

SERVICE MANUAL Level 1&2

NOKIA
6555

RM-271

RM-276

RM-289



Transceiver characteristics:

Band:

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

WCDMA: 850/2100MHz

Display:

Main LCD: (2.0") 240x320 pixel, 16M color

Sub LCD: (1.36") 128x160 pixel 262k color

Camera:

Camera: 1.3 Megapixel SMIA65, 6x digital zoom

Operating System:

Series 40

Connections:

Wireless: Bluetooth, IRDA

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

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1. CHANGE HISTORY

Status	Version No.	Date	Comments
Draft	0.1	04.July.2007	Initial draft
Approved	1.0	06.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

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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.

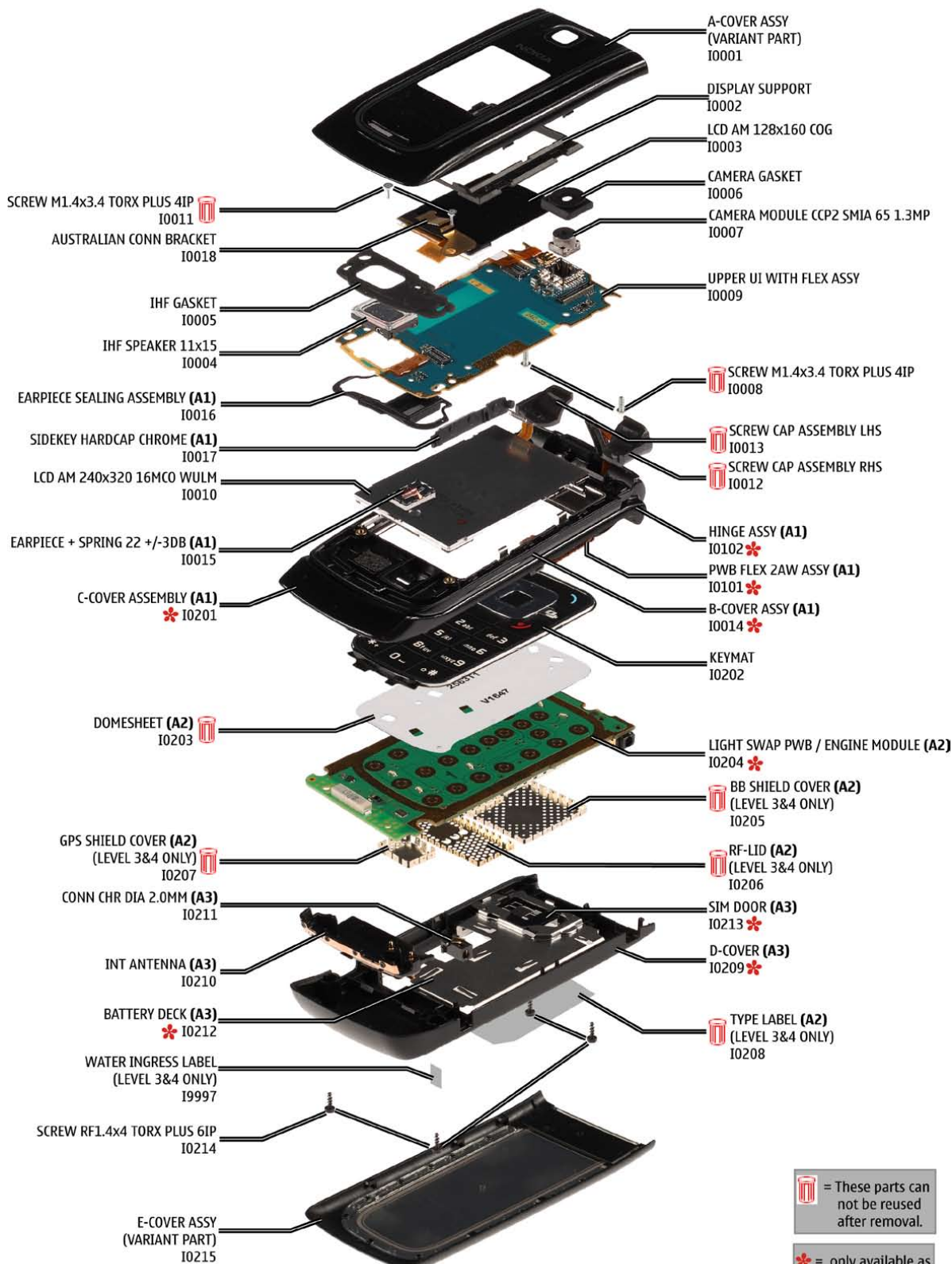
Leaving the battery in hot or cold places, such as in a closed car in summer or winter conditions, will reduce the capacity and lifetime of the battery. Always try to keep the battery between 15°C and 25°C (59°F and 77°F). A phone with a hot or cold battery may temporarily not work, even when the battery 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.

6555 RM-289/RM-271/RM-276 EXPLODED VIEW

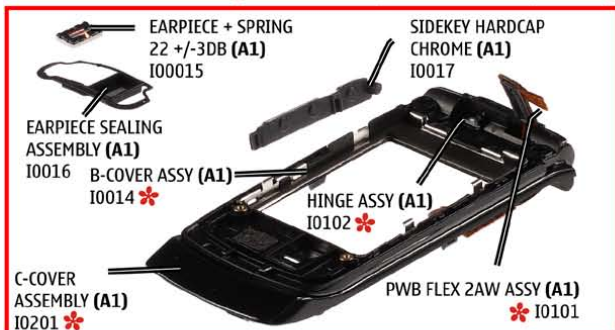


Ver 1.0

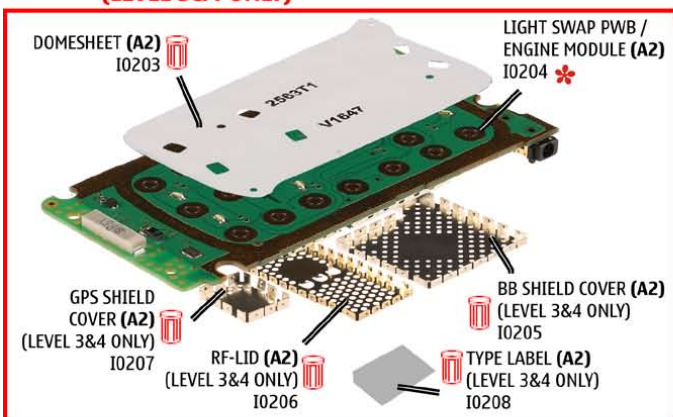
8. SPARE PARTS OVERVIEW

6555 RM-289/RM-271/RM-276 SPARE PARTS OVERVIEW

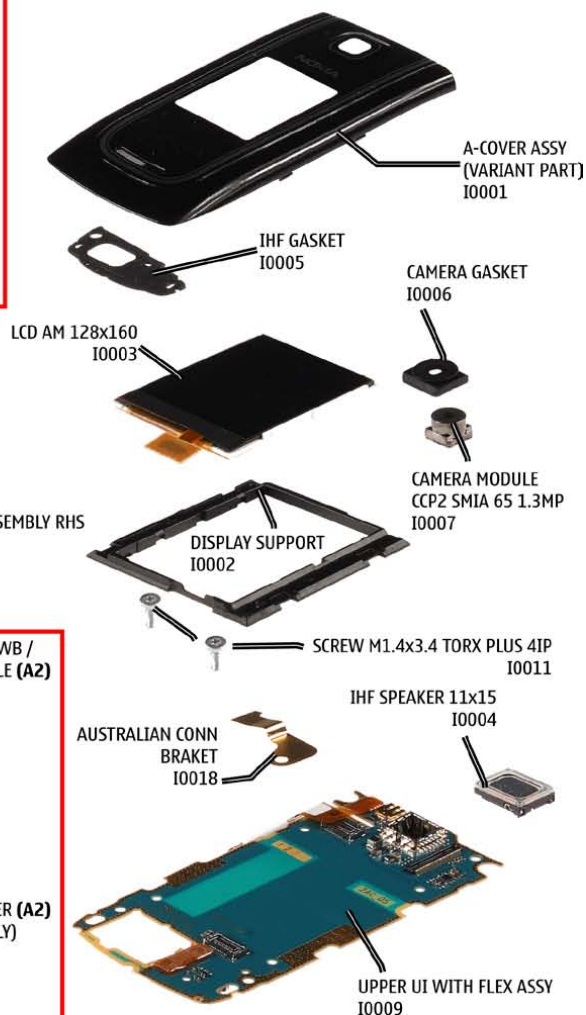
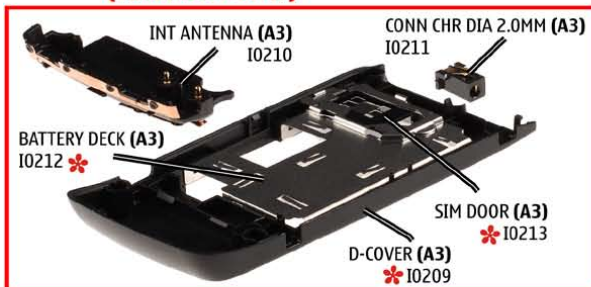
A1=FOLD ASSEMBLY (I0014-I0017, I0101-I0102, I0201)




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



A3=D-COVER ASSEMBLY (I0209-I0213) (LEVEL 3&4 ONLY)



 = These parts can not be reused after removal.

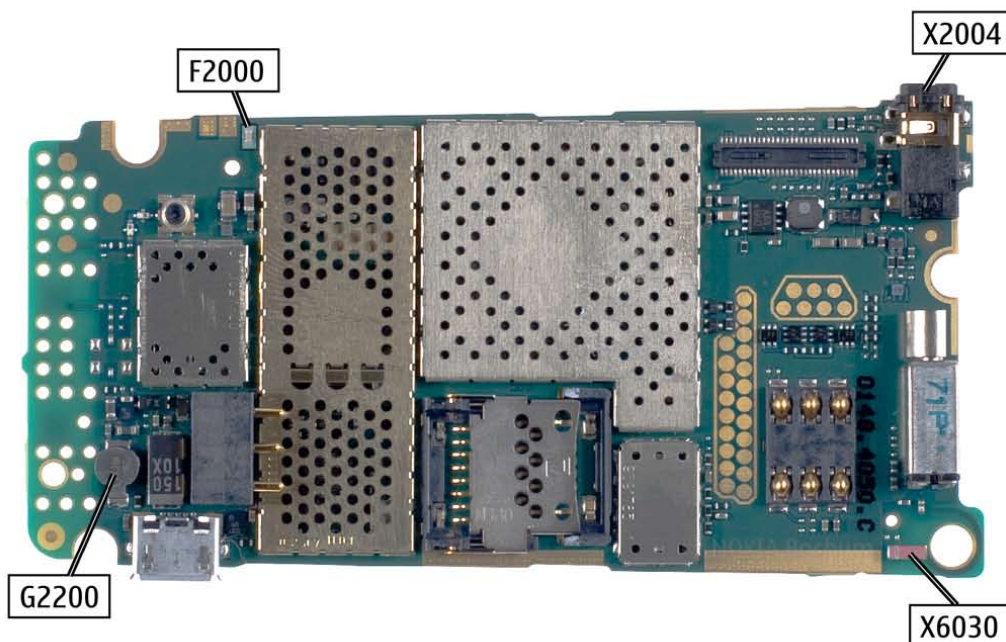
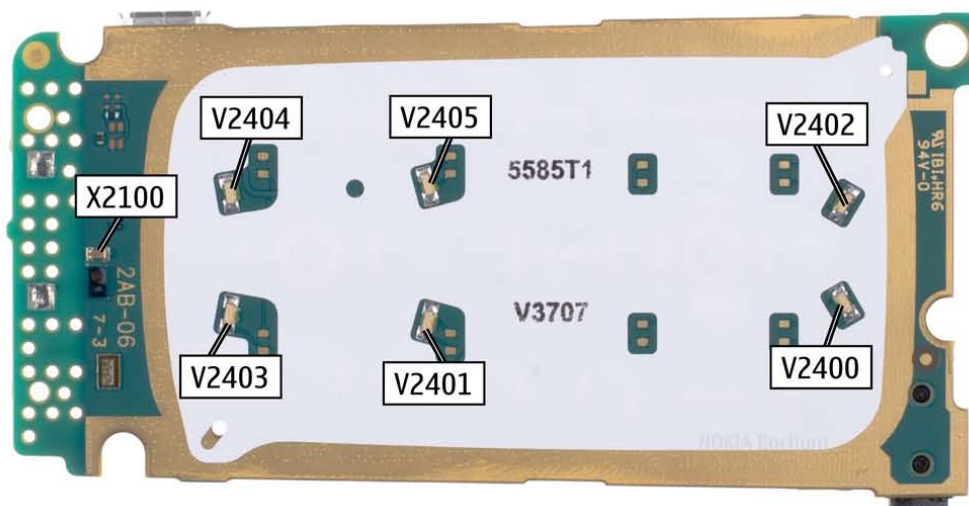
 = only available as assembly

Ver 1.0

9. LEVEL 2 SOLDER COMPONENTS

6555 RM-289 RM-271 RM-276
Level 2 solder components

Solder components only for LEVEL 2



Ver. 1.0

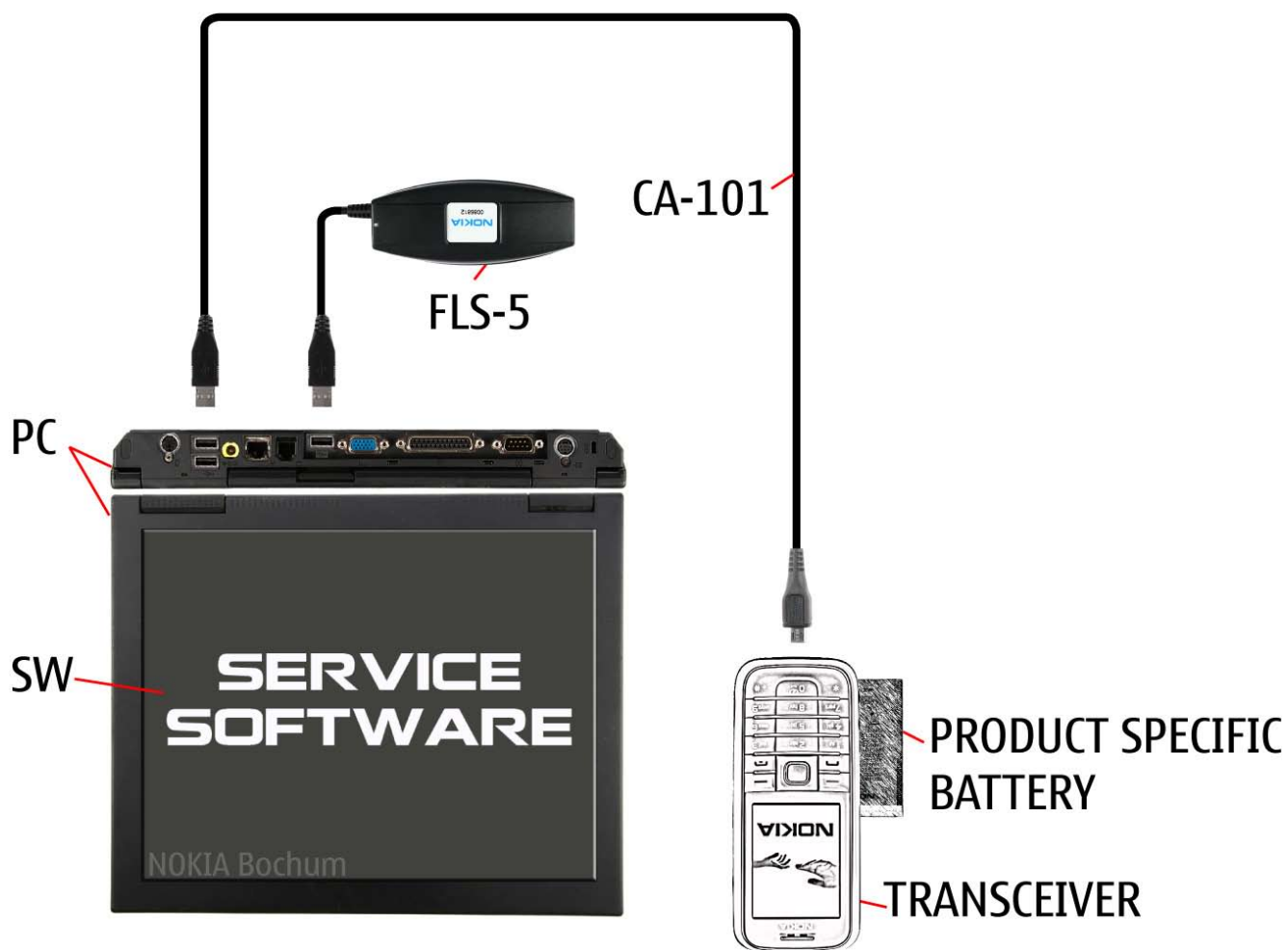
10.SERVICE TOOLS

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

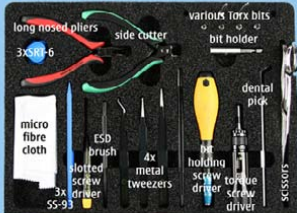


NOKIA 6555
RM-276
RM-271/RM-289

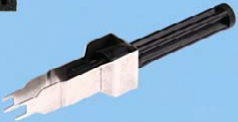
Upper Block Disassembly

NOKIA Care

1. Nokia 6555 Upper Block Disassembly.



long nosed pliers
side cutter
various Torx bits
bit holder
micro fibre cloth
ESD brush
3x6mm driver
SS-93
4x metal tweezers
bit holding screw driver
torque screw driver
SS-55
dental pick



NOKIA Care

2. You will need the Nokia Standard Toolkit version 2 as well as the camera removal tool SS-88. Also refer to the General Mechanical Guideline Video for additional hints about the tools and component handling.




NOKIA Care

3. Always cover all sensitive surfaces with a protective film. Slide the E-COVER in the shown direction and remove it. Remove battery if inserted.




NOKIA Care

4. The SCREW CAPS are glued onto the C-COVER ASSEMBLY. Remove the SCREW CAPS with the opening tool...



NOKIA Care

5. ...and discard them.



NOKIA Care

6. Undo the screws in the order shown and discard them.



7. Unlock the clips of the A-COVER starting on the HINGE side.



8. Unlock the clip in the middle...



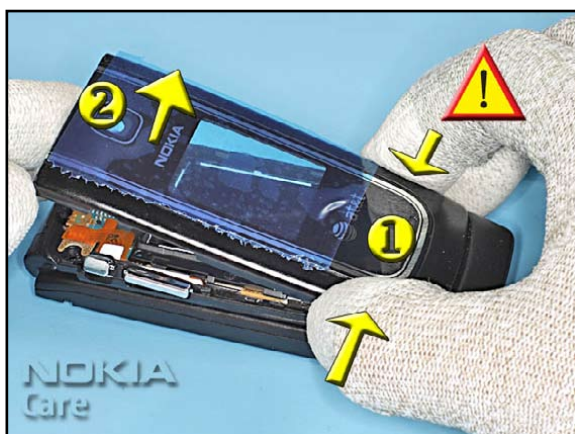
9. ... and on the top of the upper block.



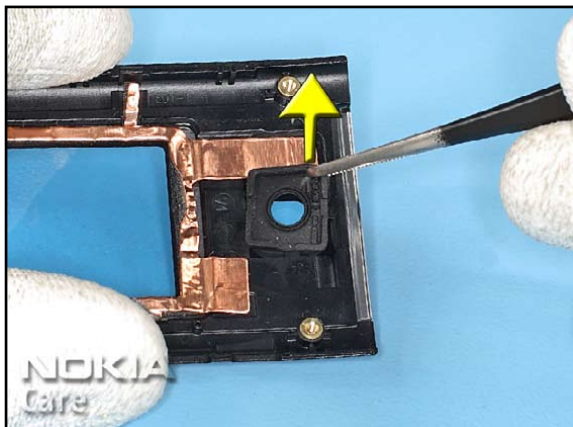
10. Do the same on the other side.



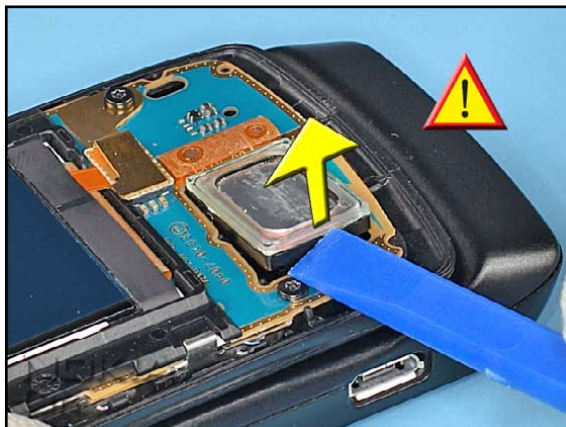
11. Now, release the two top clips of the A-COVER beginning on the rounded side of the cover.



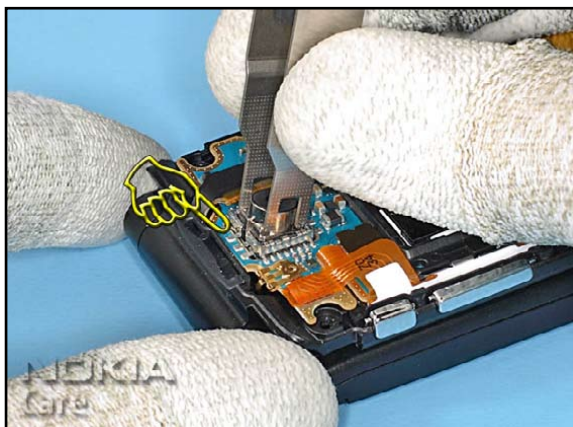
12. Slightly squeeze the A-COVER as shown and remove it carefully to avoid damaging of the UI PWB when the side snaps come out.



13. Remove the CAMERA GASKET.



14. Remove the IHF SPEAKER from the PWB UPPER.



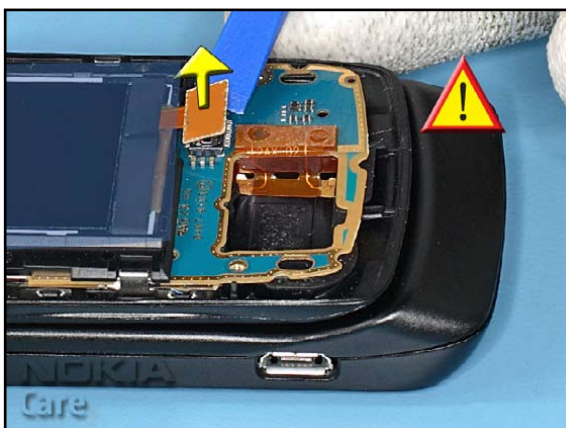
15. Carefully remove the CAMERA MODULE with the SS-88.



16. Undo the two screws in the order shown and discard them.



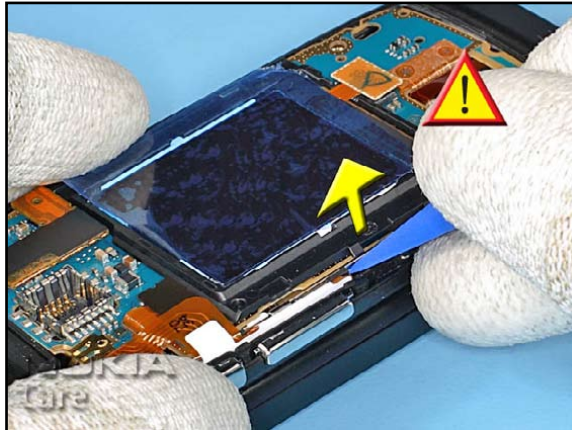
17. Remove the LCD CONNECTOR COVER with tweezers.



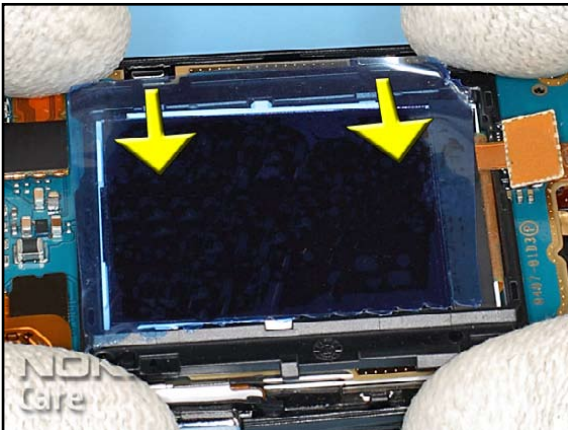
18. Gently open the LCD connector.



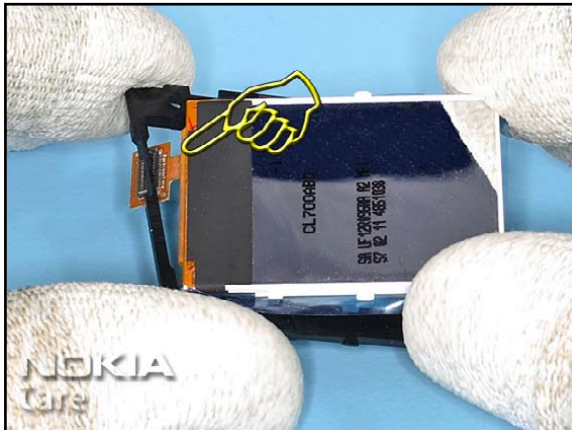
19 Place the SS-93 as shown....



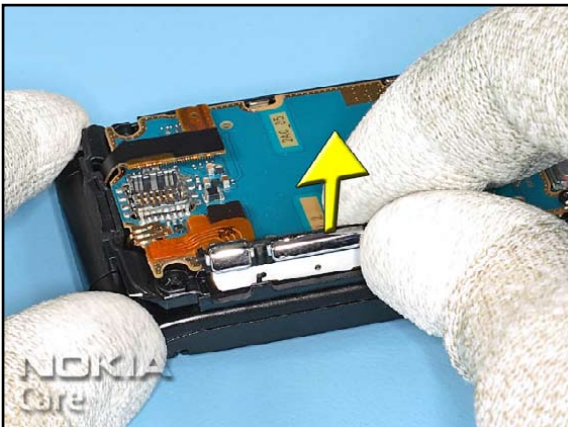
20.and gently unlock the LCD SUPPORT.



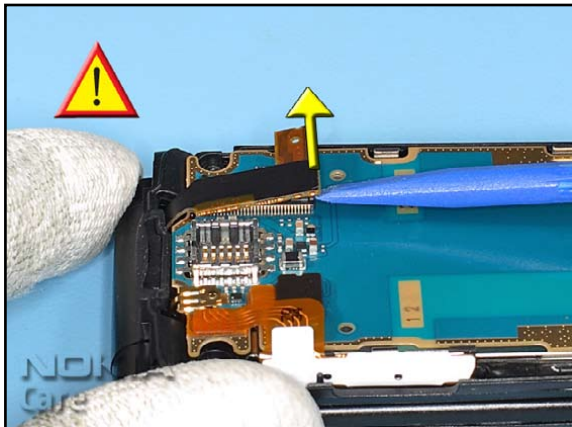
21. Remove the LCD SUPPORT and the LCD as shown.



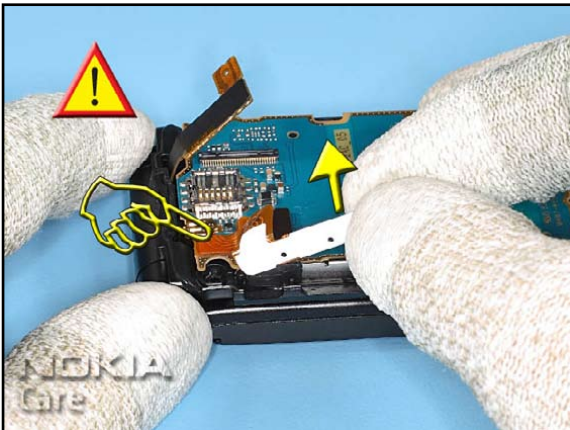
22. Separate the LCD from the LCD SUPPORT paying attention to the connector.



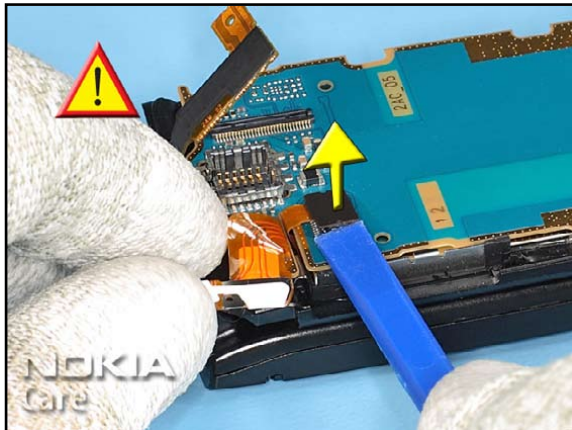
23. Remove the SIDEKEY. Use tweezers to remove the extra glue before replacing the SIDEKEY.



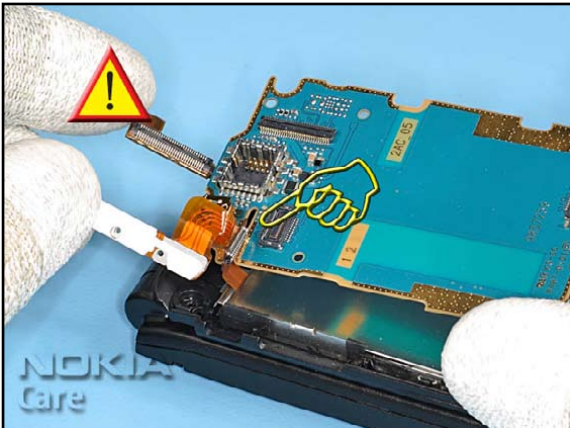
24. Gently open the HINGE connector.



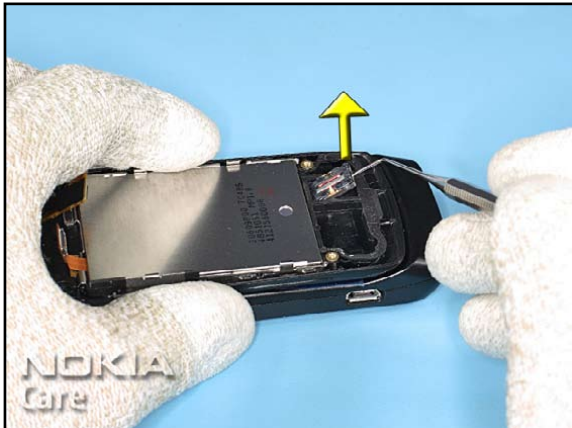
25. Lift the SIDEKEY flex very carefully...



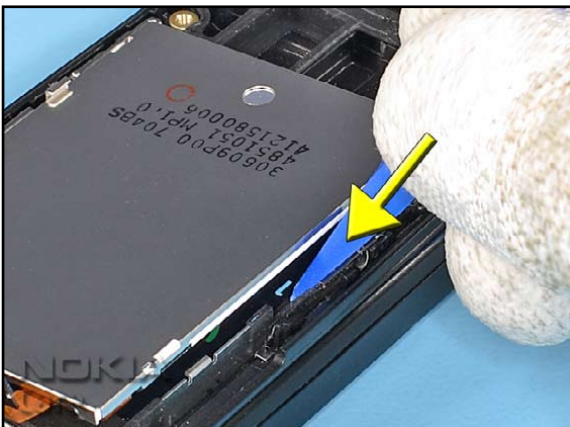
26.and open the LCD AM connector.



27. Secure the flex connector and the SIDEKEY flex and carefully remove the PWB UPPER.



28. Remove the EARPIECE with the dental pick.

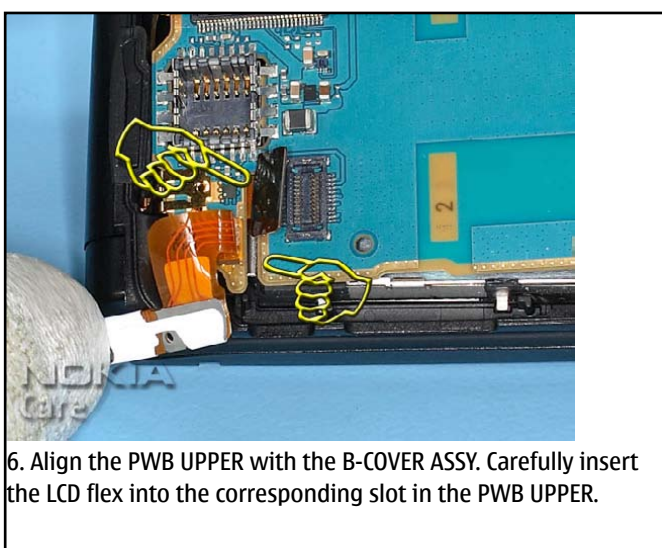
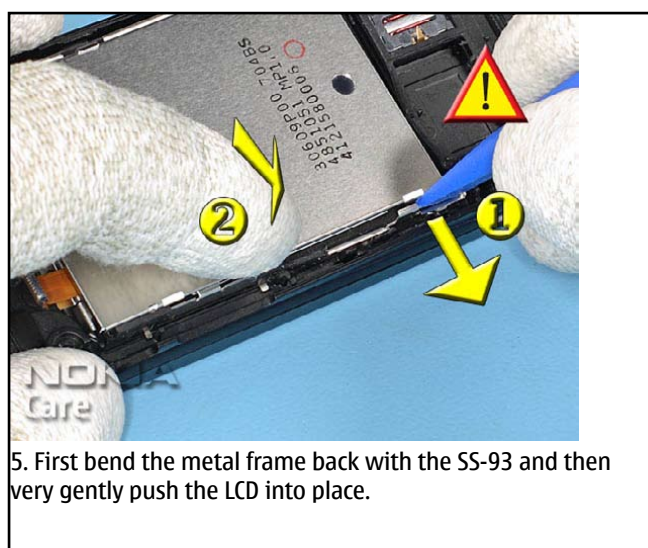
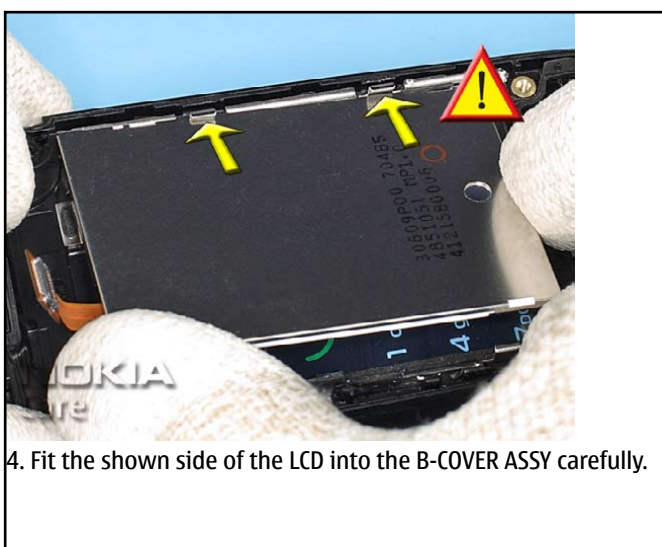
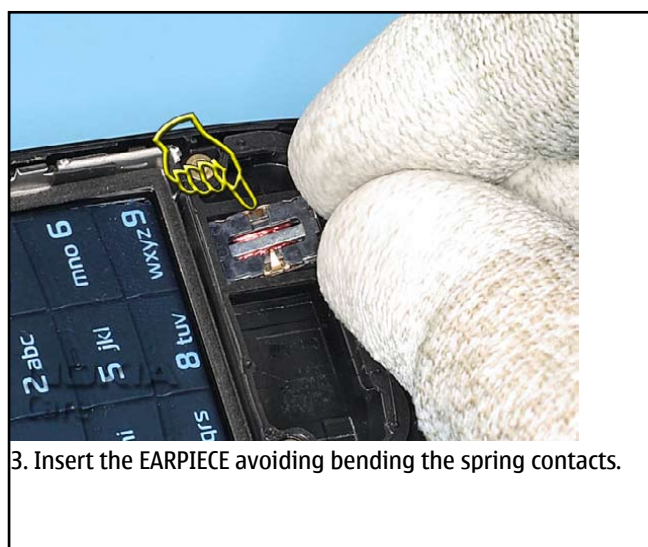
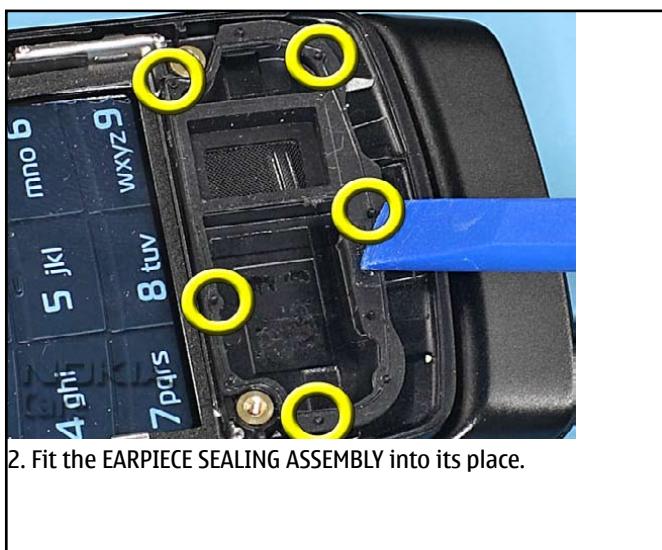


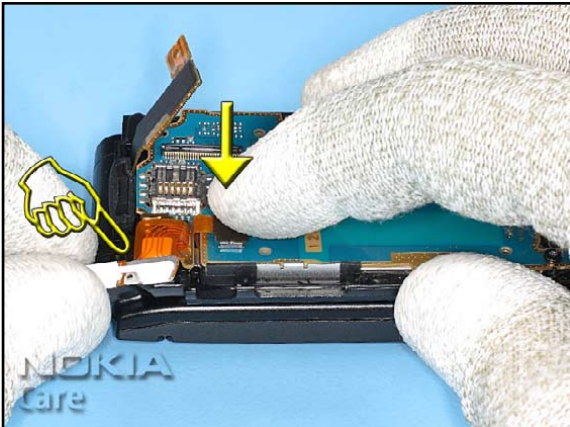
29. Unlock the LCD as shown and remove it carefully.



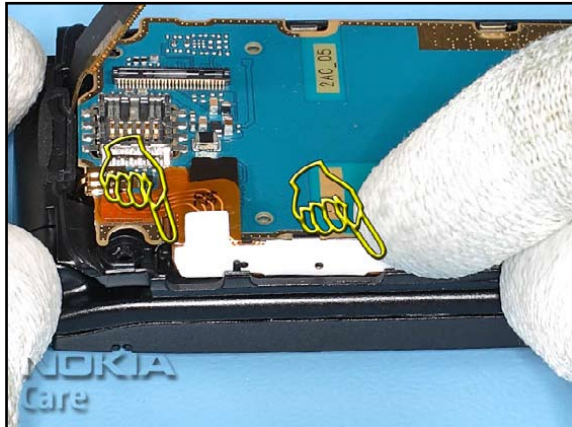
30. Finally remove the EARPIECE SEALING ASSEMBLY. The assembly procedure is now finished.

13. UPPER BLOCK ASSEMBLY

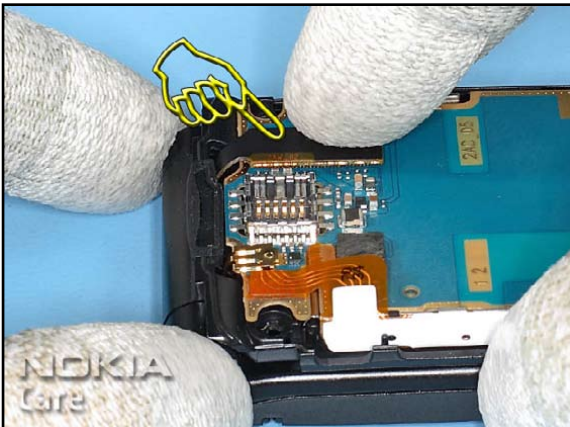




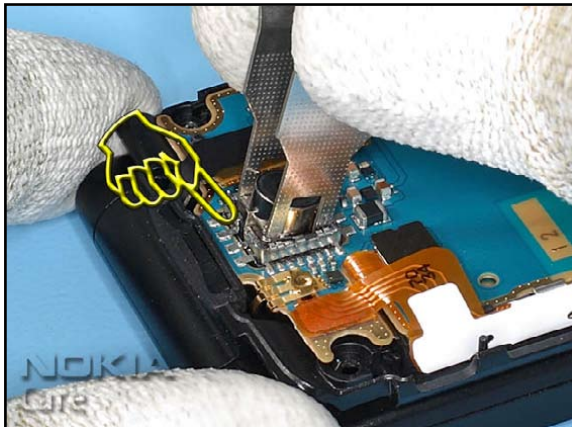
7. Secure the SIDEKEY flex and close the LCD connector.



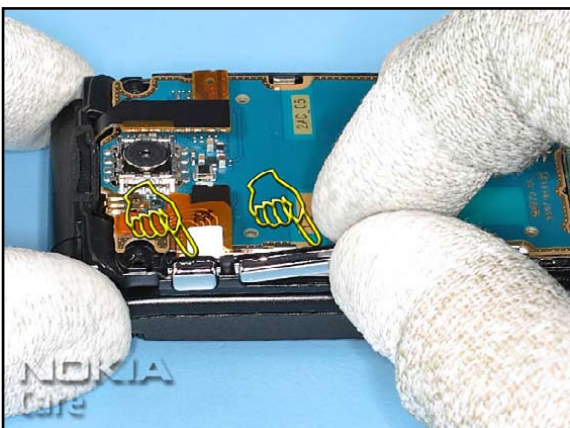
8. Fit the SIDEKEY flex into its place.



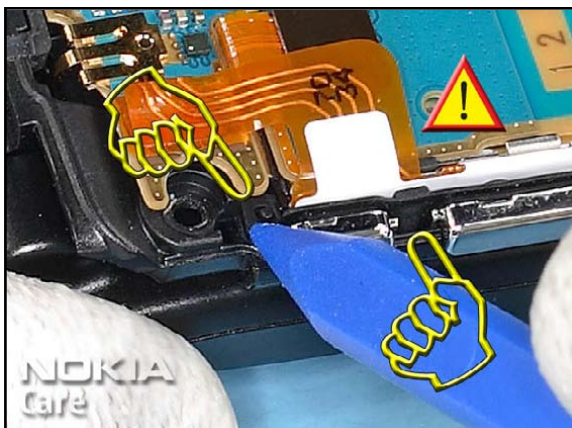
9. Close the hinge connector.



10. Insert the CAMERA MODULE paying attention to the guide pin.



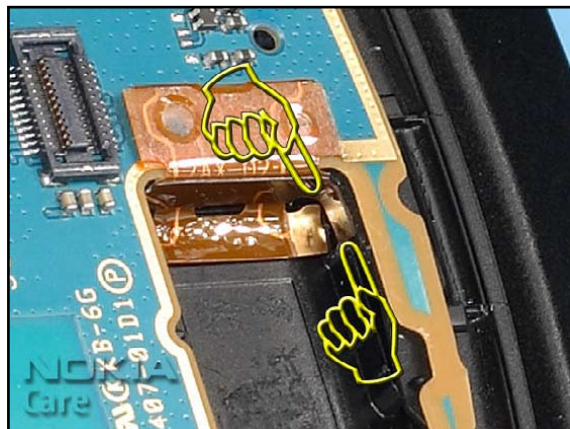
11. Fit the SIDEKEY into its place.



12. Make sure the tabs at the ends of the chrome keys are tucked behind the B-COVER.



13. Ensure that the flexible contacts for the IHF SPEAKER are also positioned correctly.



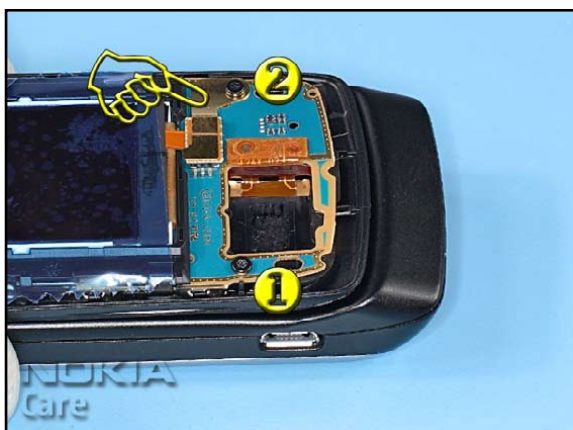
14. The side contacts must not be squeezed between the PWB UPPER and the B-COVER.



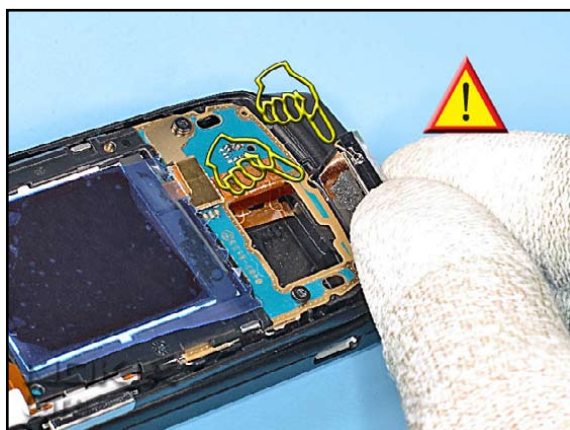
15. Fit the LCD to the LCD SUPPORT.



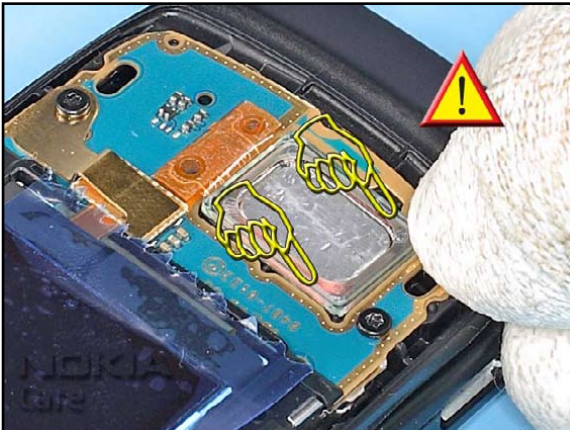
16. Fit the shown side of the LCD into the B-COVER ASSY and close the LCD connector.



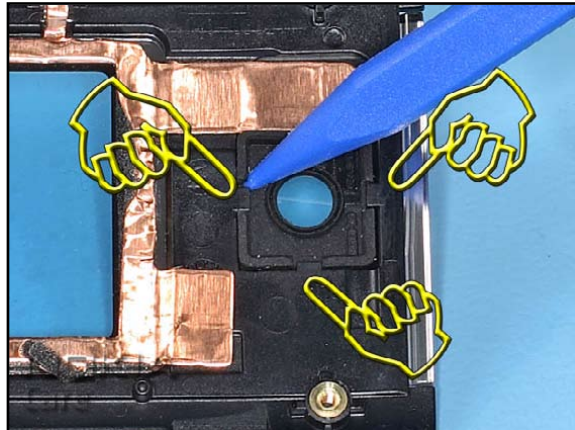
17. Place the AUSTRALIA CONN BRACKET over the LCD connector as shown. Always use new screws when assembling the unit. Tighten the screws to the torque of 14Ncm in the order shown.



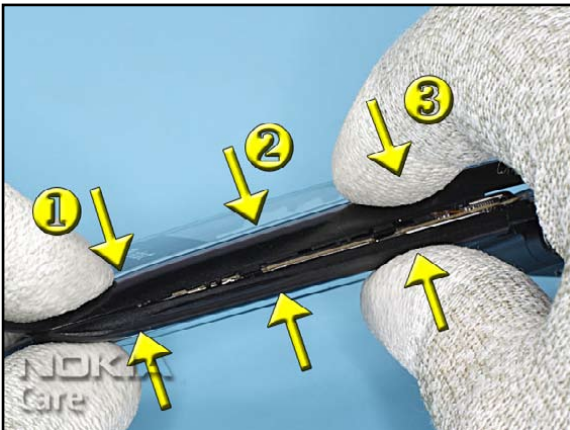
18. Pay attention to the correct position of the spring contacts when inserting the IHF SPEAKER into the B-COVER.



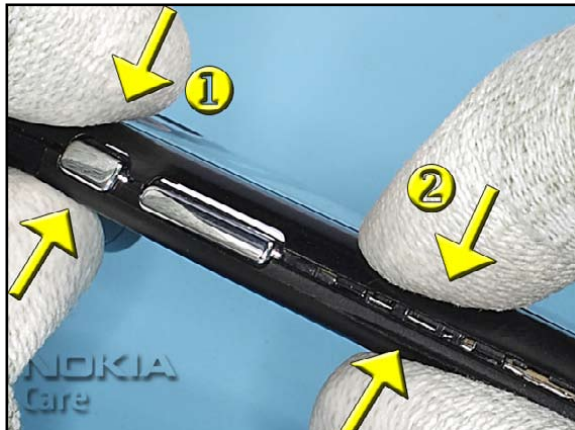
19. Carefully press the IHF SPEAKER into its place.



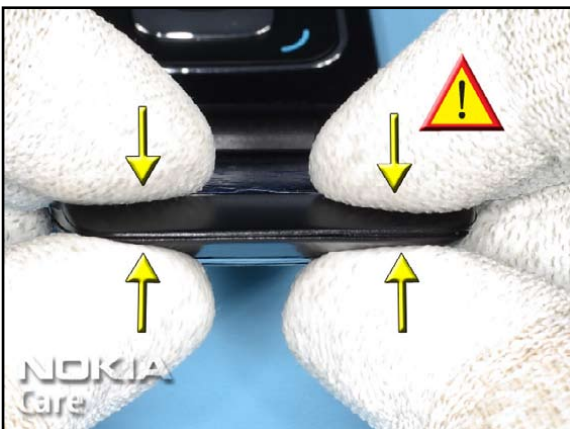
20. Fit the CAMERA GASKET as shown.



21. Gently close the covers starting on the shown side.



22. Continue on the other side.



23. Press the covers together and check that no gaps remains.



24. Always use new screws when assembling the unit. Tighten the screws to the torque of 14Ncm in the order shown.



25. Open the unit as shown and place new SCREW CAPS over the screw holes ...



26. ...and press then into its place.

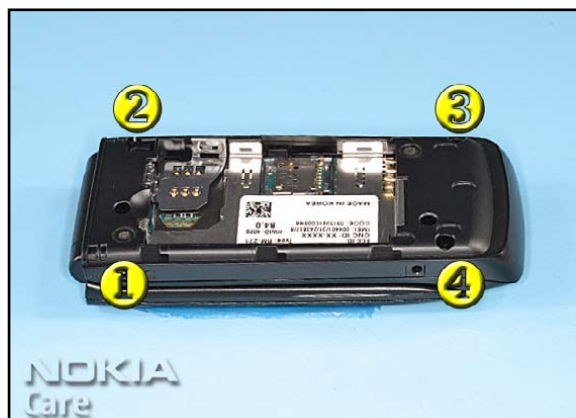
14. LOWER BLOCK DISASSEMBLY



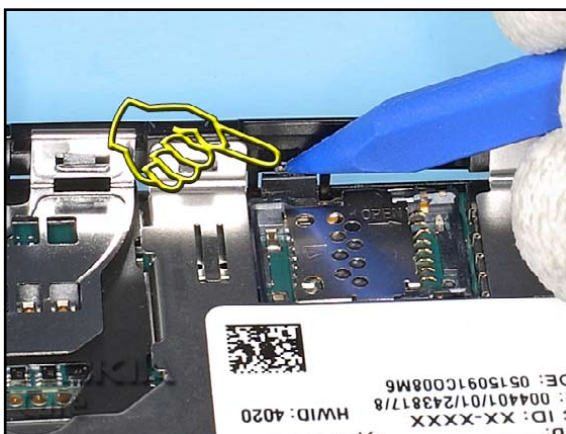
1. Nokia 6555 Lower Block Disassembly.



2. Always cover all sensitive surfaces with a protective film. Slide the E-COVER in the shown direction and remove it. Remove battery if inserted.



3. Undo the screws in the order shown and discard them.



4. Unlock the first clip of the D-COVER from the inner side.



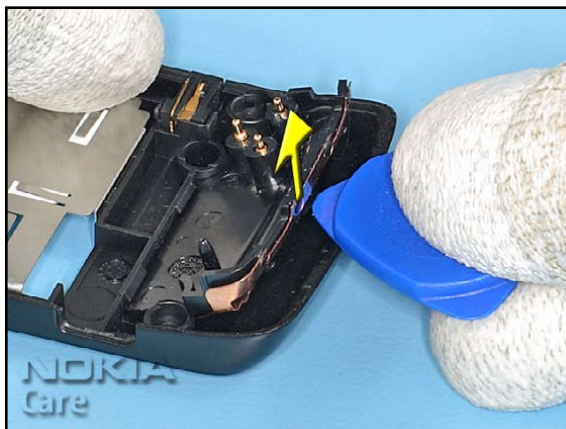
5. Slide the SRT-6 along the edge of the D-COVER to unlock the clips.



6. Continue on the shown side.



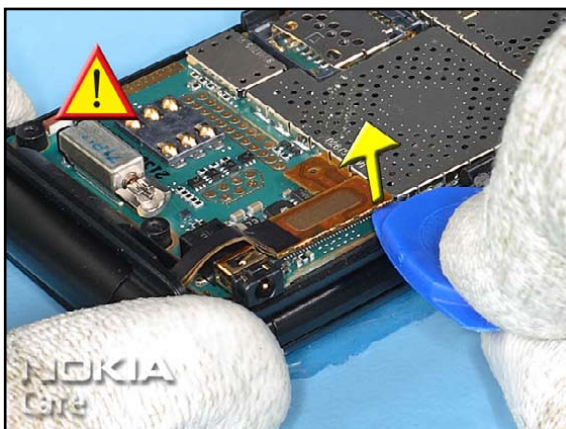
7. Remove the D-COVER.



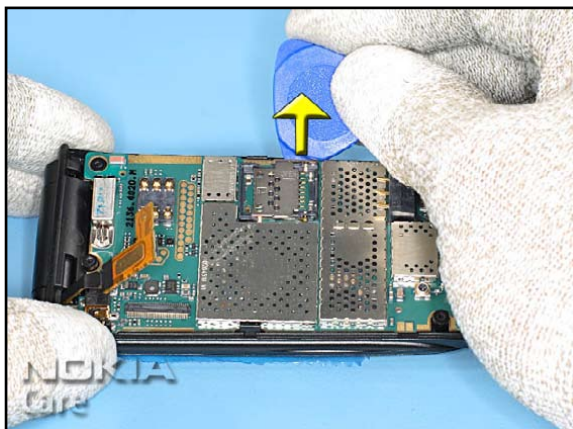
8. Lift the ANTENNA with the SRT-6 from the shown side and remove it.



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



10. Gently open the HINGE connector.



11. Carefully unlock the ENGINE MODULE starting on the shown side.



12. Continue on the other side.



13. Remove the ENGINE MODULE.



14. Finally remove the KEYMAT. The disassembly procedure is now finished.

15. LOWER BLOCK ASSEMBLY

