



Troubleshooting Guide

- mechanical -



ELM
J10, J10i2



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1 Problem Areas

1.1 Power

1.1.1 Cannot power on or will switch off randomly

Check:

Check whether the phone vibrates and the Navigation Keypad illuminates after the power key is pressed

Action:

If activation of the Vibrator and Navigation Keypad illumination is detected, refer to section 1.2 'Display'

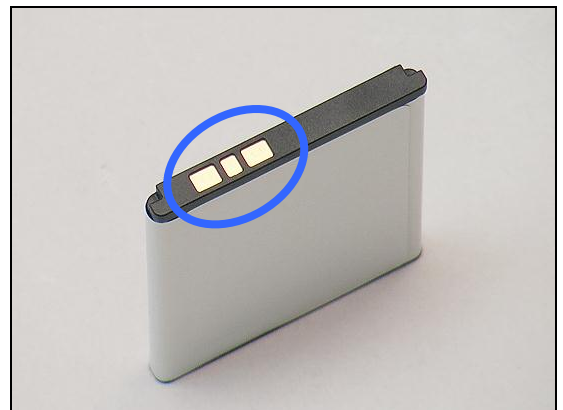


Check:

Inspect the contact pads on the Battery

Action:

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



Check:

Inspect the Battery 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. If damaged – send to higher level of repair

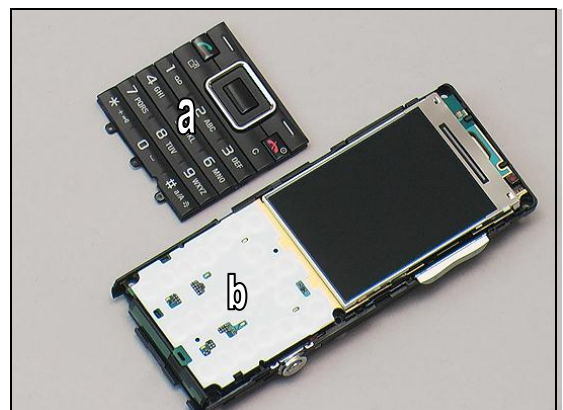


Check:

Inspect the Keyboard (a) and the Keypad Dome Sheet (b)

Action:

1. If the Keyboard is damaged – replace it
2. If the Keypad Dome Sheet is damaged – replace it
3. Send to higher level of repair





Problem Areas

1.2 Display

1.2.1 Graphics & Illumination

Check:

Check whether the phone vibrates and the Navigation Keypad illuminates after the power key has been pressed

Action:

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

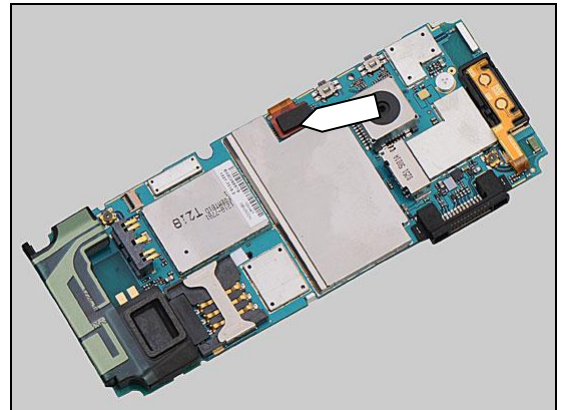


Check:

Inspect the connector

Action:

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

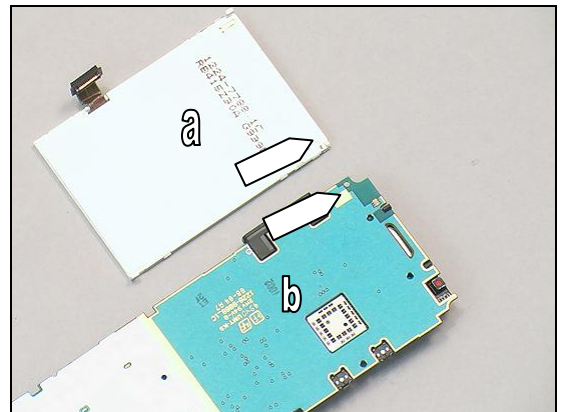


Check:

Inspect the contact pin on the back of the Display 2.2 TFT (a) and contact pad on the PBA (b)

Action:

1. If the contact pins are flattened – gently use the Flex Film Assembly Tool to lift them up higher than the surface
2. If the contact pin / contact pad dirty or oxidized – clean the contact pin / contact pad



3. If the Display 2.2 TFT is damaged – replace it
4. Send to higher level of repair





Problem Areas

1.3 Keys

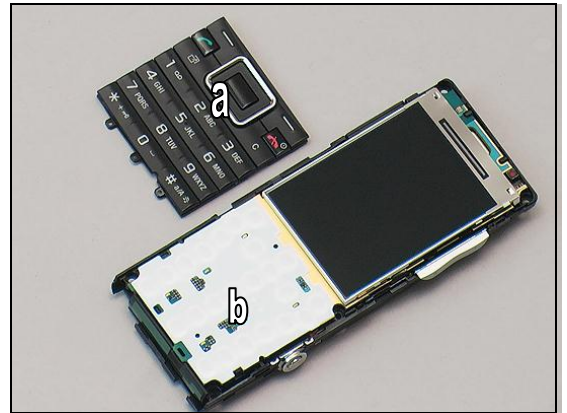
1.3.1 Keyboard keys

Check:

Inspect the Keyboard (a) and the Keypad Dome Sheet (b)

Action:

1. If the Keyboard is damaged – replace it
2. If the Dome Sheet is damaged – replace it
3. Send to higher level of repair



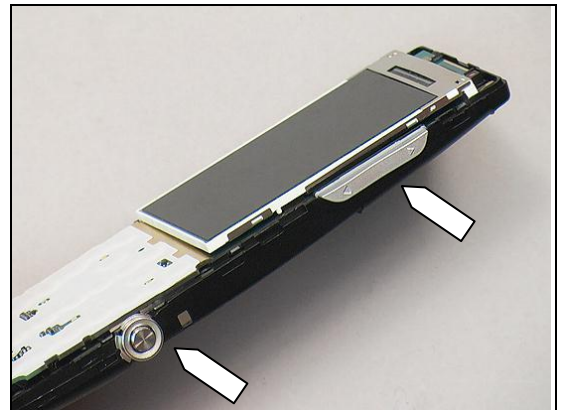
1.3.2 Side keys

Check:

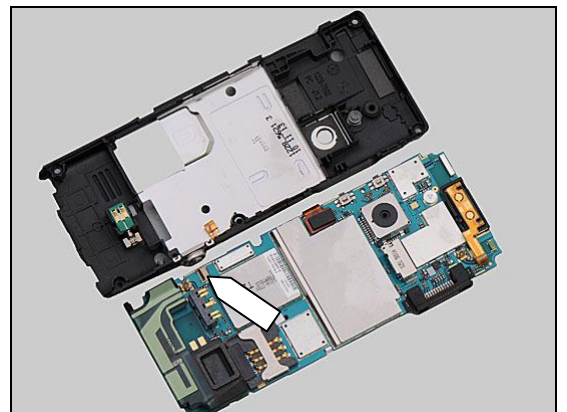
Inspect the key causing the fault

Action:

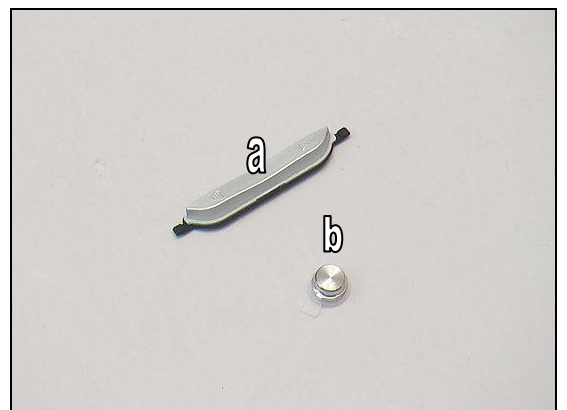
1. If dirty or clogged – clean it
2. Reinstall the PBA and ensure both the Volume Key and the Camera Key are properly located in relation to the keys switches on the PBA



3. If the connector is not properly connected – disconnect and reconnect it
4. If the Camera Key FPC is damaged – replace it.



5. If the Volume key (a) or the Camera Key (b) is damaged – replace the Volume key or the Camera Key
6. Send to higher level of repair



Problem Areas

1.4 Audio

1.4.1 Microphone

Check:

Inspect the Microphone (1)'s external port on the front

Action:

1. If clogged – clean the port
2. If damaged – change the Front Cover Assy
3. Send to higher level of repair



Check:

Inspect the Microphone (2)'s external port on the back

Action:

1. If clogged – clean the port
2. If damaged – change the Carrier Assy
3. Send to higher level of repair



1.4.2 Receiver

Check:

Inspect the Receiver's external port

Action:

If clogged – clean it or replace the Front Cover Assy

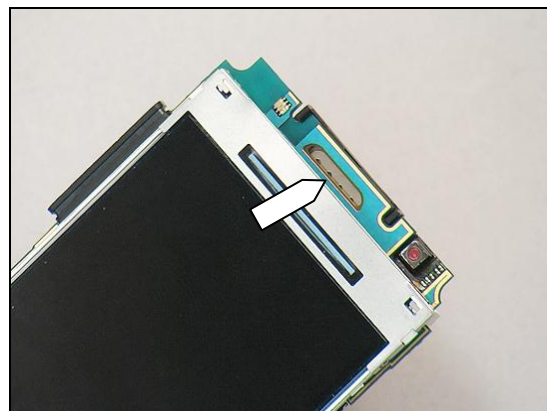


Check:

Inspect the Receiver

Action:

If not properly attached – reinstall the Carrier Frame Receiver / Carrier Frame VT+Receiver





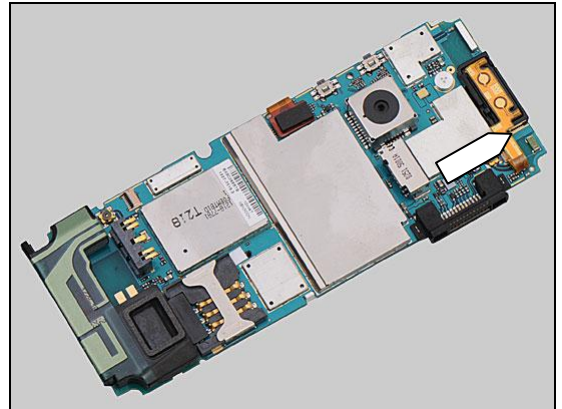
Problem Areas: Audio

Check:

Inspect the Receiver FPC

Action:

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



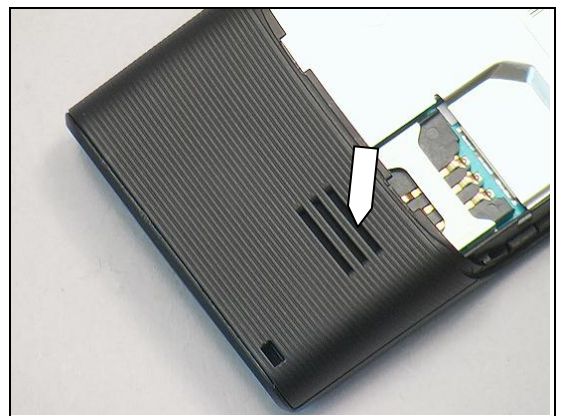
1.4.3 Loudspeaker

Check:

Inspect the Loudspeakers' external port on the Antenna Cover

Action:

1. If clogged – clean the speaker port
2. If damaged – replace the Antenna Cover



Check:

Inspect the Speaker Mesh

Action:

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

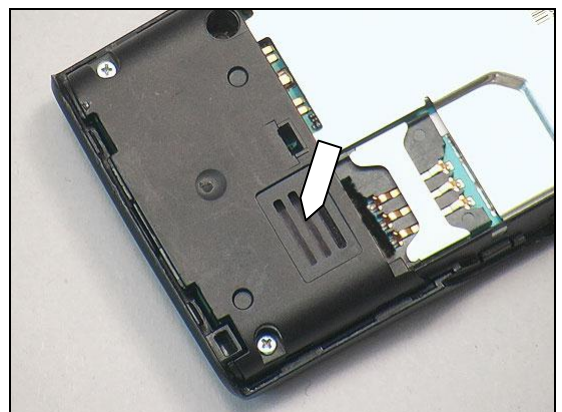


Check:

Inspect the Loudspeakers' external port on the Carrier Assy

Action:

1. If clogged – clean the speaker port
2. If damaged – replace the Carrier Assy





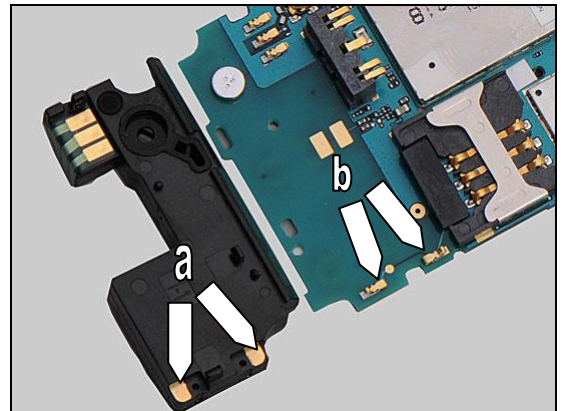
Problem Areas: Audio

Check:

Inspect the contact pads on the Loudspeaker (a) and the contact pins on the PBA (b)

Action:

If the contact pins / contact pads dirty or oxidized – clean the contact pins / contact pads

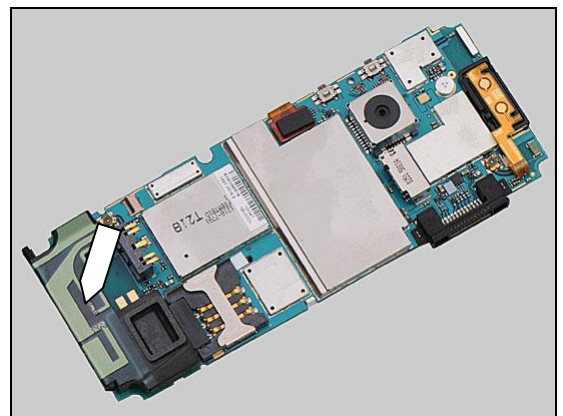


Check:

Inspect the Loudspeaker

Action:

1. If damaged – replace it
2. Send to higher level of repair



Problem Areas

1.5 Vibrator

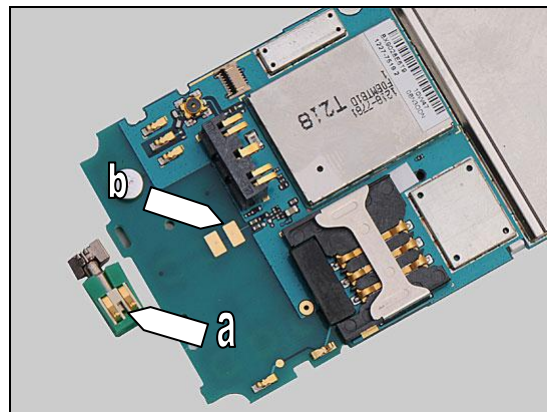
1.5.1 Vibrator not generating alerts

Check:

Inspect the contact pins on the vibrator (a) and the contact pads on the PBA (b)

Action:

If the contact pins / contact pads dirty or oxidized – clean the contact pins / contact pads

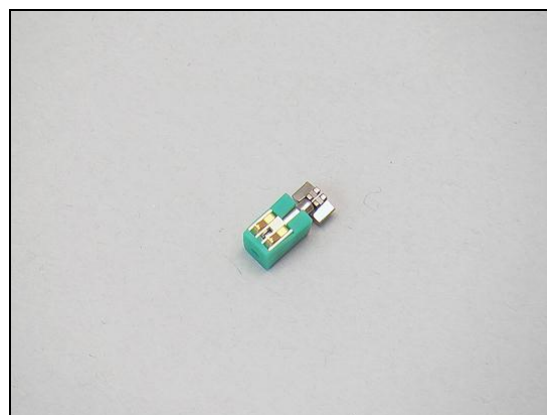


Check:

Inspect the Vibrator

Action:

1. If damaged – replace it
2. Send to higher level of repair





Problem Areas

1.6 Camera

1.6.1 Camera 5MPixel defects

Check:

Inspect the camera window

Action:

1. If dirty – clean the window



2. If scratched or damaged – replace the Carrier Assy



Check:

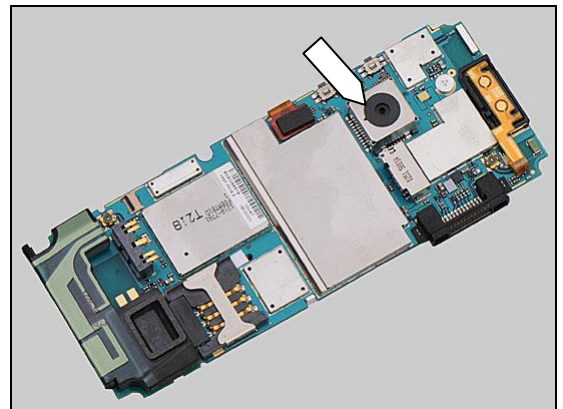
Inspect whether the Camera is properly attached

Action:

1. If not properly attached – reinstall it

2. If the Camera is damaged – replace it

3. Send to higher level of repair



1.6.2 VGA Camera defects (J10 only)

Check:

Inspect the VGA Camera window

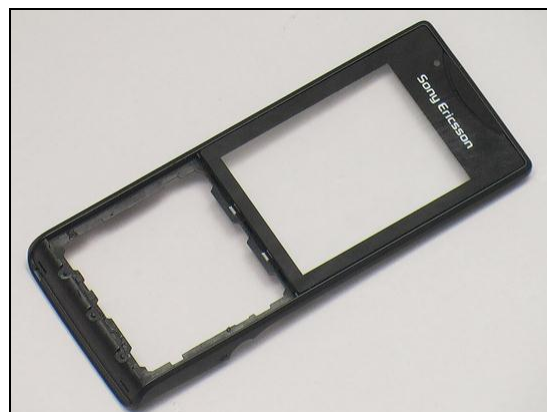
Action:

1. If dirty – clean the window



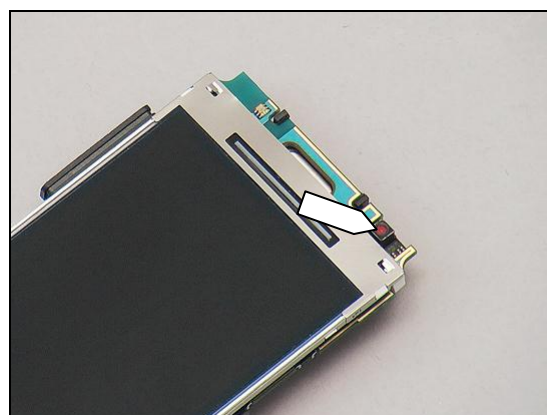
Problem Areas

2. If scratched or damaged – replace the Front Cover



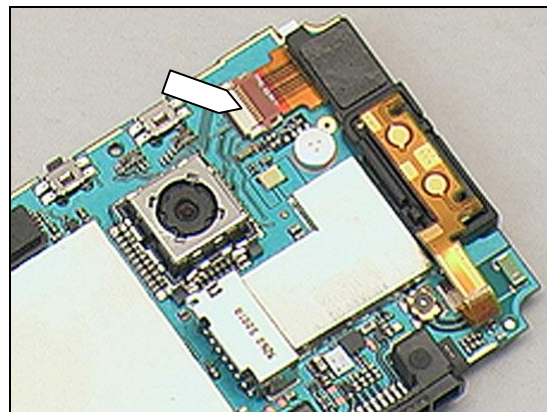
Check:

Inspect the VGA Camera



Action:

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



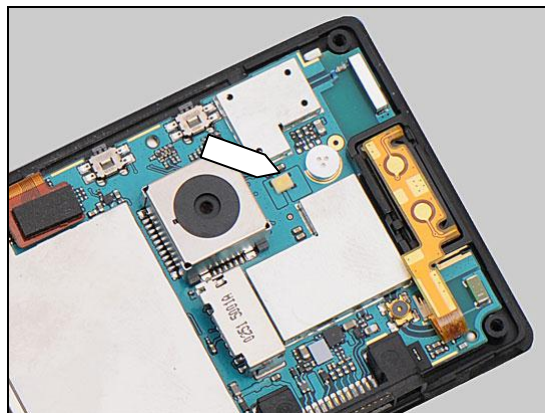
Problem Areas

1.7 Flash LED

1.7.1 Flash LED not flashing

Action:

Send to higher level of repair



Problem Areas

1.8 Accelerometer

1.8.1 Accelerometer test fails

Action:

Send to higher level of repair

Problem Areas

1.9 Memory Card

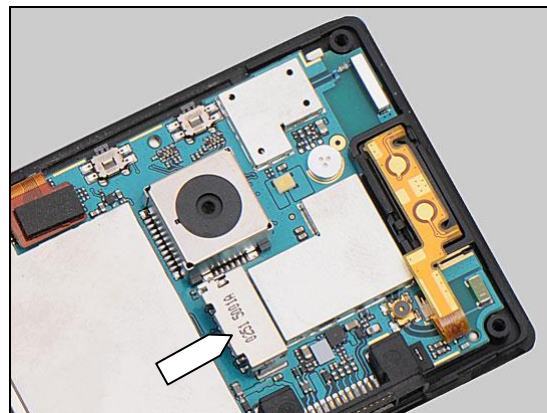
1.9.1 Memory Card not detected

Check:

Inspect the Memory Card holder

Action:

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



1.9.2 Memory Card is stuck in the holder

Action:

1. Gently pull the Memory Card out with fingers
2. Send to higher level of repair



Problem Areas

1.10 FM Radio

1.10.1 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

1.11 Real Time Clock

1.11.1 Real Time Clock test fails

Action:

Send to higher level of repair

Problem Areas

1.12 SIM

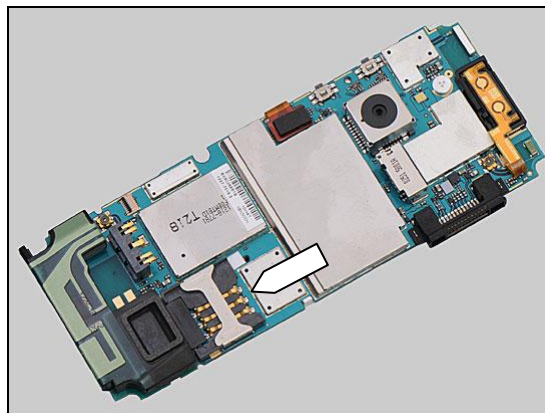
1.12.1 SIM not detected

Check:

Inspect the SIM holder

Action:

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



1.12.2 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

1.13 Charging

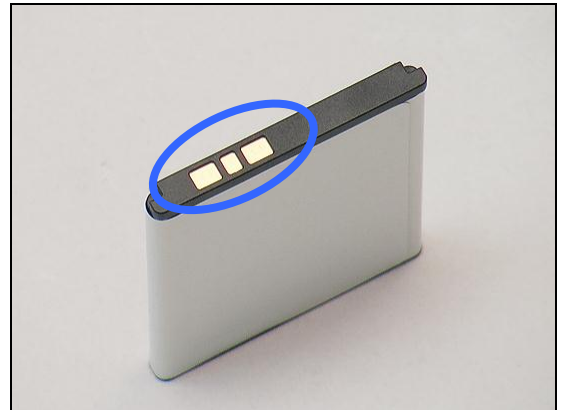
1.13.1 Battery will not charge

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

1.14 BT/W-LAN (J10i2 only)

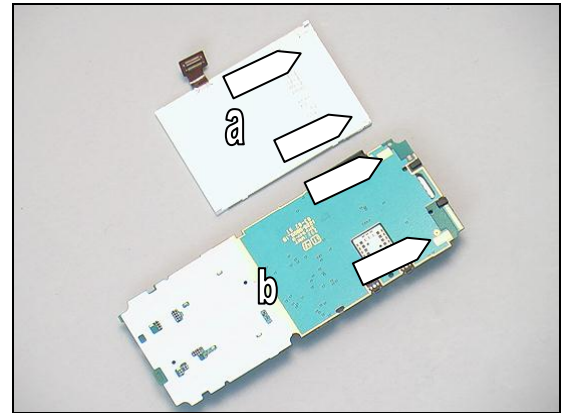
1.14.1 BT/W-LAN connection failure

Check:

Inspect the connection of two contact pins on the back of the Display 2.2 TFT (a) and contact pads on the PBA (b)

Action:

1. If the contact pins are flattened – gently use the Flex Film Assembly Tool to lift them up higher than the surface
2. If the contact pins / contact pads dirty or oxidized – clean the contact pins / contact pads
3. Send to higher level of repair





Problem Areas

1.15 GPS (J10i2 only)

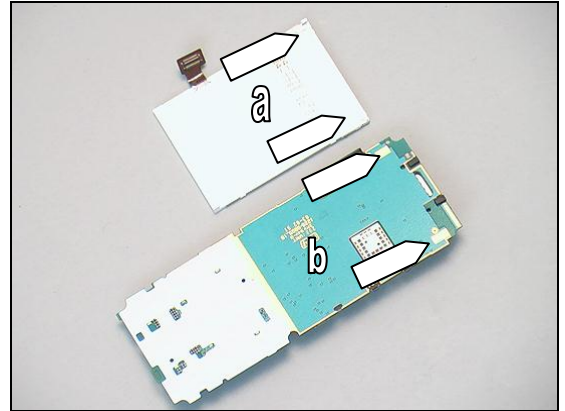
1.15.1 GPS malfunctions

Check:

Inspect the connection of two contact pins on the back of the Display 2.2 TFT (a) and contact pads on the PBA (b)

Action:

1. If the contact pins are flattened – gently use the Flex Film Assembly Tool to lift them up higher than the surface
2. If the contact pins / contact pads dirty or oxidized – clean the contact pins / contact pads
3. Send to higher level of repair





Problem Areas

1.16 Network & Signal

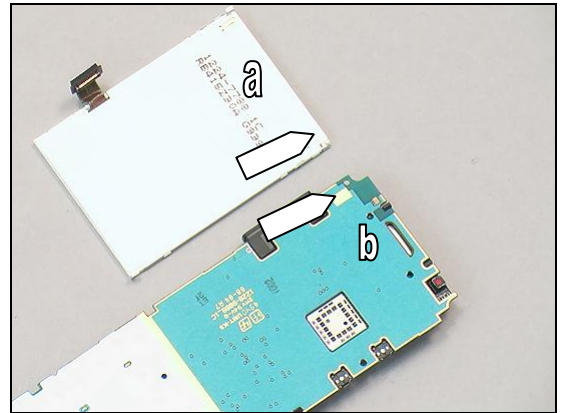
1.16.1 No/Poor signal

Check:

Inspect the connection of contact pin on the back of the Display 2.2 TFT (a) and contact pad on the PBA (b)

Action:

1. If the contact pins are flattened – gently use the Flex Film Assembly Tool to lift them up higher than the surface
2. If the contact pin / contact pad dirty or oxidized – clean the contact pin / contact pad

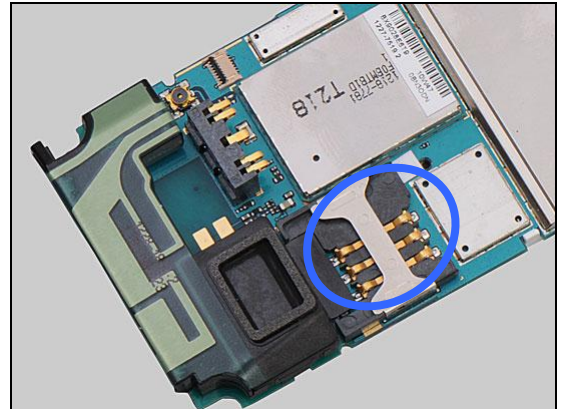


Check:

Ensure that a correct SIM is installed

Action:

Send to higher level of repair



Problem Areas

1.17 HandsFree by Wire

1.17.1 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

1.18 Data Communication

1.18.1 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 Revision History

Rev.	Date	Changes / Comments
1	2010-Mar-08	Initial release
2	2011-Apr-18	Updated SIM reader Tape