# SERVICE MANUAL

## NPL-3 Cellular Phones

NMP Part No: Original 0275648

**COMPANY CONFIDENTIAL** 



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#### Amendment Record Sheet

Amendment No	Date	Inserted By	Comments
	03/03	MPH	Issue 1

#### Nokia NPL-3 Service Manual Structure

1. General Information

2. Parts List with Schematic and Layout Diagrams

- 3. Service SW Instructions and Service Concepts
- 4. Service Tools
- 5. Disassembly and Assembly Instructions
- 6. Troubleshooting
- 7. System Module & User Interface

#### **IMPORTANT**

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

#### **Company Policy**

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While every endeavour has been made to ensure the accuracy of this document, some errors may exist. If any errors are found by the reader, NOKIA CORPORATION should be notified in writing.

Please state:

Title of the Document + Issue Number/Date of publication Latest Amendment Number (if applicable) Page(s) and/or Figure(s) in error

Please send to:

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Note: This manual is COMPANY CONFIDENTIAL material.

#### 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 ELEC-TRONIC ENGINE MANAGEMENT SYSTEMS AND ANTI-SKID BRAKING SYS-TEMS. 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 CELLU-LAR TELEPHONES, MAY INTERFERE WITH THE FUNCTIONALITY OF INADE-QUATELY 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 antistatic 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.

#### **ESD** Protection



Nokia requires that phone repair places have sufficient ESD protection (against static electricity) when servicing cellular phones.

A cellular phone, which is ready for use, can be handled normally without ESD protection. The SIM card and battery can be replaced in normal conditions of use.

To replace the color cover ESD protection must be applied, except for the phone covers which can be replaced by the customer.

All electronic parts of the phone, including the display, 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 phone or handling the phone components must be done under ESD protection.

ESD protected spare part packages MUST NOT be opened/closed out of an EPA.

For more detailed information about ESD protection and EPA, contact your local Nokia After Market Services representative.