



Sony Ericsson

Troubleshooting Guide

- mechanical -



F100i



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1 Problem Areas

1.1 On/off

1.1.1 Will not power on or will switch off randomly

Check:

Check whether the phone vibrates and the Keypad illuminates after the power key is depressed

Action:

If activation of the Vibrator and Keyboard illumination is detected, refer to section 1.2.1 'Main display'



Check:

Inspect the contact pads on the Battery

Action:

1. If dirty or oxidized – clean the pads
2. If damaged – replace the Battery



Check:

Inspect the Battery Connector

Action:

1. If dirty or oxidized – clean the connector

Be careful not to bend or damage the connector pins!

2. If damaged – send to higher level of repair



Check:

Inspect for debris or damage between the Keyboard (a) and the Dome Sheet (b)

Inspect the Keypad FPC Assy and Main PCBA connection

Action:

Refer to section 1.4.1 'Keyboard'





Problem Areas

1.2 Display

1.2.1 Main display

Check:

Check whether the phone vibrates and the Keyboard illuminates after the power key has been pressed

Action:

If the activation described above is not detected, refer to section 1.1 'On/off'.

Check:

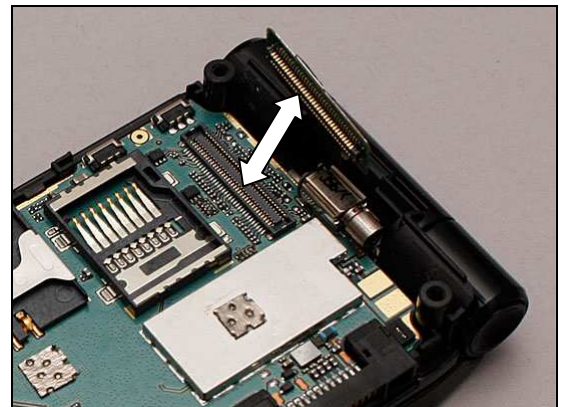
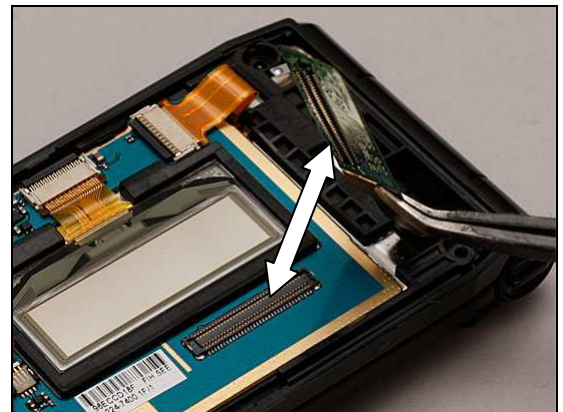
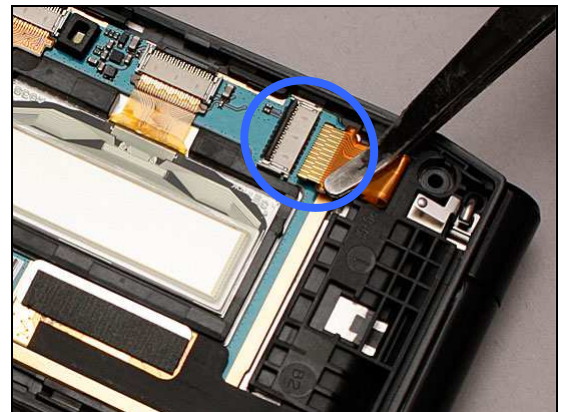
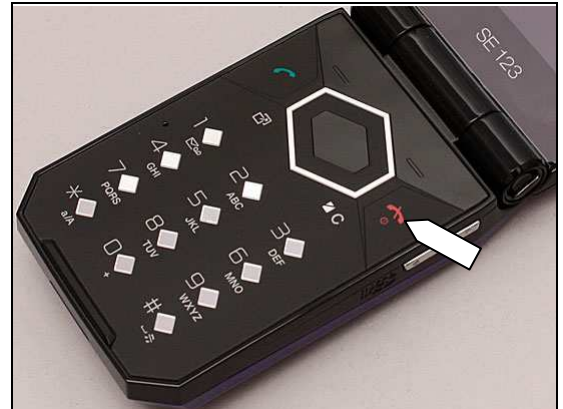
Inspect

- (a) the Main LCD and the Upper PBA connection
- (b) the Upper PBA and the Hinge FPC Assy connection
- (c) the Hinge FPC Assy and the Main PCBA connection

Action:

- 1. If not properly connected – disconnect and reconnect
- 2. If dirty or oxidized – clean all the connectors

- 3. Replace the Main LCD
- 4. Replace the Upper PBA
- 5. Replace the Hinge FPC Assy
- 6. Send to higher level of repair





Problem Areas: Display

1.2.2 External display

Check:

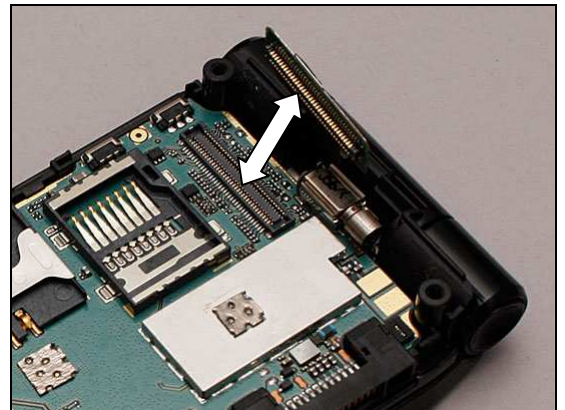
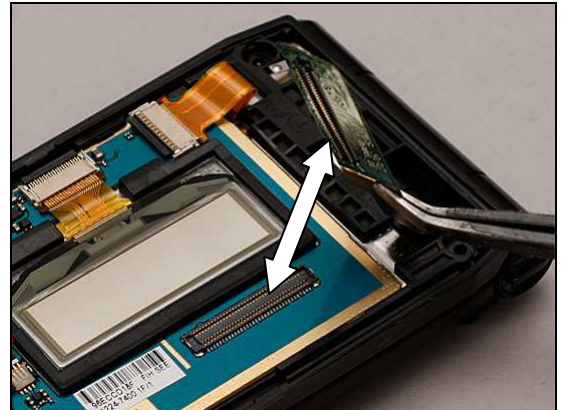
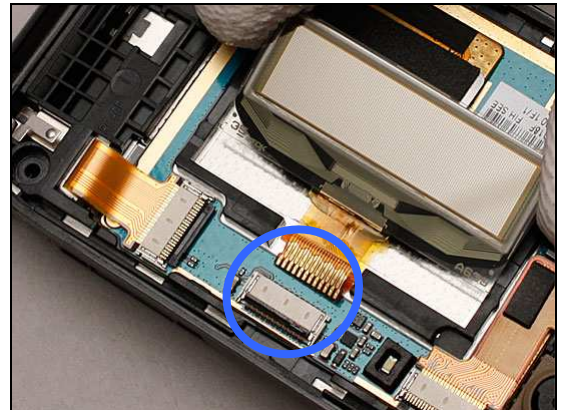
Inspect

- (a) the Sub LCD and the Upper PBA connection
- (b) the Upper PBA and the Hinge FPC Assy connection
- (c) the Hinge FPC Assy and the Main PCBA connection

Action:

- 1. If not properly connected – disconnect and reconnect
- 2. If dirty or oxidized – clean all the connectors

- 3. Replace the Sub LCD
- 4. Replace the Upper PBA
- 5. Replace the Hinge FPC Assy
- 6. Send to higher level of repair





Problem Areas

1.3 LED/illumination

1.3.1 No keyboard illumination

Check:

Inspect for debris or damage between the Keyboard (a) and the Dome sheet (b)

Action:

If damaged – replace the Keyboard (a) and/or the Dome sheet (b)

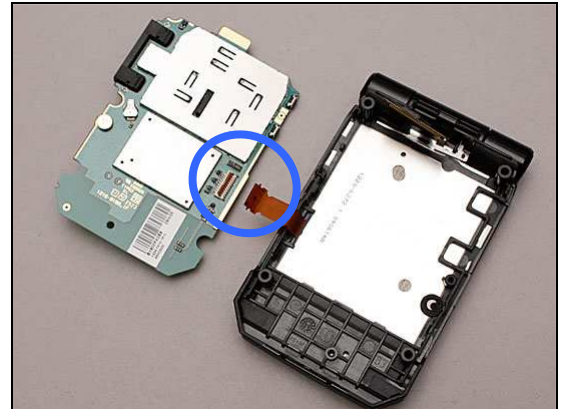


Check:

Inspect the Keypad FPC Assy and Main PCBA connection

Action:

1. If not properly connected – disconnect and reconnect
2. If dirty or oxidized – clean all the connectors
3. Replace the Keypad FPC Assy
4. Send to higher level of repair



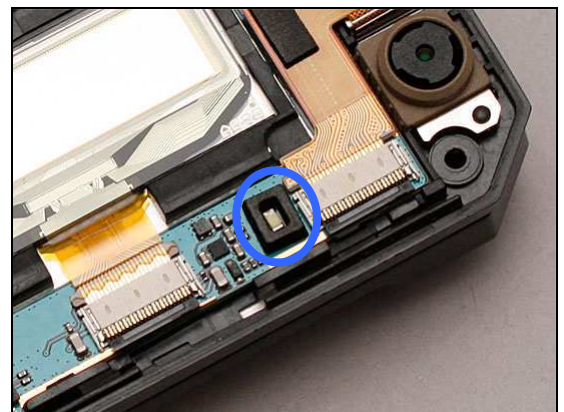
1.3.2 No Gesture illumination

Check:

Inspect for debris or damage of the Upper PBA

Action:

1. If the Gesture Control Gasket is damaged – replace it
2. If the LED damaged – replace the Upper PBA



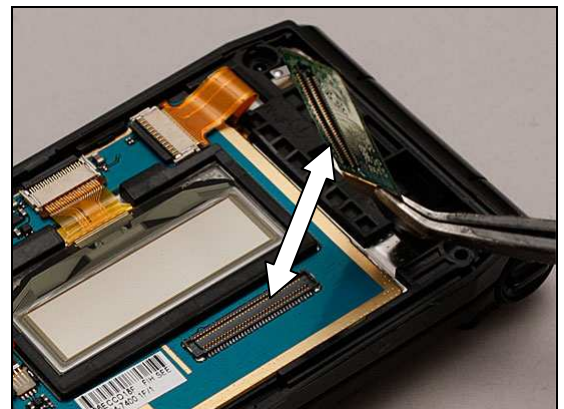
Check:

Inspect

- (a) the Upper PBA and the Hinge FPC Assy connection
- (b) the Hinge FPC Assy and the Main PCBA connection

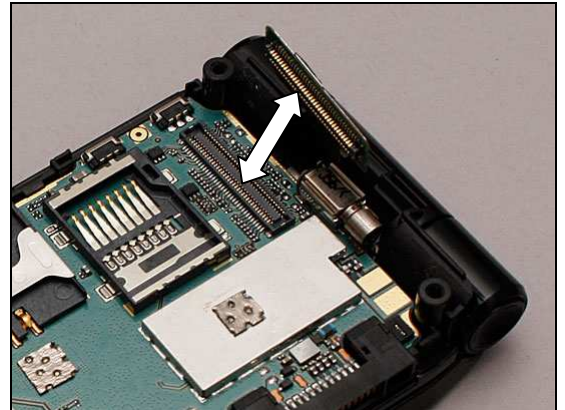
Action:

1. If not properly connected – disconnect and reconnect
2. If dirty or oxidized – clean all the connectors



Problem Areas: LED/illumination

3. Replace the Upper PBA
4. Replace the Hinge FPC Assy
5. Send to higher level of repair





Problem Areas

1.4 Keys

1.4.1 Keyboard

Check:

Inspect for debris or damage between the Keyboard (a) and the Dome Sheet (b)

Action:

If damaged – replace the Keyboard (a) and/or the Dome Sheet (b)

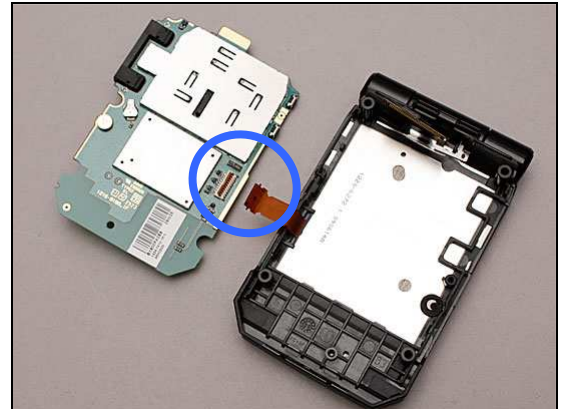


Check:

Inspect the Keypad FPC Assy and Main PCBA connection

Action:

1. If not properly connected – disconnect and reconnect
2. If dirty or oxidized – clean all the connectors
3. Replace the Keypad FPC Assy
4. Send to higher level of repair



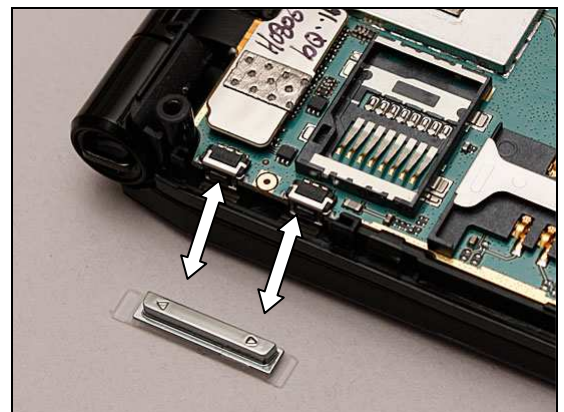
1.4.2 Volume Key

Check:

Remove the Lower Rear Assy and inspect the Volume Key causing the fault

Action:

1. If the Volume Key is damaged – replace it
2. Reinstall the Lower Rear Assy and ensure the Volume Key are properly located in relation to the key switches on the Main PCBA
3. Send to higher level of repair



Problem Areas

1.5 Audio

1.5.1 Speaker

Check:

Inspect the Speaker's external port

Action:

1. If clogged – clean the speaker port



2. Replace the Speaker mesh

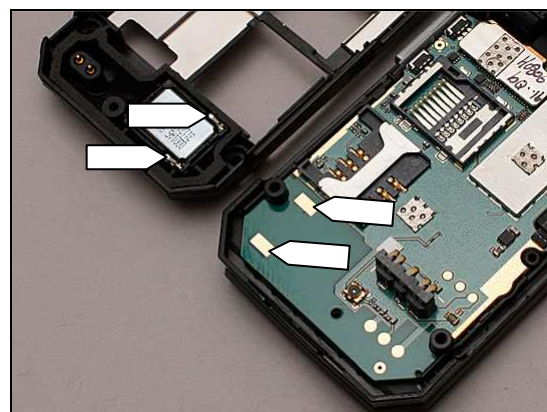


Check:

Inspect the Speaker contact pads/pins on the Loudspeaker and the Main PCBA.

Action:

1. If dirty or oxidized – clean the pads and pins
2. Replace the Loudspeaker
3. Send to higher level of repair



1.5.2 Earphone

Check:

Inspect the Earphone 's external port

Action:

1. If clogged – clean them





Problem Areas: Audio

2. Replace the Upper Inner Assy

Check:

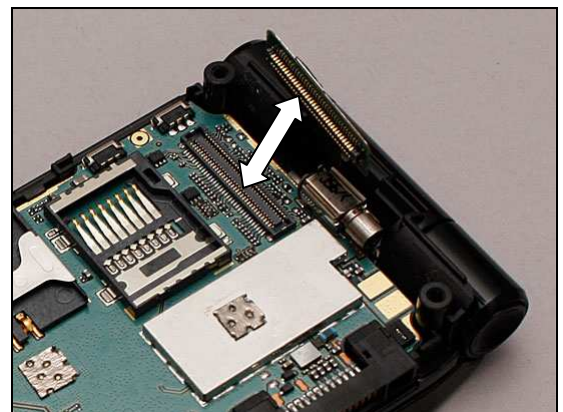
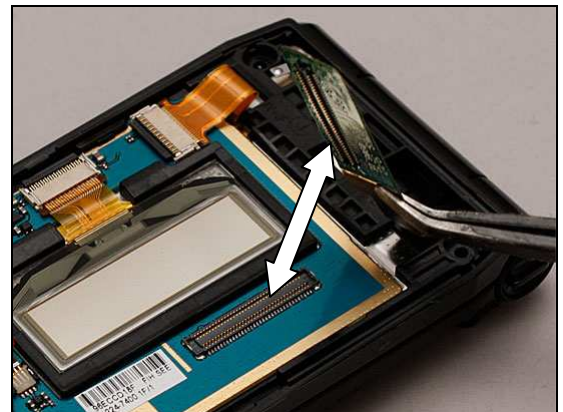
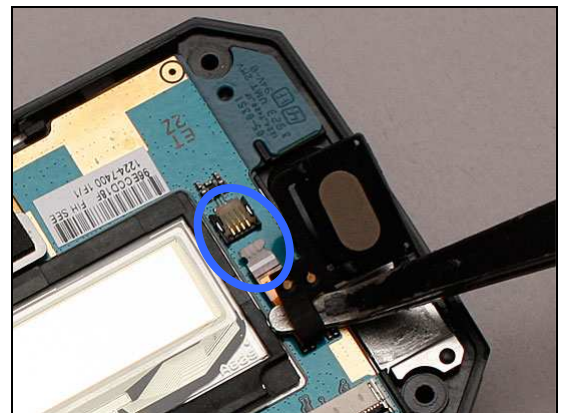
Inspect

- (a) the Ear Speaker and the Upper PBA connection
- (b) the Upper PBA and the Hinge FPC Assy connection
- (c) the Hinge FPC Assy and the Main PCBA connection

Action:

- 1. If not properly connected – disconnect and reconnect
- 2. If dirty or oxidized – clean all the connectors

- 3. Replace the Ear Speaker
- 4. Replace the Upper PBA
- 5. Replace the Hinge FPC Assy
- 6. Send to higher level of repair



Problem Areas: Audio

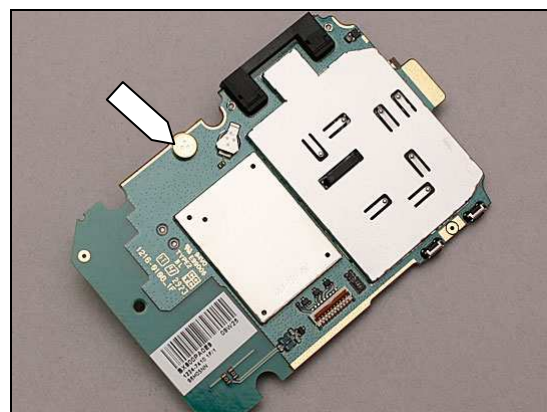
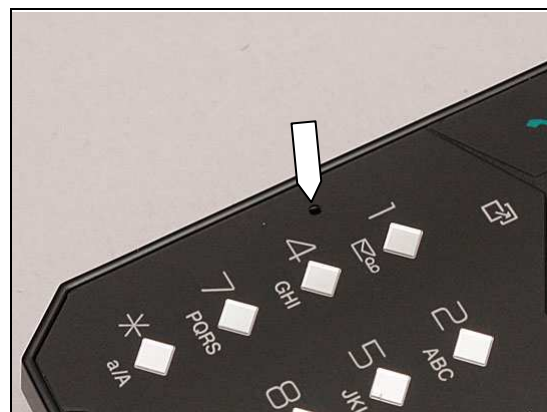
1.5.3 Microphone

Check:

Inspect the Microphone's external port

Action:

1. If clogged – clean the port
2. Send to higher level of repair





Problem Areas

1.6 Vibrating alert

1.6.1 Vibrator not generating alerts

Action:

Send to higher level of repair



Problem Areas

1.7 Camera

1.7.1 Camera defects

Check:

Inspect the camera window

Action:

1. If dirty – clean the window
2. If scratched or damaged – replace the Upper Front Cover



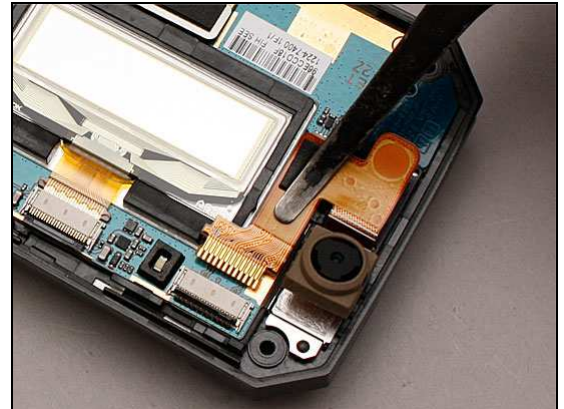
Check:

Inspect

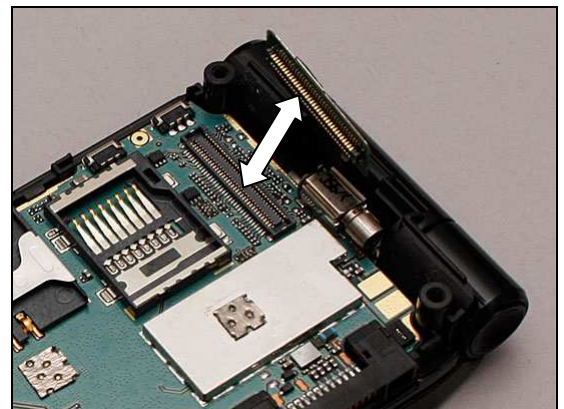
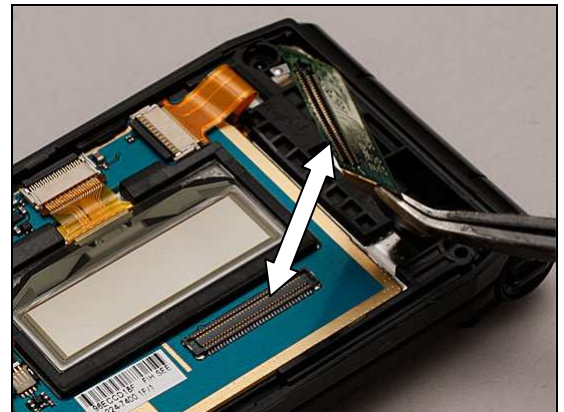
- (a) the Camera and the Upper PBA connection
- (b) the Upper PBA and the Hinge FPC Assy connection
- (c) the Hinge FPC Assy and the Main PCBA connection

Action:

1. If not properly connected – disconnect and reconnect
2. If dirty or oxidized – clean all the connectors



3. Replace the Camera 3 Mpixel CMOS
4. Replace the Upper PBA
5. Replace the Hinge FPC Assy
6. Send to higher level of repair





Problem Areas

1.8 Accelerometer

1.8.1 Accelerometer test fails

Action:

Send to higher level of repair

Problem Areas

1.9 Memory card

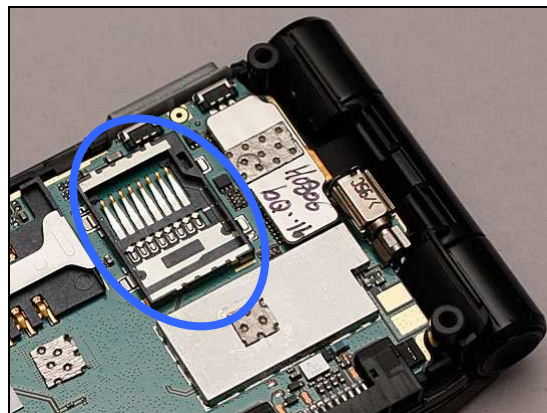
1.9.1 Memory Card not detected

Check:

Inspect the Memory Card holder

Action:

1. If dirty or oxidized – clean the holder
2. Send to higher level of repair



Problem Areas

1.10 FM radio

1.10.1 No/Poor FM Radio reception

Check:

Inspect the System Connector

Action:

1. If dirty or oxidized – clean the connector
2. Send to higher level of repair





Problem Areas

1.11 Real time clock

1.11.1 Real Time Clock test fails

Action:

Send to higher level of repair

Problem Areas

1.12 SIM

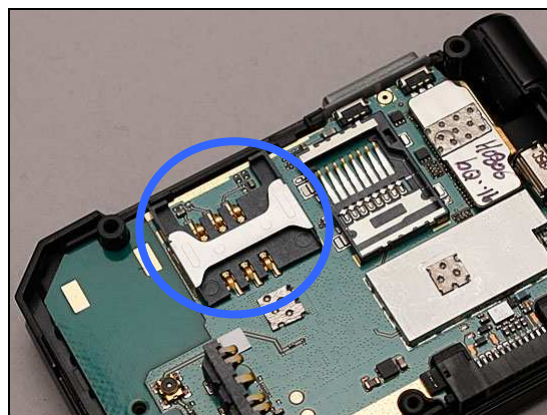
1.12.1 SIM not detected

Check:

Inspect the SIM holder

Action:

1. If dirty or oxidized – clean the holder
2. Send to higher level of repair



1.12.2 Incorrect SIM indicated

Check:

Check whether the phone is locked to a particular operator and whether the correct operator SIM is being used

Action:

1. Use a proper operator SIM or test SIM
2. Send to higher level of repair



Problem Areas

1.13 Battery charging/Capacity

1.13.1 Battery will not charge

Check:

Inspect the contact pads of the Battery

Action:

1. If dirty or oxidized – clean the pads
2. If damaged – replace the Battery



Check:

Inspect the Battery connector

Action:

If dirty or oxidized – clean the connector



Check:

Inspect the system connector

Action:

1. If dirty or oxidized – clean the connector
2. Send to higher level of repair



1.13.2 Poor battery capacity

Check:

Some features noticeably reduce the amount of standby time when turned on, Such as the back light (when on all the time), Bluetooth

Action:

1. Deactivate the backlight, Bluetooth
2. Send to higher level of repair

Problem Areas

1.14 Bluetooth

1.14.1 Bluetooth connection failure

Check:

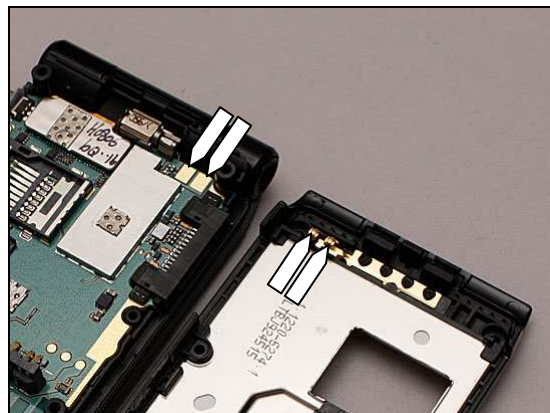
Inspect the BT antenna contact pad/pin on the Lower Rear Assy and the Main PCBA.

Action:

1. If dirty or oxidized – clean the pad and pin

2. Replace the Lower Rear Assy

3. Send to higher level of repair





Problem Areas

1.15 Network & Signal

1.15.1 No/Poor signal

Check:

Ensure that a correct SIM is installed

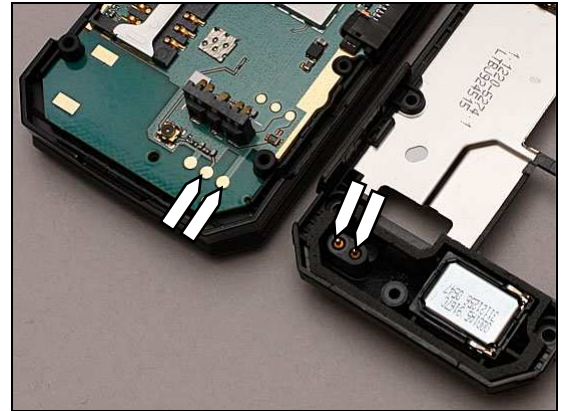
Inspect the antenna contact pads/pins on the Lower Rear Assy and the Main PCBA

Action:

1. If dirty or oxidized – clean the pads and pins

2. Replace the Lower Rear Assy

3. Send to higher level of repair



Problem Areas

1.16 HandsFree by Wire

1.16.1 Connection to Portable HandsFree fails

Check:

Inspect the system connector

Action:

1. If dirty or oxidized – clean the connector
2. Send to higher level of repair



Problem Areas

1.17 Data Communication

1.17.1 Data transfer via System Connector fails

Check:

Inspect the system connector

Action:

1. If dirty or oxidized – clean the connector
2. Send to higher level of repair



Problem Areas

1.18 Flip sensor performance

1.18.1 No flip sensor performance

Check:

Check whether the Main LCD and the Keypad illuminates when the phone is open.



Check:

Check whether the Sub LCD illuminates when the phone is closed



Check:

Inspect the magnet on the Upper Inner Assy

Action:

1. If the magnet is missing – Replace the Upper Inner Assy
2. Send to higher level of repair





2 Revision History

Rev.	Date	Changes / Comments
1	2009-Aug-01	1 st release