



Working Instruction/, Mechanical

Applicable for S302

CONTENTS

1	Introduction	3
1.1	Equipment	5
1.2	General cautions	6
1.3	Adhesives	6
2	Disassembly	7
2.1	Overview	7
2.1.1	Battery Cover & Battery	8
2.1.2	Camera Cover	9
2.1.3	Screws	10
2.1.4	Front Cover	10
2.1.5	Keypad	11
2.1.6	Rear Cover	12
2.1.7	Antenna Assy	13
2.1.8	LCD Metal Support	14
2.1.9	Camera Flex Assy/Camera support assy	15
2.1.10	LCD Assy	16
2.1.11	PBA	17
3	Replacements	18
3.1	Battery Cover	19
3.2	Battery	19
3.3	Camera Cover	19
3.4	Front Cover	19
3.5	Keypad	19
3.6	Rear Cover	19
3.7	Antenna Assy	19
3.8	LCD Metal Support	19
3.9	Camera Support Assy	20
3.10	LCD Assy	20
3.11	Metal Frame Assy	20
3.12	Mic Gasket	21
3.13	Co-brand Label	22
3.14	Side Key Volume	23
3.15	Side Key Photo	24
3.16	Media Key	25
3.17	SIM/M2 PBA Assy	26
3.18	Window Assy	27



3.19	IMEI Label.....	28
3.20	Plastic Battery Release.....	29
3.21	Speaker	31
3.22	Flash Lens.....	32
3.23	Camera Window	33
3.24	Receiver	34
3.25	Vibrator.....	35
3.26	Camera Flex Assy	36
3.27	LCD Sponge.....	37
3.28	Metal Dome	38
4	Reassembly	40
4.1	Overview	40
4.1.1	PBA	41
4.1.2	LCD Assy	42
4.1.3	Camera Flex Assembly/Camera Support Assy	43
4.1.4	LCD Metal Support.....	44
4.1.5	Antenna Assy	45
4.1.6	Rear Cover	46
4.1.7	Keypad	47
4.1.8	Front Cover	48
4.1.9	Screws	49
4.1.10	Camera Cover	49
4.1.11	Battery & Battery Cover.....	50
5	Revision history	51

1 Introduction

W302





1.1 Equipment

SPECIAL TOOLS

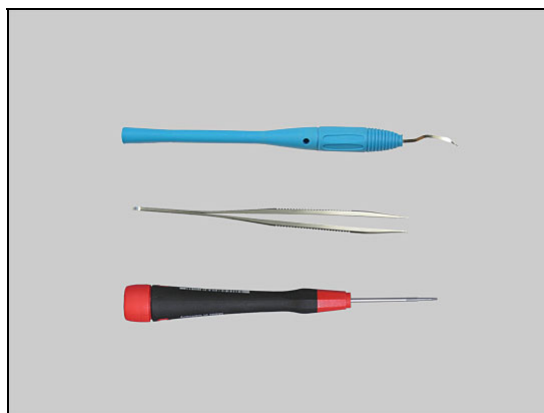
- NTZ112459 Torque Screwdriver (or equivalent)
- NTZ112288 Bits (Torx No. 6)
- NTZ112302/2 Front Opening Tool
- NTZ112590 Guitar Pick #Plectrum#
- NTZ112521 Flex film assembly tool



STANDARD TOOLS

Standard tools text:

- Dentist Hook
- Tweezers
- Screw driver



ESD EQUIPMENT

Protect the phone from ESD damages whenever it has been opened by using:

- ESD-wristband
- ESD-gloves



LABEL EQUIPMENT

The following special equipment is required when replacing or installing a new label:

- Hot air flow solder station
- Zebra printer connected to computer





1.2 General cautions

The following cautions are considered to be generic for all phone models and will not be repeated in the Disassembly, Replacements and Reassembly sections:

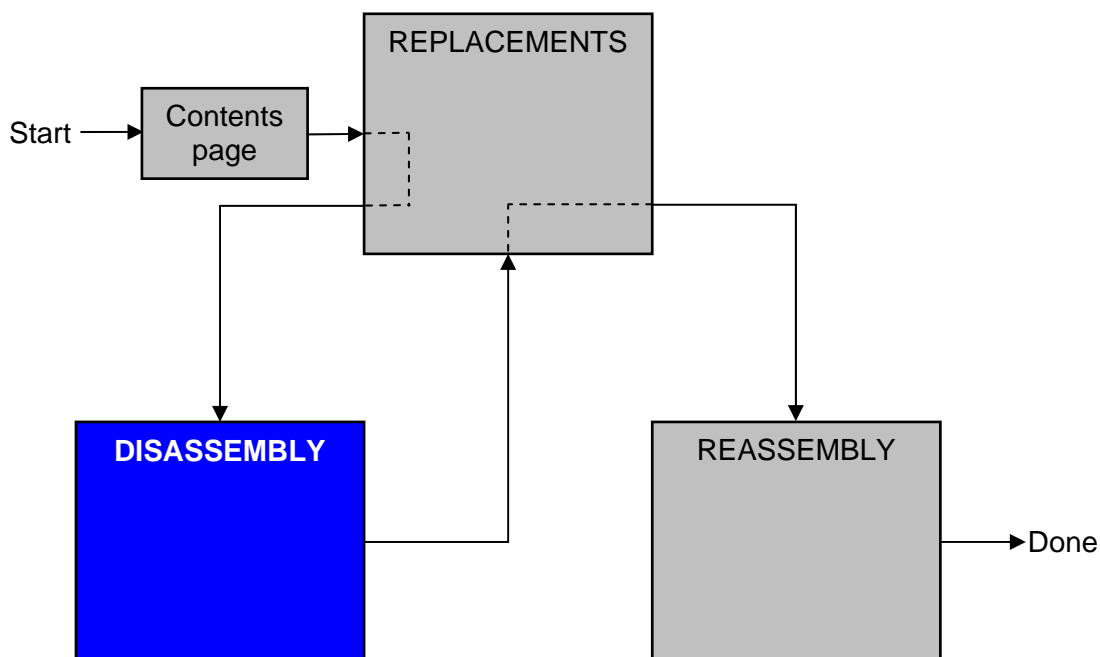
- ***SWITCH OFF THE PHONE AND REMOVE ANY MEMORY STICK BEFORE THE START OF THE DISASSEMBLY!***
- ***KEEP ALL CONTACT SURFACES CLEAN!***
- ***BE CAREFUL WHEN USING TOOLS LIKE THE DENTIST HOOK, TWEEZERS, OPENING TOOLS, GUITAR PICK ETC. TO AVOID SCRATCHES OR DAMAGES TO THE EXTERIOR AND INTERIOR PARTS OF THE PHONE!***
- ***BE CAREFUL NOT TO DAMAGE ANY CONTACT SPRINGS!***
- ***REMEMBER TO REMOVE THE PROTECTION FOILS ON NEW PARTS SUCH AS THE FRONT COVER AND LCD!***
- ***NEVER TOUCH THE DISPLAY GLASS!***
- ***USE AIR BLOW EQUIPMENT TO KEEP THE FRONT WINDOW AND DISPLAY MODULE DUST FREE!***

1.3 Adhesives

Use a dentist hook and/or the tweezers to remove old adhesives.
Clean the surface with isopropyl alcohol before attaching new adhesives.

2 Disassembly

When you are going to replace a part being listed in *Replacements*, the instruction of that section usually begins by directing you to this *Disassembly* section with a specification of the instructions you have to carry out in order to disassemble the phone as far as needed before returning to *Replacements* for the actual replacement.



2.1 Overview

The disassembly is done in the following sequence:

1. Battery Cover
2. Battery
3. Camera Cover
4. Front Cover
5. Keypad
6. Rear Cover Assy
7. Antenna Assy
8. LCD Metal Support
9. Camera Flex assy/Camera Support assy
10. LCD assy
11. PBA
12. Metal Frame



2.1.1 Battery Cover & Battery

Use your fingers to open the Battery Cover



Remove the Battery Cover with your fingers.



Use your fingers to remove the Battery



2.1.2 Camera Cover

CAREFUL NOT TO DAMAGE THE PLASTIC PARTS

Use a small Screw driver and carefully loosen the Camera Cover.



Use a Guitar Pick to loosen the Camera Cover.

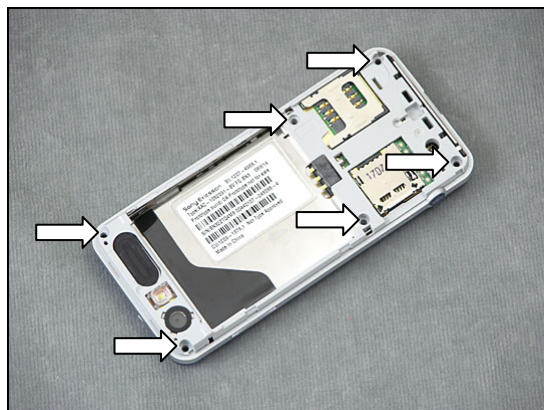


Use your fingers to remove the Camera Cover.



2.1.3 Screws

Use a screwdriver to loosen the six screws with a Torx No. 6 (T6) Bit.



2.1.4 Front Cover

Use a Guitar Pick to slide and loosen the Front Cover.



Remove the Front Cover.



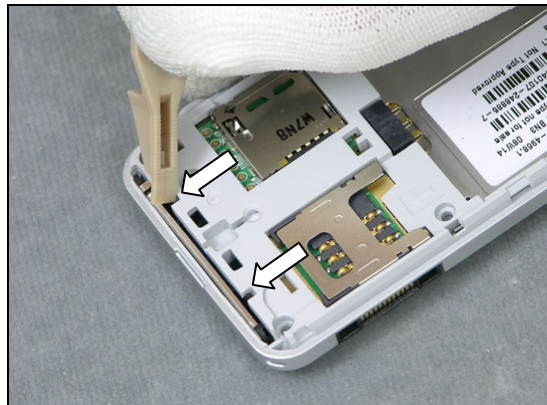
2.1.5 Keypad

Use a blunt pair of Tweezers to remove the Keypad.



2.1.6 Rear Cover

Use a Front Opening Tool to release the two snap hooks on the *Rear Cover*



Use a Front Opening Tool to release the snap hook on the side of the *Rear Cover*



Repeat on the opposite side.

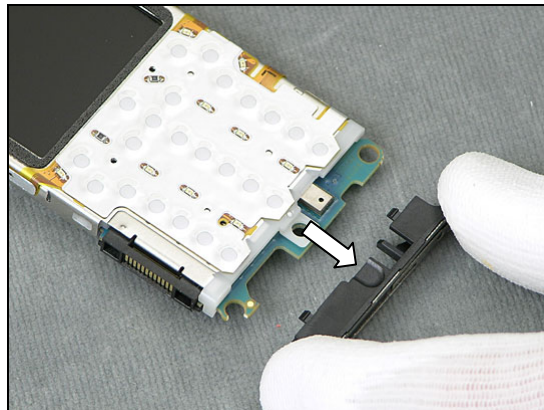


Use your fingers to remove the core unit.



2.1.7 Antenna Assy

Use your fingers to remove the Antenna Assy.



2.1.8 LCD Metal Support

Use a Front Opening Tool to release the LCD Metal Support.

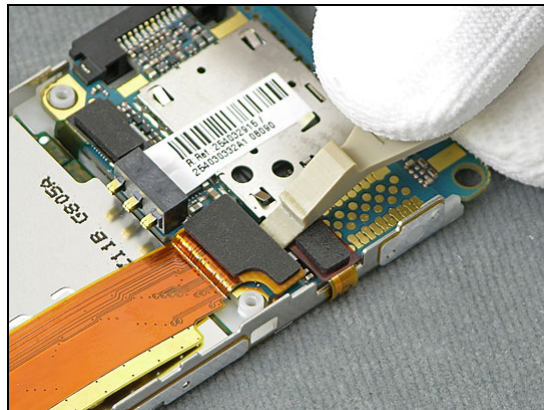


Remove the LCD Metal Support with your fingers.

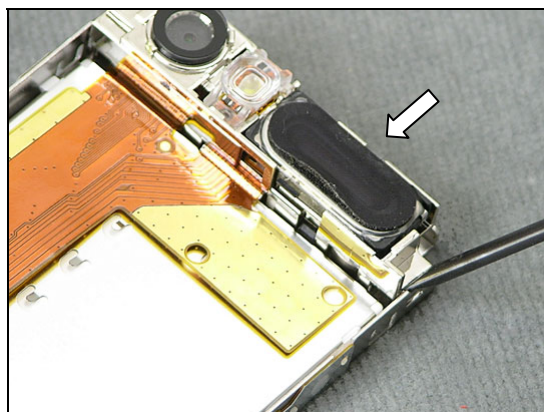


2.1.9 Camera Flex Assy/Camera support assy

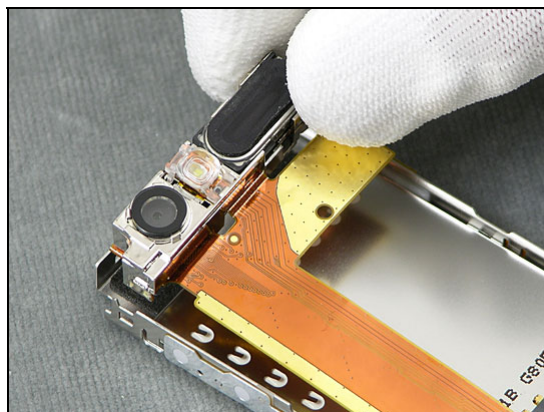
Use a Front Opening Tool to disconnect the btb Connector.



Use a small screwdriver to release the two hooks.
Press with as small screwdriver from the outside as shown in picture.

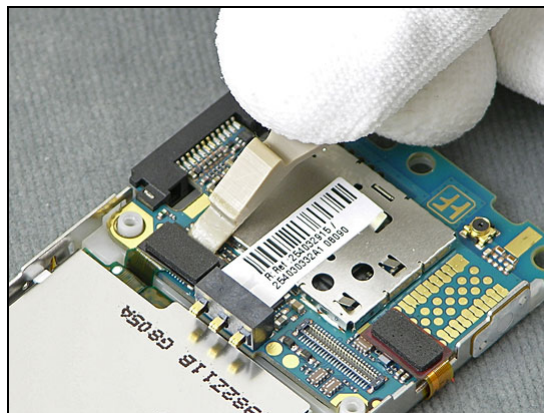


Use your fingers to remove the Camera Flex Assembly



2.1.10 LCD Assy

Use a Front Opening Tool to disconnect the LCD Assy btb Connector.



Use a Front Opening Tool to loosen the LCD assy.

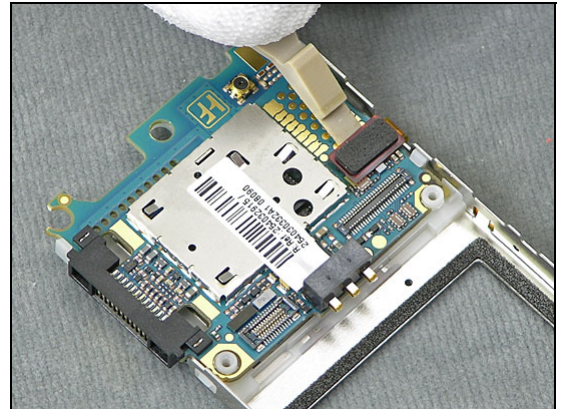


BE CAREFUL NOT TO TOUCH THE LCD FRONT SIDE!
Remove the LCD Assy.

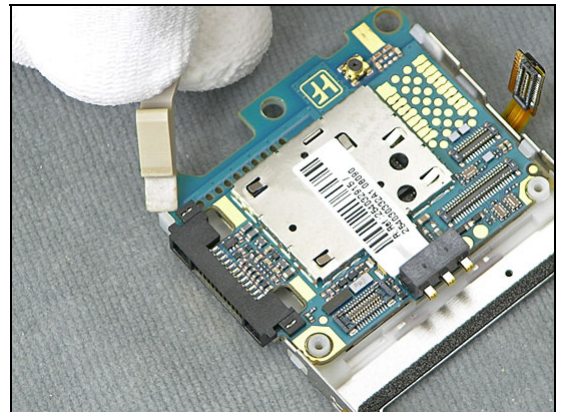


2.1.11 PBA

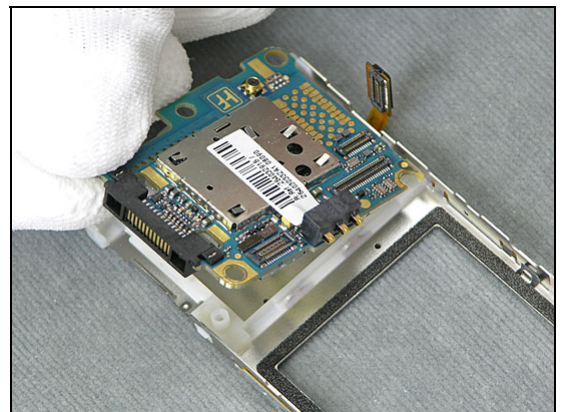
Use a Front Opening Tool to disconnect the Dome Foil Connector.



Use a Front Opening Tool to release the snap hook.



Use your fingers to remove the PBA.





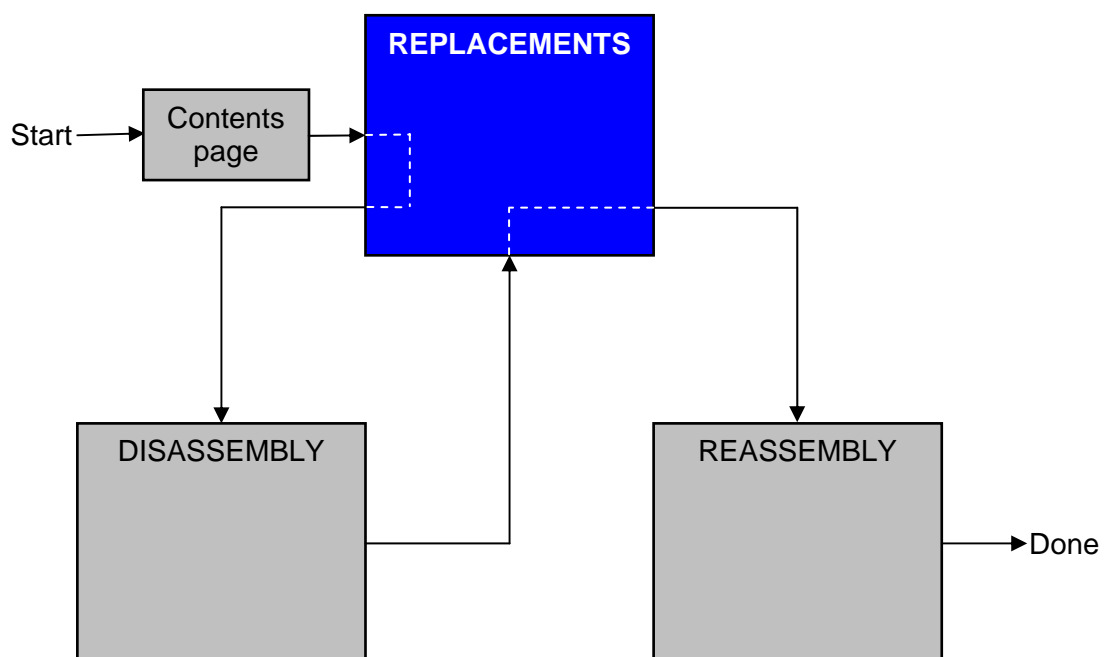
3 Replacements

Search for the part to be replaced on the Contents page and go to that instruction to be found in this *Replacements* section.

The instruction usually begins by directing you to the *Disassembly* section with a specification of the instructions you have to carry out in order to disassemble the phone as far as needed before the actual replacement.

Go back to this *Replacements* section and carry out the instruction.

The instruction usually ends by directing you to the *Reassembly* section with a specification of the instructions you have to carry out in order to reassemble the phone.





3.1 Battery Cover

Follow the 2.1.1 Disassembly instructions!

Replace the Battery Cover

Follow the 4.1.11 Reassembly instructions!

3.2 Battery

Follow the 2.1.1 Disassembly instructions!

Replace the Battery

Follow the 4.1.11 Reassembly instructions!

3.3 Camera Cover

Follow the 2.1.1-2.1.2 Disassembly instructions!

Replace the Camera Cover

Follow the 4.1.10- 4.1.11 Reassembly instructions!

3.4 Front Cover

Follow the 2.1.1 – 2.1.4 Disassembly instructions!

Replace the Battery Cover

Follow the 4.1.8 – 4.1.11 Reassembly instructions!

3.5 Keypad

Follow the 2.1.1 – 2.1.5 Disassembly instructions!

Replace the Keypad

Follow the 4.1.7 – 4.1.11 Reassembly instructions!

3.6 Rear Cover

Follow the 2.1.1 – 2.1.6 Disassembly instructions!

Replace the Rear Cover

Follow the 4.1.6 – 4.1.11 Reassembly instructions!

3.7 Antenna Assy

Follow the 2.1.1 – 2.1.8 Disassembly instructions!

Replace the Antenna Assy

Follow the 4.1.5 – 4.1.11 Reassembly instructions!

3.8 LCD Metal Support

Follow the 2.1.1 – 2.1.8 Disassembly instructions!

Replace the LCD Metal Support

Follow the 4.1.4 – 4.1.11 Reassembly instructions!

3.9 Camera Support Assy

Follow the 2.1.1 – 2.1.9 Disassembly instructions!

Follow the 3.17 Removal instructions

Follow the 3.18 Removal instructions

Follow the 3.20 Removal instructions

Follow the 3.21 Removal instructions

Replace the Camera Support Assy

Follow the 3.17 Installation instruction

Follow the 3.18 Installation instruction

Follow the 3.20 Installation instruction

Follow the 3.21 Installation instruction

Follow the 4.1.3 – 4.1.11 Reassembly instructions!

3.10 LCD Assy

Follow the 2.1.1 – 2.1.10 Disassembly instructions!

Replace the Rear Cover

Follow the 4.1.2 – 4.1.11 Reassembly instructions!

3.11 Metal Frame Assy

Follow the 2.1.1 – 2.1.11 Disassembly instructions!

Replace the Antenna Assy

Follow the 4.1.1 – 4.1.11 Reassembly instructions!

3.12 Mic Gasket

Removal

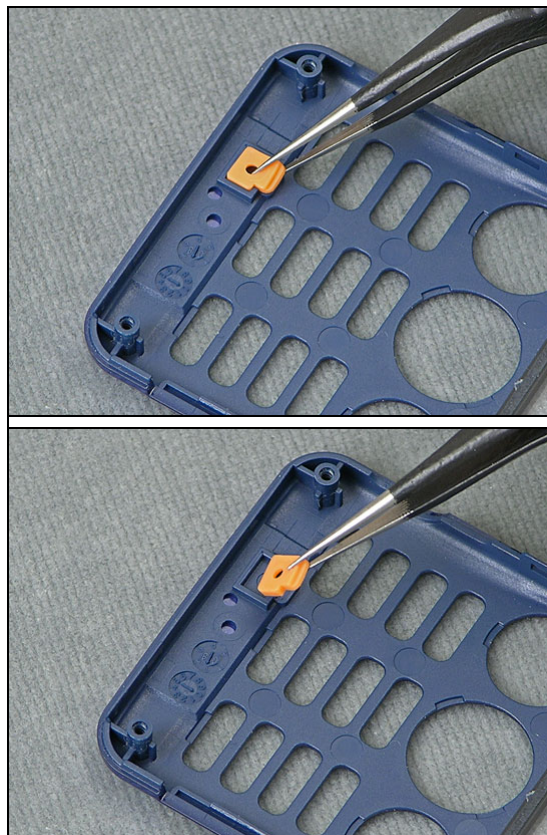
Follow the 2.1.1 – 2.1.4 Disassembly instructions!

Use a pair of Tweezers to remove the Mic Gasket.

Installation

Use a pair of Tweezers to place the Mic Gasket.

Follow the 4.1.8 – 4.1.11 Reassembly instructions!



3.13 Co-brand Label

Removal

CAREFUL NOT TO DAMAGE THE MICROPHONE

No Disassembly needed!

Use a Dentist hook to loosen the Co-brand Label. Remove the Co-brand Label with your fingers.



Installation

Use a pair of blunt Tweezers to place the Co-brand Label.

No Reassembly needed!



3.14 Side Key Volume

Removal

Follow the 2.1.1 – 2.1.6 Disassembly instructions!

Use a pair of Tweezers to remove the Side Key Volume.



Installation

Use a pair of Tweezers to mount the Side Key Volume.

Follow the 4.1.6 – 4.1.11 Reassembly instructions!



3.15 Side Key Photo

Removal

Follow the 2.1.1 – 2.1.6 Disassembly instructions!

Use a pair of Tweezers to remove the Side Key Photo.



Installation

Use a pair of Tweezers to mount the Side Key Photo.

Follow the 4.1.6 – 4.1.11 Reassembly instructions!

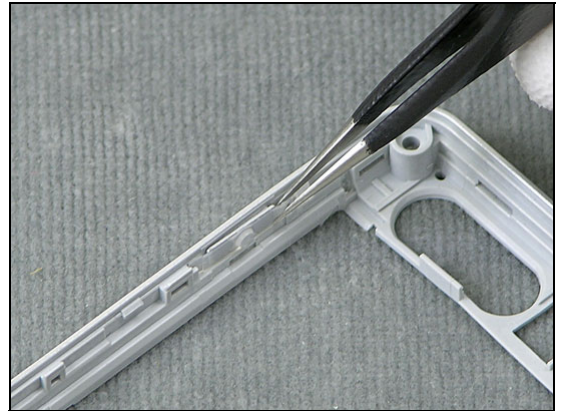


3.16 Media Key

Removal

Follow the 2.1.1 – 2.1.6 Disassembly instructions!

Use a pair of Tweezers to remove the Media Key.



Installation

Use a pair of Tweezers to mount the Media Key.

Follow the 4.1.6 – 4.1.11 Reassembly instructions!



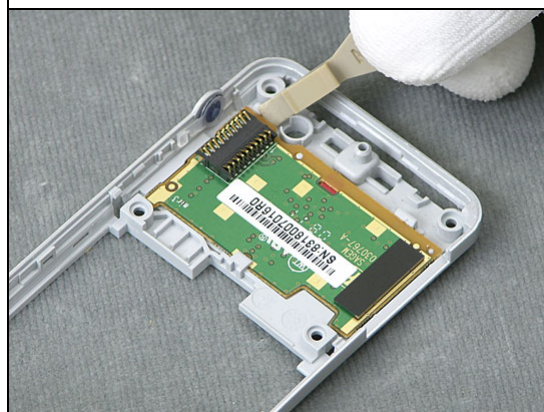
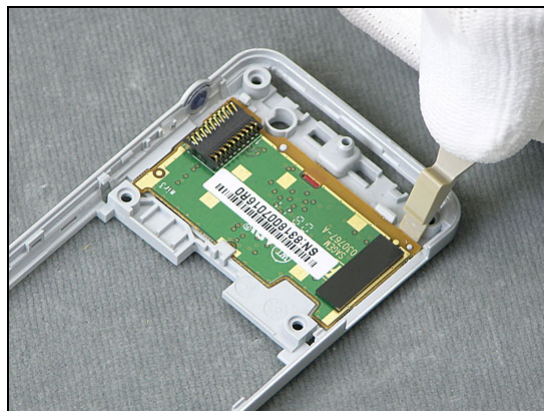
3.17 SIM/M2 PBA Assy

Removal

Follow the 2.1.1 – 2.1.6 Disassembly instructions!

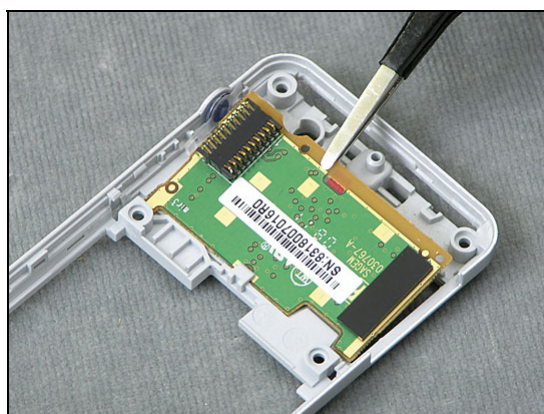
Use a Front opening Tool to loosen the SIM/M2 PBA Assy.

Use a Front opening Tool to loosen and remove the SIM/M2 PBA Assy.



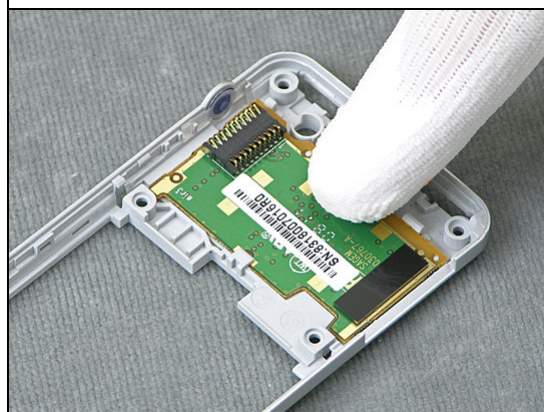
Installation

Use a blunt pair of tweezers to place the SIM/M2 PBA Assy.



Use your fingers to snap on the SIM/M2 PBA Assy.

Follow the 4.1.6 – 4.1.11 Reassembly instructions!



3.18 Window Assy

Removal

Follow the 2.1.1 – 2.1.4 Disassembly instructions!

Use your fingers to remove the Window Assy.

Use your fingers to remove the Window Assy.



Installation

MAKE SURE ALL RESIDUES OF ADHESIVE IS REMOVED FROM THE FRONT ASSY

Use your fingers to place the Window Assy from the back side of the Front Assy.

Follow the 4.1.8 – 4.1.11 Reassembly instructions!

CAREFUL NOT TO LEAVE ANY MARKS ON THE WINDOW ASSY

Press carefully around the edge of the window assy.
Remove the Protective tape from the window assy.



3.19 IMEI Label

Removal

Follow the 2.1.1 Disassembly instructions!

Read the old label and/or write the information into the “Label make” program before removal

Note the position of the label before removal

Heat up the label by using hot air, if needed.

Carefully remove the label without causing scratches

If there still are residues, clean the surface with isopropyl alcohol

Installation

Check that the proper label format is loaded in the Zebra printer.

Write a new label by using the program “Label make” and check that the printing is OK.

Take the new label and place it onto the frame as in the adjacent picture.

ONE LABEL ONLY IS ALLOWED!

Follow the 4.1.11 Reassembly instructions!

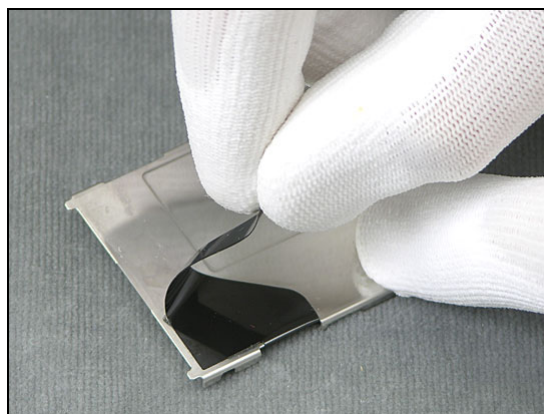


3.20 Plastic Battery Release

Removal

Follow the 2.1.1 - 2.1.8 Disassembly instructions!

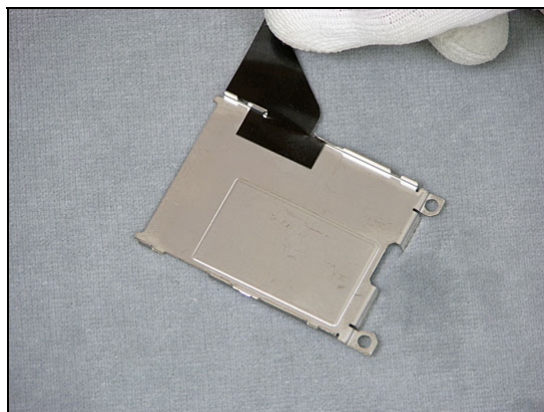
Use your fingers to remove the Plastic Battery Release



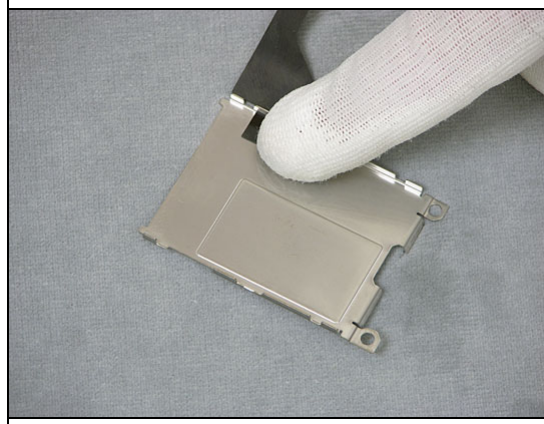
Installation

CAREFULLY ALLIGN THE PLASTIC BATTERY RELEASE

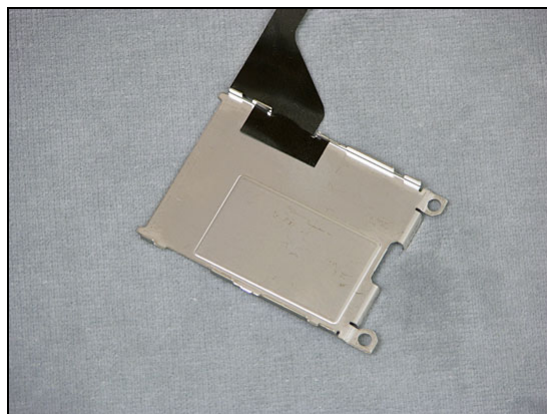
Use your fingers to mount the Plastic Battery Release



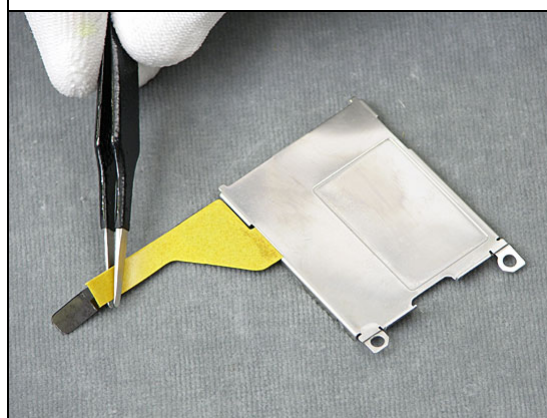
Press with your finger



***CHECK THAT THE PLASTIC BATTERY RELEASE IS WELL
ALIGNED WITH THE EDGE OF THE LCD METAL SUPPORT***



Peel of the protection tape and fold over to the front side of the LCD Metal Support



Use your fingers to press down as shown in picture

Follow the 4.1.4 – 4.1.11 Reassembly instructions!

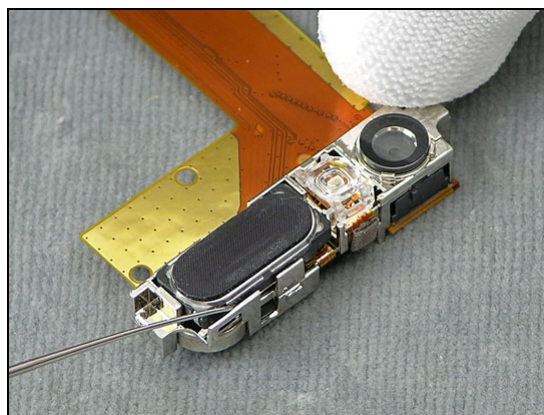


3.21 Speaker

Removal

Follow the 2.1.1 – 2.1.4 Disassembly instructions!

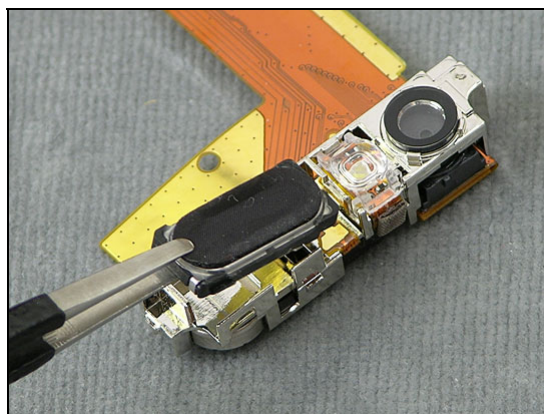
Use a dentist hook to release the snap hook



Installation

CAREFUL NOT TO DAMAGE THE CONTACT SPRINGS OF THE SPEAKER

Use a blunt pair of Tweezers to mount the Speaker.



Use the rear end of a pair of tweezers to press down the Speaker.

Follow the 4.1.6 – 4.1.11 Reassembly instructions!

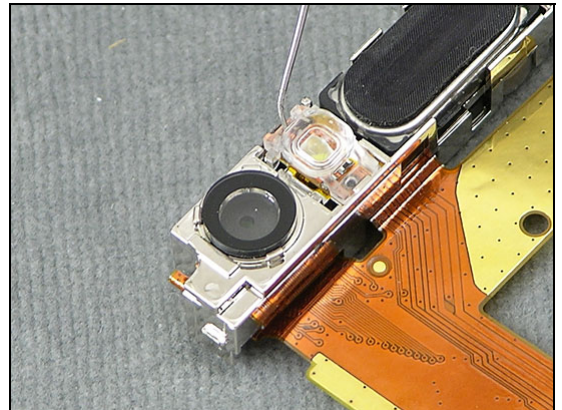


3.22 Flash Lens

Removal

Follow the 2.1.1 – 2.1.4 Disassembly instructions!

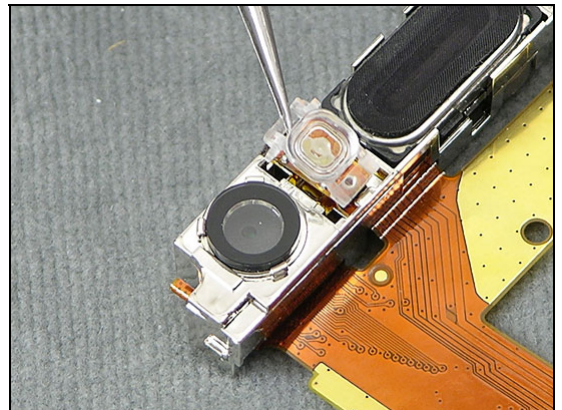
Use a Dentist Hook to remove the Flash Lens.



Installation

Use a pair of Tweezers to mount the Flash Lens.

Follow the 4.1.6 – 4.1.11 Reassembly instructions!

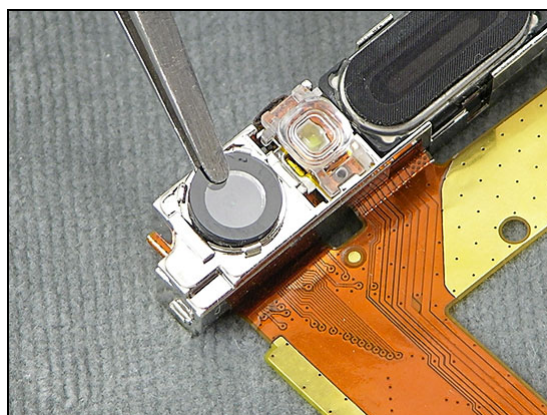


3.23 Camera Window

Removal

Follow the 2.1.1 – 2.1.4 Disassembly instructions!

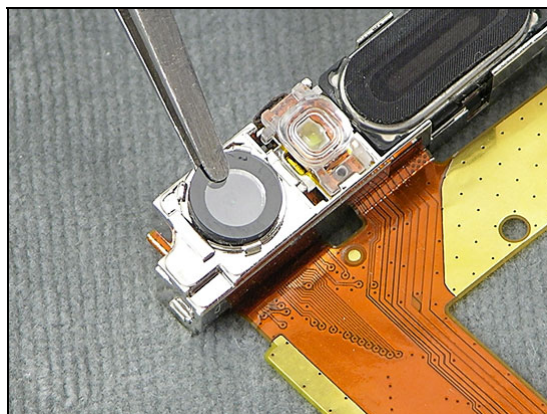
Use a Flex Film Removal Tool to remove the Camera Window



Installation

Use a Flex Film Removal Tool to mount the Camera Window.

Follow the 4.1.6 – 4.1.11 Reassembly instructions!

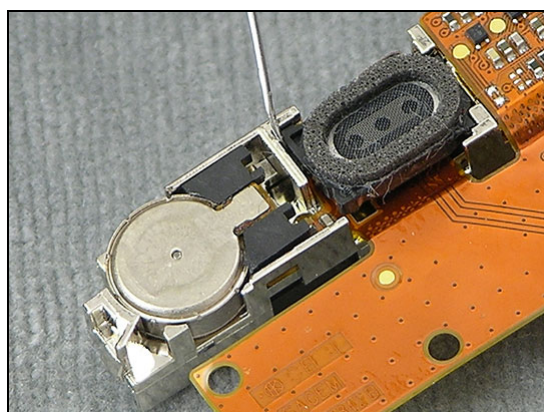


3.24 Receiver

Removal

Follow the 2.1.1 – 2.1.9 Disassembly instructions!

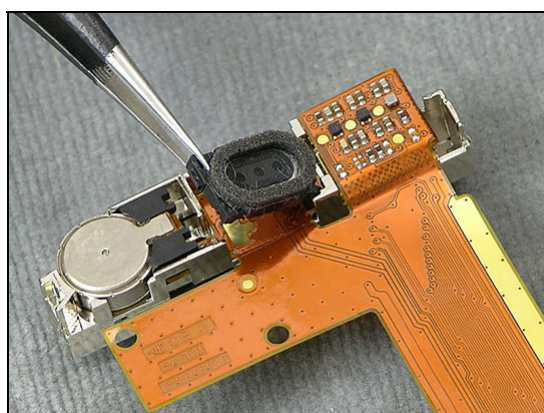
Use a dentist hook to release the snap hook



Installation

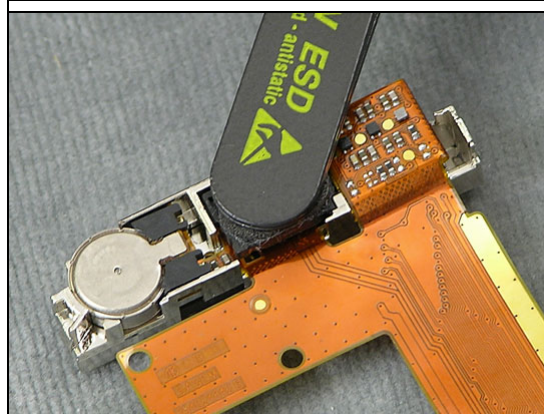
CAREFUL NOT TO DAMAGE THE CONTACT SPRINGS OF THE RECEIVER

Use a pair of Tweezers to mount the Receiver.



Use the rear end of a pair of Tweezers to carefully press down the Receiver.

Follow the 4.1.3 – 4.1.11 Reassembly instructions!

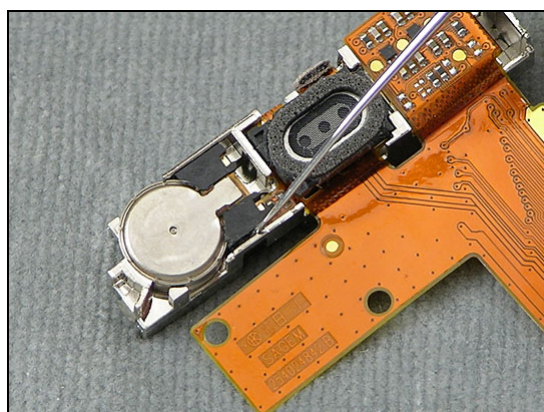


3.25 Vibrator

Removal

Follow the 2.1.1 – 2.1.9 Disassembly instructions!

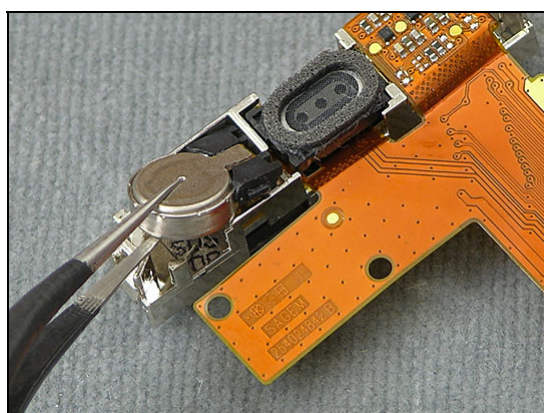
Use a Dentist Hook to release the snap hook holding the Vibrator.



Installation

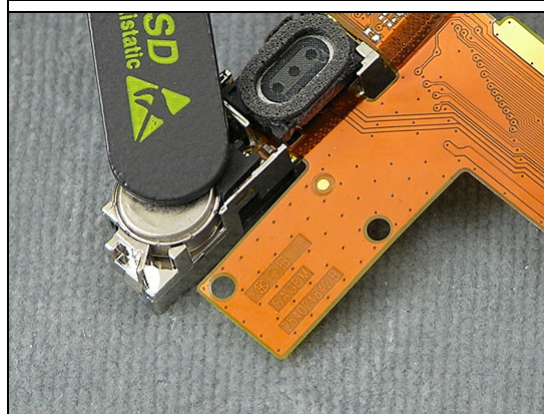
CAREFUL NOT TO DAMAGE THE CONTACT SPRINGS OF THE VIBRATOR

Use a pair of Tweezers to mount the Vibrator.



Use the rear end of a pair of Tweezers to carefully press down the Vibrator.

Follow the 4.1.3 – 4.1.11 Reassembly instructions!

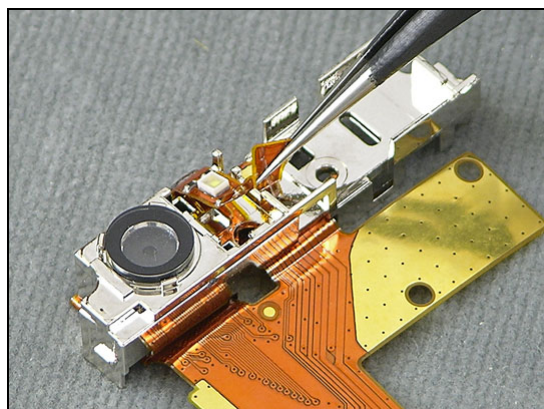


3.26 Camera Flex Assy

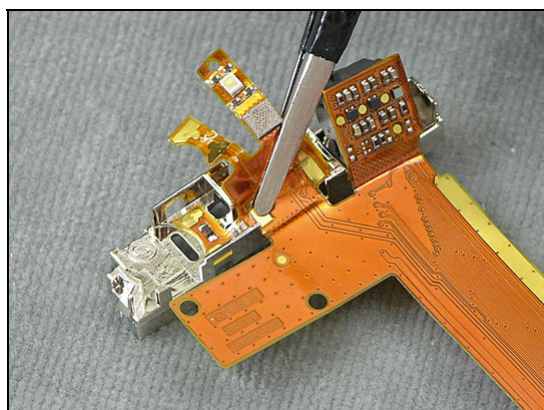
Removal

Follow the 2.1.1 – 2.1.9 Disassembly instructions!

Use a pair of tweezers to remove the Camera Flex Assy



Continue on the other side of the Plastic Support



Installation

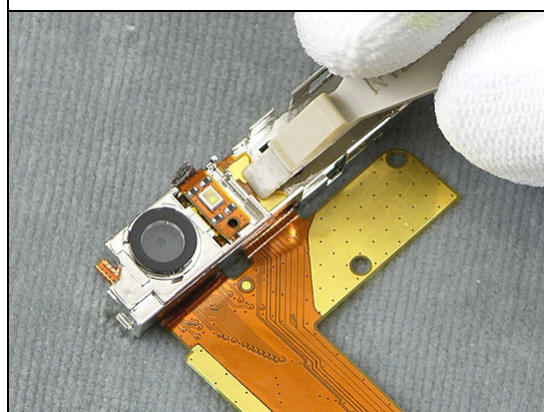
CAREFUL NOT TO DAMAGE THE NEARBY COMPONENTS

Start to mount the new Camera Flex assy according to picture, press with a Front opening tool



Continue on the other side of the Plastic Support

Follow the 4.1.3 – 4.1.11 Reassembly instructions!

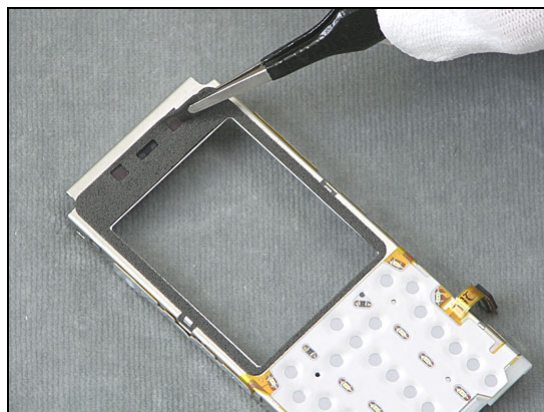


3.27 LCD Sponge

Removal

Follow the 2.1.1 – 2.1.4 Disassembly instructions!

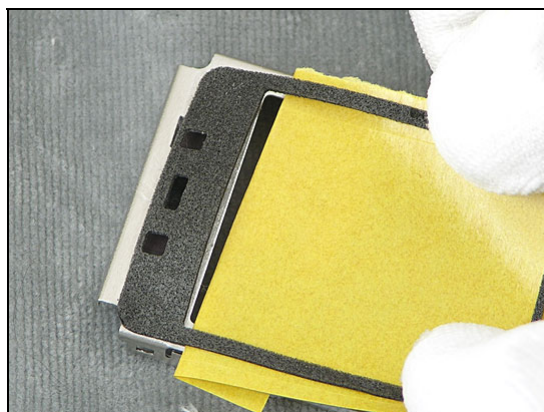
Use a pair of blunt Tweezers to remove the LCD Sponge.



Installation

Peel of and fold the protection tape as shown in picture.
Use your fingers to carefully align the LCD Window Sponge.
Remove the remaining part of the protection tape and check that the position is correct

Follow the 4.1.8 – 4.1.11 Reassembly instructions!

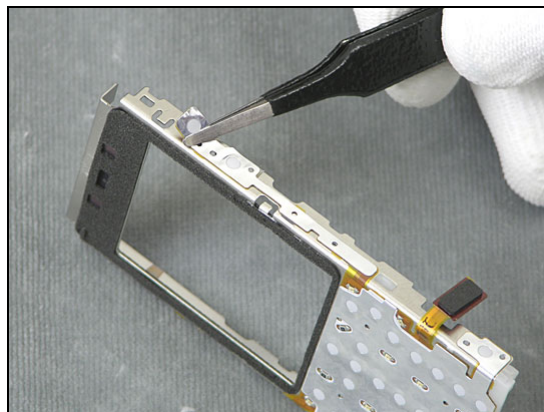


3.28 Metal Dome

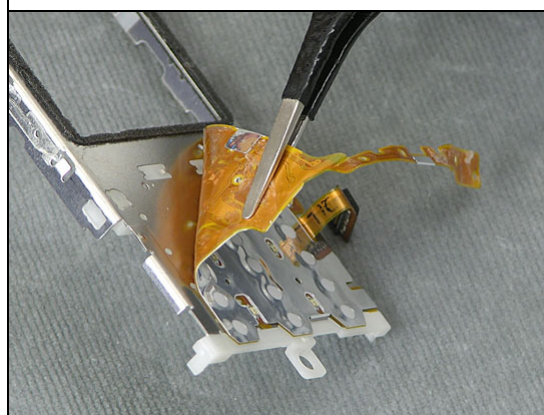
Removal

Follow the 2.1.1 – 2.1.6 Disassembly instructions!

Use a pair of blunt Tweezers to remove the Metal Dome.



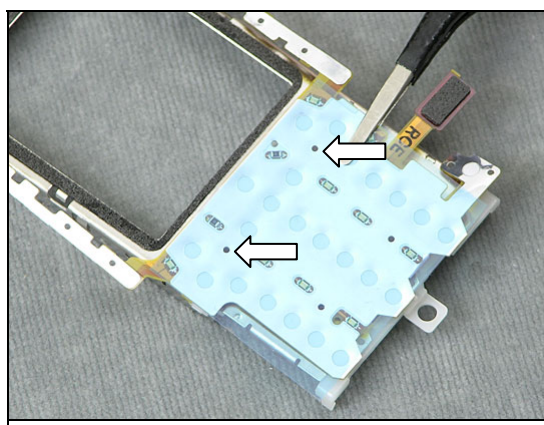
Continue on the front side of the Metal Frame Assy



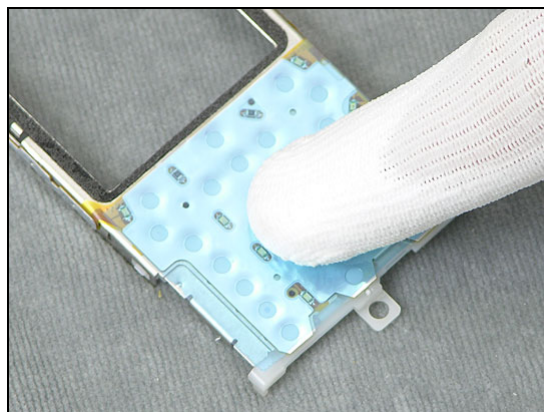
Installation

CAREFULLY ALLIGN THE METAL DOME WITH THE HOLES IN THE METAL FRAME

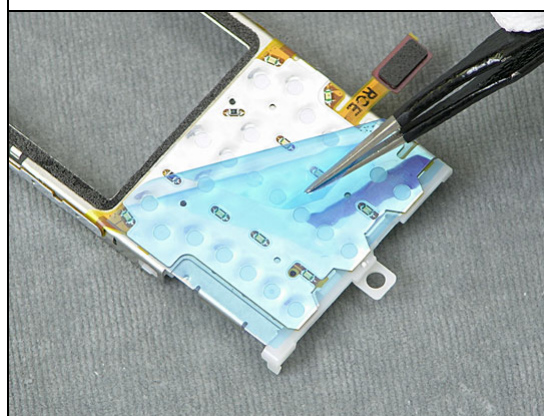
Use a blunt pair of Tweezers to mount the Metal Dome.



Use your fingers to press down the Metal Dome.

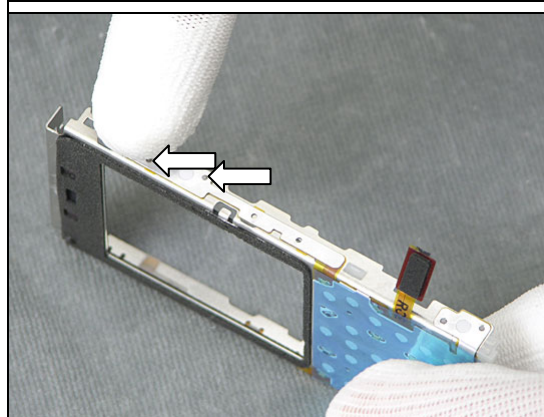


Use a pair of Tweezers to remove the protection tape of the Metal Dome



CAREFULLY ALIGN THE METAL DOME WITH THE GUIDING PINS AND HOLES IN THE METAL FRAME

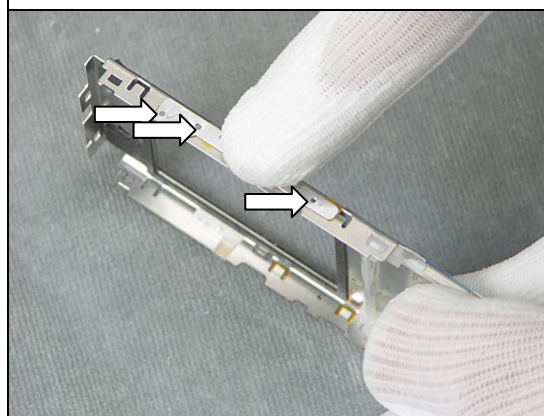
Use your fingers to attach the Metal Dome.



CAREFULLY ALIGN THE METAL DOME WITH THE GUIDING PINS AND HOLES IN THE METAL FRAME

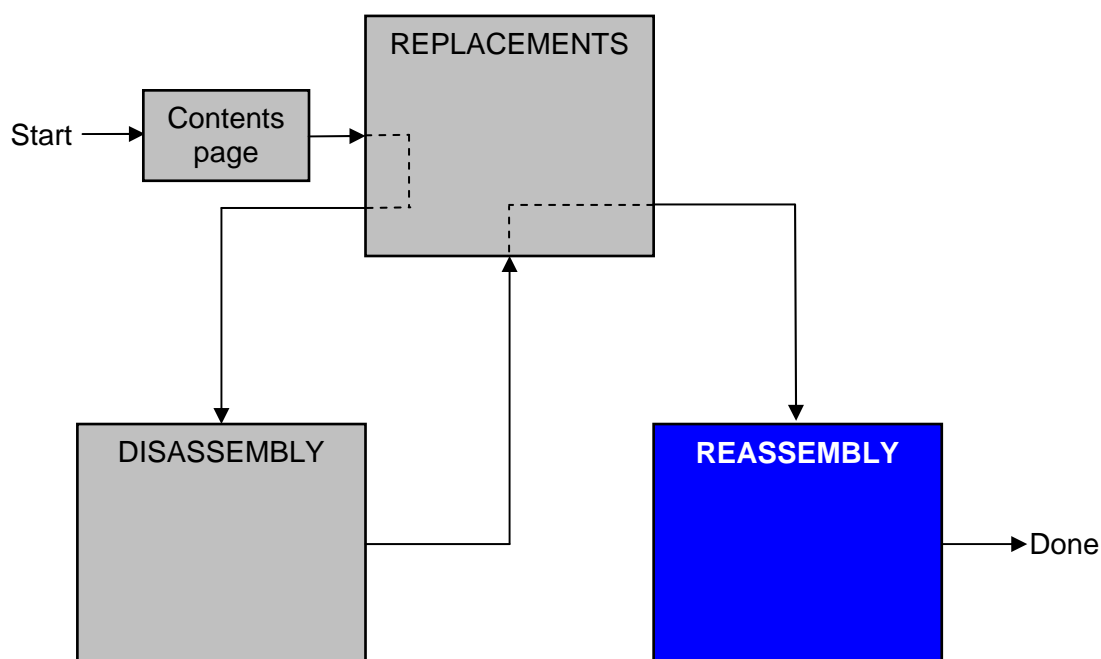
Continue on the other side

Follow the 4.1.6 – 4.1.11 Reassembly instructions!



4 Reassembly

After replacing a part being listed in Replacements, the instruction of that section usually ends by directing you to this Reassembly section with a specification of the instructions you have to carry out in order to reassemble the phone.



4.1 Overview

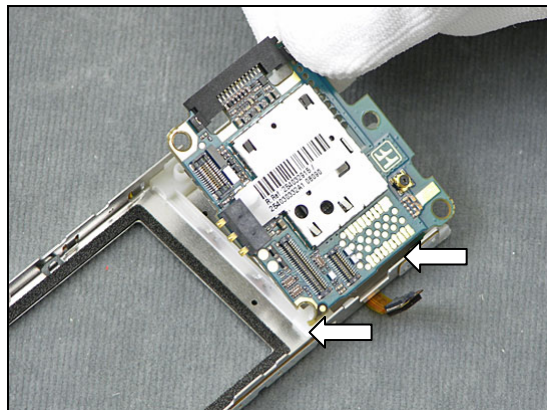
The reassembly is done in the following sequence:

1. Metal Frame Assembly
2. PBA
3. LCD Assy
4. Camera Flex Assy
5. LCD Metal Support
6. Antenna Assy
7. Rear Cover
8. Keypad
9. Front Assy
10. Screwcaps
11. Battery
12. Battery Cover

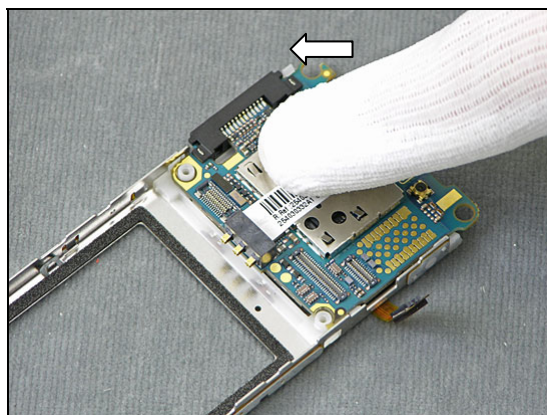


4.1.1 PBA

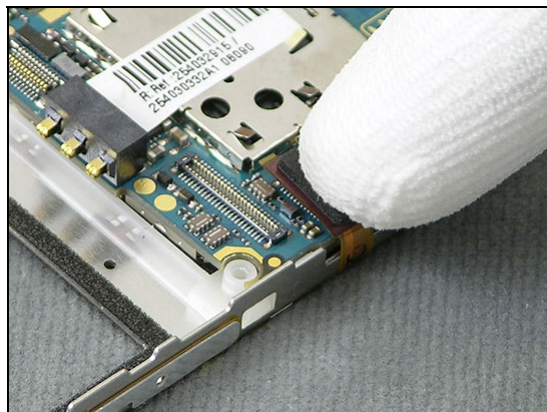
Position the PBA underneath the two hooks at the side.



Use your finger to press down the PBA.



Use your finger to connect the Dome Foil Connector.

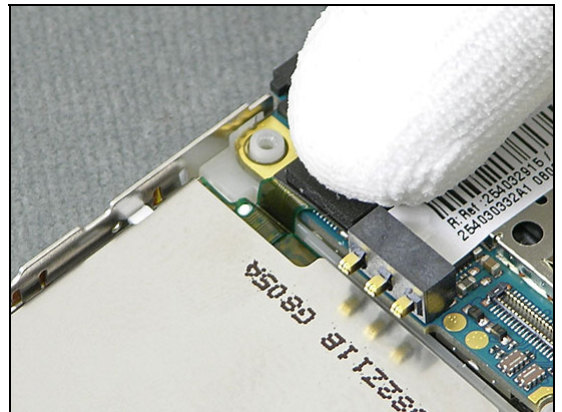


4.1.2 LCD Assy

Use your fingers to position the LCD Assy



Use your finger to connect the LCD Assy Connector.

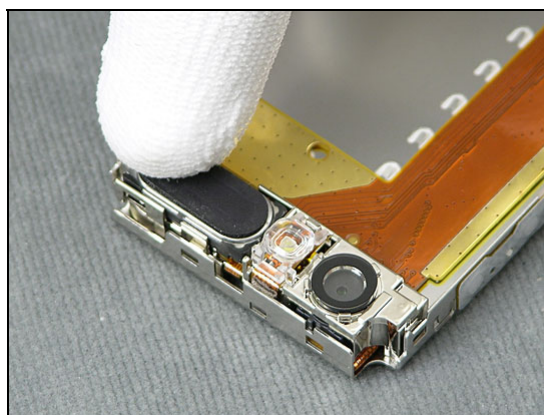


4.1.3 Camera Flex Assembly/Camera Support Assy

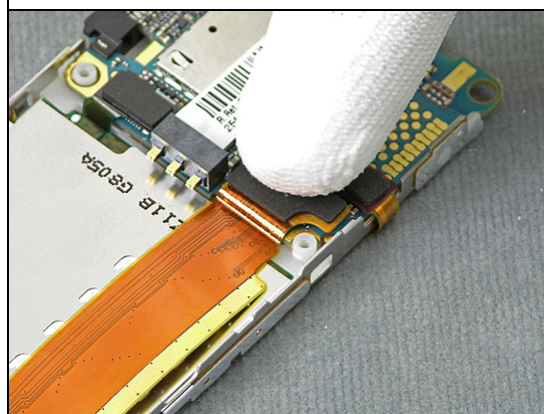
Use your fingers to position the Camera Flex Assy/Camera Support Assy.



Use your finger to press down the Camera Flex Assy/Camera Support Assy.



Use your finger to connect the Camera Flex Assy Connector.



4.1.4 LCD Metal Support

Use your fingers to position the Metal Plate.

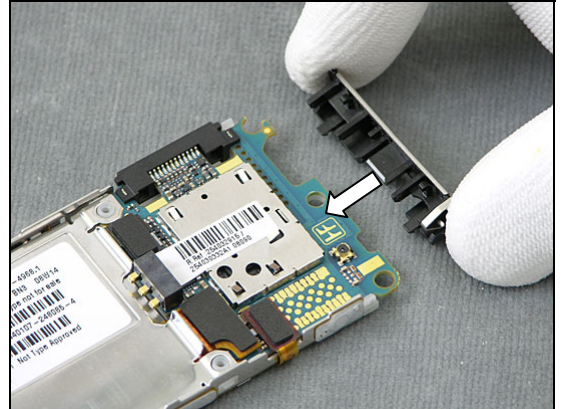


Fix the LCD Metal Support by pressing with your fingers.



4.1.5 Antenna Assy

Use your fingers to mount the Antenna Assy.



4.1.6 Rear Cover

Position the Core Unit to the Rear Cover.
Top first.



Fix the Core Unit and the Rear Cover together by pressing
with your fingers.



4.1.7 Keypad

Position the Keypad into the Front Cover.



4.1.8 Front Cover

Position the Core Unit into the Front Cover.



Fix the Front Cover by pressing with your finger.

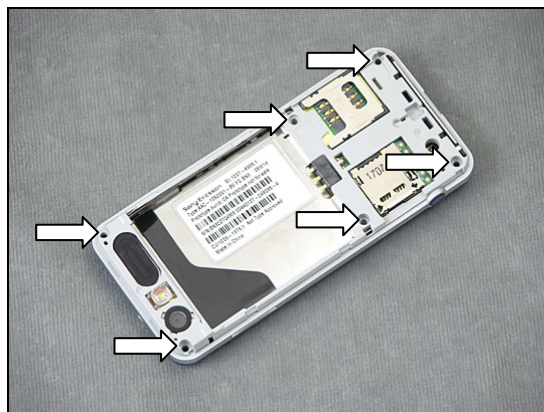


Check the seems and that there are no gap between Front Cover and rear cover.



4.1.9 Screws

Use 8 Ncm torque to tighten the six screws with a Torx No. 6 (T6) Bit.



4.1.10 Camera Cover

Place the Camera Cover as shown in picture



Use your fingers to press down the Camera Cover.



4.1.11 Battery & Battery Cover

Mount the Battery with your fingers.



Mount the Battery Cover with your fingers. Start at the top



Press down with your fingers





5 Revision history

Rev.	Date	Changes / Comments
1	2008-10-13	First release