# Nokia Customer Care 6265/6265i/6268 (RM-66) Mobile Terminals

# **Service Tools**



Contents	Page	
Service Tools	3	
CA-53 Accessory/Flash Cable	3	
CA-56RS RF Test Cable	3	
CA-57RS RF Test Cable	3	
CPL-8 GPS Antenna Coupler	4	
DA-57 Docking Station Adapter	4	
DAU-9S FBUS/MBUS Cable	4	
FLS-4S Flashing Device	5	
FPS-8 Flash Prommer	5	
FPS-10 Flash Prommer	5	
JBV-1 Docking Station	5	
JXS-2 Shield Box	6	
MJ-73 Module Jig	6	
PKD-1 Software Security Dongle		
RJ-18 LGA Rework Jig and ST-16 PA Stencil		
RJ-55 LGA Rework Jig and ST-20 Stencil		
Note: Used in conjunction with the SPS-1 Paste Spreader		
RJ-64 LGA Rework Jig and ST-24 Stencil		
RJ-65 LGA Rework Jig and ST-25 Stencil		
RJ-71 LGA Rework Jig and ST-26 Stencil		
RJ-90 Soldering Jig		
RJ-100 LGA Rework Jig and ST-34 PA Stencil		
RJ-101 LGA Rework Jig and ST-35 PA Stencil		
SRT-6 Opening Tool		
SS-45 Camera Removal Tool		
SS-69 Domesheet Alignment Jig		
XCS-4 MBUS/FBUS Cable		
Service Configurations		
Service Setup 1		
Service Setup 2		
Service Setup 3		
Service Setup 4: Automated Tuning and Alignment		
Service Setup 5: GPS Engine Testing		
GPS Engine Test Setup		
GPS Antenna Test Setup	18	

#### **Service Tools**

#### CA-53 Accessory/Flash Cable

The CA-53 allows bottom connector flashing using the FLS-4S Flash Device or the FLC-20 Flash Device.



#### **CA-56RS RF Test Cable**

The CA-56RS test cable is used for RF engine troubleshooting with covers off. This cable has a shorter probe making it more stable when connected to the PWB RF connector. The CA-56RS supports testing of both GPS and Cellular engines on the mobile terminal.



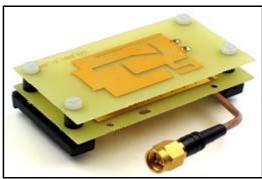
#### **CA-57RS RF Test Cable**

The CA-57RS test cable is used for RF engine troubleshooting with covers on. This cable has a longer RF probe allowing it to fit through the holes provided in the audio chamber once the E-cover has been removed.



#### **CPL-8 GPS Antenna Coupler**

The CPL-8 allows authorized service centers to test the GPS antenna during handset troubleshooting. The coupler is attached to (and detached from) the DA-57 Docking Station Adapter.



Note: The DA-57 and the coupler assembly fit into the JXS-2 Shield Box

## **DA-57 Docking Station Adapter**

The DA-57 works in conjunction with the JBV-1 Docking Station and the FPS-8, FPS-10 Prommer Boxes to allow calibration, and software flashing of the mobile terminal. The DA-57 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.



#### FLS-4S Flashing Device

The FLS-4S allows Point of Sale (POS) locations to flash the handset.



#### 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 handset at high speeds.

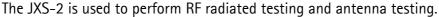


## JBV-1 Docking Station

The JBV-1 connects flash prommers. The docking station can be powered by the FPS-8/FPS-10 Flash Prommers or by an external power supply.



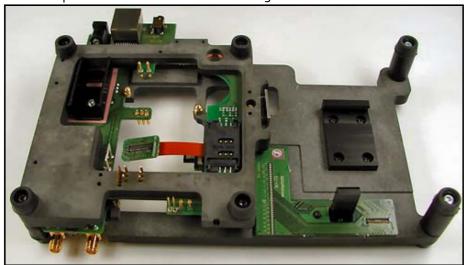
#### JXS-2 Shield Box





## MJ-73 Module Jig

The MJ-73 is used as a means to secure the PWBs and allows easy access to critical areas for troubleshooting. It supports regulated and unregulated DC power input, local and Normal mode operations, a headset jack for audio tests, a R-UIM card reader and a second DC input for VCHAR used in EM tuning.



#### **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.

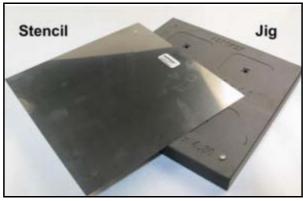


Caution: Make sure that you have switched off the PC and the printer before making connections.

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

#### RJ-18 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 N7300 and N7301 pad configurations and dimensions. The RJ-18 fits the physical dimension of the N7300 and N7301.



#### RJ-55 LGA Rework Jig and ST-20 Stencil

The ST-20 stencil allows rework on LGA-type components that do not have pre-tinned pads. The stencil is designed to specifically fit the N6601 pad configuration and dimensions while the rework jig fits the physical dimension of the N6601.



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

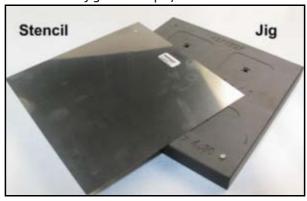
#### RJ-64 LGA Rework Jig and ST-24 Stencil

The ST-24 stencil allows rework on LGA-type components that do not have pre-tinned pads. The stencil is designed to specifically fit the N7160 pad configuration and dimensions while the rework jig fits the physical dimension of the N7160.



#### RJ-65 LGA Rework Jig and ST-25 Stencil

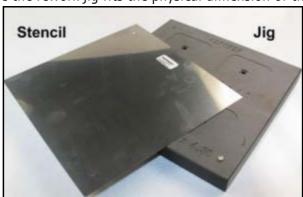
The ST-25 stencil allows rework on LGA-type components that do not have pre-tinned pads. The stencil is designed to specifically fit the N7000 pad configuration and dimensions while the rework jig fits the physical dimension of the N7000.



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

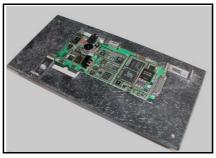
#### RJ-71 LGA Rework Jig and ST-26 Stencil

The ST-26 stencil allows rework on LGA-type components that do not have pre-tinned pads. The stencil is designed to specifically fit the N6600 pad configuration and dimensions while the rework jig fits the physical dimension of the N6600.



#### **RJ-90 Soldering Jig**

The RJ-90 serves as a mechanical holder for desoldering and soldering of components. It provides a convenient means to replace components on the PWB when they are changed during service repairs at authorized CARE locations.



Note: The RJ-90 is not intended to serve as a test jig.

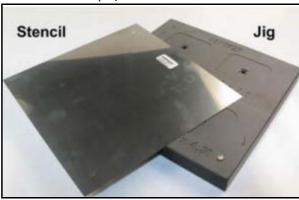
#### RJ-100 LGA Rework Jig and ST-34 PA Stencil

The ST-34 stencil allows rework on LGA-type components that do not have pre-tinned pads. The stencil is designed to specifically fit the N7200 pad configuration and dimensions. The RJ-100 fits the physical dimension of the N7200.



#### RJ-101 LGA Rework Jig and ST-35 PA Stencil

The ST-35 stencil allows rework on LGA-type components that do not have pre-tinned pads. The stencil is designed to specifically fit the Z7302 pad configuration and dimensions. The RJ-101 fits the physical dimension of the Z7302.



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

#### **SRT-6 Opening Tool**

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



#### SS-45 Camera Removal Tool

The SS-45 is used to remove the camera from its socket.





# SS-69 Domesheet Alignment Jig

The SS-69 is used to replace and align the domesheet on the PWB engine.



Note: The SS-69 is not intended to serve as a test jig.

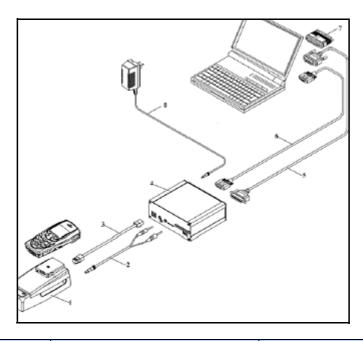
#### XCS-4 MBUS/FBUS Cable

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.



# **Service Configurations**

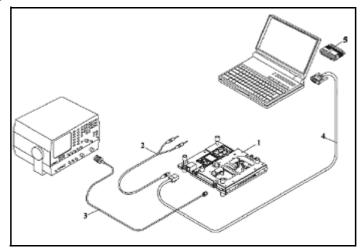
# Service Setup 1



Item	Name	Туре	
	Docking Station	JBV-1	
1	Docking Station Adapter	DA-57	
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	ACP-8F	

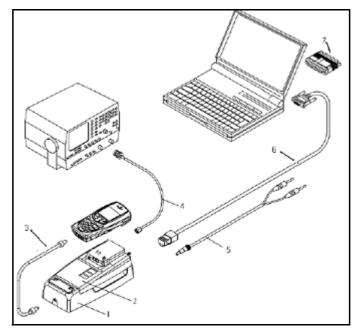


# **Service Setup 2**



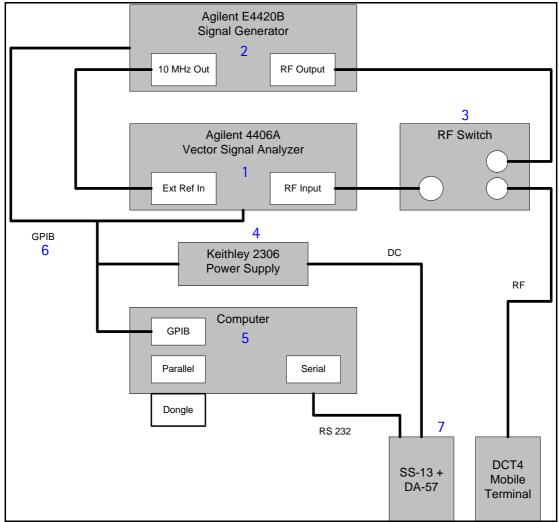
Item	Name	Туре
1	Module Jig	MJ-73
2	DC Power Cable	PCS-1
3	RF Antenna Cable	XRS-6
4	Service MBUS Cable	DAU-9S
5	SW Protection Key	PKD-1
6	RF Test Cable	CA-57RS

# **Service Setup 3**



Item	Name	Туре
1	Docking Station	JBV-1
2	Docking Station Adapter	DA-57
3	DC Service Cable	CA-52PS
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 4: Automated Tuning and Alignment

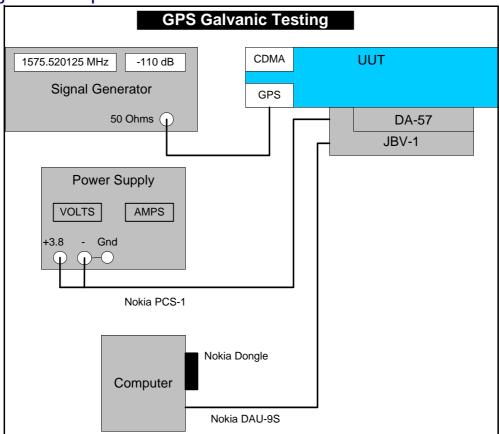


Item	Name	MFR	Model #	QTY	Comment
1	Vector Signal Analyzer	Agilent	E4406A	1	Options B78, BAC and BAE
2	Signal Generator	Agilent	E4421B	1	Digital signal generator with high- stability oscillator and high-spectral purity
3	RF Switch	GreenHill	TVi9901	1	
4	Power Supply	Keithley	K2306	2	Programmable with sense wire
5	Win2000 PC			2	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		

#### **Service Setup 5: GPS Engine Testing**

Use this setup for testing the GPS engine at Nokia Authorized Service Centers. Both galvanic and radiated tests are supported. The **GPS Test** component in Phoenix provides functionality to perform these tests. (See the *Baseband Description and Troubleshooting* chapter for more information about GPS testing.)

#### **GPS Engine Test Setup**

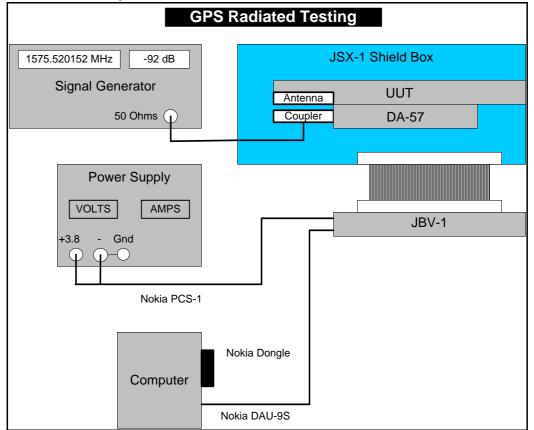


Following is a list of equipment needed for galvanic GPS engine testing:

- Power supply
- Signal generator
- Computer (Pentium 3+, Windows 2000)
- JBV-1 Docking Station
- DA-57 Docking Station Adapter
- PCS-1 DC Power Cable
- DAU-9S MBUS/FBUS Cable
- PKD-1 Dongle
- SA-9 RF Support
- XRS-4 RF Test Cable
- Miscellaneous RF Cables



#### **GPS Antenna Test Setup**



Following is a list of equipment needed for radiated GPS antenna testing:

- 4VDC power supply
- Signal generator
- Computer (Pentium 3+, Windows 2000)
- JBV-1 Docking Station
- DA-57 Docking Station Adapter
- PCS-1 DC Power Cable
- DAU-9S MBUS/FBUS Cable
- PKD-1 Dongle
- CPL-8 Antenna Coupler
- SA-8 RF Support
- XRS-4 RF Test Cable
- JXS-1 Shield Box
- Miscellaneous RF cables