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**Nexus 6**

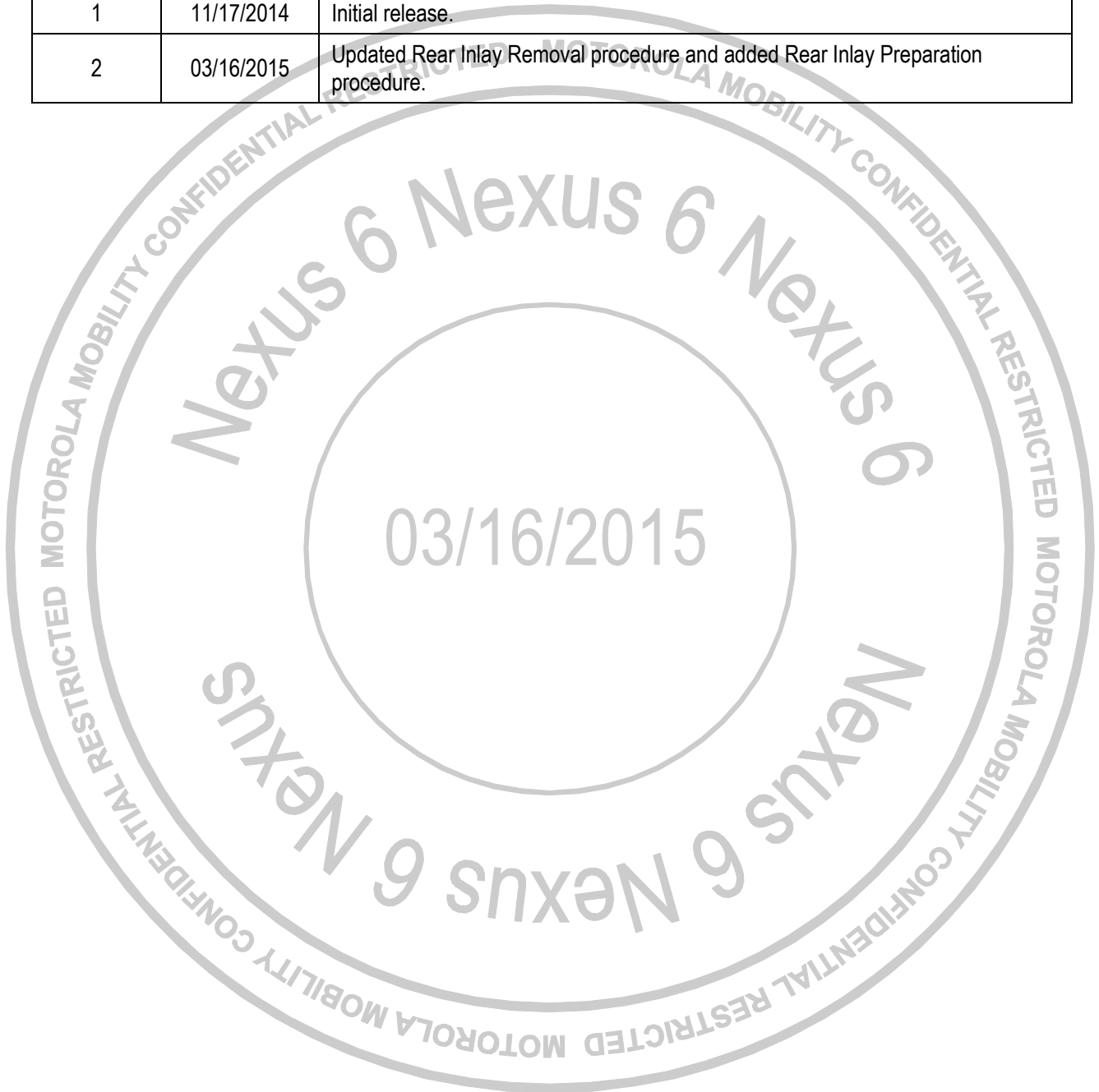


**Nexus 6**

**Level 2 – Service & Repair Manual**

# REVISION HISTORY

<i>Revision</i>	<i>Date</i>	<i>Notes</i>
1	11/17/2014	Initial release.
2	03/16/2015	Updated Rear Inlay Removal procedure and added Rear Inlay Preparation procedure.



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# SAFETY INFORMATION

## Cautions and Warnings

### Electrostatic Discharge

The phone components may be damaged by electrostatic discharge (ESD). Always use an ESD mat and ground strap when working with internal components.

## Battery Safety Guidelines

Handle Battery with care. Ensure Battery edges and surfaces are not dented or deformed. If the Battery Pack is dropped to the floor, it may be internally damaged and must be scrapped.

Ensure all surfaces, fixtures, and phone components contacting the Battery are smooth and clean.

- Ensure Battery and its insulation are not damaged (e.g. scratched, dented, punctured) prior to and throughout assembly.
- Prior to assembly, ensure Battery edges and surfaces are not dented or deformed, and that fixtures and parts that will contact the Battery are free of foreign material.
- Ensure screws and screwdrivers do not contact the Battery.
- Failure to adhere to Safety Critical Note(s) may increase risk of rupture, burning, or failure to function safely when used by the customer.

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# INTRODUCTION

## External Views

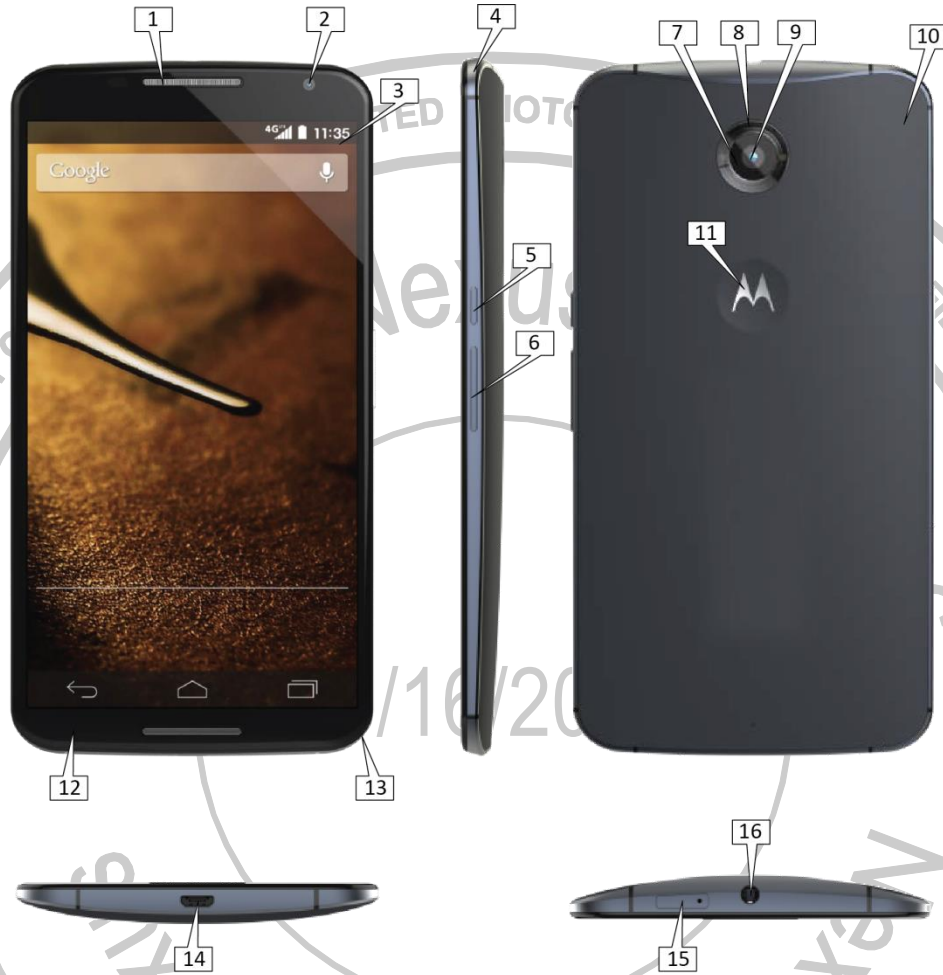


Figure 1. External Views

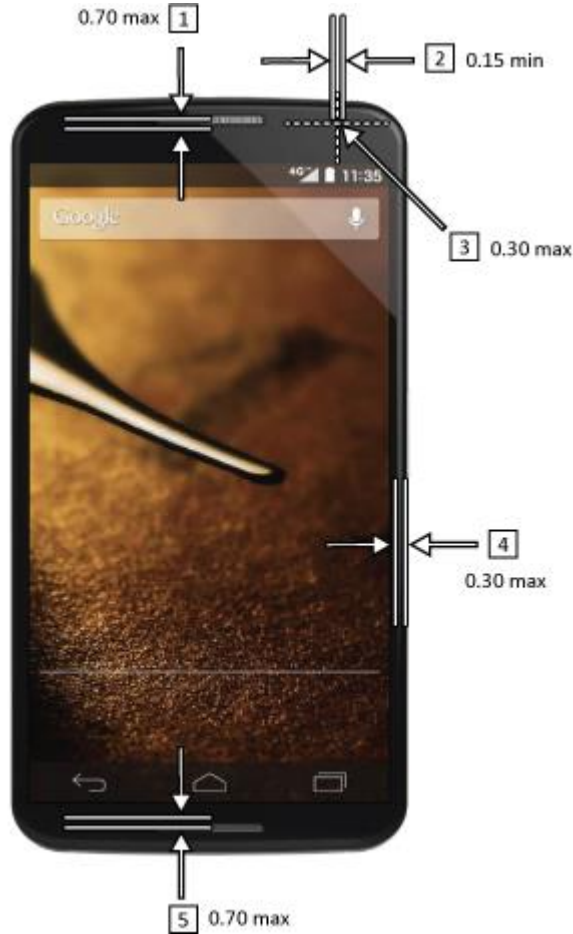
**Table 1. External Views Parts List**

<i>Reference #</i>	<i>Description</i>
1	Earpiece
2	Front-Facing Imager
3	Main Display
4	Notification LED
5	Power Key
6	Volume Key
7	Flash Ring
8	Imager Lens
9	Rear-Facing Imager
10	Inlay
11	Motorola Medallion
12	Front Housing
13	Rear Housing
14	USB Port
15	SIM Card Tray
16	Headset Jack

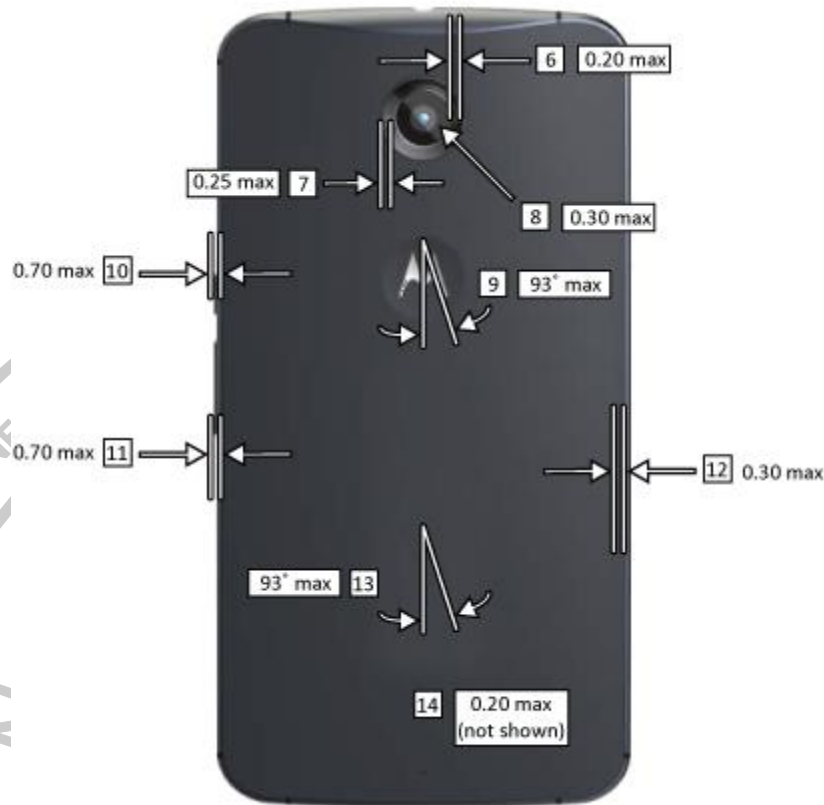


## PSCD Gaps

All dimensions are in millimeters (mm). The following gaps are considered maximum allowable without further approval from a supervisor. Measure gaps at an angle perpendicular to the surface/area being measured. Feeler Gauges must not be used at an angle as they will give false-positive results.



**Figure 2. PSCD Front View**



**Figure 3. PSCD Rear View**

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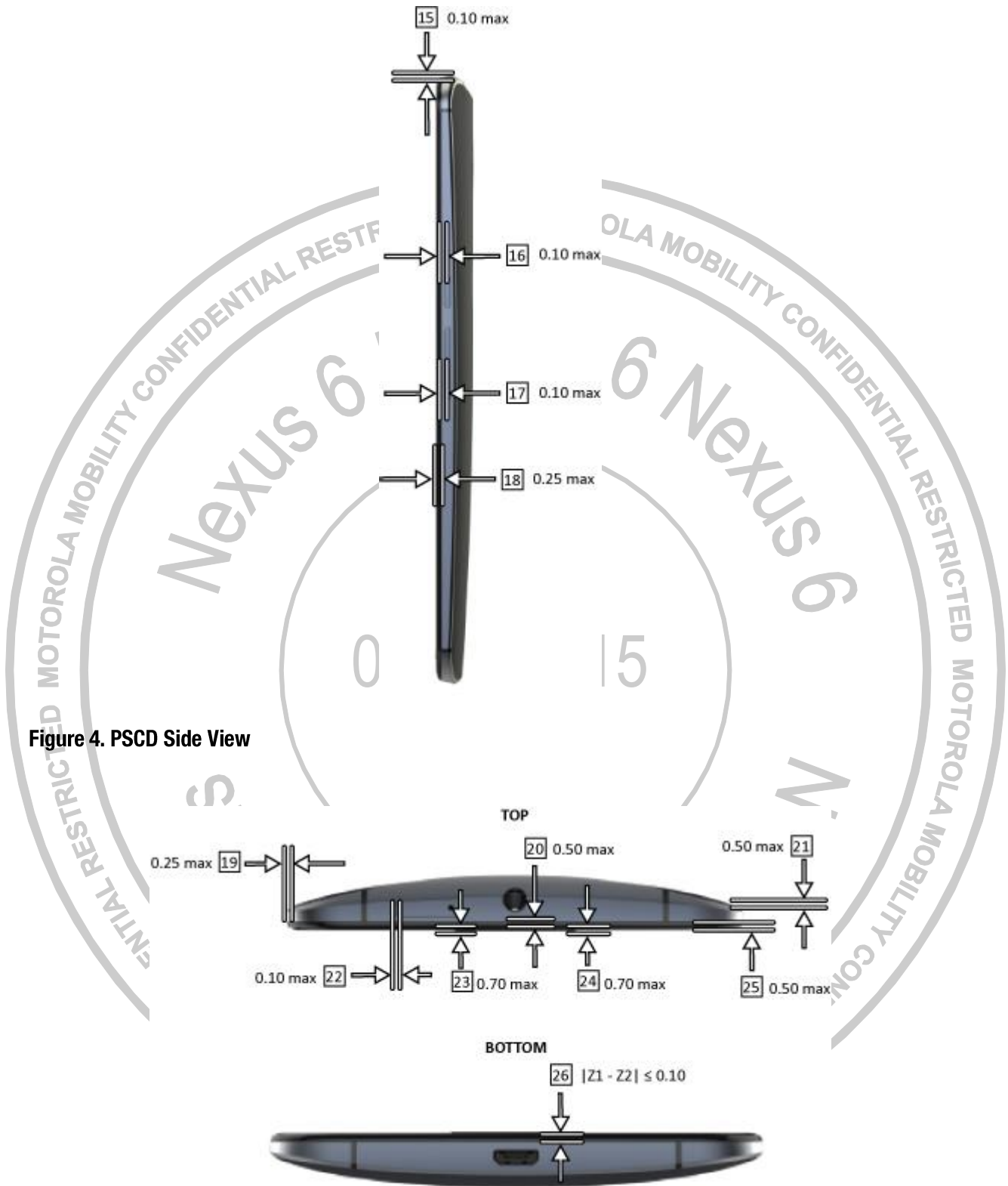


Figure 4. PSCD Side View

Figure 5. PSCD Top and Bottom View

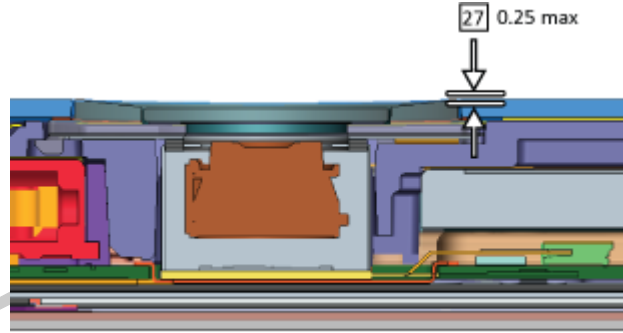


Figure 6. X-0 Section View



Figure 7. Display Alignment

**Table 2. PSCD Gap Measurements**

<i>Reference #</i>	<i>Description</i>
1	Main Lens to Earpiece Deco Perimeter
2	Front-Facing Imager to Foam Gasket Perimeter
3	Front-Facing Imager Lens Artwork Concentricity
4	Front Housing to Main Lens Perimeter
5	Main Lens to Earpiece Deco Perimeter (Top and Bottom)
6	LED Flash Lens to Rear-Facing Imager Perimeter
7	Rear Inlay to Flash Lens Perimeter
8	Rear-Facing Imager Center to Lens Artwork Center
9	M Logo to Endo Rear Housing
10	Power Key to Endo Rear Housing
11	Volume Key to Endo Rear Housing
12	Endo Rear Housing to Rear Inlay
13	Branding (not shown) to Endo Rear Housing
14	Letters (not shown) to Rear Inlay Pocket Perimeter
15	SIM Tray Recess
16	Endo Rear Housing to Power Key
17	Endo Rear Housing to Volume Key
18	Front Housing to Endo Rear Housing (Top, Sides, and Bottom)
19	Front Housing to Endo Rear Housing (X,Y) in Front View (at parting line)
20	Front Housing to Endo Rear Housing (Perimeter)
21	Rear Inlay to Endo Rear Housing
22	Endo Rear Housing to SIM Tray
23	Z2 Main Lens to Earpiece Deco (Top and Bottom)
24	Z1 Main Lens to Earpiece Deco (Top and Bottom)
25	Lens Protrusion Over Front Housing
26	Z1 Main Lens to Earpiece Deco (Top and Bottom)
27	Rear inlay to Flash Lens
28	Main Display Alignment X Skew
29	Main Display Alignment Y Skew

## Exploded Views

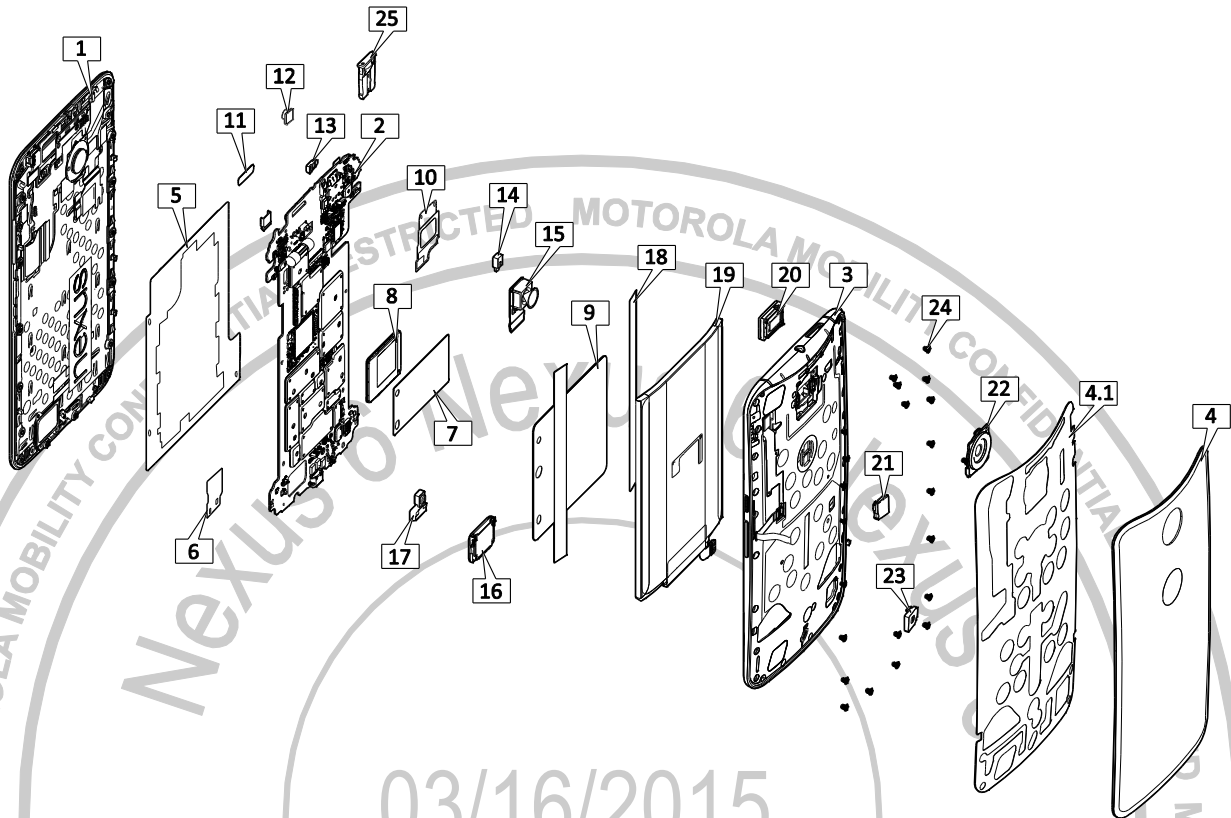


Figure 8. Assembly Exploded View

Table 3. Assembly Exploded View Parts List

Reference #	Description
1	ASSEMBLY,HSG,FRNT,LENS,XPLAY,BLACK,B ASSY,HSG,FRNT,LENS,XPLAY,BLACK,SZ ASSY,HSG,FRNT,LENS,XPLAY,MP
2	ASSEMBLY,PWA,XPLAY,32GB,AMERICAS ASSEMBLY,PWA,XPLAY,32GB,ROW
3	ASSEMBLY,HSG,REAR,INNER,XPLAY,DARK,32GB FPR (3) ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,LIGHT, FOXCONN ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,DARK, FOXCONN ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,LIGHT, FOXCONN
4	ASSEMBLY,HOUSING,REAR,INLAY,RESIN,INK HOUSING,REAR,INLAY,RESIN,DECORATED,RASPBERRY ASSEMBLY,HOUSING,REAR INLAY,RESIN,CHALK
4.1	DIE CUT, ADHESIVE, REAR INLAY, BORDER, XPLAY
5	TAPE,TOP,THERMAL SPREADER,MAIN PCB
6	PROTIVE LINER,POLY SPEAKRE FAC

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<i>Reference #</i>	<i>Description</i>
7	TAPE,COPPER,APQ,VALOCIA
8	SHIELD,APQ CVR VALOCIA
9	HEAT SPREADER,MAIN PCB THERMAL,XPLAY
10	SEAL,POLY, TOP
11	TAPE,KAPTON,DISPLAY FLX
12	ASSEMBLY,FLXCKT,CAMERA, FRONT FACING
13	GROMMET,PROXIMITY,XPLAY
14	GROMMET,MIC-2
15	ASSEMBLY,13MP OIS CAMERA
16	TRANSDUCER,OTHR,2.2V,AAC W/ ADHES W/ LINER
17	GROMMET,UUSB,VALOCIA
18	TAPE,INSULATION BATTERY, XPLAY
19	ASSEMBLY,BATTTERY,EZ30,LI POLYMER,LG CHEM, MIN 3025 MAH
20	ASSEMBLY,SPEAKER,11X15 POLYPHONIC
21	STOPPER,BRIDGE FLEX CONNECTOR,XPLAY
22	ASSEMBLY,LENS FLASH,XPLAY
23	SPACER,CONNECTOR,BATTERY,VALOCIA
24	SCREW,M1.4,ENDO,X+1
25	ASSEMBLY,SIM DOOR DARK,XPLAY ASSEMBLY,SIM DOOR LIGHT,XPLAY

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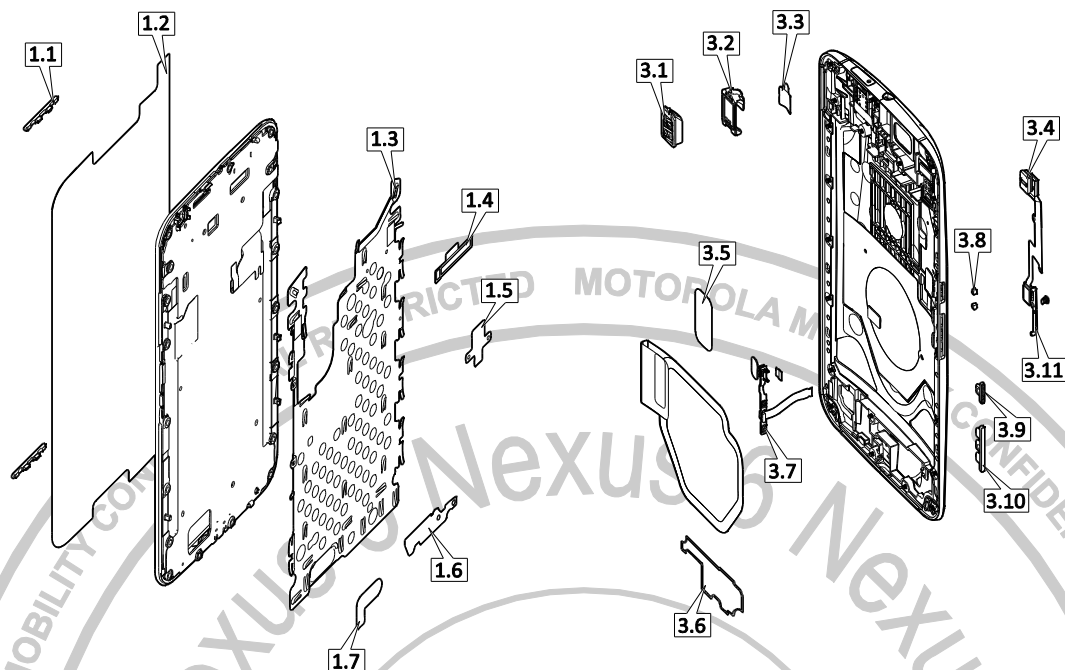


Figure 9. Subassembly Exploded View

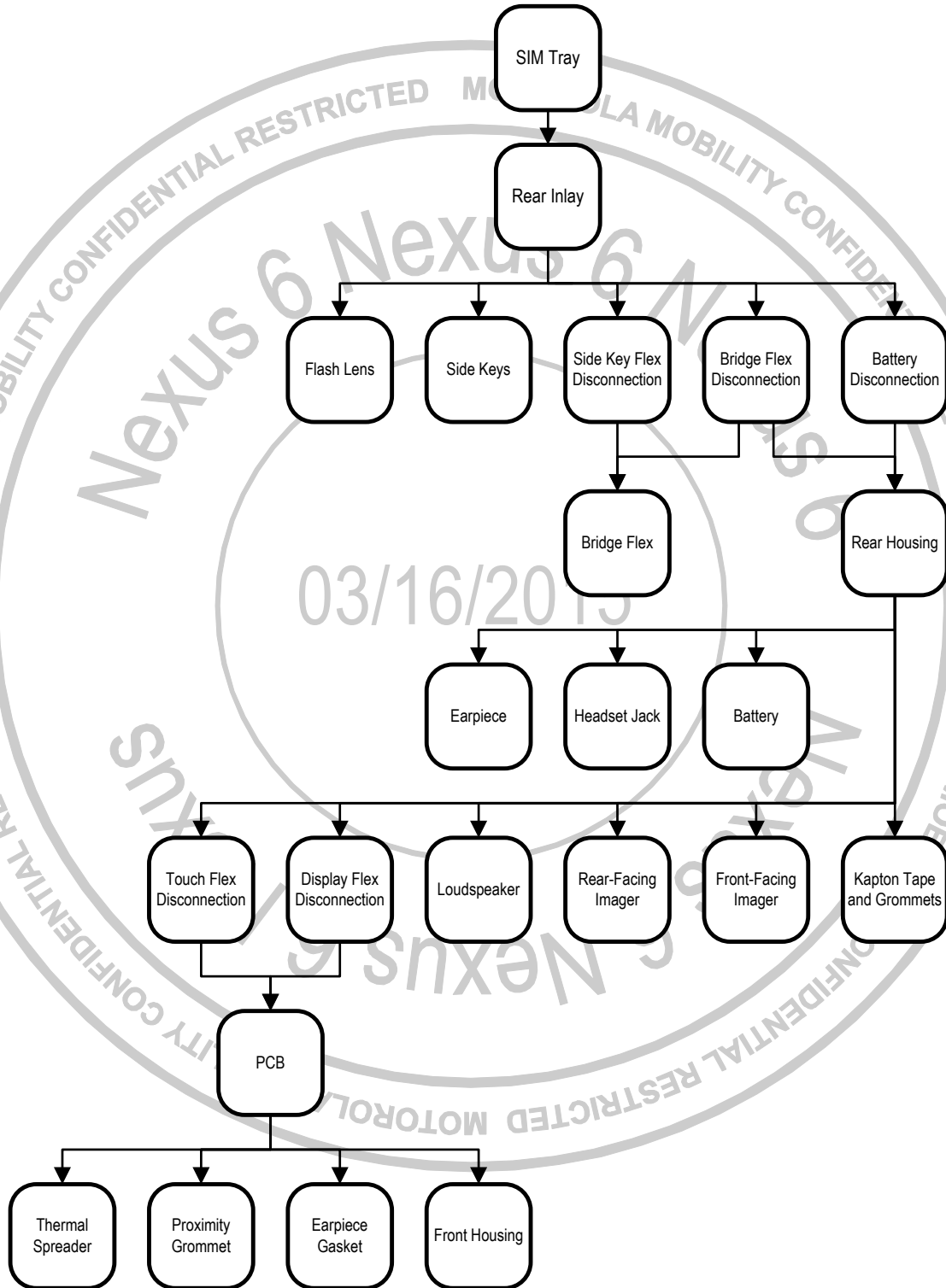
Table 4. Subassembly Exploded View Parts List

Reference #	Description
1.1	BEZEL,DECO SPEAKER DARK,XPLAY
1.3	ASSEMBLY,GROUND,PLATE,XPLAY
1.4	SEAL,FRONT,TOP,SPEAKER
1.6	SEAL,BOTTOM SPEAKER AND MIC
1.7	DIE CUT,ADHES,ACSTC GND PLT
3.1	CONN,JACK,HEADSET,3.5 MM DIA
3.2	GROMMET,HSJ,X+1
3.3	DIE CUT,ADHESIVE,HJS,X+1
3.4	ASSY,FLXCKT,BRIDGE FPCB,XPLAY ASSY,FLXCKT,BRIDGE FPCB,XPLAY
3.5	DIE CUT,ADHESIVE,BATTERY,XPLAY
3.6	SEAL,POLY,BOTTOM
3.7	ASSEMBY,FLXCKT,FLEX,VOLUME,KEY,X+1
3.8	CUSHION,PAD,POWER KEY,X1
3.9	POWER KEY,DARK,XPLAY POWER KEY,LIGHT,XPLAY
3.10	KEY,VOLUME,DARK,XPLAY KEY,VOLUME,LIGHT,XPLAY
3.11	SUPPRRT,METAL,HOLDER, VOLUME,KEY,X+1







# DISASSEMBLY

## Disassembly Map



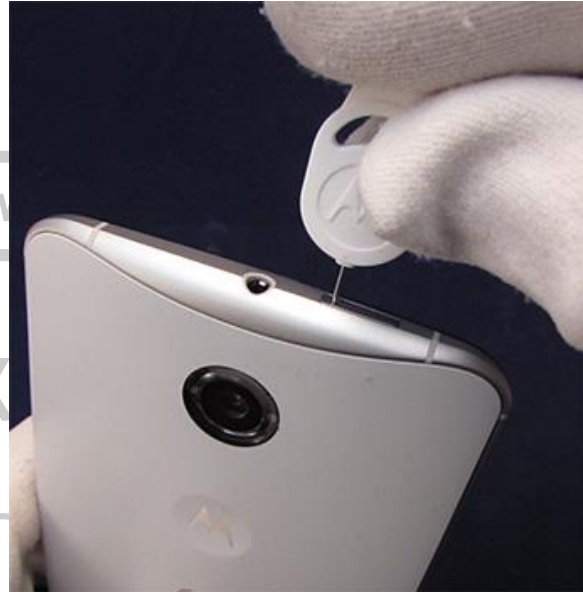
## Tools Required for Disassembly

The following tools are required to disassemble the Nexus 6 phone.

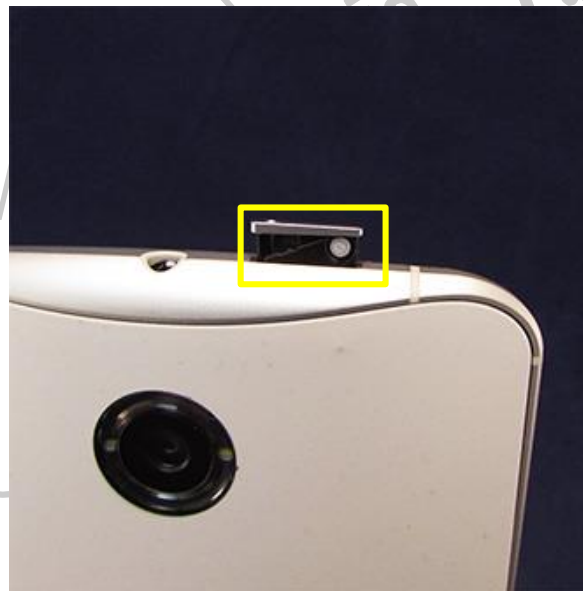
<i>Description</i>	<i>Part #</i>	<i>Picture / Drawing</i>
SIM Tray Removal Tool	4-00-U2-10000	
Inlay Pin Guide	4-00-U2-10000	
Inlay Ejection Pin	4-00-U2-10000	
Blackstick	--	
3IP Torx Bit	--	
Thin Plastic Spudger	--	
Heat Gun	--	--
Tweezers (Plastic or Plastic-Tipped)	--	--
ESD Mat and Wrist Strap	--	--
Gloves or Finger Collets	--	--
Isopropyl (ISP) Alcohol	--	--

## SIM Tray Removal

1. Insert the SIM Tray Removal Tool into the SIM Tray hole.



2. Push the SIM Tray Removal Tool into the SIM Tray hole until the SIM Tray ejects from the phone. The white dot is completely visible when the SIM Tray retaining clips have released.



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3. Remove the SIM Tray from the phone.



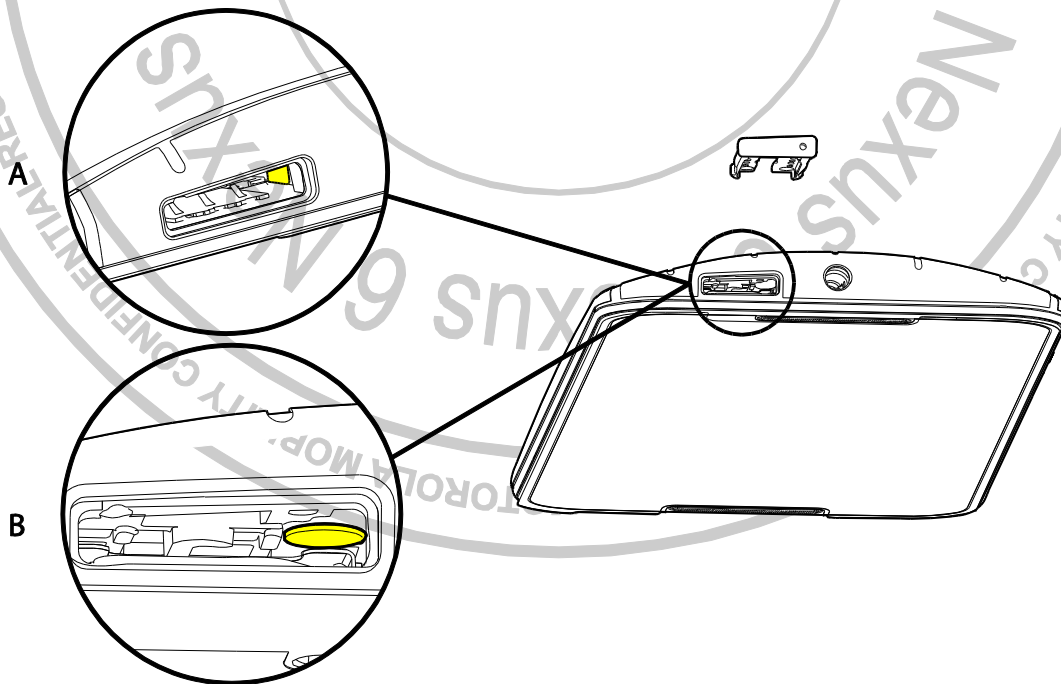
## Water Detection Label Inspection

Inspect the Water Detection Label (WDL) visible through the SIM Tray opening, as shown below, to verify it is correctly placed and inspect it for signs of activation. The WDL is in one of two locations in the SIM tray.

Location A



Location B



## Rear Inlay Removal

1. Use the Heat Gun to heat the Rear Inlay to a maximum temperature of 120° F (49° C) for 2 minutes. The Heat Gun must be held approximately 4 in. (10 cm) from the Rear Inlay.

### NOTE

Complete this step only if the Rear Inlay will be reused. If the Rear Inlay will not be reused, skip this step.

2. Insert the Inlay Pin Guide into the SIM Tray slot.



3. Insert the Inlay Ejection Pin into the guide hole on the Inlay Pin Guide.
4. Push the Inlay Ejection Pin until it lifts the Inlay away from the Rear Housing to allow the Thin Plastic Spudger to be inserted under the Rear Inlay.



### // CAUTION //

Do not insert the Inlay Ejection Pin farther than necessary to allow the Thin Plastic Spudger to be inserted. Damage to the Rear Inlay may occur.

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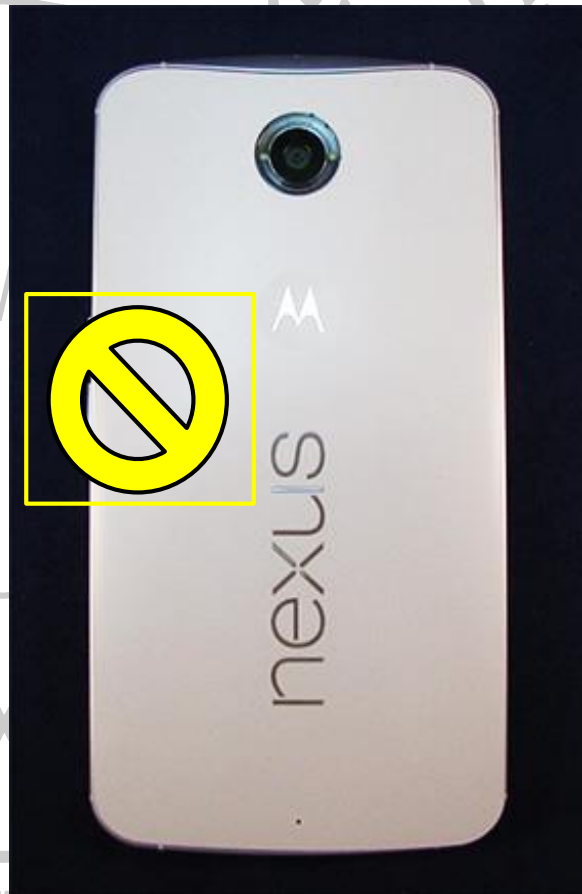
5. Insert the Thin Plastic Spudger in the gap created by the Inlay Ejection Pin.



6. Move the Thin Plastic Spudger around the perimeter of the Rear Inlay to loosen the adhesive between the Rear Inlay and Rear Housing.

#### // CAUTION //

To avoid damaging the Bridge Flex, do not use the Thin Plastic Spudger in the indicated area.



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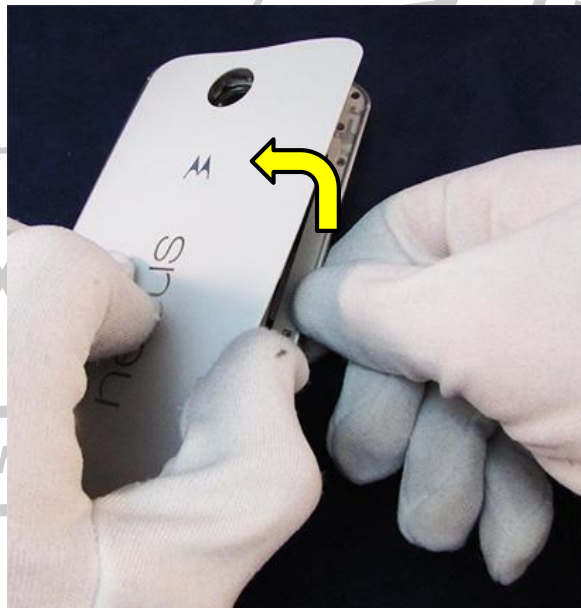
7. Lift the top edge of the Rear Inlay to separate the adhesive from the Rear Housing. Maintain thumb pressure on the center of the Rear Inlay while lifting the top edge.



8. Lift the bottom edge of the Rear Inlay to separate the adhesive from the Rear Housing. Maintain thumb pressure on the center of the Rear Inlay while lifting the bottom edge.



9. Lift the side of the Rear Inlay opposite of the Side Keys and remove it from the Rear Housing.





## Flash Lens Removal

1. Insert the flat end of the Blackstick under the removal feature on the Flash Lens.
2. Remove the Flash Lens from the Rear Housing by prying up with the Blackstick.

### NOTE

Remove the Flash Lens only if necessary.



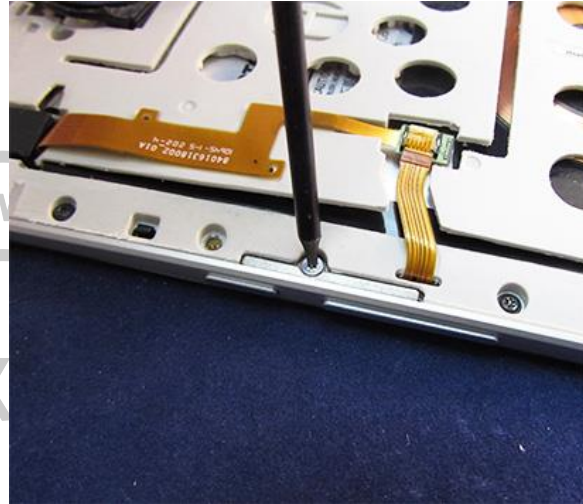
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## Side Key Removal

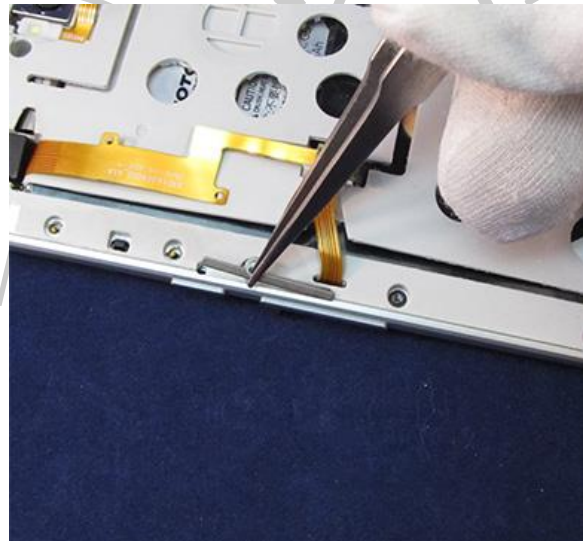
1. Remove the 3IP Screw holding the Side Key Retention Bracket in place.

### NOTE

After you remove the 3IP Screw, you cannot reuse it.



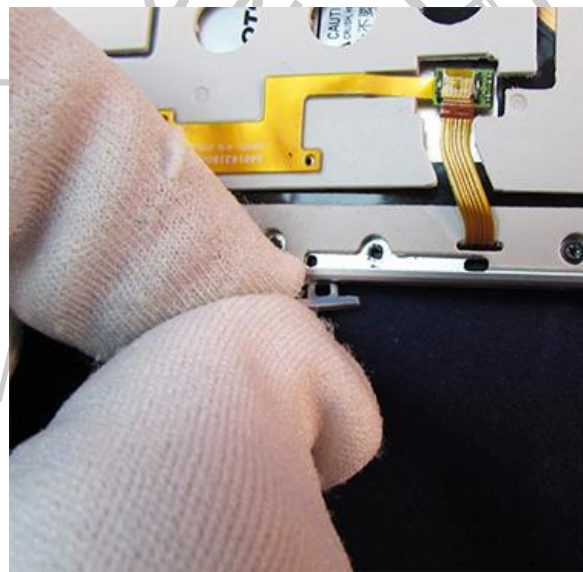
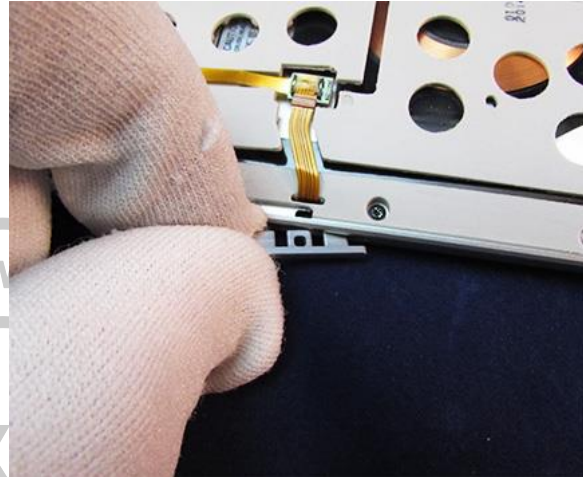
2. Use the Tweezers to remove the Side Key Retention Bracket.



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3. Remove the Power and Volume Keys. If they stick in the housing, use the Tweezers and Blackstick to pry them free.

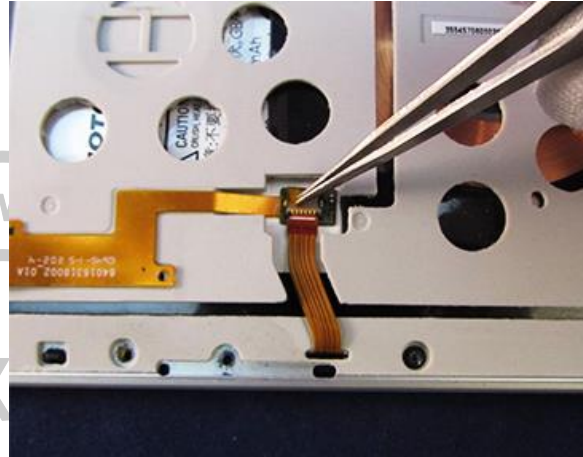


## Side Key Flex Disconnection

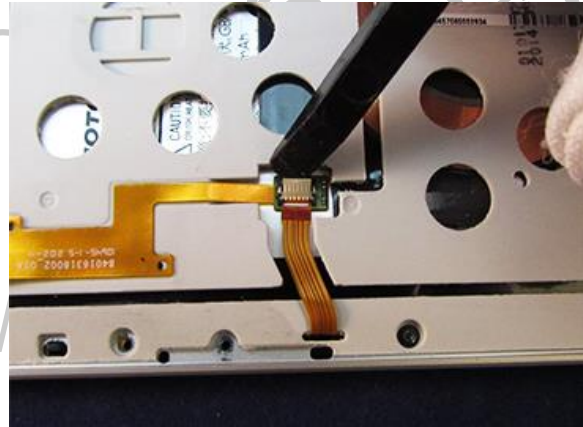
1. Remove the Kapton® Tape from the Side Key Flex ZIF Connector.

### NOTE

After you remove the Kapton Tape, you cannot reuse it.



2. Open the Side Key Flex ZIF Connector Door.

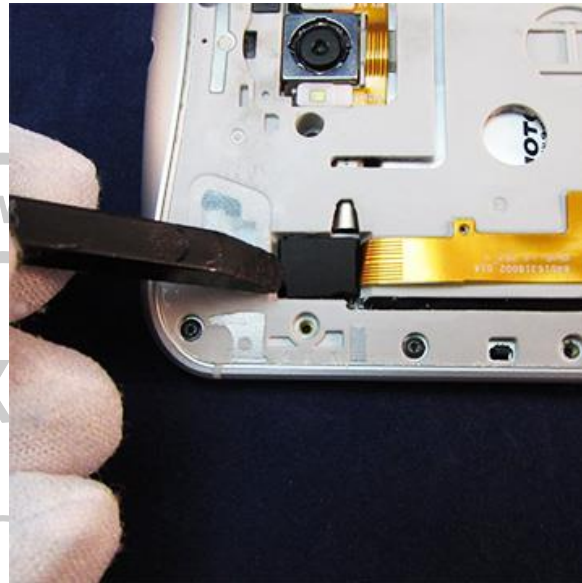


3. Disconnect the Side Key Flex from the Side Key Flex ZIF Connector.



## Bridge Flex Disconnection

1. Remove the Bridge Flex Stopper using the Blackstick or the Tweezers.



2. Use the flat end of the Blackstick to disconnect the Bridge Flex Connector.



## Bridge Flex Removal

### /// WARNING ///

Failure to adhere to Safety Critical Note(s) may increase risk of rupture, burning, or failure to function safely when used by the customer. Refer to the Battery Safety Guidelines.

### // CAUTION //

Handle the Battery Pack with care. If dropped to the floor, it may be internally damaged and must be scrapped.

Ensure Battery and its insulation are not damaged (e.g. scratched, dented, punctured) prior to and throughout assembly.

Prior to assembly, ensure Battery edges and surfaces are not dented or deformed, and that fixtures and parts that will contact the Battery are free of foreign material.

Ensure screws and screwdrivers do not contact the Battery.

Use the Blackstick to lift and separate the adhesive between the Bridge Flex, the Battery surface, and the Rear Housing.

### NOTE

Remove the Bridge Flex only if necessary. After you remove the Bridge Flex, you cannot reuse it.



### // CAUTION //

Do not use sharp tools or the pointed end of the Blackstick to separate the Bridge Flex from the Battery. Damage to the Battery may occur.



## Battery Disconnection

### /// WARNING ///

Failure to adhere to Safety Critical Note(s) may increase risk of rupture, burning, or failure to function safely when used by the customer. Refer to the Battery Safety Guidelines.

### // CAUTION //

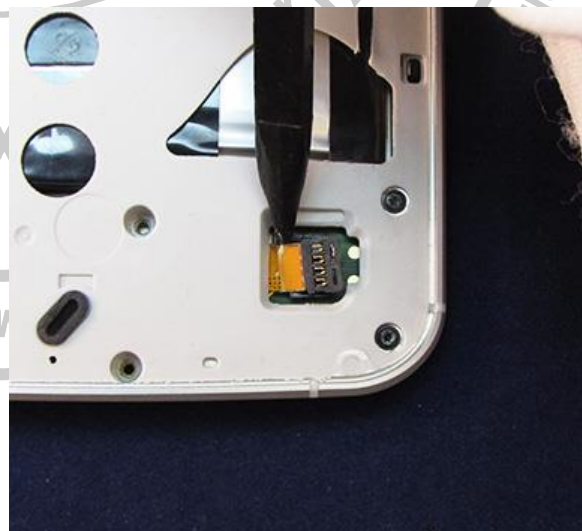
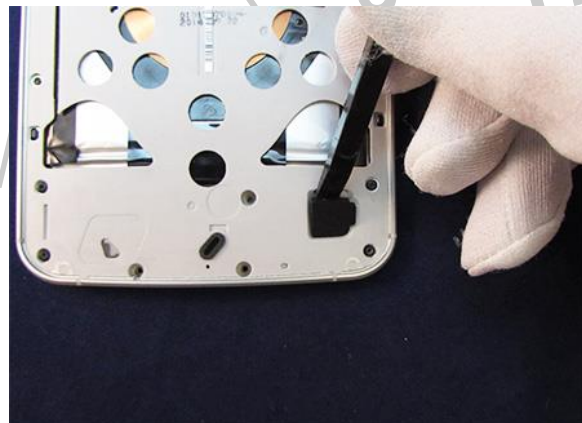
Handle the Battery Pack with care. If dropped to the floor, it may be internally damaged and must be scrapped.

Ensure Battery and its insulation are not damaged (e.g. scratched, dented, punctured) prior to and throughout assembly.

Prior to assembly, ensure Battery edges and surfaces are not dented or deformed, and that fixtures and parts that will contact the Battery are free of foreign material.

Ensure screws and screwdrivers do not contact the Battery.

1. Remove the Battery Flex Stopper using the Blackstick.
2. Insert the pointed end of the Blackstick in the access feature behind the Battery Flex Stiffener and the Rear Housing.
3. Disconnect the Battery Flex using the Blackstick.

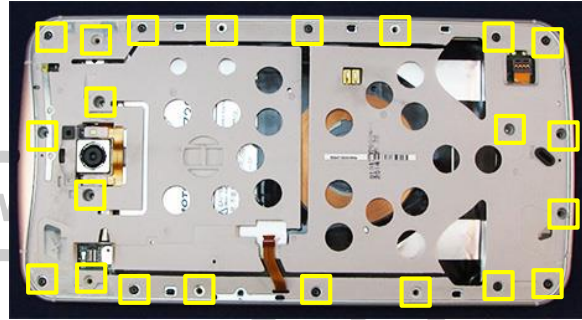


## Rear Housing Disassembly

1. Remove the 22 3IP Screws from the Rear Housing.

### NOTE

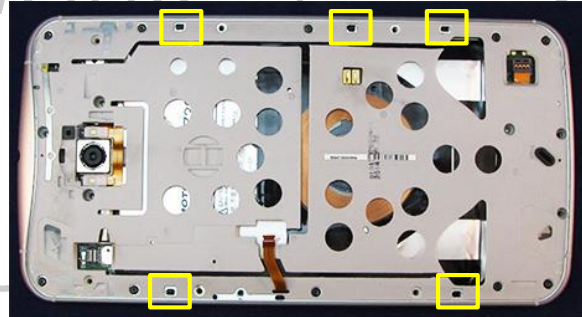
After you remove the 3IP Screws, you cannot reuse them.



2. Beginning at the USB Connector, insert the Blackstick between the Rear Housing and the Front Housing.



3. Move the Blackstick around the perimeter to disengage the 5 snap features.



4. Remove the Rear Housing from the Front Housing.



## Battery Removal

### /// WARNING ///

Failure to adhere to Safety Critical Note(s) may increase risk of rupture, burning, or failure to function safely when used by the customer. Refer to the Battery Safety Guidelines.

### NOTE

Remove the Battery only if necessary.

### // CAUTION //

Handle the Battery Pack with care. If dropped to the floor, it may be internally damaged and must be scrapped.

Ensure Battery and its insulation are not damaged (e.g. scratched, dented, punctured) prior to and throughout assembly.

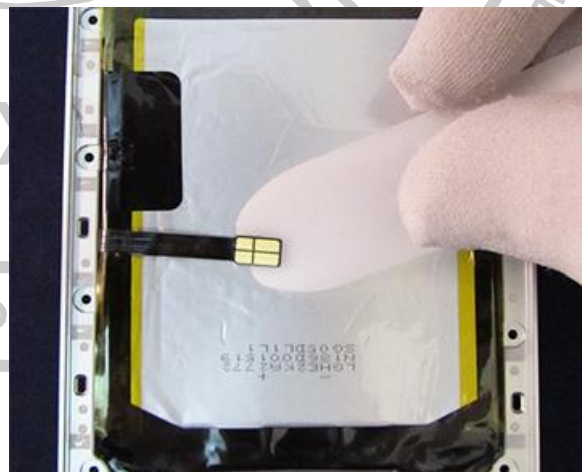
Prior to assembly, ensure Battery edges and surfaces are not dented or deformed, and that fixtures and parts that will contact the Battery are free of foreign material.

Ensure screws and screwdrivers do not contact the Battery.

1. Use the flat end of the Blackstick to lift the edge of the NFC Flex tab from the Battery.



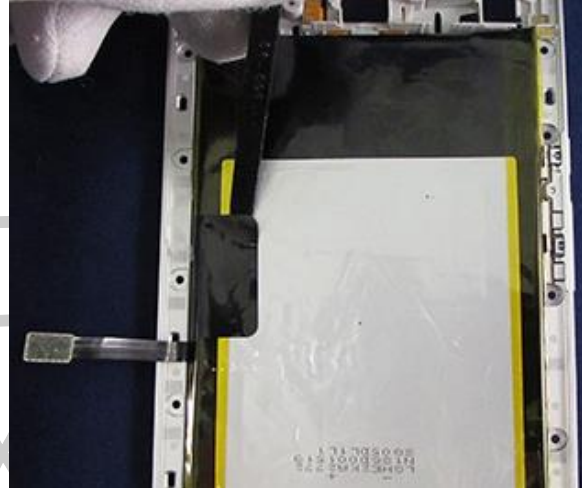
2. Use the Thin Plastic Spudger to lift and remove the NFC Flex tab from the Battery.



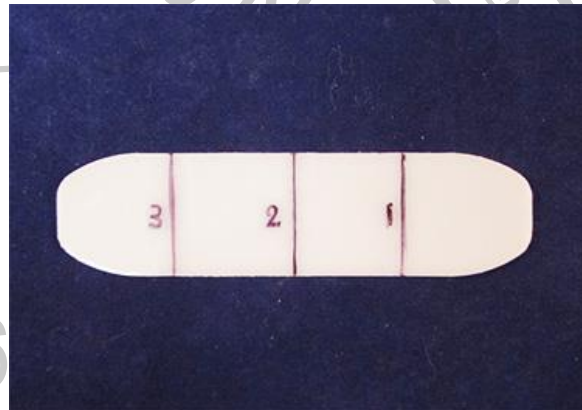
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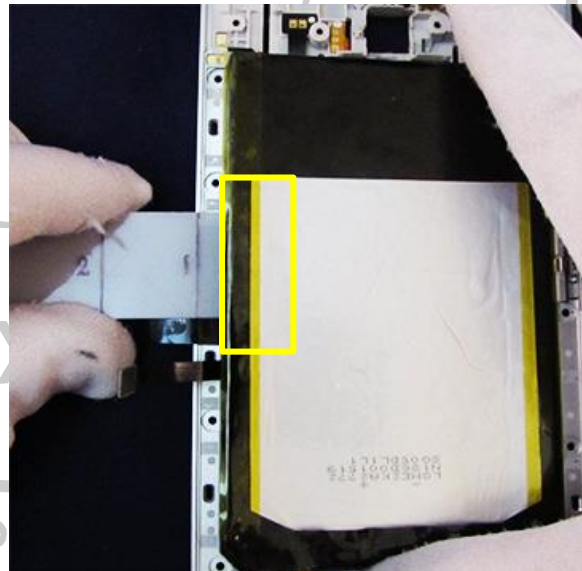
3. Use the flat end of the Blackstick to lift the Battery Adhesive tab from the Battery.



4. Use a pen or fine point marker to draw three lines on the Thin Plastic Spudger and number them as shown.



5. Lift the Battery Adhesive tab and slide the Thin Plastic Spudger under the Battery between the Battery Adhesive and NFC Antenna so that line #1 is parallel to the edge of the Rear Housing. Slide the Thin Plastic Spudger in the indicated area to separate the Battery Adhesive from the Battery.



#### // CAUTION //

Do not insert the Thin Plastic Spudger any deeper than line #1 in the area indicated to prevent damage to the NFC Antenna.

#### // CAUTION //

The Thin Plastic Spudger must be inserted between the Battery and NFC Antenna to prevent damage to the NFC Antenna.

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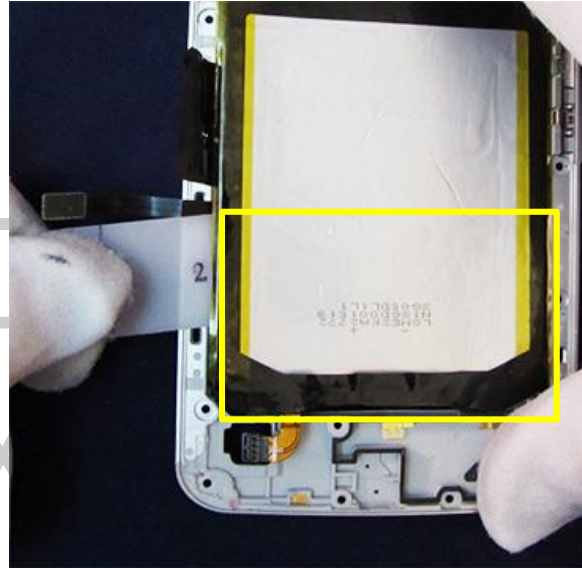
6. Lift the Battery Adhesive tab and slide the Thin Plastic Spudger under the Battery between the Battery Adhesive and NFC Antenna up to line #2. Slide the Thin Plastic Spudger in the indicated area to separate the Battery Adhesive from the Battery.

#### // CAUTION //

Do not insert the Thin Plastic Spudger any deeper than line #2 in the area indicated to prevent damage to the NFC Antenna.

#### // CAUTION //

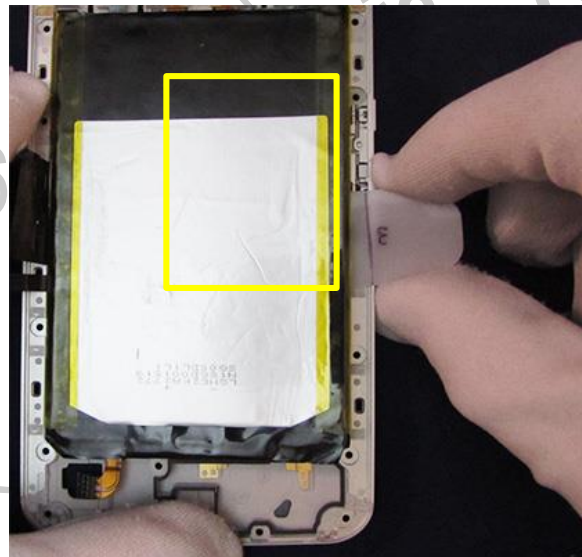
The Thin Plastic Spudger must be inserted between the Battery and NFC Antenna to prevent damage to the NFC Antenna.



7. Slide the Thin Plastic Spudger under the Battery so that line #3 is parallel to the edge of the Rear Housing. Slide the Thin Plastic Spudger in the indicated area to separate the Battery from the Rear Housing.

#### // CAUTION //

Do not insert the Thin Plastic Spudger any deeper than line #3 in the area indicated to prevent damage to the NFC Antenna.



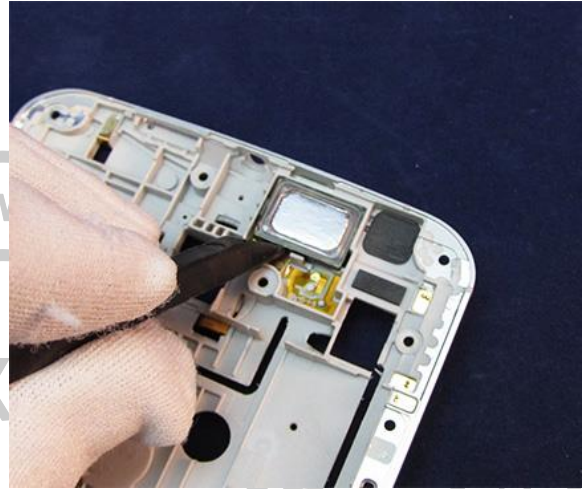
8. Remove the Battery from the Rear Housing.

## Earpiece Removal

Use the Blackstick to pry the Earpiece out of the Rear Housing.

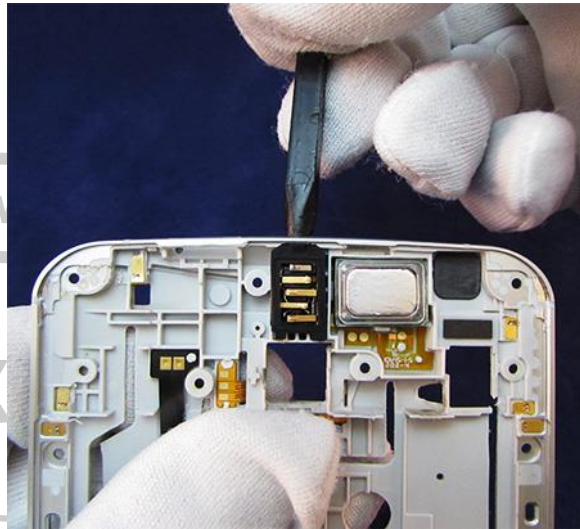
### NOTE

Remove the Earpiece only if it is defective or damaged. After you remove the Earpiece, you cannot reuse it.



## Headset Jack Removal

1. Insert the pointed end of the Blackstick into the Headset Jack.
2. Use the Blackstick to pry the Headset Jack up and out of the Rear Housing.



3. Separate the Headset Jack Grommet from the Headset Jack.

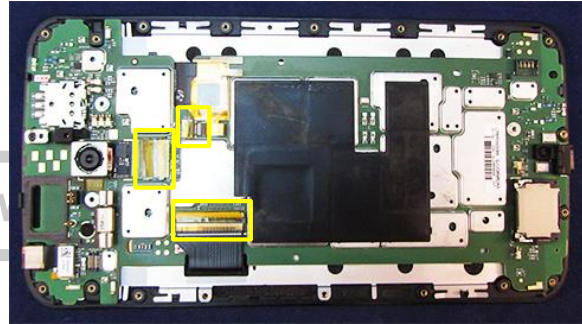


## Kapton Tape and Grommet Removal

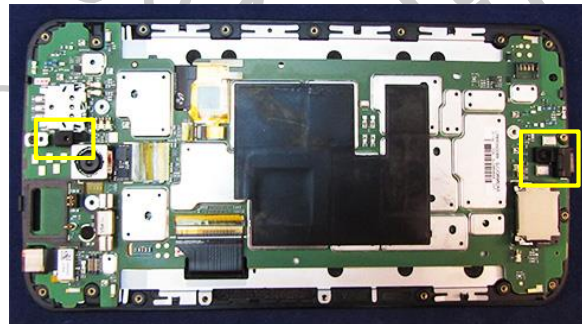
4. Use the Tweezers to remove the Kapton Tape from the 3 ZIF Connector Doors:
  - Rear-Facing Imager
  - Display Flex
  - Touch Flex

### NOTE

After you remove the Kapton Tape, you cannot reuse it.

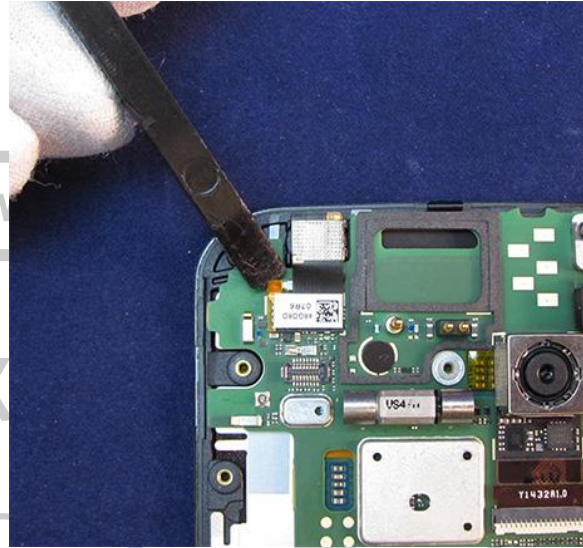


5. Use the Tweezers to remove the 2 grommets:
  - 2<sup>nd</sup> Microphone Grommet
  - USB Grommet



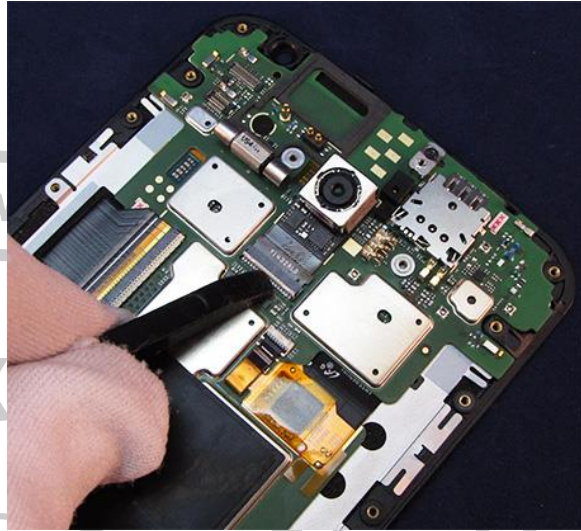
## Front-Facing Imager Removal

1. Use the flat end of the Blackstick to lift the removal tab and disconnect the Front-Facing Imager from the PCB.
2. Remove the Front-Facing Imager from the PCB.

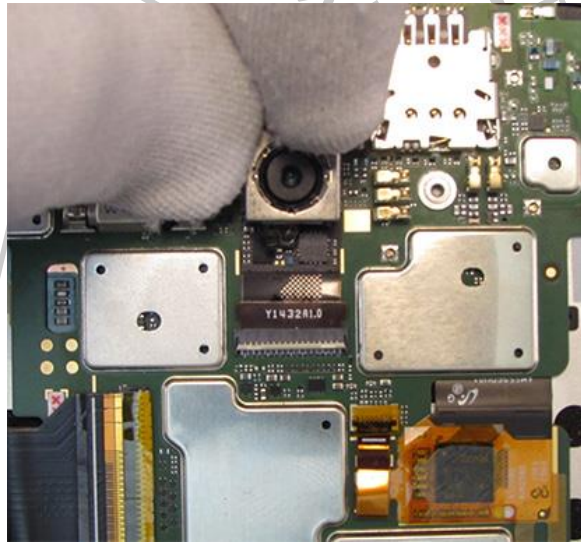


## Rear-Facing Imager Removal

1. Use the Blackstick to open the Rear-Facing Imager ZIF Connector Door.



2. Remove the Rear-Facing Imager from the ZIF Connector.





## Loudspeaker Removal

Use the Blackstick to pry the Loudspeaker off the PCB.

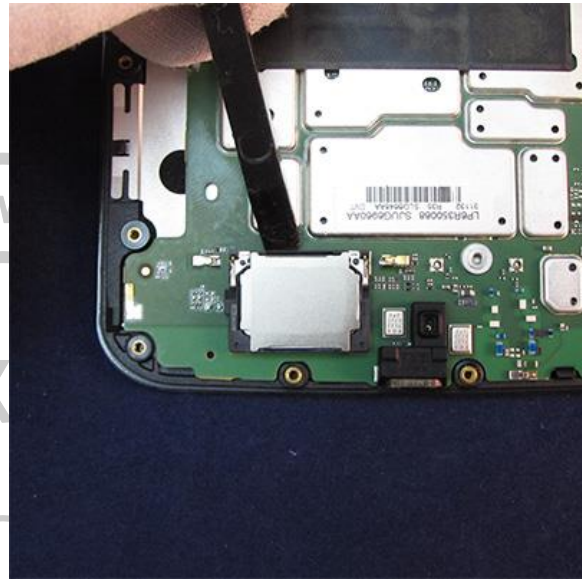
### NOTE

Remove the Loudspeaker only if it is defective or damaged. After you remove the Loudspeaker, you cannot reuse it.



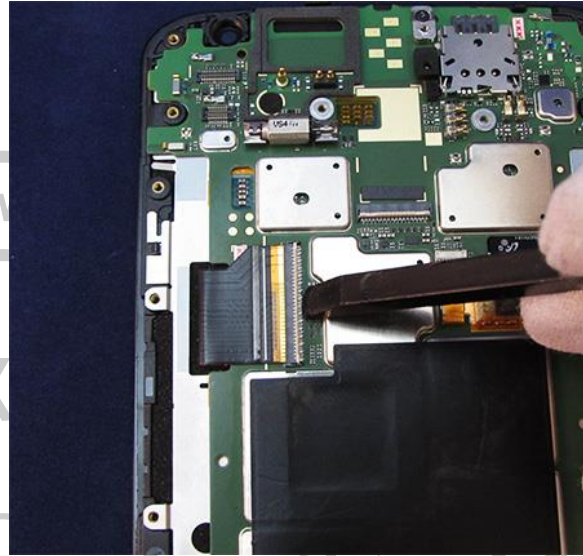
### // CAUTION //

Do not damage the PCB while removing the Loudspeaker.



## Display Flex Disconnection

1. Use the flat end of the Blackstick to open the Display Flex ZIF Connector Door.



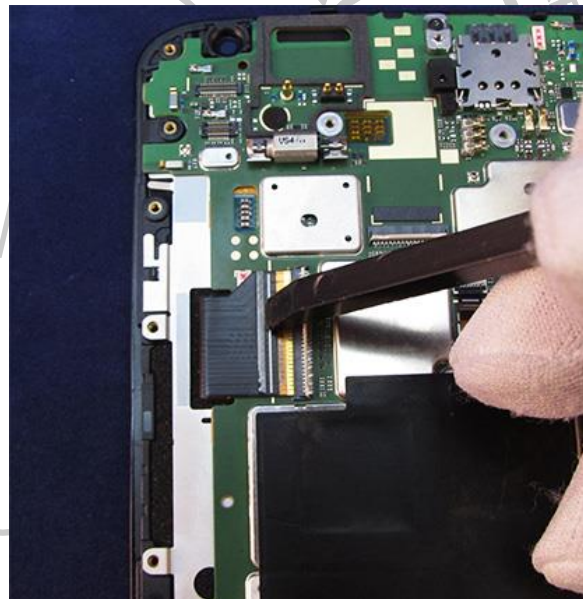
2. Push the flat end of the Blackstick against the Display Flex ledge to disconnect the flex from the connector.

### NOTE

The Display Flex can be disconnected by pushing the on the ledge or by using the Blackstick to pull the Display Flex tail.

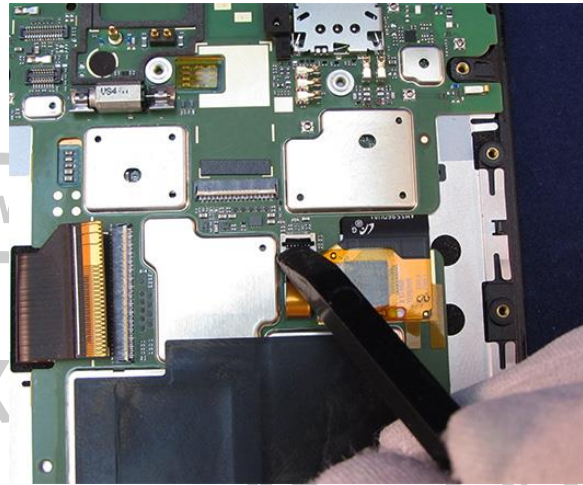
### // CAUTION //

Do not damage the Display Flex while pushing with the Blackstick.



## Touch Flex Disconnection

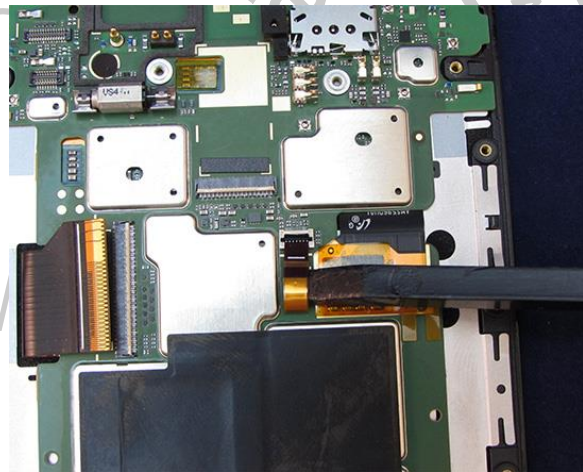
1. Use the flat end of the Blackstick to open the Touch Flex ZIF Connector Door.



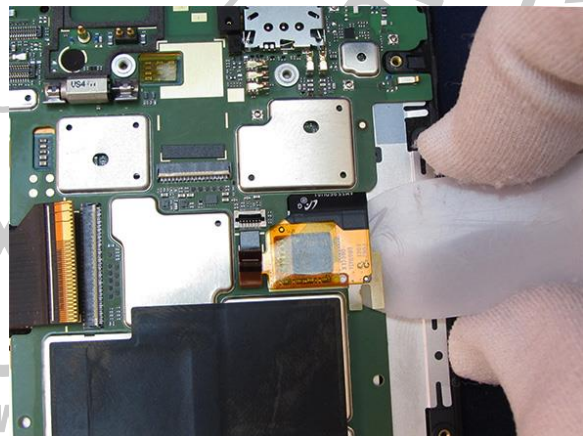
2. Disconnect the Touch Flex from the connector by inserting the Blackstick into the service loop and sliding the flex out of the connector.

**// CAUTION //**

Do not damage the Touch Flex while disconnecting it with the Blackstick.



3. Use the Thin Plastic Spudger to separate the adhesive between the Touch Flex and the PCB.

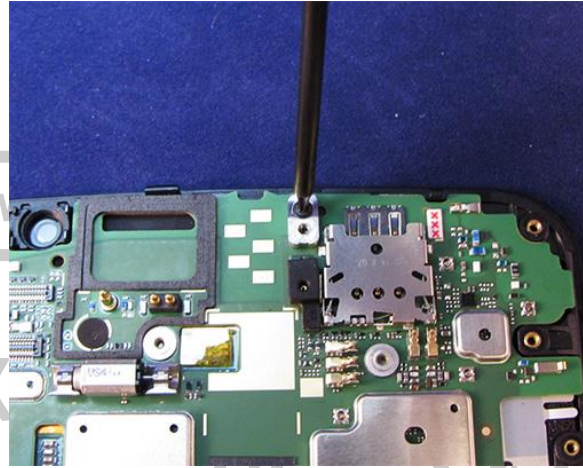


## PCB Removal

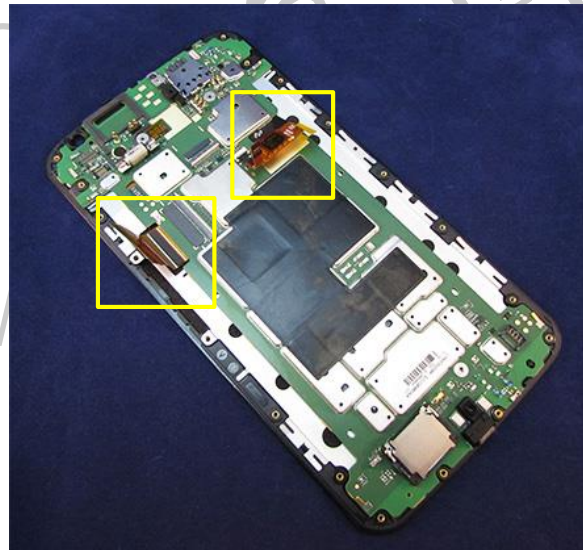
1. Remove the 3IP Screw from the PCB.

### NOTE

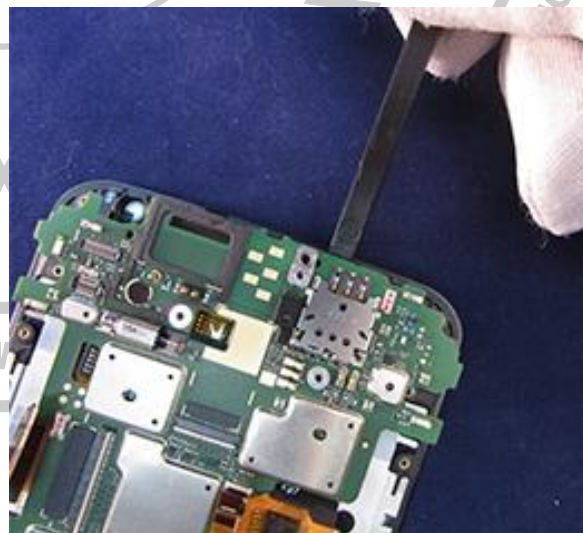
After you remove the 3IP Screw, you cannot reuse it.



2. Lift the Touch Flex and Display Flex so they can slide through the gaps in the PCB.



3. Insert the flat end of the Blackstick under the PCB near the Screw Boss to separate it from the Front Housing.



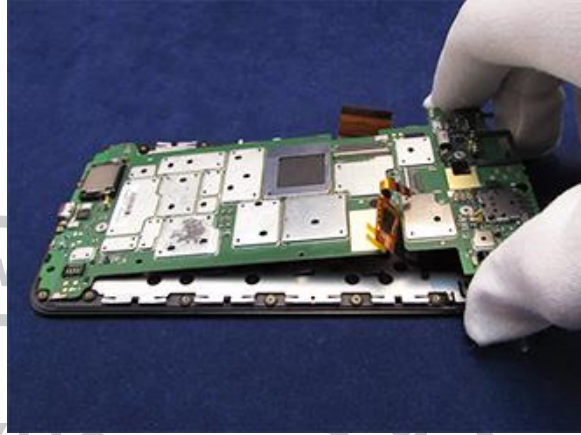
## Nexus 6

### Level 2 – Service and Repair Manual

4. Lift the PCB up and away from the Front Housing.

#### // CAUTION //

Verify that you did not damage the Touch Flex or the Display Flex while lifting the PCB.



## Thermal Spreader Removal

1. Use the Blackstick to remove the Top Thermal Spreader from the PCB.

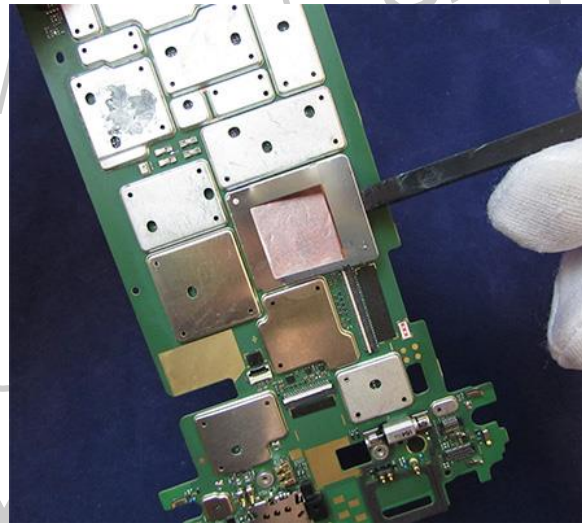
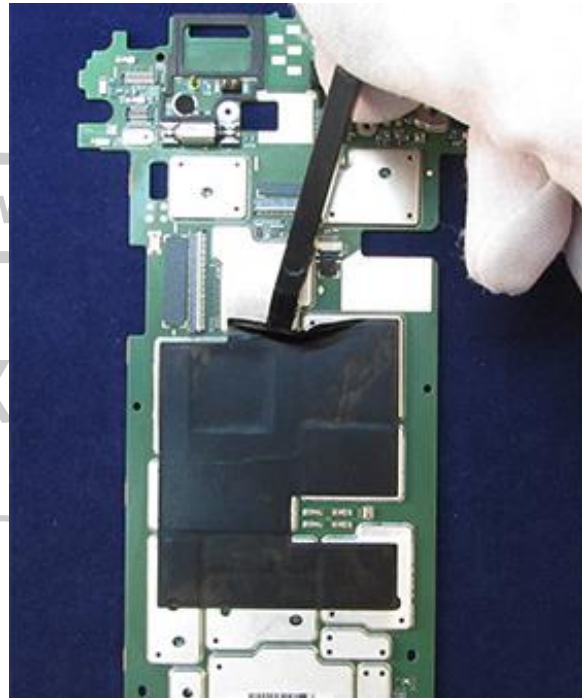
### NOTE

Remove the Thermal Spreaders and Copper Tape only if they are damaged. After you remove them, you cannot reuse them.



2. Use the Blackstick and ISP Alcohol to remove all Thermal Spreader adhesive from the PCB Shields.

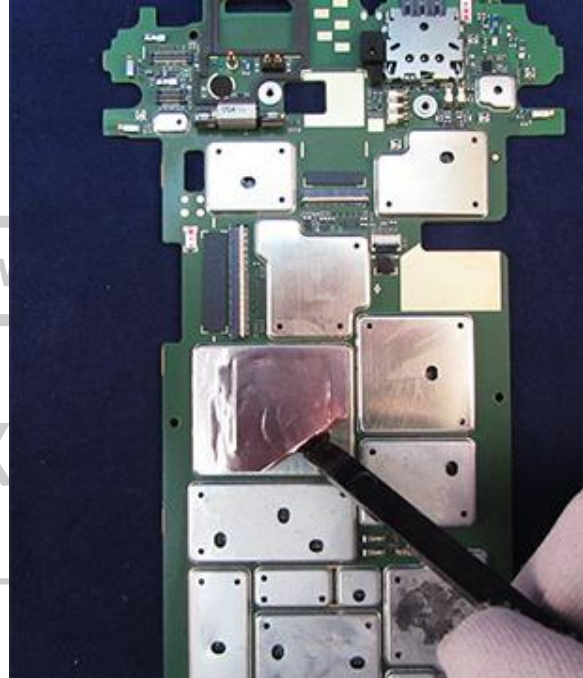
3. Use the Blackstick to unclip the PCB Shield Cover from the PCB.



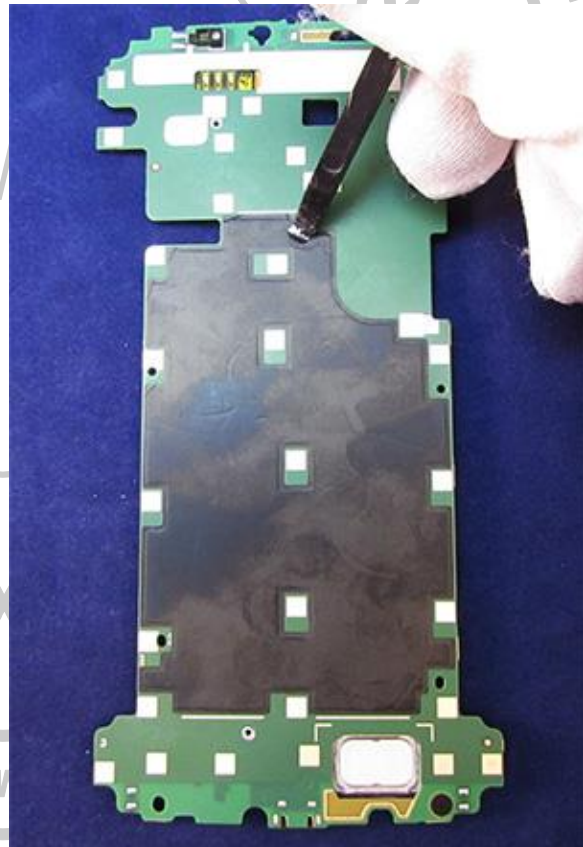
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4. Use the Blackstick to remove the Copper Tape from the PCB.



5. Use the Blackstick to remove the Bottom Thermal Spreader from the bottom of the PCB.
6. Use the Blackstick and ISP Alcohol to remove all Thermal Spreader adhesive from the PCB.

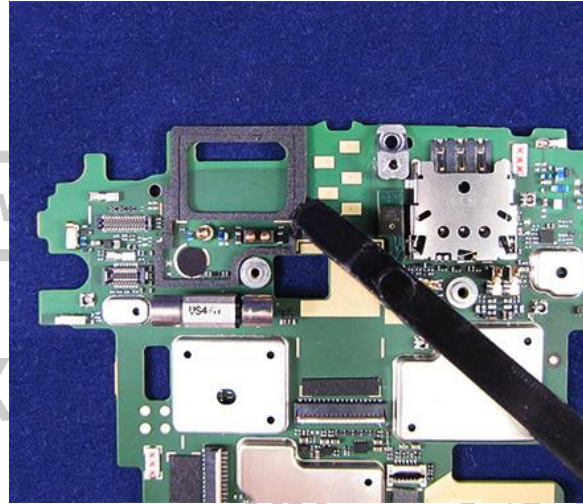


## Earpiece Gasket Removal

Use the flat end of the Blackstick to remove the Earpiece Gasket from the PCB.

### NOTE

After you remove the Earpiece Gasket, you cannot reuse it.



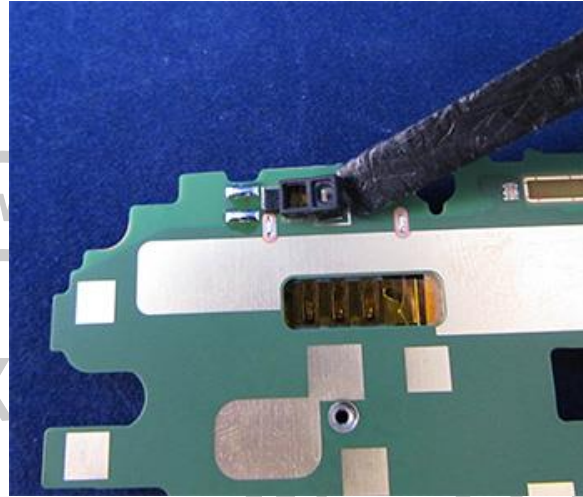


## Proximity Grommet Removal

Use the flat end of the Blackstick to remove the Proximity Grommet from the PCB.

### NOTE

After you remove the Proximity Grommet, you cannot reuse it.

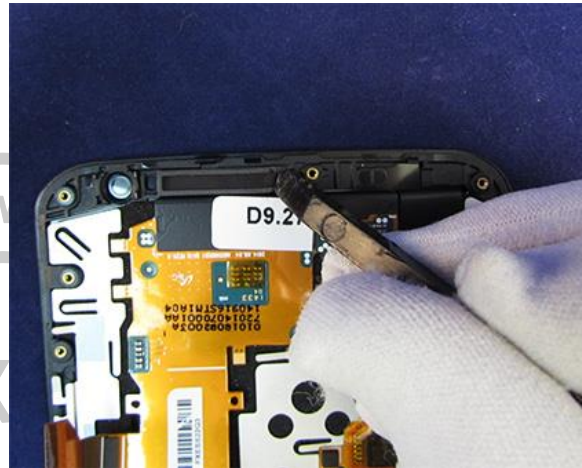


## Front Housing Disassembly

1. Use the Blackstick to pry the Earpiece Speaker Mesh up from the Front Housing.

### NOTE

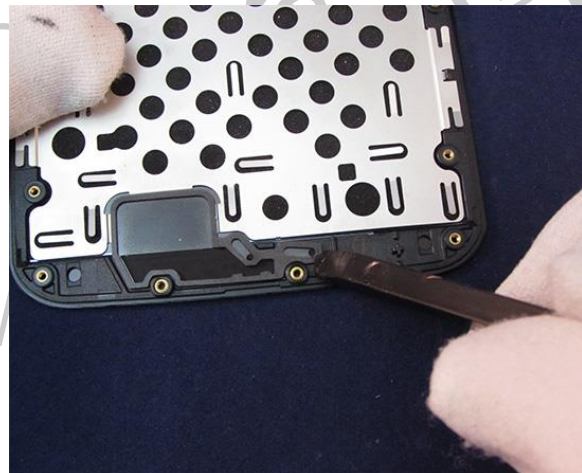
Remove the Earpiece Speaker Mesh only if it is damaged. After you remove the Earpiece Speaker Mesh, you cannot reuse it.



2. Use the Blackstick to pry the Loudspeaker Mesh free from the Front Housing.

### NOTE

Remove the Loudspeaker Mesh only if it is damaged. After you remove the Loudspeaker Mesh, you cannot reuse it.



### // CAUTION //

Do not remove the Audio Decos from the Front Housing. Audio Deco removal damages the Front Housing.

# PARTS REFRESH

## Tools Required for Parts Refresh

The following tools are required for parts refresh of the Nexus 6 phone.

Description	Part #	Image
PCB Processes Fixture	4-00-V3-10000	
Press	19501980	
Blackstick	--	
Rear Inlay Adhesive Alignment Fixture	4-00-X4-10000	
Tweezers (Plastic or Plastic-Tipped)	--	--
ESD Mat and Wrist Strap	--	--
Gloves or Finger Collets	--	--

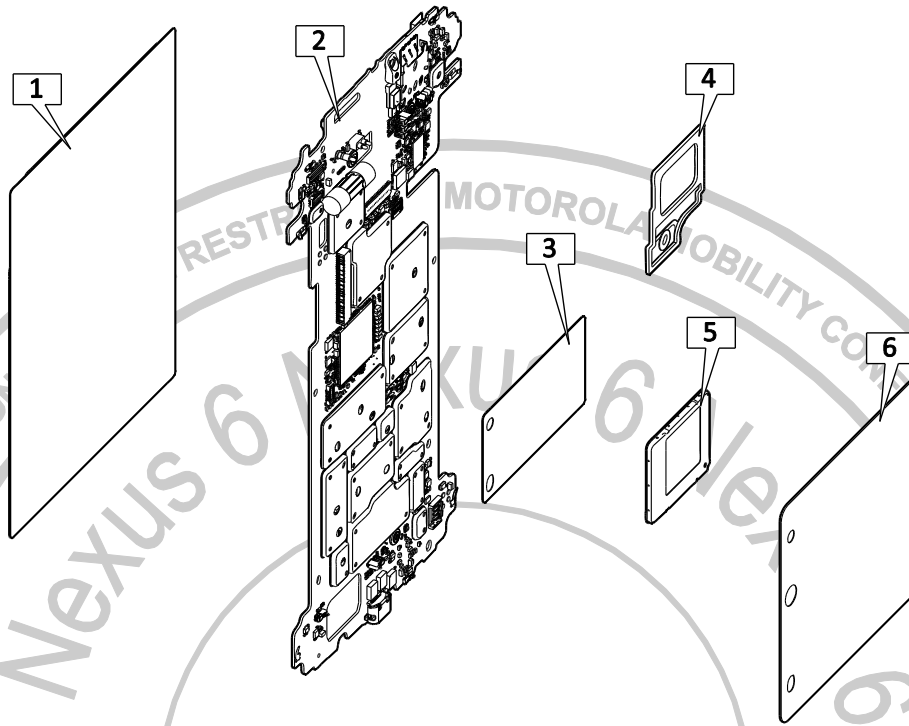
**Nexus 6**

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Description	Part #	Image
Isopropyl (ISP) Alcohol	--	--



## PCB Preparation

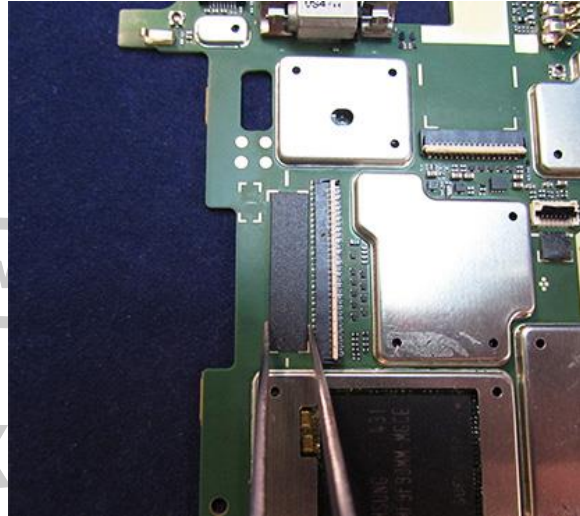


Description	Reference #
TAPE, TOP, THERMAL SPREADER, MAIN PCB	1
ASSEMBLY, PWA, XPLAY, 32GB, AMERICAS ASSEMBLY, PWA, XPLAY, 32GB, ROW	2
TAPE, COPPER, APQ, VALOCIA	3
SEAL, POLY, TOP	4
SHIELD, APQ CVR VALOCIA	5
HEAT SPREADER, MAIN PCB THERMAL, XPLAY	6
OVRLY, SHEET DISPLAY FLEX SHIM VALOCIA	N/A
DIE CUT, OVERLAY, SHEET TOUCH FLX SHIM, XPLAY	N/A
OVRLY, SHEET REAR CAMERA FLEX SHIM	N/A

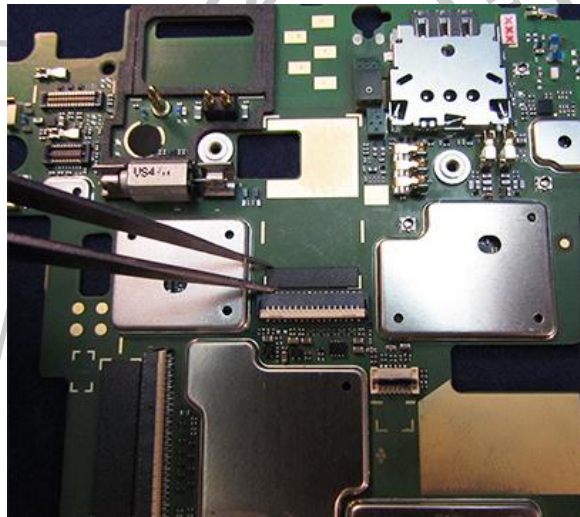
## Nexus 6

### Level 2 – Service and Repair Manual

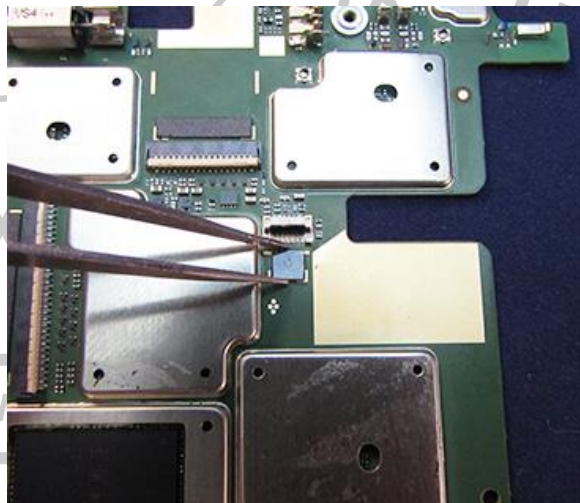
1. Use the Tweezers to place the Display Flex Shim. The Display Flex Shim aligns with the etched markings on the PCB.
2. Press down on the Display Flex Shim to secure it to the PCB.



3. Use the Tweezers to place the Rear-Facing Imager Shim. The Rear-Facing Imager Shim aligns with the etched markings on the PCB.
4. Press down on the Rear-Facing Imager Shim to secure it to the PCB.



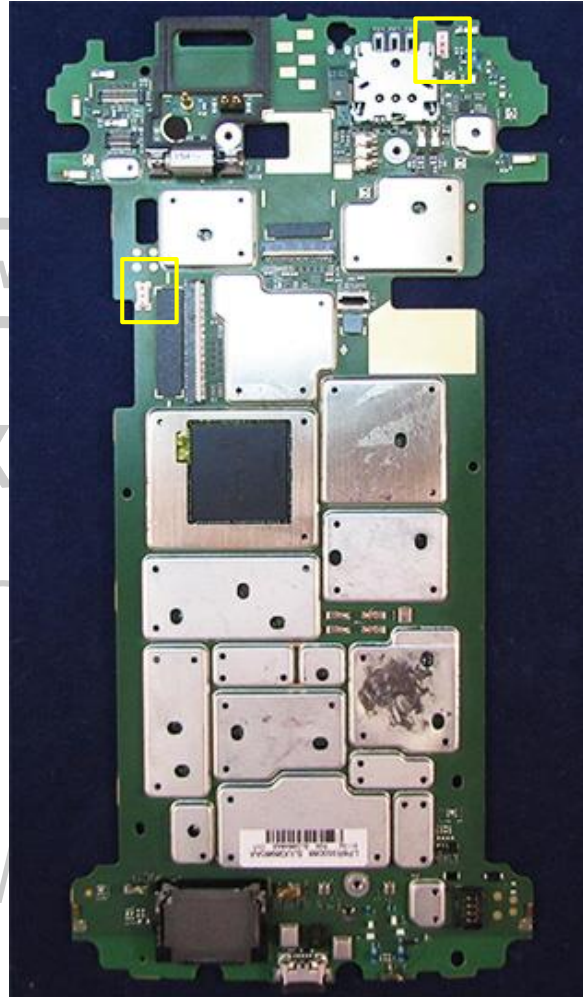
5. Use the Tweezers to place the Touch Flex Shim. The Touch Flex Shim aligns with the etched markings on the PCB.
6. Press down on the Touch Flex Shim to secure it to the PCB.



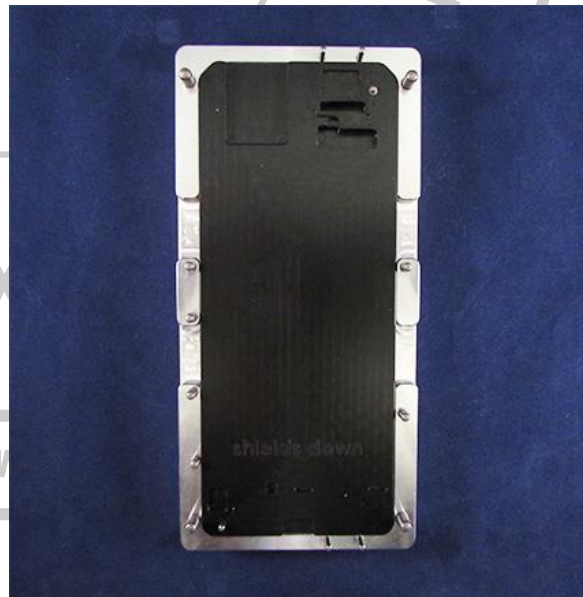
## Nexus 6

### Level 2 – Service and Repair Manual

7. Place the 2 WDLs on the PCB.



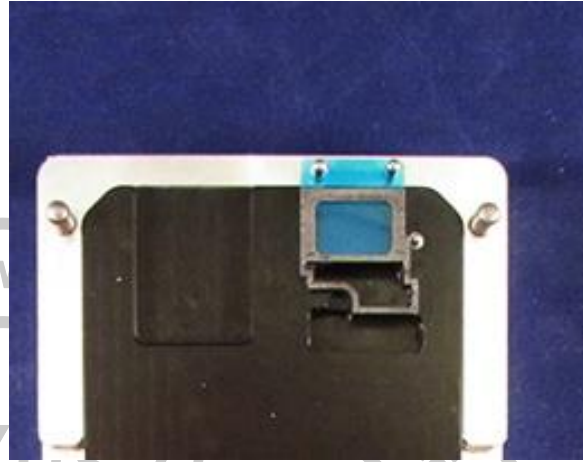
8. Set the PCB Processes Fixture nest (4-00-V3-10000) with the “shields down” side facing up.



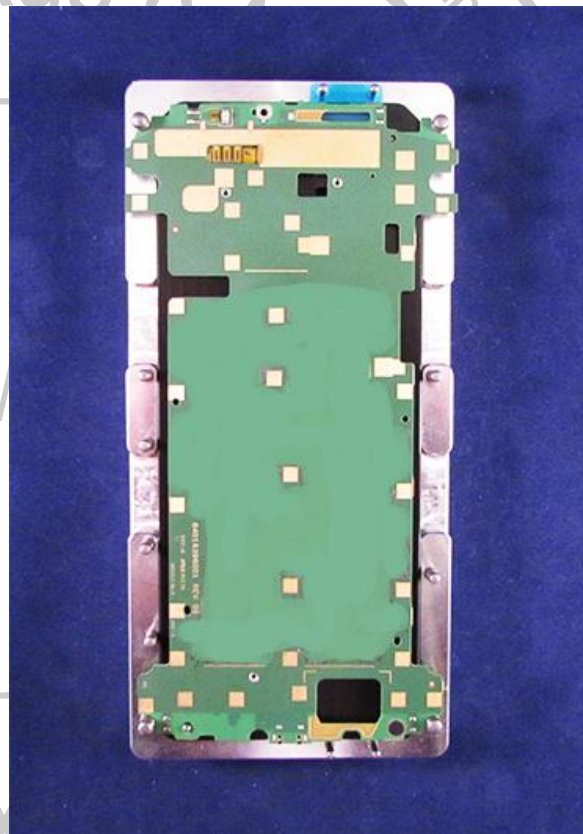
## Nexus 6

### Level 2 – Service and Repair Manual

9. Remove the Audio Gasket from the carrier.
10. Place the Audio Gasket over the alignment pins.



11. Place the PCB in the fixture nest with the shields facing down.
12. Press down on the PCB to secure the Audio Gasket.

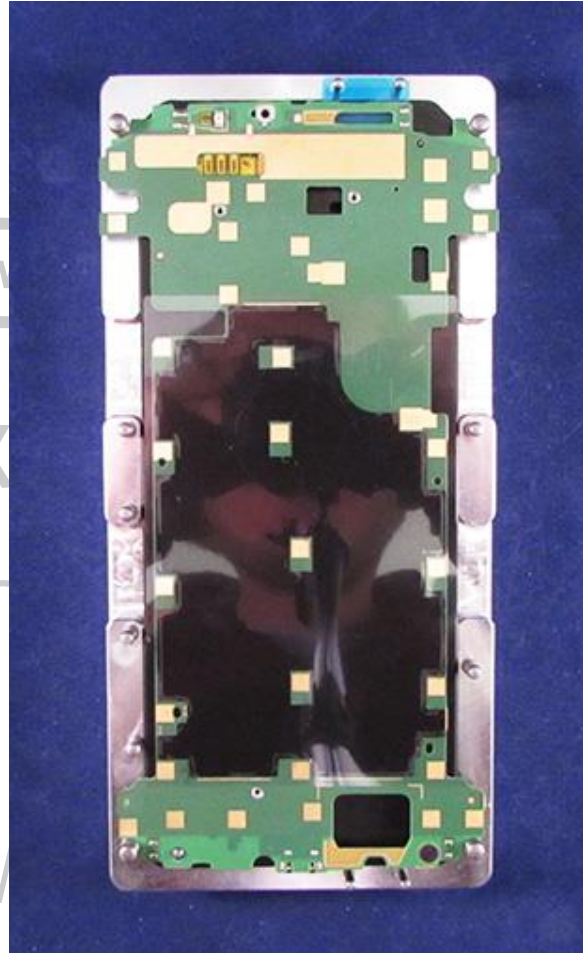




## Nexus 6

### Level 2 – Service and Repair Manual

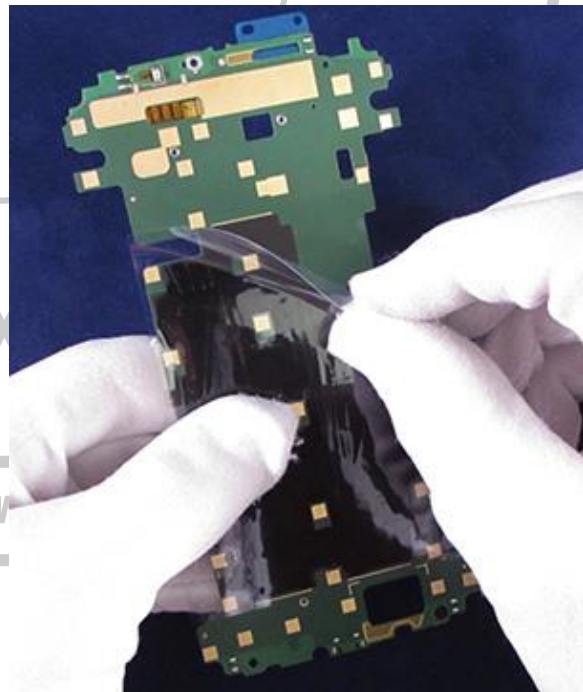
13. Remove the 2 part adhesive liner on the Bottom Thermal Spreader.
14. Place the Bottom Thermal Spreader over the alignment pins.
15. Press down on the Bottom Thermal Spreader to secure it to the PCB.



16. Remove the PCB from the fixture nest.
17. Remove the liner from the Bottom Thermal Spreader.

#### NOTE

The Bottom Thermal Spreader liner must be removed to perform the remaining steps.



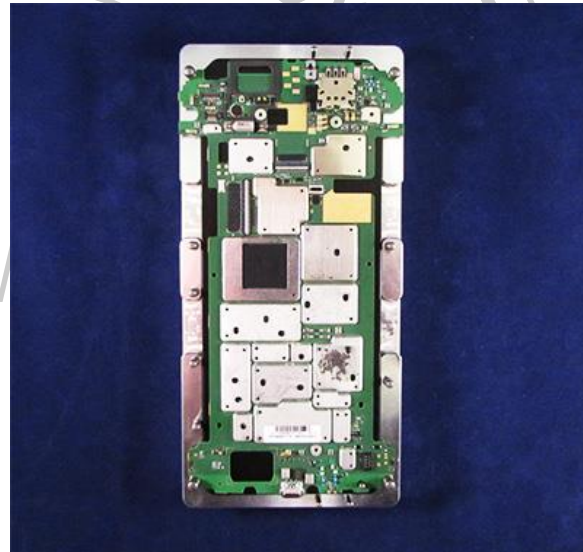
## Nexus 6

### Level 2 – Service and Repair Manual

18. Set the PCB Processes Fixture nest with the “shields up” side facing up.



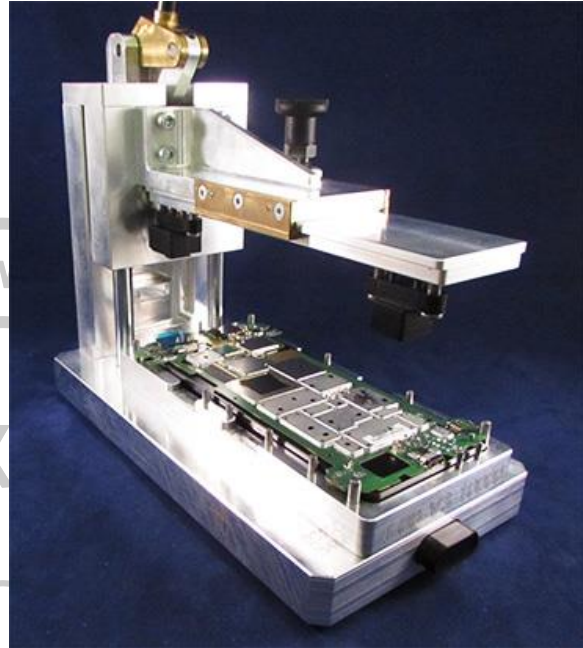
19. Place the PCB in the fixture nest with the shields facing up.



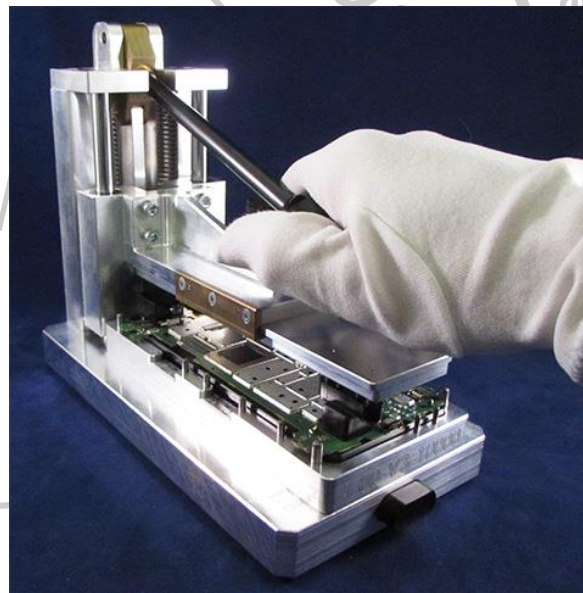
## Nexus 6

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20. Place the PCB Processes Fixture nest in the press.
21. Insert the Audio Gasket press tool in the press head.



22. Press the Audio Gasket for 10 seconds to secure it to the PCB.

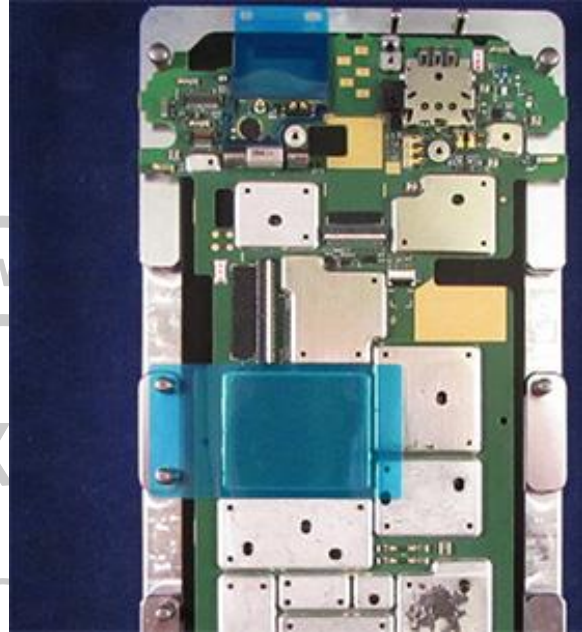


23. Remove the PCB Processes Fixture nest from the press.

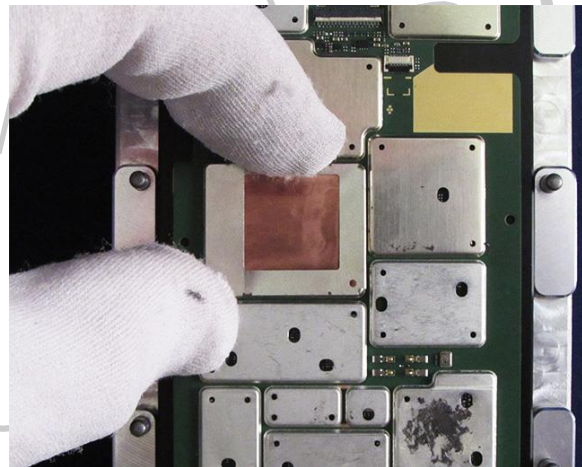
## Nexus 6

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24. Remove the Copper Tape from the carrier.
25. Place the Copper Tape over the alignment pins.
26. Press down on the Copper Tape to secure it to the PCB and to remove any air bubbles.



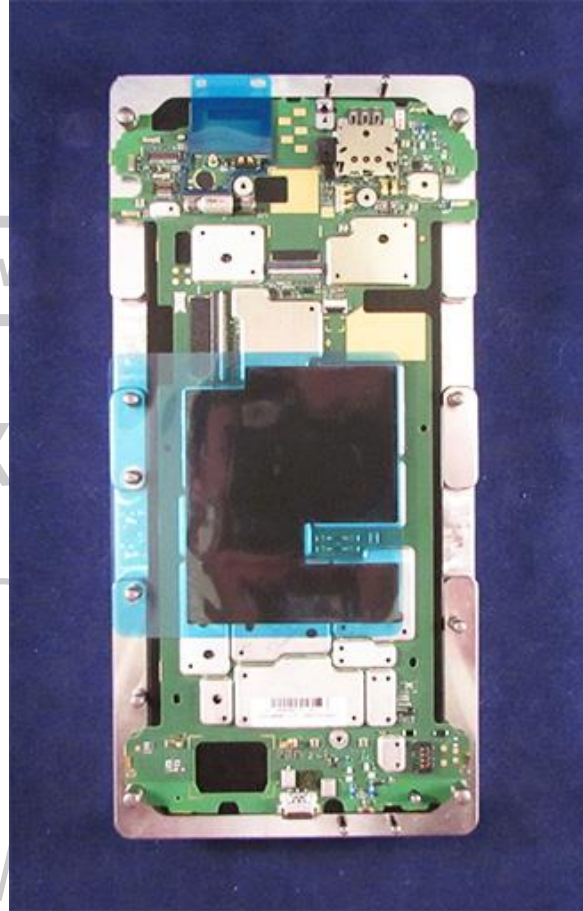
27. Remove the Copper Tape liner.
28. Attach the Shield Cover to the PCB. Orient the hole on the Shield Cover as shown.



## Nexus 6

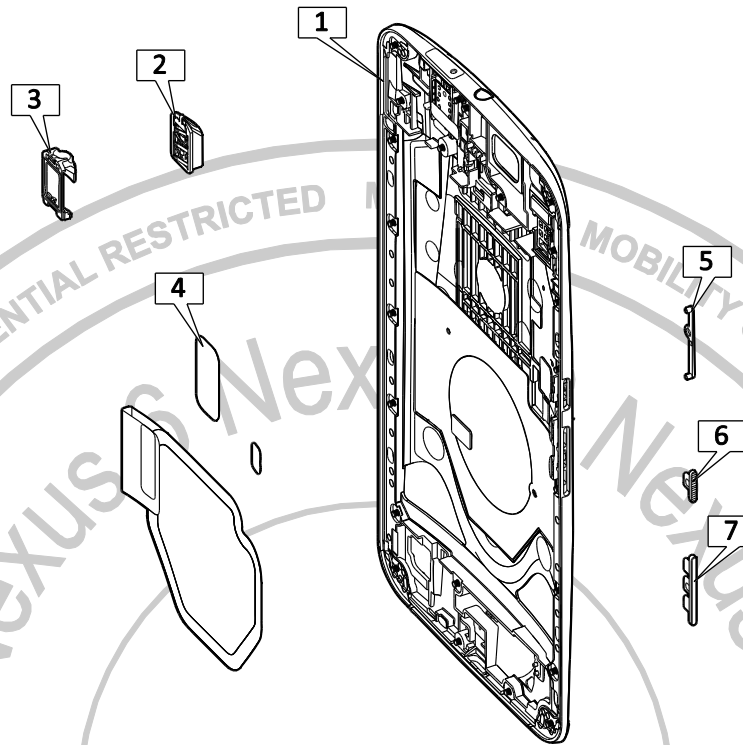
### Level 2 – Service and Repair Manual

29. Remove the 2 part adhesive liner from the Top Thermal Spreader.
30. Place the Top Thermal Spreader over the alignment pins.
31. Press down on the Top Thermal Spreader to secure it to the PCB and to remove any air bubbles.



32. Remove the upper Liner from the Top Thermal Spreader.
33. Remove the PCB from the PCB Processes Fixture nest.

## Rear Housing Preparation

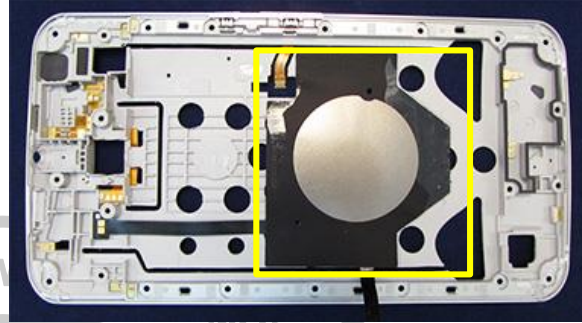


Description	Reference #
ASSEMBLY,SUB,INNER REAR HOUSING,DARK,X+1	1
ASSEMBLY,SUB,INNER REAR HOUSING,LIGHT,X+1	1
CONN,JACK,HEADSET,3.5 MM DIA	2
GROMMET,HSJ,X+1	3
DIE CUT,ADHESIVE,BATTERY,XPLAY	4
SUPPRRT,METAL,HOLDER, VOLUME,KEY,X+1	5
POWER KEY,DARK,XPLAY	6
POWER KEY,LIGHT,XPLAY	6
KEY,VOLUME,DARK,XPLAY	7
KEY,VOLUME,LIGHT,XPLAY	7

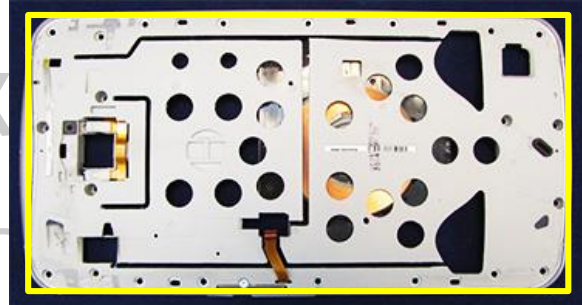
## Nexus 6

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1. Use the Blackstick and ISP Alcohol to clean any remaining adhesive in the Battery pocket.



2. Use the Blackstick and ISP Alcohol to clean any remaining adhesive left by the Rear Inlay.



3. Remove the adhesive liner from the Battery Adhesive.
4. Align the Battery Adhesive in the Rear Housing as shown.
5. Press down on the Battery Adhesive to secure it to the Rear Housing.
6. Wrap the Headset Jack Grommet around the Headset Jack.



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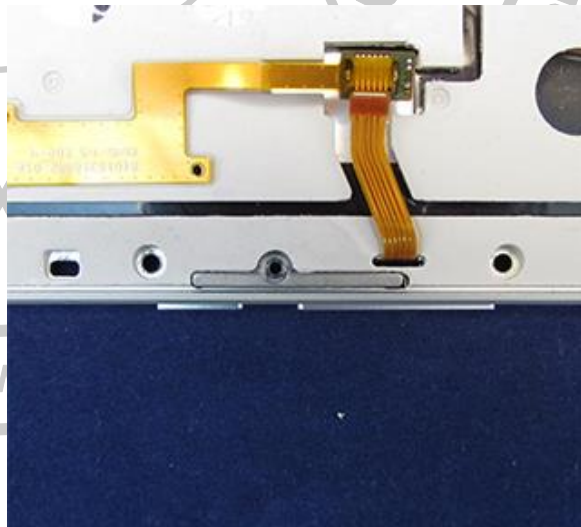
7. Press the Headset Jack assembly into position. Verify the grommet does not slip out of position.



8. Place the Power Key and Volume Key into the pockets on the side of the Rear Housing. There are no orientation requirements.



9. Place the Side Key Retention Bracket into the pocket in the Rear Housing. Do not let the Power Key or Volume Key slip from their position.

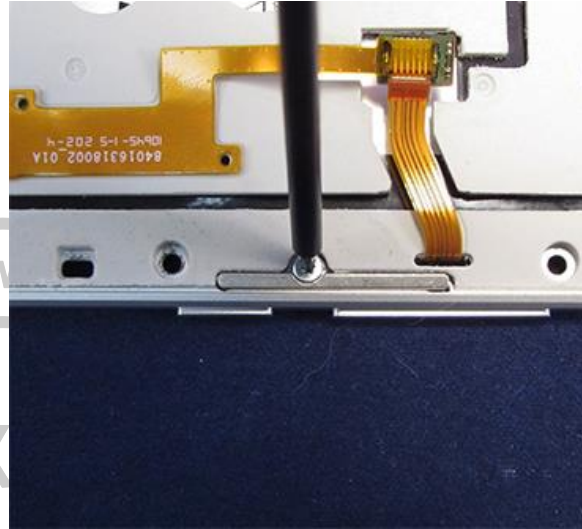




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10. Tighten the 3IP Screw to 1.0 in-lbs (0.11N-m) to secure the Side Key Retention Bracket.
11. Test the tactile feedback of the Power Key and Volume Key.



## Battery Preparation

### /// WARNING ///

Failure to adhere to Safety Critical Note(s) may increase risk of rupture, burning, or failure to function safely when used by the customer. Refer to the Battery Safety Guidelines.

### // CAUTION //

Handle the Battery Pack with care. If dropped to the floor, it may be internally damaged and must be scrapped.

Ensure Battery and its insulation are not damaged (e.g. scratched, dented, punctured) prior to and throughout assembly.

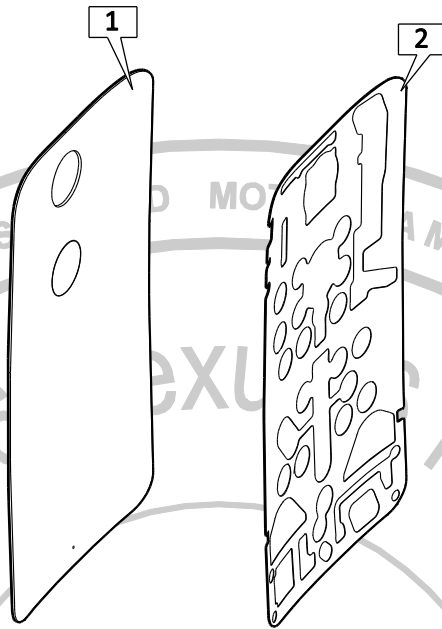
Prior to assembly, ensure Battery edges and surfaces are not dented or deformed, and that fixtures and parts that will contact the Battery are free of foreign material.

Ensure screws and screwdrivers do not contact the Battery.

1. Use the Blackstick and ISP Alcohol to remove any adhesive residue from the Battery.
2. Inspect the Battery to verify it is not creased, crushed, or punctured.
3. If the Battery foil pack is wrinkled, slide the flat edge of the Blackstick against the foil pack to smooth out all wrinkles.



## Rear Inlay Preparation



Description	Reference #
ASSEMBLY,HOUSING,REAR,INLAY,RESIN,INK HOUSING,REAR,INLAY,RESIN,DECORATED,RASPBERRY ASSEMBLY,HOUSING,REAR INLAY,RESIN,CHALK	1
DIE CUT, ADHESIVE, REAR INLAY, BORDER, XPLAY	2

1. Apply ISP Alcohol to the Rear Inlay Adhesive.
2. Wait 1-2 minutes for the alcohol to loosen the adhesive from the Rear Inlay.

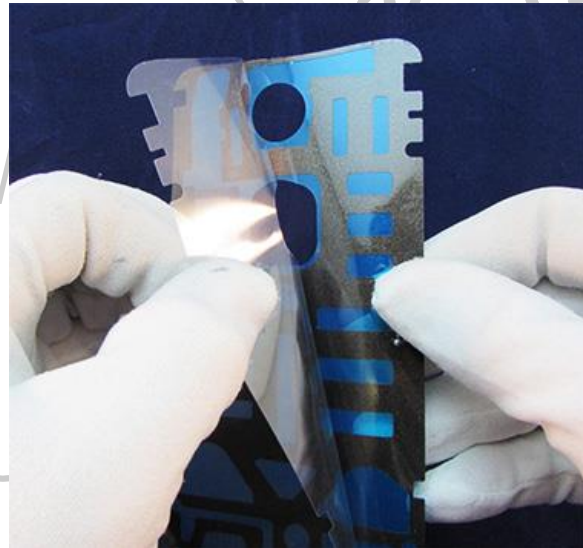
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3. Use the Blackstick and ISP Alcohol to clean any remaining adhesive on the Rear Inlay.



4. Remove the liner from the Rear Inlay Adhesive.



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5. Place the Rear Inlay Adhesive in the Rear Inlay Adhesive Alignment Fixture (4-00-X4-10000) with the adhesive facing up.



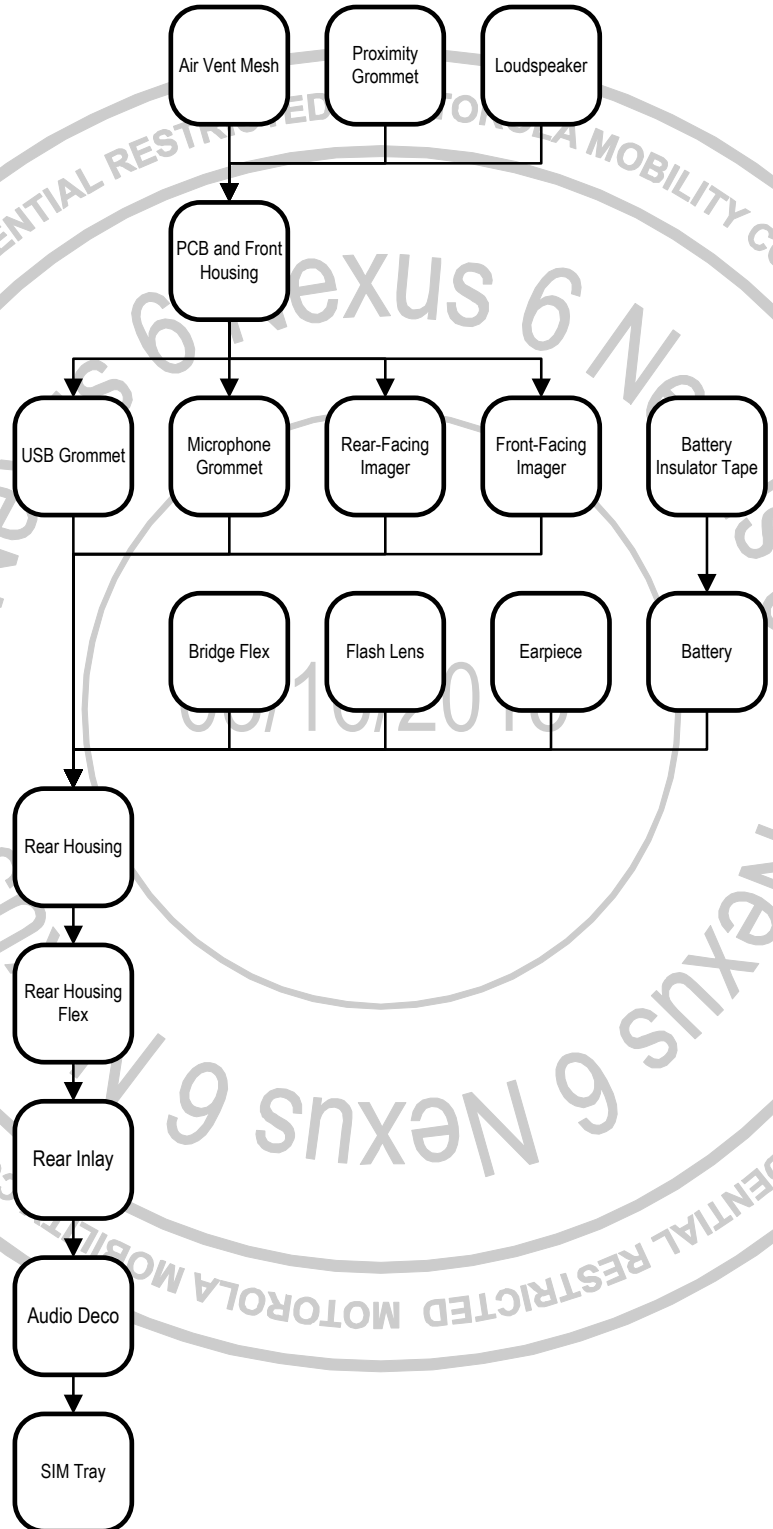
6. Place the Rear Inlay in the fixture.
7. Press down on the Rear Inlay to secure it to the Rear Inlay Adhesive.



8. Remove the Rear Inlay from the fixture.

# ASSEMBLY

## Assembly Map




## Tools Required for Assembly

The following tools are required to assemble the Nexus 6 phone.

Description	Part #	Picture / Drawing
PCB Processes Fixture	4-00-V3-10000	
Front Facing Imager Dust Gasket	4-00-R8-10000	--
Rear Housing Prep Fixture	4-00-V4-10000	
Press	19501980	
Audio Deco Press	4-00-T9-10000	
Blackstick	--	
3IP Torx Bit	--	

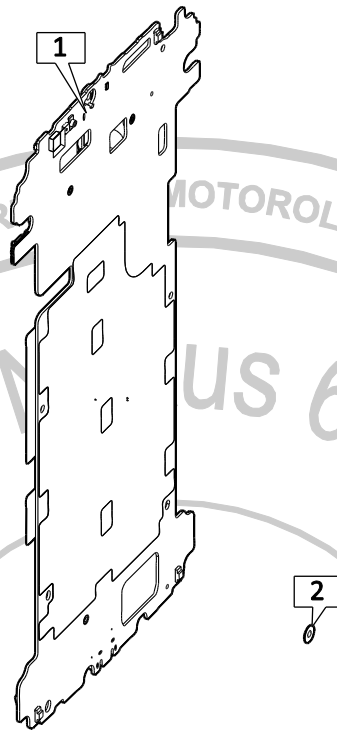
**Nexus 6**

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<i>Description</i>	<i>Part #</i>	<i>Picture / Drawing</i>
Torque Driver (Adjustable)	--	
Tweezers (Plastic or Plastic-Tipped)	--	--
ESD Mat and Wrist Strap	--	--
Gloves or Finger Collets	--	--
Isopropyl (ISP) Alcohol	--	--
Cotton Swabs	--	--
3M AP111 Surface Promoter	--	--

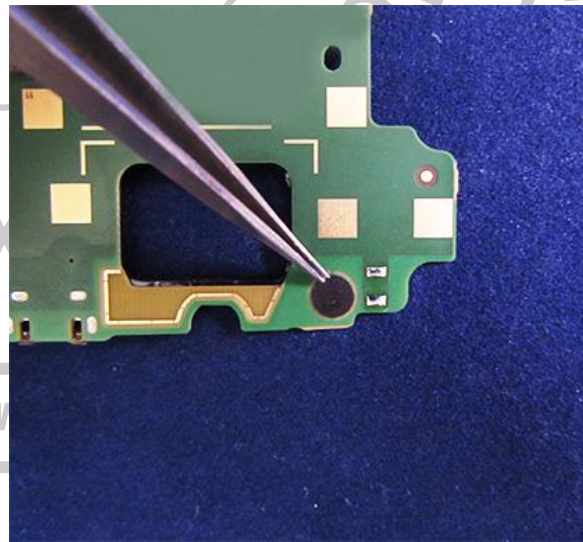


## Air Vent Mesh Assembly

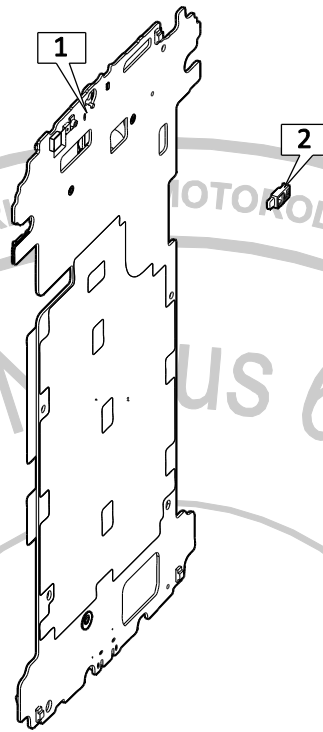


Description	Reference #
ASSEMBLY,PWA,XPLAY,32GB,AMERICAS ASSEMBLY,PWA,XPLAY,32GB,ROW	1
SCREEN,PCB VENT	2

1. Remove the Air Vent Mesh from the carrier.
2. Place the Air Vent Mesh on the PCB. The Air Vent Mesh aligns with the etched marking on the PCB.
3. Press down on the Air Vent Mesh to secure the adhesive to the PCB.



## Proximity Grommet Assembly

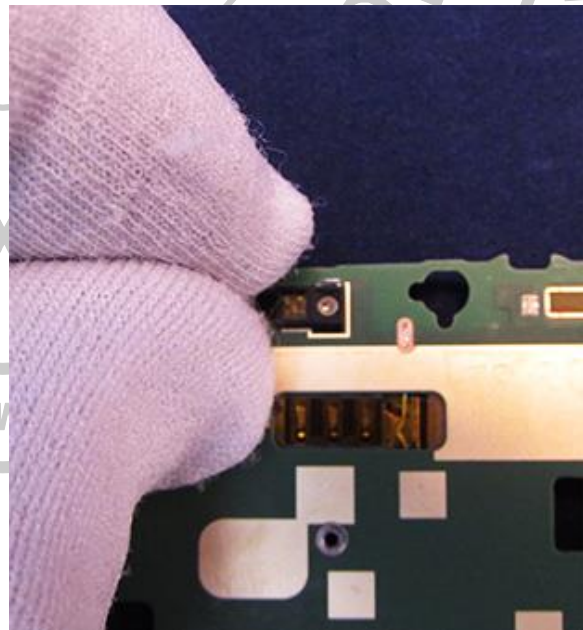


Description	Reference #
ASSEMBLY,PWA,XPLAY,32GB,AMERICAS ASSEMBLY,PWA,XPLAY,32GB,ROW	1
GROMMET,PROXIMITY,XPLAY	2

1. Remove the Proximity Grommet from the carrier.
2. Apply the Proximity Grommet to the PCB by placing the grommet over the circular component and rolling the grommet around the other components.

### // CAUTION //

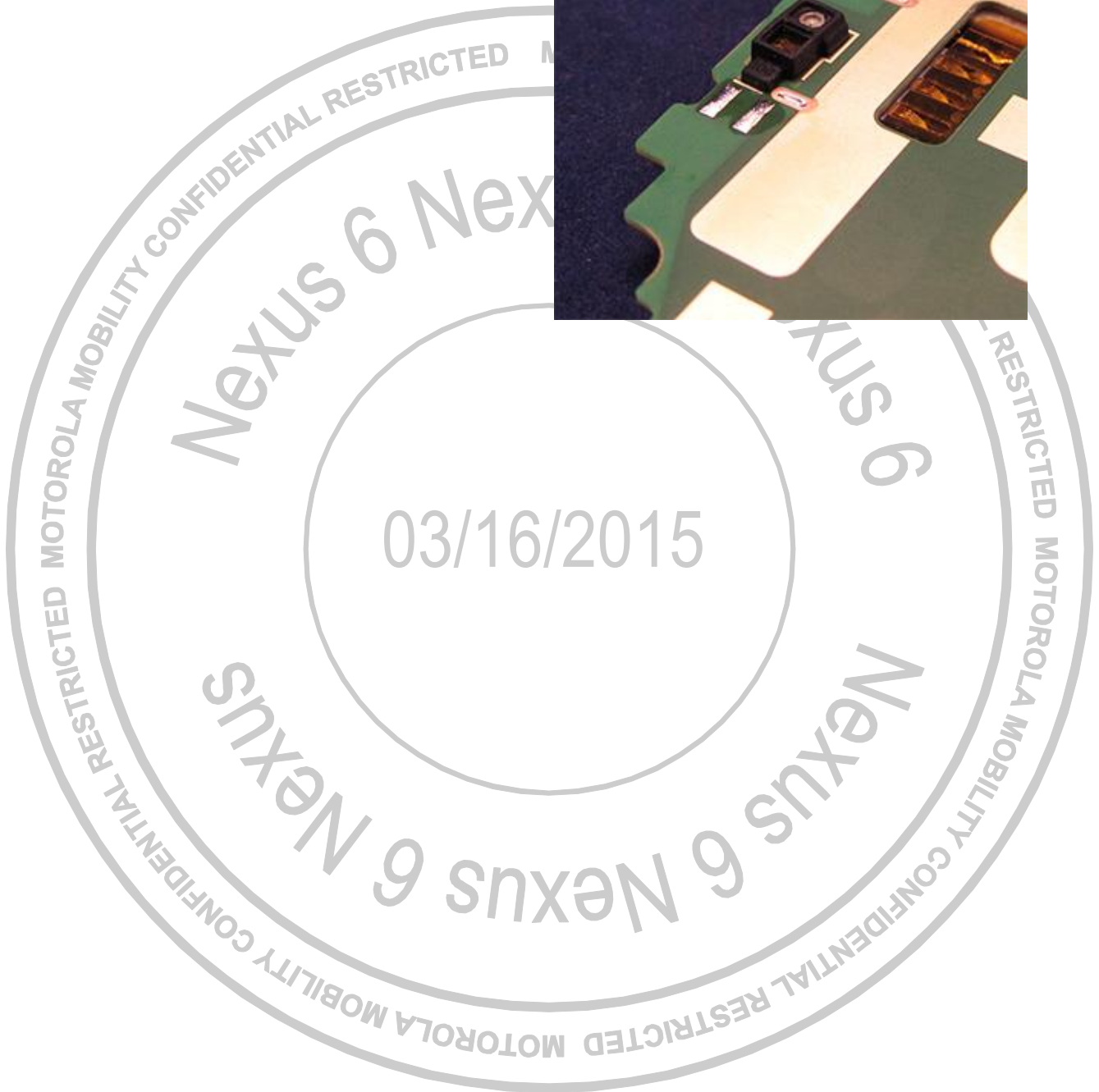
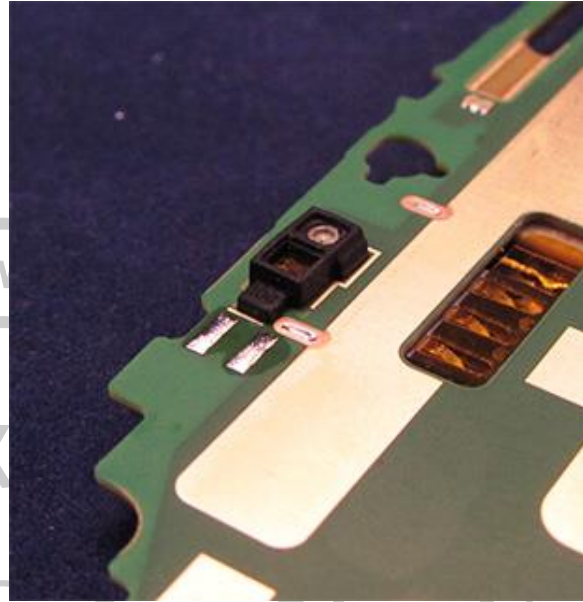
Verify that the Proximity Grommet is correctly oriented and does not obstruct the sensor.



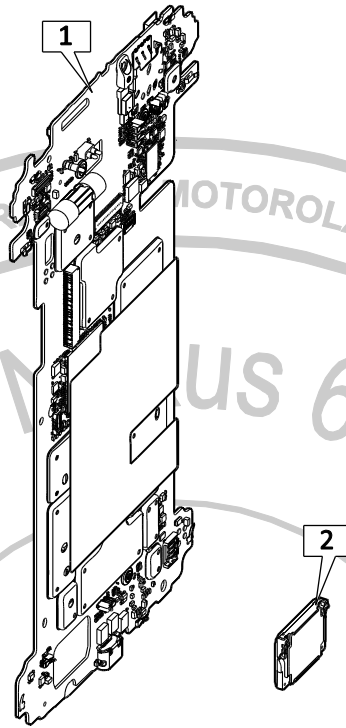
## Nexus 6

### Level 2 – Service and Repair Manual

3. Verify the Proximity Grommet is fully adhered to the PCB.
4. Press down on the Proximity Grommet to secure the adhesive to the PCB.



## Loudspeaker Assembly



Description	Reference #
ASSEMBLY,PWA,XPLAY,32GB,AMERICAS ASSEMBLY,PWA,XPLAY,32GB,ROW	1
TRANSDUCER,OTHR,2.2V,AAC W/ ADHES W/ LINER	2

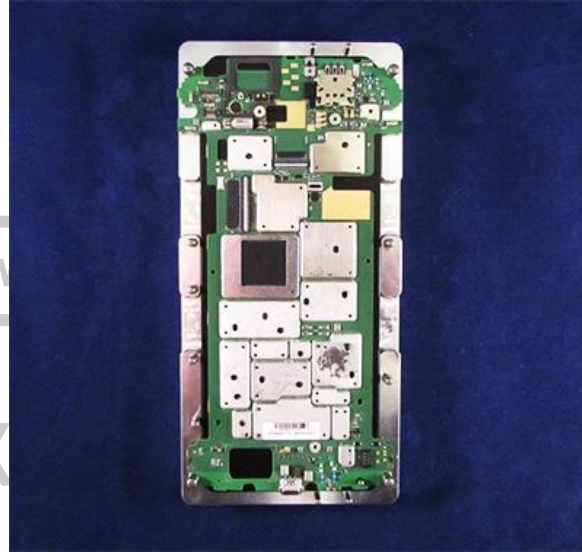
1. Set the PCB Processes Fixture nest (4-00-V3-10000) with the “shields up” side facing up.



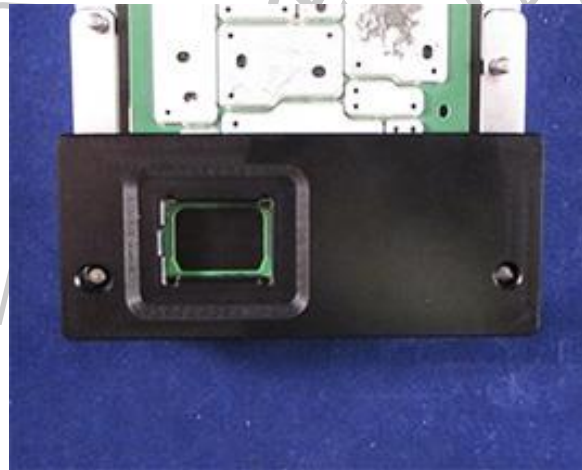
## Nexus 6

### Level 2 – Service and Repair Manual

2. Place the PCB in the fixture nest with the shields facing up.



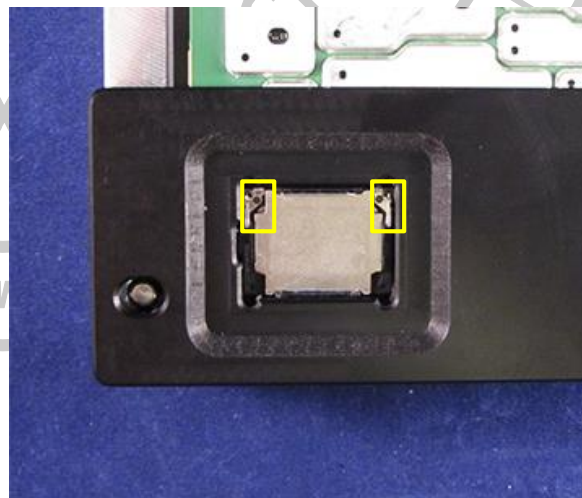
3. Place the locating tool over the alignment pins and the PCB.



4. Remove the adhesive liner from the Loudspeaker.

5. Place the Loudspeaker in the locating tool as shown.

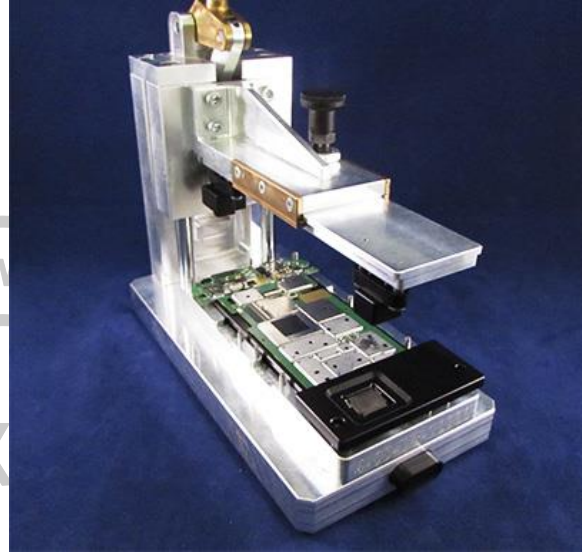
6. Press down on the Loudspeaker to secure it to the PCB.



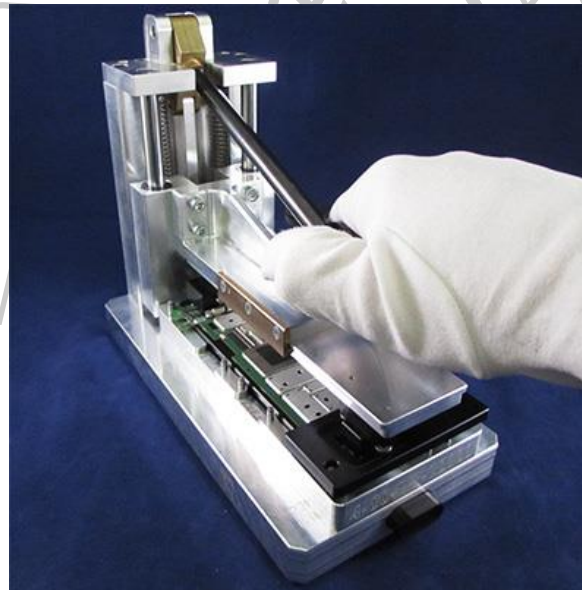
## Nexus 6

### Level 2 – Service and Repair Manual

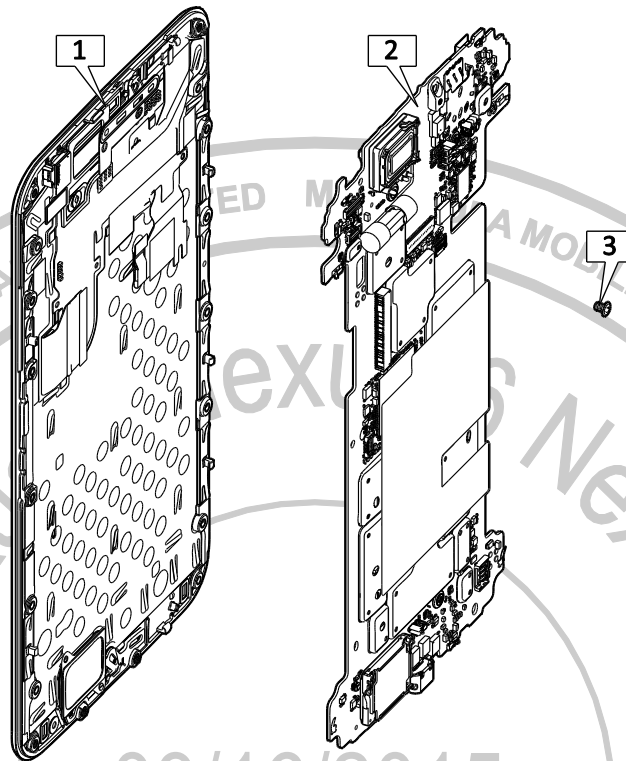
7. Place the PCB Processes Fixture nest in the press.
8. Insert the Loudspeaker press tool in the press head.



9. Press the Loudspeaker for 10 seconds to secure it to the PCB.



## PCB and Front Housing Assembly

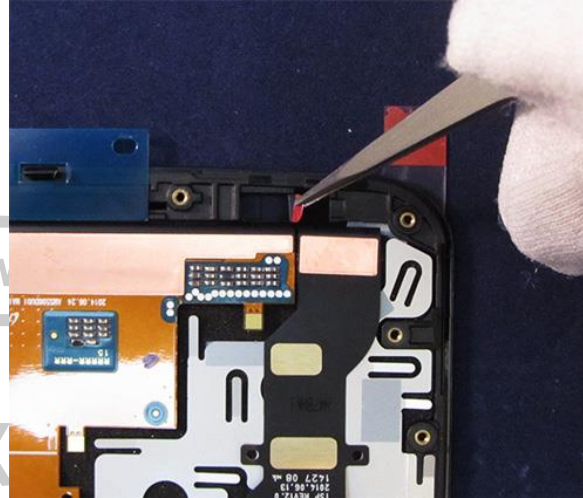


Description	Reference #
ASSEMBLY,HSG,FRNT,LENS,XPLAY,BLACK,B ASSY,HSG,FRNT,LENS,XPLAY,BLACK,SZ ASSY,HSG,FRNT,LENS,XPLAY,MP	1
ASSEMBLY,PWA,XPLAY,32GB,AMERICAS ASSEMBLY,PWA,XPLAY,32GB,ROW	2
SCREW,M1.4,ENDO,X+1	3
DIE CUT,KAPTON, UNIVERSAL, 19 X 3.0	N/A
DIE CUT,KAPTON, UNIVERSAL, 5 X 3	N/A

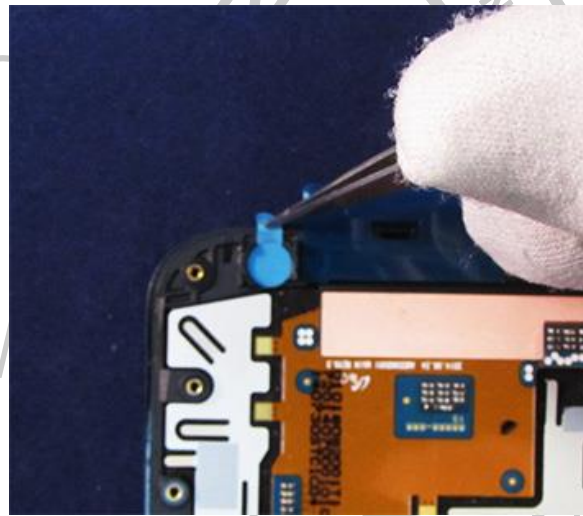
## Nexus 6

### Level 2 – Service and Repair Manual

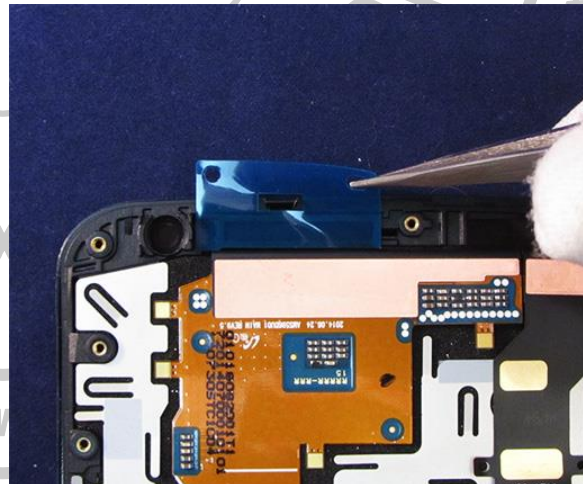
1. Remove the Proximity Viewport Liner from the Front Housing if present.



2. Remove the Front-Facing Imager liner from the Front Housing if present.



3. Remove the Earpiece and Poly Speaker Protective Liners if present.





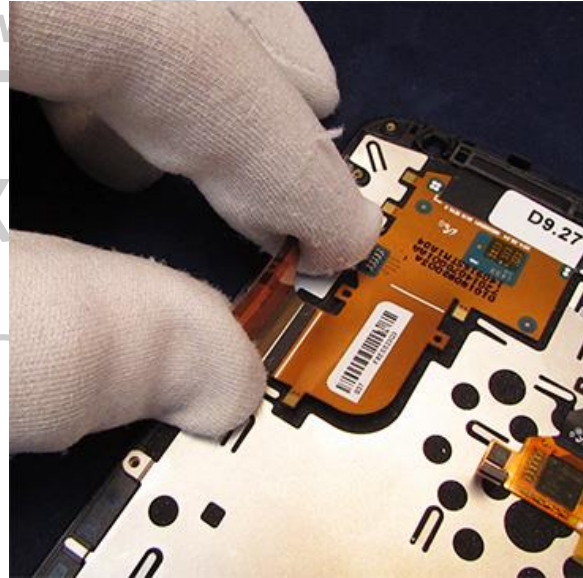
## Nexus 6

### Level 2 – Service and Repair Manual

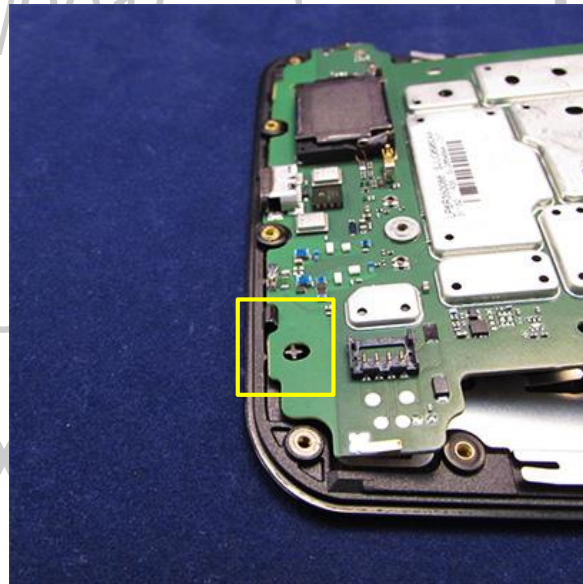
4. Remove the tape pieces holding the Grounding Plate, Display Flex, and Touch Flex in place if present.
5. Remove the Acoustic adhesive liners if present.
6. Remove the 3 screw boss liners if present.
7. Fold the end of the Display Flex to a vertical position.

#### // CAUTION //

To avoid damaging the Display Flex, fold only the end of the flex.



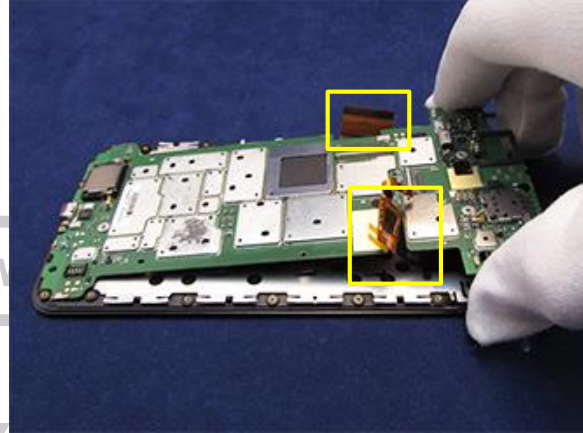
8. Insert the bottom edge of the PCB into the Front Housing at an angle, sliding it under the hook feature.



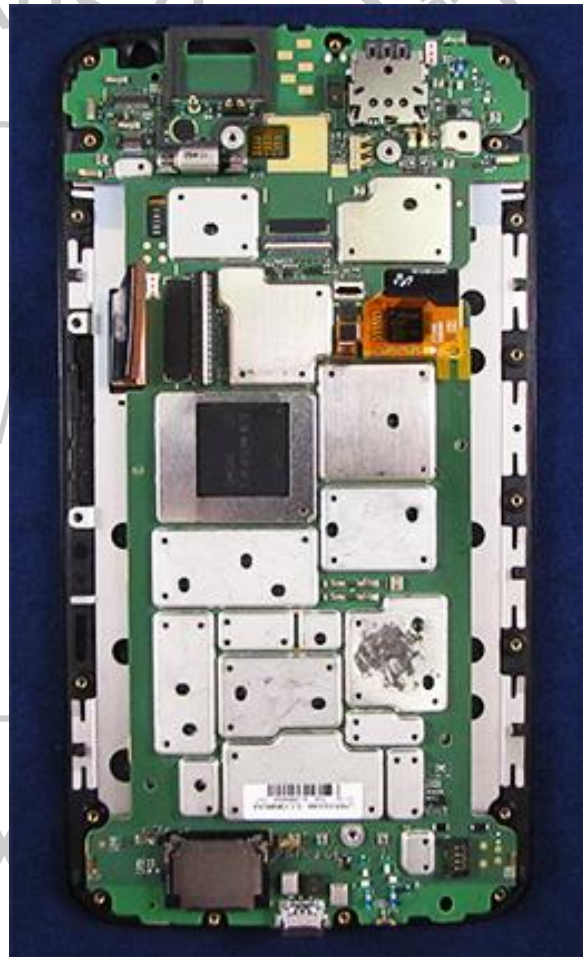
## Nexus 6

### Level 2 – Service and Repair Manual

9. Verify the Display Flex is not caught under the PCB.
10. Route the Touch Flex through the cutout in the PCB.



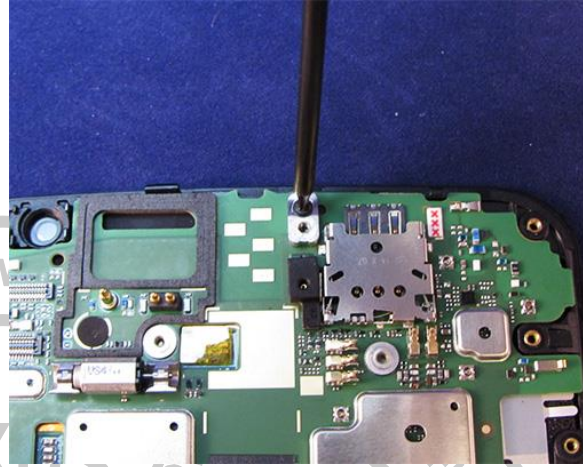
11. Lower the PCB into the Front Housing. The PCB aligns with the screw bosses and the bottom snap feature engages.



## Nexus 6

### Level 2 – Service and Repair Manual

12. Tighten the 3IP Screw to 1.0 in-lbs (0.11N-m).



13. Verify the Display Flex ZIF Connector Door is open.

#### // CAUTION //

If the ZIF Connector Door is closed, the ZIF Connector may be damaged.

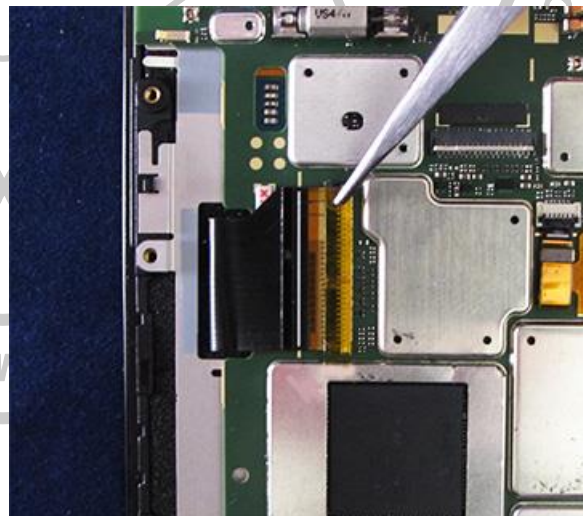
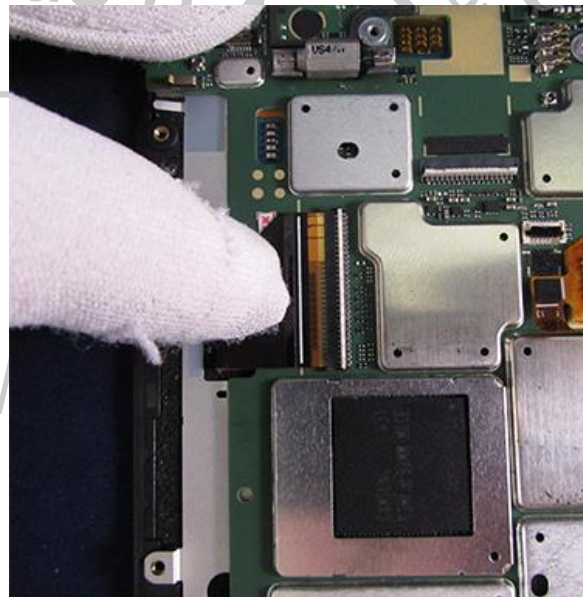
14. Insert the Display Flex into the Display Flex ZIF Connector.

#### // CAUTION //

The white line on the Display Flex must align with the etched line on the PCB.

15. Slide a fingertip across the ZIF Connector Door to close it.

16. Place Kapton Tape over the Display Flex ZIF Connector Door.



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### Level 2 – Service and Repair Manual

17. Verify the Touch Flex ZIF Connector Door is open.

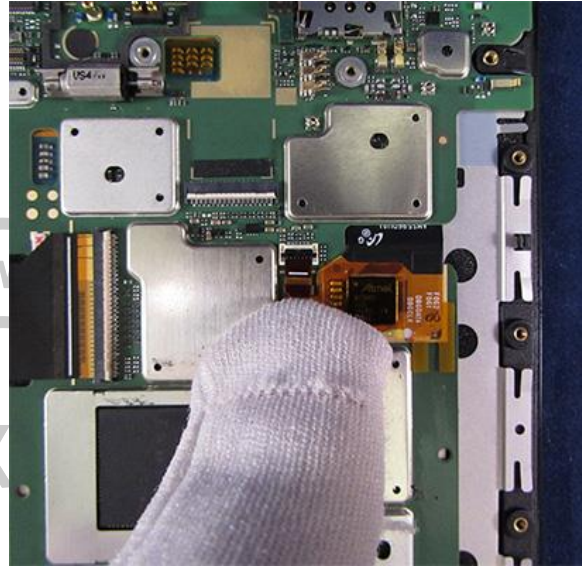
#### // CAUTION //

If the ZIF Connector Door is closed, the ZIF Connector may be damaged.

18. Insert the Touch Flex into the Touch Flex ZIF Connector.

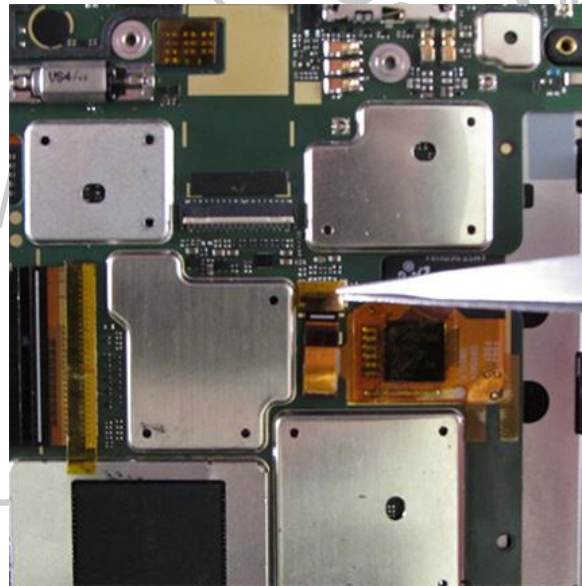
#### // CAUTION //

The white line on the Touch Flex must align with the etched line on the PCB.



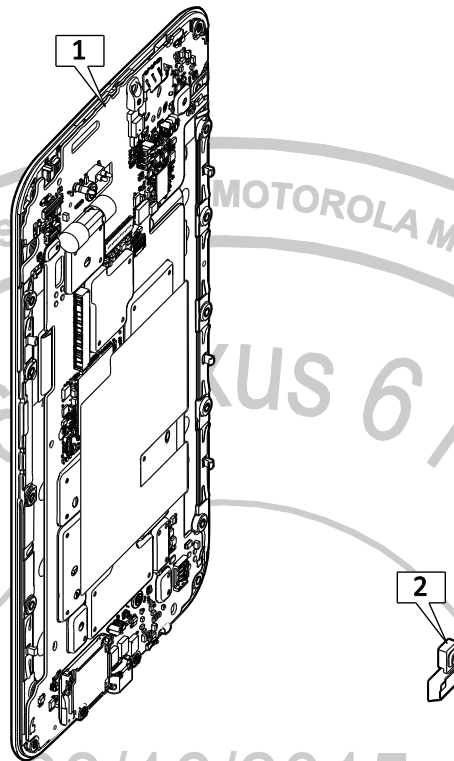
19. Slide a fingertip across the ZIF Connector Door to close it.

20. Place Kapton Tape over the Touch Flex ZIF Connector Door.



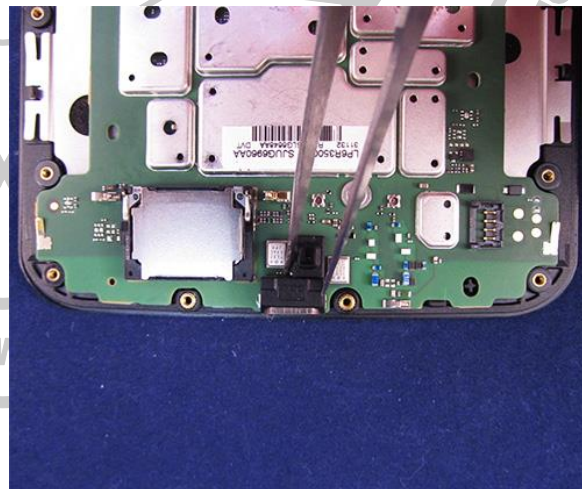
21. Remove the adhesive liner from the Touch Flex if present.
22. Press the Touch Flex down onto the gold pad on the PCB to secure the adhesive.

## USB Grommet Assembly



Description	Reference #
ASSEMBLY,HSG,FRNT,LENS,XPLAY,BLACK,B ASSY,HSG,FRNT,LENS,XPLAY,BLACK,SZ ASSY,HSG,FRNT,LENS,XPLAY,MP	1
GROMMET,UUSB,VALOCIA	2

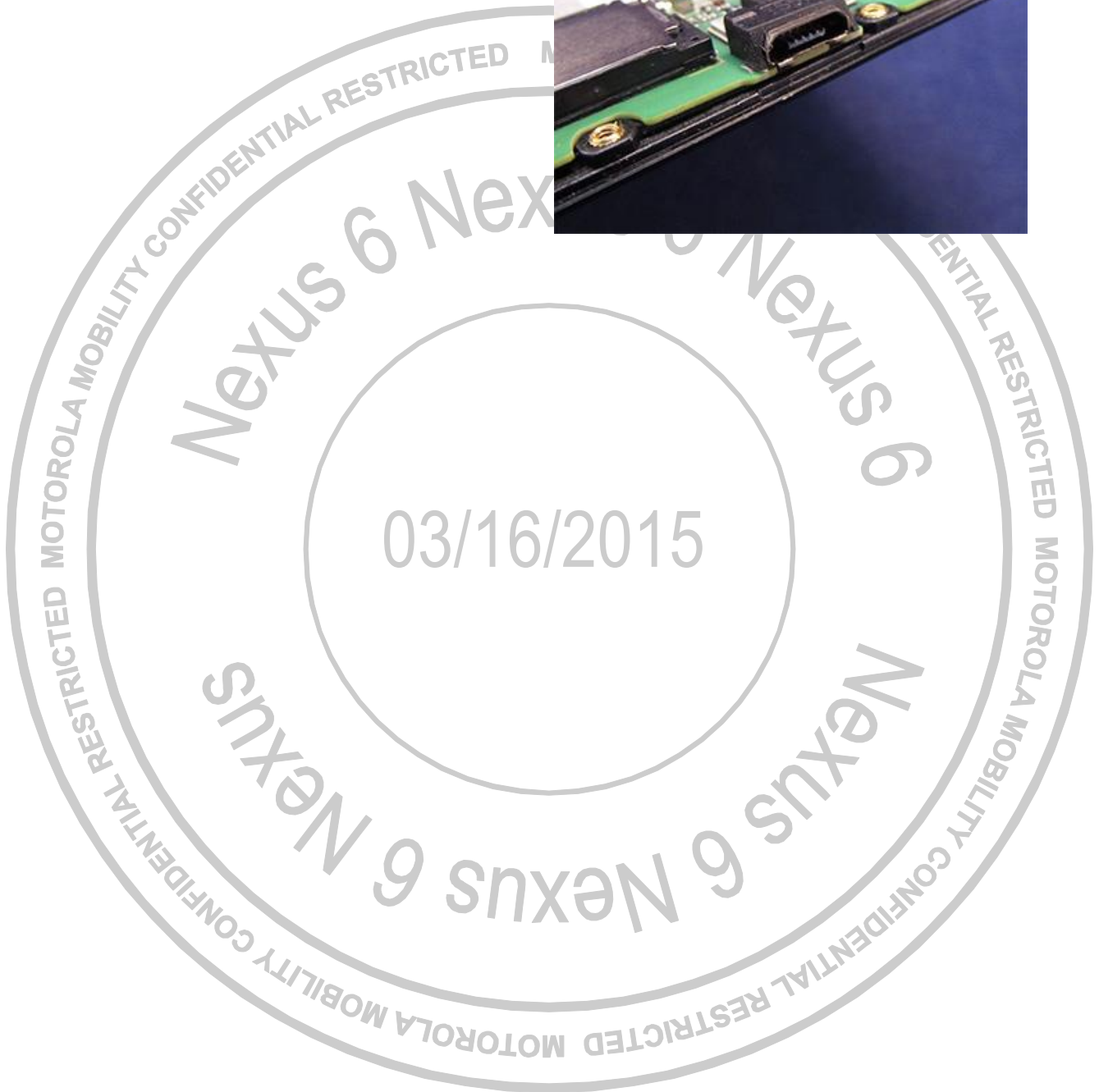
1. Seat the USB Grommet over the microphone, then roll the grommet over the USB Connector.



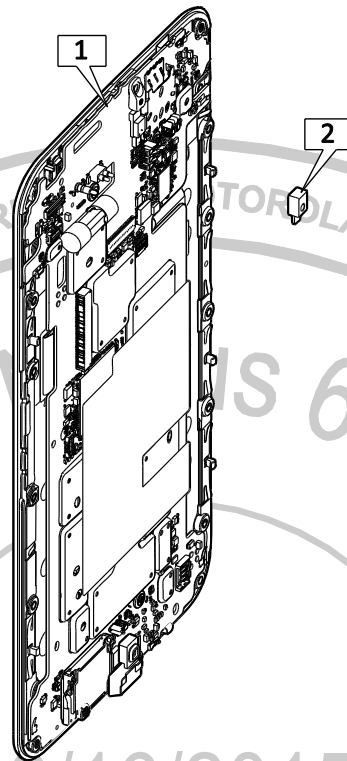
## Nexus 6

### Level 2 – Service and Repair Manual

2. Press the USB Grommet firmly to secure it.
3. Position the bottom rib of the USB Grommet along the edge of the PCB.

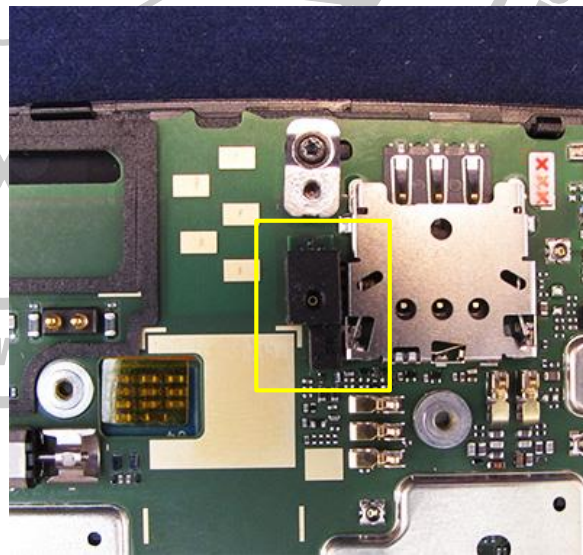


## Microphone Grommet Assembly

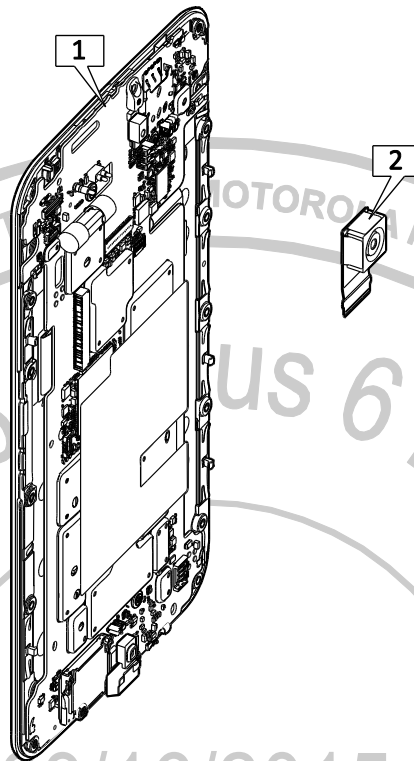


Description	Reference #
ASSEMBLY,HSG,FRNT,LENS,XPLAY,BLACK,B ASSY,HSG,FRNT,LENS,XPLAY,BLACK,SZ ASSY,HSG,FRNT,LENS,XPLAY,MP	1
GROMMET,MIC-2	2

1. Apply the 2<sup>nd</sup> Microphone Grommet to the 2<sup>nd</sup> Microphone. Verify the orientation is correct.
2. Press the 2<sup>nd</sup> Microphone Grommet to secure it to the PCB.



## Rear-Facing Imager Assembly



Description	Reference #
ASSEMBLY,HSG,FRNT,LENS,XPLAY,BLACK,B ASSY,HSG,FRNT,LENS,XPLAY,BLACK,SZ ASSY,HSG,FRNT,LENS,XPLAY,MP	1
ASSEMBLY,13MP OIS CAMERA	2

1. Verify that the Rear-Facing Imager ZIF Connector Door is open.

**// CAUTION //**

If the ZIF Connector Door is closed, the ZIF Connector may be damaged.



## Nexus 6

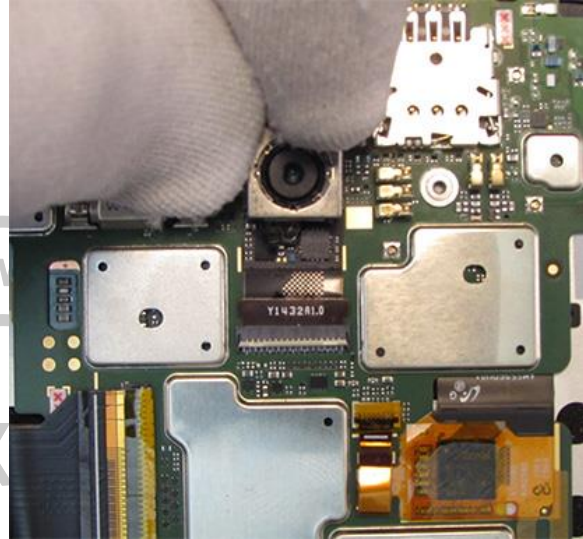
### Level 2 – Service and Repair Manual

2. Insert the Rear-Facing Imager flex into the Rear-Facing Imager ZIF Connector. Use the white line as a guide for insertion depth.

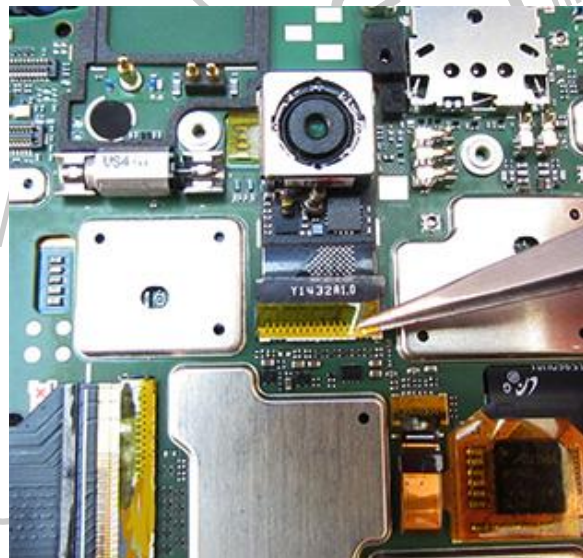
#### // CAUTION //

The white line on the Rear-Facing Imager Flex must be parallel to and fully inserted into the ZIF Connector.

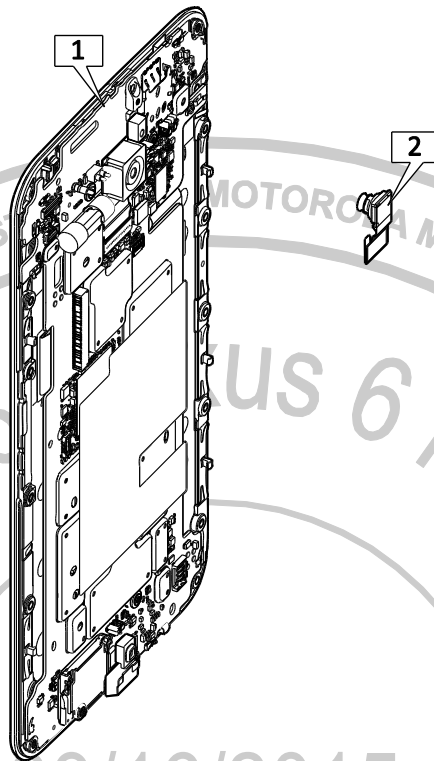
3. Slide a fingertip across the ZIF Connector Door to close it.



4. Remove the Rear-Facing Imager Liner if present.
5. Place Kapton Tape over the Rear-Facing Imager ZIF Connector Door.

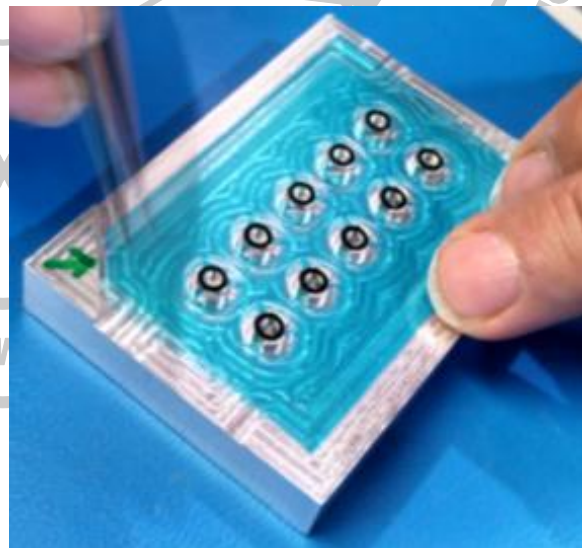


## Front-Facing Imager Assembly



Description	Reference #
ASSEMBLY,HSG,FRNT,LENS,XPLAY,BLACK,B ASSY,HSG,FRNT,LENS,XPLAY,BLACK,SZ ASSY,HSG,FRNT,LENS,XPLAY,MP	1
ASSEMBLY,FLXCKT,CAMERA, FRONT FACING	2

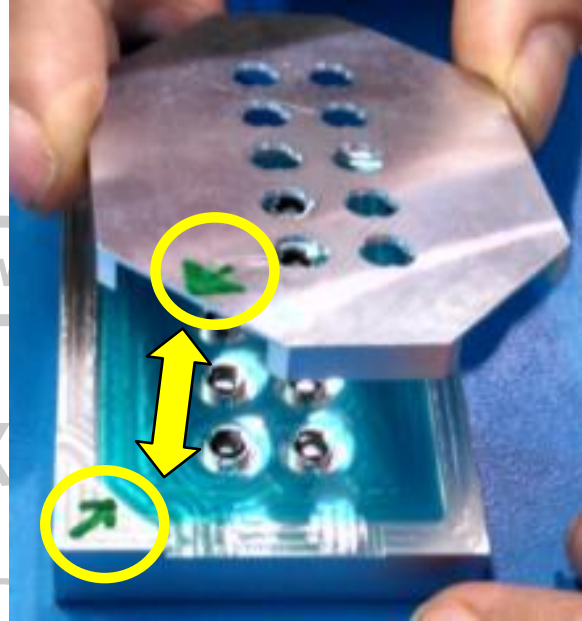
- Place the Front-Facing Imager Gasket carrier on the Front Facing Imager Dust Gasket Fixture (4-00-R8-10000) with the adhesive side facing up. Match the angled corner of the gasket carrier to the angled corner of the recessed pocket in the Fixture.



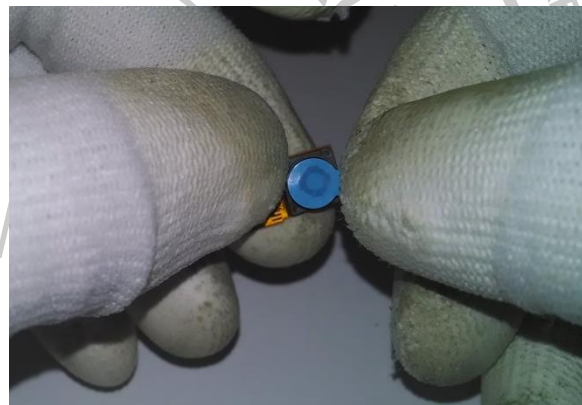
## Nexus 6

### Level 2 – Service and Repair Manual

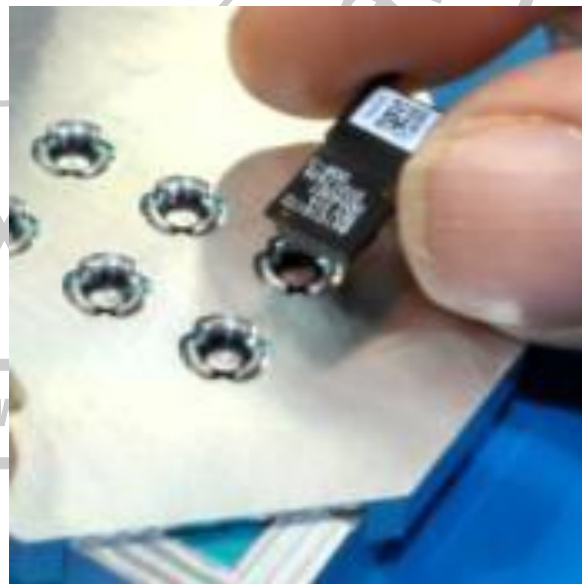
2. Place the fixture lid over the gasket carrier. Match the angled corner of the fixture lid to the angled corner of the recessed pocket in the fixture.



3. Remove the Liner from the Front-Facing Imager.



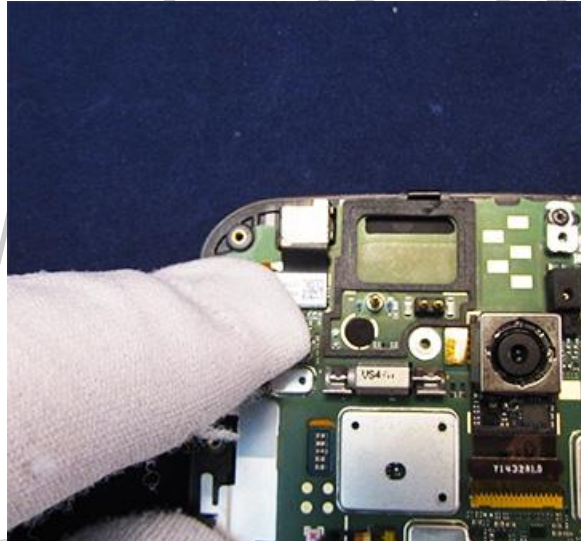
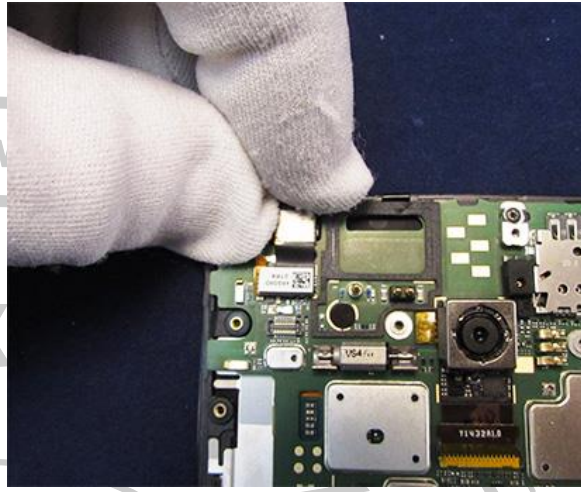
4. Place the Front-Facing Imager face-down in the fixture through the fixture lid.
5. Apply pressure to the Front-Facing Imager to adhere the gasket to the imager.



## Nexus 6

### Level 2 – Service and Repair Manual

6. Remove the Front-Facing Imager from the fixture and verify the gasket is adhered.
7. Use deionized air to clean the Front-Facing Imager socket of debris.
8. Place the Front-Facing Imager in the socket in the Front-Housing. The Front-Facing Imager does not connect at this point.
9. Starting from the Display Flex side, apply rolling pressure to connect the Front-Facing Imager BtB Connector to the PCB.



## Battery Assembly

### /// WARNING ///

Failure to adhere to Safety Critical Note(s) may increase risk of rupture, burning, or failure to function safely when used by the customer. Refer to the Battery Safety Guidelines.

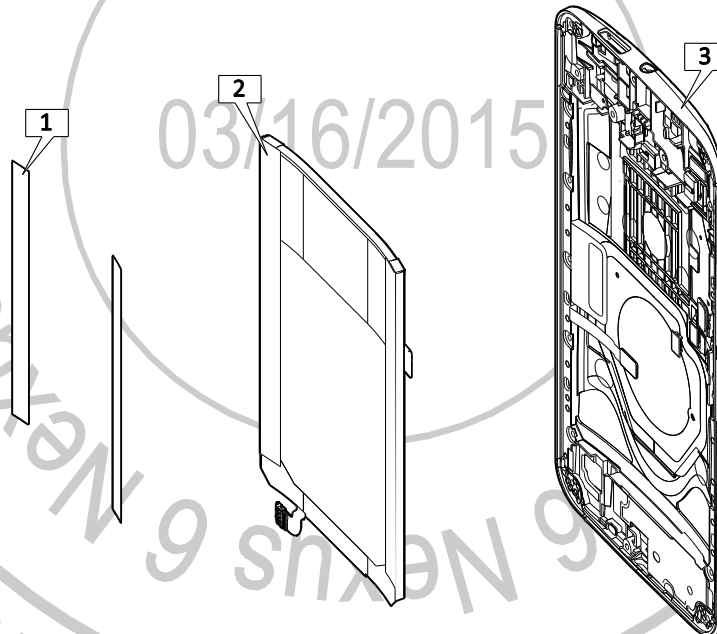
### // CAUTION //

Handle the Battery Pack with care. If dropped to the floor, it may be internally damaged and must be scrapped.

Ensure Battery and its insulation are not damaged (e.g. scratched, dented, punctured) prior to and throughout assembly.

Prior to assembly, ensure Battery edges and surfaces are not dented or deformed, and that fixtures and parts that will contact the Battery are free of foreign material.

Ensure screws and screwdrivers do not contact the Battery.



Description	Reference #
TAPE,INSULATION BATTERY, XPLAY	1
ASSEMBLY,BATTTERY,EZ30,LI POLYMER,LG CHEM, MIN 3025 MAH	2
ASSEMBLY,HSG,REAR,INNER,XPLAY,DARK,32GB FPR ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,LIGHT, FOXCONN ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,DARK, FOXCONN	3

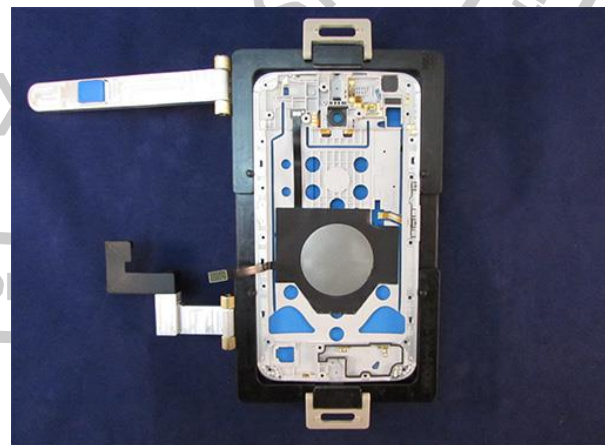
## Nexus 6

### Level 2 – Service and Repair Manual

1. Remove the Battery adhesive liner from the Rear Housing.
2. Verify the Battery Flex is aligned and folded properly.



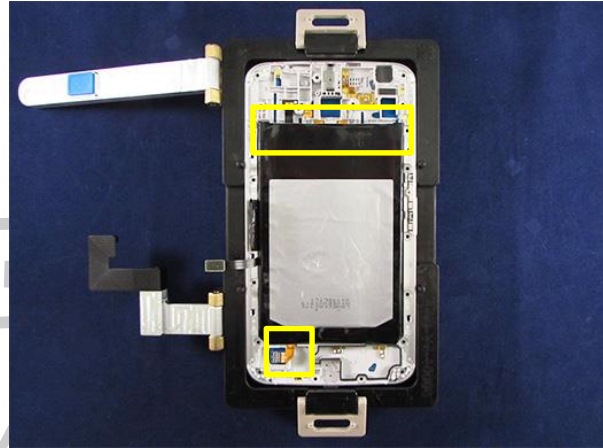
3. Place the Rear Housing in the Rear Housing Prep Fixture nest (4-00-V4-10000).
4. Remove the Battery Adhesive liner.



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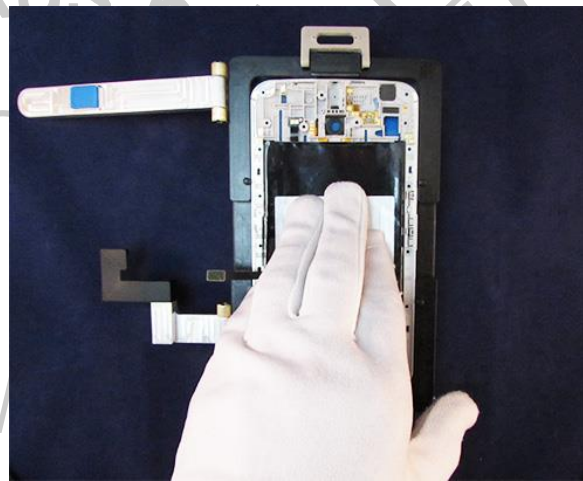
5. Insert the Battery into the pocket of the Rear Housing by aligning the top edge of the Battery with the top edge of the pocket in the Rear Housing. The Battery should be centered in the housing, and the curved Battery Flex should fit into the curved recess in the Rear Housing.



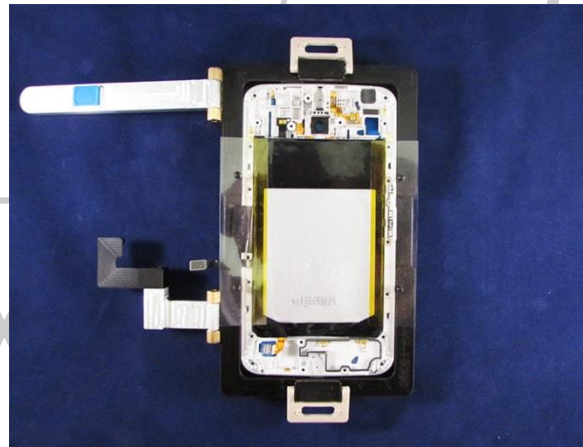
6. Press the Battery to slightly bend the Battery to the curve of the Rear Housing.

#### // CAUTION //

Do not press on the Battery Flex edge of the Battery.



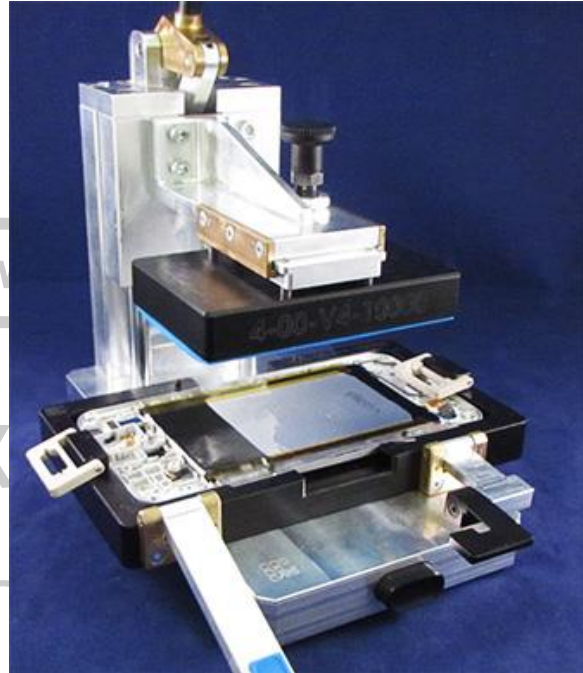
7. Remove 2 Battery Insulator Tapes from the carrier.
8. Place the Battery Insulator Tapes over the alignment pins.
9. Press down on the Battery Insulator Tapes to secure them to the Battery.



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### Level 2 – Service and Repair Manual

10. Place the Rear Housing Prep Fixture in the Press.
11. Insert the Battery press tool in the press head.



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12. Verify the Battery Flex is not between the Rear Housing and press head. Hold the Battery Adhesive tab and NFC Flex out and away from the press head.

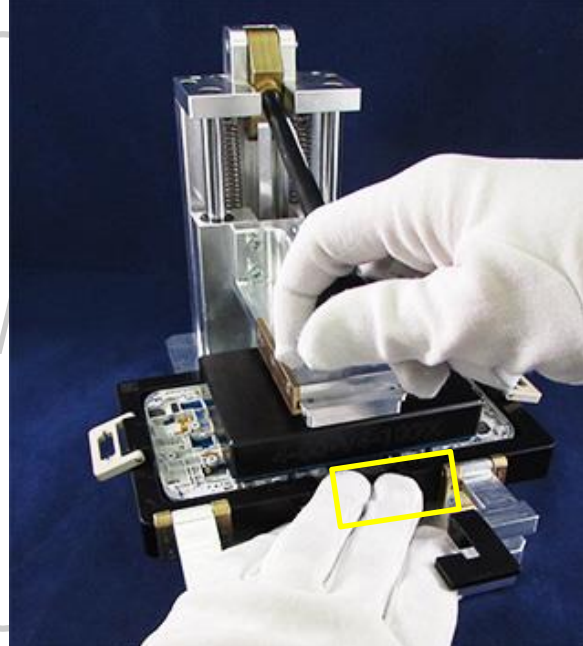
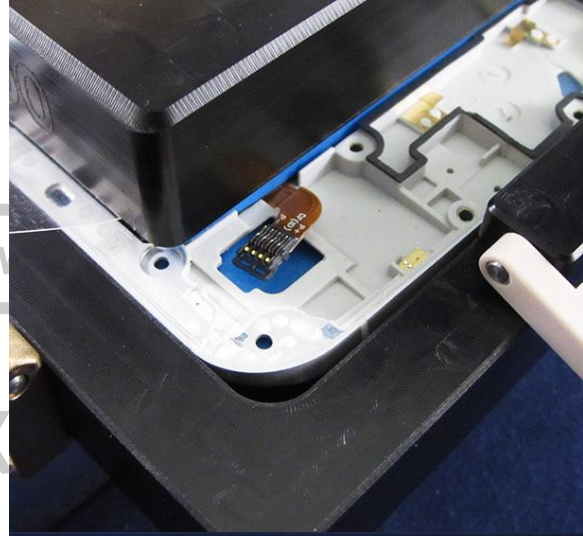
#### // CAUTION //

Do not damage the Battery Flex, Battery Adhesive tab, or NFC Flex.

#### // CAUTION //

Keep hands away from the press head during operation. Injury and/or damage to equipment may occur.

13. Press the Battery and Battery Insulator Tapes for 10 seconds.

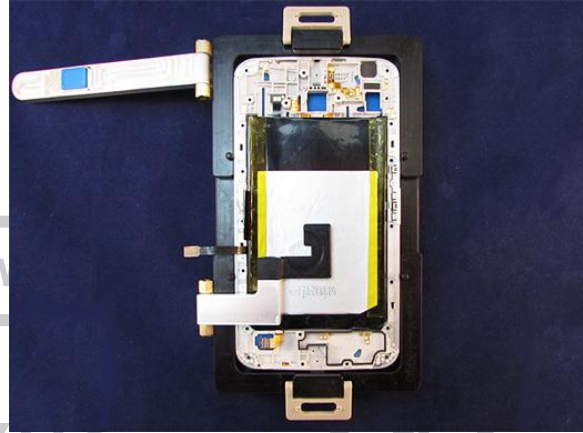


14. Remove the Rear Housing Prep Fixture nest from the Press.
15. Remove the Battery Insulator Tape liners.

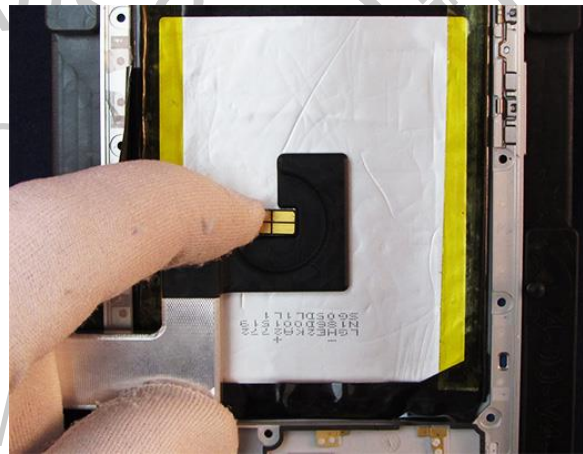
## Nexus 6

### Level 2 – Service and Repair Manual

16. Position the NFC Flex alignment tool over the Battery and Rear Housing.



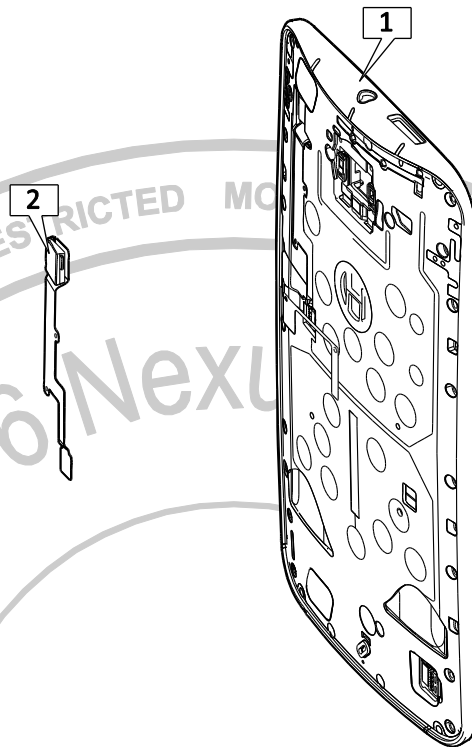
17. Remove the adhesive liner from the NFC Flex tab.
18. Position the NFC Flex tab on the Battery.
19. Press down on the NFC Flex tab to secure it to the Battery.



20. Remove the adhesive liner from the Battery Adhesive tab.
21. Fold the Battery Adhesive tab over and secure it to the Battery.



## Bridge Flex Assembly

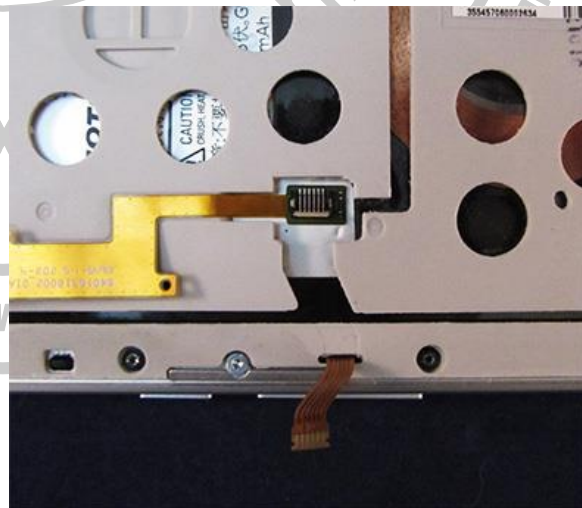


Description	Reference #
ASSEMBLY,HSG,REAR,INNER,XPLAY,DARK,32GB FPR	1
ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,LIGHT, FOXCONN	
ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,DARK, FOXCONN	
ASSY,FLXCKT,BRIDGE FPCB,XPLAY	2
DIE CUT,KAPTON, UNIVERSAL, 3.0 X 3.0	N/A

1. Press the Bridge Flex to adhere the Side Key ZIF Connector to the Battery through the opening in the Rear Housing.

**// CAUTION //**

Do not damage the Side Key ZIF Connector.



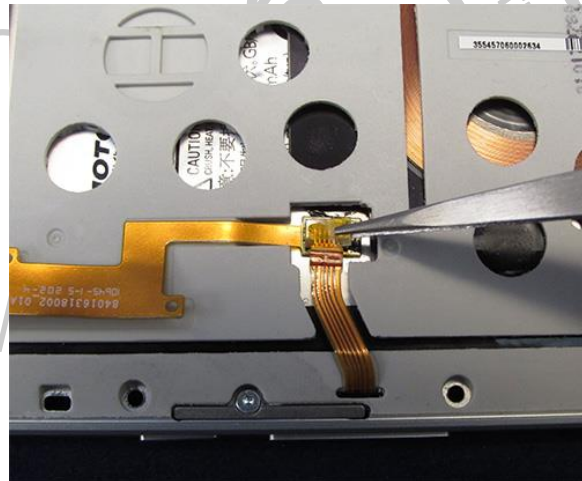
## Nexus 6

### Level 2 – Service and Repair Manual

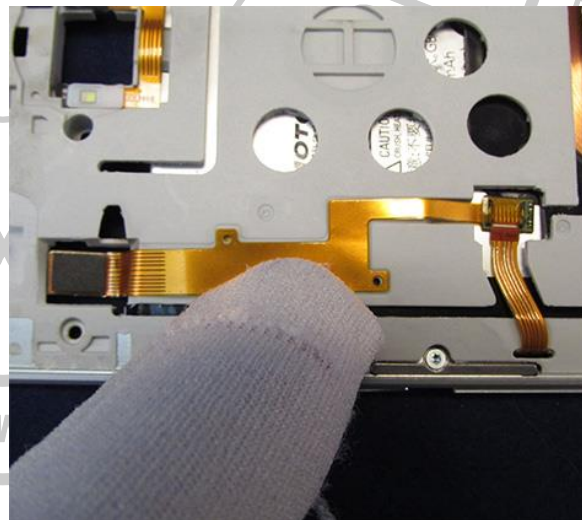
2. Remove the tape holding the Side Key Flex.
3. Insert the Side Key Flex into the Side Key Flex ZIF Connector. Use the white line as a guide for insertion depth.
4. Slide a fingertip across the Side Key Flex ZIF Connector Door to close it.



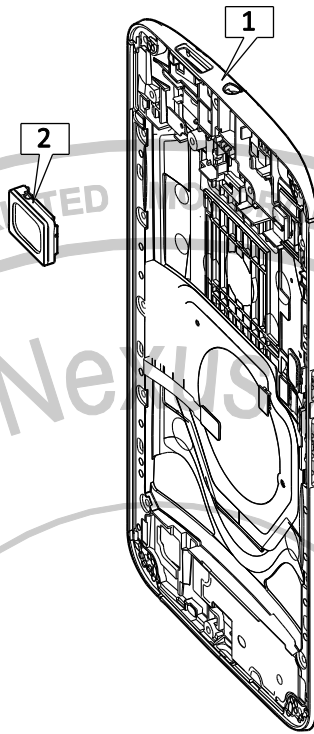
5. Apply Kapton Tape to the Side Key Flex ZIF Connector Door.



6. Align the Bridge Flex to the etched recess on the Rear Housing.
7. Remove the adhesive liner from the bottom of the Bridge Flex.
8. Press down on the Bridge Flex to secure it to the Rear Housing.

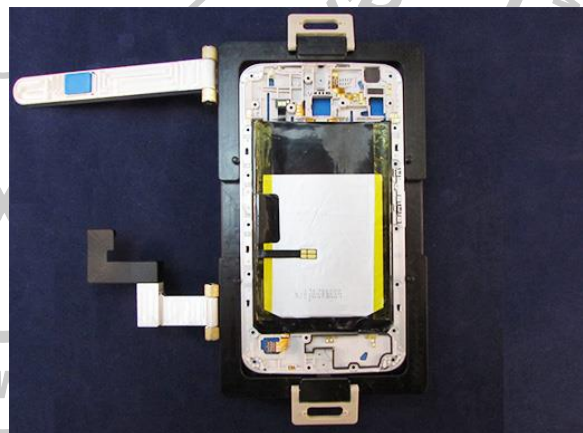


## Earpiece Assembly



Description	Reference #
ASSEMBLY,HSG,REAR,INNER,XPLAY,DARK,32GB FPR ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,LIGHT, FOXCONN ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,DARK, FOXCONN	1
ASSEMBLY,SPEAKER,11X15 POLYPHONIC	2

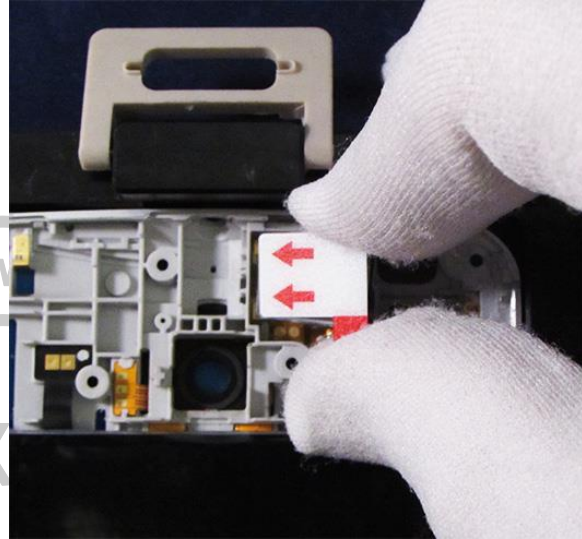
- 1 Place the Rear Housing in the Rear Housing Prep Fixture nest (4-00-V4-10000).



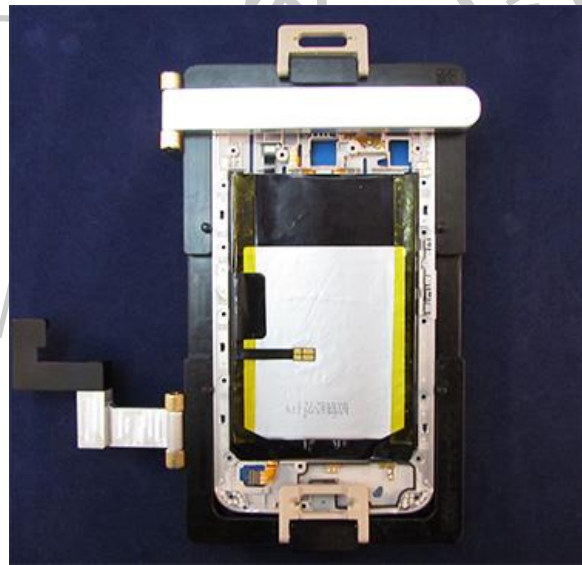
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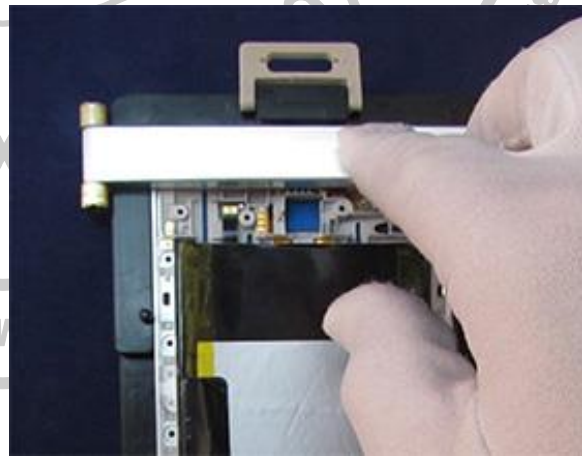
2. Remove the adhesive liner from the Earpiece.
3. Place the Earpiece in the pocket of the Rear Housing as shown. The contact side of the Earpiece must be closest to the Headset Jack, as indicated by the red arrows on the Earpiece liner.



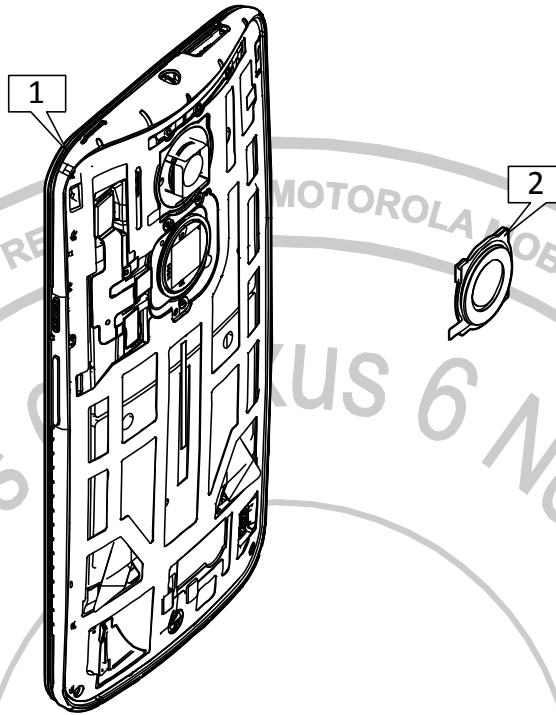
4. Position the Earpiece press tool over the Earpiece and Rear Housing.



5. Press the Earpiece for 5 seconds to secure it in the Rear Housing.



## Flash Lens Assembly



Description	Reference #
ASSEMBLY,HSG,REAR,INNER,XPLAY,DARK,32GB FPR	1
ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,LIGHT, FOXCONN	
ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,DARK, FOXCONN	
ASSEMBLY,LENS FLASH,XPLAY	2

1. Remove the liner from the Flash Lens.
2. Insert the 2 tabs of the Flash Lens into the openings in the pocket on the Rear Housing.



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3. Lower the Flash Lens into the pocket and snap the single tab into position.





## Rear Housing Assembly

### /// WARNING ///

Failure to adhere to Safety Critical Note(s) may increase risk of rupture, burning, or failure to function safely when used by the customer. Refer to the Battery Safety Guidelines.

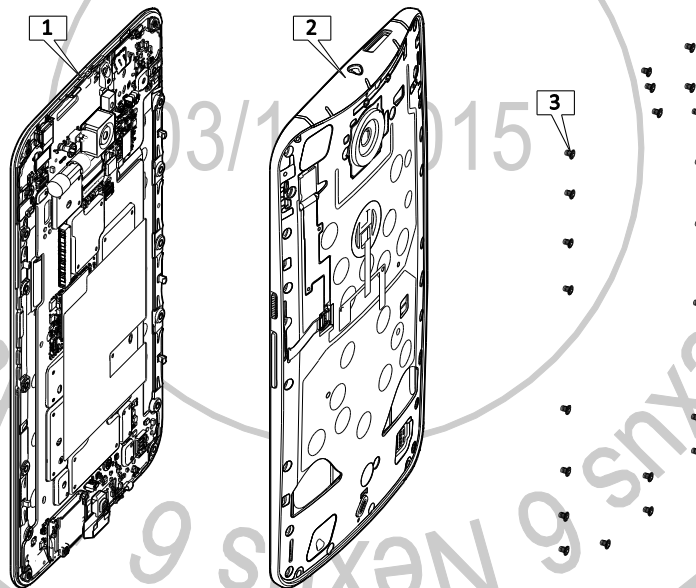
### // CAUTION //

Handle the Battery Pack with care. If dropped to the floor, it may be internally damaged and must be scrapped.

Ensure Battery and its insulation are not damaged (e.g. scratched, dented, punctured) prior to and throughout assembly.

Prior to assembly, ensure Battery edges and surfaces are not dented or deformed, and that fixtures and parts that will contact the Battery are free of foreign material.

Ensure screws and screwdrivers do not contact the Battery.



Description	Reference #
ASSEMBLY,HSG,FRNT,LENS,XPLAY,BLACK,B ASSY,HSG,FRNT,LENS,XPLAY,BLACK,SZ ASSY,HSG,FRNT,LENS,XPLAY,MP	1
ASSEMBLY,HSG,REAR,INNER,XPLAY,DARK,32GB FPR ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,LIGHT, FOXCONN ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,DARK, FOXCONN	2
SCREW,M1.4,ENDO,X+1	3

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#### NOTE

The Rear Housing Prep Fixture nest with the blue pad removed can be used to hold the Front Housing and Rear Housing during assembly.

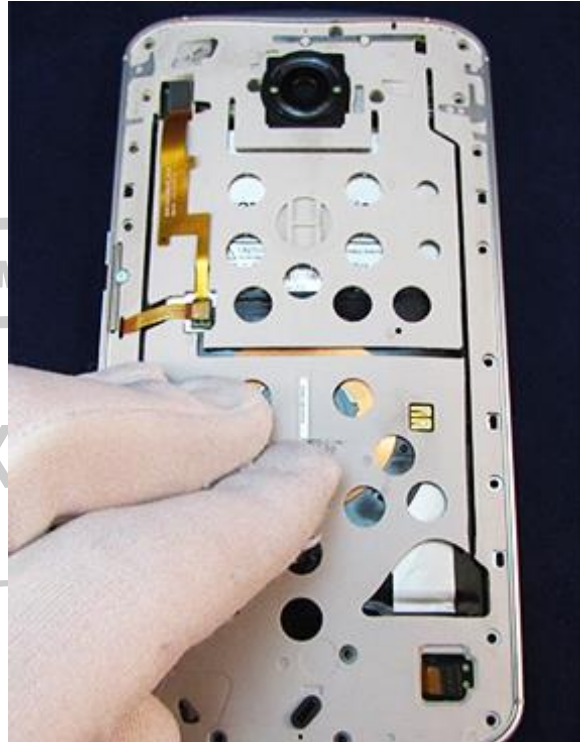
1. Use the flat end of the Blackstick to pry the Battery Flex up through the Rear Housing.
2. Remove the Rear-Facing Imager protective liner if present.
3. Remove the Earpiece liner if present.
4. Place the Rear Housing at an angle over the Front Housing assembly to engage the hook features on the Front Housing.
5. Verify the Rear-Facing Imager is visible through the center of the Flash Lens and the Rear Housing has engaged the top snap.



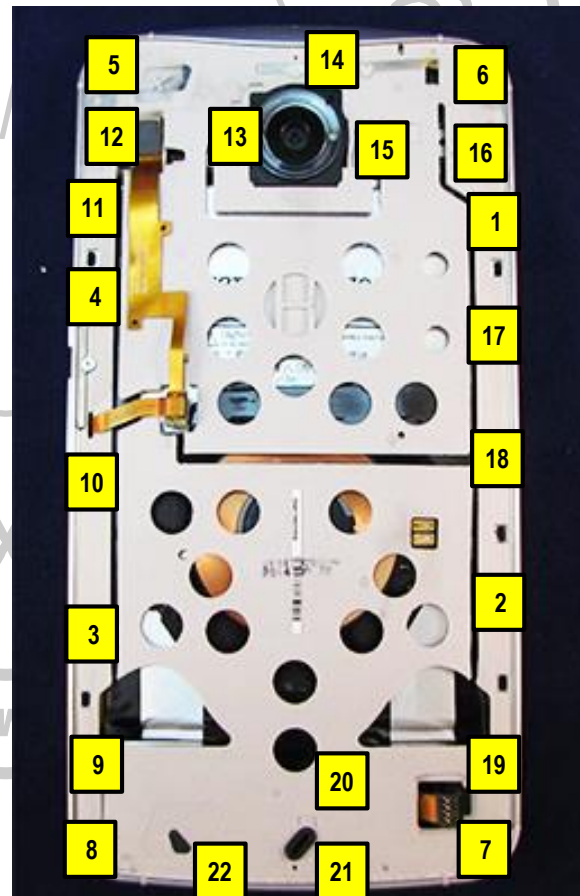
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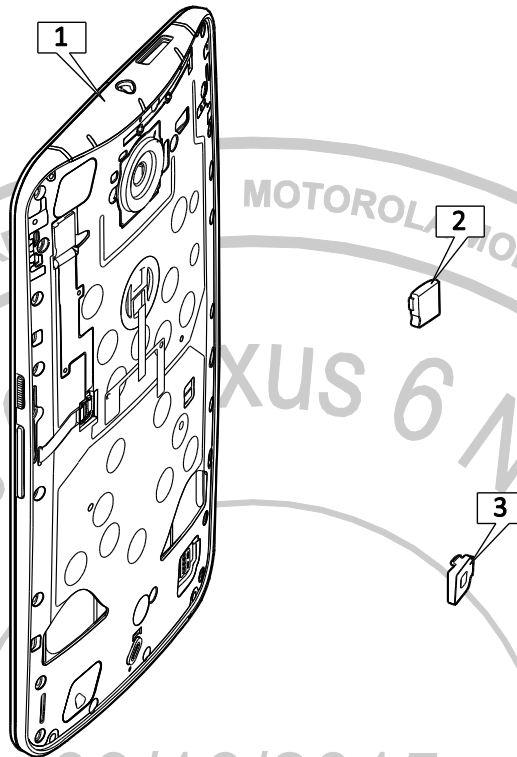
6. Press the Rear Housing down to engage the remaining snaps.



7. Tighten the 3IP Screws to 1.0 in-lbs (0.11 N-m) in the order shown.



## Rear Housing Flex Assembly

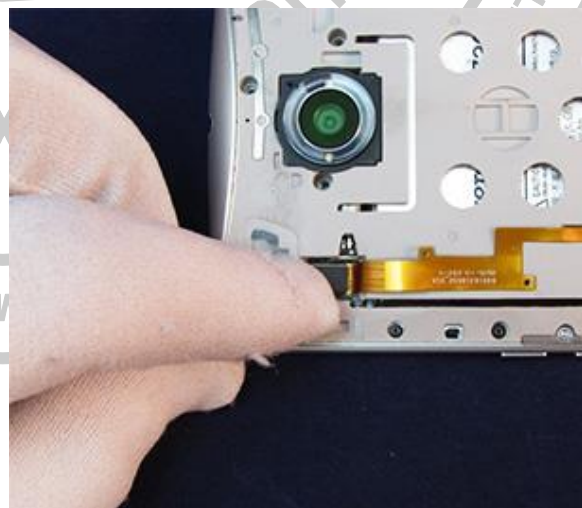


Description	Reference #
ASSEMBLY,HSG,REAR,INNER,XPLAY,DARK,32GB FPR	1
ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,LIGHT, FOXCONN	
ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,DARK, FOXCONN	
STOPPER,BRIDGE FLEX CONNECTOR,XPLAY	2
SPACER,CONNECTOR,BATTERY,VALOCIA	3

1. Gently press the Bridge Flex downward to connect it to the PCB.

### // CAUTION //

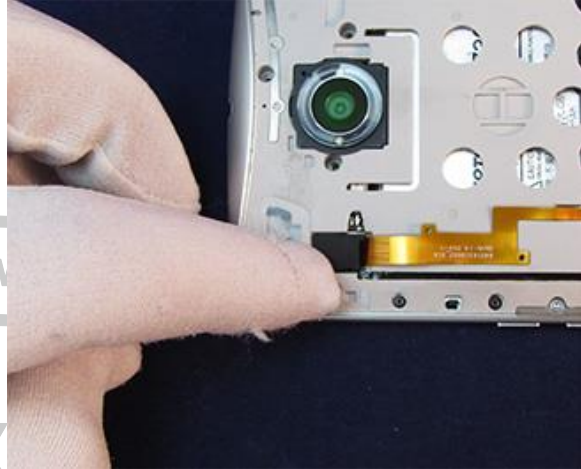
To avoid breaking the connector pins, do not use excessive force on the Bridge Flex.



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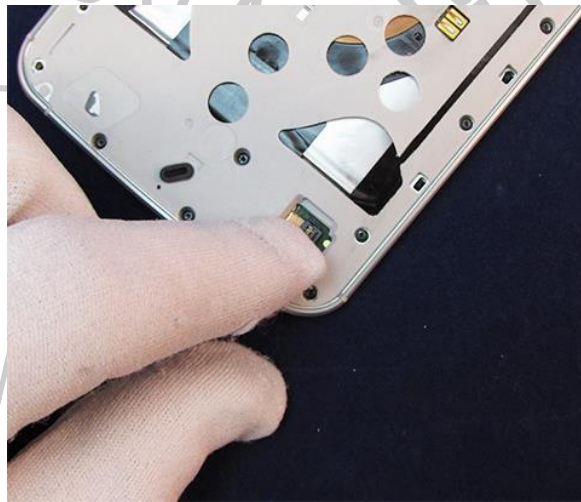
2. Insert the Bridge Flex Stopper into the opening in the Rear Housing. The Bridge Flex Stopper must be flush with the Rear Housing.



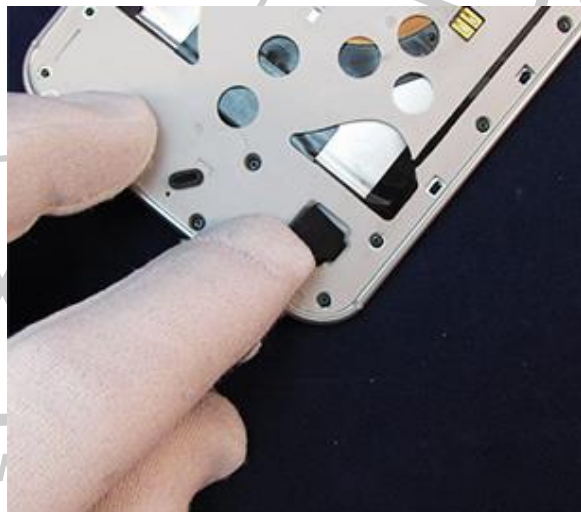
3. Gently press the Battery Flex downward to connect it to the PCB.

#### // CAUTION //

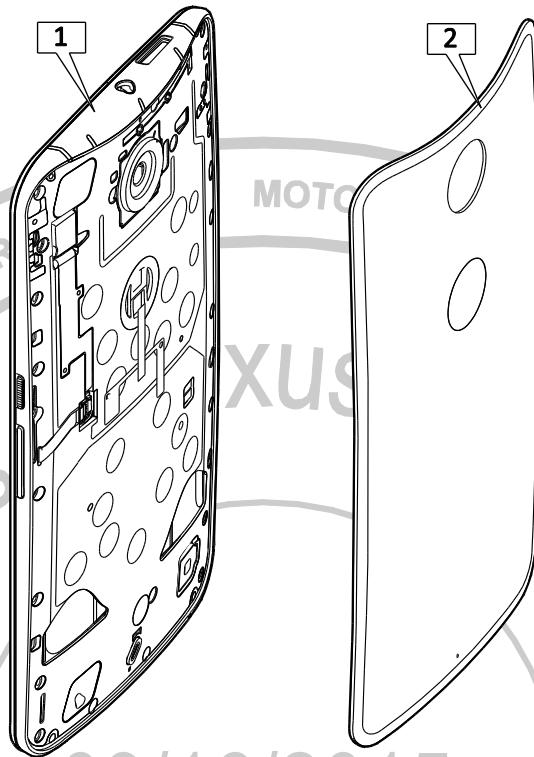
To avoid breaking the connector pins, do not use excessive force on the Battery Flex.



4. Insert the Battery Flex Stopper into the opening in the Rear Housing.



## Rear Inlay Assembly



Description	Reference #
ASSEMBLY,HSG,REAR,INNER,XPLAY,DARK,32GB FPR ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,LIGHT, FOXCONN ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,DARK, FOXCONN	1
ASSEMBLY,HOUSING,REAR,INLAY,RESIN,INK HOUSING,REAR,INLAY,RESIN,DECORATED,RASPBERRY ASSEMBLY,HOUSING,REAR INLAY,RESIN,CHALK	2

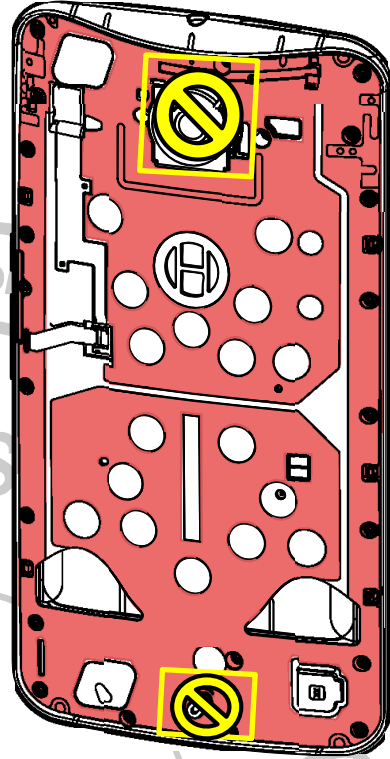
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1. Use a cotton swab to apply 3M AP111 Surface Promoter to the adhesion areas of the Rear Housing indicated in a shade of red.

#### // CAUTION //

Do not allow 3M AP111 Surface Promoter to contact the Rear-Facing Imager Lens, microphone openings, or microphone gasket.



2. Remove the adhesive liner from the inside of the Rear Inlay.



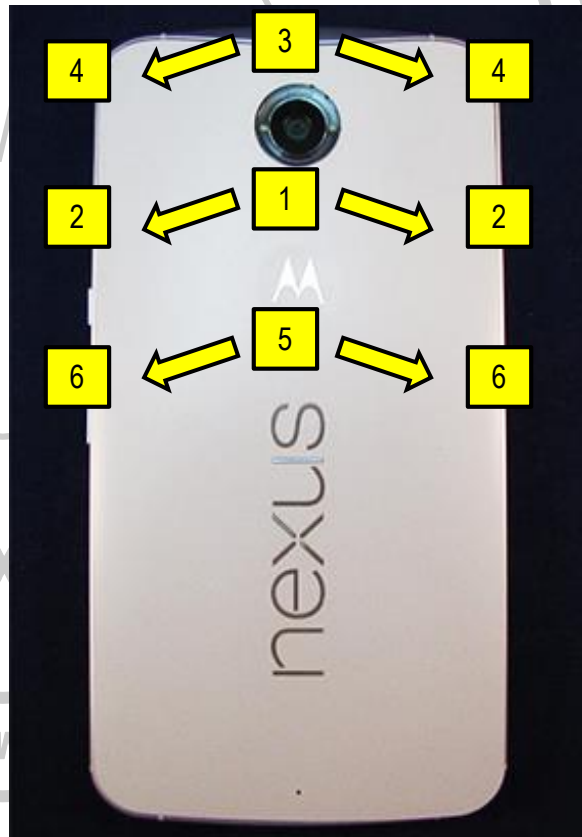
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3. Verify the Liners on the Rear Housing and Flash Lens have been removed.
4. Beginning at the top corners, apply the Rear Inlay to the Rear Housing. Verify the Flash Lens fits through the hole in the Rear Inlay.
5. Verify the Inlay is seated in all 4 corners and not overlapping any of the Rear Housing Edges.



6. Apply manual pressure to the Rear Inlay as follows:
  - a. Place both thumbs on point 1 and slide them out to point 2.
  - b. Place both thumbs on point 3 and slide them out to point 4.
  - c. Place both thumbs on point 5 and slide them out to point 6.





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- d. Place both thumbs on point 7 and slide them around the perimeter of the Rear Inlay to point 8.



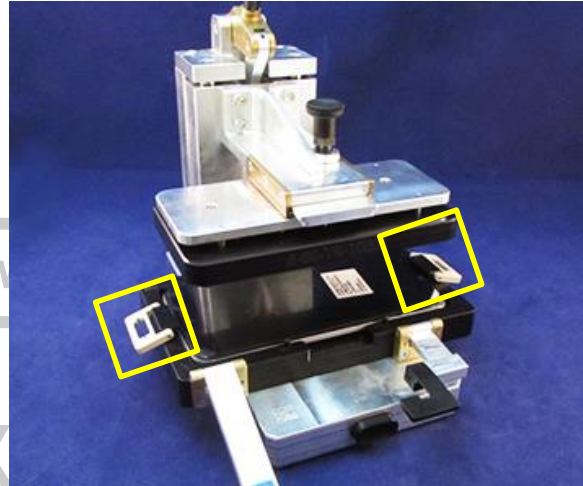
7. Place the assembly in the Rear Housing Prep Fixture nest (4-00-V4-10000).



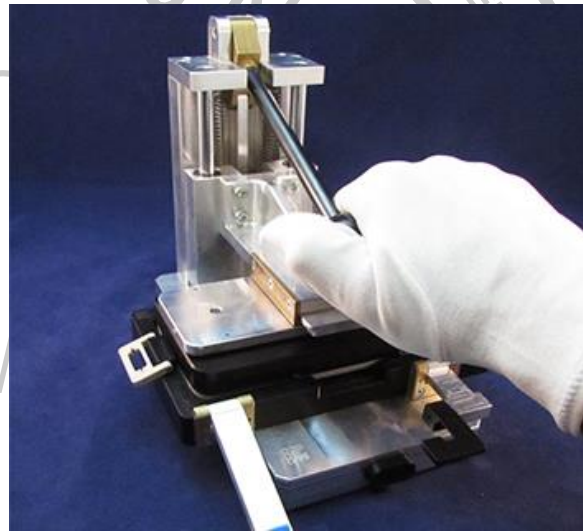
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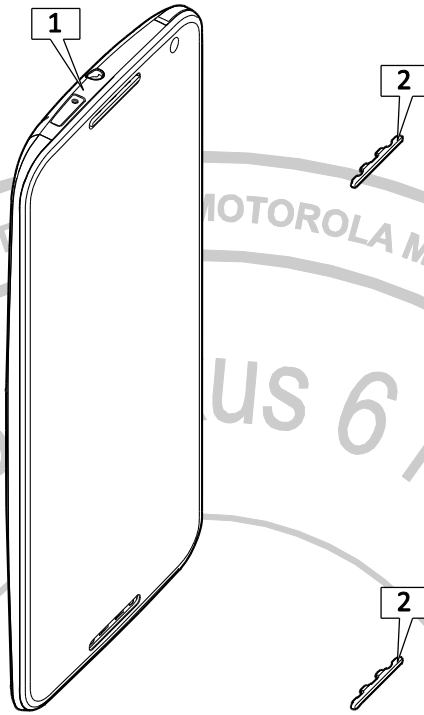
8. Place the Rear Housing Prep Fixture nest in the press.
9. Verify the Audio Deco alignment tools are positioned out of the Rear Housing Prep Fixture nest.
10. Place the Rear Inlay press tool in the press head.



11. Press the assembly for 10 seconds to secure the Rear Inlay and the Top and Bottom Audio Decos.



## Audio Deco Assembly



**Description**

**Reference #**

ASSEMBLY,HSG,REAR,INNER,XPLAY,DARK,32GB FPR	1
ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,LIGHT, FOXCONN	
ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,DARK, FOXCONN	
BEZEL,DECO SPEAKER DARK,XPLAY	2

1. Insert the Audio Deco Alignment Press (4-00-T9-10000) into the recess in the Front Housing. Align the protrusions on the Press with the edges of the recess.

**NOTE**

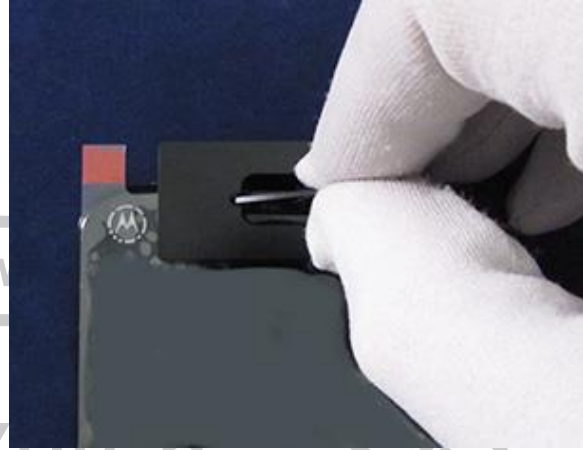
The same fixture and procedures apply for the Top and Bottom Audio Decos.



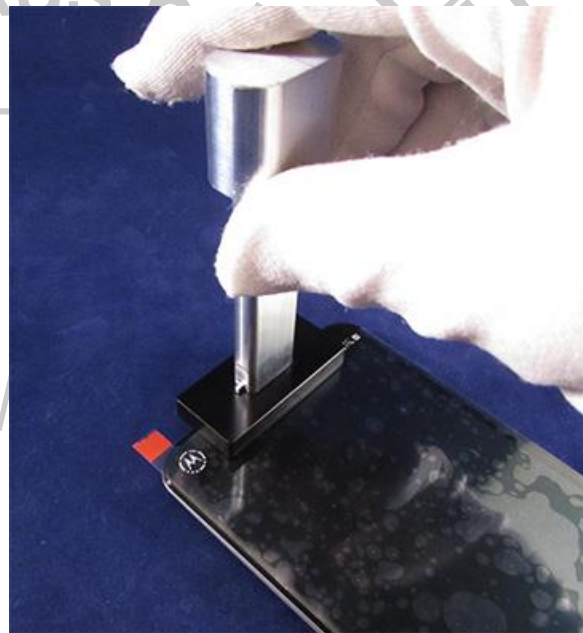
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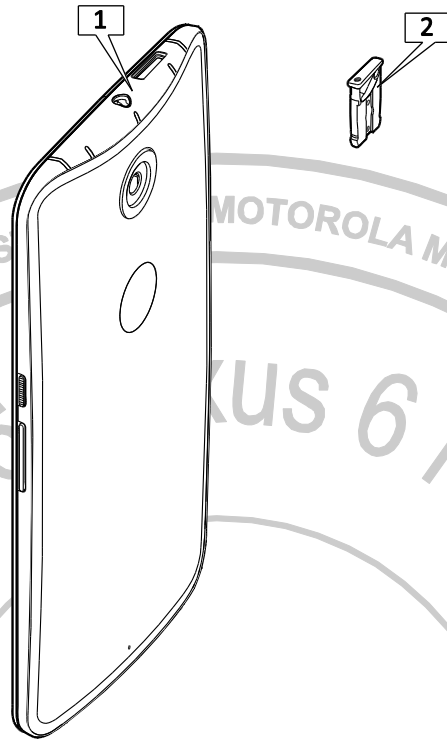
2. Place the Audio Deco into the Audio Deco Alignment Press (4-00-T9-10000) with the mesh side facing up.
3. Push the Audio Deco to the bottom of the Audio Deco Alignment Press (4-00-T9-10000).



4. Insert the Audio Deco Press Tool (4-00-T9-10000) into the Audio Deco Alignment Press (4-00-T9-10000).
5. Press the Audio Deco into the Front Housing with the Audio Deco Press Tool (4-00-T9-10000).



## SIM Tray Assembly



Description	Reference #
ASSEMBLY,HSG,REAR,INNER,XPLAY,DARK,32GB FPR	1
ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,LIGHT, FOXCONN	
ASSEMBLY,HSG,REAR,INNER,SUB,XPLAY,DARK, FOXCONN	
ASSEMBLY,SIM DOOR DARK,XPLAY	2
ASSEMBLY,SIM DOOR LIGHT,XPLAY	

1. Insert the SIM Tray into the Rear Housing assembly. The small hole should be oriented toward the Headset Jack.
2. Verify the SIM Tray is flush with the Rear Housing.

