

Customer Care Solutions
Technical Documentation

SERVICE MANUAL

[NMP Part No. 0275865]

RH-19 Cellular Phone -Nokia 3100-

NOKIA

COMPANY CONFIDENTIAL

Customer Care Solutions Technical Documentation

Copyright Statement

Copyright © 2003 Nokia Corporation. All Rights Reserved

Reproduction, transfer, distribution or storage of part or all of the contents in this document in any form without the prior written permission of Nokia is prohibited.

Nokia, Nokia Connecting People, X and Y are trademarks or registered trademarks of Nokia Corporation. Other product and company names mentioned herein may be tradenames of their respective owners.

Nokia operates a policy of continuous development. Nokia reserves the right to make changes and improvements to any of the products described in this document without prior notice.

Under no circumstances shall Nokia be responsible for any loss of data or income or any special, incidental, consequential or indirect damages howsoever caused.

The contents of this document are provided "as is". Except as required by applicable law, no warranties of any kind, either express or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose, are made in relation to the accuracy, reliability or contents of this document. Nokia reserves the right to revise this document or withdraw it at any time without prior notice.

The availability of particular products may vary by region.

IMPORTANT

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

COMPANY CONFIDENTIAL

Customer Care Solutions

Technical Documentation

Warnings and Cautions

Please refer to the product's user guide for instructions relating to operation, care and maintenance including important safety information. Note also the following:

Warnings:

1. IF THE DEVICE CAN BE INSTALLED IN A VEHICLE, 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 PRODUCT 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.

COMPANY CONFIDENTIAL

Customer Care Solutions Technical Documentation

For your safety

QUALIFIED SERVICE

Only qualified personnel may install or repair phone equipment.

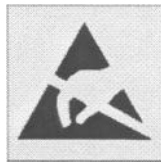
ACCESSORIES AND BATTERIES

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.

ESD Protection



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

Any product of which the covers are removed must be handled with ESD protection. The SIM card and battery can be replaced in normal conditions of 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.

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 detailed information and local requirements about ESD protection and ESD Protected Area, contact your local Nokia After Market Services representative.

COMPANY CONFIDENTIAL

Customer Care Solutions Technical Documentation

Care and Maintenance

The product is a product of superior design and craftsmanship and should be treated with care.

Keep the product dry. Precipitation, humidity and all types of liquids or moisture can contain minerals that will corrode electronic circuits.

Do not use or store the product in dusty, dirty areas. Its moving parts can be damaged.

Do not store the product in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.

Do not store the product 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 product. Rough handling can break internal circuit boards.

Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the product.

Do not paint the product, Paint can clog the moving parts and prevent proper operation.

COMPANY CONFIDENTIAL

Customer Care Solutions Technical Documentation

Company Policy

Our policy is of continuous development; details of all technical modifications will be included with service bulletins.

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: Nokia Corporation

Nokia Mobile Phones Ltd

CCS Technical Documentation

PO Box 86

FIN-24101 SALO

Finland

COMPANY CONFIDENTIAL

Customer Care Solutions Technical Documentation

RH-19 Service Manual Structure

- 1 General information
- 2 Parts lists and Component layout
- 3 Service Software instructions
- 4 Service Tools
- 5 Disassembly & Re-assembly
- 6 Baseband Description & Troubleshooting
- 7 RF Description & Troubleshooting
- 8 Schematics

COMPANY CONFIDENTIAL