

Equipment List, Electrical

Applicable for Z1010

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1 Abstract

This document describes the minimum required equipments for the Electrical Repair Process of the Z1010 mobile phone. Equipment listed without a part number is not orderable from Sony Ericsson and must be bought locally.

The matrices in the end of the equipment tables describe where the actual equipment is needed (marked with a X) or may be needed/optional (marked with a Z).

Flash upgrade:	Equipment for downloading software to the unit, both signalling and test-program.
Manual test:	Equipment necessary to perform a manual test.
Repair:	Equipment necessary for replacing components.
Go/No Go test:	Equipment necessary for Go/No Go test (GSM and W-CDMA).
SERP	Equipment necessary for SERP

2 Repair Equipment, Electrical

2.1 Sony Ericsson Provided Repair Equipment

Description	Part Number	Comments	Flash Upgrade	Go/No Go Test	Manual Test	Repair
USB Service Card Reader	LZY 213 1191	Software Package/CD+USB Reader	X			
Service Card	LZY 213 595		X			
Hard lock	KRY 105 165		X			
SonyEricsson programming interface - SEPI	LTN 214 1484	Interface Box + CD	X			
SonyEricsson interface - SEPI	KRY 101 1115	USB Cable 3V/Accessories	X			
Torque Screwdriver *	NTZ 112 459	Torque set to 15 Ncm +/- 6 %				X
- Torx Bits No. 6	NTZ 112 288	Spare part to screwdriver				X
Front opening tool	NTZ 112 302	Cabinet opening tool				X
Flex film assembly tool	NTZ 112 521	Tweezers				X
IMD fixture	NTZ 112 1059	Fixture for Z1010				X
Dummy Battery	NTZ 112 509		Z	Z		
Rework fixture	LTD 260 273	For PBA (Printed Board Assembly)				Z
RF-Holder	NTZ 112 1053	Used together with antenna adapter and RF cable.		Z		
Antenna adapter	RNT 403 303/001			Z		
RF cable	RPM 119 855	This is the only approved RF Cable		Z		

*Any screwdriver that fulfils the torque and bit demand can be used.

**The matrices describe where the actual equipment is needed (marked with a X) or may be needed/optional (marked with a Z).



LZY 213 1191



LZY 213 595



KRY 105 165



LTN 214 1484



KRY 101 1115



NTZ 112 459



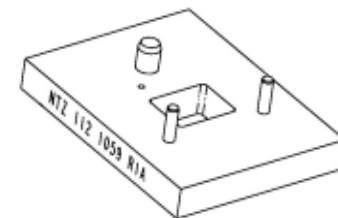
NTZ 112 288



NTZ 112 302



NTZ 112 521



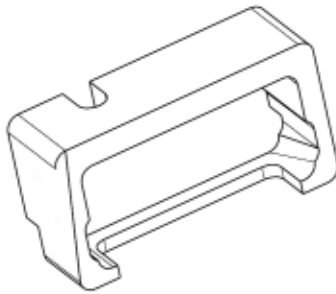
NTZ 112 1059



NTZ 112 509



LTD 260 273



NTZ 112 1053



RNT 403 303/001



RPM 119 855

2.2 Equipment Provided by Other Supplier

		Flash Upgrade	Go/No Go Test	Manual Test	Repair	SERP
Description	Comments					
Battery	BKB 193 148/1	X	X		X	
- Battery Charger	Applicable for Z1010	X	Z		X	
Computer	Minimum Pentium III 500 Mhz 128 Mb RAM or better. At least 2 USB ports.	X	Z			
USB-PC Cable	Type A-B Plug-Plug Cable	X				
Tweezers	ESD-safe				X	
Isopropyl Alcohol	To be used when removing glue.				X	
Cotton Glove	ESD-safe				X	
Zebra Printer	90xi, 90xi II or 4000 deluxe				X	

		Flash Upgrade	Go/No Go Test	Manual Test	Repair	SERP
Description	Comments					
Printer Cable	Standard RS 232 serial printer cable [referred to Zebra printer manual]				Z	
Hot Air Flow Repair Station, Medium.	Temperature range 360-380° C. Air-flow up to 9 l/min				X	
Soldering iron	For standard components: Temperature range 340-360° C. For camera mirror repair: Temperature 155° C. Tip width 2 mm. For speaker repair: Temperature 310°C.				X	
Microscope	Minimum 10x magnification				X	
Yokogawa VC 230	GSM/WCDMA GoNoGo tester		X			
- RF Shield Package Rohde&Schwarz	CMU Z11-Z10		X			
- Universal adapter cable for printer + PC	M 384 877 [41xx only (standard incl. On 42xx)]		X			
Test USIM-card	According to your Instrument supplier.		X			
Operator SIM-card	To be used when making a landline call. Must support W-CDMA!!				X	
IR-device	To be used to make connection between the phone and the device				X	
Bluetooth-device	To be used to make connection between the phone and the device				X	
Hands free equipment	To be used to verify connection in the system connector				X	
Headset equipment	To be used to verify connection in the headset jack.				X	
Memory stick	To be used to verify the connection in the memorystick holder				X	

		Flash Upgrade	Go/No Go Test	Manual Test	Repair	SERP
Description	Comments					
<p>Test and Calibration Instrument (Chose one of the following.)</p> <p>Agilent 8960 Required Components:</p> <ul style="list-style-type: none"> • E5515C (8960 Series 10 Mainframe) • Option E5515C-002 (2nd RF source) • Option E5515C-003 WCDMA • Option 201 GSM and GPRS <p>Required Software E1968A GSM Test Application. E1963A WCDMA Test Application E1985B Fast Switch Application</p>						X

		Flash Upgrade	Go/No Go Test	Manual Test	Repair	SERP
Description	Comments					
Power Supply (w/digital readout) NOTE! If using the Power Supply in conjunction with the Battery Eliminator (Dummy Battery) to power the phone during the GNG test or Calibration routine a high quality DC source that meets the following requirements <u>must</u> be used.	Device Requirements: <ul style="list-style-type: none"> • Output Voltage: 0-5 volt minimum. • Output Current: 0-2 amps minimum. • Transient response time: < 100 μs Some examples of Power Supplies that meet these requirements are as follows: <ul style="list-style-type: none"> • Agilent 66xx series • Agilent 663x series Agilent 663xx series				X	X
GPIB Card	National Instruments or Keithley NOTES: <ul style="list-style-type: none"> • Drivers are required and should be supplied with a card. • A GPIB card is not required if testing is being performed using the Willtek 420x instrument. 					X
GPIB Cable	This cable is only required if a GPIB card is used.					X

		Flash Upgrade	Go/No Go Test	Manual Test	Repair	SERP
Description	Comments					
Power cable – Red <i>NOTE: Only necessary if using the Battery Eliminator (Dummy Battery).</i>	Cable Requirements: <ul style="list-style-type: none"> Minimum cross sectional area of conductor = 1.2mm² Maximum length = 1.5 m One end of cable must have a male banana-type connector to be able to interface with the battery eliminator. The other end of the cable needs whatever connection is necessary to connect to the power supply that you have. 				X	X
Power cable – Black <i>NOTE: Only necessary if using the Battery Eliminator (Dummy Battery).</i>	Cable Requirements: <ul style="list-style-type: none"> Minimum cross sectional area of conductor = 1.2mm² Maximum length = 1.5 m One end of cable must have a male banana-type connector to be able to interface with the battery eliminator. The other end of the cable needs whatever connection is necessary to connect to the power supply that you have. 				X	X
RF Shield Package Rohde & Schwarz RF Shield Package <ul style="list-style-type: none"> CMU-Z10 – Shield box CMU-Z11 – Antenna Coupler 	Using an RF shield package is one of the options for testing the applicable product(s). Testing of the applicable product(s) can also be preformed by using the combination of an RF Probe, Holder RF and an RF cable. NOTE: The Rohde & Schwarz package will require the use of a <u>precision</u> N-type male to SMA female RF adapter to mate with the SEMC RF cable.					X

		Flash Upgrade	Go/No Go Test	Manual Test	Repair	SERP
Description	Comments					
Computer	<p>One of the following operating systems must be used:</p> <ul style="list-style-type: none"> Windows 2000 with service pack 2 or higher Windows XP <p>Minimum Requirements:</p> <ul style="list-style-type: none"> One unused PCI slot for GPIB card 2 USB Ports The processor and RAM of the computer should at least meet the the minimum requirements specified by the operating system's manufacturer. 					X
Test SIM	According to your Instrument supplier				X	X
RF adapter for RF shield box <ul style="list-style-type: none"> The adapter for a Rohde & Schwarz Shield box must be a precision N-type male to SMA female adapter. 	This adapter is used to connect the RF shield box to the RF cable and is only required if a shield package is going to be used for testing.				X	X

*The matrices describe where the actual equipment is needed (marked with a X) or may be needed/optional (marked with a Z).



Type A-B Plug-Plug Cable

3 Revision History

Rev.	Date	Changes / Comments
A	2004-04-16	First release
B	2004-10-05	Updated test instrument (added VC 100), replaced the picture for RPM 119 855 and RNT 403 303/001
C	2005-12-19	Added SERP equipment