



Sony Ericsson

Working Instructions

- mechanical -



Spiro

W100i, W100a



CONTENTS

1	Exterior Views	4
1.1	Spiro.....	4
2	Tools	5
3	Disassembly	6
3.1	Battery Cover.....	6
3.2	Battery.....	6
3.3	Upper Module and Lower Module	7
3.4	Deco Sheet	8
3.5	Upper Front Cover Assy and Sub Keypad	9
3.6	LCM FPC Connector Mylar and Upper Rear Cover Assy (incl. Main Display&Hinge Assy)	11
3.7	Sub PCBA Assembly and Hinge FPC	14
3.8	Main Keypad.....	14
3.9	Lower Rear Cover Assy	15
3.10	Lower Front Frame and Main PBA.....	17
4	Replacement.....	18
4.1	Battery Cover.....	18
4.2	Lower Rear Cover Assy	18
4.3	Lower Front Frame.....	18
4.4	Main Keypad.....	18
4.5	Deco Sheet	19
4.6	Upper Rear Cover Assy	19
4.7	Hinge FPC.....	19
4.8	Sub Keypad	19
4.9	LCM FPC Connector Mylar	20
4.10	Sub PCBA Assembly	20
4.11	Upper Front Cover Assy	20
4.12	Cobranding.....	21
4.13	Core Unit Label.....	23
4.14	Speaker Mesh	24
4.15	Camera Window	26
4.16	Volume Key	28
4.17	Speaker Support Base Sponge	31
4.18	Speaker	32
4.19	Speaker Sponge	34
4.20	Liquid Intrusion Indicator	36
4.21	Teflon Lubricator.....	38
4.22	Main Keypad Adhesive	39
4.23	Main Keypad Domesheet.....	41



4.24	Camera.....	43
4.25	Hinge Assy	46
4.26	Kapton Film	48
4.27	Magnet	49
4.28	MIC Sponge	50
4.29	Conductive Sponge.....	51
4.30	Sub Keypad Domesheet	52
4.31	Main Display	54
4.32	Ear Speaker	57
4.33	Receiver Sponge	59
5	Reassembly	61
5.1	Main PBA and Lower Front Frame	61
5.2	Lower Rear Cover Assy	62
5.3	Main Keypad.....	63
5.4	Hinge FPC and Sub PCBA Assembly	64
5.5	Upper Rear Cover Assy (incl. Main Display&Hinge Assy) and LCM FPC Connector Mylar	64
5.6	Sub Keypad and Upper Front Cover Assy	68
5.7	Deco sheet.....	70
5.8	Lower Module and Upper Module	71
5.9	Battery.....	73
5.10	Battery Cover.....	74
6	Revision History.....	75

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



1 Exterior Views

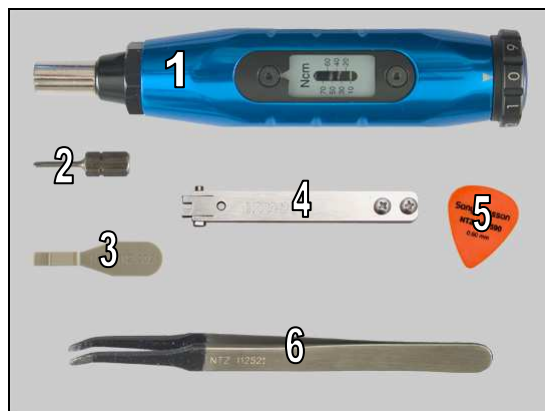
1.1 Spiro



2 Tools

SPECIAL TOOLS

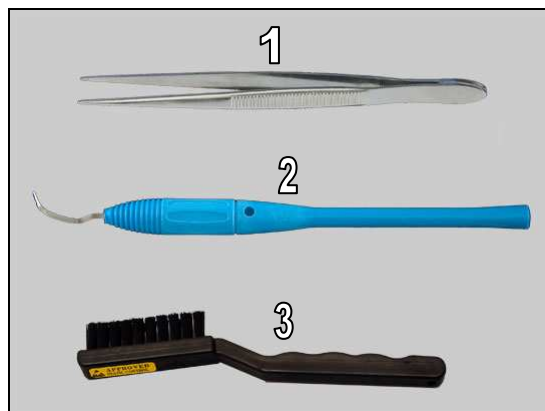
1. Torque Screwdriver
2. Bits (JCIS No.0)
3. Front Opening Tool
4. Camera Removal Tool
5. Guitar Pick
6. Flex Film Assembly Tool



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

STANDARD TOOLS

1. ESD Tweezers
2. Dentist hook
3. ESD cleaning brush





3 Disassembly

The disassembly is done in the following order:

1. Battery Cover
2. Battery
3. Deco Sheet
4. Upper Front Cover Assy (a) and Sub Keypad (b)
5. LCM FPC Connector Mylar (a) and Upper Rear Cover Assy (incl. Main Display&Hinge Assy) (b)
6. Sub PCBA Assembly (a) and Hinge FPC (b)
7. Main Keypad
8. Lower Rear Cover Assy
9. Lower Front Frame (a) and Main PBA (b)



3.1 Battery Cover

Insert the Front Opening Tool to release the Battery Cover.



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



3.2 Battery

Insert finger and lift up the bottom of the Battery to release it.





Disassembly

Remove the Battery.



3.3 Upper Module and Lower Module

Remove the four Screws (1.4mm_3.5mm) with the Torque Screwdriver by using JCIS No.0 Bits.



Turn over the phone.

Be careful not to separate upper module and lower module!



Open the slider gently.





Disassembly

Lift up upper module a little to release it from lower module and reveal the Hinge connector on the Main PBA as shown in picture.

Be careful not to damage the Hinge FPC in this operation!



Unlock the Hinge FPC connector on the Main PBA to release Hinge FPC by using the Front Opening Tool.

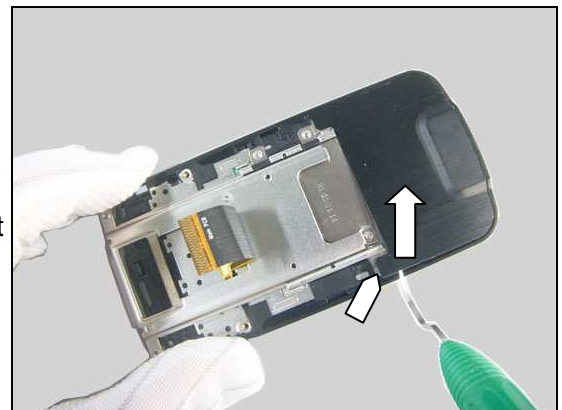


Separate the upper module from lower module as shown in picture.



3.4 Deco Sheet

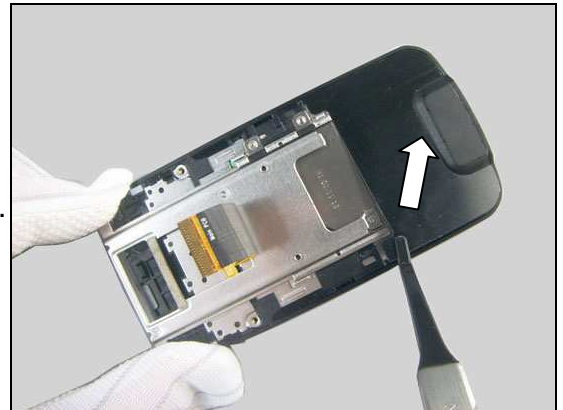
Insert Dentist hook at this corner and loosen the Deco Sheet from the Upper Rear Cover Assy.





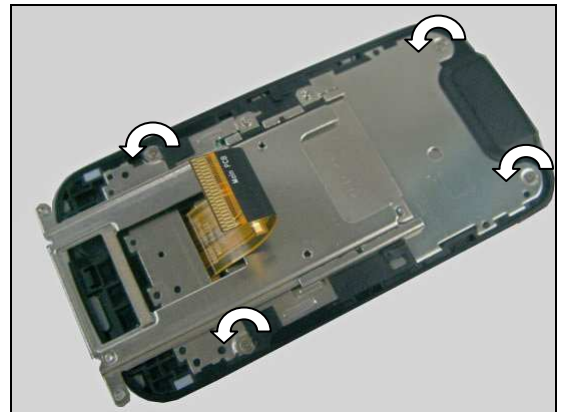
Disassembly

Peel off the Deco Sheet by using the Flex Film Assembly Tool.

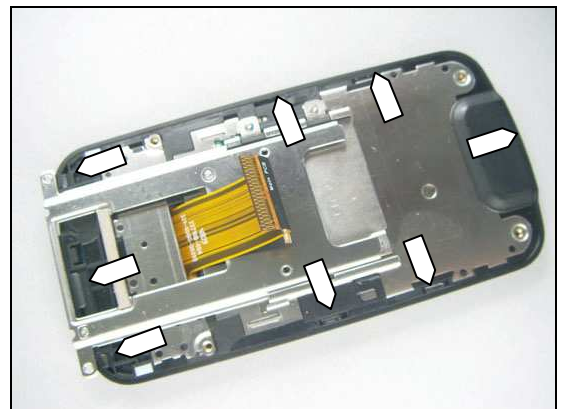


3.5 Upper Front Cover Assy and Sub Keypad

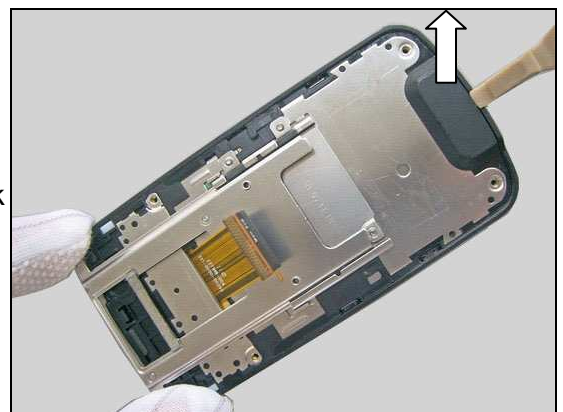
Remove the four Screws (1.4mm_1.5mm) with the Torque Screwdriver by using JCIS No.0 Bits.



There are eight hooks securing the Upper Front Cover Assy located as shown.



Insert the Front Opening Tool at the top to loosen the top hook as shown.





Disassembly

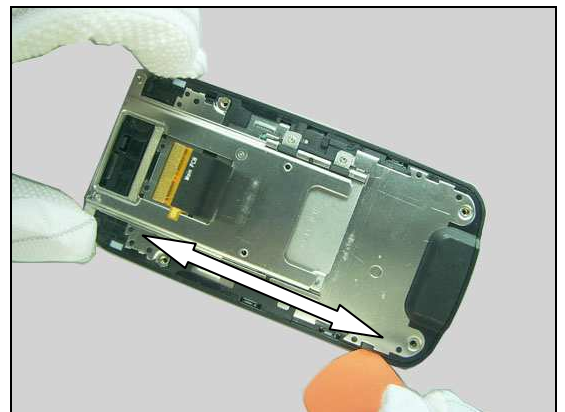
Insert the Guitar Pick and slide it along the top side to unsnap the snap hook as shown in the picture.



Insert the Guitar Pick and slide it along this side to unsnap the snap hooks.

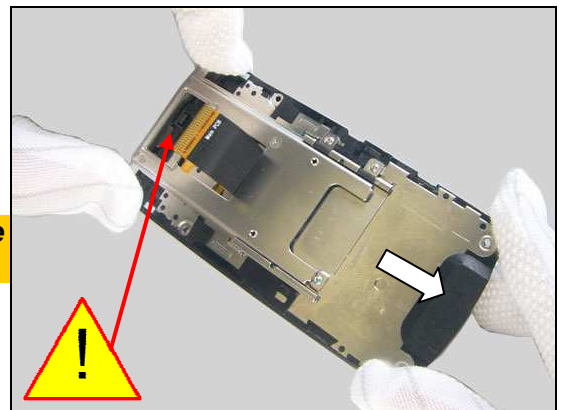


Do the same on the opposite side.



Lift up the Upper Rear Cover Assy and remove it as shown in picture.

Be careful not to damage or deform the three hooks at the bottom.





Disassembly

Separate the upper module into two parts as shown in picture.



Remove the Sub Keypad from the Upper Front Cover Assy with Tweezers.



Separate the Sub Keypad and the Upper Front Cover Assy.



3.6 LCM FPC Connector Mylar and Upper Rear Cover Assy (incl. Main Display&Hinge Assy)

There are three hooks securing the Sub PCBA Assembly located as shown.

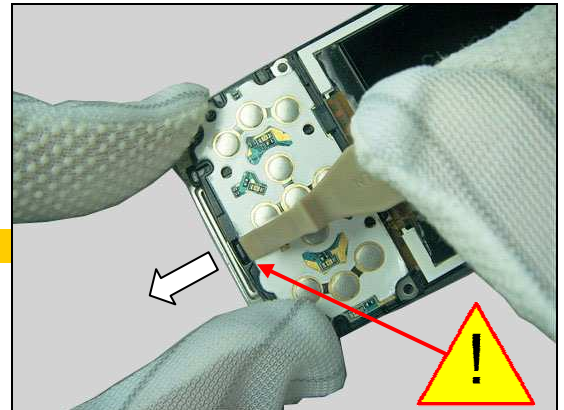




Disassembly

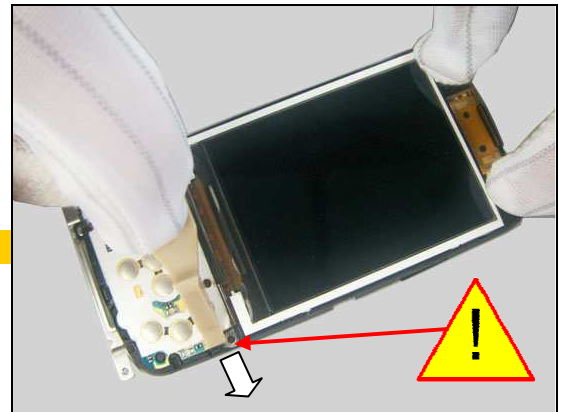
Unsnap the bottom snap hook by using the Front Opening Tool as shown in the picture.

Be careful not to damage the hook.

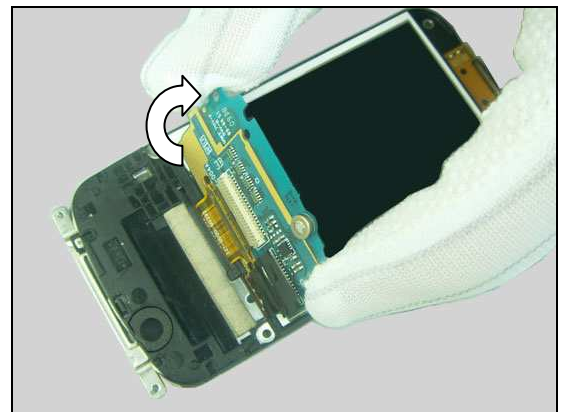


Unsnap the side snap hook by using the Front Opening Tool as shown in the picture.

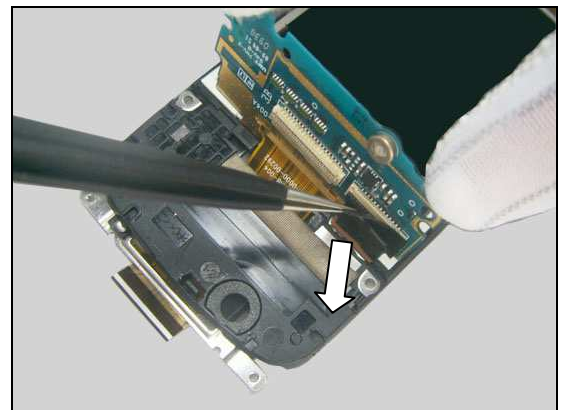
Be careful not to damage the hook.



Turn the Sub PCBA Assembly approximately 90° as shown.



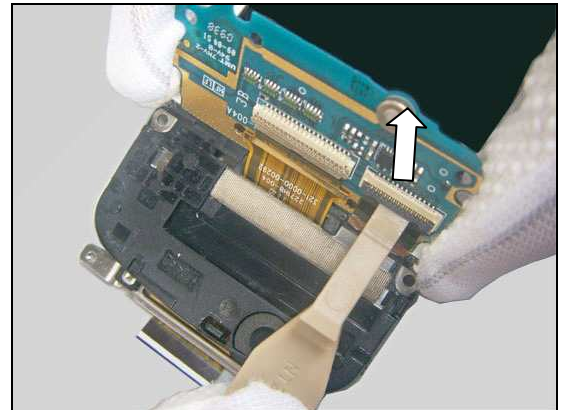
Peel off the LCM FPC Connector Mylar by using the Tweezers.



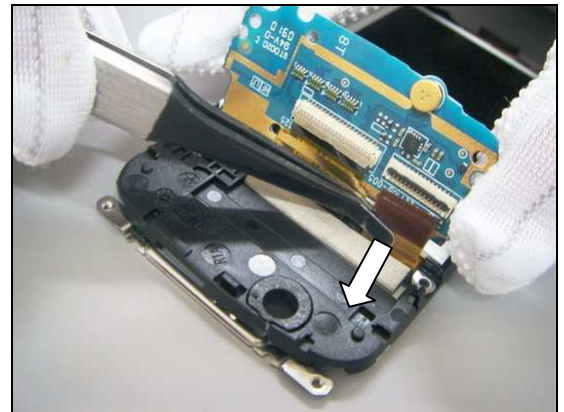


Disassembly

Unlock the LCM FPC Connector by using the Front Opening Tool.



Release the LCM FPC from the connector with the Flex Film Assembly Tool.



Thread Hinge FPC (incl. the Sub PCBA Assembly) through the slot on the Upper Rear Cover Assy to remove it as shown in picture.



Separate the Sub PCBA Assembly (incl. Hinge FPC) from the Upper Rear cover Assy (incl. Main Display&Hinge Assy).





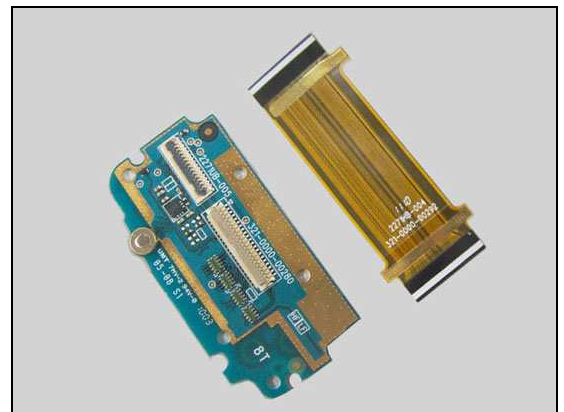
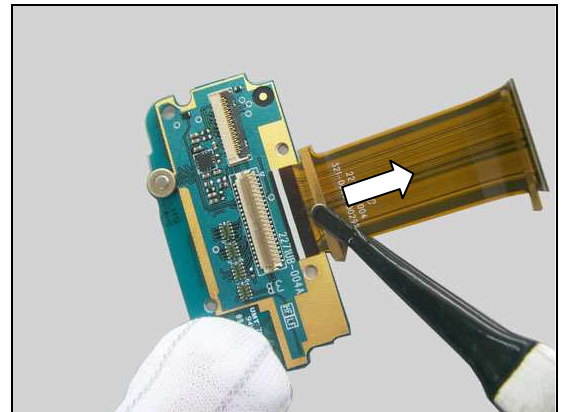
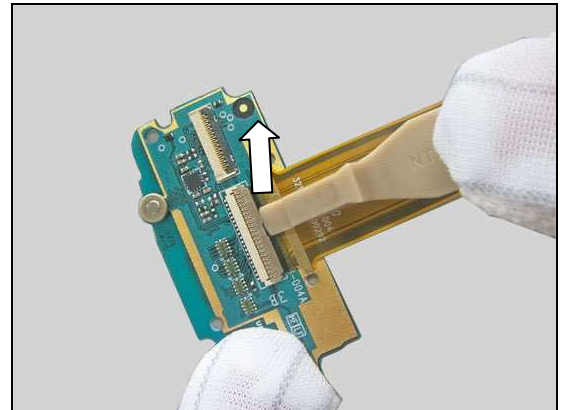
Disassembly

3.7 Sub PCBA Assembly and Hinge FPC

Unlock the Hinge FPC Connector by using the Front Opening Tool.

Remove the Hinge FPC.

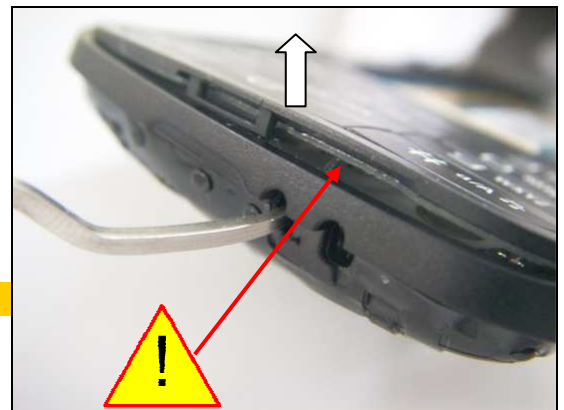
Separate the Hinge FPC from the Sub PCBA Assembly as shown in picture.



3.8 Main Keypad

Insert the Dentist hook through the hole on the bottom of the Lower Rear Cover Assy to loosen the Main Keypad as shown in picture.

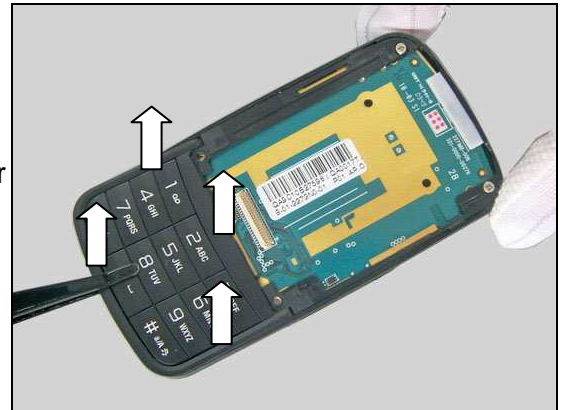
Be careful not to damage the Main Keypad.





Disassembly

Loosen the Main Keypad gently from the Main PBA and Lower Front Frame with the Flex Film Assembly Tool as shown in picture.

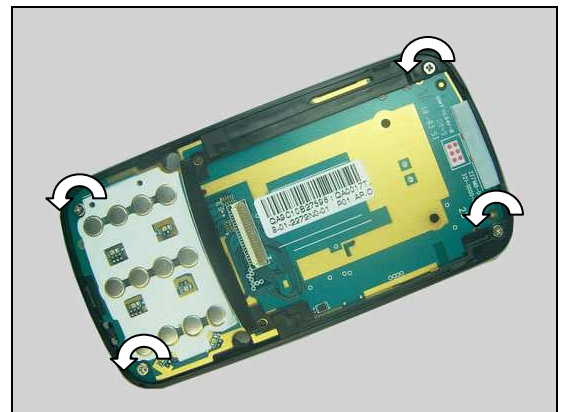


Remove the Main Keypad.

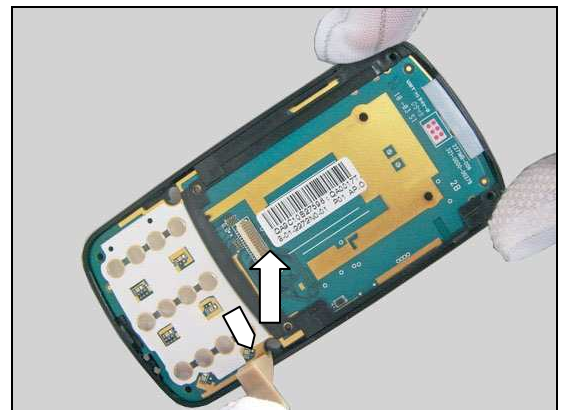


3.9 Lower Rear Cover Assy

Remove the four Screws (1.6mm_4mm) with the Torque Screwdriver by using JCIS No.0 Bits.



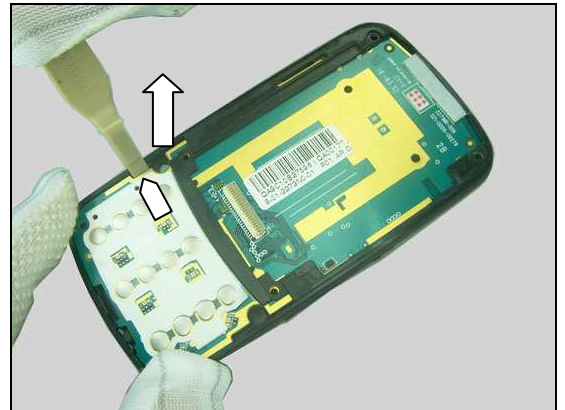
Insert the Front Opening Tool into the gap between the Main PBA and Lower Rear Cover Assy as pointer indicated in picture and gently loosen one side of the Main PBA from Lower Rear Cover Assy.



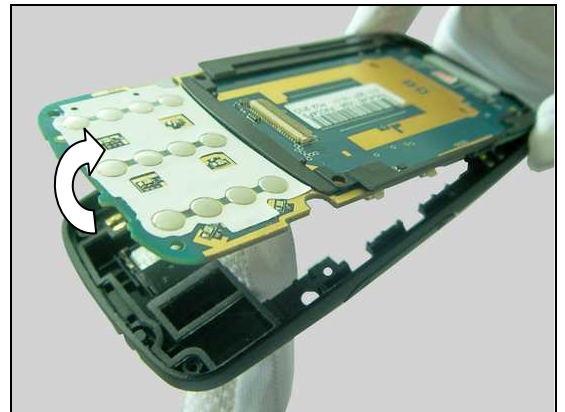


Disassembly

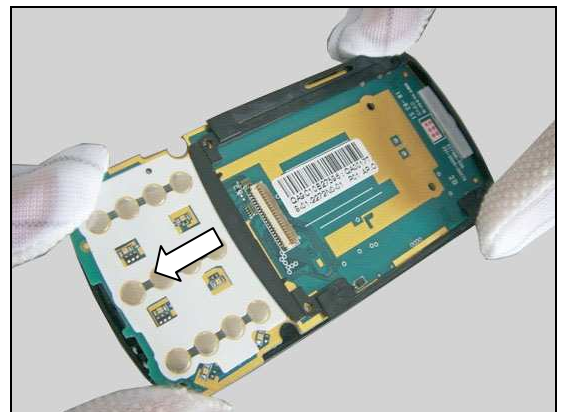
Do the same on the opposite side.



Push up the Main PBA from backside to release the bottom of the Main PBA from the Lower Rear Cover Assy as shown in picture.



Remove the Main PBA as shown in picture.



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





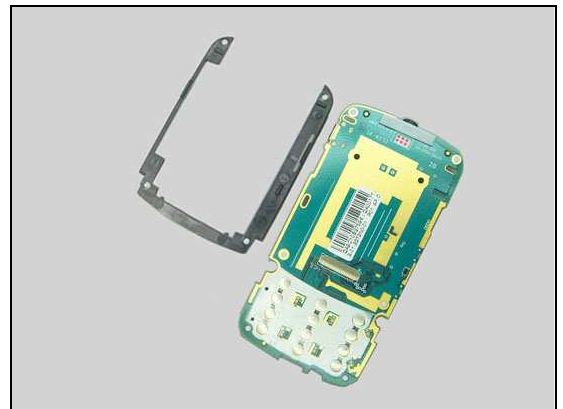
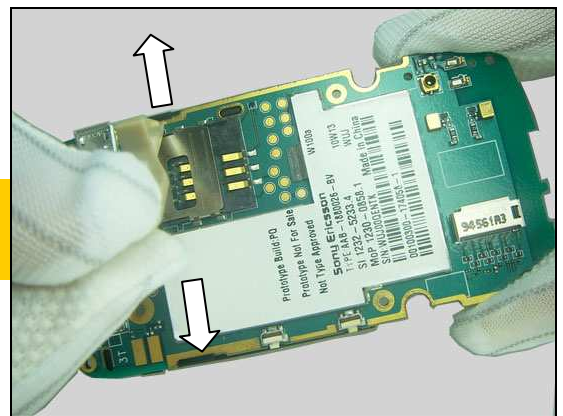
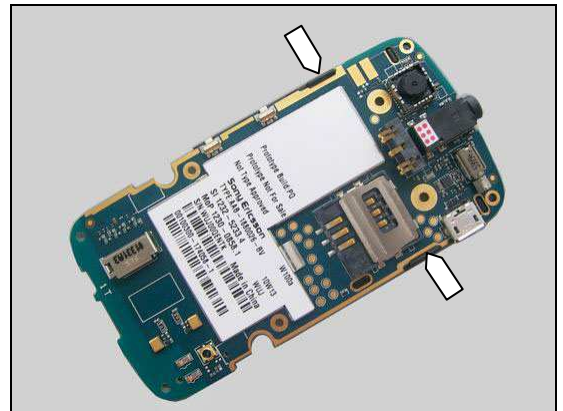
Disassembly

3.10 Lower Front Frame and Main PBA

There are two snap hooks securing the Lower Front Frame located as shown.

Unsnap the two snap hooks of the Lower Front Frame by using the Front Opening Tool as shown in picture.

Releasing the two hooks by using fingers is also the alternative method as shown in Mechanical Repair Movie document.



Separate the Lower Front Frame from the Main PBA.



4 Replacement

4.1 Battery Cover

Follow the 3.1 Disassembly Instructions!

Prepare the new Battery Cover.

Follow the 5.10 Reassembly Instructions!



4.2 Lower Rear Cover Assy

Follow the 3.1 – 3.3 & 3.8– 3.9 Disassembly Instructions!

Follow the 4.16, 4.17 and 4.18 Removal Instructions!

Prepare the new Lower Rear Cover Assy.

Follow the 4.14, 4.15, 4.16, 4.18 and 4.17 Installation Instructions!

Follow the 5.2– 5.3 & 5.8 – 5.10 Reassembly Instructions!

Install a new Speaker Mesh and a new Camera Window!



4.3 Lower Front Frame

Follow the 3.1 – 3.3 & 3.8 – 3.10 Disassembly Instructions!

Prepare the new Lower Front Frame.

Follow the 5.1– 5.3 & 5.8 – 5.10 Reassembly Instructions!



4.4 Main Keypad

Follow the 3.1 – 3.3 & 3.8 Disassembly Instructions!

Prepare the new Main Keypad.

Follow the 5.3 & 5.8 – 5.10 Reassembly Instructions!





Replacement

4.5 Deco Sheet

Follow the 3.1 – 3.4 Disassembly Instructions!

Prepare the new Deco Sheet.

Follow the 5.7 – 5.10 Reassembly Instructions!

Deco sheet cannot be reused!



4.6 Upper Rear Cover Assy

Follow the 3.1 – 3.6 Disassembly Instructions!

Follow the 4.31, 4.25, 4.29, 4.27 and 4.26 Removal Instructions!

Prepare the new Upper Rear Cover Assy.

Follow the 4.26, 4.25, 4.27, 4.28, 4.29 and 4.31 Installation Instructions!

Follow the 5.5 – 5.10 Reassembly Instructions!

Install a new MIC Sponge, a new LCM FPC Connector Mylar and a new Deco Sheet!



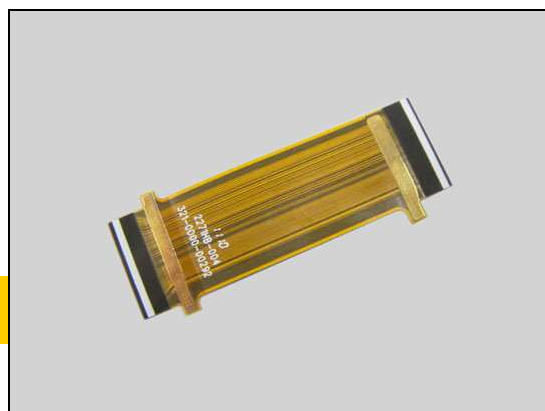
4.7 Hinge FPC

Follow the 3.1 – 3.7 Disassembly Instructions!

Prepare the new Hinge FPC.

Follow the 5.4 – 5.10 Reassembly Instructions!

Install a new LCM FPC Connector Mylar and a new Deco Sheet!



4.8 Sub Keypad

Follow the 3.1 – 3.5 Disassembly Instructions!

Prepare the new Sub Keypad.

Follow the 5.6 – 5.10 Reassembly Instructions!

Install a new Deco Sheet!



Replacement

4.9 LCM FPC Connector Mylar

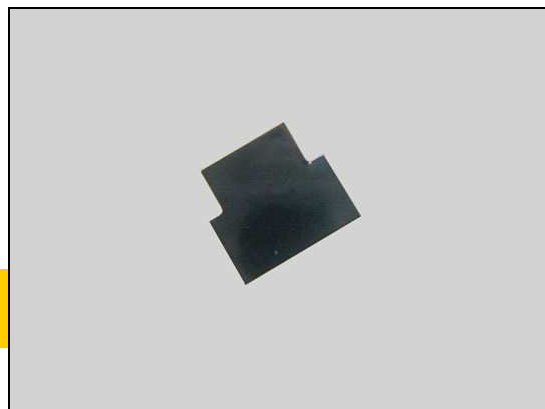
Follow the 3.1 – 3.6 Disassembly Instructions!

Prepare the new LCM FPC Connector Mylar.

Follow the 5.5 – 5.10 Reassembly Instructions!

LCM FPC Connector Mylar cannot be reused!

Install a new Deco Sheet!



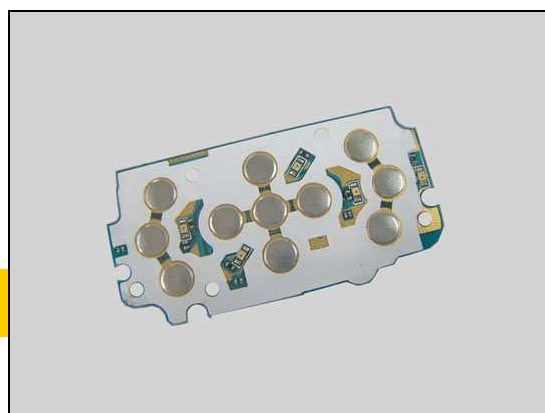
4.10 Sub PCBA Assembly

Follow the 3.1 – 3.7 Disassembly Instructions!

Prepare the new Sub PCBA Assembly.

Follow the 5.4 – 5.10 Reassembly Instructions!

Install a new LCM FPC Connector Mylar and a new Deco Sheet!



4.11 Upper Front Cover Assy

Follow the 3.1 – 3.5 Disassembly Instructions!

Follow the 4.32 Removal Instructions!

Prepare the new Upper Front Cover Assy.

Follow the 4.32 Installation Instructions!

Follow the 5.6 – 5.10 Reassembly Instructions!

Install a new Deco Sheet!



Replacement

4.12 Cobranding

Follow the 3.1 Disassembly Instructions!

Prepare the new Cobranding.

Follow the 5.10 Reassembly Instructions!

Cobranding cannot be reused!

REMOVAL

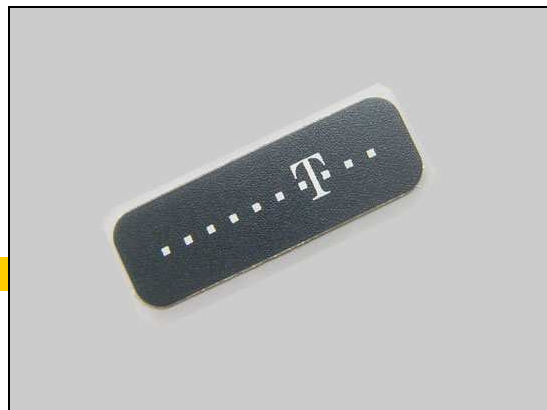
Insert the Dentist hook underneath the corner of the Cobranding to detach it.

Be careful not to damage the Battery Cover.

Peel off the Cobranding with the Flex Film Assembly Tool.

INSTALLATION

Attach a new Cobranding in its cavity as shown in picture.



Replacement: Cobranding

Press to secure the solid attachment.



Replacement

4.13 Core Unit Label

Follow the 3.1 – 3.2 Disassembly Instructions!

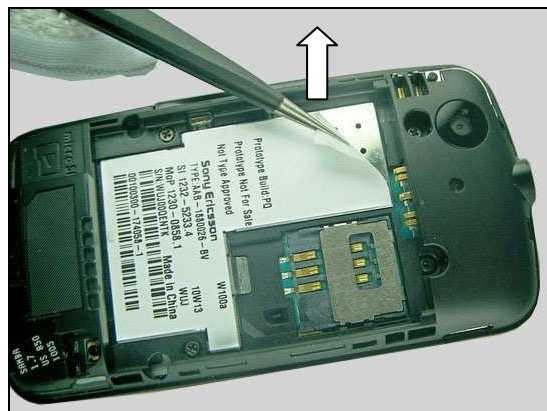
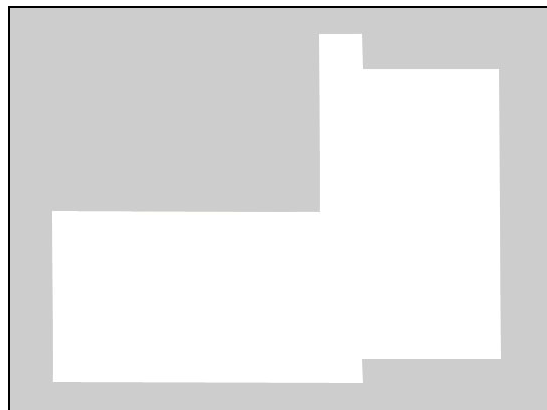
Prepare the new Core Unit Label.

Follow the 5.9 – 5.10 Reassembly Instructions!

REMOVAL

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

Remove the Core Unit 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!





Replacement

4.14 Speaker Mesh

Follow the 3.1 – 3.2 Disassembly Instructions!

Prepare the new Speaker Mesh.

Follow the 5.9 – 5.10 Reassembly Instructions!

Speaker Mesh cannot be reused!

REMOVAL

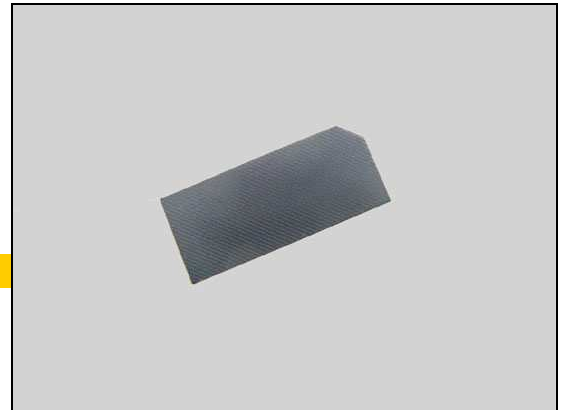
Insert the Dentist hook underneath the corner of the Speaker Mesh to detach it.

Be careful not to damage the Lower Rear Cover Assy.

Peel off the Speaker Mesh by using the Tweezers.

INSTALLATION

Attach a new Speaker Mesh in its cavity as shown in picture.



Replacement: Speaker Mesh

Press to make it securely attached.





Replacement

4.15 Camera Window

Follow the 3.1 – 3.3 & 3.8 – 3.9 Disassembly Instructions!

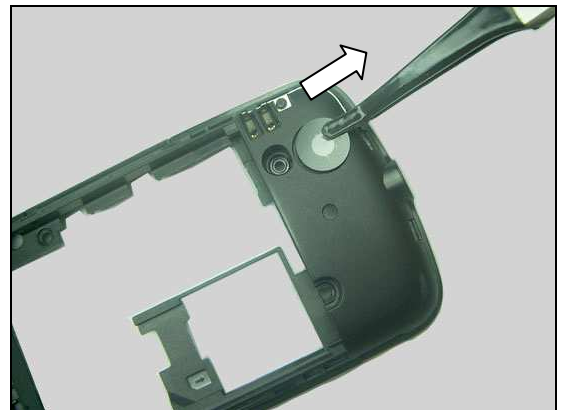
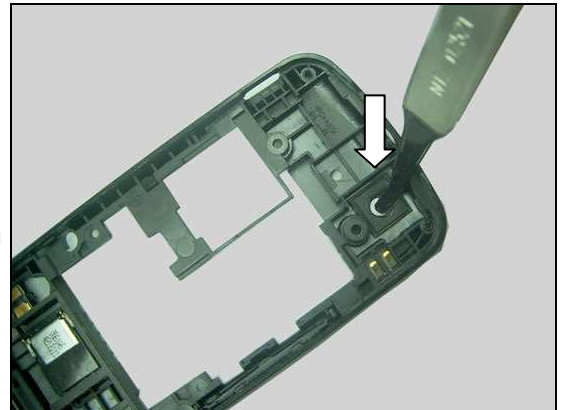
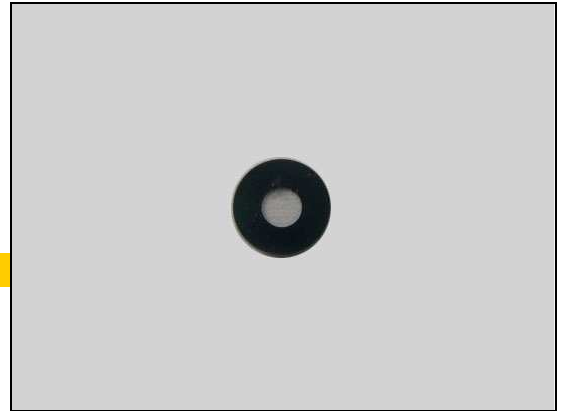
Prepare the new Camera Window.

Follow the 5.2– 5.3 & 5.8 – 5.10 Reassembly Instructions!

Camera Window cannot be reused!

REMOVAL

Push the Camera Window from inside to detach it as shown in picture.



Remove the Camera Window.

INSTALLATION

Attach a new Camera Window in its cavity.



Replacement: Camera Window

Press to secure the attachment.





Replacement

4.16 Volume Key

Follow the 3.1 – 3.3 & 3.8 – 3.9 Disassembly Instructions!

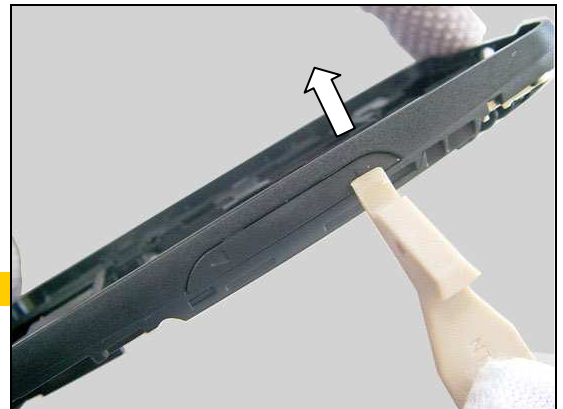
Prepare the new Volume Key.

Follow the 5.2– 5.3 & 5.8 – 5.10 Reassembly Instructions!

REMOVAL

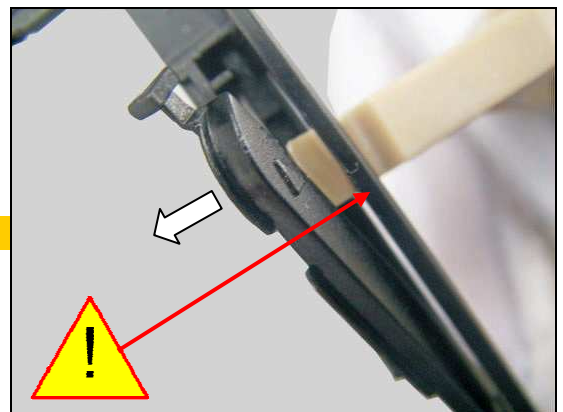
Push one end of the Volume Key from outside by using the Front Opening Tool as shown in the picture.

Be careful not to damage the Volume Key.



Release the Volume Key from its cavity.

Be careful not to damage the Lower Rear Cover Assy.



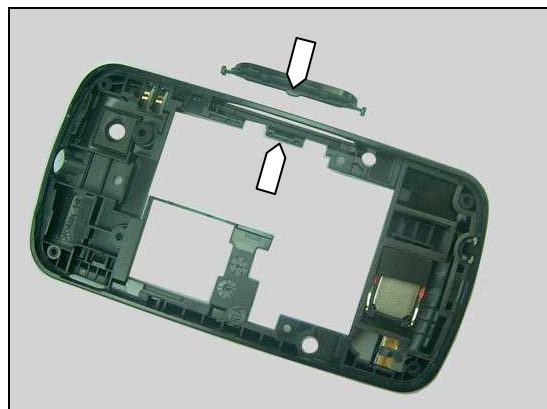
Remove it with the Flex Film Assembly Tool.



Replacement: Volume Key

INSTALLATION

Align the Volume Key with the Lower Rear Cover Assy by using the projection of the Volume Key and the cut on the Lower Rear Cover Assy as pointers indicated in picture.



Place the Volume Key in its proper position with the curve side upwards as shown in picture.



Push out the Volume Key from inside with fingers to make it into its cavity.

Be careful not to damage the Lower Rear Cover Assy.



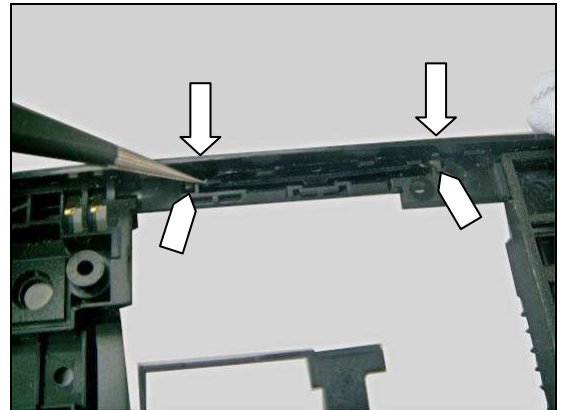
Make sure the Volume Key is properly into its cavity as shown in picture.





Replacement: Volume Key

Mount the two rubber pins properly into its cavity by using the Tweezers as pointers indicated in picture.



Replacement

4.17 Speaker Support Base Sponge

Follow the 3.1 – 3.3 & 3.8 – 3.9 Disassembly Instructions!

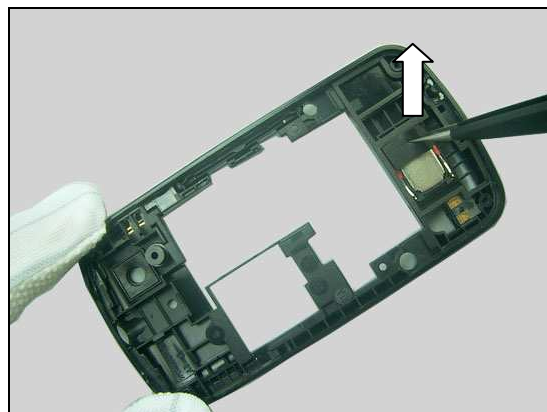
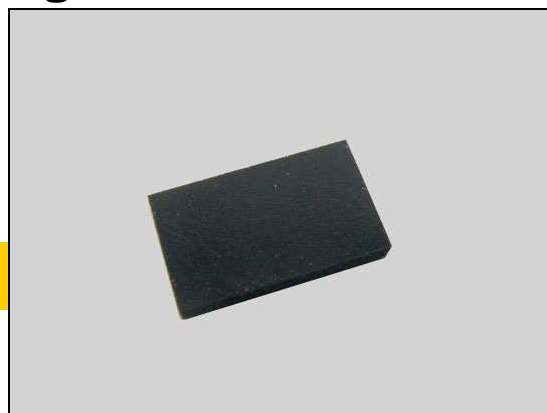
Prepare the new Speaker Support Base Sponge.

Follow the 5.2– 5.3 & 5.8 – 5.10 Reassembly Instructions!

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

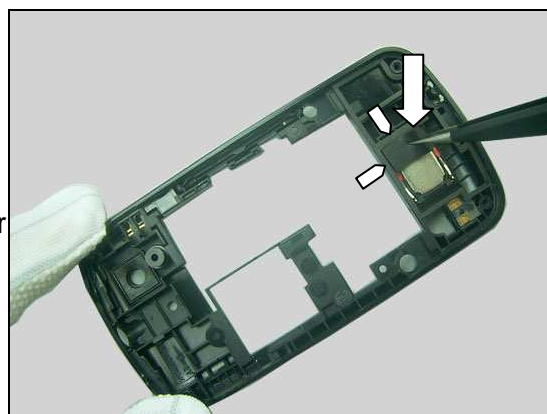
REMOVAL

Peel off the Speaker Support Base Sponge from the Speaker with the Tweezers.

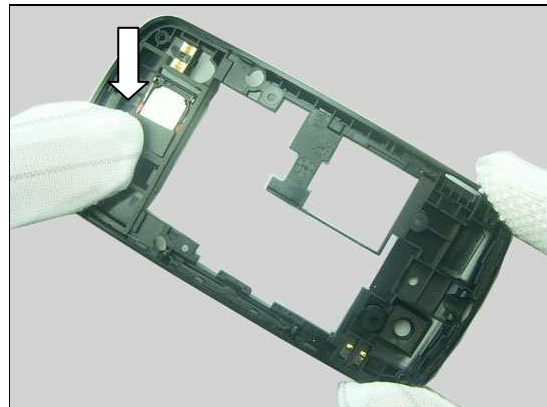


INSTALLATION

Attach a new Speaker Support Base Sponge onto the Speaker in alignment with ribs on the Lower Rear Cover Assy as pointers shown in picture.



Press to make it securely attached.



Replacement

4.18 Speaker

Follow the 3.1 – 3.3 & 3.8 – 3.9 Disassembly Instructions!

Follow the 4.17 Removal Instructions!

Prepare the new Speaker.

Follow the 4.17 Installation Instructions!

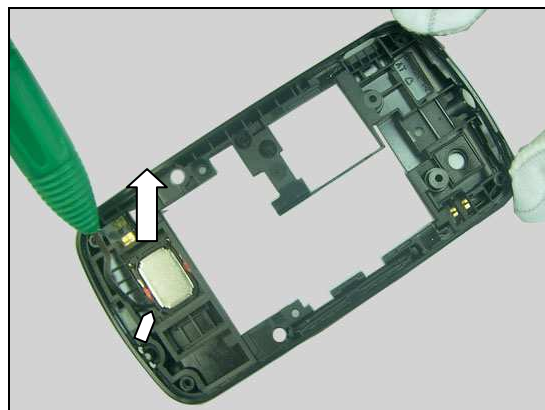
Follow the 5.2– 5.3 & 5.8 – 5.10 Reassembly Instructions!

Check the stickiness of the Speaker Support Base Sponge before the installation. Follow the 4.17 Removal and Installation instructions to change a new Speaker Support Base Sponge in case of the adhesive missing or failure.

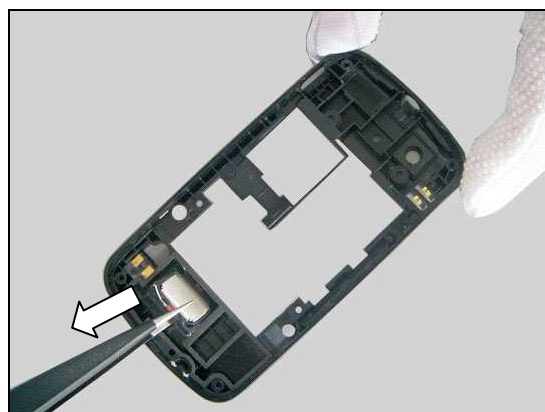


REMOVAL

Insert Dentist hook at this corner and loosen the Speaker from its cavity.



Remove it by using the Tweezers.



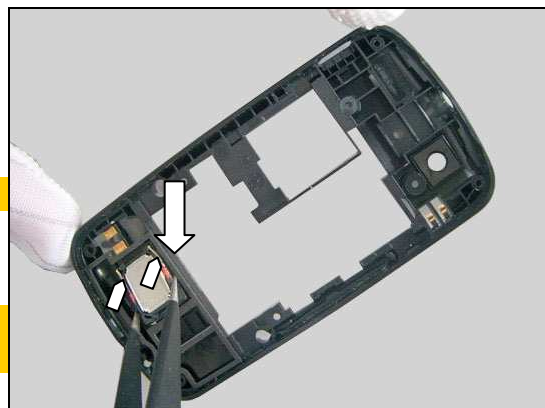
INSTALLATION

Follow the 4.19 Removal and Installation Instructions!

Install a new Speaker Sponge!

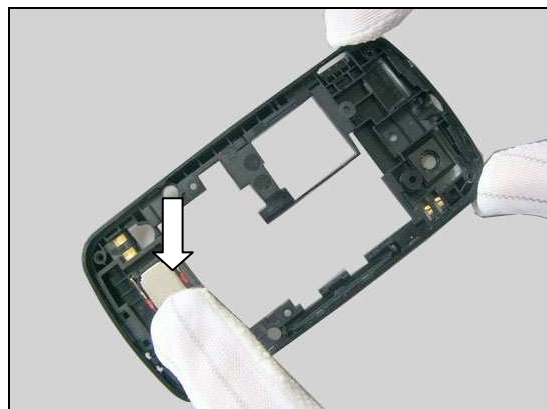
Place the Speaker into its cavity in the right direction.

The speaker contact spring pins must be placed on the left side as pointers indicated in picture!



Replacement: Speaker

Press to make it securely attached.



Replacement

4.19 Speaker Sponge

Follow the 3.1 – 3.3 & 3.8 – 3.9 Disassembly Instructions!

Follow the 4.17 and 4.18 Removal Instructions!

Prepare the new Speaker Sponge.

Follow the 4.18 and 4.17 Installation Instructions!

Follow the 5.2– 5.3 & 5.8 – 5.10 Reassembly Instructions!

The Speaker Sponge cannot be reused!

Check the stickiness of the Speaker Support Base Sponge before the installation. Follow the 4.17 Removal and Installation instructions to change a new Speaker Support Base Sponge in case of the adhesive missing or failure.

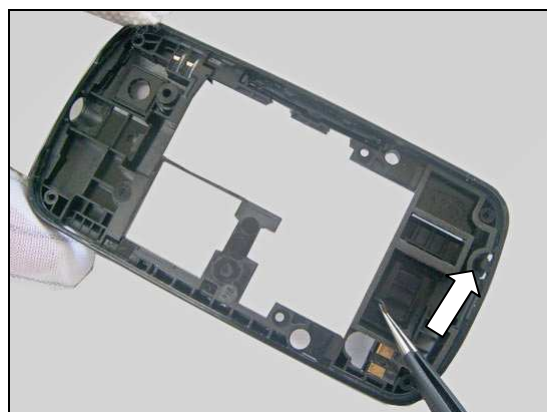
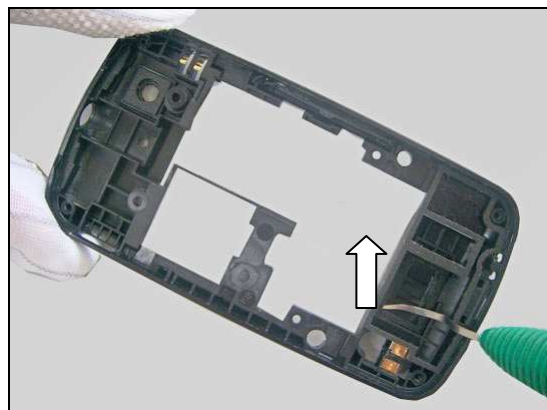
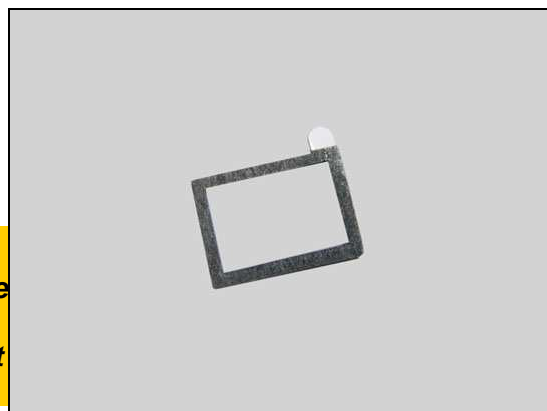
REMOVAL

Insert the Dentist hook underneath the residues of the old Speaker Sponge to loosen it.

Peel off it by using the Tweezers.

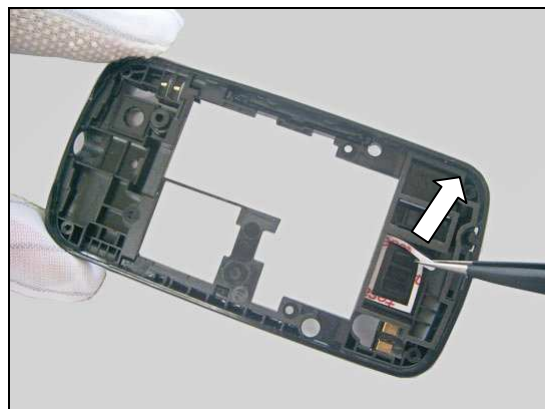
INSTALLATION

Clean the residues of the old Speaker Sponge before installation!

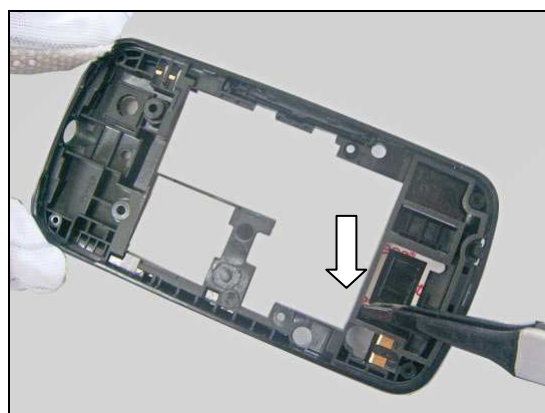


Replacement: Speaker Sponge

Attach a new Speaker Sponge in its cavity.



Press to make it securely attached by using the Flex Film Assembly Tool.



Peel off the protection paper.





Replacement

4.20 Liquid Intrusion Indicator

There are two Liquid Intrusion Indicators on the phone.

INSPECTION

Follow the 3.1 Disassembly Instructions!

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

If activated:

Follow the 3.2 – 3.3 & 3.8 – 3.10 Disassembly Instructions!

Carry out the replacement as described below.

Follow the 5.1– 5.3 & 5.8 – 5.10 Reassembly Instructions!

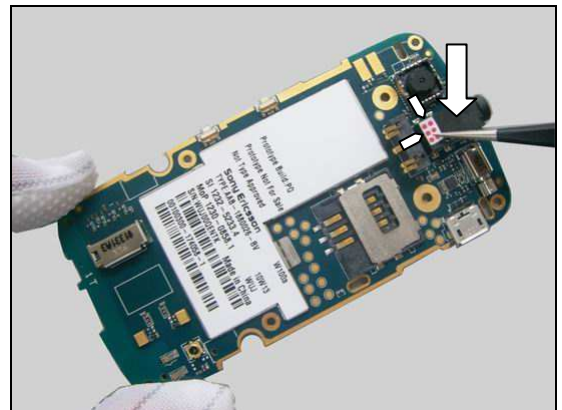
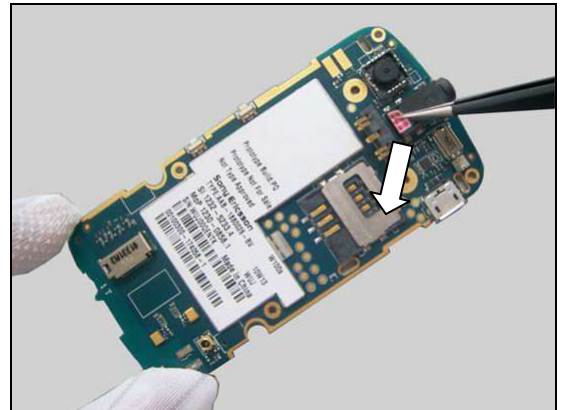
REMOVAL

Detach the activated Liquid Intrusion Indicator off the Audio Jack Connector by using the Tweezers.

INSTALLATION

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

Press to secure the attachment with finger.



Replacement: Liquid Intrusion Indicator

INSPECTION

Follow the 3.1 – 3.3 Disassembly Instructions!

To check whether the Liquid Intrusion Indicator (2) has been activated (reddish color).

If activated:

Carry out the replacement as described below.

Follow the 5.8 – 5.10 Reassembly Instructions!



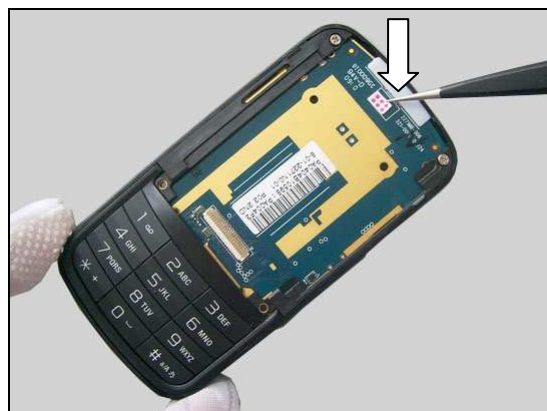
REMOVAL

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

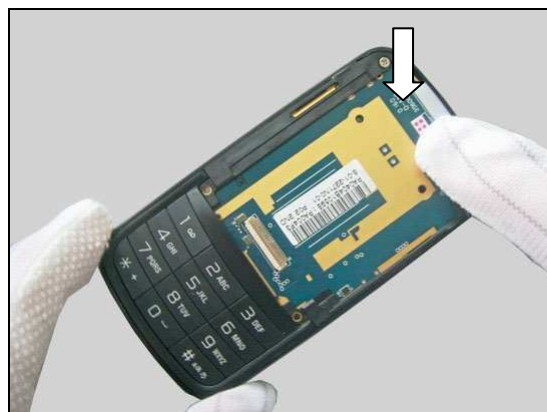


INSTALLATION

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



Press to secure the attachment with finger.





Replacement

4.21 Teflon Lubricator

Follow the 3.1 – 3.3 Disassembly Instructions!

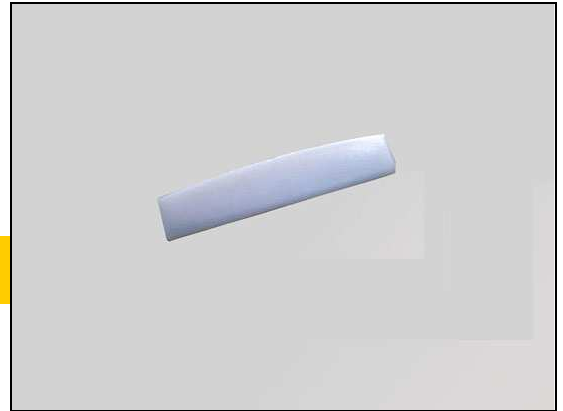
Prepare the new Teflon Lubricator.

Follow the 5.8 – 5.10 Reassembly Instructions!

Teflon Lubricator cannot be reused in case of the adhesive missing or failure!

REMOVAL

Detach the Teflon Lubricator by using the Tweezers.

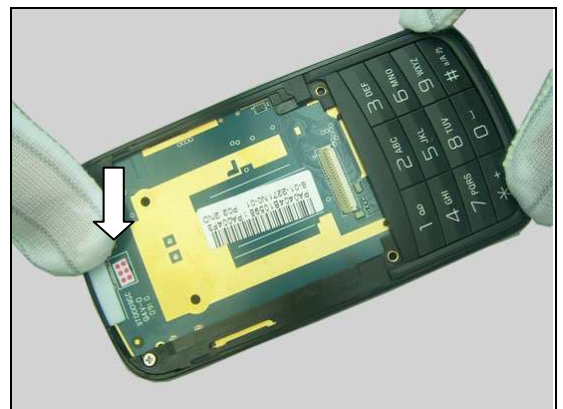


INSTALLATION

Attach a new Teflon Lubricator in alignment with the printed line on the Main PBA as shown in picture.



Press to make it securely attached.



Replacement

4.22 Main Keypad Adhesive

Follow the 3.1 – 3.3 & 3.8 Disassembly Instructions!

Prepare the new Main Keypad Adhesive.

Follow the 5.3 & 5.8 – 5.10 Reassembly Instructions!

Main Keypad Adhesive cannot be reused in case of the adhesive missing or failure!

REMOVAL

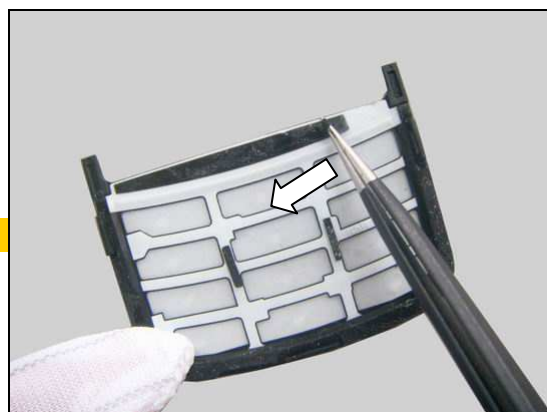
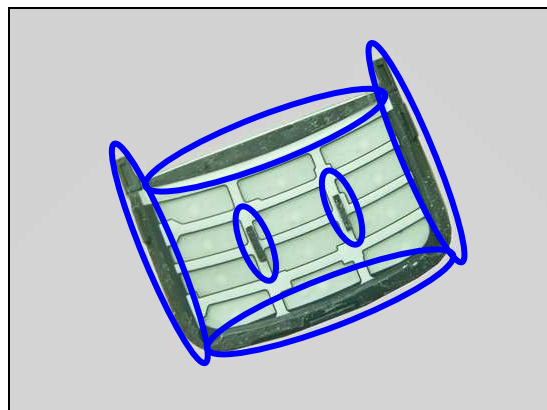
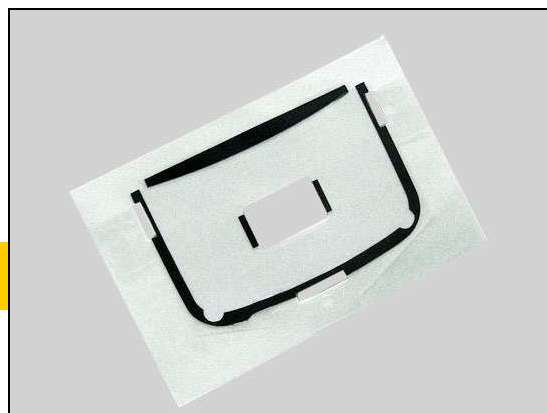
Locate the Main Keypad Adhesive indicated by the circles.

Remove the old Main Keypad Adhesive with the Tweezers.

Make sure all strips of adhesive are removed.

INSTALLATION

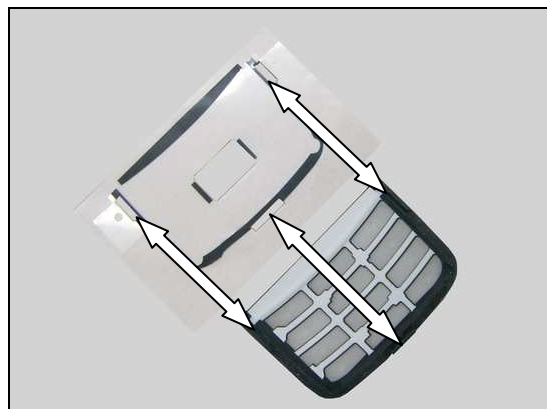
Clean the residues of the old adhesive before installation!



Replacement: Main Keypad Adhesive

Peel off protection paper.

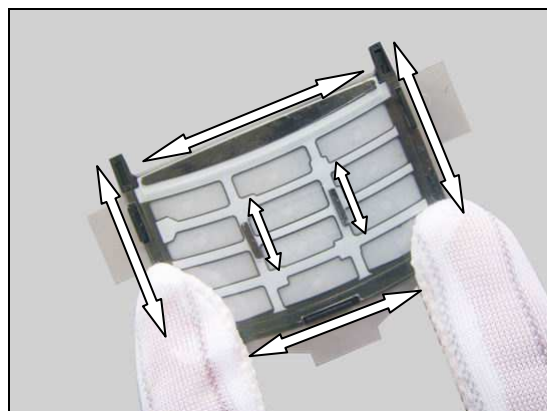
Align the Main keypad Adhesive with the Main keypad by using the guiding holes and guiding hooks as arrows indicated in picture.



Attach a new Main Keypad Adhesive in its proper position by using the guiding holes and hooks as pointers indicated in picture.



Press the adhesive area to make it securely attached as shown in picture.



Peel off the protection film.



Replacement

4.23 Main Keypad Domesheet

Follow the 3.1 – 3.3 & 3.8 – 3.10 Disassembly Instructions!

Prepare the new Main Keypad Domesheet.

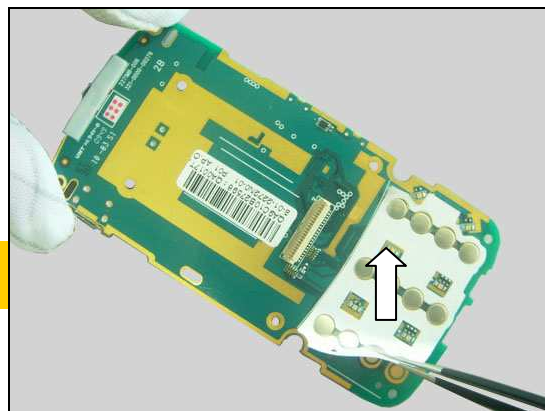
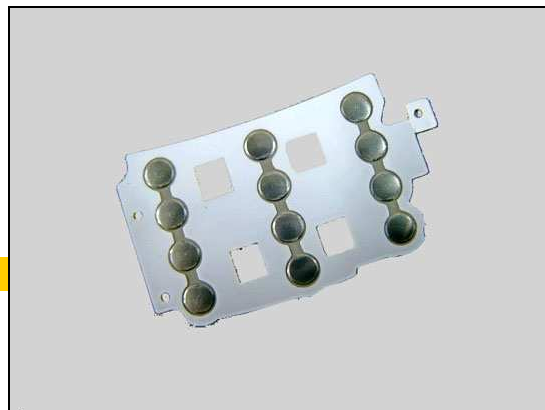
Follow the 5.1– 5.3 & 5.8– 5.10 Reassembly Instructions!

Main Keypad Domesheet cannot be reused!

REMOVAL

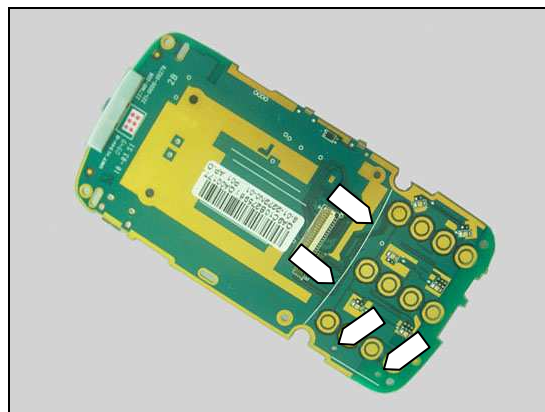
Detach the Main Keypad Domesheet from the Main PBA.

Be careful not to damage the parts on the Main PBA during the operation!

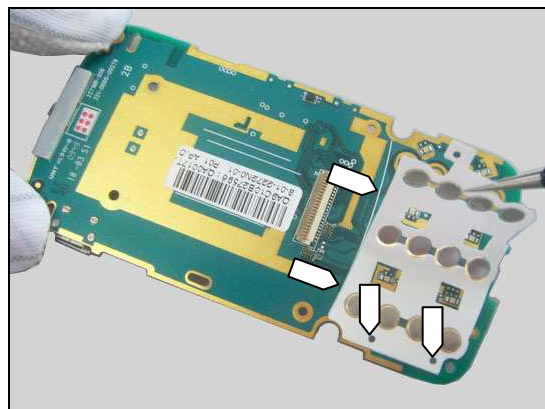


INSTALLATION

There are one printed guiding line and two guiding holes on the Main PBA for alignment.

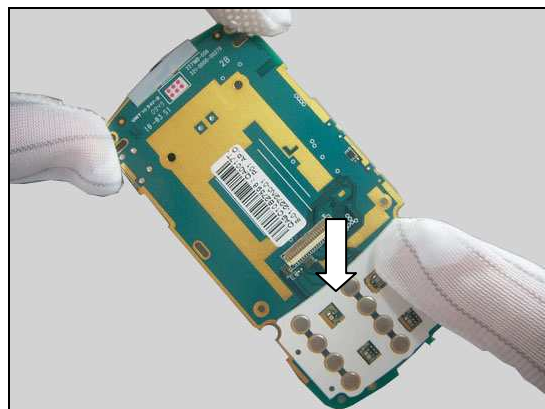


Attach a new Main Keypad Domesheet in alignment with the guiding line and guiding holes as pointers indicated in picture.

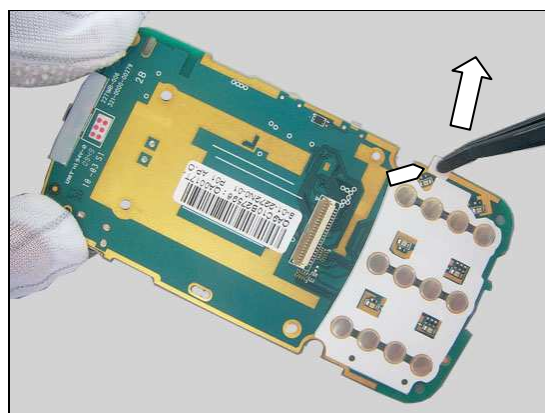


Replacement: Main Keypad Domesheet

Press to make it securely attached.



Tear off the alignment tab as shown in picture.



Replacement

4.24 Camera

Follow the 3.1 – 3.3 & 3.8 – 3.10 Disassembly Instructions!

Prepare the new Camera.

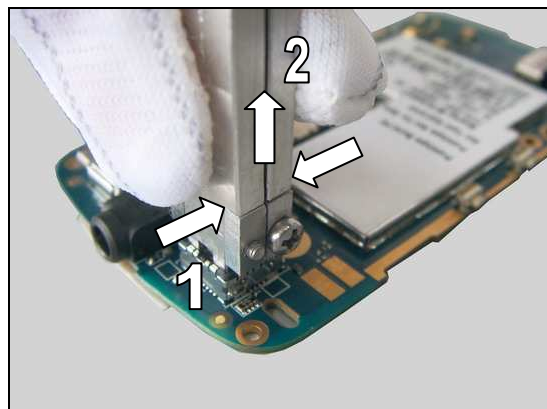
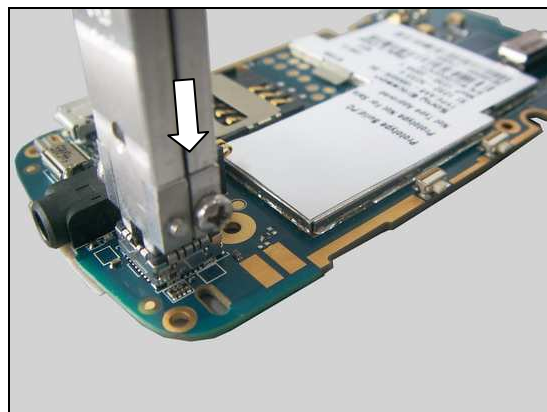
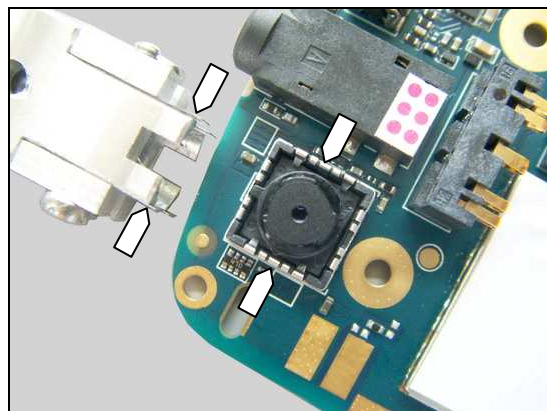
Follow the 5.1– 5.3 & 5.8 – 5.10 Reassembly Instructions!

REMOVAL

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

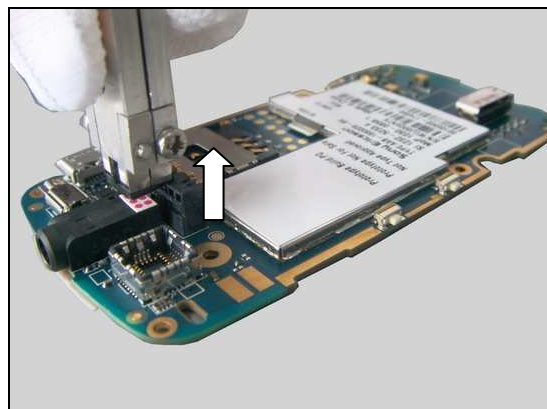
Insert the Camera Removal Tool into the camera socket as shown in picture.

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



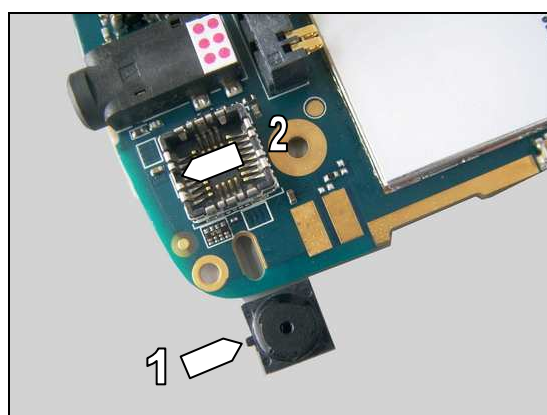
Replacement: Camera

Remove the Camera.

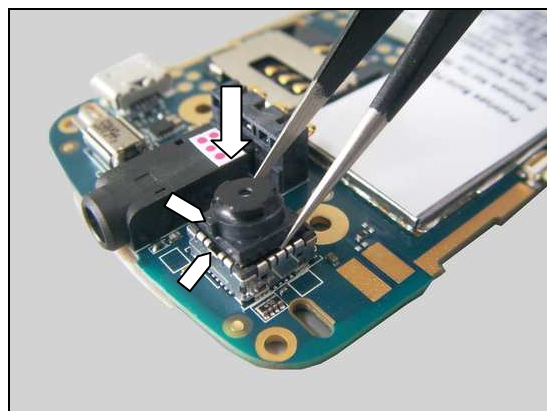


INSTALLATION

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

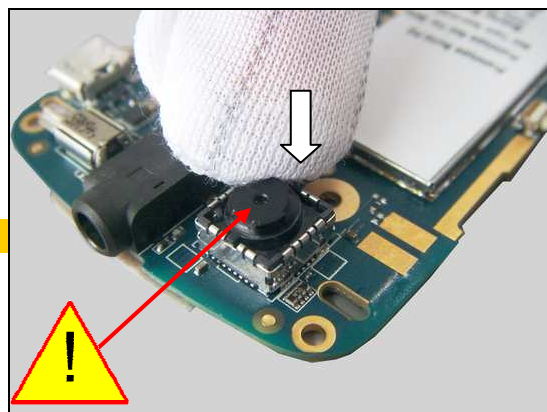


Place the Camera into the socket.



Press to secure the Camera to the bottom of the socket.

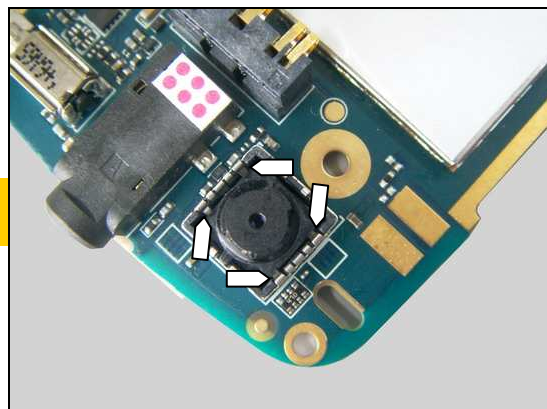
Do not touch the lens!





Replacement: Camera

Make sure the four spring pins are above the camera as pointers indicated in picture!





Replacement

4.25 Hinge Assy

Follow the 3.1 – 3.6 Disassembly Instructions!

Follow the 4.31 Removal Instructions!

Prepare the new Hinge Assy.

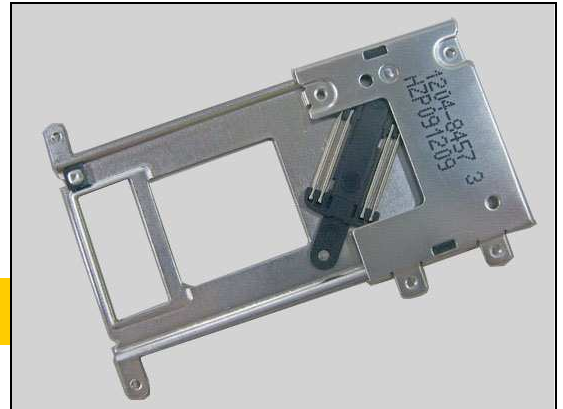
Follow the 4.31 Installation Instructions!

Follow the 5.5 – 5.10 Reassembly Instructions!

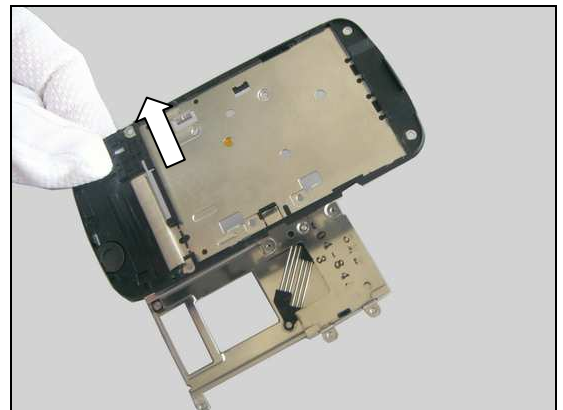
Install a new LCM FPC Connector Mylar and a new Deco Sheet!

REMOVAL

Remove the four Screws (1.4mm_1.5mm) with the Torque Screwdriver by using JCIS No.0 Bits.

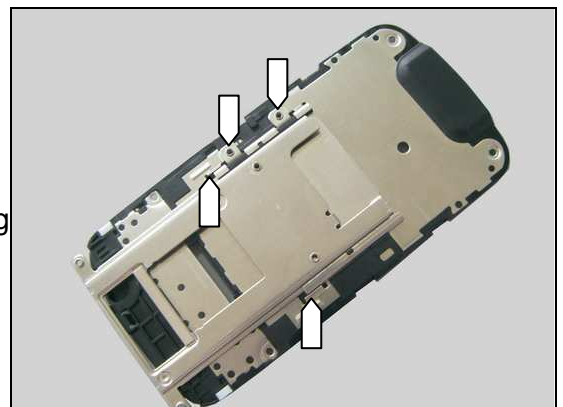


Remove the Upper Rear Cover Assy from the Hinge Assy.



INSTALLATION

Align the Hinge Assy with the Upper Rear Cover Assy by using the two metal ribs on the Upper Rear Cover Assy and the two screw holes as pointers indicated in picture.



Replacement: Hinge Assy

Turn over the Upper Rear Cover Assy with the Hinge Assy together.

Tighten the four screws (1.4mm_1.5mm) with a screwdriver by using JCIS No.0 Bits to a torque of 7 ± 0.5 Ncm.





Replacement

4.26 Kapton Film

Follow the 3.1 – 3.6 Disassembly Instructions!

Follow the 4.31 and 4.25 Removal Instructions!

Prepare the new Kapton Film.

Follow the 4.25 and 4.31 Installation Instructions!

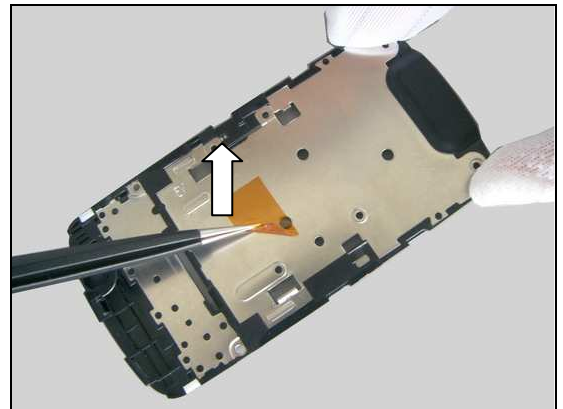
Follow the 5.5 – 5.10 Reassembly Instructions!

Kapton Film cannot be reused in case of the adhesive missing or failure!

Install a new LCM FPC Connector Mylar and a new Deco Sheet!

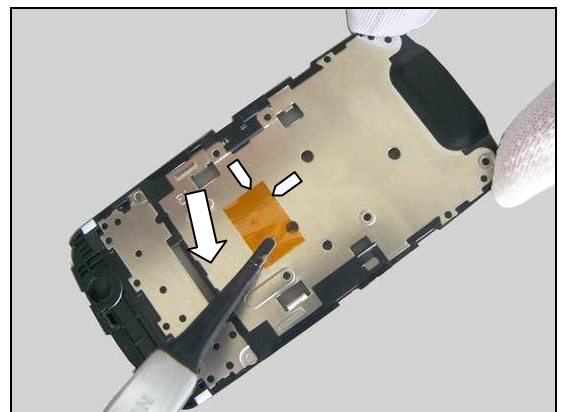
REMOVAL

Peel off the Kapton Film from the Upper Rear Cover Assy by using the Tweezers.

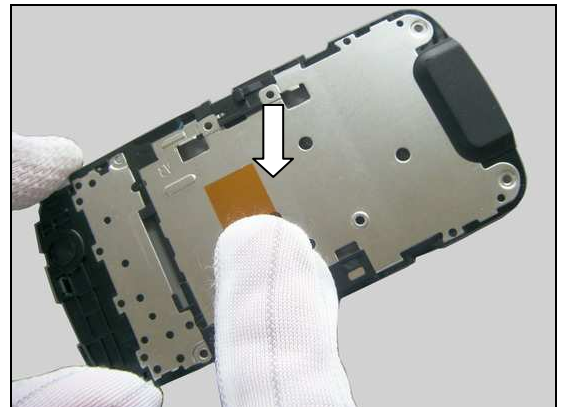


INSTALLATION

Attach the Kapton Film in alignment with the two guiding lines on the Upper Rear Cover Assy as shown in picture.



Press to make it securely attached.





Replacement

4.27 Magnet

Follow the 3.1 – 3.6 Disassembly Instructions!

Follow the 4.31 Removal Instructions!

Prepare the new Magnet.

Follow the 4.31 Installation Instructions!

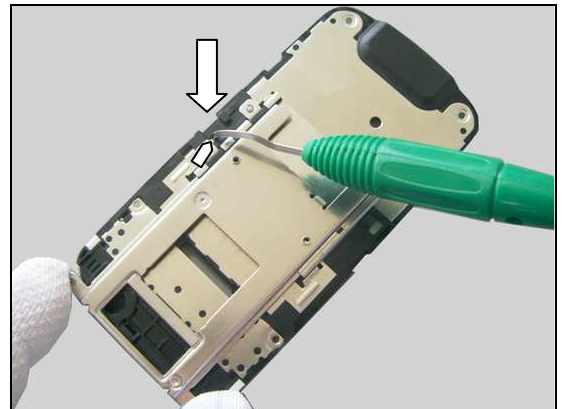
Follow the 5.5 – 5.10 Reassembly Instructions!

Magnet cannot be reused in case of the adhesive missing or failure.

Install a new LCM FPC Connector Mylar and a new Deco Sheet!

REMOVAL

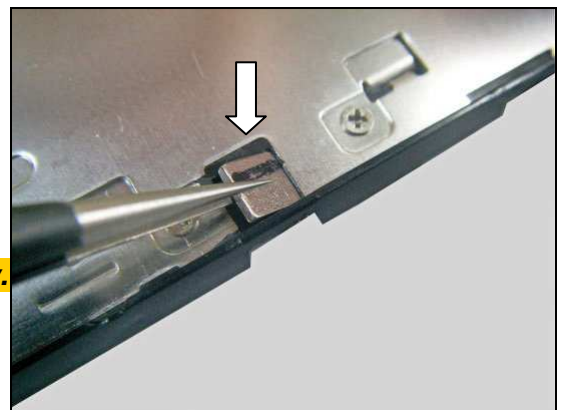
Push into the hole as the pointer indicated in picture to detach the Magnet out of its cavity by using the Dentist hook.



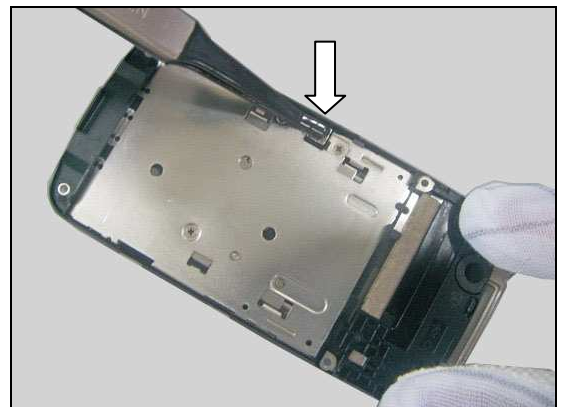
INSTALLATION

Place the Magnet into its cavity with Tweezers.

Make sure the surface with adhesive is towards the cavity.



Press to secure its attachment into its cavity by using the Flex Film Assembly Tool.



Replacement

4.28 MIC Sponge

Follow the 3.1 – 3.6 Disassembly Instructions!

Prepare the new MIC Sponge.

Follow the 5.5 – 5.10 Reassembly Instructions!

MIC Sponge cannot be reused!

Install a new LCM FPC Connector Mylar and a new Deco Sheet!

REMOVAL

Detach the MIC Sponge from its cavity by using the Tweezers.

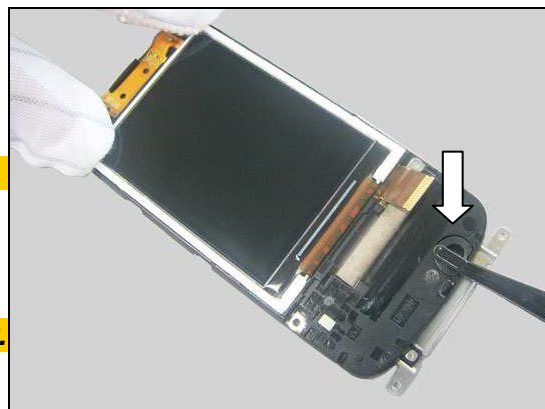
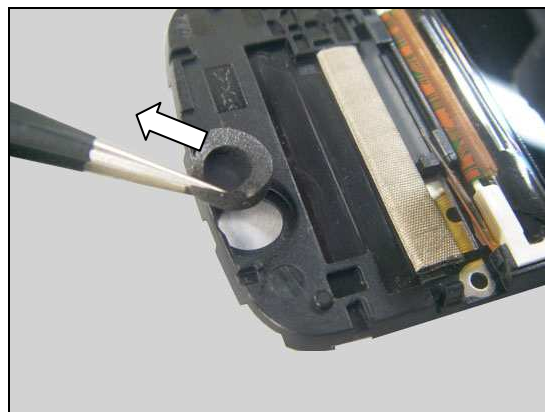
Remove it.

INSTALLATION

Clean the residues of the old adhesive before installation!

Place the MIC Sponge in its cavity and press gently to make it securely attached.

Make sure the surface with adhesive is towards the cavity.





Replacement

4.29 Conductive Sponge

Follow the 3.1 – 3.6 Disassembly Instructions!

Prepare the new Conductive Sponge.

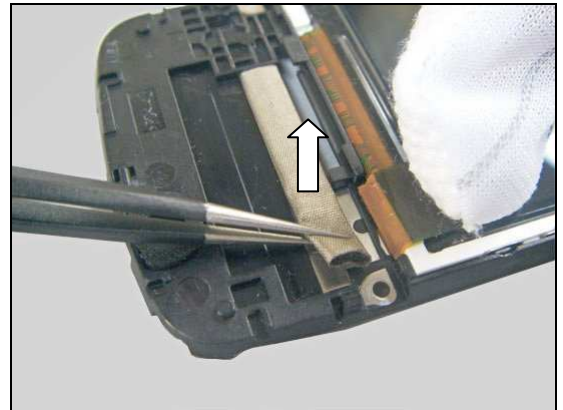
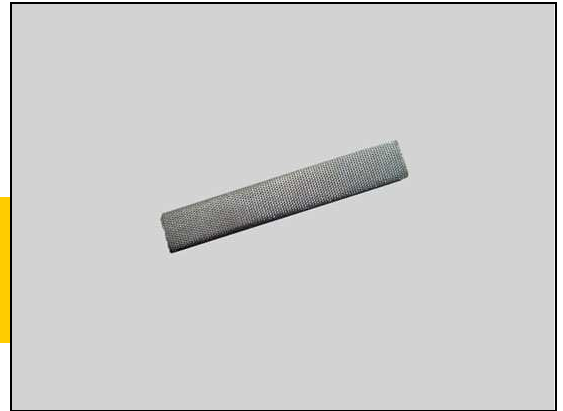
Follow the 5.5 – 5.10 Reassembly Instructions!

Conductive Sponge cannot be reused in case of the adhesive missing or failure.

Install a new LCM FPC Connector Mylar and a new Deco Sheet!

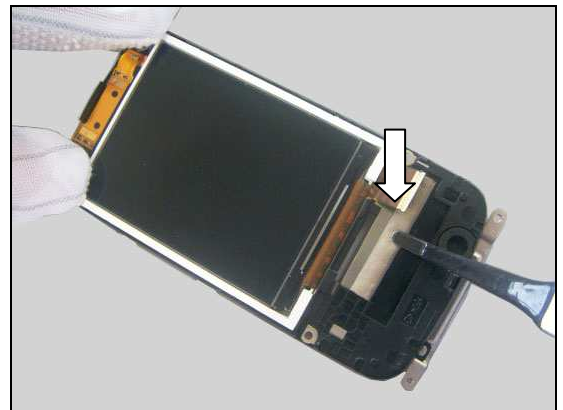
REMOVAL

Peel off the Conductive Sponge from the Upper Rear Cover Assy by using the Tweezers.

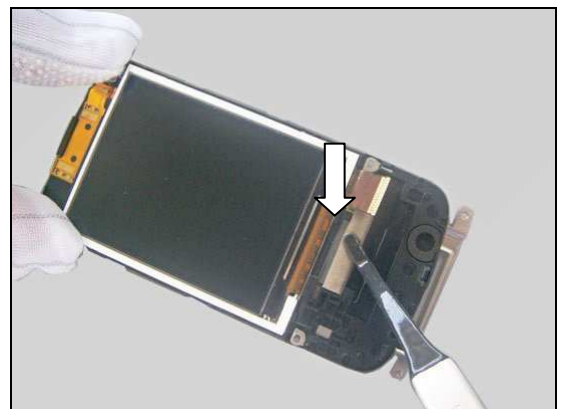


INSTALLATION

Attach a new Conductive Sponge in its proper place as shown in picture.



Press to make it securely attached.



Replacement

4.30 Sub Keypad Domesheet

Follow the 3.1 – 3.7 Disassembly Instructions!

Prepare the new Sub Keypad Domesheet.

Follow the 5.4 – 5.10 Reassembly Instructions!

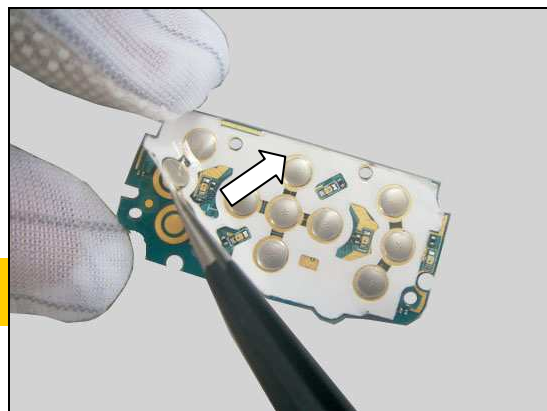
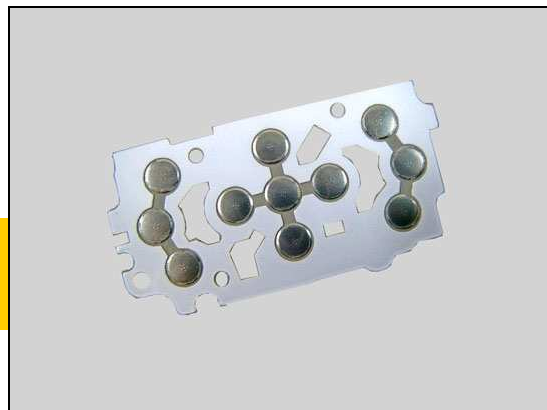
Sub Keypad Domesheet cannot be reused!

Install a new LCM FPC Connector Mylar and a new Deco Sheet!

REMOVAL

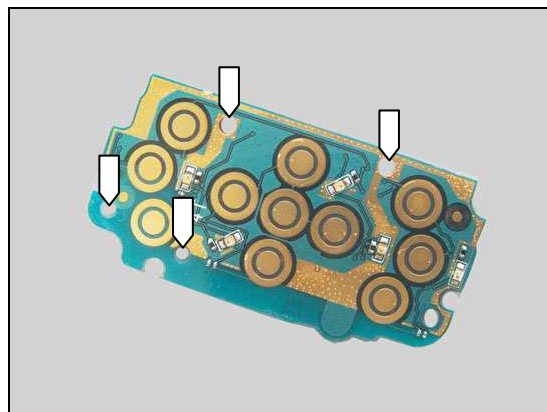
Detach the Sub Keypad Domesheet from the Sub PCBA Assembly.

Be careful not to damage the parts on the Sub PCBA during the operation!

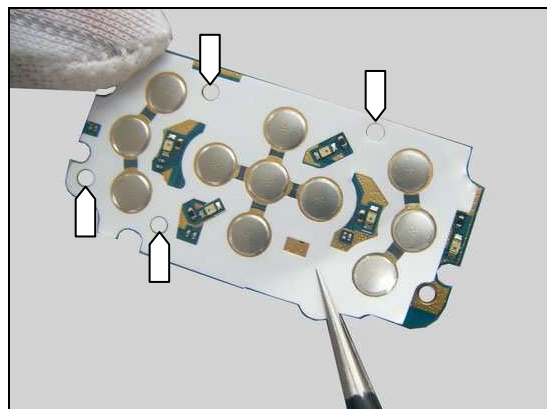


INSTALLATION

There are four guiding holes on the Sub PCBA for alignment.

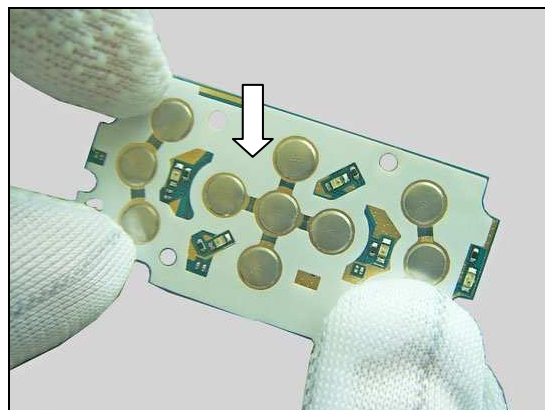


Attach a new Sub Keypad Domesheet in alignment with the guiding holes as pointers indicated in picture.



Replacement: Sub Keypad Domesheet

Press to make it securely attached.



Replacement

4.31 Main Display

Follow the 3.1 – 3.6 Disassembly Instructions!

Prepare the new Main Display.

Follow the 5.5 – 5.10 Reassembly Instructions!

Install a new LCM FPC Connector Mylar and a new Deco Sheet!

REMOVAL

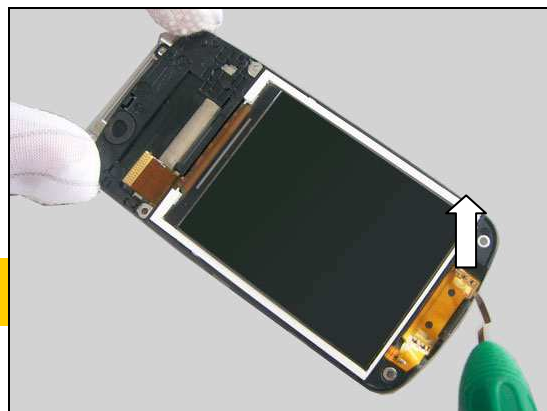
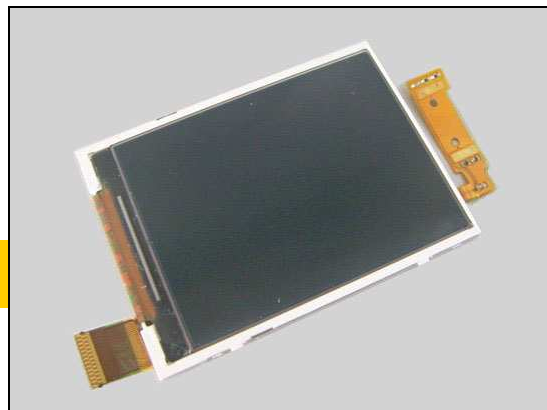
Insert the Dentist hook underneath the receiver FPC and loosen it.

Be careful not to damage the receiver FPC during the operation!

Detach the receiver FPC from the Upper Rear Cover Assy by using the Flex Film Assembly Tool.

Be careful not to tear off the receiver FPC during the operation as arrow indicated in picture!

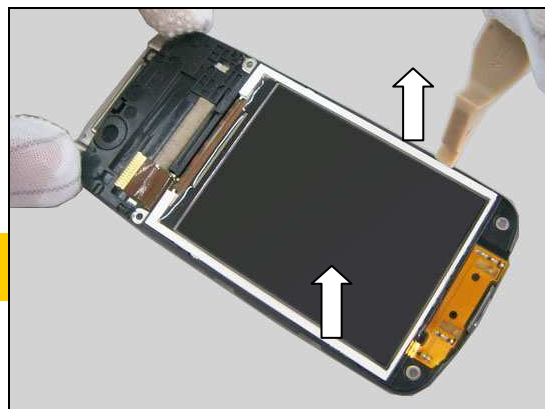
There are four snap hooks securing the Main Display into its cavity of the Upper Rear Cover Assy.



Replacement: Main Display

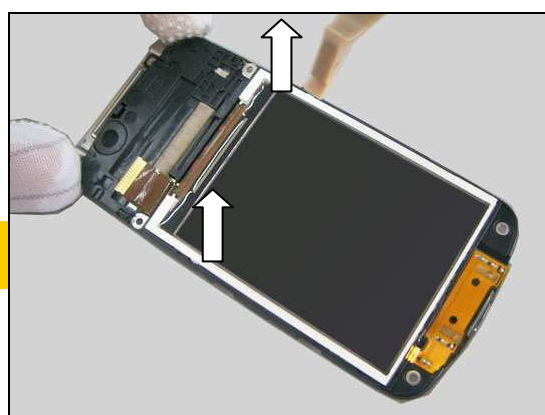
Insert the Front Opening Tool into the gap between Main Display and the Upper Rear Cover Assy to unsnap these two hooks as shown in picture.

Be careful not to damage the Upper Rear Cover Assy and the Main Display!

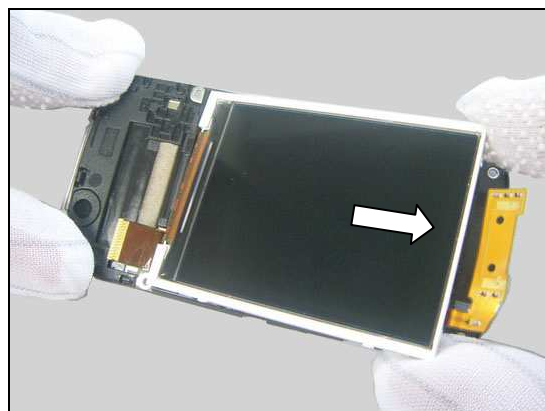


Unsnap the other two hooks by using the Front Opening Tool as shown in picture.

Be careful not to damage the Upper Rear Cover Assy and the Main Display!

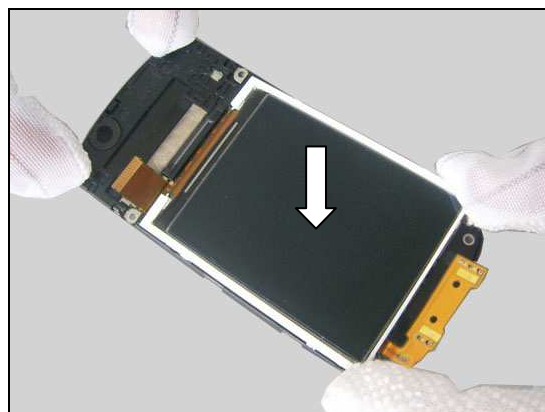


Remove the Main Display.



INSTALLATION

Place the Main Display into its cavity.



Replacement: Main Display

Press on the plastic edge of the Main Display to snap the four hooks to make the Main Display securely into its cavity.

Be careful not to damage the Main Display!



Attach the receiver FPC in its proper place as shown in picture and gently press to make it securely attached by using the Flex Film Assembly Tool.

Be careful not to tear off the receiver FPC and damage the parts on the receiver FPC during the operation as shown in picture!



Replacement

4.32 Ear Speaker

Follow the 3.1 – 3.5 Disassembly Instructions!

Prepare the new Ear Speaker.

Follow the 5.6 – 5.10 Reassembly Instructions!

Install a new Deco Sheet!

REMOVAL

Insert Dentist hook underneath the Ear Speaker and loosen it.

Remove the Ear Speaker.

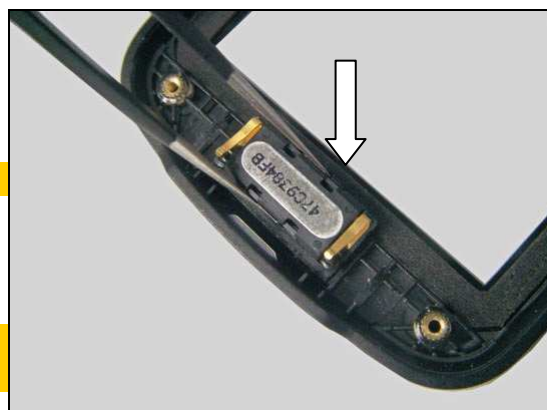
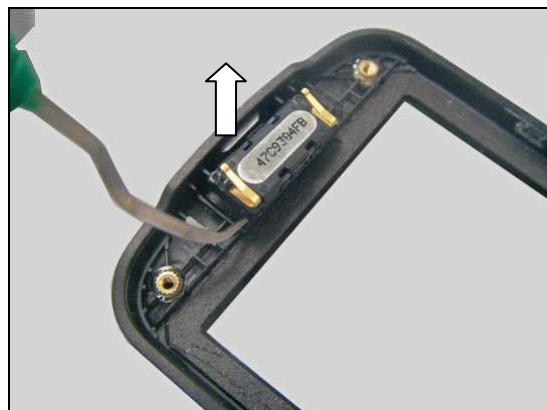
INSTALLATION

Follow the 4.33 Removal and Installation Instructions!

Install a new Receiver Sponge before this action!

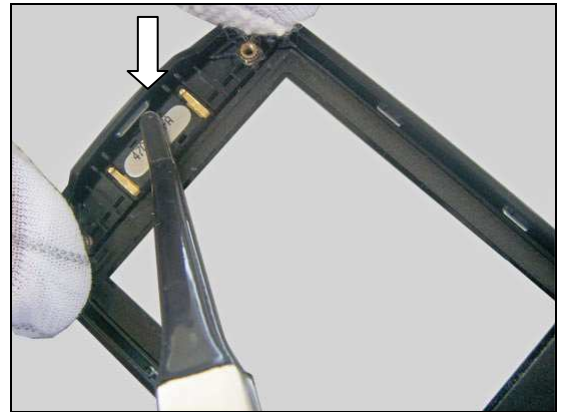
Place the Ear Speaker in the right direction as shown in picture.

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



Replacement: Ear Speaker

Press to make it securely attached.



Replacement

4.33 Receiver Sponge

Follow the 3.1 – 3.5 Disassembly Instructions!

Follow the 4.32 Removal Instructions!

Prepare the new Receiver Sponge.

Follow the 4.32 Installation Instructions!

Follow the 5.6 – 5.10 Reassembly Instructions!

Receiver Sponge cannot be reused!

Install a new Deco Sheet!

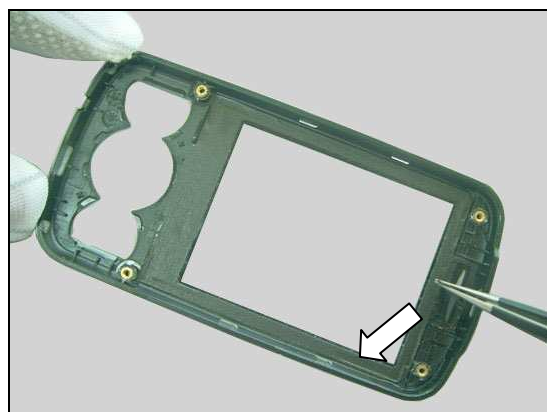
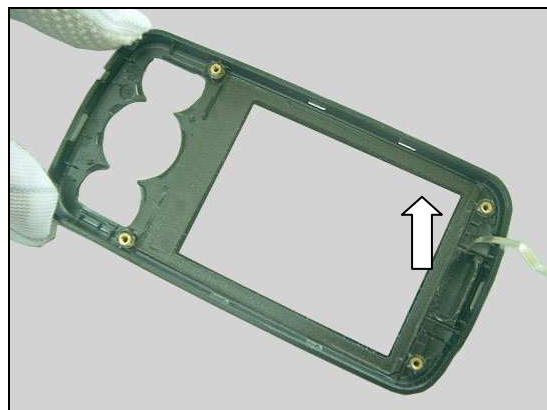
REMOVAL

Insert the Dentist hook underneath the residues of the old Receiver Sponge to loosen it.

Peel off it by using the Tweezers.

INSTALLATION

Clean the residues of the old Receiver Sponge before installation!

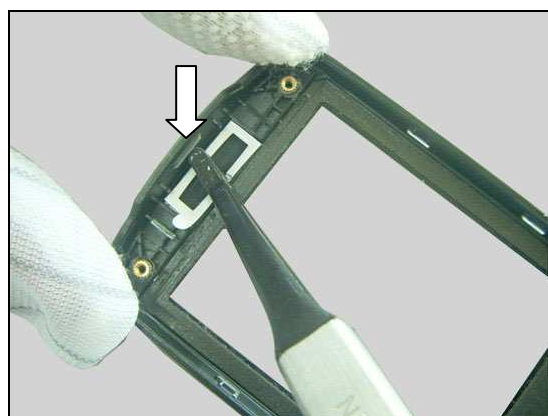


Replacement: Receiver Sponge

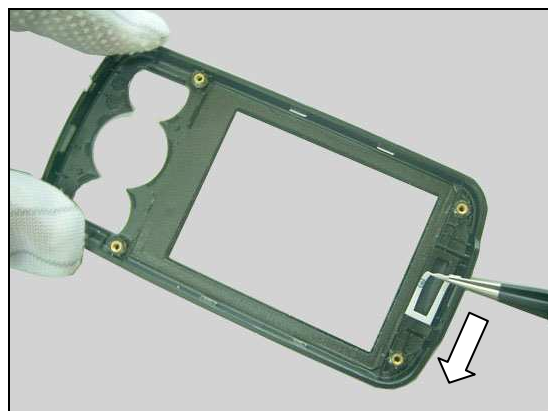
Attach a new Receiver Sponge in its cavity as shown in Picture.



Press to make it securely attached by using the Flex Film Assembly Tool.



Peel off the protection paper.



5 Reassembly

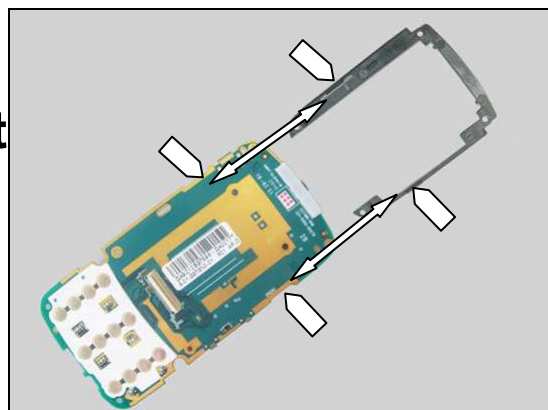
The reassembly is done in the following order:

1. Main PBA (a) and Lower Front Frame (b)
2. Lower Rear Cover Assy
3. Main Keypad
4. Hinge FPC (a) and Sub PCBA Assembly (b)
5. Upper Rear Cover Assy (incl. Main Display&Hinge Assy) (a) and LCM FPC Connector Mylar (b)
6. Sub Keypad (a) and Upper Front Cover Assy (b)
7. Deco sheet
8. Battery
9. Battery Cover

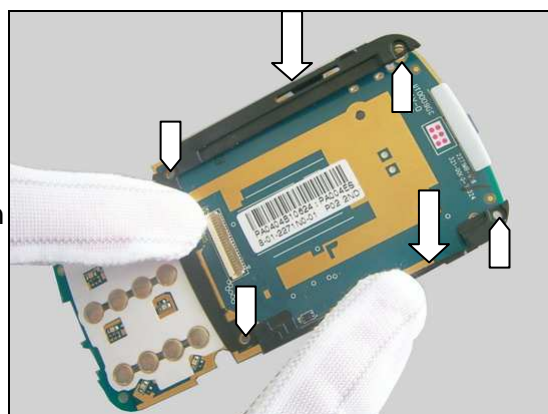


5.1 Main PBA and Lower Front Frame

There are two snap hooks securing Lower Front Frame onto the Main PBA as shown in the picture.

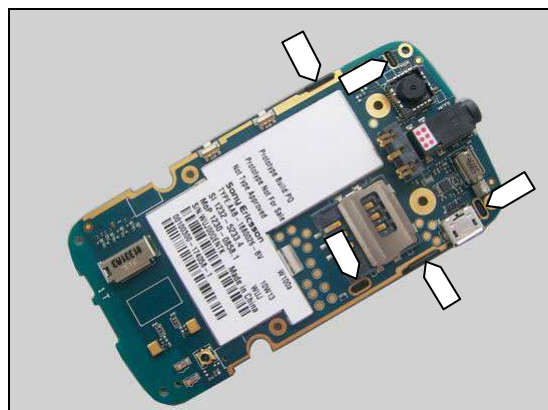


Press to snap both sides of the Lower Front Frame onto the Main PBA in alignment with the four guiding holes as shown in picture.



Turn over the Main PBA.

Make sure the two hooks are properly snapped and the three guiding bolts of the Lower Front Frame are in alignment with the three guiding holes on the Main PBA as shown in picture.

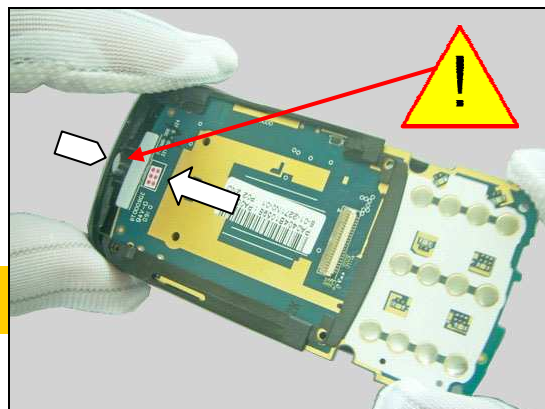


Reassembly

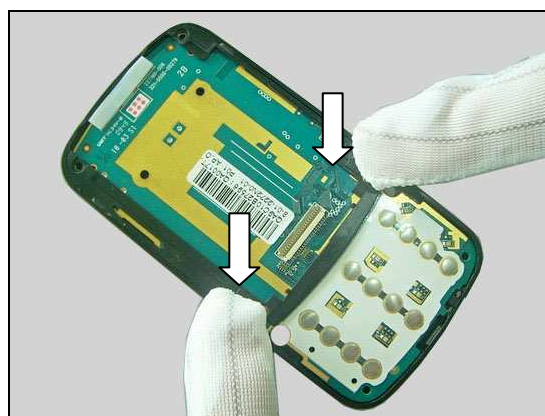
5.2 Lower Rear Cover Assy

Hold the Main PBA in a slight angle and insert the top of the Main PBA into the Lower Rear Cover Assy as indicated by the pointer and arrow in picture.

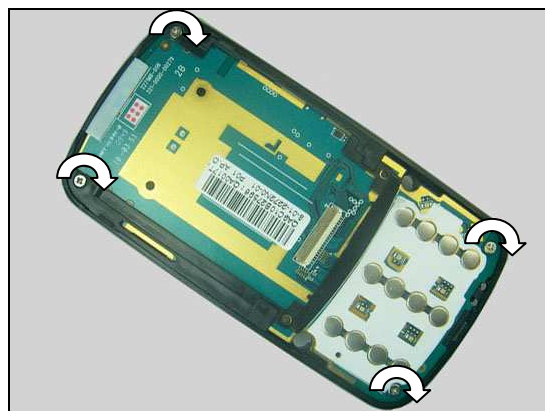
Make sure the Audio Jack is mounted into the outlet on the Lower Rear Cover Assy before next action!



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



Tighten the four screws (1.6mm_4mm) with a screwdriver by using JCIS No.0 Bits to a torque of 9 ± 0.5 Ncm.



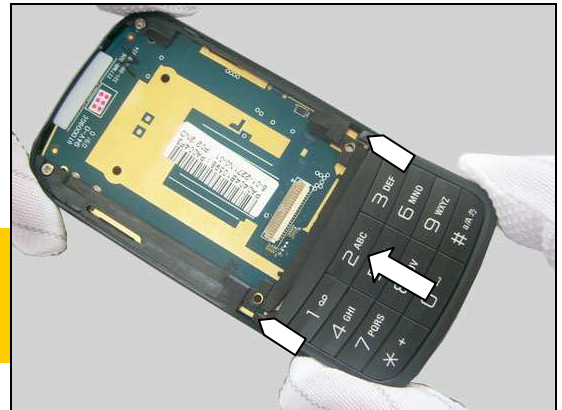


Reassembly

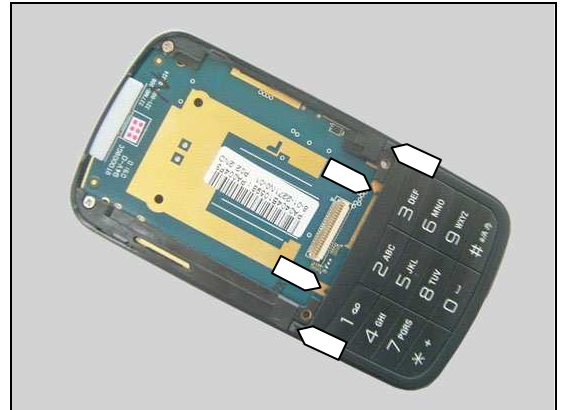
5.3 Main Keypad

Hold the Main Keypad in a slight angle and insert the two projections of the Main Keypad under the Lower Front Frame as pointers and arrow indicated in picture.

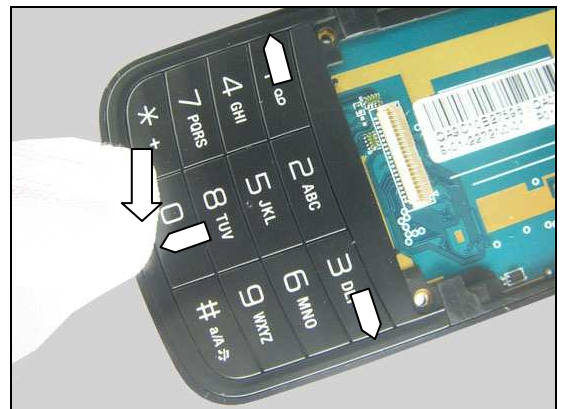
Check the stickiness of the Main Keypad adhesive before the installation. Follow the 4.22 Removal and Installation instructions to change a new adhesive in case of the adhesive missing or failure.



Place the Main Keypad in alignment with the Lower Front Frame as the four pointers indicated in picture.



Press with finger to secure the three hooks of the Main Keypad into its position as shown in the picture.



Press the Main Keypad to make it securely attached as shown in picture.

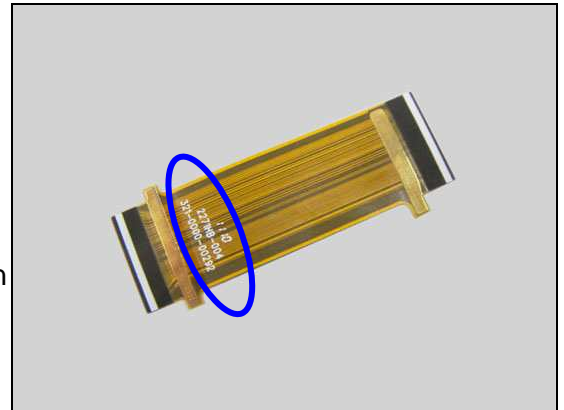




Reassembly

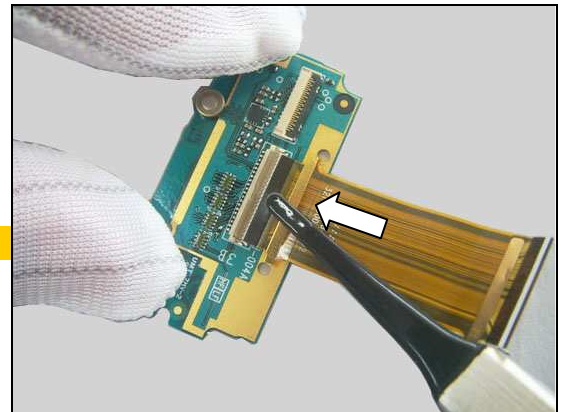
5.4 Hinge FPC and Sub PCBA Assembly

Identify the end of Hinge FPC with the printed marks as shown in picture.

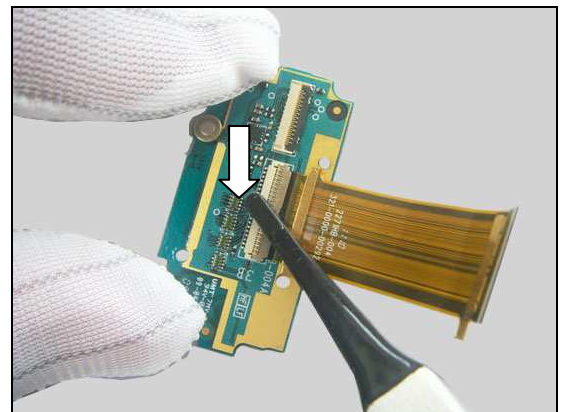


Insert the end of Hinge FPC with printed marks to the Hinge FPC connector on the Sub PCBA Assembly by using the Flex Film Assembly Tool as shown in picture.

Insert the Hinge FPC to the bottom of the connector slot!

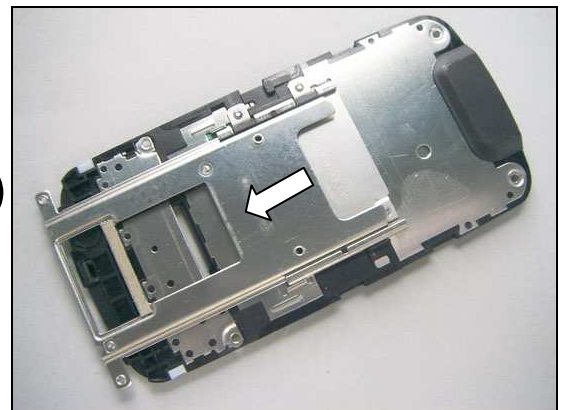


Lock the connector by using the Flex Film Assembly Tool.



5.5 Upper Rear Cover Assy (incl. Main Display&Hinge Assy) and LCM FPC Connector Mylar

Slide the Hinge Assy open as shown in picture.



Reassembly

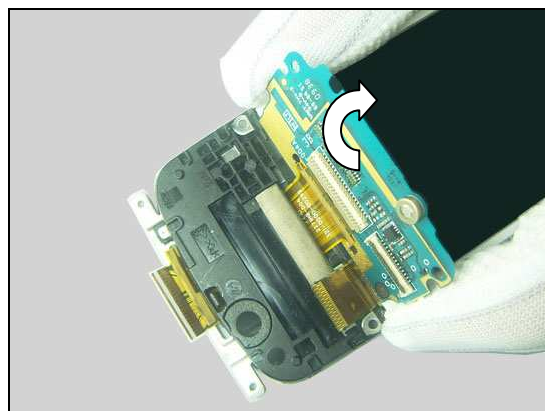
Thread the Hinge FPC (incl. the Sub PCBA Assembly) through the slot on the Upper Rear Cover Assy as shown in picture.



Make sure the Hinge FPC is threaded into the proper hole of the Hinge Assy as shown in picture!

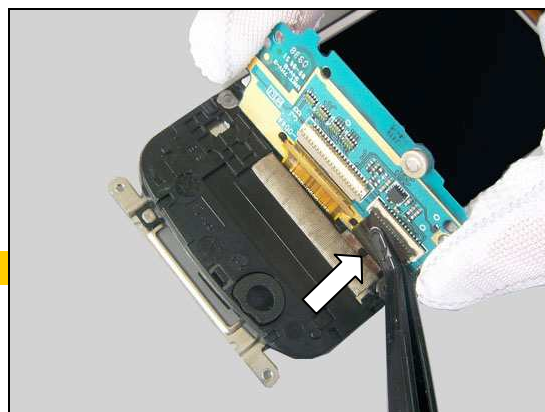


Turn the Sub PCBA Assembly approximately 90° as shown in the picture.



Insert the LCM FPC to the LCM FPC connector on the Sub PCBA Assembly by using the Flex Film Assembly Tool as shown in picture.

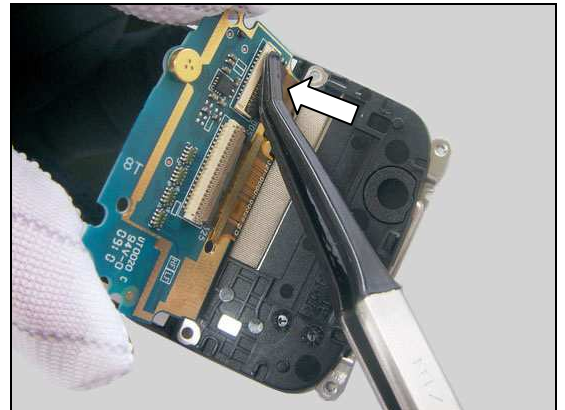
Insert the LCM FPC to the bottom of the connector slot!





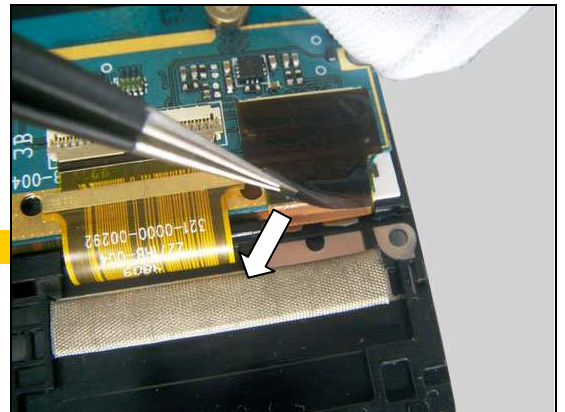
Reassembly

Lock the connector by using the Flex Film Assembly Tool.

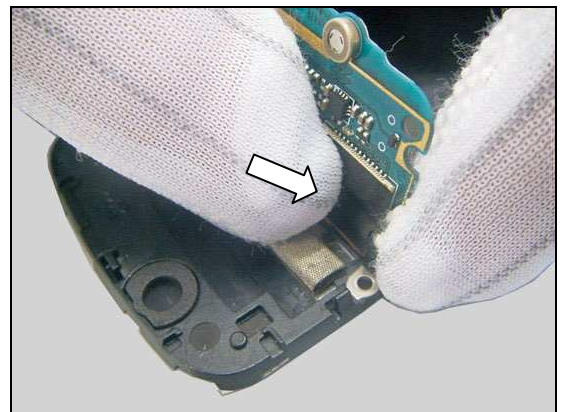


Attach the LCM FPC Connector Mylar in its proper position as shown in picture.

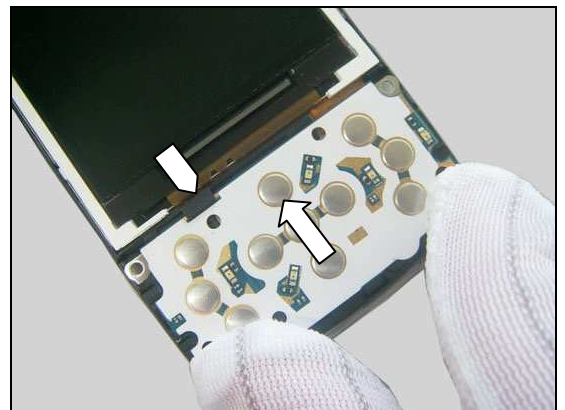
Install a new LCM FPC Connector Mylar!



Press the Mylar to make it securely attached.

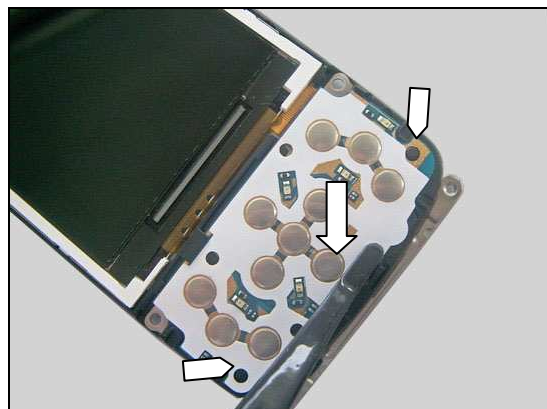


Insert the Sub PCBA Assembly under the projection of the Upper Rear Cover Assy as shown in picture.



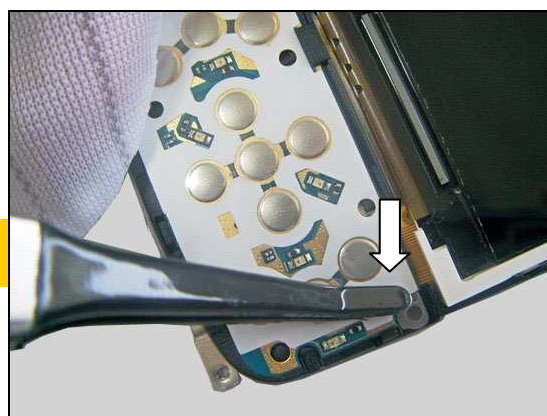
Reassembly

Press with the Flex Film Assembly Tool to snap the hook at the bottom in alignment between the two guiding holes on the Sub PCBA Assembly and the two guiding bolts on the Upper Rear Cover Assy as pointers indicated in picture.



Press with the Flex Film Assembly Tool to snap hook on the side as shown in picture.

Don't damage parts on the Sub PCBA Assembly near the hook in this action.

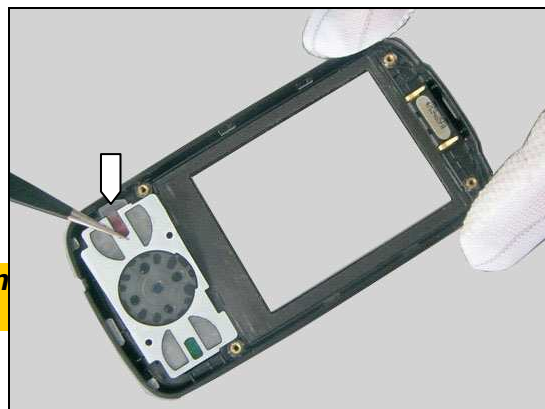


Reassembly

5.6 Sub Keypad and Upper Front Cover Assy

Place the Sub Keypad into the Upper Front Cover Assy.

Make sure the plastic wing of the Sub Keypad is placed on the left side as pointer indicated in picture.



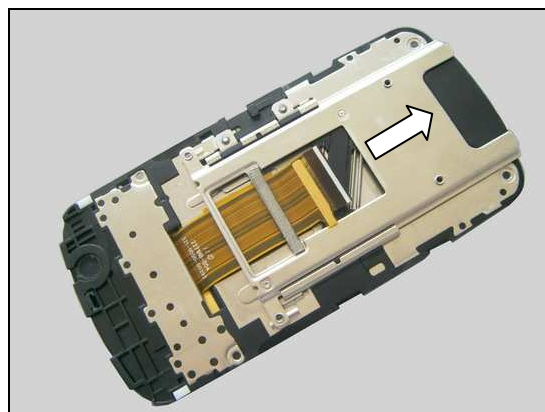
Adjust the Sub Keypad to make the two guiding bolts on the Upper Front Cover Assy into the two guiding holes on the Sub Keypad.



Prepare the two parts as shown in picture before next action.

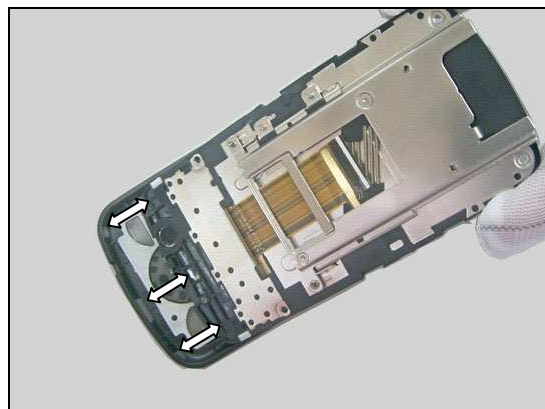


Close the Hinge Assy as shown in picture.

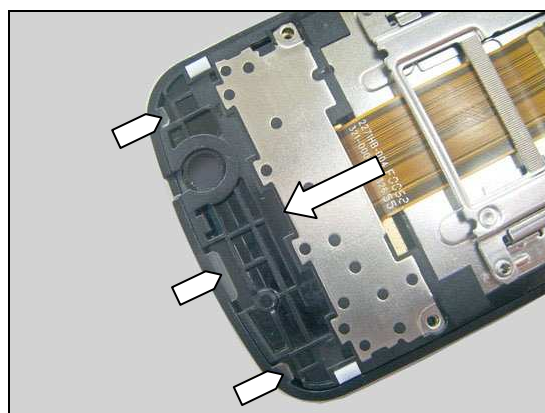


Reassembly

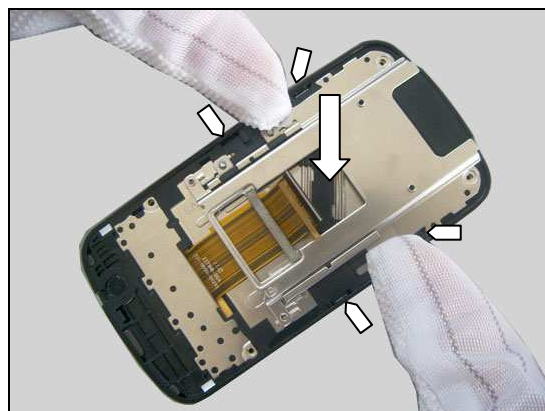
Align the Upper Rear Cover Assy with the Upper Front Cover Assy as the three arrows indicated in picture.



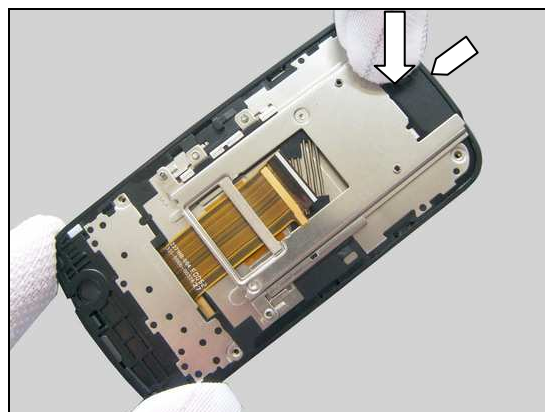
Insert the Upper Rear Cover Assy under the three hooks on the Upper Front Cover Assy as pointers indicated in picture.



Press the Upper Rear Cover Assy on both sides with finger to snap the four hooks as pointers indicated in picture.

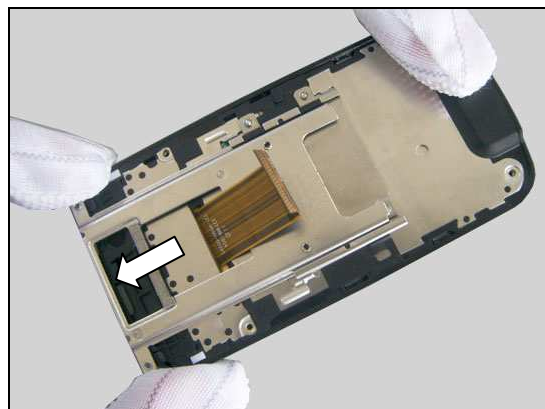


Press with finger to snap the hook at the top as pointer indicated in picture.

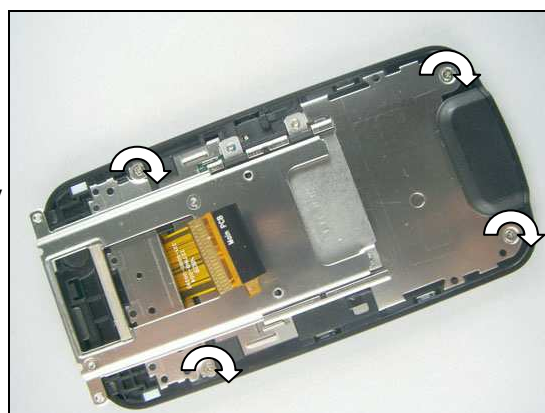


Reassembly

Slide the Hinge Assy open as shown in picture.



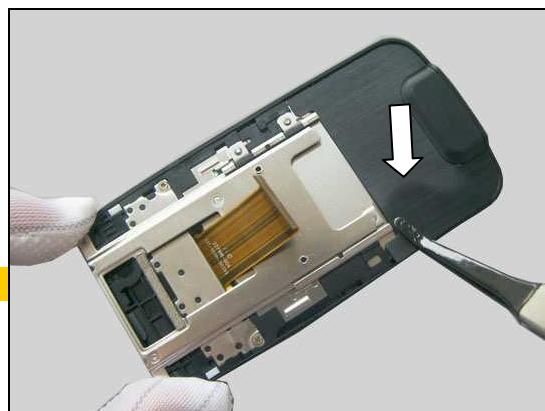
Tighten the four screws (1.4mm_1.5mm) with a screwdriver by using JCIS No.0 Bits to a torque of 7 ± 0.5 Ncm.



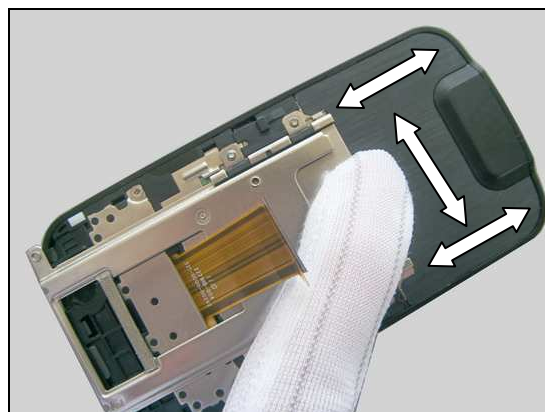
5.7 Deco sheet

Attach the Deco Sheet in its proper position as shown in picture.

Install a new Deco sheet!



Press with finger to make it securely attached.





Reassembly

5.8 Lower Module and Upper Module

Prepare lower module and upper module.



Hold the upper module in the position at an approximate 30° angle as shown in picture.

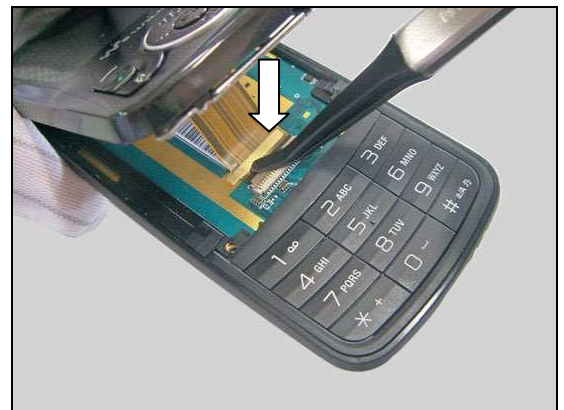


Insert the Hinge FPC into the Hinge FPC connector on the Main PBA by using the Flex Film Assembly Tool as shown in picture.

**Insert the Hinge FPC to the bottom of the connector slot!
Be careful not to damage the Hinge FPC in this action!**



Lock the connector by using the Flex Film Assembly Tool.



Reassembly

Align upper module with lower module by using guiding holes, guiding projections and guiding cuts on the Lower Front Frame and the Hinge Assy as arrows indicated in picture.



Mount upper module in its proper alignment as pointers indicated in picture.



Slide upper module down a little to make the bottom edge of upper module above the Main Keypad as shown in picture.

A sound of click may be heard when sliding, which indicate the Hinge Assy on the upper module slides itself into the cavity between the Lower Front Frame and the Lower Rear Cover Assy!



Close the slider gently.



Reassembly

Turn over upper module and lower module together.

Make sure the Hinge Assy is securely in the cavity between the Lower Front Frame and the Lower Rear Cover Assy!

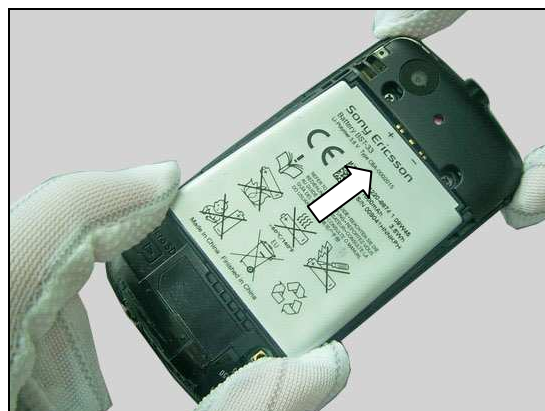


Tighten the four screws (1.4mm_3.5mm) with a screwdriver by using JCIS No.0 Bits to a torque of 7 ± 0.5 Ncm.



5.9 Battery

Insert the Battery in its cavity as shown in picture.



Press at the bottom to secure its position.



Reassembly

5.10 Battery Cover

Insert the two hooks of the Battery Cover into the two holes on the Lower Rear Cover Assy as the arrows indicated in picture.



Close the Battery Cover in the direction of the arrow.



Press around to secure the snap hooks as indicated by the pointers in picture.





6 Revision History

Rev.	Date	Changes / Comments
1	2010-Jul-26	Initial release
2	2010-Aug-24	Modify chapter 4.32 that replacing 'receiver' with 'ear speaker'. Modify some mistakes.
3	2011-Jan-07	Delete blank boxes in chapters of 3.10, 4.13 and 4.15. Add new caution in chapter of 3.10. Replace the fifth picture of chapter 4.22 with correct one. Change the color of pointers in the first picture of chapter of 3.6.