



Troubleshooting Guide

- mechanical -



Satio
U1i,U1a,U_1



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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 switch-on indicator (b) illuminates after the power key (a) is depressed.

Action:

If activation of the vibrator and the switch-on indicator illumination is detected, refer to section 1.2 'Display'.

Check:

Check if Display do not light on (Black screen) when pressing switch-on button.

Action:

If no activation of the Display when switch-on.

1. Leave the phone in this state for several minutes.
2. Touch on battery cover, then if you feel hot(40-45degree).
3. Send to higher level of repair

Check:

Inspect the contact pads on the Battery.

Action:

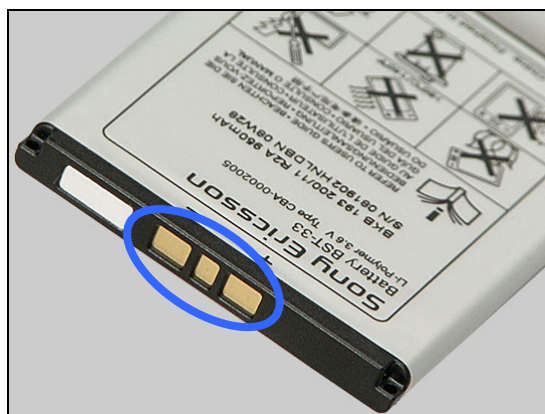
1. If dirty or oxidized – clean the pads.
2. If damaged – replace the Battery.

Check:

Inspect the battery connector.

Action:

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

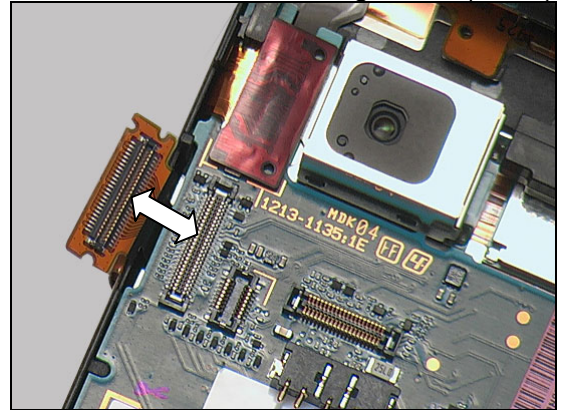


Check:

Inspect the FPC Receiver connector.

Action:

1. If not properly connected to the PCB – disconnect and reconnect it.
2. If dirty or oxidized – clean the male and female sides of the BtB connectors.
3. If damaged – replace it.
4. Send to higher level of repair.



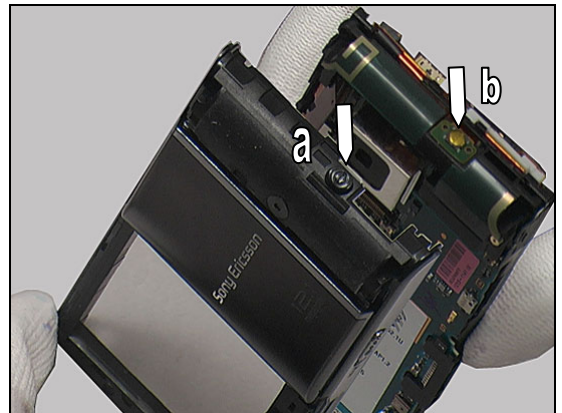
Problem Areas: Power

Check:

Inspect the On/Off Key (a) and key dome (b) on the FPC Receiver.

Action:

1. If dirty or oxidized – clean it.
2. If damaged – replace the On/Off Key or the FPC Receiver.
3. Send to higher level of repair.



Problem Areas

1.2 Display

1.2.1 Graphic & Illumination

Check:

Check whether the phone vibrates and the switch-on indicator illuminates after the power key has been pressed.

Action:

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

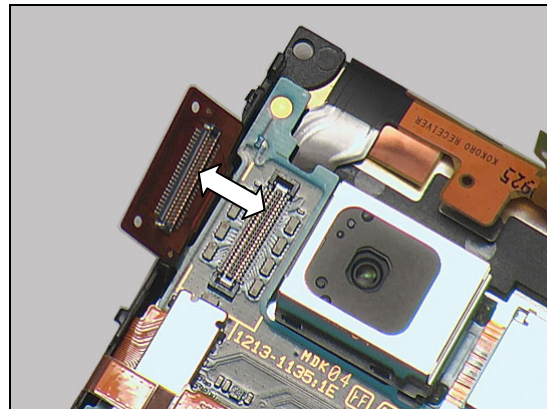


Check:

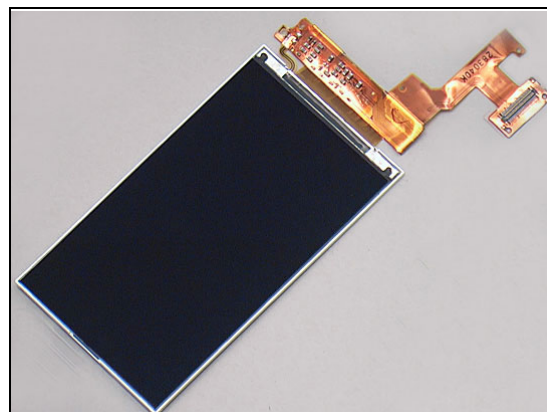
Inspect the Display connector.

Action:

1. If not properly connected to the PCB – disconnect and reconnect it.
2. If dirty or oxidized – clean the male and female sides of the BtB connectors.



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



Problem Areas

1.3 Touch Panel

1.3.1 Touch Panel no response

Do the Touch Panel calibration.

For detail information about calibration related issues, refer to 1230-3687 Test Instruction Repair Instruction.

It's important that the Stylus Pen is used when calibrating the unit! Using fingers or other tools might cause the screen to be incorrect aligned!

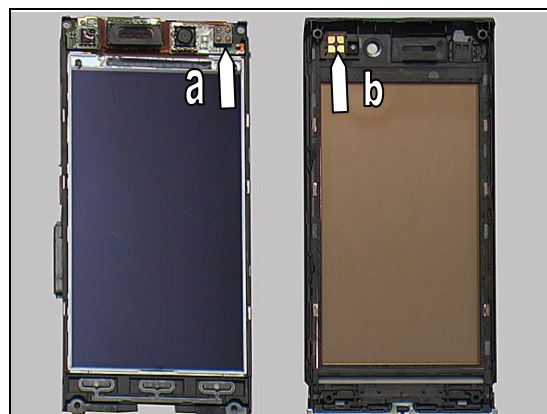


Check:

Check the contact pads (a) on the FPC Receiver and the contact pins (b) on the Window Main Display.

Action:

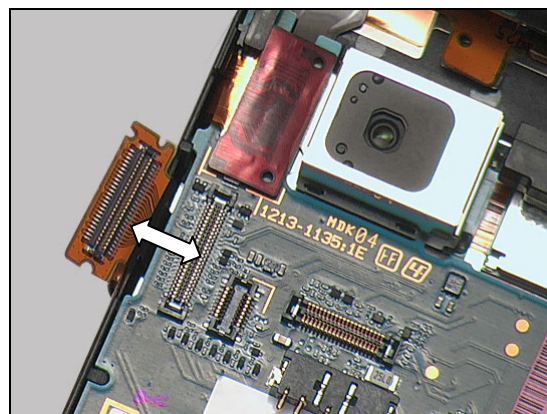
1. If dirty or oxidized – clean them.
2. If the contact pads are damaged – replace the Window. Main Display.



Check:

Inspect the FPC Receiver connector.

1. If dirty or oxidized – clean the male and female sides of the BtB connectors.
2. If damaged – replace it.



Problem Areas

1.4 Illumination

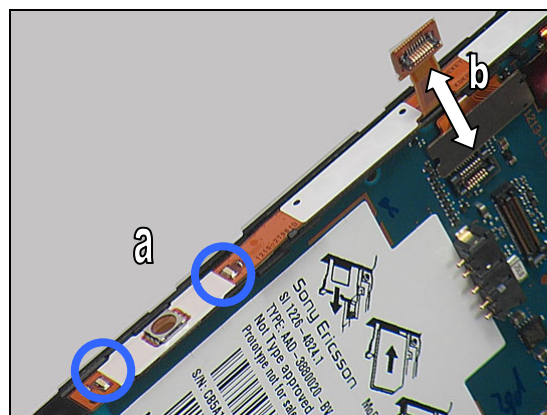
1.4.1 Camera Key

Check:

Inspect the two indicators (a) on the FPC Side Key and the BtB connector (b) of the FPC Side Key.

Action:

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



3. If damaged – replace the FPC Side Key.
4. Send to higher level of repair.

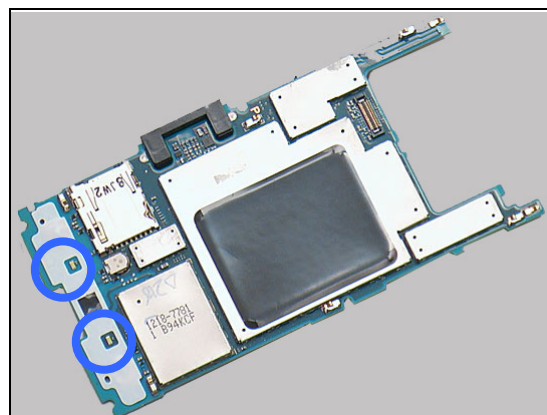
1.4.2 End, Send & Center Key

Check:

Inspect the LEDs.

Action:

1. If dirty or oxidized – clean them.
2. Replace the Input Switch Jog Dial.
3. Send to higher level of repair.



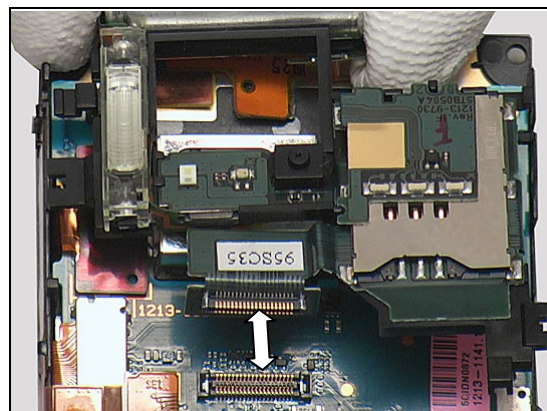
1.4.3 Flash LEDs

Check:

Inspect the BtB connector of the Xenon Flash Module to the PBA.

Action:

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



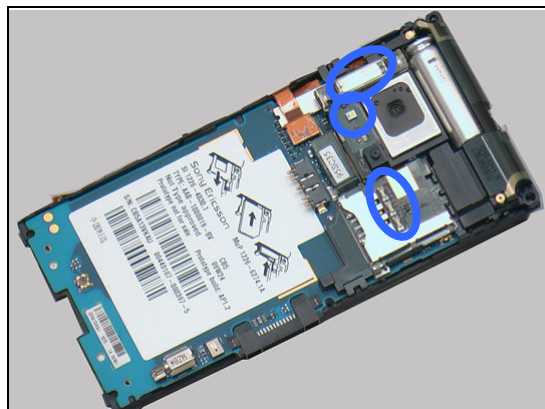
Problem Areas: Illumination

Check:

Inspect the LEDs.

Action:

1. If damaged – Replace the Xenon Flash Module.
2. Send to higher level of repair.



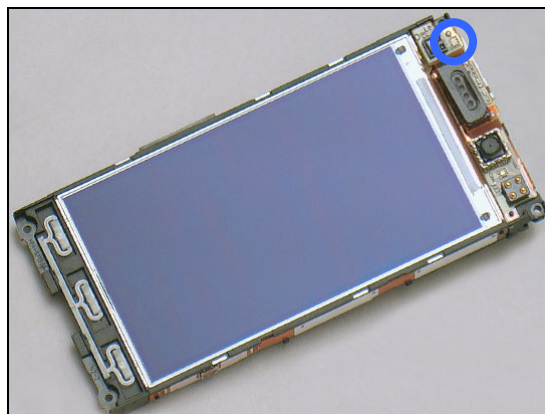
1.4.4 Switch-On LED

Check:

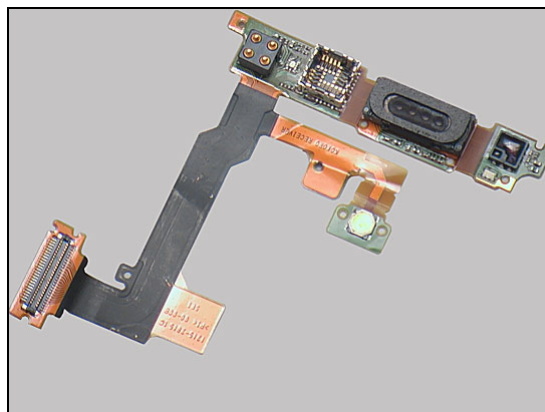
Inspect the Switch-On LED.

Action:

1. If dirty or oxidized – clean it.



2. Replace the FPC Receiver.
3. Send to higher level of repair.



Problem Areas

1.5 Keys

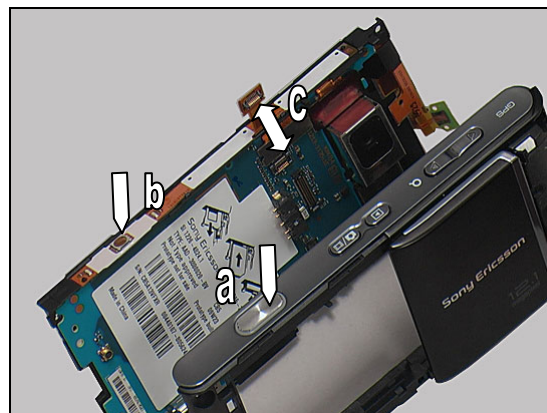
1.5.1 Camera Key

Check:

Inspect the Camera Key (a), the key dome on the FPC Side Key (b) and the connector (c) of the FPC Side Key to Main PBA.

Action:

1. If not properly connected – disconnect and reconnect it.
2. If damaged – replace it.
3. Send to higher level of repair.



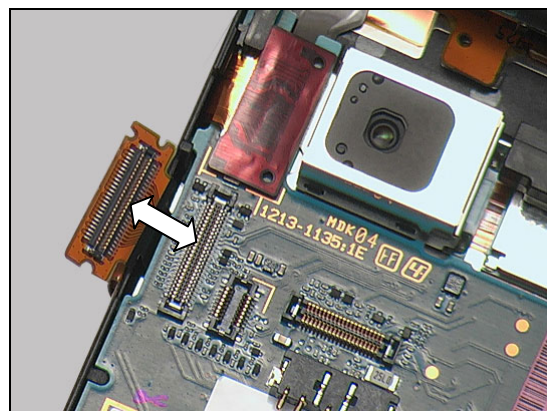
1.5.2 On/Off Key

Check:

Inspect the connector of FPC Receiver to the Main PBA.

Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean the connector.
3. If damaged – replace it.

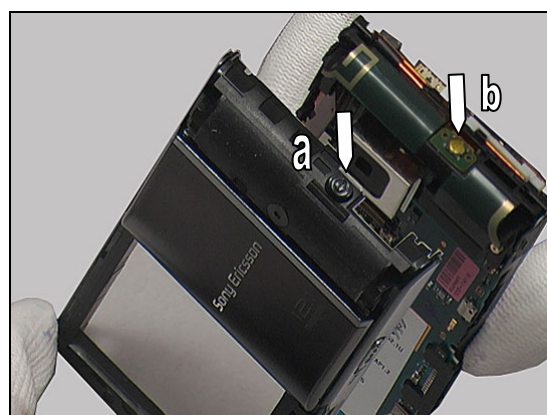


Check:

Inspect the On/Off Key (a) and key dome (b) on the FPC Receiver.

Action:

1. If dirty or oxidized – clean it.
2. If damaged – replace it.
3. Send to higher level of repair.



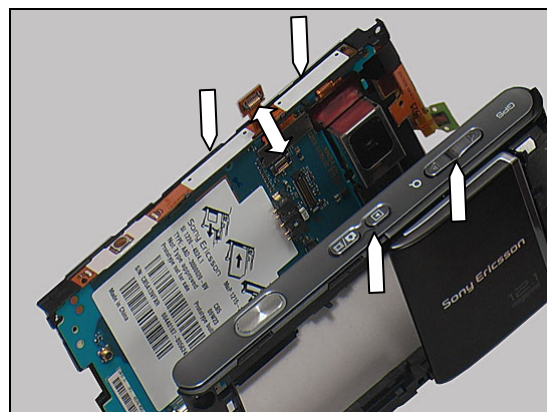
1.5.3 Side Keys

Check:

Inspect the side keys, key domes on the FPC Side Key and the FPC Side Key connector to the Main PBA.

Action:

1. If not properly connected – disconnect and reconnect it.
2. If damaged – replace the key or the FPC Side Key.
3. Send to higher level of repair.



Problem Areas: Keys

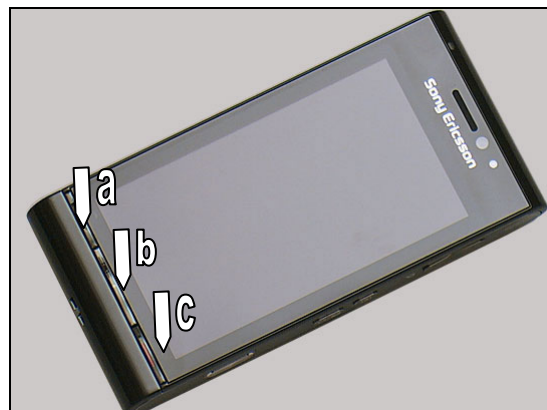
1.5.4 Send, End & Center Key

Check:

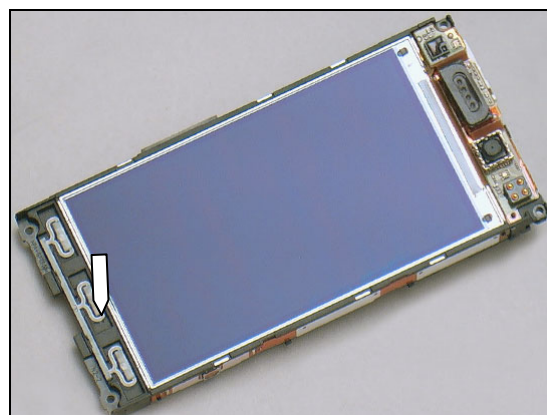
Inspect the Send (a), Center (b) & End (c) Key.

Action:

1. If damaged – replace the damaged key.

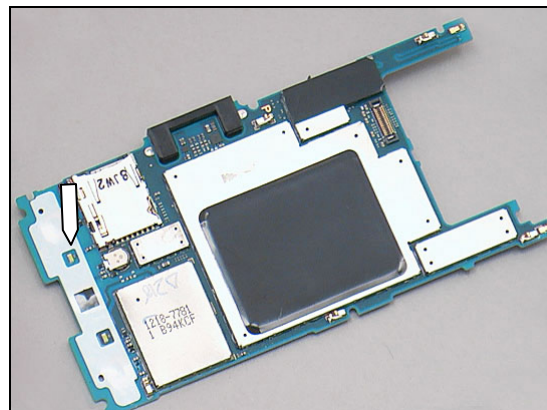


2. Replace the Navi Key.



3. Replace the Input Switch Jog Dial.

4. Send to higher level of repair.



Problem Areas

1.6 Audio

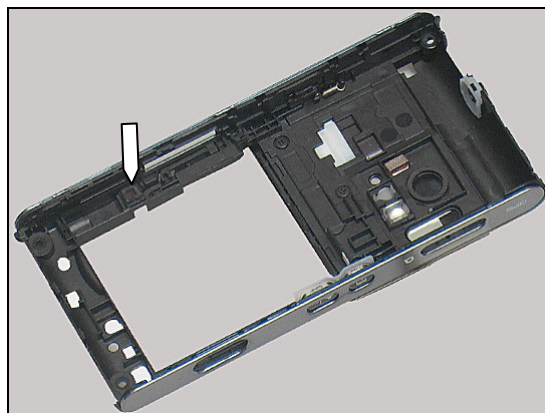
1.6.1 Microphone

Check:

Inspect the Microphone's external port and the Microphone Cushion.

Action:

1. If clogged – clean the port.
2. If damaged – replace the Microphone Cushion.
4. Send to higher level of repair.



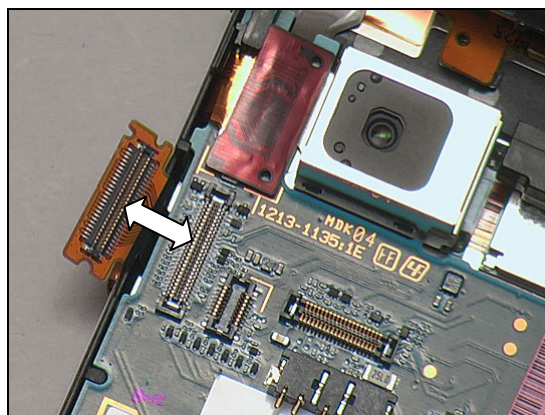
1.6.2 Receiver

Check:

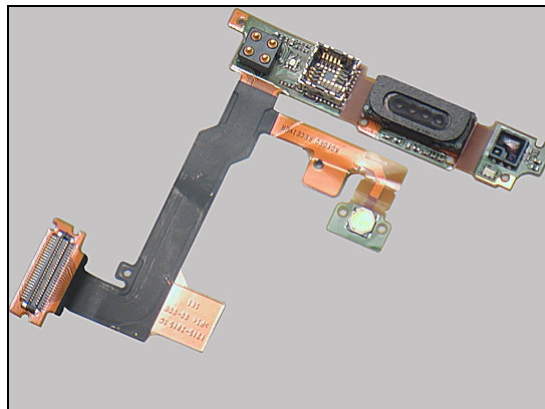
Inspect the Receiver's external port

Action:

1. If clogged – clean it or replace the Front Cover
2. If not properly connected – disconnect and reconnect it.



3. Replace the FPC Receiver.
4. Send to higher level of repair.



Problem Areas: Audio

1.6.3 Loudspeaker

Check:

Inspect the Loudspeaker's external port

Action:

1. If clogged – clean the speaker port.



2.If damaged – replace the Rear Panel Sub Assy.

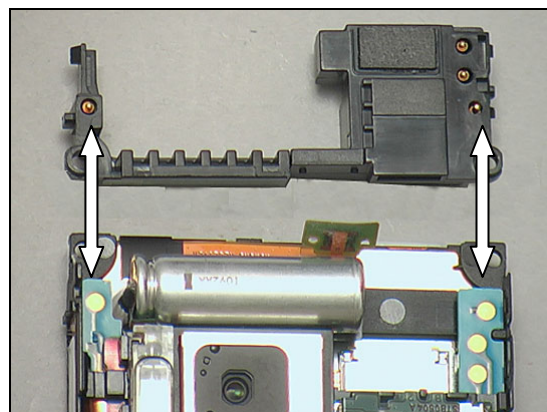


Check:

Inspect the contact pads on the Main PBA and pins on the Antenna(Wlan/GPS/Bluetooth).

Action:

1. If dirty or oxidized – clean the pads and pins.
2. Replace the Antenna(Wlan/GPS/Bluetooth).
3. Send to higher level of repair.



Problem Areas

1.7 Vibrator

1.7.1 Vibrator not generating alerts

Action:

Send to higher level of repair.

Problem Areas

1.8 Proximity Switch

1.8.1 Proximity Switch malfunction

Action:

Send to higher level of repair.

Problem Areas

1.9 Ambient Light

1.9.1 Ambient light malfunction

Action:

Send to higher level of repair.

Problem Areas

1.10 Camera

1.10.1 Rear camera defects

Check:

Inspect the camera window

Action:

1. If dirty – clean the window.

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

Check:

Inspect the Camera and the Camera connector to Main PBA.

Action:

1. If not properly connected – disconnect and reconnect it.
2. Replace the Camera 12.1M MPixel.
3. Send to higher level of repair.

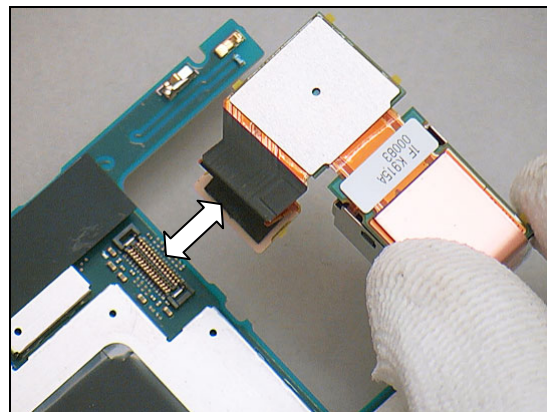
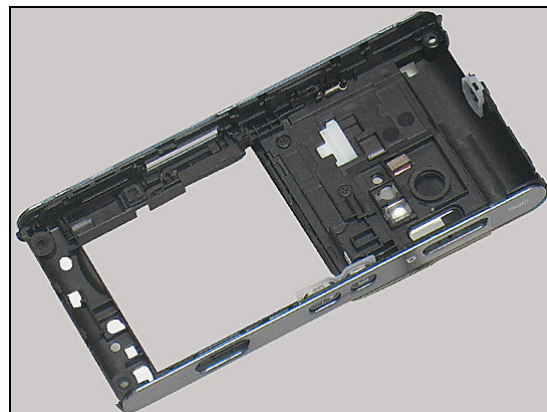
1.10.2 Front camera defects

Check:

Inspect the camera window on the Window Main Display.

Action:

1. If dirty – clean the window.
2. If scratched or damaged – replace the Window Main Display.



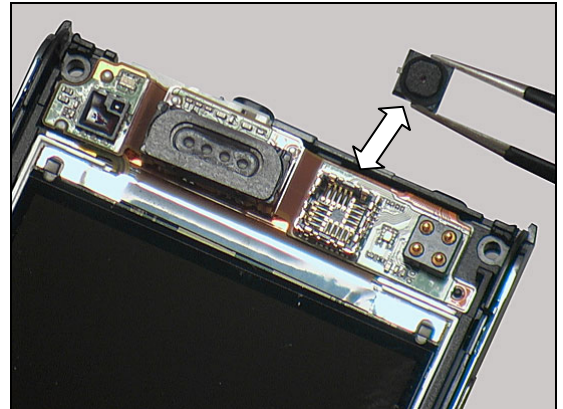
Problem Areas: Camera

Check:

Inspect the Camera QCIF MPixel and its connection with the FPC Receiver.

Action:

1. If dirty – clean the Camera QCIF MPixel and the camera socket on the FPC Receiver.
2. If not properly connected – re-establish the connection.

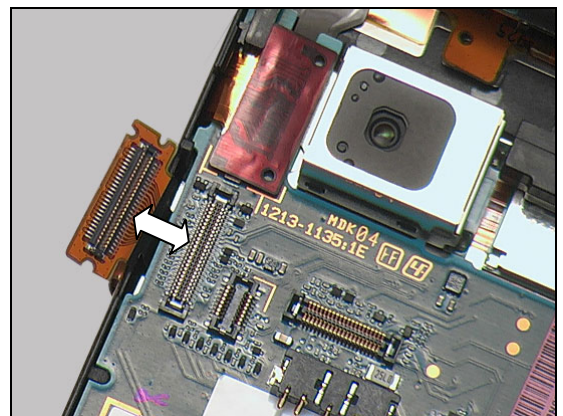


Check:

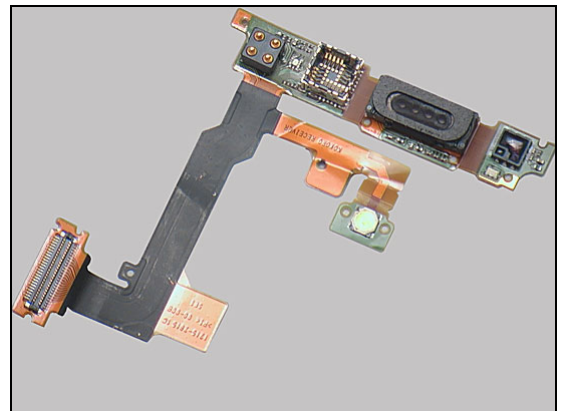
Check the connector of FPC Receiver to the Main PBA.

Action:

1. If not properly connected – re-establish the connection.



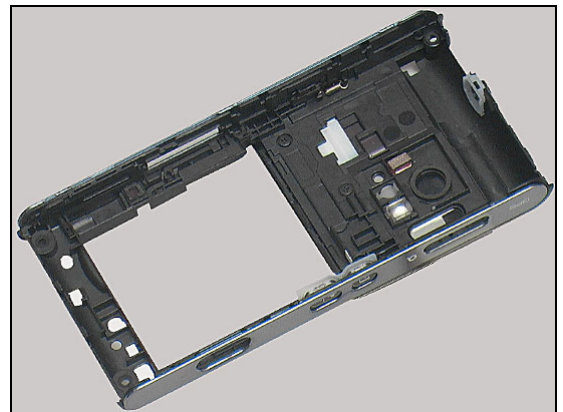
2. If the Camera QCIF MPixel or the FPC Receiver is damaged – replace it.
3. Send to higher level of repair.



1.10.3 Camera Cover Sensor performance

Action:

1. Replace the Rear Cover Sub Assy.
2. Send to higher level of repair.



Problem Areas

1.11 Accelerometer

1.11.1 Accelerometer test fails

Action:

Send to higher level of repair.

Problem Areas

1.12 Memory Card

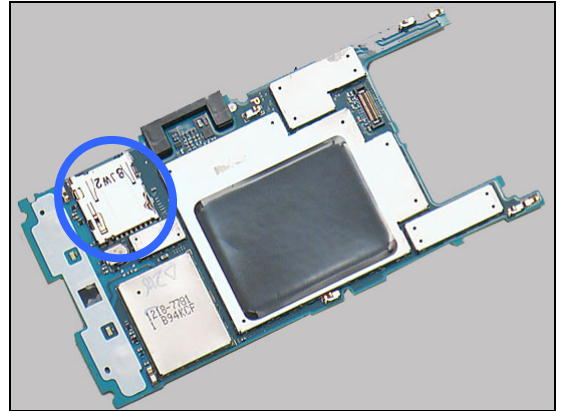
1.12.1 Memory Card not detected

Check:

Inspect the memory card holder.

Action:

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



Problem Areas

1.13 FM Radio

1.13.1 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

1.14 Real Time Clock

1.14.1 Real Time Clock test fails

Action:

Send to higher level of repair.

Problem Areas

1.15 SIM

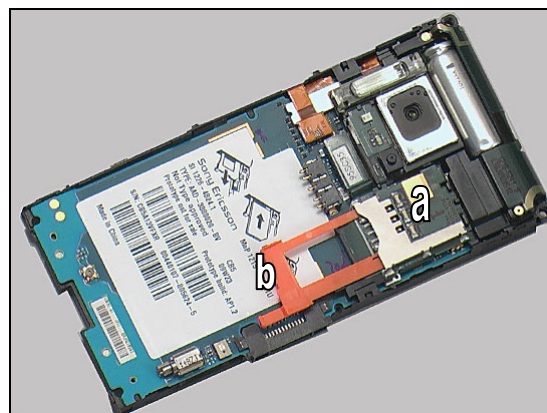
1.15.1 SIM not detected

Check:

Inspect the SIM holders (a) and (b).

Action:

1. If dirty or oxidized – clean the holder.
2. If damaged – Replace the Xenon Flash Module.

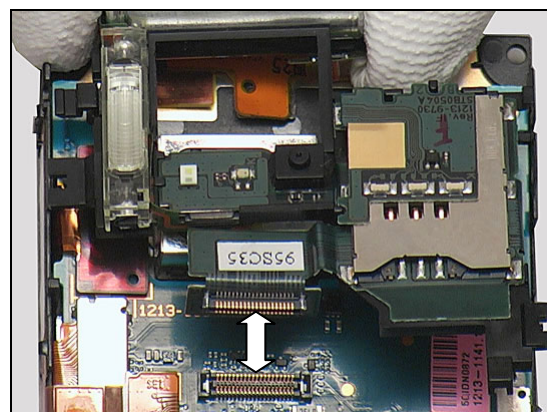


Check:

Inspect the BtB connectors of the Xenon Flash Module and the Main PBA.

Action:

1. If dirty or oxidized – clean the connectors.
2. If damaged – Replace the Xenon Flash Module.
3. Send to higher level of repair.



1.15.2 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

1.16 Charging

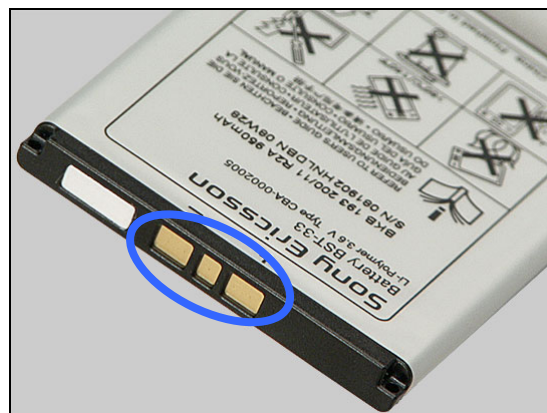
1.16.1 Battery will not charge

Check:

Inspect the contact pads of the Battery.

Action:

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

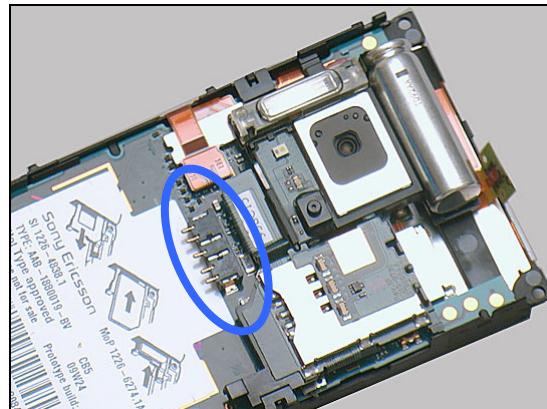


Check:

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.



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 Bluetooth, GPS & W-LAN

1.17.1 Bluetooth, GPS & W-LAN malfunctions

Check:

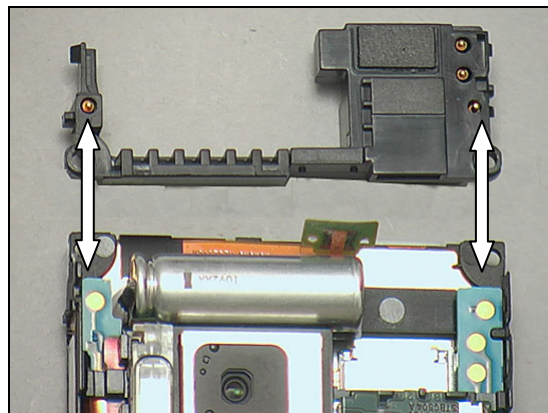
Inspect the contact pads on the Main PBA and pins on the Antenna(Wlan/GPS/Bluetooth).

Action:

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

2. Replace the Antenna(Wlan/GPS/Bluetooth).

3. Send to higher level of repair.



Problem Areas

1.18 Network & Signal

1.18.1 No/Poor signal

Check:

Ensure that a correct SIM is installed.

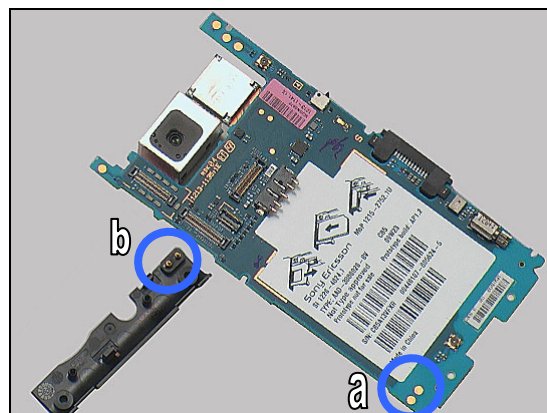
Inspect the contact pads on the Main PBA and the pins on the Main Antenna.

Action:

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

2. Replace the Main Antenna.

3. Send to higher level of repair.



Problem Areas

1.19 HandsFree by Wire

1.19.1 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

1.20 Data Communication

1.20.1 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.



2 History

Rev.	Date	Changes / Comments
1	2009-Oct-14	Initial Release
2	2009-Oct-19	Chapters of Proximity Switch and Ambient Light are added
3	2009-Dec-01	Added Trouble shooting in Chapter 1.1.1