

SERVICE MANUAL
Level 1&2

Nokia Asha 305

RM-766

Nokia Asha 306

RM-767/RM-768



Transceiver characteristics

Band

GSM 900/ 1800 MHz (RM-766)
GSM 900/ 1800 MHz (RM-767)
GSM 850/ 1900 MHz (RM-768)

Display

3.0" WQVGA TFT Display, 240 x 400 pixels

Camera

2Mpix

Operating System

S40

Connections

GPRS
WAP 2.0
Bluetooth 2.1
FM Radio
IEEE 802.11 b/g WLAN
(RM-767 / RM-768)

3.5mm AV Jack
2.0mm DC Jack
Micro USB
Micro SD card slot

Transceiver with BL-4U battery pack

Talk time	Standby
Asha 305 GSM-A: up to 5.5 h Best time: up to 13.6 h	Asha 305 GSM-A: up to 432 h Best time: up to 487 h
Asha 306 GSM-A: up to 5.4 h Best time: up to 9.8 h	Asha 306 GSM-A: up to 587 h Best time: up to 620 h

Note:

Talk times are dependent on network
parameters
and phone settings

Table of contents

1. COPYRIGHT	4
2. WARNINGS AND CAUTIONS	5
2.1 WARNINGS	5
2.2 CAUTIONS	5
3. ESD PROTECTION	6
4. CARE AND MAINTENANCE.....	7
5. BATTERY INFORMATION.....	8
6. EXPLODED VIEW	9
7. SERVICE DEVICES.....	10
8. SOFTWARE UPDATE	11
9. DISASSEMBLY INSTRUCTIONS.....	12
10. ASSEMBLY HINTS	19
11. SOLDER COMPONENTS.....	20

CHANGE HISTORY

Status	Version No.	Date	Comments
Approved	1.0	06.06.2012	First approved version

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:

Nokia Care Academy
service.manuals@nokia.com

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

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The availability of particular products may vary by region.

IMPORTANT

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

2. 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:

2.1 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.

2.2 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

3. 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.

4. 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.

5. 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. Shortcircuiting the terminals may damage the battery or the connecting object.

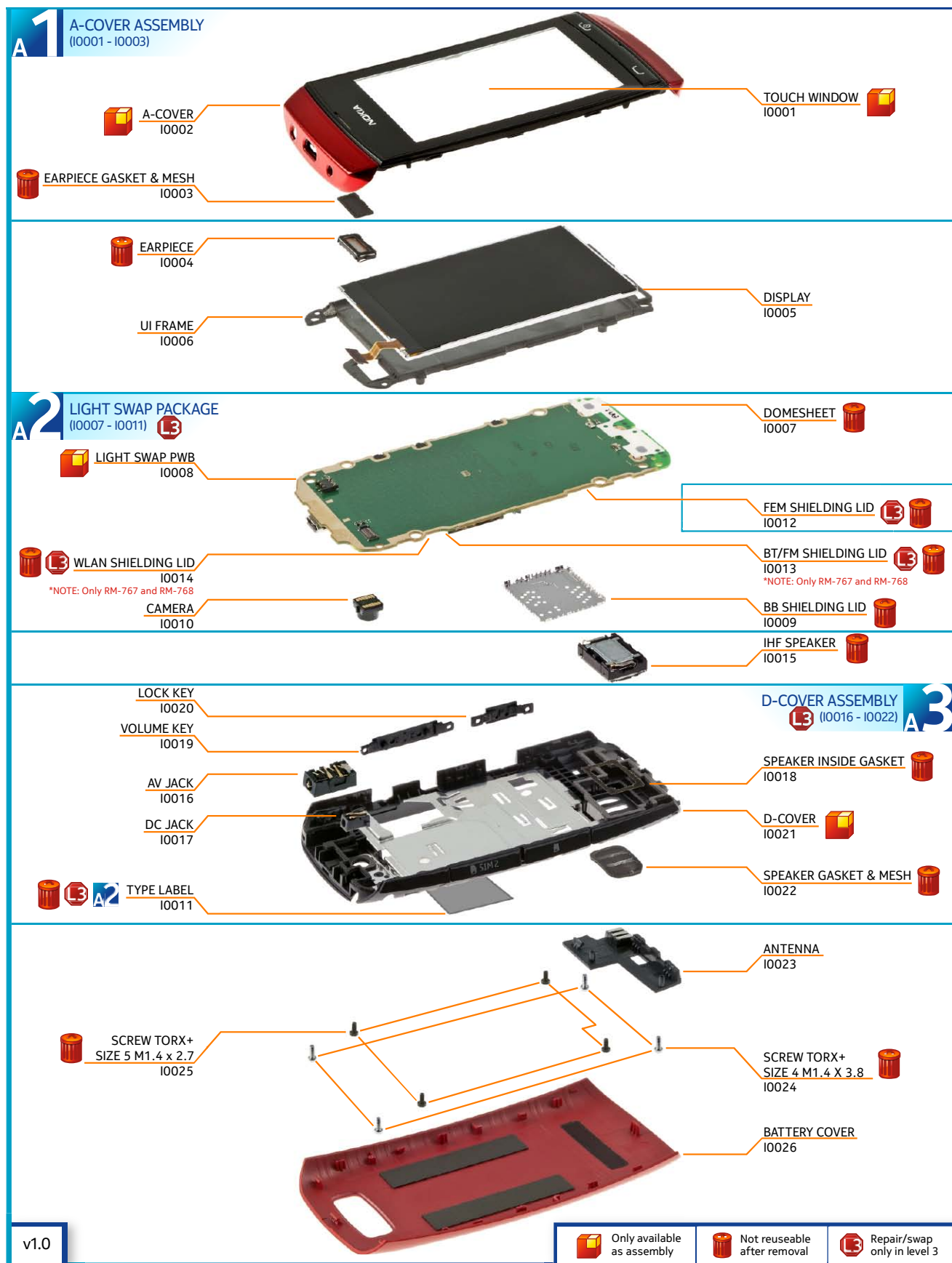
Leaving the battery in hot or cold places, such as in a closed car in summer or winter conditions, will reduce the capacity and lifetime of the battery. Always try to keep the battery between 15°C and 25°C (59°F and 77°F).

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.

6. EXPLODED VIEW



v1.0

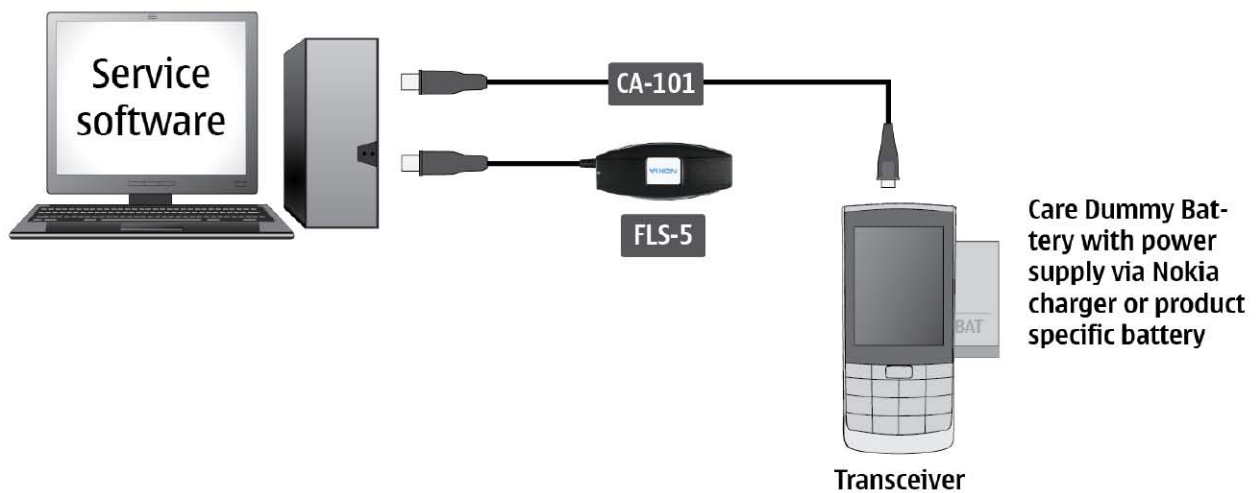
7. SERVICE DEVICES

 <p>CA-101 100cm</p>		
CA-190CD Service Cable	AC-11 Travel Charger	Battery BL-4U
 <p>SS-276</p>		
SS-276 Camera removal tool	<p>Nokia Standard Toolkit (v2) For more information, 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>	

8. SOFTWARE UPDATE

Flash concept (Point of Sale)

To use the FLS-5 Flash Dongle, follow the user guide inside the sales package. Please check always for the latest version of flash software, which is available on Nokia Online.



9. DISASSEMBLY INSTRUCTIONS



1) Nokia Asha 305/306 disassembly.
Note that the disassembly instructions are made with dual SIM variant.



2) For disassembling you need the Nokia Standard Toolkit version 2. You will also need the camera removal tool SS-276.



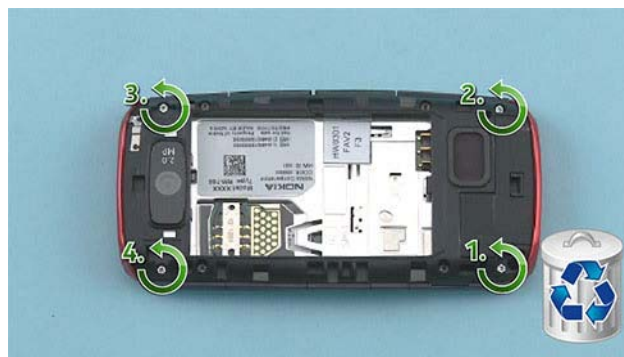
3) Protect the TOUCH WINDOW with protective film.



4) Before disassembling the device make sure the SD and the SIM cards are removed.



5) Use the opening notch to release the BATTERY COVER and remove the cover.



6) Unscrew the four Torx+ size 4 screws in the order shown. Do not use them again. Discard them.



7) To detach the A-COVER, first release the bottom end of the A-COVER with the SRT-6.



8) Continue to release the A-COVER with the SRT-6 on the VOLUME KEY side.



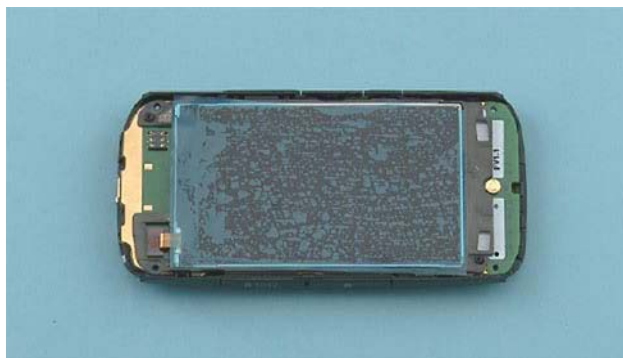
9) Release also the SIM DOOR side with the SRT-6.



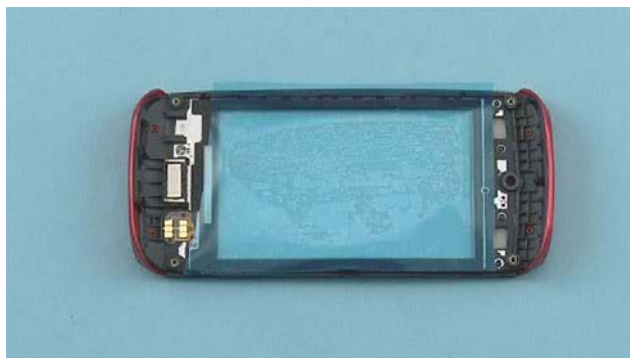
10) To remove the A-COVER, first lift up the bottom end of the A-COVER and then release the top end of the cover.



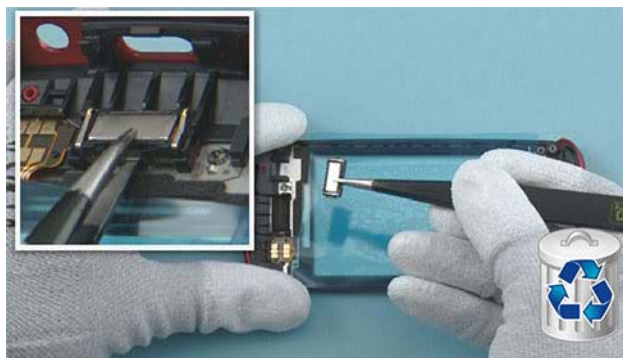
11) Remove the A-COVER.



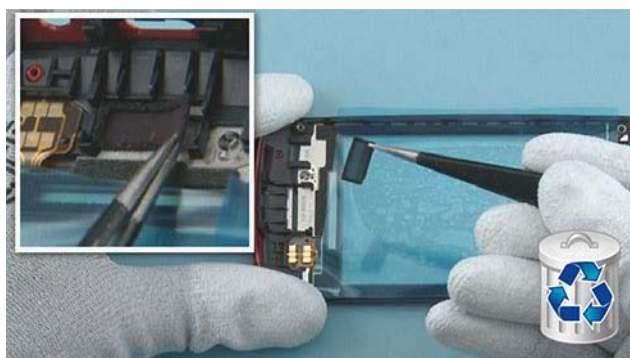
12) Protect the DISPLAY with protective film.



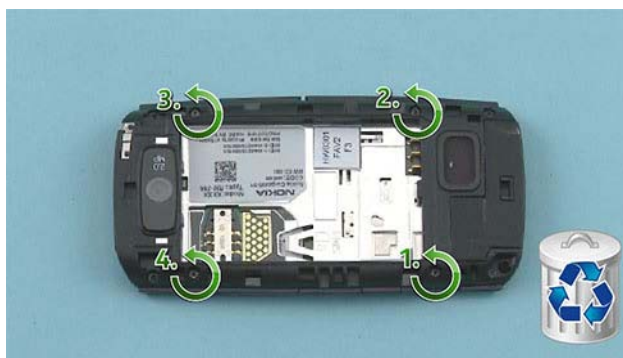
13) Protect the inner side of the TOUCH WINDOW with protective film.



14) Remove the EARPIECE with the tweezers. Do not use it again.



15) Use the tweezers to peel off the EARPIECE GASKET with MESH. Do not use it again.



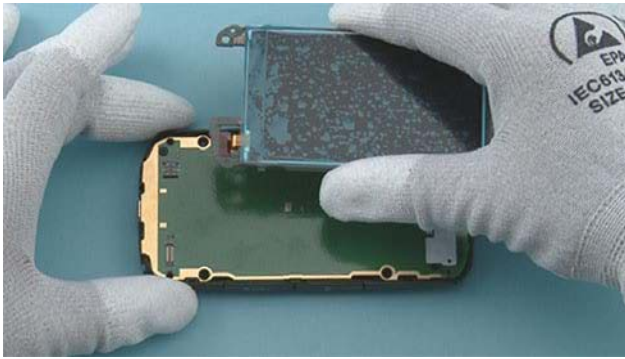
16) Unscrew the four Torx+ size 5 screws in the order shown. The screws are not reusable. Discard them.



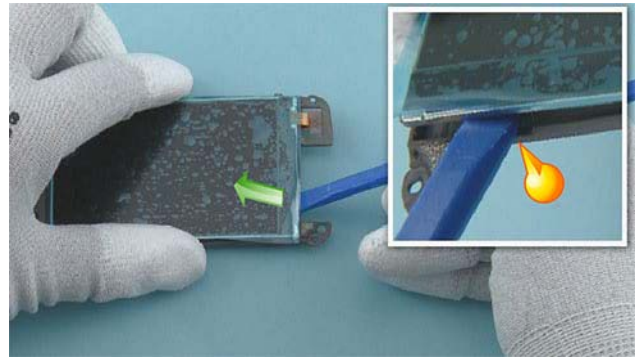
17) Use the SS-93 to carefully lift up the UI FRAME a little bit to gain access to the DISPLAY CONNECTOR.



18) Disconnect the DISPLAY CONNECTOR with the SS-93. Be careful not to damage any components nearby.



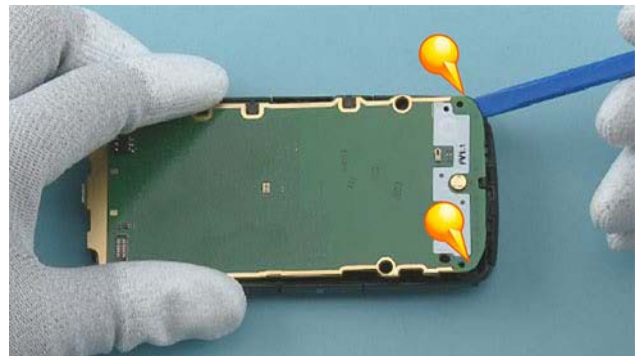
19) Remove the UI FRAME including the DISPLAY.



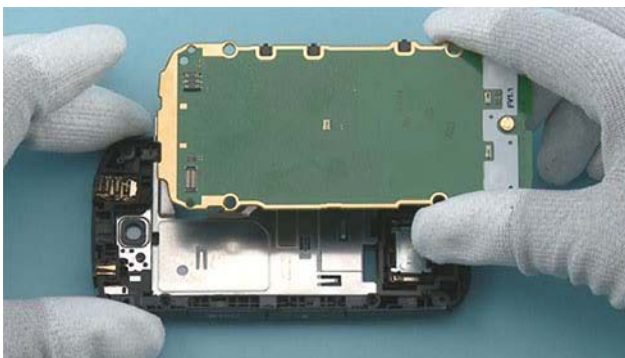
20) Detach the DISPLAY from the UI FRAME with the SS-93.



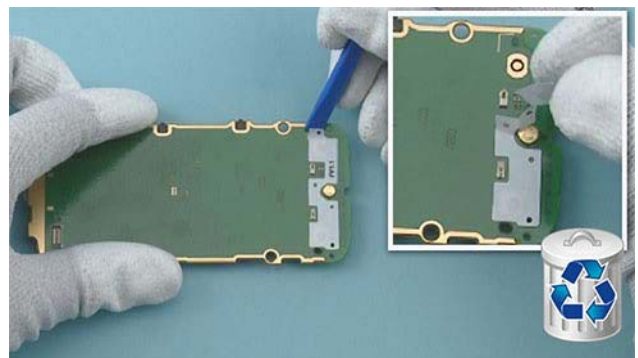
21) Separate the DISPLAY and the UI FRAME.



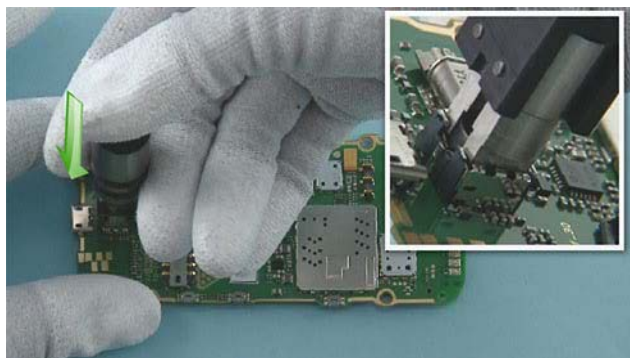
22) Use the SS-93 to lift up the ENGINE BOARD.



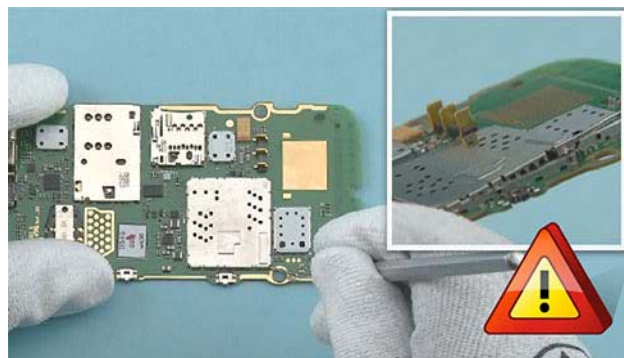
23) Remove the ENGINE BOARD.



24) Release one corner of the DOMESHEET with the SS-93 and then peel it off with fingers. Do not use the DOMESHEET again.



25) Place the camera removal tool SS-276 on top of the CAMERA and push down the button on top of the SS-276. Lift the SS-276 up and remove the CAMERA.



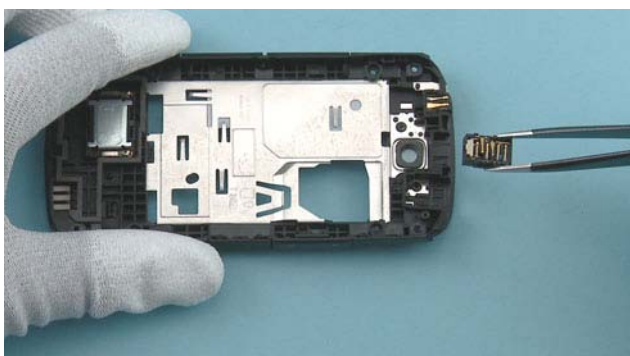
26) Use the dental tool to detach the BB SHIELDING LID. Be careful not to injure yourself with the sharp end of the dental tool.



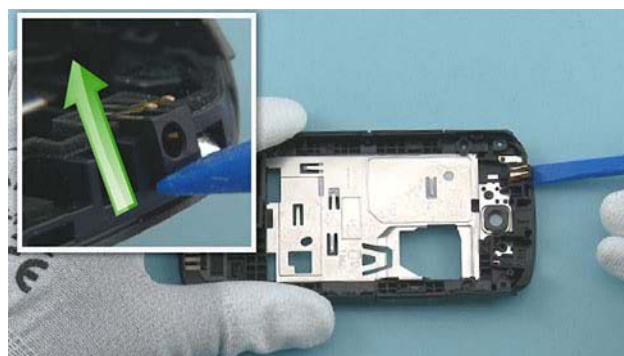
27) Remove the BB SHIELDING LID with the tweezers. Do not use the BB SHIELDING LID again. Discard it.



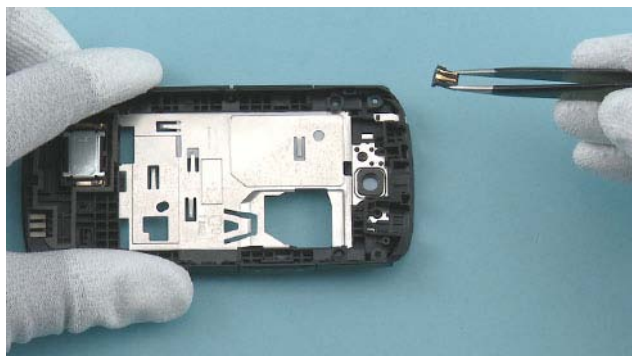
28) Use the SS-93 to lever out the AV JACK.



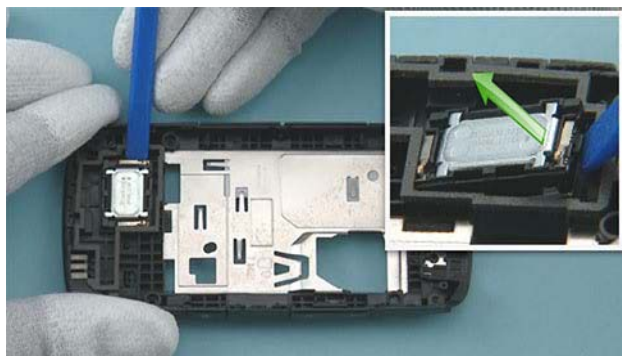
29) Remove the AV JACK with the tweezers.



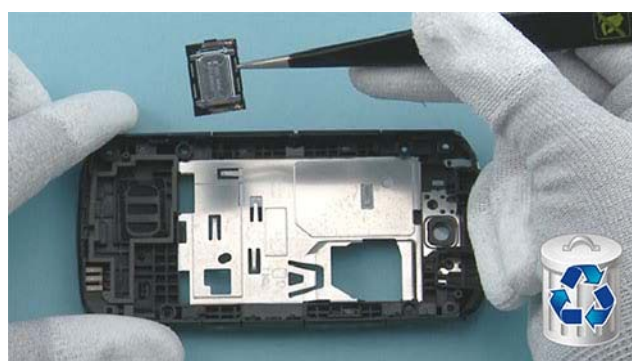
30) Use the SS-93 to lever out the DC JACK.



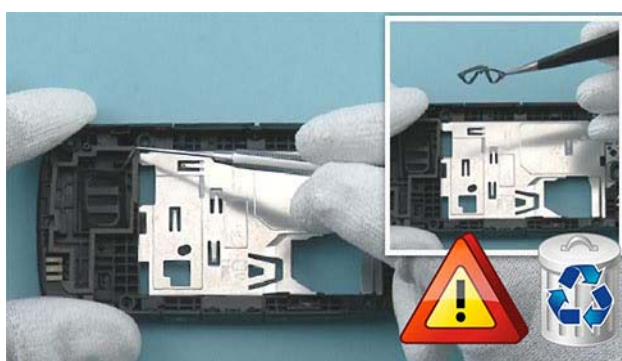
31) Remove the DC JACK with the tweezers.



32) Use the SS-93 to detach the IHF SPEAKER.



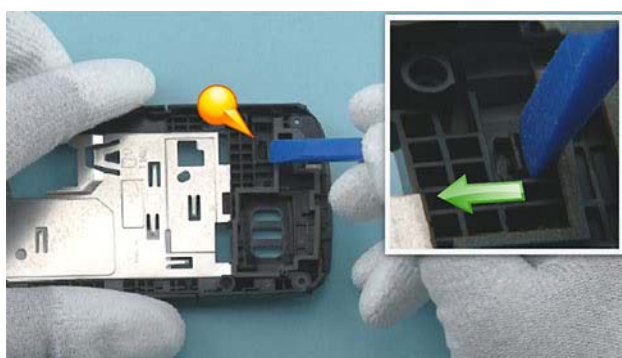
33) Remove the IHF SPEAKER with the tweezers.
The IHF SPEAKER cannot be reused.



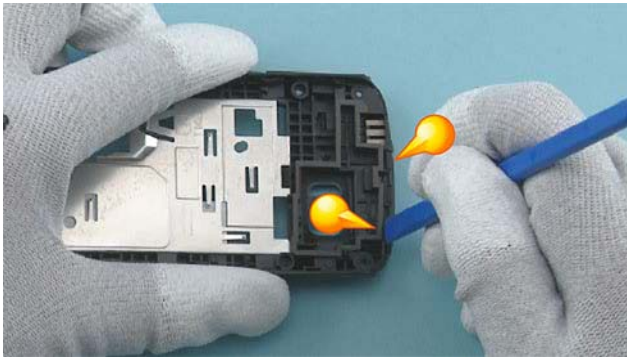
34) Use the dental tool to carefully peel off the
SPEAKER INSIDE GASKET. Remove the gasket with
the tweezers and discard it. Make sure there are
no adhesive residues left.



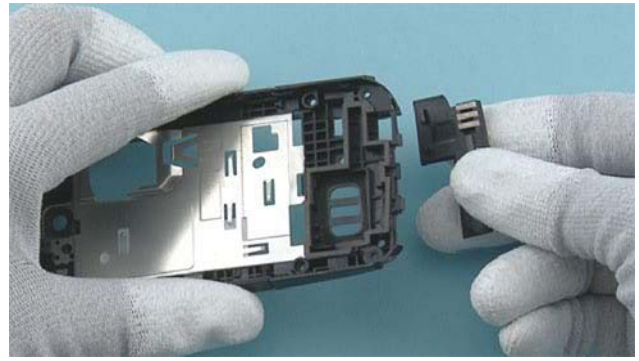
35) Use the tweezers to carefully remove the
SPEAKER GASKET with MESH. Do not use it again.
Make sure there are no adhesive residues left in
the slot.



36) Release the hook holding the ANTENNA with
the SS-93.



37) Release the bottom end of the ANTENNA with the SS-93.



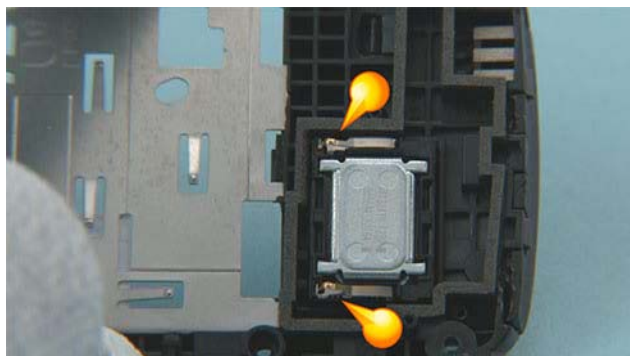
38) Remove the ANTENNA.



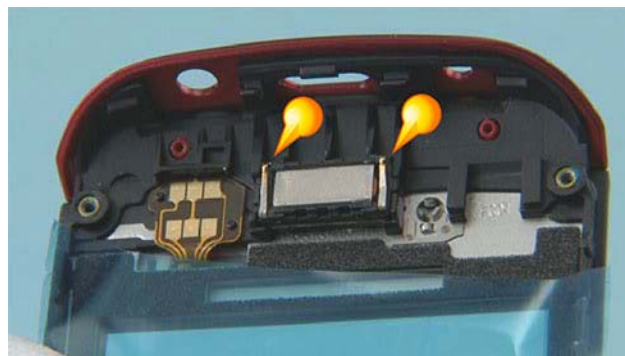
39) Now the Nokia Asha 305/306 disassembly procedure is complete.

-END OF DISASSEMBLY-

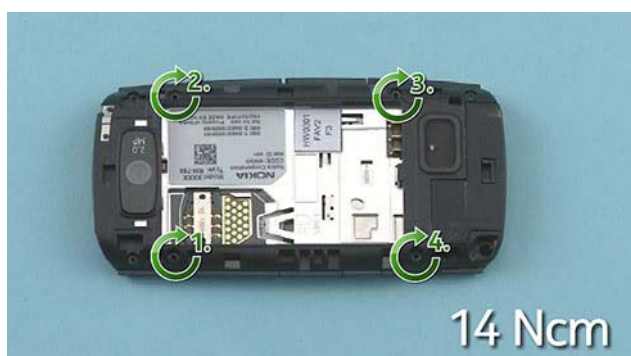
10.ASSEMBLY HINTS



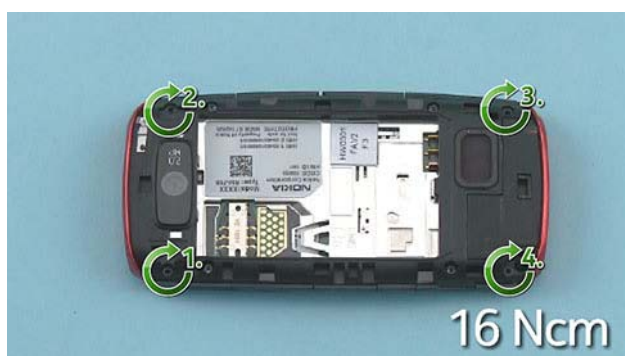
1) When assembling the IHF SPEAKER, check that the speaker is aligned correctly.



2) When assembling the EARPIECE, check that the EARPIECE is aligned correctly.



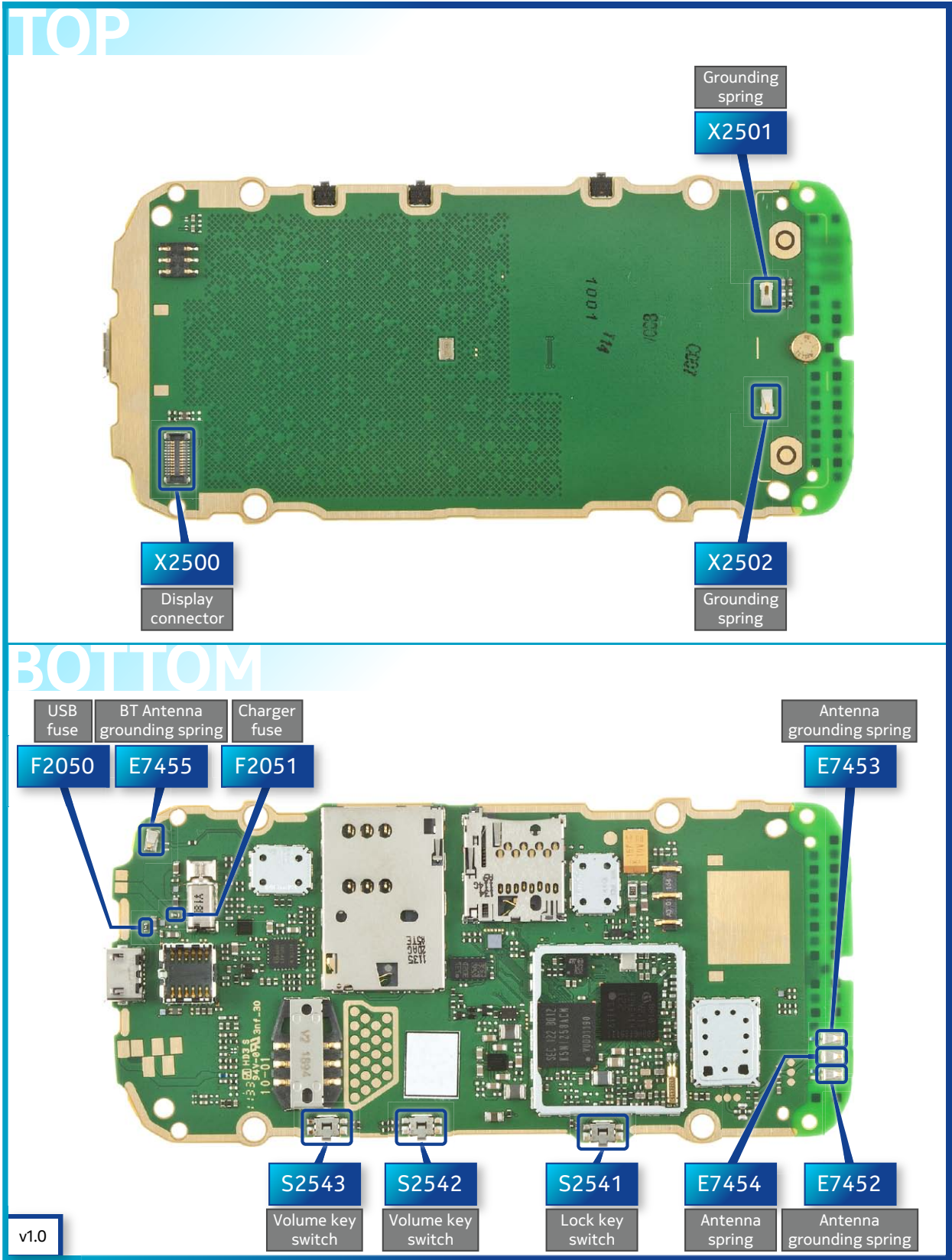
3) Tighten the four Torx+ size 5 screws to the torque of 14 Ncm in the order shown.



4) Tighten the four Torx+ size 4 screws to the torque of 16 Ncm in the order shown.

11.SOLDER COMPONENTS

11.3 Asha 305(RM-766)



11.4 Asha 306 (RM-767, RM-768)

