

## Working Instructions

- mechanical -



*Xperia E4g*  
*E2003, E2006, E2033, E2043, E2053*

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

## 1 Exterior Views

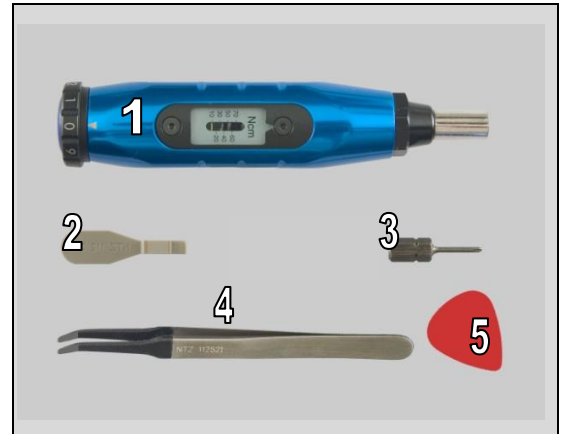
### 1.1 E2003, E2006, E2033, E2043, E2053



## 2 Tools

### SPECIAL TOOLS

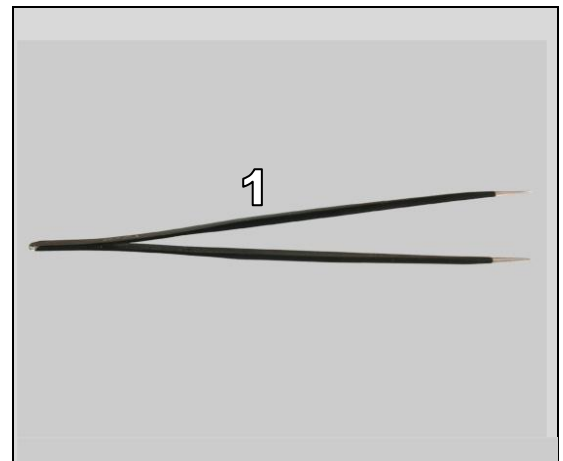
1. Torque Screwdriver
2. Front Opening Tool
3. Bits (T5)
4. Flex Film Assembly Tool
5. Guitar Pick



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

### STANDARD TOOLS

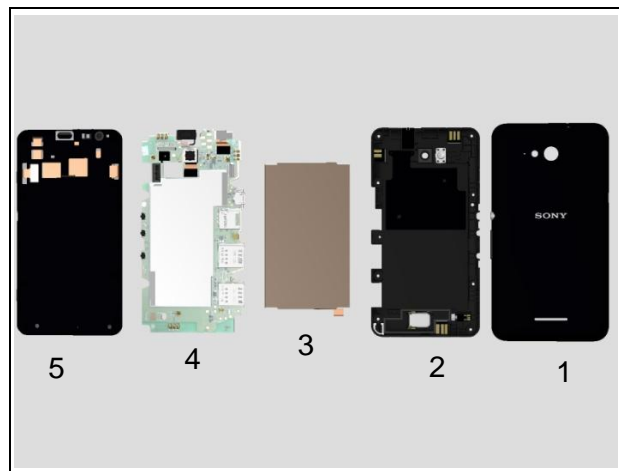
1. Tweezers



## 3 Disassembly

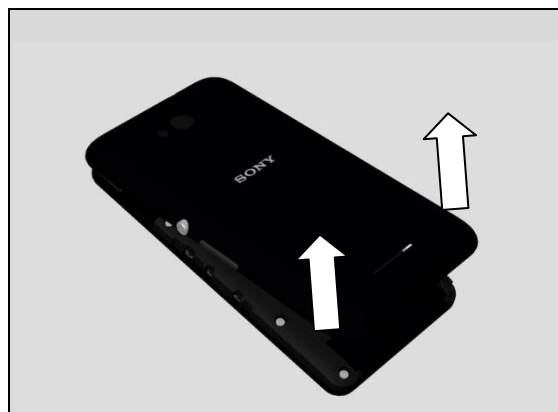
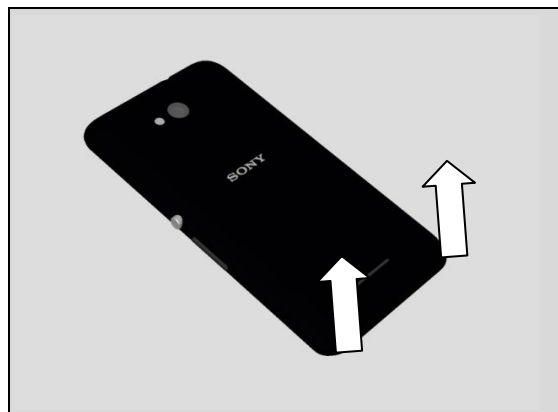
The disassembly is done in the following order:

1. Battery Cover
2. Rear Assy
3. Battery Assy
4. Main PBA
5. Front Assy

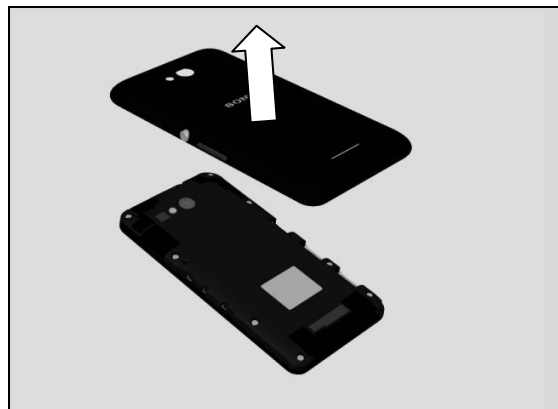


### 3.1 Battery Cover

Open the Battery Cover from the bottom side corner as shown.



The bottom side of Battery Cover is open.



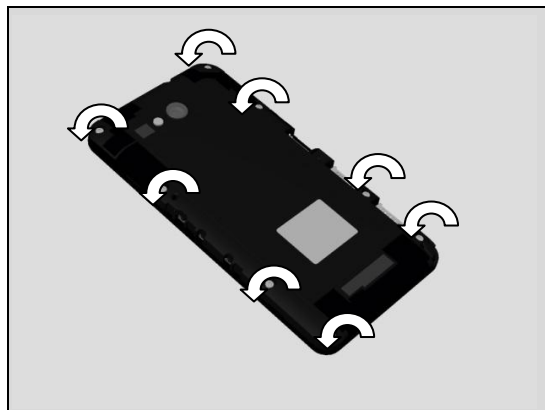
Remove the Battery Cover.

## Disassembly

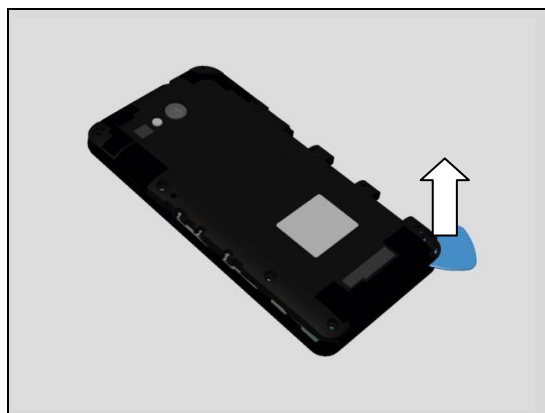
### 3.2 Rear Assy

Remove the eight Screws by using a screwdriver with Bits (T5).

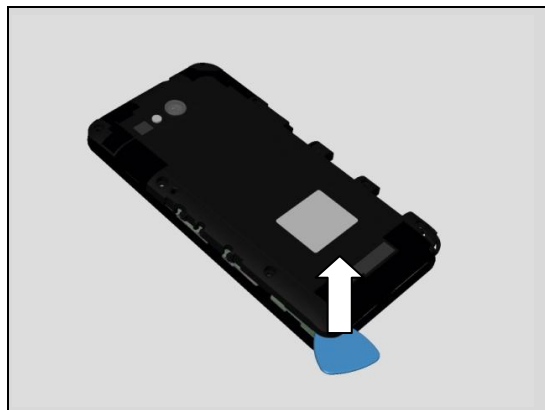
**Scrap! Not to be reused.**



Insert Guitar Pick as shown to open Rear Assy.



Insert Guitar Pick as shown to open Rear Assy.

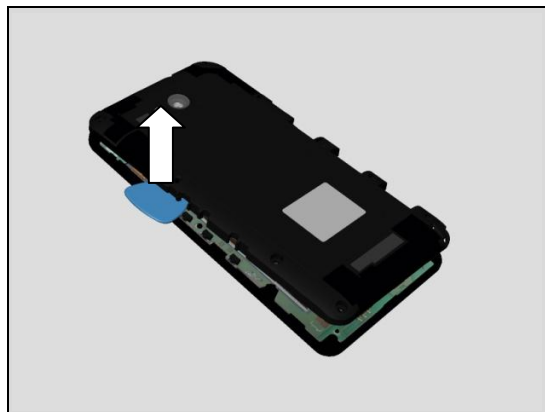


Insert Guitar Pick as shown to open Rear Assy.

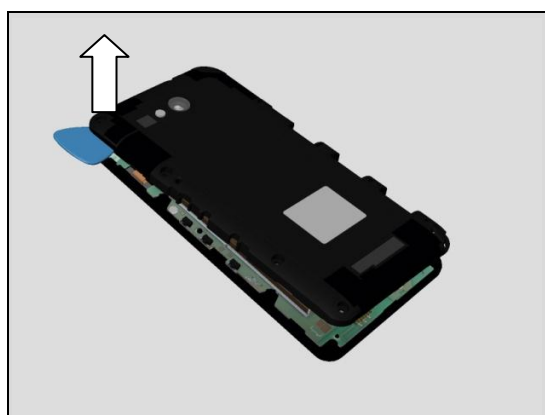


## Disassembly

Insert Guitar Pick as shown to open Rear Assy.



Insert Guitar Pick as shown to open Rear Assy.



Remove the Rear Assy.

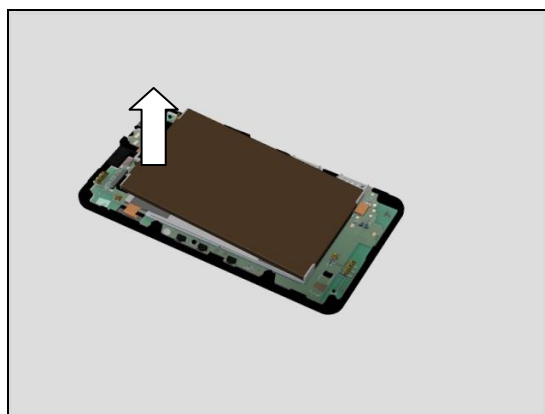


### 3.3 Battery Assy

Disassemble the Battery Assy from Top side as shown gently.

**Note:**

1. *There are two pieces of Adhesive Battery between Battery Assy and Shielding can.*
2. *Be careful not to make shielding can pop up.*

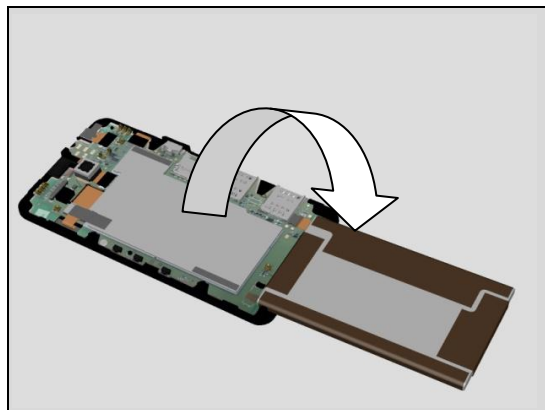




## Disassembly

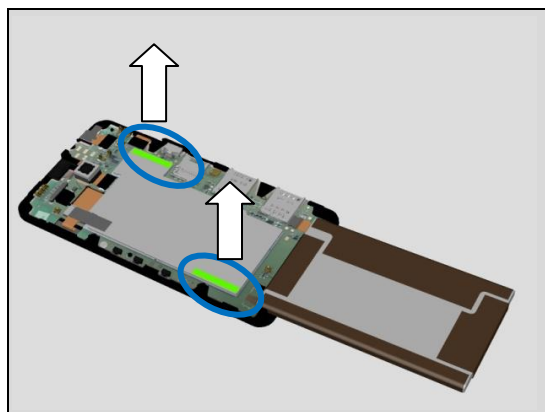
Turn over the Battery Assy 180 degree as shown.

**Note: be careful not to damage Battery Assy.**

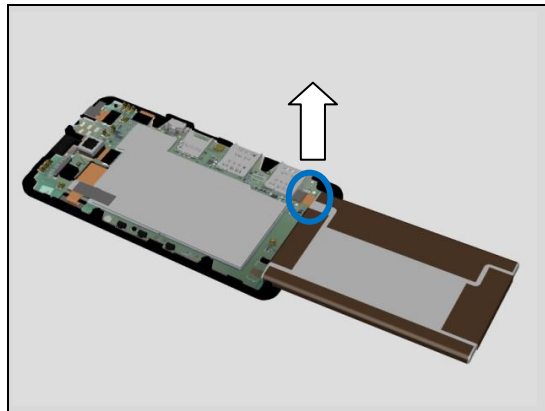


Remove the two pieces of Adhesive Battery as shown on shield can.

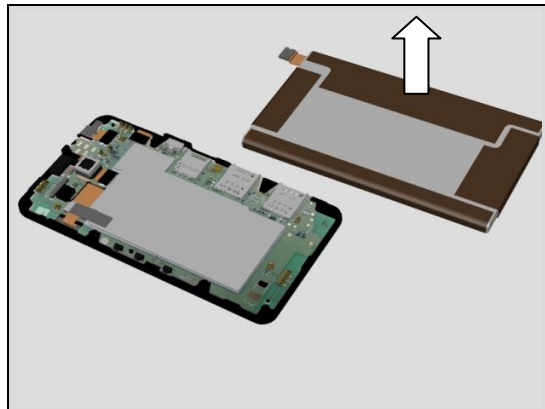
**Scrap! Not to be reused.**



Unsnap the BtB connector of Battery Assy from Main PBA as shown.



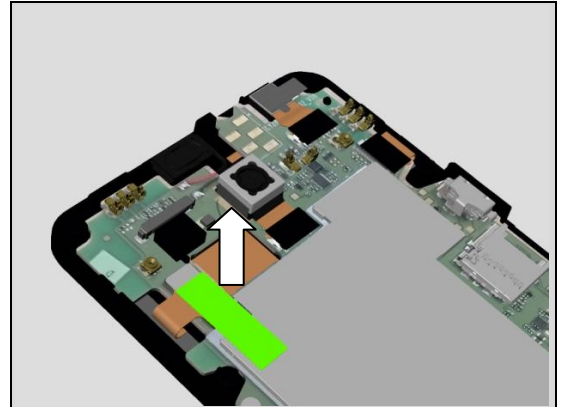
Remove the Battery Assy.



## Disassembly

### 3.4 Main PBA

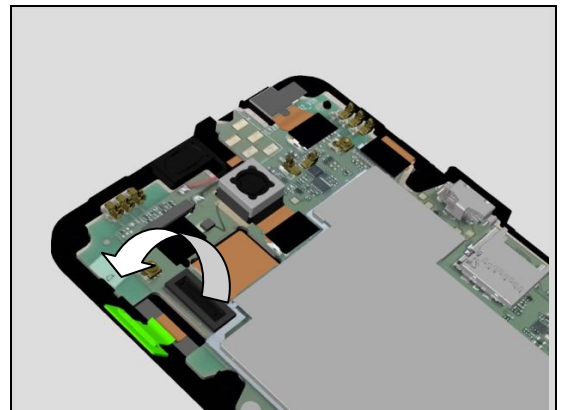
Remove the Fabric TP BTB from Main PBA.



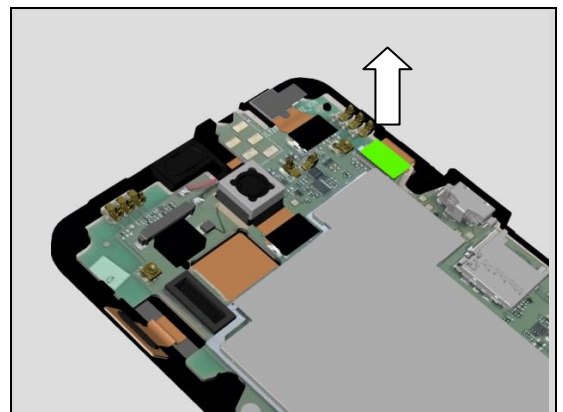
Unsnap the BtB connector of TP.



Open the BtB connector of TP as shown.

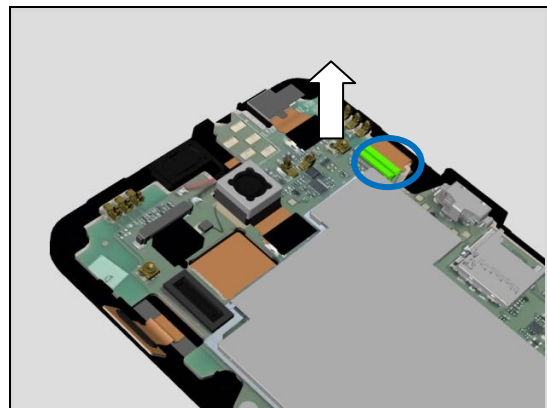


Remove the Mylar CONN from LCM ZIF Connector.

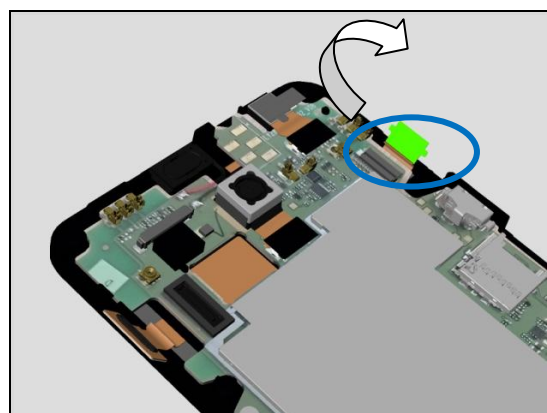


## Disassembly

Unsnap the LCM ZIF Connector as shown.



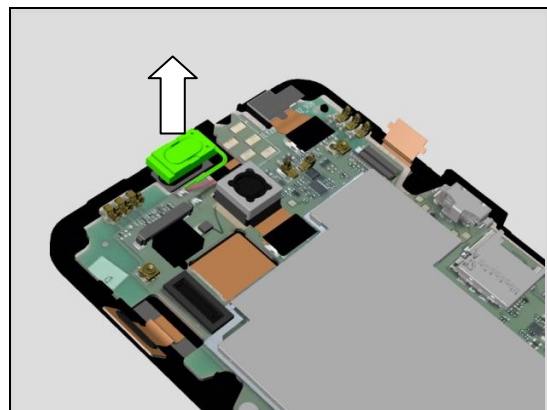
Open the LCM FPC from its ZIF connector as shown.



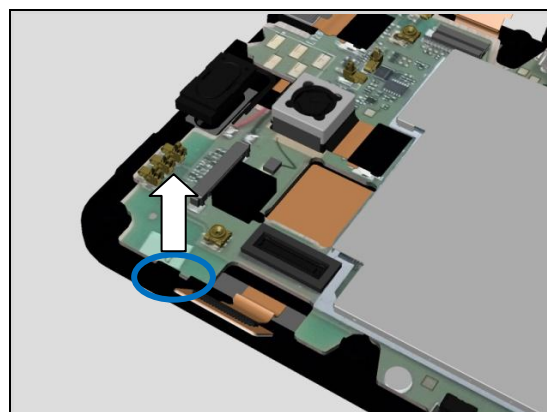
Disassemble the Receiver from its cavity.

**Note: there's Adhesive Receiver under Receiver in its cavity.**

**Be careful! Don't damage the receiver.**

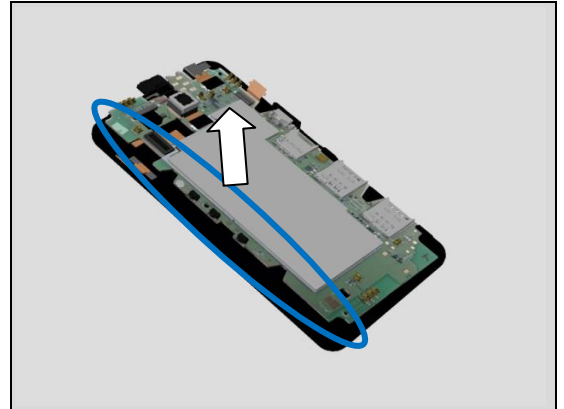


Open the hook of Front Assy from Main PBA.

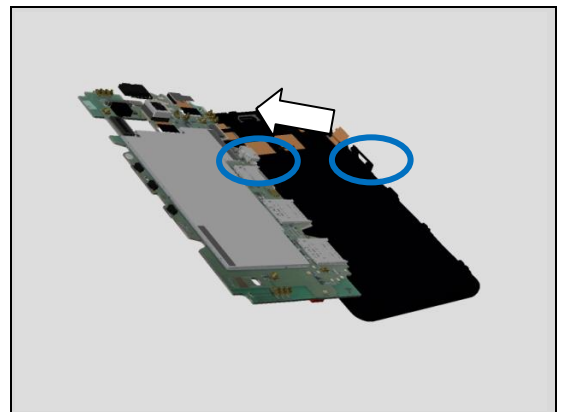


## Disassembly

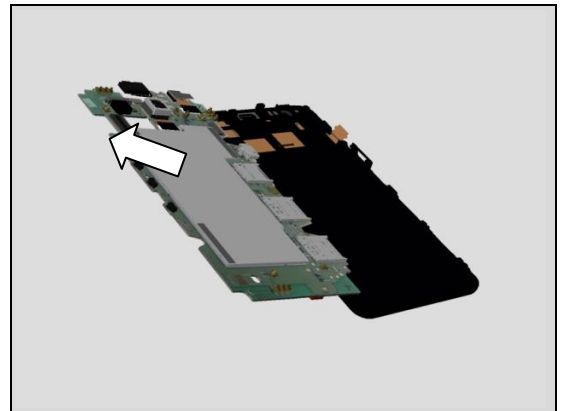
Lift up the left side of Main PBA as shown first.



Pull out USB connector from Front Assy then.

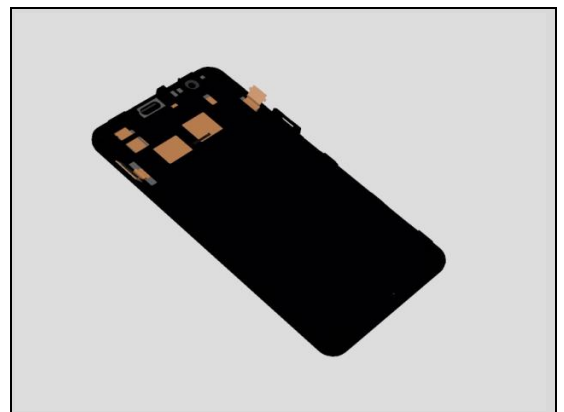


Remove the Main PBA as shown.



### 3.5 Front Assy

Front Assy as shown.



## 4 Replacement

### 4.1 Battery Cover

*Follow the 3.1 Disassembly instructions!*

Prepare the new Battery Cover.

*Follow the 5.5 Reassembly instructions!*



### 4.2 Rear Assy

*Follow the 3.1-3.2 Disassembly instructions!*

*Follow 4.8, 4.20, 4.21 Removal instructions*

Prepare the new Rear Assy.

*Follow 4.8, 4.20, 4.21, 4.22, 4.23 Installation instructions.*

*Follow the 5.4-5.5 Reassembly instructions!*



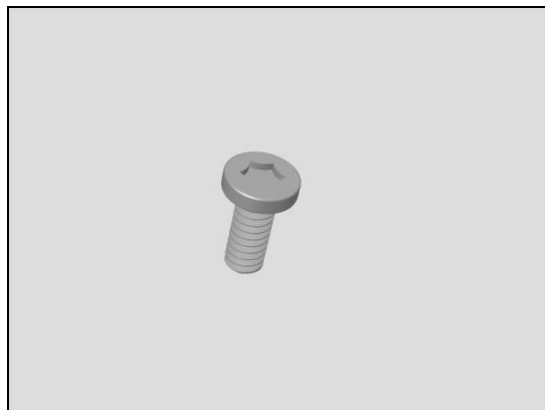
### 4.3 Screw TORX PT 1.6L4

*Follow the 3.1 Disassembly instructions!*

Prepare the new Screw TORX PT1.6 L4.

*Follow the 5.5 Reassembly instructions!*

**Scrap! Not to be reused.**



### 4.4 Battery Assy

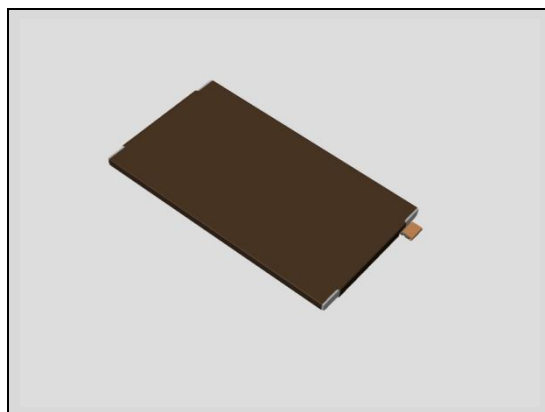
*Follow the 3.1 – 3.3 Disassembly instructions!*

Prepare the new Battery Assy.

*Follow the 5.3 – 5.5 Reassembly instructions!*

**Note: Must use new Adhesive Battery on Shield can.**

**Visual Inspection of Battery Assy.**



## Replacement

### 4.5 Front Assy

*Follow the 3.1 – 3.5 Disassembly instructions!*

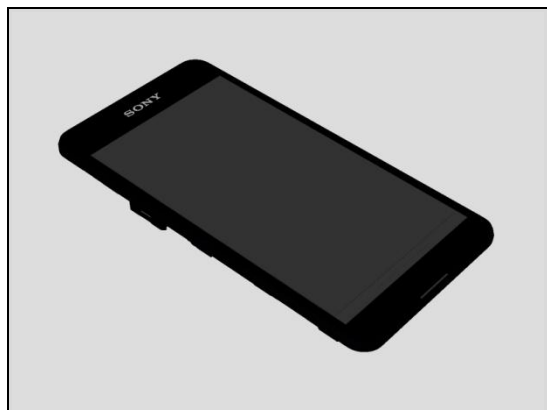
*Follow 4.7,4.17 Removal instructions*

*Prepare the new Front Assy.*

*Follow 4.7,4.17 Installation instructions*

*Follow the 5.1– 5.5 Reassembly instructions!*

**When replacing Front Assy or board swap, must do the Calibration for P-sensor, light sensor, accelerometer: 1289-2983 Trouble Shooting Application – mechanical**



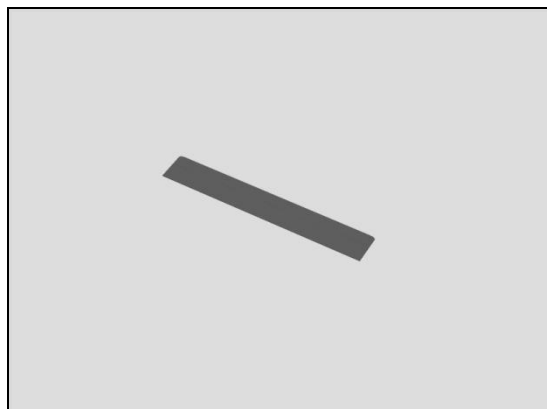
### 4.6 Adhesive Battery

*Follow the 3.1-3-3 Disassembly instructions!*

*Prepare the new Adhesive Battery.*

*Follow the 5.3-5.5 Reassembly instructions!*

**Scrap! Not to be reused.**



### 4.7 Adhesive Receiver

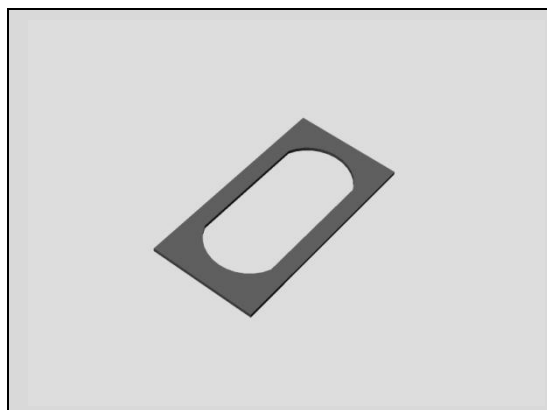
*Follow the 3.1-3.2 Disassembly instructions!*

*Carry out the Removal as described below.*

*Prepare the new Adhesive Receiver.*

*Carry out the Installation as described below*

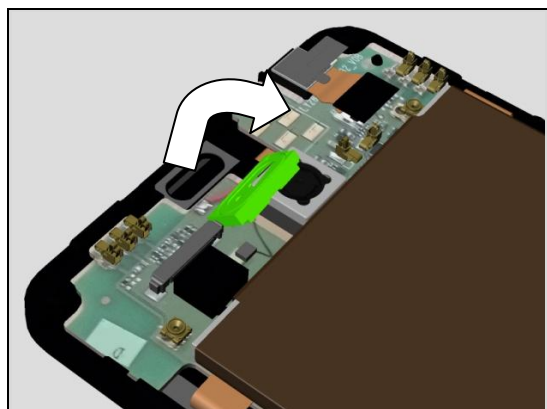
*Follow the 5.4-5.5 Reassembly instructions!*



### REMOVAL

Disassemble the Receiver from its cavity first carefully.

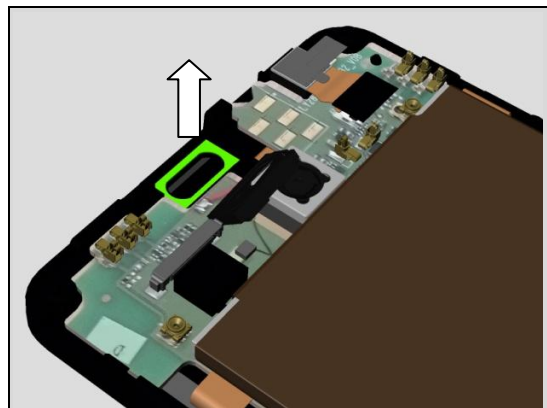
**Be careful, do not damage Receiver.**



## Replacement

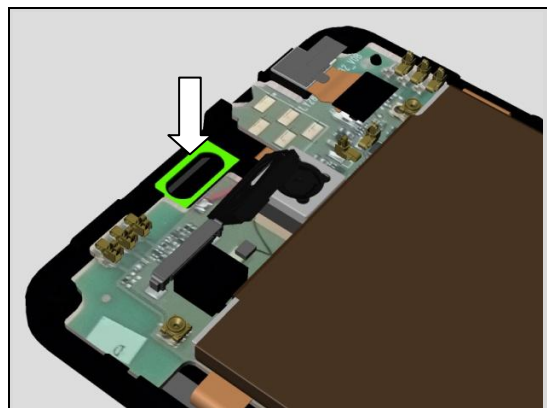
Remove the Adhesive Receiver from its cavity of Front Assy.

**Scrap! Not to be reused.**



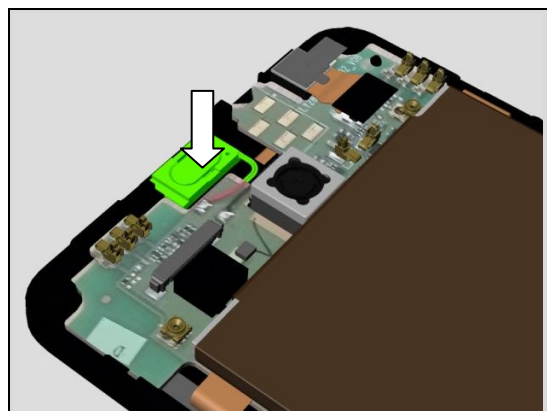
## INSTALLATION

Assemble new Adhesive Receiver onto its cavity of Front Assy.



Place Receiver back onto its cavity of Front Assy.  
Press to secure its attachment.

**Note: Adjust Receiver Cable at its correct position.**



## 4.8 Audio Jack

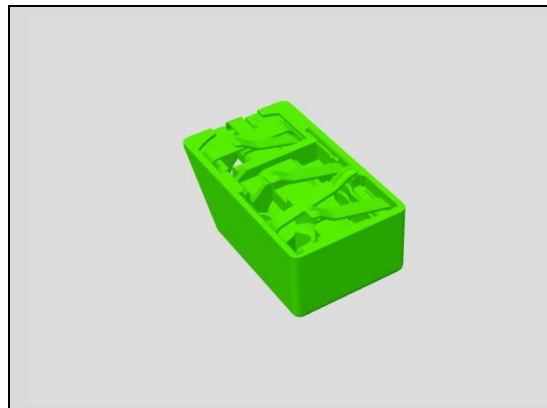
*Follow the 3.1-3.2 Disassembly instructions!*

Carry out the Removal as described below.

Prepare the new Audio Jack.

*Carry out the Installation as described below*

*Follow the 5.4-5.5 Reassembly instructions!*

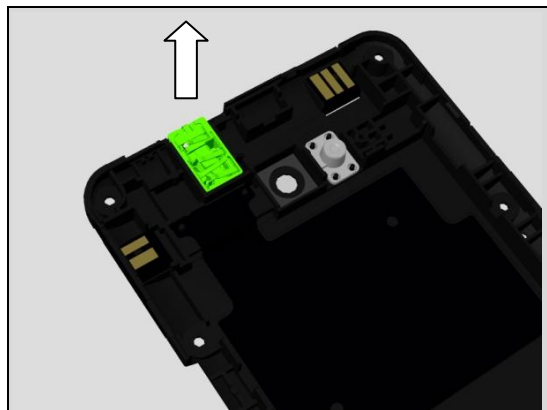




## Replacement

### REMOVAL

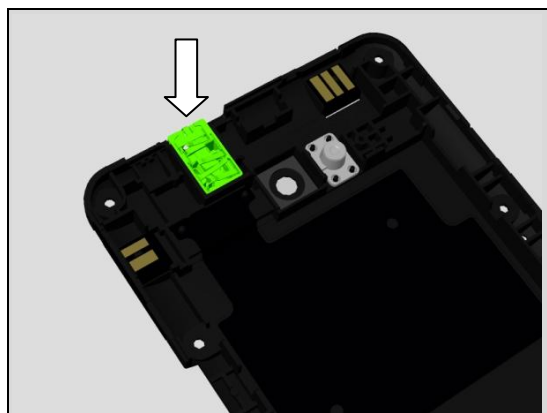
Remove the Audio Jack from Rear Assy.



### INSTALLATION

Assemble the Audio Jack into its cavity on Rear Assy.

**Note: do not press Pins of Audio Jack.**



## 4.9 Core Unit Label

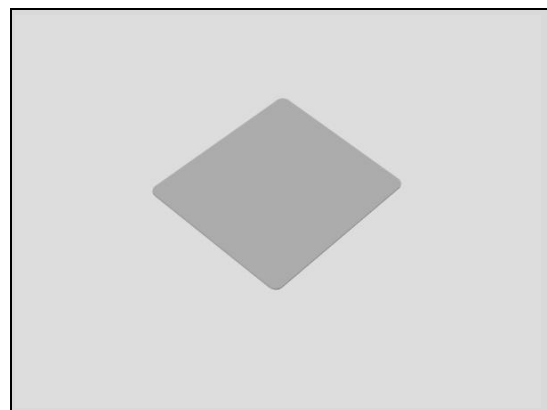
*Follow the 3.1 Disassembly instructions!*

Carry out the Removal as described below.

Prepare the new Core Unite Label.

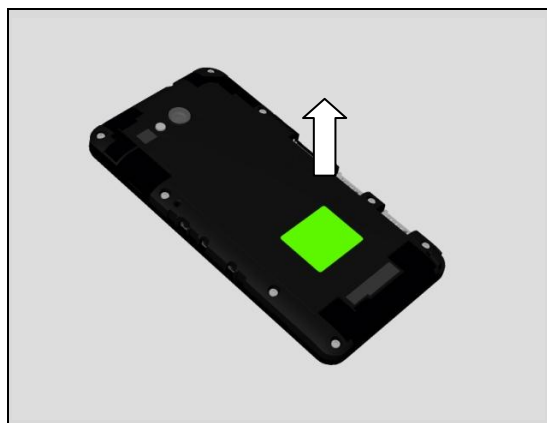
*Carry out the Installation as described below*

*Follow the 5.6 Reassembly instructions!*



### REMOVAL

Remove the Core Unite Label from Rear Assy.



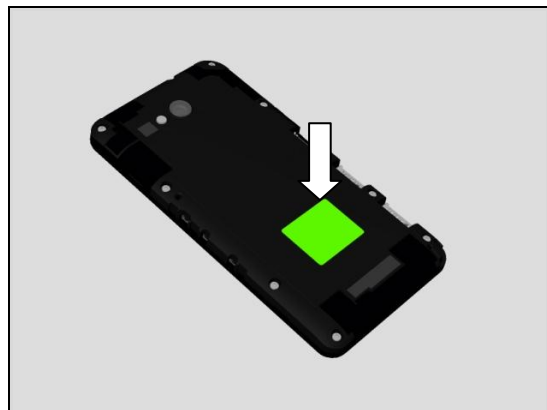


## Replacement

### INSTALLATION

Assemble Core Unit Label at its correct position as shown on Rear Assy.

**One label only is allowed.**



### 4.10 Fabric Front Camera

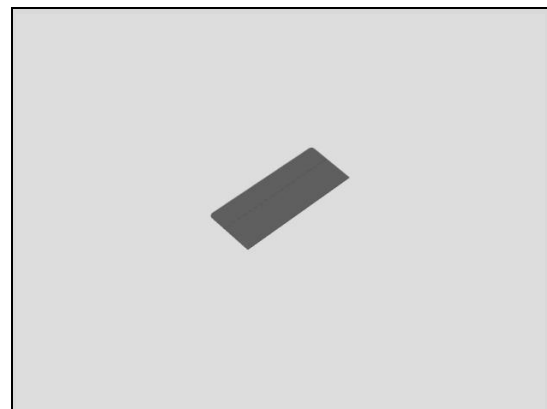
*Follow the 3.1-3.2 Disassembly instructions!*

Carry out the Removal as described below.

*Prepare the new Fabric Front Camera.*

*Carry out the Installation as described below*

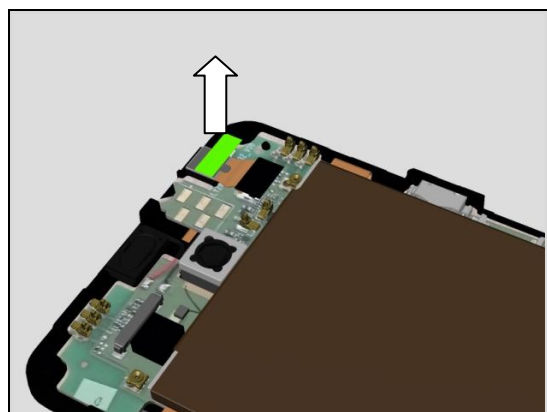
*Follow the 5.4-5.5 Reassembly instructions!*



### REMOVAL

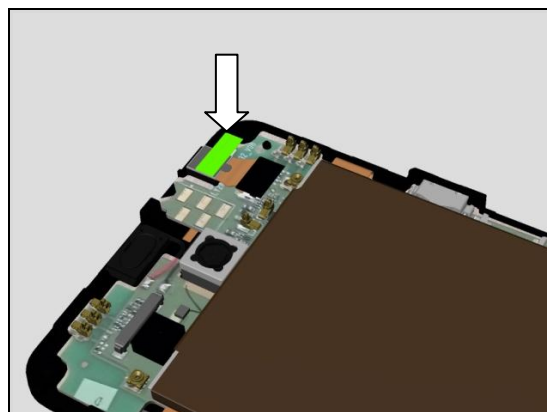
Remove the Fabric Front Camera from Front Camera.

**Scrap! Not to be reused.**



### INSTALLATION

Assemble new Fabric Front Camera on Front Camera as shown.



## Replacement

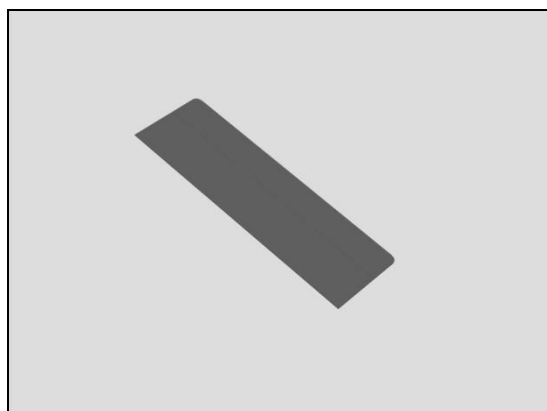
### 4.11 Fabric TP BTB

*Follow the 3.1-3.3 Disassembly instructions!*

*Prepare the new Fabric TP BTB.*

*Follow the 5.3-5.5 Reassembly instructions!*

**Scrap! Not to be reused.**



### 4.12 Front Camera

*Follow the 3.1 – 3.2 Disassembly instructions!*

*Follow 4.14, 4.10 Removal instructions.*

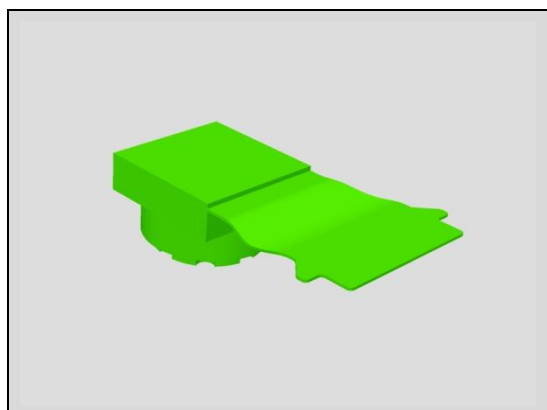
*Carry out the Removal as described below.*

*Prepare the new Front Camera.*

*Carry out the Installation as described below*

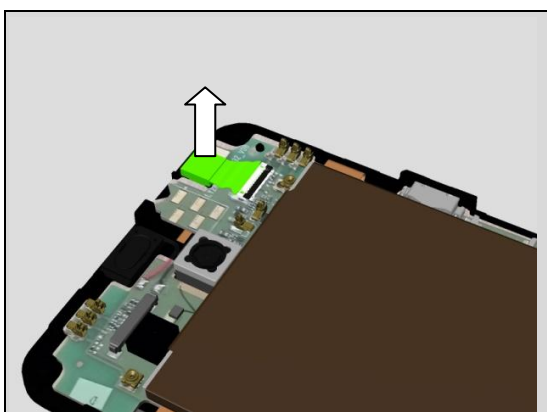
*Following 4.14, 4.10 Installation instructions*

*Follow the 5.4 – 5.5 Reassembly instructions!*



## REMOVAL

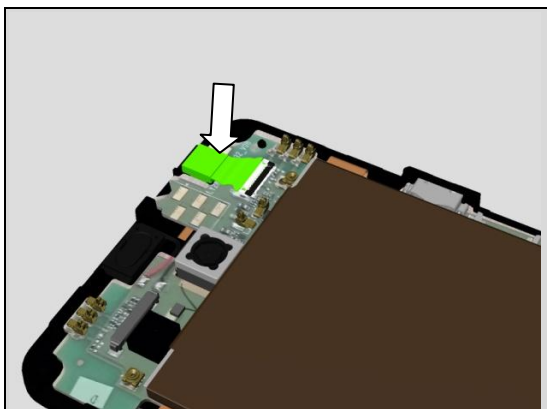
Open ZIF Connector and remove the Front Camera from its ZIF connector on Main PBA.



## INSTALLATION

Assemble the Front Camera into its ZIF connector and snap the ZIF connector.

Put Front Camera into its Cavity correctly.



## Replacement

### 4.13 Main Camera Assy

*Follow the 3.1 – 3.3 Disassembly instructions!*

*Follow 4.14 Removal instructions.*

Carry out the Removal as described below.

*Prepare the new Main Camera Assy.*

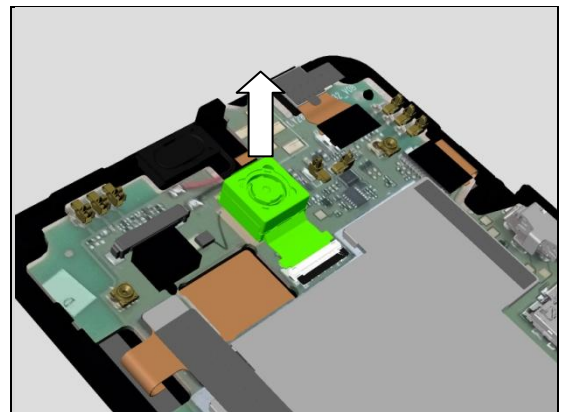
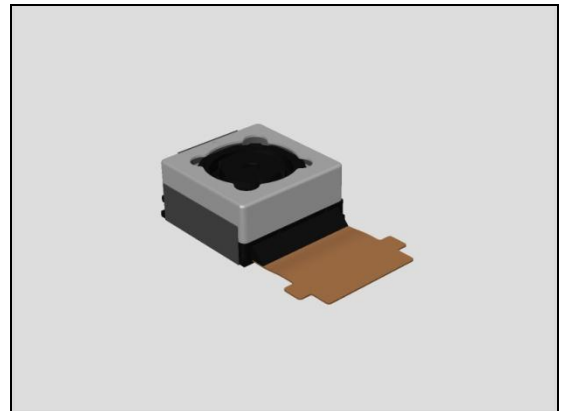
Carry out the Installation as described below.

*Follow 4.14 Installation instructions.*

*Follow the 5.3 – 5.5 Reassembly instructions!*

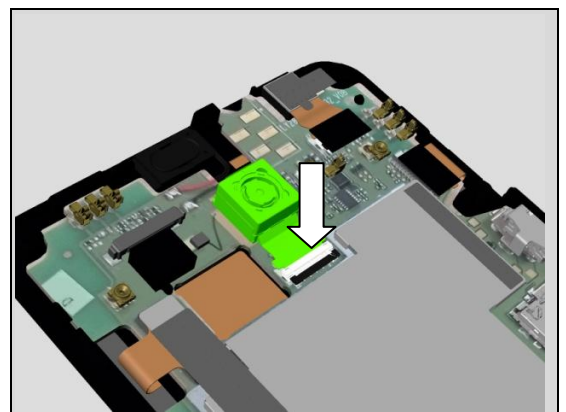
#### REMOVAL

Open the ZIF connector first and Remove the *Main Camera Assy* from its ZIF connector on Main PBA.

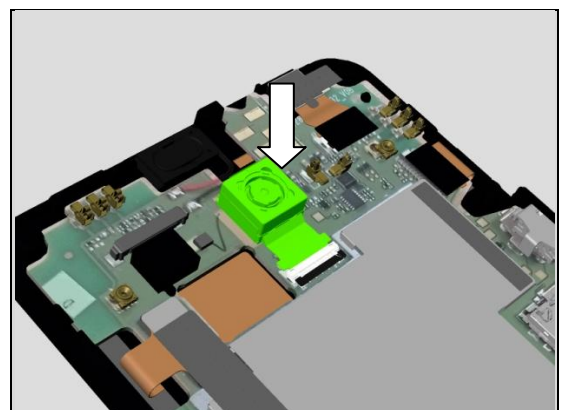


#### INSTALLATION

Assemble the new Main Camera Assy into its ZIF connector and snap the ZIF connector on Main PBA.



Place the Main Camera Assy on Main PBA at its correct position.



## Replacement

### 4.14 Mylar CONN

*Follow the 3.1 – 3.3 Disassembly instructions!*

Carry out the Removal as described below.

*Prepare the new Mylar CONN.*

Carry out the Installation as described below.

*Follow the 5.3 – 5.5 Reassembly instructions!*

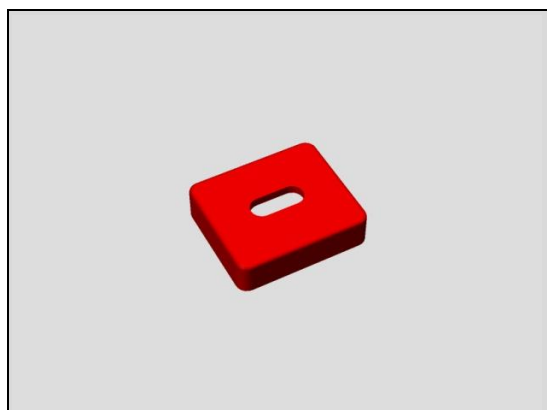
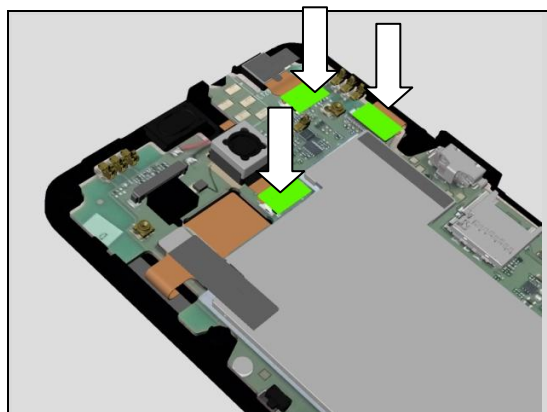
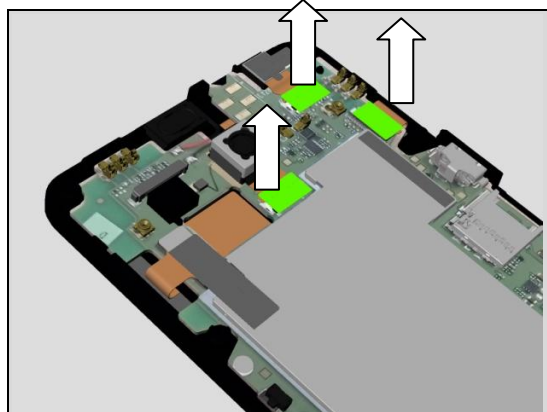
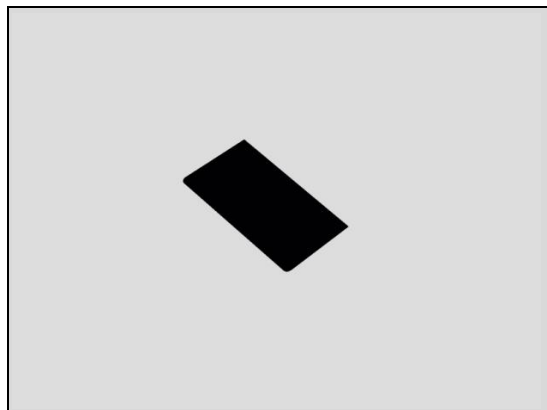
#### REMOVAL

Remove the three Mylar CONN from ZIF connectors as shown from Main PBA.

**Note: Scrap! Cannot be reused.**

#### INSTALLATION

Assemble the three Mylar CONN on their ZIF connectors as shown on Main PBA.



### 4.15 Rubber 1<sup>st</sup> MIC

*Follow the 3.1 – 3.5 Disassembly instructions!*

Carry out the Removal as described below.

Prepare the new Rubber 1st MIC.

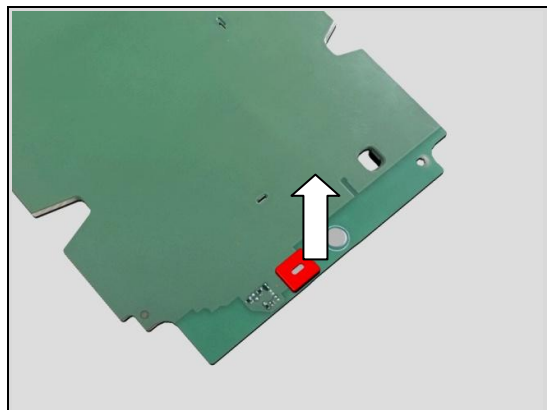
Carry out the Installation as described below.

*Follow the 5.1 – 5.5 Reassembly instructions!*

## Replacement

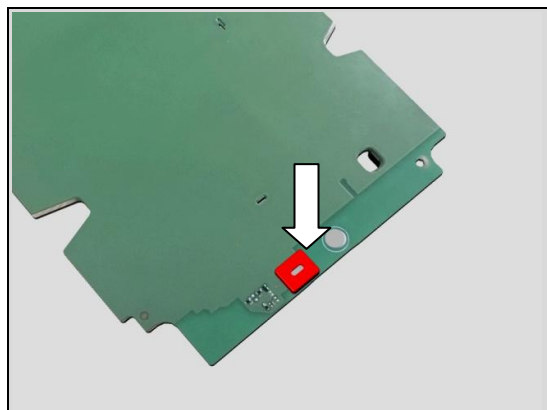
### REMOVAL

Remove the Rubber 1st MIC from main MIC on Main PBA.



### INSTALLATION

Place new Rubber 1st MIC on main MIC on Main PBA.



## 4.16 Rubber 2<sup>nd</sup> MIC

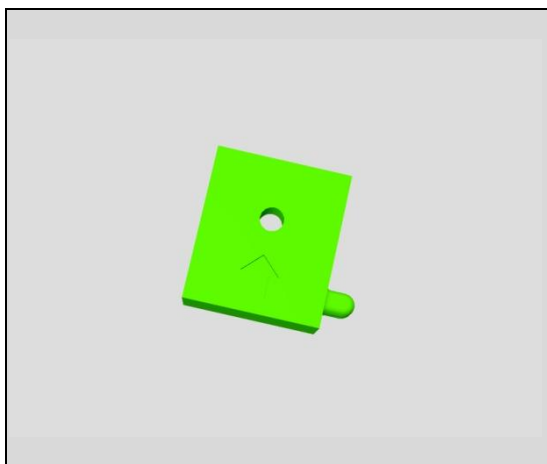
Follow the 3.1 – 3.2 Disassembly instructions!

Carry out the Removal as described below.

Prepare the new Rubber 2nd MIC.

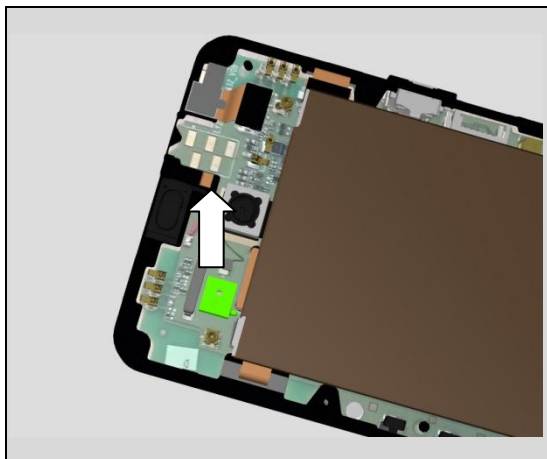
Carry out the Installation as described below.

Follow the 5.4 – 5.5 Reassembly instructions!



### REMOVAL

Remove the Rubber 2<sup>nd</sup> MIC from 2<sup>nd</sup> MIC on Main PBA as shown.

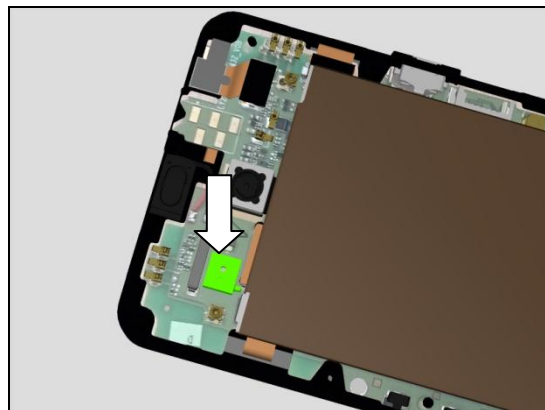


## Replacement

### INSTALLATION

Assemble new Rubber 2<sup>nd</sup> MIC onto 2<sup>nd</sup> MIC on Main PBA as shown.

**Note: Pay more attention about its direction.**



### 4.17 Rubber PL Sensor

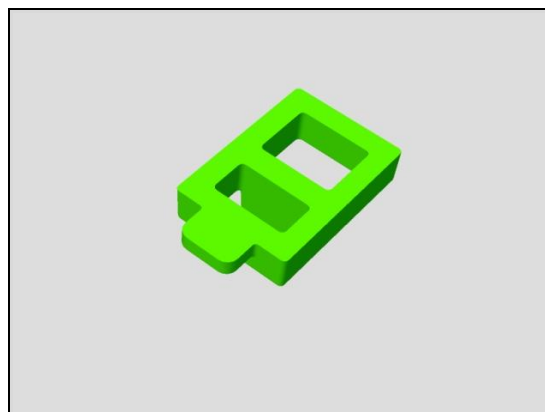
*Follow the 3.1 – 3.5 Disassembly instructions!*

Carry out the Removal as described below.

Prepare the new Rubber PL Sensor.

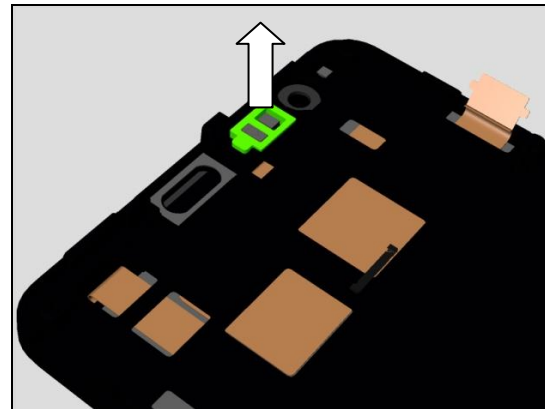
Carry out the Installation as described below.

Follow the 5.1 – 5.5 Reassembly instructions!



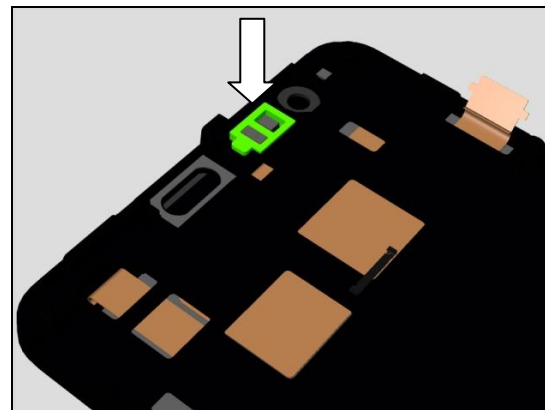
### REMOVAL

Remove the Rubber PL Sensor from its cavity of Front Assy.



### INSTALLATION

Assemble the Rubber PL Sensor into its cavity of Front Assy.





## Replacement

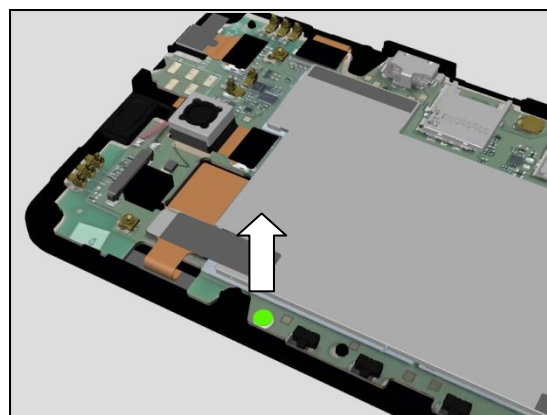
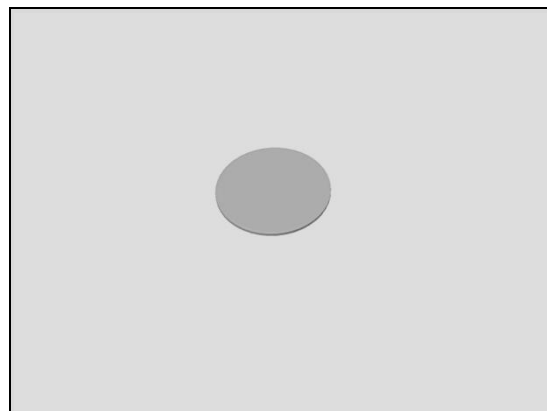
### 4.18 Water Intrusion Label

*Follow the 3.1 – 3.5 Disassembly instructions!*  
 Carry out the Removal as described below.  
 Prepare the new Water Intrusion Label.  
 Carry out the Installation as described below.  
*Follow the 5.1 – 5.5 Reassembly instructions!*

#### REMOVAL

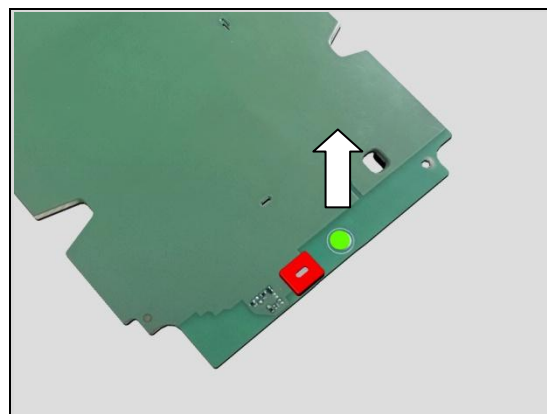
Remove the first Water Intrusion Label from Main PBA as shown.

**Note: Scrap! Cannot be reused.**



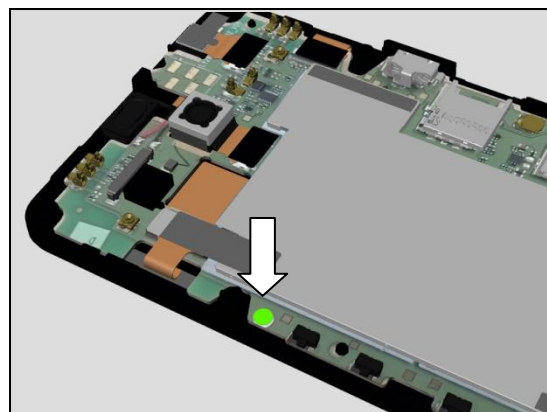
Remove the second Water Intrusion Label from Main PBA as shown.

**Note: Scrap! Cannot be reused.**



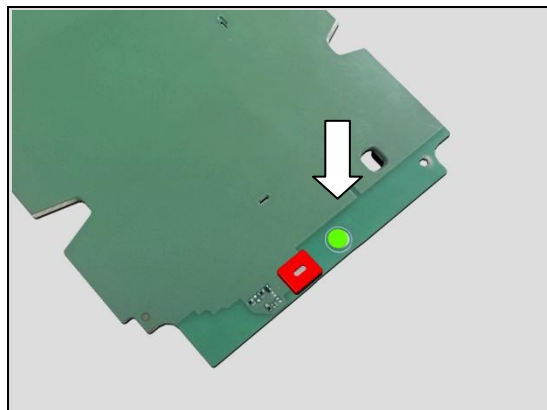
#### INSTALLATION

Attach first new Water Intrusion Label on Main PBA as shown.



## Replacement

Attach second new Water Intrusion Label on Main PBA as shown.



### 4.19 Sponge TP BTB

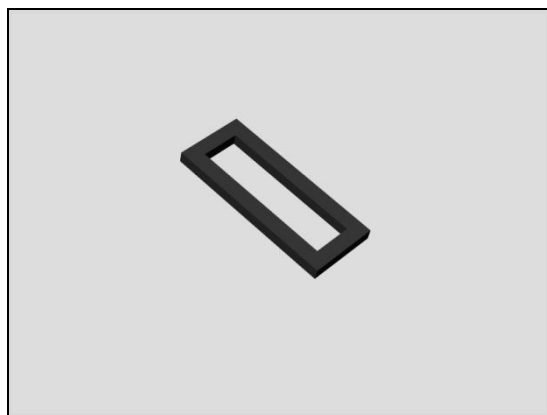
Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below.

Prepare the new Sponge TP BTB.

Carry out the Installation as described below.

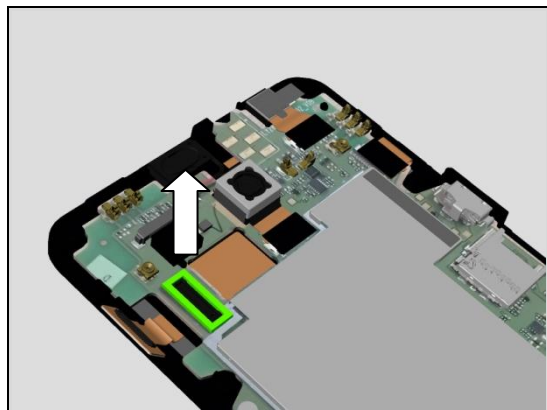
Follow the 5.3 – 5.5 Reassembly instructions!



#### REMOVAL

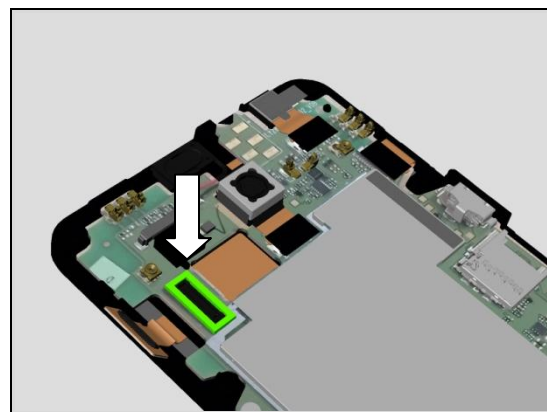
Remove the Sponge TP BTB from TP BTB connector on Main PBA as shown.

**Note: Scrap! Cannot be reused.**



#### INSTALLATION

Assemble the *Sponge TP BTB* onto TP BTB connector on Main PBA as shown.





## Replacement

### 4.20 Speaker & Adhesive Speaker

*Follow the 3.1 – 3.2 Disassembly instructions!*

Carry out the Removal as described below.

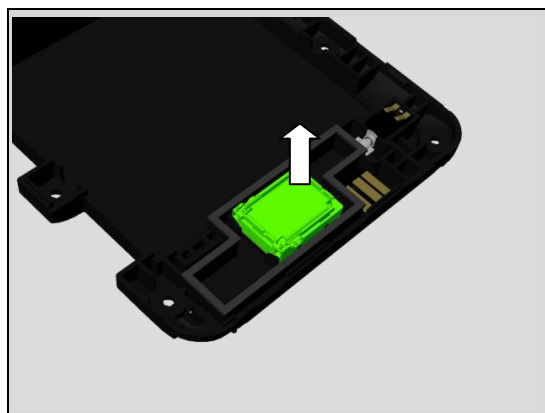
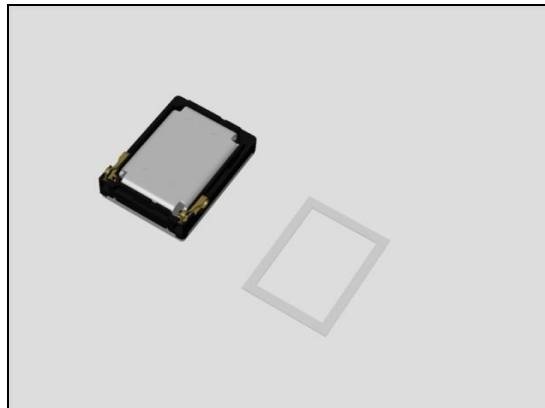
Prepare the new Speaker & new Adhesive Speaker.

Carry out the Installation as described below.

*Follow the 5.4 – 5.5 Reassembly instructions!*

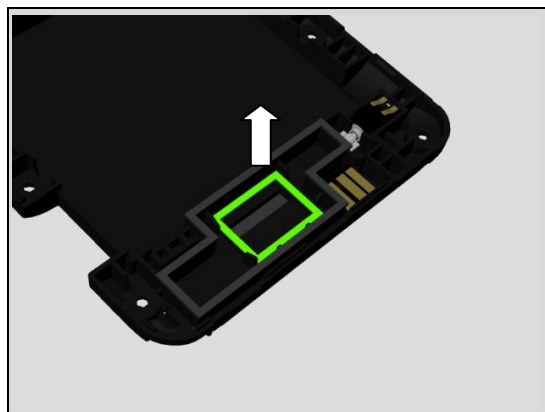
#### REMOVAL

Remove the Speaker from its cavity.



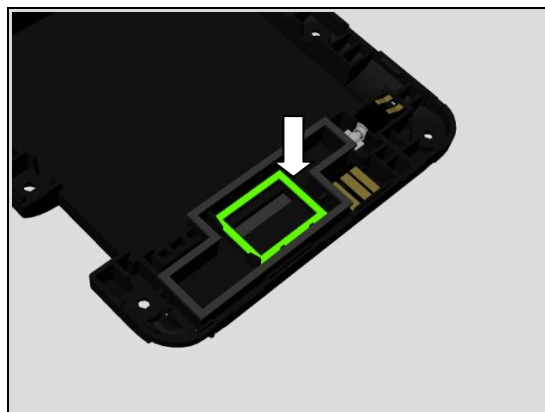
Remove the old Adhesive Speaker from its cavity.

**Scrap! Not to be reused!**



#### INSTALLATION

Place new Adhesive Speaker into its cavity.



## Replacement:

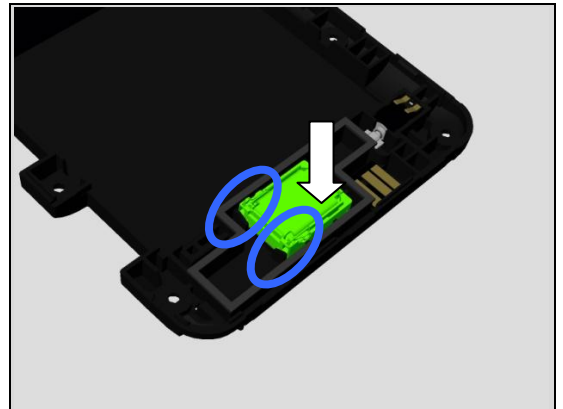
Place the new Speaker into its cavity as shown in the picture.

***Do not touch the pins of the Speaker!***



Press the Speaker to secure the attachment.

***Do not touch the pins of the Speaker!***



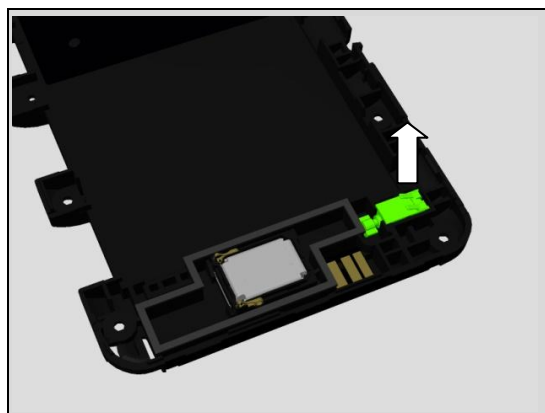
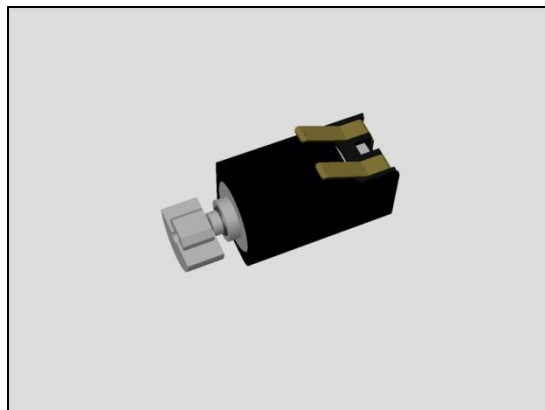
## Replacement

### 4.21 Vibrator

*Follow the 3.1 – 3.2 Disassembly instructions!*  
 Carry out the Removal as described below.  
 Prepare the new Vibrator.  
 Carry out the Installation as described below.  
*Follow the 5.4 – 5.5 Reassembly instructions!*

#### REMOVAL

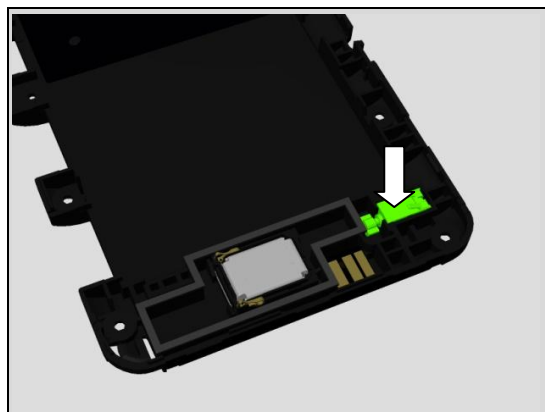
Remove the Vibrator from its cavity.



#### INSTALLATION

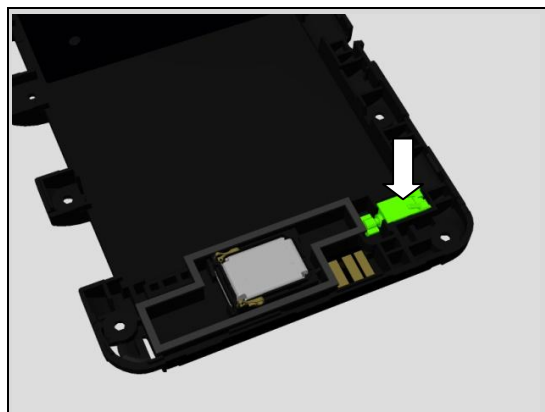
Place new Vibrator into its cavity.

**Note: be careful about its correct direction.**



Press to secure its correct position in its cavity.

**Note: don't touch its pins.**



## Replacement

### 4.22 Spongy Main Camera

*Follow the 3.1 – 3.2 Disassembly instructions!*  
 Carry out the Removal as described below.  
 Prepare the Spongy Main Camera.  
 Carry out the Installation as described below.  
*Follow the 5.4 – 5.5 Reassembly instructions!*

#### REMOVAL

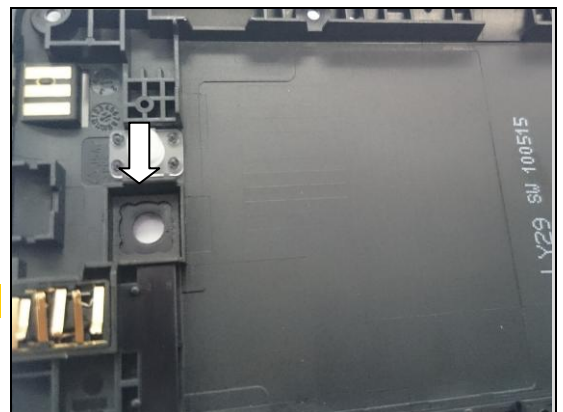
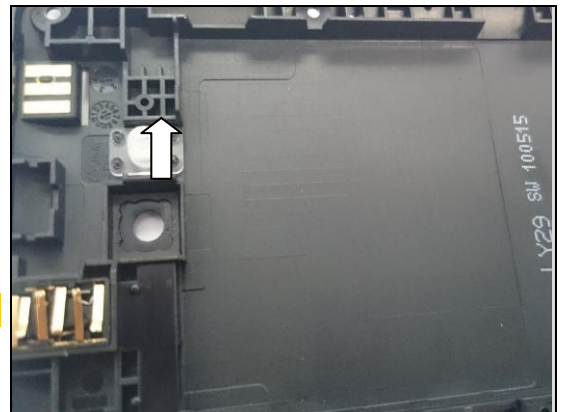
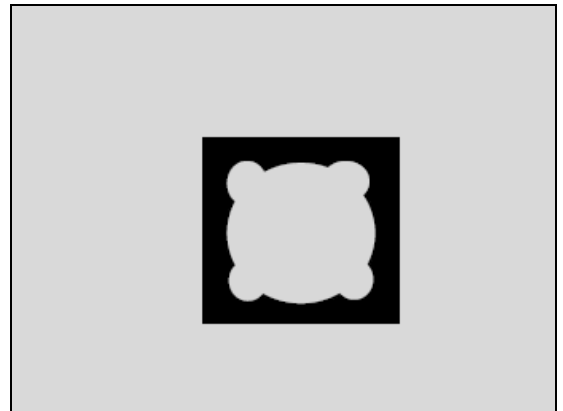
Remove the Spongy Main Camera from its cavity on Rear Assy.

**Scrap! Cannot be reused.**

#### INSTALLATION

Place new Spongy Main Camera into its cavity on Rear Assy.

**Note: Be careful! Don't touch Camera Lens.**



## Replacement

### 4.23 Spongy BATT BTB

*Follow the 3.1 – 3.2 Disassembly instructions!*  
 Carry out the Removal as described below.  
 Prepare the Spongy BATT BTB.  
 Carry out the Installation as described below.  
*Follow the 5.4 – 5.5 Reassembly instructions!*

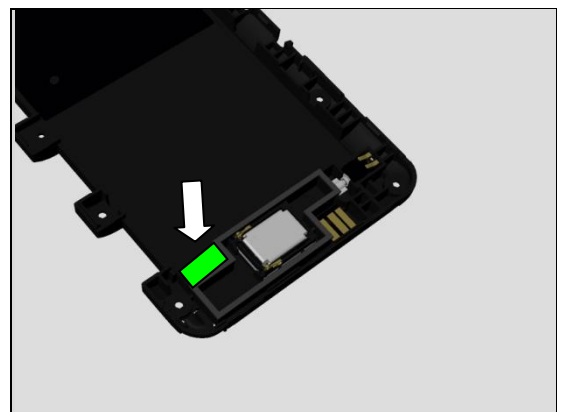
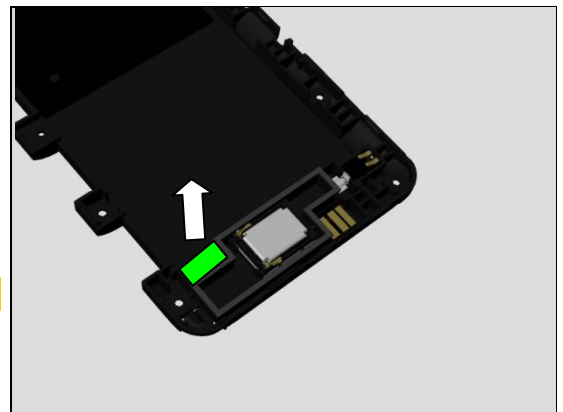
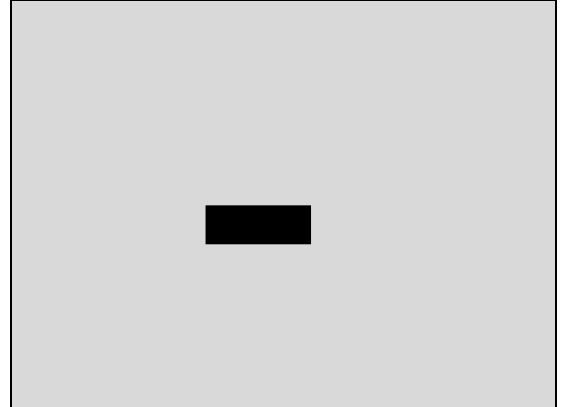
#### REMOVAL

Remove the Spongy BATT BTB from Rear Assy.

**Scrap! Cannot be reused.**

#### INSTALLATION

Place new Spongy BATT BTB onto Rear Assy.



## Replacement

### 4.24 Board Swap - Replacement

*Follow the 3.1 – 3.5 Disassembly instructions!*

*Follow the 4.14, 4.13, 4.10, 4.12, 4.15, 4.16 Removal instructions!*

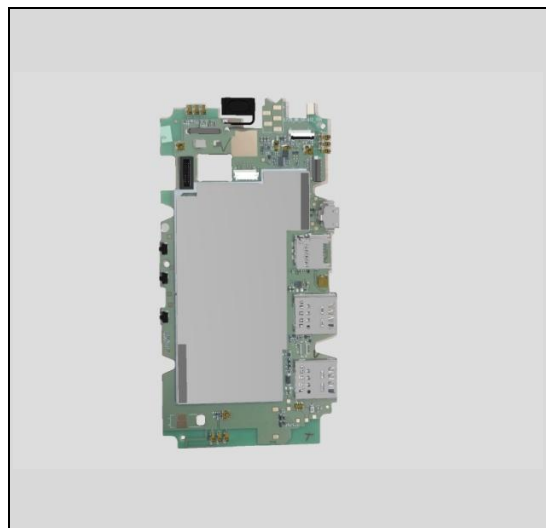
Replace the Swap Board.

Reuse the Main Camera and the Front Camera.

*Follow the 4.14, 4.13, 4.10, 4.12, 4.15, 4.16, 4.18 Installation instructions!*

*Follow the 5.1 – 5.5 Reassembly instructions!*

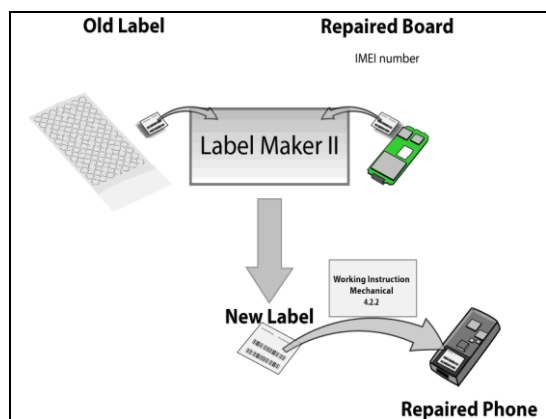
**When replacing Front Assy or board swap, must do the Calibration for P-sensor, light sensor, accelerometer: 1289-2983 Trouble Shooting Application – mechanical.**



### 4.25 Board Swap – Change Label

#### CHANGE LABEL

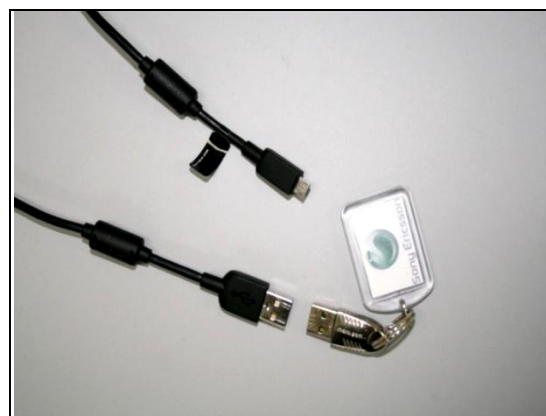
Follow the instructions in the Generic Repair Manual – Build swap for change of label.



### 4.26 Board Swap – Customize of Software

#### CUSTOMIZE OF SOFTWARE

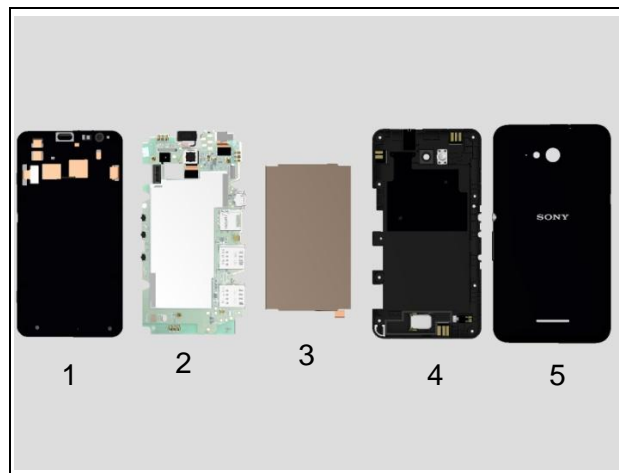
Follow the instructions in the Generic Repair Manual – Build swap for customization of the software.



## 5 Reassembly

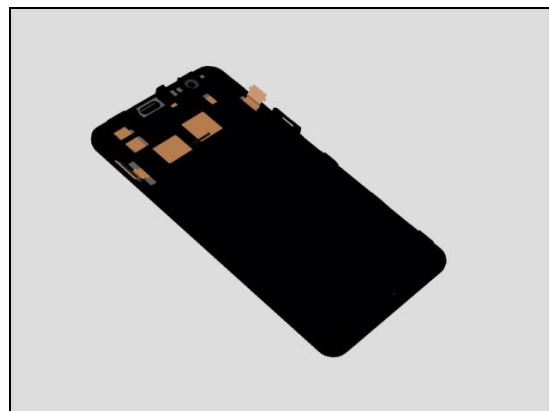
The reassembly is done in the following order:

1. Front Assy
2. Main PBA
3. Battery Assy
4. Rear Assy
5. Battery Cover



### 5.1 Front Assy

Prepare the Front Assy.



Replace a new Adhesive Receiver on Front Assy.

**Note: new Front Assy already has new Adhesive Receiver.**

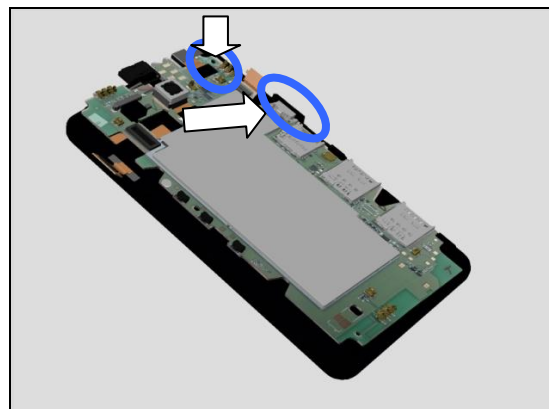


### 5.2 Main PBA

Place the Main PBA onto Front Assy.

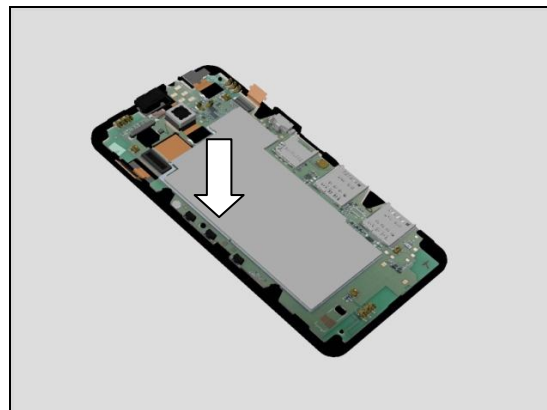
Insert the USB connector first into its cavity.

**Note: Ensure the Main PBA position Pillar is inside its hole.**



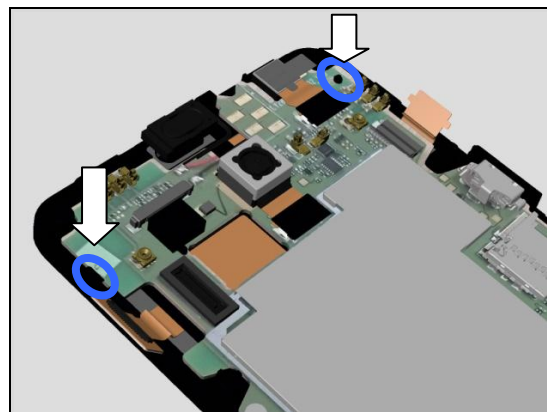
## Reassembly

Put down left side of Main PBA gently at its correct position.



Press Main PBA gently to secure its hook attachment as shown.

**Note: check Main PBA pillar at right corner at its correct hole.**

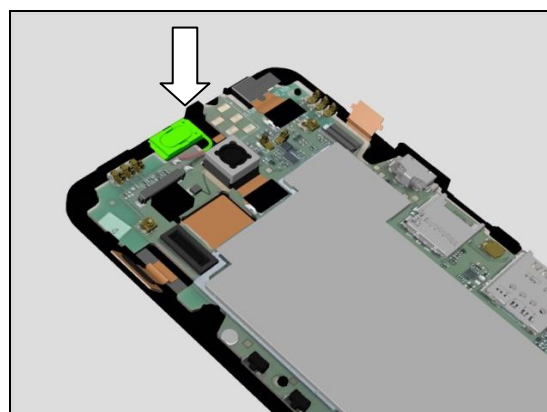


Press Receiver back into its cavity.

**Note: Ensure the Adhesive Receiver under Receiver is new part.**

**Adjust Receiver Cable' correct position as shown.**

**Make sure Receiver Cable are not pressed by Main Camera!**



Replace new Sponge TP BTB as shown on Main PBA.

**Note: Sponge TP BTB cannot be reused.**

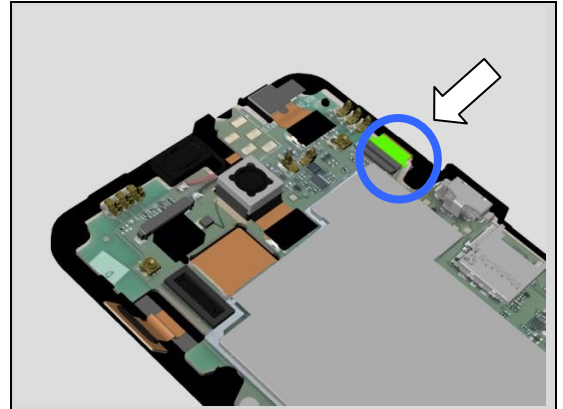
**Clean Surplus from TP BTB connector on both Main PBA and TP FPC before replacement.**



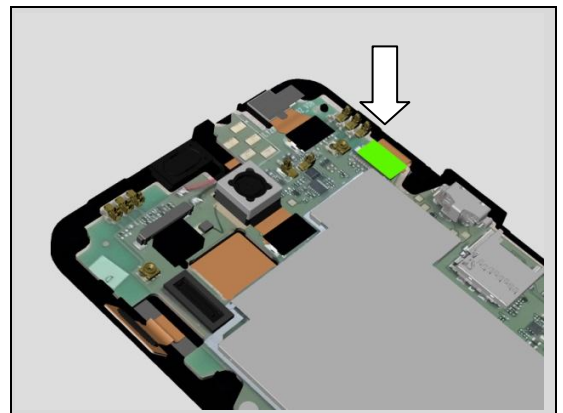


## Reassembly

Insert LCM FPC into its ZIF connector and close its ZIF connector.



Place new Mylar CONN on LCM ZIF connector.

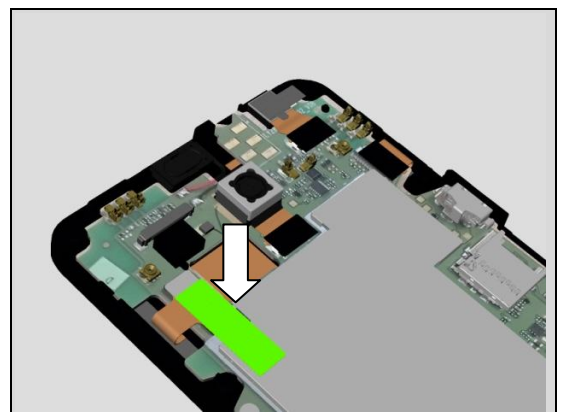


Assemble the TP BTB connector on Main PBA.  
Press to secure its attachment.

**Note: Ensure the Sponge TP BTB around TP BTB connector on Main PBA is new part.**



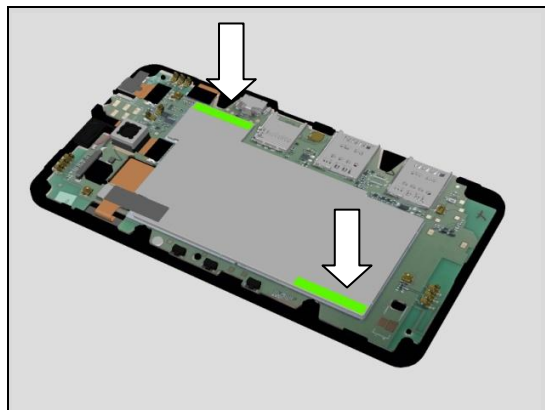
Assemble new Fabric TP BTB on Main PBA as shown.



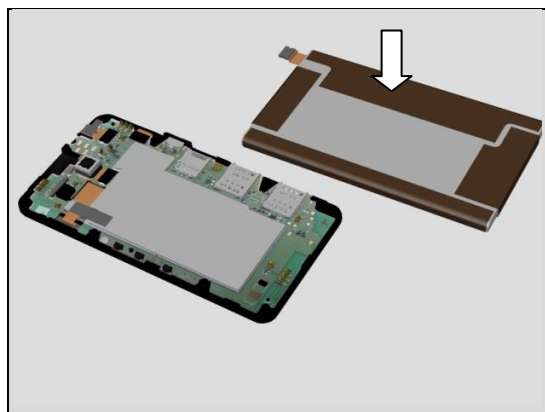
## Reassembly

### 5.3 Battery Assy

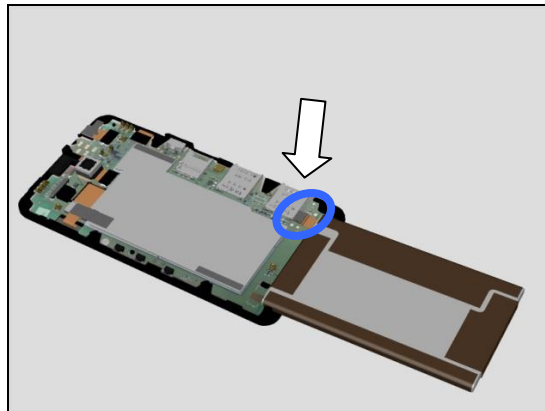
Place two pieces of new Adhesive Battery on shield can corner as shown.



Place Battery Assy back onto Core unit.

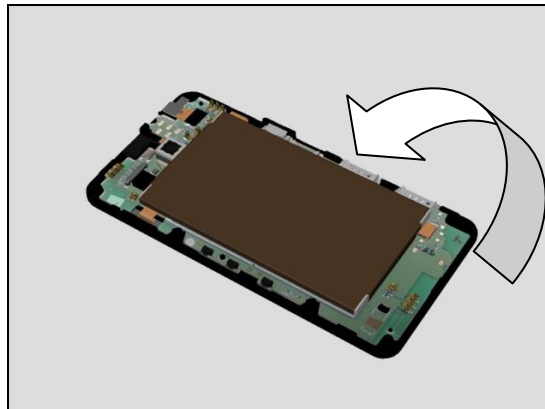


Assemble the connector of Battery Assy on Main PBA.



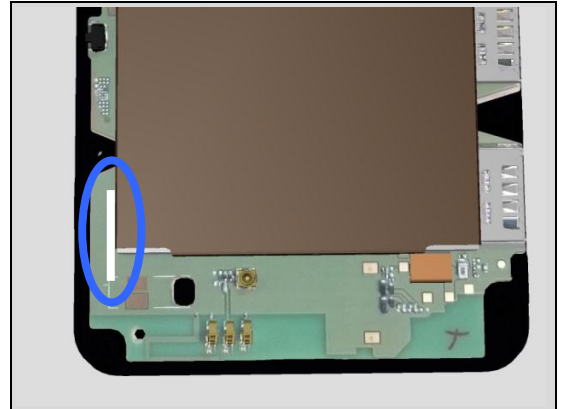
Turn over Battery Assy 180 degree back gently on Main PBA.

**Note: Don't press Battery Assy! Just put Battery Assy on shield can gently at its correct position.**

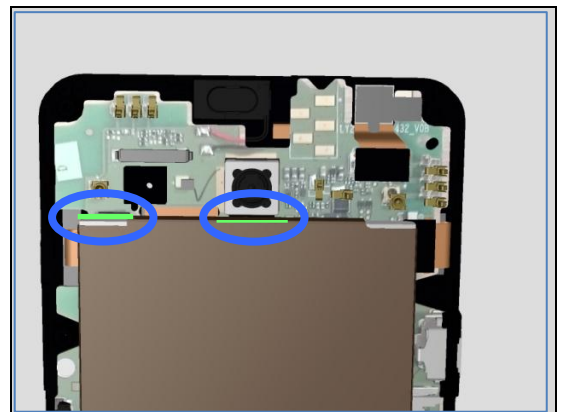


## Reassembly

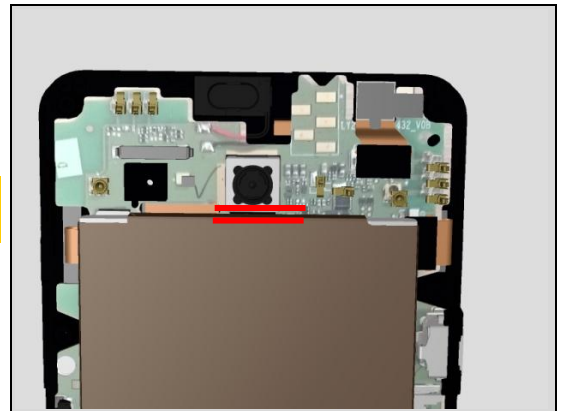
Align the left side of Battery Assy with the Vertical Line on Main PBA as shown.



Align the top side of Battery Assy with the TP connector edge and white line on Main Camera FPC.



**Note: Make sure there is about 1mm distance between Main Camera and Battery Assy.**



## Reassembly

### 5.4 Rear Assy

Prepare the Rear Assy.

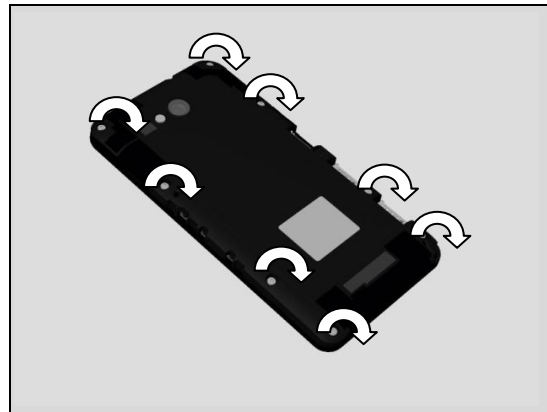
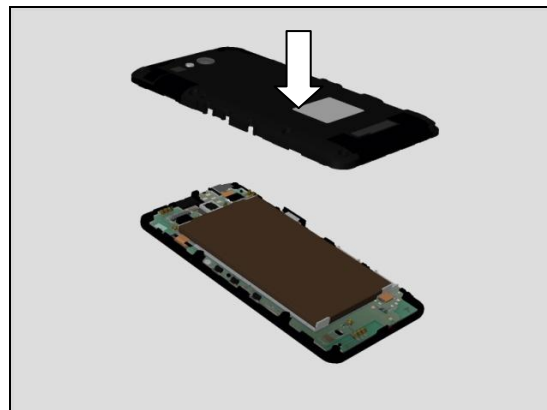
**Note:** Check Audio Jack, Vibrator, Speaker and Sponge Main Camera, Sponge BATT BTB are well assembled on Rear Assy.

Place the Rear Assy onto Core Unit at its correct position.

Press around carefully to secure its attachment.

Apply 12 Ncm torque on Rear Assy when tightening the eight Screws with Bits (T5).

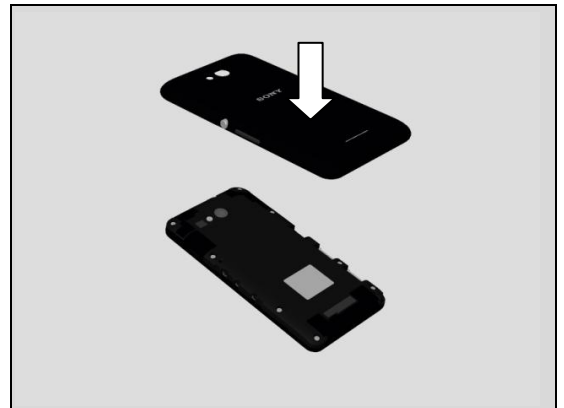
**Take new Screws!**



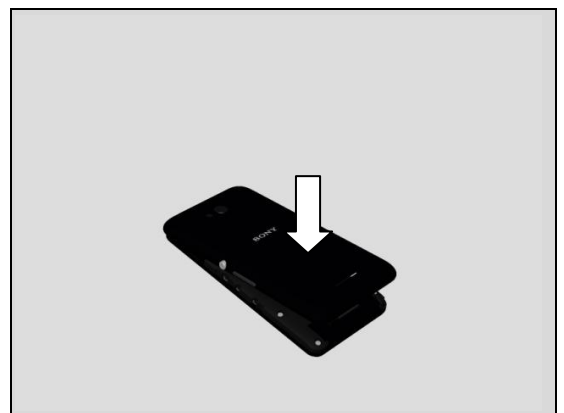
## Reassembly

### 5.5 Battery Cover

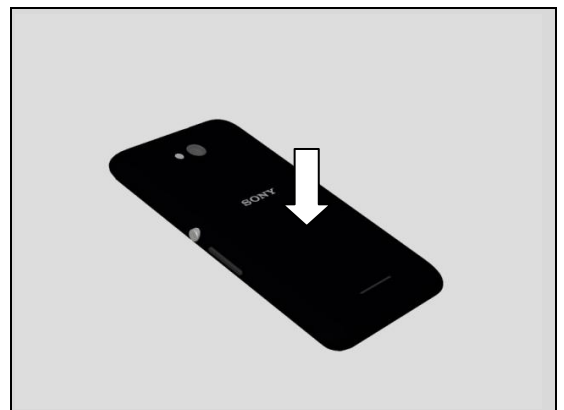
Prepare the Battery Cover.



Place the Battery Cover onto Core unit.



Press around to secure the attachment.



## 6 Revision History

Rev.	Date	Changes / Comments
1	2015-03-06	Initial release
1	2015-03-10	No changes