

Equipment List, Mechanical

Applicable for K550i, K550c & K550im

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1 General

This document describes the minimum required equipments for the Mechanical Repair Process of the K550 mobile phones.

Equipment listed without a part number is not orderable from Sony Ericsson and must be bought locally.

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 signalling 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

| Pos | Description | Part Number | Comments | Picture | Flash Upgrade | Manual Test | Trouble Shoot | Repair |
|-----|--------------------------------------|-------------|--|--|---------------|-------------|---------------|--------|
| 1 | Adjustable Manual Torque Screwdriver | NTZ 112 459 | <p>In any instance where a specified torque value is required to repair products supported by this document, any torque driver may be used as long as the following specifications are met:</p> <ul style="list-style-type: none"> • Must have a driver capable of applying 20 N·cm +/- 6% torque • Any driver used must be set so that the maximum torque speed of the driver does not exceed 670 rpm |  | | | X | X |

| Pos | Description | Part Number | Comments | Picture | Flash Upgrade | Manual Test | Trouble Shoot | Repair |
|-----|-----------------------------|---------------|--|---|---------------|-------------|---------------|--------|
| 3 | JCIS No. 0 Screw Bit | NTZ 112 1052 | |  | | | X | X |
| 2 | Extended length T6 Torx Bit | NTZ 112 288/1 | The old T6 Torx bit (NTZ 112 288) can be used if you already have it. |  | | | X | X |
| 5 | DCU-60/USB Cable | KRY 101 1413 | This is the flashing cable. This cable interfaces the phone to the PC. |  | X | X | | |

| Pos | Description | Part Number | Comments | Picture | Flash Upgrade | Manual Test | Trouble Shoot | Repair |
|-----|--|--------------|---|---|---------------|-------------|---------------|--------|
| 7 | USB Smartcard Reader and CD | LZY 213 1191 | This USB Smartcard Reader provides the means of reading a Service Card (POS 8). This item is required for using the LabelMake II application and flashing offline. |  | X | | | X |
| 8 | Service Card | LZY 213 595 | This item is required for using the LabelMake II application and flashing offline. |  | X | | | X |
| 9 | Sony Ericsson Programming Interface (SEPI) | LTN 214 1484 | The Sony Ericsson Programming Interface is used in conjunction with the SEPI interface cable (POS 10) and the USB computer cable (POS 43) for E-ROM recovery. |  | | | | X |

| Pos | Description | Part Number | Comments | Picture | Flash Upgrade | Manual Test | Trouble Shoot | Repair |
|-----|----------------------|---------------|---|---|---------------|-------------|---------------|--------|
| 10 | SEPI Interface Cable | KRY 101 1119 | This is part of the hardware needed for E-ROM recovery. This cable connects the phone to the Sony Ericsson Programming Interface (SEPI) - (POS 9). |  | | | | X |
| 13 | Zebra Printer Ribbon | LZK 102 734/1 | This is the ribbon that should be used in the Zebra printer when generating labels for this product. |  | | | | X |
| 14 | Front Opening Tool | NTZ 112 302/2 | This tool is one of the options that can be used during the repair process of this product anywhere the term “pry tool” is specified in the repair instructions. The other pry tool options can be found in the “Equipment Provided by Other Supplier” section. |  | | | | Z |


| Pos | Description | Part Number | Comments | Picture | Flash Upgrade | Manual Test | Trouble Shoot | Repair |
|-----|------------------------|-----------------|--|---|---------------|-------------|---------------|--------|
| 15 | Memory Stick Micro | KDR 109 171/256 | This item is needed to test the applicable product's memory slot. |  | | X | | |
| 16 | Camera Extraction Tool | NTZ111077 | This tool is needed to remove the camera module from its connector on the circuit board. |  | | | | X |
| 52 | Battery Eliminator | NTZ 112 533 | This item, also known as a "Dummy Battery", can be used in the place of the battery when it is used in conjunction with the power supply (POS 49) and the power cables (POS 88). |  | Z | Z | | |


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

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

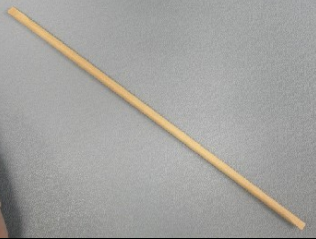

3.2 Equipment Provided by Other Suppliers



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


| Pos | Description | Comments | Picture | Flash Upgrade | Manual Test | Trouble Shoot | Repair |
|-----|---|--|--|---------------|-------------|---------------|--------|
| 26 | Battery | Model # - BST-33 <ul style="list-style-type: none"> Purchase from local vendor | | X | X | | |
| 27 | Battery Charger - that connects to system connector | Model #: CST-60 or equivalent <ul style="list-style-type: none"> Use a charger that works with your area's electrical system. Purchase from local vendor | | | X | | X |
| 28 | Style 2A Tweezers | This device must be conductive or electrostatic-dissipative. This part can be ordered from Contact East (1-800-432-2223 or www.contacteast.com). |  | | | | X |

| Pos | Description | Comments | Picture | Flash Upgrade | Manual Test | Trouble Shoot | Repair |
|-----|---|---|---|---------------|-------------|---------------|--------|
| 29 | Style 3 or Style 3C Tweezers | This device must be conductive or electrostatic-dissipative. This part can be ordered from Contact East (1-800-432-2223 or www.contacteast.com). |  | | | | X |
| 30 | Brush | This device must be electrostatic-dissipative | | | | | X |
| 31 | 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. <ul style="list-style-type: none"> * http://www.jnj-industries.com * http://www.first-aid-product.com/industrial/isopropyl-alcohol.htm * http://www.sigmaaldrich.com/ | | | | X | |
| 32 | Gloves | This device must be electrostatic-dissipative | | | | X | X |

| Pos | Description | Comments | Picture | Flash Upgrade | Manual Test | Trouble Shoot | Repair |
|-----|--|---|---------|---------------|-------------|---------------|--------|
| 33 | Finger Cots | This device must be electrostatic-dissipative | | | | X | X |
| 34 | Computer | Computer requirements for flashing: <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 a Bluetooth device • A connection for an IR device • Must use one of the following operating systems – Windows 98SE, 2000, and XP | | X | | | X |
| 35 | Hands-Free Cable - that connects to system connector | Model #: HPM-70 or equivalent <ul style="list-style-type: none"> • Purchase from local vendor | | | X | | |
| 37 | Lint-free wipes | | | | | | X |

| Pos | Description | Comments | Picture | Flash Upgrade | Manual Test | Trouble Shoot | Repair |
|-----|------------------------------------|--|--|---------------|-------------|---------------|--------|
| 38 | Orangewood Sticks | This tool is one of the options that can be used during the repair process of this product(s) anywhere the term "pry tool" is specified in the repair instructions. |  | | | | Z |
| 39 | Barcode Scanner | The device must be able to decode code 128 and 128C | | | | | X |
| 40 | Nylon Pointer | This tool is one of the options that can be used during the repair process of this product(s) anywhere the term "pry tool" is specified in the repair instructions. This part can be ordered from Contact East (1-800-432-2223 or www.contacteast.com). The Contact East Part Number is 151-168 . |  | | | | X |
| 41 | Zebra Printer (Must be 300 dpi) | Current Model Options: 110XiIIIPlus Z4MPlus These models use a DB9 Male-DB9 Female Null Modem Cable to connect to the computer (POS 42). | | | | | Z |

| Pos | Description | Comments | Picture | Flash Upgrade | Manual Test | Trouble Shoot | Repair |
|-----|------------------|--|--|---------------|-------------|---------------|--------|
| | | <p>Discontinued Model Options: NOTE - The following models may also be used, but Zebra has discontinued selling them.</p> <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). | | | | | |
| 42 | Null Modem Cable | <p>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).</p> <p>Part numbers for the DB9 Male-DB9 Female version: CDW - 361875 (6 Feet Long)</p> <hr/> <p>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)</p> |   | | | | Z |

| Pos | Description | Comments | Picture | Flash Upgrade | Manual Test | Trouble Shoot | Repair |
|-----|---------------------------|---|---|---------------|-------------|---------------|--------|
| 43 | USB Computer Cable | <ul style="list-style-type: none"> Type A to Type B cable This is part of the hardware needed for E-ROM recovery. This cable connects the Sony Ericsson Programming Interface (SEPI) – (POS 9) to the computer. |  | | | | X |
| 44 | Infrared Device | An infrared device is needed to test the infrared feature of a phone. One company that carries infrared devices is IRGEAR (www.irgear.com). | | | X | | |
| 45 | Bluetooth Device | A working Bluetooth device such as a known good mobile phone with Bluetooth enabled or a PC with a Bluetooth card installed is needed to test the functionality of the Bluetooth feature on this product. | | | X | | |
| 46 | Phase 2 Test SIM | A Phase 2 Test SIM is needed to evaluate some functionalities of this product. | | | X | | |
| 47 | Hot Air Device | This kind of device may be needed to assist in removing the label from this product. | | | | | Z |
| 48 | 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 |

| Pos | Description | Comments | Picture | Flash Upgrade | Manual Test | Trouble Shoot | Repair |
|-----|--------------------------------------|---|---------|---------------|-------------|---------------|--------|
| | | | | | | | |
| 49 | Power Supply | <p>NOTE: Only necessary if using a battery eliminator</p> <p>Requirements:</p> <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 | | |
| 50 | Functional Operator SIM card | This is for "over the air" testing. | | | X | | |
| 88 | 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 | | |

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

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 | 2007-02-19 | First release |
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