

Test Instruction - Electrical

Applicable for J100a, J100c and J100i

1	Abstract	2
2	Test Procedure	2
3	Test flow	2
3.1	Software Update	2
3.1.1	Verify Software Version	2
3.1.2	Phone Lock Reset	2
3.1.3	Language Reset.....	2
3.2	Service Tests.....	3
3.2.1	Keypad Test.....	3
3.2.2	Vibrator Test	3
3.2.3	LCM test.....	3
3.2.4	Buzzer Test.....	3
3.2.5	Voice Loopback Test.....	4
3.3	Manual Tests	4
3.3.1	On The Air Call To Mobile	4
3.3.2	System Connector Test	4
3.4	Go/No-Go Test.....	4
4	Revision History.....	5

1 Abstract

This document describes the process used for flashing software upgrades, service tests and radio tests if the mobile phone.

If there are any failures, the mobile must be repaired according to the troubleshooting guide.

2 Test Procedure

To verify all components within the Electrical repair package, all tests must be performed.

3 Test flow

If the phone passes these tests without any failures, it is OK to return it to the customer.

If there are any failures, the phone must be repaired according to the troubleshooting guide or sent to a higher repair level.

3.1 Software Update

TBD

3.1.1 Verify Software Version

To verify if the phone needs new software, you have to check the current Software Version in the phone. Software Versions are checked through the following steps:

1. Start the phone.
2. Press the following keyboard sequence: #82#
3. Check the software file revisions on the display.
4. Press the On/Off key to leave Software Information.

3.1.2 Phone Lock Reset

TBD

3.1.3 Language Reset

To reset the language to English, press the following keyboard sequence: #0000#

3.2 Service Tests

NOTE! It is not necessary to have a SIM card inserted.

Turn on the phone.

The Service Tests menu is entered using the following key sequence: #890#

3.2.1 Keypad Test

To verify that the keypad is OK:

1. Select “Keypad” from the Test Menu.
2. Press all keys on the keypad.

NOTE! You must press down all keys in order to return to the Test Menu.

3.2.2 Vibrator Test

To verify the vibrator function:

1. Select “Vibrator” from the Tests Menu to start the vibrator.
2. Press any key in order to return to the Test Menu.

3.2.3 LCM test

To verify the LCM (Liquid Crystal Module) display:

1. Select “LCM” from the Test Menu to start the LCM test.
2. Press any key to toggle between the different test patterns.
Make sure that there are no dots missing and that the colours and contrast is OK.
3. The Test Menu will be shown when all patterns have been tested

3.2.4 Buzzer Test

To verify the Loudspeaker function:

1. Select “Buzzer” from the Test Menu to start the Buzzer Test.
2. Press any key in order to return to the Test Menu.

WARNING! Do NOT hold the phone to your ear while performing this test.

3.2.5 Voice Loopback Test

This function is intended to test the microphone. Therefore, the earphone should be tested before this test entered.

1. Select "Voice loopback" from the Tests Menu.
2. Check that every sound that is going into the microphone can be instantly heard in the earphone.
3. Press any key in order to return to the Test Menu.

3.3 Manual Tests

3.3.1 On The Air Call To Mobile

To verify the function of the earphone, microphone, polyphonic ring signal, joystick button and GSM radio:

1. Insert an operator SIM card and turn on the phone.
2. Set up a call from another phone to the mobile phone.
3. Answer the phone call.
4. Check the polyphonic ring signal is working and that the backlight switches on OK.
5. Also check the quality of the sound both in the mobile phone and the other phone are OK.
6. Adjust the joystick up and down and check that the volume in the phone is altered.
7. End the call.

Check that the ending procedure is OK and that the speech time is displayed.

3.3.2 System Connector Test

Hands free equipment and a charger are used in this test, to check the functionality of the System Connector.

1. Insert a SIM card, connect a battery and start the unit.
2. Connect the Hands free equipment to the system connector and set up a call and listen if you can speak/hear in the hands free set.
3. Connect the charger to the system connector and see if the phone starts to charge and if the charging is indicated in the display.

3.4 Go/No-Go Test

This test verifies that the radio parameters of a mobile fulfill the GSM specifications. A mobile is considered good if all measurements pass. All results will be presented on the screen and can be printed out if a printer is available.

NOTE! Will be added later.

4 Revision History

Rev.	Date	Changes / Comments
A	2006-04-10	First Release