

Working Instructions

- mechanical -



Xperia™ V
LT25i



Xperia™ VC
LT25c

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***For general information about mechanical repair related issues, refer to
1220-1333: Generic Repair Manual - mechanical
LT25i and LT25c share the same repair method in the following common sections whose pictures
are taken with LT25c.***

1 Exterior Views

1.1 LT25i



Exterior Views

1.2 LT25c



2 Tools

SPECIAL TOOLS

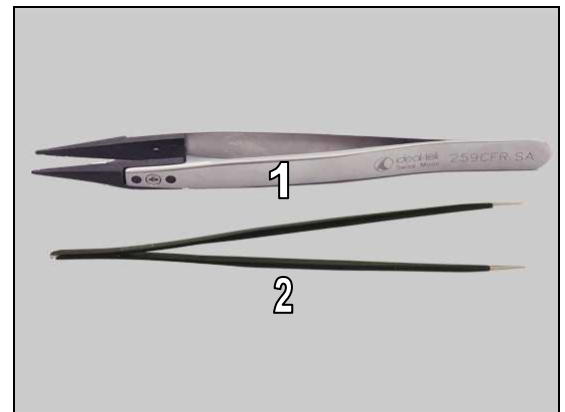
1. Torque Screwdriver
2. Flex Film Assembly Tool
3. Bits (T5)
4. Bits (JCIS No 0)
5. Front Opening Tool
6. Guitar Pick
7. Finger Cots
8. Press Tool Earspeaker
9. Press Tool Loudspeaker
10. Sub Antenna Press Insert
11. Pressure Tool



For part no's on the tools above, refer to the 'Tools Catalogue/Matrix'!

STANDARD TOOLS

1. Plastic Tweezers
2. Tweezers

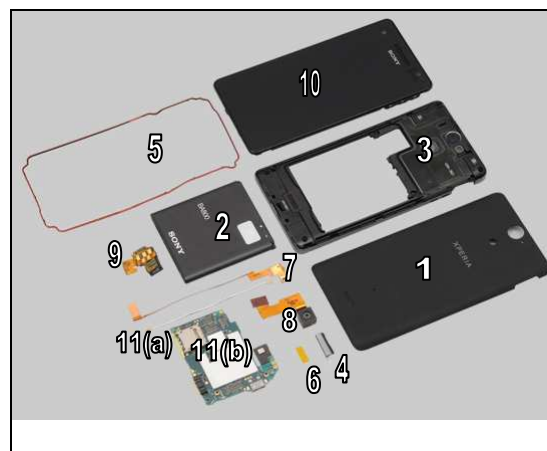


3 Disassembly

3.1 Overview

The LT25i disassembly is done in the following order:

1. Cover Battery Assy
2. Battery
3. Cover Rear Assy
4. Cap Micro USB
5. Main Gasket
6. Sheet Side Key FPC
7. Relay Flex PBA Assy
8. Main Camera
9. Jack Flex PBA Assy
10. Touch/Display Front Cover Assy
11. Cable RF (a) & Main PBA (b)

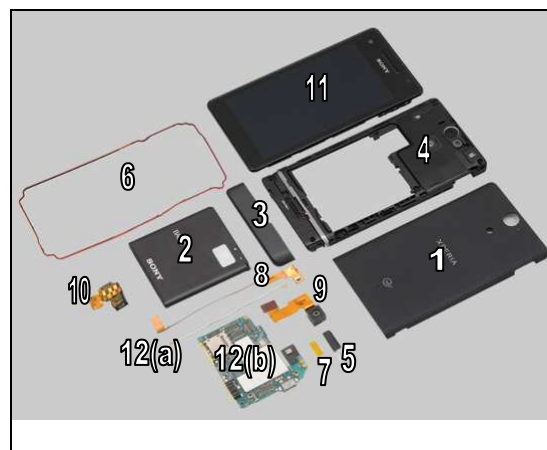


The order 1 – 4 refers to 3.2.1 – 3.2.4.

The order 5 – 11 refers to 3.4.1 – 3.4.7.

The LT25c disassembly is done in the following order:

1. Cover Battery Assy
2. Battery
3. Cover Bottom
4. Cover Rear Assy
5. Cap Micro USB
6. Main Gasket
7. Sheet Side Key FPC
8. Relay Flex PBA Assy
9. Main Camera
10. Jack Flex PBA Assy
11. Touch/Display Front Cover Assy
12. Cable RF (a) & Main PBA (b)



The order 1 – 5 refers to 3.3.1 – 3.3.5.

The order 6 – 12 refers to 3.4.1 – 3.4.7.

Disassembly

3.2 Disassembly-LT25i Specific

3.2.1 Cover Battery Assy

Insert the Guitar Pick into the gap as shown in the picture and gently pull upwards to release the Cover Battery Assy.



Lift up the Cover Battery Assy to remove it with fingers.



3.2.2 Battery

Insert the Front Opening Tool as shown and raise the bottom of the battery to release it.



Remove the battery.



Disassembly

3.2.3 Cover Rear Assy

Pull out the Card Connector Tray with fingers.



Remove the two Screw Len:3.2 Diam:1.4 M by using a screwdriver with Bits (JCIS No 0).

Scrap! Not to be reused!



Remove the four Screw Len:5.0 Diam:1.4 by using a screwdriver with Bits (T5).

Scrap! Not to be reused!



Insert the Guitar Pick as shown in the picture and gently slide back and forth to release the bottom side of the Cover Rear Assy.



Disassembly

Do the same on this side.



Do the same on the opposite side.

Stop here and do not damage the Side Key Frame!

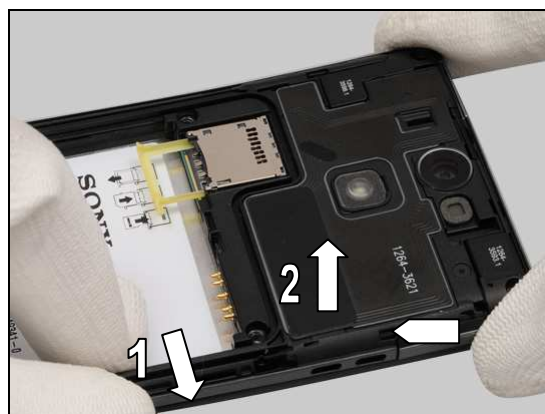


Do the same on the top side.

Stop here and do not damage the Side Key Frame!



1. Pull outwards from this side of the Cover Rear Assy as shown in the picture;
2. Pull upwards to release this hook.



Disassembly

Do the same to release this hook.

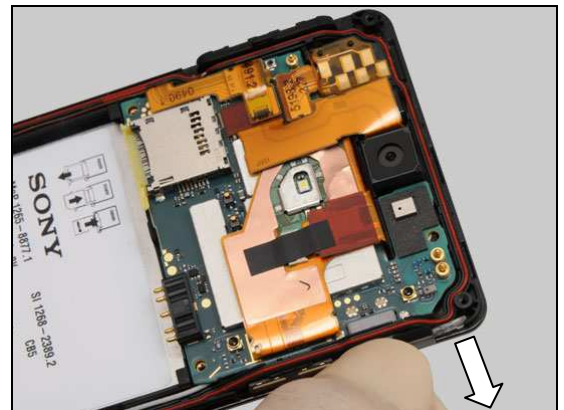


Remove the Cover Rear Assy.



3.2.4 Cap Micro USB

Wear the new Finger Cots and remove the Cap Micro USB.



Disassembly

3.3 Disassembly-LT25c Specific

3.3.1 Cover Battery Assy

Insert a Guitar Pick into the gap as shown in picture and gently pull upwards to release the hooks of the Cover Battery Assy.



Remove the Cover Battery Assy.



3.3.2 Battery

Insert the Front Opening Tool as shown and raise the bottom of the battery to release it.



Remove the battery.



Disassembly

3.3.3 Cover Bottom

Insert the Guitar Pick between the Cover Bottom and the Touch/Display Front Cover Assy as shown in the picture and gently pull upwards to release the hook.



Gently slide back and forth as shown in the picture to release the hooks of the Cover Bottom.



Slowly lift up the Cover Bottom as shown in the picture.

Do not damage the antenna on the Cover Rear Assy!



Remove the Cover Bottom.

Scrap! Not to be reused!



Disassembly

3.3.4 Cover Rear Assy

Pull out the Card Connector Tray with fingers.



Remove the two Screw Len:3.2 Diam:1.4 M by using a screwdriver with Bits (JCIS No 0).

Scrap! Not to be reused!



Remove the four Screw Len:5.0 Diam:1.4 by using a screwdriver with Bits (T5).

Scrap! Not to be reused!



Gently insert the Guitar Pick as shown in the picture and gently slide back and forth to release this side of the Cover Rear Assy.



Disassembly

Do the same on the opposite side.

Stop here and do not damage the Side Key Frame!



Do the same on the top side.

Stop here and do not damage the Side Key Frame!

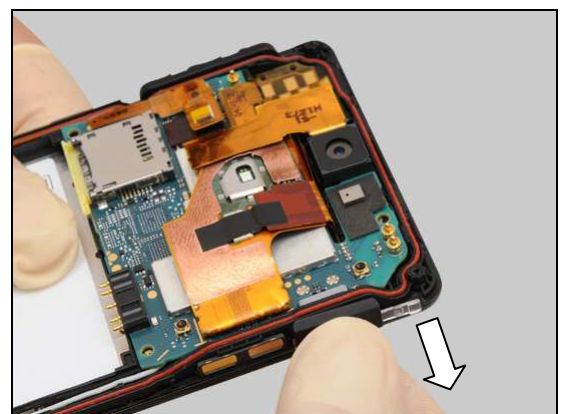


Raise the Cover Rear Assy from the top side and remove it with fingers.



3.3.5 Cap Micro USB

Wear the new Finger Cots and gently remove the Cap Micro USB.



Disassembly

3.4 Disassembly-LT25i/LT25c Common

3.4.1 Main Gasket

Gently lift up the Main Gasket to remove it by using the Flex Film Assembly Tool.

Do not damage the Main Gasket!

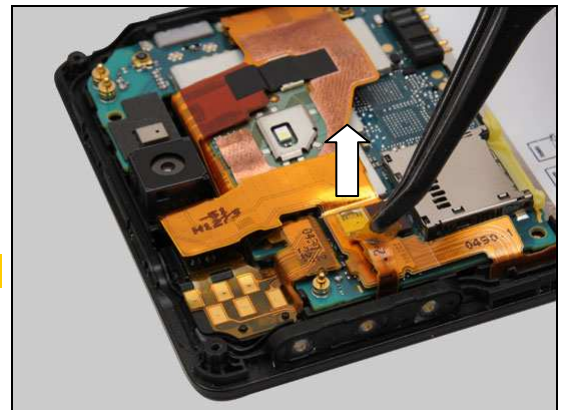
Make sure the Main Gasket is clean, no dirt, particles and fiber attached on it!



3.4.2 Sheet Side Key FPC

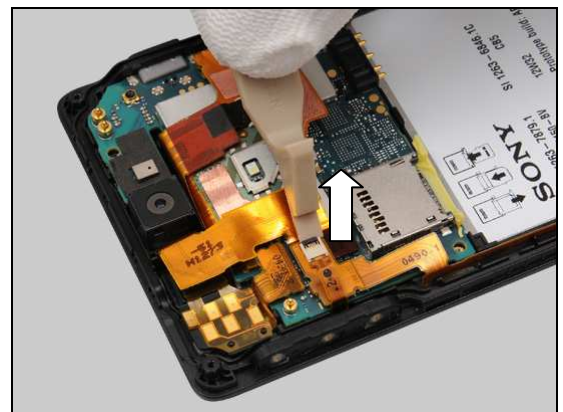
Gently peel off the Sheet Side Key FPC by using the Flex Film Assembly Tool.

Scrap! Not to be reused!



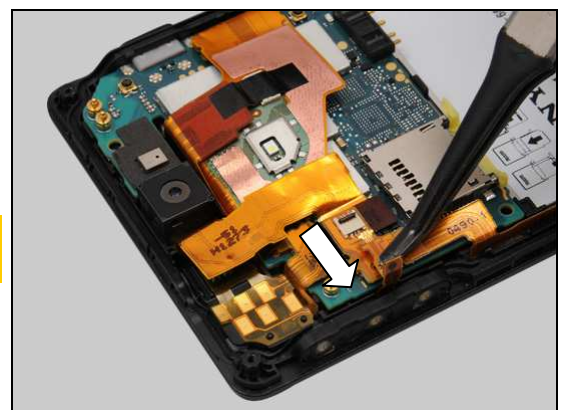
3.4.3 Relay Flex PBA Assy

Unlock the ZIF connector on the Relay Flex PBA Assy by using the Front Opening Tool.



Release the flex part of the Side Key Flex PBA Frame Assy_WR by using the Flex Film Assembly Tool.

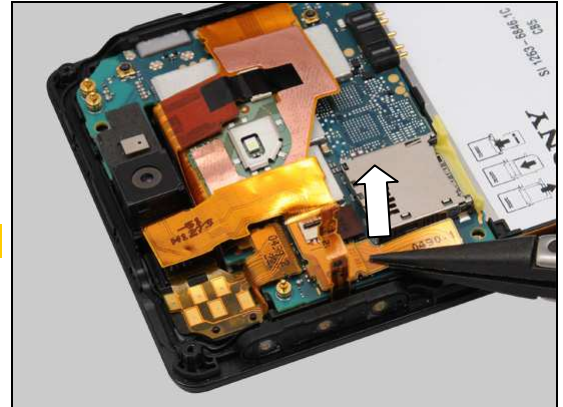
Be careful! Do not stretch the Side Key Flex PBA Frame Assy_WR FPC!



Disassembly

Disconnect the BtB connector by using the Plastic Tweezers.

Do not damage components on the Main PBA!



Do the same to release the second BtB connector of the Relay Flex PBA Assy.



Remove the Relay Flex PBA Assy from its cavity by using the Plastic Tweezers.



3.4.4 Main Camera

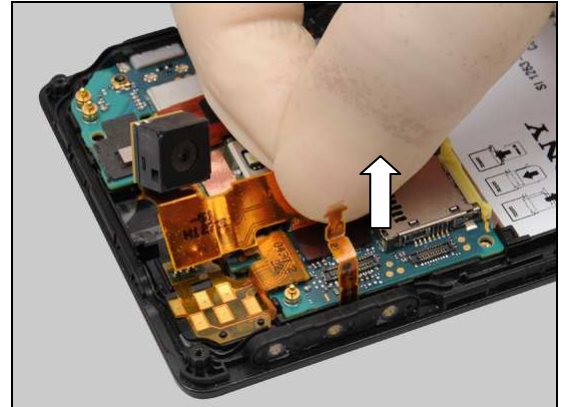
Wear the Finger Cots and lift up the head of the Main Camera from its cavity.

Do not touch the camera lens!



Disassembly

Disconnect the BtB connector as shown in the picture.



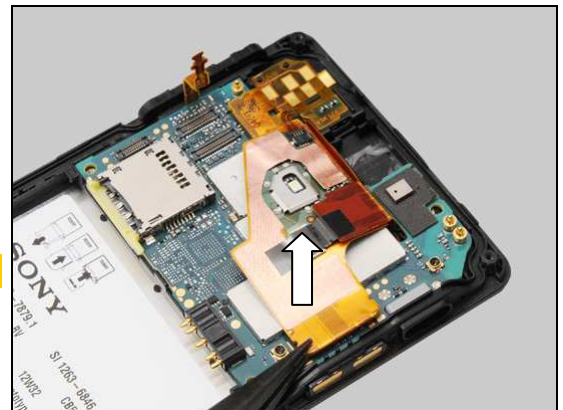
Remove the Main Camera.



3.4.5 Jack Flex PBA Assy

Disconnect the BtB connector of the display FPC by using the Plastic Tweezers.

Do not damage components on the Main PBA!



Disconnect the BtB connector from this side as shown in the picture by using the Plastic Tweezers.

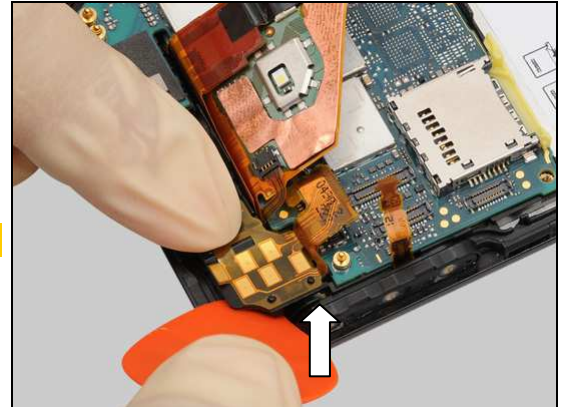
Do not damage components on the Main PBA!



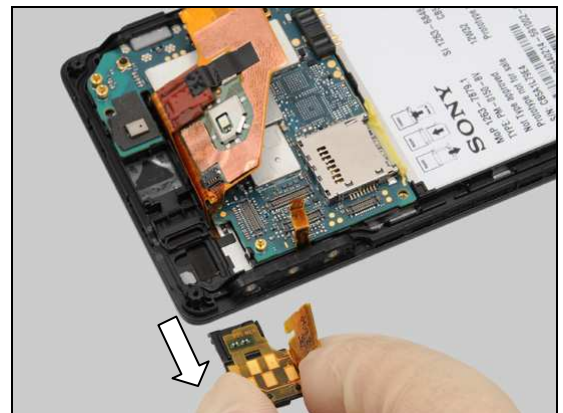
Disassembly

Wear Finger Cots and gently insert the Guitar Pick as shown in the picture to release the hook.

Do not damage the components below the finger!



Remove the Jack Flex PBA Assy.



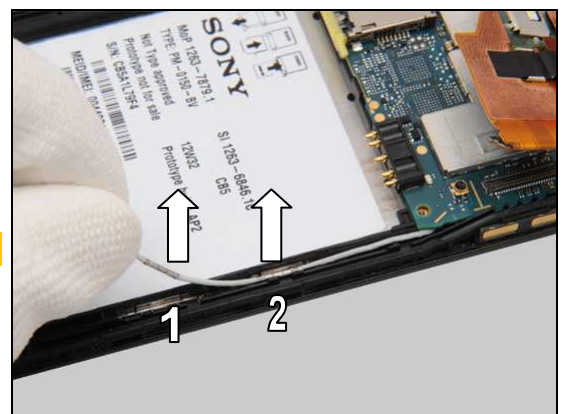
3.4.6 Touch/Display Front Cover Assy

Disconnect the Cable RF connector by using the Flex Film Assembly Tool.



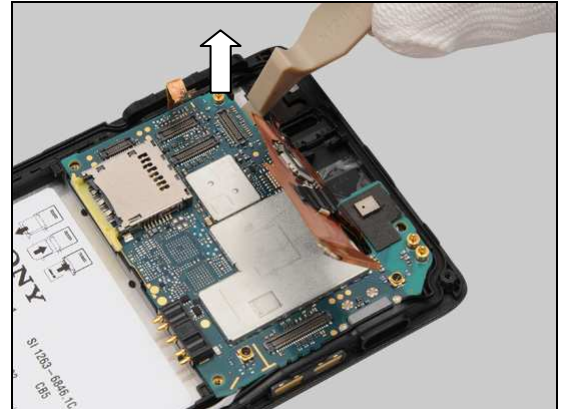
Release the Cable RF from its cavity as shown in the picture.

Do not stretch the Cable RF!

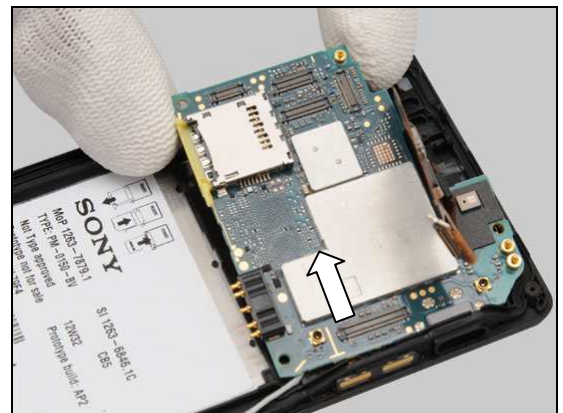


Disassembly

Insert the Front Opening Tool to release this hook of the main PBA.



Release the USB connector from its hole as shown in the picture.



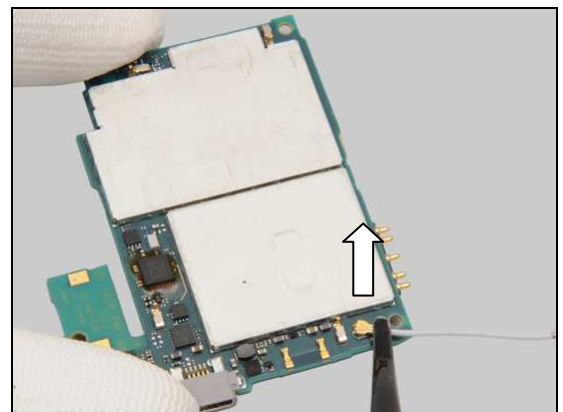
Separate the Touch/Display Cover Front Assy and Cable RF & Main PBA as shown in the picture.

Do not stretch the display FPC!



3.4.7 Cable RF & Main PBA

Disconnect the Cable RF connector and remove the Cable RF by using the Flex Film Assembly Tool.



4 Replacement

4.1 Replacement-LT25i/LT25c Common

4.1.1 Cable RF

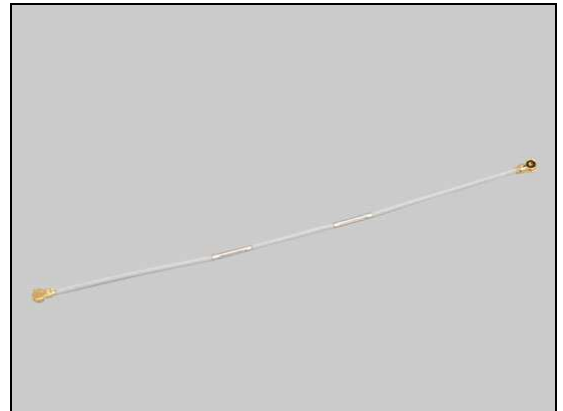
LT25i follow the 3.2.1 – 3.2.4, 3.4.1 – 3.4.7 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 – 3.4.7 Disassembly instructions!

Prepare a new Cable RF.

LT25i follow the 5.2.1 – 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!

LT25c follow the 5.2.1 – 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!



4.1.2 Main Camera

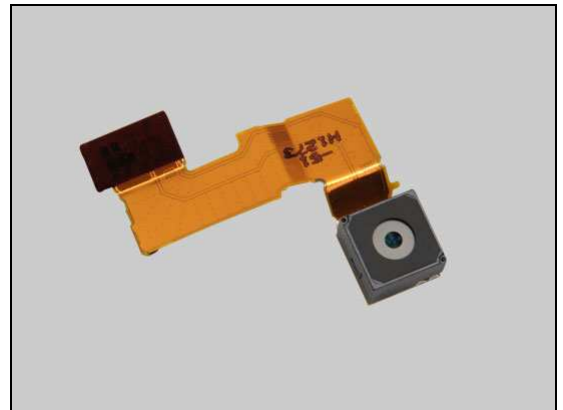
LT25i follow the 3.2.1 – 3.2.4, 3.4.1 – 3.4.4 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 – 3.4.4 Disassembly instructions!

Prepare a new Main Camera.

LT25i follow the 5.2.4 – 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!

LT25c follow the 5.2.4 – 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!



4.1.3 Main Gasket

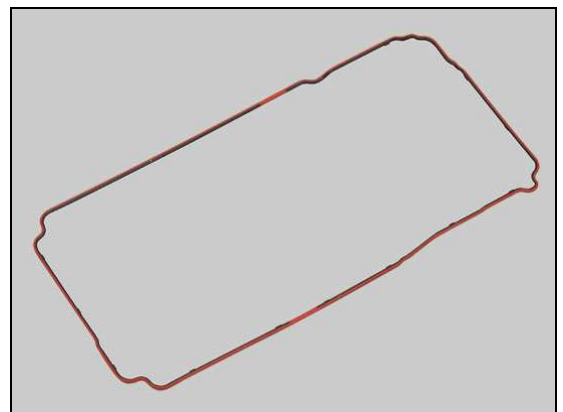
LT25i follow the 3.2.1 – 3.2.4, 3.4.1 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 Disassembly instructions!

Prepare a new Main Gasket.

LT25i follow the 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!

LT25c follow the 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!



4.1.4 Relay Flex PBA Assy

LT25i follow the 3.2.1 – 3.2.4, 3.4.1 – 3.4.3 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 – 3.4.3 Disassembly instructions!

Prepare a new Relay Flex PBA Assy.

LT25i follow the 5.2.5 – 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!

LT25c follow the 5.2.5 – 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!



Replacement

4.1.5 Sheet Side Key FPC

LT25i follow the 3.2.1 – 3.2.4, 3.4.1 – 3.4.2 Disassembly instructions!

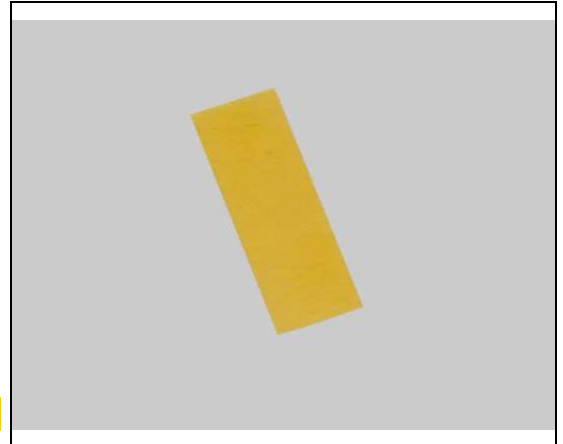
LT25c follow the 3.3.1 – 3.3.5, 3.4.1 – 3.4.2 Disassembly instructions!

Prepare a new Sheet Side Key FPC.

LT25i follow the 5.2.6 – 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!

LT25c follow the 5.2.6 – 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!

Scrap! Not to be reused!



4.1.6 Touch/Display Front Cover Assy

LT25i follow the 3.2.1 – 3.2.4, 3.4.1 – 3.4.6 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 – 3.4.6 Disassembly instructions!

Follow the 4.1.19, 4.1.20 Removal instructions!

Prepare a new Touch/Display Front Cover Assy.

Follow the 4.1.19, 4.1.20, 4.1.10 Installation instructions!

LT25i follow the 5.2.2 – 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!

LT25c follow the 5.2.2 – 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!

The new Ear Speaker, Charge Pad, Foil Adhesive CAM and Adhesive Sub PBA Assy are mounted in the new Touch/Display Front Cover Assy.

Touch Vendor ID Writing and LCD reset SW must be performed for all replaced units; 1257-2706 Trouble Shooting Application – mechanical.



Replacement

4.1.7 Audio Jack

LT25i follow the 3.2.1 – 3.2.4, 3.4.1 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Audio Jack.

Carry out the Installation as described below.

LT25i follow the 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!

LT25c follow the 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!

REMOVAL

Push upwards to release the Audio Jack from its cavity and remove it by using the Flex Film Assembly Tool.



INSTALLATION

Place a new Audio Jack into the socket by using the Flex Film Assembly Tool.



Gently push inwards the Audio Jack to secure its position as shown in the picture.



Replacement: Audio Jack

Press to secure its position.

Do not touch the contact pins!



Replacement

4.1.8 Card Connector Tray

LT25i follow the 3.2.1 – 3.2.2 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.2 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Card Connector Tray.

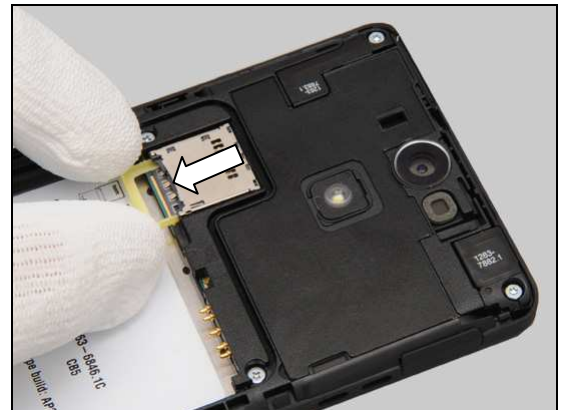
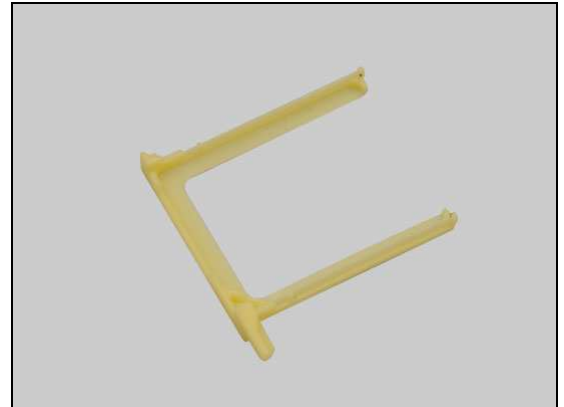
Carry out the Installation as described below.

LT25i follow the 5.3.3 – 5.3.4 Disassembly instructions!

LT25c follow the 5.4.4 – 5.4.5 Disassembly instructions!

REMOVAL

Gently pull out the Card Connector Tray from its cavity and remove it.



INSTALLATION

Place a new Card Connector Tray into its slot.

Make sure the correct direction of the Card Connector Tray!



Gently push the Card Connector Tray to the bottom.



Replacement

4.1.9 Charge Pad

LT25i follow the 3.2.1 – 3.2.4, 3.4.1 – 3.4.7 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 – 3.4.7 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Charge Pad.

Carry out the Installation as described below.

LT25i follow the 5.2.1 – 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!

LT25c follow the 5.2.1 – 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!

REMOVAL

Insert the Flex Film Assembly Tool from this position to loosen the Charge Pad as shown in the picture.

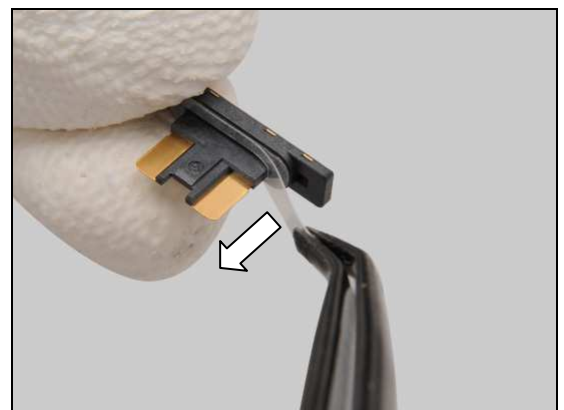
Push to remove the Charge Pad by using the Front Opening Tool as shown in the picture.

Scrap! Not to be reused!

Do not stretch the display FPC in this operation!

INSTALLATION

Prepare a new Charge Pad and peel off the protective film.

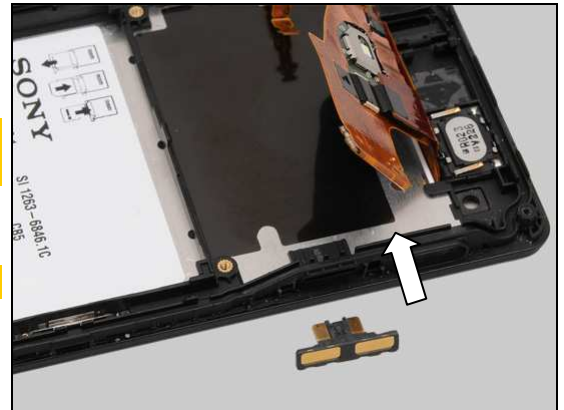


Replacement: Charge Pad

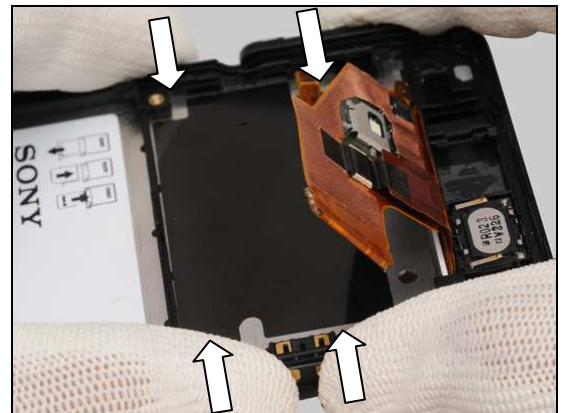
Clean the adhesive residues on the Touch/Display Front Cover Assy before assembly!

Place the Charge Pad into its slot as shown in the picture.

Make sure the correct direction of the Charge Pad!



Press the Charge Pad hard as shown in the picture for 10 seconds to secure its attachment.



Replacement

4.1.10 Core Unit Label

LT25i follow the 3.2.1 – 3.2.2 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.2 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Core Unit Label.

Carry out the Installation as described below.

LT25i follow the 5.3.3 – 5.3.4 Disassembly instructions!

LT25c follow the 5.4.4 – 5.4.5 Disassembly instructions!

REMOVAL

Read the old Core Unit Label and/or write the information into the 'LabelMake' program before removal.

Carefully remove the Core Unit Label by using the Flex Film Assembly Tool.

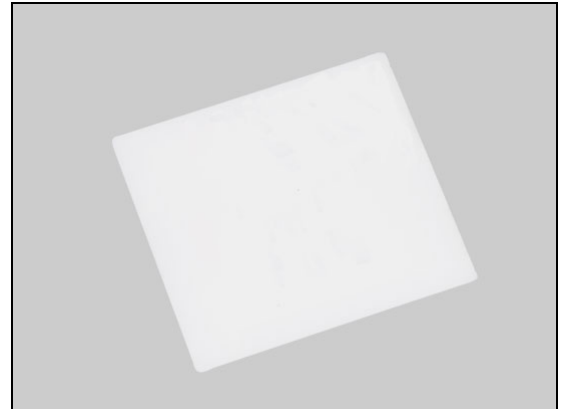
Scrap! Not to be reused!

INSTALLATION

Check that the label format is properly loaded in the Zebra printer and write a new Label using the 'Label Make' software.

Attach a new Core Unit Label on its proper position aligning by the guide line as shown in the picture.

Press to secure its attachment.



Replacement

4.1.11 Cushion 2nd Mic_WR

LT25i follow the 3.2.1 – 3.2.2 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.2 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Cushion 2nd Mic_WR.

Carry out the Installation as described below.

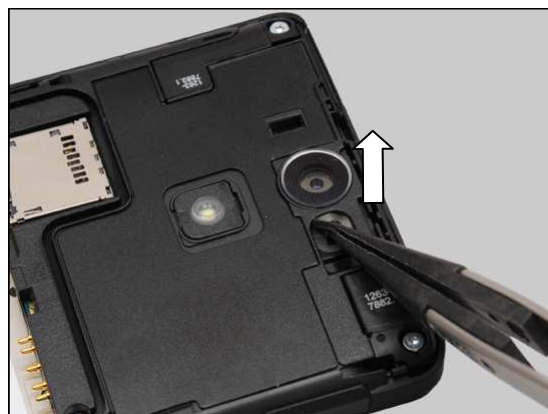
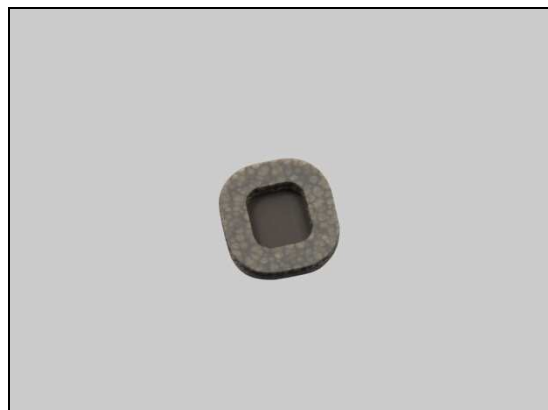
LT25i follow the 5.3.3 – 5.3.4 Disassembly instructions!

LT25c follow the 5.4.4 – 5.4.5 Disassembly instructions!

REMOVAL

Peel off the Cushion 2nd Mic_WR by using a pair of Plastic Tweezers.

Scrap! Not to be reused!



Detach to remove the remains by using the Front Opening Tool.

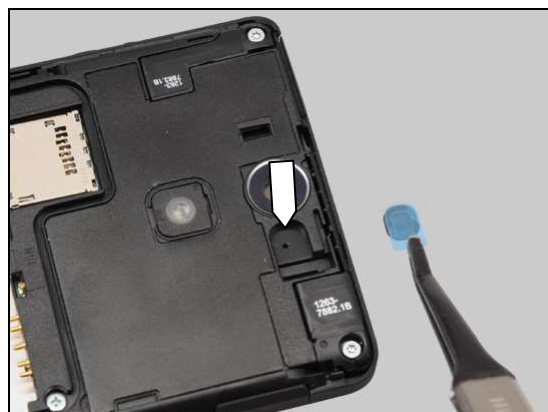
Make sure all remains have been removed!

Do not scratch the plastic surface!



INSTALLATION

Place a new Cushion 2nd Mic_WR on the correct position.

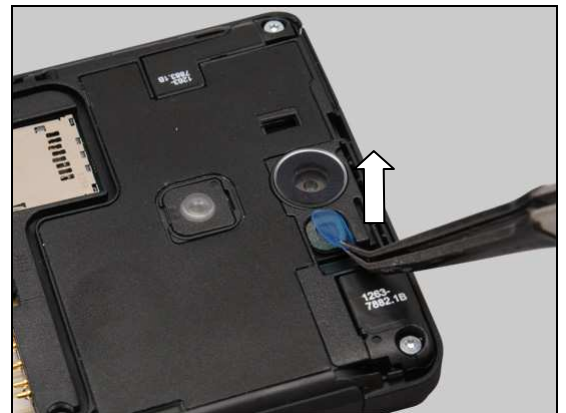


Replacement: Cushion 2nd Mic_WR

Press along to secure its attachment.



Peel off the protective film.



Replacement

4.1.12 Cushion MIC2 PCB

LT25i follow the 3.2.1 – 3.2.4, 3.4.1 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Cushion MIC2 PCB.

Carry out the Installation as described below.

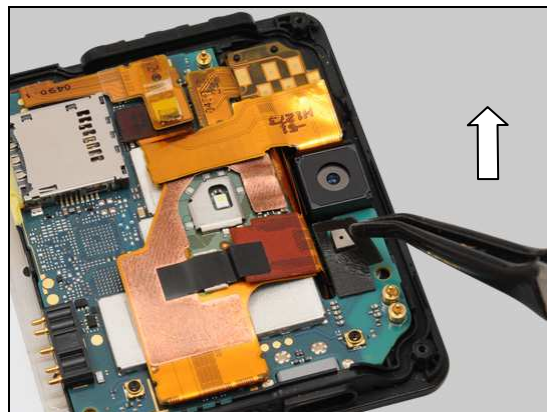
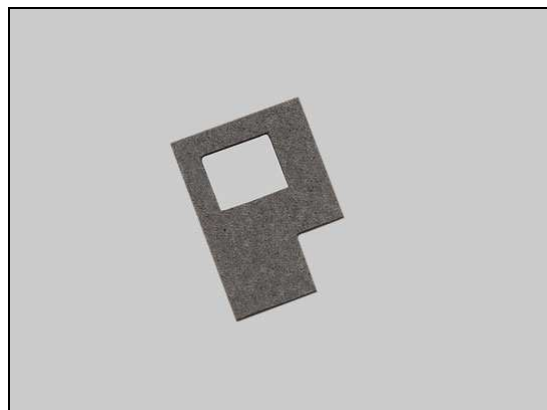
LT25i follow the 5.2.7, 5.3.1 – 5.3.4 Disassembly instructions!

LT25c follow the 5.2.7, 5.4.1 – 5.4.5 Disassembly instructions!

REMOVAL

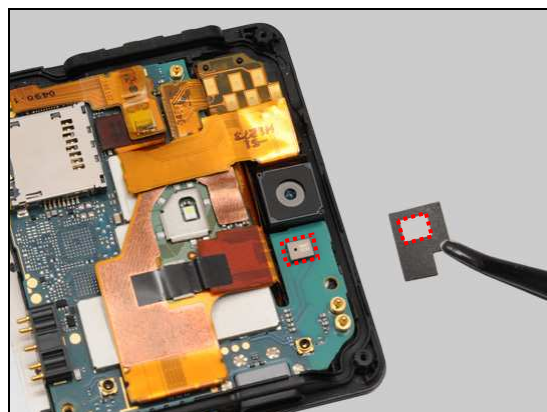
Peel off the Cushion MIC2 PCB by using the Flex Film Assembly Tool.

Scrap! Not to be reused!

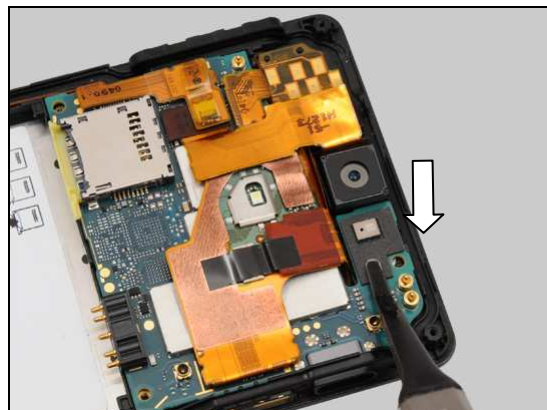


INSTALLATION

Place a new Cushion MIC2 PCB aligning by the Microphone on the Main PBA as shown in the picture.



Press along to secure its attachment.



Replacement

4.1.13 Ear Speaker & Adhesive Earspeaker_WR

LT25i follow the 3.2.1 – 3.2.4, 3.4.1 – 3.4.7 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 – 3.4.7 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Ear Speaker & Adhesive Earspeaker_WR.

Carry out the Installation as described below.

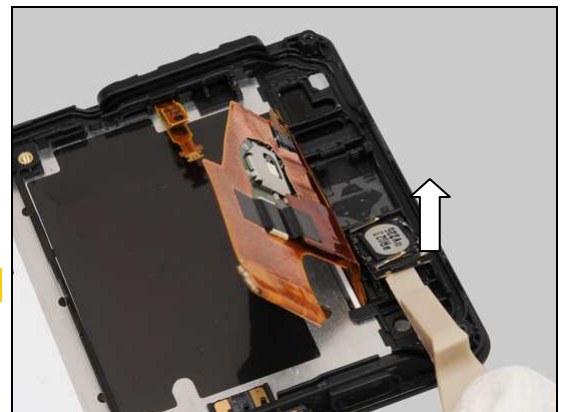
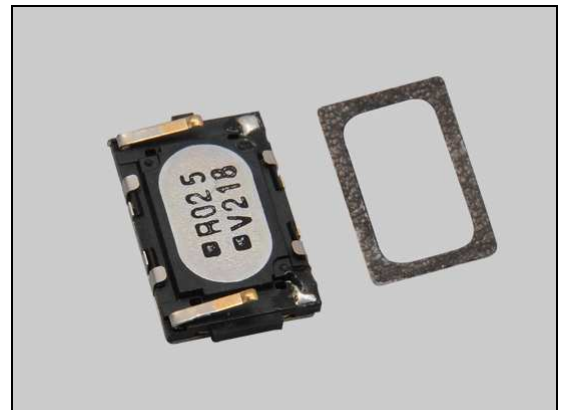
LT25i follow the 5.2.1 – 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!

LT25c follow the 5.2.1 – 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!

REMOVAL

Detach to remove the Ear Speaker by using the Front Opening Tool.

Scrap! Not to be reused!



Detach to remove the Adhesive Earspeaker_WR by using the Front Opening Tool.

Scrap! Not to be reused!

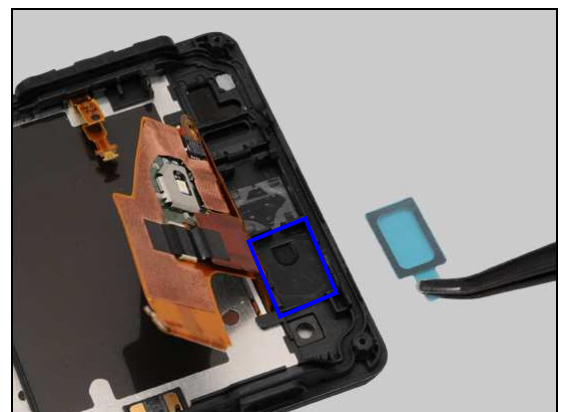
Make sure all remains have been removed!

Do not scratch the plastic surface!



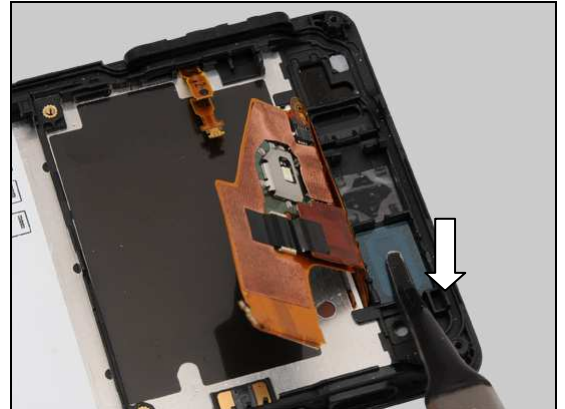
INSTALLATION

Place a new Adhesive Earspeaker_WR into its cavity.

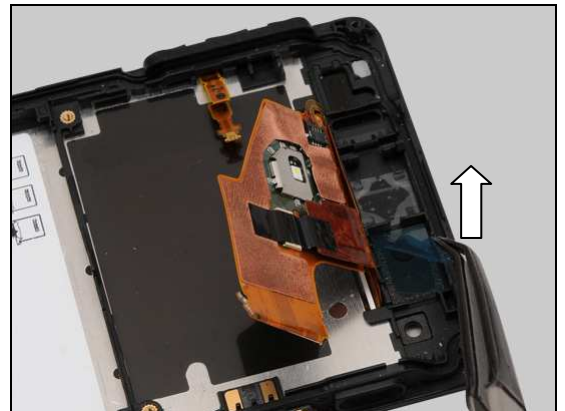


Replacement: Ear Speaker & Adhesive Earspeaker_WR

Press along to secure its attachment.

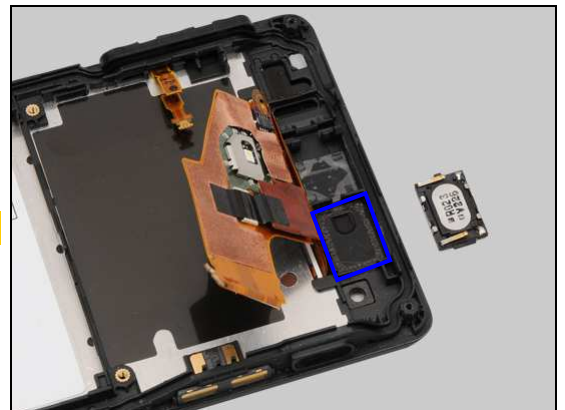


Gently peel off the protective film.



Place a new Ear Speaker into the cavity.

Note the orientation of the Ear Speaker to be installed!



Prepare the Press Tool Earspeaker.

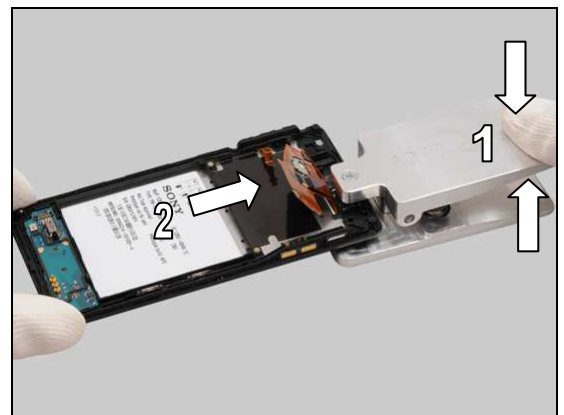


Replacement: Ear Speaker & Adhesive Earspeak_WR

Make sure the press rubber of the tool press the centre of the Ear Speaker.



Hold the clip and position the press rubber on the center area of the Ear Speaker.

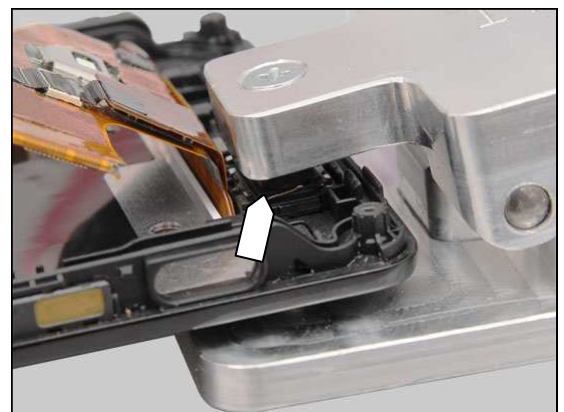


Loosen the clip to press the Ear Speaker for 10 seconds.

Do not press the clip!

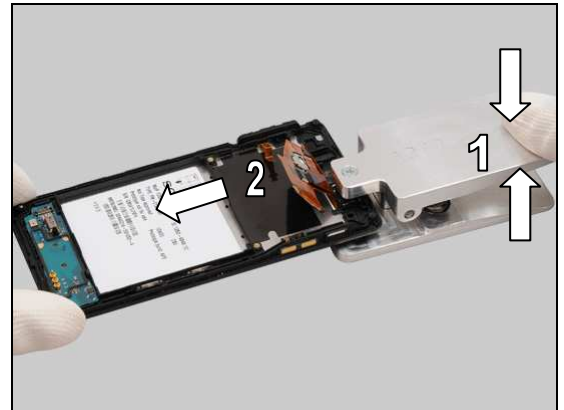


The rubber of the tool presses the Ear Speaker when pressing as shown.



Replacement: Ear Speaker & Adhesive Earspeak_WR

Press the clip and remove the Touch/Display Front Cover Assy.



Replacement

4.1.14 Foil Adhesive CAM

LT25i follow the 3.2.1 – 3.2.4, 3.4.1 – 3.4.4 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 – 3.4.4 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Foil Adhesive CAM.

Carry out the Installation as described below.

LT25i follow the 5.2.4 – 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!

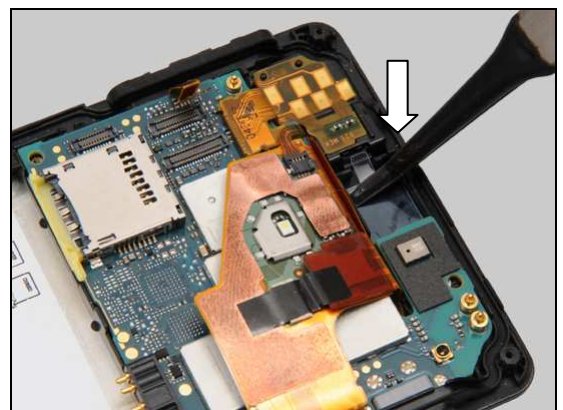
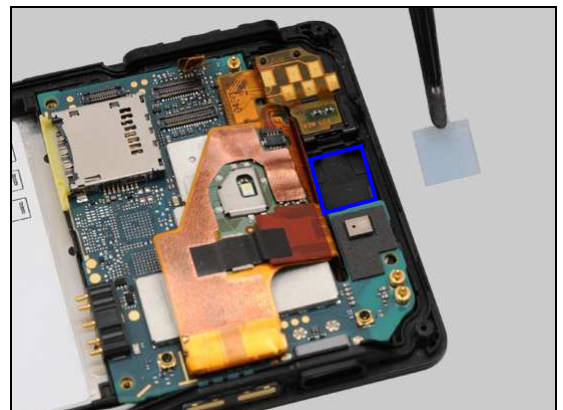
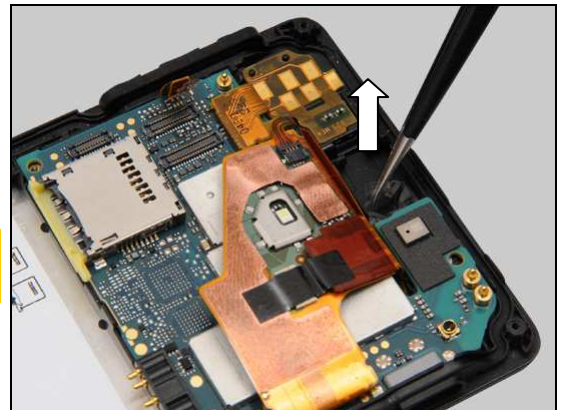
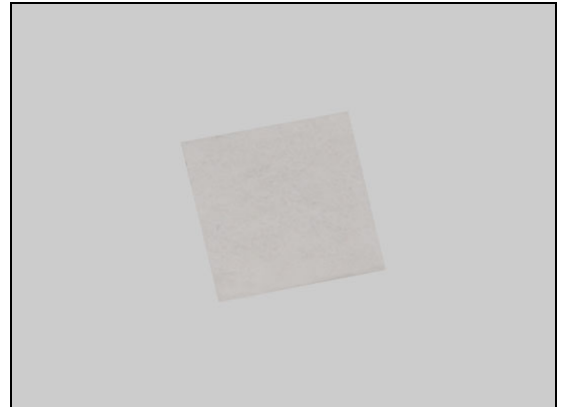
LT25c follow the 5.2.4 – 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!

REMOVAL

Peel off the Foil Adhesive CAM by using the Tweezers.

Scrap! Not to be reused!

Make sure all remains have been removed!



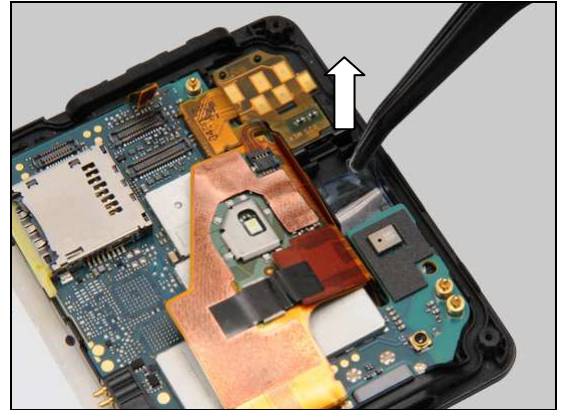
INSTALLATION

Place a new Foil Adhesive CAM into its cavity.

Press along to secure its attachment.

Replacement: Foil Adhesive CAM

Peel off the protective film.



Replacement

4.1.15 Jack Flex PBA Assy

LT25i follow the 3.2.1 – 3.2.4, 3.4.1 – 3.4.5 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 – 3.4.5 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Jack Flex PBA Assy.

Carry out the Installation as described below.

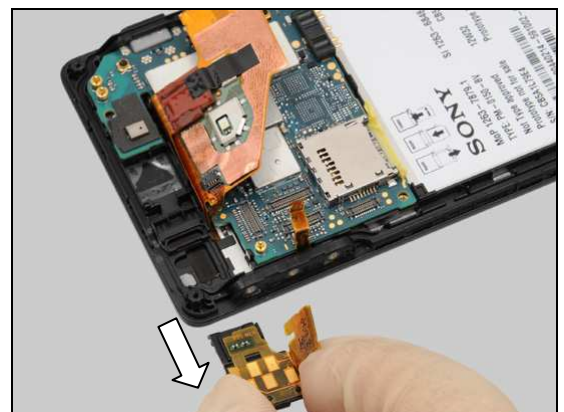
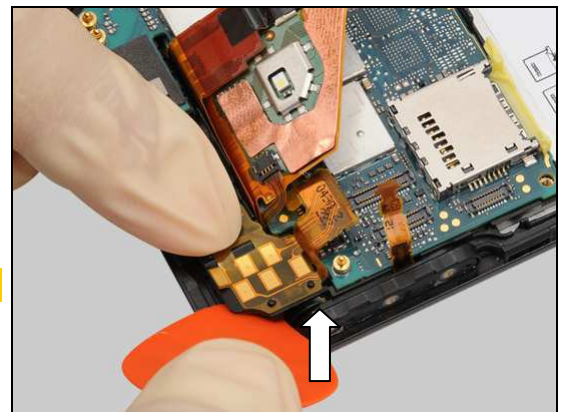
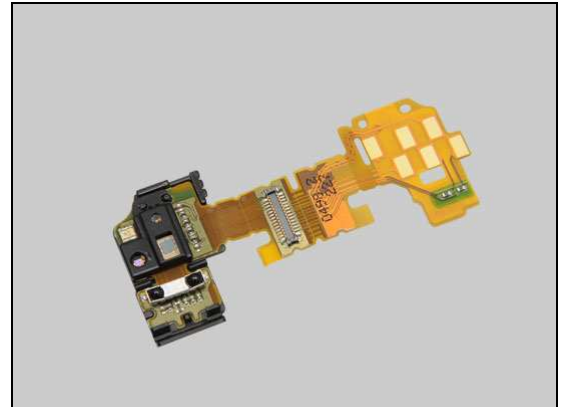
LT25i follow the 5.2.3 – 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!

LT25c follow the 5.2.3 – 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!

REMOVAL

Wear Finger Cots and gently insert the Guitar Pick as shown in the picture to release the hook.

Do not damage the components below the finger!

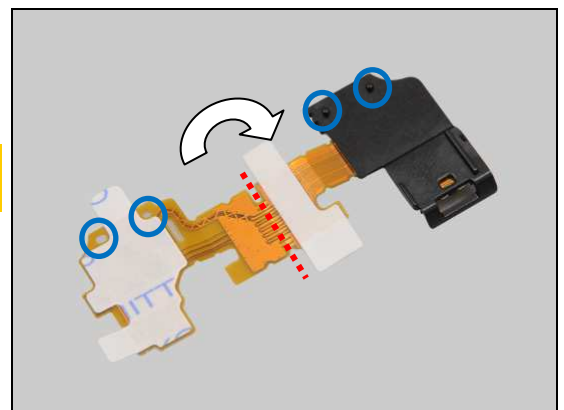


Remove the Jack Flex PBA Assy.

INSTALLATION

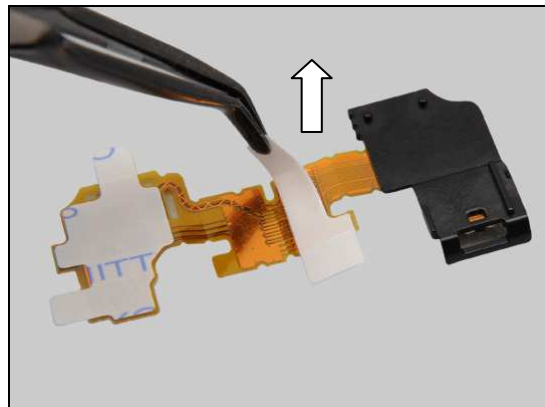
Do not damage the components on the Jack Flex PBA Assy when assembly!

Prepare a new Jack Flex PBA Assy and pre-bend the FPC by aligning the guiding holes and pegs as shown in the picture.

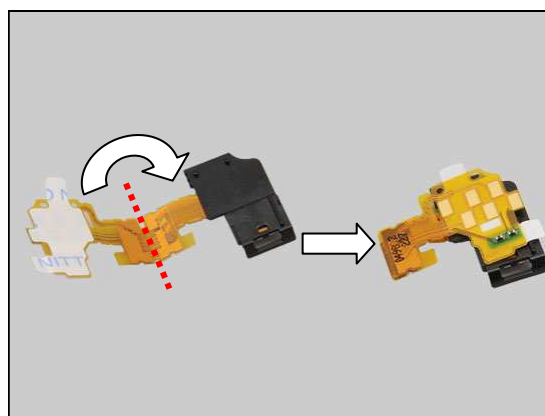


Replacement: Jack Flex PBA Assy

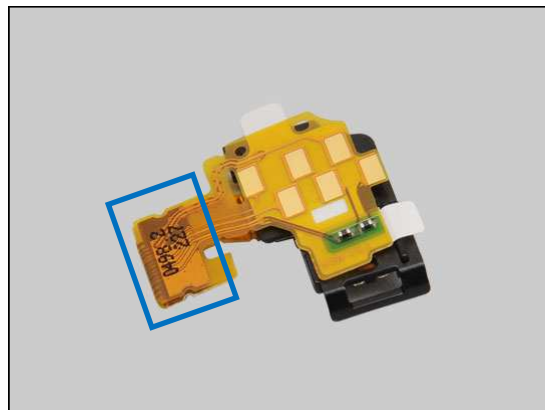
Peel off the protective film.



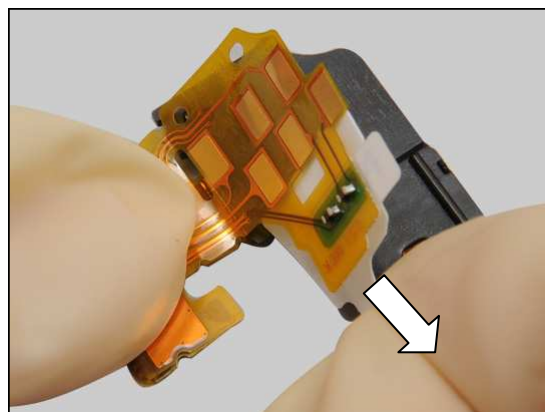
Bend the FPC of the Jack Flex PBA Assy by aligning the guiding holes and pegs as shown in the picture.



Press the FPC to secure its attachment as indicated by the blue rectangle.

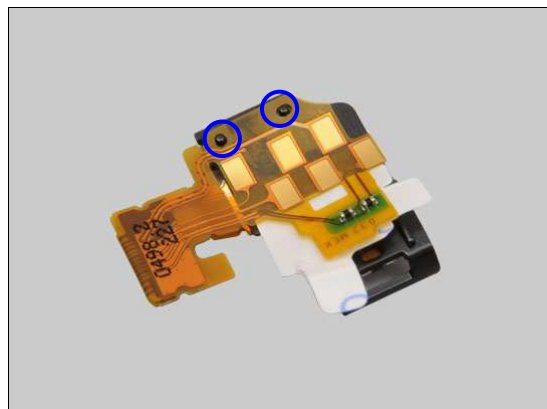


Wear Finger Cots and gently peel off half of this protective film as shown.

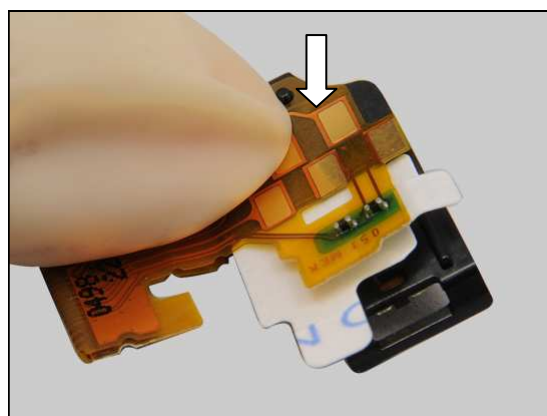


Replacement: Jack Flex PBA Assy

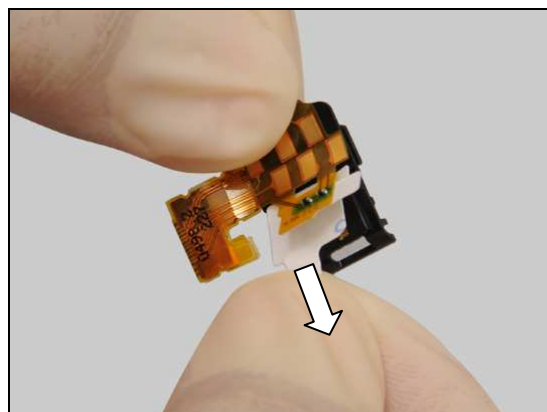
Make sure the position of the FPC as indicated by the guiding holes and pegs.



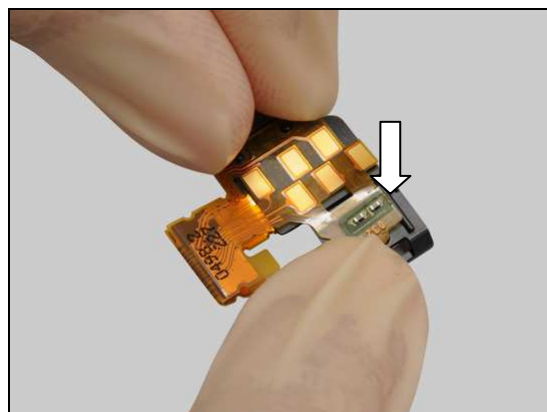
Wear Finger Cots and press to secure its attachment as shown in the picture.



Peel off the other half of this protective film.

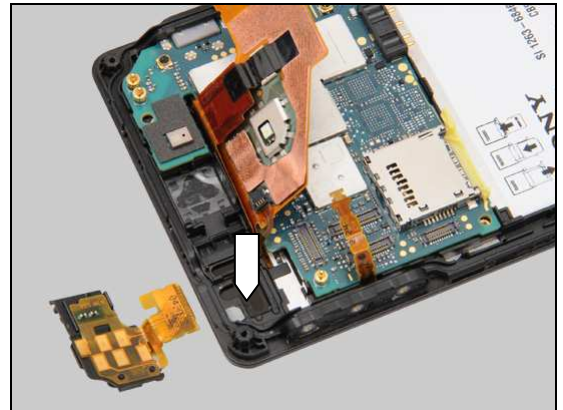


Press to secure its attachment.



Replacement: Jack Flex PBA Assy

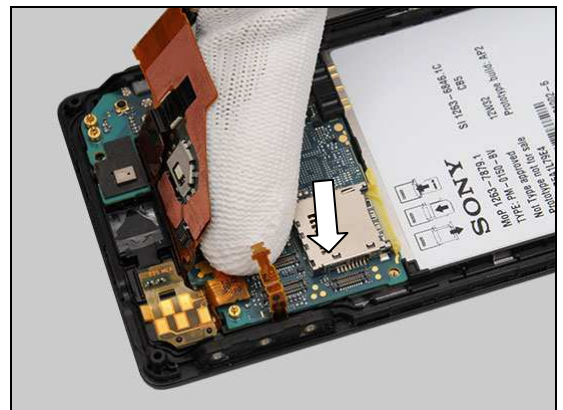
Place the new Jack Flex PBA Assy into its cavity.



Press to secure its position.



Press to snap the BtB connector.



Replacement

4.1.16 Loudspeaker & Adhesive Speaker_WR

LT25i follow the 3.2.1 – 3.2.4, 3.4.1 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Loudspeaker & Adhesive Speaker_WR.

Carry out the Installation as described below.

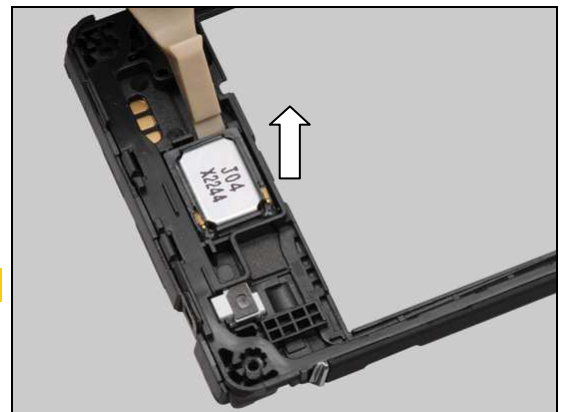
LT25i follow the 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!

LT25c follow the 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!

REMOVAL

Detach to remove the Loudspeaker by using the Front Opening Tool.

Scrap! Not to be reused!

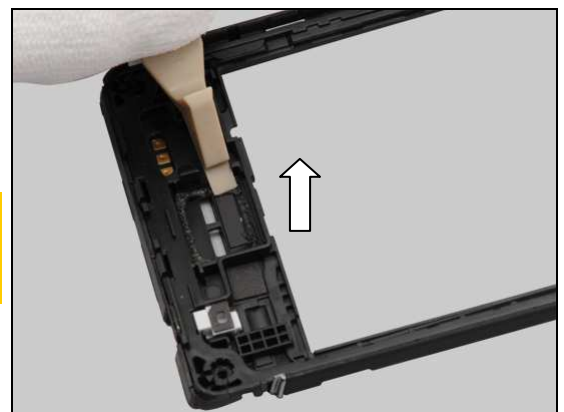


Detach to remove the Adhesive Speaker_WR by using the Front Opening Tool.

Scrap! Not to be reused!

Make sure all remains have been removed!

Do not scratch the plastic surface!



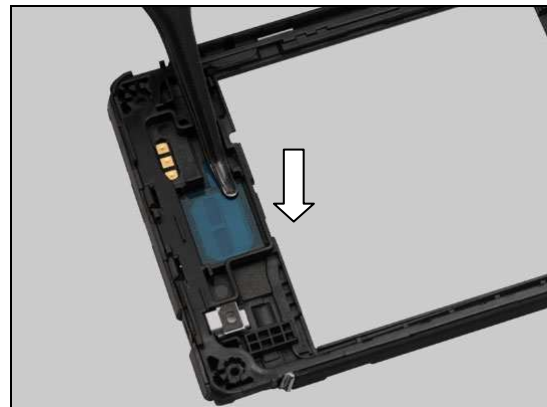
INSTALLATION

Place a new Adhesive Speaker_WR into its socket.

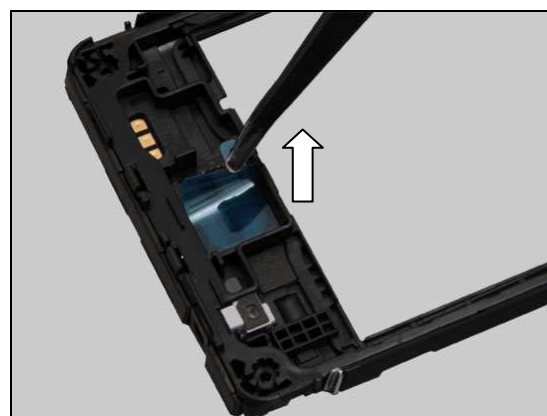


Replacement: Loudspeaker & Adhesive Speaker_WR

Press along to secure its attachment.



Gently peel off the protective film.



Place a new Loudspeaker into the cavity.

Note the orientation of the Loudspeaker to be installed!



Prepare the Press Tool Loudspeaker.

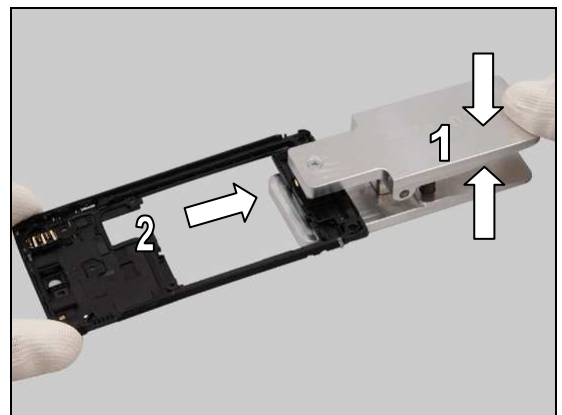


Replacement: Loudspeaker & Adhesive Speaker_WR

Make sure the press rubber of the tool press the centre of the Loudspeaker.

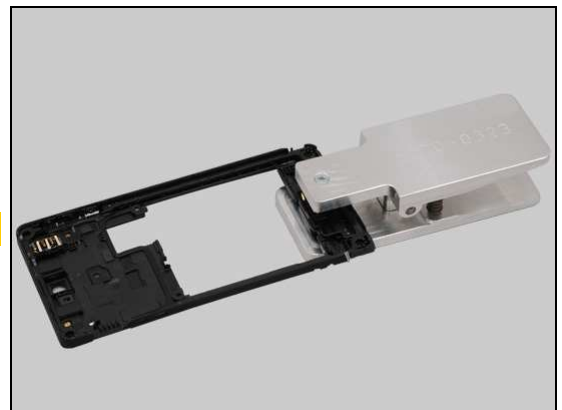


Hold the clip and position the press rubber on the center area of the Loudspeaker.

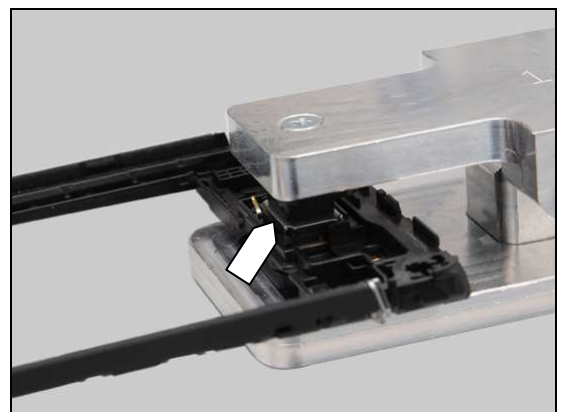


Loosen the clip to press the Loudspeaker for 10 seconds.

Do not press the clip!

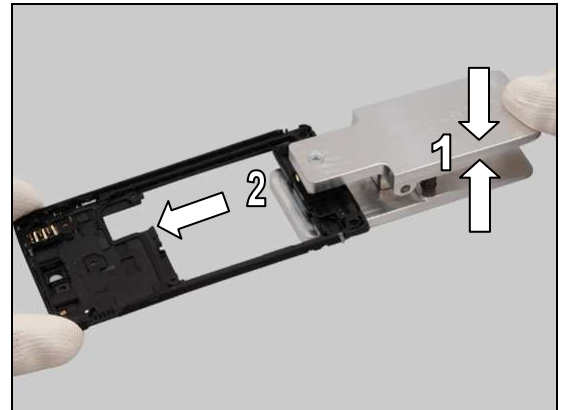


The press rubber of the tool presses the Loudspeaker when pressing as shown.



Replacement: Loudspeaker & Adhesive Speaker_WR

Press the clip and remove the Cover Rear Assy.



Replacement

4.1.17 Sheet Shield NonCell

LT25i follow the 3.2.1 – 3.2.4, 3.4.1 – 3.4.7 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 – 3.4.7 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Sheet Shield NonCell.

Carry out the Installation as described below.

LT25i follow the 5.2.1 – 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!

LT25c follow the 5.2.1 – 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!

REMOVAL

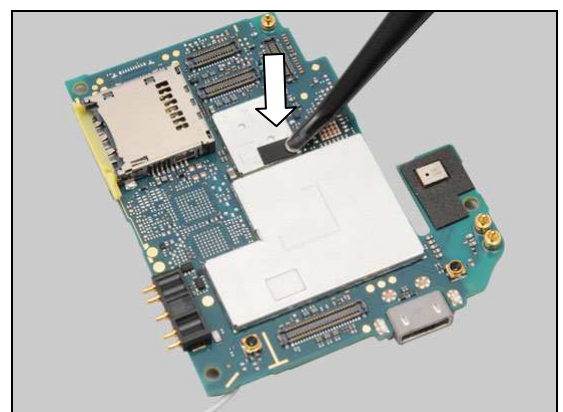
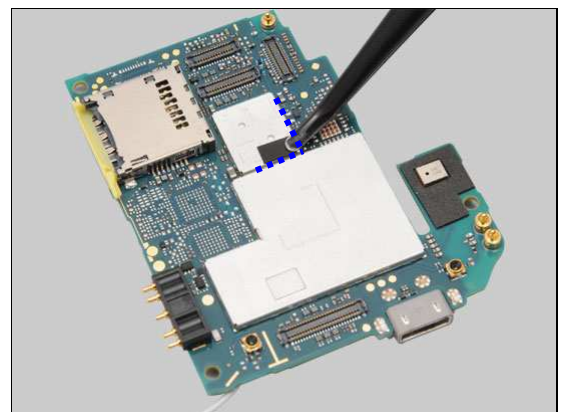
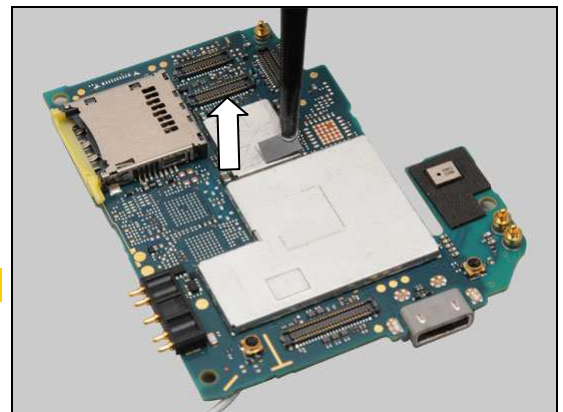
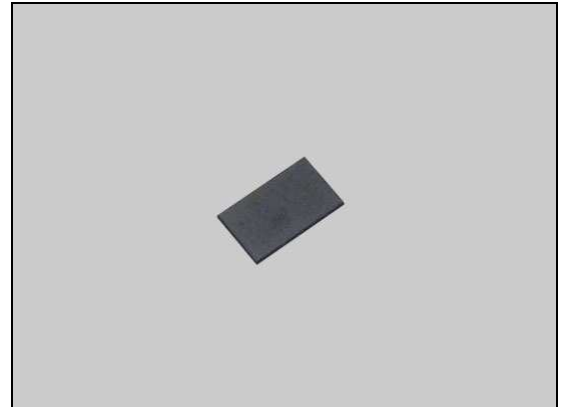
Peel off the Sheet Shield Noncell by using the Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Attach a new Sheet Shield NonCell aligning by the blue lines.

Press to secure its attachment.



Replacement

4.1.18 Side Key

LT25i follow the 3.2.1 – 3.2.4, 3.4.1 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Side Key.

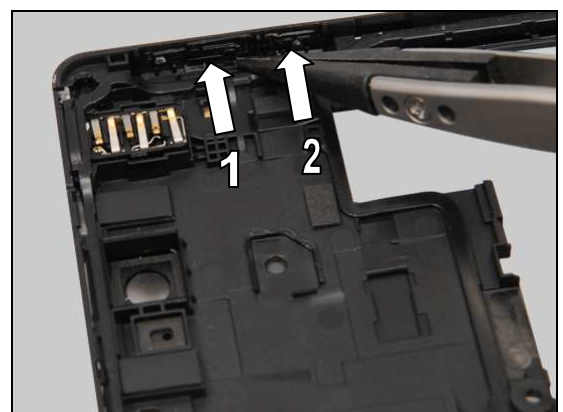
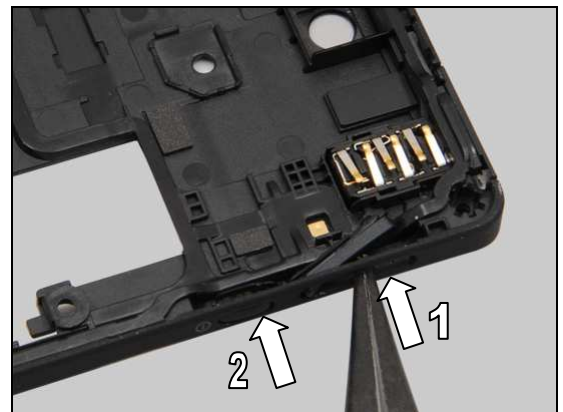
Carry out the Installation as described below.

LT25i follow the 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!

LT25c follow the 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!

REMOVAL

Gently push against the outside of the Side Key to remove it by using the Plastic Tweezers.



INSTALLATION

Place a new Side Key into its slot.

Press to secure its position.

Replacement

4.1.19 Side Key Flex PBA Frame Assy_WR

LT25i follow the 3.2.1 – 3.2.4, 3.4.1 – 3.4.7 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 – 3.4.7 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Side Key Flex PBA Frame Assy_WR.

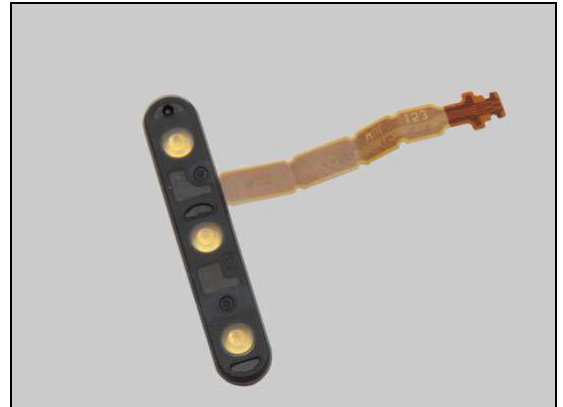
Carry out the Installation as described below.

LT25i follow the 5.2.1 – 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!

LT25c follow the 5.2.1 – 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!

REMOVAL

Gently push outwards the Side Key Flex PBA Frame Assy_WR through the hole as shown in the picture by using a pair of Tweezers and remove it.



INSTALLATION

Insert the FPC of the Side Key Flex PBA Frame Assy_WR into its slot as shown in the picture.

Note the orientation of the Side Key Flex PBA Frame Assy_WR to be installed!

Use an air gun to clean the Side Key Flex PBA Frame Assy_WR and its cavity on the Touch/Display Front Cover Assy!

Make sure the Side Key Flex PBA Frame Assy_WR is clean and no dirt, particles and fiber attached on it and is not damaged! Otherwise replace a new one.

Make sure its cavity is not damaged! Otherwise replace a new Touch/Display Front Cover Assy!



Place the Side Key Flex PBA Frame Assy_WR from the bottom side as shown in the picture.



Replacement: Side Key Flex PBA Frame Assy_WR

Press along to secure its position.



Check that if the Side Key Flex PBA Frame Assy_WR is properly installed as shown in the picture!



Replacement

4.1.20 Sub PBA Assy & Adhesive Sub PBA Assy

LT25i follow the 3.2.1 – 3.2.4, 3.4.1 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Sub PBA Assy and a new Adhesive Sub PBA Assy.

Carry out the Installation as described below.

LT25i follow the 5.2.7, 5.3.1 – 5.3.4 Disassembly instructions!

LT25c follow the 5.2.7, 5.4.1 – 5.4.5 Disassembly instructions!

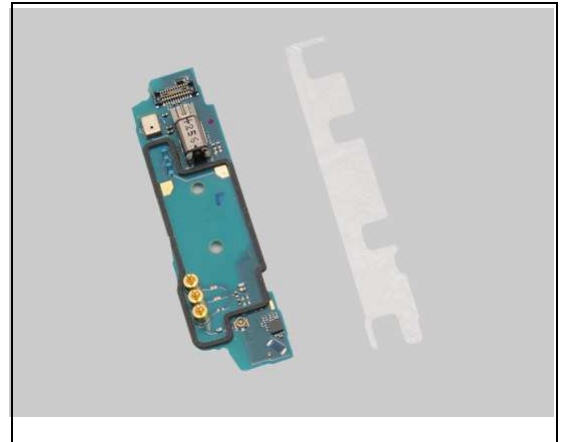
REMOVAL

Disconnect the BtB connector of the Relay Flex PBA Assy by using the Plastic Tweezers.

Disconnect the Cable RF connector by using the Flex Film Assembly Tool.

Gently insert the Guitar Pick and slide along to release the Sub PBA Assy and remove it.

Be careful! Do not deform the Sub PBA Assy!



Replacement: Sub PBA Assy & Adhesive Sub PBA Assy

Reuse the Adhesive Sub PBA Assy in case its stickiness is not lost. Otherwise scrap it!

Detach to remove the Adhesive Sub PBA Assy by using the Front Opening Tool.

Make sure all remains have been removed!

INSTALLATION

Place a new Adhesive Sub PBA Assy on the correct position as shown in the picture.

Press along to secure its attachment.

Peel off the protective film.



Replacement: Sub PBA Assy & Adhesive Sub PBA Assy

Place a new Sub PBA Assy aligning by the guide lines as shown in the picture.



Press to secure its attachment by using the Flex Film Assembly Tool.

Press on the Sub PBA Assy where there are no components and no contact pads to secure its attachment.

Do not damage the components on the Sub PBA Assy!

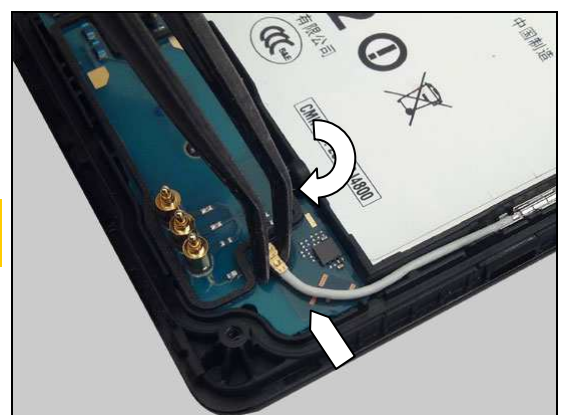


Press to connect this end of the Cable RF connector by using the Flex Film Assembly Tool.



Rotate the Cable RF as shown in the picture.

Make sure the Cable RF assembled in the range of this line!



Replacement: Sub PBA Assy & Adhesive Sub PBA Assy

Bend the FPC of the Relay Flex PBA Assy 90 degrees as shown in the picture.



Insert the FPC into its cavity as shown in the picture.



Gently press to secure its position of the FPC of the Relay Flex PBA Assy as shown in the picture.



Press to snap the BtB connector.



Replacement

4.1.21 Board Swap - Replacement

LT25i follow the 3.2.1 – 3.2.4, 3.4.1 – 3.4.7 Disassembly instructions!

LT25c follow the 3.3.1 – 3.3.5, 3.4.1 – 3.4.7 Disassembly instructions!

Follow the 4.1.8 Removal instructions!

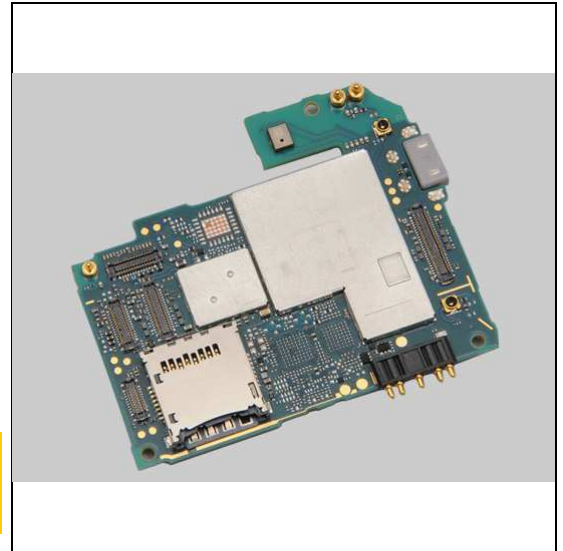
Replace the Swap Board.

Follow the 4.1.8, 4.1.12 4.1.17 Installation instructions!

LT25i follow the 5.2.1 – 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!

LT25c follow the 5.2.1 – 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!

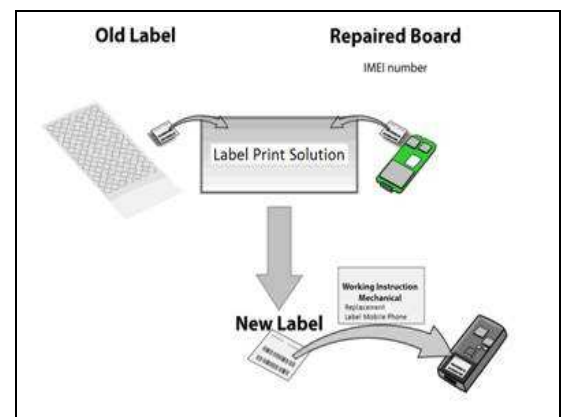
Touch Vendor ID Writing and LCD reset SW must be performed for all replaced units; 1257-2706 Trouble Shooting Application – mechanical.



4.1.22 Board Swap – Change Label

CHANGE LABEL

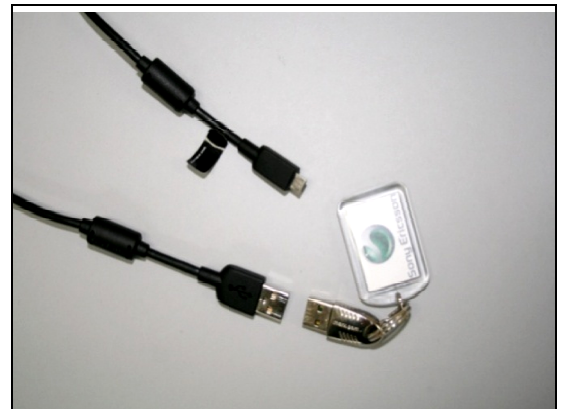
Follow the instructions in the Generic Repair Manual – Build swap for change of label.



4.1.23 Board Swap – Customize of Software

CUSTOMIZE OF SOFTWARE

Follow the instructions in the Generic Repair Manual – Build swap for customization of the software.



Replacement

4.2 Replacement-LT25i Specific

4.2.1 Cap Micro USB

Follow the 3.2.1 – 3.2.4, 3.4.1 Disassembly instructions!

Prepare a new Cap Micro USB.

Follow the 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!



4.2.2 Cover Battery Assy

Follow the 3.2.1 Disassembly instructions!

Prepare a Cover Battery Assy.

Follow the 5.3.4 Reassembly instructions!



4.2.3 Cover Rear Assy

Follow the 3.2.1 – 3.2.4, 3.4.1 Disassembly instructions!

Follow the 4.1.7, 4.1.18 Removal instructions!

Prepare a new Cover Rear Assy.

Follow the 4.1.7, 4.1.18 Installation instructions!

Follow the 5.2.7, 5.3.1 – 5.3.4 Reassembly instructions!



Replacement

4.2.4 Ant Diversity Flex & Adhesive ANT NonCell_WR

Follow the 3.2.1 – 3.2.2 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Ant Diversity Flex & Adhesive NonCell_WR.

Carry out the Installation as described below.

Follow the 5.3.3 – 5.3.4 Reassembly instructions!

REMOVAL

Remove this Screw Len:5.0 Diam:1.4 M by using a screwdriver with Bits (T5).

Scrap! Not to be reused!



Detach to remove the Ant Diversity Flex by using the Front Opening Tool.

Scrap! Not to be reused!



Detach to remove the Adhesive ANT NonCell_WR by using the Front Opening Tool.

Scrap! Not to be reused!

Make sure all remains have been removed!

Do not scratch the plastic surface!

Do not touch the pogo pins!



Replacement: Ant Diversity Flex & Adhesive ANT NonCell_WR

INSTALLATION

Place a new Adhesive ANT NonCell_WR on the correct position.



Press along to secure its attachment.



Peel off the protective film.

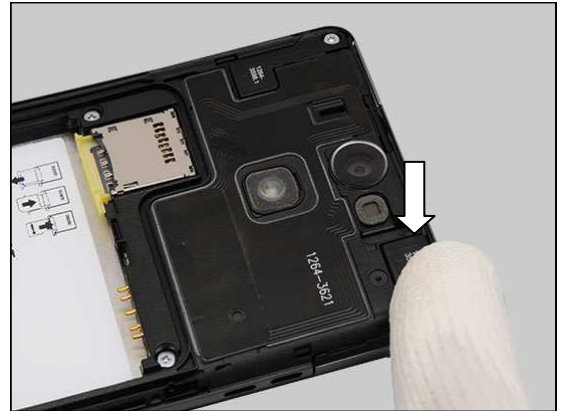


Insert a new Ant Diversity Flex into its socket as shown in the picture.



Replacement: Ant Diversity Flex & Adhesive ANT NonCell_WR

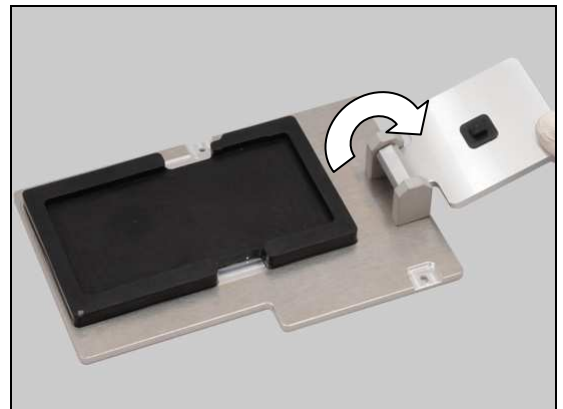
Press to secure its attachment as shown in the picture.



Prepare the Sub Antenna Press Insert.



Open the tool.

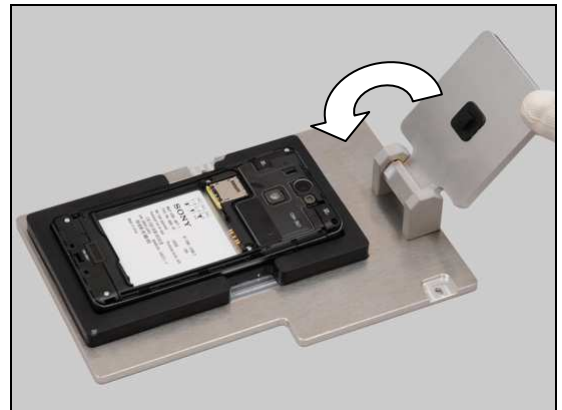


Place the unit into its cavity.



Replacement: Ant Diversity Flex & Adhesive ANT NonCell_WR

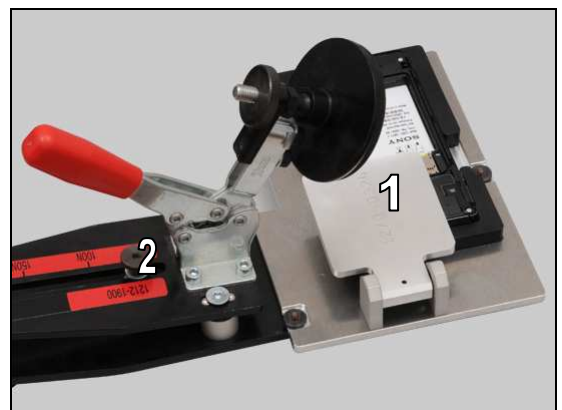
Close the Tool.



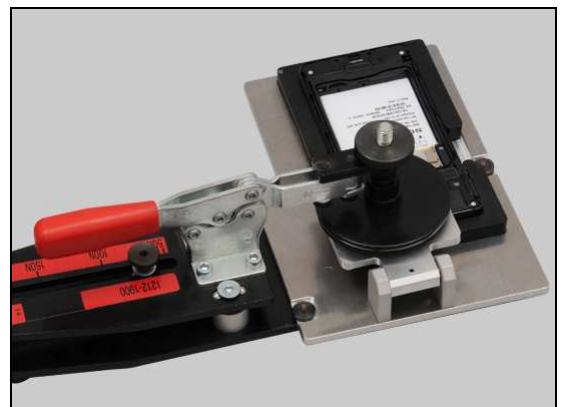
Prepare the Pressure Tool as shown.



Fasten the Sub Antenna Press Insert assembly (1) to the Pressure Tool (2).



Press it with a pressure value of 60N for 5 seconds.



Replacement: Ant Diversity Flex & Adhesive ANT NonCell_WR

Apply $12\text{Ncm} \pm 2\text{Ncm}$ torque when tightening this screw with Bits (T5).



Replacement

4.2.5 Cap Audio Jack

Follow the 3.2.1 – 3.2.2 Disassembly instructions!

Follow the 4.2.4 Removal instructions!

Carry out the Removal as described below.

Prepare a new Cap Audio Jack.

Carry out the Installation as described below.

Follow the 4.2.4 Installation instructions!

Follow the 5.3.3 – 5.3.4 Reassembly instructions!

REMOVAL

Gently remove the Cap Audio Jack by lifting straight up.



INSTALLATION

Gently insert the plug of the Cap Audio Jack into the socket completely as shown in the picture.

**Use an air gun to clean the Cap Audio Jack and its hole!
Do not touch the sealing rubber of the Cap Audio Jack!
Make sure that the Cap Audio Jack is clean and no dirt,
particles and fiber attached on it and is not damaged!
Otherwise replace a new one.**



Press along to secure its position.



Replacement: Cap Audio Jack

Check that if the Cap Audio Jack is properly installed as shown in the picture!



Replacement

4.2.6 Net Speaker

Follow the 3.2.1 – 3.2.2 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Net Speaker.

Carry out the Installation as described below.

Follow the 5.3.3 – 5.3.4 Reassembly instructions!

REMOVAL

Detach to remove the Net Speaker by using the Flex Film Assembly Tool.

Scrap! Not to be reused!

Make sure that all remains have been removed!

INSTALLATION

Place a new Net Speaker on the correct position.

Press along to secure its position.



Replacement

4.2.7 Water Indicator

Follow the 3.2.1 – 3.2.4, 3.4.1 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Water Indicator.

Carry out the Installation as described below.

Follow the 5.2.7, 5.3.1 – 5.3.4 Disassembly instructions!

REMOVAL

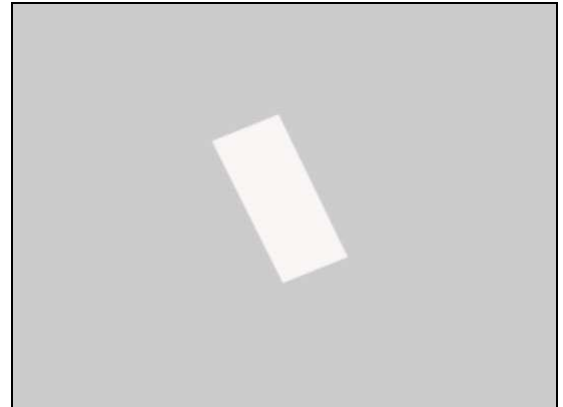
Detach to remove the Water Indicator by using the Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

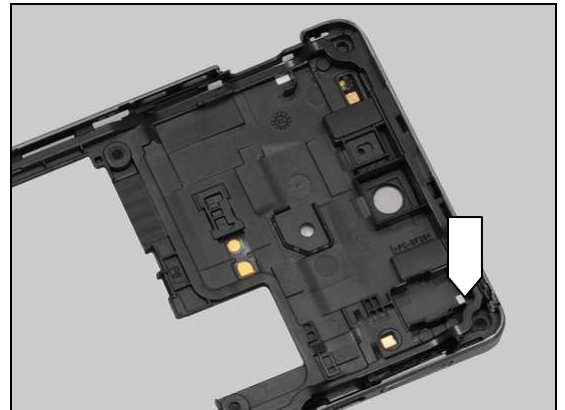
Attach a new Water Indicator on the correct position.

Press to secure its attachment.



Replacement: Water Indicator

Follow the 4.1.7 Removal instructions!
Do the same to this Water Indicator.
Follow the 4.1.7 Installation instructions!



Do the same to this Water Indicator on the Cover Rear Assy.



Replacement

4.3 Replacement-LT25c Specific

4.3.1 Cap Micro USB

Follow the 3.3.1 – 3.3.5, 3.4.1 Disassembly instructions!

Prepare a new Cap Micro USB.

Follow the 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!



4.3.2 Cover Battery Assy

Follow the 3.3.1 Disassembly instructions!

Prepare a new Cover Battery Assy.

Follow the 5.4.5 Reassembly instructions!



4.3.3 Cover Bottom

Follow the 3.3.1 – 3.3.3 Disassembly instructions!

Prepare a new Cover Bottom.

Follow the 5.4.3 – 5.4.5 Reassembly instructions!

Scrap! Not to be reused!



4.3.4 Cover Rear Assy

Follow the 3.3.1 – 3.3.5, 3.4.1 Disassembly instructions!

Follow the 4.1.7, 4.1.18 Removal instructions!

Prepare a new Cover Rear Assy.

Follow the 4.1.7, 4.1.18 Installation instructions!

Follow the 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!



Replacement

4.3.5 Cap Audio Jack

Follow the 3.3.1 – 3.3.5, 3.4.1 Disassembly instructions!

Carry out the Removal as described below.

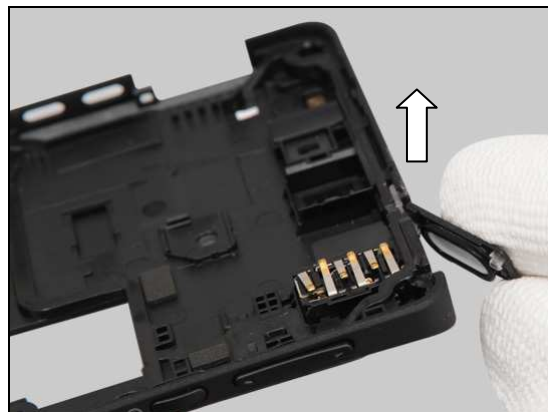
Prepare a new Cap Audio Jack.

Carry out the Installation as described below.

Follow the 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!

REMOVAL

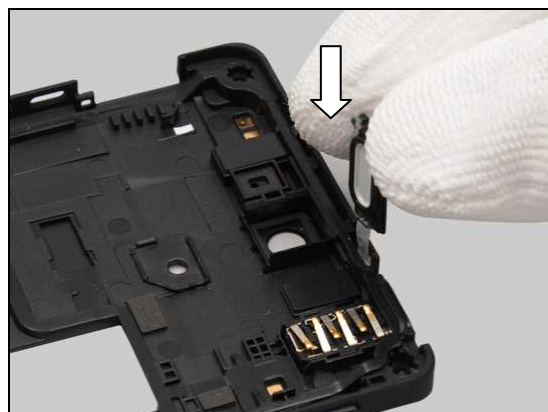
Gently remove the Cap Audio Jack by lifting straight up.



INSTALLATION

Gently insert the plug of the Cap Audio Jack into the socket as shown in the picture.

**Use an air gun to clean the Cap Audio Jack and its hole!
Do not touch the sealing rubber of the Cap Audio Jack!
Make sure that the Cap Audio Jack is clean and no dirt,
particles and fiber attached on it and is not damaged!
Otherwise replace a new one.**



Turn it over.



Replacement: Cap Audio Jack

Press along to secure its position.



Replacement

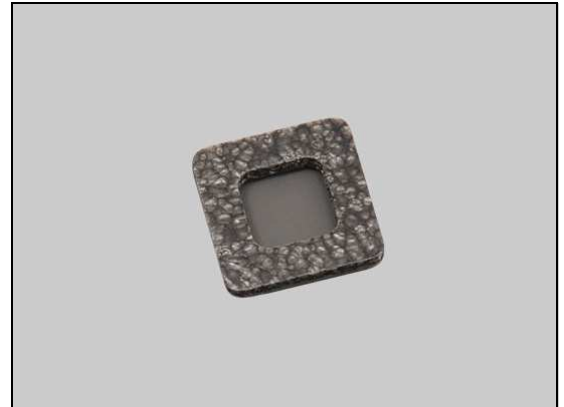
4.3.6 Cushion Sheet 1st Mic_WR

Follow the 3.3.1 – 3.3.3 Disassembly instructions!
 Carry out the Removal as described below.
 Prepare a new Cushion Sheet 1st Mic_WR.
 Carry out the Installation as described below.
Follow the 5.4.3 – 5.4.5 Reassembly instructions!

REMOVAL

Gently peel off the Cushion Sheet 1st Mic_WR to remove it by using a pair of Plastic Tweezers.

Scrap! Not to be reused!
Make sure all remains have been removed!
Do not scratch the plastic surface!



INSTALLATION

Place a new Cushion Sheet 1st Mic_WR on the correct position.

Press along to secure its attachment.



Replacement: Cushion Sheet 1st Mic_WR

Peel off the protective film.



Replacement

4.3.7 Cover Bottom Deco Silver

Follow the 3.3.1 – 3.3.3 Disassembly instructions!
 Carry out the Removal as described below.
 Prepare a new Cover Bottom Deco Silver.
 Carry out the Installation as described below.
Follow the 5.4.3 – 5.4.5 Reassembly instructions!

REMOVAL

Detach to remove the Cover Bottom Deco Silver with fingers.

Scrap! Not to be reused!

INSTALLATION

Place a new Cover Bottom Deco Silver on the correct position.

Press to secure its attachment.



Replacement

4.3.8 Net Speaker

Follow the 3.3.1 – 3.3.3 Disassembly instructions!

Follow the 4.3.7 Removal instructions!

Carry out the Removal as described below.

Prepare a new Net Speaker.

Carry out the Installation as described below.

Follow the 4.3.7 Installation instructions!

Follow the 5.4.3 – 5.4.5 Reassembly instructions!

REMOVAL

Detach to remove the Net Speaker by using a Flex Film Assembly Tool.

Scrap! Not to be reused!

Make sure that all remains have been removed!

INSTALLATION

Place a new Net Speaker on its proper position.

Press along to secure its position.



Replacement

4.3.9 Water Indicator

Follow the 3.3.1 – 3.3.5, 3.4.1 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Water Indicator.

Carry out the Installation as described below.

Follow the 5.2.7, 5.4.1 – 5.4.5 Reassembly instructions!

REMOVAL

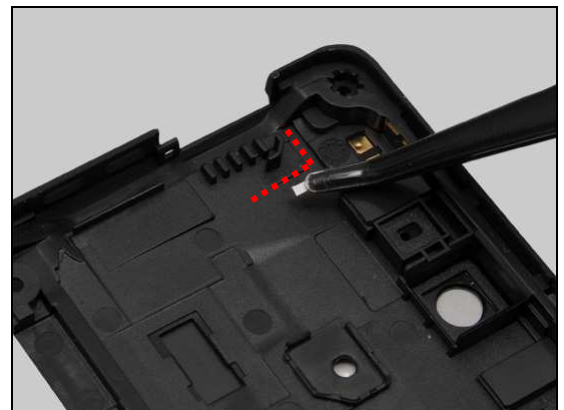
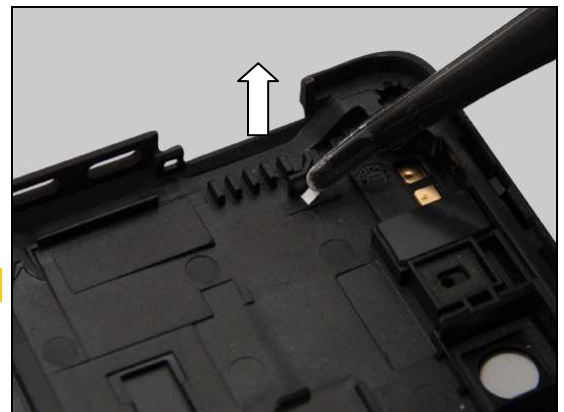
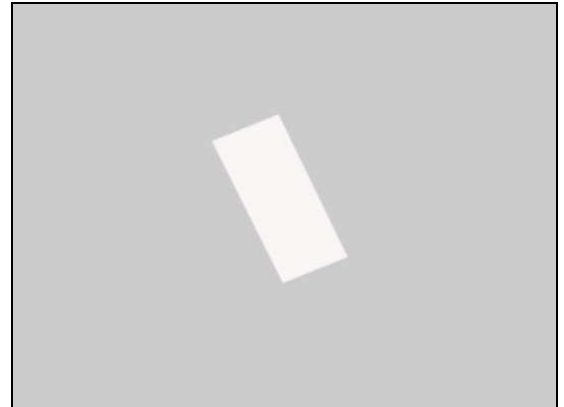
Detach to remove the Water Indicator by using the Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

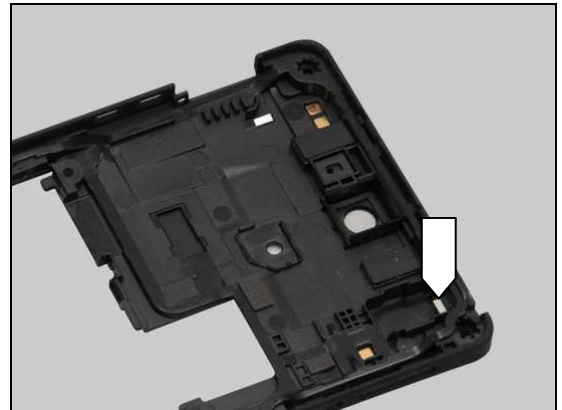
Attach a new Water Indicator on the correct position.

Press to secure its attachment.



Replacement: Water Indicator

Follow the 4.1.7 Removal instructions!
Do the same to this Water Indicator.
Follow the 4.1.7 Installation instructions!



Follow the 3.3.1 – 3.3.2 Disassembly instructions!
Do the same to this water indicator on the Touch/Display
Front Cover Assy.
Follow the 5.4.4 – 5.4.5 Reassembly instructions!

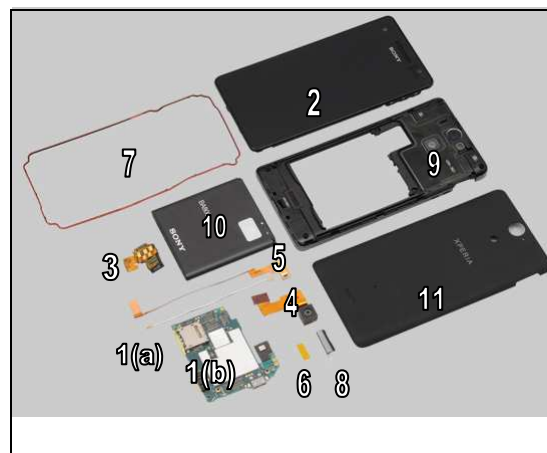


5 Reassembly

5.1 Overview

The LT25i reassembly is done in the following order:

1. Cable RF (a) & Main PBA (b)
2. Touch/Display Front Cover Assy
3. Jack Flex PBA Assy
4. Main Camera
5. Relay Flex PBA Assy
6. Sheet Side Key FPC
7. Main Gasket
8. Cap Micro USB
9. Cover Rear Assy
10. Battery
11. Cover Battery Assy

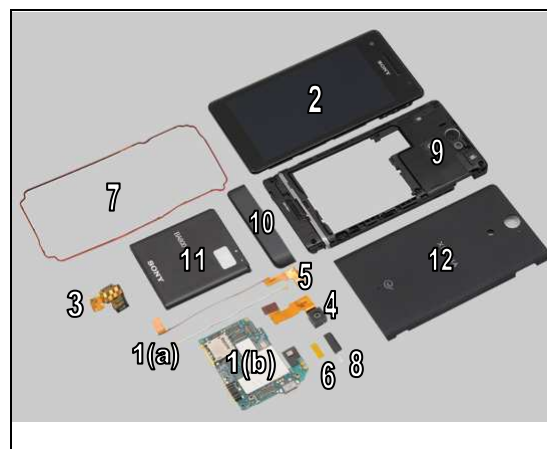


The order 1 – 7 refers to 5.2.1 – 5.2.7.

The order 8 – 11 refers to 5.3.1 – 5.3.4.

The LT25c reassembly is done in the following order:

1. Cable RF (a) & Main PBA (b)
2. Touch/Display Front Cover Assy
3. Jack Flex PBA Assy
4. Main Camera
5. Relay Flex PBA Assy
6. Sheet Side Key FPC
7. Main Gasket
8. Cap Micro USB
9. Cover Rear Assy
10. Cover Bottom
11. Battery
12. Cover Battery Assy



The order 1 – 7 refers to 5.2.1 – 5.2.7.

The order 8 – 12 refers to 5.4.1 – 5.4.5.

Reassembly

5.2 Reassembly-LT25i/LT25c Common

5.2.1 Cable RF & Main PBA

Prepare the Cable RF and the Main PBA.

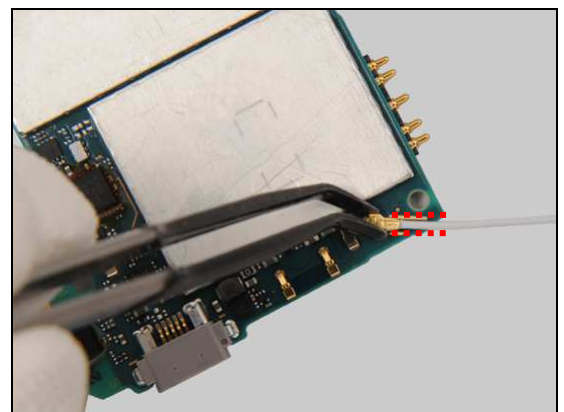
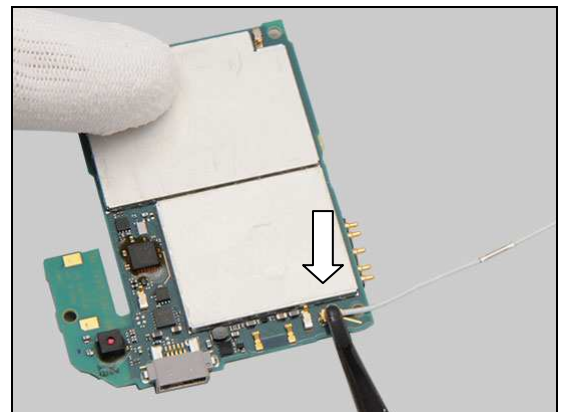
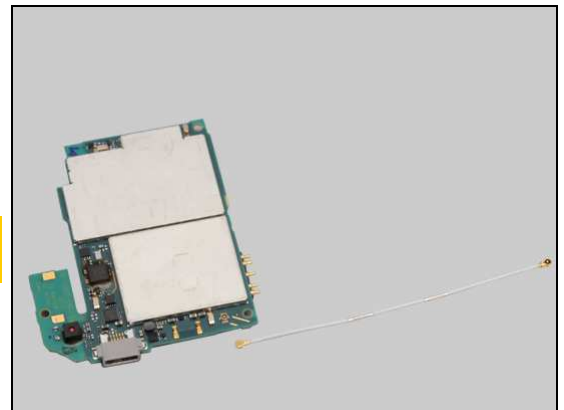
Check if the Sheet Shield NonCell (1272-1888) is attached or not, add this sheet if not.

Press to connect this end of the Cable RF connector by using the Flex Film Assembly Tool.

Rotate the Cable RF to the right direction aligning the guide line as shown in the picture.

5.2.2 Touch/Display Front Cover Assy

Prepare the Touch/Display Front Cover Assy.



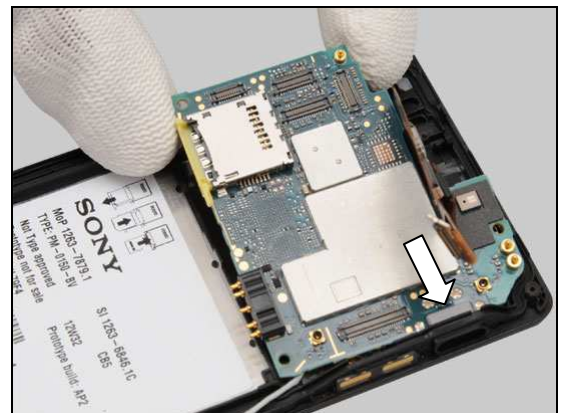
Reassembly

Gently insert the FPC into the slot of the Main PBA as shown in the picture.

Do not stretch the display FPC!

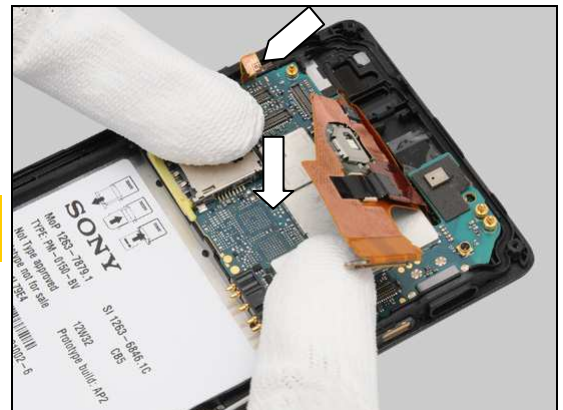


Gently insert the USB connector of the Main PBA into its hole.



Press to snap the hook of the Main PBA.

Make sure the FPC of the Side Key Flex PBA Frame Assy_ WR not under the Main PBA!

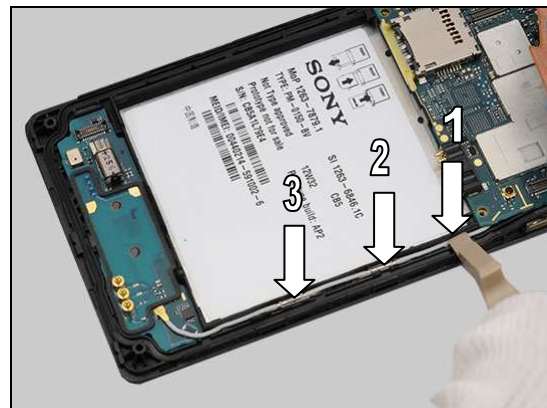


Press to connect this end of the Cable RF connector by using the Flex Film Assembly Tool.



Reassembly

Press to secure the position of the Cable RF by using the Front Opening Tool.



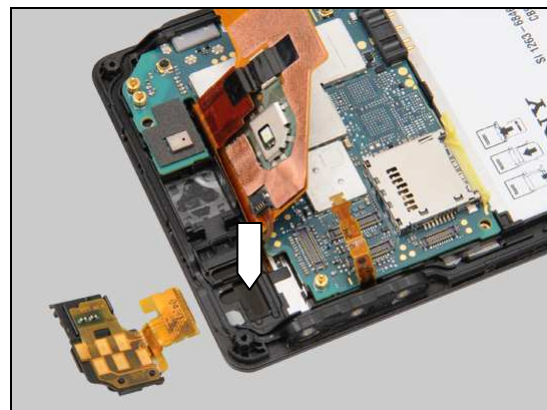
Rotate the Cable RF as shown in the picture.

Make sure the Cable RF assembled in the range of this line!



5.2.3 Jack Flex PBA Assy

Place the Jack Flex PBA Assy into its cavity.

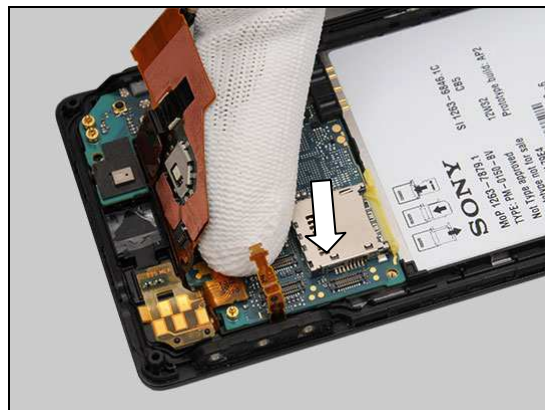


Press to secure its position.

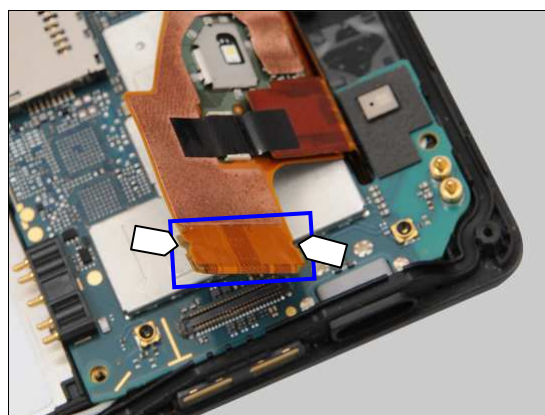


Reassembly

Press to snap the BtB connector.



Make sure the display BtB connector FPC is attached as shown in the picture. If not, press to secure its attachment by alignment with the guiding feature as the pointers indicated!



Press to snap the BtB connector of the display FPC.



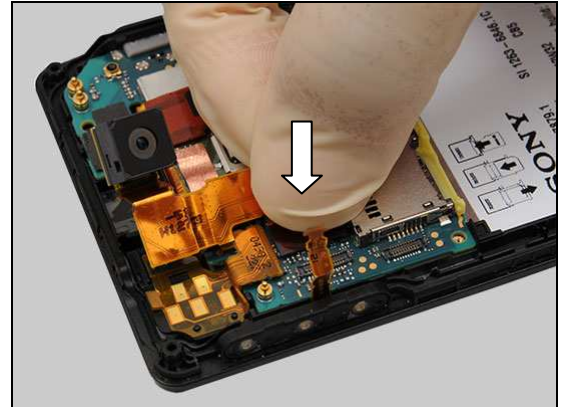
5.2.4 Main Camera

Make sure the stickiness of the Foil Adhesive CAM is not lost! Otherwise follow 4.1.14 Removal and Installation instructions to replace a new one.



Reassembly

Wear Finger Cots and press to snap the BtB connector of the Main Camera as shown in the picture.



Securely place the head of the Main Camera into its cavity.

Do not touch the camera lens!



Press to secure its position.

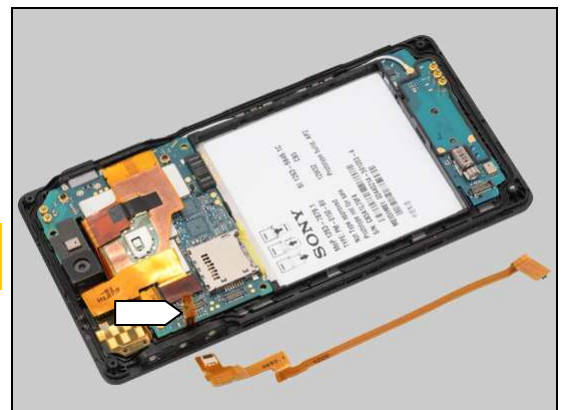
Do not touch the camera lens!



5.2.5 Relay Flex PBA Assy

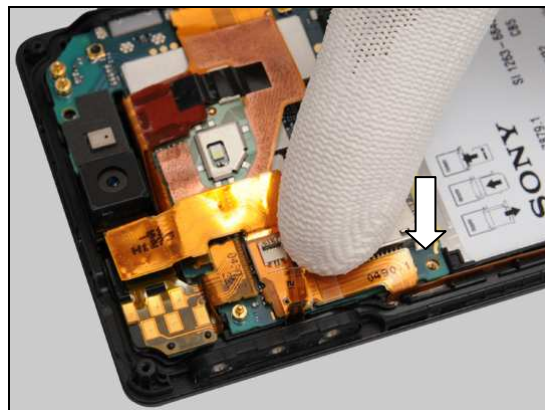
Prepare the Relay Flex PBA Assy.

Make sure the FPC of the Side Key Flex PBA Frame Assy_WR is vertical as shown in the picture!



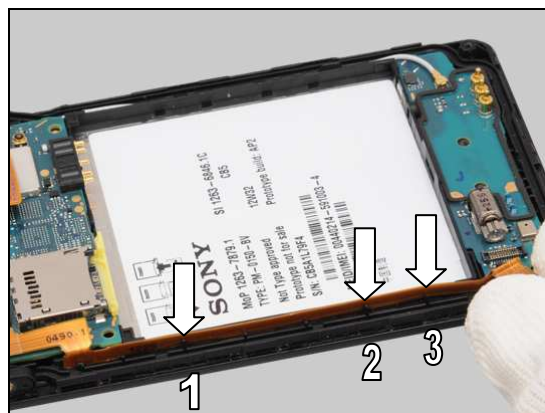
Reassembly

Press to snap the BtB connector.

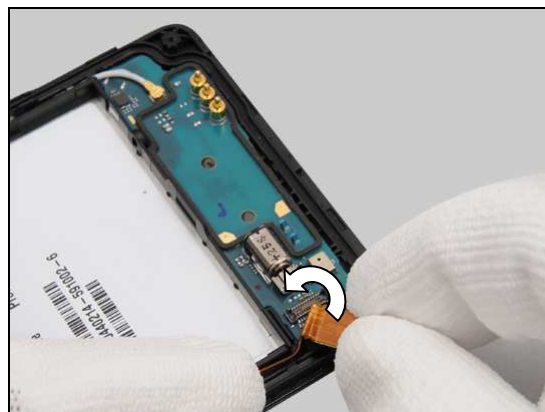


Securely place the Relay Flex PBA Assy into its cavity as shown in the picture.

Make sure the FPC of the Relay Flex PBA Assy installed in its cavity as shown in the picture!



Bend the FPC of the Relay Flex PBA Assy 90 degrees as shown in the picture.



Insert the FPC into its cavity as shown in the picture.



Reassembly

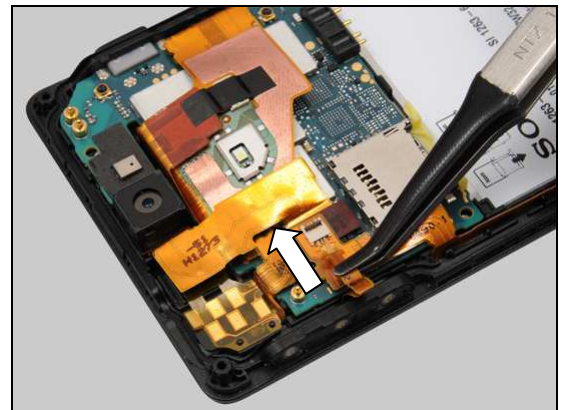
Gently press to secure its position of the FPC as shown in the picture.



Press to snap the BtB connector.



Gently insert the flex part of the Side Key Flex PBA Frame Assy_WR into the ZIF connector by using the Flex Film Assembly Tool.



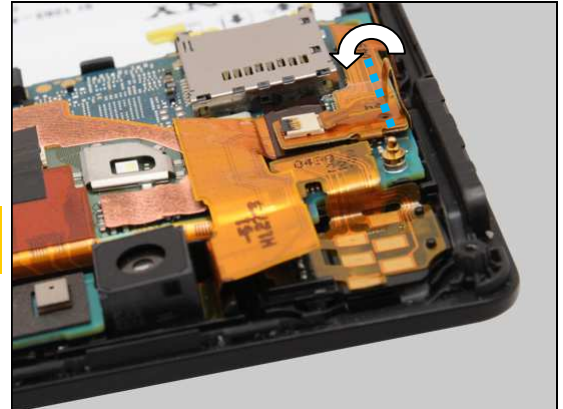
Lock the ZIF connector by using the Front Opening Tool.



Reassembly

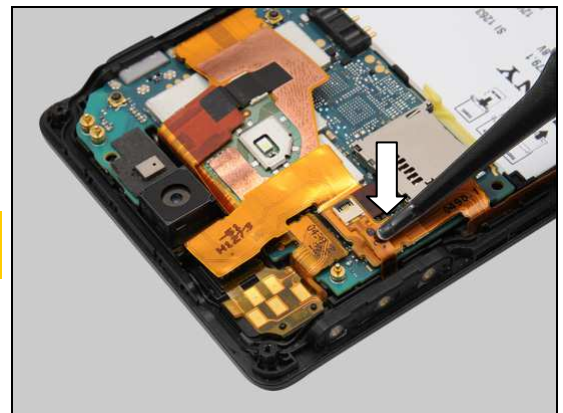
Bend the FPC of the Side Key Flex PBA Frame Assy_WR as shown in the picture.

Do not stretch the FPC of the Side Key Flex PBA Frame Assy_WR!



Fold the Side Key Flex PBA Frame Assy_WR FPC as shown in the picture.

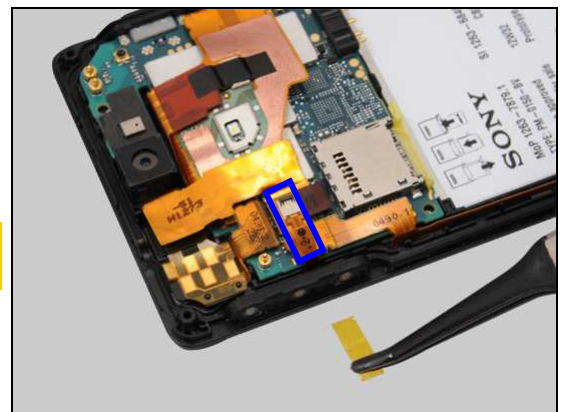
Do not damage the Side Key Flex PBA Frame Assy_WR FPC!



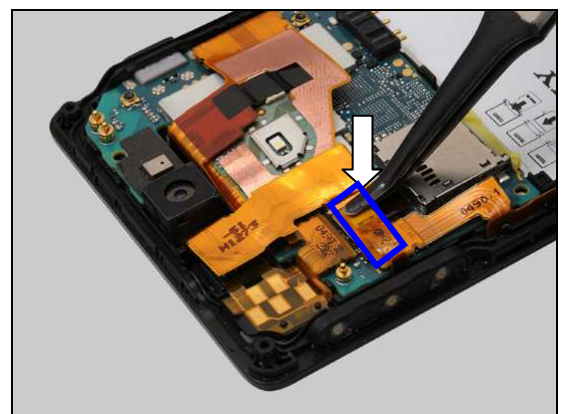
5.2.6 Sheet Side Key FPC

Attach a new Sheet Side Key FPC on the correct position.

Make sure the Sheet Side Key FPC covers the blue rectangle!



Gently press along to secure its attachment by using the Flex Film Assembly Tool.



Reassembly

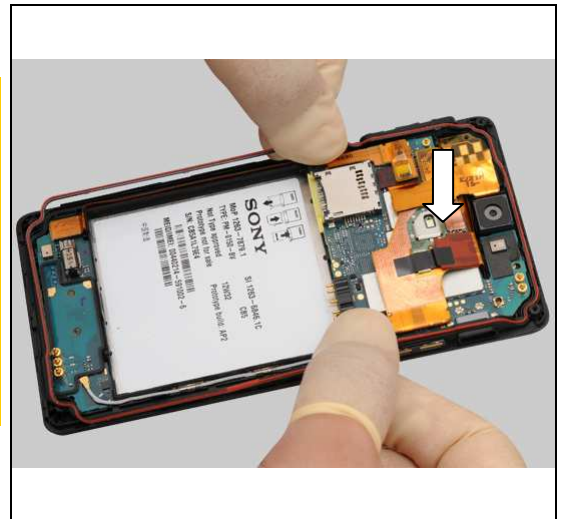
5.2.7 Main Gasket

Use an air gun to clean the Main Gasket and its cavity on the Touch/Display Front Cover Assy!

Make sure that the Main Gasket is clean and no dirt, particles and fiber attached on it! And make sure that the Main Gasket is not twisted, not deformed or not damaged! Otherwise replace a new Main Gasket!

Make sure that the Main Gasket cavity on the Touch/Display Front Cover Assy is not damaged! Otherwise replace a new Touch/Display Front Cover Assy!

Place the top side of the Main Gasket into its cavity as shown in the picture.



Place the bottom side to secure its position as shown in the picture.



Press the Main Gasket as shown in the picture.



Do the same as shown in the picture.



Reassembly

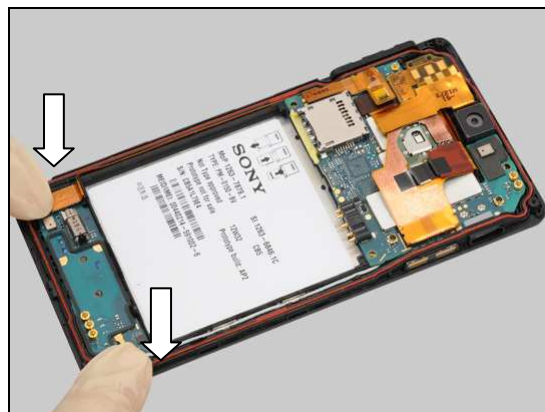
Do the same as shown in the picture.



Do the same as shown in the picture.



Do the same as shown in the picture.



Do the same as shown in the picture.

Make sure that the Main Gasket is properly mounted into its cavity, no twisted or no deformed! Otherwise reassemble it or replace a new Main Gasket!



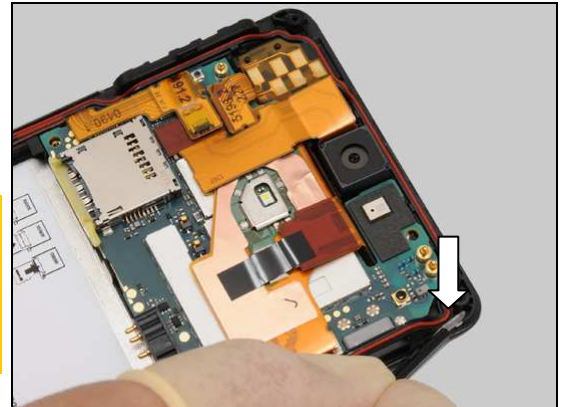
Reassembly

5.3 Reassembly-LT25i Specific

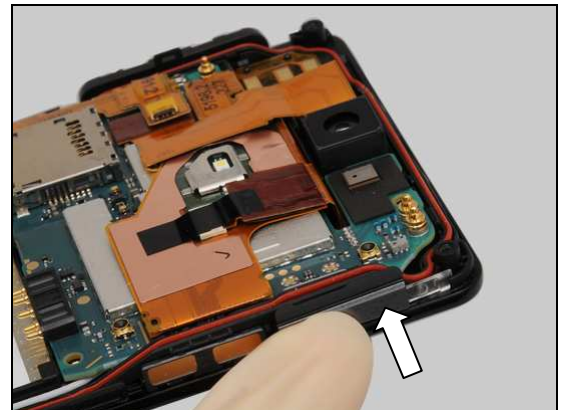
5.3.1 Cap Micro USB

Wear new Finger Cots and gently insert the plug of the Cap Micro USB into the socket with fingers as shown in the picture.

Use an air gun to clean the Cap Micro USB and its hole!
Do not touch the sealing rubber of the Cap Micro USB!
Make sure that the Cap Micro USB is clean and no dirt, particles and fiber attached on it and is not damaged!
Otherwise replace a new one.

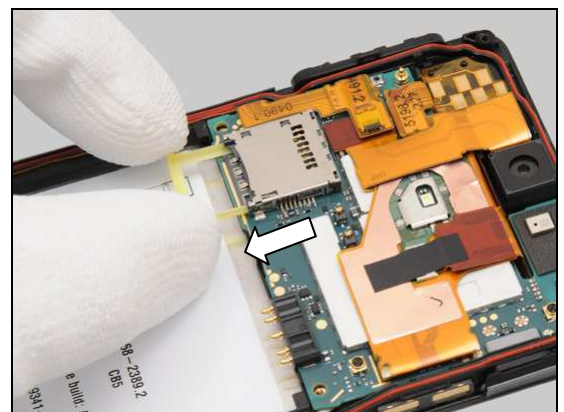


Press to secure its position.



5.3.2 Cover Rear Assy

Gently pull the Card Connector Tray out from its cavity.



Gently place the Cover Rear Assy on the correct position from the left side.

Use an air gun to clean the Cover Rear Assy!
Make sure that the Cover Rear Assy is clean and no dirt, particles and fiber attached on it!
Make sure that the contact surface of the Main Gasket on the Cover Rear Assy is not damaged! Otherwise replace a new one.
Make sure the hooks of the Cover Rear Assy are not damaged! Otherwise replace a new one.



Reassembly

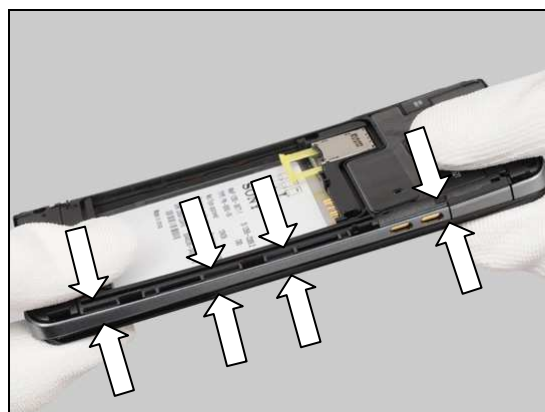
Make sure that the Cover Rear Assy is aligned as shown in the picture!



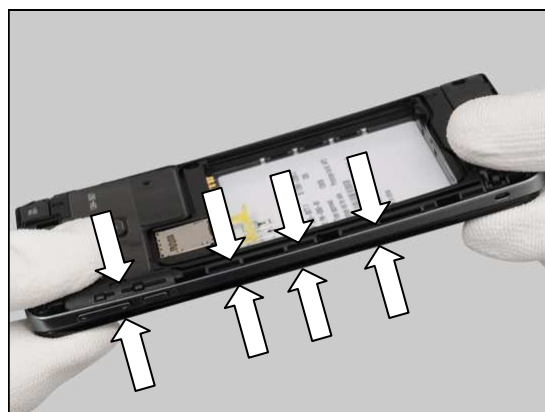
Press to snap the hooks.



Press to snap hooks of this side.



Do the same on the opposite side.



Reassembly

Do the same on the top side.



Do the same on the bottom side.



Press to snap this hook as shown in the picture.



Press to snap this hook as shown in the picture.



Reassembly

Press to secure the flash LED position as shown in the picture.



Gently push the Card Connector Tray into its cavity.



Apply 14Ncm±2Ncm torque when tightening these two screws with Bits (JCIS No 0).



Apply 12Ncm±2Ncm torque when tightening these four screws with Bits (T5).



Reassembly

5.3.3 Battery

Gently place the battery into its cavity.



Press to secure its position.



5.3.4 Cover Battery Assy

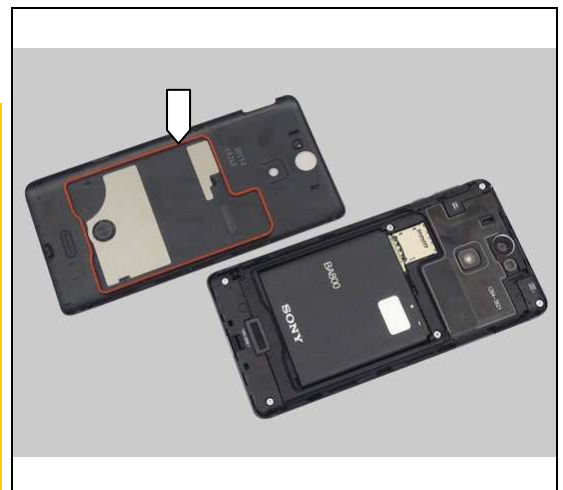
Prepare the Cover Battery Assy and the unit.

Use an air gun to clean the sealing rubber on the Cover Battery Assy and its cavity on the Cover Rear Assy as shown in the picture!

Make sure that the sealing rubber on the Cover Battery Assy is clean and no dirt, particles and fiber attached on it and is not damaged! Otherwise replace a new Cover Battery Assy.

Make sure the hooks of the Cover Battery Assy are not damaged! Otherwise replace a new Cover Battery Assy.

Make sure that the cavity on the Cover Rear Assy is not damaged! Otherwise replace a new Cover Rear Assy.



Place the Cover Battery Assy on the correct position from the top side.

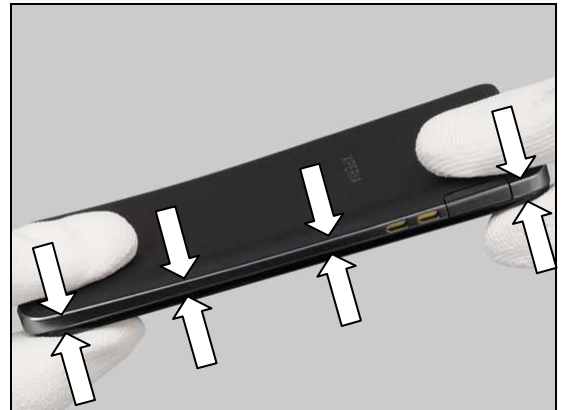


Reassembly

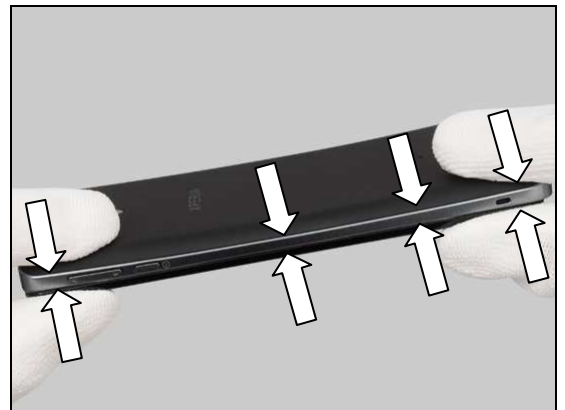
Press to snap the hooks.



Press to snap hooks of this side.



Do the same on the opposite side.



Press to snap the hooks on the top side.



Reassembly

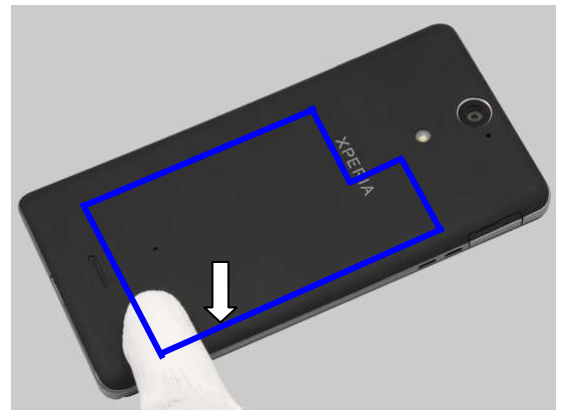
Press to snap the hook on the bottom side.



Press to snap this hook as shown in the picture.



Press along to secure the proper sealing between the Cover Battery Assy and the Cover Rear Assy as shown in the picture.



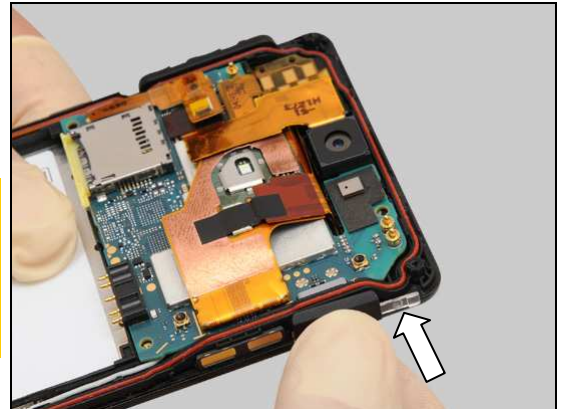
Reassembly

5.4 Reassembly-LT25c Specific

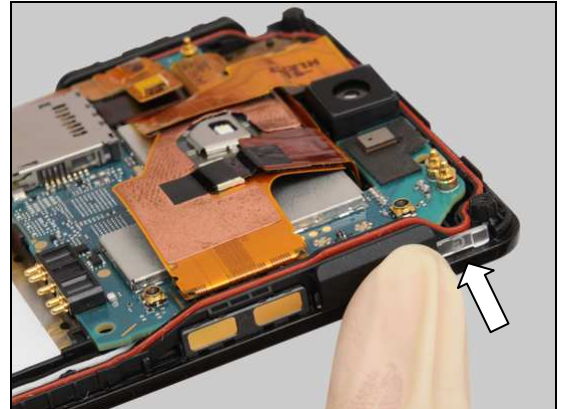
5.4.1 Cap Micro USB

Wear new Finger Cots and place the Cap Micro USB on the correct position.

Use an air gun to clean the Cap Micro USB and its hole!
Do not touch the sealing rubber of the Cap Micro USB!
Make sure that the Cap Micro USB is clean and no dirt, particles and fiber attached on it and is not damaged!
Otherwise replace a new one.

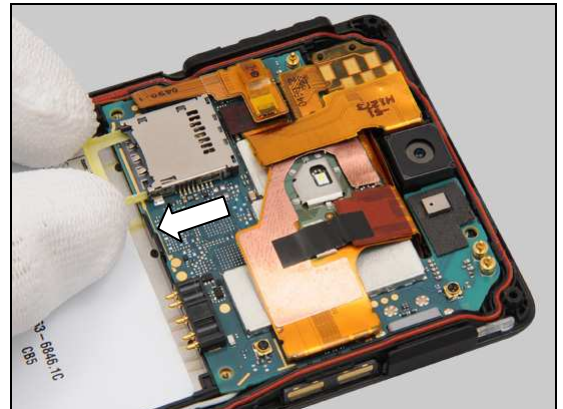


Press to secure its position.



5.4.2 Cover Rear Assy

Gently pull the Card Connector Tray out from its cavity.



Gently place the Cover Rear Assy on the correct position from the left side.

Use an air gun to clean the Cover Rear Assy!
Make sure that the Cover Rear Assy is clean and no dirt, particles and fiber attached on it!
Make sure that the contact surface of the Main Gasket on the Cover Rear Assy is not damaged! Otherwise replace a new Cover Rear Assy.
Make sure the hooks of the Cover Rear Assy are not damaged! Otherwise replace a new Cover Rear Assy.



Reassembly

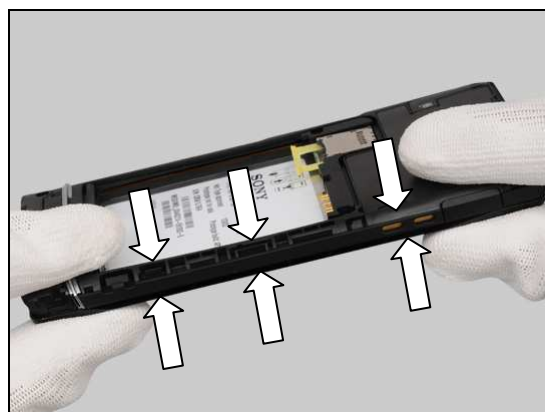
Make sure the Cover Rear Assy is aligned as shown in the picture!



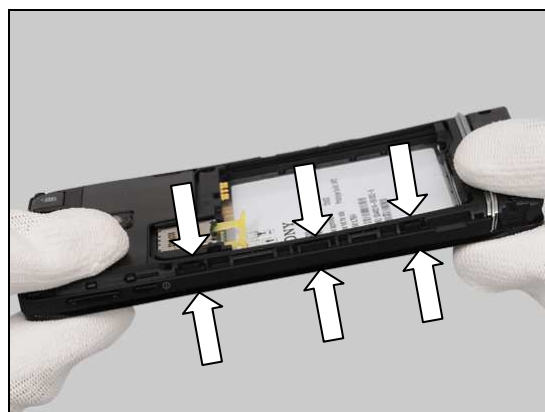
Press to snap the hooks.



Press to snap the hooks on this side.



Do the same on the opposite side.



Reassembly

Do the same on the top side.



Do the same on the bottom side.



Press to snap this hook as shown in the picture.



Press to snap this hook as shown in the picture.



Reassembly

Press to secure the flash LED position as shown in the picture.



Gently push the Card Connector Tray into its cavity.



Apply 13Ncm \pm 2Ncm torque when tightening these two screws with Bits (JCIS No 0).



Apply 12Ncm \pm 2Ncm torque when tightening these four screws with Bits (T5).



Reassembly

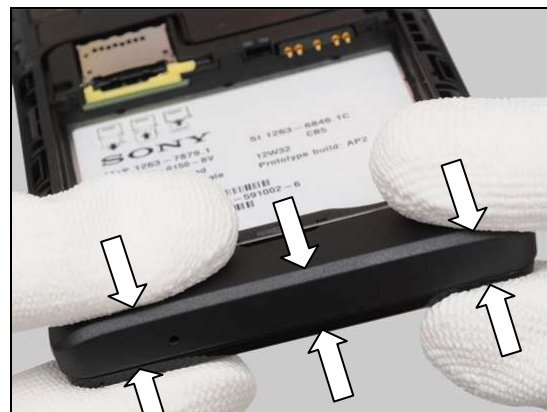
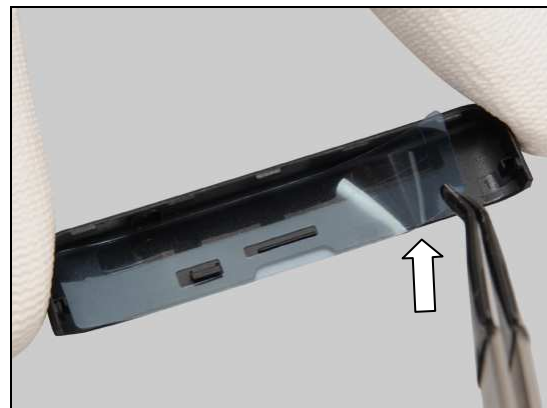
5.4.3 Cover Bottom

Prepare a new Cover Bottom and peel off the protective film.

Insert the hooks of both sides at the same time as shown in the picture.

Press to snap the hooks.

Make sure this side of Cover Bottom properly installed as shown in the picture!



Reassembly

Make sure the other side of Cover Bottom properly installed as shown in the picture!



Press along to secure the adhesive attachment of the Cover Bottom.



5.4.4 Battery

Gently place the battery into its cavity.



Press to secure its position.



Reassembly

5.4.5 Cover Battery Assy

Prepare the Cover Battery Assy and the unit.

Use an air gun to clean the sealing rubber on the Cover Battery Assy and its cavity on the Cover Rear Assy as shown in the picture!

Make sure that the sealing rubber on the Cover Battery Assy is clean and no dirt, particles and fiber attached on it and is not damaged! Otherwise replace a new Cover Battery Assy.

Make sure the hooks of the Cover Battery Assy are not damaged! Otherwise replace a new Cover Battery Assy. Make sure that the cavity on the Cover Rear Assy is not damaged! Otherwise replace a new Cover Rear Assy.



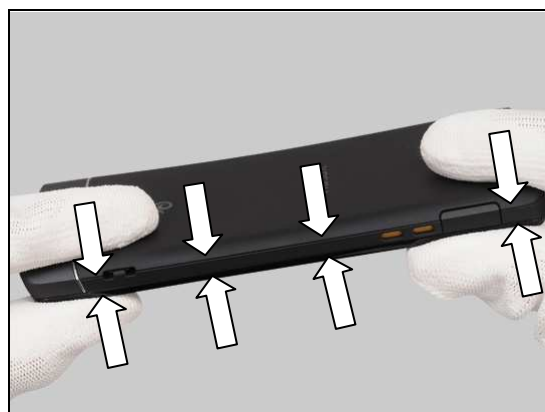
Place the Cover Battery Assy on the correct position from the top side.



Press to snap the hooks of the Cover Battery Assy.

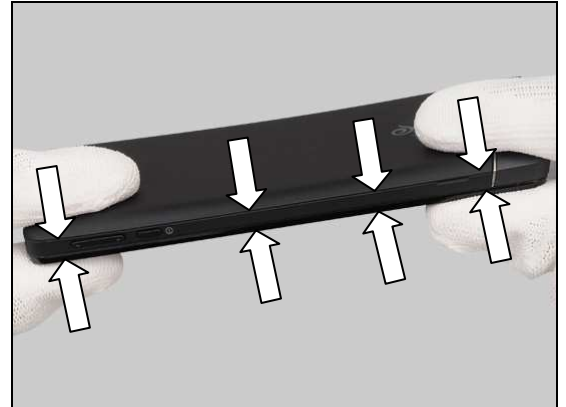


Press to snap the hooks of this side.



Reassembly

Do the same on the opposite side.



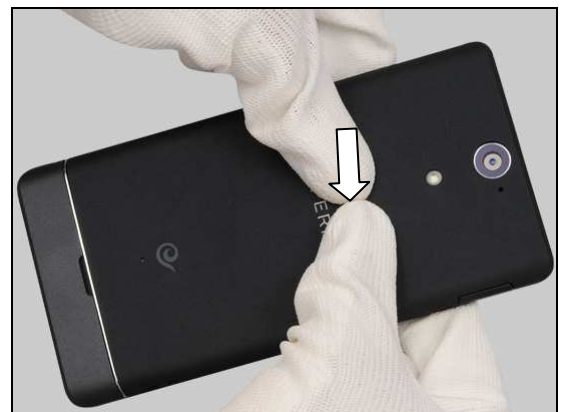
Press to snap the hooks on the top side.



Do the same on the bottom side.

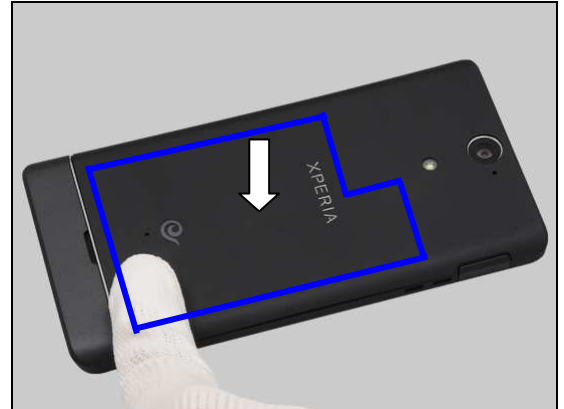


Press to snap this hook as shown in the picture.



Reassembly

Press along to secure the proper sealing between the Cover Battery Assy and the Cover Rear Assy as shown in the picture.



6 Revision History

Rev.	Date	Changes / Comments
1	2012-Nov-16	Initial release
2	2012-Nov-26	No change
3	2012-Dec-7	Update chapter 4.1.21
4	2012-Dec-27	Add Replacement 4.1.17, update 4.1.21 and 5.2.1
5	2013-Feb-25	Add "and LCD reset" in the notice of chapter 4.1.6 and 4.1.21

Repair Movies

- mechanical -



Xperia™ V
LT25i



Xperia™ VC
LT25c

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2.2	Reassembly	4
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To view the embedded repair movies in this document, Acrobat Reader version 8 (or later) and Flash Player version 8 (or later) must be installed on your computer.

***For best picture quality, select “Actual size” or “100%” as zoom level in Acrobat Reader.
To magnify while keeping an acceptable picture quality, increase the zoom level to 200%.***

***If the movies appear to be jerky or blurred when viewing on-line, this is probably caused by the connection speed being too slow.
In that case, right-click with the mouse on the document name and select Save Target As to download the repair movie document for off-line viewing.***

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

1 Movies-LT25i

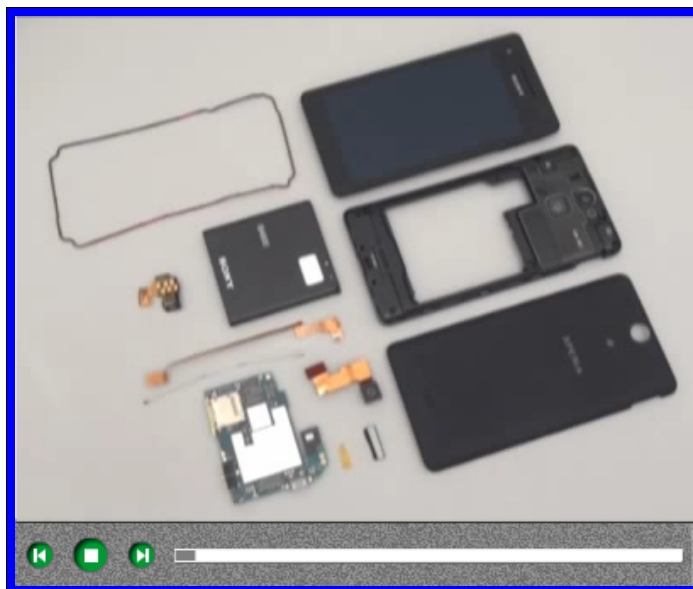
1.1 Disassembly

- Cover Battery Assy
- Battery
- Cover Rear Assy
- Cap Micro USB
- Main Gasket
- Sheet Side Key FPC
- Relay Flex PBA Assy
- Main Camera
- Jack Flex PBA Assy
- Touch/Display Front Cover Assy
- Cable RF (a) & Main PBA (b)



1.2 Reassembly

- Cable RF (a) & Main PBA (b)
- Touch/Display Front Cover Assy
- Jack Flex PBA Assy
- Main Camera
- Relay Flex PBA Assy
- Sheet Side Key FPC
- Main Gasket
- Cap Micro USB
- Cover Rear Assy
- Battery
- Cover Battery Assy



2 Movies-LT25c

2.1 Disassembly

- Cover Battery Assy
- Battery
- Cover Bottom
- Cover Rear Assy
- Cap Micro USB
- Main Gasket
- Sheet Side Key FPC
- Relay Flex PBA Assy
- Main Camera
- Jack Flex PBA Assy
- Touch/Display Front Cover Assy
- Cable RF (a) & Main PBA (b)



2.2 Reassembly

- Cable RF (a) & Main PBA (b)
- Touch/Display Front Cover Assy
- Jack Flex PBA Assy
- Main Camera
- Relay Flex PBA Assy
- Sheet Side Key FPC
- Main Gasket
- Cap Micro USB
- Cover Rear Assy
- Cover Bottom
- Battery
- Cover Battery Assy



3 Revision History

Rev.	Date	Changes / Comments
1	2012-Nov-16	Initial release

Troubleshooting Guide

- mechanical -



Xperia™ V
LT25i



Xperia™ VC
LT25c

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If there are no special indications of 'LT25i Specific' or 'LT25c Specific', LT25i and LT25c share the same trouble shooting guide as common sections, whose pictures are taken with LT25c.

Note: Touch Vendor ID Writing and LCD reset SW always must be performed for Touch/Display Front Cover Assy replacement or Board swap; 1257-2706 Trouble Shooting Application – mechanical.

1 Problem Areas

1.1 Power

1.1.1 Will not power on or will switch off randomly

Check:

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

Action:

If activation of the vibrator is detected, refer to section 1.4 '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 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 Main PBA.



Check:

Inspect the on/off key.

Action:

Refer to section 1.2.3 'On/Off Key'.



Problem Areas

1.2 Keys

1.2.1 Menu, Home and Multitask 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 volume key.

Action:

If dirty – clean it.

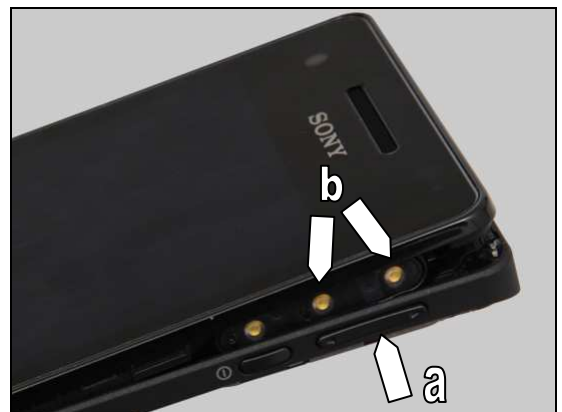


Check:

Inspect the volume key (a) and volume key switch (b).

Action:

1. If dirty – clean them.



2. If the volume key is damaged – replace the Side Key.



Problem Areas: Keys

3. If the volume key switch is damaged – replace the Side Key Flex PBA Frame Assy_WR.

Check:

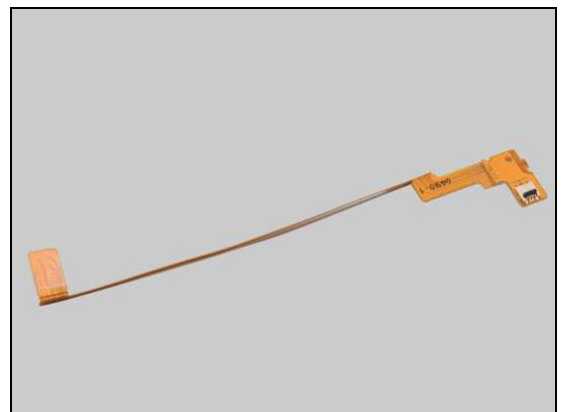
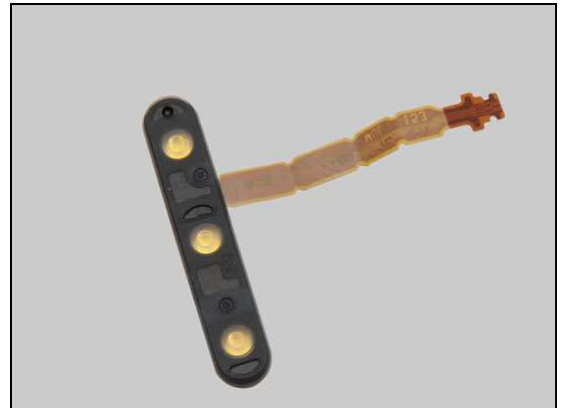
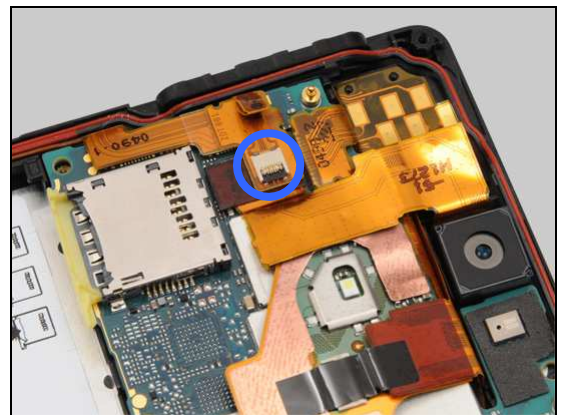
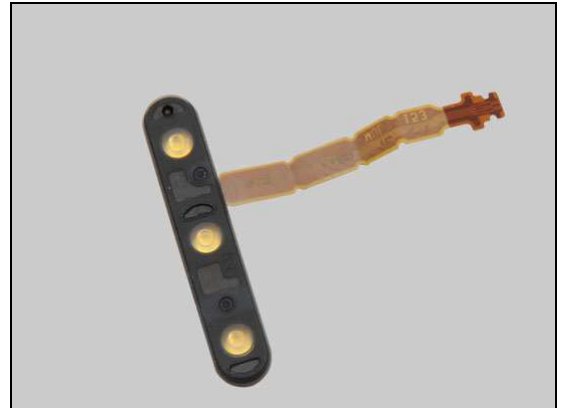
Inspect the ZIF connector of Side Key Flex PBA Frame Assy_WR to Relay Flex PBA Assy.

Action:

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

3. If the FPC of Side Key Flex PBA Frame Assy_WR is damaged – replace the Side Key Flex PBA Frame Assy_WR.

4. If the ZIF connector of the Relay Flex PBA Assy is damaged – replace the Relay Flex PBA Assy.



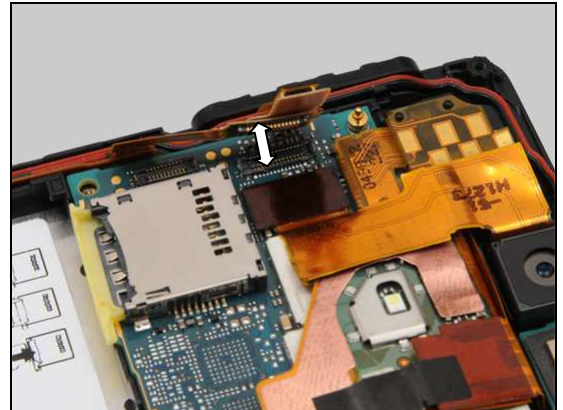
Problem Areas: Keys

Check:

Inspect the BtB connector of Relay Flex PBA Assy 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 or the FPC of Relay Flex PBA Assy is damaged – replace the Relay Flex PBA Assy.
4. Replace Main PBA.



1.2.3 On/Off Key

Check:

Inspect the external area of the on/off key.

Action:

If dirty – clean it.



Check:

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

Action:

1. If dirty – clean them.

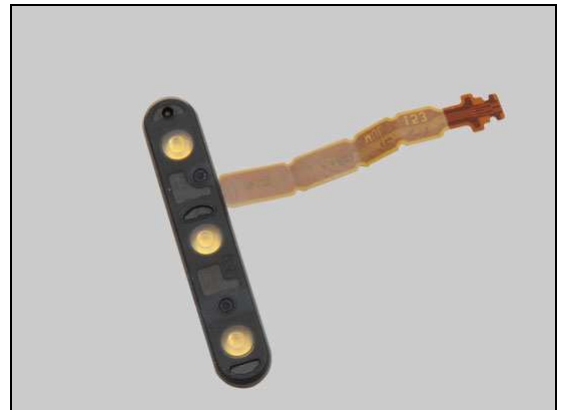


Problem Areas: Keys

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



3. If the on/off key switch is damaged – replace the Side Key Flex PBA Frame Assy_WR.

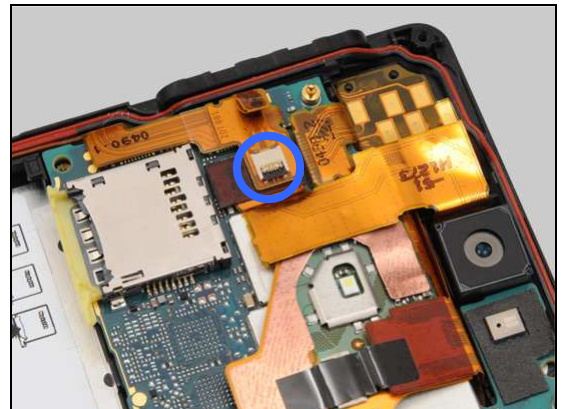


Check:

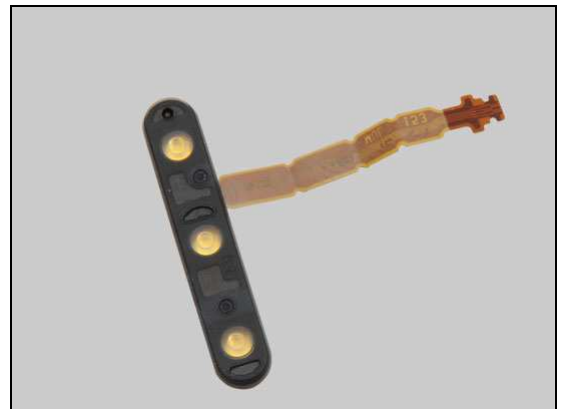
Inspect the ZIF connector of Side Key Flex PBA Frame Assy_WR to Relay Flex PBA Assy.

Action:

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



3. If the FPC of Side Key Flex PBA Frame Assy_WR is damaged – replace the Side Key Flex PBA Frame Assy_WR.



Problem Areas: Keys

4. If the ZIF connector of Relay Flex PBA Assy is damaged – replace the Relay Flex PBA Assy.

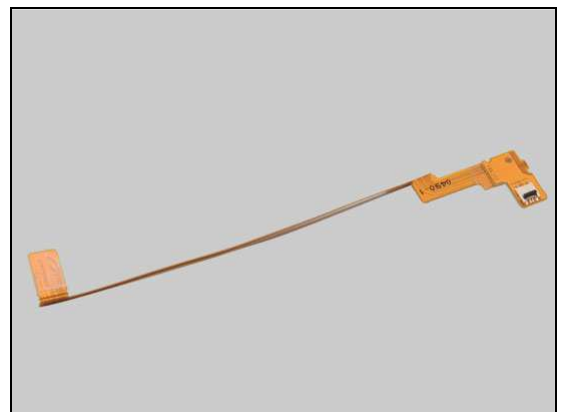
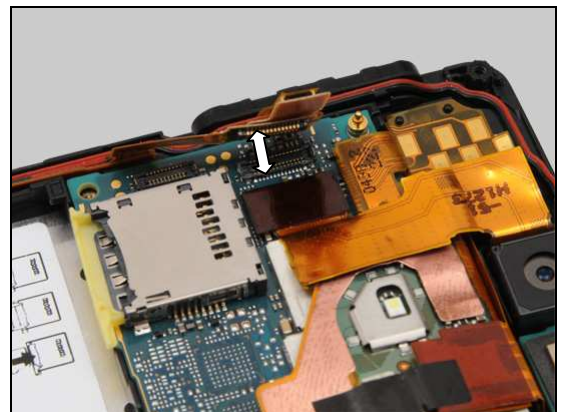
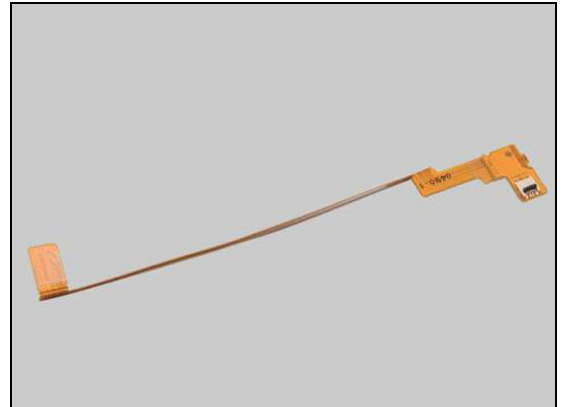
Check:

Inspect the BtB connector of Relay Flex PBA Assy 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 or the FPC of Relay Flex PBA Assy is damaged – replace the Relay Flex PBA Assy.
4. Replace Main PBA.



Problem Areas

1.3 Touch Screen

1.3.1 Touch Screen malfunction

Check:

Inspect the touch screen of the Touch/Display Front Cover Assy.

Action:

1. If dirty – clean it.



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

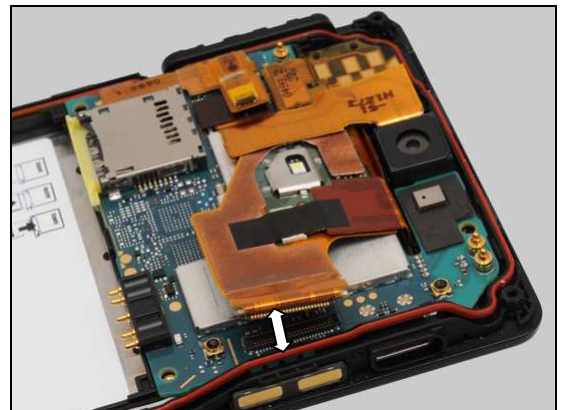


Check:

Inspect the BtB connector of display FPC 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 display FPC is damaged – replace the Touch/Display Front Cover Assy.

4. Replace Main 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'.

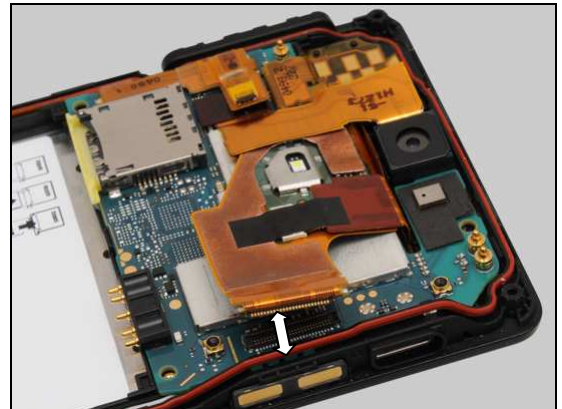


Check:

Inspect the BtB connector of display FPC 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 display FPC is damaged – replace the Touch/Display Front Cover Assy.
4. Replace Main PBA.



Problem Areas

1.5 LED/Illumination

1.5.1 LED/Illumination

Check:

Inspect the external window area of the RGB LED on the Touch/Display Front Cover Assy.

Action:

1. If dirty – clean it.

2. If the external window area is damaged – replace the Touch/Display Front Cover Assy.

Check:

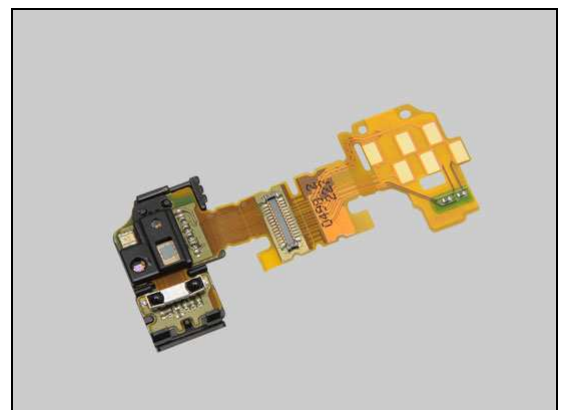
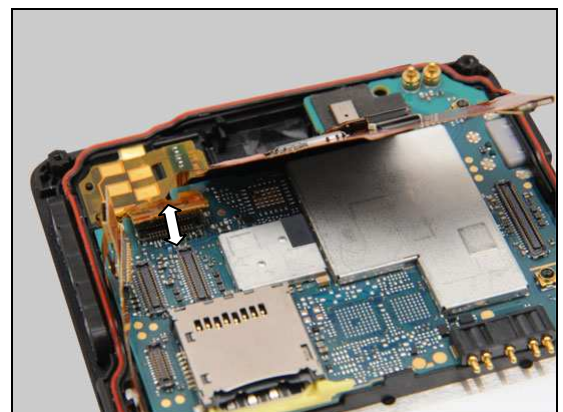
Inspect the BtB connector of the Jack Flex PBA Assy to Main PBA.

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 or FPC of Jack Flex PBA Assy is damaged – replace the Jack Flex PBA Assy.



Problem Areas: LED/Illumination

Check:

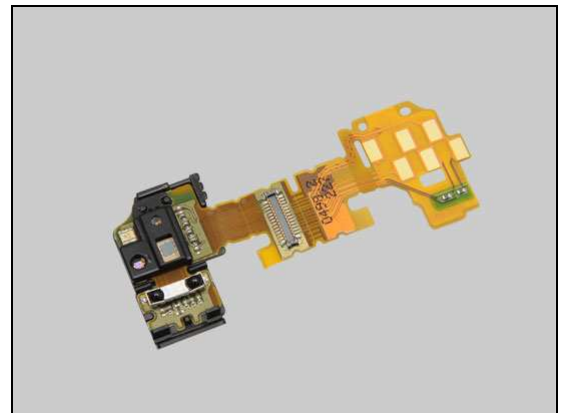
Inspect the RGB LED on the Jack Flex PBA Assy.

Action:

1. If dirty or clogged – clean it.



2. If the RGB LED is damaged – replace the Jack Flex PBA Assy.



Check:

Inspect the RGB LED light guide on the Touch/Display Front Cover Assy.

Action:

1. If dirty – clean it.



2. If damaged – replace the Touch/Display Front Cover Assy.

3. Replace Main PBA.



Problem Areas

1.6 Speaker

1.6.1 Loudspeaker (LT25i Specific)

Check:

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

Action:

1. If the Loudspeaker external port is clogged – clean it.

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



Check:

Inspect the Net Speaker on the Cover Rear Assy.

Action:

1. If dirty – clean it.

2. If damaged – replace the Net Speaker.



Problem Areas: Speaker

Check:

Inspect the contact pins of Loudspeaker and the contact pads on the Sub PBA Assy.

Action:

1. If dirty – clean them.

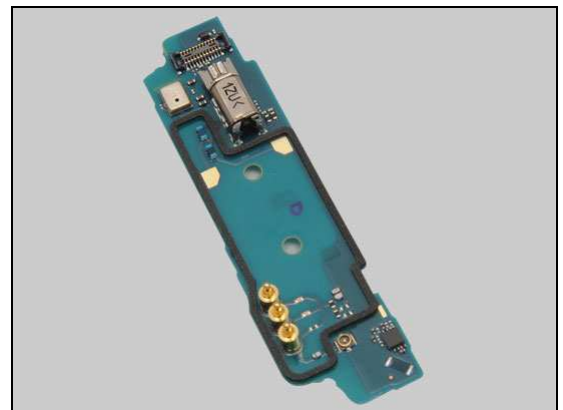
2. If the contact pins of Loudspeaker are damaged – replace the Loudspeaker.

Check:

Inspect the cushion on the Sub PBA Assy.

Action:

If the contact pads or the cushion on the Sub PBA Assy is damaged – replace the Sub PBA Assy.



Problem Areas: Speaker

Check:

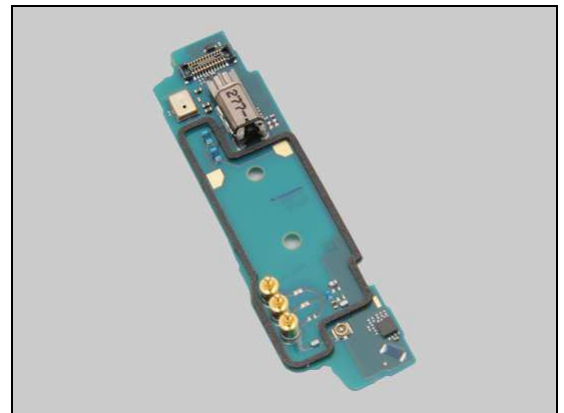
Inspect the BtB connector of Relay Flex PBA Assy to Sub PBA Assy.

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 Sub PBA Assy is damaged – replace the Sub PBA Assy.

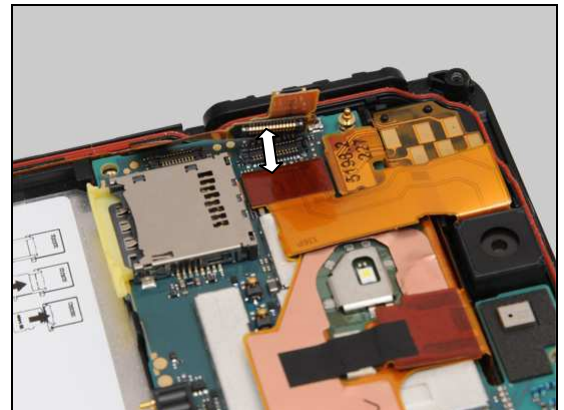


Check:

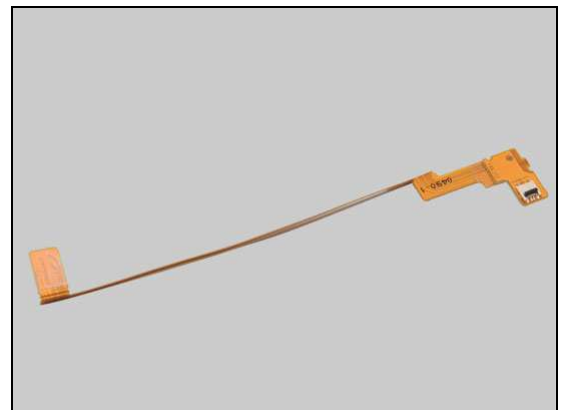
Inspect the BtB connector of the Relay Flex PBA Assy to Main PBA.

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 two BtB connectors or FPC of the Relay Flex PBA Assy is damaged – replace the Relay Flex PBA Assy.
4. Replace Main PBA.



Problem Areas: Speaker

1.6.2 Loudspeaker (LT25c Specific)

Check:

Inspect the Loudspeaker's external port on the Cover Bottom.

Action:

1. If the Loudspeaker external port is clogged – clean it.

2. If the Loudspeaker external port is damaged – replace the Cover Bottom.



Check:

Inspect the Net Speaker on the Cover Rear Assy.

Action:

1. If dirty – clean it.

2. If the Net Speaker is damaged – replace it.



Problem Areas: Speaker

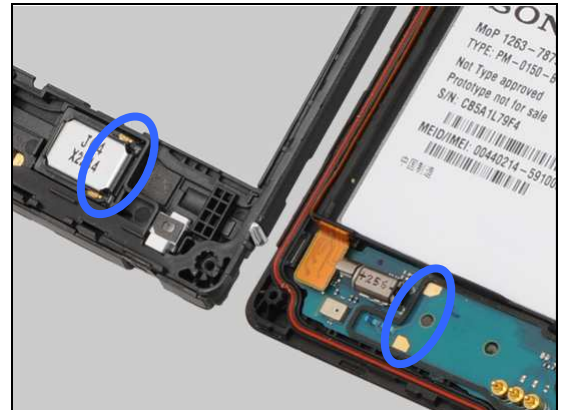
Check:

Inspect the contact pins of Loudspeaker and the contact pads on the Sub PBA Assy.

Action:

1. If dirty – clean them.

2. If the contact pins of Loudspeaker are damaged – replace the Loudspeaker.



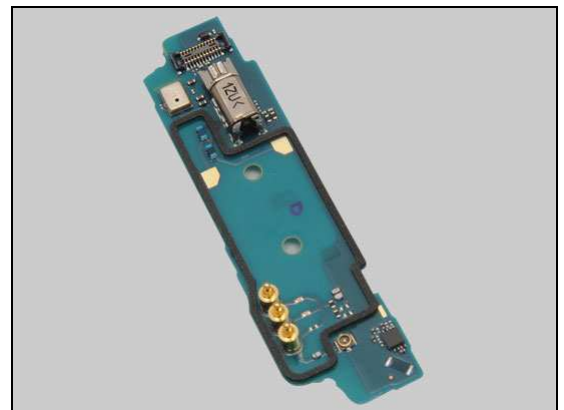
Check:

Inspect the cushion on the Sub PBA Assy.



Action:

If the contact pads or the cushion on the Sub PBA Assy is damaged – replace the Sub PBA Assy.



Problem Areas: Speaker

Check:

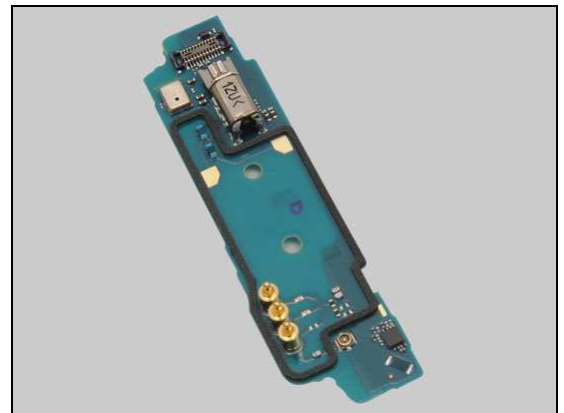
Inspect the BtB connector of Relay Flex PBA Assy to Sub PBA Assy.

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 Sub PBA Assy is damaged – replace the Sub PBA Assy.

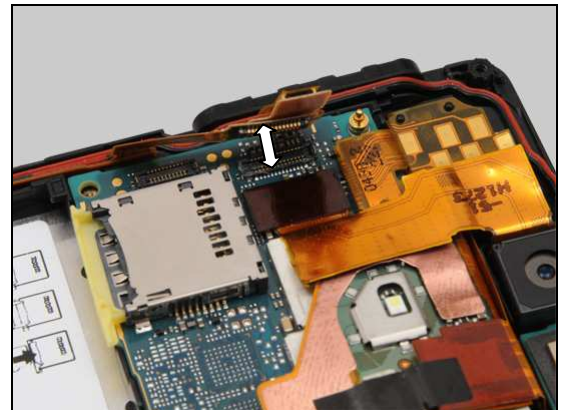


Check:

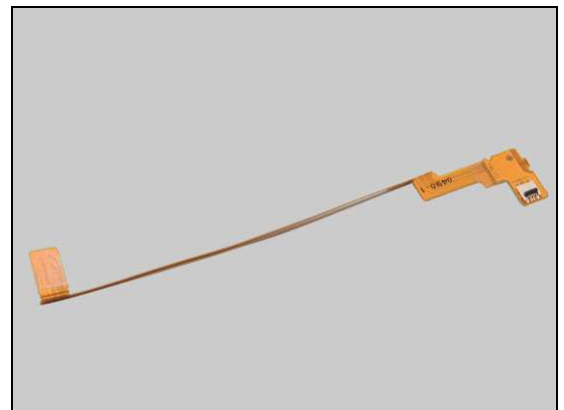
Inspect the BtB connector of the Relay Flex PBA Assy to Main PBA.

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 two BtB connectors or FPC of the Relay Flex PBA Assy is damaged – replace the Relay Flex PBA Assy.
4. Replace Main PBA.



Problem Areas

1.7 Earphone

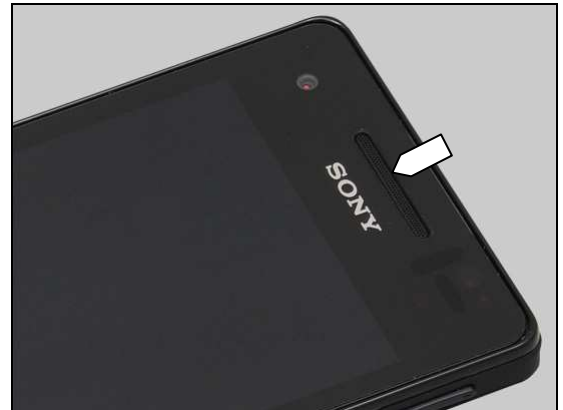
1.7.1 Ear Speaker

Check:

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

Action:

1. If clogged – clean it.



2. If the port is damaged – replace the Touch/Display Front Cover Assy.



Check:

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

Action:

1. If dirty – clean them.



2. If the contact pins are damaged – replace the Ear Speaker.

3. Replace Main PBA.



Problem Areas

1.8 Microphone

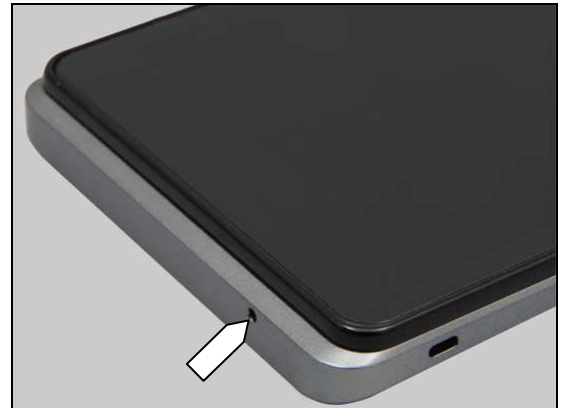
1.8.1 Microphone (LT25i Specific)

Check:

Inspect the microphone's external port on the Cover Rear Assy.

Action:

1. If clogged – clean it.



2. If the port is damaged – replace the Cover Rear Assy.



Check:

Inspect the microphone on Sub PBA Assy and the microphone hole and cushion on the Cover Rear Assy.

Action:

1. If dirty – clean them.



2. If the microphone hole or cushion is damaged – replace the Cover Rear Assy.



Problem Areas: Microphone

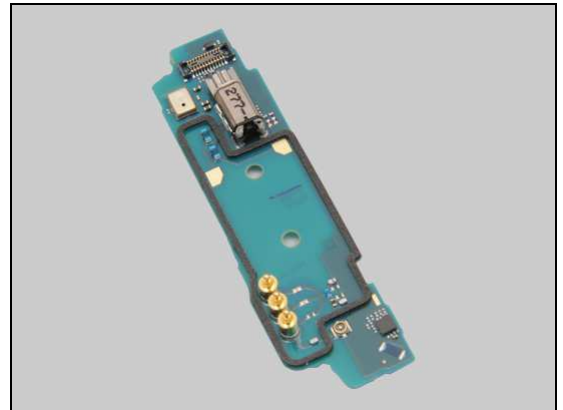
3. If the microphone on Sub PBA Assy is damaged – replace the Sub PBA Assy.

Check:

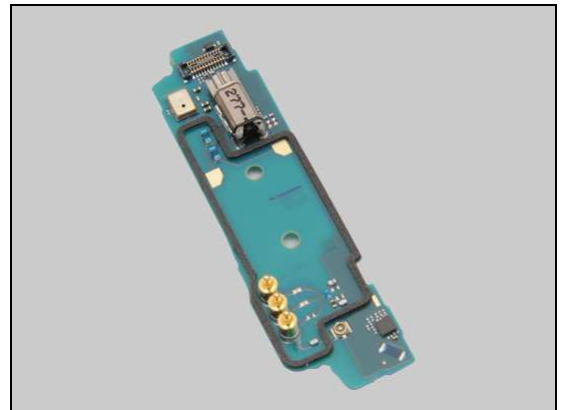
Inspect the BtB connector of Relay Flex PBA Assy to Sub PBA Assy.

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 Sub PBA Assy is damaged – replace the Sub PBA Assy.

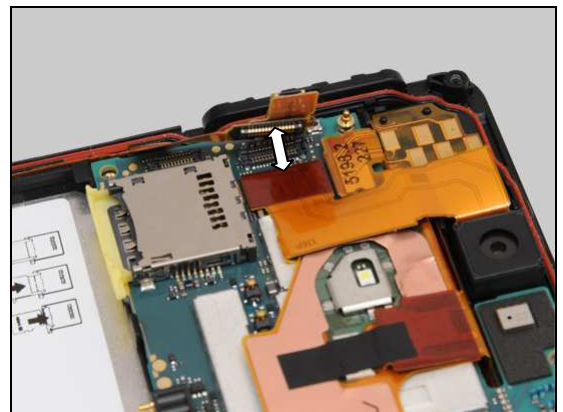


Check:

Inspect the BtB connector of Relay Flex PBA Assy 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.



Problem Areas: Microphone

3. If the two BtB connectors or the FPC of Relay Flex PBA Assy is damaged – replace the Relay Flex PBA Assy.
4. Replace Main PBA.



1.8.2 Microphone (LT25c Specific)

Check:

Inspect the microphone's external port on the Cover Bottom.

Action:

1. If clogged – clean it.



2. If the port is damaged – replace the Cover Bottom.



Check:

Inspect the Cushion Sheet 1st Mic_WR.

Action:

1. If dirty – clean it.



Problem Areas: Microphone

2. If damaged – replace it.

Check:

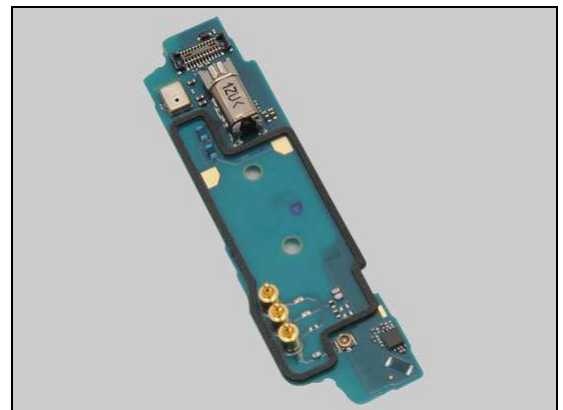
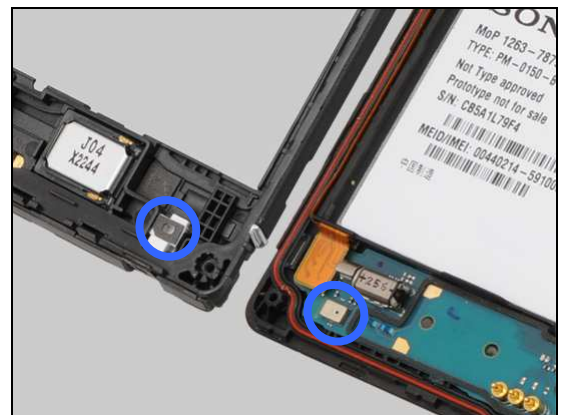
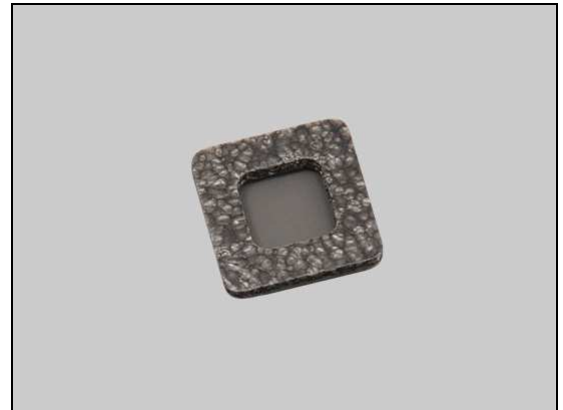
Inspect the microphone on Sub PBA Assy and the microphone hole and cushion on Cover Rear Assy.

Action:

1. If dirty – clean them.

2. If the microphone hole or cushion is damaged – replace the Cover Rear Assy.

3. If the microphone on Sub PBA Assy is damaged – replace the Sub PBA Assy.



Problem Areas: Microphone

Check:

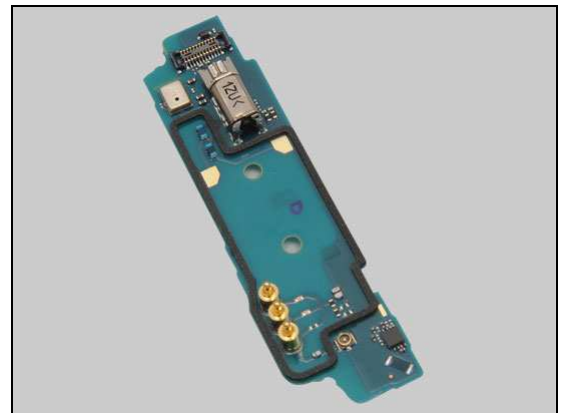
Inspect the BtB connector of Relay Flex PBA Assy to Sub PBA Assy.

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 Sub PBA Assy is damaged – replace the Sub PBA Assy.

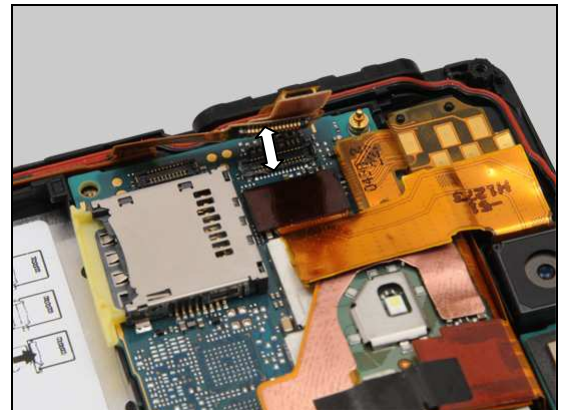


Check:

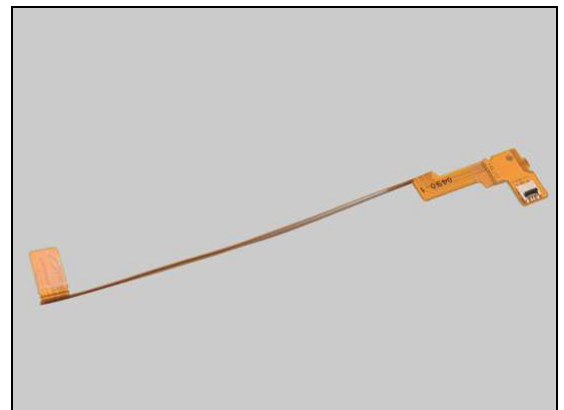
Inspect the BtB connector of the Relay Flex PBA Assy to Main PBA.

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 two BtB connectors or FPC of Relay Flex PBA Assy is damaged – replace the Relay Flex PBA Assy.
4. Replace Main PBA.



Problem Areas: Microphone

1.8.3 Secondary Microphone

Check:

Inspect the secondary microphone's external port on the Cover Battery Assy.

Action:

1. If clogged – clean it.



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



Check:

Inspect the Cushion 2nd Mic_WR on the Cover Rear Assy.

Action:

1. If dirty – clean it.



2. If damaged – replace the Cushion 2nd Mic_WR.



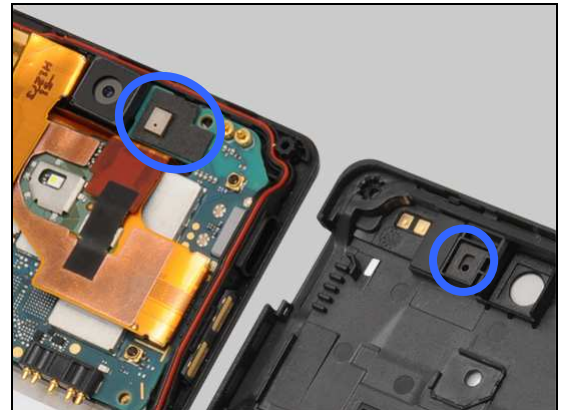
Problem Areas: Microphone

Check:

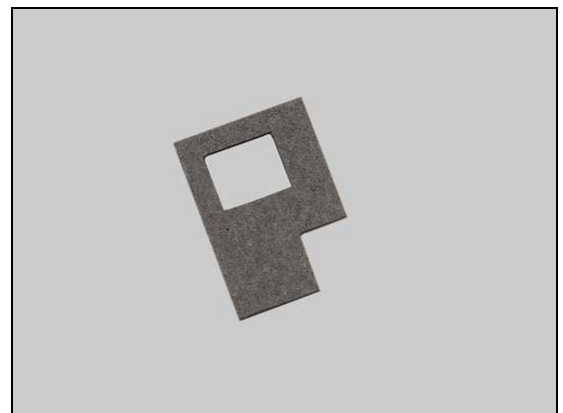
Inspect the Cushion MIC2 PCB on Main PBA and the secondary microphone hole and cushion on the Cover Rear Assy.

Action:

1. If dirty – clean them.



2. If the Cushion MIC2 PCB is damaged – replace it.



3. If the secondary microphone hole or cushion is damaged – replace the Cover Rear Assy.



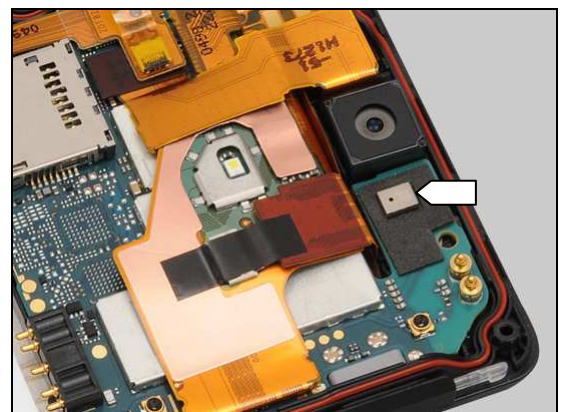
Check:

Inspect the secondary microphone on the Main PBA.

Action:

1. If dirty – clean it.

2. Replace Main PBA.



Problem Areas

1.9 Vibrator

1.9.1 Vibrator not generating alerts

Check:

Inspect the vibrator on Sub PBA Assy and the cushion of vibrator on the Cover Rear Assy.

Action:

1. If dirty – clean them.

2. If the cushion of vibrator is damaged – replace the Cover Rear Assy.

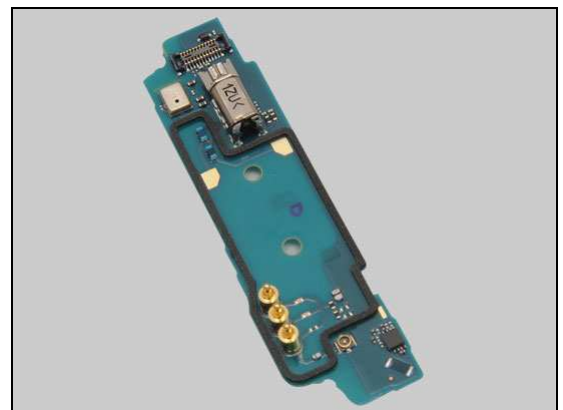
3. If the vibrator is damaged – replace the Sub PBA Assy.

Check:

Inspect the BtB connector of Relay Flex PBA Assy to Sub PBA Assy.

Action:

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



Problem Areas: Vibrator

3. If the BtB connector of Sub PBA Assy is damaged – replace the Sub PBA Assy.

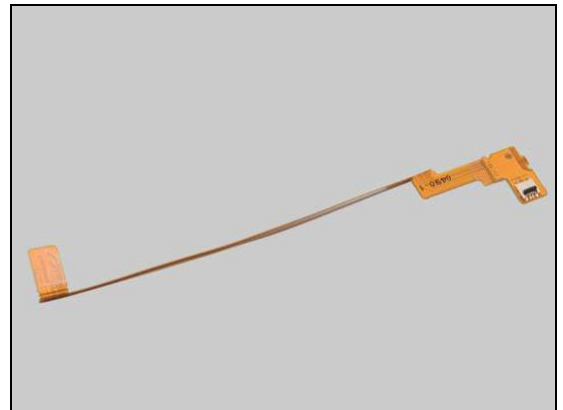
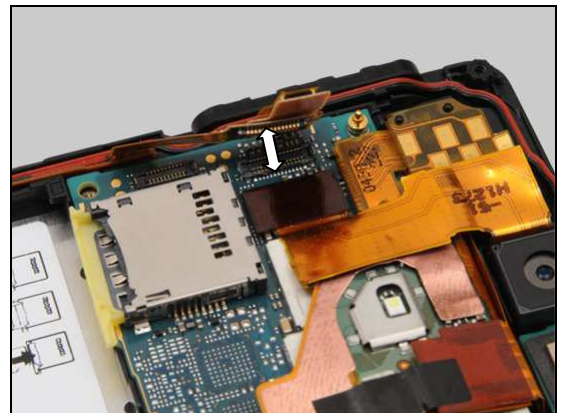
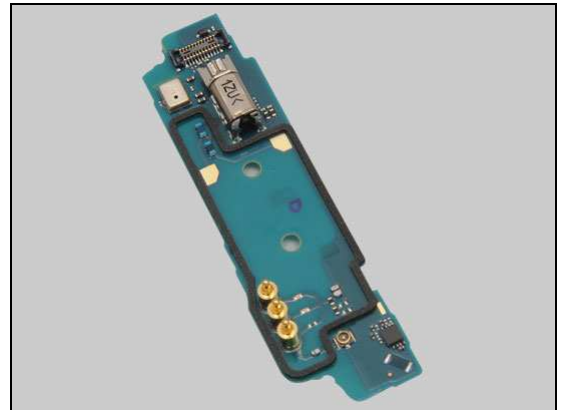
Check:

Inspect the BtB connector of Relay Flex PBA Assy 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 two BtB connectors or the FPC of Relay Flex PBA Assy is damaged – replace the Relay Flex PBA Assy.
4. Replace Main PBA.



Problem Areas

1.10 Camera

1.10.1 Camera defects

Check:

Inspect the external area of camera window.

Action:

1. If dirty – clean it.



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



Check:

Inspect the main camera cushion on the Cover Rear Assy.

Action:

1. If dirty – clean it.



2. If the main camera cushion is damaged – replace the Cover Rear Assy.



Problem Areas: Camera

Check:

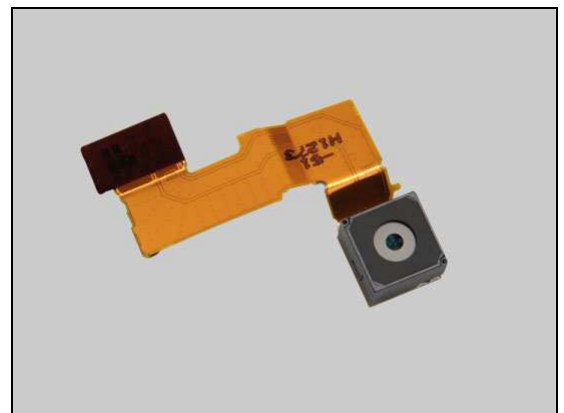
Inspect the BtB connector of Main Camera to Main PBA.

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 or the Main Camera is damaged – replace the Main Camera.
4. Replace Main PBA.



1.10.2 Video Call Camera defects

Check:

Inspect the external area of the video camera window.

Action:

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



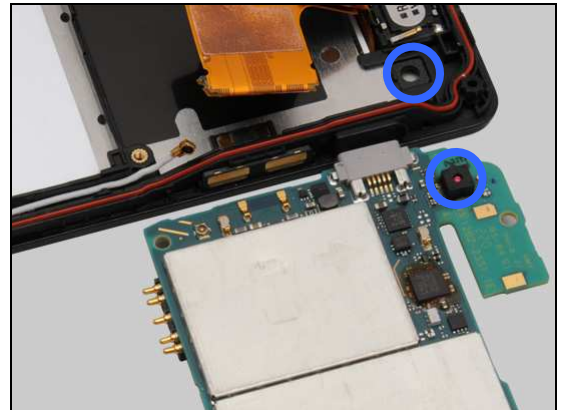
Problem Areas: Camera

Check:

Inspect the video camera on the Main PBA and the video camera cushion on the Touch/Display Front Cover Assy.

Action:

1. If dirty – clean them.
2. If the video camera cushion is damaged – replace the Touch/Display Front Cover Assy.
3. 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 window.

Action:

1. If dirty – clean it.



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

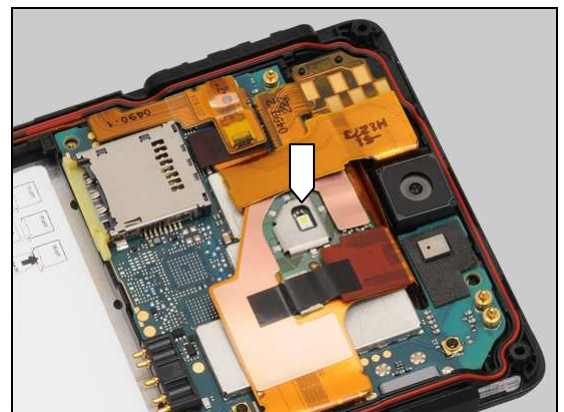


Check:

Inspect the flash LED on the display FPC.

Action:

If dirty – clean it.

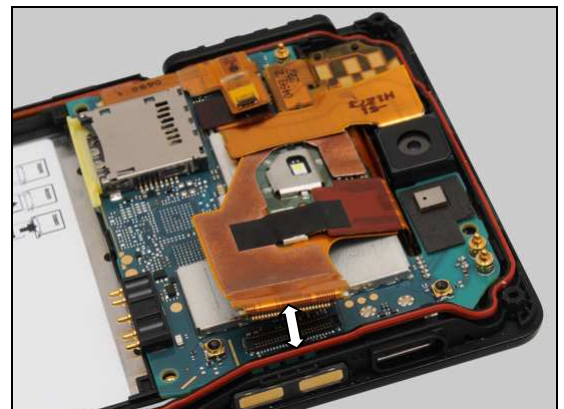


Check:

Inspect the BtB connector of display FPC to Main PBA.

Action:

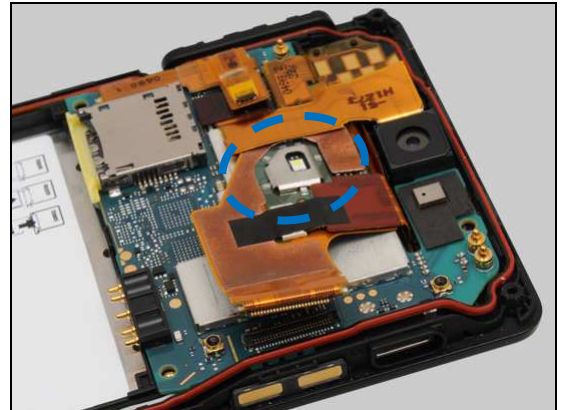
1. If not properly connected – disconnect and reconnect it.
2. If dirty or oxidized – clean the both sides of the BtB connector.



Problem Areas: Flash LED

Check:

Inspect the display FPC as shown.



Action:

1. If the flash LED, the BtB connector or display FPC is damaged – replace the Touch/Display Front Cover Assy.

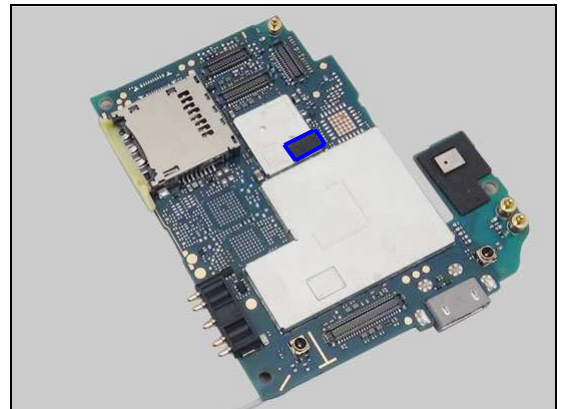


Check:

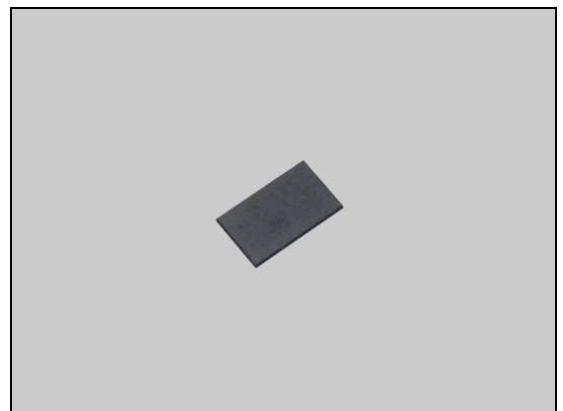
Inspect the shielding can area as indicated by the blue rectangle.

Action:

1. If there is no Sheet Shield NonCell attached – ALWAYS attach it on its proper position.



2. If the Sheet Shield NonCell is damaged – replace it.
3. Replace Main PBA.



Problem Areas

1.12 Bluetooth and WLAN

1.12.1 Bluetooth or WLAN connection failure (LT25i Specific)

Check:

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



Action:

If the antenna is damaged – replace the Cover Rear Assy.

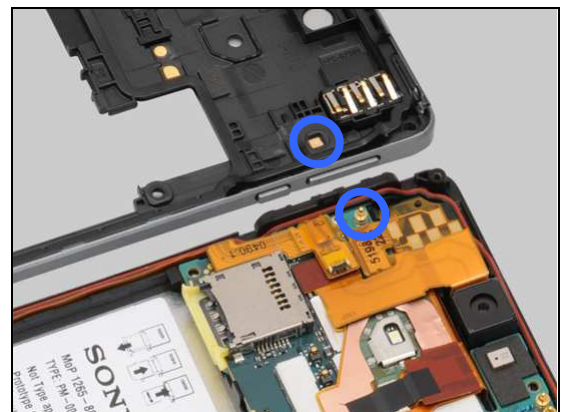


Check:

Inspect the WLAN and Bluetooth antenna contact pad on Cover Rear Assy and the contact pin on Main PBA.

Action:

1. If dirty or oxidized – clean the pad and pin.



2. If the contact pad is damaged – replace the Cover Rear Assy.

3. Replace Main PBA.

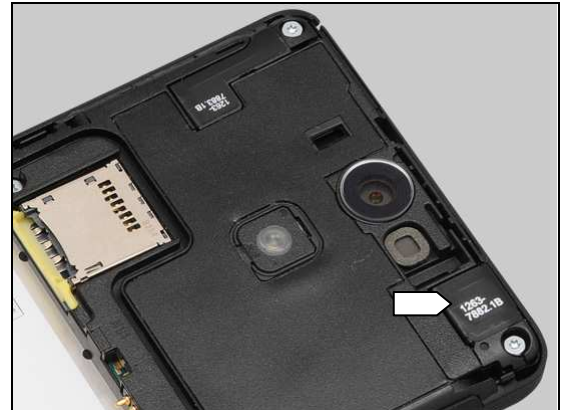


Problem Areas: Bluetooth and WLAN

1.12.2 Bluetooth or WLAN connection failure (LT25c Specific)

Check:

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



Action:

If the antenna is damaged – replace the Cover Rear Assy.

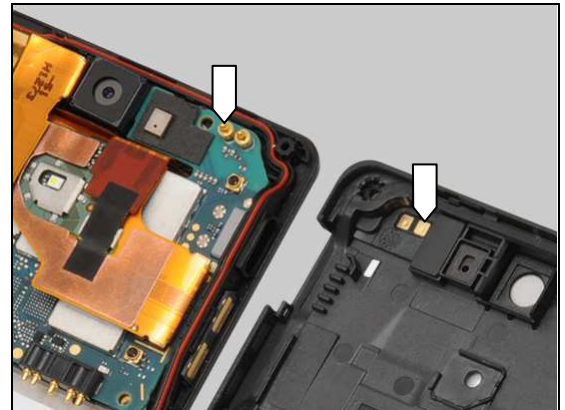


Check:

Inspect the WLAN and Bluetooth antenna contact pad on Cover Rear Assy and the contact pin on Main PBA.

Action:

1. If dirty or oxidized – clean the pad and pin.



2. If the contact pad is damaged – replace the Cover Rear Assy.

3. Replace Main PBA.



Problem Areas

1.13 NFC (LT25i Specific)

1.13.1 NFC malfunctions

Check:

Inspect the NFC antenna on the Cover Rear Assy.



Action:

If the antenna is damaged – replace the Cover Rear Assy.



Check:

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

Action:

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



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

3. Replace Main PBA.



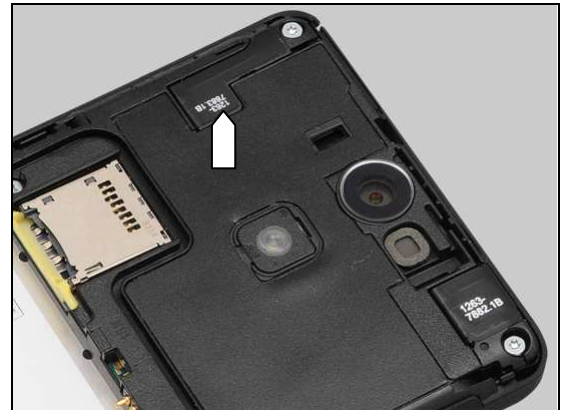
Problem Areas

1.14 GPS

1.14.1 GPS malfunctions

Check:

Inspect the GPS antenna on the Cover Rear Assy.



Action:

If the antenna is damaged – replace the Cover Rear Assy.

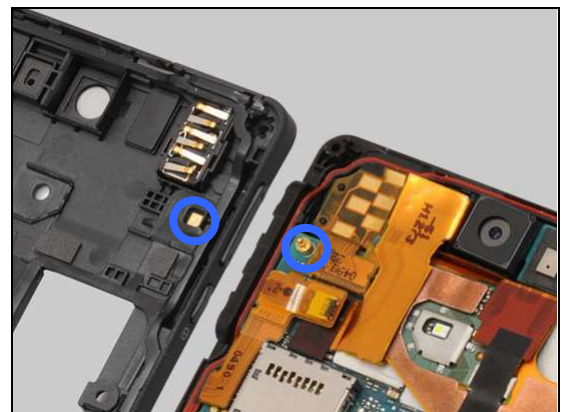


Check:

Inspect the GPS antenna contact pad on Cover Rear Assy and the contact pin on Main PBA.

Action:

1. If dirty or oxidized – clean the pad and pin.



2. If the contact pad is damaged – replace the Cover Rear Assy.

3. Replace Main PBA.



Problem Areas

1.15 Compass

1.15.1 Compass fails

Action:

Replace Main PBA.

Problem Areas

1.16 Accelerometer

1.16.1 Accelerometer test fails

Action:

Replace Main PBA.

Problem Areas

1.17 Gyroscope

1.17.1 Gyroscope test fails

Action:

Replace Main PBA.

Problem Areas

1.18 Ambient Light Sensor

1.18.1 Light Sensor malfunctions

Check:

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

Action:

1. If dirty – clean it.



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



Check:

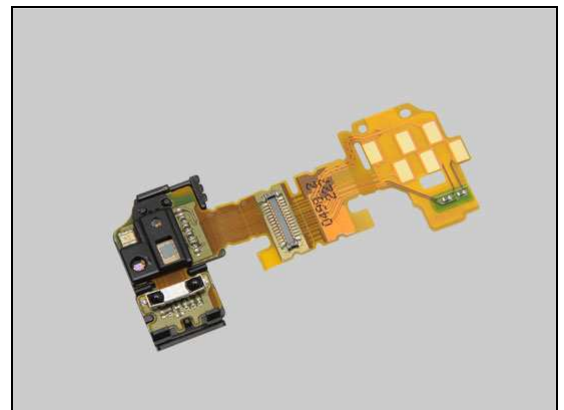
Inspect the light sensor on the Jack Flex PBA Assy.

Action:

1. If dirty or clogged – clean it.



2. If damaged – replace the Jack Flex PBA Assy.



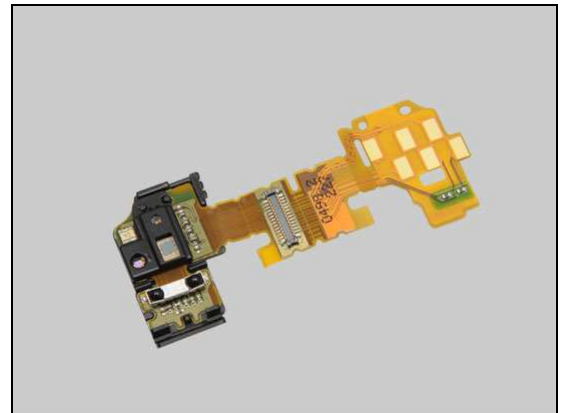
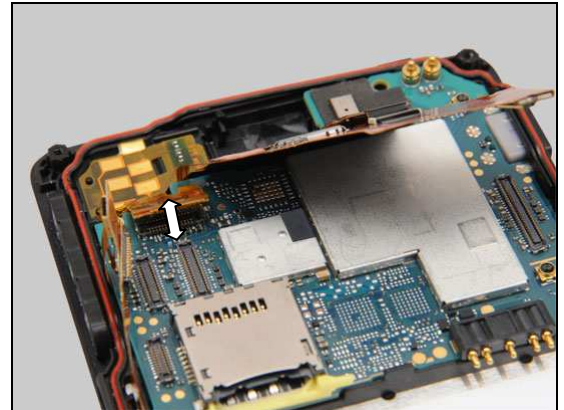
Problem Areas: Ambient Light Sensor

Check:

Inspect the BtB connector of the Jack Flex PBA Assy 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 or FPC of the Jack Flex PBA Assy is damaged – replace the Jack Flex PBA Assy.
4. Replace Main PBA.



Problem Areas

1.19 Proximity Switch

1.19.1 Proximity switch malfunctions

Check:

Inspect the proximity switch and the proximity sensor window area on the Touch/Display Front Cover Assy.

Action:

1. If dirty – clean it.

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

Check:

Inspect the proximity sensor and proximity switch on the Jack Flex PBA Assy.

Action:

If dirty or clogged – clean it.

Check:

Inspect the bracket of the proximity sensor.



Problem Areas: Proximity Switch

Action:

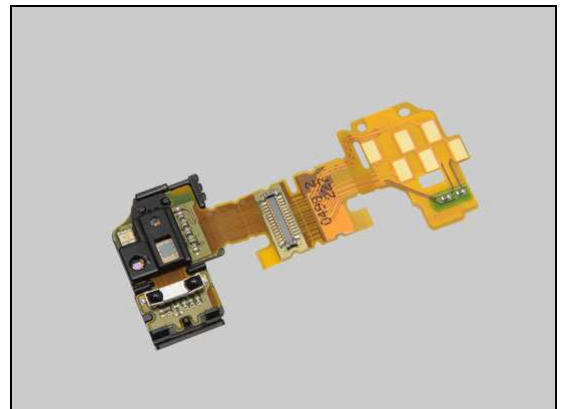
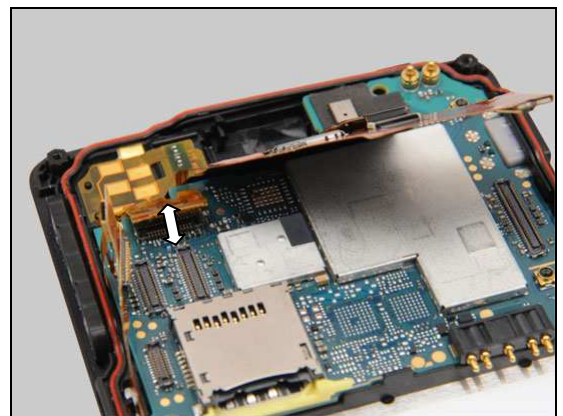
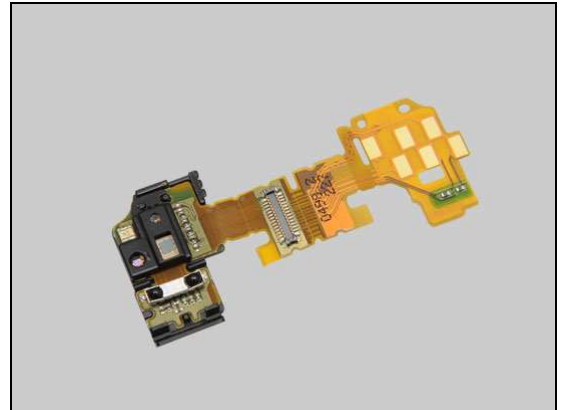
If the proximity sensor, proximity switch or the bracket of proximity sensor is damaged – replace the Jack Flex PBA Assy.

Check:

Inspect the BtB connector of Jack Flex PBA Assy 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 or FPC of the Jack Flex PBA Assy is damaged – replace the Jack Flex PBA Assy.
4. Replace Main PBA.



Problem Areas

1.20 Pressure Sensor

1.20.1 Pressure Sensor test fails

N/A. No pressure sensor on Main PBA.

Problem Areas

1.21 Water Resistance

1.21.1 Water Resistance fails (LT25i Specific)

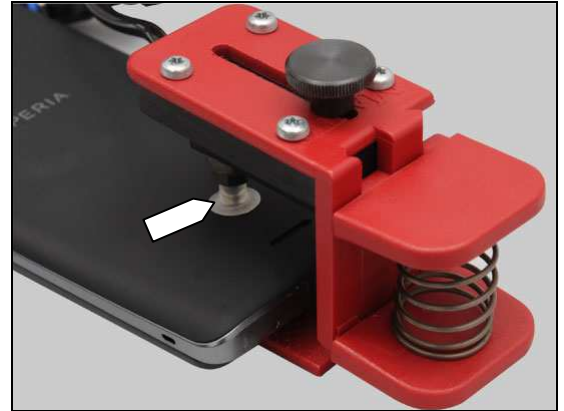
Check:

Inspect that the Vacuum Cup is correctly mounted to the ventilation hole.

Action:

If not properly mounted – reseal the ventilation hole with the Vacuum Cup.

Run the Water Resistance Test again!



Check:

Inspect that the primary microphone is properly sealed with tape.

Action:

If not properly sealed – reseal the primary microphone with tape.



Check:

Inspect that the secondary microphone is properly sealed with the Protection Film 2nd Mic (1266-0740).

Action:

1. If not properly sealed – reseal the secondary microphone with the Protection Film 2nd Mic (1266-0740).
2. If the Cushion 2nd Mic_WR (1262-0562) is dirty or damaged – replace it and do **not** peel off its protection film.

Run the Water Resistance Test again!



Check:

Inspect the equipment:

Check all tubing connections as arrows shown.

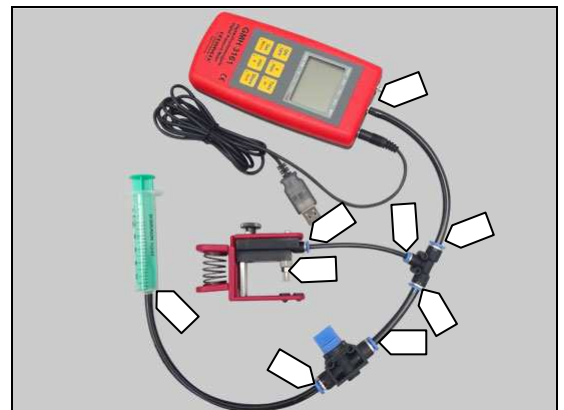
Check the Vacuum Cup sealing area and the syringe.

Check for dirt, cracks, damages.

Check direction on the valve.

Action:

1. If any bad connection – remount the equipment.
2. If damaged – replace the equipment.



Problem Areas: Water Resistance

3. If the arrow on the valve is not pointing to the tube connected to syringe – reconnect it in the correct direction.

Run the Water Resistance Test again!



Check:

Inspect the Cap Audio Jack.

Action:

1. If dirty – clean it.
2. If not properly assembled – disassemble and reassemble.



3. If the Cap Audio Jack is damaged – replace it.

Run the Water Resistance Test again!



Check:

Inspect the Cap Micro USB.

Action:

1. If dirty – clean it.
2. If not properly assembled – disassemble and reassemble.



Problem Areas: Water Resistance

3. If the Cap Micro USB is damaged – replace it.

Run the Water Resistance Test again!

Check:

Inspect the Cover Battery Assy.

Action:

1. If not properly assembled – disassemble and reassemble it.
2. If sealing gasket is dirty – clean it.

3. If the sealing gasket, water resistant sheet or hooks are damaged – replace the Cover Battery Assy.

Run the Water Resistance Test again!

Check:

Inspect the battery.

Action:

1. If not properly assembled – disassemble and reassemble it.



Problem Areas: Water Resistance

2. If the battery is damaged or out of shape – replace it.

Run the Water Resistance Test again!

Check:

Inspect the cavity of the battery cover sealing gasket on the Cover Rear Assy.

Action:

1. If dirty – clean it.



2. If the cavity is damaged – replace the Cover Rear Assy.

Run the Water Resistance Test again!



Check:

Inspect the Screw Len:3.2 Diam:1.4 M.

Action:

2012- If not properly assembled – reassemble them.

Do not reuse in case of disassembling!



Problem Areas: Water Resistance

2. If the Screw Len:3.2 Diam:1.4 M is damaged – replace it.

Run the Water Resistance Test again!

Check:

Inspect the Screw Len:5.0 Diam:1.4.

Action:

2012- If not properly assembled – reassemble them.

Do not reuse in case of disassembling!



2. If the Screw Len:5.0 Diam:1.4 is damaged – replace it.

Run the Water Resistance Test again!



Check:

Inspect the Ant Diversity Flex.

Problem Areas: Water Resistance

Action:

1. If suspect that the Ant Diversity Flex is not securely attached – replace it.
2. If inspect that the Ant Diversity Flex is damaged – replace it.

Run the Water Resistance Test again!

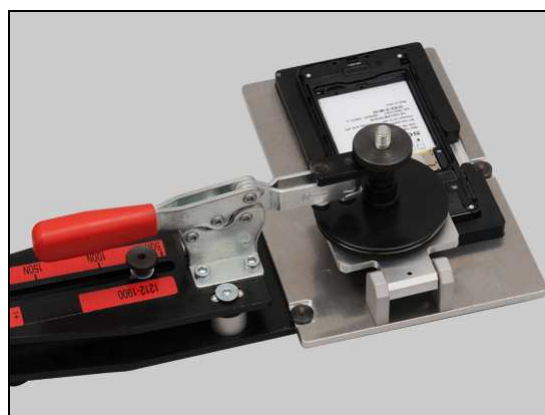


Action:

If suspect that the newly replaced Ant Diversity Flex is not securely attached – press it again with the Sub Antenna Press Insert and Pressure Tool.

This action is only applicable for newly replaced Ant Diversity Flex.

If this action failed, replace a new Ant Diversity Flex.



Run the Water Resistance Test again!

Check:

Inspect the Main Gasket.

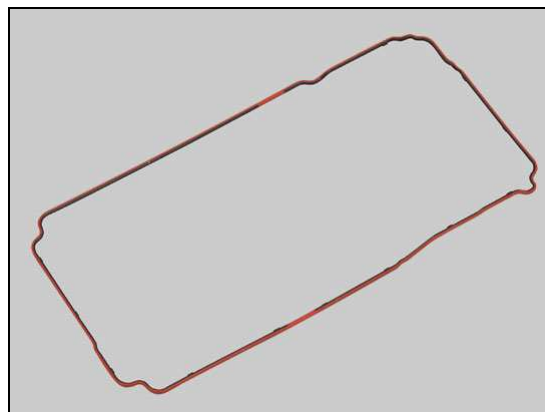
Action:

1. If dirty – clean it.
2. If not properly assembled – disassemble and reassemble it.



3. If the Main Gasket is damaged – replace it.

Run the Water Resistance Test again!



Problem Areas: Water Resistance

Check:

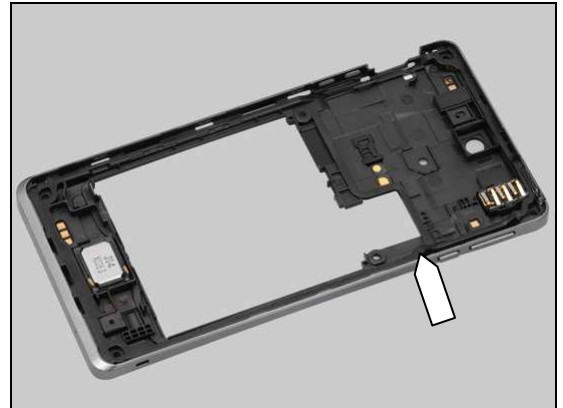
Inspect the hooks and main gasket contact surface of the Cover Rear Assy.

Action:

1. If contact surface is dirty – clean it.

2. If the hooks or contact surface is damaged – replace the Cover Rear Assy.

Run the Water Resistance Test again!



Check:

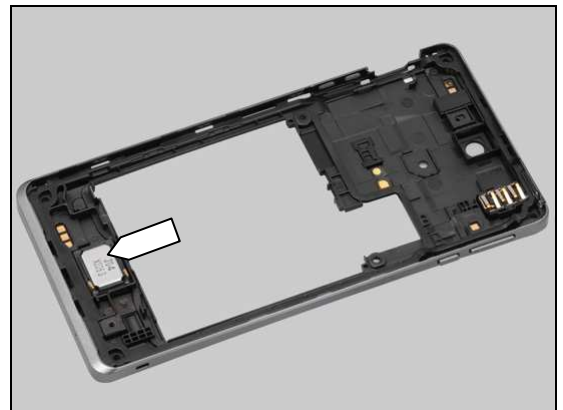
Inspect the Loudspeaker.

Action:

1. If suspect that the Loudspeaker is not securely attached – replace it.

2. If inspect that the Loudspeaker is damaged – replace it.

Run the Water Resistance Test again!



Problem Areas: Water Resistance

Action:

If suspect that newly replaced Loudspeaker is not securely attached – press it again with the Press Tool Loudspeaker.

This action is only applicable for newly replaced Loudspeaker.

Be careful! The Loudspeaker can be pressed only twice.

Run the Water Resistance Test again!



Action:

If above inspections and actions for the Cover Rear Assy are failed – replace the Cover Rear Assy.

Run the Water Resistance Test again!



Check:

Inspect the main gasket cavity of the Touch/Display Front Cover Assy.

Action:

1. If dirty – clean it.



2. If the cavity is damaged – replace the Touch/Display Front Cover Assy.

Run the Water Resistance Test again!



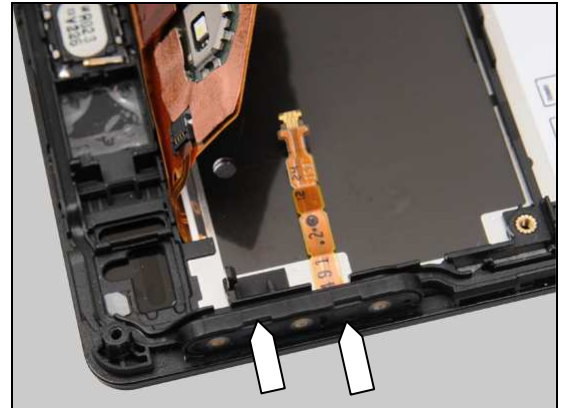
Problem Areas: Water Resistance

Check:

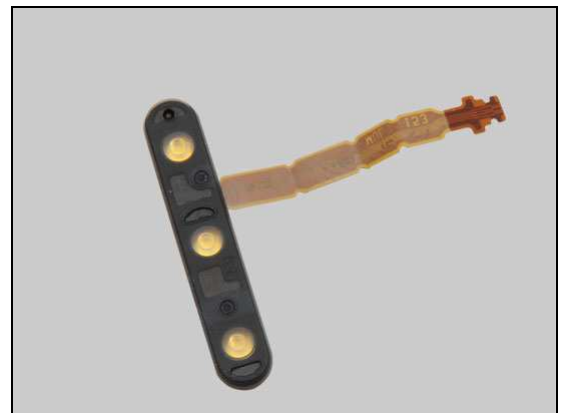
Inspect the Side Key Flex PBA Frame Assy_WR and its cavity.

Action:

1. If dirty – clean them.
2. If the Side Key Flex PBA Frame Assy_WR is not properly assembled – disassemble and reassemble it.



3. If the Side Key Flex PBA Frame Assy_WR is damaged – replace it.



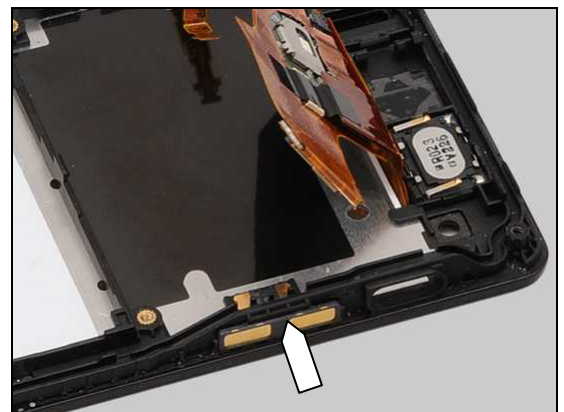
4. If the cavity is damaged – replace the Touch/Display Front Cover Assy.

Run the Water Resistance Test again!



Check:

Inspect the Charge Pad.



Problem Areas: Water Resistance

Action:

1. If suspect that the Charge Pad is not securely attached – replace it.
2. If inspect that the Charge Pad is damaged – replace it.

Run the Water Resistance Test again!



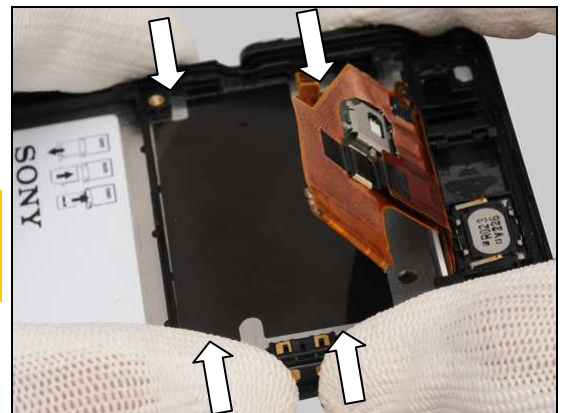
Action:

If suspect that the newly replaced Charge Pad is not securely attached – press it again.

This action is only applicable for newly replaced Charge Pad.

If this action failed, replace a new Charge Pad.

Run the Water Resistance Test again!



Check:

Inspect the Ear Speaker.



Action:

1. If suspect that the Ear Speaker is not securely attached – replace it.
2. If inspect that the Ear Speaker is damaged – replace it.

Run the Water Resistance Test again!



Problem Areas: Water Resistance

Action:

If suspect that newly replaced Ear Speaker is not securely attached – press it again with the Press Tool Earspeaker.

This action is only applicable for newly replaced Ear Speaker.

Be careful! The Ear Speaker can be pressed only twice.

Run the Water Resistance Test again!



Action:

If above inspections and actions for the Touch/Display Front Cover Assy are failed – replace the Touch/Display Front Cover Assy.

Run the Water Resistance Test again!



If the test fails, handle the unit according to your local instruction.

1.21.2 Water Resistance fails (LT25c Specific)

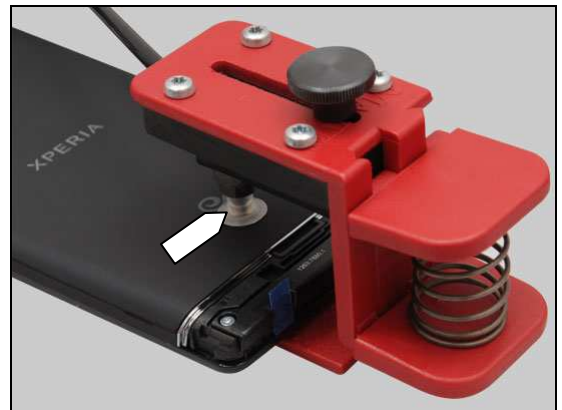
Check:

Inspect that the Vacuum Cup is correctly mounted to the ventilation hole.

Action:

If not properly mounted – reseal the ventilation hole with the Vacuum Cup.

Run the Water Resistance Test again!

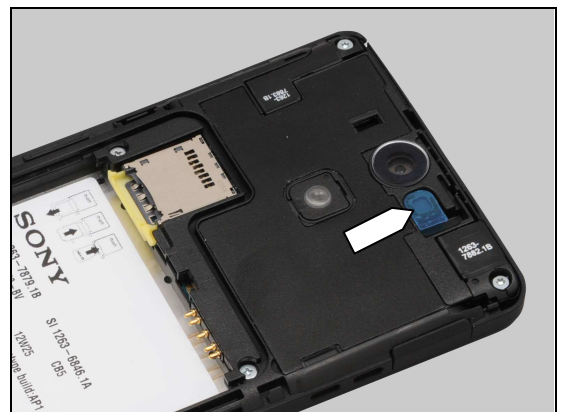


Check:

Inspect that the secondary microphone is properly sealed with the Protection Film 2nd Mic (1266-0740).

Action:

1. If not properly sealed – reseal the secondary microphone with the Protection Film 2nd Mic (1266-0740).
2. If the Cushion 2nd Mic_WR (1262-0562) is dirty or damaged – replace it and do **not** peel off its protection film.



Problem Areas: Water Resistance

Check:

Inspect that the primary microphone is properly sealed with the Protection Film 1st Mic (1269-1565).

Action:

1. If not properly sealed – reseal the primary microphone with the Protection Film 1st Mic (1269-1565).
2. If the Cushion Sheet 1st Mic_WR (1262-0572) is damaged – replace it and do **not** peel off its protection film.

Run the Water Resistance Test again!

Check:

Inspect the equipment:

Check all tubing connections as arrows shown.

Check the Vacuum Cup sealing area and the syringe.

Check for dirt, cracks, damages.

Check direction on the valve.

Action:

1. If any bad connection – remount the equipment.
2. If damaged – replace the equipment.

3. If the arrow on the valve is not pointing to the tube connected to syringe – reconnect it in the correct direction.

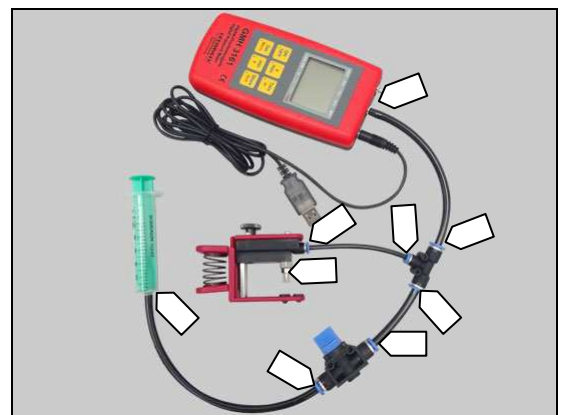
Run the Water Resistance Test again!

Check:

Inspect the Cap Audio Jack.

Action:

1. If dirty – clean it.
2. If not properly assembled – disassemble and reassemble it.



Problem Areas: Water Resistance

3. If the Cap Audio Jack is damaged – replace it.

Run the Water Resistance Test again!

Check:

Inspect the Cap Micro USB.

Action:

1. If dirty – clean it.
2. If not properly assembled – disassemble and reassemble it.



3. If the Cap Micro USB is damaged – replace it.

Run the Water Resistance Test again!



Check:

Inspect the Cover Battery Assy.

Action:

1. If not properly assembled – disassemble and reassemble it.
2. If the sealing gasket is dirty – clean it.



Problem Areas: Water Resistance

3. If the sealing gasket, water resistant sheet or hooks are damaged – replace the Cover Battery Assy.

Run the Water Resistance Test again!

Check:

Inspect the battery.

Action:

1. If not properly assembled – disassemble and reassemble it.



2. If the battery is damaged or out of shape – replace it.

Run the Water Resistance Test again!



Check:

Inspect the cavity of the battery cover sealing gasket on the Cover Rear Assy.

Action:

1. If dirty – clean it.



Problem Areas: Water Resistance

2. If the cavity is damaged – replace the Cover Rear Assy.

Run the Water Resistance Test again!

Check:

Inspect the Screw Len:3.2 Diam:1.4 M.

Action:

2012- If not properly assembled – reassemble them.

Do not reuse in case of disassembling!



2. If the Screw Len:3.2 Diam:1.4 M is damaged – replace it.

Run the Water Resistance Test again!



Check:

Inspect the Screw Len:5.0 Diam:1.4.

Action:

2012- If not properly assembled – reassemble them.

Do not reuse in case of disassembling!



Problem Areas: Water Resistance

2. If the Screw Len:5.0 Diam:1.4 is damaged – replace it.

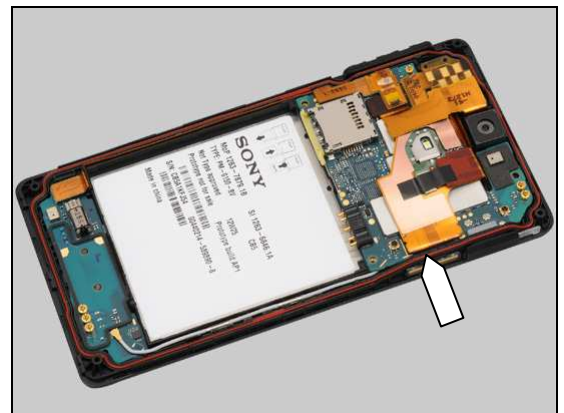
Run the Water Resistance Test again!

Check:

Inspect the Main Gasket.

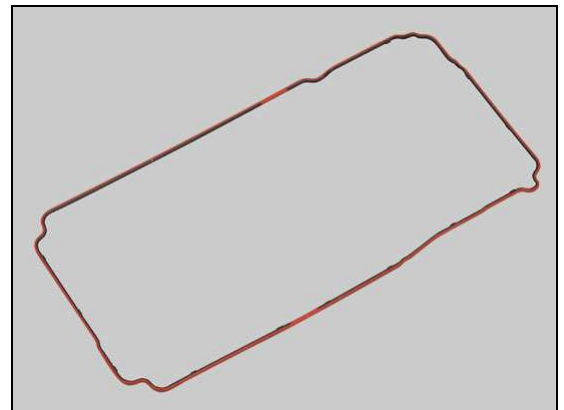
Action:

1. If dirty – clean it.
2. If not properly assembled – disassemble and reassemble it.



3. If the Main Gasket is damaged – replace it.

Run the Water Resistance Test again!



Check:

Inspect the hooks and main gasket contact surface of the Cover Rear Assy.

Action:

1. If the contact surface is dirty – clean it.



Problem Areas: Water Resistance

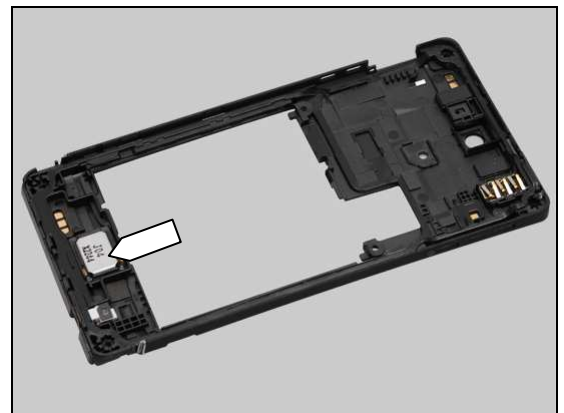
2. If the hooks or contact surface is damaged – replace the Cover Rear Assy.

Run the Water Resistance Test again!



Check:

Inspect the Loudspeaker.



Action:

1. If suspect that the Loudspeaker is not securely attached – replace it.
2. If inspect that the Loudspeaker is damaged – replace it.

Run the Water Resistance Test again!



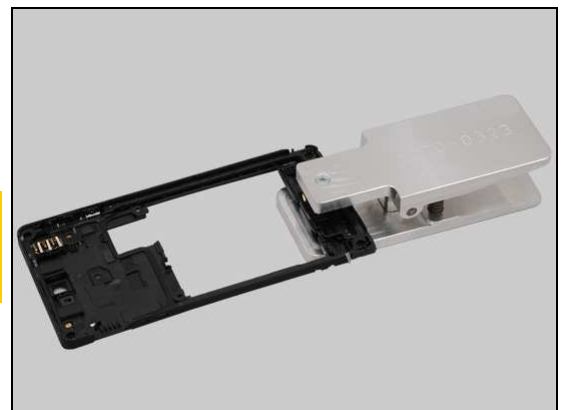
Action:

If suspect that newly replaced Loudspeaker is not securely attached – press it again with the Press Tool Loudspeaker.

This action is only applicable for newly replaced Loudspeaker.

Be careful! The Loudspeaker can be pressed only twice.

Run the Water Resistance Test again!



Problem Areas: Water Resistance

Action:

If above inspections and actions for the Cover Rear Assy are failed – replace the Cover Rear Assy.

Run the Water Resistance Test again!



Check:

Inspect the main gasket cavity of the Touch/Display Front Cover Assy.

Action:

1. If dirty – clean it.



2. If the cavity is damaged – replace the Touch/Display Front Cover Assy.

Run the Water Resistance Test again!



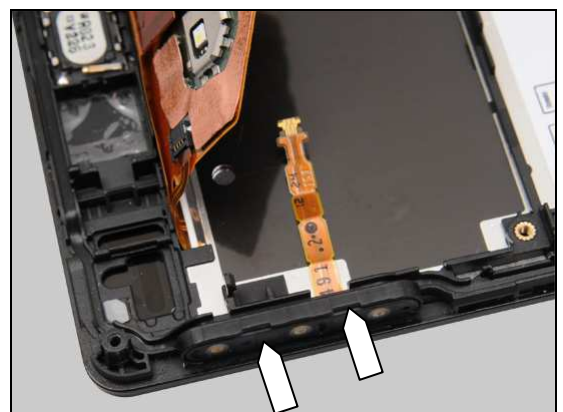
Check:

Inspect the Side Key Flex PBA Frame Assy_WR and its cavity.

Action:

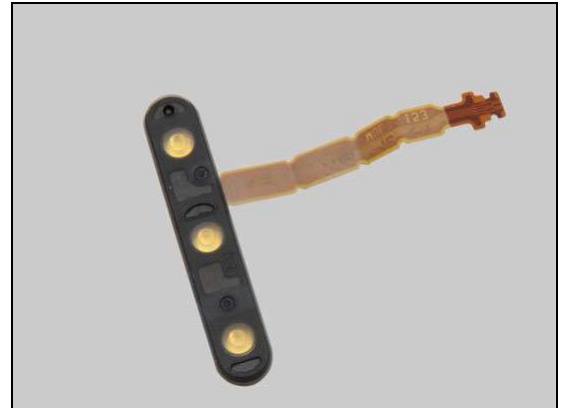
1. If dirty – clean them.

2. If the Side Key Flex PBA Frame Assy_WR is not properly assembled – disassemble and reassemble it.



Problem Areas: Water Resistance

3. If the Side Key Flex PBA Frame Assy_WR is damaged – replace it.

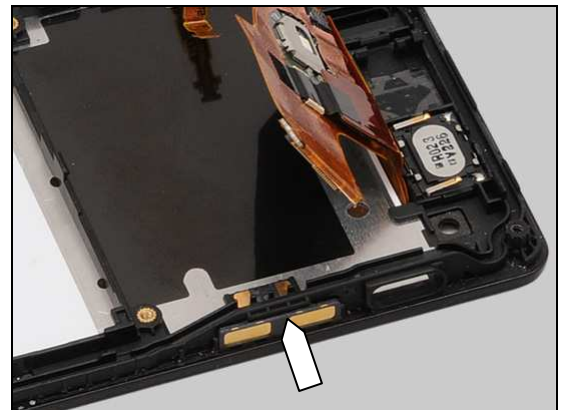


4. If the cavity is damaged – replace the Touch/Display Front Cover Assy.



Run the Water Resistance Test again!

Check:
Inspect the Charge Pad.



Action:

1. If suspect that the Charge Pad is not securely attached – replace it.
2. If inspect that the Charge Pad is damaged – replace it.

Run the Water Resistance Test again!



Problem Areas: Water Resistance

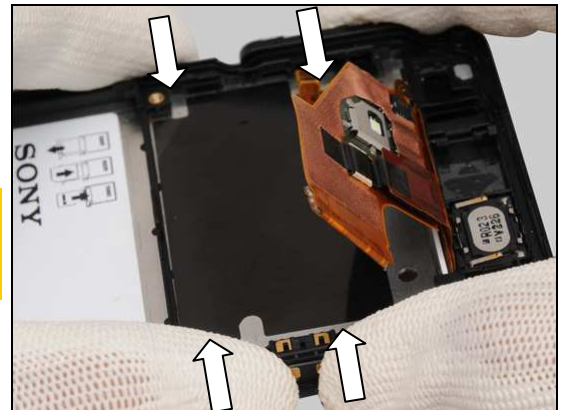
Action:

If suspect that the newly replaced Charge Pad is not securely attached – press it again.

This action is only applicable for newly replaced Charge Pad.

If this action failed, replace a new Charge Pad.

Run the Water Resistance Test again!



Check:

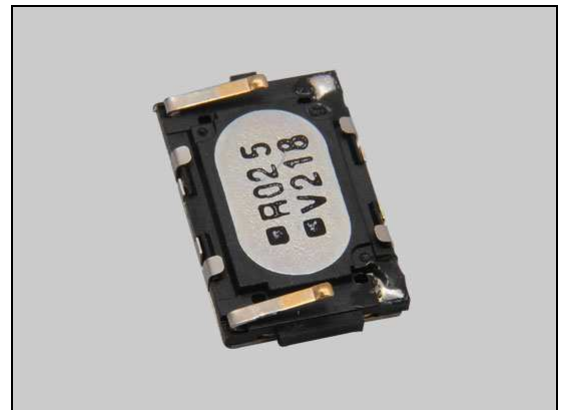
Inspect the Ear Speaker.



Action:

1. If suspect that the Ear Speaker is not securely attached – replace it.
2. If inspect that the Ear Speaker is damaged – replace it.

Run the Water Resistance Test again!



Action:

If suspect that newly replaced Ear Speaker is not securely attached – press it again with the Press Tool Earspeaker.

This action is only applicable for newly replaced Ear Speaker.

Be careful! The Ear Speaker can be pressed only twice.

Run the Water Resistance Test again!



Problem Areas: Water Resistance

Action:

If above inspections and actions for the Touch/Display Front Cover Assy are failed – replace the Touch/Display Front Cover Assy.

Run the Water Resistance Test again!

If the test fails, handle the unit according to your local instruction.



Problem Areas

1.22 Real Time Clock

1.22.1 Real time clock test fails

Action:

Replace Main PBA.

Problem Areas

1.23 Total call time

1.23.1 Total call time fails

Action:

Replace Main PBA.

Problem Areas

1.24 External Memory

1.24.1 Memory Card not detected

Check:

Inspect that if a memory card is properly inserted.

Action:

If not properly inserted – insert the memory card correctly.



Check:

Inspect the memory card holder on Main PBA.

Action:

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



Problem Areas

1.25 Security

1.25.1 Security fails

Action:

Replace Main PBA.

Problem Areas

1.26 FM Radio

1.26.1 No/Poor FM Radio reception

Check:

Inspect the external port of the Audio Jack.

Action:

If dirty or oxidized – clean it.

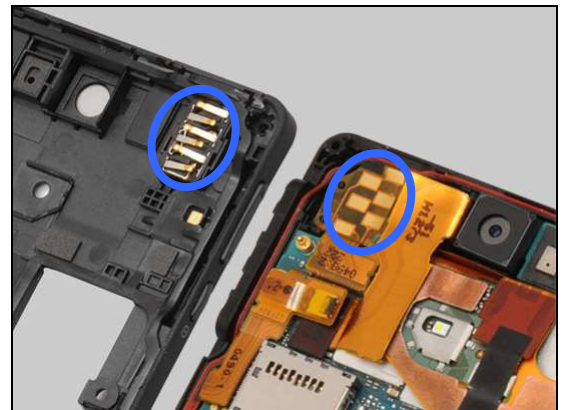


Check:

Inspect the contact pins on Audio Jack and the contact pads on the Jack Flex PBA Assy.

Action:

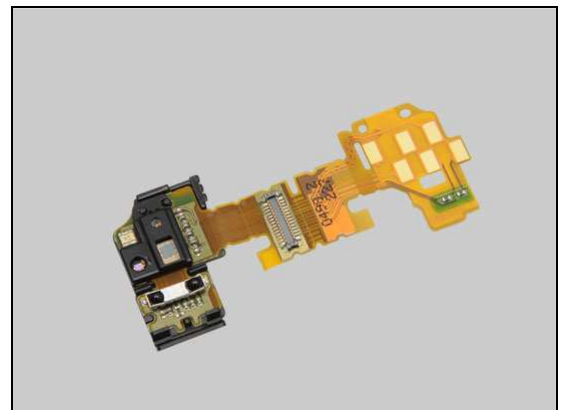
1. If dirty or oxidized – clean them.



2. If the contact pins of the Audio Jack are damaged – replace the Audio Jack.



3. If the contact pads of Jack Flex PBA Assy are damaged – replace the Jack Flex PBA Assy.



Problem Areas: FM Radio

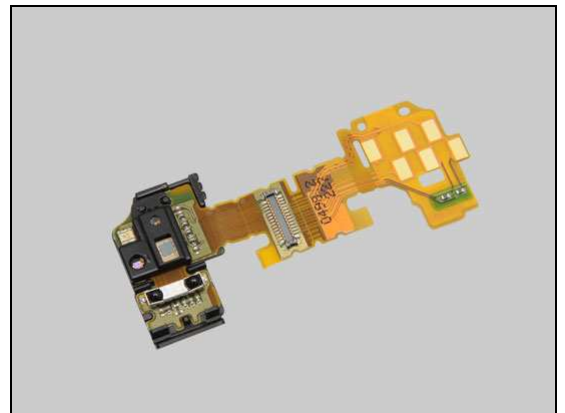
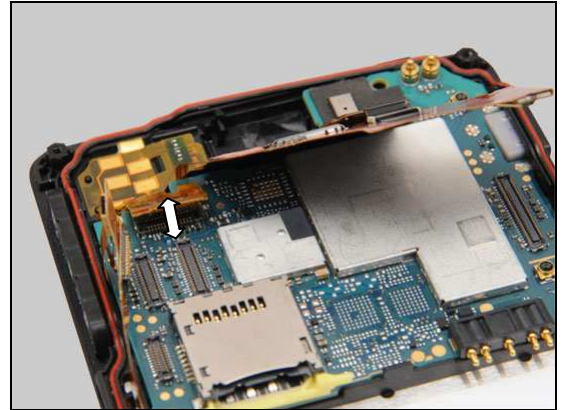
Check:

Inspect the BtB connector of Jack Flex PBA Assy 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 or FPC of Jack Flex PBA Assy is damaged – replace the Jack Flex PBA Assy.
4. Replace Main PBA.



Problem Areas

1.27 Battery Health test

1.27.1 Battery Health test fails

Action:

Replace the battery.

Problem Areas

1.28 Flip Slider Counter

1.28.1 Flip Slider Counter fails

Action:

N/A. Not slider phone.

Problem Areas

1.29 Verify Certificates

1.29.1 Verify Certificates fails

Action:

Replace Main PBA.

Problem Areas

1.30 IrDA Test

1.30.1 IrDA test fails

Action:

N/A. No IrDA functionality in the phone.

Problem Areas

1.31 TV-Out Test

1.31.1 TV-Out test fails

Check:

Inspect the USB connector.

Action:

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



Problem Areas

1.32 Network & Signal

1.32.1 No/Poor signal (LT25i Specific)

Check:

Inspect the main antenna on the Cover Rear Assy.

Action:

If the main antenna is damaged – replace the Cover Rear Assy.

Check:

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

Action:

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

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



Problem Areas: Network & Signal

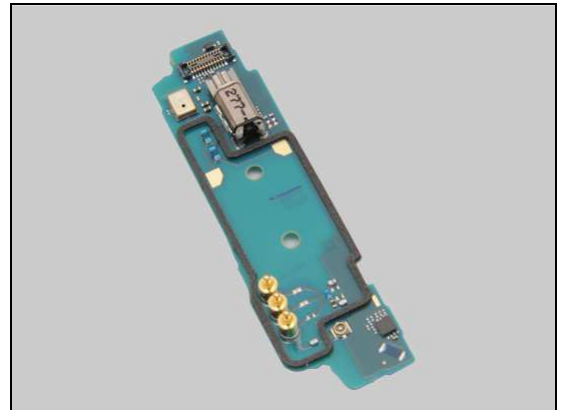
3. If the contact pins on Sub PBA Assy are damaged – replace the Sub PBA Assy.

Check:

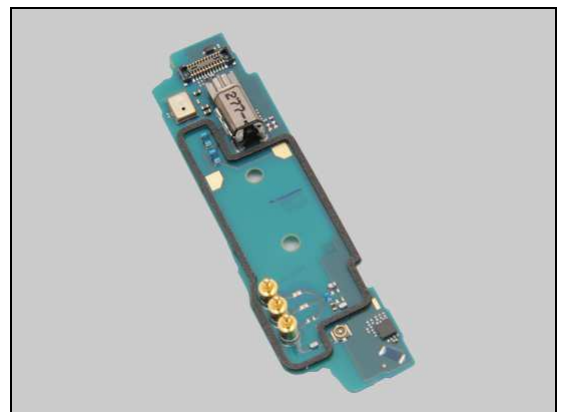
Inspect the connector of Cable RF to Sub PBA Assy.

Action:

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



2. If the connector on Sub PBA Assy is damaged – replace the Sub PBA Assy.

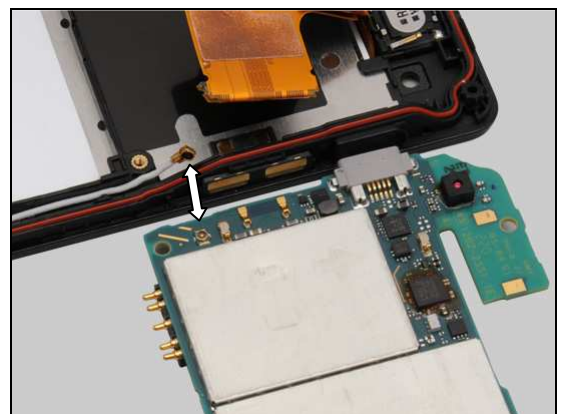


Check:

Inspect the connector of Cable RF to Main PBA.

Action:

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



Problem Areas: Network & Signal

2. If the Cable RF or either of the both connectors is damaged – replace the Cable RF.
3. Replace Main PBA.



Check:

Inspect the contact pins on Main PBA and contact pads on Ant Diversity Flex.

Action:

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



2. If the contact pads are damaged – replace the Ant Diversity Flex.
3. Replace Main PBA.



1.32.2 No/Poor signal (LT25c Specific)

Check:

Inspect the main antenna on the Cover Rear Assy.



Problem Areas: Network & Signal

Action:

If the main antenna is damaged – replace the Cover Rear Assy.

Check:

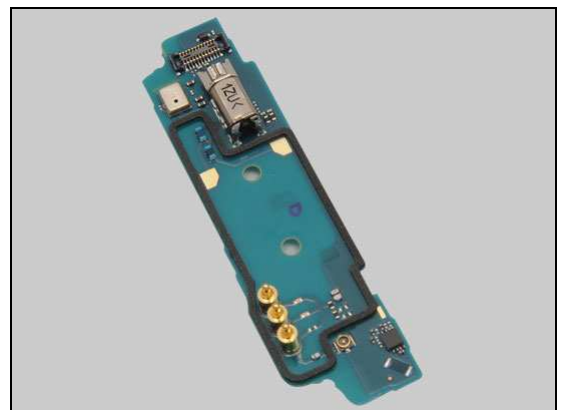
Inspect the main antenna contact pins on Sub PBA Assy and contact pads on the Cover Rear Assy.

Action:

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

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

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



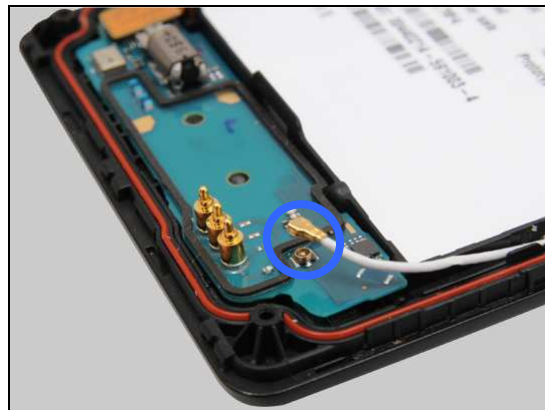
Problem Areas: Network & Signal

Check:

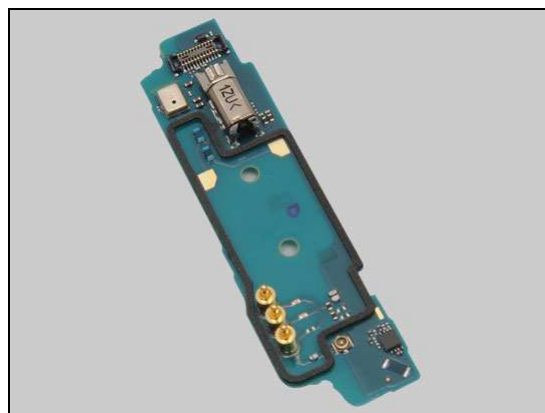
Inspect the connector of Cable RF to Sub PBA Assy.

Action:

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



2. If the connector on the Sub PBA Assy is damaged – replace the Sub PBA Assy.

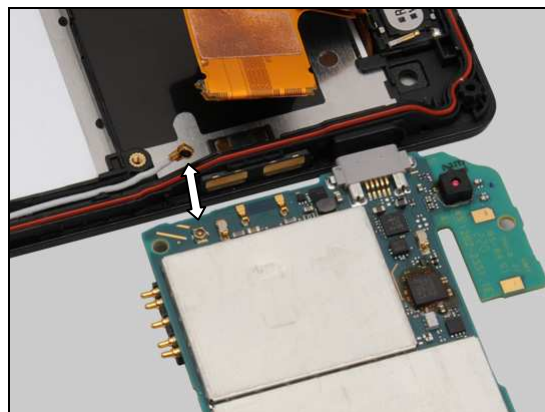


Check:

Inspect the connector of Cable RF to Main PBA.

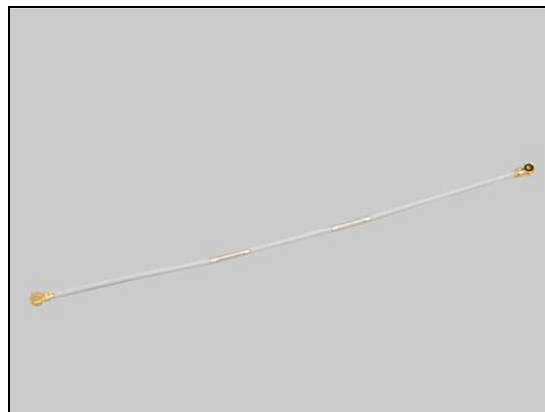
Action:

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



2. If the Cable RF or either of the both connectors is damaged – replace the Cable RF.

3. Replace Main PBA.



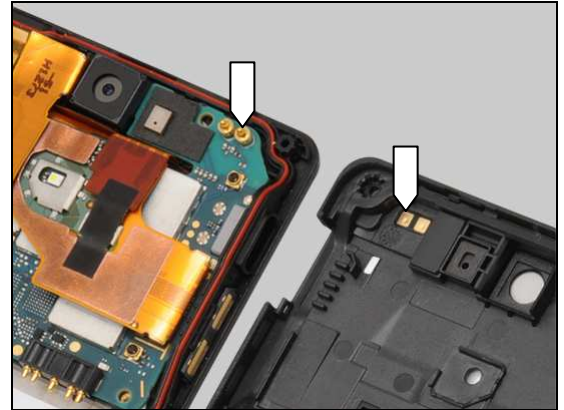
Problem Areas: Network & Signal

Check:

Inspect the contact pin on Main PBA and contact pad on Cover Rear Assy.

Action:

1. If dirty or oxidized – clean the pin and pad.
2. If the contact pad is damaged – replace Cover Rear Assy.
3. Replace Main PBA.



Problem Areas

1.33 SIM

1.33.1 SIM not detected

Check:

Inspect the external port of the SIM card holder and check if a SIM card can be properly inserted.

Action:

If dirty or clogged – clean the external port.



Check:

Inspect the Card Connector Tray.

Action:

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



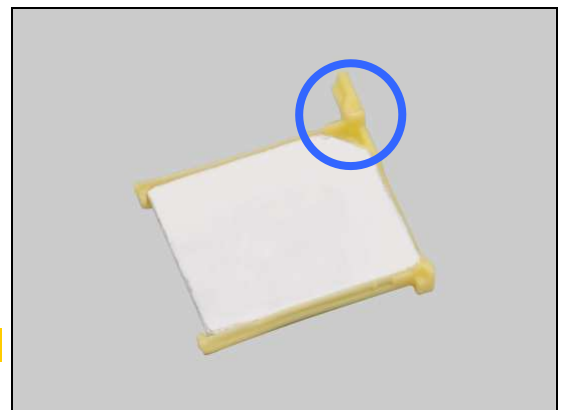
Check:

Check whether the SIM card is correctly assembled onto the Card Connector Tray and into its holder.

Action:

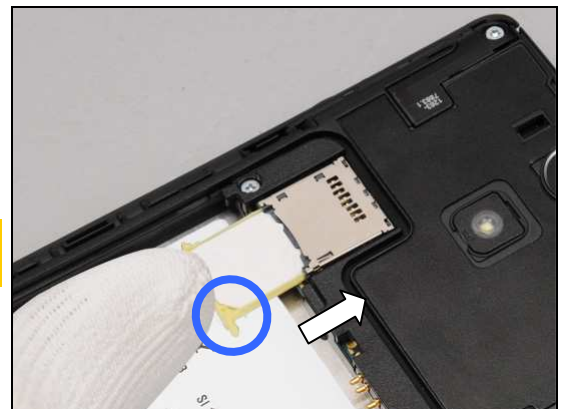
- 2012- If not properly assembled – disassemble and reassemble it.

Note the orientation of the SIM card to be assembled!



2. Insert the Card Connector Tray into the holder.

Note the orientation of the Card Connector Tray to be assembled!



Problem Areas: SIM

Check:

Inspect the SIM card holder on Main PBA.

Action:

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



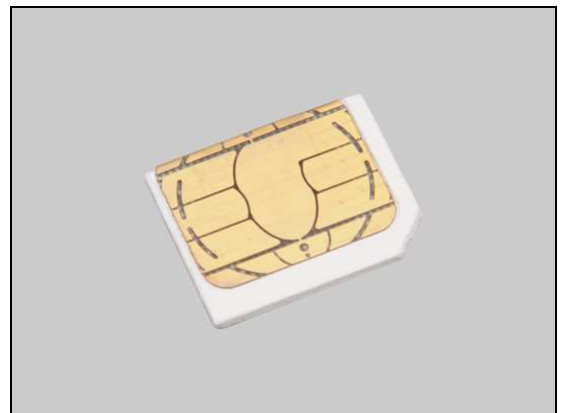
1.33.2 Incorrect SIM indicated

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 Main PBA.



Problem Areas

1.34 Charging

1.34.1 Battery will not charge by USB connector

Check:

Inspect the contact pads of the battery.

Action:

1. If dirty or oxidized – clean the pads.
2. If the contact pads are 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.
3. If the battery contact pins are damaged – replace Main PBA.



Check:

Inspect the USB connector.

Action:

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



1.34.2 Battery will not charge by Charge Pad

Check:

Inspect the contact pads of the battery.

Action:

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



Problem Areas: Charging

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



Check:

Inspect the external port of the Charge Pad.

Action:

If dirty or oxidized – clean it.

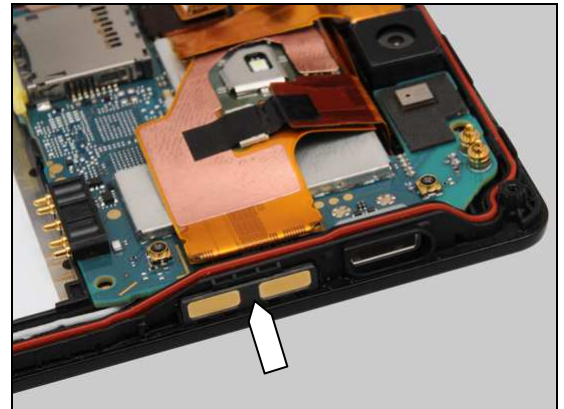


Check:

Inspect the Charge Pad.

Action:

1. If not properly assembled – replace a new Charge Pad.



2. If the Charge Pad is damaged – replace it.



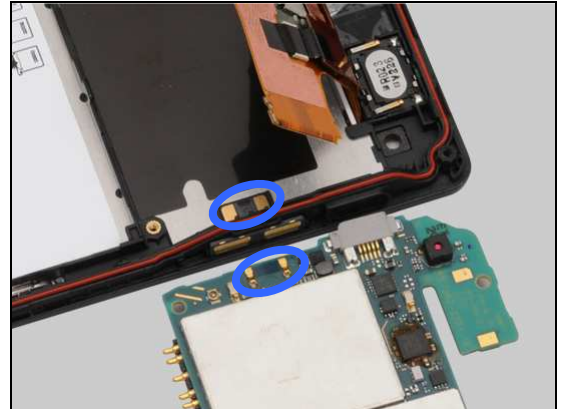
Problem Areas: Charging

Check:

Inspect the contact pins on Main PBA and pads on Charge Pad.

Action:

1. If dirty or oxidized – clean the pins and pads.
2. If the contact pads of Charge Pad are damaged – replace the Charge Pad.
3. Replace Main PBA.



Problem Areas

1.35 HandsFree by Wire

1.35.1 Connection to portable Handsfree fails

Check:

Inspect the external port of the Audio Jack.

Action:

If dirty or oxidized – clean the connector.

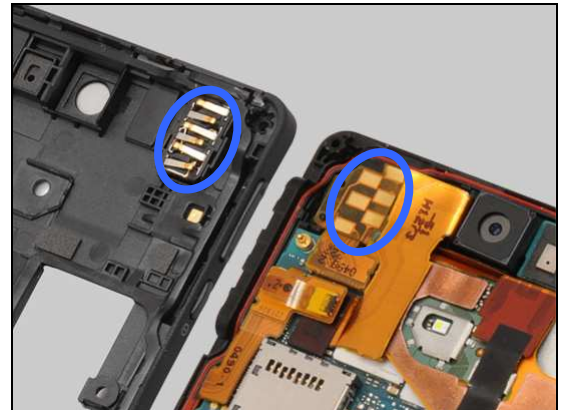


Check:

Inspect the contact pins on the Audio Jack and the contact pads on the Jack Flex PBA Assy.

Action:

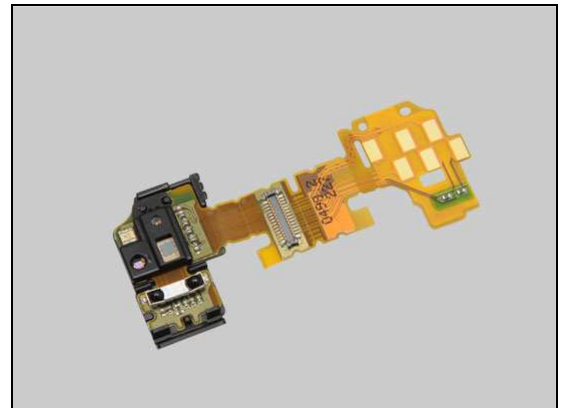
1. If dirty or oxidized – clean the pins and pads.



2. If the contact pins on the Audio Jack are damaged – replace the Audio Jack.



3. If the contact pads of the Jack Flex PBA Assy are damaged – replace the Jack Flex PBA Assy.



Problem Areas: HandsFree by Wire

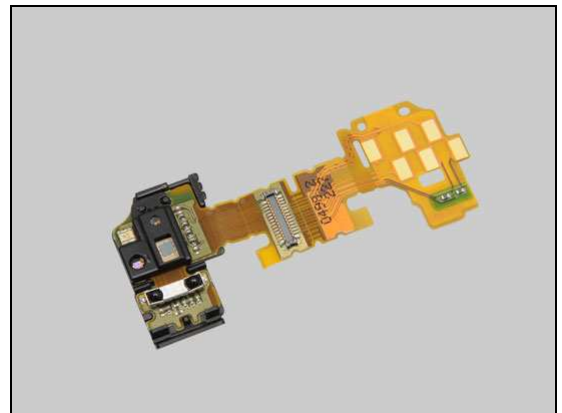
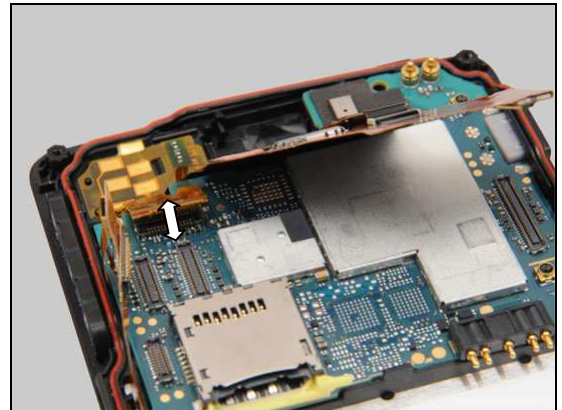
Check:

Inspect the BtB connector of the Jack Flex PBA Assy 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 or FPC of the Jack Flex PBA Assy is damaged – replace the Jack Flex PBA Assy.
4. Replace Main PBA.



Problem Areas

1.36 Data Communication

1.36.1 Data transfer via System Connector fails

Check:

Inspect the USB connector.

Action:

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



2 Revision History

Rev.	Date	Changes / Comments
1	2012-Nov-16	Initial release
2	2012-Dec-26	Update chapter 1.11 for Sheet Shield Noncell
3	2013-Feb-25	Add " and LCD reset" in the notice after contents

Test Instructions

- mechanical -



Xperia™ V
LT25i



Xperia™ VC
LT25c

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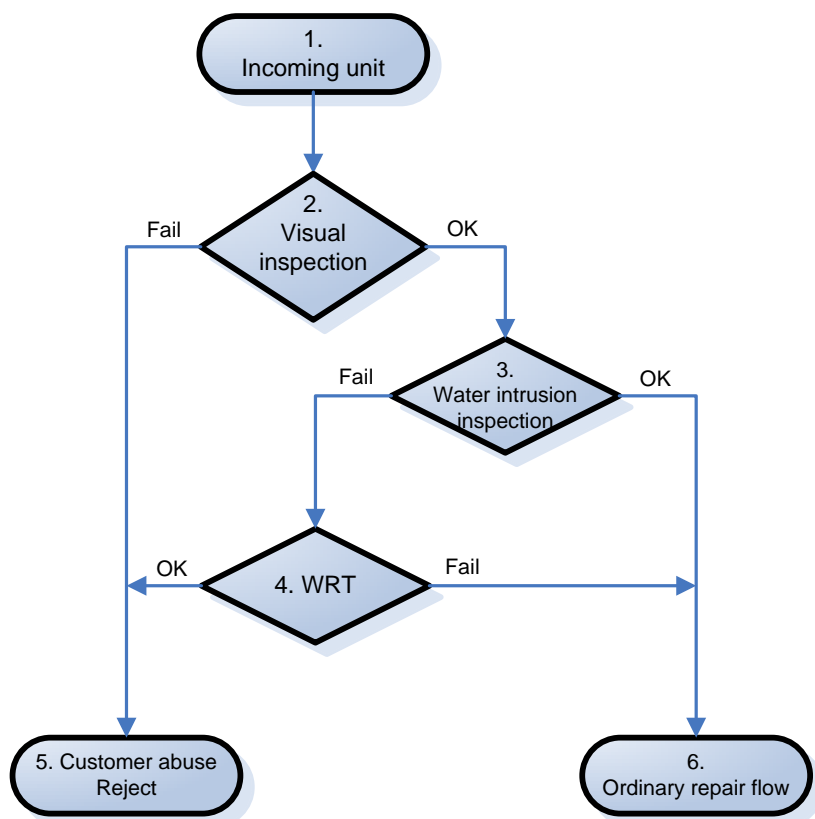
For general information about test procedures, refer to

1220-1333: Generic Repair Manual – mechanical

If there are no special indications of 'LT25i Specific' or 'LT25c Specific', LT25i and LT25c share the same test instruction as common sections, whose pictures are taken with LT25c.

1 Pre-Test Preparations

1.1 Process flow – Water Resistance Test (WRT) for incoming units



This process flow is a complement to the process flow in the *1220-1333 Generic Repair Manual*.

1. Unpack and handle the unit according to your local instruction and check of warranty.
2. Try to determine whether the unit has been exposed to abuse by doing a close general visual inspection, according to chapter 4 *1220-1333 Generic Repair Manual*.
3. General condition inspection of the sealing at the Cap Audio Jack, Cap Micro USB and Cover Battery Assy. Check the Liquid Indicator. This check up will give you an indication whether the unit has been in contact with liquid.
4. Perform a Water Resistance Test to verify if the unit is water resistance or not.
5. The unit must be rejected if the visual inspection or the Water Resistance Test shows any kind of abuse of the unit.
6. Otherwise shall the unit be handled in the ordinary repair flow.

Pre-Test Preparations

1.2 Hardware

1.2.1 Water indicator inspection (LT25i Specific)

Before starting any tests, make a general inspection of the unit. If the Liquid Indicator has been affected or the unit indicates any kind of water damaged, perform the WRT test to confirm if the unit still is water resistance, see section 1.1

The indicator is located as shown in these pictures after the Cover Battery Assy is removed.



The indicator is located as shown in these pictures after the Cap Audio Jack is opened.

If Liquid Indicator are affected (red color) **and** the WRT test proves that the unit is water resistance then handle the phone according to your local directives.

If the Liquid Indicator isn't affected or the WRT test prove that the unit **isn't** water resistance, proceed to the 'Pre-Test Preparation' below.



1.2.2 Water indicator inspection (LT25c Specific)

Before starting any tests, make a general inspection of the unit. If the Liquid Indicator has been affected or the unit indicates any kind of water damaged, perform the WRT test to confirm if the unit still is water resistance, see section 1.1

The indicator is located as shown in these pictures after the Cover Battery Assy is removed.



The indicator is located as shown in these pictures after the Cap Audio Jack is opened.

If Liquid Indicator are affected (red color) **and** the WRT test proves that the unit is water resistance then handle the phone according to your local directives.

If the Liquid Indicator isn't affected or the WRT test prove that the unit **isn't** water resistance, proceed to the 'Pre-Test Preparation' below.



Pre-Test Preparations

1.2.3 Water Resistance (LT25i Specific)

It is mandatory to verify that the unit is water resistance if you disassemble the unit or suspect abuse, (i.e. not for No Trouble found or Software problems).

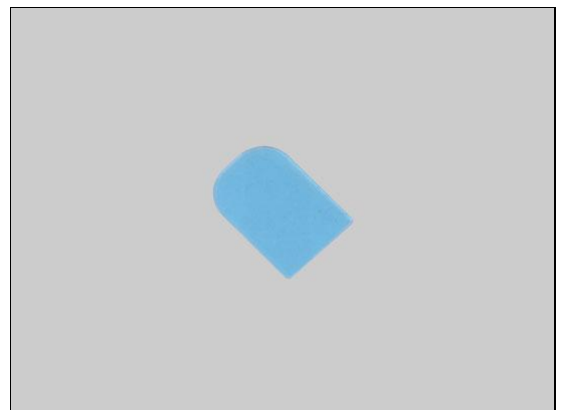
The test is done with battery and Cover Battery Assy assembled. This test must run again, once replace the Cover Battery Assy!

This test is done with air, therefore you have to seal the two microphones, and make sure that Cover Battery Assy, Cap Audio Jack and Cap Micro USB are assembled well.

Seal the primary microphone hole with tape as shown.



Seal the secondary microphone hole with Protection Film 2nd Mic (1266-0740).



If the Cushion 2nd Mic_WR (1262-0562) is dirty or damaged, which lead to bad sealing, replace a new Cushion 2nd Mic_WR (1262-0562) and use its protection film as sealing film.

Do not peel off the protection film after replacement!



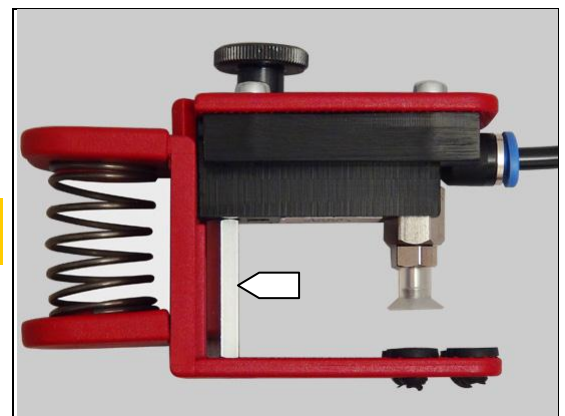
Pre-Test Preparations

Seal the secondary microphone hole as shown.



Pillar for WRT 23mm, part number is 1264-8565.

Use the 23mm Pillar (1264-8565: Pillar for WRT 23mm) for LT25i instead of the original 25mm Pilliar.

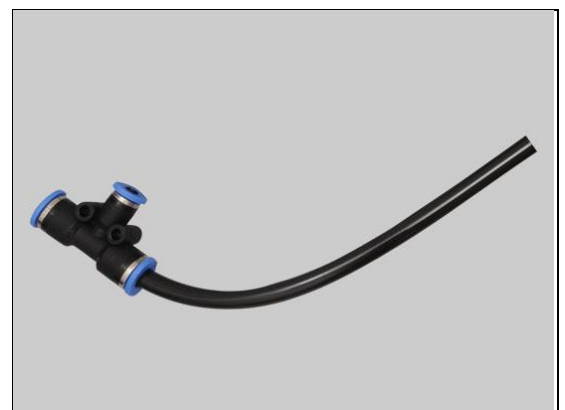


Vacuum Cup 9mm Silicone, part number is 1254-2696.

Use the Vacuum Cup 9mm Silicone (1254-2696: Vacuum Cup 9mm Silicone) for LT25i.

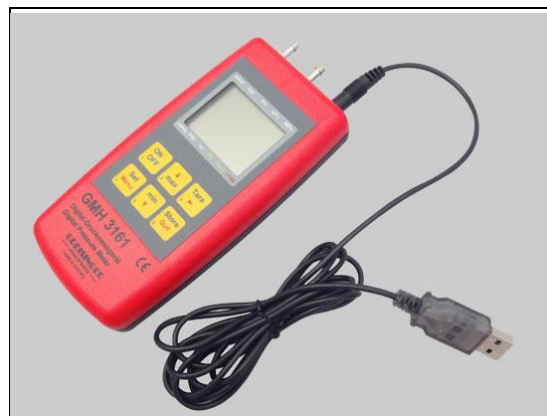


Ext. pressure sensor tubing upgrade kit, part number is 1265-7242.



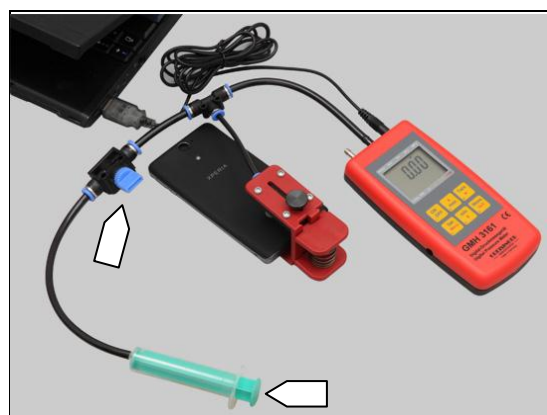
Pre-Test Preparations

External pressure sensor (Greisinger GMH 3161-07) and USB Interface Cable Greisinger USB3100N.



Water Resistance Test (WRT) tool with external pressure sensor is connected to PC.

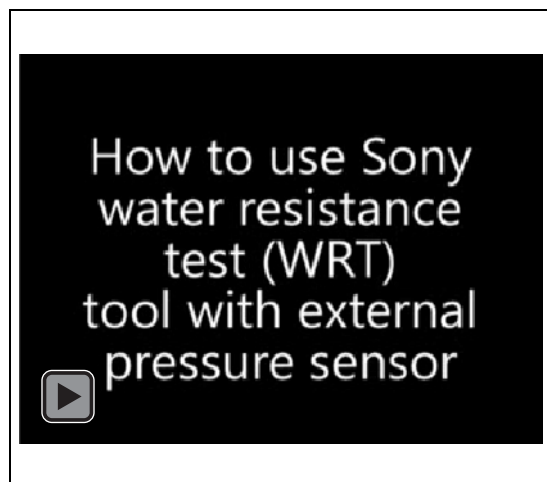
Make sure the valve is open and the syringe is pushed to the bottom before test!



How to assemble the Water Resistance Test (WRT) tool with external sensor.

How to run the Water Resistance Test (WRT).

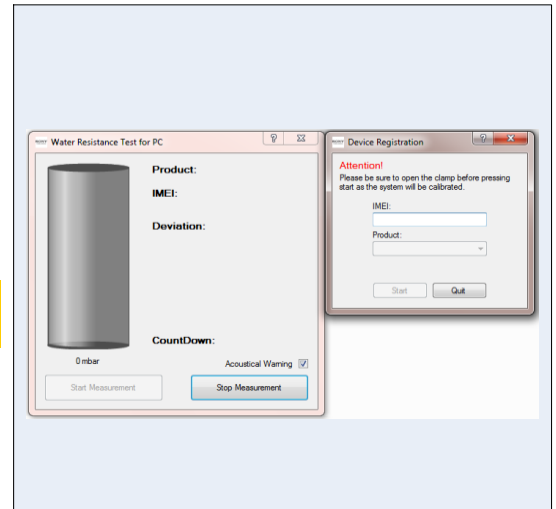
Sample phone is used in Movie, WRT method is the same.



Pre-Test Preparations

Start the Water Resistance Test application on your PC and power on the external pressure sensor.

Water Resistance Test application refers to 1269-3536 Water Resistance Test for PC.

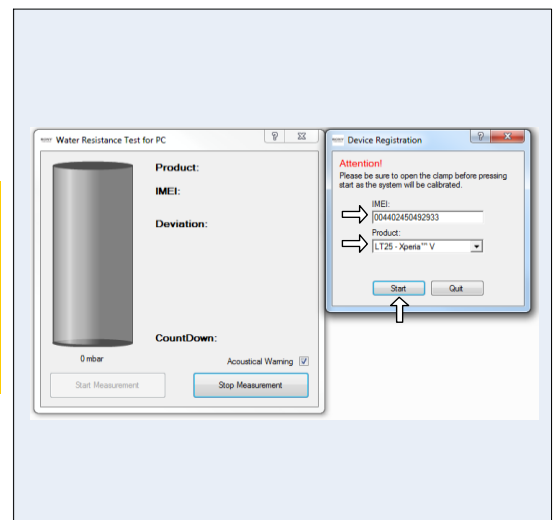


Enter IMEI number, select product and press 'start'.

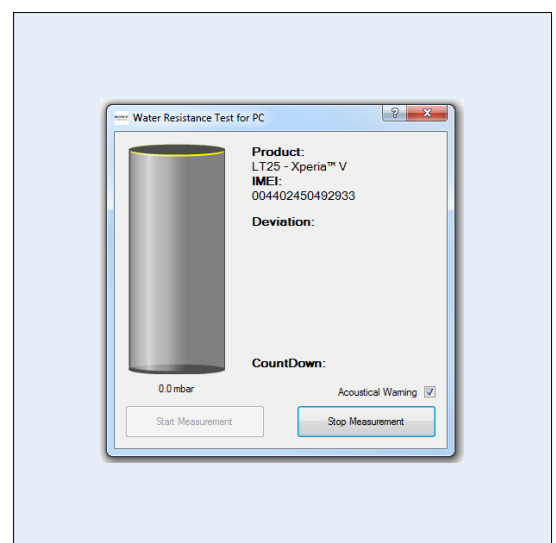
The 'Start' button is valid only when IMEI has been entered.

Make sure to select correct product as measurement evaluation is product specific.

Make sure to open the clamp before pressing "start" as the system will be calibrated.



The Water Resistance Test application is ready for test.

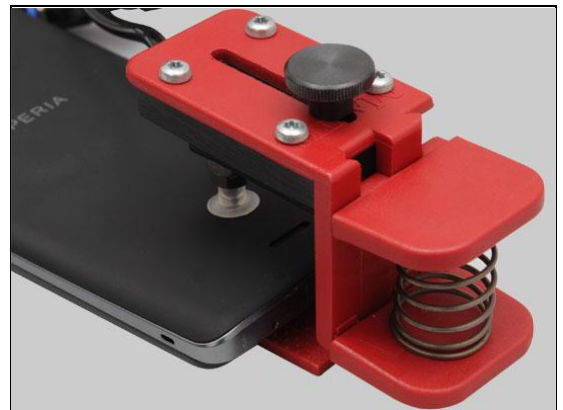


Pre-Test Preparations

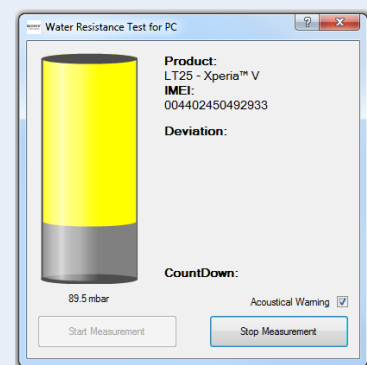
LT25i Ventilation hole.



Position the clamp to make sure the ventilation hole is fully sealed by vacuum cup.



Pull the Syringe SLOWLY to produce under pressure, meanwhile the bar becomes yellow color.

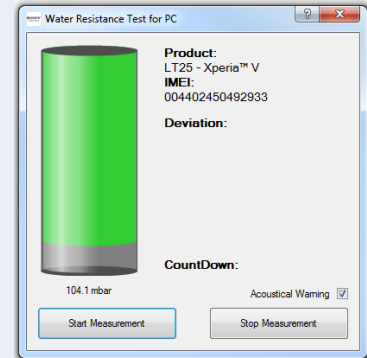


Pre-Test Preparations

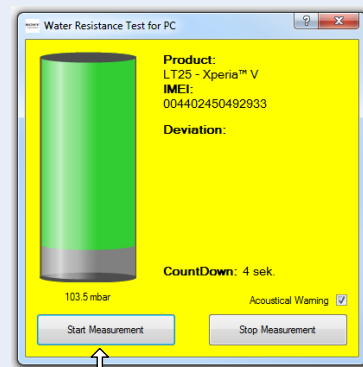
When the bar color changes to green, stop pulling syringe and close the valve to minimize influence of tubes and syringe.

The 'Start Measurement' button is valid only when the bar color is green.

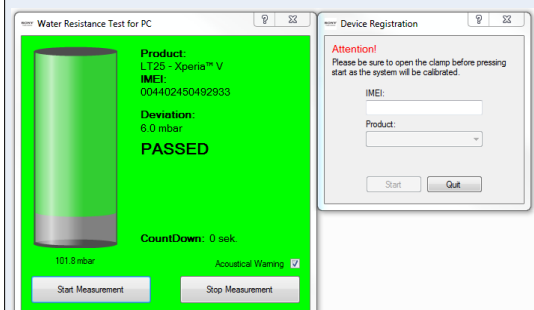
Do not push back syringe if bar color is red! Re-start the test.



Press 'Start Measurement' button and wait for measurement result.

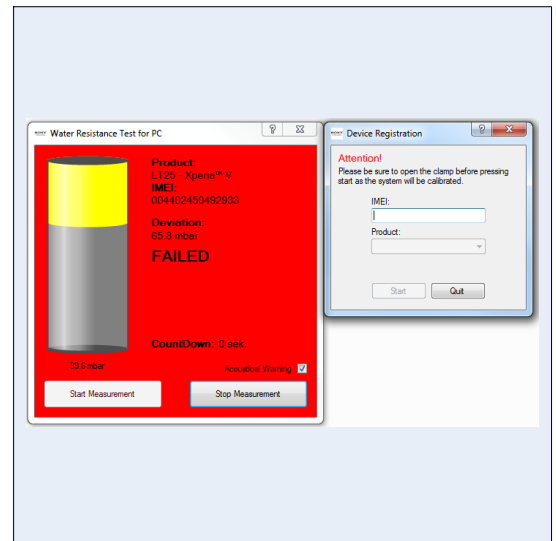


If the deviation value is less than or equal to test limit the test is 'PASSED'.



Pre-Test Preparations

Otherwise the test is 'FAILED'.
Repair the unit according to the Mechanical Troubleshooting Guide and Working Instructions, then run the test again.



Pre-Test Preparations

1.2.4 Water Resistance (LT25c Specific)

It is mandatory to verify that the unit is water resistance if disassemble the unit or suspect abuse, (i.e. not for No Trouble found or Software problems).

The test is done with battery and Cover Battery Assy assembled and Cover Bottom removed. This test must run again, once replace the Cover Battery Assy!

This test is done with air, therefore you have to seal the two microphones, and make sure that Cover Battery Assy, Cap Audio Jack and Cap Micro USB are assembled well.

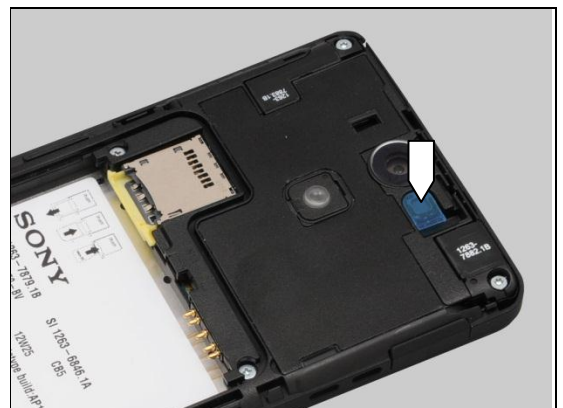
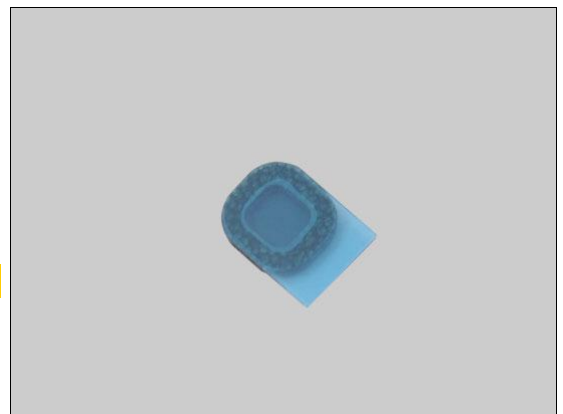
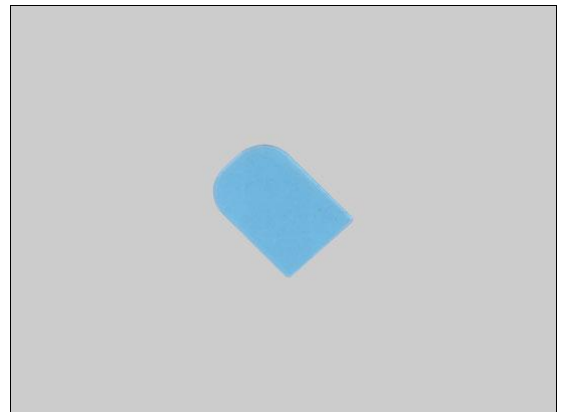
Seal the secondary microphone hole with Protection Film 2nd Mic (1266-0740).

If the Cushion 2nd Mic_WR (1262-0562) is dirty or damaged, which lead to bad sealing, replace a new Cushion 2nd Mic_WR (1262-0562) and use its protection film as sealing film.

Do not peel off the protection film after replacement!

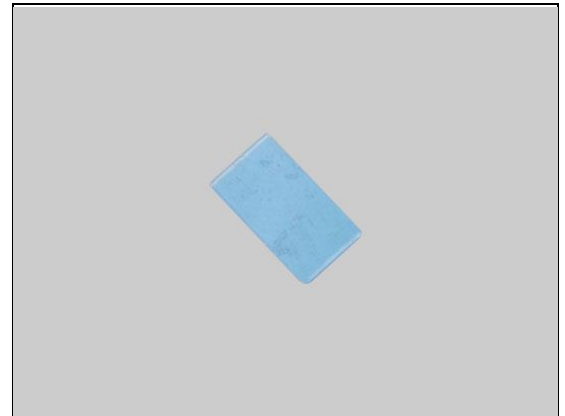
0

Seal the secondary microphone hole as shown.



Pre-Test Preparations

Seal the primary microphone hole with Protection Film 1st Mic (1269-1565).



If the Cushion Sheet 1st Mic_WR (1262-0572) is dirty or damaged, which lead to bad sealing, replace a new Cushion Sheet 1st Mic_WR (1262-0572) and use its protection film as sealing film.

Do not peel off the protection film after replacement!

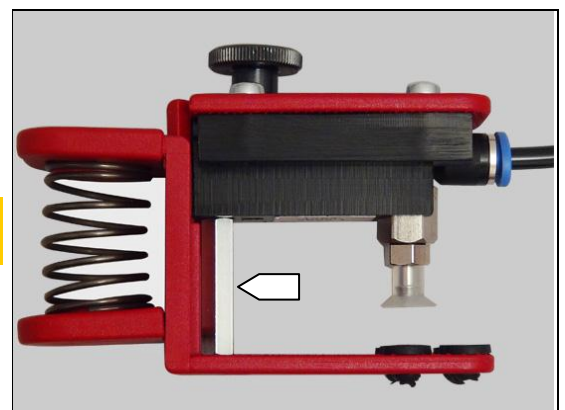


Seal the primary microphone hole as shown.



Pillar for WRT 23mm, part number is 1264-8565.

Use the 23mm Pillar (1264-8565: Pillar for WRT 23mm) for LT25c instead of the original 25mm Pilliar.



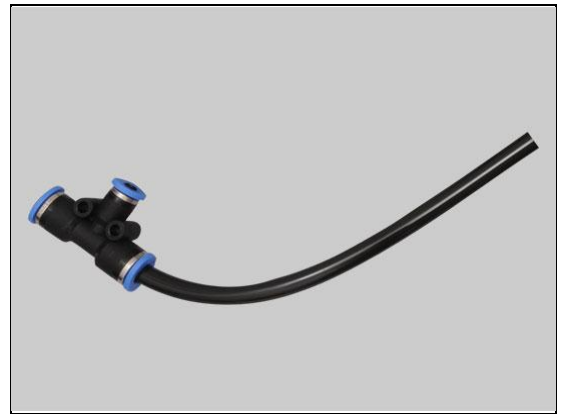
Pre-Test Preparations

Vacuum Cup 9 mm Silicone, part number is 1254-2696.

Use the Vacuum Cup 9mm Silicone (1254-2696: Vacuum Cup 9mm Silicone) for LT25c.



Ext. pressure sensor tubing upgrade kit, part number is 1265-7242.



External pressure sensor (Greisinger GMH 3161-07) and USB Interface Cable Greisinger USB3100N.



Water Resistance Test (WRT) tool with external pressure sensor is connected to PC.

Make sure the valve is open and the syringe is pushed to the bottom before test!

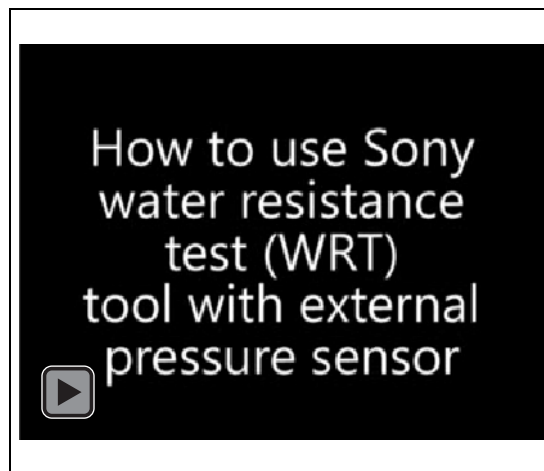


Pre-Test Preparations

How to assemble the Water Resistance Test (WRT) tool with external sensor.

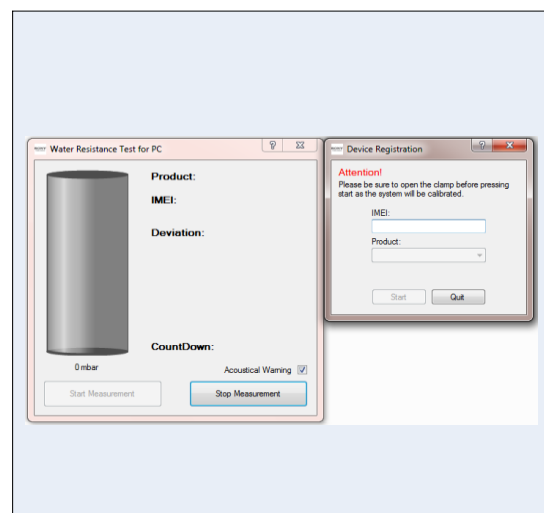
How to run the Water Resistance Test (WRT).

Sample phone is used in Movie, WRT method is the same.



Start the Water Resistance Test application on your PC and power on the external pressure sensor.

Water Resistance Test application refers to 1269-3536 Water Resistance Test for PC.

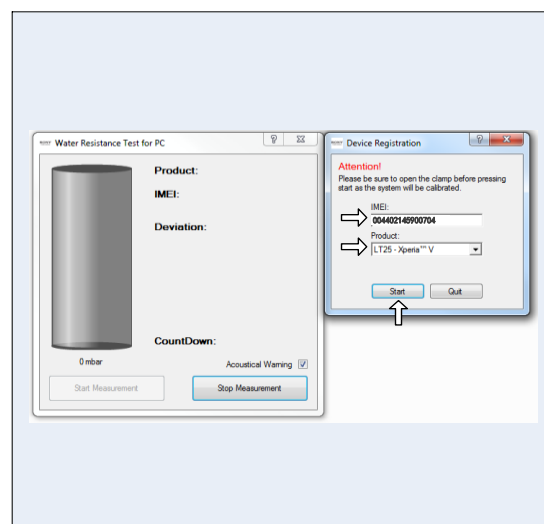


Enter IMEI number, select product and press 'start'.

The 'Start' button is valid only when IMEI has been entered.

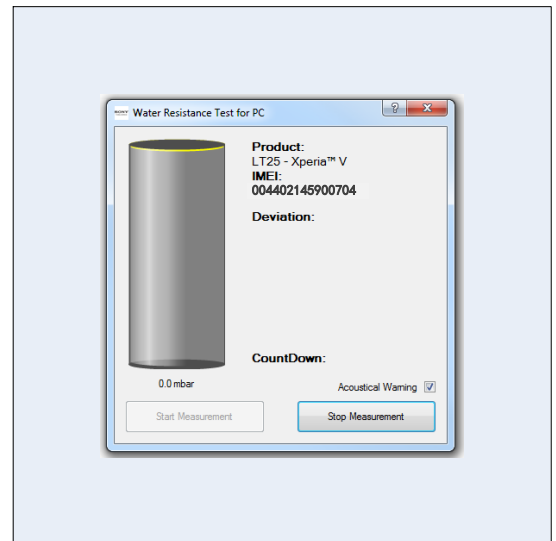
Make sure to select correct product as measurement evaluation is product specific.

Make sure to open the clamp before pressing "start" as the system will be calibrated.



Pre-Test Preparations

The Water Resistance Test application is ready for test.



LT25c Ventilation hole.

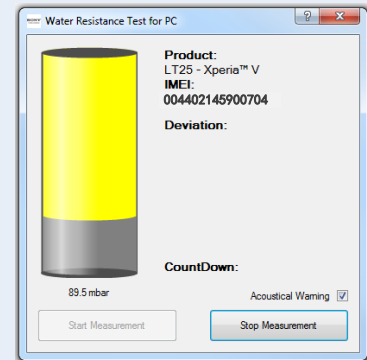


Position the clamp to make sure the ventilation hole is fully sealed by vacuum cup.



Pre-Test Preparations

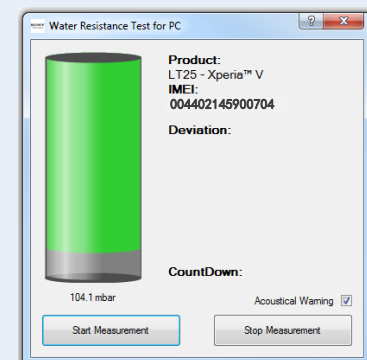
Pull the Syringe SLOWLY to produce under pressure, meanwhile the bar becomes yellow color.



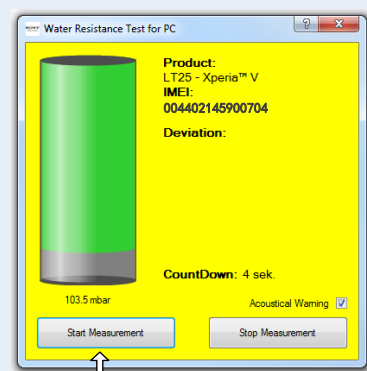
When the bar color changes to green, stop pulling syringe and close the valve to minimize influence of tubes and syringe.

The 'Start Measurement' button is valid only when the bar color is green.

Do not push back syringe if bar color is red! Re-start the test.

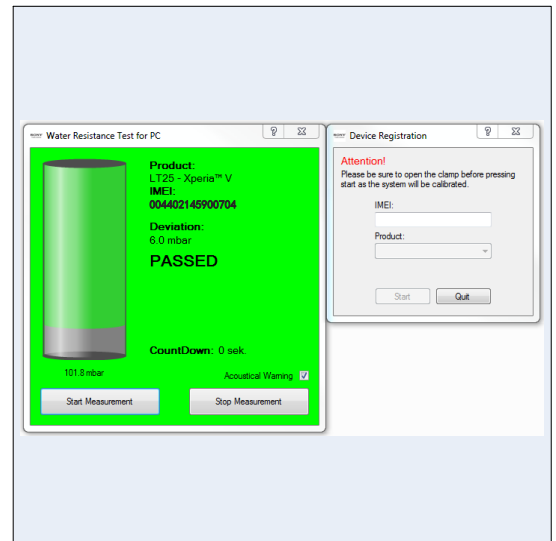


Press 'Start Measurement' button and wait for measurement result.

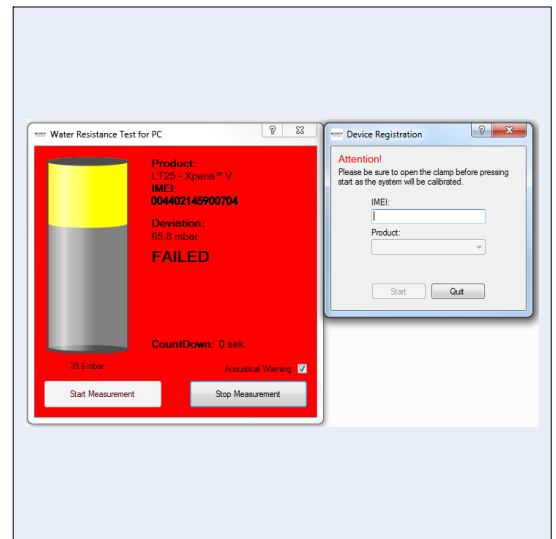


Pre-Test Preparations

If the deviation value is less than or equal to test limit the test is 'PASSED'.



Otherwise the test is 'FAILED'.
Repair the unit according to the Mechanical Troubleshooting Guide and Working Instructions, then run the test again.



Pre-Test Preparations

1.3 Software

1.3.1 Software update

1.3.1.1 Software version verification

Check the software version of the phone for fault verification. The latest improvements are found on the support pages under the support news

<http://www.sonyericsson.com/cws/marketingurlportal?pageid=key.SupportZone.Overview>

- Start up the phone
 - Note: Make sure the phone is in call setup.
- Press the following keypad combination: ***##7378423#*#***
- Select 'Service info'
- Select 'Software info'
- Check the software file revisions and, if needed, update as described below:

For more information, refer to 1220-1333: Generic Repair Manual - mechanical

1.3.1.2 Software version update

Mandatory first repair action!

Use the USB cable to connect with the Micro USB connector of the phone for this purpose!

Ensure the phone is powered off and proceed as follows:

- Open the Emma application and log in.
- Press and hold the volume down key on the phone, connect the phone to the USB cable and then release the volume down key.
- Select the appropriate service and follow the on-screen instructions.

Note: For phones with eMMC flash memory (built in "SD card" memory), the only service which erase this eMMC memory is Service's "Refurbish" and "Customize". See also emma User Guide info. http://emma.extranet.sonyericsson.com/documents/emma_user_guide.pdf (see "Service Types" and "Aspects of large files")

In Swap flow, when change a phone from Customer A to Customer B, always use the service Customization script.

2 Tests

2.1 Service Test Mode

Note: Make sure the phone is in call setup when pressing these touching keypads to get into the Service menu!

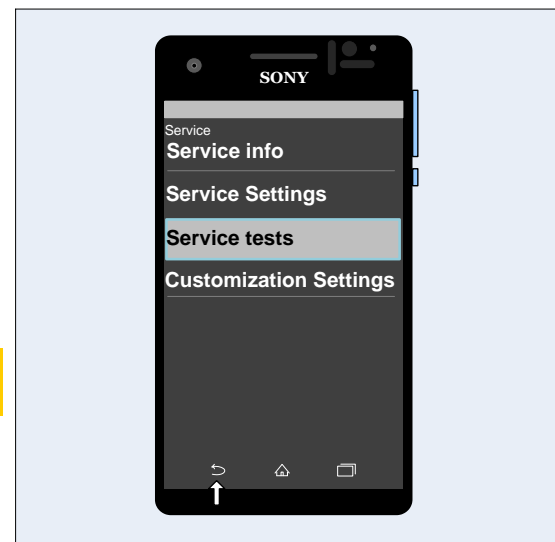
Start up the phone and enter the service menus:

- Press the following keypad combination: *****#7378423#****



- Select 'Service tests'
- Select one of the tests and follow the test instructions as described below
- To stop the test and return to the 'Service tests' menu, press the Back key

For more information, refer to 1220-1333: Generic Repair Manual - mechanical



The following pictures will show a simplified basic phone for a general visualization of the service tests!

Tests

2.2 Service Tests

2.2.1 Keyboard & Switch

Text Note: The Home Key, On/Off key and Multitask Key are not part of the keyboard test, but are in the Manual tests.

To return to the Service Test Menu, wait for 8 seconds.

Press all keys on the:

- Back key
- Menu key
- Volume up key
- Volume down key



2.2.1 Touch Screen

Move a finger across the touch screen, a line will be drawn as it touches.

Check all area of the touch screen as indicated by the two lines.

Press the Back key to return to the Service Test Menu.



2.2.2 Display

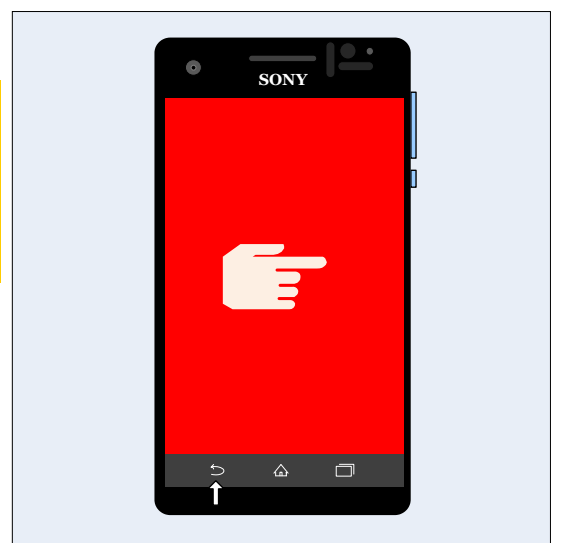
Minor variations in the display's brightness and color may occur between phones.

There may be tiny bright dots on the display, called defective pixels and which occur when individual dots have malfunctioned and cannot be adjusted.

Two defective pixels are considered to be acceptable.

Touch the display using a finger. With every touch, the display will show six test patterns of White, Black, Red, Green, Blue, White and Rainbow colors on the full screen. Make sure that there are no missing segments and that the colors and contrast are OK.

Press the Back key to return to the Service Test Menu.



Tests: Service Tests

2.2.3 LED/Illumination

Check that the:

- Display Backlight illumination goes from low to high strength back to low again.
- Notification LED on the top right corner changes, showing four colors in the following sequence: red, red, green, green, blue, blue and off.

Press the Back key to return to the Service Test Menu.



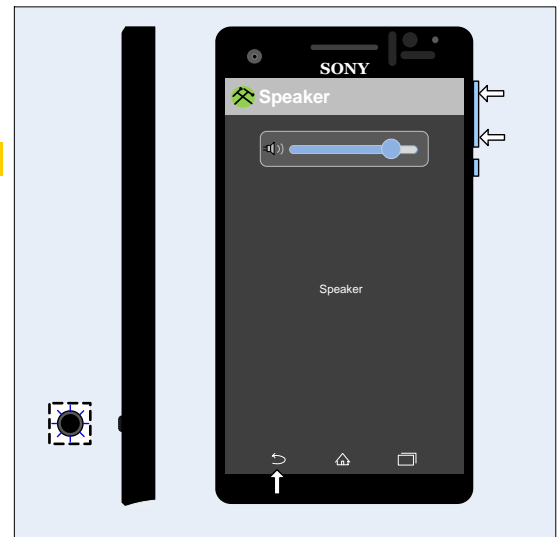
2.2.4 Speaker

Do not hold the phone close to an ear during this test!

Make sure that the sound from the speaker port on the middle bottom back side of the phone is emitted loud and clear and that the test includes maximum volume.

Press the volume up/volume down key to adjust the speaker volume.

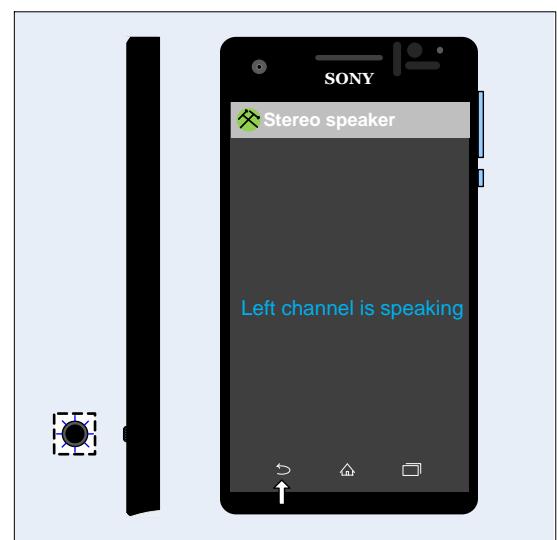
Press the Back key to return to the Service Test Menu.



2.2.5 Stereo speaker

N/A.

Press the Back key to return to the Service Test Menu.



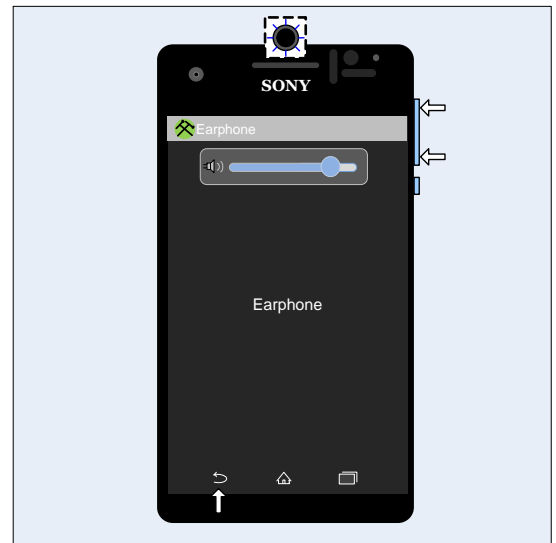
Tests: Service Tests

2.2.6 Earphone

Make sure that the sound from the earphone port on the top of the phone is emitted loud and clear and the test includes maximum volume.

Press the volume up/volume down key to adjust the earphone volume.

Press the Back key to return to the Service Test Menu.



2.2.7 Microphone

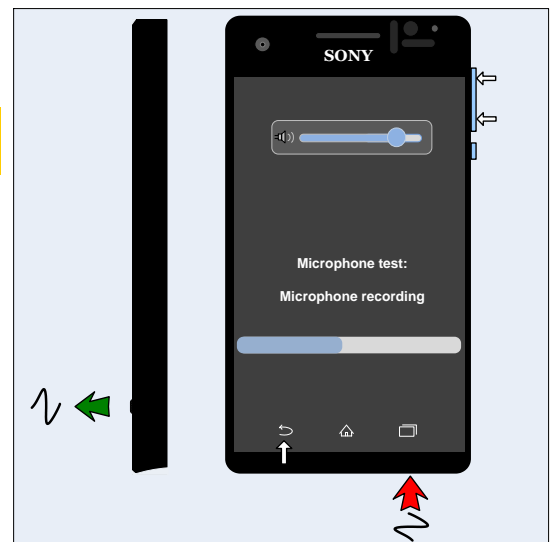
The previous 'Speaker' test must have been successfully carried out before doing this test!

The phone will start to record and after approximately ten seconds the sound is played back through the speaker.

Step 1: Speak into the microphone during the 'Microphone Recording' phase;

Step 2: Check the quality by listening to the recording from the speaker during the 'Playing recorded sound' phase at maximum volume.

Press the Back key to return to the Service Test Menu.



2.2.8 Secondary Microphone

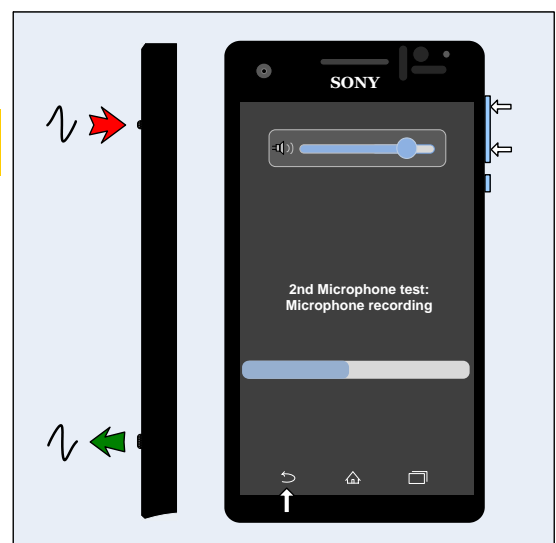
The previous 'Speaker' test must have been successfully carried out before doing this test!

The phone will start to record and after approximately ten seconds the sound is played back through the speaker.

Step 1: Speak into the secondary microphone during the 'Microphone Recording' phase;

Step 2: Check the quality by listening to the recording from the speaker during the 'Playing recorded sound' phase at maximum volume.

Press the Back key to return to the Service Test Menu.

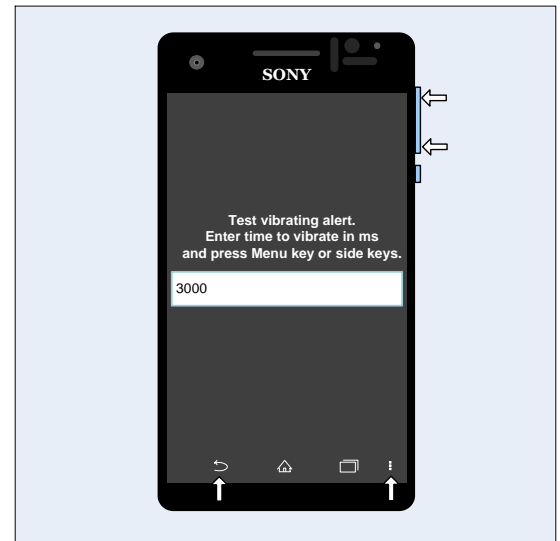


Tests: Service Tests

2.2.9 Vibrator

Press the Menu key or side keys to start the vibrator test.
It is possible to modify the duration of this test.

Press the Back key to return to the Service Test Menu.



2.2.10 Camera

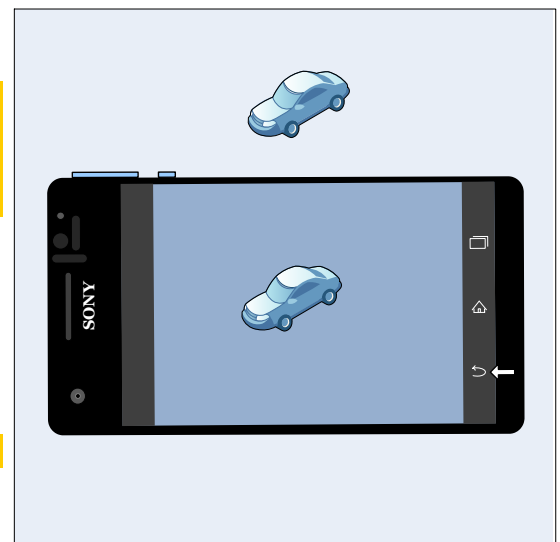
Minor variations in image appearance may occur between phones, but is not uncommon and should not be regarded as an indication of a defective camera module!

Aim the camera (located at the back of the phone) at an object and check the quality of the image shown in the display.

Touch the screen to take picture and preview the photo's auto focus quality.

Photos are taken but not saved during this test!

Press the Back key to return to the Service Test Menu.

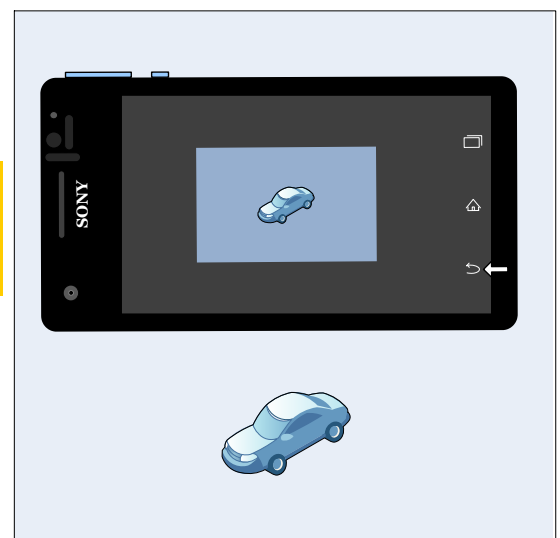


2.2.11 Secondary Camera

Minor variations in image appearance may occur between phones, but is not uncommon and should not be regarded as an indication of a defective camera module!

Aim the camera (located in front of the phone) at an object and check the quality of the image shown in the display.

Press the Back key to return to the Service Test Menu.

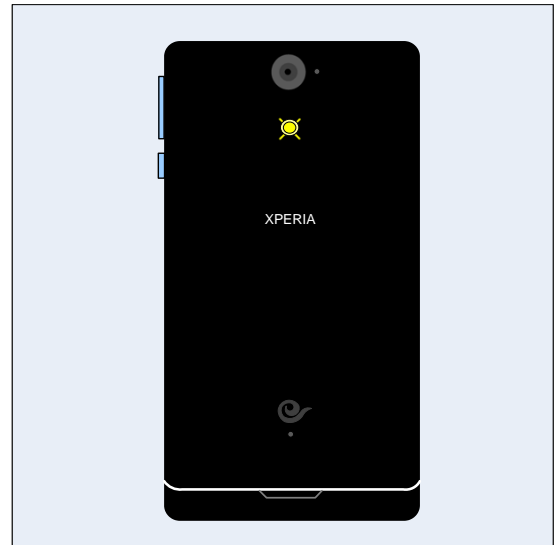


Tests: Service Tests

2.2.12 Flash LED

Check the Flash LED at the back side of phone to see whether it's turned on.

Press the Back key to return to the Service Test Menu.



2.2.13 Bluetooth

During this test, the distance between the phone and the target Bluetooth device must be 1.5 to 5 meters! Make sure the target Bluetooth device is enabled and visible always!

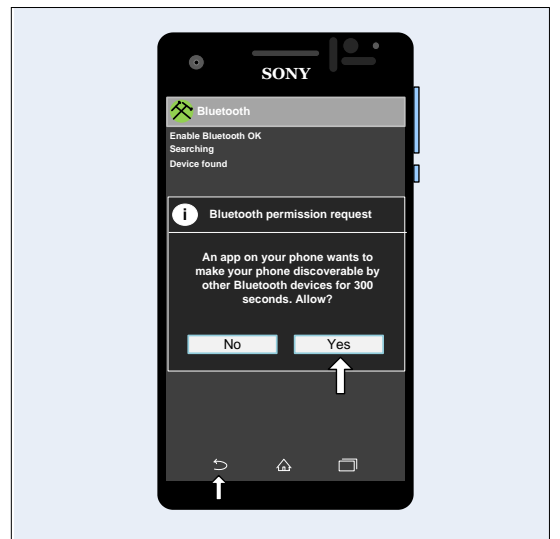
The Bluetooth test will be done in following sequences:

Step 1: Enable Bluetooth; wait 4-5 seconds, shows OK;

There is a permission request, select 'Yes'.

Step 2: Searching;

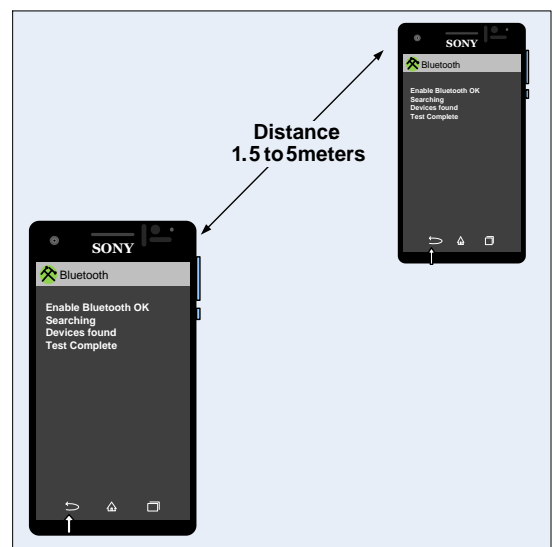
Step 3: Show the Device Found list;



Step 4: Select the Target Bluetooth Device, and type the PIN code to pair;

Step 5: Type the Pairing PIN code on the Target Bluetooth Device also, when successful, it shows 'Test Complete'.

Press the Back key to return to the Service Test Menu.



Tests: Service Tests

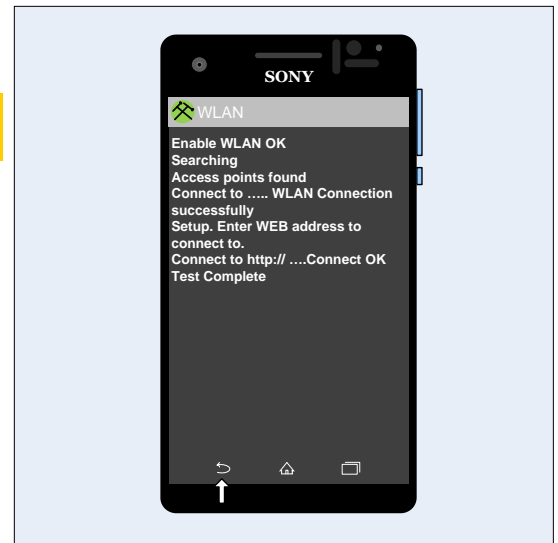
2.2.14 WLAN

Make sure there's a WLAN network before performing this test.

The WLAN test will be done in following sequences:

- Step 1: Enable WLAN; wait 4-5 seconds, shows OK;
- Step 2: Searching;
- Step 3: Access points found list;
- Step 4: Select the Target WLAN network, and type the password to get connected;
- Step 5: Enter a web address (e.g. Google.com);
- Step 6: When connection succeeded, it shows 'Test Complete'.

Press the Back key to return to the Service Test Menu.



2.2.15 NFC (LT25i Specific)

A NFC SIM card 3FF should be inserted in the phone before the start of this test!

The NFC test will be done in following sequences:

- Step 1: Select 'NFC';
- Step 2: Select 'NFC Diag Test';
- Step 3: After 'Tag Reading...Enabled' can be seen on the display, bring a NFC Tag close to middle of Rear Cover Assy.

Don't touch each other to avoid Rear Cover Assy scratch.

Press the Back key two times to return to Service Test Menu.

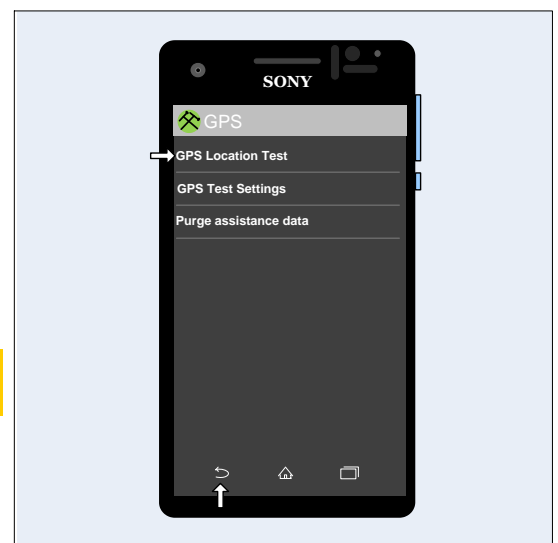


2.2.16 GPS

Enter the GPS Location Test and wait for the GPS location data.

Press the Back key to return to the Service Test Menu.

For GPS testing, refer to 1220-1333: Generic Repair Manual – mechanical

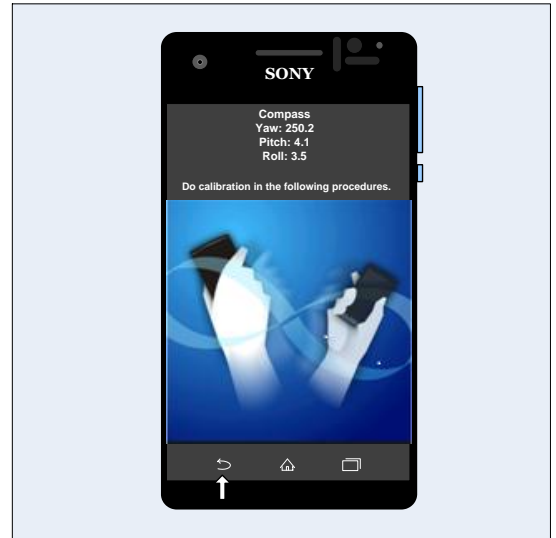


Tests: Service Tests

2.2.17 Compass

Do calibration with hand movements as shown in the phone, and then check the actual direction with measured value.
(Yaw:0=North, 90=East, 180=South, 270=West)

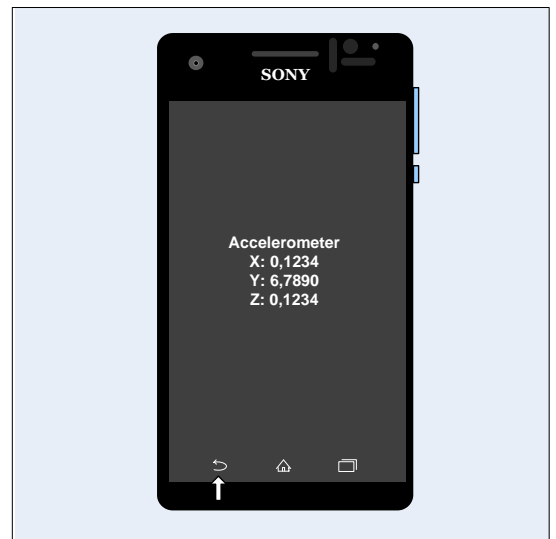
Press the Back key to return to the Service Test Menu.



2.2.18 Accelerometer

The accelerometer test displays the actual position of the phone as a 3D coordinate X: Y: Z.

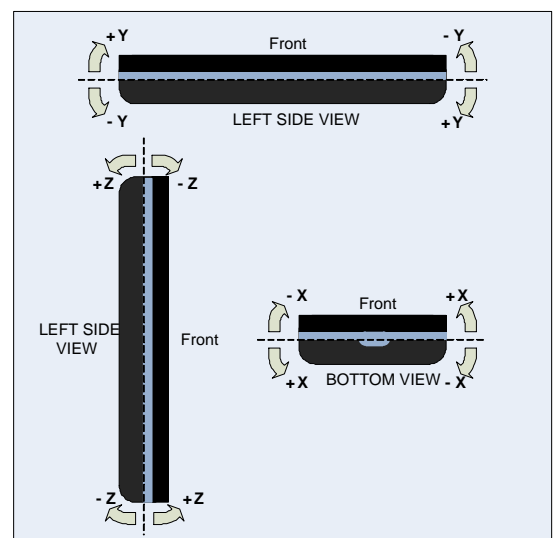
Press the Back key to return to the Service Test Menu.



By tilting the phone in various directions, the X: Y: Z values will change in size and polarity depending on the angle and direction as shown in the adjacent picture.

Check by tilting the phone that the X: Y: Z values shown in the display are in accordance with the tilting shown in the picture.

Press the Back key to return to the Service Test Menu.



Tests: Service Tests

2.2.19 Gyroscope

The gyroscope test displays the actual position of the phone as a 3D coordinate X: Y: Z.

Check by moving the phone that the X: Y: Z values shown in the display are in accordance with the moving.

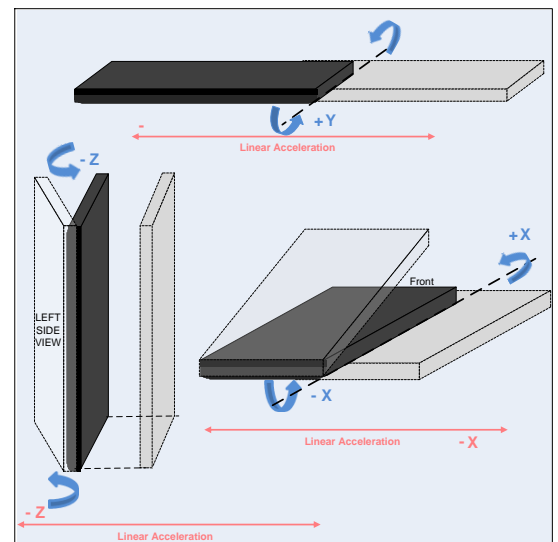
Press the Back key to return to the Service Test Menu.



Check 'Gravity Values' 'Linear Acceleration Values' 'Rotation Vector Values' and 'Gyroscope Values' by moving the phone:

'Gravity Values' can be refer to Accelerometer; 'Linear Acceleration Values' and 'Rotation Vector Values' are in accordance with the action shown in the picture. 'Gyroscope Values' are updated while moving the phone.

Press the Back key to return to the Service Test Menu.



2.2.20 Ambient Light Sensor

The Ambient light test states a value. The value should increase when the window gets more light and decrease when the window gets less light.

Press the Back key to return to the Service Test Menu.



Tests: Service Tests

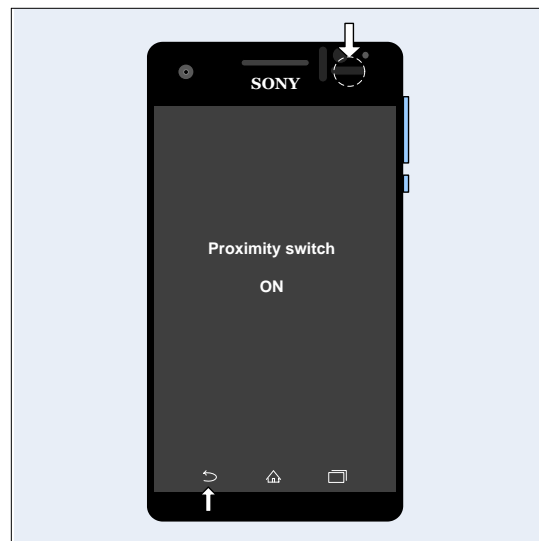
2.2.21 Proximity switch

The previous 'Speaker' test should have been successfully carried out before doing this test!
Make sure the phone is not in 'silent mode' before performing this test.

When entering into the test, the screen shows 'Proximity switch OFF' and a tone is emitted.

When covering the proximity switch area (on the right side of the Ear Speaker), the screen will show 'Proximity switch ON' with a different type of tone.

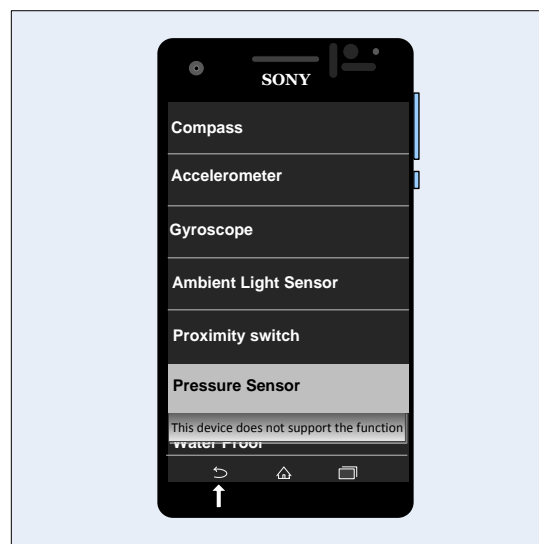
Press the Back key to return to the Service Test Menu.



2.2.22 Pressure Sensor

N/A.

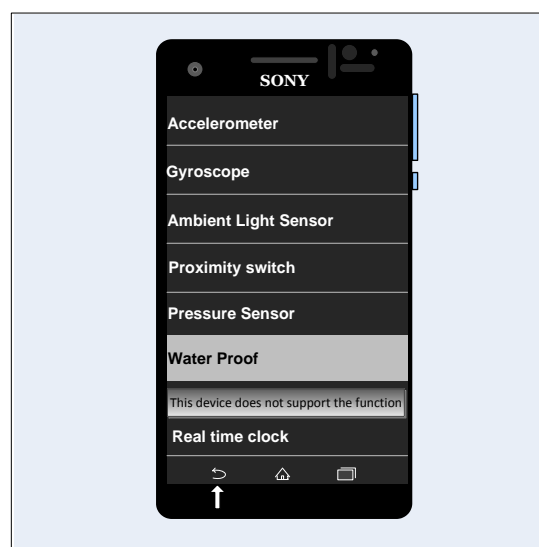
This test is not available for this product!



2.2.23 Water Resistance

N/A. Refer to section 1.2.3 Water Resistance (LT25i Specific) and 1.2.4 Water Resistance (LT25c Specific).

This test is not available for this product!

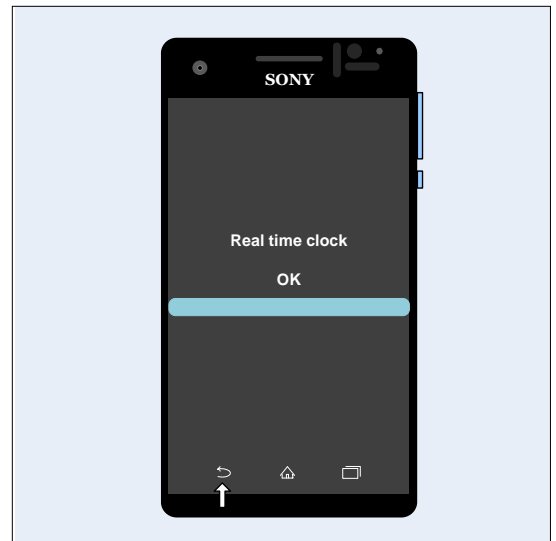


Tests: Service Tests

2.2.24 Real time clock

During the actual test the text 'Real time clock' is displayed, and then followed by a message stating whether the test was OK or not.

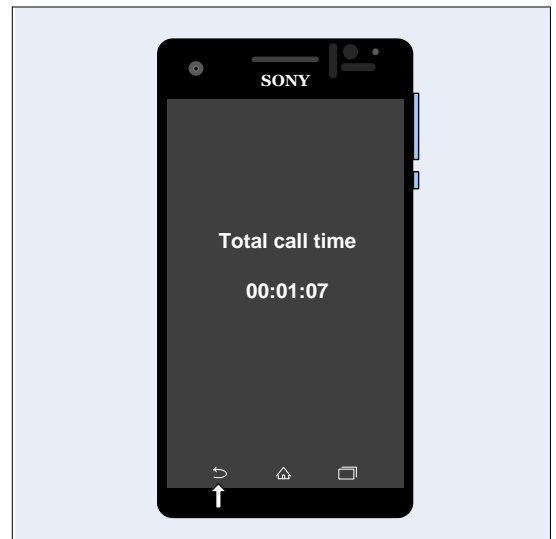
Press the Back key to return to the Service Test Menu.



2.2.25 Total call time

The total call time is displayed in the format HH:MM:SS (hours: minutes: seconds).

Press the Back key to return to the Service Test Menu.



2.2.26 Storage

Memory Storage status:

- Internal Mass Storage is 'Inserted/Mounted' as shown on the screen.

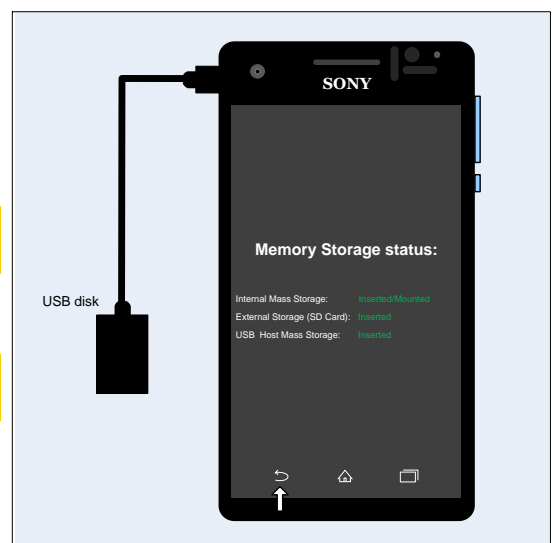
A memory card should be inserted in the phone before starting this test!

- External Storage (SD Card) is 'Inserted' as shown on the screen.

Attach USB Adaptor between phone and an USB disk as shown in picture.

- The USB Host Mass Storage status is shown on the screen.

Press the Back key to return to the Service Test Menu.

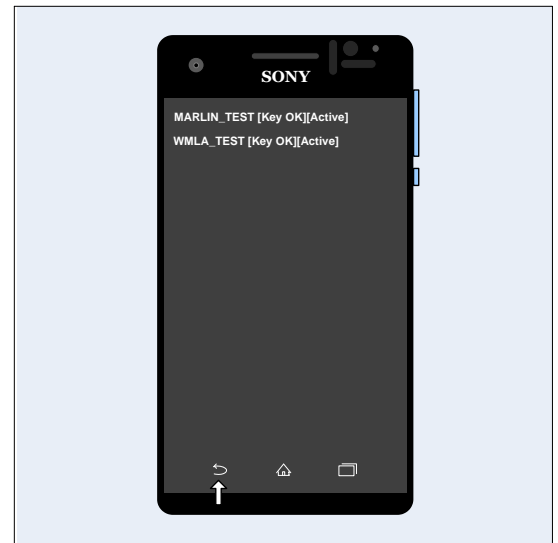


Tests: Service Tests

2.2.27 Security

The DRM keys are shown in the display.
There may be different content shown based on different market software versions.

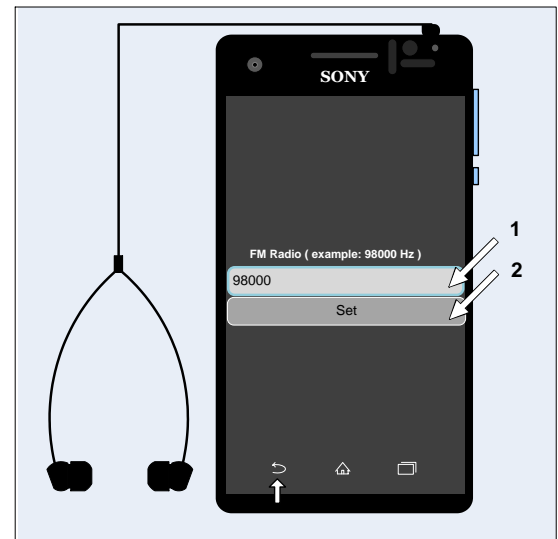
Press the Back key to return to the Service Test Menu.



2.2.28 FM Radio

Verify that the phone can detect a radio station:
Connect a headset and then set your local radio station in Hz.
Verify that the reception and sound quality is normal.

Press the Back key to return to the Service Test Menu.

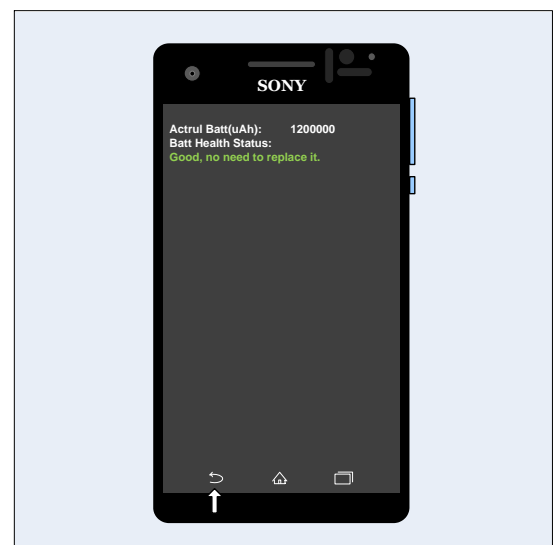


2.2.29 Battery Health test

This test is intended to verify the battery health status when the consumer has complained about the charging or standby time before trying to replace the battery.
When entering the battery health test menu, the screen will have:

Green writing and say 'Good, no need to replace it' if the battery is OK and red writing and say 'Bad, need to replace it' if the battery is not OK.

Press the Back key to return to the Service Test Menu.



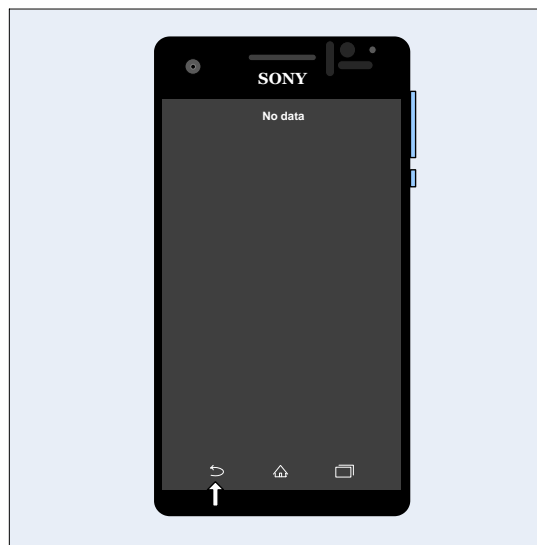
Tests: Service Tests

2.2.30 Flip slider counter

N/A.

This test is not available for this product!

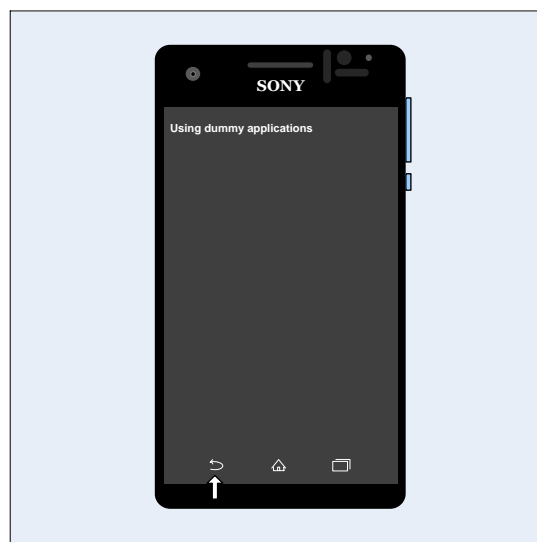
Press the Back key to return to the Service Test Menu.



2.2.31 Verify certificates

When entering the test, four information categories will be shown: Media, Shared, Platform and Application.

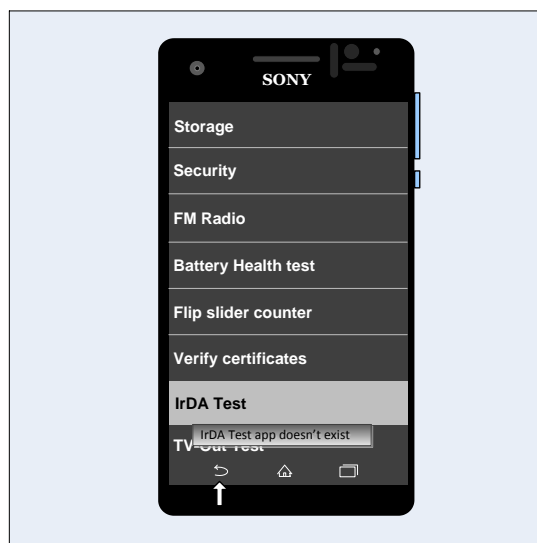
Press the Back key to return to the Service Test Menu.



2.2.32 IrDA Test

N/A.

This test is not available for this product!



Tests: Service Tests

2.2.33 TV-Out Test

MHL adapter, HDMI Type A Cable, charger and TV should be connected with the phone before the start of this test!

Press 'TV-Out On'.

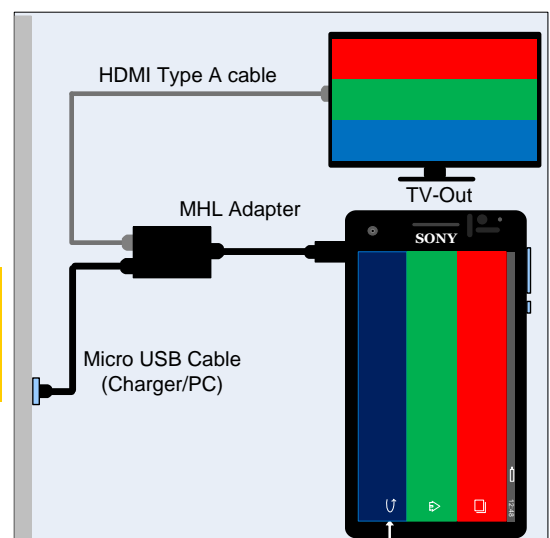
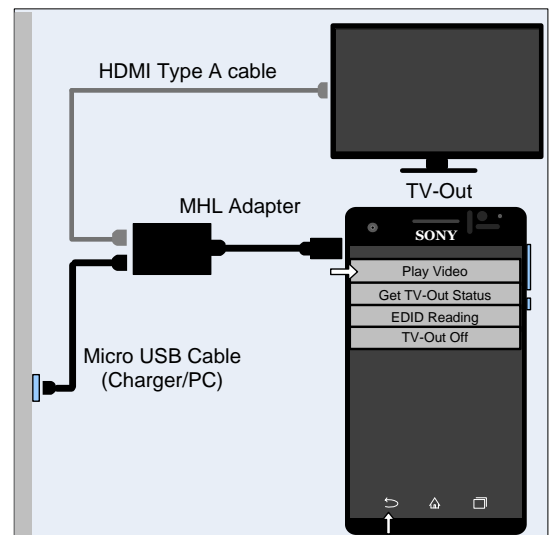
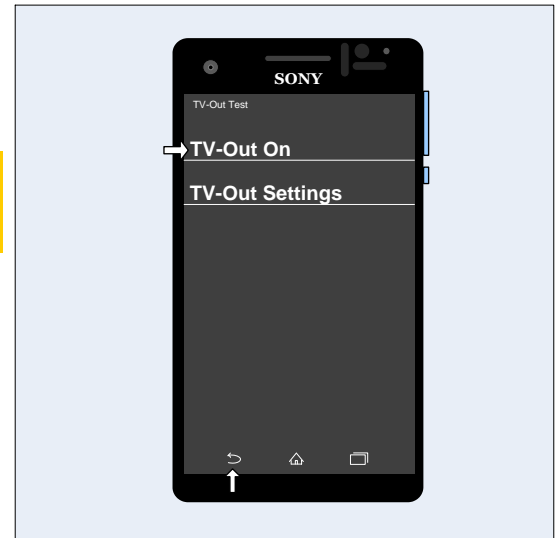
(TV-Out Settings is usually not needed since the unit should be in automatic resolution and the TV-Out monitor should set the resolution automatic. If you get no picture on the TV-Out monitor you can try different resolutions under TV-Out Settings.)

Step 1: Attach cable between phone and TV-Out as shown in picture;

Step 2: Press 'Play Video'.

Receive a test tone and a red-green-blue test picture in the TV-Out Monitor and phone.

Note: If the TV-Out Monitor doesn't automatically identify the picture, the Monitor may require to set the TV-Out port chosen as source manually in the Monitors menus.



Tests: Service Tests

Press 'Get TV-Out Status':

You should now get:

Power Status: Active

HPD Status: H

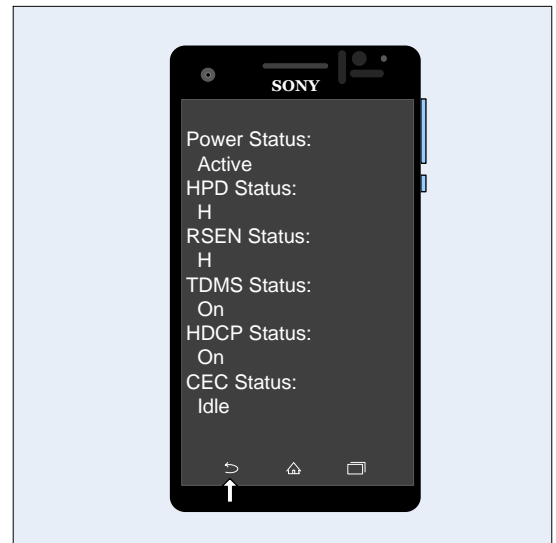
RSEN Status: H

TDMS Status: On

HDCP Status: On

CEC Status: Idle

Press the Back key to return to the Service Test Menu.



Tests

2.3 Manual Tests

2.3.1 SIM

Verify that the phone can detect a SIM card:

Step 1: Insert a SIM card, and start the phone;

If the SIM card is detected by the phone, the start-up procedure will continue.

Step 2: Pull down the Status Bar (put finger next to the receiver and drag the menu down from the Status Bar);

Step 3: See SIM card operator name.

The SIM card operator name will be displayed above the Time Clock when phone is in Lock status.

If not detected, the message 'Emergency call only' will be displayed instead in the pull down Status Bar.

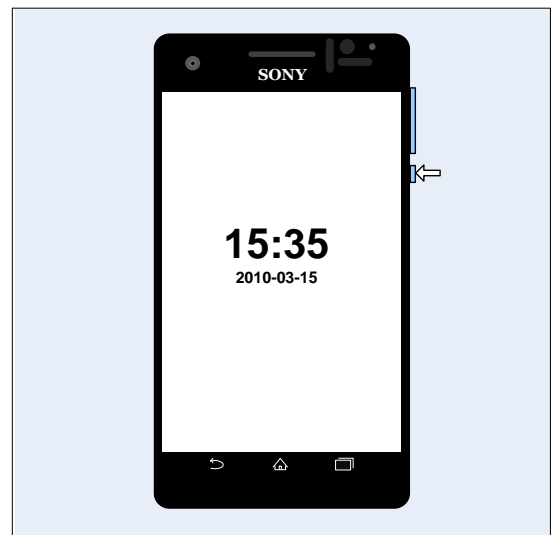
Press Back key to return to Standby Menu.



2.3.2 On/Off key test

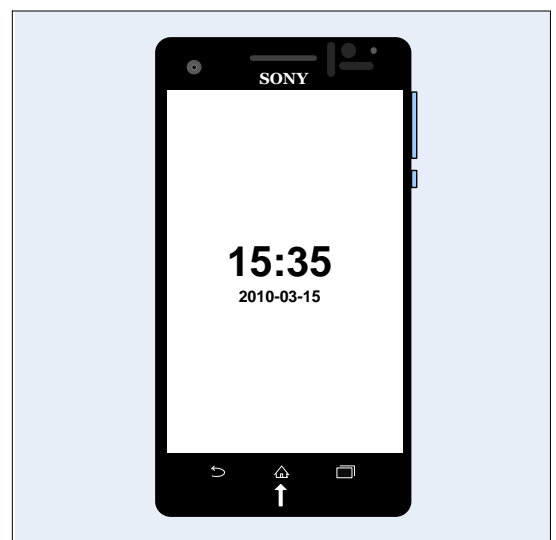
Press the on/off key for a long time to turn the phone on or off.

Press the on/off key for a short time to enter Sleep mode or to wake it up from Sleep mode.



2.3.3 Home key test

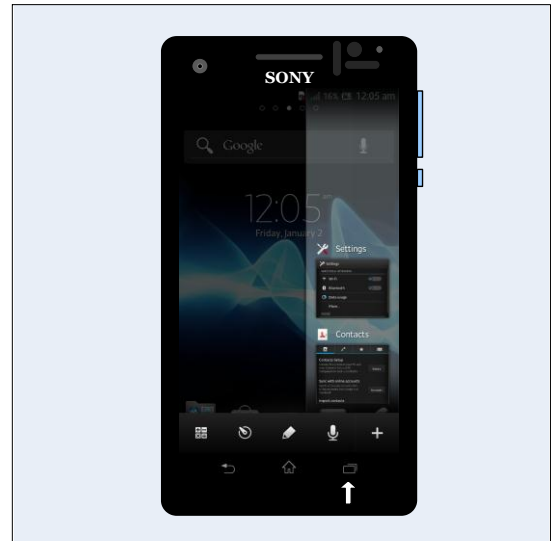
Whatever the phone shows now during operation, press the Home key for the phone go directly back to the Standby screen.



Tests

2.3.4 Multitask key test

Whatever the phone shows now during operation, press the Multitask key to show the programs used recently.



2.3.5 Charging via USB (Charger or Computer)

Verify that the phone can charge the battery by a USB port:

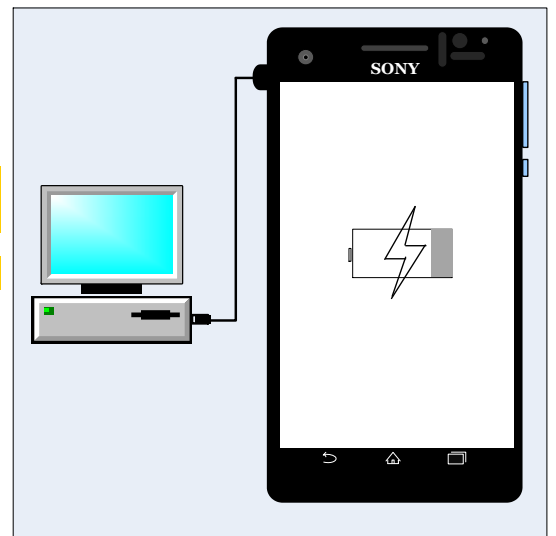
Ensure that no computer application, such as PC Suite or Emma, is active!

Do not start the phone.

Connect a USB cable from a computer or charger to the phone.

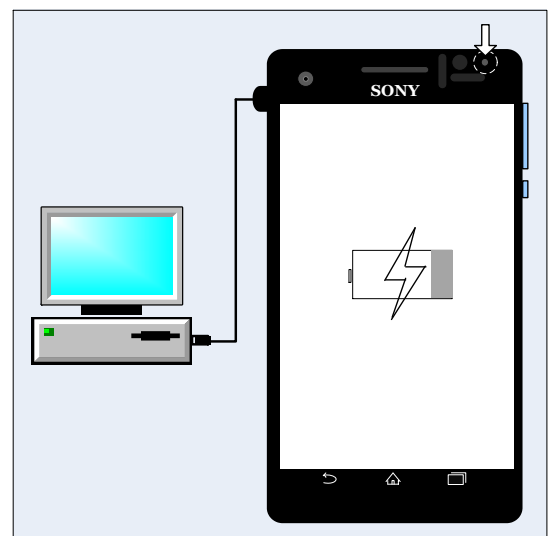
Verify that the phone is being charged by the notification LED and Battery icon in the display.

Remove the USB cable from the connector and verify that the notification LED and Battery icon no longer indicates charging.



The Notification LED colour status is depended on battery remaining capacity:

- Red: Battery level is between 1% and 10%;
- Orange: Battery level is between 11% and 89%;
- Green: Battery is between 90% and 100%;



Tests

2.3.6 Charging via Charger PAD connector (Charger or Computer)

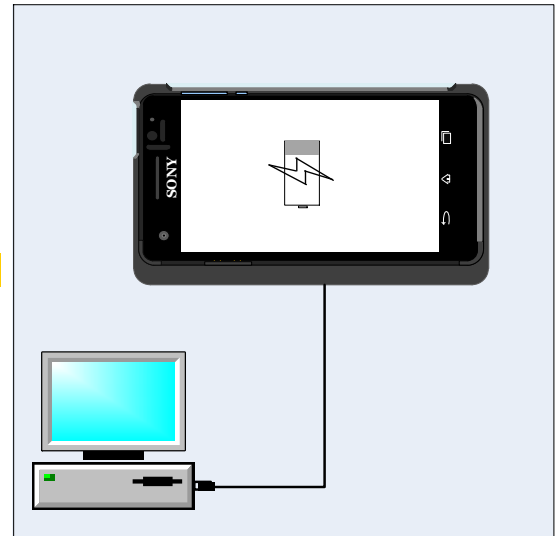
Verify that the phone can charge the battery by a Charger PAD connector:

Do not start the phone.

Insert the phone into the charging dock as shown.

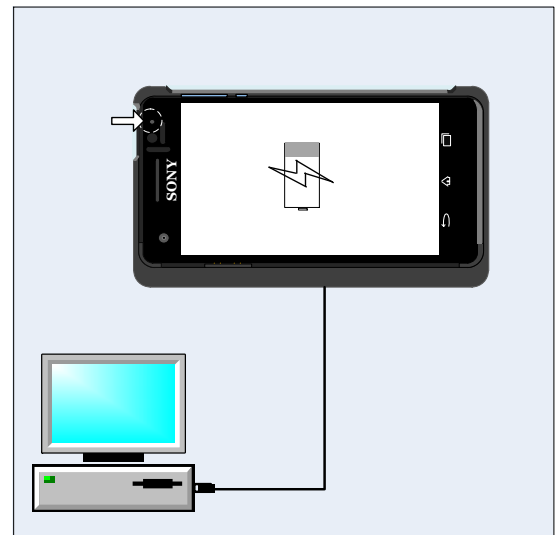
Verify that the phone is being charged by the notification LED and Battery icon in the display.

Remove the phone from the charging dock and verify that the notification LED and Battery icon no longer indicates charging.



The Notification LED colour status is depended on battery remaining capacity:

- Red: Battery level is between 1% and 10%;
- Orange: Battery level is between 11% and 89%;
- Green: Battery is between 90% and 100%;



Tests

2.4 Battery Test

If bad battery performance or capacity problem is claimed, the battery and charging function can be tested by using an application designed for this purpose.

By using this application the battery is tested in a fast and controlled environment.

This is especially convenient when phones with embedded batteries should be checked, to avoid unnecessary work to disassembly the phone to access the battery.

This test is designed to identify a faulty battery or a hardware issue in the phone or with the charger. The guide will describe different procedures depending on the battery level when the battery test is initiated.

The test is downloaded to the phone, using cable or Bluetooth, and executed.

The test is available in CSPN at Level: Mechanical,

Title: **Trouble Shooting Application 1266-2711.**

Unzip this file, where you find the application, installation and user guide content.

The Charger and charging cable is specified. (**Charger EP 800, Cable EC480**)

After the test the SOMC Battery test.apk shall be removed by tap "Uninstall" "OK" in the application.

Error messages are described in the user guide for the SOMC Battery test.

Tests

2.5 Network Test

This test can only be performed if the phone has an activated SIM/USIM card (no Test SIM/USIM) and an available network signal!

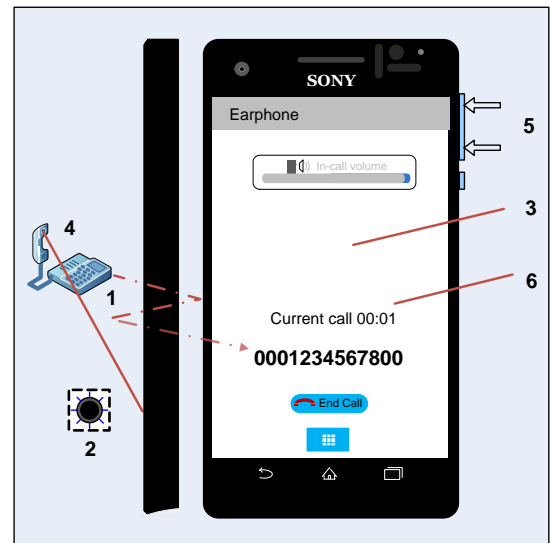
**There are two versions of the test depending on whether a UMTS network is available or not!
If a UMTS network is available, the network test has to be done separately for GSM and UMTS!**

2.5.1 On-the-air call to mobile (no UMTS network available)

To verify the radio functions (GSM) of the phone, follow the '2.4.1.1 Procedure' below:

2.5.1.1 Procedure

- Step 1: Set up a call from a landline phone (PSTN).
- Step 2: Check that there is a ring signal.
- Step 3: Check that the display backlight illuminates.
- Step 4: Answer the call and check the sound quality in both phones.
- Step 5: Adjust the volume up and down with the side keys and verify that the sound level is altered.
- Step 6: End the call and check that the elapsed time is displayed and that the termination is done properly.



2.5.2 On-the-air call to mobile (UMTS network available)

GSM

Go to the phone menu and set:

Press Menu key → Settings ⇒ More... ⇒ Mobile Networks ⇒ Network mode ⇒ GSM only

To verify the radio functions (GSM) of the phone, follow the '2.4.1.1 Procedure' above.

UMTS

Go to the phone menu and set:

Press Menu key → Settings ⇒ More... ⇒ Mobile Networks ⇒ Network mode ⇒ WCDMA only

Switch off the phone and then start it up again to enable search for an available UMTS signal.

Ensure that the UMTS/3G icon now is visible at the top of the display.

To verify the radio functions (UMTS) of the phone, follow the '2.4.1.1 Procedure' above.

3 Revision History

Rev.	Date	Changes / Comments
1	2012-Nov-16	Initial release

Part List

- mechanical -



Xperia™ V
LT25i



Xperia™ VC
LT25c

CONTENTS

1 Part List 3

1.1 LT25i/LT25c Common Parts 4

1.2 LT25i Specific Parts 7

1.3 LT25c Specific Parts 9

2 Revision History 11

The following location pictures of common sections are taken with LT25c.

1 Part List

The following parts are available for order in 'E-star'.

The 'E-star' name of a part may often be complex and even confusing, so the name of certain parts mentioned in the Working Instructions, Repair Movies and Troubleshooting Guide are often referred to by a simple descriptive name for better understanding.

Both names (designations) will in that case be included in this Part List, where the name being used in the documents mentioned above is underlined, e.g. Battery Cover.











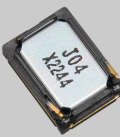

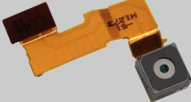

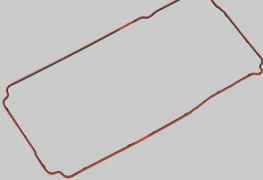

1.1 LT25i/LT25c Common Parts







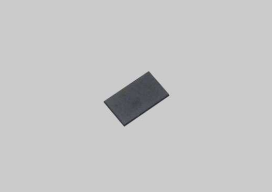
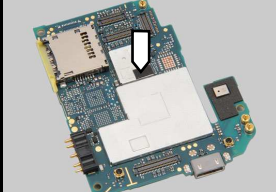

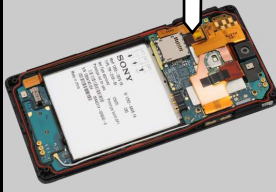
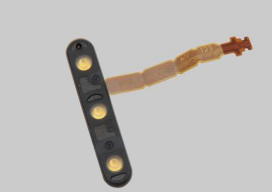

The following parts are available for order in 'E-star'.

The 'E-star' name of a part may often be complex and even confusing, so the name of certain parts mentioned in the Working Instructions, Repair Movies and Troubleshooting Guide are often referred to by a simple descriptive name for better understanding.

Both names (designations) will in that case be included in this Part List, where the name being used in the documents mentioned above is underlined, e.g. Battery Cover.

Designation	Part No.	Part	Location
Adhesive Earspeaker_WR	1262-0266		
Adhesive Speaker_WR	1262-0564		
Adhesive Sub PBA Assy	1262-0253		
Audio Jack	1257-5965		
Cable RF	1261-3593		
Card Connector Tray	1261-4278		
Charge Pad	1264-3313		

Designation	Part No.	Part	Location
Core Unit Label	1262-1754		
Cushion 2nd Mic_WR	1262-0562		
Cushion MIC2 PCB	1262-0296		
<u>Ear Speaker</u> Ear Speaker 12.0 Rectangular_WR	1262-3081		
Foil Adhesive CAM	1268-2287		
Loudspeaker	1252-7372		
<u>Main Camera</u> FICTIVE Camera 13.1 MPixel	1261-9394		
Main Gasket	1262-0375		













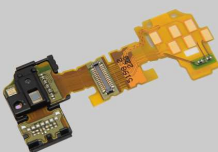
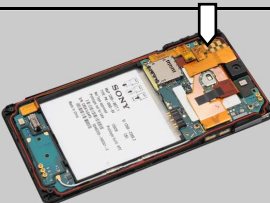
Designation	Part No.	Part	Location
Relay Flex PBA Assy	1258-0490		
Screw Len:3.2 Diam:1.4 M	1262-4308		
Screw Len:5.0 Diam:1.4	1262-0636		
Sheet Shield NonCell	1272-1888		
Sheet Side Key FPC	1265-3433		
Side Key Flex PBA Frame Assy_WR	1267-5404		





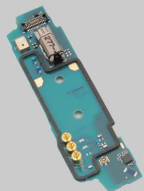




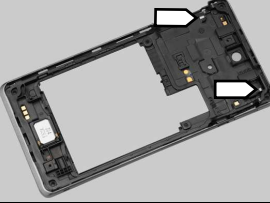

1.2 LT25i Specific Parts

The following parts are available for order in 'E-star'.

The 'E-star' name of a part may often be complex and even confusing, so the name of certain parts mentioned in the Working Instructions, Repair Movies and Troubleshooting Guide are often referred to by a simple descriptive name for better understanding.

Both names (designations) will in that case be included in this Part List, where the name being used in the documents mentioned above is underlined, e.g. Battery Cover.

Designation	Part No.	Part	Location
Adhesive ANT NonCell_WR	1262-4925		
Ant Diversity Flex	1264-3593		
<u>Cap Audio Jack</u> Cap Audio Jack Black Cap Audio Jack Pink Cap Audio Jack White	1262-1675 1264-1669 1265-6187		
<u>Cap Micro USB</u> Cap Micro USB Black Cap Micro USB Pink Cap Micro USB White	1262-1714 1264-1681 1265-6191		
<u>Cover Battery Assy</u> Cover Battery Assy Black Cover Battery Assy Pink Cover Battery Assy White	1264-1757 1267-4253 1264-1765		
<u>Cover Rear Assy</u> Cover Rear Assy Black Cover Rear Assy Pink Cover Rear Assy White	1268-4322 1268-4324 1268-4326		
Jack Flex PBA Assy	1263-5198		















Designation	Part No.	Part	Location
Net Speaker	1262-1659		
<u>Side Key</u> Side Key Black Side Key Pink Side Key White	1262-1670 1264-1660 1265-6186		
Sub PBA Assy	1268-2616		
<u>Touch/Display Front Cover Assy</u> Touch/Display Front Cover Assy Black	1268-1634		
Water Indicator	1255-4136		
			

1.3 LT25c Specific Parts

The following parts are available for order in 'E-star'.

The 'E-star' name of a part may often be complex and even confusing, so the name of certain parts mentioned in the Working Instructions, Repair Movies and Troubleshooting Guide are often referred to by a simple descriptive name for better understanding.

Both names (designations) will in that case be included in this Part List, where the name being used in the documents mentioned above is underlined, e.g. Battery Cover.

Designation	Part No.	Part	Location
<u>Cap Audio Jack</u> Cap Audio Jack Black Cap Audio Jack Pink Cap Audio Jack White	1262-0607 1264-1966 1265-6215		
<u>Cap Micro USB</u> Cap Micro USB Black Cap Micro USB Pink Cap Micro USB White	1262-0620 1264-1969 1265-6217		
<u>Cover Battery Assy</u> Cover Battery Assy Black Cover Battery Assy Pink Cover Battery Assy White	1263-7889 1264-3086 1265-7810		
<u>Cover Battery Assy</u> Cover Battery Assy Black_APT Cover Battery Assy Pink_APT Cover Battery Assy White_APT	1268-4733 1268-4741 1268-4734		
<u>Cover Bottom</u> Cover Bottom Black Cover Bottom Pink Cover Bottom White	1267-3025 1267-3037 1267-3033		
Cover Bottom Deco Silver	1267-5611		
<u>Cover Rear Assy</u> Cover Rear Assy Black Cover Rear Assy Pink Cover Rear Assy White	1267-5594 1267-5617 1267-5620		

Designation	Part No.	Part	Location
Cushion Sheet 1st Mic_WR	1262-0572		
Jack Flex PBA Assy	1258-0498		
Net Speaker	1262-0414		
Side Key Side Key Black Side Key Pink Side Key White	1262-0602 1264-1965 1265-6214		
Sub PBA Assy	1267-5567		
Touch/Display Front Cover Assy Touch/Display Front Cover Assy Black	1267-5403		
Water Indicator	1255-4136		
			

2 Revision History

Rev.	Date	Changes / Comments
1	2012-Nov-16	Initial release
2	2012-Dec-27	New part 1272-1888 update

Go/No Go Test - electrical -



Xperia™ V
LT25i



Xperia™ VC
LT25c

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2 Revision History 7

LT25i is ONLY implemented in CMWrun.

LT25c is ONLY implemented in SERPII.

1 Go/No Go Testing

For more information on Antenna Coupler and Cable in shield box testing, refer to 1220-1336: Generic Repair Manual – electrical, section ‘Setup Go/NoGo Test’!

For part no’s on the equipment below, refer to the ‘Tools Catalogue/Matrix’!

1.1 Antenna Coupler LT25i:

The following equipment has to be used:

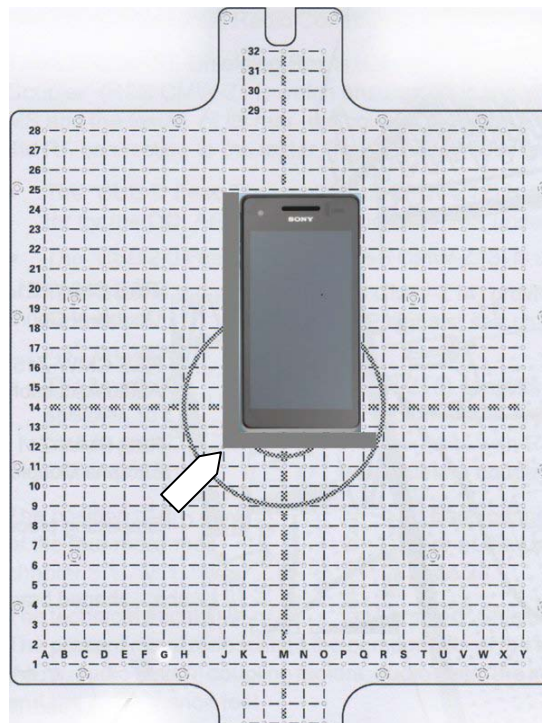
- Rohde & Schwartz RF Shield Package
 - Rohde & Schwartz RF Shield Box
 - Rohde & Schwartz RF Coupler
 - Grid Positioning Holder
- RF Test Cable Flexible 1M
- RF Adapter for RF Shield Box
- Micro USIM Card, instrument specific

GSM-850/900/1800/1900

WCDMA-850/900/2100

LTE BAND-1/3/5/7/20

Put the grid positioning holder with its reference point in position **J12** and place the phone as shown in the adjacent picture.



1.2 Antenna Coupler LT25c:

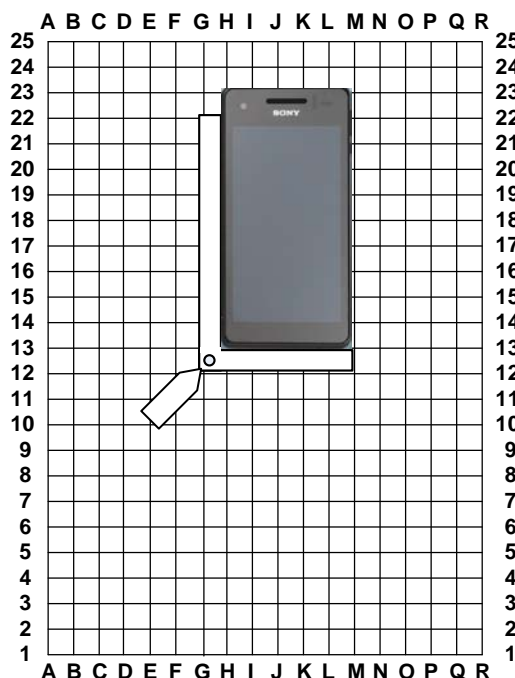
The following equipment has to be used:

- Rohde & Schwartz RF Shield Package
 - Rohde & Schwartz RF Shield Box CMU-Z11
 - Rohde & Schwartz RF Coupler
 - Grid Positioning Holder
- RF Test Cable Flexible 1M
- RF Adapter for RF Shield Box
- Micro USIM Card, instrument specific for GSM.
- Micro UICC Card, R&S CMW-Z04 for CDMA

GSM-850/900/1800/1900

CDMA-800/1900

Put the grid positioning holder with its reference point in position **G12** and place the phone as shown in the adjacent picture.



Go/NoGo Testing

Follow the directions stated in 'Go/NoGo Test Script Parameters' to be found in 1220-1336: Generic Repair Manual – electrical, together with the 'Attenuation Factors' below!

This phone is available in two versions, LT25i and LT25c, including the following bands:

LT25i:

GSM-850/900/1800/1900

WCDMA-850/900/2100

LTE-Band-1/3/5/7/20

LT25c:

GSM-850/900/1800/1900

CDMA-800/1900

Go/NoGo Testing

1.3 Attenuation Factors

The attenuation values listed below is valid only when the equipment listed on the previous pages is being used!

1.3.1 Loss Values – Antenna Coupler CMW-Z11

Band	Channel	Attenuation LT25i	
		Rx	Tx
GSM 850	Low	8.00	4.27
	Mid	8.00	5.59
	High	8.00	5.33
GSM 900	Low	7.00	6.5
	Mid	9.00	6.35
	High	7.00	6.41
GSM 1800	Low	12.00	12.55
	Mid	10.00	13.4
	High	15.00	11.72
GSM 1900	Low	7.00	9.58
	Mid	11.00	12.12
	High	12.00	12.53
WCDMA 850	Low	10.00	5.99
	Mid	10.00	6.3
	High	10.00	7.18
WCDMA 900	Low	15.00	5.18
	Mid	15.00	5.83
	High	15.00	6.8
WCDMA 2100	Low	17.00	12.88
	Mid	19.00	11.57
	High	19.00	10.95
LTE BAND 1	Low	16.00	14.71
	Mid	17.00	13.52
	High	19.00	13.21
LTE BAND 3	Low	14.00	14.87
	Mid	17.00	14.24
	High	17.00	13.72
LTE BAND 5	Low	15.00	9.11
	Mid	15.00	8.14
	High	15.00	9.04
LTE BAND 7	Low	20.00	14.57

LTE BAND 7	Mid	21.00	13.71
	High	22.00	14.66
LTE BAND 20	Low	15.00	8.22
	Mid	15.00	8.76
	High	15.00	9.24

1.3.2 Loss Values – Antenna Coupler CMU-Z11

Band	Channel	Attenuation LT25c	
		Rx	Tx
GSM 850	Low	10.00	12.00
	Mid	7.00	6.80
	High	10.00	11.40
GSM 900	Low	7.00	7.55
	Mid	6.00	8.90
	High	7.00	7.80
GSM 1800	Low	12.00	14.50
	Mid	12.00	11.88
	High	12.00	12.45
GSM 1900	Low	11.00	14.89
	Mid	12.00	14.67
	High	12.00	12.98
CDMA 800	Low	15.00	10.50
	Mid	15.00	10.50
	High	15.00	10.50
CDMA 1900	Low	14.00	11.50
	Mid	14.00	11.50
	High	14.00	11.50

2 Revision History

Rev.	Date	Changes / Comments
1	2012-Nov-12	Initial release, LT25c to be updated
2	2012-Dec-03	LT25c added.
3	2013-Feb-18	CDMA Loss Values – Antenna Coupler CMU-Z11 added

SONY

make.believe

Customization - build swap -



Xperia™ V
LT25i

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 2.3.2 Build Swap 7

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For general information about Customization and Swap, refer to
1221-5655: Generic Repair Manual – build swap

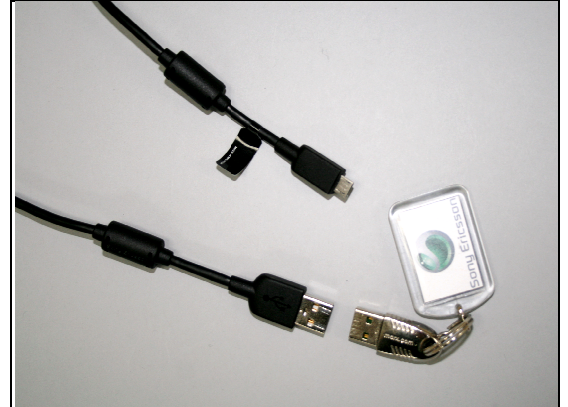
1 Emma Login & Script Execution

In order to change a phone from Customer A to Customer B you must run a 'Customization Script' followed by an 'Activation Script'.

Start by launching the Emma application.

Connect the Micro USB to USB cable to one of the computer's USB ports but do not connect the cable to the phone.

The USB Activation Dongle has to be inserted into one of the computer's USB ports to be able to log in.



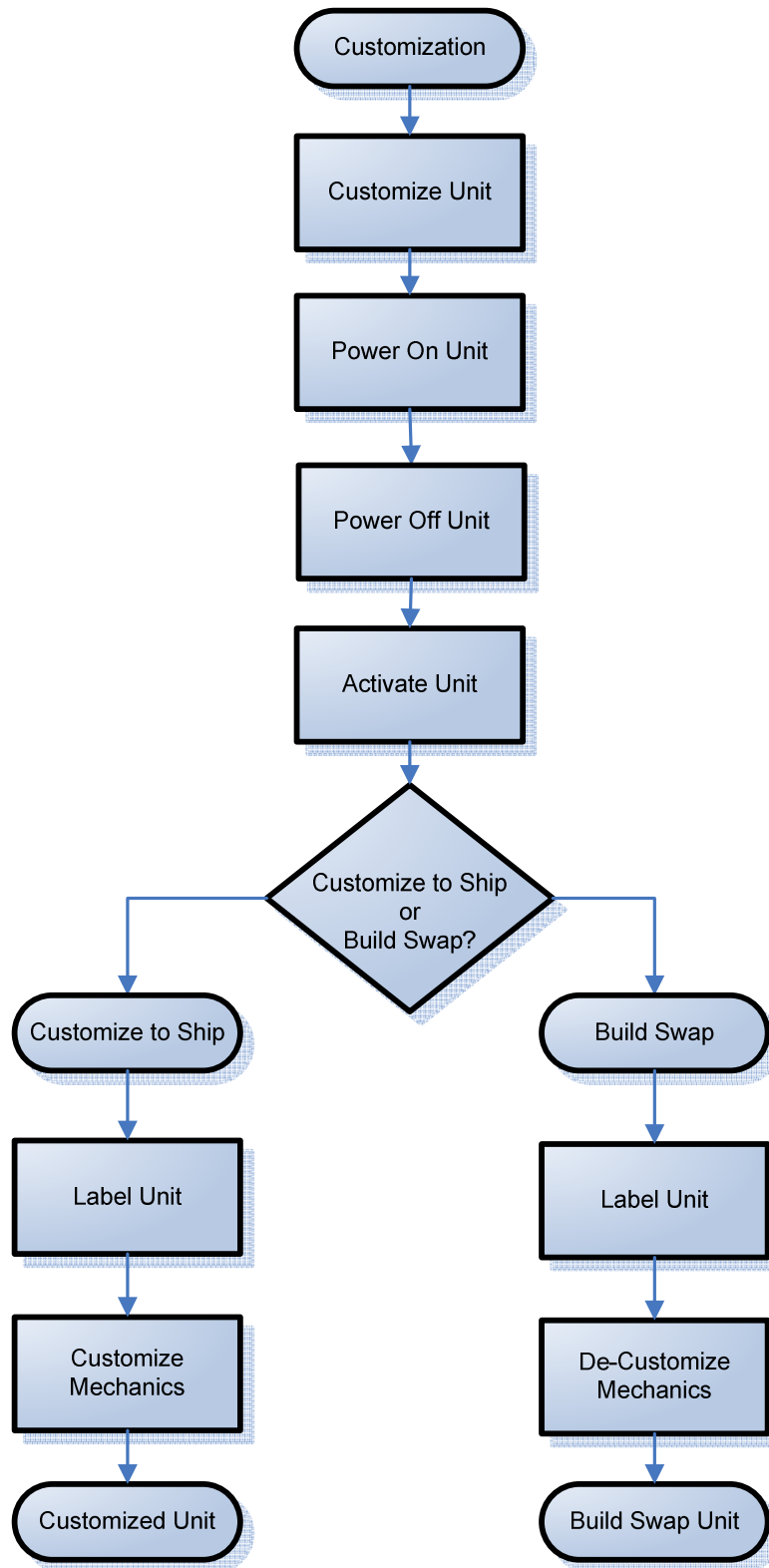
To execute a 'Customization' or 'Activation' you need to be properly logged on to the Emma application by using your User ID and Password.

To execute a 'Customization Script' or 'Activation Script' (or any other function):

- check that the phone is powered off
- press and keep the "Volume Down" key down on the phone
- connect the phone to the USB Cable
- release the "Volume Down" key

When executing an 'Activation Script' you will be prompted for the PIN of your USB Activation Dongle.

2 Customization Workflow



Customization Workflow

The primary reason for the customization process is to create a customized unit.

A customized unit is a unit that is ready to ship as a final swap unit.

The second reason for customization is to create “build swap” units and this can be done by selecting the ‘Service Exchange Unit’ customization script for the particular model.

The instruction steps below refer to the flowchart on previous page.

2.1 Customize Unit

After following the steps in section 1, ‘Emma Login & Script Execution’, you can customize a phone as follows:

- look for the Customize script for the desired Sales Item
- if that script is not available locally, select ‘Server search’ for a complete list of available scripts.

When creating a ‘build swap’ unit, select “LT25i Service Exchange Unit” as the customization scripts!

- choose the desired script
- the application will download all necessary software to run the script and then flash that software to the phone
- after successful update, disconnect the phone from the USB Cable

NOTE: For phones with eMMC flash memory (built in “SD card” memory), the only service which erase this eMMC memory is Service’s “Refurbish” and “Customize”. See also emma User Guide info. http://emma.extranet.sonyericsson.com/documents/emma_user_guide.pdf (see “Service Types” and “Aspects of large files”)

In Swap flow, when change a phone from Customer A to Customer B, always use the service Customization script.

Customization Workflow

2.2 Power on unit

Press the **Key Power** to power on the unit, place unit on the flat desk and wait until system boot up has been completed.

Please DO NOT move the unit during starting up until “Select Language” menu is shown on the display!

Customization Workflow

2.3 Customize to Ship or Build Swap

Is the unit a customized unit to be shipped?

Yes – proceed to 2.2.1 Customize to Ship

No – go to 2.2.2 Build Swap

2.3.1 Customize to Ship

2.3.1.1 Label Unit

Print two Core Unit labels by using 'Labe Print Solution'.

Place one label on the phone as described in *1269-3525: Working Instructions – mechanical*.

Place the second label on the Exchange Unit Box.

2.3.1.2 Customize Mechanics

If necessary, apply the proper custom mechanical parts (co-branding, keyboard, etc.) for the variant being created in accordance with the *Cross Reference List* by following the instructions of

1269-3525: Working Instructions – mechanical

2.3.2 Build Swap

2.3.2.1 Label Unit

Using a red marker, label the unit with the correct Exchange Unit number.

Refer to the *Cross Reference List* for the appropriate variant, which should be based on the non-customizable mechanics of the unit.

2.3.2.2 De-Customize Unit

Remove any co-branding as described in *1269-3525: Working Instructions – mechanical*

3 Revision History

Rev	Date	Changes / Comments
1	2012-Nov-16	Initial release