

Working Instructions

- mechanical -



Xperia™ M4 Aqua

E2303, E2306, E2312, E2333, E2353, E2363

CONTENTS

1	Exterior Views.....	4
1.1	E2303,E2306,E2312,E2333,E2353,E2363	4
2	Tools	5
3	Disassembly.....	6
3.1	Back Panel.....	6
3.2	Battery.....	7
3.3	Thermal Film.....	8
3.4	USB Holder 2	8
3.5	Main PBA Assy.....	9
3.6	Speaker Module Assy & Front Cover Assy	11
4	Replacement	13
4.1	Back Panel.....	13
4.2	Gasket Battery.....	13
4.3	Battery.....	13
4.4	Thermal Film.....	13
4.5	USB Holder 2	14
4.6	Fixed Film BTB Conn	14
4.7	Gasket USB FPC	14
4.8	1st Mic Mesh & 1st Mic Rubber.....	15
4.9	Adhesive Battery, Adhesive 1st Battery & 2nd Battery adhesive... ..	17
4.10	2nd Mic Assy	18
4.11	Adhesive Audio Jack	19
4.12	Adhesive Back Panel	20
4.13	Adhesive USB holder & Adhesive USB Holder 2	22
4.14	Adhesive Vibrator & Vibrator	23
4.15	BT/WLAN FPC Antenna	25
4.16	Cap SD	26
4.17	Cap SIM.....	28
4.18	Chat Camera 5M & Gasket Chat Camera	30
4.19	Cushion Battery	32
4.20	Diversity Holder Assy & Adhesive Diversity Holder & Adhesive Diversity Holder 2.....	33
4.21	Earspeaker & Adhesive Earspeaker & Gasket Earspeaker	35
4.22	FPC Audio Jack Assy	37
4.23	FPC USB Assy.....	39
4.24	Front Cover Assy	40
4.25	Gasket Link FPC Bottom Connector.....	41
4.26	Gasket RF Cable Bottom	42

4.27	Gasket RF Cable Top	43
4.28	Gasket Vib	44
4.29	GPS FPC Antenna	45
4.30	Holder Sensor.....	46
4.31	Label Tray	47
4.32	Liquid Indicator	48
4.33	Main Camera Assy	49
4.34	Rubber LED	50
4.35	Sub Antenna PBA & Gasket TP Shielding.....	51
4.36	Speaker Module Assy	54
4.37	Tape Chat Camera connector.....	55
4.38	USB Holder Assy 1	56
4.39	Vent Hole Mesh	58
4.40	Label	59
4.41	Board Swap - Replacement	60
4.42	Board Swap – Change Label	60
4.43	Board Swap – Customize of Software	61
5	Reassembly.....	62
5.1	Front Cover Assy& Speaker Module Assy	62
5.2	Main PBA	63
5.3	USB Holder 2	65
5.4	Thermal Film.....	67
5.5	Battery.....	67
5.6	Back Panel.....	69
6	Revision History	71

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

1 Exterior Views

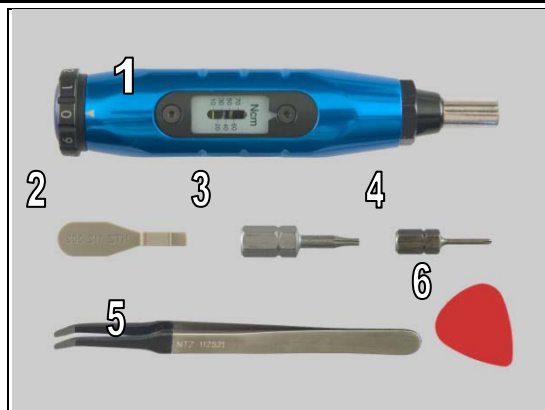
1.1 E2303,E2306,E2312,E2333,E2353,E2363



2 Tools

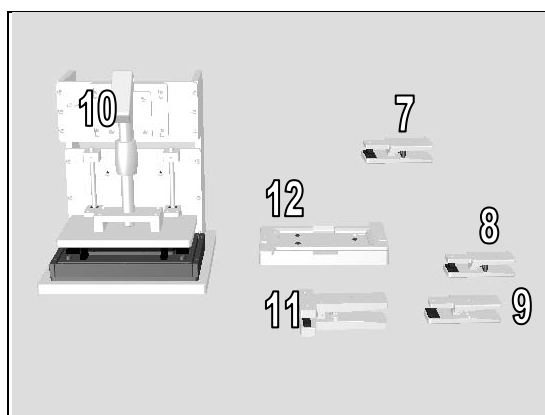
SPECIAL TOOLS

1. Torque Screwdriver
2. Front Opening Tool
3. Bits (T5)
4. Bits (JCIS No 0)
5. Flex Film Assembly Tool
6. Guitar Pick



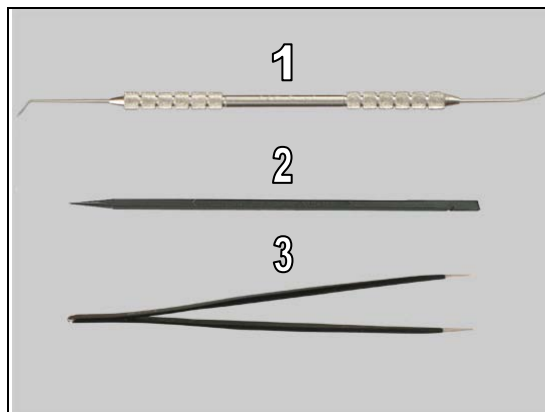
For part no's on the tools above, refer to the 'Tools Catalogue/Matrix'!

7. 1st Mic Mesh Press Fixture
8. 1st Mic Press Fixture
9. Earspeaker Press Fixture
10. Back Panel Press Fixture
11. Battery Press Fixture
12. Back Panel Adhesive alignment fixture



STANDARD TOOLS

1. Dentist Hook
2. Nylon Pointer
3. Tweezers



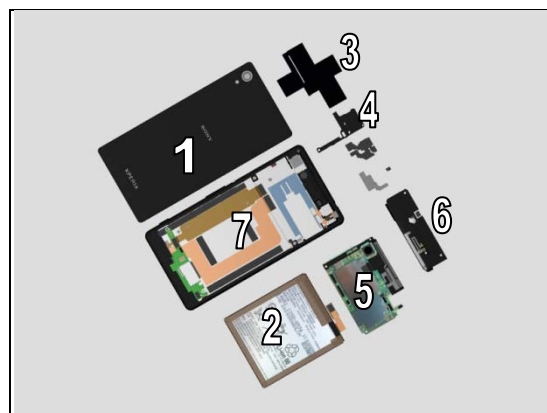
4. Suction Cup



3 Disassembly

The disassembly is done in the following order:

1. Back Panel
2. Battery
3. Thermal Film
4. USB Holder 2
5. Main PBA Assy
6. Speaker Module Assy
7. Front Cover Assy



3.1 Back Panel

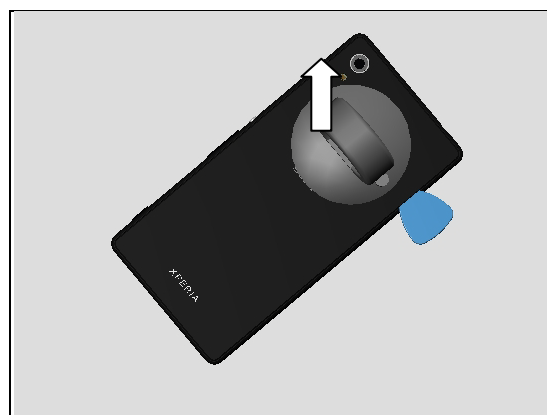
Use Suction cup to get space for inserting the Guitar Pick from top of the right side.

Note! Start in the top of the right long side!



Gently slide the Guitar Pick along as sequence shown in the picture to release all sides of the Back Panel.

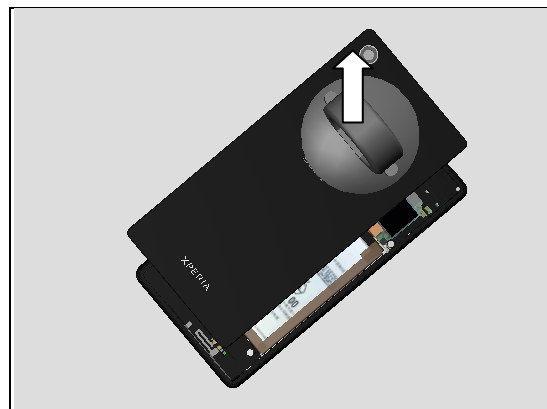
Avoid position as shown!



Remove the Back Panel by using the Suction cup.

Note! BT/WLAN FPC Antenna and GPS FPC Antenna could be peeled off, Scrap!

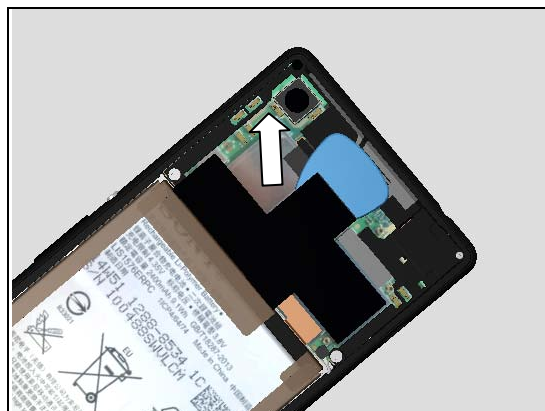
All the adhesive residues should be cleaned!



Disassembly

3.2 Battery

Detach to release the Thermal Film by using the Guitar Pick.

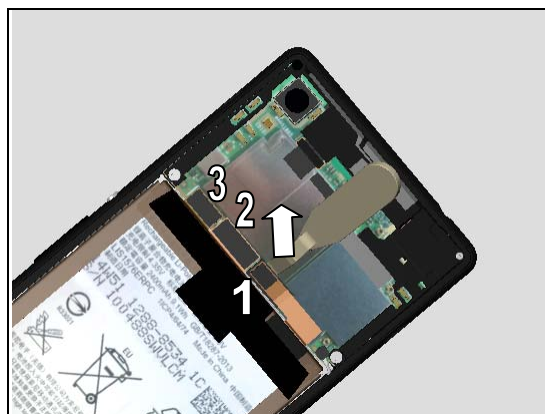


Lift to fully release the upper part of Thermal Film from the Main PBA.



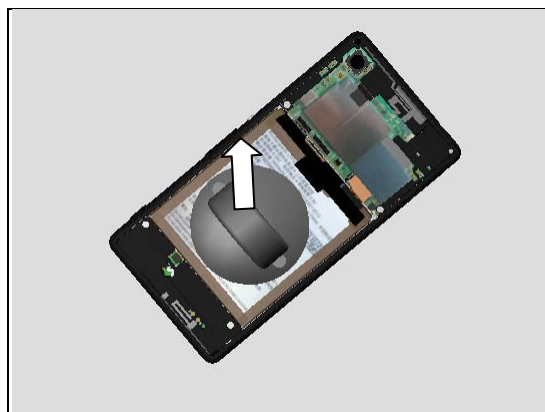
Use a Front Opening Tool to disconnect three BtB connectors as sequence shown.

Scrap! Gasket Battery cannot be reused!



Lift to remove the Battery by Section Cup.

Scrap! Battery cannot be reused!

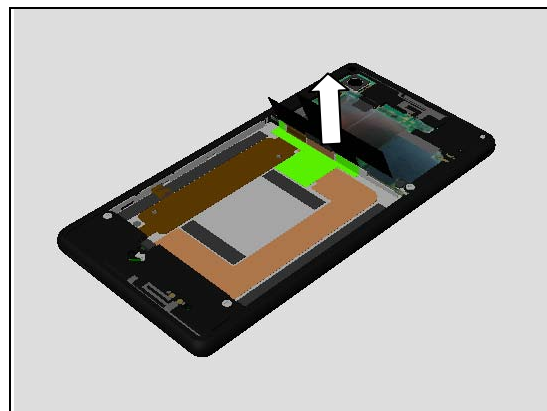


Disassembly

3.3 Thermal Film

Detach to remove the lower part of the Thermal Film from the Front Cover Assy.

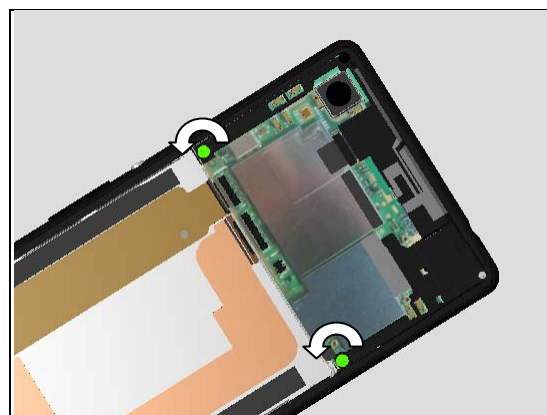
Scrap! Do not reuse!



3.4 USB Holder 2

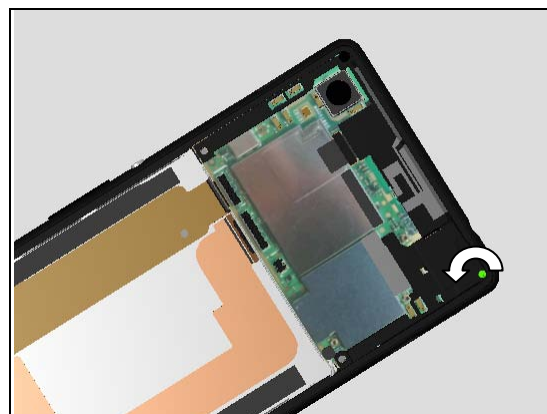
Remove two Screw M1.6 by using a screwdriver with Bits (T5).

Scrap! Not to be reused!



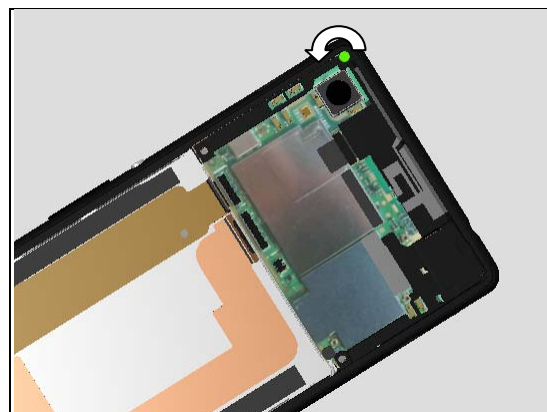
Remove the Screw M1.0 by using a screwdriver with Bits (JCIS No 0).

Scrap! Not to be reused!



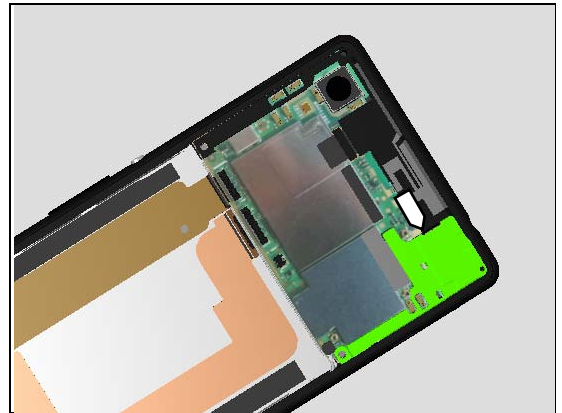
Remove the Screw M1.2 by using a screwdriver with Bits (JCIS No 0).

Scrap! Not to be reused!



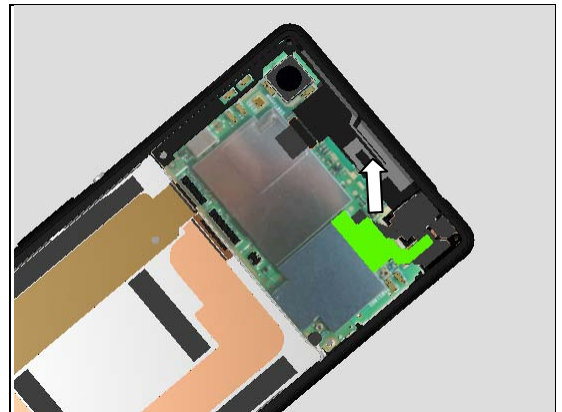
Disassembly

Release the hook as shown to remove the USB Holder 2.



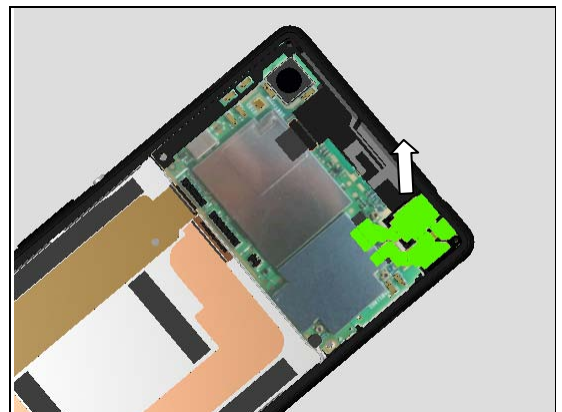
Detach to remove the Fixed Film BTB Conn

Scrap! Not to be reused!



Detach to remove the Gasket USB FPC

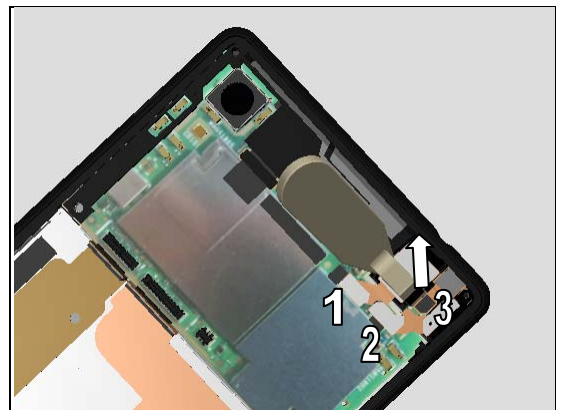
Scrap! Not to be reused!



3.5 Main PBA Assy

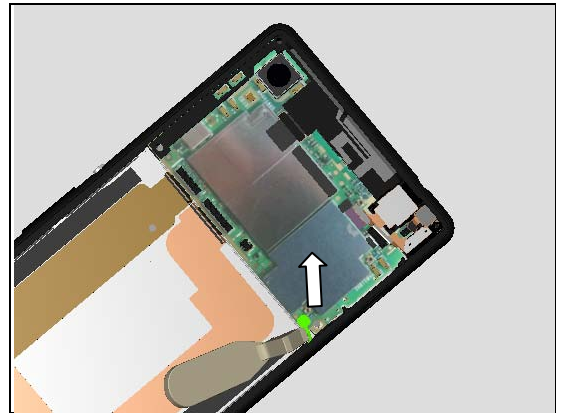
Use a Front Opening Tool to disconnect the

1. Audio Jack FPC BtB connector
2. USB FPC BtB connector
3. 2nd Microphone FPC BtB connector

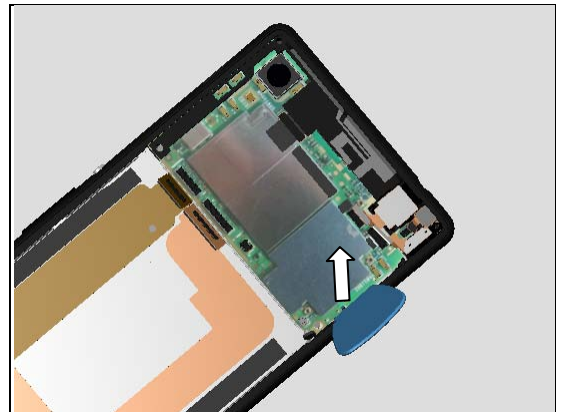


Disassembly

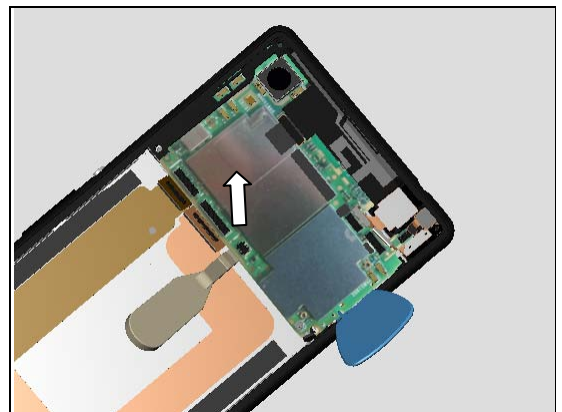
Unsnap the coax connector by using the Front Opening Tool.



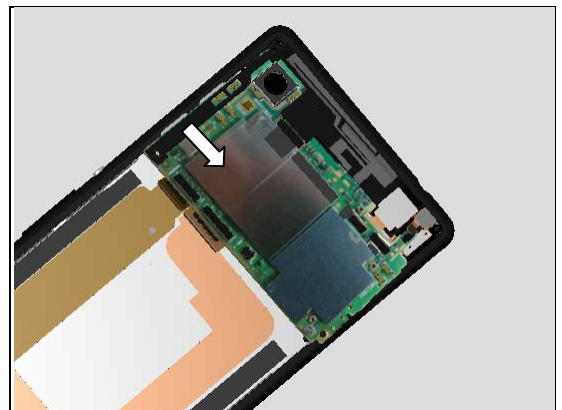
Release first snap hook at right side of Main PBA by using the Guitar Pick as shown in picture.



Keep Guitar Picks' position and release bottom side as shown position by using the Front Opening tool.



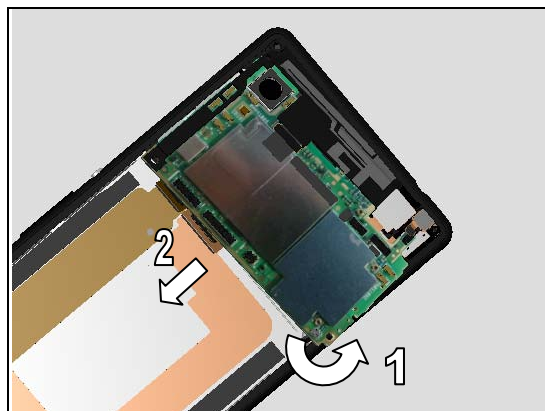
Pull the Main PBA towards right side to release the left side.



Disassembly

Raise the bottom side at approximately 15° and pull to remove the Main PBA gently.

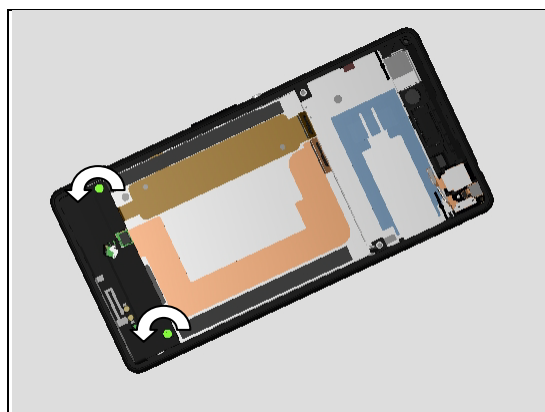
Be careful of the Main Camera!



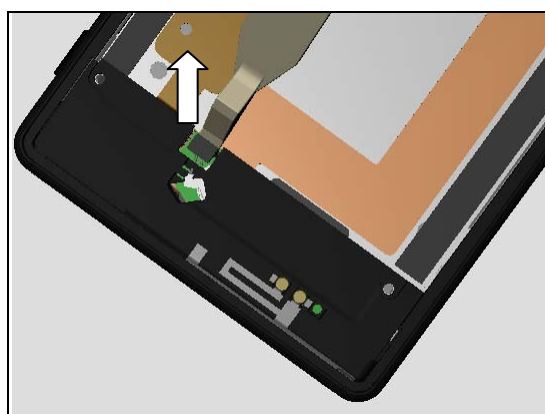
3.6 Speaker Module Assy & Front Cover Assy

Remove two Screw M1.6 by using a screwdriver with Bits (T5).

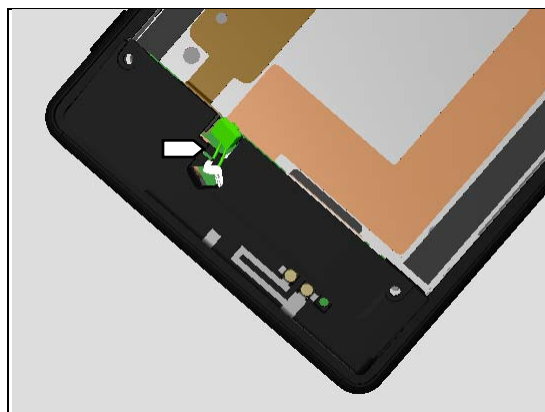
Scrap! Not to be reused!



Disconnect the Vibrator Connector.

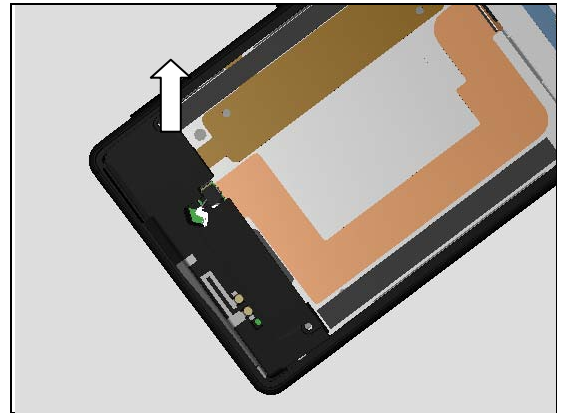


Bend the Vibrator wire to unhook the Vibrator connector as shown direction.

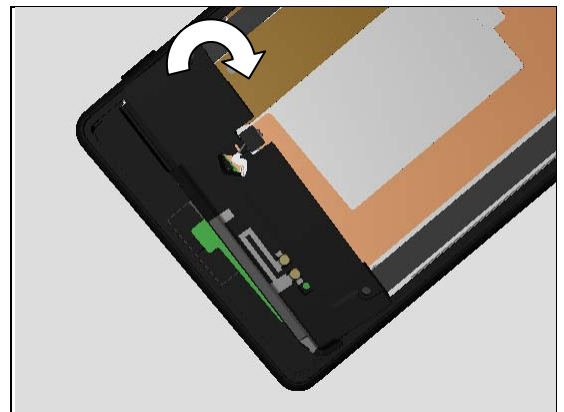


Disassembly

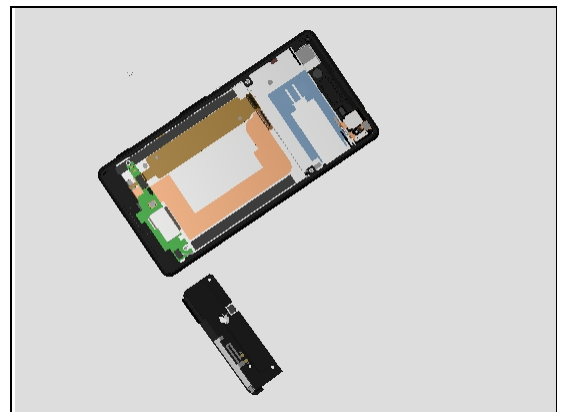
Pull upwards to release the right corner as shown in the picture.



Pull and rotate as shown direction to release the bottom side of the Speaker Module Assy.



Remove the Speaker Module Assy from the Front Cover Assy.



4 Replacement

4.1 Back Panel

Follow the 3.1 Disassembly instructions!

Prepare the new Back Panel

Follow the 5.6 Reassembly instructions!



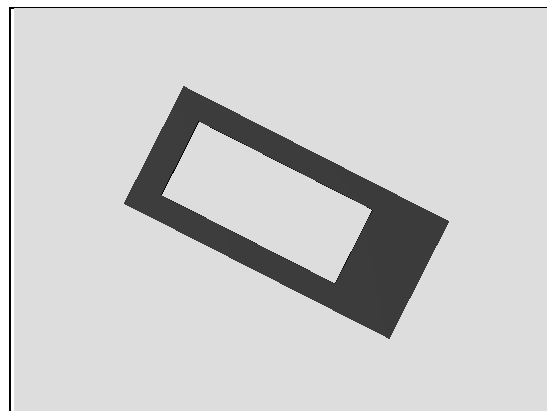
4.2 Gasket Battery

Follow the 3.1 - 3.2 Disassembly instructions!

Prepare the new Gasket Battery.

Do not reuse!

Follow the 5.4 - 5.6 Reassembly instructions!



4.3 Battery

Follow the 3.1 – 3.3 Disassembly instructions!

Prepare the new Battery.

Do not reuse!

Follow the 5.5- 5.6 Reassembly instructions!



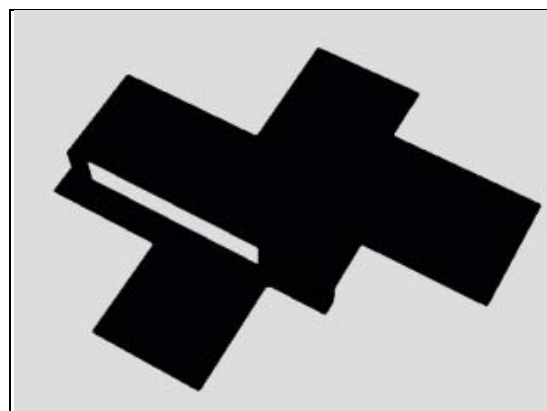
4.4 Thermal Film

Follow the 3.1 – 3.3 Disassembly instructions!

Prepare the new Thermal Film.

Do not reuse!

Follow the 5.4 – 5.6 Reassembly instructions!



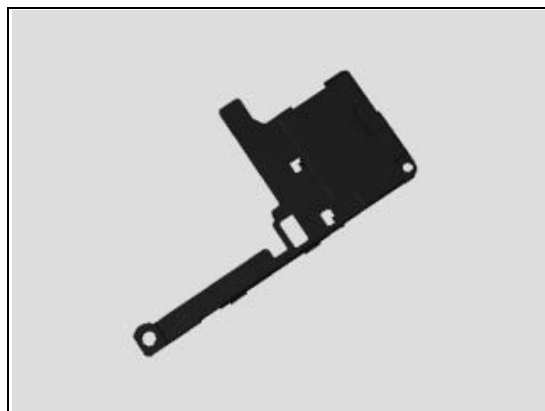
Replacement

4.5 USB Holder 2

Follow the 3.1 – 3.4 Disassembly instructions!

Prepare the new USB Holder 2.

Follow the 5.3 - 5.6 Reassembly instructions!



4.6 Fixed Film BTB Conn

Follow the 3.1 – 3.4 Disassembly instructions!

Prepare the new Fixed Film BTB Conn.

Do not reuse!

Follow the 5.3 – 5.6 Reassembly instructions!



4.7 Gasket USB FPC

Follow the 3.1 – 3.4 Disassembly instructions!

Prepare the new Gasket USB FPC

Do not reuse!

Follow the 5.3 – 5.6 Reassembly instructions!



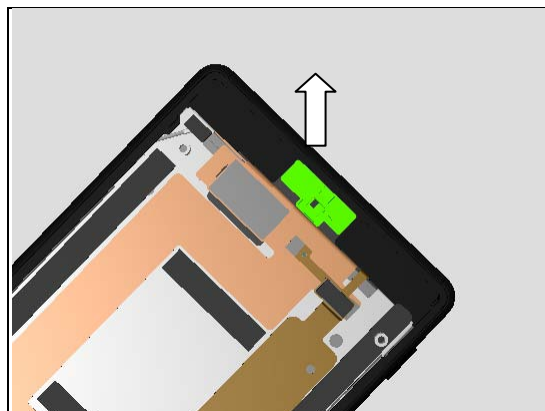
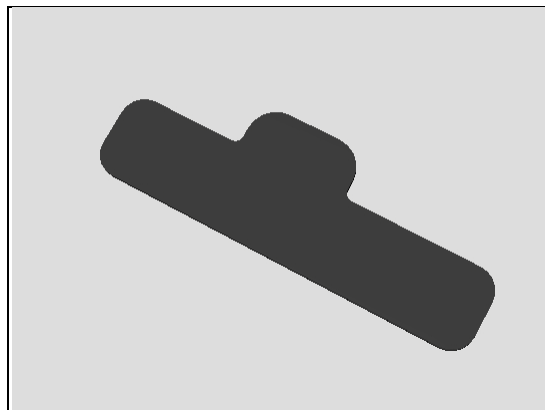
Replacement

4.8 1st Mic Mesh & 1st Mic Rubber

Follow the 3.1 – 3.6 Disassembly instructions!
Follow the 4.35 Removal Instructions!
 Prepare the new 1st Mic Mesh & 1st Mic Rubber.
Follow the 4.35 Installation Instructions!
Follow the 5.1 – 5.6 Reassembly instructions!

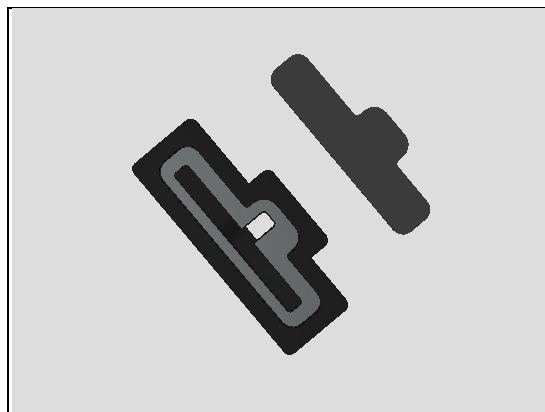
REMOVAL

Insert the Front Opening Tool underneath the 1st Mic Rubber and pull upwards to remove them from the Front Cover Assy.

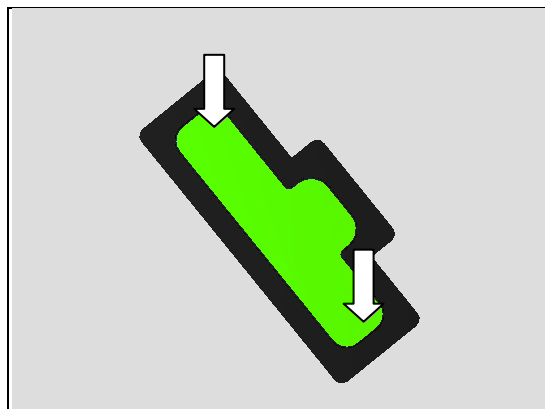


INSTALLATION

Prepare a new 1st Mic Mesh and 1st Mic Rubber.

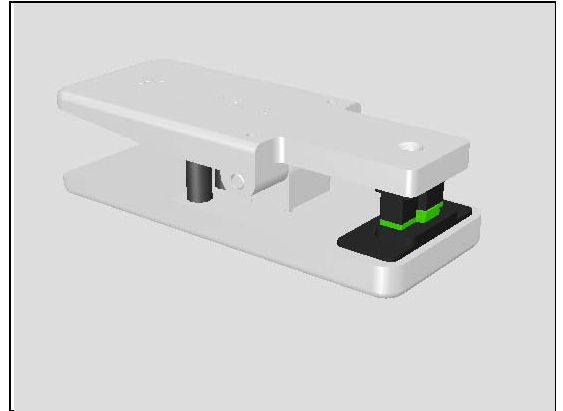


Place the 1st Mic Mesh into the 1st Mic Rubber cavity with correct direction.

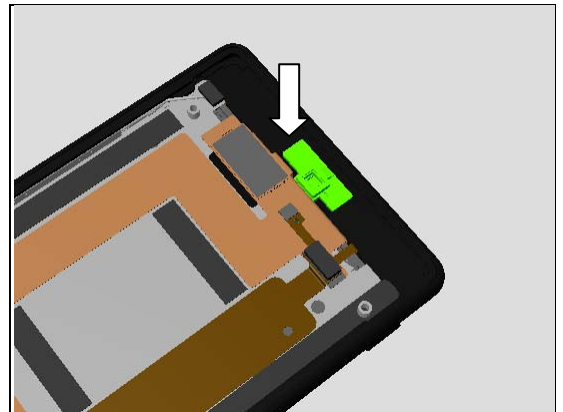


Replacement

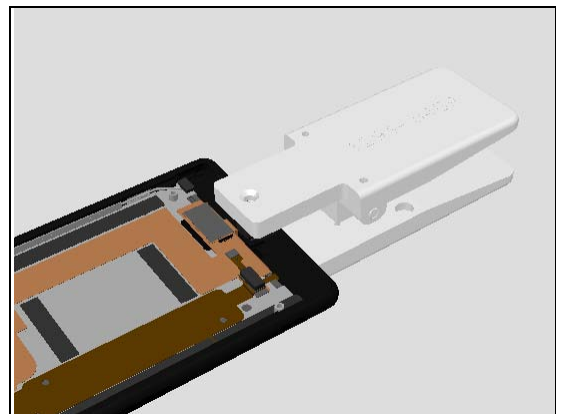
Place the new 1st Mic Rubber into the 1st Mic Mesh Press Fixture in a correct position and press for 5 seconds to secure the attachment.



Place the 1st Mic Rubber Assy into the cavity of Front Cover Assy.



Press for 8 seconds with the 1st Mic Press Fixture to secure the attachment.



Replacement

4.9 Adhesive Battery, Adhesive 1st Battery & 2nd Battery adhesive

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Adhesive Battery, Adhesive 1st Battery 2nd Battery adhesive.

Carry out the Installation as described below!

Follow the 5.4 - 5.6 Reassembly instructions!

REMOVAL

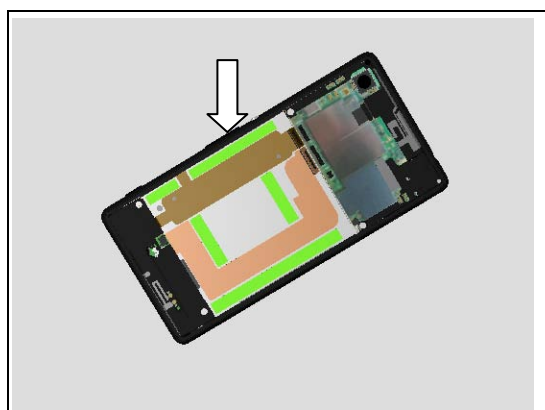
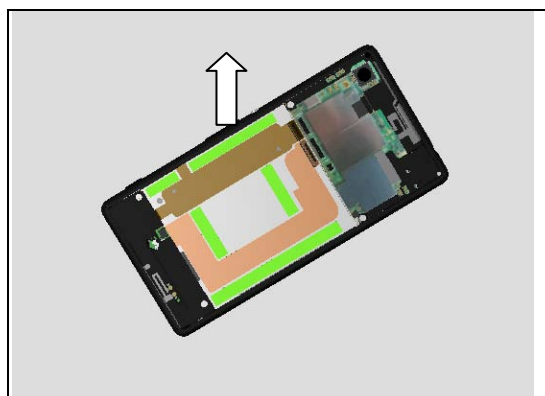
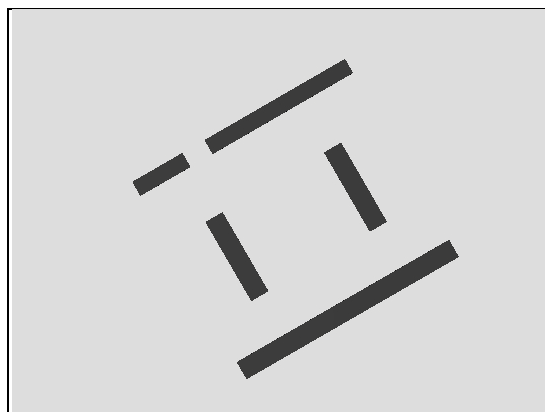
Detach to remove Adhesive Battery, Adhesive 1st Battery 2nd Battery adhesive From Front Cover Assy by using the Flex Film Assembly Tool.

Clean any remaining adhesive residue!

Scrap! Not to be reused!

INSTALLATION

Place the new Adhesive Battery, Adhesive 1st Battery and 2nd Battery adhesive aligning with the guiding lines and press to make them securely attached.



Replacement

4.10 2nd Mic Assy

Follow the 3.1 – 3.5 Disassembly instructions!

Follow the 4.22, 4.38 Removal Instructions!

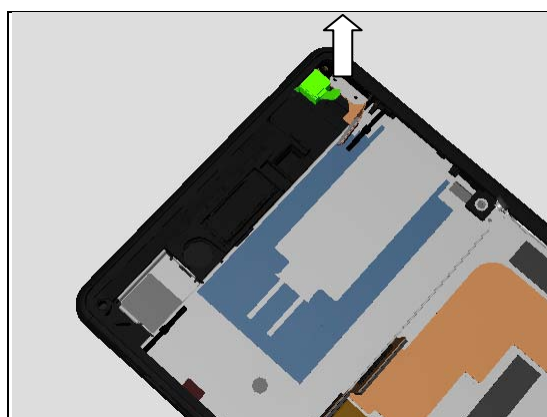
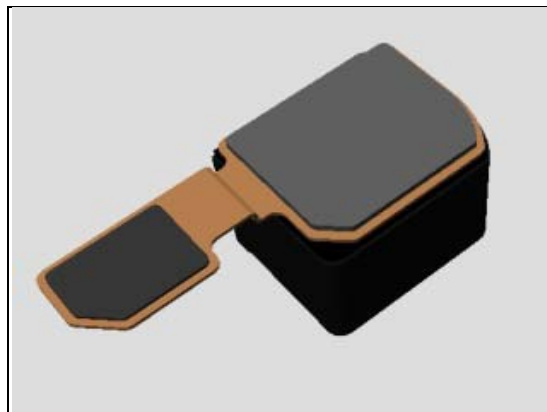
Prepare the new 2nd Mic Assy.

Follow the 4.22, 4.38 Installation Instructions!

Follow the 5.2 – 5.6 Reassembly instructions!

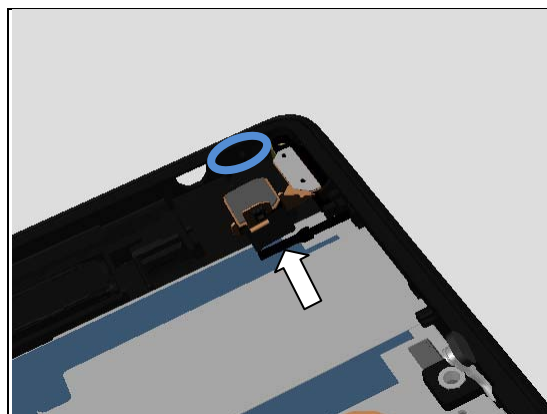
REMOVAL

Insert the Front Opening Tool underneath the 2nd Mic Assy and pull upwards to remove it.

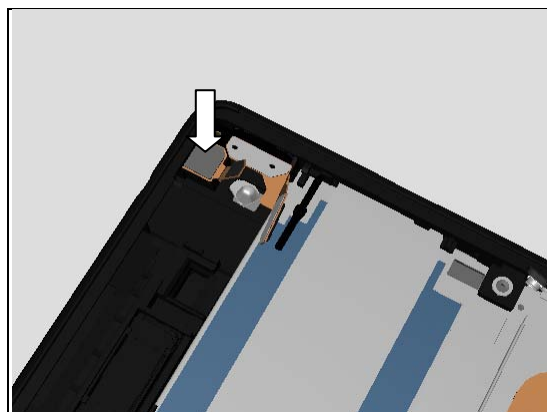


INSTALLATION

Insert the new 2nd Mic Assy into the hole as shown in picture.



Press as shown direction to secure its position.



Replacement

4.11 Adhesive Audio Jack

Follow the 3.1 – 3.5 Disassembly instructions!

Follow the 4.22 Removal Instructions!

Prepare the new Adhesive Audio Jack.

Follow the 4.22 Installation Instructions!

Follow the 5.2 – 5.6 Reassembly instructions!

REMOVAL

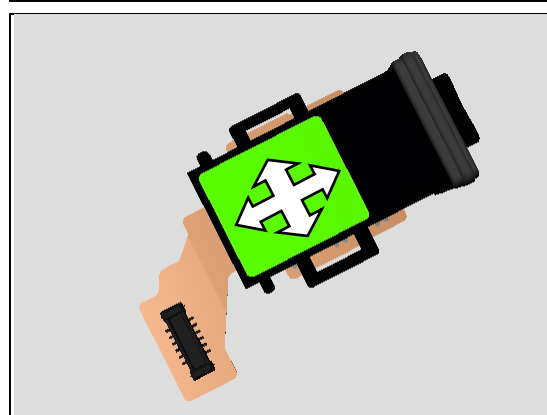
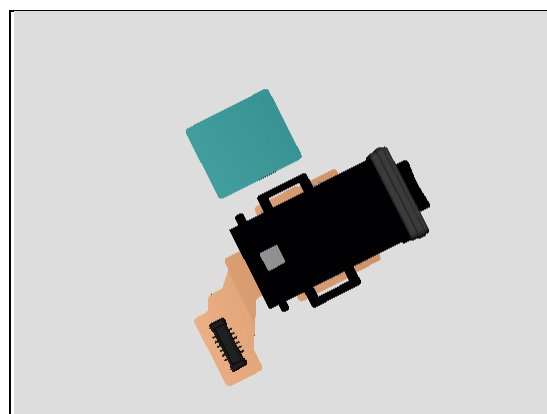
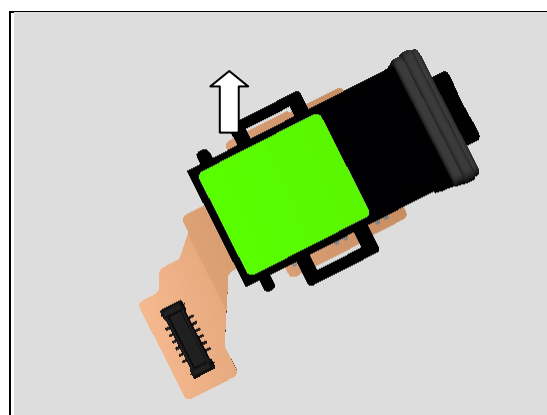
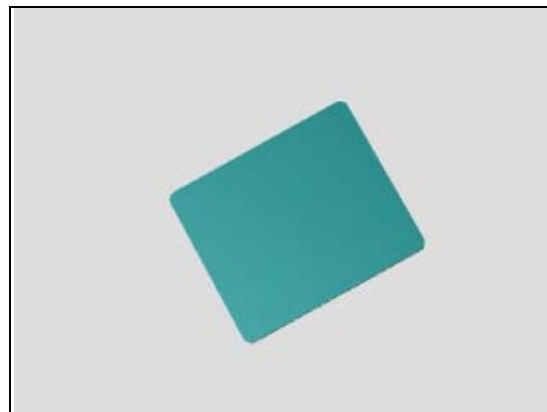
Detach to remove Adhesive Audio Jack from FPC Audio Jack Assy by using the Flex Film Assembly Tool.

Scrap! Cannot be reused!

INSTALLATION

Place the new Adhesive Audio Jack aligning with the bottom edge of the FPC Audio Jack Assy.

Press long to secure its attached firmly.



Replacement

4.12 Adhesive Back Panel

Follow the 3.1 Disassembly instructions!
Carry out the Removal as described below!
 Prepare the new Adhesive Back Panel.
Carry out the Installation as described below!
Follow the 5.6 Reassembly instructions!

REMOVAL

Remove the old Adhesive Back Panel and all remains of the Adhesive residue.

Clean the edges of the Back Panel carefully with alcohol before the new Adhesive Back Panel is mounted.

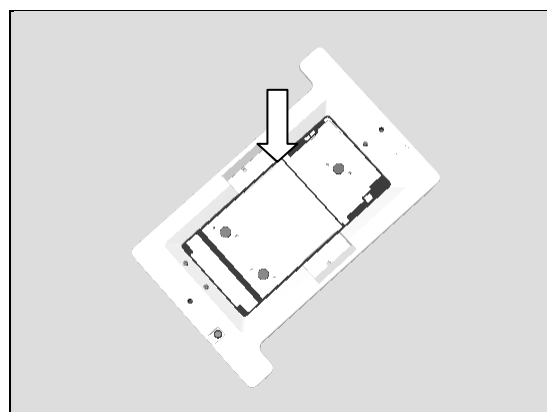
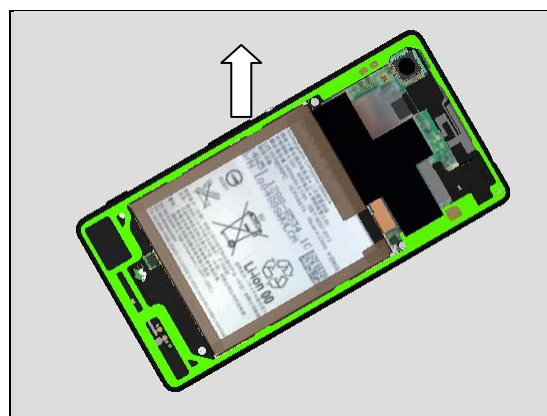
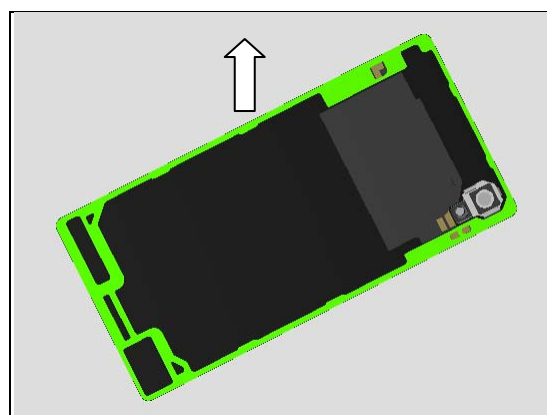
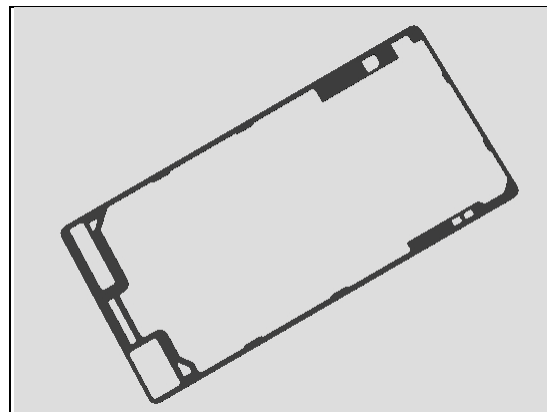
This action is done to secure the water resistant of the unit.

Scrap! Not to be reused!

Do the same of the other side.

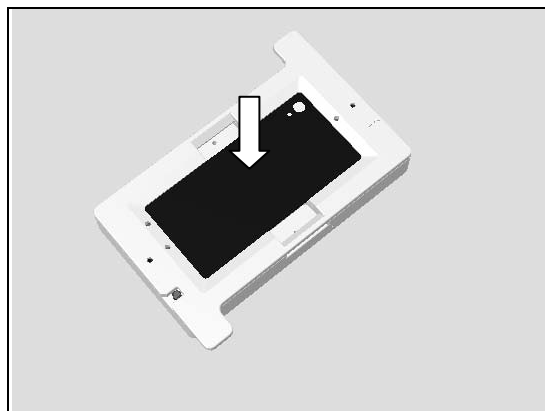
INSTALLATION

Place the new Adhesive Back Panel in the Back Panel Adhesive Alignment Fixture



Replacement: Adhesive Back Panel

Place the Back Panel in the Fixture with correct position and press to secure the attachment.



Replacement

4.13 Adhesive USB holder & Adhesive USB Holder 2

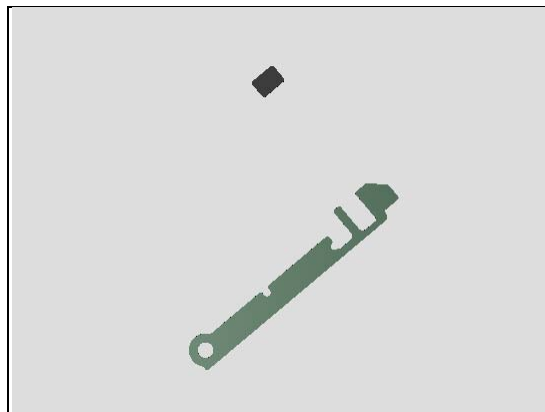
Follow the 3.1 Disassembly instructions!

Carry out the Removal as described below.

Prepare the new Adhesive USB holder & Adhesive USB Holder 2.

Carry out the Installation as described below!

Follow the 5.6 Reassembly instructions!



REMOVAL

Detach to remove Adhesive USB holder & Adhesive USB Holder 2 by using a Flex Film Assembly Tool gently.

INSTALLATION

Place new Adhesive USB holder & Adhesive USB Holder 2 using a Flex Film Assembly Tool at proper positions and press to make them securely attached.



Replacement

4.14 Adhesive Vibrator & Vibrator

Follow the 3.1 – 3.3, 3.6 Disassembly instructions!

Carry out the Removal as described below.

Prepare the new Adhesive Vibrator & Vibrator.

Carry out the Installation as described below!

Follow the 5.1, 5.4 - 5.6 Reassembly instructions!

REMOVAL

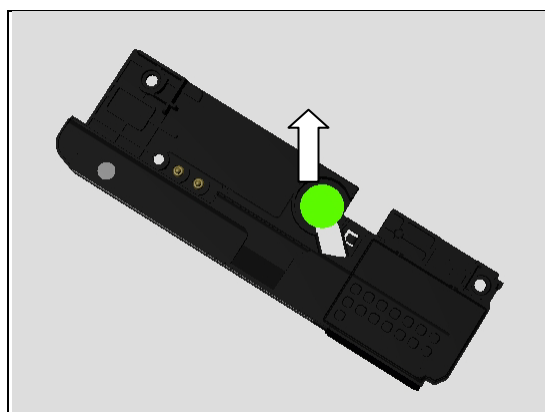
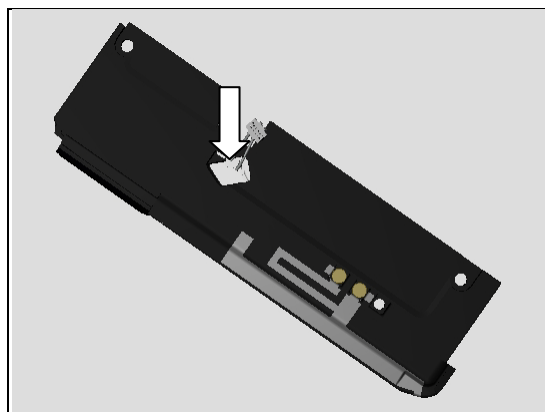
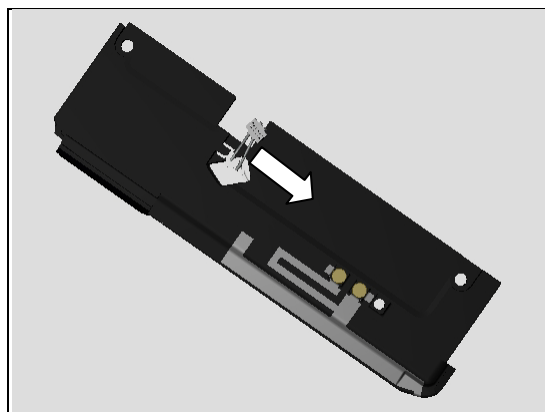
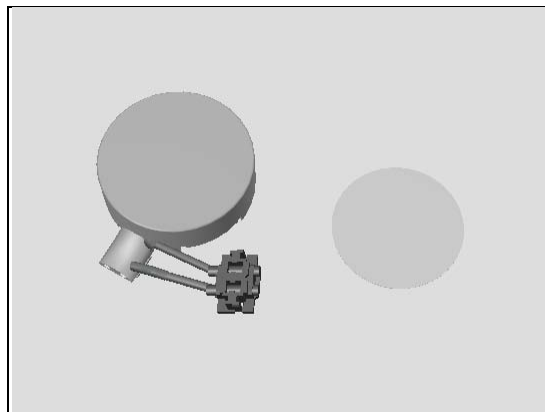
Release the Vibrator wires from the hook of the Speaker Module Assy with fingers.

Push from the back side of the Vibrator by using Nylon Pointer to release it from the Speaker Module Assy.

Detach to remove the Adhesive Vibrator.

Clean any remaining adhesive residue!

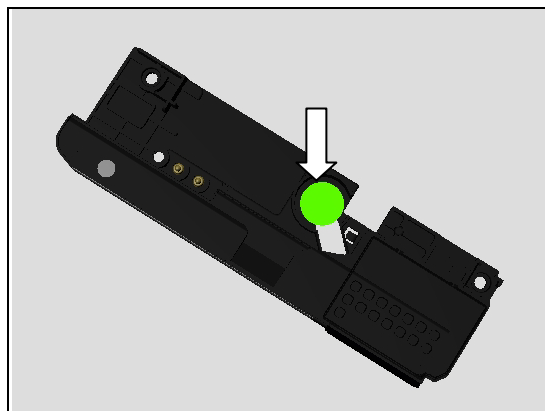
Scrap! Not to be reused!



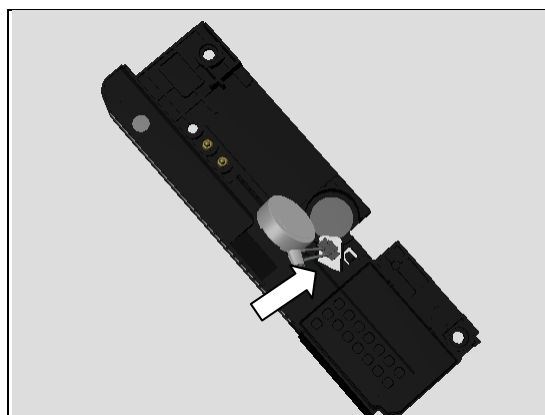
Replacement: Adhesive Vibrator & Vibrator

INSTALLATION

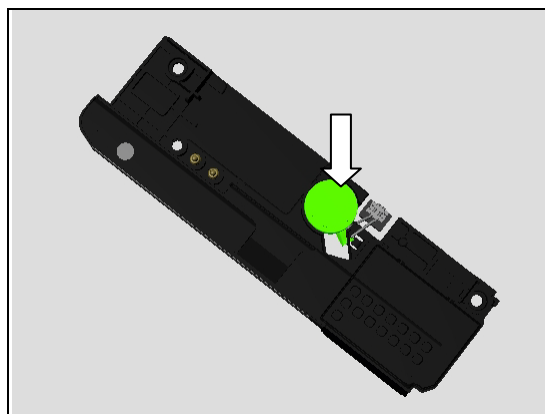
Attach the new Adhesive Vibrator into its proper position and press to make it securely attached.



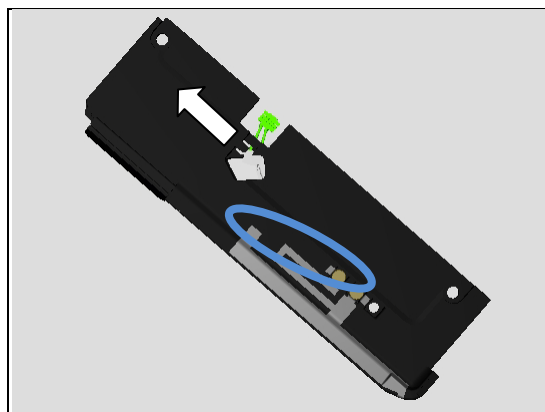
Prepare a new Vibrator and insert the Vibrator connector through the hole on the Speaker Module Assy.



Place the Vibrator into its cavity with correct direction and press with fingers to secure the attachment.



Turn over the Speaker Module Assy to the other side.
Bend the Vibrator wire to hook it on the Speaker Module Assy.



Replacement

4.15 BT/WLAN FPC Antenna

Follow the 3.1 Disassembly instructions!
Follow the 4.12 Removal Instructions!
Prepare the new BT/WLAN FPC Antenna.
Follow the 4.12 Installation Instructions!
Follow the 5.6 Reassembly instructions!

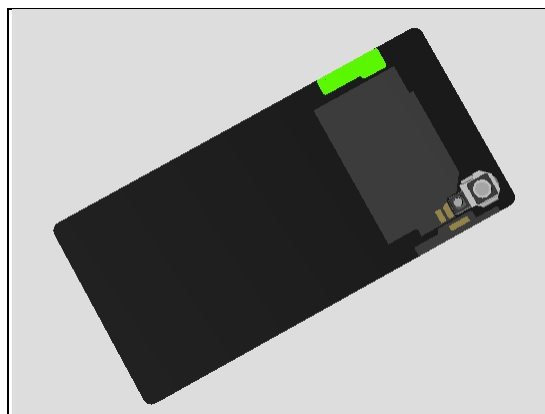
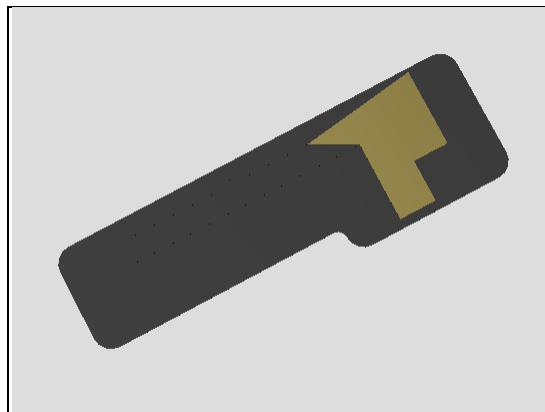
REMOVAL

Detach to remove it from the Back Panel by using Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Attach a new BT/WLAN FPC Antenna with alignment of the guiding line on the Back Panel and press to secure the attachment.



Replacement

4.16 Cap SD

Follow the 3.1 – 3.5 Disassembly instructions!

Carry out the Removal as described below.

Prepare the new Cap SD.

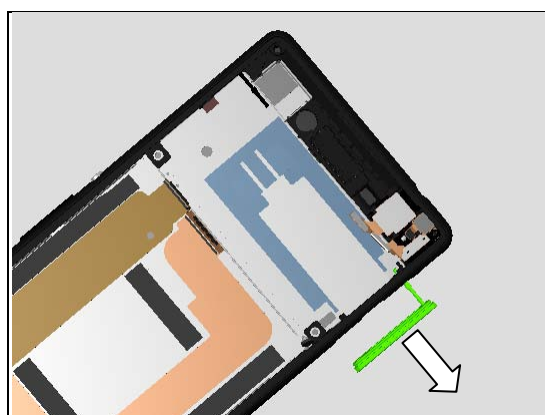
Carry out the Installation as described below!

Follow the 5.2 – 5.6 Reassembly instructions!

REMOVAL

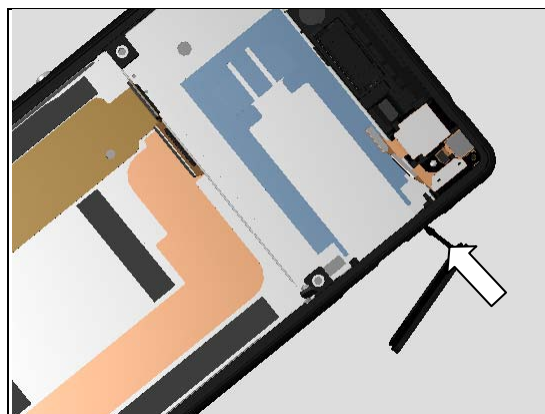
Open the Cap SD and pull it out.

Make sure the residues are removed if the Cap SD breaks!

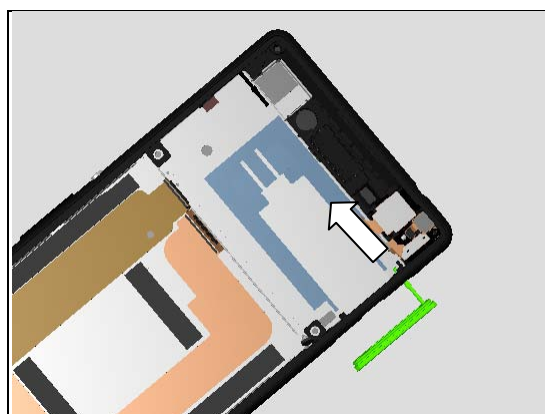


INSTALLATION

Insert the rubber head into the Cap SD Hole with an angle.

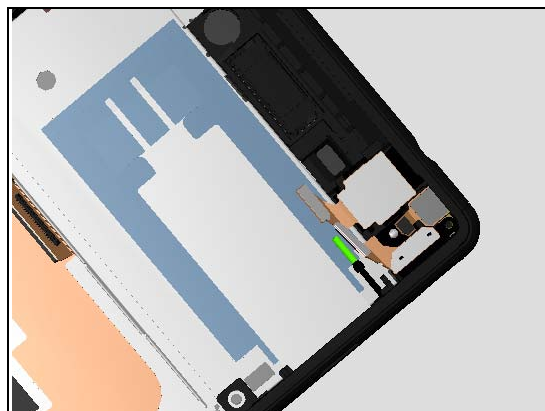


Pull the rubber head through hole of the Front Cover Assy.



Replacement: Cap SD

Cut the extra part with scissors as shown.



Replacement

4.17 Cap SIM

Follow the 3.1 – 3.5 Disassembly instructions!

Carry out the Removal as described below.

Prepare the new Cap SIM.

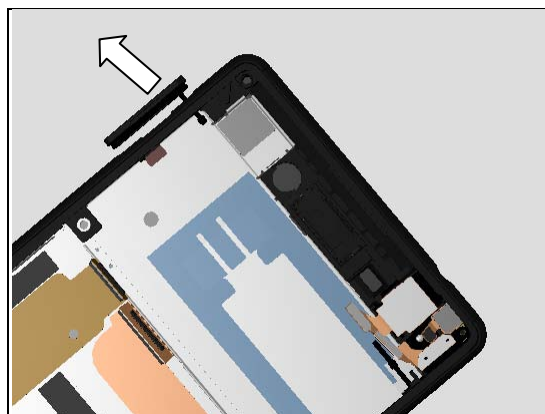
Carry out the Installation as described below!

Follow the 5.2 – 5.6 Reassembly instructions!

REMOVAL

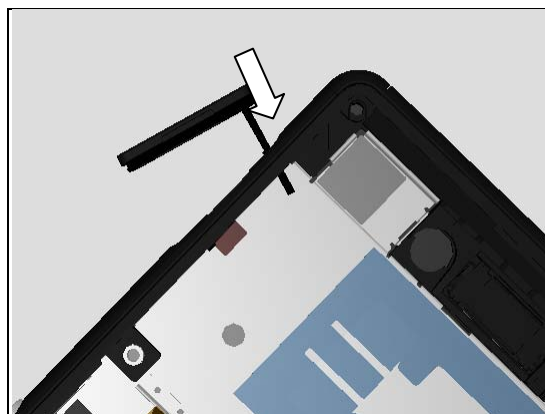
Open the Cap SIM and pull it out.

Make sure the residues are removed if the Cap SIM breaks!

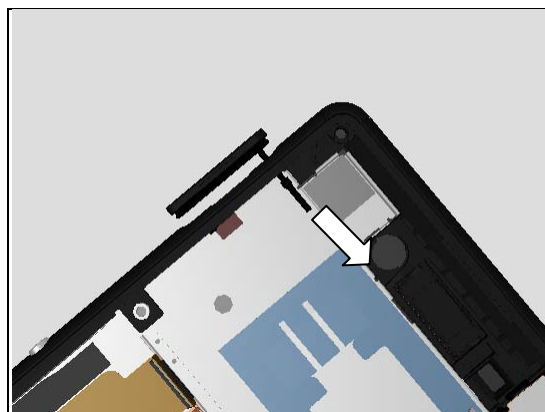


INSTALLATION

Insert the rubber head into the Cap SIM Hole with an angle.

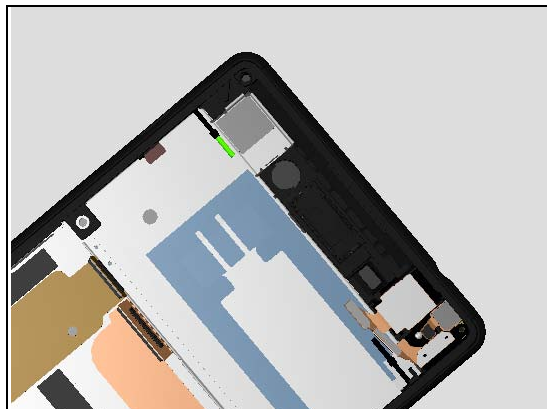


Pull the rubber head through hole of the Front Cover Assy.



Replacement: Cap SIM

Cut the extra part with scissors as shown.



Replacement

4.18 Chat Camera 5M & Gasket Chat Camera

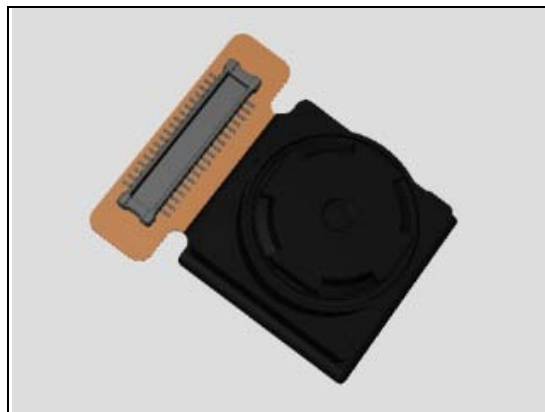
Follow the 3.1 – 3.5 Disassembly instructions!

Follow the 4.37 Removal Instructions!

Prepare the new Chat Camera 5M & Gasket Chat Camera.

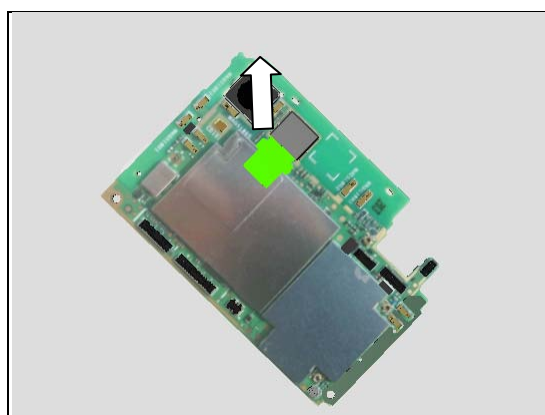
Follow the 4.37 Installation Instructions!

Follow the 5.2 – 5.6 Reassembly instructions!



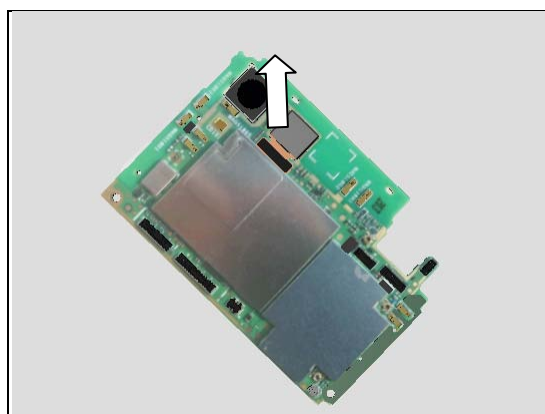
REMOVAL

Detach to remove the Gasket Chat Camera.



Disconnect the BtB connector of the Chat Camera 5M to remove it.

Do not touch the lens!



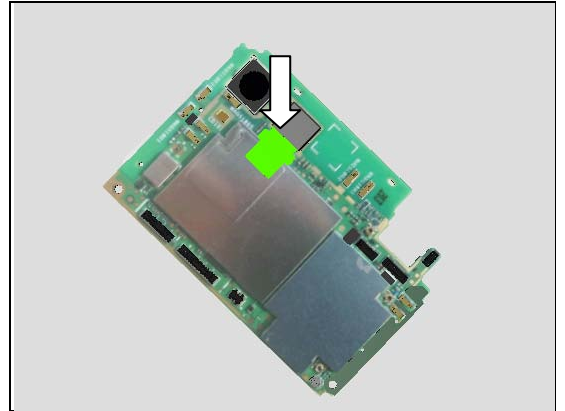
INSTALLATION

Place the Chat Camera 5M lens into the hole of the Main PBA and press to connect the BtB connector.



Replacement: Chat Camera 5M & Gasket Chat Camera

Attach the new Gasket Chat Camera on the Chat Camera 5M FPC by using a Flex Film Assembly Tool.



Replacement

4.19 Cushion Battery

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below.

Prepare the new Cushion Battery.

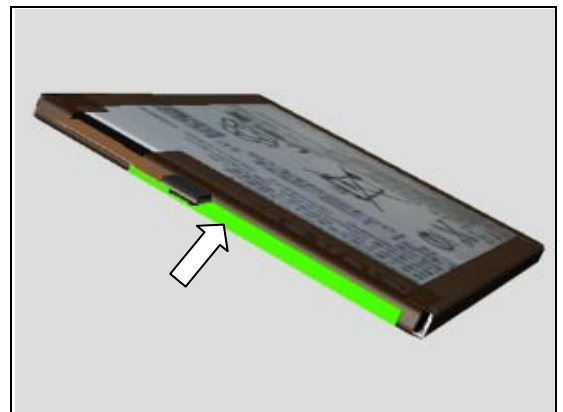
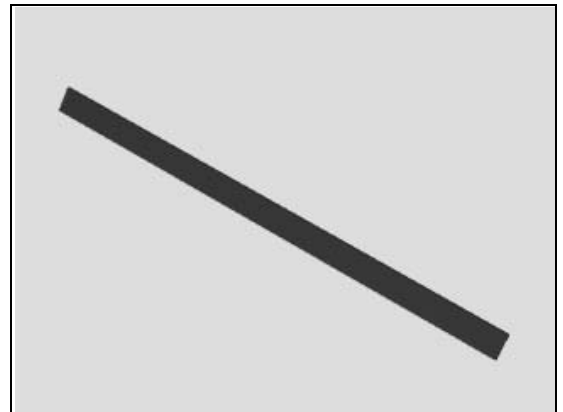
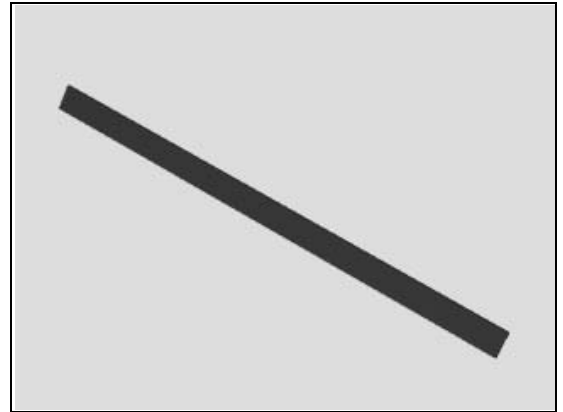
Carry out the Installation as described below!

Follow the 5.4 - 5.6 Reassembly instructions!

Scrap the old Cushion Battery.

INSTALLATION

Place the new Cushion Battery in its proper position and press to make it securely attached.



Replacement

4.20 Diversity Holder Assy & Adhesive Diversity Holder & Adhesive Diversity Holder 2

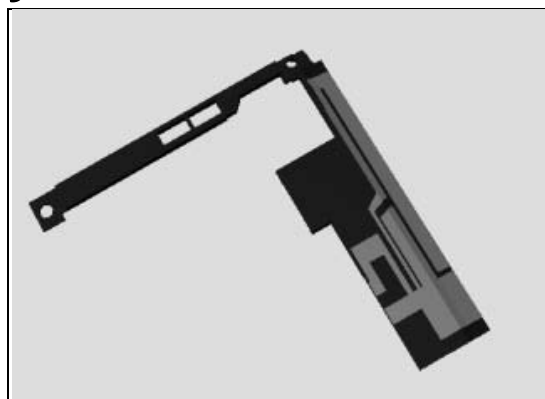
Follow the 3.1 –3.5 Disassembly instructions!

Carry out the Removal as described below.

Prepare the new Diversity Holder Assy & Adhesive Diversity Holder & Adhesive Diversity Holder 2.

Carry out the Installation as described below!

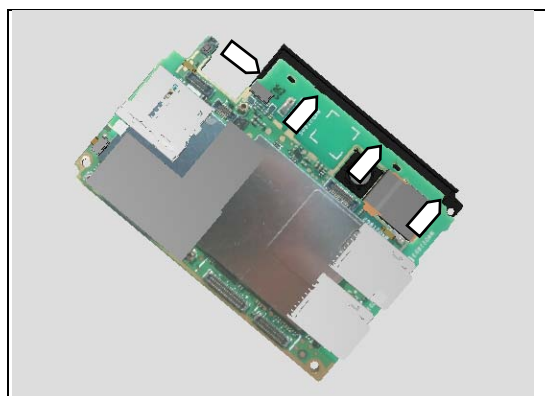
Follow the 5.2 – 5.6 Reassembly instructions!



REMOVAL

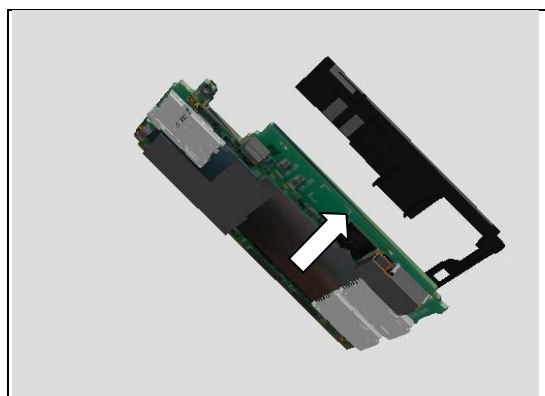
Release the four hooks as shown by using Front Opening Tool.

Be careful of spring pins on the other side!



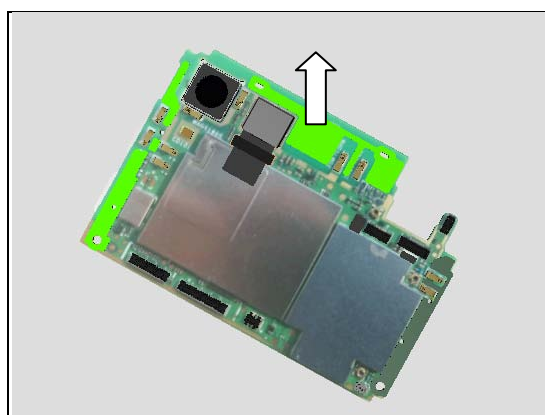
Push to release the Diversity Holder Assy from the Main PBA

Be careful of the spring pins!



Detach to remove the Adhesive Diversity Holder and Adhesive Diversity Holder 2.

Scrap! Do not reuse!



Replacement: Diversity Holder Assy & Adhesive Diversity Holder & Adhesive Diversity Holder 2

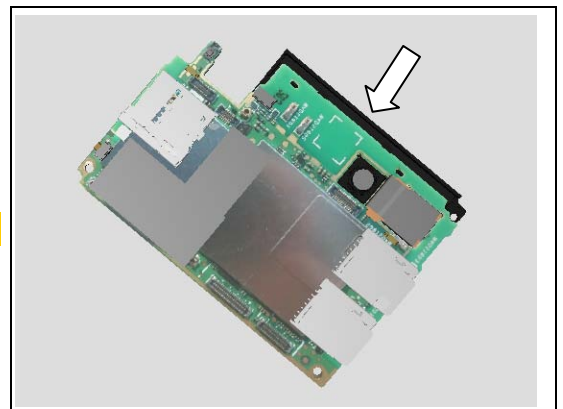
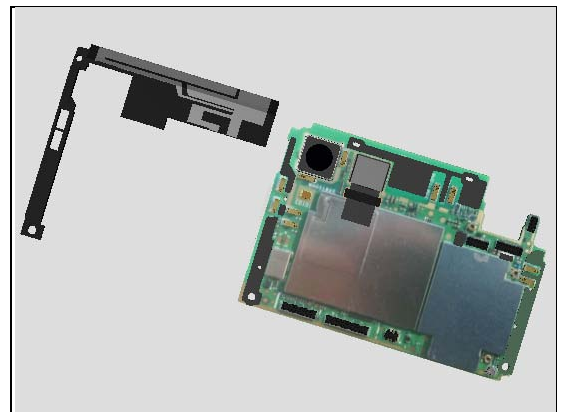
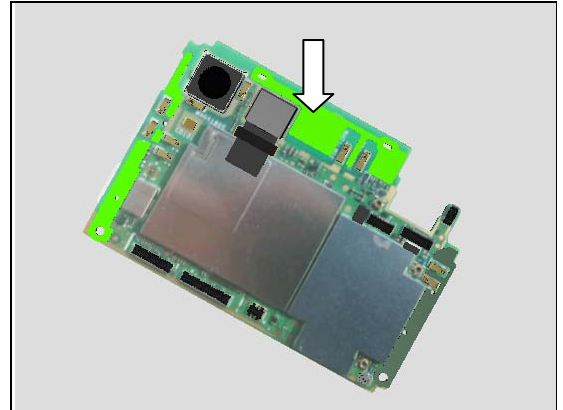
INSTALLATION

Attach the new Adhesive Diversity Holder and Adhesive Diversity Holder 2 on the Main PBA with proper position.

Place the new Diversity Holder Assy in place.

Press to snap the four hooks of the Diversity Holder Assy.

Be careful of the spring pins of the Main PBA!



Replacement

4.21 Earspeaker & Adhesive Earspeaker & Gasket Earspeaker

Follow the 3.1 –3.5 Disassembly instructions!

Carry out the Removal as described below.

Prepare the new Earspeaker & Adhesive Earspeaker & Gasket Earspeaker.

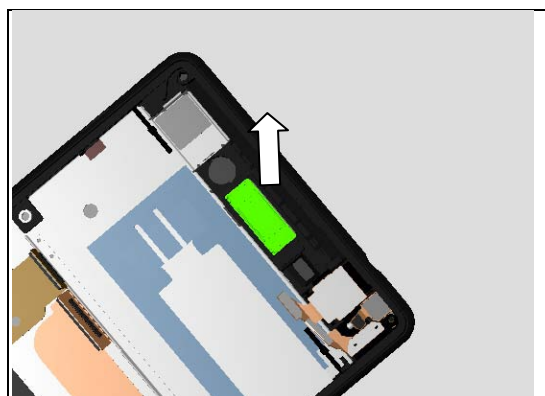
Carry out the Installation as described below!

Follow the 5.2 – 5.6 Reassembly instructions!

REMOVAL

Carefully remove the Earspeaker using Front Opening Tool.

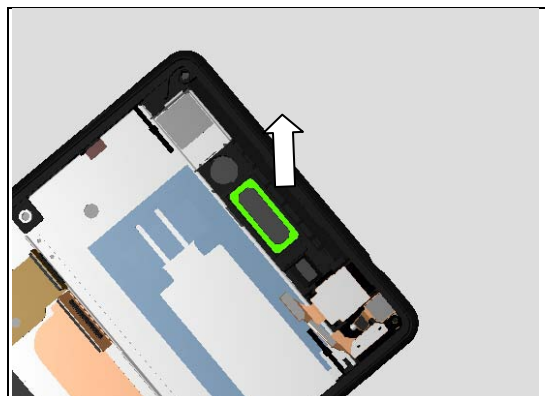
Inspect Earspeaker for damage!



Remove the Adhesive Earspeaker with the Dentist Hook.

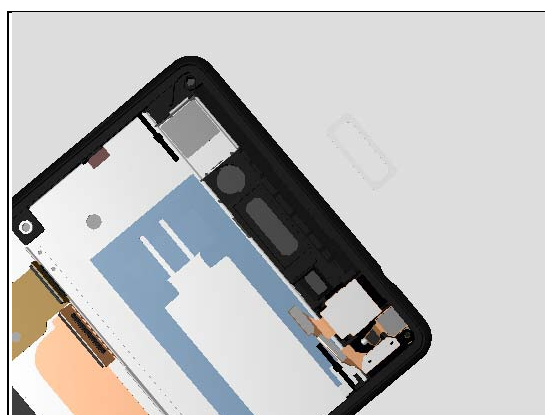
Clean any remaining adhesive residue!

Scrap! Not to be reused!



INSTALLATION

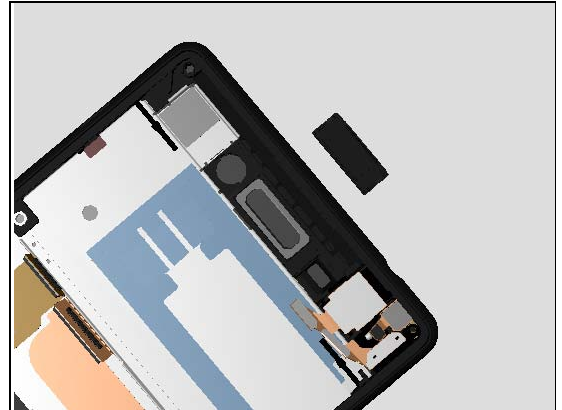
Place new Adhesive Earspeaker using a Flex Film Assembly Tool into its proper position.



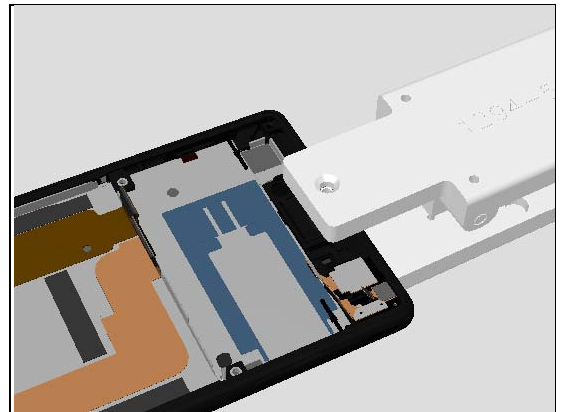
Replacement: Earspeaker & Adhesive Earspeaker & Gasket Earspeaker

Place new Earspeaker using fingers into its proper position.

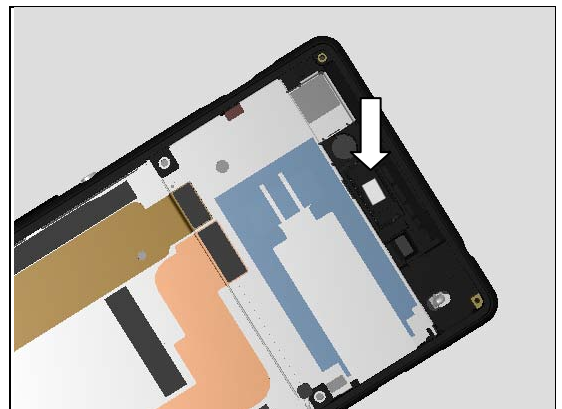
Attention: Check alignment of Earspeaker contact pins before installation as shown in picture!



Use Earspeaker Press Fixture press for 5 seconds to secure the attachment.



Place new Gasket Earspeaker using a Flex Film Assembly Tool to cover the Earspeaker center metal part.



Replacement

4.22 FPC Audio Jack Assy

Follow the 3.1 – 3.5 Disassembly instructions!

Carry out the Removal as described below.

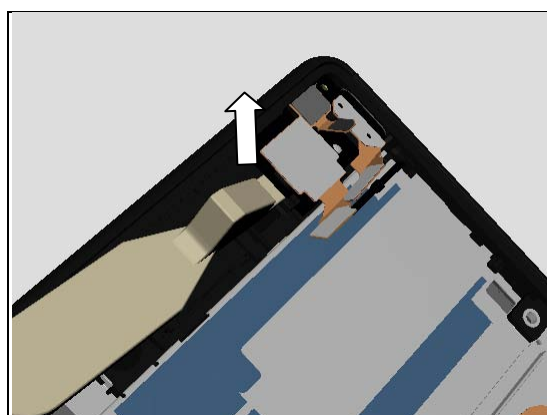
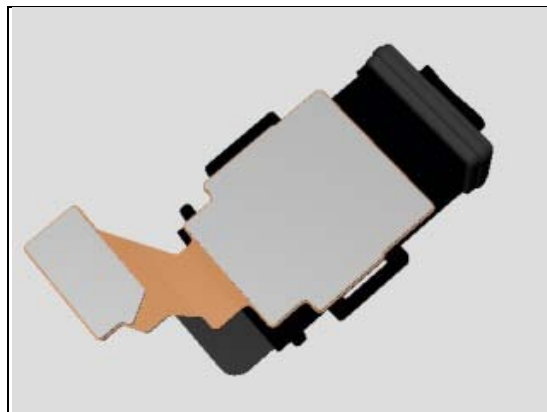
Prepare the new FPC Audio Jack Assy.

Carry out the Installation as described below!

Follow the 5.2 – 5.6 Reassembly instructions!

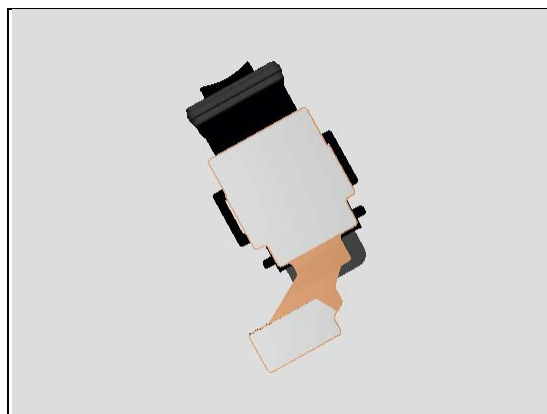
REMOVAL

Insert the Front Opening Tool underneath the left side of the FPC Audio Jack Assy and pull upwards to remove the FPC Audio Jack Assy as shown.



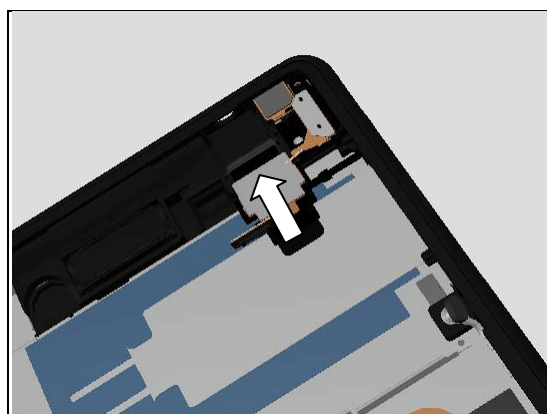
INSTALLATION

Make sure the rubber on the top of the FPC Audio Jack Assy is properly placed!



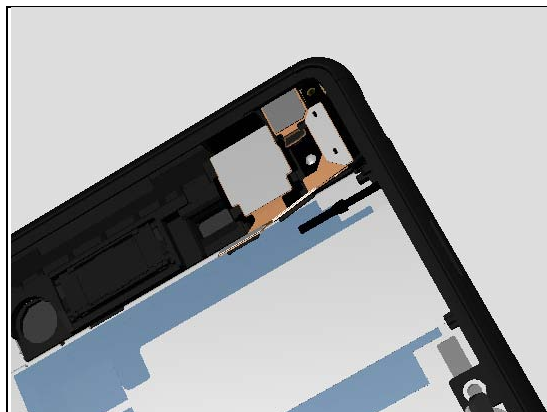
Insert the new FPC Audio Jack head into Audio Jack hole as shown in picture.

Don't reverse the movement to avoid any malfunction of water resistant of the Adhesive.



Replacement: FPC Audio Jack Assy

Press along the surface to secure its attachment.



Replacement

4.23 FPC USB Assy

Follow the 3.1 –3.5 Disassembly instructions!

Follow the 4.22, 4.10, 4.38 Removal Instructions!

Prepare the new FPC USB Assy.

Follow the 4.22, 4.10, 4.38 Installation Instructions!

Follow the 5.2 – 5.6 Reassembly instructions!

REMOVAL

Remove it from the Front Cover Assy.

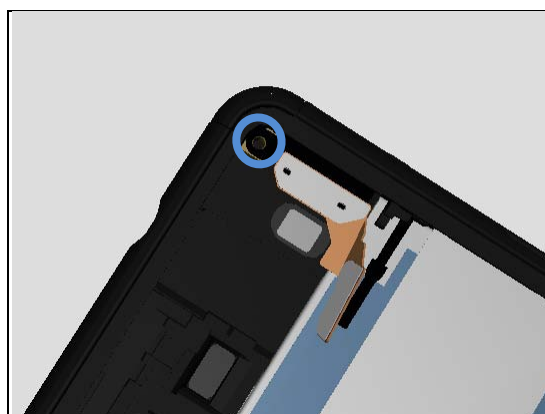
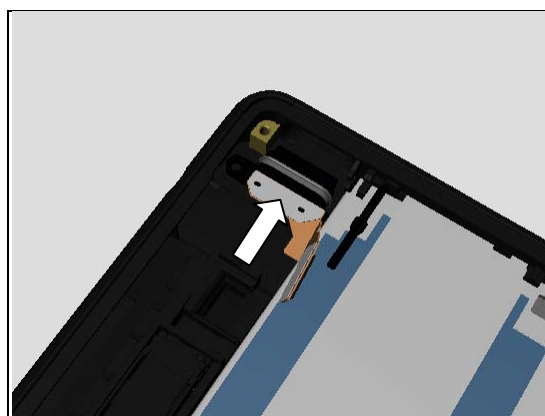
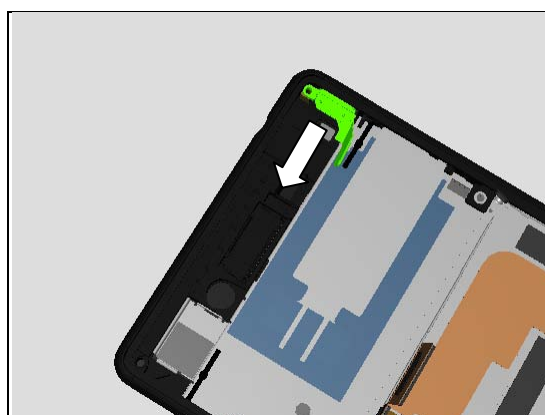
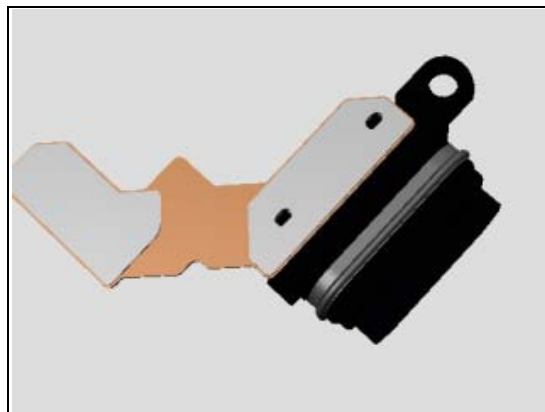
INSTALLATION

Prepare a new FPC USB Assy.

Insert the USB Connector into the USB hole of the Front Cover Assy.

Push as shown direction to make sure its correct position.

Check the FPC USB Assy position using Screw nut as guiding!



Replacement

4.24 Front Cover Assy

Follow the 3.1 – 3.6 Disassembly instructions!

Follow the 4.8–4.11, 4.16 – 4.17, 4.21 - 4.23, 4.10, 4.25 - 4.27, 4.30 - 4.31, 4.35, 4.38 Removal Instructions!

Prepare the new Front Cover Assy.

Follow the 4.8 - 4.11, 4.16 – 4.17, 4.21 - 4.23, 4.10, 4.25 - 4.27, 4.30 - 4.31, 4.35, 4.38 Installation Instructions!

Follow the 5.1 – 5.6 Reassembly instructions!



P-Sensor / G-sensor/ Touch Panel Calibration should be performed after replacing Front Cover Assy

For Calibration, refer to 1297-3232 Test and Calibration.

Replacement

4.25 Gasket Link FPC Bottom Connector

Follow the 3.1 – 3.3, 3.6 Disassembly instructions!
Carry out the Removal as described below.
Prepare the new Gasket Link FPC Bottom Connector.
Carry out the Installation as described below!
Follow the 5.1, 5.4 - 5.6 Reassembly instructions!

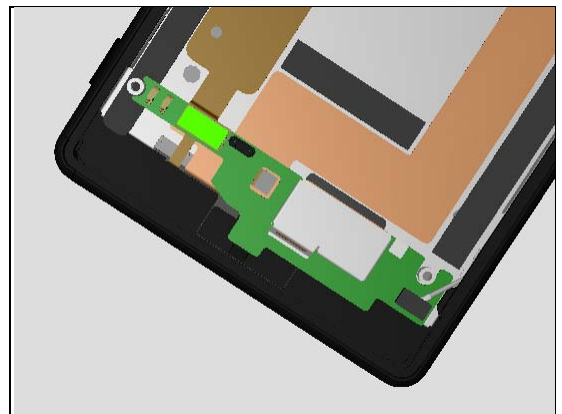
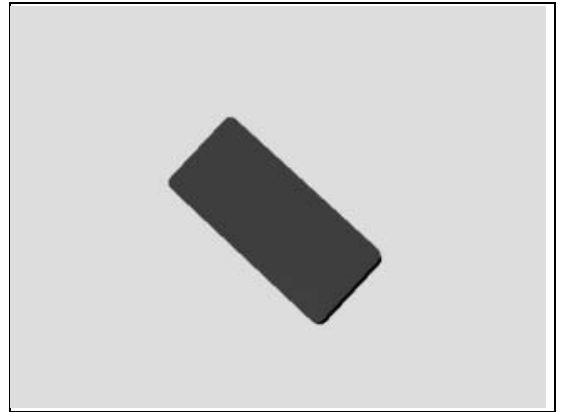
REMOVAL

Detach to remove the Gasket Link FPC Bottom Connector with the Flex Film Assembly Tool

Scrap! Not to be reused!

INSTALLATION

Place a new Gasket Link FPC Bottom Connector on Link FPC connector using a Flex Film Assembly Tool.



Replacement

4.26 Gasket RF Cable Bottom

Follow the 3.1 – 3.3, 3.6 Disassembly instructions!

Carry out the Removal as described below.

Prepare the new Gasket RF Cable Bottom.

Carry out the Installation as described below!

Follow the 5.1, 5.4 - 5.6 Reassembly instructions!

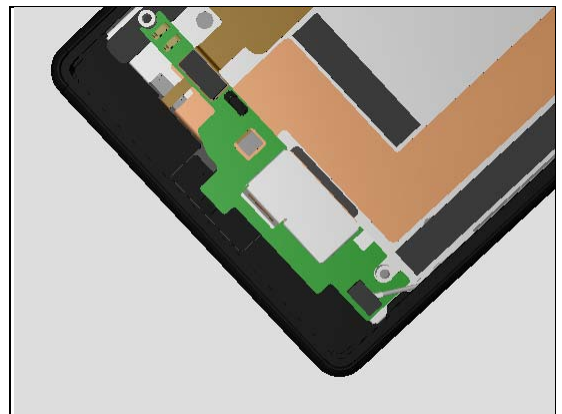
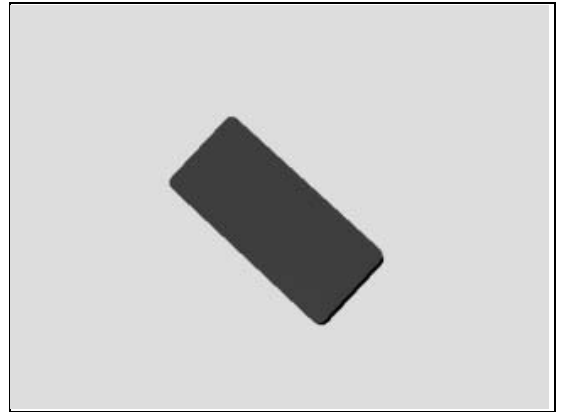
REMOVAL

Detach to remove the Gasket RF Cable Bottom with the Flex Film Assembly Tool

Scrap! Not to be reused!

INSTALLATION

Place a new Gasket RF Cable Bottom on RF Cable connector using a Flex Film Assembly Tool.



Replacement

4.27 Gasket RF Cable Top

Follow the 3.1 Disassembly instructions!
 Carry out the Removal as described below.
 Prepare the new Gasket RF Cable Top.
Carry out the Installation as described below!
 Follow the 5.6 Reassembly instructions!

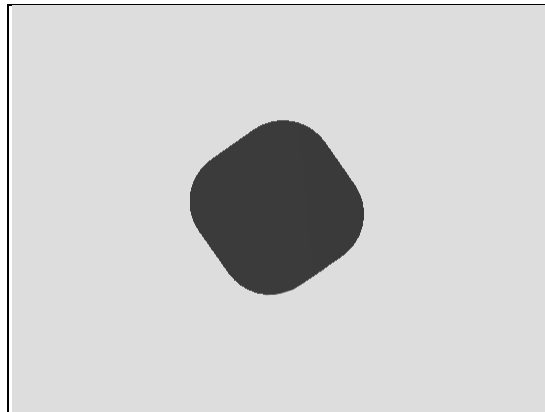
REMOVAL

Detach to remove the Gasket RF Cable Top with the Flex Film Assembly Tool

Scrap! Not to be reused!

INSTALLATION

Place a new Gasket RF Cable Top on RF Cable connector using a Flex Film Assembly Tool.



Replacement

4.28 Gasket Vib

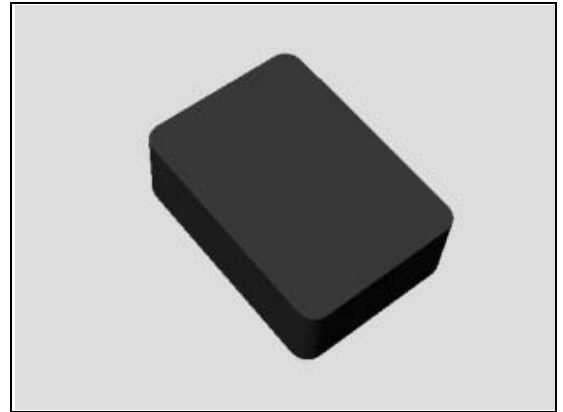
Follow the 3.1 Disassembly instructions!

Carry out the Removal as described below.

Prepare the new Gasket Vib.

Carry out the Installation as described below!

Follow the 5.6 Reassembly instructions!



REMOVAL

Detach to remove the Gasket Vib with the Flex Film Assembly Tool

Scrap! Not to be reused!

INSTALLATION

Place a new Gasket Vib on Vibrator connector using a Flex Film Assembly Tool.



Replacement

4.29 GPS FPC Antenna

Follow the 3.1 Disassembly instructions!

Follow the 4.12 Removal instructions!

Prepare the new GPS FPC Antenna.

Follow the 4.12 Installation instructions!

Follow the 5.6 Reassembly instructions!

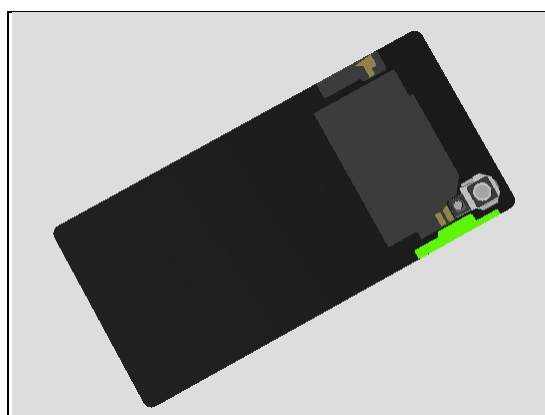
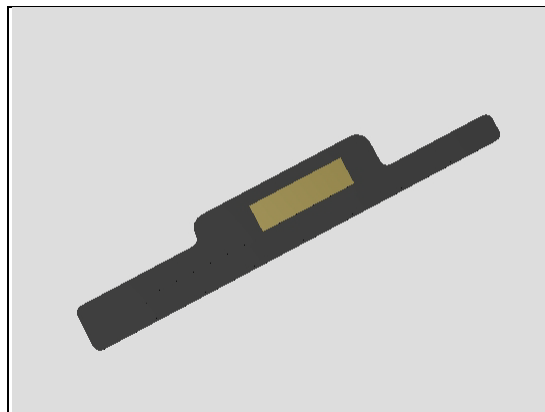
REMOVAL

Detach to remove it from the Back Panel by using Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Attach a new GPS FPC Antenna with alignment of the guiding line on the Back Panel and press to secure the attachment.



Replacement

4.30 Holder Sensor

Follow the 3.1 – 3.5 Disassembly instructions!

Follow the 4.22 Removal instructions!

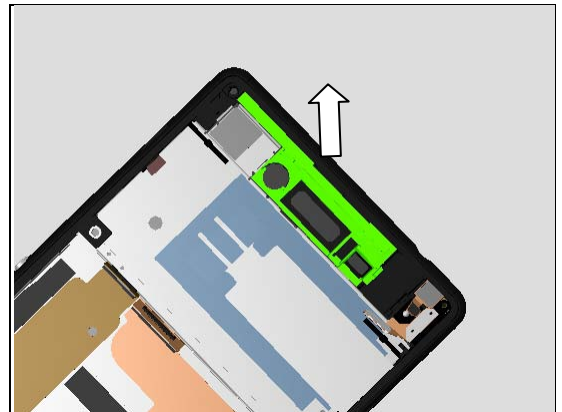
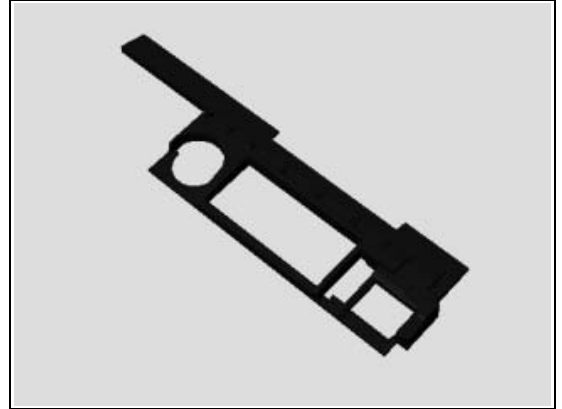
Prepare the new Holder Sensor.

Follow the 4.22 Installation instructions!

Follow the 5.2 – 5.6 Reassembly instructions!

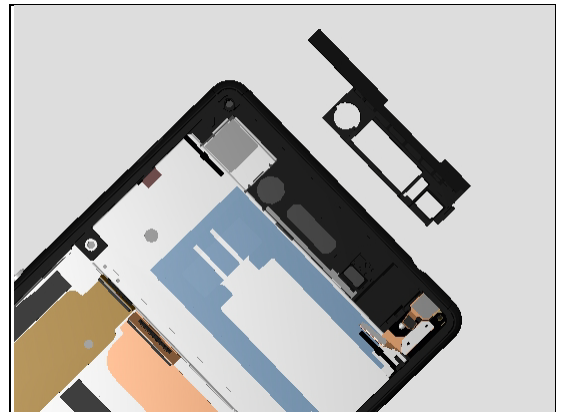
REMOVAL

Insert the Front Opening Tool underneath the Holder Sensor and pull upwards to remove it from the Front Cover Assy.



INSTALLATION

Place the new Holder Sensor in proper position and press to make it securely attached.



Replacement

4.31 Label Tray

Follow the 3.1 –3.5 Disassembly instructions!

Carry out the Removal as described below.

Prepare the new Label Tray.

Carry out the Installation as described below!

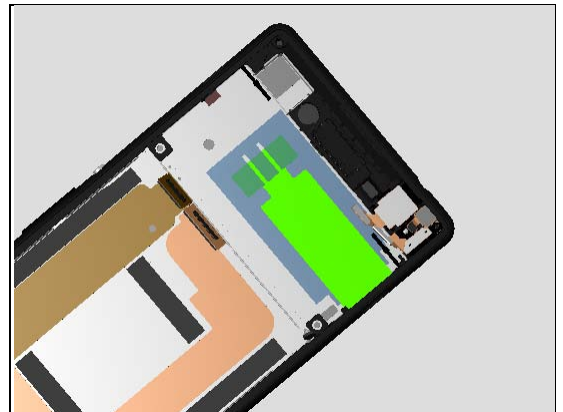
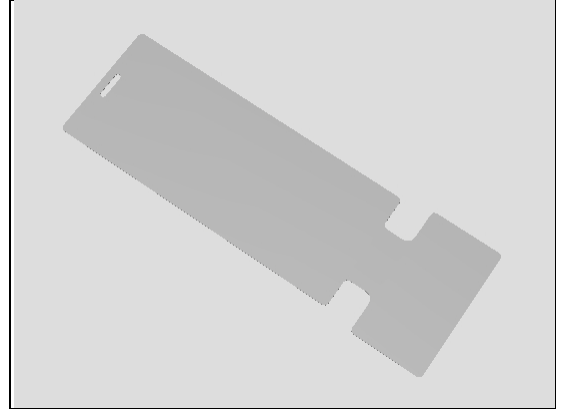
Follow the 5.2 – 5.6 Reassembly instructions!

REMOVAL

Remove it from the Front Cover Assy by using Flex Film Assembly Tool.

INSTALLATION

Place the Label Tray by using guiding lines on the Front Cove Assy and press to make it securely attached.



Replacement

4.32 Liquid Indicator

Follow the 3.1 – 3.5 Disassembly instructions!

Carry out the Removal as described below.

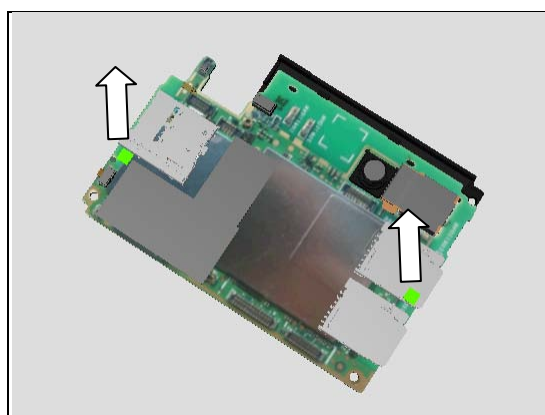
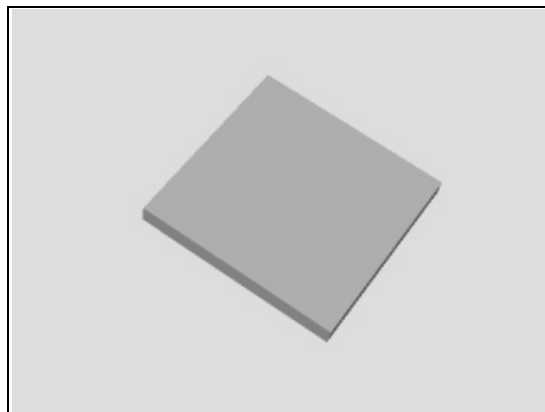
Prepare the new Liquid Indicator.

Carry out the Installation as described below!

Follow the 5.2 – 5.6 Reassembly instructions!

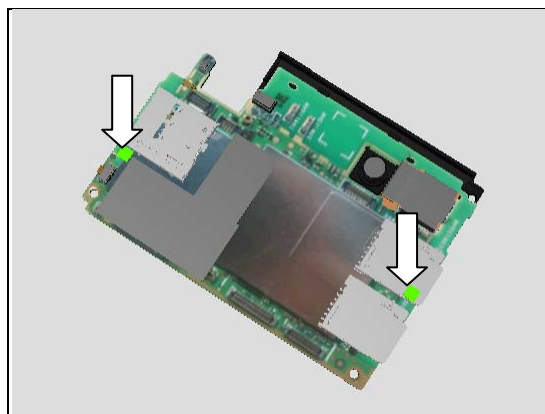
REMOVAL

Detach to remove two Liquid Indicators from Main PBA by using the Flex Film Assembly Too.



INSTALLATION

Place new Liquid Indicators using Flex Film Assembly Tool into its proper position.



Replacement

4.33 Main Camera Assy

Follow the 3.1 – 3.5 Disassembly instructions!

Carry out the Removal as described below.

Prepare the new Main Camera Assy.

Carry out the Installation as described below!

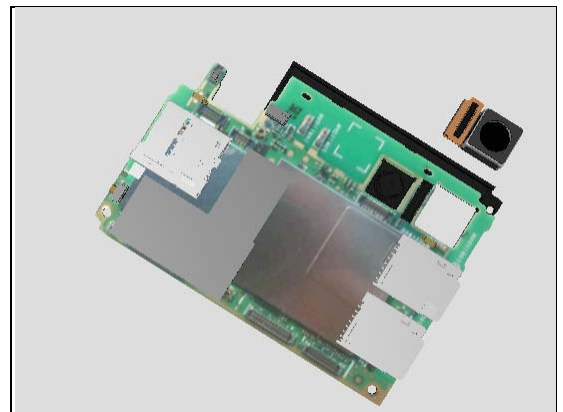
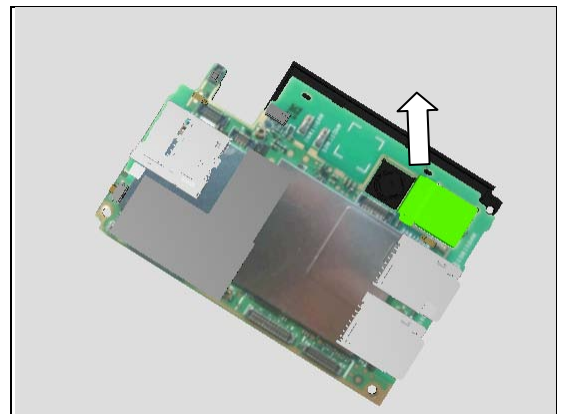
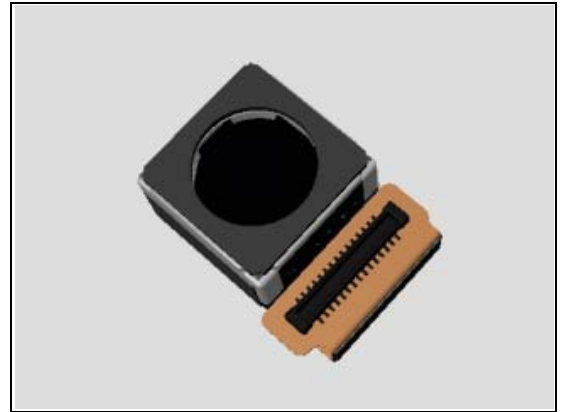
Follow the 5.2 – 5.6 Reassembly instructions!

REMOVAL

Unsnap the Main Camera Assy using Front Opening Tool.

INSTALLATION

Press to snap the Main Camera Assy.



Replacement

4.34 Rubber LED

Follow the 3.1 –3.5 Disassembly instructions!

Follow the 4.22, 4.38 Removal instructions!

Prepare the new Rubber LED.

Follow the 4.22, 4.38 Installation instructions!

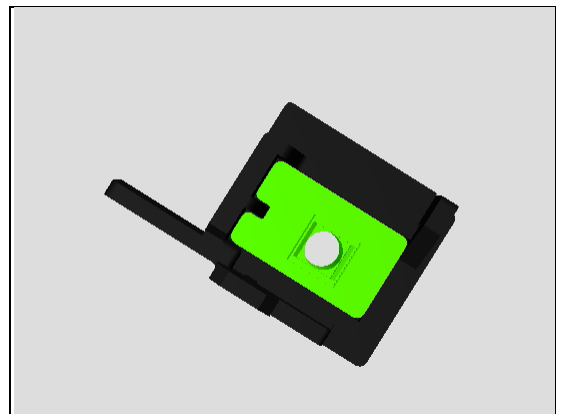
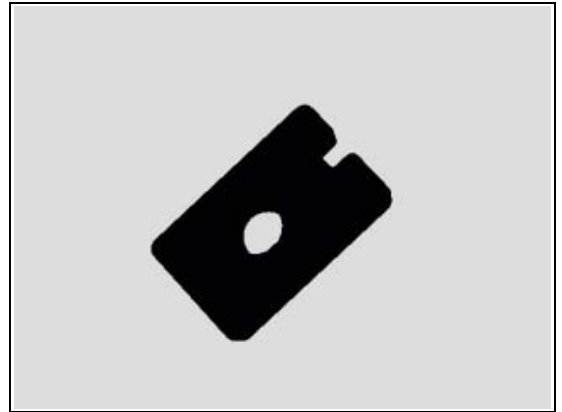
Follow the 5.2, – 5.6 Reassembly instructions!

REMOVAL

Remove it from the Front Cover Assy by using Flex Film Assembly Tool.

INSTALLATION

Place a new Rubber LED into the cavity with correct direction.



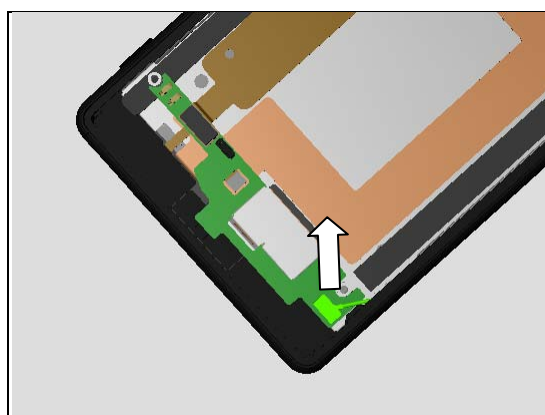
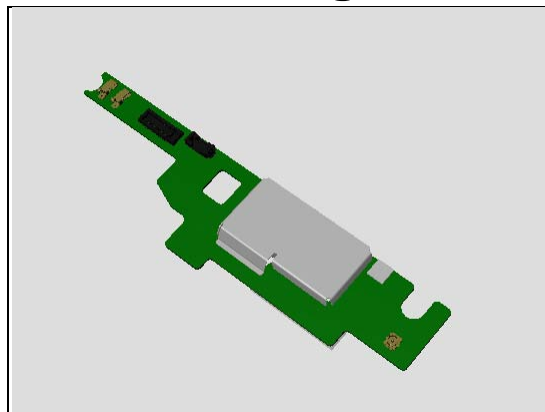
Replacement

4.35 Sub Antenna PBA & Gasket TP Shielding

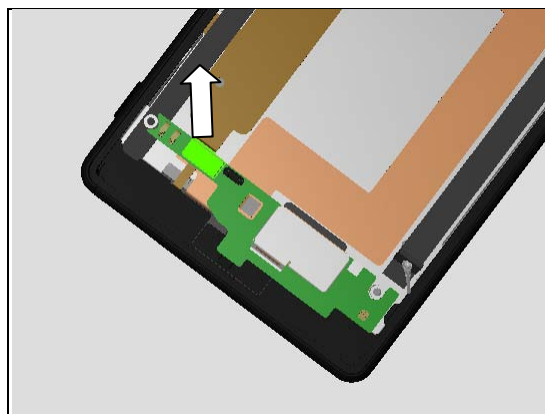
Follow the 3.1 – 3.3, 3.6 Disassembly instructions!
 Carry out the Removal as described below.
 Prepare the new Sub Antenna PBA & Gasket TP Shielding.
Follow the 4.9 Installation instructions!
Follow the 5.1, 5.4 - 5.6 Reassembly instructions!

REMOVAL

Unsnap the coax connector of RF Cable by using the Front Opening Tool as shown.

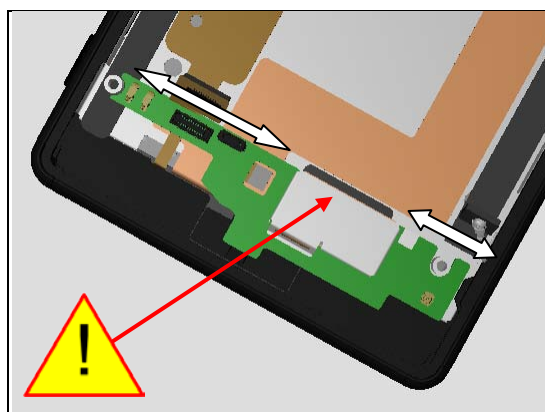


Unsnap the BtB connector of Link FPC by using the Front Opening Tool as shown.



Insert the Front Opening Tool underneath the Sub Antenna PBA from the corner and slide back and force gently to release it from the Front Cover Assy as shown.

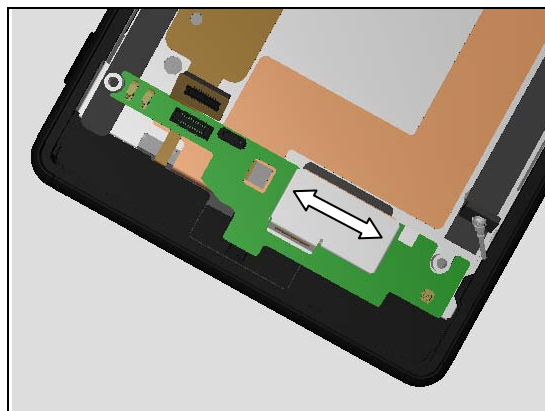
Metal cover should be avoided!



Replacement: Sub Antenna PBA & Gasket TP Shielding

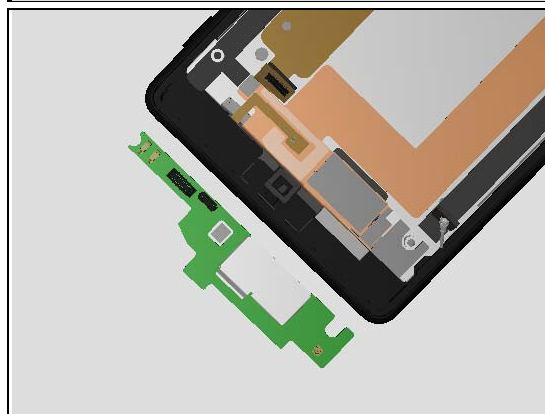
Insert the Front Opening Tool between the Sub Antenna PBA metal cover and Touch Panel FPC carefully and slide to release the Sub Antenna PBA.

Do not damage the Touch Panel BtB Connector!



Remove the Sub Antenna PBA.

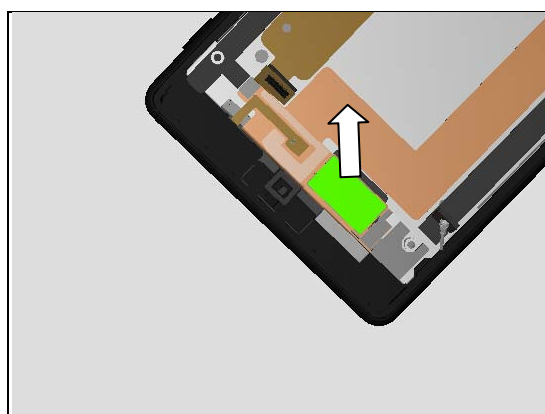
Scrap! Do not reuse!



Detach to remove the Gasket TP Shielding gently.

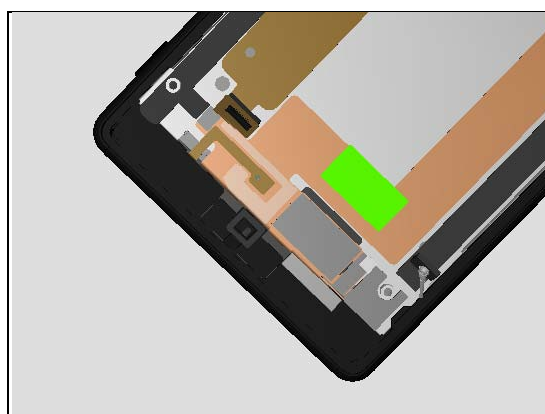
Make sure no residue remains!

Scrap! Do not reuse!



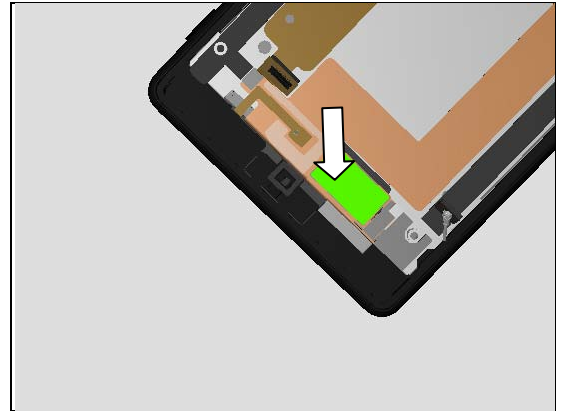
INSTALLATION

Prepare a new Gasket TP Shielding.

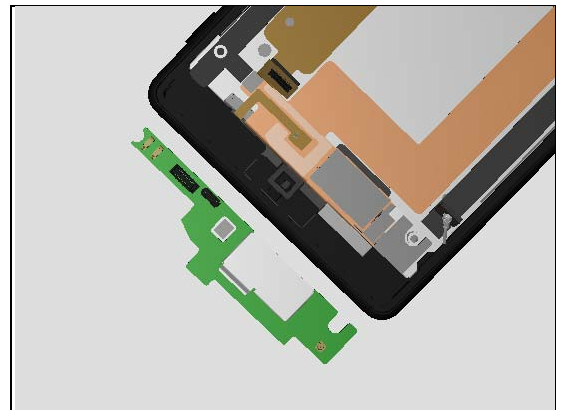


Replacement: Sub Antenna PBA & Gasket TP Shielding

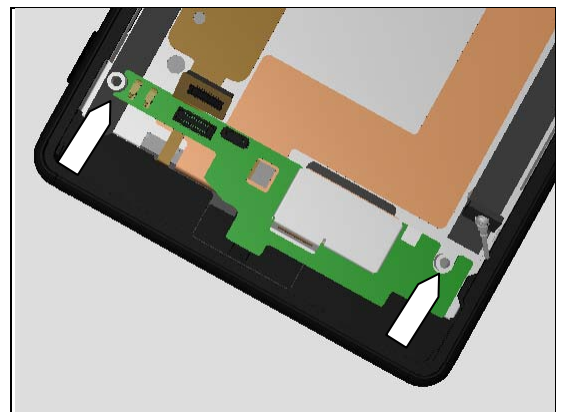
Attach the new Gasket TP Shielding on the Touch Panel BtB connector and press along to make it securely attached.



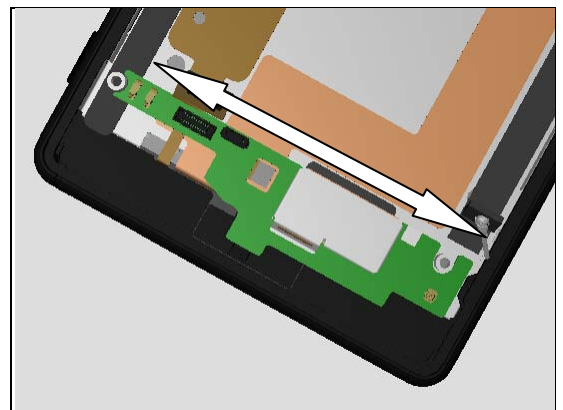
Prepare a new Sub Antenna PBA.



Attach it on the Front Cover Assy by using two screw nuts as guiding poles.



Press along to make it securely attached.



Replacement

4.36 Speaker Module Assy

Follow the 3.1 – 3.3, 3.6 Disassembly instructions!

Follow the 4.14 Removal instructions!

Prepare the new Speaker Module Assy.

Follow the 4.14 Installation instructions!

Follow the 5.1, 5.4 – 5.6 Reassembly instructions!



Replacement

4.37 Tape Chat Camera connector

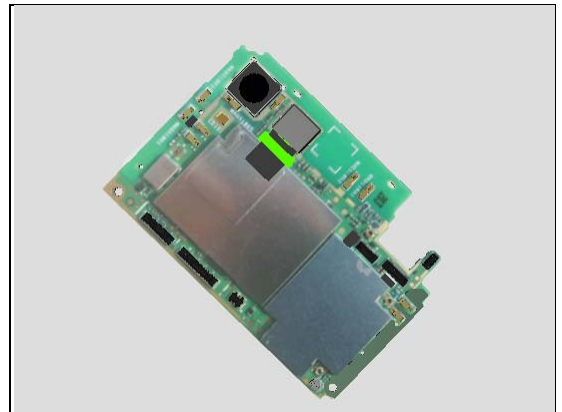
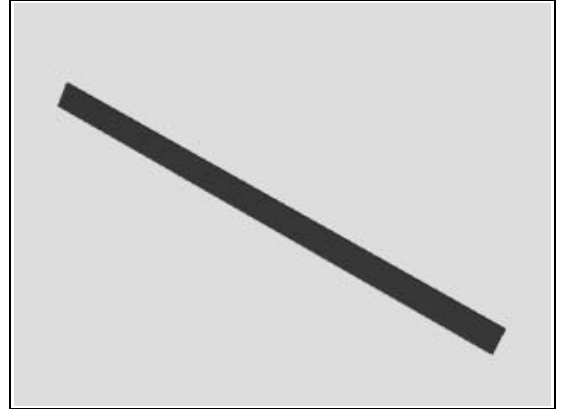
Follow the 3.1 – 3.5 Disassembly instructions!
Carry out the Removal as described below.
Prepare the new Tape Chat Camera connector.
Carry out the Installation as described below!
Follow the 5.2– 5.6 Reassembly instructions!

REMOVAL

Detach to remove it from the Main PBA gently.

INSTALLATION

Attach the new Tape Chat Camera connector at proper position and press to secure its attachment.



Replacement

4.38 USB Holder Assy 1

Follow the 3.1 – 3.5 Disassembly instructions!

Follow the 4.22 Removal instructions!

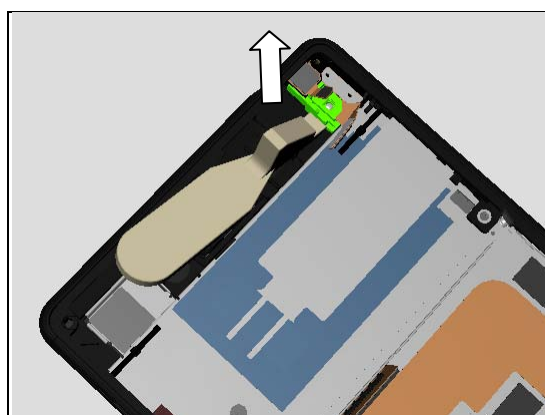
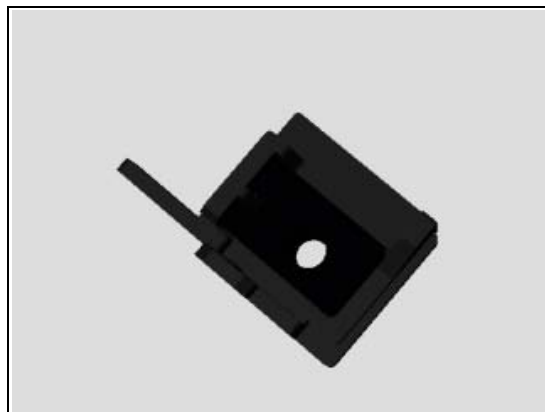
Prepare the new USB Holder Assy 1.

Follow the 4.22 Installation instructions!

Follow the 5.2 – 5.6 Reassembly instructions!

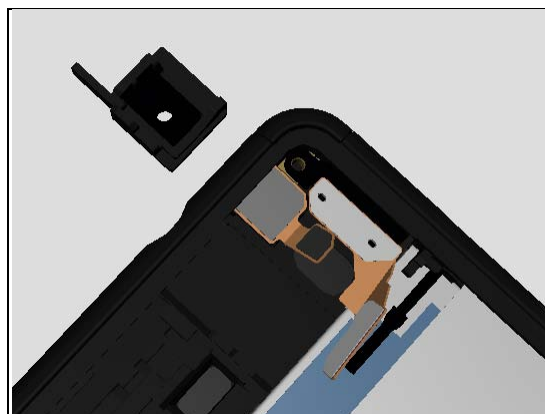
REMOVAL

Insert the Front Opening Tool underneath the USB Holder Assy 1 and pull upwards to remove the USB Holder Assy 1.

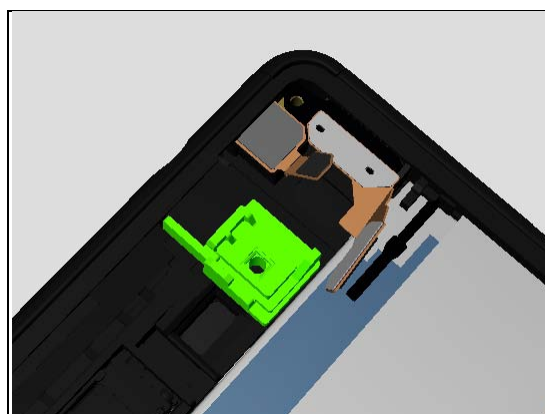


INSTALLATION

Prepare a new USB Holder Assy 1 with Rubber Mic preinstalled.

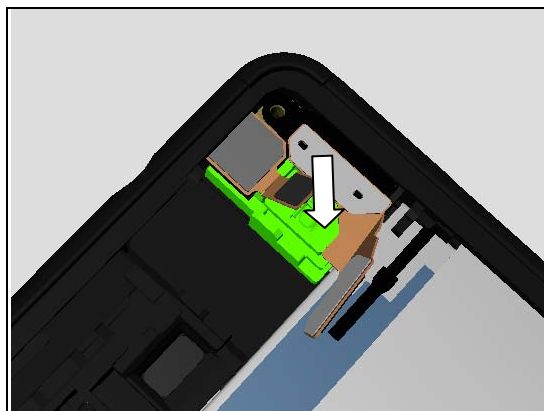


Place the USB Holder Assy 1 into the cavity and press to hook it on the Front Cover Assy.



Replacement: USB Holder Assy 1

Press the surface to secure the attachment



Replacement

4.39 Vent Hole Mesh

Follow the 3.1 – 3.3, 3.6 Disassembly instructions!

Carry out the Removal as described below.

Prepare the new Vent Hole Mesh.

Carry out the Installation as described below!

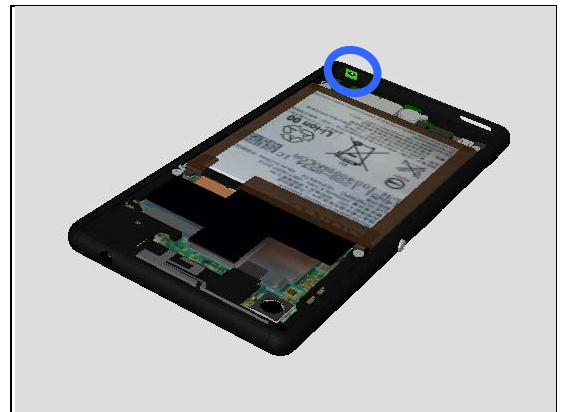
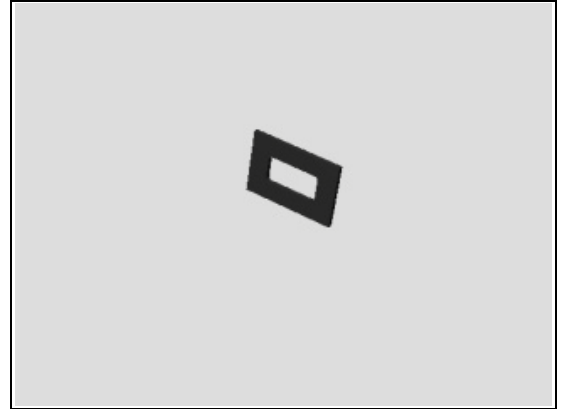
Follow the 5.1, 5.4 – 5.6 Reassembly instructions!

REMOVAL

Detach to remove it from the Front Cover Assy gently.

INSTALLATION

Attach the new Vent Hole Mesh at proper position and press with fingers for 10 seconds to secure its attachment.



Replacement

4.40 Label

Follow the 3.1 – 3.6 Disassembly instructions!

Carry out the Removal as described below.

Prepare a new Label.

Carry out the Installation as described below.

Follow the 5.1 – 5.6 Reassembly instructions!

REMOVAL

Read the old Label content and write the information into the Label Print Solution' software.

Carefully remove the Label.

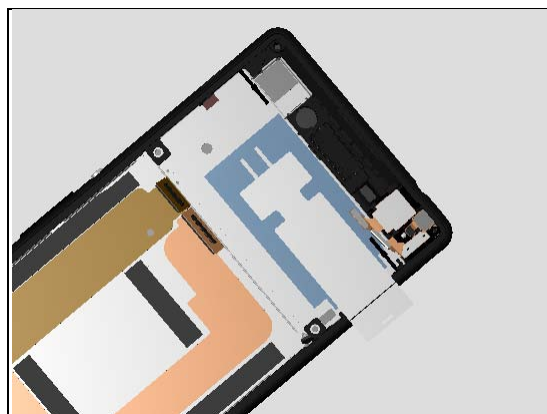
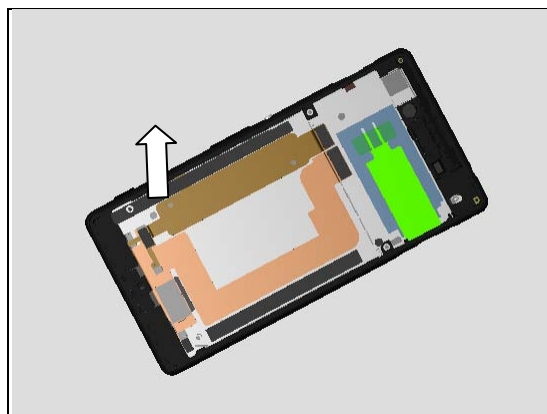
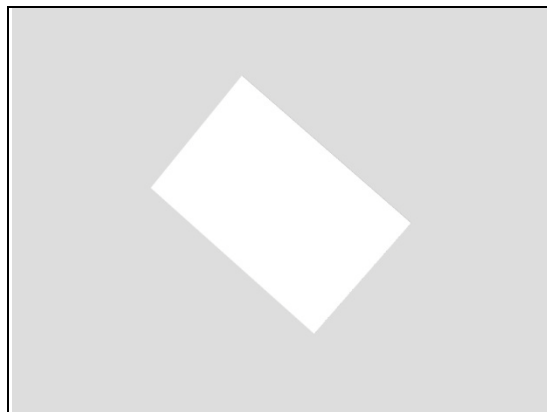
Scrap! Not to be reused!

INSTALLATION

Check that the proper label format is loaded in the Zebra printer and write a new label by using the 'Label Print Solution' software.

Attach the new Label on the Label Tray and insert the Label Tray into Front Cover Assy.

One label only is allowed!



Replacement

4.41 Board Swap - Replacement

Follow the 3.1 – 3.5 Disassembly instructions!

Follow the 4.13, 4.18, 4.20, 4.33, 4.37 Removal instructions!

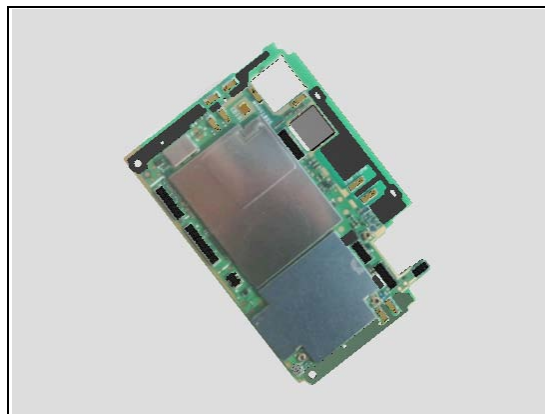
Replace the Swap Board.

Follow the 4.13, 4.18, 4.20, 4.33, 4.37 Installation instructions!

Follow the 5.1 – 5.5 Reassembly instructions!

P-sensor / G-sensor / Touch Panel Calibration should be performed after replacing Main PBA.

For Calibration, refer to 1297-3232 Test and Calibration.

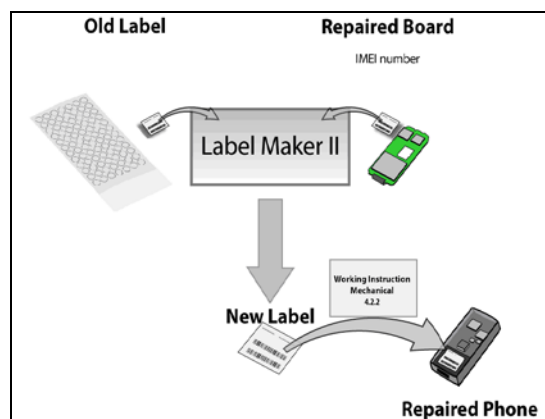


Important information: When you turn on your new Xperia M4 Aqua for the first time, the device attempts to install settings for various service providers. The installation procedure normally takes about 10 minutes. During this time, different animations may appear on the screen as well as the logos for the relevant service provider or providers.

4.42 Board Swap – Change Label

CHANGE LABEL

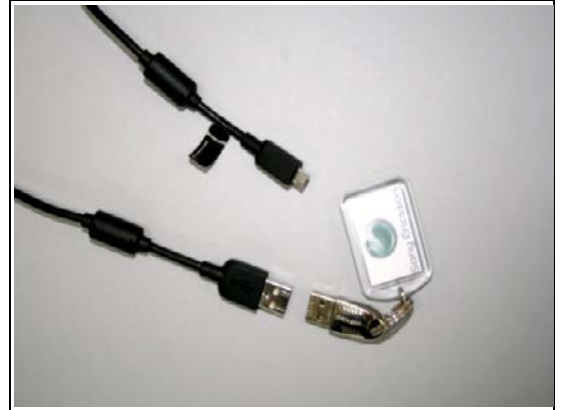
Follow the instructions in the Generic Repair Manual – Build swap for change of label.



4.43 Board Swap – Customize of Software

CUSTOMIZE OF SOFTWARE

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



5 Reassembly

The Reassembly is done in the following order:

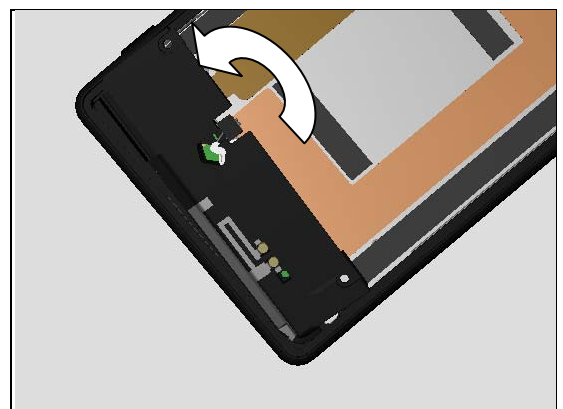
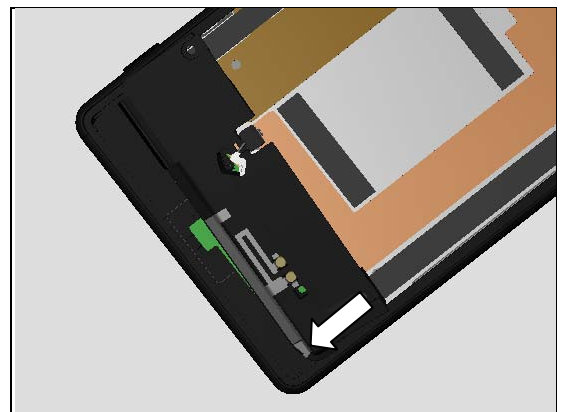
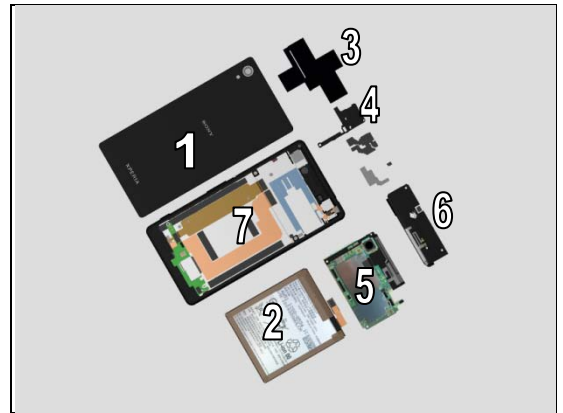
1. Back Panel
2. Battery
3. Thermal Film
4. USB Holder 2
5. Main PBA Assy
6. Speaker Module Assy
7. Front Cover Assy

5.1 Front Cover Assy & Speaker Module Assy

Prepare Front Cover Assy and Speaker Module Assy.

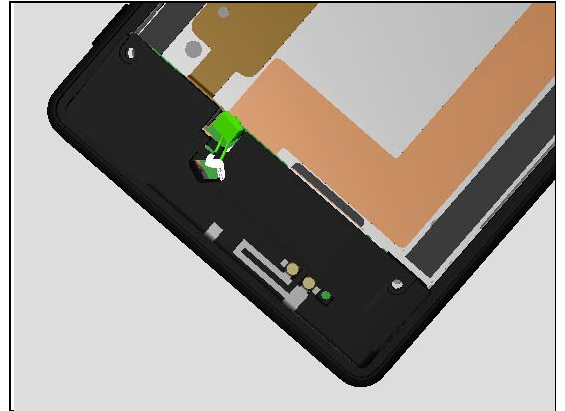
Insert Speaker Module Assy right corner to its cavity of the Front Cover Assy as shown in the picture.

Press and rotate as shown direction to hook the Speaker Module Assy to the Front Cover Assy.

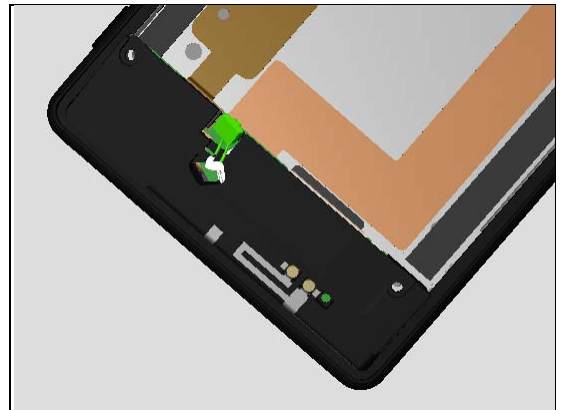


Reassembly

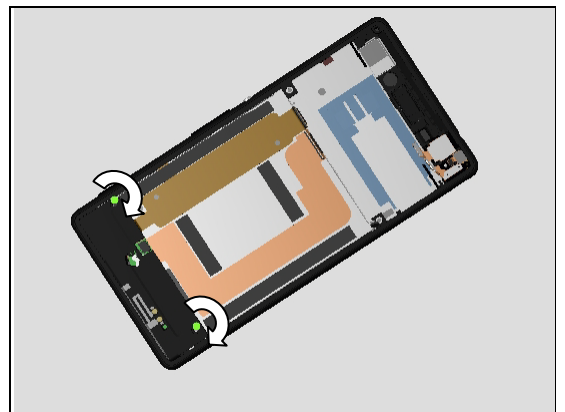
Bent the Vibrator wire to hook the Front Cover Assy.



Press to connect the Vibrator connector.

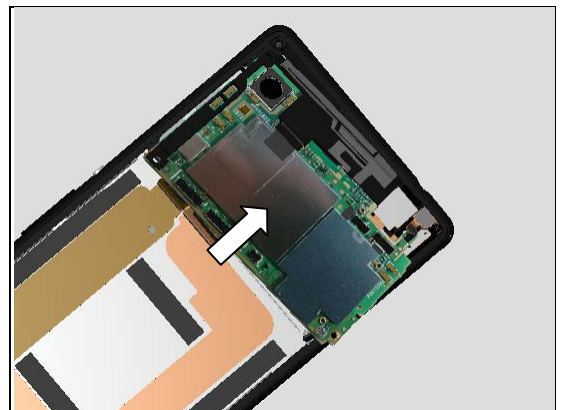


Apply 8 ± 0.5 Ncm torque when tightening the Screw with Bits T5.



5.2 Main PBA

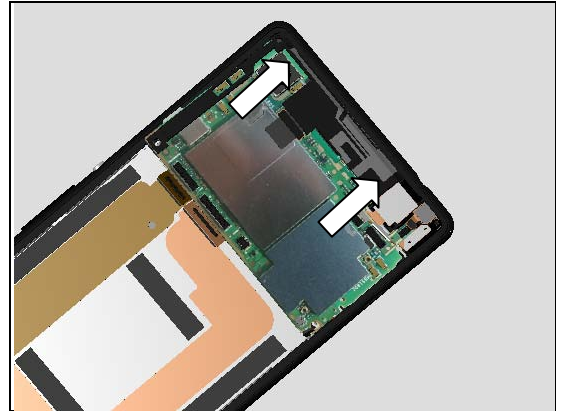
Place the Main PBA above the Front Cover Assy with 15 degrees as shown



Reassembly

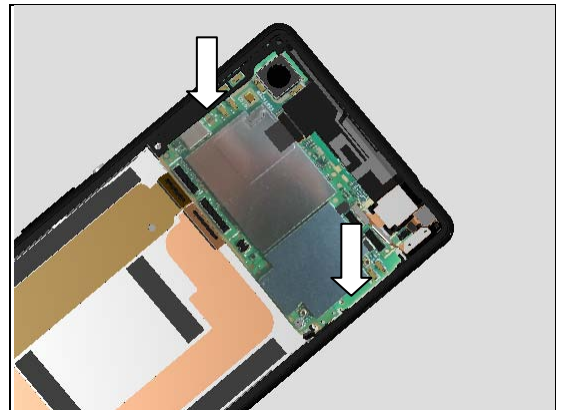
Insert to hook the top side of the Main PBA.

Check all the connectors' position!

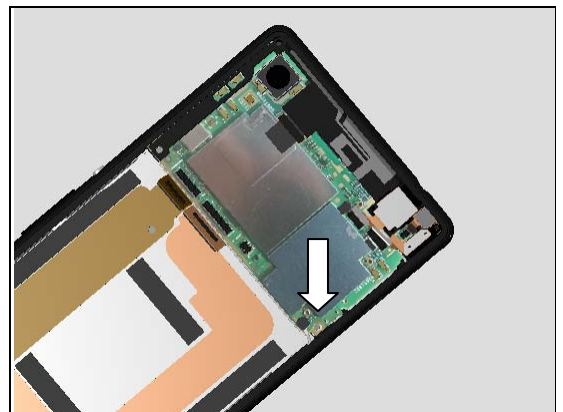


Press to snap the two hooks to secure its position.

Be careful of Antenna Pins!

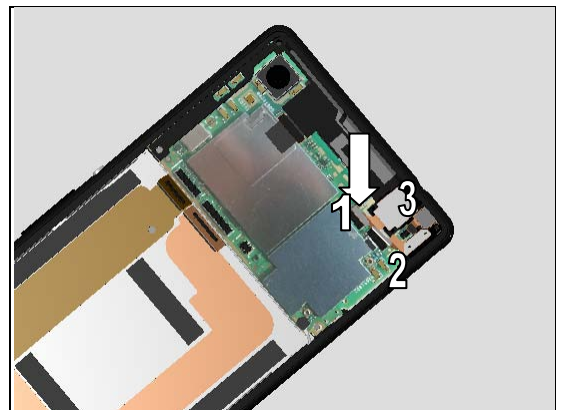


Press to connect the coax connector by fingers.



Press to connect the

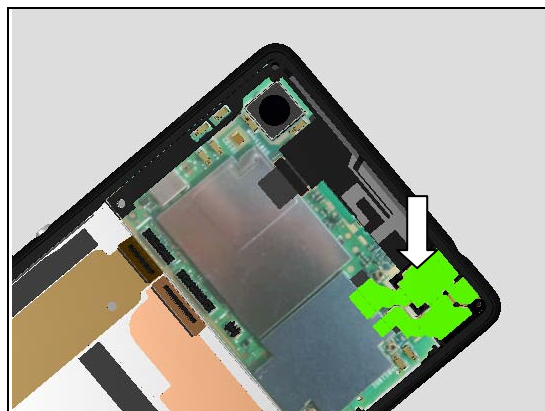
1. Audio Jack FPC BtB connector
2. USB FPC BtB connector
3. 2nd Microphone FPC BtB connector



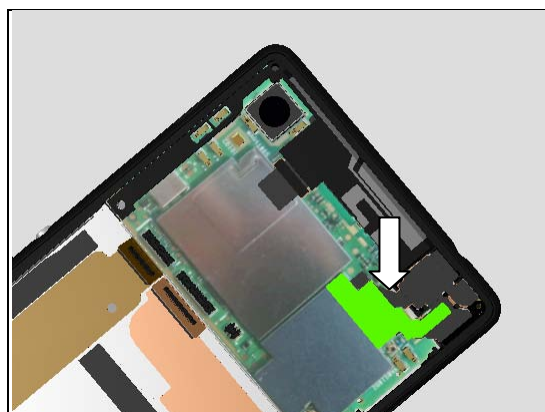
Reassembly

5.3 USB Holder 2

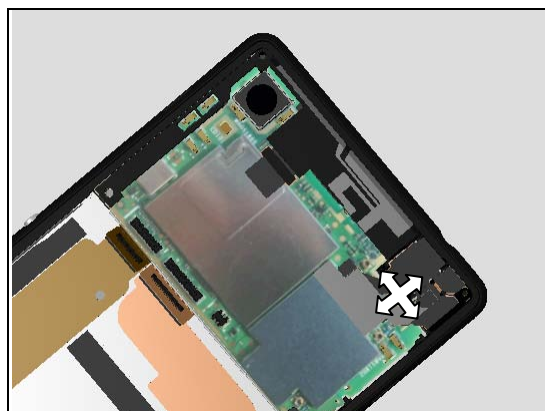
Attach a new Gasket USB FPC aligning with the shape of FPC Audio Jack Assy, 2nd Mic Assy and FPC USB Assy.



Attach a new Fixed Film BTB Connector aligning with the shape of three connectors.



Press along to secure their attachment.



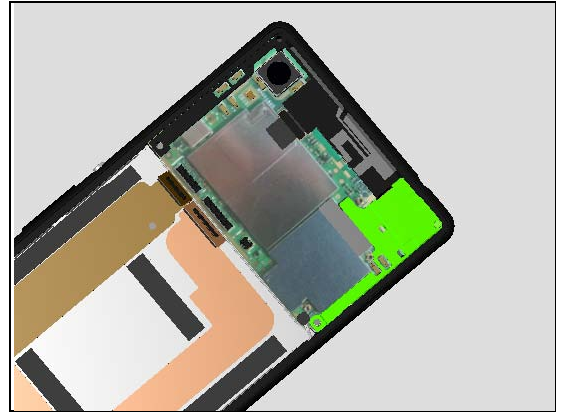
Check if Adhesive USB holder and Adhesive USB holder 2 are in place or damaged.

Replace them if necessary following 4.14 Adhesive USB holder and Adhesive USB holder 2

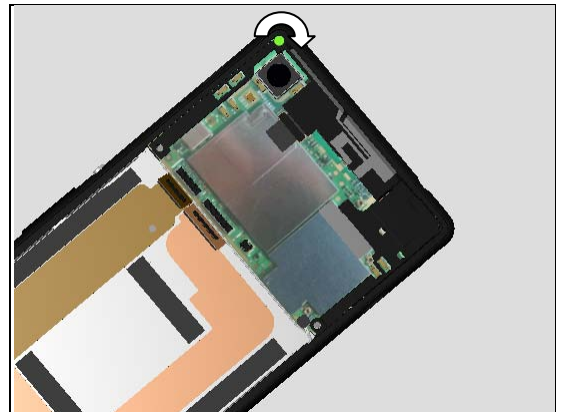


Reassembly

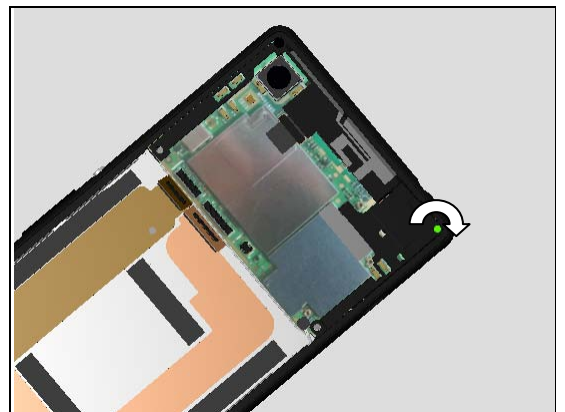
Press to snap the USB Holder 2.



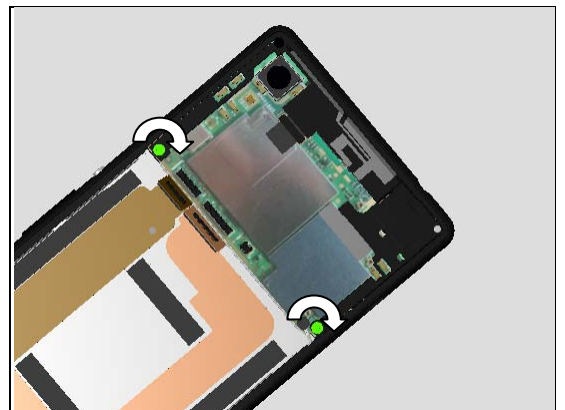
Apply 7.5-8.5 Ncm torque when tightening the new Screw M1.2 with Bits (JCIS No 0)



Apply 3-4 Ncm torque when tightening the new Screw M1.0 with Bits (JCIS No 0)



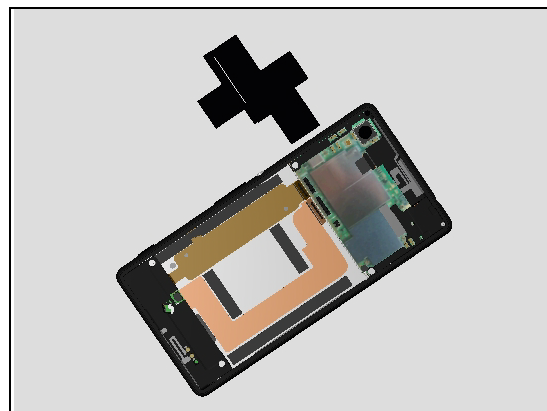
Apply 7.5-8.5 Ncm torque when tightening the new two Screw M1.6 with Bits (T5)



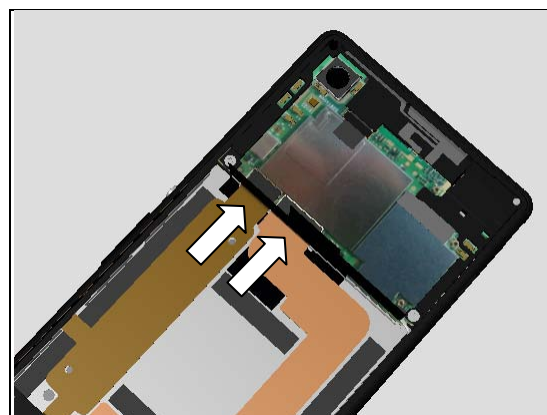
Reassembly

5.4 Thermal Film

Prepare a new Thermal Film in place.

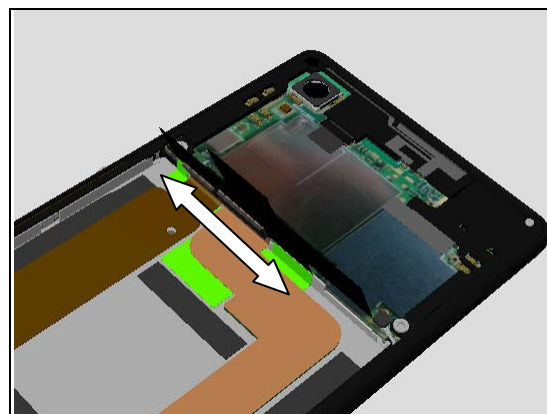


Bent the FPCs through the hole of the Thermal Film.



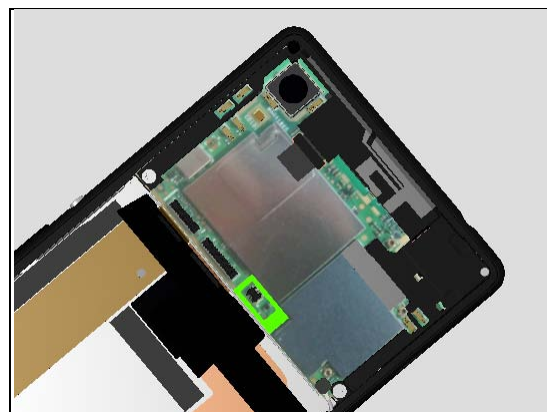
Attach the lower part of the Thermal Film aligning with the guide lines on the Front Cover Assy and press along to secure its attachment.

Be careful of the Link FPC and Display FPC!



5.5 Battery

Remove the old Gasket Battery and attach a new Gasket Battery Front!



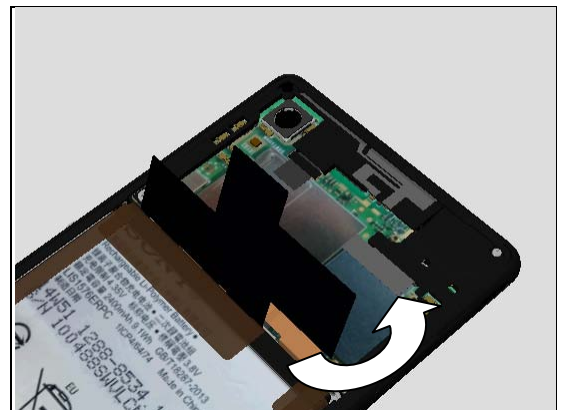
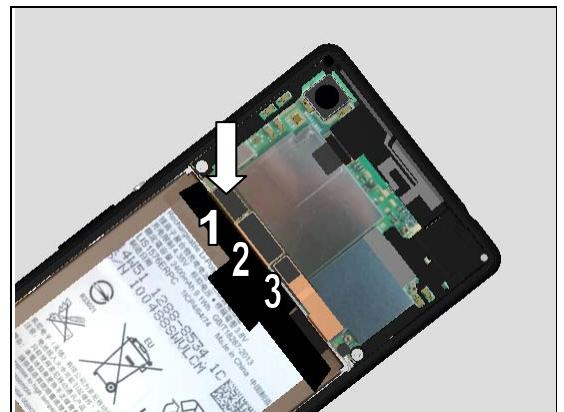
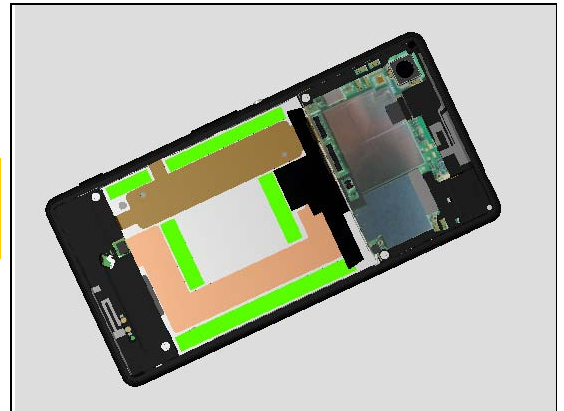
Reassembly

Follow the 4.10 removal and installation instruction to replace a new Adhesive Battery, Adhesive 1st Battery 2nd Battery adhesive.

Place the new Embedded Battery into the cavity

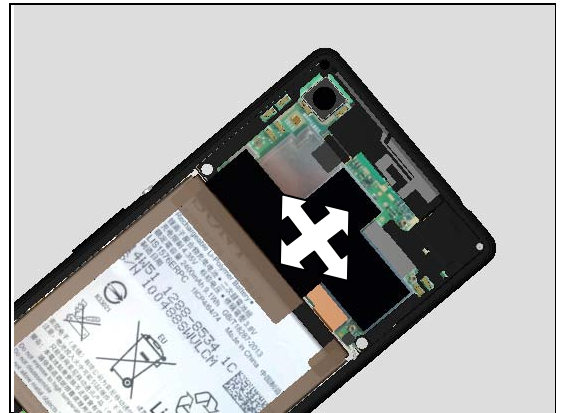
Press to connect three BtB connectors as shown.

Rotate the upper part of the Thermal Film to attach onto the Main PBA

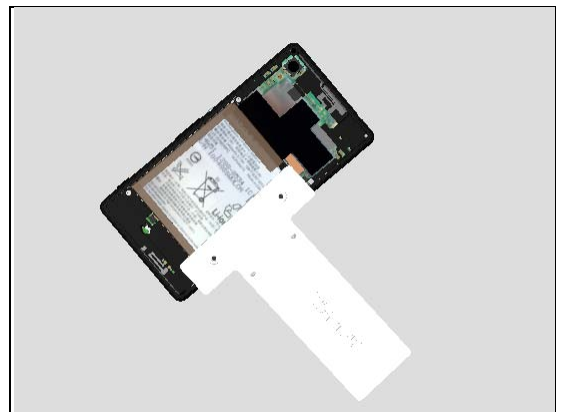


Reassembly

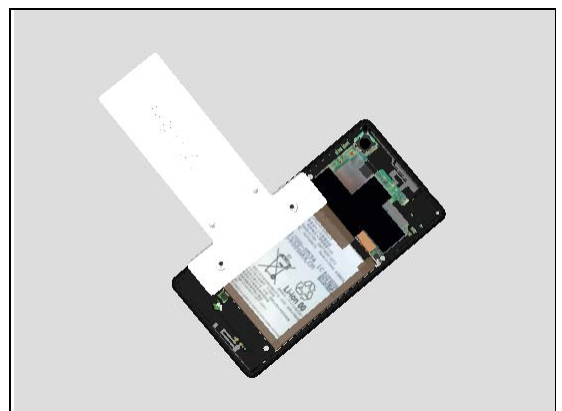
Press along to make it securely attached.



Use the Battery Press Fixture and press for 5s.



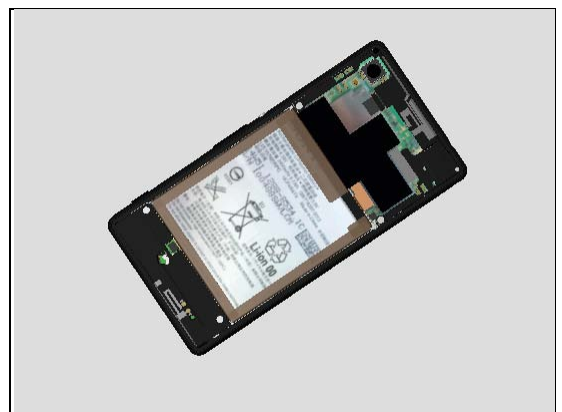
Do the same for the opposite side.



5.6 Back Panel

Follow the 4.13,4.17,4.32 removal and installation instruction to replace a new Adhesive Back Panel, BT/WLAN FPC Antenna and GPS FPC Antenna

Use Isopropyl Alcohol - 99 % for clean around the edges of Front Assy before assembly Back Panel.



Reassembly

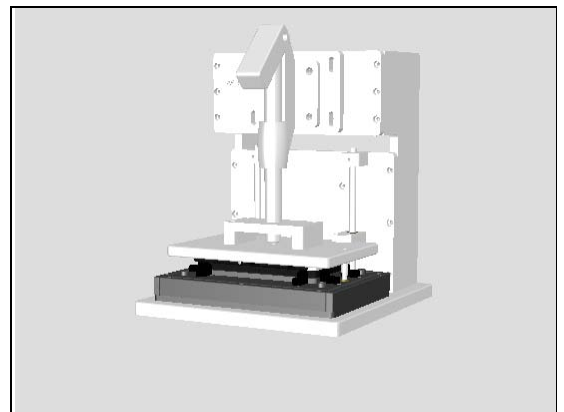
Place the Back Panel on the Front Cover Assy



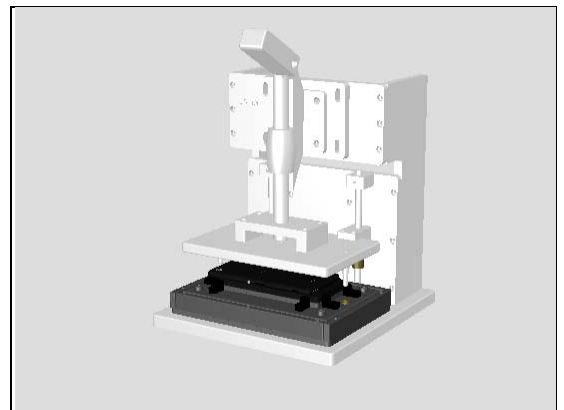
Make sure of an good alignment so the Back Panel is centered



Place the phone in the Back Panel Press Fixture and press for 10 seconds.



Remove the unit from the pressure fixture.



6 Revision History

Rev.	Date	Changes / Comments
1	2015-May-06	Initial release
2	2015-May-21	Delete Gasket 2nd Mic and update Label Tray