

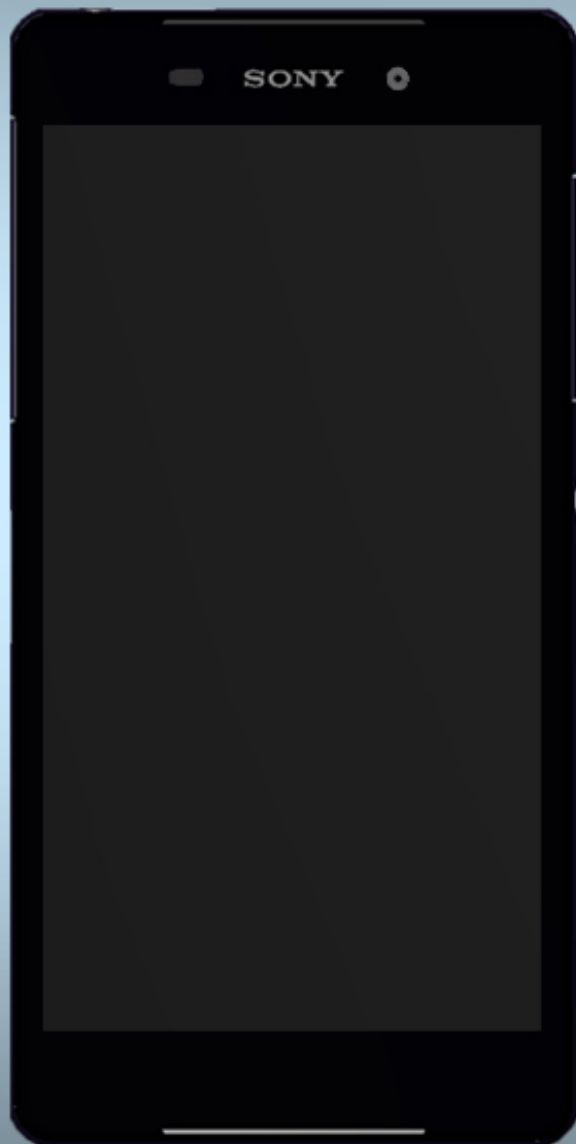
# SONY

make.believe

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## Working Instructions

- mechanical -



*Xperia™ Z2*  
*L50t, L50u*

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

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

**Always finally connect the Battery FPC BtB connector before the Sub Antenna Assy is  
reassembled.**

## 1 Exterior Views

### 1.1 L50t/L50u



## 2 Tools

### SPECIAL TOOLS

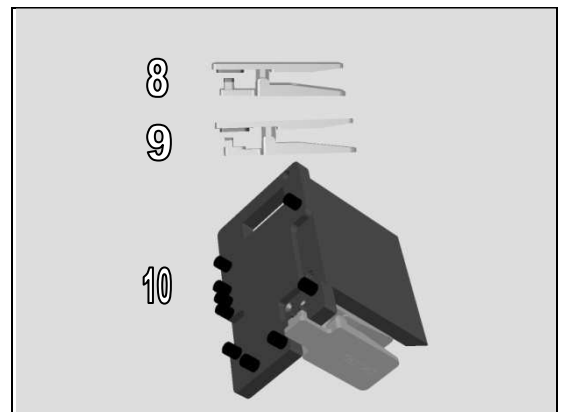
1. Torque Screwdriver
2. Flex Film Assembly Tool
3. Bits JCIS No.0
4. Front Opening Tool
5. Guitar Pick



6. Back Panel Adhesive Fixture
7. Back Panel Press Top/Bottom Inlay



8. Earspeaker/Loudspeaker Top and 2nd Mic Holder Press Tool
9. Main Mic Holder Press Tool
10. Audio Jack Press Tool



11. Side Panel press
12. Side Panel Press Head
13. Charge connector press pad
14. Side Panel Press Pad

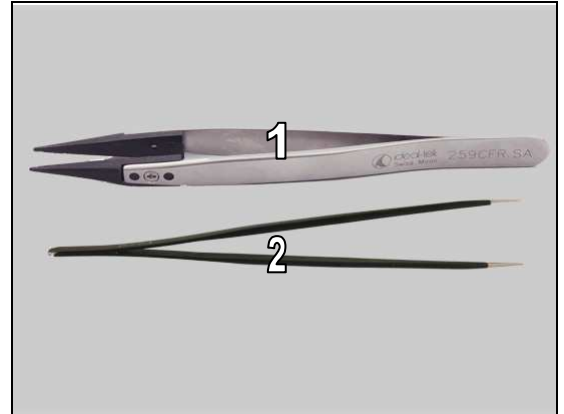


**For part no's on the tools above, refer to the 'Tools Catalogue/Matrix'!**

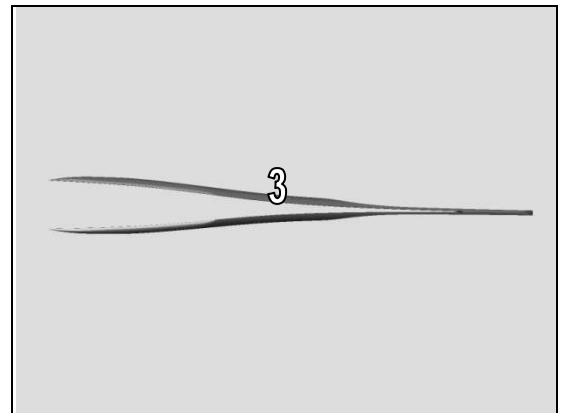
## Tools

### STANDARD TOOLS

1. Plastic Tweezers
2. Pointed-tip Tweezers



3. Blunt-tip Tweezers



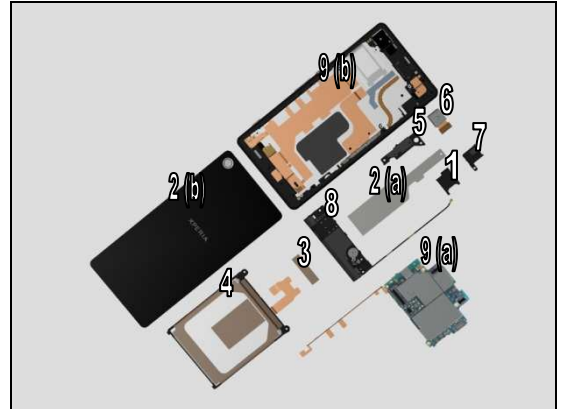
4. Suction cup



## 3 Disassembly

The L50t/L50u disassembly is done in the following order:

1. SIM Tray
2. Adhesive Battery Top (a) and Back Panel Assy (b)
3. Sheet FPC Battery
4. Battery
5. Ant WLAN/BT Holder Assy
6. Camera
7. Holder 2nd Mic
8. Antenna Speaker Box Assy & PBA Sub & RF Cable
9. Main PBA & RF LCP FPC Assy (a) and Display Frame Assy (b)



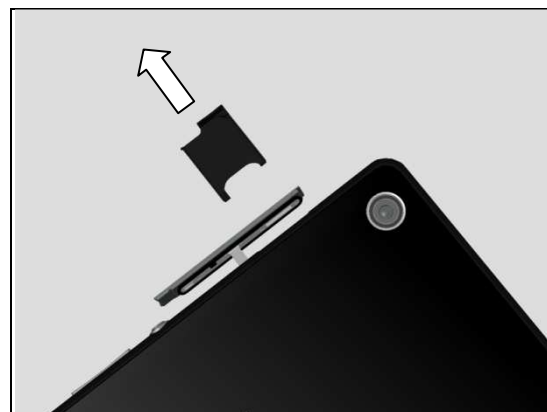
## Disassembly

### 3.1 SIM Tray

Open the Cap SIM.



Remove the SIM Tray with fingers.

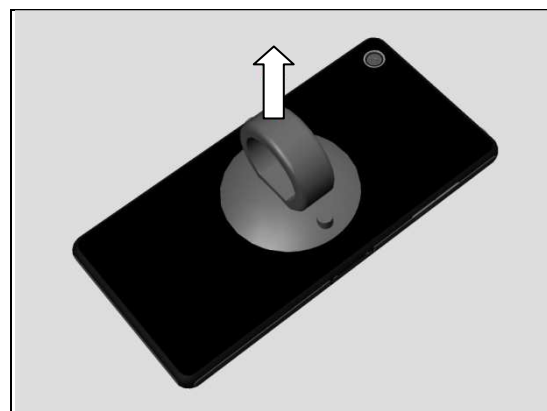


Close the Cap SIM.



### 3.2 Adhesive Battery Top (a) and Back Panel Assy (b)

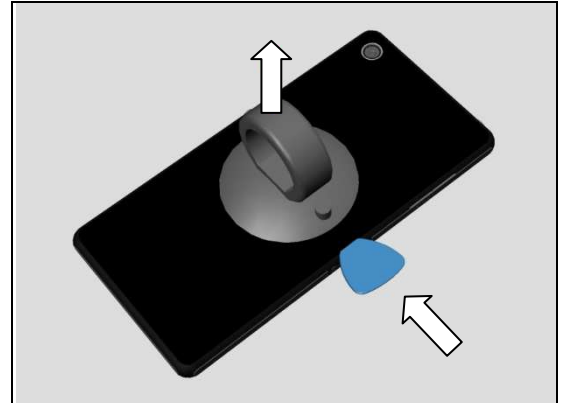
Use Suction Cup to get space for inserting the Guitar Pick.





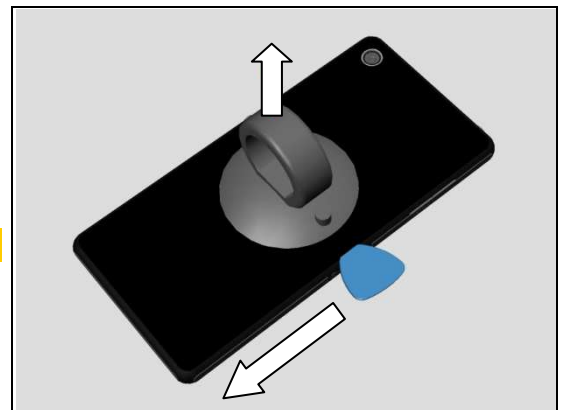
## Disassembly

Insert the Guitar Pick.

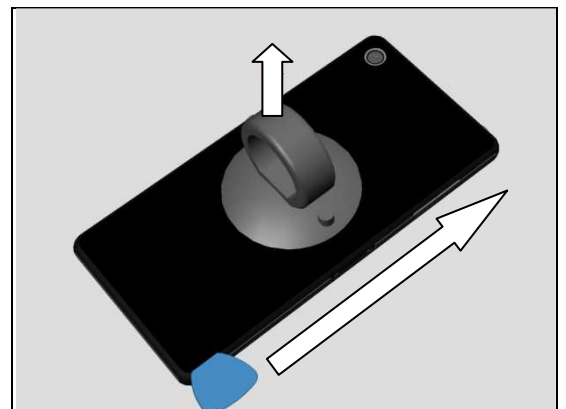


Gently slide the Guitar Pick along to release all sides of the Back Panel Assy.

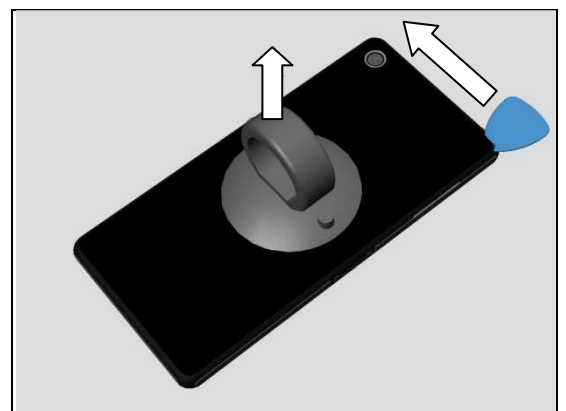
**Note! Start in the middle of the right long side!**



Do the same.

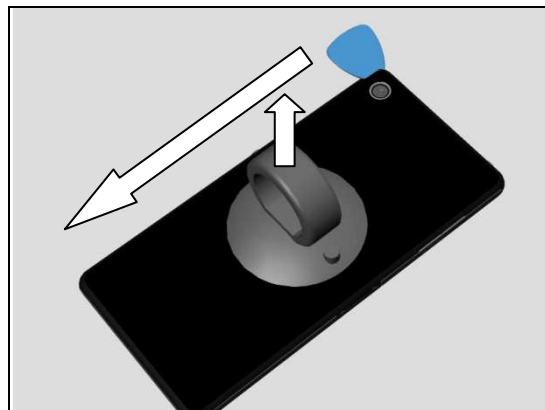


Do the same.

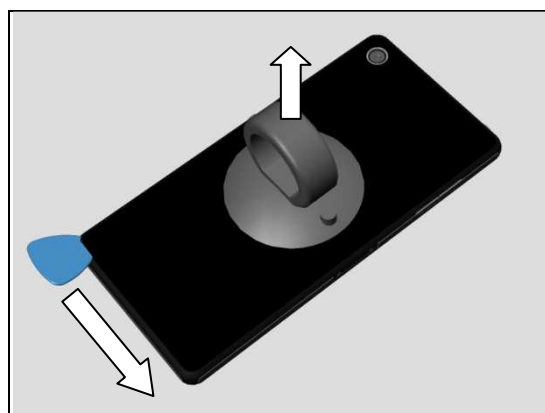


## Disassembly

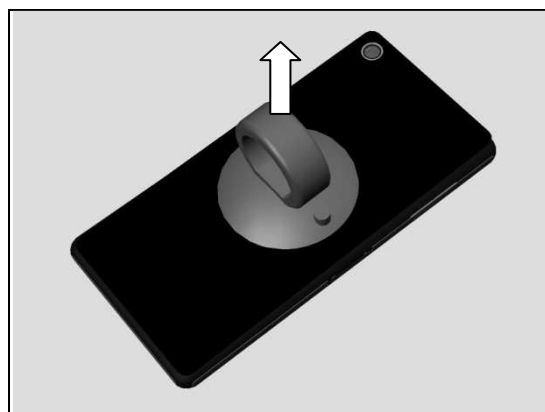
Do the same.



Do the same.

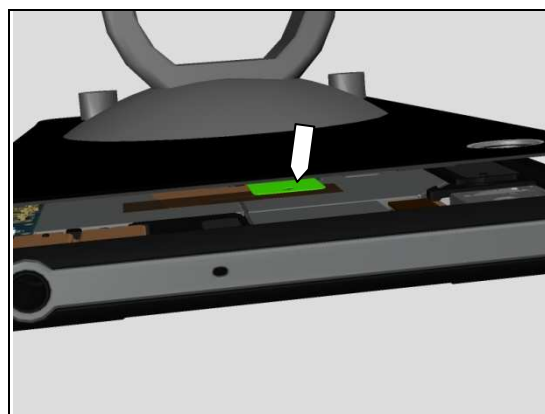


Pull up the upper half of the Back Panel Assy a little.



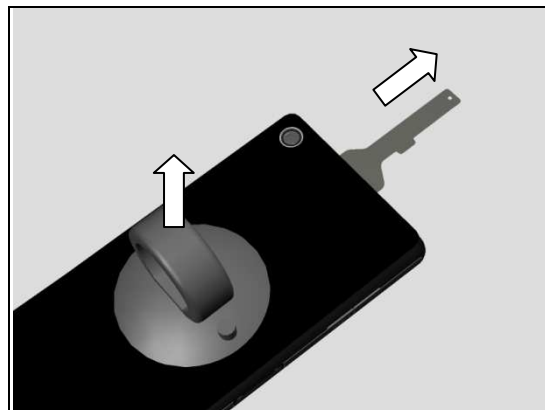
Identify the Adhesive Battery Top and hold it by fingers.

**Note! The Back Panel Assy will deform a little during this action.**



## Disassembly

Pull out the Adhesive Battery Top under the Back Panel Assy.

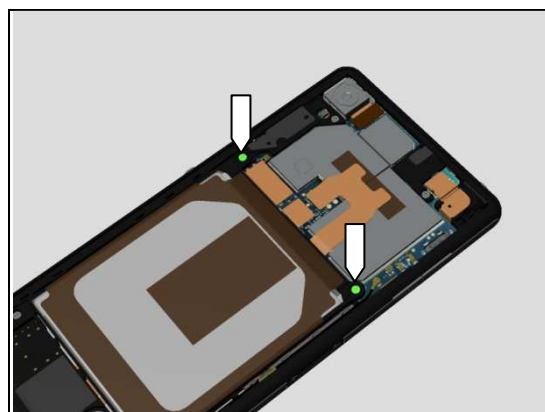


Remove the Back Panel Assy by using the Suction Cup.

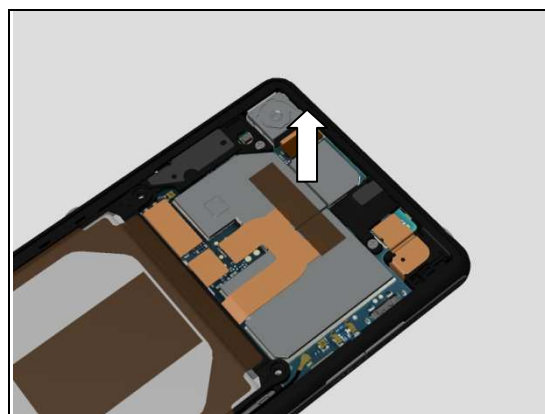


### 3.3 Sheet FPC Battery

Remove the two Screw Other Len:3.0 Diam:1.4 by using a screwdriver with Bits JCIS No.0.



Detach the Sheet FPC Battery by using the Flex Film Assembly Tool.

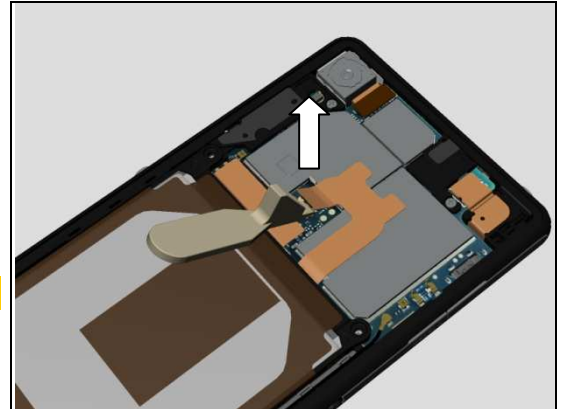


## Disassembly

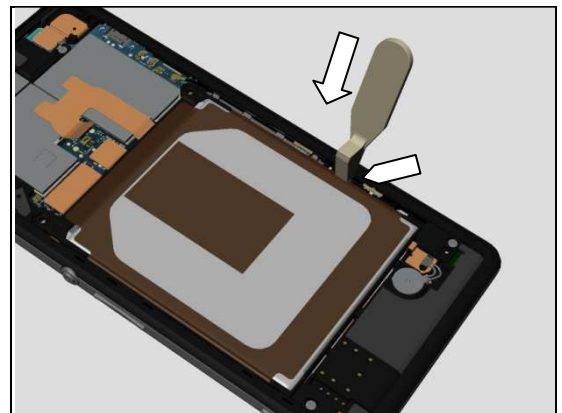
### 3.4 Battery

Disconnect the Battery FPC BtB connector by using the Front Opening Tool.

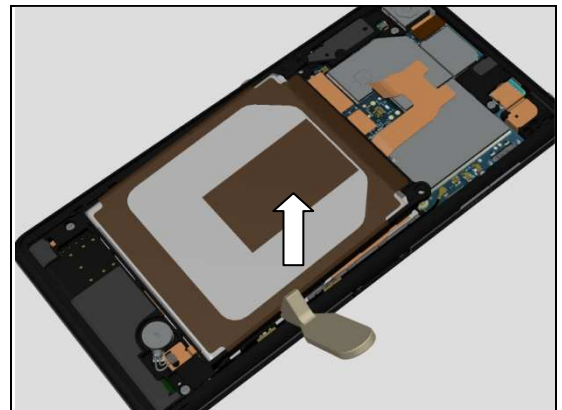
**Do not damage components on the Main PBA!**



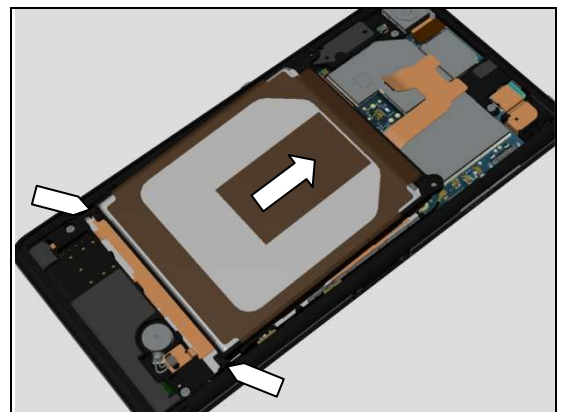
Insert Front Opening Tool between the Battery and the Display Frame Assy at this position.



Detach the Battery from its cavity.



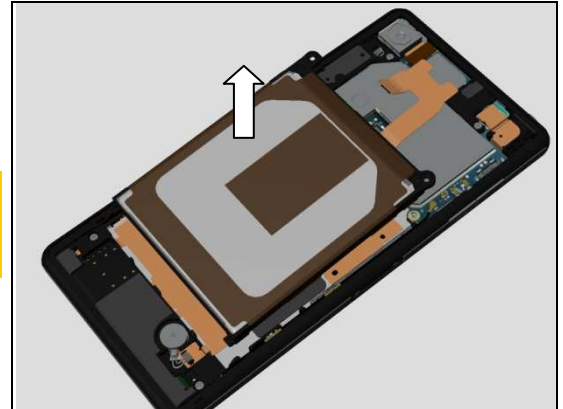
Release the Battery from the Antenna Speaker Box Assy.



## Disassembly

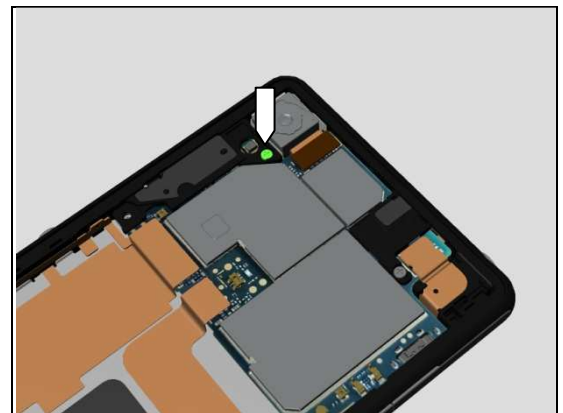
Remove the Battery.

**Carefully inspect the Battery after removing it.  
Battery with visual signs of been punctured etc, then  
should be scraped after removal!**

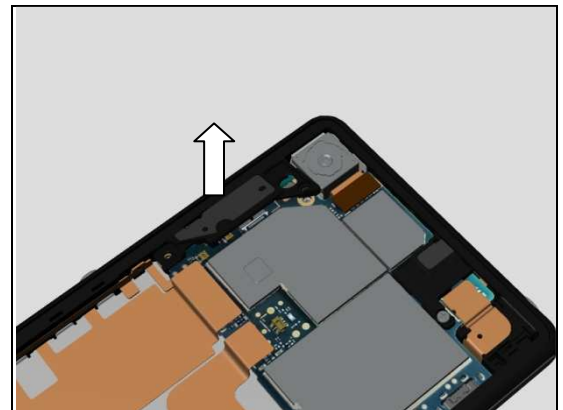


### 3.5 Ant WLAN/BT Holder Assy

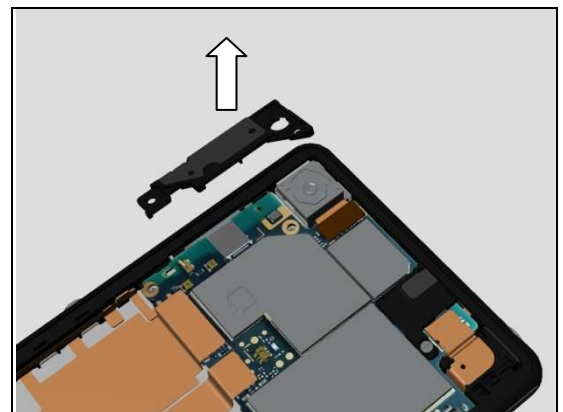
Remove the Screw Other Len:3.0 Diam:1.4 by using a screwdriver with Bits JCIS No.0.



Unsnap the Ant WLAN/BT Holder Assy.



Remove it.

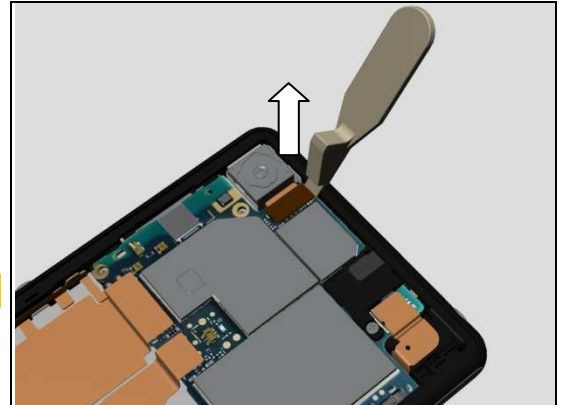


## Disassembly

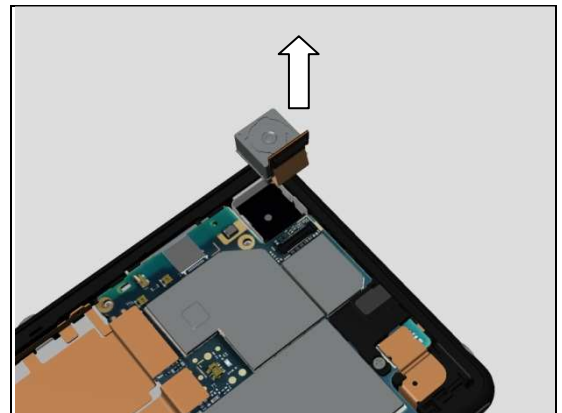
### 3.6 Camera

Disconnect BtB connector of the Camera FPC by using the Front Opening Tool.

**Do not damage components on the Main PBA!**

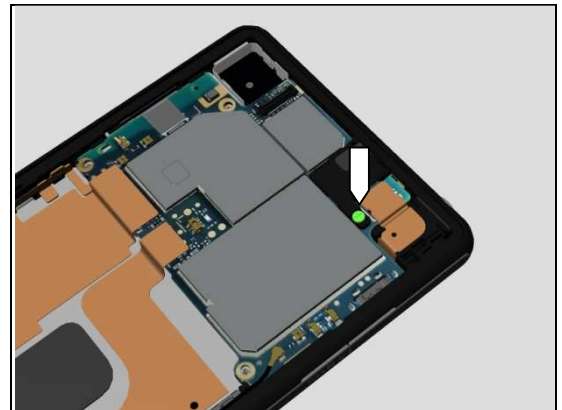


Remove the Camera.

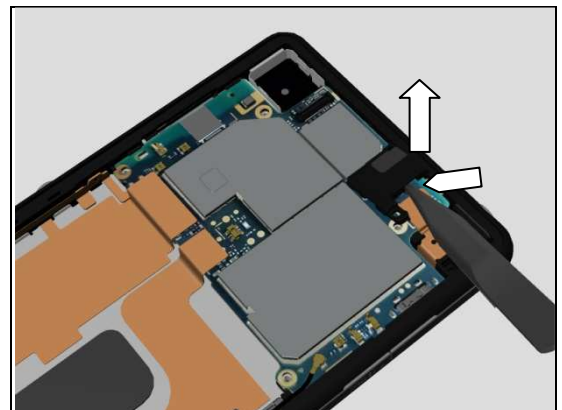


### 3.7 Holder 2nd Mic

Remove the Screw Other Len:3.0 Diam:1.4 by using a screwdriver with Bits JCIS No.0.



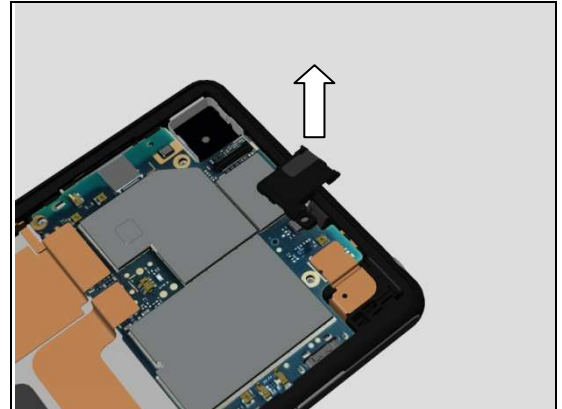
Unsnap the Holder 2nd Mic by using a pair of Plastic Tweezers as shown in picture.





## Disassembly

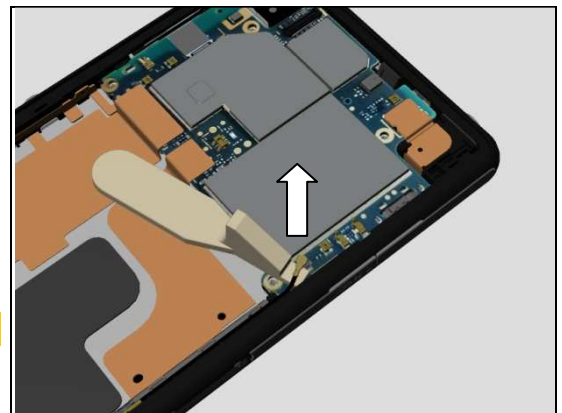
Remove it.



### 3.8 Antenna Speaker Box Assy & PBA Sub & RF Cable

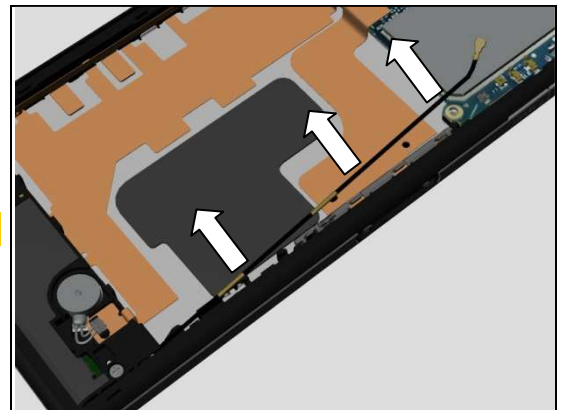
Disconnect RF Cable connector by using the Front Opening Tool.

**Do not damage components on the Main PBA!**

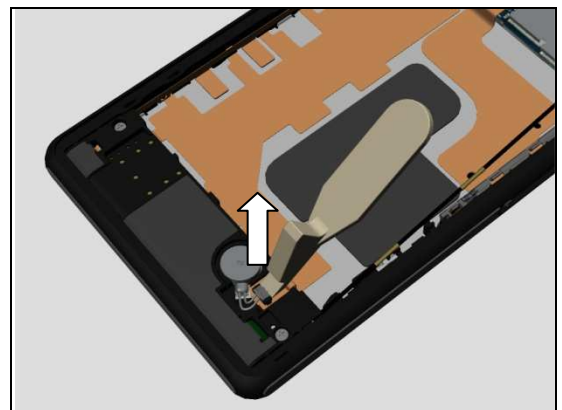


Release the RF cable from its cavity.

**Do not stretch the RF Cable!**

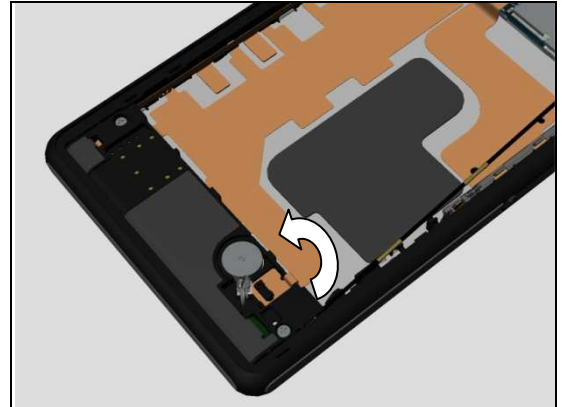


Disconnect Vibrator connector by using the Front Opening Tool.



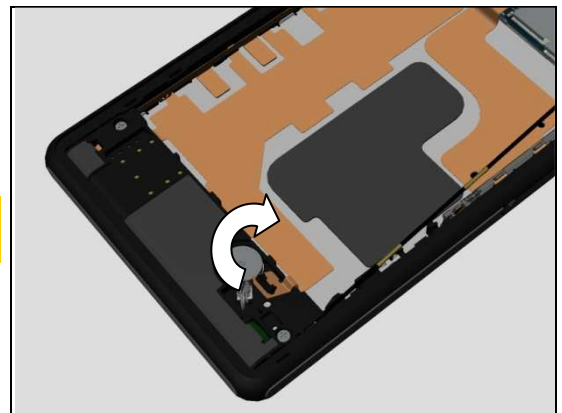
## Disassembly

Rotate the Vibrator connector as shown in picture.

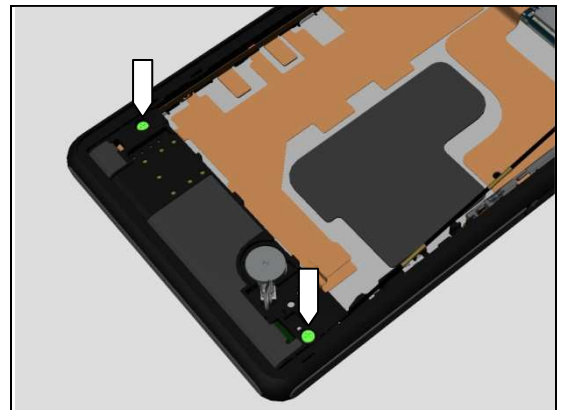


Detach and rotate the vibrator connector FPC.

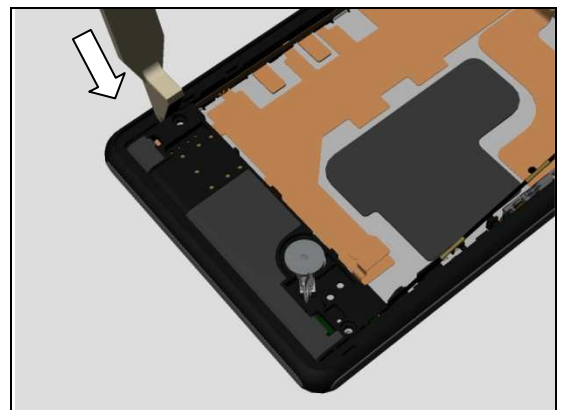
**Do not damage components on the vibrator connector FPC and FPC itself!**



Remove the two Screw Other Len:3.0 Diam:1.4 by using a screwdriver with Bits JCIS No.0.



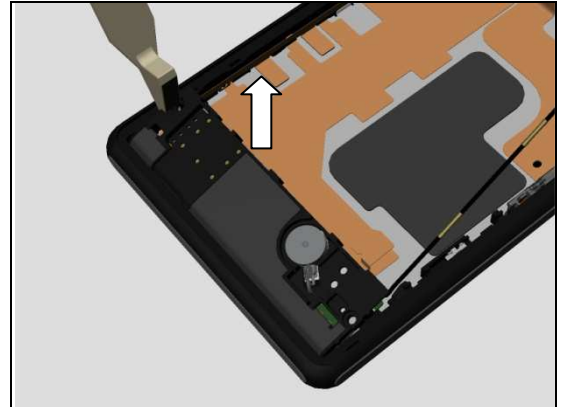
Insert Front Opening Tool between the Antenna Speaker Box Assy and the Display Frame Assy.



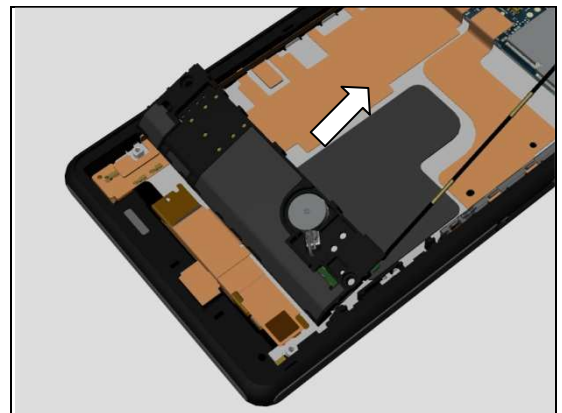


## Disassembly

Release the hooks of the Antenna Speaker Box Assy.

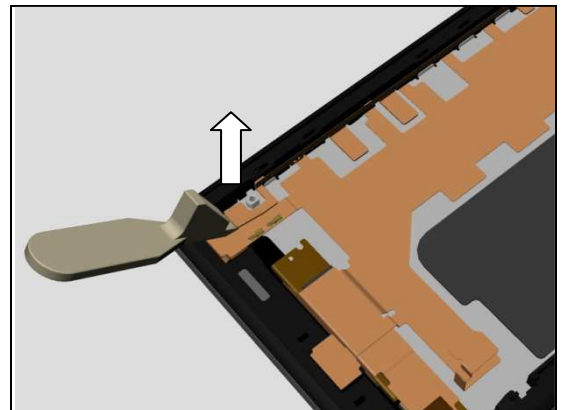


Remove the Antenna Speaker Box Assy.

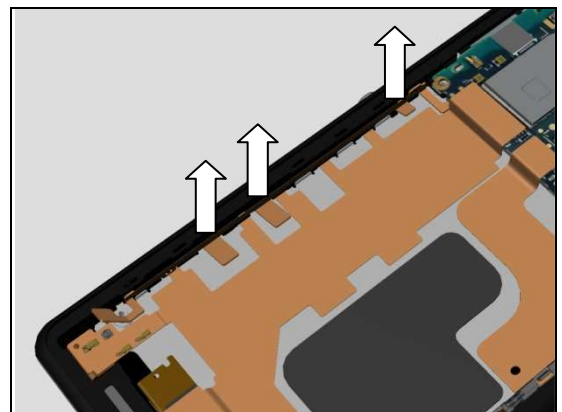


### 3.9 Main PBA & RF LCP FPC Assy (a) and Display Frame Assy (b)

Disconnect RF connector of the RF LCP FPC Assy.

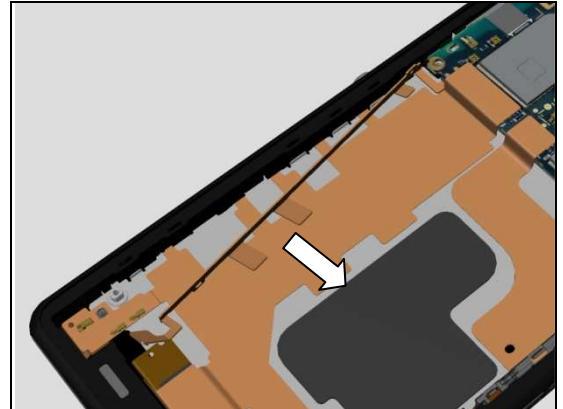


Detach the three FPCs as shown in picture.



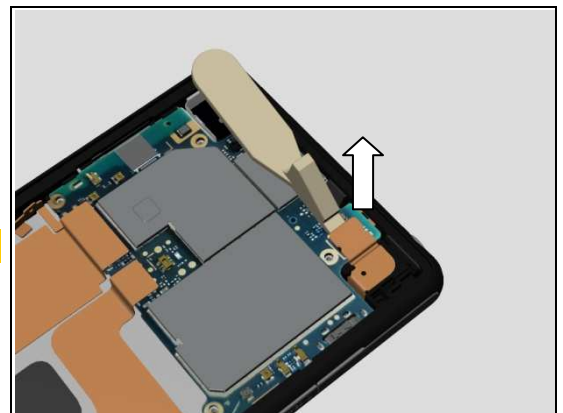
## Disassembly

Detach the FPC as shown in picture.



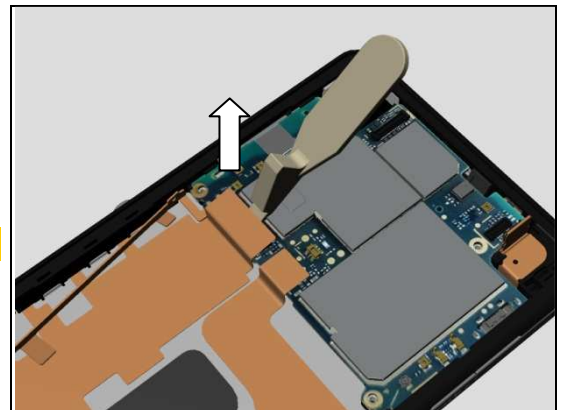
Disconnect BtB connector of the Top FPC Assy by using the Front Opening Tool.

***Do not damage components on the Main PBA!***



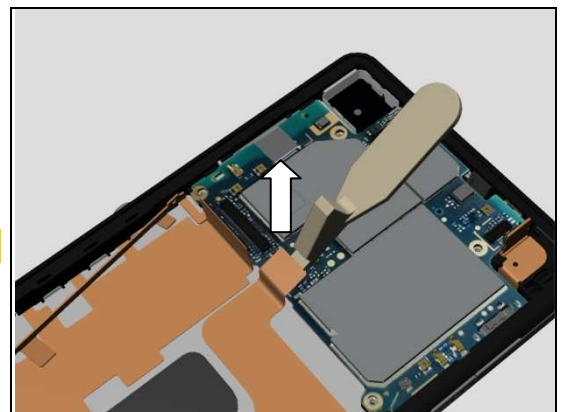
Disconnect BtB connector of the Relay FPC Assy by using the Front Opening Tool.

***Do not damage components on the Main PBA!***



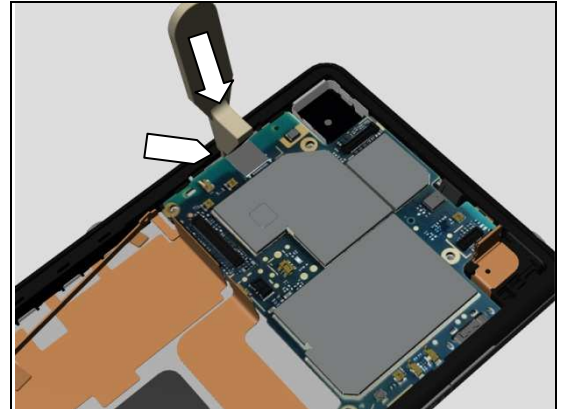
Disconnect BtB connector of the Charge FPC Assy by using the Front Opening Tool.

***Do not damage components on the Main PBA!***

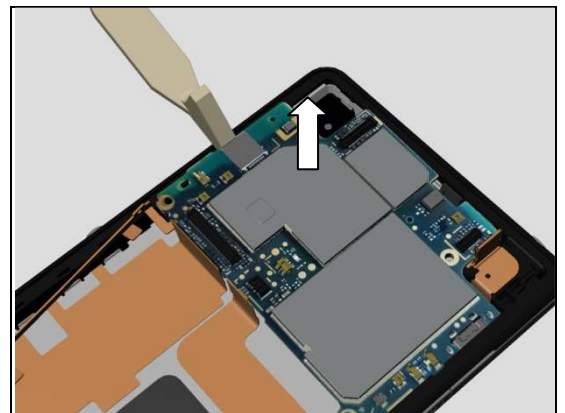


## Disassembly

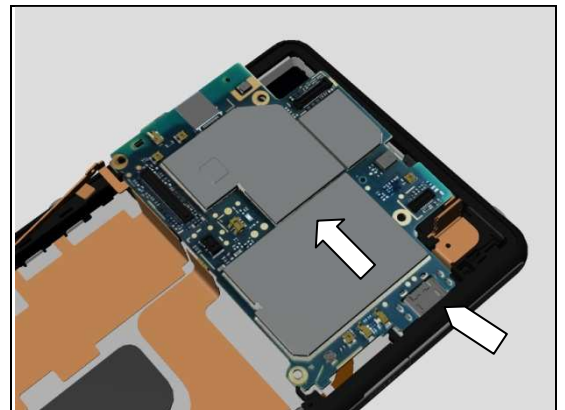
Insert the Front Opening Tool at this position as shown in picture.



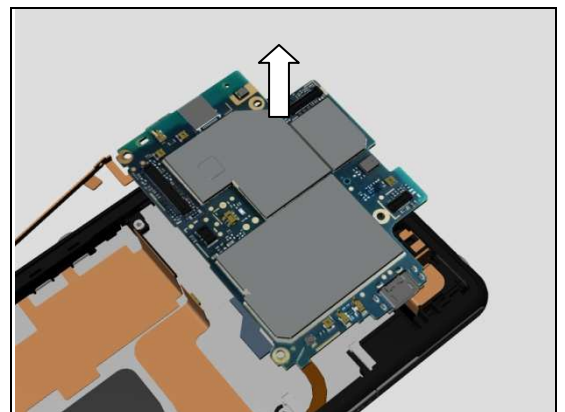
Release the Main PBA.



Move the Main PBA as shown in picture until the USB connector is visible.



Remove the Main PBA.



## 4 Replacement

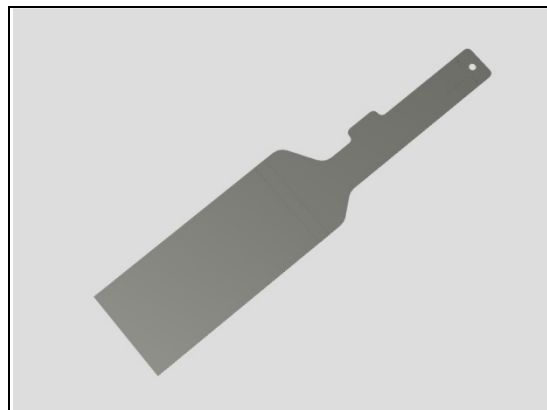
### 4.1 Adhesive Battery Top

*Follow the 3.1 – 3.2 Disassembly instructions!*

Prepare a new Adhesive Battery Top.

*Follow the 5.8 – 5.9 Reassembly instructions!*

**Scrap! Not to be reused!**



### 4.2 Ant WLAN/BT Holder Assy

*Follow the 3.1 – 3.5 Disassembly instructions!*

Prepare a new Ant WLAN/BT Holder Assy.

*Follow the 5.5 – 5.9 Reassembly instructions!*



### 4.3 Antenna Speaker Box Assy

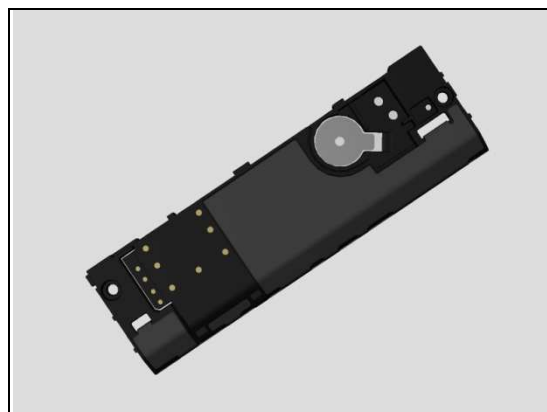
*Follow the 3.1 – 3.4 and 3.8 Disassembly instructions!*

*Follow the 4.27 and 4.36 Removal instructions!*

Prepare a new Antenna Speaker Box Assy.

*Follow the 4.36 and 4.27 Installation instructions!*

*Follow the 5.2 and 5.6 – 5.9 Reassembly instructions!*



### 4.4 Back Panel Assy

*Follow the 3.1 – 3.2 Disassembly instructions!*

*Follow the 4.12 Removal instructions!*

Prepare a new Back Panel Assy.

*Follow the 4.12 Installation instructions!*

*Follow the 5.8 – 5.9 Reassembly instructions!*



## Replacement

### 4.5 Battery

*Follow the 3.1 – 3.4 Disassembly instructions!*

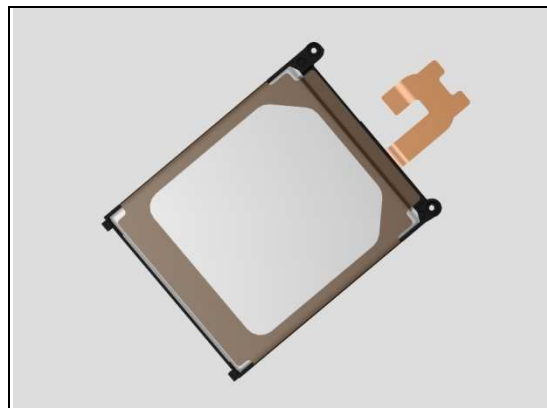
Prepare a new Battery.

*Follow the 4.31 and 4.37 Installation instructions!*

*Follow the 5.6 – 5.9 Reassembly instructions!*

**Carefully inspect the Battery after removing it.**

**Battery with visual signs of been punctured etc, then should be scraped after removal!**

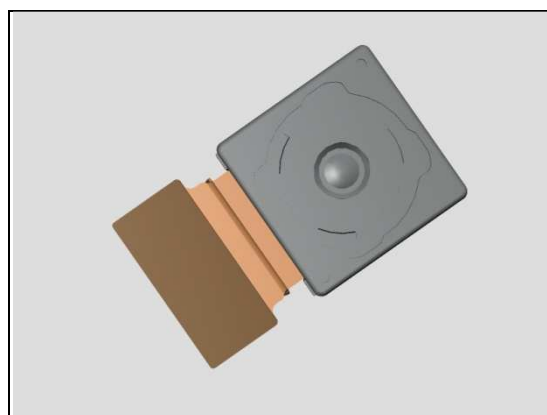


### 4.6 Camera

*Follow the 3.1 – 3.4 and 3.6 Disassembly instructions!*

Prepare a new Camera.

*Follow the 5.4 and 5.6 – 5.9 Reassembly instructions!*



### 4.7 Display Frame Assy

*Follow the 3.1 – 3.9 Disassembly instructions!*

*Follow the 4.33 and 4.35 Removal instructions!*

Prepare a new Display Frame Assy.

*Follow the 4.35, 4.33 and 4.26 Installation instructions!*

*Follow the 5.1 – 5.9 Reassembly instructions!*



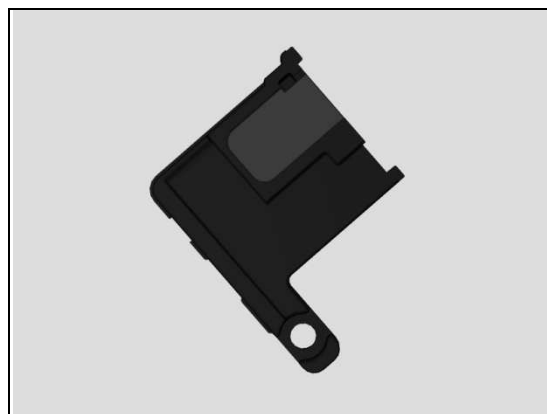
### 4.8 Holder 2nd Mic

*Follow the 3.1 – 3.4 and 3.7 Disassembly instructions!*

Prepare a new Holder 2nd Mic.

*Follow the 5.3 and 5.6 – 5.9 Reassembly instructions!*

**Scrap! Not to be reused!**



## Replacement

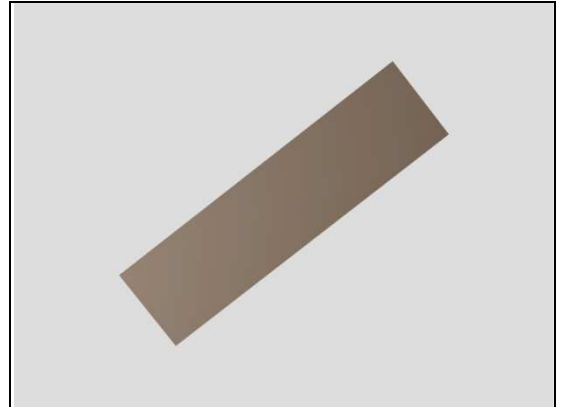
### 4.9 Sheet FPC Battery

*Follow the 3.1 – 3.3 Disassembly instructions!*

Prepare a new Sheet FPC Battery.

*Follow the 5.7 – 5.9 Reassembly instructions!*

**Scrap! Not to be reused!**

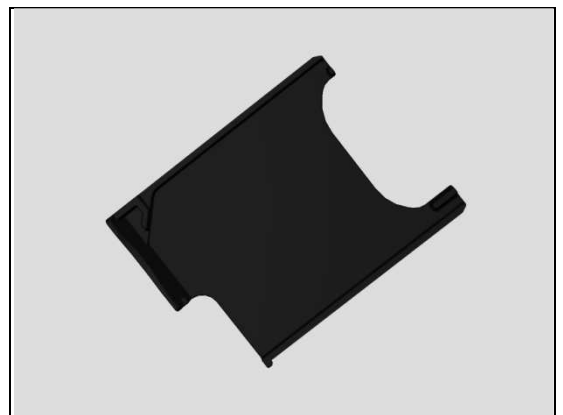


### 4.10 SIM Tray

*Follow the 3.1 Disassembly instructions!*

Prepare a new SIM Tray.

*Follow the 5.9 Reassembly instructions!*



## Replacement

### 4.11 Adhesive Audio Jack

*Follow the 3.1 – 3.9 Disassembly instructions!*

*Follow the 4.33 Removal instructions!*

Prepare a new Adhesive Audio Jack.

*Follow the 4.33 Installation instructions!*

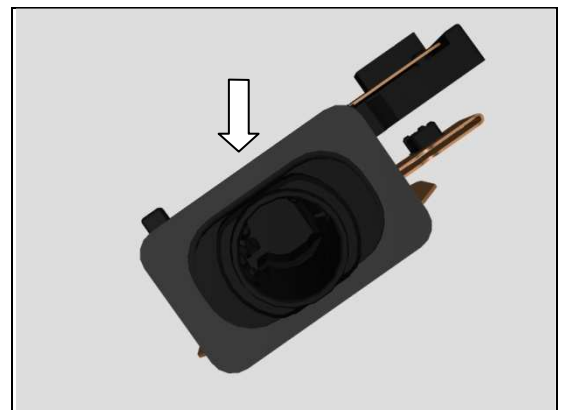
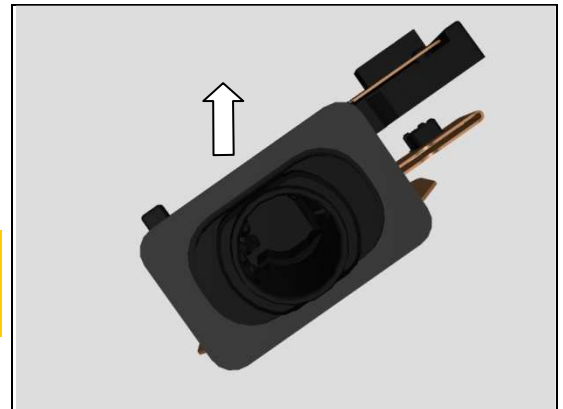
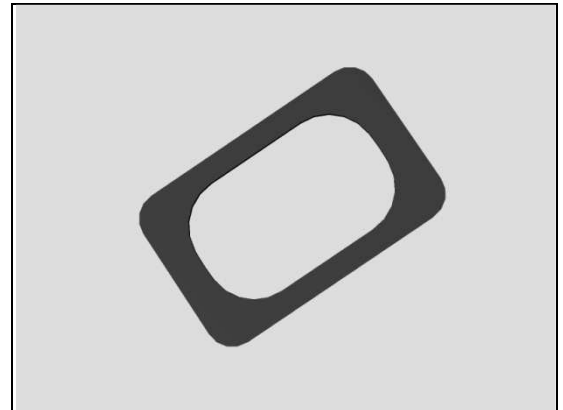
*Follow the 5.1 – 5.9 Reassembly instructions!*

#### REMOVAL

Detach the Adhesive Audio Jack and remove it with a pair of Plastic Tweezers.

**Scrap! Not to be reused!**

**Make sure all remaining adhesive residue have been removed!**



#### INSTALLATION

Attach a new Adhesive Audio Jack by using a pair of Plastic Tweezers as shown in picture.



## Replacement

### 4.12 Adhesive Back Panel Assy

*Follow the 3.1 – 3.2 Disassembly instructions!*

*Prepare a new Adhesive Back Panel Assy.*

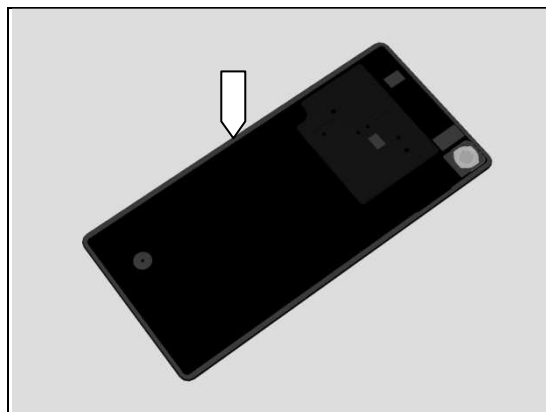
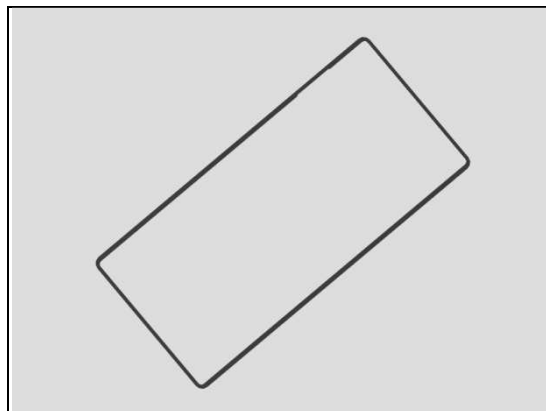
*Follow the 5.8 – 5.9 Reassembly instructions!*

#### REMOVAL

Detach to remove the Adhesive Back Panel Assy with fingers.

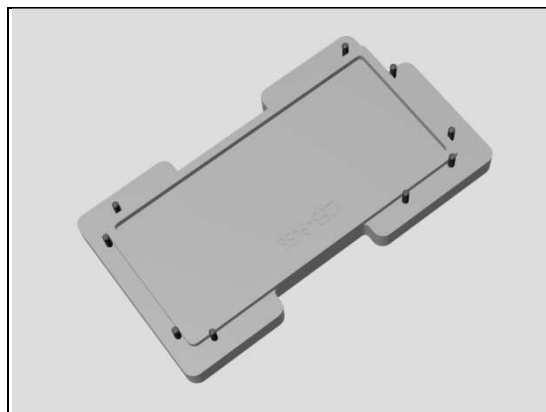
**Scrap! Not to be reused!**

**Make sure all remaining adhesive residue have been removed!**



#### INSTALLATION

Prepare the Bottom Part of the Back Panel Adhesive Fixture.

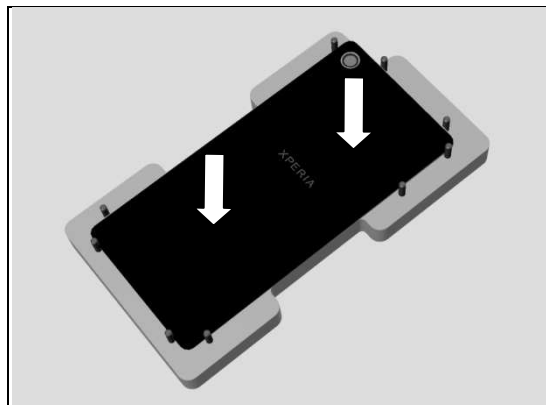


Place a new Adhesive Back Panel Assy with fingers onto the Back Panel Adhesive Fixture (Bottom Part).

Then place the old Back Panel Assy above the Adhesive Back Panel Assy.

Press hard along the adhesive area.

**Important to make sure that old adhesive is removed before installation because of WRT requirement!**





## Replacement

### 4.13 Adhesive Battery Bottom

*Follow the 3.1 – 3.4 Disassembly instructions!*

Prepare a new Adhesive Battery Bottom.

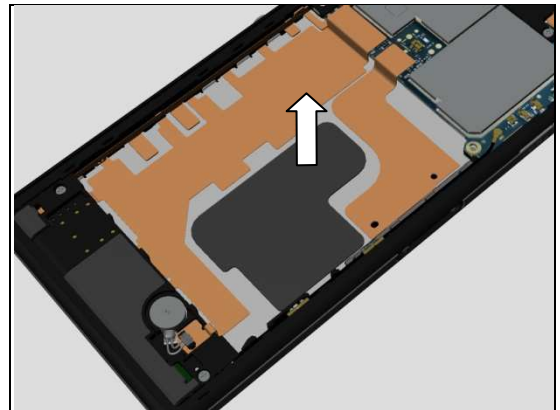
Follow the 5.6 – 5.9 Reassembly instructions!

#### REMOVAL

Detach the Adhesive Battery Bottom by using a pair of Plastic Tweezers.

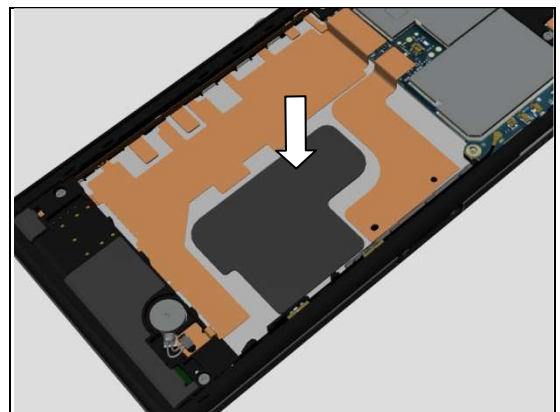
**Scrap! Not to be reused!**

**Make sure all remaining adhesive residue have been removed!**



#### INSTALLATION

Attach a new Adhesive Battery Bottom as shown in picture by using a pair of Plastic Tweezers.



## Replacement

### 4.14 Adhesive Vibrator

*Follow the 3.1 – 3.2 Disassembly instructions!*

*Follow the 4.36 Removal instructions!*

Prepare a new Adhesive Vibrator.

*Follow the 4.36 Installation instructions!*

Follow the 5.8 – 5.9 Reassembly instructions!

#### REMOVAL

Disconnect the Battery FPC connector.

Detach the Adhesive Vibrator by using a pair of Plastic Tweezers.

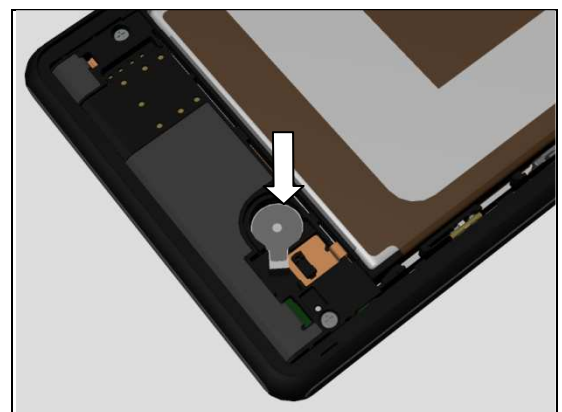
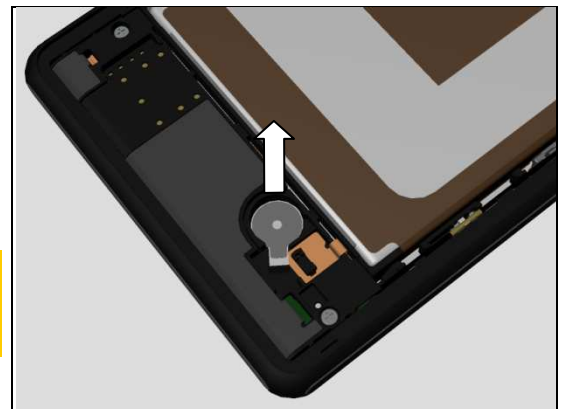
**Scrap! Not to be reused!**

**Make sure all remaining adhesive residue have been removed!**

#### INSTALLATION

Press to snap the Battery FPC connector.

Attach a new Adhesive Vibrator as shown in picture by using a pair of Plastic Tweezers.



## Replacement

### 4.15 Camera Chat

*Follow the 3.1 – 3.9 Disassembly instructions!*  
*Follow the 4.23 Removal instructions!*  
*Prepare a new Camera Chat.*  
*Follow the 4.23 Installation instructions!*  
*Follow the 5.1 – 5.9 Reassembly instructions!*

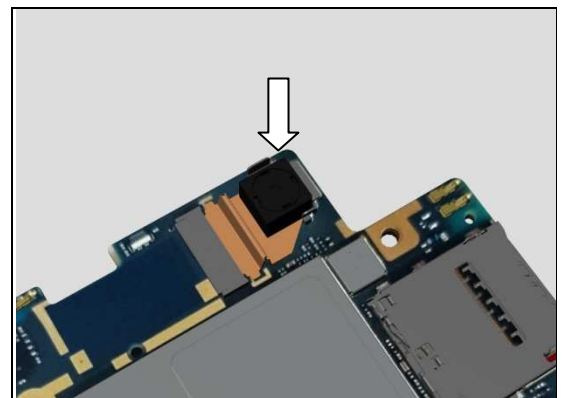
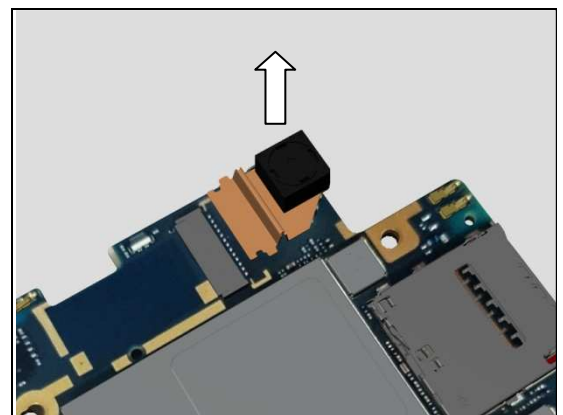
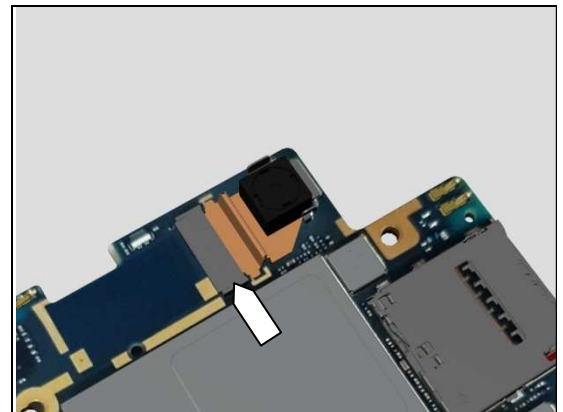
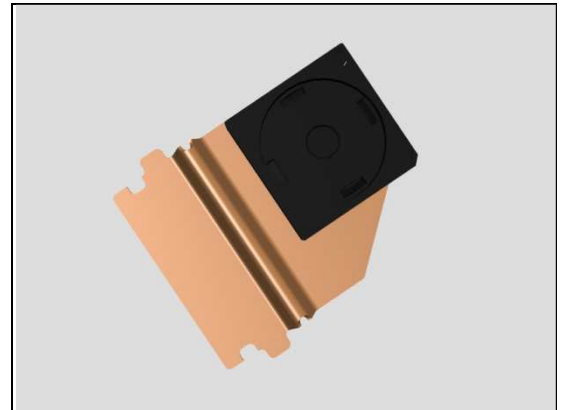
#### REMOVAL

Unlock the ZIF connector by using the Front Opening Tool.

Use the Flex Film Assembly Tool to release the Camera Chat FPC from ZIF connector.  
 And then remove it.

#### INSTALLATION

Place a new Camera Chat in the cavity as shown in picture and press to secure its position.  
 Gently insert the Camera Chat FPC into the ZIF connector by using the Flex Film Assembly Tool.



## Replacement:

### 4.16 Cap SD

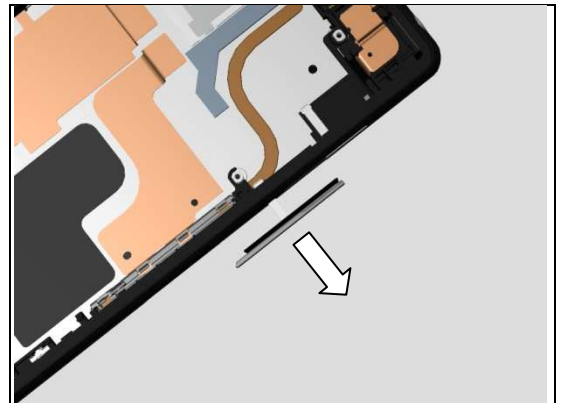
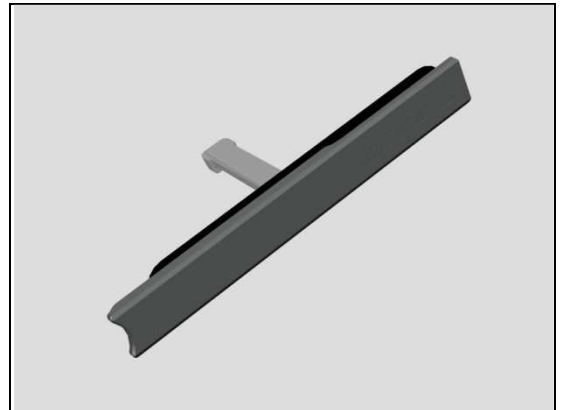
*Follow the 3.1 – 3.9 Disassembly instructions!*

*Prepare a new Cap SD.*

*Follow the 5.1 – 5.9 Reassembly instructions!*

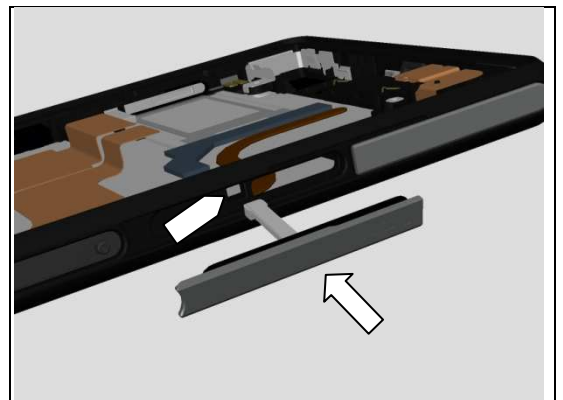
#### REMOVAL

Pull to remove the Cap SD with fingers.



#### INSTALLATION

Insert to mount a new Cap SD in its proper position with fingers as shown in picture.



## Replacement

### 4.17 Cap SIM

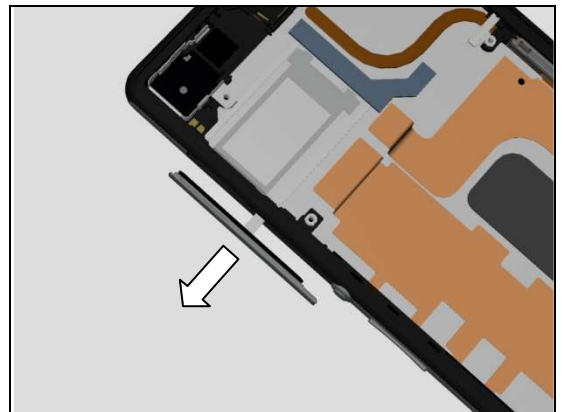
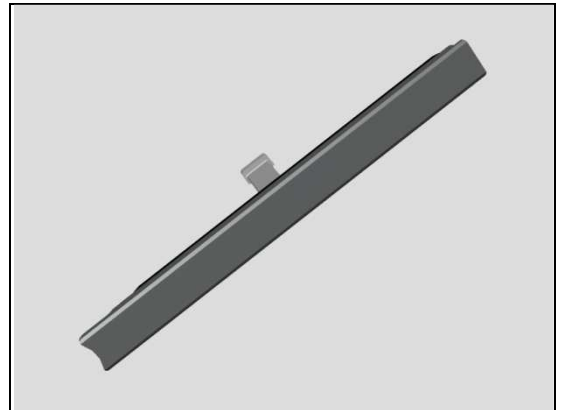
*Follow the 3.1 – 3.9 Disassembly instructions!*

*Prepare a new Cap SIM.*

*Follow the 5.1 – 5.9 Reassembly instructions!*

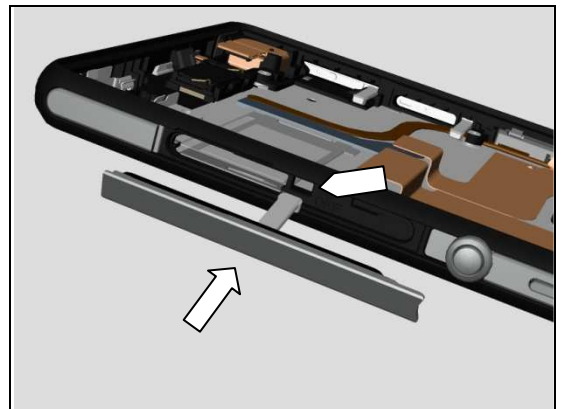
#### REMOVAL

Pull to remove the Cap SIM with fingers.



#### INSTALLATION

Insert to mount a new Cap SIM in its proper position with fingers as shown in picture.



## Replacement

### 4.18 Cap USB

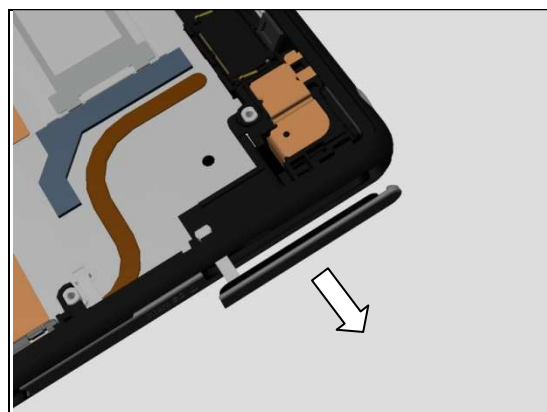
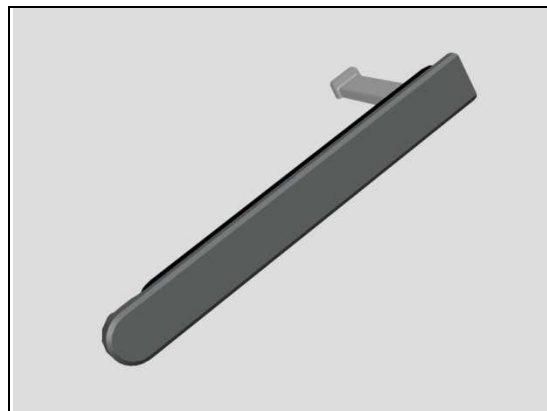
*Follow the 3.1 – 3.9 Disassembly instructions!*

*Prepare a new Cap USB.*

*Follow the 5.1 – 5.9 Reassembly instructions!*

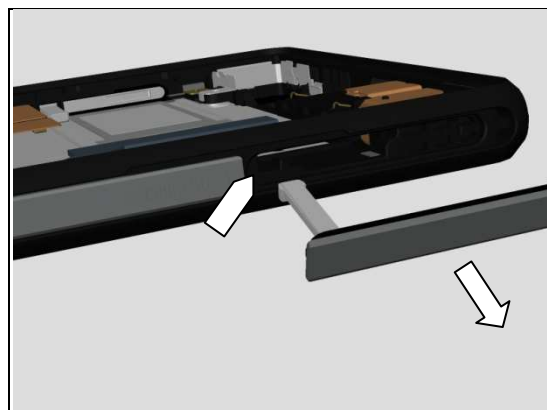
#### REMOVAL

Pull to remove the Cap USB with fingers.



#### INSTALLATION

Insert to mount a new Cap USB in its proper position with fingers as shown in picture.



## Replacement

### 4.19 Carrier Holder Main Mic

*Follow the 3.1 – 3.9 Disassembly instructions!*

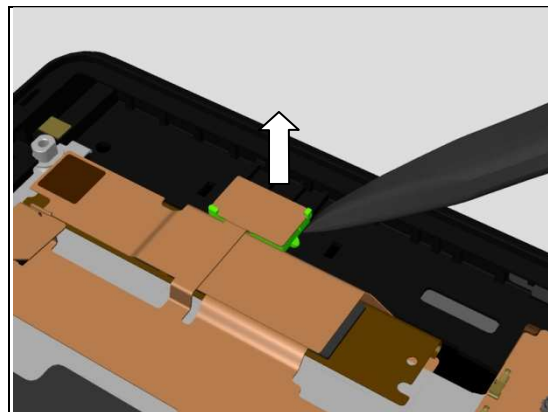
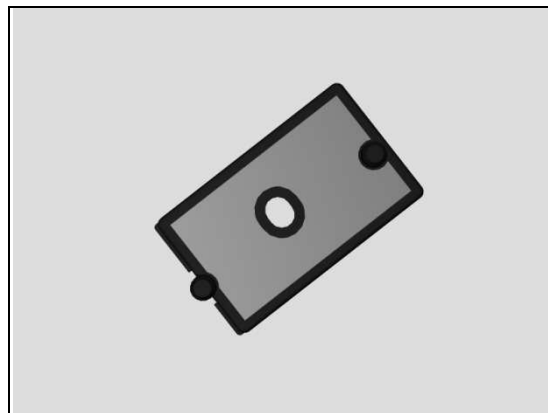
*Prepare a new Carrier Holder Main Mic.*

*Follow the 5.1 – 5.9 Reassembly instructions!*

#### REMOVAL

Detach the Carrier Holder Main Mic from the Display Frame Assy by using a pair of Plastic Tweezers.

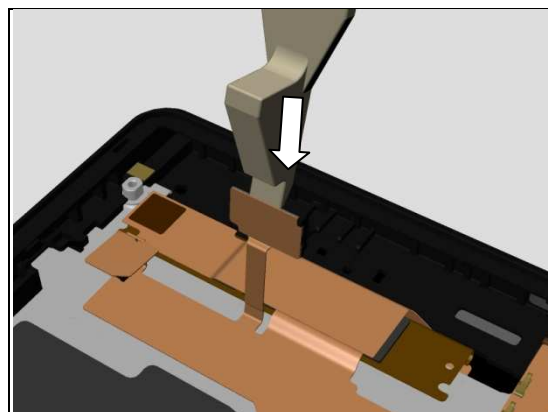
**Be careful! Do not damage the Relay FPC Assy.**



Detach the Carrier Holder Main Mic from the Relay FPC Assy by using Front Opening Tool.

**Scrap! Not to be reused!**

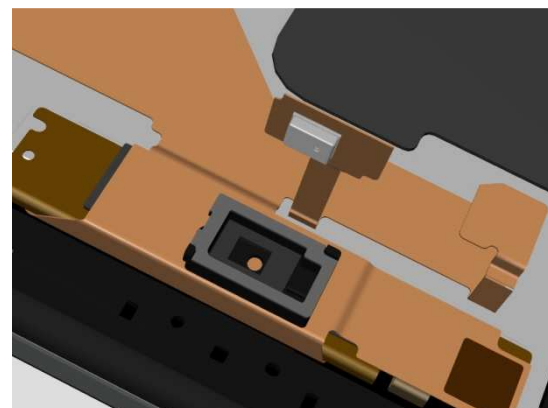
**Be careful! Do not damage the components on the Relay FPC Assy and FPC itself.**



#### INSTALLATION

**Make sure all remaining adhesive residue on the FPC have been removed!**

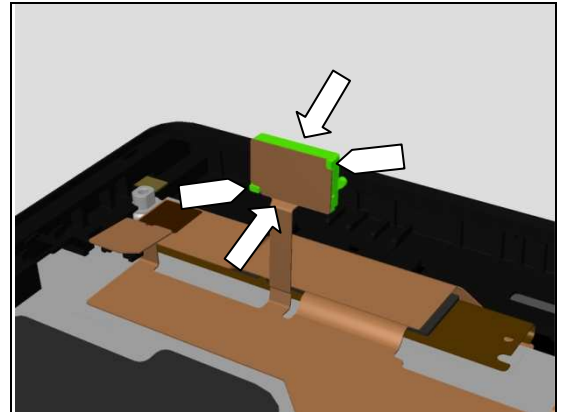
**Make sure the right orientation of the Carrier Holder Main Mic to be installed!**



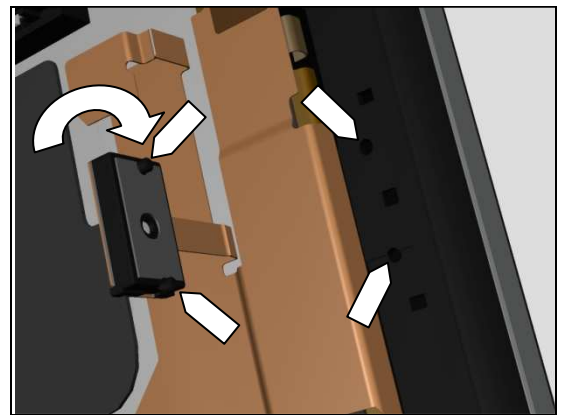


## Replacement: Carrier Holder Main Mic

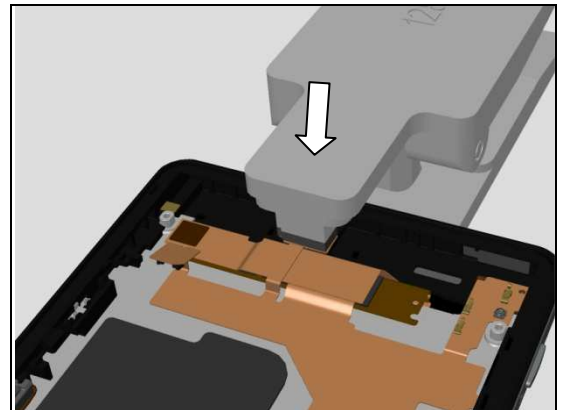
Attach the Carrier Holder Main Mic onto the FPC as shown in picture.



Attach the Carrier Holder Main Mic onto the Display Frame Assy aligning with the pins and holes as shown in picture.



Press it by using the Main Mic Holder Press Tool for 10 seconds.





## Replacement

### 4.20 Charge FPC Assy

*Follow the 3.1 – 3.4 and 3.8 Disassembly instructions!*

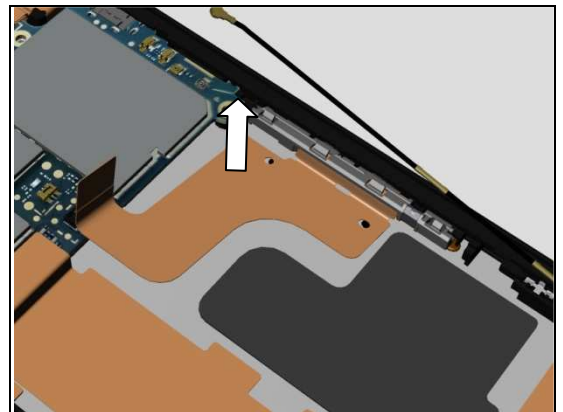
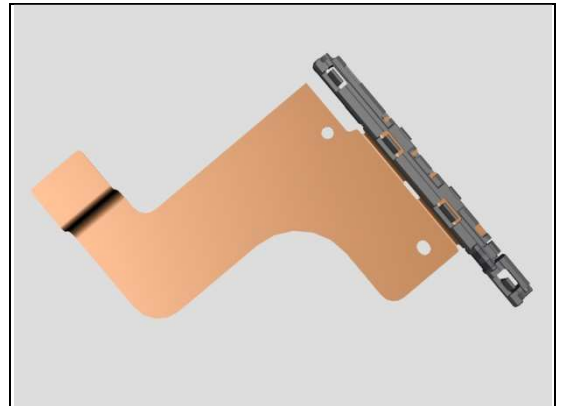
*Prepare a new Charge FPC Assy.*

*Follow the 5.2 and 5.6 – 5.9 Reassembly instructions!*

#### REMOVAL

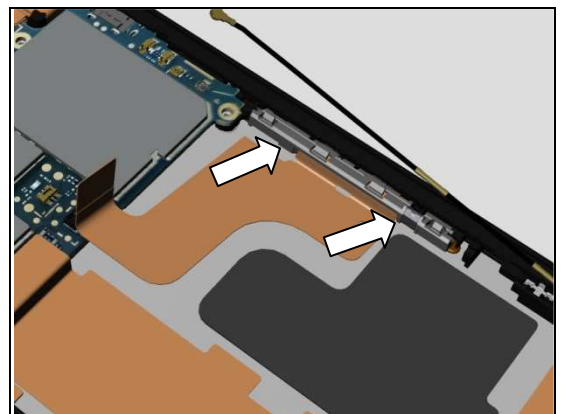
Disconnect the Charge FPC Assy connector.  
Detach the Charge FPC Assy and remove it.

**Scrap! Not to be reused!**



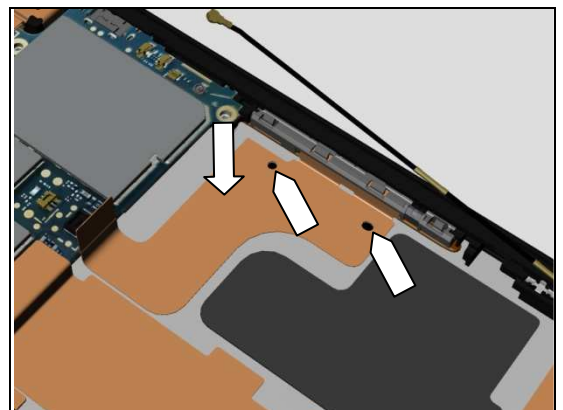
#### INSTALLATION

Insert to mount the plastic part of the Charge FPC Assy into its proper position as shown in picture.



Attach the FPC aligning with the two holes as shown in picture.

Press to snap the Charge FPC Assy connector.



## Replacement

### 4.21 Conductive Adhesive PBA Sub

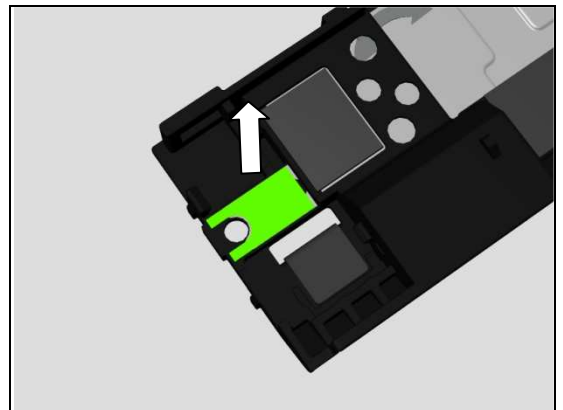
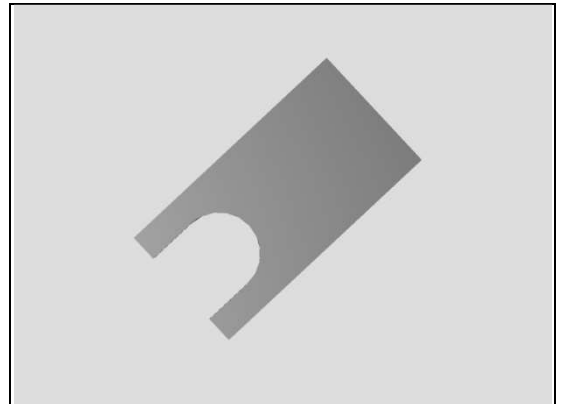
*Follow the 3.1 – 3.4 and 3.8 Disassembly instructions!*  
*Follow the 4.27 Removal instructions!*  
 Prepare a new Conductive Adhesive PBA Sub.  
*Follow the 4.27 Installation instructions!*  
*Follow the 5.2 and 5.6 – 5.9 Reassembly instructions!*

#### REMOVAL

Detach the Conductive Adhesive PBA Sub and remove it with a pair of Plastic Tweezers.

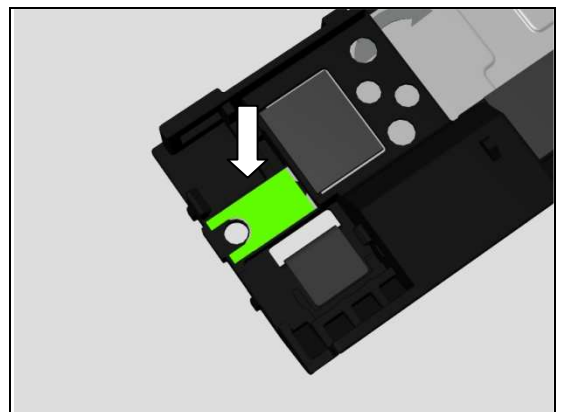
**Scrap! Not to be reused!**

**Make sure all remaining adhesive residue have been removed!**



#### INSTALLATION

Attach a new Conductive Adhesive PBA Sub by using a pair of Plastic Tweezers as shown in picture.



## Replacement

### 4.22 Core Unit Label

*Prepare a new Core Unit Label.*

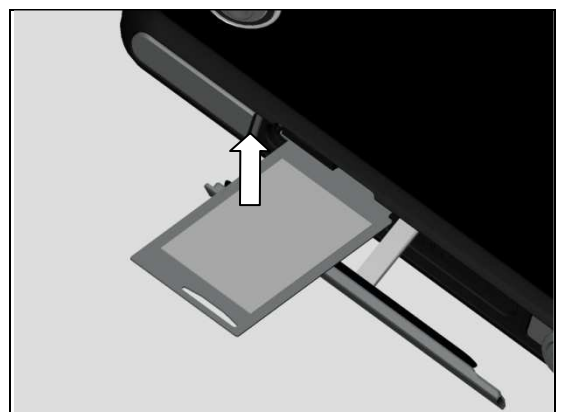
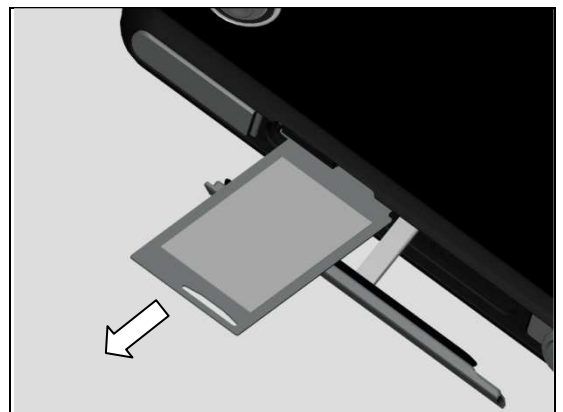
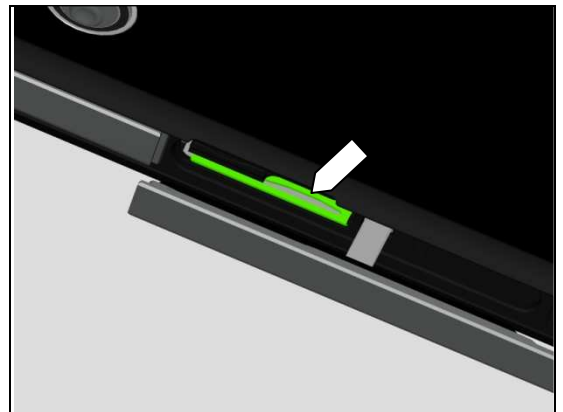
#### REMOVAL

Open the Cap SIM.  
Identify the release hole for pulling.

Pull out the Tray Core Unit Label with fingers.

Read the old Core Unit Label and/or write the information into the 'Label Print Solution' program before removal.  
Carefully remove the Core Unit Label by using the Flex Film Assembly Tool.

**Scrap! Not to be reused!**



## Replacement: Core Unit Label

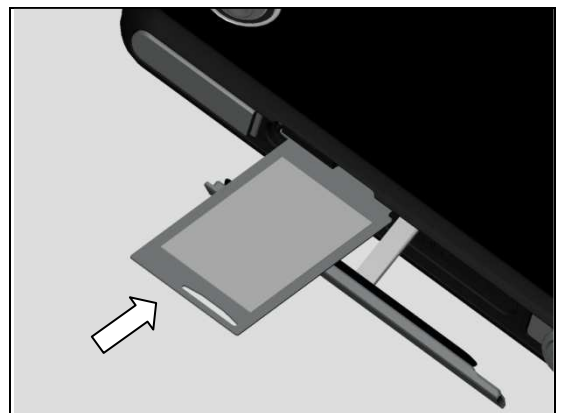
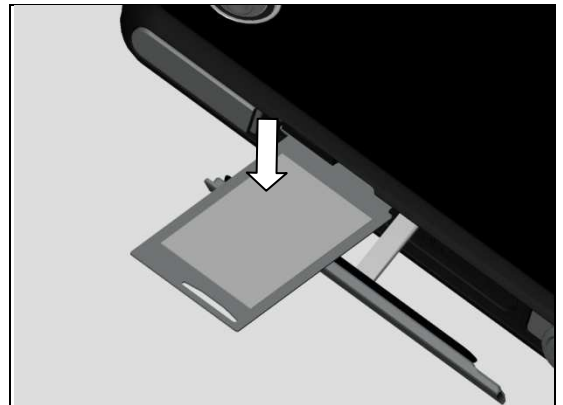
### INSTALLATION

Check that the label format is properly loaded in the Zebra printer and write a new Label using the 'Label Print Solution' software.

Attach a new Core Unit Label in its proper position as shown in picture.

Push the Tray Core Unit Label into the slot.

Close the Cap SIM.



## Replacement

### 4.23 Holder Camera Chat

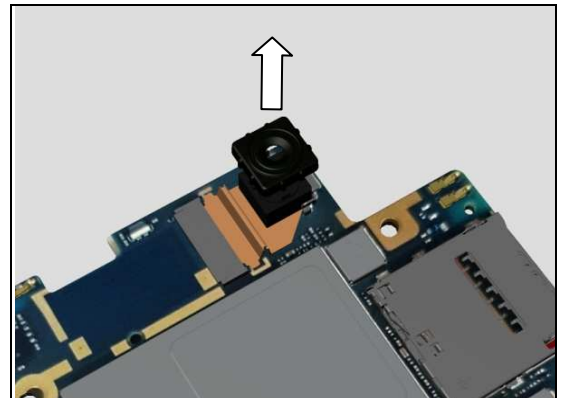
*Follow the 3.1 – 3.9 Disassembly instructions!*

*Prepare a new Holder Camera Chat.*

*Follow the 5.1 – 5.9 Reassembly instructions!*

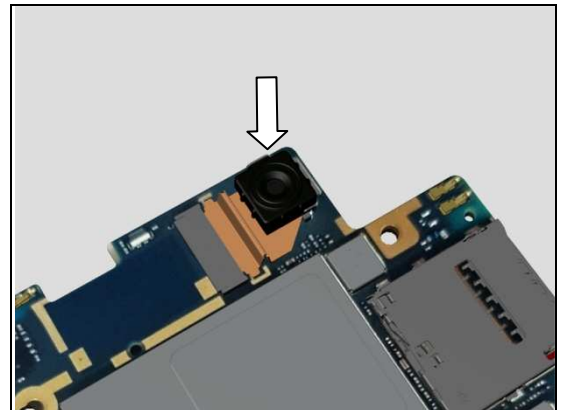
#### REMOVAL

Remove the Holder Camera Chat with fingers.



#### INSTALLATION

Mount a new Holder Camera Chat with fingers.



## Replacement

### 4.24 Liquid indicator

*Follow the 3.1 – 3.9 Disassembly instructions!*

*Prepare a new Liquid indicator.*

*Follow the 5.1 – 5.9 Reassembly instructions!*

#### REMOVAL

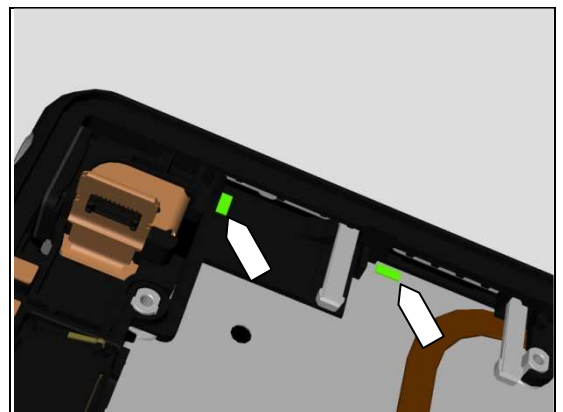
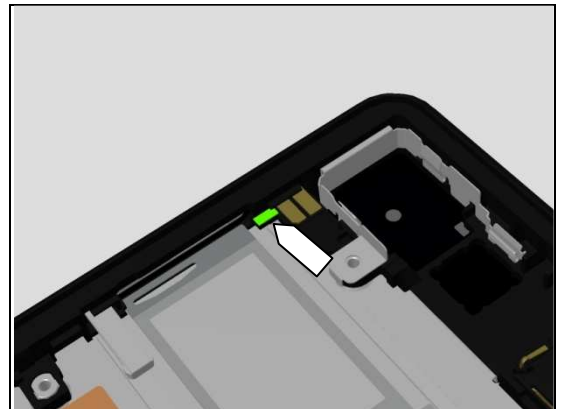
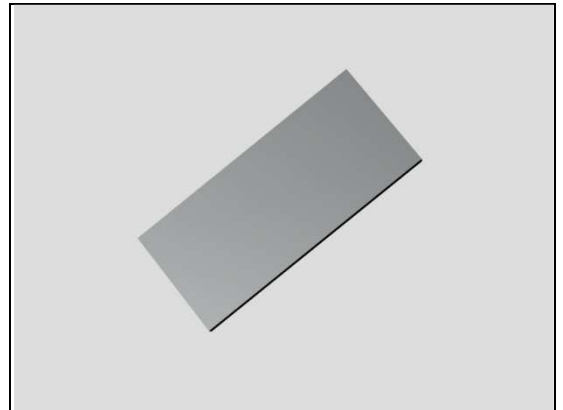
Detach to remove the Liquid indicator by using a Flex Film Assembly Tool.

**Scrap! Not to be reused!**

#### INSTALLATION

Attach a new Liquid indicator in its proper position by using a Flex Film Assembly Tool as shown in picture.

Do the same to these two Liquid Indicators.



## Replacement

### 4.25 Magnetic Connector

*Follow the 3.1 – 3.4 and 3.8 Disassembly instructions!*

*Follow the 4.20 Removal instructions!*

*Prepare a new Magnetic Connector.*

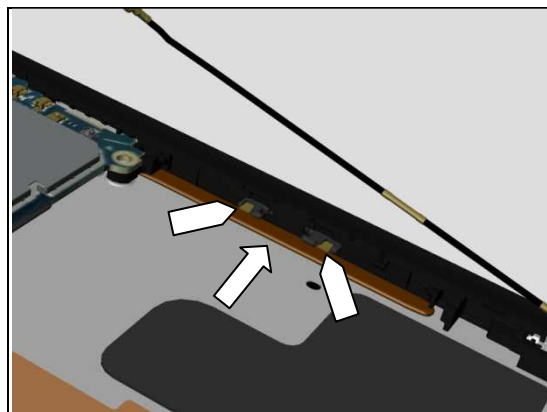
*Follow the 4.20 Installation instructions!*

*Follow the 5.2 and 5.6 – 5.9 Reassembly instructions!*

#### REMOVAL

Push the two contact pads of the Magnetic Connector by using Front Opening Tool to detach it.

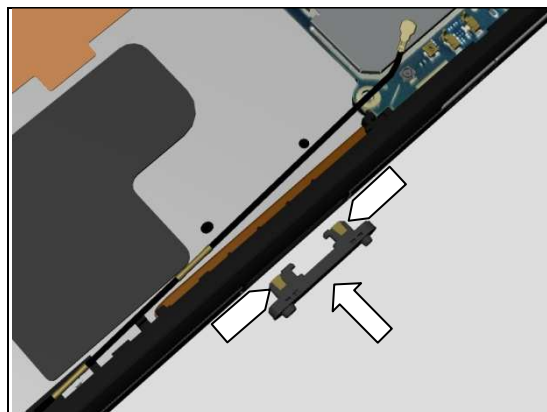
**Scrap! Not to be reused!**



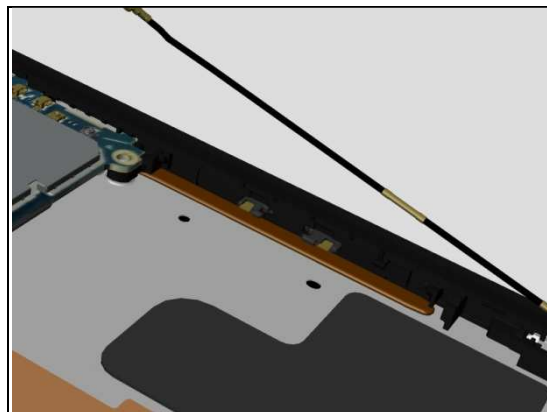
#### INSTALLATION

Mount a new Magnetic connector into its hole with fingers.

**Note the orientation of the Magnetic Connector to be installed as shown in picture!**



Use Side Panel press, Side Panel Press Head and Charge connector press pad with the force of  $60N \pm 6N$  for 10 seconds. According to 1003-9107 Tool Catalogue – mechanical and document Side Panel press Instruction for use.



## Replacement

### 4.26 Panel Bottom

*Prepare a new Panel Bottom.*

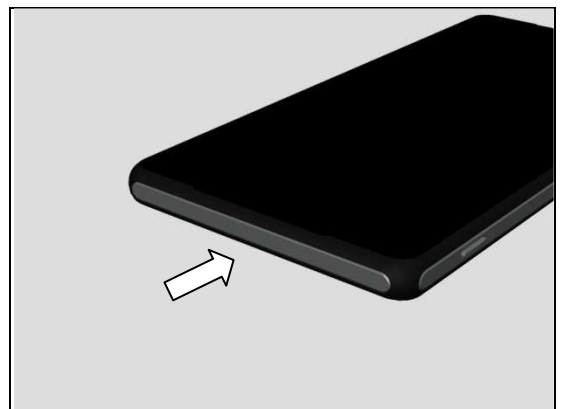
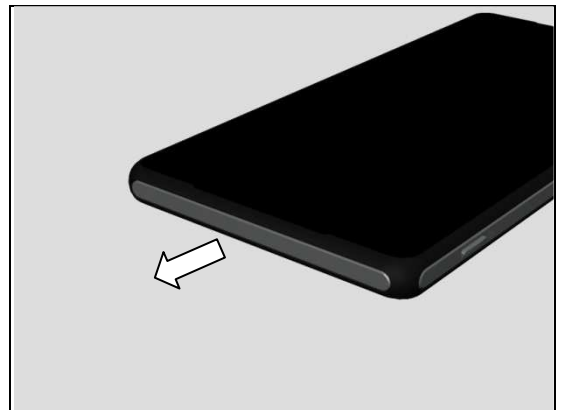
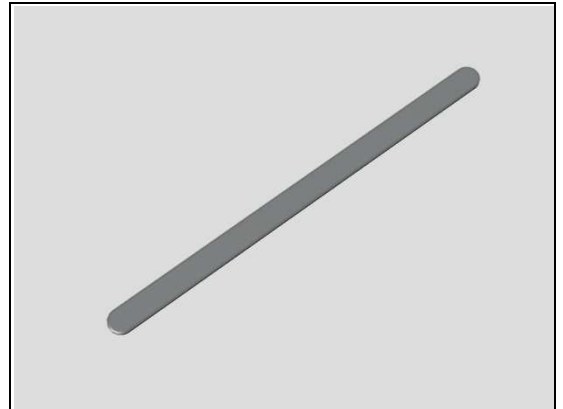
#### REMOVAL

Detach to remove the Panel Bottom by using the Front Opening Tool.

**Scrap! Not to be reused!**

**Make sure not to damage the cosmetic surface of the phone.**

**Make sure all remaining adhesive residue have been removed!**



#### INSTALLATION

Attach a new Panel Bottom in its cavity as shown in picture.

Use Side Panel press, Side Panel Press Head and Side Panel Press Pad with the force of  $30N \pm 5N$  for 5 seconds. According to 1003-9107 Tool Catalogue – mechanical and document Side Panel press Instruction for use.



## Replacement

### 4.27 PBA Sub

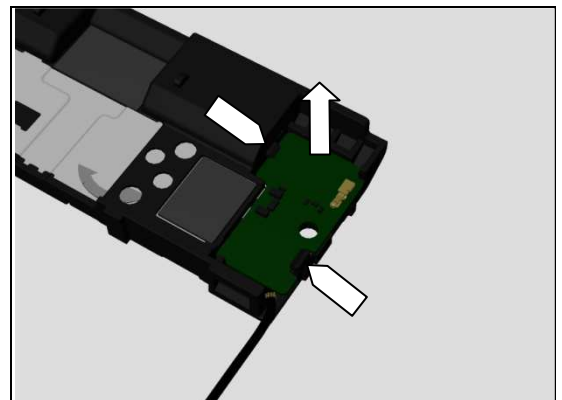
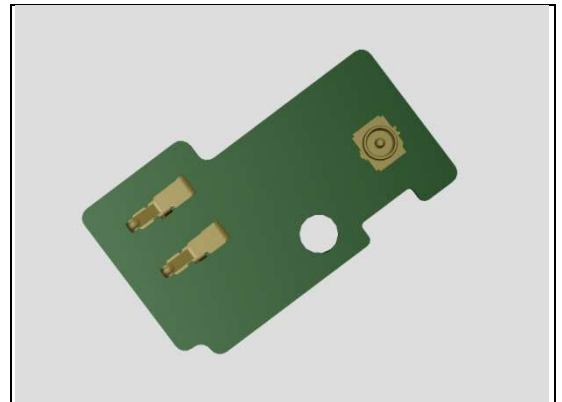
*Follow the 3.1 – 3.4 and 3.8 Disassembly instructions!*

*Prepare a new PBA Sub.*

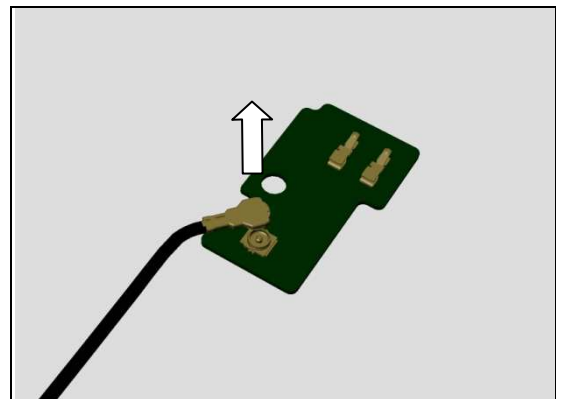
*Follow the 5.2 and 5.6 – 5.9 Reassembly instructions!*

#### REMOVAL

Unsnap the two hooks by using the Front Opening Tool as shown in picture and remove the PBA Sub.

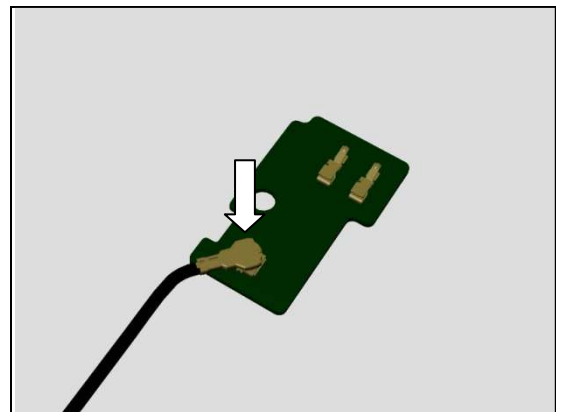


Disconnect the RF Cable.



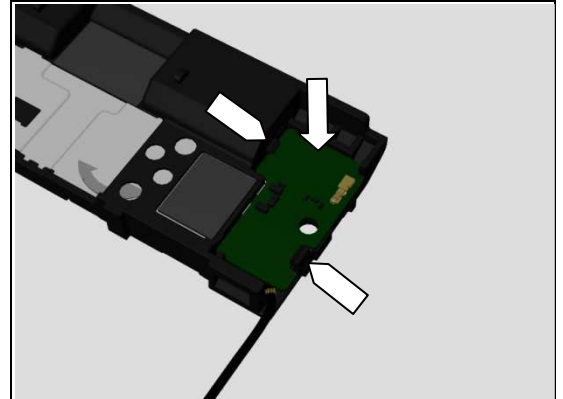
#### INSTALLATION

Connect the RF Cable.



## Replacement: PBA Sub

Press to snap the new PBA Sub into its cavity as shown in picture.



## Replacement

### 4.28 Relay FPC Assy

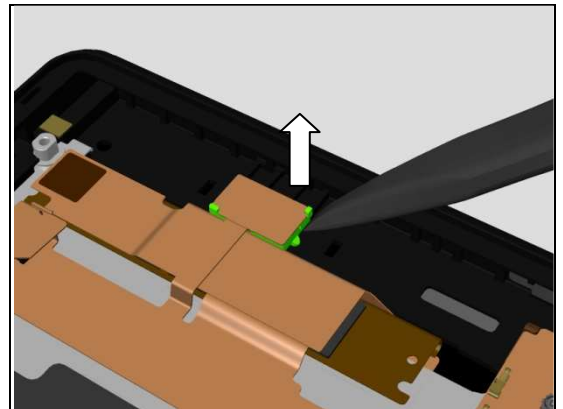
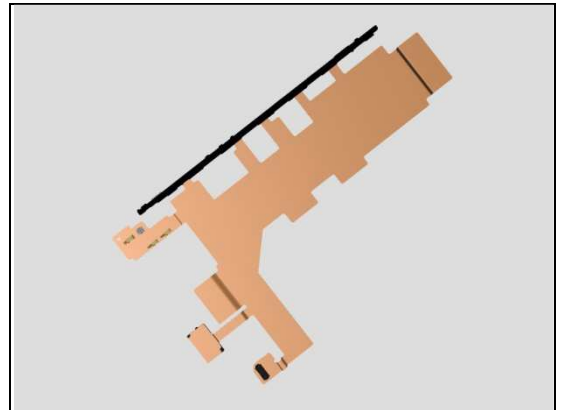
*Follow the 3.1 – 3.9 Disassembly instructions!*

*Prepare a new Relay FPC Assy.*

*Follow the 5.1 – 5.9 Reassembly instructions!*

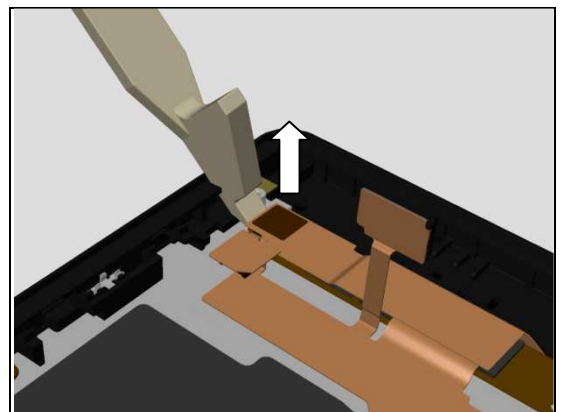
#### REMOVAL

Detach the Carrier Holder Main Mic from the Display Frame Assy by using a pair of Plastic Tweezers.

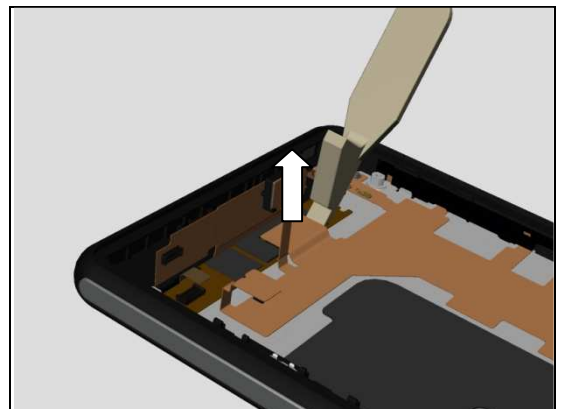


#### INSTALLATION

Disconnect the touch panel FPC connector.



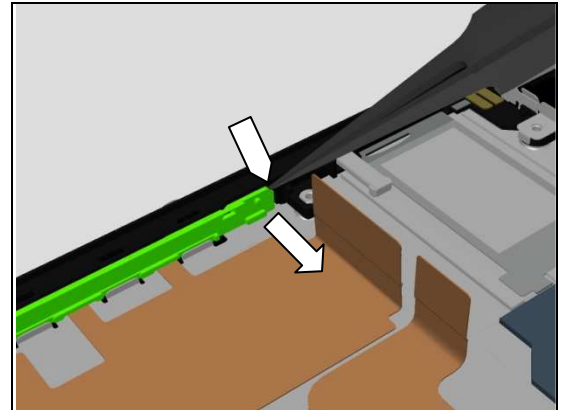
Disconnect the Relay FPC Assy connector.



## Replacement: Relay FPC Assy

Insert the Pointed-tip Tweezers at this position as shown in picture.

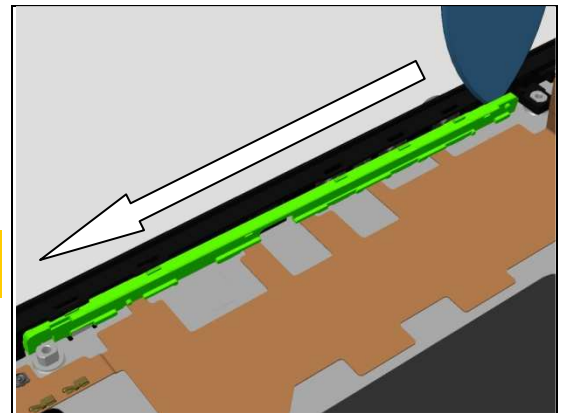
Use the Pointed-tip Tweezers to get space for inserting the Guitar Pick.



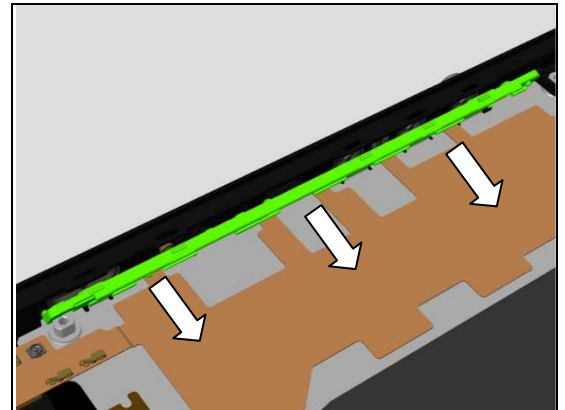
Insert the Guitar Pick.

Gently slide the Guitar Pick along to release plastic side hooks of the Relay FPC Assy.

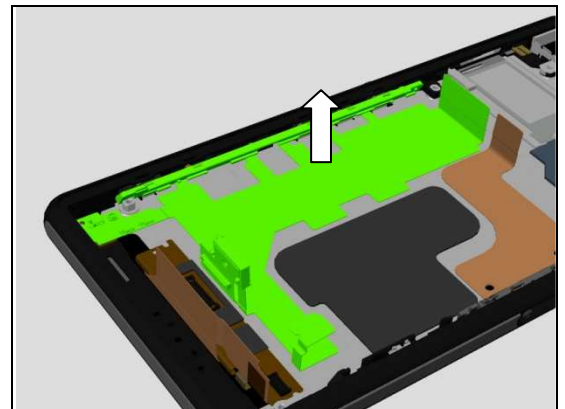
**Be careful! Do not damage the components on the side key FPC and camera key FPC.**



Release the plastic side from its cavity.



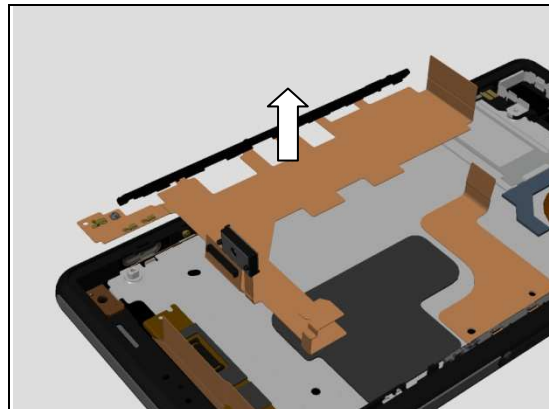
Detach the Relay FPC Assy from the Display Frame Assy.



## Replacement: Relay FPC Assy

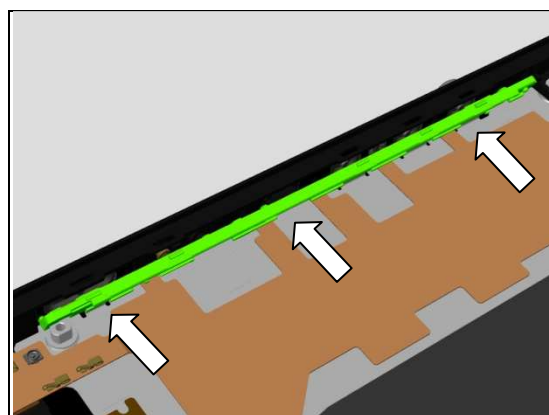
Remove it.

**Scrap! Not to be reused!**

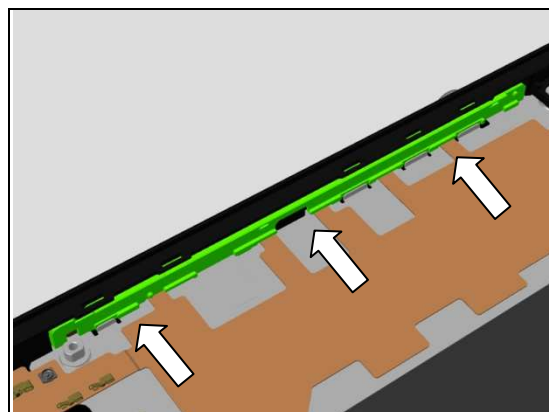


### INSTALLATION

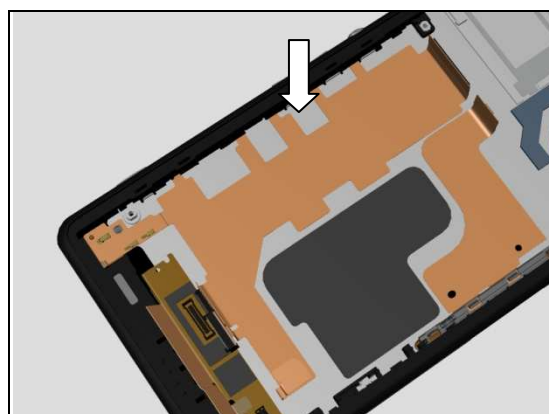
Mount the plastic side into its cavity.



Press to snap it into its proper position.

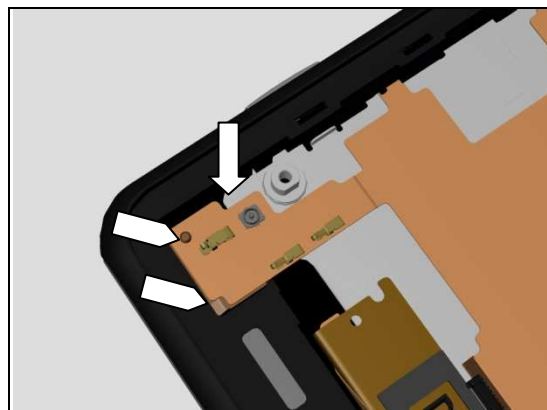


Attach the Relay FPC Assy as shown in picture.

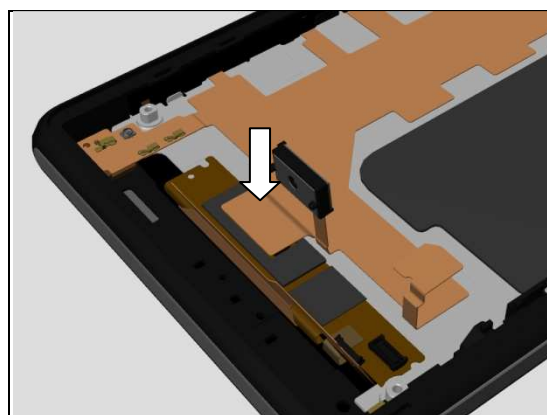


## Replacement: Relay FPC Assy

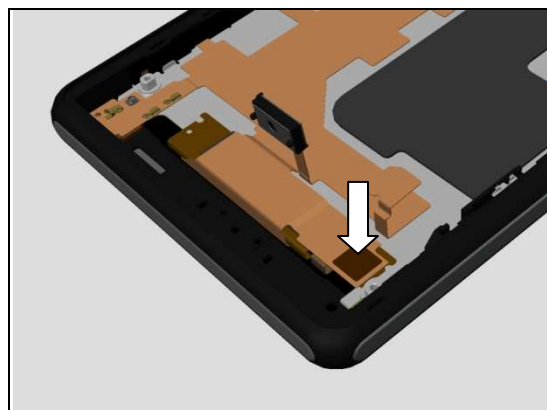
Attach the FPC as shown in picture.



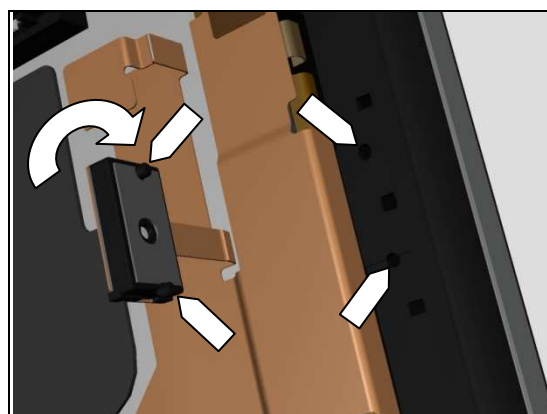
Press to snap the Relay FPC Assy connector.



Press to snap the touch panel FPC connector.

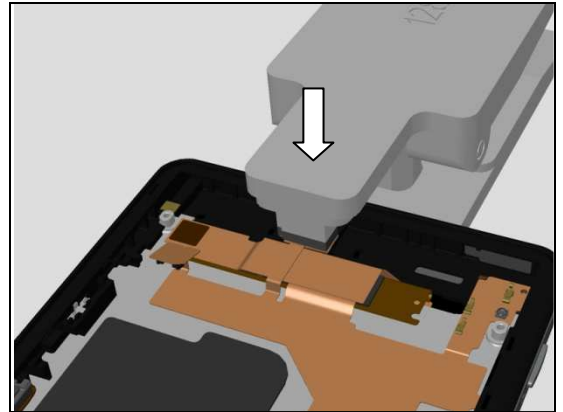


Attach the Carrier Holder Main Mic onto the Display Frame Assy aligning with the pins and holes as shown in picture.



## Replacement: Relay FPC Assy

Press it by using the Main Mic Holder Press Tool for 10 seconds.



## Replacement

### 4.29 RF Cable

*Follow the 3.1 – 3.4 and 3.8 Disassembly instructions!*

*Follow the 4.27 Removal instructions!*

*Prepare a new RF Cable.*

*Follow the 4.27 Installation instructions!*

*Follow the 5.2 and 5.6 – 5.9 Reassembly instructions!*

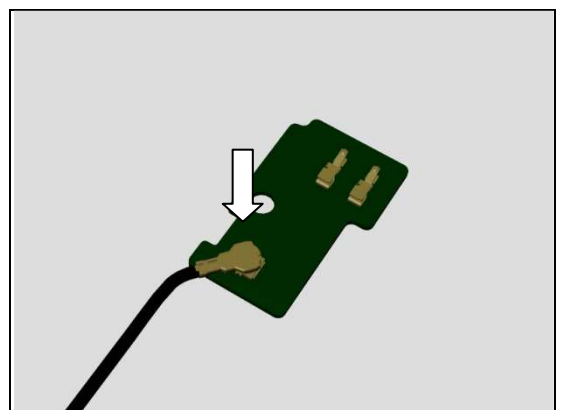
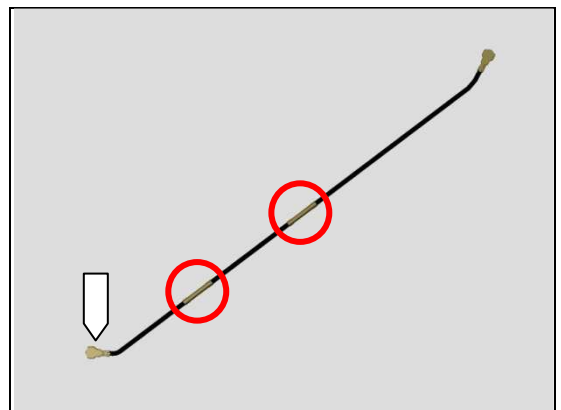
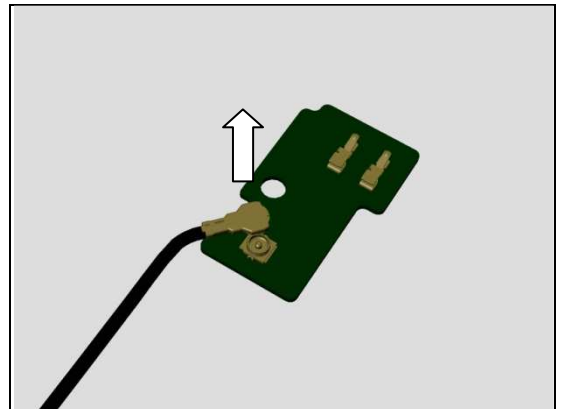
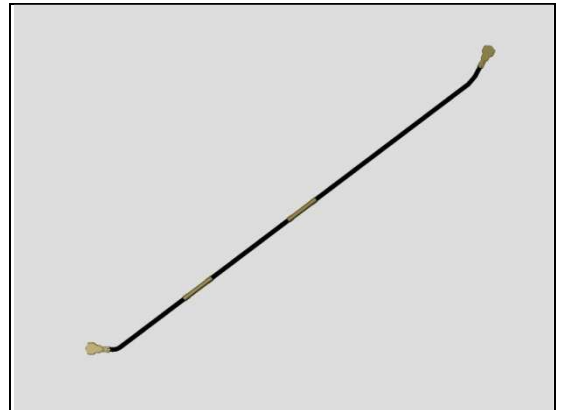
#### REMOVAL

Disconnect the connector of the RF Cable.

Identify the two metal areas on the RF Cable.  
The connector will be assembled as indicated by arrow shown in picture.

#### INSTALLATION

Press to snap the connector of the RF cable.





## Replacement

### 4.30 RF LCP FPC Assy

*Follow the 3.1 – 3.9 Disassembly instructions!*

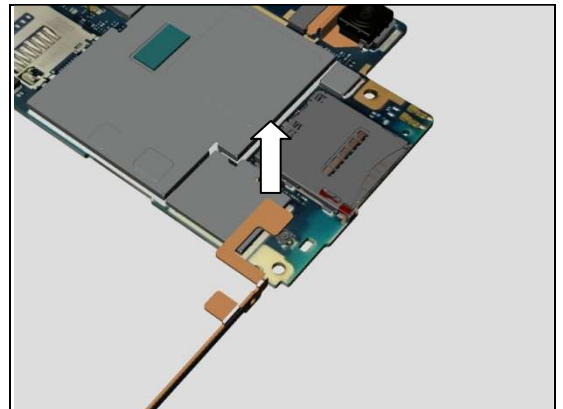
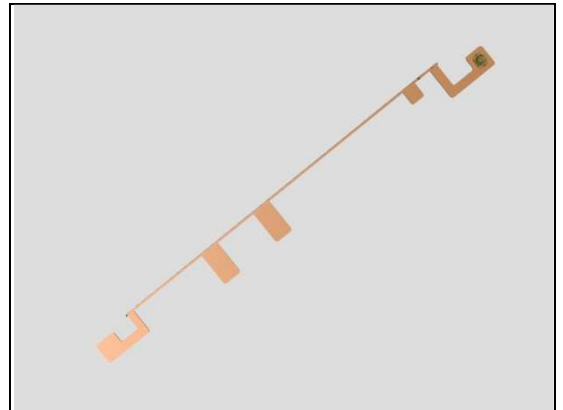
*Prepare a new RF LCP FPC Assy.*

*Follow the 5.1 – 5.9 Reassembly instructions!*

#### REMOVAL

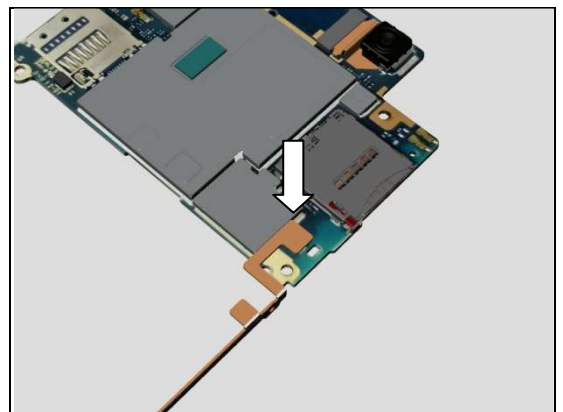
Disconnect RF connector of the RF LCP FPC Assy.

**Scrap it due to adhesive bonding strength is lost or FPC is damaged or folded from disassembly.**



#### INSTALLATION

Press to snap the RF connector of the RF LCP FPC Assy.



## Replacement

### 4.31 Sheet Battery Adhesive Top

*Follow the 3.1 – 3.2 Disassembly instructions!*  
*Prepare a new Sheet Battery Adhesive Top.*  
*Follow the 5.8 – 5.9 Reassembly instructions!*

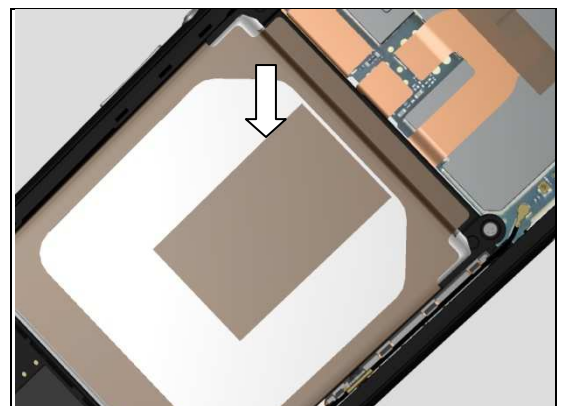
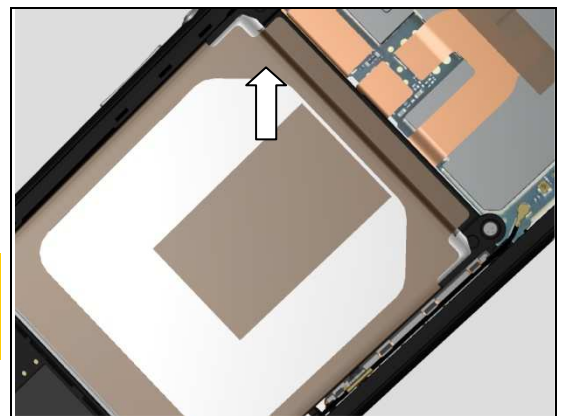
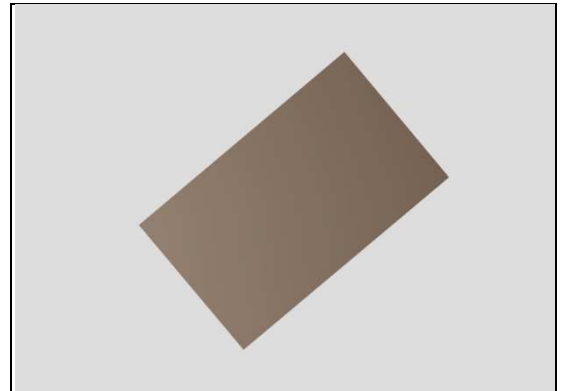
#### REMOVAL

Disconnect the Battery FPC connector.  
 Detach the Sheet Battery Adhesive Top with a pair of Plastic Tweezers.

**Scrap! Not to be reused!**  
**Be careful! Do not damage the protecting film of the Battery.**

#### INSTALLATION

Attach a new Sheet Battery Adhesive Top in its proper position with a pair of Plastic Tweezers as shown in picture.  
 Press to snap the Battery FPC connector.



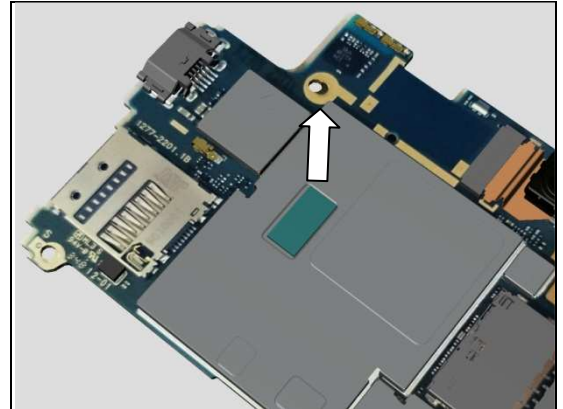
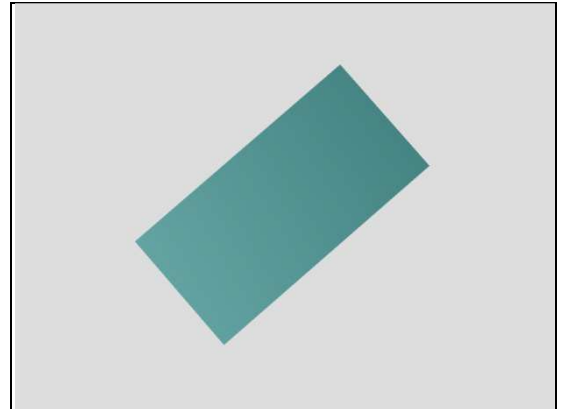
## Replacement

### 4.32 Sheet\_Thermal\_Conductive\_C

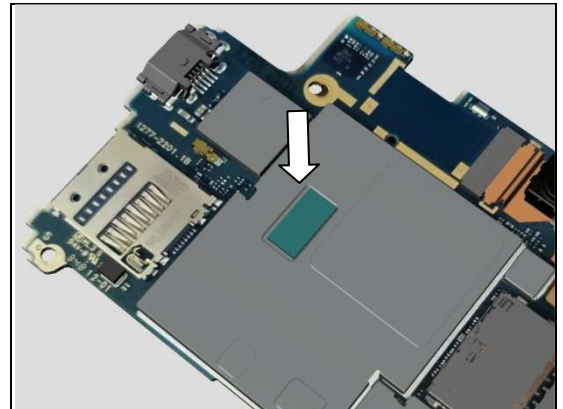
*Follow the 3.1 – 3.9 Disassembly instructions!*  
*Prepare a new Sheet\_Thermal\_Conductive\_C.*  
*Follow the 5.1 – 5.9 Reassembly instructions!*

#### REMOVAL

Detach the Sheet\_Thermal\_Conductive\_C.



Attach the Sheet\_Thermal\_Conductive\_C into its cavity.



## Replacement

### 4.33 Top FPC Assy

*Follow the 3.1 – 3.9 Disassembly instructions!*

*Follow the 4.11 Removal instructions!*

*Prepare a new Top FPC Assy.*

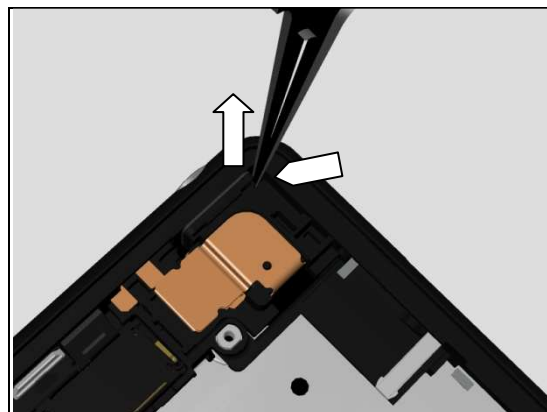
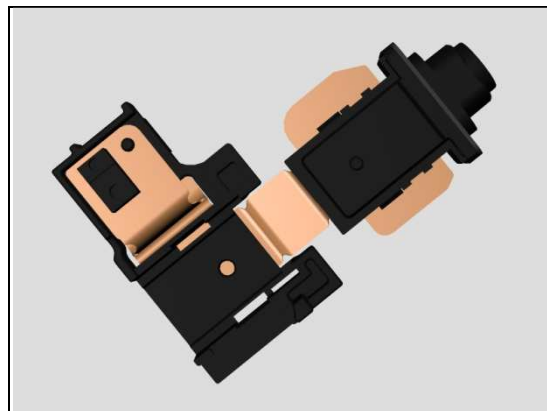
*Follow the 4.11 Installation instructions!*

*Follow the 5.1 – 5.9 Reassembly instructions!*

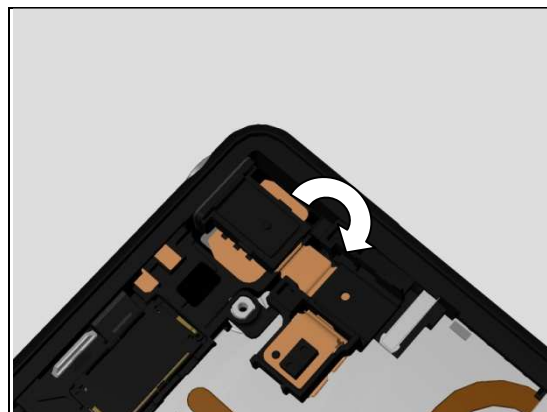
**Noise Cancelling Calibration must be performed for all replaced units; 1262-6643 Trouble Shooting Application – mechanical.**

#### REMOVAL

Release the upper part of the Top FPC Assy by using a pair of Pointed-tip Tweezers as shown in picture.

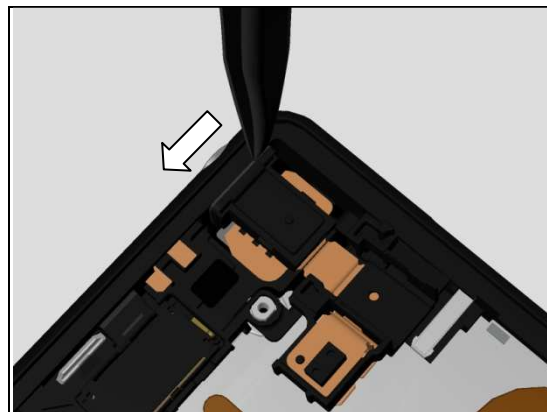


Rotate the upper part as shown in picture.



Slide to detach the Top FPC Assy from the Display Frame Assy by using a pair of Plastic Tweezers as shown in picture.

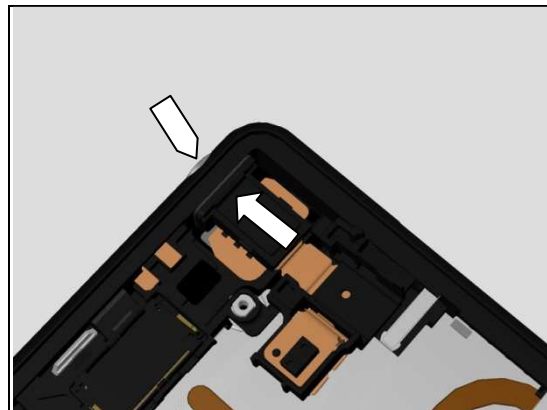
**Make sure all remaining adhesive residue have been removed!**



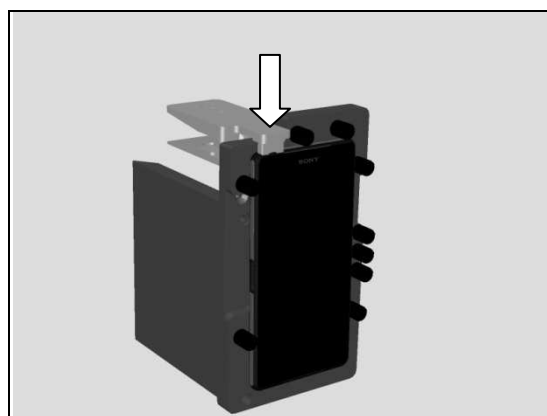
## Replacement: Top FPC Assy

### INSTALLATION

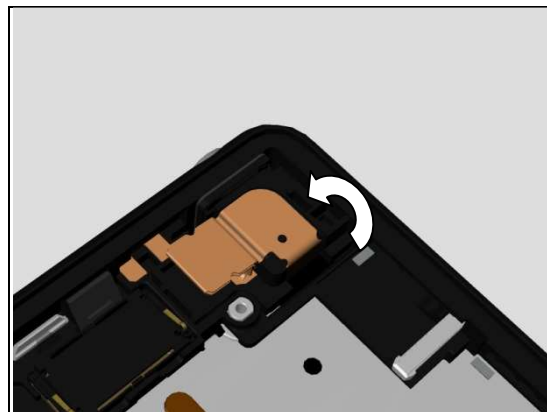
Insert to mount a new Top FPC Assy into Audio Jack hole as shown in picture.



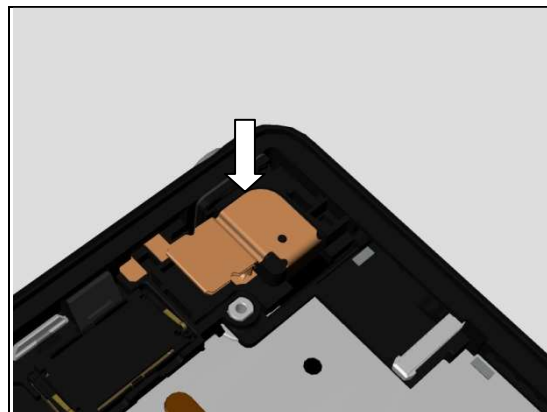
Press it by using the Audio Jack Press Tool for 10 seconds.



Rotate to install the upper part as shown in picture.



Press to snap it.



## Replacement

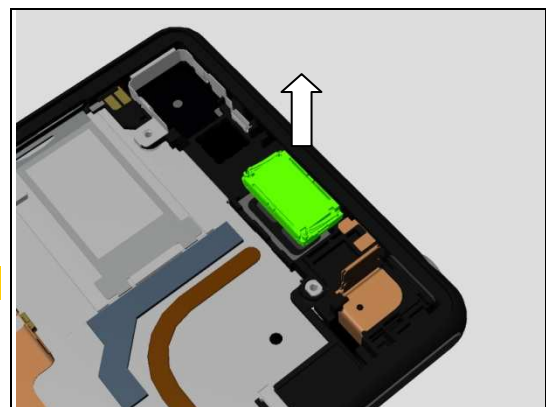
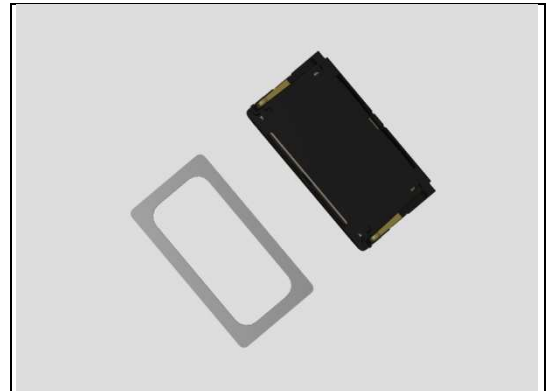
### 4.34 Top Speaker and Adhesive Top Speaker

*Follow the 3.1 – 3.9 Disassembly instructions!*  
*Prepare a new Top Speaker and Adhesive Top Speaker.*  
*Follow the 5.1 – 5.9 Reassembly instructions!*

#### REMOVAL

Detach to remove the Top Speaker by using the Front Opening Tool.

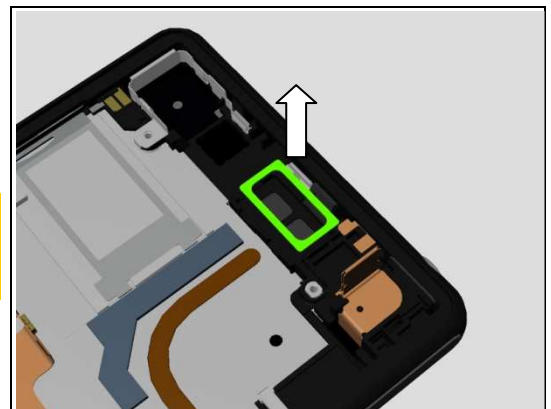
**Scrap! Not to be reused!**



Detach to remove the Adhesive Top Speaker by using the Front Opening Tool.

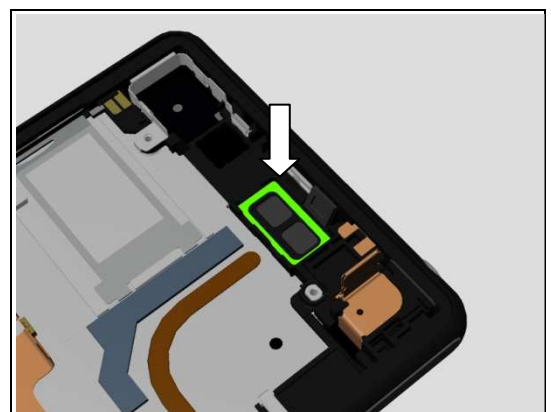
**Scrap! Not to be reused!**

**Make sure all remaining adhesive residue have been removed!**



#### INSTALLATION

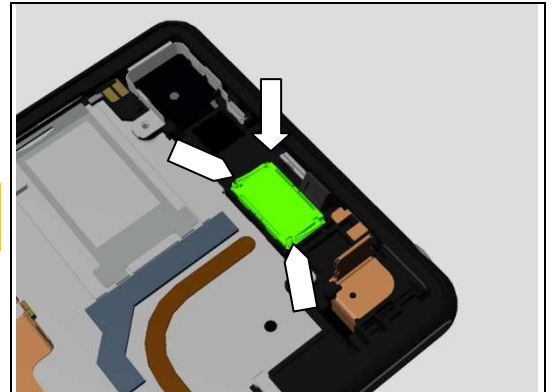
Attach a new Adhesive Top Speaker in its proper position as shown in picture.



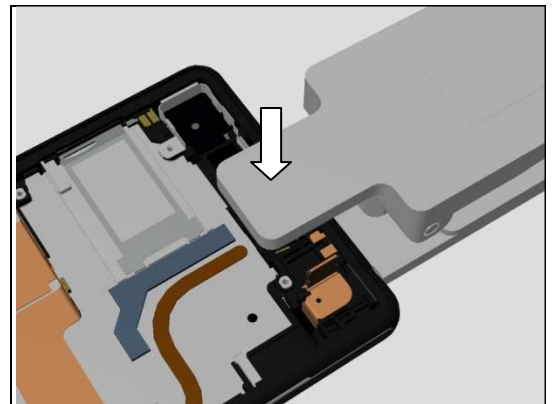
## Replacement: Top Speaker and Adhesive Top Speaker

Mount a new Top Speaker in its cavity.

**Note the orientation of the Top Speaker to be installed as shown in picture!**



Press it by using the Earspeaker/Loudspeaker Top and 2nd Mic Holder Press Tool for 5 seconds.





## Replacement

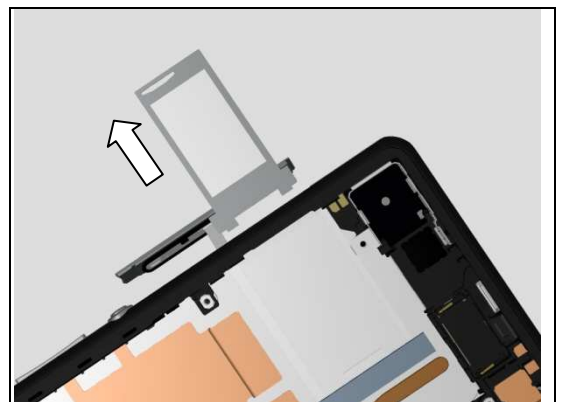
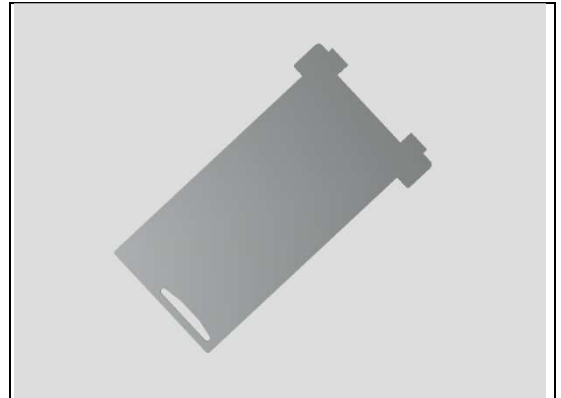
### 4.35 Tray Core Unit Label

*Follow the 3.1 – 3.9 Disassembly instructions!*  
*Prepare a new Tray Core Unit Label.*  
*Follow the 5.1 – 5.9 Reassembly instructions!*

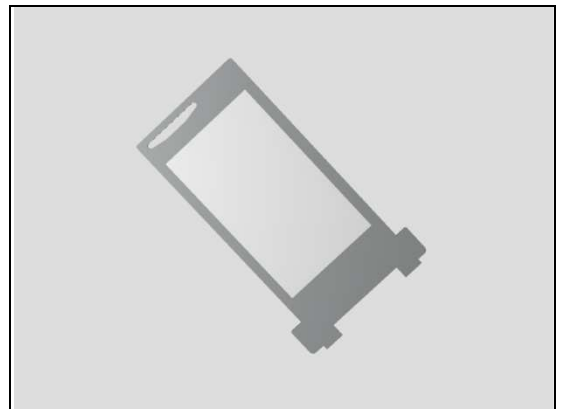
#### REMOVAL

Open the Cap SIM.  
 Pull out the Tray Core Unit Label with fingers.

***Tray Core Unit Label has to be deformed a little when pulling out from its tray guide.***



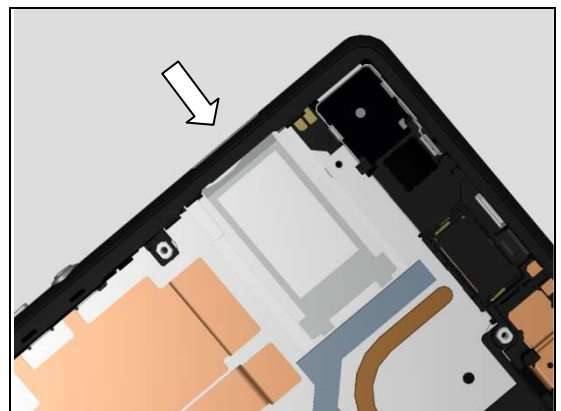
***Follow the 4.22 Removal and Installation instructions to replace a new Core Unit Label.***



#### INSTALLATION

Insert the Tray Core Unit Label into its tray guide and then push it in.  
 Close the Cap SIM.

***Tray Core Unit Label has to be deformed a little when inserting into its tray guide.***





## Replacement

### 4.36 Vibrator

*Follow the 3.1 – 3.2 Disassembly instructions!*

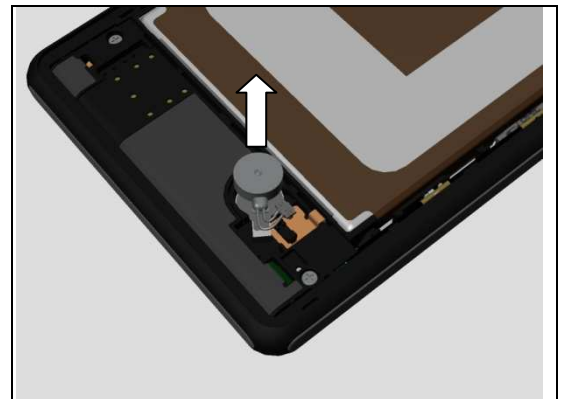
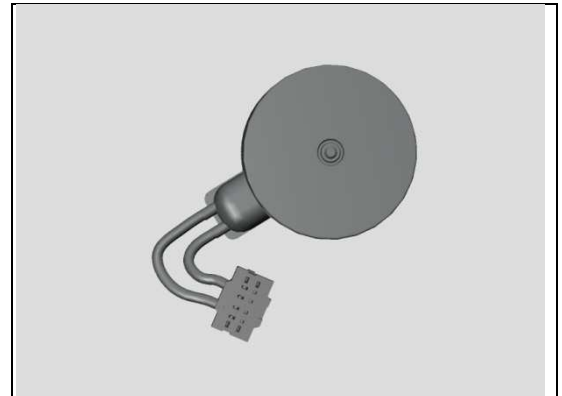
*Prepare a new Vibrator.*

*Follow the 5.8 – 5.9 Reassembly instructions!*

#### REMOVAL

Disconnect the Battery FPC connector.

Disconnect the Vibrator connector and detach it.



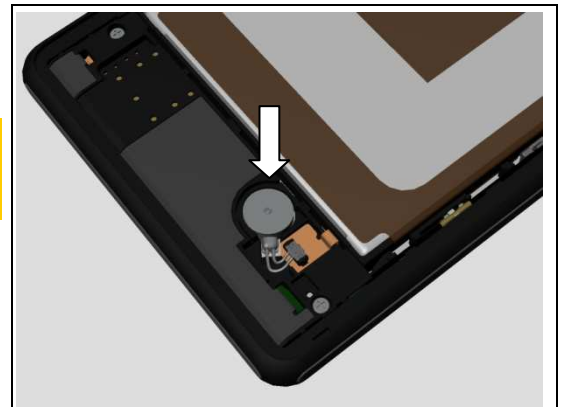
#### INSTALLATION

***Follow the 4.14 Removal and Installation instructions to replace a new Adhesive Vibrator due to adhesive bonding strength is lost from disassembly.***

Attach the Vibrator in its cavity.

Press to snap the connector of the Vibrator.

Press to snap the Battery FPC connector.



## Replacement

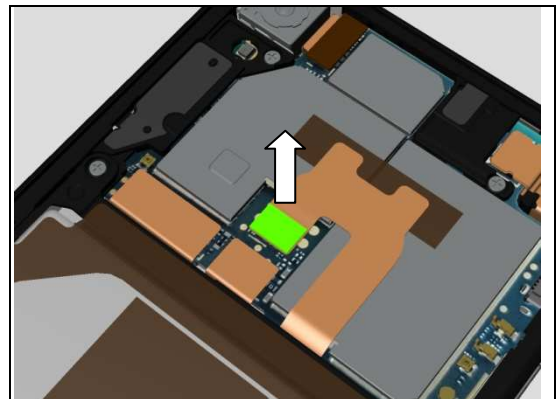
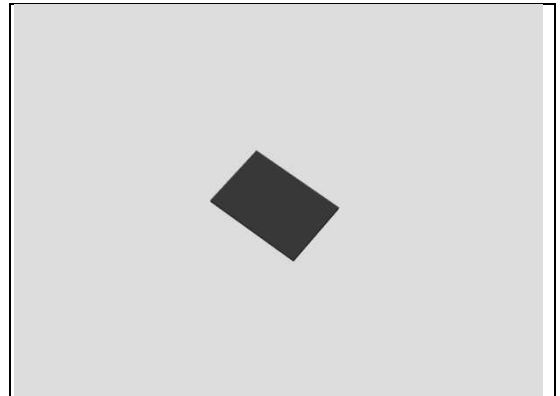
### 4.37 Gasket Battery BtB Connector

*Follow the 3.1 – 3.2 Disassembly instructions!*  
*Prepare a new Gasket Battery BtB Connector.*  
*Follow the 5.8 – 5.9 Reassembly instructions!*

#### REMOVAL

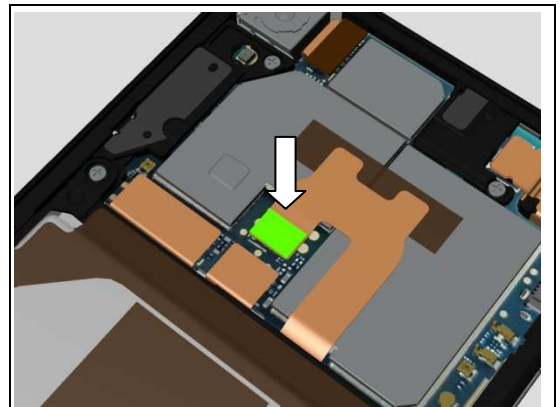
Detach the Gasket Battery BtB Connector.

**Scrap! Not to be reused!**



#### INSTALLATION

Attach the Gasket Battery BtB Connector in its proper position.



## Replacement

### 4.38 Board Swap – Replacement

*Follow the 3.1 – 3.9 Disassembly instructions!*

*Follow the 4.23, 4.15, 4.30 and 4.32 Removal instructions!*

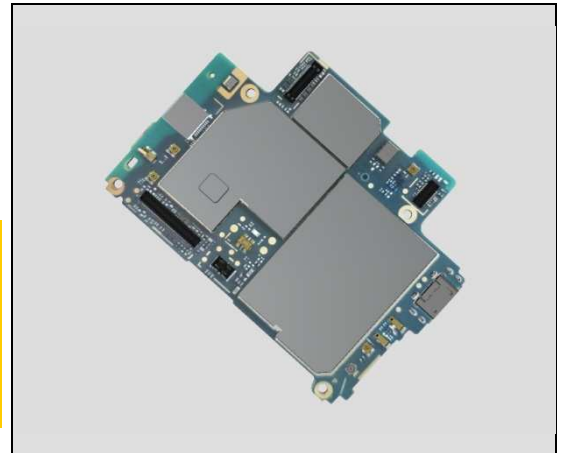
*Prepare a new Camera Chat.*

*Follow the 4.32, 4.30, 4.15 and 4.23 Installation instructions!*

*Follow the 5.1 – 5.9 Reassembly instructions!*

**Noise Cancelling Calibration must be performed for all replaced units; 1262-6643 Trouble Shooting Application – mechanical.**

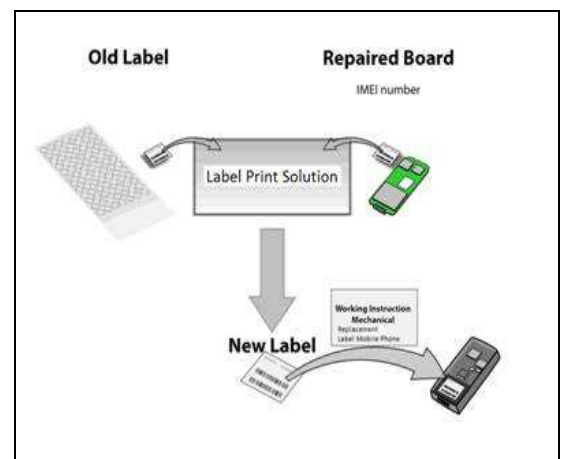
**Gyroscope and Accelerometer Calibration must be performed for all replaced units; 1262-6643 Trouble Shooting Application – mechanical.**



### 4.39 Board Swap – Change Label

#### CHANGE LABEL

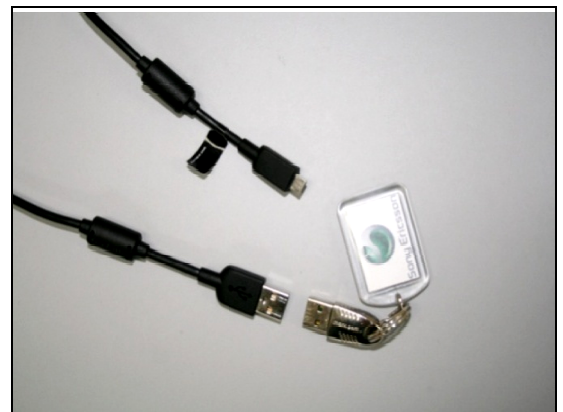
Follow the instructions in the Generic Repair Manual – Build swap for change of label.



### 4.40 Board Swap – Customize of Software

#### CUSTOMIZE OF SOFTWARE

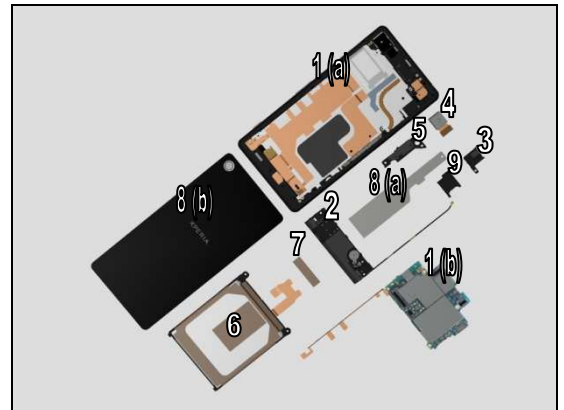
Follow the instructions in the Generic Repair Manual – Build swap for customization of the software.



## 5 Reassembly

The L50t/L50u reassembly is done in the following order:

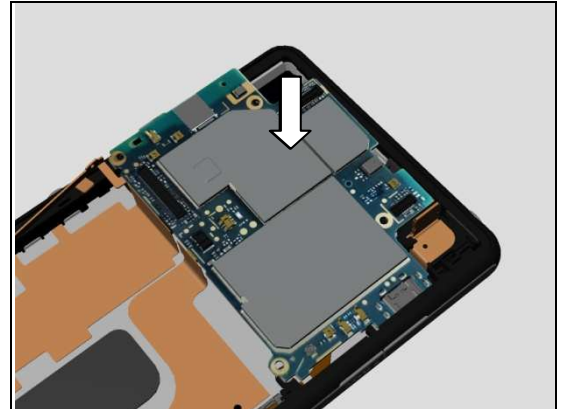
1. Display Frame Assy (a) and Main PBA & RF LCP FPC Assy (b)
2. Antenna Speaker Box Assy & PBA Sub & RF Cable
3. Holder 2<sup>nd</sup> Mic
4. Camera
5. Ant WLAN/BT Holder Assy
6. Battery
7. Sheet FPC Battery
8. Adhesive Battery Top (a) and Back Panel Assy (b)
9. SIM Tray



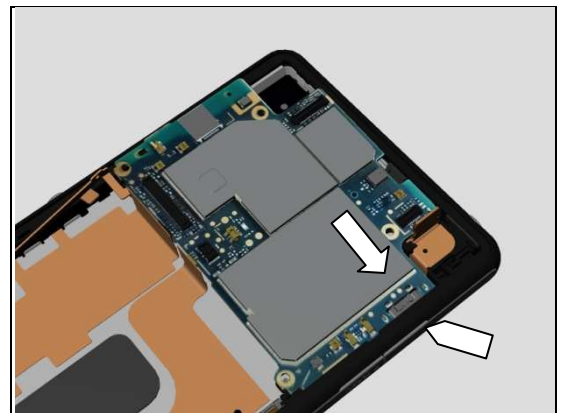
## Reassembly

### 5.1 Display Frame Assy (a) and Main PBA & RF LCP FPC Assy (b)

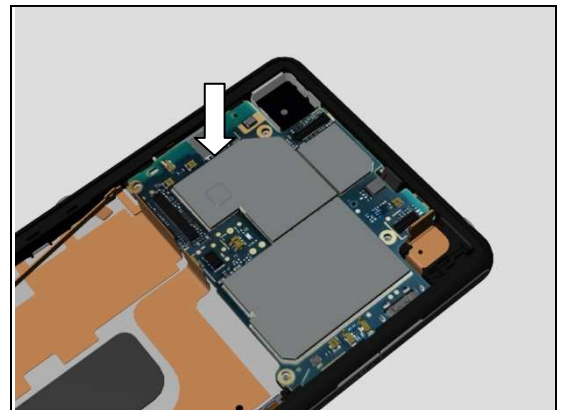
Mount the Main PBA into its cavity.



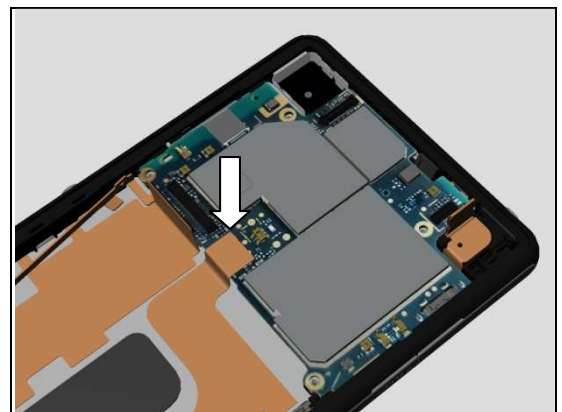
Move the Main PBA as shown in picture until the USB connector goes into its hole.



Press to secure the Main PBA into its cavity as shown in picture.

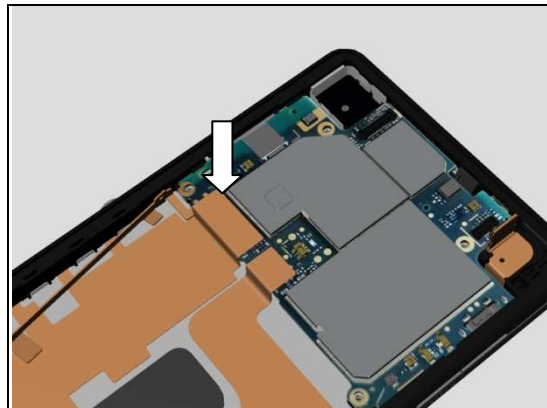


Press to snap the Charge FPC Assy BtB connector.

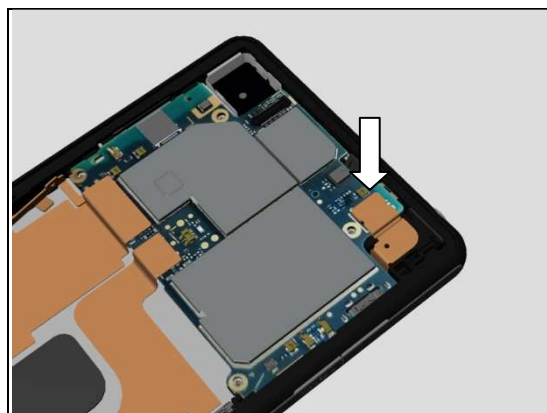


## Reassembly

Press to snap the Relay FPC Assy BtB connector.

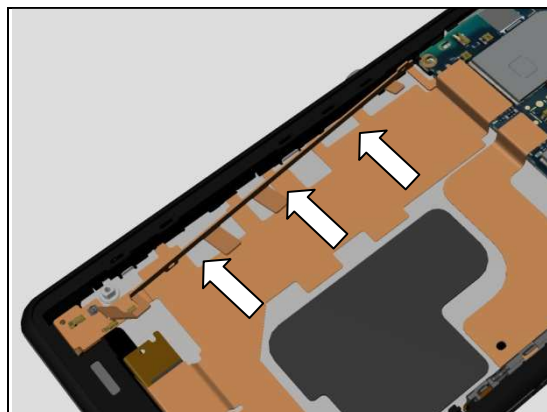


Press to snap the Top FPC Assy BtB connector.

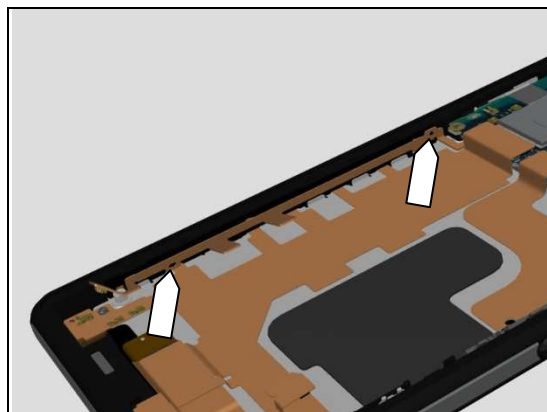


**Follow the 4.30 Removal and Installation instructions to replace a new RF LCP FPC Assy due to adhesive bonding strength is lost from disassembly.**

Attach the FPC onto the Display Frame Assy as shown in picture.



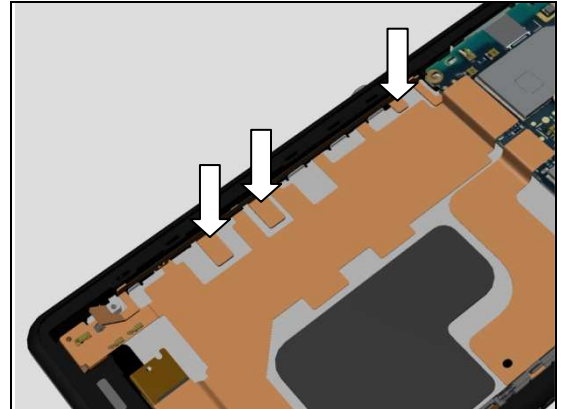
Make sure the proper position as shown in picture.



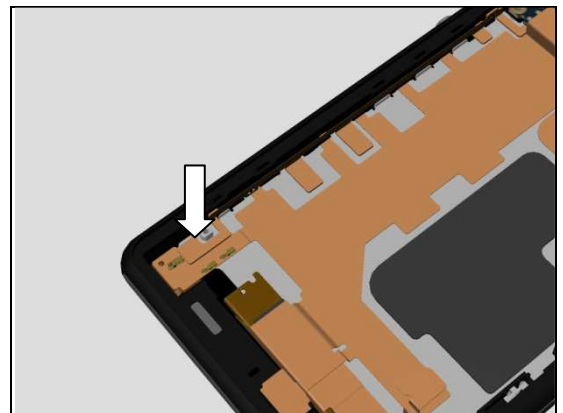


## Reassembly

Attach the three FPCs onto the Display Frame Assy as shown in picture.

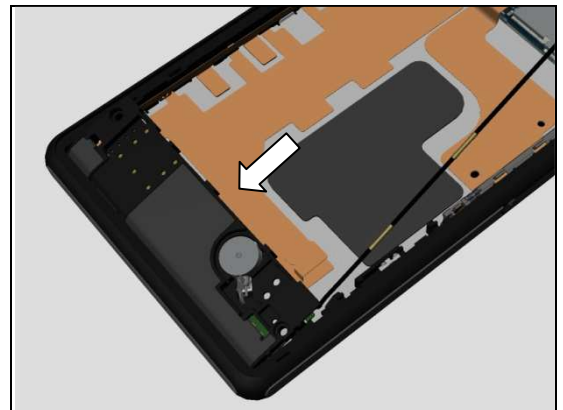


Press to snap the RF connector of the RF LCP FPC Assy.

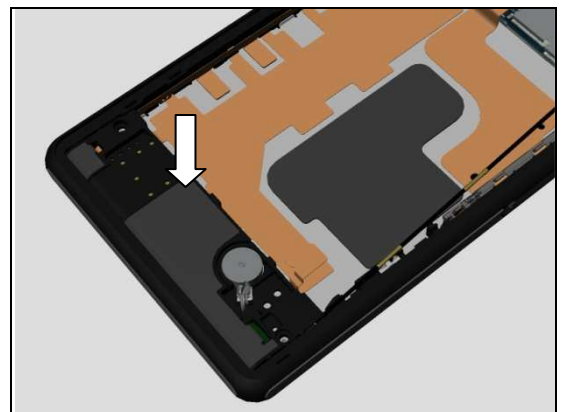


### 5.2 Antenna Speaker Box Assy & PBA Sub & RF Cable

Insert to mount bottom side of the Antenna Speaker Box Assy as shown in picture.

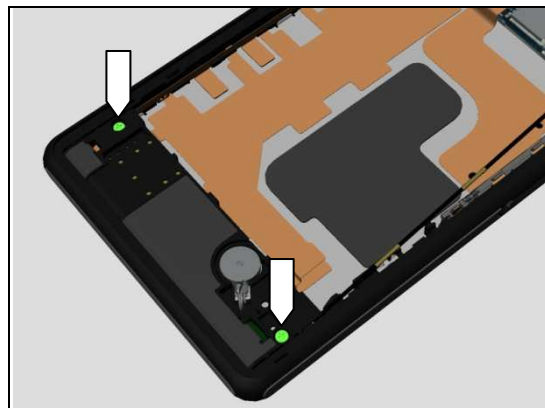


And then press to snap it.

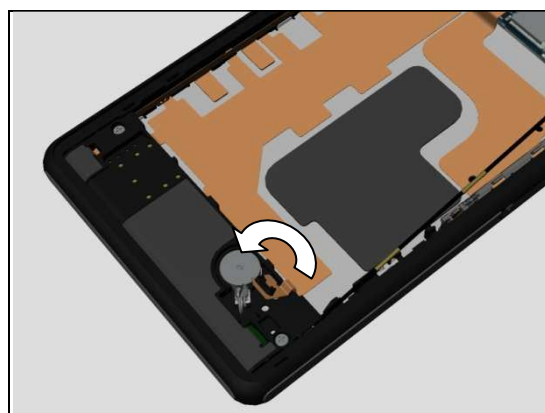


## Reassembly

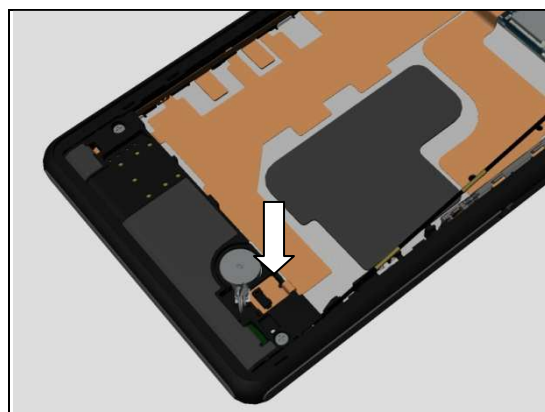
Apply 12Ncm torque when tightening the two Screw Other  
Len:3.0 Diam:1.4 with Bits JCIS No.0.



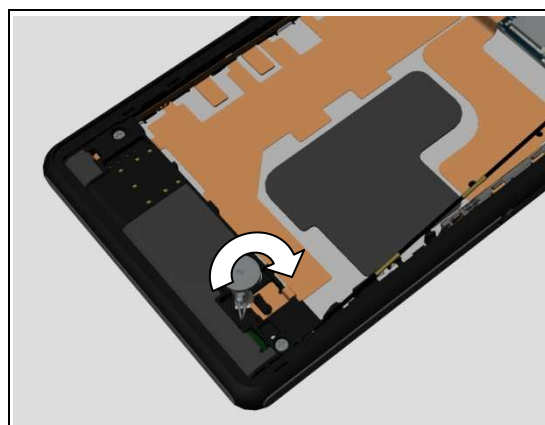
Rotate the vibrator connector FPC.



Attach the vibrator connector FPC in its cavity.



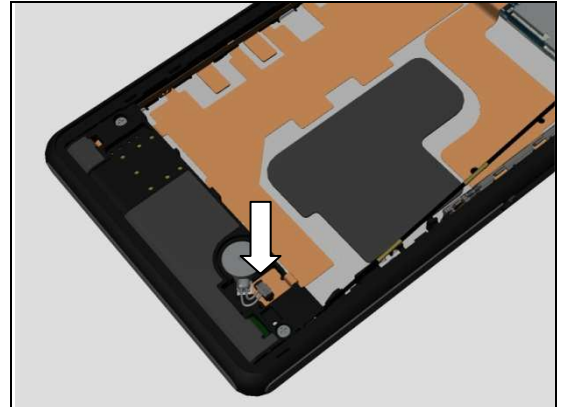
Rotate the vibrator connector.





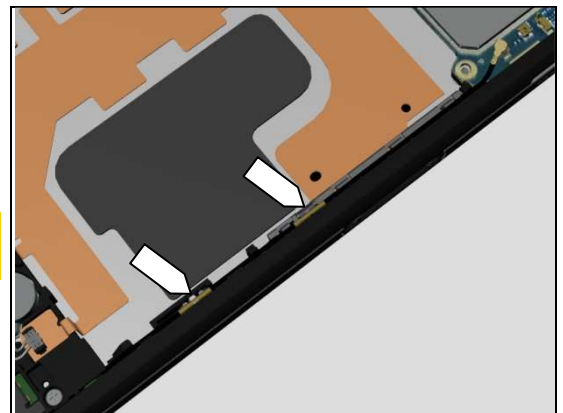
## Reassembly

Press to snap the Vibrator connector.

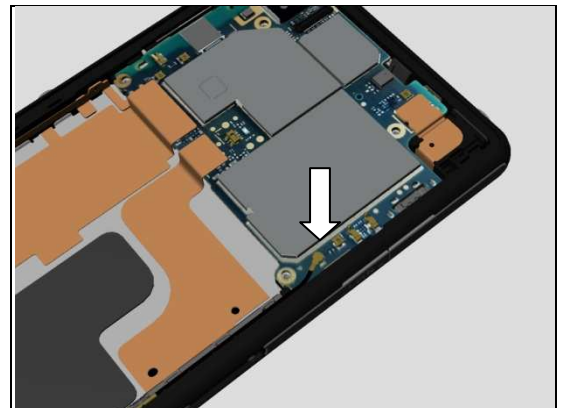


Mount the RF cable into its proper position as shown in picture.

**Note! The metal area of the RF cable must be mounted into the clips.**

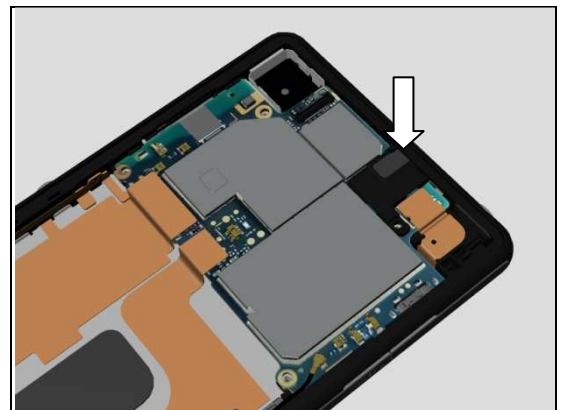


Press to snap the RF cable connector.



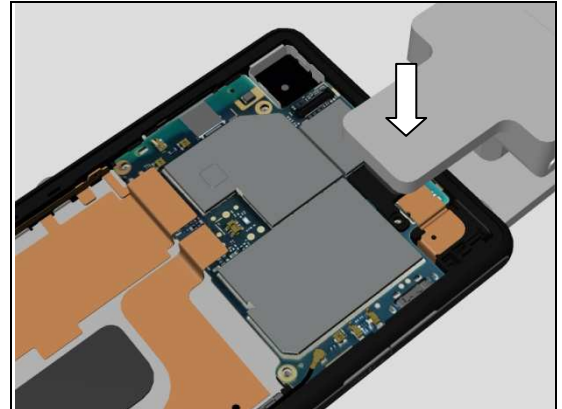
### 5.3 Holder 2<sup>nd</sup> Mic

Press to snap the Holder 2<sup>nd</sup> Mic as shown in picture.

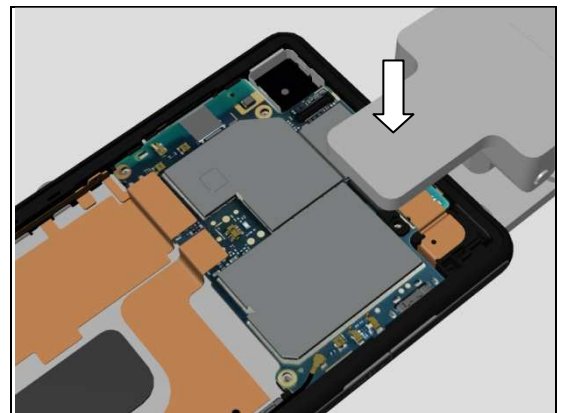


## Reassembly

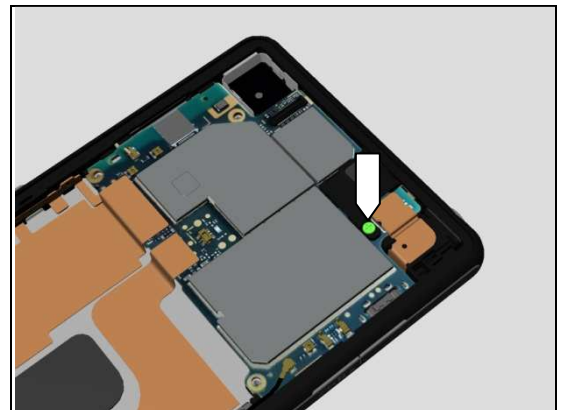
Press upper half of the Holder 2<sup>nd</sup> Mic by using the Earspeaker/Loudspeaker Top and 2<sup>nd</sup> Mic Holder Press Tool for 5 seconds.



Press lower half of the Holder 2<sup>nd</sup> Mic by using the Earspeaker/Loudspeaker Top and 2<sup>nd</sup> Mic Holder Press Tool for 5 seconds.

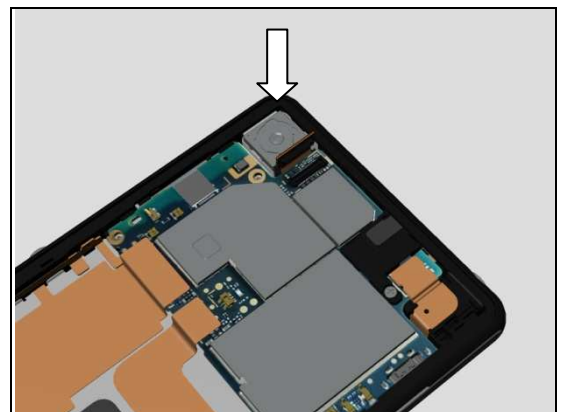


Apply 12Ncm torque when tightening the Screw Other Len:3.0 Diam:1.4 with Bits JCIS No.0.



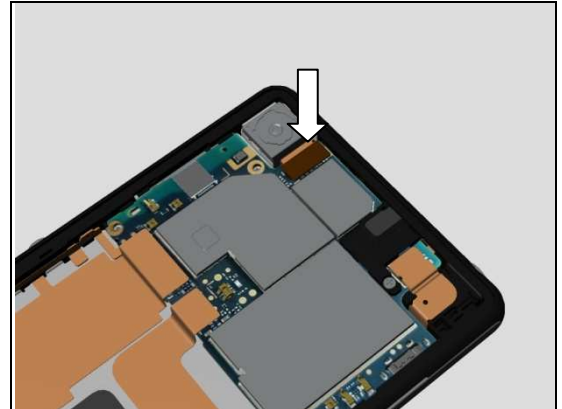
## 5.4 Camera

Mount the Camera into its cavity as shown in picture.



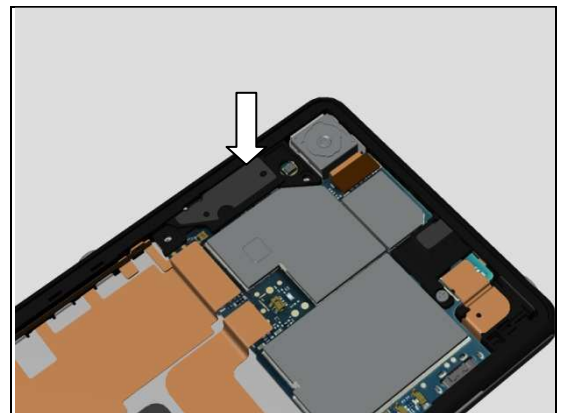
## Reassembly

Press to snap the Camera FPC BtB connector.

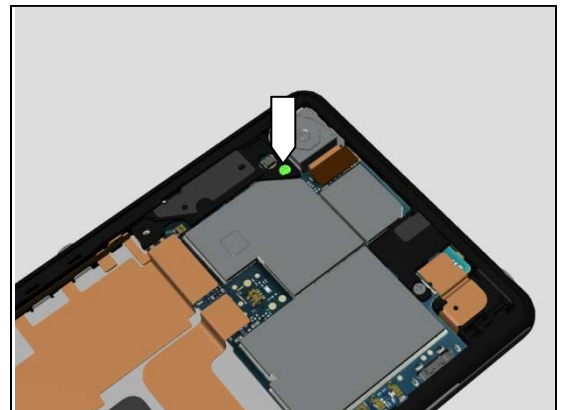


### 5.5 Ant WLAN/BT Holder Assy

Press to snap the Ant WLAN/BT Holder Assy as shown in picture.

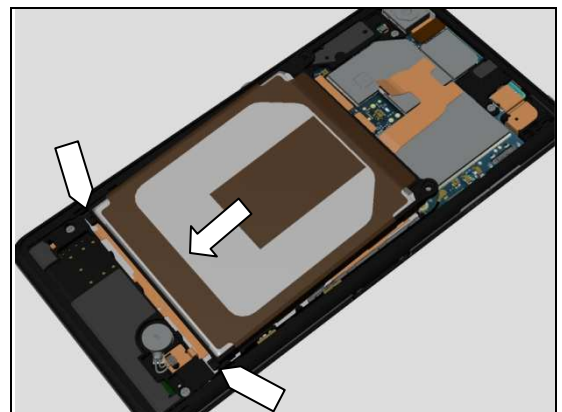


Apply 12Ncm torque when tightening the Screw Other  
Len:3.0 Diam:1.4 with Bits JCIS No.0.



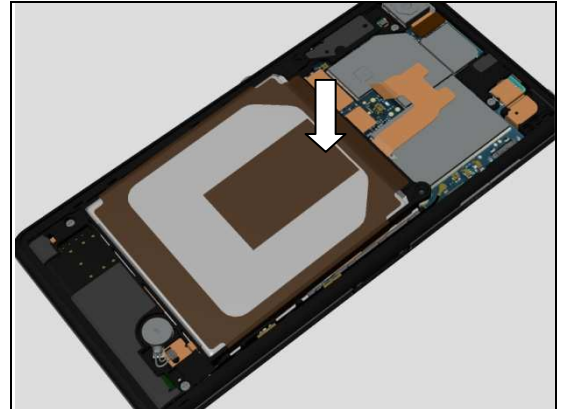
### 5.6 Battery

Insert the bottom side of the Battery as shown in picture.

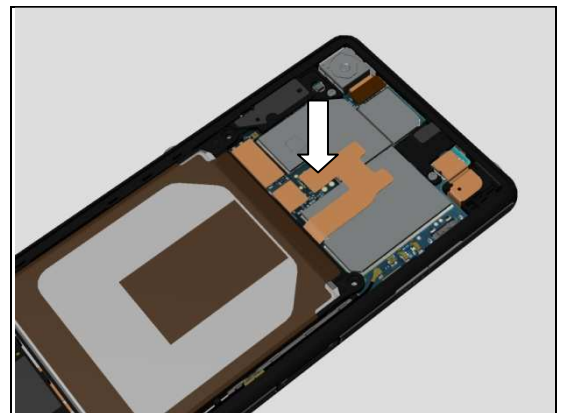


## Reassembly

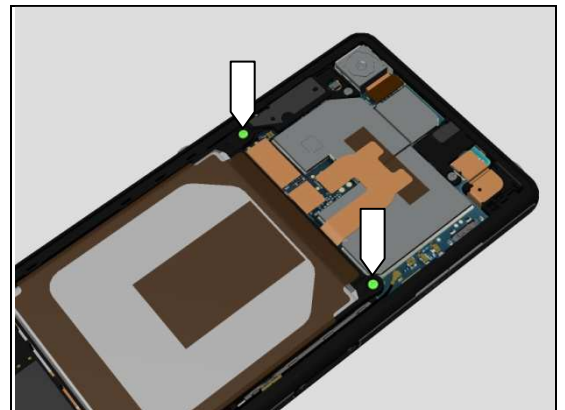
Press to attach the Battery.



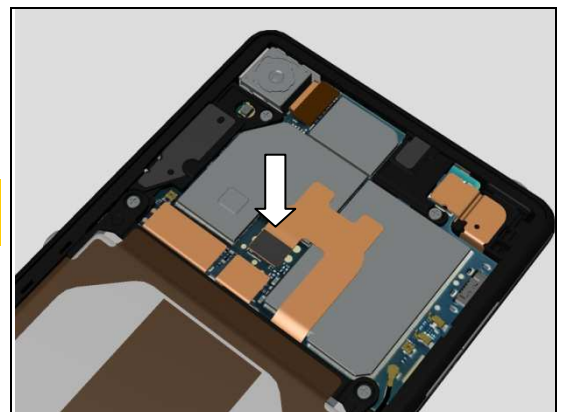
Press to snap the Battery FPC BtB connector.



Apply 12Ncm torque when tightening the two Screw Other  
Len:3.0 Diam:1.4 with Bits JCIS No.0.



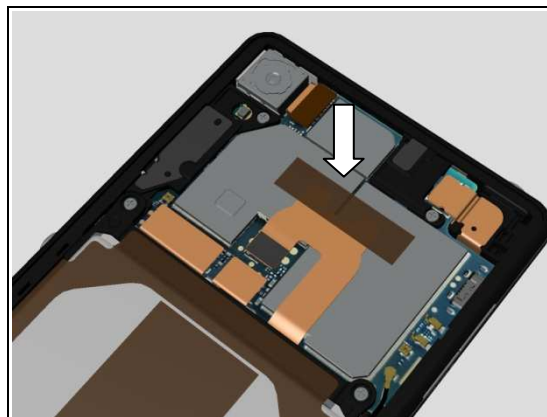
**Follow the 4.37 installation instruction to attach a new  
Gasket Battery BtB Connector.**



## Reassembly

### 5.7 Sheet FPC Battery

Attach the Sheet FPC Battery in its proper position as shown in picture.



### 5.8 Adhesive Battery Top (a) and Back Panel Assy (b)

Attach the Adhesive Battery Top in its proper position as shown in picture.

**Note! The lower half of the Adhesive Battery Top is attached within the area of the Sheet Battery Adhesive Top.**



**Follow the 4.12 removal and installation instruction to replace a new Adhesive Back Panel Assy.**

Use Isopropyl Alcohol – 99 % to clean around the Adhesive Back Panel Assy attaching area on the Display Frame Assy before assembly of the Back Panel Assy.



Place the Back Panel Assy onto the Display Frame Assy.





## Reassembly

Make sure of a good alignment so the Back Panel Assy is centered.

**Upper inlay = Window Back Press Inlay**

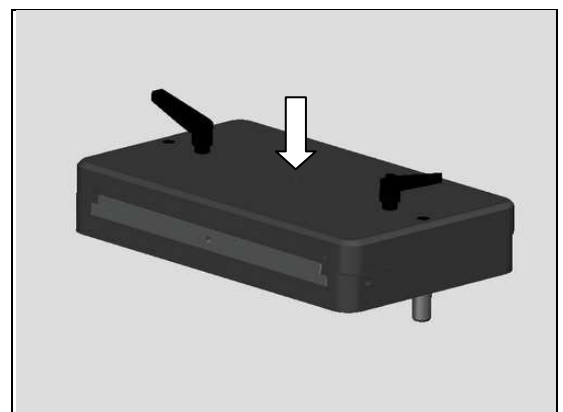
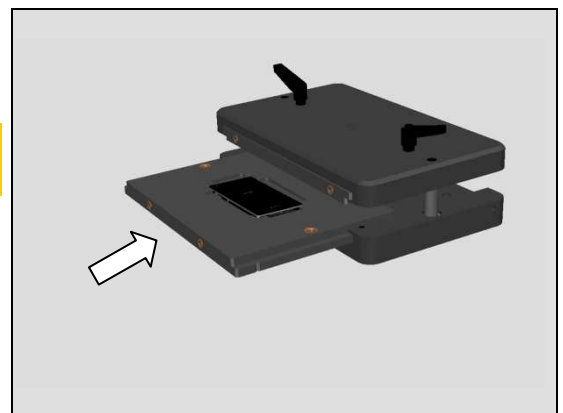
**Lower inlay = Bottom Press Inlay**

Place the phone in the Bottom Press Inlay and follow the instruction in 1003-9107 Tool Catalogue – mechanical and document Toothed Rack Press Instruction for use.

Press it with a pressure value of  $494N \pm 60N$  for 20 sec. (pressure value is adjust from 600N because of the weight of the press fixture).

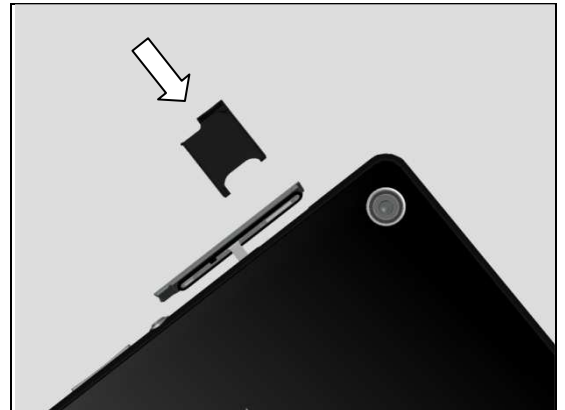
## 5.9 SIM Tray

Open the Cap SIM.



## Reassembly

Insert the SIM Tray with fingers.



Close the Cap SIM.



## 6 Revision History

Rev.	Date	Changes / Comments
1	2014-Apr-01	Initial release
2	2014-Apr-25	Added L50u
3	2014-Jun-27	Update chapter 4.12 since there is no upper part of the Back Panel Adhesive Fixture. Update pressure value and duration for Back Panel Assy, new pressure value and duration is 494N±60N for 20 sec.
4	2014-Jul-17	Update since chapter Gasket Battery BtB Connector is added.