

Trouble shooting Guide

- mechanical -



Xperia™ XZs
G8231, G8232 (Dual SIM)

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For general information about mechanical repair related issues, refer to 1220-1333: Generic Repair Manual - mechanical

Always disconnect the Battery FPC BtB connector to cut off power supply when the Display Assy is disassembled.

Always finally connect the Battery FPC BtB connector after other connector are connected except the Display BtB.

1289-2983 SMRA(Sony Mobile Repair Application) Calibration or Flashing Customize by Emma or Aged Battery Reset by Emma must be performed when following Reassembly or Replacement.

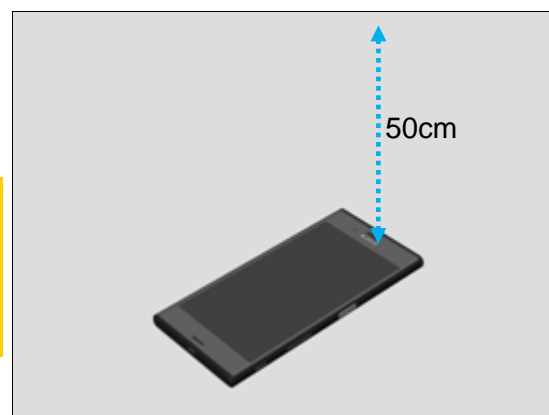
		SMRA Calibration					Emma	
		Proximity	Noise Cancelling	Color ID Flashing	RGB-C-IR	ToF	Flashing Customize	Aged Battery Reset
Reassembly	Display Assy	○						
	PBA Complete	○						
Replacement	Display Assy	○						
	PBA Complete	○	○	○	○	○		
	FPC JK Module		○					
	Battery							○
	Cover Main				○			
	Loudspeaker						○	
	Speaker						○	

When performing proximity sensor calibration, put the phone unit on a stable place, facing up, and no any objects within 50cm.

Note!

Remove the protection film if sensor window is covered by the protection film.

The sensor window shouldn't be covered by protection film for proximity sensor calibration.



1 Problem Areas

1.1 Power

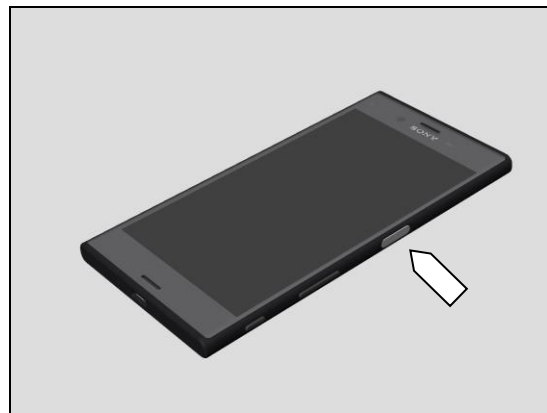
1.1.1 Will not power on or will switch off randomly

Check:

Check whether the Notification LED blinks by pressing the on/off key.

Action:

If NO Notification LED blink is detected, perform a force shut down, press power key and volume up key for 10 seconds and then power on the unit again.

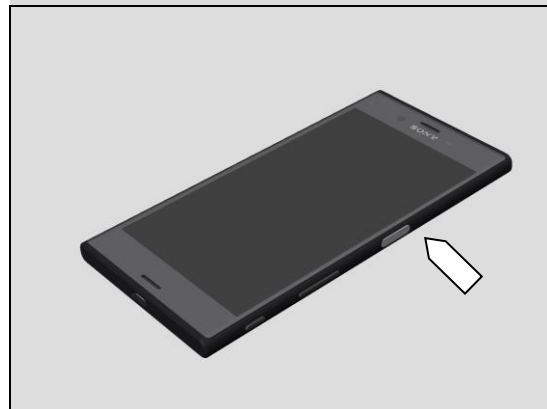


Check:

Check whether the phone vibrates by pressing the on/off key.

Action:

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



2. If NO activation of the Vibrator is detected and the Notification LED blinks by pressing the on/off key, check that the battery is charging when connected to a charger.

Follow Test Instruction - mechanical chapter 2.4.5 (Charging via Charger or Computer), Diagnostic Battery / Charging status.

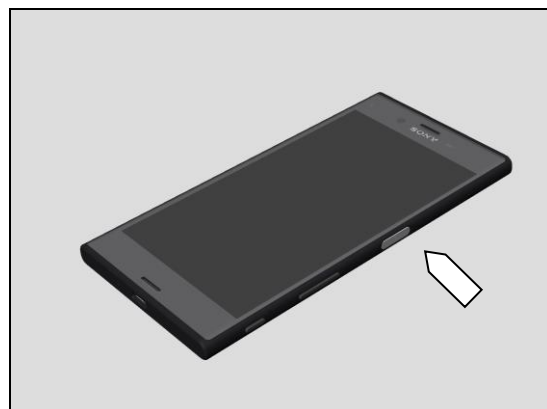


Check:

Inspect the on/off key.

Action:

Refer to section 1.2.3 'On/Off Key'.



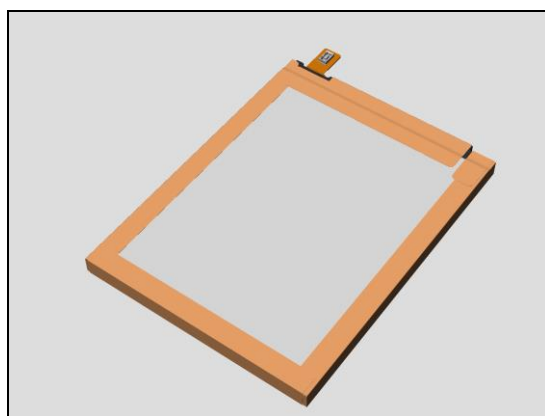
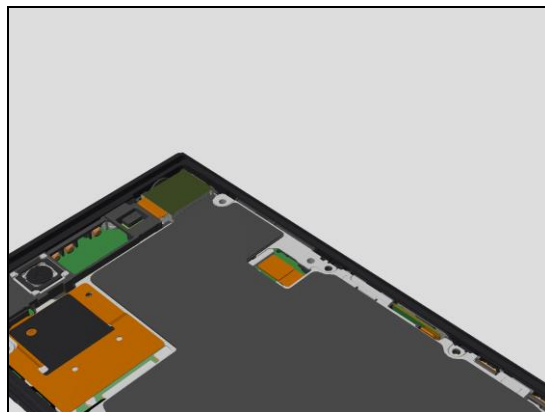
Problem Areas: Power

Check:

Inspect the BtB connector of Battery to Main PBA.

Action:

1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean the both sides of the BtB connector.
3. If the BtB connector of the FPC or the Battery is damaged – replace the Battery.
4. Replace Main PBA.



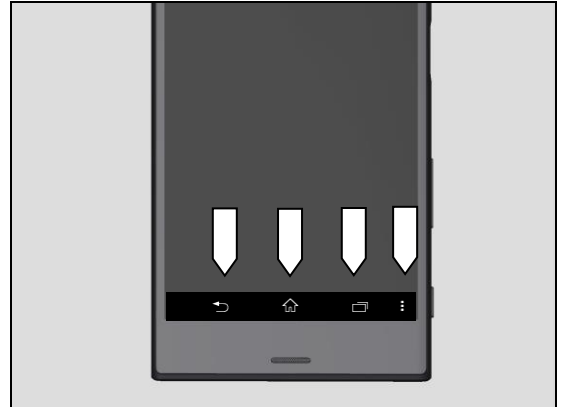
Problem Areas

1.2 Keys

1.2.1 Back, Menu, and Home Keys

Action:

1. Refer to section 1.3 'Touch Screen'.
2. Replace Main PBA.



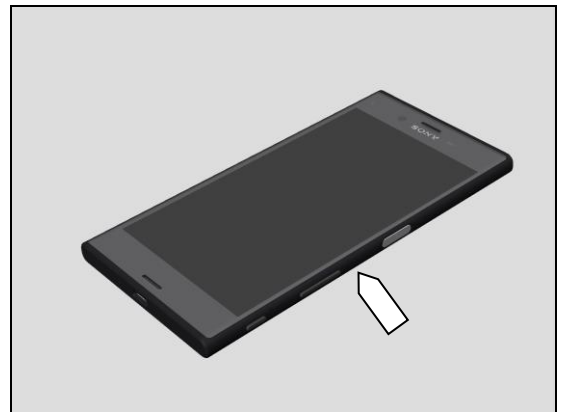
1.2.2 Volume Key

Check:

Inspect the external area of the Key Volume.

Action:

1. If dirty – clean it.
2. If damaged – replace the Key Volume.

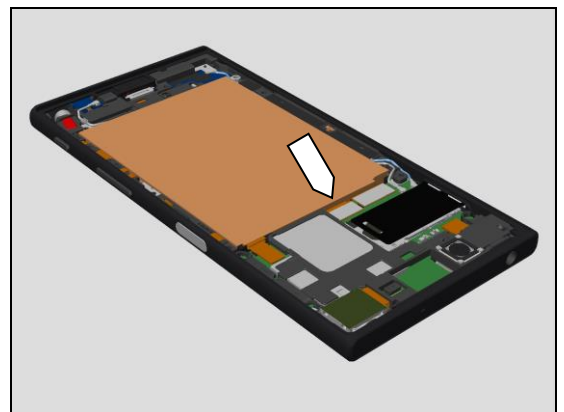


Check:

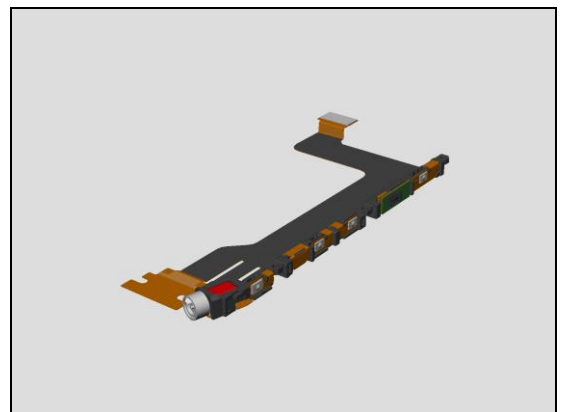
Inspect the BtB connector of FPC Key Assy to Main PBA.

Action:

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



3. If the FPC Key Assy is damaged – replace it.
4. Replace Main PBA.



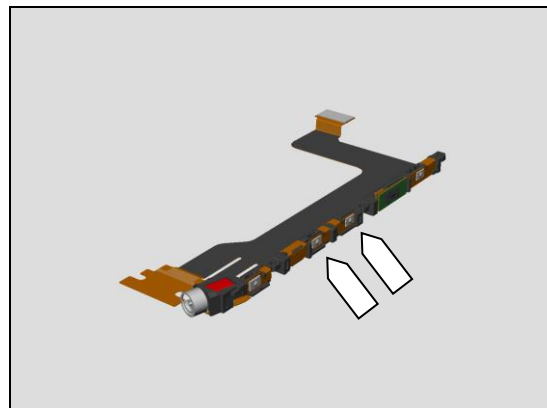
Problem Areas: Keys

Check:

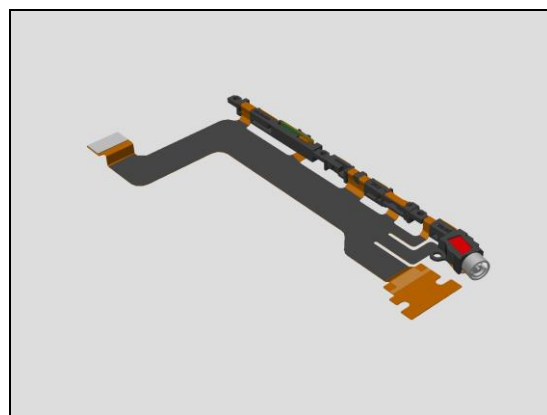
Inspect the condition of Volume Key switch.

Action:

1. If dirty – clean them.



2. If the Volume Key switch is damaged – replace the FPC Key Assy.



Check:

Inspect the condition of the Gasket Volume.

Action:

1. If dirty – clean them.



2. If the Gasket Volume damaged – replace the Gasket Volume.



Problem Areas: Keys

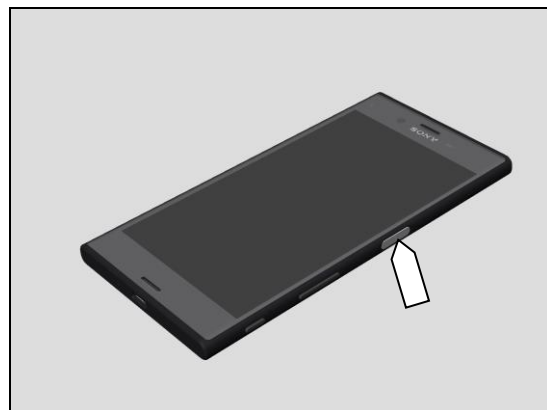
1.2.3 On/Off Key

Check:

Inspect the external area of the On/Off Key.

Action:

1. If dirty – clean it.
2. If damaged – replace the FP Sensor Assy.

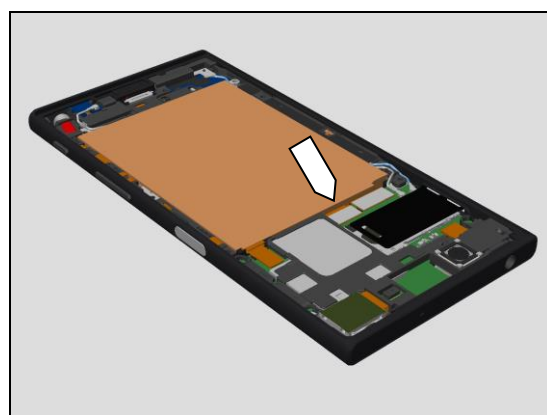


Check:

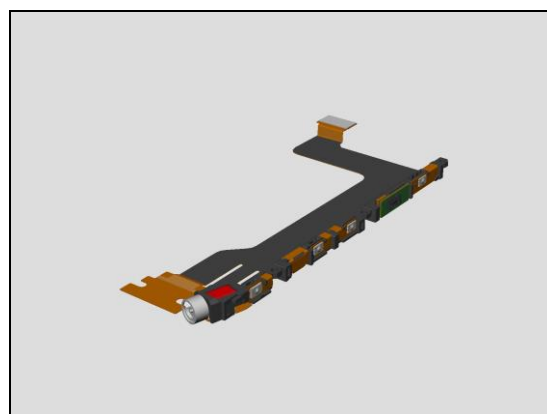
Inspect the BtB connector of FPC Key Assy to Main PBA.

Action:

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



3. If the FPC Key Assy is damaged – replace it.
4. Replace Main PBA.

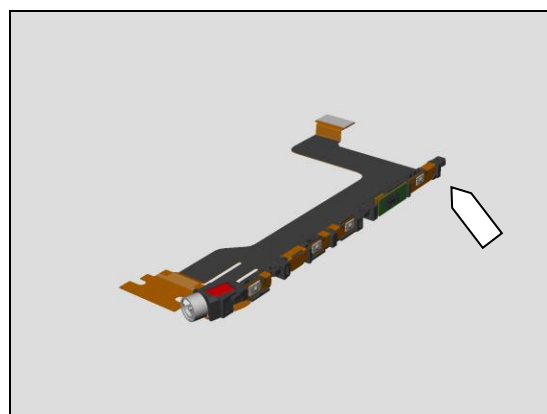


Check:

Inspect the condition of the On/Off Key.

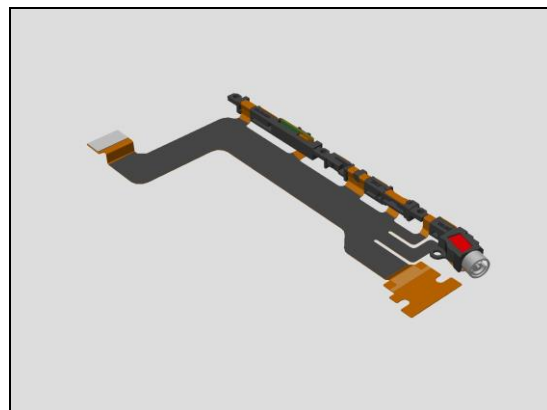
Action:

1. If dirty – clean them.



Problem Areas: Keys

2. If the On/Off Key switch is damaged – replace the FPC Key Assy.



Check:

Inspect the condition of On/Off Key Gasket.

Action:

1. If dirty – clean them.



2. If the On/Off Key Gasket is damaged – replace the FP Sensor Assy.



1.2.4 Camera Key

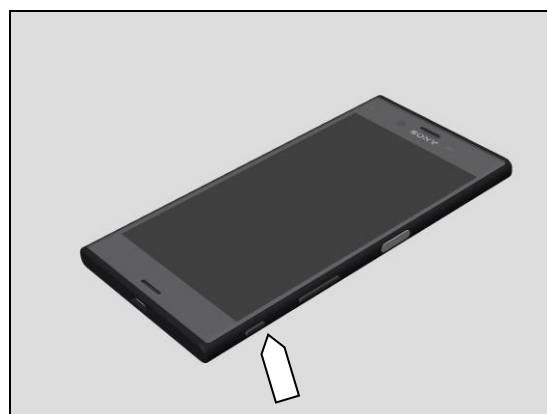
Check:

Inspect the external area of the Key Camera.

Action:

1. If dirty – clean it.

2. If damaged – replace the Key Camera.



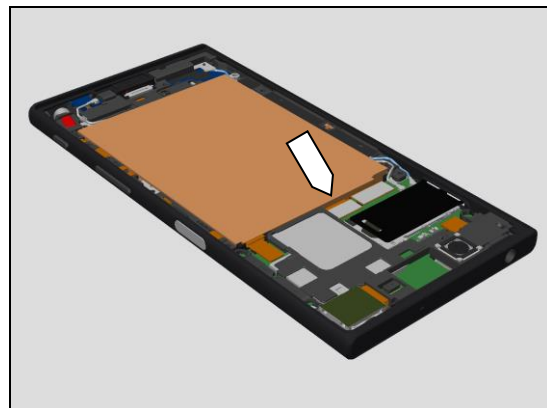
Problem Areas: Keys

Check:

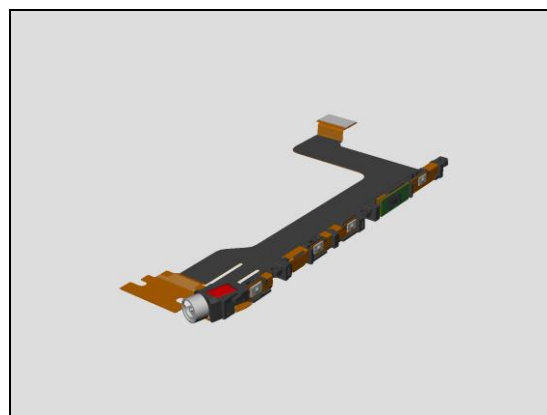
Inspect the BtB connector of FPC Key Assy to Main PBA.

Action:

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



3. If the FPC Key Assy is damaged – replace it.
4. Replace Main PBA.

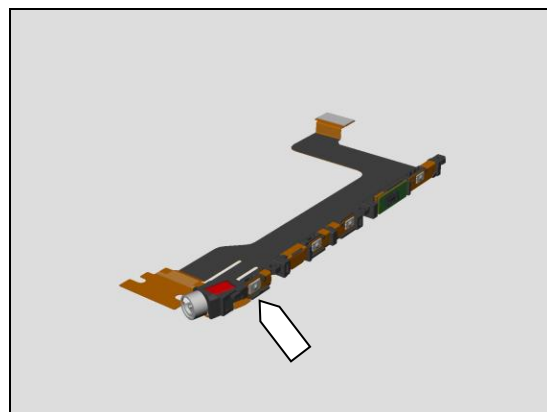


Check:

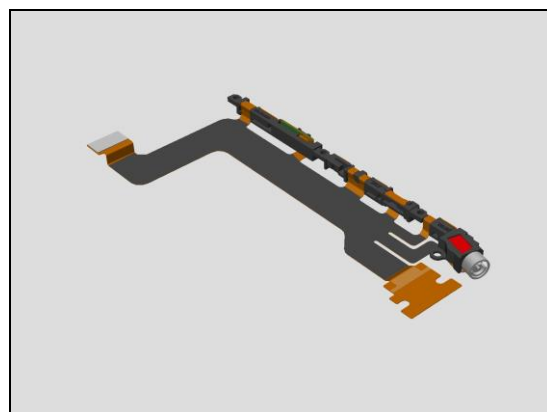
Inspect the condition of the Camera Key switch.

Action:

1. If dirty – clean them.



2. If the Camera Key switch is damaged – replace the FPC Key Assy.



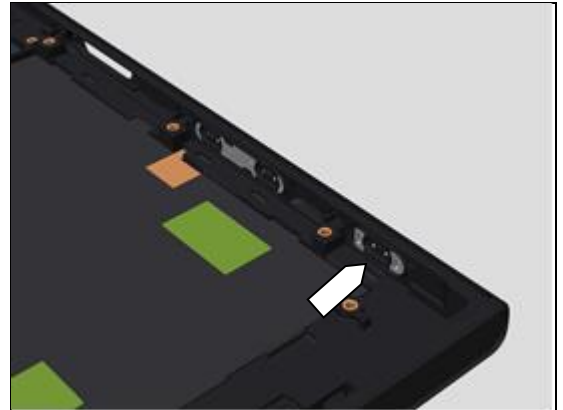
Problem Areas: Keys

Check:

Inspect the condition of the Gasket Camera.

Action:

1. If dirty – clean them.



2. If the Gasket Camera is damaged – replace the Gasket Camera.



Problem Areas

1.3 Touch Screen

1.3.1 Touch Screen malfunction

Check:

Inspect the touch screen of the Display Assy.

Action:

1. If dirty – clean it.

2. If scratched or damaged – replace the Display Assy.

Check:

Inspect the BtB connector of Display Assy to FPC Relay

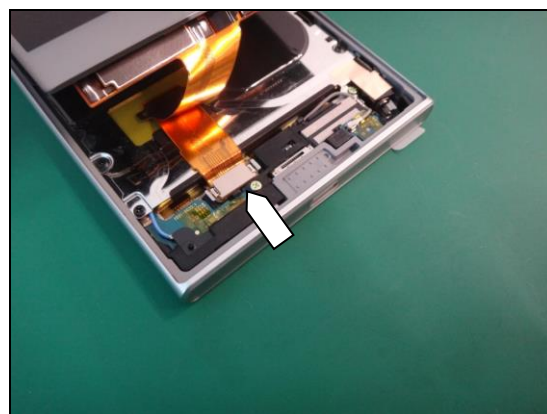
Action:

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

2. If dirty or oxidized – clean it.

3. If the Display Assy FPC is damaged – replace the Display Assy.

4. Replace Main PBA.



Problem Areas : Touch Screen

Check:

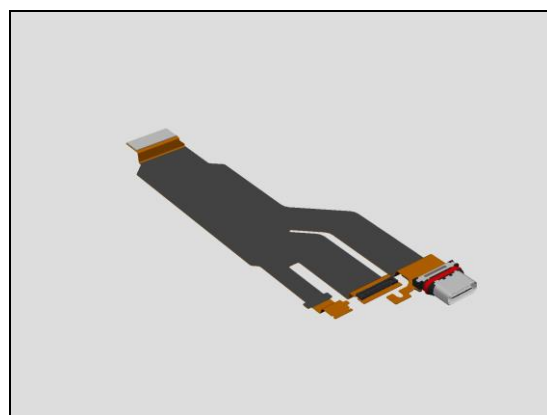
Inspect the BtB connector of FPC Relay Assy Display Assy to Main PBA.

Action:

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



3. If the FPC Relay Assy is damaged – replace the FPC Relay Assy.



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:

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

2. If the Display Assy is damaged – replace it.

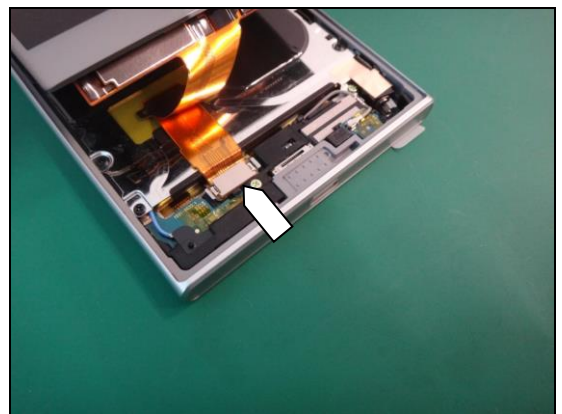
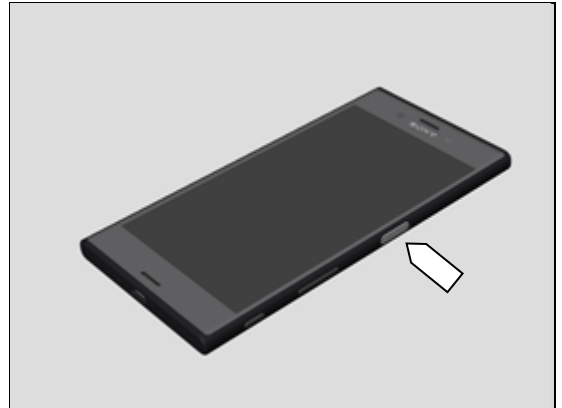
Check:

Inspect the BtB connector of Display Assy to FPC Relay

Action:

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

3. If the Display Assy FPC is damaged – replace Display Assy.



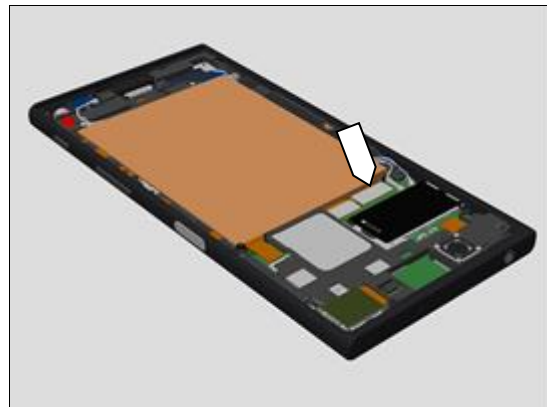
Problem Areas : Display

Check:

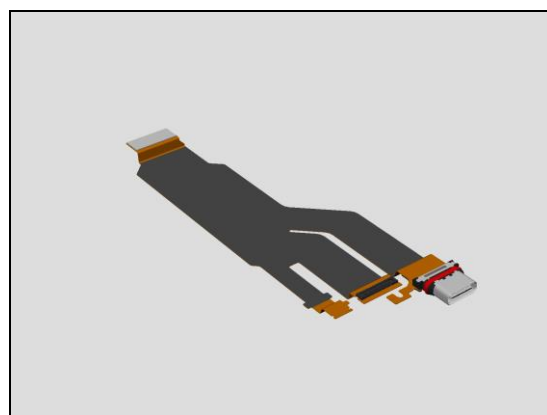
Inspect the BtB connector of FPC Relay Assy to Main PBA.

Action:

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



3. If the FPC Relay Assy is damaged – replace the FPC Relay Assy.
4. Replace Main PBA.



Problem Areas

1.5 LED/Illumination

1.5.1 LED/Illumination

Check:

Inspect external window area of Notification LED on the Display Assy.

Action:

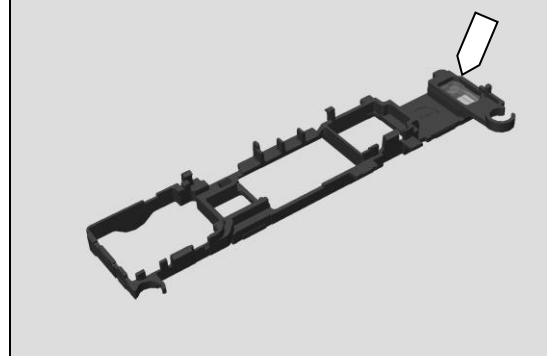
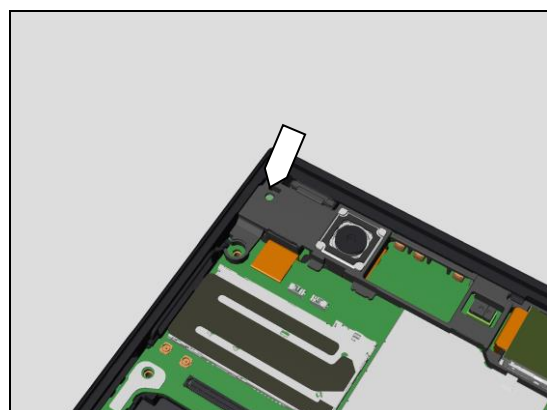
1. If dirty – clean it.



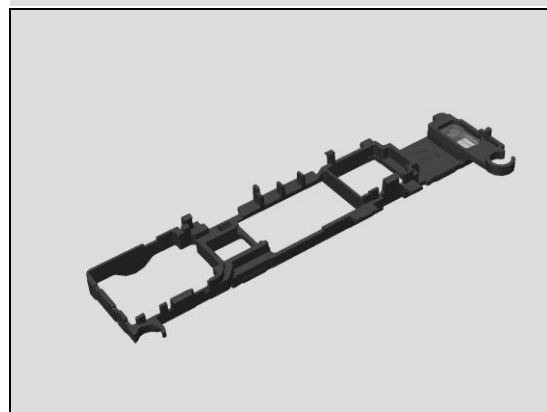
Check:

Inspect Light Guide on the Holder Top.

1. If dirty – clean it.



3. If damaged – replace the Holder Top.



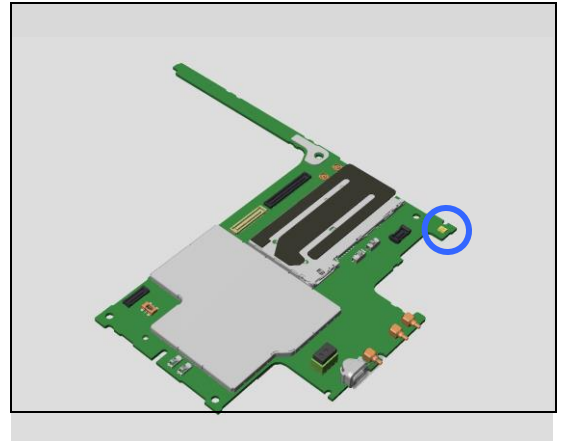
Problem Areas : LED Illumination

Check:

Inspect the LED on the Main PBA.

Action:

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



Problem Areas

1.6 Speaker

1.6.1 Speaker Bottom

Check:

Inspect the Speaker Bottom external port on the Display Assy.

Action:

1. If clogged – clean it.

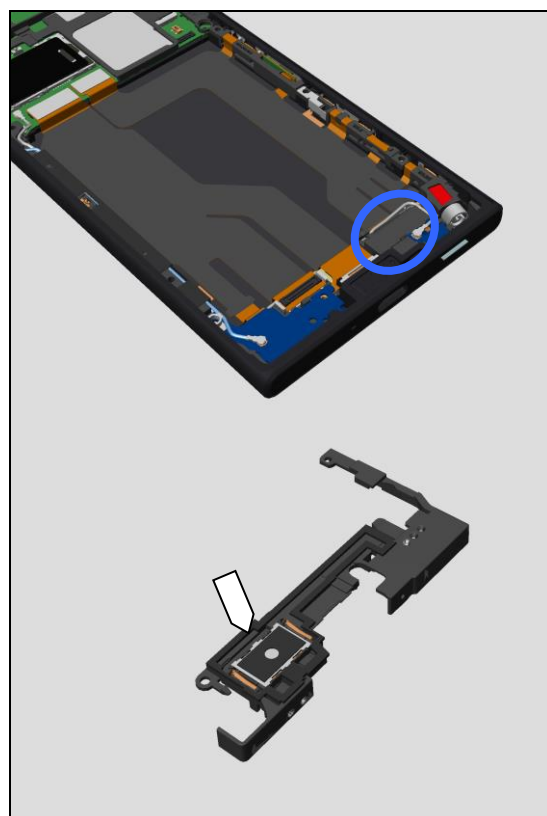
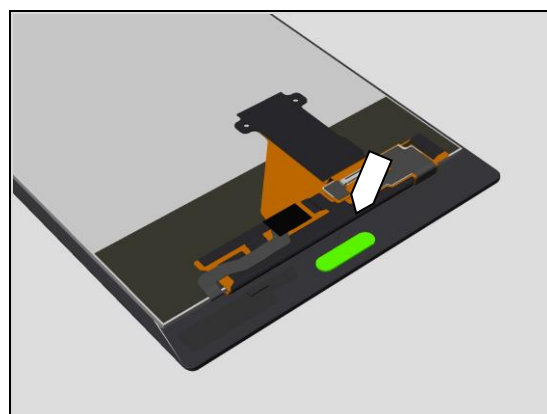
2. If damaged – replace the Sheet Net Speaker.

Check:

Inspect the Speaker is assembled properly or not.

Action:

1. If not assembled properly – reassemble it.



Problem Areas: Speaker

Check:

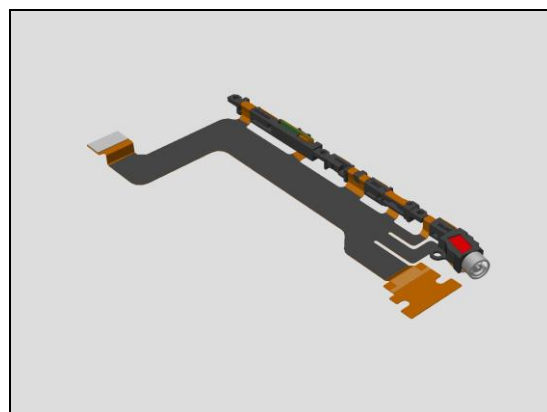
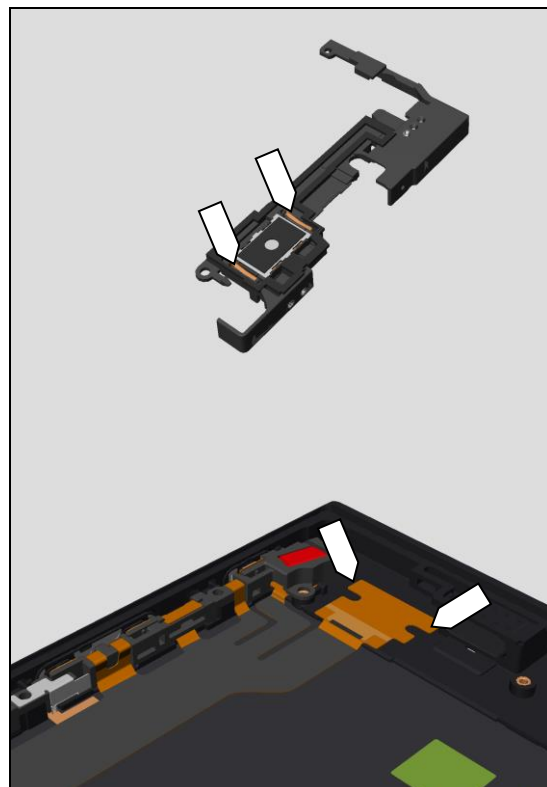
Inspect the contact pads on the FPC Key Assy and the contact pins on the Speaker.

Action:

1. If dirty – clean them.

2. If contact pins on the Speaker are damaged – replace the Adhesive WR Speaker Bottom the Speaker and the Cushion Speaker Bottom.

3. If the contact pads on the FPC Key Assy are damaged - replace the FPC Key Assy.



Problem Areas

1.7 Earphone

1.7.1 Sheet Net Speaker Top

Check:

Inspect the external port of Loudspeaker on the Display Assy.

Action:

1. If clogged – clean it.

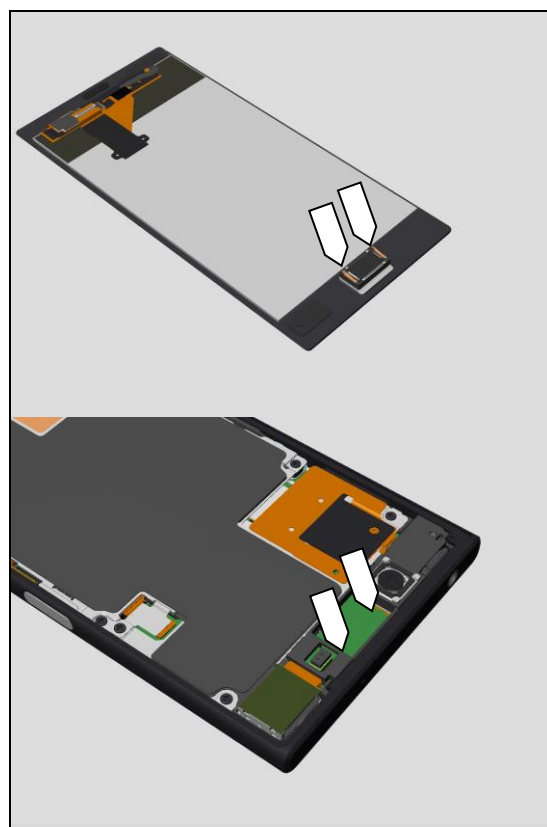
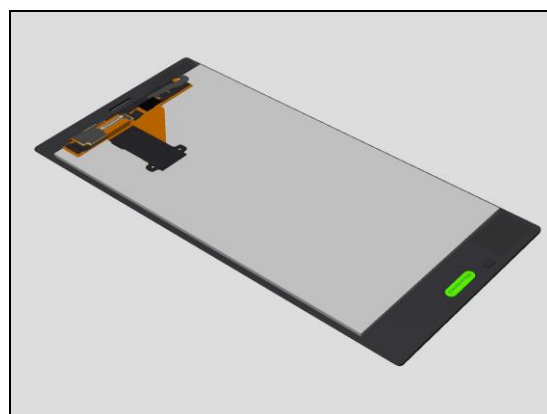
2. If damaged – replace the Sheet Net Speaker.

Check:

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

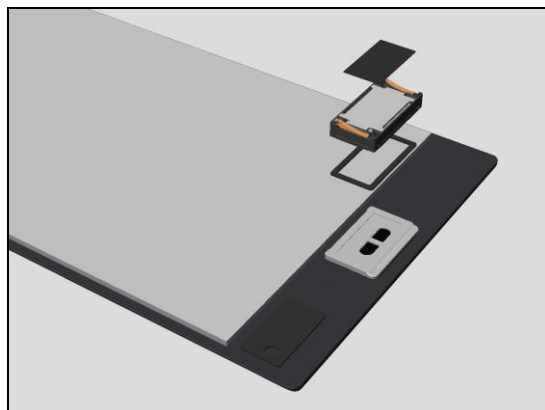
Action:

1. If dirty – clean them.

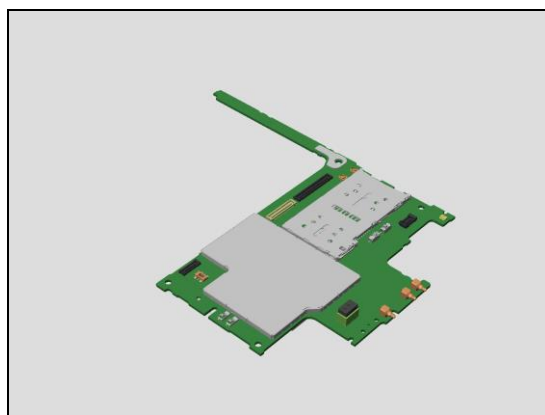


Problem Areas

2. If the contact pins of the Loudspeaker or the Loudspeaker are damaged – replace the Loudspeaker, the Adhesive WR Speaker Bottom, and the Cushion Speaker.



3. Replace Main PBA.



Problem Areas

1.8 Microphone

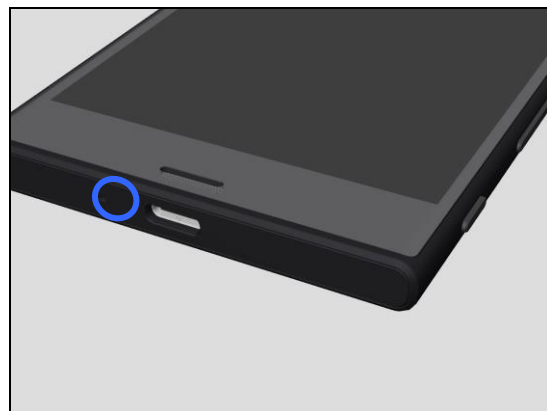
1.8.1 Primary Microphone

Check:

Inspect the hole of Primary Microphone port on the Cover Main Assy.

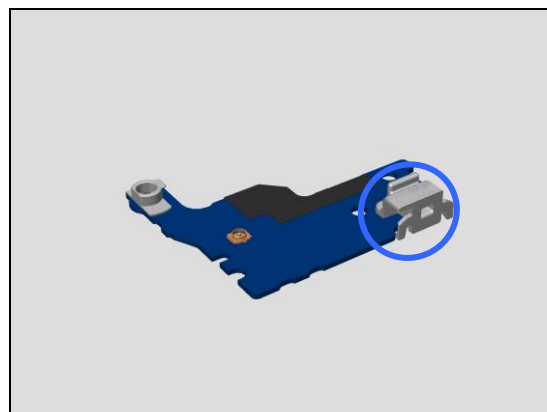
Action:

1. If clogged – clean it.



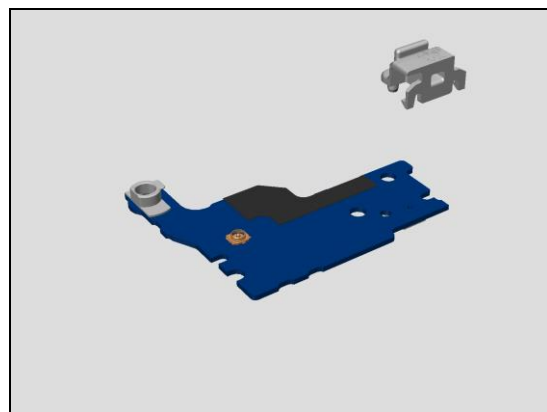
Check:

Inspect if the Holder MIC 1st Assy on the PBA Sub is assembled properly.



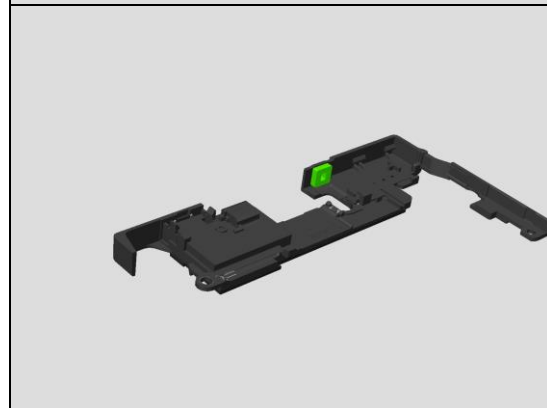
Action:

1. If it is not assembled properly – replace the Holder MIC 1st Assy.



Check:

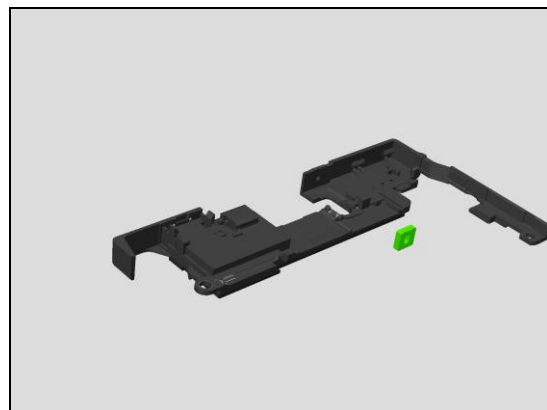
Inspect if the Cushion Holder MIC 1st on the Ant Main is assembled properly.



Problem Areas: Microphone

Action:

1. If it is not assembled properly – replace the Cushion Holder MIC 1st.



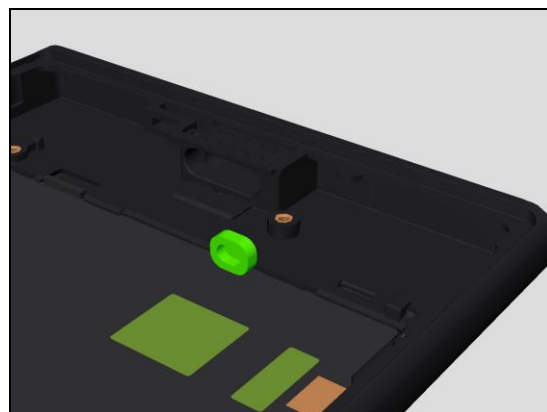
Check:

- Inspect if the Sheet WR MIC on the Cover Main Assy is assembled properly.

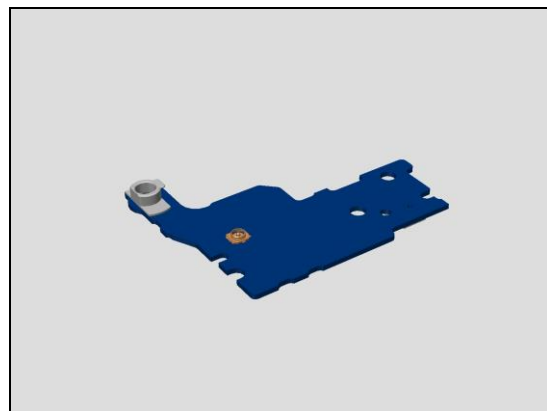


Action:

1. If it is not assembled properly – replace the Sheet WR MIC.



2. Replace the PBA Sub.



Problem Areas: Microphone

1.8.2 Secondary Microphone

Check:

Inspect the hole of secondary microphone on the Cover Main Assy.

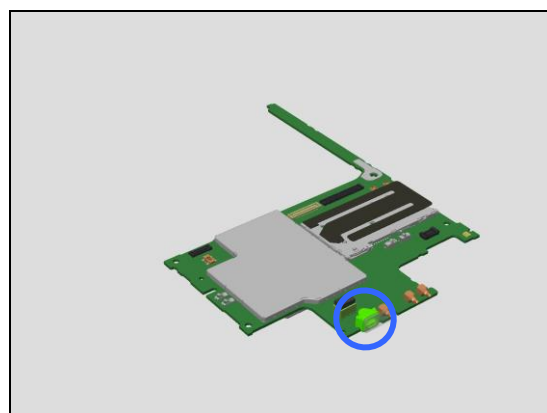
Action:

1. If clogged – clean it.



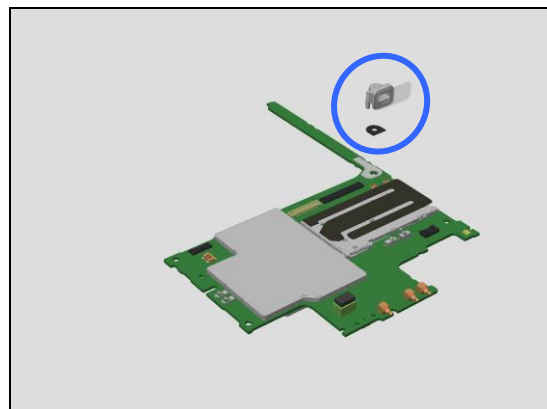
Check:

Inspect if the Holder MIC 2nd on Main PBA is assembled properly.



Action:

1. If is not assembled properly – replace the Holder MIC 2nd and the Adhesive Holder MIC 2nd.



Check:

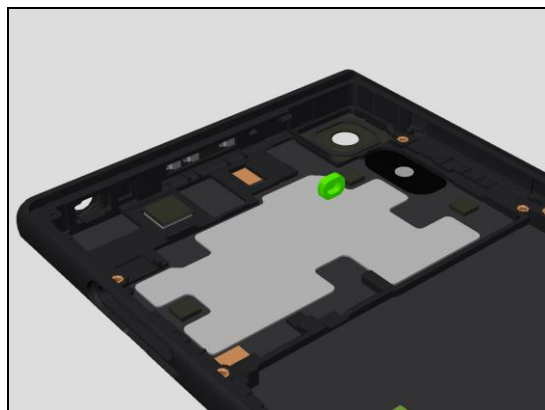
Inspect if the Sheet WR MIC on the Cover Main Assy is assembled properly.



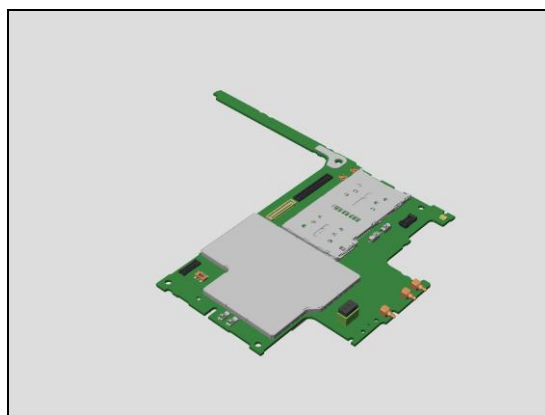
Problem Areas: Microphone

Action:

1. If it is not assembled properly – replace the Sheet WR MIC



2. Replace Main PBA.



Problem Areas

1.9 Vibrator

1.9.1 Vibrator not generating alerts

Check:

Inspect the BtB connector of the FPC Key Assy to Main PBA.

Action:

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

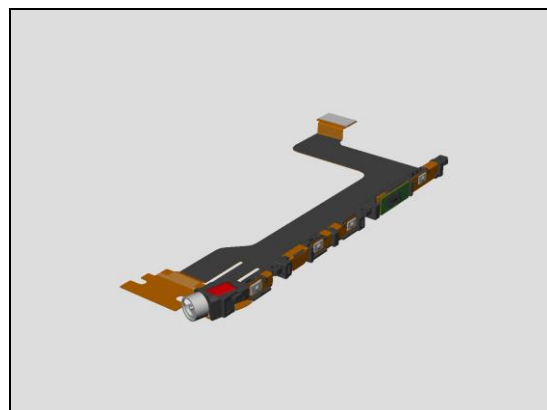
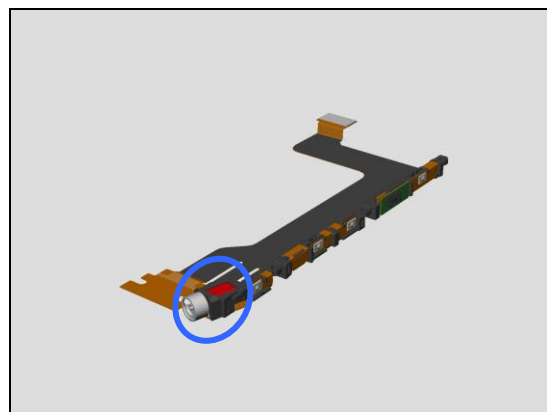
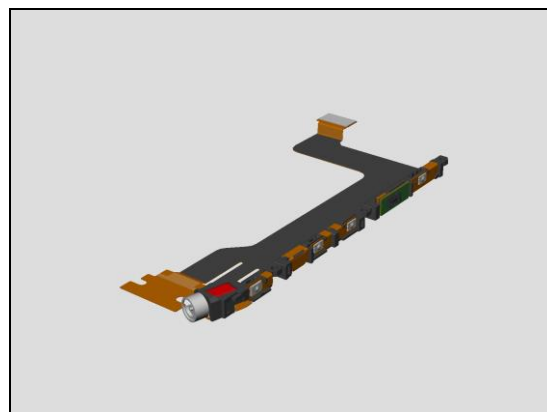
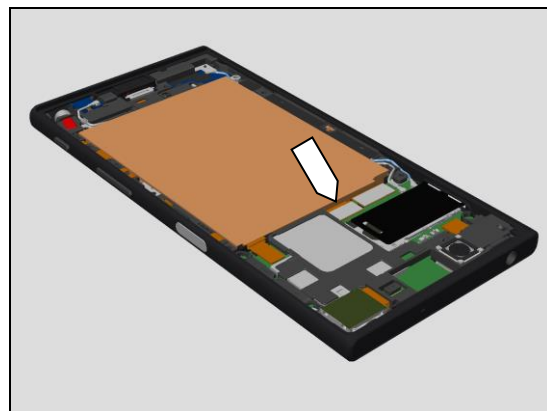
3. If the FPC Key Assy is damaged – replace it.
4. Replace Main PBA.

Check:

Inspect the Vibrator on the FPC Key Assy.

Action:

1. If damaged – replace the FPC Key Assy.



Problem Areas

1.10 Camera

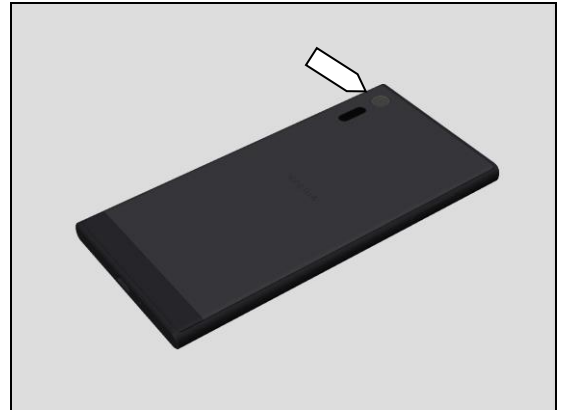
1.10.1 Main Camera

Check:

Inspect the external area of camera window.

Action:

1. If dirty – clean it.



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



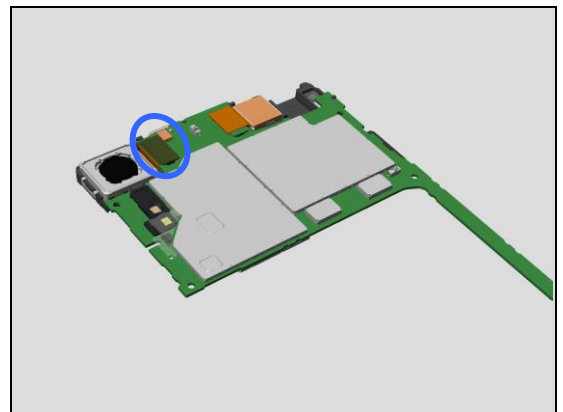
Check:

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

Action:

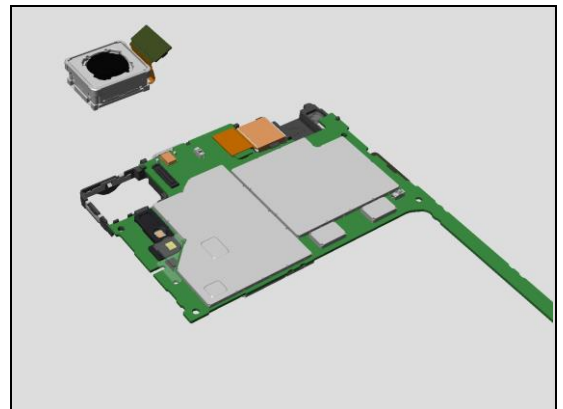
1. If not properly connected – disconnect and reconnect it.

2. If dirty or oxidized – clean it.



3. If the BtB connector or the FICTIVE Main Camera is damaged – replace the FICTIVE Main Camera.

4. Replace Main PBA.



Problem Areas: Camera

1.10.2 Video Call Camera defects

Check:

Inspect the external area of the FICTIVE Sub Camera window.

Action:

1. If dirty – clean it.

2. If scratched or damaged – replace the Display Assy.

Check:

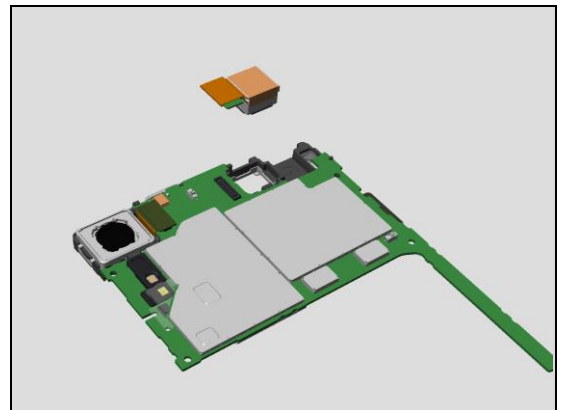
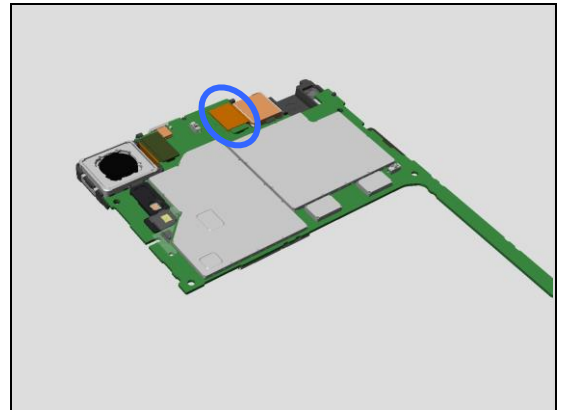
Inspect the BtB connector of Sub Camera to Main PBA.

Action:

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

3. If the Sub Camera is damaged – replace the Sub Camera.

4. Replace Main PBA.



Problem Areas

1.11 Flash LED

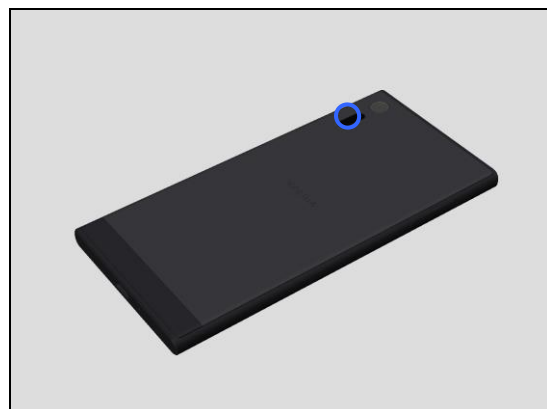
1.11.1 Flash LED not flashing

Check:

Inspect the external area of the flash LED.

Action:

1. If dirty – clean it.



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

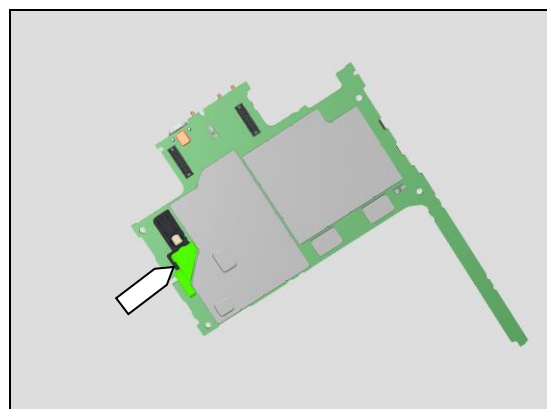


Check:

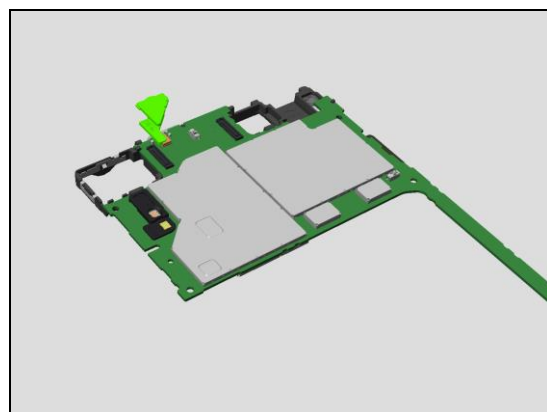
Inspect the Lens Flash on Main PBA.

Action:

1. If dirty – clean it



2. If scratched or damaged – replace the Lens Flash.



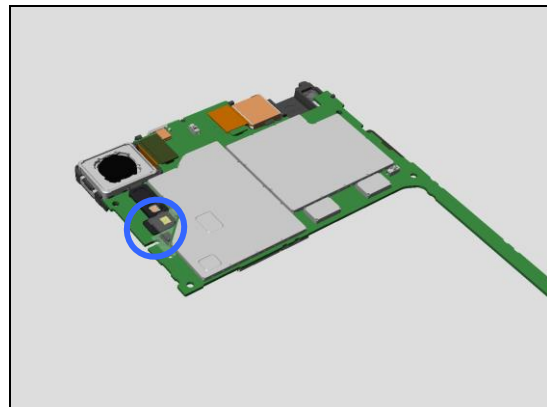
Problem Areas

Check:

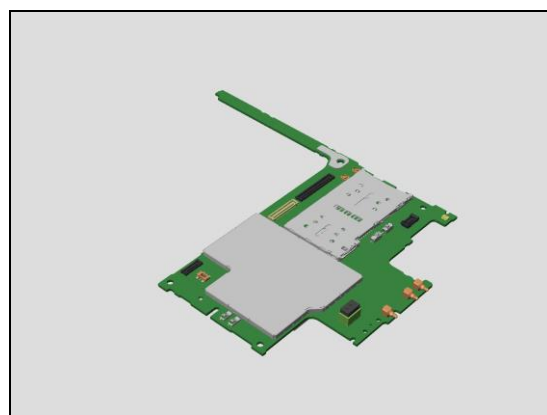
Inspect the Flash LED on Main PBA.

Action:

1. If dirty – clean it.



2. Replace Main PBA.



Problem Areas

1.12 WLAN Main

1.12.1 WLAN Main connection failure

Check:

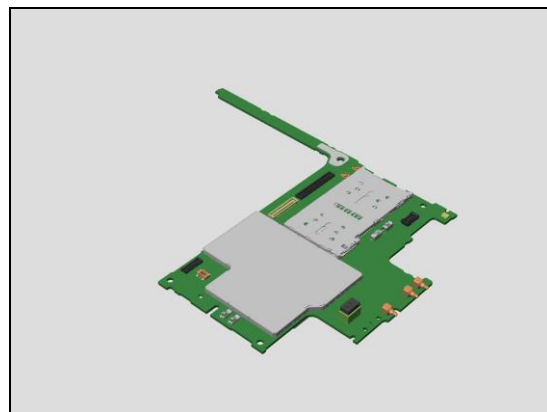
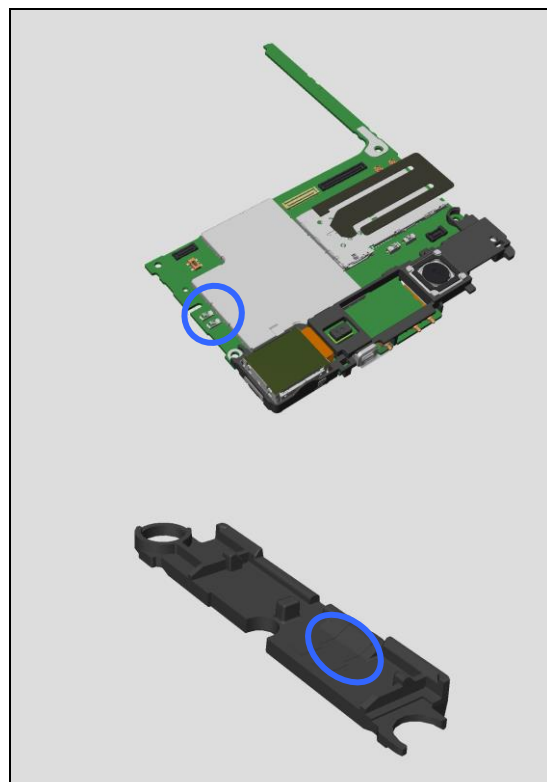
Inspect the Ant WLAN Main contact pads and the contact pins on Main PBA.

Action:

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

2. If the contact pads on the Ant WLAN Main are damaged – replace the Ant WLAN Main.

3. If the contact pins on Main PBA is damaged – replace Main PBA.



Problem Areas

1.13 WLAN Sub

1.13.1 WLAN Sub connection failure

Check:

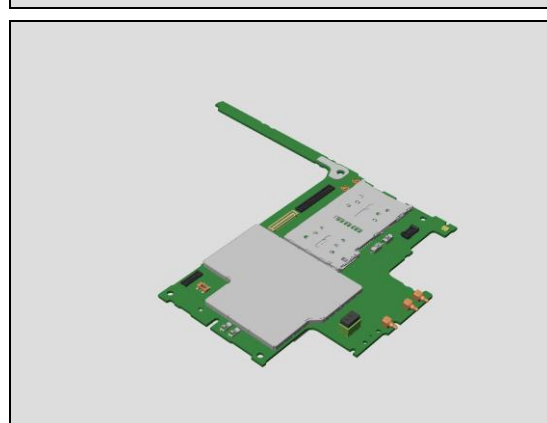
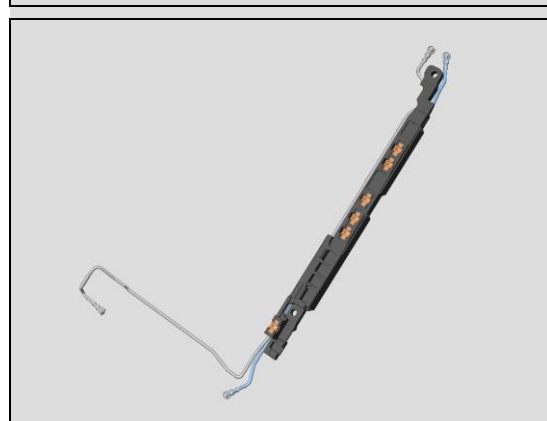
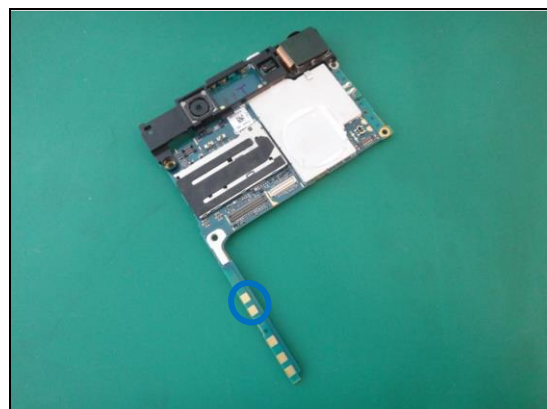
Inspect the pads on Main PBA and the contact pins on Ant WLAN Assy.

Action:

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

2. If the contact pins on the Ant WLAN Assy are damaged – replace the Ant WLAN Assy.

3. If the contact pads on Main PBA is damaged – replace Main PBA.



Problem Areas

1.14 NFC

1.14.1 NFC malfunctions

Check:

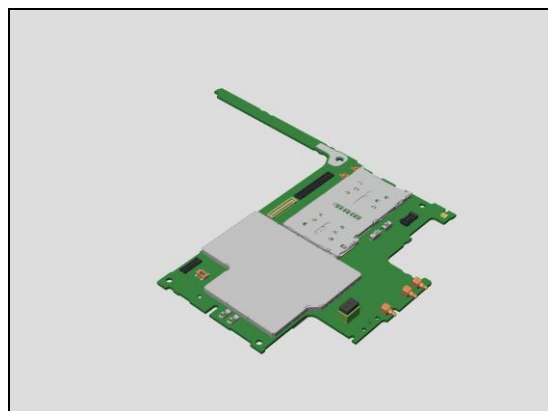
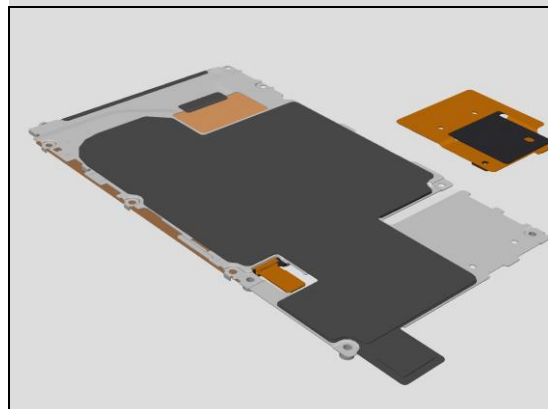
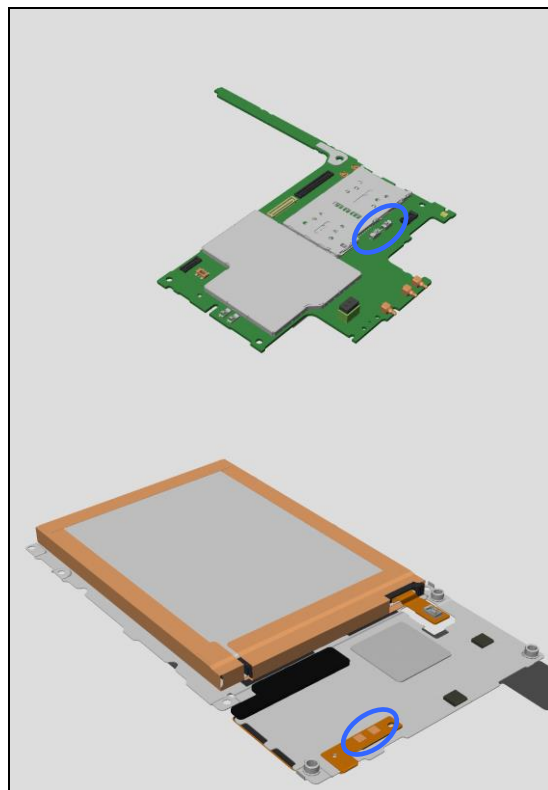
Inspect the FPC NFC contact pads on the Plate Display Assy and the contact pins on Main PBA.

Action:

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

2. If the FPC NFC contact pads on the Plate Display Assy are damaged – replace the FPC NFC.

3. If the contact pins on main PBA are damaged – replace Main PBA.



Problem Areas

1.15 GPS

1.15.1 GPS malfunctions

Check:

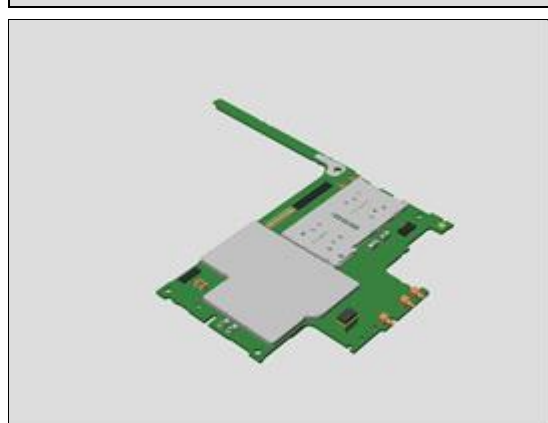
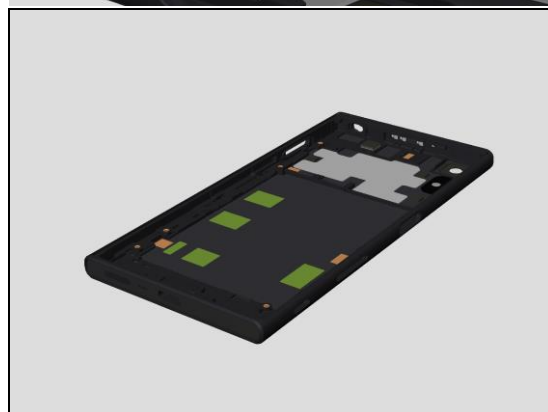
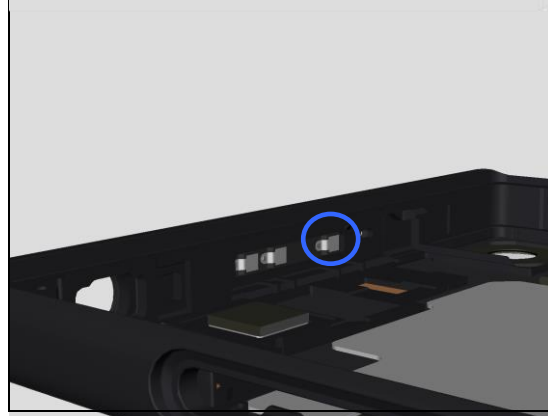
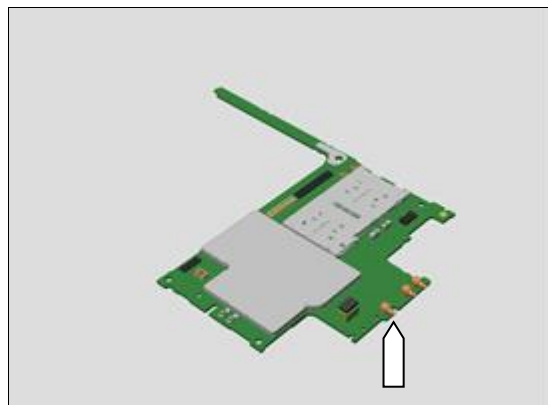
Inspect the GPS antenna contact pads on the Front Assy, and the contact pins on Main PBA.

Action:

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

2. If the GPS antenna contact pads on the Cover Main Assy are damaged – replace the Cover Main Assy.

3. If the contact pins on main PBA are damaged – replace Main PBA.



Problem Areas

1.16 Compass

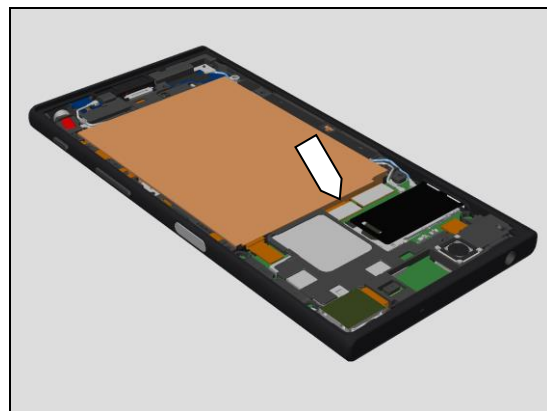
1.16.1 Compass fails

Check:

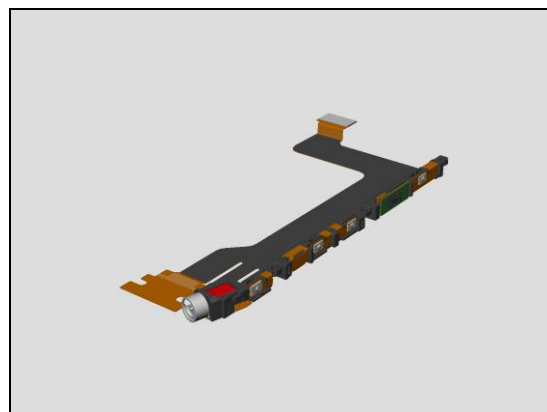
Inspect the BtB connector of the FPC Key Assy to Main PBA.

Action:

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

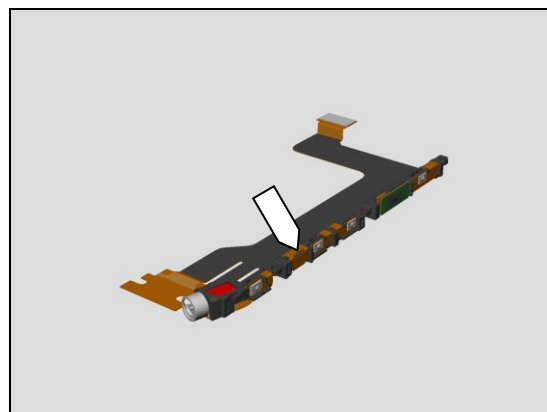


3. If the FPC Key Assy is damaged – replace it.
4. Replace Main PBA.



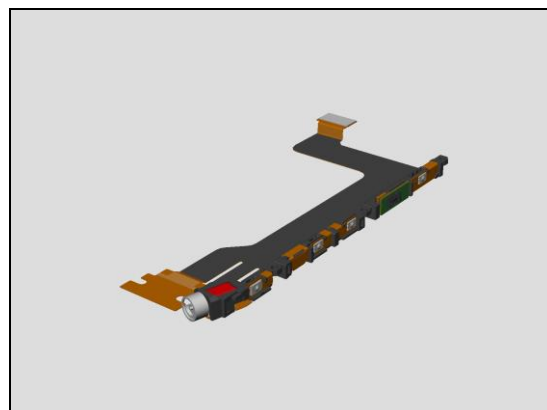
Check:

Inspect the compass chipset on the FPC Key Assy.



Action:

1. If damaged – replace the FPC Key Assy.



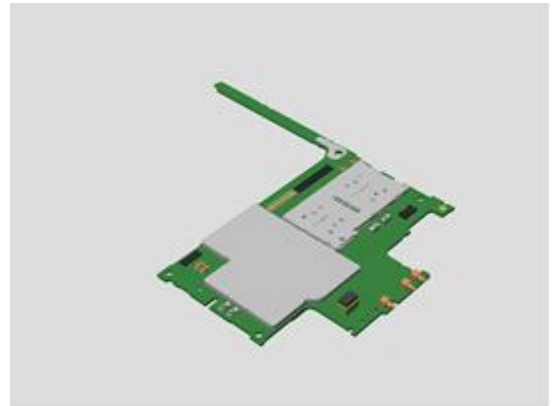
Problem Areas

1.17 Accelerometer

1.17.1 Accelerometer test fails

Action:

1. Follow the 1289-2983 Sony Mobile Repair Application – mechanical to run the Accelerometer Calibration.
2. Replace Main PBA.



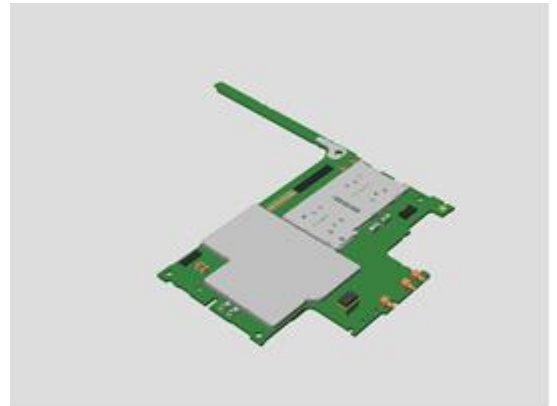
Problem Areas

1.18 Gyroscope

1.18.1 Gyroscope test fails

Action:

1. Follow the 1289-2983 Sony Mobile Repair Application – mechanical to run the Gyroscope Calibration.
2. Replace Main PBA.



Problem Areas

1.19 Ambient Light Sensor

1.19.1 Light Sensor malfunctions

Check:

Inspect the external window area of light sensor on the Display Assy.

Action:

1. If dirty – clean it.

2. If scratched or damaged – replace the Display Assy.

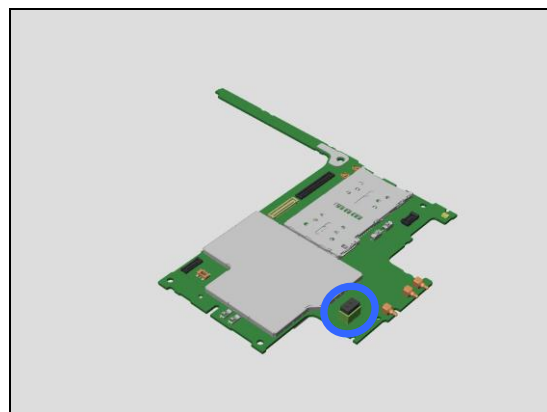
Check:

Inspect the light sensor on the Main PBA.

Action:

1. If dirty or oxidized – clean it.

2. Replace Main PBA.



Problem Areas

1.20 Proximity Switch

1.20.1 Proximity switch malfunctions

Check:

Inspect the external window area of proximity switch.

Action:

1. If dirty – clean it.

2. If scratched or damaged – replace the Display Assy.

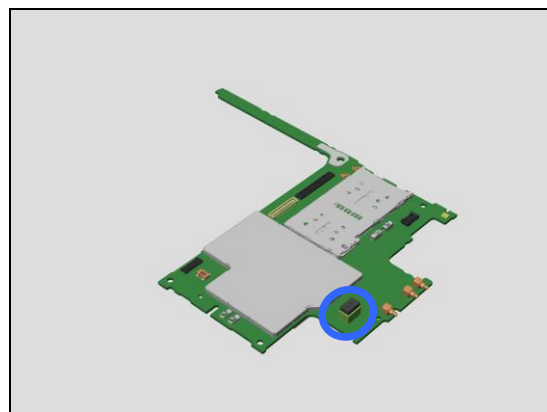
Check:

Inspect the proximity switch on the Main PBA.

Action:

1. If dirty or oxidized – clean it.

2. Replace Main PBA.



Problem Areas

1.21 Hall Element

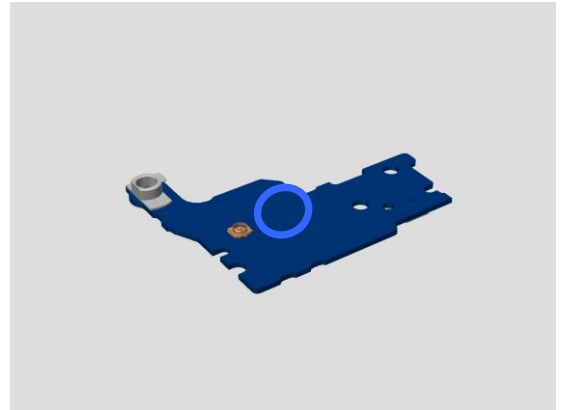
1.21.1 Hall Element test fails

Check:

Inspect the Hall Sensor on the PBA Sub.

Action:

1. If dirty or oxidized – Clean it.
If defective – Replace the PBA Sub.

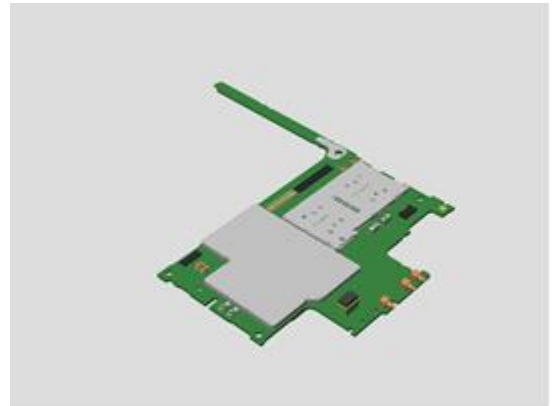


Problem Areas

1.22 Pressure Sensor

1.22.1 Pressure Sensor test fails

Replace Main PBA.



Problem Areas

1.23 Water Resistance

1.23.1 Water Resistance fails

Check:

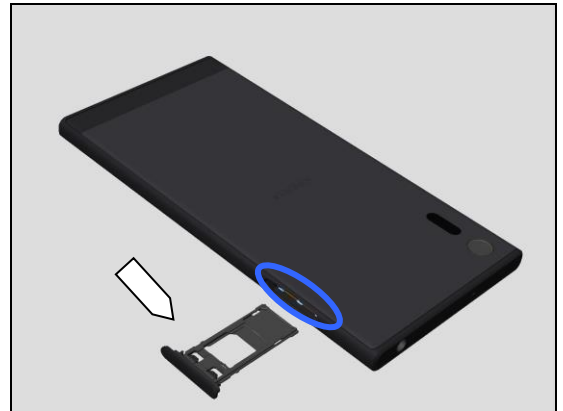
Inspect the Cap Tray Assy, and slot of the Cap Tray Assy of the Cover Main Assy.

Action:

1. If dirty – clean it.
2. If Cap Tray Assy is not properly inserted – remove and reinsert.

3. If the Cap Tray Assy is damaged – replace it.

Perform the Water Resistance Test again!



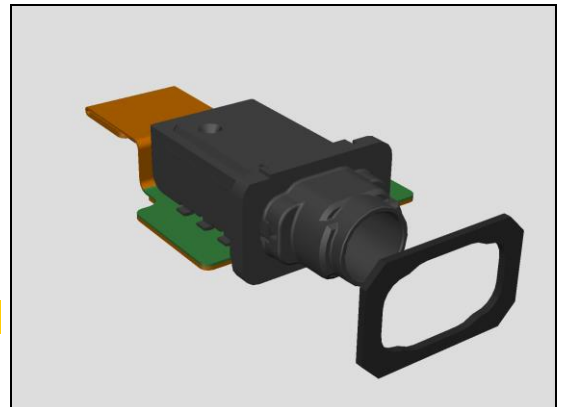
Check:

Inspect the Audio Jack hole.

Action:

1. If not assembled properly – replace the Adhesive WR Audio Jack to reassemble the FPC JK Module.
2. If damaged – replace the Adhesive WR Audio Jack, and FPC JK Module.

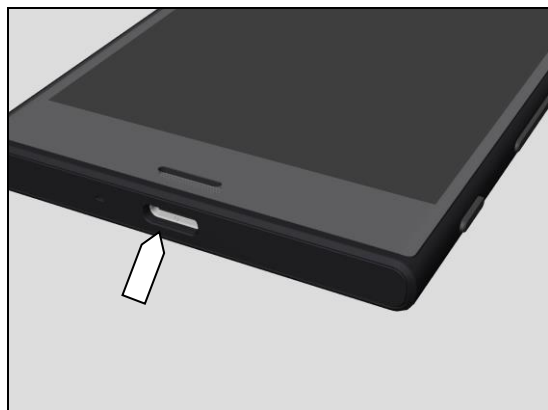
Perform the Water Resistance Test again!



Problem Areas: Water Resistance

Check:

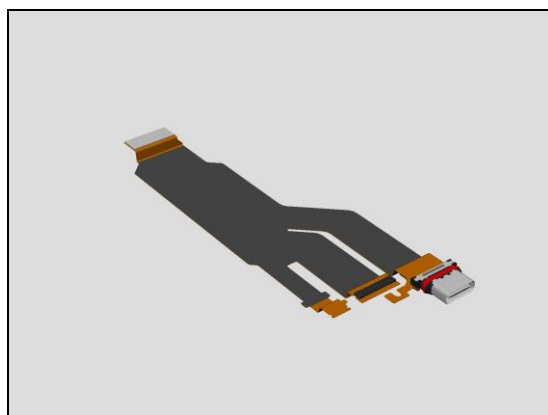
Inspect the USB connector.



Action:

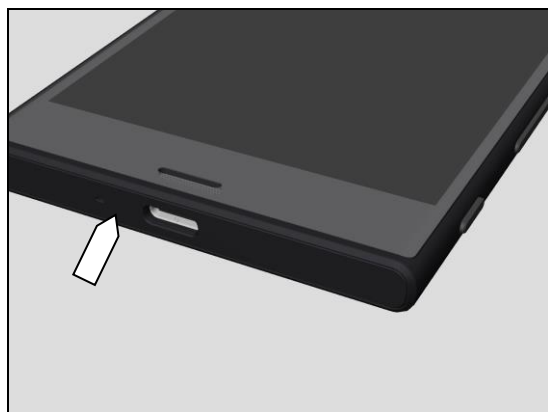
1. If the FPC Relay Assy is not properly assembled – reassemble it
2. If the FPC Relay Assy is damaged – replace it.

Perform the Water Resistance Test again!



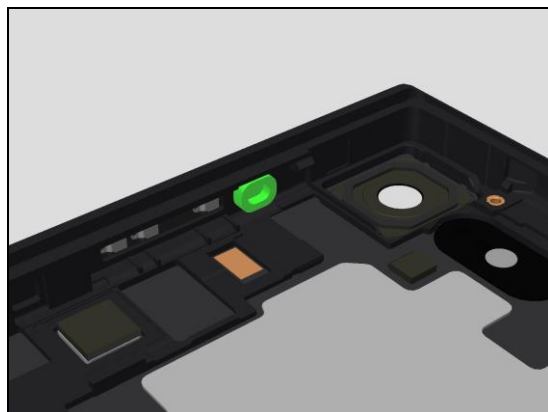
Check:

Inspect the main microphone port.



Action:

If damaged – replace the Sheet WR MIC.



Problem Areas: Water Resistance

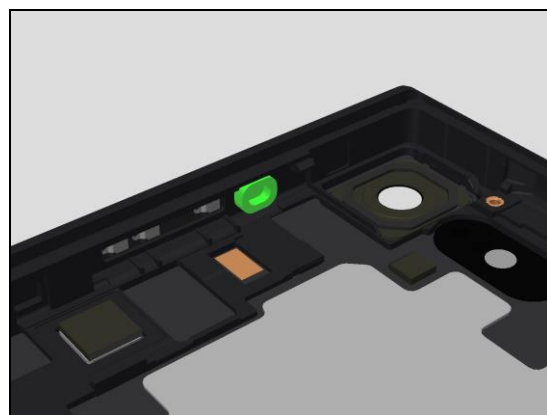
Check:

Inspect the second microphone port.



Action:

If damaged – replace the Sheet WR MIC.



Check:

Inspect the edge of Display there is damage and/or gap.



Action:

1. If the Display Assy has gap – replace the Display Assy.
2. If the Display Assy is damaged – replace the Display Assy.

Run the Water Resistance Test again!



Problem Areas: Water Resistance

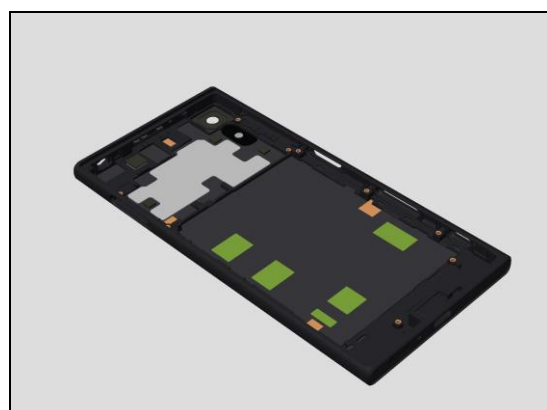
Check:

Inspect the edge of Display there is damage and/or gap.



Action:

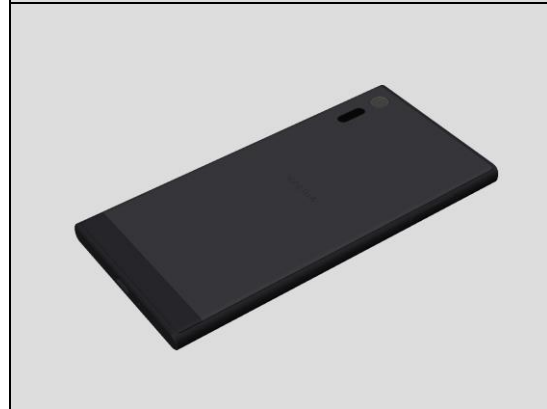
1. If the Cover Main Assy has gap – replace the Cover Main Assy.
2. If the Cover Main Assy is damaged – replace the Cover Main Assy.



Check:

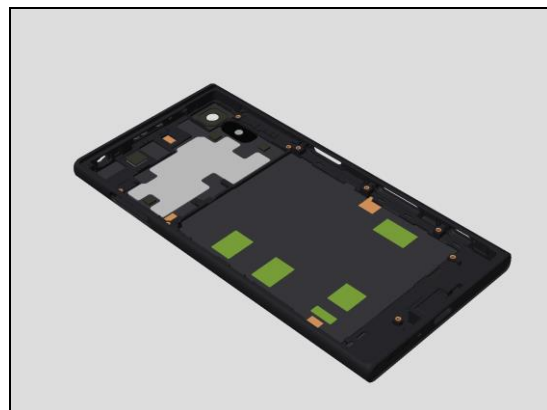
Inspect back side of the Cover Main Assy, if it is damaged, and/or any gap between Panel Rear.

Inspect the main camera window, and LED window, if any damage, and/or gap



Action:

1. If the Cover Main Assy has gap – replace the Cover Main Assy.
2. If the Cover Main Assy is damaged – replace the Cover Main Assy.

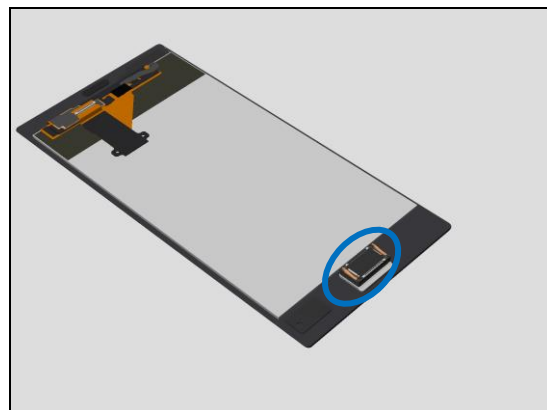


Run the Water Resistance Test again!

Problem Areas: Water Resistance

Check:

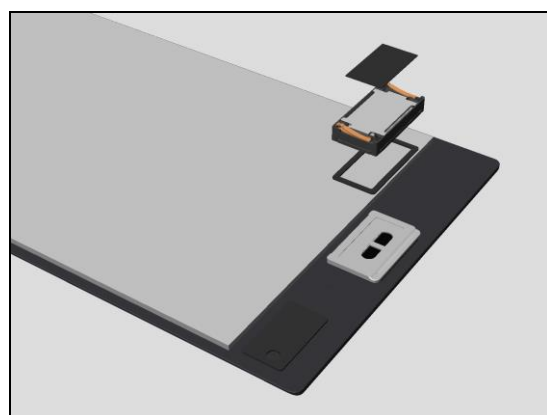
Inspect the Loudspeaker.



Action:

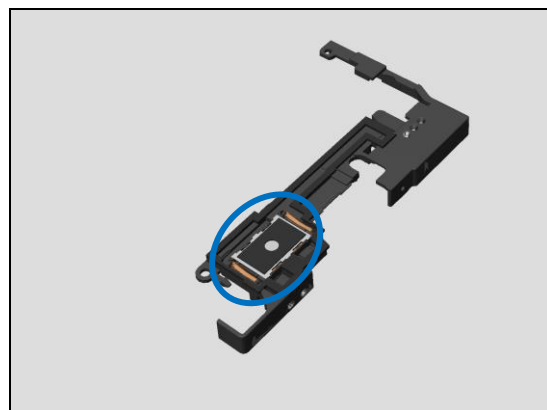
If not assembled properly or damaged – replace the Loudspeaker, the Adhesive WR Speaker Bottom, and the Cushion Speaker.

Perform the Water Resistance Test again!



Check:

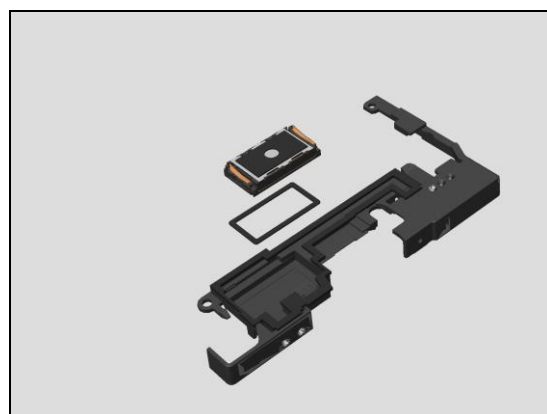
Inspect assembly of Bottom Speaker.



Action:

If not assembled properly or damaged – replace the Adhesive WR Speaker Bottom the Speaker and the Cushion Speaker Bottom.

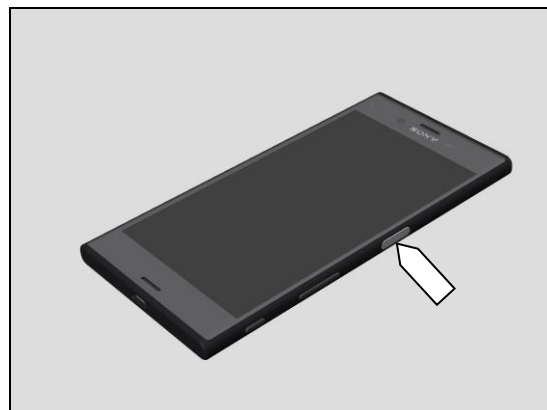
Run the Water Resistance Test again!



Problem Areas: Water Resistance

Check:

Inspect the FP Sensor Assy.



Action:

1. If FP Sensor Assy is not properly assembled – reassemble it
2. If FP Sensor Assy is damaged – replace it.

Run the Water Resistance Test again!



Check:

Inspect assembly of the Key Gasket.



Action:

1. If the Key Gasket is not properly assembled – reassemble it
2. If the Key Gasket is damaged – replace it.

Run the Water Resistance Test again!

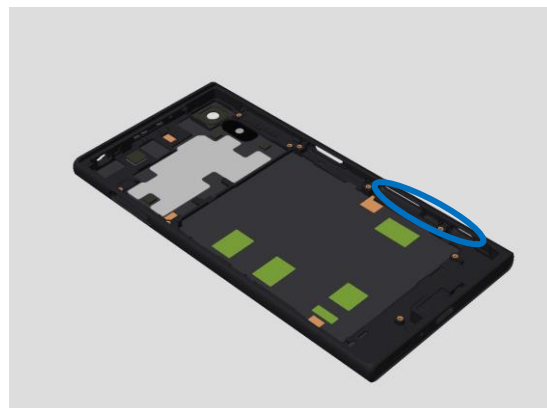


Problem Areas: Water Resistance

Action:

1. If it is not properly assembled – re-push it into its hole of the Cover Main Assy.
2. If can't be fully pushed into its hole or it is damaged – replace the Cover Main Assy.

Run the Water Resistance Test again!



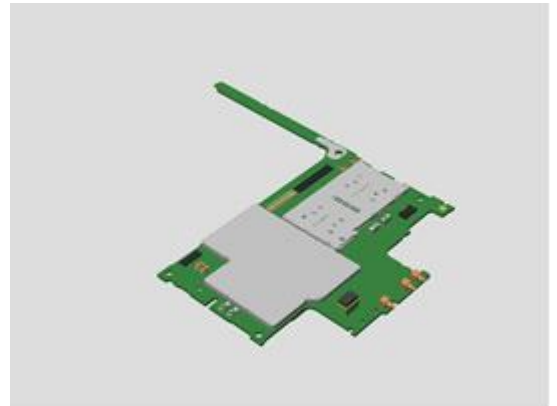
Problem Areas

1.24 Real Time Clock

1.24.1 Real time clock test fails

Action:

Replace Main PBA.



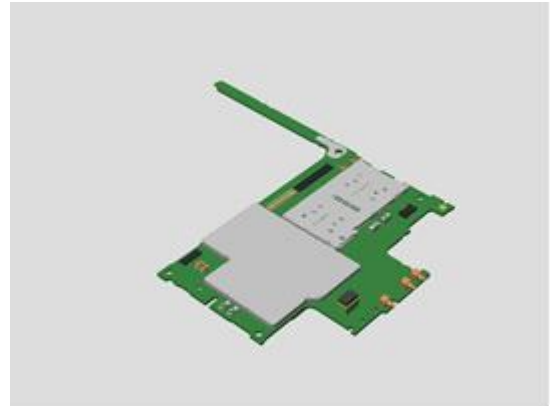
Problem Areas

1.25 Total call time

1.25.1 Total call time fails

Action:

Replace Main PBA.



Problem Areas

1.26 External Memory, SIM

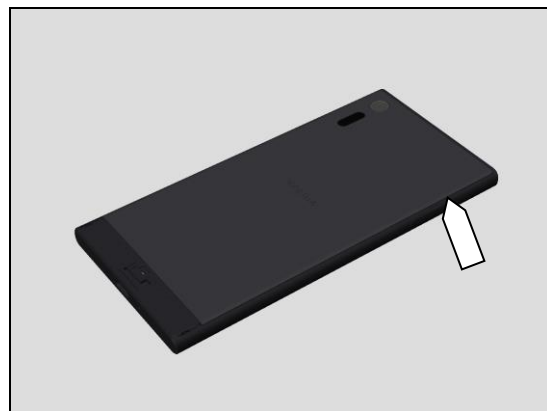
1.26.1 Memory Card/ SIM not detected

Check:

Inspect if the Cap Tray Assy is properly inserted.

Action:

If not properly inserted – insert the Cap Tray Assy correctly.



Check:

Inspect the Cap Tray Assy.

Inspect if Nano SIM and/or Memory Card is properly mounted on the Cap Tray Assy.

Action:

1. If dirty or clogged – clean the Cap Tray Assy.
2. If not properly mounted – remount the Memory Card/Nano SIM
3. Replace Cap Tray Assy.

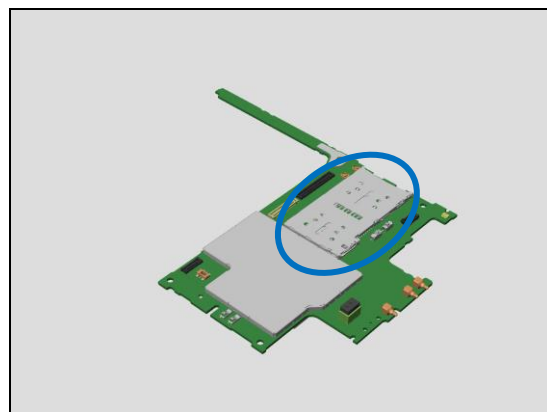


Check:

Inspect the SIM/SD card holder on Main PBA.

Action:

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



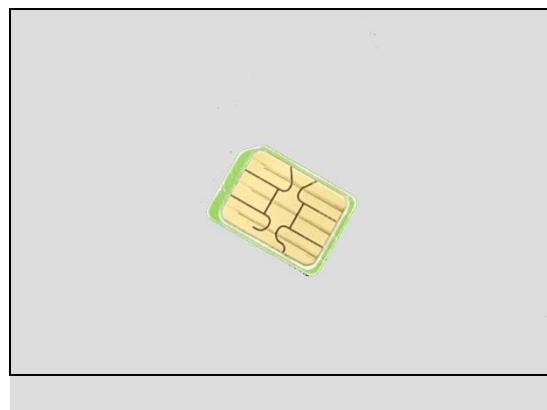
1.26.2 Incorrect Nano SIM indicated

Check:

Check if the phone is locked to a particular operator and if the correct operator Nano SIM is being used.

Action:

1. Use a proper operator Nano SIM or test Nano SIM.
2. Replace Main PBA.



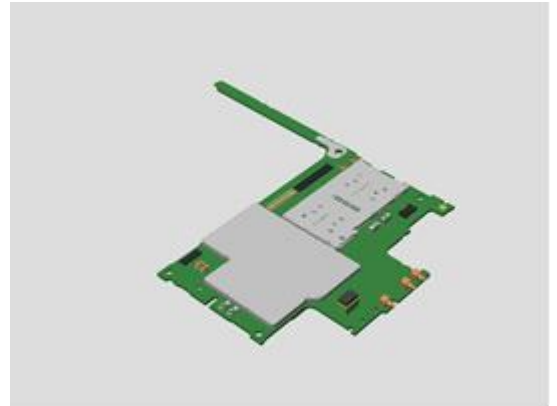
Problem Areas

1.27 Security

1.27.1 Security fails

Action:

Replace Main PBA.



Problem Areas

1.28 Network & Signal

1.28.1 No/Poor signal

Check:

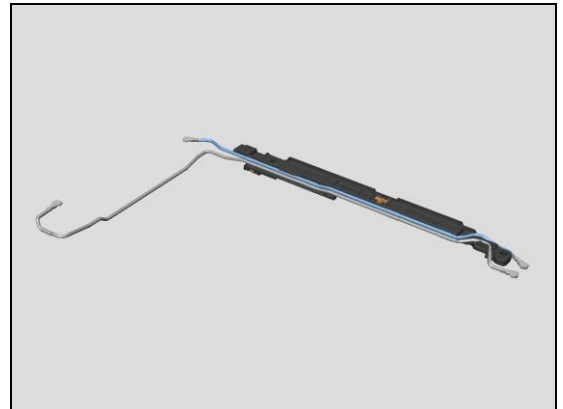
Inspect the RF connector of Ant WLAN Assy to Main PBA.

Action:

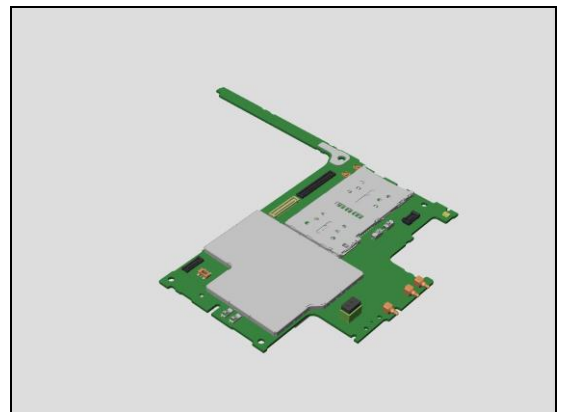
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the RF cable is damaged – replace the Ant WLAN Assy.



4. If the connector on Main PBA is damaged – replace Main PBA.

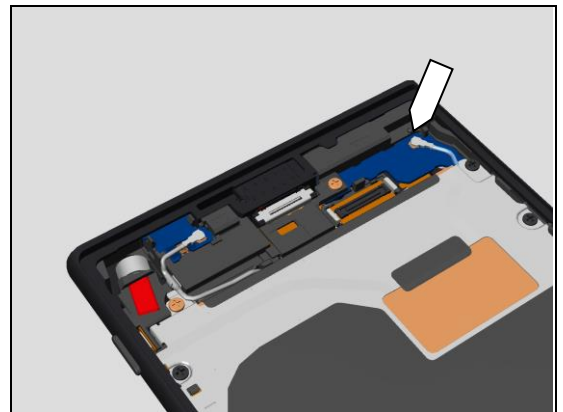


Check:

Inspect the RF connector of Ant WLAN Assy to the PBA Sub.

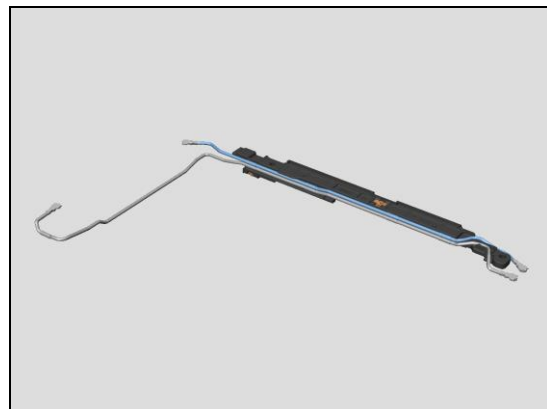
Action:

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

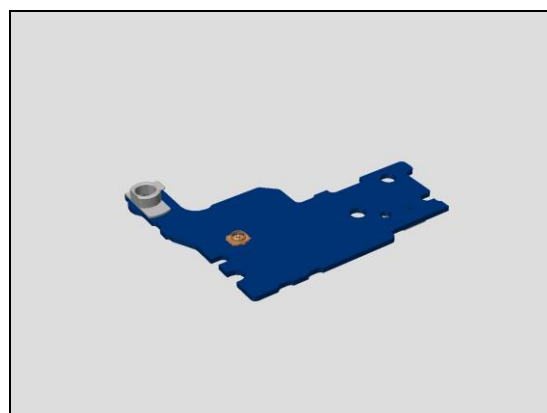


Problem Areas: Network & Signal

3. If the RF cable is damaged – replace the Ant WLAN Assy.



4. If the connector on the PBA Sub is damaged– replace the PBA Sub.

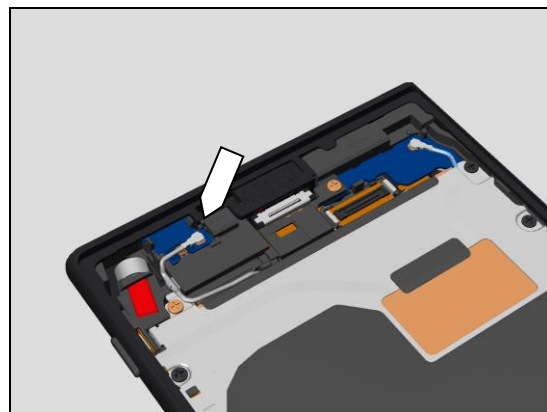


Check:

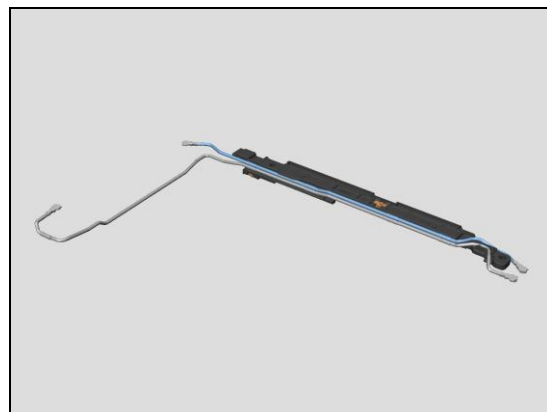
Inspect the RF connector of Ant WLAN Assy to the PBA Ant.

Action:

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



3. If the RF cable is damaged – replace the Ant WLAN Assy.



Problem Areas: Network & Signal

4. If the connector on the PBA Ant is damaged– replace the PBA Ant.

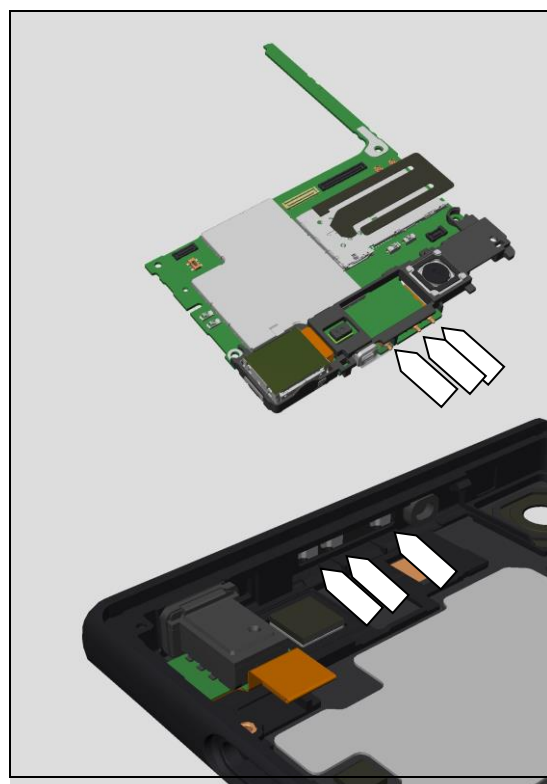


Check:

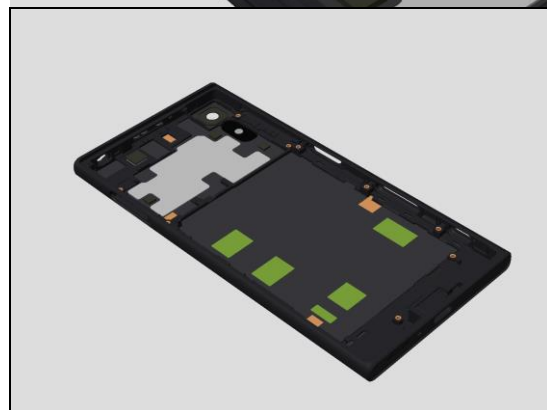
Inspect the contact pads on the Cover Main Assy and the contact pins on Main PBA.

Action:

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

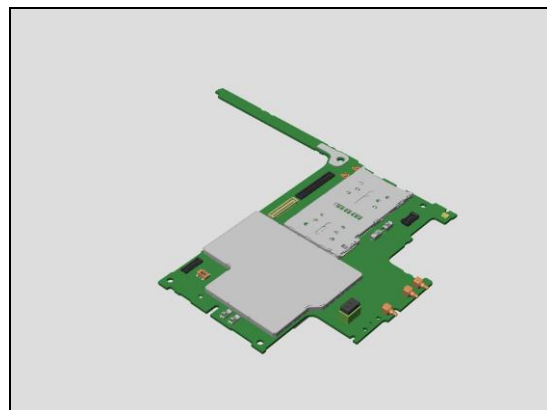


2. If the contact pads on the Cover Main Assy are damaged – replace the Cover Main Assy.



Problem Areas: Network & Signal

3. If the contact pins on Main PBA are damaged – replace Main PBA.

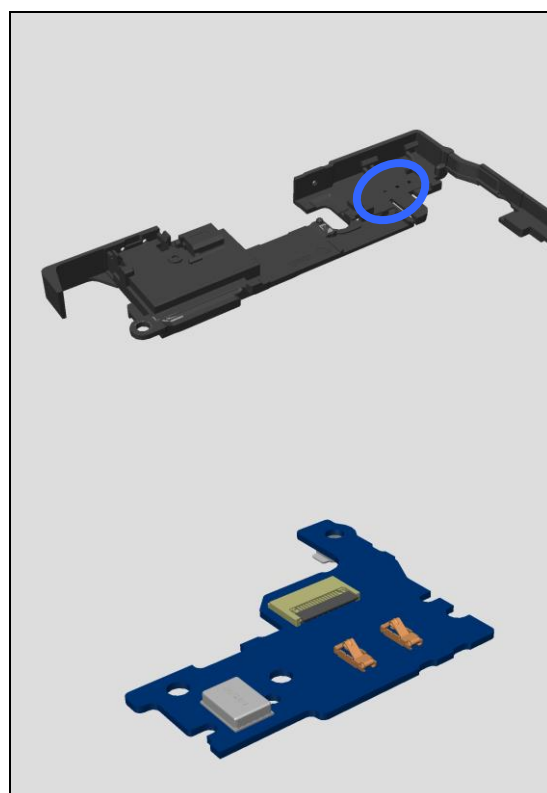


Check:

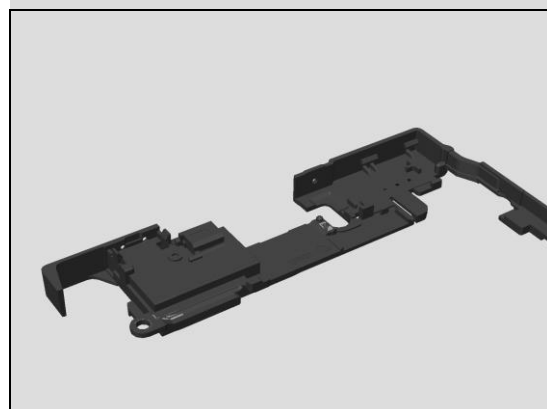
Inspect the contact pads on the Ant Main Assy and the contact pins on the PBA Sub.

Action:

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

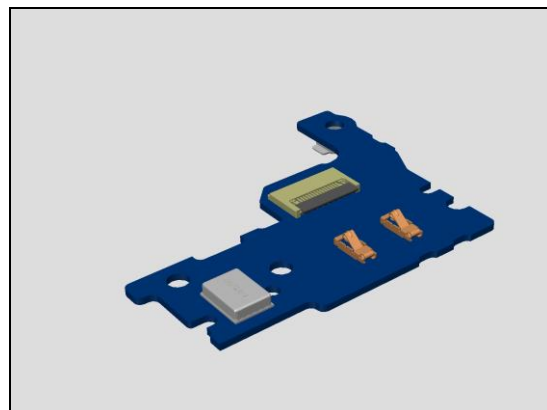


2. If the contact pads on the Ant Main Assy are damaged – replace the Ant Main Assy.



Problem Areas: Network & Signal

3. If the contact pins on the PBA Sub are damaged – replace the PBA Sub.

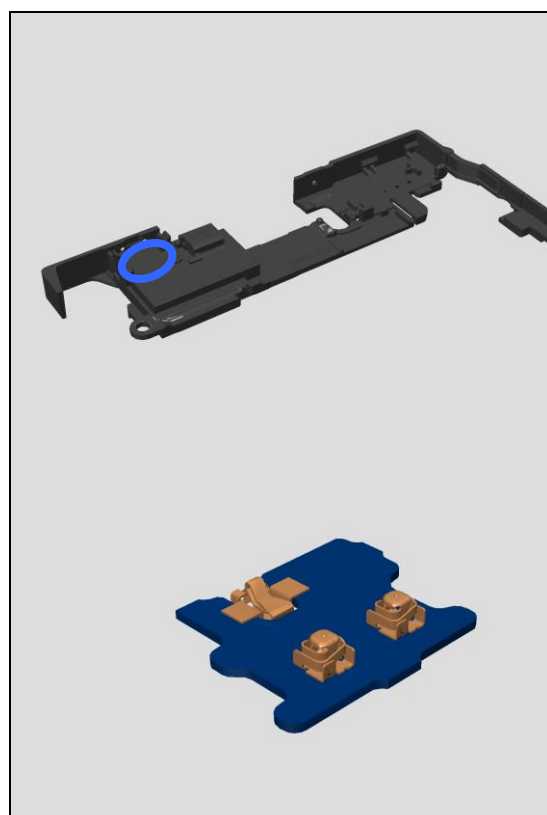


Check:

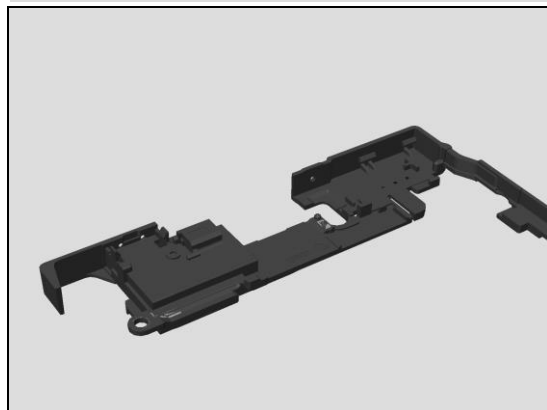
Inspect the contact pads on the Ant Main Assy and the contact pins on the PBA Ant.

Action:

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

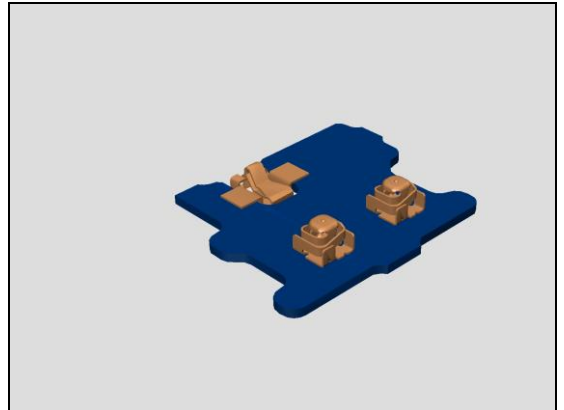


2. If the contact pads on the Ant Main Assy are damaged – replace the Ant Main Assy.



Problem Areas: Network & Signal

3. If the contact pins on the PBA Ant are damaged – replace the PBA Ant.



Problem Areas

1.29 Charging

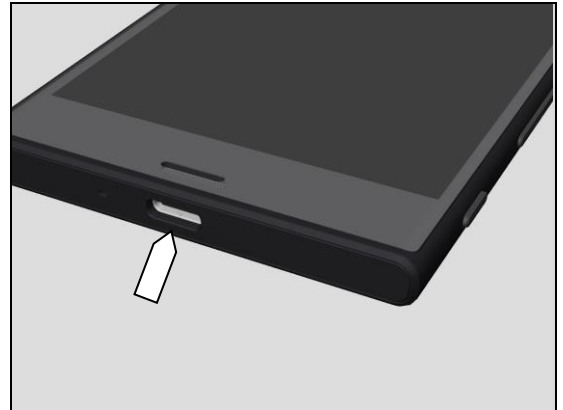
1.29.1 Battery will not charge by USB connector

Check:

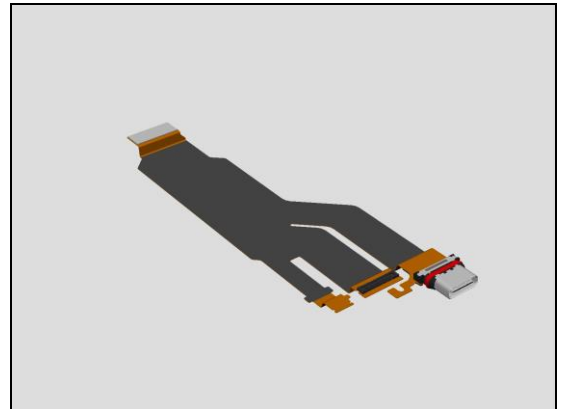
Inspect the USB connector.

Action:

1. If dirty or oxidized – clean the connector.



3. If the FPC Relay Assy is damaged – replace FPC Relay Assy.

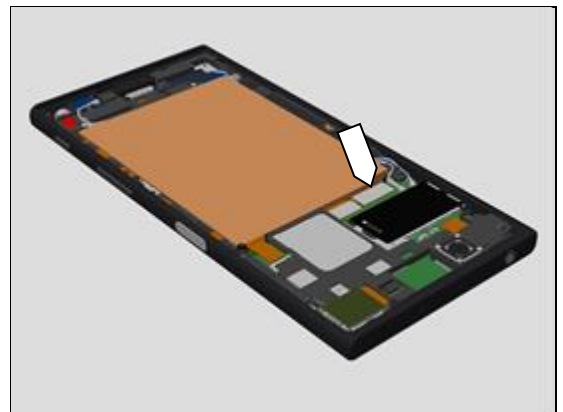


Check:

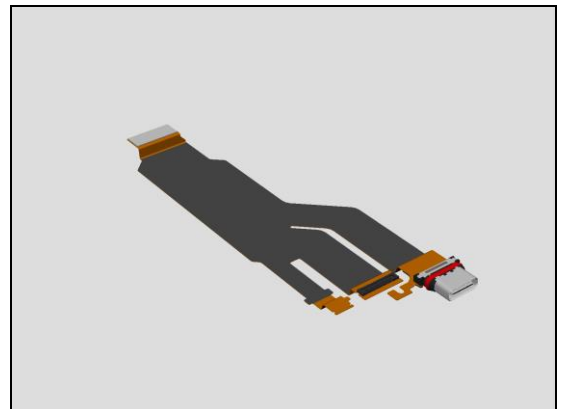
Inspect the BtB connector of FPC Relay Assy Display Assy to Main PBA.

Action:

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



3. If the FPC Relay Assy is damaged – replace FPC Relay Assy.



Problem Areas: Charging

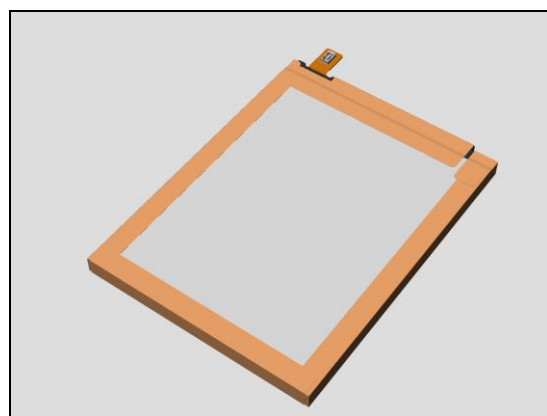
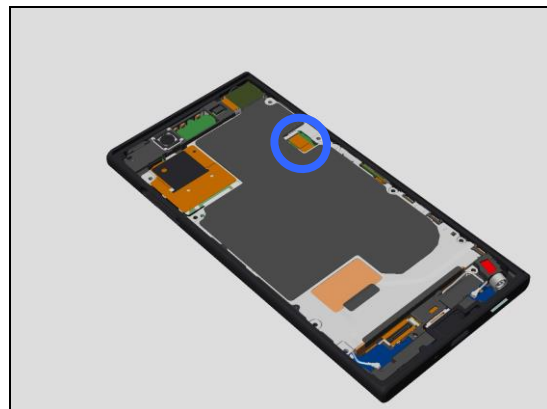
Check:

Inspect the BtB connector of the Battery to Main PBA.

Action:

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

3. If the BtB connector on the FPC or the Battery is damaged – replace the Battery.
4. Replace Main PBA.



Problem Areas

1.30 Audio Jack test

1.30.1 Connection to headset fails

Check:

Inspect the external port of the Audio Jack.

Action:

1. If dirty or oxidized – clean it.

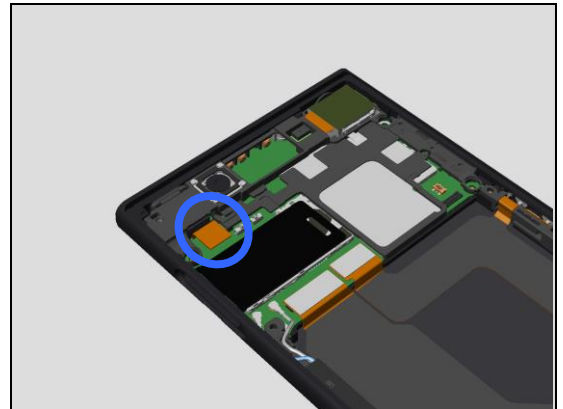


Check:

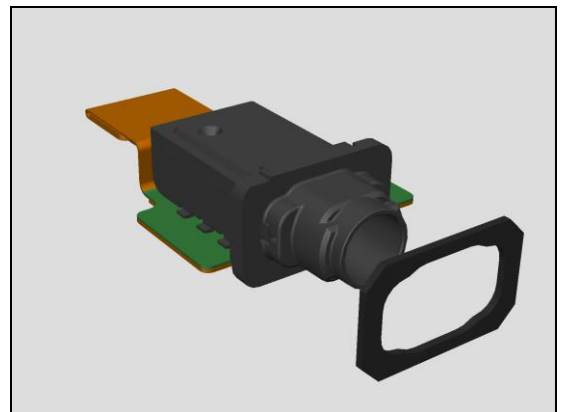
Inspect the BtB connector of the FPC JK Module to Main PBA.

Action:

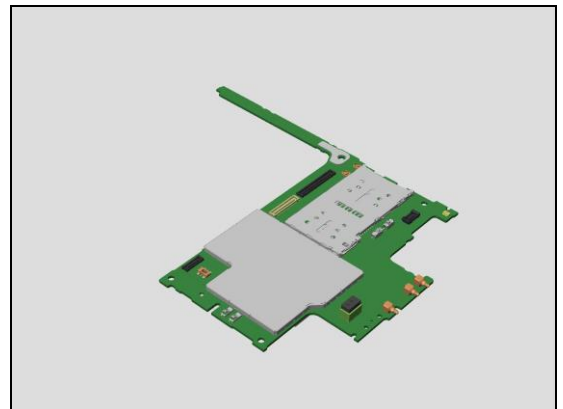
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean it.



3. If the BtB connector of the FPC JK Module is damaged – replace the FPC JK Module and Adhesive WR Audio Jack.



4. Replace Main PBA.



Problem Areas

1.31 Fingerprint Sensor test/Fingerprint Sensor function test

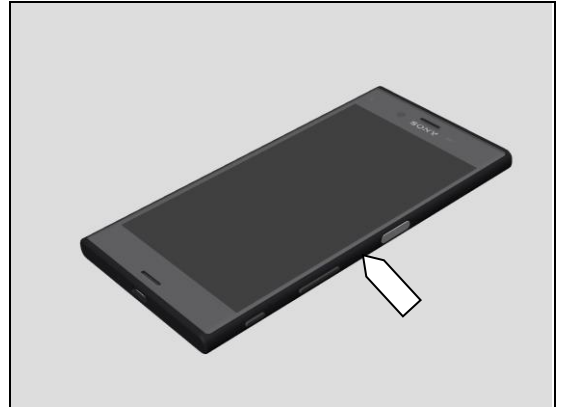
1.31.1 Fingerprint Sensor test fails / Fingerprint Sensor function test fails

Check:

Inspect the FP Sensor Assy.

Action:

1. If dirty or oxidized – clean it.
2. If the FP Sensor Assy is damaged – replace the FP Sensor Assy.

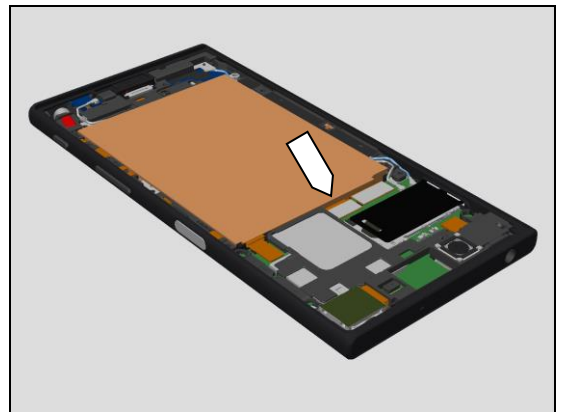


Check:

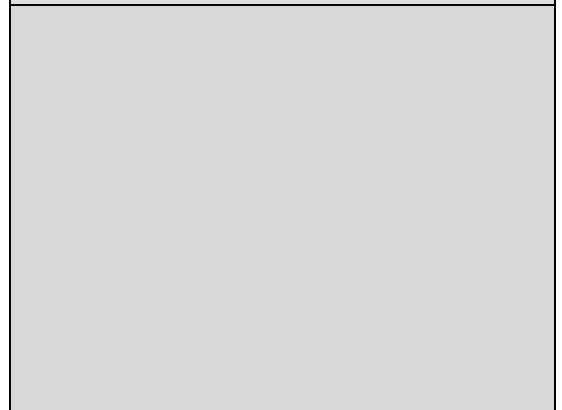
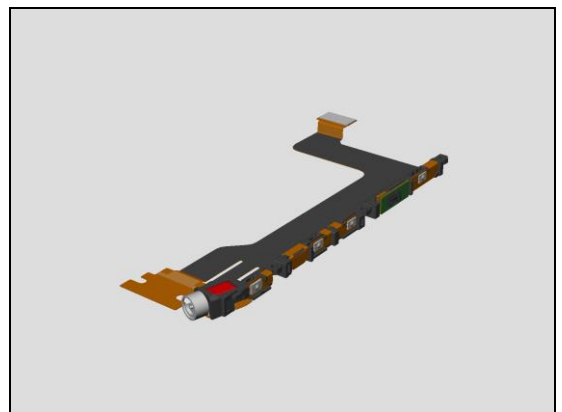
Inspect the BtB connector of FPC Key Assy to Main PBA.

Action:

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



3. If the FPC Key Assy is damaged – replace it.
4. Replace Main PBA.



Problem Areas: Finger Print Sensor test

Check:

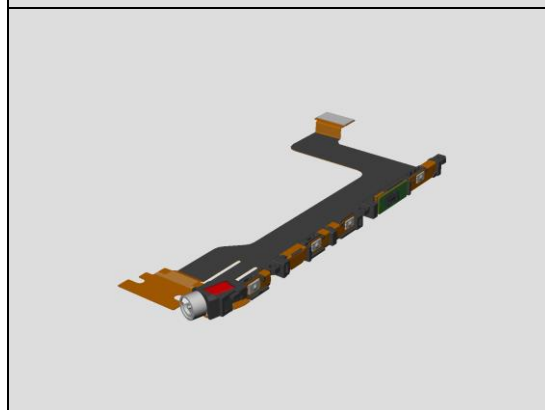
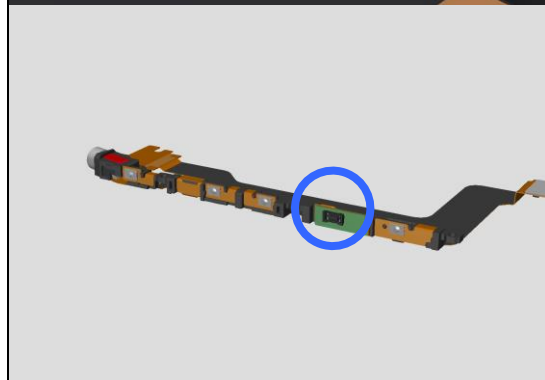
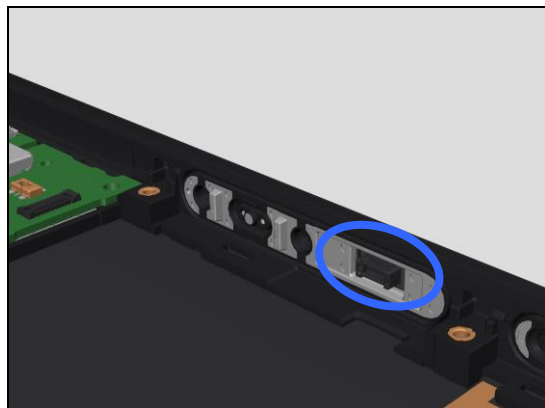
Inspect the BtB connector of FP Sensor Assy to FPC Key Assy.

Action:

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

3. If the BtB connector or FPC Key Assy is damaged – replace the FPC Key Assy.

4. If the BtB connector of FP Sensor Assy is damaged – replace the FP Sensor Assy.



Problem Areas

1.32 Data Communication

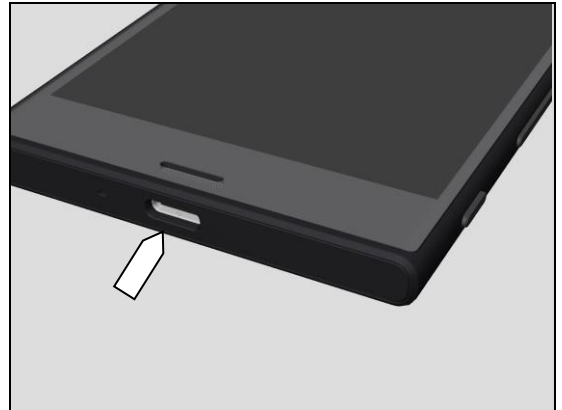
1.32.1 Data transfer via System Connector fails

Check:

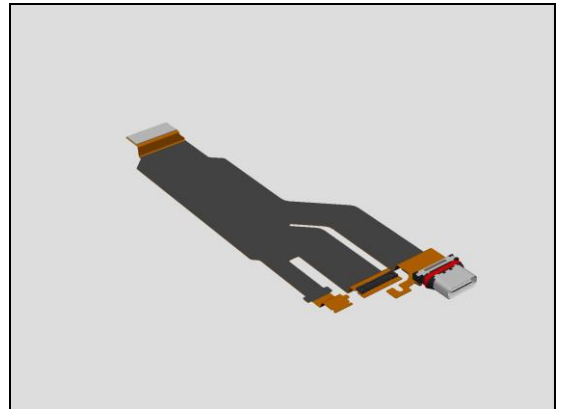
Inspect the USB connector.

Action:

1. If dirty or oxidized – clean the connector.



3. If the FPC Relay Assy is damaged – replace FPC Relay Assy.



Check:

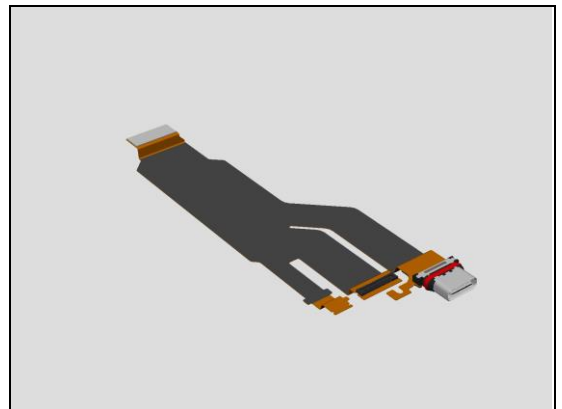
Inspect the BtB connector of FPC Relay Assy Display Assy to Main PBA.

Action:

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



3. If the FPC Relay Assy is damaged – replace the FPC Relay Assy.



Problem Areas

1.33 RGBC-IR Sensor

1.33.1 RGBC-IR Sensor

Check:

Inspect the external area of the sensor.

Action:

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

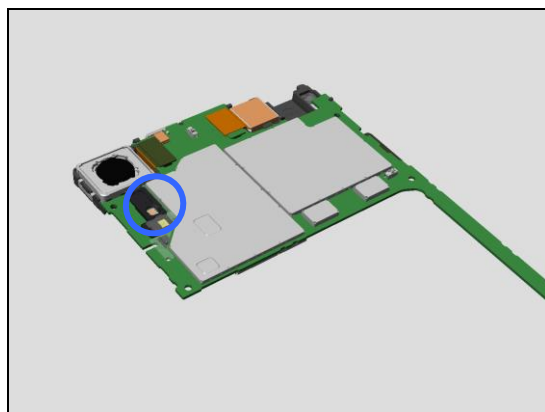


Check:

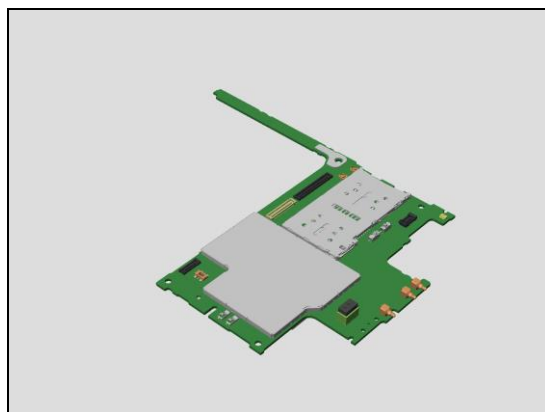
Inspect the Flash LED on Main PBA.

Action:

1. If dirty – clean it.



2. Replace Main PBA.



Problem Areas

1.34 ToF Sensor

1.34.1 ToF Sensor

Check:

Inspect the external area of the sensor.

Action:

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

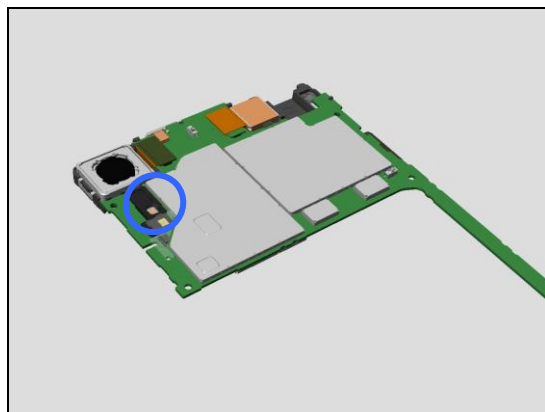


Check:

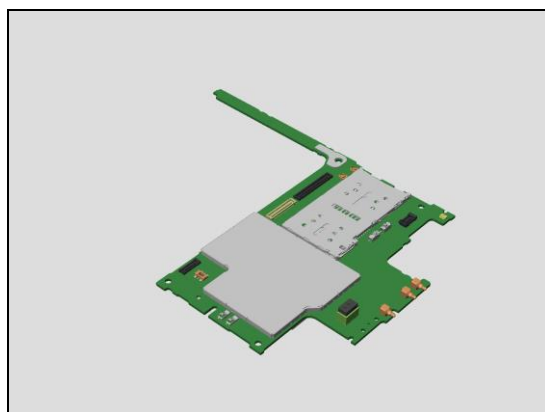
Inspect the Flash LED on Main PBA.

Action:

1. If dirty – clean it.



2. Replace Main PBA.



Problem Areas

1.35 Unbalance Sound Level of Speaker L/R channel

1.35.1 Unbalance Sound Level of Speaker L/R channel

Check:

Check Speaker calibration is complete to refer to the Speaker Calibration Status of the Service Tests.

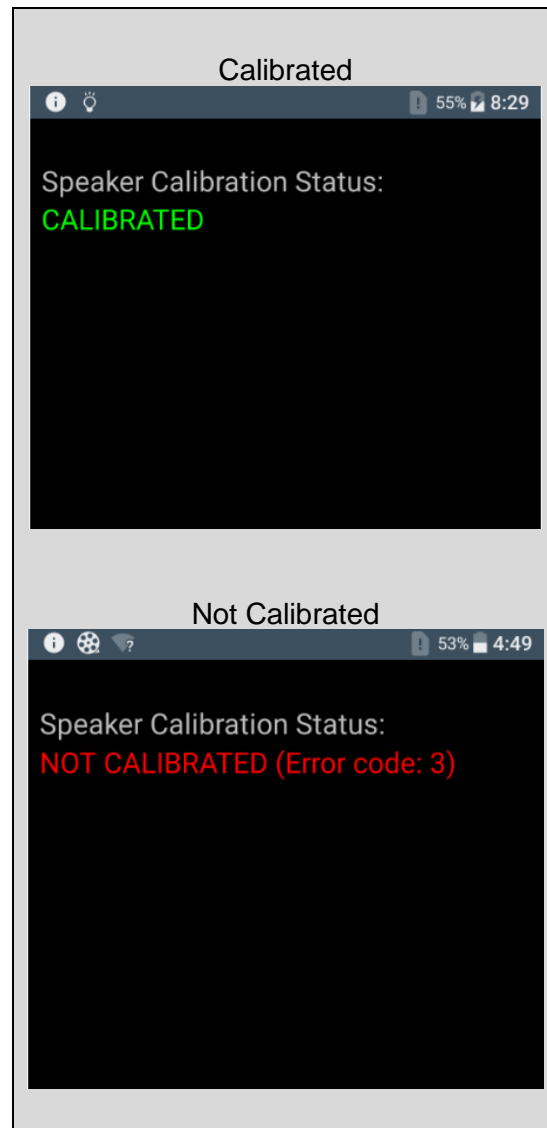
Action:

If not calibrated, implement speaker calibration.

Speaker Calibration Procedure;

Re-start the phone and leave the phone (connect the charger to the USB connector) more than 30 minutes without any access to the phone, and then calibration will be done as automatically.

If the phone is accessed during the period, calibration process is reset, and another 30 minutes will be taken.



2 Revision History

Rev.	Date	Changes / Comments
1	2017-Mar-17	Initial release