



Sony Ericsson

# Working Instructions

- mechanical -



**Zylo**  
**W20, W20i**

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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 W20 & W20i



## 2 Tools

### SPECIAL TOOLS

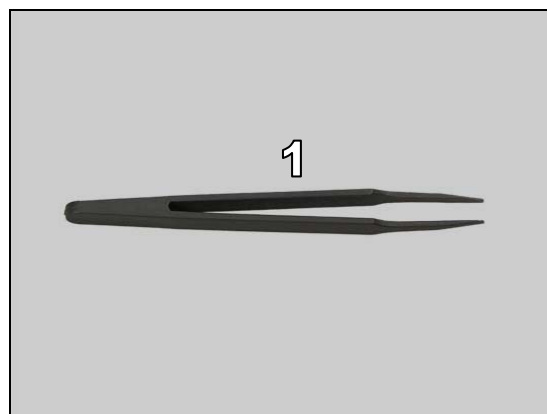
1. Torque Screwdriver
2. Bits (T6)
3. Bits (JCIS No 0)
4. Flex Film Assembly Tool
5. Camera Removal Tool
6. Front Opening Tool
7. Guitar Pick



**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 (a) & Battery (b)
2. Lower Rear Cover
3. Main antenna/Speaker box
4. Main PBA
5. Decoration Sheet
6. Core Unit Label
7. Upper Front Cover Assy
8. Sub keyboard
9. Display (a) & Display Gasket (b)
10. Lower Front Cover Assy & Hinge Metal Slider



### 3.1 Battery Cover & Battery

Unsnap to release the Battery Cover with fingers.



Lift it off to remove it.



Raise the bottom of the Battery.





## Disassembly

Remove the Battery.

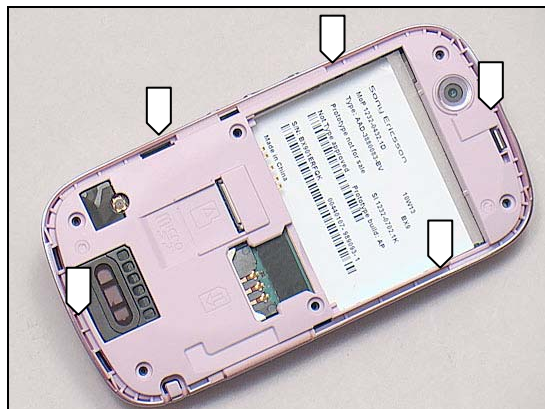


### 3.2 Lower Rear Cover Assy

Remove the six screws with T6.



There are five hooks securing the Lower Rear Cover as shown.



Turn the phone over and open the slider.



## Disassembly

Insert the guitar pick as shown and slide it back and forth to unsnap this side of the Lower Rear Cover.

**Keep the guitar pick as vertical as possible and do not damage the Lower Rear Cover!**



Slide downwards to release the hooks at the bottom.

**Keep the guitar pick as vertical as possible and do not damage the Lower Rear Cover!**



Keep sliding upwards to release the hooks on this side of the Lower Rear Cover.

**Be careful not to damage the Side Keys on the right side of the Lower Rear Cover!**



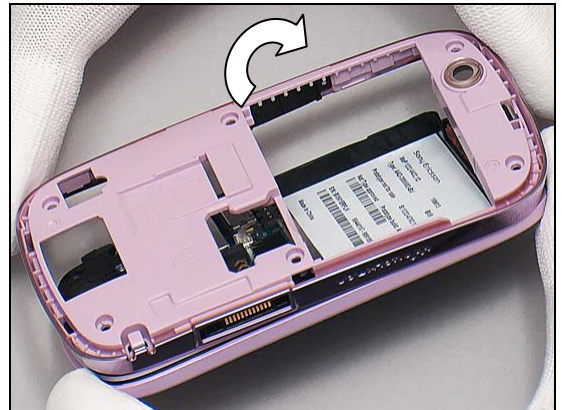
Close the slider and slide along the top side.





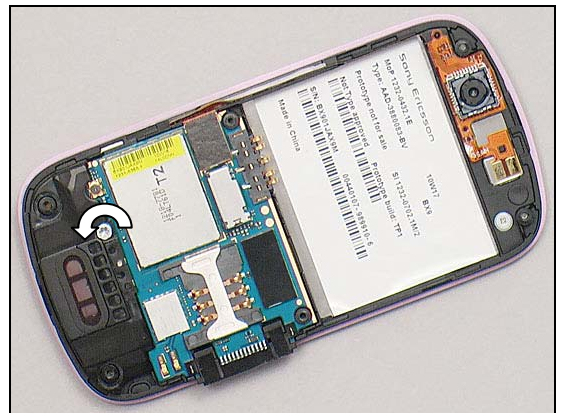
## Disassembly

Lift the Lower Rear Cover from one side as shown and remove it.



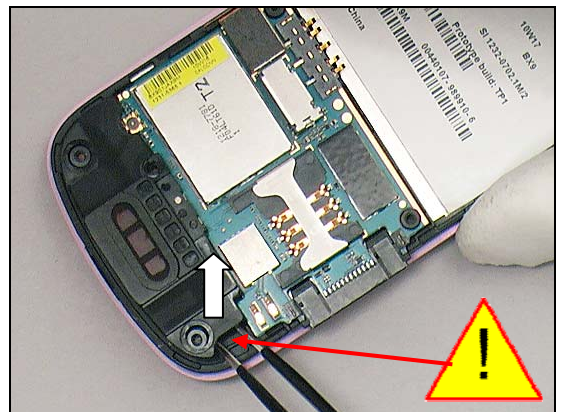
### 3.3 Main antenna/Speaker box

Remove the screw with T6.

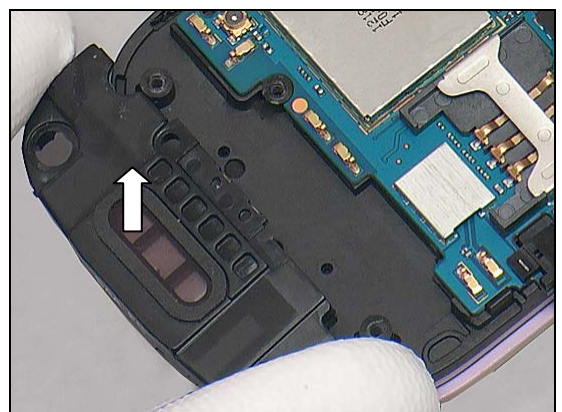


Release the Main antenna/Speaker box from the corner by using a pair of tweezers.

**Be careful not to damage the Main Antenna!**



Detach to remove the Main antenna/Speaker box with fingers.



## Disassembly

### 3.4 Main PBA

Unsnap the BtB connector by using the front opening tool.

There are three hooks (1, 2 and 3) securing the Main PBA upside as shown.

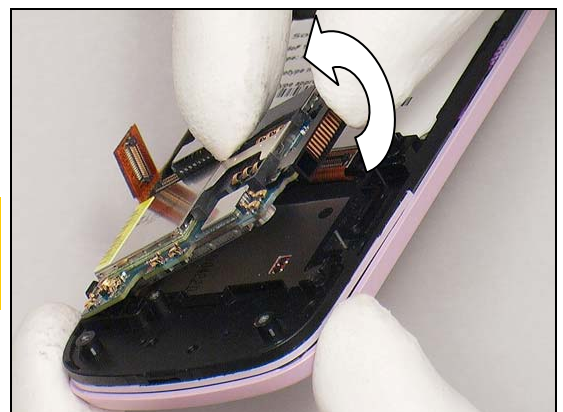
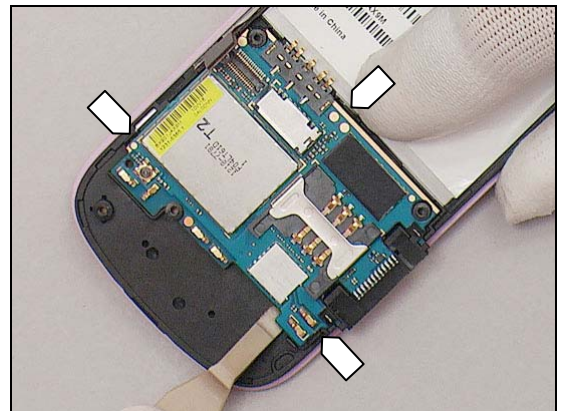
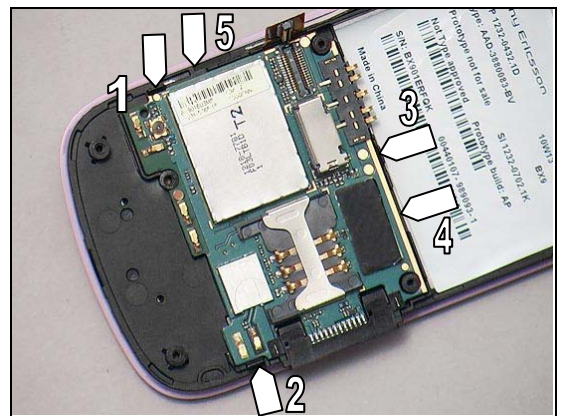
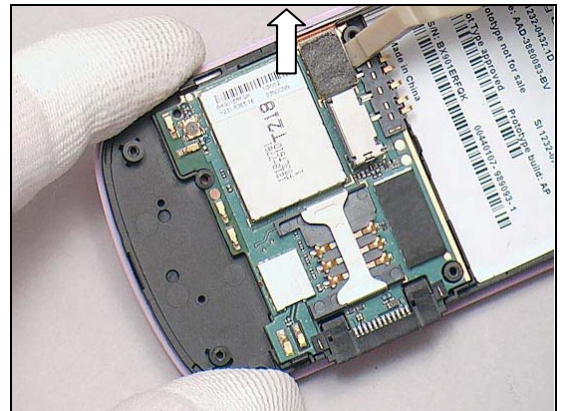
There are two BtB connectors (4 and 5) connected to the Main PBA underneath as shown.

Unsnap the three hooks securing the Main PBA with a front opening tool.

Release the Main PBA by rotating it from the system connector side to 20° to 30°.

**Be careful not to damage the guiding hole of the Main PBA!**

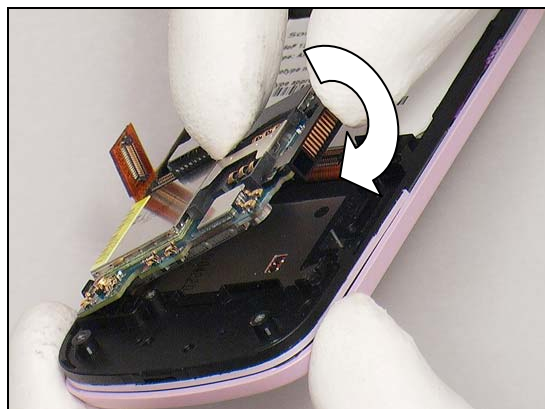
**Do not touch the BtB connectors underneath!**



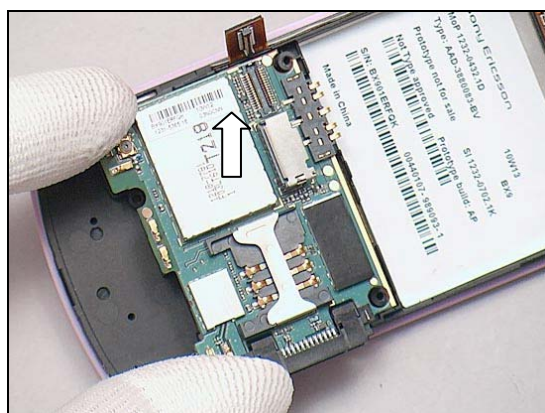


## Disassembly

Place the Main PBA back on the unit.



Lift the Main PBA up with fingers and remove it.



### 3.5 Decoration Sheet

Open the slider.

**Do not touch the two BtB connectors during this operation.**



Insert the tweezers into the corner of the Decoration Sheet to detach it.

**Be careful not to scratch the back side of the Upper Front Cover!**



## Disassembly

Peel it off gently.

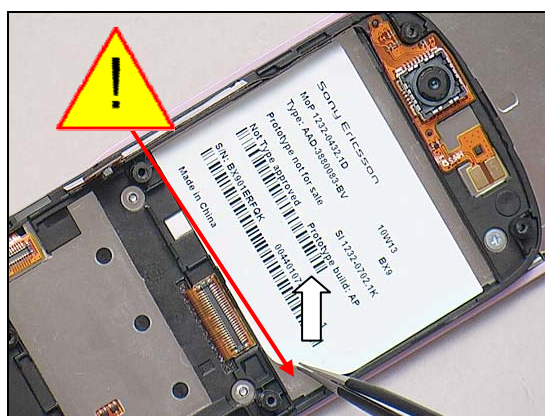
**Scrap! Not to be reused!**



### 3.6 Core Unit Label

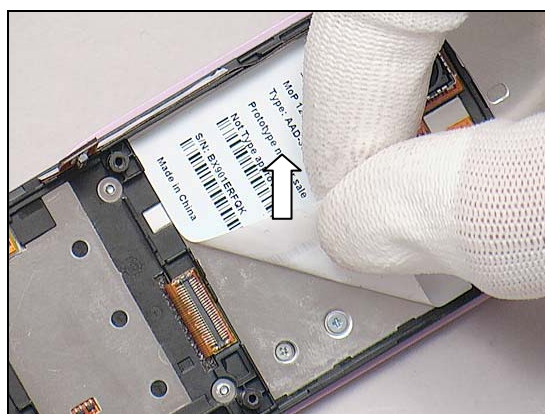
Insert the tweezers into the corner as shown to release the Core Unit Label.

**Be careful not to scratch the back side of the Lower Front Cover!**



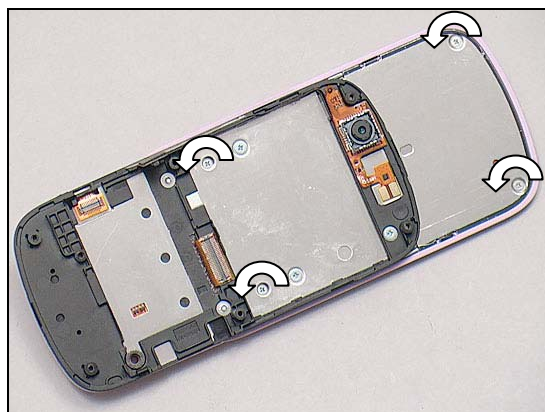
Peel off the Core Unit Label gently.

**Scrap! Not to be reused!**



### 3.7 Upper Front Cover Assy

Remove the four screws by using a JCIS No.0.





## Disassembly

There are eight hooks securing the Upper Front Cover.



Close the Slider.

Turn it over and insert the guitar pick into the bottom and push to release the bottom hooks.

**Do not hold the Main Window Assembly during this operation.**

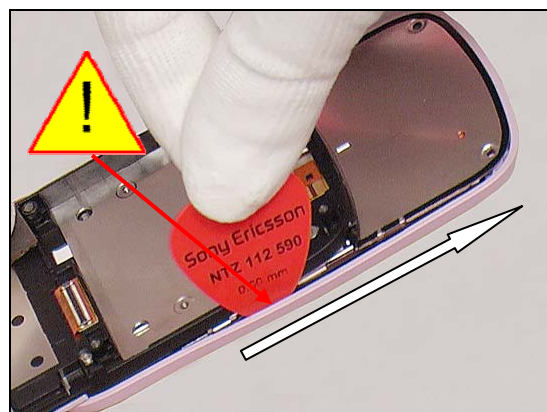


Open the Slider.

Slide the guitar pick along the right side to release the hooks.

**Be careful not to insert the guitar pick too deep and keep it as vertical as possible!**

**Do not touch the Main Window Assembly and the two BtB connectors.**



Do the same on the opposite side.

**Be careful not to insert the guitar pick too deep and keep it as vertical as possible!**

**Do not touch the Main Window Assembly during this operation !**

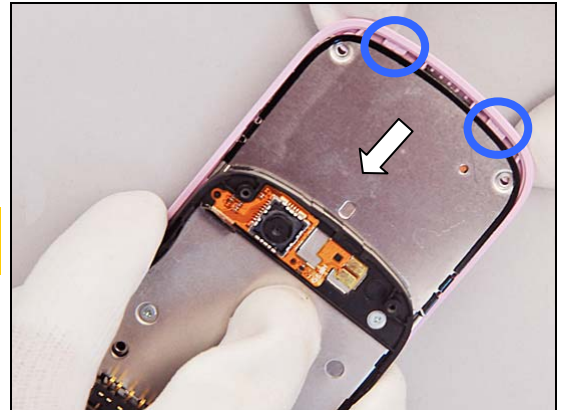




## Disassembly

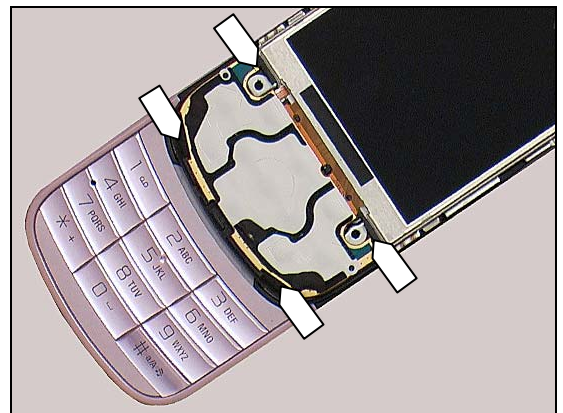
Pull backwards as shown to release the top hooks of the Upper Front Cover and remove it.

**Do not slide top sides using the guitar pick due to the two special hooks.**



### 3.8 Sub keyboard

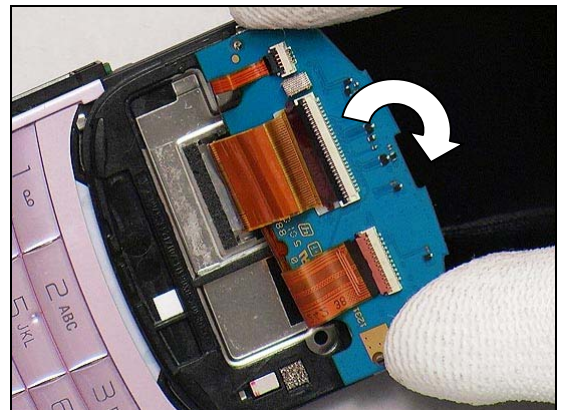
There are four hooks located as shown.



Insert the guitar pick underneath the bottom Sub keyboard to unsnap the two hooks as shown.

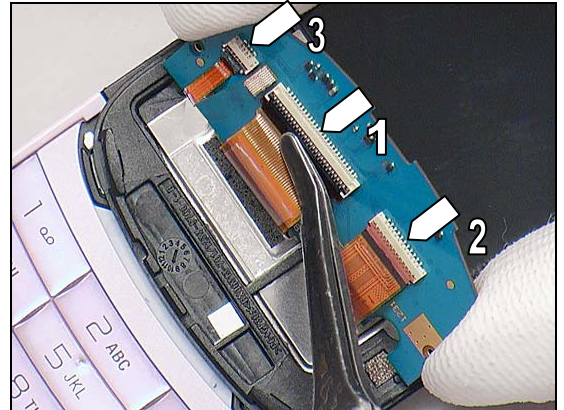


Release the other two hooks and turn the Sub keyboard over.



## Disassembly

Unlock and release the three ZIF connectors in order of (1), (2), and (3) with a flex film assembly tool.

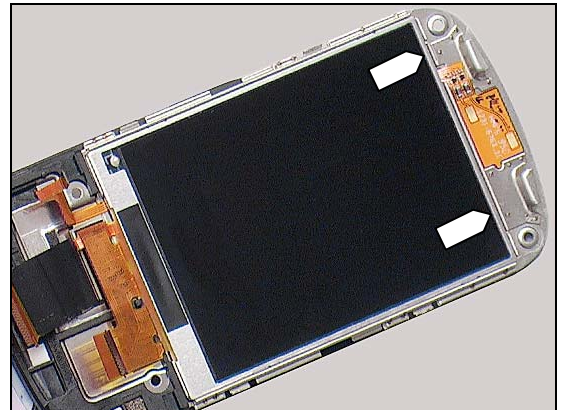


Remove the Sub keyboard.

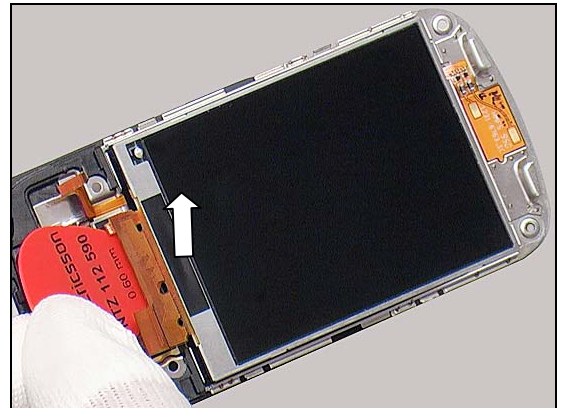


### 3.9 Display & Display Gasket

There are two hooks securing the Display.

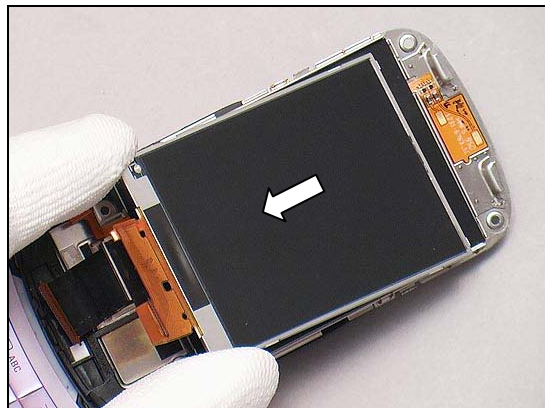


Insert the guitar pick underneath and lift to release the Display from the bottom side.

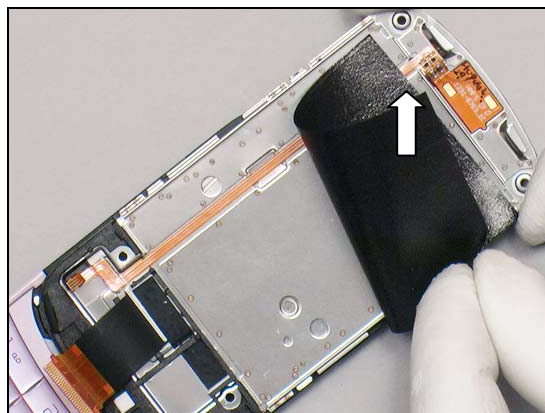


## Disassembly

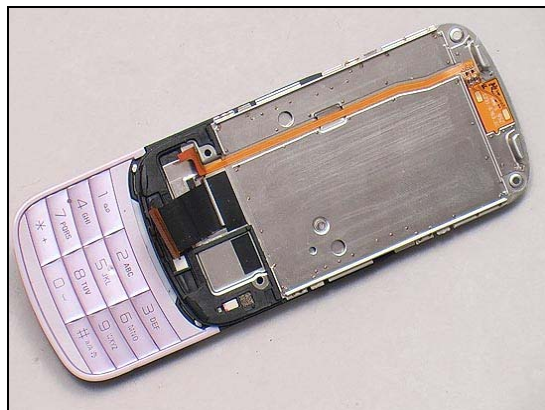
Lift to remove it.



Remove the Display Gasket.



### 3.10 Lower Front Cover Assy & Hinge Metal Slider





## 4 Replacement

### 4.1 Display

*Follow the 3.1 – 3.8 Disassembly instructions!*

*Follow the 3.9 Display Disassembly instructions!*

Prepare the new Display.

*Follow the 5.2 Display Reassembly instructions!*

*Follow the 5.3 – 5.10 Reassembly instructions!*

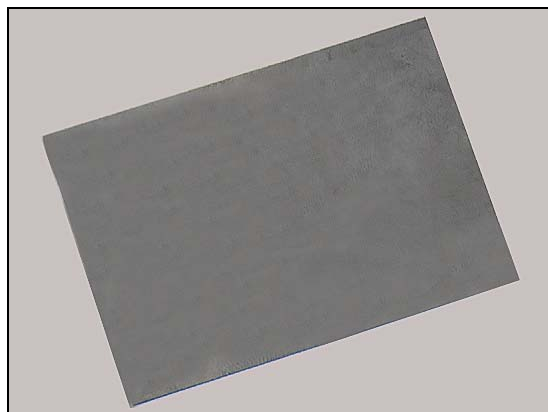


### 4.2 Display Gasket

*Follow the 3.1 – 3.9 Disassembly instructions!*

Prepare the new Display Gasket.

*Follow the 5.2 – 5.10 Reassembly instructions!*



### 4.3 Main antenna/Speaker box

*Follow the 3.1 – 3.3 Disassembly instructions!*

Prepare the new Main antenna/Speaker box.

*Follow the 5.7 – 5.8, and 5.10 Reassembly instructions!*



## Replacement

### 4.4 Co-Branding

*Follow the 3.1 Battery Cover Disassembly instructions!*

Carry out the replacement as described below.

*Follow the 5.10 Battery Cover Reassembly instructions!*

#### REMOVAL

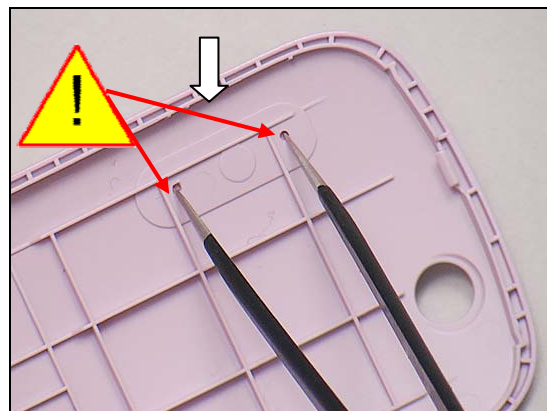
Push against the Co-Branding from behind in the two holes of the Battery Cover by using a pair of tweezers.

Lift to remove it.

**Scrap! Not to be reused!**

#### INSTALLATION

Place a new Co-Branding in the proper position as shown.





## Replacement: Co-Branding

Press to secure the attachment.



Remove the protection film.



## Replacement

### 4.5 Hinge FPC

*Follow the 3.1 – 3.10 Disassembly instructions!*

*Follow the 4.11(Main camera/side key/vib FPC),*

*4.22(Side Key FPC Connector Gasket),*

*4.23(Side Key FPC Film),*

*4.6(Hinge Metal Slider& Insulation protection film)*

*Removal instructions!*

Carry out the replacement as described below.

*Follow the 4.11, 4.22, 4.23, 4.6 Installation instructions!*

*Follow the 5.1 – 5.10 Reassembly instructions!*

**4.11,4.22 and 4.23 Parts can't be reused after disassembly.**

#### REMOVAL

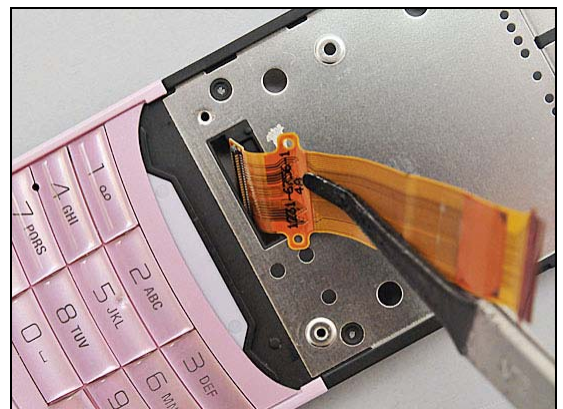
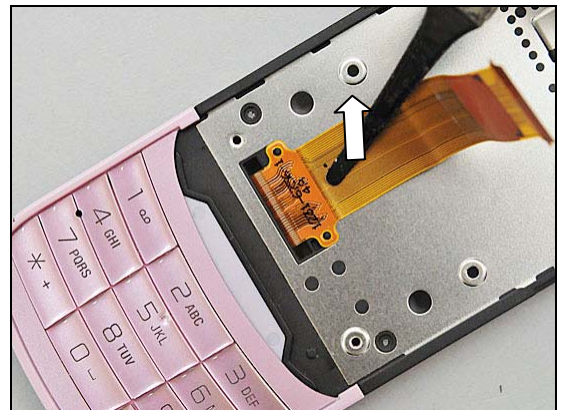
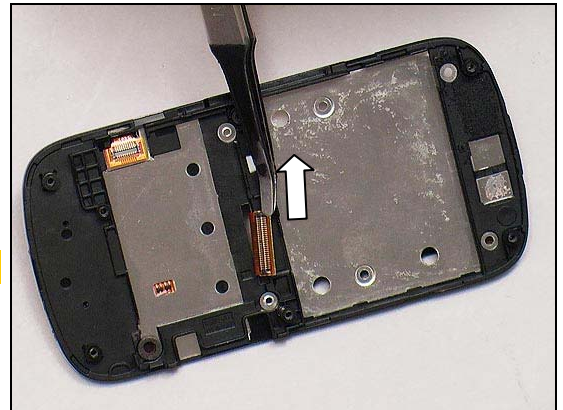
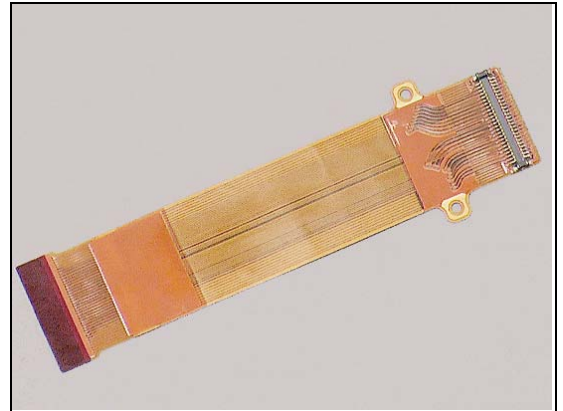
Detach to release the BtB connector from the Lower Front Cover by using a flex film assembly tool.

**Do not touch the pins of the BtB connector.**

Turn it over.

Detach the Hinge FPC from the Lower Front Cover.

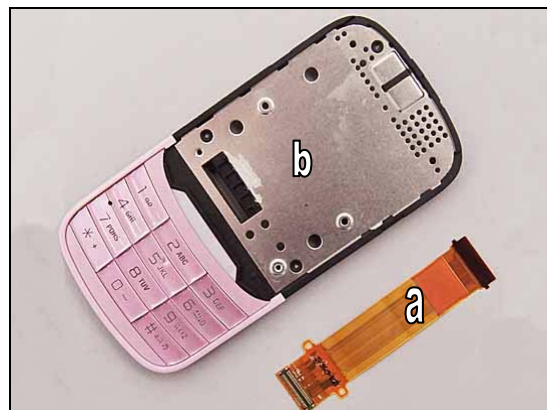
Remove the Hinge FPC through the hole on the Lower Front Cover and remove it.



## Replacement: Hinge FPC

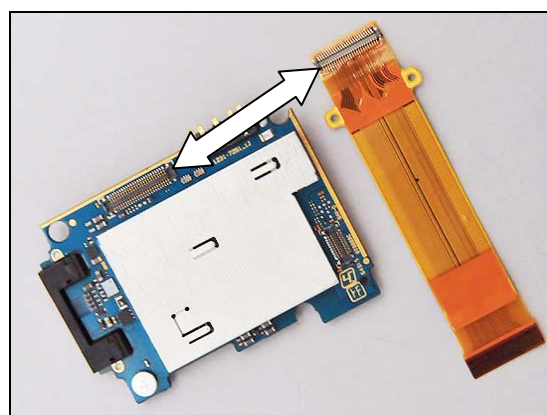
Separate the Hinge FPC (a) and the Lower Front Cover (b).

**Hinge FPC: Scrap ! Not to be reused!**

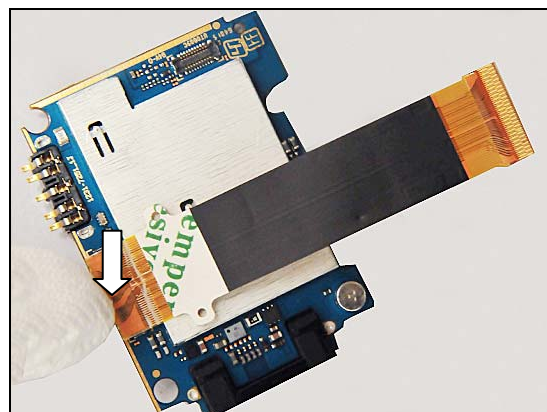


### INSTALLATION

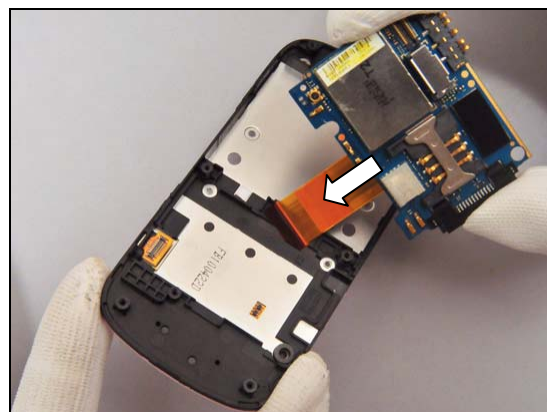
Connect the BtB connector of the Hinge FPC to the PBA.



Press to snap the BtB connector of the Hinge FPC onto the Main PBA.



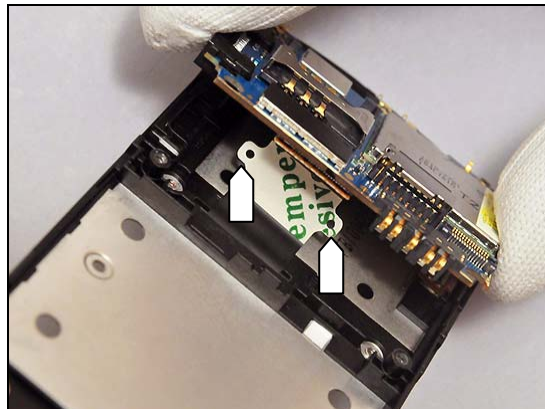
Thread the Hinge FPC through the hole of the Lower Front Cover with proper direction.





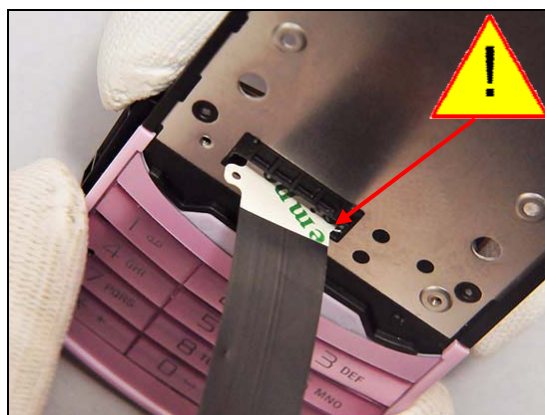
## Replacement: Hinge FPC

There are two guiding holes on the Hinge FPC as shown by the arrows.

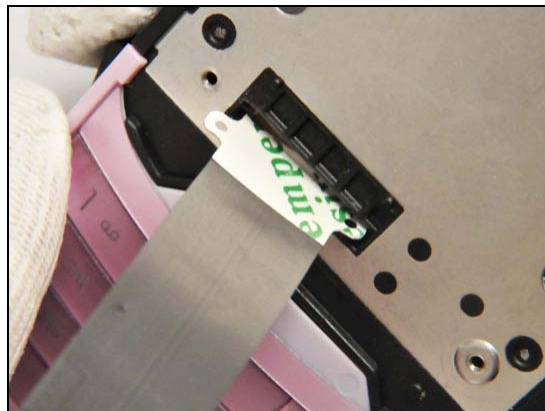


Thread one guiding hole through the hole first.

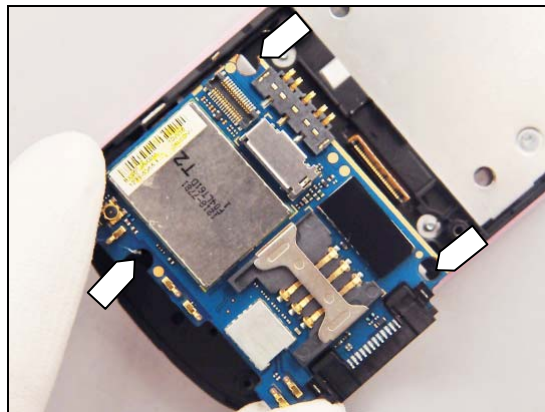
**Do not damage the other guiding hole.**



Thread the other guiding hole as shown.

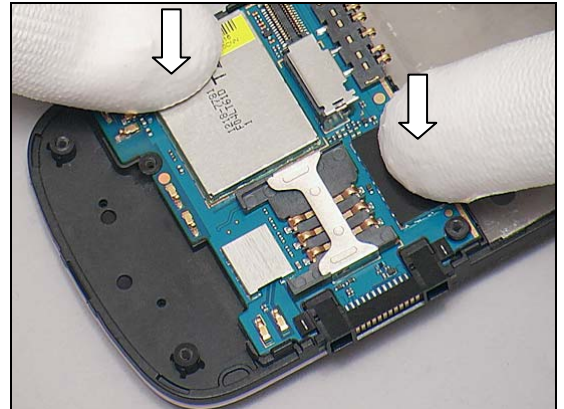


Install the Main PBA in alignment with the three guiding poles as shown by the arrows.

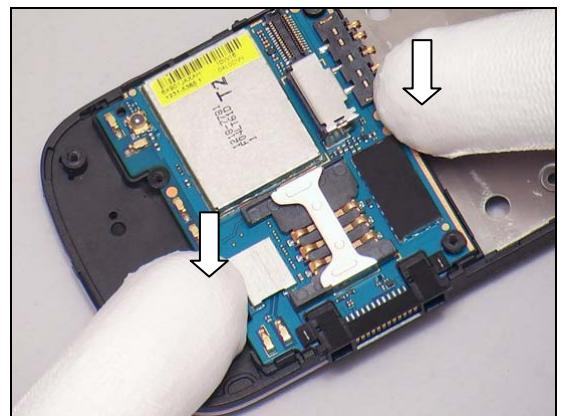


## Replacement: Hinge FPC

Press to snap the BtB connectors underneath the Main PBA.

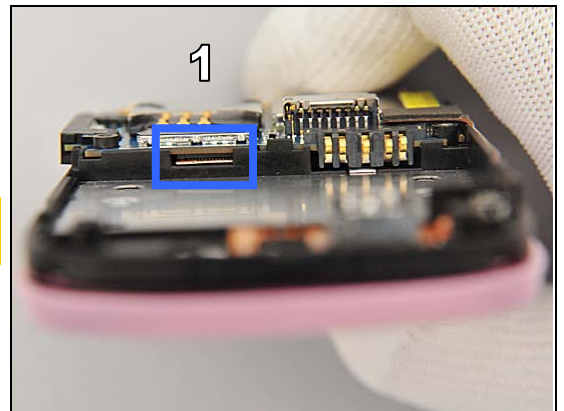


Press to snap the three hooks securing the Main PBA.



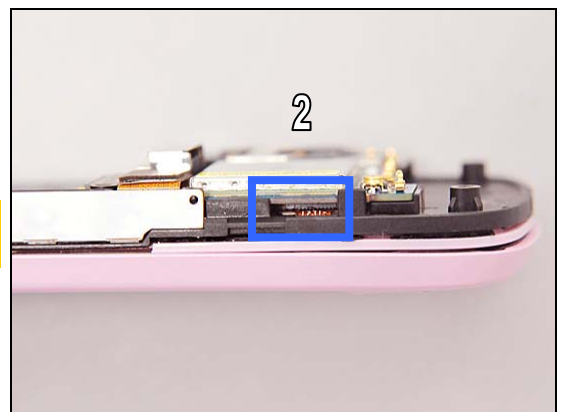
Connector 1 can be inspected from the slot as shown.

**If the the metal connecting pins can be seen, the connector is not properly installed.**



Connector 2 can be inspected from the slot as shown.

**If the the metal connecting pins can be seen, the connector is not properly installed.**





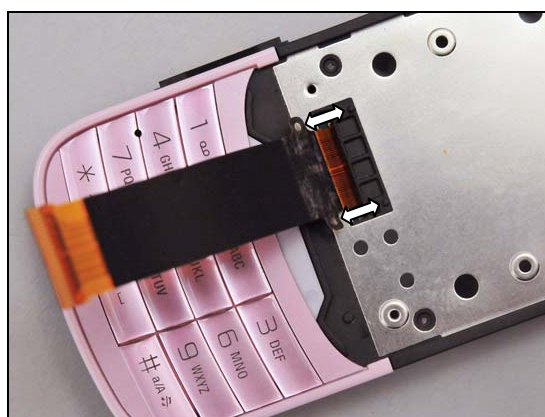
## Replacement: Hinge FPC

Turn over the unit.

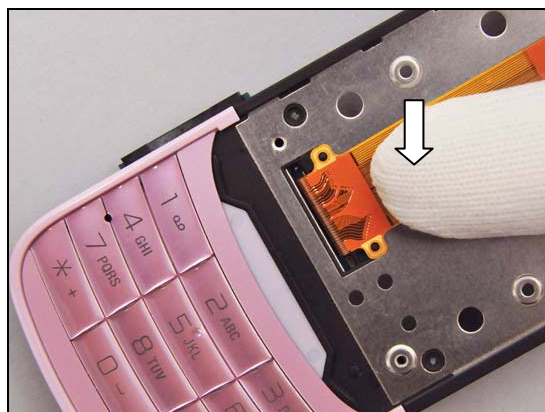
Peel off the protection film on the Hinge FPC with a flex film assembly tool.



Align the Hinge FPC with the two guiding pins on the Lower Front Cover.



Turn over and press to attach the Hinge FPC in alignment with the guiding pins.



## Replacement

### 4.6 Hinge Metal Slider& Insulation protection film

*Follow the 3.1 – 3.2, 3.5 – 3.10 Disassembly instructions!*

*Follow the 4.23, 4.10 and 4.11 Removal instructions!*

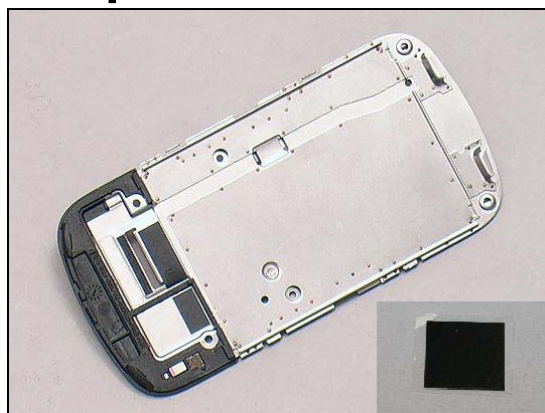
Carry out the replacement as described below.

Install Insulation protection film firstly.

*Follow the 4.17, 4.11, 4.23, 4.10 and 4.22 Installation instructions!*

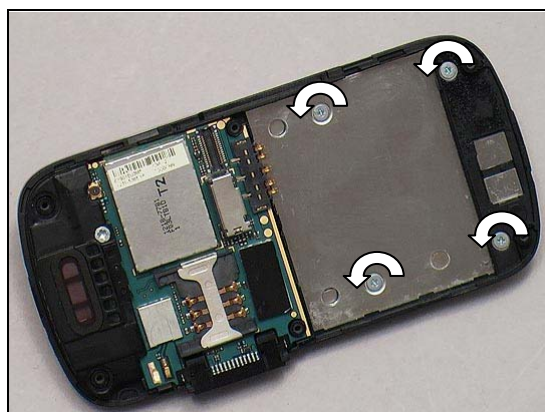
*Follow the 5.1 – 5.5, 5.8 – 5.10 Reassembly instructions!*

**4.11,4.17, 4.22,4.23 Part can't be reused after disassembly!**

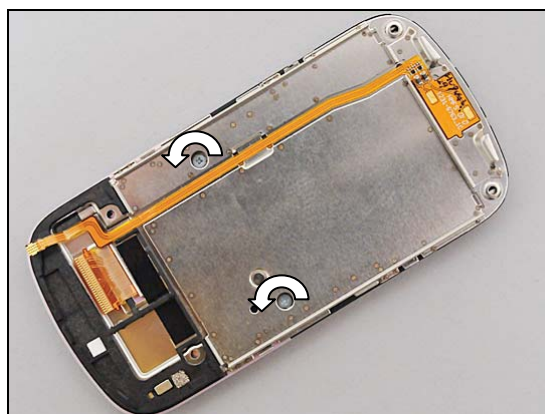


#### REMOVAL

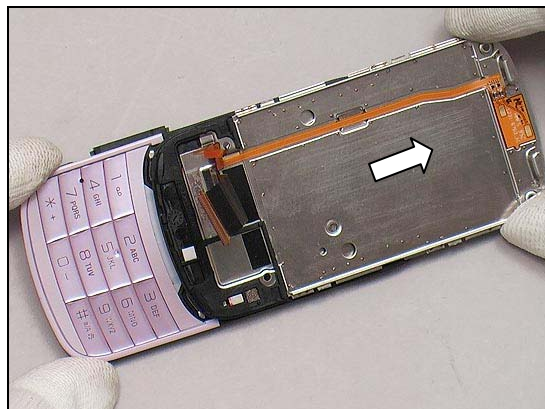
Remove the four screws by using the JCIS No.0.



Turn the unit over and remove the two screws by using a JCIS No.0.



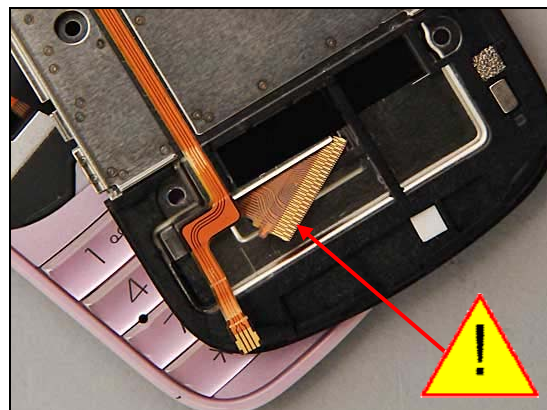
Open the Slider.



## Replacement: Hinge Metal Slider

Thread the Hinge FPC through the hole on the Hinge Metal Slider.

**Do not damage the Hinge FPC!**

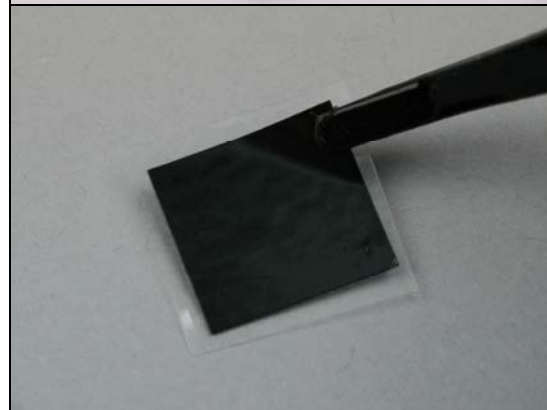


Separate the Hinge Metal Slider and the Lower Front Cover.



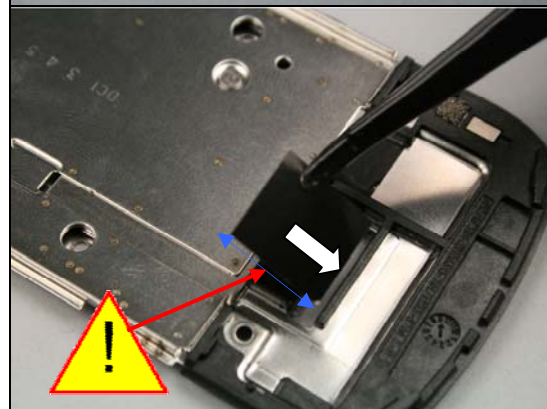
### INSTALLATION

Pick up one piece of Insulation protection film.



Thread the Insulation protection film through Hinge FPC hole.

**Note: Blue arrow shows the Length side.**





Half size of Position as shown in the photo.



Align the Insulation protection film with the left corner on Hinge Metal Slider as shown.



Press the Insulation protection film using finger.



Press around the four sides using flex assembly tool to ensure the edges attached securely.



Turn over the Hinge Metal Slider.



Attach another side of Insulation protection film at back side of Hinge Metal Slider.

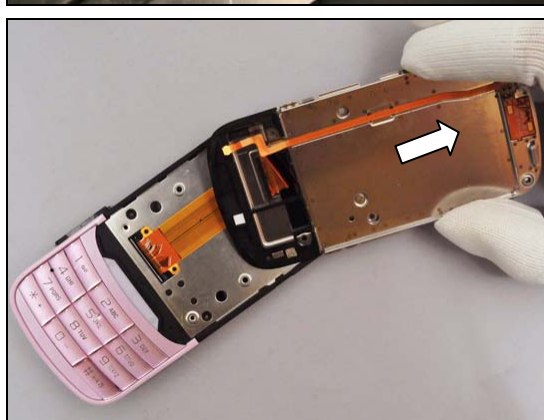


Press it using finger from right side to left side to attach it securely.



*Follow the 4.17 Installation instructions!*

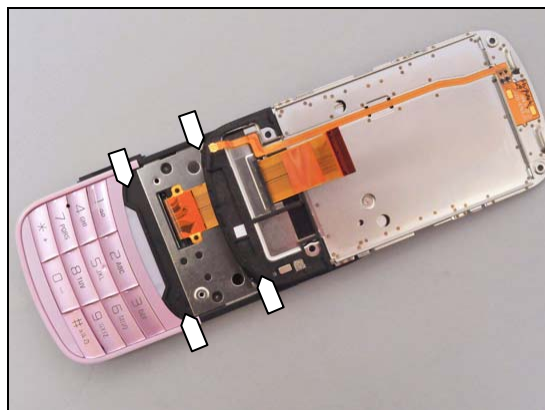
Thread the Hinge FPC through the hole of the Metal Hinge Slider.



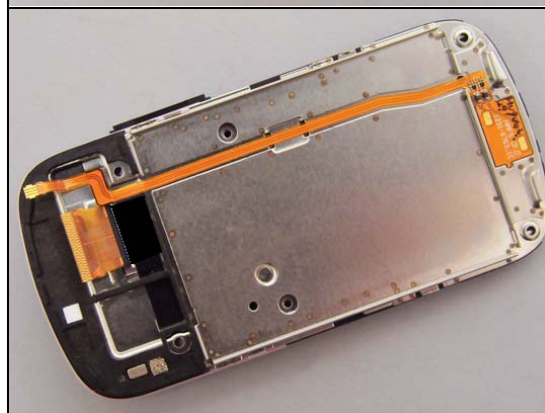


## Replacement: Hinge Metal Slider

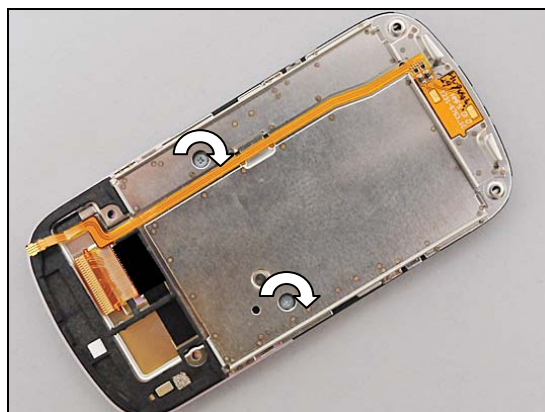
Align the Hinge Metal Slider with the guiding markers on the Lower Front Cover.



Close the Hinge Metal Slider.



Tight the two screws with a JCIS No.0 bit to a torque of 12 Ncm.



Tight the four screws with a JCIS bit to a torque 12 Ncm.



## Replacement

### 4.7 Liquid Intrusion Indicator

#### INSPECTION

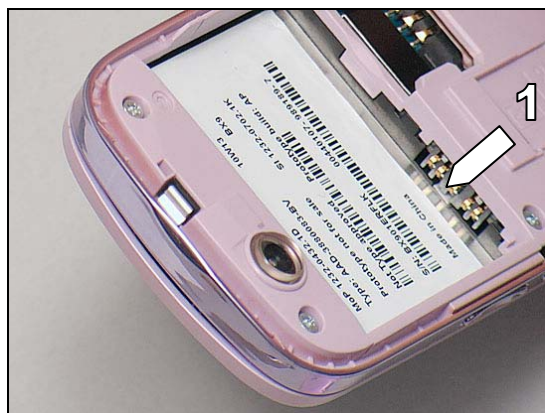
To check whether the Liquid Intrusion Indicator (1) has been activated (reddish color), just remove the Battery Cover and Battery.

If activated:

*Follow the 3.1 – 3.4 Disassembly instructions!*

Carry out the replacement as described below.

*Follow the 5.7 – 5.10 Reassembly instructions!*



#### INSPECTION

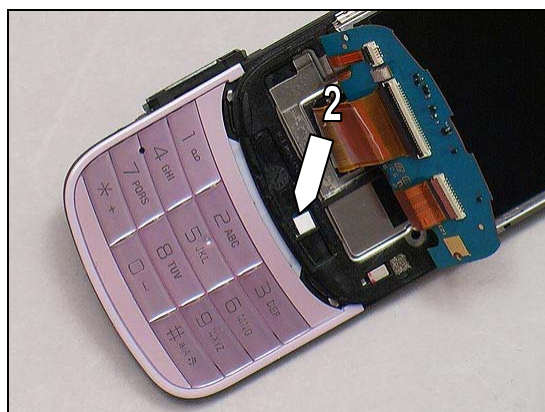
To check whether the Liquid Intrusion Indicator (2) has been activated (reddish color), just remove the Battery Cover, Battery, Decoration Sheet, Core Unit Label and Upper Front Cover Assy.

If activated:

*Follow the 3.1 – 3.2, 3.5 – 3.7 Disassembly instructions!*

Carry out the replacement as described below.

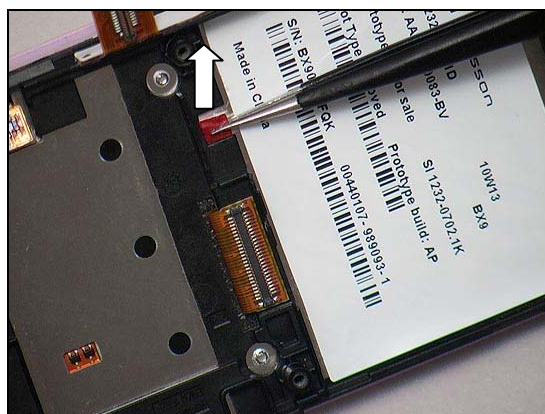
*Follow the 5.4 – 5.6, 5.9 – 5.10 Reassembly instructions!*



#### REMOVAL

Remove the activated Liquid Intrusion Indicator (1) with the tweezers.

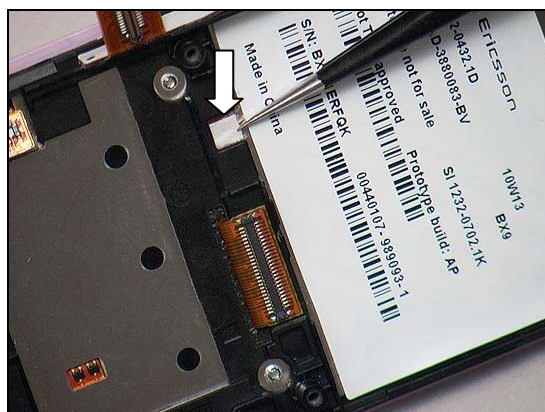
**Do the same with the Liquid Intrusion Indicator (2)!**



#### INSTALLATION

Attach the new Liquid Intrusion Indicator (1) with the tweezers.

**Do the same with the Liquid Intrusion Indicator (2)!**



## Replacement

### 4.8 Lower Front Cover

*Follow the 3.1 – 3.10 Disassembly instructions!*

*Follow the 4.6, 4.5, 4.10, 4.23, 4.11, 4.14 and 4.13,4.12 Removal instructions!*

Prepare the new Lower Front Cover.

*Follow the 4.5, 4.6, 4.17, 4.11, 4.23,4.22, 4.10, 4.12,4.13 and 4.14 Installation instructions!*

*Follow the 5.1 – 5.10 Reassembly instructions!*

**4.5,4.11,4.13,4.14,4.17,4.22,4.23 Parts can't be reused after disassembly!**





## Replacement

### 4.9 Lower Rear Cover

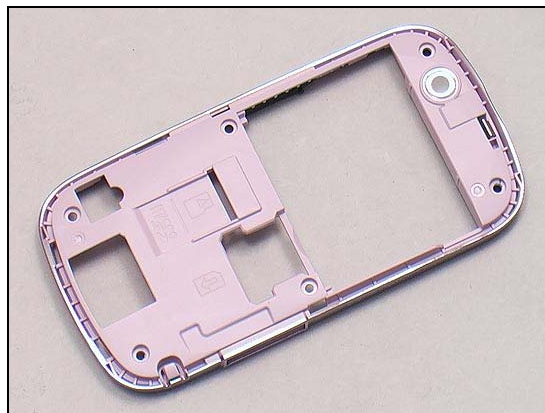
*Follow the 3.1 – 3.2 Disassembly instructions!*

*Follow the 4.21 and 4.29 Removal instructions!*

Prepare the new Lower Rear Cover.

*Follow the 4.21 4.29 Installation instructions!*

*Follow the 5.9 – 5.10 Reassembly instructions!*



## Replacement

### 4.10 Main Camera

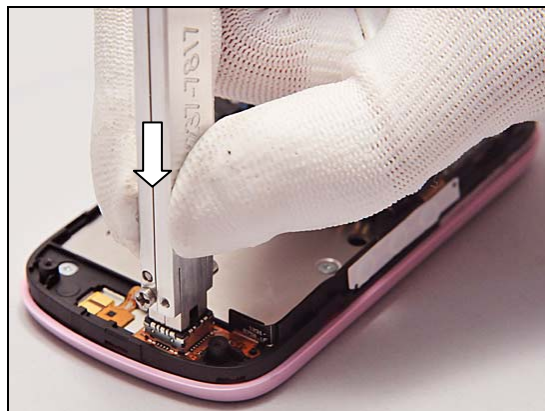
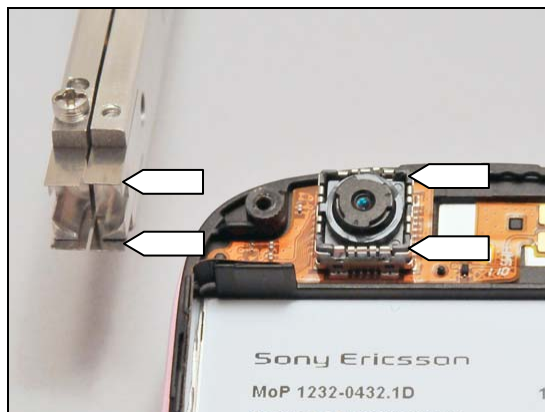
*Follow the 3.1 – 3.2 Disassembly instructions!*  
 Carry out the replacement as described below.  
*Follow the 5.8, 5.10 Reassembly instructions!*

#### REMOVAL

**Note the orientation of the blades on the camera removal tool in relation to the position of the camera socket!**

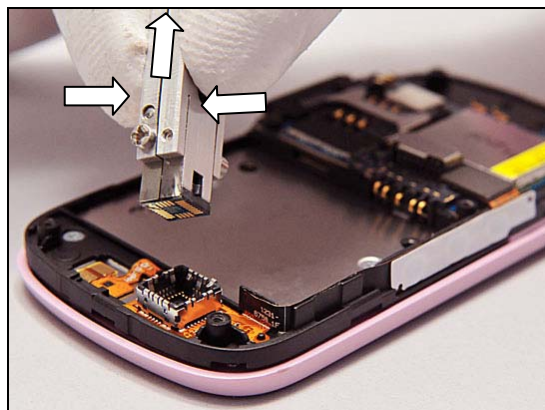
Insert the camera removal tool into the camera socket as shown.

Push the camera removal tool downwards to release the camera from its socket.



## Replacement: Main Camera

Press the handle of the camera removal tool and lift it up to remove the Camera from its socket.



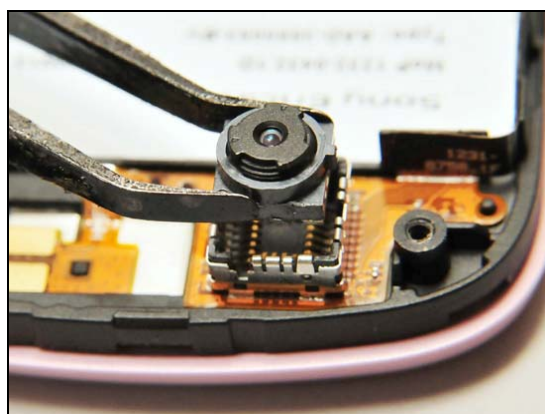
### INSTALLATION

**Note the orientation of the guiding bolt of the Camera and its socket!**

**Make sure that camera module's solder pad and connect pins of camera socket are very clean! If dirty or dust, blow off or clean it!**

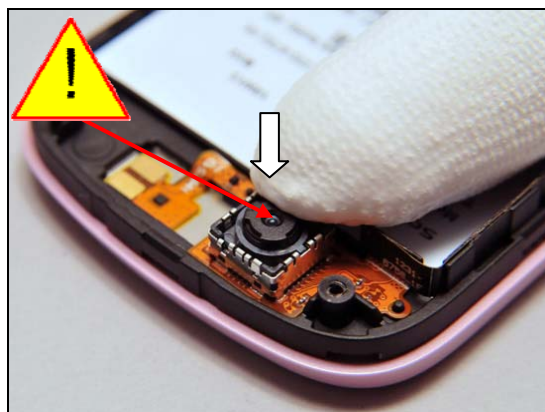


Place the Camera inside and in level with the socket.



Press the Camera to the bottom of the socket with the finger.

**Do not touch the camera lens.**





## Replacement

### 4.11 Main camera/side key/vib FPC

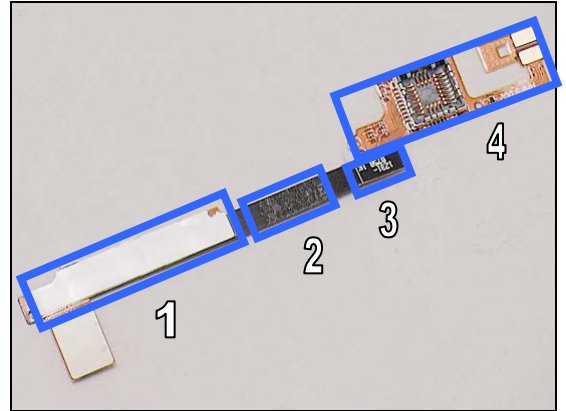
*Follow the 3.1 – 3.2 Disassembly instructions!*

*Follow the 4.10 and 4.23 Removal instructions!*

Carry out the replacement as described below.

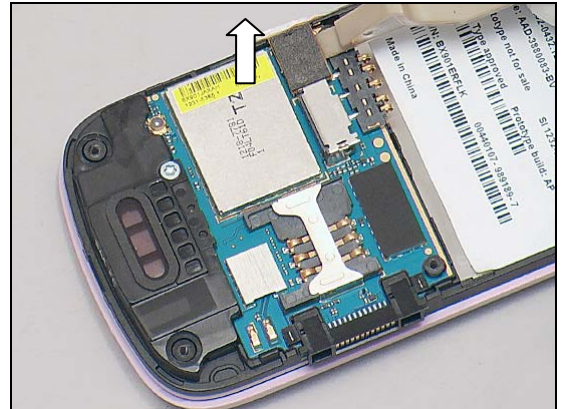
*Follow the 4.23, 4.10 and 4.22 Installation instructions!*

*Follow the 5.8, 5.10 Reassembly instructions!*

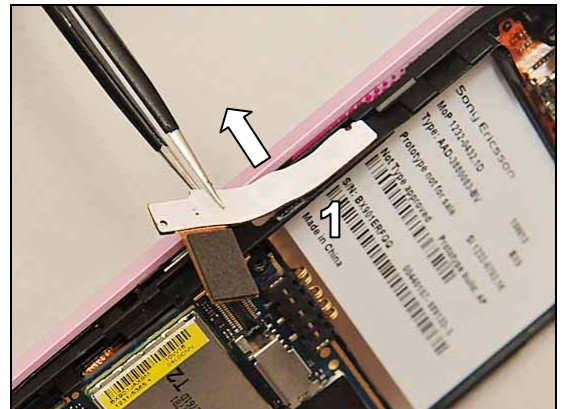


#### REMOVAL

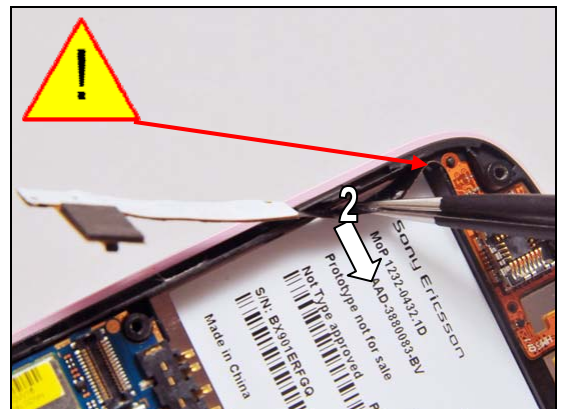
Unsnap the BtB connector with the front opening tool as shown.



Detach key dome (1) of the Main camera/side key/vib FPC with a pair of tweezers.



Detach flex part (2) of the Main camera/side key/vib FPC with a pair of tweezers as shown.



## Replacement: Main camera/side key/vib FPC

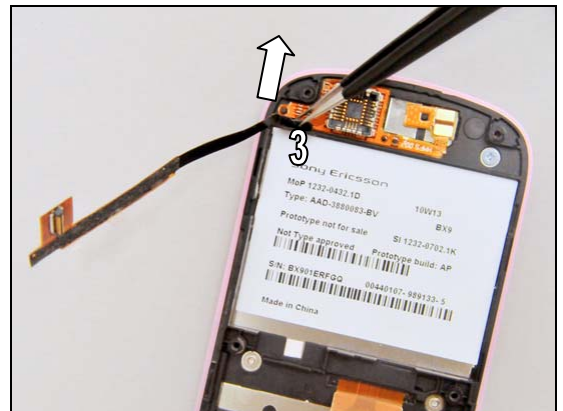
Turn the Main camera/side key/vib FPC interior side from the slot as indicated by the arrow.



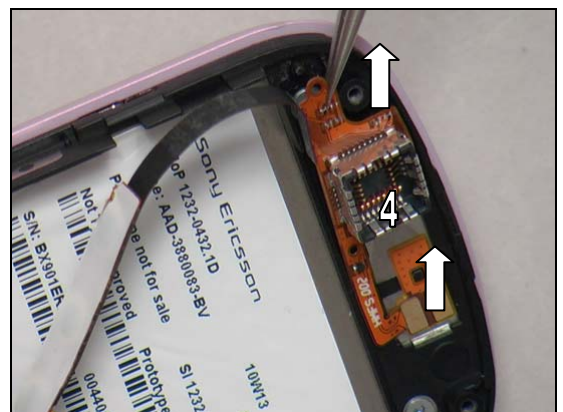
Turn the Main camera/side key/vib FPC exterior side from the slot as indicated by the arrow.



Detach flex part (3) with a pair of tweezers as shown.



Detach the top part (4) from the corners as shown and then remove it.

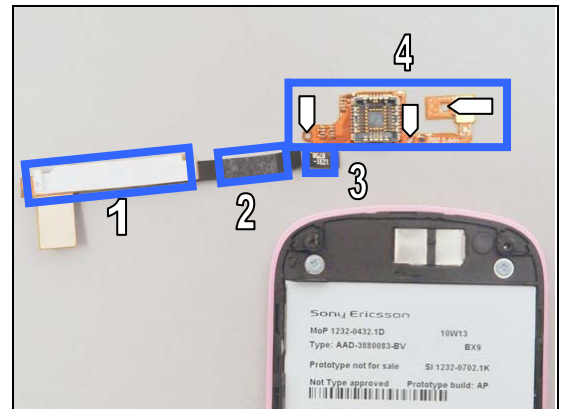


**Scrap! Not to be reused!**

## Replacement: Main camera/side key/vib FPC

### INSTALLATION

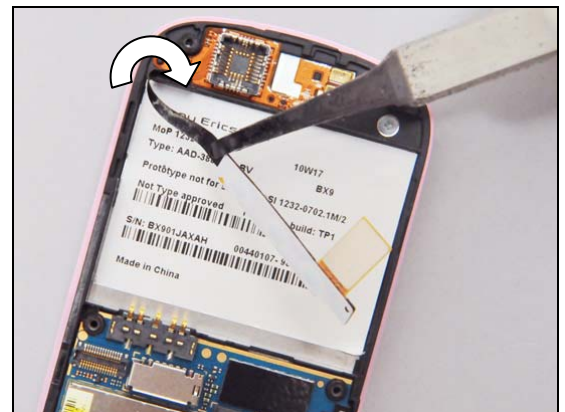
There are three guiding holes in the Main camera/side key/vib FPC as shown by the three arrows.



Place the top part (4) in alignment of the three guiding holes and press with fingers.



Turn the Main camera/side key/vib FPC interior side from the slot as indicated by the arrow.



Press to attach flex part (3) with a flex film assembly tool.



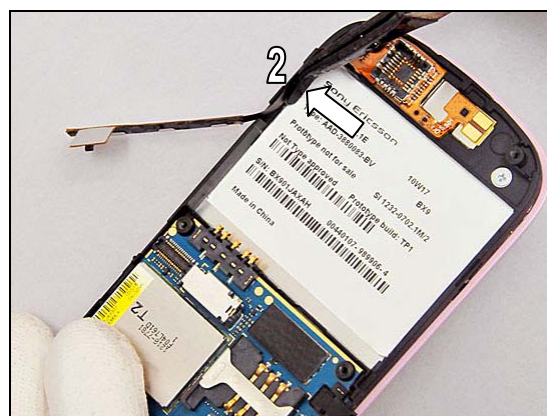


## Replacement: Main camera/side key/vib FPC

Turn the Main camera/side key/vib FPC exterior side from the slot as indicated by the arrow.



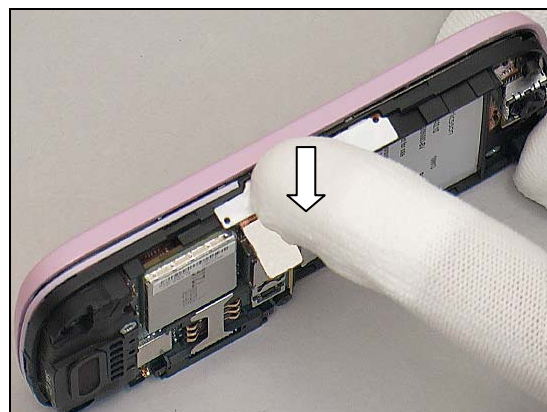
Press to attach flex part (2) with a flex film assembly tool.



Attach the key dome (1) in the alignment of the two guiding holes as shown.

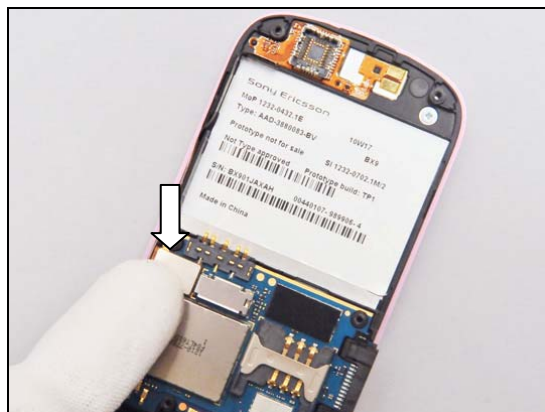


Press to make it securely attached.



**Replacement: Main camera/side key/vib FPC**

Press to snap the BtB connector with finger.



## Replacement

### 4.12 Main Keyboard FPC Bracket

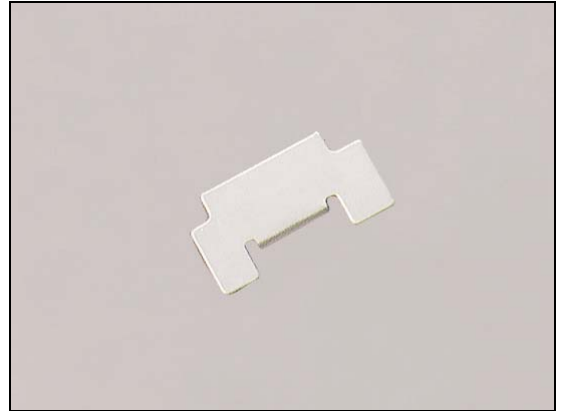
*Follow the 3.1 Disassembly instructions!*

*Follow the 4.13, 4.14 Removal instructions!*

Prepare the new Main Keyboard FPC Bracket.

*Follow the 4.13, 4.14 Installation instructions!*

*Follow the 5.10 Installation instructions!*





## Replacement

### 4.13 Main Keyboard FPC

*Follow the 3.1 Disassembly instructions!*

*Follow the 4.14 Removal instructions!*

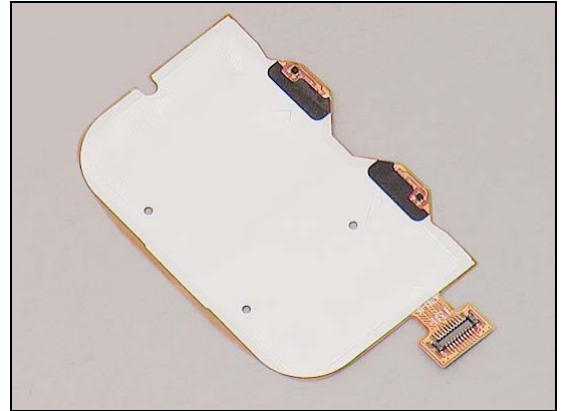
Carry out the replacement as described below.

*Follow the 4.14 Installation instructions!*

*Follow the 5.10 Reassembly instructions!*

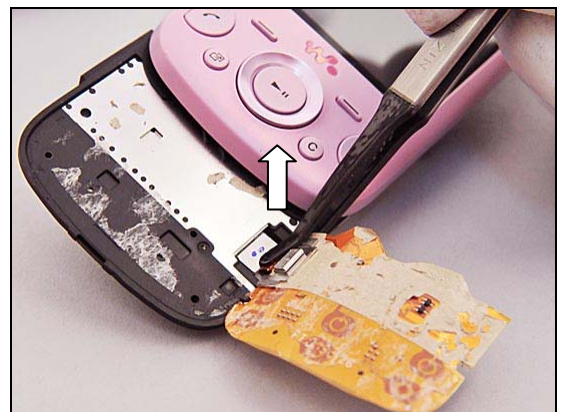
#### REMOVAL

Peel off the Main Keyboard FPC from the Lower Front Cover by using the flex film assembly tool.

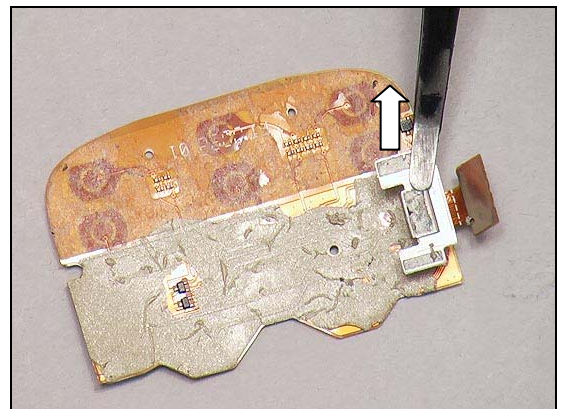


Disconnect the BtB connector.

**Main keyboard FPC: Scrap! Not to be reused!**



Detach the Main Keyboard FPC Bracket from the Main keyboard FPC as shown.





## Replacement: Main Keyboard FPC

### INSTALLATION

Place the new Main Keyboard FPC on the Lower Front Cover.

***Make sure the adhesive residue is removed!***



Press to snap it by using a flex film assembly tool.



Place the Main Keyboard FPC Bracket into its socket on the Lower Front Cover.



Press to make sure it is securely attached.

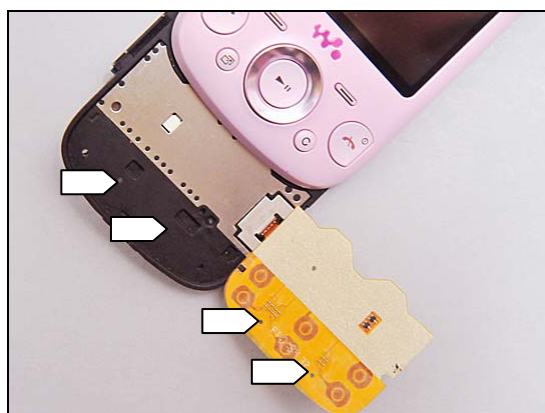


## Replacement: Main Keyboard FPC

Remove the two pieces of protection film.



There are two guiding holes on the Main Keyboard FPC.



Inserting the top side of the Main Keyboard FPC under the Upper Front Cover aligning to the two guiding holes as shown.



Press around to make it securely attached.





## Replacement

### 4.14 Main Keypad

Carry out the replacement as described below.

#### REMOVAL

Insert the guitar pick underneath the Main Keypad.



Detach and remove the Main Keypad with fingers.

**Scrap! Not to be reused!**



#### INSTALLATION

Insert the top side of the new Main Keyboard into its proper position as shown.

**Make sure to remove the old adhesive before replacement!**



## Replacement: Main Keypad

Press around with fingers to make sure it is securely attached.



## Replacement

### 4.15 Main Window Assembly

*Follow the 3.1 – 3.2, 3.5 – 3.7 Disassembly instructions!*

*Follow the 4.30, 4.27 Removal instructions!*

Carry out the replacement as described below.

*Follow the 5.5 – 5.6, 5.9 – 5.10 Reassembly instructions!*

#### REMOVAL

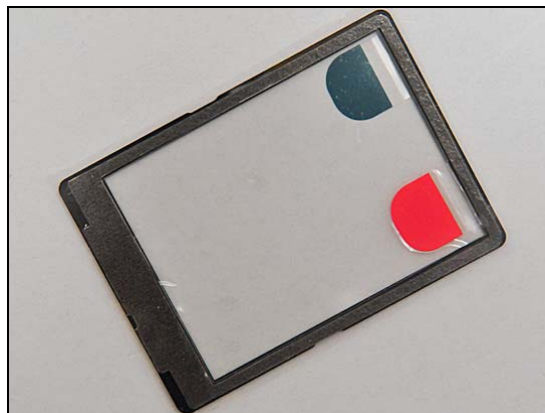
**Scrap! The Main Window Assembly and the Upper Front Cover cannot be reused.**

#### INSTALLATION

*Follow the 4.30, 4.27 Installation instructions!*

Peer off the protection film of the Upper Front Cover.

Attach the new Main Window Assembly aligning to the bottom side as shown.





## Replacement

Press around with fingers to make sure it is securely attached.



Peer off the protection film inside.



**Notice: Peer off the protection film outside before using the phone.**



## Replacement

### 4.16 Receiver Film

*Follow the 3.1 – 3.2, 3.5 – 3.7 Disassembly instructions!*

*Follow the 4.30 Removal instructions!*

Carry out the replacement as described below.

*Follow the 4.30 Installation instructions!*

*Follow the 5.4 – 5.5, 5.8 - 5.10 Reassembly instructions!*

#### REMOVAL

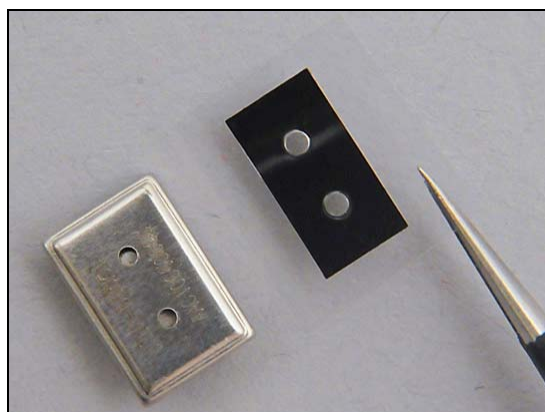
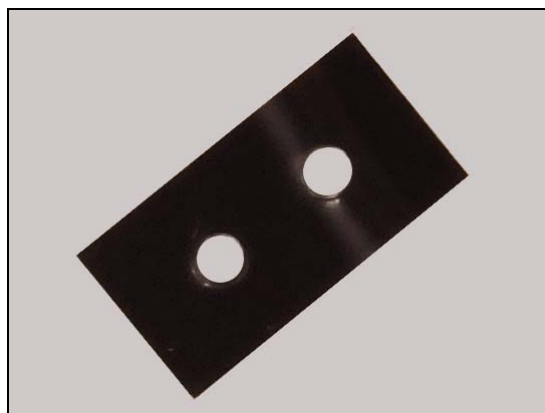
Remove the Receiver Film with a pair of tweezers.

**Scrap! Not to be reused!**

#### INSTALLATION

There are two guiding holes as shown.

Place the new Receiver Film aligning to the two guiding holes.

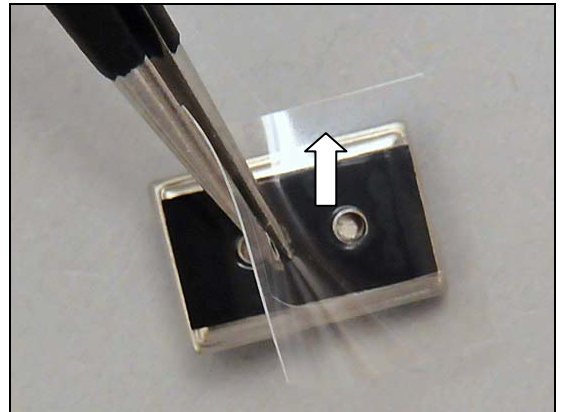


## Replacement: Receiver Film

Press to make sure it is securely attached.



Remove the protection film.





## Replacement

### 4.17 Receiver FPC

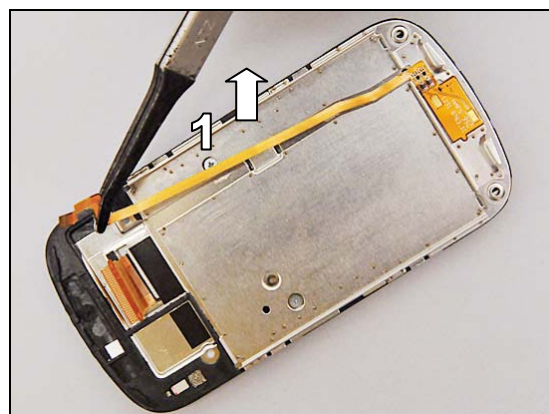
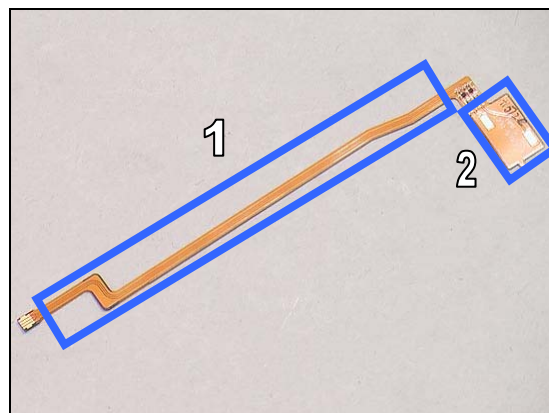
*Follow the 3.1 – 3.2, 3.5 – 3.10 Disassembly instructions!*

Carry out the replacement as described below.

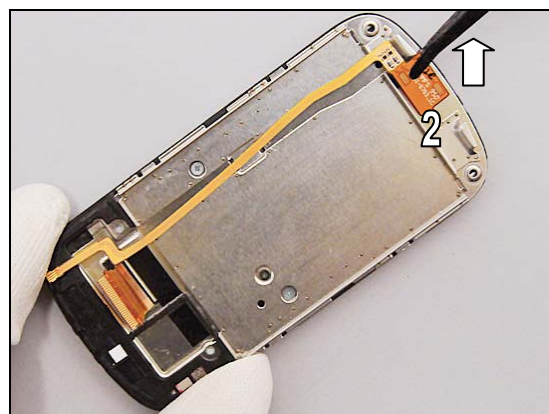
*Follow the 5.1 – 5.5, 5.8 – 5.10 Reassembly instructions!*

#### REMOVAL

Detach the flex part (1) of the Receiver FPC with a flex film assembly tool.



Detach the top part (2) of the Receiver FPC with a flex film assembly tool and remove it.



**Scrap! Not to be reused!**

#### INSTALLATION

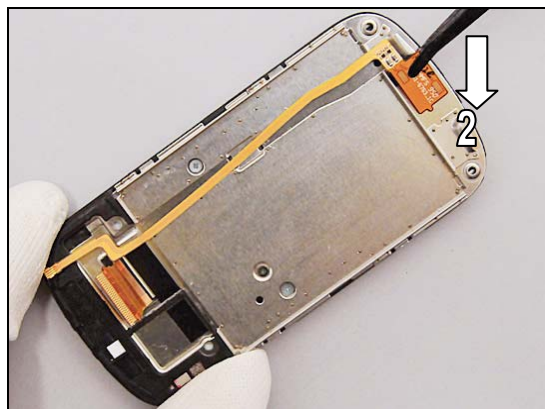
Align a new Receiver FPC with the guiding grooves as shown.

**Make sure the adhesive residue on the Hinge Metal Slider is removed!**



## Replacement: Receiver FPC

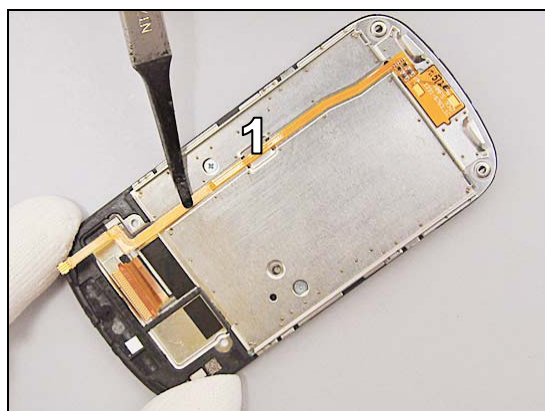
Place the top part (2) of the Receiver FPC in the alignment as shown.



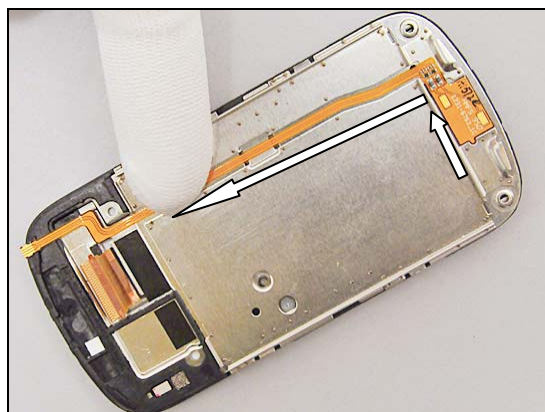
Remove the protection film.



Attach the flex part (1) in its groove.



Press to make sure it is securely attached.



## Replacement

### 4.18 Shield Can Lid BB

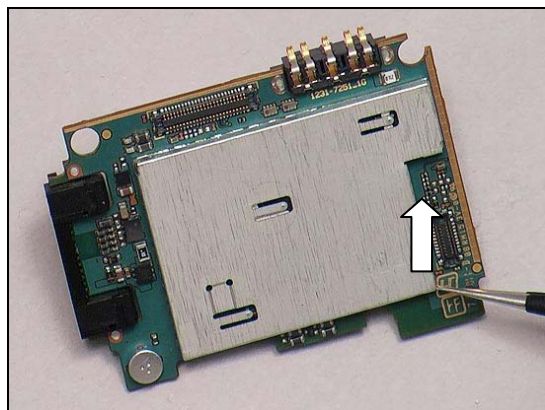
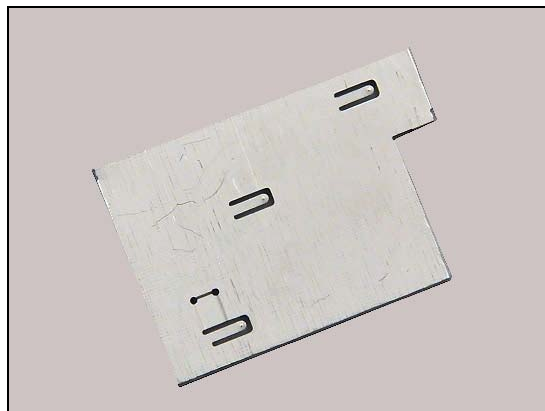
*Follow the 3.1 – 3.4 Disassembly instructions!*

Carry out the replacement as described below.

*Follow the 5.6 – 5.8, and 5.10 Reassembly instructions!*

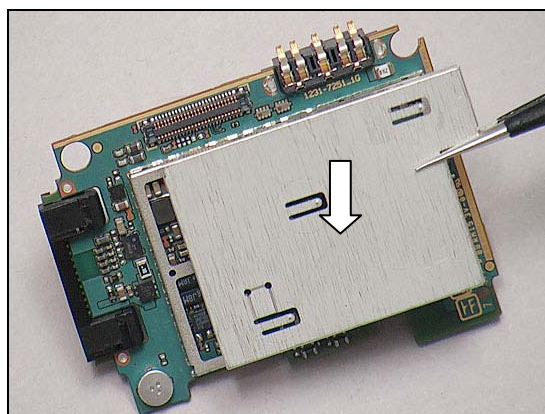
#### REMOVAL

Insert the tweezers into the corner of the Shield Can Lid BB and pull upwards to release it.

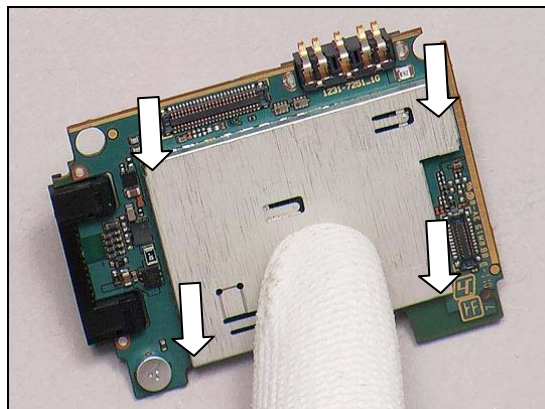


#### INSTALLATION

Place the new Shield Can Lid BB in place.



Press to snap it.





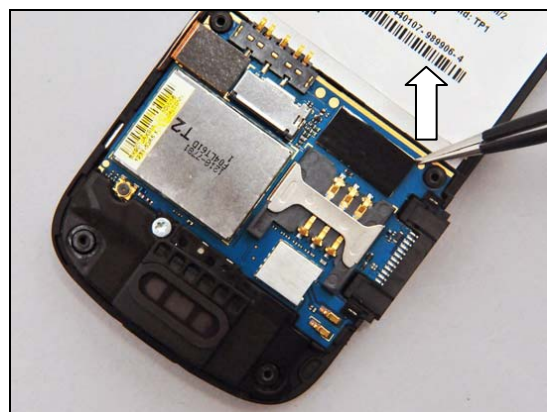
## Replacement

### 4.19 Shield Can Lid DCDA

*Follow the 3.1 – 3.2 Disassembly instructions!*  
 Carry out the replacement as described below.  
*Follow the 4.20 Installation instructions!*  
*Follow the 5.9 – 5.10 Reassembly instructions!*

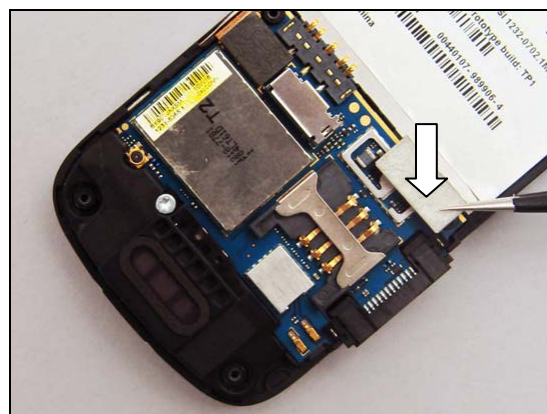
#### REMOVAL

Insert the tweezers into the corner of the Shield Can Lid DCDA and pull upwards to remove it.



#### INSTALLATION

Place a new Shield Can Lid DCDA in place.



Press to snap it.



## Replacement

### 4.20 Shield Can Mask Film

*Follow the 3.1 – 3.2 Disassembly instructions!*  
 Carry out the replacement as described below.  
*Follow the 5.8 and 5.10 Reassembly instructions!*

#### REMOVAL

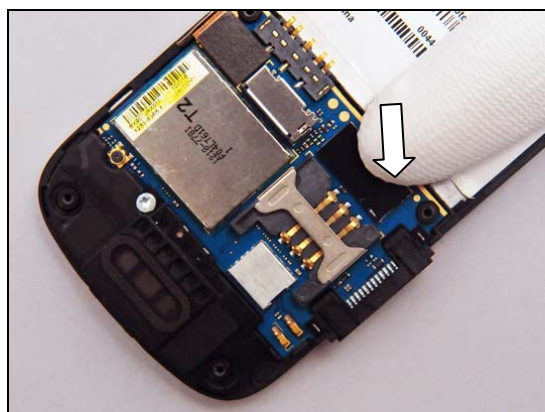
Detach the Shield Can Mask Film by using a pair of tweezers.

**Scrap! Not to be reused!**

#### INSTALLATION

Place a new Shield Can Mask Film aligning to the edge of Shield Can Lid DCDA.

Press to make sure it is securely attached.



## Replacement

### 4.21 Side Key

*Follow the 3.1 – 3.2 Disassembly instructions!*  
 Carry out the replacement as described below.  
*Follow the 5.8, 5.10 Reassembly instructions!*

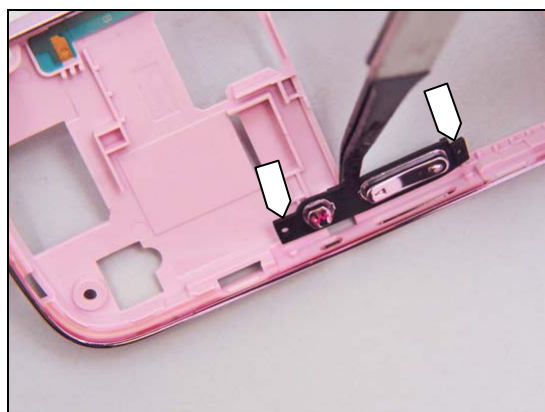
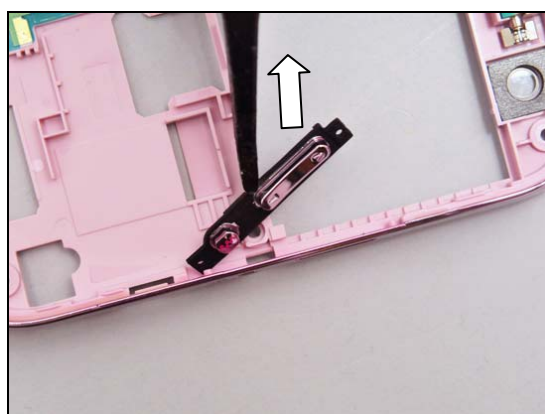
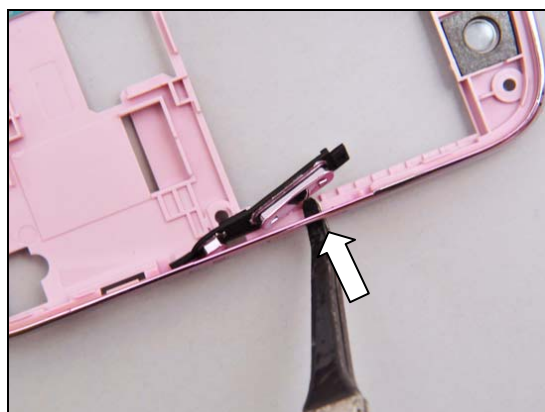
#### REMOVAL

Push to release the Side Key with a flex film assembly tool.

Lift to remove it.

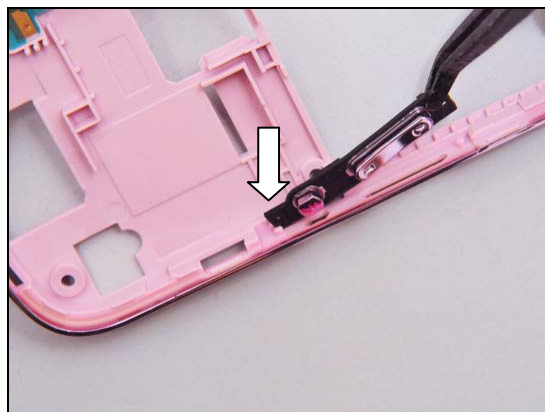
#### INSTALLATION

There are two guiding holes used for positioning the Side Key.

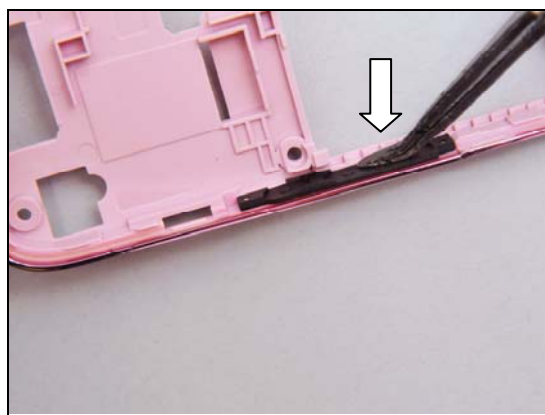


## Replacement: Side Key

Place the new Side Key on the Lower Rear Cover in the alignment.



Press to make sure it is securely installed.





## Replacement

### 4.22 Side Key FPC Connector Gasket

*Follow the 3.1 – 3.2 Disassembly instructions!*  
 Carry out the replacement as described below.  
*Follow the 5.8, 5.10 Reassembly instructions!*

#### REMOVAL

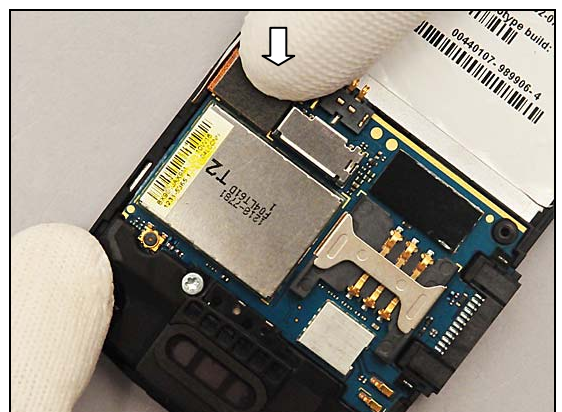
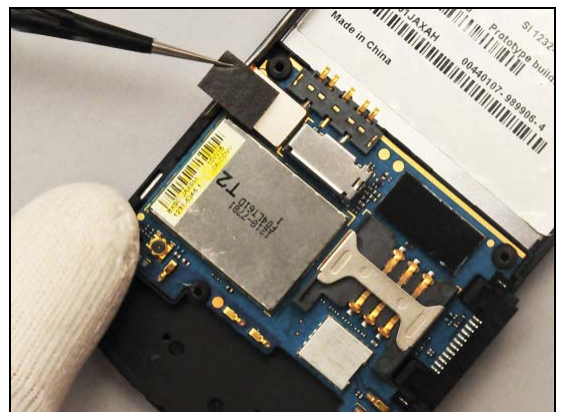
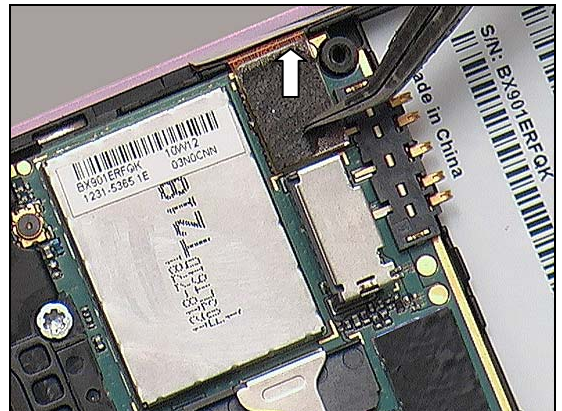
Detach the Side Key FPC Connector Gasket by using a pair of tweezers.

**Scrap! Not to be reused!**

#### INSTALLATION

Attach a new Side Key FPC Connector Gasket aligning the edges of the back side of the BtB connector.

Press to make sure it is securely attached.



## Replacement

### 4.23 Side Key FPC Film

*Follow the 3.1 – 3.2 Disassembly instructions!*  
 Carry out the replacement as described below.  
*Follow the 5.8, 5.10 Reassembly instructions!*

#### REMOVAL

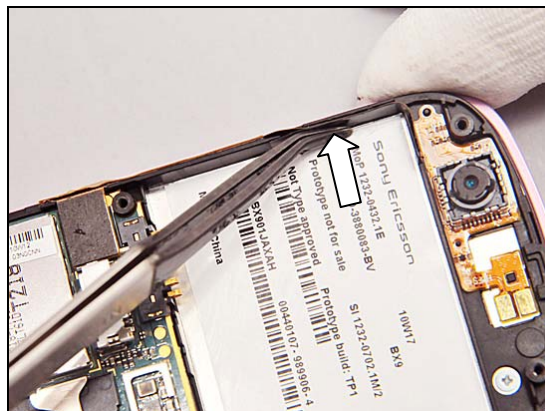
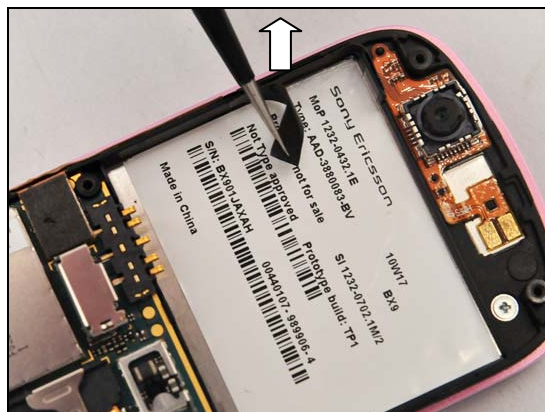
Gently peel off the Side Key FPC Film with the tweezers.

**Scrap! Not to be reused!**

#### INSTALLATION

Attach the new Side Key FPC Film on the Main camera/side key/vib FPC with the tweezers.

Press to make sure its attachment.



## Replacement

### 4.24 Sub keyboard

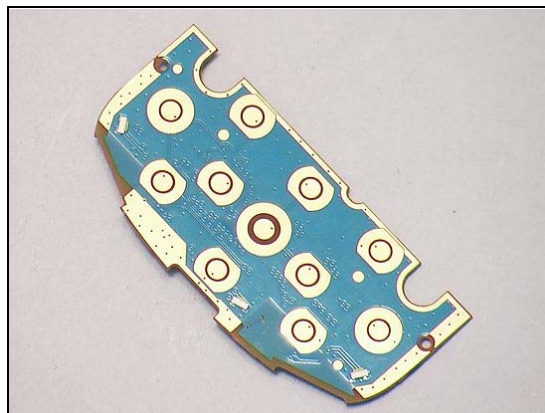
*Follow the 3.1 – 3.2, 3.5 – 3.7 Disassembly instructions!*

*Follow the 4.26, 4.25 and 4.33 Removal instructions!*

Prepare the new Sub keyboard.

*Follow the 4.33, 4.25, and 4.26 Installation instructions!*

*Follow the 5.4 – 5.6, 5.8, 5.10 Reassembly instructions!*





## Replacement

### 4.25 Sub keyboard conductive Gasket

*Follow the 3.1 – 3.2, 3.5 – 3.7 Disassembly instructions!*

Carry out the replacement as described below.

*Follow the 5.4 – 5.6, 5.8, 5.10 Reassembly instructions!*



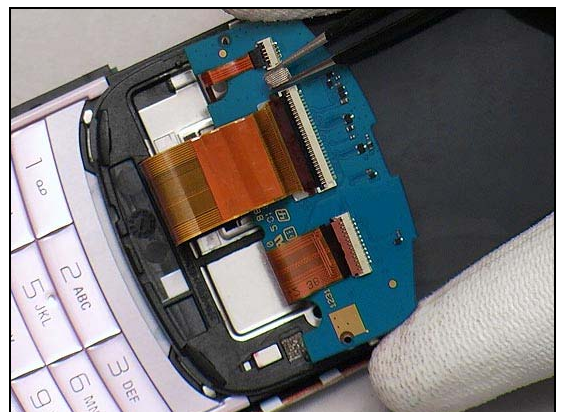
#### REMOVAL

Detach the Sub keyboard conductive Gasket from the Sub Keyboard with the tweezers.



#### INSTALLATION

Place the Sub keyboard conductive Gasket in its proper position as shown.



Press to make sure it is securely attached.





## Replacement

### 4.26 Sub keyboard Dome

*Follow the 3.1 – 3.2, 3.5 – 3.7 Disassembly instructions!*

Carry out the replacement as described below.

*Follow the 5.4 – 5.6, 5.8, 5.10 Reassembly instructions!*

#### REMOVAL

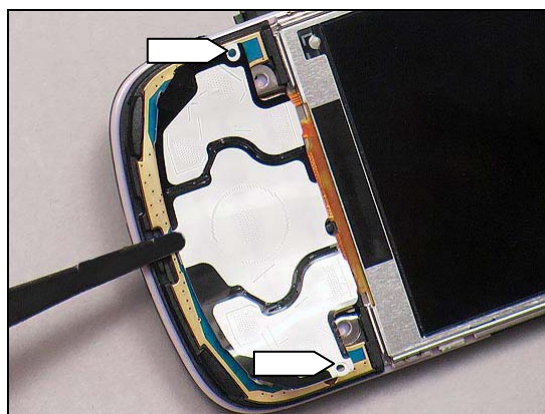
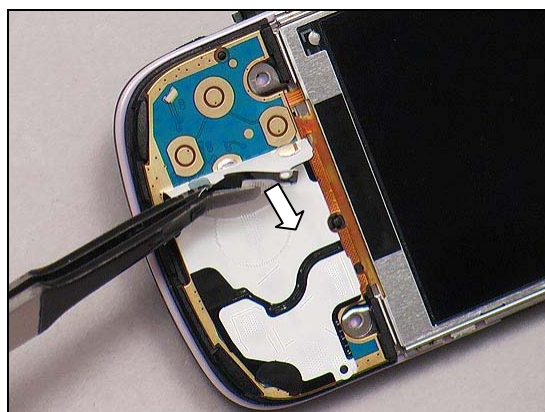
Detach the Sub keyboard Dome from the Sub keyboard with the flex film assembly tool.

**Scrap! Not to be reused!**

#### INSTALLATION

Place the Sub keyboard Dome on the Sub keyboard aligning to the two guiding holes.

Press around with fingers to make sure it is securely attached.



## Replacement

### 4.27 Sub keypad

*Follow the 3.1 – 3.2, 3.5 – 3.7 Disassembly instructions!*

Carry out the replacement as described below.

*Follow the 5.4 – 5.5, 5.8, 5.10 Reassembly instructions!*

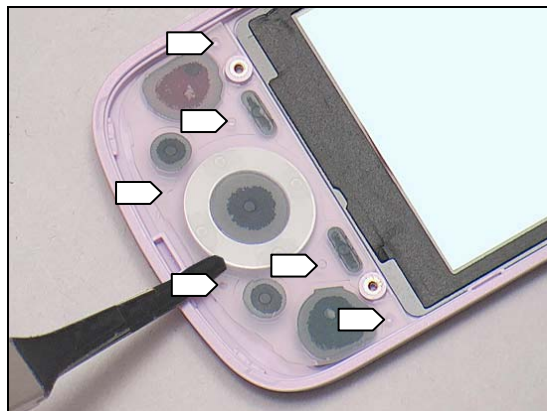
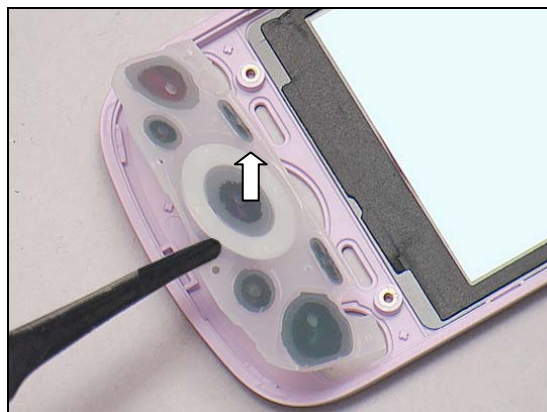
#### REMOVAL

Push from the outside to release the Sub keypad from the Upper Front Cover.

Remove the Sub keypad.

#### INSTALLATION

Place the new Sub keypad in its proper position aligning to the six guiding pins.



## Replacement

### 4.28 Upper Front Cover

*Follow the 3.1 – 3.2, 3.5 – 3.7 Disassembly instructions!*

*Follow the 4.27, 4.30 Removal instructions!*

**Scrap! The Main Window Assembly and the Upper Front Cover cannot be reused.**

Prepare a new Upper Front Cover and a new Main Window Assembly.

*Follow the 4.15, 4.30, 4.27 Installation instructions!*

*Follow the 5.4 – 5.6, 5.8, 5.10 Reassembly instructions!*



## Replacement

### 4.29 Vibrator

*Follow the 3.1 – 3.2 Disassembly instructions!*  
 Carry out the replacement as described below.  
*Follow the 5.8, 5.10 Reassembly instructions!*

#### REMOVAL

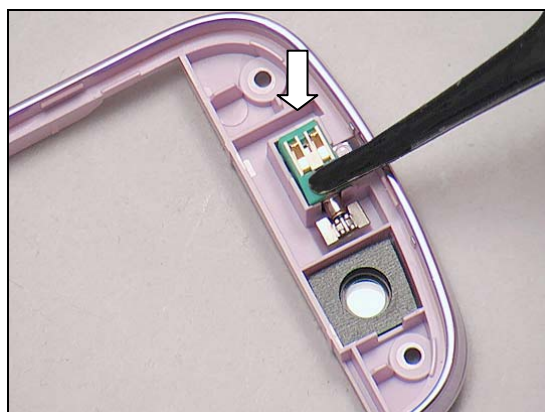
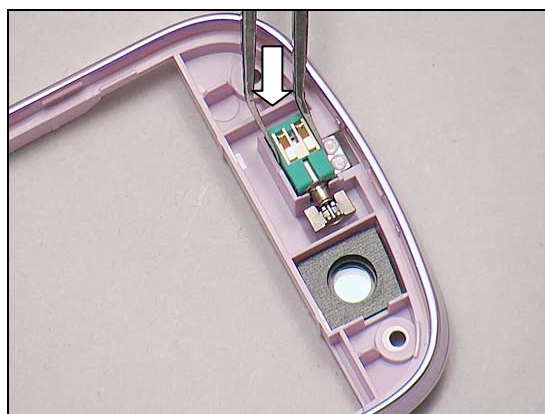
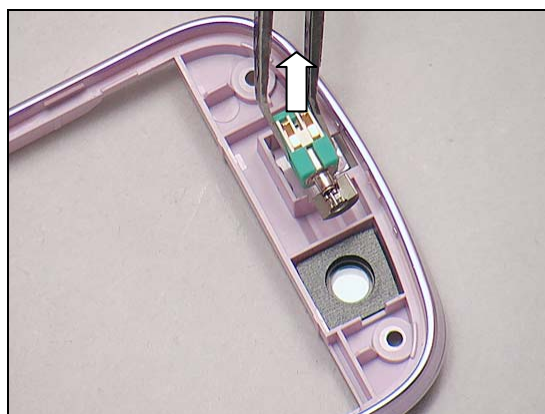
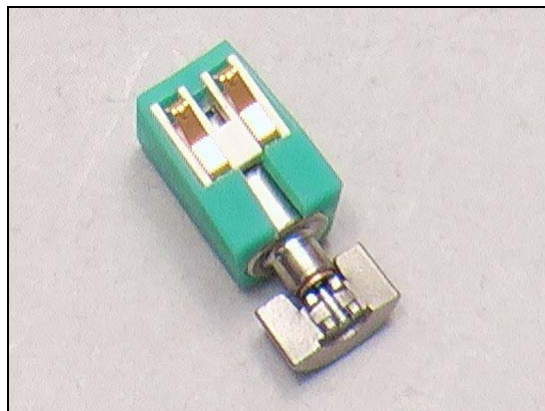
Remove the Vibrator by using the flex film assembly tool.

#### INSTALLATION

Place the new Vibrator in its socket in the Lower Rear Cover.

Press to make sure it is securely installed.

**Do not touch the pins.**





## Replacement

### 4.30 Ear Speaker

*Follow the 3.1 – 3.2, 3.5 – 3.7 Disassembly instructions!*

*Follow the 4.16 Removal instructions!*

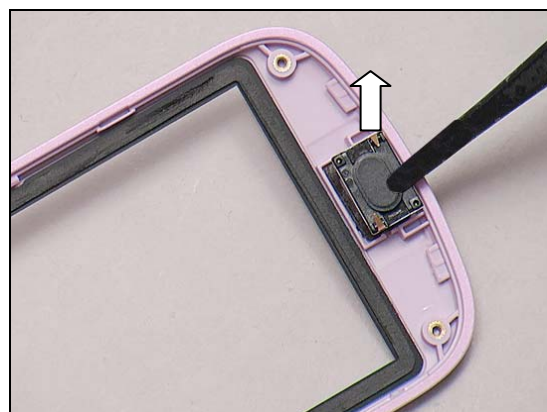
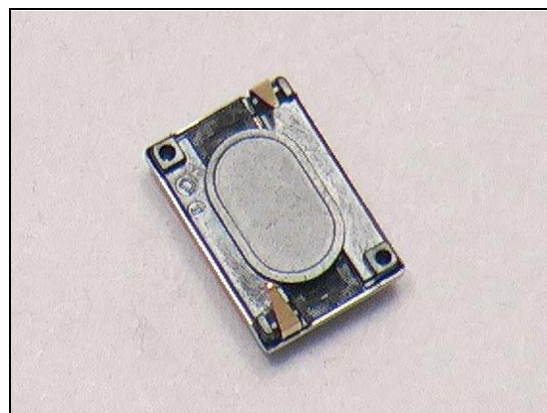
Carry out the replacement as described below.

*Follow the 4.16 Installation instructions!*

*Follow the 5.4 – 5.5, 5.8 – 5.10 Reassembly instructions!*

#### REMOVAL

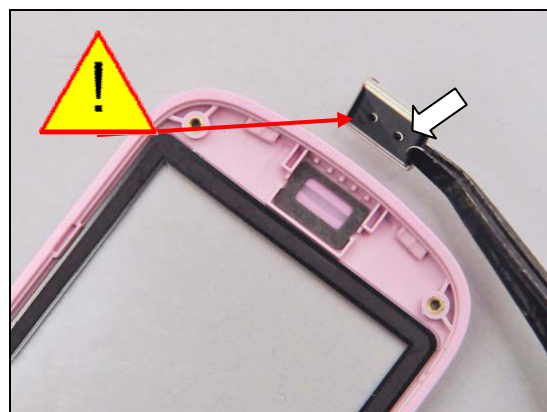
Detach and remove the Ear Speaker from the socket with the flex film assembly tool.



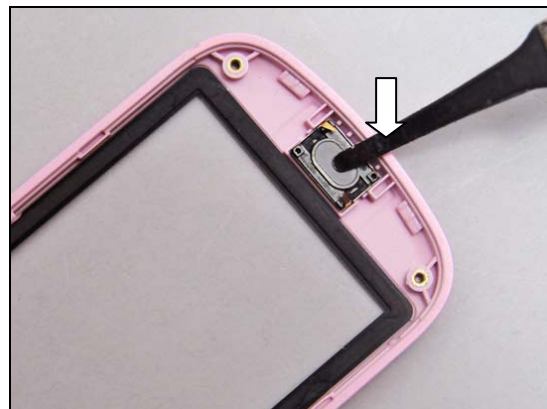
#### INSTALLATION

***Make sure a new Receiver Film has been installed on the new Ear Speaker.***

Place the new Ear Speaker in its socket in the Upper Front Cover.



Press to make sure it is securely attached.



## Replacement

### 4.31 Core Unit Label

*Follow the 3.1 – 3.2 Disassembly instructions!*  
 Carry out the replacement as described below.  
*Follow the 5.9 – 5.10 Reassembly instructions!*

#### REMOVAL

Detach the Core Unit Label from the corner by using a pair of tweezers.

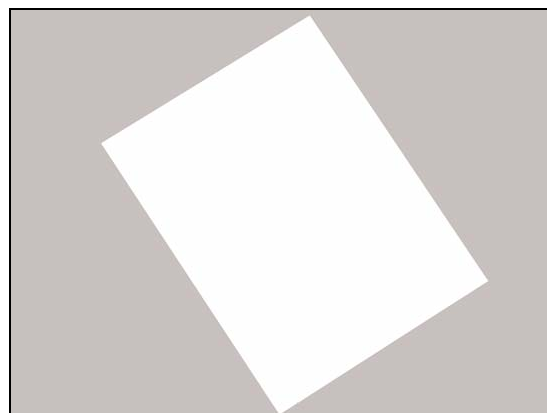
**Scrap! Not to be reused!**

#### INSTALLATION

Check that the proper label format is loaded in the Zebra printer and write a new Label by using the 'LabelMake' software.

Attach the new label and press around the surface to make Label securely attached.

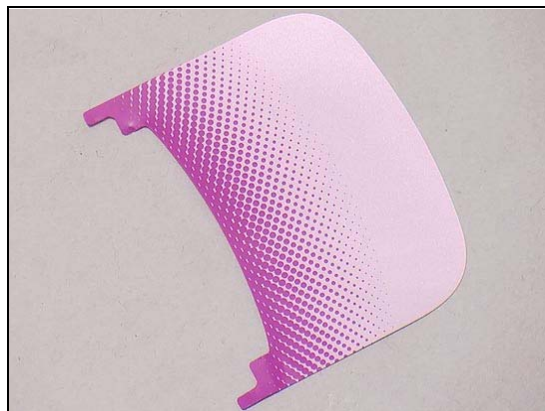
**One label only is allowed!**



## Replacement

### 4.32 Decoration Sheet

Prepare a new Decoration Sheet.



#### REMOVAL

Insert the tweezers into the corner to release the Decoration Sheet.



Peel off the Decoration Sheet with fingers.



**Scrap! Not to be reused!**

#### INSTALLATION

Place a new Decoration Sheet in its proper position by using the flex film assembly tool.



## Replacement: Decoration Sheet

Press around to make sure it is securely attached.





## Replacement

### 4.33 Sub keyboard Foil

*Follow the 3.1 – 3.2, 3.5 – 3.7 Disassembly instructions!*  
 Carry out the replacement as described below.  
*Follow the 5.4 – 5.5, 5.8 – 5.10 Reassembly instructions!*

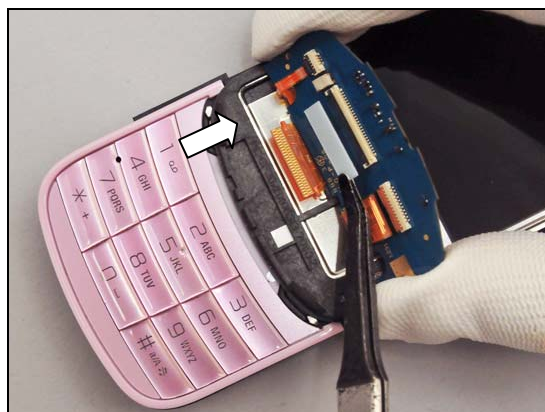
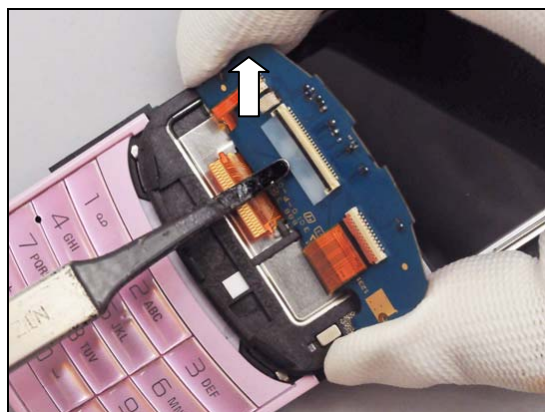
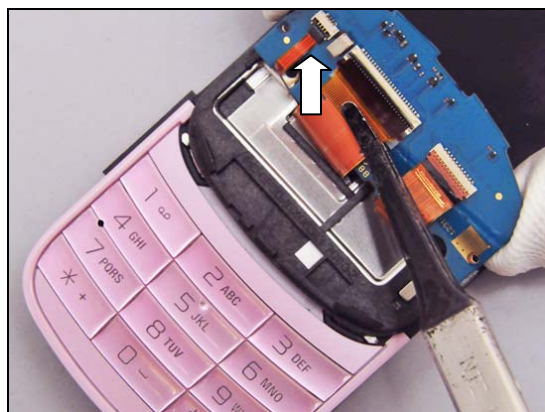
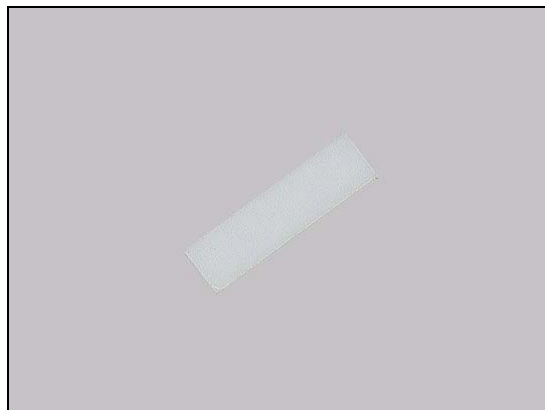
#### REMOVAL

Lift the Sub keyboard up with fingers and use the flex film assembly tool to release the ZIF connector in the middle.

Peel off the Sub keyboard Foil with the flex film assembly tool.

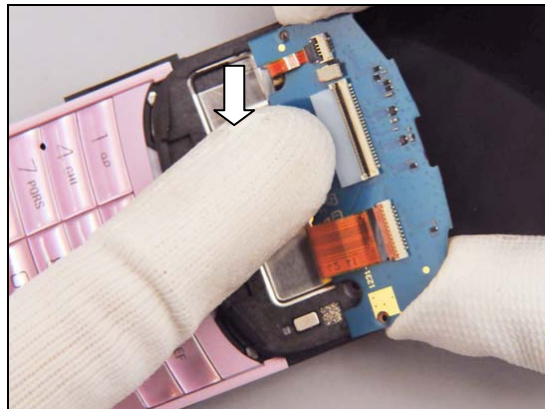
#### INSTALLATION

Place a new Sub keyboard Foil in its proper position as shown.

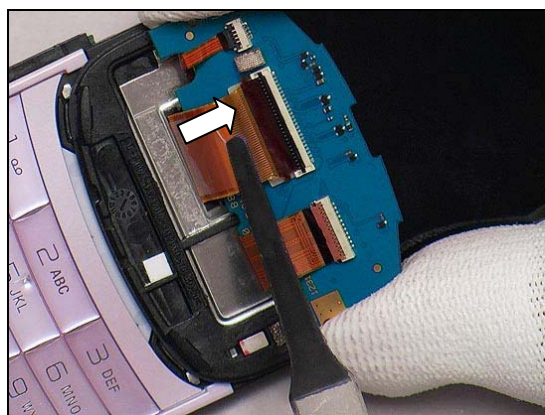


## Replacement: Sub keyboard Foil

Press to make sure it is securely attached.



Use the flex film assembly tool to insert the flex in the middle into the ZIF connector.



Lock the connector with the flex film assembly tool.



## Replacement

### 4.34 Battery Cover

*Follow the 3.1 Battery Cover Disassembly instructions!*

Prepare the new Battery Cover.

*Follow the 4.4 Installation instructions!*

*Follow the 5.9 Battery Cover Reassembly instructions!*



## Replacement-- Board Swap

### 4.35 Board Swap—Replace Swap Board

*Follow the 3.1 – 3.4 Disassembly instructions!*

Prepare a new swap board.

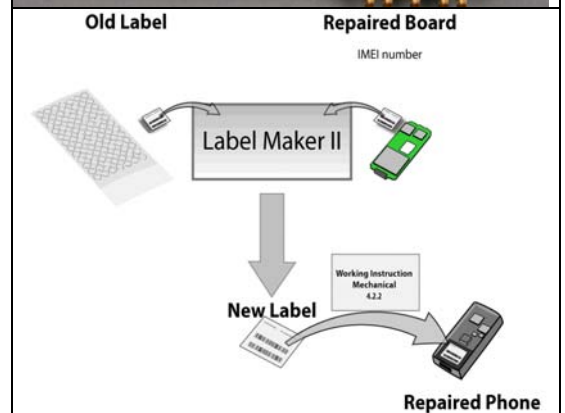
*Follow the 5.6 - 5.10 Reassembly instructions!*



### 4.36 Board Swap – Change Label

#### Change Label

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



### 4.37 Board Swap – Customize Software

#### Customization of software

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

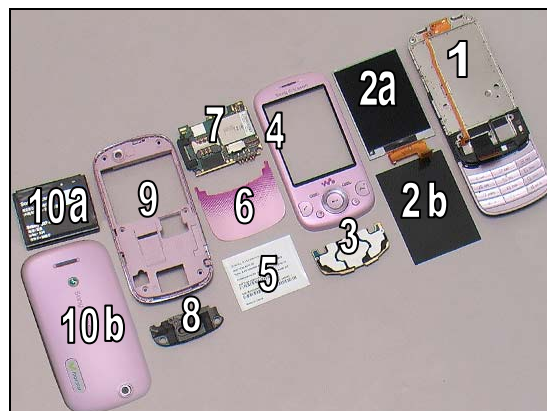




## 5 Reassembly

The reassembly is done in the following order:

1. Lower Front Cover Assy & Hinge Metal Slider
2. Display (a) & Display Gasket (b)
3. Sub keyboard
4. Upper Front Cover Assy
5. Core Unit Label
6. Decoration Sheet
7. Main PBA
8. Main antenna/Speaker box
9. Lower Rear Cover Assy
10. Battery (a) & Battery Cover (b)



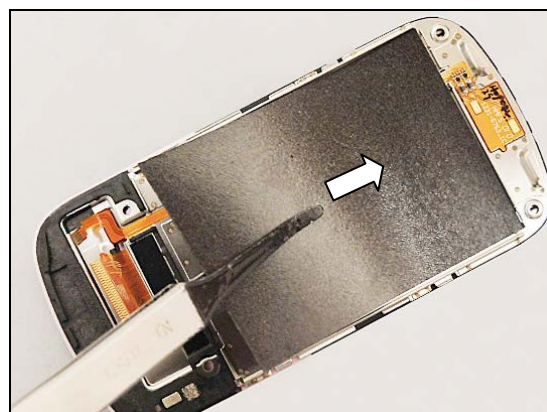
### 5.1 Hinge Metal Slider & Lower Front Cover Assy

Place the Hinge Metal Slider and Lower Front Cover Assy in place.

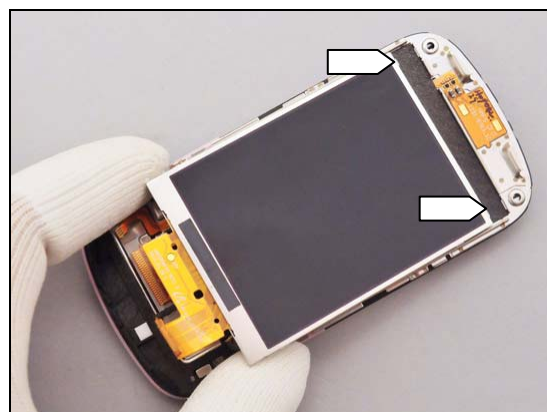


### 5.2 Display & Display Gasket

Place the Display Gasket in its proper position with a flex film assembly tool.



Insert the two top hooks of the Display into the Hinge Metal Slider as shown.



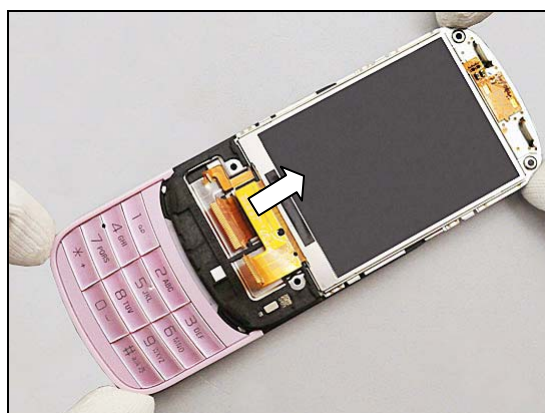
## Reassembly

Press to snap the bottom side of the Display.



### 5.3 Sub keyboard

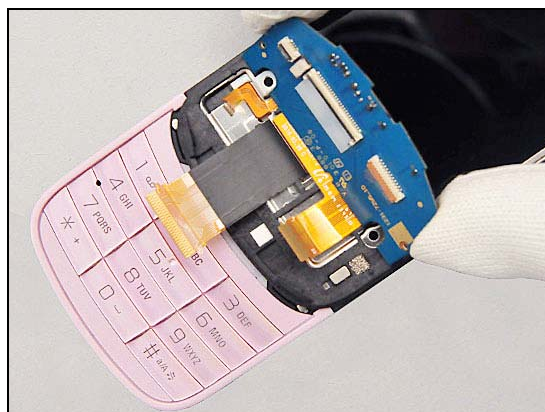
Open the slider.



Pull outwards the Hinge FPC with a flex film assembly tool.



Place the Sub keyboard in place as shown.



## Reassembly

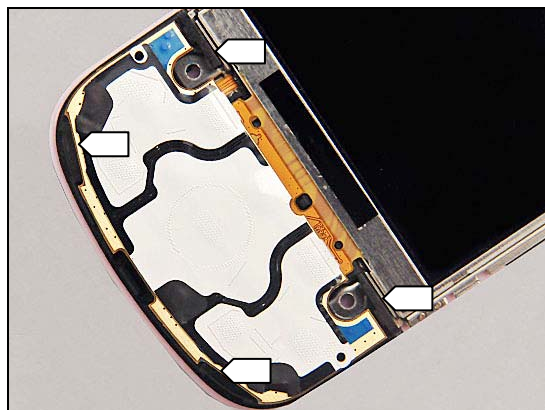
Connect the three ZIF connectors in order of (1), (2) and (3) with the flex film assembly tool.



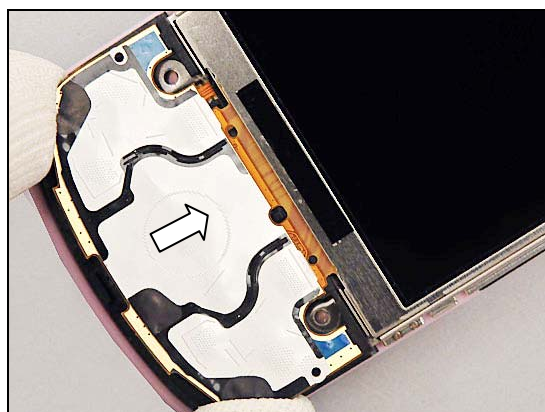
Turn over the Sub keyboard and close the slider gently.



There are four hooks located as shown.



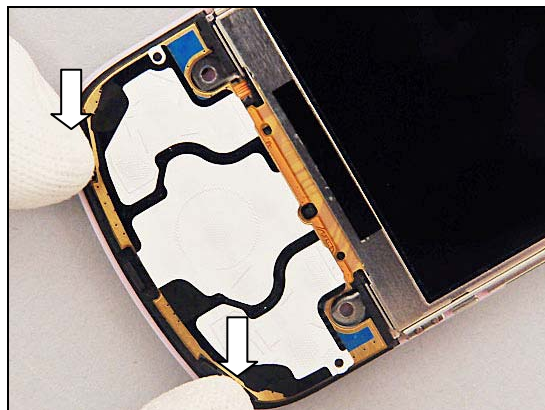
Insert the Sub keyboard into the two top hooks with fingers.





## Reassembly

Press to snap the two bottom hooks of the Sub keyboard.



### 5.4 Upper Front Cover Assy

Open the slider.

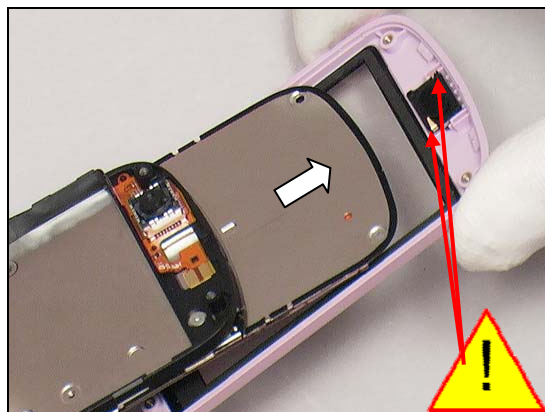
There are two hooks on the top of the Hinge Metal Slider and the Upper Front Cover Assy as shown.



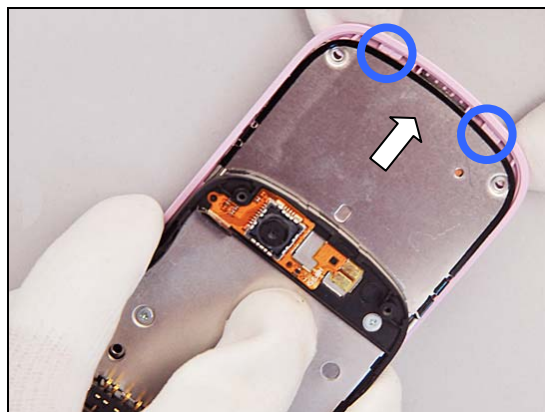
Place the unit on the Upper Front Cover Assy.

**Special hooks!**

**Do not destroy the Ear Receiver pins !**



Push the unit to hook the two hooks.

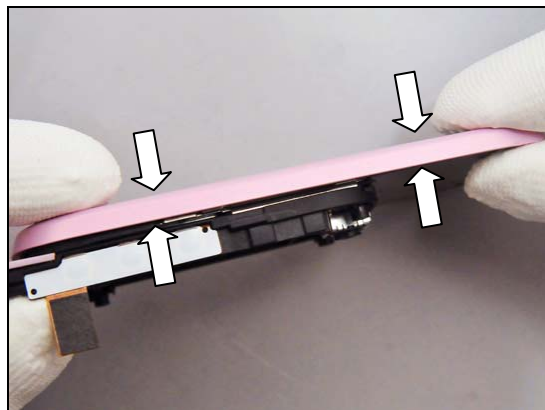




## Reassembly

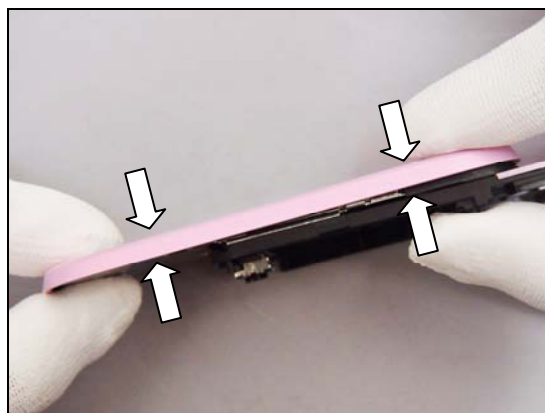
Press to snap this side.

**Do not touch the Main Window Assy !**

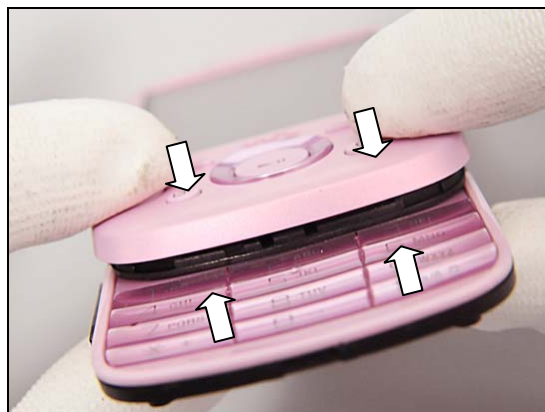


Do the same with the opposite side.

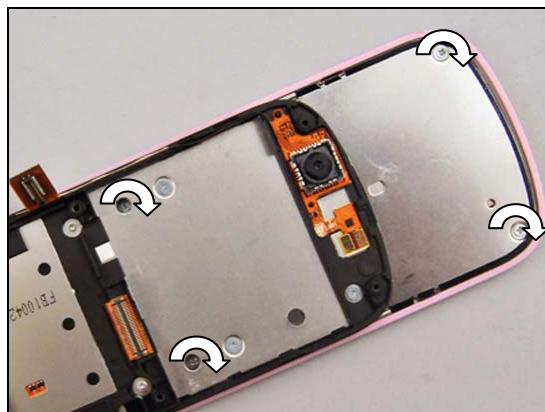
**Do not touch the Main Window Assy !**



Do the same with the bottom side.



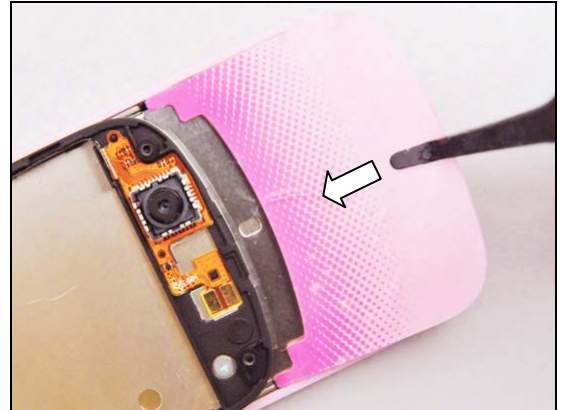
Tighten the four screws with the JCIS bit to a torque of 12 Ncm.



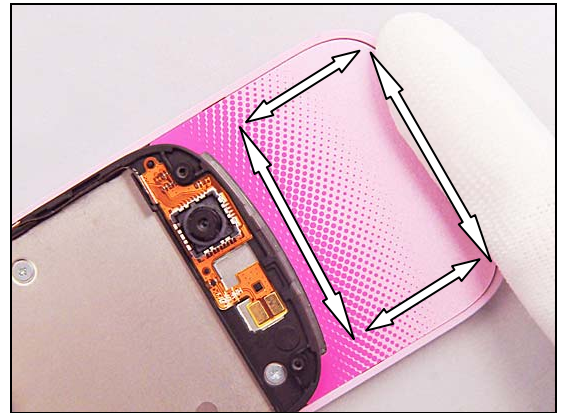
## Reassembly

### 5.5 Decoration Sheet

Place a new Decoration Sheet in its proper position by using the flex film assembly tool.

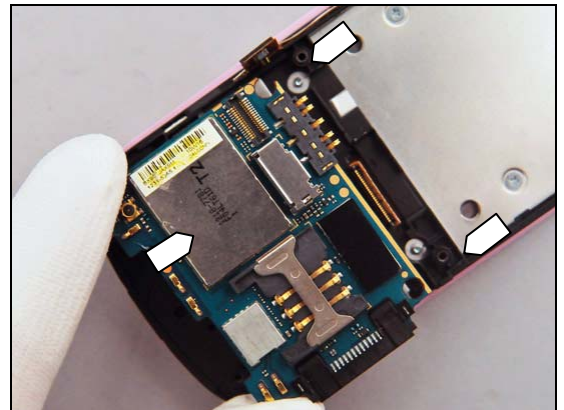


Press around to make sure it is securely attached.

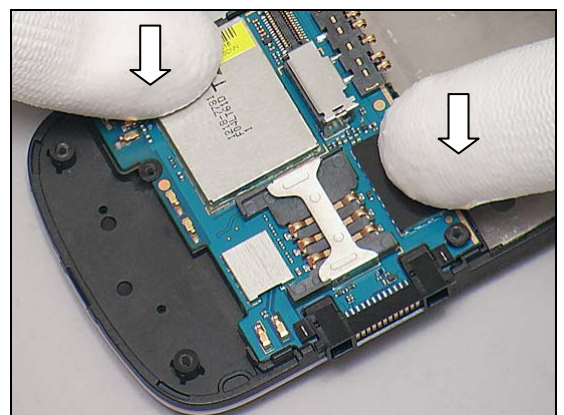


### 5.6 Main PBA

Place the Main PBA on top of the Lower Front Cover in alignment with the three guiding poles.

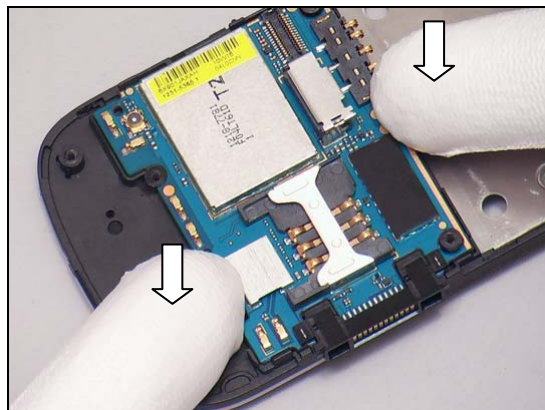


Press to snap the two BtB connectors securely under the Main PBA.



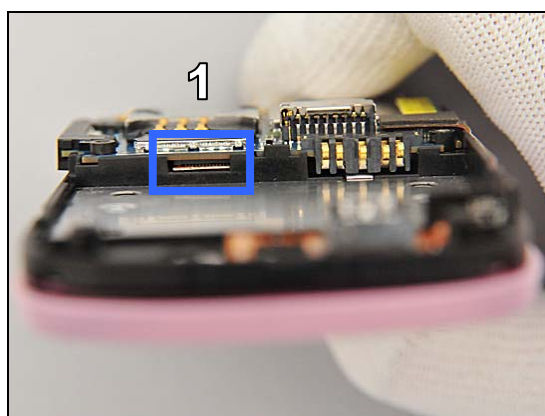
## Reassembly

Press to snap the hooks.



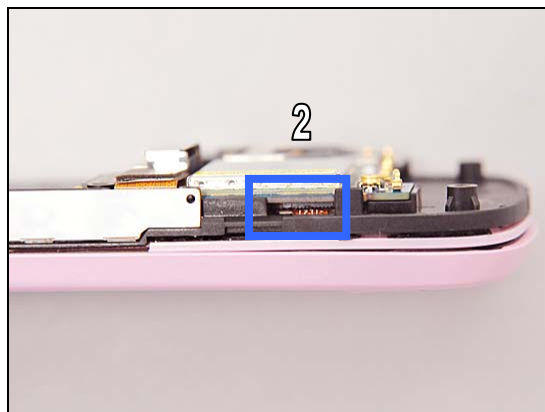
Make sure the BtB connector (1) is connected properly as shown.

***If the the metal connecting pins can be seen, the connector is not properly installed.***

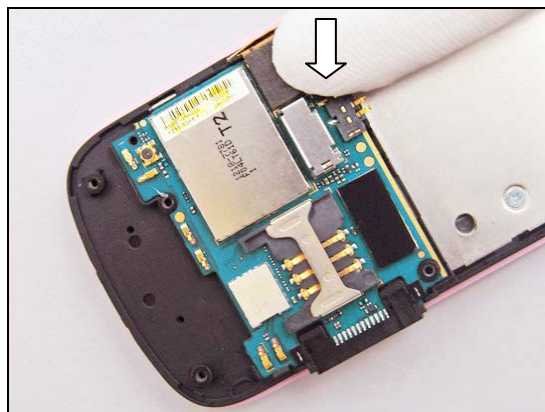


Make sure the BtB connector (2) is connected properly as shown.

***If the the metal connecting pins can be seen, the connector is not properly installed.***



Press to snap the BtB connector of the Main Camera/Side Key/Vib FPC.

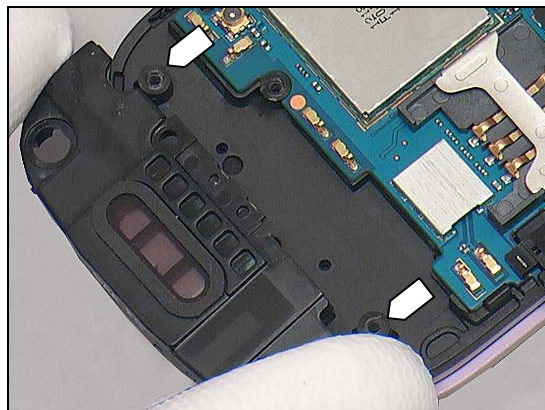




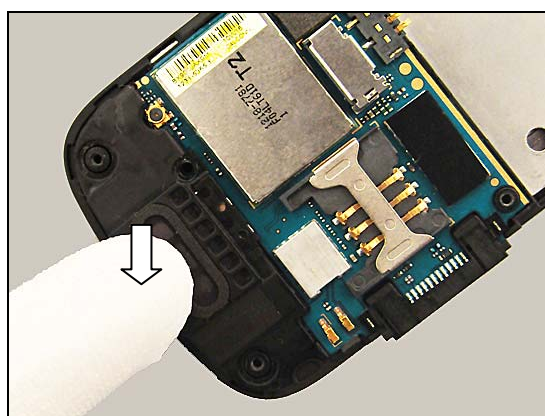
## Reassembly

### 5.7 Main antenna/Speaker box

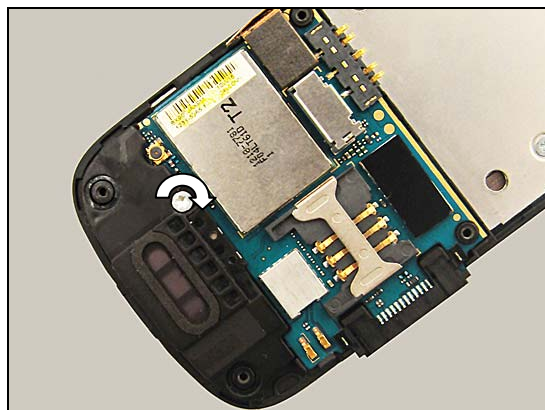
Place the Main antenna/Speaker box in its proper position in the alignment of the two guiding poles.



Press to make sure it is securely attached.



Apply 12 Ncm torque when tightening the screw by using the T6.



### 5.8 Lower Rear Cover Assy

Align the system connector with its corresponding hole in the Lower Rear Cover Assy.



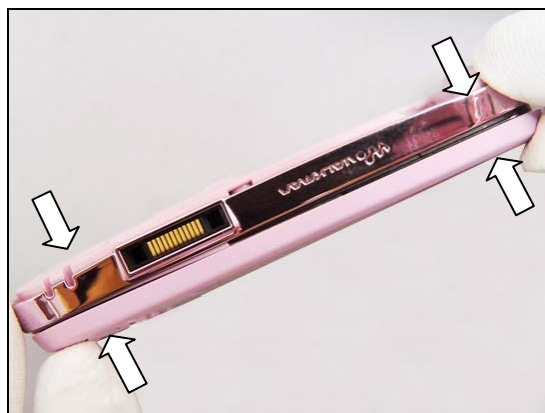


## Reassembly

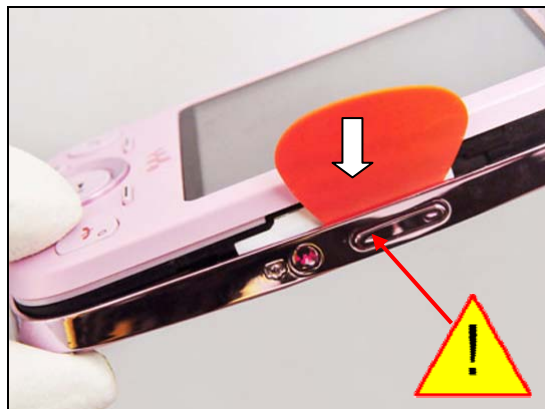
Install the Lower Rear Cover Assy in the alignment of the the system connector.



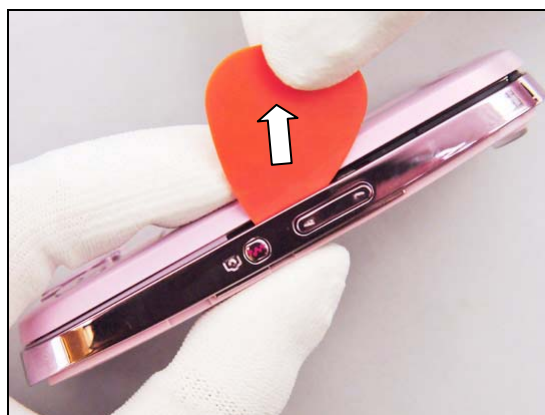
Press to snap this side.



Insert a guitar pick to protect the Side Key and the Main camera/side key/vib FPC.



Remove the guitar pick while pressing the Lower Rear Cover.



## Reassembly

Press to snap this side.



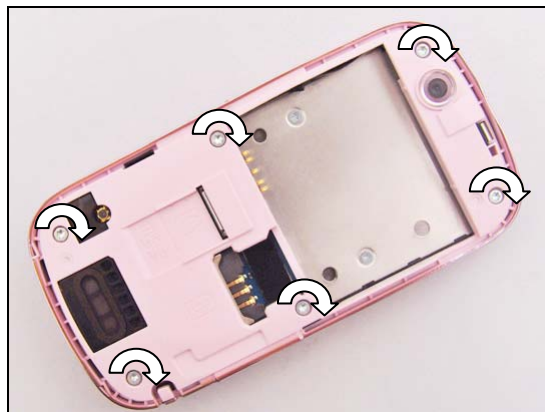
Press to snap the hooks on the top side.



Press to snap the hooks on the bottom side.



Apply 22 Ncm torque when tightening the six screws by T6.

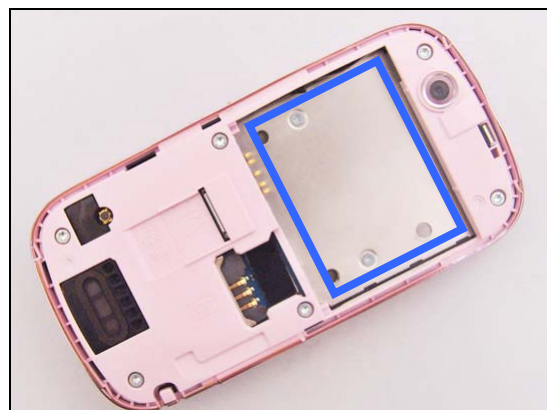


## Reassembly

### 5.9 Core Unit Label

Check that the proper label format is loaded in the Zebra printer and write a new Label by using the 'LabelMake' software.

Place a new Core Unit Label in place.



Press around the surface to make Label is securely attached.

**One label only is allowed!**



### 5.10 Battery & Battery Cover

Install the Battery in its position.



Place the Battery Cover as shown.



## Reassembly

Press to snap this side.



Press to snap the opposite side.



Press to snap the top side.



Press to snap the bottom side.







## 6 Revision History

Rev.	Date	Changes / Comments
1	2010-June-28	Initial release
2	2010-08-18	Add board Swap chapter
3	2010-08-31	Add more comments to clean main camera module on page32.
4	2010-09-16	Add Insulation protection film(1245-0490) on Hinge metal slider before its replacement on page25 in chapter 4.
5	2010-11-08	Add scrap information for parts which can't be reused.
6	2010-11-12	Updated about scrap informations.