





Nokia Customer Care 2112 (RH-57) Series Transceivers





Service Tools





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Model 2112 Service Tools



JBV-1 Docking Station	MJF-17 Docking Station Adapter
0770298	0774282
	
<p>The docking station and the docking station adapter are needed for Mbus, Fbus, RF, and audio connections. This setup allows connection between flash prommers. When the audio box is connected, it has to be connected to the phone's audio connector. The docking-station can be powered by FPS-8 (using the PCS-1 and XRS-4 cables) or external power supply. You must update your JBV-1 to the latest firmware to properly operate LYNX-type handsets.</p>	<p>The MJF-17 works in conjunction with the JBV-1 docking station and the FPS-8 prommer box to allow calibration, tuning, and software flashing of the phone. It supports the LYNX battery interface, which does not require BTEMP. The MJF-17 also has a built-in RUIIM card reader.</p>


CA-25RS RF Test Cable	SA-54 RF Calibration Adapter
0730316	0780318
	
<p>After removing the A-cover, the CA-25RS snaps directly on the phone's RF connector and converts the output to an SMA connector. This test cable is used for CDMA RF engine testing and tuning.</p>	<p>The SA-54 adapter is used to replicate the phone's RF when calculating cable path losses.</p>

FPS-8 Flash Prommer	AAS-10A RF Probe
0080321	0730306
	
<p>The FPS-8 flash prommer is used for flashing at service centers with Phoenix service software.</p>	<p>The AAS-10A RF probe can be used for RF trouble-shooting. The AAS-10A requires a SMA(M)-type connector on the test cable.</p>
SS-13 Tuning Docking Station (CDMA)	FLS-4S POS Flash Dongle
0080852	0081482
	
<p>SS-13 is used with the MJF-x/DA-x flashing adapters (shown with MJF-17).</p>	<p>The Point of Sale (POS) flash is a low-cost software upgrade tool. This requires XCS-1 cable and ACF-8 for operation.</p>

CA-22DS Service Cable	MJ-42 Module Test Jig
0730311	0780317
	
<p>This cable is used for bottom connector flashing using FLS-4S or FLC-20.</p>	<p>This jig allows phone PWB-level service and troubleshooting for authorized service centers. The MJ-42 supports regulated and unregulated DC input voltages and includes Local and Normal mode operations, a headset jack for audio tests, a RUIM card reader, and a second DC input for VCHAR used in EM tuning. The jig also supports simultaneous RF connections to the CDMA engine. A completely functional UI module is provided on the right side. The MJ-42 supports the RJ-32 RF cable.</p>
DAU-9S F/MBUS Cable	DAU-9T FBUS Cable
0730108	0730267
	
<p>This is a general-purpose cable to support F / MBUS communication between a Mod-10 device and a PC. This cable is used for diagnostic purposes.</p>	<p>The MBUS cable DAU-9T provides a connection from the serial port of the computer to the system connector of the phone. This cable is used for diagnostic purposes.</p> <p><i>Note: This cable does not support M-BUS.</i></p>

DKU-5F USB Single Flash Cable	XCS-4 Modular Cable
0080738	0730178
	
<p>For use with the Spirent UPST and UMPP service software.</p> <p><i>Note: The cable cannot be used as a straight through USB connection cable.</i></p>	<p>XCS-4 Service Cable is a modular cable for flashing DCT4 products.</p>

RJ-32 Rework Jig	PKD-1 SW Security Device
0770757	0750018
	
<p>The rework jig is a PWB component that allows de-soldering and soldering.</p>	<p>SW security device PKD-1 is hardware device that, when connected to the parallel (LPT) port of the PC, enables the use of the service software. Without the dongle present, it is not possible to use the service software. Printers or other peripheral devices can be connected to the PC through the dongle, if needed.</p> <p><i>Caution: Make sure that you have switched off the PC and the printer before making connections. Also, do not connect the PKD-1 to the serial port. You may damage your PKD-1.</i></p> <p><i>Note: PKD-1RD dongles are restricted to Nokai Product Creation Centers only.</i></p>

PCS-1 DC Power Cable
0730012

The PCS-1 Power Cable is used to connect the service tools to an external power supply.

Flashing, Testing, and Tuning

Tightened performance specifications require more precise equipment and methods for testing and alignment. Manual tuning cannot provide accurate results for the 2112, which means that this test has to be automated.

These setups are intended to be with the Phoenix Service Software. Both manual testing and automated tuning are permitted with Phoenix Service Software.

Service Configuration 1: Point of Sales Flashing



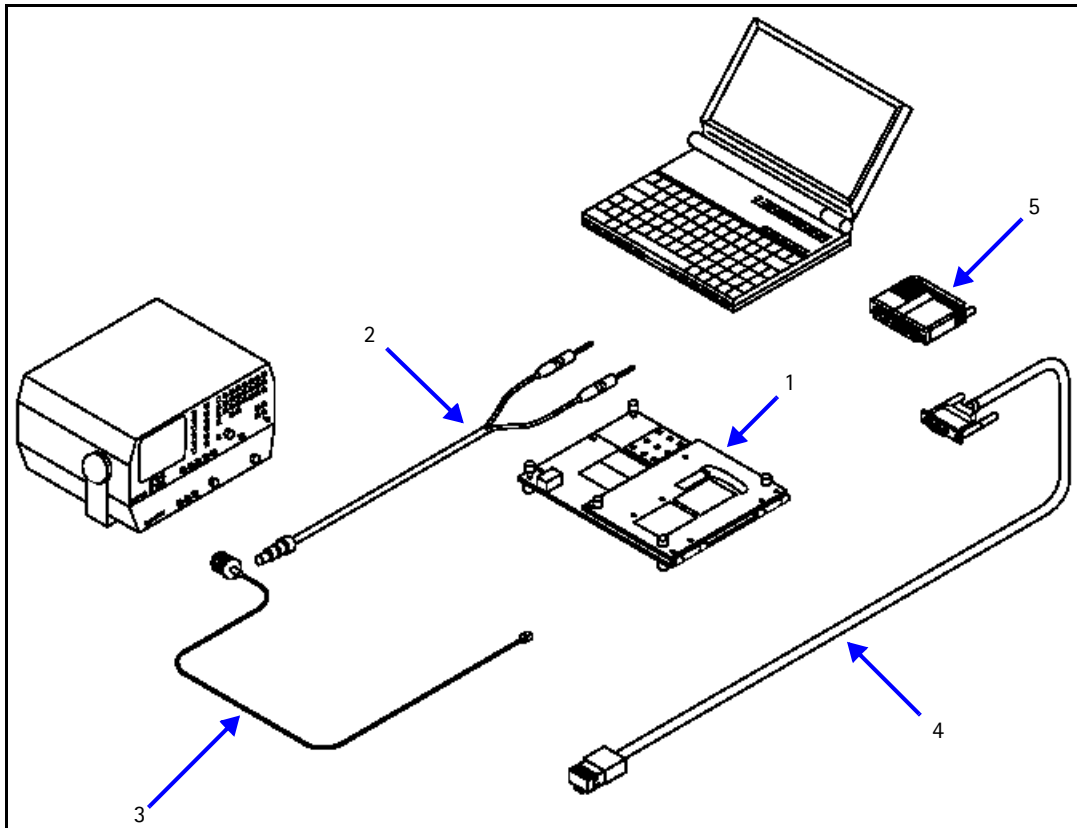
Item	Name	Type	Code
1	FLS-4S flash device (sales pack) (ACF-8 power supply is included in the FLS-4S sale pack)	FLS-4S	0080543
2	Service cable	CA-22DS	0730311
	Point-of-sale service software	Diego Phoenix	8405139 8407840
NOTE	Other POS flashing configurations available: USB single-flash cable (DCT4 only) USB flash cable for DCT3/DCT4 handsets	DKU-5F FLC-20	0080738 0081544

Service Configuration 2: Flash Programming Using Docking Station



Item	Name	Type	Code
1	Flash prommer box (sales pack) Included in FPS-8 sales pack: Service cable Serial cable Power supply	FPS-8 CA-10DS AXS-4 ACF-8	0080321 0730298 0730090 0680032
2	Docking station	JBV-1	0770298
3	Docking adapter	MJD-17	0774282
4	DC power cable	PCS-1	0730012
5	Modular cable	XCS-4	0730178
	Software protection key (not shown)	PKD-1	0750018
	Service software	CDMA Phoenix	8407840

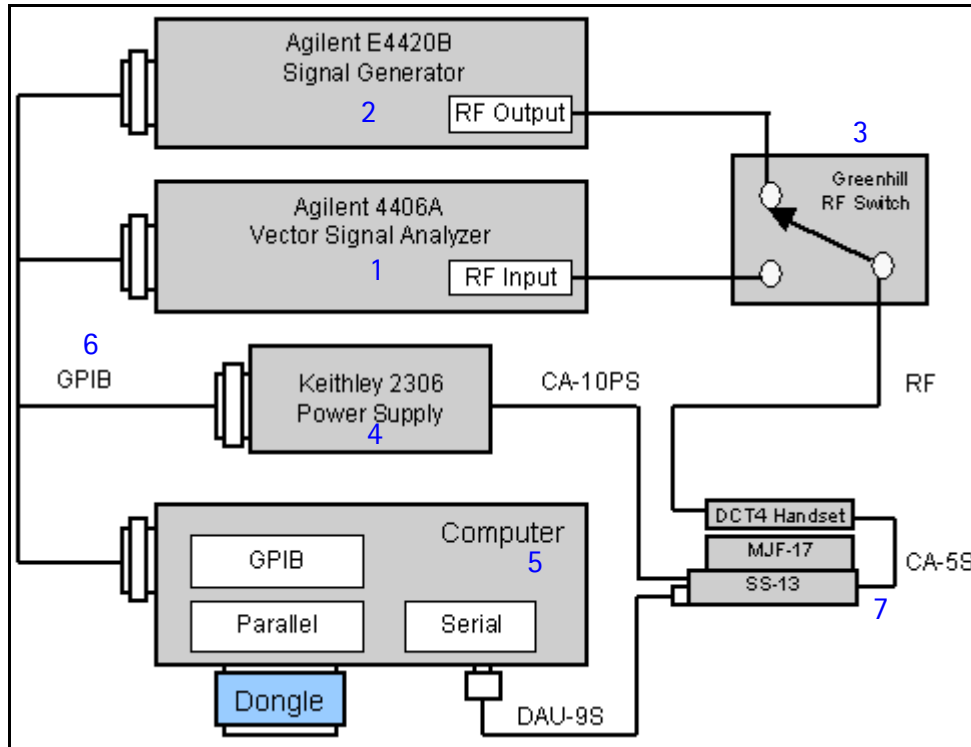
Service Configuration 3: Covers-Off Troubleshooting Using Service Jig



Item	Name	Type	Code
1	Module repair jig (includes RF test cable)	MJ-42 CA-25RS	0780317 0730316
2	DC power cable	PCS-1	0730012
3	RF test cable	XRS-6	0730231
4	Service MBUS/FBUS cable	DAU-9S	0730108
5	Software protection key	PKD-1	0750018
	Service software (not shown)	Phoenix	8407840

Service Configuration 4: Automated Tuning and Alignment

This setup is used for tuning of the handset at Nokia Authorized Service Centers.



Automated Tuning and Alignment Equipment List

Item	Name	MFR	Model #	QTY	Comment
1	Vector Signal Analyzer	Agilent	E4406A	1	
2	Signal Generator	Agilent	E4420B	1	Digital signal generator with high-stability oscillator and high-spectral purity
3	RF Series	GreenHill	TVi9901	1	
4	Power Supply	Keithly	K2306	2	Programmable with sense wire
5	Win2000 PC				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. SS-13 is specifically designed for CDMA RF tuning.

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