Installation Instruction, Mechanical

Applicable for V800/V802se, Z800i

Contents

Test Instruction, SP/Mechanical

Applicable for V800/V802 se, Z800i

Contents

1 Abstract

This document describes the test procedure for the SP/Mechanical repair package.

2 Test Procedure

To verify all components within the SP/Mechanical repair package, all tests must be performed.

3 Test flow

If the phone is passing these steps of testing without any failures,
it is OK to return the phone to the customer.

If there are any failures, the phone must be repaired according to the troubleshooting guide or sent to a higher repair level.

3.1 Software Update

Update to latest signalling software and run the service activities software from EMMA II.

3.1.1 Verify Software Version

To verify if the phone needs new software, you have to check the Software Version in the phone. Current Software Versions are checked through the following steps:

1. Start the phone.
2. Press the following navigate-button and keyboard sequence: ⇨ ✷ ⇦ ⇦ ✷ ⇦ ✷
3. Select Service info.
4. Select SW Information.
5. Check the software file revisions on the display.
6. Press OK to return to the Service info menu.

3.1.2 Update Software Version

Update the software in the phone by doing the following steps:

1. Make sure that the phone’s battery is fully charged or use a Dummy battery. Connect correct flash cable and interface according to the Installation instruction.
2. Connect to the EMMA II server, choose application “GSM” and follow the instructions.

3.2 Service Tests

NOTE! It is not necessary to have a SIM card inserted.

Start the phone.

The Service Tests menu is entered using the following navigate-button and key sequence: ⇨✶⇦⇦✶⇦✶ and select “Service Tests”.

3.2.1 Main display

To verify the display:

1. Select “Main display” from the “Service Tests” menu.
2. The display toggles between four different test patterns.
   Make sure that there are no dots missing and that the colours and contrast is OK.
3. Press the “⮌” key to return to the service tests menu.

3.2.2 External display

To verify the external display:

1. Select “External display” from the “Service Tests” menu.
2. Close the flip
3. The display toggles between four different test patterns.
   Make sure that there are no dots missing and that the contrast is OK.
4. Open the flip and you will return to the service tests menu.

3.2.3 Camera Test

To verify the camera functionality:

1. Select Camera from the “Service Tests” menu.
2. The camera function will now starts and are visible in the display. Make sure that the contrast and light is OK.
3. Press the “⮌” key to return to the service tests menu.

3.2.4 LED/Illumination Test

To verify that the backlight and the status led are OK:

1. Select “LED/illumination” from the “Service Tests” menu.
2. Check that the backlight in the display and the keyboard is toggle between on and off.
3. Also check that the status led on the front (located below the Sub-display) is toggle between red and green.
4. Press the “Ok” key to return to the service tests menu.

3.2.5 Flash Led test

To verify that the Flash Led is working:

1. Select “Flash LED” from the “Service tests” menu.
2. Check that the flash led is toggle between on and off.
3. Press the “Ok” key to return to the service tests menu.

3.2.6 Keyboard Test

To verify that all the keys are working:

1. Select “Keyboard” from the “Service Tests”.
2. Press all keys on the keypad, the camera and the flash led key on the right side and the volume keys on the left side. If they are ok a text feedback is displayed showing the information which key was pressed. All keys should be tested.
3. If you stop pressing keys the phone will return to the service test menu.

3.2.7 Vibrator Test

To verify the vibrator function:

1. Select “Vibrator” from the “Service Tests” menu.
2. Press any key and the vibrator will vibrate 3 times.
3. Press the “Ok” key to return to the service tests menu.

3.2.8 Earphone Test

To verify the Earphone function:

1. Select “Earphone” from the “Service Tests” menu.
2. Adjust the volume up and down to make sure that the Earphone is working properly.
3. Press the “Ok” key to return to the service tests menu.

3.2.9 Speaker Test

WARNING! Do not hold the phone close to your ear when performing this test.

To verify the Speaker function:

1. Select “Speaker” from the “Service Tests” menu.
2. Adjust the volume up and down to make sure that the Speaker is working properly.
3. Press the “Ok” key to return to the service tests menu.

3.2.10 Microphone Test

The intention with this test is to verify that the microphone is working properly. Therefore, the earphone test should be performed before this test is entered.

1. Select “Microphone” from the “Service Tests” menu.
2. The phone will start to record, and then the sound will be heard in the speaker. Make sure that the record sounds are load and clear sound.
3. Press the “Ok” key to return to the service tests menu.

3.2.11 Real Time Clock Test

This test will verify that the built in real time clock works.

1. Select “Real time clock” from the “Service Tests” menu.
   After approximately 5 seconds you will get information whether the clock is working properly or not.
2. Press the “Ok” key to return to the service tests menu.

3.2.12 Memory stick test

This test is to verify if the communication to the memory stick is working.

1. Insert a memory stick in to the memory stick holder.
2. Select “Memory Stick” from the “Service tests” menu.
3. Make sure that the phone will detect the memory stick (Status will be shown in the Main Display).
4. Remove the memory stick from the holder.
5. Press the “Ok” key to return to the service tests menu

3.3 Manual Tests

3.3.1 On The Air Call To Mobile

To verify the function of the speaker, microphone, polyphonic ring signal and volumes button.

1. Insert an operator SIM card and start up the phone.
2. Set up a call from another phone to the mobile phone.
3. Answer the phone call.
4. Check that the polyphonic ring signal is working and that the backlight switches on OK.
5. Also check that the quality of the sound both in the mobile phone and the other phone are OK.
6. Press the volume keys up and down and check that the volume in the phone is altered.
7. End the call.
8. Check that the ending procedure is OK and that the speech time is displayed.

3.3.2 Infrared Test

To verify that the Infrared communication is working:

1. Insert a SIM card, connect a battery and start the unit.
2. Activate the function by entering Connectivity/Infrared port and select “10 minutes”.
3. Set up an infrared link between an IR device and the phone. The IR-module is placed on the left side of the phone. If a link can be established, the module is considered working.

3.3.3 Bluetooth Test

To verify that the Bluetooth communication is working:

1. Insert a SIM card, connect a battery and start the unit.
2. Activate the Bluetooth function by entering Connectivity/Bluetooth and turn it on.
3. Set up a link between the phone and another Bluetooth compatible device. If a connection can be established the Bluetooth module is considered working.

3.3.4 System Connector Test

Hands free equipment and a charger are used in this test, to check the functionality of the System Connector.

1. Insert a SIM card, connect a battery and start the unit.
2. Connect the Hands free equipment to the system connector and set up a call and listen if you can speak and hear in the hands free set.
3. Connect the charger to the system connector and see if the charging is indicated in the display or on the Status Led.

3.3.5 Micro USB connector test

USB cable (RPM 131 102) is used in this test, to check the functionality of the micro USB connector on the phone.

1. Connect the micro USB cable in to the phone and to a PC.
2. If the PC finds the new advice, the USB connection is considered working properly.

4 Revision History

Rev.	Date	Changes / Comments
A	2004-11-04	First draft
B	2005-04-21	Z800i added

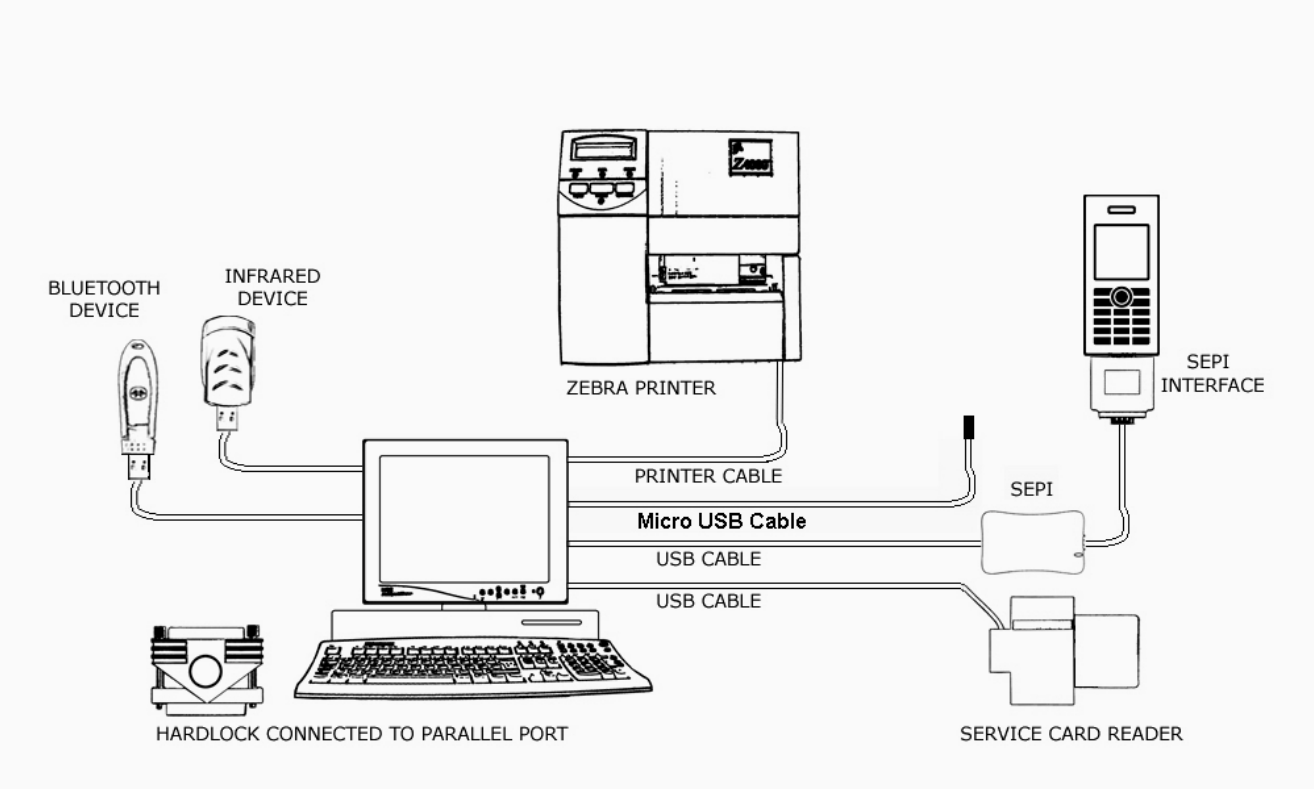
1 General

This document describes the installation procedure for the Mechanical repair package.
The Mechanical repair package consists of a Computer and Interface Cables. A Hardlock and a Service Card are required for security reasons. A label printer can be installed to be able to print new labels (optional).

2 Hardware

All hardware must be approved by Sony Ericsson and is documented in the Equipment List.

2.1 Test Setup



2.2 Computer

IBM compatible computer is required. The computer should include at least two USB-ports. Refer to Equipment List for minimum requirements.

2.3 Hardlock

Hardlock with article number KRY 105 165 is required. The Hardlock should be connected to the parallel port on the computer.

2.4 Service Card Reader/Service Card

The Service Card Reader is delivered with the necessary software and instructions for installation. The Service Card Reader should be connected to an USB-port on the computer.

2.5 Sony Ericsson programming interface – SEPI

The USB programming interface is delivered with the necessary software and instruction for installation.

2.6 Sony Ericsson programming interface – Cable

The cable is the interface between the USB programming interface and the phone. Connect the cable between the programming interface and the phone.

2.7 USB PC cable

The A-B Plug-Plug cable is the interface between the computer and the programming interface. Connect the cable between the programming interface and the computer.

2.8 Infrared Device

An RS 232 or USB type infrared adapter may be used. Install according to the manufactor´s instructions.

2.9 Bluetooth Device

Any Bluetooth device as headset, other Bluetooth phone or other Bluetooth device can be used to verify the Bluetooth function in the phone. Set up the connection according to the chosen equipments manufacture.

2.10 Label Printer (optional)

A Zebra printer model 90xi, 90xiII or 4000 deluxe shall be used. Connect the printer with a standard RS 232 serial printer cable [refer to the Zebra printer manual] to the serial port on the computer. Read the Zebra installation manual for more information about the installation.

2.11 Micro USB cable

A micro USB cable (RPM 131 102) is used to verify the USB connector in the phone. Connect the USB cable in one of the USB connectors on the PC and the other end of the cable in to the phone.

3 Software

3.1 EMMA II

EMMA II contains software upgrades and tools requiring for servicing this phone. Emma II is accessible through the CSPN. Installation and user manuals are available in the EMMA II start page.

http://emma.extranet.sonyericsson.com

3.2 Labelmake software (optional)

LabelMake II is an application installed through Java Web Start.

Access the Labelmake software from the CSPN Web page.

You will find LabelMake II in the dropdown menu on the CSPN web page.

http://cspn.extranet.sonyericsson.com

Press “START LabelMake II “button and you will be directed to the LABELMAKE II client page.

Product labels are downloaded on-line from a remote server database.

4 Revision History

Rev.	Date	Changes / Comments
A	2004-11-30	First release
B	2004-12-03	Due to system problem
C	2004-12-30	Updated chapter 3.2 Labelmake software
D	2005-04-21	Z800i added

Working Instruction, Mechanical

Applicable for V800/V802se, Z800i

Disassembly

Tools

- Torque screwdriver. Bits Torx T5
- Torque screwdriver, set to 15 Ncm ± 6%. Bits Torx T6
- Blunt pair of tweezers, pair of tweezers
- Front opening tool NTZ 112 1063
- Dentist hook
- Guitar Plectrum
- Upper Rear lid opening tool

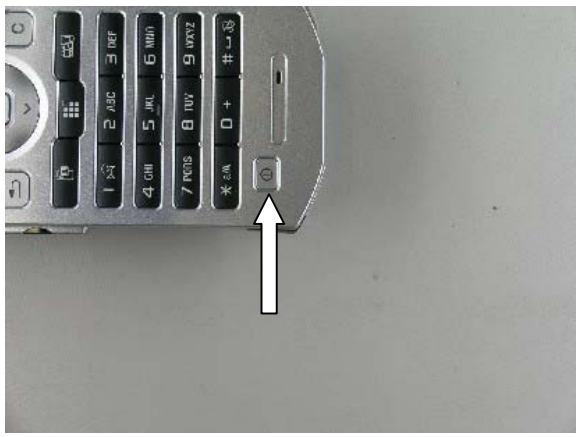
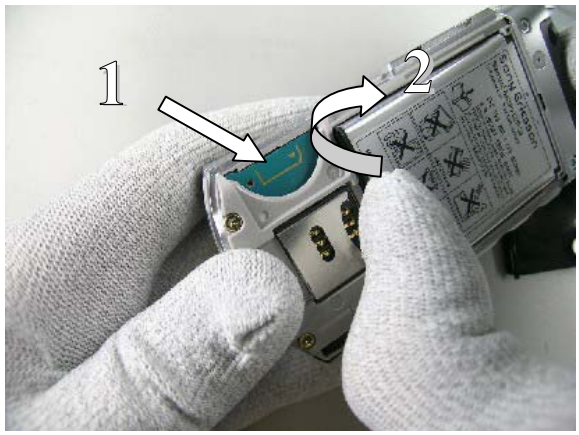
Equipment

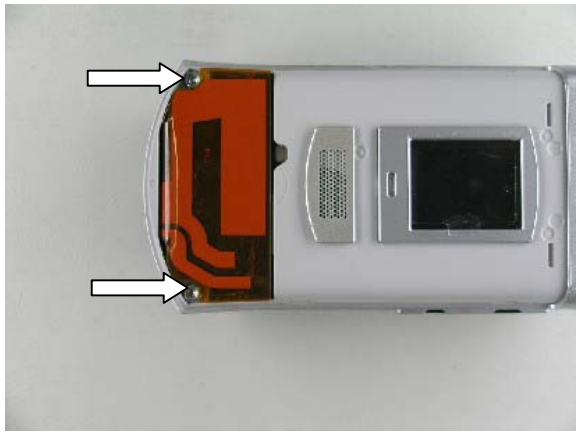
- ESD-gloves (cotton gloves)
- ESD-wristband

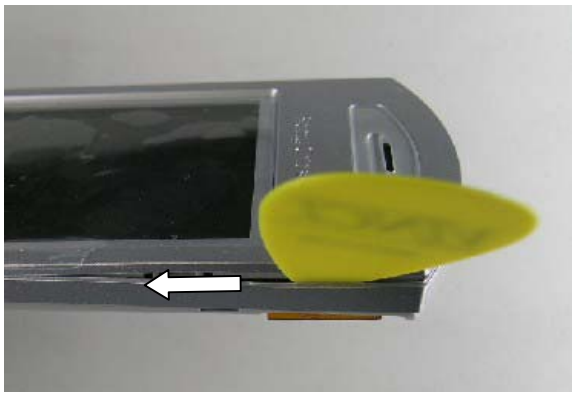
Instruction

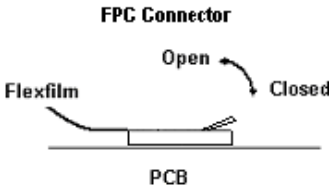
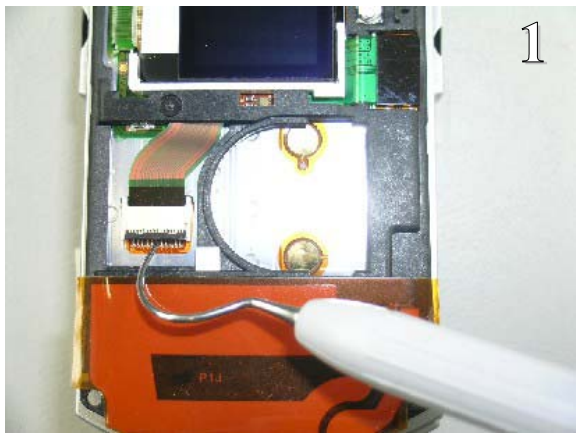
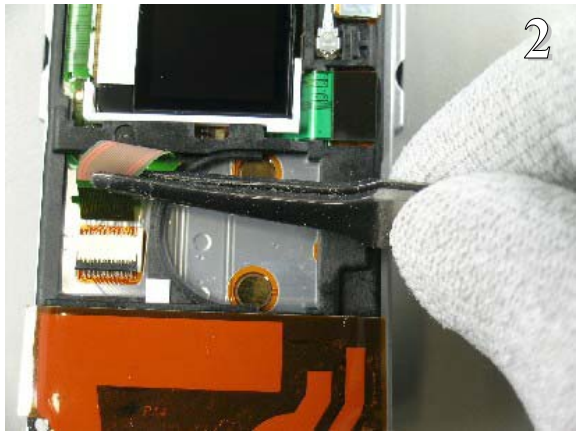
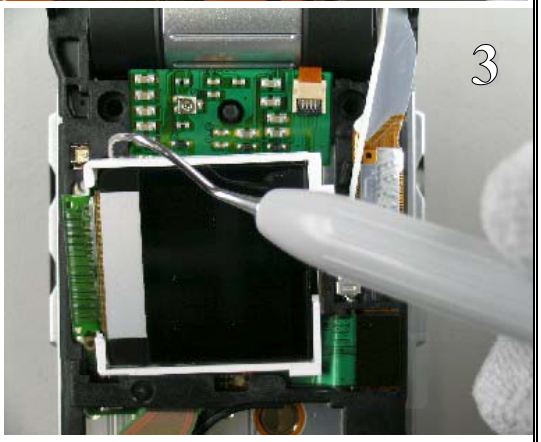
- Keep all contact surfaces clean of dirt and hand-grease
- Disassembly performed without Memory stick.

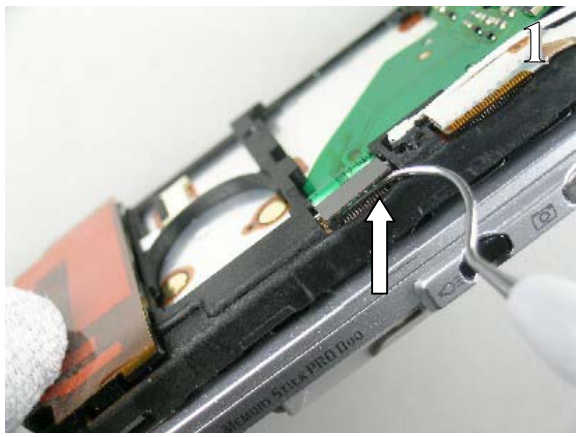
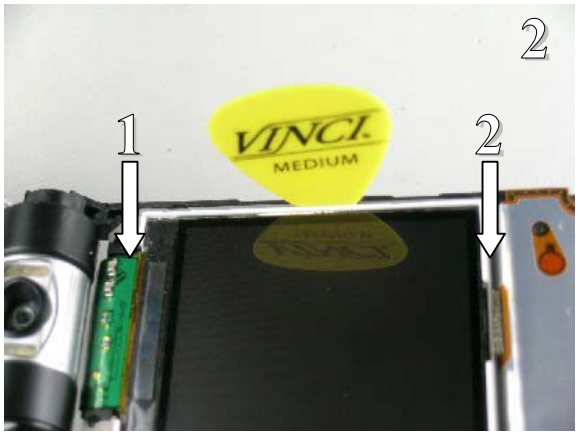
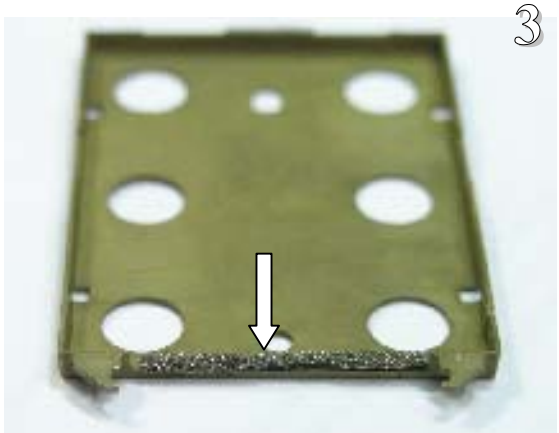
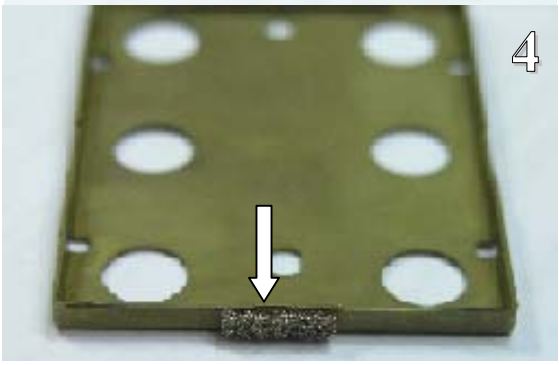
	Upper Front view	Upper Rear view
		
	Lower Front view	**Lower Rear view**
		

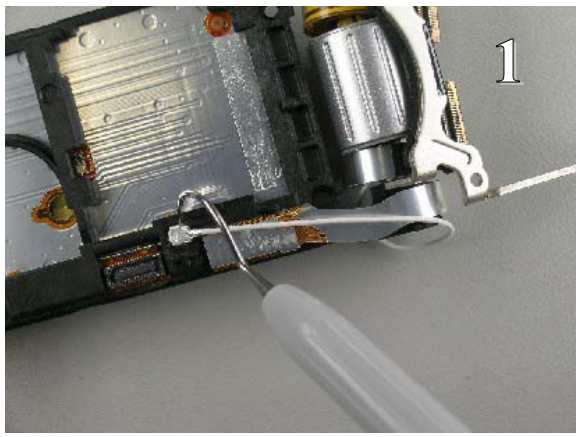
	Step-by-Step Instructions	
1	NOTE! The On/Off Buttom is located according to the arrow. Turn off the phone by pushing the On/Off Button.	
2	Place your thumbs, according to the picture. Slide, according to the arrow, the Battery Cover upwards and remove it.	
3	NOTE! The place for the Memory Stick is placed according to the arrow (**1**). Confirm that the Memory Stick is removed. Use your fingers, according to the arrow (**2**), to remove the Battery from the phone.	
4	The disassembly of the Upper Half Assemblies will be carried out from operation 5 to 12. The disassembly of the Lower Half Assemblies will be carried out from operation 13 to 18.	

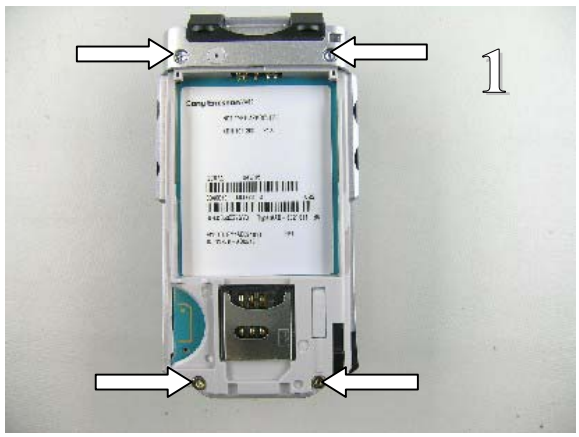
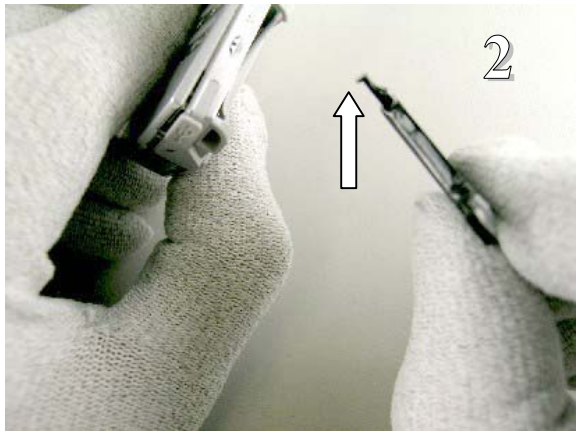
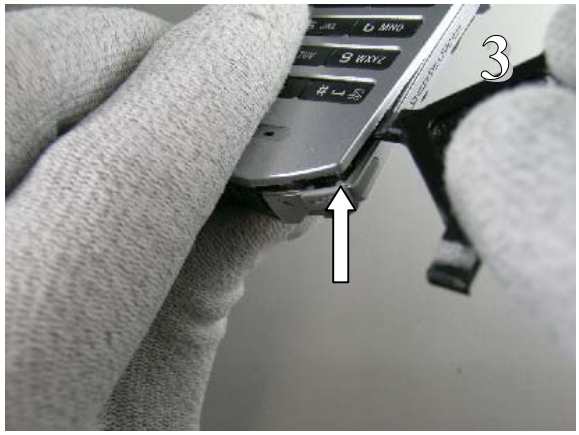
	Step-by-Step Instructions	
5	NOTE! Be careful not to damage the edges on the Upper Rear Lid and the Upper Rear Cover Assy when using the plectrum. The plectrum angle shuld be 130 degrees according to the Upper Lid, according to the picture. Use a Plectrum, according to the picture, to remove the Upper Rear Lid Assy. Start at the middle and slide along upwards, according to the arrow (**1**), and downwards, according to the arrow (**2**). Repeat the procedure on the opposite side.	
6	NOTE! Be careful not to damage the Antenna Flex Film. Remove the two screws at the antenna with the screwdriver (T6). Use a pair of tweers to carefully fold the Antenna Flex Film when removing the untighten screws. NOTE! Removed screws cannot be reused.	

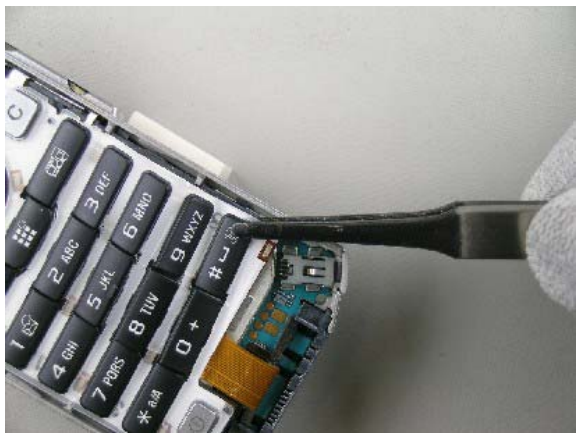
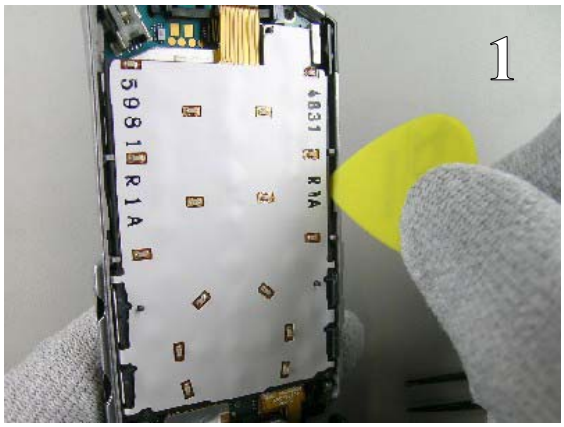
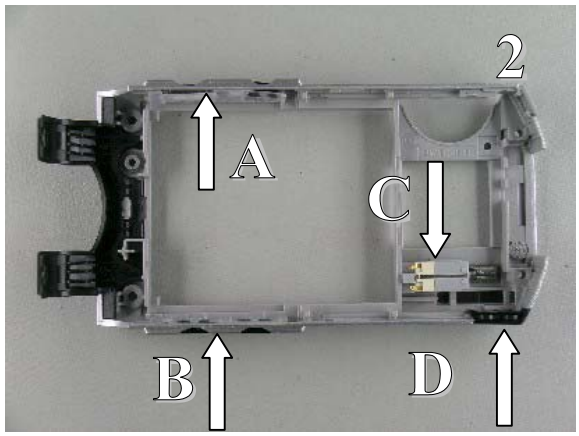
	Step-by-Step Instructions	
7	NOTE! Be careful not to damage the phone. Open the phone between 90 and 180 degrees. Use a dentist hook to remove the Screw Protection Cover on the Upper Front Cover Assy, according to the picture (**1**). NOTE! Removed screw protection cannot be reused. Use a screwdriver (T6) to remove the two screws, which are placed according to the arrows (**2**), with the screwdriver. NOTE! Removed screws cannot be reused.	 
8	NOTE! The plectrum should have an angle of 130 degrees according to the Main Display, according to the picture. Use a plectrum to remove the Upper Front Cover Assy. Start at the Upper Part of the phone then slide towards the Hinge area, according to the arrow, while twisting the plectrum until the Snap Fit Latches opens. Separate the Upper Front Cover Assy from Upper rear complete and remove it.	
9	NOTE! Do not touch the Sub LCD. Cover it with a plastic protection. The width of opening should have an angle of 90 degrees, according to the picture. Use your thumbs to lift up the Upper Rear Complete from its position and remove it.	

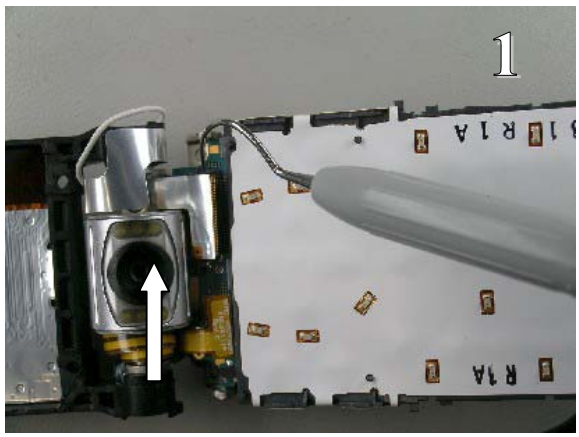
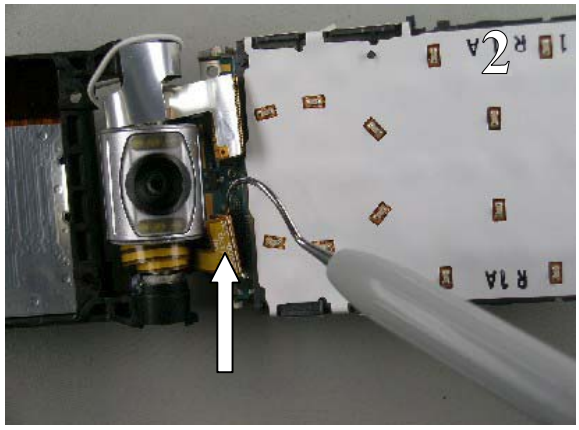
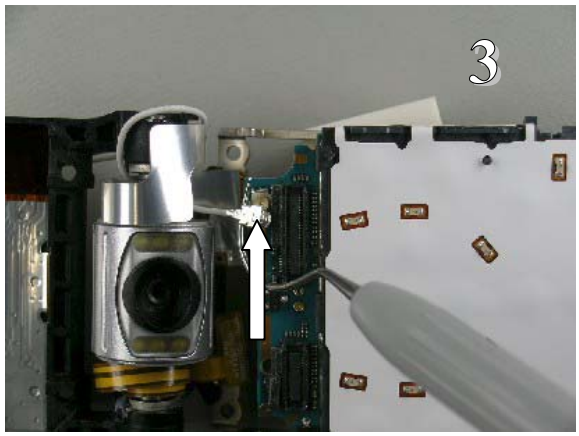
	Step-by-Step Instructions	
10	*Remove the Sub LCD.* Close the phone so that the Upper Rear Cover is visible. NOTE! Be careful not to damage the Upper Rear Cover or other components. Open the FPC connector with the dentist hook, according to the picture (**1**).  NOTE! Be careful not to damage the Sub LCD Flex Film. Use a pair of tweezers to disassemble the flex film from the connector, according to the picture (**2**). NOTE! The flex film on the rear of the Sub LCD can be stuck in the FPC Connector. Twist gently the Flex Film while removing it. Be careful not to touch the Sub LCD glass plate. Be careful not to damage the flex film or other components. Use a dentist hook to lift up the Sub LCD in the left corner from the cavity, according to the picture (**3**). Grab the outside frame of the Sub LCD with your fingers and drag it towards the Hinge area.	  

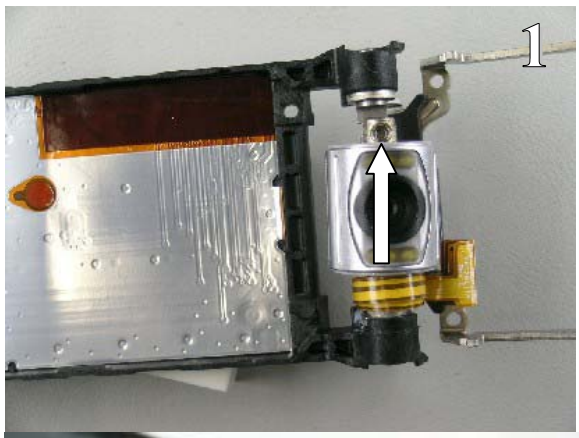
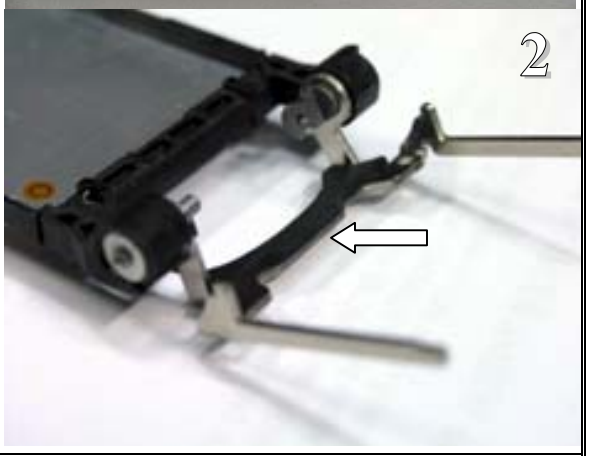
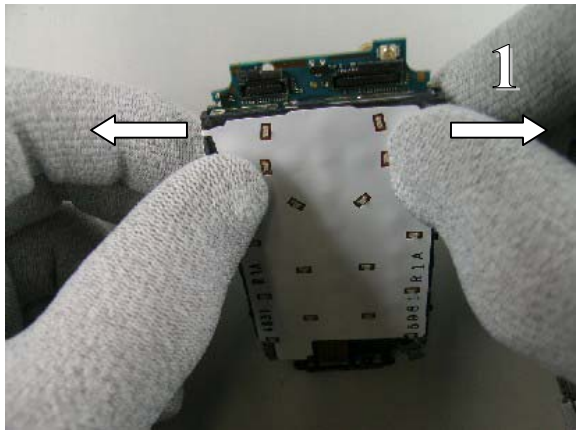
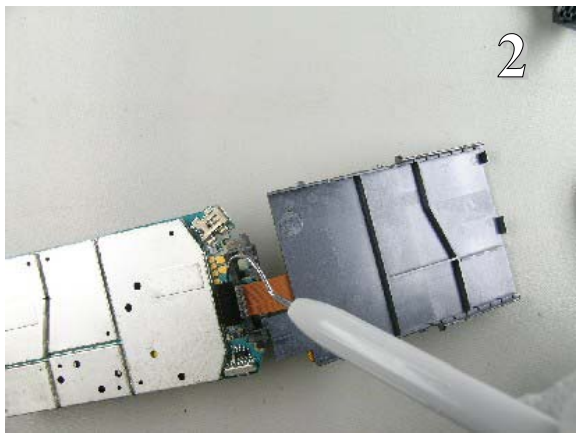
	Step-by-Step Instructions	
11	*Remove the Main LCD.* NOTE! Be careful not to damage the Board-To-Board connector. Disconnect the Board-To-Board connector by using a dentist hook, according to picture 1. NOTE! Be careful not to damage the Flex Film. Carefully release/separate the flex film from the Antenna Flex Assy. The Main Display flex film is glued onto the Antenna Flex Assy. Open the phone so that the Main LCD is visible. NOTE! Be careful not to damage the Main LCD. Use the plectrum to release the Main LCD from the Upper Carrier Assy, according to picture 2. Carefully lift the LCD from the cavity in Upper Carrier Assy. There are two Gaskets which are placed according to the arrows. The Lower Gasket is placed under the Flex Film according to arrow 1 in picture 2. The Lower Gasket is mounted at the bottom of the Main LCD Cavity, according to the arrow in the picture (**3**). The Upper Gasket is placed according to arrow 2 in picture 2. The Lower Gasket is mounted at the top of the Main LCD Cavity, according to the arrow in the picture (**4**).	   

	Step-by-Step Instructions	
12	Close the phone, so the Coax connector is visible. NOTE! Be careful not to damage the Coax Cable. Disconnect the Coax Cable connector by using a dentist hook, according to the picture (**1**). NOTE! Be careful not to damage the Flex Film or the Board-To-Board connector Disconnect the Half-to-half Assy Board-To-Board connector on the Antenna Flex Film by using a dentist hook, according to the picture (**2**).	 

	Step-by-Step Instructions	
13	Close the phone so the lower rear is visible, according to the picture. Remove the four screws on the lower rear cover (T6), according to the arrows. NOTE! When performing the separation between the Lower Rear Cover Assy and the Lower front Cover Assy, the hook of the tool shall point downwards, according to the picture (**2**), against the Lower Rear Cover Assy. Be careful not to damage the edges of the Lower Rear Cover Assy or the Lower Front Cover Assy. Fold up the phone. Separate the Lower Front Cover Assy from the Lower Rear Cover Assy by lifting the Lower Front Cover Assy carefully. When there is enough gap between the two parts, insert the front opening tool NTZ 112 1063. NOTE! Be careful not to damage the Hall element on the PCB. Start to slide the opening tool at the lower end, according to the picture (**3**), and slide it all the way to the hinge area. Repeat the same procedure on the opposite side of the phone. When the two parts are totally separated (**4**), release the Lower Front Cover Assy from its position. NOTE! Removed screws cannot be reused.	   

	Step-by-Step Instructions	
14	Use a pair of tweezers to remove the Keyboard, according to the picture.	
15	Insert the plectrum, according to the picture (**1**), between the Lower Rear Cover Assy and the PCB. Gently bend the plectrum outwards and separate the Lower Rear Cover Assy from the PCB. Remove the Lower Rear Cover Assy. NOTE! Compare your Lower Rear Cover Assy to the picture number two. Confirm that the volume keys (**A**), the camera keys (**B**), vibrator **(C**) and the IrDA window (**D**) not have falling out.	 

	Step-by-Step Instructions	
16	*Remove the Key Foil Assy and the PCB.* NOTE! Be careful not to damage the Board-To-Board connectors. Use a dentist hook to disconnect the Half-To-Half Assy Board-To-Board connector from PCB, according to the arrow (**1**). NOTE! Be careful not to damage the Coax Cable. Use a dentist hook to disconnect the Camera Board-To-Board connector from PCB, according to the arrow (**2**). NOTE! Hold the dentist hook according to the picture **3**. Use a dentist hook to remove the Coax Cable, according to the picture.	  

	Step-by-Step Instructions	
17	Remove the screw (T5) on the Camera axis, which is located according to the arrow in picture 1. NOTE! Removed screws cannot be reused. Be careful not to damage the Camera Flex Film. Bend the camera outwards. Drag the camera to the right, according to the arrow. Use a pair of tweezers to remove the Dust Gasket Hinge, which is located according to the arrow in the picture (**2**).	 
18	Separate the Key Foil Assy and the PWB from the Upper Carrier Assy. Grab the Key Foil Assy´s clips, according to the picture (**1**). Bend gently the Key Foil Assy outwards, according to the arrows. At the same time, bend the Key Foil Assy towards you. Fold the Key Fold Assy, according to the picture (**2**). NOTE! Be careful not to damage the Board-To-Board connector. Use a dentist hook, according to the picture, to disconnect the Board-To-Board connector from the Key Foil Assy.	 

Reassembly

Tools

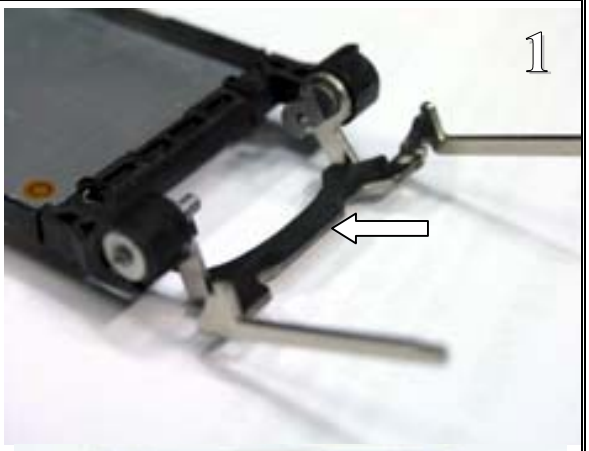
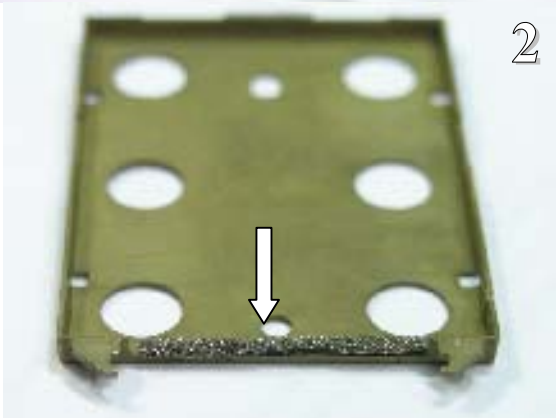
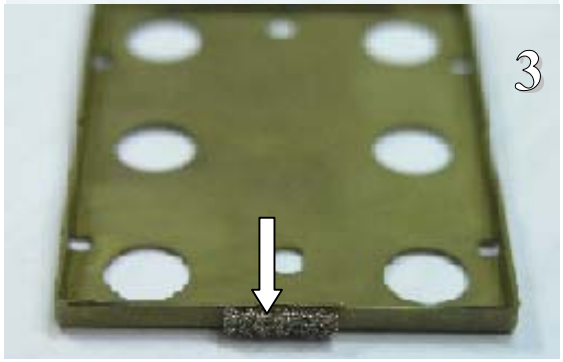
- Torque screwdriver. Bits Torx T5
- Torque screwdriver, set to 15 Ncm ± 6%. Bits Torx T6
- Blunt pair of tweezers, pair of tweezers
- Front opening tool NTZ 112 1063
- Dentist hook
- Plectrum
- Upper Rear lid opening tool

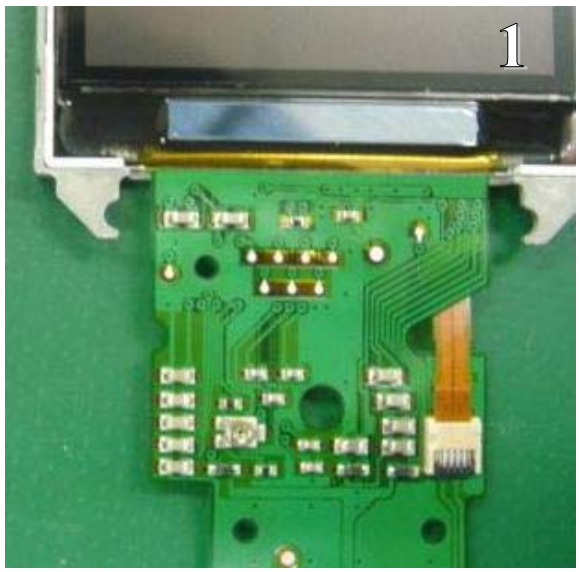
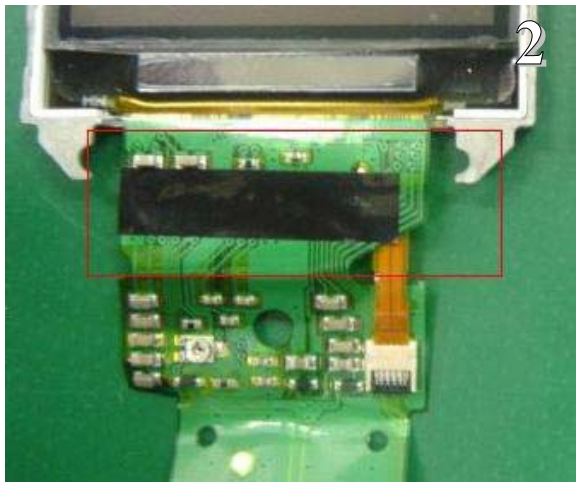
Equipment

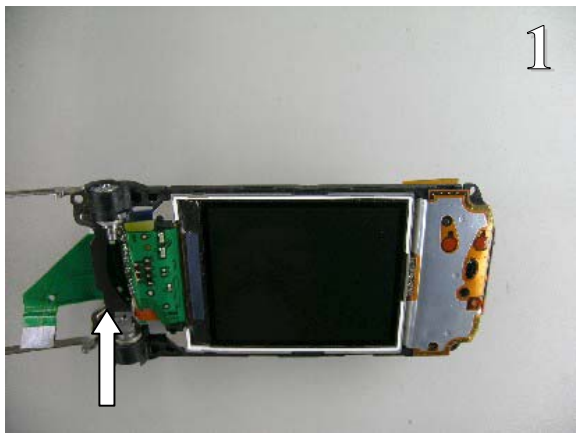
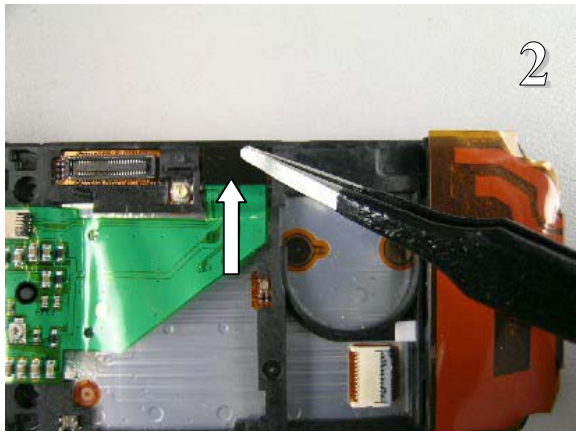
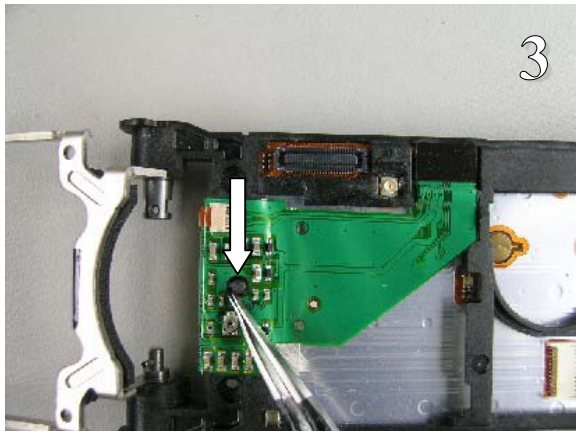
- ESD-gloves (cotton gloves)
- ESD-wristband

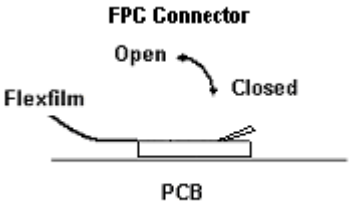
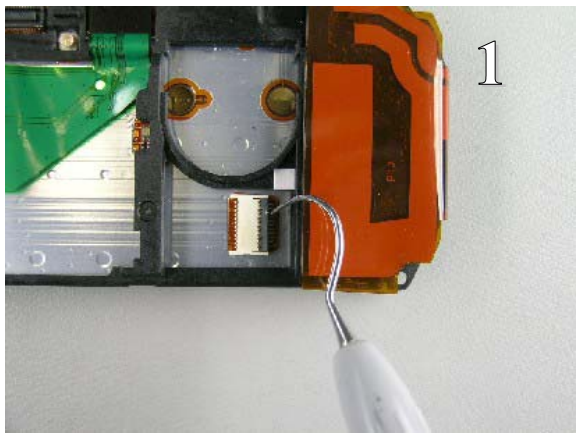
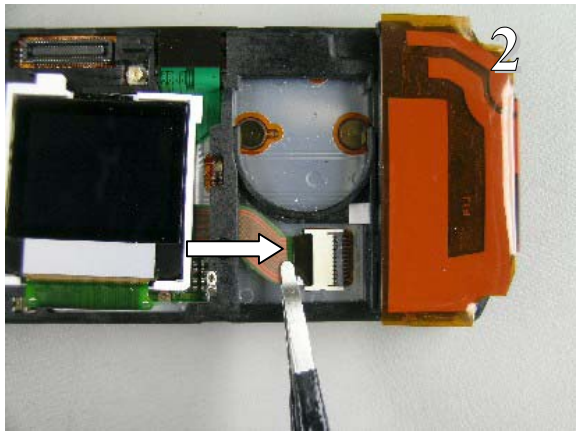
Instruction

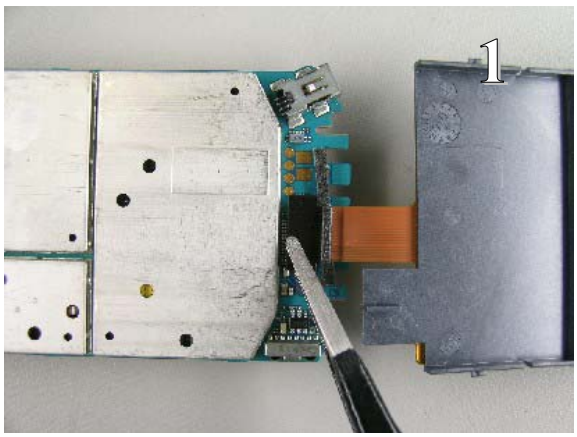
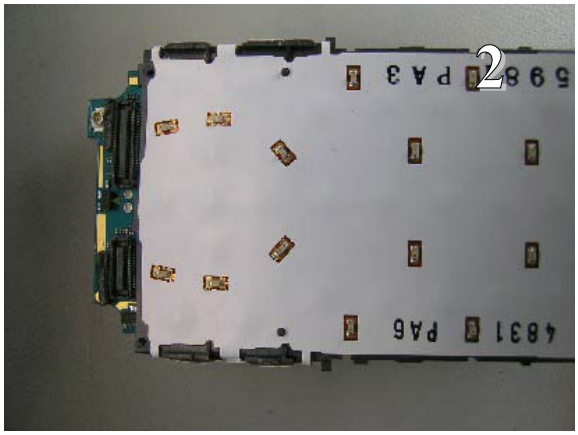
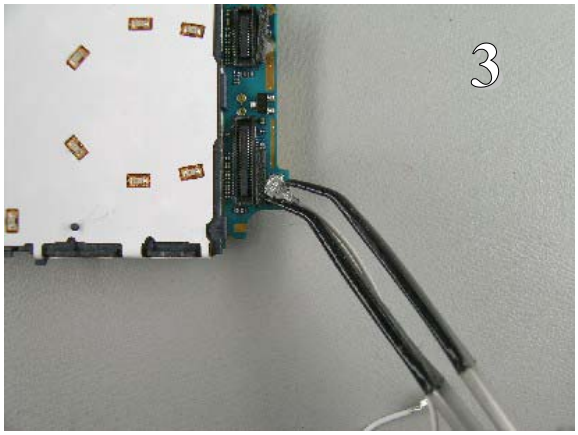
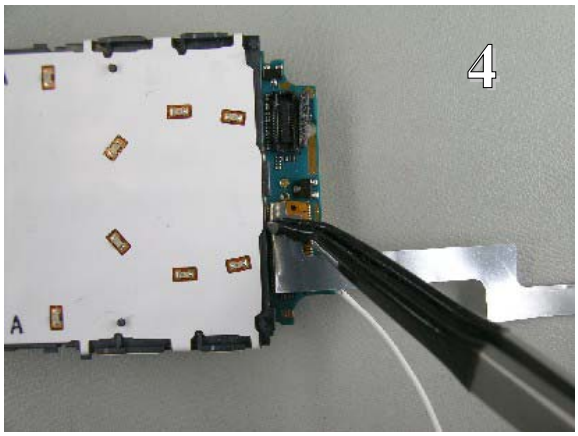
Keep all contact surfaces clean of dirt and hand-grease

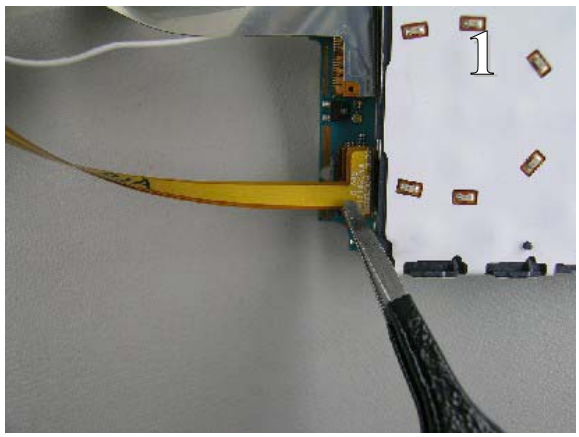
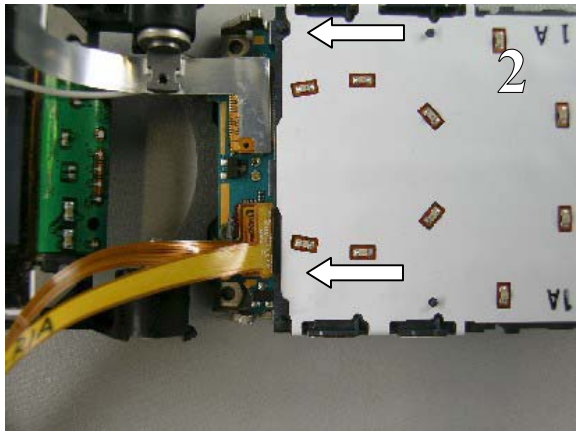
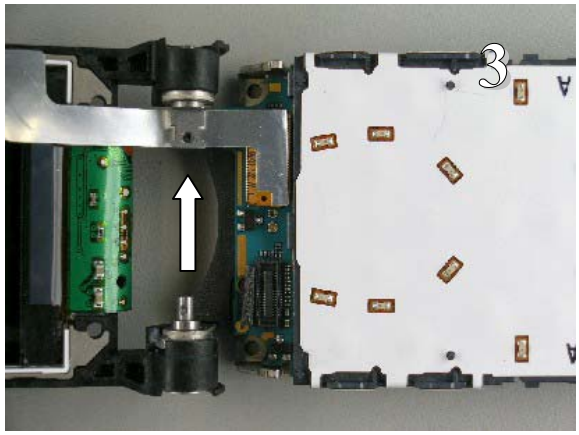
	Step-by-Step Instructions	
1	Use a pair of tweezers to mount the Dust Gasket Hinge in the right position, according to the arrow in the picture (**1**). Use a pair of tweezers to mount the Lower Gasket at the bottom of the Main LCD Cavity, according to the arrow in the picture (**2**). Use a pair of tweezers to mount the Upper Gasket at the top of the Main LCD Cavity, according to the arrow in the picture (**3**).	  

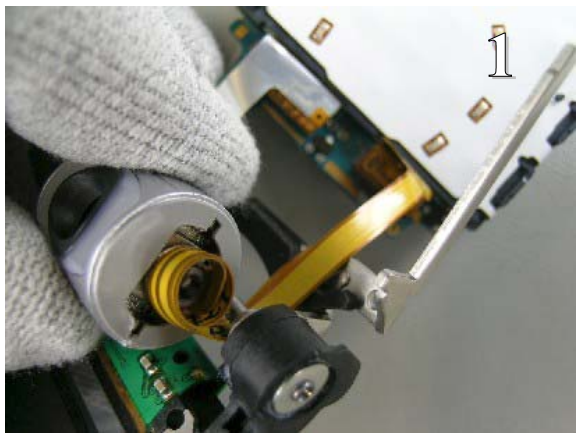
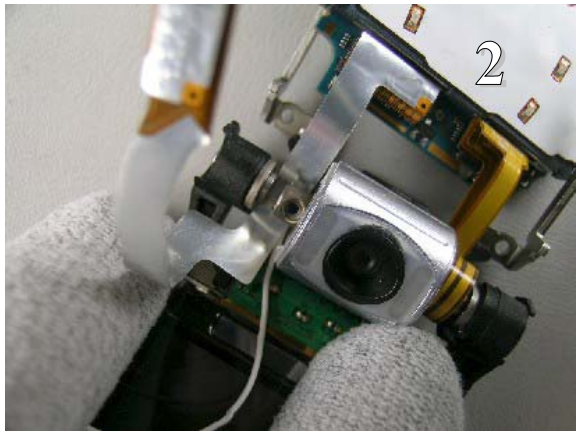
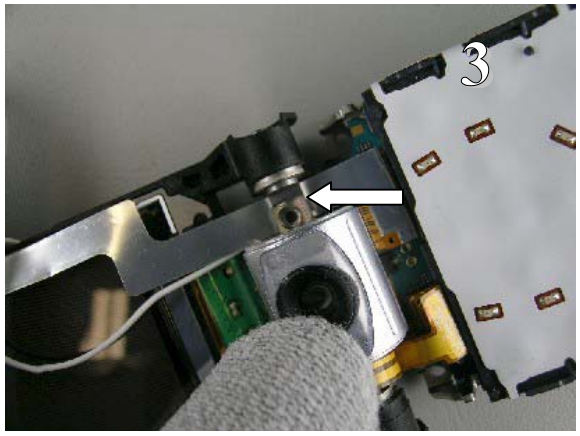
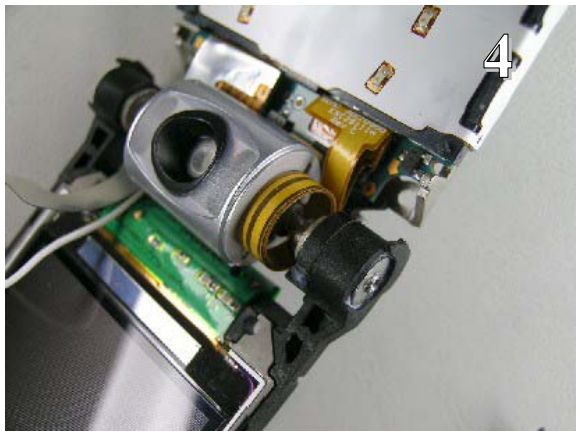
	Step-by-Step Instructions	
1	NOTE! Be careful not to damage the Main LCD when mounting the black ESD Tape. Picture 1 shows the Flex Film of the Main LCD. Mount the ESD Tape according to picture 2. NOTE! Make sure that the ESD Tape is mounted according to the picture (**2**).	 

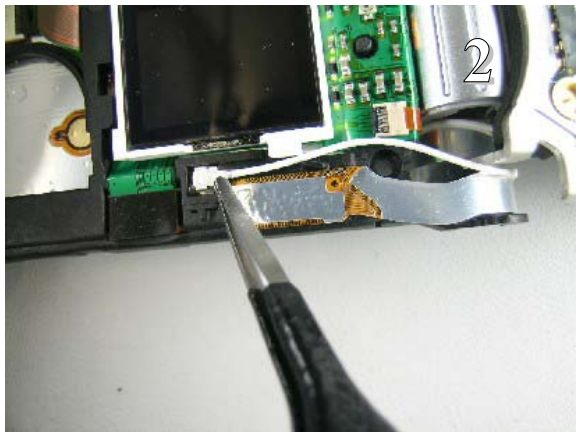
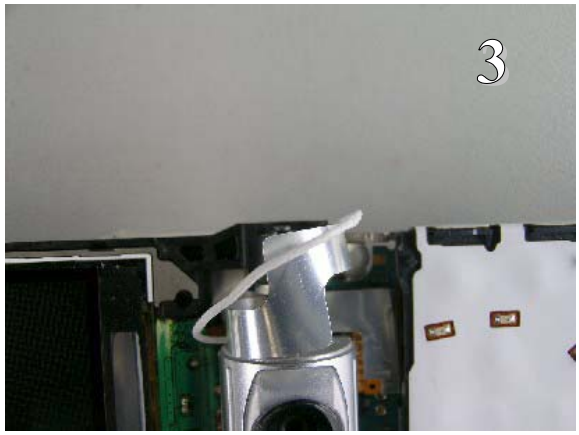
	Step-by-Step Instructions	
2	*Assembling of the Main LCD.* NOTE! Do not touch the Main LCD during the next procedure. Put the Main LCD in the cavity of the Upper Carrier Assy. Fold the flex film in the opening between the hinge mechanism and Upper Carrier Assy (**1**). Turn the Assembly. NOTE! Make sure that the flex film is correct mounted according to the pictures. Use a pair of tweezers to connect the Main Display Board-to-Board to the Antenna Flex Film Connector (**2**). Press gently the flex film on the adhesive. For the correct position of the Main Display Flex Film, use the guiding pin according to the picture (**3**).	  

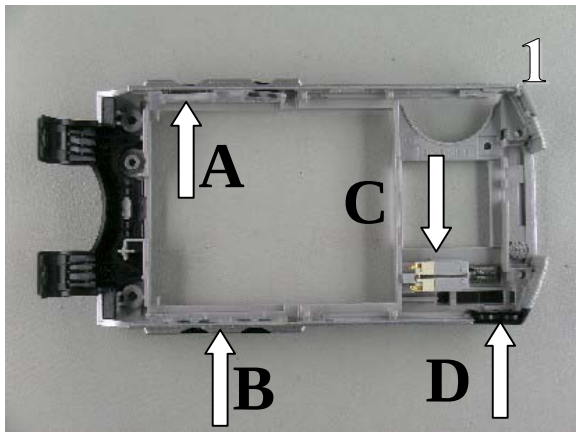
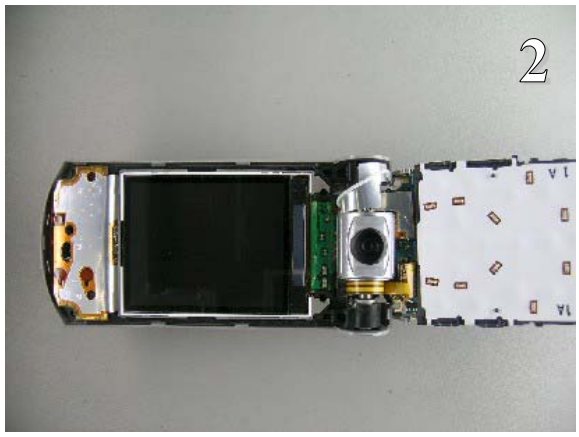
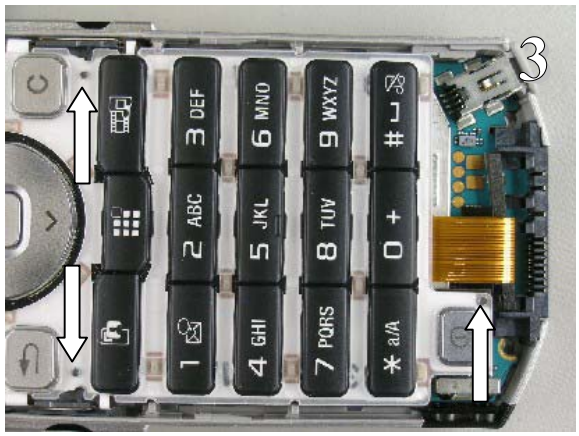
	Step-by-Step Instructions	
3	*Assembling of the Sub LCD* NOTE! Be careful not to damage the Board-To-Board connector or the Antenna Flex Film. Use a dentist hook, according to the picture (**1**), to open the FPC connector. Slide the flex film under the bar on the Upper Carrier Assy, according to the picture (**2**). Use a pair of tweezers, according to the picture (**2**), to move the Flex Film straight forward into the connector. Close the FPC connector according to the picture below.  NOTE! Make sure that the FPC-connector will be closed properly.	 

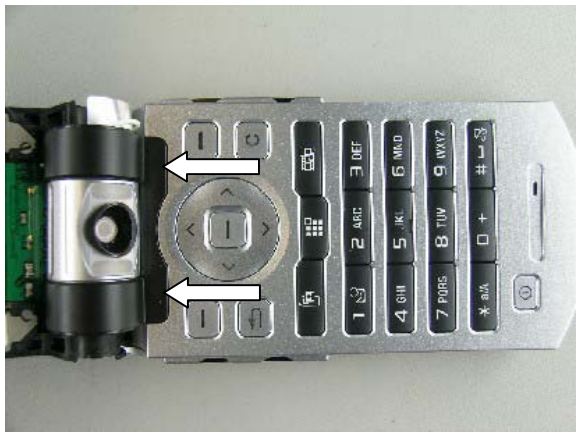
	Step-by-Step Instructions	
4	NOTE! Be careful not damage the connector. Use a pair of tweezers, according to the picture (**1**), to connect the Key Foil Assy Board-to-Board Connector to the Board-to-Board Connector on the PCB. Fold the Key Foil Assy over the PCB and assemble it, according to the picture (**2**). Use a pair of tweezers, according to the picture (**3**), to connect the Coax Cable. Use a pair of tweezers, according to the picture (**4**), to connect the Board-To-Board connector of the Half-to-Half Assy.	   

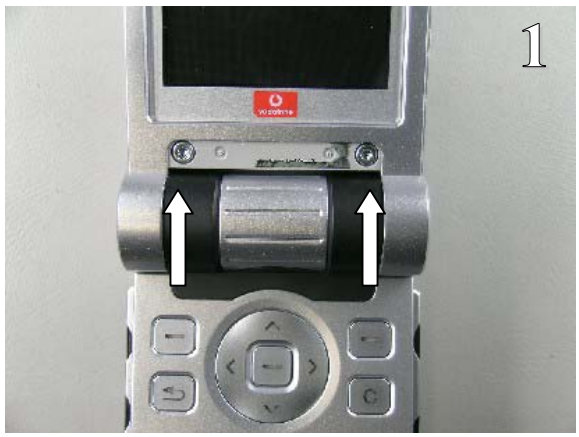
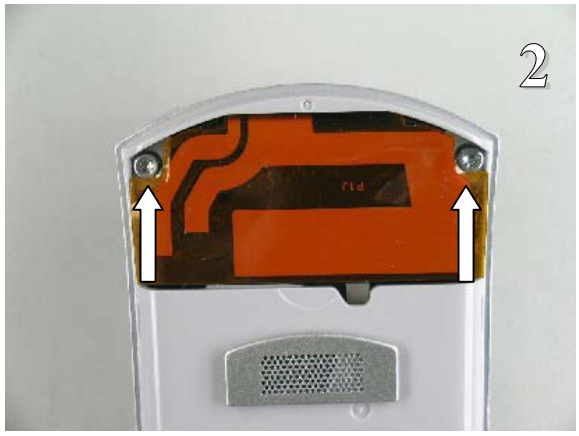
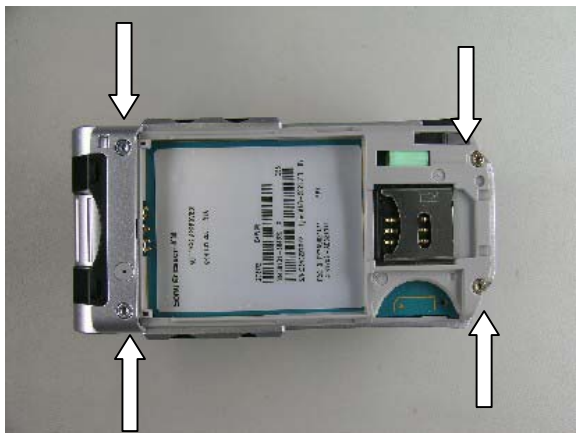
	Step-by-Step Instructions	
5	*Assemble the Camera* NOTE! Be careful not damage the Flex Films or the Coaxial Cable. Be careful so that the Ground Springs stays intact in the next procedure. They are located on the top of the PCB. Use a pair of tweezers, according to the picture (**1**), to connect the Cameras Board-To-Board connector on the PCB. Slide the assembled PCB, according to the arrows (**2**), on the two carriers from the hinge mechanism all the way into the hinge, according to the arrows. Confirm that the Camera flex films are positioned as the picture shows. The Coax Cable should be behind the Half-to-Half Assy under the hinge shaft, according to the picture (**3**).	  

	Step-by-Step Instructions	
6	NOTE! Be careful not damage the Flex Films or the Coaxial Cable. Wind the Camera Flex Film two times around the hinge shaft of the camera module (**1**). NOTE! Use the screw hole to guide the assembly on the right shaft. Position the camera, according to the picture (**2**). Make sure that the hinge shaft is placed in the Camera cavity, according to the picture (**3**). NOTE! Use new screw (T5). Mount and tighten the screw on to the Camera shaft.	   

	Step-by-Step Instructions	
7	NOTE! Be careful not damage the Half-to half Assy and its connector. Turn the Half-to-Half Assy and connect it to the Board-to-Board connector by using a pair of tweezers, according to the picture (**1**). NOTE! Be careful not damage the Coaxial Cable and its connector. Turn the Coaxial Cable and connect it to the Board-to-Board connector by using a pair of tweezers, according to the picture (**2**). NOTE! The Coaxial Cable should be placed on top of the Half-to-Half Assy, according to the picture (**3**).	  

	Step-by-Step Instructions	
8	NOTE! Confirm that the volume keys (**A**), the camera keys (**B**) , vibrator (**C**) and the Irda window (**D**) are in place, according to the picture (**1**). Be careful not to damage the Coaxial Cable. Open the phone 90 degrees. Place the assembly into the Lower Rear Cover Assy and press gently it together (**2**). Use a pair of tweezers to place the Key board. Use the guiding pins, according to the arrow (**3**), to fix the Key board on the Key Foil Assy.	  

	Step-by-Step Instructions	
9	NOTE! Do not damage the Coax Cable or the Half-to-Half Assy. Assemble the Lower Front with the Lower Rear Cover. Start at the hinge area. Position the two black covers from the Lower Rear Cover together with the two black covers from the Lower Front Cover. Press at the hinge covers, according to the arrows, until the two parts snaps fits together. After that, continue to press together the Lower Front Cover onto the Lower Rear Cover.	
10	Partly close the phone so it has an angle of 90 degrees, according to the picture. NOTE! Do not damage the coax-cable and the Half-to-Half Assy. Assemble the Upper Rear Cover Assy. Start at the hinge area and gentle press into correct position.	
11	NOTE! Do not damage the coax-cable and the Half-to-Half Assy. Assemble the Upper Front Cover Assy. Start at the hinge area and snap fit it into the Upper Rear Cover.	

	Step-by-Step Instructions	
12	NOTE! Use new screws and new screw protection cover. Clean the surface before assemble the screw protection cover with Isopropyl alcohol. Assemble and tighten the two long screws (T6) at the hinge area, according to the arrows (**1**). Assemble the screw protection cover into the cavity. Turn the phone. Assemble and tighten the two short screws (T6) at the Antenna Flex Film, according to the arrows (**2**).	 
13	Assemble the Upper rear lid assy. Press it into correct position.	
14	NOTE! Use new screws. Assemble and tighten two short screws at the hinge area, according to the left arrows. Assemble and tighten two long screws at the bottom, according to the right arrows.	

	Step-by-Step Instructions	
15	Assemble the battery (**1**). Assemble the Battery Cover Assy (**2**).	 

Replacement of Mechanical Parts

Equipment

- ESD-gloves (cotton gloves)
- ESD-wristband
- Dentist hook
- Blunt pair of tweezers
- Front opening tool NTZ 112
- Torque screwdriver, set t 15 Ncm ± 6%. Bits Torx T6 NTZ 112 1052
- Bits Torx T5

Instruction

- Keep all contact surfaces clean of dirt and hand-grease

1.1 Main LCD

Replacement of *Main LCD*: Follow the Disassembly and the Reassembly headings and pay attention to the Note comments.

1.2 Sub LCD

Replacement of *Sub LCD*: Follow the Disassembly and the Reassembly headings and pay attention to the Note comments.

1.3 Battery Cover Assy

Replacement of *Battery Cover Assy*: Follow the Disassembly and the Reassembly headings and pay attention to the Note comments.

1.4 Lower Rear Cover Assy

Replacement of *Lower Rear Cover Assy*: Follow the Disassembly and the Reassembly headings and pay attention to the Note comments.

1.5 Lower Front Cover Assy

Replacement of *Lower Front Cover Assy*: Follow the Disassembly and the Reassembly headings and pay attention to the Note comments.

1.6 Upper Rear Complete

Replacement of *Upper Rear Complete*: Follow the Disassembly and the Reassembly headings and pay attention to the Note comments.

1.7 Upper Front Complete

Replacement of *Upper Front Complete*: Follow the Disassembly and the Reassembly headings and pay attention to the Note comments.

1.8 Upper Rear Lid

Replacement of *Upper Rear Lid*: Follow the Disassembly and the Reassembly headings and pay attention to the Note comments.

1.9 Upper Rear Lid Assy

Replacement of *Upper Rear Lid Assy*: Follow the Disassembly and the Reassembly headings and pay attention to the Note comments.

1.10 Upper Carrier Assy

Replacement of *Upper Carrier Assy*: Follow the Disassembly and the Reassembly headings and pay attention to the Note comments.

1.11 Key Foil Assy

Replacement of *Upper Carrier Assy*: Follow the Disassembly and the Reassembly headings and pay attention to the Note comments.

1.12 Keyboard

Replacement of *Upper Carrier Assy*: Follow the Disassembly and the Reassembly headings and pay attention to the Note comments.

1.13 Coax Cable

Replacement of *Upper Carrier Assy*: Follow the Disassembly and the Reassembly headings and pay attention to the Note comments.

1.14 Half to Half Flex Assy

Replacement of *Upper Carrier Assy*: Follow the Disassembly and the Reassembly headings and pay attention to the Note comments.

1.15 Antenna Lid

See under *3.18 Antenna Flex Assy* .

1.16 Adhesives

Replacement of all the *Adhesives:*

Clean the surface where the adhesive was assembled with Isopropyl Alcohol.

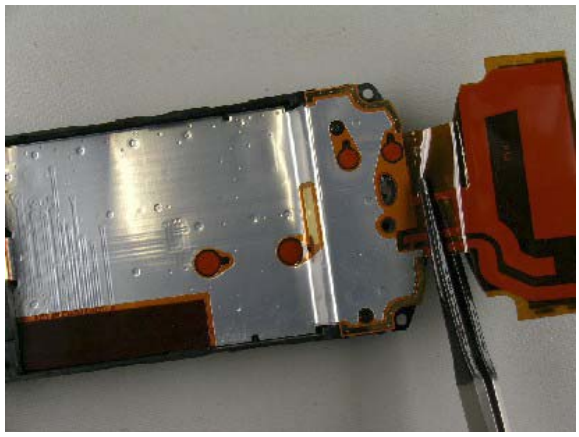
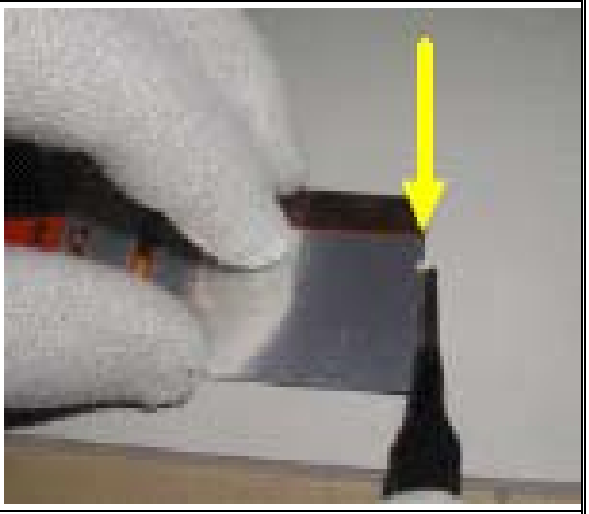
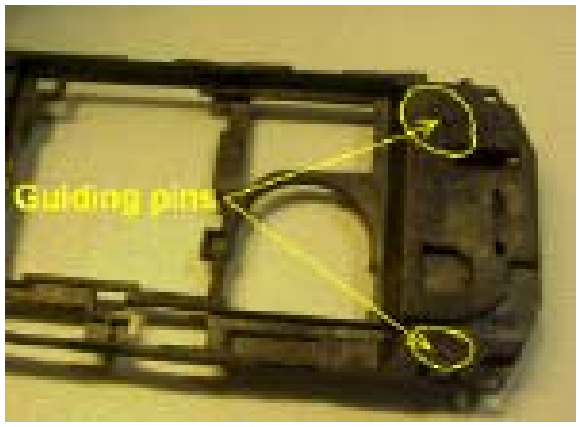
Use a dentist hook or a blunt pair of tweezers to remove the old used adhesive and replace it with a new one.

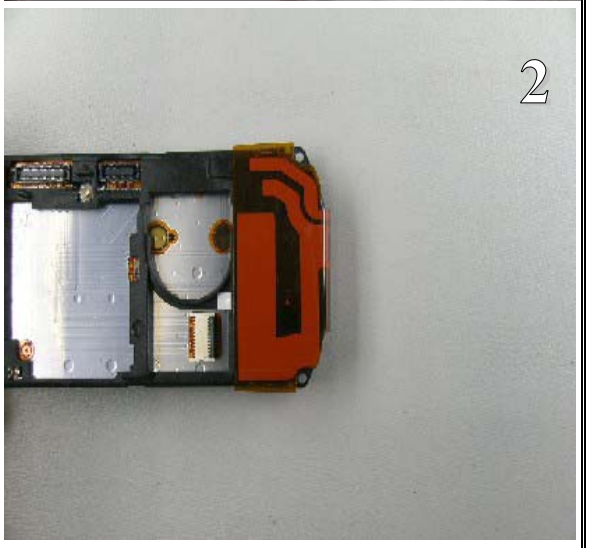
1.17 Screw protection Tape

Replacement of *Upper Carrier Assy*: Follow the Disassembly and the Reassembly headings and pay attention to the Note comments.

1.18 Antenna Flex Assy

Disassemble the phone as described in Disassembly

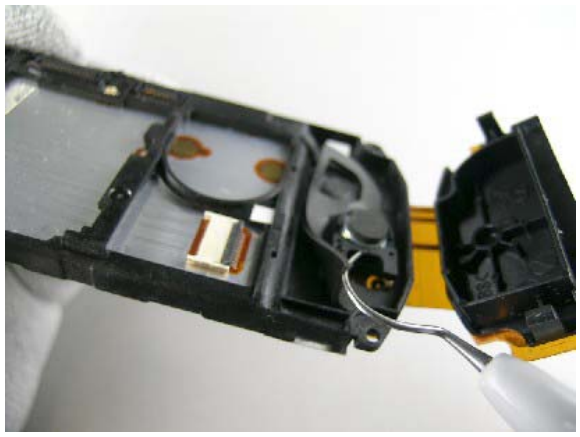
	Step-by-Step Instructions	
1	Use a pair of tweezers to remove the old Antenna Flex Assy, according to the picture. Note! Do not reuse a Antenna Flex Assy.	
2	Note! Use a new Antenna Flex Assy. Place the Antenna Flex Assy on the table with the connectors facing downwards, according to the picture. Locate the protruding edge to the right on Antenna Flex Assy, according to the arrow. Use a pair of tweezers to bend the protruding edge 90 degrees upwards, according to the picture.	
3	NOTE! Do not scratch the Antenna Flex Assy. Clean the Antenna Lid surface with Isopropyl alcohol. NOTE! When assembling the Antenna Flex Film Assy use the guiding pins on the Upper Carrier Assy, according to the arrows.	

	Step-by-Step Instructions	
4	Note! Make sure that the Antenna Lid is mounted on the Upper Carrier Assy. Insert the Antenna Flex Film in the Upper Carrier Assy cavity. Turn the Upper Carrier Assy with the Antenna Flex Assy in it, so it has the same view as the picture (**1**). Remove the protective tape on the Antenna Flex Part. Fold it down and apply it onto the Antenna Lid, according to the picture (**2**)**.**	 

- Assemble the phone as described in Reassembly

1.19 Antenna lid gasket

• Disassemble the phone as described in Disassembly

	Step-by-Step Instructions	
1	NOTE! Be careful not to damage the Antenna Gasket. Remove the old Antenna Gasket. Use a dentist hook, according to the picture, or a pair of tweezers. NOTE! Do not reuse a damaged Antenna Gasket.	
2	Clean the surface with Isopropyl Alcohol. Assemble the Antenna Gasket in the cavity of the Upper Carrier Assy. Use a pair of tweezers, according to the picture.	

- Assemble the phone as described in Reassembly

1.20 External Antenna Plug

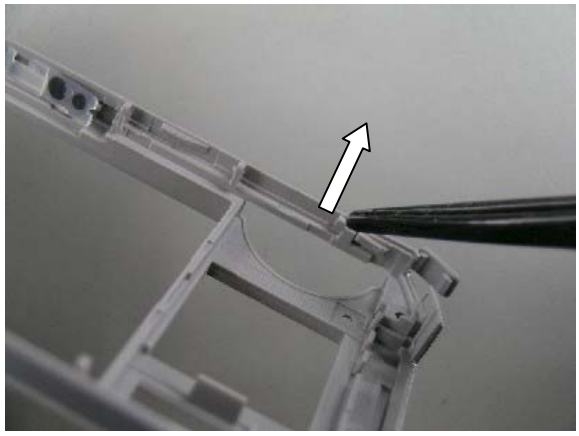
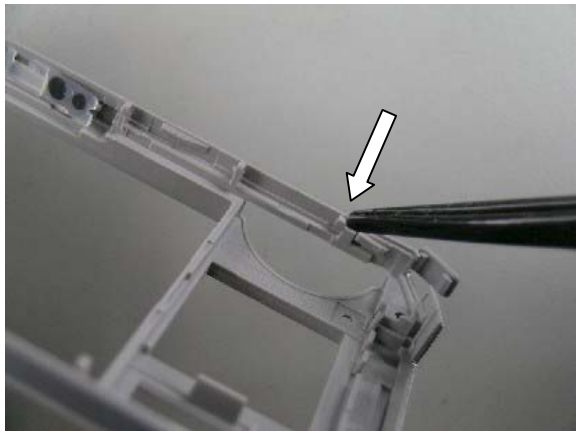
- Disassemble the phone as described in Disassembly

	Step-by-Step Instructions	
1	NOTE! Be careful not to damage the phone. Use a dentist hook to remove the External Antenna Plug, according to the picture.	
2	Use a pair of tweezers to assemble the External Antenna Plug, according to the picture.	

- Assemble the phone as described in Assembly

1.21 USB cover

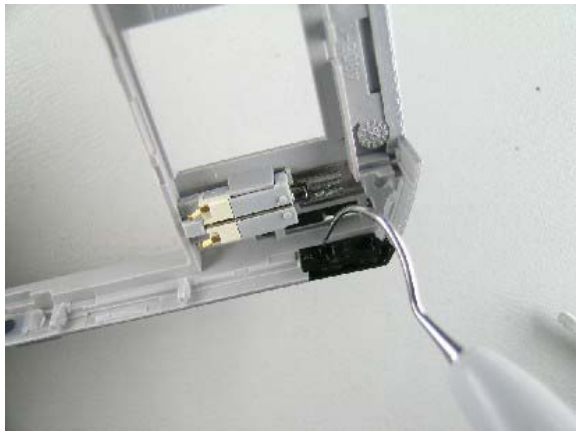
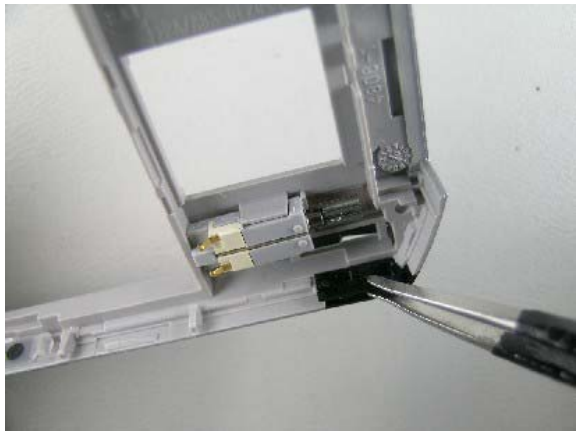
- Disassemble the phone as described in Disassembly

	Step-by-Step Instructions	
1	Use a pair of tweezers, according to the picture, to remove the USB Cover. Unhook the USB Cover, according to the arrow. Release and remove the USB Cover from the Lower Rear Cover Assy.	
2	Assemble the USB Cover in the cavity in the Lower Inside Cabinet. Use a pair of tweezers, according to the picture, to hook the USB Cover into the Lower Rear Cover Assy cavity, according to the arrow.	

- Assemble the phone as described in Assembly

1.22 Irda window

- Disassemble the phone as described in Disassembly

	Step-by-Step Instructions	
1	NOTE! Be careful not to damage the IrDA window. Remove the IrDA window with a dentist hook, according to the picture, or a pair of tweezers. NOTE! Do not reuse a damaged IrDA window.	
2	NOTE! Be careful not to damage the IrDA window. Make a visual control to be sure that the IrDA window is not damaged or scratched. Assemble the new IrDA window in the Lower Rear Cover with a pair of tweezers, according to the picture.	

- Assemble the phone as described in Assembly

1.23 Battery Lock Spring

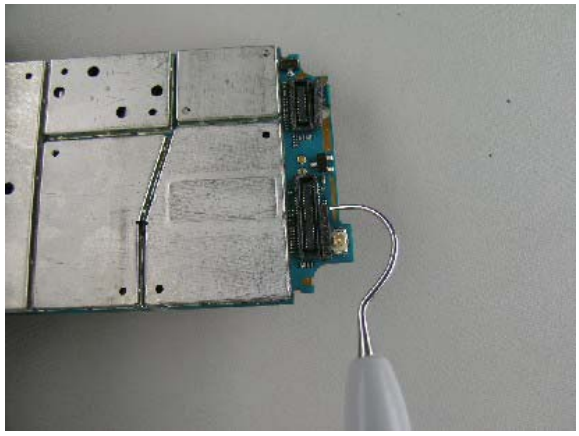
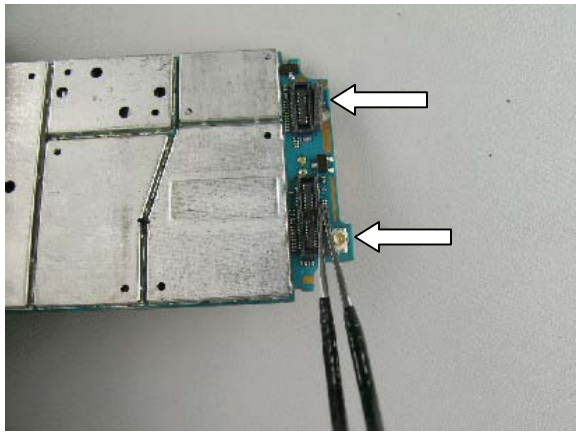
- Disassemble the phone as described in Disassembly

	Step-by-Step Instructions	
1	NOTE! Be careful not to damage the Lower Rear Cover Assy. Remove the Battery Lock Spring. Use a dentist hook, according to the picture. NOTE! Do not reuse a damaged Battery Lock Spring.	
2	NOTE! Be careful not to damage the Battery Lock Spring. Assemble the Battery Lock Spring into the Lower Rear Cover and place it into the cavity, according to arrow. Use a pair of tweezers, according to the picture.	

- Assemble the phone as described in Assembly

1.24 Sealing Gasket

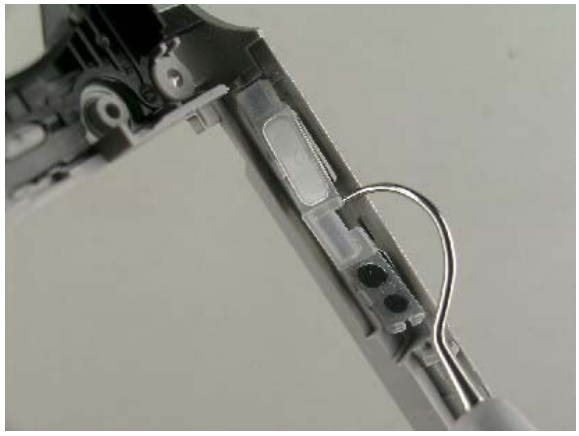
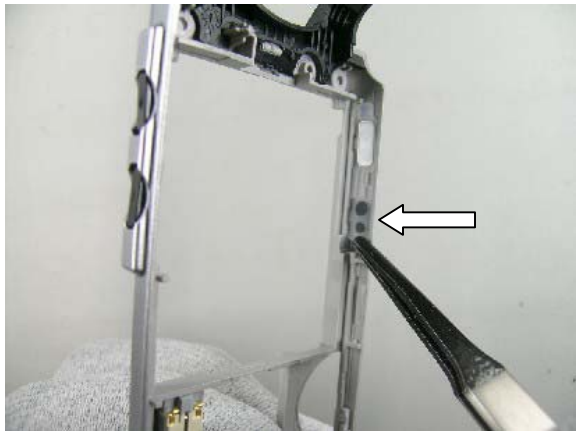
- Disassemble the phone as described in Disassembly

	Step-by-Step Instructions	
1	NOTE! Be careful not to damage the PCB or other components. Remove the Sealing Gaskets. Use a dentist hook, according to the picture, or a pair of tweezers. NOTE! Do not reuse a Sealing Gasket.	
2	Clean the surface of the PCB with Isopropyl Alcohol. Assemble the new sealing gaskets, according to the arrows. Use a pair of tweezers, according to the picture.	

- Assemble the phone as described in Assembly

1.25 Camera Keys

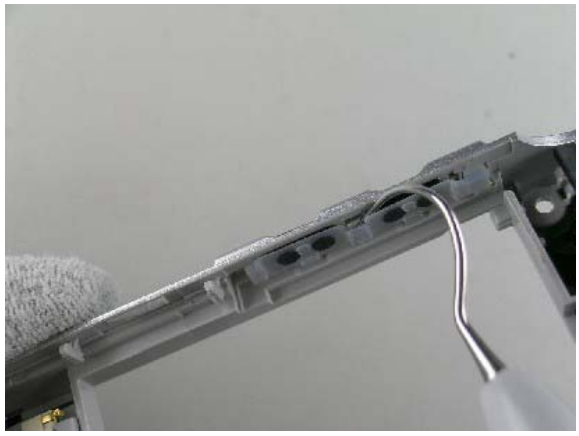
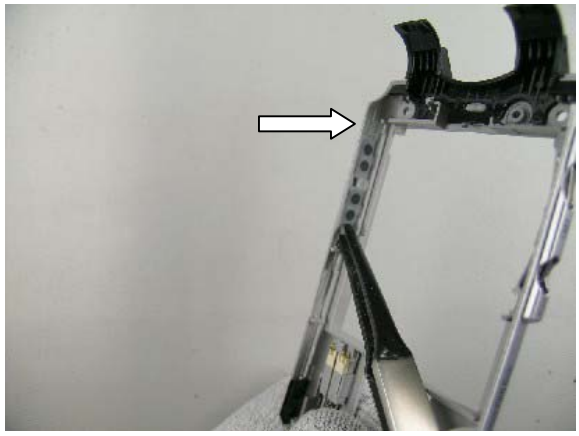
- Disassemble the phone as described in Disassembly

	Step-by-Step Instructions	
1	NOTE! Be careful not to damage the Lower Rear Cover Assy. Remove the Camera Keys. Use the dentist hook, according to the picture, or a pair of tweezers. NOTE! Do not reuse damaged Camera Keys.	
2	NOTE! Place in right direction. The black dots should be located on the Camera Led Bottom, according to the arrow. Place the Camera Keys in the Lower Rear Cover Assy. Press gently to secure the assembly. Use a pair of tweezers, according to the picture.	

- Assemble the phone as described in Assembly

1.26 Volume Keys

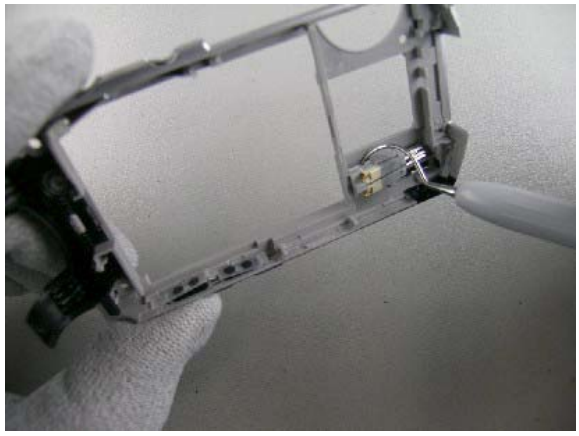
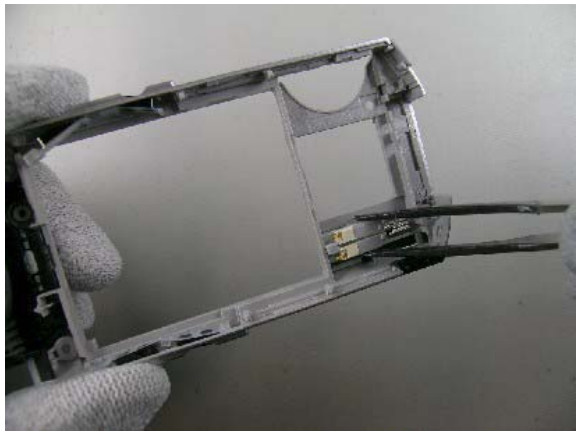
- Disassemble the phone as described in Disassembly

	Step-by-Step Instructions	
1	NOTE! Be careful not to damage the Lower Rear Cover Assy. Remove the Volume Keys. Use the dentist hook, according to the picture, or a pair of tweezers. NOTE! Do not reuse damaged Volume Keys.	
2	NOTE! Place in right direction. The Lower Rear Cover Assy has a guiding pin, which is located according to the arrow, and the Volume Keys has a guiding hole. Place the new volume keys in the Lower Rear Cover Assy and press the guiding pin into the Volume Keys guiding hole. Press slightly to secure the assembly.	

- Assemble the phone as described in Assembly

1.27 Vibrator

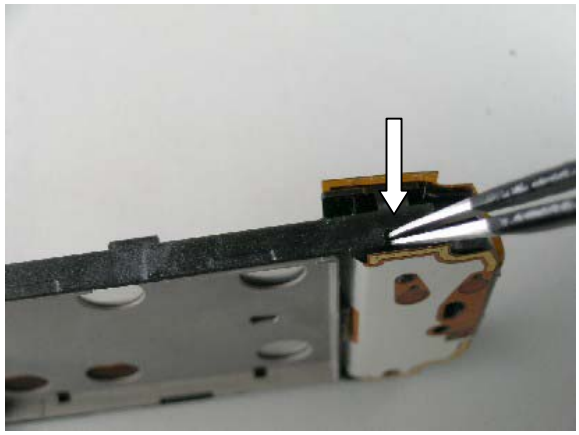
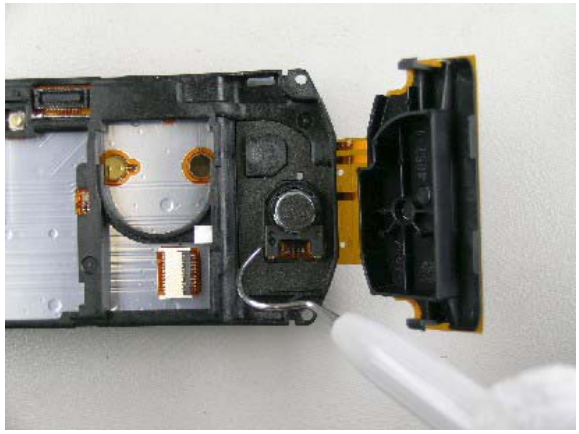
- Disassemble the phone as described in Disassembly

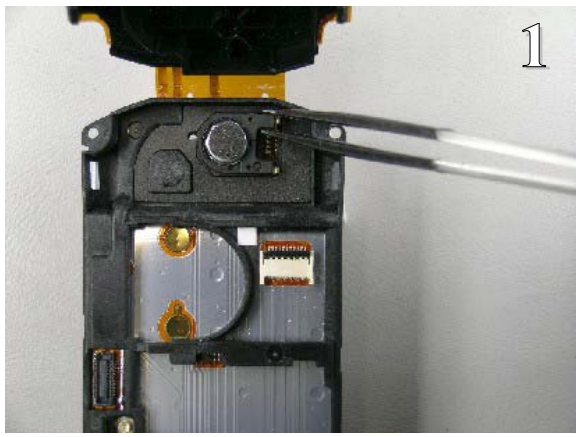
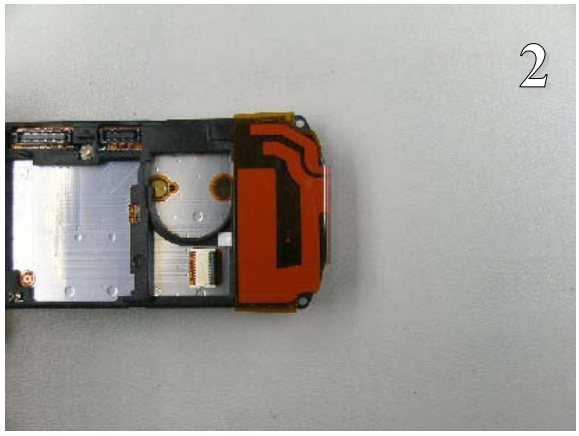
	Step-by-Step Instructions	
1	NOTE! Do not lift the Vibrator in the flywheel. Be careful not to damage the Connector Pins or the Coating of the Vibrator. Use a dentist hook, according to the picture, or a pair of tweezers to remove the Vibrator . NOTE! Do not reuse a damaged Vibrator.	
2	NOTE! Be careful not to damage the Connector Pins or the Coating of the Vibrator. Place the new Vibrator in cavity of Lower Rear Cover Cavity. Use a pair of tweezers, according to the picture, to press it into the correct position.	

- Assemble the phone as described in Assembly

1.28 Earspeaker

- Disassemble the phone as described in Disassembly

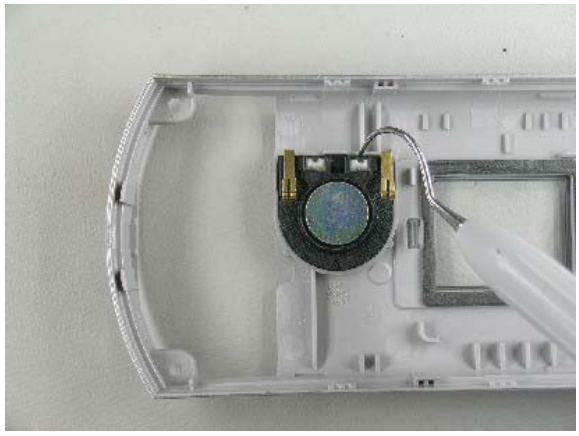
	Step-by-Step Instructions	
1	NOTE! Be careful not to damage the snap hooks of the Antenna Lid. There are two snap hooks. One is located on the left side of the Antenna Lid, according to the arrow, and the other one is located on the right side. Unhook the two snaps hooks of the Antenna Lid. Use a pair of tweezers, according to the picture. Gently fold up the Antenna Flex Film Assy.	
2	NOTE! Be careful not to damage Ear Speaker. Remove the Ear Speaker. Use the dentist hook, according to the picture, or a pair of tweezers. NOTE! Do not reuse a damaged Ear Speaker.	

	Step-by-Step Instructions	
3	Clean the cavity in the Upper Carrier Assy with Isopropyl Alcohol. Remove the protective tape of the Ear Speaker. Assemble the Ear Speaker in the cavity of the Upper Carrier Assy. Press gently with a pair of tweezers, according to the picture (**1**). Fold down the Antenna Lid, according to the picture (**2**).	 

- Assemble the phone as described in Assembly

1.29 Loud Speaker

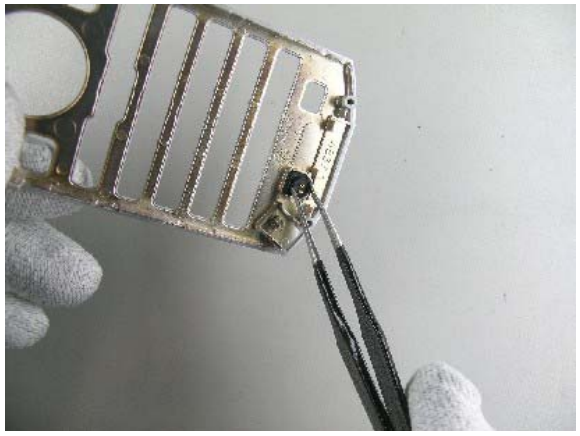
- Disassemble the phone as described in Disassembly

	Step-by-Step Instructions	
1	NOTE! Be careful not to damage Load Speaker Remove the Load Speaker with a dentist hook, according to the picture, or a pair of tweezers. NOTE! Do not reuse a damaged Loud Speaker	
2	NOTE! Be careful not to damage the Connector springs on the Loud Speaker. Place the Speaker in the cavity of Upper Rear Cover Assy. Press gently down the Speaker with your fingers, according to the picture.	

- Assemble the phone as described in Assembly

1.30 Microphone

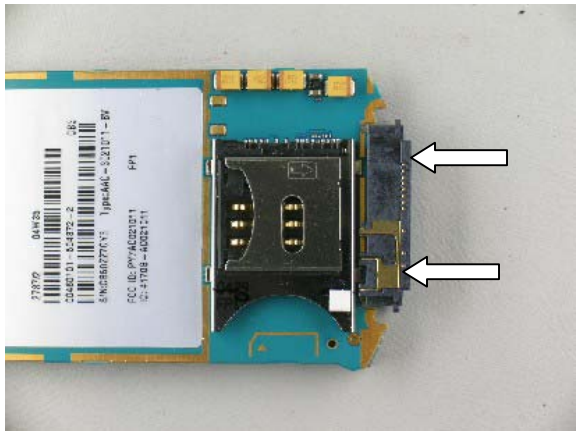
- Disassemble the phone as described in Disassembly

	Step-by-Step Instructions	
1	NOTE! Be careful not to damage the Microphone or the Lower Front Assy. Remove the Microphone by using a dentist hook, according to the picture, or a pair of tweezers. NOTE! Do not reuse a damage Microphone.	
2	NOTE! Be careful not to damage the connecting pins Press down the Microphone with a pair of tweezers, according to picture.	

- Assemble the phone as described in Assembly

1.31 System Connector

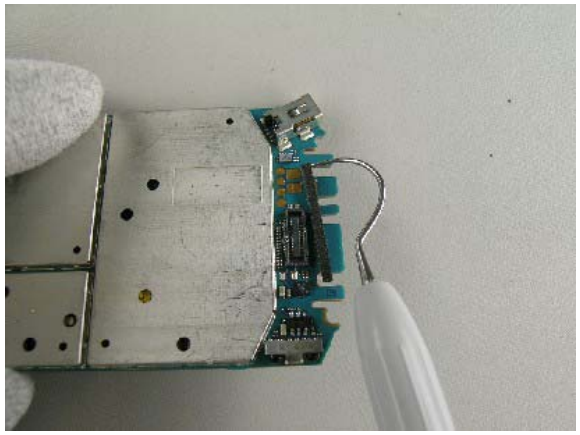
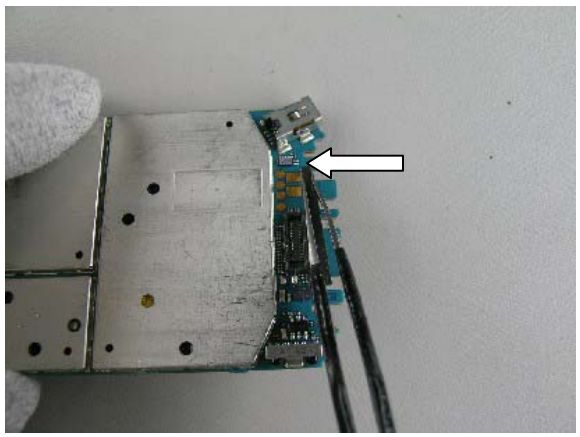
- Disassemble the phone as described in Disassembly

	Step-by-Step Instructions	
1	Remove the System Connector. Use your fingers. Assemble the System Connector. Press it, according to the arrows, all the way into the PCB. Use your fingers.	

- Assemble the phone as described in Assembly

1.32 Light Gasket

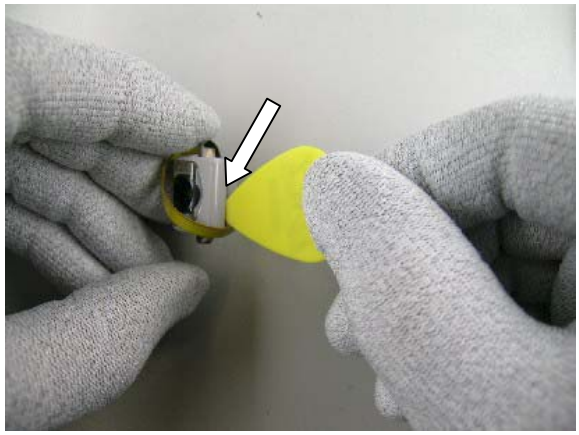
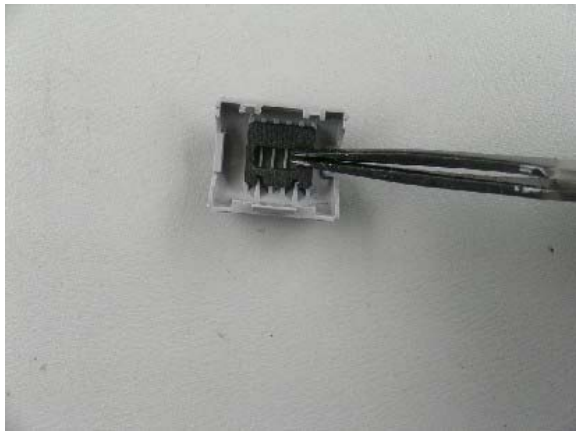
- Disassemble the phone as described in Disassembly

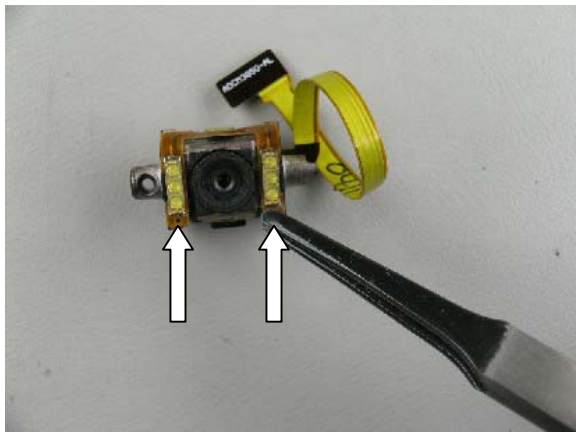
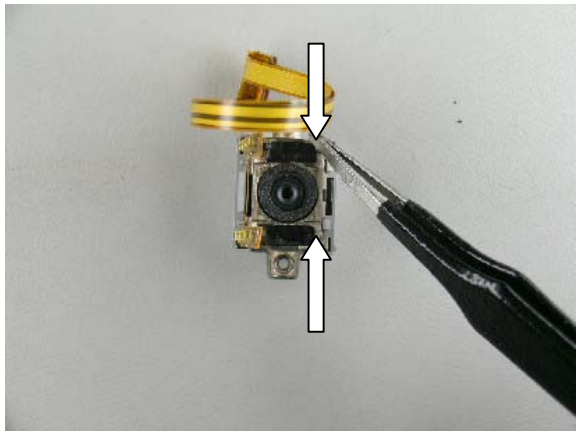
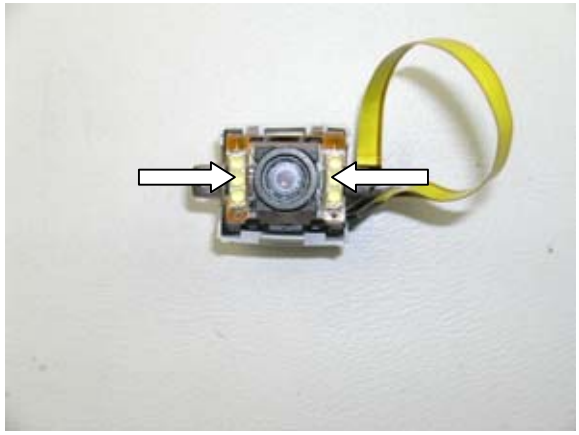
	Step-by-Step Instructions	
1	NOTE! Be careful not to damage the PCB or other components. Remove the Light Gasket. Use a dentist hook, according to the picture. NOTE! Do not reuse a Light Gasket.	
2	Clean the PCB with Isopropyl Alcohol. NOTE! Be careful not to damage the Light Gasket, PCB or other components. Assemble the Light Gasket, according to the arrow. Use a pair of tweezers, according to the picture.	

- Assemble the phone as described in Assembly

1.33 Camera

- Disassemble the phone as described in Disassembly

	Step-by-Step Instructions	
1	NOTE! There is a small gap between the Camera Back Cover and the Camera Front Assy. This is where the Plectrum should be inserted, according to the arrow. Separate the Camera Back Cover and Camera Front Assy by insert the Plectrum in the gap, according to the arrow. NOTE! Do not reuse the Camera Back Cover or the Camera Front Assy.	
2	NOTE! All parts of the camera must be new parts. Use a pair of tweezers to apply the Camera Gasket on the Camera Back Cover, according to the picture.	
3	NOTE! All parts of the camera must be new parts. Use a pair of tweezers to assemble the magnet in the cavity of the Camera Carrier, according to the picture.	

	Step-by-Step Instructions	
4	NOTE! All parts of the camera must be new parts. Be careful not to damage the Camera Lens. There are two guiding pins on the Camera Carrier and there are two guiding holes in the Flex Film that carries the LED´s. They are located according to the arrows. Insert the Camera Module into the Camera Carrier. Use a pair of tweezers to fold down, and apply, the Flex Film that carries the LED´s over the Camera Carrier, according to the picture. Match the guiding pins of the Camera Carrier with the guiding holes of the Flex Film that carries the LED´s.	
5	NOTE! All parts of the camera must be new parts. The Conductive Tape´s has a bevelled edges and the Camera Carrier has guiding pins. They are locade according to the arrows. Clean the cavity in the top of the Camera Carrier with Isopropyl Alcohol. Use a pair of tweezers, according to the picture, to apply the two Conductive Tapes on the top of the Camera Carrier. Match the bevelled edge of the Conductive Tape with the guiding pin of the Camera Carrier.	
6	NOTE! All parts of the camera must be new parts. Be careful not to damage the Flex Film. Use your fingers to snap the Camera Module into the Camera Back Cover. Press according to the arrows. A click sound will confirm that the covers are correct mounted. NOTE! Confirm that the Magnet on the Camera Carrier is still in the correct position.	

	Step-by-Step Instructions	
7	NOTE! All parts of the camera must be new parts. Be careful not to damage the Camera Lens. Clean the Camera Lens with Isopropyl Alcohol. Apply the Light Gasket with a pair of tweezers, according to the picture, on the Camera Lens edge.	
8	NOTE! Be careful not to damage the Camera Flex Film. The Camera Back Cover and the Camera Front Assy must be assembled in straight Z-direction, according to the picture. This is important because the snap hooks of the Camera Back Cover are sensitive and can easily be damaged. Do not use damaged covers. Snap the Front Cover Assy over the Camera Back Cover. A click sound will confirm that the covers are correct mounted.	

- Assemble the phone as described in Assembly

1.34 ESD Ground Pad, Cabinet

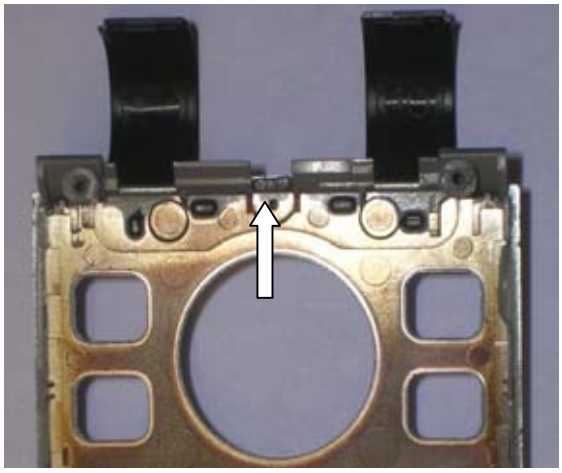
- Disassemble the phone as described in Disassembly

	Step-by-Step Instructions	
1	Use a a pair of tweezers to remove the ESD Ground Pad from the Lower Front Cover. NOTE! Do not reuse a ESD Ground Pad. Clean the surface of the Lower Front Cover with Isoproyl Alcohol. Assemble the ESD Ground Pad on the Lower Front Cover, according to the arrow.	

- Assemble the phone as described in Assembly

1.35 Dust Gasket Lower Front

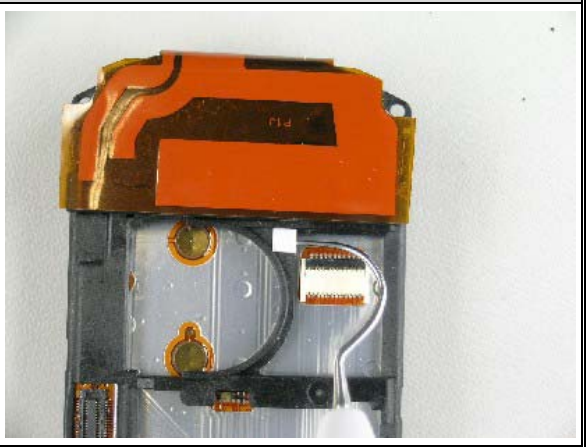
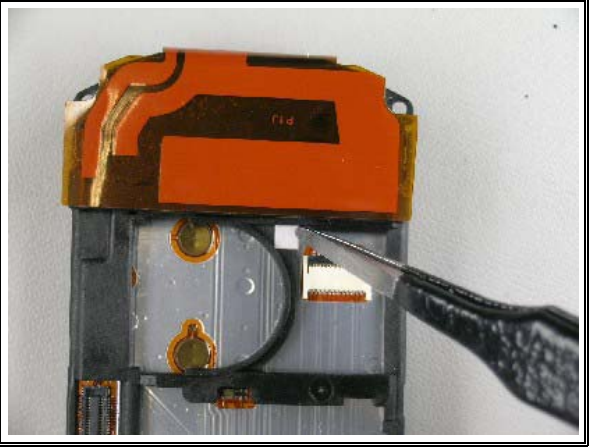
- Disassemble the phone as described in Disassembly

	Step-by-Step Instructions	
1	Use a pair of tweezers to remove the Dust Gasket Lower Front from the Lower Front Cover. NOTE! Do not reuse a Dust Gasket Lower Front. Clean the surface of the Lower Front Cover with Isoproyl Alcohol. Assemble the Dust Gasket Lower Front on the Lower Front Cover, according to the arrow.	

- Assemble the phone as described in Assembly

1.36 Water Indicator

- Disassemble the phone as described in Disassembly

	Step-by-Step Instructions	
1	NOTE! Be careful not to damage the Upper Carrier Assy or the Antenna Flex Film. Use a dentist hook, according to the picture, to remove the Water Indicator. NOTE! Do not reuse a Water Indicator.	
2	Clean the surface of the Upper Carrier Assy with Isopropyl Alcohol. Use a pair of tweezers, according to the picture, to apply the Water Indicator on the Upper Carrier Assy.	

Label

Tools

- **Hot air flow solder station**
- **Tweezers**
- **Zebra printer and computer**

Instruction

This instruction should be used when you will replace a label.

1. Read the old label and write the information into the LabelMake II program.
2. Heat up the label with a hot air flow solder station.
3. Carefully remove the label. Do not scratch the frame. Clean the surface with Isopropyl alcohol.

   NOTE! Only one label is allowed on the frame.
4. Check that the right label format is loaded in the Zebra printer. See Part List for correct part number.
5. Write a new label by using the LabelMake II program. Confirm that the printing is ok.
6. Apply the new label into the frame, according to figure 4.1. Assure that label is placed in the correct position.

figure 4.1

Revision History

Rev.	Date	Changes / Comments
A	2004-11-04	First Release
B	2004-12-13	Due to system problem
C	2004-12-15	Due to system problem
D	2004-12-20	Corrected wrong R-state references
E	2005-02-11	Updated Chapter Disassembly
F	2005-04-21	Z800i added
G	2005-05-02	Added ESD Tape chapter Re-Assembly

Trouble Shooting Guide, Mechanical

Applicable for V800, V802se, Z800i

Contents

1 Explanations

1.1 Service functions in the software

The service menu will be accessed with the following key combination. Use the joystick.

⇒*⇐⇐*⇐*

They are as follows:

Service info

Service tests

Text labels

The phones software service can do a functionality test of the following parts in the phone:

Main display

External display

Camera

LED/illumination

Flash LED

Keyboard

Vibrator

Earphone

Speaker

Microphone

Real time clock

Total call time

Memory Stick

1.2 Misuse and other no warranty issues

This chapter will explain what is not covered by warranty.

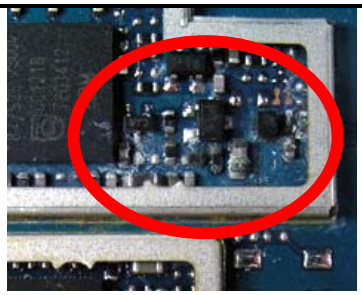
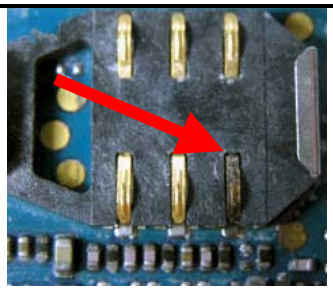
Phones that have been exposed to misuse will not be covered by warranty. If the phone is reparable, the customer will have to pay for it. SEMC will not allow any of these phones to be claimed into WCMS. Some local perspectives may interfere with this. Please reference to local directives.

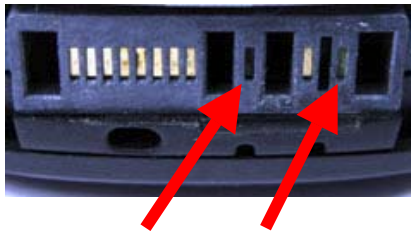
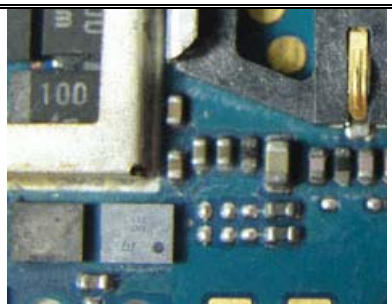
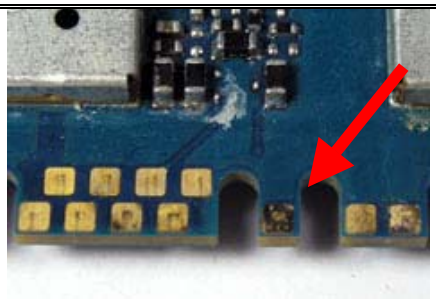
1.2.1 Action

Make a general visual inspection for misuse.

Below are some examples of what is not covered by warranty.

		
Front window broken due to misuse.	LCD cracked due to drop.	Clear scratches

		
Corrosion components on the PCB.	Corrosion components on the PCB.	SIM reader damaged by liquid.

		
System connector damaged by liquid	Components around system connector damaged by liquid	System connector pad(s) damaged by liquid

1.2.2 Liquid damage sticker

There are stickers placed in the phone that can give you the possibility to see if the phone is damage by liquid or not. One of these stickers is located near the SIM reader (Fig. 1.2.1) and it is possible to see it without disassemble the phone.

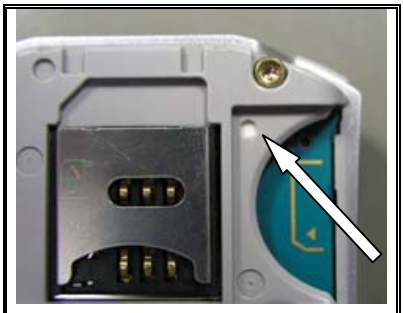


Fig. 1.2.1

On the pictures below you will see the difference between a sticker that has been in contact with liquid (Fig. 1.2.3) and one that has not (Fig. 1.2.2).

This sticker is ok

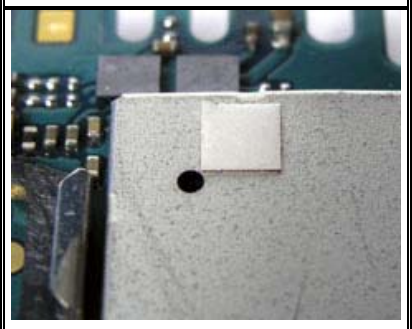


Fig. 1.2.2

This sticker has not been in contact with liquid.

This sticker <u>is not</u> ok

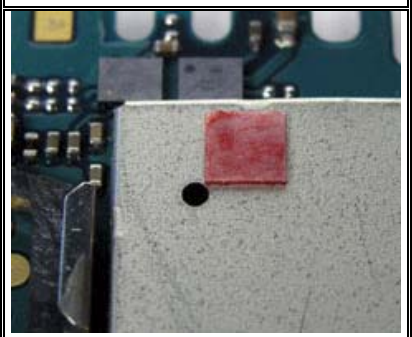


Fig. 1.2.3

This sticker has been in contact with liquid. As you can see the label color has turn from white into a pink or red. In this case you should check the phone for liquid damage
(See point 1.2.2).

Note: There must be clear marks after liquid on the PCB before rejecting the phone for repair.

1.2.3 Action

Make a general visual inspection for corrosion or oxidation from liquid damage. No further action should be taken for a liquid damaged phone. Handle the unit according to local directives.

2 Appearance Problems

- Make a general visual inspection for misuse, corrosion or oxidation from liquid damage according to point 1.2

2.1 General inspection

- Check the Upper Rear Complete (Fig. 2.1), the Upper Rear Lid (Fig. 2.1), the Lower Rear Cover (Fig. 2.2), the Battery Cover (Fig. 2.2.), the Upper Front Complete (Fig.2.3) and the Lower Front Complete (Fig. 2.4) for damage, scratches and if the parts fit correct. Replace faulty components if necessary.
- Check the Keyboard (Fig. 2.4), the Camera Keys (Fig. 2.5) and the Volume Keys (Fig. 2.5) for damage, scratches and if the parts fit correct. Replace faulty components if necessary.
- Check the Camera Front Assy (Fig. 2.6) and the Camera Back Cover (Fig. 2.7) for damage, scratches and gaps. Also check if the parts fit correct. Replace the faulty components if necessary.
- Check the External Antenna Plug (Fig. 2.2), the USB Cover, (Fig. 2.8) and the IrDA Window (Fig. 2.9) for damage, scratches and if the parts fit correct. Replace faulty components if necessary.

If the failure still occurs, handle the unit according to the local directives.

2.2 Squeaking sound

Do the following instructions when there is a squeaking sound:

1 Remove the two lower screws. Gently bend up the Lower Front and lift up the IRDA Window.

2 Put the IRDA Window back and make sure it is pressed down as far as possible.

3 When assembling the screws, start with the screw at the IRDA Window and press down over the IRDA while screwing.

Fig. 2.1

Fig. 2.2

Fig. 2.3

Fig. 2.4

Fig. 2.5

Fig. 2.6

Fig. 2.7

Fig. 2.8

Fig. 2.9

3 Alert Problems

- Make a general visual inspection for misuse, corrosion or oxidation from liquid damage according to point 1.2

3.1 Vibrator

- Turn on the phone. Go to the service test menu; choose “Vibrator”. Press any key to confirm that the vibrator works properly.
- Check if the Vibrator Pads on the PCB (Fig. 3.1) are dirty or oxidized. Clean them if necessary.
- Check if the Vibrator (Fig. 3.2) is mechanical damaged, dirty or oxidized. Replace it if necessary.

  Note: When replacing vibrator; assure that the water indicator is correct placed, according to the picture (Fig. 3.2).

If the fault still occurs, try to update the phone to the latest available software version. If this does not solve the problem, handle the unit according to the local directives.

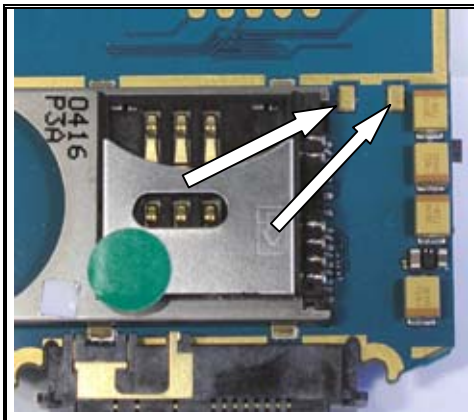


Fig. 3.1

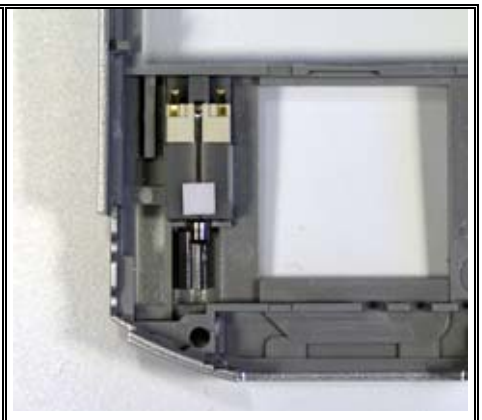


Fig. 3.2

3.2 Loudspeaker

- Turn on the phone. Go to the service test menu; choose “Speaker”. Press any key to confirm that the polyphonic ring signal works properly.
- Check if the Loudspeaker pads on the PCB (Fig. 3.3) are dirty or oxidized. Clean them if necessary.
- Check if the Loudspeaker (Fig. 3.4) is mechanical damaged, dirty or oxidized. Replace it if necessary.

If the fault still occurs, try to update the phone to the latest available software version. If this does not solve the problem, handle the unit according to the local directives.

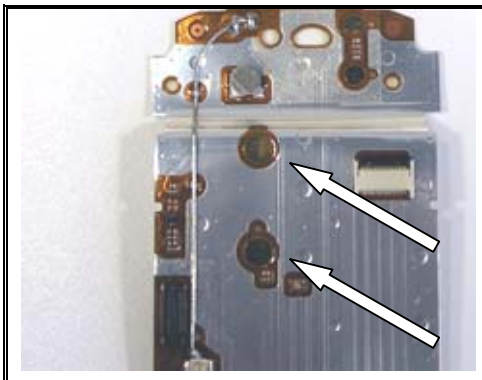


Fig. 3.3

Fig. 3.4

4 Audio Problems

- Make a general visual inspection for misuse, corrosion or oxidation from liquid damage according to point 1.2

4.1 Earphone

- Turn on the phone. Go to the service test menu; choose “Earphone”. Press any key to confirm that the speaker works properly.
- Check if the Earphone pads on the PCB (Fig. 4.1) are dirty or oxidized. Clean them if necessary.
- Check if the Earphone (Fig. 4.2) is mechanical damaged, dirty or oxidized. Replace it if necessary.

If the fault still occurs, try to update the phone to the latest available software version. If this does not solve the problem, handle the unit according to the local directives.

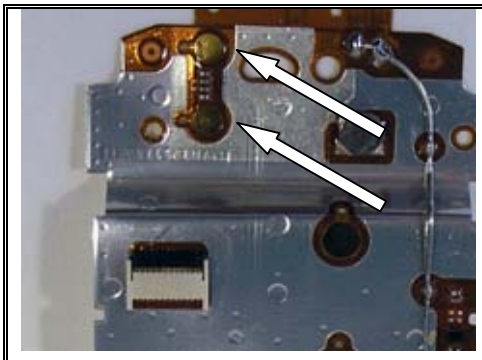


Fig. 4.1

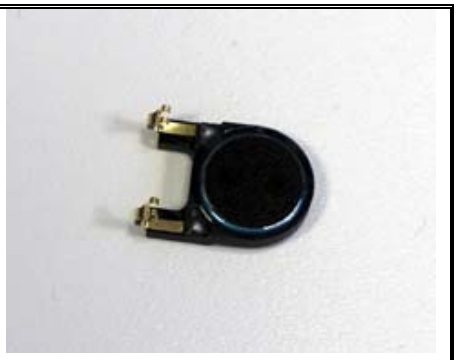


Fig. 4.2

4.2 Microphone problems

- Turn on the phone. Go to the service test menu; choose “Microphone”. Confirm that the microphone works properly.
- Check if the Microphone Pads (Fig. 4.4) are dirty or oxidized. Clean them if necessary.
- Check if the Microphone Assy (Fig. 4.5) is mechanical damaged, dirty or oxidized. Replace it if necessary.

If the fault still occurs, try to update the phone to the latest available software version. If this does not solve the problem, handle the unit according to the local directives.

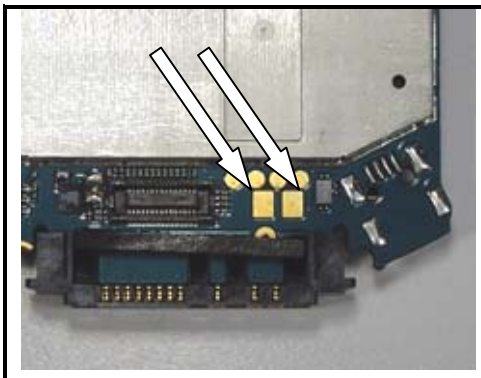


Fig. 4.4

Fig. 4.5

5 Charging/Capacity Problems

- Make a general visual inspection for misuse, corrosion or oxidation from liquid damage according to point 1.2

5.1 Charging

- Insert a working battery and connect a working charger to the phone. If the battery voltage is too low the phone will charge the battery without turning on the phone. This will usually take less than 10 minutes. When the battery voltage is high enough the phone will be able to turn on and show charging in the LCD and the Status Led.
- Check if the system connector (Fig 6.1) is mechanical damaged, dirty or oxidized. Replace it if necessary.

If the fault still occurs, try to update the phone to the latest available software version. If this does not solve the problem, handle the unit according to the local directives.

5.2 Capacity

- The standby time will be reduced if the light is turned on all the time, or if the infrared is activated.

6 Data Communication Problems

- Make a general visual inspection for misuse, corrosion or oxidation from liquid damage according to point 1.2.
- If there is a problem with the communication through the System Connector, e.g. if it is not possible to synchronizing with MS Outlook, check if the System Connector (Fig. 6.1) is mechanical damaged, dirty or oxidized. Replace it if necessary.
- Check for problems with the Bluetooth communication. Replace the System Connector (Fig. 6.1) if necessary.

Note: The Bluetooth Antenna is included in the system connector.

If the fault still occurs, try to update the phone to the latest available software version. If this does not solve the problem, handle the unit according to the local directives.

Fig. 6.1

7 Key/Flip Problems

- Make a general visual inspection for misuse, corrosion or oxidation from liquid damage according to point 1.2

7.1 Side keys

- Turn on the phone. Go to the service test menu; choose “Keyboard”. Press all the Side Keys. The pressed key will be indicated in the LCD and DTMF tones will be heard.
- Check if the Camera Leys (Fig. 7.1) and the Volume Keys (Fig. 7.1) are working properly. Also check if the mechanical response feels normal. Replace the faulty component if necessary.
- Check if the Key Foil Assy (Fig. 7.2) is working properly and that the mechanical response feels normal. Replace it if necessary.

If the fault still occurs, try to update the phone to the latest available software version. If this does not solve the problem, handle the unit according to the local directives.

Fig. 7.1

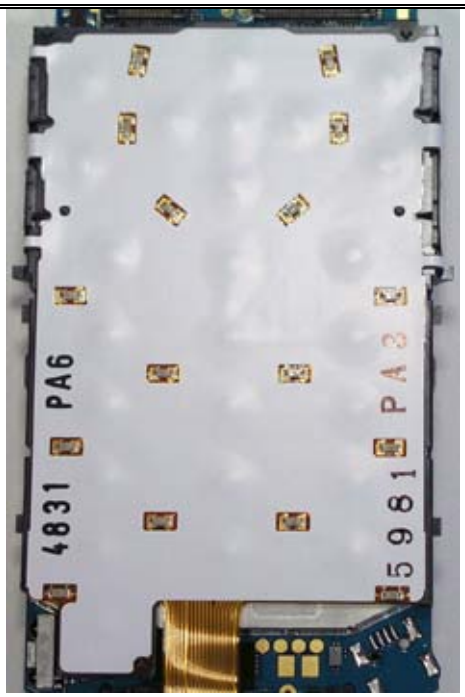


Fig. 7.2

7.2 Keyboard

- Turn on the phone. Go to the service test menu; choose “Keyboard”. Press all the keys. The pressed key will be indicated in the LCD and DTMF tones will be heard.
- Check if the mechanically response feels normal and that all the keys have been showed in the LCD.
- Check if the Keyboard (Fig. 7.3) is mechanical damaged or dirty. Replace it if necessary.
- Check if the Keyboard is working properly and if the mechanical response feels normal. Replace the Key Foil Assy (Fig. 7.2) if necessary.

If the fault still occurs, try to update the phone to the latest available software version. If this does not solve the problem, handle the unit according to the local directives.

Fig. 7.3

8 LCD/Illumination Problems

- Make a general visual inspection for misuse, corrosion or oxidation from liquid damage according to point 1.2.

8.1 Steps to make for detecting a clam open, or close, fault.

If the Sub and/or Main Display does not work at any of the questions under the problem is a clam open/close problem. No SIM Card is needed for this procedure.

These are the steps to make for detecting a clam open, or close, fault:

1 Rotate the Camera to its end ‘click’ position so that it points toward the joystick/rocker key.

2 Turn the phones power off and then turn the power on again.

3 Close the clam and check if the Sub Display work. After that open the clam and check if the Main Display work.

4 Rotate the Camera to its end ‘click’ position so that it points towards the user.

5 Close the clam and check if the Sub Display work. After that open the clam and check if the Main Display work.

6 Rotate the Camera to its end ‘click’ position so that it points away from the user.

7 Close the clam and check if the Sub Display work. After that open the clam and check if the Main Display work.

Continue doing the Steps to make for detecting a clam open, or close, fault if no fault has been detected yet.

8 Rotate the Camera a little bit towards the user.

9 Close the clam and check if the Sub Display work. After that open the clam and check if the Main Display work.

10 Repeat the steps 8 and 9 at least two more times until the Camera is in ‘click’ position, pointing towards the user.

If there is a clam open/close fault do the following steps:

1 Open the Upper Part of the phone and change the Flip Magnet, which is located according to the arrow in Fig. 8.2.

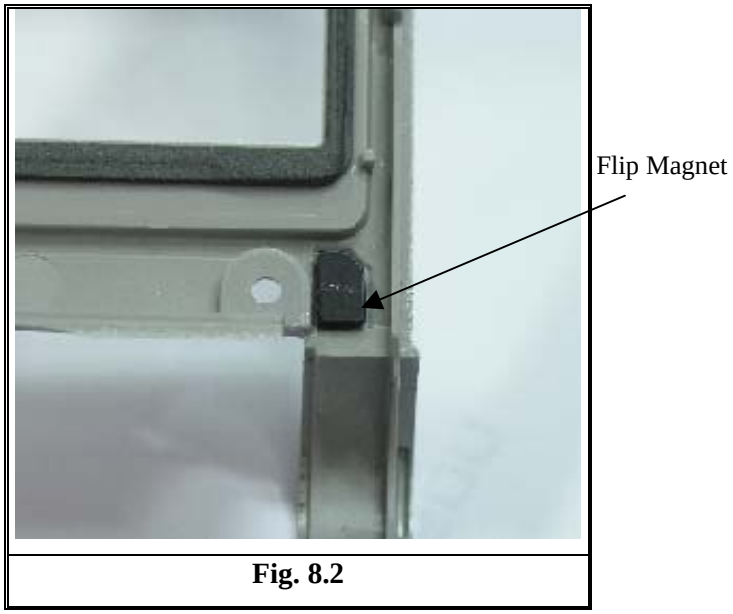


Fig. 8.2

2 Make sure that the new Flip Magnet is placed straight and in bottom of the left corner of the cavity marked in the plastic part.

3 Put together the phone again and go through the steps to make for detecting a clam open, or close, fault. If a clam open/close fault is detected again continue at step number 4.

4 Put together the phone again and go through the steps to make for detecting a clam open, or close, fault. If a clam open/close fault is detected again continue at step number 6.

5 In the Camera Module there is a similar Magnet. Either this or the complete Camera Module is replaced.

8.2 Main LCD

- Turn on the phone. Go to service test menu; choose “Display”. A colour pattern should appear in the Main LCD.
- Check if the Main Display Assy (Fig. 8.1) works properly and if there are lines missing or discolours. Replace it if necessary.

Fig. 8.1

If the fault still occurs, try to update the phone to the latest available software version. If this does not solve the problem, handle the unit according to the local directives.

8.3 Sub LCD

- Turn on the phone. Go to service test menu; choose “Display”. A colour pattern should appear in the Sub LCD.
- Check if the Sub LCD Assy (Fig. 8.2) works properly and if there are lines missing or discolours. Replace it if necessary.

If the fault still occurs, try to update the phone to the latest available software version. If this does not solve the problem, handle the unit according to the local directives.

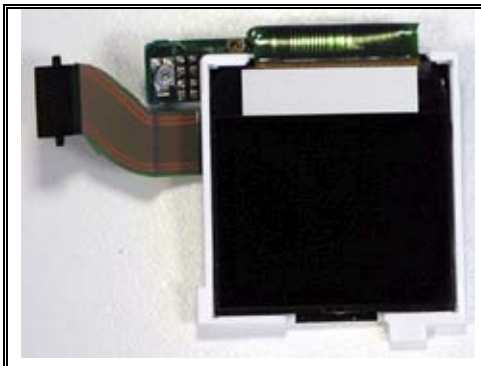


Fig. 8.2

8.4 Illumination

- Turn on the phone. Go to service test menu; choose “LED/Illumination”. The illumination should start blinking (~1Hz).
- Check if the Main Display Assy (Fig 8.1) is lighting up properly. Replace it if necessary.
- Check if the Sub Display Assy (Fig. 8.2) is lighting up properly. Replace it if necessary.
- Check if the Keyboard is lighting up properly. Confirm that all LED’s has the same luminance. Replace the Key Foil Assy (Fig. 8.3) if necessary.

If the fault still occurs, try to update the phone to the latest available software version. If this does not solve the problem, handle the unit according to the local directives.

Fig. 8.1

9 Network Problems

- Make a general visual inspection for misuse, corrosion or oxidation from liquid damage according to point 1.2
- Insert a correct working SIM-card in the phone and turn it on. Check if the phone gets service and if the Signal Strength Indicator shows a value in the Display. Compare this value to the value from a similar test on a properly working phone.
- Check if the Coax Cable (Fig. 9.1) is mechanical damaged, dirty or oxidized. Replace it if necessary.
- Check if the Antenna Assembly (Fig. 9.2) is mechanical damaged, dirty or oxidized. Replace it if necessary.

If the fault still occurs, try to update the phone to the latest available software version. If this does not solve the problem, handle the unit according to the local directives.

Fig. 9.1

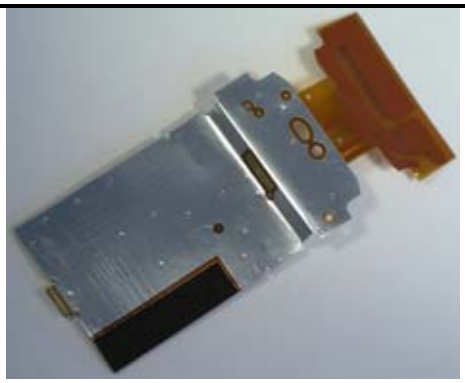


Fig. 9.2

10 On/Off Problems

- Make a general visual inspection for misuse, corrosion or oxidation from liquid damage according to point 1.2.

10.1 Battery

- Insert a working Battery and connect a working charger to the phone. If the Battery Voltage is too low the phone will charge the Battery without turning on the phone. This will usually take less than 10 minutes. When the Battery Voltage is high enough the phone will be able to turn on and show charging in the LCD and the Status LED.

If the fault still occurs, try to update the phone to the latest available software version. If this does not solve the problem, handle the unit according to the local directives.

10.2 On/Off Key

Insert a fully charged Battery and turn the phone on. If it fails to the following actions below.

- Check the keyboard (Fig. 10.1) for mechanical damaged. Replace it if necessary.
- Check if the On/Off Key is working properly and that the mechanical response feels normal. Replace the Key Foil Assy (Fig. 10.1) if necessary.

If the fault still occurs, try to update the phone to the latest available software version. If this does not solve the problem, handle the unit according to the local directives.

Fig. 10.1

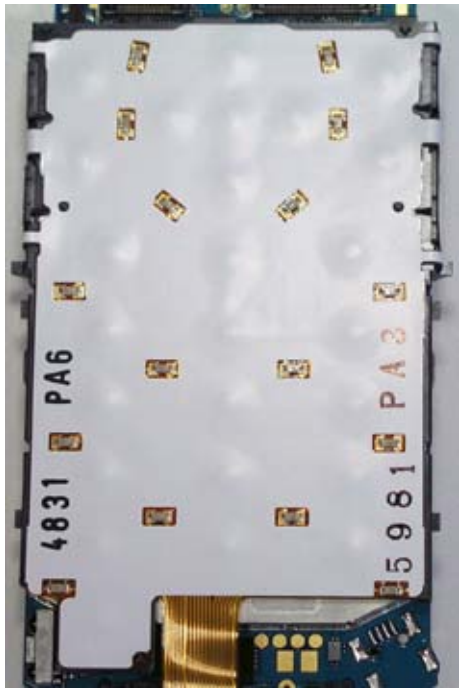


Fig. 10.2

11 Other Problems

11.1 Camera Problems

- Make a general visual inspection of the Camera for misuse, corrosion or oxidation from liquid damage according to point 1.2
- Turn on the phone. Go to the service test menu; choose “Camera”. The Viewfinder will be visible in the LCD.
- Check if the Camera Module (Fig. 11.1) is working properly. Confirm the Viewfinder functionality in the LCD. Confirm that there are no black spots or if the picture is not out of focus. Replace the Camera Module if necessary.
- Check if the picture is flipped upside down. Replace the Camera Magnet (Fig. 11.2) if necessary.

Note: When replacing the Camera Module. Check if the Camera Gasket is damaged. Replace it if necessary.

If the fault still occurs, try to update the phone to the latest available software version. If this does not solve the problem, handle the unit according to the local directives.

Fig. 11.1

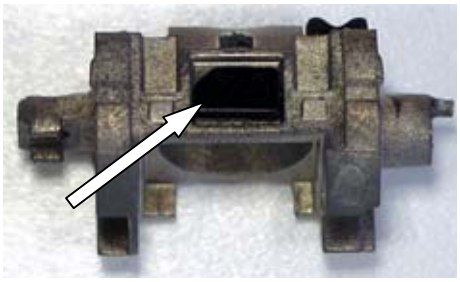


Fig. 11.2

12 Software Problems

There can be problems with the response of the keypad commands, or spelling errors can occur in the menu. If they are not related to mechanical damage, make a master reset and update the phone with the latest software from EMMA II.

Checking the software revision can be done in the Service info, see chapter *Service functions in the software*. Choose; Service info / SW information. The Software revision and date will appear in the display.

If a software upgrade is interrupted for some reason, EMMA II will prompt "Error in sequence" after which the phone will not start up. In order to restore functionality you will need to run "V800x Flash Recovery". The script can be found under "Flash" in EMMA II.
After a successful recovery you will need to re-flash the phone with correct signalling software before start up.

Note: Do a software upgrade before sending the unit to a higher level. Do **not** scrap a phone that has not been upgraded with the latest software.

If the failure still occurs, handle the unit according to the local directives.

13 Revision History

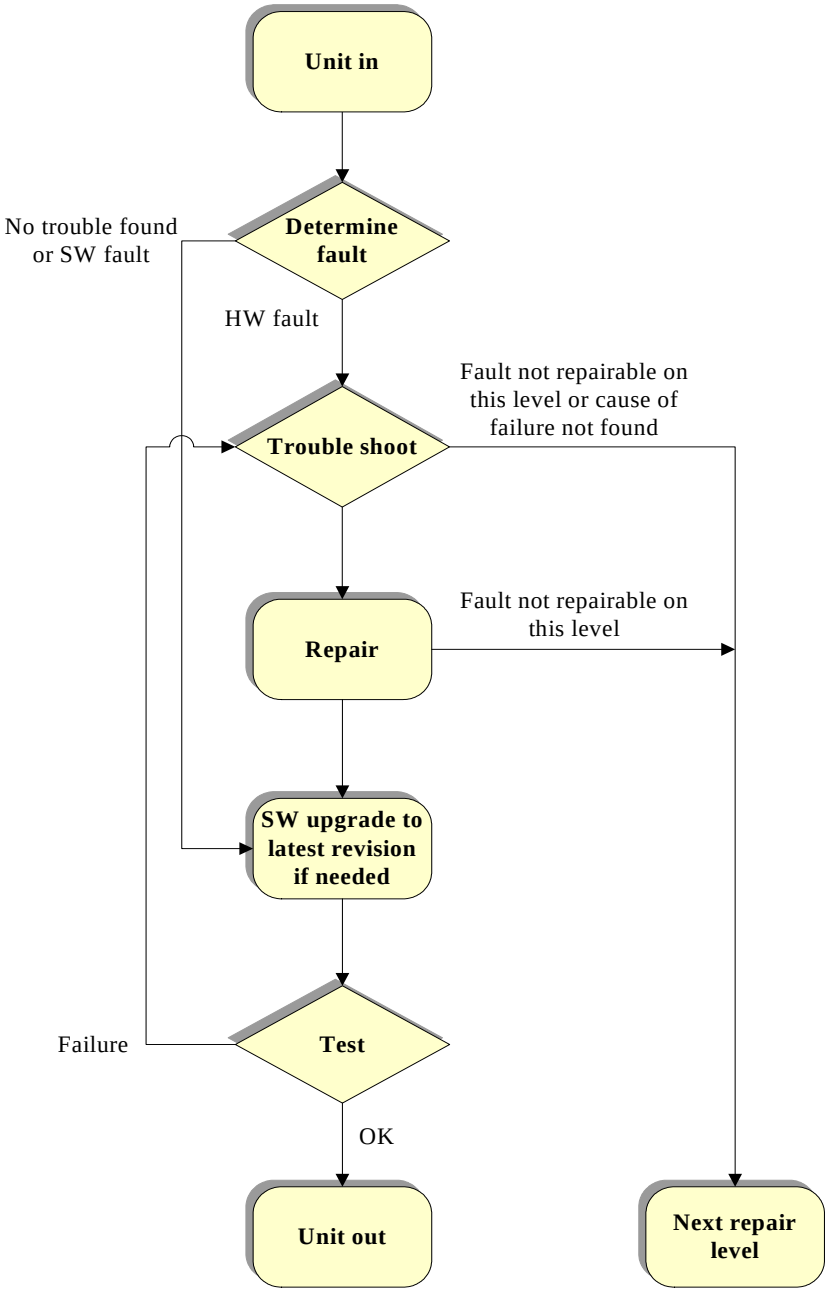
Rev.	Date	Changes / Comments
A	2004-11-05	First release
B	2004-12-13	Due to system problem
C	2004-12-15	Due to system problem
D	2005-02-11	Chapter 2.2 and 8.1 is added
E	2005-04-21	Z800i added

Process Flow, Mechanical

Applicable for V800/V802se, Z800i

Contents

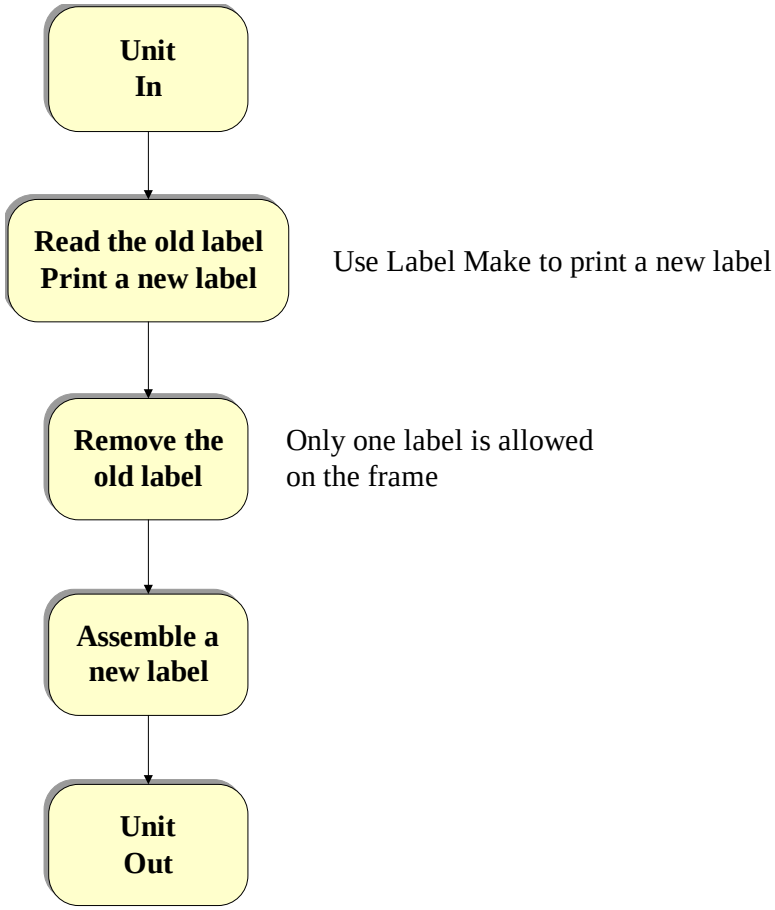
1 Process Flow, Mechanical



1.1 Process Flow Mechanical, Description

Box	Reference
Unit in	Process the phone according to local requirements.
Determine fault	Determine if the phone is faulty or not and if it possible confirm the customer's complaint. If a **HW** fault is found, or a HW **and** SW fault is found, continue with **Trouble shoot.** If only a SW fault is found **Software upgrade to latest revision,** continue to **Test,** and **Unit out. Report as *SW upgrade*** If no HW or SW fault is found, continue to **Software upgrade to latest revision,** continue to **Test,** and **Unit out.** **Report as *No Trouble Found, NTF*.**
Trouble shoot	***Trouble Shooting Guide, Mechanical*** Determine the cause of the failure. Trouble-shoot the phone according to the guide for the most common faults.
Repair	***Working Instruction, Mechanical*** Repair the faulty phone according to the instruction. Replace parts as required. ***(Product Change Survey, Mechanical)*** Flashing the latest software into the phone at this point may "repair" some problems.
SW upgrade to latest revision if needed	Control the SW revision in the product, update to latest revision if needed.
Test	***Test Instruction, Mechanical*** To verify that the phone works, all test actions must be performed.
Unit Out	Process and package the phone according to local requirements.
Next Repair Level	If the cause of the failure cannot be found or is not reparable at this level, then send the phone to the next repair level, or return it to the customer at the customer's request.

2 Process Flow, Label



2.1 Process Flow Label, Description

Box	Reference
Read the old label **Print a new label**	Use the **Label Make** program; read the information on the old label and use that as an input for the new label. Print a new Label. Continue with **Remove the old label**.
Remove the old label	***Working Instructions*** Remove the old label according to the instructions. Only one label is allowed on the frame. Continue with **Assemble a new label**.
Assemble a new label	***Working Instructions*** Assemble the new label according to the instructions.

3 Revision History

Rev.	Date	Changes / Comments
A	2004-11-30	First Release
B	2004-12-03	Due to system problem
C	2004-12-13	Due to system problem
D	2004-12-15	Due to system problem
E	2005-04-21	Z800i added

Product Change Survey

Applicable for V800, V802se, Z800

Content

1 Repair Overview

1.1 Label content

Printing Information

Content		Format
Line 1a (3.0/4,0)	Sony Ericsson stylized name.	Graphics, height 1,4 mm. According to 190 89–EN/LZT 108 5347
Line 1b (3.0/19,0)	Model name	Text, height 1,2 mm.
Line 1c (3.0/25,0)	Product number (without R-state) of the DPY kit in which the phone is packed, if applicable. Printed without “DPY 101”, “0000/000”	Text, height 1,2 mm.
Line 2a (5,0/4,0)	Type number of the phone (KRH), “TYPE: AAD-3021011-BV”.	Text, height 1,2 mm.
Line 2b (5,0/23,0)	ROA and R-state identification field, “GHY$_1$Y$_2$Y$_3$”	Text, height 1,2 mm. According to the 3/151 86- document in the 1095- for the SVV.

Line 2c (5,0/28,0)	Location code of where the phone is flashed, if applicable, "FFF"	Text, height 1,2 mm.
Line 3a (7,0/4,0)	Federal Communications Commission identification number: "FCC ID: PY7AD021011"	Text, height 1,2 mm.
Line 3b (7,0/21,0)	Industry Canada certification number: "IC: 4170B-AD021011 "	Text, height 1,2 mm.
Line 4 (11,0/4,0)	Line 5a in bar code. As desired by supplier (e.g. only actual number).	Bar code, height 2,5 mm. As desired by supplier (e.g. Code 128 symbology).
Line 5a (13,0/4,0)	Supplier's identification for trace-ability of the telephone, as desired by supplier (e.g. "S/N: nnn…." for serial number).	Text, height 1,2 mm. Defined by supplier.
Line 5b (13,0/15,0)	Electronic serial number (IMEI) of phone (KRH), "IMEI: 00000000-000000-0".	Text, height 1,2 mm. In the format TAC-SNR-CD. TAC and SNR derived from the 3/151 86-document in the 1095- for the SVV. CD = check digit according to the Luhn formula (ISO/IEC 7812), GSM 02.16.
Line 6 (16,0/4,0)	Line 5b in bar code (only actual number, without data identifier).	Bar code, height 2,5 mm. Code 128 symbology, code C subset. If uneven number of digits, code B subset shall be used for the last digit.
Line 7 (20,0/4,0)	Repair week, if applicable. "Ry'W'ww" (y = year, ww = week)	Text, height 1,2 mm.
Line 8a (22,0/4,0)	Production week, "yy'W'ww" (yy = year, ww = week)	Text, height 1,2 mm.
Line 8b (22,0/22,0)	"CE0682" approval symbol.	Graphics, height 5 mm. According to SVF 930 182/2.
Line 9 (39,0/1,5)	Additional field/lines.	The field shall be left blank unless otherwise stated in a separate 2/151 86–document in the 1095- of the actual SVV.
Line 10 (46,0/4,0)	Marking of origin. The line shall be printed as stated in a separate 1/151 86- document in the 1095- for the SVV, if any.	Text, height 1,2 mm.

1.2 KRH Label

1.2.1 V800/V802se

Type: AAD-3021011-BV

Reference list for the G, H, Y_1, Y_2, Y_3 fields

R-state of T/A CXC	G-field
R1A not type approved	A
R1B	B
R1C	C
R1D	D
R1E	E
R1F	F
R1G	G
R1J	H
R1S	J
R1K	K

KRH R-state	Y_1-field
R1B	A
R1D	B

Type of ROA	Y_2-field
ROA 128 0955/2	A

R-state of T/A KRH from	H-field
R1B	A

ROA R-state	Y_3-field
R2B	A
R3A	B

IMEI number split per production unit

TAC	SNR range			Comments
	BMC	Alsace	Reserve	
35488500	000 000 – 999 999			

1.2.2 Z800i

Type: AAD-3021011-BV

Reference list for the G, H, Y_1, Y_2, Y_3 fields

R-state of T/A CXC	G-field
R1X	L
R1Y	M
R1Z	N

KRH R-state	Y_1-field
R1B	A
R1D	B

Type of ROA	Y_2-field
ROA 128 0955/2	A
ROA 128 0955/4	B

R-state of T/A KRH from	H-field
R1B	A

ROA R-state	Y_3-field
R2B	A
R3A	B

IMEI number split per production unit

TAC	SNR range			Comments
	BMC	FSA	Reserve	
35599100	000 000 – 499 999	500 000 – 699 999		

1.3 Service Keys

Required Service Keys on your smartcard:

- Flash – UMTS SERVICE A00
- Service softwares – UMTS SERVICE A00
- CSCA – CSCA KEY A00

1.4 Service Softwares

- EFR ON (Enhanced Full Rate)
- EFR OFF
- Half Rate ON
- Half Rate OFF
- Ciphering Indicator ON
- Ciphering Indicator OFF
- Reset Total Call Time
- Phone Lock Reset
- *Master Reset* – Not available via EMMA 2. Should be done manually via the MMI in the phone

1.5 Additional Information

The software structure is different from previously released products (eg T610) and this means that cross flashing (change language configuration) is no longer possible.
If a phone contains EU5 from factory it could only be upgraded (flash) with EU5.

If a flash is interrupted for some reason and fails, the message “Error in sequence” is shown and the phone will not be able to start up. A flash recovery could be done to restore functionality again.

1.6 Service Information revision description

The SI ref # is the original document number. Search with the first 5 digits in the ref # to find the document.

SI Ref #	Date	Description
12923-46429	2004-12-22	SI - V800 availability of software on EMMA II
12957-46704	2005-01-05	SI - V800 Signalling software R1J
13139-47653	2005-03-14	SI - V800/802 Signalling Software R1S
13141-47655	2005-03-14	SI - V800/802 Customisation scripts
13149-47732	2005-03-17	SI - V800/V802 Signalling software R1S update
13198-47955	2005-04-01	SI - V800 SWpatch for Voice Dial
13202-47969	2005-04-04	SI - V800/V802 Customisation Scripts R1S

2 Software description

NOTE!
The RTL version (the first release) will **NOT** be available as flash scripts. It is not until the first maintenance release the flash scripts will be available.
However the RTL version will be available as Customise Scripts.

2.1 Identification of correct sw variant

The software description can be found in the MMI (>*<<*<*). The correct variant can be found in the **end** of the Software Info menu in the phone (see example below).

Note ! V800, V802se

The EMMA II variants for V800/V802se contain the ISO code for each specific country, see chapter 2.2.

The reason for adding the country code to the variants is to secure the selection of correct software revision for each specific operator/country. Due to the operator acceptance process, where each operator/country approves or does not approve a software revision, a new revision will not be approved by all countries at the same time. As soon as a specific country has approved a new revision, the country specific EMMA II script will be updated accordingly.

Note! The CXC number is the same for several SW i.e. the correct variant is identified by the language group EU_5, EU_6 etc.

Software Info

R1D003
prgcxc125839_EU_1_VA

LCD SW versions
Main Screen
Current: 20041001
Extern display
Current: 20040920

Camera SW versions
Camera
Current: 5.7

ITP SW version
CXC 125834 R1c

Customization
CDA 102295/17 R19A
cxc125840 R1D003
EU5_VA

2.2 Language Configuration

2.2.1 V800/V802se

Operator	EMMA II variant	Menu languages	T9 Languages	Keypad	Markets & Manuals	TAC #
VFE KK	VFE V802se JP1 (jp/en/es/pt)	(5) Japanese, English, Spanish, Portuguese	Japanese, English, Spanish, Portuguese	Japanese	Japanese (JP + EN)	35488500
VF D2	V800 EU6 DE (en/fr/de/it/ar/hu/tr)	(1) English, French, German, Italian, Arabic, Hungarian, Turkish	English, French, German, Italian, Arabic, Hungarian, Turkish	Latin	Germany (DE)	35488500
VF Spain	V800 EU5 ES (en/nl/el/pt/es/sv)	(2) English, Dutch, Greek, Portuguese, Spanish, Swedish	English, Dutch, Greek, Portuguese, Spanish, Swedish	Latin	Spain (ES)	35488500
VF Sweden	V800 EU5 SE (en/nl/el/pt/es/sv)	(2) English, Dutch, Greek, Portuguese, Spanish, Swedish	English, Dutch, Greek, Portuguese, Spanish, Swedish	Latin	Sweden (SV)	35488500
VF Netherlands	V800 EU5 NL (en/nl/el/pt/es/sv)	(2) English, Dutch, Greek, Portuguese, Spanish, Swedish	English, Dutch, Greek, Portuguese, Spanish, Swedish	Latin	Netherlands (NL+ENs, FR)	35488500
VF Australia	V800 EU6 AU (en/fr/de/it/ar/hu/tr)	(1) English, French, German, Italian, Arabic, Hungarian, Turkish	English, French, German, Italian, Arabic, Hungarian, Turkish	Latin	Australia (EN s)	35488500
VF Ireland	V800 EU6 IE (en/fr/de/it/ar/hu/tr)	(1) English, French, German, Italian, Arabic, Hungarian, Turkish	English, French, German, Italian, Arabic, Hungarian, Turkish	Latin	Ireland (EN s)	35488500
VF Greece	V800 EU5 GR (en/nl/el/pt/es/sv)	(2) English, Dutch, Greek, Portuguese, Spanish, Swedish	English, Dutch, Greek, Portuguese, Spanish, Swedish	Latin	Greece (EL)	35488500
VF Hungary	V800 EU6 HU (en/fr/de/it/ar/hu/tr)	(1) English, French, German, Italian, Arabic, Hungarian, Turkish	English, French, German, Italian, Arabic, Hungarian, Turkish	Latin	Hungary (HU)	35488500
VF Egypt	V800 EU6 EG (en/fr/de/it/ar/hu/tr)	(1) English, French, German, Italian, Arabic, Hungarian, Turkish	English, French, German, Italian, Arabic, Hungarian, Turkish	Latin	Egypt (AR+EN s)	35488500
VF New Zealand	V800 EU6 NZ (en/fr/de/it/ar/hu/tr)	(1) English, French, German, Italian, Arabic, Hungarian, Turkish	English, French, German, Italian, Arabic, Hungarian, Turkish	Latin	N. Zealand (EN s)	35488500
VF UK	V800 EU6 UK (en/fr/de/it/ar/hu/tr)	(1) English, French, German, Italian, Arabic, Hungarian, Turkish	English, French, German, Italian, Arabic, Hungarian, Turkish	Latin	UK (EN s)	35488500
VF Italy	V800 EU6 IT (en/fr/de/it/ar/hu/tr)	(1) English, French, German, Italian, Arabic, Hungarian, Turkish	English, French, German, Italian, Arabic, Hungarian, Turkish	Latin	Italy (IT)	35488500
VF Portugal	V800 EU5 PT (en/nl/el/pt/es/sv)	(2) English, Dutch, Greek, Portuguese, Spanish, Swedish	English, Dutch, Greek, Portuguese, Spanish, Swedish	Latin	Portugal (PT)	35488500
Swisscom (Partner)	V800 EU9 CH (en/fr/de/it/ar/hu/tr)	(1) English, French, German, Italian, Arabic, Hungarian, Turkish	English, French, German, Italian, Arabic, Hungarian, Turkish	Latin	Switzerland (DE+FR+IT+ENs)	35488500
SFR (Partner)	V800 EU9 FR (en/fr/de/it/ar/hu/tr)	(1) English, French, German, Italian, Arabic, Hungarian, Turkish	English, French, German, Italian, Arabic, Hungarian, Turkish	Latin	France (FR)	35488500
Mobilkom (Partner	V800 EU9 AT (en/fr/de/it/ar/hu/tr)	(1) English, French, German, Italian, Arabic, Hungarian, Turkish	English, French, German, Italian, Arabic, Hungarian, Turkish	Latin	Austria (EN s+DE)	35488500
Proximus (Belgacom) (Partner)	V800 EU7 BE (en/nl/fr/de)	(4) French, Dutch, English, German	French, Dutch, English, German	Latin	Belgium (FR, NL, EN s)	35488500

2.2.2 Z800i

EMMA II variant	Menu languages	T9 Languages	Keypad	Markets & Manuals	TAC #
Z800i Asian Latin (EN/ID/TL/VI/MS/ZS)	English + Indonesian + Tagalog + Vietnamese + Malay + Chinese Simplified (ZS)	English, Smart Pinyin	Latin	Singapore, Malaysia, Indonesia, Vietnam, Philippines (IN, EN)	35599100
Z800i Thailand (EN/TH)	English, Thai	English, Thai	Latin	Thailand (TH+EN)	35599100
Z800i Hong Kong (EN/ZH)	English, Chinese Traditional (ZH)	English + Stroke + Smart PinYin	Latin/Stroke	Hong Kong (ZH)	35599100
		Default: Stroke			35599100
Z800i Taiwan (EN/ZT)	English, Chinese Traditional (ZT)	English + Stroke + Smart BoPoMoFo	Latin/ Stroke/BoPoMoFo	Taiwan (ZT)	35599100
		Default: Smart BoPoMoFo			35599100
Z800i EMEA 1 (EN/PL/RU)	English, Polish, Russian,	English, Polish, Russian	Latin	Poland (PL), Russia (RU)	35599100
Z800i EMEA 2 (EN/HR/CS/SK)	English, Czech, Croatian, Slovak	English, Czech, Slovak	Latin	Croatia (HR), Czech republic (CS), Slovak Republic (SK)	35599100
Z800i EMEA 3 (EN/EL)	English, Greek	English, Greek	Latin	Greece (EL+SQ)	35599100
Z800i EMEA 4 (EN/RO/HU/RU)	English, Romanian, Hungarian, Russian	English, Hungarian, Russian	Latin	Hungary (HU)	35599100
Z800i EMEA 5 (EN/AR/HE/RU/FR)	English, Arabic, Hebrew, Russian, French	English, French, Arabic, Russian	Hebrew	Israel (IW+EN s)	35599100
Z800i EMEA 6 (EN/FR/AR/RU)	English, French, Arabic, Russian	English, French, Arabic, Russian	Latin	UAE (AR+EN s), Morocco (EN s+FR), India, Pak, Bang	35599100
Z800i EMEA 7 (EN/TR/RU)	English, Turkish, Russian	English, Turkish, Russian	Latin	Turkey (TR)	35599100
Z800i EU 1 (EN/PT/ES/FR)	English, Portuguese, Spanish, French	English, Portuguese, Spanish, French	Latin	Portugal (PT), Spain (ES)	35599100
Z800i EU 2 (EN/FR/DE/TR)	English, French, German, Turkish	English, French, German, Turkish	Latin	Australia (EN s), N. Zealand (EN s), Austria (DE), Germany (DE), France (FR), Ireland (EN s), UK (EN s)	35599100
Z800i EU 3 (EN/DA/NL/FR/DE)	English, Danish, Dutch, French, German	English, Danish, Dutch, French, German	Latin	Belgium (FR, NL, EN s), Denmark (DA), Netherlands (NL+ENs)	35599100
Z800i EU 4 (EN/FI/DA/SV/NO)	English, Finnish, Danish, Swedish, Norwegian	English, Finnish, Danish, Swedish, Norwegian	Latin	Finland (SV+FI), Sweden (SV), Norway (NO)	35599100
Z800i EU 5 (EN/FR/DE/IT)	English, French, German, Italian	English, French, German, Italian	Latin	Italy (IT), Switzerland (DE+FR+IT)	35599100

3 DPY/Z Structure

3.1 Variants

Reference list for Service Centers with access to “Customise” and “Advanced Services”.
NOTE! Customisation can only be done with user selection “Advanced Services”. See FEA instructions.

3.1.1 V800/V802se

DPY/Z	Rev.	Description	KRH
DPY 101 2790/Z1	R1A	V800/Swap Unit/Vodafone	101 200
DPY 101 2790/Z2	R1A	V800/Swap Unit/Partners Network	101 201
DPY 101 2790/Z3	R1A	Vodafone 802SE/Swap Units/Vodafone Japan	101 202

3.1.2 Z800i

DPY/Z	Rev.	Description	KRH
DPY 101 2841/Z1	R1A	Z800i/Swap Unit/Latin	101 203
DPY 101 2841/Z2	R1A	Z800i/Swap Unit/Chinese	101 204
DPY 101 2841/Z3	R1A	Z800i/Swap Unit/Bopomofo	101 329
DPY 101 2841/Z4	R1A	Z800i/Swap Unit/Hebrew	101 339
DPY 101 2841/Z5	R1A	Z800i/Swap Unit/Thai	101 340
DPY 101 2841/Z6	R1A	Z800i/Swap Unit/Cyrillic	101 341
DPY 101 2841/Z7	R1A	Z800i/Swap Unit/ 3,Latin	101 356
DPY 101 2841/Z8	R1A	Z800i/Swap Unit/ 3, Chinese	101 357
DPY 101 2841/Z9	R1A	Z800i/Swap Unit/Arabic	101 361

3.2 Cross reference list

3.2.1 V800/V802se

DPY 101 2790/Z1	V800/Swap Unit/Latin
DPY 101 279x/1	V800/Vodafone,Germany
DPY 101 279x/2	V800/Vodafone,Spain
DPY 101 279x/3	V800/Vodafone,Sweden
DPY 101 279x/4	V800/Vodafone,Netherlands
DPY 101 279x/6	V800/Vodafone,Ireland
DPY 101 279x/7	V800/Vodafone,Greece
DPY 101 279x/11	V800/Vodafone,UK
DPY 101 279x/12	V800/Vodafone,Italy
DPY 101 279x/13	V800/Vodafone,Portugal
DPY 101 279x/16	V800/Mobilkom,Austria
DPY 101 279x/19	V800/UK,Prepaid
DPY 101 279x/21	V800/Vodafone,South Africa
DPY 101 279x/26	V800/Vodafone,Netherlands, HBH-600 Bundle
DPY 101 279x/23	V800/VIP Net, Croatia
DPY 101 279x/28	V800/Vodafone,Greece, HBH-660 Bundle
DPY 101 279x/101	V800/Vodafone,Australia
DPY 101 279x/112	V800/New Zealand

DPY 101 2790/Z2	V800/Swap Unit/Partners Network
DPY 101 279x/14	V800/Swisscom, Switzerland
DPY 101 279x/15	V800/SFR, France

DPY 101 2790/Z3	Vodafone 802se/Swap Unit/Japan
DPY 101 279x/18	Vodafone 802SE/Japan

3.2.2 Z800i

For co-branded parts, see partslist on CSPN.

DPY 101 2841/Z1	Z800i/Swap Unit/Latin	Co-branded parts
DPY 101 2841/4	Z800i/Belgium Trade,Titanium Silver	N/A
DPY 101 2841/15	Z800i/UK-Ireland Trade,Titanium Silver	N/A
DPY 101 2841/20	Z800i/Netherlands Trade,Titanium Silver	N/A
DPY 101 2841/53	Z800i/E-Plus Germany,Titanium Silver	N/A
DPY 101 2841/61	Z800i/Telia Sonera Sweden,Titanium Silver	N/A
DPY 101 2841/101	Z800i/Sweden-Finland Trade,Titanium Silver	N/A

DPY 101 2841/Z2	Z800i/Swap Unit/Chinese	Co-branded parts
DPY 101 2841/12	Z800i/HongKong,Titanium Silver	N/A

DPY 101 2841/Z3	Z800i/Swap Unit/Bopomofo	Co-branded parts
DPY 101 2842/35	Z800i/Taiwan Trade,Linear Silver	N/A

DPY 101 2841/Z4	Z800i/Swap Unit/Hebrew	Co-branded parts
No data available		

DPY 101 2841/Z5	Z800i/Swap Unit/Thai	Co-branded parts
No data available		

DPY 101 2841/Z6	Z800i/Swap Unit/Cyrillic	Co-branded parts
No data available		

DPY 101 2841/Z7	Z800i/Swap Unit/ 3,Latin	Co-branded parts
DPY 101 2841/60	Z800i/3-Hutch,Sweden,Titanium Silver	Co-brand label
DPY 101 2841/66	Z800i/3-Hutch,Australia,Titanium Silver	Co-brand label
DPY 101 2841/100	Z800i/3-Hutch,Denmark,Titanium Silver	Co-brand label

DPY 101 2841/Z8	Z800i/Swap Unit/ 3, Chinese	Co-branded parts
DPY 101 2841/71	Z800i/3-Hutch,HongKong,Titanium Silver	Co-brand label

DPY 101 2841/Z9	Z800i/Swap Unit/Arabic	Co-branded parts
No data available		

4 Revision history

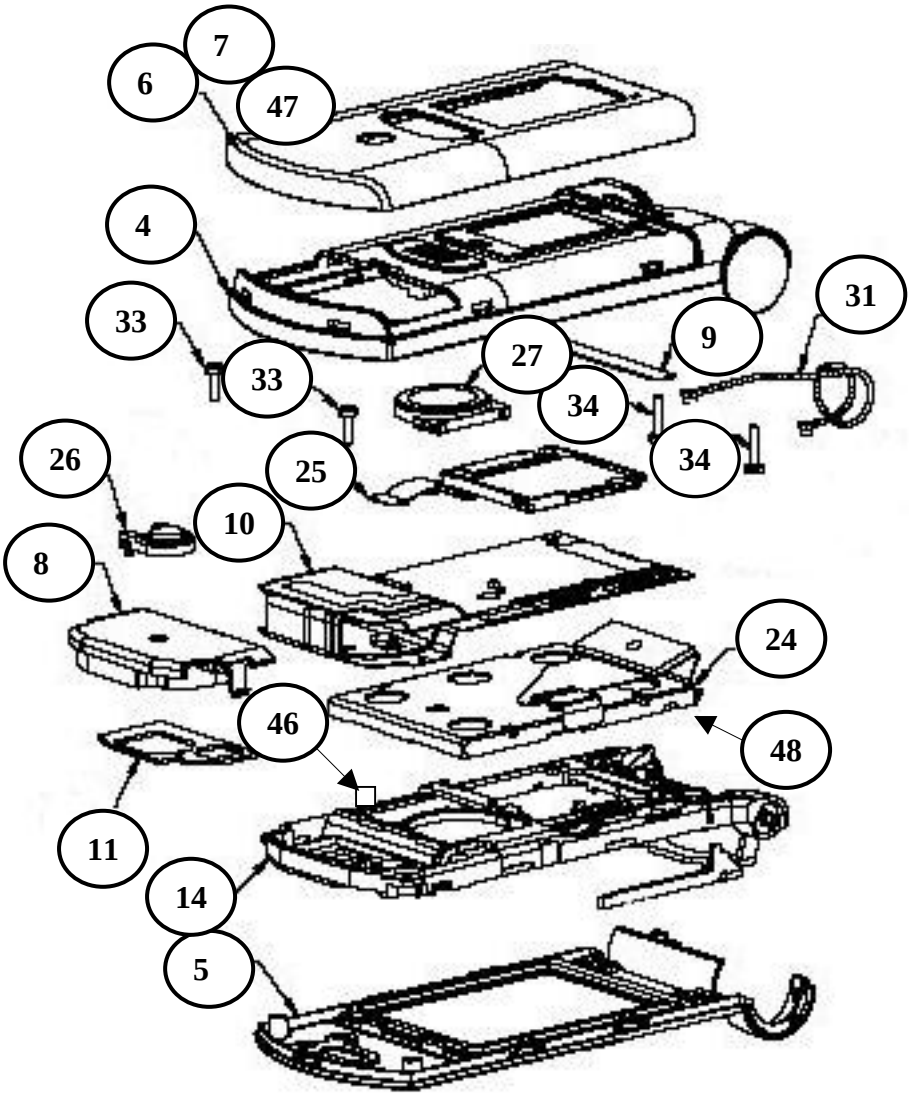
Rev.	Date	Changes / Comments
A	2004-11-25	First release
B	2005-01-13	Changed naming convention for EMMA II variants i.e. changed position of country code.
C	2005-05-02	Added Z800i

Part List Mechanical

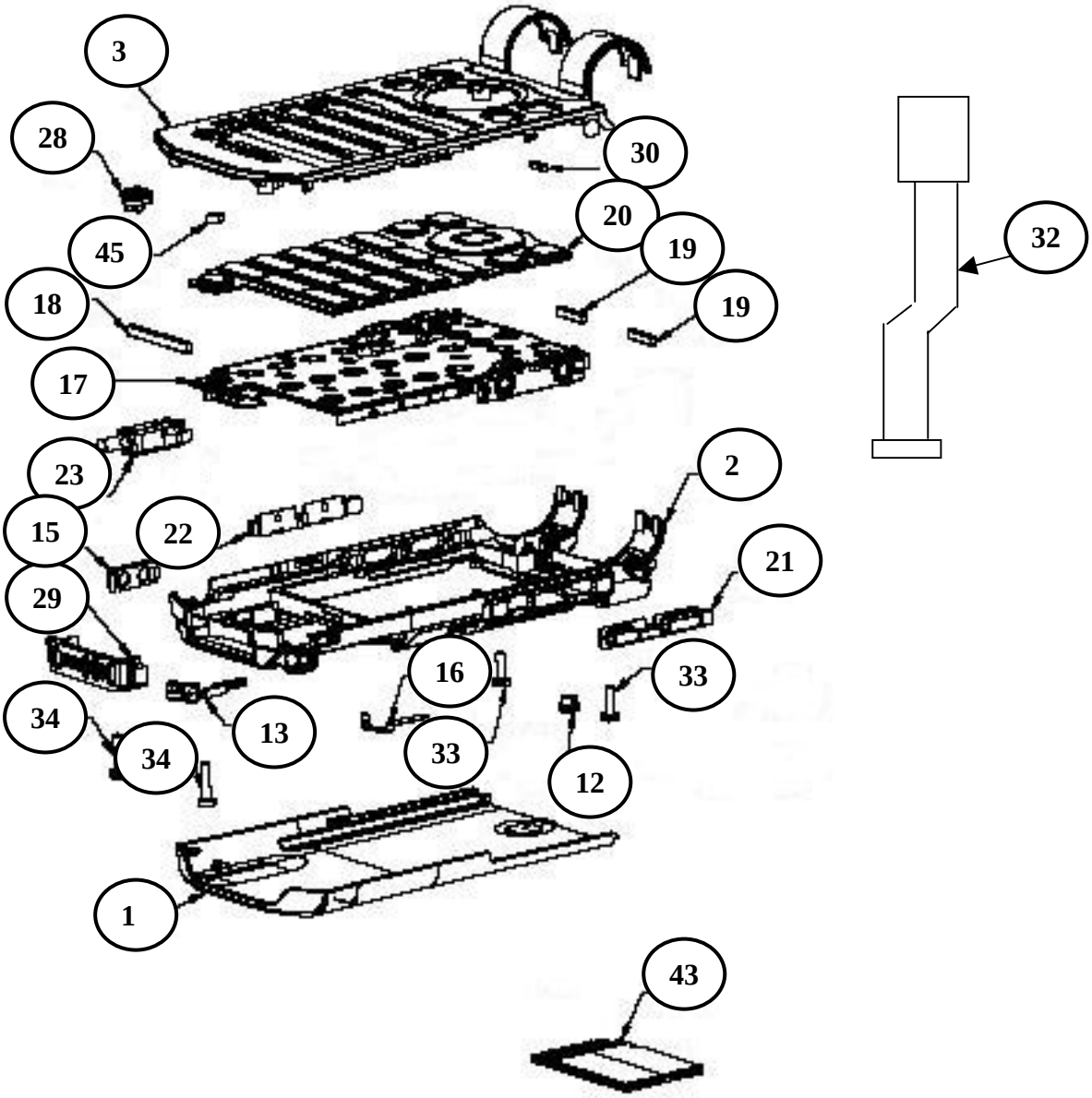
Applicable for V800/ 802se, Z800i

1 Exploded view

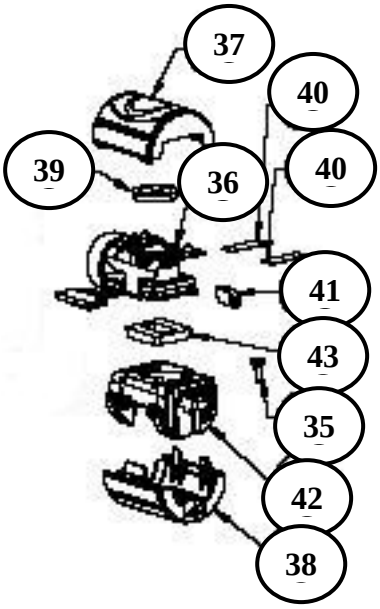
1.1 Exploded view upper cabinet



1.2 Exploded view lower cabinet



1.3 Exploded view camera



2 Part List

2.1 Part list phone

This Part List includes all parts possible to replace by using the Mechanical Repair Process.
Parts available to order will be found in the Web Shop.
Pos. number refers to the Exploded View.

Pos.	Description	Part Number	Comments
1	Battery Cover Assy/Black/Partners Network	SXK1096035	
1	Battery Cover Assy/White/Partners Network	SXK1096035/2	
1	Battery Cover Assy/Copper/Partners Network	SXK1096035/3	
1	Battery Cover Assy/Black/**Vodafone**	SXK1096035/11	
1	Battery Cover Assy/White/ **Vodafone**	SXK1096035/12	
1	Battery Cover Assy/Copper/ **Vodafone**	SXK1096035/13	
1	Battery Cover Assy/Titanium Silver	SXK1096035/4	For Z800i
1	Battery Cover Assy/ Linear Silver	SXK1096384	
2	Lower Rear Cover Assy	SXK1095978	
3	Lower Front Cover Assy	SXK1095982	
4	Upper Rear Complete	SXK1095985/Z	
5	Upper Front Complete	SXK1096004	
5	Upper Front Complete/Partners Network	SXK1096004/2	
6	Upper Rear Lid, Black	SXA1095075	
6	Upper Rear Lid, White	SXA1095075/11	
6	Upper Rear Lid, Copper	SXA1095075/21	
7	Upper Rear Lid Assy/Black/**Vodafone**	SXK1096131	
7	Upper Rear Lid Assy/White/**Vodafone**	SXK1096131/2	
7	Upper Rear Lid Assy/Copper/**Vodafone**	SXK1096131/3	
7	Upper Rear Lid/Titanium Silver	SXA1095525	For Z800i

Pos.	Description	Part Number	Comments
7	Upper Rear Lid/Linear Silver	SXA1095566	For Z800i
8	Antenna Lid	SXA1094857	
9	Screw Protection Tape	SXA1094860	
9	Screw Protection Tape, Motion Eye	SXA1094860/5	For Z800i
10	Antenna Flex Assy	ROA1281010	
11	Antenna Lid Gasket	SXA1094864	
12	External Antenna Plug	SXA1094921	
13	USB Cover	SXA1094922	
14	Upper Carrier Assy	SXK1096033	
15	IrDA Window	SXA1094809	
16	Battery Lock Spring	SXA1094922	
17	Key Foil Assy	SXK1095981	
18	Light Gasket	SXA1094938	
19	Sealing Gasket	SXA1094939	
20	Keyboard Latin	SXA1094936	
20	Keyboard Japanese	SXA1094936/2	
20	Keyboard Latin Generic	SXA1094836/3	For Z800i
20	Keyboard Bopomofo Generic	SXA1094836/5	For Z800i
20	Keyboard Hebrew	SXA1094836/6	For Z800i
20	Keyboard Thai	SXA1094836/7	For Z800i
20	Keyboard Cyrillic	SXA1094836/8	For Z800i
20	Keyboard Latin 3	SXA1094836/9	For Z800i
20	Keyboard Arabic	SXA1094836/11	For Z800i
21	Camera Keys	SXA1094810	
22	Volume Keys	SXA1094811	
23	Vibrator	BKE902019/26	
24	Main Display Assy	RNH94265	
25	Sub LCD Module	RNH94266	
26	Earspeaker	RLE90817	
27	Loud Speaker	RLE90818	
28	Microphone Assy	RLC509425	
29	System Connector	RNV79946	
30	Dust Gasket Lower Front	SXA1094975	
31	Coax Cable	RPM113357	
32	Halt to Half Flex Assy	SXK1096064	
33	Screw L=5,8	SXA1094853	
34	Screw L=7,8	SXA1094867	
35	Camera Screw	SXA1094830	
36	Camera part for mobile phone	KNC20111	
37	Front Assy (Camera, for mobile phone)	SXK1095957	
38	Back Cover (Camera, for mobile phone)	SXA1094826	
39	Light Gasket (Camera, for mobile phone)	SXA1094858	
40	Conductive Tape (Camera, for mobile phone)	SXA1094936	
41	Magnet (Camera, for mobile phone)	SXA1094813	
42	Carrier (Camera, for mobile phone)	SXA1094825	
43	Gasket (Camera, for mobile phone)	SXA1094829	
44	32Mbyte Memory Stick Duo	KDR109016/32	
44	64Mb MS Duo	KDR109044/64	For Z800i
45	ESD Ground Pad, cabinet	SXA1094911	
46	Water Indicator	SXA1094884	
47	Co-Brand Label Orange	SXA1095536	For Z800i
47	Co-Brand Label T-Mobile	SXA1095536/2	For Z800i
47	Co-Brand Label 3/Hutchinson	SXA1095536/3	For Z800i

Pos.	Description	Part Number	Comments
47	Co-Brand Label Quick Share	SXA1095536/5	For Z800i
48	ESD Tape	SXA1094909R1	

3 Label Part List

Pos.	Description	Part Number	Comments
	KRH Label	SVF 930 2320	
	Printer Ribbon	LZK 102 734/1	

4 Revision History

Rev.	Date	Changes / Comments
A	2004-11-05	First Release
B	2004-12-13	Due to system problem
C	2004-12-15	Due to system problem
D	2005-04-21	Added Z800i Components to the Spare Part List
E	2005-05-02	ESD Tape added

Equipment List, Mechanical

Applicable for V800/ V802se, Z800i

Contents

1 General

This document describes the minimum required equipments for the Mechanical Repair Process of the V800 and V802se mobile phones. Equipment listed without a part number is not orderable from Sony Ericsson and must be bought locally.

The matrices in the end of the equipment tables describe where the actual equipment is needed (marked with an X) or may be needed/optional (marked with a Z).

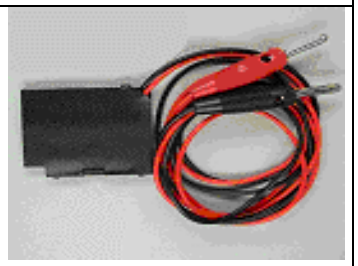
Flash upgrade:	Equipment for downloading software to the unit, both signalling and test-program.
Manual test:	Equipment necessary to perform a manual test.
Repair:	Equipment necessary for replacing components.

2 Repair Equipment, Mechanical

2.1 Sony Ericsson Provided Repair Equipment

Description	Part Number	Comments	Flash Upgrade	Manual Test	Repair
USB Service Card Reader	LZY 213 1191	Software Package/CD+USB Reader	X		
Service Card	LZY 213 595		X		
Hard lock	KRY 105 165		X		
Sony Ericsson programming interface - SEPI	LTN 214 1484	USB/Interface Box + CD	X		
Sony Ericsson interface - SEPI	KRY 101 1115	USB Cable 3V/Accessories	X		
Torque Screwdriver *	NTZ 112 459	Torque set 15 Ncm +/- 6 %			X
Torx Bits No.6	NTZ 112 288	Bits to the screwdriver			X
Front opening tool	NTZ 112 1063				X
Flex film assembly tool	NTZ 112 521	Tweezers for flexfilms	Z		
Dummy Battery	NTZ 112 533	Dummy battery	Z		

*Any screwdriver that fulfils torque and bit demand can be used.
**The matrices describe where the actual equipment is needed (marked with an X) or may be needed/optional (marked with a Z).

			
LZY 213 1191	LZY 213 595	KRY 105 165	KRY 101 1115
			
LTN 214 1484	NTZ 112 459	NTZ 112 1063	NTZ 112 533
			
NTZ 112 521			

2.2 Equipment Provided by Other Suppliers

Description	Comments	Flash Upgrade	Manual Test	Repair
Battery	BKB 193 200	X	X	
Battery Charger	Standard SonyEricsson charger		X	
Computer	Minimum Pentium III 500 Mhz 128 Mb RAM or better. At least 2 USB ports	X		
USB-PC Cable	Type A-B Plug-Plug Cable	X		
Tweezers	ESD-safe			X
Dentist hook	To be used when removing the adhesives.			X
Torx Bits No.5 or Torx Screwdriver No.5 (T5)	For reasembly and diasembly of the Camera			X
Bits	Spare part to screwdriver			X
Isopropyl Alcohol	To be used when removing glue.			X
Cotton Gloves	ESD-safe			X
Zebra Printer	90xi, 90xi II or 4000 deluxe			Z
Printer Cable	Standard RS 232 serial printer cable [referred to Zebra printer manual]			Z
Hot Air Flow Repair Station, Medium.	To be used when removing phone label (if needed)			Z
IR-device	To be used to make connection between the phone and the device		X	
Bluetooth-device	To be used to make connection between the phone and the device		X	
Hands free equipment.	To be used to verify the system connector. Applicable for V800 phone		X	
Operator SIM-card	To be used when making a landline call.		X	

*The matrices describe where the actual equipment is needed (marked with an X) or may be needed/optional (marked with a Z).

Type A-B Plug-Plug Cable

3 Revision History

Rev.	Date	Changes / Comments
A	2004-11-04	First release
B	2004-12-16	Due to system problem
C	2005-04-21	Z800i added