

# NOKIA 6600

NHL-10



## Transceiver Features

- Integrated digital camera with zoom
- Video recorder with audio support
- Streaming video and audio
- Wireless connectivity with Bluetooth and infrared
- 6 MB internal memory
- Memory card slot for additional user memory and applications.
- Supports Java™ MIDP 2.0 applications
- Data synchronization with PC via PC Suite
- Tri-band operation in GSM E900/1800/1900 networks

Transceiver with BL-5C 850mAh Li-ion battery pack

Talk time	Standby	Note
Up to 2-4 hours	150-240 hours	Depends on network parameters

# SERVICE MANUAL

## Service Level 1&2

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## CHANGE HISTORY

Status	Version No.	Date	Comments
Draft	0.1	27.08.2003	Initial draft
Approved	1.0	08.10.2003	approval
Approved	2.0	30.10.2003	Content of Service Tools corrected

## 1. INTRODUCTION

The purpose of this document is to help Nokia service levels 1 and 2 workshop technicians to carry out service to Nokia 6600. This Service Manual is to be used **only** by authorized Nokia service partners, and the content of it is **confidential**. Please note that Nokia provides also other guidance documents (e.g. Service Bulletins) for service partners, 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. Ensure solder, wire, or foreign matter does not enter the telephone as damage may result.
4. Use only approved components as specified in the parts list.
5. Ensure all components, modules screws and insulators are correctly re-fitted after servicing and alignment. Ensure all cables and wires are repositioned correctly.
6. All PC's used with NMP Service Software for this produce must be bios and operating system "Year 2000 Compliant".



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 Partner Web Site. Also see ESD Protection Requirements in this Service Manual.

## 2. GENERAL REPAIR INFORMATION

### IN THIS SECTION THE TECHNICIAN WILL GET SOME GENERAL HINTS HOW TO CARRY OUT REPAIRS:

- To familiarize oneself with Nokia 6600 read the tutorials or user guide on [www.nokia.com](http://www.nokia.com) -->Support--> Phones, by selecting the Phone Model.
- Before starting the repair you must take care of ESD precautions like being in your ESD Protected Area and connecting your wristband.
- Use gloves to avoid corrosion and fingerprints.
- Protect windows and displays with a film to avoid dust and scratches.
- When cleaning the pads you have to use a soft cloth/ESD brush and Isopropanol. It is not allowed to use a glass fiber pencil because it scratches the surface and will lead later on to corrosion.
- Mechanical parts (except shielding lids), which didn't repair the failure, can be reused, if they are not soldered.
- When removing the shielding lids make sure to replace them with new ones, otherwise the high-frequency leakage can have an influence on the device.
- Use always original Nokia spare parts.
- Check the soldering joints of the parts which are concerned regarding the indicated error (e.g. soldered connectors or switches) and resolder them if necessary (Level 2 only).
- Remove redundant soldering flux after repair.
- Meet the torque requirements when assembling the unit (see also the document "torques for transceiver assembly" on Nokia Partner Web Site).
- Always use your own equipment for testing where you are sure that it works. E.g. if the customer complains about charger function, please test the phone with your own charger to be sure if phone or charger causes the malfunction.
- When doing the Faultlogger entries, always note the Item code, which caused the malfunction. Also, fill in the appropriate part code from the assembly, if needed.
- Please be aware that some malfunctions could be software related and solved by an update.

#### *These mention Service Bulletins have to be followed:*

##### General

- SB-027: Original Nokia Accessories
- SB-089: Don't try to repair prototypes (indicated on Type Label).
- SB-107: Be sure that you have minimum hardware requirements in place.
- SB-115: Handling of liquid damages.
- SB-121: Return the defective part, if one of your service tools causes malfunction.
- SB-124: Service Policy for packaging serviced products
- SB-131: Check these guidelines when refurbishing products.
- SB-148: Improvements to Faultlog Reporting Tool
- SB-156: Packing Material
- SB-161: New structure of General Bulletins
- SB-163: Service handling of PWBs and PCBs during repair process
- SB-164: New barcode for future products
- SB-165: NMP Global Symptom Codes
- SB-167: NMP Global Fault Codes (Level 1&2)

##### Service Tools

- SB-011: NMP Standard Toolkit

##### Spare Parts

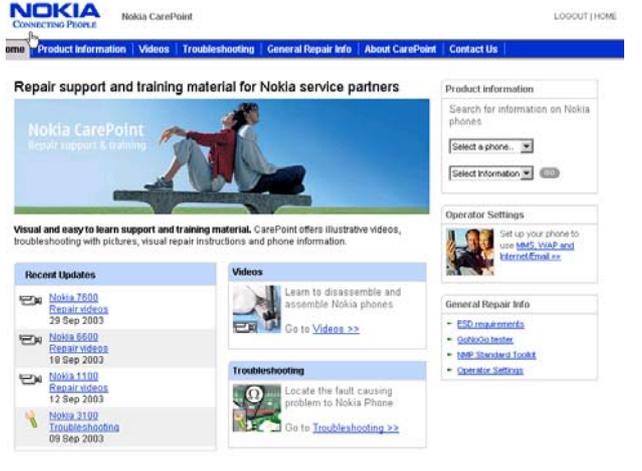
- SB-004: New swap phone cartons

**Please check Nokia Partner Web Site and CarePoint for latest news and files on a regular basis.**

### 3. PATHFINDER FOR WORKSHOP STAFF

In addition to the information in this Service Manual, there are several instructions and information, which have to be followed.

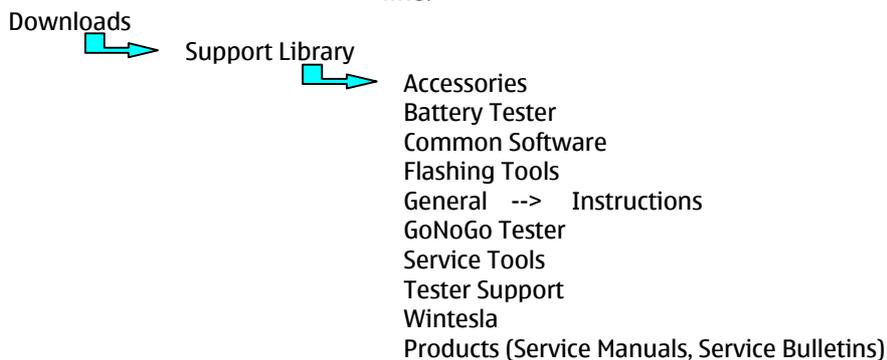
Main documentation database is [Nokia Partner Website](#), which refers also to [Nokia Care Point](#) with the purpose of serving different multimedia content, like video clips or interactive tutorials.

Nokia Partner Web Site	Nokia Care Point
<p>Nokia Partner Web Site for EMEA region is the most important document database for all service suppliers (level 1-4). All service relevant information like e.g. Service Manuals, Service Bulletins or general instructions are available. Content is restricted according you access level. To be kept up-to-date also concerning newest software updates, a daily check of "latest updates in support library" is needed.</p>	<p>Nokia Care Point is repair support and training channel for Nokia service suppliers (mainly for service levels 1 and 2). By providing visual and easy to learn support and training material, such as illustrative repair videos, troubleshooting with pictures, product information and general repair information, Nokia Care Point offers user-friendly channel for service partners to learn technical issues.</p>
	

It is mandatory to watch for newest technical and organizational information on a daily basis to be updated as required (see "**Latest Updates in support Library**"). Every new information has to be processed and implemented as soon as possible.

When logged into PWS you can also find needed information to different headlines respectively tools

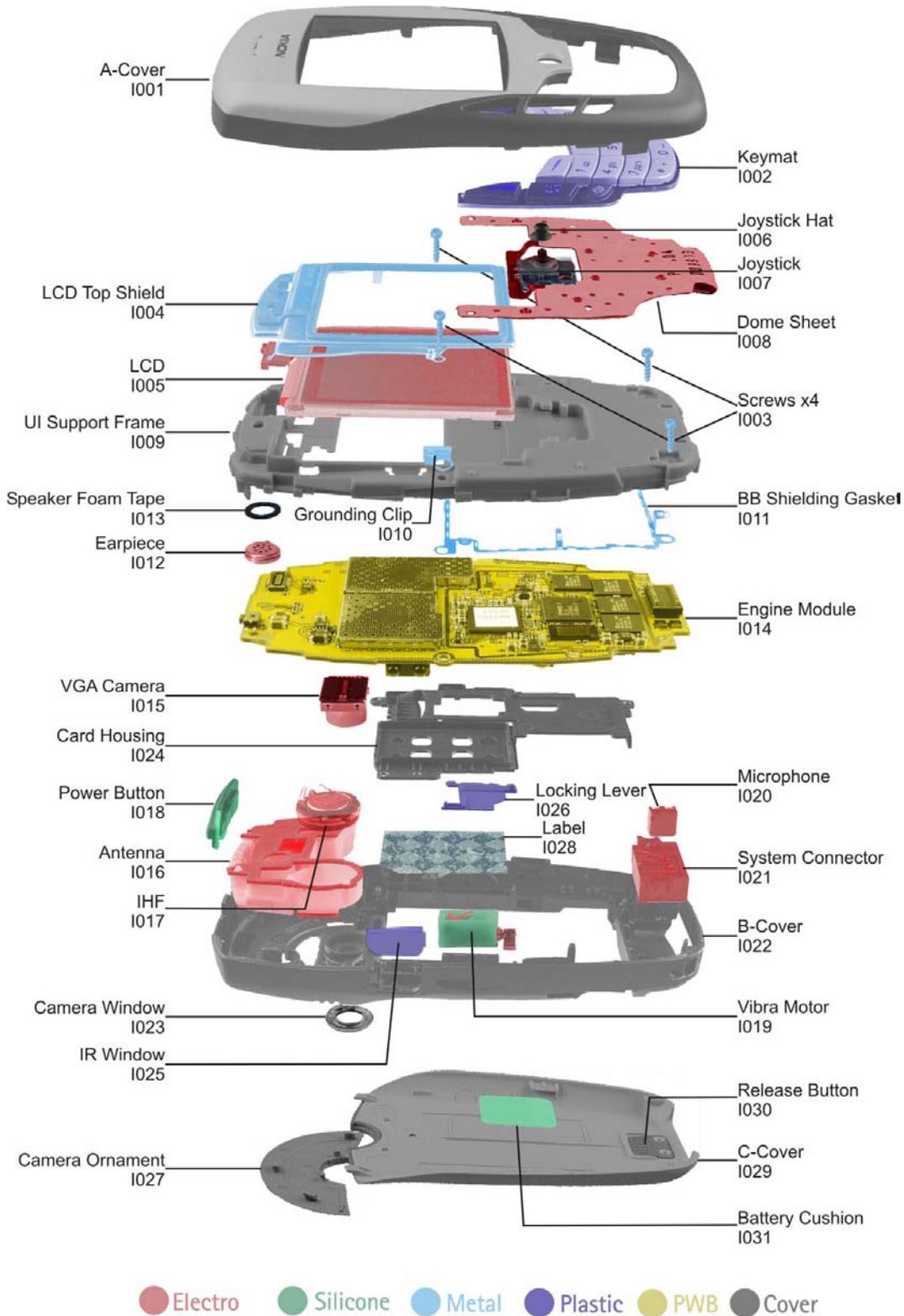
like:



To spare server bandwidth it is recommended to download newest version of huge files like videos, Phoenix packages or Service Manuals only once and distribute it internally for further use.

## 4. EXPLODED VIEW AND COMPONENT DISPOSAL

Recommendation for the ecologically friendly disposal of components. Colorized components show the different categories.



Description: See corresponding ITEM/CIRCUIT REF of the SPL (Spare Parts List)

## 5. SPARE PARTS LIST

ITEM/ CIRCUIT REF.	QTY	PART NO	PART NAME
I001	1	XXXXXXX	A-COVER
I002	1	XXXXXXX	KEYMAT
I003	4	6290109	SCREWS 1.8X9 T6 PLUS
I004	1	9511102	LCD TOP SHIELD
I005	1	4850343	LCD
-	1	<b>0201957</b>	<b>UI SUPPORT FRAME ASSY</b>
I006	1	9452804	JOYSTICK HAT
I007	1	-	JOYSTICK
I008	1	-	DOME SHEET
I009	1	-	UI SUPPORT FRAME
I010	1	9517293	GROUNDING CLIP
I011	1	9511104	BB SHIELDING GASKET
I012	1	5140251	EARPIECE
I013	1	9470283	SPEAKER FOAM TAPE
I014	1	-	ENGINE MODULE
I015	1	4858009	VGA CAMERA
-	1	<b>0660296</b>	<b>ANTENNA ASSY</b>
I016	1	-	ANTENNA
I017	1	-	IHF SPEAKER
I018	1	9790812	POWER BUTTON
I019	1	6800063	VIBRA MOTOR
-	1	<b>5460113</b>	<b>SYSTEM CONNECTOR ASSY</b>
I020	1	-	MICROPHONE
I021	1	-	SYSTEM CONNECTOR
-	1	-	<b>B-COVER ASSY</b>
I022	1	-	B-COVER
I023	1	-	CAMERA WINDOW
I024	1	-	CARD HOUSING
I025	1	9452798	IR WINDOW
I026	1	9460517	LOCKING LEVER
I027	1	XXXXXXX	CAMERA ORNAMENT
I028	1	-	LABEL
-	1	<b>XXXXXXX</b>	<b>C-COVER ASSY</b>
I029	1	-	C-COVER
I030	1	-	RELEASE BUTTON
I031	1	9470618	BATTERY CUSHION

## SOLDERING COMPONENTS **ONLY FOR LEVEL 2**

ITEM/ CIRCUIT REF.	QTY	PART NO	PART NAME
F380		5119019	SM FUSE F 1.5A 32V 0603
G190		4700801	BATTERY LI-ION 0.14MAH 3V RB414
S130		5209001	SM SW TACT SPST 12V 50MA SIDE KEY
X600		9510434	SPRING CLIP M3E14601 NSJ-3 HD925

## VARIANT PARTS

ITEM/ CIRCUIT REF.	QTY	PART NO	PART NAME
I001	1	9459090	A-COVER (LIGHT GREY)
I001	1	9459091	A-COVER (ROSE)
I002	1	9791020	KEYMAT LATIN (LIGHT GREY)
I002	1	9791037	KEYMAT LATIN (ROSE)
I002	1	9791021	KEYMAT RUSSIAN (LIGHT GREY)
I002	1	9791088	KEYMAT RUSSIAN (ROSE)
I002	1	9791022	KEYMAT GREEK (LIGHT GREY)
I002	1	9791089	KEYMAT GREEK (ROSE)
I002	1	9791025	KEYMAT ARABIC (LIGHT GREY)
I002	1	9791090	KEYMAT ARABIC (ROSE)
I002	1	9791026	KEYMAT HEBREW (LIGHT GREY)
I002	1	9791091	KEYMAT HEBREW (ROSE)
I027	1	9459107	CAMERA ORNAMENT (LIGHT GREY)
I027	1	9459108	CAMERA ORNAMENT (ROSE)
-	1	9459260	C-COVER ASSY (LIGHT GREY)
-	1	9459261	C-COVER ASSY (ROSE)

## SWAP UNITS

	QTY	PART NO	PART NAME
		0050486	NHL-10 N6600 SWAP UNIT EUROPE&AFRICA (LIGHT GREY)
		0050487	NHL-10 N6600 SWAP UNIT EUROPE (ROSE)
		0050488	NHL-10 N6600 SWAP UNIT FRANCE (LIGHT GREY)
		0050489	NHL-10 N6600 SWAP UNIT FRANCE (ROSE)
		0050491	NHL-10 N6600 SWAP UNIT SOUTH AFRICA (LIGHT GREY)
		0050490	NHL-10 N6600 SWAP UNIT SOUTH AFRICA (ROSE)
		0050493	NHL-10 N6600 SWAP UNIT POLAND (LIGHT GREY)
		0050492	NHL-10 N6600 SWAP UNIT POLAND (ROSE)
		0050494	NHL-10 N6600 SWAP UNIT TURKEY (LIGHT GREY)
		0050495	NHL-10 N6600 SWAP UNIT TURKEY (ROSE)
		0050501	NHL-10 N6600 SWAP UNIT CZECH/SLOVAK. (LIGHT GREY)
		0050502	NHL-10 N6600 SWAP UNIT CZECH/SLOVAKIA (ROSE)
		0050497	NHL-10 N6600 SWAP UNIT RUSSIA (LIGHT GREY)
		0050496	NHL-10 N6600 SWAP UNIT RUSSIA (ROSE)
		0050499	NHL-10 N6600 SWAP UNIT UKRAINA (LIGHT GREY)
		0050498	NHL-10 N6600 SWAP UNIT UKRAINA (ROSE)

## SERVICE TOOLS

TYPE	QTY	PART NO	PART NAME
		<b>0080541</b>	<b>FLS-4S SALES PACK E&amp;A (INCLUSIVE 0680032)</b>
		0680032	UNIV. POWERSUPPLY ACF-8
ACCESSORY		0273558	BL-5C BATTERY PACK LI-IO 850MAH
ACCESSORY		0272169	AC TRAVEL CHARGER ACP-8E (EURO)
ACCESSORY		0272172	AC TRAVEL CHARGER ACP-8X (UK)
ACCESSORY		0271467	HDC-5 HEADSET
		0770506	SF-2 POS FLASH ADAPTER
		0730218	XCS-1 SERVICE CABLE
		0770722	SS-12 DISASSAMBL Y JIG
<b>LEVEL 2 ONLY</b>		0770502	RJ-2 SOLDERING JIG
		0770527	SRT-9 CAMERA REMOVAL TOOL
		0772040	STANDARD TOOLKIT
		0770450	SF-2 TESTPINS (10 PCS)

## 6. SERVICE TOOLS

	<p><b>ACF-8</b> Universal Power Supply is used to power FLS-4S.</p> <p><b>FLS-4S incl. Driver and User Guide</b> is a dongle and flash device incorporated into one package, developed specifically for POS use.</p>
	<p><b>XCS-1</b> Service Cable is used to connect FLS-4S to SF-2.</p>
	<p><b>Internal Battery BL-5C</b> Inserted under the back cover, this Li-ion 850 mAh battery provides power in a lightweight package.</p>
	<p><b>Travel Charger ACP-8E/ACP-8X</b> Lightweight multi-voltage charger for charging your phone battery.</p>
	<p><b>Headset HS-5</b> An easy and convenient handsfree solution with remote control.</p>
	<p><b>SS-12</b> Disassembly Jig for Nokia 6600</p>
	<p><b>SF-2</b> POS Flash Adapter is used in POS (Point of Sales) environment for software updating. It provides controlled supply voltage and necessary connections between the phone and the Flash Device. It substitutes for the phone's standard battery during the software update.</p>
	<p><b>RJ-2</b> Soldering Jig (for level 2 or higher service Level supplier)</p>



**SRT-9**  
Camera removal tool for VGA Cameras



**New Test Pins**  
for Flash Adapter SF-2

NMP code 0772040



**Content**

- Nokia opening tool SRT-6 Nokia No. 0770431
- Tonichi torque driver Nokia No. 6901525
- [Hoya](#) micro fibre cloth MX304
- [Dastex](#) gloves S, M, XL
- [Artilux](#) goggles AH166
- [Wera](#) bit T5 867/4TX 5x50
- Wera bit T6 867/4TX 6x50
- 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

## 7. SW-UPDATE

To use FLS-4S Flash Dongle you have to follow the user guide inside the sales package. Please check always the latest version of flash software, which is available on Nokia Partner Web Site.

### Flash Concept - (Point of Sales)

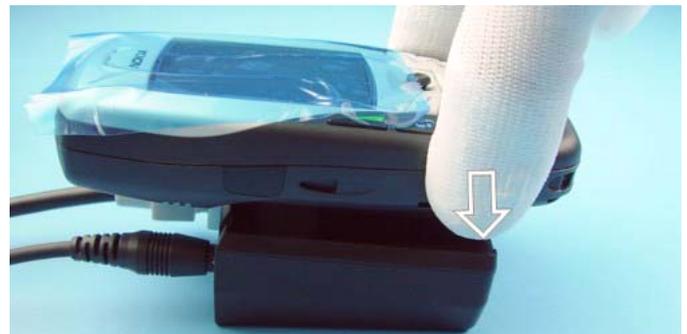
**It is very important to follow this insertion and removal procedure, otherwise the contact pins of Flash Adapter will be damaged.**



Open the Locking Lever.



Insert the Flash Adapter SF-2 like a battery, start at the Battery Connector side.



Now, push down the bottom side of the Flash Adapter, do not use too much force.



When removing the Flash Adapter, always start from the bottom side of the unit.



Take away the unit now.

**8. DISASSEMBLY INSTRUCTIONS (ALSO SEE THE VIDEO CLIPS ON CARE POINT)**



If not already done protect window with a film to avoid dust and scratches.



Press the Release Button before removing the C-Cover.



Remove the Camera Ornament with SRT-6 only, use a second one to twist the Camera Ornament easier.



Now, the Camera Ornament can be taken away.



Place the unit into the Disassembly Jig SS-12. Note that guiding pins are positioned correctly into the gaps.



Place the SRT-6 on the Jig and shift it carefully along the edge of the Jig. Start at green mark to release the A-Cover, use it like a blade with moderate force only, to prevent damages at the covers. Shift the SRT-6 to the next mark and carefully press in the tip. (watch videos)



Shift the SRT-6 to the next mark and press in the tip again.



The same procedure on the other side.



Lift the A-Cover on its bottom side carefully. Place the SRT-6 in the groove and shift it to the next mark. Then press in the tip as in the step above.



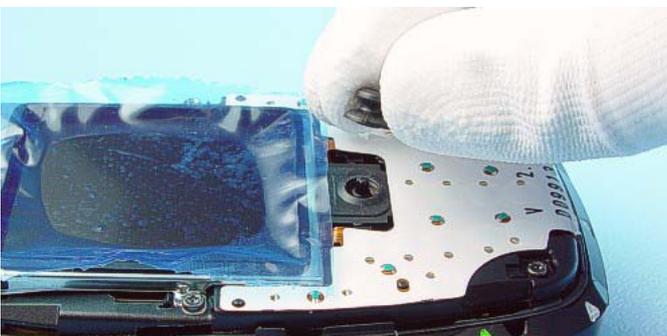
The same procedure on the other side.



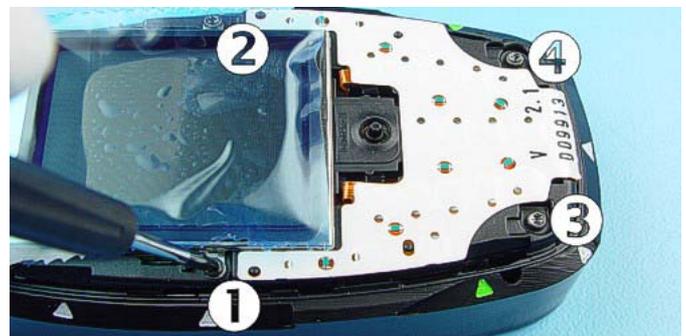
Now, the A-Cover can be pulled up. Always protect the inner side of the window and LCD with a film.



Remove Keypad...



...and Joystick Hat.



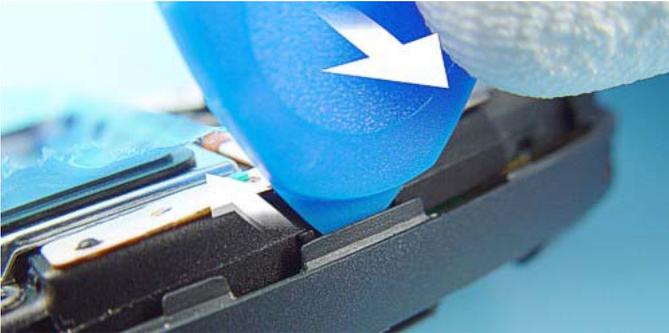
Unscrew the four Torx Plus® size 6 screws using the order shown. **For assembly, the reverse order and a Torx Plus® driver with a torque of 19Ncm have to be used.**



Take the phone from the jig.



The UI Support Frame is attached with four snaps in B-Cover.



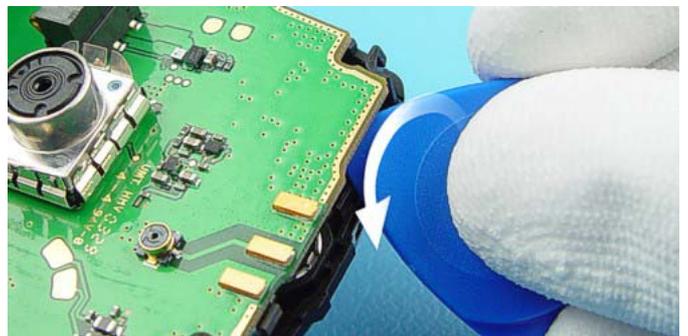
Use the SRT-6 as a lever to release the snap. Do not twist SRT-6, because this would damage the cover.



Now release the next snap. Use the same procedure on the other side.



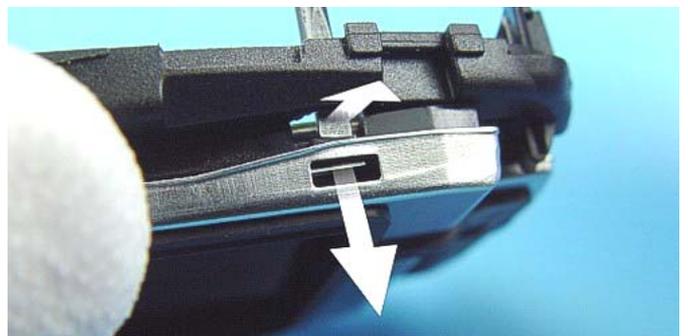
Remove the modules from B-Cover.



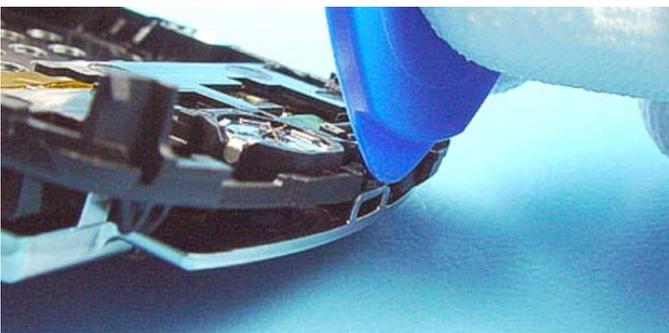
Place the SRT-6 between Engine Module and the UI Support Frame. To open the connector, twist it carefully as shown in the picture.



Now, the Engine Module can be removed.



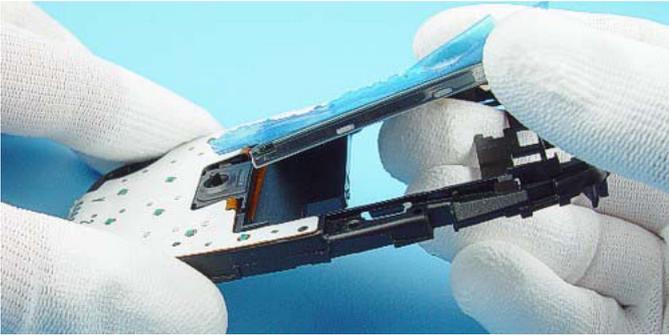
A slotted screwdriver can be used to open the clip of the LCD Top Shield.



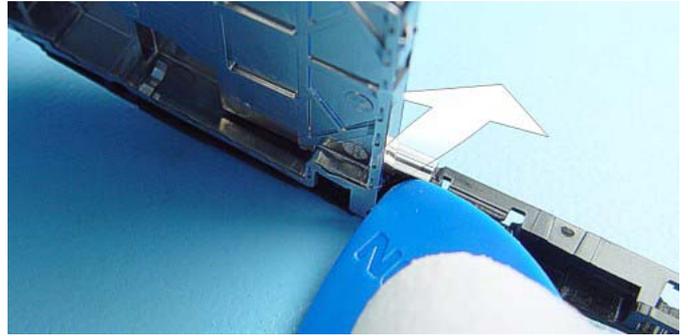
Release the next snap by using the SRT-6.



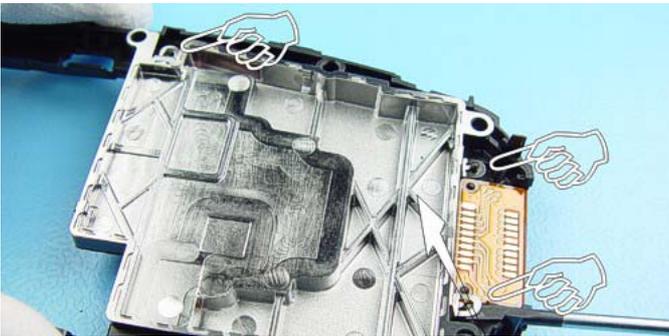
Now, take away the LCD Top Shield.



Remove LCD after protecting it with a film.



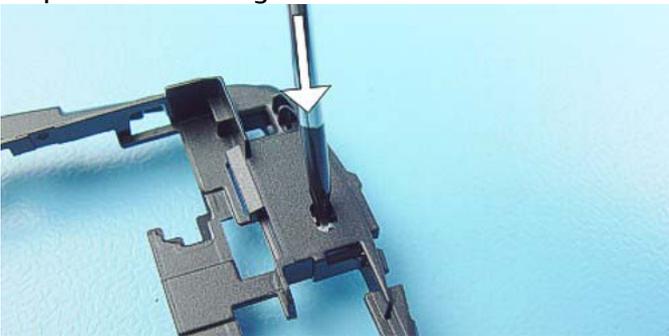
SRT-6 can be used to remove the Grounding Clip.



A slotted screwdriver can be used to release the three snaps of the Shielding Gasket.



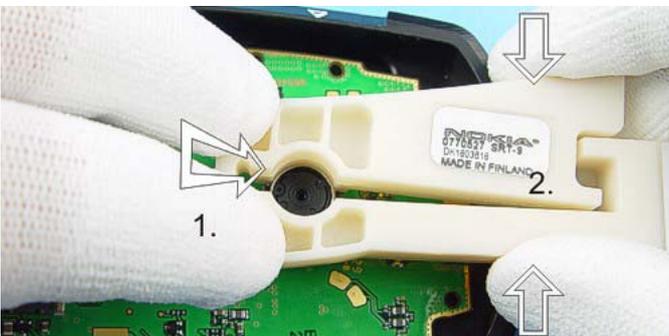
Please note the guiding pin of the Earpiece while assembling.



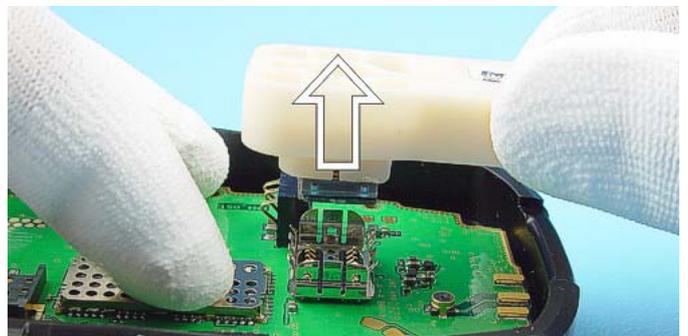
Use a Torx screwdriver to pull down the Earpiece.



To prevent damages of spring contacts use always the disassembly jig when removing VGA Camera.



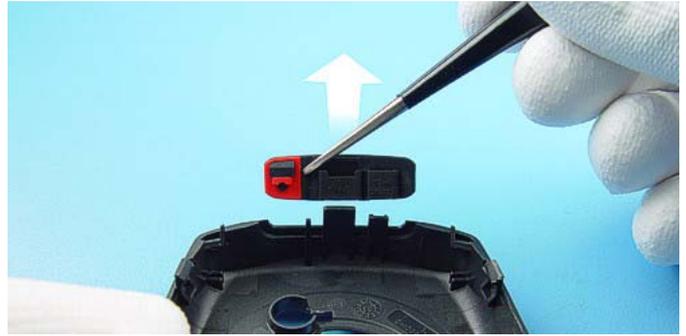
The SRT-9 has to be placed onto the VGA Camera to release its snaps. Some additional force might be needed to press down the SRT-9. Then squeeze it as shown in the picture.



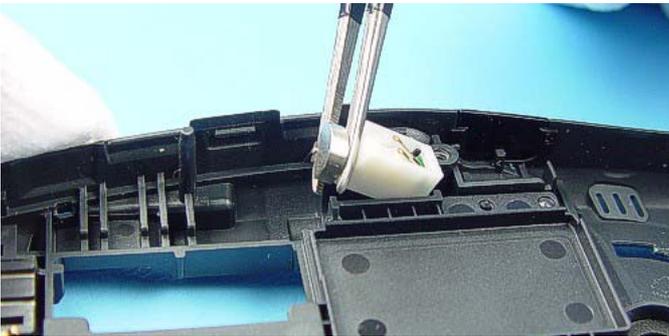
Now, the VGA Camera can be removed by pulling up the removal tool. Please note the right position of the guiding snaps for re-assembling.



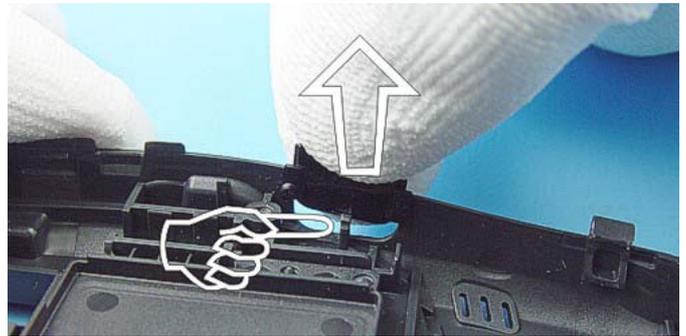
Use SRT-6 to lift up the Antenna.



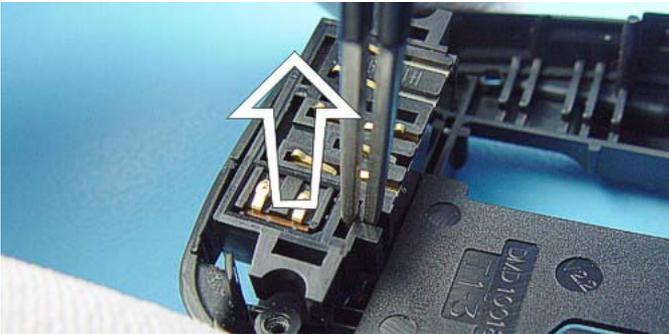
The Power Button can be removed easily.



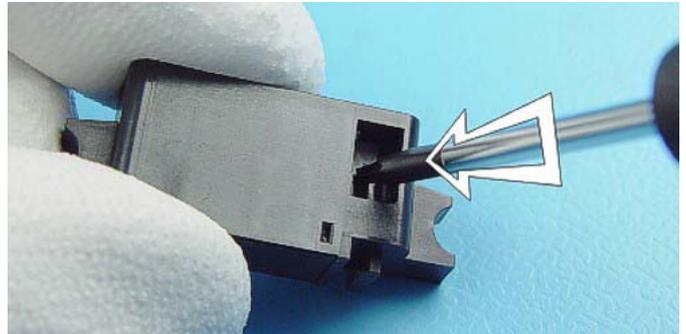
Use tweezers when removing the Vibra Motor.



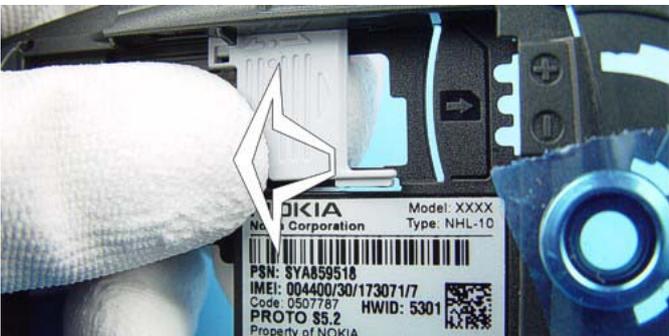
Remove the IR Window.



Use tweezers to lift the System Connector.



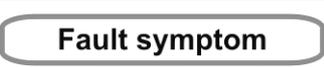
Push out the Microphone with Torx driver.



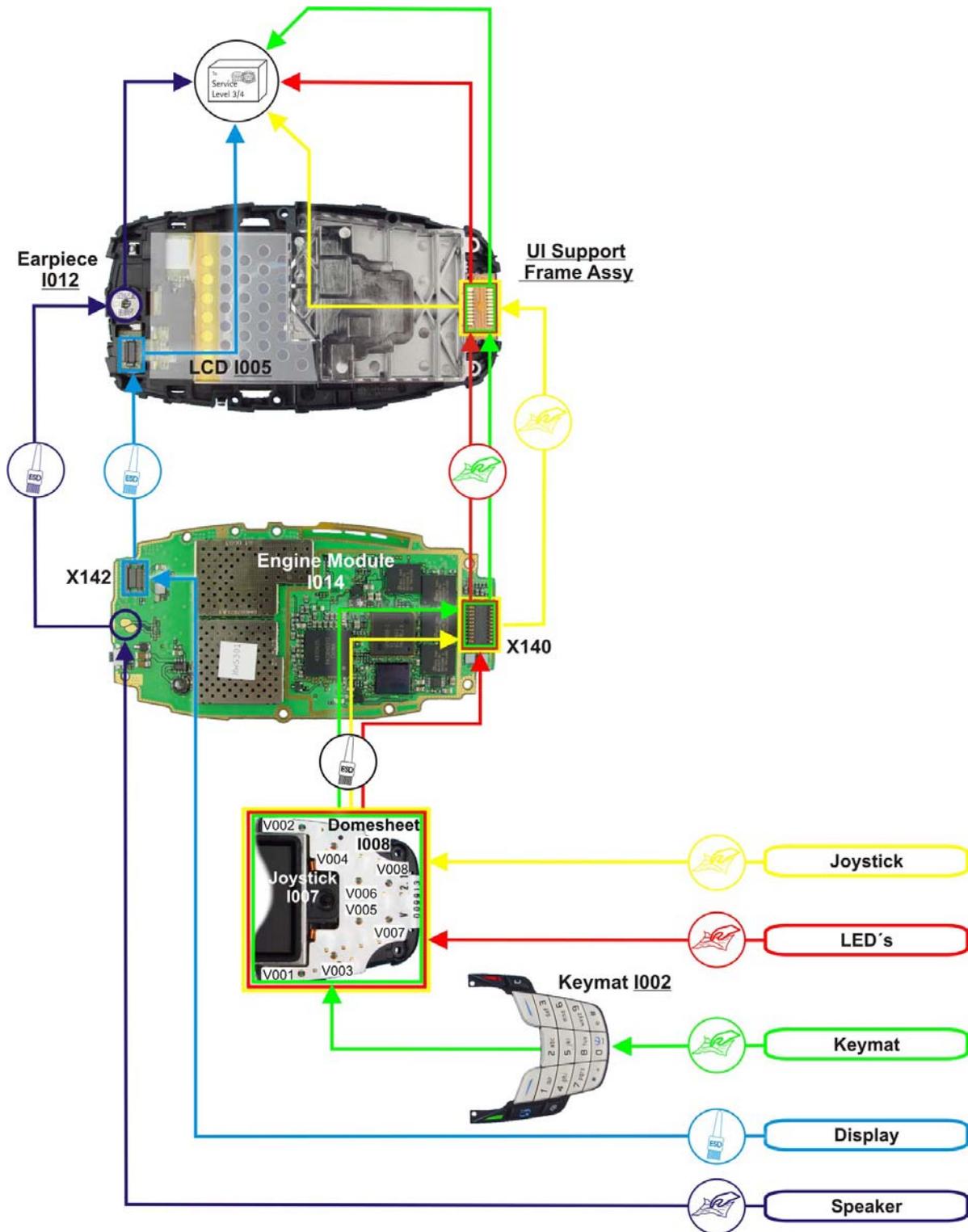
To remove Locking Lever place it in the shown position first, than push it from the other side with moderate force.

## 9. LEGEND FOR QUICK TROUBLE SHOOTER

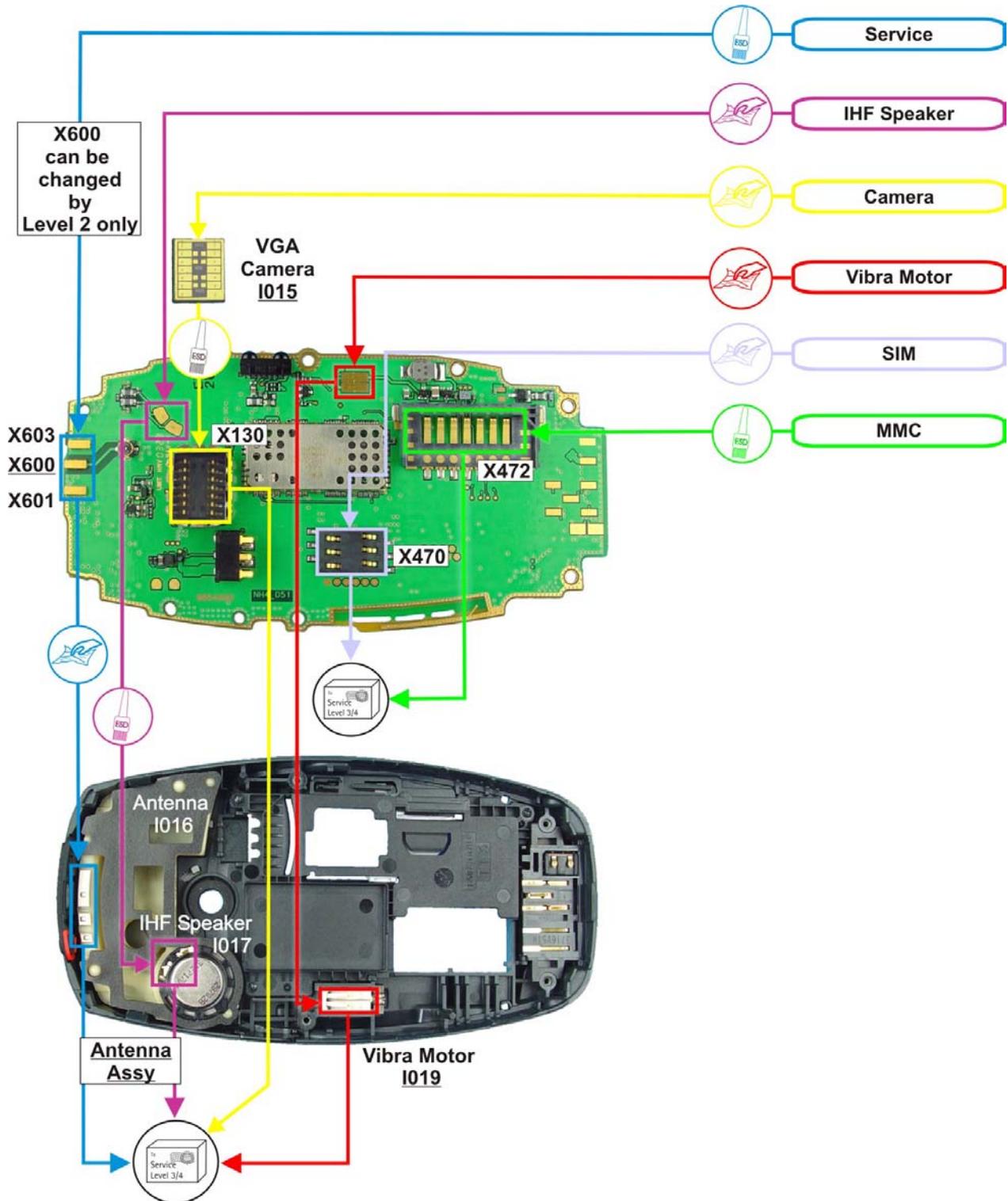
This legend is valid for all parts of the **Quick Trouble Shooter**

<p>Follow the steps until the problem is solved. If this doesn't help, you are not authorized to go forward. Only underlined components ( e.g. <u>I002</u>) can be changed.</p>	
	<p>The start point of repair activities regarding the appeared fault symptoms.</p>
	<p>Follow the arrows step by step</p>
	<p>Pads or contacts: Check optical and mechanical condition particularly regarding to corrosion. Clean if necessary.</p>
	<p>Measure component for electrical functionality and change, if needed. (Level 2 only)</p>
	<p>Pads or contacts: Check optical and mechanical condition particularly regarding to corrosion. Clean with ESD brush only, if necessary.</p>
	<p>No more actions possible send product to the appropriate service partner with higher service level.</p>

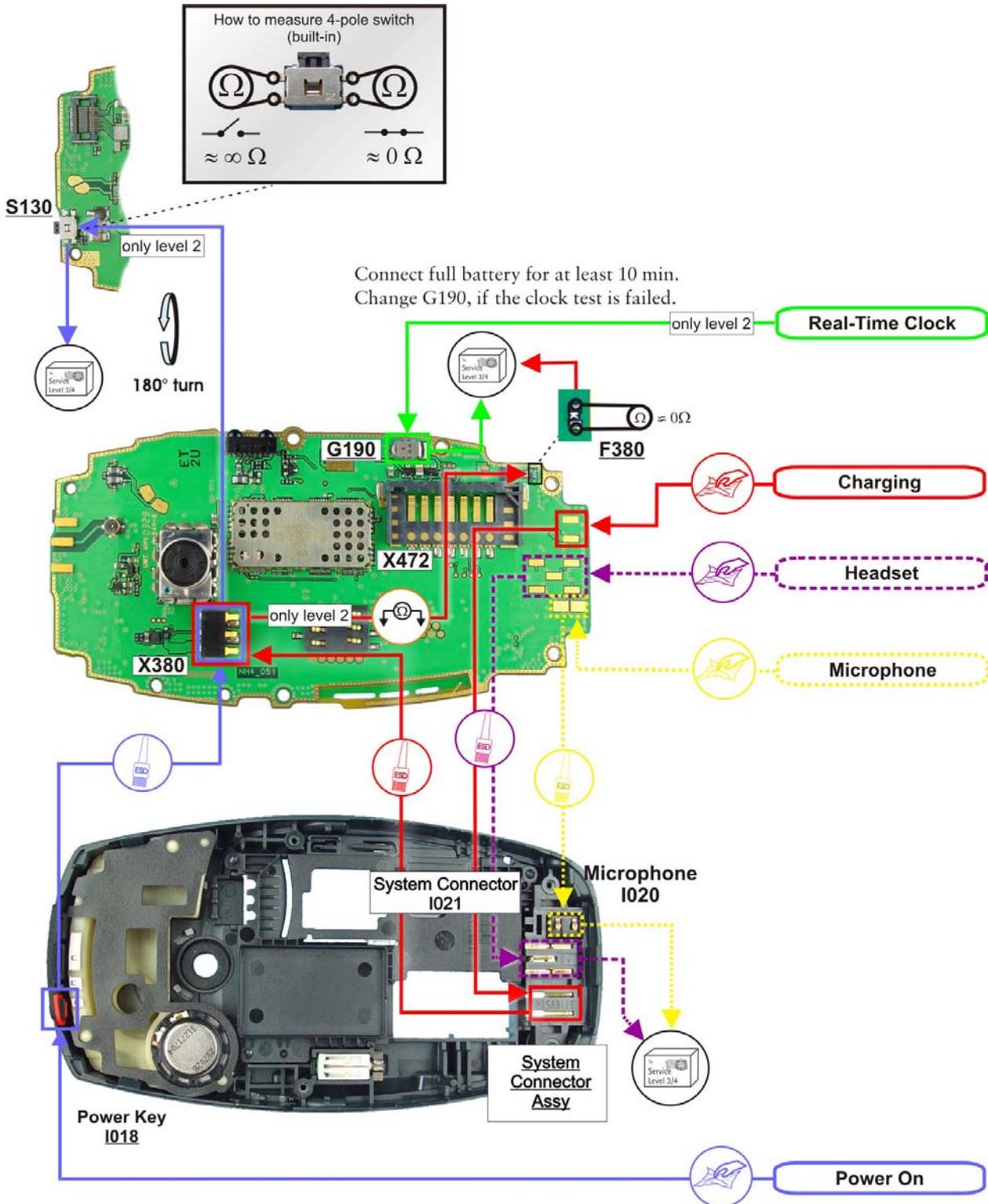
10. QUICK TROUBLE SHOOTER PART 1



11. QUICK TROUBLE SHOOTER PART 2



**12. QUICK TROUBLE SHOOTER PART 3**



### 13. CAMERA GONOGO TEST

Before starting the GoNoGo test, check that camera window is clean. If not, clean the window with cloth.

If camera lens is dirty, do not use cloth or brush for cleaning, use compressed air only.

**Exchange of VGA Camera does not improve picture quality!**



- From Home Menu, select **Camera**
- Select **Standard** photo by using the joystick.
- To take a picture, press the joystick.
- This Image will be saved to Gallery into the Photos folder automatically.
- Test was successful, if the Image appears on your Display. The camera is ok.
- Select **Options**
- Select **Delete**
- Select **Yes**
- Press red receive button for Home Menu
- If the test is failed see Quick Trouble Shooter.

## 14. BLUETOOTH AND INFRARED GONOGO TEST

### Bluetooth test

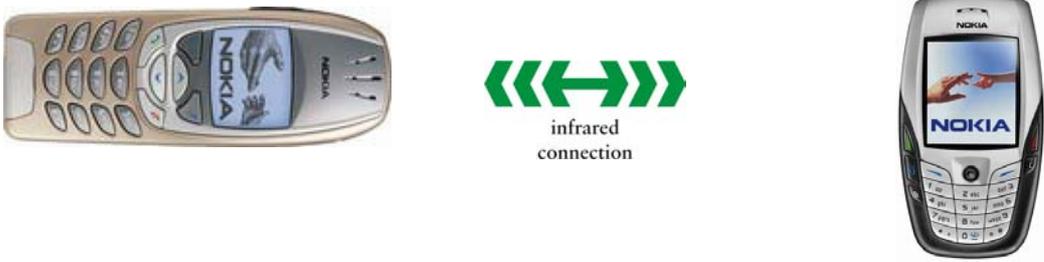
You need another Bluetooth device (e.g. 6310i) to do a GoNoGo test.

Make sure that Bluetooth is activated in the reference unit. The distance of the devices should be not more than 5m from each other.

### Infrared test

You need another infrared device (e.g. 6310i) to do a GoNoGo test. The infrared windows of the devices must be directed to each other and should have a distance of approximate 15 cm. Make sure that infrared is activated in receiver device.

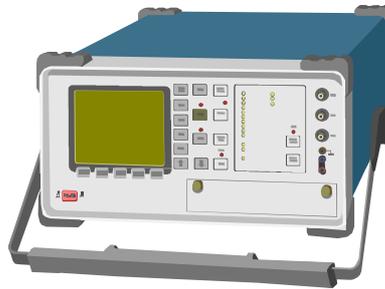
**Warning:** Do not point the IR (infrared) beam at anyone's eye or allow it to interfere with other IR devices. This device is a Class 1 Laser product.

	
Reference unit, Bluetooth /infrared activated	Test unit
<p><b>Settings on the test unit:</b></p> <ul style="list-style-type: none"> <li>o Press the Menu Key and open the Contacts folder.</li> <li>o If phone and SIM memory is empty, create one new entry.</li> <li>o Choose one phonebook entry and select <b>Options</b>.</li> <li>o Select <b>Send</b></li> <li>o for infrared test: Select <b>Via infrared</b> If sending of business card fails, make sure again that infrared windows are directed to each other and infrared is activated in reference device. Then try again sending. Test was successful, if you get this message on receiver device. You will <b>not</b> get a confirmation on sender device.</li> <li>o for Bluetooth test: Select <b>Via Bluetooth</b> Search window appears, if all Bluetooth devices in range will be displayed, the test is successful!</li> <li>o Press red receiver button for Home Menu.</li> </ul>	

## 15. GONOGO TEST (GSM ONLY)

After the optical check as GoNoGo test has to be carried out if the unit has been unscrewed to guarantee the functionality of the phone.

**Please refer to the actual information on Partner Web Site and Nokia Care Point. When using automatic tester support, take care of the right setup according to the tester type and product type. Please refer to “Recommended Service Equipment” on Nokia Partner Web Site.**



Mobile Phone Tester

## 16. BATTERY TEST

A battery tester lets you test the capacity of Nokia batteries.

**Please refer to the actual information on Partner Web Site.**



<http://www.astratec.co.uk/>

<http://www.cadex.com/>

## 17. SERVICE NOTES

We recommend using Service Notes when shipping phones to other Service Partners. It prevents the product from scratches, it is ESD-neutral and has the possibility to give valuable feedback of the fault symptom through a structured form. Please refer to the document [Service Notes for faulty NMP transceiver](#) on Partner Web Site to get further information.

Sender <u>Repair Center</u>		Our Ref. <u>4711</u>
Handled by _____		Product Code <u>050381</u>
Serial n.o.: <u>449333/20/975406/2</u>		Date <u>10.07.01</u>
Yes <input checked="" type="checkbox"/> Warranty Case <input type="checkbox"/> No		Inst <input type="checkbox"/> Instant Service <input type="checkbox"/> DOA

<input checked="" type="checkbox"/> Repair	<input type="checkbox"/> Repair and Refurbishment
<input type="checkbox"/> Refurbishment only	<input type="checkbox"/> Software update
<input type="checkbox"/> Analysis	<input type="checkbox"/> Claim
<input type="checkbox"/> 24 h Service	<input checked="" type="checkbox"/> Special Request <u>Save User data</u>

**A) EXISTENCE OF FAULT**

1. <input checked="" type="checkbox"/> Continuous fault	2. <input type="checkbox"/> Intermittent fault	3. <input type="checkbox"/> Temperature
4. <input type="checkbox"/> By shock or vibration	5. <input type="checkbox"/> No clear fault	6. <input type="checkbox"/> Only as portable
7. <input type="checkbox"/> Only in a car	8. <input type="checkbox"/> Only in desktop	

**B) SYMPTOM OF THE FAULT ON CMT-PART - Symptom Code** \_\_\_\_\_

1. <input type="checkbox"/> Totally dead	2. <input type="checkbox"/> Selftest failure	3. <input type="checkbox"/> SIM Fail
4. <input checked="" type="checkbox"/> No service	5. <input type="checkbox"/> No calls in	6. <input type="checkbox"/> No calls out
7. <input type="checkbox"/> Keypad failure	8. <input type="checkbox"/> Display failure	9. <input type="checkbox"/> Audio failure
10. <input type="checkbox"/> Doesn't charge	11. <input type="checkbox"/> Overcharging	12. <input type="checkbox"/> Hand-free failure
13. <input type="checkbox"/> Burns fuses	14. <input type="checkbox"/> Accessory fail, which _____	
15. <input type="checkbox"/> Switches off	16. <input type="checkbox"/> Other _____	

**C) OBSERVED OR MEASURED FAULT**

1. <input checked="" type="checkbox"/> TX Power
2. <input type="checkbox"/> TX Phase error
3. <input type="checkbox"/> Bit Error Rate
4. <input type="checkbox"/> Burst Template
5. <input type="checkbox"/> Ramping spectra
6. <input type="checkbox"/> RX Quality
7. <input type="checkbox"/> RSSI
8. <input type="checkbox"/> Other _____

**D) SYMPTOM OF THE FAULT ON PDA-PART - Symptom Code** \_\_\_\_\_

1. <input type="checkbox"/> PDA doesn't start
2. <input type="checkbox"/> Internal error
3. <input type="checkbox"/> Keypad failure
4. <input type="checkbox"/> Display failure


## 18. FORWARDING OF REPAIRS TO SERVICE LEVEL 3 OR 4 SUPPLIERS

We recommend using the offered swap phone cartons as described in Spare Parts SB004.



Always Protect the window with a protection film.



Put the unit under the stretch film.



Add repair documentation e.g. filled-in service note into the swap carton.



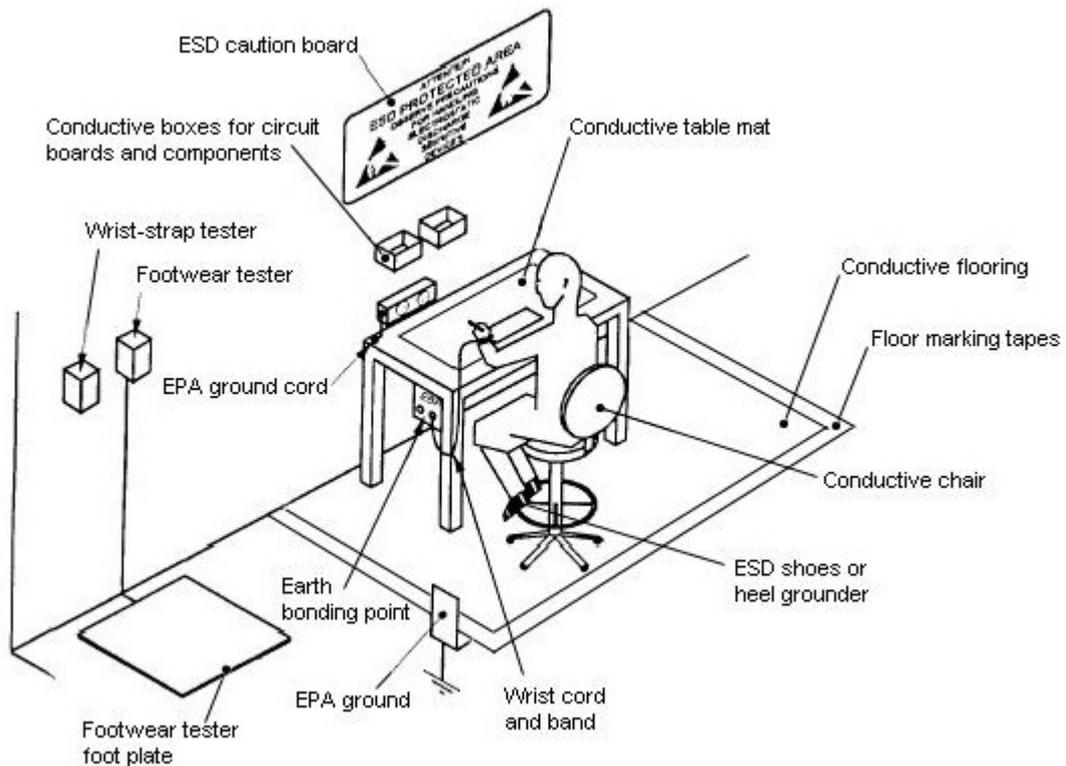
Fold the swap carton as shown in Spare Parts SB-004.



There two different sizes of swap cartons for common mobile phones.

## 19. ESD PROTECTION REQUIREMENTS

Please refer to the Partner Web Site document  
General instructions [Service Partner Requirements](#).



- USE** Conductive bags and boxes
- USE** ESD compatible service tools
- USE** Conductive wastebaskets
- USE** ESD gloves when handling PWBs/PCBs
- USE** Cleaning material without changing el. Characteristics
- USE** Grounded service equipment, i.e. soldering station
- USE** ESD clothes such as coat or frock

- NO** Smoking
- NO** Drinking
- NO** Eating
- NO** Dust
- NO** Useless Items
- NO** Normal pressured air for cleaning modules/displays



The video covers general issues concerning Electro-Static Discharge (ESD)  
source: Nokia Care Point