



# Working Instructions, SP/Mechanical

Applicable for T630/T628

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# 1 Disassembly

## Process Tools

- Torque screwdriver, torx no.6 set to 20 Ncm.
- Blunt Pair of tweezers
- Antenna Cover Opener NTZ 112 520
- Flex film Assembly Tool NTZ 112 521
- Front opening tool NTZ 112 302

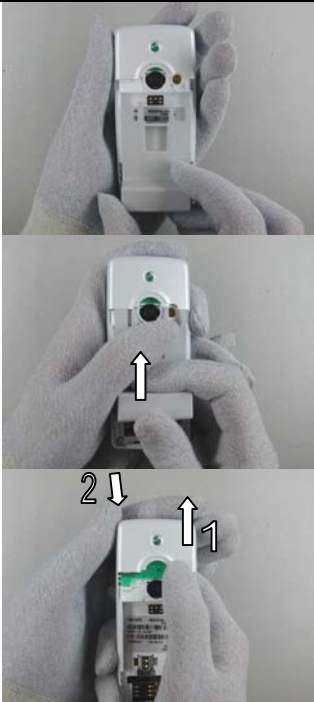
## Equipment

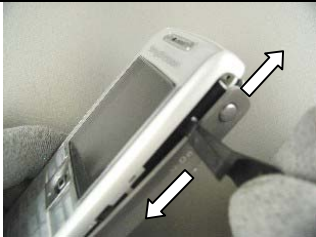
- ESD-gloves (cotton gloves)
- ESD-wristband

## Instructions

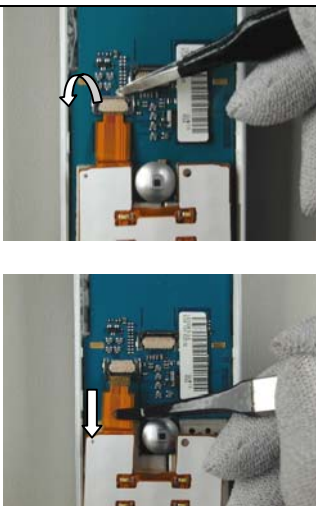
| # | Figure                                                                                                | Instruction                                                                                    | Note |
|---|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------|
| 1 | <br><i>fig 1.1</i> | Remove the battery cover with your fingers. Slide the battery cover down.<br><i>(fig 1.1)</i>  |      |
| 2 | <br><i>fig 1.2</i> | Remove the battery from the phone by overturn the phone.<br><i>(fig 1.2)</i>                   |      |
| 3 | <br><i>fig 1.3</i> | Remove the rubber plug, for the external antenna, with a pair of tweezers.<br><i>(fig 1.3)</i> |      |

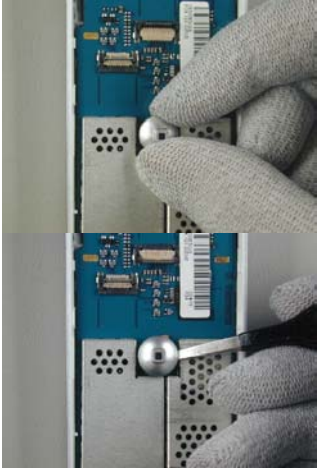
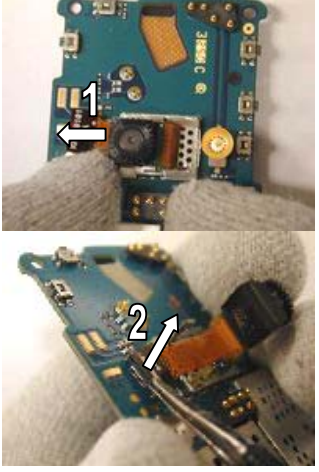
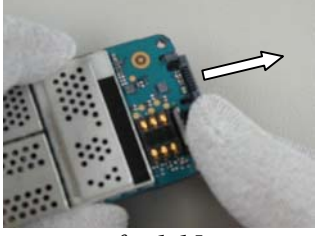


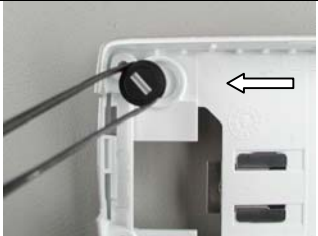
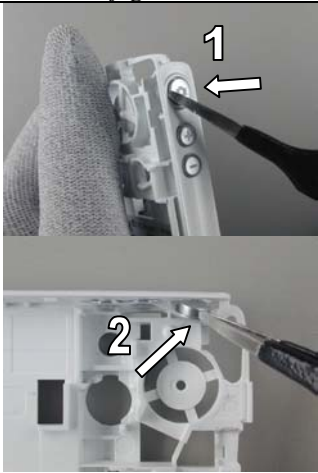
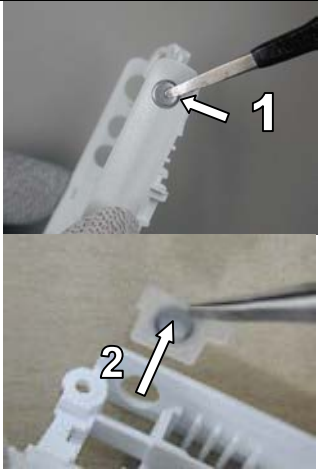
| # | Figure                                                                                                | Instruction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Note                                                                                                                                                           |
|---|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4 | <br><i>fig 1.4</i>   | <p>Remove the camera ring by using the front opening tool. Place the tool under the camera ring in the arrow direction</p> <p>Turn the tool in the arrow direction until a click sound is heard. Remove the camera ring.</p> <p><i>(fig 1.4)</i></p>                                                                                                                                                                                                                                                           |                                                                                                                                                                |
| 5 | <br><i>fig 1.5</i>  | <p>Remove the antenna cover. Use the Antenna Cover Opening tool. Push the tool inside the battery cavity in the arrow direction until it contacts the battery cavity wall. The cover should only be pushed until the snap lock is released and a “click” sound is heard.</p> <p>Remove the antenna cover, with your fingers, in the arrow (1) direction.</p> <p>The on/off key sometimes falls out when the antenna cover is removed. The arrow (2) shows the on/off key location.</p> <p><i>(fig 1.5)</i></p> | <p>Be careful not to damage the close clips on the antenna cover with the antenna cover opening tool. If you damage it you must replace the antenna cover.</p> |
| 6 | <br><i>fig 1.6</i> | <p>Remove the antenna assembly by using the front opening tool NTZ 112 302.</p> <p><i>(fig 1.6)</i></p>                                                                                                                                                                                                                                                                                                                                                                                                        | <p>Place the thumb on the antenna assembly at the left side to release the assembly in a controlled way.</p>                                                   |

| # | Figure                                                                                                   | Instruction                                                                                                                                                                                                                                                     | Note                                                                    |
|---|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| 7 |  <p><i>fig 1.7</i></p>  | <p>Remove the 4 screws.<br/>(<i>fig 1.7</i>)</p>                                                                                                                                                                                                                | <p>Removed screws can not be reused and must be scrapped.</p>           |
| 8 |  <p><i>fig 1.8</i></p>  | <p>Open the phone with the front opening tool.<br/>Begin as the picture shows.<br/>If necessary gently move the tool along the gap both ways until the latch on the inside is loose. If necessary do the same thing on the other side.<br/>(<i>fig 1.8</i>)</p> | <p>Be careful not to scratch the phone with the front opening tool.</p> |
| 9 |  <p><i>fig 1.9</i></p> | <p>Remove the keyboard with your fingers.<br/>(<i>fig 1.9</i>)</p>                                                                                                                                                                                              |                                                                         |

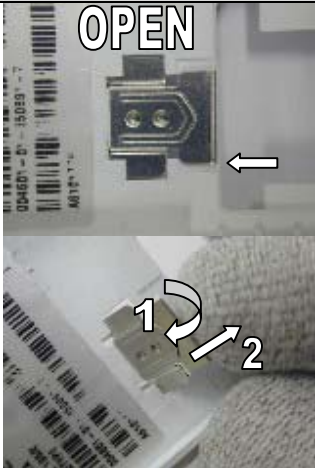


| #  | Figure                                                                                                     | Instruction                                                                                                                                                                                                                                                                                                                                                 | Note                                                                                                                                                  |
|----|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10 |  <p><i>fig 1.10</i></p>  | <p>Lift the display with your fingers. You may have to loose the latches at the arrows.</p> <p>Remove the ZIF tape with the help of a pair of tweezers.</p> <p>Open the ZIF-connector, connected to the display, with a pair of tweezers.</p> <p>Remove the Flex film from the ZIF-connector with the flex-film-assembly tool.</p> <p><i>(fig 1.10)</i></p> | <p>Do not touch the display-glass with your fingers</p> <p>Be careful not to damage the ZIF-connector.</p> <p>Use the correct pair of tweezers !!</p> |
| 11 |  <p><i>fig 1.11</i></p> | <p>Open the ZIF-connector, connected to the dome foil assembly, with a pair of tweezers.</p> <p>Remove the Flex film from the ZIF-connector with the flex film assembly tool.</p> <p><i>(fig 1.11)</i></p>                                                                                                                                                  | <p>Be careful not to damage the ZIF-connector.</p> <p>Use the correct pair of tweezers !!</p>                                                         |

| #  | Figure                                                                                                     | Instruction                                                                                                                                                                                                                                 | Note                                                                                                                                                                                      |
|----|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12 |  <p><i>fig 1.12</i></p>   | <p>Remove the joystick button with your fingers.</p> <p>If necessary use a pair of tweezers. Put the tweezers under the joystick button and press gently upwards.</p> <p><i>(fig 1.12)</i></p>                                              | <p>The Joystick may be a little bit tight fitted to the switch.</p> <p>Be careful not to damage the button, gasket and PCB when using a pair of tweezers.</p>                             |
| 13 |  <p><i>fig 1.13</i></p>   | <p>Release the PCB from the frame cavity by overturn the frame.</p> <p><i>(fig 1.13)</i></p>                                                                                                                                                |                                                                                                                                                                                           |
| 14 |  <p><i>fig1.14</i></p>  | <p>Tilt the camera and remove it from the camera holder by sliding it gently with your fingers in the arrow (1) direction.</p> <p>Lift the camera board to board connector (2) gently with a pair of tweezers.</p> <p><i>(fig 1.14)</i></p> | <p>Be careful not to damage the camera holder or camera flexfilm when removing the camera.</p> <p>Be careful not to damage the components on the PCB when using the pair of tweezers.</p> |
| 15 |  <p><i>fig 1.15</i></p> | <p>Remove the system connector from the board with your fingers.</p> <p><i>(fig 1.15)</i></p>                                                                                                                                               |                                                                                                                                                                                           |
| 16 |  <p><i>fig 1.16</i></p> | <p>Remove the speaker gasket. Use a pair of tweezers.</p> <p><i>(fig 1.16)</i></p>                                                                                                                                                          | <p>Removed speaker gasket can not be reused and must be scrapped.</p> <p>Do not touch the contact pads on the speaker with your fingers.</p>                                              |

| #  | Figure                                                                                                 | Instruction                                                                                                                                                               | Note                                                                                                                                     |
|----|--------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 17 | <br><i>fig 1.17</i>   | <p>Pick up the speaker from the frame cavity with a pair of tweezers.</p> <p>(<i>fig 1.17</i>)</p>                                                                        | <p>Do not touch the contact pads on the speaker with your fingers.</p>                                                                   |
| 18 | <br><i>fig 1.18</i>   | <p>Remove the vibrator by pushing it from the rear end of the frame with a pair of tweezers.</p> <p>(<i>fig 1.18</i>)</p>                                                 | <p>Do not touch or damage the vibrator contact springs.</p>                                                                              |
| 19 | <br><i>fig 1.19</i>  | <p>Pick up the microphone from the frame with a pair of tweezers.</p> <p>(<i>fig 1.19</i>)</p>                                                                            | <p>Do not touch the elastomer with your fingers.</p>                                                                                     |
| 20 | <br><i>fig 1.20</i> | <p>Gently push the camera key and the two volume keys in from the outside (1).</p> <p>Pick it up on the inside with a pair of tweezers (2).</p> <p>(<i>fig 1.20</i>)</p>  | <p>Be gentle!<br/>Keys might be cosmetically damaged if pushing to hard (1).</p> <p>The rubber can be damaged when picking it up (2)</p> |
| 21 | <br><i>fig 1.21</i> | <p>Remove the internet access key by gently pushing it in from the outside (1).</p> <p>Pick it up on the inside with a pair of tweezers (2).</p> <p>(<i>fig 1.21</i>)</p> | <p>Be gentle!<br/>The rubber can be damaged when picking it up (2)</p>                                                                   |



| #  | Figure                                                                                                   | Instruction                                                                                                                                       | Note |
|----|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 22 |  <p><i>fig 1.22</i></p> | <p>Remove the Sim lock lid with your fingers by first open it.</p> <p>Lift it up (1) and then pull it backwards (2).</p> <p><i>(fig 1.22)</i></p> |      |



## 2 Reassembly

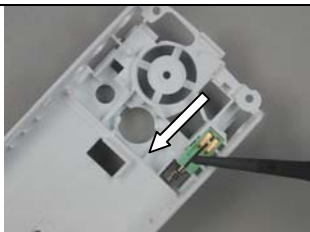
### Process Tools

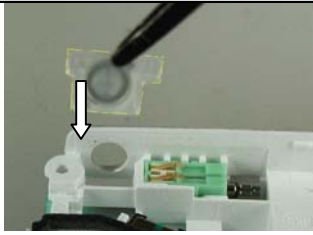
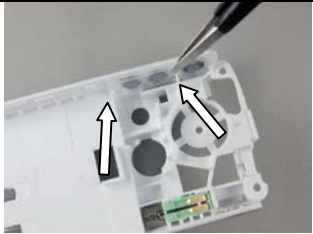
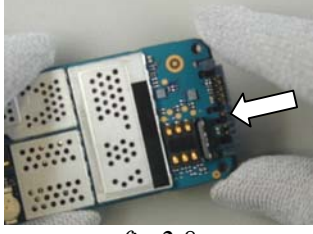
- Torque screwdriver, torx no.6 set to 20 Ncm.
- Blunt Pair of tweezers.
- Flex film Assembly Tool NTZ 112 521
- Camera gasket assembly tool NTZ 112 507

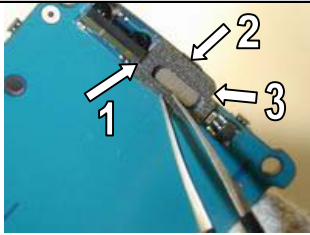
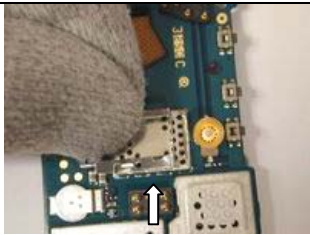
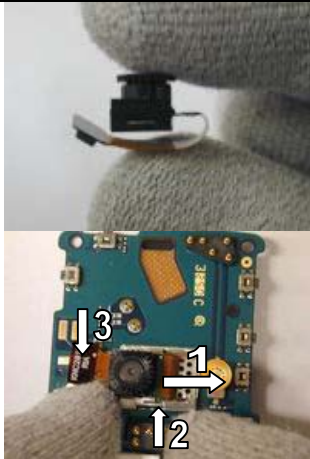
### Equipment

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

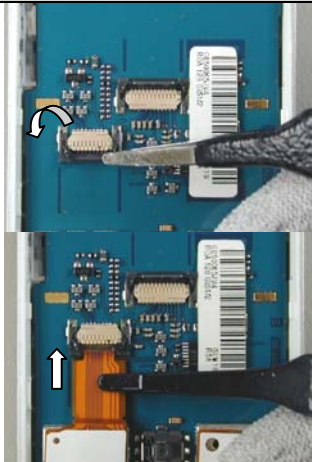
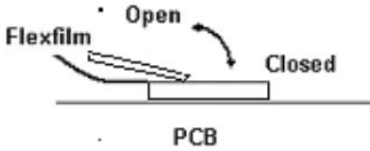
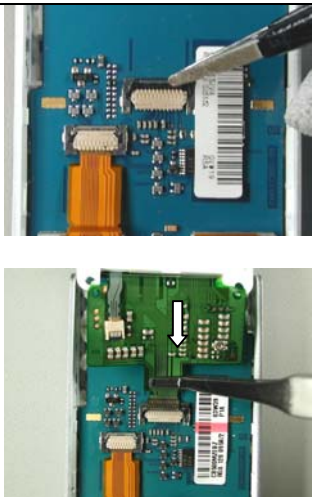
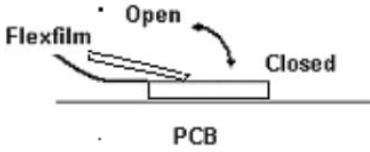
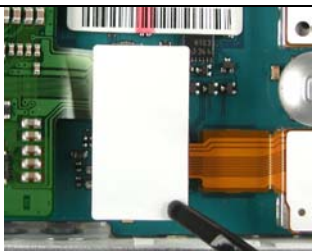
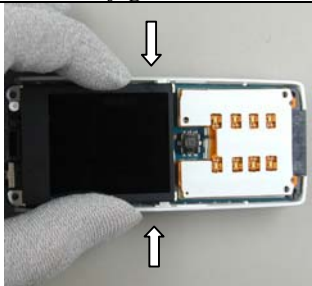
### Instructions

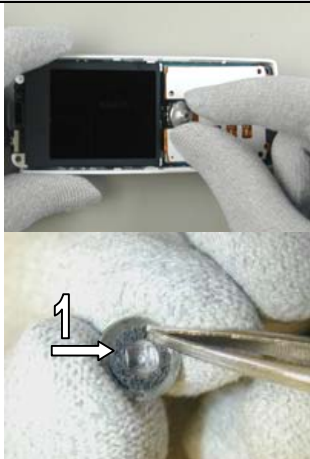
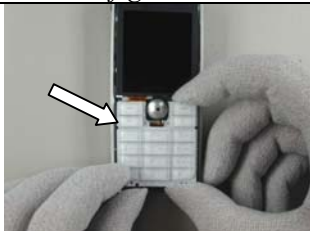
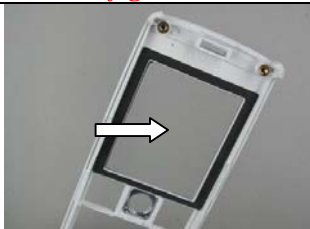
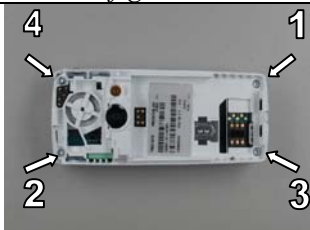
| # | Figure                                                                                                | Instruction                                                                                                                                                                       | Note                                                        |
|---|-------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| 1 | <br><i>fig 2.1</i> | Put the SIM-lock lid into the frame cavity (1) flip it down (2) and lock it (3).<br><i>(fig 2.1)</i>                                                                              |                                                             |
| 2 | <br><i>fig 2.2</i> | Mount the vibrator with a pair of tweezers. Push it gently down, with the contact springs up, into the frame cavity with the flywheel in the arrow direction.<br><i>(fig 2.2)</i> | <b>Do not touch or damage the vibrator contact springs.</b> |

| # | Figure                                                                                         | Instruction                                                                                                                                                                               | Note                                                                                                                                                                                            |
|---|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3 | <br>fig 2.3   | Mount the internet access key with the narrow side down. Use a pair of tweezers. The rubber mat extended must be tight attached to the cavity walls.<br>(fig 2.3)                         | Be careful not to damage the rubber with the pair of tweezers.                                                                                                                                  |
| 4 | <br>fig 2.4   | Mount the volume/camera key with a pair of tweezers. The rubber mat extended must be fitted behind the support pegs at the arrows.<br>(fig 2.4)                                           | Make sure that the volume/camera key rubber has contact with the frame cavity walls.<br><br>Be careful not to damage the rubber with the pair of tweezers.                                      |
| 5 | <br>fig 2.5  | Put the microphone in its place with a pair of tweezers. The microphone does not have to be mounted in any special direction. Assure that the elastomer is pointing upwards.<br>(fig 2.5) | Do not touch the elastomer with your fingers but make sure the elastomer is pointing upwards.                                                                                                   |
| 6 | <br>fig 2.6 | Pick up the speaker with the flex film assembly tool and mount the speaker in the frame cavity.<br>(fig 2.6)                                                                              | The contact pads on the speaker must be mounted upwards.<br><br>Do not contaminate the speaker contact pads.                                                                                    |
| 7 | <br>fig 2.7 | Mount the speaker gasket over the speaker. The gasket shall not cover the contact pads or speaker cavity edge at the arrow.<br>(fig 2.7)                                                  |                                                                                                                                                                                                 |
| 8 | <br>fig 2.8 | Mount the system connector on the PCB with your fingers. Push it on in the arrow direction<br>(fig 2.8)                                                                                   | The system connector will be straight and parallel to the bottom line of the PCB.<br><br>Incorrect mounted the connector can cause damage to the small components close to the PCB bottom line. |

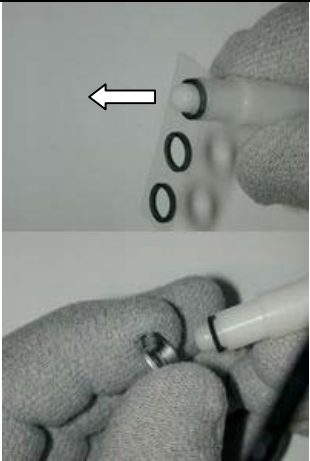
| #  | Figure                                                                                                     | Instruction                                                                                                                                                                                                                                                                                                                                          | Note                                                                                                                                                                         |
|----|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9  |  <p><i>fig 2.9</i></p>    | <p>Mount the sound channel gasket on the PCB with a pair of tweezers.</p> <p>Use the IRDA sidewall (1), the PCB edge (2) and the PCB cut (3) to place it in the correct position.</p> <p><i>(fig 2.9)</i></p>                                                                                                                                        |                                                                                                                                                                              |
| 10 |  <p><i>fig 2.10</i></p>   | <p>Mount the camera holder over the shielding can, with your fingers. Snap fit the holder centred over the shielding can and make sure that the camera stop pin (arrow) is correctly oriented.</p> <p><i>(fig 2.10)</i></p>                                                                                                                          | <p>The camera holder has normally not been removed in disassembly.</p> <p>This is only to be done if the camera holder has been removed by accident.</p>                     |
| 11 |  <p><i>fig 2.11</i></p>  | <p>Pick up the camera with your fingers. The flex film on the camera must be folded under the camera.</p> <p>Push the camera into the camera holder (1) and use the camera holder stop pins (2) for the correct position.</p> <p>Snap fit the camera flex film (3) onto the board to board connector with your fingers.</p> <p><i>(fig 2.11)</i></p> |                                                                                                                                                                              |
| 12 |  <p><i>fig 2.12</i></p> | <p>Place the PCB in the frame cavity.</p> <p>Start by putting the volume and camera switch side into frame cavity and then lay the PCB down.</p> <p><i>(fig 2.12)</i></p>                                                                                                                                                                            | <p>Make sure that the switches on the PCB are in contact with the camera/volume key.</p> <p>Check also that the switch for internet is in contact with the internet key.</p> |



| #  | Figure                                                                                                     | Instruction                                                                                                                                                                                                                                                                                                                                                                                                     | Note                                                                                                                                                                                                                                      |
|----|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 13 |  <p><i>fig 2.13</i></p>   | <p>Open the dome foil assembly ZIF connector.</p>  <p>Take a dome foil assembly and mount it in the ZIF connector. Push it into the ZIF connector with the flex film assembly tool. It is in the correct position when the edge is tight to the connector. Close the connector with a pair of tweezers.</p> <p>(fig 2.13)</p> | <p>Be careful not to damage the flex film with the flex film assembly tool.</p> <p>Make sure the ZIF connector is properly closed.</p> <p>When the connector is closed a gap between the flex film edge and the connector is visible.</p> |
| 14 |  <p><i>fig 2.14</i></p>  | <p>Open the display ZIF connector.</p>  <p>Mount the flex film into the ZIF connector. Use the flex film assembly tool. Close the connector with a pair of tweezers.</p> <p>(fig 2.14)</p>                                                                                                                                  | <p>Make sure the flex film is in the proper position before closing the ZIF connector.</p> <p>Be careful not to damage the flex film with the tool.</p> <p>Make sure that the ZIF connector is properly closed.</p>                       |
| 15 |  <p><i>fig 2.15</i></p> | <p>Assemble a new ZIF tape over the two ZIF connectors by hand or with a pair of tweezers.</p> <p>(fig 2.15)</p>                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                           |
| 16 |  <p><i>fig 2.16</i></p> | <p>Gently press the display edges until the two latches at the arrows locks the display assembly in the proper position with a “click” sound.</p> <p>(fig 2.16)</p>                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                           |

| #  | Figure                                                                                                     | Instruction                                                                                                                                                           | Note                                                                                                                                                                          |
|----|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 17 |  <p><i>fig 2.17</i></p>   | <p>Press the joystick button down onto the square plastic pin on the joystick switch.</p> <p>Make sure the gasket (1) is left on the button<br/>(<i>fig 2.17</i>)</p> | <p>The button does not have to be oriented in any special direction.</p>                                                                                                      |
| 18 |  <p><i>fig 2.18</i></p>   | <p>Pick up the keyboard with your fingers and mount it over the dome foil assembly.<br/>(<i>fig 2.18</i>)</p>                                                         | <p>Use the 2 keyboard guiding pins below * and # keys to mount the keyboard in its correct position.</p>                                                                      |
| 19 |  <p><i>fig 2.19</i></p>  | <p>Extra paragraph.<br/>(<i>fig 2.19</i>)</p>                                                                                                                         | <p>If you have assembled a new LCD display: Don't forget to remove the display protection foil with a pair of tweezers before assembling the front (See <i>fig 2.20</i>).</p> |
| 20 |  <p><i>fig 2.20</i></p> | <p>Pick up the front. Make sure that no dust, particles or adhesive remains on the glass.<br/>(<i>fig 2.20</i>)</p>                                                   |                                                                                                                                                                               |
| 21 |  <p><i>fig 2.21</i></p> | <p>Place the front over the frame.<br/>(<i>fig 2.21</i>)</p>                                                                                                          | <p>Very important: Check for dust inside the phone before assembling the front.</p> <p>Use air blow equipment</p>                                                             |
| 22 |  <p><i>fig 2.22</i></p> | <p>Mount the screws, with washers, in the order 1 to 4.<br/>(<i>fig 2.22</i>)</p>                                                                                     | <p>Use Torque screwdriver torx no 6 set to 20 Ncm Screw until the torque is reached.</p> <p>Removed screws cannot be reused and must be scrapped due to lock tite.</p>        |



| #  | Figure                                                                                                 | Instruction                                                                                                                                                                                                                                                                                              | Note                                                                                                                                                                                                                            |
|----|--------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 23 | <br><i>fig 2.23</i>   | Place the antenna assembly on the cavity with your fingers. Then push the antenna assembly in the arrow direction until a click sound is heard.<br><i>(fig 2.23)</i>                                                                                                                                     | Be careful not to damage the pogo pins on the board.                                                                                                                                                                            |
| 24 | <br><i>fig 2.24</i>  | Place the on/off key, with a pair of tweezers, at the top of the antenna cover (1).<br><br>Slide on the antenna cover over the antenna assembly in the arrow direction (2)<br><br>Continue to push the antenna cover until it properly fits in it's right place with a click sound.<br><i>(fig 2.24)</i> | Make sure that the antenna cover has not been damaged when opening the phone. If the close clip or any other part is damaged, the antenna cover must be replaced.<br><br>Check so the on/off key remains in its right position. |
| 25 | <br><i>fig 2.25</i> | Remove the camera gasket from the carrier tape with the camera gasket tool<br><br>Mount the gasket in the camera ring with the Camera gasket tool.<br><i>(fig 2.25)</i>                                                                                                                                  | Make sure that the adhesive side is up (in the arrow direction).                                                                                                                                                                |

| #  | Figure                                                                                                     | Instruction                                                                                                                           | Note |
|----|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|------|
| 26 |  <p><i>fig 2.26</i></p>   | <p>Place the camera ring as the picture shows.</p> <p>Press with your fingers to fasten the camera ring.</p> <p><i>(fig 2.26)</i></p> |      |
| 27 |  <p><i>fig 2.27</i></p>  | <p>Mount the rubber plug for the external antenna connector.</p> <p><i>(fig 2.27)</i></p>                                             |      |
| 28 |  <p><i>fig 2.28</i></p> | <p>Place the battery into the frame cavity like the picture shows.</p> <p><i>(fig 2.28)</i></p>                                       |      |
| 29 |  <p><i>fig 2.29</i></p> | <p>Slide the battery cover onto the phone.</p> <p><i>(fig 2.29)</i></p>                                                               |      |

## 3 Replacement of Mechanical Parts

### 3.1 Microphone

#### 3.1.1 Process tools

- Pair of tweezers

#### 3.1.2 Equipment

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

#### 3.1.3 Instructions

- Disassemble the phone as described in *1 Disassembly*

| # | Figure                                                                                                  | Instruction                                                                                                                                                                       | Note                                                                                                                                                                     |
|---|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <br><i>fig 3.1.1</i> | Remove the microphone from the frame cavity with a pair of tweezers.<br><i>(fig 3.1.1)</i>                                                                                        |                                                                                                                                                                          |
| 2 | <br><i>fig 3.1.2</i> | Pick up the new microphone with a pair of tweezers. Mount the microphone in the cavity in the frame. Press the microphone to the bottom of the frame cavity<br><i>(fig 3.1.2)</i> | <b>Do not touch the elastomer.</b><br><br><b>The microphone does not have to be oriented in any special direction except the elastomer that must be pointing upwards</b> |

- Assemble the phone as described in *2 Reassembly*

## 3.2 Vibrator Assembly

### 3.2.1 Process Tools

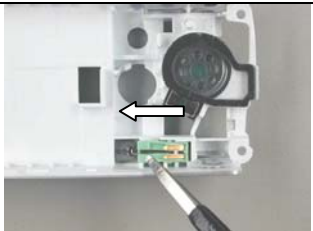
- Pair of tweezers.

### 3.2.2 Equipment

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

### 3.2.3 Instructions

- Disassemble the phone as described in *1 Disassembly*

| # | Figure                                                                                                  | Instruction                                                                           | Note                                                                                                 |
|---|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 1 | <br><i>fig 3.2.1</i>  | Remove the vibrator. Use a pair of tweezers.<br><i>(fig 3.2.1)</i>                    | To remove the vibrator press on it from the rear side of the frame                                   |
| 2 |                                                                                                         | Take a new vibrator.                                                                  | Hold the vibrator on the rubber parts.                                                               |
| 3 | <br><i>fig 3.2.2</i> | Mount the vibrator in the frame cavity with a pair of tweezers.<br><i>(fig 3.2.2)</i> | Do not touch or damage the vibrator contact springs.<br>The flywheel shall be in the arrow direction |

- Assemble the phone as described in *2 Reassembly*

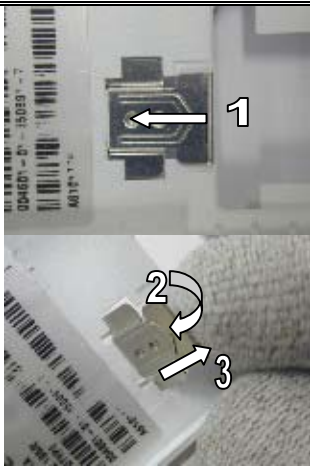
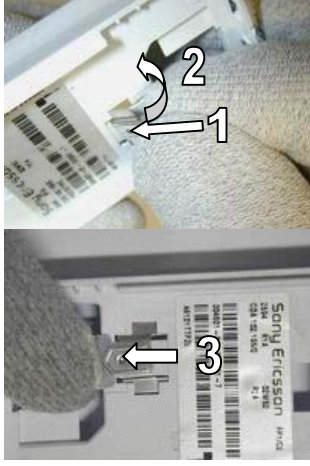
## 3.3 SIM-lock lid

### 3.3.1 Equipment

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

### 3.3.2 Instructions

- Disassemble the phone as described in *1 Disassembly*

|   |                                                                                                             |                                                                                                                                                                                                                            |  |
|---|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 1 |  <p><i>fig 3.3.1</i></p>  | <p>Remove the old SIM-lock lid with your fingers by first pushing it in open position (1)</p> <p>Lift it up (2) and pull it backwards (3)</p> <p>(<i>fig 3.3.1</i>)</p>                                                    |  |
| 2 |  <p><i>fig 3.3.2</i></p> | <p>Mount the new SIM-lock lid with your fingers. Put the SIM-lock lid into the frame cavity (1) and push it down (2).</p> <p>Lock the SIM-lock lid by pushing it in the arrow direction (3).</p> <p>(<i>fig 3.3.2</i>)</p> |  |

- Assemble the phone as described in *2 Reassembly*

## 3.4 Speaker

### 3.4.1 Process Tools

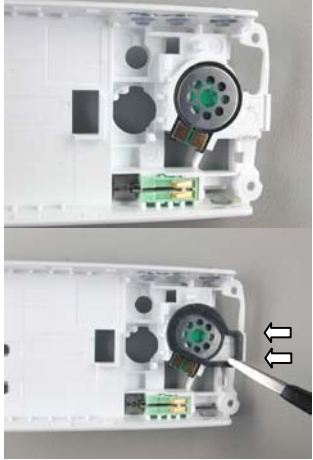
- Pair of tweezers

### 3.4.2 Equipment

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

### 3.4.3 Instructions

- Disassemble the phone as described in *1 Disassembly*

| # | Figure                                                                                                      | Instruction                                                                                                                                                                                                                         | Note                                                           |
|---|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| 1 |  <p><i>fig 3.4.1</i></p>  | <p>Remove the speaker gasket with a pair of tweezers.</p> <p>Remove the speaker with a pair of tweezers.<br/>(<i>fig 3.4.1</i>).</p>                                                                                                |                                                                |
| 2 |  <p><i>fig 3.4.2</i></p> | <p>Mount the new speaker in the frame cavity with a pair of tweezers</p> <p>Mount the speaker gasket over the speaker. The gasket shall not cover the contact pads or speaker cavity edge at the arrows.<br/>(<i>fig 3.4.2</i>)</p> | <p><b>Do not touch the speaker pads with your fingers.</b></p> |

- Assemble the phone as described in *2 Reassembly*

## 3.5 Keyboard

### 3.5.1 Equipment

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

### 3.5.2 Instructions

- Disassemble the phone as described in *1 Disassembly*

| # | Figure                                                                                                    | Instruction                                                                    | Note                                                                                              |
|---|-----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| 1 |  <p><i>fig 3.5.1</i></p> | Replace the old keys, with a new set, with your fingers.<br><i>(fig 3.5.1)</i> | Use the 2 keyboard guiding pins below keys * and # to mount the keyboard in its correct position. |

- Assemble the phone as described in *2 Reassembly*

## 3.6 Volume/Camera Key

### 3.6.1 Process Tools

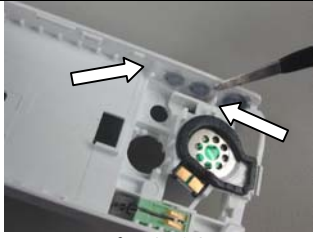
- Pair of tweezers.

### 3.6.2 Equipment

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

### 3.6.3 Instructions

- Disassemble the phone as described in *1 Disassembly*

| # | Figure                                                                                                  | Instruction                                                                                                                                                                              | Note                                                                                                                                                                           |
|---|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <br><i>fig 3.6.1</i>  | <p>Push the camera key and the two volume keys in from the outside (1).</p><br><p>Pick it up on the inside with a pair of tweezers (2).</p><br><p>(fig 3.6.1)</p>                        |                                                                                                                                                                                |
| 2 | <br><i>fig 3.6.2</i> | <p>Take a new volume/camera key and mount it in the frame with a pair of tweezers. The rubber mat extend must be fitted behind the support pegs at the arrows.</p><br><p>(fig 3.6.2)</p> | <p><b>Make sure that the volume/camera key rubber has contact with the frame cavity walls.</b></p><br><p><b>Be gentle!</b><br/>The rubber can be damaged when mounting it.</p> |

- Assemble the phone as described in *2 Reassembly*

## 3.7 Internet Access Key

### 3.7.1 Process tools

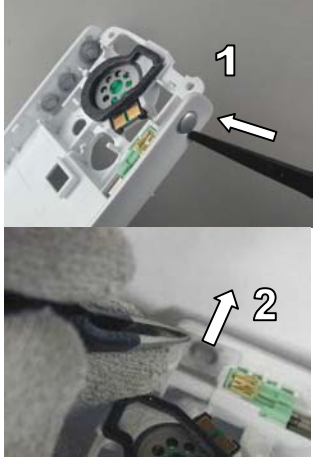
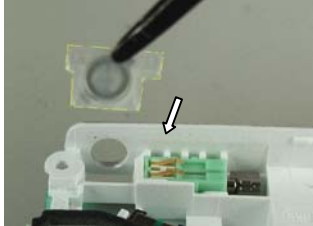
- Pair of tweezers

### 3.7.2 Equipment

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

### 3.7.3 Instructions

- Disassemble the phone as described in *1 Disassembly*

| # | Figure                                                                                                      | Instruction                                                                                                                                                                | Note                                                                         |
|---|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| 1 |  <p><i>fig 3.7.1</i></p>  | <p>Remove the internet access key by gently pushing it in from the outside (1).</p> <p>Pick it up on the inside with a pair of tweezers (2).</p> <p><i>(fig 3.7.1)</i></p> |                                                                              |
| 3 |  <p><i>fig 3.7.2</i></p> | <p>Mount the new internet access key with a pair of tweezers. The rubber mat extend must be tight attached to the cavity walls.</p> <p><i>(fig 3.7.2)</i></p>              | <p><b>Be careful not to damage the rubber with the pair of tweezers.</b></p> |

- Assemble the phone as described in *2 Reassembly*

## 3.8 Sound channel Gasket

### 3.8.1 Process Tool

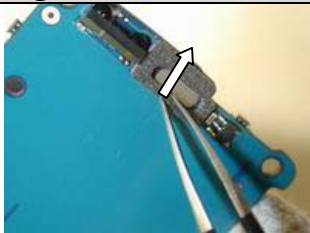
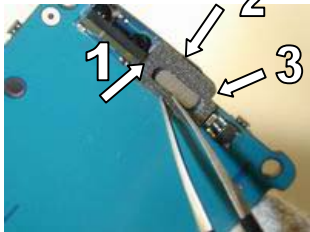
- Pair of tweezers.

### 3.8.2 Equipment

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

### 3.8.3 Instructions

- Disassemble the phone as described in *1 Disassembly*

| # | Figure                                                                                                  | Instruction                                                                                                                                                                | Note                                          |
|---|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| 1 | <br><i>fig 3.8.1</i>  | Remove the sound channel gasket from the PCB with a pair of tweezers.<br><br><i>(fig 3.8.1)</i>                                                                            | <b>Do not reuse the sound channel gasket.</b> |
| 2 |                                                                                                         | Take a new sound channel gasket with a pair of tweezers.                                                                                                                   |                                               |
| 3 | <br><i>fig 3.8.2</i> | Mount the sound channel gasket onto the PCB. Use the IRDA sidewall (1), the PCB edge (2) and the PCB cut (3) to place it in the proper position.<br><br><i>(fig 3.8.2)</i> |                                               |

- Assemble the phone as described in *2 Reassembly*

## 3.9 Joystick gasket

### 3.9.1 Process Tool

- Pair of tweezers.

### 3.9.2 Equipment

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

### 3.9.3 Instructions

- Disassemble the phone as described in *1 Disassembly*

| # | Figure                                                                                                  | Instruction                                                                                                                                                                  | Note                                   |
|---|---------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| 1 | <br><i>fig 3.9.1</i>  | Remove the old joystick gasket with a pair of tweezers.<br><br>The joystick gasket is not always possible to remove in one piece.<br><br><i>(fig 3.9.1)</i>                  | Remove all left residues with alcohol. |
| 2 | <br><i>fig 3.9.2</i> | Pick up the new joystick gasket with a pair of tweezers and the joystick with your fingers. Place the gasket in the centre of the joystick button.<br><br><i>(fig 3.9.2)</i> |                                        |

- Assemble the phone as described in *2 Reassembly*

## 3.10 Antenna assembly

### 3.10.1 Equipment

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

### 3.10.2 Instructions

- Disassemble the phone as described in *1 Disassembly*

| # | Figure                                                                                                   | Instruction                                                                                                                                                             | Note                                                                          |
|---|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 1 | <br><i>fig 3.10.1</i>  | Remove the antenna assembly by using the front opening tool.<br><i>(fig 3.10.1)</i>                                                                                     | Place the thumb at the left side to release the assembly in a controlled way. |
| 2 |                                                                                                          | Take a new antenna assembly.                                                                                                                                            |                                                                               |
| 3 | <br><i>fig 3.10.2</i> | Place the antenna assembly on the cavity, with your fingers. Then push the antenna assembly in the arrow direction until a click sound is heard.<br><i>(fig 3.10.2)</i> | Be careful not to damage the pogo pins on the board.                          |

- Assemble the phone as described in *2 Reassembly*



## 3.11 Dome Foil assembly

### 3.11.1 Process tool

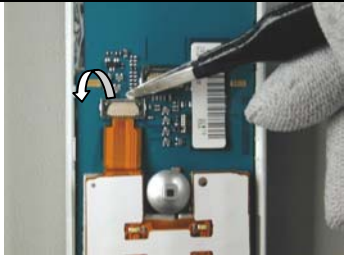
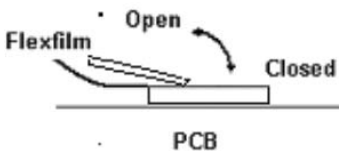
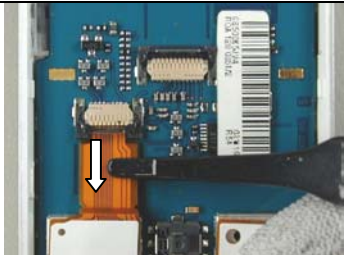
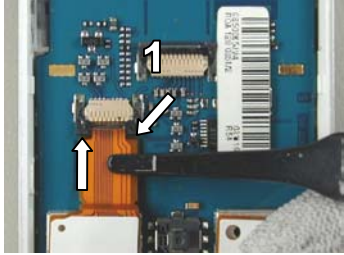
- Blunt Pair of tweezers
- Flexfilm assembly tool NTZ 112 521

### 3.11.2 Equipment

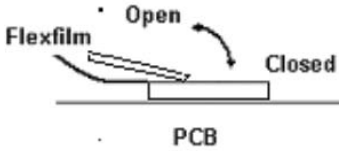
- ESD-gloves (cotton gloves)
- ESD-wristband

### 3.11.3 Instructions

- Disassemble the phone as described in *1 Disassembly*

| # | Figure                                                                                                   | Instruction                                                                                                                                                                                                                     | Note                                                                     |
|---|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| 1 | <br><i>fig 3.11.1</i>  | Open the dome foil assembly ZIF connector with a pair of tweezers.<br><br><i>(fig 3.11.1)</i>                                               | Be careful not to damage the ZIF-connector.                              |
| 2 | <br><i>fig 3.11.2</i> | Remove the dome foil assembly with the flex film assembly tool.<br><i>(fig 3.11.2)</i>                                                                                                                                          |                                                                          |
| 3 | <br><i>fig 3.11.3</i> | Take a new dome foil assembly and mount it in the ZIF connector. Push it into the connector with the flex film assembly tool. It is in the correct position when the edge (1) is tight to the connector.<br><i>(fig 3.11.3)</i> | Be careful not to damage the flex film with the flex film assembly tool. |



| # | Figure                                                                                                 | Instruction                                                                                                                                                       | Note                                                                                               |
|---|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
| 4 | <br><i>fig 3.11.4</i> | <p>Close the ZIF connector with a pair of tweezers.</p> <br><i>(fig 3.11.4)</i> | <p>When the connector is closed a gap between the flex film edge and the connector is visible.</p> |

- Assemble the phone as described in 2 Reassembly

## 3.12 Display assembly

### 3.12.1 Process tool

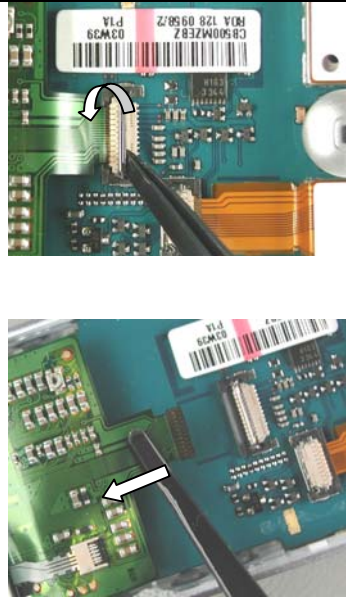
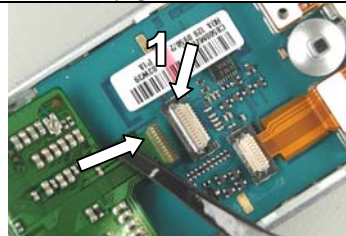
- Blunt Pair of tweezers
- Flex film assembly tool NTZ 112 521

### 3.12.2 Equipment

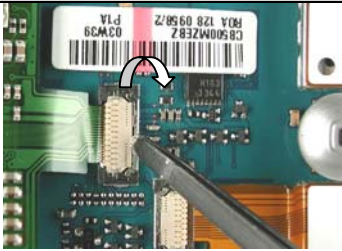
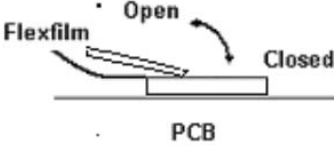
- ESD-gloves (cotton gloves)
- ESD-wristband

### 3.12.3 Instructions

- Disassemble the phone as described in *1 Disassembly*

| # | Figure                                                                                                       | Instruction                                                                                                                                                                                                                                         | Note                                                                                                                                                                                                                                   |
|---|--------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 |  <p><i>fig 3.12.1</i></p>  | <p>Lift the display with your fingers. Open the display ZIF-connector with a pair of tweezers.</p> <p>Remove the Flex film from the ZIF-connector with the flex film assembly tool.</p> <p>(<i>fig 3.12.1</i>)</p>                                  | <p>Be careful not to damage the ZIF-connector.</p> <p>Do not touch the display-glass with your fingers.</p> <p>Use the correct pair of tweezers !!</p> <p>Be careful not to damage the flex film with the flex film assembly tool.</p> |
| 2 |  <p><i>fig 3.12.2</i></p> | <p>Take a new display assembly and mount it in the ZIF connector. Push the flex film into the connector with the flex film assembly tool. It is in the correct position when the edge (1) is tight to the connector.</p> <p>(<i>fig 3.12.2</i>)</p> | <p>Be careful not to damage the flex film with the flex film assembly tool.</p>                                                                                                                                                        |



| # | Figure                                                                                                   | Instruction                                                                                                                                                   | Note                                                                                                                        |
|---|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 3 | <br><i>fig 3.12.3</i>   | Close the ZIF connector with a pair of tweezers.<br><br><i>(fig 3.12.3)</i> | <b>Be careful not to damage the flex film with the tool.</b><br><b>Make sure that the ZIF connector is properly closed.</b> |
| 4 | <br><i>fig 3.12.4</i>   | Assemble a new ZIF tape over the two ZIF connectors by hand or with a pair of tweezers.<br><br><i>(fig 3.12.4)</i>                                            |                                                                                                                             |
| 5 | <br><i>fig 3.12.5</i> |                                                                                                                                                               | <b>Don't forget to remove the LCD display protection foil with a pair of tweezers before reassembling the front.</b>        |

- Assemble the phone as described in 2 *Reassembly*

## 3.13 Camera ring and camera ring gasket

### 3.13.1 Process tool

- Front opening tool NTZ 112 302
- Camera gasket tool NTZ 112 507

### 3.13.2 Equipment

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

### 3.13.3 Instructions

- Disassemble the phone as described in *1 Disassembly*

| # | Figure                                                                                                     | Instruction                                                                                                                                                                                                                                             | Note |
|---|------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| 1 |  <p><i>fig 3.13.1</i></p> | <p>Remove the camera ring by using the front opening tool. Place the tool under the camera ring in the arrow direction</p> <p>Turn the tool in the arrow direction until a click sound is heard. Remove the camera ring.</p> <p><i>(fig 3.13.1)</i></p> |      |



| # | Figure                                                                                                      | Instruction                                                                                                                                                                                                                                                                                           | Note                                                                    |
|---|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|
| 2 |  <p><i>fig 3.13.2</i></p> | <p>Remove the camera gasket from the carrier tape with the camera gasket tool</p> <p>Mount the camera gasket in the camera ring with the camera gasket tool.</p> <p>Place the camera ring as the picture shows.</p> <p>Press with your fingers to fasten the camera ring.<br/><i>(fig 3.13.2)</i></p> | <p>Make sure that the adhesive side is up (in the arrow direction).</p> |

- Assemble the phone as described in *2 Reassembly*

### 3.14 Front replacement

#### 3.14.1 Process tools

- Pair of tweezers.

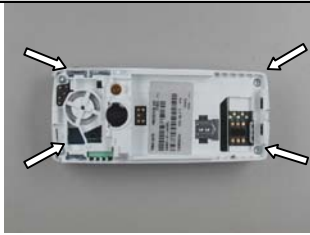
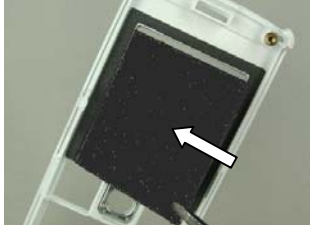
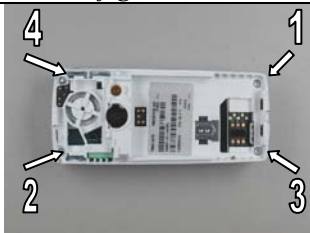
#### 3.14.2 Equipment

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

#### 3.14.3 Instructions

- Disassemble the phone as described in *1 Disassembly*



| # | Figure                                                                                                   | Instruction                                                                                                                                                  | Note                                                                                                                                       |
|---|----------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <br><i>fig 3.14.1</i>   | Remove the four screws at the arrows.<br><i>(fig 3.14.1)</i>                                                                                                 | Use screwdriver, torx no 6.<br>Removed screws cannot be reused and must be scrapped                                                        |
| 2 | <br><i>fig 3.14.2</i>   | Remove the dust gasket, inside the new front, with a pair of tweezers. Make sure no dust, particles or adhesive remains on the glass.<br><i>(fig 3.14.2)</i> | Be careful not to scratch the inside of the window with the pair of tweezers.                                                              |
| 4 | <br><i>fig 3.14.4</i>   | Place the front over the frame.<br><i>(fig 3.14.4)</i>                                                                                                       | Very important: Check for dust inside the phone before assembling the front.<br>Use air blow equipment                                     |
| 5 | <br><i>fig 3.14.5</i> | Mount the screws, with washer, in the order 1 to 4.<br><i>(fig 3.14.5)</i>                                                                                   | Use Torque screwdriver torx no 6 set to 20 Ncm Screw until the torque is reached.<br>Removed screws cannot be reused and must be scrapped. |

- Assemble the phone as described in 2 Reassembly



## 4. Process Tools for Label

- Hot air blower.
- Pair of tweezers.

### 4.1 Instructions

This instruction should be used when you intend to exchange an old label and/or mount a new one.

1. Heat up the label with a hot air blower.
2. Carefully remove the label, make sure that all residue is removed. Do not scratch the frame.
3. Printing: The text must be fully readable visually and through bar code readers.
4. Replace the CDA-number with the KRH-number and revision.
5. Take the new label and place it in the battery cavity. The label should be centred and parallel to the sides of the cavity.

**NOTE!** Make sure there are no air bubbles under the label. Only one label is allowed in the battery cavity.

## 5 Revision History

| Rev. | Date       | Changes / Comments                             |
|------|------------|------------------------------------------------|
| A    | 2003-11-18 | First release                                  |
| B    | 2004-01-27 | Label information added (replace CDA with KRH) |