

# Service Manual

# Nokia 8910

## NHM-4

### Service Level 1&2

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## Introduction

The purpose of this document is to give Nokia service level 1&2 workshops aids to carry out service for 8910. The use of this Service Manual is only for Nokia authorized service partners additionally to other service documentation like Service Bulletins.

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, Nokia should be notified. 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".

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## Change History

Originator	Status	Version No.	Date	Comments
MWy	Draft	0.1	02.05.2002	Initial draft
MWy	Approved	1.0	06.06.2002	approval
MWy	Approved	2.0	17.06.2002	Battery Cover and Logo Plate added

Spare parts list

**SPARE PARTS**

ITEM/ CIRCUIT REF.	QTY	PART NO	PART NAME
I003		9430309	LOGO PLATE
I013		9590057	BATTERY COVER ASSEMBLY BLACK
I013		9590123	BATTERY COVER ASSEMBLY NATURAL TITANIUM

**SWAP UNITS**

	QTY	PART NO	PART NAME
		0073520	NHM-4NX N8910 SWAP EN-AR NATURAL
		0073521	NHM-4NX N8910 SWAP EN-AR BLACK
		0073522	NHM-4NX N8910 SWAP ENGINE IL NATURAL
		0073523	NHM-4NX N8910 SWAP ENGINE IL BLACK
		0073524	NHM-4NX N8910 SWAP ENGINE RU NATURAL
		0073525	NHM-4NX N8910 SWAP ENGINE RU BLACK
		0073526	NHM-4NX N8910 SWAP ENGINE FR BLACK
		0073527	NHM-4NX N8910 SWAP ENGINE FR NATURAL
		0073528	NHM-4NX N8910 SWAP ENGINE TR NATURAL
		0073529	NHM-4NX N8910 SWAP ENGINE TR BLACK
		0073530	NHM-4NX N8910 SWAP ENGINE PL NATURAL
		0073531	NHM-4NX N8910 SWAP ENGINE PL BLACK
		0073532	NHM-4NX N8910 SWAP ENGINE E&A NATURAL
		0073533	NHM-4NX N8910 SWAP ENGINE E&A BLACK

**SERVICE TOOLS**

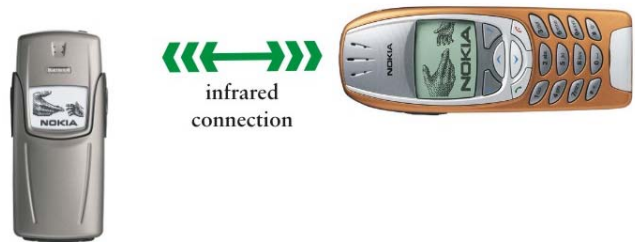
TYPE	QTY	PART NO	PART NAME
		0775265	FLA-16 FLASH LOADING ADAPTER
		0730218	XCS-1 SERVICE CABLE
		0080541	FLS-4S SALES PACK E&A
		0670246	BLB-2 BATTERY BLOCK
		0273001	DCV-4 DESKTOP STAND
		0271467	HDC-5 HEADSET
		0272169	TRAVEL CHARGER ACP-8E (EURO)
		0272172	TRAVEL CHARGER ACP-8X (UK)

## 1. SIMPLE INFRARED TEST

You need another NOKIA infrared device when testing infrared via sending a business card. The infrared windows of the devices must be directed to each other and should have a distance of approx. 15cm.

Make sure that infrared is activated in receiver device (e. g. 6310).

1. From Home Menu, select "**Names**"
2. Select "**Search**"
3. Select "**List**"
4. Select "**Details**" from one phonebook entry
5. Select "**Options**"
6. Select "**Send bus.card**"
7. Select "**Send via IR**"
8. Press red receiver button for Home Menu



**Note: A simple Bluetooth test is under development. If you are faced with Bluetooth problems, please send the unit to appropriate Service Center with higher Service Level.**

## 2. 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,

### Flash Concept – (Point of Sales)

**Note that ACF-8 charger is inside FLS-4S sales pack and cannot be ordered separately.**



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

## SOFTWARE UPDATE PREPARATION



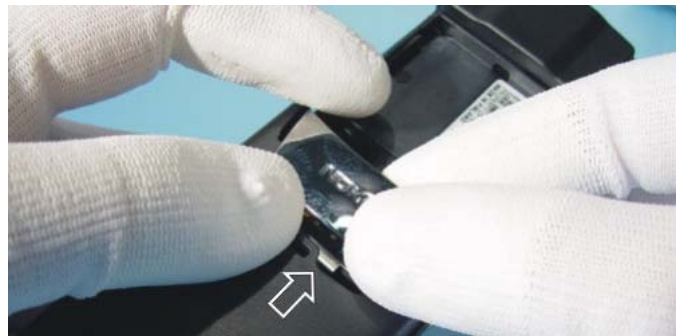
To remove the Battery Cover push the lock button with plastic tweezers and then push the Battery Cover forward softly.



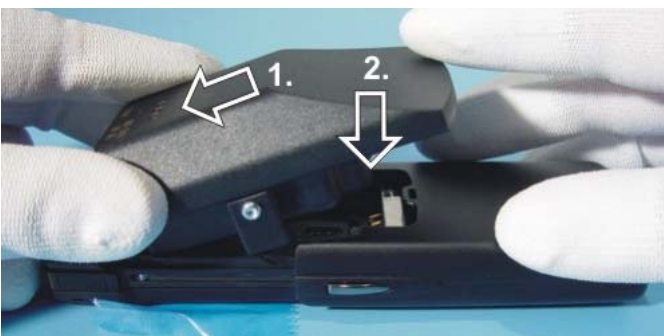
Lift the Battery Cover up and then pull it out carefully.



Press down the Grip Cover to release the snap of the Logo Plate.



Pull the Logo Plate smoothly on both sides.



First, place the Flash Adapter (FLA-16) to the hole on the left side (no.1). Then press the Adapter down on the right side (no.2).



Press the adapter carefully downwards with low pressure, until it clicks. Take care that the FLA-16 adapter fits well.

### 3. GENERAL REPAIR INFORMATION

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

- Use gloves to avoid corrosion and fingerprints.
- Protect windows and displays with a foil to avoid dust and scratches.
- Use always original Nokia parts and accessories.
- Always use your own equipment for testing which 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.

*These General Service Bulletins have to be followed:*

- SB-089: Don't try to service proto types (indicated on Type Label).
- SB-107: Be sure that you have minimum hardware requirements in place.
- SB-121: If one of your service tools cause malfunction, return the defective part.
- SB-124: Service Policy for packaging serviced products
- SB-132: You need a **Golden Phone** for inspecting your measuring equipment.

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



**4. 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"/> R Repair	<input type="checkbox"/> RR Repair and Refurbishment
<input type="checkbox"/> RO Refurbishment only	<input type="checkbox"/> SW Software update
<input type="checkbox"/> A Analysis	<input type="checkbox"/> C Claim
<input type="checkbox"/> 24h 24 h Service	<input checked="" type="checkbox"/> SR 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