NOKIA Care Academy

NOKIA

1706

Service Manual

Level 1&2

COMPANY CONFIDENTIAL

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Transceiver characteristics

Modes:
800MHz
CDMA IS-95 & IS-2000
1x RTT

Main Display:
2.2"
240*320
262k
QVGA
LCD backlight white

Operating System：
Nucleus
Connectors:
Micro-USB connector
Headset jack

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

Talk time	Standby time	Note
5 hours	12 days	Depends on network parameters

Environmental characteristics:

- Lead-free soldered

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Amendment record sheet

Amendment No	Date	Inserted by	Comments
Version 1.0	05/2010	Vivian.Jin	

The purpose of this document is to guide technicians of Nokia service levels 1 and 2 workshop to carry out services to Nokia products. This Service Manual is Company confidential and to be used by authorized Nokia service suppliers. Nokia also provides other guidance documents (e.g. Service Bulletins) for service suppliers, and please regularly follow them and comply with the given instructions.

While every endeavor has been made to ensure the accuracy of this document, some errors may exist. If any errors are found or if you have further suggestions, please notify Nokia in writing by ending letters or mails by sending English-language email to the following:

Nokia Care Academy

mailto:Service.Manuals@nokia.com

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

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IMPORTANT

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

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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

- 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.
- THE HANDPORTABLE TELEPHONE MUST NOT BE OPERATED IN AREAS LIKELY TO CONTAIN POTENTIALLY EXPLOSIVE ATMOSPHERES, EG PETROL STATIONS (SERVICE STATIONS), BLASTING AREAS ETC.
- 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

- Servicing and alignment must be undertaken by qualified personnel only.
- Ensure that all work is carried out at in anti–static workstation and that an anti–static wrist strap is worn.
- Use only approved components as specified in the parts list.
- Ensure that all components, modules screws and insulators are correctly re–fitted after servicing and alignment.
- Ensure that all cables and wires are correctly repositioned.

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For your safety

QUALIFIED SERVICE

Only qualified personnel may install or repair mobile terminal equipment.

ACCESSORIES AND BATTERIES

Use only approved accessories and batteries. Do not connect incompatible products.

CONNECTING TO OTHER DEVICES

When connecting to any other device, read its user's guide for detailed safety instructions. Do not connect incompatible products.

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ESD production



Nokia requires that product service points have sufficient ESD protection (against static electricity) when servicing products.

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.

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Care and maintenance

This product is of superior design and craftsmanship and should be treated with care. The suggestions below will help you to fulfill 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. Unauthorized 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.

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Battery information

Note that 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 that 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 of batteries in a fire!

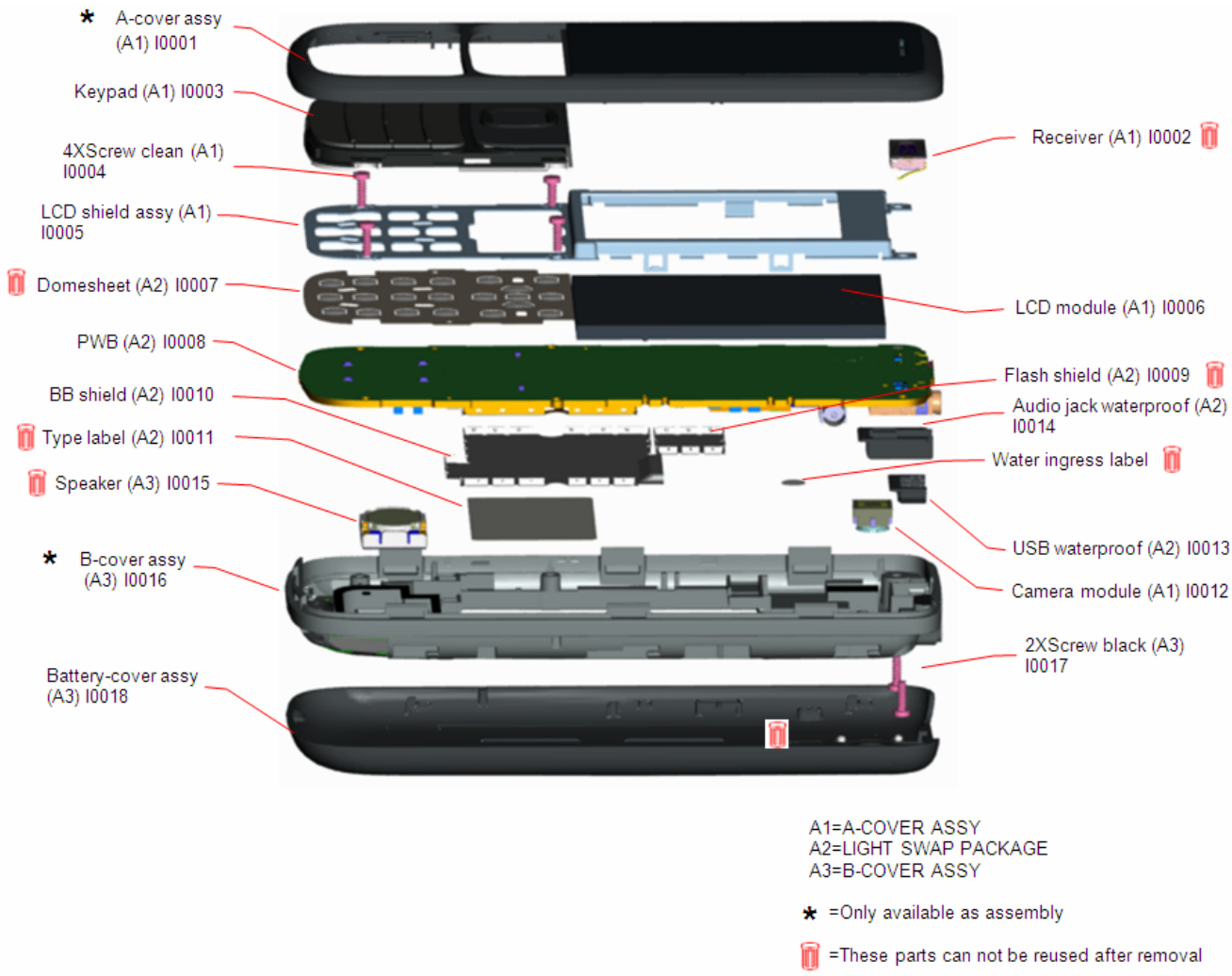
Dispose of batteries according to local regulations (e.g. recycling). Do not dispose as household waste.

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Exploded view

Refer to the image below for the recommended ecologically sound disposal of components. Colorized components show the different categories.

Refer to the corresponding ITEM/CIRCUIT REF in the Spare Parts Service Bulletins on the Nokia Online (NOL) website.



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Service devices

Picture	Description	
	SS-219	Camera Removal Tool
	This jig is used to separate the camera from the socket.	
	RJ-230	Soldering Jig
	This jig serves as a holder for PWB component de-soldering and soldering.	
	CA-101	Data Service Cable
	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.	

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Software update

Point of Sales Flashing

Check always for the latest version of flash software, which is available on Nokia Online. Use Care Suite to flash Nokia 1706.



For instructions, refer to Care Suite User Guide.

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Disassembly instructions

1



Slide BATTERY COVER in arrow direction.

2



Open BATTERY COVER and remove.

3



Unscrew two screws with Torx 5plus screw driver.

4



Slide between A-COVER ASSY…

5



6



… and D-COVER ASSY using an SRT-6 tool to detach …

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7



….the A-COVER ASSY.

8



Remove A-COVER ASSY in arrow direction.

9



Detach the KEYMAT from A-COVER ASSY as shown.

10



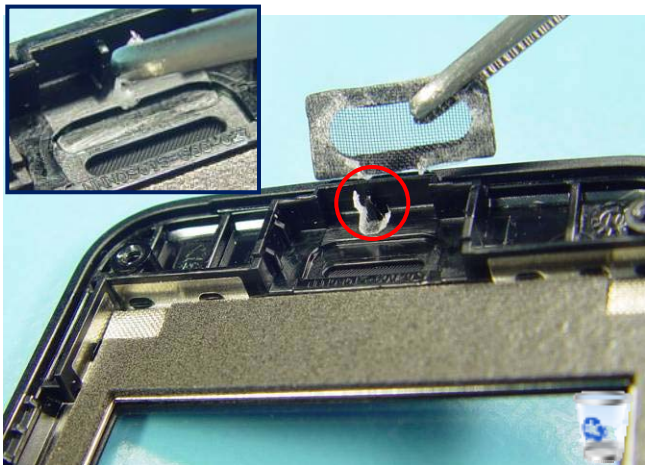
Lift up EARPIECE with an SS-93 tool and remove it.

11



Peel off EARPIECE NET with an SS-93 tool.

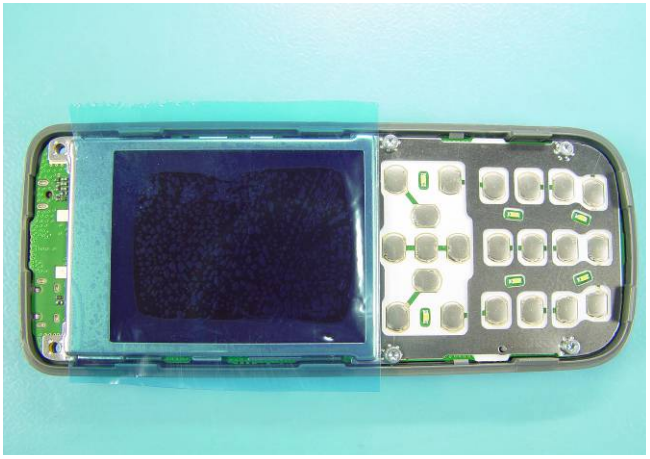
12



Remove EARPIECE NET and residues with tweezers.

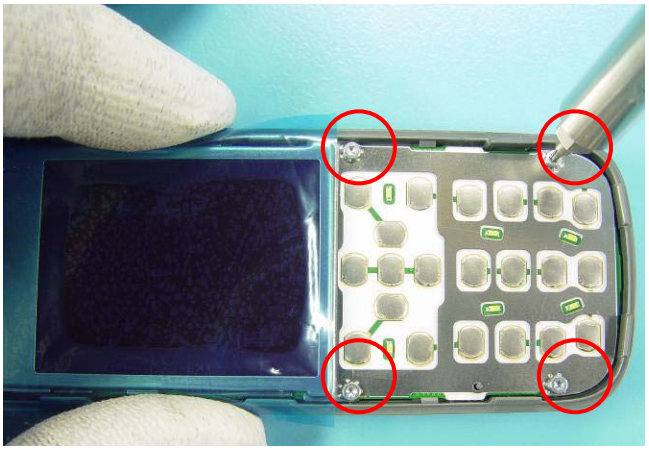
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13



Protect the LCD with a protection foil to avoid scratches.

14

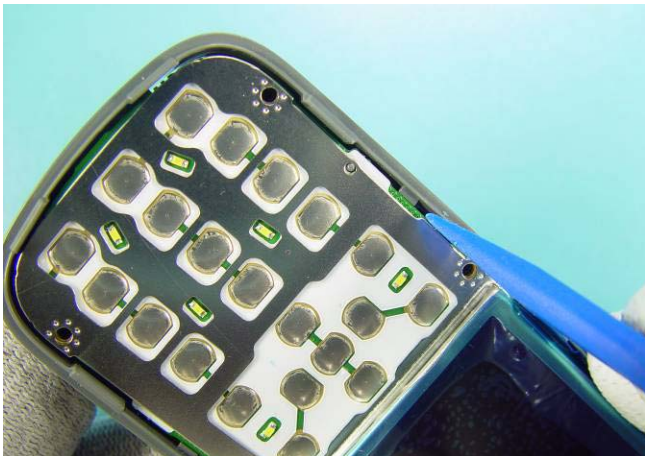


Unscrew four screws with Torx 5 plus screw driver.

15

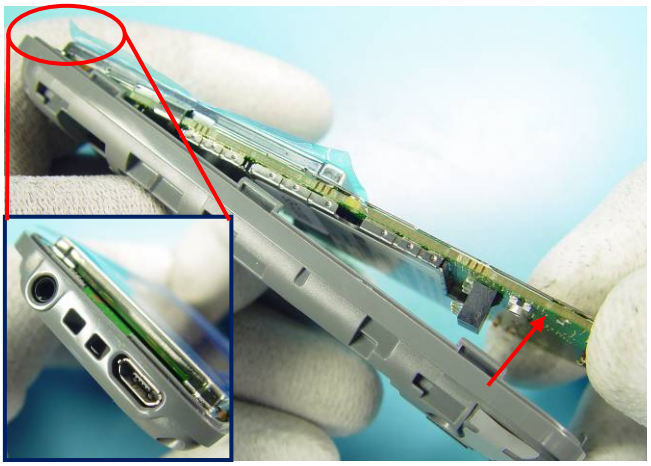


16



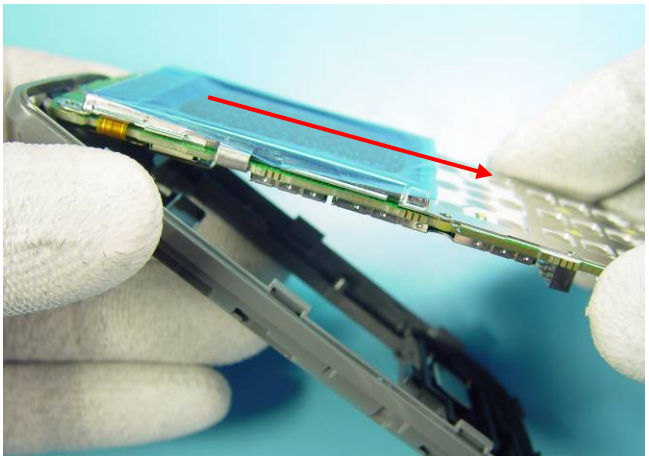
Release the UI SHIELDING/PWB with an SS-93 tool near by the hooks.

17



Lift up UI SHIELDING/PWB on bottom side.

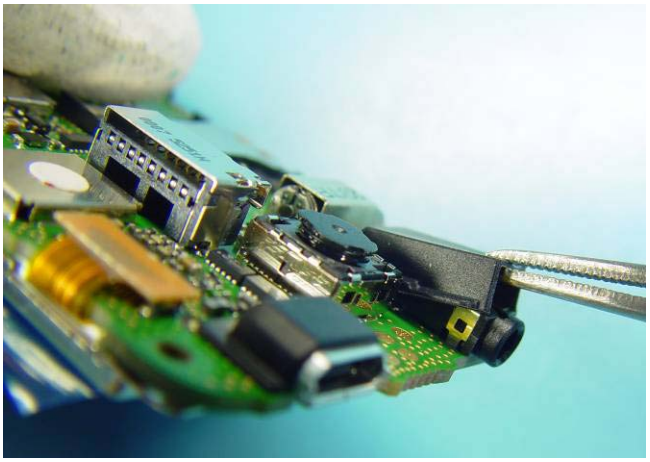
18



Remove it in arrow direction.

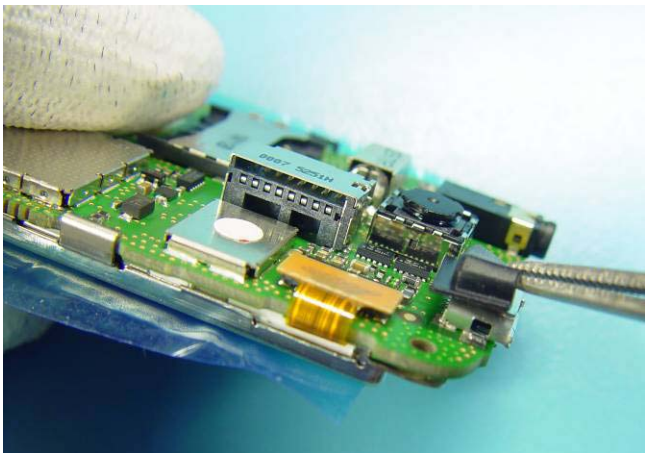
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19



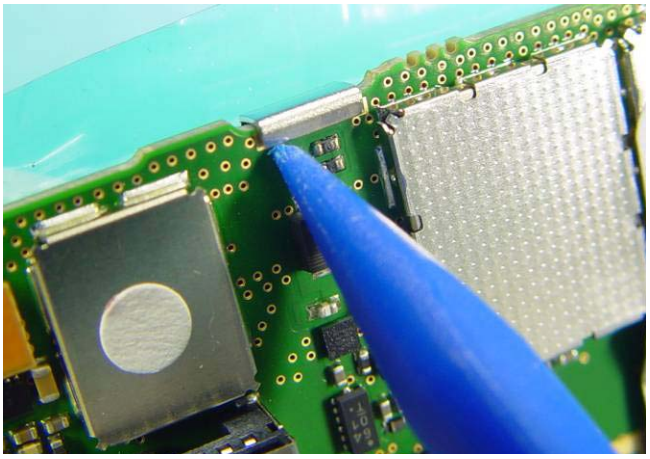
Remove AUDIO JACK RUBBER by using tweezers.

20



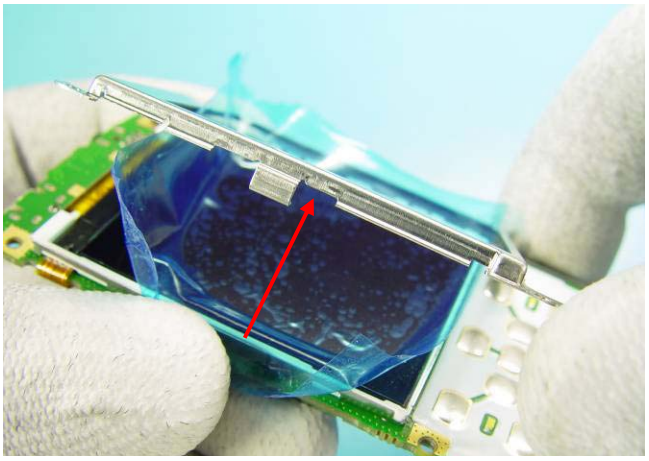
Remove USB-Connector RUBBER by using tweezers.

21



Release UI SHIELDING with an SS-93 tool as shown.

22



Flip open UI SHIELDING in arrow direction and remove it.

23



Open LCD connector with an SS-93 tool.

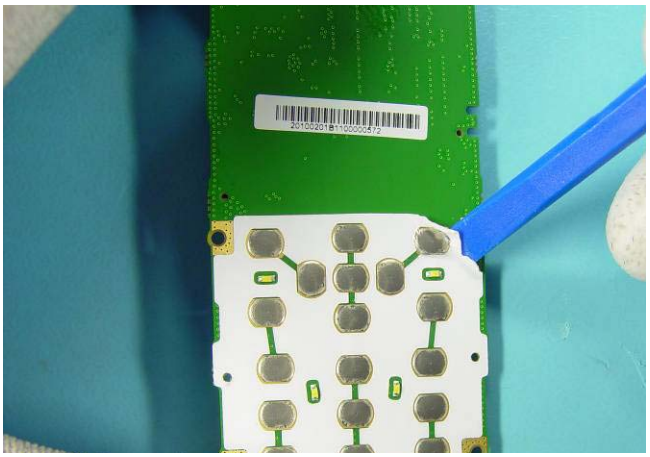
24



Lift up LCD MODULE with an SS-93 tool as shown.

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25

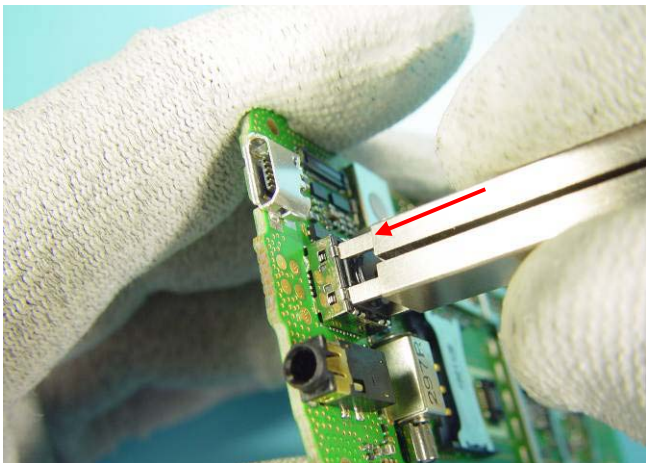


26

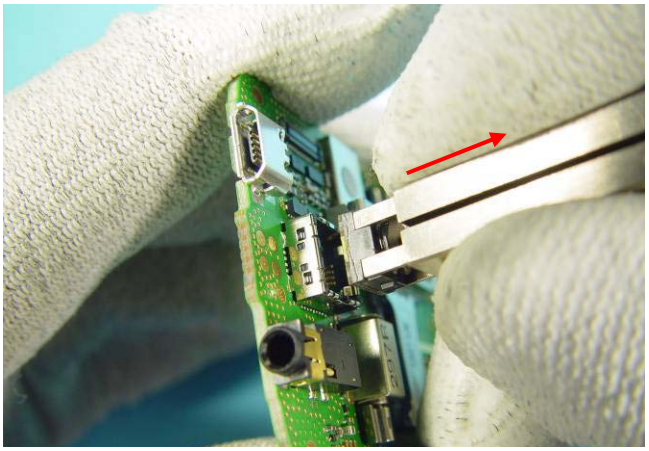


Peel off DOMESHEET with an SS-93 tool and then remove it.

27

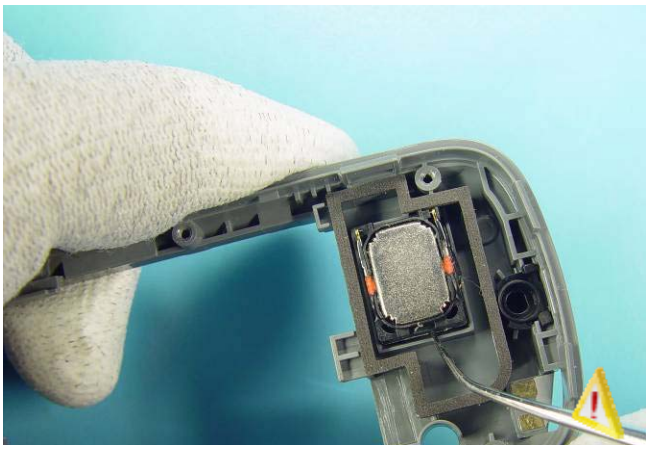


28



Remove CAMERA MODULE with a Camera removal tool.

29



30



Lift up IHF SPEAKER with dental tool and remove it carefully.

31

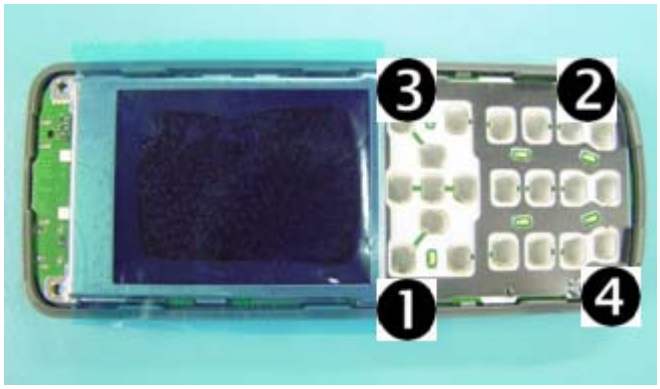
End of disassembling!

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

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Assembly and disassembly hints

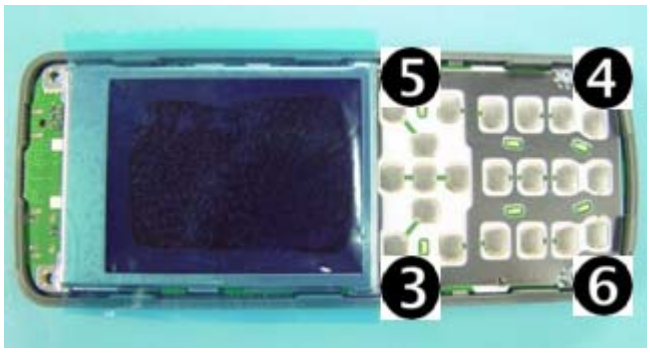
OrOrder for screw assembly





Order for screw disassembly



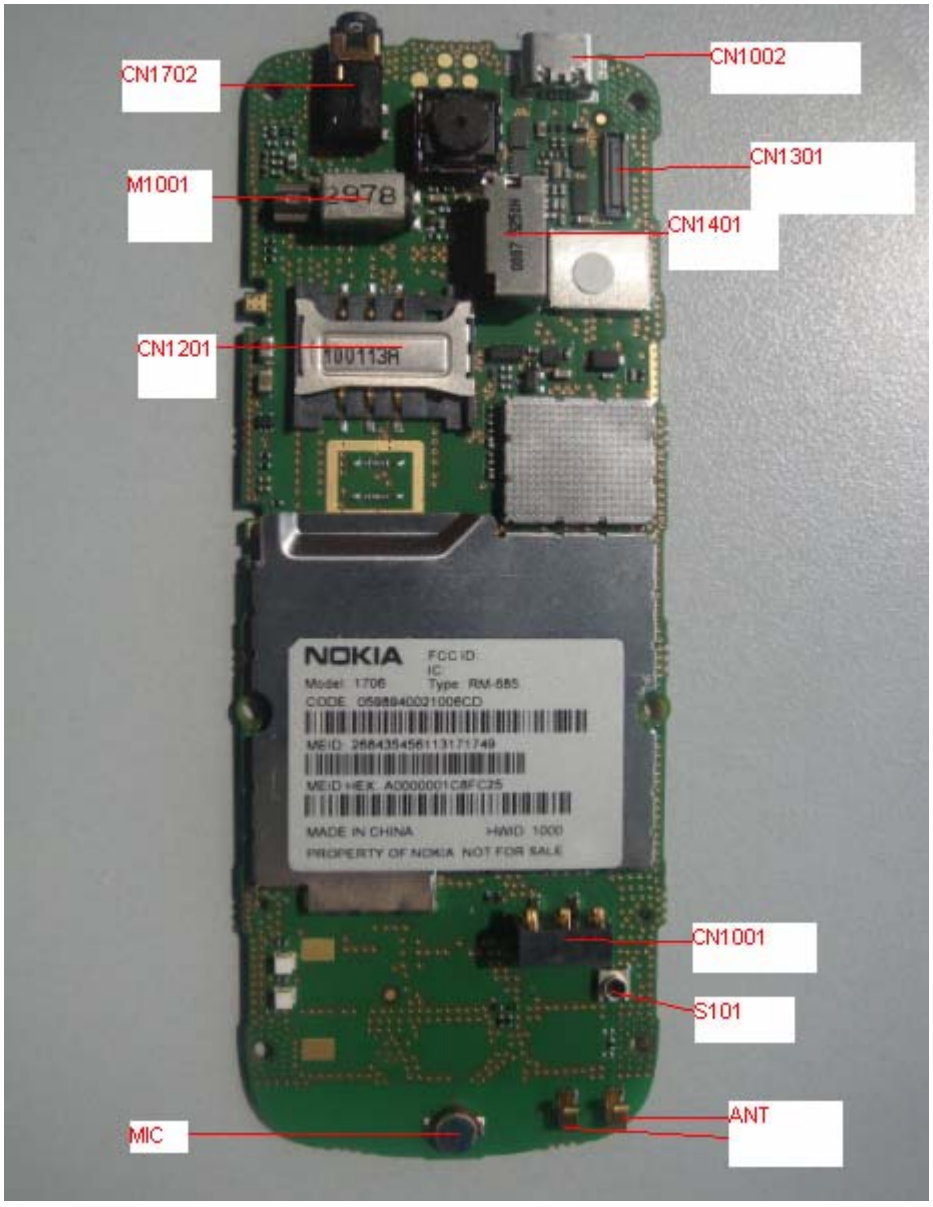


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Torque Information

Related to above picture: 10 Ncm

Solder components



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