

Working Instruction, Mechanical

Applicable for P990i

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1 Introduction

P990i



1.1 Equipment

SPECIAL TOOLS

- NTZ 112 459 Torque screwdriver (or equivalent)
- NTZ 112 288 Torx bit no. 6
- NTZ 112 1052 JCIS bit
- NTZ 112 521 Flex film assembly tool
- NTZ 112 302/2 Front opening tool



STANDARD TOOLS

- Dentist hook
- Blunt pair of tweezers
- Guitar pick



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

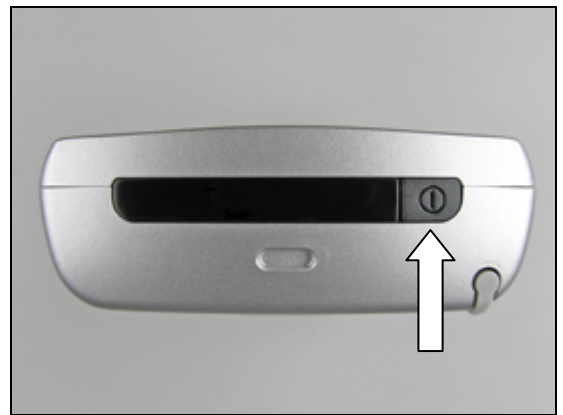


1.2 General cautions

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

- **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!**
- **NEVER TOUCH THE DISPLAY GLASS!**
- **USE AIR BLOW EQUIPMENT TO KEEP THE DISPLAY MODULE DUST FREE!**

Press the On/Off button to turn off the phone.



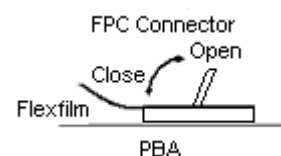
Check that the memory stick has been removed.



How to open a board-to-board connector with the front opening tool.

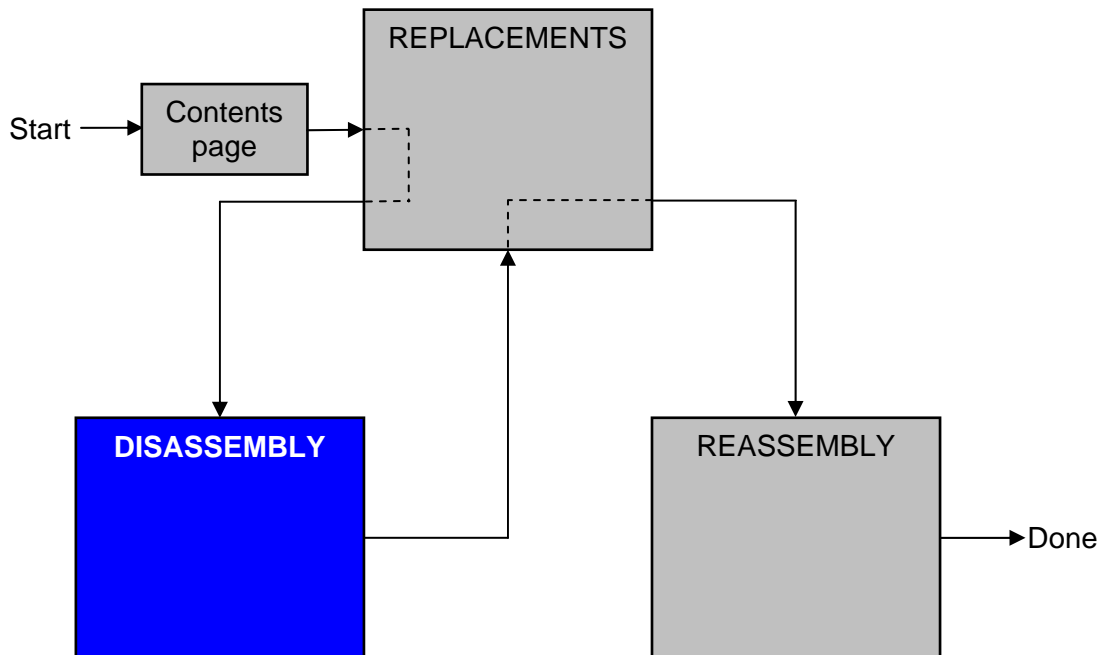


How to open and close a FPC connector (often done with a dentist hook).



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 Lid (a) & Battery (b)
2. Flip
3. Bezel Top
4. Cabinet Lower Sub
5. Cabinet Upper Sub



2.1.1 Battery Lid asm & Battery

Press the *battery lid* backwards until you get a gap by using your thumbs.



Slide down the *battery lid* from its mounted position towards the bottom of the phone and remove it.



Start to remove the *battery* from the phone with your fingers or the front opening tool.

Lift up the *battery* to release it.

If not released, turning the phone around at the same time will make it become released.



Remove the *battery* from the phone with your fingers.



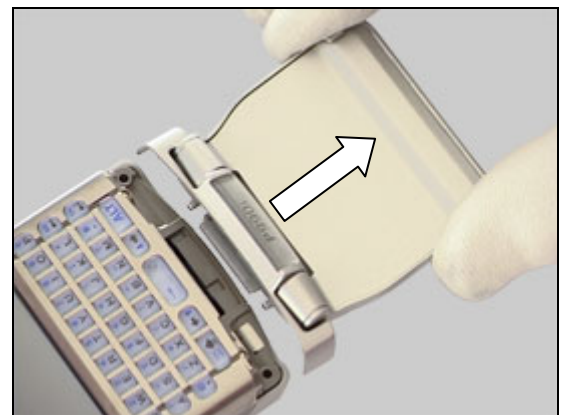
2.1.2 Flip asm

Use the JCIS bit to remove the two screws from the *lower cabinet sub*.

REMOVED SCREWS CANNOT BE REUSED AND MUST BE SCRAPPED!



Pull the *flip* straight backwards to remove it.

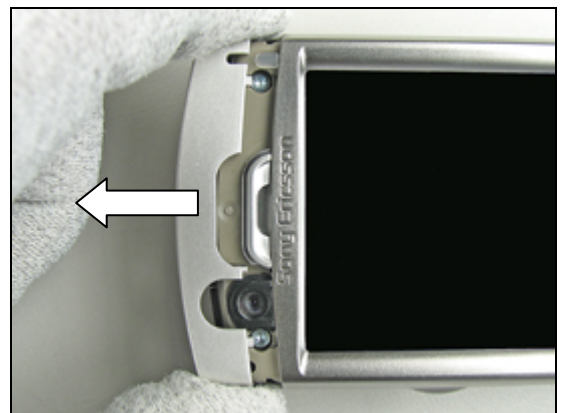


2.1.3 Bezel Top

Press the front opening tool in the joint between the *bezel top* and the *cabinet upper sub* until it becomes loose. If necessary, do the same thing on the opposite side.



Pull the *bezel top* straight backwards and remove it by hand.



2.1.4 Cabinet Lower Sub asm

Remove the two top screws by using torx bit no. 6.

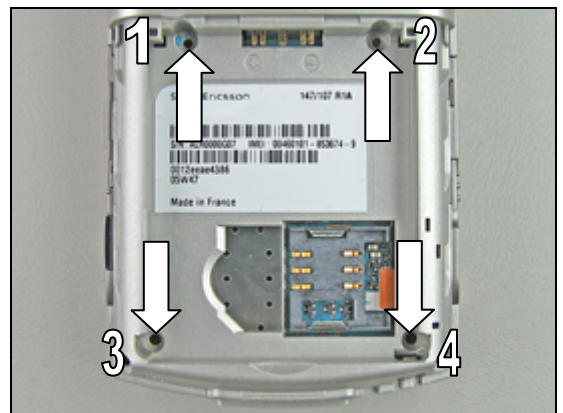
REMOVED SCREWS CAN BE REUSED IF THEY ARE NOT DAMAGED!



Remove the four inside screws by using torx bit no. 6.

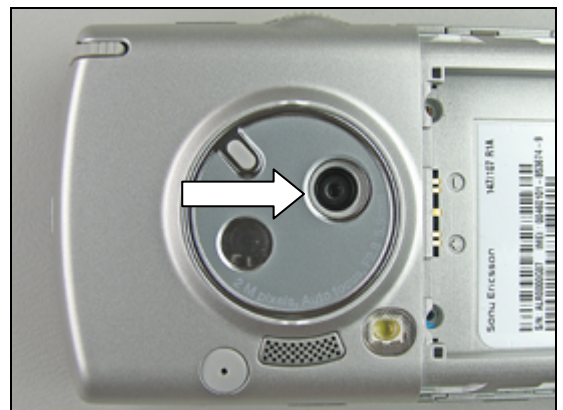
REMOVED SCREWS 1 & 2 CANNOT BE REUSED AND MUST BE SCRAPPED!

REMOVED SCREWS 3 & 4 CAN BE REUSED IF THEY ARE NOT DAMAGED!



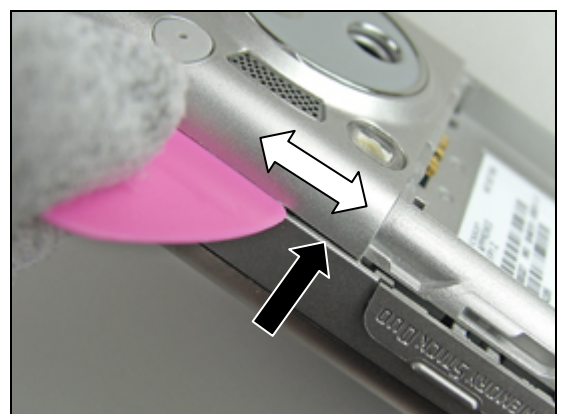
THE CAMERA LID MUST BE OPEN WHEN THE CABINET LOWER SUB IS REMOVED FROM THE PHONE.

Open the camera lid with your fingers.



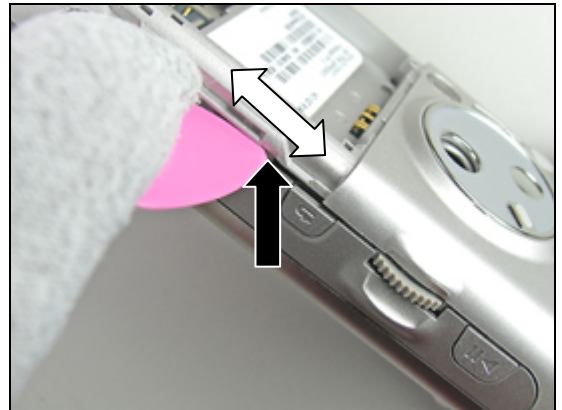
Gently but firmly move the guitar pick along the gap (starting where the gap is widest) both ways until the *cabinet lower sub* is loose on this side.

The snap hook to be released is located at the position of the black arrow.

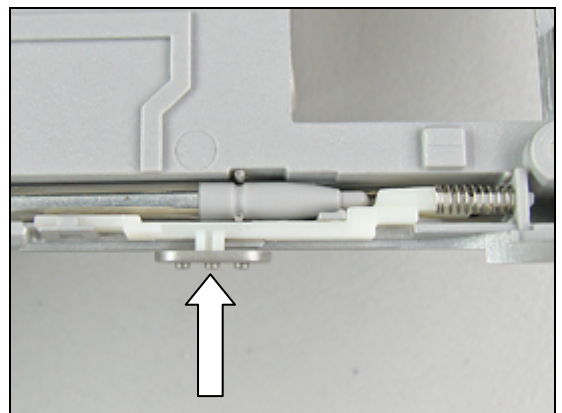


Cabinet Lower Sub asm *continued*

Continue to do the same thing on the opposite side.



Sometimes during the removal of the *cabinet lower sub* the *key lock button* may fall out.



Remove the *cabinet lower sub*.

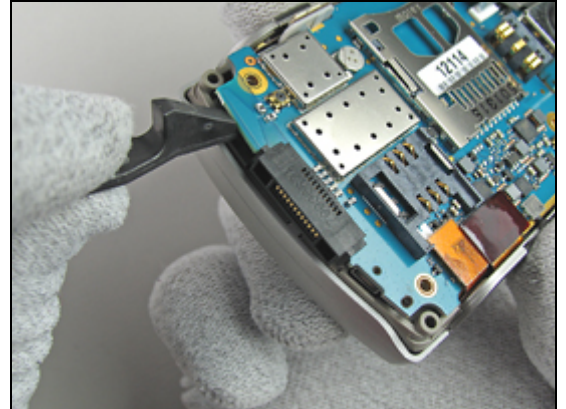


Cabinet lower sub removed.

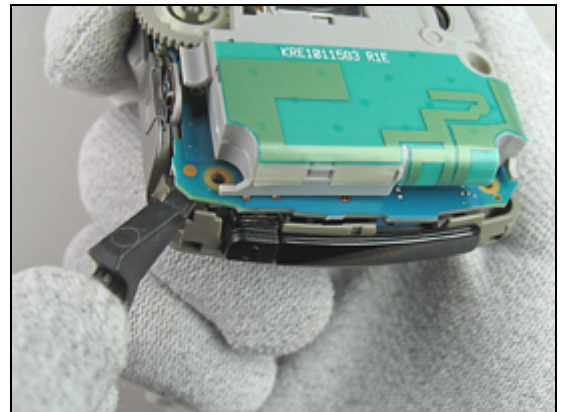


2.1.5 Cabinet Upper Sub asm

Gently bend with the front opening tool under the *main PBA* like the picture shows until it starts to become loose at the bottom of the phone.



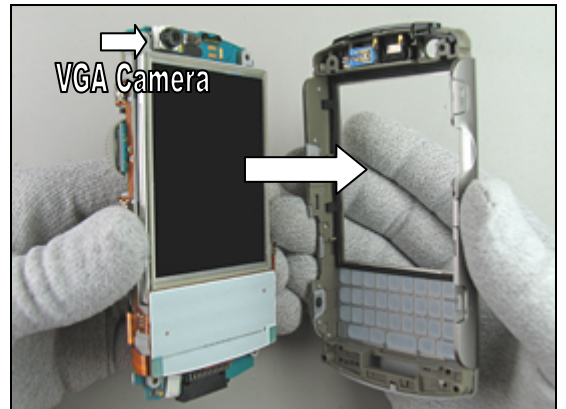
Continue to bend under the *main PBA* like the picture shows until it is completely free from the front.



BE CAREFUL WITH THE VGA CAMERA WHEN THE PBA/LCD SEPARATES FROM THE FRONT!

Sometimes the keyboard will fall out when the front is removed.

If necessary, wiggle the front slightly side to side while lifting the PBA/LCD away from the front.



Cabinet upper sub removed



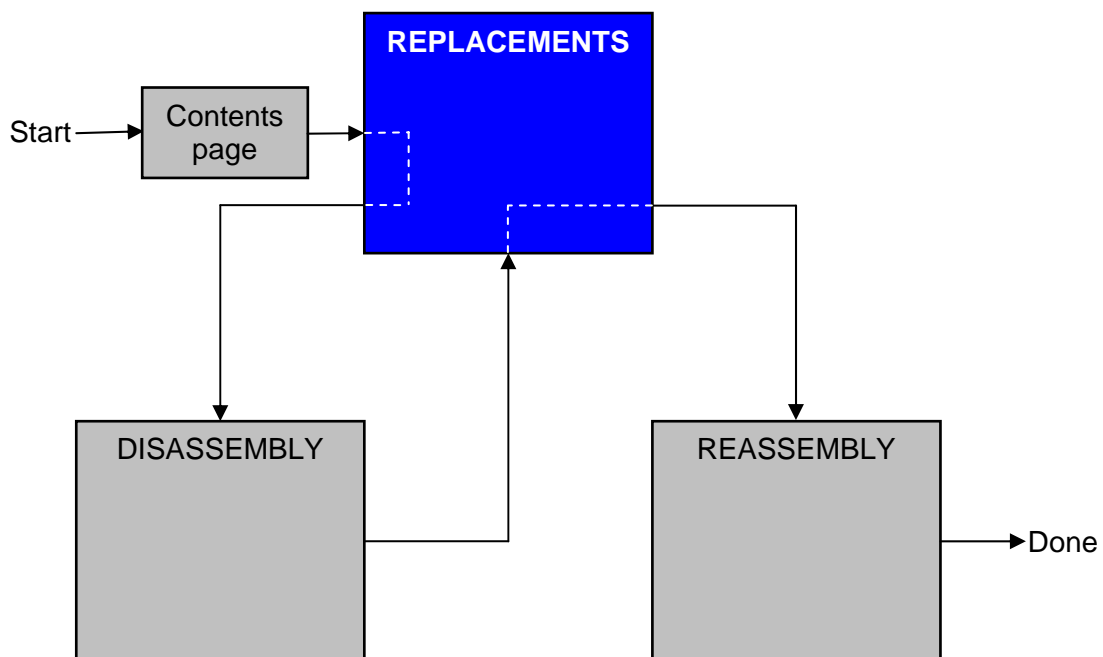
3 Replacements

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 Lid

Follow the 2.1.1 Disassembly instructions!

Prepare the new *battery lid*.

Follow the 4.1.5 Reassembly instructions!

3.2 Flip

Follow the 2.1.1 - 2.1.2 Disassembly instructions!

Prepare the new *flip*.

Follow the 4.1.4 - 4.1.5 Reassembly instructions!

3.3 Bezel Top

Follow the 2.1.3 Disassembly instructions!

Prepare the new *bezel top*.

Follow the 4.1.3 Reassembly instructions!

3.4 Cabinet Lower Sub

Follow the 2.1.1- 2.1.4 Disassembly instructions!

Prepare the new *cabinet lower sub*.

Follow the 4.1.2 – 4.1.5 Reassembly instructions!

3.5 Cabinet Upper Sub

Follow the 2.1.1 – 2.1.5 Disassembly instructions!

Prepare the new *cabinet upper sub*.

Follow the 4.1.1 – 4.1.5 Reassembly instructions!

3.6 Ext Antenna Cap

REMOVAL

Remove the *external antenna cap* with a dentist hook.



INSTALLATION

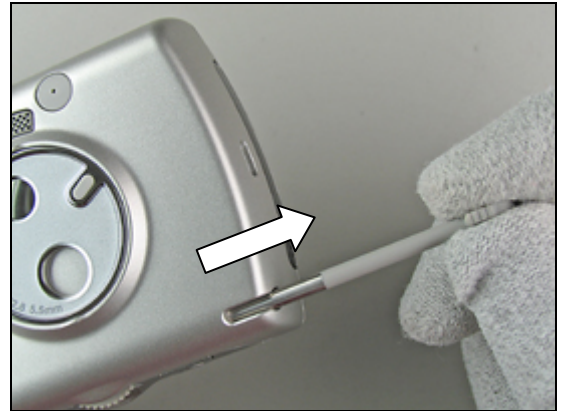
Insert a new *external antenna cap* with your fingers.



3.7 Stylus asm

REMOVAL

Remove the *stylus* with your fingers.



INSTALLATION

Insert the *stylus* with your fingers.



3.8 Co-Branding Plate

REMOVAL

Gently remove the *co-branding plate* with a dentist hook.



INSTALLATION

Attach the *co-branding plate* with the tweezers or by hand. Keep the pressure on for a few seconds to secure a good attachment.



3.9 Bezel Replacement asm

REMOVAL

Follow the 2.1.1 Disassembly instructions!

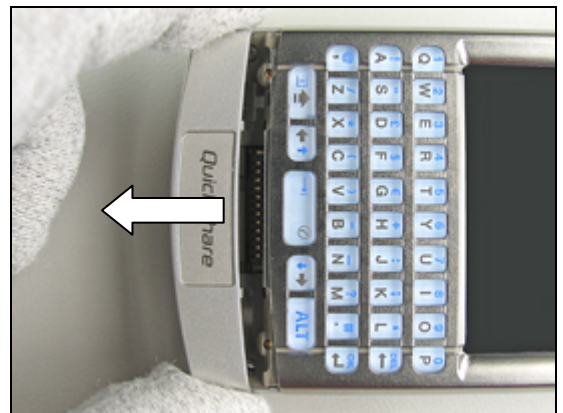
THIS INSTRUCTION DESCRIBES HOW TO REMOVE AND INSTALL A BEZEL REPLACEMENT ON A PHONE WHERE THE FLIP HAS BEEN REPLACED BY A BEZEL.

Use the JCIS bit to remove the two screws from the *cabinet lower sub*.

REMOVED SCREWS CANNOT BE REUSED AND MUST BE SCRAPPED!

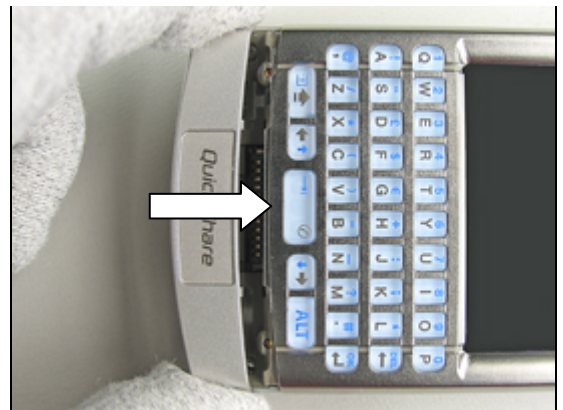


Pull the *bezel replacement* straight backwards to remove it.



INSTALLATION

Gently place the *bezel replacement* over the *cabinet upper sub*.



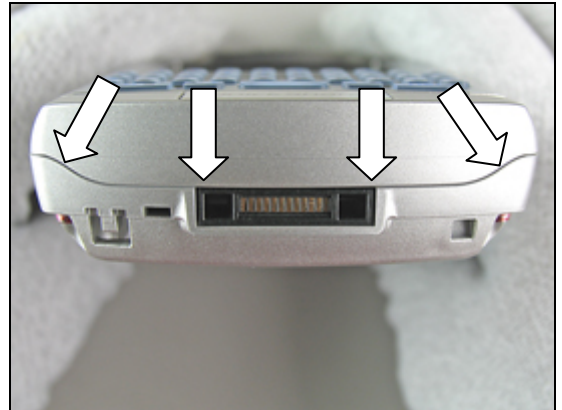
Apply **15 Ncm** \pm 2 Ncm of torque for the two new screws by using the JCIS bit!



Bezel Replacement asm *continued*

Make sure that there are no gaps around the *bezel replacement*.

If there still is a gap recheck your torque setting and retighten the screws.



Correctly mounted *bezel replacement*.

Follow the 4.1.5 Reassembly instructions!



3.10 Camera Bezel asm

REMOVAL

Follow the 2.1.3 Disassembly instructions!

Use the tweezers to bend under the *camera bezel* until it becomes loose.

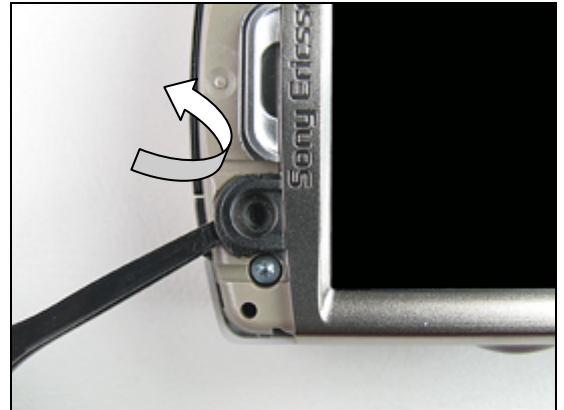
Remove the *camera bezel* with the tweezers.

INSTALLATION

Install a new *camera bezel* with the tweezers.
Press on the edges to make a secure fit.

Correctly mounted *camera bezel*.

Follow the 4.1.3 Reassembly instructions!



3.11 Memory Stick Cover

REMOVAL

Follow the 2.1.1 – 2.1.4 Disassembly instructions!

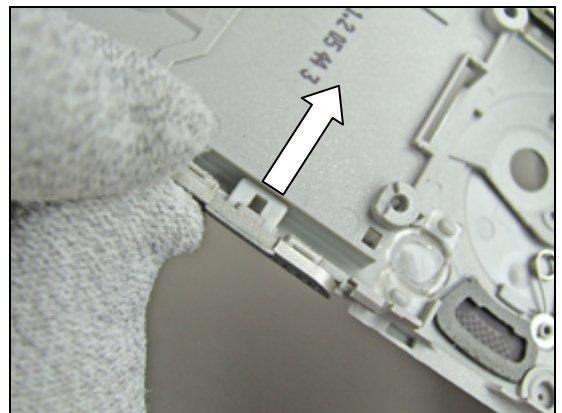
Before the actual removal – turn the *memory stick cover* 90° left or right, and then remove it with your fingers.



INSTALLATION

First turn the *memory stick cover* 90° left or right, then attach the new *memory stick cover* over the fastening pin.

Follow the 4.1.2 - 4.1.5 Reassembly instructions!

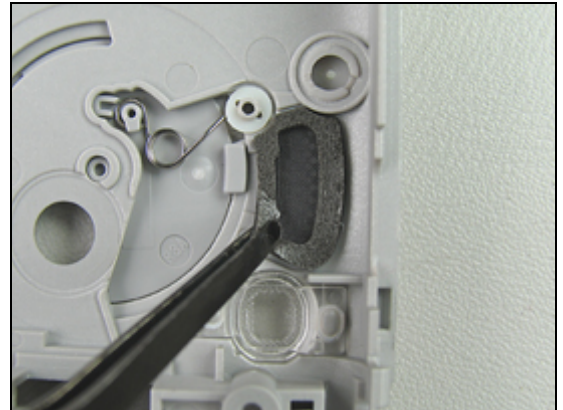


3.12 Dust Cover

REMOVAL

Follow the 2.1.1 – 2.1.4 Disassembly instructions!

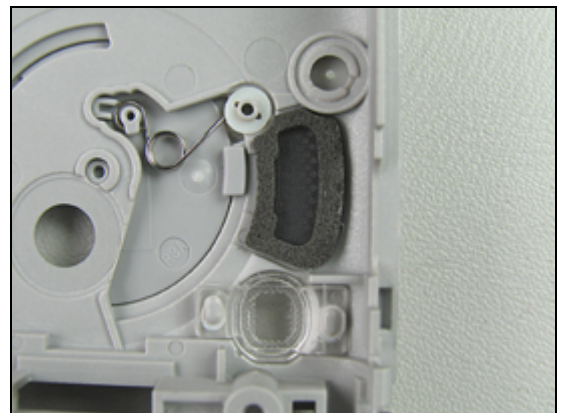
Remove the *dust cover* with the tweezers.



INSTALLATION

Attach a new *dust cover* with the tweezers

Follow the 4.1.2 - 4.1.5 Reassembly instructions!

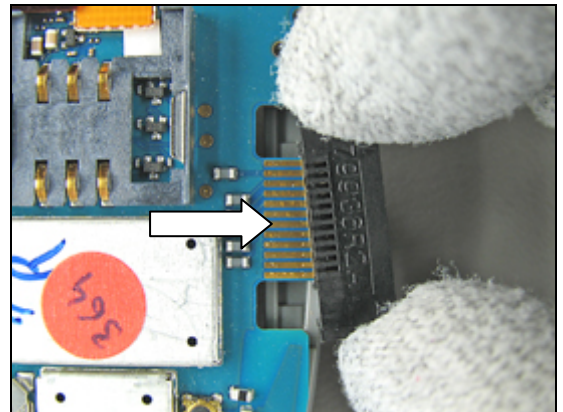


3.13 System Connector

REMOVAL

Follow the 2.1.1 – 2.1.4 Disassembly instructions!

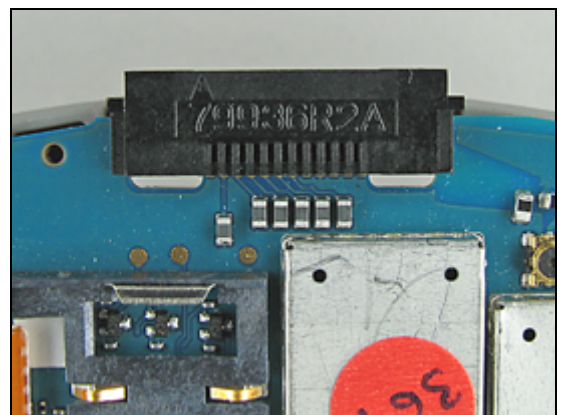
Remove the *system connector* by hand.



INSTALLATION

Mount a new *system connector* with your fingers.
Press the *system connector* firmly to the bottom of the PBA as shown in picture.

Follow the 4.1.2 - 4.1.5 Reassembly instructions!

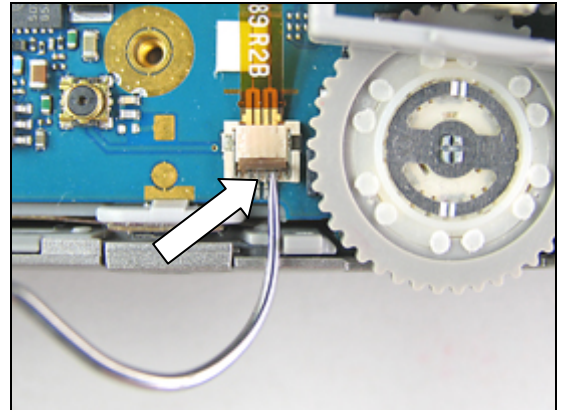


3.14 Flex Film, Camera Cover Switch

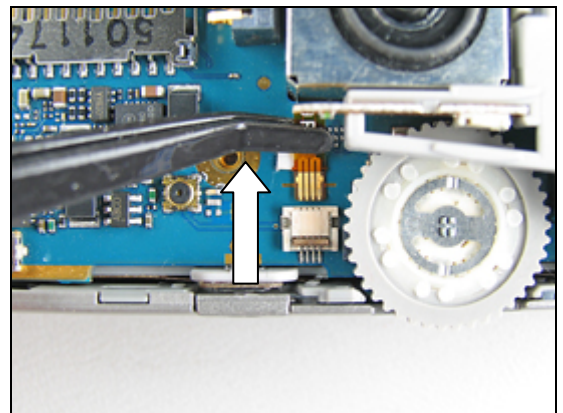
REMOVAL

Follow the 2.1.1 – 2.1.4 Disassembly instructions!

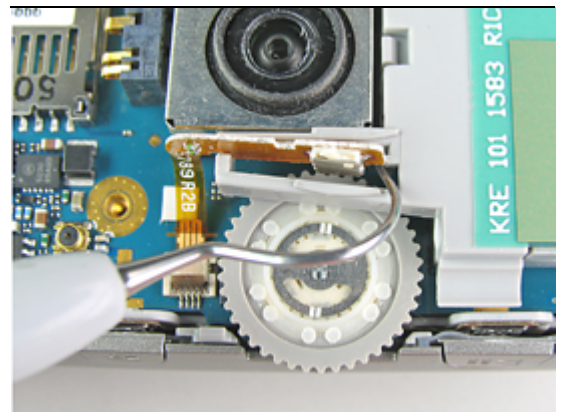
Gently open the FPC connector with the dentist hook.



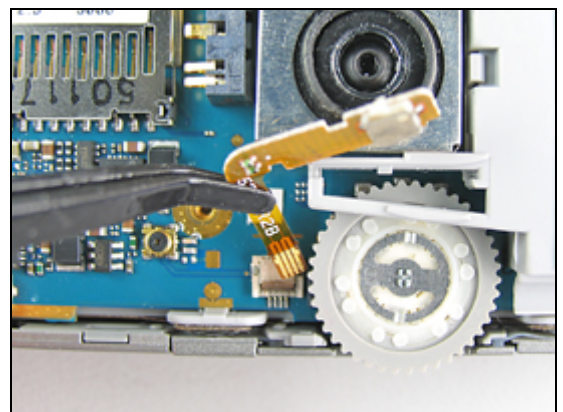
Pull the *flex film, camera cover switch* straight backwards out of the FPC connector with the flex film assembly tool.



Use the dentist hook to make the *flex film* become loose from the speaker box.



Remove the *flex film* with the flex film assembly tool.



Flex Film, Camera Cover Switch *continued*

INSTALLATION

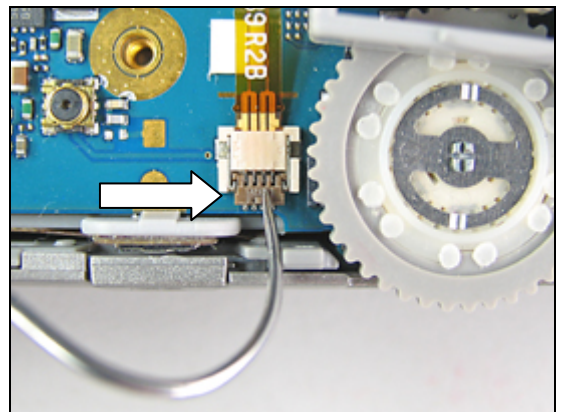
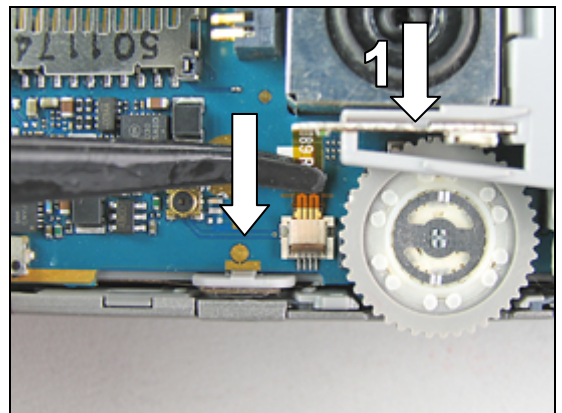
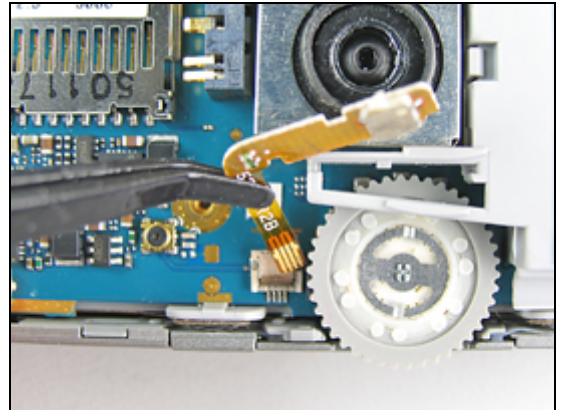
Start the installation of a new *flex film, camera cover switch* with the flex film assembly tool.

Insert the *flex film* into the FPC connector with the flex film assembly tool.

Make sure that the *flex film* is pushed all the way into the bottom of the connector.

Close the FPC connector with the dentist hook.

Follow the 4.1.2 - 4.1.5 Reassembly instructions!



3.15 Liquid Intrusion Indicator

REMOVAL

Follow the 2.1.1 – 2.1.4 Disassembly instructions!
Follow the 3.14 Removal instructions!

Remove the two board-to-board connectors with the front opening tool.

Remove the first *liquid intrusion indicator* with the dentist hook.

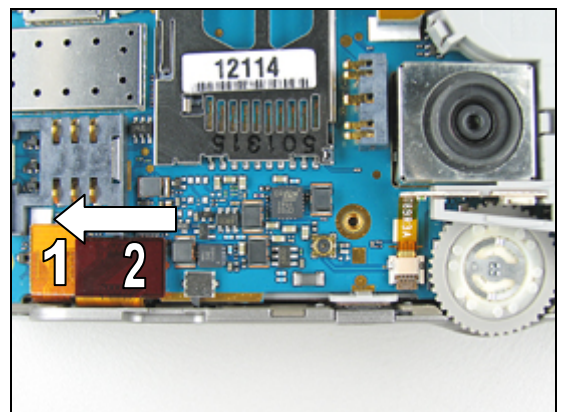
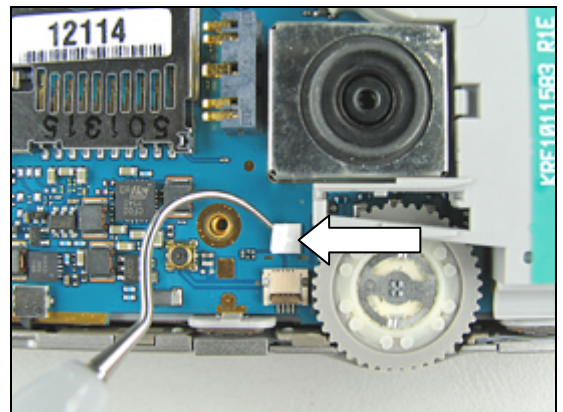
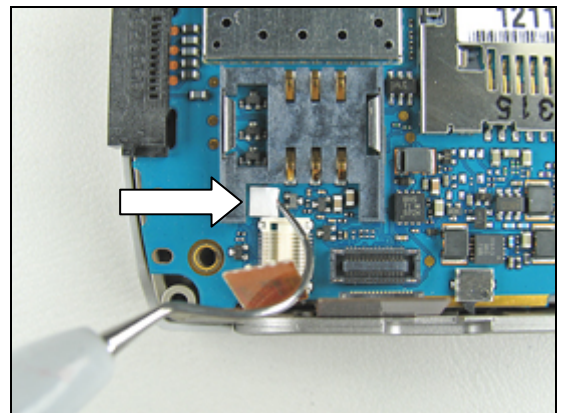
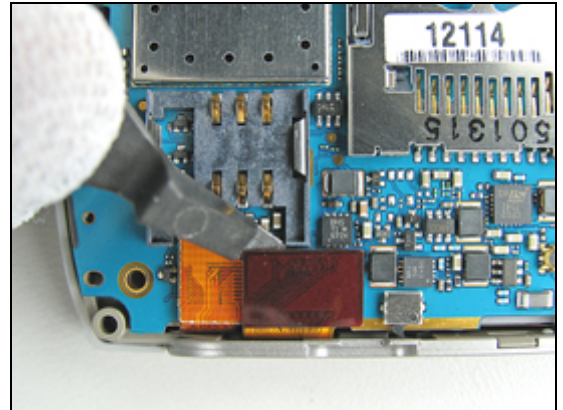
Remove the second *liquid intrusion indicator* with a dentist hook.

INSTALLATION

Attach two new *liquid intrusion indicators* with the dentist hook.

Then connect the two board-to-board connectors, starting with no. 1.

Follow the 3.14 Installation instructions!
Follow the 4.1.2 - 4.1.5 Reassembly instructions!

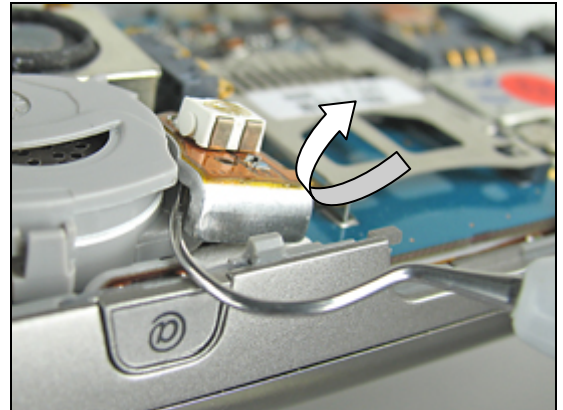


3.16 Antenna/Acoustic asm

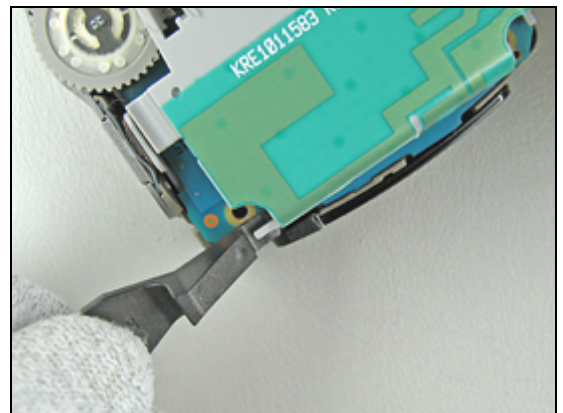
REMOVAL

Follow the 2.1.1 – 2.1.4 Disassembly instructions!
Follow the 3.14 Removal instructions!

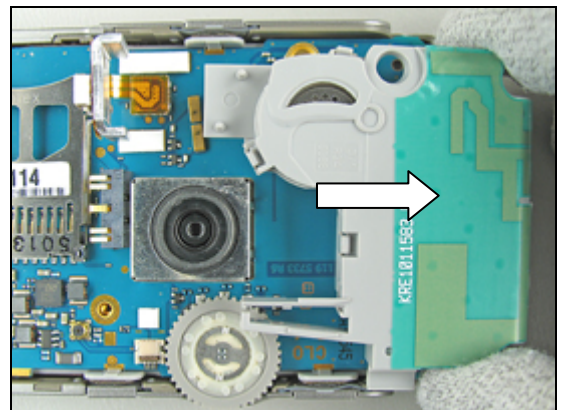
Gently bend under the *flash LED* with a dentist hook until it becomes loose.



Use the front opening tool to bend under the *antenna/acoustic* until it becomes loose.

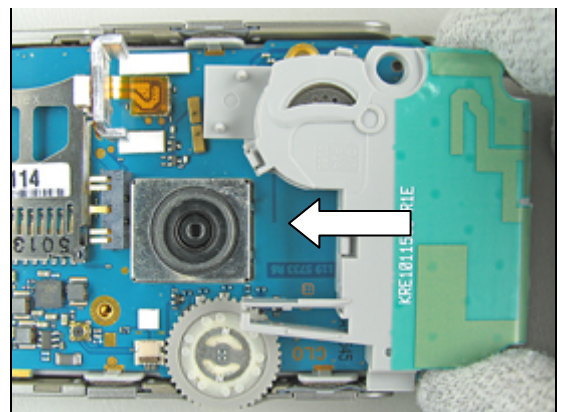


Lift and remove the *antenna/acoustic* from the *main PBA* by hand.



INSTALLATION

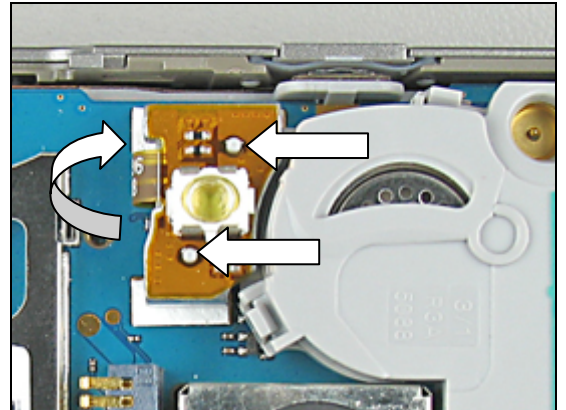
Install the *antenna/acoustic* onto the *main PBA*.



Antenna/Acoustic asm continued

Gently fold and attach the *flash LED* to the *antenna/acoustic*.
Make sure it is mounted correctly on the two guide pins.

Follow the 3.14 Installation instructions!
Follow the 4.1.2 - 4.1.5 Reassembly instructions!

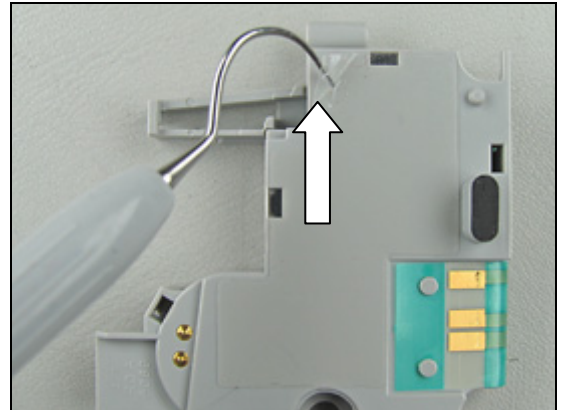


3.17 Box Tape

REMOVAL

Follow the 2.1.1 – 2.1.4 Disassembly instructions!
Follow the 3.14 & 3.16 Removal instructions!

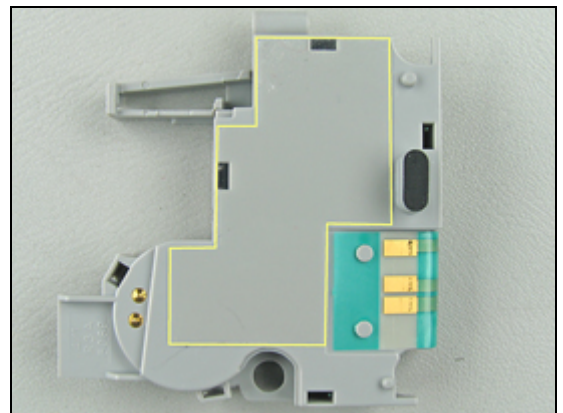
Remove the *box tape* with a dentist hook.



INSTALLATION

Attach a new *box tape* with the tweezers.

Follow the 3.16 & 3.14 Installation instructions!
Follow the 4.1.2 - 4.1.5 Reassembly instructions!

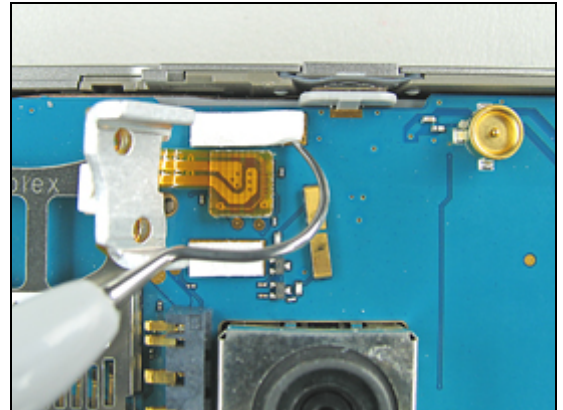


3.18 Heat, Conductive 9.4 x 1.5 mm

REMOVAL

Follow the 2.1.1 – 2.1.4 Disassembly instructions!
Follow the 3.14 & 3.16 Removal instructions!

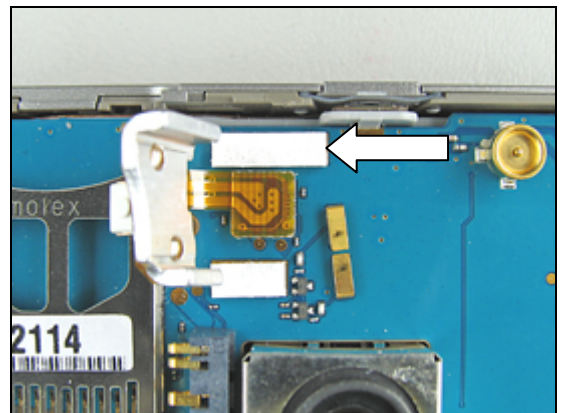
Remove the *heat conductive* with the dentist hook.



INSTALLATION

Attach a new *heat conductive* with the tweezers.

Follow the 3.16 & 3.14 Installation instructions!
Follow the 4.1.2 - 4.1.5 Reassembly instructions!



3.19 Heat, Conductive 5.7 x 1.5 mm

REMOVAL

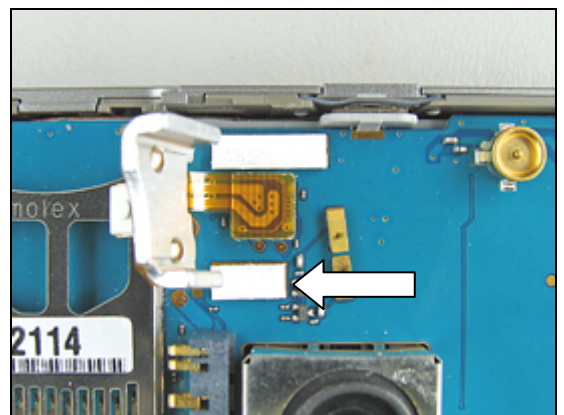
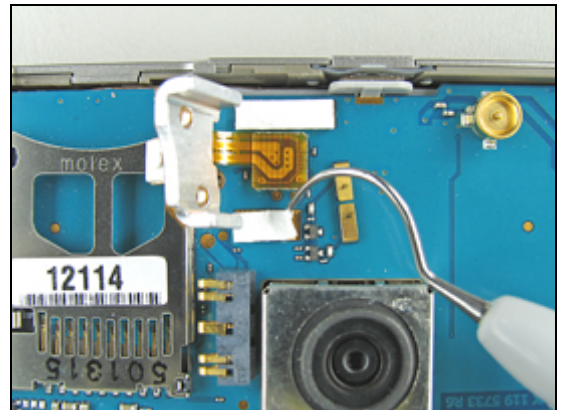
Follow the 2.1.1 – 2.1.4 Disassembly instructions!
Follow the 3.14 & 3.16 Removal instructions!

Remove the *heat conductive* with the dentist hook.

INSTALLATION

Attach a new *heat conductive* with the tweezers.

Follow the 3.16 & 3.14 Installation instructions!
Follow the 4.1.2 - 4.1.5 Reassembly instructions!



3.20 Flash Flex asm

REMOVAL

*Follow the 2.1.1 – 2.1.4 Disassembly instructions!
Follow the 3.14 & 3.16 Removal instructions!*

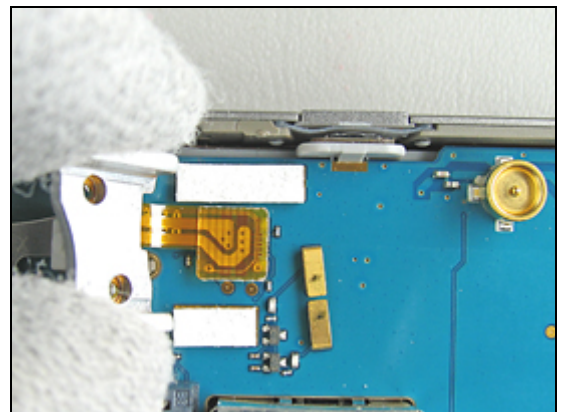
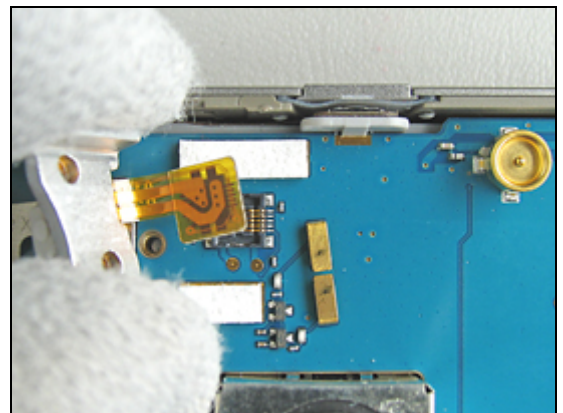
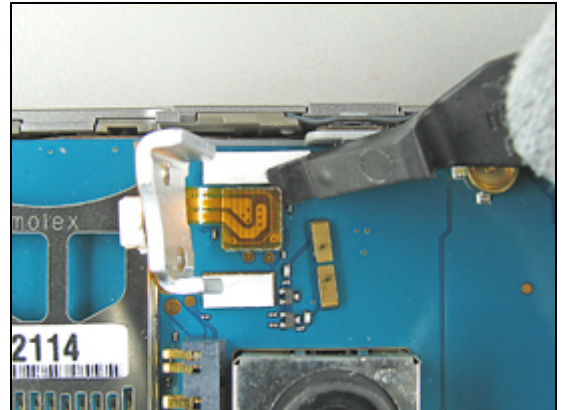
Use the front opening tool to disconnect the board-to-board connector from the *main PBA*.

Remove the *flash flex* by hand.

INSTALLATION

Connect the new *flash flex* to the board-to-board connector.
Use your finger to gently press on the board-to-board connector to make a secure connection.

*Follow the 3.16 & 3.14 Installation instructions!
Follow the 4.1.2 - 4.1.5 Reassembly instructions!*



3.21 Keyboard QWERTY

REMOVAL

Follow the 2.1.1 – 2.1.5 Disassembly instructions!

Remove the *keyboard QWERTY* with the tweezers or by hand.



INSTALLATION

Put a new *keyboard QWERTY* in its proper position by hand.

Follow the 4.1.1 - 4.1.5 Reassembly instructions!

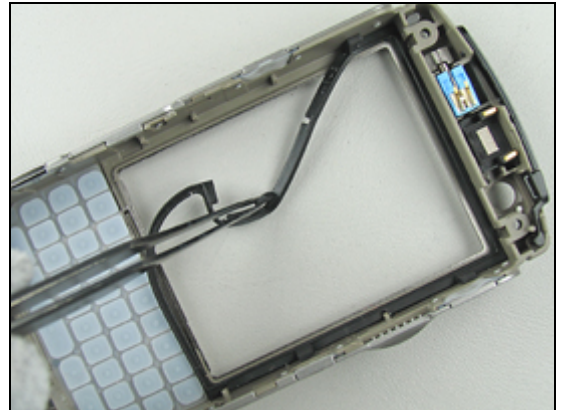


3.22 LCD Gasket

REMOVAL

Follow the 2.1.1 – 2.1.5 Disassembly instructions!

Remove the *LCD gasket* with the tweezers or by hand.



INSTALLATION

Attach a new *LCD gasket* by hand.

Follow the 4.1.1 - 4.1.5 Reassembly instructions!

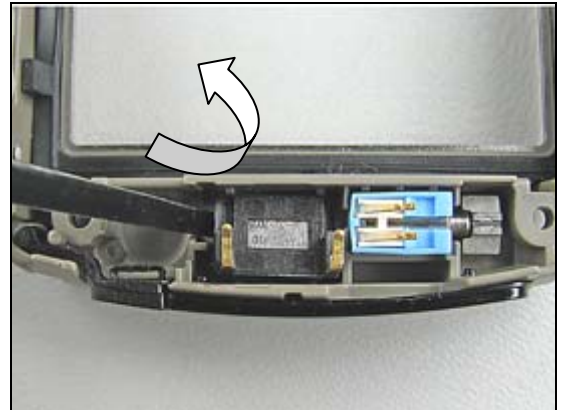


3.23 Ear Speaker

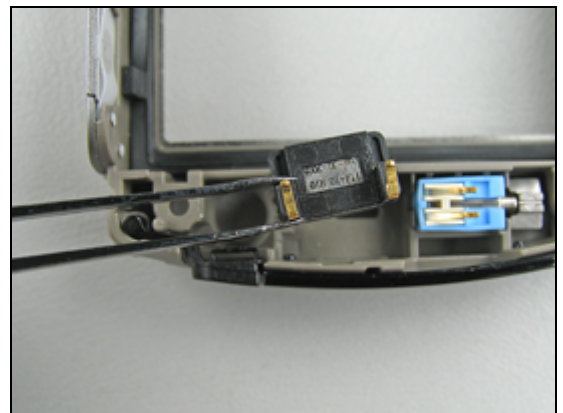
REMOVAL

Follow the 2.1.1 – 2.1.5 Disassembly instructions!

Start to bend up the *ear speaker* with the tweezers.



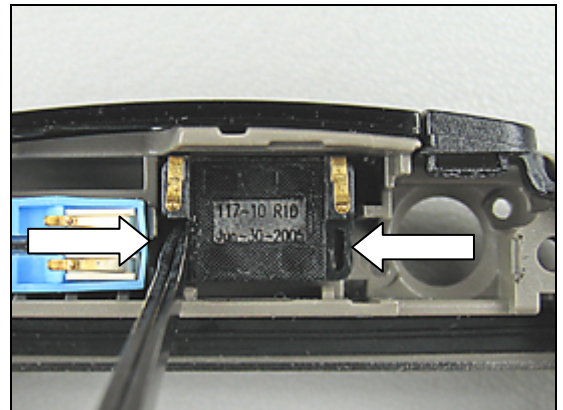
Continue to lift up the *ear speaker* and remove it with the tweezers.



INSTALLATION

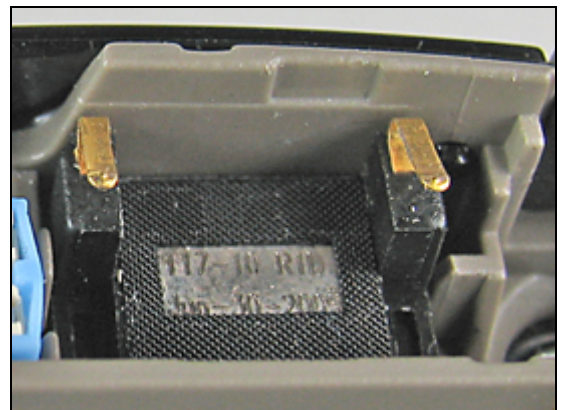
DO NOT TOUCH OR BEND THE CONTACT SPRINGS!

Press gently on each side of the new *ear speaker* to the bottom of the cavity with the tweezers.



Check that the contact springs are in good condition and that they are not deformed.

Follow the 4.1.1 - 4.1.5 Reassembly instructions!



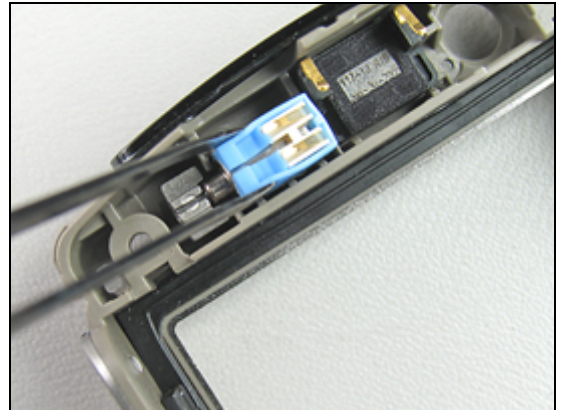
3.24 Vibrator

REMOVAL

Follow the 2.1.1 – 2.1.5 Disassembly instructions!

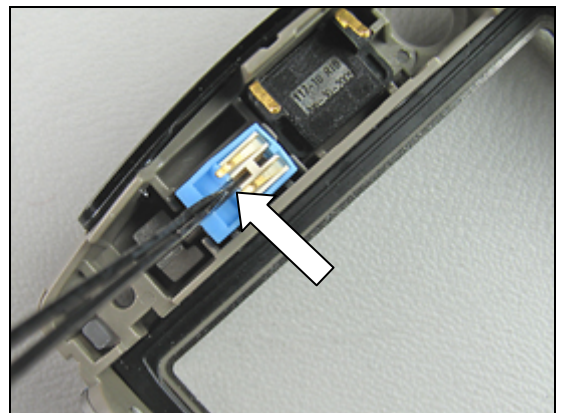
DO NOT TOUCH THE VIBRATOR CONTACT SPRINGS OR DAMAGE THE FLYWHEEL!

Lift the *vibrator* straight up with the tweezers to remove it.



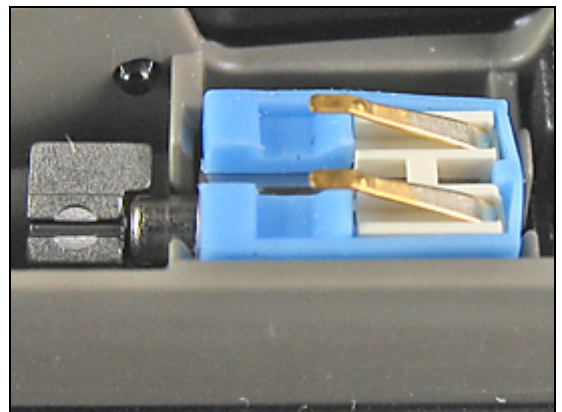
INSTALLATION

Press the new *vibrator* gently to the bottom of the cavity with the tweezers.



Check that the contact springs are in good condition and that they are not deformed.

Follow the 4.1.1 - 4.1.5 Reassembly instructions!

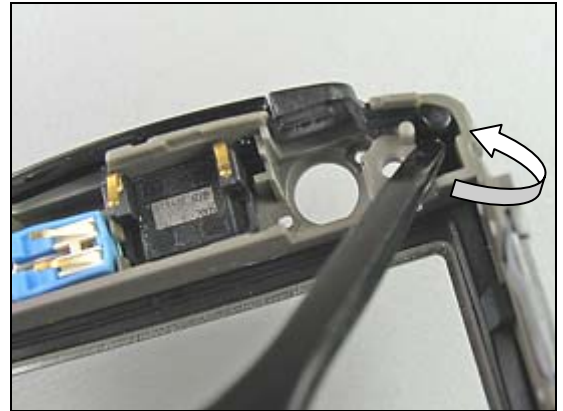


3.25 Power Key

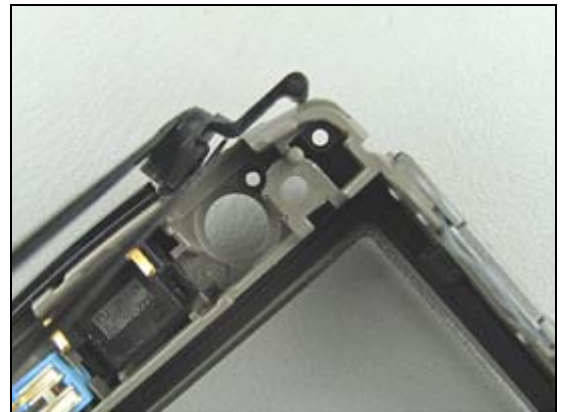
REMOVAL

Follow the 2.1.1 – 2.1.5 Disassembly instructions!

Bend gently under the *power key* with the tweezers until it becomes loose.



Remove the *power key* with the tweezers or your fingers.



INSTALLATION

Insert a new *power key* into its proper position with the tweezers.

Follow the 4.1.1 - 4.1.5 Reassembly instructions!

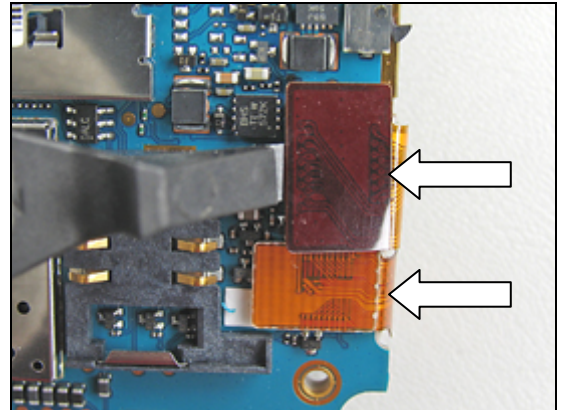


3.26 LCD Frame asm

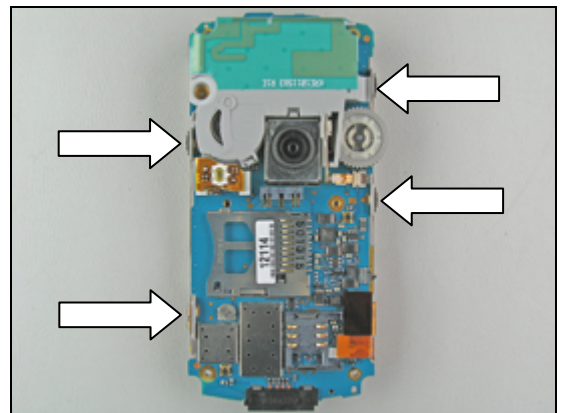
REMOVAL

Follow the 2.1.1 – 2.1.5 Disassembly instructions!

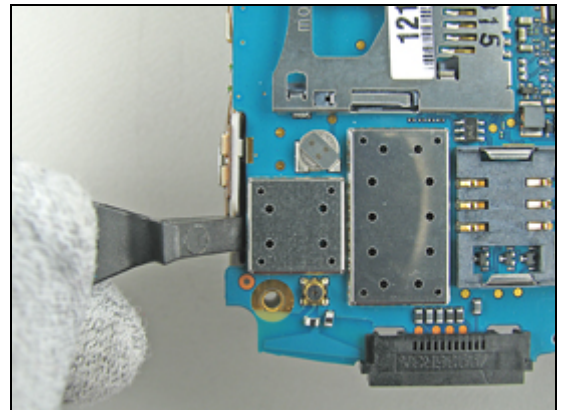
Use the front opening tool to disconnect the two board-to-board connectors from the *main PBA* (starting like the picture shows).



These four hooks must be released before you can remove the *LCD frame*.

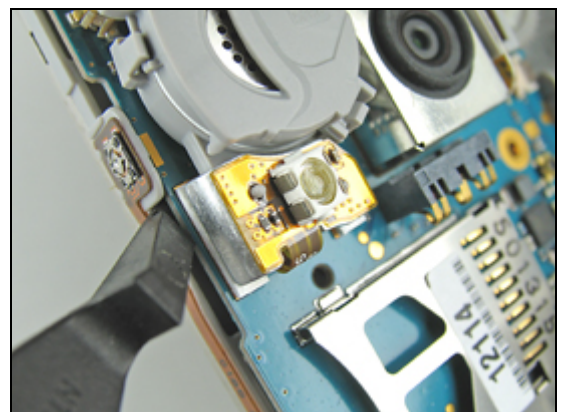


Insert the front opening tool under the *main PBA* and gently bend until you get a gap.



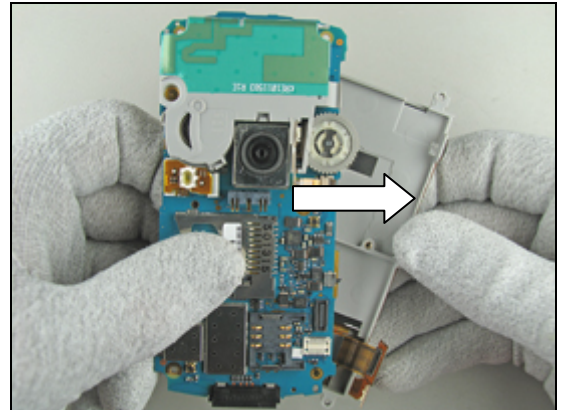
Continue until the *main PBA* is completely free from the *LCD frame*.

Continue to do the same on the opposite side, if necessary.

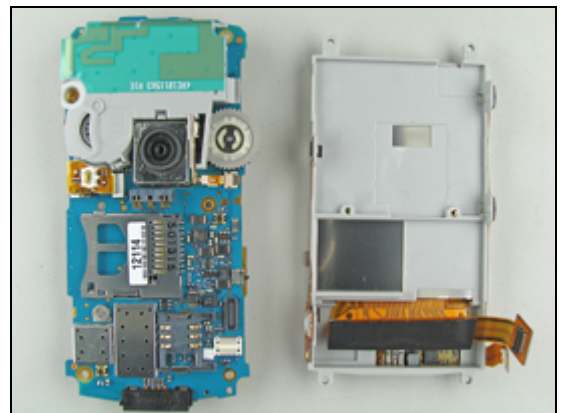


LCD Frame asm *continued*

Remove the *main PBA* from the *LCD frame*.

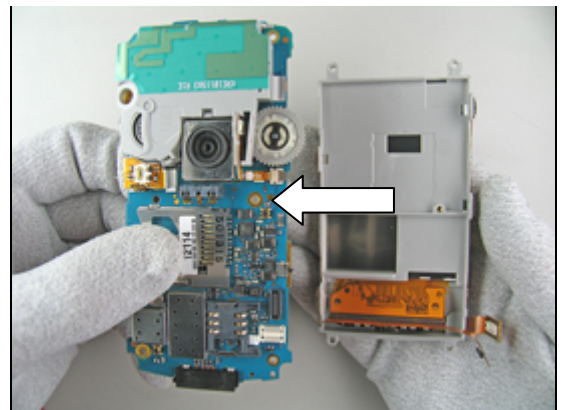


LCD frame removed from *main PBA*.

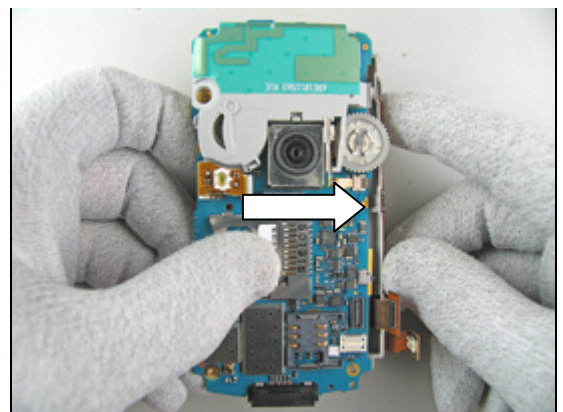


INSTALLATION

Place the *main PBA* and the *LCD frame* in your hands like this.

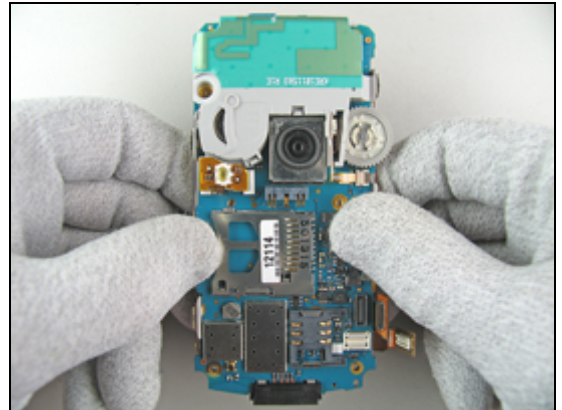


Gently start to mate the *LCD frame* over the *main PBA*.
Turn the *main PBA* to the left into the *LCD frame*.



LCD Frame asm *continued*

Place the *LCD frame* over the *main PBA* and snap them together.

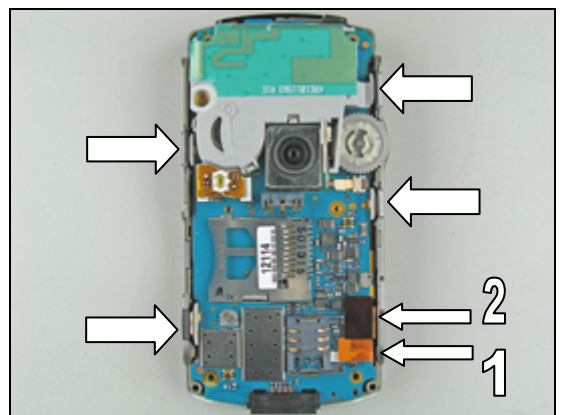


Make sure that the *main PBA* is in the right position, and properly latched by the four hooks (two on each side of the frame).

Gently fold the two flex films to the left (1 and 2).

Connect the two flex film board to board connectors with your fingers starting with no. 1.

Follow the 4.1.1 - 4.1.5 Reassembly instructions!

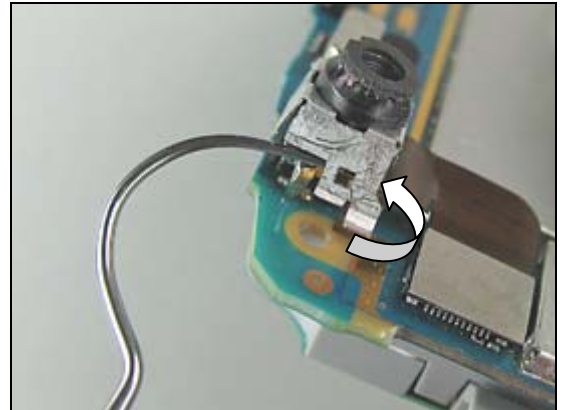


3.27 Shield Box VGA Camera

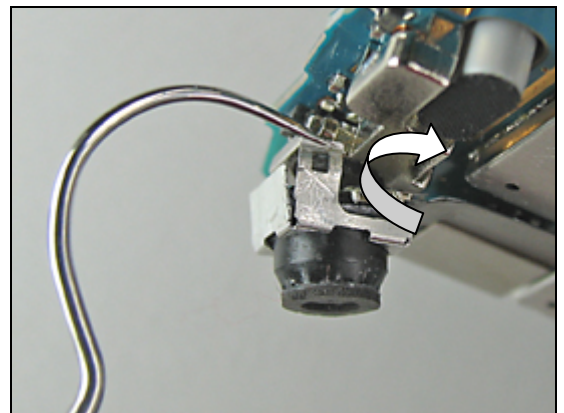
REMOVAL

Follow the 2.1.1 – 2.1.5 Disassembly instructions!
Follow the 3.26 Removal instructions!

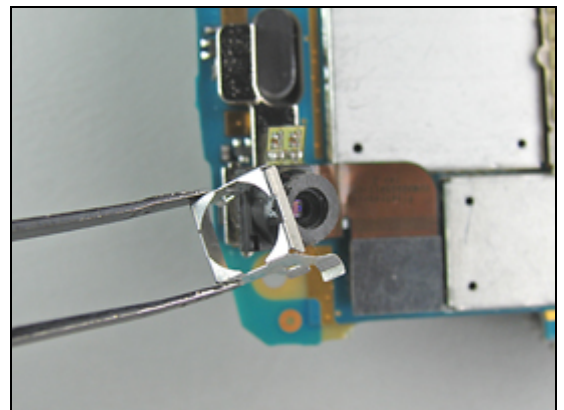
Gently release the first hook with a dentist hook.



Release the second one on the opposite side.

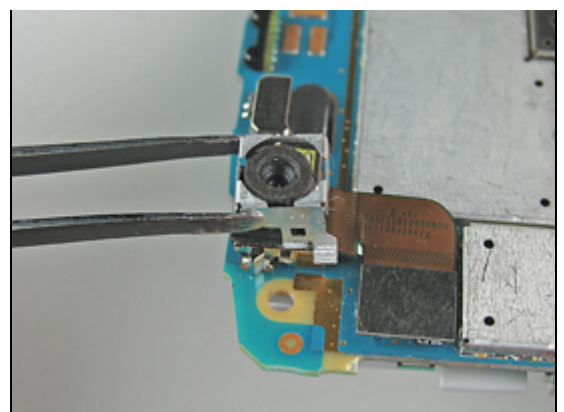


Remove the *shield box VGA camera* with the tweezers.



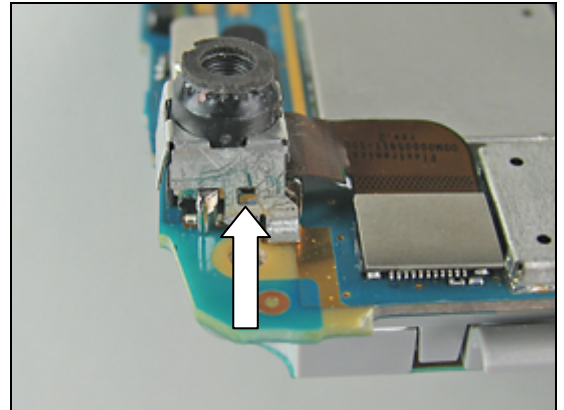
INSTALLATION

Place the new *shield box VGA camera* over the camera with the tweezers.



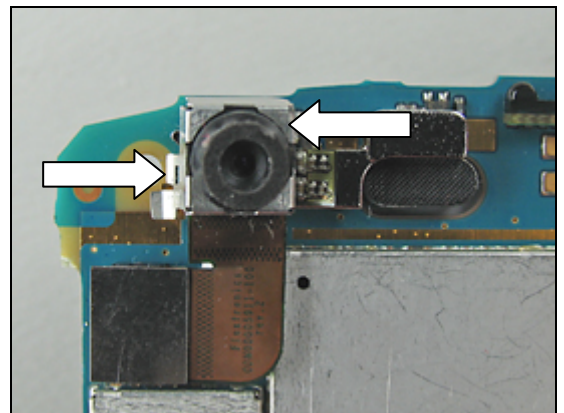
Shield Box VGA Camera *continued*

Continue to snap the hooks onto each side of the shield box.



Make sure that the *shield box VGA camera* is in the right position and properly latched by the two hooks (one on each side of the shield box).

Follow the 3.26 Installation instructions!
Follow the 4.1.1 - 4.1.5 Reassembly instructions!



3.28 Camera Module, VGA

REMOVAL

Follow the 2.1.1 – 2.1.5 Disassembly instructions!
Follow the 3.26 & 3.27 Removal instructions!

Use the front opening tool to disconnect the *camera module, VGA's* board-to-board connector from the *main PBA*.

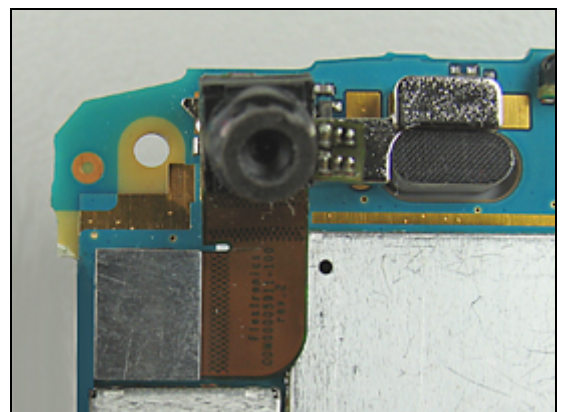
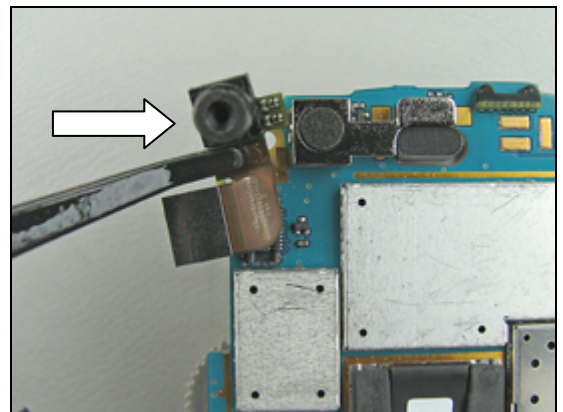
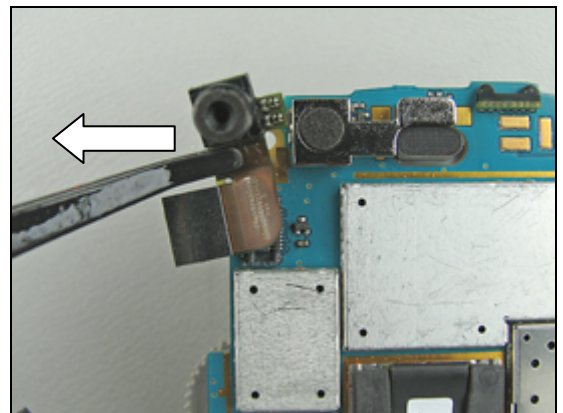
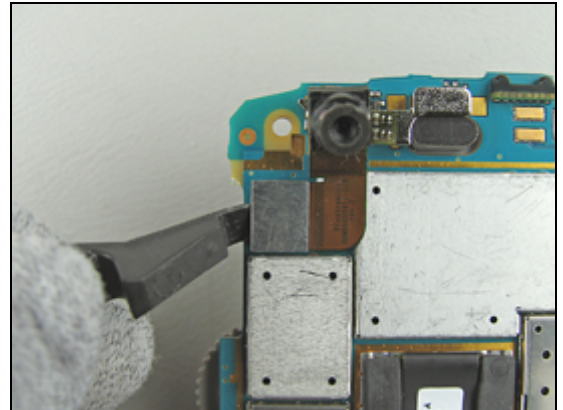
Remove the *camera module, VGA* with the tweezers.

INSTALLATION

Install a new *camera module, VGA*.
Use your finger when connecting the board-to-board connector to the *main PBA*.

Correctly installed *camera module, VGA*.

Follow the 3.27 & 3.26 Installation instructions!
Follow the 4.1.1 - 4.1.5 Reassembly instructions!

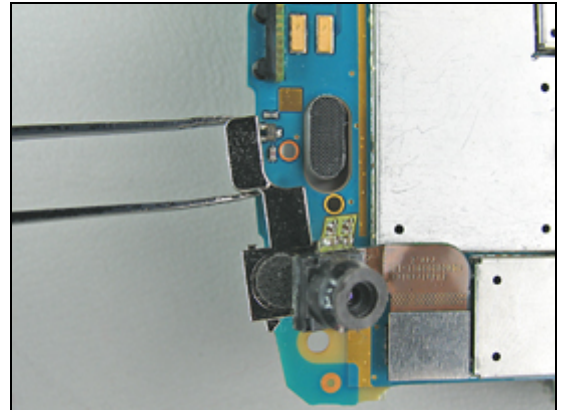


3.29 VGA Support asm

REMOVAL

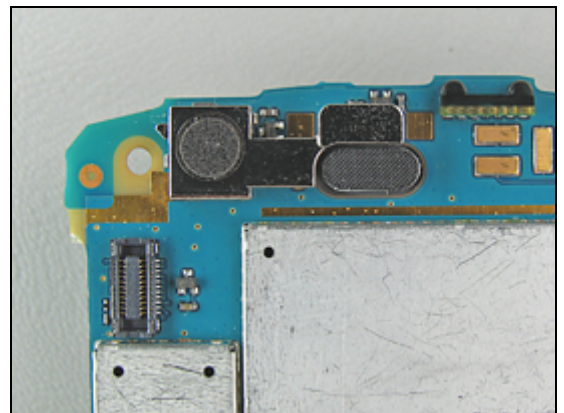
*Follow the 2.1.1 – 2.1.5 Disassembly instructions!
Follow the 3.26 & 3.27 Removal instructions!*

Remove the *VGA support* with the tweezers.



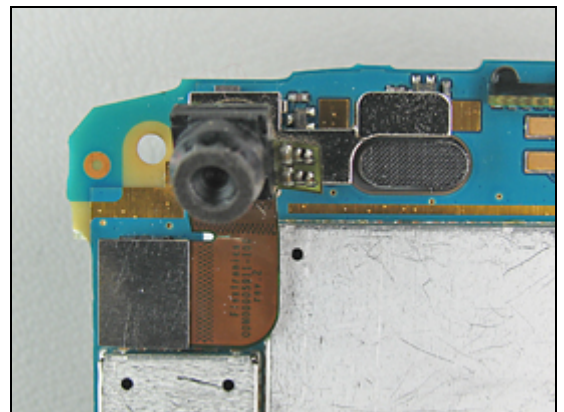
INSTALLATION

Install a new *VGA support* by hand.



VGA support together with *camera module*, VGA.

*Follow the 3.27 & 3.26 Installation instructions!
Follow the 4.1.1 - 4.1.5 Reassembly instructions!*

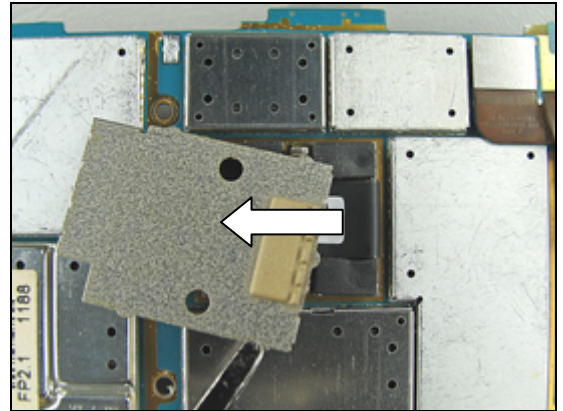


3.30 Camera, 2M Pixel, Shielding Box Mpixel Camera

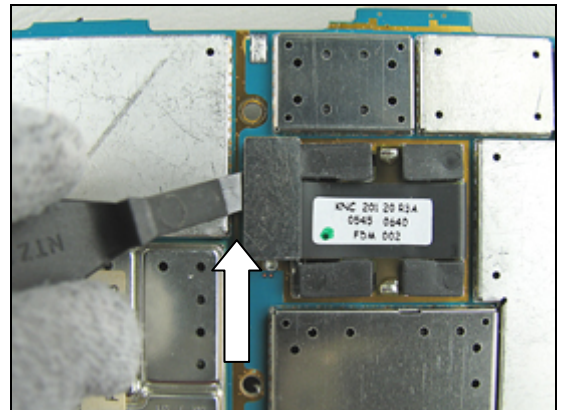
REMOVAL

Follow the 2.1.1 – 2.1.5 Disassembly instructions!
Follow the 3.26 Removal instructions!

Start by removing the *shielding box* with your fingers.

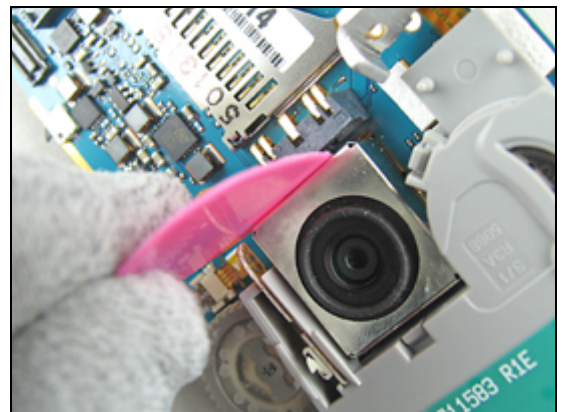


Use the front opening tool to disconnect the *camera, 2M pixel's* board-to-board connector from the *main PBA*.

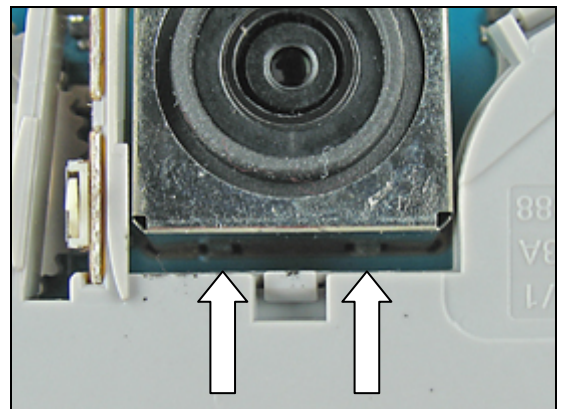


Gently put a guitar pick between the *camera, 2M pixel* and the battery connector just enough to unsnap the two hooks that holds the camera box in place on this side.

NEVER TOUCH THE CAMERA LENS!

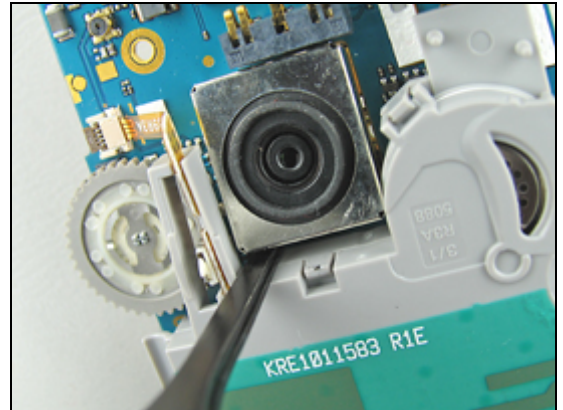


Close up picture on the two hooks which secure the camera box against the antenna/acoustic box.

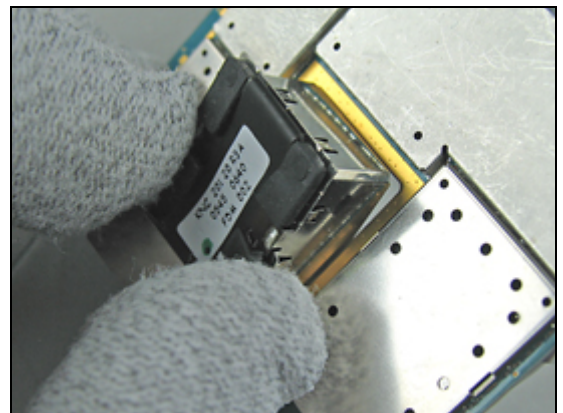


Camera, 2M Pixel, Shielding Box Mpixel Camera *continued*

Continue on the opposite side, but this time by using the tweezers to press the two hooks inwards on the camera box.

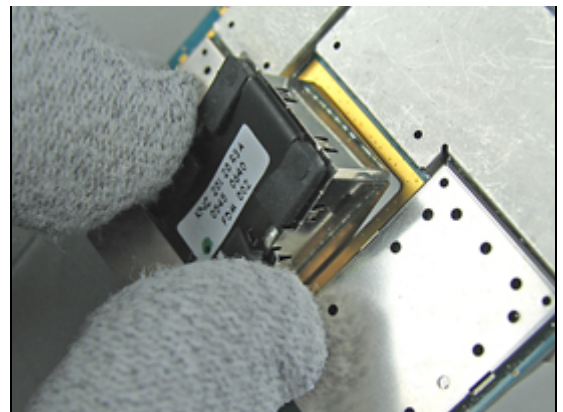


Use your fingers to remove the camera.



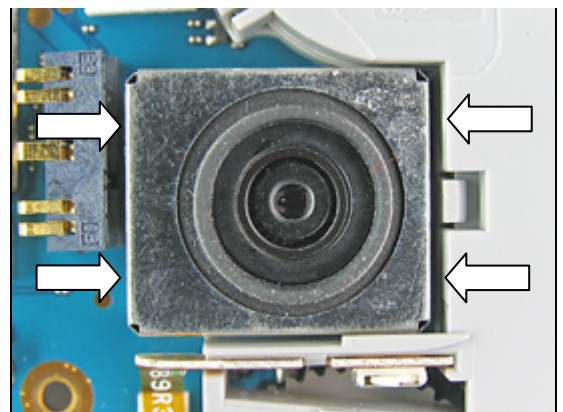
INSTALLATION

Insert the new *camera, 2M pixel*.



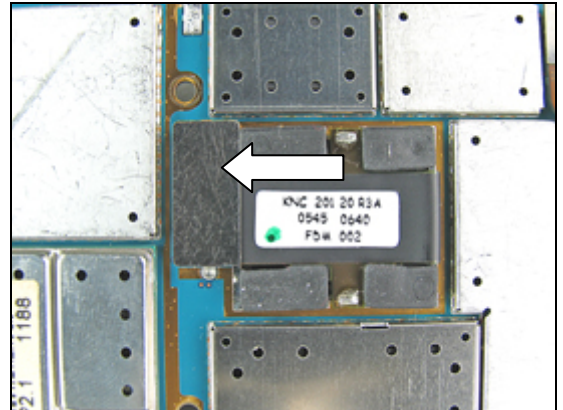
Press gently from the back of the camera until it snaps into place.

Make sure that the camera is in the right position and properly latched by the four hooks (two on each side of the camera box).



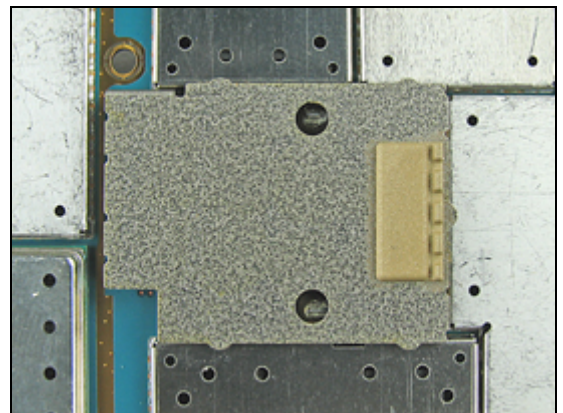
Camera, 2M Pixel, Shielding Box Mpixel Camera *continued*

Use your finger when connecting the camera's board-to-board connector to the *main PBA*.



Reinstall the *shielding box* with your fingers.

Follow the 3.26 Installation instructions!
Follow the 4.1.1 - 4.1.5 Reassembly instructions!



3.31 LCD

REMOVAL

Follow the 2.1.1 – 2.1.5 Disassembly instructions!
Follow the 3.26 Removal instructions!

Start by sliding the *LCD* out of the *LCD frame* by hand.

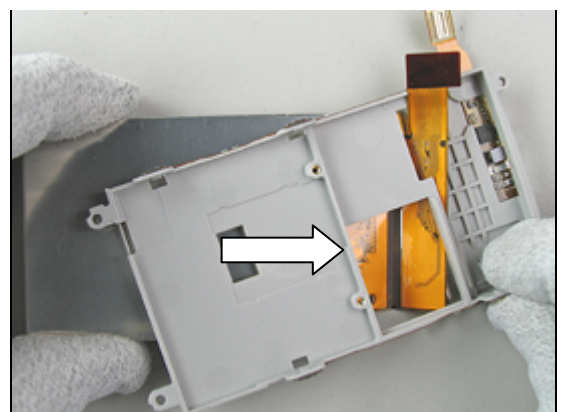
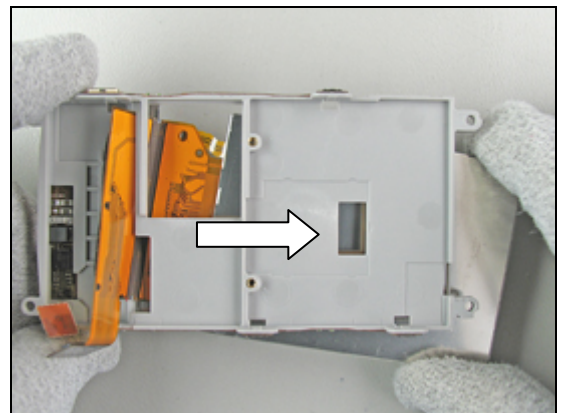
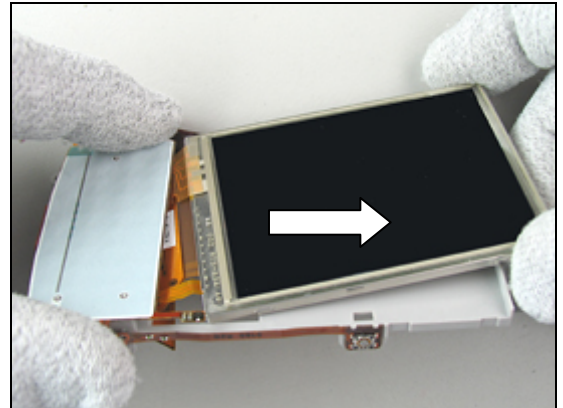
BE CAREFUL WITH THE LCD FLEX FILM!

Turn the *LCD frame* around and continue to slide the flex film out of the frame until it gets free.

LCD removed.

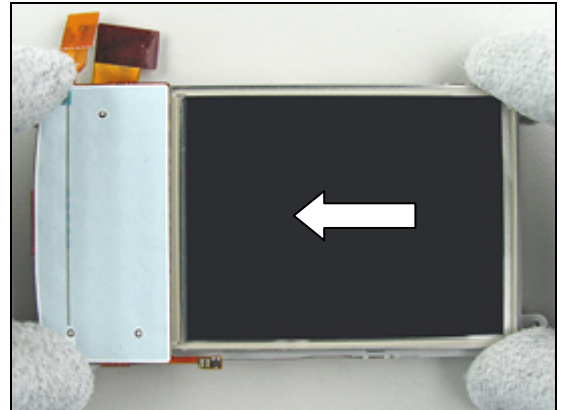
INSTALLATION

Start by sliding the *LCD* into the *LCD frame* by hand as shown in the picture.



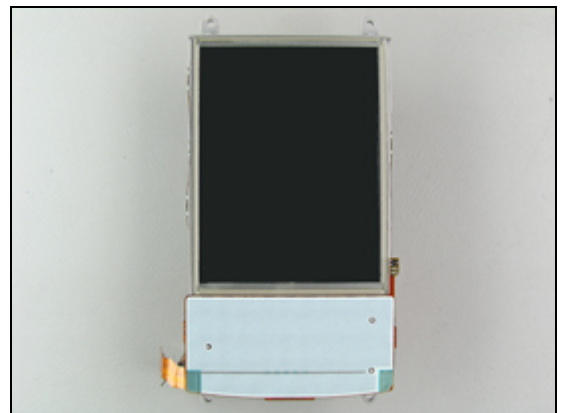
LCD continued

Turn the *LCD frame* around and continue to slide until the *LCD* is in the correct position.



LCD properly mounted in the *LCD frame*.

Follow the 3.26 Installation instructions!
Follow the 4.1.1 - 4.1.5 Reassembly instructions!



3.32 Isolation Tape

REMOVAL

Follow the 2.1.1 – 2.1.5 Disassembly instructions!
Follow the 3.26 & 3.31 Removal instructions!

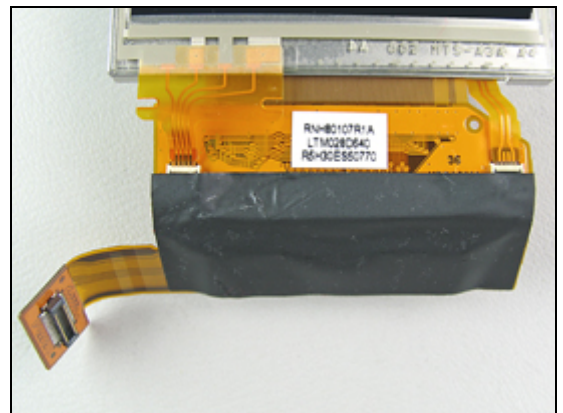
Remove the *isolation tape* with the tweezers.



INSTALLATION

Attach a new *isolation tape*.

Follow the 3.31 & 3.26 Installation instructions!
Follow the 4.1.1 - 4.1.5 Reassembly instructions!

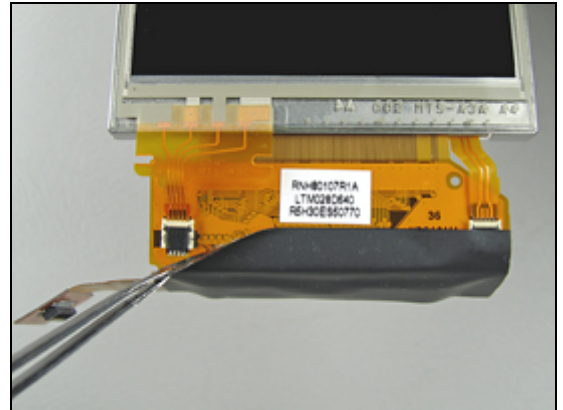


3.33 Touch Panel asm + Frame

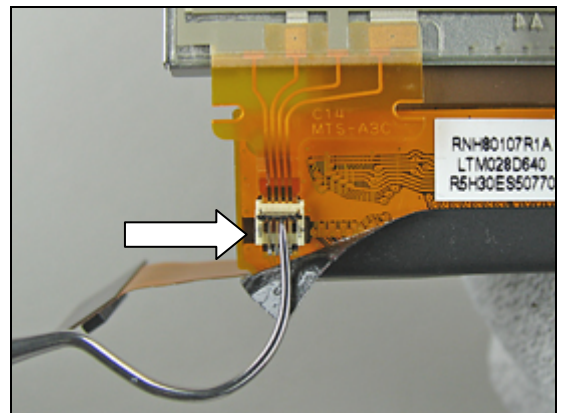
REMOVAL

Follow the 2.1.1 – 2.1.5 Disassembly instructions!
Follow the 3.26 & 3.31 Removal instructions!

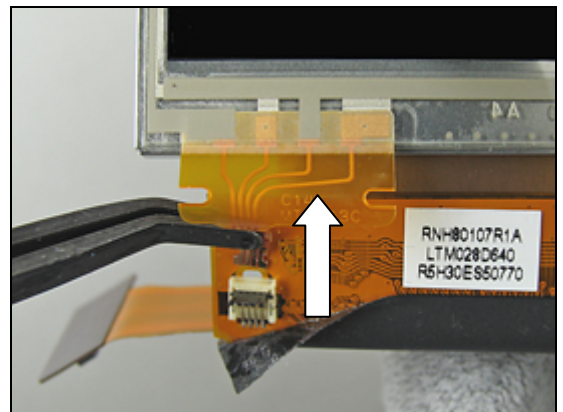
Partly fold the *isolation tape* to get access to the FPC connector with the tweezers.



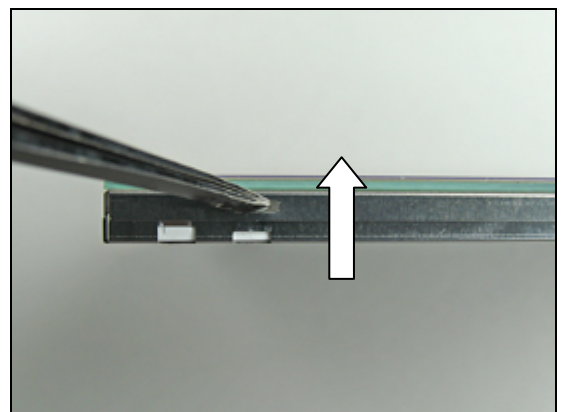
Open up the FPC connector with a dentist hook.



Remove the touch panel flex film with the flex film assembly tool.

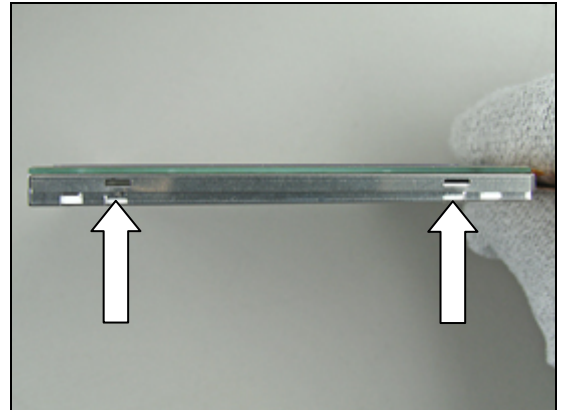


Use the tweezers (or a small screwdriver) to start detaching the *touch screen* from the *LCD*.

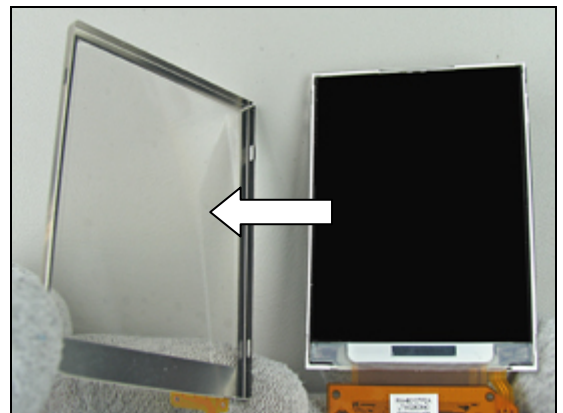


Touch Panel asm + Frame *continued*

Detach all four (two on each side of the *LCD*) hooks until the *touch screen* is loose on all sides.

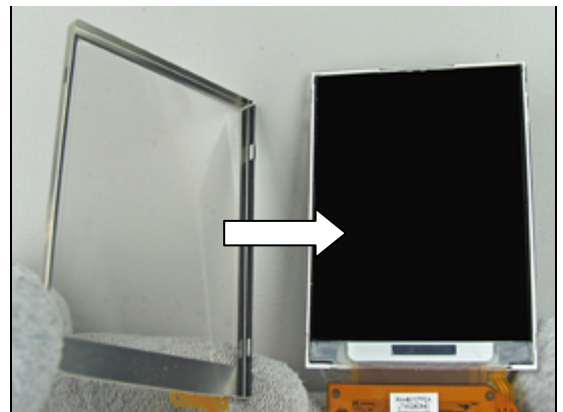


Remove the *touch screen* by hand.



INSTALLATION

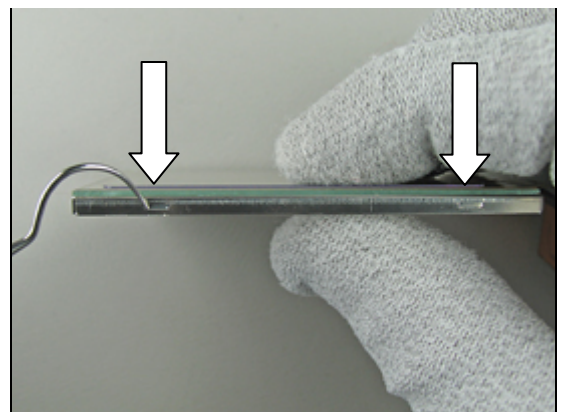
When installing the new *touch screen*, do not touch the inside of the *touch screen* or the *LCD* surface.
Use an ionized air gun or blower to remove any dust.



Mount the new *touch screen* on the *LCD*.
If it doesn't fit right on it might help to press on one of the hooks with the dentist hook.

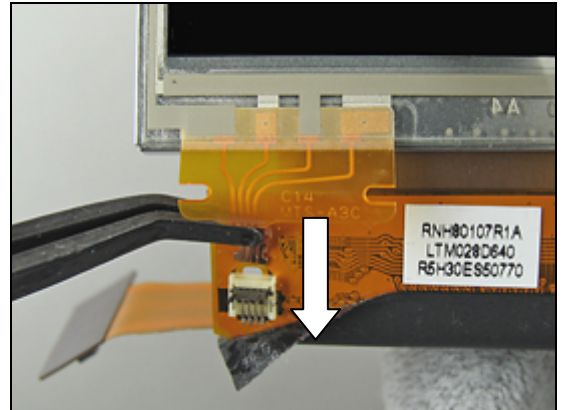
DO NOT USE FORCE!

Make sure the *touch panel* is correctly mounted over the *LCD*.

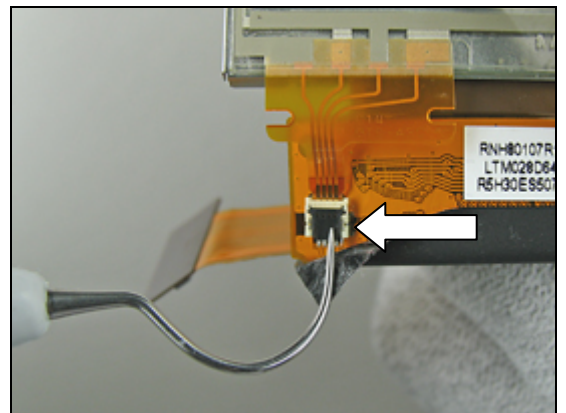


Touch Panel asm + Frame *continued*

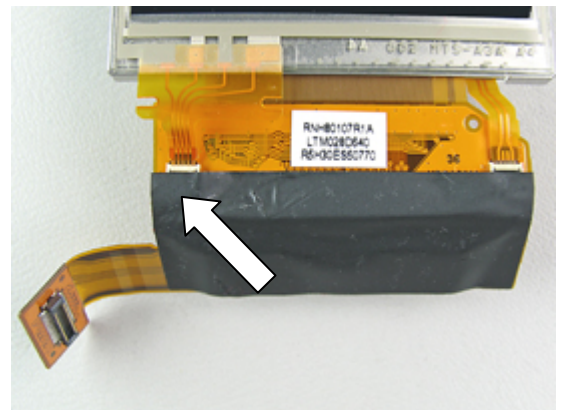
Connect the *touch panel* flex film with the flex film assembly tool.



Close the FPC connector with the dentist hook.



Fold the *isolation tape* over the FPC connector.



Properly assembled *touch panel* and LCD.

Follow the 3.31 & 3.26 Installation instructions!
Follow the 4.1.1 - 4.1.5 Reassembly instructions!



Touch Panel asm + Frame *continued*

Do these seven tests when the phone is reassembled to check that the LCD unit works properly.

(2_00021-1_FEA209544_97 Test instruction mechanical):

- Touch screen test
- Backlight brightness uniformity
- Contrast
- Display position to check correctly aligned
- Dust inspection
- Dot inspection
- Color check

3.34 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.

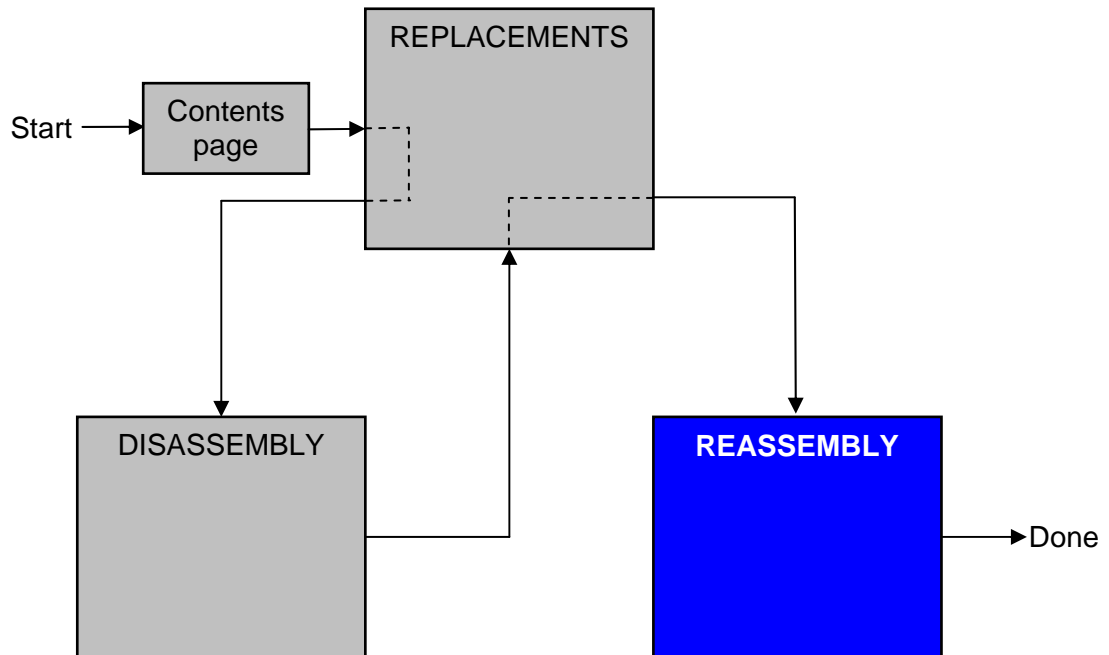
ONE LABEL ONLY IS ALLOWED!

Follow the 4.1.5 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. Cabinet Upper Sub
2. Cabinet Lower Sub
3. Bezel Top
4. Flip
5. Battery (a) & Battery Lid (b)

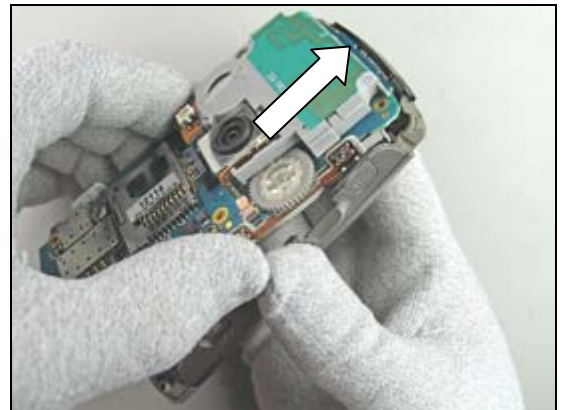


4.1.1 Cabinet Upper Sub asm

Place the PBA/LCD towards the *cabinet upper sub*.

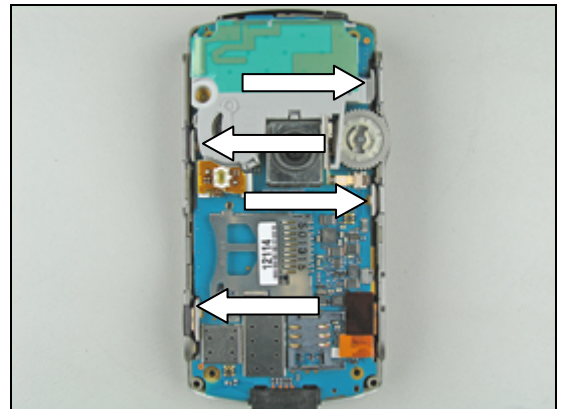


Place the top of the PBA/LCD into the top of the *cabinet upper sub*.



Gently lower the PBA/LCD completely into the *cabinet upper sub*.

Make sure that the PBA/LCD is properly mounted in the *cabinet upper sub* and that all four "frame" snap fit hooks (located by the arrows) are latched.



4.1.2 Cabinet Lower Sub asm

Place the *cabinet lower sub* over the phone and snap them together.



Check that there are no gaps along the sides.
If there still is a gap somewhere, gently press the two halves together with your fingers.



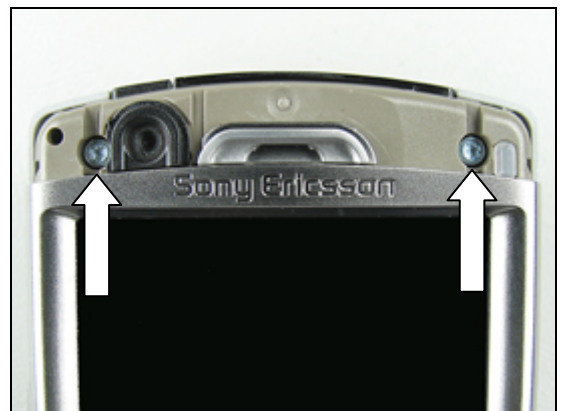
DON'T FORGET TO CLOSE THE CAMERA LID.

Apply **15 Ncm** \pm 2 Ncm torque when tightening two new screws (1 and 2) using torx bit no. 6!

Apply **24 Ncm** \pm 2 Ncm torque when tightening screws 3 and 4 using torx bit no. 6! (can be reused if not damaged)



Apply **24 Ncm** \pm 2 Ncm torque when tightening the two screws using torx bit no. 6! (can be reused if not damaged)

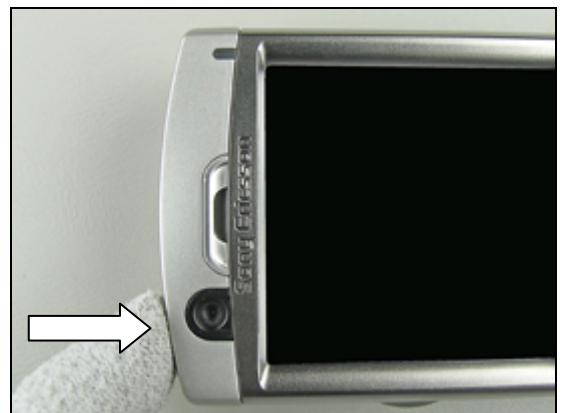
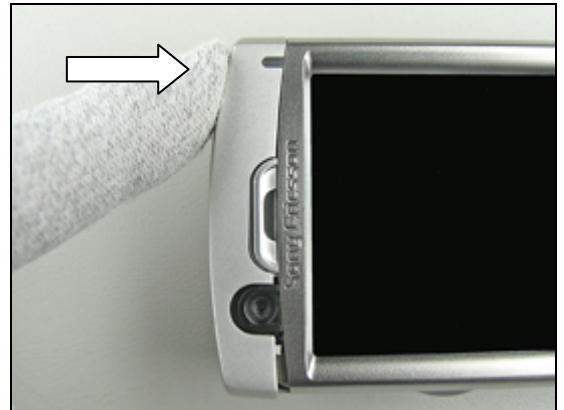


4.1.3 Bezel Top

MAKE SURE THAT THE CAMERA BEZEL IS IN ITS PROPER POSITION!

Slide the *bezel top* onto the phone and press until it is securely latched on one side.

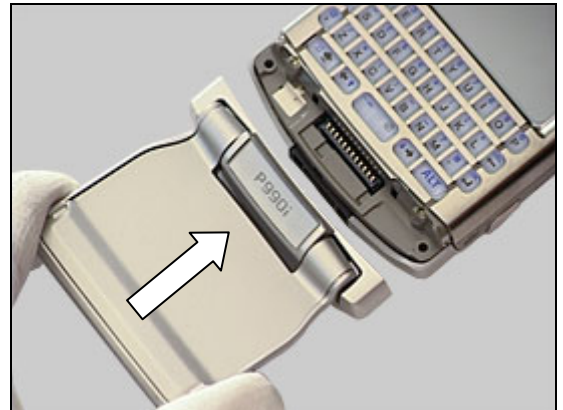
Continue to press on the other side until the *bezel top* is latched on this side as well.



4.1.4 Flip asm

THE FLIP MUST BE OPEN WHEN BEING MOUNTED ON THE PHONE!

Gently snap the *flip* onto the *upper cabinet sub.*



Apply **15 Ncm** \pm 2 Ncm torque when tightening two new screws using the JCIS bit!



4.1.5 Battery & Battery Lid asm

Put the top of the *battery* into the battery compartment.



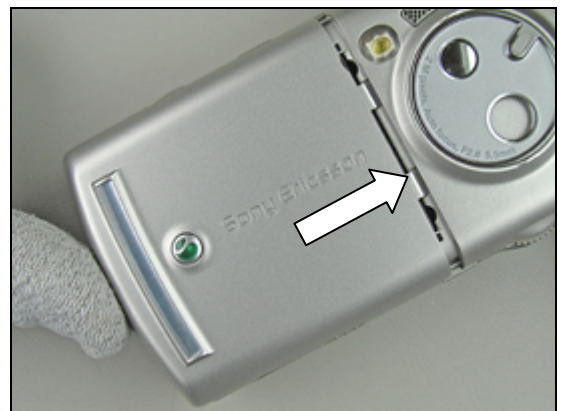
Slide the *battery* all the way inside the battery compartment and press it down at the bottom.



Place the *battery lid* like this and slide it towards the top.



Push on the *battery lid* until it becomes completely closed.



5 Revision history

Rev.	Date	Changes / Comments
A	2006-06-28	Initial release