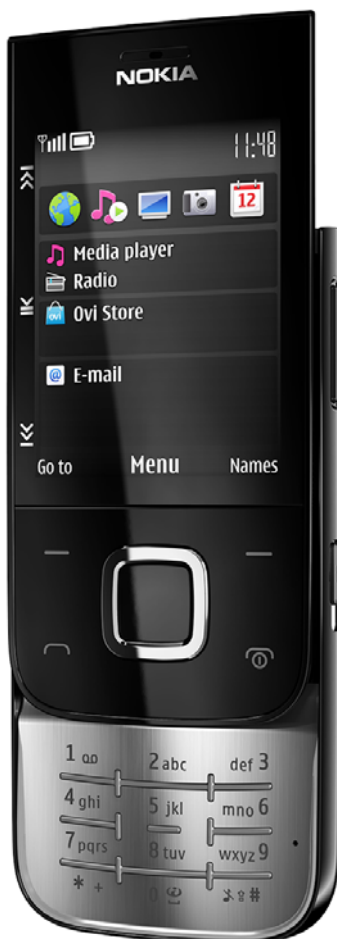


SERVICE MANUAL
Level 1&2

NOKIA
5330

NOKIA
5330
Mobile TV Edition

RM-615



Transceiver characteristics

Band:

- Quad Band GSM 850/900/1800/1900
- Tri Band WCDMA 850/1700/2100, 3GPP Rel. 5

Display:

2.4" 240x320 16M colours TFT QVGA display

Camera:

3.2 Mpix

Operating System:

S40 6th edition

Connections:

- 3.5 mm AV connector
- 2.0 mm DC charger connector
- MicroUSB 2.0 (with Mass Storage support)
- DVB-H (Mobile TV Edition only)
- Bluetooth: 2.1 + EDR

Transceiver with BL-4U battery pack

Talk time	Standby
GSM: Up to 5.3 hours	GSM: Up to 408 hours
WCDMA: Up to 4.0 hours	WCDMA: Up to 408 hours
Mobile TV playing time	6 hours

Note:

Talk times are dependant on network parameters and phone settings

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1. CHANGE HISTORY

Status	Version No.	Date	Comments
Approved	1.0	12.01.2010	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
<mailto: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.

3. 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:

3.1 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.

3.2 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

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. 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.

7. EXPLODED VIEW

A1 A-COVER MODULE
(I0001 - I0002)

A-COVER *
I0001



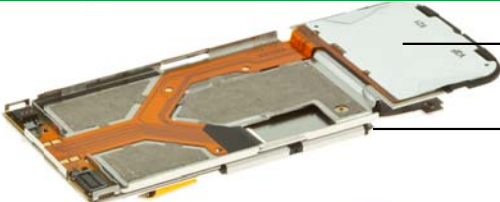
EARPIECE M STOUT
I0002

FUNCTION KEYPAD
I0003

LCD AM 240x320 Brixton
I0004

A2 CARE SLIDE MODULE ASSY
(I0101 - I0102)

UI FLEX MODULE ASSY *
I0101



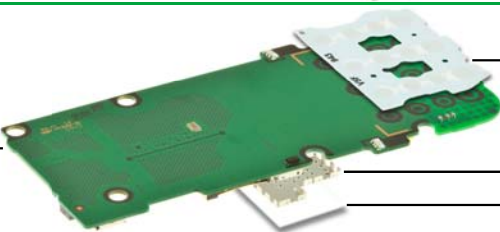
SCREW
I0005

SLIDE MODULE ASSY *
I0102

NUMERIC KEYPAD
I0201

A3 3CU Engine Module
(I0202 - I0205)

DOME SHEET NUMERIC
I0202



PWB *
I0203


BB-SHIELD LID
I0204

DOCKING FLEX MOD FOR CARE
I0206

TYPE LABEL
I0205

A4 ANTENNA MODULE ASSY
(I0209 - I0210)

IHF SPEAKER *
I0210




CAMERA MODULE
I0207

ANTENNA MODULE *
I0209

DECOPLATE ASSEMBLY
I0208

A5 D-COVER ASSY
(I0211 - I0213)

D-COVER *
I0213

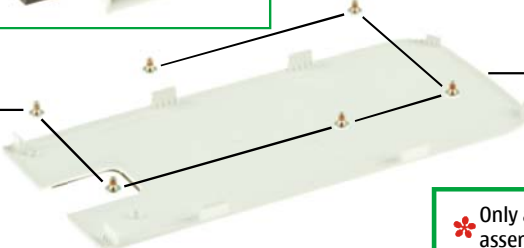


VOLUME KEY PWB ASSY *
I0212

DC JACK
I0211

SCREW
I0214

F-COVER ASSY
I0215



Ver. 1.0

* Only available as assembly

🗑️ These parts can not be reused after removal

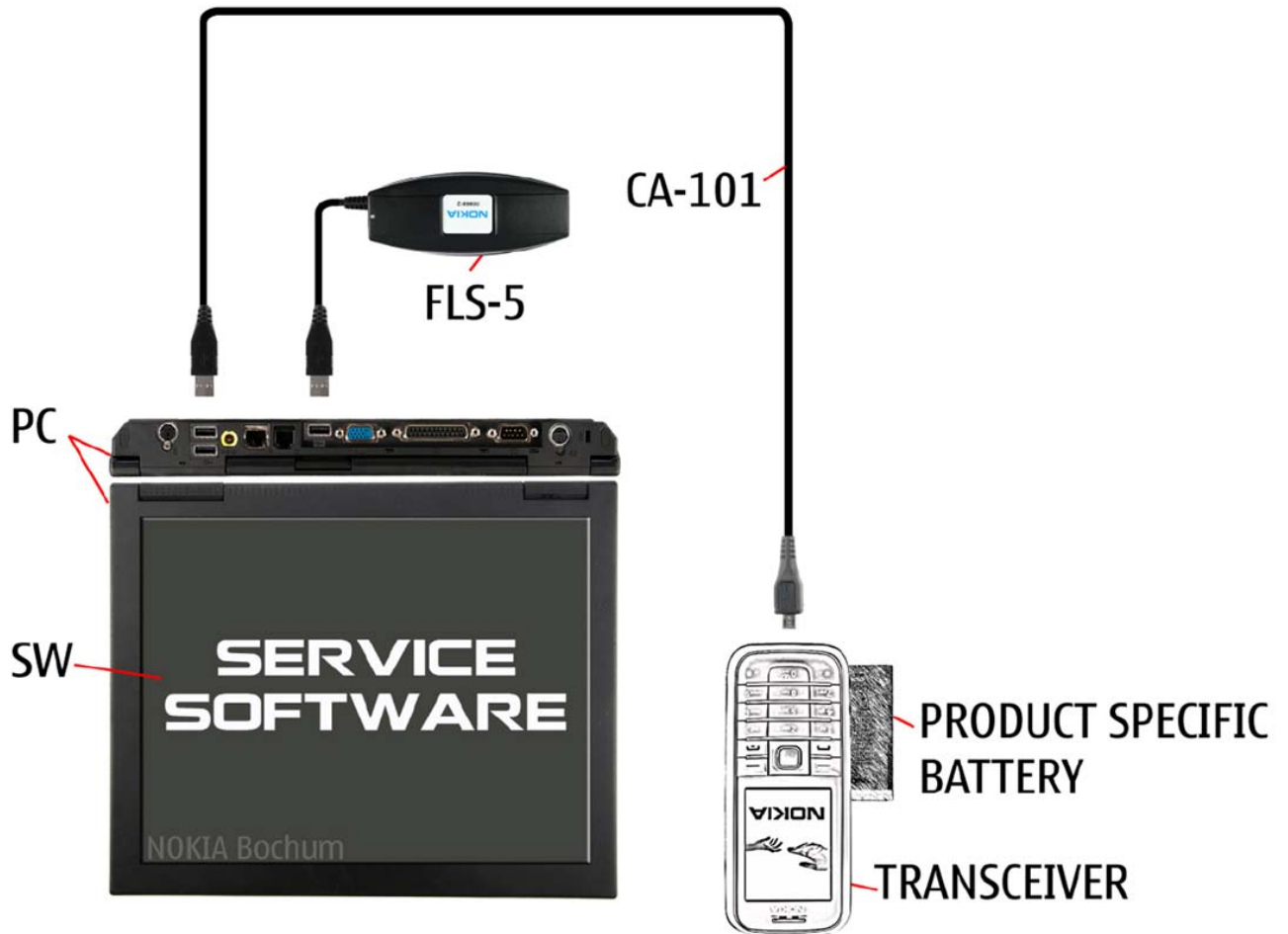
8. SERVICE DEVICES

 <p>FLS-5</p> <p>FLS-5 Flash Device</p>	 <p>CA-101 100cm</p> <p>CA-101 Service Cable</p>	 <p>AC-8 Travel Charger</p>
 <p>BL-4U</p> <p>BL-4U Battery</p>	 <p>SS-88 Camera removal tool</p>	 <p>NMP 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>

9. SW-UPDATE

Flash concept- (Point of Sales)

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.



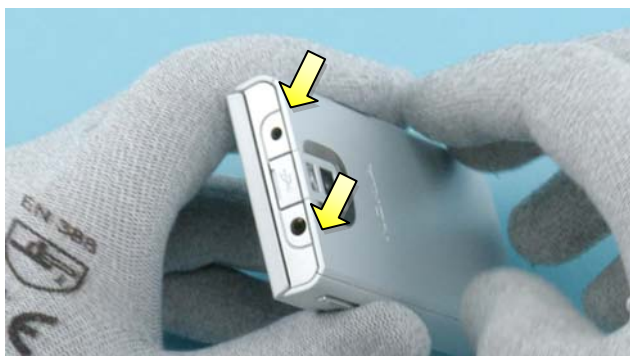
10. DISASSEMBLY INSTRUCTIONS



1) Nokia 5330 and 5330 Mobile TV Edition disassembly.



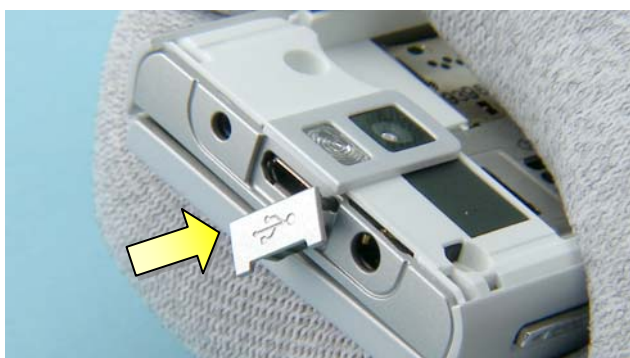
2) You must use the Nokia Standard Toolkit version 2. You will also need the SS-88 camera removal tool and the 2 mm charger plug.



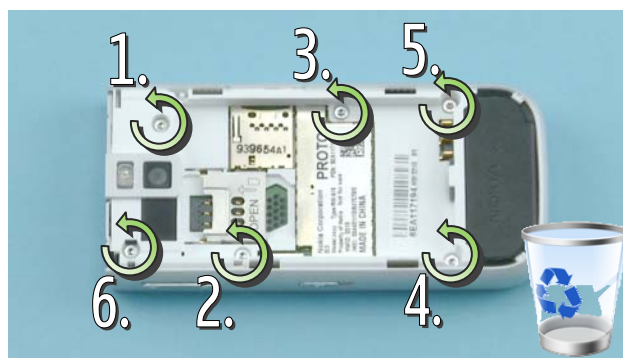
3) To remove the F-COVER ASSY first release the two clips on the top side of the cover.



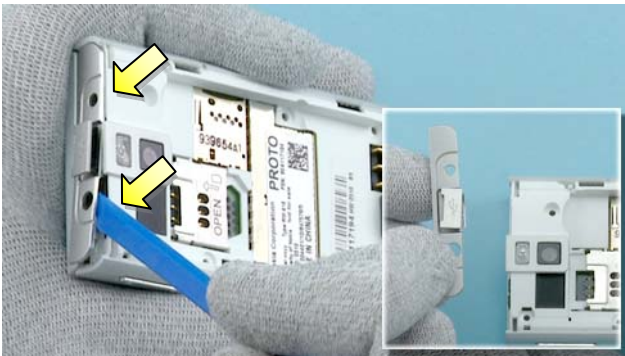
4) Remove the F-COVER ASSY.



5) Open the USB door.



6) Unscrew the six TORX + size 6 screws in the order shown. Do not use them again.



7) Use the SS-93 to detach the snaps of DECOPLATE ASSEMBLY on back side. Remove the DECOPLATE ASSEMBLY.



8) Push the ANTENNA MODULE ASSY slightly towards the engine board and detach the D-COVER ASSY.



9) Remove the D-COVER ASSY.



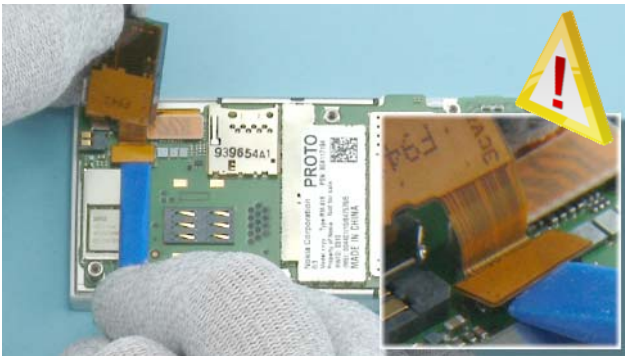
10) Use a DC plug to lift up the DC JACK.



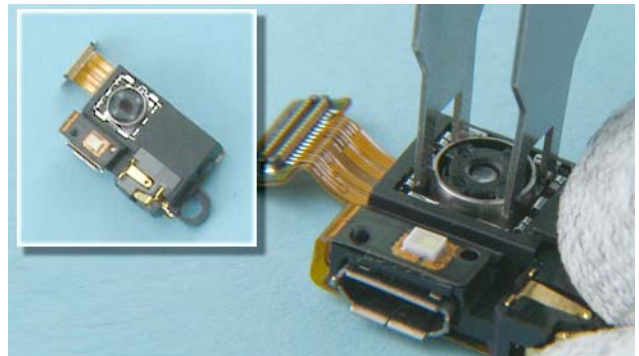
11) Remove ANTENNA MODULE ASSY.



12) Carefully turn over the DOCKING FLEX MODULE to gain access to the connector underneath.



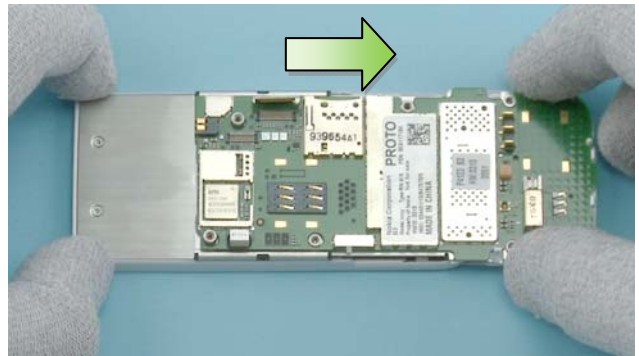
13) Open the DOCKING FLEX MODULE connector with the SS-93.
Be careful not to damage the connector or the components nearby!



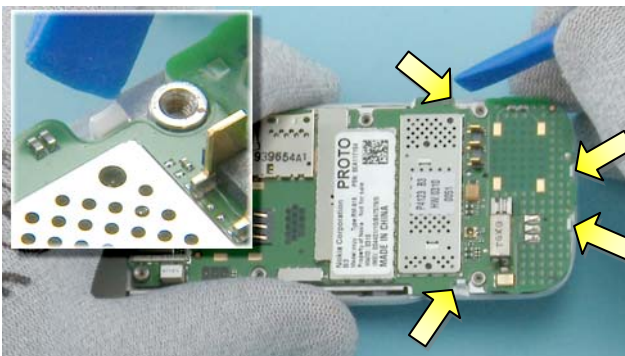
14) Use the camera removal tool SS-88, to detach the CAMERA. Lift up the SS-88 and remove the camera.



15) Open the UI FLEX connector with the SS-93.
Be careful not to damage the connector or the components nearby!



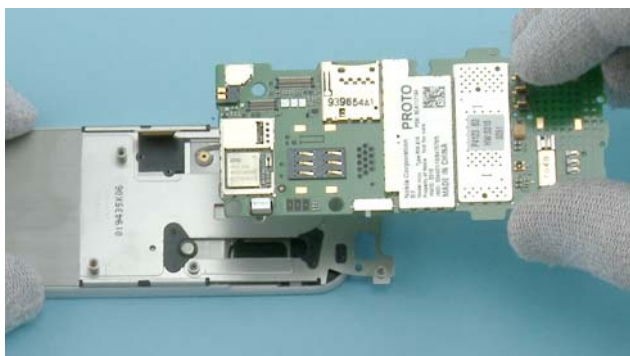
16) Move the slide to the opposite position.



17) Use the SS-93 to release the four clips holding the NUMERIC KEYPAD.



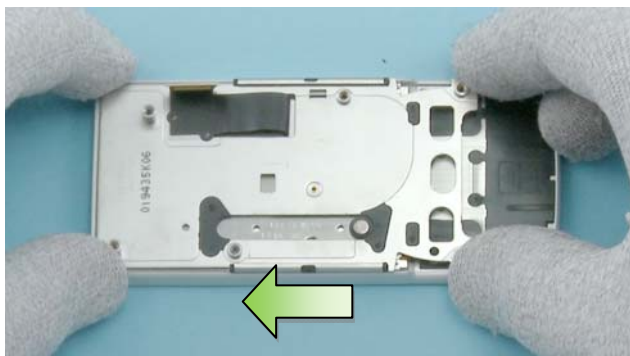
18) The NUMERIC KEYPAD is glued to the engine board. While removing the keypad be careful not to damage the components on the engine board! The NUMERIC KEYPAD has always to be renewed.



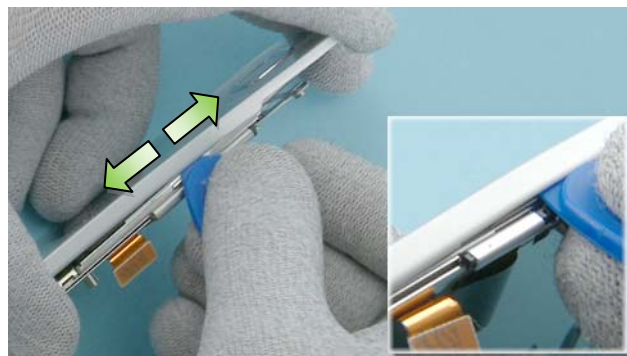
19) Remove the engine board.



20) Unscrew the two TORX + size 4 screws in the order shown. Do not use them again.



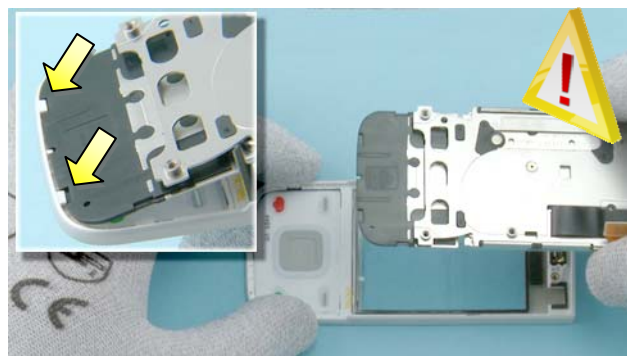
21) Move the slide to the opposite position.



22) Start detaching the A-COVER MODULE from the middle of the device. Slide the SRT-6 along the edge to release the clips holding the A-COVER MODULE.



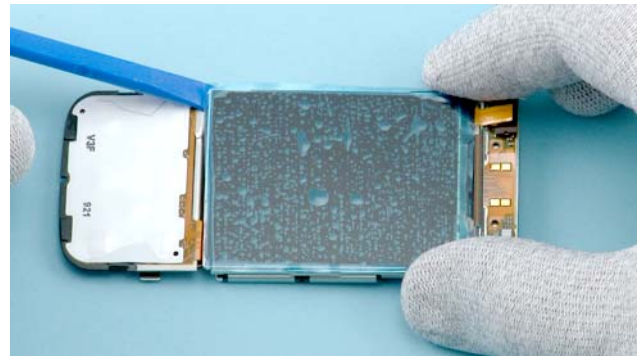
23) Release also the clips on the other side of the device.



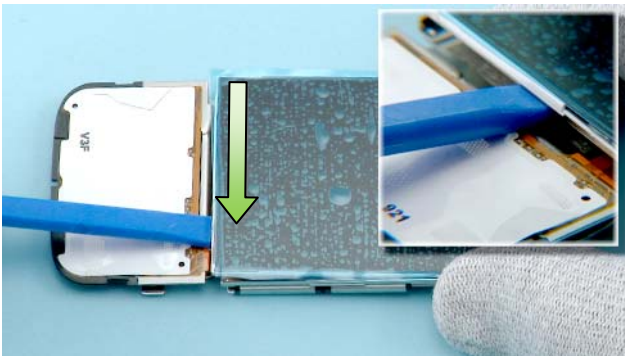
24) While removing the A-COVER MODULE, take care of the clips on bottom side.



25) Use the SS-93 to open the LCD connector. Be careful not to damage the connector!



26) Carefully start to detach the LCD from the shown place with the SS-93.



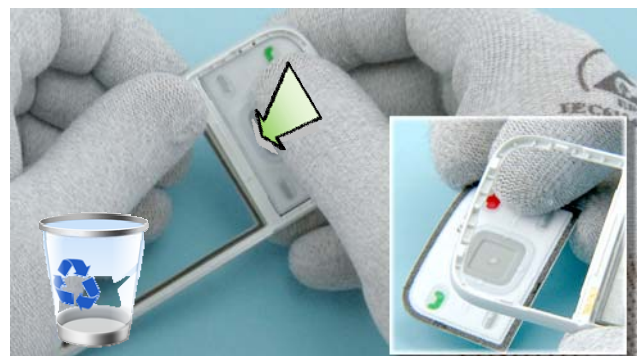
27) Slide the SS-93 to direction shown to detach the bottom end of the LCD.



28) Carefully push the SS-93 under the LCD to detach the LCD completely. Lift up the LCD as shown. Be careful not to damage the UI FLEX underneath the LCD!



29) Remove the LCD. The LCD cannot be used again. Discard it.



30) Separate the FUNCTION KEYPAD from the A-COVER MODULE by pressing the keypad slightly through the A-COVER MODULE. The FUNCTION KEYPAD must always be renewed.



31) Use the dental tool to lift up the EARPIECE. Be aware of the sharp point of the dental tool - be careful not to injure yourself.



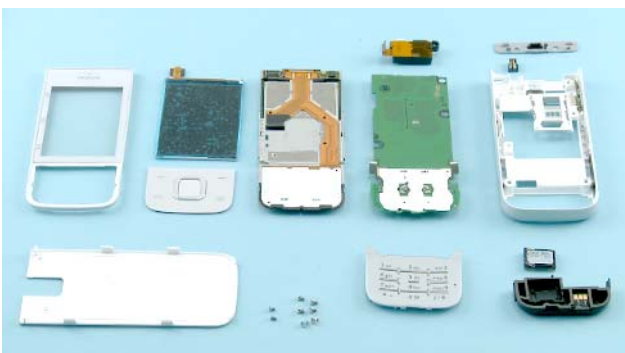
32) Remove the EARPIECE with the tweezers. The EARPIECE cannot be used again.



33) Use the dental tool to release the EARPIECE ADHESIVE.



34) Remove the EARPIECE ADHESIVE with the tweezers. The EARPIECE ADHESIVE cannot be used again.



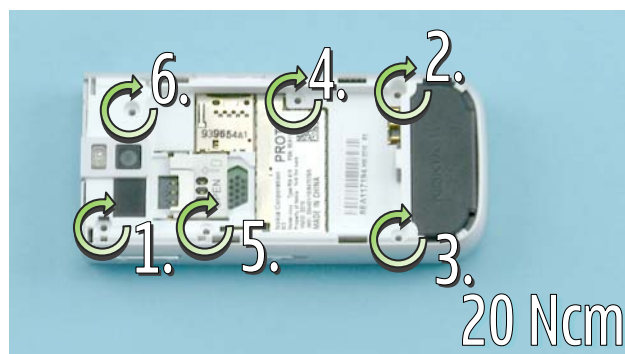
35) Nokia 5330 Mobile TV Edition disassembly is now complete.

-END OF DISASSEMBLY-

11. ASSEMBLY HINTS

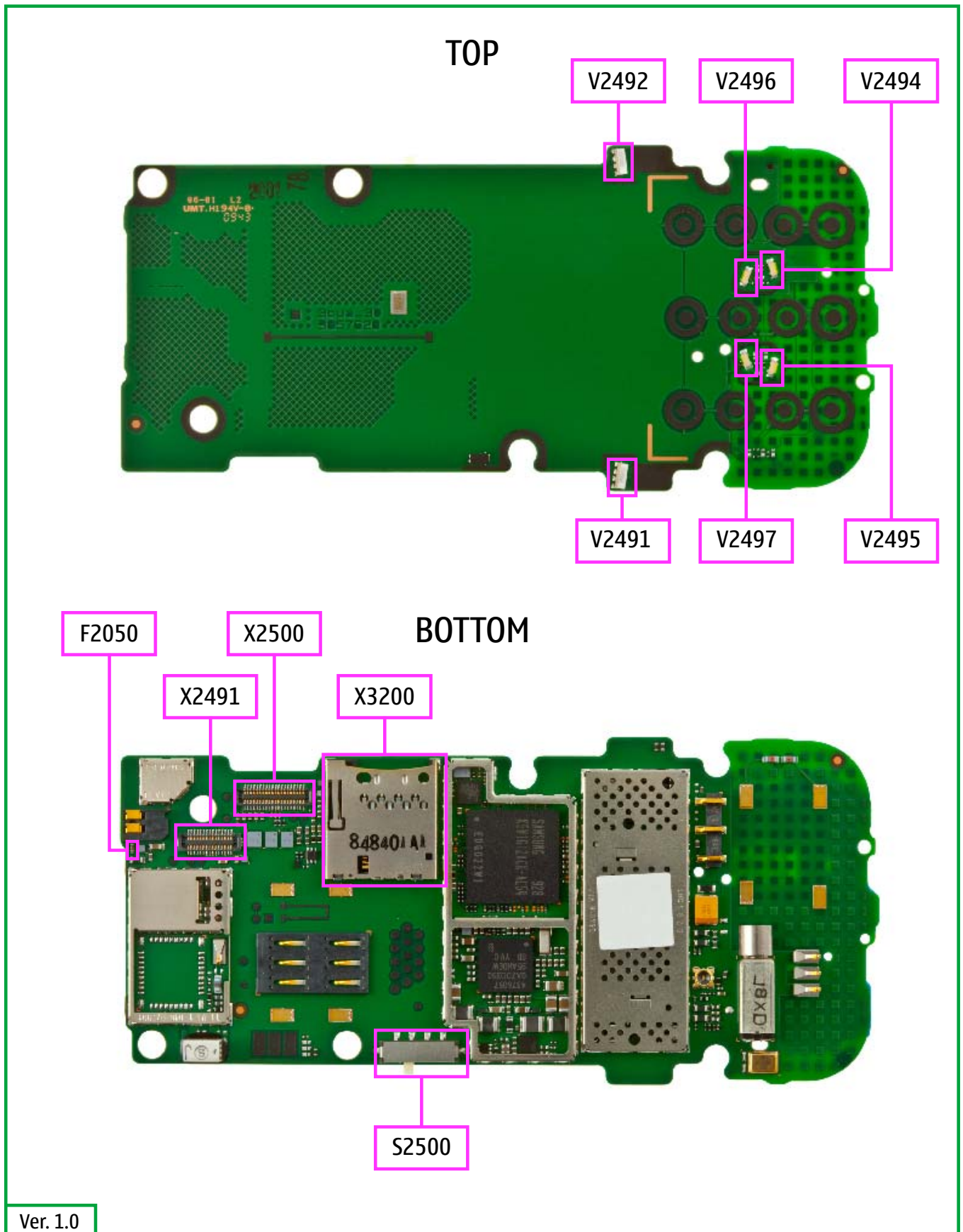


1) Tighten the six TORX + size 6 screws to the torque of 20 Ncm in the order shown.



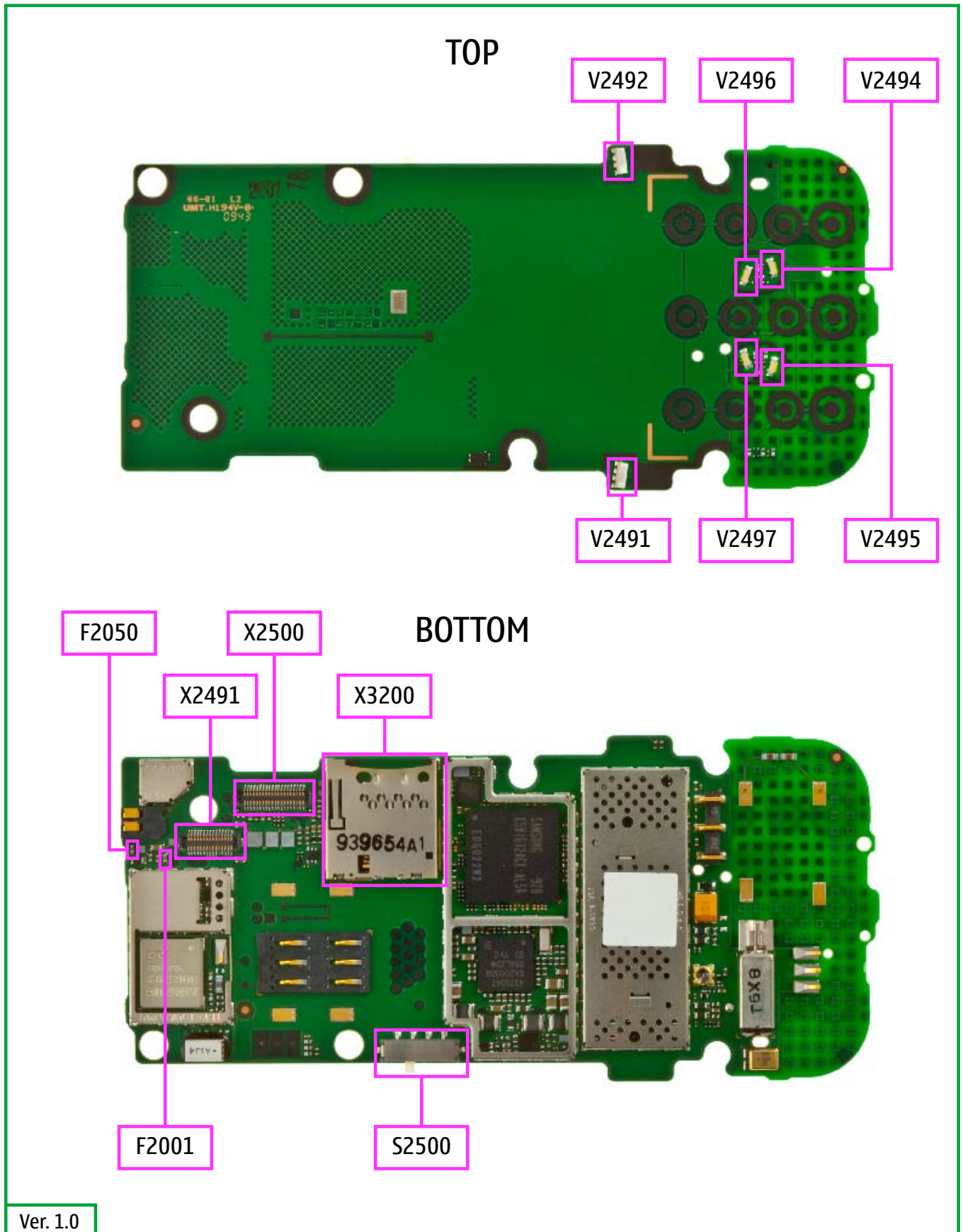
2) Tighten the six TORX + size 6 screws to the torque of 20 Ncm in the order shown.

12. NOKIA 5330 SOLDER COMPONENTS



Ver. 1.0

13. NOKIA 5330 MOBILE TV EDITION SOLDER COMPONENTS



Ver. 1.0