

**Nokia Customer Care
2118 (RH-77)
Mobile Terminal**

Service Tools

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Model 2118 Service Tools

AAS-10A RF Probe

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



CA-22DS Flash Cable

The CA-22DS allows bottom connector flashing using the FLS-4S Flash Adapter or the FLC-20 Flash Device.



CA-25RS RF Test Cable

The CA-25RS test cable is used for RF engine testing and tuning. This cable snaps directly on the mobile terminal's RF connector and converts the output to an surface mounting assembly connector. Removal of the A-cover is required.



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.



DAU-9T FBUS Cable

The DAU-9T provides a connection from the serial port of the computer to the Pop-port™ connector of the mobile terminal.



DKU-5F Flash Cable

The DKU-5F is a single-cable flashing solution for CDMA handsets that include Pop-port™ connectors. This cable supports Diego, Phoenix, and UPST service tools.



Note: Customers using the UPST application also require a Spirent protection key (dongle).

Note: The DKU-5F is not supported in the APAC and LTA markets.

FLS-4S Flashing Device

The FLS-4S allows Point of Sale (POS) locations to flash the handset and power the FLA-44 Flash-loading Adapter. The FLS-4S works with the XCS-1 Service Cable (not included).



FPS-8 Flash Prommer

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



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.



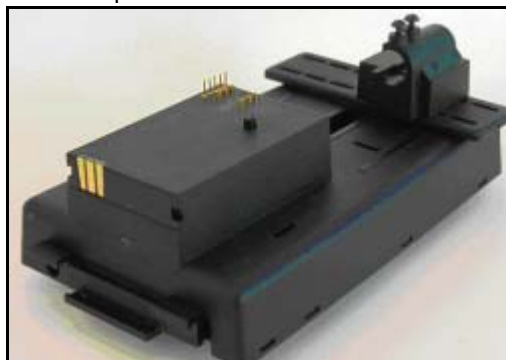
MJ-42 Module Test Jig

The MJ-42 allows PWB-level service and troubleshooting for authorized service centers. It 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 MJ-42 also supports simultaneous RF connections to the CDMA engine. A completely functional UI module is provided on the right side.



MJF-17 Docking Station Adapter

The MJF-17 works in conjunction with the JBV-1 Docking Station and the FPS-8 Flash Prommer to enable tuning, testing, and flashing. The MJF-17 supports the LYNX battery interface, which does not require BTEMP, and also has a built-in RUIM card reader.



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.



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.

RJ-32 Rework Jig

The RJ-32 serves as a holder for PWB component de-soldering and soldering.



SA-54 RF Calibration Adapter

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



SS-13 Tuning Docking Station

The SS-13 is used with the MJF-x/DA-x Docking Station Adapters (shown with MJF-17) for CDMA RF autotuning.



XCS-4 MBUS/FBUS 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.



Flashing, Testing, and Tuning

Use the following setups with either manual or automatic tuning with the Phoenix Service Software.

Service Configuration 1: Point of Sales Flashing



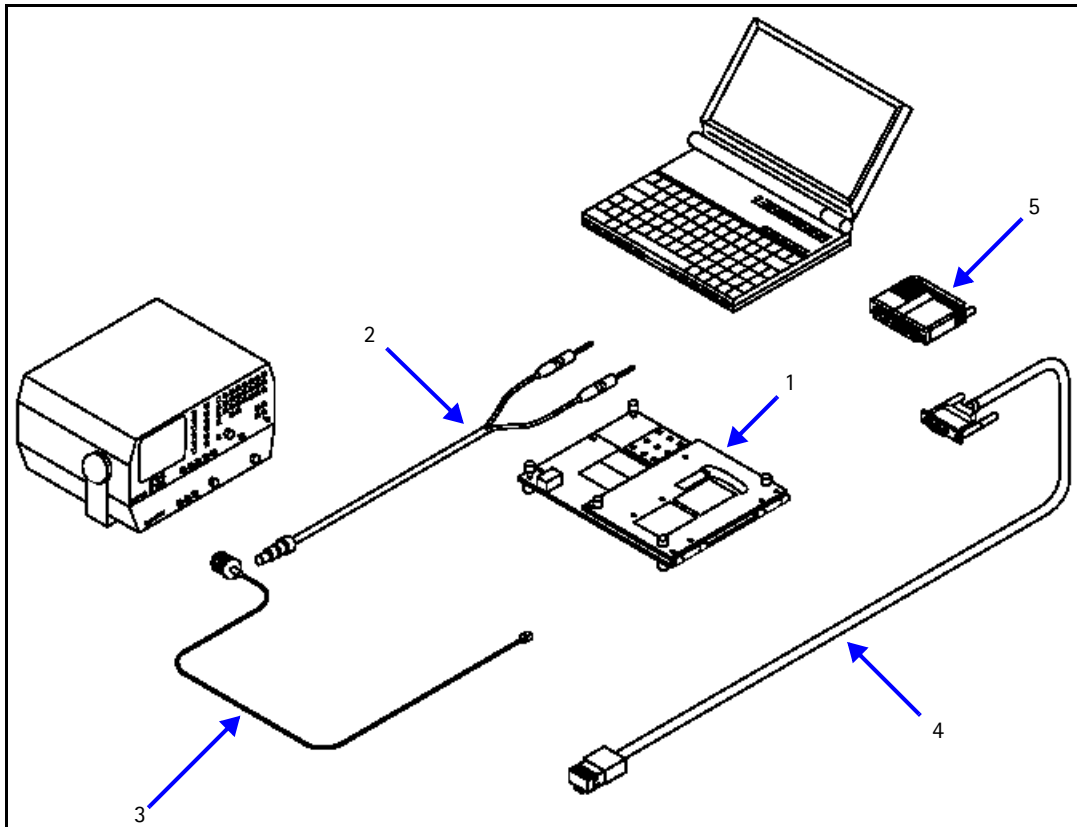
Item	Name	Type	Code
1	FLS-4S flash device (sales pack) (ACF-8 power supply is included in the FLS-4S sale pack)	FLS-4S	0080543
2	Service cable	CA-22DS	0730311
	Point-of-sale service software	Diego Phoenix	8405139 8407840
NOTE	Other POS flashing configurations available: USB single-flash cable (DCT4 only)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

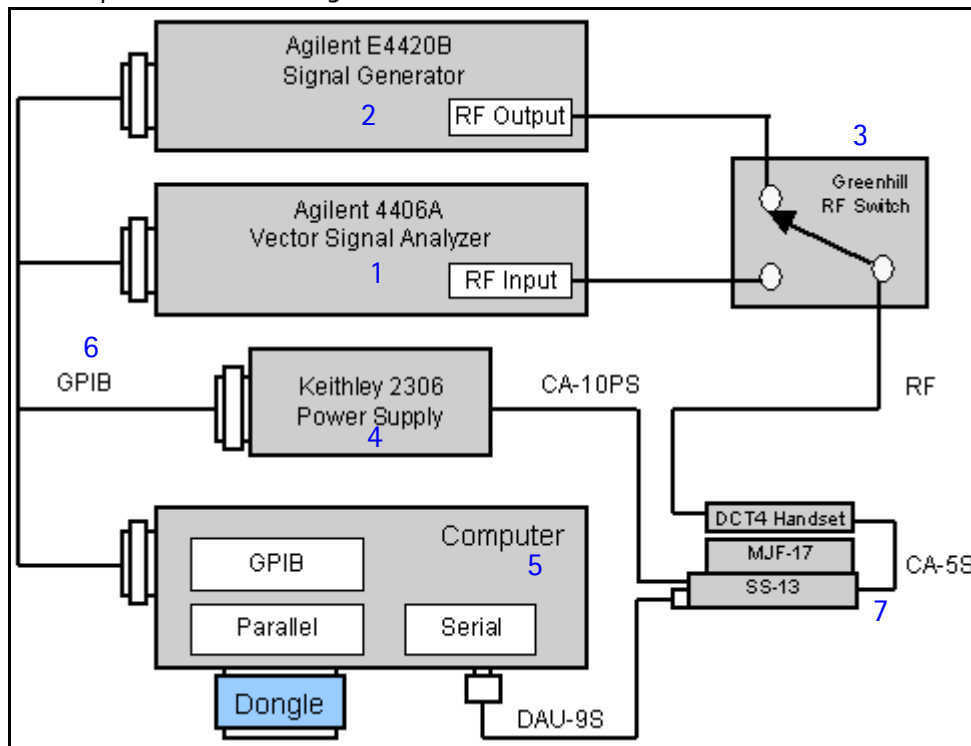
Service Configuration 3: Covers-Off Troubleshooting Using Service Jig



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.



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.