



Sony Ericsson

Troubleshooting Guide

- mechanical -



Mix, WT13i



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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, the Home Key LED illuminates, the ZAP and Walkman key LEDs illuminate after the Power/Lock Key is depressed.

Action:

If activation of the Vibrator and Key LED illumination is detected, refer to section 1.2 'Display'.

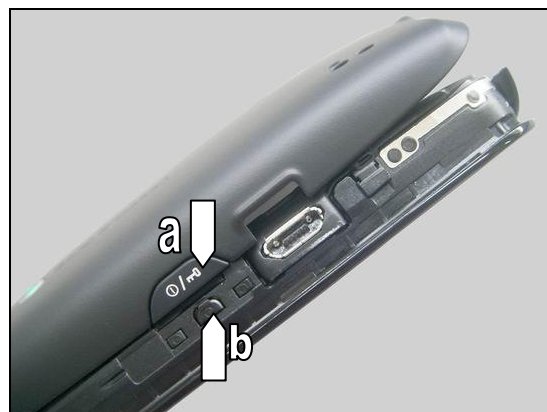


Check:

Inspect the Power/Lock key (a) on the Battery Cover Assy and the Rubber Power/Lock Key (b) on the Front Cover Assy.

Action:

1. If dirty – clean them.
2. If (a) is scratched or damaged – replace the Battery Cover Assy.
3. If (b) is improperly connected – reconnect it.
4. If (b) is damaged – replace it.



Check:

Inspect the contact pads on the Battery.

Action:

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



Check:

Inspect the Battery Connector.

Action:

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

Be careful not to bend or damage the contact pins!



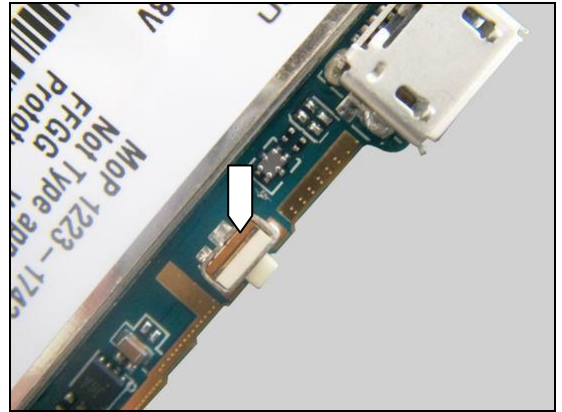
Problem Areas: power

Check:

Inspect the Power/Lock Key Switch on the Main PBA.

Action:

1. If dirty – clean it.
2. Send to higher level of repair.



Problem Areas

1.2 Display

1.2.1 Graphics & Illumination

Check:

Check whether the phone vibrates, the Home Key LED illuminates, the ZAP and Walkman key LEDs illuminate after the Power/Lock Key is depressed.

Action:

If activation of the Vibrator and Key LED illumination is not detected, refer to section 1.1 'Power'.

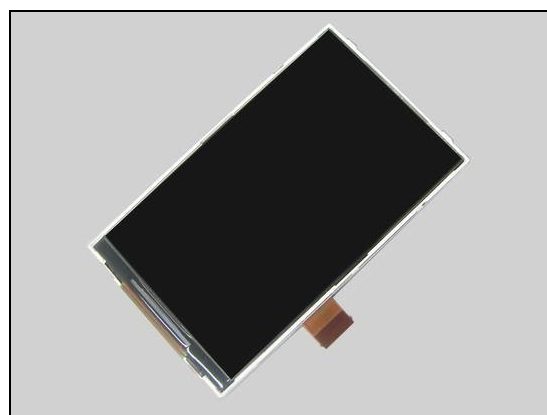


Check:

Inspect the LCM FPC and Connector FPC on the Main PBA.

Action:

1. If improperly connected – reconnect them.
2. If dirty or oxidized – clean them.
3. If the LCM FPC or the Display is damaged– replace the Display.
4. Send to higher level of repair.



Problem Areas

1.3 Illumination/LED

1.3.1 Home key Illumination

Check:

Inspect the Home key on the Front Cover Assy.

Action:

1. If dirty – clean it.
2. If scratched or damaged – replace the Front Cover Assy.

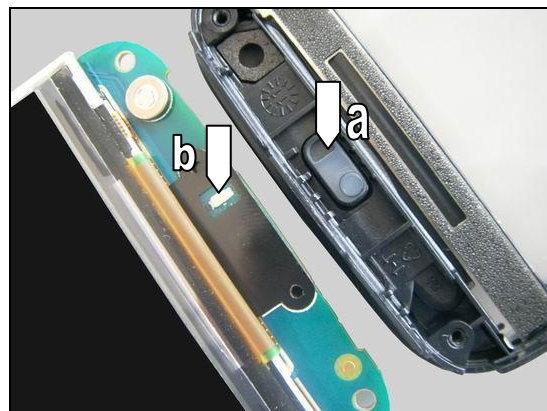


Check:

Inspect the Home key inner (a) and the Home Key LED (b) on the Main PBA.

Action:

1. If dirty – clean them.
2. If (a) is scratched or damaged – replace the Front Cover Assy.
3. Send to higher level of repair.



1.3.2 Pre-Charge LED

Check:

Inspect the Pre-Charge LED window on the Front Cover Assy.

Action:

1. If dirty – clean it.
2. If scratched or damaged – replace the Front Cover Assy.

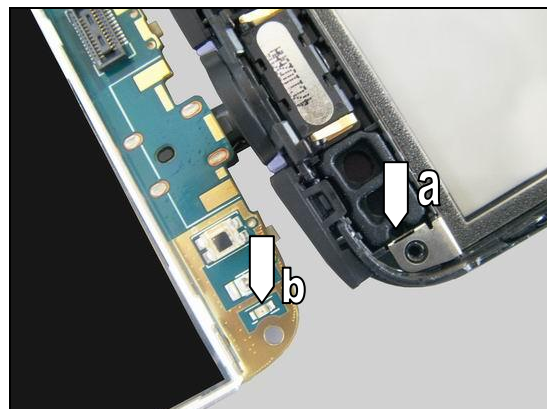


Check:

Inspect the Pre-Charge LED window inner (a) and Pre-Charge LED (b) on the Main PBA.

Action:

1. If dirty or clogged – clean them.
2. If (a) is scratched or damaged – replace the Front Cover Assy.
3. Send to higher level of repair.



Problem Areas: Illumination/LED

1.3.3 ZAP key LED

Check:

Inspect the Light Guide Right on the Front Cover Assy.

Action:

1. If dirty – clean it.
2. If scratched or damaged – replace the Front Cover Assy.

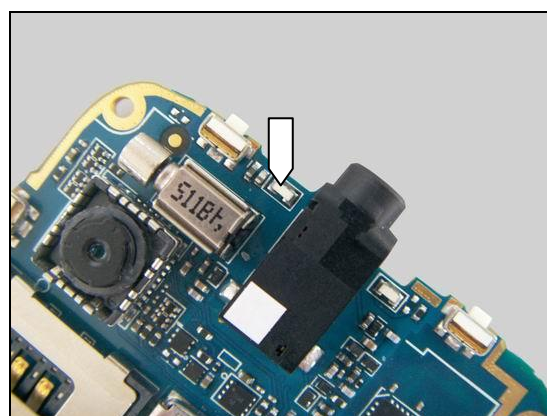


Check:

Inspect the ZAP key LED on the Main PBA.

Action:

1. If dirty – clean it.
2. Send to higher level of repair.



1.3.4 Walkman key LED

Check:

Inspect the Light Guide Left on the Front Cover Assy.

Action:

1. If dirty – clean it
2. If scratched or damaged – replace the Front Cover Assy.

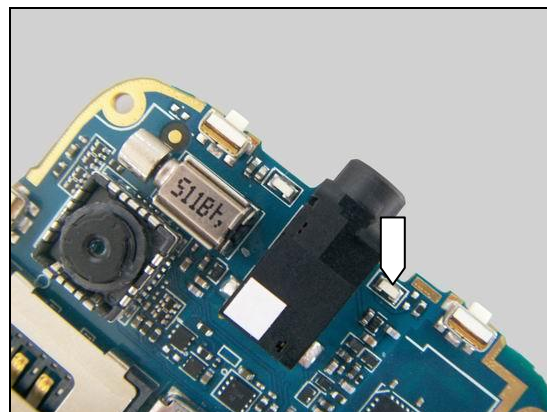


Check:

Inspect the Walkman key LED on the Main PBA.

Action:

1. If dirty – clean it.
2. Send to higher level of repair.



Problem Areas

1.4 Keys

1.4.1 Home Key

Check:

Inspect the Home key on the Front Cover Assy.

Action:

1. If dirty – clean it.
2. If scratched or damaged – replace the Front Cover Assy.

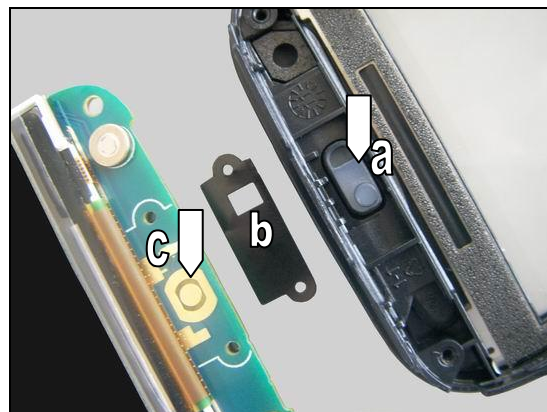


Check:

Inspect the Home key inner (a), the Metal Dome (b) and contact pad (c) on the Main PBA.

Action:

1. If dirty or oxidized – clean them.
2. If (a) is damaged –replace the Front Cover Assy.
3. If (b) is damaged – replace it.
4. Send to higher level of repair.



1.4.2 Camera Key

Check:

Inspect the Camera key on the Battery Cover Assy.

Action:

1. If dirty – clean it.
2. If scratched or damaged – replace the Battery Cover Assy.



Check:

Inspect the Rubber Camera Key on the Front Cover Assy.

Action:

1. If dirty – clean it.
2. If improperly connected – reconnect it.
3. If damaged – replace it.



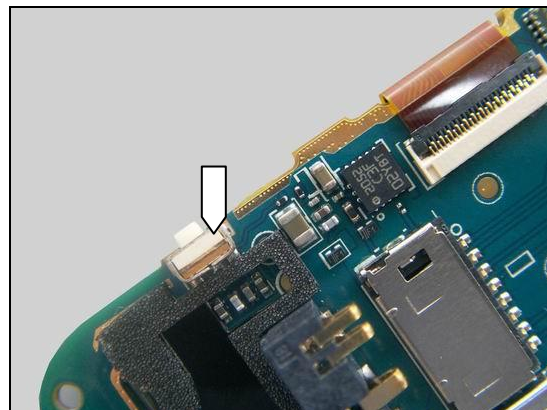
Problem Areas: Keys

Check:

Inspect the Camera Key Switch on the Main PBA.

Action:

1. If dirty – clean it.
2. Send to higher level of repair.



1.4.3 Power/Lock Key

Check:

Inspect the Power/Lock key on the Battery Cover Assy.

Action:

1. If dirty – clean it.
2. If scratched or damaged –replace the Battery Cover Assy.



Check:

Inspect the Rubber Power/Lock Key on the Front Cover Assy.

Action:

1. If dirty – clean it.
2. If improperly connected – reconnect it.
3. If damaged – replace it.

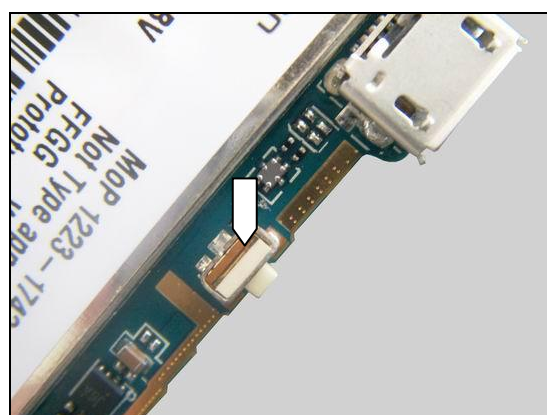


Check:

Inspect the Power/Lock Key Switch on the Main PBA.

Action:

1. If dirty – clean it.
2. Send to higher level of repair.



Problem Areas: Keys

1.4.4 Volume Key

Check:

Inspect the Volume key on the Battery Cover Assy.

Action:

1. If dirty – clean it.
2. If scratched or damaged – replace the Battery Cover Assy.

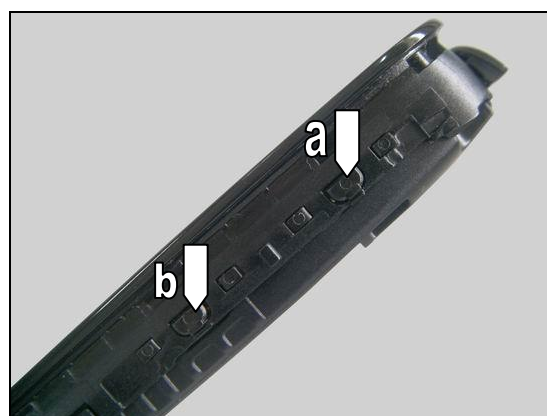


Check:

Inspect the Rubber Volume up Key (a) and the Rubber Volume down Key (b) on the Front Cover Assy.

Action:

1. If dirty – clean them.
3. If (a) or (b) is improperly connected – reconnect it.
4. If (a) or (b) is damaged – replace it.

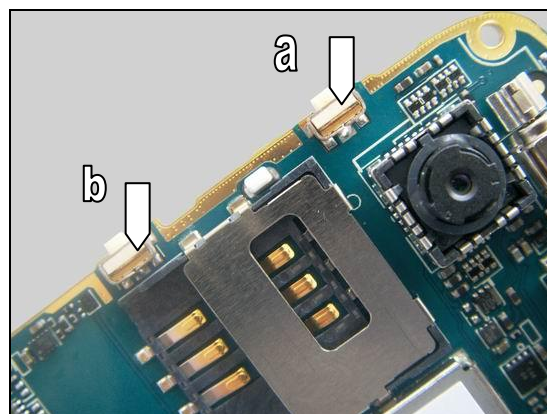


Check:

Inspect the Volume up Key Switch (a) and the Volume down Key Switch (b) on the Main PBA.

Action:

1. If dirty – clean them.
2. Send to higher level of repair.



1.4.5 ZAP Key

Check:

Inspect the ZAP key on the Front Cover Assy.

Action:

1. If dirty – clean it.
2. If scratched or damaged – replace it.



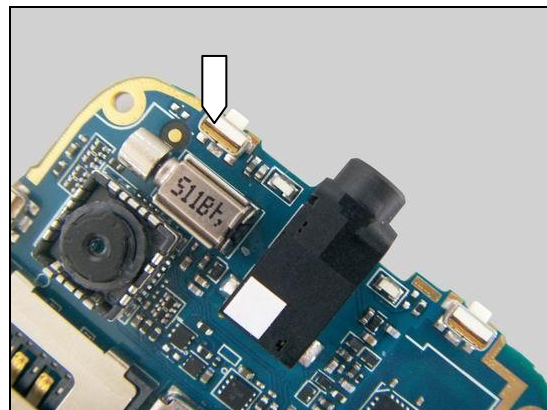
Problem Areas: Keys

Check:

Inspect the ZAP Key Switch on the Main PBA.

Action:

1. If dirty – clean it.
2. Send to higher level of repair.



1.4.6 Walkman Key

Check:

Inspect the Walkman key on the Front Cover Assy.

Action:

1. If dirty – clean it
2. If scratched or damaged – replace it.

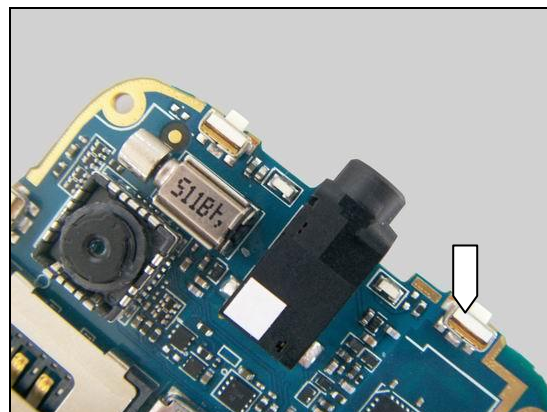


Check:

Inspect the Walkman Key Switch on the Main PBA.

Action:

1. If dirty – clean it.
2. Send to higher level of repair.



Problem Areas

1.5 Audio

1.5.1 Microphone

Check:

Inspect the Microphone's external port on the Band.

Action:

1. If clogged – clean it.

2. If damaged – replace the Band.



Check:

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

Action:

1. If clogged – clean it.

2. If damaged – replace the Front Cover Assy.



Check:

Inspect the MIC sponge with mesh on the Front Cover Assy.

Action:

1. If dirty – clean it.

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





Problem Areas: Audio

Check:

Inspect the Mic on the Main PBA.

Action:

1. If dirty – clean it.
2. Send to higher level of repair.

1.5.2 Ear Speaker

Check:

Inspect the Ear Speaker's external port on the Front Cover Assy.

Action:

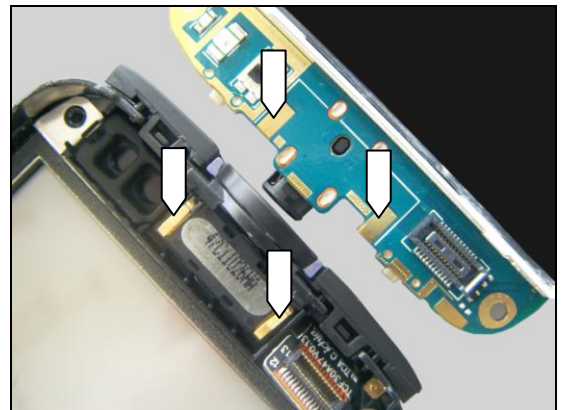
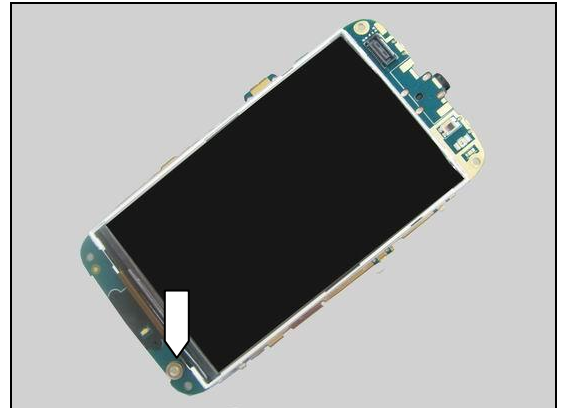
1. If clogged – clean it.
2. If damaged –replace the Front Cover Assy.

Check:

Inspect the Ear Speaker pins and pads on the Main PBA.

Action:

1. If dirty or oxidized – clean the pins and pads.
2. If the Ear Speaker is damaged – replace the Ear Speaker.
3. Send to higher level of repair.



Problem Areas: Audio

1.5.3 Loudspeaker

1.5.3.1 Upper Loudspeaker

Check:

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

Action:

1. If clogged – clean it.
2. If damaged – replace the Battery Cover Assy.



Check:

Inspect the Upper Loudspeaker's mesh on the Rear Cover Assy.

Action:

1. If clogged –clean it.
2. If damaged – replace the Rear Cover Assy.

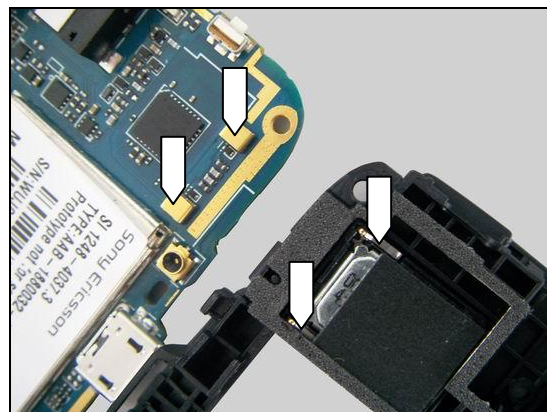


Check:

Inspect the Upper Loudspeaker's pins and the Speaker Connectors on the Main PBA.

Action:

1. If dirty or oxidized – clean the pins and the Speaker Connectors.



2. If the Upper Loudspeaker is damaged – replace the Upper Loudspeaker.
3. Send to higher level of repair.



Problem Areas: Audio

1.5.3.2 Lower Loudspeaker

Check:

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

Action:

1. If clogged – clean it.
2. If damaged – replace the Battery Cover Assy.



Check:

Inspect the lower Loudspeaker's mesh on the Rear Cover Assy.

Action:

1. If dirty –clean it.
2. If damaged – replace the Rear Cover Assy.

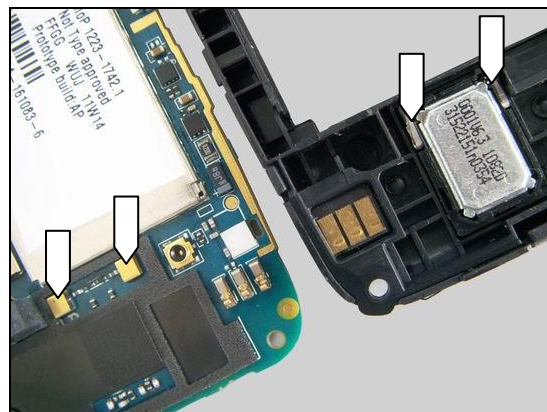


Check:

Inspect the lower Loudspeaker's pins and the Speaker Connectors on the Main PBA.

Action:

1. If dirty or oxidized – clean the pins and the Speaker Connectors.



2. If the lower Loudspeaker is damaged – replace the lower Loudspeaker.
3. Send to higher level of repair.



Problem Areas

1.6 Vibrator

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 Lens on the Rear Cover Assy.

Action:

1. If dirty – clean it.



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



Check:

Inspect the Camera Sponge on the Rear Cover Assy.

Action:

1. If dirty – clean it.
2. If scratched or damaged – replace the Rear Cover Assy.

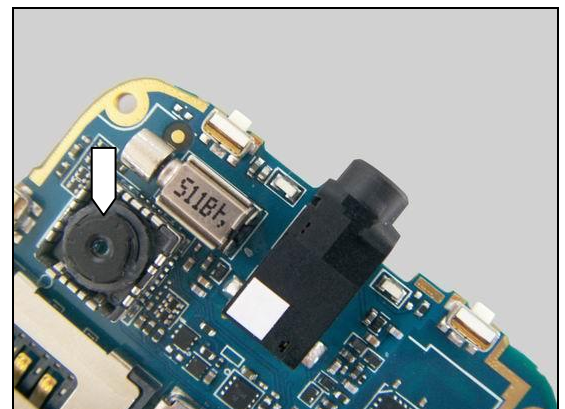


Check:

Inspect the Camera and its socket on the Main PBA.

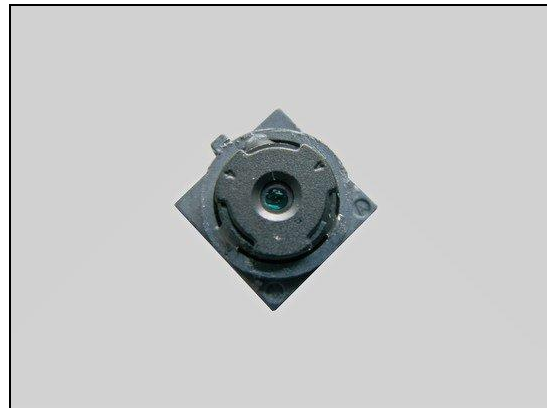
Action:

1. If improperly connected – re-install the camera.
2. If dirty or oxidized – clean them.



Problem Areas: Camera

3. If the Camera is damaged – replace it.
4. Send to higher level of repair.





Problem Areas

1.8 Touch Screen

1.8.1 Touch Screen malfunction

Check:

Inspect the touch screen of the Front Cover Assy.

Action:

1. If dirty – clean it.

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

Check:

Check the Touch Panel FPC (a) on the Front Cover Assy and the BtB connector (b) on the Main PBA.

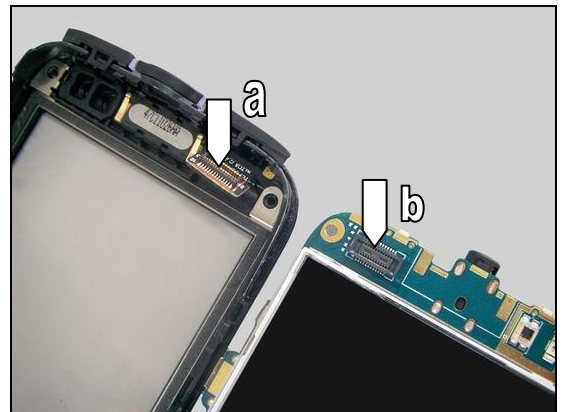
Action:

1. If improperly connected – reconnect it.

2. If dirty or oxidized – clean the two sides of the BtB connector.

3. If (a) is damaged – replace the Front Cover Assy.

4. 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 Conn Audio Jack.

Action:

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



Problem Areas

1.11 Sensor

1.11.1 Proximity Sensor malfunctions

Check:

Inspect the sensor window on the Front Cover Assy.

Action:

1. If dirty – clean it.
2. If scratched or damaged – replace the Front Cover Assy.



Check:

Inspect the sensor window inner and the Proximity sensor rubber on the Front Cover Assy.

Action:

1. If dirty – clean them.
2. If the sensor window inner is scratched or damaged – replace the Front Cover Assy.
3. If the Proximity sensor rubber is scratched or damaged – replace it.

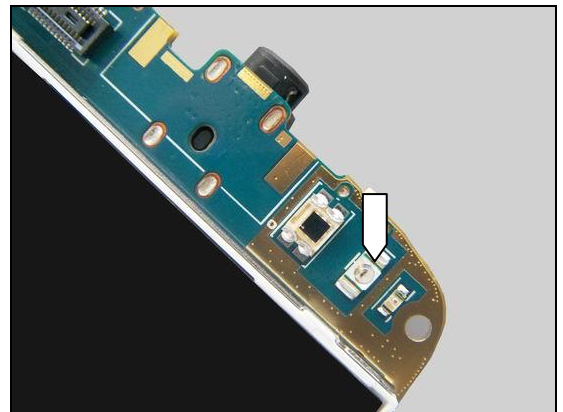


Check:

Inspect the lighter sensor on the Main PBA.

Action:

1. If dirty – clean it.
2. Send to higher level of repair.



1.11.2 Accelerometer test fails

Action:

Send to higher level of repair.



Problem Areas

1.12 Real Time Clock

1.12.1 Real Time Clock test fails

Action:

Send to higher level of repair.

Problem Areas

1.13 SIM

1.13.1 SIM not detected

Check:

Inspect the SIM holder.

Action:

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



1.13.2 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

1.14 Charging

1.14.1 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:

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

Be careful not to bend or damage the contact pins!



Check:

Inspect the Micro USB Connector.

Action:

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



Problem Areas

1.15 Bluetooth and WLAN

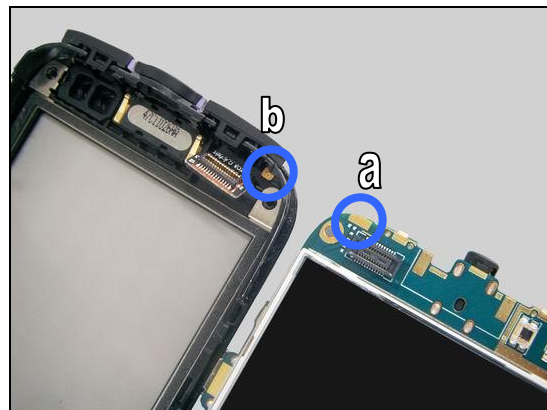
1.15.1 Bluetooth connection failure

Check:

Inspect the Bluetooth antenna contact pad (a) on the Main PBA and contact spring pin (b) on the Front Cover Assy.

Action:

1. If dirty or oxidized – clean them.
2. If (b) is damaged – replace the Front Cover Assy.
3. Send to higher level of repair.



Problem Areas

1.16 Network & Signal

1.16.1 No/Poor signal

Check:

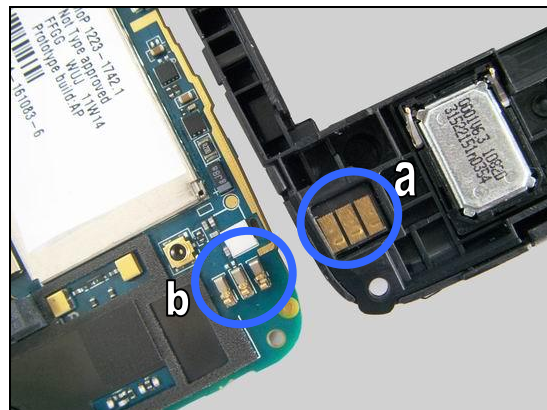
Inspect the main antenna contact pads (a) on the Rear Cover Assy and Conn Leaf Spring pins (b) on the Main PBA.

Action:

1. If dirty or oxidized – clean them.

2. If (a) are damaged – replace the Rear Cover Assy.

3. Send to higher level of repair.



Problem Areas

1.17 HandsFree by Wire

1.17.1 Connection to Portable HandsFree fails

Check:

Inspect the Conn Audio Jack.

Action:

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



Problem Areas

1.18 Data Communication

1.18.1 Data transfer via System Connector fails

Check:

Inspect the Micro 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-Aug-05	Initial release