



Working Instructions

- mechanical -



Cedar
J108i, J108a



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



1 Exterior Views

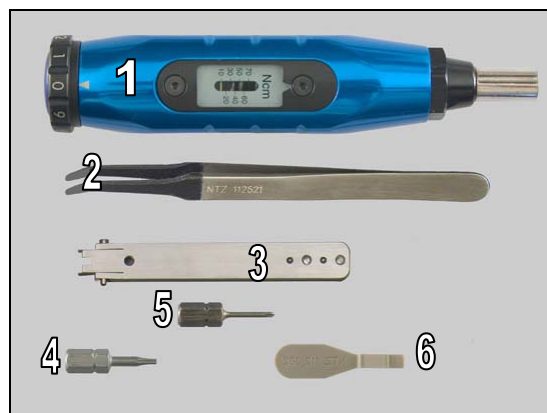
1.1 J108i, J108a



2 Tools

SPECIAL TOOLS

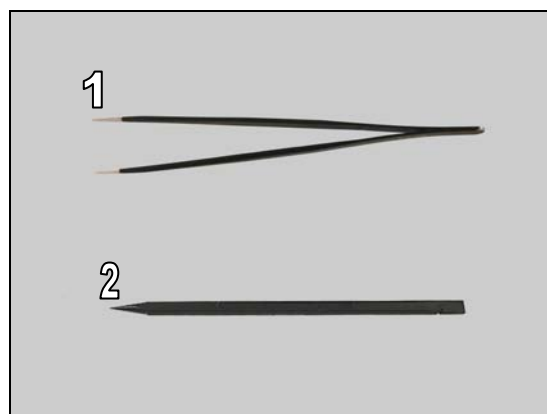
1. Screwdriver
2. Flex Film Assembly Tool
3. Camera Removal Tool
4. Bits(T6)
5. Bits(JCIS No.0)
6. Front Opening Tool



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

STANDARD TOOLS

1. Tweezers
2. Nylon Pointer

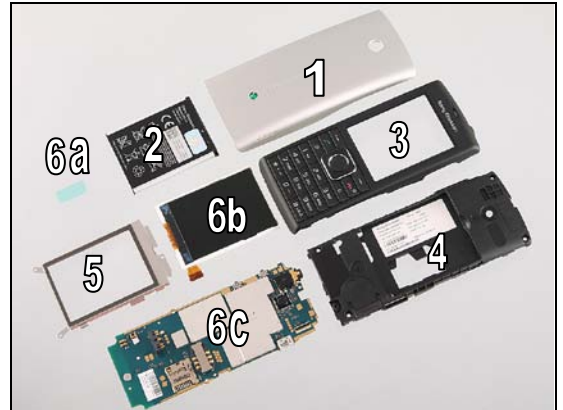




3 Disassembly

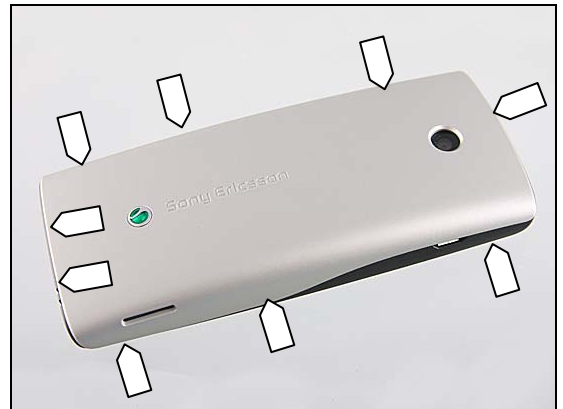
The disassembly is done in the following order:

1. Battery Cover
2. Battery
3. Front Cover Assy
4. Frame Assy
5. LCD Metal Assy
6. LCD Connector Protective Foil (a), Display (b) & PBA (c)



3.1 Battery Cover

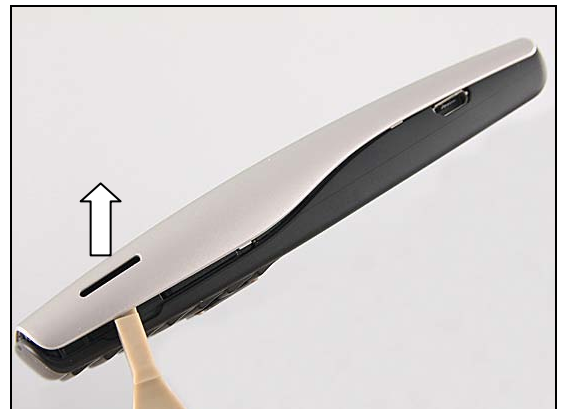
There are nine hooks securing the Battery Cover.



Release the bottom hooks of this side on the Battery Cover by using a Front Opening Tool.



Release the hooks from the opposite side.



Disassembly

Lift it off to remove the Battery Cover.

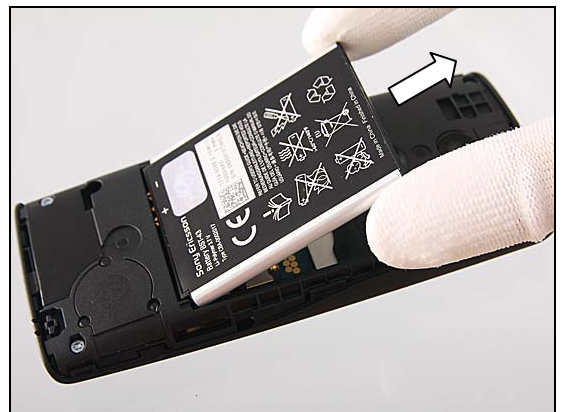


3.2 Battery

Raise the bottom of the Battery to release it with finger.



Remove the Battery.



3.3 Front Cover Assy

Remove the four screws with T6 bits.



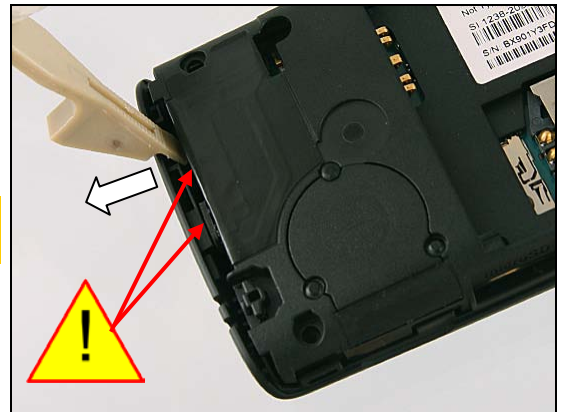
Disassembly

There are seven hooks securing the Front Cover Assy.



Release the bottom hooks as shown in the picture.

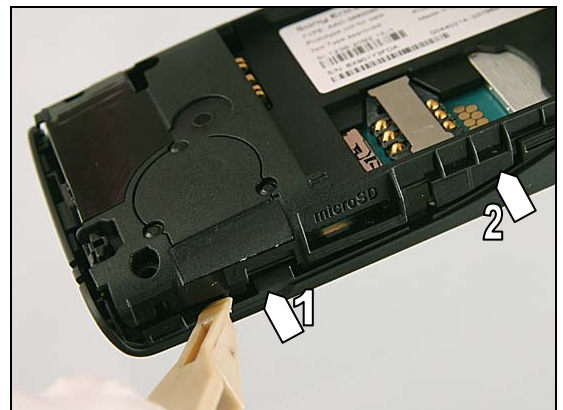
Be careful do not damage the Microphone Gasket and the black foil!



Release the two hooks from this side as shown.

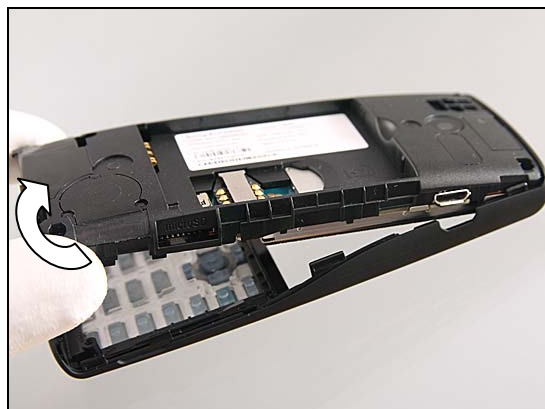


Release the two hooks from the opposite side as shown.



Disassembly

Lift the Front Cover Assy up from the bottom side at 60° approximately.



Pull to release the Audio Jack from the cavity carefully.

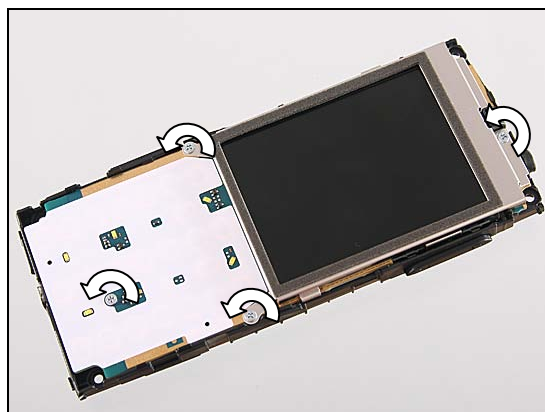


Separate the Front Cover Assy and the Core Unit.



3.4 Frame Assy

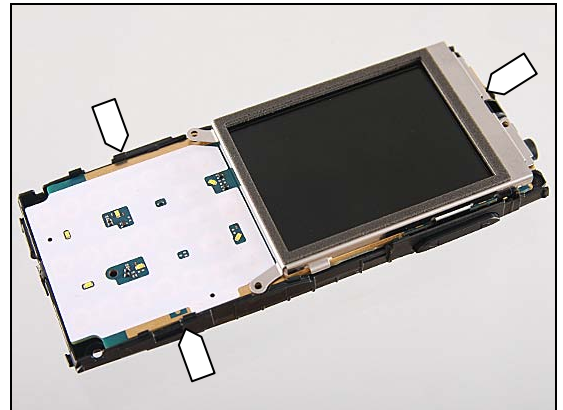
Remove the four screws with JCIS No.0.



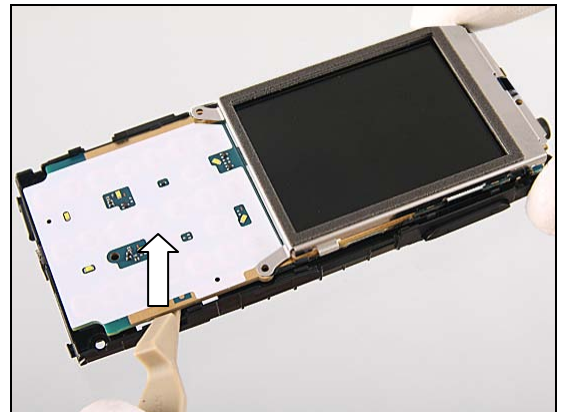


Disassembly

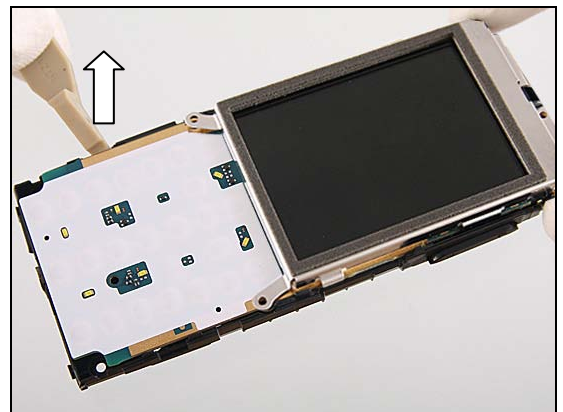
There are three hooks securing the PBA Assembly.



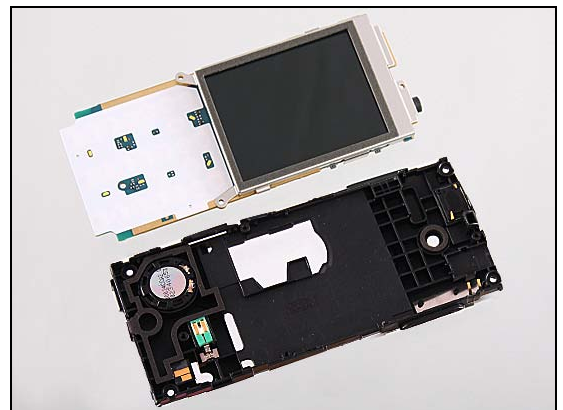
Release the Frame Assy from this side by using a Front Opening Tool as shown.



Release the Frame Assy from the opposite side.



Separate the Frame Assy and the PBA Assembly.

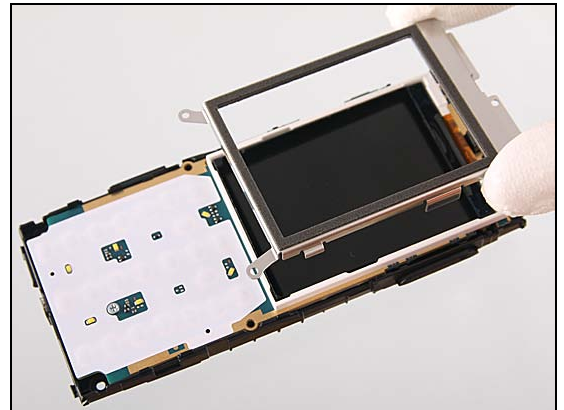




Disassembly

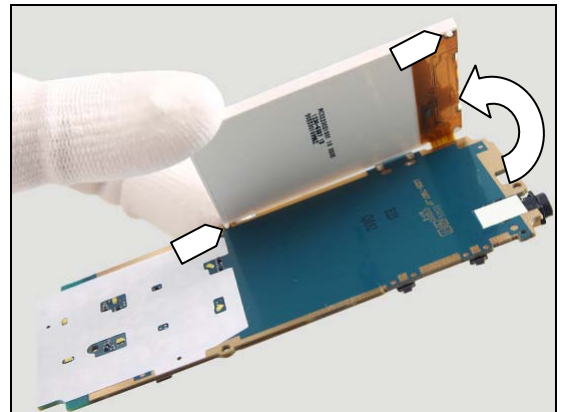
3.5 LCD Metal Assy

Lift up to remove the LCD Metal Assy with fingers.

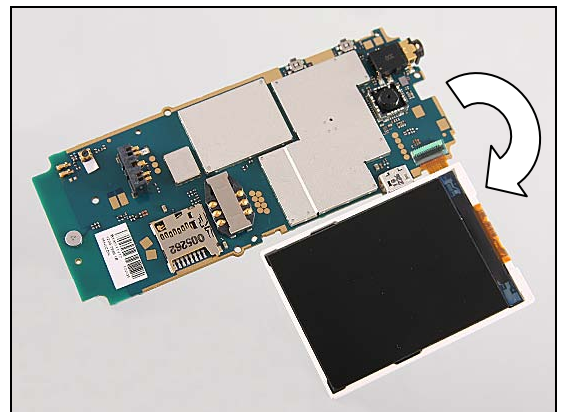


3.6 LCD Connector Protective Foil, Display & PBA

Turn from this side to release the two guiding poles.

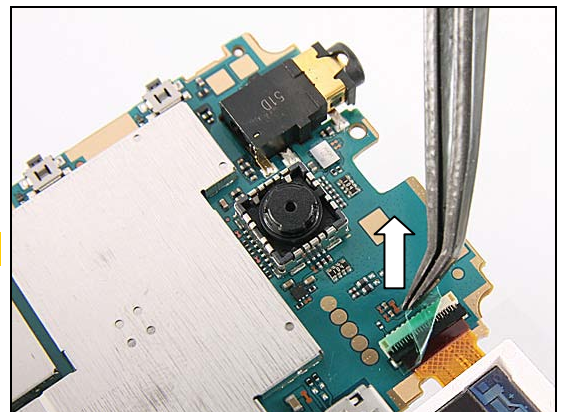


Rotate the Display to a horizontal level with the PBA as the picture shown.



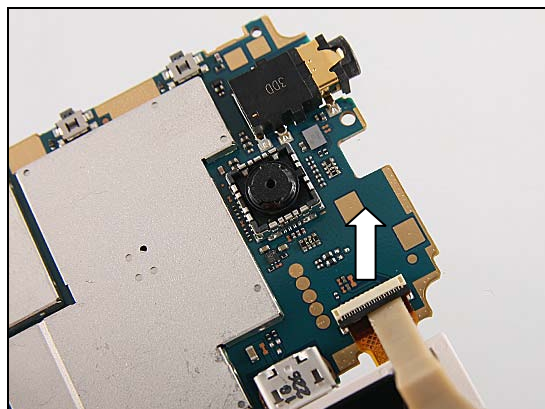
Remove the LCD Connector Protective Foil by using a Flex Film Assembly Tool.

Scrap! Not to be reused!

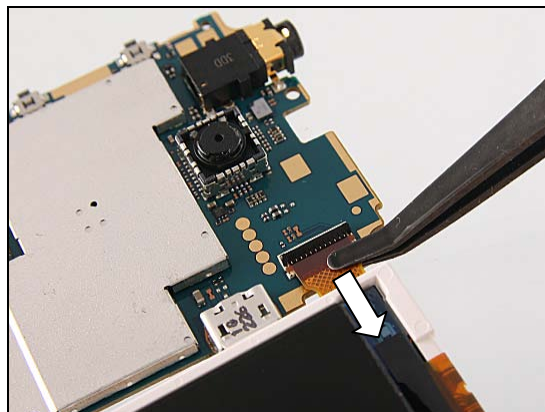


Disassembly

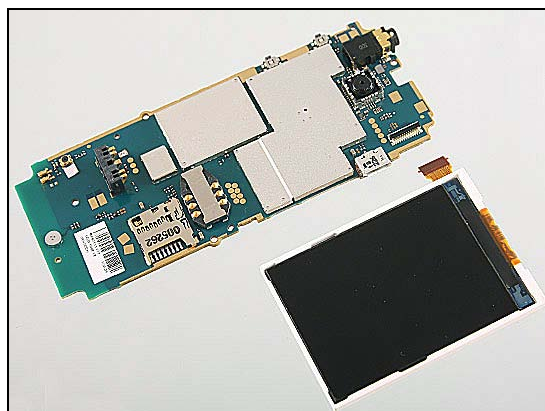
Unlock the ZIF connector by using a Front Opening Tool.



Release the flex part from the ZIF connector with a Flex Film Assembly Tool.



Separate the PBA Assembly and the Display.



4 Replacement

4.1 Battery Cover Assy

Follow the 3.1 Disassembly instructions!

Prepare the new Battery Cover Assy.

Follow the 5.6 Reassembly instructions!

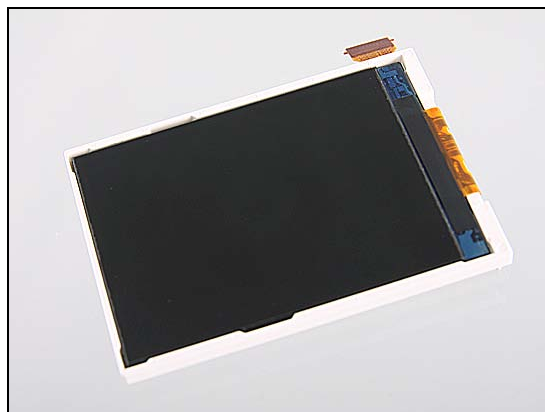


4.2 Display

Follow the 3.1 – 3.6 Disassembly instructions!

Prepare the new Display.

Follow the 5.1 – 5.6 Reassembly instructions!





Replacement

4.3 Audio Jack Spacer

Not apply for NAM variant!

Follow the 3.1 – 3.6 Disassembly instructions!
Carry out the replacement as described below.
Follow the 5.1 – 5.6 Reassembly instructions!

REMOVAL

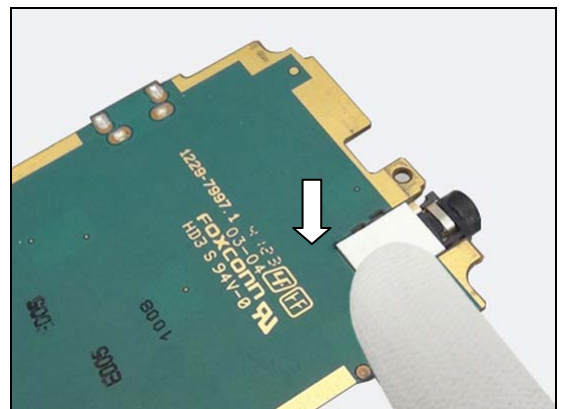
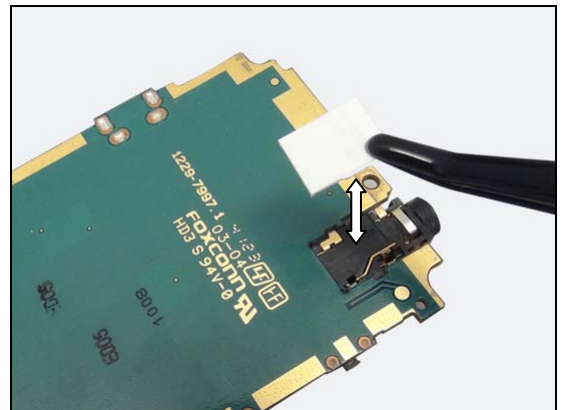
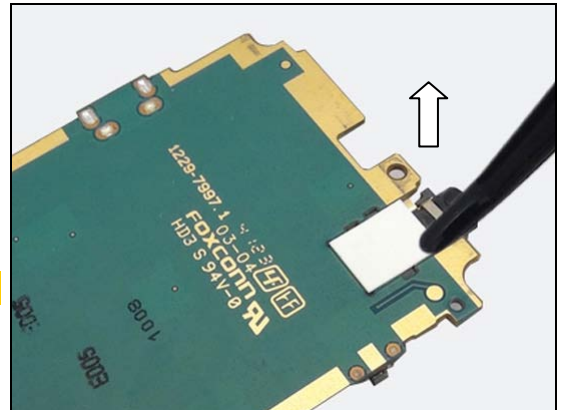
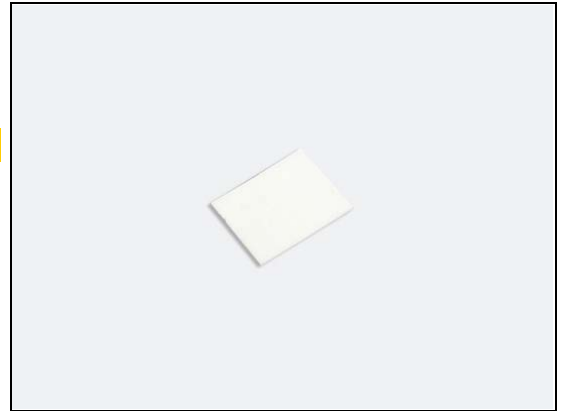
Remove the Audio Jack Spacer from the corner with a Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Place a new Audio Jack Spacer.

Press to secure its attachment.



Replacement

4.4 Camera 2 MPixel CMOS

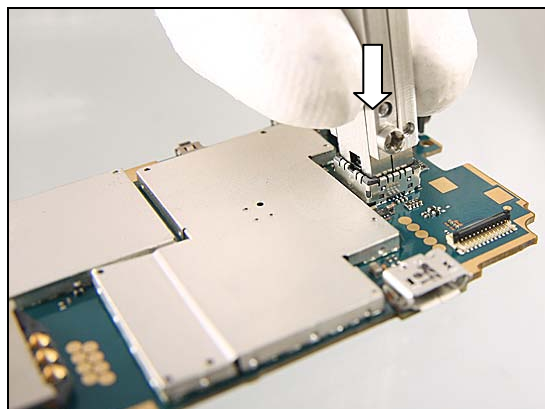
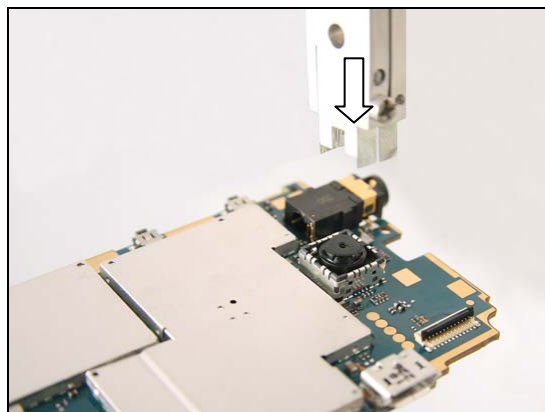
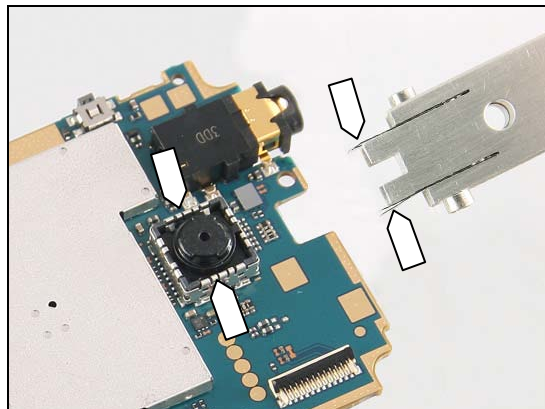
Follow the 3.1 – 3.6 Disassembly instructions!
 Carry out the replacement as described below.
Follow the 5.1 – 5.6 Reassembly instructions!

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.

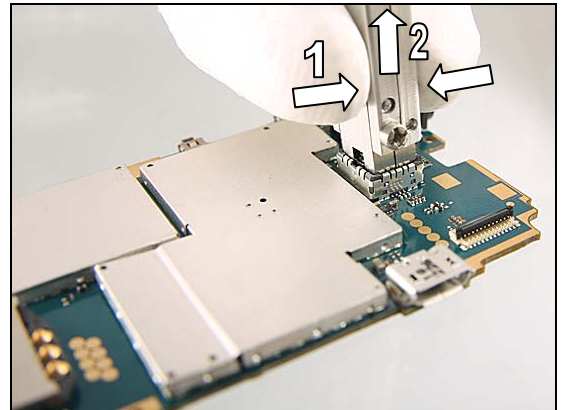
Push the Camera Removal Tool downwards to release the camera from its socket.



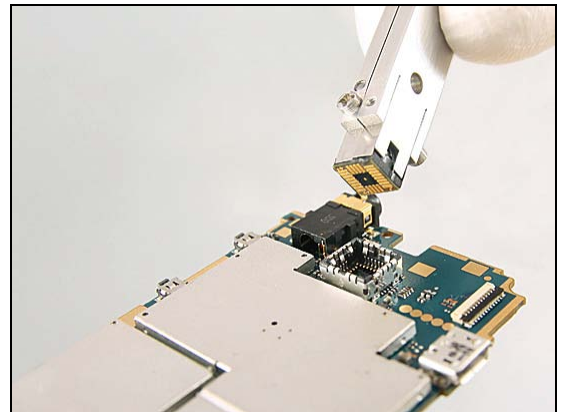


Replacement: Camera 2 MPixel CMOS

Grip (1) the Camera Removal Tool and lift (2) straight up to release the Main Camera from the socket.

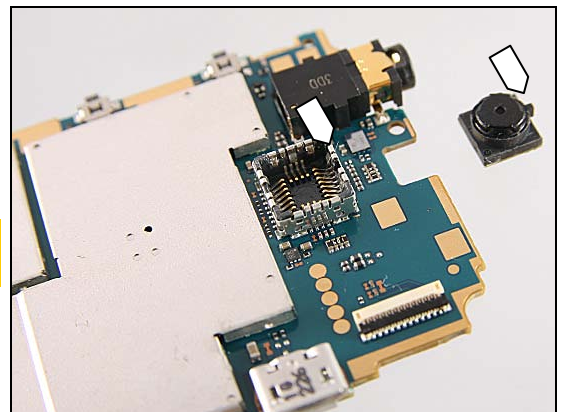


Lift it up to remove the Camera.

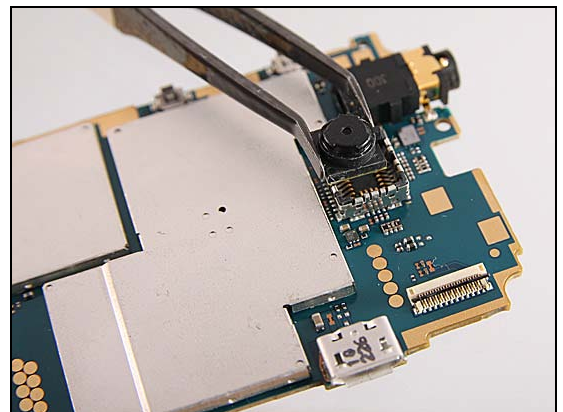


INSTALLATION

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



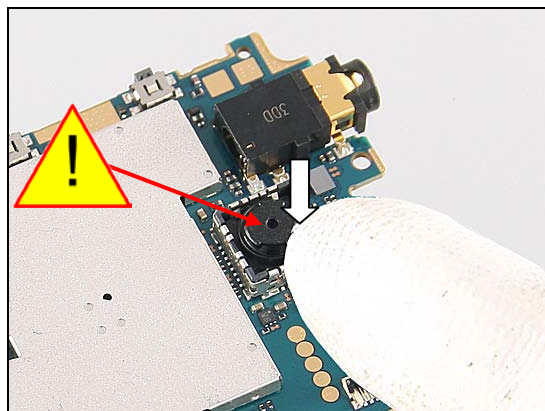
Place the Camera inside and in level with the socket.



Replacement: Camera 2 MPixel CMOS

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

Do not touch the camera lens!



Replacement

4.5 Camera Gasket

Follow the 3.1 – 3.4 Disassembly instructions!
 Carry out the replacement as described below.
Follow the 5.3 – 5.6 Reassembly instructions!

REMOVAL

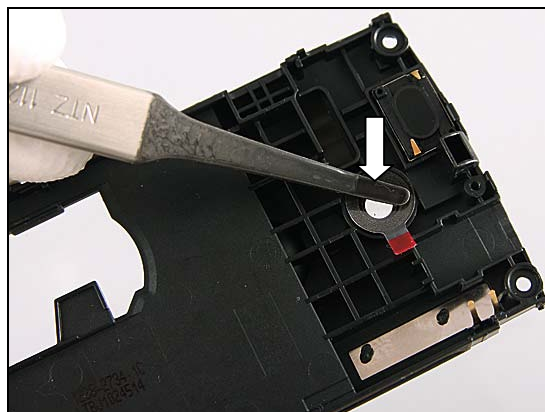
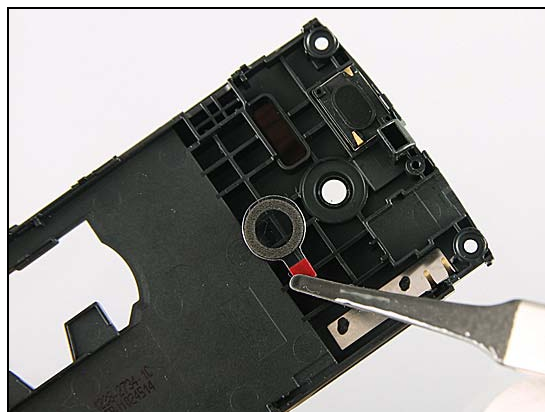
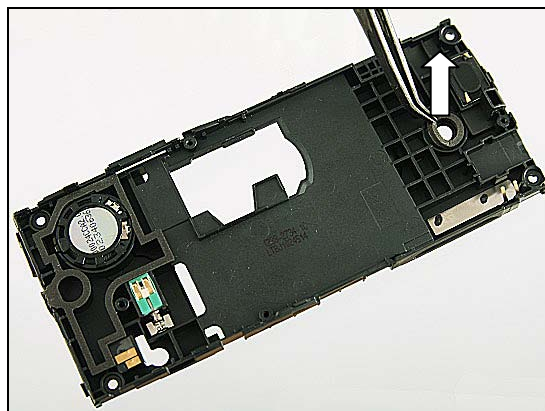
Remove the Camera Gasket with a Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

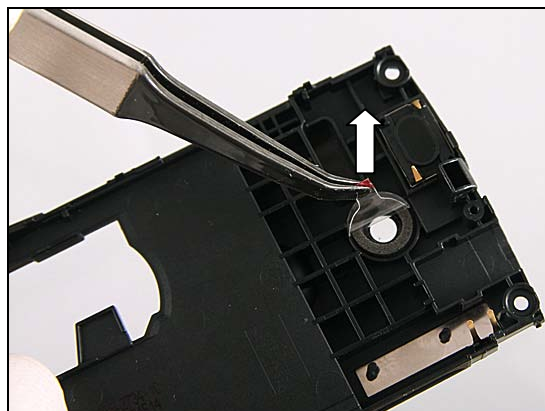
Put a new Camera Gasket into the cavity as shown.

Press around to make sure it is securely attached.



Replacement: Camera Gasket

Remove the protection film.





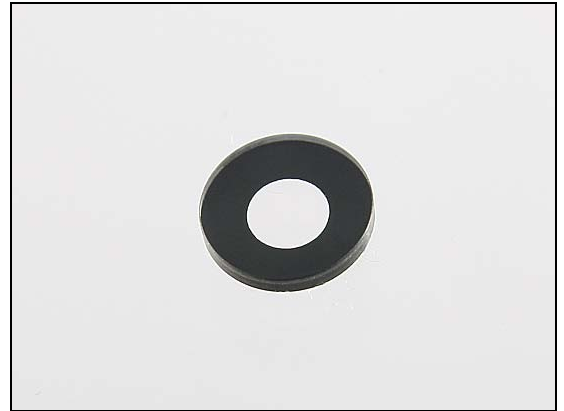
Replacement

4.6 Camera Lens

Follow the 3.1 – 3.4 Disassembly instructions!
Carry out the replacement as described below.
Follow the 5.3 – 5.6 Reassembly instructions!

REMOVAL

Push from the back side to release the Camera Window by using a Nylon Pointer.



INSTALLATION

Place the Camera Window as shown.



Press with finger to make sure it is securely attached.





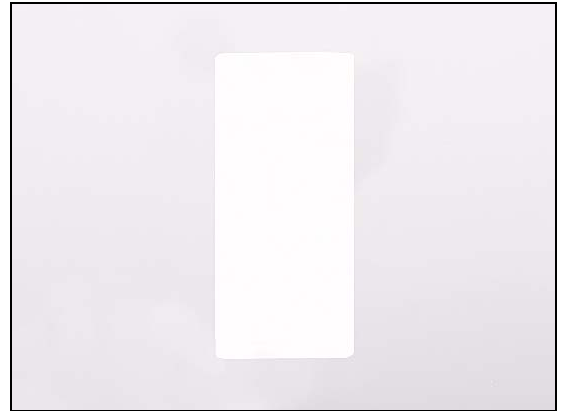
Replacement

4.7 Core Unit Label

Follow the 3.1 – 3.2 Disassembly instructions!
Carry out the replacement as described below.
Follow the 5.5 – 5.6 Reassembly instructions!

REMOVAL

Read the old Core Unit Label and enter the information into the 'LabelMake' program before removal.
Carefully remove the Core Unit Label with a Flex Film Assembly Tool.



INSTALLATION

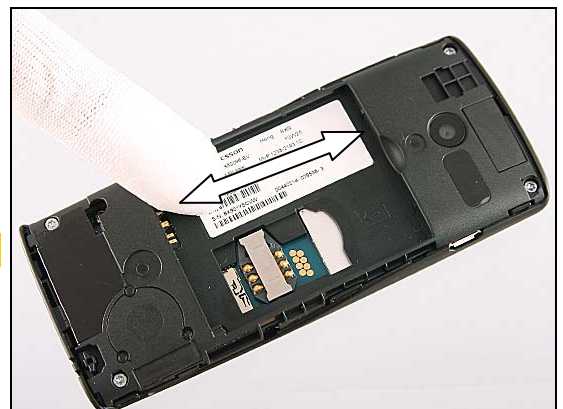
Check that the proper label format is loaded in the Zebra printer and write a new Label by using the 'LabelMake' software.

The Label has to be positioned inside the frame as indicated by the pointers.



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

One label only is allowed!





Replacement

4.8 Dome Sheet

Follow the 3.1 – 3.3 Disassembly instructions!

Follow the 4.15 Removal instructions!

Carry out the replacement as described below.

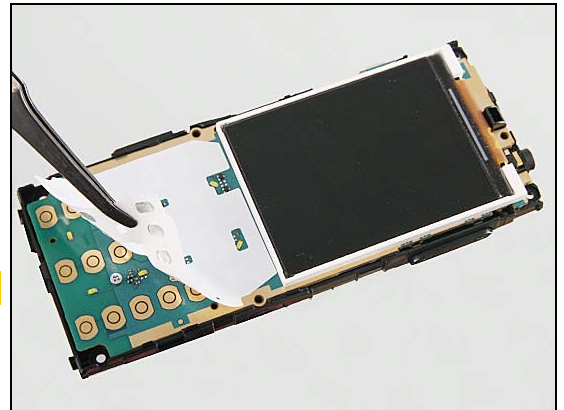
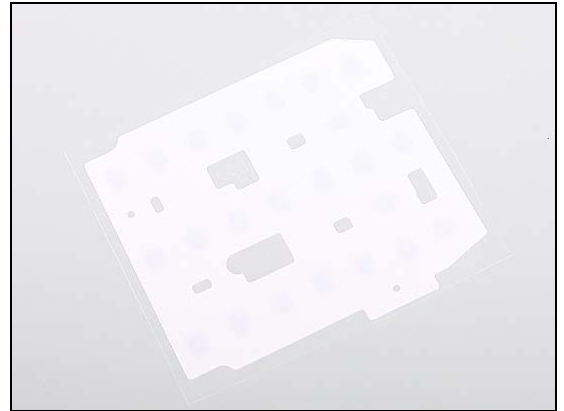
Follow the 4.15 Installation instructions!

Follow the 5.4 – 5.6 Reassembly instructions!

REMOVAL

Peel off the Dome Sheet from the corner by using a Flex Film Assembly Tool carefully.

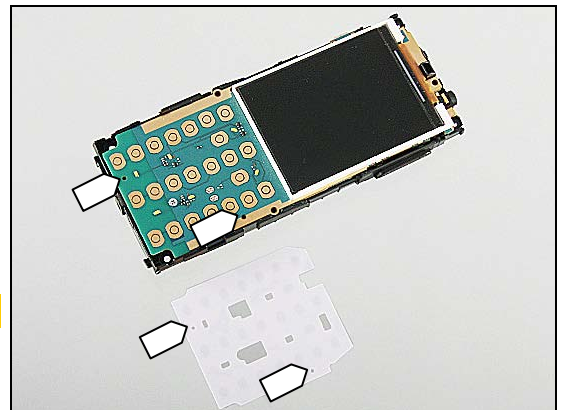
Scrap! Not to be reused!



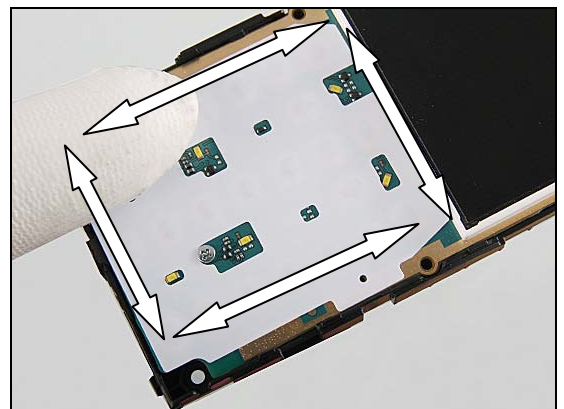
INSTALLATION

Attach the new Dome Sheet aligning with the two guiding holes as shown.

Be careful not to touch the dome area!

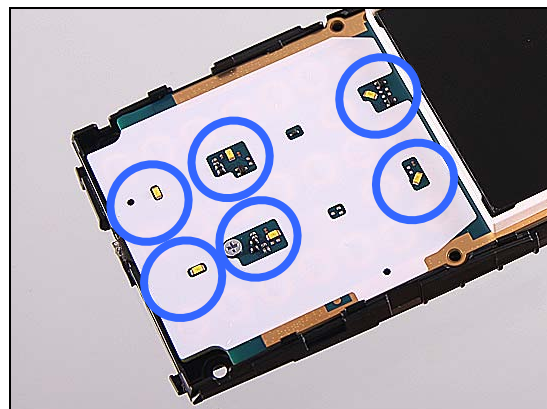


Press around to make sure it is securely attached.



Replacement: Dome Sheet

Make sure the two guiding holes are properly aligned and six LEDs can emit light through the holes as shown by the blue circle!



Replacement

4.9 Frame Assy

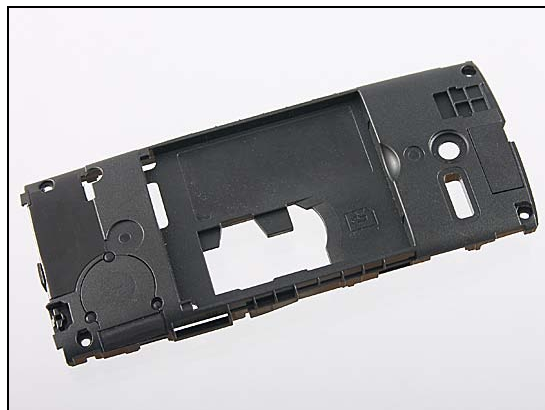
Follow the 3.1 – 3.4 Disassembly instructions!

Follow the 4.19, 4.24, 4.25 Removal instructions!

Prepare the new Frame Assy.

Follow the 4.18, 4.19, 4.24, 4.25 Installation instructions!

Follow the 5.3 – 5.6 Reassembly instructions!



Replacement

4.10 Front Cover Assy

Follow the 3.1 – 3.3 Disassembly instructions!

Follow the 4.12 Removal instructions!

Prepare the new Front Cover Assy.

Follow the 4.12 Installation instructions!

Follow the 5.4 – 5.6 Reassembly instructions!





Replacement

4.11 Keyboard

Follow the 3.1 – 3.3 Disassembly instructions!
Carry out the replacement as described below.
Follow the 5.4 – 5.6 Reassembly instructions!



REMOVAL

Push from inside to detach the Keyboard by fingers.



Lift it up to remove it.



Remove the Keypad Adhesive residue as shown.



Replacement: Keyboard

INSTALLATION

Put the new Keyboard Assembly into the cavity.



Press around to snap and attach it.





Replacement

4.12 Keypad Adhesive

Follow the 3.1 – 3.3 Disassembly instructions!
Carry out the replacement as described below.
Follow the 5.4 – 5.6 Reassembly instructions!

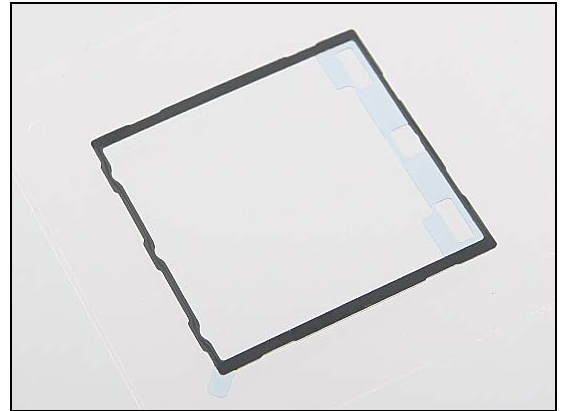
REMOVAL

Push from inside to detach the Keyboard by fingers.

Lift it up to remove it.

Remove the Keypad Adhesive residue.

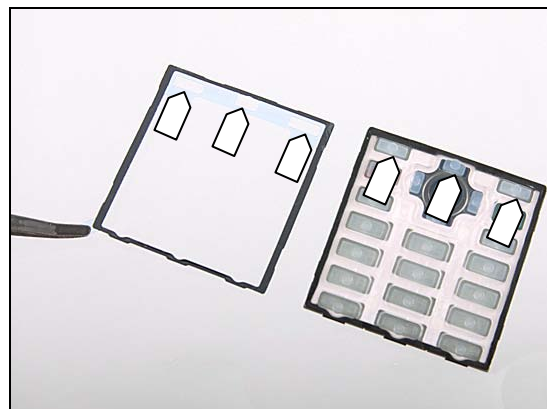
Scrap! Not to be reused!



Replacement: Keypad Adhesive

INSTALLATION

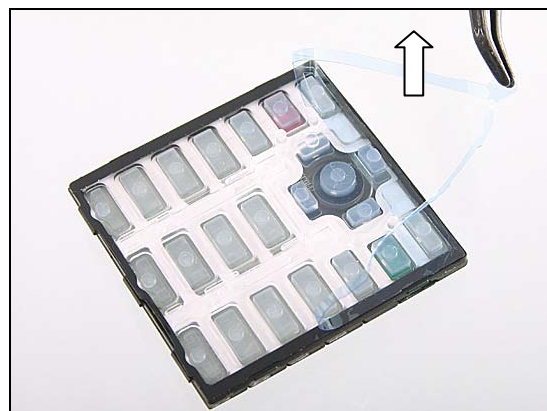
Attach the new Keypad Adhesive onto the Keyboard aligning with the guiding poles.



Press to secure its attachment.



Remove the protection film.



Put the Keyboard Assembly into the cavity.



Replacement: Keypad Adhesive

Press around to snap and attach it.



Replacement

4.13 LCD Connector Protective Foil

Follow the 3.1 – 3.4 Disassembly instructions!
 Carry out the replacement as described below.
Follow the 5.3 – 5.6 Reassembly instructions!

REMOVAL

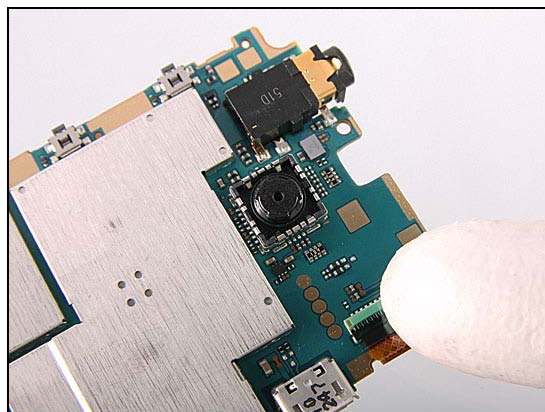
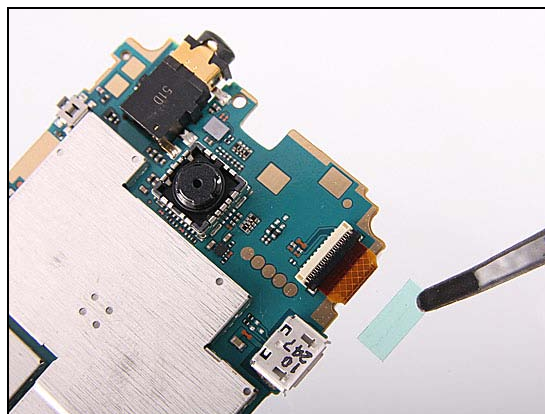
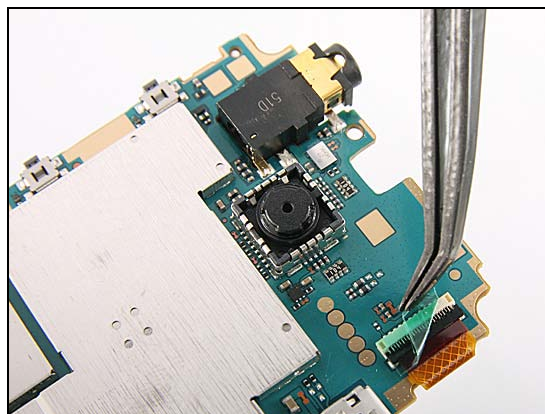
Remove the LCD Connector Protective Foil by using a Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Attach a new LCD Connector Protective Foil onto the ZIF connector.

Press with finger to secure its attachment.



Replacement

4.14 LCD Gasket

Not apply for NAM variant!

Follow the 3.1 – 3.5 Disassembly instructions!

Carry out the replacement as described below.

Follow the 5.2 – 5.6 Reassembly instructions!

REMOVAL

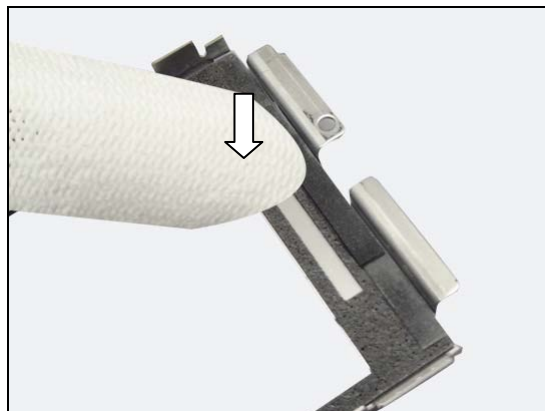
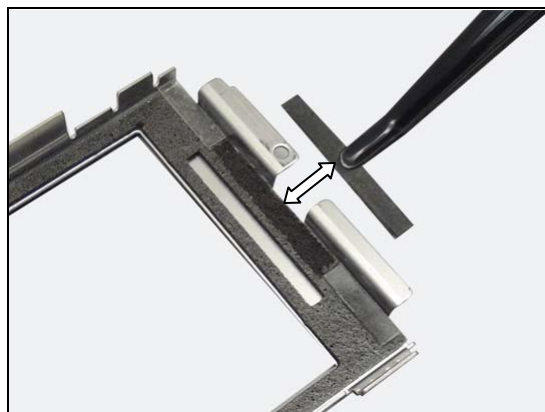
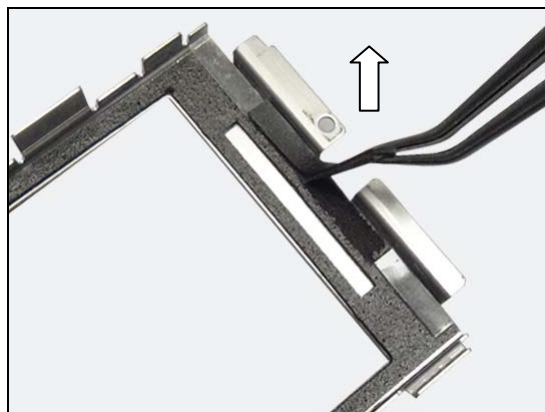
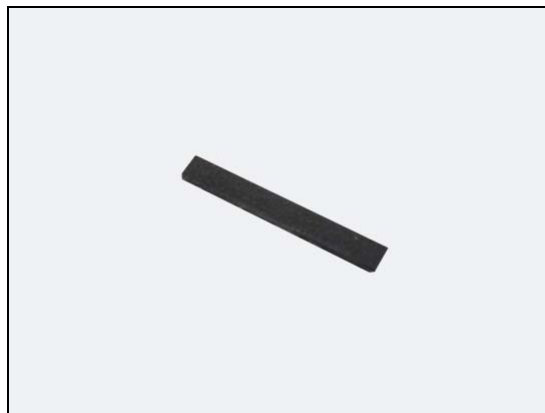
Remove the LCD Gasket with a Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Place a new LCD Gasket.

Press to secure its attachment.





Replacement

4.15 LCD Metal Assy

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new LCD Metal Assy.

Follow the 4.14, 4.16 Installation instructions!

Not apply for NAM variant!

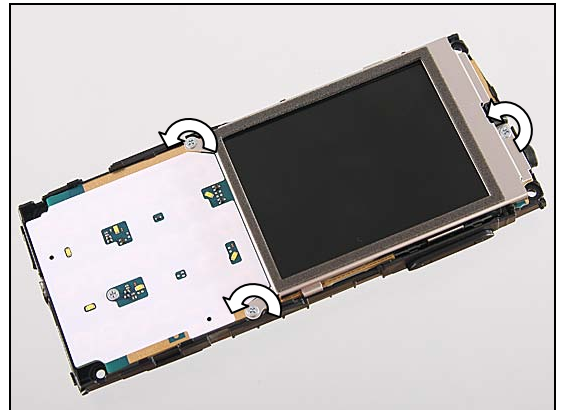
Carry out the Installation as described below.

Follow the 5.4 – 5.6 Reassembly instructions!



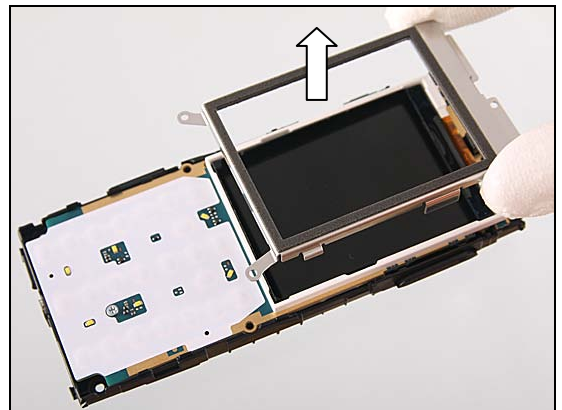
REMOVAL

Remove the three screws by JCIS No.0.



Lift up to remove the LCD Metal Assy.

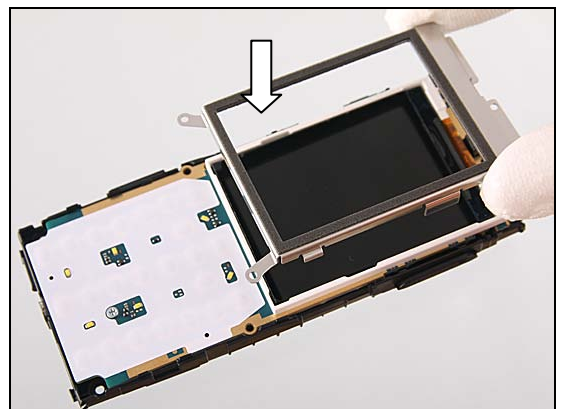
Be careful do not touch Display!



INSTALLATION

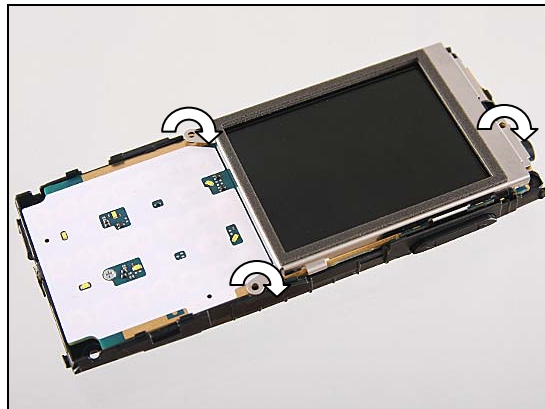
Put a new LCD Metal Assy onto the Display with correct position.

Be careful do not touch Display!



Replacement: LCD Metal Assy

Apply 10 ± 1 Ncm torque when tightening the three Screw
Len:4.0 Diam:1.4 with JCIS No.0 bit.



Replacement

4.16 LCD Spacer

Not apply for NAM variant!

Follow the 3.1 – 3.5 Disassembly instructions!
Carry out the replacement as described below.
Follow the 5.2 – 5.6 Reassembly instructions!

**There are two LCD Spacers as shown.
Do the same to the other if need!**

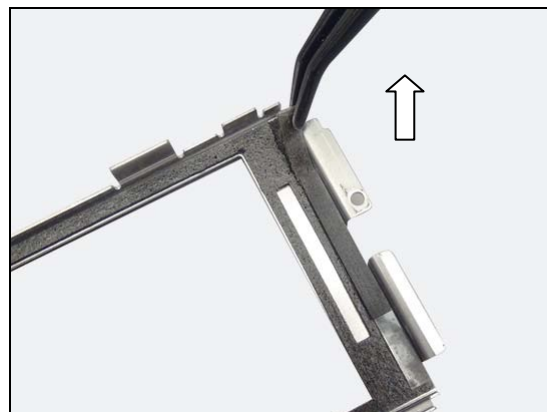
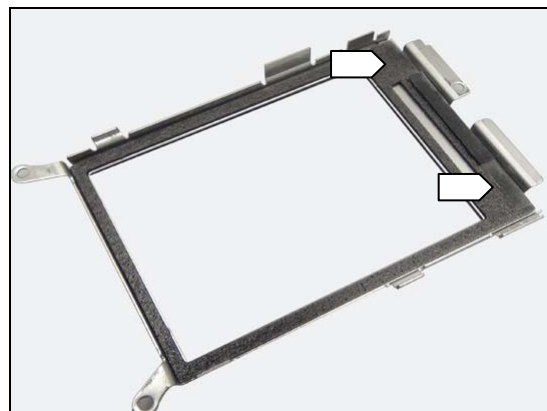
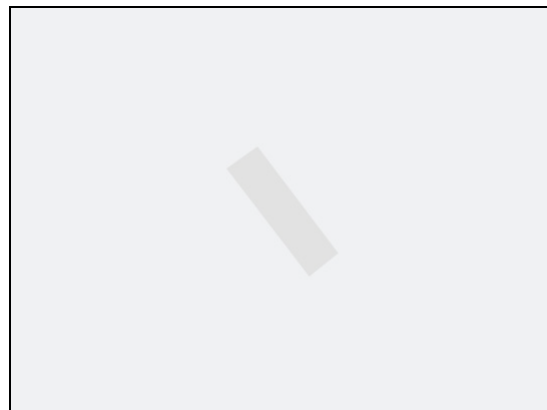
REMOVAL

Remove the LCD Spacer with a Flex Film Assembly Tool.

Scrap! Not to be reused!

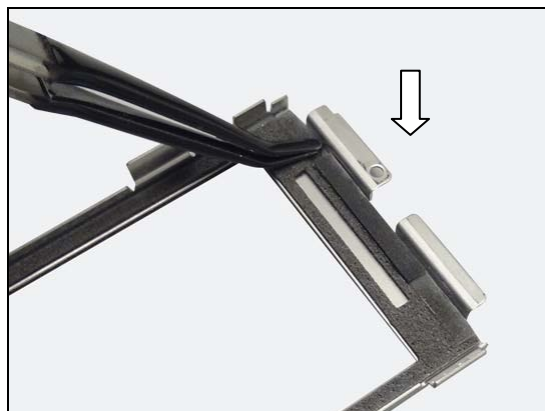
INSTALLATION

Place a new LCD Spacer.



Replacement: LCD Spacer

Press to secure its attachment.





Replacement

4.17 Microphone Gasket

Follow the 3.1 – 3.3 Disassembly instructions!
Carry out the replacement as described below.
Follow the 5.4 – 5.6 Reassembly instructions!

REMOVAL

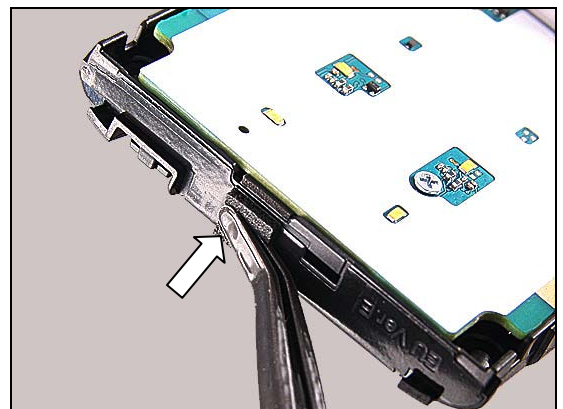
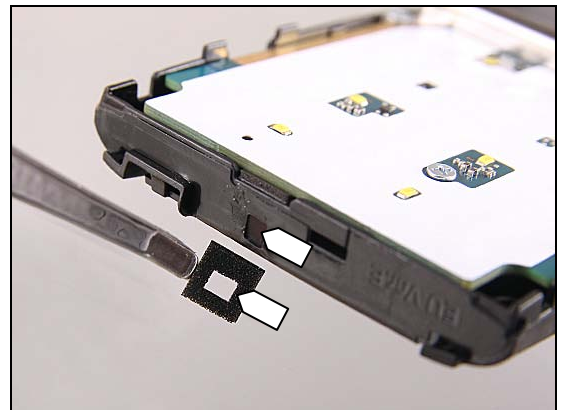
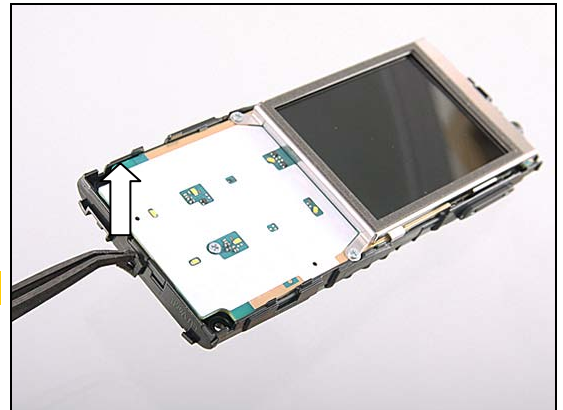
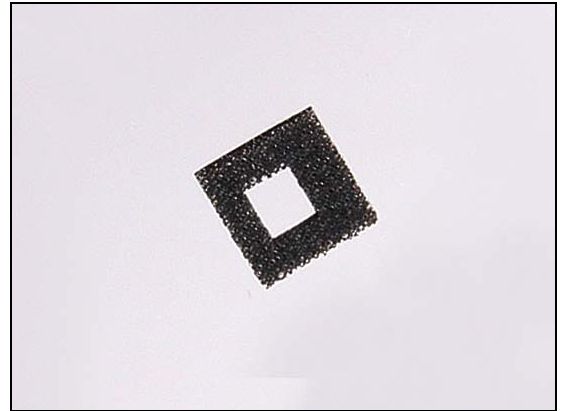
Remove the Microphone Gasket by using a Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Place a new Microphone Gasket aligning with the microphone hole.

Attach a new Microphone Gasket onto the Frame.



Replacement

4.18 Protective Foil

Follow the 3.1 – 3.2 Disassembly instructions!
 Carry out the replacement as described below.
Follow the 5.5 – 5.6 Reassembly instructions!

REMOVAL

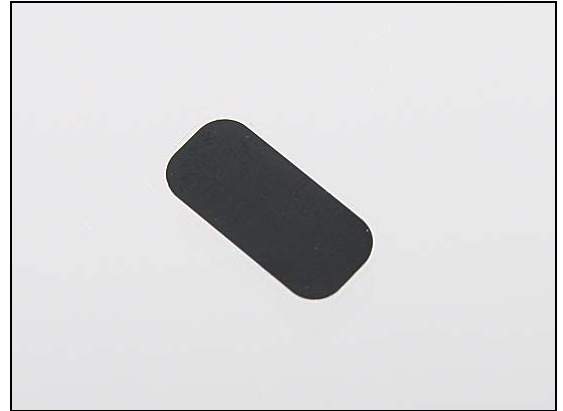
Remove the Protective Foil with a Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Attach a new Protective Foil aligning within the guiding frame cavity.

Press along to secure its attachment with finger.



Replacement

4.19 Receiver & Receiver Gasket

Follow the 3.1 – 3.4 Disassembly instructions!
 Carry out the replacement as described below.
Follow the 5.3 – 5.6 Reassembly instructions!

REMOVAL

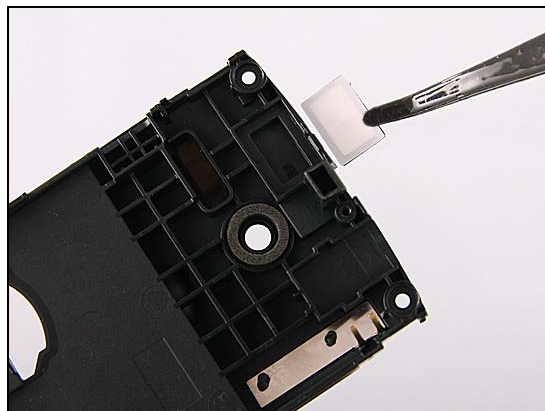
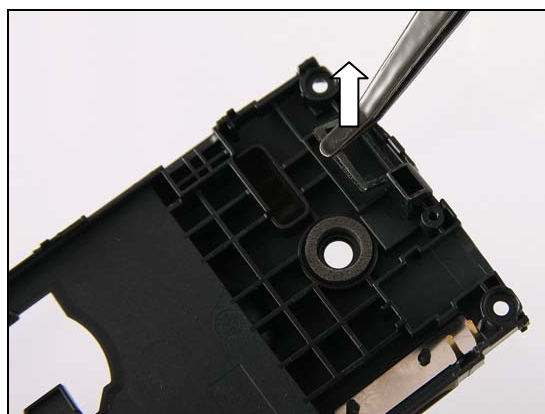
Lift up to remove the Receiver by using a Flex Film Assembly Tool as shown.

Remove the Receiver Gasket and residues until it is clean.

Scrap! Not to be reused!

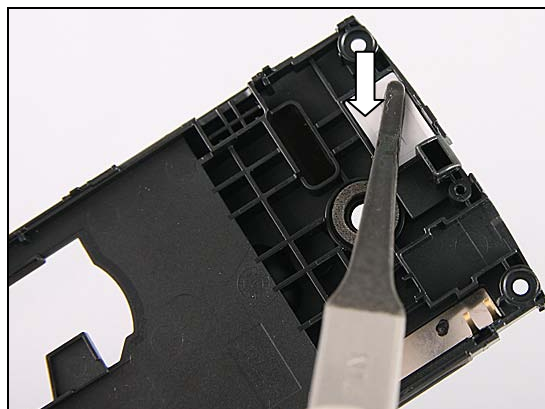
INSTALLATION

Put a new Receiver Gasket in place.

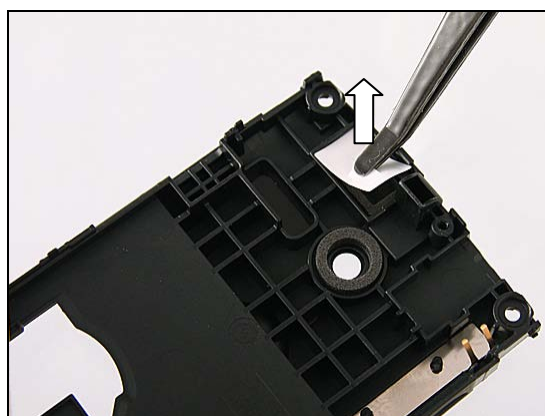


Replacement: Receiver & Receiver Gasket

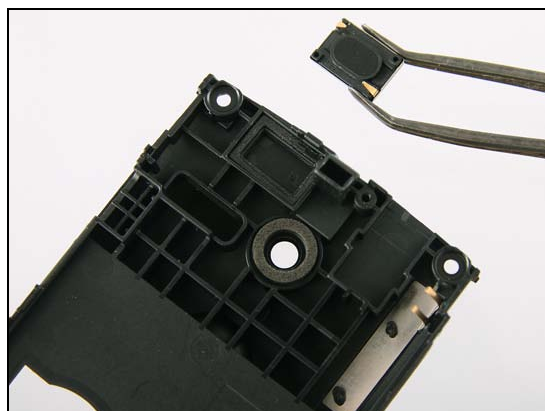
Attach and press it into the cavity.



Remove the protection film.

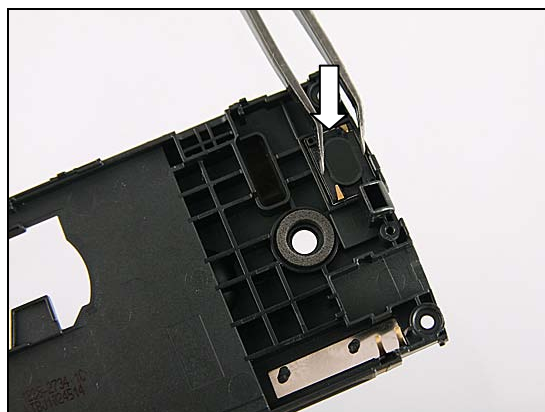


Put a new Receiver into the cavity.



Press to make sure the attachment.

Don't touch the contact pins!



Replacement

4.20 Receiver Gasket Mesh

Follow the 3.1 – 3.3 Disassembly instructions!
 Carry out the replacement as described below.
Follow the 5.4 – 5.6 Reassembly instructions!

REMOVAL

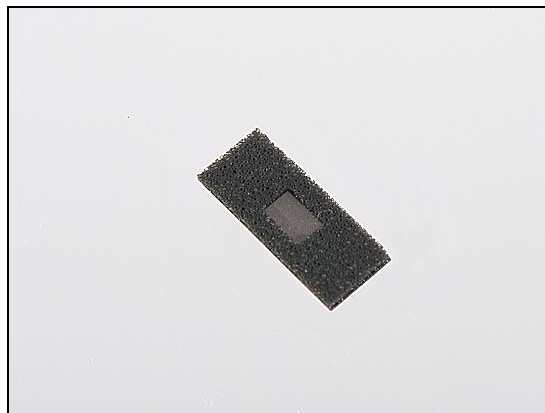
Remove the Receiver Gasket Mesh by using a Flex Film Assembly Tool as shown.

Scrap! Not to be reused!

INSTALLATION

Put a new Receiver Gasket Mesh in place.

Attach it into the cavity and press to secure its attachment.





Replacement

4.21 Shield Can Lid BB

Follow the 3.1 – 3.6 Disassembly instructions!
Carry out the replacement as described below.
Follow the 5.1 – 5.6 Reassembly instructions!

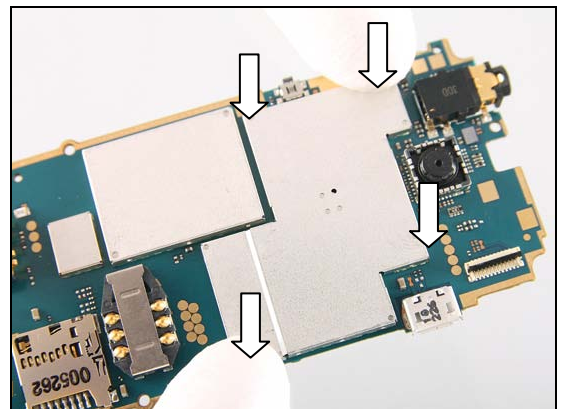
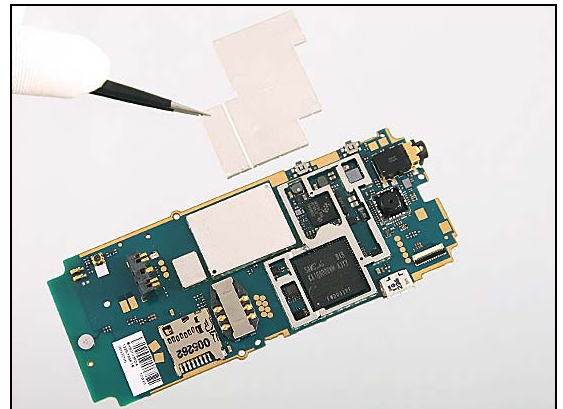
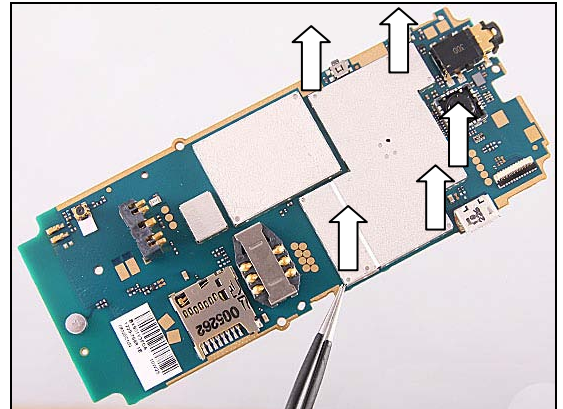
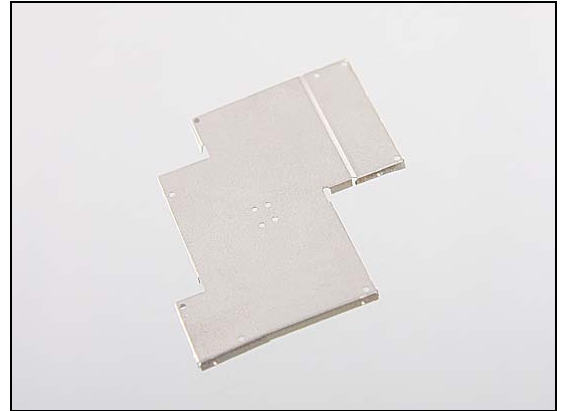
REMOVAL

Insert a pair of Tweezers in corners of the Shield Can Lid BB and pull upwards to release it.

Lift up to remove it.

INSTALLATION

Install a new Shield Can Lid BB and press with fingers to hook it securely.





Replacement

4.22 Shield Can Lid For Tiger

Follow the 3.1 – 3.6 Disassembly instructions!
Carry out the replacement as described below.
Follow the 5.1 – 5.6 Reassembly instructions!

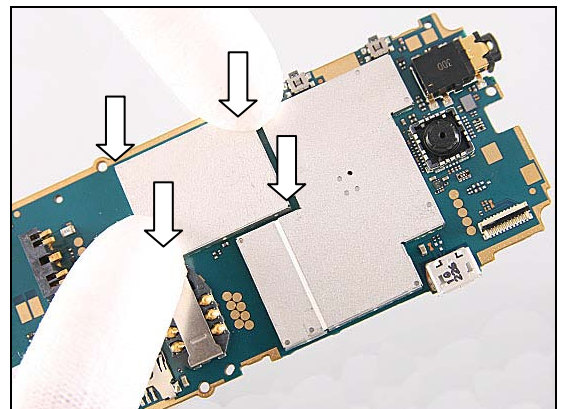
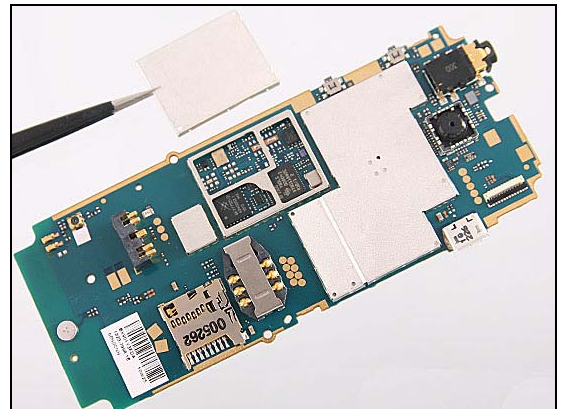
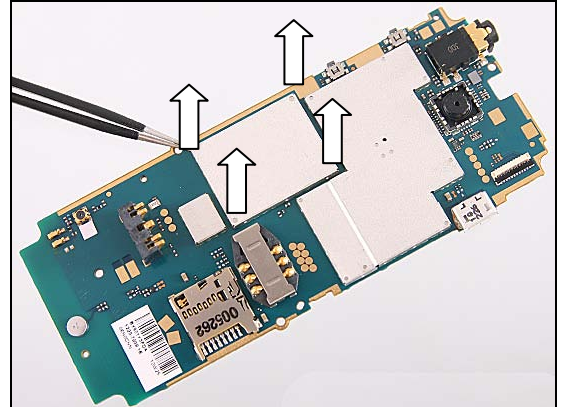
REMOVAL

Insert a pair of Tweezers in corners of the Shield Can Lid For Tiger and pull upwards to release it.

Lift it up to remove it.

INSTALLATION

Install a new Shield Can Lid For Tiger and press with fingers to hook it securely.





Replacement

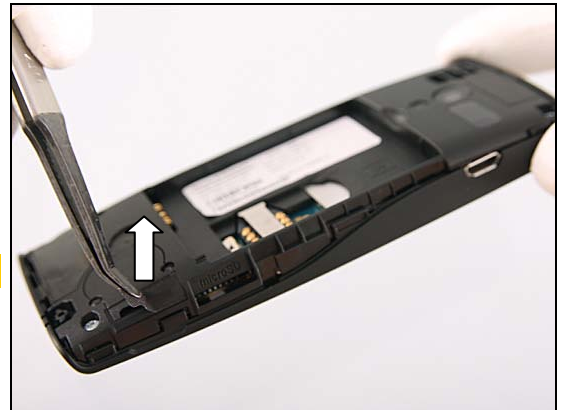
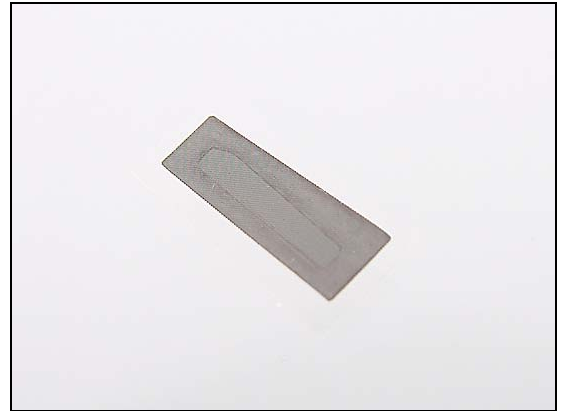
4.23 Speaker Mesh

Follow the 3.1 – 3.2 Disassembly instructions!
Carry out the replacement as described below.
Follow the 5.5 – 5.6 Reassembly instructions!

REMOVAL

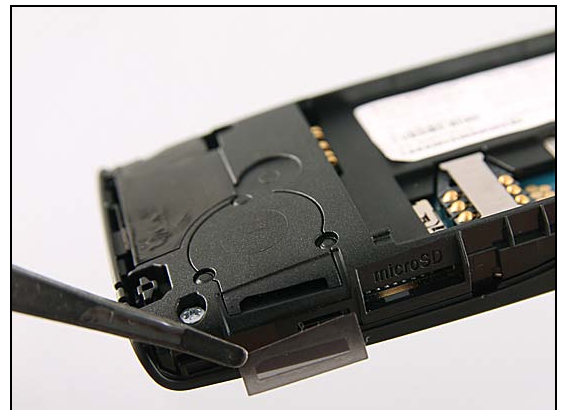
Remove the Speaker Mesh with a Flex Film Assembly Tool.

Scrap! Not to be reused!

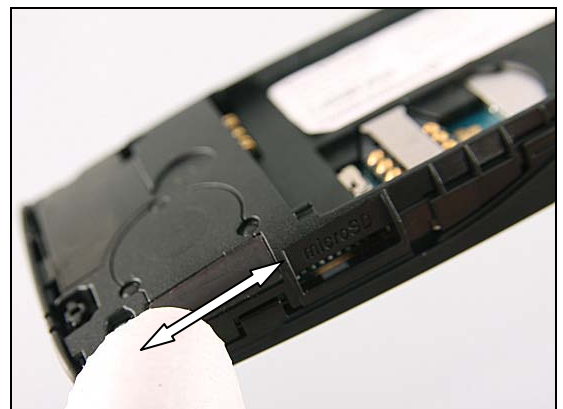


INSTALLATION

Attach a new Speaker Mesh aligning within the guiding frame cavity.



Press along to secure its attachment by finger.





Replacement

4.24 Vibrator

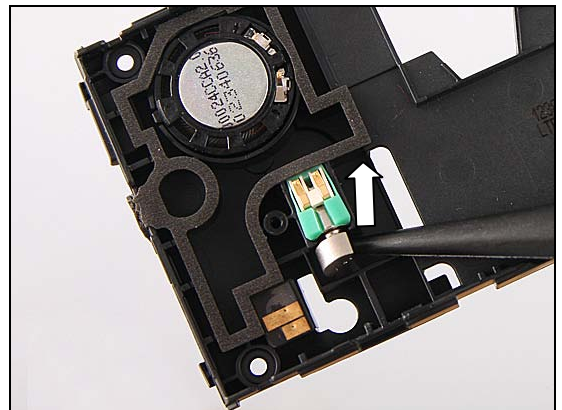
Follow the 3.1 – 3.4 Disassembly instructions!
Carry out the replacement as described below.
Follow the 5.3 – 5.6 Reassembly instructions!

REMOVAL

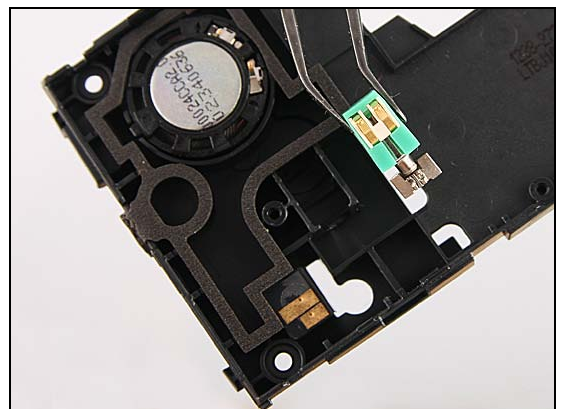
Insert the Nylon Pointer underneath the head of the Vibrator



Lift upwards to release the Vibrator.



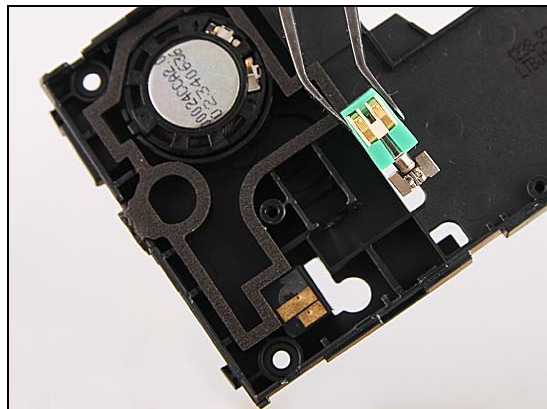
Remove the Vibrator by using a Flex Film Assembly Tool gently.



Replacement: Vibrator

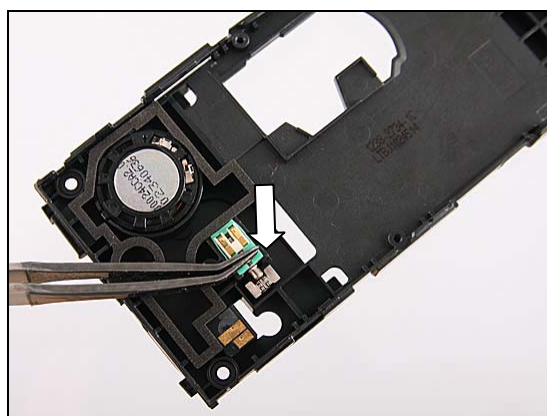
INSTALLATION

Put a new Vibrator with proper direction.



Press it into the cavity.

Do not touch the contact pins!



Replacement

4.25 Volume Key

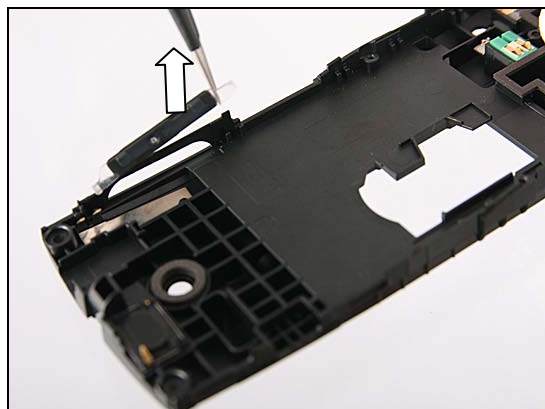
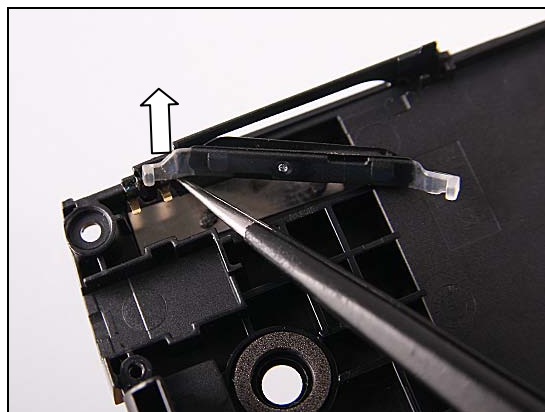
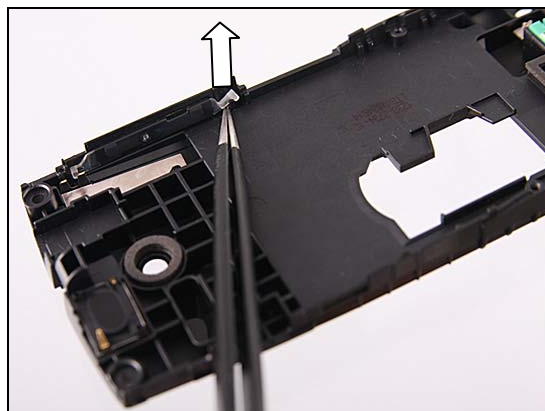
Follow the 3.1 – 3.4 Disassembly instructions!
 Carry out the replacement as described below.
Follow the 5.3 – 5.6 Reassembly instructions!

REMOVAL

Lift upwards to release this side of Volume Key from the cavity.

Do the same for the other side.

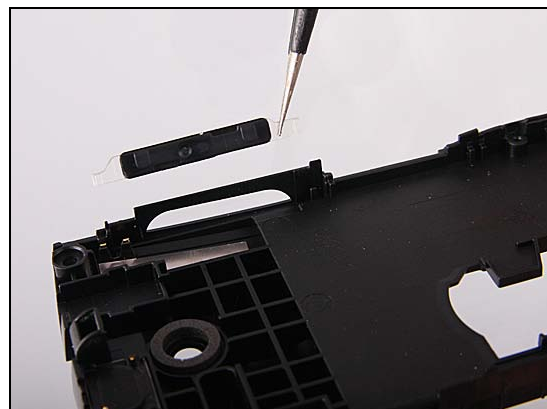
Lift up to remove the Volume Key.



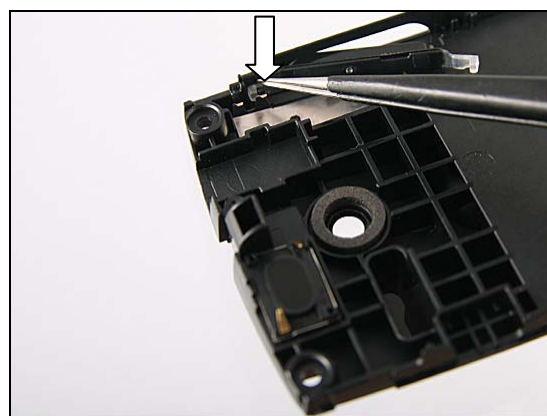
Replacement: Volume Key

INSTALLATION

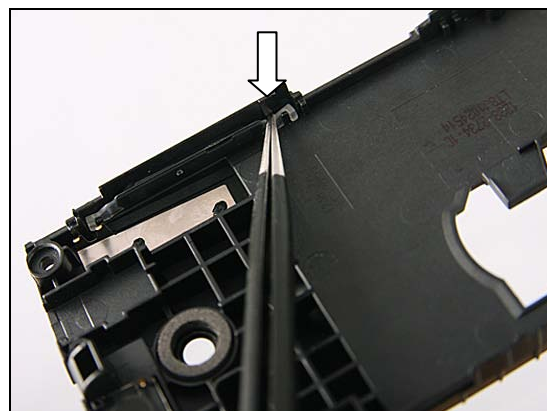
Put a new Volume Key in place.



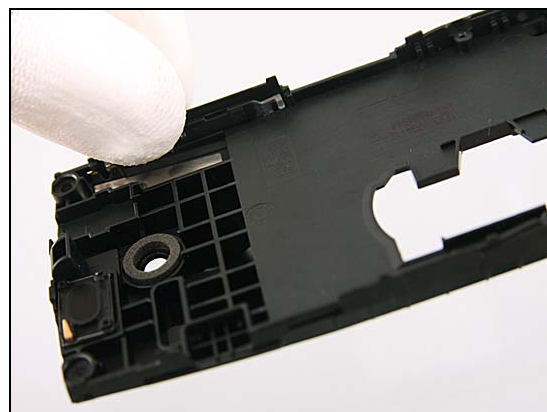
Insert the Volume Key into the cavity from this side.



Do the same for the other side.



Press along to make sure it is securely inserted.



Replacement

4.26 Water indicator

INSPECTION

To check whether the Water indicator has been activated (reddish color), just remove the Battery Cover and Battery.

If activated:

Follow the 3.1 – 3.6 Disassembly instructions!

Carry out the replacement as described below.

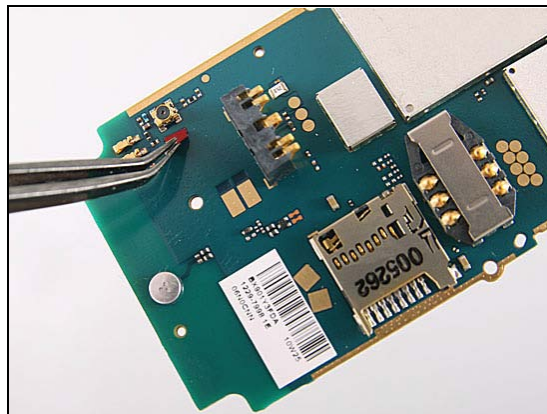
Follow the 5.1 – 5.6 Reassembly instructions!



REMOVAL

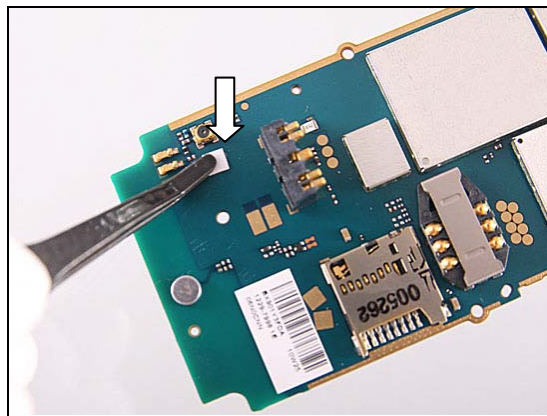
Remove the activated Water Indicator by using a Flex Film Assembly Tool.

Scrap! Not to be reused!



INSTALLATION

Attach the new Water Indicator as shown in the picture.





Replacement

4.27 Receiver Gasket Mesh

Follow the 3.1 – 3.3 Disassembly instructions!
Carry out the replacement as described below.
Follow the 5.4 – 5.6 Reassembly instructions!

REMOVAL

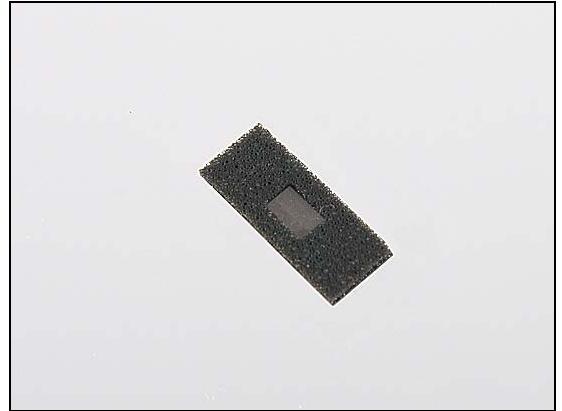
Remove the Receiver Gasket Mesh by using a Flex Film Assembly Tool as shown.

Scrap! Not to be reused!

INSTALLATION

Put a new Receiver Gasket Mesh in place.

Attach it into the cavity and press to secure its attachment.



Replacement

4.28 Board Swap—Replace Swap Board

Follow the 3.1 – 3.6 Disassembly instructions!

Follow the 4.4 Removal instructions!

Prepare a new swap board.

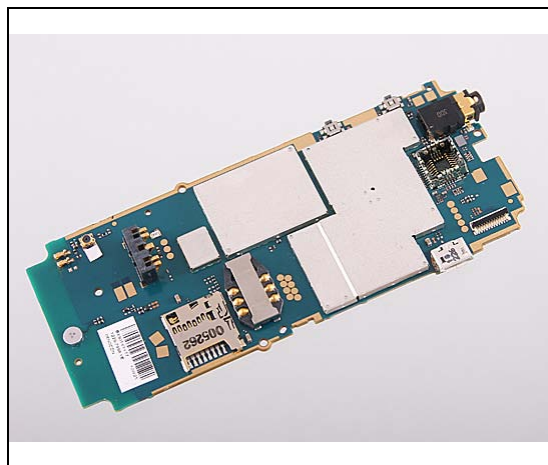
Reuse the Camera 2 MPixel CMOS

Follow the 4.3 Installation instructions! **(Not apply for NAM!)**

Follow the 4.4 Installation instructions!

Follow the 5.1 - 5.6 Reassembly instructions!

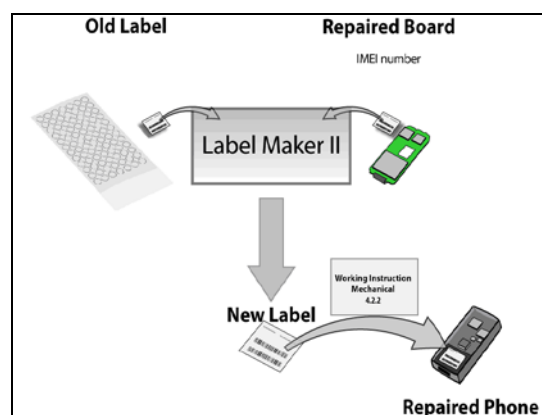
NOTE: Startup the unit to initialize settings, before perform Customize Phone in Emma



4.29 Board Swap – Change Label

Change Label

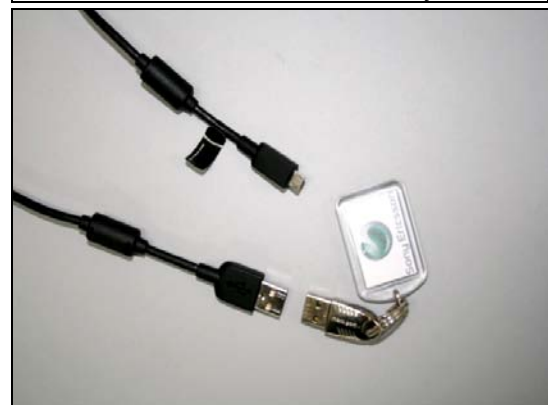
Follow the instructions in the Generic Repair Manual – Build swap for change of label.



4.30 Board Swap – Customize Software

Customization of software

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

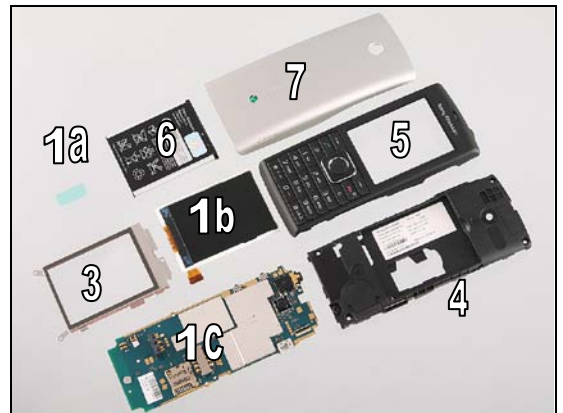




5 Reassembly

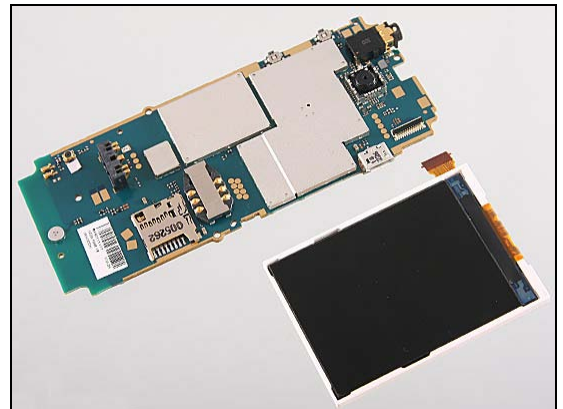
The reassembly is done in the following order:

1. LCD Connector Protective Foil (a), Display (b) & PBA (c)
2. LCD Metal Assy
3. Frame Assy
4. Front Cover Assy
5. Battery
6. Battery Cover Assy

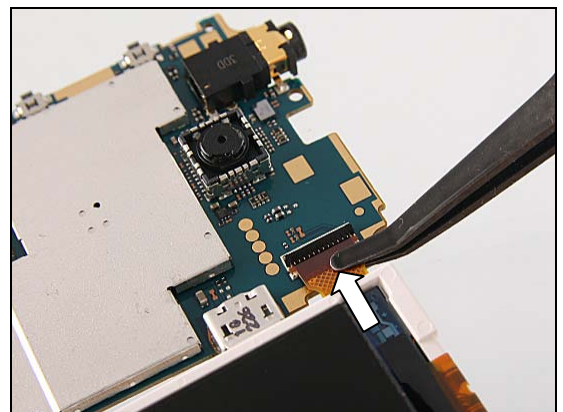


5.1 LCD Connector Protective Foil, Display & PBA

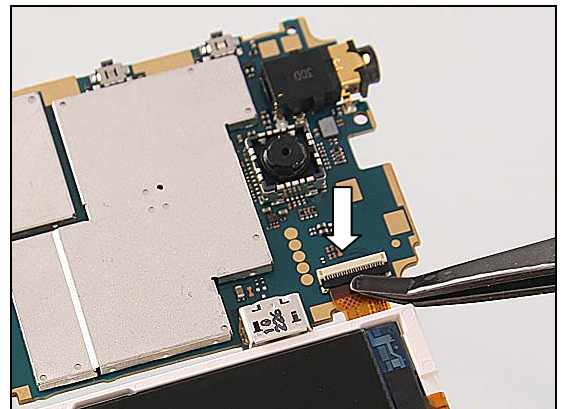
Put PBA and Display in place.



Insert the FPC into the ZIF connector deeply.



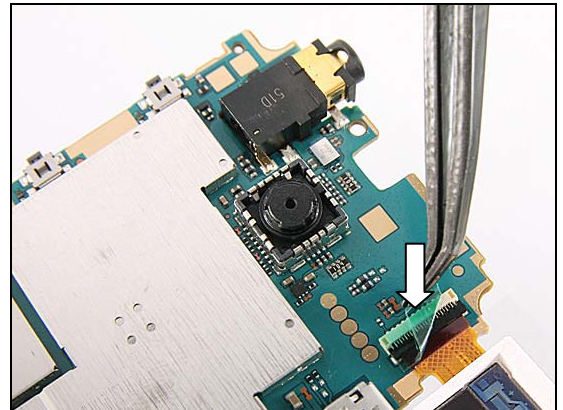
Lock it.



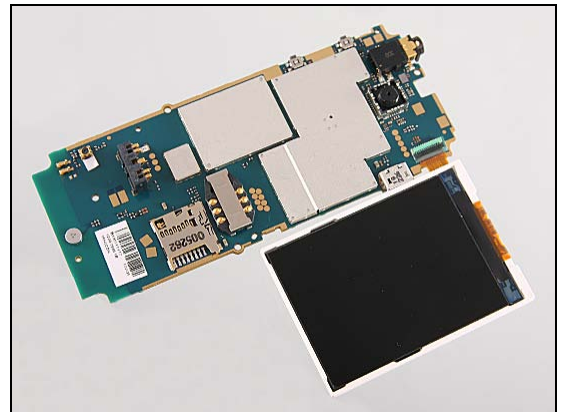


Reassembly

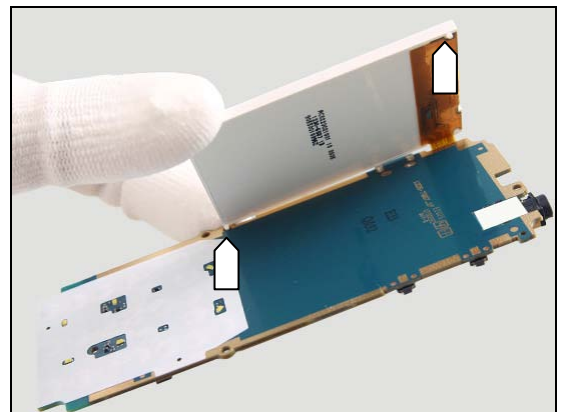
Attach a new LCD Connector Protective Foil aligning to the ZIF connector.



Turn the Display over to another side.



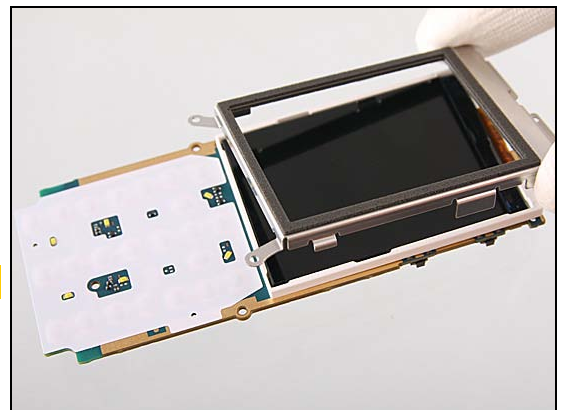
Put the Display onto the PBA Assembly aligning with two guiding poles as shown.



5.2 LCD Metal Assy

Put the LCD Metal Assy onto the Display with the proper direction.

Be careful do not to touch the Display!

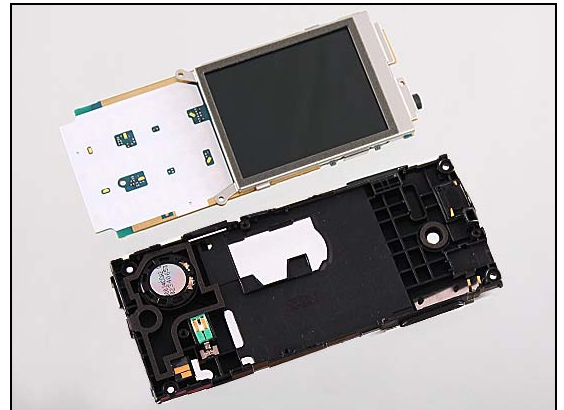




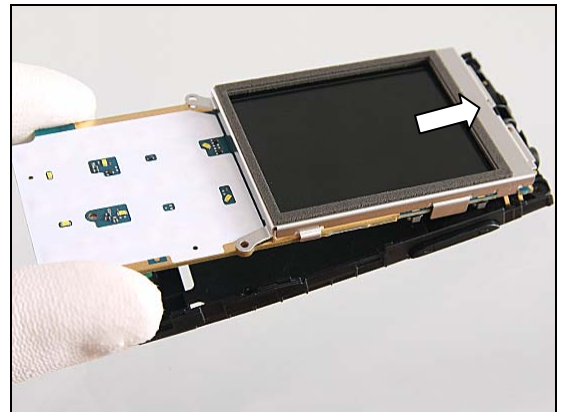
Reassembly

5.3 Frame Assy

Put the Frame Assy in place.

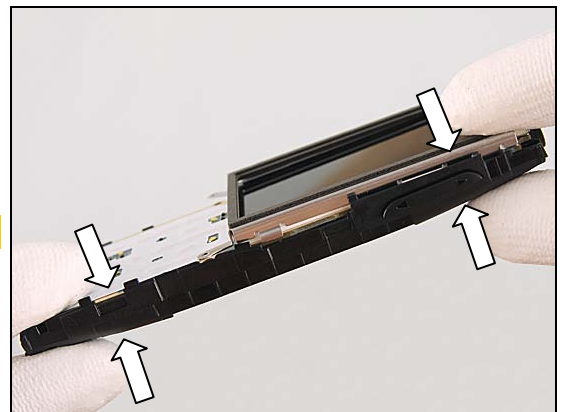


Insert the top side.



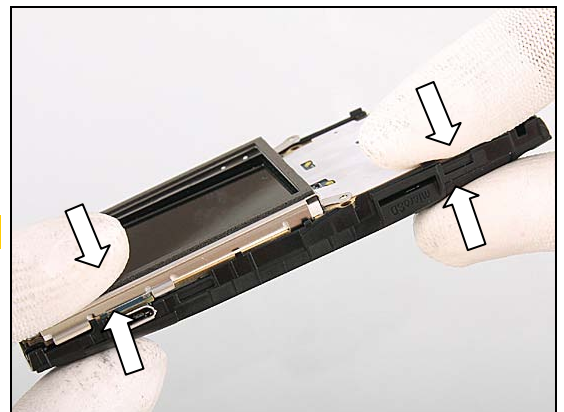
Press to snap the two hooks of this side.

Be careful do not to touch the Display!



Press to snap the two hooks of the opposite side.

Be careful do not to touch the Display!

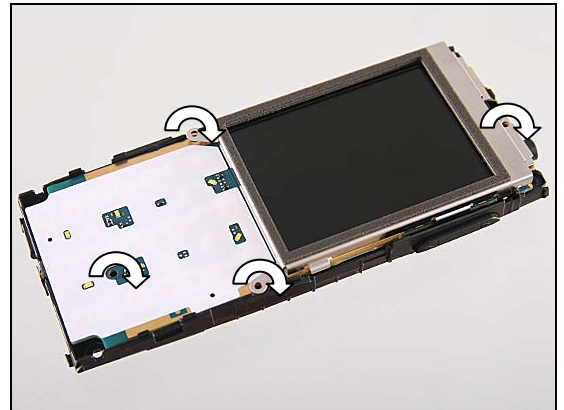




Reassembly

5.4 Front Cover Assy

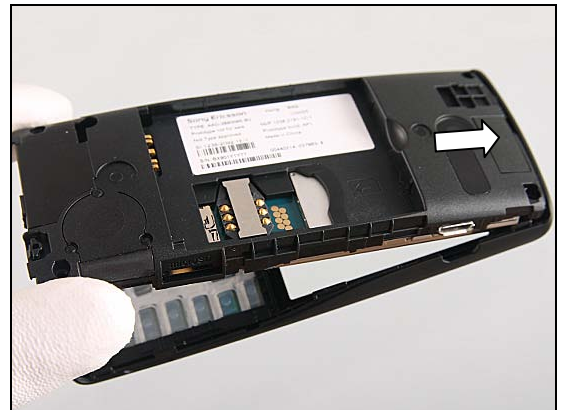
Apply $10 \pm 1\text{Ncm}$ torque when tightening the four Screw
Len:4.0 Diam:1.4 with JCIS No.0 bits.



Put Front Cover Assy in place.



Align the Front Cover Assy with the Core Unit on the top,
with a 30° angle between the bottoms.



Insert the Audio Jack into the cavity.





Reassembly

Press to snap the Front Cover Assy.

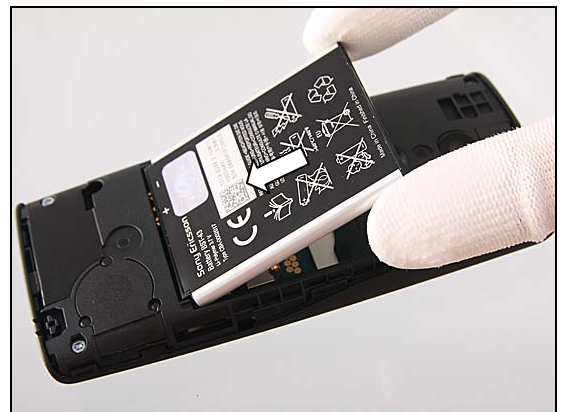


Apply $18 \pm 1\text{Ncm}$ torque when tightening the four Screw
Len:4.5 Diam:1.7 with T6 bits.

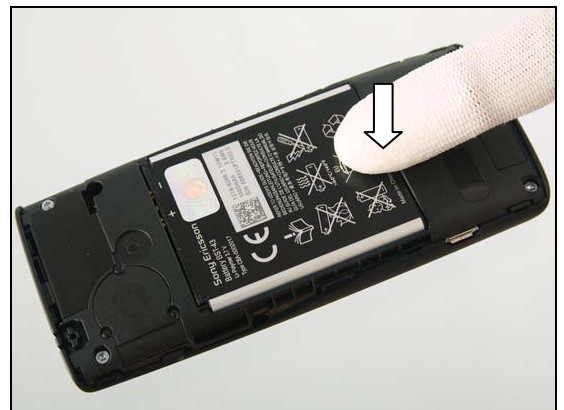


5.5 Battery

Insert the Battery into its cavity as shown.



Press the bottom of battery to secure its position.

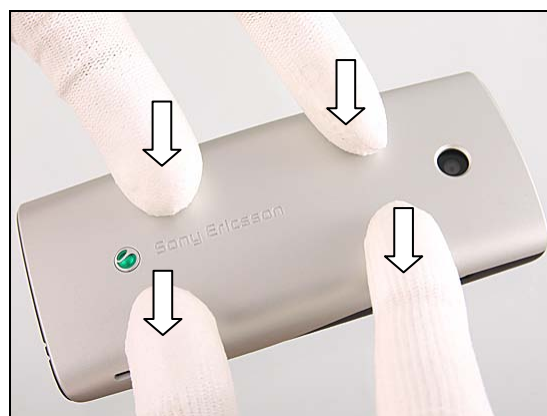


Reassembly

5.6 Battery Cover

Place the Battery Cover as shown.

Press to snap it.





6 Revision History

Rev.	Date	Changes / Comments
1	2010-Sep-24	Initial release
2	2010-Oct-11	Add Receiver Gasket Mesh chapter
3	2010-Oct-28	Update Camera Remove Tool picture
4	2010-Dec-10	Add sections from 4.24 to 4.26 for board swap
5	2011-Sep-28	Add new parts 1247-3696, 1250-9260, 1250-9265.
6	2012-Jul-25	Update the chapter 4.28