

SERVICE MANUAL

Level 1&2

NOKIA 3500 CLASSIC

RM-272

RM-273

**Transceiver characteristics:****Band:**

-RM-272: Tri-band EDGE phone for EGSM 900/1800/1900MHz

-RM-273: Tri-band EDGE phone for EGSM 850/1800/1900MHz

Camera: 2.0 Megapixel, 8x digital zoom**Display:** Active TFT color display with 262.144 colors,
resolution 128 x 160 pixel**Operating System:** Series 40**Bluetooth****FM stereo radio****Memory card:** microSD**Connector:** mini USB Connector, AV Connector**Transceiver with BL-4c Li-Ion battery pack**

| Talk time | Standby | Note |
|------------|----------------|-------------------------------|
| up to 3.5h | up to 14.5days | Depends on network parameters |

Environmental characteristics:

- Lead-free soldered

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CHANGE HISTORY

| Status | Version No. | Date | Comments |
|----------|-------------|-------------|---------------|
| Draft | 0.1 | 07.Sep.2007 | Initial draft |
| Approved | 1.0 | 13.Sep.2007 | Approval |
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1. INTRODUCTION

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:

<mailto:cc-ts-rc.documentation@nokia.com>

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

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.

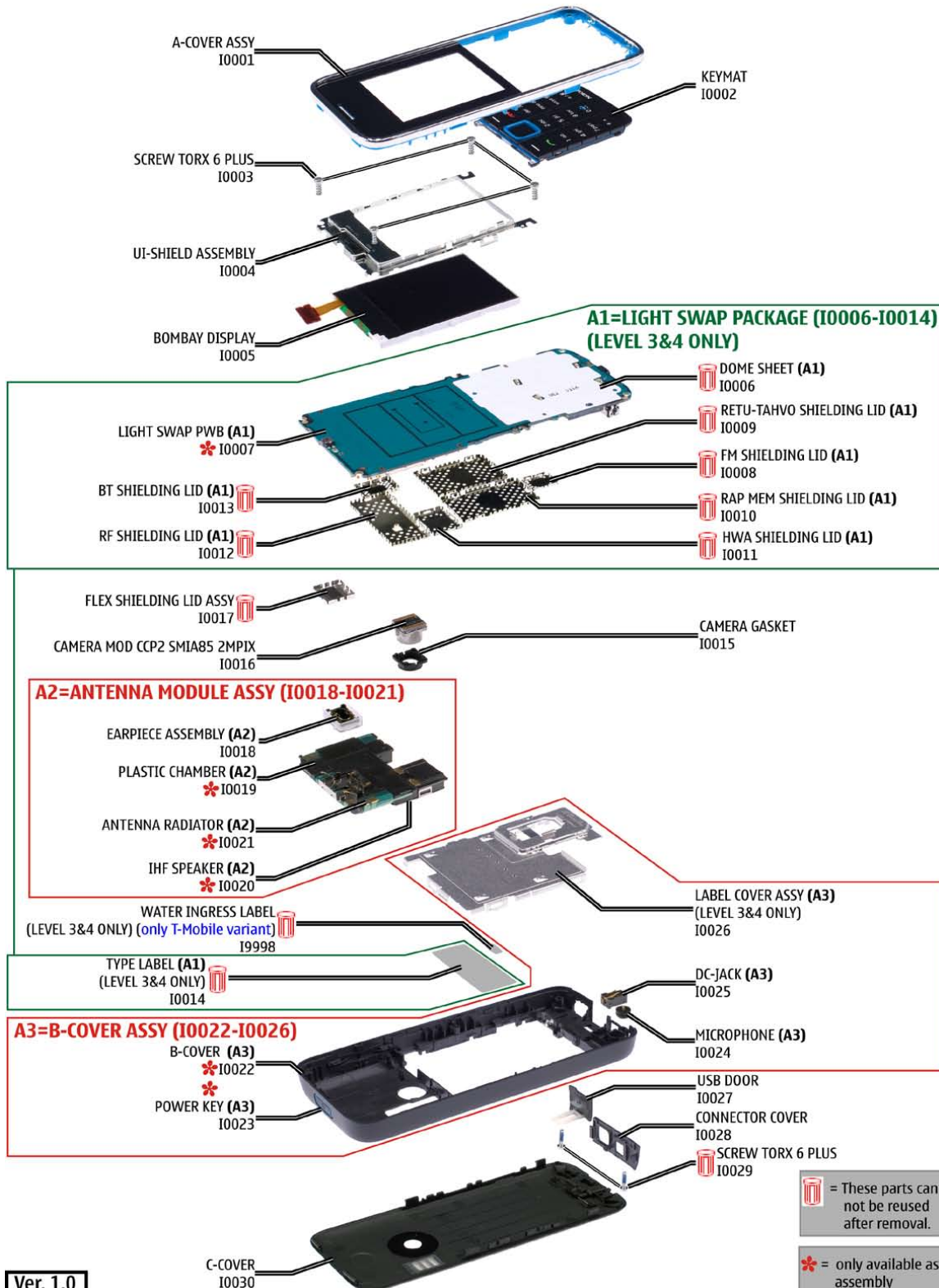


Electrostatic discharge can easily damage the sensitive components of electronic products. Therefore every Service Supplier has to take care of all precautions, which are mentioned in the service level related "Service Partner Requirements", available on NOKIA Online. Also see ESD Protection Requirements in this Service Manual.

2. EXPLODED VIEW

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

3500c RM-272 / RM-273 EXPLODED VIEW

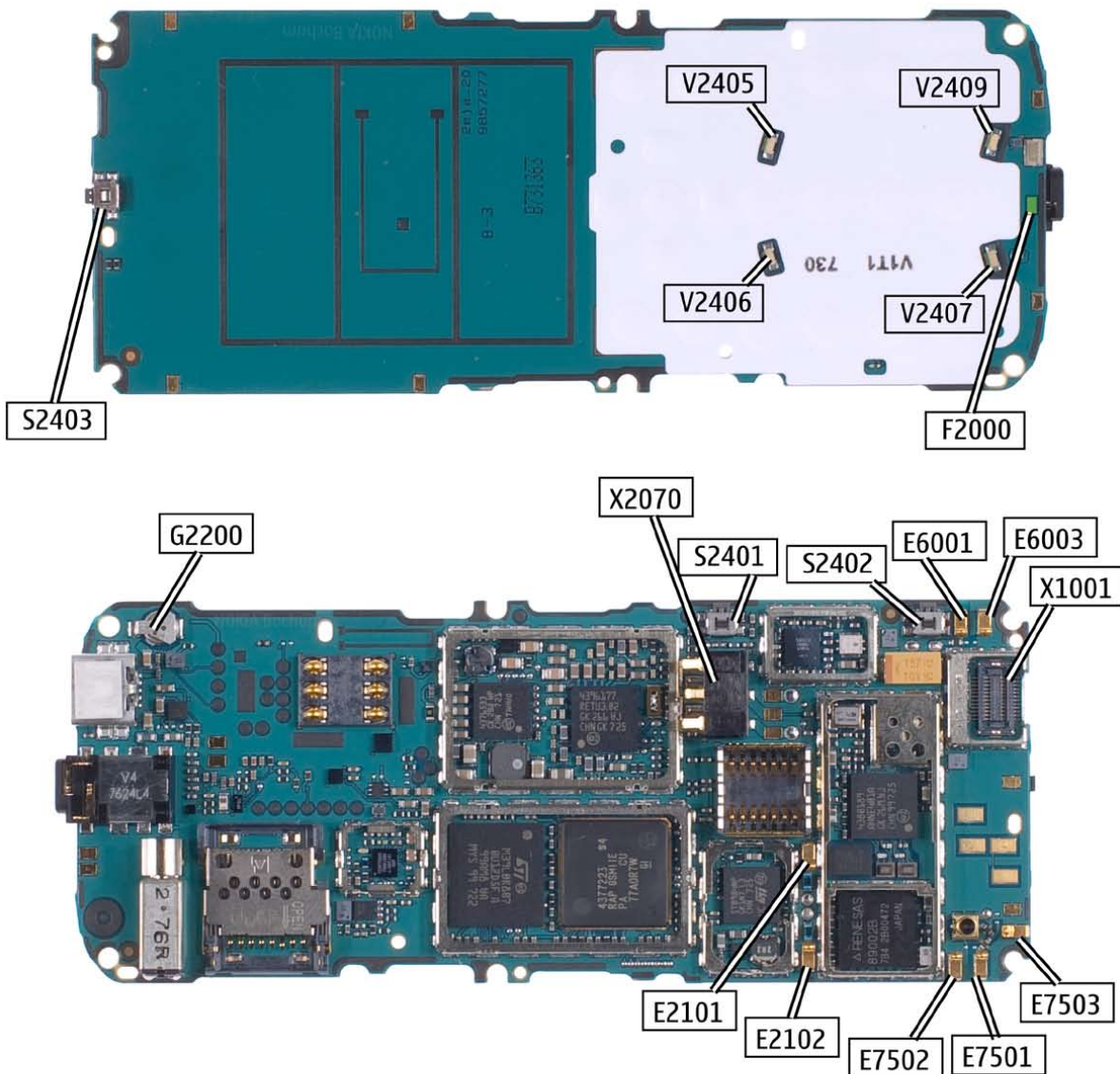


Ver. 1.0

3. LEVEL 2 SOLDER COMPONENTS

3500c RM-272/RM-273 Components overview

Solder components only for LEVEL 2



4. SERVICE DEVICES

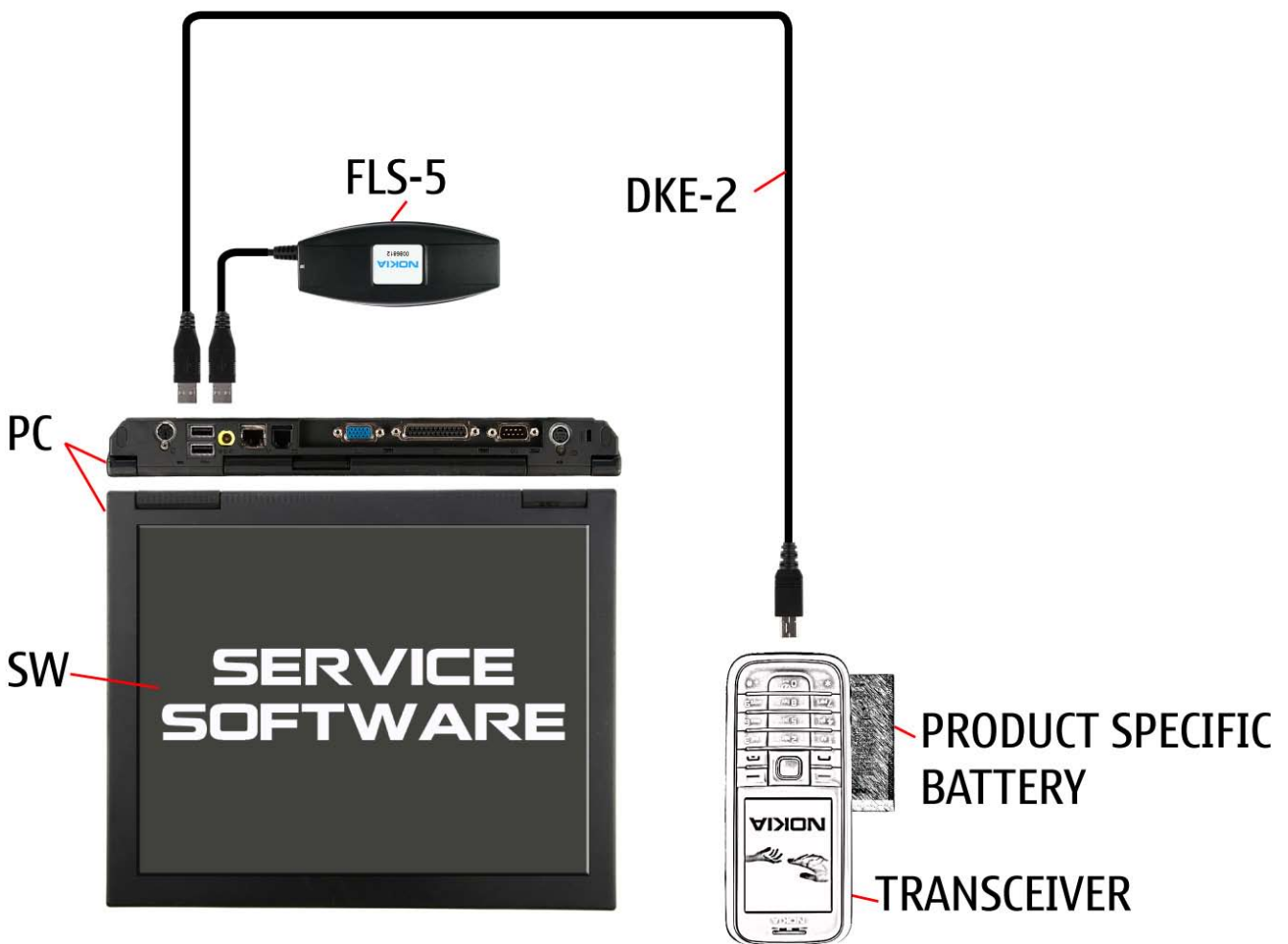
| | |
|--|--|
| <p>FLS-5</p>  | <p>FLS-5 incl. ACF-8, Driver and User Guide Dongle and flash device incorporated into one package, developed specifically for POS use.</p> |
|  | <p>ACF-8 Universal Power Supply is used to power FLS-4S.</p> |
|  | <p>Travel Charger AC-4 Small and lightweight charger for fast charging of your phone battery.</p> |
| <p>BL-4C</p>  | <p>Internal Battery BL-4C Inserted under the back cover, this Li-Ion battery provides power in a lightweight package.</p> |
| <p>SS-45</p>  | <p>SS-45 Camera removal tool.</p> |
|  | <p>DKE-2 Service Cable to connect the PC with the mini USB connector.</p> |

| | |
|---|--|
| <p>RJ-148</p>  | <p>RJ-148 Soldering Jig</p> |
|  | <p>Lead-free Solder Wire Mandatory for lead-free products (Level 2 only).</p> |
|  | <p>0772040 NMP Standard Toolkit (V2)</p> <p>For more informations refer to the Service Bulletin (SB-011) on NOKIA Online.</p> <p>Supplier or manufacturer contacts for tool re-order can be found in “Recommended service equipment” document on NOKIA Online.</p> |

5. 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](#).



6. DISASSEMBLY INSTRUCTION



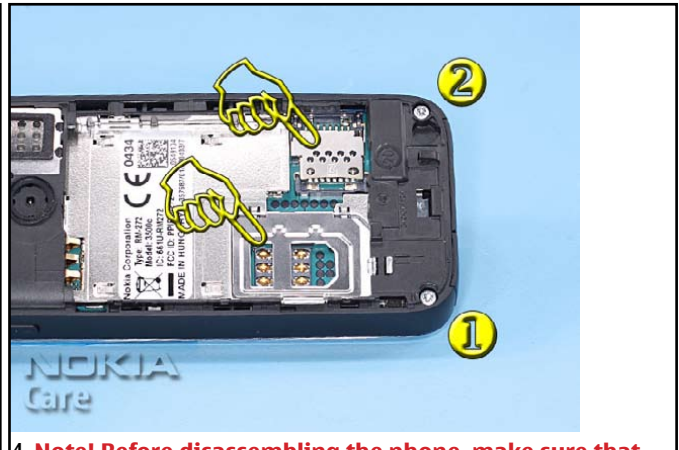
1. Nokia 3500 Classic, disassembly.



2. You will need the Nokia Standard Toolkit version 2 and the camera removal tool SS-45. Also refer to the General Mechanical Guideline Video for additional hints about the tools and component handling.



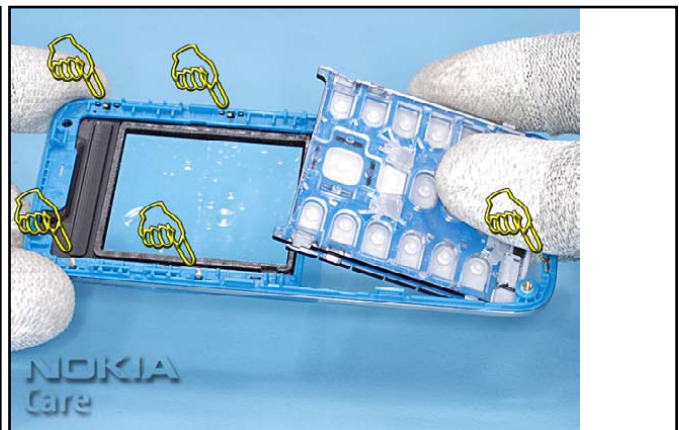
3. Unlock and remove the C-COVER.



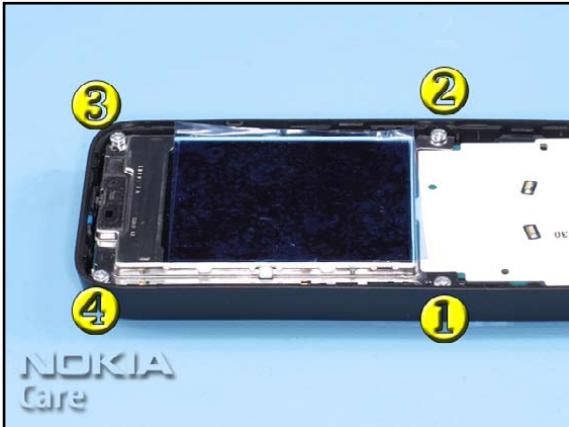
4. **Note! Before disassembling the phone, make sure that the cards are removed.** Undo both screws in the order shown and discard them.



5. Unlock the plastic clips and remove the A-COVER.



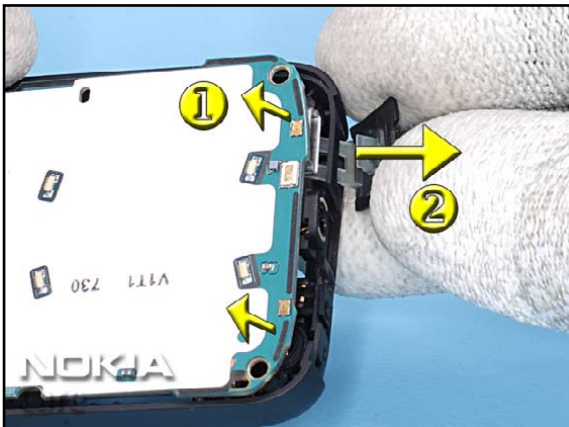
6. Take care to the spring contacts of the A-COVER. Remove the KEYMAT.



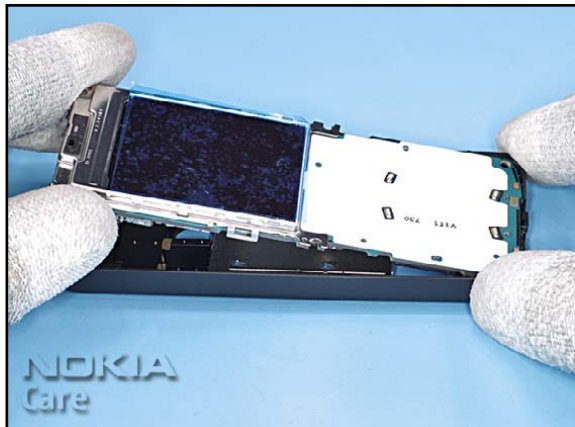
7. Unscrew the four screws in the order shown.



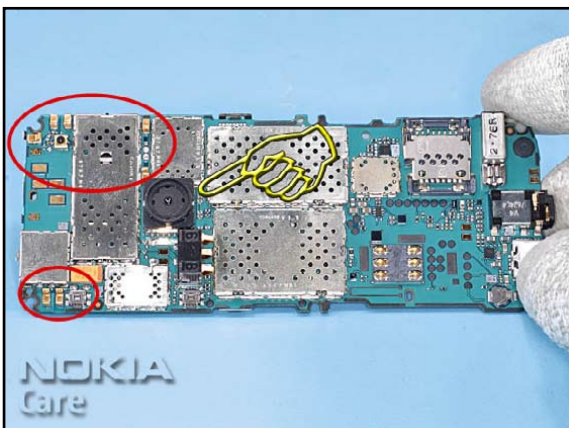
8. Remove the CONNECTOR COVER.



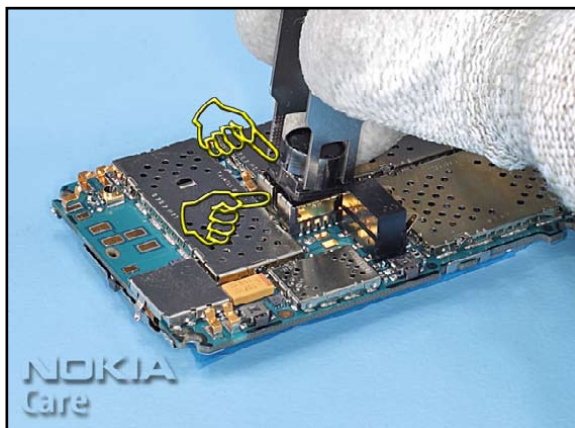
9. Lift a bit the PWB and remove the USB DOOR.



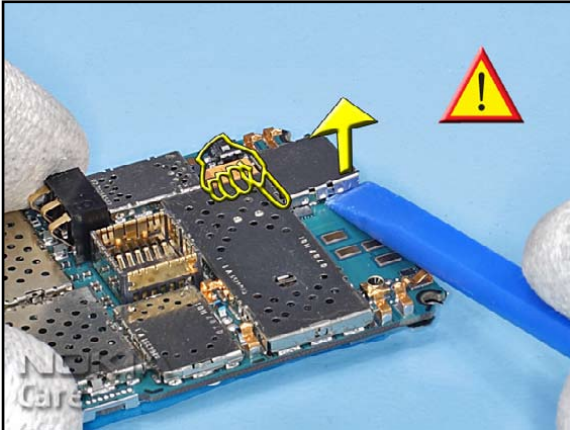
10. Remove the PWB with DISPLAY from the B-COVER.



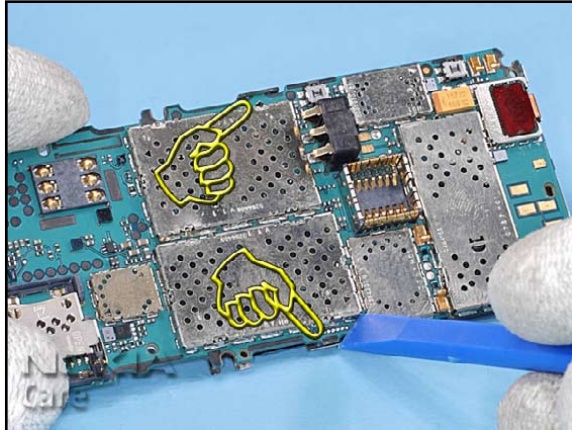
11. Take special care to the spring contacts of the PWB. Remember the correct position of the CAMERA GASKET when replacing.



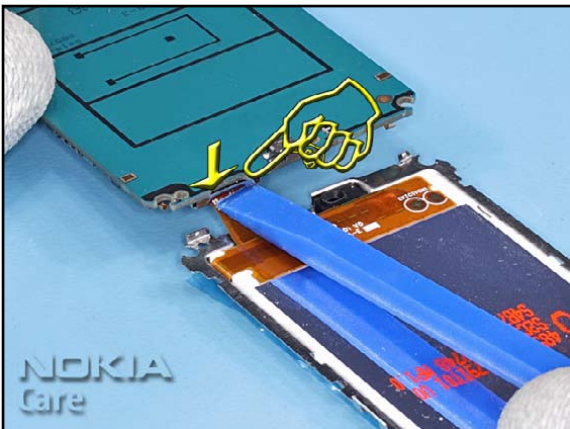
12. Unlock and remove the CAMERA with the SS-45.



13. Remove the FLEX SHIELDING LID and discard it.



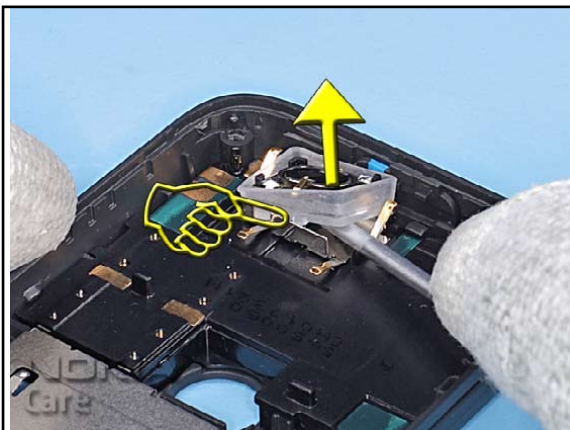
14. Unlock both metal clips of the UI-SHIELD.



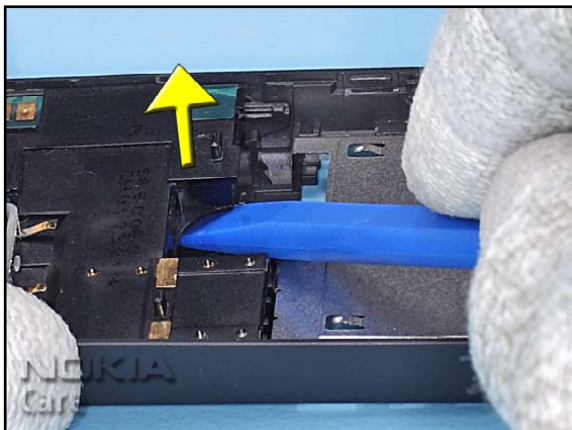
15. Carefully open the DISPLAY connector.



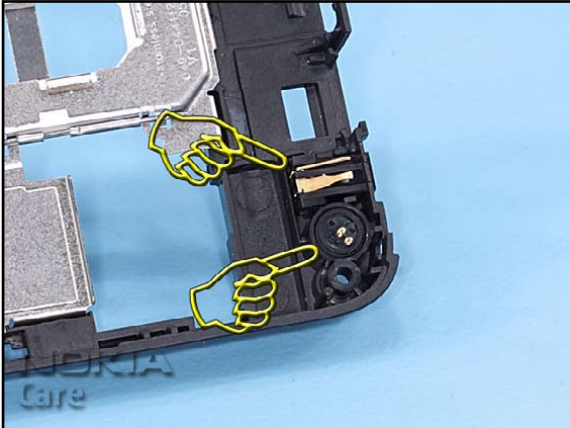
16. Separate the DISPLAY from the UI-SHIELD.



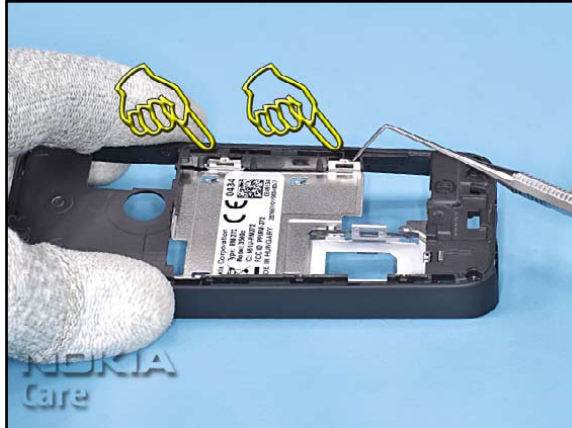
17. Remove the EARPIECE ASSEMBLY. Remember its correct position when assembling the unit.



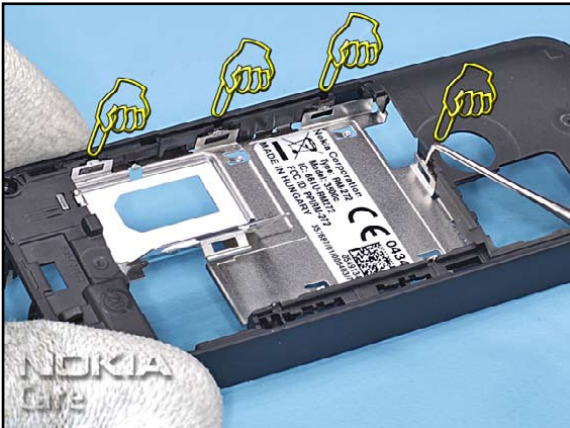
18. Unlock and remove the ANTENNA MODULE ASSY.



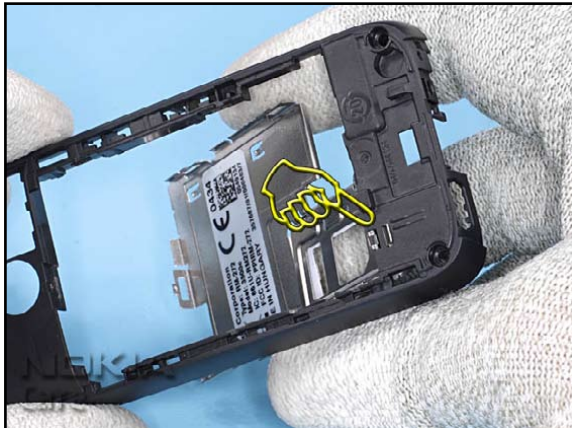
19. DC-JACK and MICROPHONE can be removed easily.



20. First unlock the metal clips of the LABEL COVER ASSY on the shown side.



21. Then continue on the other side.



22. Now separate the parts as shown. The disassembly procedure is now finished.

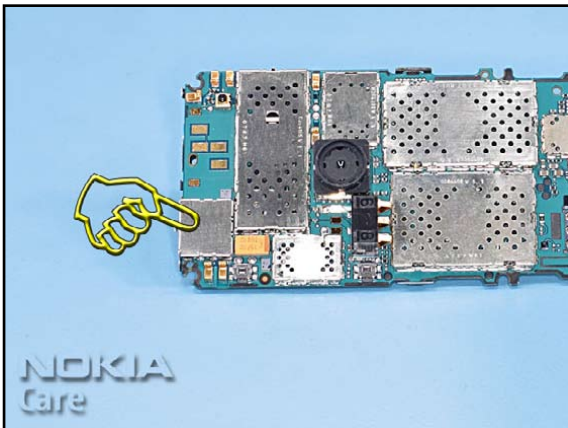
7. ASSEMBLY HINTS



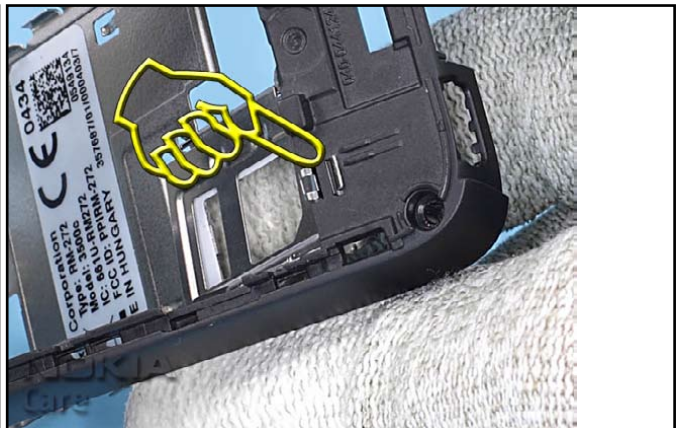
1. Nokia 3500 Classic, assembly hints.



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



3. Always use a new FLEX SHIELDING LID when assembling the unit.



4. Insert the LABEL COVER ASSEMBLY into the B-COVER. The LABEL COVER ASSEMBLY must always be assembled together with the corresponding engine module!



5. Place the PWB into the B-COVER ASSY as shown.



6. Take special care to the power switch when assembling the unit.



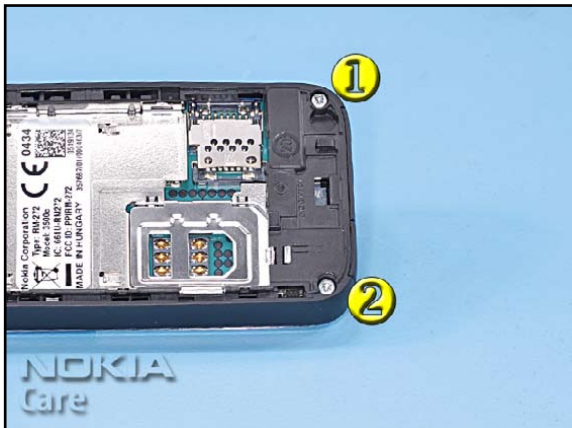
7. Lift a bit the PWB and fit the USB DOOR into its place. Check its correct position.



8. Fit the CONNECTOR COVER onto the B-COVER.



9. Tighten the screws with a torque of 20Ncm in the order shown.



10. Insert new screws and tighten them with a torque of 20Ncm in the order shown.