

# SERVICE MANUAL Level 1&2

## NOKIA 3555

RM-257

RM-270

RM-277



### Transceiver characteristics:

#### Band:

**EGSM:** Quad-band 850/900/1800/1900MHz

#### WCDMA:

**RM-257:** WCDMA IV (1700MHz)

**RM-270:** WCDMA V (850MHz) & WCDMA I (2100MHz)

**RM-277:** WCDMA V (850MHz) & WCDMA II (1900MHz)

#### Display:

**Main LCD:** (1.8") 128x160 pixel, 262k color TFT

**Sub LCD:** (1.0") 96x68 pixel BW FSTN

#### Camera:

**Camera:** VGA 4x digital zoom

#### Operating System:

Series 40

#### Connections:

**Wireless:** Bluetooth

**Connector:** Micro USB Connector; AV Connector

#### Memory:

MicroSD™ (max 2GB)

### Transceiver with BL-5C Li-Ion battery pack

Talk time	Standby	Note
up to 3h	up to 11days	Depends on network parameters

**TABLE OF CONTENTS**

	Page
1. CHANGE HISTORY	3
2. COPYRIGHT	3
3. WARNINGS AND CAUTIONS	4
4. ESD PROTECTION	4
5. CARE AND MAINTENANCE	5
6. BATTERY INFORMATION	5
7. EXPLODED VIEW	6
8. SPARE PARTS OVERVIEW	7
9. LEVEL 2 SOLDER COMPONENTS	8
10. SERVICE TOOLS	9
11. SW-UPDATE	10
12. UPPER BLOCK DISASSEMBLY	11
13. UPPER BLOCK ASSEMBLY	17
14. LOWER BLOCK DISASSEMBLY	24
15. LOWER BLOCK ASSEMBLY	27

## 1. CHANGE HISTORY

Status	Version No.	Date	Comments
Draft	0.1	08.Aug.2007	Initial draft
Approved	1.0	31.Aug.2007	Approval

The purpose of this document is to help NOKIA service levels 1 and 2 workshop technicians to carry out service to NOKIA products. This Service Manual is to be used only by authorized NOKIA service suppliers, and the content of it is confidential. Please note that NOKIA provides also other guidance documents (e.g. Service Bulletins) for service suppliers, follow these regularly and comply with the given instructions.

While every endeavor has been made to ensure the accuracy of this document, some errors may exist. If you find any errors or if you have further suggestions, please notify NOKIA using the address below:

**CMO Operation & Logistics**  
**Training and Vendor Development**  
**Multimedia Creation & Support**  
<mailto:Service.Manual@nokia.com>

Please keep in mind also that this documentation is continuously being updated and modified, so watch always out for the newest version.

## 2. COPYRIGHT

Copyright © 2007 Nokia. All rights reserved.

Reproduction, transfer, distribution or storage of part or all of the contents in this document in any form without the prior written permission of Nokia is prohibited.

Nokia, Nokia Connecting People, and Nokia X and Y are trademarks or registered trademarks of Nokia Corporation. Other product and company names mentioned herein may be trademarks or tradenames of their respective owners.

Nokia operates a policy of continuous development. Nokia reserves the right to make changes and improvements to any of the products described in this document without prior notice.

Under no circumstances shall Nokia be responsible for any loss of data or income or any special, incidental, consequential or indirect damages howsoever caused.

The contents of this document are provided "as is". Except as required by applicable law, no warranties of any kind, either express or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose, are made in relation to the accuracy, reliability or contents of this document. Nokia reserves the right to revise this document or withdraw it at any time without prior notice. The availability of particular products may vary by region.

**IMPORTANT**

This document is intended for use by qualified service personnel only.

### 3. WARNINGS AND CAUTIONS

#### Warnings and Cautions

Please refer to the phone's user guide for instructions relating to operation, care and maintenance including important safety information. Note also the following:

#### Warnings:

1. CARE MUST BE TAKEN ON INSTALLATION IN VEHICLES FITTED WITH ELECTRONIC ENGINE MANAGEMENT SYSTEMS AND ANTI-SKID BRAKING SYSTEMS. UNDER CERTAIN FAULT CONDITIONS, EMITTED RF ENERGY CAN AFFECT THEIR OPERATION. IF NECESSARY, CONSULT THE VEHICLE DEALER/MANUFACTURER TO DETERMINE THE IMMUNITY OF VEHICLE ELECTRONIC SYSTEMS TO RF ENERGY.
2. THE HANDPORTABLE TELEPHONE MUST NOT BE OPERATED IN AREAS LIKELY TO CONTAIN POTENTIALLY EXPLOSIVE ATMOSPHERES, EG PETROL STATIONS (SERVICE STATIONS), BLASTING AREAS ETC.
3. OPERATION OF ANY RADIO TRANSMITTING EQUIPMENT, INCLUDING CELLULAR TELEPHONES, MAY INTERFERE WITH THE FUNCTIONALITY OF INADEQUATELY PROTECTED MEDICAL DEVICES. CONSULT A PHYSICIAN OR THE MANUFACTURER OF THE MEDICAL DEVICE IF YOU HAVE ANY QUESTIONS. OTHER ELECTRONIC EQUIPMENT MAY ALSO BE SUBJECT TO INTERFERENCE.

#### Cautions:

1. Servicing and alignment must be undertaken by qualified personnel only.
2. Ensure all work is carried out at an anti-static workstation and that an anti-static wrist strap is worn.
3. Use only approved components as specified in the parts list.
4. Ensure all components, modules screws and insulators are correctly re-fitted after servicing and alignment.
5. Ensure all cables and wires are repositioned correctly.

### 4. ESD PROTECTION

Nokia requires that service points have sufficient ESD protection (against static electricity) when servicing the phone.

Any product of which the covers are removed must be handled with ESD protection. The SIM card can be replaced without ESD protection if the product is otherwise ready for use.

To replace the covers ESD protection must be applied.

All electronic parts of the product are susceptible to ESD. Resistors, too, can be damaged by static electricity discharge.

All ESD sensitive parts must be packed in metallized protective bags during shipping and handling outside any ESD Protected Area (EPA).

Every repair action involving opening the product or handling the product components must be done under ESD protection.

ESD protected spare part packages MUST NOT be opened/closed out of an ESD Protected Area.

For more information and local requirements about ESD protection and ESD Protected Area, contact your local Nokia After Market Services representative.



## 5. CARE AND MAINTENANCE

This product is of superior design and craftsmanship and should be treated with care. The suggestions below will help you to fulfil any warranty obligations and to enjoy this product for many years.

- Keep the phone and all its parts and accessories out of the reach of small children.
- Keep the phone dry. Precipitation, humidity and all types of liquids or moisture can contain minerals that will corrode electronic circuits.
- Do not use or store the phone in dusty, dirty areas. Its moving parts can be damaged.
- Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store the phone in cold areas. When it warms up (to its normal temperature), moisture can form inside, which may damage electronic circuit boards.
- Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the phone.
- Do not paint the phone. Paint can clog the moving parts and prevent proper operation.
- Use only the supplied or an approved replacement antenna. Unauthorised antennas, modifications or attachments could damage the phone and may violate regulations governing radio devices.

All of the above suggestions apply equally to the product, battery, charger or any accessory.

## 6. BATTERY INFORMATION

Note: A new battery's full performance is achieved only after two or three complete charge and discharge cycles! The battery can be charged and discharged hundreds of times but it will eventually wear out. When the operating time (talk-time and standby time) is noticeably shorter than normal, it is time to buy a new battery. Use only batteries approved by the phone manufacturer and recharge the battery only with the chargers approved by the manufacturer.

Unplug the charger when not in use. Do not leave the battery connected to a charger for longer than a week, since overcharging may shorten its lifetime.

If left unused a fully charged battery will discharge itself over time. Temperature extremes can affect the ability of your battery to charge.

For good operation times with Ni-Cd/NiMh batteries, discharge the battery from time to time by leaving the product switched on until it turns itself off (or by using the battery discharge facility of any approved accessory available for the product).

Do not attempt to discharge the battery by any other means. Use the battery only for its intended purpose. Never use any charger or battery which is damaged.

Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object (coin, clip or pen) causes direct connection of the + and - terminals of the battery (metal strips on the battery) for example when you carry a spare battery in your pocket or purse. Short-circuiting the terminals may damage the battery or the connecting object.

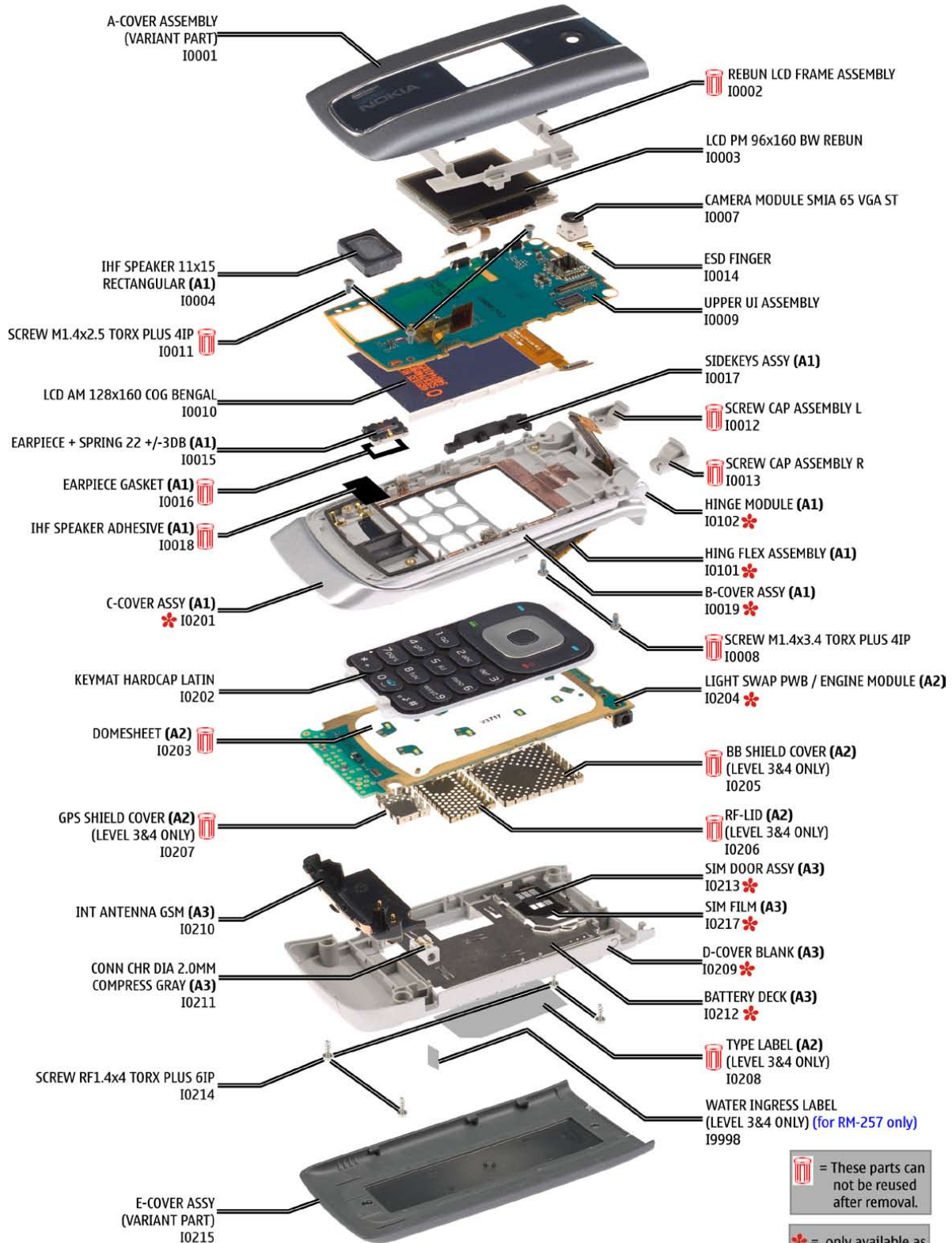
Leaving the battery in hot or cold places, such as in a closed car in summer or winter conditions, will reduce the capacity and lifetime of the battery. Always try to keep the battery between 15°C and 25°C (59°F and 77°F). A phone with a hot or cold battery may temporarily not work, even when the battery is fully charged. Batteries' performance is particularly limited in temperatures well below freezing.

Do not dispose batteries in a fire! Dispose of batteries according to local regulations (e.g. recycling). Do not dispose as household waste.

## 7. EXPLODED VIEW

See corresponding ITEM/CIRCUIT REF in the Spare Parts Service Bulletins on NOL.

### 3555 RM-257/RM-270/RM-277 EXPLODED VIEW



= These parts can not be reused after removal.

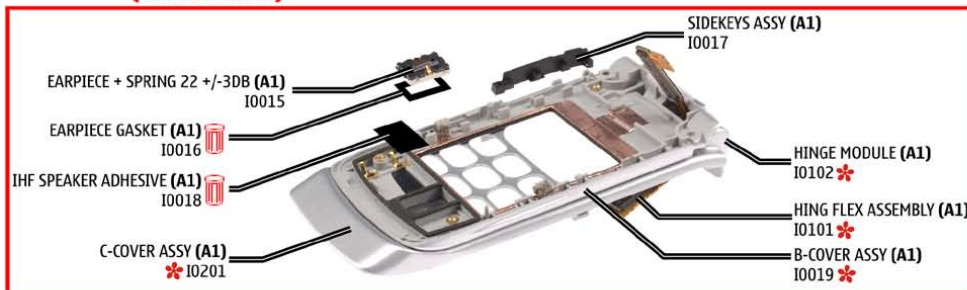
= only available as assembly

Ver 1.0

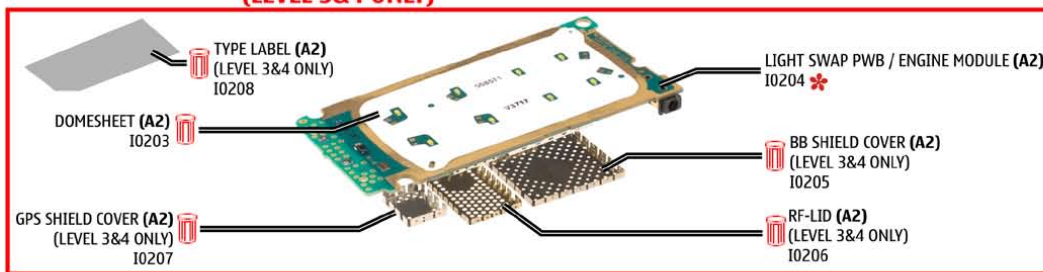
## 8. SPARE PARTS OVERVIEW

### 3555 RM-257/RM-270/RM-277 SPARE PARTS OVERVIEW

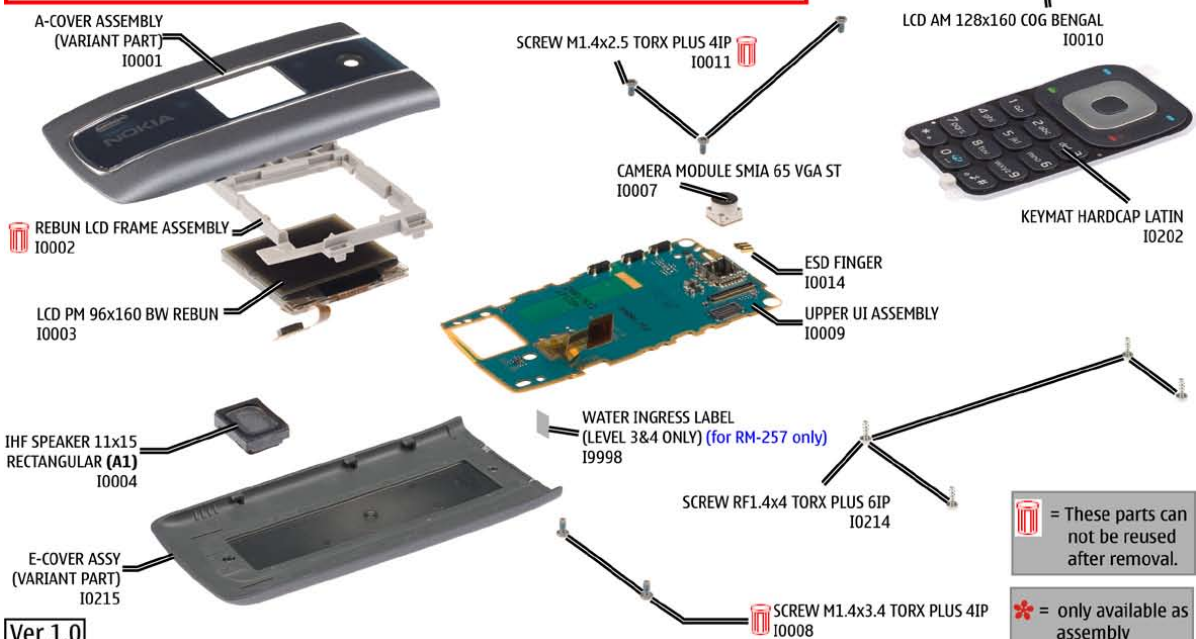
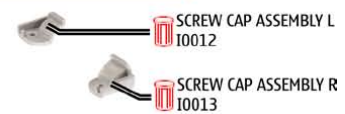
**A1=FOLD ASSY LIBAI (I0004, I0015- I0019, I0101-I0102, I0201)**  
**(Variant Part)**



**A2=LIGHT SWAP PACKAGE (I0203-I0208)**  
**(LEVEL 3&4 ONLY)**



**A3=D-COVER ASSY LIBAI (I0203-I0208)**  
**(LEVEL 3&4 ONLY)**



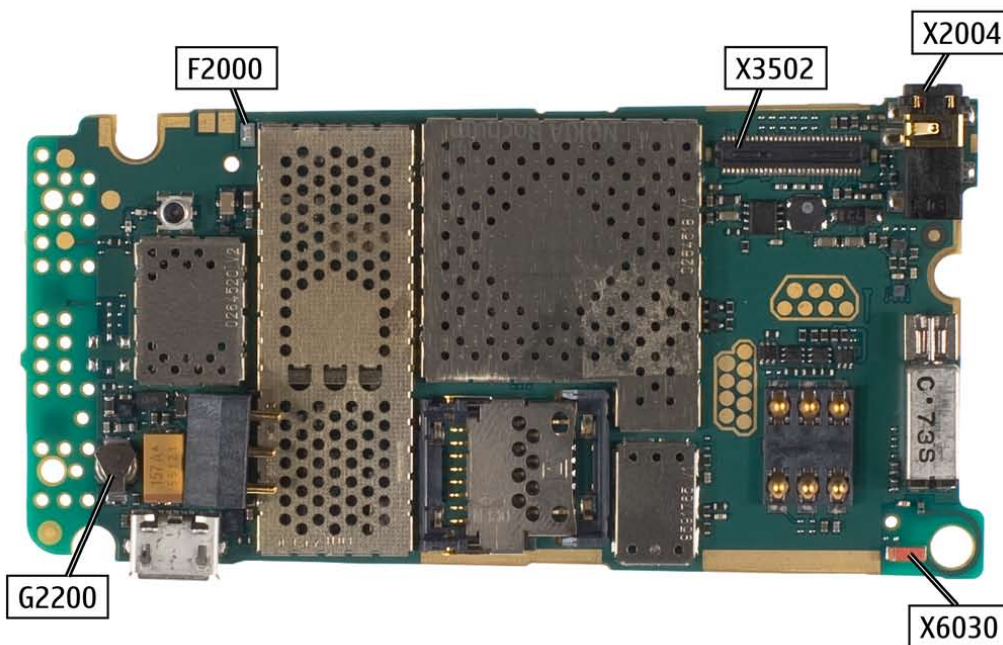
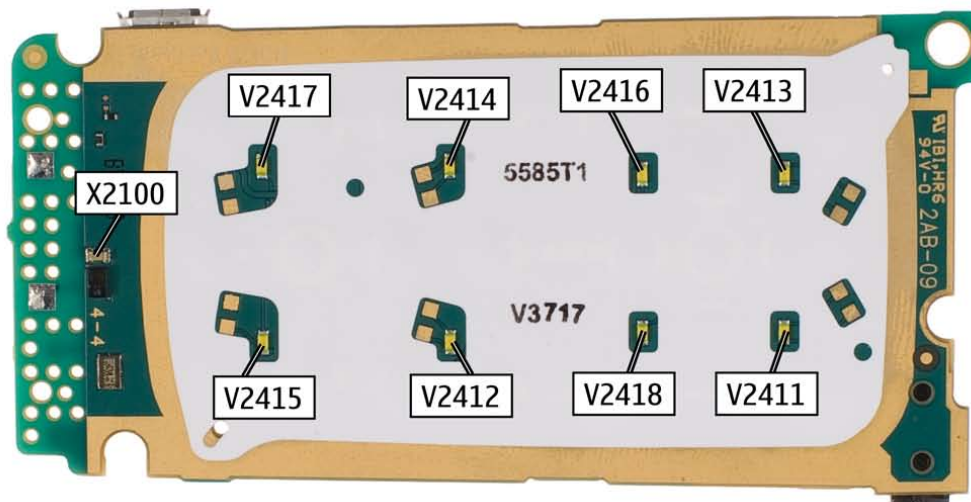
= These parts can not be reused after removal.  
 = only available as assembly

Ver 1.0

**9. LEVEL 2 SOLDER COMPONENTS**

3555 RM-257 RM-270 RM-277  
Level 2 solder components

**Solder components only for LEVEL 2**



Ver. 1.0



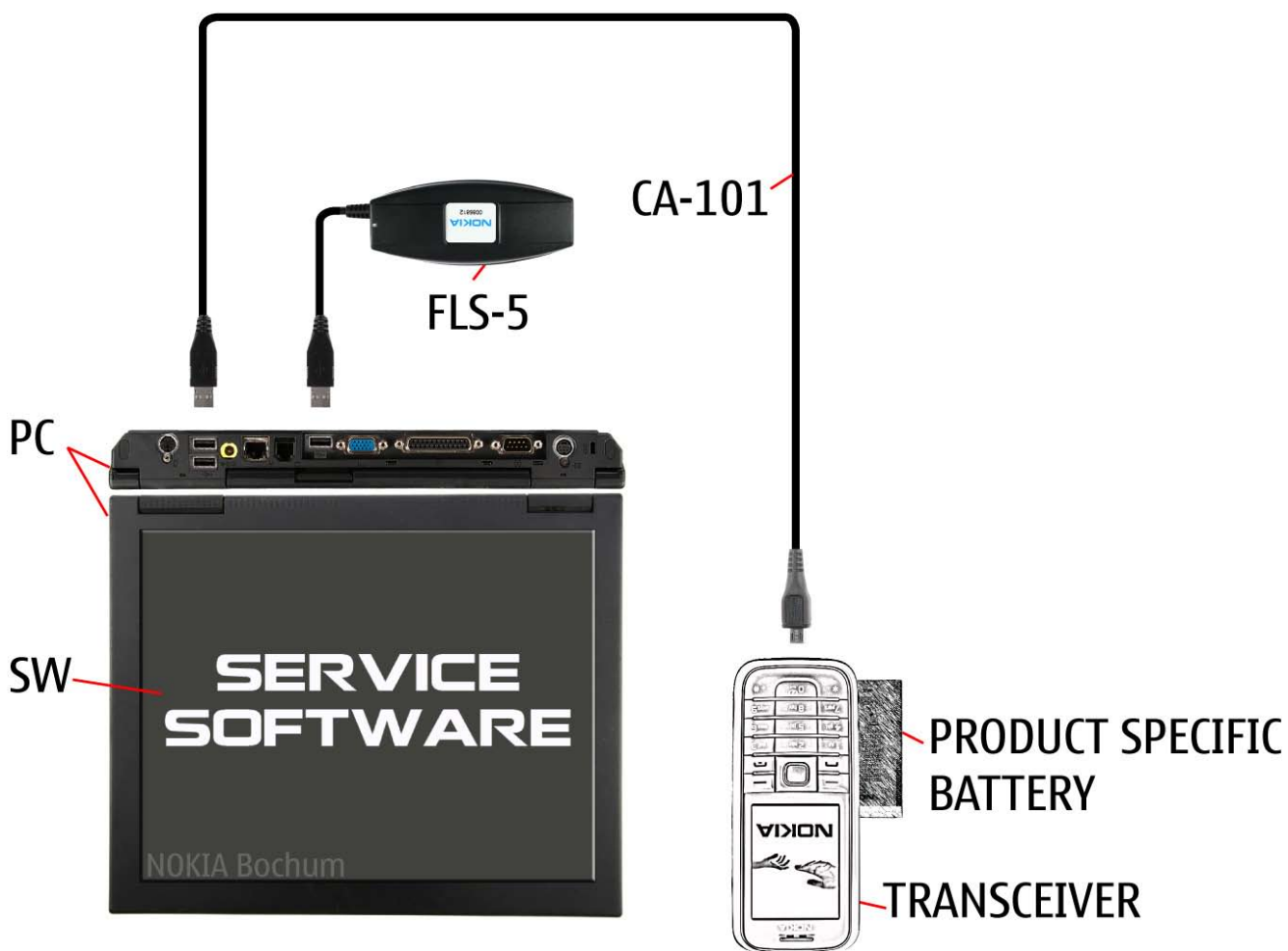
**10.SERVICE TOOLS**

 <p><b>FLS-5</b></p> <p><b>FLS-5 incl. ACF-8, Driver and User Guide</b> Dongle and flash device incorporated into one package, developed specifically for POS use.</p>	 <p><b>ACF-8</b> Universal Power Supply is used to power FLS-4S.</p>	 <p><b>Travel Charger AC-4</b> Small and lightweight charger for fast charging of your phone battery.</p>
 <p><b>CA-101</b> 100cm</p> <p><b>CA-101</b> Service Cable to connect the PC with the mini USB connector.</p>	 <p><b>SS-88</b> Camera removal tool. One side is for disassembly, the other side for assembly.</p>	 <p><b>RJ-177</b> Soldering Jig</p>
 <p><b>Internal Battery BL-5C</b> Inserted under the back cover, this Li-Ion battery provides power in a lightweight package.</p>		 <p><b>0772040</b> <b>NMP Standard Toolkit (V2)</b> For more informations refer to the Service Bulletin (SB-011) on NOKIA Online. Supplier or manufacturer contacts for tool re-order can be found in “<b>Recommended service equipment</b>” document on NOKIA Online.</p>

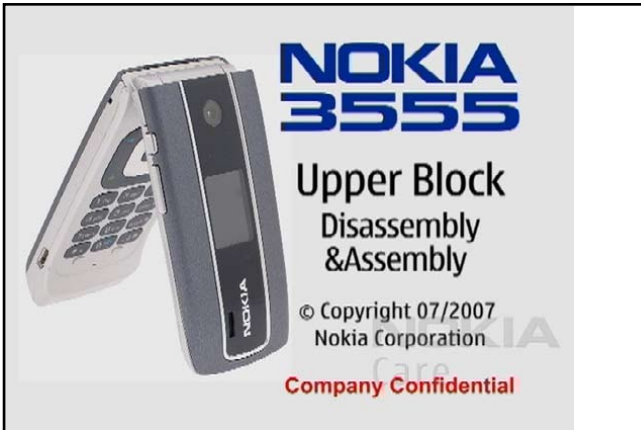
## 11.SW-UPDATE

### Flash Concept – (Point of Sales)

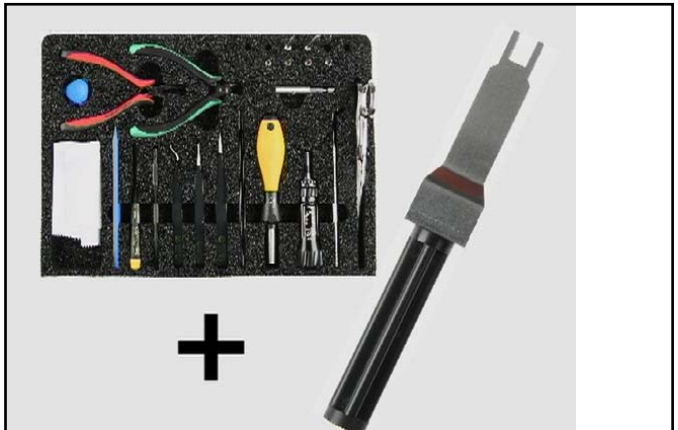
To use FLS-5 Flash Dongle you have to follow the user guide inside the sales package. Please check always for the latest version of flash software, which is available on [NOKIA Online](#).



## 12. UPPER BLOCK DISASSEMBLY



1. Nokia 3555 Upper Block Disassembly.



2. You will need the Nokia Standard Toolkit version 2 as well as the camera removal tool SS-85. Also refer to the General Mechanical Guideline Video for additional hints about the tools and component handling.



3. Gently remove the SCREW CAPS with the SS-93.



4. Discard these caps. Do not use them again.



5. Unscrew these 2 screws in the order shown.



6. Do not use these screws again.



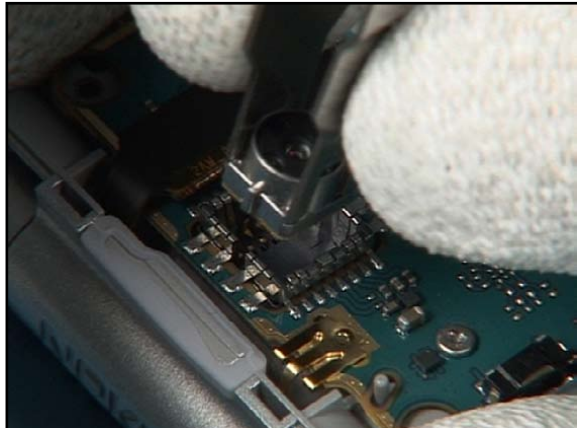
7. Gently pry open the clips of the A-COVER with the SRT-6...



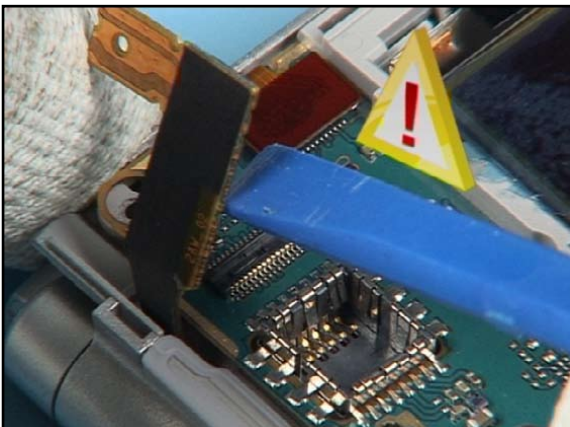
8. ...on both sides.



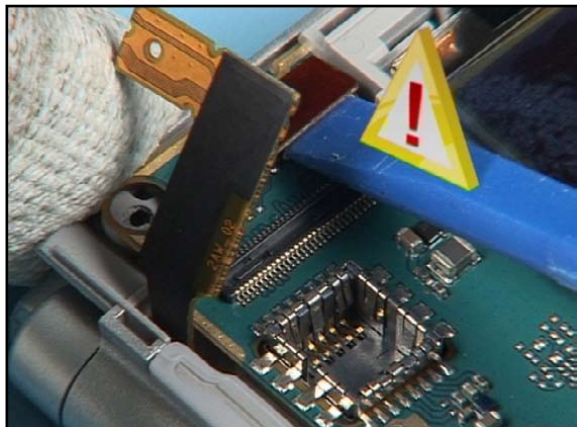
9. Lift up the A-COVER now.



10. Unlock and remove the CAMERA MODULE with the SS-88.



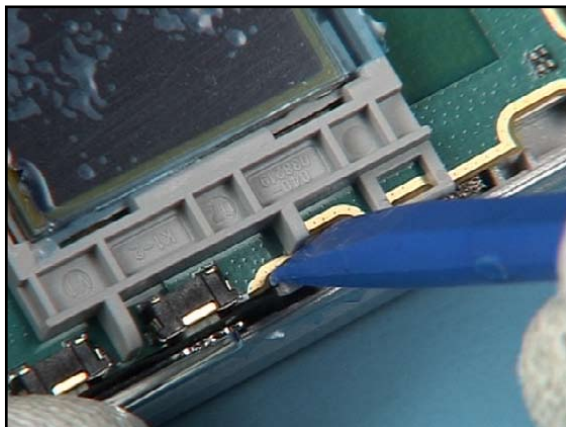
11. Carefully open the large...



12. ...and the small flex connector with the SS-93. Mind the hidden components underneath.



13. Unscrew these 3 screws in the order shown. Discard these screws. Do not use them again.



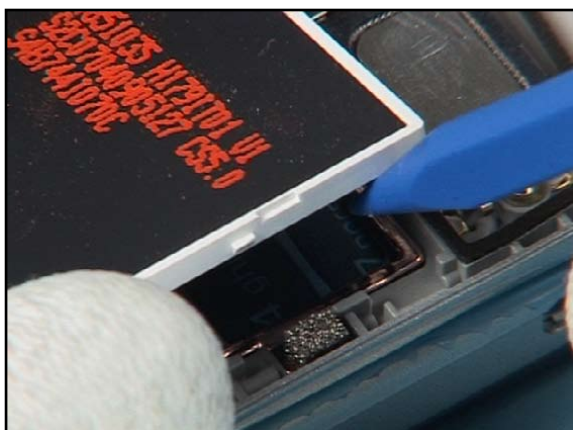
14. Unlock the plastic clips...



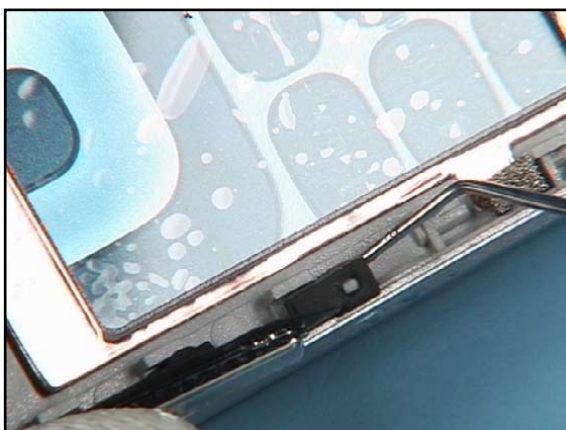
15. ...on both sides with the SS-93.



16. Now the UPPER UI ASSEMBLY can be removed.



17. Lift up the LCD AM.



18. Carefully ease out the SIDE KEYS with the dental pick.



19. Now it can be removed easily.



20. Ease out and remove the IHF SPEAKER with the SS-93.



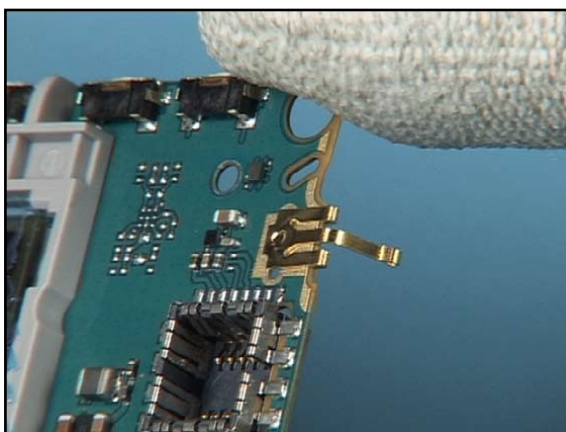
21. Remove the adhesive residues of the IHF SPEAKER ADHESIVE completely if the cover should be used for reassembling again.



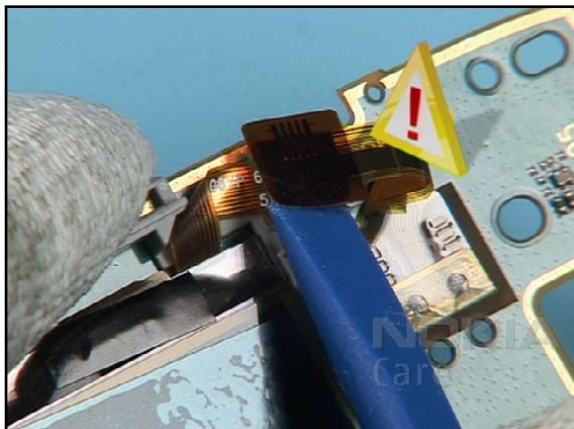
22. Ease out and remove the EARPIECE with the dental pick.



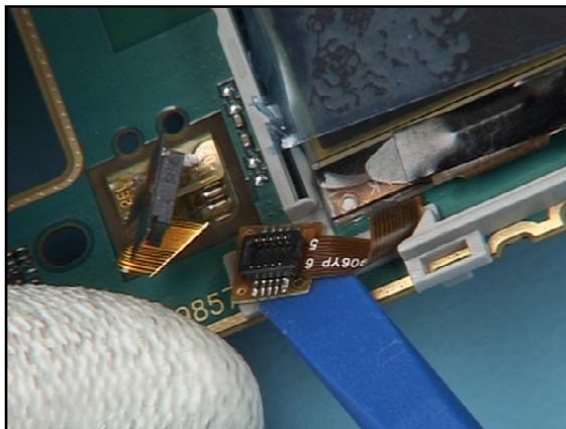
23. Remove this adhesive residues.



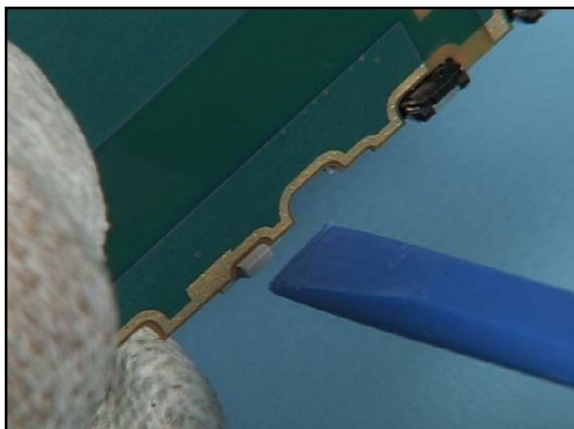
24. Mind not to destroy or bend the ESD FINGER.



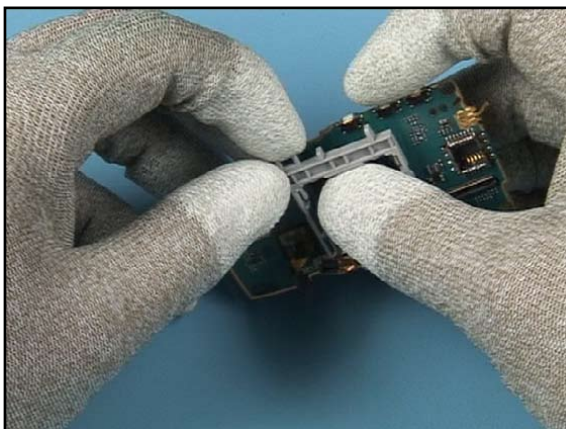
25. Carefully open this flex connector of the display.



26. Lift up the glued in flex connector with the SS-93.



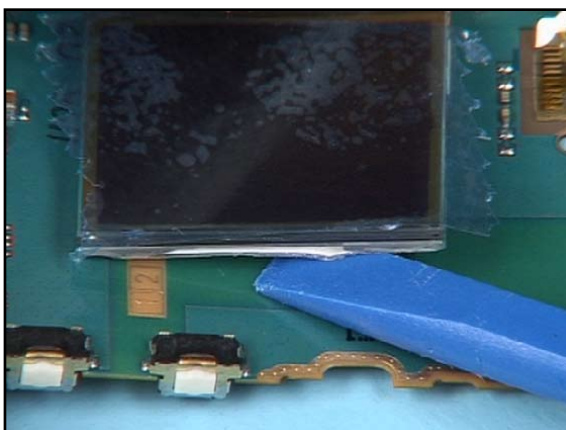
27. Unlock this plastic clip of the REBUN LCD FRAME ASSEMBLY.



28. Now flip it over.



29. Mind the delicate flex foil.



30. Gently lift up the glued in LCD PM with the SS-93.



31. If the adhesive was released completely, the LCD can be removed.



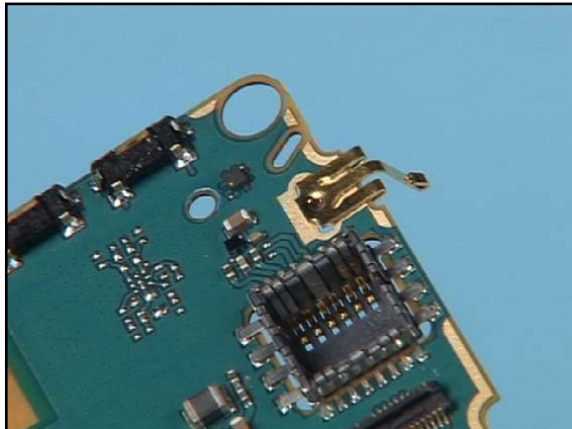
32. The disassembly procedure is now completed.



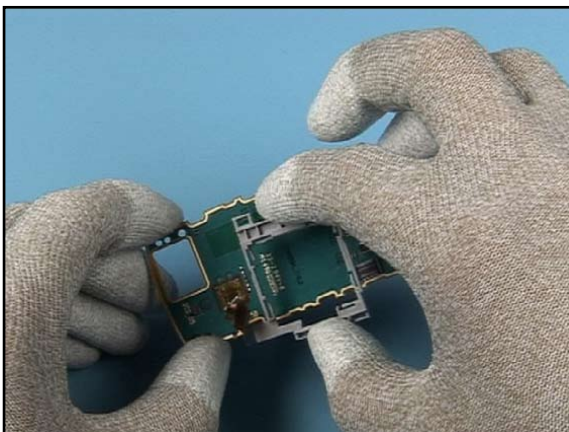
### 13. UPPER BLOCK ASSEMBLY



1. Assembly hints.



2. Mind the correct positioning of the ESD FINGER.



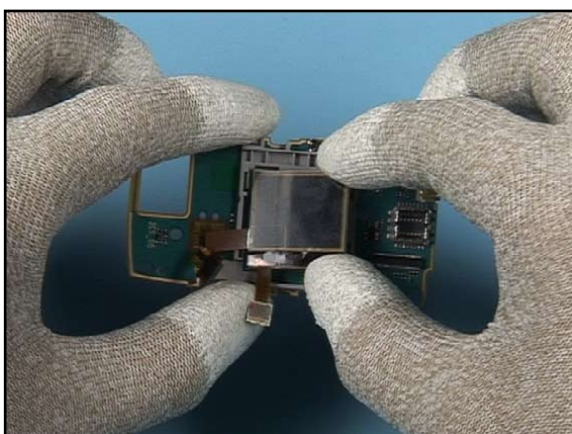
3. Place the REBUN LCD FRAME ASSEMBLY.



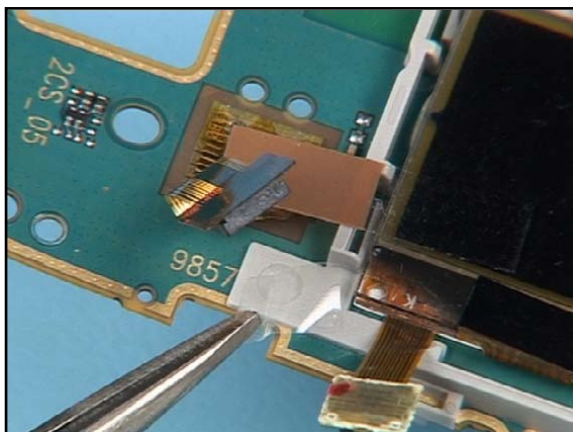
4. Click the clips into their places.



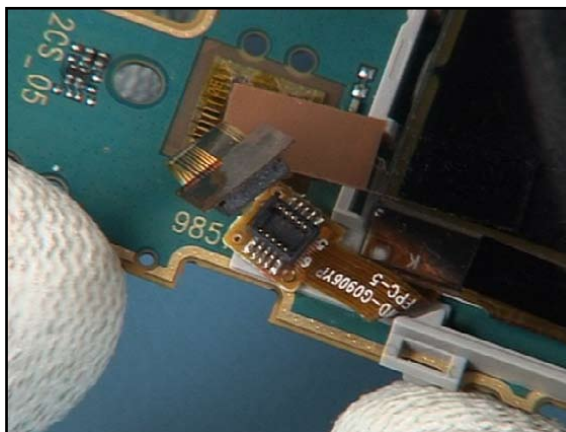
5. Remove the protective film from the display.



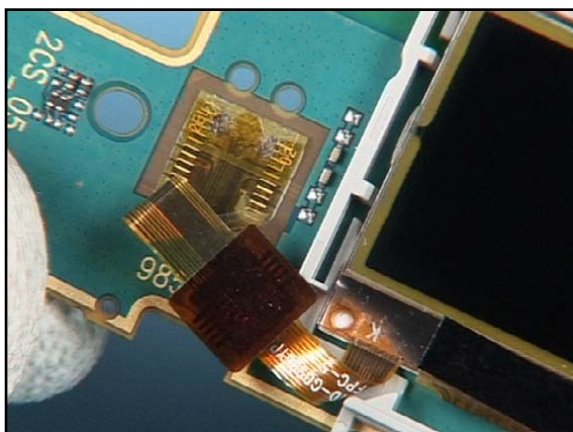
6. Now position the display into its place.



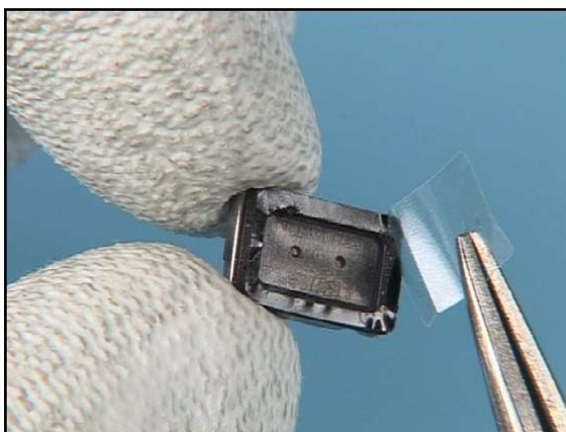
7. Peel up the protective film from the REBUN LCD FRAME ASSEMBLY.



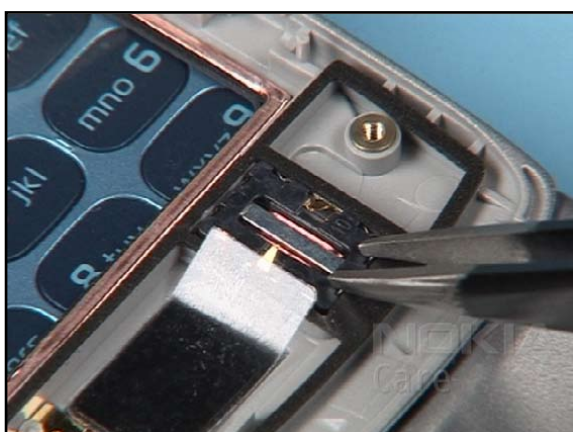
8. Position the flex foil connector exactly as shown.



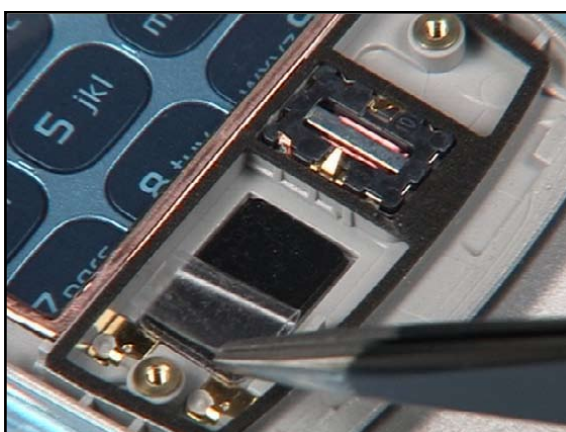
9. Now close the connectors.



10. Remove the protective film from the EARPIECE GASKET.



11. Insert the EARPIECE into its compartment. Push it down slightly.



12. Insert a new IHF SPEAKER ADHESIVE. Remove the protective film.



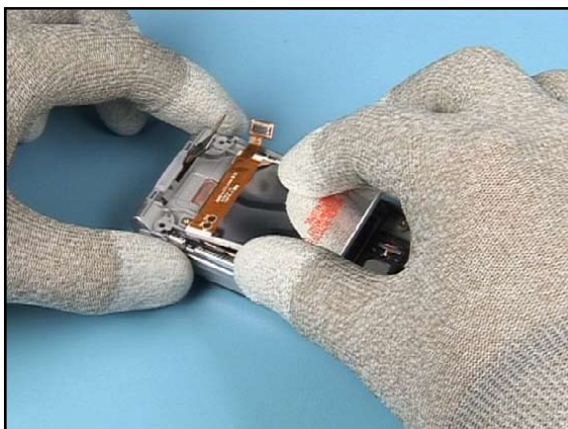
13. Insert the IHF SPEAKER.



14. Mind the correct polarity of the terminals. Slightly push it into its place.



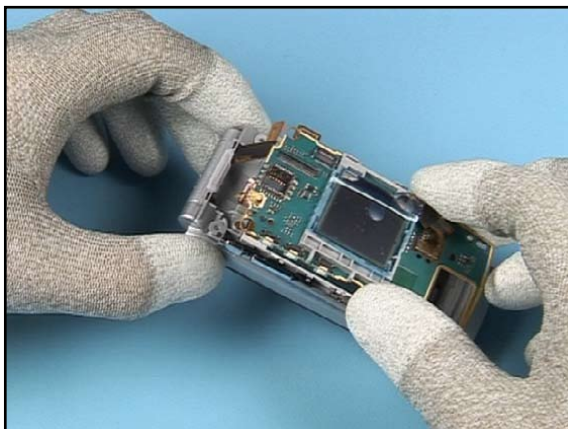
15. Mind the correct positioning of the SIDE KEYS.



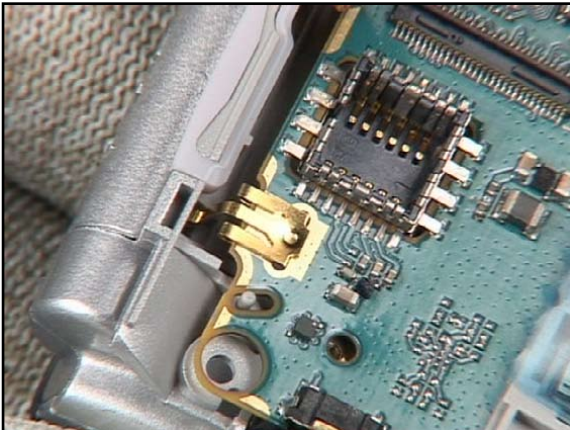
16. Insert the LCD AM.



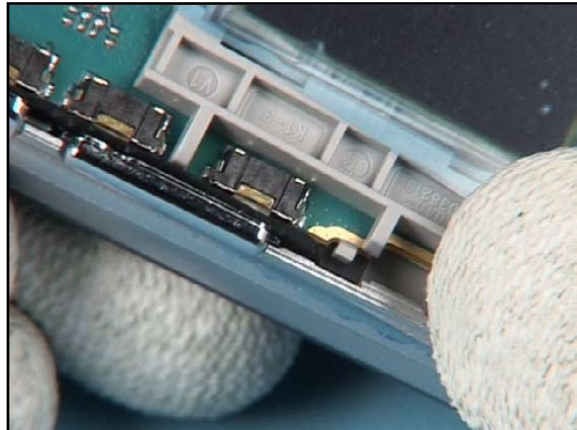
17. Note the grounding pads on both sides of the display before going on.



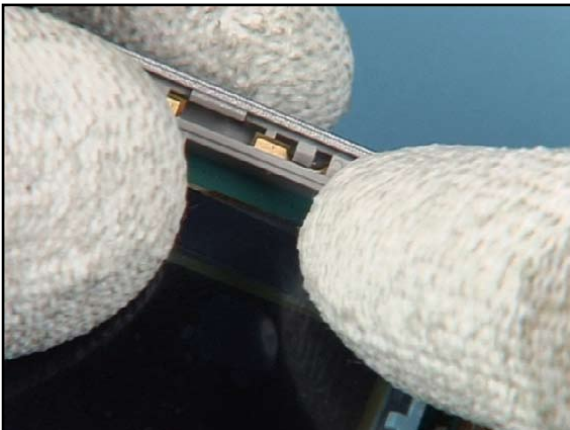
18. Place the UPPER UI ASSEMBLY into the cover.



19. Mind the correct positioning of the ESD FINGER.



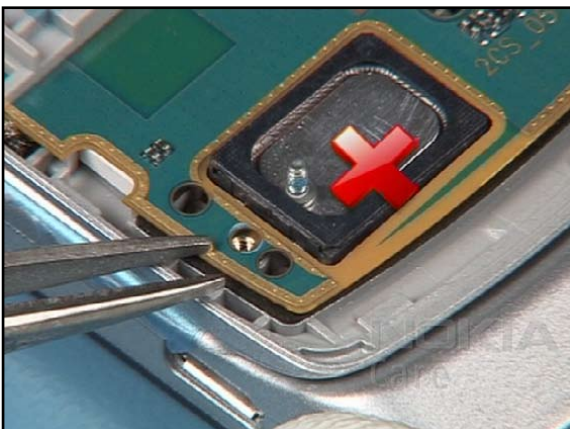
20. Click the plastic clips into their places.



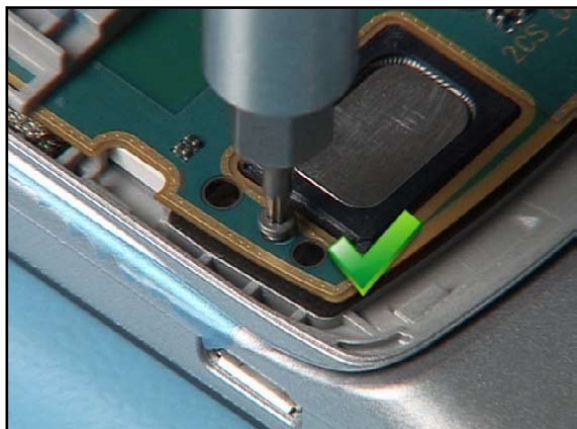
21. ...on both sides of the PWB.



22. Always use new screws.



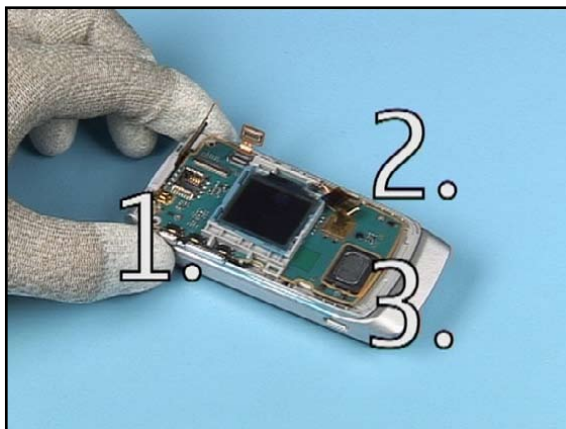
23. Due to the fact that the IHF SPEAKER is equipped with a strong magnet, the screw can destroy the delicate membrane.



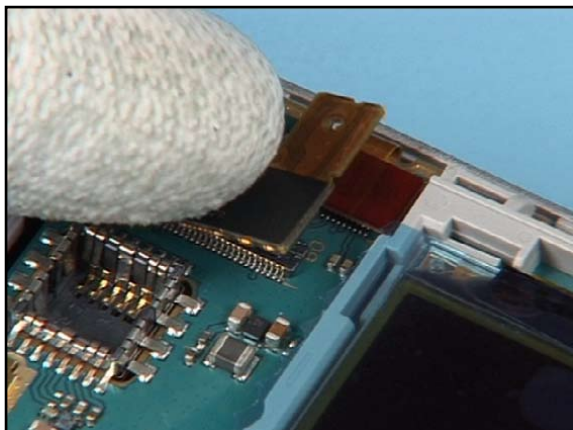
24. Hold this screw with tweezers while screwing it down. Now the screw can't flip over to the IHF SPEAKER'S membrane.



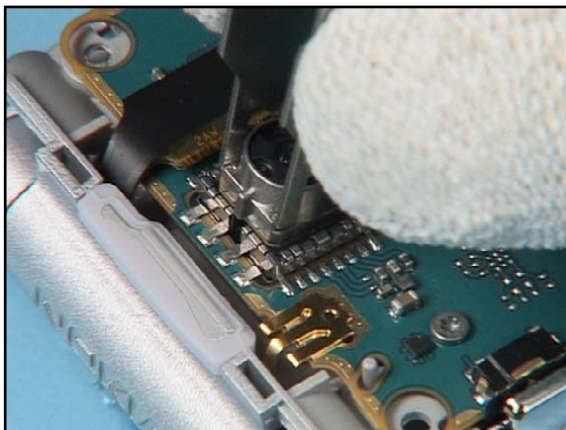
25. Set the correct torque.



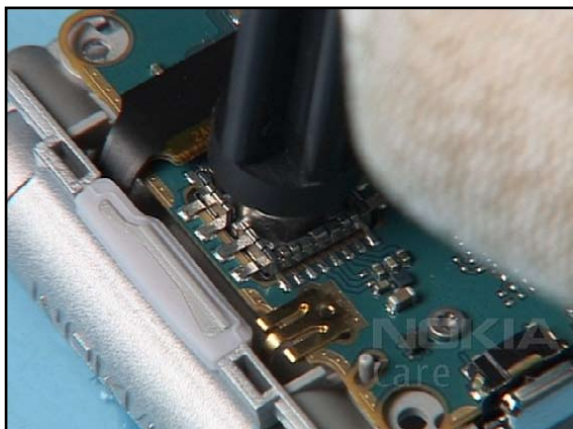
26. Apply the torque to the screws in the order shown.



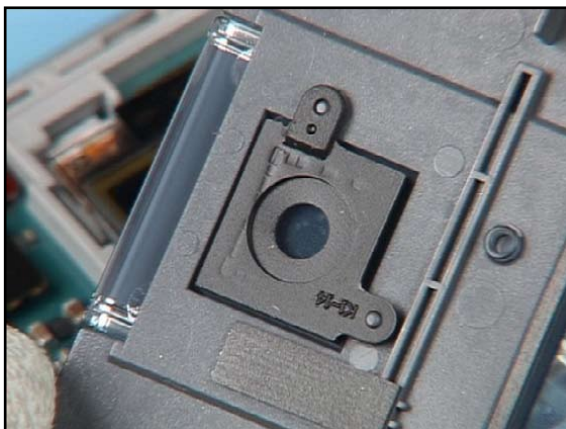
27. Close these 2 flex connectors.



28. Insert the CAMERA MODULE. Mind the correct positioning of the alignment tab.



29. Slightly push it down.



30. Mind the correct positioning of the CAMERA GASKET. Also check the window for cleanliness before continue.



31. Now place the A-COVER, beginning with the top clips.



32. Click the snaps into their places.



33. Use two new screws.



34. Set the correct torque.



35. Apply the torque to the screws in the order shown.



36. Peel up the protective films from the SCREW CAPS.

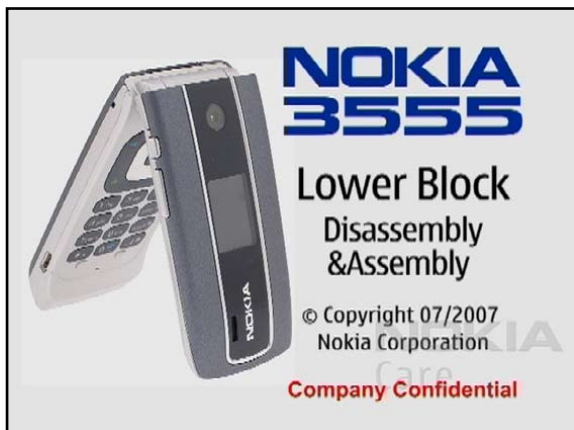


37. Place them as shown.



38. Push them slightly into their places now.

## 14. LOWER BLOCK DISASSEMBLY



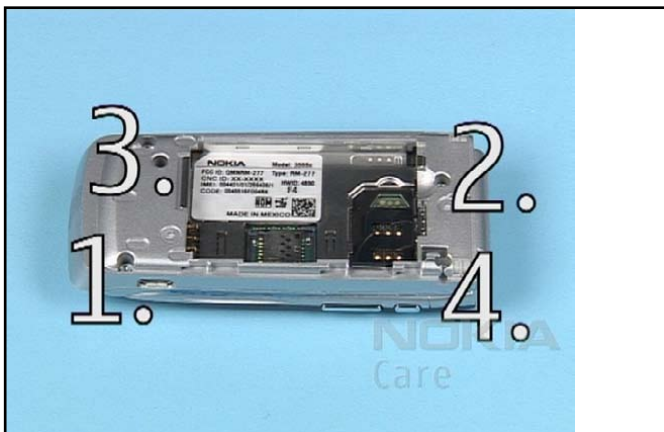
1. Nokia 3555 Lower Block Disassembly.



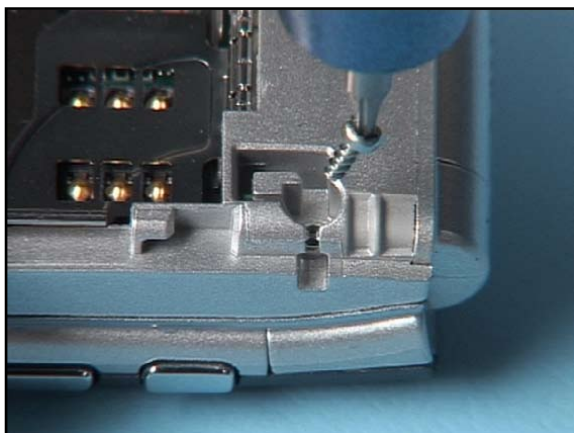
2. You will need the Nokia Standard Toolkit version 2.



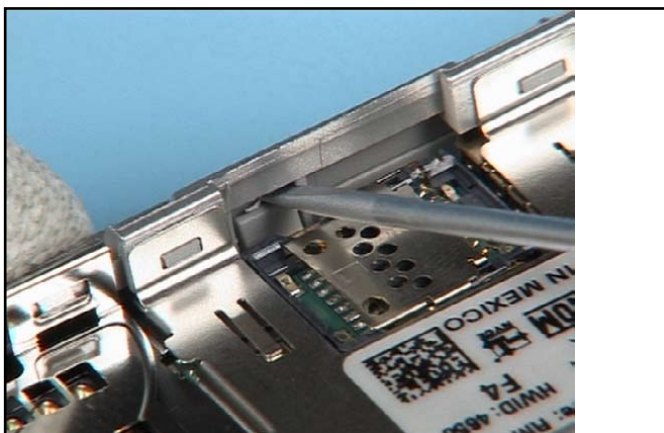
3. Remove the D-COVER ASSY.



4. Unscrew the 4 Torx Plus size 6 screws in the order shown.



5. Remove these screws and discard them. Do not use them again.



6. Release this clip first.

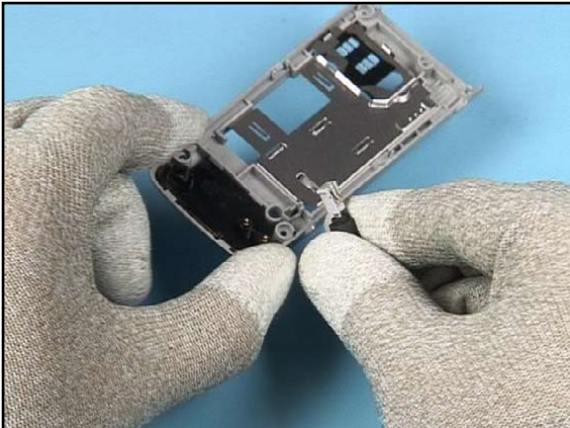




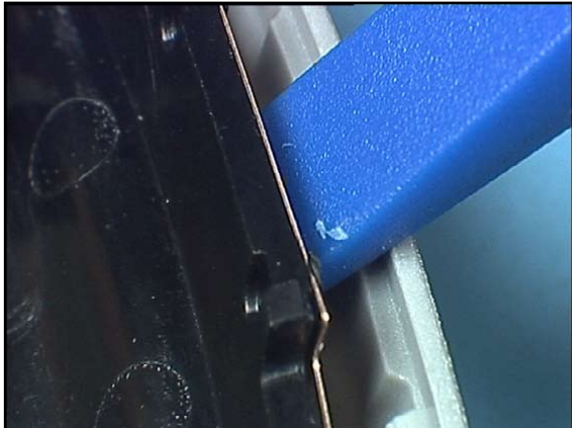
7. Carefully release all clips of the C-COVER.



8. Now the cover can be released.



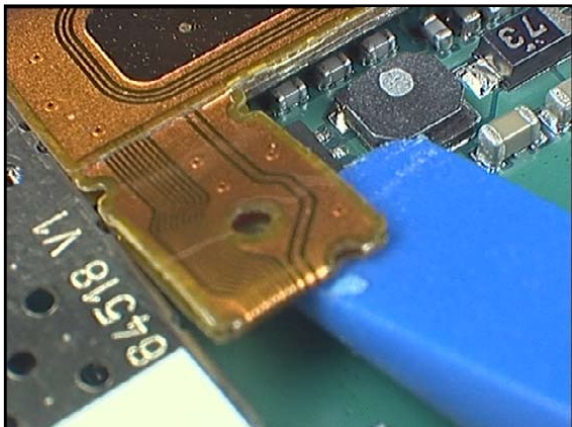
9. Remove the DC-JACK with the DC plug.



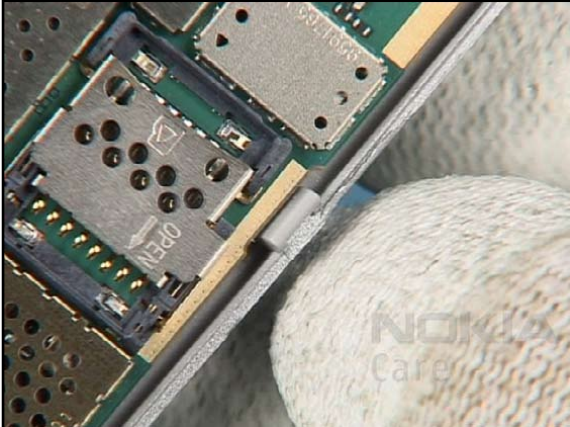
10. Gently ease out the INT ANTENNA with the SS-93. Mind the metal foil. If the foil was bend, the antenna becomes unusable.



11. Turn the cover and let drop out the INT ANTENNA.



12. Open the flex foil connector with the SS-93. Mind the hidden components underneath.



13. Unlock this plastic clip in order to release the ENGINE MODULE.



14. Now the ENGINE MODULE can be lifted up easily.



15. Push out and remove the HARDCAP KEYMAT.



16. The disassembly procedure is now finished.

### 15. LOWER BLOCK ASSEMBLY



1. Assembly



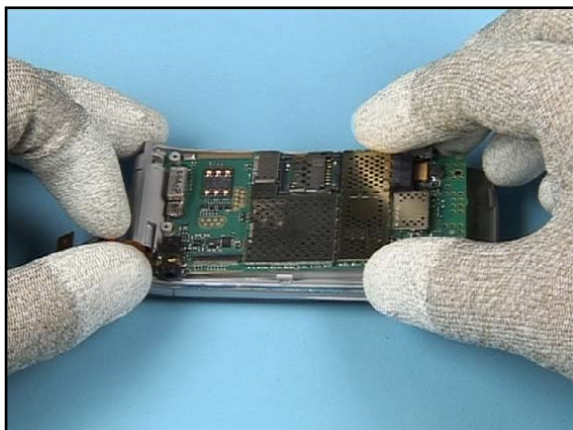
2. Insert the HARDCAP KEYMAT.



3. Slightly push it down with the SS-93.



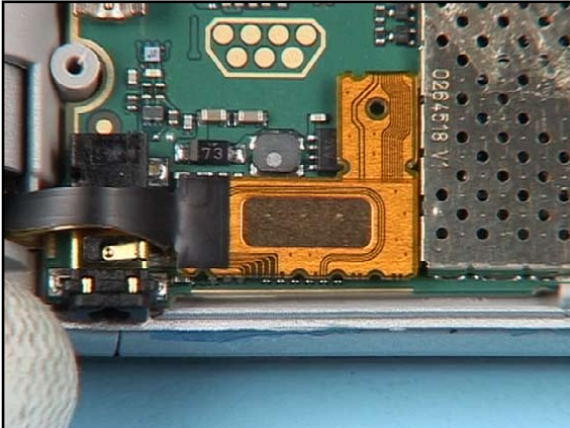
4. Mind the positioning of the alignment tabs before going on.



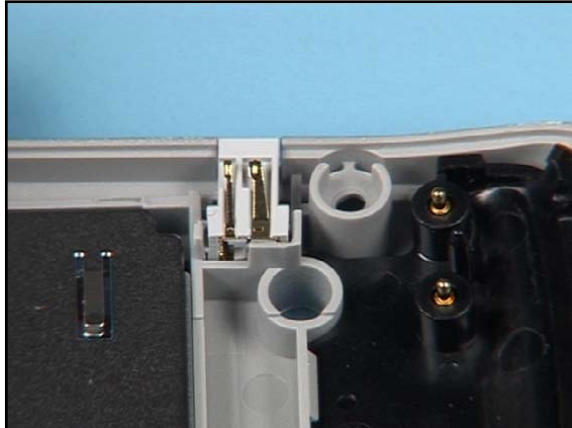
5. Replace the ENGINE MODULE now.



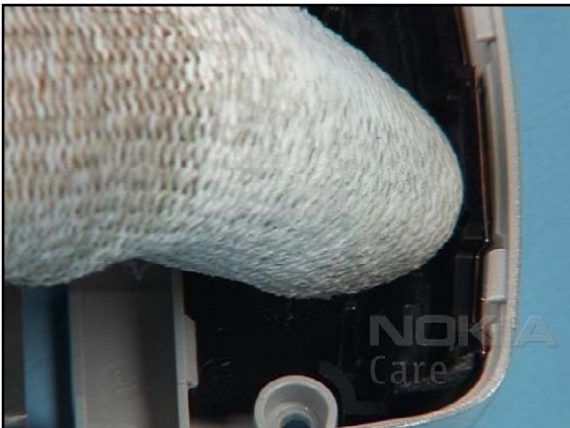
6. Click it slightly into its place before continue.



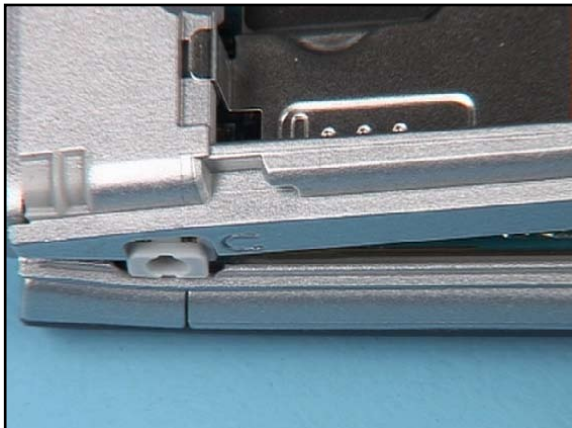
7. Close the flex connector.



8. Mind the correct positioning of the DC JACK.



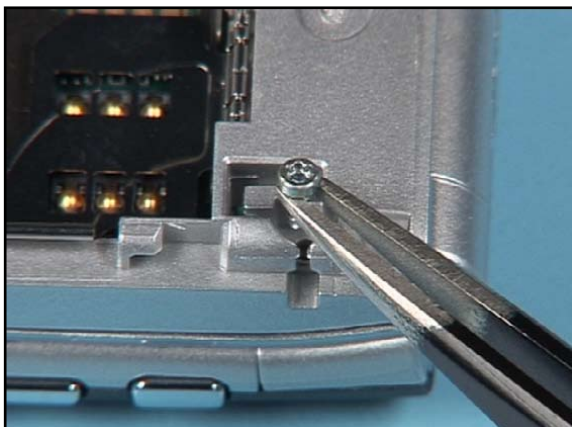
9. The INT ANTENNA must be clicked into its place correctly.



10. Carefully align this snaps of the C-COVER into their guides.



11. Click all clips into their places.



12. Insert the screws.



13. Set the correct torque.



14. Tighten the 4 screws in the order shown.



15. Complete the assembly with the D-COVER.