

Equipment List, Mechanical

Applicable for Z250 and Z320

Contents

1	General	2
2	Column Definitions.....	2
3	Repair Equipment, Mechanical	3
3.1	Sony Ericsson Provided Repair Equipment.....	3
3.2	Equipment Provided by Other Suppliers.....	8
4	Revision History	14

1 General

This document describes the minimum required equipments for the Mechanical Repair Process of the Z250 and Z320 mobile phones.

2 Column Definitions

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

Flash upgrade: Equipment for downloading software to the unit, both signaling and test-program.

Manual test: Equipment necessary to perform a manual test.

Repair: Equipment necessary for replacing components.


The columns that assist in specifying and/or clarifying the equipment needed are considered description type columns.




- Description The name of the equipment.
- Part Number The Sony Ericsson part number to use when ordering from Sony Ericsson.
- Comments Additional information that helps to specify or clarify the equipment.




3 Repair Equipment, Mechanical




Some of the required equipment will be provided by Sony Ericsson and some equipment has to be sourced locally. This chapter will separate these equipments.




3.1 Sony Ericsson Provided Repair Equipment

Description	Part Number	Comments	Picture	Flash Upgrade	Manual Test	Trouble Shoot	Repair
Adjustable Manual Torque Screwdriver	NTZ 112 459	<p>Any torque driver may be used as long as the driver meets the following requirements:</p> <ul style="list-style-type: none"> The driver must be capable of applying the specified torque value +/- 6% The driver must be set so that the maximum torque speed of the driver does not exceed 670 rpm <p>NOTE - The torque value used on this product is 11 N·cm</p>				X	X

Description	Part Number	Comments	Picture	Flash Upgrade	Manual Test	Trouble Shoot	Repair
Torx Bit T5	NTZ 112 478					X	X
Sony Ericsson Programming Interface (SEPI)	LTN 214 1484	The Sony Ericsson Programming Interface (SEPI) is used in conjunction with the SEPI interface cable, the USB computer cable and battery charger to perform flash upgrade on this product.		X			
Sony Ericsson Programming Interface (SEPI) cable – A1	KRY 101 1119	A battery charger needs to be connected to this cable during flash upgrade.		X			

Description	Part Number	Comments	Picture	Flash Upgrade	Manual Test	Trouble Shoot	Repair
USB Smartcard Reader and CD	LZY 213 1191	<p>This USB Smartcard Reader provides the means for reading a Service Card.</p> <p>This item is required for using the LabelMake II application and flashing offline.</p>		X			
Service Card	LZY 213 595	<p>This item is required for using the LabelMake II application and flashing offline.</p>		X			
Zebra Printer Ribbon	LZK 102 734/1	<p>This is the ribbon that should be used in the Zebra printer when generating labels for this product.</p>					X

Description	Part Number	Comments	Picture	Flash Upgrade	Manual Test	Trouble Shoot	Repair
Front Opening Tool	NTZ 112 302/2						Z
Flex Film Assembly Tool	NTZ 112 521						
Plectrum	NTZ 112 590	Also known as Guitar Pick					

Description	Part Number	Comments	Picture	Flash Upgrade	Manual Test	Trouble Shoot	Repair
Camera Removal Tool	NTZ 112 1067	Only for Z320!					
Camera Removal Tool	NTZ 112 579	Only for Z250!					
Dummy Battery	NTZ 112 542	This item, also known as a “Battery Eliminator”, can be used in the place of the battery when it is used in conjunction with the power supply and the power cables.		Z	Z		

The matrix describes where the actual equipment is needed, marked with an X, or may be needed/option, marked with a Z.



3.2 Equipment Provided by Other Suppliers

This is the list of equipments provided by other suppliers than Sony Ericsson

Description	Comments	Picture	Flash Upgrade	Manual Test	Trouble Shoot	Repair
Battery	Model # - BST-33 • Purchase from local vendor		X	X		
Battery Charger - that connects to system connector	Model #: CST-60 or equivalent • Use a charger that works with your area's electrical system. • Purchase from local vendor		X	X		
Brush	This device must be electrostatic-dissipative					X
Dentist Hook	Also known as Dental Tool					X
Pair of tweezers						X

Description	Comments	Picture	Flash Upgrade	Manual Test	Trouble Shoot	Repair
Isopropyl Alcohol – 99% concentration by volume	<p>Only isopropyl alcohol that is 99% concentration by volume should be used.</p> <ul style="list-style-type: none"> Other names used for this material include rubbing alcohol, IPA, 2-Propanol, and Isopropanol. Products named using any of the names mentioned are acceptable as long as they meet the 99% concentration by volume requirement. There is no specific supplier that this material needs to be obtained from, but a list of web sites that sell products that meet the 99% by volume requirement are provided below for convenience. <p>* http://www.inj-industries.com</p> <p>* http://www.first-aid-product.com/industrial/isopropyl-alcohol.htm</p> <p>* http://www.sigmaaldrich.com/</p>					X
Gloves	This device must be electrostatic-dissipative				X	X
Finger Cots	This device must be electrostatic-dissipative				X	X
Lint-free wipes						X
Barcode Scanner	The device must be able to decode code 128 and 128C					X
Hands-Free Cable - that connects to system connector	<p>Model #: HPM-70 or equivalent</p> <ul style="list-style-type: none"> Purchase from local vendor 			X		

Description	Comments	Picture	Flash Upgrade	Manual Test	Trouble Shoot	Repair
Computer	Computer requirements at this service level: <ul style="list-style-type: none"> • An IBM compatible 500 MHz or higher processor • A minimum of 256 MB RAM or greater, depending on what is specified by the operating system's manufacturer • Two extra USB ports – one for the Smartcard reader and one for flashing equipment • A COM port for the Zebra Printer • A connection for barcode scanner • A connection for an IR device • Must use one of the following operating systems – Windows 98SE, 2000, and XP 		X			X
Zebra Printer (Must be 300 dpi)	Current Model Options: 110XIIIPlus or Z4MPlus These models use a DB9 Male-DB9 Female Null Modem Cable to connect to the computer (POS 42).					Z

Description	Comments	Picture	Flash Upgrade	Manual Test	Trouble Shoot	Repair
	Discontinued Model Options: NOTE - The following models may also be used, but Zebra has discontinued selling them. <ul style="list-style-type: none"> • 90xi Series • Z4M • Z4000 deluxe These models use a DB25 Male-DB9 Female Null Modem Cable to connect to the computer (POS 42).					
Null Modem Cable	This cable connects the Zebra printer to the computer. Two companies that carry this type of cable are CDW (www.cdw.com) and QVS (www.qvs.com). Part numbers for the DB9 Male-DB9 Female version: CDW - 361875 (6 Feet Long)					Z
	Part numbers for the DB25 Male-DB9 Female version: CDW – 375939 (6 Feet Long) QVS – CC314-06 (6 Feet Long) QVS – CC314-10 (10 Feet Long)					
Hot Air Device	This kind of device may be needed to assist in removing the label from this product.					Z

Description	Comments	Picture	Flash Upgrade	Manual Test	Trouble Shoot	Repair
Ionized Air Gun or Blower	Optional, but recommended – Ionized air neutralizes the static that tends to cause particles to cling to a surface, therefore allowing dust and fine particles to be easily blown off unlike most standard air blowing devices.					Z
A Functional SIM (GSM)	A functional SIM (GSM) is needed for performing an “ On the Air ” GSM test . A functional SIM (GSM) can be used instead of the inactive SIM or Test SIM to evaluate phone functionalities such as the Portable Hands-free radio			X		
Power Supply	NOTE: Only necessary if using a dummy battery Requirements: <ul style="list-style-type: none"> • The output voltage should, at minimum, be variable from 0 to 5 volts • The output current should, at minimum, be adjustable from 0 to 2 amps • Optional, but recommended - A digital display capable of showing the current value 		Z	Z		

Description	Comments	Picture	Flash Upgrade	Manual Test	Trouble Shoot	Repair
Power cables – one red and one black	<p>NOTE: Only necessary if using a battery eliminator.</p> <p>Cable Requirements:</p> <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. 		Z	Z		

The matrix describes where the actual equipment is needed, marked with an X, or may be needed/option, marked with a Z.

4 Revision History

Rev.	Date	Changes / Comments
A	2007-10-09	1 st release