NOKIA
Care

CMO Operations & Logistics
TRAINING & VENDOR Development
MULTIMEDIA CREATION & SUPPORT

PAGE 1 (20)

Confidential

Approved 2.0
MGR

30.Jan.2007

SERVICE MANUAL
Level 1&2

NOKIA 2610

RH-86/87

NOKIA 2626

RM-291

Transceiver characteristics:

- **Band:** Dual-band phone for GSM
- **RH-86/RM-291:** 900/1800MHz
- **RH-87:** 850/1900MHz
- **Display:** High resolution color display with up to 65,536 colors (128 x 128 Pixels)
- **Connector:** Easy Flash connector

Transceiver with BL-5c Li-Ion battery pack

Talk time	Standby	Note
Up to 5h	Up to 12,5days	Depends on network parameters

Environmental characteristics:

- Lead-free soldered

PAGE 2 (20)

Approved 2.0

MGR

CMO Operations & Logistics
TRAINING & VENDOR Development
MULTIMEDIA CREATION & SUPPORT

Confidential

30.Jan.2007

TABLE OF CONTENT

Page

CHANGE HISTORY

Status	Version No.	Date	Comments
Draft	0.1	11.Apr.2006	Initial draft
Approved	1.0	24.Mai.2006	Approval
Approved	2.0	30.Jan.2007	2626 added; Exploded view/Spare Parts overview updated; General Recycling recommendation/ Level 2 solder Components added

CMO Operations & Logistics   MGR
TRAINING & VENDOR Development
MULTIMEDIA CREATION & SUPPORT   Confidential   30.Jan.2007

1. INTRODUCTION

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:
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. 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.

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 Online. Also see ESD Protection Requirements in this Service Manual.

NOKIA
Care

PAGE 4 (20)   Approved 2.0

CMO Operations & Logistics   MGR
TRAINING & VENDOR Development
MULTIMEDIA CREATION & SUPPORT   Confidential   30.Jan.2007

2. GENERAL REPAIR INFORMATION

In this section the technician will get some general hints how to carry out repairs:

o To familiarize oneself with NOKIA product read the tutorials or user guide on www.nokia.com -->Support--> Phones, by selecting the Phone Model.
o Before starting the repair you must take care of ESD precautions like being in your ESD Protected Area and connecting your wristband.
o Use gloves to avoid corrosion and fingerprints.
o Protect windows and displays with a film to avoid dust and scratches.
o When cleaning the LCD Module any lint-free cloth can be used (e.g. Micro-Fibre cloth).
o 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.
o Mechanical parts (except shielding lids and bent parts), which didn't repair the failure, can be reused, if they are not soldered.
o 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.
o Always use original NOKIA spare parts.
o 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).
o Remove redundant soldering flux after repair.
o Meet the torque requirements when assembling the unit (see also the document "torques for transceiver assembly" on NOKIA Online).
o 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.
o A SIM card is needed for all GoNoGo tests.
o When doing the fault log entries, always note the Item code, which caused the malfunction. Also, fill in the appropriate part code from the assembly, if needed.
o Please be aware that some malfunctions could be software related and solved by an update.

o There are several documents available on NOL, which have to be followed:

o First, take care for the latest content pages of Service Bulletins, which are always available for each folder on NOKIA Online. This is also important to recognize, if existing documents have become invalid.

o The service level indicator at the bottom of each document tells the appropriate destination.

Example:
Downloads > Support Library >

1. **Instructions**
2. **General Service Bulletins**
3. **Product related documents**
4. **Spare Part Service Bulletins**
5. **Service Tools Service Bulletins**
6. **Common Software Service Bulletins**
   etc,...

Please also check NOKIA Online (NOL) 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 Online with the purpose of serving different multimedia content, like video clips or interactive tutorials.

It is mandatory to watch for newest technical and organizational information on a daily basis to be updated as required (see **"Latest files in Support Library"**). Every new information has to be processed and implemented as soon as possible.
When logged into NOL you can also find needed information in different folder like:

Support Library

Phones

Service Manuals
Service Bulletins
Software
Repair Information

Level 1&2 e-learning (former NOKIA CarePoint) on NOKIA Online

Former NOKIA CarePoint content, such as	• **Online Troubleshooting** • **Product information** • **Videos – Disassembly/Assembly**	can be found on **NOKIA Online**

NOKIA Online

Care Services

Training

Phone Models

Level 1&2 e-learning courses offer a quick overview of the NOKIA phone and support for how to repair and use the phone:

Overview & Guides	Disassembly & Assembly	Troubleshooting
Basic information about the phone, features and technologies	Instructions how to disassemble and assemble the phone	Step-by-step instructions on how to locate and repair the most common problems with the phone

To reduce the server traffic 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.

NOKIA
Care

PAGE 6 (20)   Approved 2.0

CMO Operations & Logistics   MGR
TRAINING & VENDOR Development
MULTIMEDIA CREATION & SUPPORT   Confidential   30.Jan.2007

4. EXPLODED VIEW AND COMPONENT DISPOSAL

Recommendation for the ecologically friendly disposal of components. Colorized components show the different categories. See corresponding ITEM/CIRCUIT REF in the Spare Parts Service Bulletins on NOL.
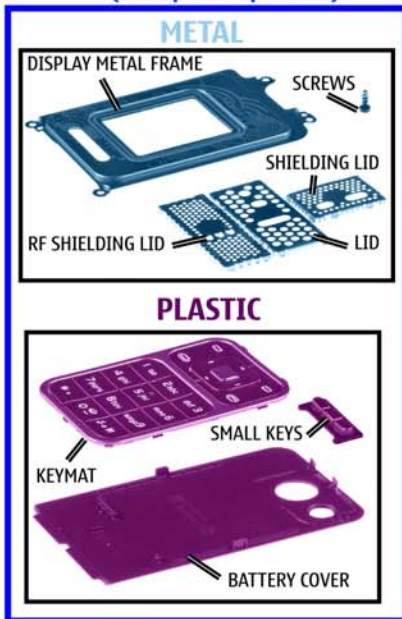
2610 RH-86/87 2626 RM-291 EXPLODED VIEW

A-COVER ASSY I001
KEYMAT I002
SCREWS M1.8x6 I003
SHIELDDING LCD I004
LIGHT GUIDE ASSY I007
ACOUSTIC CHANNEL ASSY I005
DOMESHEET (A1) I008
LCD MODULE I006
LID BB ASSY (A1) (INCL. TAPE SIM) I010
ENGINE MODULE (A1) ✳ I009
MICROPHONE (A2) I015
LID FEM (A1) I012
EASY FLASH CONNECTOR (A2) I016
LID RF ASIC (A1) I011
ANTENNA (A3) ✳ I017
IHF (A3) ✳ I018
SIM LID ASSY (A2) I014 ✳
D-COVER (A2) ✳ I013
TYPE LABEL(A1) I019
B-COVER I020

🔴 = These parts can not be reused after removal.

✳ = only available as assembly

Ver. 1.0

NOKIA
Care
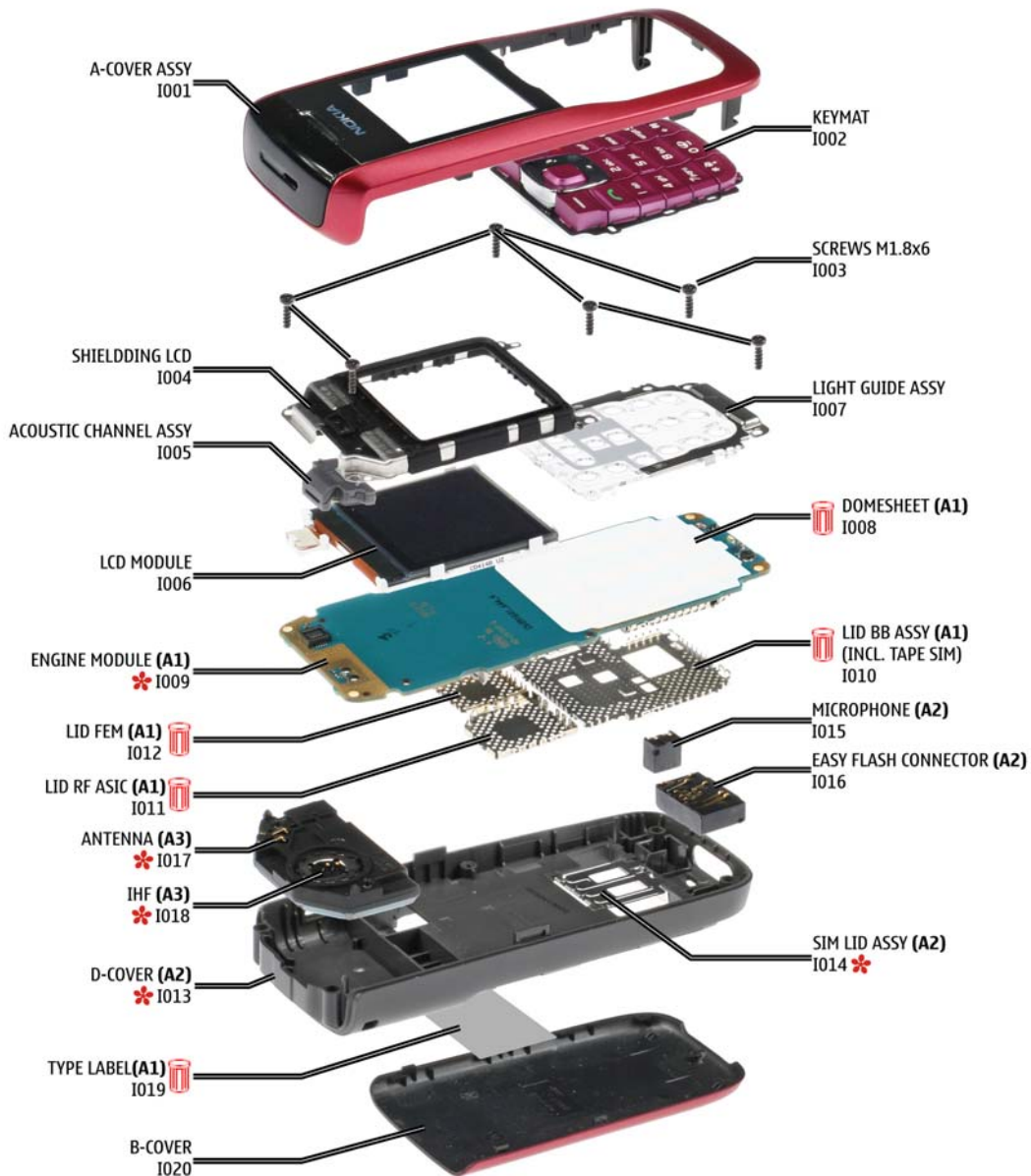
5. SPARE PARTS OVERVIEW

2610 RH-86/87 2626 RM-291 SPARE PARTS OVERVIEW

A1=LIGHT SWAP ENGINE MODULE ASSY (I008-I012, I019)

DOMESHEET **(A1)**
I008

ENGINE MODULE **(A1)**
✱ I009

LID BB ASSY **(A1)**
(INCL. TAPE SIM)
I010

LID FEM **(A1)**
I012

LID RF ASIC **(A1)**
I011
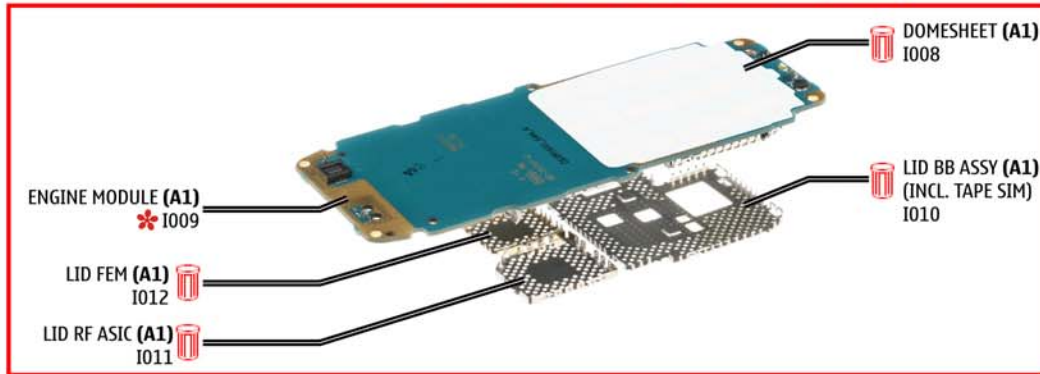
A3=ANTENNA MODULE ASSY (I017-I018)

ANTENNA **(A3)**
✱ I017

IHF **(A3)**
✱ I018

A2=D-COVER ASSY (I013-I016)
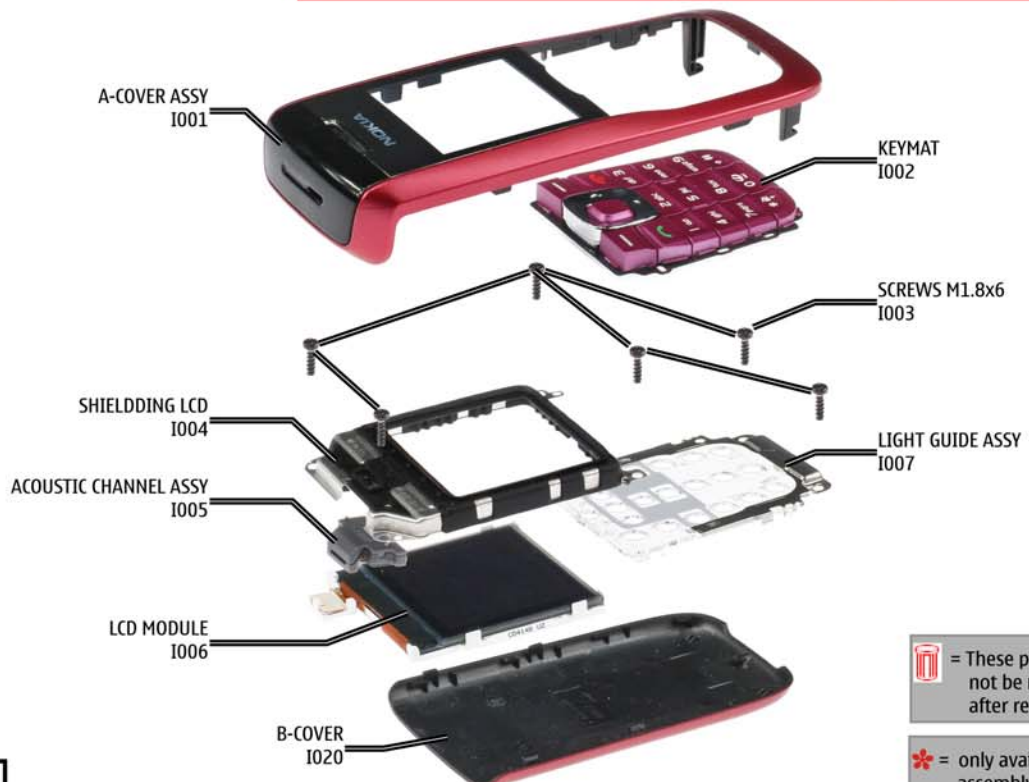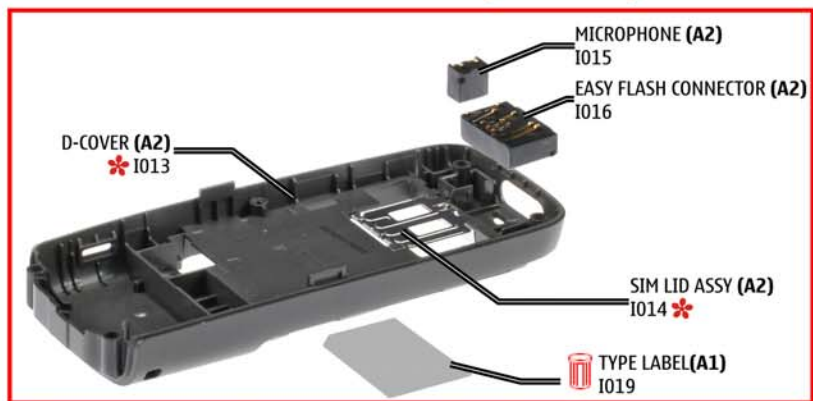
MICROPHONE **(A2)**
I015

EASY FLASH CONNECTOR **(A2)**
I016

D-COVER **(A2)**
✱ I013

SIM LID ASSY **(A2)**
I014 ✱

TYPE LABEL **(A1)**
I019

A-COVER ASSY
I001

KEYMAT
I002

SCREWS M1.8x6
I003

SHIELDDING LCD
I004

LIGHT GUIDE ASSY
I007

ACOUSTIC CHANNEL ASSY
I005

LCD MODULE
I006

B-COVER
I020

= These parts can not be reused after removal.

✱ = only available as assembly

Ver. 1.0

NOKIA
Care
PAGE 8 (20)   Approved 2.0
CMO Operations & Logistics   MGR
TRAINING & VENDOR Development
MULTIMEDIA CREATION & SUPPORT   Confidential   30.Jan.2007

6. GENERAL RECYCLING RECOMMENDATION

NOKIA
Care

PAGE 9 (20)   Approved 2.0

CMO Operations & Logistics   MGR
TRAINING & VENDOR Development
MULTIMEDIA CREATION & SUPPORT   Confidential   30.Jan.2007

7. LEVEL 2 SOLDER COMPONENTS

2610 RH-86/87 2626 RM-291 Level 2 solder components

Solder components only for LEVEL 2
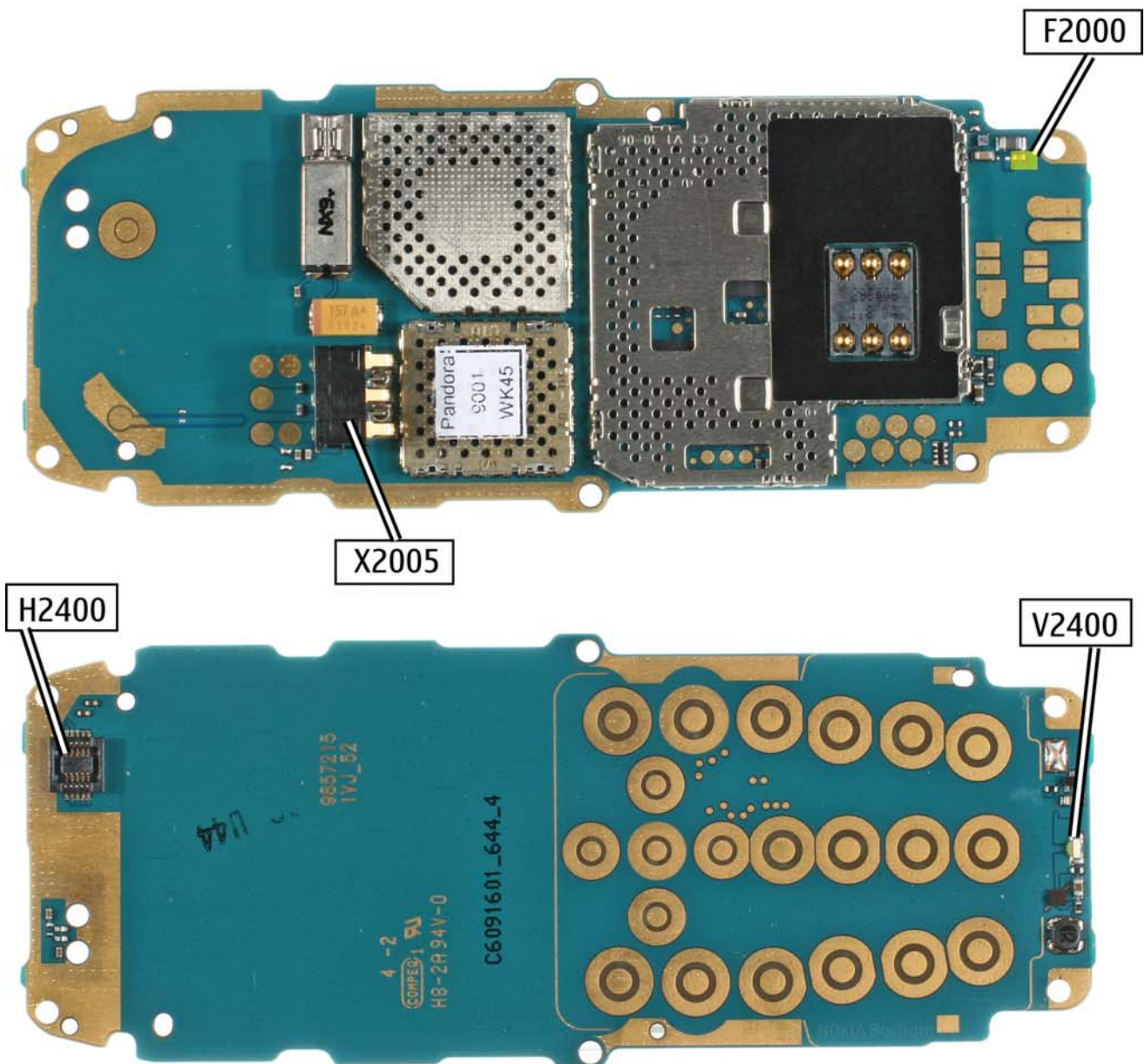
8. SPARE PARTS LIST

Please exchange this page (placeholder) with latest corresponding Service Bulletins (spare parts, SWAP units and service tools) from NOL!

This will ensure, that you are using up-to-date order codes only.

Therefore Service Bulletins have to be checked from NOL on daily basis.

NOKIA
Care

PAGE 11 (20)   Approved 2.0

CMO Operations & Logistics   MGR
TRAINING & VENDOR Development
MULTIMEDIA CREATION & SUPPORT   Confidential   30.Jan.2007

9. SERVICE TOOLS

	FLS-4S incl. ACF-8, Driver and User Guide Dongle and flash device incorporated into one package, developed specifically for POS use.
	ACF-8 Universal Power Supply is used to power FLS-4S.
	Internal Battery BL-5C Inserted under the back cover, this Li-Ion 900 mAh battery provides power in a lightweight package.
	Travel Charger ACP-12 Small and lightweight charger for fast charging of your phone battery.
	Headset HS-7 Comfortable handsfree operation with a remote control button for answering and ending calls makes this headset convenient and easy-to-use.
	XCS-1 Service Cable is used to connect FLS-4S to **SF-10** .
	SF-10 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.

PAGE 12 (20)

Approved 2.0

MGR

CMO Operations & Logistics
TRAINING & VENDOR Development
MULTIMEDIA CREATION & SUPPORT

Confidential

30.Jan.2007

	Test Pins for Flash Adapter **SF-10**
	RJ-79 Soldering Jig
	Lead-free Solder Wire Mandatory for lead-free products (Level 2 only).
	0772040 NMP Standard Toolkit • 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 867/4 6IP; 50mm (Torx 6 PLUS®) • Wera bit T6 867/4TX 6x50 • Wera 867/1 5IP; 25mm (Torx 5 PLUS®) • 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

![NOKIA Care logo]

PAGE 13 (20)   Approved 2.0
CMO Operations & Logistics   MGR
TRAINING & VENDOR Development
MULTIMEDIA CREATION & SUPPORT   Confidential   30.Jan.2007

10.SW-UPDATE

Flash Concept – (Point of Sales)

To use 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.
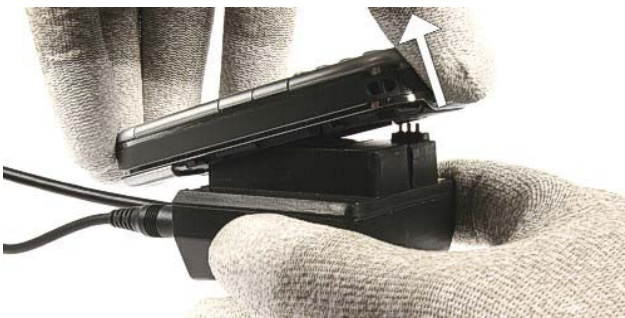
Easy Flash Concept	POS Flash Concept
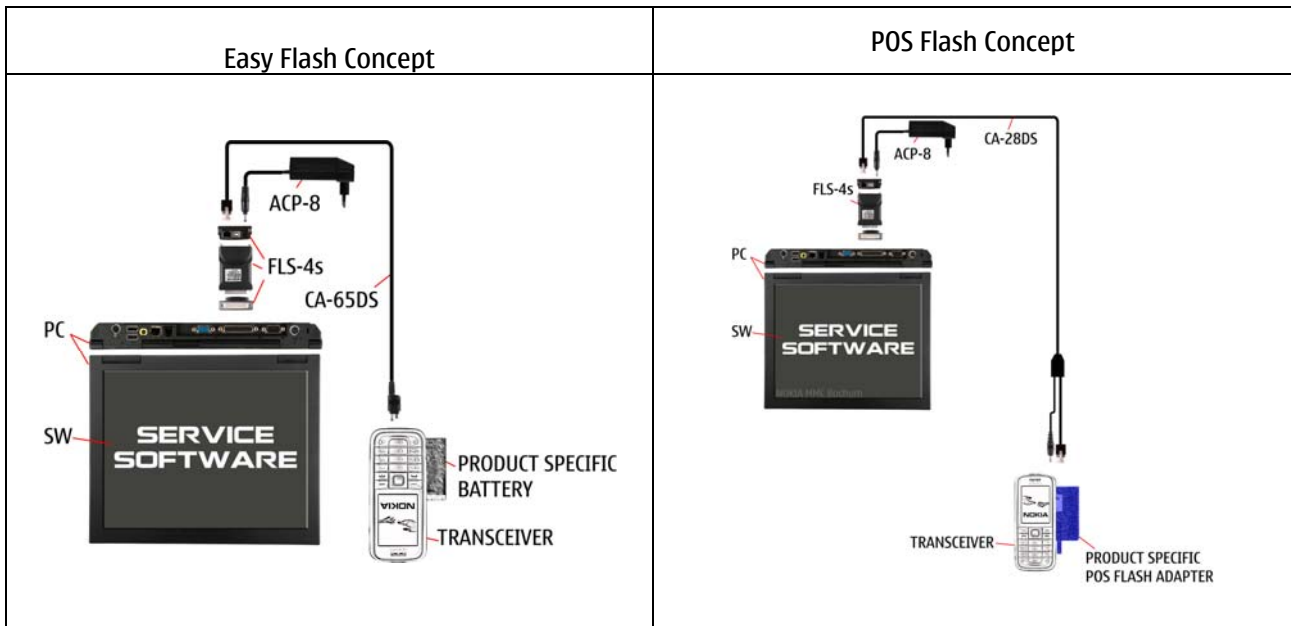
It is very important to follow this insertion and removal procedure, otherwise the contact pins of Flash Adapter will be damaged (only for POS Flash Concept).

Insert the Flash Adapter SF-10 like a battery, start at the Battery Connector side.

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

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

Now, take the unit away.

NOKIA
Care
CMO Operations & Logistics
TRAINING & VENDOR Development
MULTIMEDIA CREATION & SUPPORT   Confidential   30.Jan.2007

11.DISASSEMBLY INSTRUCTIONS

1.) Needed tools for disassembly and assembly.
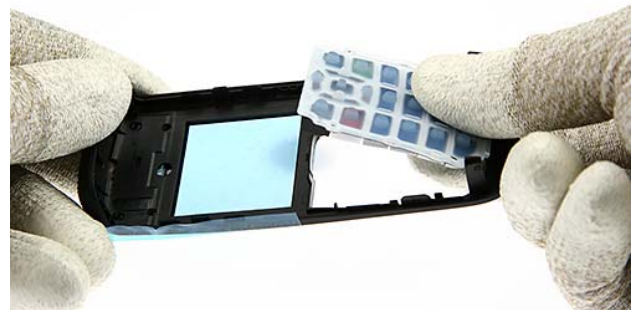

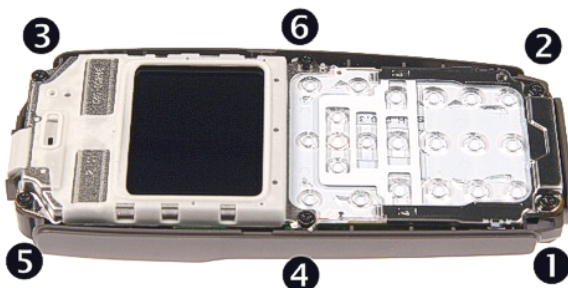2.) Protect the window with a film.

3.) Remove the **B-Cover**.

4.) Use the SRT-6 to unlock the **A-Cover** on both sides**.**

5.) Remove the **A-Cover**. Always start on the top side of the device when re-assembling the **A-Cover.**

6.) Remove the **Keymat** and protect the inner side of the window with a film.

7.) Unscrew the six, Torx Plus® size 6 screws in the shown order. For assembly, use the reverse order and a Torx Plus® size 6 driver with a torque setting of 24Ncm.

8.) Lift the **LCD Shielding** while pressing on the **LCD Module** with a clean cloth carefully.

PAGE 15 (20)

Approved 2.0
MGR

CMO Operations & Logistics
TRAINING & VENDOR Development
MULTIMEDIA CREATION & SUPPORT

Confidential

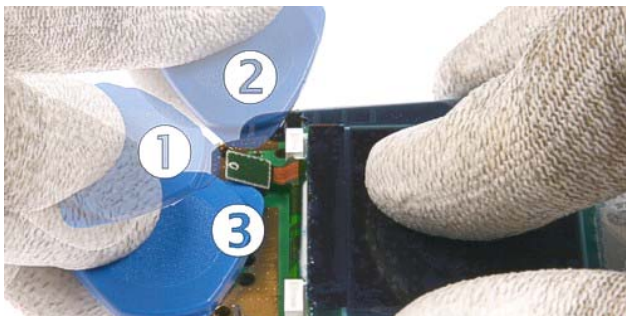30.Jan.2007

9.) Remove the **LCD Shielding**.

10.) Remove the **Acoustic Channel**.
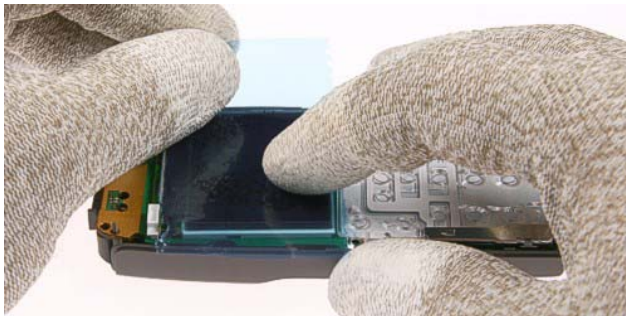
11.) Protect the **LCD Module** with a film.
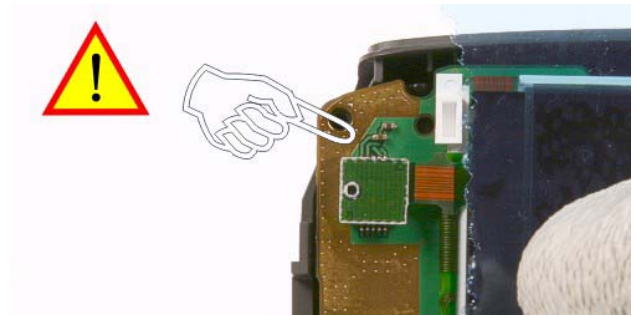
12.) Take care to the surrounding components when opening the LCD connector.
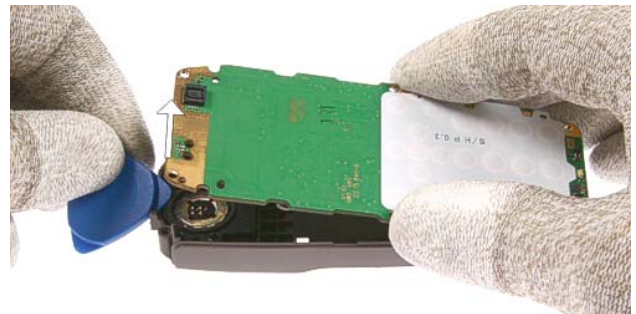

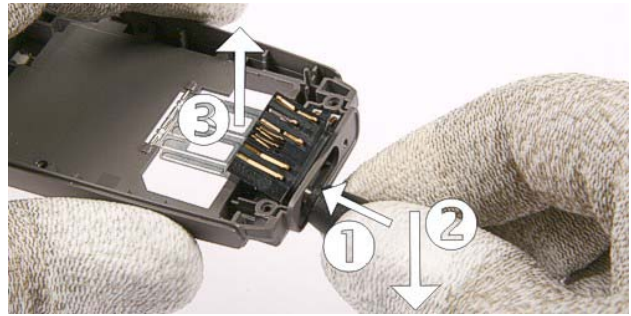13.) Use the SRT-6 to open the LCD connector in the order shown. Take care to the flex foil of the **LCD Module**.

14.) Remove the **LCD Module.**
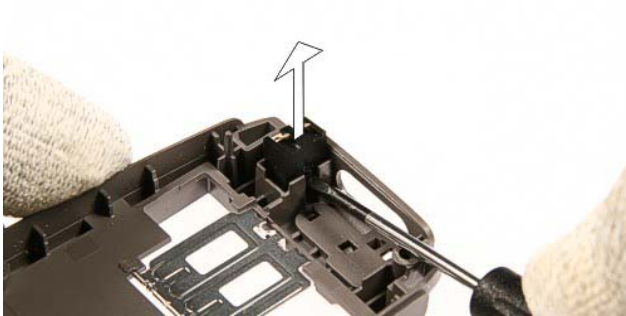

15.) Remove the **Light Guide Assy**.

16.) Lift the **Engine Module** a bit with the SRT-6 and remove it from the **D-Cover Assy**.

NOKIA Care

CMO Operations & Logistics
TRAINING & VENDOR Development
MULTIMEDIA CREATION & SUPPORT

MGR

Confidential

30.Jan.2007

17.) The **Antenna IHF Assy** drops out when turning the **D-Cover Assy**.
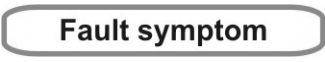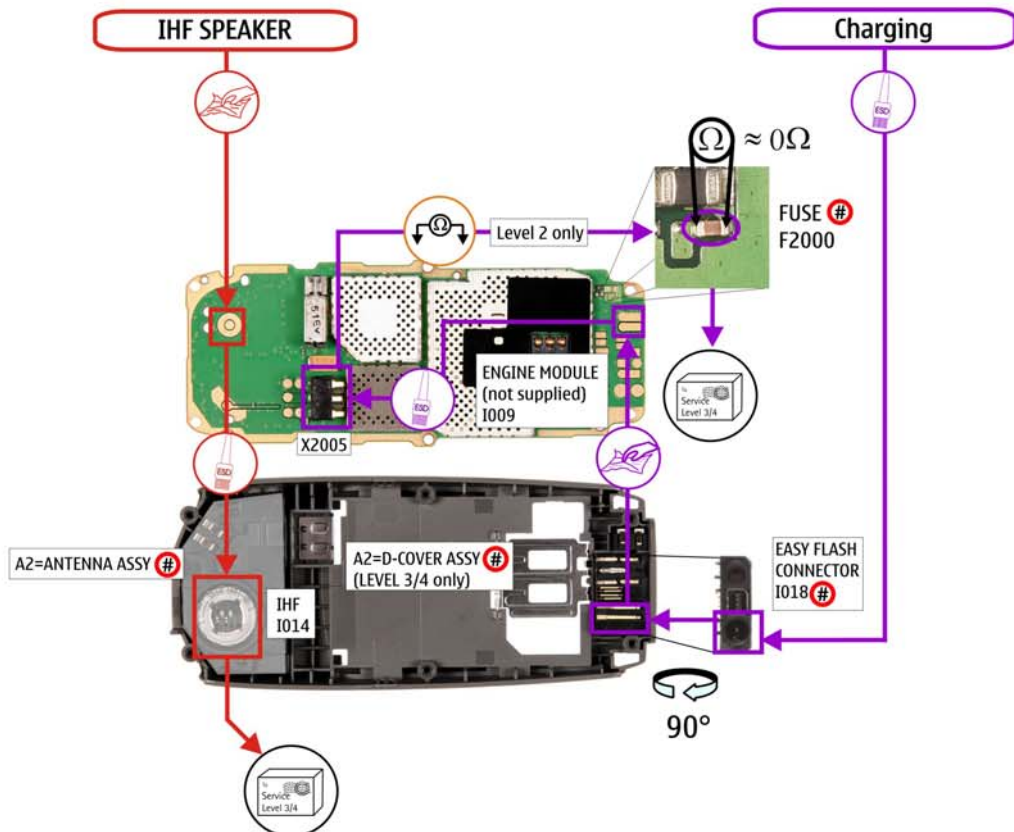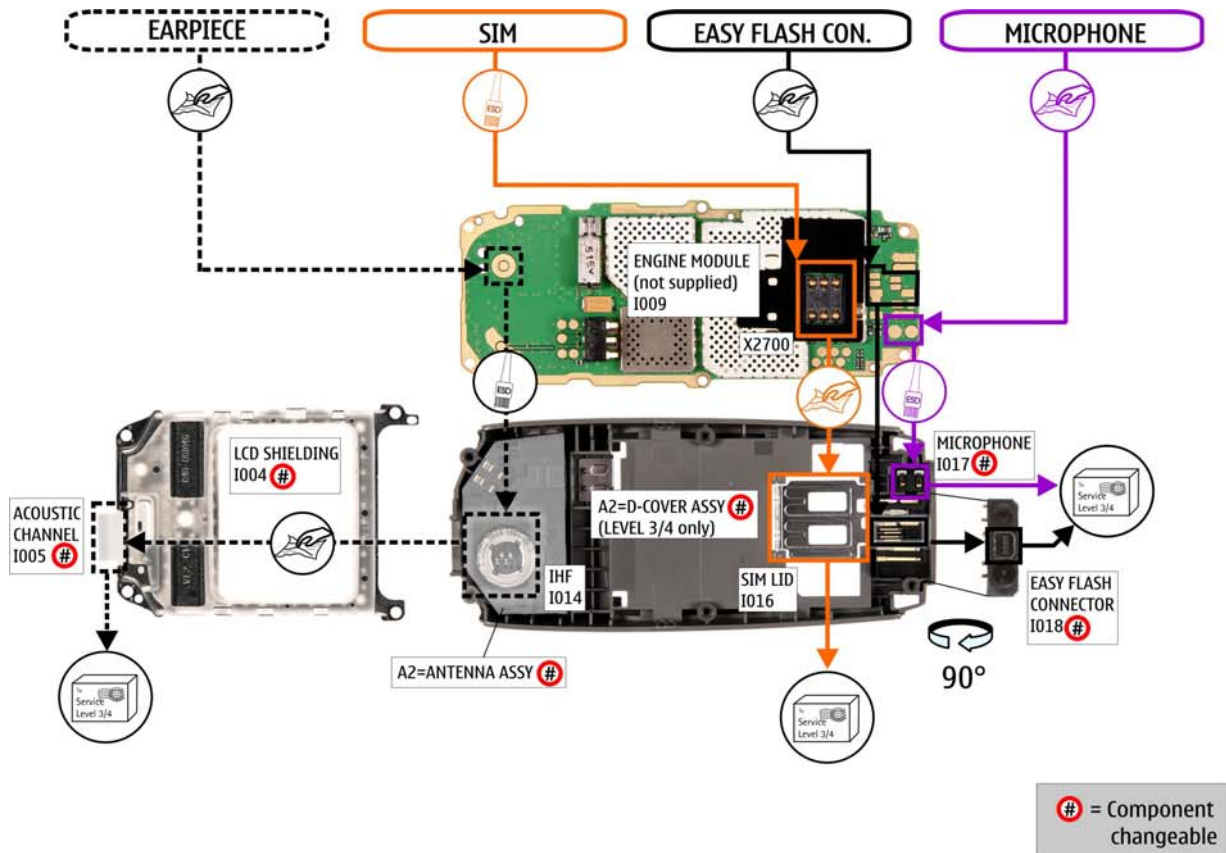

18.) Press out the **Easy Flash Connector** by using the DC-plug.

19.) Remove the **Microphone** with the slotted screwdriver.

12.LEGEND FOR QUICK TROUBLE SHOOTER

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

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

NOKIA
Care
CMO Operations & Logistics   MGR
TRAINING & VENDOR Development
MULTIMEDIA CREATION & SUPPORT   Confidential   30.Jan.2007

13.QUICK TROUBLE SHOOTER PART 1

NOKIA
Care

CMO Operations & Logistics   MGR
TRAINING & VENDOR Development
MULTIMEDIA CREATION & SUPPORT   Confidential   30.Jan.2007

14.QUICK TROUBLE SHOOTER PART 2

DISPLAY   POWER   KEYMAT

ENGINE MODULE
(not supplied)
I009

X2005

KEYMAT
I002 #

LCD MODULE
I006 #

H2400

ENGINE MODULE
(not supplied)
I009

DOMESHEET
I008 #

LIGHT GUIDE
ASSY
I007 #

To Service Level 3/4

SERVICE   HEADSET

ENGINE MODULE
(not supplied)
I009

EASY FLASH
CONECTOR
I018 #

ANTENNA
I013

A2=ANTENNA ASSY #

A2=D-COVER ASSY #
(LEVEL 3/4 only)

90°

= Component
changeable

15.BATTERY TEST

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

Please refer to the actual information on NOKIA Online.

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

http://www.cadex.com/