

Troubleshooting Guide

- mechanical -



Xperia™ neo L

MT25i

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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 after the on/off key is depressed.

Action:

If activation of the Vibrator is detected, refer to section 1.4 'Display'.



Check:

Check the contact pads on the battery.

Action:

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



Check:

Check 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 – Replace PBA.

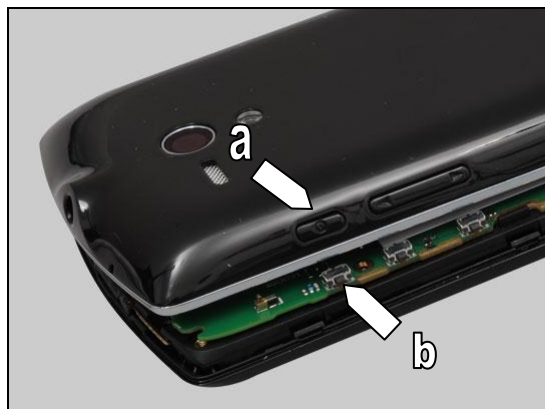


Check:

Inspect the on/off key (a) and the on/off switch (b) on the Main PBA.

Action

1. If the on/off key (a) or the on/off switch (b) is dirty or clogged – clean them.



Problem Areas: Power

2. If the on/off key is damaged – replace the Side Key.
3. Replace PBA.



Problem Areas

1.2 Keys

1.2.1 Home, Menu, Back and Search Keys

Check:

Inspect the Function Key on the Front Cover Assy.

Action:

1. If the Function Key is dirty or clogged – clean it.

2. If damaged – replace it.



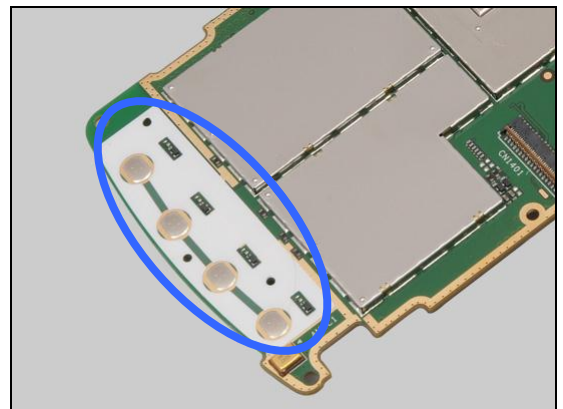
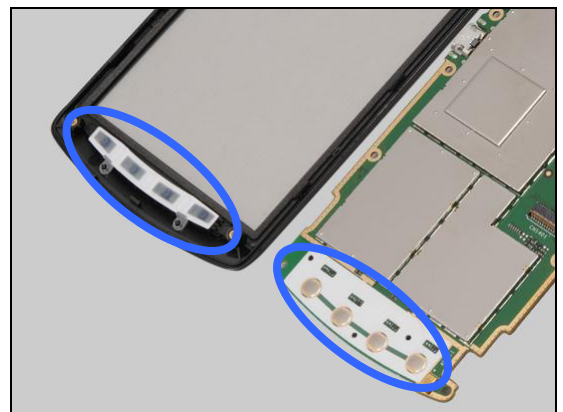
Check:

Check the connection between the Dome Sheet on the PBA and the back side of the Function Key.

Action:

1. If dirty or clogged – clean them.

2. If the Function Key is damaged – replace it.



Check:

Check the connection between the Dome Sheet and the PBA.

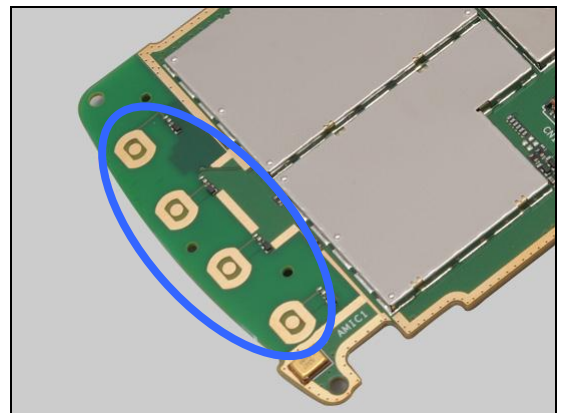
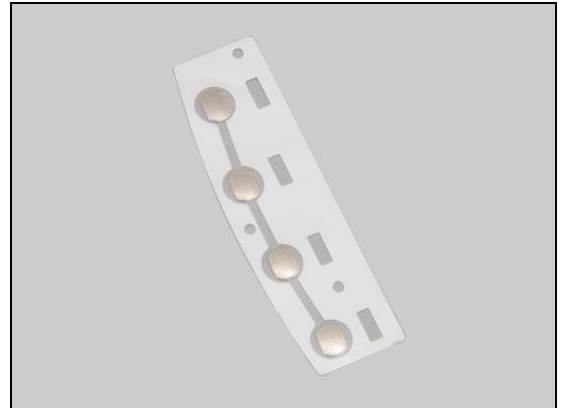
Problem Areas: Keys

Action:

1. If the Dome sheet is not properly attached or damaged – replace it.

2. If the golden pad is dirty – clean it.

3. Replace PBA.



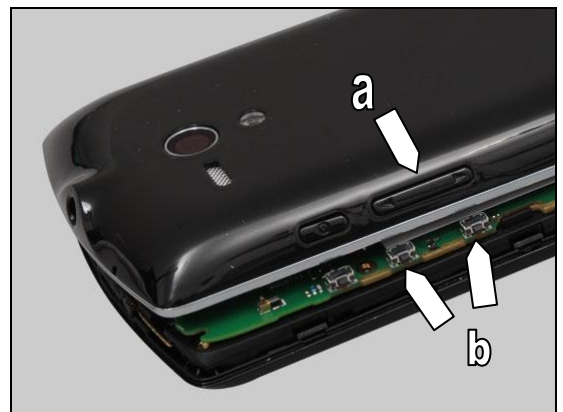
1.2.2 Volume Key

Check:

Inspect the volume key (a) on the Battery Cover and the volume switches (b) on the PBA.

Action:

1. If the volume key (a) or the volume switches (b) is dirty or clogged – clean them.



2. If the Side Key is damaged – replace it.

3. Replace PBA.



Problem Areas: Keys

1.2.3 On/Off key

Check:

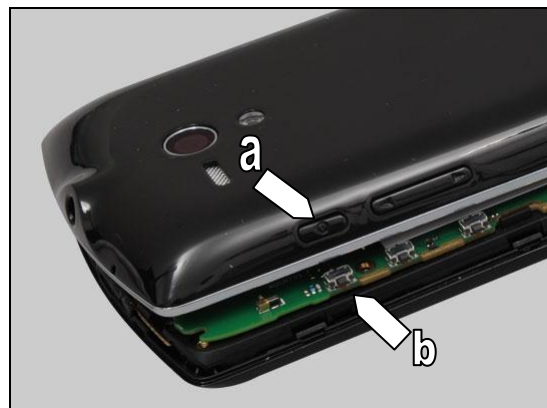
Inspect the on/off key (a) on the Front Cover and the on/off switch (b) on the PBA.

Action:

1. If the on/off key (a) or the on/off switch (b) is dirty or clogged – clean them.

2. If the on/off key is damaged – replace the Side Key.

3. Replace PBA.



Problem Areas

1.3 Touch Screen

1.3.1 Touch Screen malfunction

Check:

Inspect the touch screen.

Action:

If dirty – clean it.

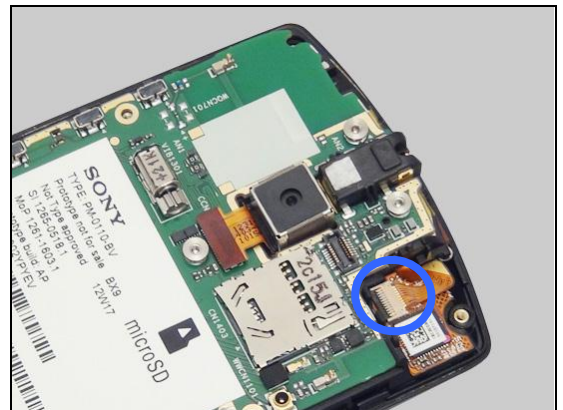


Check:

Inspect the both sides of the ZIF connector on the Front Cover Assy and the FPC on the PBA Receiver Flex.

Action:

1. If not properly connected – disconnect and reconnect.
2. If dirty or oxidized – clean it.



Check:

Inspect the Front Cover Assy and its FPC.

Action:

1. If the FPC or the touch screen is damaged – replace the Front Cover Assy.

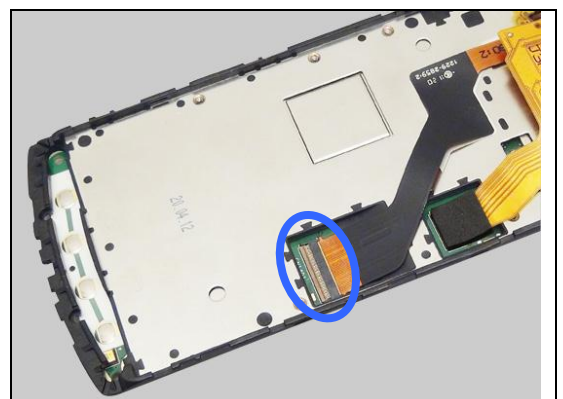


Check:

Inspect the both sides of the ZIF connector on the PBA and the FPC on the PBA Receiver Flex.

Action:

1. If not properly connected – disconnect and reconnect.
2. If dirty or oxidized – clean it.



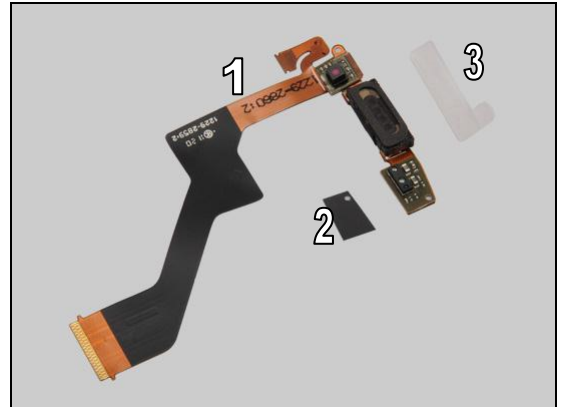
Problem Areas: Touch Screen

Check:

Inspect the PBA Receiver Flex.

Action:

1. If the PBA Receiver Flex is damaged – replace the PBA Receiver Flex, Mylar Tape LCD Frame and Receiver Adhesive.
2. Replace PBA.



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'.

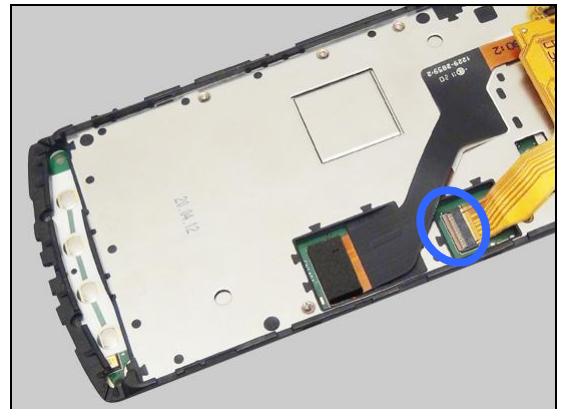


Check:

Inspect the both sides of the ZIF connector on the Main PBA and the FPC of the Display.

Action:

1. If not properly connected – disconnect and reconnect.
2. If dirty or oxidized – clean it.

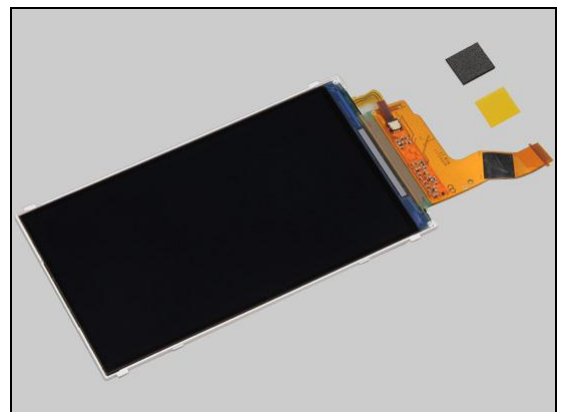


Check:

Inspect the Display and its FPC.

Action:

1. If the Display or its FPC is damaged – replace the Display, Gasket LCM Connector, Kapton LCM FPC.
2. Replace PBA.



Problem Areas:

1.5 LED/Illumination

1.5.1 LED/Illumination

Check:

Inspect the external port of the LED Indicator.

Action:

1. If dirty – clean it.

2. If the external port is damaged – replace the Battery Cover.

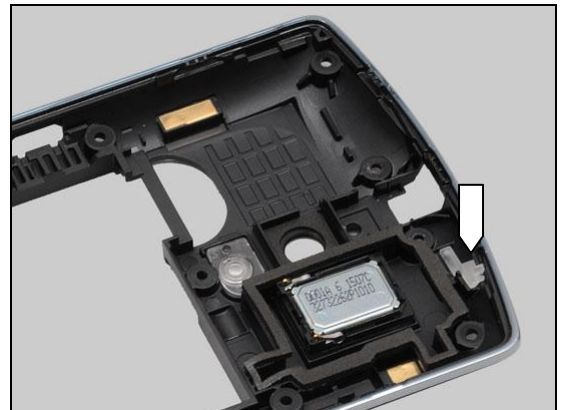
Check:

Inspect the LED Indicator.

Action:

1. If the LED Indicator is dirty – clean it.

2. If the LED Indicator is damaged – replace the LED Indicator and the LED Indicator Adhesive.



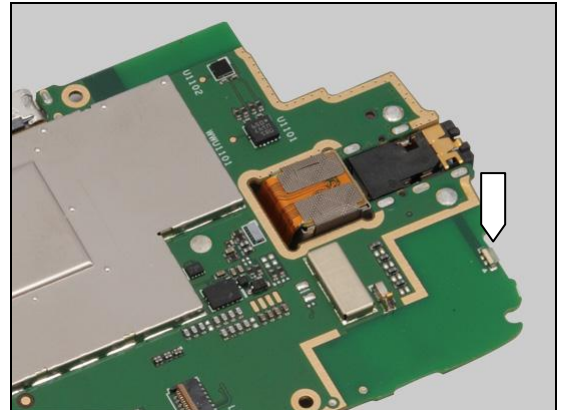
Problem Areas: LED/Illumination

Check:

Inspect the RGB LED on the PBA.

Action:

1. If dirty – clean it.
2. Replace PBA.



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 loudspeaker port.



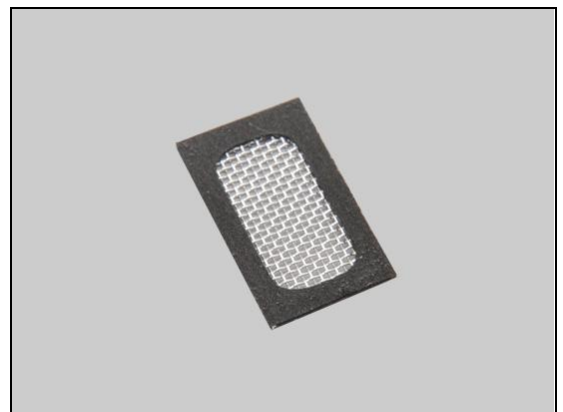
Check:

Inspect the Mesh Speaker on the Rear Cover Assembly.



Action:

If the Mesh Speaker is damaged – replace it.



Check:

Check the connection between Loudspeaker contact pins and contact pads on the PBA.

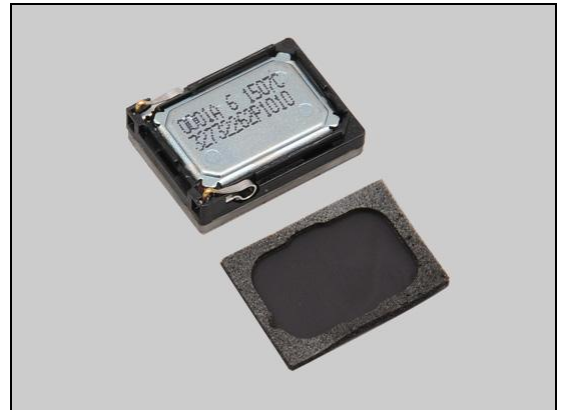
Action:

1. If dirty – clean them.



Problem Areas: Speaker

2. If the Loudspeaker or its pins are damaged – replace the Loudspeaker and Gasket Speaker.
3. Replace PBA.



Problem Areas

1.7 Earphone

1.7.1 Earphone

Check:

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

Action:

If clogged – clean it.



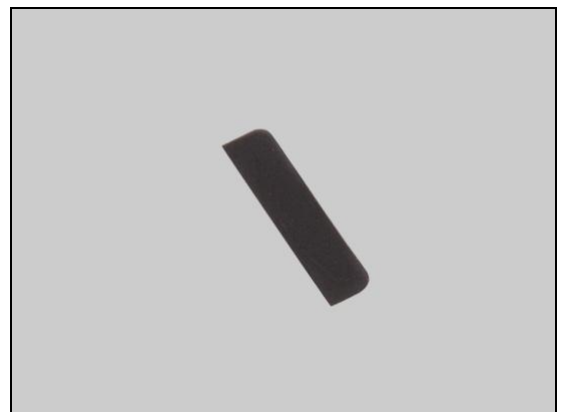
Check:

Inspect the Receiver Mesh on the Front Cover Assy.



Action:

If the Receiver Mesh is damaged – replace it.

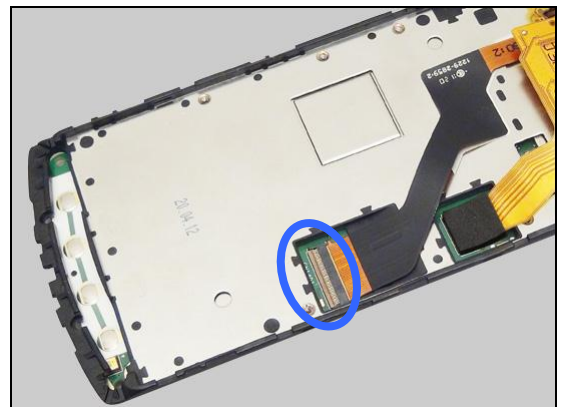


Check:

Inspect the both sides of the ZIF connector on the PBA and the FPC on the PBA Receiver Flex.

Action:

1. If not properly connected – disconnect and reconnect.
2. If dirty or oxidized – clean it.



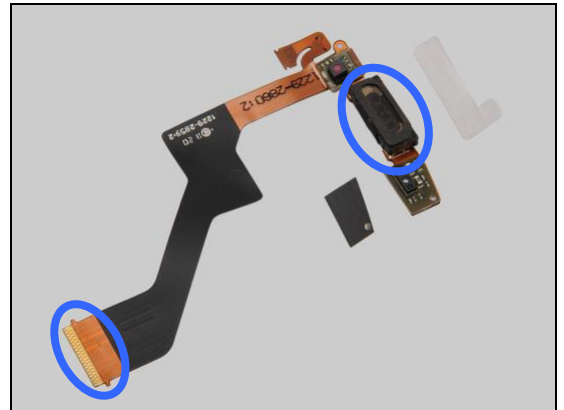
Problem Areas: Earphone

Check:

Inspect the PBA Receiver Flex and the Receiver.

Action:

1. If the PBA Receiver Flex or the receiver is damaged – replace the PBA Receiver Flex, Mylar Tape LCD Frame and Receiver Adhesive.
2. Replace PBA.



Problem Areas

1.8 Microphone

1.8.1 Microphone

Check:

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

Action:

If dirty or clogged – clean the port.



Check:

Inspect the Mesh Microphone on the Battery Cover.

Action:

If dirty – clean it.



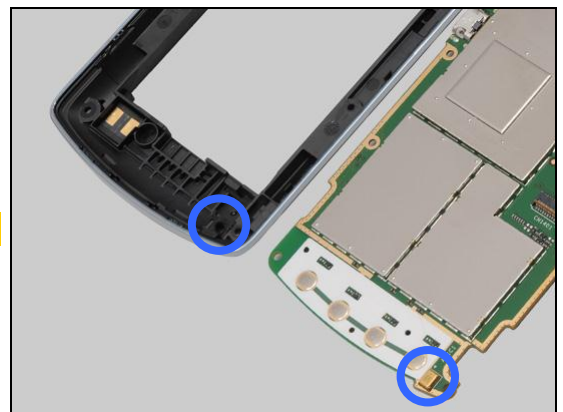
Check:

Inspect the Rubber Microphone and the Microphone on the PBA.

Liquid is not allowed!

Action:

1. If dirty – clean them.



2. If the Rubber Microphone is damaged – replace it.

3. Replace PBA.



Problem Areas

1.9 Vibrator

1.9.1 Vibrator not generating alerts

Action:

Replace PBA.



Problem Areas

1.10 Camera

1.10.1 Camera defects

Check:

Inspect the camera window on the Rear Cover Assembly.

Action:

1. If dirty – clean it.



2. If the camera window is scratched or damaged – replace the Rear Cover Assembly.

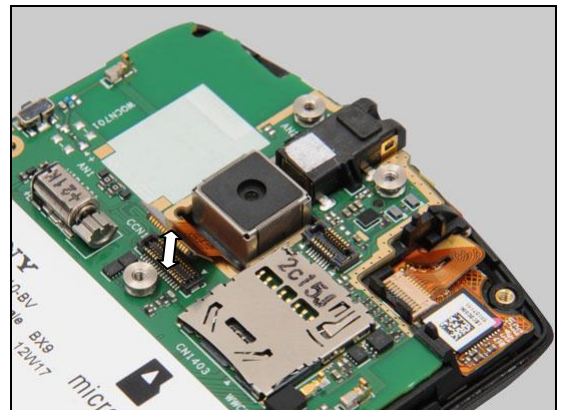


Check:

Check the BtB connector of the Camera to the PBA.

Action:

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

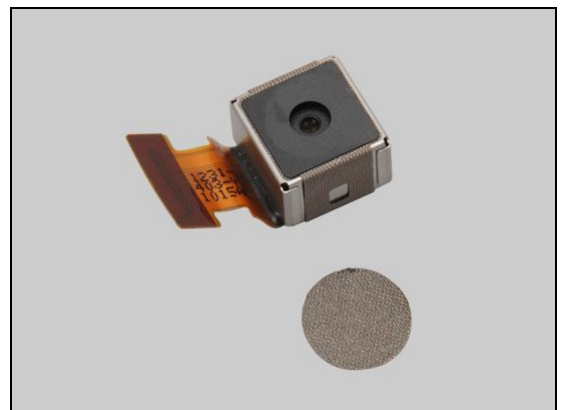


Check:

Inspect the Camera.

Action:

1. If the Camera is damaged – replace the Camera and Camera Conductive Adhesive.
2. Replace PBA.



Problem Areas: Camera

1.10.2 Video Call Camera defects

Check:

Inspect the video camera window on the Front Cover Assy.

Action:

1. If dirty – clean the window area.



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



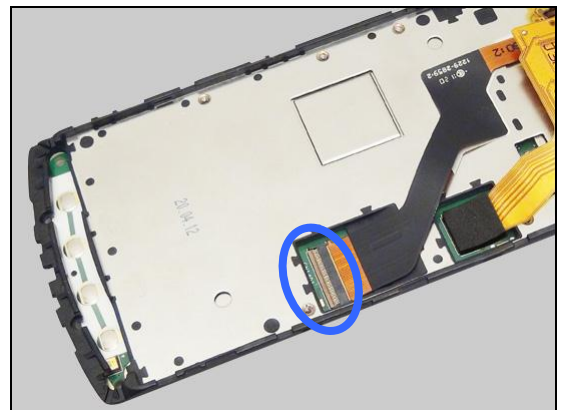
Check:

Inspect the both sides of the ZIF connector on the PBA and the FPC on the PBA Receiver Flex.

Action:

1. If not properly connected – disconnect and reconnect.

2. If dirty or oxidized – clean it.



Check:

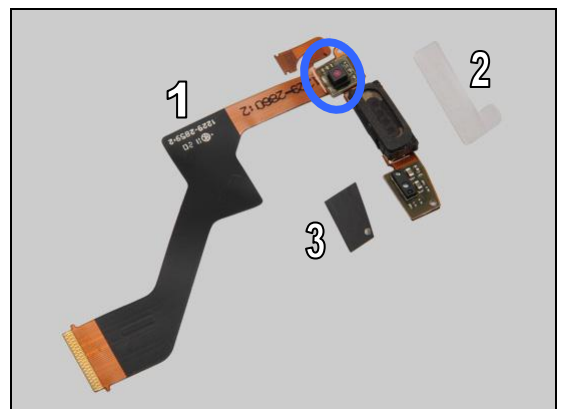
Inspect the PBA Receiver Flex and the VGA camera on it.

Action:

1. If dirty – clean it.

2. If the VGA camera or the PBA Receiver Flex is damaged – replace the PBA Receiver Flex, Mylar Tape LCD Frame and Receiver Adhesive.

3. Replace PBA.



Problem Areas

1.11 Flash LED

1.11.1 Flash LED not flashing

Check:

Inspect the window of the flash LED on the Rear Cover Assembly.

Action:

1. If dirty – clean the window.

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

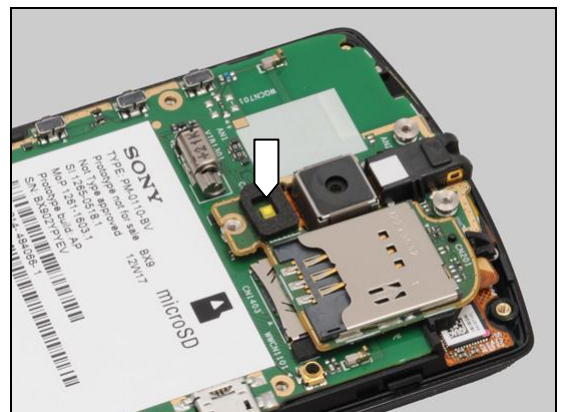


Check:

Inspect the Flash LED on the Sub SIM PBA Assy.

Action:

If dirty – clean it.

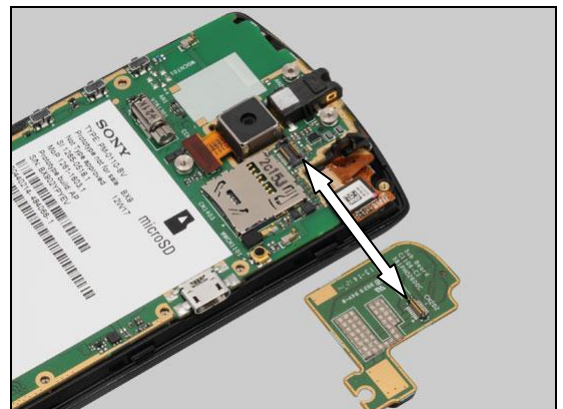


Check:

Inspect the BtB connector of the Sub SIM PBA Assy to the PBA.

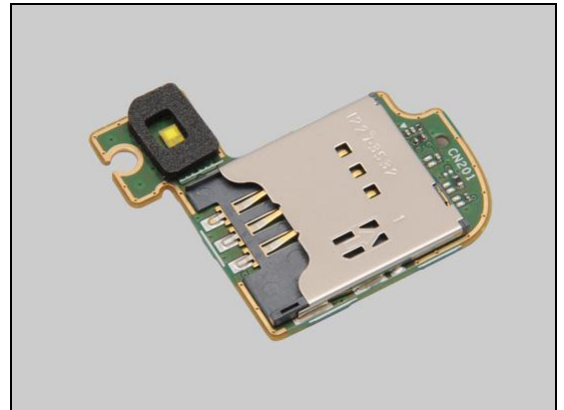
Action:

1. If not properly connected – disconnect and reconnect.
2. If dirty or oxidized – clean it.



Problem Areas: Flash LED

3. If the Flash LED or the BtB connector of the Sub SIM PBA Assy is damaged – replace the Sub SIM PBA Assy.
4. Replace PBA.



Problem Areas

1.12 Bluetooth and WLAN

1.12.1 Bluetooth or WLAN connection failure

Check:

Inspect the WLAN and Bluetooth antenna on the Rear Cover Assembly.

Action:

1. If dirty – clean it.



2. If the pads are damaged – replace the Rear Cover.



Check:

Inspect the WLAN and Bluetooth antenna contact pads on the Rear Cover Assembly and the contact pins on the PBA.

Action:

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



2. If the pads are damaged – replace the Rear Cover.
3. Replace PBA.



Problem Areas

1.13 GPS

1.13.1 GPS malfunctions

Check:

Inspect the GPS antenna on the Rear Cover Assembly.

Action:

1. If dirty – clean it.



2. If the pads are damaged – replace the Rear Cover Assembly.



Check:

Inspect the GPS antenna contact pads on the Rear Cover Assembly and the contact pins on the PBA.

Action:

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



2. If the pads are damaged – replace the Rear Cover Assembly.

3. Replace PBA.



Problem Areas

1.14 Compass

1.14.1 Compass fails

Action:

Replace PBA.

Problem Areas

1.15 Accelerometer

1.15.1 Accelerometer test fails

Action:

Replace PBA.

Problem Areas

1.16 Ambient Light Sensor

1.16.1 Light Sensor malfunctions

Check:

Inspect the external window area of light sensor on the Front Cover Assy.

Action:

If dirty – clean it.

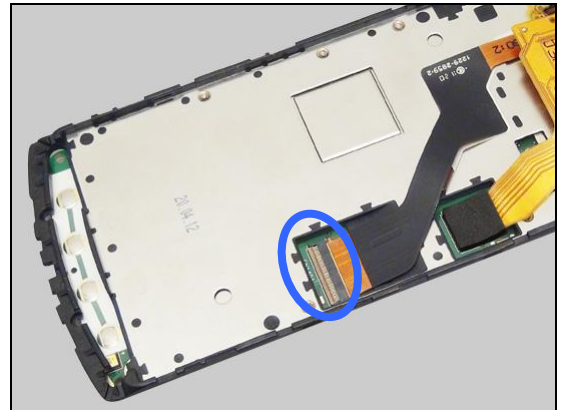


Check:

Inspect the both sides of the ZIF connector on the PBA and the FPC on the PBA Receiver Flex.

Action:

1. If not properly connected – disconnect and reconnect.
2. If dirty or oxidized – clean it.

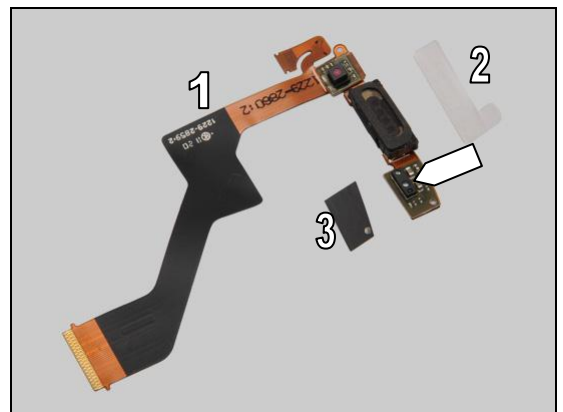


Check:

Inspect the PBA Receiver Flex.

Action:

1. If the PBA Receiver Flex or its light sensor is damaged – replace the PBA Receiver Flex, Mylar Tape LCD Frame and Receiver Adhesive.
2. Replace PBA.



Problem Areas

1.17 Proximity switch

1.17.1 Proximity switch malfunctions

Check:

Inspect the Proximity switch and sensor window area on the Front Cover Assy.

Action:

1. If dirty – clean it.

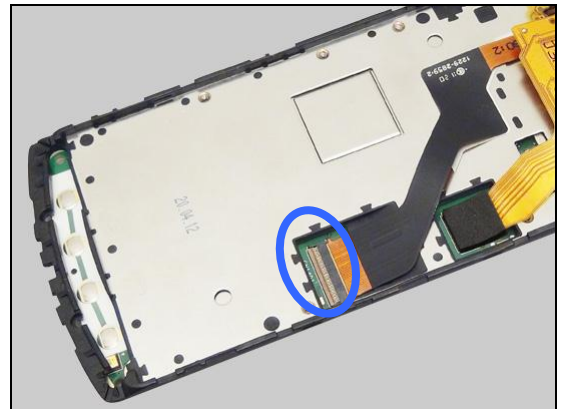


Check:

Inspect the both sides of the ZIF connector on the PBA and the FPC on the PBA Receiver Flex.

Action:

1. If not properly connected – disconnect and reconnect.
2. If dirty or oxidized – clean it.

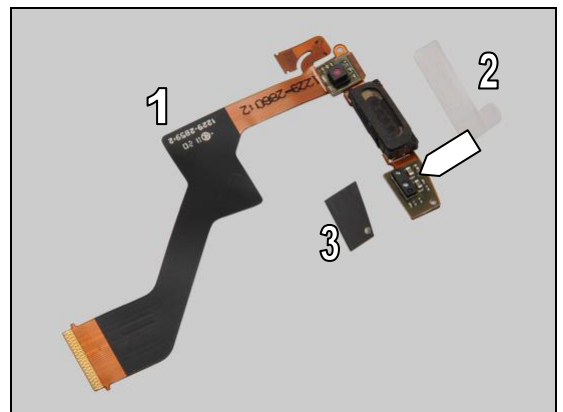


Check:

Inspect the PBA Receiver Flex.

Action:

1. If the PBA Receiver Flex, its sensor or switch is damaged – replace the PBA Receiver Flex, Mylar Tape LCD Frame and Receiver Adhesive.
2. Replace PBA.



Problem Areas

1.18 Real Time Clock

1.18.1 Real Time Clock test fails

Action:

Replace PBA.

Problem Areas

1.19 Total call time

1.19.1 Total call time fails

Action:

Replace PBA.

Problem Areas

1.20 External Memory

1.20.1 Memory Card not detected

Check:

Inspect the memory card holder and check if a memory card can be properly inserted.

Action:

If dirty or clogged – clean the holder.

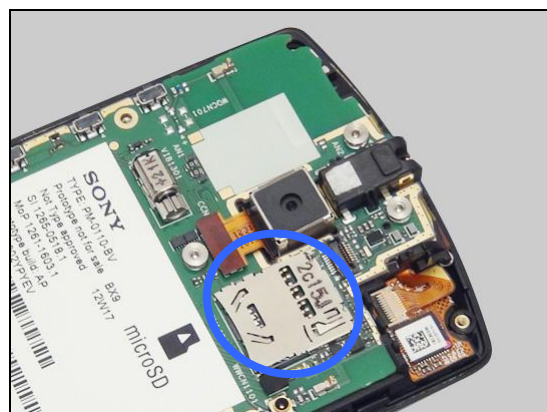


Check:

Inspect the memory card holder on the PBA.

Action:

1. If dirty or clogged – clean the holder.
2. Replace PBA.



Problem Areas

1.21 Security

1.21.1 Security fails

Action:

Replace PBA.

Problem Areas

1.22 FM Radio

1.22.1 No/Poor FM Radio reception

Check:

Inspect the Audio Jack Connector.

Action:

If dirty or clogged – clean the connector.

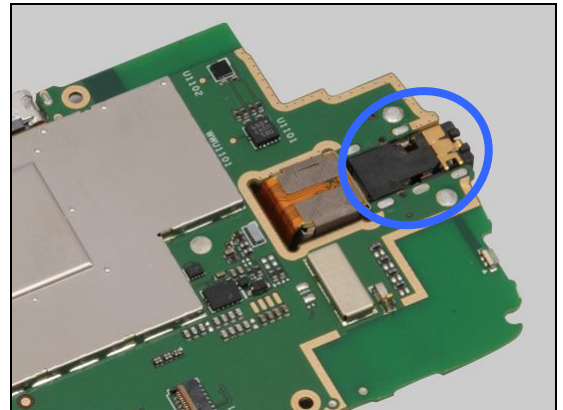


Check:

Inspect the Audio Jack Connector on the PBA.

Action:

1. If dirty or oxidized – clean it.
2. Replace PBA.



Problem Areas

1.23 Network & Signal

1.23.1 No/Poor signal

Check:

Inspect the main antenna on the Rear Cover Assembly.

Action:

1. If dirty – clean it.

2. If damaged – replace the Antenna Holder.

Check:

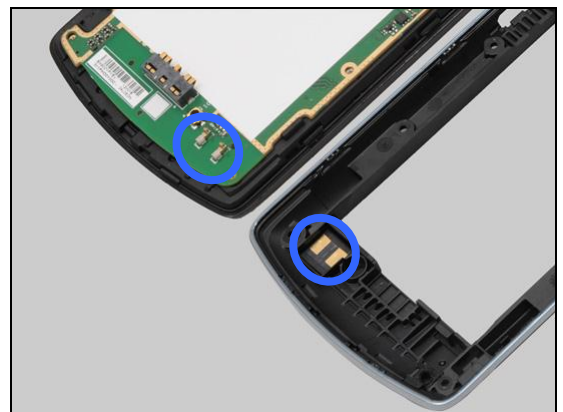
Inspect the main antenna contact pins on the Rear Cover Assembly and contact pads on the PBA.

Action:

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

2. If the pads are damaged – replace the Antenna Holder.

3. Replace PBA.



Problem Areas

1.24 SIM

1.24.1 SIM not detected

Check:

Inspect the external area of the SIM card holder.

Action:

If dirty or oxidized – clean the holder.



Check:

Inspect the SIM card holder of the Sub SIM PBA Assy.

Action:

If dirty or oxidized – clean the holder.

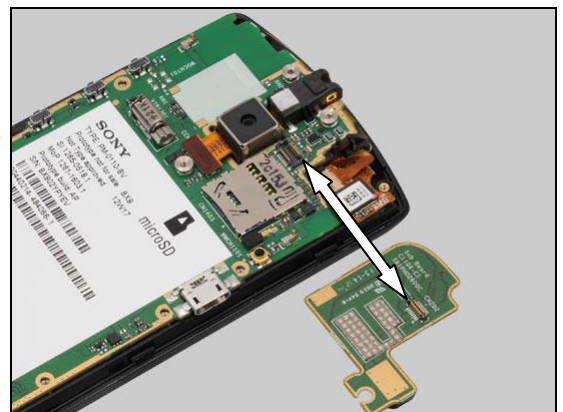


Check:

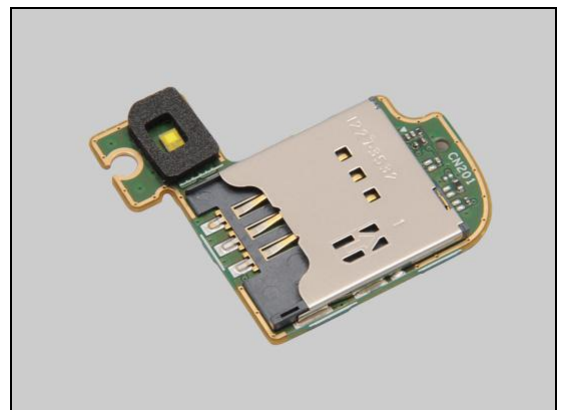
Inspect the BtB connector of the Sub SIM PBA Assy to the PBA.

Action:

1. If not properly connected – disconnect and reconnect.
2. If dirty or oxidized – clean it.



3. If the SIM holder or the BtB connector of the Sub SIM PBA Assy is damaged – replace the Sub SIM PBA Assy.
4. Replace PBA.



Problem Areas: SIM

1.24.2 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. Replace PBA.



Problem Areas

1.25 Charging

1.25.1 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. Replace PBA.



Problem Areas

1.26 HandsFree by Wire

1.26.1 Connection to Portable HandsFree fails

Check:

Inspect the Audio Jack Connector.

Action:

If dirty or clogged – clean the connector.

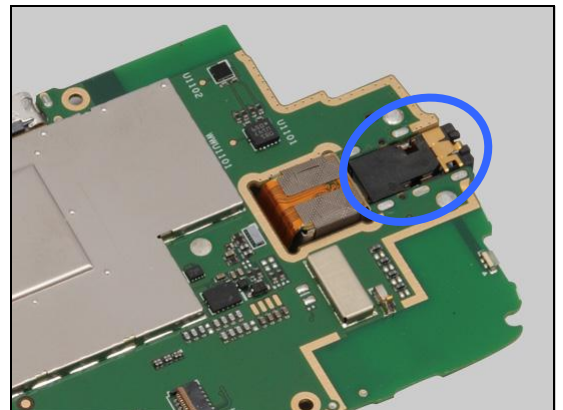


Check:

Inspect the Audio Jack Connector on the PBA.

Action:

1. If dirty or oxidized – clean it.
2. Replace PBA.



Problem Areas

1.27 Data Communication

1.27.1 Data transfer via System Connector fails

Check:

Inspect the USB connector.

Action:

1. If dirty or oxidized – clean the connector.
2. Replace PBA.



2 Revision History

Rev.	Date	Changes / Comments
1	2012-Jun-25	Initial release
2	2012-Sep-11	Update Chapter 1.4 Display