

## SERVICE MANUAL Level 1&2

# NOKIA 1508i

A front-facing view of a Nokia 1508i mobile phone. The phone has a blue and silver design. At the top, there is a small speaker grille and the Nokia logo. Below the logo is a large, black, rectangular screen. Under the screen is a circular navigation pad with a central button. Below the navigation pad is a standard 12-key numeric keypad. The keys are labeled with numbers and letters: 1 (ao), 2 (abc), 3 (def), 4 (ghi), 5 (jkl), 6 (mno), 7 (pqrs), 8 (tuv), 9 (wxyz), 0 (with a small 'L' symbol), \*, and #. There are also call and end-call buttons on the left and right sides of the navigation pad.

### Transceiver characteristics

#### Band:

- 1900MHz, CDMA2000 1xRTT

#### Display:i

- 1.47" 128\*128 CSTN, 65k Main display

#### Operation System:

- Nucleus

#### Connections:

- 4-pin 2.5mm stereo audio jack required for UHJ support.
- Micro-USB 2.0
- FM radio

### Transceiver with BL-4C 860mAh Li-Ion battery pack

Talk time	Standby time	Note
3.0 hours	China :2 to 8.3 days SEAP/MEA/LTA: 4 to 8.3 days	Depends on network parameters

### Environmental characteristics:

- Lead-free soldered

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## 1. CHANGE HISTORY

Version #	Status	Review	Date	Author
V0.1	Draft	Daisy.Qian	17 <sup>th</sup> , March	Linda.Yan
Reason for this version	Draft release			
Significant Changes since last version	Note: 1. Pls refer to the Care Suit User Manual for detailed Software Update instruction. 2. Quick troubleshooter will get from HW&ME and it will be based on B3 sample. (Frozen HW&ME)			

Version #	Status	Review	Date	Author
V0.2	Draft	Daisy.Qian	3 <sup>rd</sup> , April	Linda.Yan
Reason for this version	Updated			
Significant Changes since last version	1. General information modification. 2. Disassembly picture 11 (access door) should be eliminated. 3. Rename the phone as Nokia 1508/1508i.			

Version #	Status	Review	Date	Author
V0.3	Draft	Daisy.Qian	18 <sup>th</sup> , April	Linda.Yan
Reason for this version	Updated			
Significant Changes since last version	1. Add quick troubleshooting. 2. Improve the pictures quality.			

Version #	Status	Review	Date	Author
V0.4	Draft	Daisy.Qian	29 <sup>th</sup> , May	Daisy.Qian
Reason for this version	Updated			
Significant Changes since last version	1. Add domesheet handling instruction. 2. Update Exploded view picture based on the current ME design.			

Version #	Status	Review	Date	Author
V0.5	Draft	Daisy.Qian	16 <sup>th</sup> , June	Daisy.Qian
Reason for this version	Updated			
Significant Changes since last version	Update the disassembly instructions.			

Version #	Status	Review	Date	Author
V1.0	Approved	Daisy.Qian	20 <sup>th</sup> , August	Daisy.Qian
Reason for this version	Approved			
Significant Changes since last 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 endeavour 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.

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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 metallised 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).

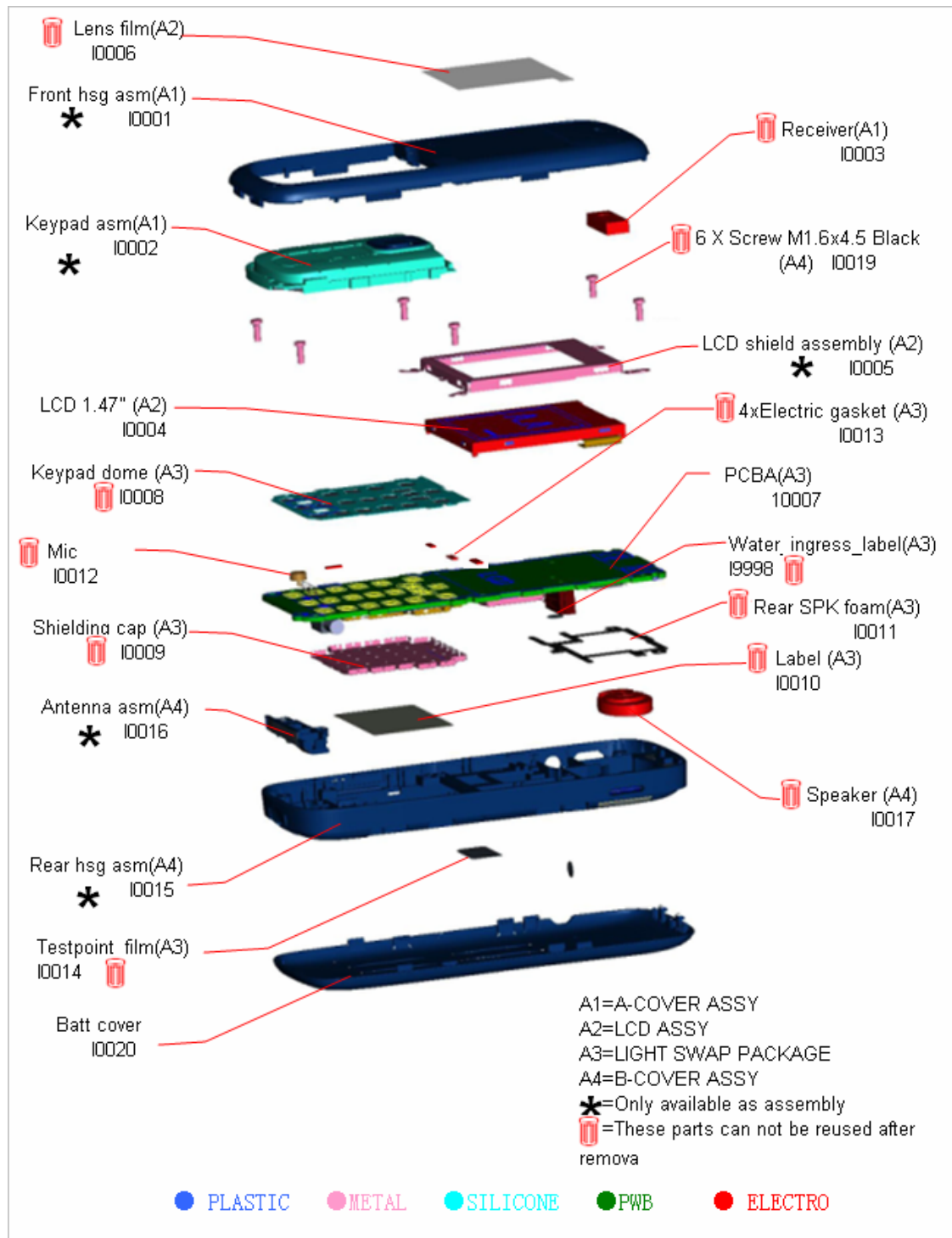
A phone with a hot or cold battery may temporarily not work, even when the battery is fully charged. Battery performance is particularly limited in temperatures well below freezing.

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




Do not dispose of as household waste.

## 7. EXPLODED VIEW

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



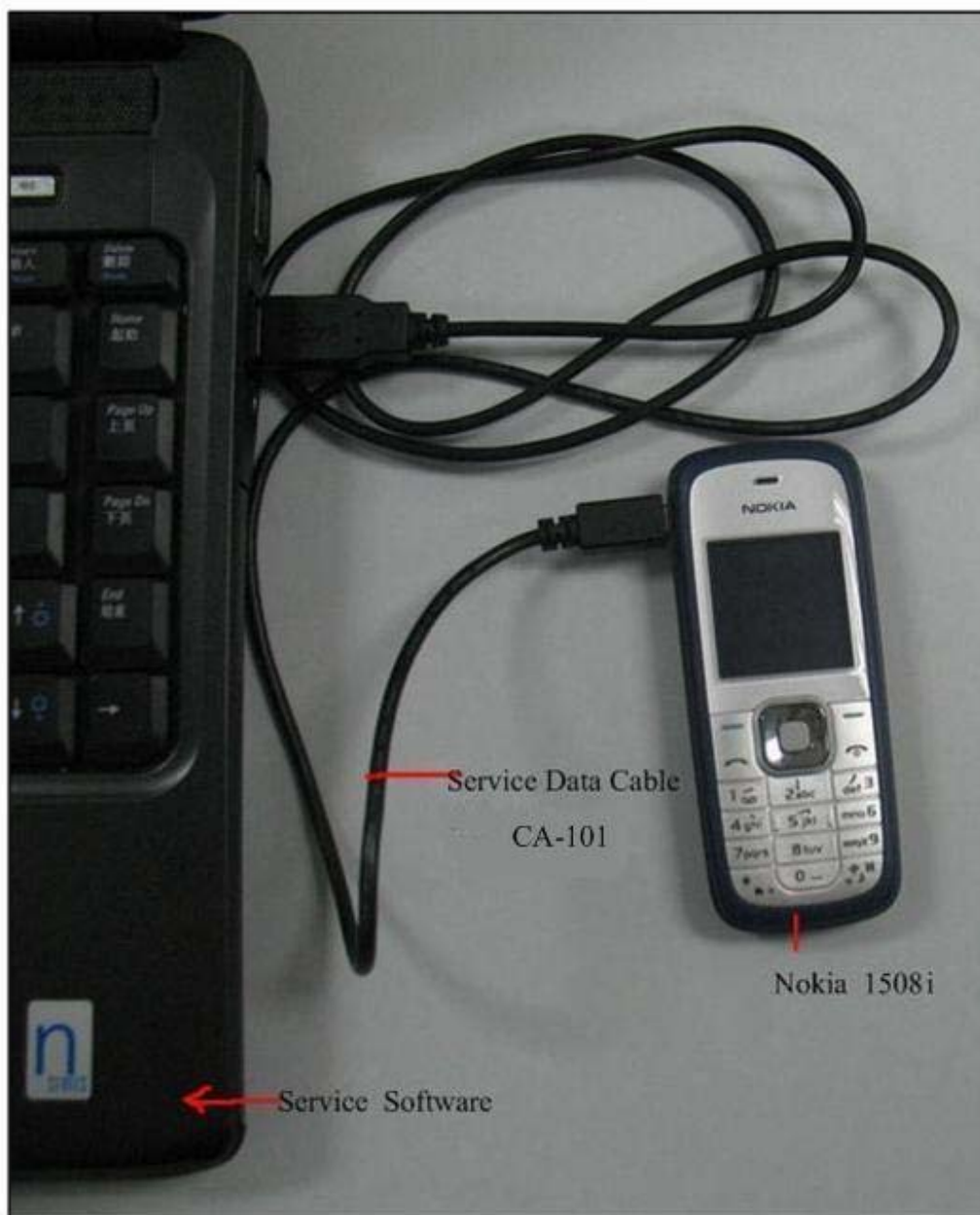
## 8. SERVICE DEVICES

Picture	Description	
	SS-180	Alignment Jig
	<p>This jig is used to align the adhesive domesheet assembly onto the PWB in the proper location during domesheet replacement.</p> <p>Domesheet Alignment Jig</p>	
	CA-101	Data Service Cable
	<p>This cable provides a connection from the USB port of the personal computer or notebook to the micro USB connector of the phone and allows Point of Sale (POS) locations to flash the mobile terminal.</p>	
	RJ-230	Soldering Jig
	<p>This jig serves as a holder for PWB component de-soldering and soldering.</p>	

## 9. SW-UPDATE

Flash concept – (Point of Sales)

Please follow the service manual to update software. Check always for the latest version of flash software, which is available on NOKIA Online.



For instructions, see the Care Suite User Guide.

## 10. DISASSEMBLY INSTRUCTION

1) Depress battery latch and remove battery cover.



2) Using the SRT-6 start at the bottom of the phone and work around the edges to loosen the A-Cover.



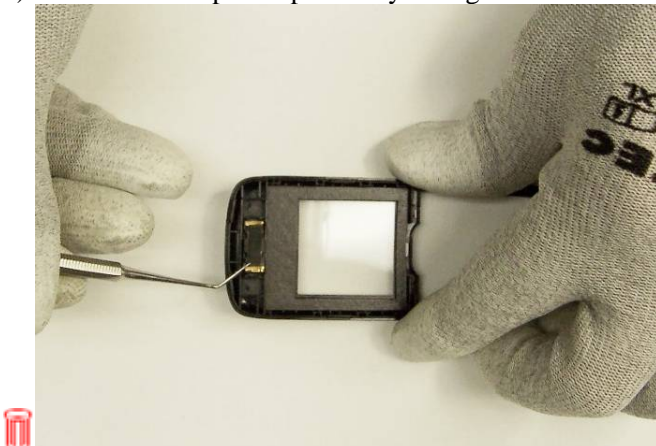
3) Remove the A-Cover.



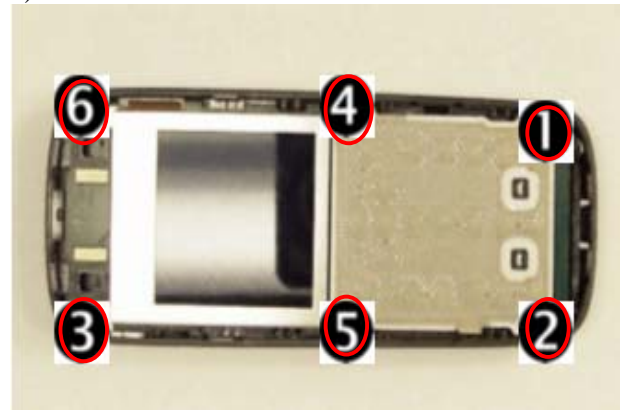
4) Separate the keymat.



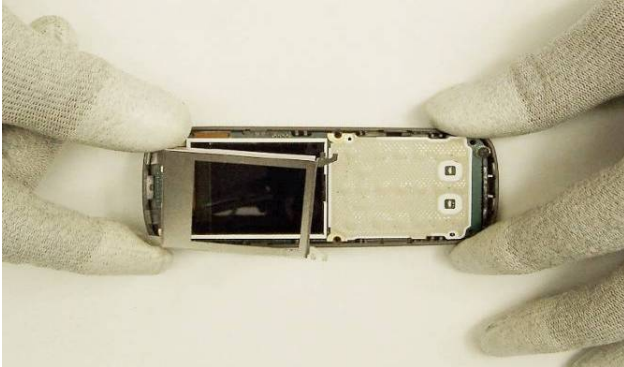
5) Remove the earpiece speaker by lifting with dental tool.



6) Remove 6 ea. #5+ TORX screws.



7) Remove LCD frame.



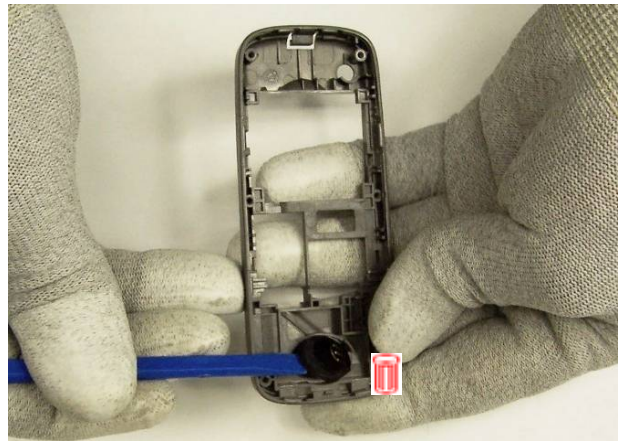
8) Separate the engine module and B-Cover.



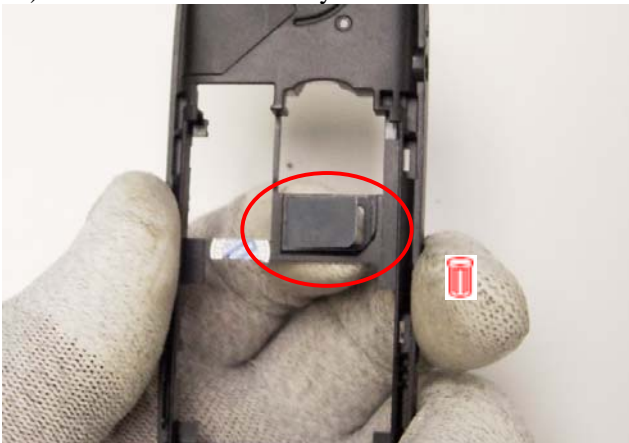
9) Lift and remove the antenna assy. Using the SS-93.



10) Lift and remove the IHF speaker using the SS-93.



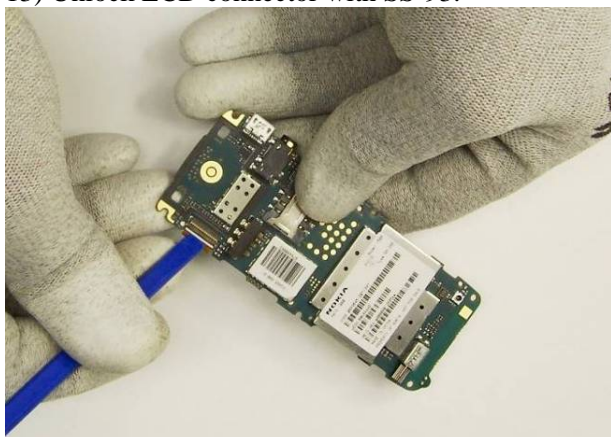
11) Push out and remove Mylar film.



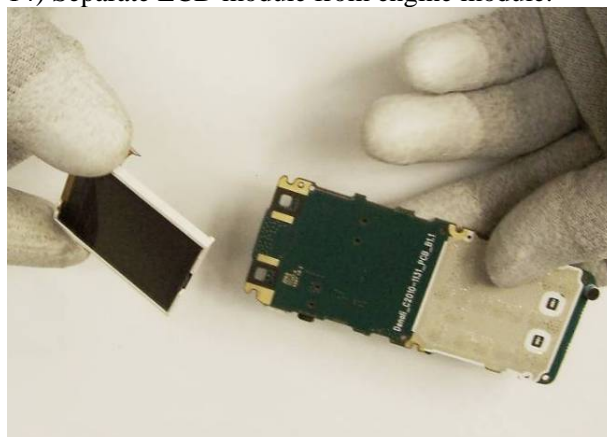
12) Using SS-93 carefully lift LCD.



13) Unlock LCD connector with SS-93.



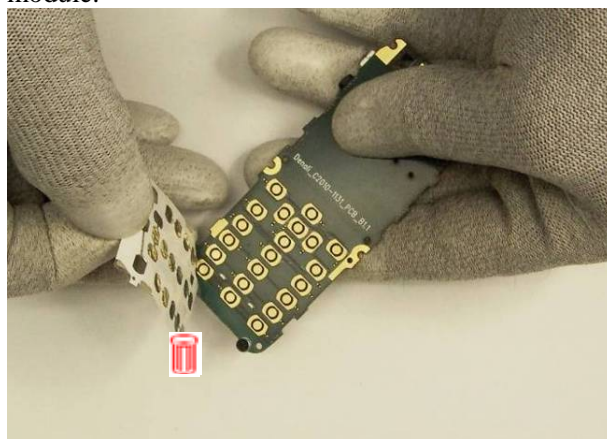
14) Separate LCD module from engine module.



15) Carefully lift edge of key dome with dental tool.



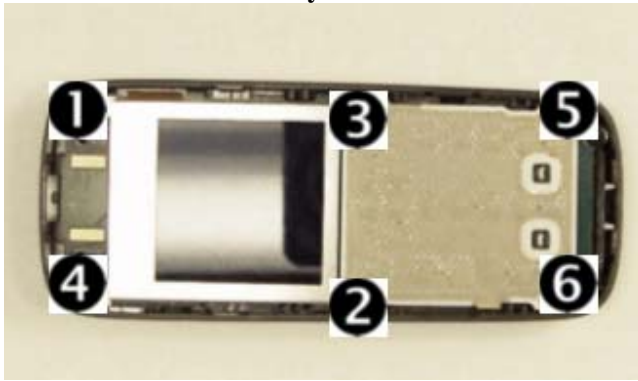
16) Peel back and remove key dome from engine module.



Note: To assemble the mobile terminal, follow the “Disassembly Instructions” in reverse order.

## 11. ASSEMBLY HINTS

### Screw order for Assembly



### Torques Information

Related to above picture: 19.6 Ncm

## 12. L2 SOLDER COMPONENTS

