Nokia Customer Care 2255 (RM-97) Mobile Terminal

Service Tools

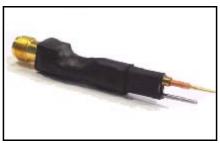


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Service Tools

AAS-10A RF Probe

The AAS-10A allows you to troubleshoot the handset. The probe can be used with the XRS-6 RF Cable.



CA-5S DC Service Cable

The CA-5S is used for energy management calibration with the JBV-1 Docking Station.



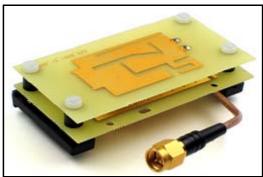
CA-57RS RF Test Cable

The CA-56RS test cable is used with Module Jig (MJ-72) for RF engine testing and tuning. This cable is 10 cms long. It snaps directly on the mobile terminal's RF connector and converts the output to an surface mounting assembly connector.



CPL-8 Antenna Coupler

The CPL-8 allows authorized service centers to test the antenna during handset troubleshooting. The coupler is attached to (and detached from) the DA-55 Docking Station Adapter.



Note: The DA-55 and the coupler assembly fit into the JXS-2 Shield Box

DA-55 Docking Station Adapter

The DA-55 works in conjunction with the JBV-1 Docking Station and the FPS-8/10 Prommer Box to allow calibration, tuning and/or software flashing of the handset. The DA-55 also has a built-in RUIM card reader and supports both Local and Normal modes.



DAU-9S FBUS/MBUS Cable

The DAU-9S is a general purpose cable that supports FBUS/MBUS communication between a Mod-10 device and a PC.



FPS-8 Flash Prommer

The FPS-8 is used for mobile terminal flashing at authorized service centers.



FPS-10 Flash Prommer

The FPS-10 replaces the FPS-8 Flash Prommer. The FPS-10 allows the flash code to be pre-loaded into the unit's memory and then can be flashed directly to the mobile terminal at high speeds. A smart card is required when flashing DCT-4 mobile terminal.

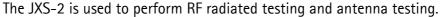


JBV-1 Docking Station

The JBV-1 connects flash prommers. The docking station can be powered by the FPS-8 Flash Prommer or by an external power supply.



JXS-2 Shield Box





MJ-72 Module Jig

The MJ-72 is used as a means to secure the PWBs and allows easy access to critical areas of the mobile terminal during troubleshooting. It supports regulated and unregulated DC input voltages, Local and Normal mode operations, and UIM card reader. The MJ-72 also supports simultaneous RF connections to the CDMA engine.



Note: CA-56RS is an optional cable used with the MJ-72 module jig.

PKD-1 Software Security Dongle

The PKD-1 is a hardware dongle that, when connected to the parallel (LPT) port of the PC, enables the use of the service software. It is not possible to use the service software without the dongle. Printers or other peripheral devices can be connected to the PC through the dongle, if needed.



Caution: Make sure that you have switched off the PC and the printer before making connections.

Caution: Do not connect the PKD-1 to the serial port. You may damage your PKD-1 and/or your PC.

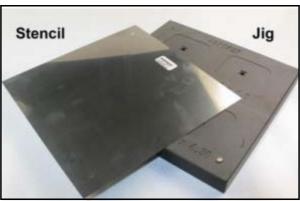
PCS-1 Power Cable

The PCS-1 is used to connect the service tools (e.g., JBV-1 Docking Station, MJS-82 Service Jig) to an external power supply.



RJ-18 Power Amp LGA Rework Jig and ST-16 PA Stencil

The ST-16 stencil allows rework on LGA-type components that do not have pre-tinned pads. Both power amps require the use of this stencil. The stencil is designed to specifically fit the PA pad configuration and dimensions. The RJ-18 fits the physical dimension of the PAs.

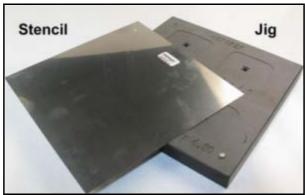


Note: Used in conjunction with the SPS-1 Paste Spreader.

Note: The RJ-13 is not intended to serve as a test jig.

RJ-64 LNA LGA Rework Jig and ST-24 Stencil

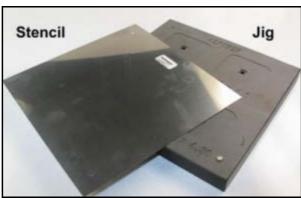
The ST-24 stencil allows rework on LGA-type components that do not have pre-tinned pads. The LNA requires the use of this stencil. The stencil is designed to specifically fit the pad configuration and dimensions while the rework jig fits the physical dimension of the LNA.



Note: Used in conjunction with the SPS-1 Paste Spreader.

RJ-65 TX IC LGA Rework Jig and ST-25 Stencil

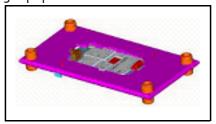
The ST-25 stencil allows rework on LGA-type components that do not have pre-tinned pads. The Tx RF IC requires the use of this stencil. The stencil is designed to specifically fit the IC pad configuration and dimensions while the rework jig fits the physical dimension of the IC.



Note: Used in conjunction with the SPS-1 Paste Spreader.

RJ-77 Soldering Jig

The RJ-77 serves as a mechanical holder for desoldering and soldering of components using approved soldering equipment.



SA-54 RF Calibration Adapter

The SA-54 adapter is used to replicate the mobile terminal's RF when calculating cable path losses.



SF-65 Flash Adapter

The SF-65 Flasher Adapter replaces the mobile terminal's battery to provide continuous power to the handset. The mobile terminal can be flashed through flash pins in the battery compartment. The SF-65 Flasher Adapter has power regulation circuitry for overvoltage and over-current protection. A slide switch allows for local and normal modes.



SRT-6 Opening Tool

The SRT-6 is used to open and remove parts during disassembly of the mobile terminal.



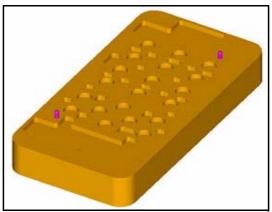
SS-13 Tuning Docking Station

The SS-13 is used with the DA-55 Docking Station Adapters for CDMA RF autotuning.



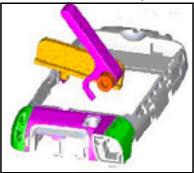
SS-75 Domesheet Alignment Jig

The SS-75 is used to replace the domesheet on the PWB engine. It is used to align the domesheet to the PWB.



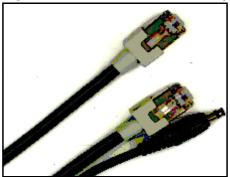
SS-87 Antenna Removal Tool

The SS-87 is used to remove the antenna and open the C/D cover.



XCS-1 Service Cable

The XCS-1 provides both power and communication when flashing the mobile terminal using the FLS-4S Flashing Device and the SF-64 flash adapter.





XCS-4 Cable

The XCS-4 is a general purpose cable for flashing and communicating with the mobile terminal. It is used to connect the FPS-8 Flash Prommer to the docking station adapter or the service jig.



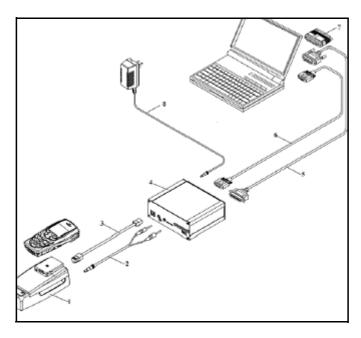
XRS-6 RF Cable

The XRS-6 is used to connect service tools to RF measuring equipment.



Service Configurations

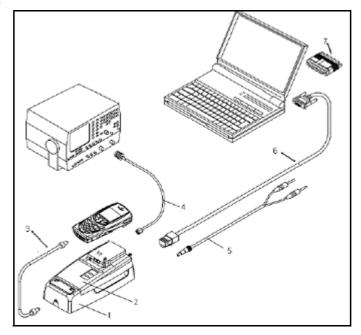
Service Setup 1



Item	Name	Туре
	Docking Station	JBV-1
1	Docking Station Adapter	DA-55
2	DC Power Cable	PCS-1
3	Modular Cable	XCS-4
4	Flash Prommer Box	FPS-8 or FPS-10
5	Printer Cable (included with FPS-8)	CA-10DS
6	D9-D9 Cable (included with FPS-8)	AXS-4
7	SW Protection Key	PKD-1
8	AC Charger	ACF-8

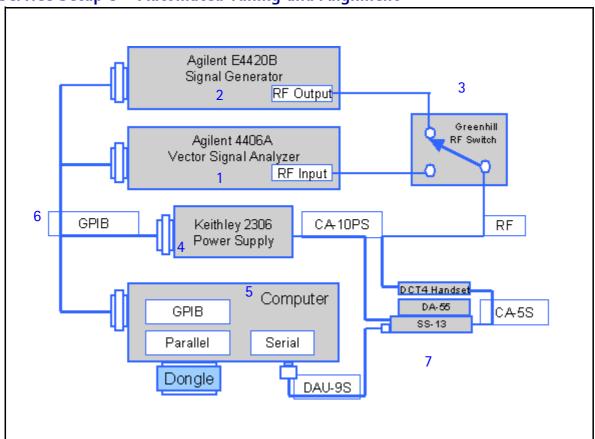


Service Setup 2



Item	Name	Туре
1	Docking Station	JBV-1
2	Docking Station Adapter	DA-55
3	DC Service Cable	CA-5S
4	RF Antenna Cable	XRS-6
5	DC Power Cable	PCS-1
6	Service MBUS Cable	DAU-9S
7	SW Protection Key	PKD-1

Service Setup 3 - Automated Tuning and Alignment



Item	Name	MFR	Model #	QTY	Comment
1	Vector Signal Analyzer	Agilent	E4406A	1	B78, CDMA 2000 measurements
2	Signal Generator	Agilent	E4421B	1	Digital signal generator with high- stability oscillator and high-spectral purity
3	RF Switch	GreenHill	TVi9901	1	RF switch with GPIB control
4	Power Supply	Keithley	K2306	2	Programmable with sense wire
5	Win2000 PC			1	Dell with Pentium III or above, network card, 256M RAM, 20GB HD, CD-ROM, etc.
6	GPIB Interface	NI	GPIB-USB-A	2	USB to GPIB adapter (184983G-01)
7	Docking Station	Nokia	SS-13	1	For DCT4 handset tuning.
8	10dB Attenuator				
9	Security Key (Dongle)	Nokia	PDK-1		

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