



Sony Ericsson

Troubleshooting Guide

- mechanical -



MT11i, MT11a



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1 Problem Areas

1.1 Power

1.1.1 Will not power on or will switch off randomly

Check:

Check whether the phone vibrates and the keyboard illuminates after the On/Off Key is depressed.

Action:

If activation of the vibrator is detected, refer to section 1.4 '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 contact pins.

Action:

1. If dirty or oxidized – clean the contact pins.
2. If adhesive is detected on the contact pins, use an eraser to gently rub off the adhesive.
3. If damaged – send to higher level of repair.

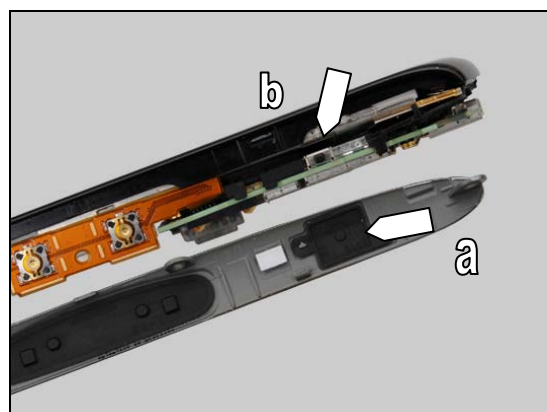


Check:

Inspect the On/Off Key (a) on the Cover Right Side panel right assembly and the input switch (b) on the Keyflex.

Action:

1. If On/Off Key (a) or input switch (b) is dirty or clogged – clean them.



Problem Areas: Power

2. If On/Off Key (a) is damaged – replace the On/Off Key.
3. Send to higher level of repair.



Problem Areas

1.2 Keys

1.2.1 Menu, Home and Back Keys

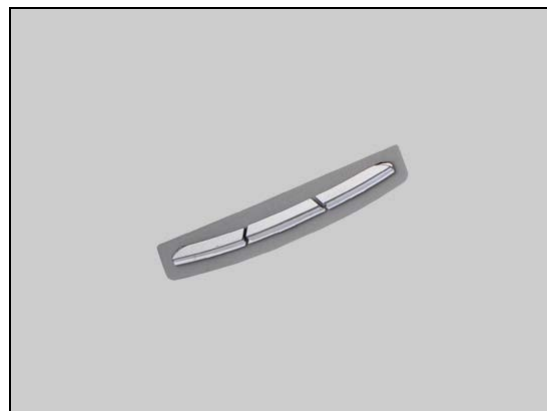
Check:

Inspect the menu, home and back keys in the Cover Front Assy.

Action:

1. If the menu, home and back keys are clogged – clean them.

2. If the menu, home and back keys are damaged – replace the Multifunc Front Keys.

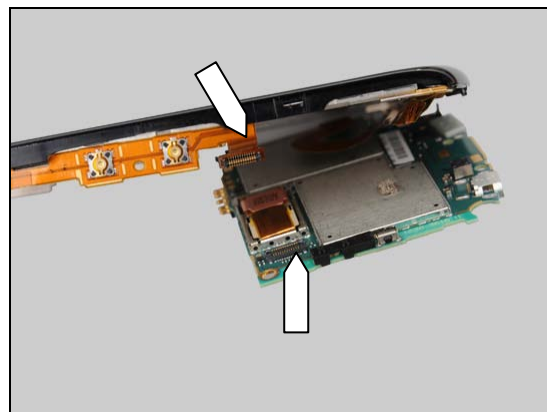


Check:

Check the BtB connector of the Keyflex to the PBA.

Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean both sides of the BtB connector.

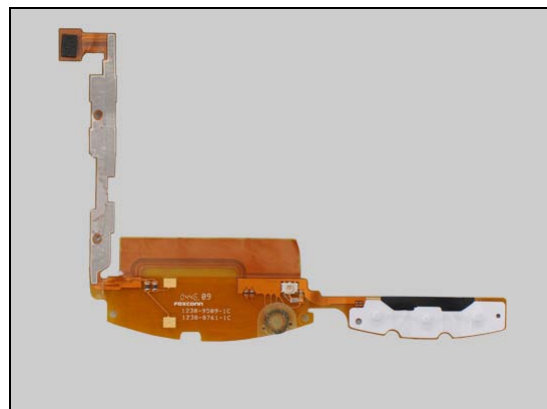


Check:

Inspect the Keyflex.

Action:

If the Keyflex or its BtB connector is damaged – replace the Keyflex.





Problem Areas: Keys

1.2.2 Camera Key

Check:

Inspect the Camera Key on the Cover Right Side panel right assembly.



Action:

If the Camera Key is damaged – replace the Camera Key.

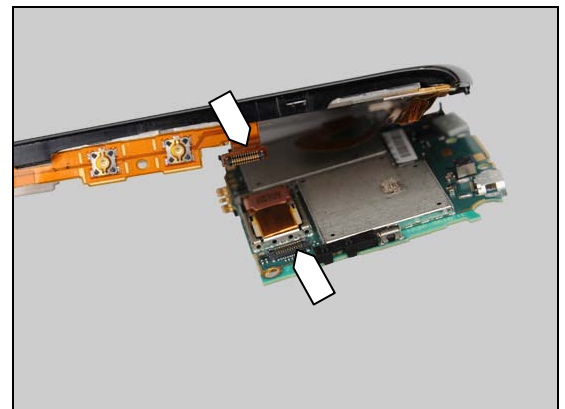


Check:

Check the BtB connector of the Keyflex to the PBA.

Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean both sides of the BtB connector.

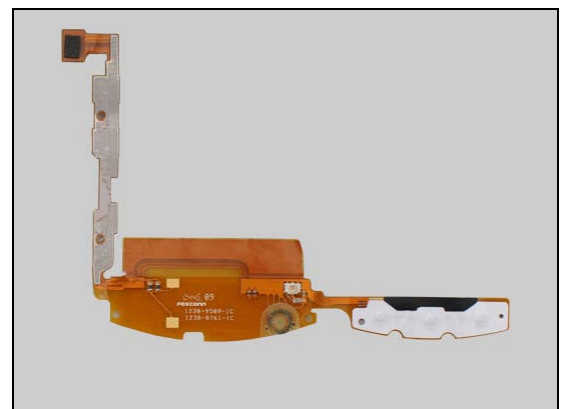


Check:

Inspect the Keyflex.

Action:

If the Keyflex or its BtB connector is damaged – replace the Keyflex.





Problem Areas: Keys

1.2.3 Volume Key

Check:

Inspect the Volume Key on the Cover Right Side panel right assembly.



Action:

If the Volume Key is damaged – replace the Volume Key.

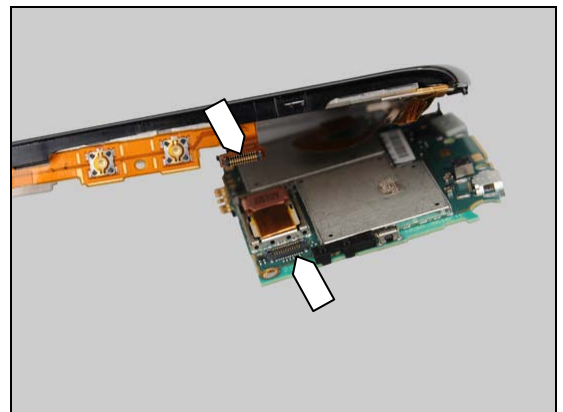


Check:

Check the BtB connector of the Keyflex to the PBA.

Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean both sides of the BtB connector.

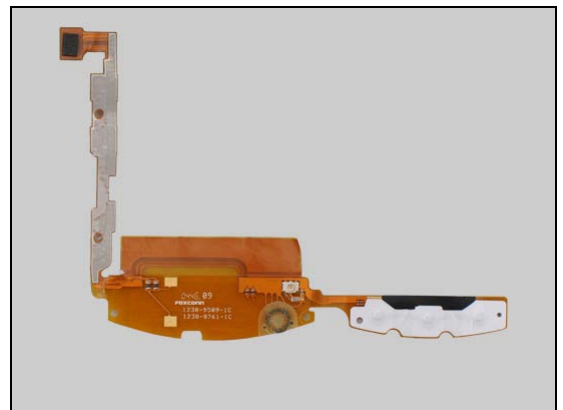


Check:

Inspect the Keyflex.

Action:

If the Keyflex or its BtB connector is damaged – replace the Keyflex.



Problem Areas: Keys

1.2.4 On/Off key

Check:

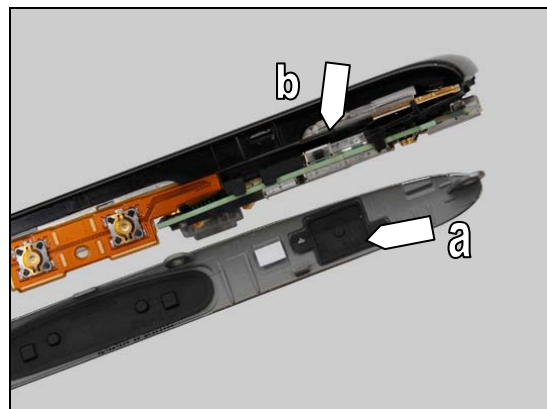
Inspect the On/Off Key (a) on the Cover Right Side panel right assembly and the input switch (b) on the PBA.

Action:

1. If (a) or (b) is dirty or clogged – clean them.

2. If (a) is damaged – replace the On/Off Key.

3. Send to higher level of repair.



Problem Areas

1.3 Touch Screen

1.3.1 Touch Screen malfunction

Check:

Inspect the Cover Front Assy.

Action:

If damaged, replace the Cover Front Assy.



Check:

Inspect the BtB connector of the Cover Front Assy to the PBA.

Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean both sides of the BtB connector.



3. If damaged, replace the Cover Front Assy.



Check:

Inspect the BtB connector of the Display to the PBA.

Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean both sides of the BtB connector.



Problem Areas

1.4 Display

1.4.1 Graphics & Illumination

Check:

Check whether the phone vibrates after the On/Off Key has been pressed.

Action:

If the activation described above is not detected, refer to section 1.1 'Power'.



Check:

Inspect the BtB connector of the Display to the PBA.

Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean both sides of the BtB connector.

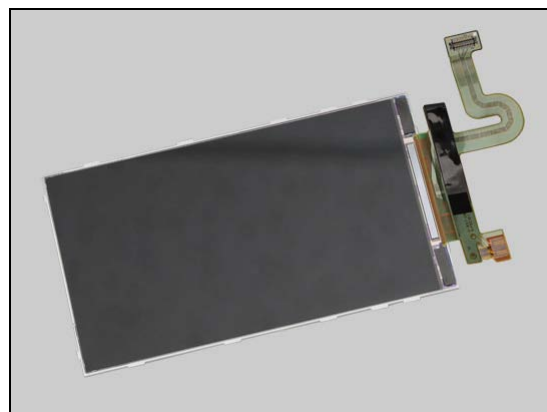


Check:

Inspect the Display.

Action:

If damaged – replace the Display.



Problem Areas

1.5 LED/Illumination

1.5.1 LED/Illumination

Check:

Inspect the BtB connector of the Cover Front Assy to the PBA.

Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean both sides of the BtB connector.
3. If the Cover Front Assy or its BtB connector is damaged – replace the Cover Front Assy.
4. Send to higher level of repair.



1.5.2 Key Illumination

Check:

Inspect the Multifunc Front Keys on the Cover Front Assy.

Action:

1. If dirty – clean it.
2. If damaged – replace the Multifunc Front Keys.





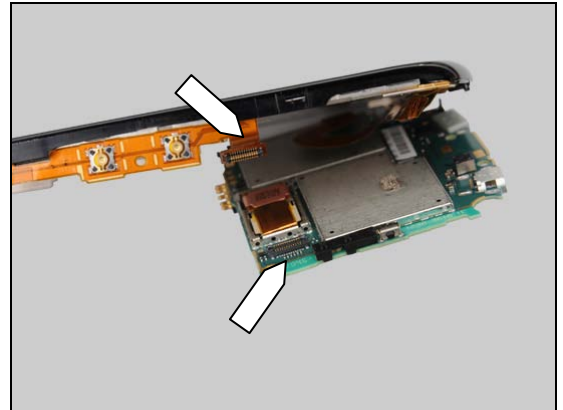
Problem Areas: Illumination

Check:

Check the BtB connector of the Keyflex to the PBA.

Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean both sides of the BtB connector.



Check:

Inspect the Keyflex.

Action:

1. If the Keyflex or its BtB connector is damaged – replace the Keyflex.
2. Send to higher level of repair.





Problem Areas

1.6 Speaker

1.6.1 Loudspeaker

Check:

Inspect the Loudspeaker's external port on the Battery Cover.

Action:

If clogged – clean the speaker port or replace the Battery Cover.



Check:

Inspect the Loudspeaker's mesh on the Carrier Inner frame assembly.

Action:

1. If clogged – clean the speaker mesh.



2. If the mesh is damaged – replace the Carrier Inner frame assembly.



Check:

Inspect the loudspeaker's pads on the Keyflex and the pins on the Lower Speaker.

Action:

1. If dirty – clean them.



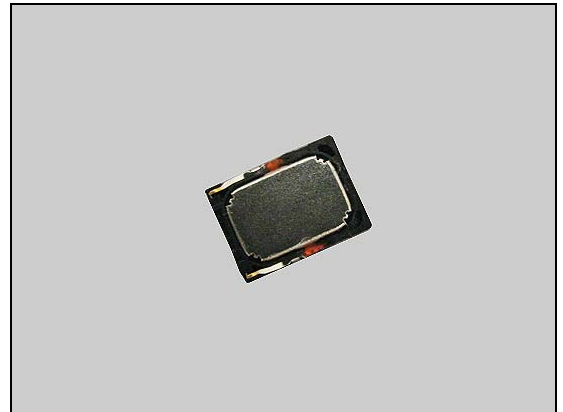


Problem Areas: Speaker

2. If the pads on the Keyflex are damaged – replace the Keyflex.



3. If the pins on the Speaker are damaged – replace the Speaker.

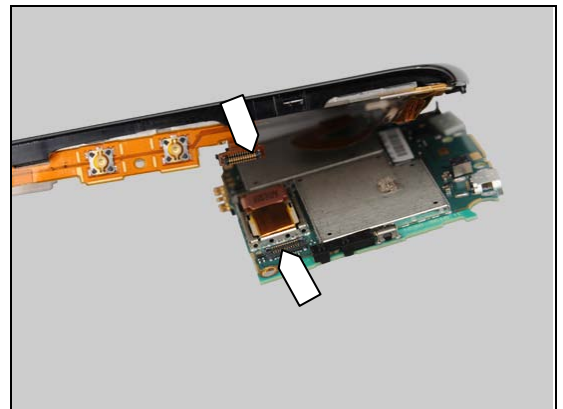


Check:

Check the BtB connector of the Keyflex to the PBA.

Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean both sides of the BtB connector.

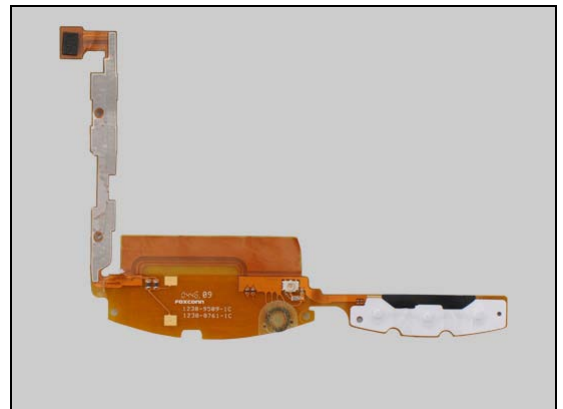


Check:

Inspect the Keyflex.

Action:

If the Keyflex or its BtB connector is damaged – replace the Keyflex.





Problem Areas

1.7 Earphone

1.7.1 Earphone

Check:

Inspect the Speaker's external port.

Action:

1. If clogged – clean it.



2. If the net receiver is damaged – replace the Cover Front Assy.

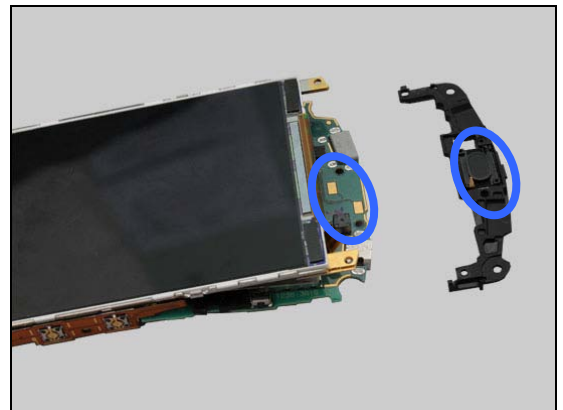


Check:

Inspect the Speaker pins and the pads on the PBA.

Action:

If dirty – clean them.



Check:

Inspect the Speaker.

Action:

If the Speaker is damaged – replace the Speaker.





Problem Areas

1.8 Microphone

1.8.1 Microphone

Check:

Inspect the microphone's external port on Cover Front Assy.

Action:

1. If clogged – clean the port.

2. If damaged – replace the Cover Front Assy.



Check:

Inspect the Microphone Net on the Carrier Metal LCM Carrier Assembly.

Action:

1. If clogged – clean it.

2. If damaged, replace the Microphone Net.



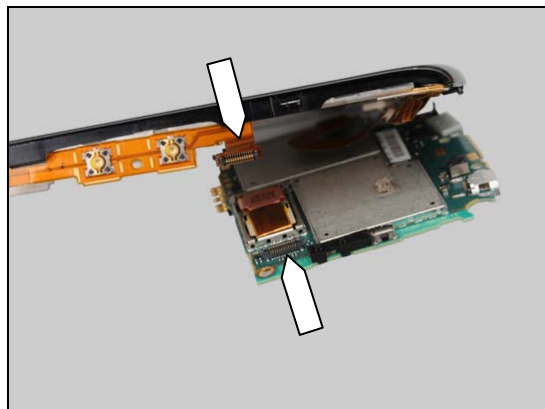
Problem Areas: Microphone

Check:

Check the BtB connector of the Keyflex to the PBA.

Action:

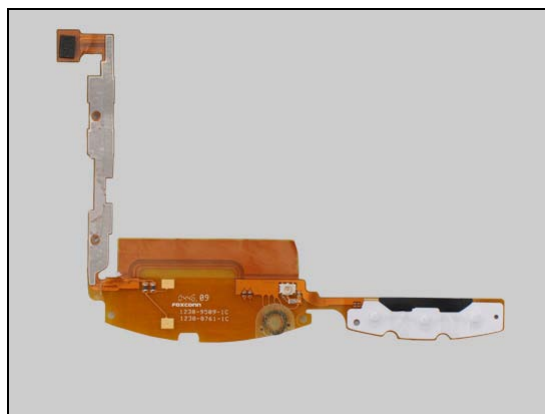
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean both sides of the BtB connector.

**Check:**

Inspect the Keyflex.

Action:

1. If the Keyflex or its BtB connector is damaged – replace the Keyflex.





Problem Areas: Microphone

1.8.2 Secondary Microphone

Check:

Inspect the microphone's external port on the Cover Battery.

Action:

1. If clogged – clean the port.



2. If damaged – replace Cover Battery.



Check:

Inspect the second microphone's net on the Carrier Inner frame assembly.

Action:

1. If clogged – clean it.



2. If the second microphone's net is damaged – replace the Carrier Inner frame assembly.

3. Send to higher level of repair.



Problem Areas

1.9 Vibrator

1.9.1 Vibrator not generating alerts

Action:

Send to higher level of repair.

Problem Areas

1.10 Camera

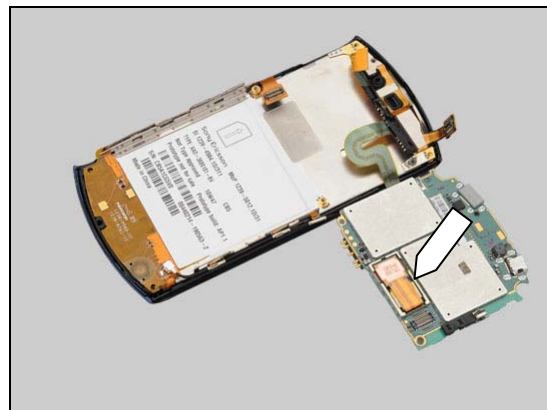
1.10.1 Camera defects

Check:

Inspect the BtB connector of the Main Camera to the PBA.

Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean both sides of the BtB connector.

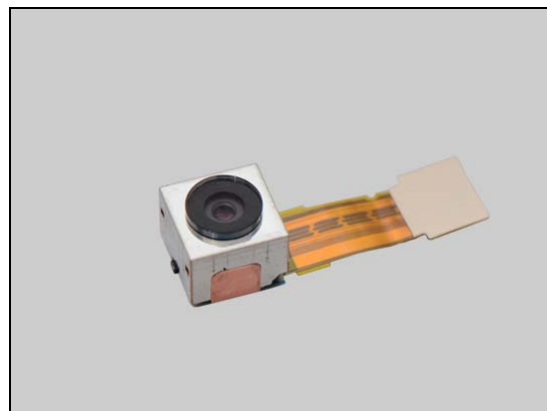


Check:

Inspect the Main Camera on the PBA.

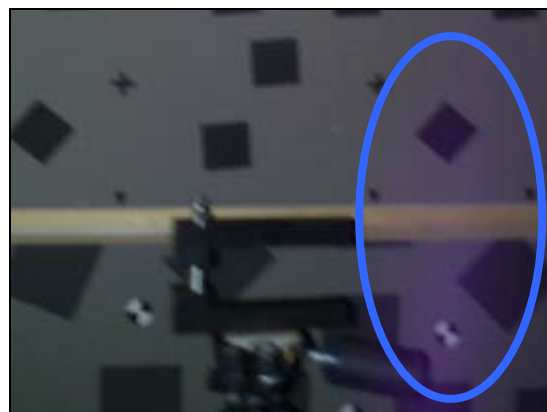
Action:

1. If damaged – replace the Main Camera and Camera Spacer.
2. Send to higher level of repair.



1.10.2 Camera defects in darkness

A few cameras produced before approx 12W20 (that don't have tape over the guiding pin on the side), may have problem with light leakage from the flash LED in complete darkness (see picture to the right with lighter area in the picture).

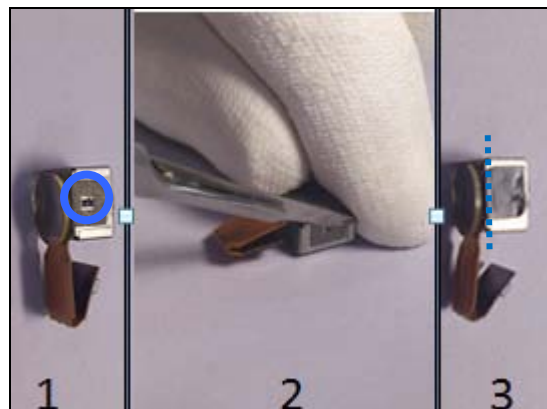


Check:

If there is no tape over the guiding pin (1).

Action:

Remove the guiding pin carefully with a scalpel (2) and add the Switch Cover Adhesive over the guiding pin hole along the bottom edge (3).



Problem Areas

1.11 Flash LED

1.11.1 Flash LED not flashing

Check:

Inspect flash lens window on Carrier Inner frame assembly.

Action:

1. If scratched or damaged – replace the Light Guide Flash Lens.
2. Send to higher level of repair.



Problem Areas

1.12 Bluetooth and WLAN

1.12.1 Bluetooth or WLAN connection failure

Check:

Inspect the contact pins on the Carrier Inner frame assembly and contact pads on the PBA.

Action:

1. If dirty or oxidized – clean the contact pads and the contact pins.
2. If the contact pins on the Carrier Inner frame assembly are damaged – replace the Carrier Inner frame assembly.
3. Send to higher level of repair.



Problem Areas

1.13 GPS

1.13.1 GPS malfunctions

Check:

Inspect the contact pins on the Carrier Inner frame assembly and contact pads on the PBA.

Action:

1. If dirty or oxidized – clean the contact pads and the contact pins.
2. If the contact pins on the Carrier Inner frame assembly are damaged – replace the Carrier Inner frame assembly.
3. Send to higher level of repair.



Problem Areas

1.14 Compass

1.14.1 Compass fails

Action:

Send to higher level of repair.



Problem Areas

1.15 Accelerometer

1.15.1 Accelerometer test fails

Action:

Send to higher level of repair.



Problem Areas

1.16 Ambient Light Sensor

1.16.1 Light Sensor malfunctions

Check:

Inspect the light sensor window on the Cover Front Assy.

Action:

1. If clogged – clean it.

2. If scratched or damaged – replace the Cover Front Assy.

Check:

Inspect the BtB connector of the Cover Front Assy to the PBA.

Action:

1. If not properly connected – disconnect and reconnect it.

2. If dirty or oxidized – clean both side of the BtB connector.

3. If damaged, replace the Cover Front Assy.

4. Send to higher level of repair.





Problem Areas

1.17 Proximity switch

1.17.1 Proximity switch malfunctions

Check:

Inspect the proximity switch window on the Cover Front Assy.

Action:

1. If clogged – clean it.

2. If scratched or damaged – replace the Cover Front Assy.

Check:

Inspect the BtB connector of the Cover Front Assy to the PBA.

Action:

1. If not properly connected – disconnect and reconnect.

2. If dirty or oxidized – clean both side of the BtB connector.

3. If damaged, replace the Cover Front Assy.

4. Send to higher level of repair.



Problem Areas

1.18 Real Time Clock

1.18.1 Real Time Clock test fails

Action:

Send to higher level of repair.

Problem Areas

1.19 Total call time

1.19.1 Total call time fails

Action:

Send to higher level of repair.

Problem Areas

1.20 External Memory Card

1.20.1 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

1.21 Security

1.21.1 Security fails

Action:

Send to higher level of repair.

Problem Areas

1.22 FM Radio

1.22.1 No/Poor FM Radio reception

Check:

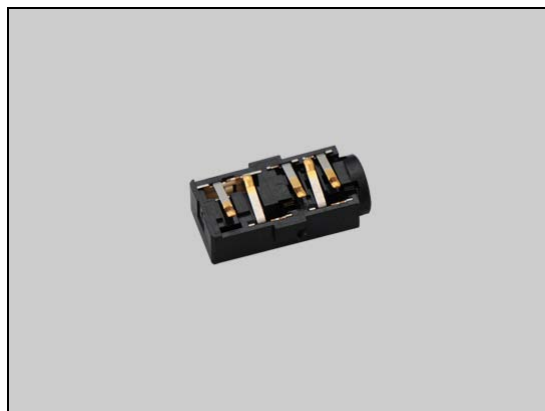
Inspect the Conn Op.

Action:

1. If dirty or oxidized – clean the connector.

2. If damaged, replace the Conn Op.

3. Send to higher level of repair.



Problem Areas

1.23 Battery test

1.23.1 Battery test fails

Action:

Send to higher level of repair.

Problem Areas

1.24 Flip slider counter

1.24.1 Flip slider counter fails

Action:

N/A. No slider phone



Problem Areas

1.25 Verify Certificates

1.25.1 Verify certificates fails

Action:

Send to higher level of repair.

Problem Areas

1.26 IrDA Test

1.26.1 IrDA test fails

Action:

N/A. No IrDA in the phone

Problem Areas

1.27 HDMI Test

1.27.1 HDMI test fails

Check:

Inspect the HDMI connector.

Action:

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



Problem Areas

1.28 Network & Signal

1.28.1 No/Poor signal

Check:

Inspect the main antenna on Carrier Inner frame assembly.



Check:

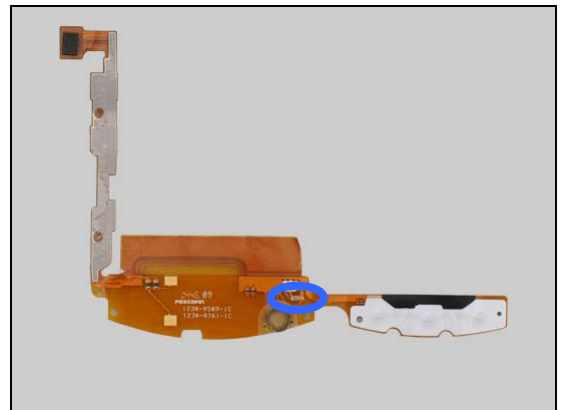
Inspect the main antenna contact pins on Carrier Inner frame assembly and contact pads on the Keyflex.

Action:

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



2. If the pins are damaged – replace the Keyflex.



3. If the pads are damaged – replace Carrier Inner frame assembly.





Problem Areas

Check:

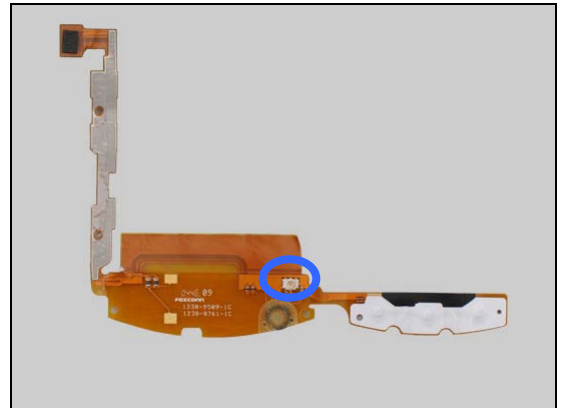
Inspect the connector of Cable Coax on Keyflex and Main PBA.

Action:

1. If not properly connected to the antenna – disconnect and reconnect it.

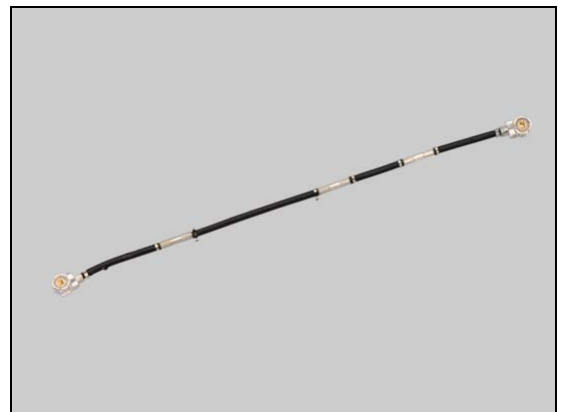


2. If the connector on Keyflex damaged – replace the Keyflex.



3. If the connector on Cable Coax damaged – replace the Cable Coax.

4. Send to higher level of repair.



Problem Areas

1.29 SIM

1.29.1 SIM not detected

Check:

Inspect the SIM holder.

Action:

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



1.29.2 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

1.30 Charging

1.30.1 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 contact pins.

Action:

1. If dirty or oxidized – clean the contact pins.
2. If adhesive is detected on the contact pins – use an eraser to gently rub off the adhesive.



Check:

Inspect the USB connector.

Action:

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



Problem Areas

1.31 HandsFree by Wire

1.31.1 Connection to Portable HandsFree fails

Check:

Inspect the audio jack.

Action:

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



Problem Areas

1.32 Data Communication

1.32.1 Data transfer via System Connector fails

Check:

Inspect the USB connector.

Action:

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





2 Revision History

Rev.	Date	Changes / Comments
1	2011-Oct-03	Initial release
2	2011-Oct-24	Updated Chapter 1.3 Touch screen
3	2012-April-11	Touch screen updated
4	2012-April-24	Camera updated with tape.