

SERVICE MANUAL

Level 1&2

NOKIA
6233

RM-145

NOKIA
6234

RM-123



Transceiver characteristics:

Band: Tri-band phone for GSM/EDGE 900/1800/1900MHz and WCDMA 2100

Camera: Integrated camera 2 Megapixel

Display: Active TFT QVGA color display with 262.144 colors, resolution 320 x 240 pixel

Bluetooth

IrDA

Stereo FM radio

Vibra Alert: Small round Vibra motor

Connector: Easy Flash connector

Transceiver with BP-6M-S Li-Ion battery pack

Talk time	Standby	Note
GSM: Up to 4h WCDMA: Up to 3.1h	up to 14 days	Depends on network parameters

Environmental characteristics:

- Lead-free soldered

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CHANGE HISTORY

Status	Version No.	Date	Comments
Draft	0.1	18.Apr.2006	Initial draft
Approved	1.0	25.Apr.2006	Approval
Approved	2.0	29.Mrz.2007	Exploded view updated /Chapter Battery Test removed
Approved	3.0	14.May.2007	Disassy instruction updated - new torque settings

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:

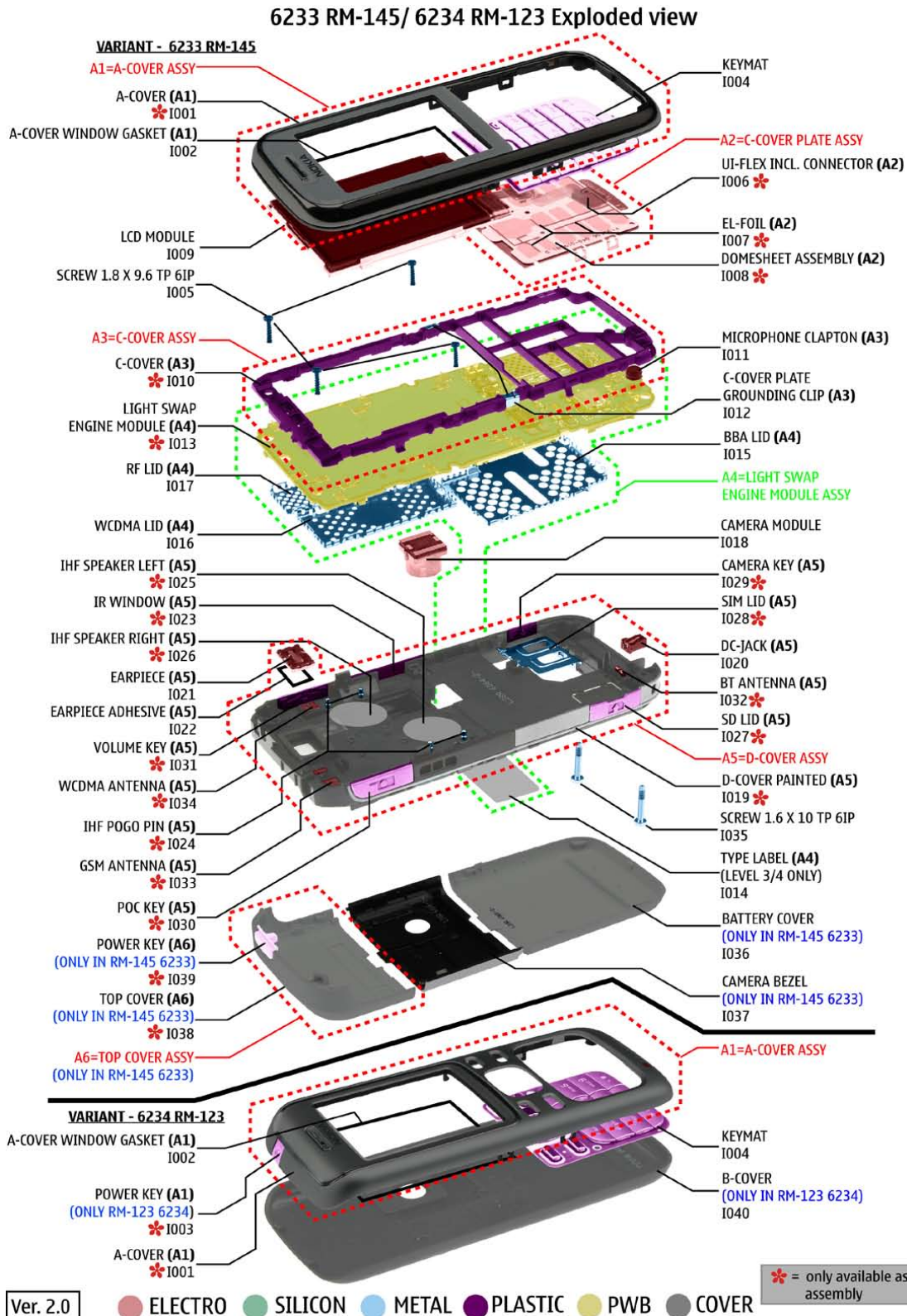
1. Servicing and alignment must be undertaken by qualified personnel only.
2. Ensure all work is carried out at an anti-static workstation and that an anti-static wrist strap is worn.
3. Use only approved components as specified in the parts list.
4. Ensure all components, modules screws and insulators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

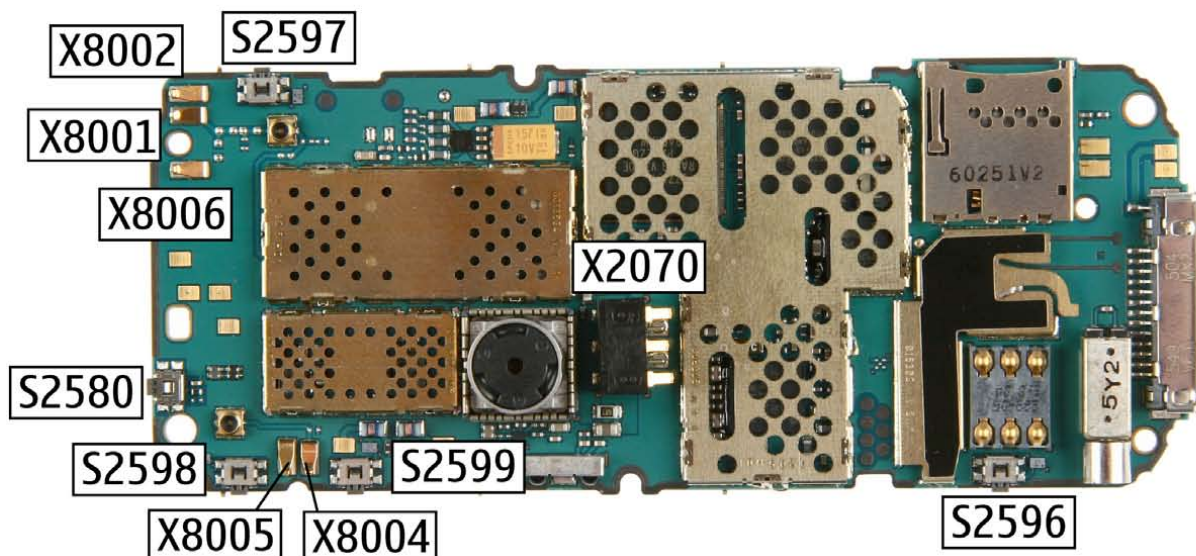
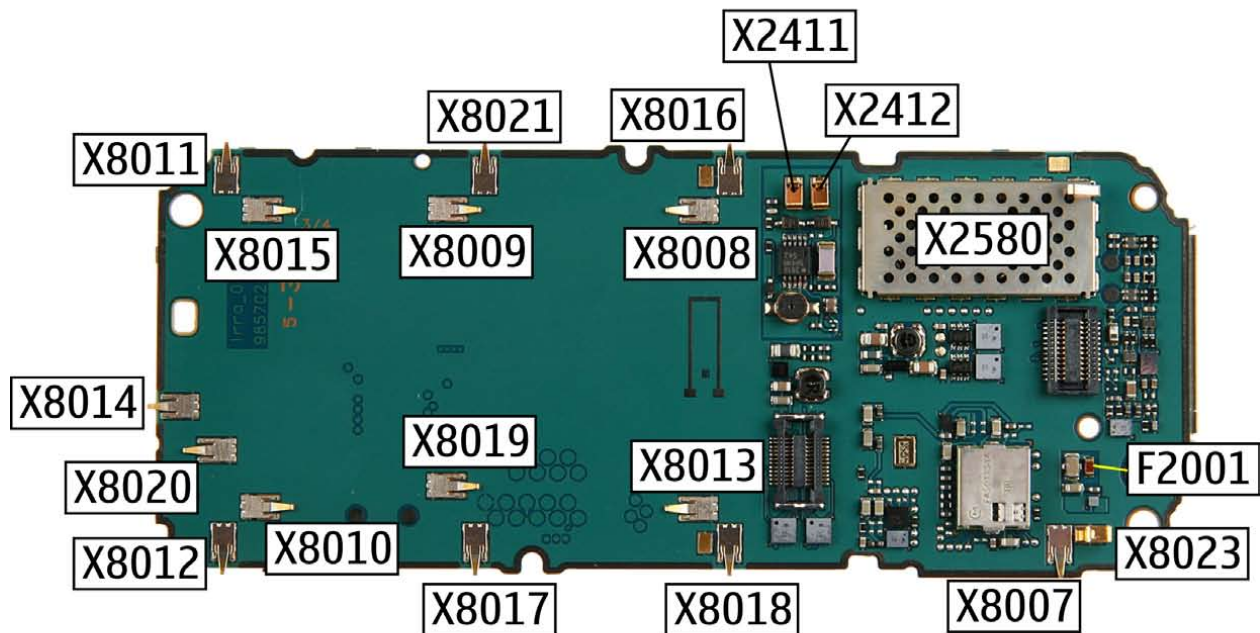
2. EXPLODED VIEW AND COMPONENT DISPOSAL

Recommendation for the ecologically friendly disposal of components. Colorized components show the different categories. See corresponding ITEM/CIRCUIT REF in the Spare Parts Service Bulletins on NOL.

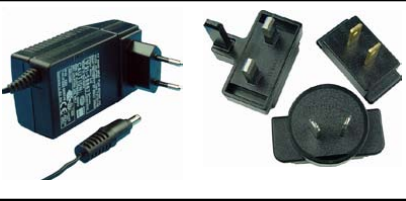
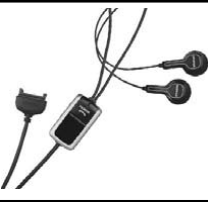


3. COMPONENT OVERVIEW

6233 RM-145/ 6234 RM-123 Component overview



4. SERVICE DEVICES

	FLS-4S incl. ACF-8, Driver and User Guide Dongle and flash device incorporated into one package, developed specifically for POS use.
	ACF-8 Universal Power Supply is used to power FLS-4S.
	Travel Charger AC-4 Small and lightweight charger for fast charging of your phone battery.
	Internal Battery BP-6M-S Inserted under the back cover, this Li-Ion battery provides power in a lightweight package.
	Headset HS-23 Small and lightweight stereo headset with handsfree call handling, volume control, push to talk support, and comfortable earpieces for listening to the FM radio or music player.
SS-45 	SS-45 Camera removal tool. One side is for disassembly, the other side for assembly.
	CA-53 Service Cable to connect the PC with the Pop-Port™ connector.

	RJ-108 Soldering Jig
	Lead-free Solder Wire Mandatory for lead-free products (Level 2 only).
	0772040 NMP Standard Toolkit • NOKIA opening tool SRT-6 NOKIA No. 0770431 • Tonichi torque driver NOKIA No. 6901525 • Hoya micro Fibre cloth MX304 • Dastex gloves S, M, XL • Artitlux goggles AH166 • Wera bit T5 867/4TX 5x50 • Wera 867/4 6IP; 50mm (Torx 6 PLUS®) • Wera bit T6 867/4TX 6x50 • Wera 867/1 5IP; 25mm (Torx 5 PLUS®) • Wera bit T6 PLUS® 867/4TX 6IP • Facom side cutter 416E • Facom T5 driver SP.14032 • Facom T6 driver SP.14033 • Facom slot screwdriver AEF. 2x35.E • Wetec tweezers 7abb SA-ESD • Wetec tweezers 22 SA-ESD • Wetec tweezers 13 SA-SMD ESD • Wetec tweezers PSF SA-ESD • Wetec ESD brush E1211 • Kaiser Fototechnik airbrush 6315 • Wetec dental tool DEM83266/0 • RS Components Scissors 323-5732

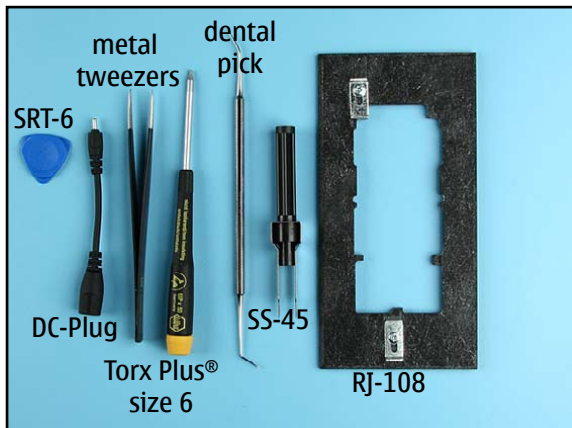
5. SW-UPDATE

Flash Concept – (Point of Sales)

To use FLS-4S 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](#).



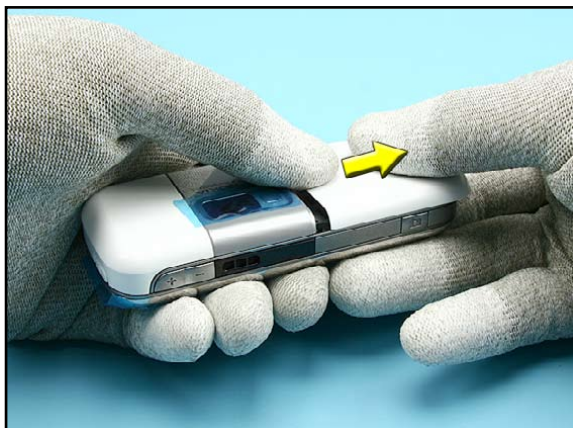
6. DISASSEMBLY INSTRUCTION



1. Needed tools.



2. Protect the window with a protective film.



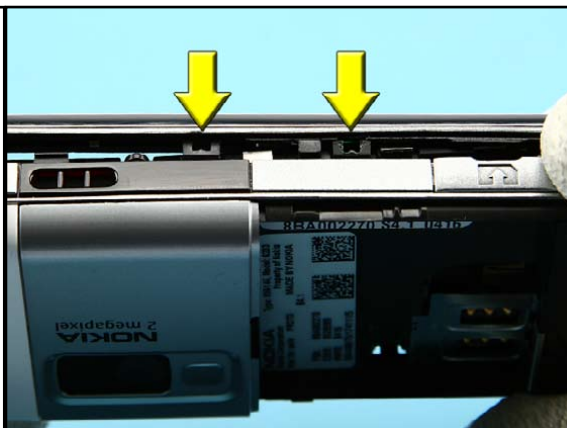
3. Open the BATTERY COVER and ensure that now battery is inserted.



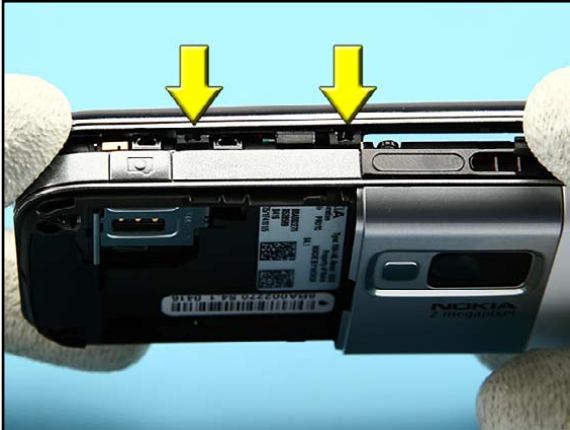
4. Undo the Torx Plus size 6 screws in the order shown.
For assembly, use the reverse order and a torque of 27 Ncm.



5. Discard the screws and use always new ones because of the locking compound.



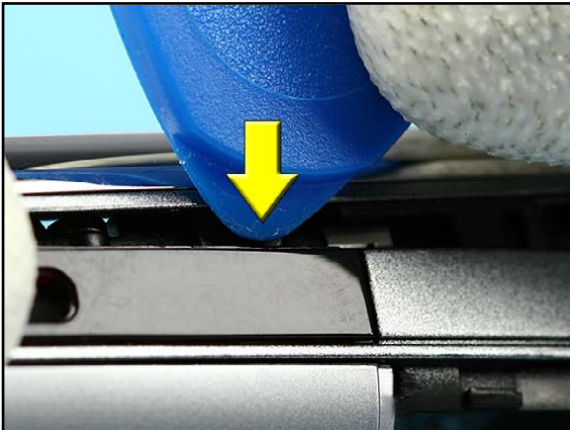
6. This picture shows the position of the holding clips on the left side of the unit.



7. This picture shows the position of the holding clips on the right side of the unit.



8. Bring the SRT-6 exactly to the position over the (invisible) clips. NOTE! A little sliding motion could be needed (like a 'credit card') when releasing the snaps. Do not damage the edges of the A-COVER.



9. Stick the SRT-6 between the cover and release the four clips.



10. Remove the A-COVER and protect the inner window with a protective film.



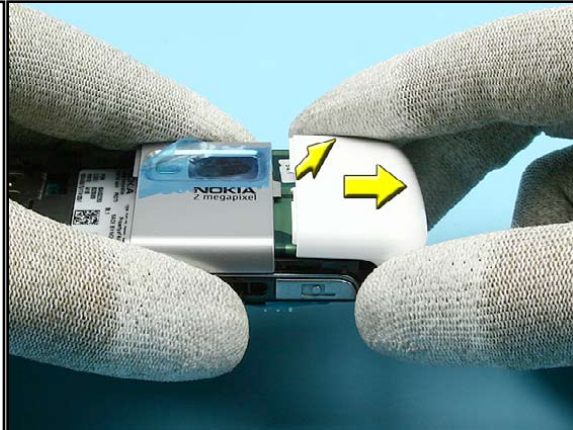
11. Protect the LCD MODULE with a protective film.



12. Press out the KEYMAT.



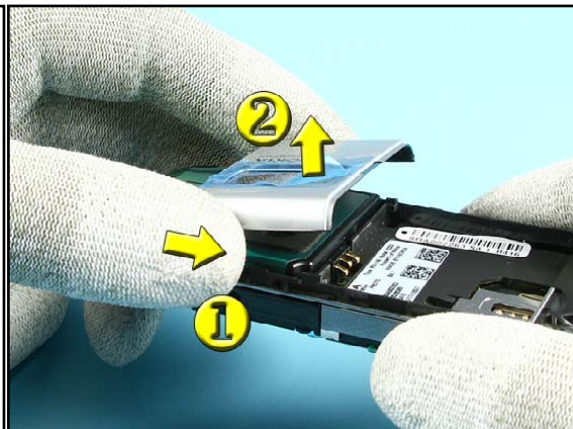
13. Stick the SRT-6 into between the TOP COVER and the CAMERA BEZEL and release the TOP COVER.



14. Now, remove the TOP COVER.



15. To release the CAMERA BEZEL, stick the closed tweezers between the CAMERA BEZEL and the D-COVER.



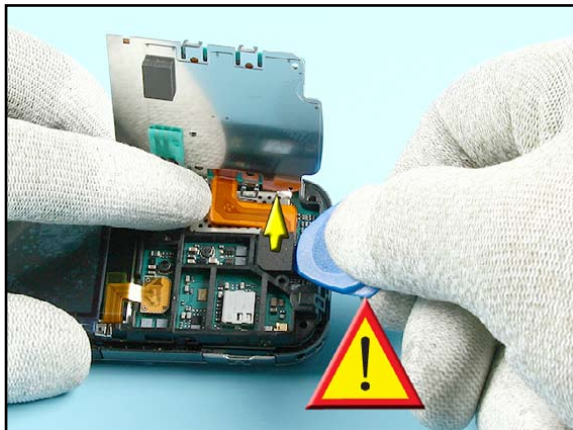
16. Now, remove the CAMERA BEZEL.



17. Unlock the four clips of the C-COVER PLATE ASSY and loosen it.



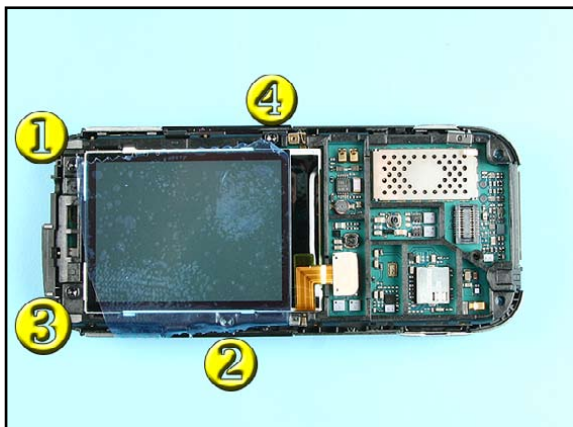
18. Flip over the C-COVER PLATE ASSY and pay attention to the flex foil.



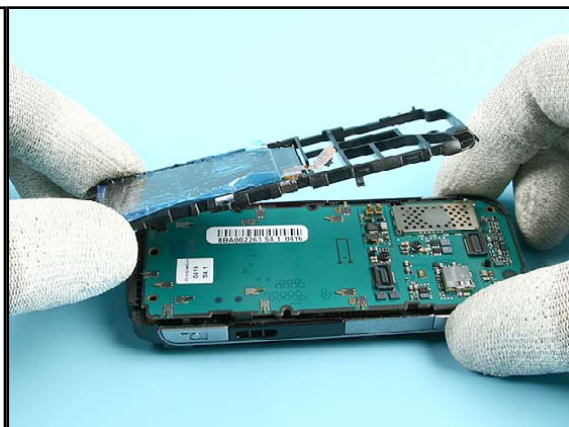
19. Carefully open the flex connector with the SRT-6.



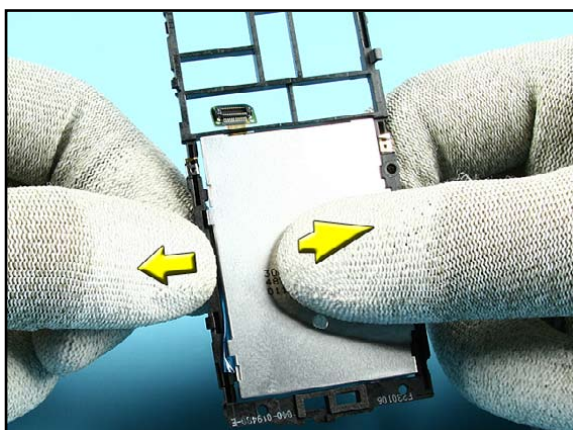
20. Now, also open the flex connector of the LCD MODULE.



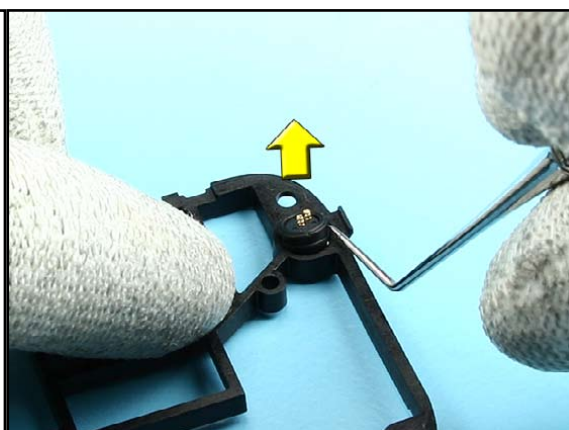
21. Open the Torx Plus size 6 screws in the order shown. **For assembly, use the reverse order and a torque of 27Ncm.**



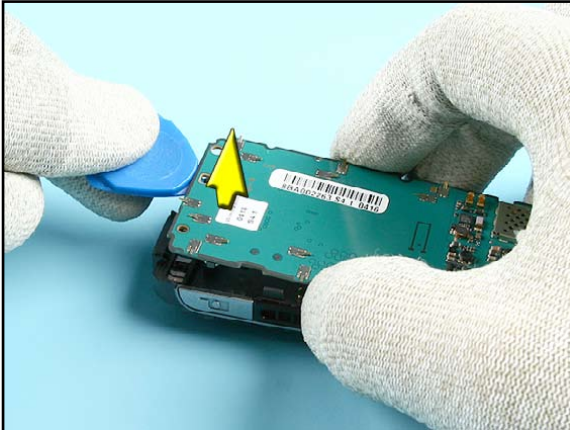
22. Take off the C-COVER ASSY with the LCD MODULE.



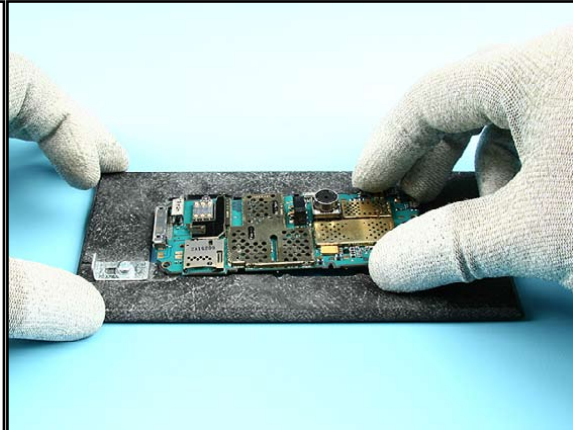
23. Release the LCD MODULE from the C-COVER ASSY by pushing the edges outwards first. Mind the grounding clips.



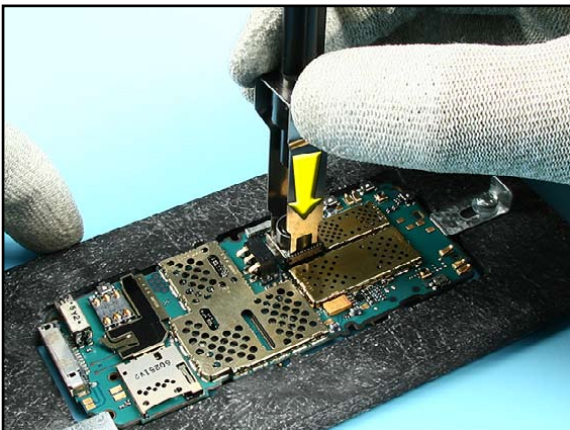
24. Remove the MICROPHONE CLAPTON with the dental pick.



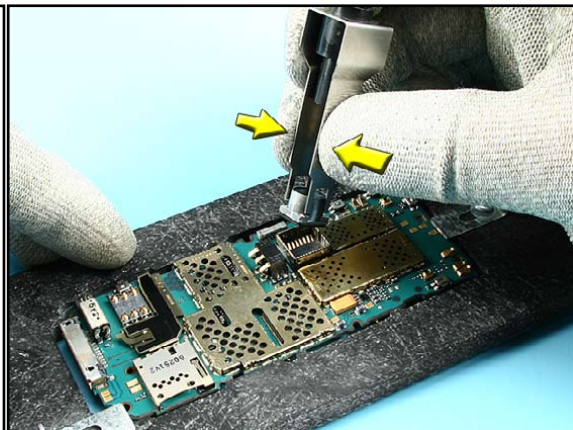
25. Use the SRT-6 as an aid to lift out the ENGINE MODULE from the D-COVER ASSY.



26. Use the soldering jig RJ-108 as a support when working at the CAMERA MODULE. This prevents from damaging or soiling the underneath spring contacts.



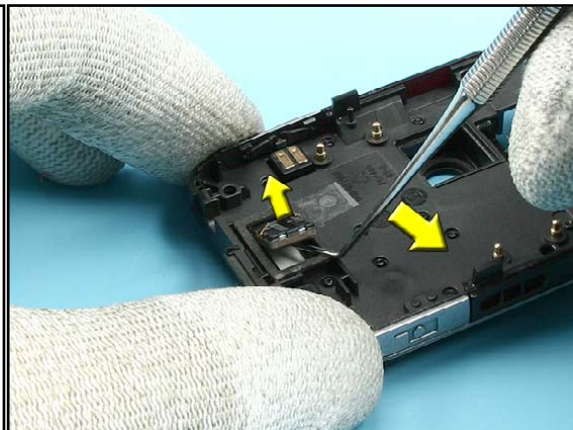
27. Take the SS-45 and fit it between the CAMERA MODULE and the shielding.



28. Press the tool and pull out the CAMERA MODULE.



29. Remove the DC-JACK with a DC-plug.



30. Carefully remove the EARPIECE with the dental tool. Always use a new adhesive tape when replacing the EARPIECE.

