

Working Instructions

- mechanical -



*Xperia™ T3, Xperia™ Style
D5102, D5103, D5106, M50w*

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6 Revision History 72

For general information about mechanical repair related issues, refer to

1220-1333: Generic Repair Manual - mechanical

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1 Exterior Views

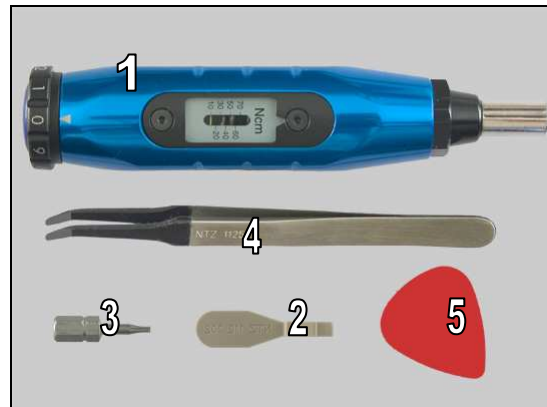
1.1 D5102, D5103, D5106, M50w



2 Tools

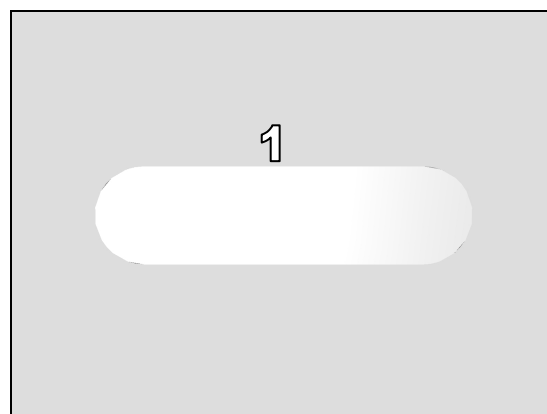
SPECIAL TOOLS

1. Torque Screwdriver
2. Front Opening Tool
3. Torx Bit T5
4. Flex Film Assembly Tool
5. Guitar Pick



SPECIAL TOOLS

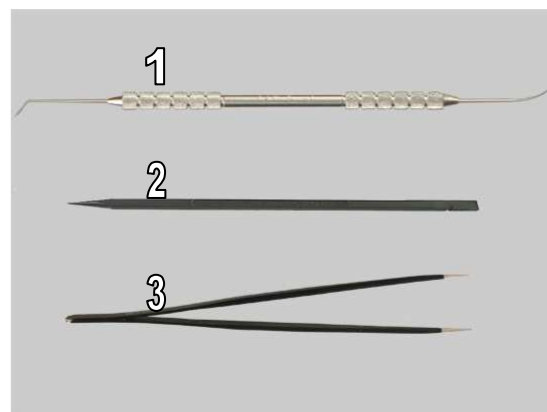
1. Flexible Disassembly tool



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

STANDARD TOOLS

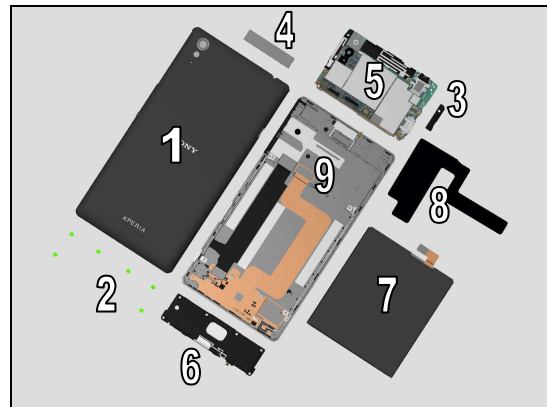
1. Dentist Hook
2. Nylon Pointer
3. Tweezers



3 Disassembly

The disassembly is done in the following order:

1. Battery Cover
2. Screw FPH(T5)M1.2 x 2.4
3. Antenna GPS
4. Kapton Connector
5. Main PBA
6. Antenna Main RF
7. Battery 2500 mAh
8. Thermal Pad 2
9. Front Cover Assy



3.1 Battery Cover

Overview

Using fingers unlock SIM-SD Cap.

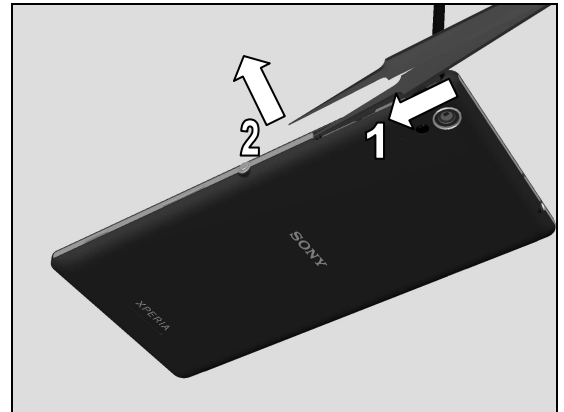
Open SIM-SD cap fully as shown in picture.

Remove MicroSD card if inserted!



Disassembly

1. Insert pointed Tweezers into cavity carefully.
2. Gently push upwards and outwards to unsnap Battery Cover hook as shown in picture.



Insert Guitar Pick into gap created between Battery Cover and Front Cover Assy.



Slide Guitar Pick along side of phone to unsnapping all hooks.

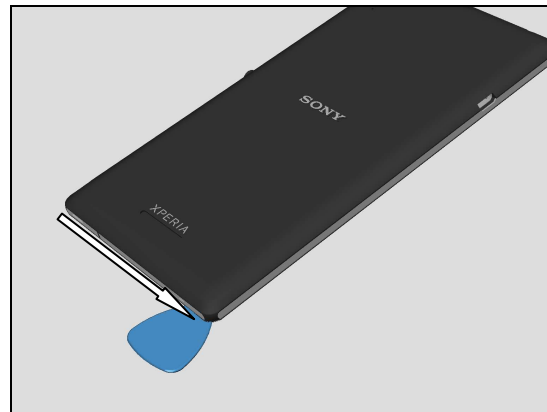


Pay attention to this area of Battery Cover easy to damage if too much force used!



Disassembly

Repeat action for bottom side.



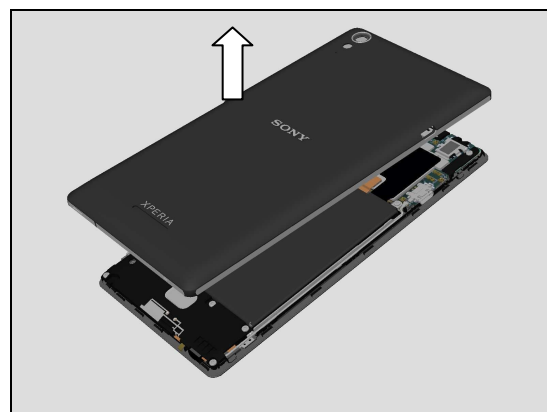
Repeat action for other side.



1. Grip Battery Cover at bottom lift up gently.
2. Push in forward direction to release Battery Cover.



Remove Battery Cover.



Disassembly

3.2 Screw FPH(T5)M1.2 x 2.4 & Antenna GPS & Kapton Connector

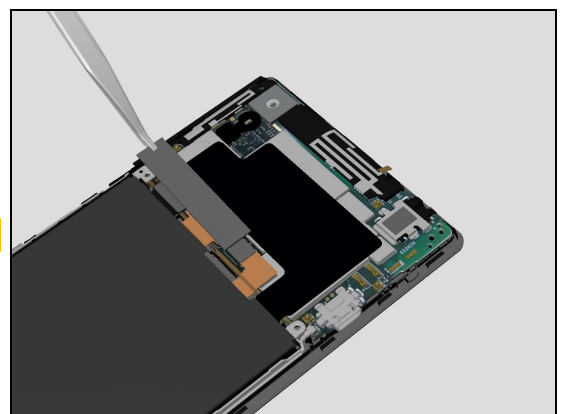
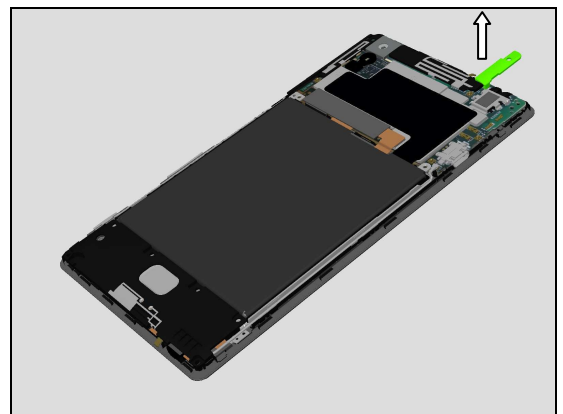
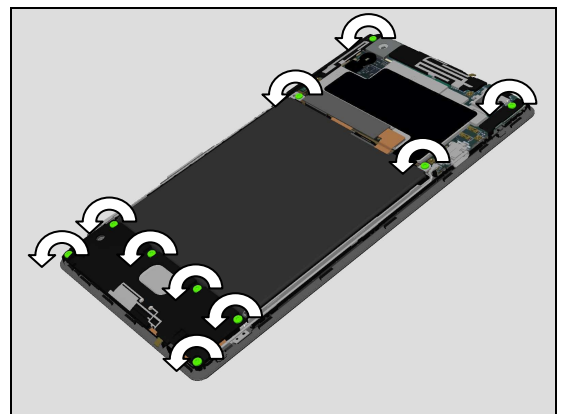
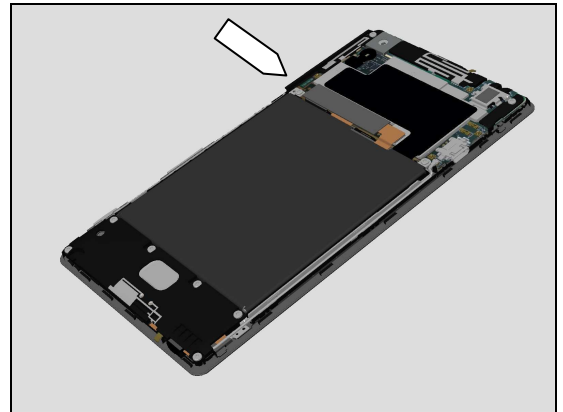
Close SIM-SD Cap to prevent damage.

Remove ten Screw FPH(T5)M1.2 x 2.4 by using Torx Bit T5.

Remove Antenna GPS.

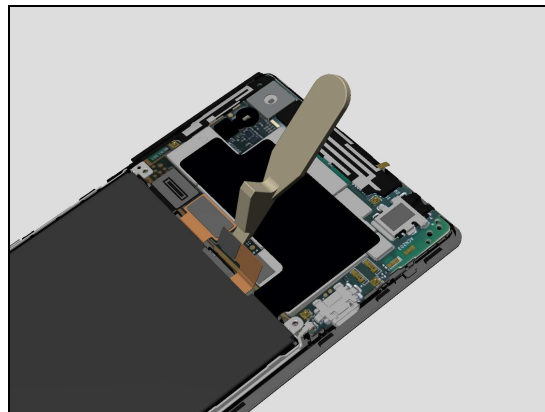
Remove Kapton Connector using Flex Film Assembly Tool.

Scrap! Not to be reused!

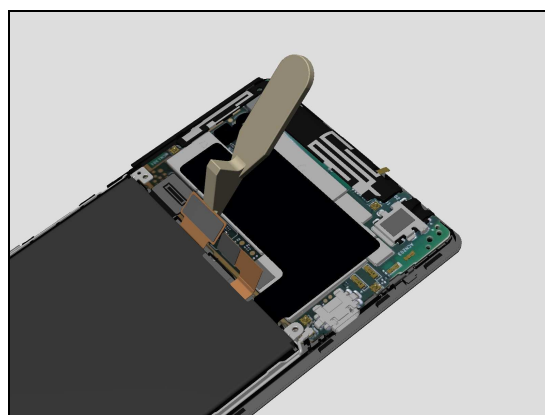


3.3 Main PBA

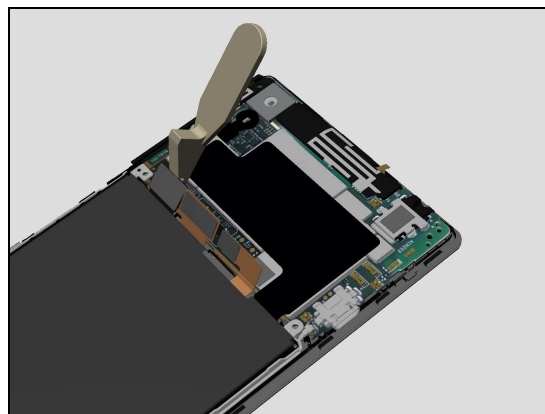
Use Front Opening Tool to disconnect firstly the Battery 2500 mAh board-to-board (BtB) connector.



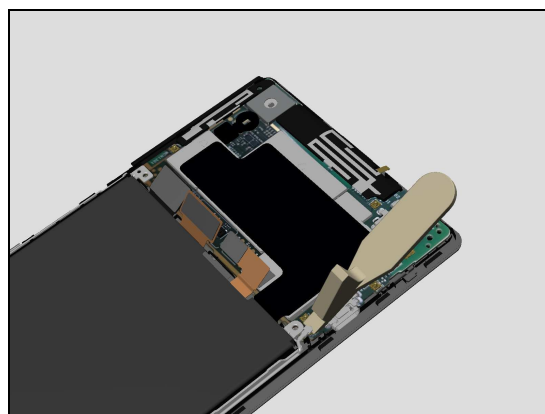
Use Front Opening Tool to disconnect the LCD board-to-board (BtB) connector.



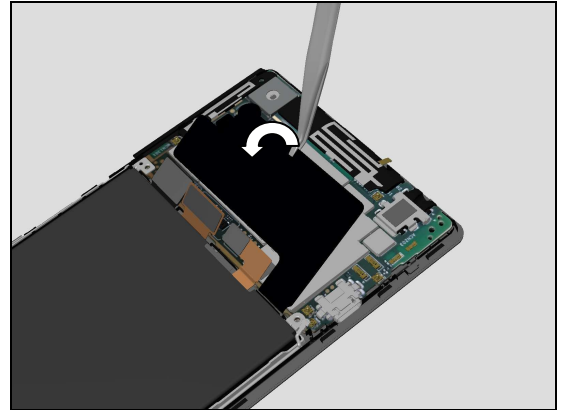
Use Front Opening Tool to disconnect the Link FPC board-to-board (BtB) connector.



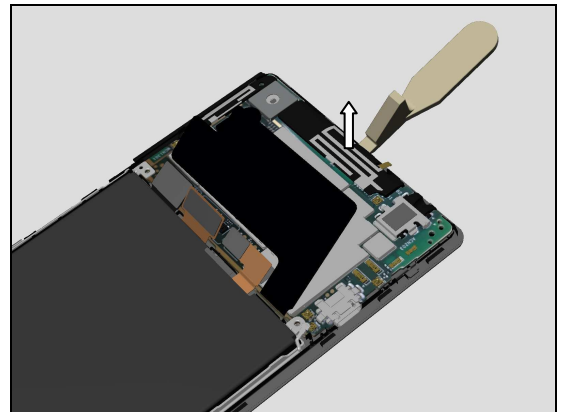
Use Front Opening Tool to disconnect the RF Cable connector.



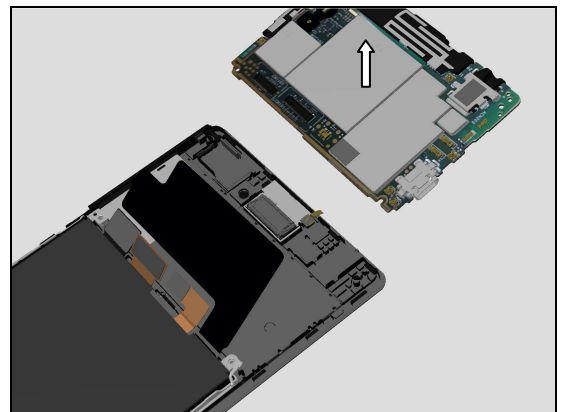
Use Flex Film Assembly Tool lifting Thermal Pad 2 upwards to detach from Main PBA.



Gently insert Guitar Pick the tilt to loosen Main PBA as shown in picture.

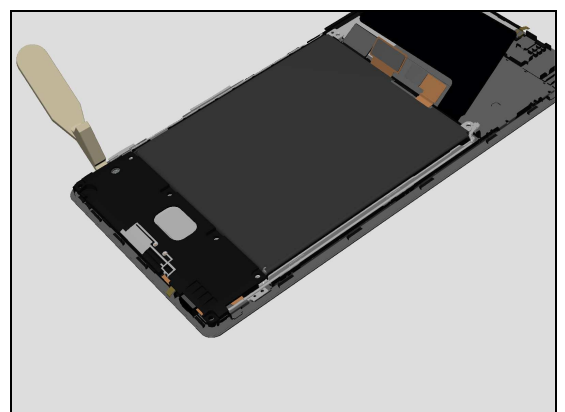


Remove Main PBA.

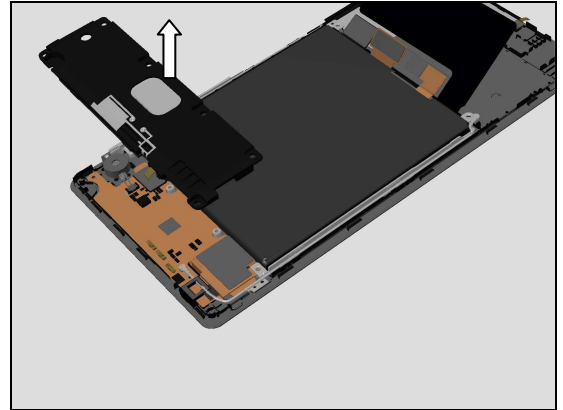


3.4 Antenna Main RF

Insert Guitar Pick and tilt to loosen Antenna Main RF.



Remove Antenna Main RF using fingers.



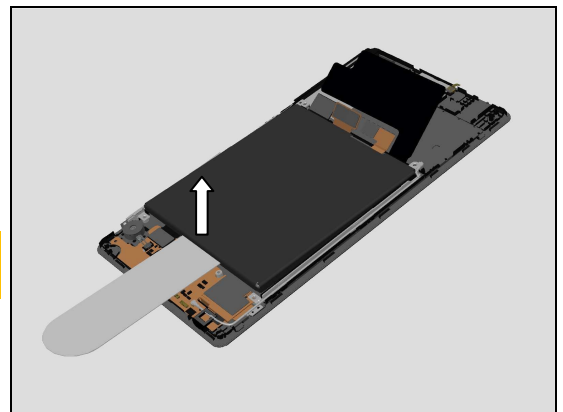
3.5 Battery 2500 mAh

1. Place the Front Assy with Battery 2500 mAh into ESD safe bag.
2. Place the unit into the fridge.
3. Set the fridge temperature at -20°C, and set the time at 30 minutes.



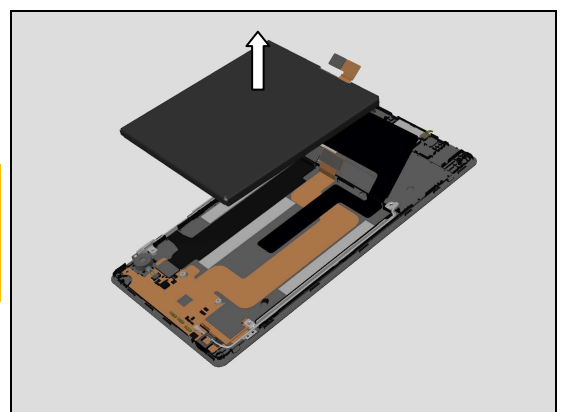
Remove from freezer, then immediately Insert Flexible Disassembly Tool as shown in picture to loosen adhesive located under battery.

Attention: If Front Assy with Battery 2500 mAh returns to room temperature, adhesive will bond again!



Remove Battery 2500 mAh using fingers

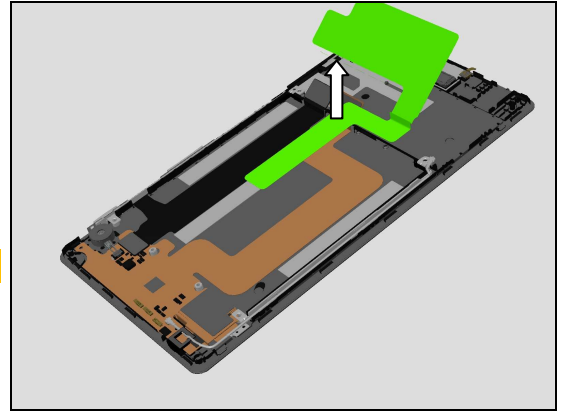
Carefully inspect the Battery after removing it. Battery with visual signs of been punctured etc, should be scraped after removal and disposed of in accordance with local policies!



3.6 Thermal Pad 2 & Front Cover Assy

Remove Thermal Pad 2 using fingers.

Scrap! Not to be reused!



4 Replacement

4.1 Battery Cover

Follow the 3.1 Disassembly instructions!

Prepare the new Battery Cover.

Follow the 5.6 Reassembly instructions!

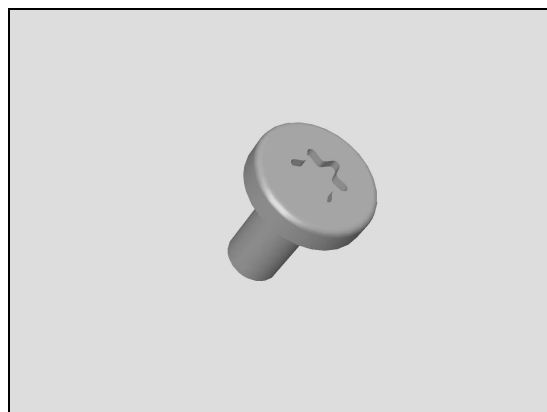


4.2 Screw FPH(T5)M1.2 x 2.4

Follow the 3.1 – 3.2 Disassembly instructions!

Prepare the new Screw FPH(T5)M1.2 x 2.4.

Follow the 5.5 – 5.6 Reassembly instructions!



4.3 Antenna GPS

Follow the 3.1 – 3.2 Disassembly instructions!

Prepare the new Antenna GPS.

Follow the 5.5 – 5.6 Reassembly instructions!

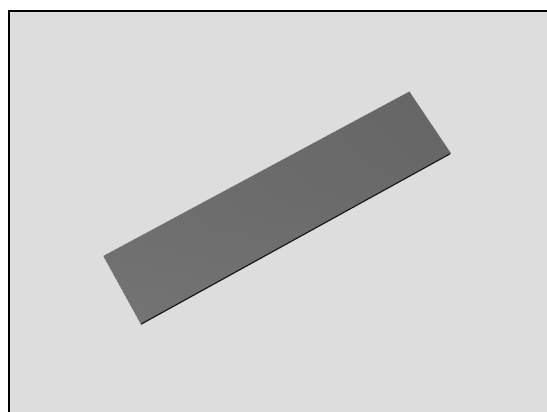


4.4 Kapton Connector

Follow the 3.1 – 3.2 Disassembly instructions!

Prepare the new Kapton Connector.

Follow the 5.5 – 5.6 Reassembly instructions!



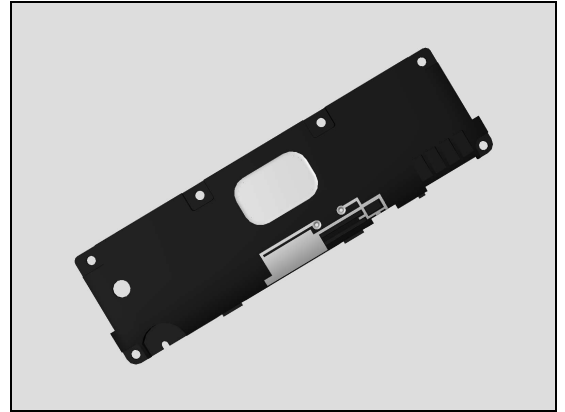
Replacement

4.5 Antenna Main RF

Follow the 3.1 – 3.4 Disassembly instructions!

Prepare the new Antenna Main RF.

Follow the 5.3 – 5.6 Reassembly instructions!



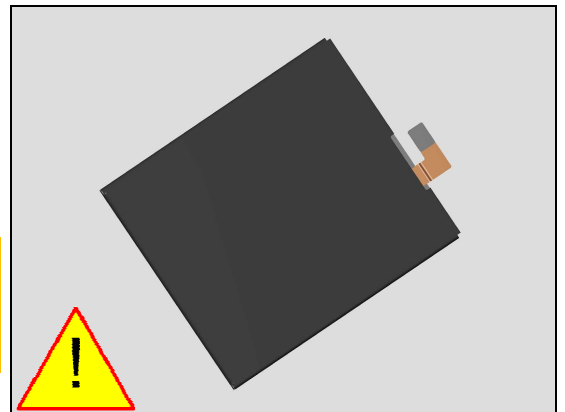
4.6 Battery 2500 mAh

Follow the 3.1 – 3.5 Disassembly instructions!

Prepare the new Battery 2500 mAh.

Follow the 5.2 – 5.6 Reassembly instructions!

Caution: Risk of Explosion if the Battery is replaced by incorrect type. Only use original approved Sony Mobile Battery according to "Part List 1287-6176". Dispose of used batteries accordance with local policies!

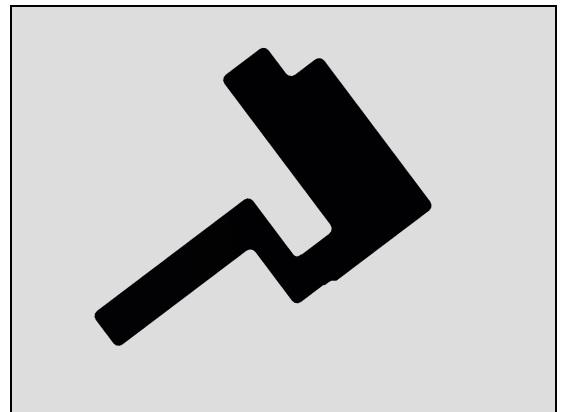


4.7 Thermal Pad2

Follow the 3.1 – 3.6 Disassembly instructions!

Prepare the new Thermal Pad2.

Follow the 5.1 – 5.6 Reassembly instructions!



4.8 Front Cover Assy

Follow the 3.1 – 3.6 Disassembly instructions!

Prepare the new Front Assy.

Follow the 5.1 – 5.6 Reassembly instructions!



Replacement

4.9 Adhesive Tape Battery 1

Follow the 3.1 – 3.6 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Adhesive Tape Battery 1

Carry out the Installation as described below!

Follow the 5.1 – 5.6 Reassembly instructions!

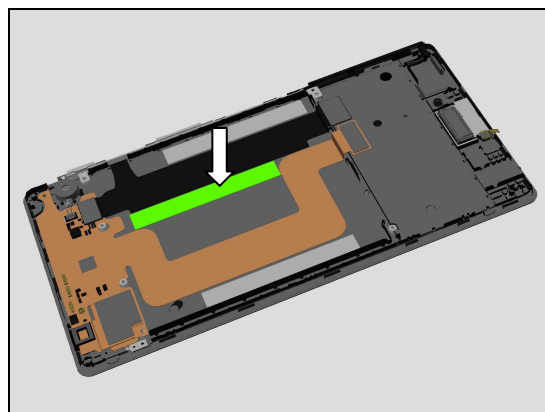
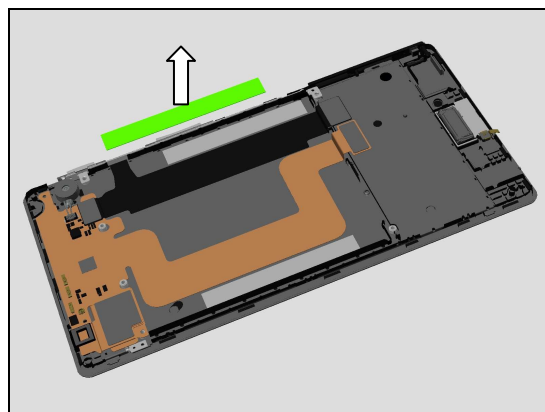
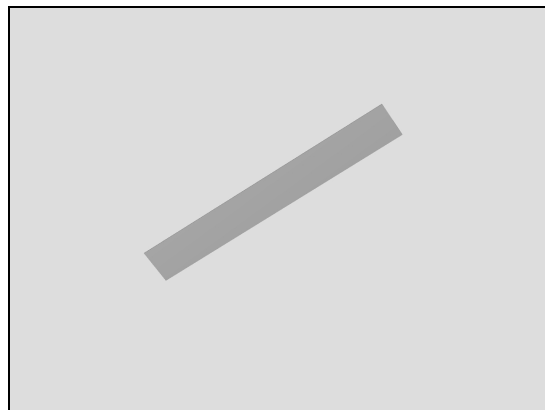
REMOVAL

Remove Adhesive Tape Battery 1 using Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Place new Adhesive Tape Battery 1 using Flex Film Assembly Tool into its proper position.



Replacement

4.10 Adhesive Tape Battery 2

Follow the 3.1 – 3.6 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Adhesive Tape Battery 2.

Carry out the Installation as described below!

Follow the 5.1 – 5.6 Reassembly instructions!

REMOVAL

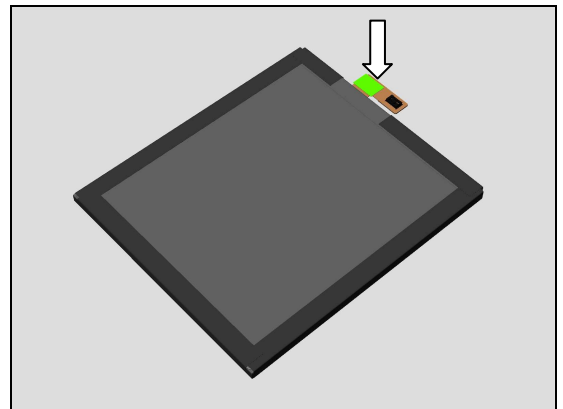
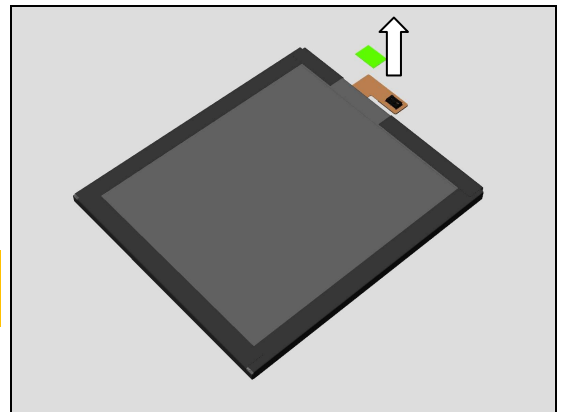
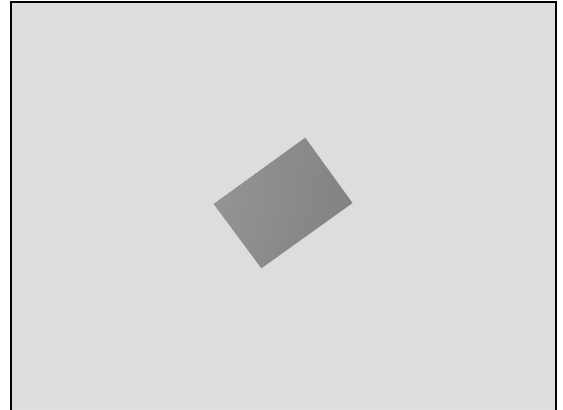
Remove Adhesive Tape Battery 2 using Flex Film Assembly Tool.

Scrap! Not to be reused!

Caution: Do not damage Battery FPC!

INSTALLATION

Place new Adhesive Tape Battery 2 using Flex Film Assembly Tool into its proper position.



Replacement

4.11 Adhesive Tape Battery 3

Follow the 3.1 – 3.6 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Adhesive Tape Battery 3.

Carry out the Installation as described below!

Follow the 5.1 – 5.6 Reassembly instructions!

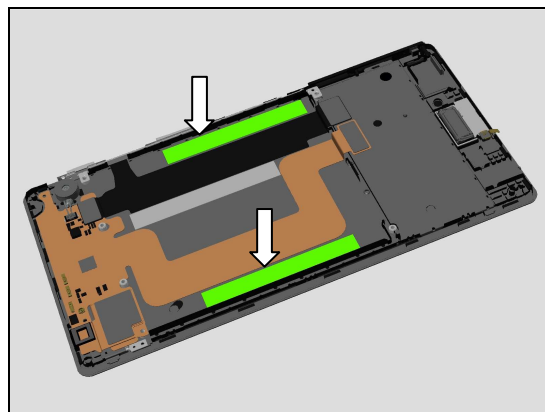
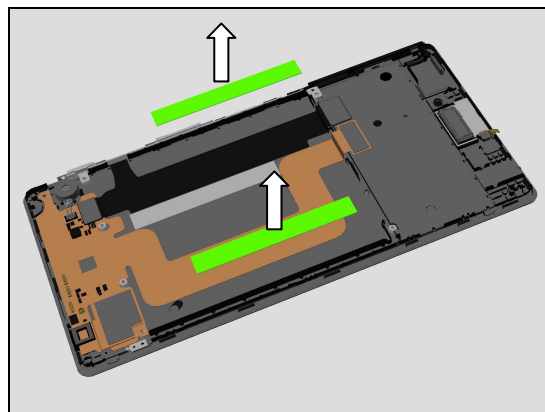
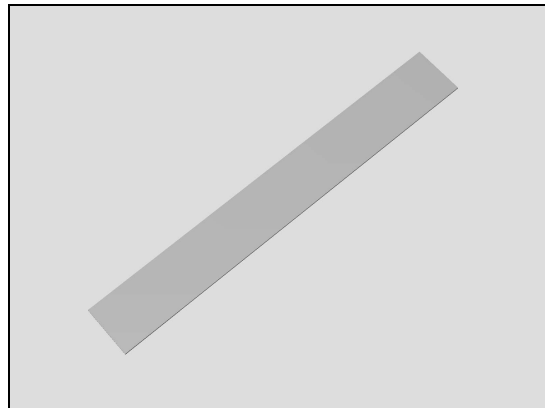
REMOVAL

Remove Adhesive Tape Battery 3 using Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Place new Adhesive Tape Battery 3 using Flex Film Assembly Tool into its proper position.



Replacement

4.12 Adhesive Tape FPC (LCD FPC)

Follow the 3.1 – 3.6 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Adhesive Tape FPC.

Carry out the Installation as described below!

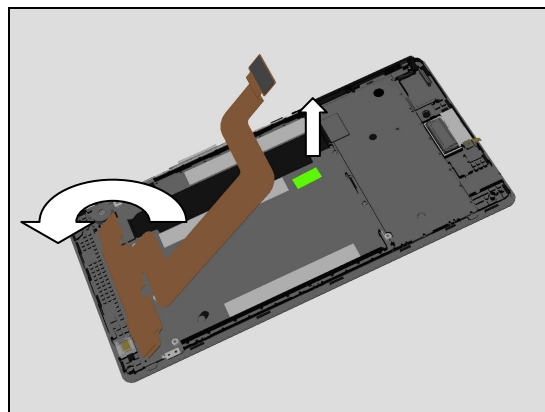
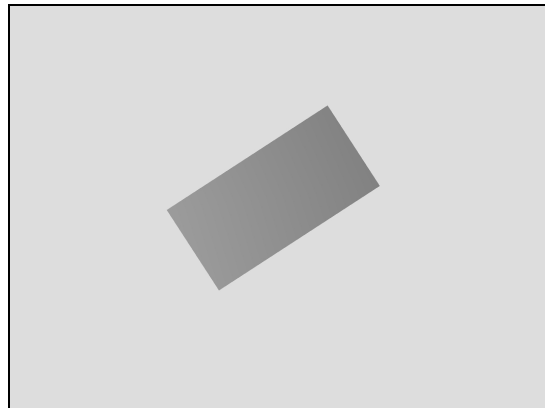
Follow the 5.1 – 5.6 Reassembly instructions!

REMOVAL

Carefully bend back LCD FPC then remove Adhesive Tape FPC using Flex Film Assembly Tool.

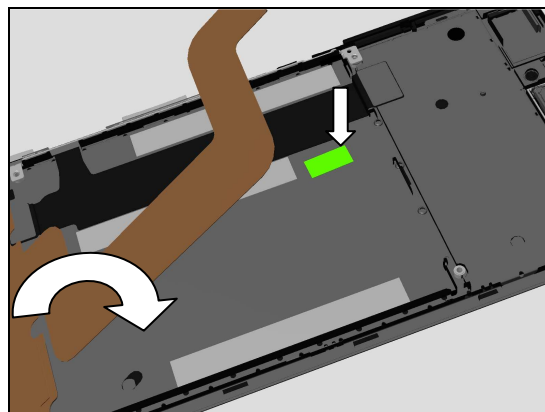
Scrap! Not to be reused!

Caution: Do not damage FPC!



INSTALLATION

Place new Adhesive Tape FPC using Flex Film Assembly Tool into its proper position, then bend back LCD FPC into its proper position.



Replacement

4.13 Adhesive Tape FPC (Link FPC)

Follow the 3.1 – 3.6 Disassembly instructions!

Follow the 4.22 Removal instructions!

Carry out the Removal as described below!

Prepare the new Adhesive Tape FPC.

Carry out the Installation as described below!

Follow the 4.22 Installation instructions!

Follow the 5.1 – 5.6 Reassembly instructions!

REMOVAL

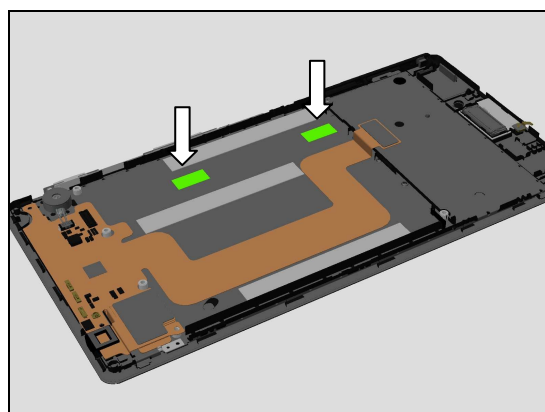
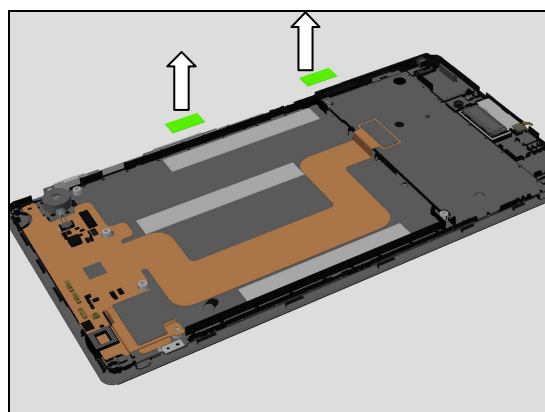
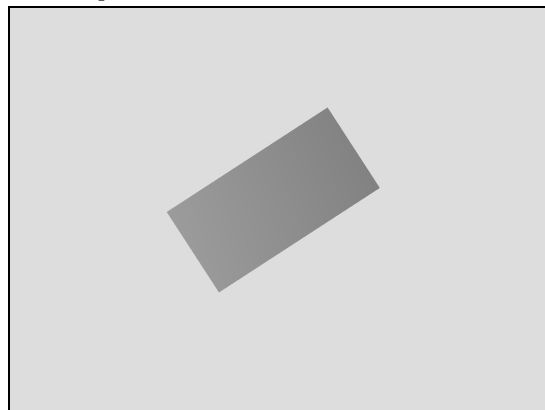
Remove Adhesive Tape FPC using Flex Film Assembly Tool.

Scrap! Not to be reused!

Caution: Do not damage FPC!

INSTALLATION

Place new Adhesive Tape FPC using Flex Film Assembly Tool into its proper position.



Replacement

4.14 Adhesive Tape Vibrator

Follow the 3.1 – 3.4 Disassembly instructions!

Follow the 4.54 Removal instructions!

Carry out the Removal as described below!

Prepare the new Adhesive Tape Vibrator.

Carry out the Installation as described below!

Follow the 4.54 Installation instructions!

Follow the 5.3 – 5.6 Reassembly instructions!

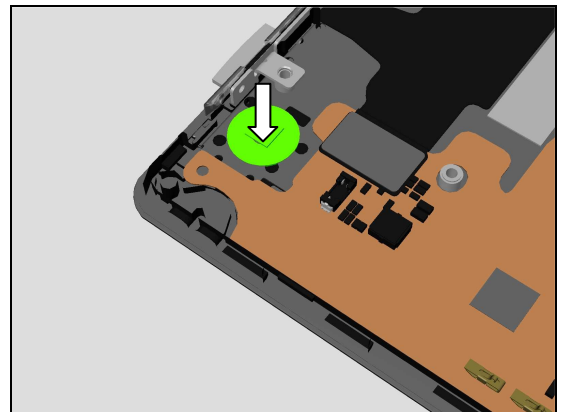
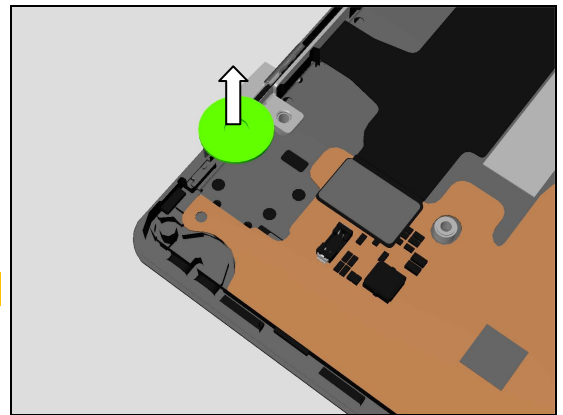
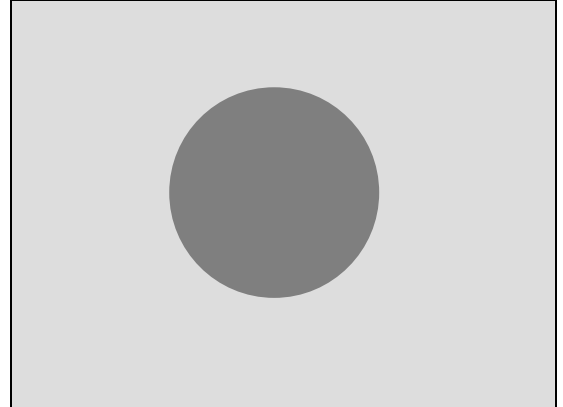
REMOVAL

Remove Adhesive Tape Vibrator using Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Place new Adhesive Tape Vibrator using Flex Film Assembly Tool into its proper position.



Replacement

4.15 Antenna BT & WIFI + Tape BT & WiFi Antenna

Follow the 3.1 – 3.2 Disassembly instructions!

Carry out the Removal as described below!

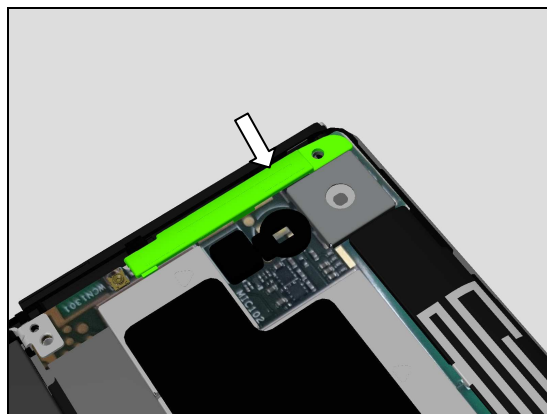
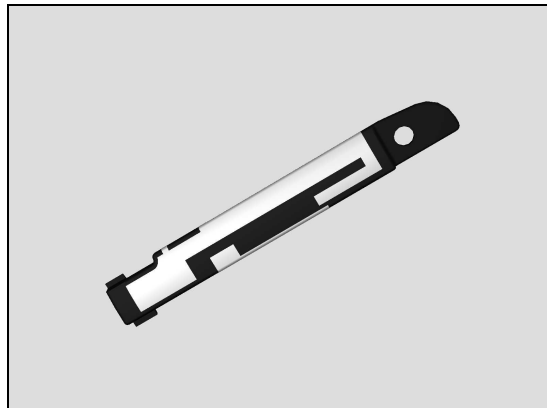
Prepare the new Antenna BT & WIFI + Tape BT & WiFi Antenna.

Carry out the Installation as described below!

Follow the 5.5 – 5.6 Reassembly instructions!

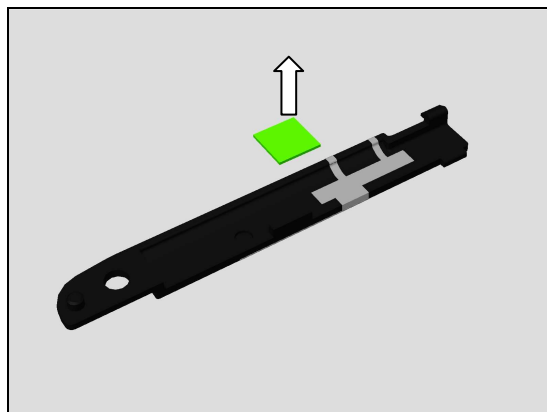
REMOVAL

Gently insert Front Opening Tool at location shown in picture to loosen Antenna BT & WIFI, and then remove using fingers.



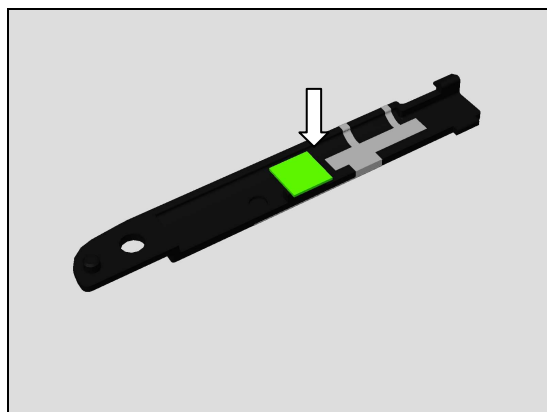
Remove Tape BT & Wifi Antenna using Dentist Hook.

Scrap! Not to be reused!



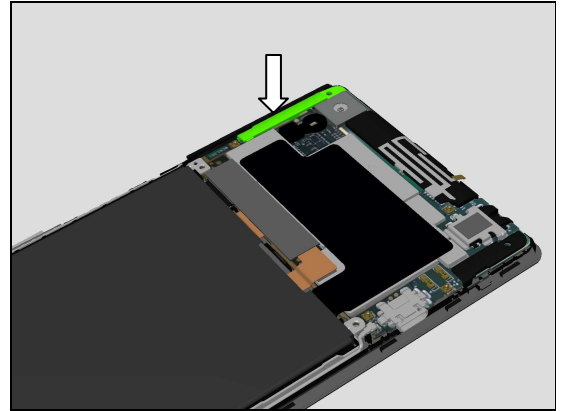
INSTALLATION

Place new Tape BT & Wifi Antenna using Tweezers into its proper position.



Replacement

Place new Antenna BT & WIFI using Flex Film
Assembly Tool into its proper position.



Replacement

4.16 Antenna Diversity & Tape Diversity Antenna

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

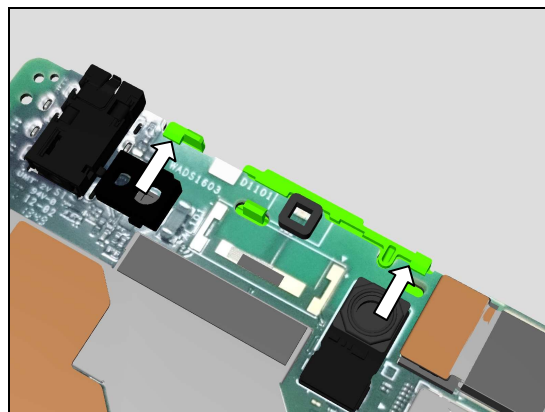
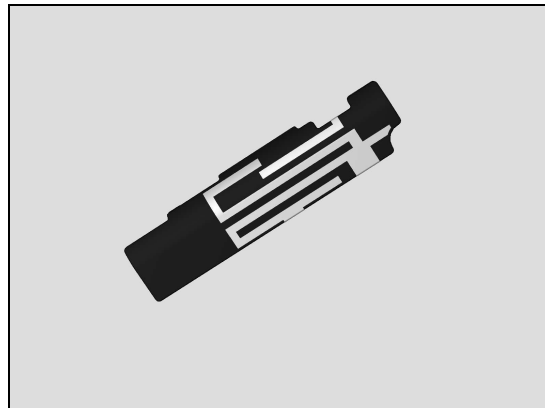
Prepare the new Antenna Diversity & Tape Diversity Antenna.

Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

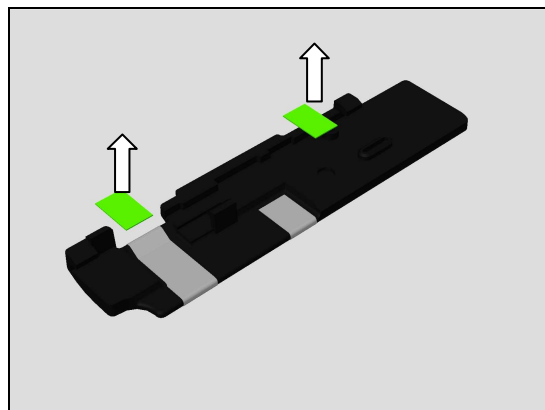
REMOVAL

Detach the two hooks from Main PBA to remove the Antenna Diversity using Front Opening Tool.



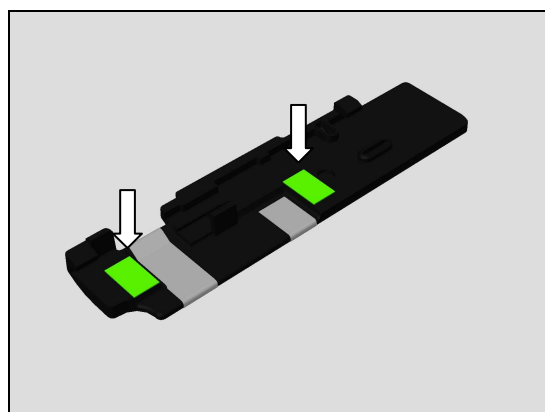
Remove Tape Diversity Antenna using Dentist Hook.

Scrap! Not to be reused!



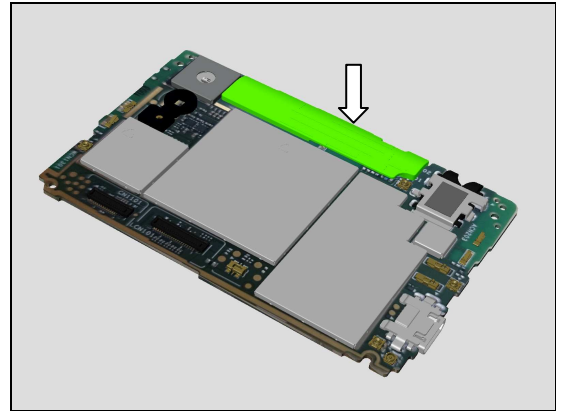
INSTALLATION

Place new Tape Diversity Antenna using Tweezers into its proper position.



Replacement

Place a new Antenna Diversity by using fingers, snap onto Main PBA to secure its attachment.



Replacement

4.17 Antenna FPC

Follow the 3.1 – 3.6 Disassembly instructions!

Follow the 4.29 Removal instructions!

Carry out the Removal as described below!

Prepare the new Antenna FPC

Carry out the Installation as described below!

Follow the 4.29 Installation instructions!

Follow the 5.1 – 5.6 Reassembly instructions!

REMOVAL

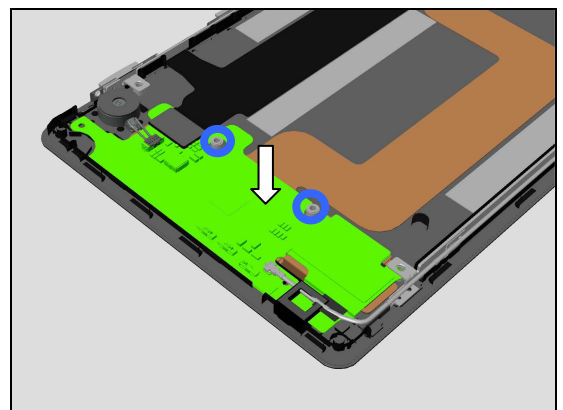
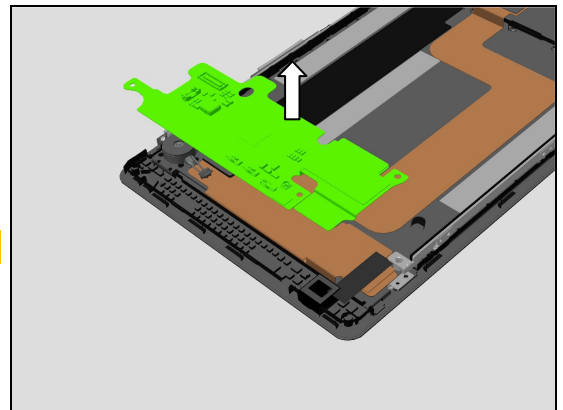
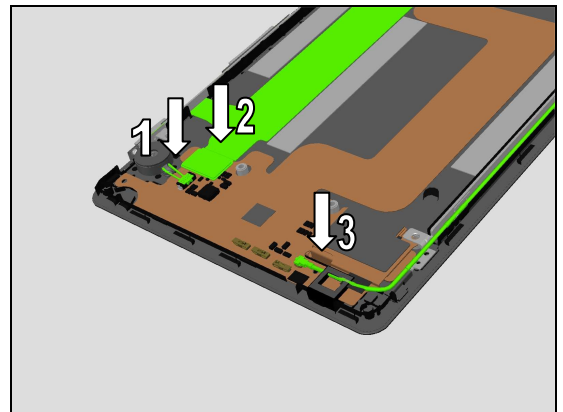
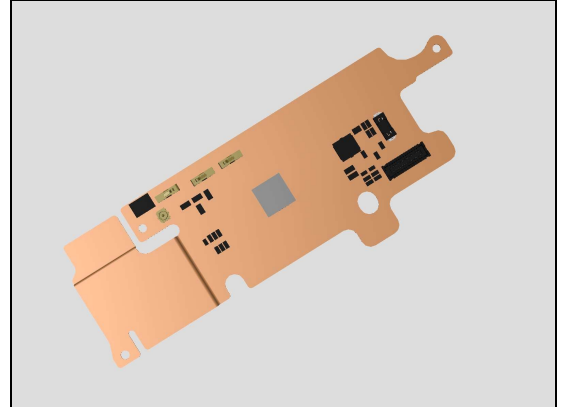
Disconnect Link FPC BtB and Vibrator BtB connectors, and RF Cable connector

Detach using Flex Film Assembly Tool then remove the Antenna FPC.

Scrap! Not to be reused!

INSTALLATION

Place a new Antenna FPC by using fingers into its proper position. Use screw towers for alignment located on Front Cover Assy for aligning Antenna FPC during installation as shown in picture.



Replacement

4.18 Antenna Spring 1 & Gasket Spring

Follow the 3.1 – 3.4 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Antenna Spring 1 & Gasket Spring.

Carry out the Installation as described below!

Follow the 5.3 – 5.6 Reassembly instructions!

REMOVAL

Remove Antenna Spring 1 & Gasket Spring using Dentist Hook.

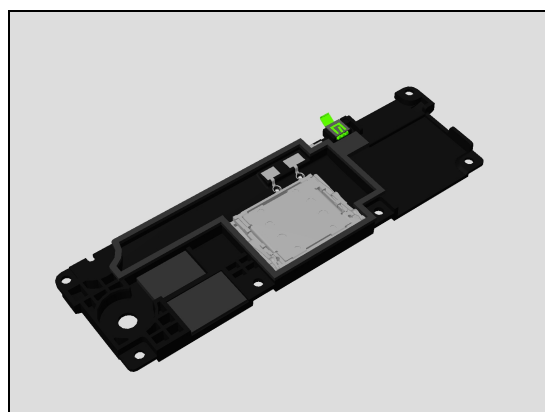
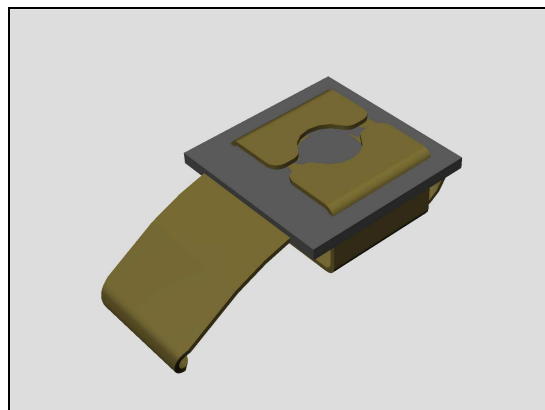
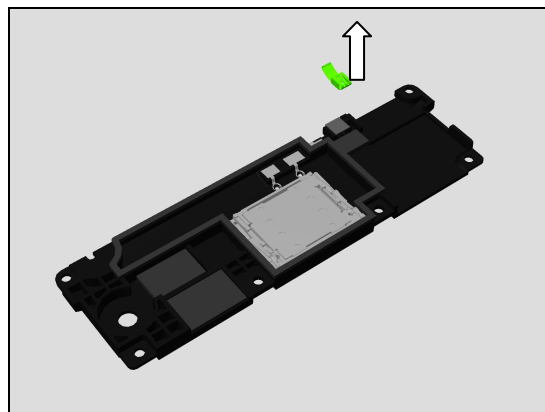
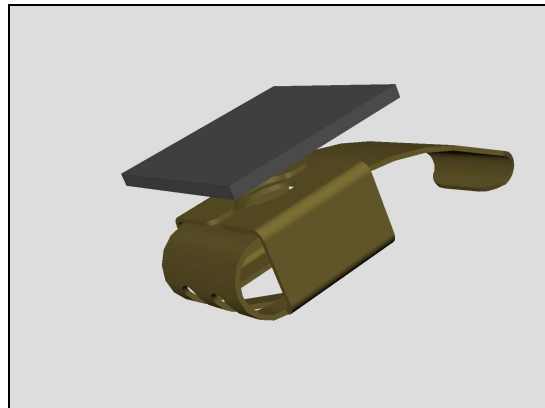
Scrap! Not to be reused!

Use Isopropyl Alcohol for cleaning Antenna Main RF cavity!

INSTALLATION

Assemble new Gasket Spring onto new Antenna Spring 1 as shown in picture.

Place new Antenna Spring 1 & Gasket Spring using Tweezers into its proper position.



Replacement

4.19 Antenna Spring 2

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Antenna Spring 2.

Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

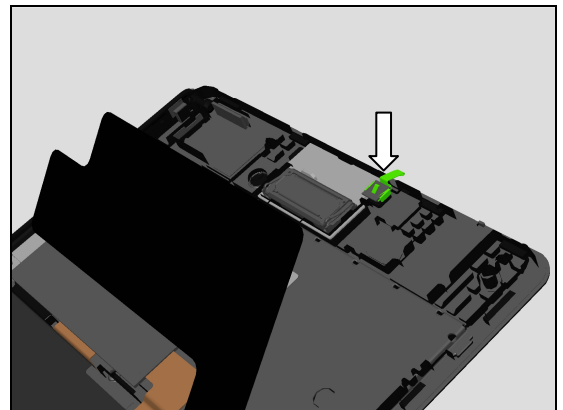
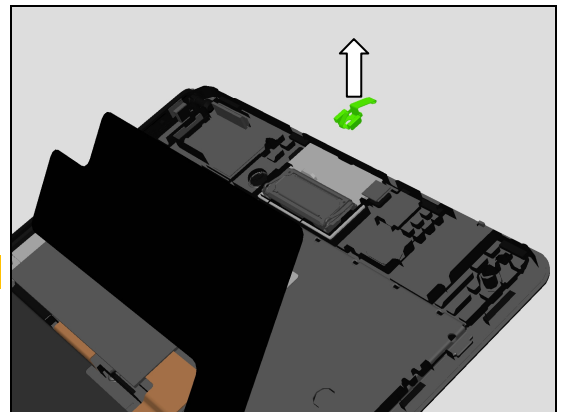
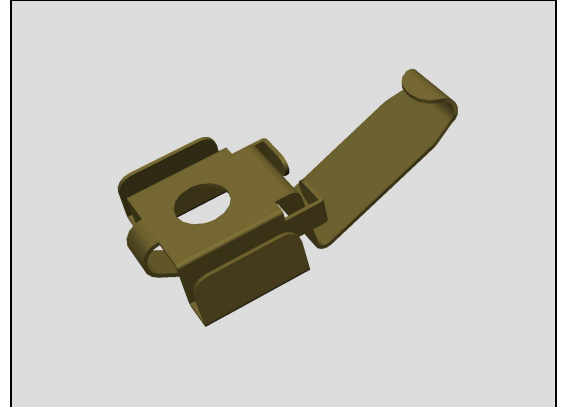
REMOVAL

Remove Antenna Spring 2 using Flat Tweezers.

Scrap! Not to be reused!

INSTALLATION

Place new Antenna Spring 2 using Tweezers into its proper position.



Replacement

4.20 Audio Jack Mylar

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Audio Jack Mylar.

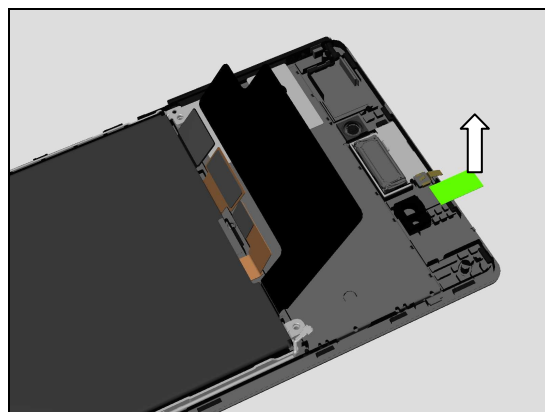
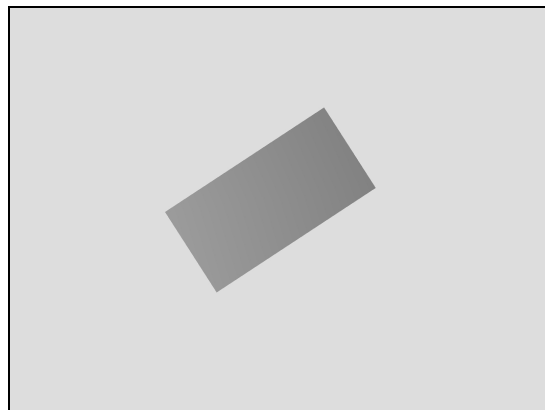
Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

REMOVAL

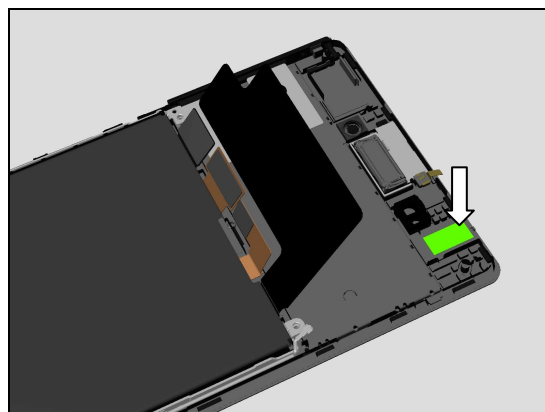
Remove Audio Jack Mylar using Flat Tweezers.

Scrap! Not to be reused!



INSTALLATION

Place new Audio Jack Mylar using Tweezers into its proper position.



Replacement

4.21 Bracket Cable Assy & Gasket Cable & RF Cable

Follow the 3.1 – 3.2 & 3.4 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Bracket Cable Assy & Gasket Cable & RF Cable.

Carry out the Installation as described below!

Follow the 5.3 & 5.5 – 5.6 Reassembly instructions!

REMOVAL

Carefully detach RF Cable connector from Main PBA and then carefully detach RF Cable connector from Antenna FPC.

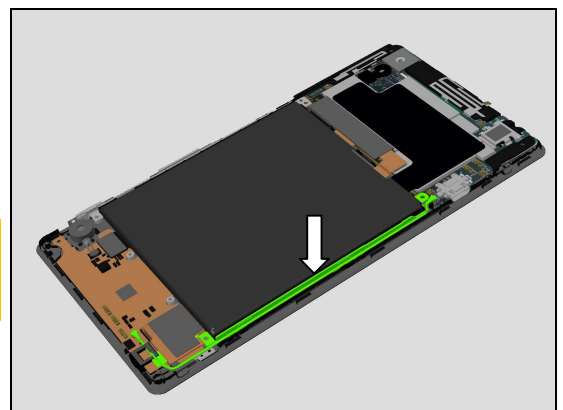
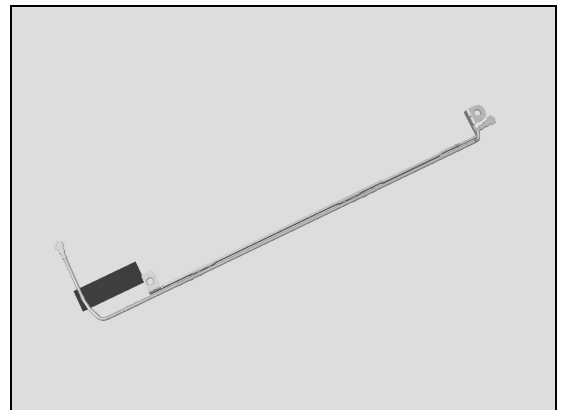
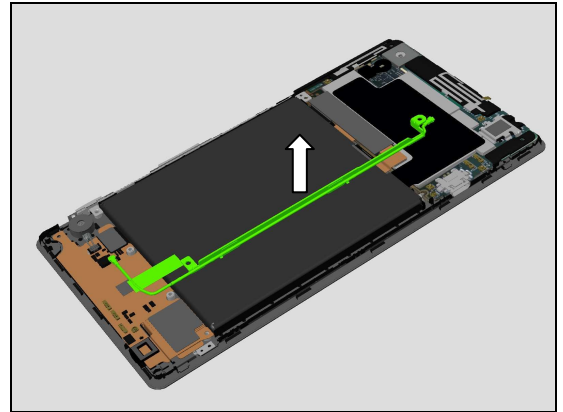
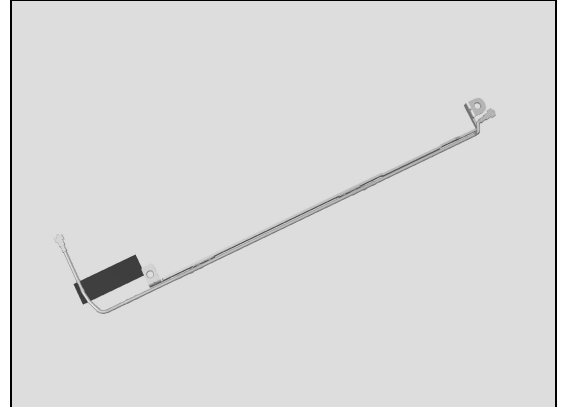
Carefully detach Gasket Cable from LCD FPC and then remove bracket Cable Assy using Front Open Tool.

INSTALLATION

Prepare new Bracket Cable Assy & Gasket Cable & RF Cable as shown in picture.

Place new Bracket Cable Assy & Gasket Cable & RF Cable using fingers into its proper position.

Connect both RF Cable connectors! Press directly on top using Nylon Pointer for 5 seconds to secure attachment!



Replacement

4.22 Bracket Side Key & Link FPC

Follow the 3.1 – 3.6 Disassembly instructions!

Follow the 4.13 Removal instructions!

Carry out the Removal as described below!

Prepare the new Bracket Side Key & Link FPC.

Carry out the Installation as described below!

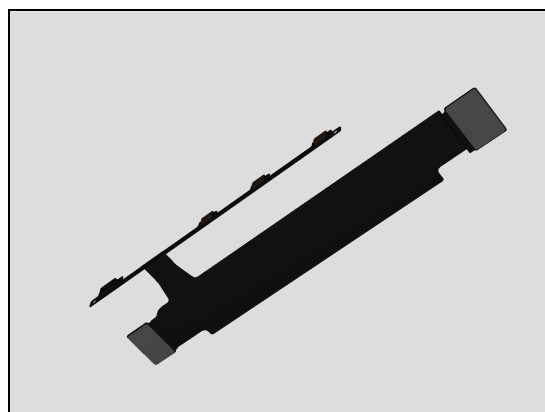
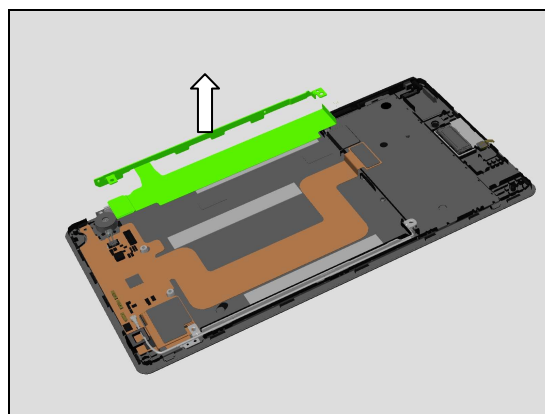
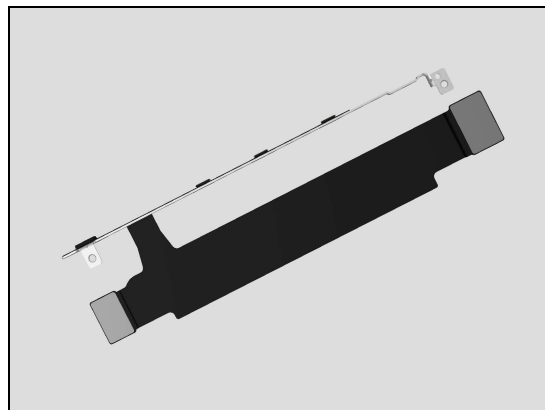
Follow the 4.13 Installation instructions!

Follow the 5.1 – 5.6 Reassembly instructions!

REMOVAL

Remove Bracket Side Key & Link FPC using Front Opening Tool and then detach the Link FPC from Bracket Side Key.

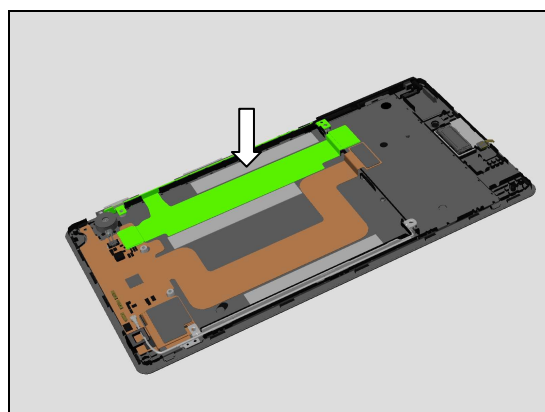
Scrap! Not to be reused!



INSTALLATION

Prepare new Bracket Side Key & Link FPC assembly.

Place new Bracket Side Key & Link FPC using fingers into its proper position.



Replacement

4.23 Camera 8MP

Follow the 3.1 – 3.3 Disassembly instructions!

Follow the 4.27, 4.39 & 4.52 Removal instructions!

Carry out the Removal as described below!

Prepare the new Camera 8MP.

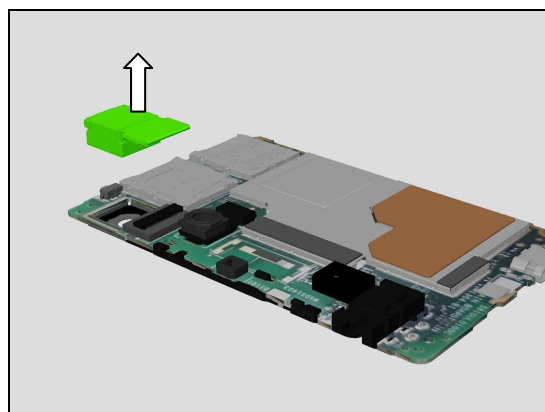
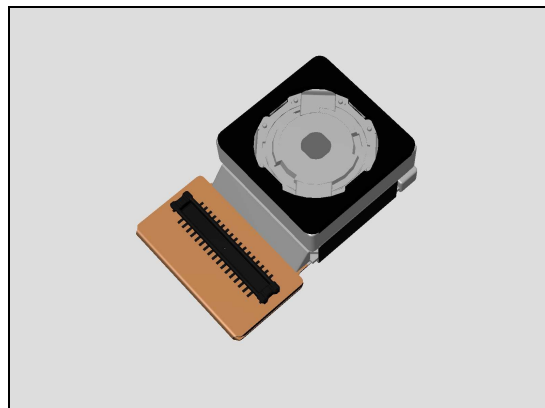
Carry out the Installation as described below!

Follow the 4.27, 4.39 & 4.52 Installation instructions!

Follow the 5.4 – 5.6 Reassembly instructions!

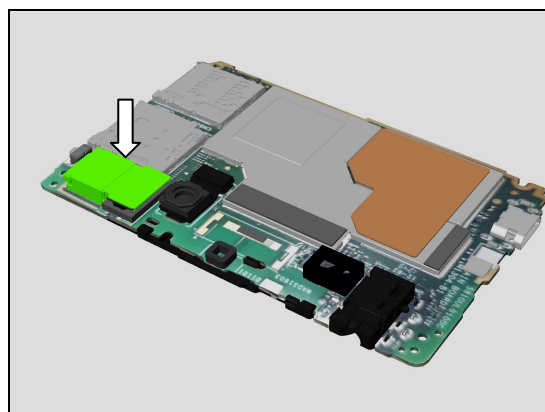
REMOVAL

Disconnect Camera 8MP BtB using Front Opening Tool and then remove from Main PBA.



INSTALLATION

Place new Camera 8PM using fingers into its proper position and then press directly on top of BtB connector for 5 seconds to secure its attachment.



Replacement

4.24 Camera Chat

Follow the 3.1 – 3.3 Disassembly instructions!

Follow the 4.41 Removal instructions!

Carry out the Removal as described below!

Prepare the new Camera Chat

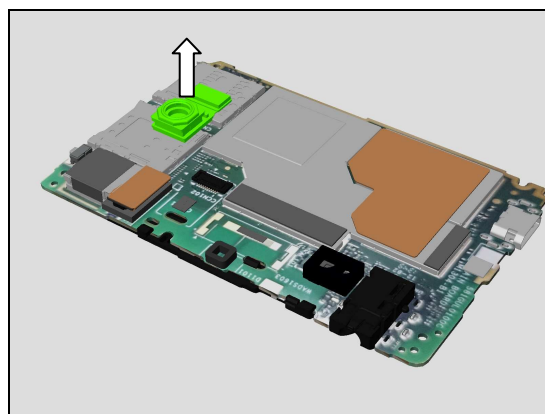
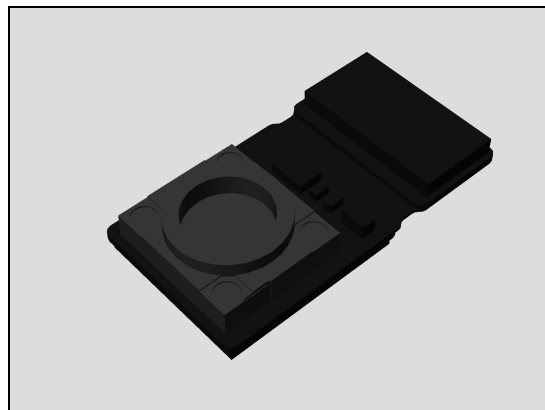
Carry out the Installation as described below!

Follow the 4.41 Installation instructions!

Follow the 5.4 – 5.6 Reassembly instructions!

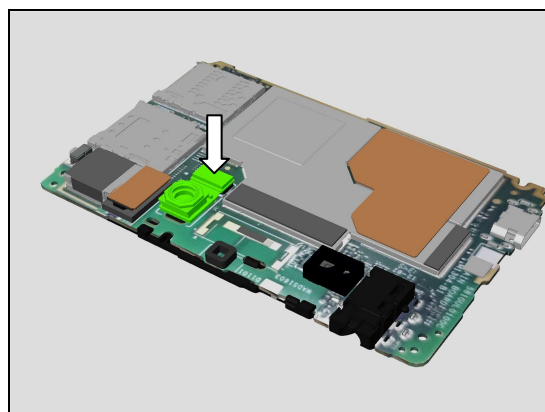
REMOVAL

Disconnect Camera Chat BtB using Front Opening Tool and then remove from Main PBA.



INSTALLATION

Place new Camera Chat using fingers into its proper position and then press directly on top of BtB connector for 5 seconds to secure its attachment.



Replacement

4.25 Core Unit Label

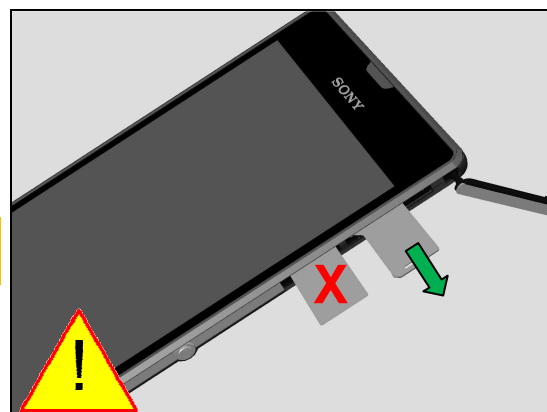
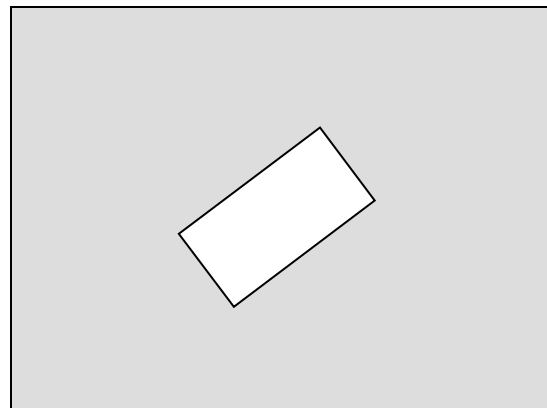
*Carry out the Removal as described below!
Prepare a new Core Unit Label.
Carry out the Installation as described below!*

REMOVAL

Open SIM-SD Cap.

Pull out the Label Tray CU with fingers, gripping only top-sided label as shown in picture.

Caution: gripping bottom label can cause damage to Label Tray CU!



Caution: Do not pullout Label Tray CU further than indicated by red dotted line shown in picture!



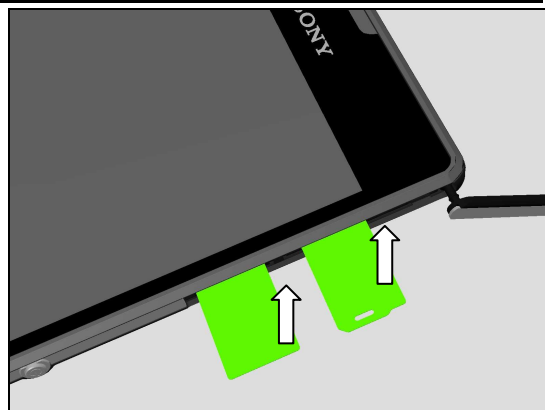
Replacement

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

Carefully remove the Core Unit Label by using the Flex Film Assembly Tool and fingers from Label Tray CU.

Scrap! Not to be reused!

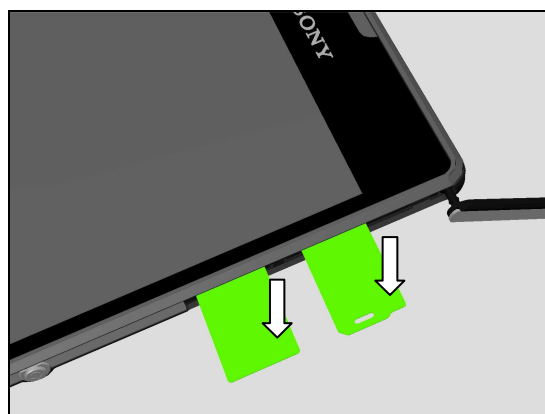
Be careful not to damage Label Tray CU!



INSTALLATION

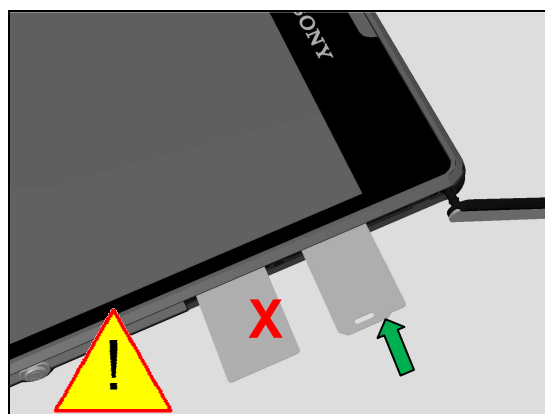
Check that the label format is properly loaded in the Zebra printer and write a new Label using the 'Label Print Solution' software.

Attach a new Core Unit Label onto Label Tray CU in its proper position!



Insert Label Tray CU pushing only top-sided label as shown in picture.

Caution: gripping bottom label can cause damage to Label Tray CU!



Close SIM-SD Cap.



Replacement

4.26 Ear Speaker

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Ear Speaker.

Carry out the Installation as described below!

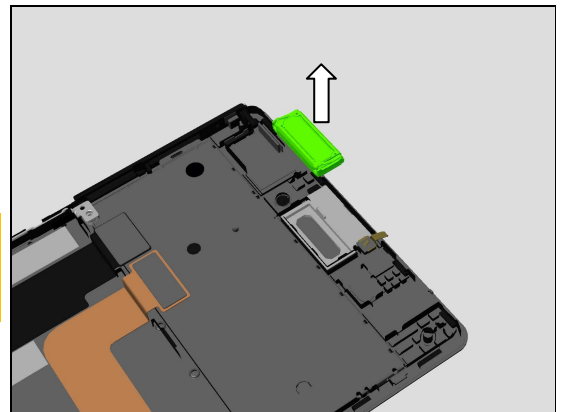
Follow the 5.4 – 5.6 Reassembly instructions!

REMOVAL

Insert the Front Opening Tool and gently remove the Ear Speaker.

Scrap! Not to be reused!

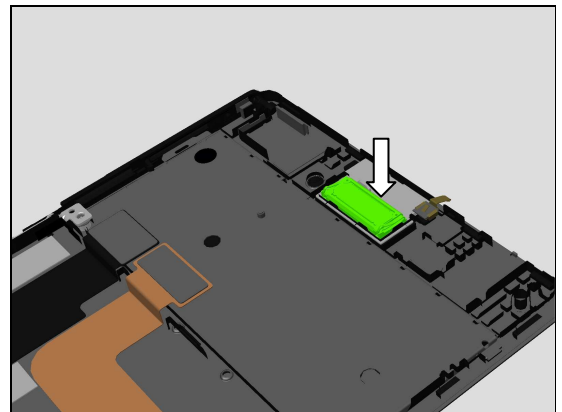
Use Isopropyl Alcohol for cleaning Front Cover Assy cavity!



INSTALLATION

Position and place a new Ear Speaker into Front Cover Assy cavity as shown in picture.

Press directly on top of Ear Speaker using Nylon Pointer for five seconds to secure attachment.



Replacement

4.27 Gasket Camera Main

Follow the 3.1 – 3.3 Disassembly instructions!

Follow the 4.23, 4.39 & 4.52 Removal instructions!

Carry out the Removal as described below!

Prepare the new Gasket Camera Main.

Carry out the Installation as described below!

Follow the 4.23, 4.39 & 4.52 Installation instructions!

Follow the 5.4 – 5.6 Reassembly instructions!

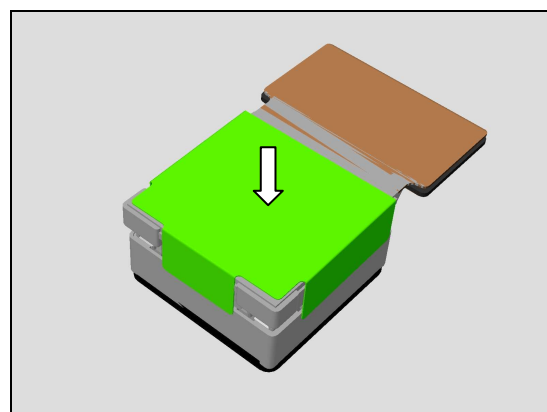
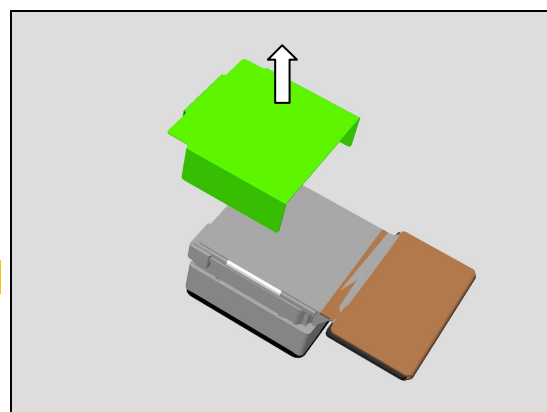
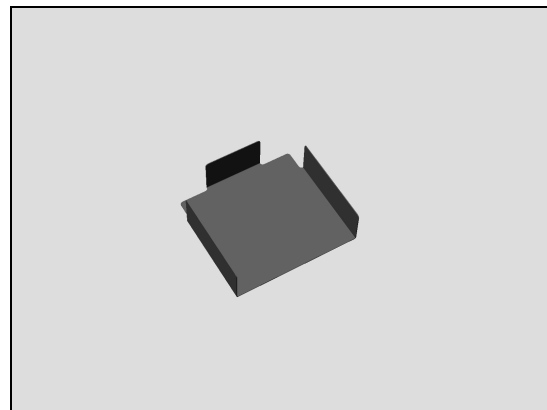
REMOVAL

Carefully remove Gasket Camera Main using fingers.

Scrap! Not to be reused!

INSTALLATION

Position and place a new Gasket Camera Main onto Camera 8MP as shown in picture using fingers.



Replacement

4.28 Gasket Ear Speaker

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Gasket Ear Speaker.

Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

REMOVAL

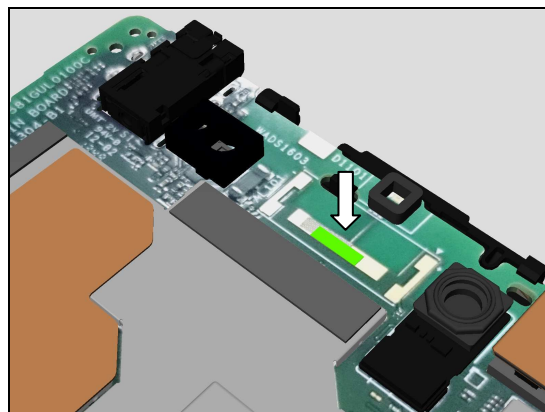
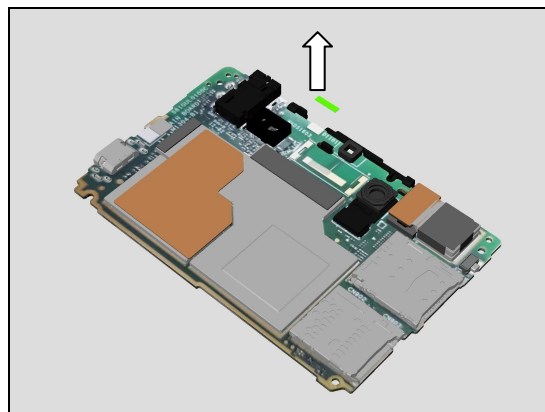
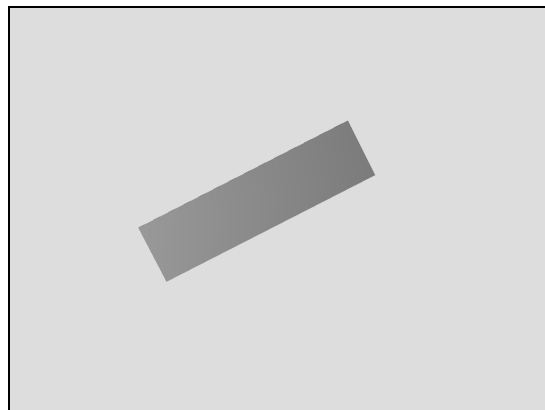
Use Flex Film Assembly Tool to remove the Gasket Ear Speaker.

Scrap! Not to be reused!

Use Isopropyl Alcohol for cleaning Main PBA!

INSTALLATION

Place new Gasket Ear Speaker using Flex Film Assembly Tool into its proper position.



Replacement

4.29 Gasket Loudspeaker

Follow the 3.1 – 3.2 & 3.4 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Gasket Loudspeaker.

Carry out the Installation as described below!

Follow the 5.3 & 5.5 – 5.6 Reassembly instructions!

REMOVAL

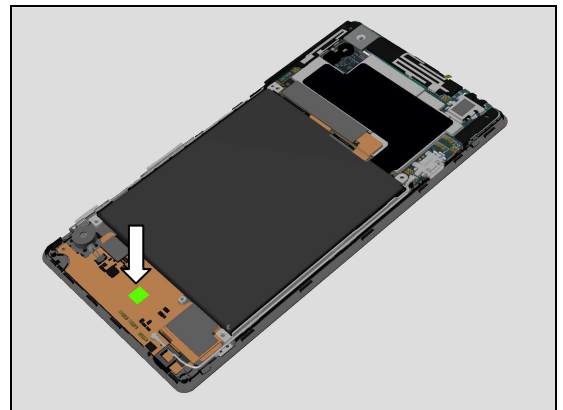
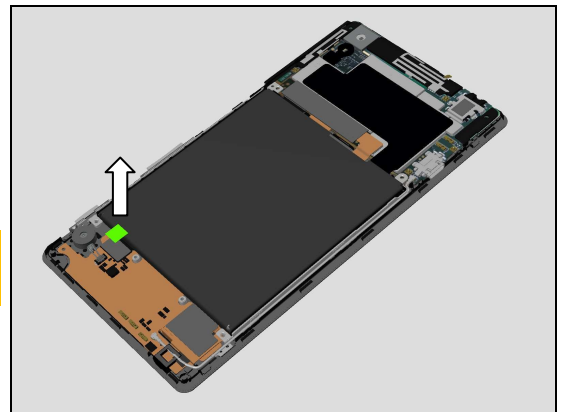
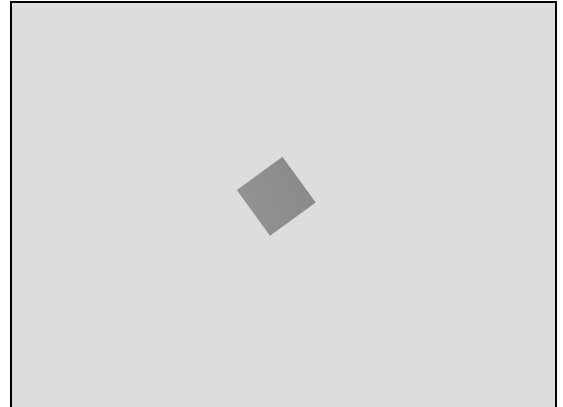
Carefully remove the Gasket Loudspeaker using Flex Film Assembly Tool.

Scrap! Not to be reused!

Use Isopropyl Alcohol for cleaning Antenna FPC!

INSTALLATION

Place new Gasket Loudspeaker using Flex Film Assembly Tool into its proper position.



Replacement

4.30 Gasket Shielding 1

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Gasket Shielding 1.

Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

REMOVAL

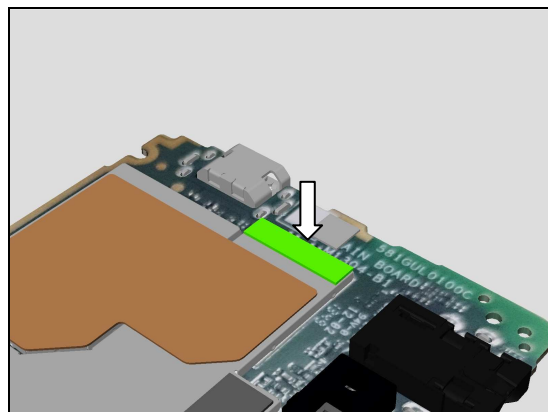
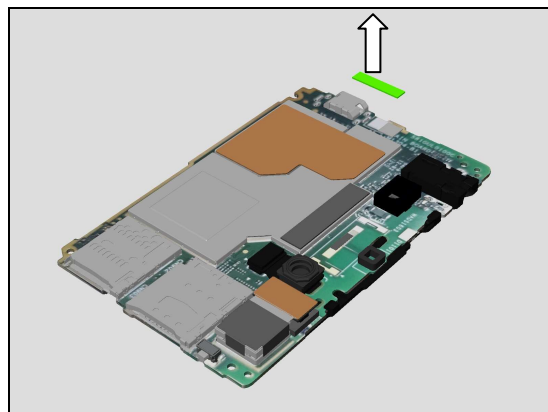
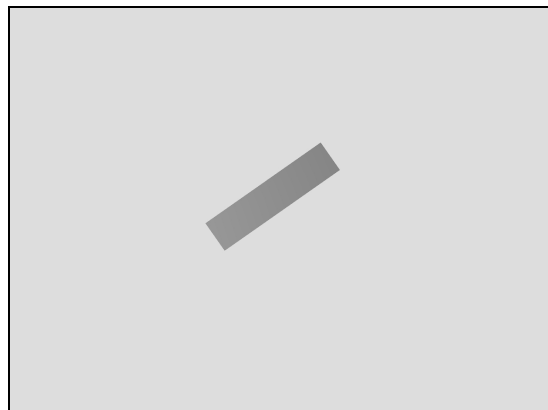
Carefully remove the Gasket Shielding 1 using Flex Film AssemblyTool.

Scrap! Not to be reused!

Use Isopropyl Alcohol for cleaning Main PBA!

INSTALLATION

Place new Gasket Shielding 1 using Flex Film Assembly Tool into its proper position.



Replacement

4.31 Gasket Shielding 2

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Gasket Shielding 2.

Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

REMOVAL

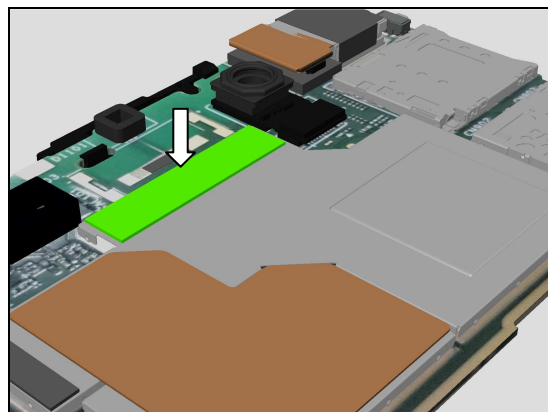
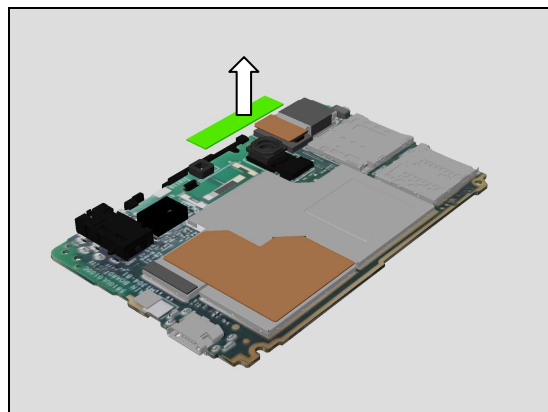
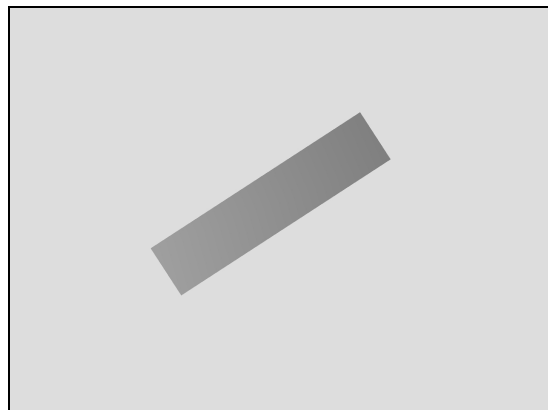
Carefully remove the Gasket Shielding 2 using Flex Film Assembly Tool.

Scrap! Not to be reused!

Use Isopropyl Alcohol for cleaning Main PBA!

INSTALLATION

Place new Gasket Shielding 2 using Flex Film Assembly Tool into its proper position.



Replacement

4.32 Gasket Vibrator

Follow the 3.1 – 3.2 & 3.4 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Gasket Vibrator.

Carry out the Installation as described below!

Follow the 5.3 & 5.5 – 5.6 Reassembly instructions!

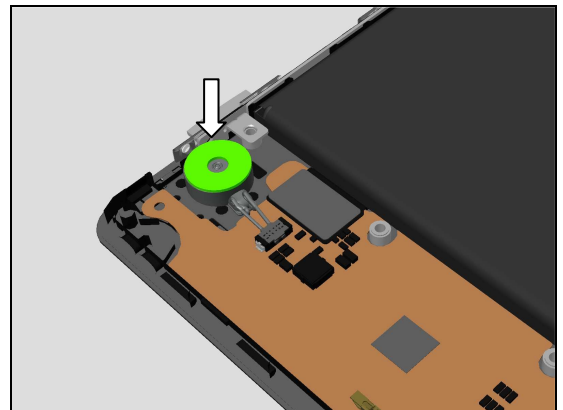
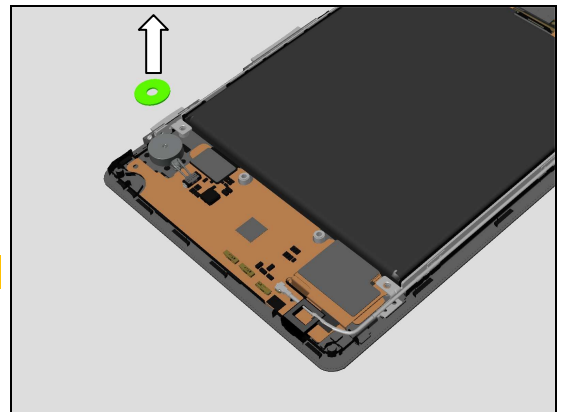
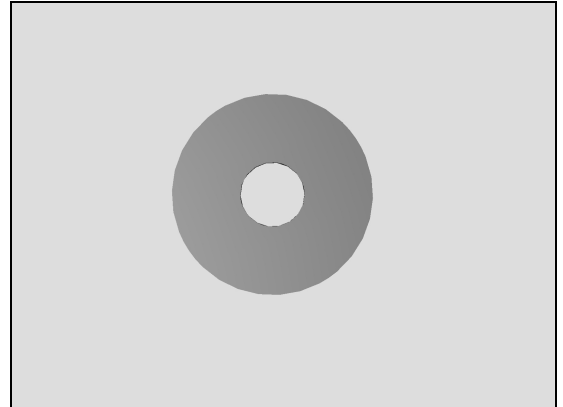
REMOVAL

Carefully remove the Gasket Vibrator using fingers.

Scrap! Not to be reused!

INSTALLATION

Place new Gasket Vibrator using Flex Film Assembly Tool into its proper position.



Replacement

4.33 Kapton Bracket (Bracket Side Key)

Follow the 3.1 – 3.6 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Kapton Bracket.

Carry out the Installation as described below!

Follow the 5.1 – 5.6 Reassembly instructions!

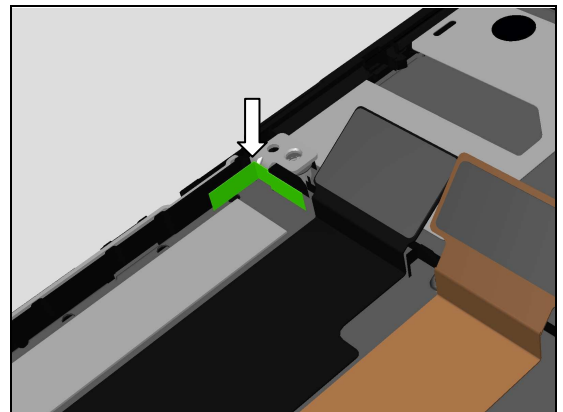
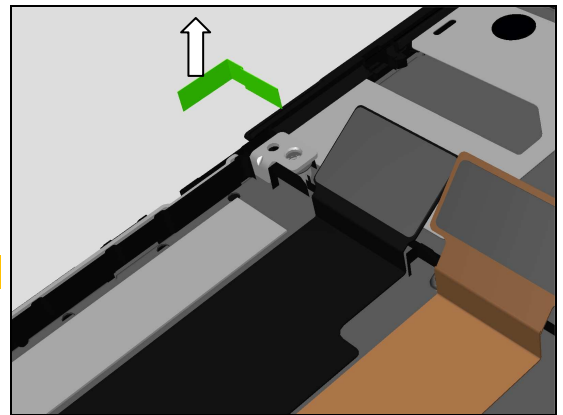
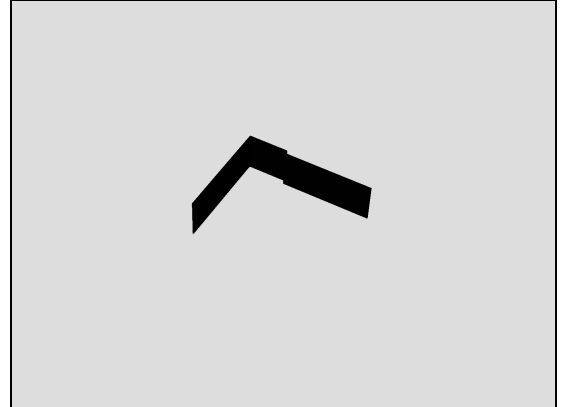
REMOVAL

Remove the Kapton Bracket using Tweezers.

Scrap! Not to be reused!

INSTALLATION

Place new Kapton Bracket using Flex Film Assembly Tool into its proper position.



Replacement

4.34 Kapton Bracket (Bracket Cable Assy)

Follow the 3.1 – 3.6 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Kapton Bracket.

Carry out the Installation as described below!

Follow the 5.1 – 5.6 Reassembly instructions!

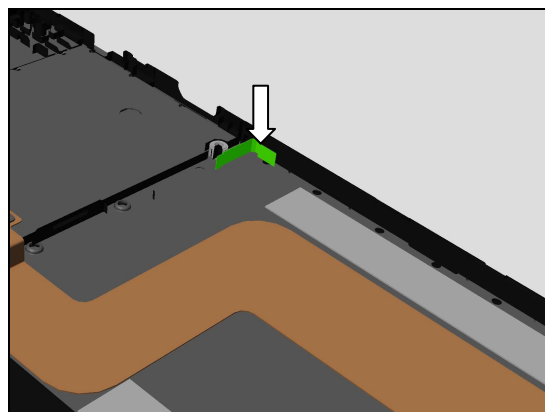
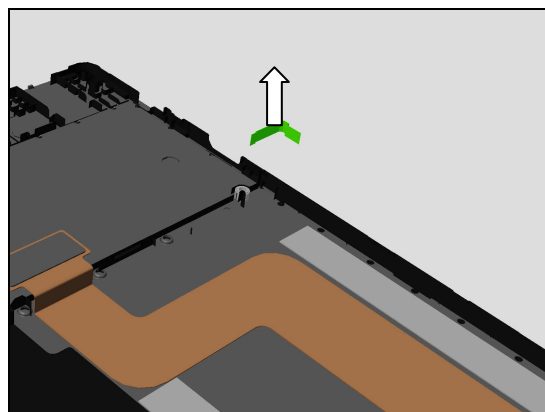
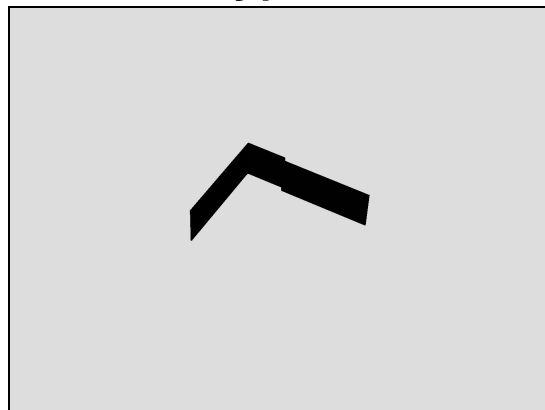
REMOVAL

Remove the Kapton Bracket using Tweezers.

Scrap! Not to be reused!

INSTALLATION

Place new Kapton Bracket using Flex Film Assembly Tool into its proper position.



Replacement

4.35 Label Tray CU

Follow the 3.1 – 3.3 Disassembly instructions!

Follow the 4.25 Removal instructions!

Carry out the Removal as described below!

Prepare the new Label Tray CU.

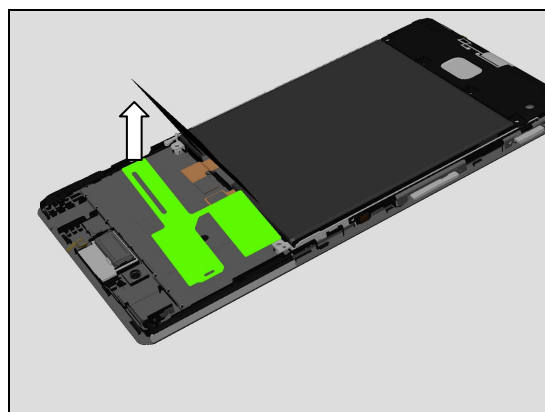
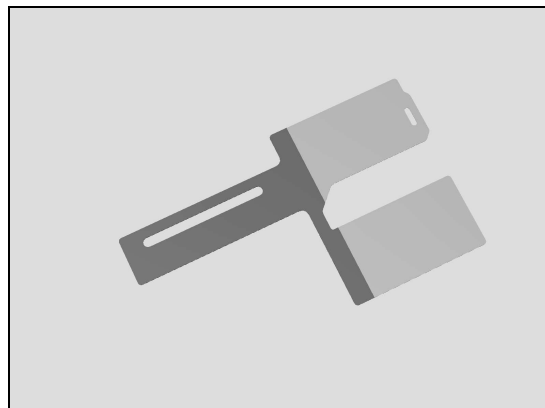
Carry out the Installation as described below!

Follow the 4.25 Installation instructions!

Follow the 5.4 – 5.6 Reassembly instructions!

REMOVAL

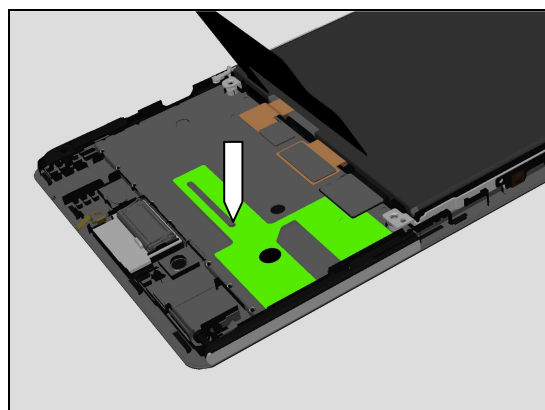
Remove the Label Tray CU using Flex Film Assembly Tool.



INSTALLATION

Place new Label Tray CU using Flex Film Assembly Tool into its proper position.

Use the peg indicated in the picture for alignment during installation.



Replacement

4.36 Liquid Indicator 1

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Liquid Indicator 1.

Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

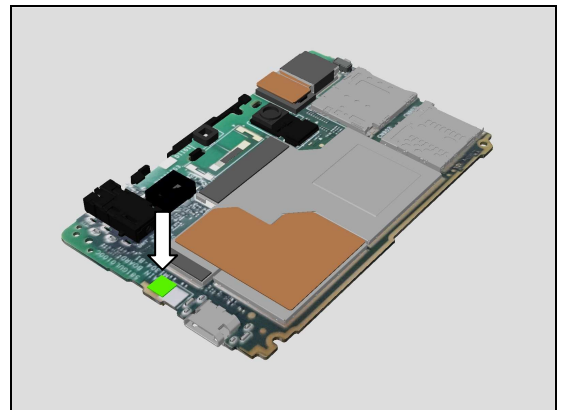
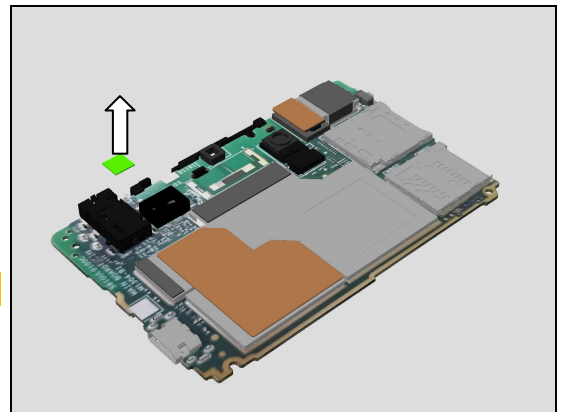
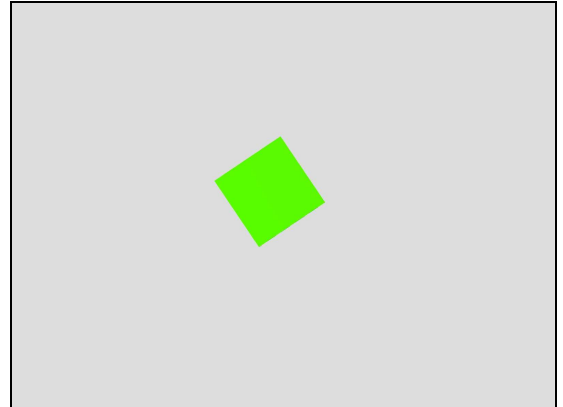
REMOVAL

Remove the Liquid Indicator 1 using Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Place new Liquid Indicator 1 using Flex Film Assembly Tool into its proper position.



Replacement

4.37 Liquid Indicator 2

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Liquid Indicator 2.

Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

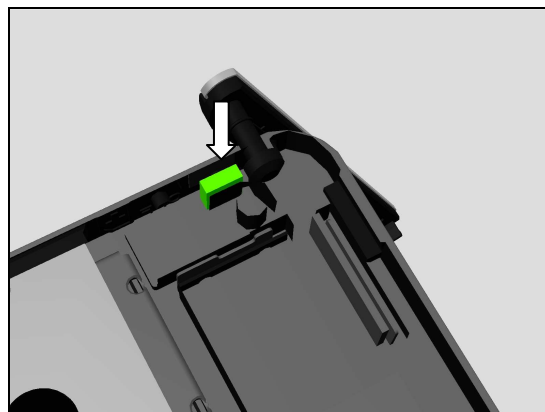
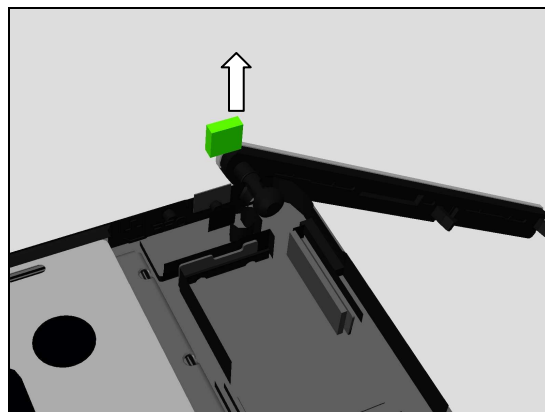
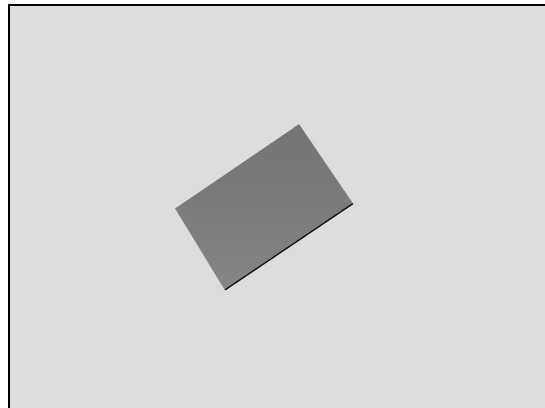
REMOVAL

Remove the Liquid Indicator 2 using Dentist Hook.

Scrap! Not to be reused!

INSTALLATION

Place new Liquid Indicator 2 into Front Cover Assy cavity using tweezers as shown in picture.



Replacement

4.38 Loudspeaker

Follow the 3.1 – 3.2 & 3.4 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Loudspeaker.

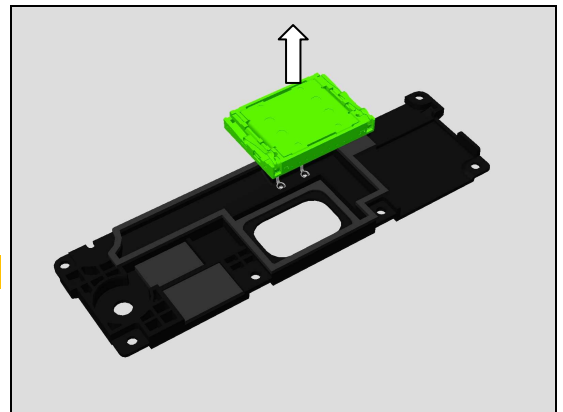
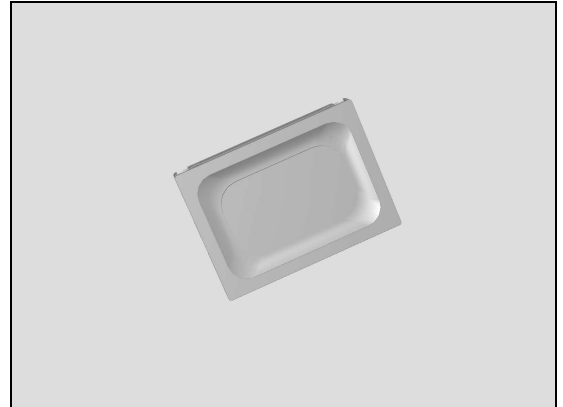
Carry out the Installation as described below!

Follow the 5.3 & 5.5 – 5.6 Reassembly instructions!

REMOVAL

Remove the Loudspeaker using Front Opening Tool

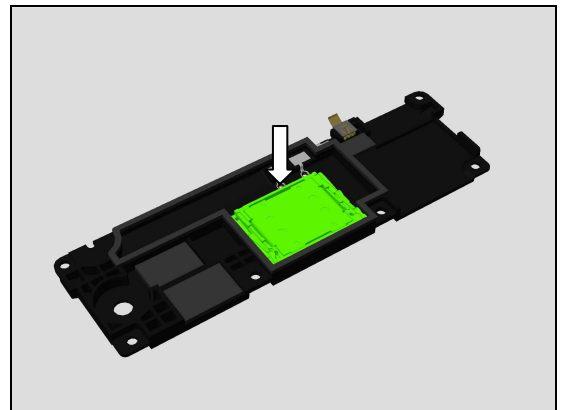
Scrap! Not to be reused!



INSTALLATION

Place new Loudspeaker using fingers into its proper position.

Press directly on top of Loudspeaker using Nylon Pointer for five seconds to secure attachment.



Replacement

4.39 Mylar Camera Main

Follow the 3.1 – 3.3 Disassembly instructions!

Follow the 4.23, 4.27 & 4.52 Removal instructions!

Carry out the Removal as described below!

Prepare the new Mylar Camera Main.

Carry out the Installation as described below!

Follow the 4.23, 4.27 & 4.52 Installation instructions!

Follow the 5.4 – 5.6 Reassembly instructions!

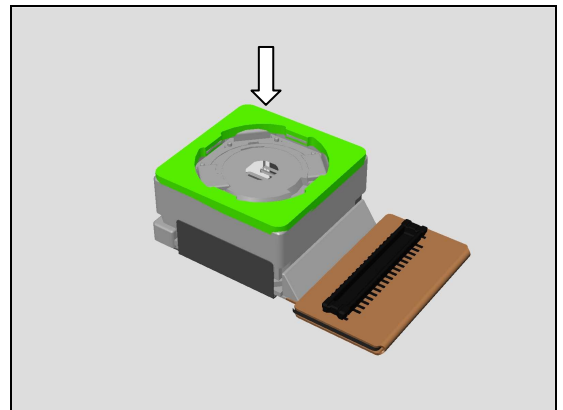
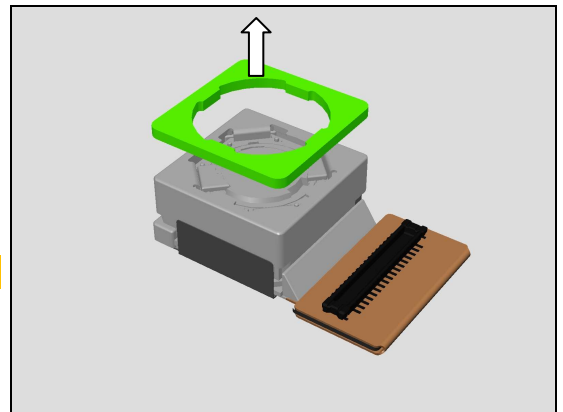
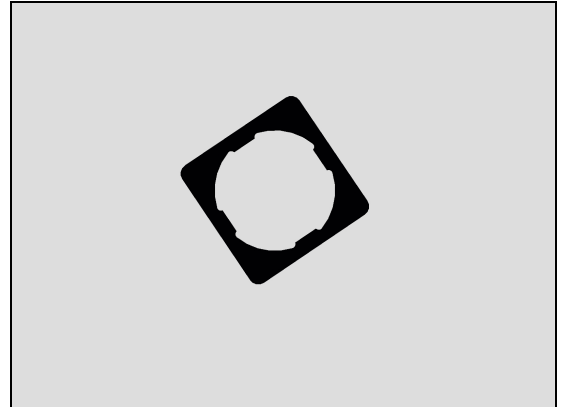
REMOVAL

Remove the Mylar Camera Main using fingers.

Scrap! Not to be reused!

INSTALLATION

Place new Mylar Camera Main using Flex Film Assembly Tool into its proper position.



Replacement

4.40 Mylar USB

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Mylar USB.

Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

REMOVAL

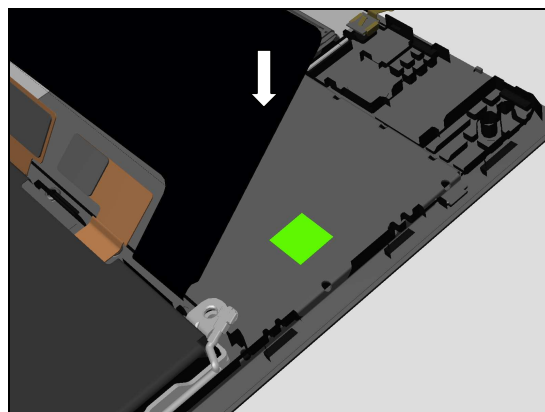
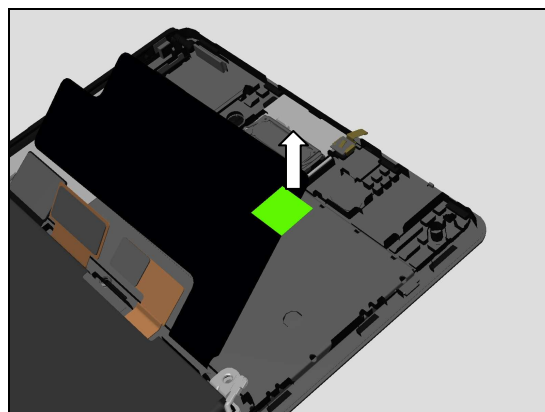
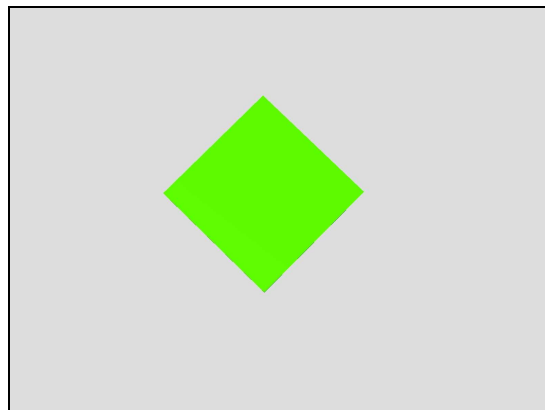
Remove the Mylar USB using Tweezers

Scrap! Not to be reused!

INSTALLATION

Place new Mylar USB using Flex Film Assembly Tool into its proper position.

Note: The Mylar USB should cover round hole opening on Front Cover Assy!



Replacement

4.41 Rubber Camera Chat

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Rubber Camera Chat.

Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

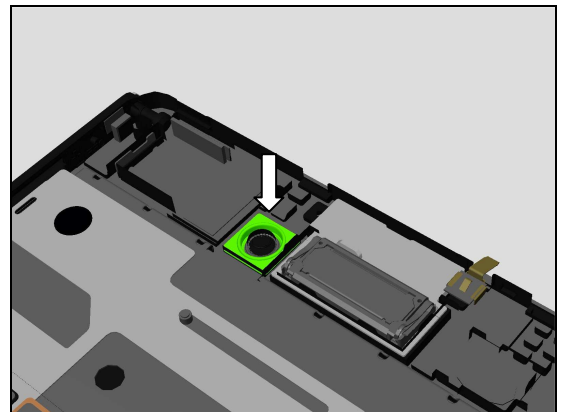
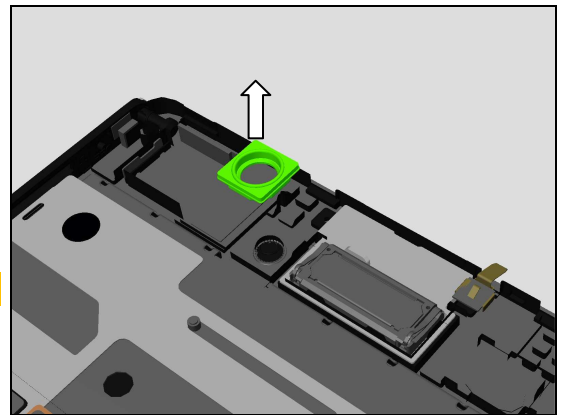
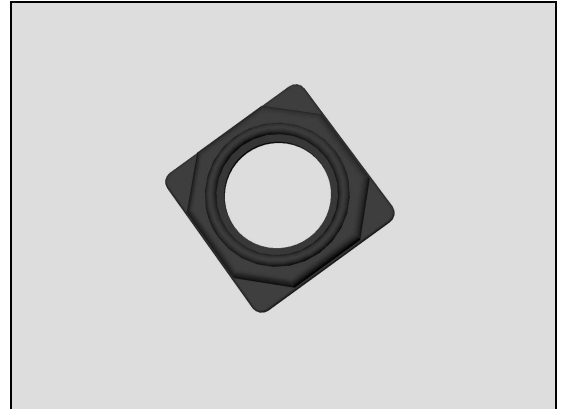
REMOVAL

Remove the Rubber Camera Chat using Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Place new Rubber Camera Chat using Flex Film Assembly Tool into its proper position.



Replacement

4.42 Rubber Gasket Flash

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Rubber Gasket Flash

Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

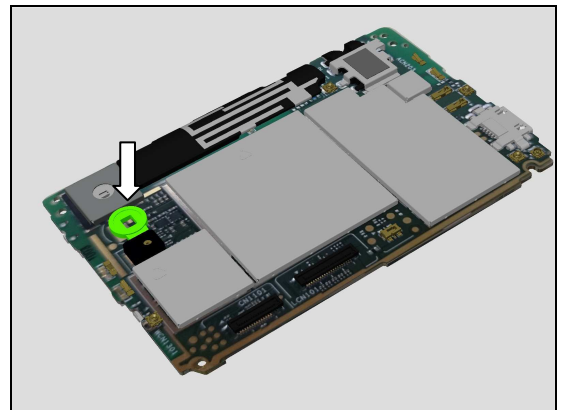
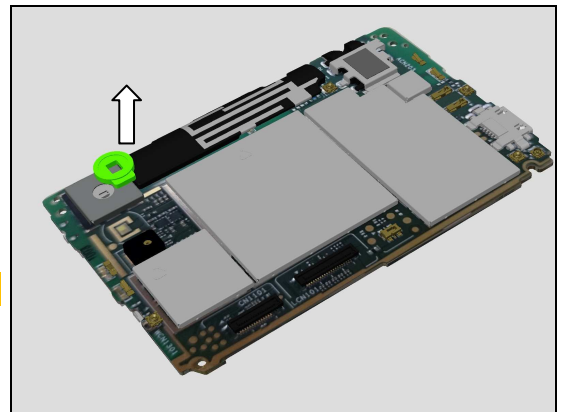
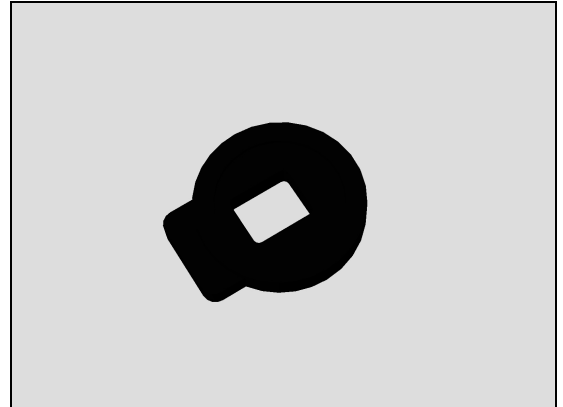
REMOVAL

Remove Rubber Gasket Flash using Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Place new Rubber Gasket Flash using Flex Film Assembly Tool into its proper position.



Replacement

4.43 Rubber Gasket Mic 2nd

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Rubber Gasket Mic 2nd.

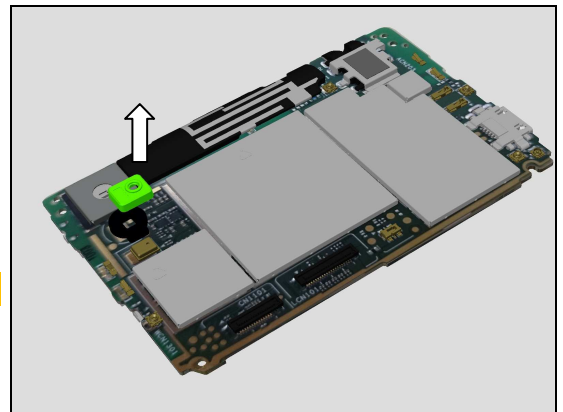
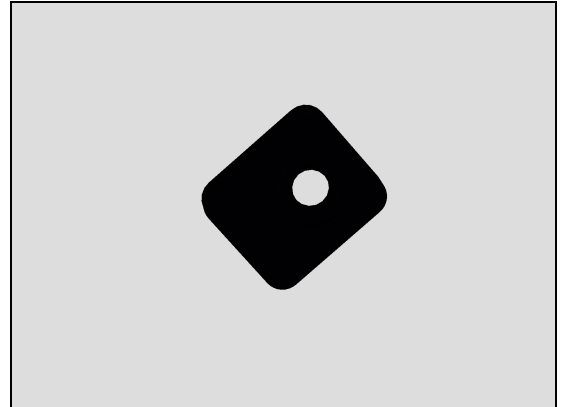
Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

REMOVAL

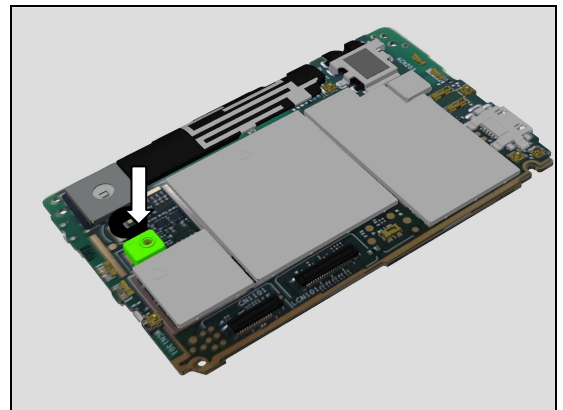
Remove Rubber Gasket Mix 2nd using Flex Film Assembly Tool.

Scrap! Not to be reused!



INSTALLATION

Place new Rubber Gasket Mic 2nd using Flex Film Assembly Tool into its proper position.



Replacement

4.44 Rubber Gasket Mic Main

Follow the 3.1 – 3.2 & 3.4 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Rubber Gasket Mic Main.

Carry out the Installation as described below!

Follow the 5.3 & 5.5 – 5.6 Reassembly instructions!

REMOVAL

Carefully bend back Antenna FPC mic tab and then disconnect RF cable connector.

Remove Rubber Gasket Mic Main using Flex Film Assembly Tool.

Scrap! Not to be reused!

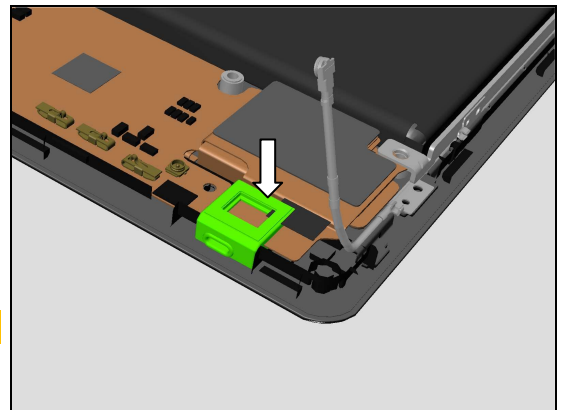
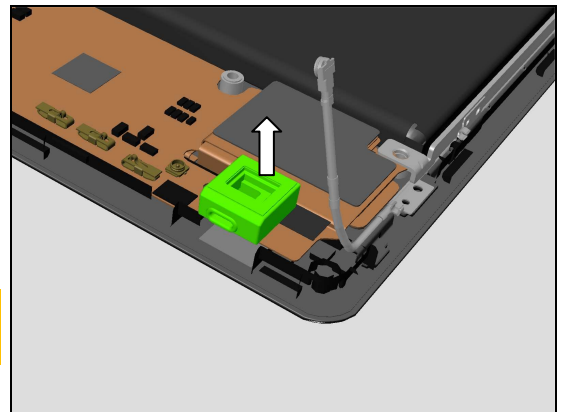
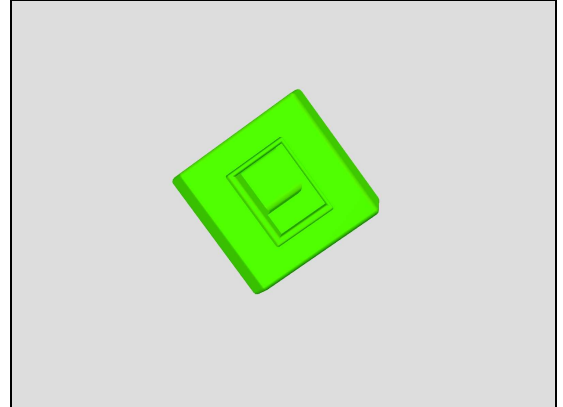
Be careful not to damage Antenna FPC or RF Cable!

INSTALLATION

Place new Rubber Gasket Mic Main using Flex Film Assembly Tool into its proper position.

Reconnect RF cable connector and then carefully attach Antenna FPC mic tab again.

Be careful not to damage Antenna FPC or RF Cable!



Replacement

4.45 Rubber Indicator

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Rubber Indicator.

Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

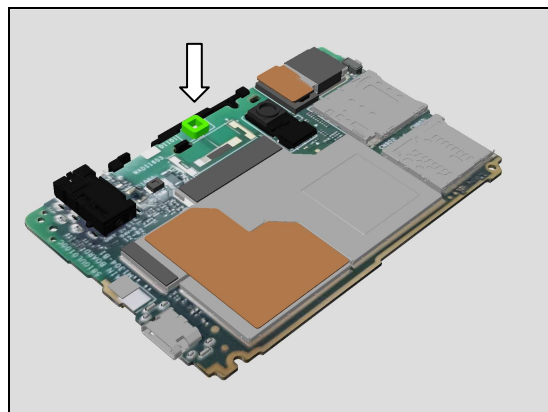
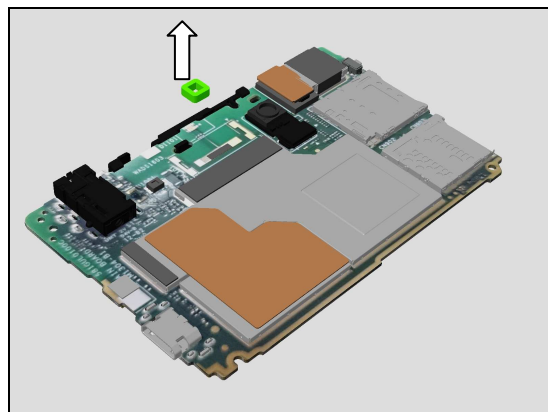
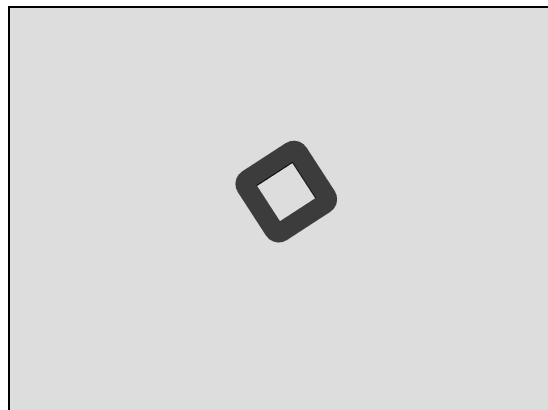
REMOVAL

Remove Rubber Indicator using Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Place new Rubber Indicator using Flex Film Assembly Tool into its proper position.



Replacement

4.46 Rubber Proximity

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Rubber Proximity.

Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

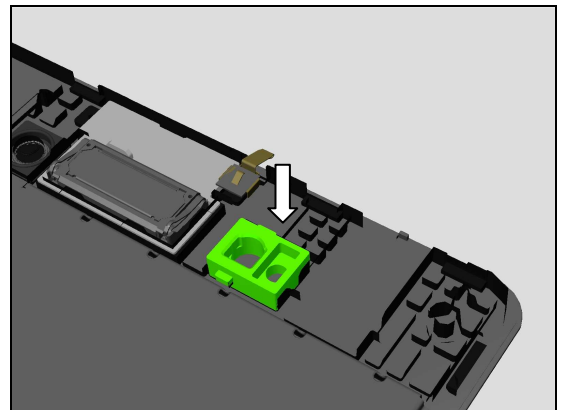
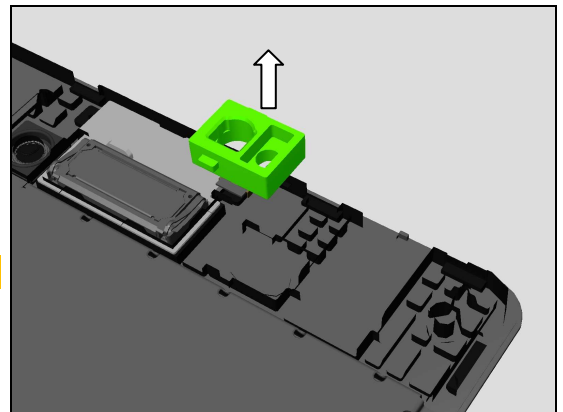
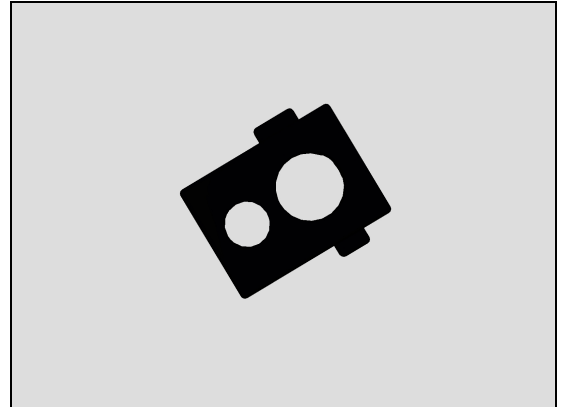
REMOVAL

Remove Rubber Proximity using Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Place new Rubber Proximity using Flex Film Assembly Tool into its proper position.



Replacement

4.47 Sheet Brittle Label

Carry out the Removal as described below!

Prepare the new Sheet Brittle Label

Carry out the Installation as described below!

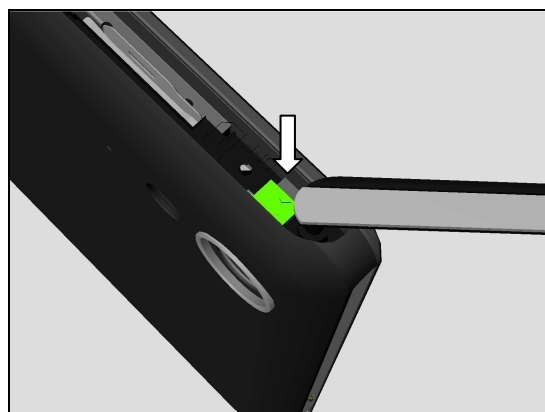
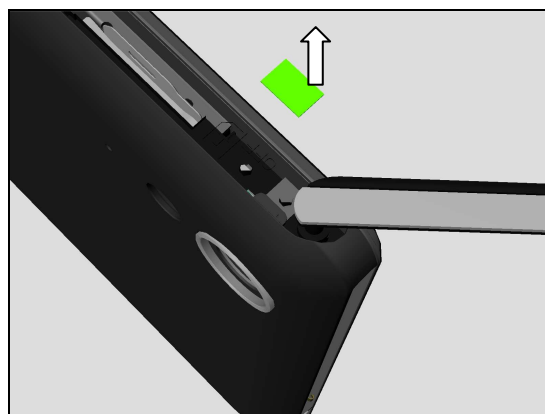
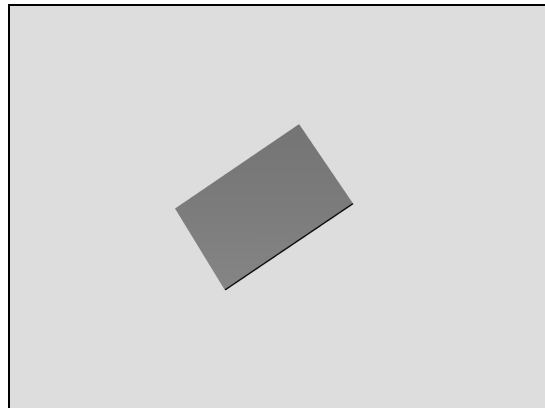
REMOVAL

Open SIM-SD Cap and then remove Sheet Brittle Label using Tweezers.

Scrap! Not to be reused!

INSTALLATION

Place new Sheet Brittle Label using Tweezers into its proper position.



Replacement

4.48 SIM-SD Cap

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

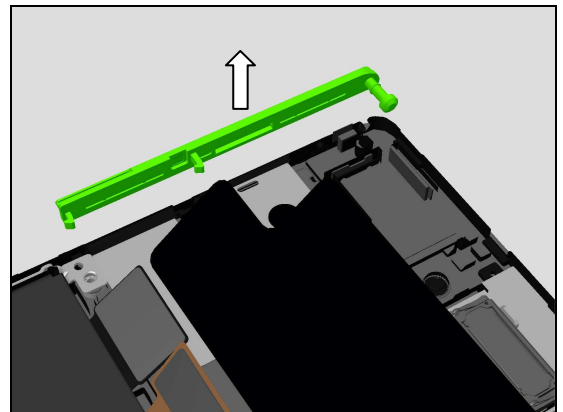
Prepare the new SIM-SD Cap.

Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

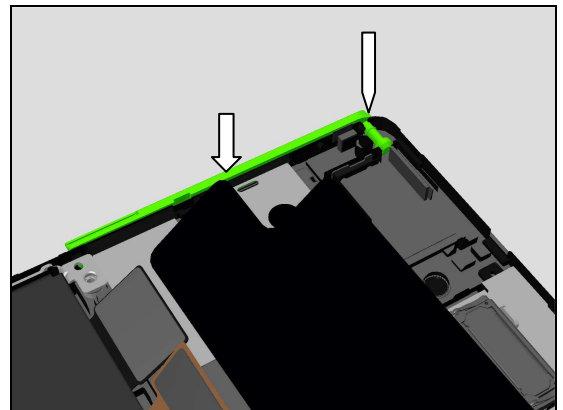
REMOVAL

Remove SIM-SD Cap using fingers



INSTALLATION

Place new SIM-SD Cap using fingers into its proper position and then secure its attachment shown in picture.



Replacement

4.49 Speaker Sponge

Follow the 3.1 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Speaker Sponge.

Carry out the Installation as described below!

Follow the 5.6 Reassembly instructions!

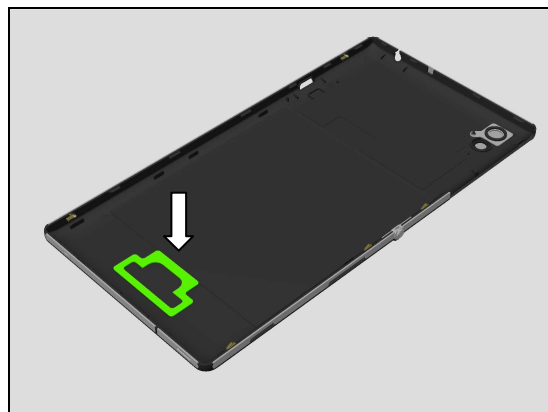
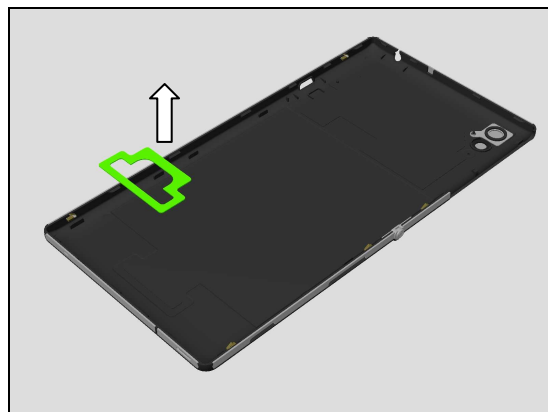
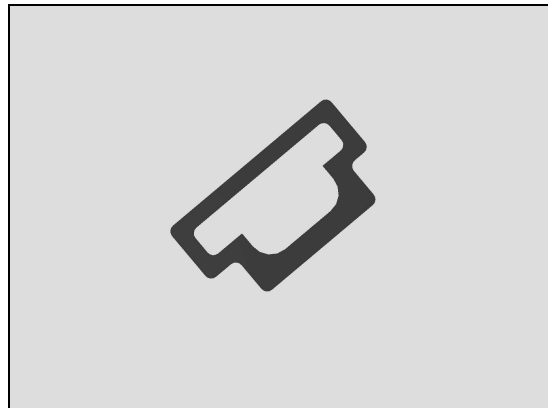
REMOVAL

Remove Speaker Sponge using Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Place new Speaker Sponge using Flex Film Assembly Tool into its proper position.



Replacement

4.50 Spring Grounding

Follow the 3.1 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Speaker Grounding.

Carry out the Installation as described below!

Follow the 5.6 Reassembly instructions!

REMOVAL

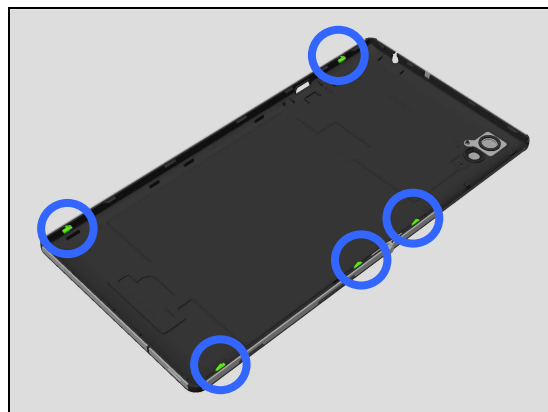
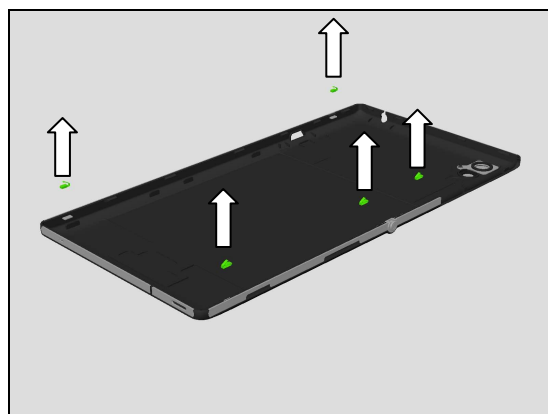
Remove Spring Grounding using Dentist Hook.

Scrap! Not to be reused!

INSTALLATION

Place new Spring Grounding using Tweezers into its proper position.

Note: Total of 5 x Spring Grounding parts!



Replacement

4.51 Tape Camera Main 1

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Tape Camera Main 1

Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

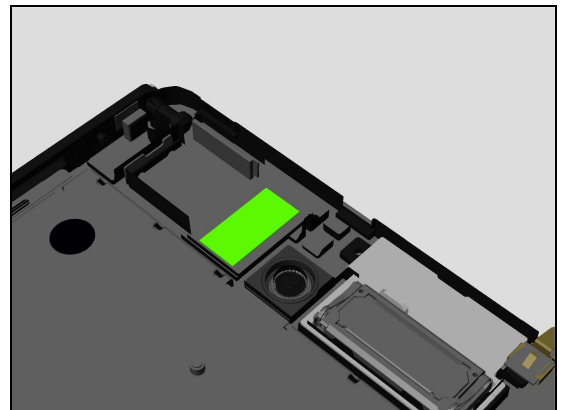
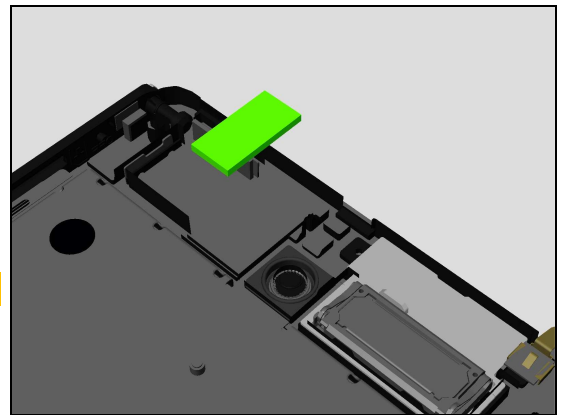
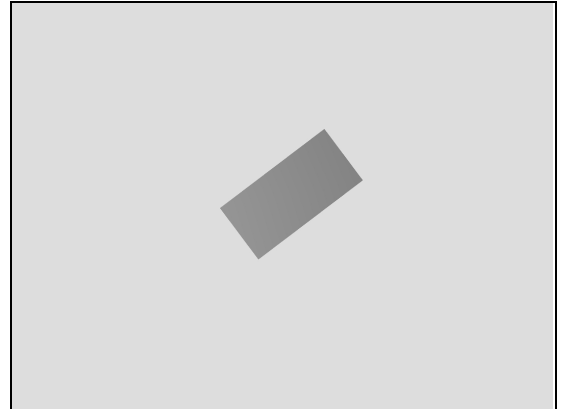
REMOVAL

Remove Tape Camera Main 1 using Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Place new Tape Camera Main 1 using Flex Film Assembly Tool into its proper position.



Replacement

4.52 Tape Camera Main 2

Follow the 3.1 – 3.3 Disassembly instructions!

Follow the 4.23, 4.27 & 4.39 Removal instructions!

Carry out the Removal as described below!

Prepare the new Tape Camera Main 2.

Carry out the Installation as described below!

Follow the 4.23, 4.27 & 4.39 Installation instructions!

Follow the 5.4 – 5.6 Reassembly instructions!

REMOVAL

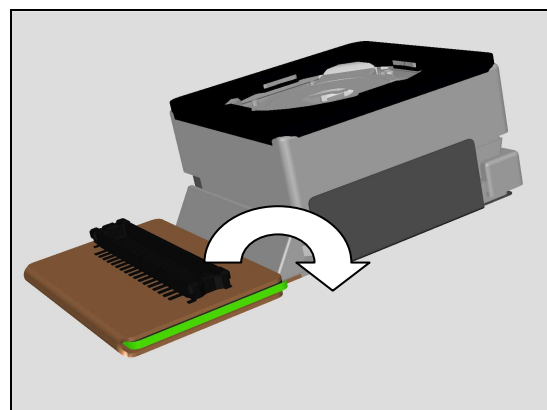
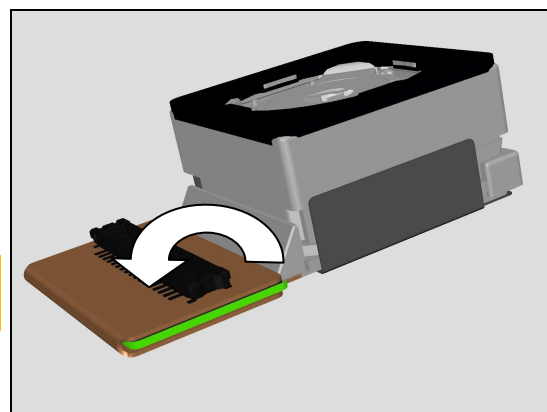
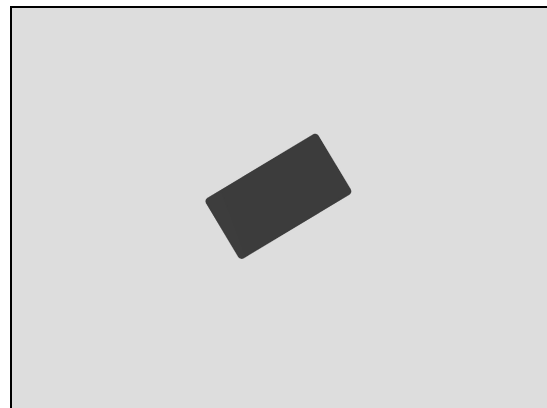
Bend back Camera 8MP FPC and then remove Tape Camera Main 2 using fingers.

Scrap! Not to be reused!

Be careful not to damage FPC!

INSTALLATION

Place new Tape Camera Main 2 using Flex Film Assembly Tool into its proper position and then fold over Camera 8MP FPC to secure its attachment.



Replacement

4.53 Thermal Pad 1

Follow the 3.1 – 3.3 Disassembly instructions!

Carry out the Removal as described below!

Prepare the new Thermal Pad 1.

Carry out the Installation as described below!

Follow the 5.4 – 5.6 Reassembly instructions!

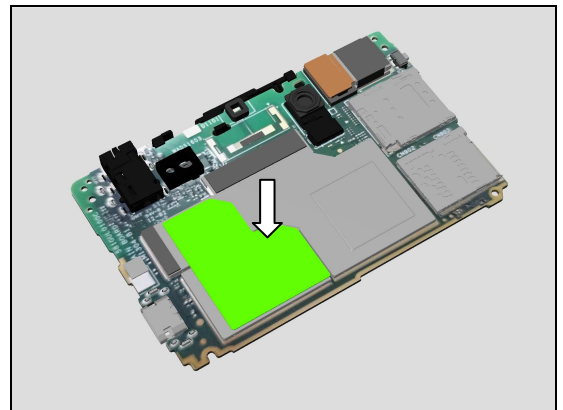
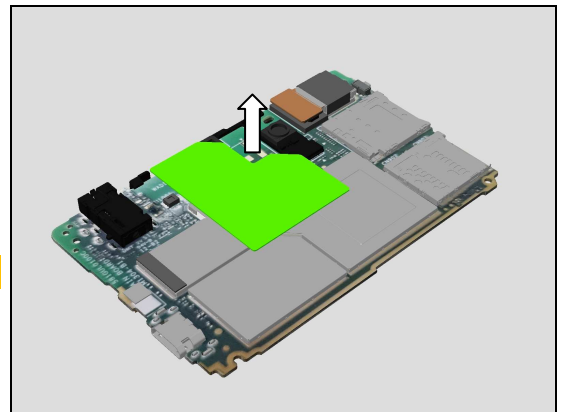
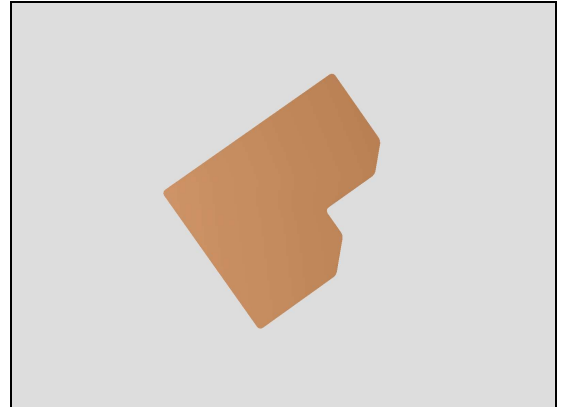
REMOVAL

Remove Thermal Pad 1 using Flex Film Assembly Tool.

Scrap! Not to be reused!

INSTALLATION

Place new Thermal Pad1 using Flex Film Assembly Tool into its proper position.



Replacement

4.54 Vibrator

Follow the 3.1 – 3.2 & 3.4 Disassembly instructions!

Follow the 4.14 Removal instructions!

Carry out the Removal as described below!

Prepare the new Vibrator.

Carry out the Installation as described below!

Follow the 4.14 Installation instructions!

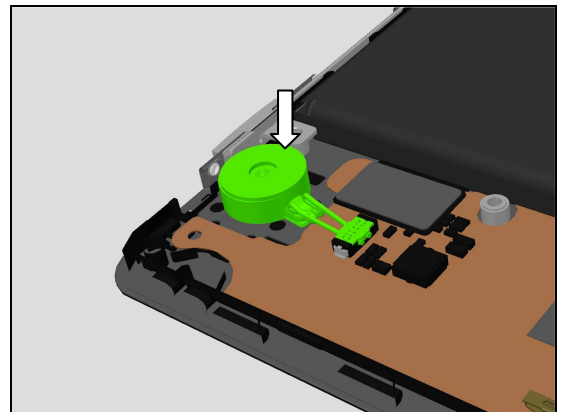
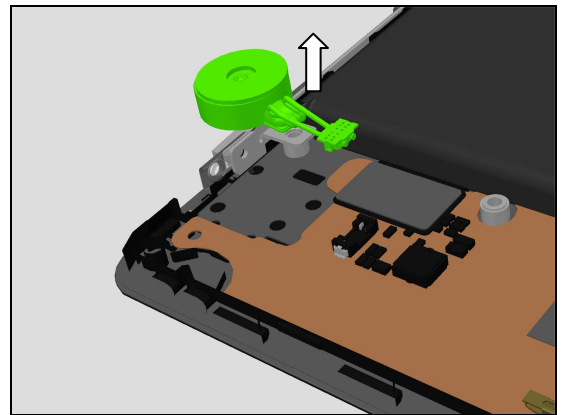
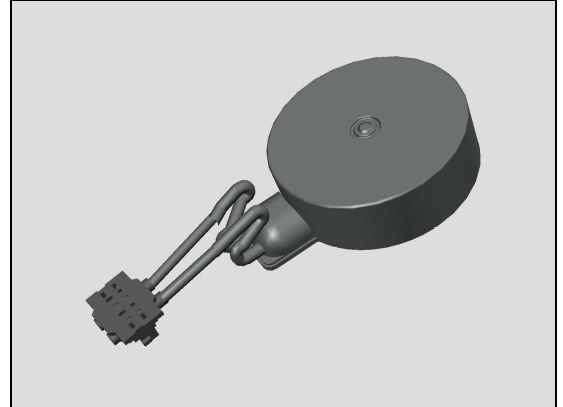
Follow the 5.3 & 5.5 – 5.6 Reassembly instructions!

REMOVAL

Disconnect Vibrator connector and then remove Vibrator using fingers.

INSTALLATION

Place new Vibrator using Flex Film Assembly Tool into its proper position and then reconnect Vibrator connector.



Replacement

4.55 Board Swap – Replacement

Follow the 3.1 – 3.3 Disassembly instructions!

Follow the 4.15, 4.16 and 4.23 Removal instructions!

Replace the Swap Board.

Follow the 4.15, 4.16 and 4.23 Installation instructions!

Additionally if applicable follow the 4.27, 4.28, 4.29, 4.36, 4.39, 4.42, 4.43, 4.45, Installation instructions!

Follow the 5.4 – 5.6 Reassembly instructions!

Reuse the Camera, Chat Camera and Antenna's Diversity, BT & WiFi!

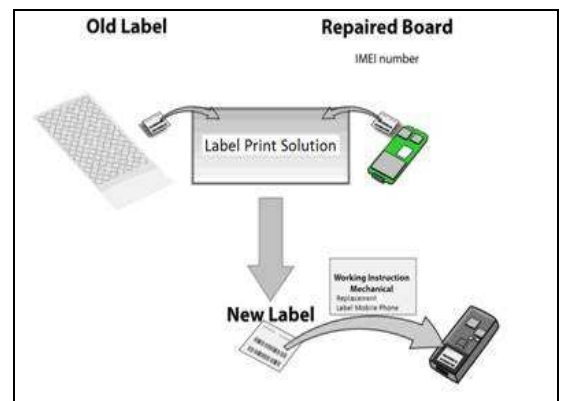
Please refer to: Trouble Shooting Application 1257-2706 for applicable D5102, D5103, D5106 and M50w



4.56 Board Swap – Change Label

CHANGE LABEL

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

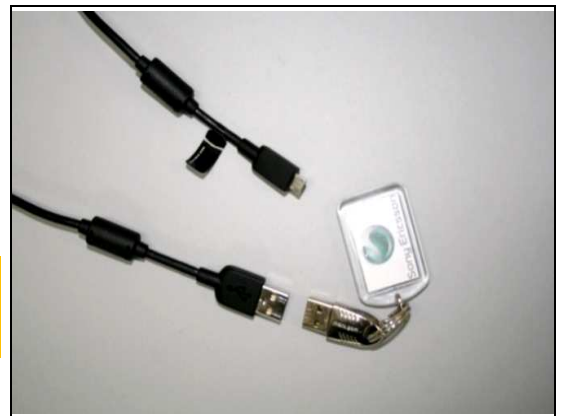


4.57 Board Swap – Customize of Software

CUSTOMIZE OF SOFTWARE

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

After SW Flash press the Key On/Off to power on the phone, place unit on flat desk and wait 4 minutes until system boot up has been completed!



5 Reassembly

The reassembly is done in the following order:

1. Front Cover Assy
2. Thermal Pad 2
3. Battery 2500 mAh
4. Antenna Main RF
5. Main PBA
6. Kapton Connector
7. Antenna GPS
8. Screw FPH(T5)M1.2 x 2.4
9. Battery Cover

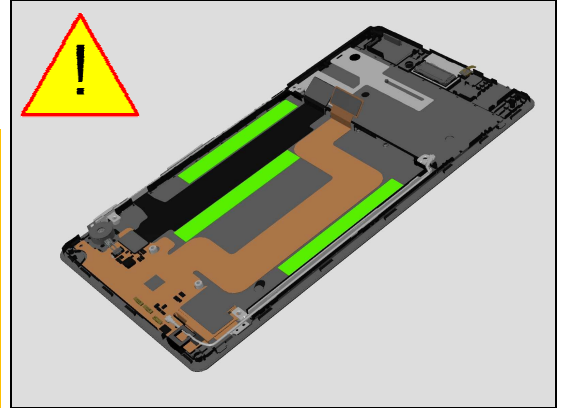


5.1 Front Cover Assy & Thermal Pad 2

Scrap! Not to be reused!

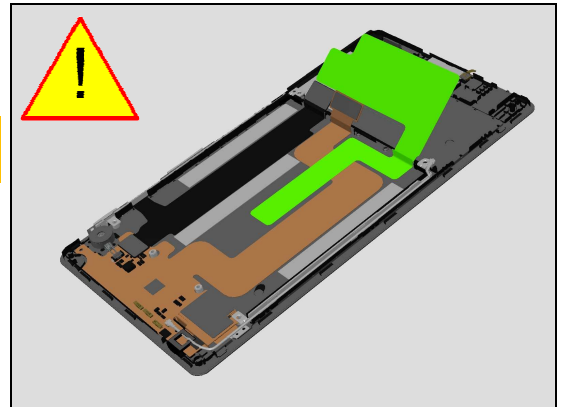
Follow the 4.9 & 4.11 removal and installation instructions to replace a new Adhesive Battery 1 & Adhesive Battery 3. Attention: Before commencing assembly inspect Antenna Spring 2 for any damage, if damaged follow the 4.18 removal and installation instructions to replace a new Antenna Spring 2!

Inspect Mylar USB is assembled, if missing follow the 4.40 installation instructions to replace a new Mylar USB!



Don not reuse, Thermal Pad2 if fully removed or damaged! Scrap!

Place the Thermal Pad 2 in its proper position onto the Front Cover Assy using Flex Film Assembly Tool.

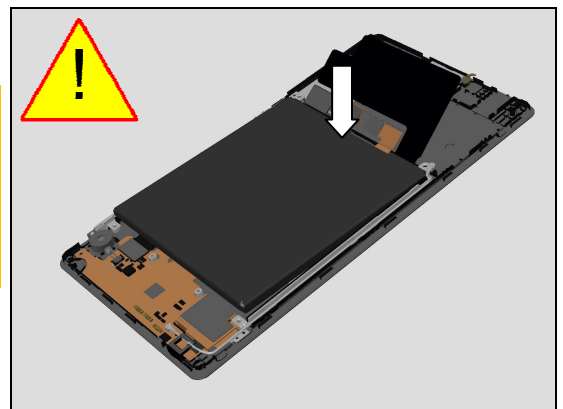


5.2 Battery 2500 mAh

If reusing the Battery 2500 mAh carefully inspect the Battery before assembly. Batteries with visual signs of being bent, having been punctured, bubbles etc. should be scraped after removal!

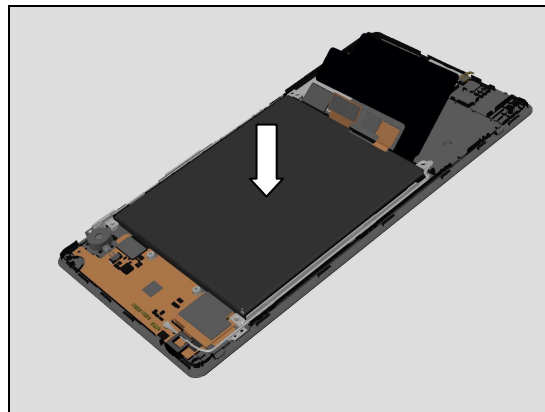
Follow chapter 4.6 replacement instructions to replace a new Battery 2500 mAh!

Place the Battery 2500 mAh in its proper position onto the Front Cover Assy connector side first as shown in picture.



Reassembly

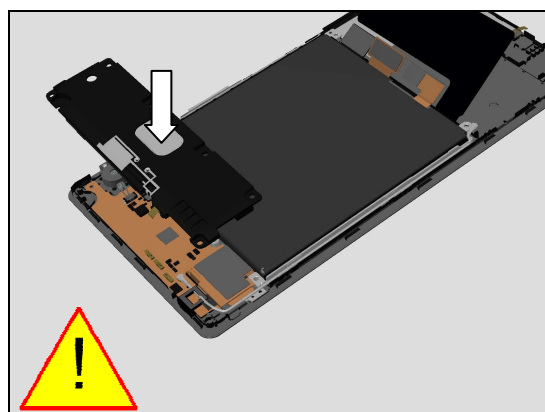
Press down on Battery 2500 mAh using fingers for 5 seconds to secure its attachment.



5.3 Antenna Main RF

Attention: Before assembling Antenna Main RF inspect Antenna Spring 1 for any damage, if damaged follow the 4.18 removal and installation instructions to replace a new Antenna Spring 1 & Gasket Spring!

Place the Antenna Main RF into its proper position.

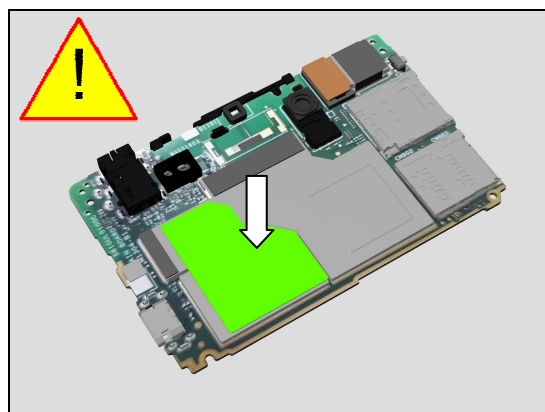


Press to secure its attachment.



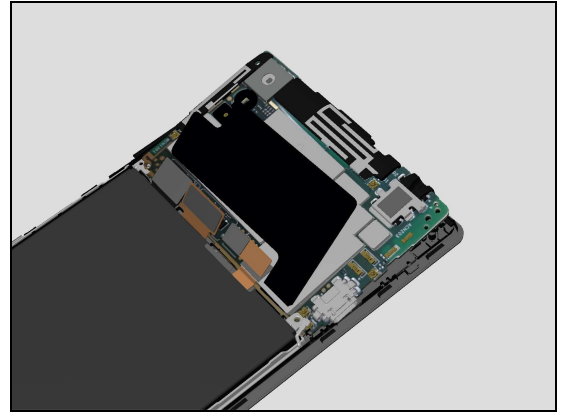
5.4 Main PBA

Don not reuse, Thermal Pad1 if damaged! Scrap! Follow the 4.53 removal and installation instructions to replace a new Thermal Pad1!

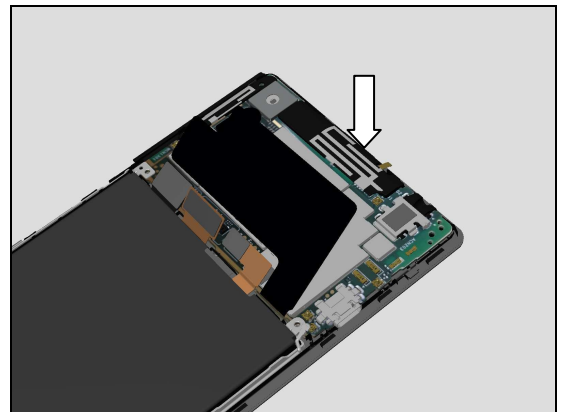


Reassembly

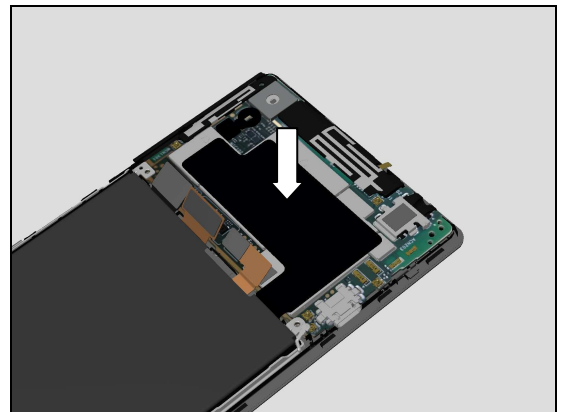
Place Main PBA at an angle into its proper position as shown in picture.



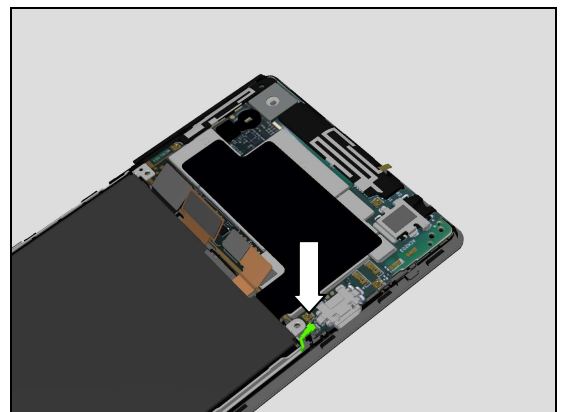
Press to secure the attachment of Main PBA.



Secure the attachment of Thermal Pad 2.

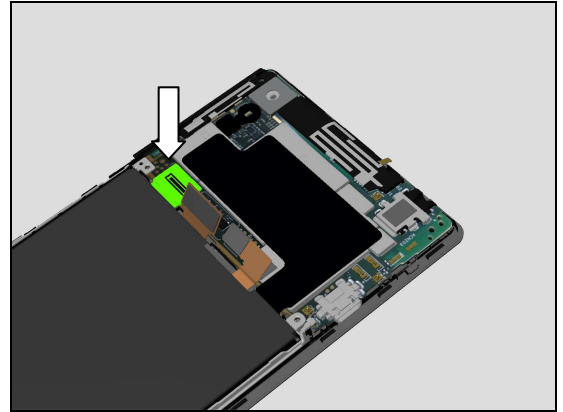


Attach RF Cable connector, press directly on top of connector using Nylon Pointer for 5sec to fully secure RF Cable connector attachment!

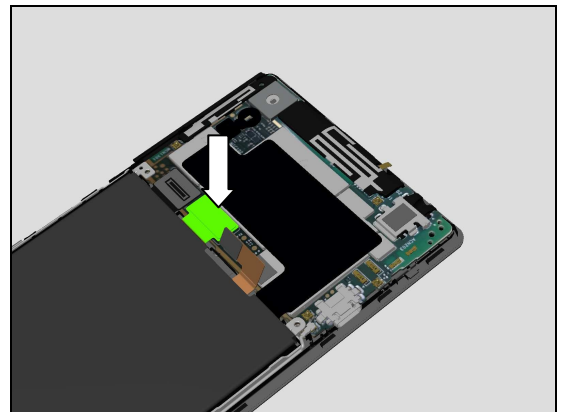


Reassembly

Attach Link FPC BtB connector, press directly on top of connector using Nylon Pointer for 5sec to fully secure board-to-board (BtB) connector attachment!

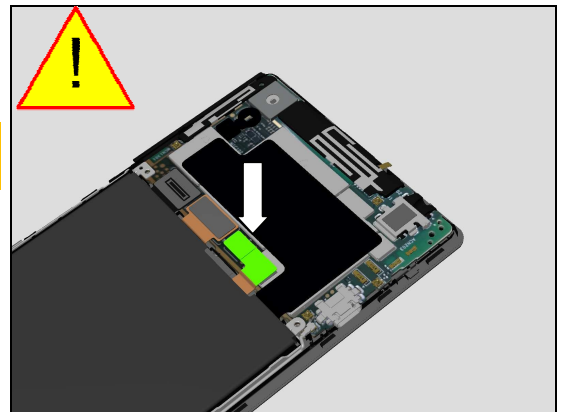


Attach LCD BtB connector, press directly on top of connector using Nylon Pointer for 5sec to fully secure board-to-board (BtB) connector attachment!



Follow the 4.10 removal and installation instructions to replace a new Adhesive Battery Tape 2! Do Not Reuse!

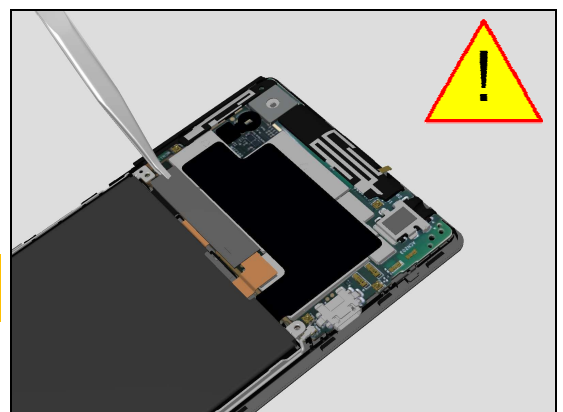
Attach Battery 2500 mAh BtB connector, press directly on top of connector using Nylon Pointer for 5sec to fully secure board-to-board (BtB) connector attachment!



5.5 Kapton Connector & Antenna GPS Screw FPH(T5)M1.2 x 2.4

Follow the 4.4 installation instruction to replace a new Kapton Connector! Do Not Reuse!

Attach Kapton Connector using Flex Film Assembly Tool.

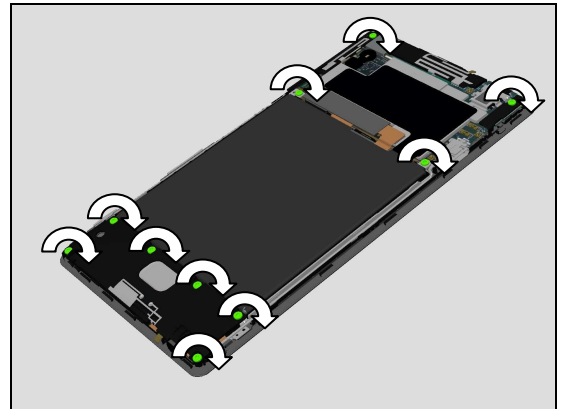


Reassembly

Attach Antenna GPS.



Apply 4 NCM torque when tightening all ten Screw FPH(T5)M1.2 x 2.4 by using Torx Bit T5.



5.6 Battery Cover

Attention: Before assembling Battery Cover inspect all five Spring Grounding for any damage, if damaged follow the 4.50 removal and installation instructions to replace a new Spring Grounding! Scrap! Not to be reused! Follow the 4.49 removal and installation instructions to replace a new Speaker Sponge!

Hold Battery Cover at an angle and insert the hooks of the Battery Cover into topside of Front Cover Assy cavity,



Then press down at bottom side, then press down on all sides of Battery Cover make it snap securely on to Front Cover Assy.



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Working Instruction Repair Instruction Mechanical/

6 Revision History

Rev.	Date	Changes / Comments
1	2014-June-27	Released
2	2014-July-17	Chapter 4.25 Core Unit Label updated
3	2014-Sep-19	Part Reference Mistakes fixed for chapters 5.3, 5.4 & 5.6
4	2014-Sep-19	No Change "System Migration Error"
5	2014-Sep-26	New Chapter Added 4.40 Mylar USB