



Working Instruction, SP/Mechanical

Applicable for Z1010

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1 Disassembly Upper & Lower cabinets

Tools




- Pair of tweezers
- Screwdriver: Set to 15Ncm \pm 6 %. Torx 6
- Front opening Tool NTZ 112 302/2
- Flex film assembly Tool NTZ 112 521
- Dentist hook

1.1 Equipment


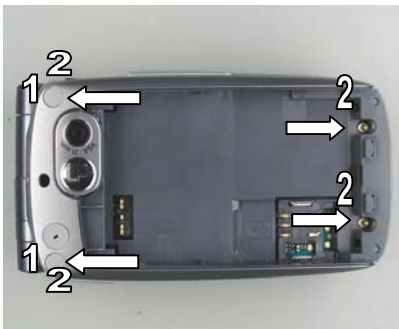

- ESD-gloves (cotton gloves).
- ESD-wristband

1.2 Instruction

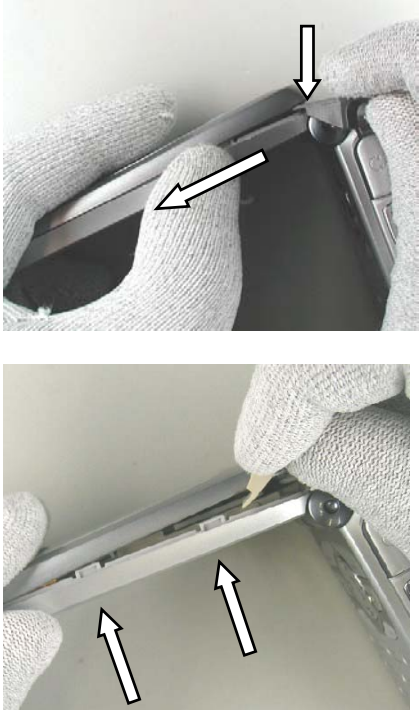

- Keep all contact surfaces clean of dirt and hand-grease.
- Use gloves and an ESD wrist strap.
- Disassembly performed without Memory stick.

		
<p align="center">Front view (Status Display)</p>	<p align="center">Open view (Main Display)</p>	<p align="center">Back view (Battery Cover)</p>

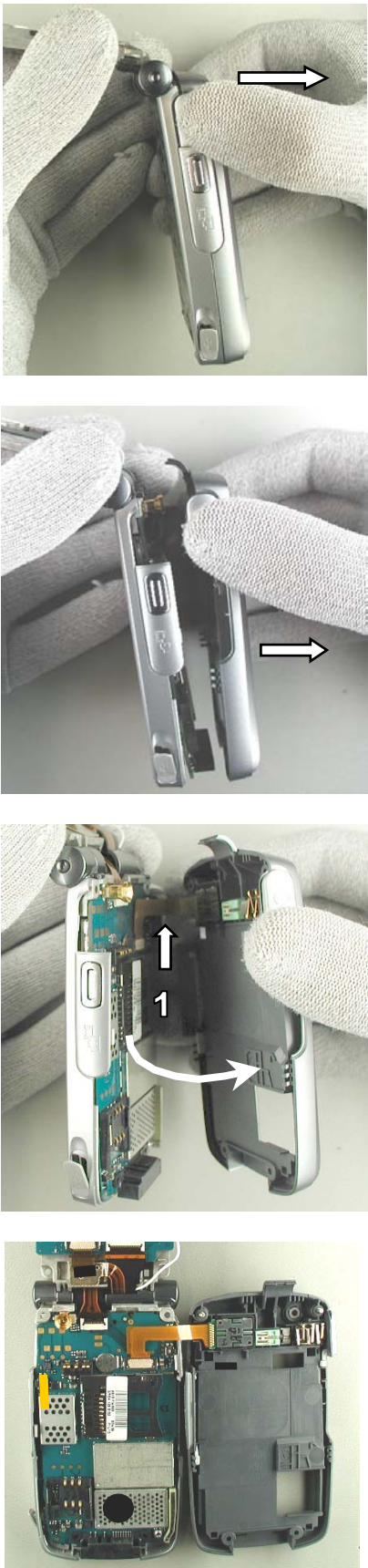


#	Figure	Instruction	Note
1	 <i>Fig.1.1</i>	Remove the battery cover with your fingers. Slide the battery cover down. Take out the battery. <i>(Fig.1.1)</i>	Check that the memory stick is removed. (1).
2	 <i>Fig.1.2</i>	Remove the two Lower Rear Cabinet screw covers with a dentist hook. (1) Remove the four screws. (2) <i>(Fig.1.2)</i>	Be careful not to scratch the phone with the dentist hook. Do not reuse the screw covers.
3	 <i>Fig.1.3</i>	Remove the four Upper Inside Cabinet screw covers with a dentist hook. Remove the four screws. <i>(Fig.1.3)</i>	Do not reuse the screws. Do not reuse the screw covers.

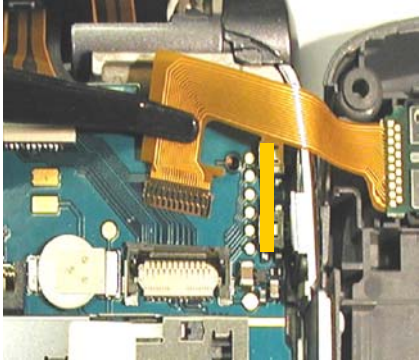
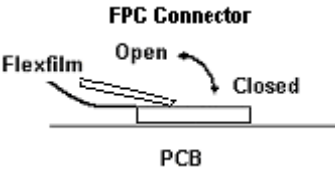
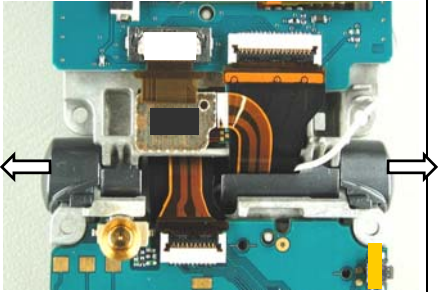
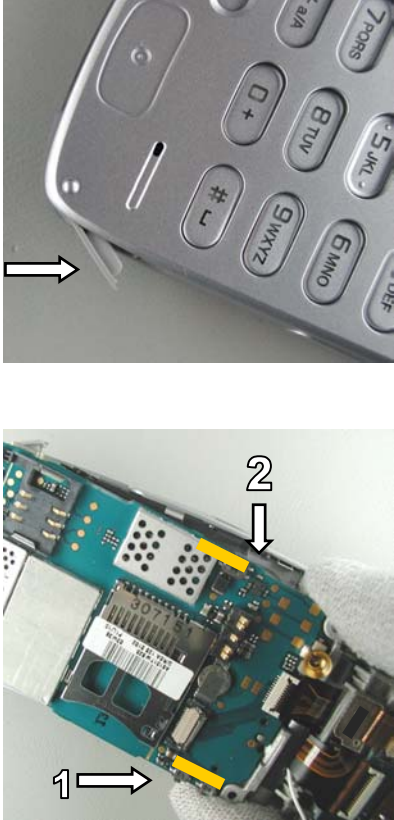


#	Figure	Instruction	Note
4	 <p><i>Fig.1.4</i></p>	<p>Remove the Upper Rear Cabinet. Use opening tool NTZ 112 302/2, if needed.</p> <p>Start at hinge area and twist the tool until the snap fit latches opens. Continue in the arrow direction.</p> <p><i>(Fig.1.4)</i></p>	<p>Don't touch the status LCD.</p> <p>Be careful not to scratch the phone with the opening tool.</p> <p>LCD is only connected to board with flex film and falls easily out from Frame.</p> <p>Upper Rear Cabinet assy separated</p>
5	 <p><i>Fig.1.5</i></p>	<p>Remove the Upper Inside Cabinet. Open the phone between 90° and 180° like the picture shows. Start at the upper area and pull forward in the arrow direction.</p> <p><i>(Fig.1.5)</i></p>	<p>Don't touch main LCD.</p> <p>LCD is only connected to board with flex film and falls easily out of Frame.</p> <p>Upper Inside Cabinet assy separated</p>

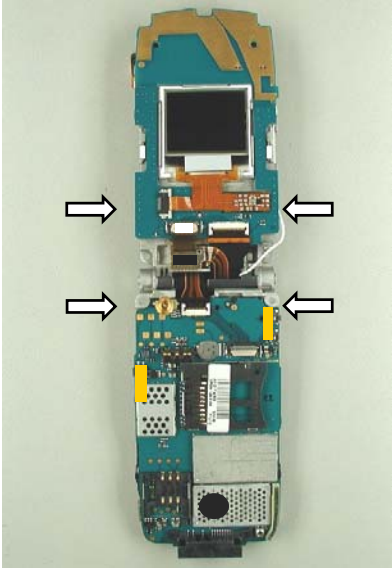




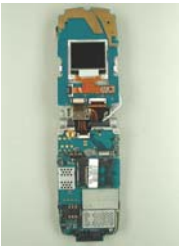


#	Figure	Instruction	Note
6	 <p><i>Fig.1.6</i></p>	<p>Remove the Lower Rear Cabinet. Use your fingers or opening tool NTZ 112 302/2, if needed.</p> <p>Start at hinge area and pull gently.</p> <p>“Open” Lower Rear Cabinet cautiously as VGA camera flex still connects to Lower Rear Cabinet assembly (at volume key side).</p> <p>Fold the Lower Rear Cabinet 180°. Be careful as the VGA camera flex is connected to the PCB.</p> <p>VGA camera flex (1).</p> <p><i>(Fig.1.6)</i></p>	<p>Be careful with the camera flex film.</p>



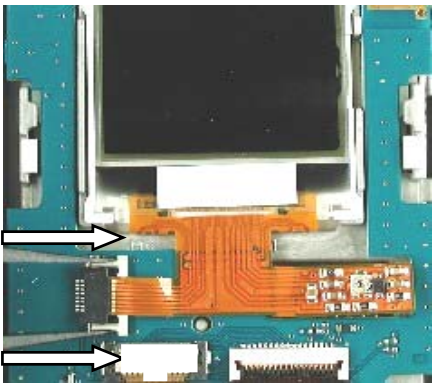
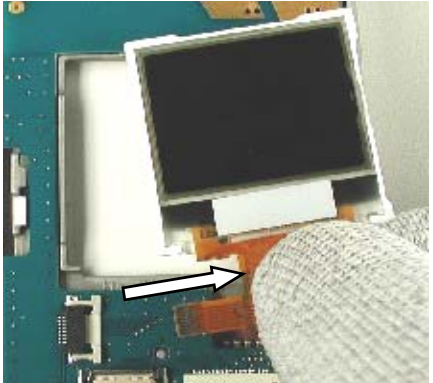
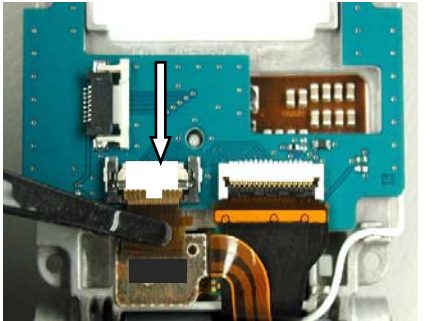
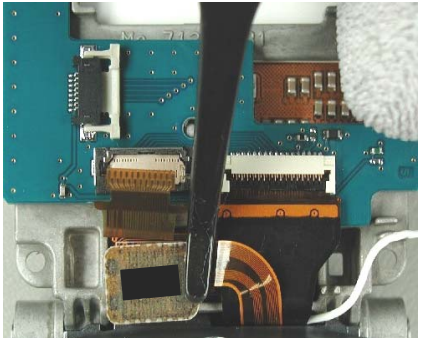
#	Figure	Instruction	Note
7	 <p><i>Fig.1.7</i></p>	<p>Open the FPC connector. Remove VGA camera flex film. Use Flex film assembly Tool NTZ 112521.</p> <p>(Fig.1.7)</p> 	<p>Lower rear cabinet assy separated</p>
8	 <p><i>Fig.1.8</i></p>	<p>Remove the two hinge covers with your fingers in the arrows direction.</p> <p>(Fig.1.8)</p>	
9	 <p><i>Fig.1.9</i></p>	<p>Open the USB cover (located close to the microphone), at the Lower Inside Cabinet. To be able to remove the PCB.</p> <p>Turn the phone around so that the PCB is visible</p> <p>Open the phone 180° and remove Lower Inside Cabinet from main PCB (incl. Frame and Sub PCB) Start at hinge part and continue to system connector.</p> <p>Make sure that the volume switches (1) and the camera switch (2) not are damaged.</p> <p>(Fig.1.9)</p>	<p>Hold the assy in the Frame hinge.</p> <p>Be careful so that the volume switches (1) and camera switch (2) not are damaged.</p> <p>Lower Inside Cabinet assy separated.</p>



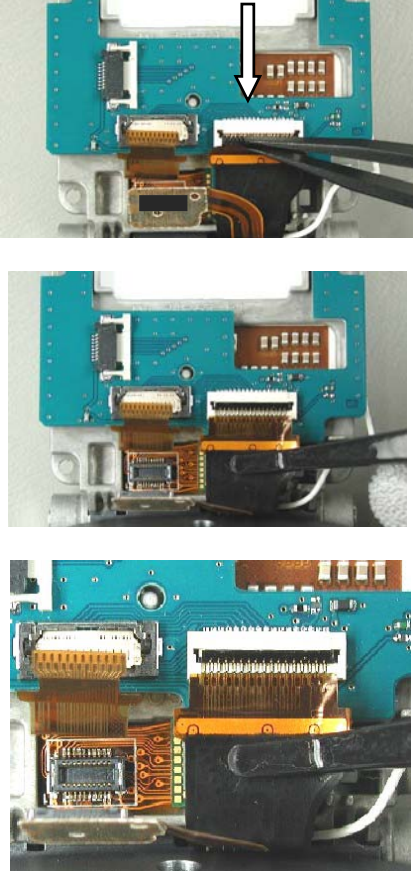
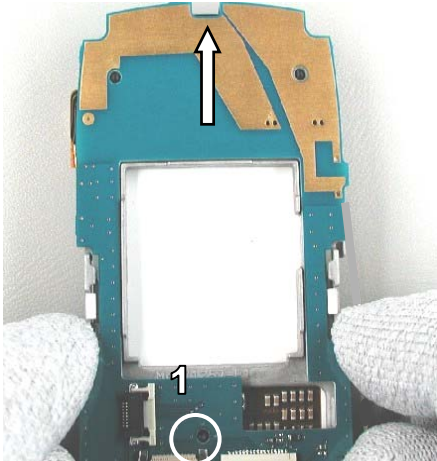
#	Figure	Instruction	Note
10	 <p><i>Fig.1.10</i></p>		<p>Hold the Main PCB and Frame together when handling the phone to avoid main PCB to separate from the Frame. See arrows.</p> <p>Main PCB and Sub PCB assy separated from cabinets.</p>

				
Lower Inside Cabinet	Lower Rear Cabinet	Main PCB SUB PCB	Upper Rear Cabinet	Upper Inside Cabinet

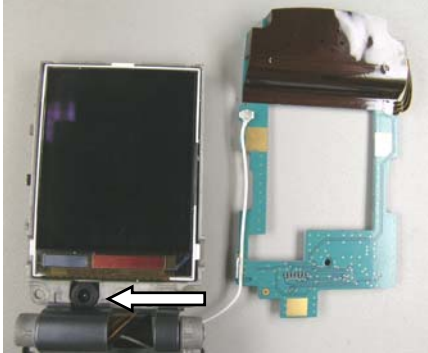
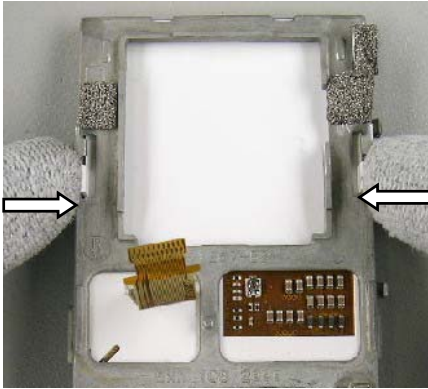
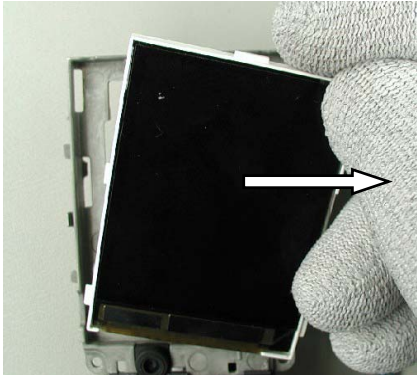



#	Figure	Instruction	Note
11	 <p><i>Fig. 1.11</i></p>	<p>Push the Status LCD connector in the arrows direction with a pair of tweezers.</p> <p>Disconnect the status LCD flexfilm by using Flexfilm assembly tool NTZ 112521. (Fig.1.11)</p>	
12	 <p><i>Fig.1.12</i></p>	<p>Remove the Status LCD from Sub PCB with your fingers. (Fig.1.12)</p>	
13	 <p><i>Fig. 1.13</i></p>	<p>Remove the tape (Tape connector upper) and open Main LCD FPC connector and remove Main LCD flex film with Flex film assembly Tool NTZ 112521. (Fig.1.13)</p>	Be careful not to damage the flex film.
14	 <p><i>Fig.1.14</i></p>	<p>Disconnect CIF camera flex with Flex film assembly Tool NTZ 112521.</p> <p>To avoid damage on the camera connector, start carefully at one side and continue at the other side. (Fig.1.14)</p>	Be careful handling the flex film.

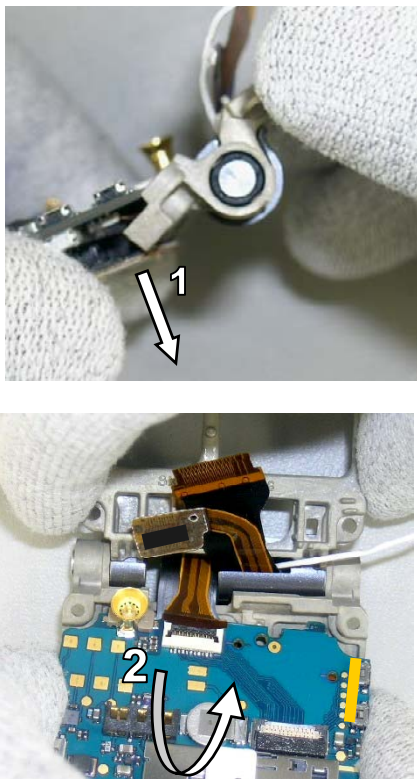
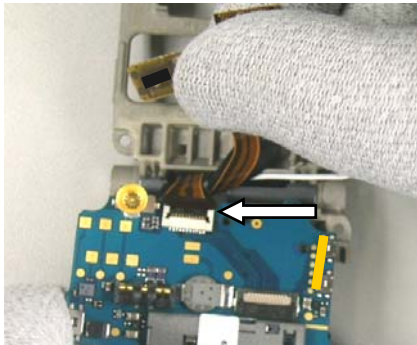



#	Figure	Instruction	Note
15	 <p><i>Fig.1.15</i></p>	<p>Open the FPC connector with a pair of tweezers and disconnect Main PCB flex. Flex film assembly Tool NTZ 112521.</p> <p><i>(Fig.1.15)</i></p> <p>FPC Connector</p> <p>Flexfilm Open Closed</p> <p>PCB</p>	
17	 <p><i>Fig.1.17</i></p>	<p>Lift up the Sub PCB from the guiding pin (1) and slide the PCB in the arrow direction. Fold the Sub PCB beside and turn the phone around.</p> <p><i>(Fig.1.17)</i></p>	

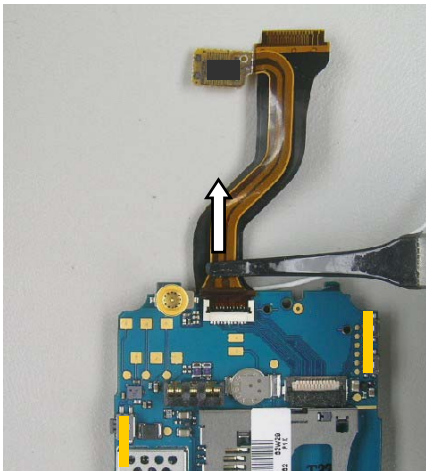
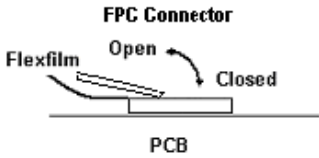
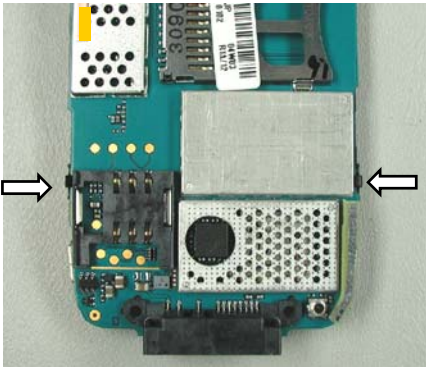
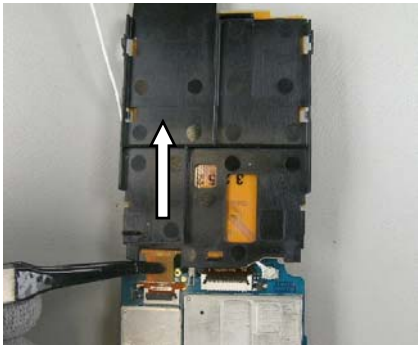
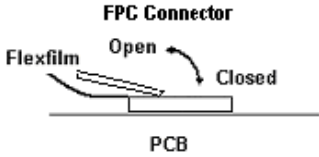


#	Figure	Instruction	Note
18	 <p><i>Fig.1.18</i></p>	Press out the Cif camera with your finger or a pair of tweezers. <i>(Fig.1.18)</i>	Be careful, not to scratch the Camera lens.
19	 <p><i>Fig.1.19</i></p>	Turn the phone around. Loosen the Main LCD by pressing the snap fit hooks in the arrows direction with your fingers. <i>(Fig.1.19)</i>	
20	 <p><i>Fig.1.20</i></p>	Turn the phone around and remove the Main LCD. <i>(Fig.1.20)</i>	
21	 <p><i>Fig.1.21</i></p>	Turn the phone around. <i>(Fig.1.21)</i>	

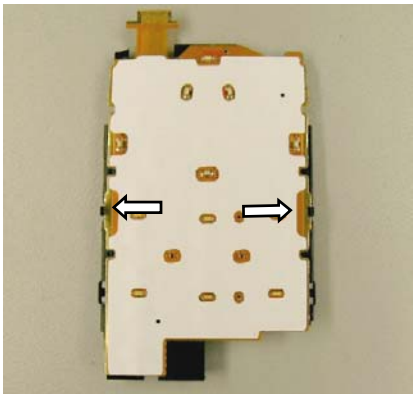
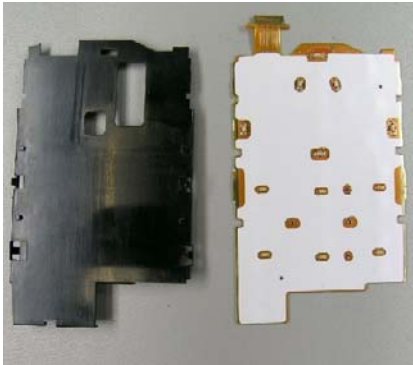
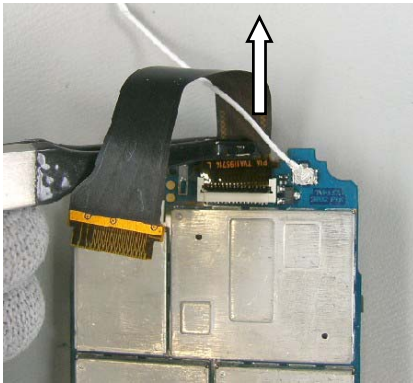
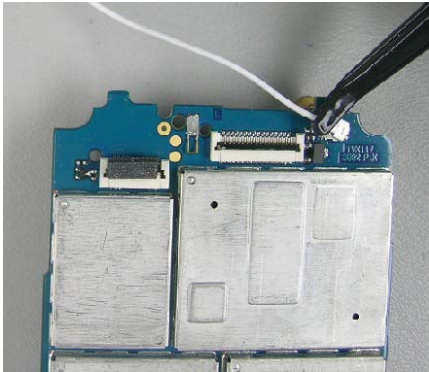


#	Figure	Instruction	Note
22	 <p><i>Fig.1.22</i></p>	<p>To release the main board from the hinge frame: Hold the Main PCB and Frame as the picture shows. Bend the keyboard support down in the arrow direction (1).</p> <p>Then bend Main PCB in the arrow direction (upwards) (2). <i>(Fig.1.22)</i></p>	
23	 <p><i>Fig.1.23</i></p>	<p>Hold the Camera flex and Hinge flex in your right hand.</p> <p>Slide the Camera and Hinge flex in the arrow direction and lift them out of the hinge. <i>(Fig.1.23)</i></p>	
24	 <p><i>Fig.1.24</i></p>	<p>To release the frame from the Main PCB. Press down the Keyboard support (1) and remove the frame in the arrow direction. <i>(Fig.1.24)</i></p>	



#	Figure	Instruction	Note
25	 <p><i>Fig.1.25</i></p>	<p>Open the Camera flex FPC connector and remove the Camera flex.</p> <p>Use Flex film assembly Tool NTZ 112521.</p> <p>(Fig.1.25)</p> 	
26	 <p><i>Fig.1.26</i></p>	<p>Turn the Main PCB around and release the two keyboard support snap fit hooks with a pair of tweezers.</p> <p>(Fig.1.26)</p>	
27	 <p><i>Fig.1.27</i></p>	<p>Turn the phone around. Fold the keyboard support forward and open Keyboard support connector. Use Flex film assembly Tool NTZ 112521.</p> <p>(Fig.1.27)</p> 	



#	Figure	Instruction	Note
28	 <i>Fig.1.28</i>	Turn the keyboard support around. Open carefully the two snap fit hooks in the arrows direction. <i>(Fig.1.28)</i>	
29	 <i>Fig.1.29</i>	Lift up the keyboard PCB from the keyboard support. <i>(Fig.1.29)</i>	
30	 <i>Fig.1.30</i>	Open the Hinge flex FPC connector and remove the hinge flex. Use Flex film assembly Tool NTZ 112521. <i>(Fig.1.30)</i>	
31	 <i>Fig.1.31</i>	Remove the Coax cable by using a pair of tweezers. <i>(Fig.1.31)</i>	



2 Reassembly Upper & Lower cabinets

Tools

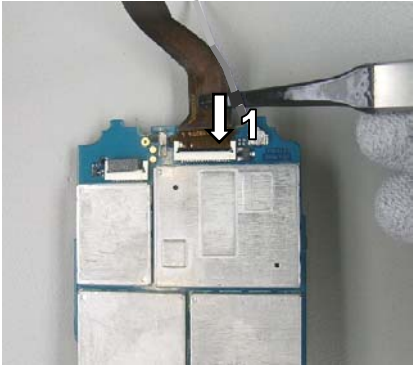
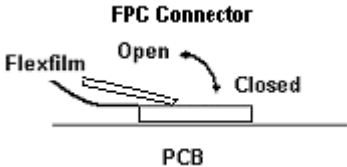
- Pair of tweezers
- Screwdriver: Set to 15Ncm \pm 6 %. Torx 6
- Flex film assembly Tool NTZ 112 521
- Dentist hook

2.1 Equipment

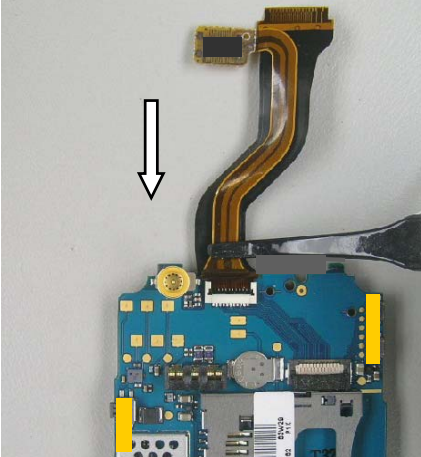
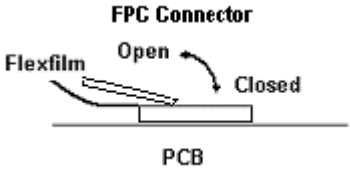
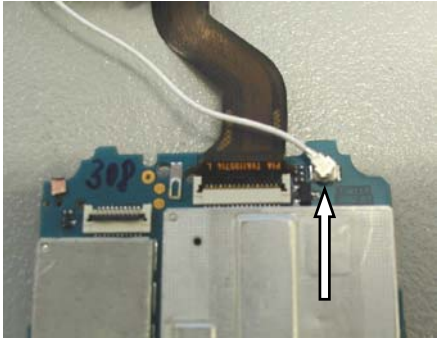
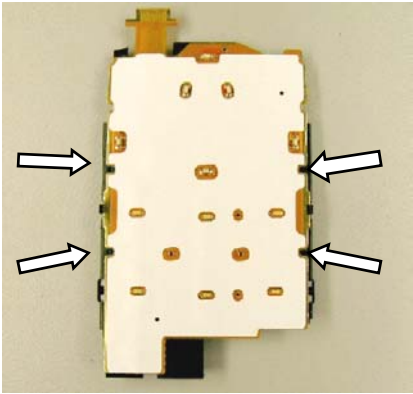
- ESD-gloves (cotton gloves).
- ESD-wristband

2.2 Instruction

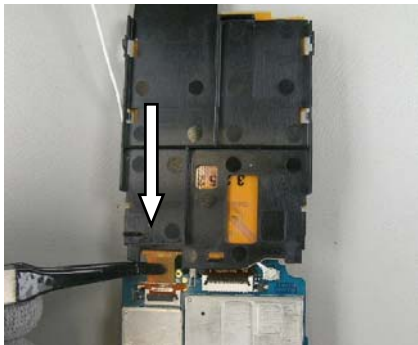
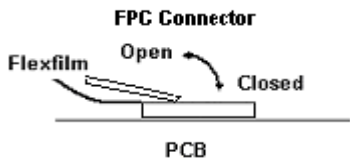
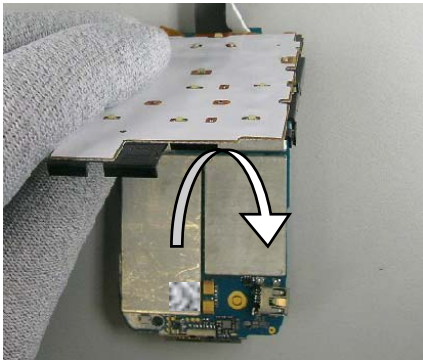
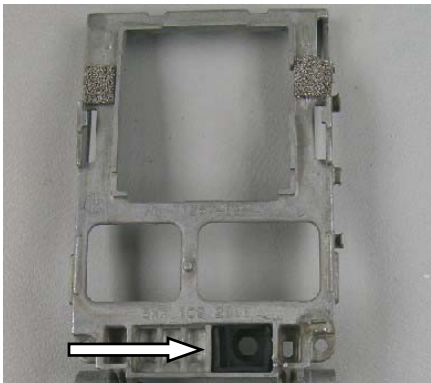
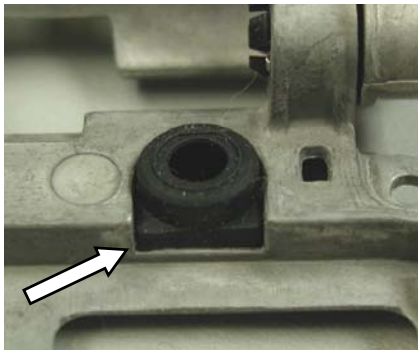
- Keep all contact surfaces clean of dirt and hand-grease
- Use gloves and an ESD wrist strap.

#	Figure	Instruction	Note
1	 <i>Fig.2.1</i>	<p>Open the FPC connector. Connect hinge flex film. Use Flex film assembly Tool NTZ 112521 (1).</p> <p>Use your finger to close the FPC-connector.</p> <p>(Fig.2.1)</p> 	

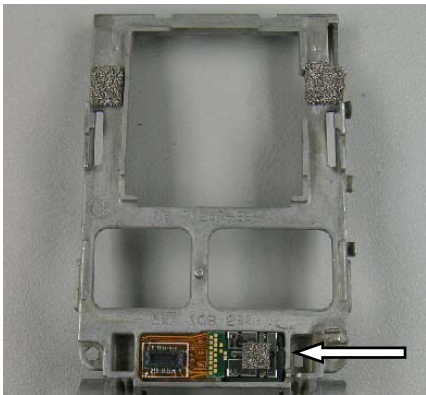



#	Figure	Instruction	Note
2	 <p>Fig.2.2</p>	<p>Turn Main the PCB around and connect the Camera flex film. Use Flex film assembly Tool NTZ 112521.</p> <p>Use your finger to close the FPC-connector.</p> <p>(Fig.2.2)</p> 	
3	 <p>Fig.2.3</p>	<p>Connect the Coax cable. Use a pair of tweezers.</p> <p>(Fig.2.3)</p>	
4	 <p>Fig.2.4</p>	<p>Position the Keyboard PCB on the keyboard support guiding pins (arrows) and snap fit it on the keyboard support.</p> <p>(Fig.2.4)</p>	

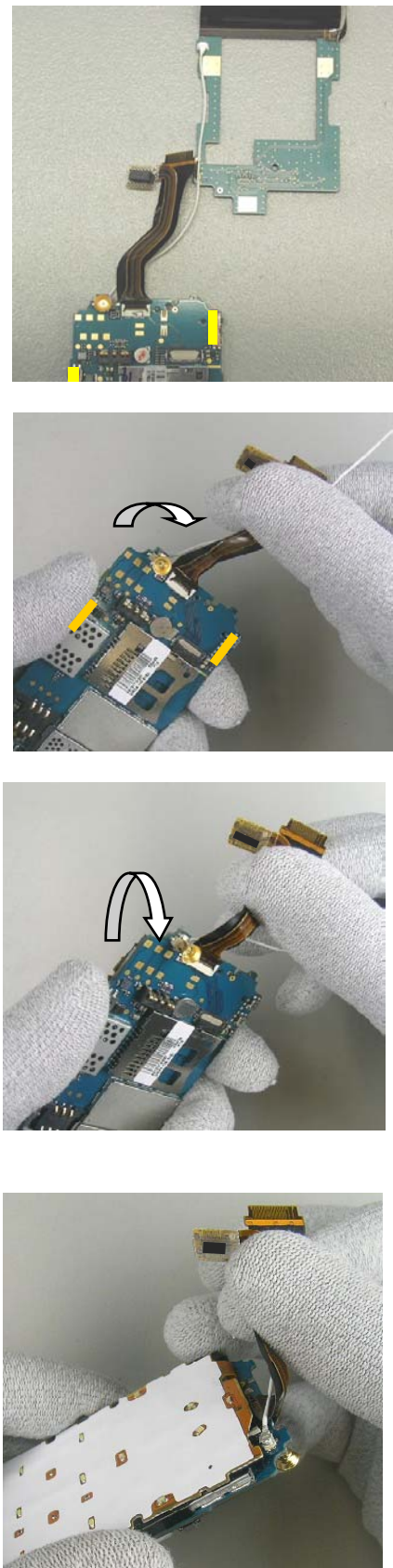


#	Figure	Instruction	Note
5	 <p><i>Fig.2.5</i></p>	<p>Turn the phone around and open the FPC connector. Connect the Keyboard assembly flex film. Use Flex film assembly Tool NTZ 112521.</p> <p>Use your finger to close the FPC-connector.</p> <p><i>(Fig.2.5)</i></p> 	
6	 <p><i>Fig.2.6</i></p>	<p>Fold down the Keyboard support in the arrow direction and snap fit it on the Main PCB.</p> <p><i>(Fig.2.6)</i></p>	
7	 <p><i>Fig.2.7</i></p>	<p>Place the gasket in the frame.</p> <p><i>(Fig.2.7)</i></p>	
8	 <p><i>Fig.2.8</i></p>	<p>Turn the frame around and check that the gasket is in correct position.</p> <p><i>(Fig.2.8)</i></p>	

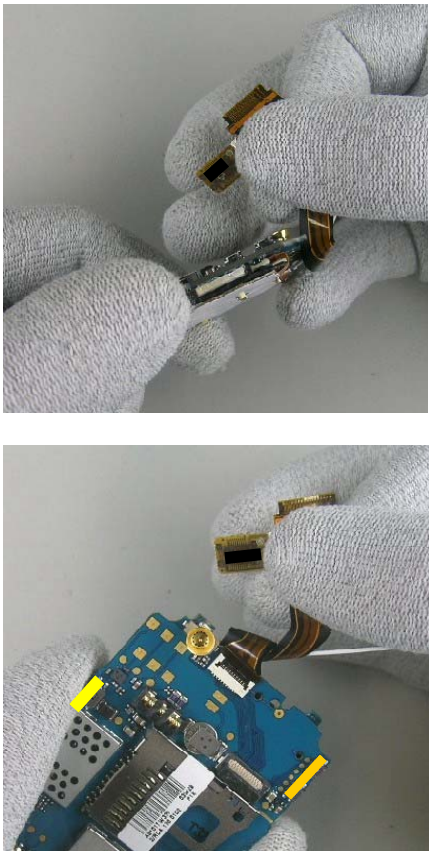



#	Figure	Instruction	Note
9	 <p><i>Fig.2.9</i></p>	Place the Cif camera in the frame. <i>(Fig.2.9)</i>	
10	 <p><i>Fig.2.10</i></p>	Place the frame in front of you. <i>(Fig.2.10)</i>	

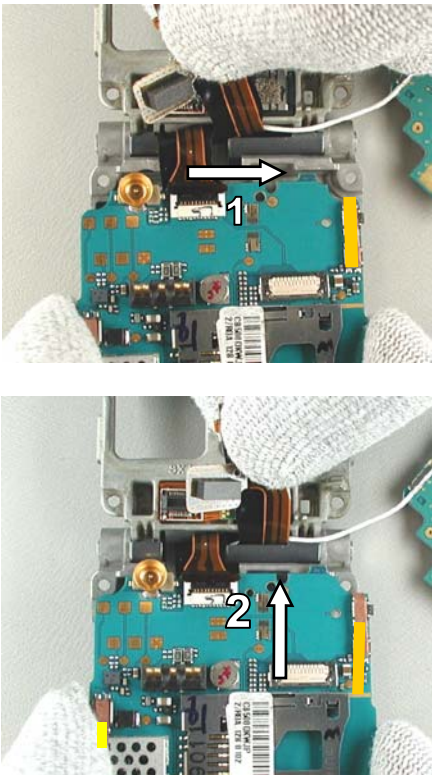
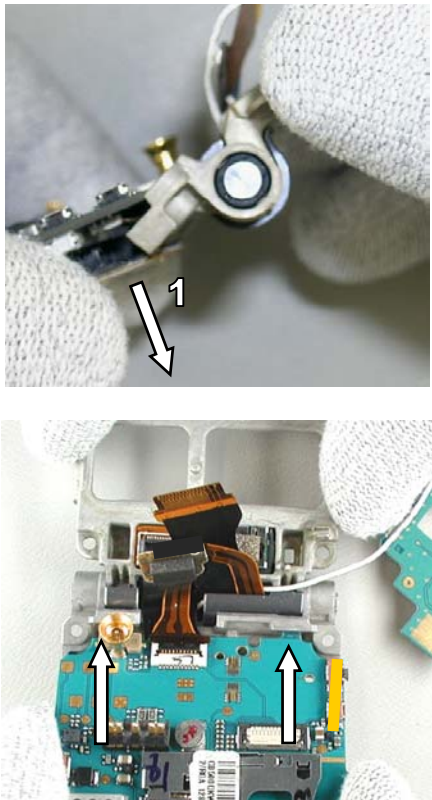


#	Figure	Instruction	Note
11		<p>Place the Main PBA and Sub PBA in front of you.</p> <p>Hold Main PCB in your left hand.</p> <p>Hold camera flex film and hinge flex film between your right thumb and forefinger.</p> <p>Rotate Main PCB 360 degrees around antenna cable as in following picture sequence. (Fig.2.11)</p>	


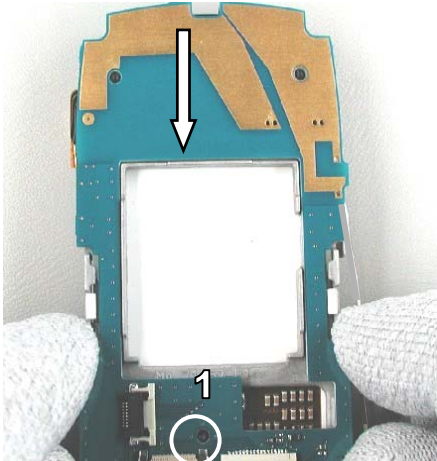
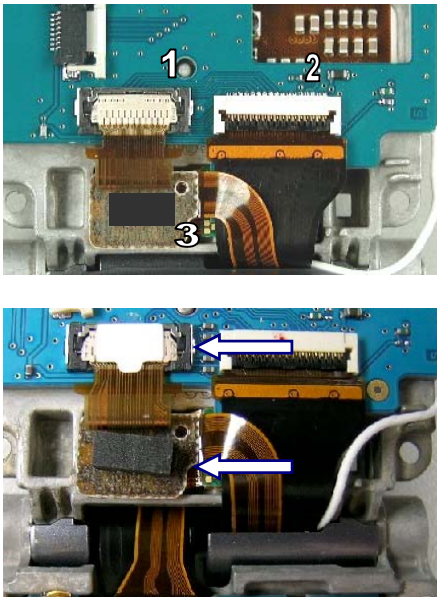


#	Figure	Instruction	Note
11	 <p><i>Fig.2.11</i></p>	Main PCB 360 degrees rotated.	
12	 <p><i>Fig.2.12</i></p>	Place the Frame in front of you. (<i>Fig.2.12</i>)	

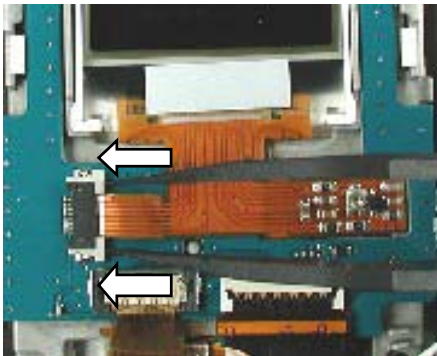
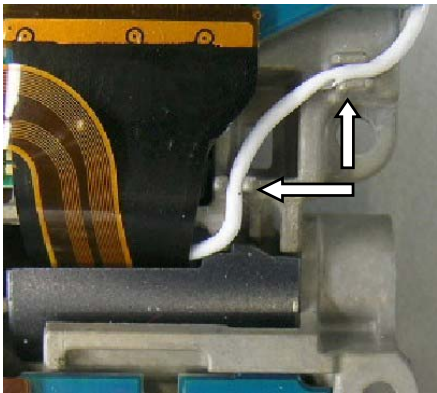
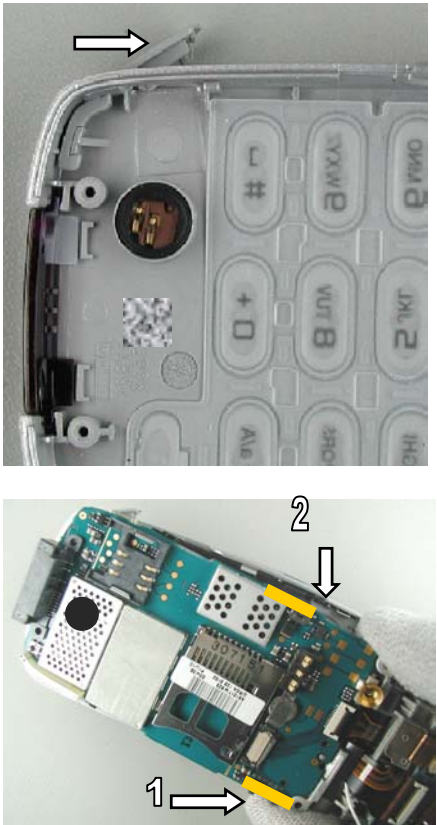


#	Figure	Instruction	Note
13	 <p><i>Fig.2.13</i></p>	<p>Slide the flex films and antenna cable into the hinge cover gap in the arrows direction (1).</p> <p>Continue to the end of the hinge cover gap (2). (Fig.2.13)</p>	
14	 <p><i>Fig.2.14</i></p>	<p>To assemble the main PCB and frame:</p> <p>Hold the Main PCB and frame as the picture shows. Hold Keyboard support down (1) and fit the guiding pins into the frame (2). (Fig.2.14)</p>	<p>Be careful, the keyboard support will easily separate from main PCB.</p>

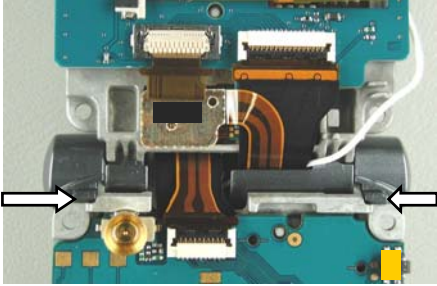

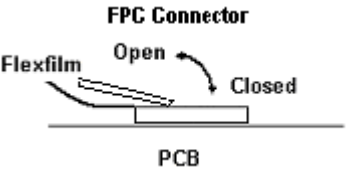


#	Figure	Instruction	Note
15	 <p><i>Fig.2.15</i></p>	<p>Turn the phone around and place the Main LCD in the Frame and snap fit it.</p> <p><i>(Fig.2.15)</i></p>	<p>Be careful handling the Main LCD to avoid dust and contamination.</p> <p>Do not press in the middle of the LCD.</p>
16	 <p><i>Fig.2.16</i></p>	<p>Place the Sub PCB on the Frame and slide down Sub PCB in the arrow direction until the guiding pin is visible (1).</p> <p><i>(Fig.2.16)</i></p>	
17	 <p><i>Fig.2.17</i></p>	<p>Connect following flex films on the PCB:</p> <p>Main LCD flex (1).</p> <p>Main PCB flex (2).</p> <p>Camera flex (3).</p> <p>Use Flexfilm assembly Tool NTZ 112521.</p> <p>Apply the new tape connector upper, on the main LCD connector.</p> <p>Apply a new B2B Support pad on the Cif camera connector, if needed.</p> <p><i>(Fig.2.17)</i></p>	

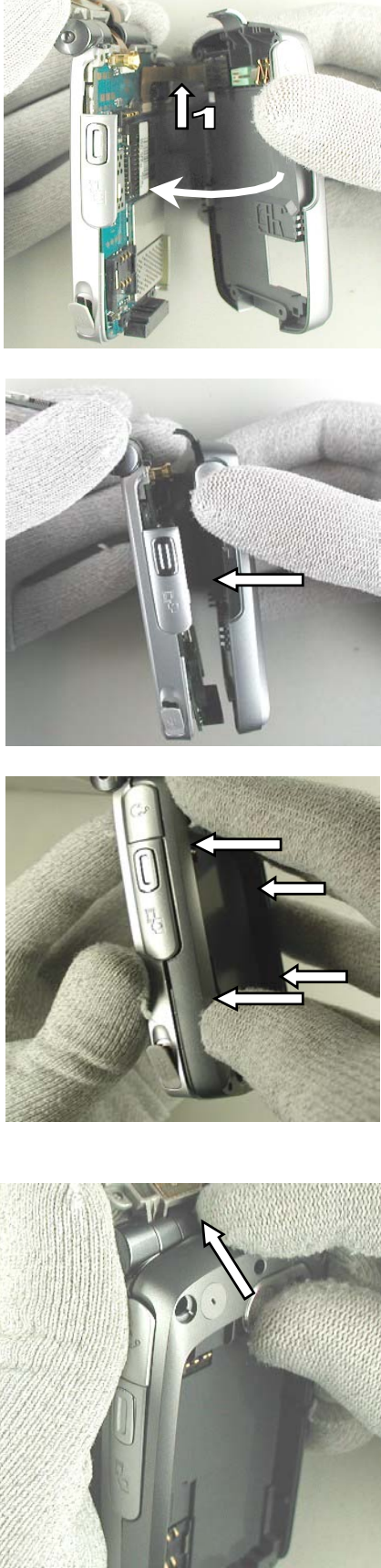


#	Figure	Instruction	Note
18	 <p><i>Fig.2.18</i></p>	<p>Reconnect the status LCD flexfilm by using Flexfilm assembly Tool NTZ 112521.</p> <p>Push the Status LCD connector in the arrows direction with a pair of tweezers.</p> <p><i>(Fig.2.18)</i></p>	
19	 <p><i>Fig.2.19</i></p>	<p>Place the Coax cable on the guiding hooks on Frame.</p> <p><i>(Fig.2.19)</i></p>	
20	 <p><i>Fig.2.20</i></p>	<p>To insert the main PCB in Lower Inside Cabinet:</p> <p>Open the USB cover (located close to the microphone), at the Lower Inside Cabinet.</p> <p>Put main PCB (incl Frame and sub PCB) into the Lower Inside Cabinet. Start by placing volume switches (1) correctly, continue with camera switch (2) and finally fit lower part (system connector) into Lower Inside Cabinet.</p> <p><i>(Fig.2.20)</i></p>	<p>Assure that the Keypad and microphone is correctly mounted in the Lower Inside Cabinet.</p> <p>Assure that volume switches and camera switch not are damaged when the main PCB is inserted into Lower Inside Cabinet.</p>

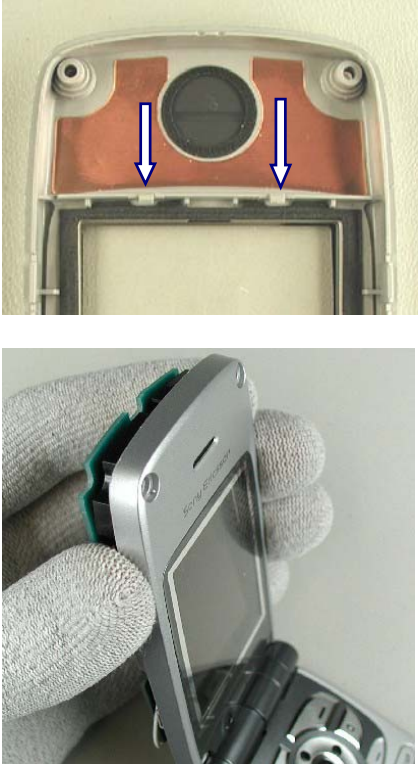




#	Figure	Instruction	Note
21	 <p><i>Fig.2.21</i></p>	<p>Hold the assembly in your hand; keep main PCB and Lower Inside Cabinet together. Assemble left and right hinge covers. (The tap shall be placed up close to main PCB, see picture).</p> <p><i>(Fig.2.21)</i></p>	<p>The tap on the Hinge Covers should be placed up according to the arrows on the picture.</p> <p>Two variants of hinge covers.</p>
22	 <p><i>Fig.2.22</i></p>	<p>Put Lower Inside Cabinet assembly and Lower Rear Cabinet next to each other.</p> <p>Connect VGA camera flex film in FPC-connector; use Flexfilm assembly Tool NTZ 112521.</p> <p>Use your finger to close the FPC-connector.</p> <p><i>(Fig.2.22)</i></p> 	<p>Be careful handling the flex film.</p>





#	Figure	Instruction	Note
23	 <p><i>Fig.2.23</i></p>	<p>Assemble the Lower Rear Cabinet to the Lower Inside Cabinet.</p> <p>Fold the Lower Rear Cabinet against the Lower Inside Cabinet, assure that camera flex not is pinched. (1).</p> <p>Fit the Lower Rear Cabinet into the Lower Inside Cabinet gently.</p> <p>Snap fit Lower Rear Cabinet latches by pressing gently around the Lower rear Cabinet.</p> <p>Close the “phone” 90° and snap fit hinge part (Fig.2.23)</p>	



#	Figure	Instruction	Note
24	 <i>Fig.2.24</i>	<p>Check that the two taps (for the Main display) are in place and not broken.</p> <p>If the taps are broken remove them from the cabinet.</p> <p>Snap fit the Upper Inside Cabinet, start at hinge area.</p> <p>(Fig.2.24)</p>	<p>Make sure that speaker flex film not is pinched.</p>
25	 <i>Fig.2.25</i>	<p>Snap fit the Upper Rear Cabinet, start at hinge area and continue to press on all four sides.</p> <p>(Fig.2.25)</p>	<p>Make sure that the speaker flex film and the coax cable not are pinched.</p>
26	 <i>Fig.2.26</i>	<p>Open the phone in 130 degrees angle.</p> <p>Tighten the four Upper Inside Cabinet screws according to screw sequence in Fig.2.26.</p> <p>Mount the four Upper Inside Cabinet screw covers with your fingers.</p> <p>(Fig.2.26)</p>	<p>15 Ncm \pm 6 %. Torx 6</p> <p>2 variants of screw covers.</p>



#	Figure	Instruction	Note
27	 <p><i>Fig.2.27</i></p>	<p>Close the phone and tighten the four Lower Rear Cabinet screws according to screw sequence in <i>Fig 2.27</i>.</p> <p>Mount the two Lower Rear Cabinet screw covers with your fingers.</p> <p><i>(Fig.2.27)</i></p>	<p>15Ncm \pm 6 %. Torx 6</p> <p>1 variant of screw covers.</p>
28	 <p><i>Fig.2.28</i></p>	<p>Assemble the battery. Slide the battery cover on to Lower Rear Cabinet, in the direction of the arrow.</p> <p><i>(Fig.2.28)</i></p>	



3 Replacement of Mechanical Parts

3.1 Equipment

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

3.2 Instruction

- Screwdriver: Set to 15Ncm \pm 6 %. Torx 6
- Keep all contact surfaces clean of dirt and hand-grease!

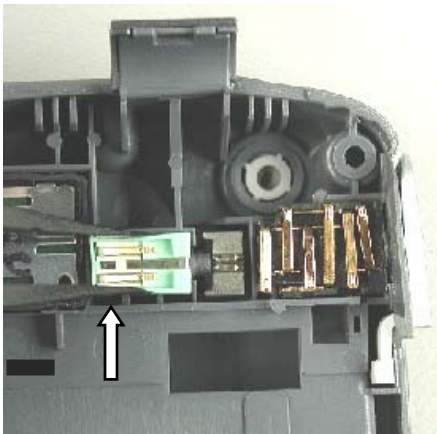
3.3 Vibrator

Tools

- Pair of tweezers

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 1, 2 and 6.

#	Figure	Instruction	Note
1	 <i>Fig.3.1</i>	<p>1.Use a pair of tweezers to lift up the vibrator.</p> <p>2.Place the new vibrator in Lower Rear Cabinet cavity by using a pair of tweezers.</p> <p>(Fig.3.1)</p>	<p>Be careful handling the connecting pins.</p> <p>Do not lift/press the vibrator in the flywheel.</p>

- Assemble the phone as described in *2 Reassembly Upper & Lower cabinets*, step 23 and 26-28.



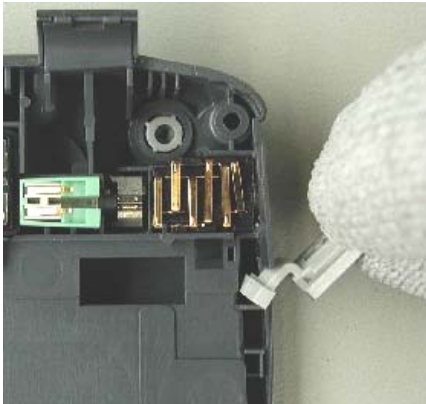
3.4 Audio jack cover

Tools

- Pair of tweezers

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 1,2 and 6.

#	Figure	Instruction	Note
1	 <i>Fig.3.2</i>	<p>1.Remove the Audio jack cover from Lower Rear Cabinet by twisting the cover tap out of the cavity with your fingers.</p> <p>2.Assemble a new Audio jack cover in the Lower Rear Cabinet. Use your fingers.</p> <p>(Fig.3.2)</p>	

- Assemble the phone as described in *2 Reassembly Upper & Lower cabinets*, step 23 and 26-28.



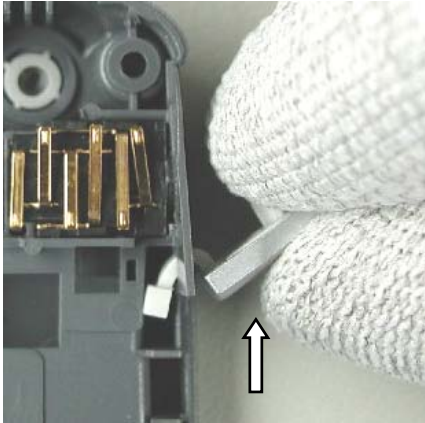

3.5 Audio jack

Tools

- Opening tool NTZ112 302/2

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 1,2 and 6.
- Disassemble the Vibrator as described in *3.3 Vibrator*, step1.

#	Figure	Instruction	Note
1	 <i>Fig.3.3</i>	Open Audio jack cover with your fingers. <i>(Fig.3.3)</i>	
2	 <i>Fig.3.4</i>	1.Remove the Audio jack by lifting the rear side. Use tool NTZ112 302/2. 2. Place the new Audio jack in cavity in Lower Rear Cabinet. Start with the front, and then carefully press down the back of the Audio jack. <i>(Fig.3.4)</i>	Be careful handling the connecting pins.

- Assemble the Vibrator as described in *3.3 Vibrator*, step1.
- Assemble the phone as described in *2 Reassembly Upper & Lower cabinets*, step 23 and 26-28.





3.6 MS-Duo cover

Tools

- Pair of tweezers

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 1, 2 and 6, 7.

#	Figure	Instruction	Note
1	 <i>Fig.3.5</i>	1.Remove the MS-DUO cover from the Lower Rear Cabinet by twisting the cover tap out of the cavity <i>(Fig.3.5)</i>	
2	 <i>Fig.3.6</i>	Assemble a new MS-Duo cover in the Lower Rear Cabinet. <i>(Fig.3.6)</i>	

- Assemble the phone as described in *2 Reassembly Upper & Lower cabinets*, step 22, 23 and 26-28.

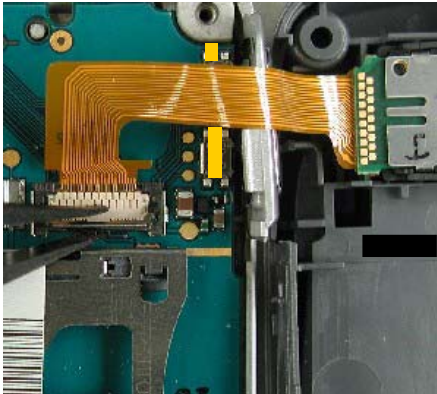
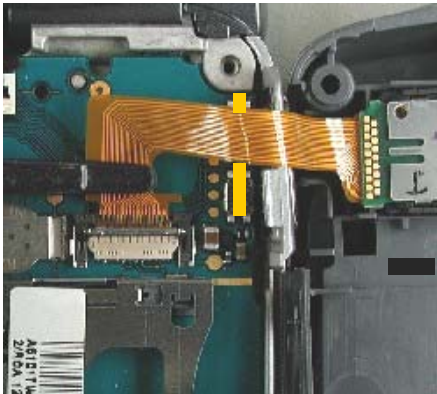
3.7 VGA camera

Tools

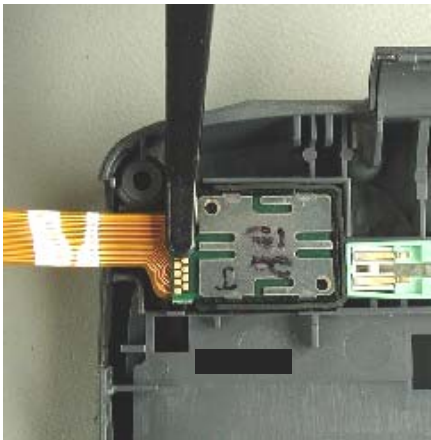
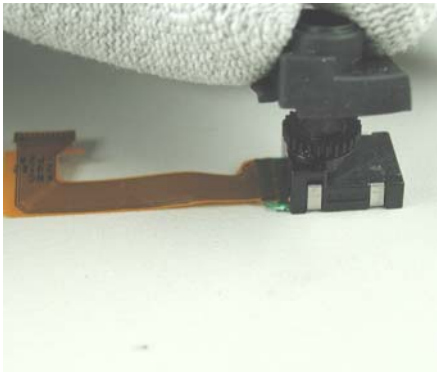

- Pair of tweezers

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 1,2 and 6.

#	Figure	Instruction	Note
1	 <p><i>Fig.3.7</i></p>	<p>Use a tweezers to open the VGA camera FPC connector.</p> <p>(Fig.3.7)</p> <p>FPC Connector</p> <p>Flexfilm Open Closed</p> <p>PCB</p>	
2	 <p><i>Fig.3.8</i></p>	<p>Use Flexfilm assembly Tool NTZ 112521 to remove the VGA camera flex film.</p> <p>(Fig.3.8)</p>	<p>Be careful handling the Camera flex film.</p>



#	Figure	Instruction	Note
3	 <i>Fig.3.9</i>	Use Flexfilm assembly Tool NTZ 112521 to lift up the VGA camera and gasket. <i>(Fig.3.9)</i>	Be careful handling the Camera flex film.
4	 <i>Fig.3.10</i>	Assemble a new Camera gasket lower VGA, on the VGA camera. <i>(Fig.3.10)</i>	
5	 <i>Fig.3.11</i>	Assemble the Camera and Camera gasket lower VGA, in the Lower Rear Cabinet. <i>(Fig.3.11)</i>	

- Assemble the phone as described in 2 Reassembly Upper & Lower cabinets, step 22,23 and 26-28.



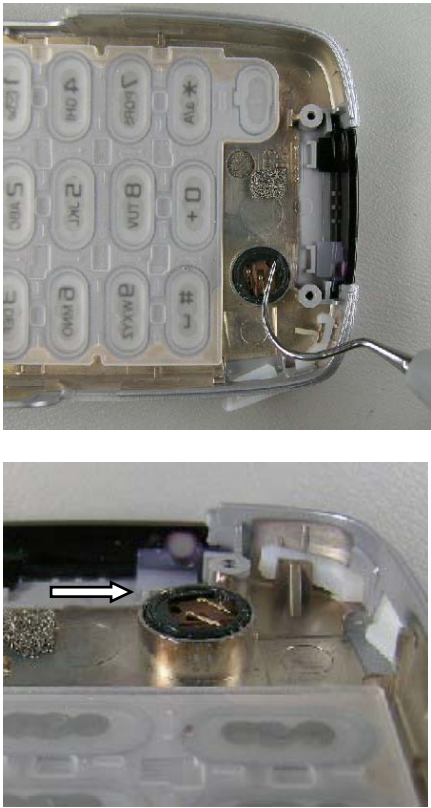
3.8 Microphone

Tools

- Pair of tweezers

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 1,2 6,7,8 and 9.

#	Figure	Instruction	Note
1	 <i>Fig.3.13</i>	<p>1.Lift up the old microphone from Lower Inside Cabinet. Use a dentist hook.</p> <p>2. Press down the new microphone with your fingers or a pair of tweezers and hold down for a couple of seconds.</p> <p>Check that the microphone gasket is in level with the edge of the Microphone cavity.</p> <p>(Fig.3.13)</p>	<p>Do not bend the connecting pins.</p> <p>The connecting pins should be facing upwards.</p>

- Assemble the phone as described in *2 Reassembly Upper & Lower cabinets*, step 20, 21,22 and 26-28.





3.9 USB cover

Tools

- Pair of tweezers

Instructions

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 1,2 6,7,8 and 9.

#	Figure	Instruction	Note
1	 <i>Fig.3.14</i>	Remove the USB cover; use a pair of tweezers to lift up the cover tap, then pull out the cover in the arrow direction. <i>(Fig.3.14)</i>	
2	 <i>Fig.3.15</i>	Assemble a new USB cover in the cavity in Lower Inside Cabinet. Use a pair of tweezers to lift the tap in place. <i>(Fig.3.15)</i>	

- Assemble the phone as described in *2 Reassembly Upper & Lower cabinets*, step 20, 21, 22 and 26-28.





3.10 Keypad

Tools

- Pair of tweezers

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 1, 2 and 6,7,8 and 9.

#	Figure	Instruction	Note
1	 <i>Fig.3.16</i>	Remove the old Keypad from the Lower Inside Cabinet with your fingers or a pair of tweezers. <i>(Fig.3.16)</i>	
2	 <i>Fig.3.17</i>	Place the new Keypad in Lower Inside Cabinet. Make sure that the volume and camera switches pads are correct placed (arrows). <i>(Fig.3.17)</i>	

- Assemble the phone as described in *2 Reassembly Upper & Lower cabinets*, step 20, 21, 22 and 26-28.



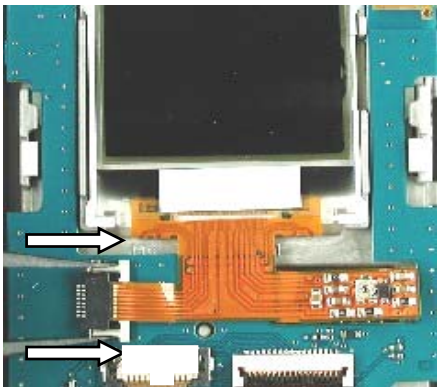
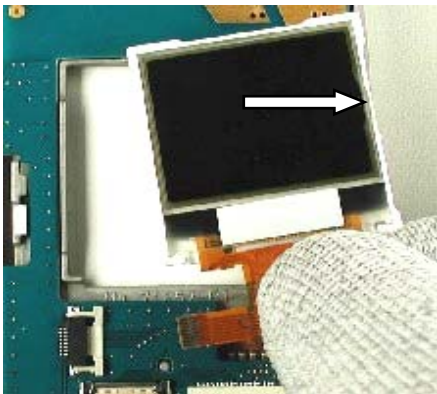
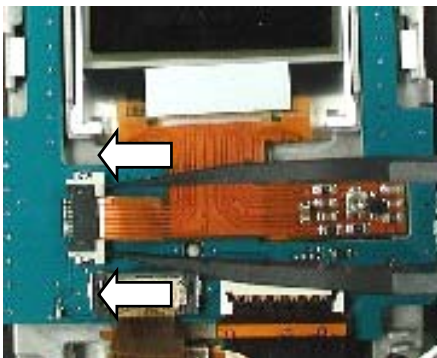
3.11 Status LCD

Tools

- Pair of tweezers

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 3-5.

#	Figure	Instruction	Note
1	 <i>Fig.3.18</i>	<p>Push the Status LCD connector in the arrows direction with a pair of tweezers.</p> <p>Disconnect the status LCD flexfilm by using Flexfilm assembly Tool NTZ 112521.</p> <p>(Fig.3.18)</p>	
2	 <i>Fig.3.19</i>	<p>Remove the Status LCD from the Sub PCB with your fingers.</p> <p>(Fig.3.19)</p>	
3	 <i>Fig.3.20</i>	<p>Connect the new status LCD flexfilm by using Flexfilm assembly Tool NTZ 112521.</p> <p>Push the Status LCD connector in the arrows direction with a pair of tweezers.</p> <p>(Fig.3.20)</p>	

- Assemble the phone as described in *2 Reassembly Upper & Lower cabinets*, step 24-26.



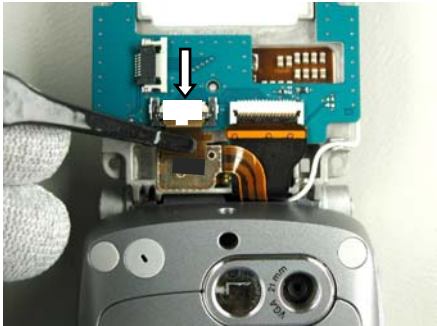
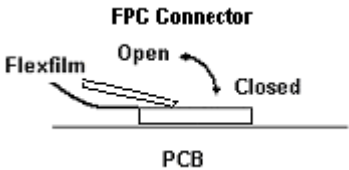

3.12 CIF camera

Tools

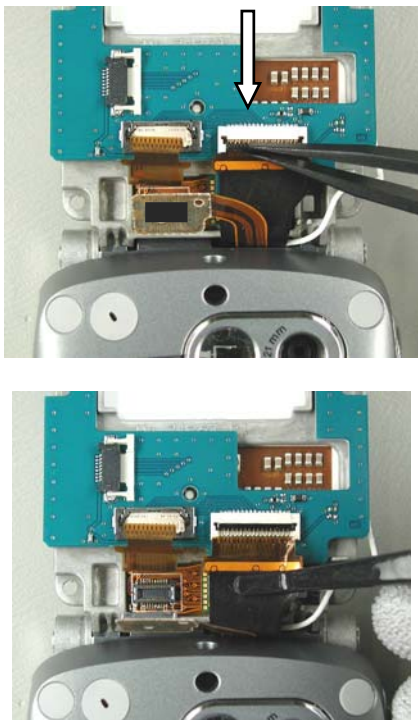
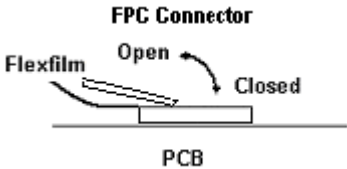
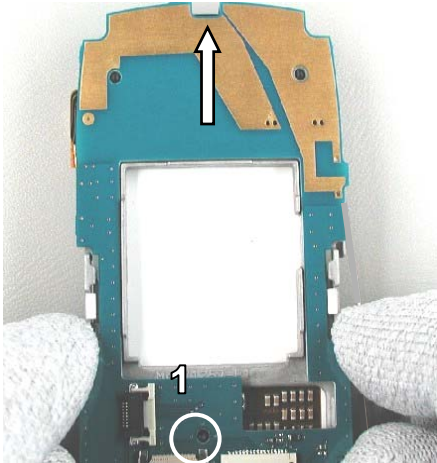
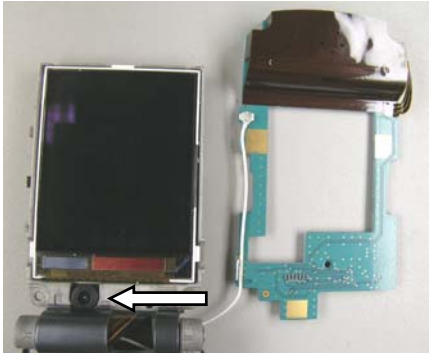
- Pair of tweezers

Instruction


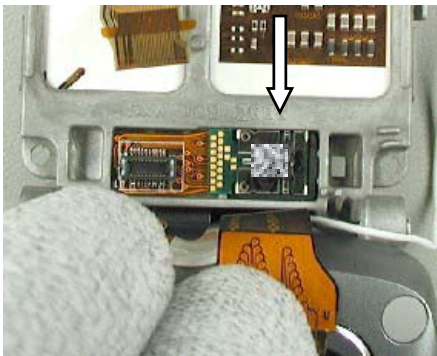
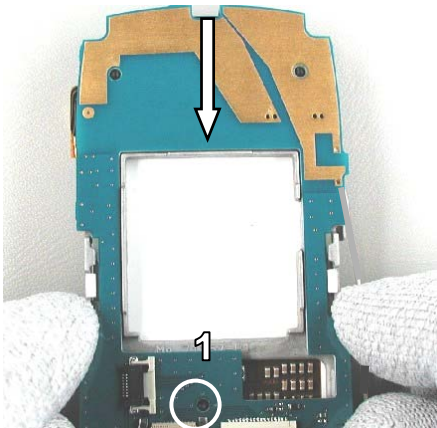
- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 3-5.
- Disassemble the Status LCD as described in *3.11 Status LCD*, step1 and 2.

#	Figure	Instruction	Note
1	 <i>Fig.3.21</i>	<p>Remove the connector tape upper on the Main LCD connector (arrow). Open the Main LCD FPC connector and remove the Main LCD flex film with Flexfilm assembly Tool NTZ 112521.</p> <p>(Fig.3.21)</p> 	Be careful not to damage the flex film.
2	 <i>Fig.3.22</i>	<p>Disconnect the CIF camera flex using Flexfilm assembly Tool NTZ 112521.</p> <p>To avoid damage on the camera connector, start carefully at one side and continue at the other side.</p> <p>(Fig.3.22)</p>	Be careful handling the flex film.

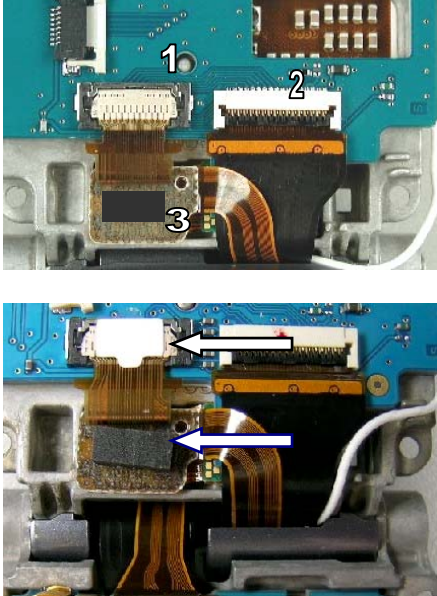
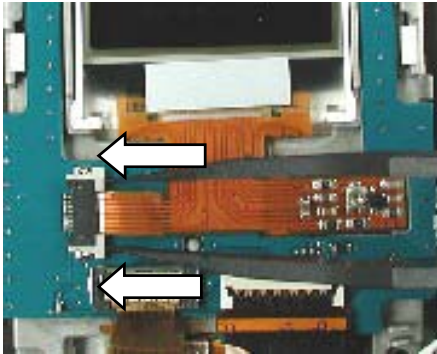


#	Figure	Instruction	Note
3	 <i>Fig.3.23</i>	<p>Open the FPC connector with a pair of tweezers and disconnect Main PCB flex by using Flexfilm assembly Tool NTZ 112521.</p> <p>(Fig.3.23)</p> 	
5	 <i>Fig.3.25</i>	<p>Lift up the Sub PCB from the guiding pin (1) and slide the PCB in the arrow direction. Fold the Sub PCB beside and turn the phone around.</p> <p>(Fig.3.25)</p>	
6	 <i>Fig.3.26</i>	<p>Press out the Cif camera with your finger or a pair of tweezers.</p> <p>(Fig.3.26)</p>	<p>Use gloves to avoid dust and grease. Be careful handling the camera lens.</p>



#	Figure	Instruction	Note
7	 <i>Fig.3.27</i>	Turn the phone around and place a new camera gasket in the Frame cavity. <i>(Fig.3.27)</i>	Check that the gasket is in the right position.
8	 <i>Fig.3.28</i>	Place the new Cif camera in the gasket. Apply the ground pad on the camera <i>(Fig.3.28)</i>	Press down the camera in the cavity.
9	 <i>Fig.3.29</i>	Place the Sub PCB on the Frame. Slide down Sub PCB in the arrow direction until the guiding pin is visible (1). <i>(Fig.3.29)</i>	



#	Figure	Instruction	Note
10	 <p><i>Fig.3.30</i></p>	<p>Connect following flex films on the PCB:</p> <p>Main LCD flex (1).</p> <p>Main PCB flex (2).</p> <p>Camera flex (3).</p> <p>Use Flexfilm assembly Tool NTZ 112521.</p> <p>Apply the new connector tape upper, on the main LCD connector.</p> <p>Apply a new B2B Support pad on the Cif camera connector, if needed.</p> <p><i>(Fig.3.30)</i></p>	<p>Be careful handling the flex films.</p>
11	 <p><i>Fig.3.31</i></p>	<p>Place Status LCD in Frame and connect flex film, use Flexfilm assembly Tool NTZ 112521.</p> <p>Close the connector; use a pair of tweezers and push, in the arrows direction.</p> <p><i>(Fig.3.31)</i></p>	

- Assemble the phone as described in 2 Reassembly Upper & Lower cabinets, step 24-26.

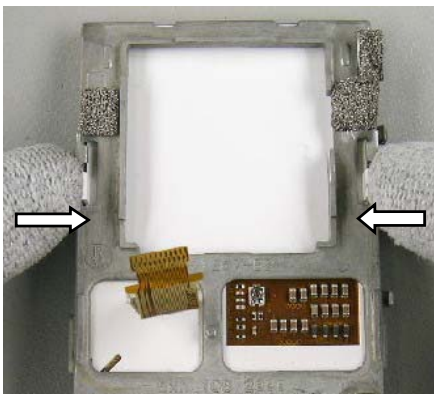
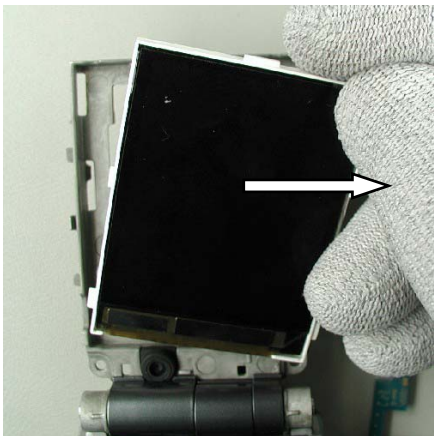
3.13 Main LCD

Tools


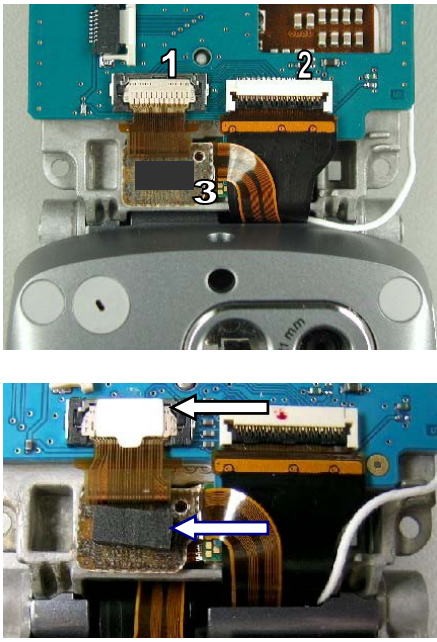
- Pair of tweezers

Instructions

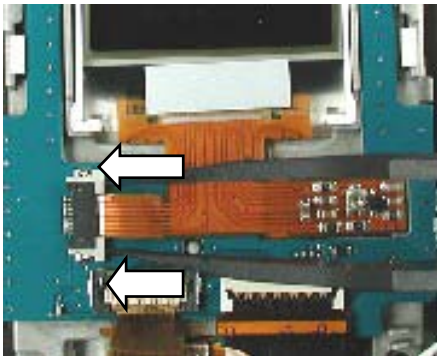
- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 3,4 and 5.
- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 11-18.

#	Figure	Instruction	Note
1	 <p><i>Fig.3.32</i></p>	<p>Release the Main LCD by pressing the snap fit hooks in the arrows direction with your fingers.</p> <p><i>(Fig.3.32)</i></p>	
2	 <p><i>Fig.3.33</i></p>	<p>Turn the phone around and remove the Main LCD.</p> <p><i>Fig.3.33</i></p>	



#	Figure	Instruction	Note
3	 <i>Fig.3.34</i>	Place the new Main LCD in the in Frame and press gently on the sides of the LCD until it snap fit in frame. <i>(Fig.3.34)</i>	Be careful handling the Main LCD to avoid dust and contamination. Do not press in the middle of the LCD.
4	 <i>Fig.3.35</i>	Place the Sub PCB on the Frame and slide down Sub PCB in the arrow direction until the guiding pin is visible (1). <i>(Fig.3.35)</i>	
5	 <i>Fig.3.36</i>	Connect following flex films on the PCB: Main LCD flex (1). Main PCB flex (2). Camera flex (3). Use Flexfilm assembly Tool NTZ 112521. Apply the new connector tape upper, on the main LCD connector. Apply B2B Support pad on the Cif camera connector, if needed. <i>(Fig.3.36)</i>	



#	Figure	Instruction	Note
6	 (Fig.3.37)	<p>Turn the phone around and place Status LCD in Frame. Connect the flex film, use Flexfilm assembly Tool NTZ 112521.</p> <p>Close the connector, use a pair of tweezers and push in the arrows direction.</p> <p>(Fig.3.37)</p>	

- Assemble the phone as described in 2 Reassembly Upper & Lower cabinets, step 24-26.


3.14 Icon

Tools



- Dentist hook

Instructions

-

#	Figure	Instruction	Note
1	 Fig.3.38	<p>Remove the icon with a dentist hook.</p> <p>(Fig.3.38)</p>	<p>Handle careful to avoid scratches.</p>



#	Figure	Instruction	Note
2	 <i>Fig.3.39</i>	Place the icons guiding pin into the guiding hole in Upper Rear Cabinet. Use a pair of tweezers. <i>(Fig.3.39)</i>	Use a pair of tweezers.
3	 <i>Fig.3.40</i>	Press down the icon with your finger for a couple of seconds. <i>(Fig.3.40)</i>	



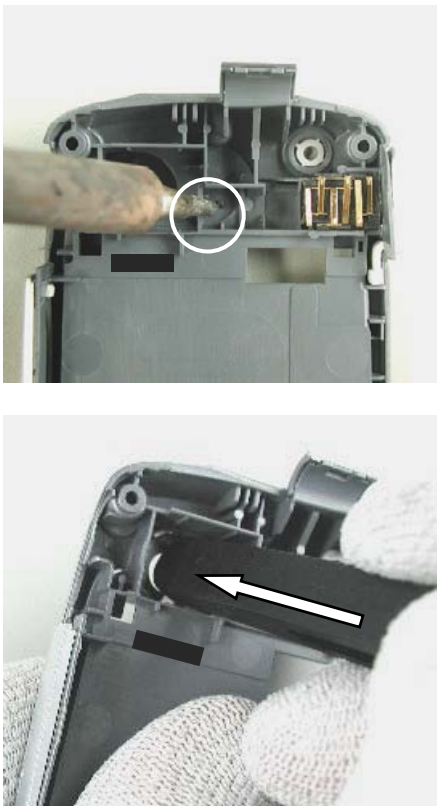
3.15 Camera mirror

Tools


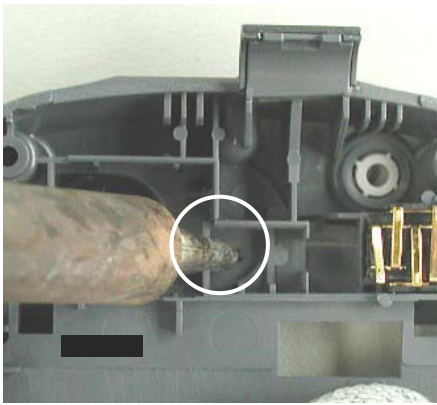
- Soldering Iron

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 1,2 and 6,7.
- Disassemble the VGA camera as described in *3.5 VGA camera*, step1-3.
- Disassemble the Vibrator as described in *3.3 Vibrator*, step1.

#	Figure	Instruction	Note
1	 <i>Fig.3.41</i>	<p>Place a soldering iron tip at the pin until it melts.</p> <p>Do not touch the vibrator cavity with the soldering iron.</p> <p>Then rapidly lift up Lower Rear Cabinet and press out camera mirror with the backside of a pair of tweezers in the arrows direction. (Fig.3.41)</p>	<p>Do not use this soldering iron for soldering any electrical component.</p> <p>Soldering temp 155 degrees Celsius. +/- 5 degrees.</p> <p>Tip width 2 mm.</p> <p>Clean the cavity from all plastic residues.</p>



2	 <p><i>Fig.3.42</i></p>	<p>Snap fit the Camera mirror guiding pin into Lower Rear Cabinet (1) and press down Camera mirror (2).</p> <p>Then turn the Lower Rear Cabinet around with the Camera mirror down.</p> <p><i>(Fig.3.42)</i></p>	<p>Use a pair of tweezers or your fingers.</p>
3	 <p><i>Fig.3.43</i></p>	<p>Press down the Lower Rear Cabinet and place the soldering iron tip at the pin until it melts. Remove the soldering iron and continue to hold down the Lower Rear Cabinet for a couple of seconds.</p> <p>Be careful; do not touch the vibrator cavity with the soldering iron.</p> <p><i>(Fig.3.43)</i></p>	<p>Do not use this soldering iron tip for soldering any electrical component.</p>

- Assemble the vibrator as described in 3.3 *Vibrator*, step 2.
- Assemble the VGA Camera as described in 3.5 *VGA Camera*, step 2.
- Assemble the phone as described in 2 *Reassembly Upper & Lower cabinets*, step 22, 23 and 26-28.




3.16 Frame Assembly

Tools

- Pair of tweezers
- Flex film assembly Tool NTZ 112 521
- Dentist hook

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 1-24.

#	Figure	Instruction	Note
1	 <i>Fig.3.44</i>	Frame separated (<i>Fig.3.44</i>)	

- Assemble the phone as described in *2 Reassembly Upper & Lower cabinets*, 7 – 28.





3.17 Hinge Covers - Right and Left

Tools

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 1-2.

#	Figure	Instruction	Note
1	 <i>Fig.3.45</i>	Remove hinge covers with your fingers in the arrows direction. <i>(Fig.3.45)</i>	
2	 <i>Fig.3.46</i>	Assemble hinge covers with your fingers in the arrows direction. <i>(Fig.3.46)</i>	

- Assemble the phone as described in *2 Reassembly Upper & Lower cabinets*, step,23-28.

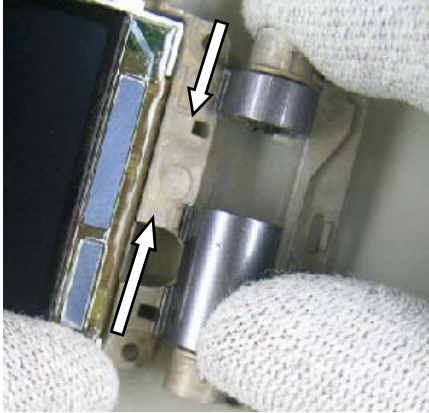
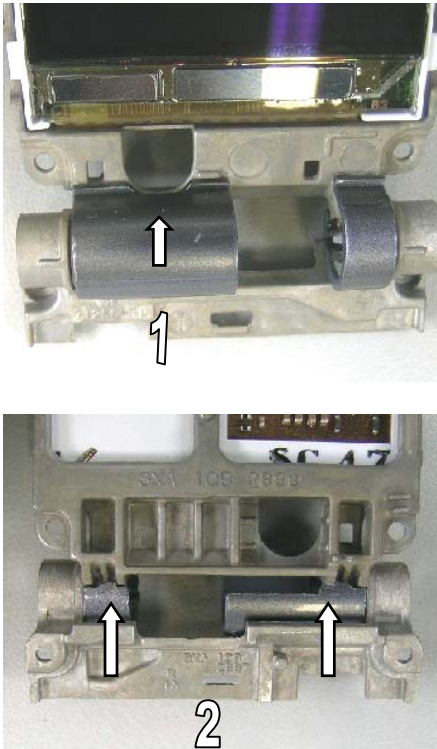


3.18 Hinge Covers-Inner

Tools

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 1-9, 11-18 and 21-24.

#	Figure	Instruction	Note
1	 <i>Fig.3.47</i>	Disassemble the hinge covers with your fingers in the arrows directions. Reassemble the new ones in the opposite direction. (Fig.3.47)	Be careful handling the LCD to avoid contamination.
2	 <i>Fig.3.48</i>	Control that the gap in the large hinge cover, is parallel to the hole in the frame (1). Check that the hooks in the hinge covers fit into the frame (2). (Fig.3.48)	Be careful handling the LCD to avoid contamination.

- Assemble the phone as described in *2 Reassembly Upper & Lower cabinets*, 7-11 and 14-28.

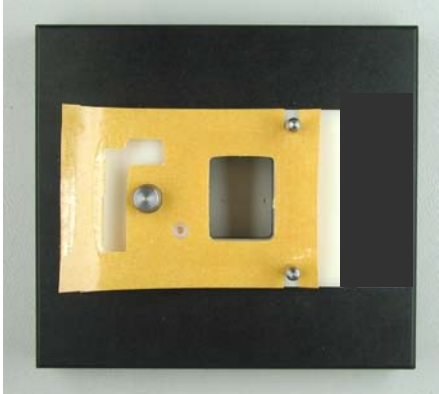



3.19 IMD Plate (upper rear cabinet)

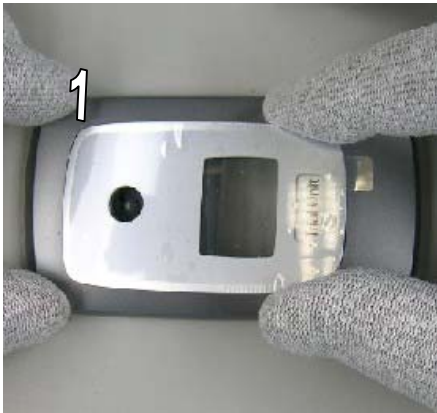

Tools

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 3-5

#	Figure	Instruction	Note
1	 <i>Fig.3.49</i>	Place the Upper Rear IMD tape in the fixture. Remove the protection foil. (Fig.3.49)	
2	 <i>Fig.3.50</i>	Place Upper Rear IMD plate in the fixture and press down with your fingers. (Fig.3.50)	
3	 <i>Fig.3.51</i>	Lift up the IMD plate from the fixture and remove the protection foil. (Fig.3.51)	



#	Figure	Instruction	Note
4	 <p><i>Fig.3.52</i></p>	Place the IMD plate on the Upper Rear Cabinet. Start at the icon side (1). <i>(Fig.3.52)</i>	
5	 <p><i>Fig.3.53</i></p>	Turn the Upper Rear Cabinet around and press gently down the Upper Inside Cabinet with your fingers. <i>(Fig.3.53)</i>	Remember to assemble the icon.

- Assemble the icon as described in 3.14 Icon steps 2-3.
- Reassemble the phone as described in *1 Reassembly Upper & Lower cabinets*, step 24-26.





3.20 Upper inside cabinet assembly

Tools

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 3-5.

#	Figure	Instruction	Note
1	 (Fig.3.54)	Remove the Upper Inside Cabinet. Open the phone between 90° and 180° like the picture show. Start at the upper area and pull forward in the arrow direction. (Fig.3.54)	Don't touch main LCD. Status LCD is only connected to board with flex film and falls easily out of Frame.
2	 (Fig.3.55)	Reassembly the new Upper Inside Cabinet assembly. Start at hinge area. (Fig.3.55)	

- Reassemble the phone as described in *1 Reassembly Upper & Lower cabinets*, step 24-26.



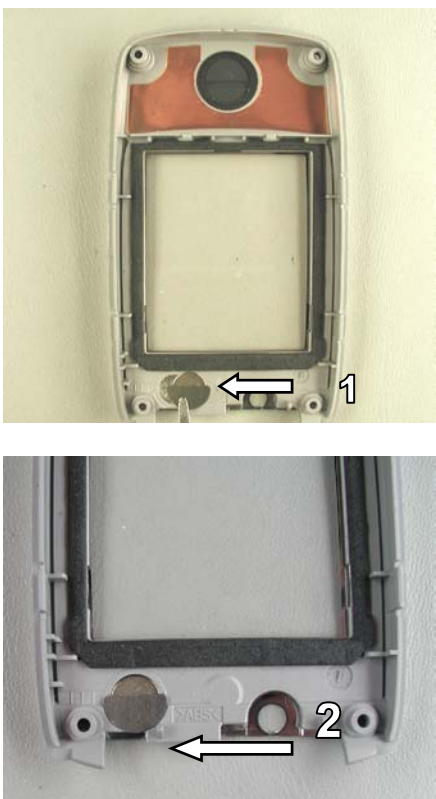
3.21 Magnet

Tools

- Pair of tweezers
- Flex film assembly Tool NTZ 112 521
- Dentist hook

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 3-5.

#	Figure	Instruction	Note
1	 <p>Fig.3.56</p>	<p>Assemble the magnet in Upper Inside Cabinet cavity by using a pair of tweezers (1).</p> <p>Then press down the magnet with your finger (2).</p> <p>(Fig.3.56)</p>	

- Assemble the phone as described in *2 Reassembly Upper & Lower cabinets*, 24-26.



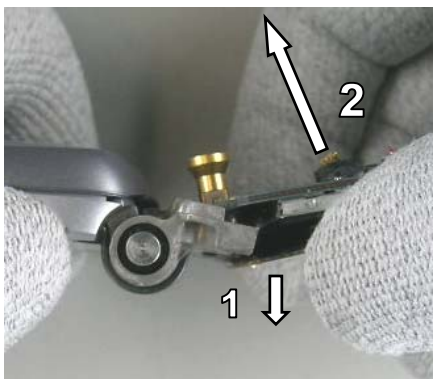
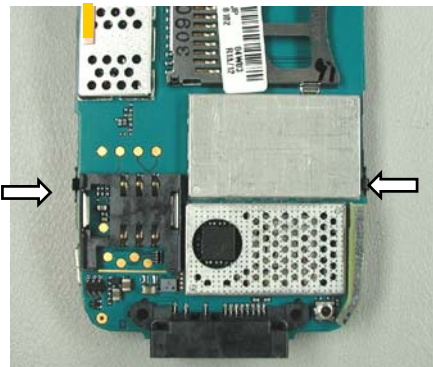
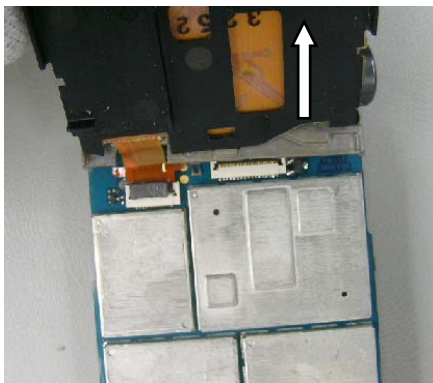
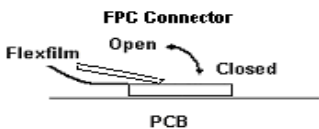
3.22 Keyboard support Complete and Keyboard PCB

Tools

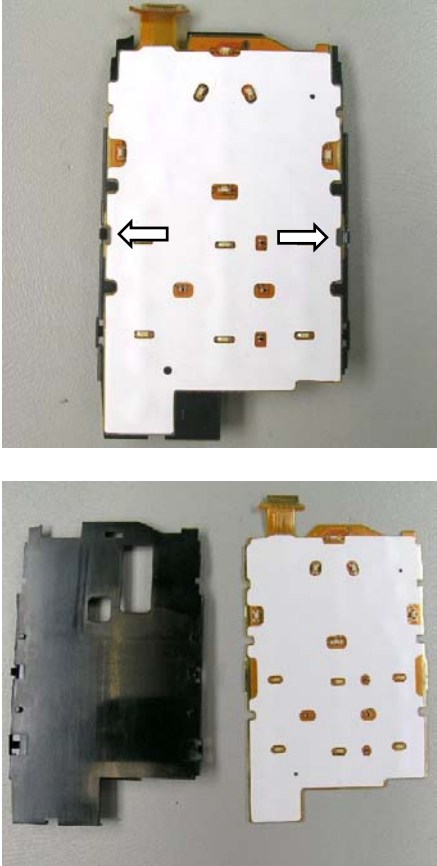
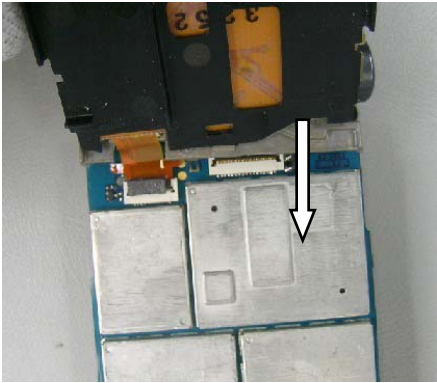
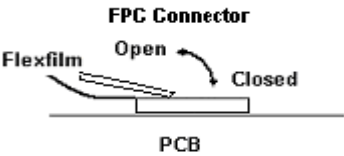
- Flexfilm assembly Tool NTZ 112521

Instruction


- Disassemble the phone as described in *Disassembly Upper & Lower cabinets*, step 1-2, 6, 7 and 9.

#	Figure	Instruction	Note
1	 <p><i>Fig.3.57</i></p>	<p>Hold the Main PCB and Frame, bend the keyboard support down (1)</p> <p>Then bend Main PCB in the arrow direction (upwards) (2).</p> <p>(Fig.3.57)</p>	
2	 <p><i>Fig.3.58</i></p>	<p>Turn the Main PCB around and open the two keyboard support snap fit hooks with a pair of tweezers.</p> <p>(Fig.3.58)</p>	
3	 <p><i>Fig.3.59</i></p>	<p>Turn the phone around. Fold the keyboard support forward and open Keyboard support connector. Remove Keyboard support and Keyboard PCB. Use Flexfilm assembly Tool NTZ 112521.</p> <p>(Fig.3.59)</p> 	



#	Figure	Instruction	Note
4	 <p><i>Fig.3.60</i></p>	<p>Open the hooks on the Keyboard support in arrows direction and remove Keyboard PCB.</p> <p>Assemble a new Keyboard Support or a new Keyboard complete PCB.</p> <p><i>(Fig.3.60)</i></p>	
5	 <p><i>Fig.3.61</i></p>	<p>Open the FPC connector. Assemble Keyboard support Complete flex film. Use Flex film assembly Tool NTZ 112521. Use your finger to close the FPC-connector. Fold down Keyboard support in the arrow direction and snap fit it on main PCB</p> <p><i>(Fig.3.61)</i></p> 	



#	Figure	Instruction	Note
6	 <p><i>Fig.3.62</i></p>	<p>Hold the Main PCB and Frame, bend the keyboard support down (1)</p> <p>Then fit in the guiding pins on Main PCB in the frame. (2).</p> <p>Turn the phone around and check that the keyboard PCB flex film not have been pinched.</p> <p>(Fig.3.62)</p>	

- Assemble the phone as described in 2 Reassembly Upper & Lower cabinets, step 19-22 and 26-28.



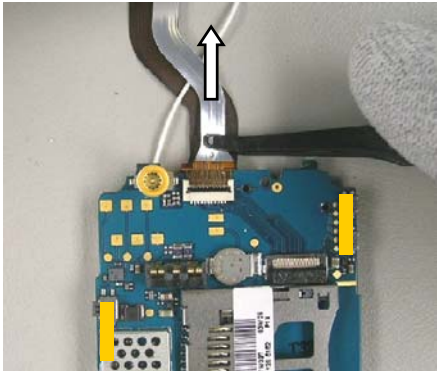
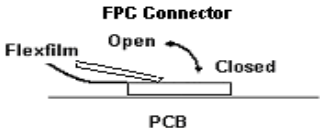
3.23 Hinge flex PCB Assembly (Cif camera)

Tools

- Pair of tweezers
- Flex film assembly tool NTZ 112 521
- Dentist hook

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 1-9,11-17 and 21-24.

#	Figure	Instruction	Note
1	 <i>Fig.3.63</i>	<p>Open Camera flex FPC connector and remove Camera flex. Assemble a new Camera flex and close the connector.</p> <p>Use Flex film assembly Tool NTZ 112 521</p> <p>(Fig.3.63)</p> 	

- Assemble the phone as described in *2 Reassembly Upper & Lower cabinets*, 5-6,10-14,16 -28.



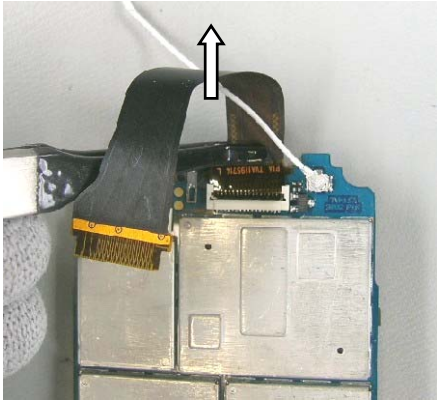
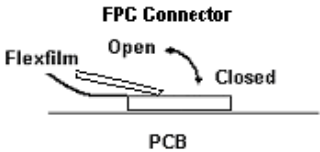
3.24 Flex film Hinge flex

Tools

- Flex film assembly tool NTZ 112 521
- Dentist hook

Instruction

- Disassemble the phone as described in *1 Disassembly Upper & Lower cabinets*, step 1-9, 11-17 and 21-24.

#	Figure	Instruction	Note
1	 <i>Fig.3.64</i>	<p>Open Hinge flex FPC connector and remove Camera flex. Assemble a new Hinge flex and close the connector.</p> <p>Use Flexfilm assembly Tool NTZ 112521.</p> <p>(Fig.3.64)</p> 	

- Assemble the phone as described in *2 Reassembly Upper & Lower cabinets*, 5-6,10-14,16 -28.



4 Label

Tools

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

Instruction

This instruction should be used when you are intending to exchange an old label or assemble a new one.

1. Read the old label and/or write the information into the Labelmake program.
2. Heat up the label with a hot air flow solder station.
3. Carefully remove the label, make sure that all residues are gone. Do not scratch the cabinet. **NOTE! Only one label is allowed on the cabinet.**
4. Check that the right label format is loaded in the Zebra printer.
5. Write a new label by using the program Labelmake. Replace the CDA-number with the KRH-number and R-state. Check that the printing is ok.
6. Take the new label and place it onto the cabinet according to *Fig.4.1* Assure that label is placed in the right position.



Fig.4.1



5 Revision History

Rev.	Date	Changes / Comments
A	2004-04-19	First release