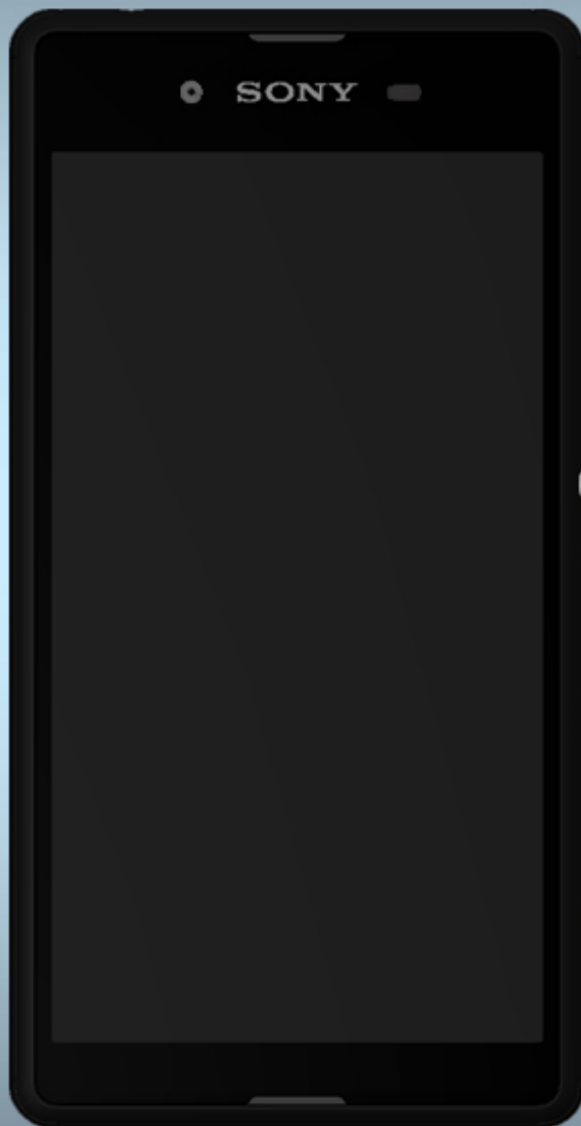


# SONY

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## Working Instructions

- mechanical -



*Xperia™ E3 & E3 Dual*

*D2202, D2203, D2206, D2212, D2243*

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*Working Instruction Repair Instruction Mechanical/*

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

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Working Instruction Repair Instruction Mechanical/

## 1 Exterior Views

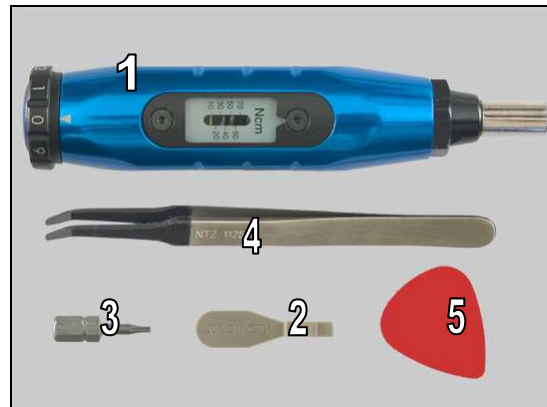
### 1.1 D2202, D2203, D2206, D2212, D2243



## 2 Tools

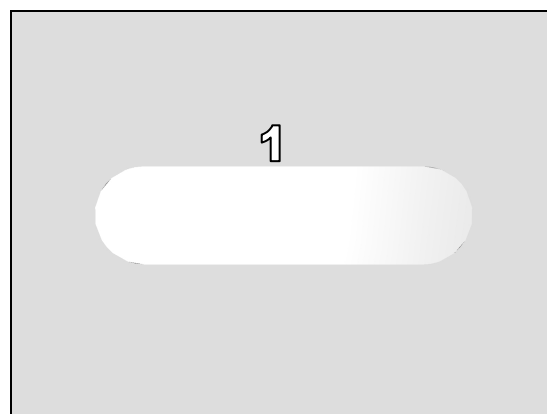
### SPECIAL TOOLS

1. Torque Screwdriver
2. Front Opening Tool
3. Torx Bit T5
4. Flex Film Assembly Tool
5. Guitar Pick



### SPECIAL TOOLS

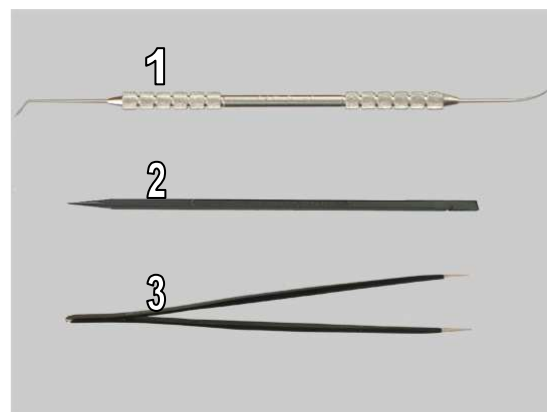
1. Flexible Disassembly tool



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

### STANDARD TOOLS

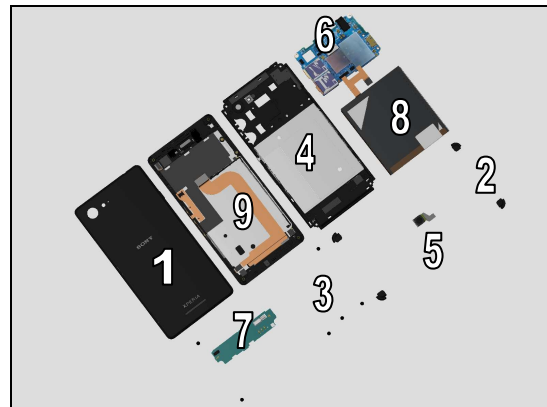
1. Dentist Hook
2. Nylon Pointer
3. Tweezers



## 3 Disassembly

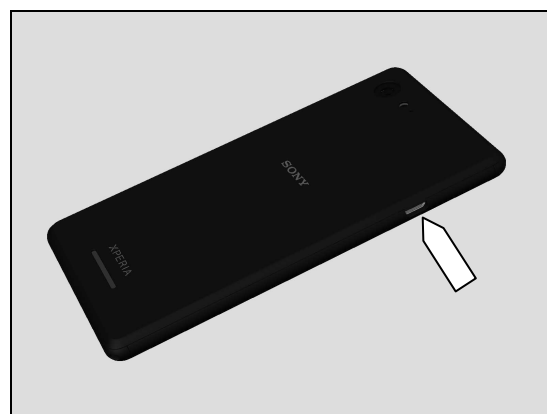
The disassembly is done in the following order:

1. Battery Cover
2. Rubber Corner
3. Screw 16mm x 3.2mm
4. Rear Cover Assy
5. Camera Main
6. Main PBA
7. Sub PBA
8. Battery 2300 mAh
9. Front Cover Assy



### 3.1 Battery Cover

Loosen Battery Cover at USB connector area using finger as shown in picture.



Lift up the Battery Cover.



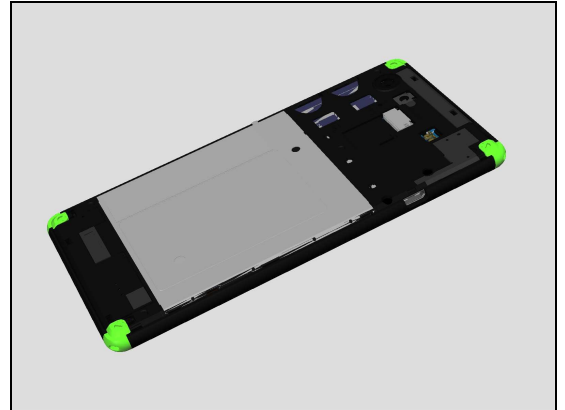
Remove Battery Cover with fingers



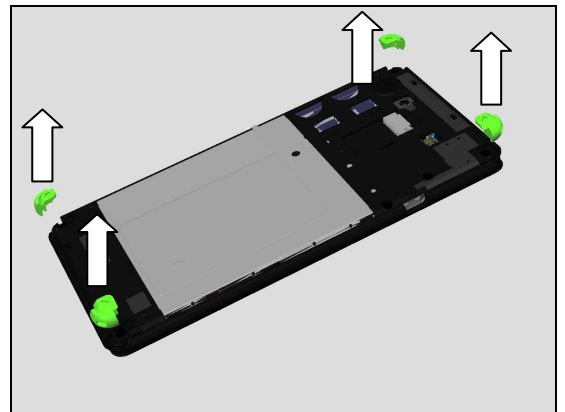
## Disassembly

### 3.2 Rubber Corner & Screw 1.6mm x 3.2mm

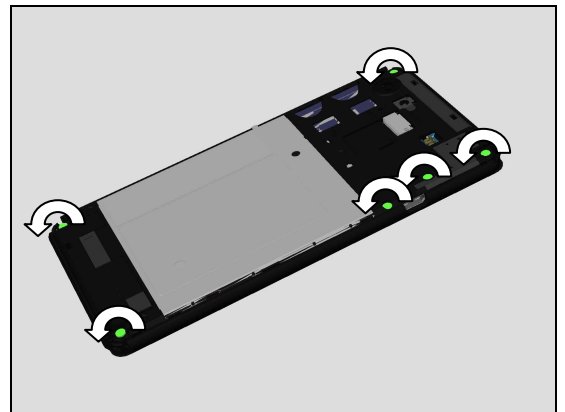
Loosen four Rubber Corner using dentist hook.



Remove the four Rubber Corner parts using fingers.

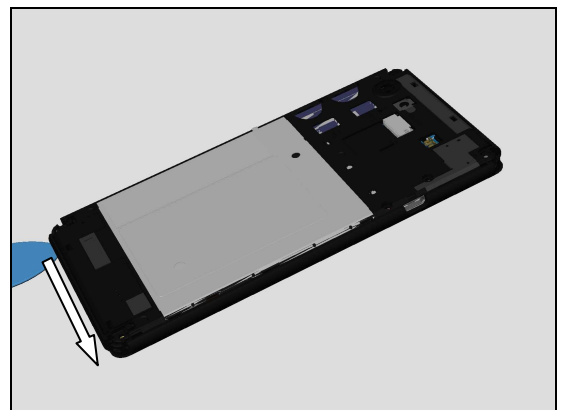


Remove six, Screw 1.6mm x 3.2mm by using Torx Bit T5.



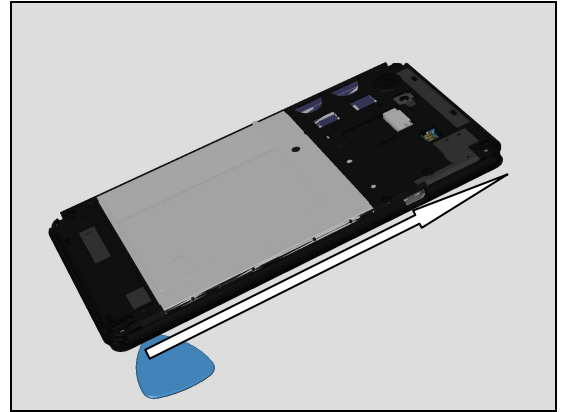
### 3.3 Rear Cover Assy

Insert Guitar Pick into Rear Cover Assy as shown in picture and slide along bottom side as shown in picture.

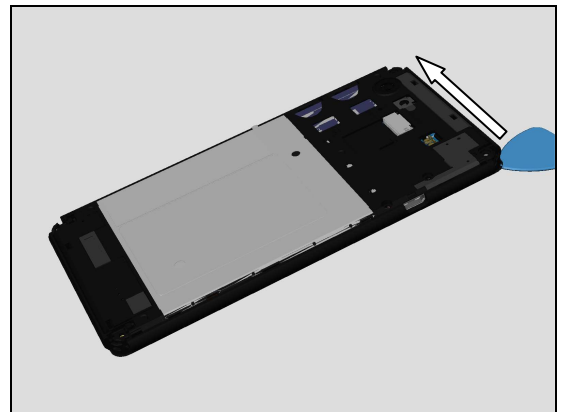


## Disassembly

Slide Guitar Pick along side of phone to unsnapping all hooks.

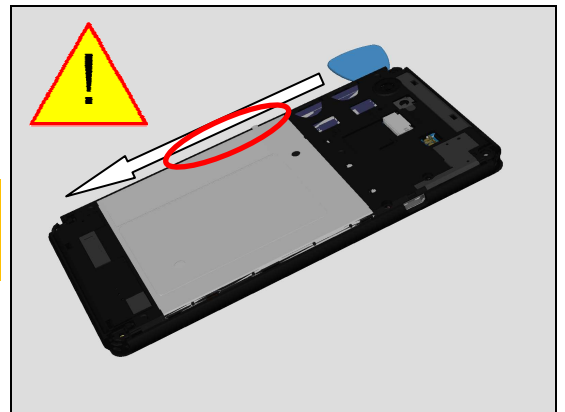


Repeat same action for topside.

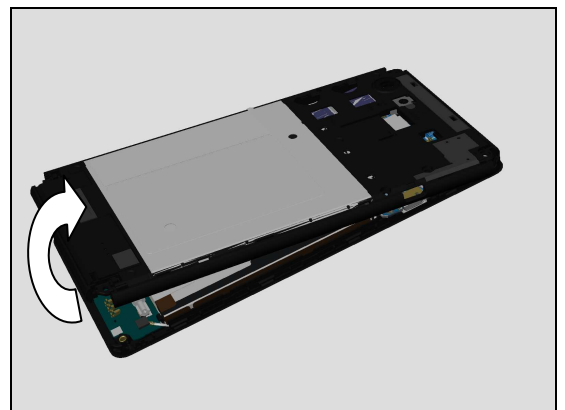


Repeat same action for last side.

**Be careful not to use too much force at Key Power/Vol area as shown in picture, it may cause damage to Rear Cover Assy!**

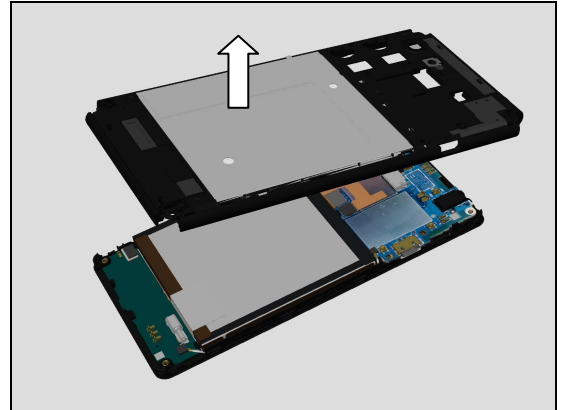


Tilt up Rear Cover Assy from bottom side using fingers as shown in picture.



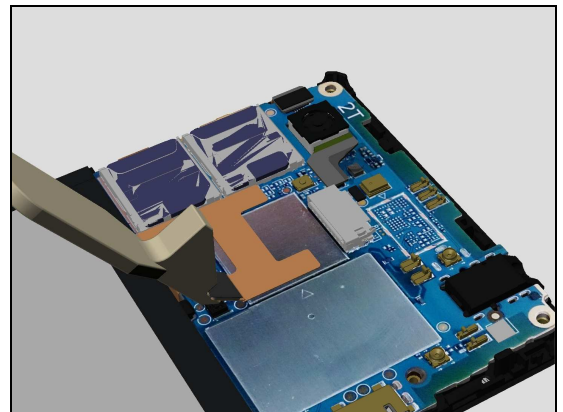
## Disassembly

Remove using fingers.

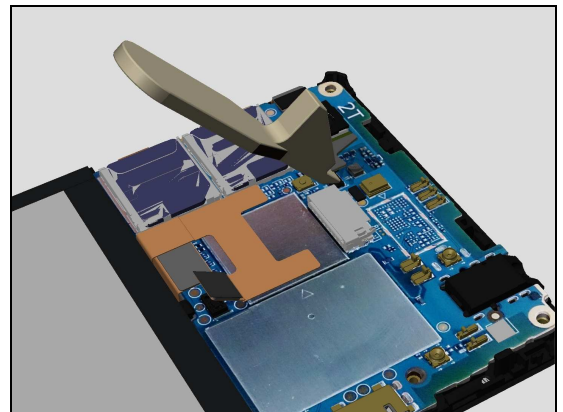


### 3.4 Camera Main

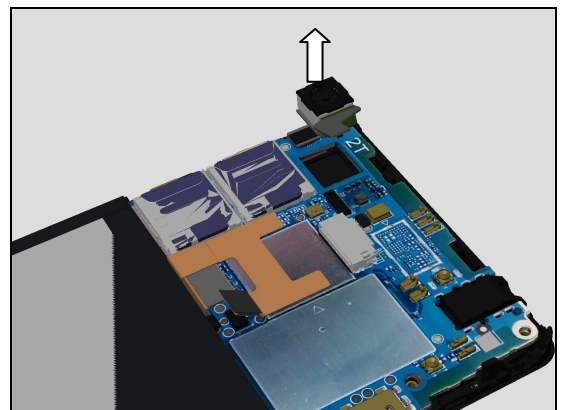
Use Front Opening Tool to disconnect Battery 2300 mAh board-to-board (BtB) connector to cut to power to Main PBA.



Use Front Opening Tool to disconnect Camera Main board-to-board (BtB) connector.

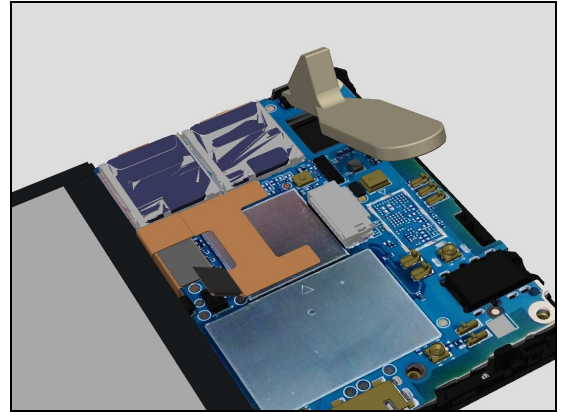


Remove Camera Main using fingers gripping at the sides.

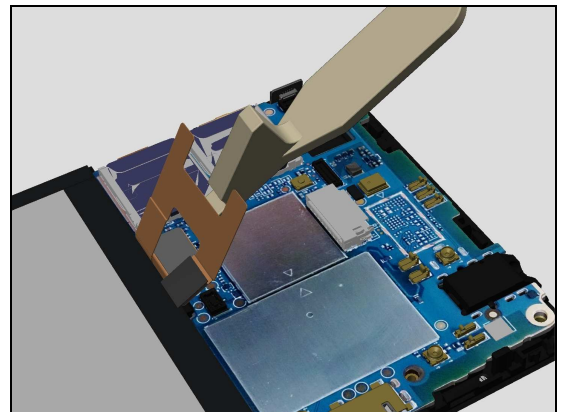


### 3.5 Main PBA

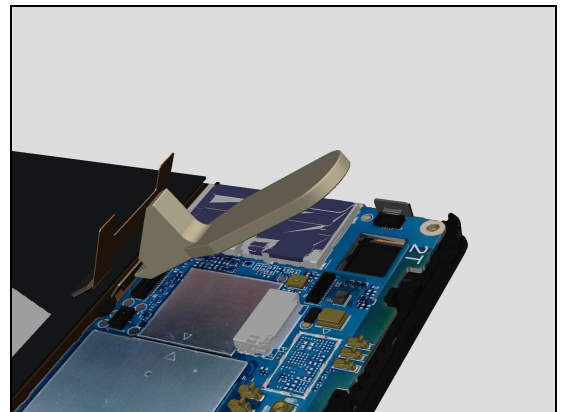
Use Front Opening Tool to disconnect Touch Panel board-to-board (BtB) connector.



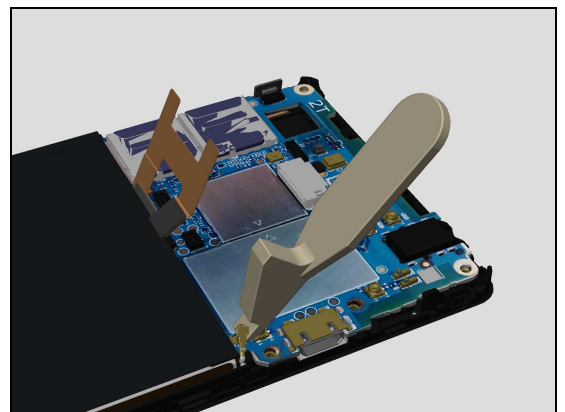
Use Front Opening Tool to raise up the Battery 2300 mAh board-to-board (BtB) connector.



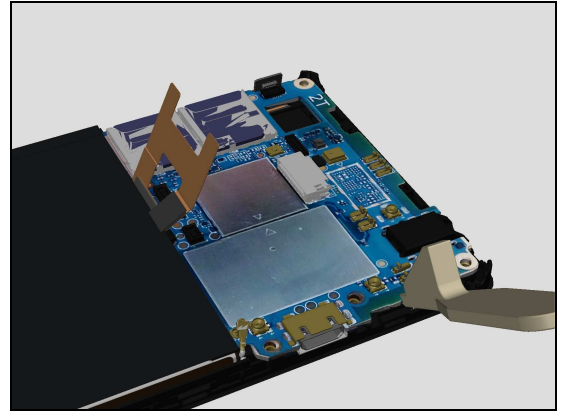
Use Front Opening Tool to disconnect LCD FPC board-to-board (BtB) connector.



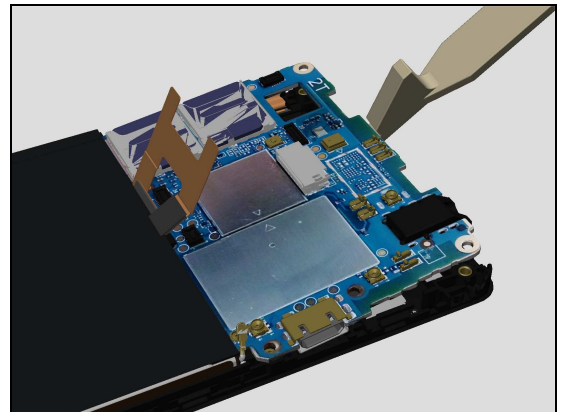
Use Front Opening Tool to disconnect RF Cable board-to-board (BtB) connector Main PBA.



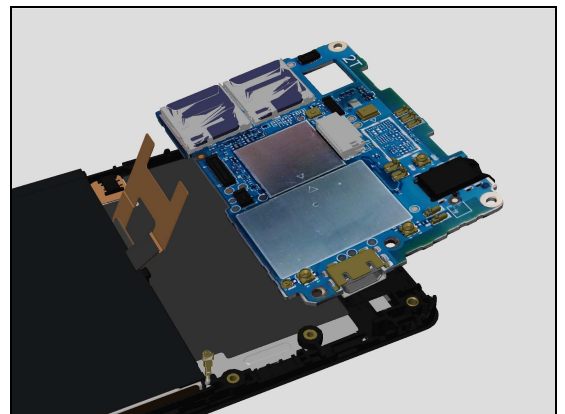
Use Front Opening Tool to release snap hook at side of Main PBA.



Use Front Opening Tool to rise up Main PBA at the side releasing snap hook.

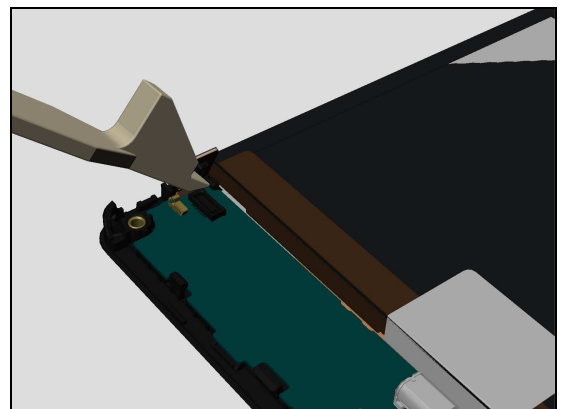


Remove Main PBA.



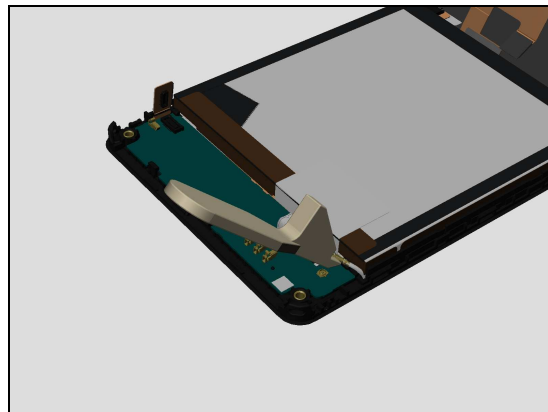
### 3.6 Sub PBA

Use Front Opening Tool to disconnect LCD FPC board-to-board (BtB) connector Sub PBA.

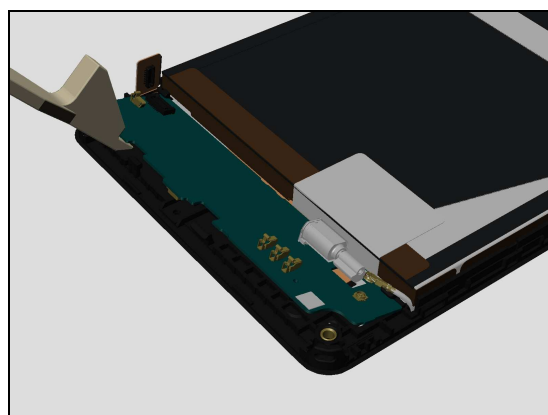


## Disassembly

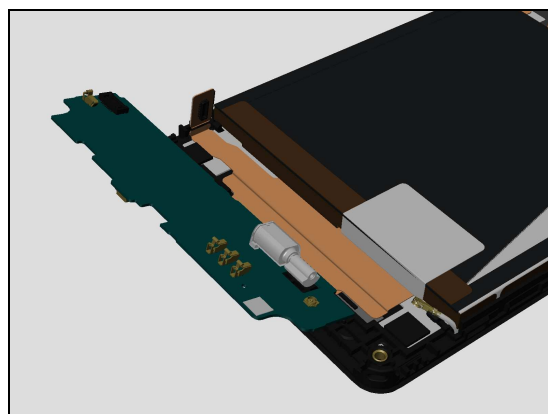
Use Front Opening Tool to disconnect RF Cable board-to-board (BtB) connector Sub PBA.



Insert Front Opening Tool, tilt to loosen Sub PBA.



Remove Sub PBA.



### 3.7 Battery 2300 mAh & Front Cover Assy

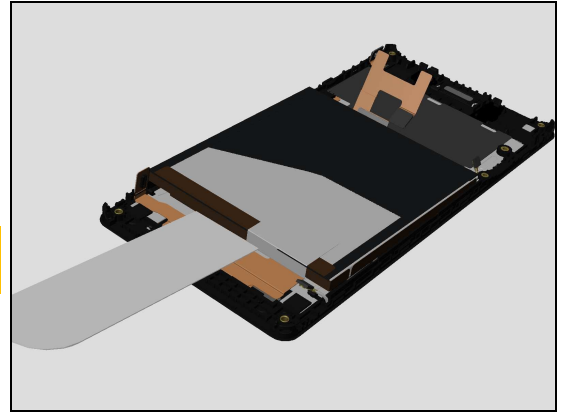
1. Place the Front Assy with Battery 2300 mAh into ESD safe bag.
2. Place the unit into the fridge.
3. Set the fridge temperature at -20°C, and set the time at 30 minutes.



## Disassembly

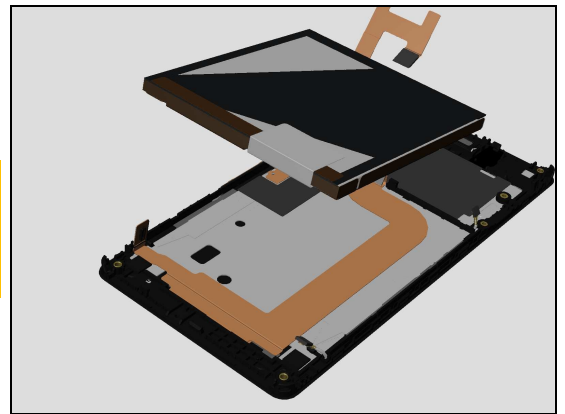
Remove from freezer, then immediately Insert Flexible Disassembly Tool as shown in picture to loosen adhesive located under battery.

**Attention: If Front Cover Assy with Battery 2300 mAh returns to room temperature, adhesive will bond again!**



Remove Battery 2300 mAh using fingers

**Carefully inspect the Battery after removing it. Battery with visual signs of been punctured etc, should be scraped after removal and disposed of in accordance with local policies!**



## 4 Replacement

### 4.1 Battery Cover

*Follow the 3.1 Disassembly instructions!*

Prepare the new Battery Cover

*Follow the 5.7 Reassembly instructions!*



### 4.2 Rubber Corner

*Follow the 3.1 – 3.2 Disassembly instructions!*

Prepare the new Rubber Corner

*Follow the 5.6 – 5.7 Reassembly instructions!*

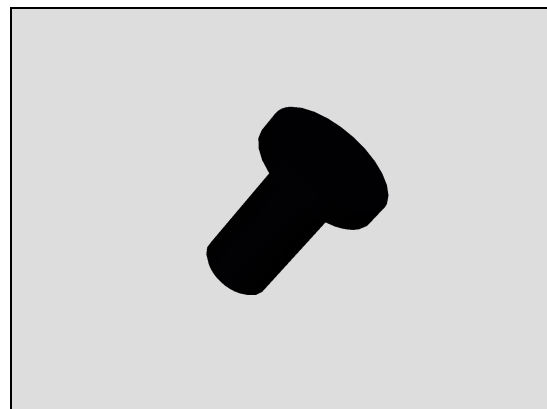


### 4.3 Screw 1.6mm x 3.2mm

*Follow the 3.1 – 3.2 Disassembly instructions!*

Prepare the new Screw 1.6mm x 3.2mm

*Follow the 5.6 – 5.7 Reassembly instructions!*

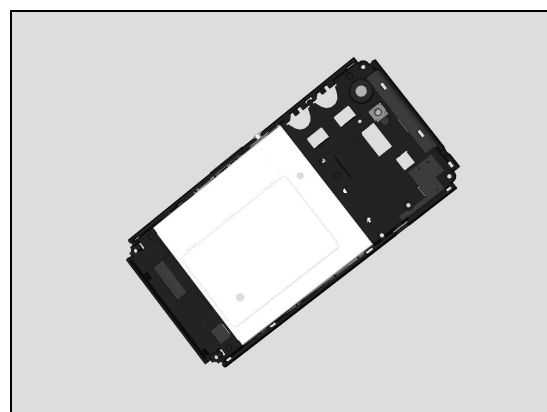


### 4.4 Rear Cover Assy

*Follow the 3.1 – 3.3 Disassembly instructions!*

Prepare the new Rear Cover Assy.

*Follow the 5.5 – 5.7 Reassembly instructions!*

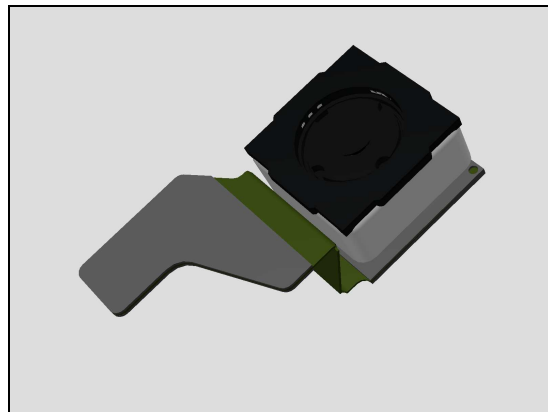


### 4.5 Camera Main

*Follow the 3.1 – 3.4 Disassembly instructions!*

Prepare the new Camera Main

*Follow the 5.4 – 5.7 Reassembly instructions!*

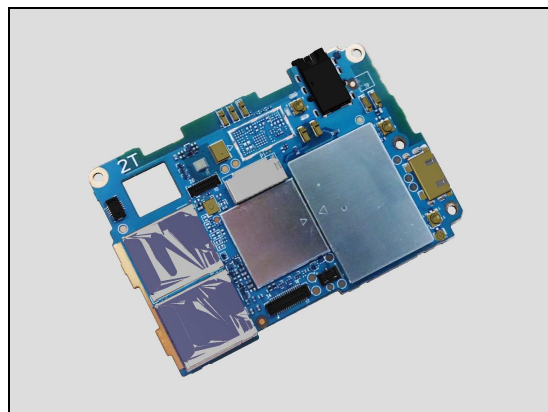


### 4.6 Main PBA

*Follow the 3.1 – 3.5 Disassembly instructions!*

Prepare the new Main PBA

*Follow the 5.3 – 5.7 Reassembly instructions!*

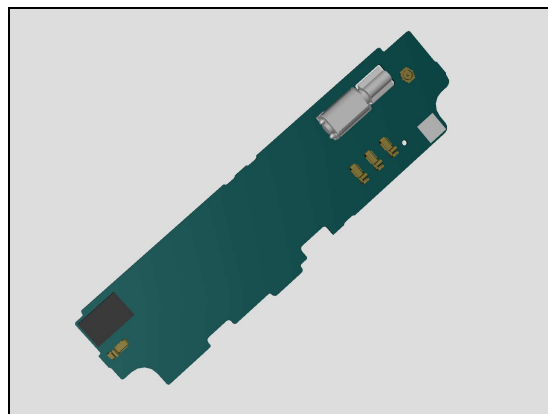


### 4.7 Sub PBA

*Follow the 3.1 – 3.6 Disassembly instructions!*

Prepare the new Sub PBA

*Follow the 5.2 – 5.7 Reassembly instructions!*



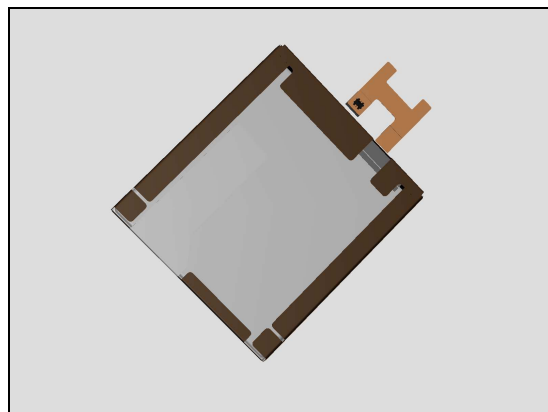
### 4.8 Battery 2300 mAh

*Follow the 3.1 – 3.7 Disassembly instructions!*

Prepare the new Battery 2300 mAh

*Follow the 5.1 – 5.7 Reassembly instructions!*

**Caution: Risk of Explosion if the Battery is replaced by incorrect type. Only use original approved Sony Mobile Battery according to "Part List 1291-1034". Dispose of used batteries accordance with local policies!**



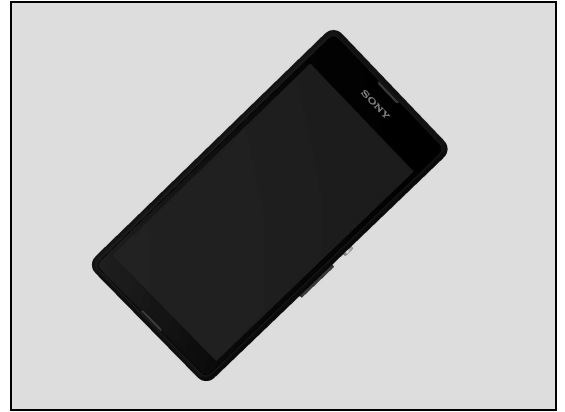
## Replacement

### 4.9 Front Cover Assy

*Follow the 3.1 – 3.7 Disassembly instructions!*

Prepare the new Front Cover Assy

*Follow the 5.1 – 5.7 Reassembly instructions!*



## Replacement

### 4.10 Battery Adhesive-1

*Follow the 3.1 – 3.7 Disassembly instructions!*

*Carry out the Removal as described below!*

*Prepare the new Battery Adhesive-1.*

*Carry out the Installation as described below!*

*Follow the 5.1 – 5.7 Reassembly instructions!*

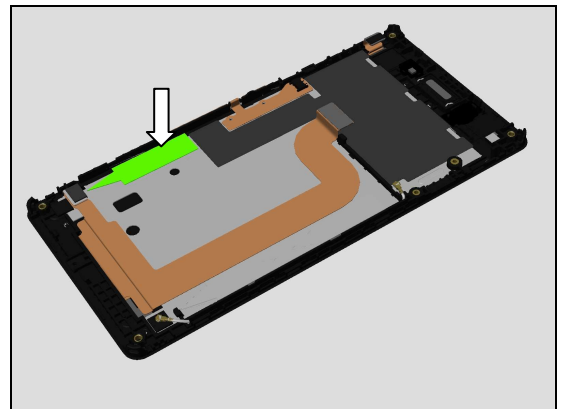
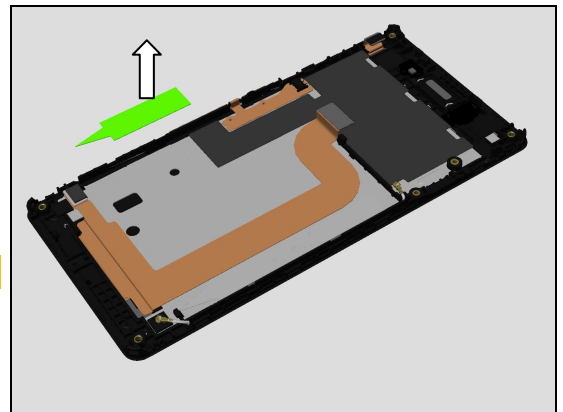
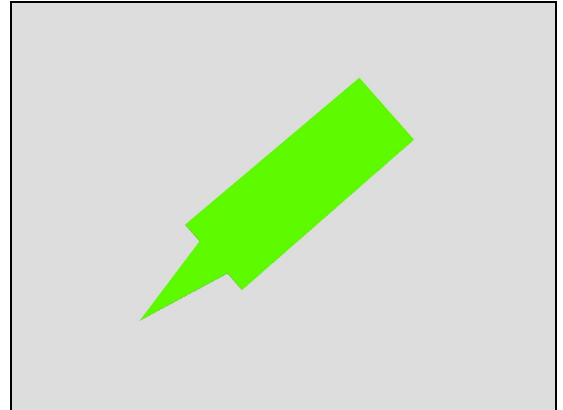
#### REMOVAL

Remove Battery Adhesive-1 using Flex Film Assembly Tool.

**Scrap! Not to be reused!**

#### INSTALLATION

Place new Battery Adhesive-1 using Flex Film Assembly Tool into its proper position.



## Replacement

### 4.11 Battery Adhesive-2

*Follow the 3.1 – 3.7 Disassembly instructions!*

*Carry out the Removal as described below!*

*Prepare the new Battery Adhesive-2.*

*Carry out the Installation as described below!*

*Follow the 5.1 – 5.7 Reassembly instructions!*

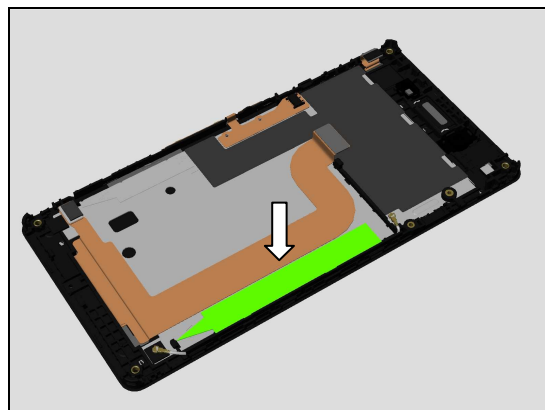
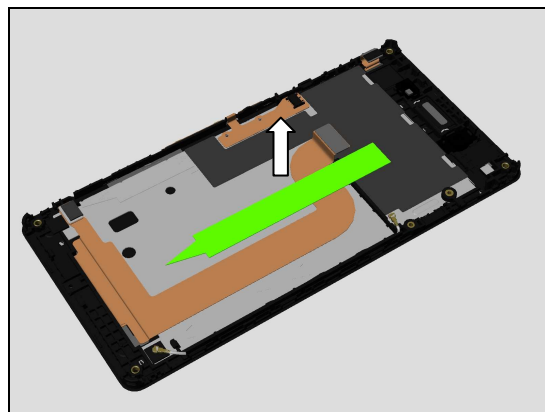
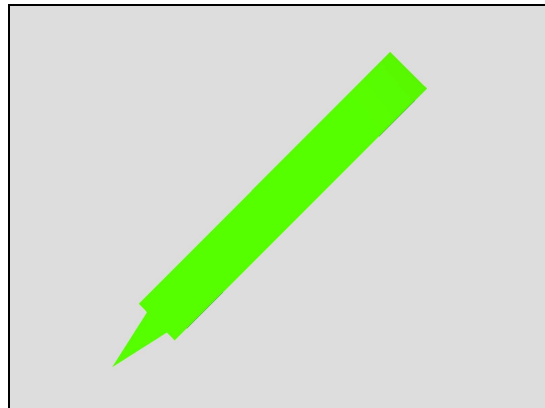
#### REMOVAL

Remove Battery Adhesive-2 using Flex Film Assembly Tool.

**Scrap! Not to be reused!**

#### INSTALLATION

Place new Battery Adhesive-2 using Flex Film Assembly Tool into its proper position.



## Replacement

### 4.12 CU Label

*Follow the 3.1 Disassembly instructions!*

*Carry out the Removal as described below!*

Prepare the new CU Label.

*Carry out the Installation as described below!*

*Follow the 5.7 Reassembly instructions!*

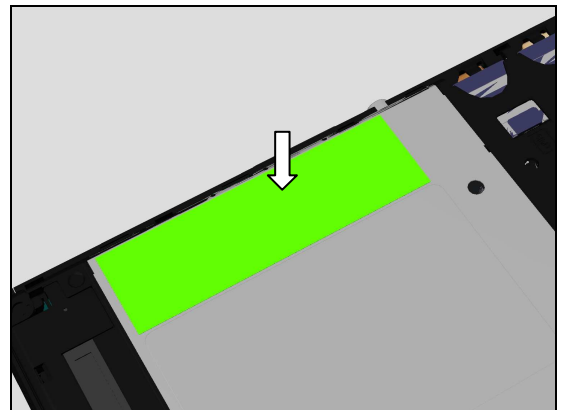
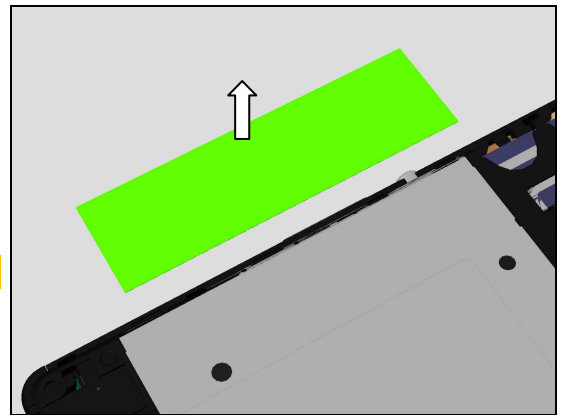
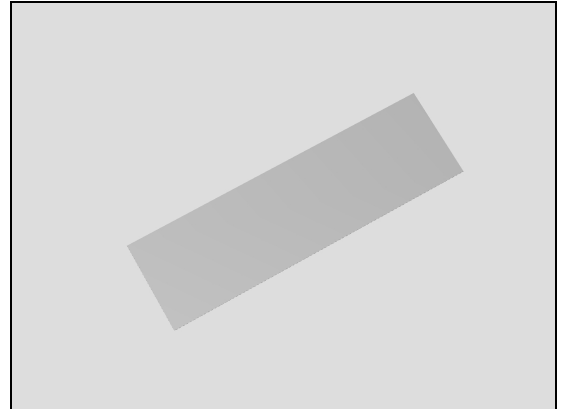
#### REMOVAL

Remove CU Label using Flex Film Assembly Tool.

**Scrap! Not to be reused!**

#### INSTALLATION

Place new CU Label using Flex Film Assembly Tool into its proper position.



## Replacement

### 4.13 Key Power/Vol

*Follow the 3.1 – 3.3 Disassembly instructions!*

*Carry out the Removal as described below!*

*Prepare the new Key Power/Vol.*

*Carry out the Installation as described below!*

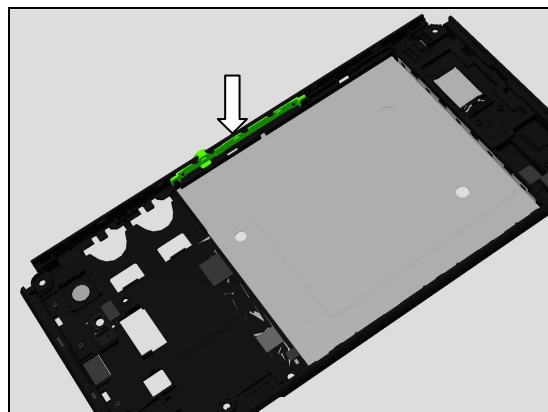
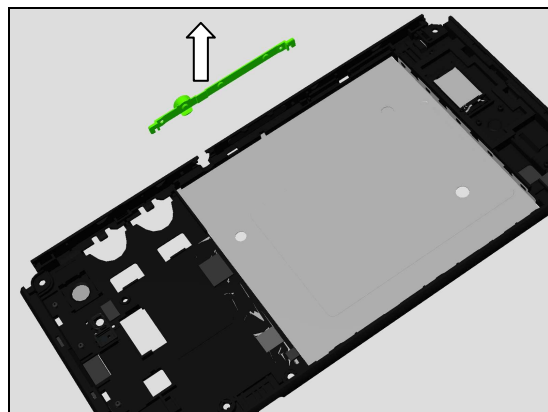
*Follow the 5.5 – 5.7 Reassembly instructions!*

#### REMOVAL

Detach the Key Power/Vol from Rear Cover Assy using Dentist Hook and then remove Key Power/Vol carefully using fingers.

#### INSTALLATION

Place new Key Power/Vol using fingers into its proper position using cavity pegs and slot for alignment located on Rear Cover Assy.



## Replacement

### 4.14 Liquid Intrusion Label “Main PBA”

*Follow the 3.1 – 3.5 Disassembly instructions!*

*Carry out the Removal as described below!*

*Prepare the new Liquid Intrusion Label.*

*Carry out the Installation as described below!*

*Follow the 5.3 – 5.7 Reassembly instructions!*

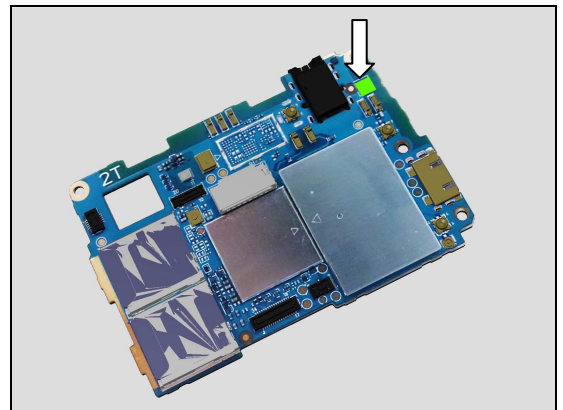
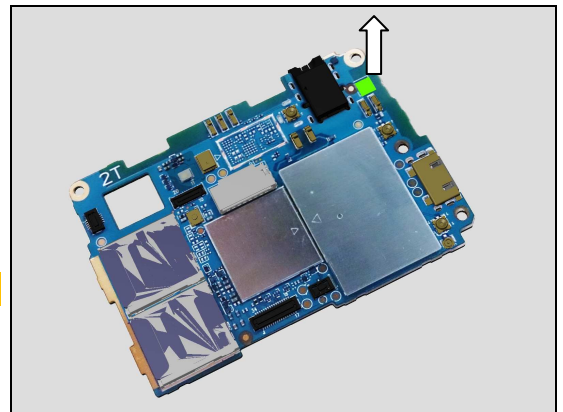
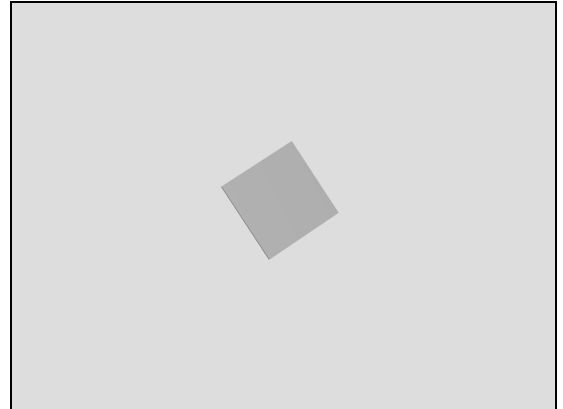
#### REMOVAL

Remove the Liquid Intrusion Label using Flex Film Assembly Tool.

**Scrap! Not to be reused!**

#### INSTALLATION

Place new Liquid Intrusion Label using Flex Film Assembly Tool into its proper position.



## Replacement

### 4.15 Liquid Intrusion Label Sub PBA

*Follow the 3.1 – 3.5 Disassembly instructions!*

*Carry out the Removal as described below!*

*Prepare the new Liquid Intrusion Label.*

*Carry out the Installation as described below!*

*Follow the 5.3 – 5.7 Reassembly instructions!*

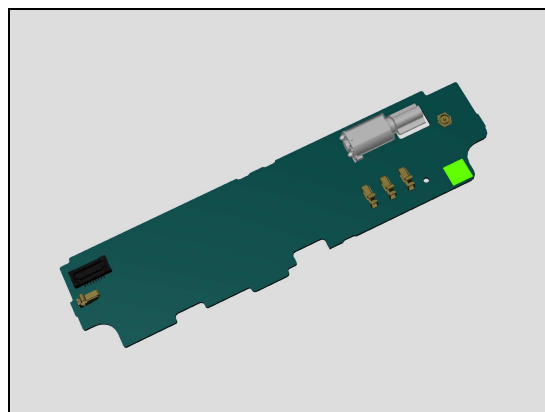
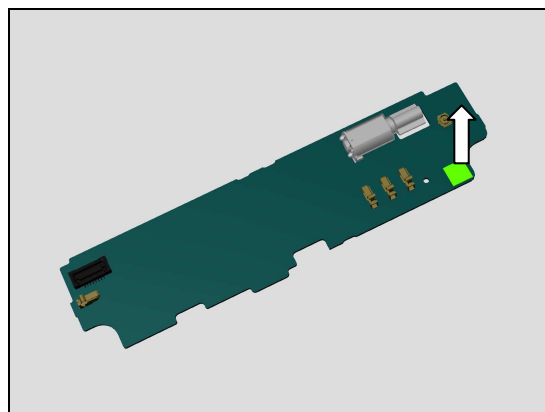
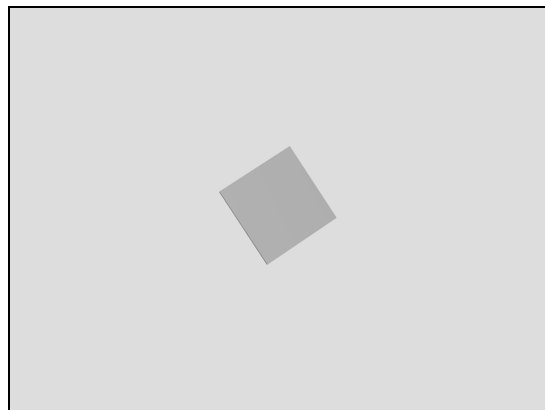
#### REMOVAL

Remove the Liquid Intrusion Label using Flex Film Assembly Tool.

**Scrap! Not to be reused!**

#### INSTALLATION

Place new Liquid Intrusion Label using Flex Film Assembly Tool into its proper position.



## Replacement

### 4.16 Loudspeaker

*Follow the 3.1 – 3.3 Disassembly instructions!*

*Carry out the Removal as described below!*

Prepare the new Loudspeaker.

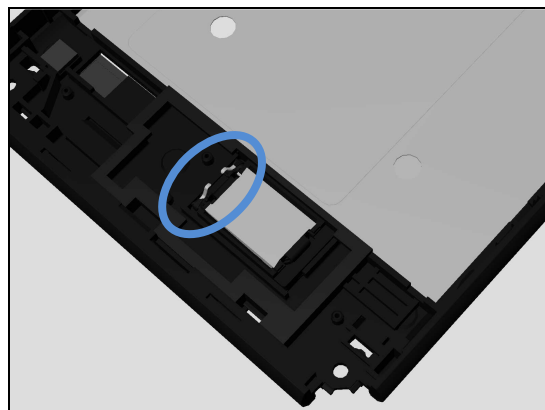
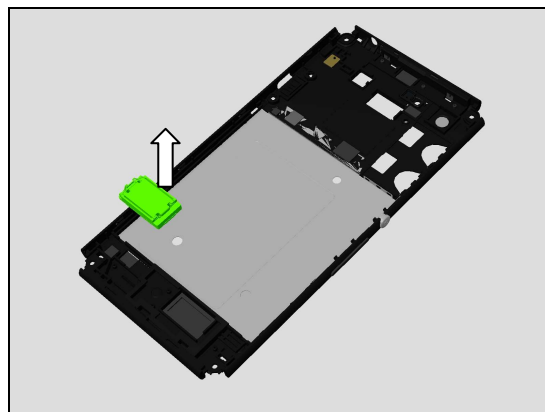
*Carry out the Installation as described below!*

*Follow the 5.5 – 5.7 Reassembly instructions!*

#### REMOVAL

Remove the Loudspeaker using Front Opening Tool

**Scrap! Not to be reused!**

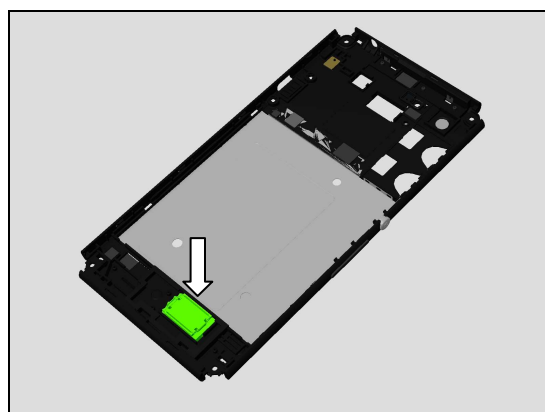


#### INSTALLATION

**Attention: Check alignment of Loudspeaker contact pins before installation as shown in picture!**

Place new Loudspeaker using fingers into its proper position.

Press directly on top of Loudspeaker using Nylon Pointer for five seconds to secure attachment.



## Replacement

### 4.17 Proximity Sensor Rubber Gasket

*Follow the 3.1 – 3.7 Disassembly instructions!*

*Carry out the Removal as described below!*

Prepare the new Proximity Sensor Rubber Gasket.

*Carry out the Installation as described below!*

*Follow the 5.1 – 5.7 Reassembly instructions!*

#### REMOVAL

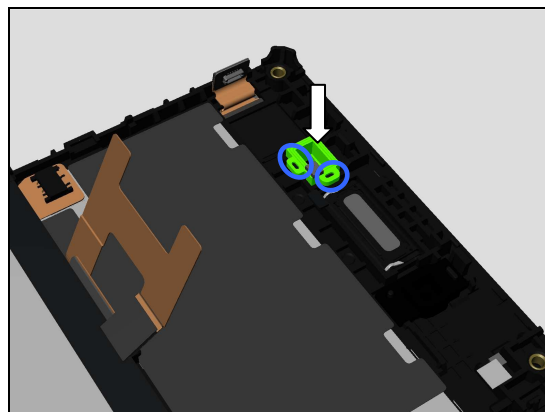
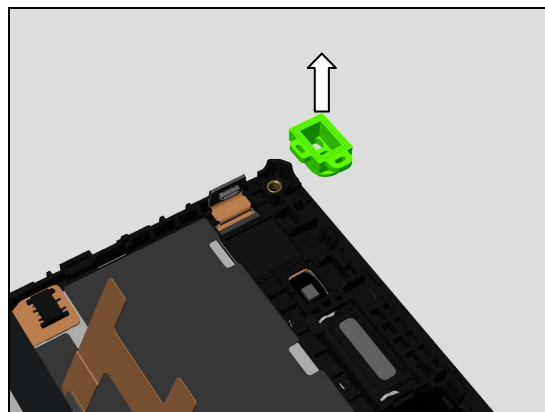
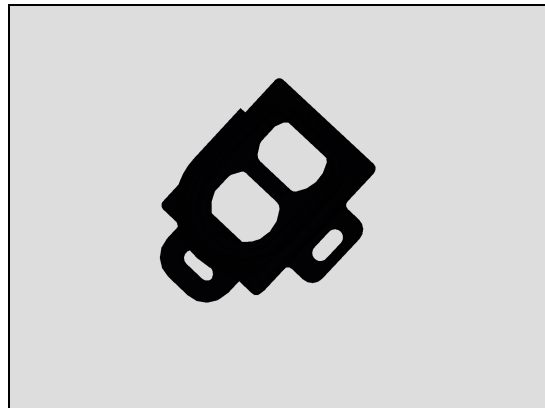
Remove Proximity Sensor Rubber Gasket using Flex Film Assembly Tool.

**Scrap! Not to be reused!**

#### INSTALLATION

Place new Proximity Sensor Rubber Gasket using Flex Film Assembly Tool into its proper position.

Use pegs located on Front Cover Assy to align Proximity Sensor Rubber Gasket as shown in picture!



## Replacement

### 4.18 Receiver

*Follow the 3.1 – 3.7 Disassembly instructions!*

*Follow the 4.19 Removal instructions!*

*Carry out the Removal as described below!*

Prepare the new Receiver.

*Carry out the Installation as described below!*

*Follow the 4.19 Removal instructions!*

*Follow the 5.1 – 5.7 Reassembly instructions!*

#### REMOVAL

Insert the Front Opening Tool and gently remove the Receiver.

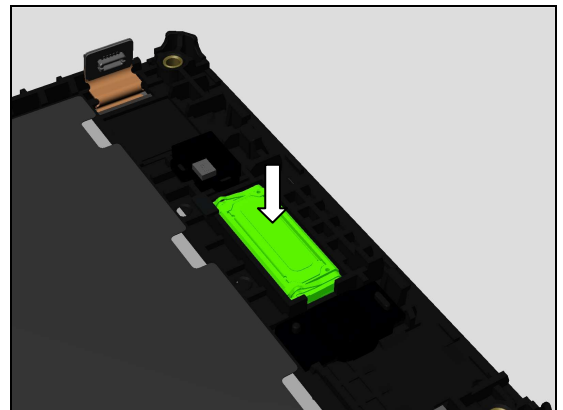
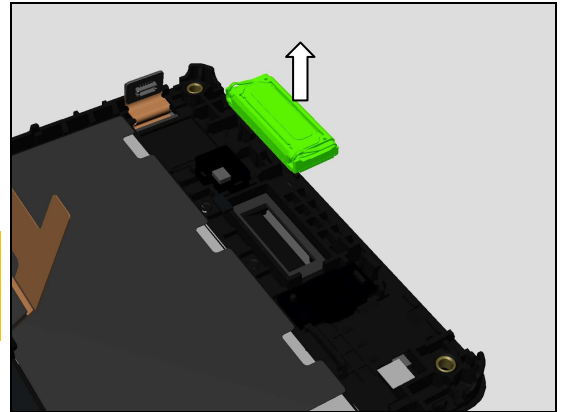
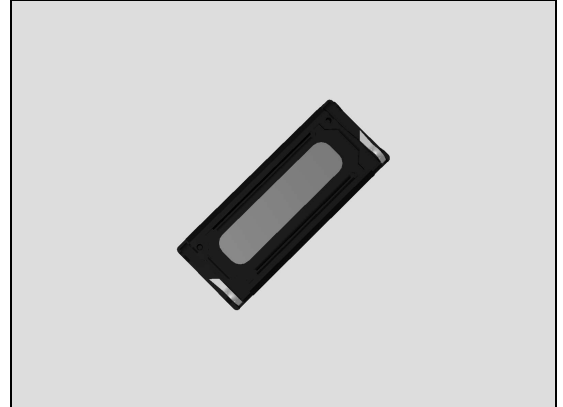
**Scrap! Not to be reused!**

**Use Isopropyl Alcohol for cleaning Front Cover Assy cavity!**

#### INSTALLATION

Position and place a new Receiver into Front Cover Assy cavity as shown in picture.

Press directly on top of Receiver using Nylon Pointer for five seconds to secure attachment.



## Replacement

### 4.19 Receiver Sponge

*Follow the 3.1 – 3.7 Disassembly instructions!*

*Follow the 4.18 Removal instructions!*

*Carry out the Removal as described below!*

Prepare the Receiver Sponge.

*Carry out the Installation as described below!*

*Follow the 4.18 Installation instructions!*

*Follow the 5.1 – 5.7 Reassembly instructions!*

#### REMOVAL

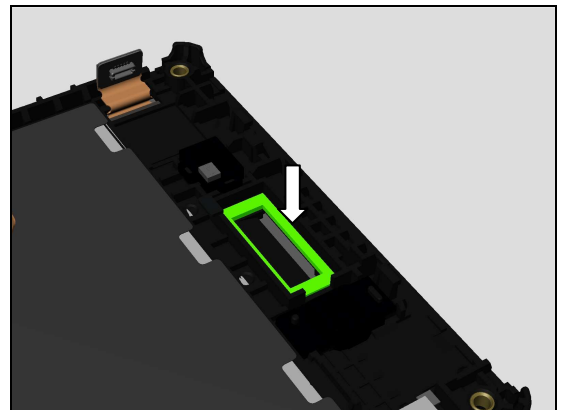
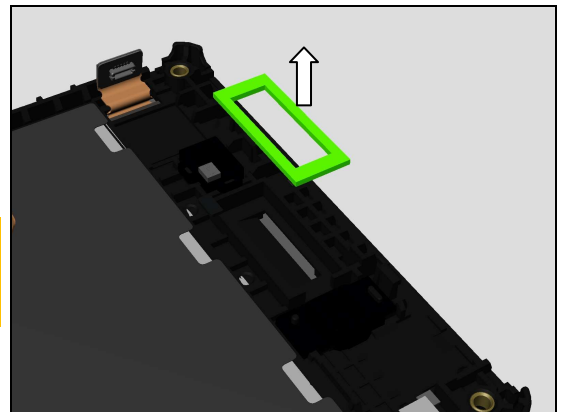
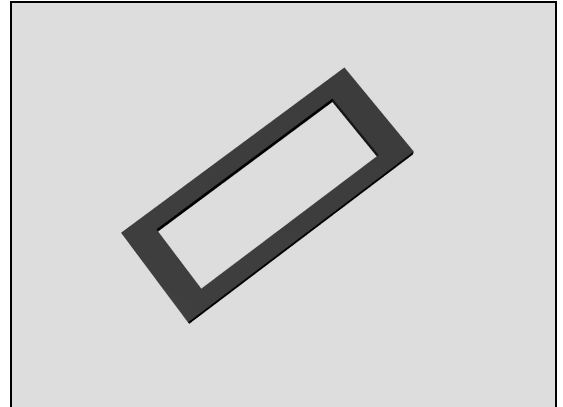
Use Tweezers to remove the Receiver Sponge.

**Scrap! Not to be reused!**

**Use Isopropyl Alcohol for cleaning Front Cover Assy Cavity!**

#### INSTALLATION

Place new Receiver Sponge using Flex Film Assembly Tool into its proper position.



## Replacement

### 4.20 RF Cable

*Follow the 3.1 – 3.7 Disassembly instructions!*

*Carry out the Removal as described below!*

*Prepare the new RF Cable.*

*Carry out the Installation as described below!*

*Follow the 5.1 – 5.7 Reassembly instructions!*

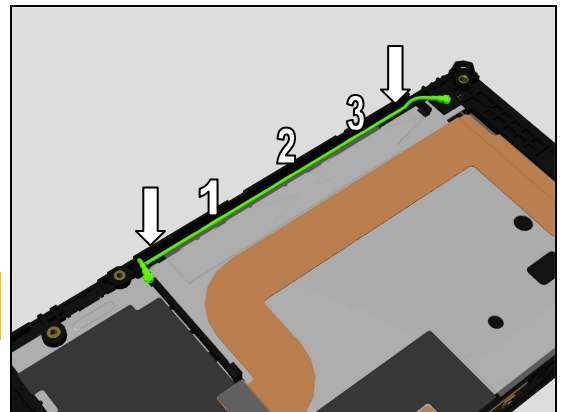
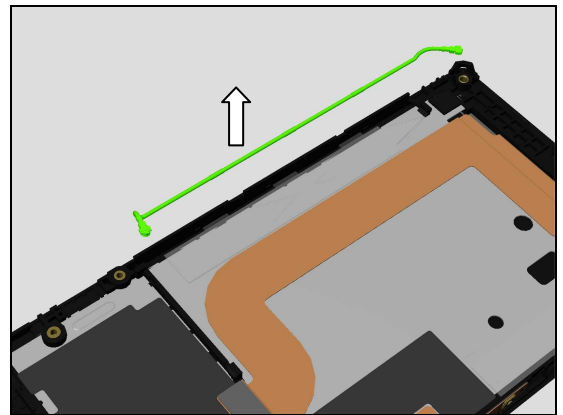
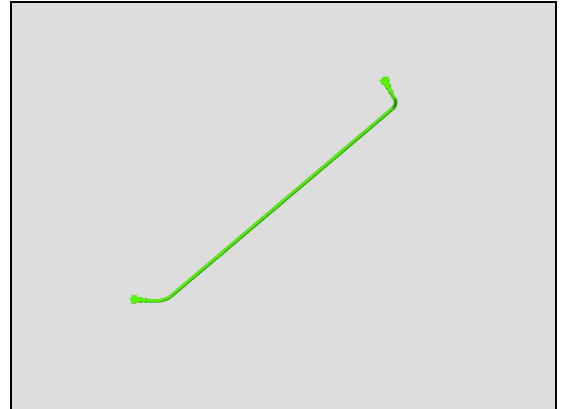
#### REMOVAL

Carefully detach RF Cable from Front Cover Assy cavity using Front Open Tool and fingers.

#### INSTALLATION

Place new RF Cable using fingers into its proper position aligning the cable rings to three conductive gaskets within Front Cover Assy cavity as shown in picture.

***Inspect RF Cable for any physical damage after assembly!***



## Replacement

### 4.21 Side Key FPC

*Follow the 3.1 – 3.7 Disassembly instructions!*

*Carry out the Removal as described below!*

Prepare the new Side Key FPC.

*Carry out the Installation as described below!*

*Follow the 5.1 – 5.7 Reassembly instructions!*

#### REMOVAL

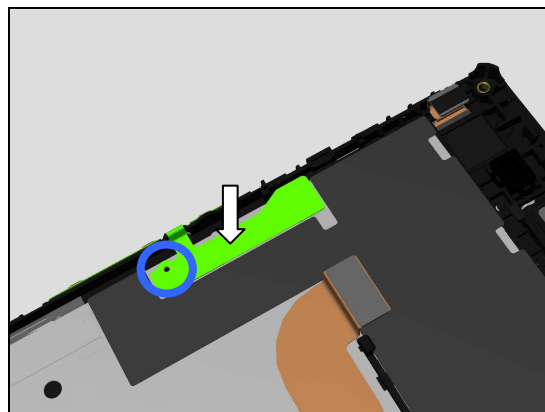
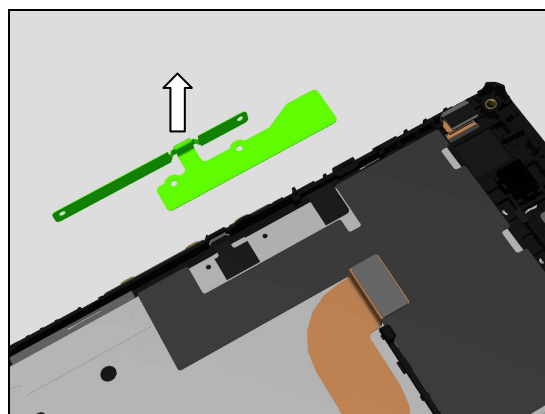
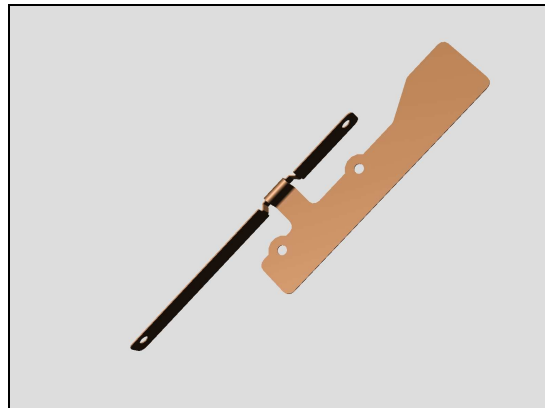
Remove Side Key FPC using Flex Film Assembly Tool.

**Scrap! Not to be reused!**

#### INSTALLATION

Place new Side Key FPC using fingers into its proper position.

Use hole to align Side Key FPC to Front Cover Assy shown in picture!



## Replacement

### 4.22 VGA Rubber

*Follow the 3.1 – 3.7 Disassembly instructions!*

*Carry out the Removal as described below!*

Prepare the new VGA Rubber.

*Carry out the Installation as described below!*

*Follow the 5.1 – 5.7 Reassembly instructions!*

#### REMOVAL

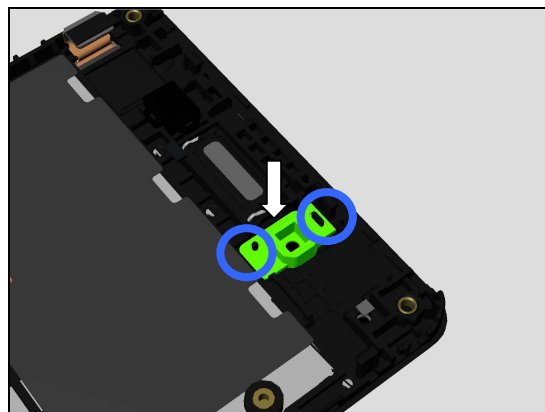
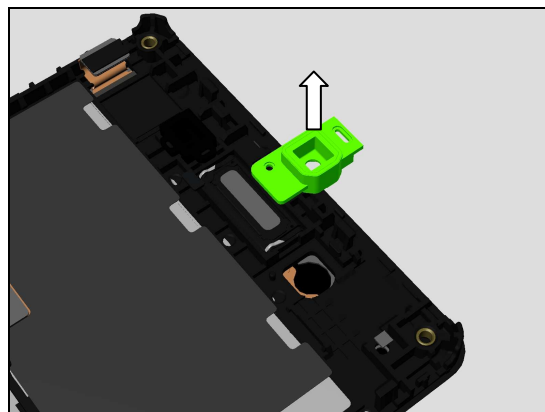
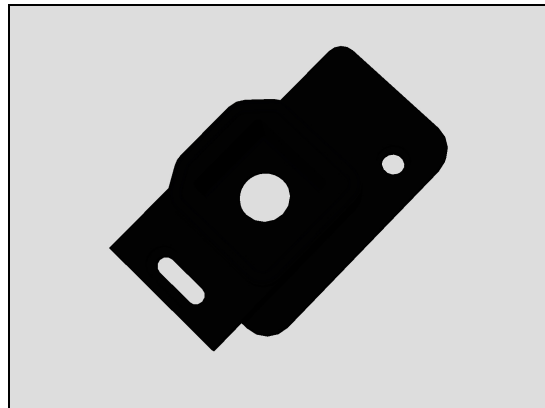
Remove Proximity Sensor Rubber Gasket using Flex Film Assembly Tool.

**Scrap! Not to be reused!**

#### INSTALLATION

Place new VGA Rubber using Flex Film Assembly Tool into its proper position.

Use pegs located on Front Cover Assy to align VGA Rubber as shown in picture!



## Replacement

### 4.23 Board Swap – Replacement

*Follow the 3.1 – 3.5 Disassembly instructions!*

*Follow the 4.14 Removal instructions!*

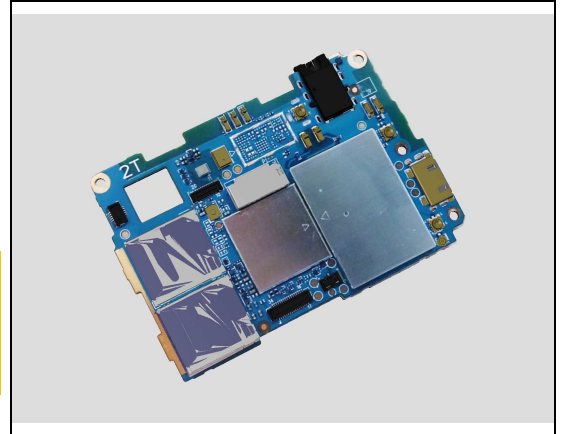
Replace the Swap Board.

*Follow the 4.14 Installation instructions!*

*Follow the 5.3 – 5.7 Reassembly instructions!*

**Reuse the Camera Main!**

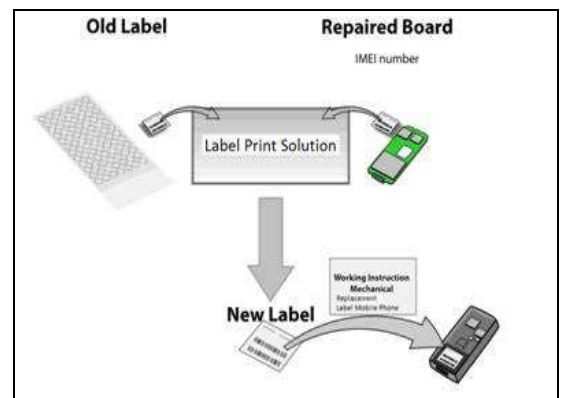
**Please refer to: Trouble Shooting Application 1257-2706 for applicable D2202, D2203, D2206, D2212 & D2243 calibrations!**



### 4.24 Board Swap – Change Label

#### CHANGE LABEL

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

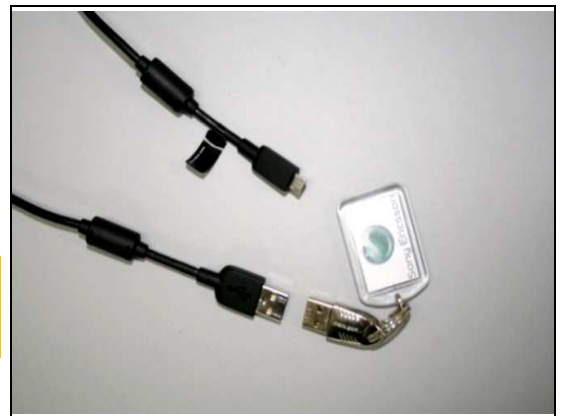


### 4.25 Board Swap – Customize of Software

#### CUSTOMIZE OF SOFTWARE

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

**After SW Flash press the Key On/Off to power on the phone, place unit on flat desk and wait 4 minutes until system boot up has been completed!**



## 5 Reassembly

The reassembly is done in the following order:

1. Front Cover Assy
2. Battery 2300 mAh
3. Sub PBA
4. Main PBA
5. Camera Main
6. Rear Cover Assy
7. Screw 1.6mm x 3.2mm
8. Rubber Corner
9. Battery Cover

### 5.1 Front Cover Assy & Battery 2300 mAh

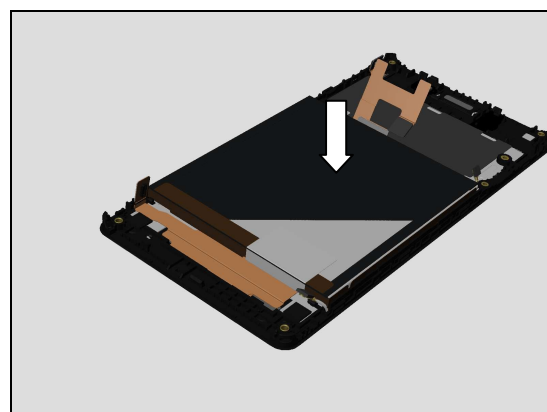
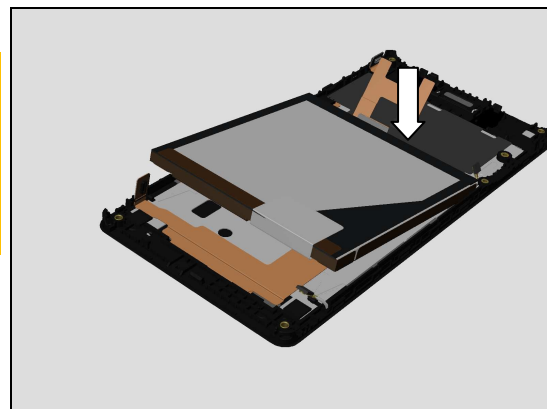
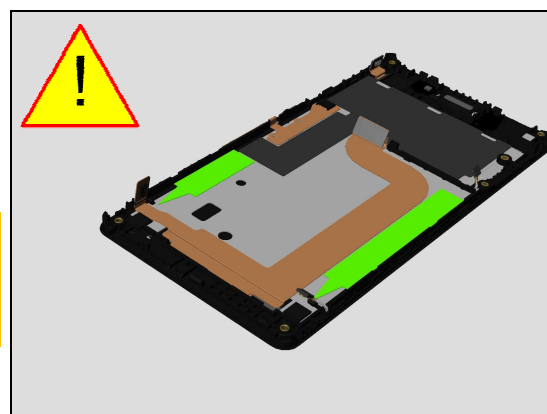
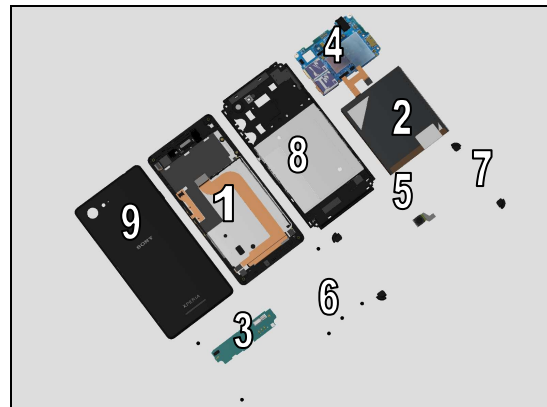
**Scrap! Not to be reused!**

**Follow the 4.10 & 4.11 removal and installations to replace a new Battery Adhesive- 1 & Battery Adhesive - 2!**

**If reusing the Battery 2300 mAh carefully inspect the Battery before assembly. Batteries with visual signs of being bent, having been punctured, bubbles etc. should be scrapped after removal!**  
**Follow chapter 4.8 replacement instructions to replace a new Battery 2300 mAh!**

Place the Battery 2300 mAh in its proper position onto the Front Cover Assy connector side first as shown in picture.

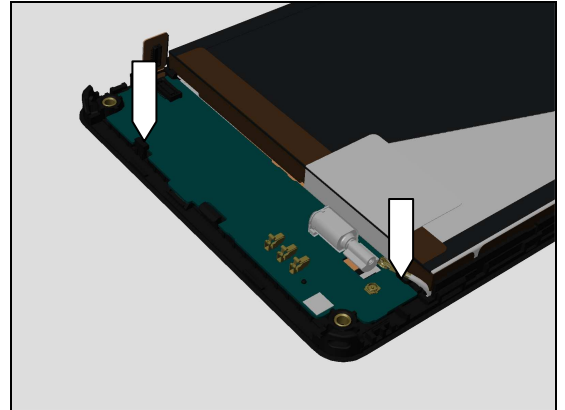
Press down gently on Battery 2300 mAh using fingers for 5 seconds to secure its attachment.



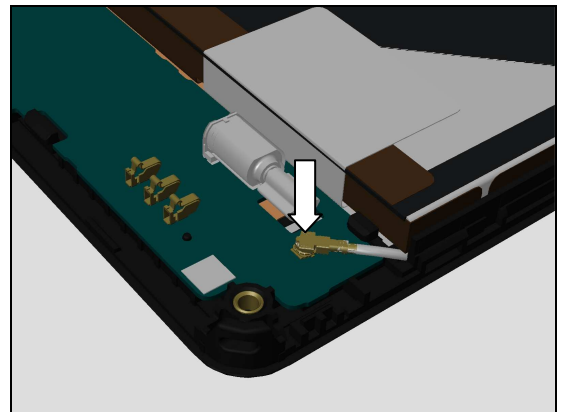
## Reassembly

### 5.2 Sub PBA

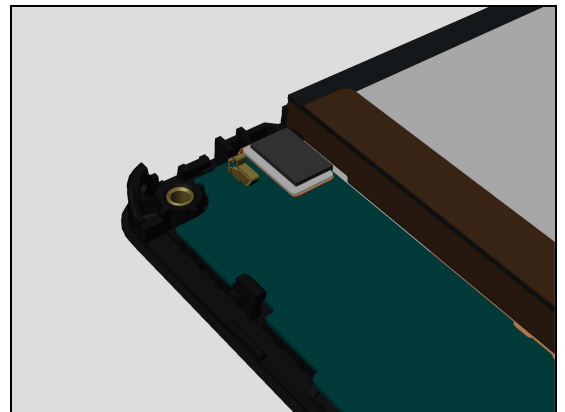
Place the Sub PBA into its proper position, gently press down on sub PBA to secure both snap hooks as shown in picture.



Attach RF Cable connector to Sub PBA, press directly on top of connector using Nylon Pointer for 5sec to fully secure RF Cable connector attachment!

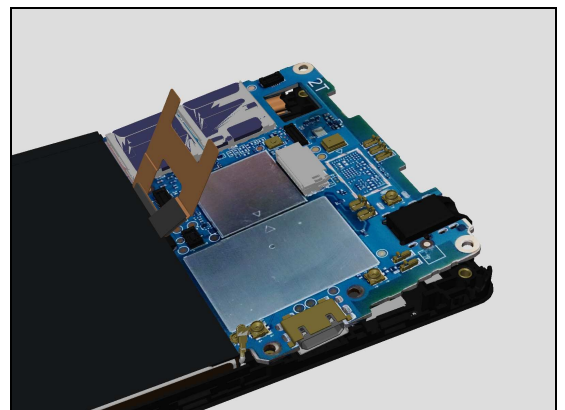


Attach LCD FPC BtB connector to Sub PBA, press directly on top of connector using Nylon Pointer for 5sec to fully secure board-to-board (BtB) connector attachment!



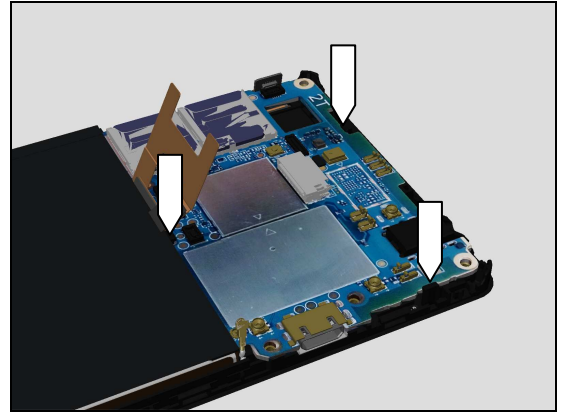
### 5.3 Main PBA

Place Main PBA at an angle into its proper position as shown in picture.

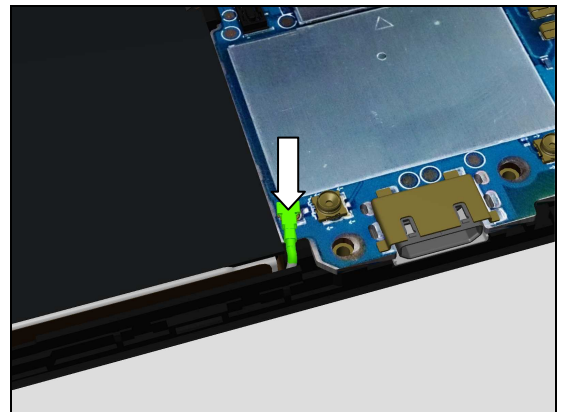


## Reassembly

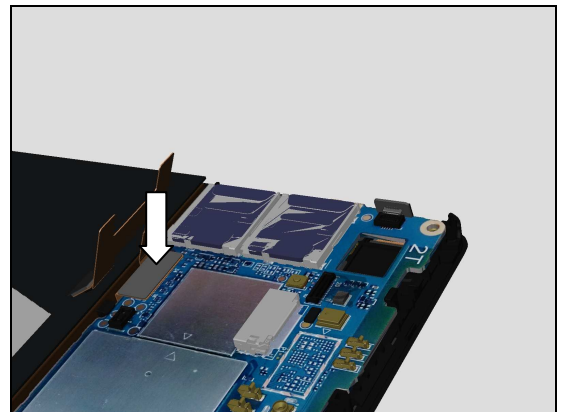
Press Main PBA gently to secure three snap hooks as shown in picture.



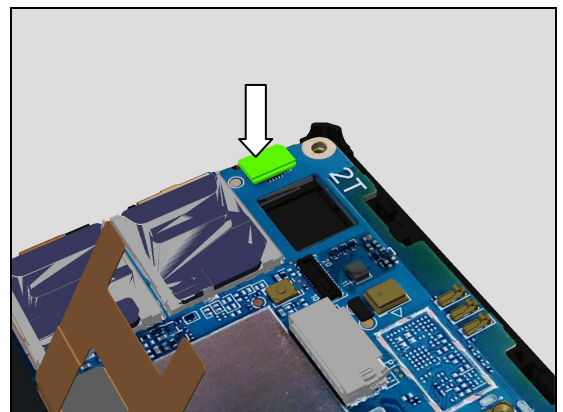
Attach RF Cable connector to Main PBA, press directly on top of connector using Nylon Pointer for 5sec to fully secure RF Cable connector attachment!



Attach LCD FPC BtB connector to Main PBA, press directly on top of connector using Nylon Pointer for 5sec to fully secure board-to-board (BtB) connector attachment!

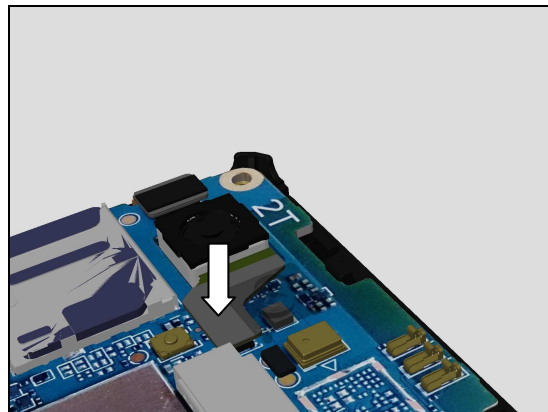


Attach Touch Panel BtB connector to Main PBA, press directly on top of connector using Nylon Pointer for 5sec to fully secure board-to-board (BtB) connector attachment!

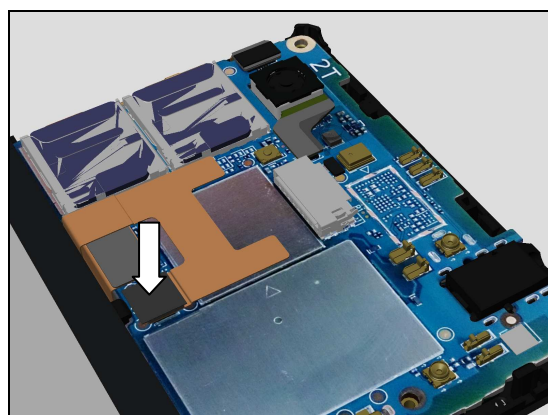


## Reassembly

Attach Camera Main BtB connector to Main PBA, press directly on top of connector using Nylon Pointer for 5sec to fully secure board-to-board (BtB) connector attachment!

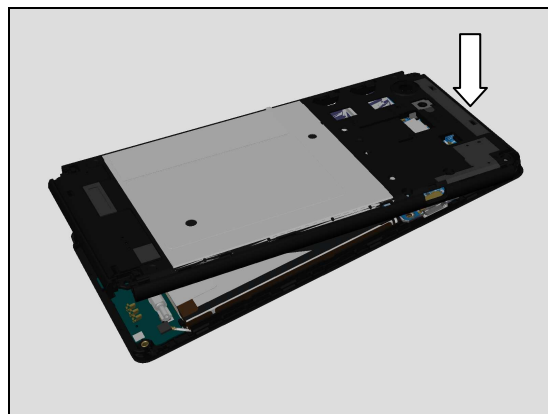


Bend back the Battery 2300 mAh FPC to its proper position then attach Battery 2300 mAh BtB connector to Main PBA, press directly on top of connector using Nylon Pointer for 5sec to fully secure board-to-board (BtB) connector attachment!

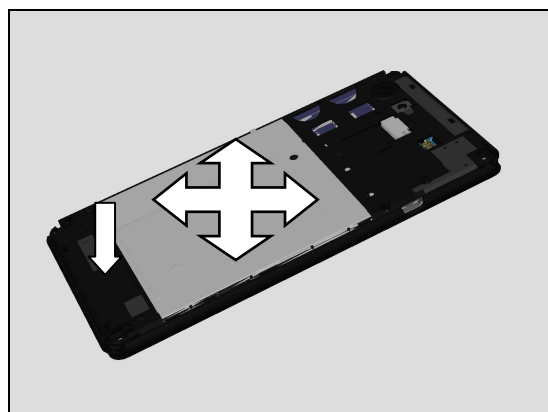


### 5.4 Rear Cover Assy

Hold Rear Cover Assy at an angle and insert the hooks of the Rear Cover Assy onto topside of Front Cover Assy cavity as shown in picture.



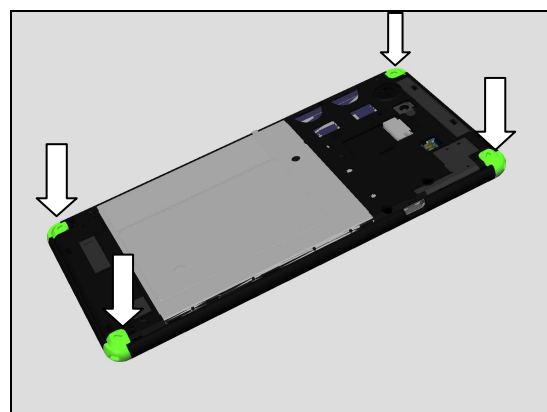
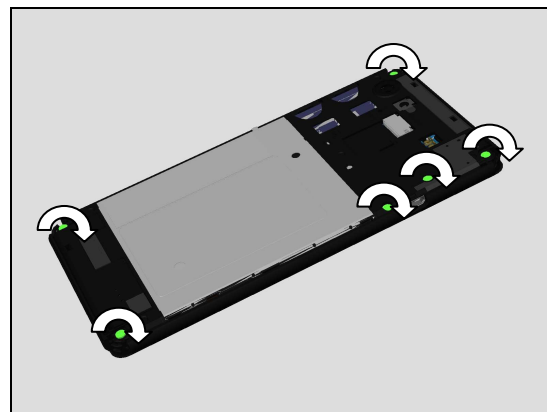
Then press down at bottom side, then press down on all sides of Battery Cover make it snap securely on to Front Cover Assy.



### 5.5 Screw 1.6mm x 3.2mm & Rubber Corner

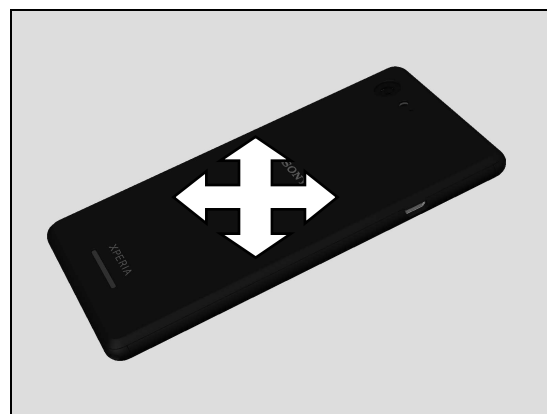
Apply 9 NCM torque when tightening all six Screw 1.6mm x 3.2mm by using Torx Bit T5.

Attach Rubber Corner x4 into its proper position and then press directly on top of connector using fingers for 5sec to secure attachment!



### 5.6 Battery Cover

Attach Battery Cover and then press down on all sides of Battery Cover make it snap securely on to Rear Cover Assy.



# SONY

make.believe

*Working Instruction Repair Instruction Mechanical/*

## 6 Revision History

Rev.	Date	Changes / Comments
1	2014-Sep-09	Released
2	2014-Sep-11	No Change
3	2014-Oct-02	D2243 Added