SERVICE MANUAL
Level 1&2

NOKIA 5030

Transceiver characteristics
Band:
RM-524: EGSM900/GSM1800
RM-525: GSM 850/1900
Display:
128x160 (TFT), 65k color display, active area size 28.42mm x 35.52mm
Operating System:
S30
Connections:
2.5 mm AV connector, 2.0 mm charger, Easy Flash II connector
Transceiver with BL-5C (BL-5CA for China) battery pack

	Talk time best case	Talk time Ectel	Standby time
With BL-5C battery (1020 mAh)	Up to 10h 15 min	Up to 5 h	Up to 525 h, up to 22 days
With BL-5CA battery (700 mAh)	Up to 6h 40 min	Up to 3.5 h	Up to 360 h, up to 15 days
Note: These values depend on network parameters and phone settings			

1. CHANGE HISTORY

Status	Version No.	Date	Comments
Draft	0.1	30.01.2009	First draft
Approved	1.0	06.04.2009	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:

CMO Operation & Logistics
Training and Vendor Development
Multimedia Creation & Support
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.

2. COPYRIGHT

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. 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.

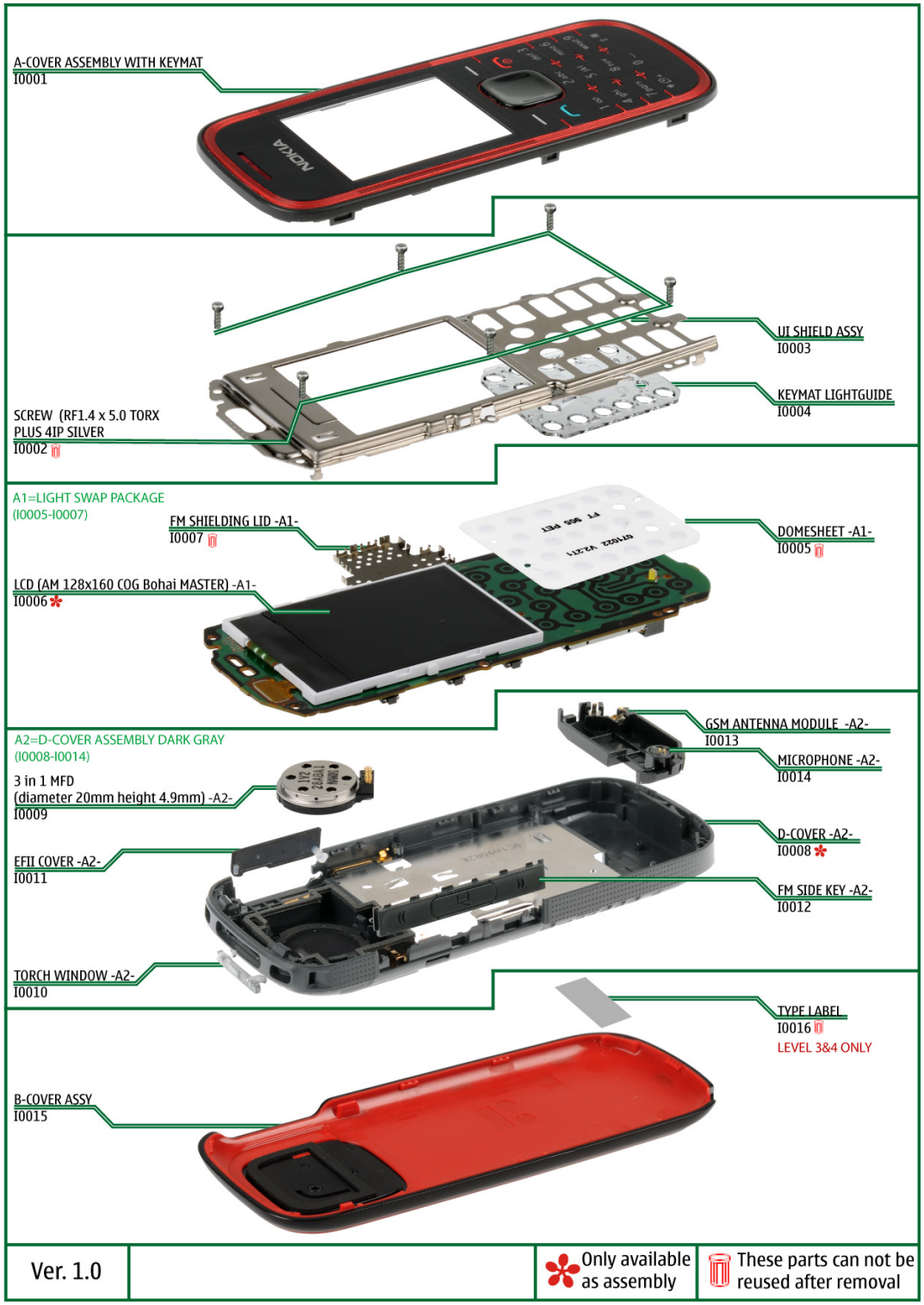
Do not dispose batteries in a fire! Dispose of batteries according to local regulations (e.g. recycling).

Do not dispose as household waste.

7. EXPLODED VIEW

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

5030 RM-524 and RM-525 EXPLODED VIEW



8. SERVICE DEVICES

 FLS-5 Flash device	 CA-112DS Data Service Cable	 CA-111DS Service Cable (alternative)
 Travel charger	 BL-5C/BL-5CA battery	 ACF-8 power supply
 FLS-4 POS Flash Device (alternative)	 ACF-8 Country-Specific Adapters	 NMP standard toolkit (v2) For more information, refer to the

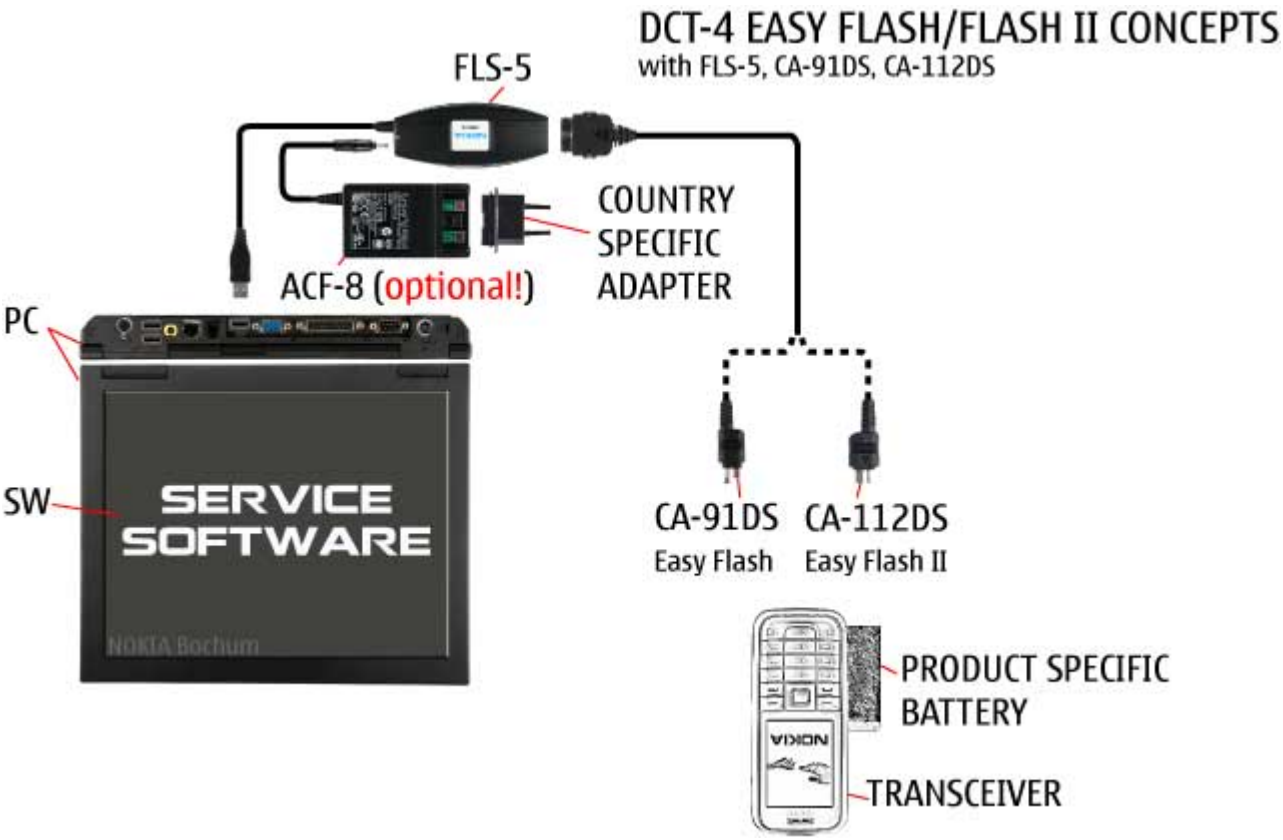
		Service Bulletin (SB-011) on NOKIA Online. Supplier or manufacturer contacts for tool re-order can be found in “Recommended service equipment” document on NOKIA Online.

9. SW-UPDATE

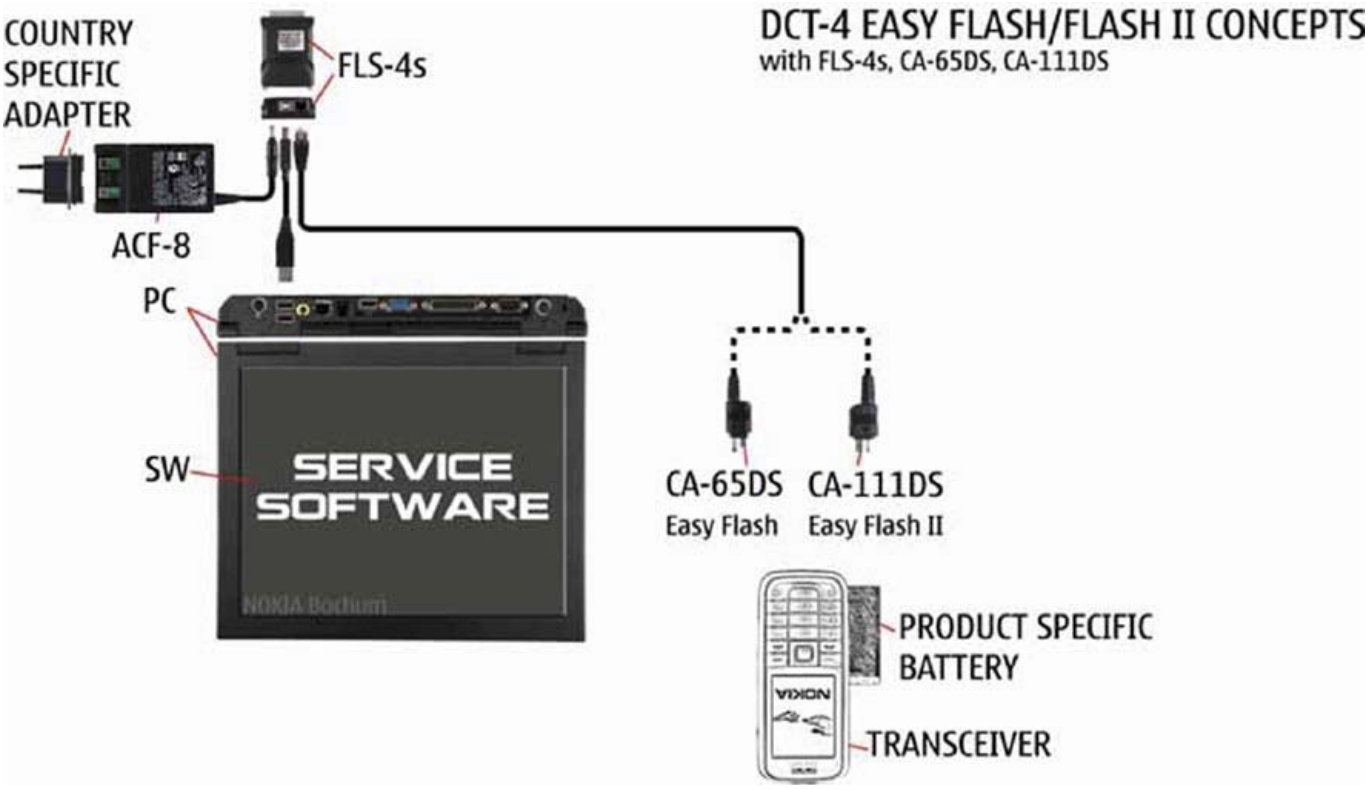
Flash concept – (Point of Sales)

To use the FLS-5 or 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.

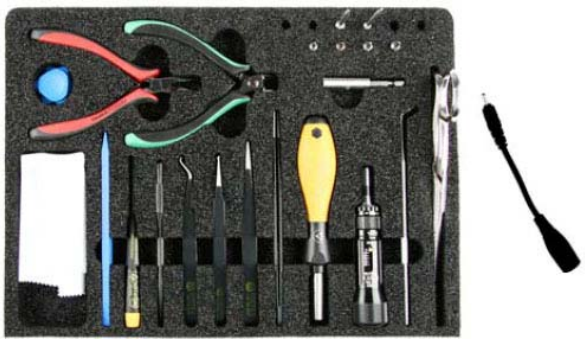
For flashing with FLS-5 use the CA-112DS cable



For flashing with FLS-4 use the CA-111DS cable NOTE: No longer available for purchase



10. DISASSEMBLY INSTRUCTIONS



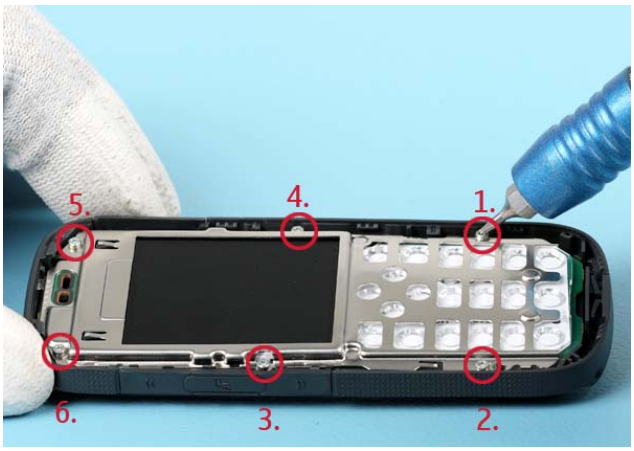
1) Use the Nokia Standard Toolkit version 2.

2) To release the B-COVER, push the release button on the bottom of the device, lift and push the B-COVER forward.

3) Remove the B-COVER.

4) Wedge the SRT-6 tool between the A- and D-COVERs. Work the tool around the A-COVER to release the 8 clips.

5) Lift up the A-COVER to remove it.

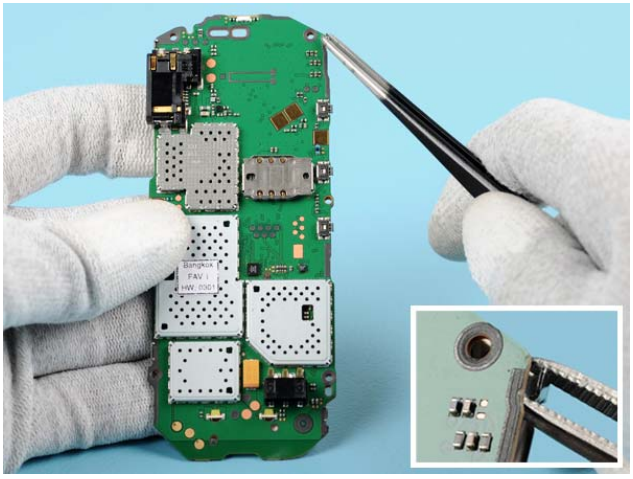


6) Unscrew the 6ea. #4 TORX screws in the order shown.

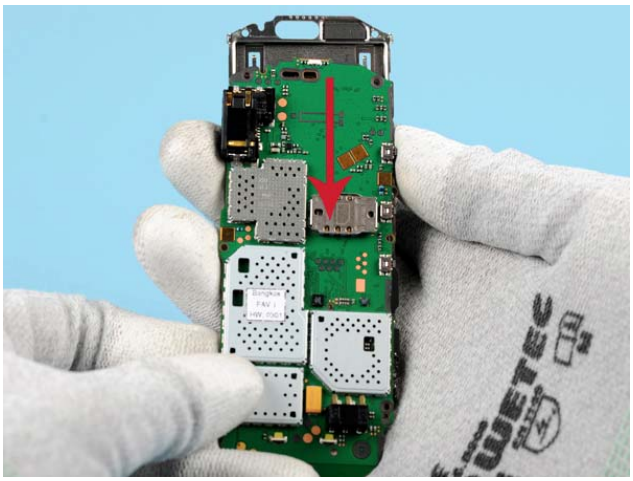
7) Remove the screws with the tweezers. Do not use the screws again.

8) There are 4 clips on each side and 2 clips on top of the D-cover. Release the clips by carefully streching the D-cover out.

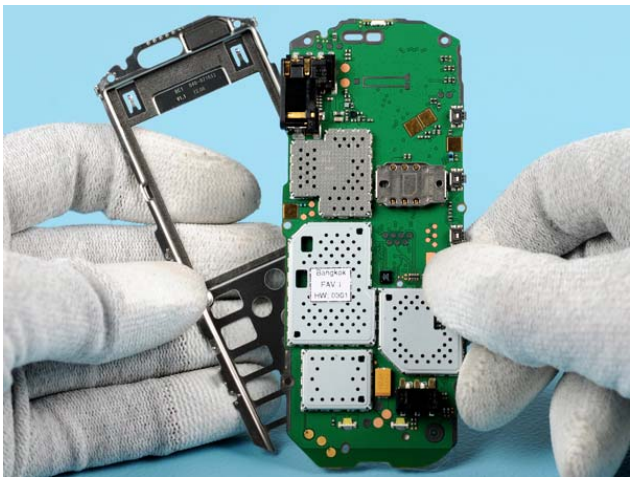
9) Remove the D-cover.



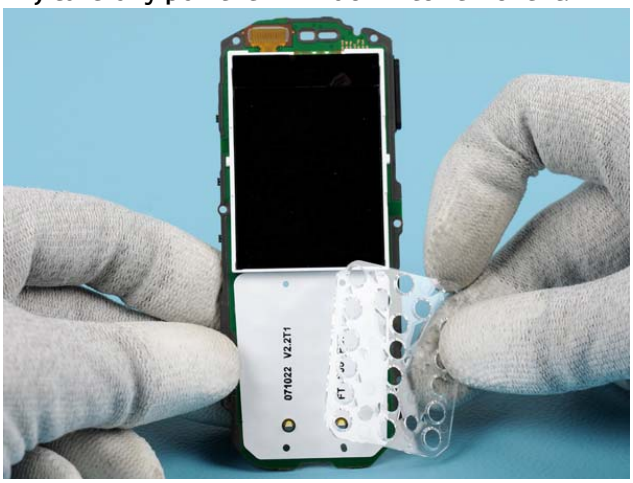
10) Use the tweezers to release the clips on the bottom side and top side (2 on each side) of the engine module.



11) Carefully pull the PWB down to remove it.



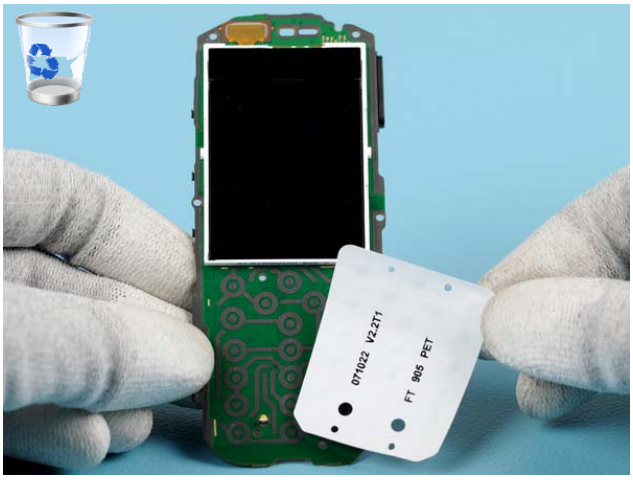
12) Remove the UI SHIELD.



13) Remove the LIGHT GUIDE.

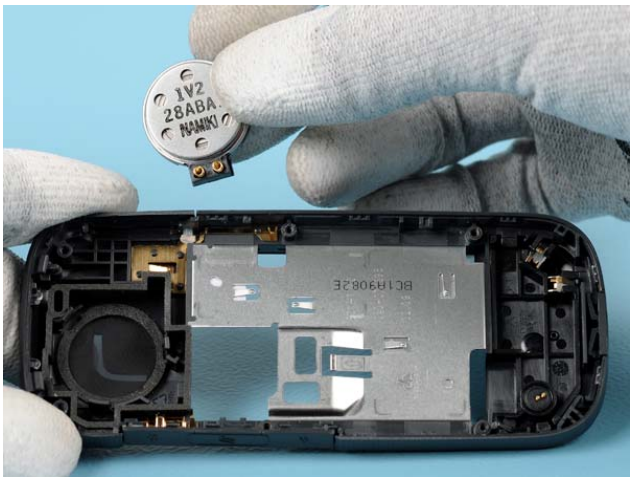
14) Use the dental tool to lift a corner of the DOME SHEET.

15) Peel back the DOME SHEET.

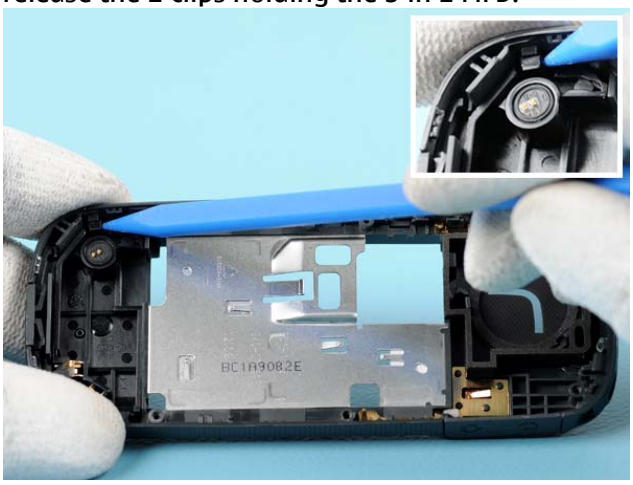


16) Remove the DOME SHEET. Do not use this part again.

17) Use the SS-93 tool to lift the 3 in 1 MFD and release the 2 clips holding the 3 in 1 MFD.

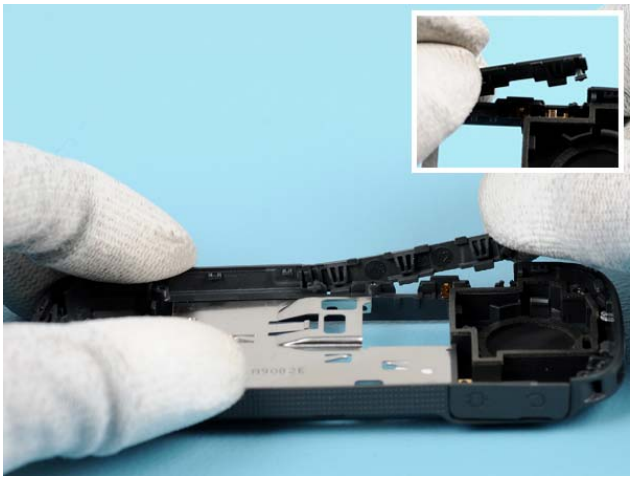


18) Remove the 3 in 1 MFD.



19) Use the SS-93 tool to release the clip holding the ANTENNA ASSY.

20) Remove the ANTENNA ASSY.



21) Remove the SIDE KEY by pulling it up and out.

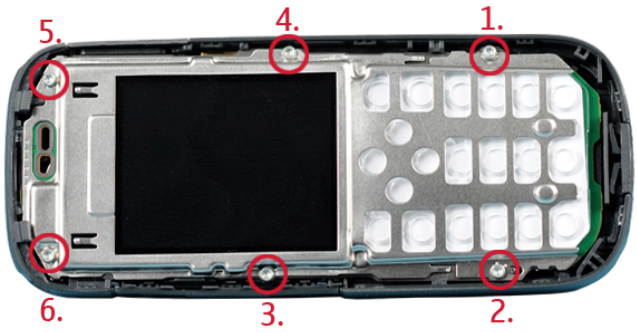
22) Carefully pull the EFII COVER to remove it.

23) Use the SS-93 tool to release the clips holding the TORCH WINDOW.

24) Remove the TORCH WINDOW.

End of disassembling!

11. DISASSEMBLY/ASSEMBLY HINTS

	
1) Unscrew the screws in the order shown.	2) Tighten the screws to the torque of 15 Ncm in the order shown.

12. SOLDER COMPONENTS

Solder components only for Level 2