



Sony Ericsson

Working Instructions

- mechanical -



Mix, WT13i



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



1 Exterior Views

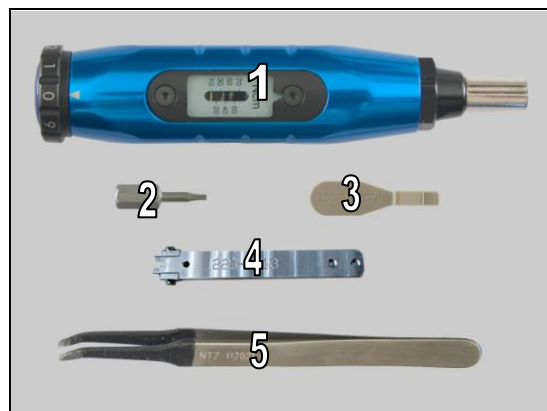
1.1 Mix, WT13i



2 Tools

SPECIAL TOOLS

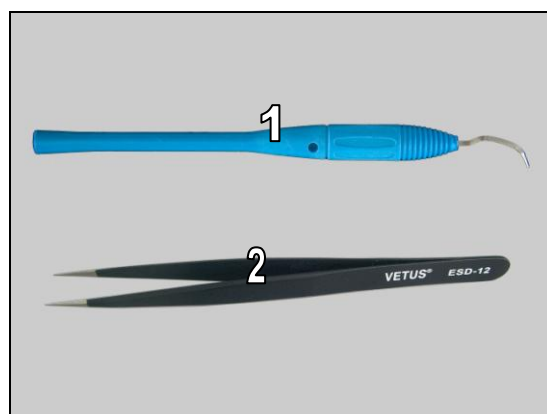
1. Torque Screwdriver
2. Bits (T6)
3. Front Opening Tool
4. Camera Removal Tool
5. Flex Film Assembly Tool



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

STANDARD TOOLS

1. Dentist hook (curve-shape)
2. Tweezers (ESD-safe & non-metallic)



3 Disassembly

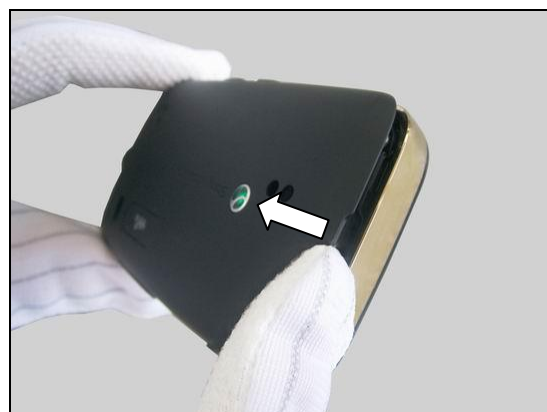
The disassembly is done in the following order:

1. Battery Cover
2. Battery
3. Band
4. Rear Cover Assy
5. Front Cover Assy
6. Mylar Connector
7. Display (a) and Main PBA (b)



3.1 Battery Cover

Release the Battery Cover with finger.

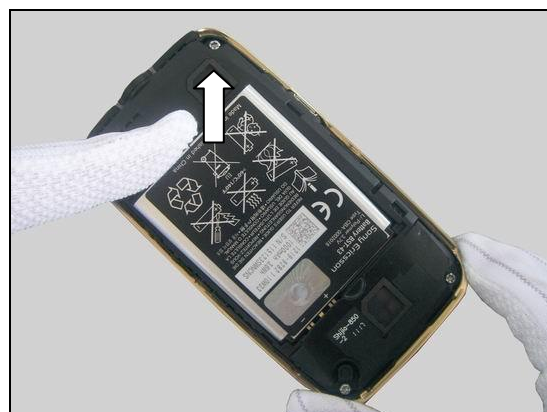


Lift up the bottom of the Battery Cover and remove it.



3.2 Battery

Release the Battery with finger.



Disassembly

Lift up the bottom of the Battery and remove it.



3.3 Band

Release the bottom of the Band with fingers as show in picture.



1. Move forward the Band.
2. Lift the Band up and remove it.



3.4 Rear Cover Assy

Remove the four Screws PH (T6) 16mm*5.0mm with the Torque Screwdriver by using T6 Bits.

Scrap the screws. The screws can not be reused.





Disassembly

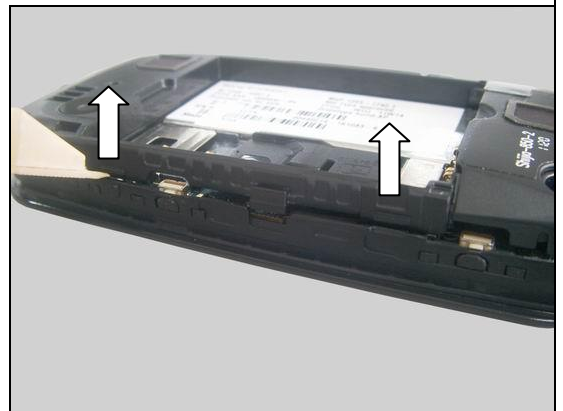
There are eight hooks securing the Rear Cover Assy located as shown in picture.



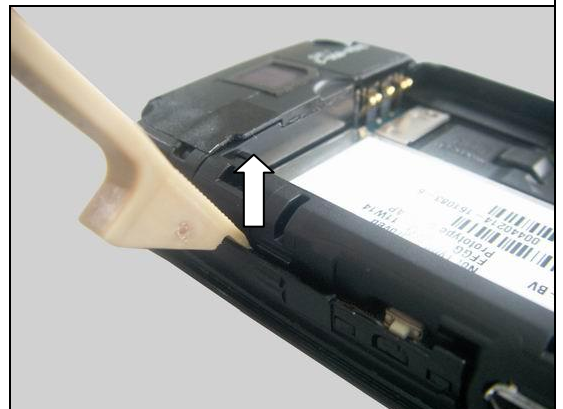
Insert the Front Opening Tool to release the bottom hook as shown in picture.



Insert the Front Opening Tool to release the hooks as shown in picture.



Insert the Front Opening Tool to release the one hook at the opposite side as shown in picture.



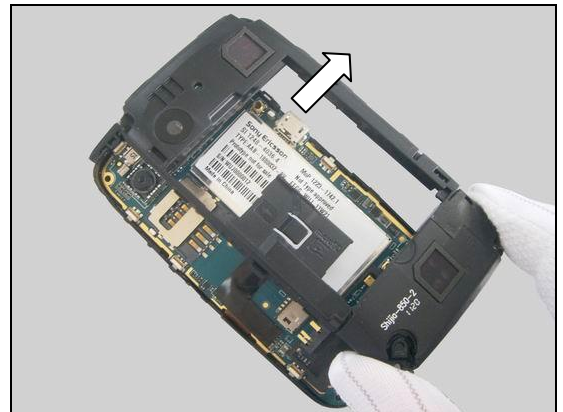
Disassembly

Lift the side of the Rear Cover Assy and release the other hooks as show in picture.

Be careful not to damage the Micro USB Connector.



Remove the Rear Cover Assy.



3.5 Front Cover Assy

There are two hooks securing the Front Cover Assy as shown in picture.



Insert the Front Opening Tool to release the hook as shown.



Disassembly

Do the same on the opposite side.



Lift up the Main PBA Assy with a small angle to separate it from the Front Cover Assy and reveal the Connector Audio Jack.

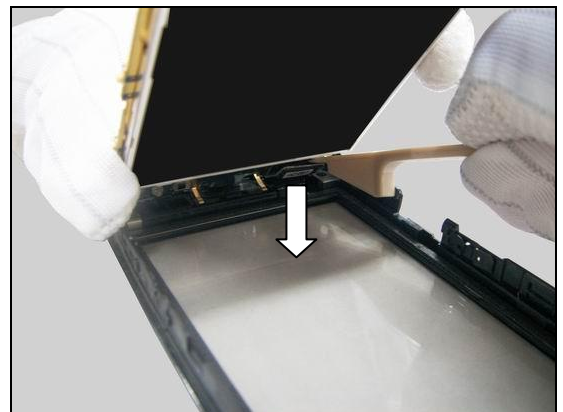


Lift up the Main PBA Assy at an approximate 80 degree as shown in picture.

Be careful not to damage the Touch Panel FPC.



Disconnect the BtB Connector with the Front Opening Tool.





Disassembly

Separate the Main PBA Assy from the Front Cover Assy as shown in picture.



3.6 Mylar Connector

Detach the Mylar Connector by using Flex Film Assembly Tool and remove it.

Be careful not to damage the components under Mylar.

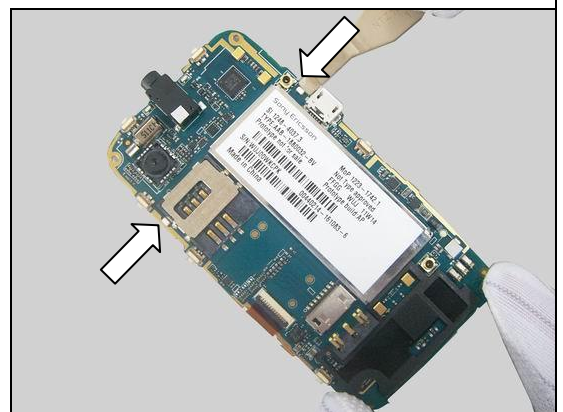


3.7 Display and Main PBA

There are two hooks securing the Display as shown in picture.

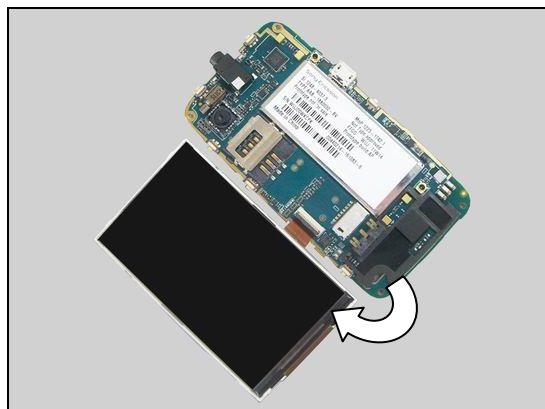


Unsnap the hooks of Display by using the Front Opening Tool as pointers indicated in picture.

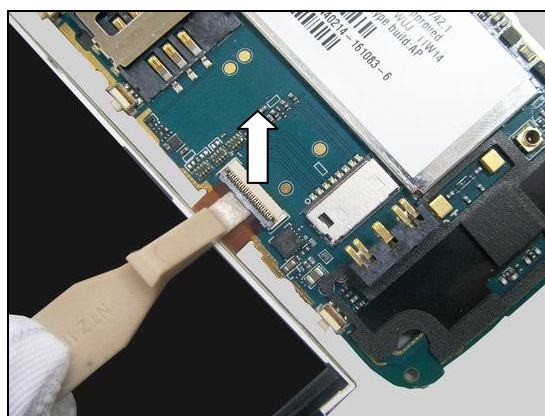


Disassembly

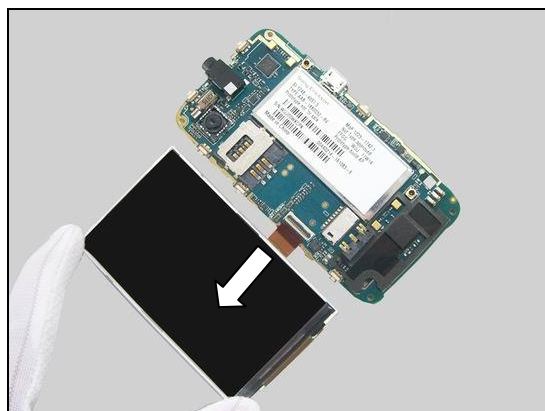
Turn over the Display.



Disconnect the Connector FPC with the Front Opening Tool.



Separate the Display from the Main PBA as shown in picture.





4 Replacement

4.1 Battery Cover

Follow the 3.1 Disassembly instructions!

Follow the 4.7 Removal Instructions!

Prepare the new Battery Cover.

Follow the 4.7 Installation Instructions!

Follow the 5.7 Reassembly instructions!

Install a new Co-Branding Label!



4.2 Band

Follow the 3.1 – 3.3 Disassembly instructions!

Prepare the new Band.

Follow the 5.5 – 5.7 Reassembly instructions!



4.3 Rear Cover Assy

Follow the 3.1 – 3.4 Disassembly instructions!

Follow the 4.11 – 4.12 Removal Instructions!

Prepare the new Rear Cover Assy.

Follow the 4.11 – 4.12 Installation Instructions!

Follow the 5.4 – 5.7 Reassembly instructions!



4.4 Front Cover Assy

Follow the 3.1 – 3.5 Disassembly instructions!

Follow the 4.17 – 4.18 Removal Instructions!

Prepare the new Front Cover Assy.

Follow the 4.17 – 4.18 Installation Instructions!

Follow the 5.3 – 5.7 Reassembly instructions!

Calibration must be implemented after reassembly following below Service Information in CSPN!!

SI:18766-92670 Mix,WT13i Proximity sensor issue



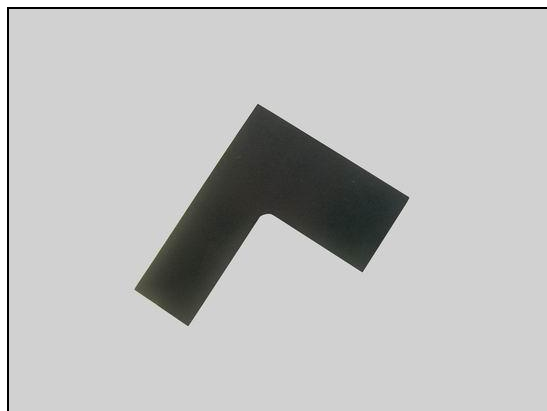
Replacement

4.5 Mylar Connector

Follow the 3.1 – 3.6 Disassembly instructions!

Prepare the new Mylar Connector.

Follow the 5.2 – 5.7 Reassembly instructions!

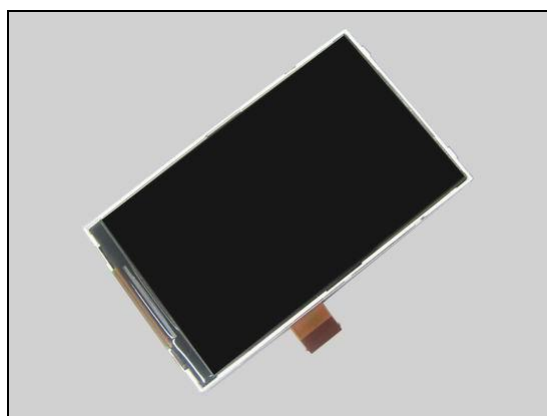


4.6 Display 3.0 inch TFT

Follow the 3.1 – 3.7 Disassembly instructions!

Prepare the new Display.

Follow the 5.1 – 5.7 Reassembly instructions!



Replacement

4.7 Co-Branding

Follow the 3.1 Disassembly instructions!

Prepare the new Co-Branding.

Follow the 5.7 Reassembly instructions!

Co-Branding cannot be reused!

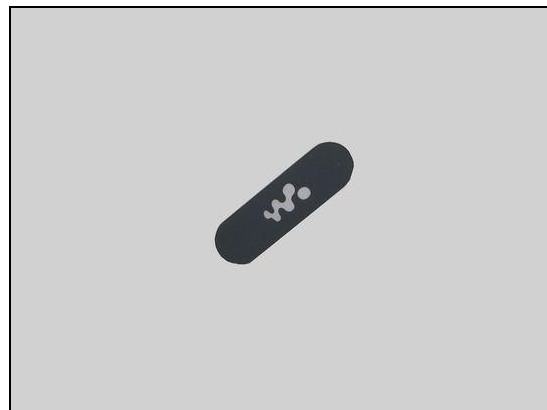
REMOVAL

Push from the holes on the back side of the Battery Cover with the tweezers.

Peel off the Co-Branding with the Flex Film Assembly Tool.

INSTALLATION

Attach a new Co-Branding in its Cavity as shown in picture.



Replacement: Co-Branding Label

Press to make it securely attached.



Replacement

4.8 Mylar RF Hole

Follow the 3.1 – 3.2 Disassembly instructions!

Prepare the new Mylar RF Hole.

Follow the 5.6 – 5.7 Reassembly instructions!

Mylar RF Hole cannot be reused!

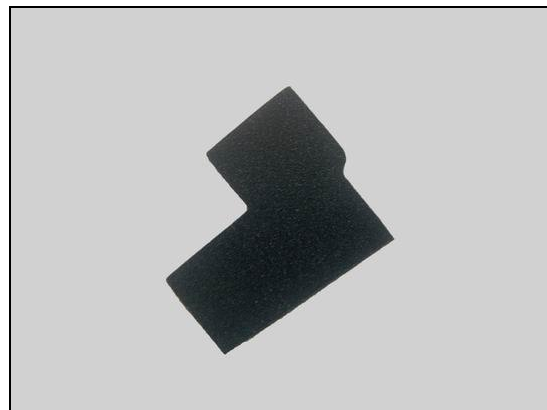
REMOVAL

Peel off the Mylar RF Hole from the Rear Cover Assy with the Tweezers.

INSTALLATION

Attach a new Mylar RF Hole to the Rear Cover Assy in the proper position as shown in picture.

Press to make it securely attached.



Replacement

4.9 Core Unit Label

Follow the 3.1 – 3.3 Disassembly instructions!

Prepare the new Core Unit Label.

Follow the 5.5 – 5.7 Reassembly instructions!

Core Unit Label cannot be reused!

REMOVAL

Read the old Core Unit Label and/or write the information into the 'LabelMake' program before removal.

Carefully remove the Label by using the Tweezers.



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 Core Unit Label in place as shown.

One label only is allowed!



Press to make it securely attached.



Replacement

4.10 Copper Shielding Can

Follow the 3.1 – 3.3 Disassembly instructions!

Follow the 4.9 Removal Instructions!

Prepare the new Copper Shielding Can.

Follow the 4.9 Removal Instructions!

Follow the 5.5 – 5.7 Reassembly instructions!

REMOVAL

Peel off the Copper Shielding Can from Shield Can by using the Tweezers.



INSTALLATION

Attach the Copper Shielding Can on the Shield Can as shown in picture.



Press to make it securely attached.



Replacement

4.11 Sponge Speaker support

Follow the 3.1 – 3.4 Disassembly instructions!

Prepare the new Sponge Speaker support.

Follow the 5.4– 5.7 Reassembly instructions!

Sponge Speaker support cannot be reused in case of the adhesive missing or failure!

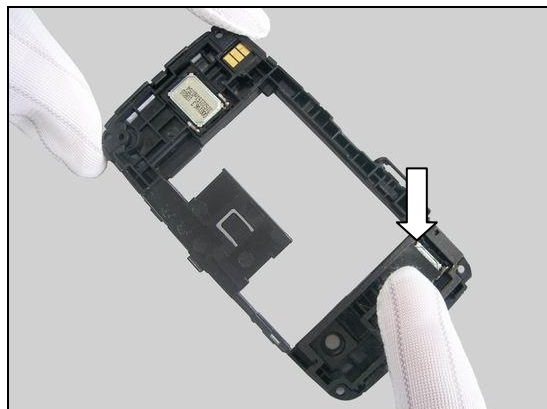
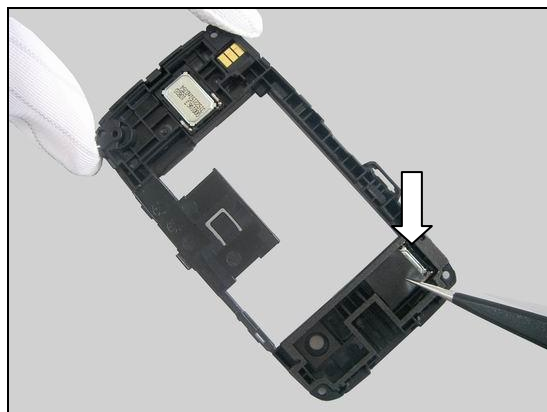
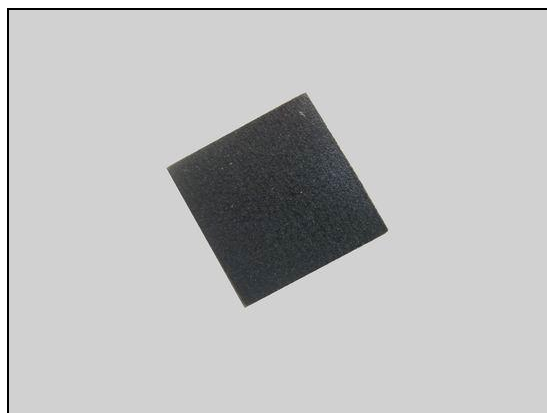
REMOVAL

Peel off the Sponge Speaker support from the Upper Loudspeaker with the Tweezers.

INSTALLATION

Attach a new Sponge Speaker support onto the Upper Loudspeaker in the proper position as shown in picture.

Press to make it securely attached.





Replacement

4.12 Loudspeaker 11x15mm & Speaker Sponge

4.12.1 Upper Loudspeaker 11x15mm & Speaker Sponge

Follow the 3.1 – 3.4 Disassembly Instructions!

Follow the 4.11 Removal Instructions!

Prepare the new Upper Loudspeaker & Upper Speaker Sponge.

Follow the 4.11 Installation Instructions!

Follow the 5.4– 5.7 Reassembly Instructions!

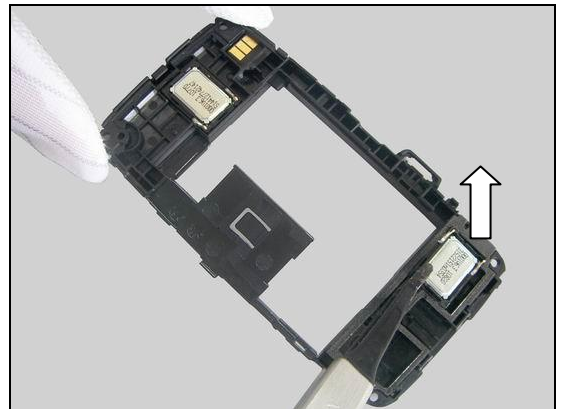


REMOVAL

Insert Dentist hook into this corner and lift to detach the Upper Loudspeaker from its cavity.



Remove it by using the Flex Film Assembly Tool.



Peel off the old Upper Speaker Sponge with the Tweezers.



Replacement: Loudspeaker 11x15m& Speaker Sponge

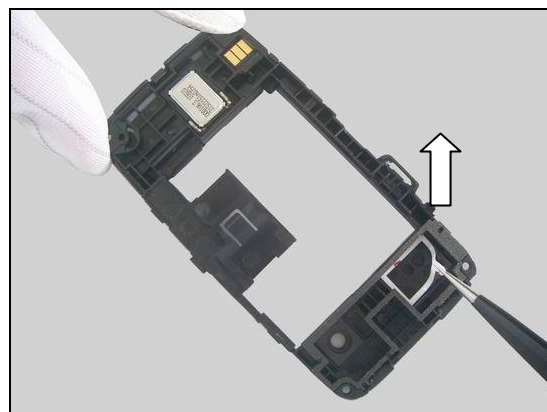
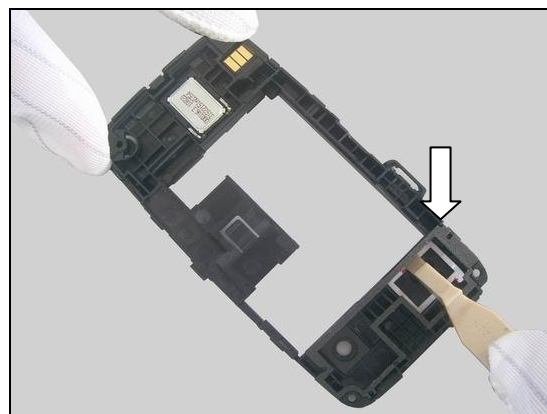
Clean the residues of the old Upper Speaker Sponge before installation!

INSTALLATION

Attach a new Upper Speaker Sponge into its cavity.

Press to make it securely attached by using the Front Opening Tool.

Peel off the protective paper.

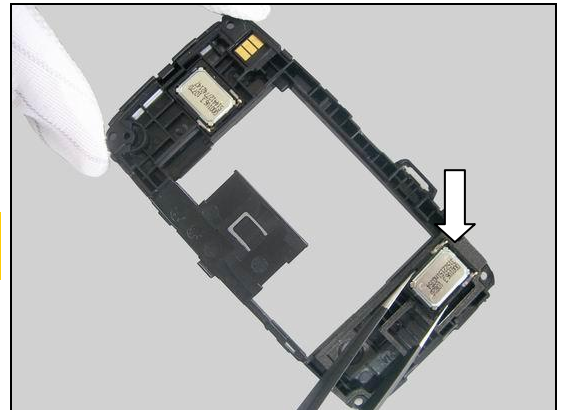




Replacement: Loudspeaker 11x15m& Speaker Sponge

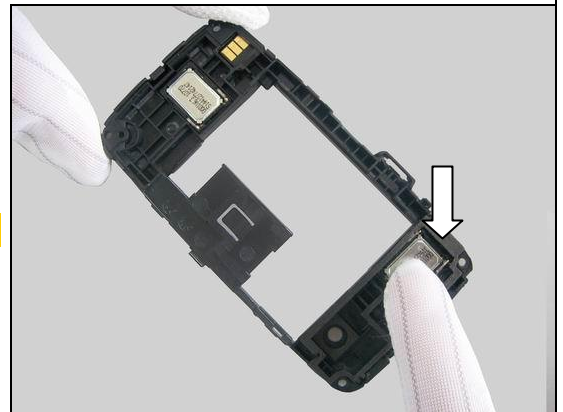
Place the Upper Loudspeaker into its cavity in the right direction.

The Upper Loudspeaker contact spring pins must be placed as show in picture!



Press to make it securely attached.

Not to touch the contact pins!



4.12.2 Lower Loudspeaker 11x15mm & Speaker Sponge

Follow the 3.1 – 3.4 Disassembly Instructions!

Prepare the new Lower Loudspeaker & Lower Speaker Sponge.

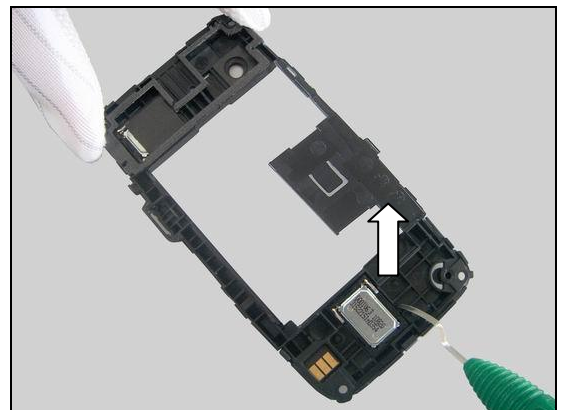
Follow the 5.4– 5.7 Reassembly Instructions!

The Lower Speaker Sponge cannot be reused!



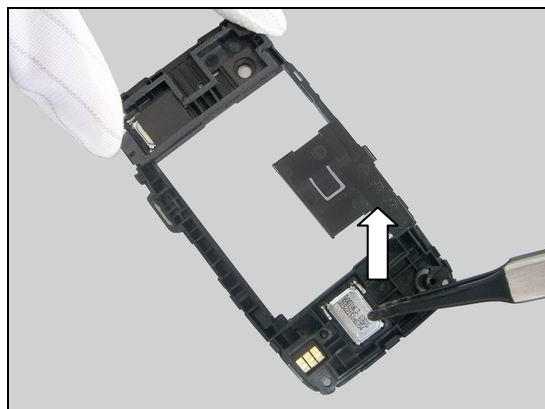
REMOVAL

Insert Dentist hook into this corner and lift to detach the Lower Loudspeaker from its cavity.

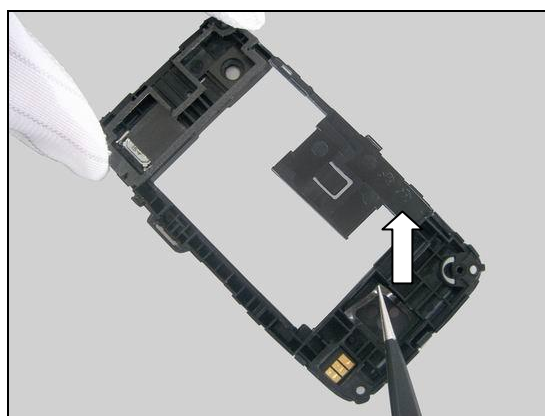


Replacement: Loudspeaker 11x15m& Speaker Sponge

Remove it by using the Flex Film Assembly Tool.



Peel off the old Lower Speaker Sponge with the Tweezers.

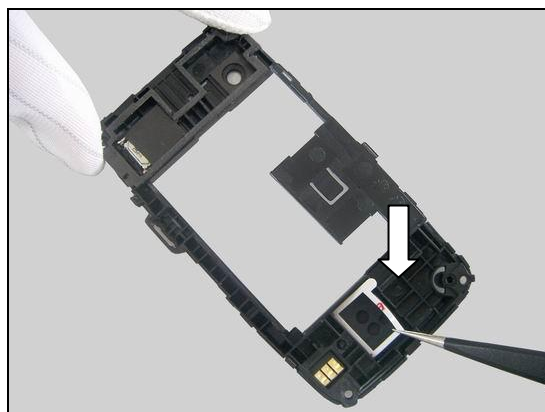


Clean the residues of the old Lower Speaker Sponge before installation!



INSTALLATION

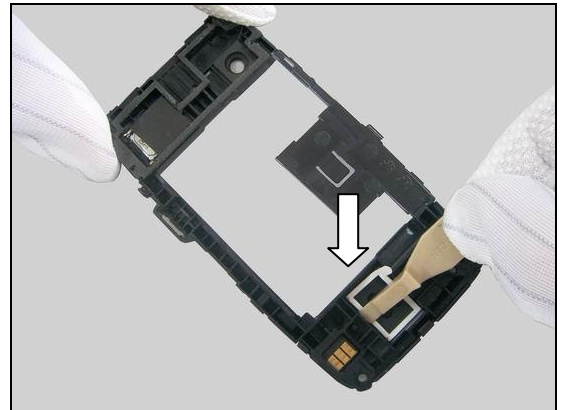
Attach a new Lower Speaker Sponge in its cavity.



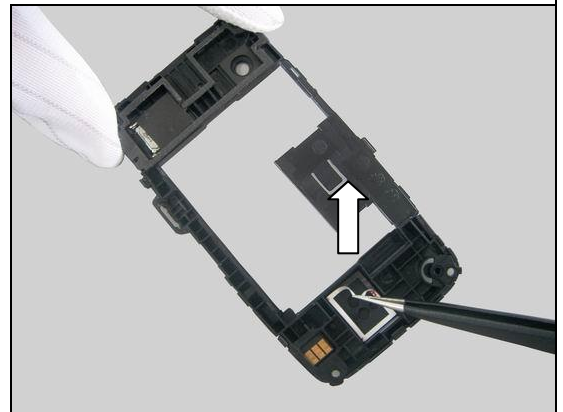


Replacement: Loudspeaker 11x15m& Speaker Sponge

Press to make it securely attached by using the Front Opening Tool.

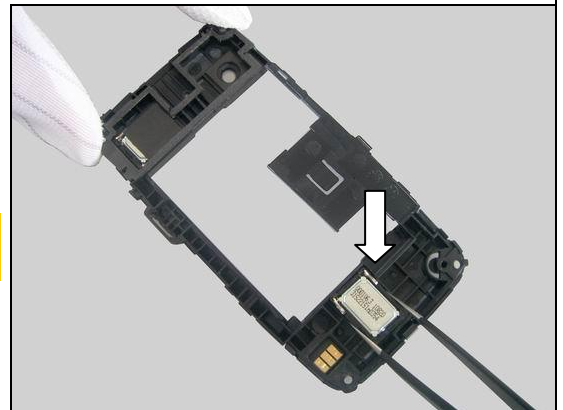


Peel off the protective paper.



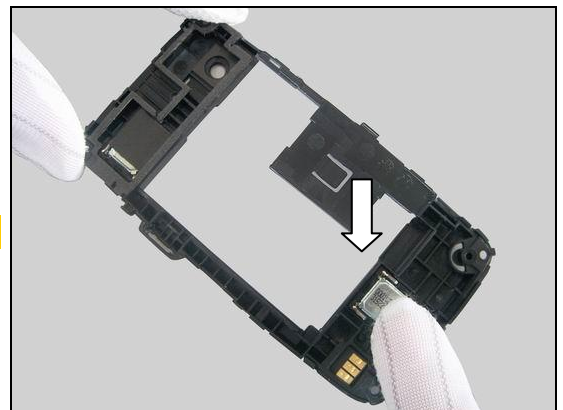
Place the Lower Loudspeaker into its cavity in the right direction.

The Lower Loudspeaker contact spring pins must be placed on the top side as pointers indicated in picture!



Press to make it securely attached.

Be careful not to touch the contact pins!



Replacement

4.13 Sponge Speaker Lower

Follow the 3.1 – 3.5 Disassembly instructions!

Prepare the new Sponge Speaker Lower.

Follow the 5.3 – 5.7 Reassembly instructions!

Sponge Speaker Lower cannot be reused!

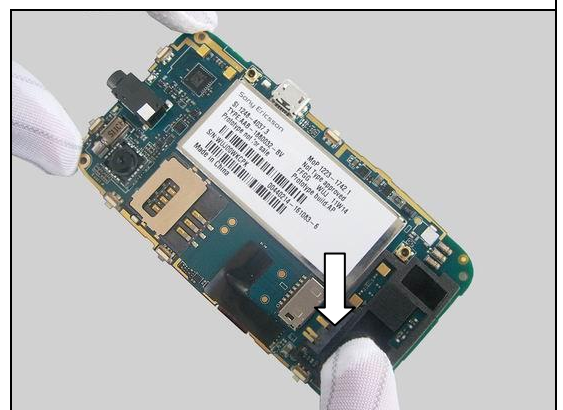
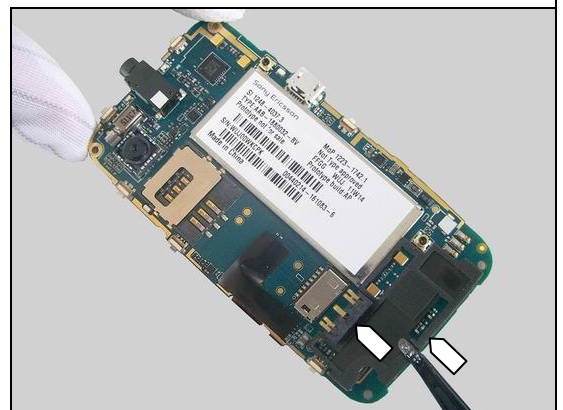
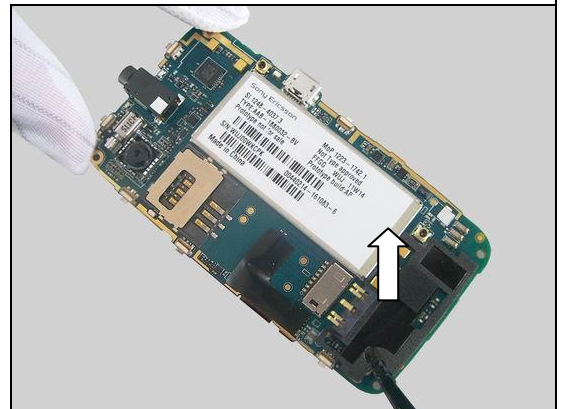
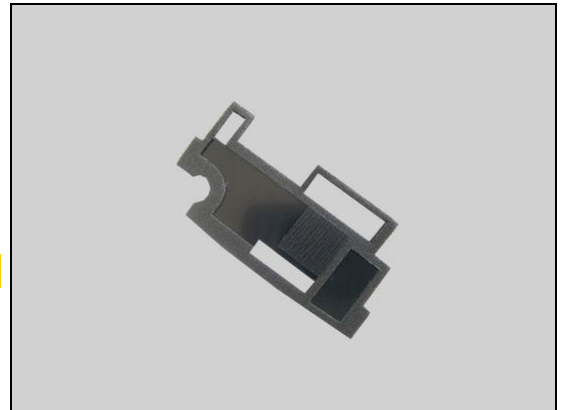
REMOVAL

Remove the Sponge Speaker Lower from the Main PBA.

INSTALLATION

Attach a new Sponge Speaker Lower in alignment with the guiding frame as pointers indicated in picture.

Press to make it securely attached.



Replacement

4.14 Liquid Intrusion Indicator

There are two Liquid Intrusion Indicators on the phone.

INSPECTION

Follow the 3.1 – 3.2 Disassembly Instructions!

To check whether the Liquid Intrusion Indicator (1) has been activated (reddish color).

If activated:

Follow the 3.3 – 3.4 Disassembly instructions!

Carry out the replacement as described below.

Follow the 5.4– 5.7 Reassembly instructions!

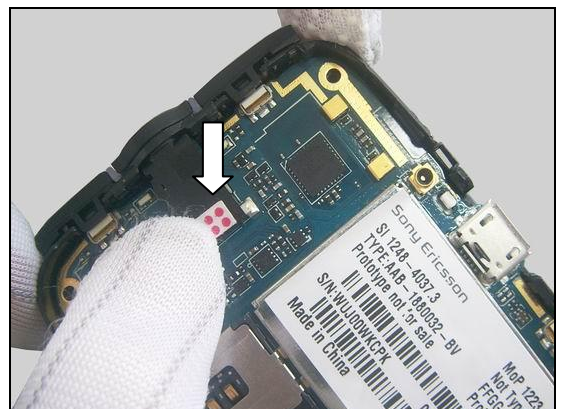
REMOVAL

Remove the activated Liquid Intrusion Indicator off the Conn Audio Jack by using the Tweezers.

INSTALLATION

Attach a new Liquid Intrusion Indicator in alignment with the edges of the Conn Audio Jack by using the Tweezers as shown in picture.

Press to make it securely attached.



Replacement: Liquid Intrusion Indicator

INSPECTION

Follow the 3.1-3.4 Disassembly Instructions!

To check whether the other Liquid Intrusion Indicator has been activated (reddish color).

If activated:

Carry out the replacement as described below.

Follow the 5.4 – 5.7 Reassembly instructions!

REMOVAL

Remove the activated Liquid Intrusion Indicator from the Main PBA by using the Tweezers.

INSTALLATION

Attach a new Liquid Intrusion Indicator in alignment into the printed rectangle area on the Main PBA by using the Tweezers as shown in picture.

Press to secure the attachment with the Flex Film Assembly Tool.



Replacement

4.15 Camera 3 Mpixel

Follow the 3.1 – 3.7 Disassembly Instructions!

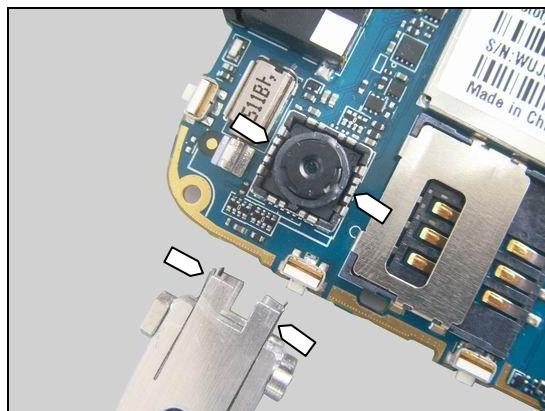
Prepare the new Camera.

Follow the 5.1 – 5.7 Reassembly Instructions!

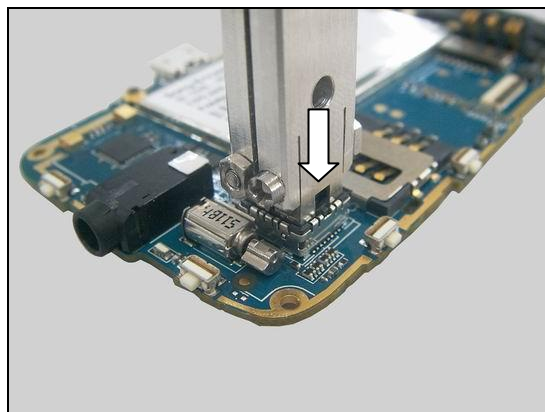


REMOVAL

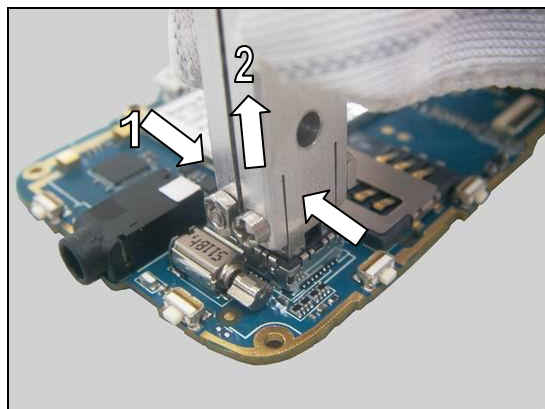
Align the orientation of the blades on the Camera Removal Tool in relation to the position of the camera socket.



Insert the Camera Removal Tool into the camera socket as shown in picture.

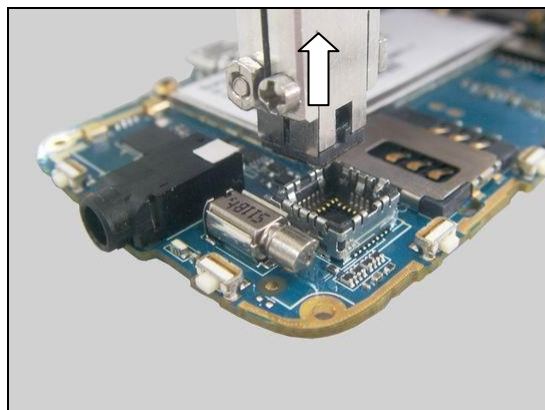


Grip (1) the Camera Removal Tool and lift (2) straight up to remove the Camera from its socket.



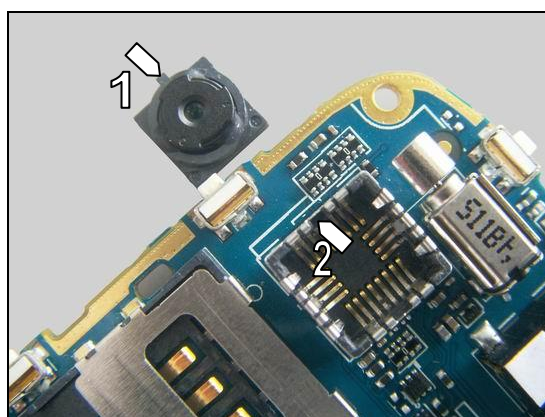
Replacement: Camera 3 Mpixel

Remove the Camera.

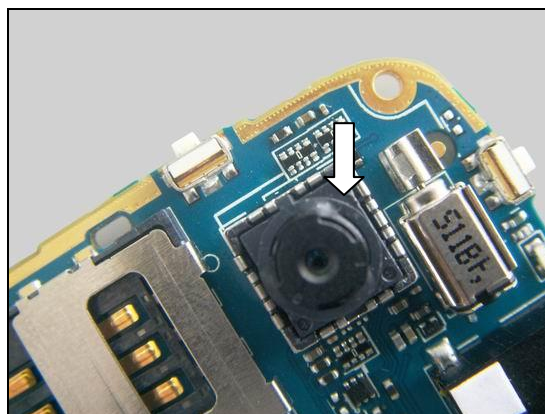


INSTALLATION

Make sure the orientation of the Camera and its socket: camera pin (1) into socket slot (2) when installing the Camera.

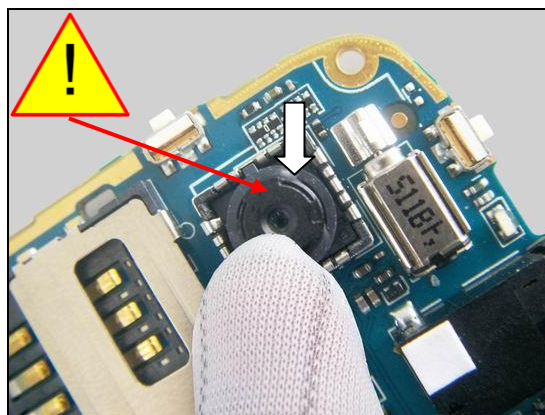


Place the Camera into the socket.



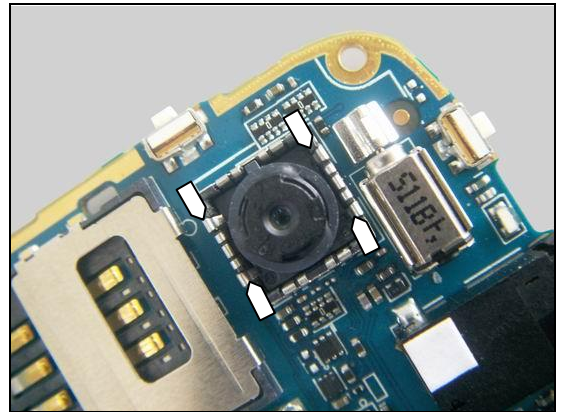
Press to secure the Camera.

Do not touch the lens!



Replacement: Camera 3 Mpixel

Make sure the four spring pins are snapped the camera as shown.



Replacement

4.16 Metal Dome

Follow the 3.1 – 3.7 Disassembly instructions!

Prepare the new Metal Dome

Follow the 5.1 – 5.7 Reassembly instructions!

REMOVAL

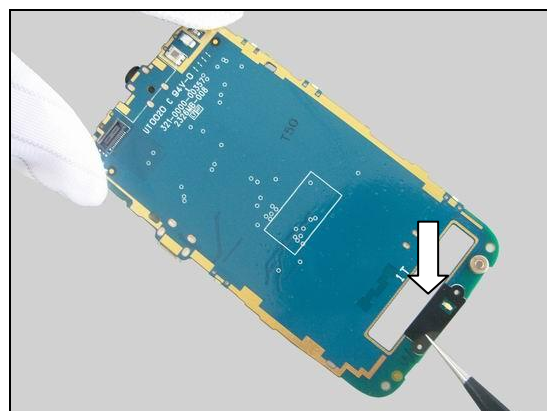
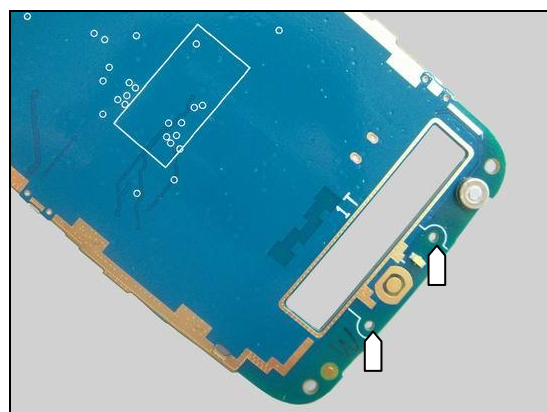
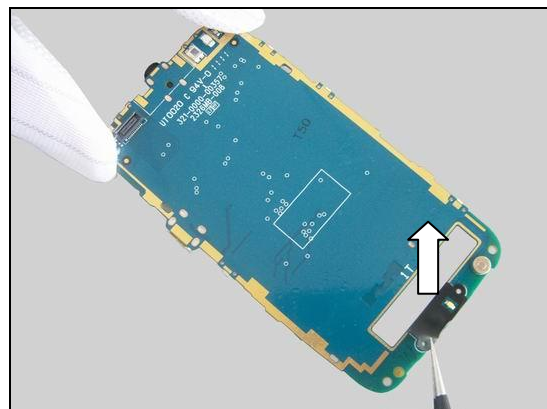
Remove the Metal Dome from the Main PBA.

Cannot be reused!

INSTALLATION

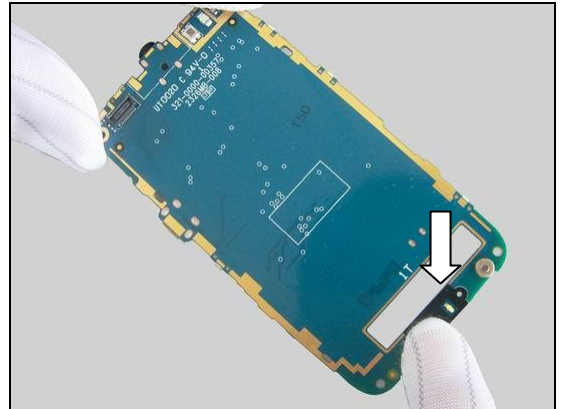
There are printed guiding frame and two guiding holes on the Main PBA for alignment as show in picture.

Attach a new Metal Dome in alignment with the guiding frame and guiding holes.



Replacement: Metal Dome

Press to make it securely attached.



Replacement

4.17 Proximity Sensor Rubber

Follow the 3.1 – 3.5 Disassembly instructions!

Prepare the new Proximity Sensor Rubber.

Follow the 5.3 – 5.7 Reassembly instructions!

REMOVAL

Insert Dentist hook underneath the Proximity Sensor Rubber and lift it as show in picture.



Remove the Proximity Sensor Rubber from the Front Cover Assy with the Tweezers.

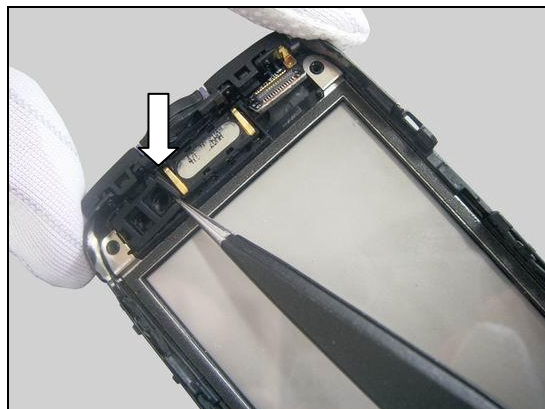


Clean the residues of the old Proximity Sensor Rubber before installation!

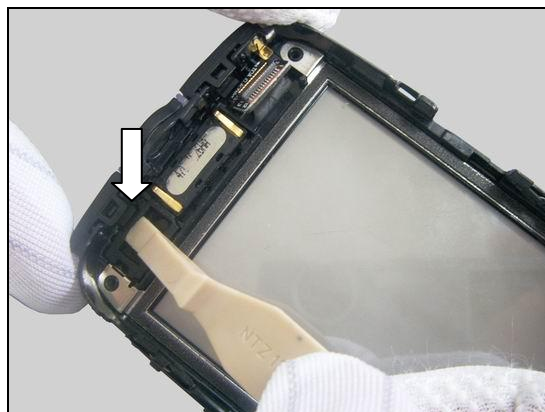
Replacement: Proximity Sensor Rubber

INSTALLATION

Place the Proximity Sensor Rubber into its proper position as shown in picture.



Press to secure the attachment with the Front Opening Tool.



Replacement

4.18 Ear Speaker & Sponge Receiver

Follow the 3.1 – 3.5 Disassembly instructions!

Prepare the new Ear Speaker & Sponge Receiver.

Follow the 5.3 – 5.7 Reassembly instructions!

REMOVAL

Insert Dentist hook underneath the Ear Speaker and lift to loosen it.

Remove the Ear Speaker.

Peel off the old Sponge Receiver with the Tweezers.

The Sponge Receiver cannot be reused!





Replacement: Ear Speaker & Sponge Receiver

Clean the residues of the old Sponge Receiver before installation!

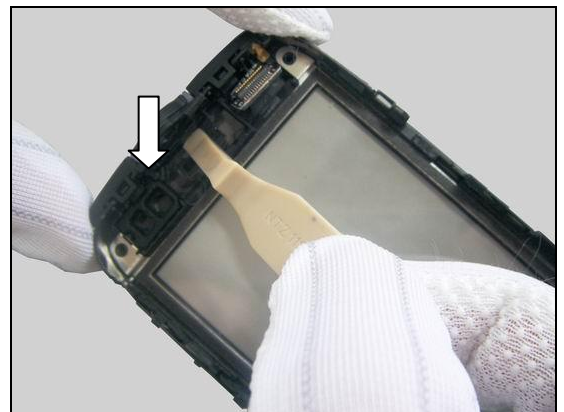


INSTALLATION

Attach a new Sponge Receiver into its cavity as shown in Picture.



Press to make it securely attached with the Front Opening Tool.



Peel off the protective paper.



Replacement: Ear Speaker & Sponge Receiver

Place the Ear Speaker in the right direction as shown in picture.

Ear Speaker contact spring pins are towards the top side of the phone as shown in picture.



Press to make it securely attached.



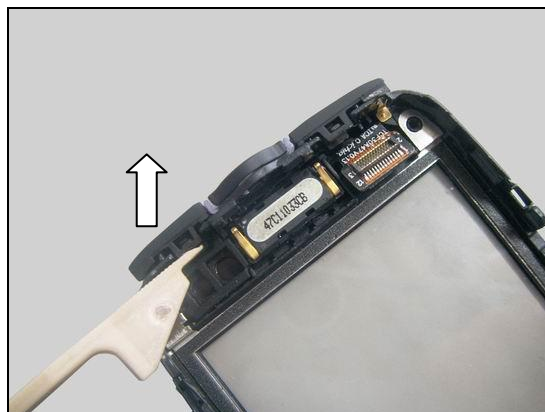
Replacement

4.19 Key ZAP

Follow the 3.1 – 3.5 Disassembly instructions!
 Carry out the replacement as described below.
Follow the 5.3 – 5.7 Reassembly instructions!

REMOVAL

Release the hook of the Key ZAP by using the Front Opening Tool and remove it.

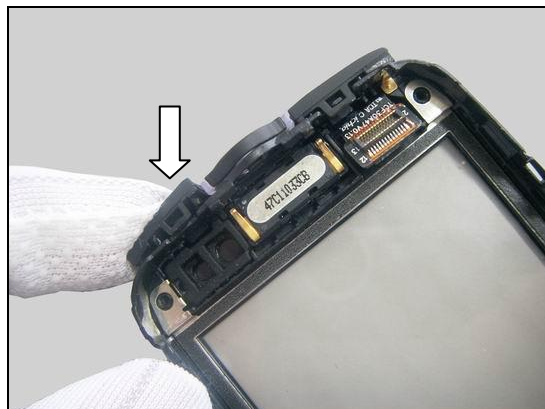


INSTALLATION

Place the Key ZAP in its proper position as shown in picture.



Press to snap the Key ZAP.



Replacement

4.20 Key Walkman

Follow the 3.1 – 3.5 Disassembly instructions!
 Carry out the replacement as described below.
Follow the 5.3 – 5.7 Reassembly instructions!

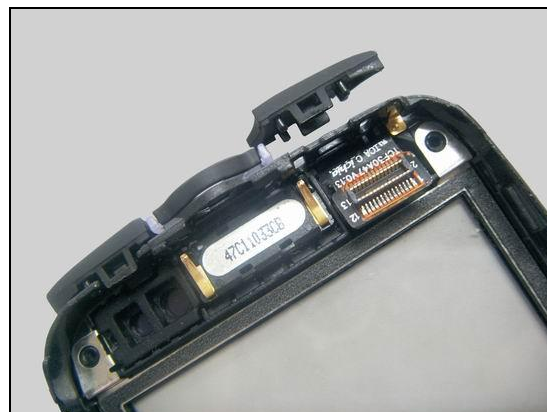
REMOVAL

Release the hook of the Key Walkman by using the Front Opening Tool and remove it.

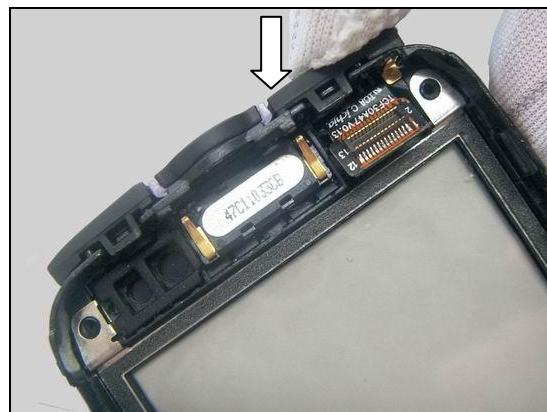


INSTALLATION

Place the Key Walkman in its proper position as shown in picture.



Press to snap the Key Walkman.



Replacement

4.21 Rubber Side Key

Follow the 3.1 – 3.5 Disassembly instructions!
 Carry out the replacement as described below.
Follow the 5.3 – 5.7 Reassembly instructions!

REMOVAL

Push the Rubber Power/Lock Key with the Front Opening Tool to release it.

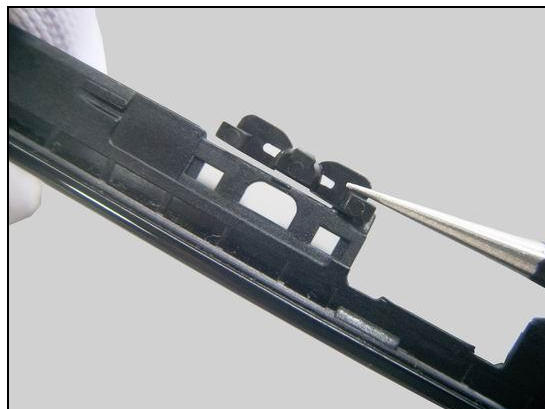


Remove the Rubber Power/Lock Key with the Tweezers.



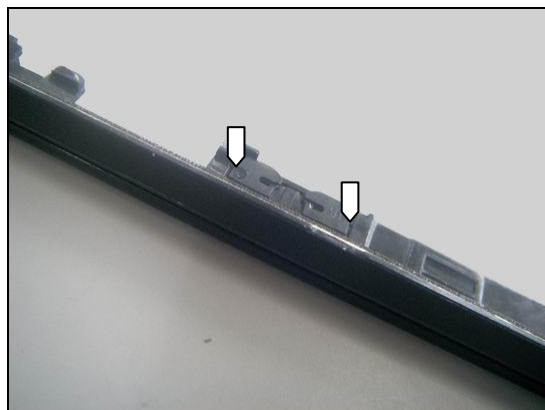
INSTALLATION

Place the Rubber Power/Lock Key into its proper position as shown in picture.



Replacement: Rubber Side Key

Make sure the two rubber pins are mounted properly into its cavity.



The Rubber Camera Key (1), the Rubber Volume Up Key (2) and the Rubber Volume down Key (3) are removed and installed same as described above.





5 Reassembly

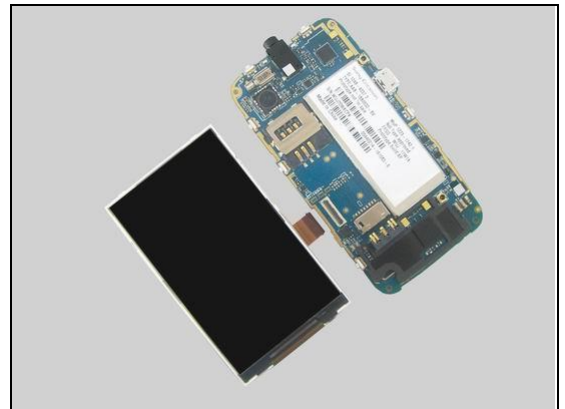
The Reassembly is done in the following order:

1. Main PBA (a) and Display (b)
2. Mylar Connector
3. Front Cover Assy
4. Rear Cover Assy
5. Band
6. Battery
7. Battery Cover

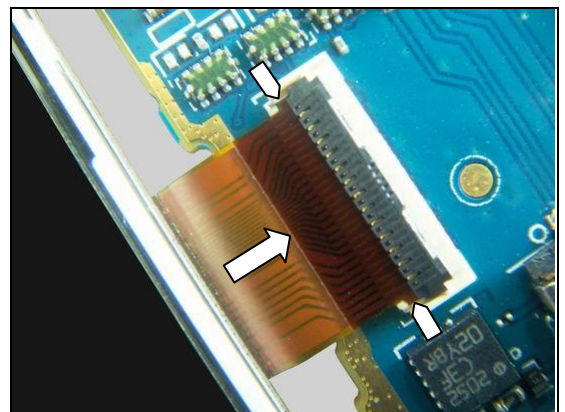


5.1 Main PBA and Display

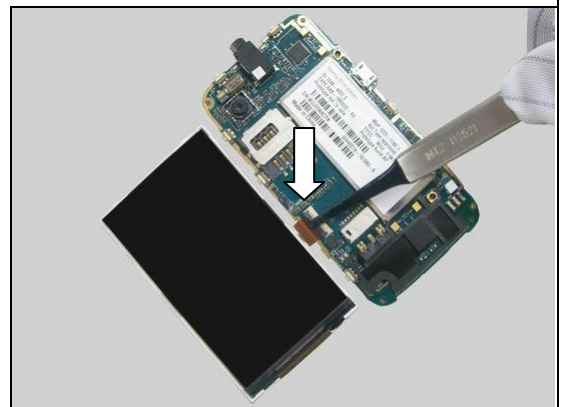
Place the Main PBA and Display together.



Insert the Display FPC into the bottom of the Connector on the Main PBA as show in picture.



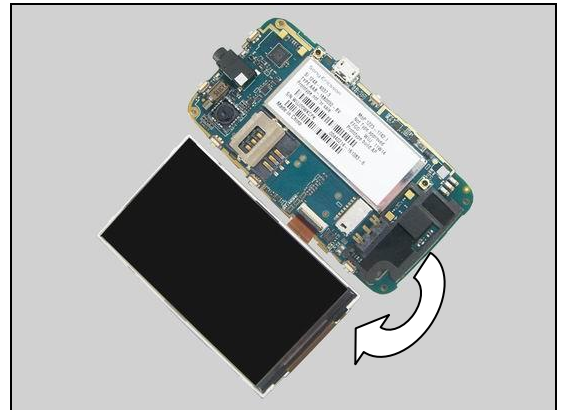
Lock the Connector with the Flex Film Assembly Tool.





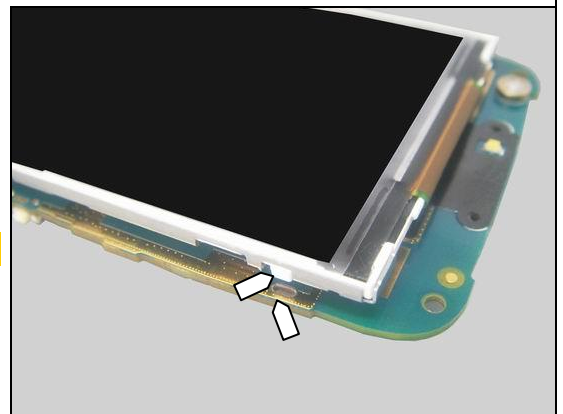
Reassembly

Carefully turn the Main PBA over.



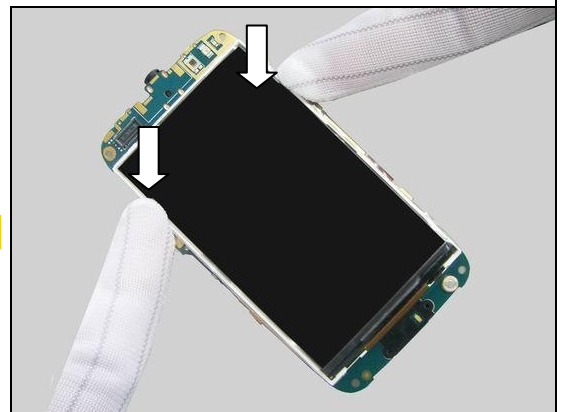
Align the guiding pole on the Display with the guiding hole on the Main PBA as the pointers indicated in the picture.

Be careful not to damage the Display FPC!



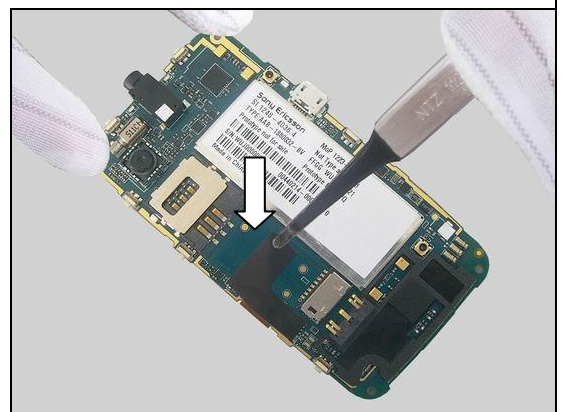
Press to snap the two hooks of the Display.

Do not touch the screen!



5.2 Mylar Connector

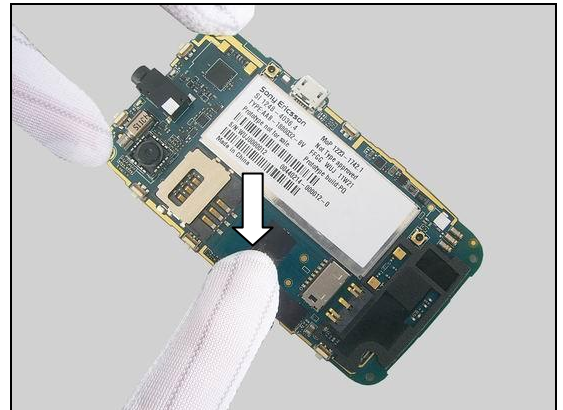
Attach the Mylar Connector in its proper position as shown in picture.





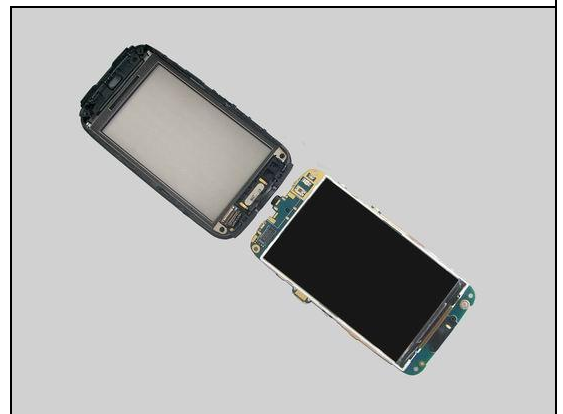
Reassembly

Press the Mylar Connector to make it securely attached.



5.3 Front Cover Assy

Place the Front Cover and Main PBA Assy together.



Lift up the Touch Panel FPC with the Tweezers gently.

Be careful not to damage the Touch Panel FPC!



Hold the Main PBA Assy at an approximate 80 degree and put the two sides of BtB connector together.





Reassembly

Press to snap the BtB Connector.



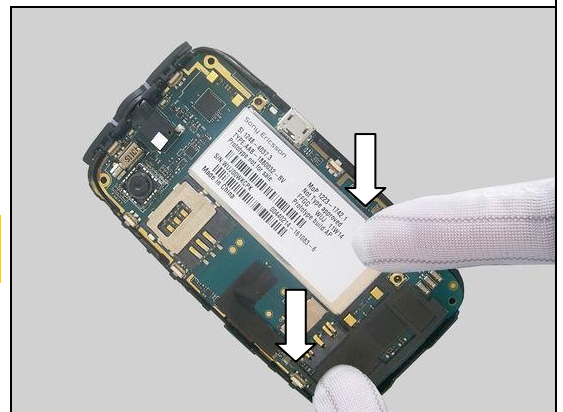
Hold the Main PBA Assy and insert the top side of it into the Front Cover Assy.

Make sure the Conn Audio Jack proper insert!



Press on both sides of the Main PBA Assy to secure it into the Front Cover Assy as shown in picture.

Make sure the rubber side keys are mounted properly into its cavities !



5.4 Rear Cover Assy

Place the Rear Cover Assy and Main PBA Assy together as show in picture.



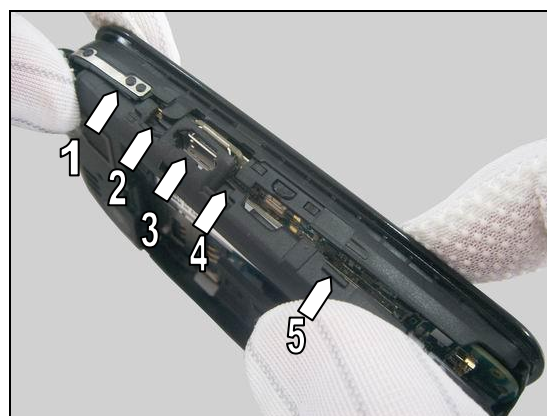
Reassembly

Hold the Rear Cover Assy on the Main PBA Assy in the proper position as shown in picture.



Press the Rear Cover Assy following the direction to snap the hooks as shown in picture.

Make sure the five hooks are properly snapped.



Press to snap the hook as shown.

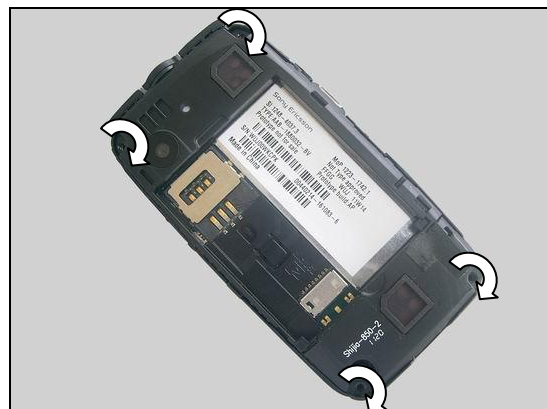


Press to snap the hooks as shown in picture.



Reassembly

Tighten the four Screws PH (T6) 16mm*5.0mm with the Torque Screwdriver by using T6 Bits to a torque of 9 ± 1 Ncm.



5.5 Band

Hold the Band in a slight angle as shown in picture.



Press to secure its position.



Do the same for the other side.



Reassembly

5.6 Battery

Insert the Battery in its cavity as shown in picture.



Press at the bottom to secure its position.

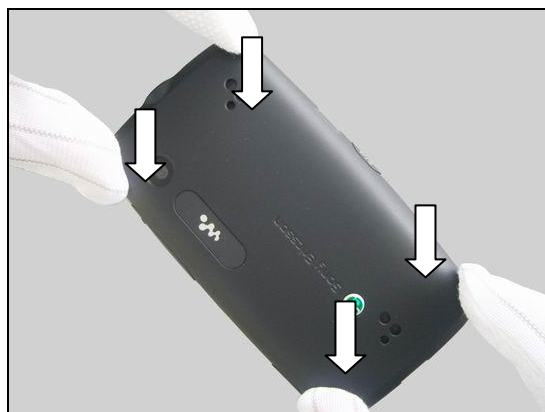


5.7 Battery Cover

Hold the Battery Cover in a slight angle and put it on the Rear Cover Assy as shown in picture.



Press to secure the Battery Cover as show in picture.





6 Revision History

Rev.	Date	Changes / Comments
1	2011-Aug-05	Initial release
2	2011-Oct-12	Add calibration request after reassembly front cover to fix P-sensor issue