

## Service Manual for L1 and L2

# Nokia Lumia 630 (RM-976, RM-977) Nokia Lumia 630 Dual SIM (RM-978, RM-979)

## Key features

- Windows Phone 8.1
- Smart Dual SIM (RM-978 & RM-979 only)
- 4.5" LCD display
- 1.2 GHz Quad Core processor

Version 1.0

**Note:** Check the repair policy before performing any mechanical repair on Service Level 1&2!

## Send feedback

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careacademy@nokia.com

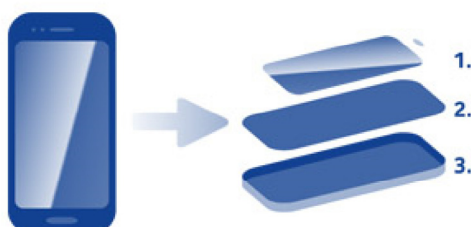


## Exploded view



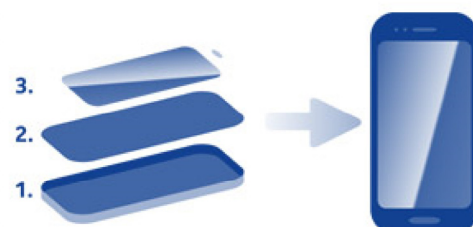
More

## Disassembly steps



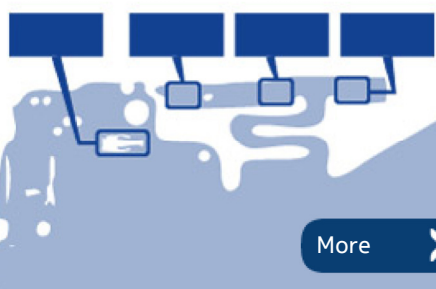
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## Assembly steps



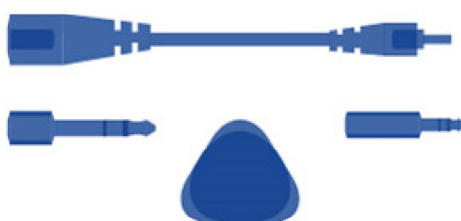
More

## Solder components



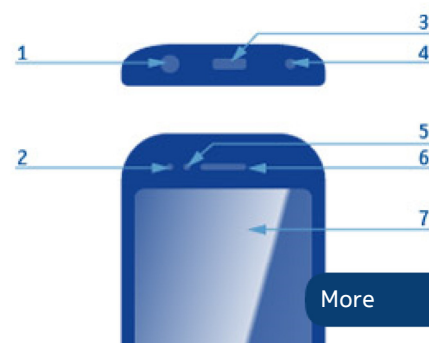
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## Service devices



More

## Product controls and interfaces



More

## Service concept



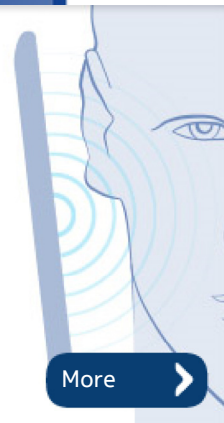
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## Phone reset



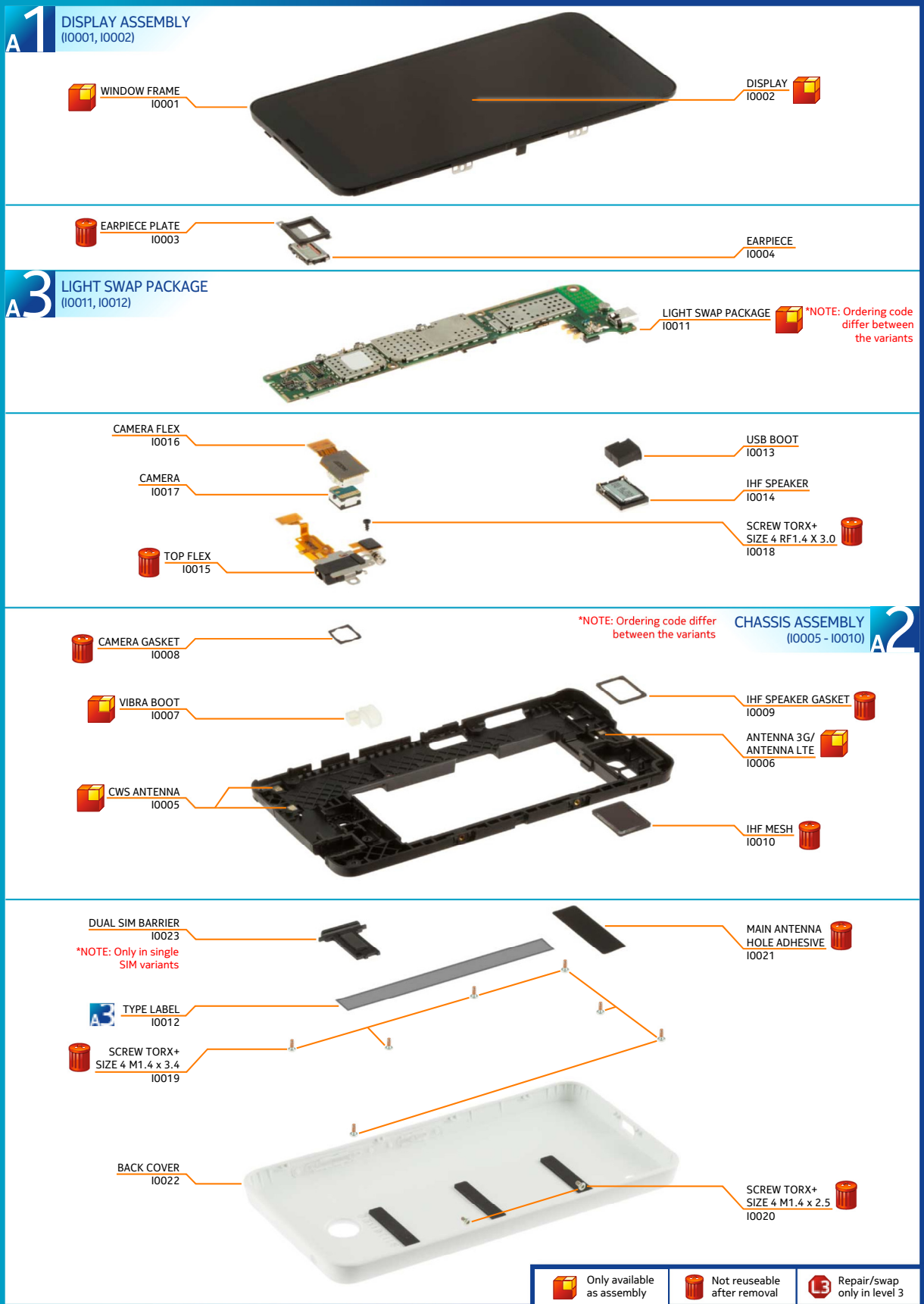
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## Proximity sensor troubleshooting



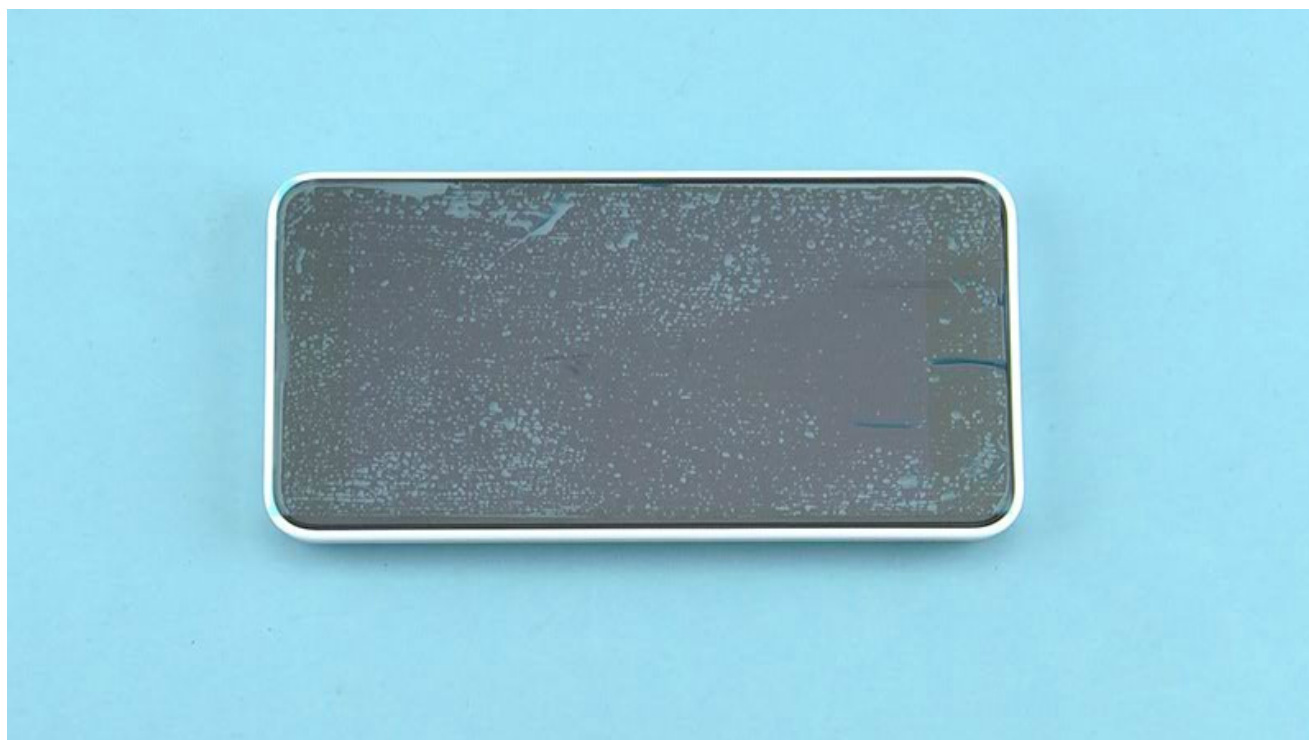
More

Version	Date	Description
1.0	29.04.2014	First published version





1) For disassembling you need the Nokia Standard toolkit version 2. You will also need the camera removal tool SS-305.



2) Protect the DISPLAY with protective film.





3) Release the BACK COVER by pulling from the both top end corners as shown.



4) Lift up and remove the BACK COVER.



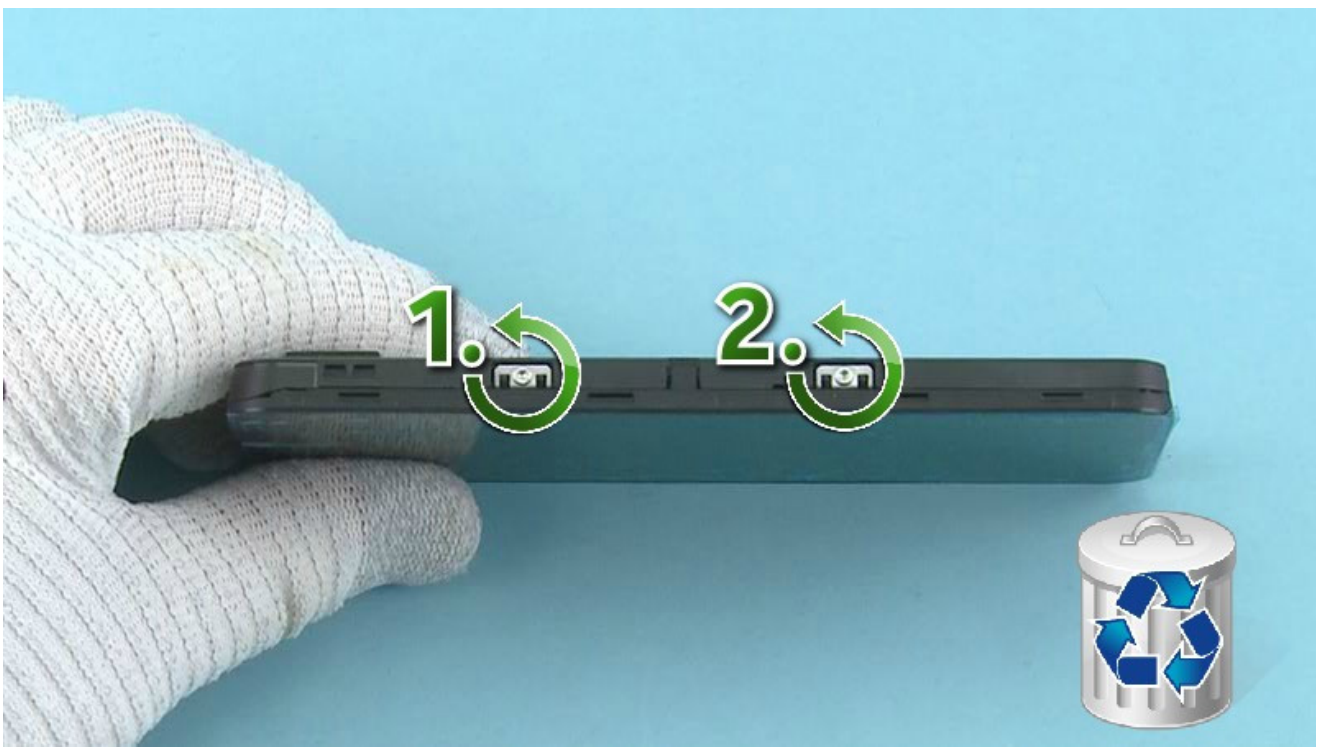
5) If there is battery inserted, remove it by using the shown finger notch.



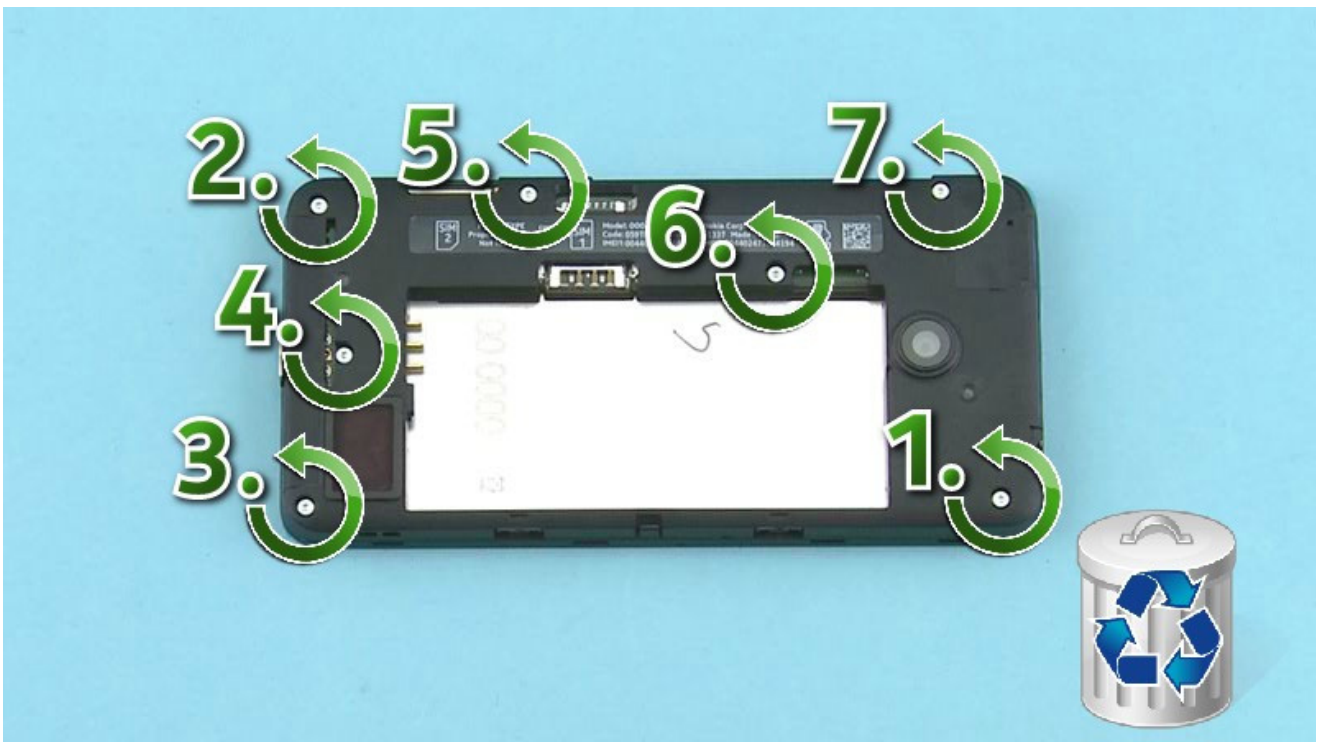
6) Lift up one corner of the MAIN ANTENNA HOLE ADHESIVE with the dental tool. Peel off and discard the MAIN ANTENNA HOLE ADHESIVE.

Be careful not to injure yourself or the device with the sharp end of the dental tool.





7) Unscrew the two TORX+ size 4 screws in the order shown. Do not use them again. Discard them.



8) Unscrew the seven TORX+ size 4 screws in the order shown. Do not use them again. Discard them.

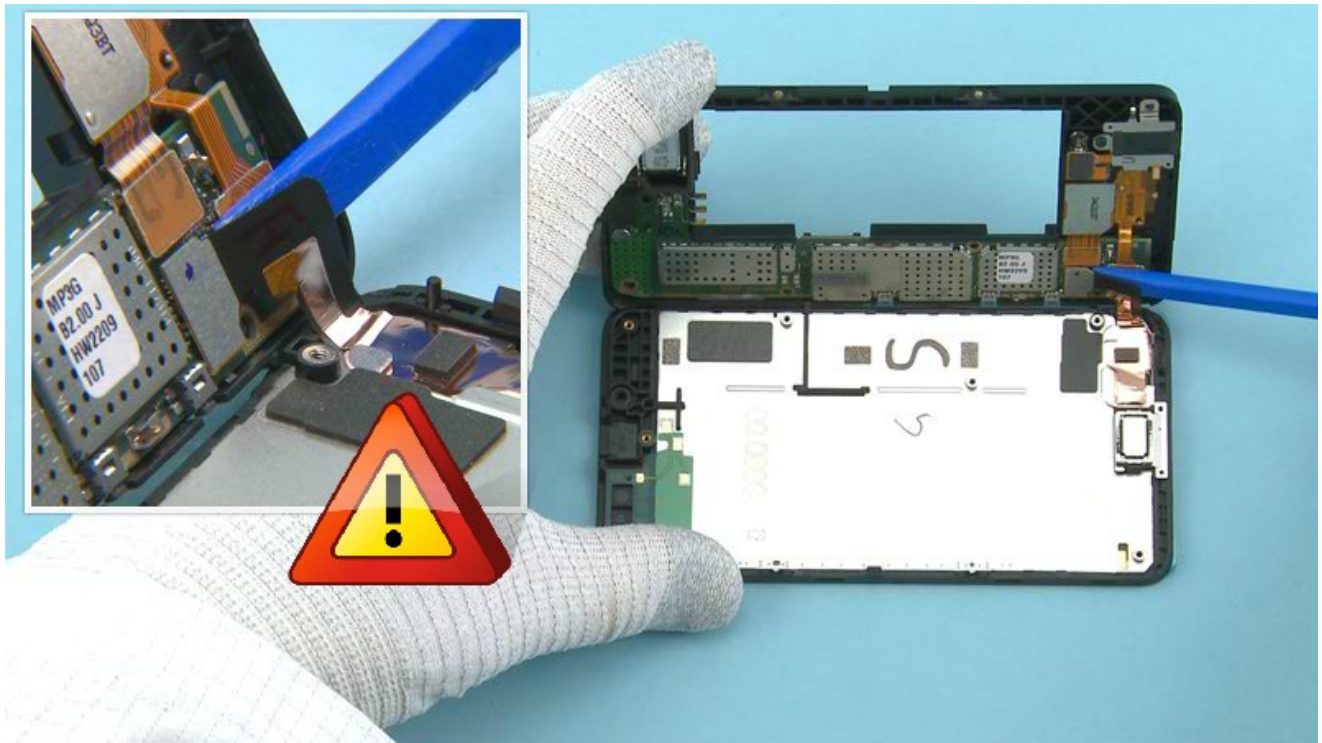


9) Use the SS-93 to carefully release the CHASSIS ASSEMBLY from the DISPLAY ASSEMBLY.  
Be careful not to damage the shown flex.



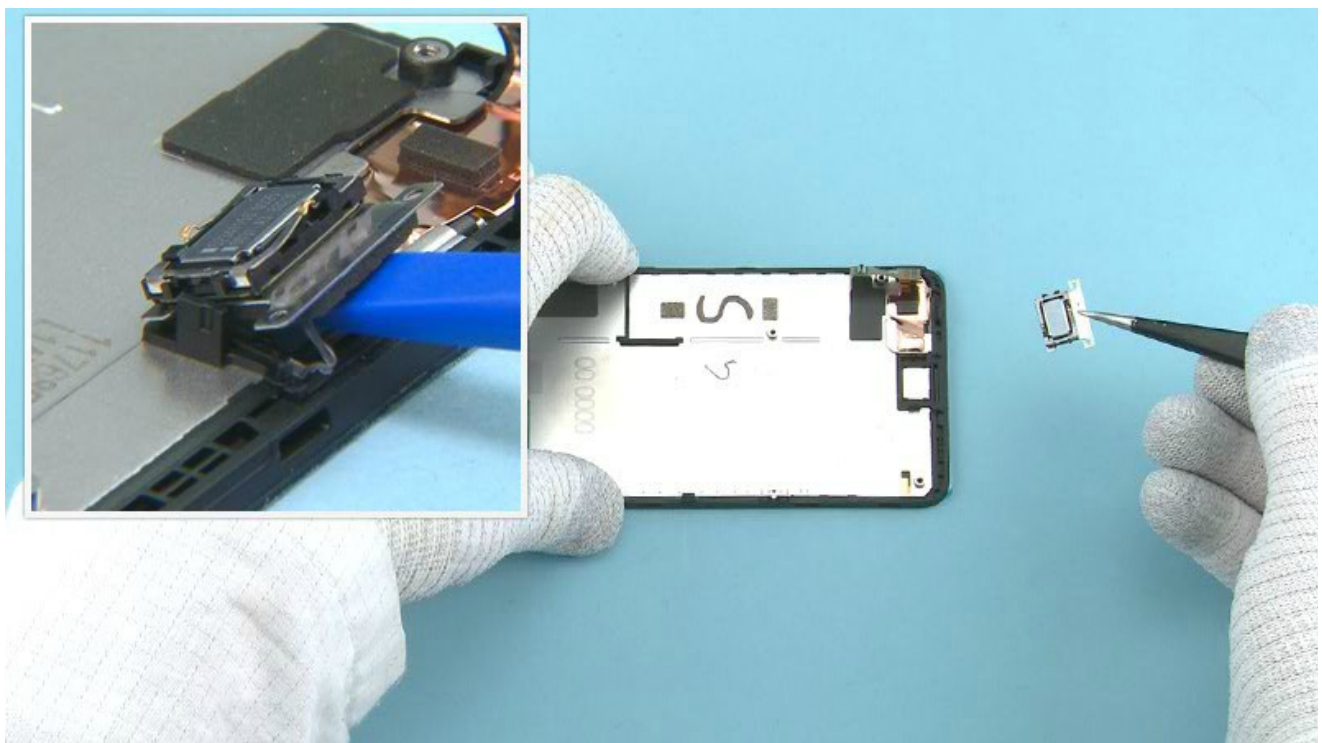
10) Use the SS-93 to release the shown clip on the other side of the device.





11) Turn the CHASSIS ASSEMBLY as shown and open the DISPLAY connector. The DISPLAY ASSEMBLY can be separated once the connector is opened.

Be careful not to bend the flex or damage the connector.

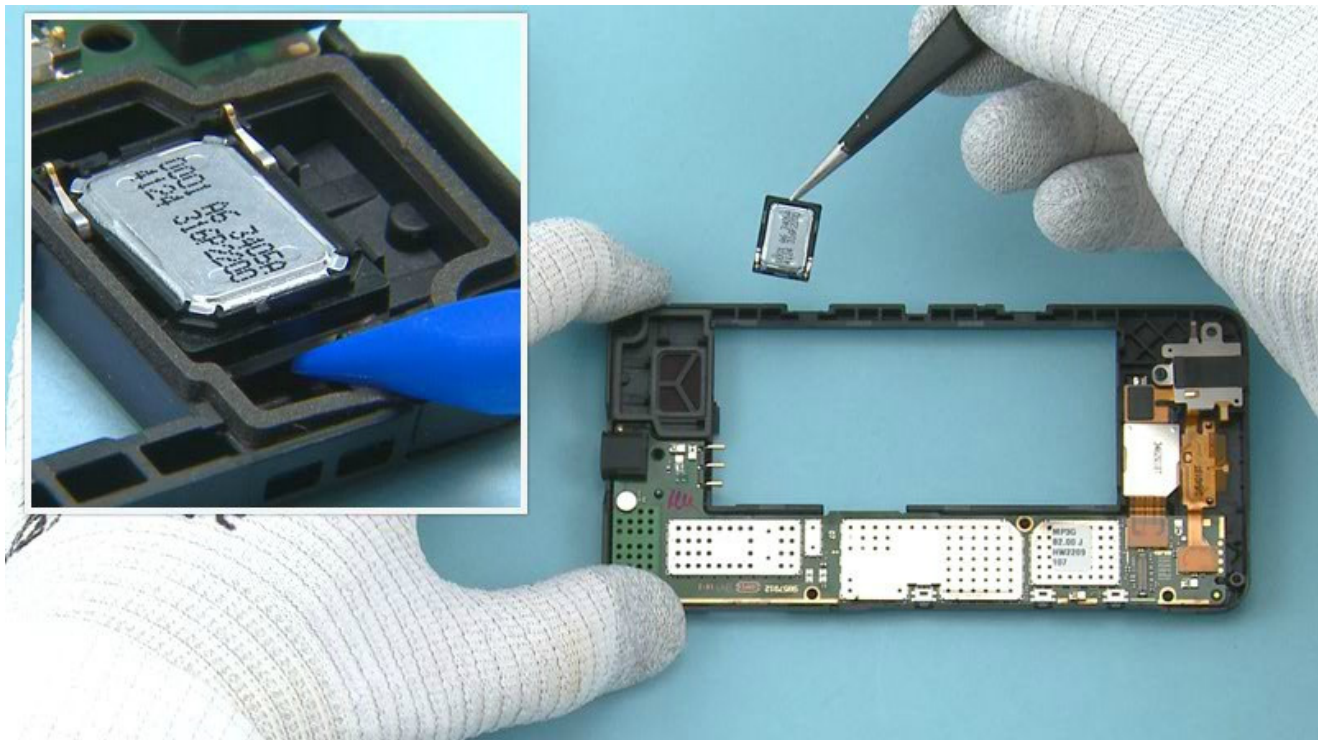


12) Push the SS-93 under the EARPIECE PLATE to release it. Make sure to remove all EARPIECE PLATE adhesive remains from the DISPLAY ASSEMBLY.

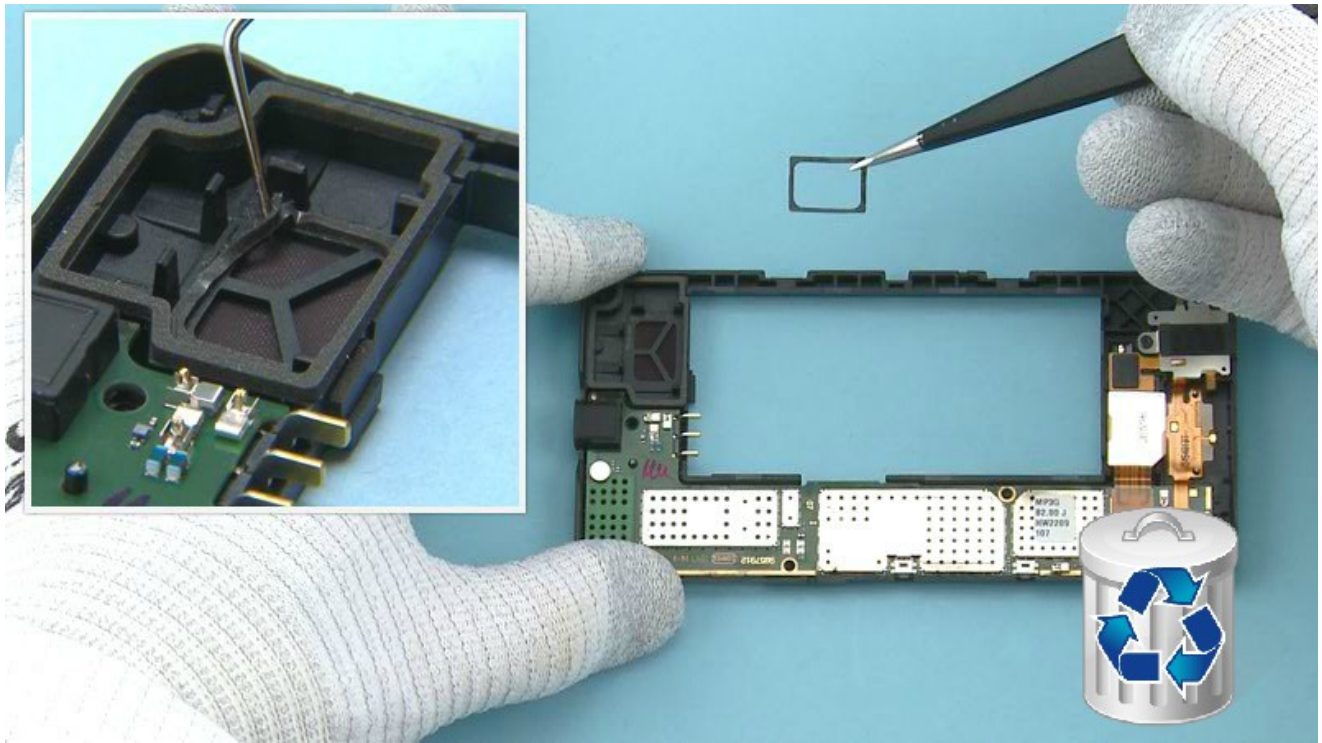




13) Use the dental tool to separate the EARPIECE from the EARPIECE PLATE. Do not use the EARPIECE PLATE again. Discard it.



14) Push the sharp end of the SS-93 under the IHF SPEAKER to release it. Remove it with tweezers.

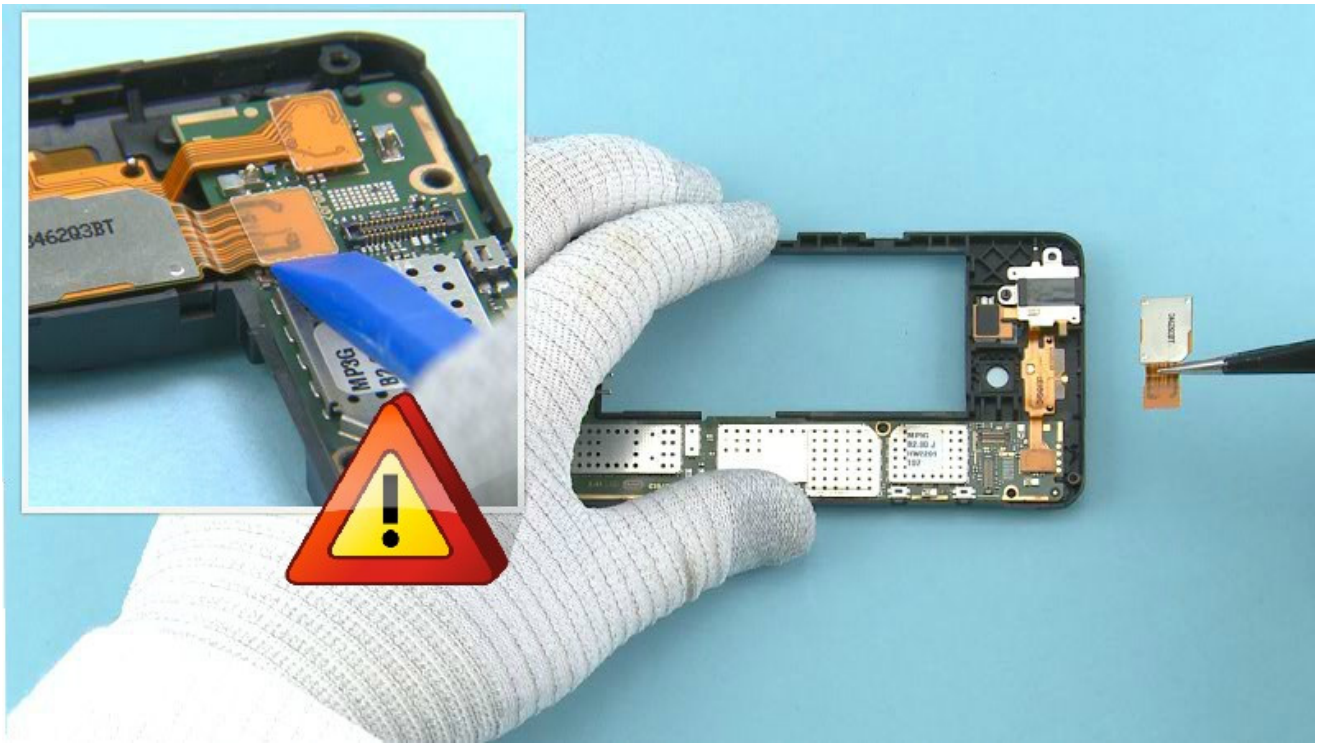


15) Release the IHF SPEAKER GASKET with dental tool. Remove and discard the IHF SPEAKER GASKET.

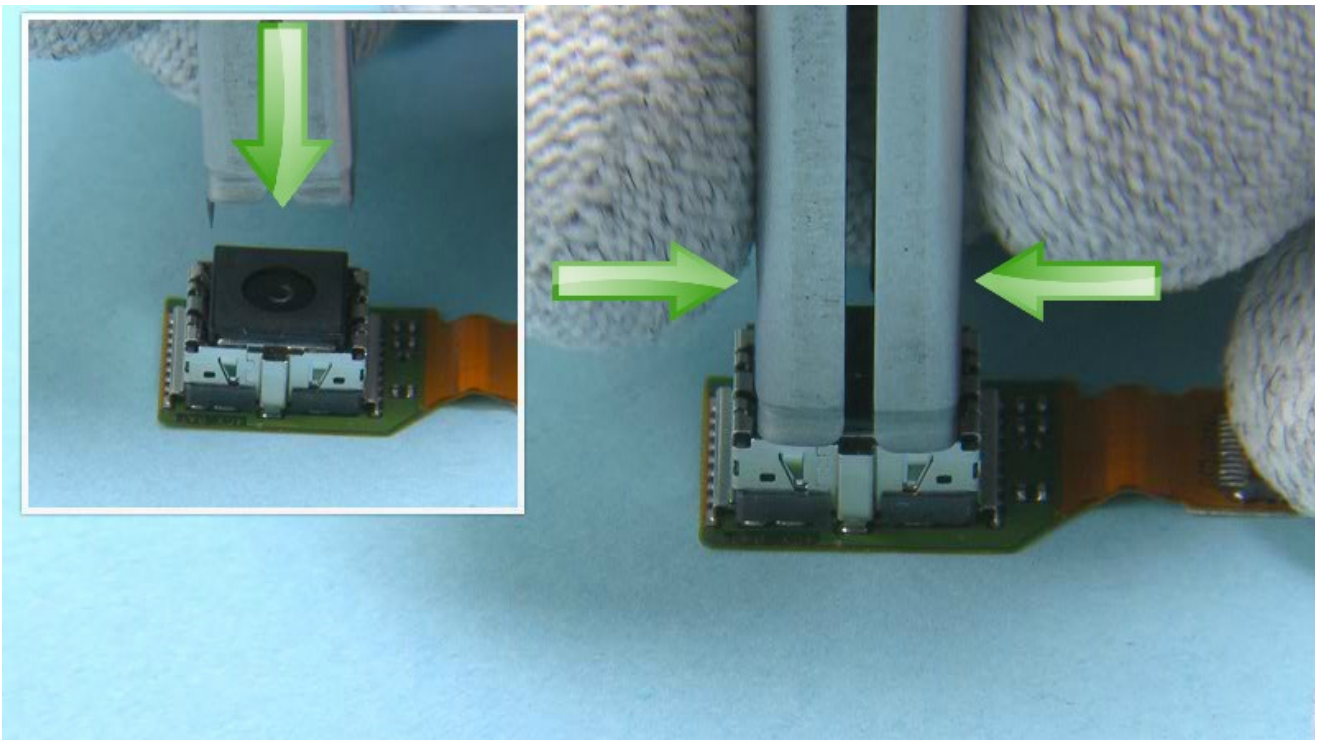


16) Use the SS-93 to release the IHF MESH. Remove and discard the IHF MESH.

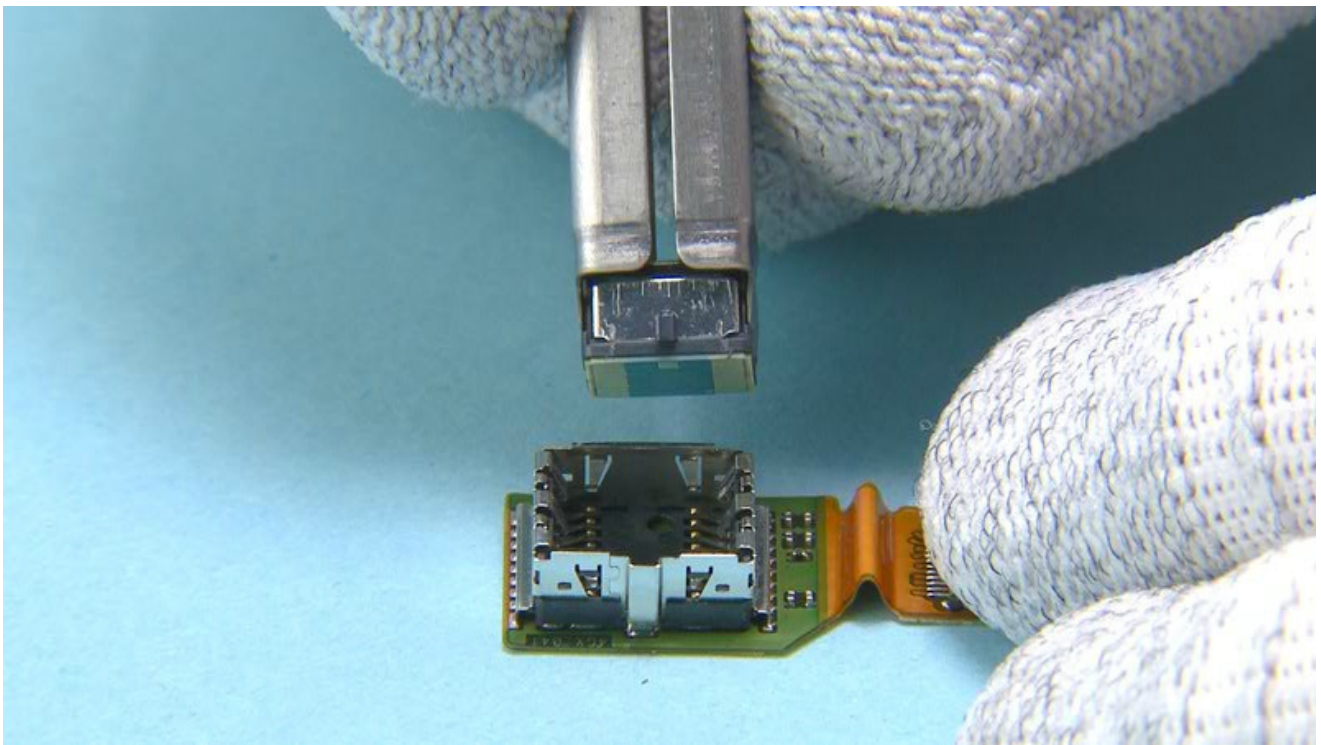




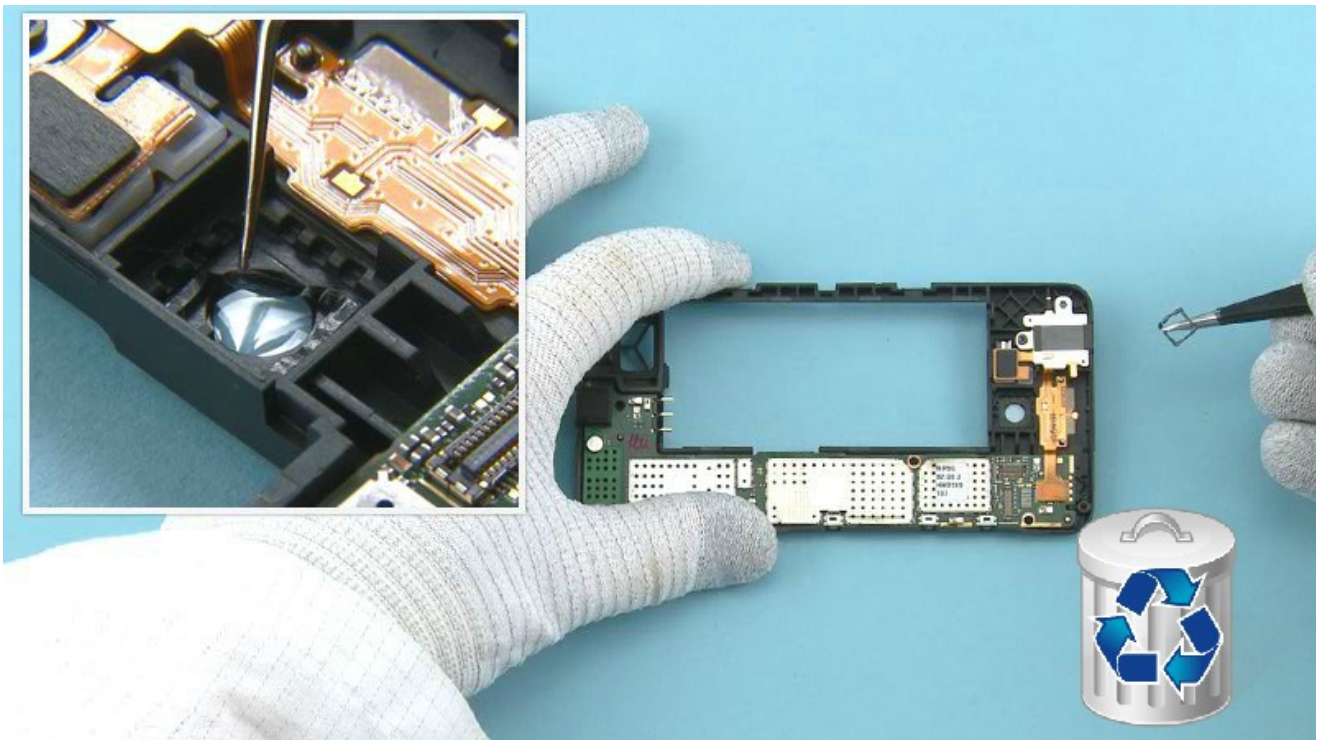
17) Open the CAMERA connector with the SS-93. Remove the CAMERA FLEX and CAMERA.  
Be careful not to damage the connector or any nearby components.



18) Place the SS-305 camera removal tool on top of the CAMERA as shown. Note the alignment. Push down the SS-305 until the camera retaining clips are released. Hold from the sides of the SS-305.

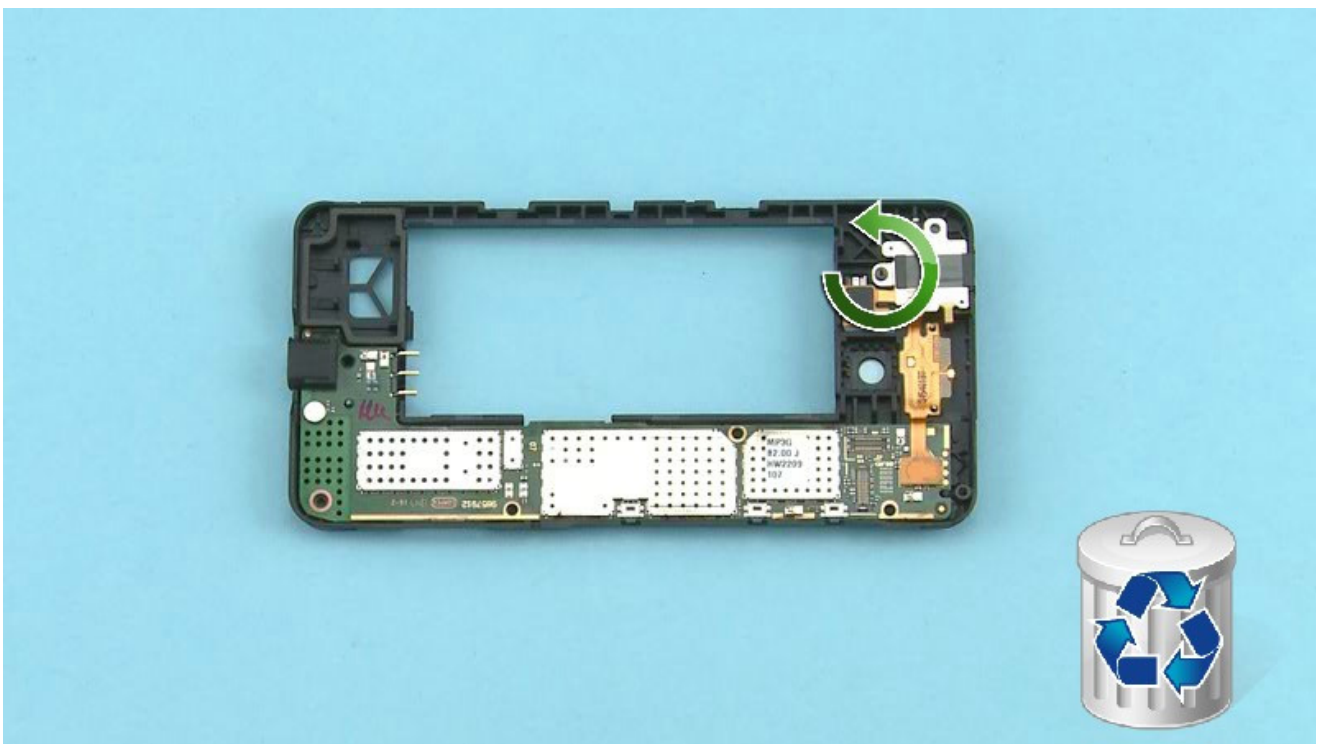


19) Pull up the SS-305 while holding from the sides of it and remove the CAMERA.

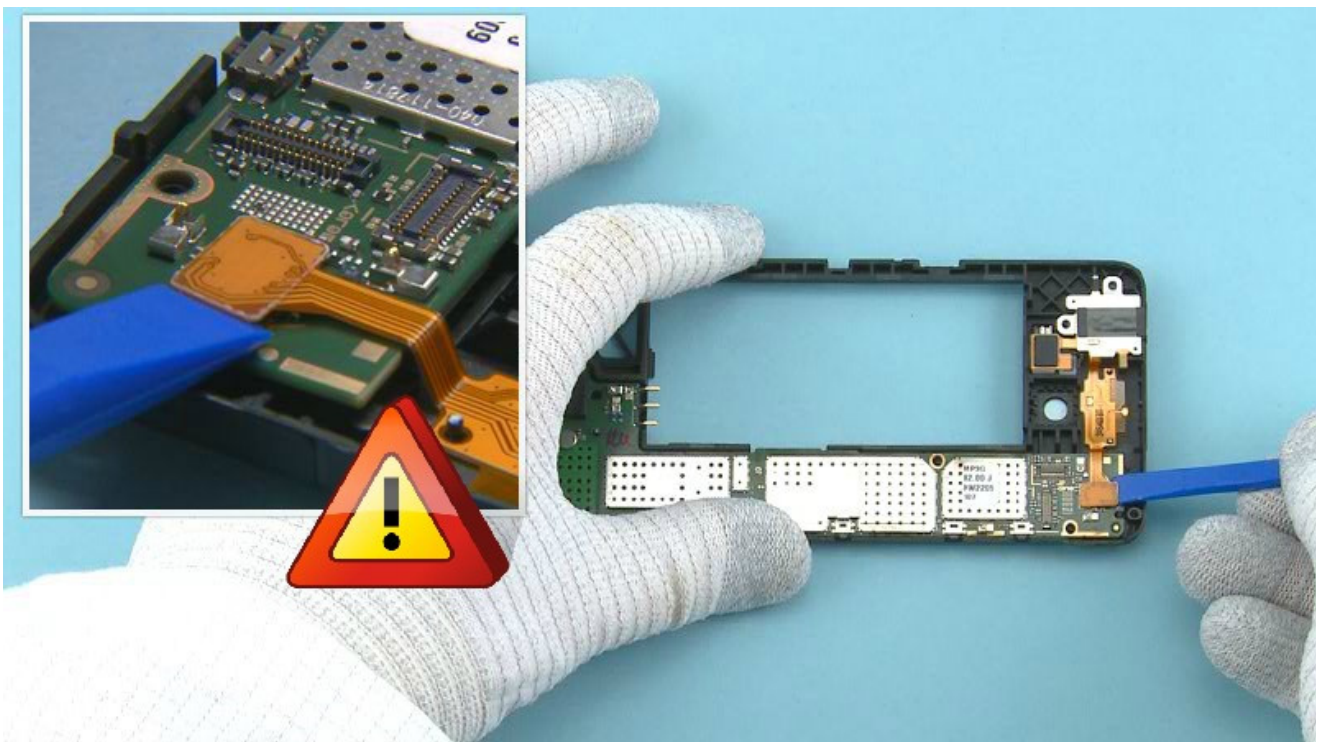


20) Use dental tool to remove the CAMERA GASKET. Do not use it again. Discard it.



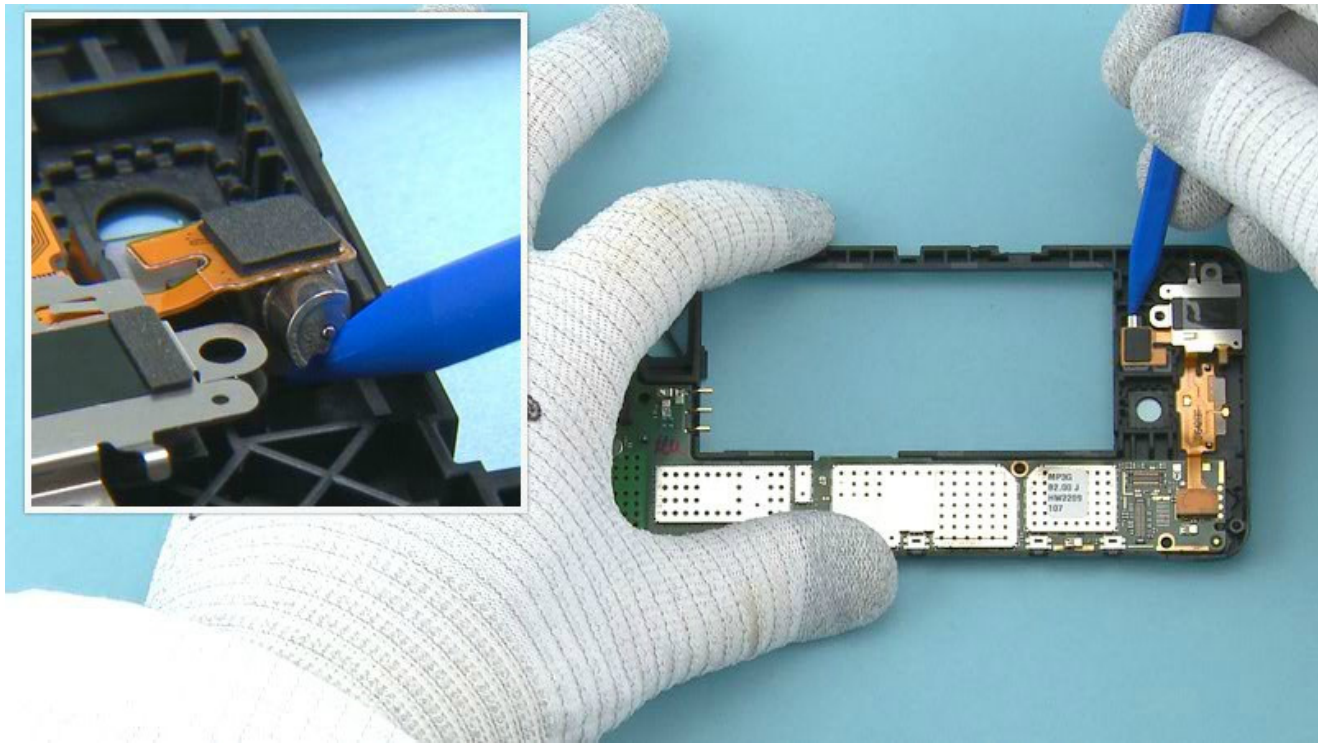


21) Unscrew the shown TORX+ size 4 screw. Discard it.

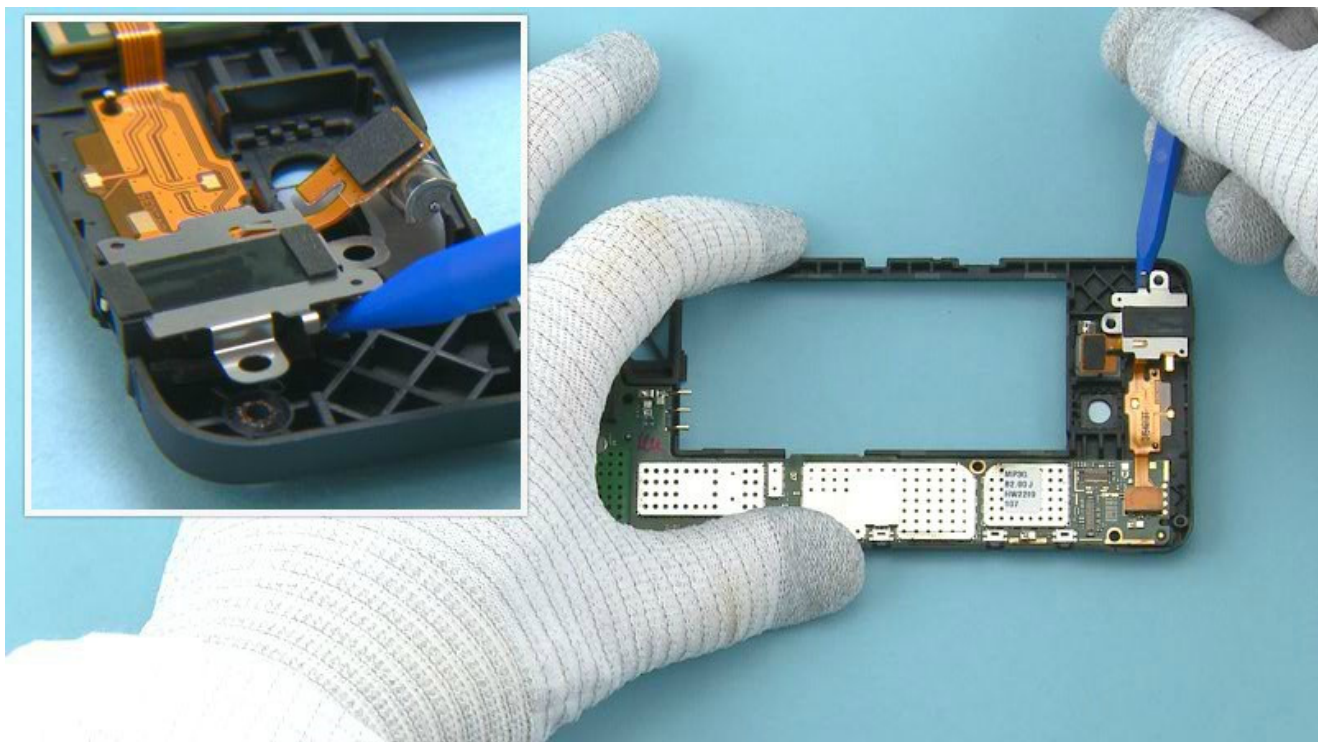


22) Open the TOP FLEX connector with the SS-93.  
Be careful not to damage the connector or any components nearby.

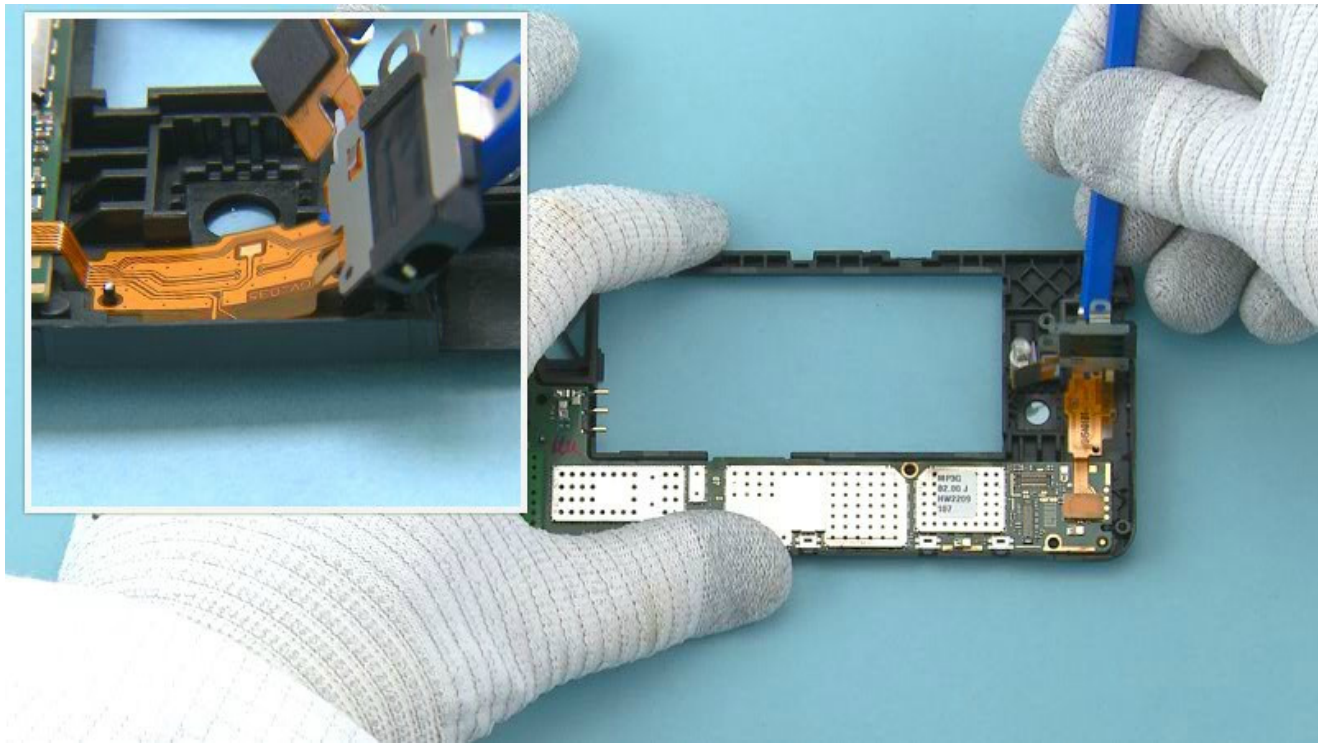




23) Use the sharp end of the SS-93 to lift up the vibra as shown.



24) Lift up also the AV connector.

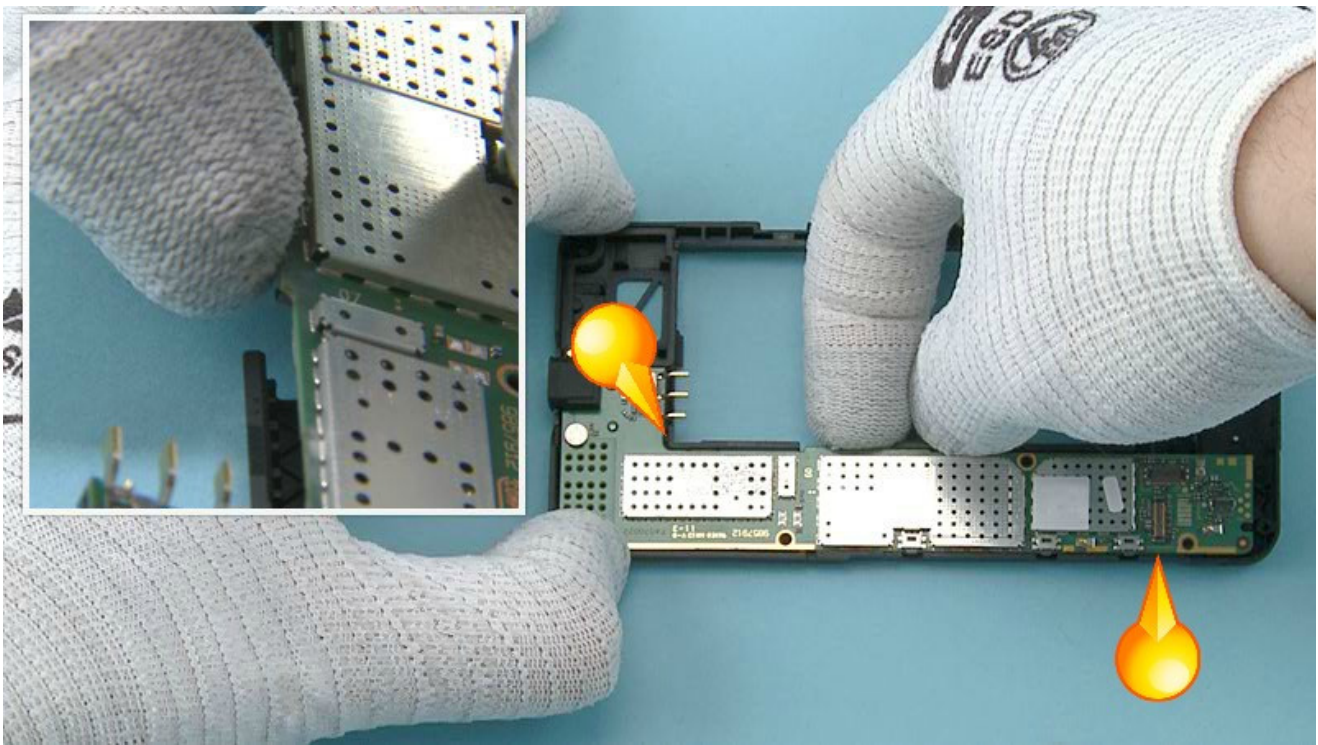


25) Push the SS-93 under the flex part as shown.

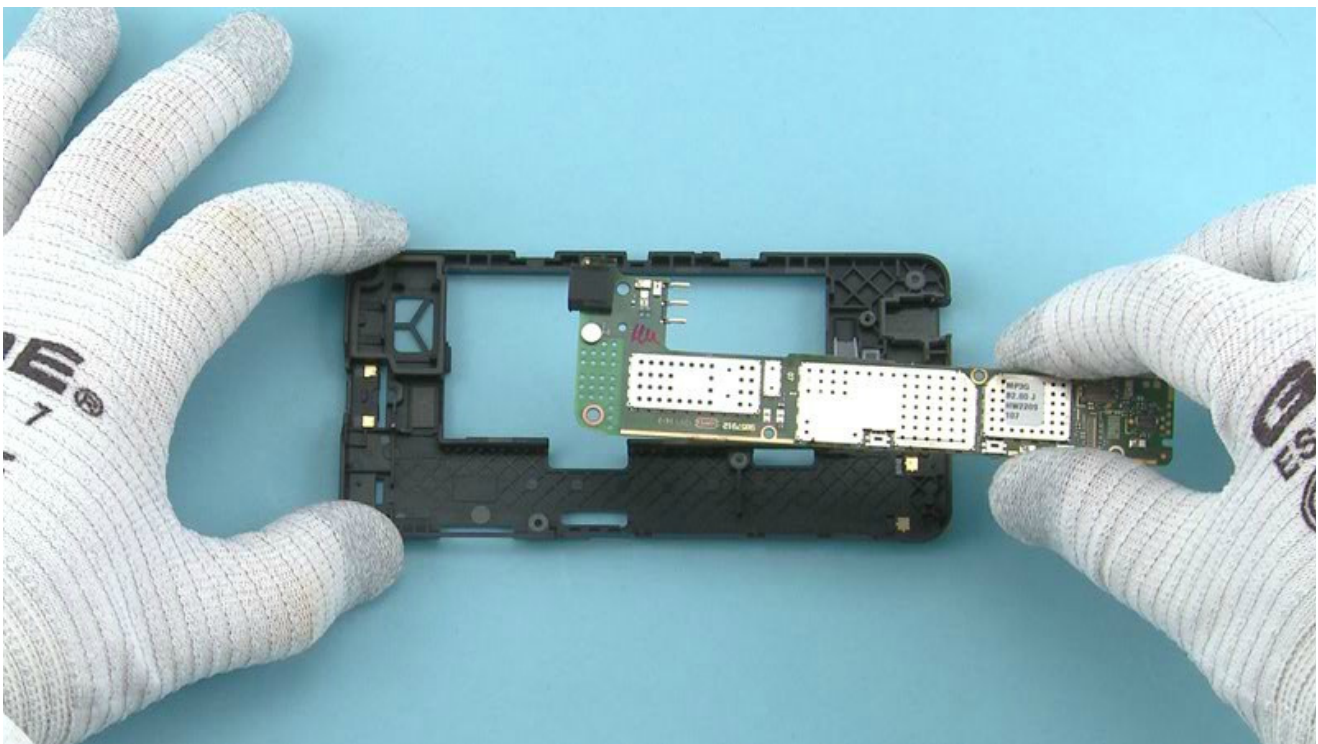


26) Remove and discard the TOP FLEX.

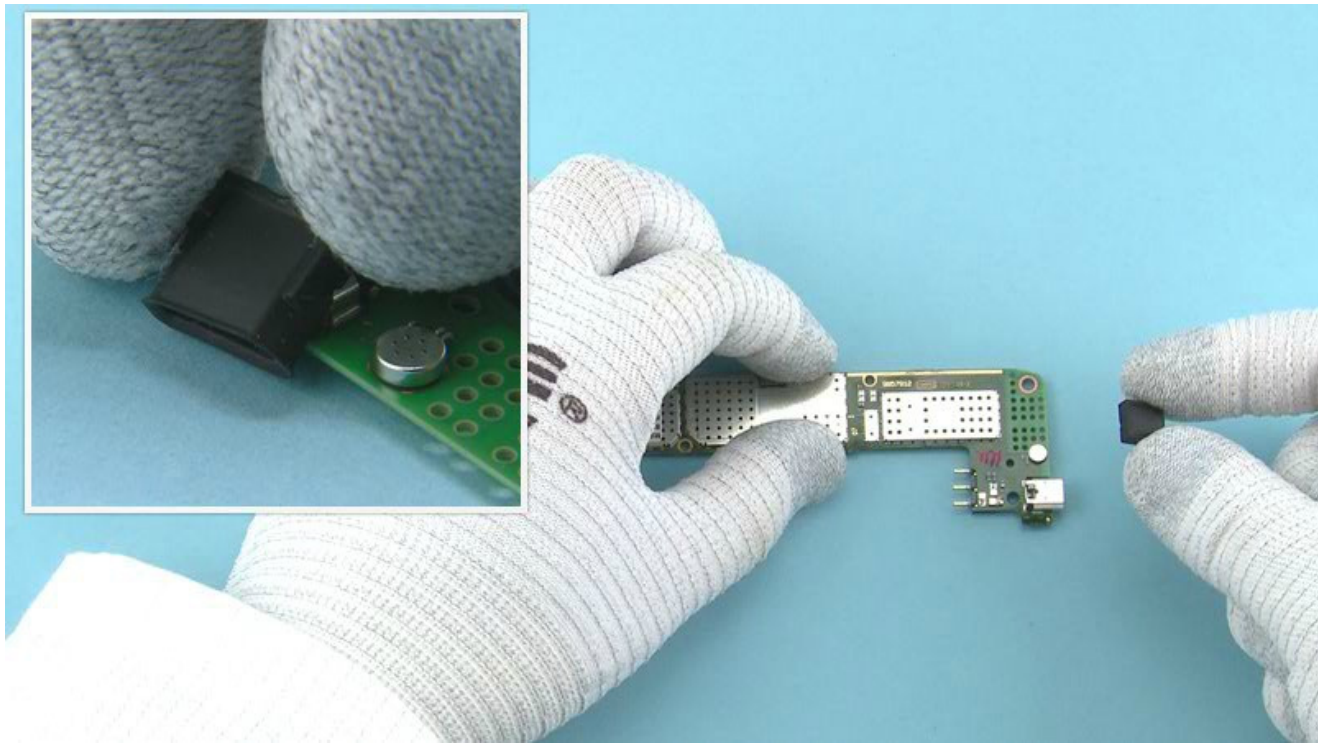




27) Lift up the ENGINE BOARD from the shown place so that the shown two clips holding it are released.



28) The ENGINE BOARD can now be separated.



29) Remove the USB BOOT.



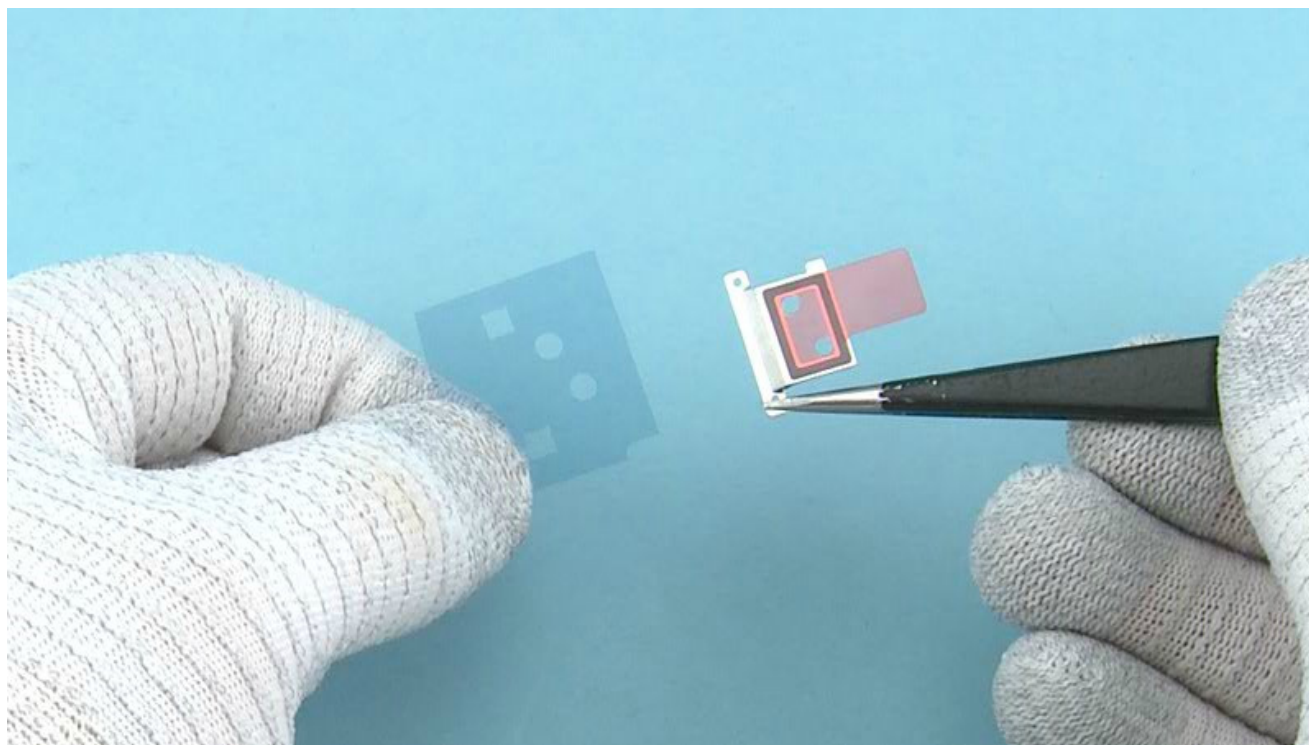
30) The Nokia Lumia 630 / Nokia Lumia 630 Dual SIM disassembly procedure is complete.

-END OF DISASSEMBLY-



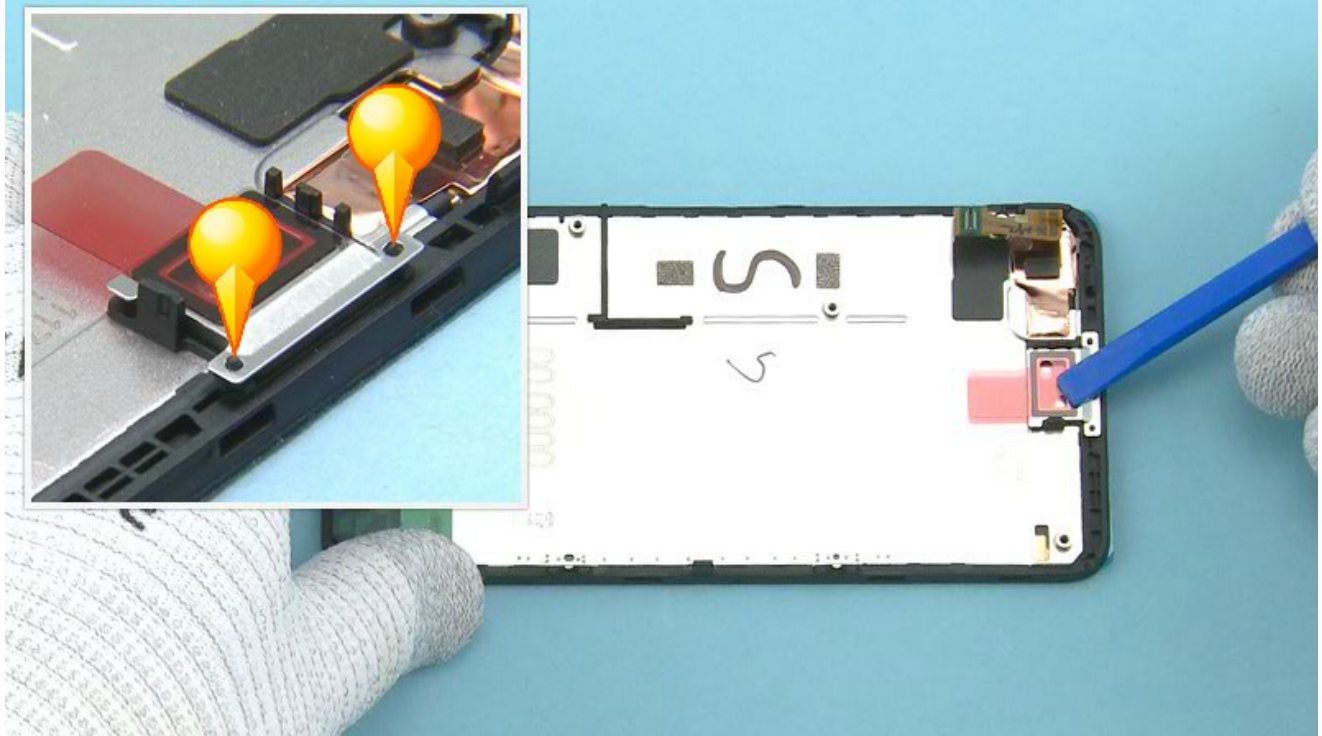


1) For assembling you need the Nokia Standard toolkit version 2.



2) Remove the shown protective film from the EARPIECE PLATE.





3) Place the EARPIECE PLATE to the DISPLAY ASSEMBLY as shown. Align the EARPIECE PLATE with the two shown guiding pins. Press the EARPIECE PLATE gently to activate the adhesive.

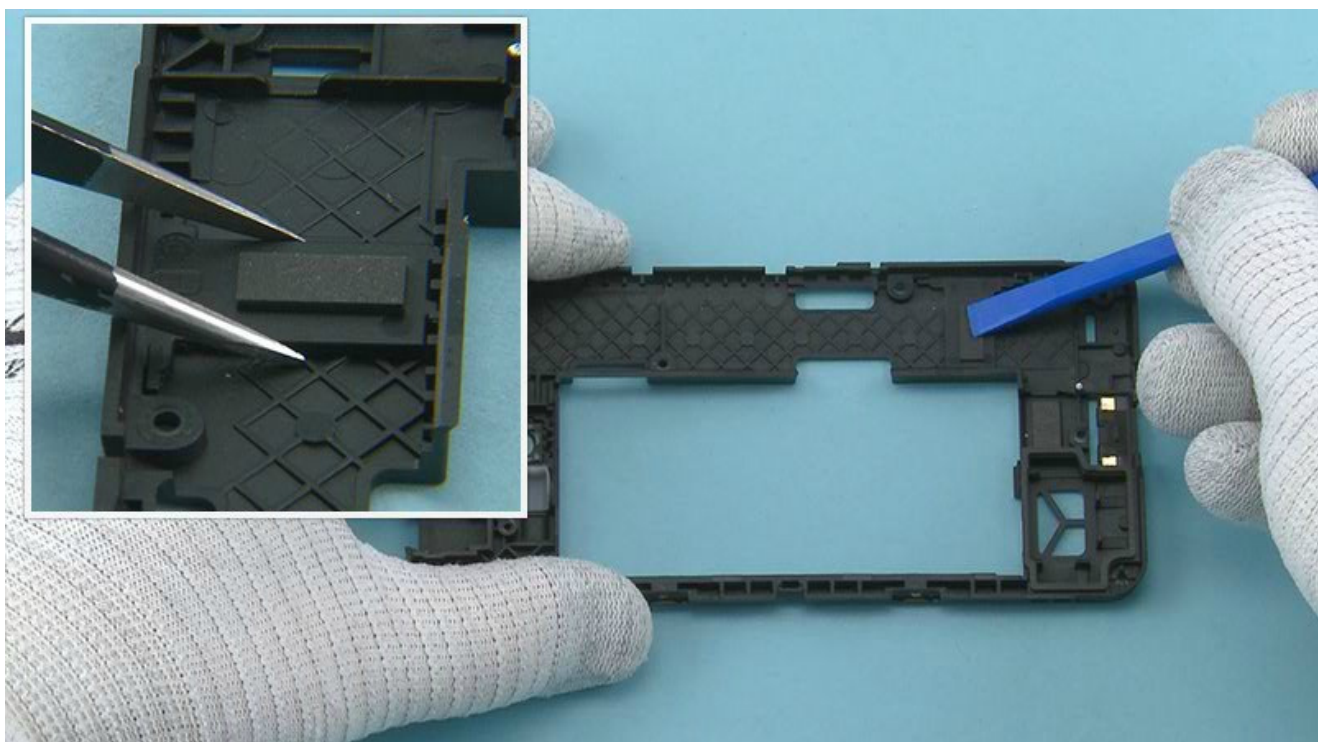


4) Remove the second EARPIECE PLATE protective film.



5) Hold the EARPIECE with tweezers as shown so that the pins does not get damaged. Place the EARPIECE to the EARPIECE PLATE. Make sure to align the EARPIECE so that the guiding pins are as shown. Press the EARPIECE gently to activate the adhesive.

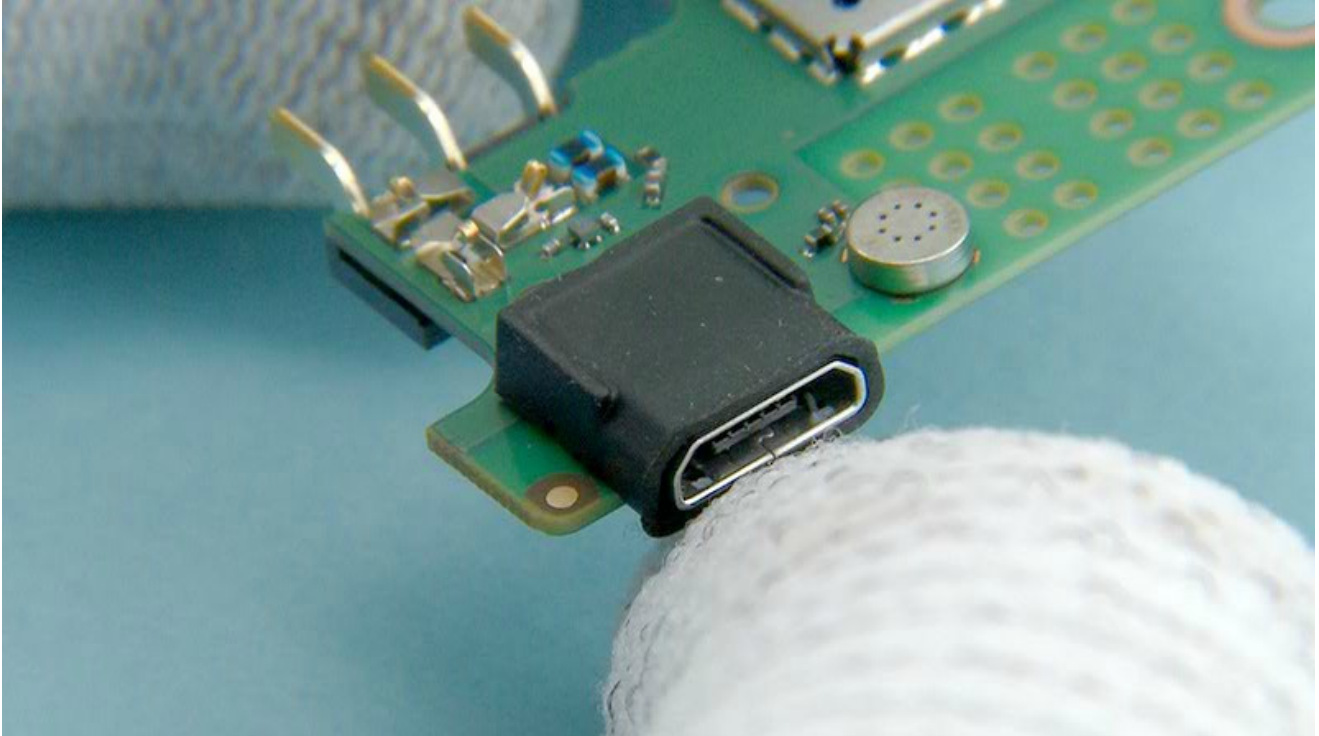
Be careful not to damage the EARPIECE pins.



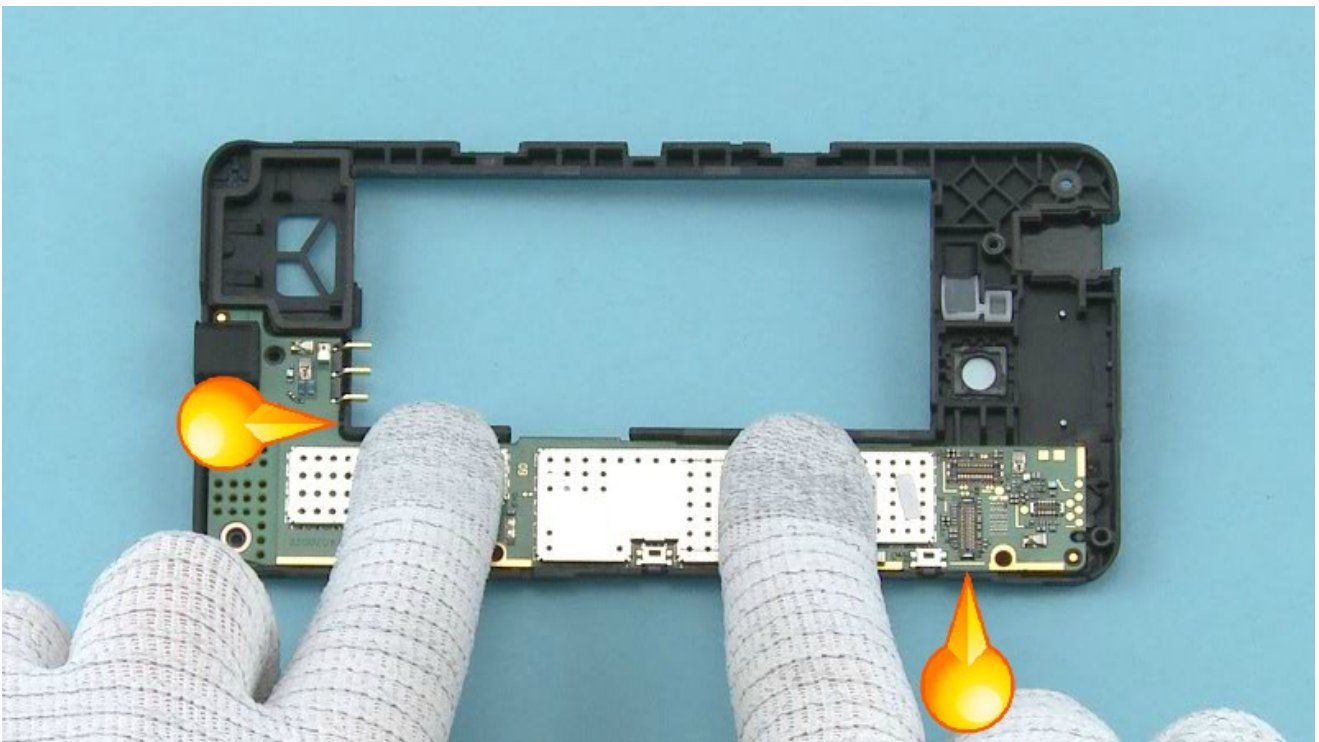
6) Note that this step is only for the single SIM variants.

Place the DUAL SIM BARRIER as shown and press it to activate the adhesive.

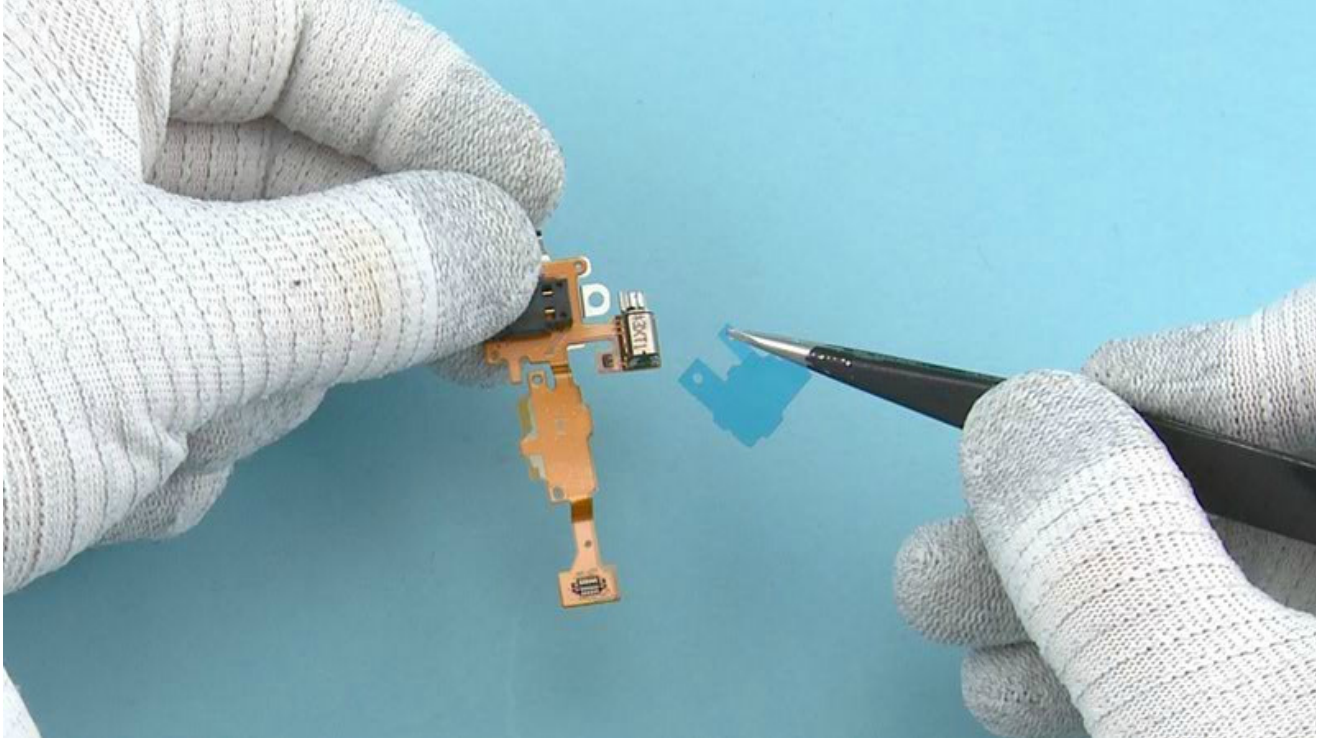




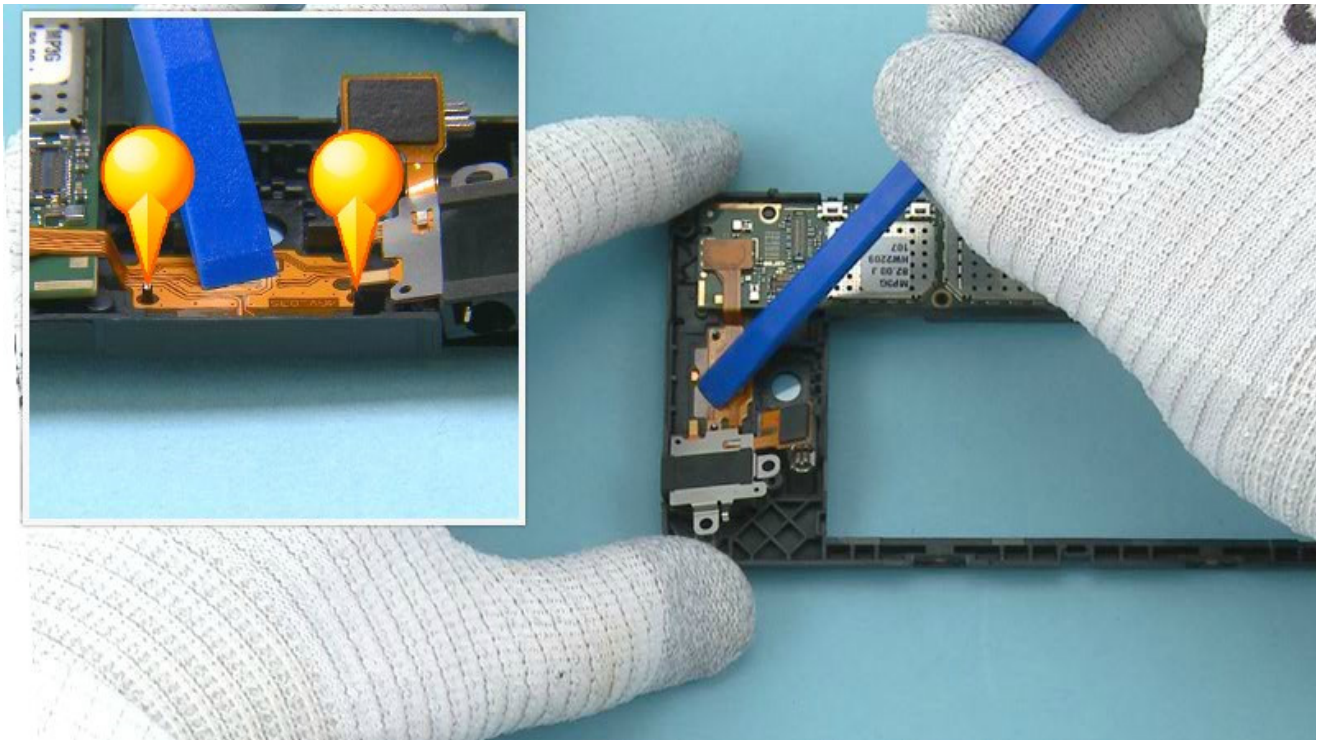
7) Place the USB BOOT as shown.



8) Place the ENGINE BOARD to the CHASSIS ASSEMBLY. Press the ENGINE BOARD as shown and make sure the two shown clips are attached properly.

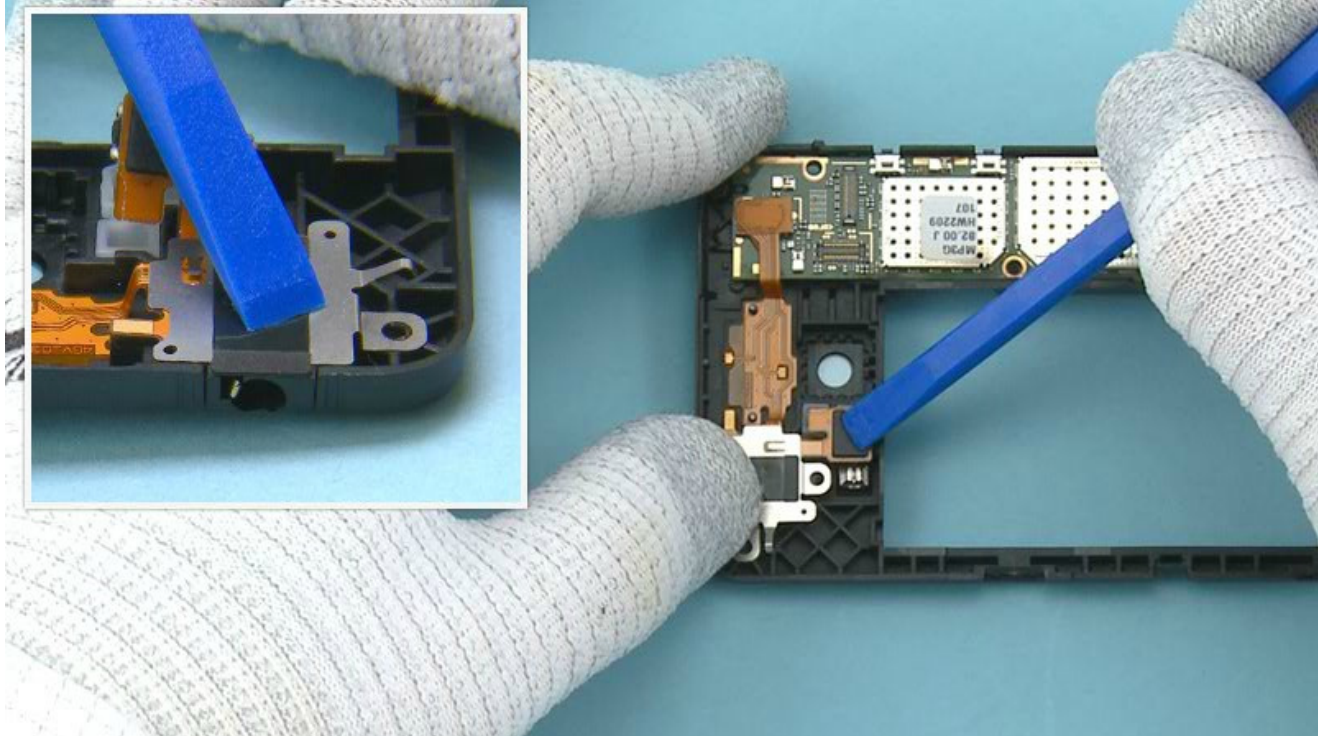


9) Remove the TOP FLEX protective film.

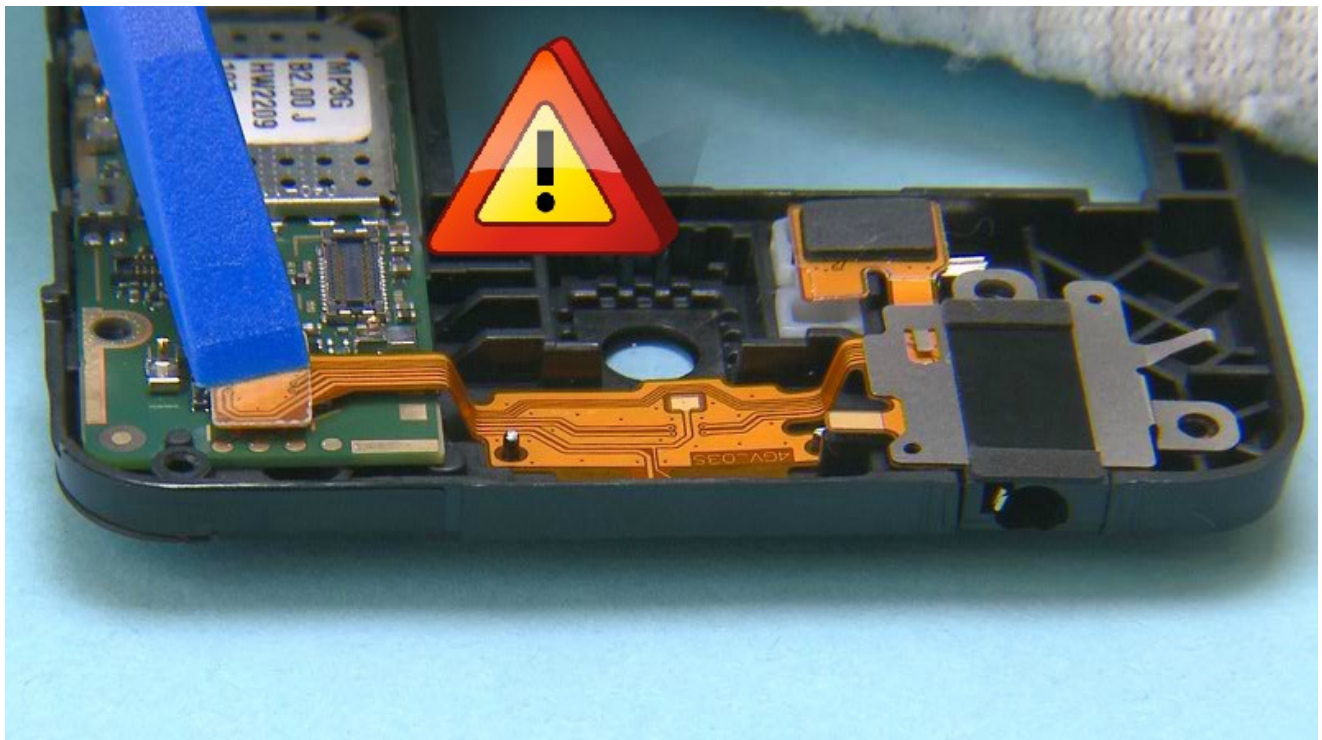


10) Place the TOP FLEX to the CHASSIS ASSEMBLY by using the two shown guiding pins. Press the flex part gently to activate the adhesive.



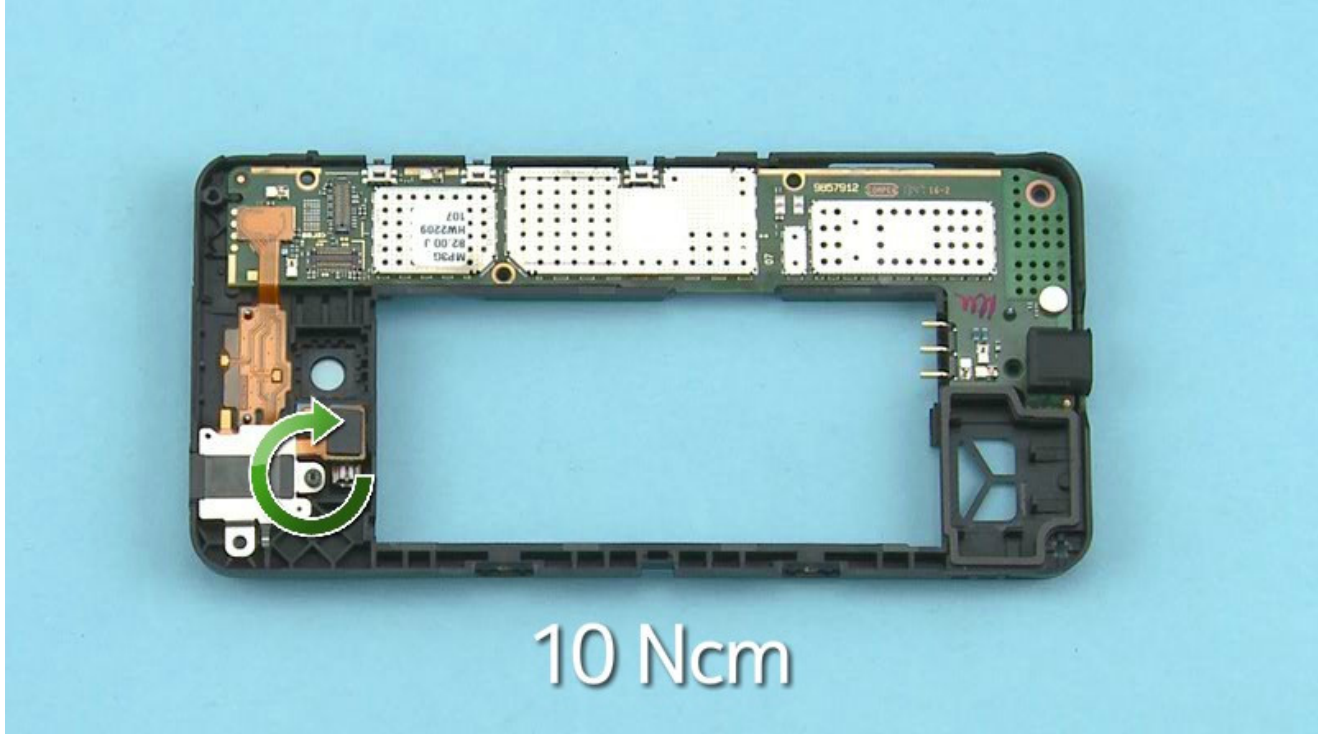


11) Push the AV connector and the vibra to their places.

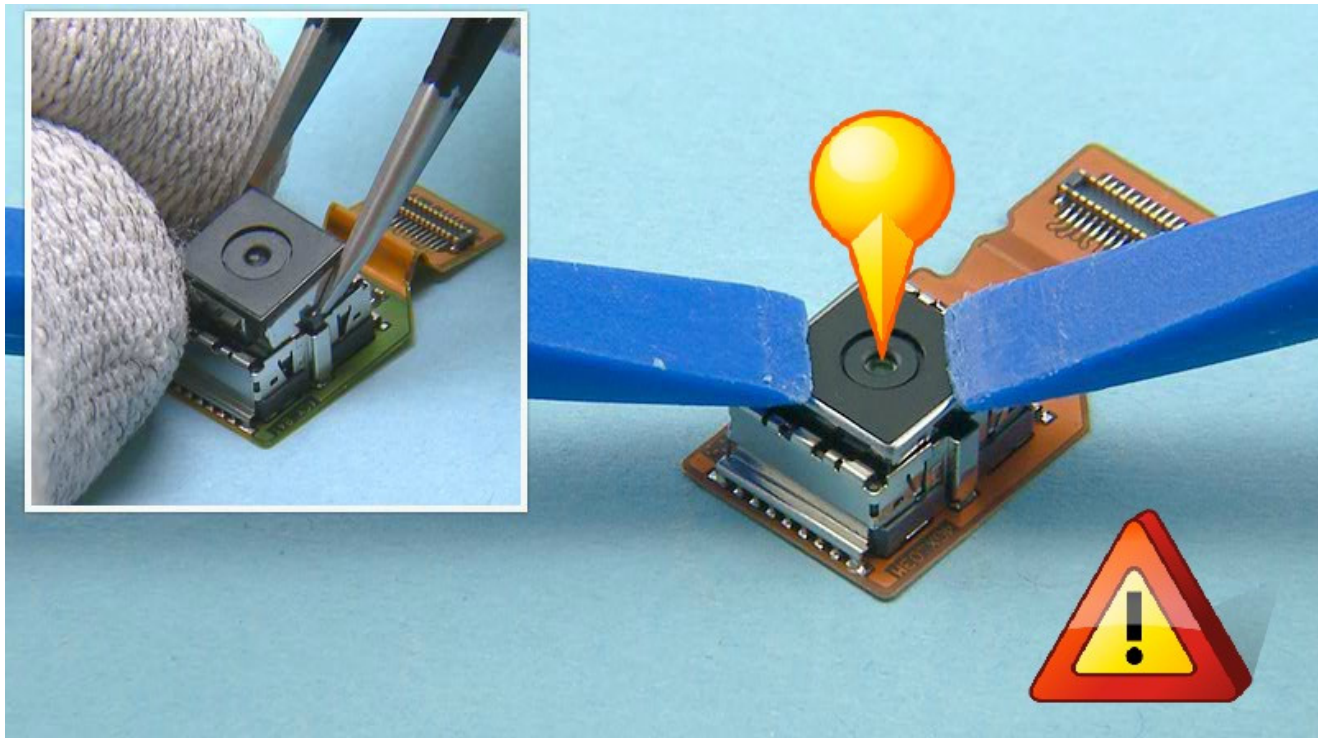


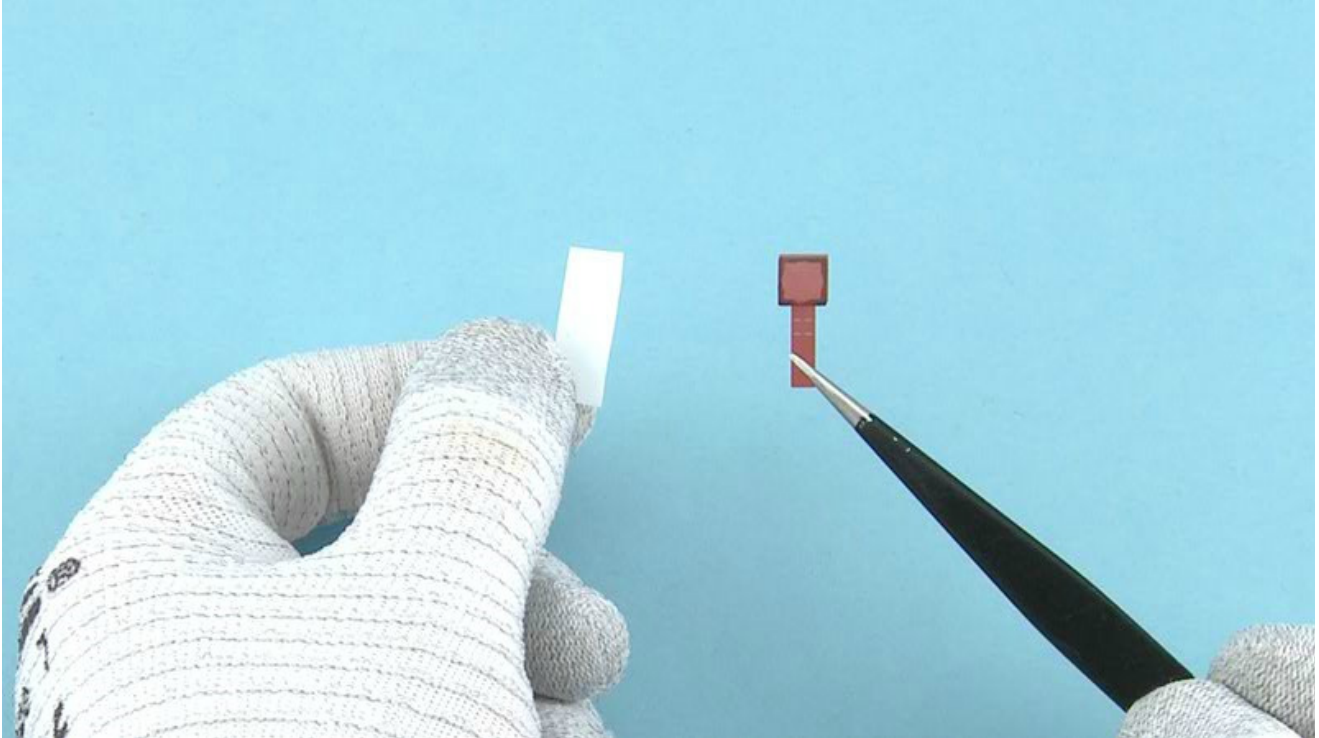
12) Connect the TOP FLEX connector with the SS-93.  
Be careful not to damage the connector or any components nearby.



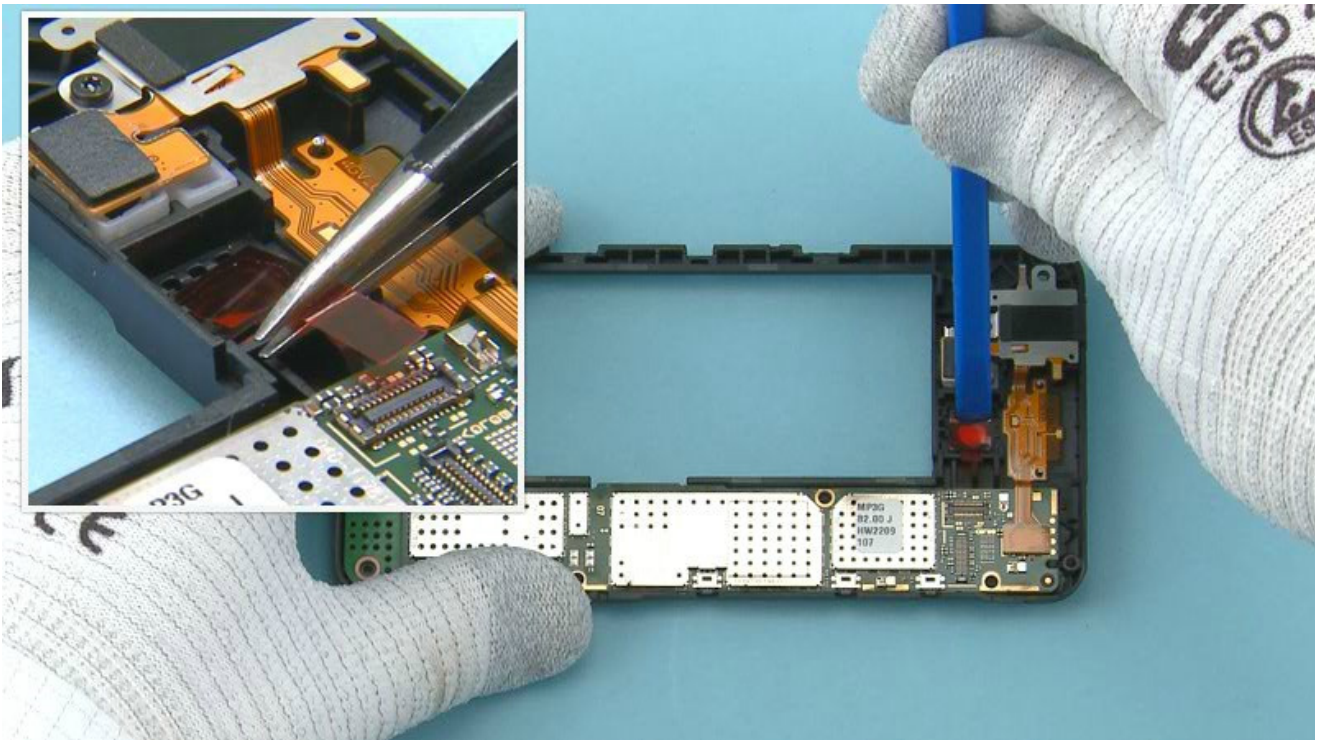


13) Fasten the shown TORX+ size 4 screw to torque of 10 Ncm.





15) Remove the shown protective film from the CAMERA GASKET.

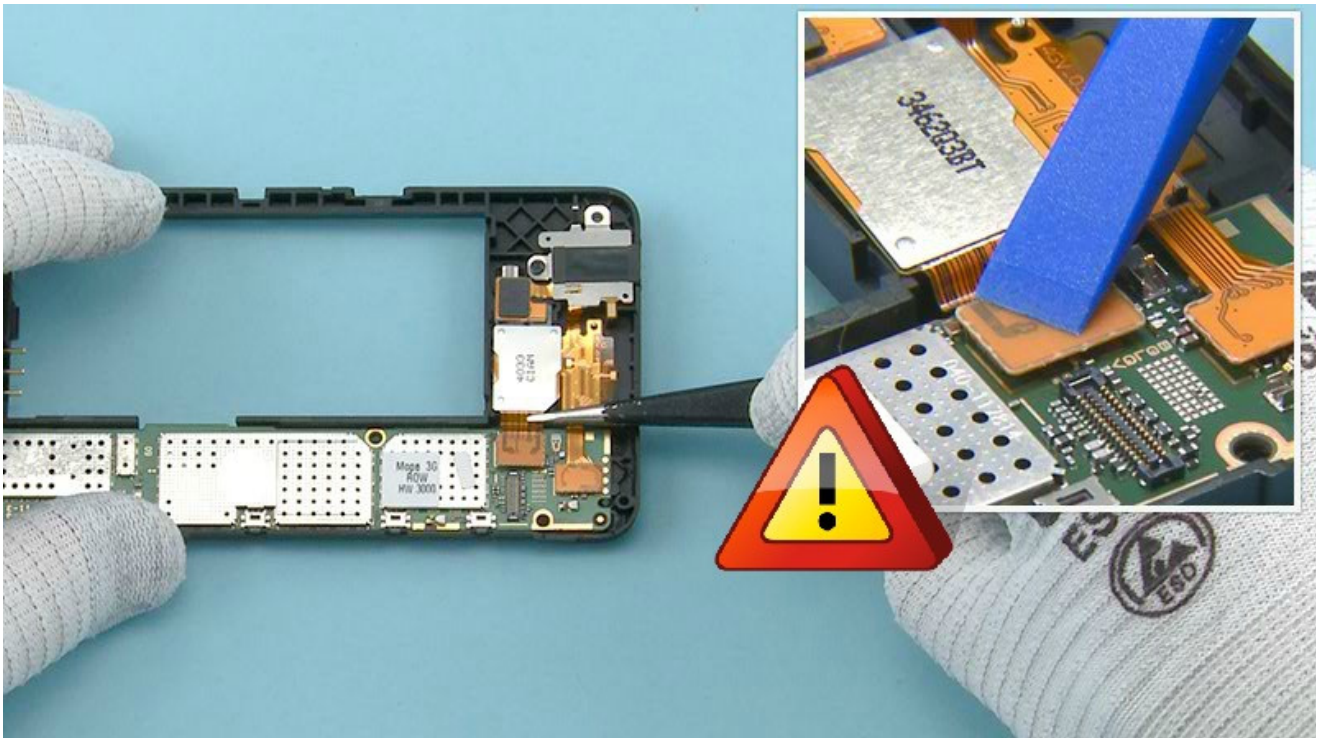


16) Place the CAMERA GASKET to the CHASSIS ASSEMBLY as shown. Push the CAMERA GASKET to activate the adhesive.



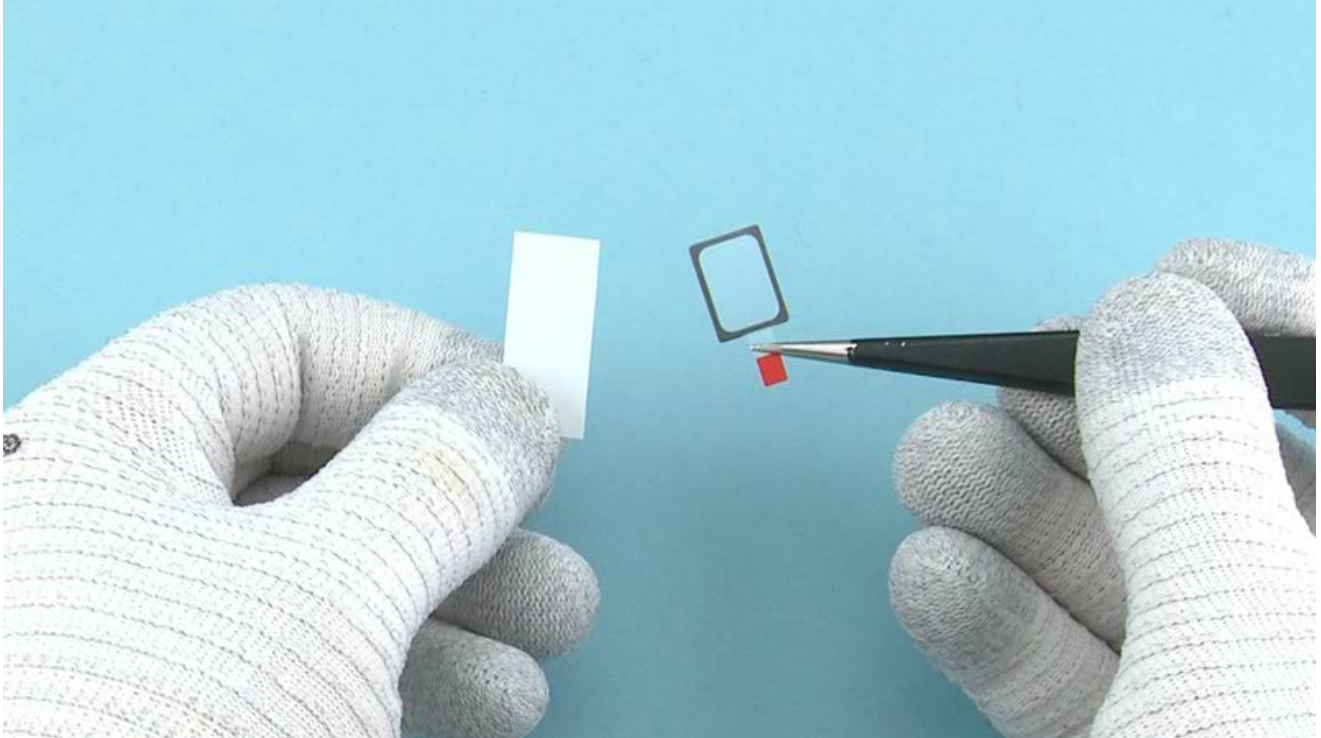


17) Remove the shown CAMERA GASKET protective film.

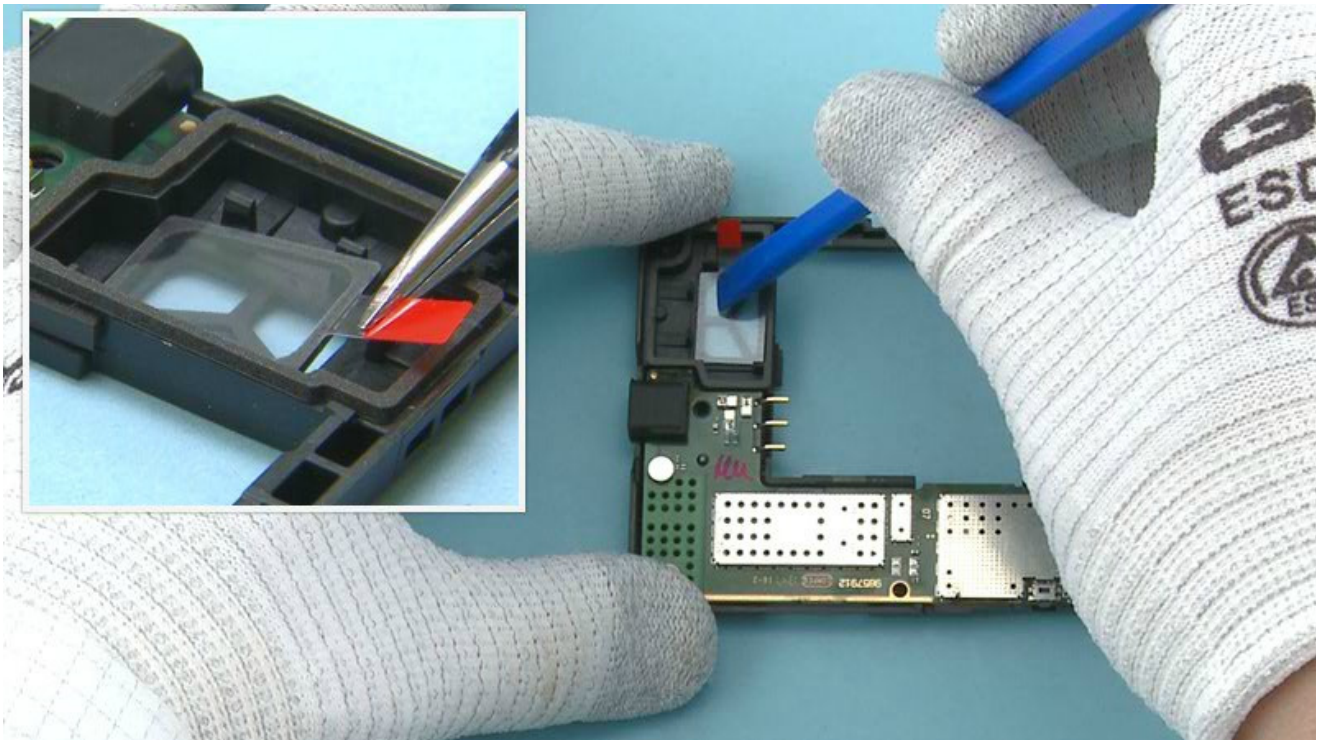


18) Place the CAMERA FLEX to the CHASSIS as shown. Make sure to place it straight as the CAMERA GASKET might move or bend and be visible in the CAMERA window if the CAMERA is placed in angle. Connect the CAMERA connector.

Be careful not to damage the connector or any components nearby.

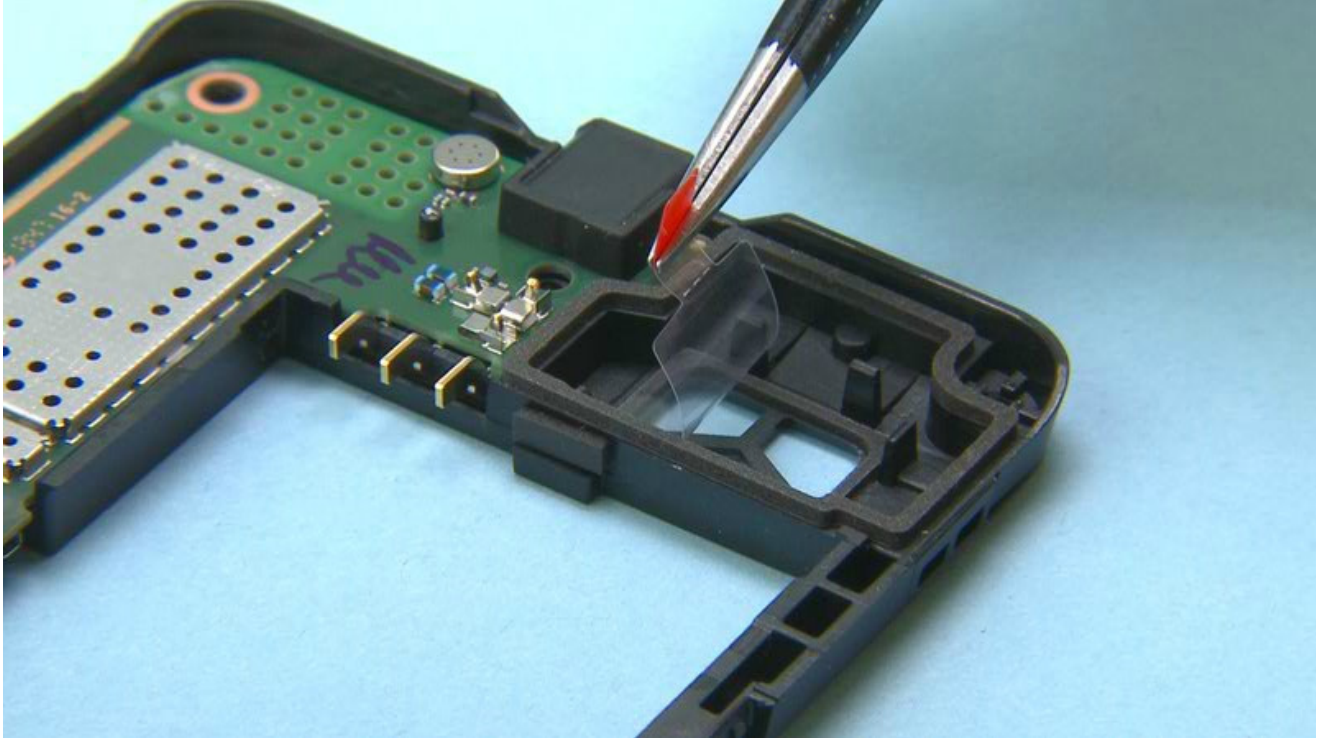


19) Remove the shown protective film from the IHF SPEAKER GASKET.

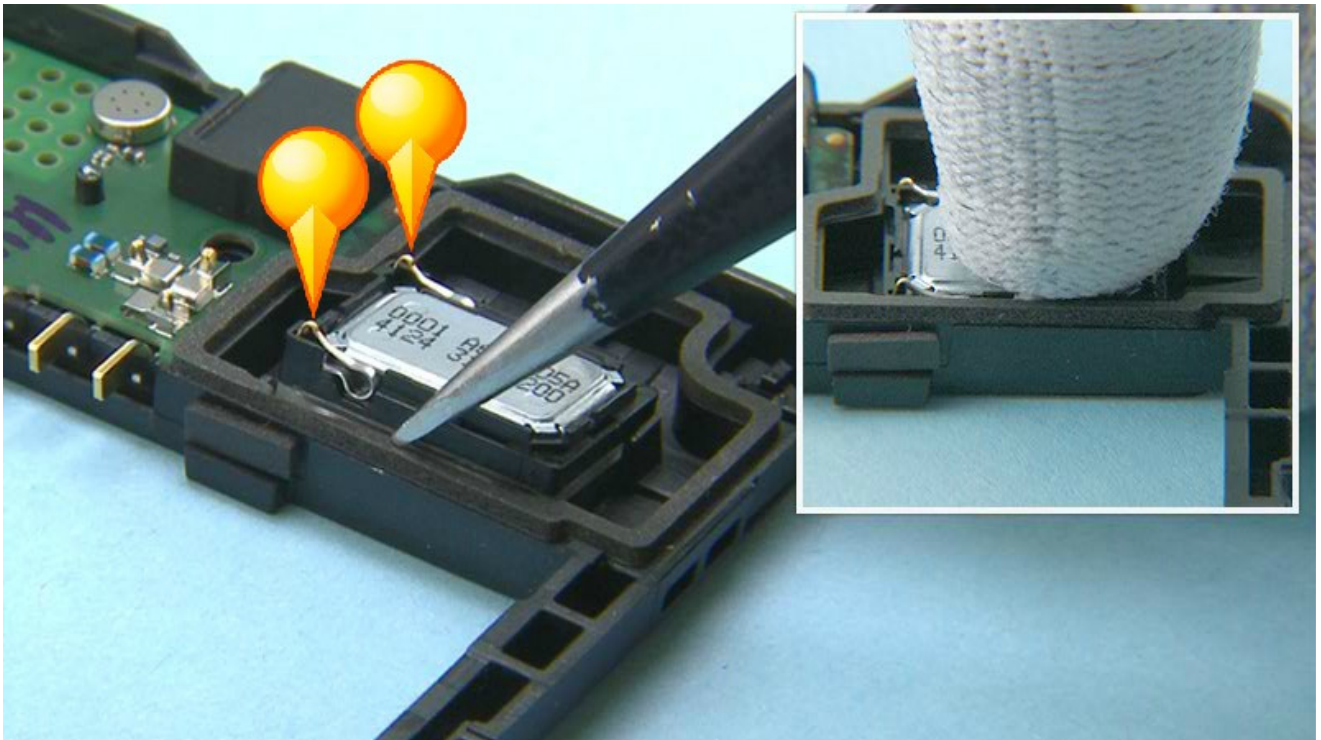


20) Place the IHF SPEAKER GASKET to its place and press it to activate the adhesive.

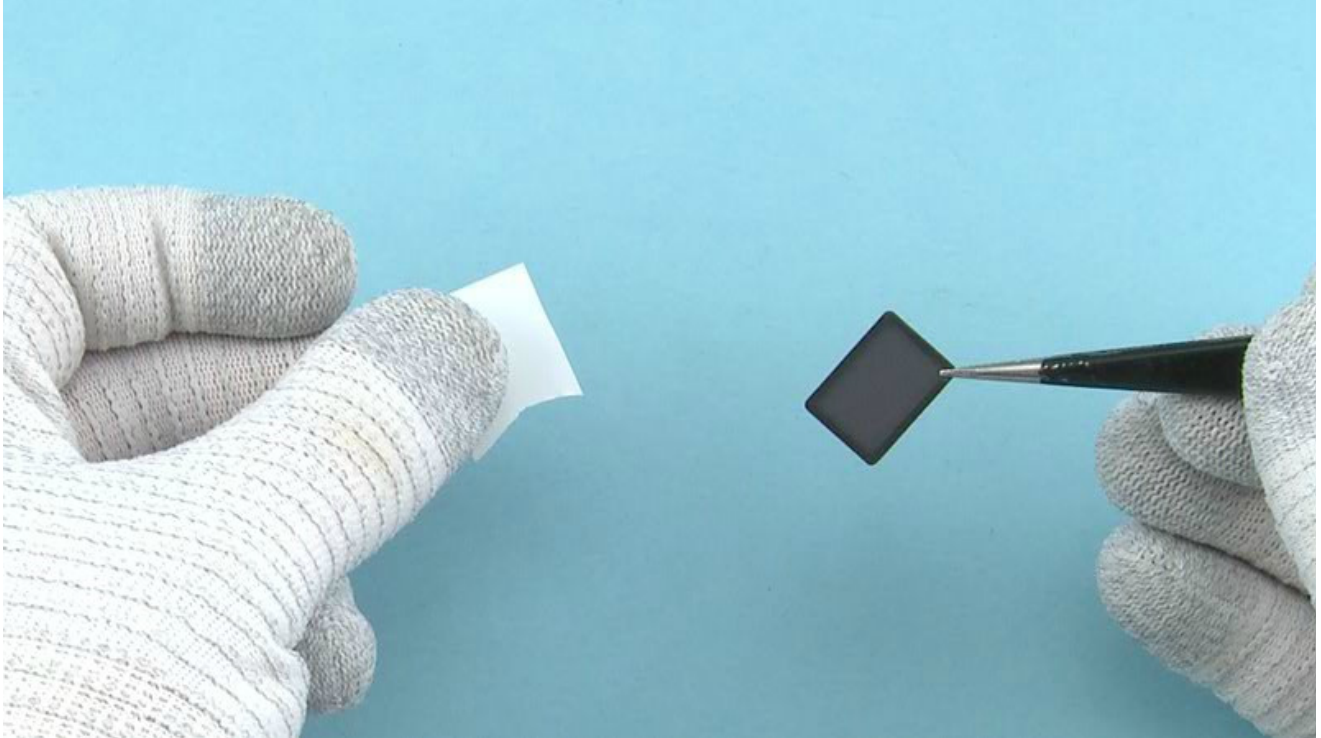




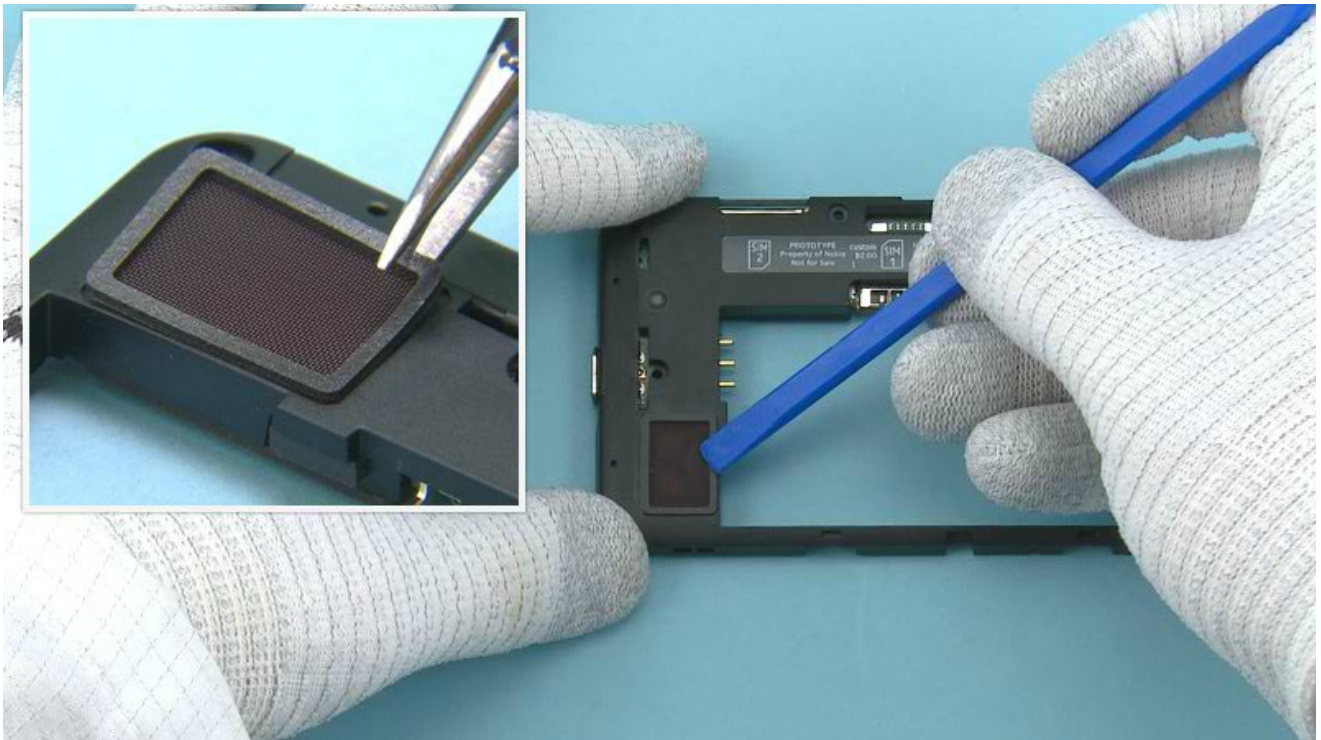
21) Remove the second IHF SPEAKER GASKET protective film.



22) Note the IHF SPEAKER alignment when placing it. Push the IHF SPEAKER gently to activate the adhesive.

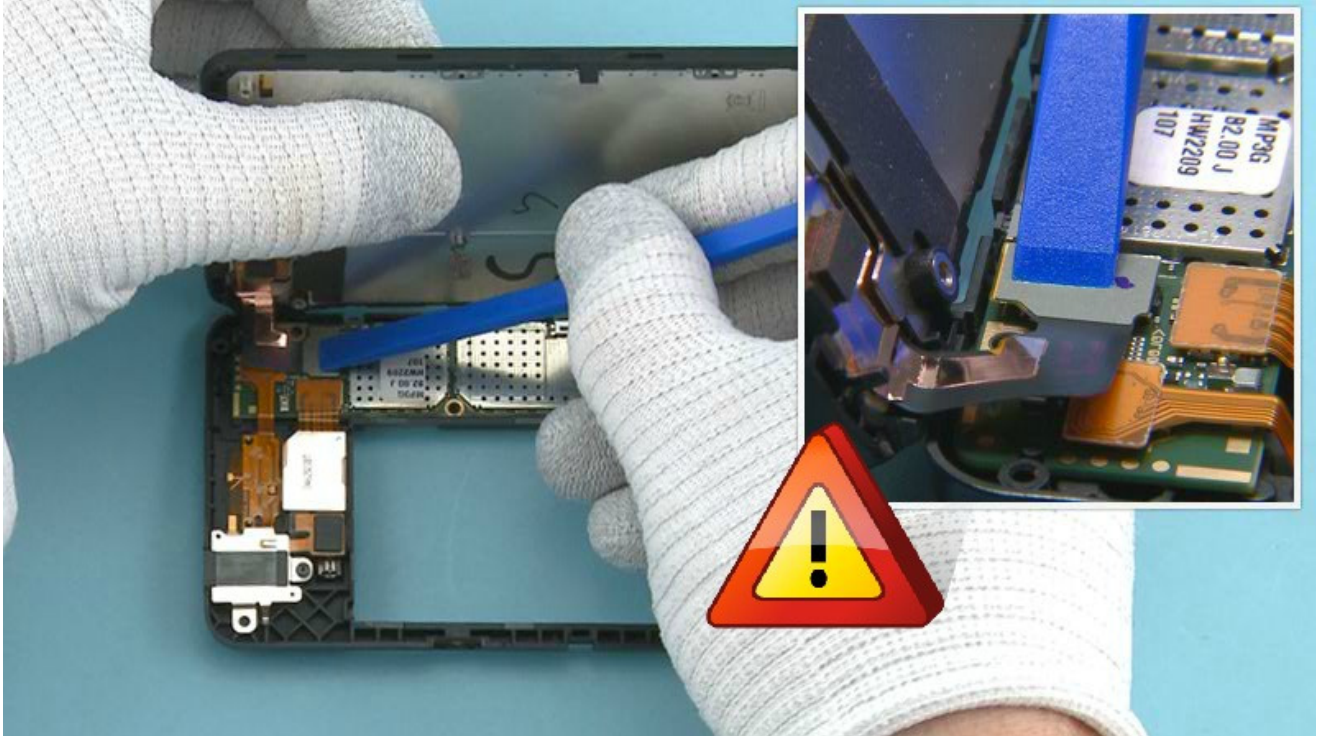


23) Remove the IHF MESH protective film.

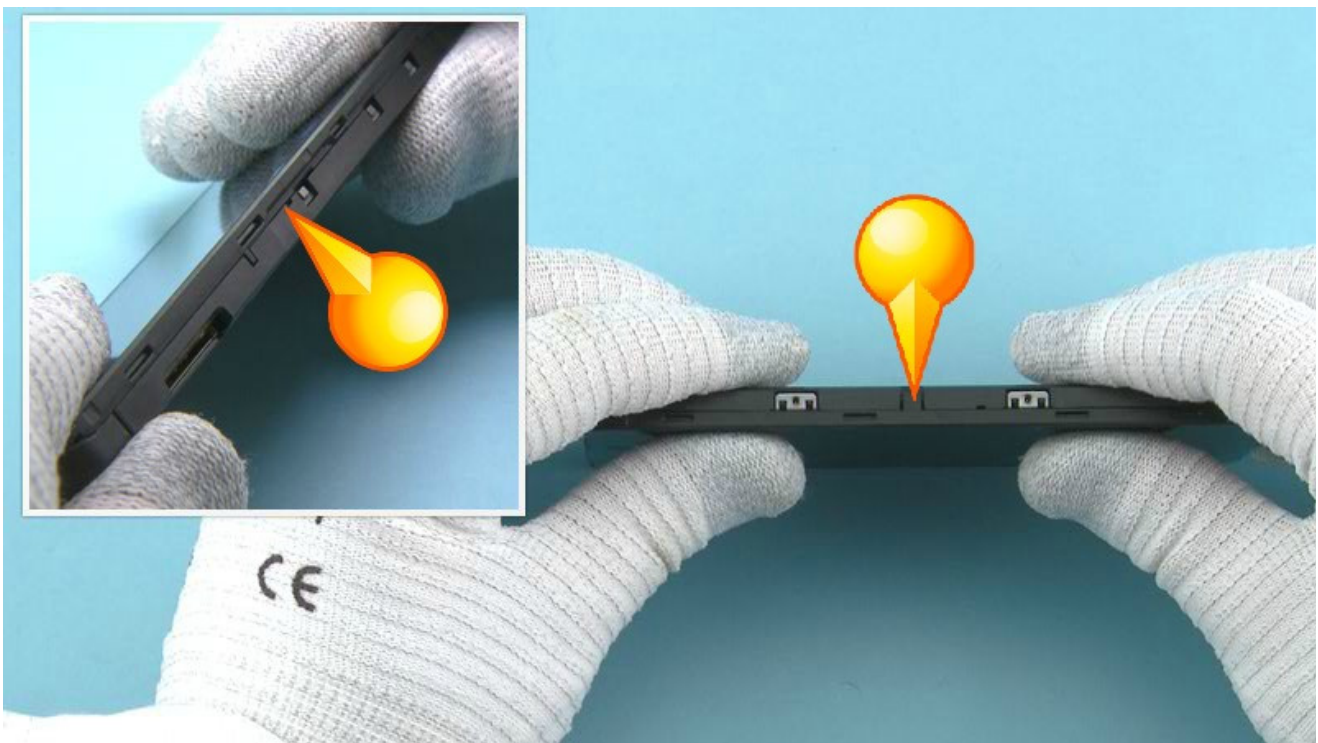


24) Place the IHF MESH and press it gently to activate the adhesive.





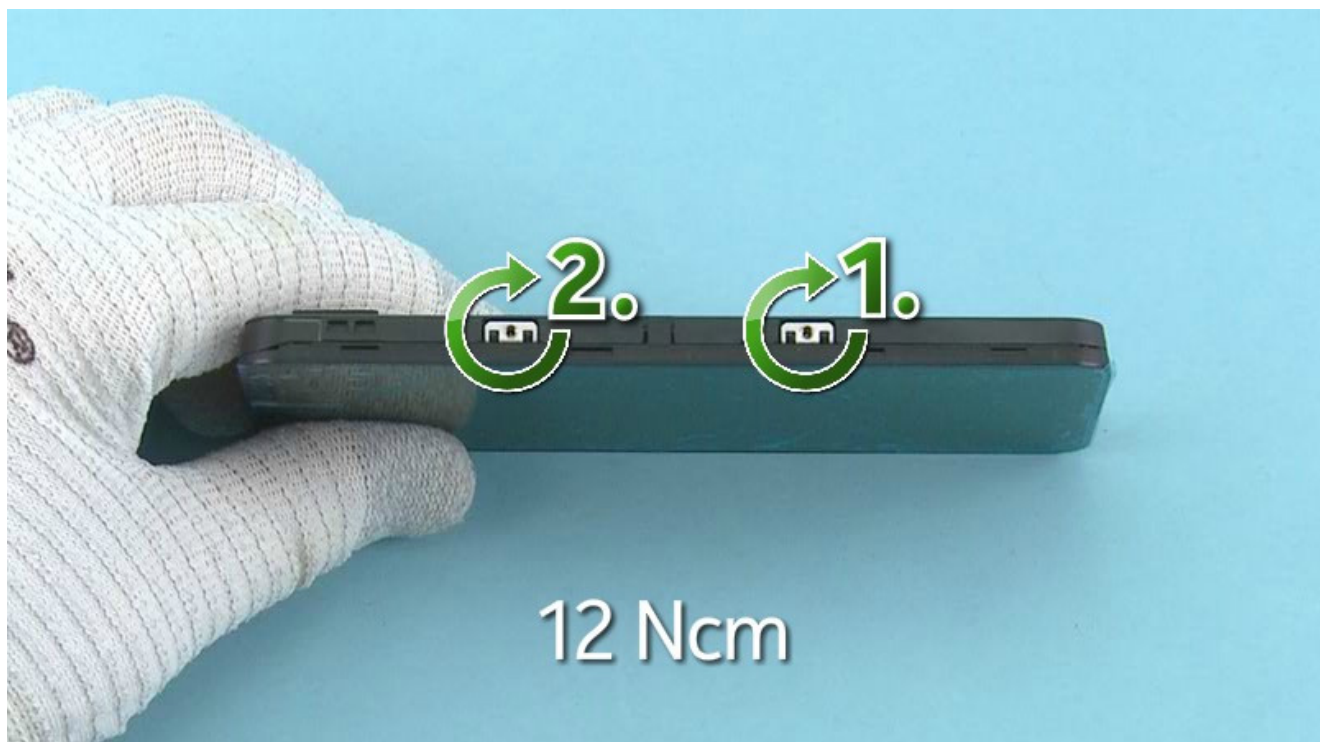
25) Hold the DISPLAY ASSEMBLY as shown when connecting the DISPLAY connector.  
Be careful not to damage the connector or any nearby components.



26) Turn over the DISPLAY ASSEMBLY on top of the CHASSIS ASSEMBLY and press them so that both sides of the device are closed properly.

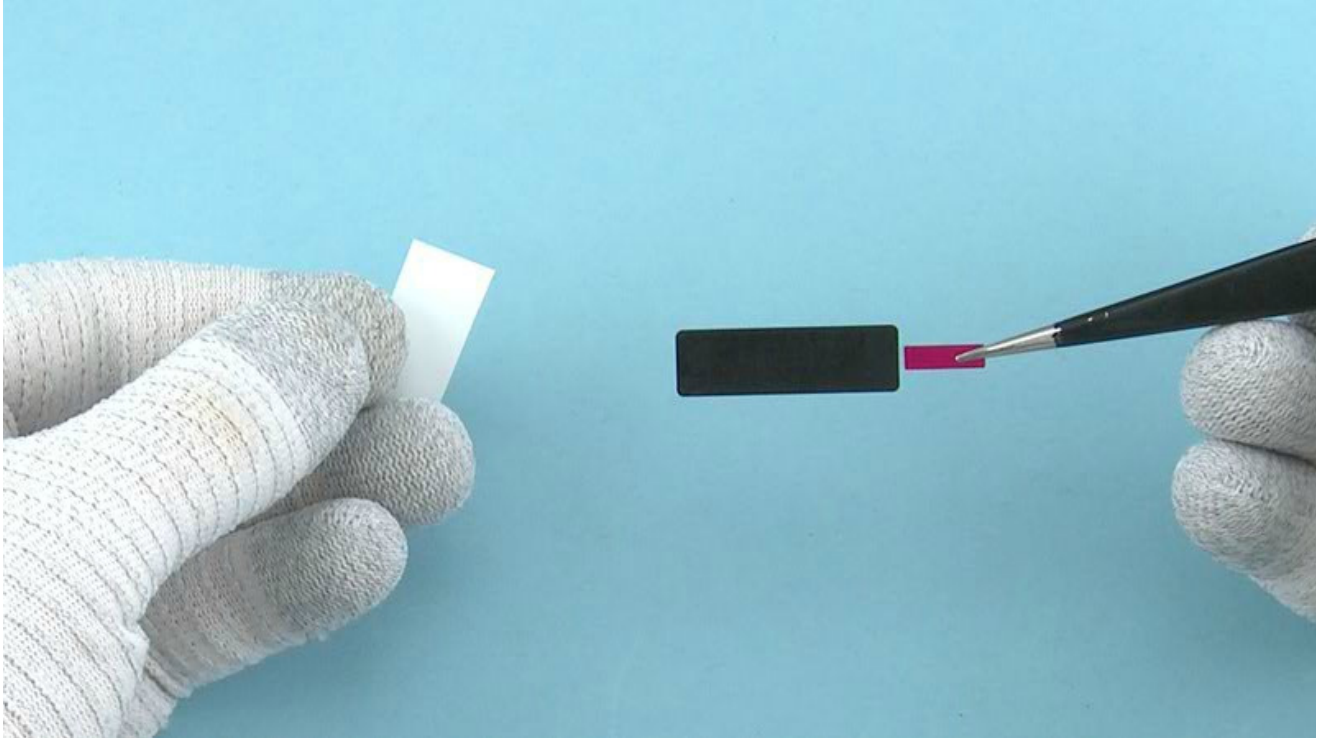


27) Fasten the seven TORX+ size 4 screws in the order shown to the torque of 11 Ncm.  
Note that these seven screws are longer than the two screws shown in the next step.



28) Fasten the two TORX+ size 4 screws in the order shown to the torque of 12 Ncm.  
Note that these two screws are shorter than the seven screws shown in the previous step.





29) Remove the shown protective film from the MAIN ANTENNA HOLE ADHESIVE.



30) Place the MAIN ANTENNA HOLE ADHESIVE as shown.



31) Press the MAIN ANTENNA HOLE ADHESIVE to activate the adhesive. Remove the protective film from the MAIN ANTENNA HOLE ADHESIVE.



32) Place the BATTERY.

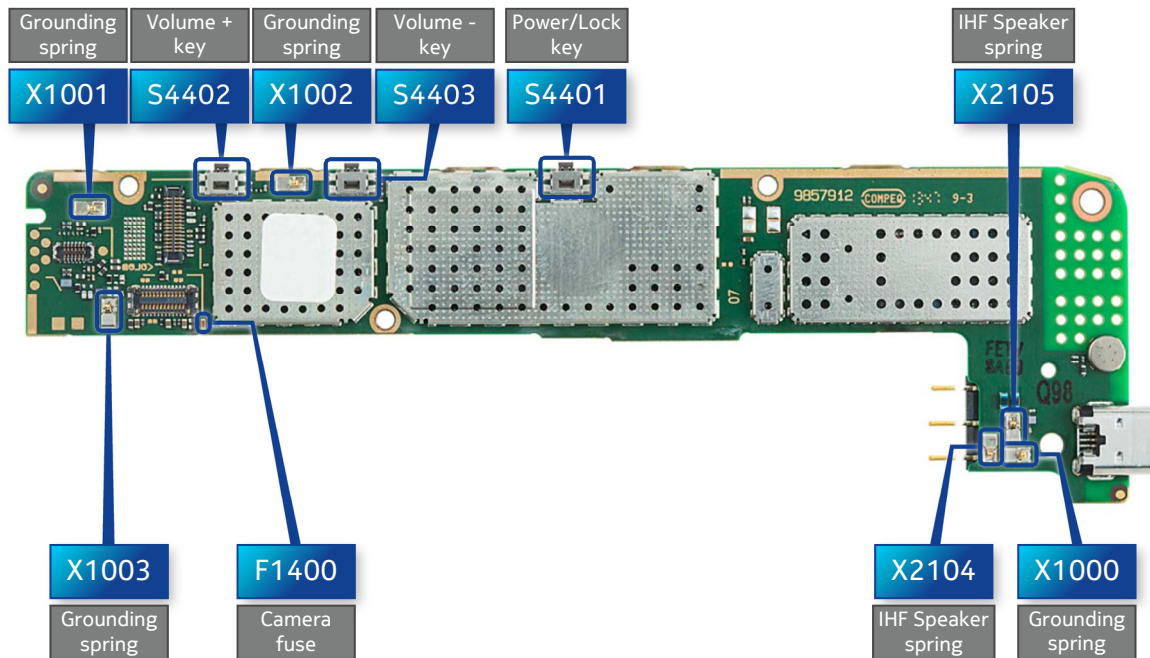




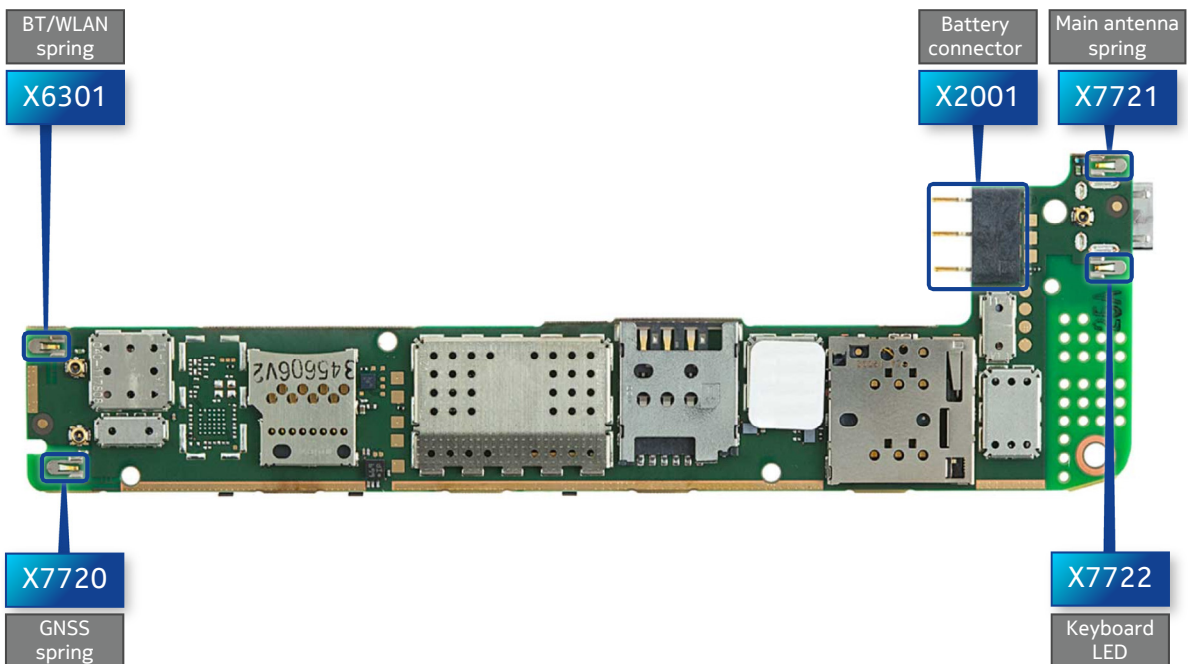
33) Place the DISPLAY ASSEMBLY to the BACK COVER bottom end first. Press the DISPLAY ASSEMBLY to attach it properly to the BACK COVER.

The Nokia Lumia 630 / Nokia Lumia 630 Dual SIM assembly procedure is complete.

## TOP



## BOTTOM







CA-101 Service cable



AC-20  
AC-21C (Only for China)



SS-305 Camera removal tool

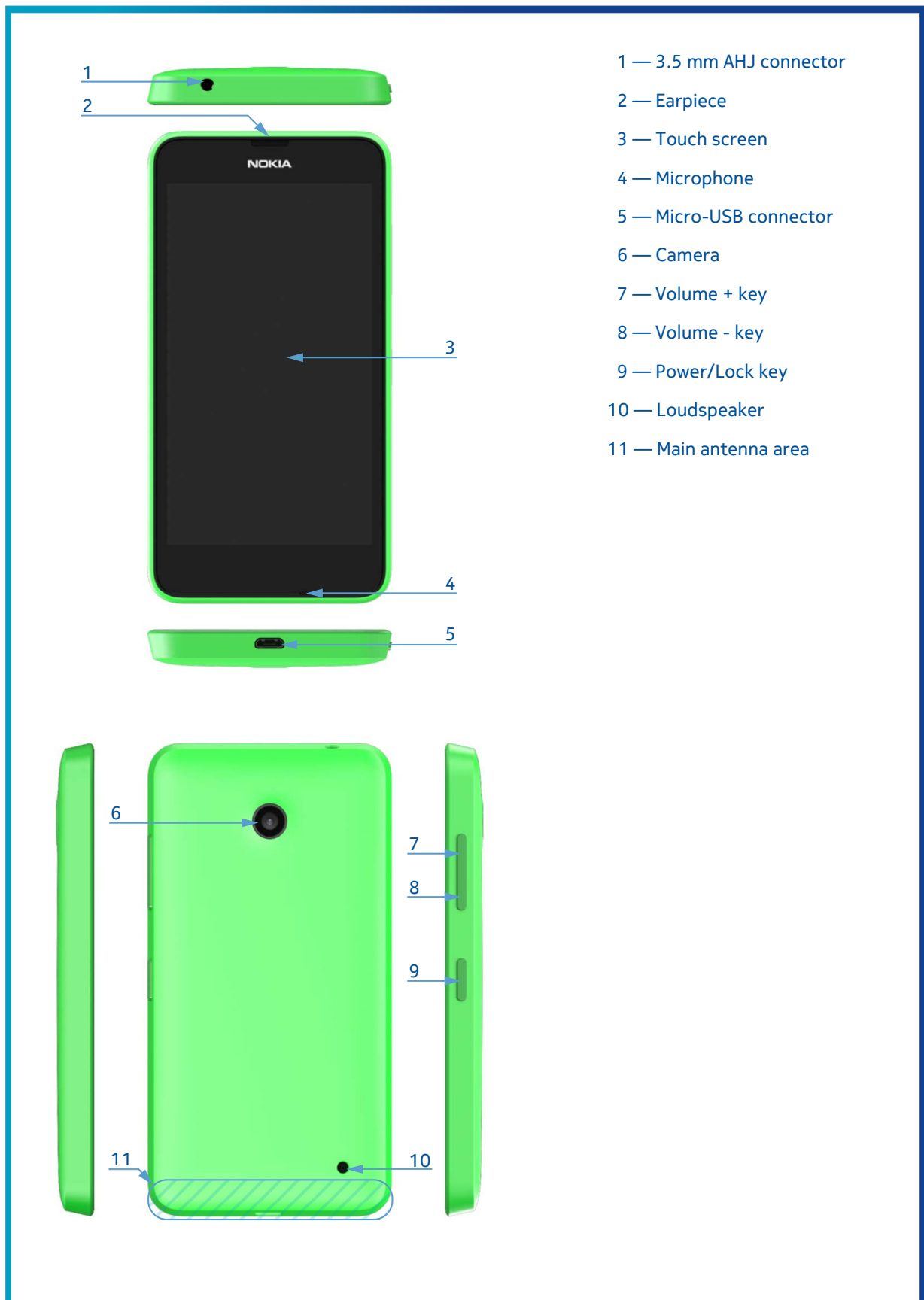


BL-5H Battery



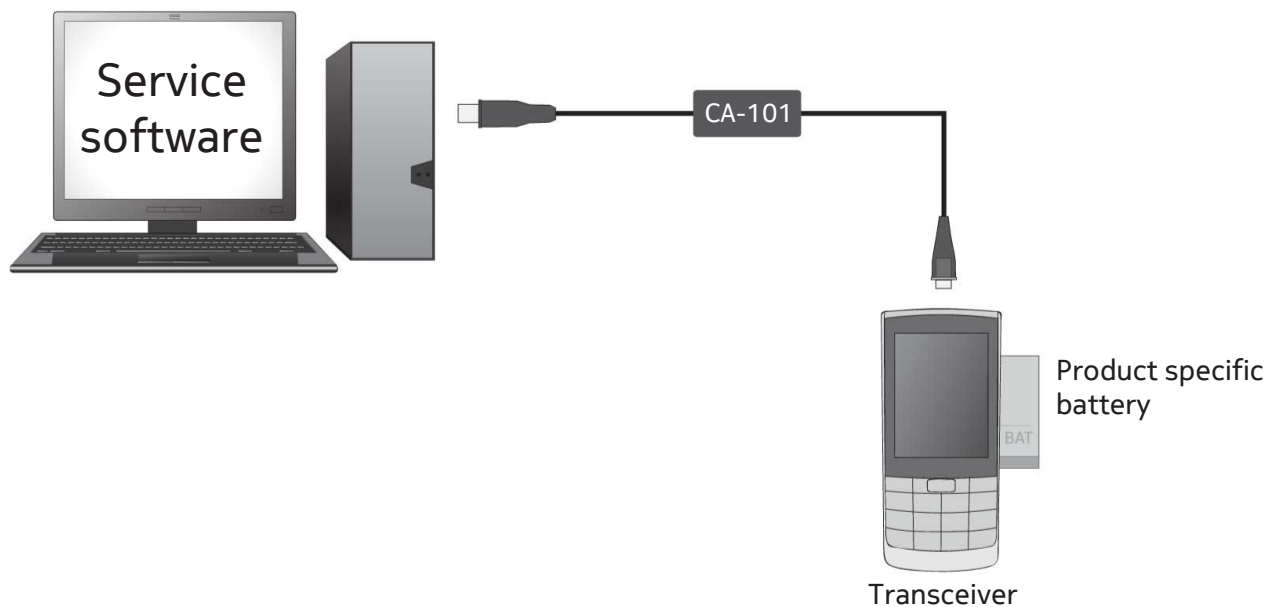
Nokia Standard Toolkit (v2)

For more information, refer to the Service Bulletin (SB-011) on Nokia Online. Supplier or manufacturer contacts for tool re-order can be found in “Recommended service equipment” document on Nokia Online.





## Flashing concept

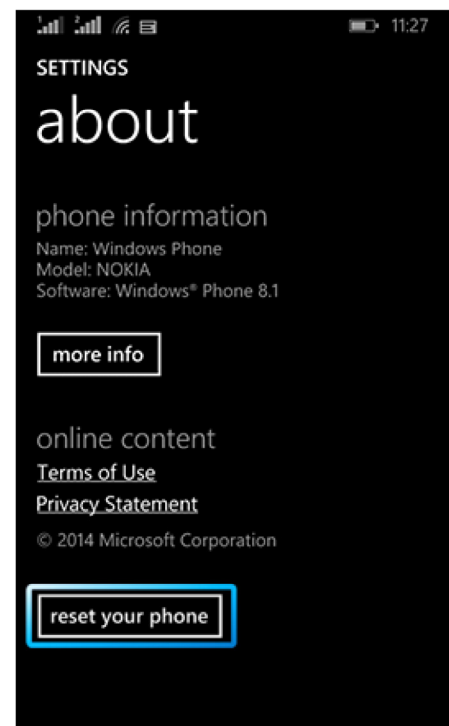


### Software / operating system (OS) reset

The software / operating system (OS) reset returns the phone to its out-of-the-box state. Note that this procedure erases all consumer data! Always first try to perform a hardware reset.

#### Option 1: About menu

- Use this option if the consumer knows the lock code
- This option warns the consumer about data loss!
- Tap **Settings > About > reset your phone**



#### Option 2: Hardware key combination

- Use this option if the phone is locked and the consumer does not know the code
- Note: no warning about data loss!
- Do not advertise this feature to consumers!

Follow next steps to perform OS reset with phone keys.

##### Step 1

Make sure the phone is turned Off.

1. Press and hold the power key
2. Phone vibrates (release the power key)
3. Press and hold the volume down key
4. Exclamation mark is shown on the screen (release the volume down key)





## Step 2

Input the following key combination:

1. Volume up
2. Volume down
3. Power
4. Volume down



## Step 3

The phone will reset and boot up automatically



# Display, Touch and Proximity sensing related troubleshoot

## Proximity sensing

This phone does not have optical proximity sensor, like previous Nokia products. In this device touch module is used for proximity sensing purpose. Proximity sensing works when call is active. When conductive large object (e.g. face or ear) is in touch with display, display is turned off.

## Troubleshooting on call related (proximity sensing) problems.

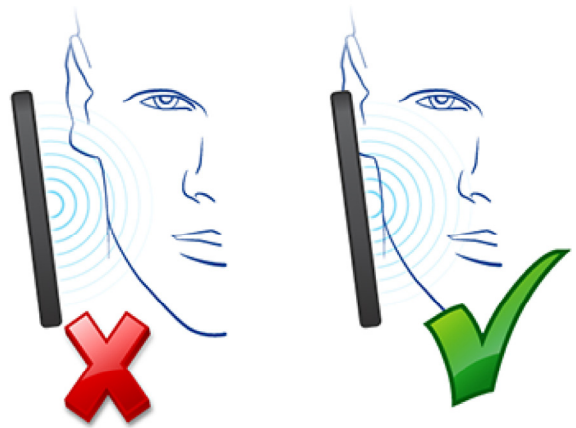
Solutions to the possible problems are as follows:

### Problem:

Display stays on during the call when phone is next to the ear.

### Solution:

Advise the customer to keep the phone closer to the ear during the call. Cheek or ear should be in touch with the display area of the phone, not the frame of the phone.



### Problem:

Display stays black when phone is removed from ear during the call or Customer complains that phone display blinks or stays black when headset, charger or both are connected.

### Solutions:

1. Touch screen functions or proximity sensing may be affected by humidity, rain drops, make-up, or dirt on the display. If your phone touch screen becomes unresponsive, use a cleaning cloth to wipe the touch screen clean. To avoid scratches on display do not use anything that could scratch the display and do not use chemicals for cleaning.
2. Advise the customer that two short power key presses wake up the display if it stays black in situation where it should be active.
3. Check that latest Phone SW is in use. That has the best proximity sensing parameters.
4. Check that user has original Nokia headset and charger in use.





**Problem:**

Customer complains about accidental key presses during the call.

**Solutions:**

1. Touch screen functions or proximity sensing may be affected by humidity, rain drops, make-up, or dirt on the display. If your phone touch screen becomes unresponsive, use a cleaning cloth to wipe the touch screen clean. To avoid scratches on display do not use anything that could scratch the display and do not use chemicals for cleaning.

2. Check that latest Phone SW is in use. That has the best proximity sensing parameters.



## Troubleshooting on general touch related problems.

**Problem:**

Customer uses display protective foil.

**Solution:**

Advise the customer that protective foils may affect the functionality of the touch screen.

Touch screen functions or proximity sensing may be affected by humidity, rain drops, make-up, or dirt on the display. If your phone touch screen becomes unresponsive, use a cleaning cloth to wipe the touch screen clean. To avoid scratches on display do not use anything that could scratch the display and do not use chemicals for cleaning.



**NOTE!** Customer problems above do not require change of the display module. Changing the display module does not correct the situation. Updating the SW is the right procedure as the latest SW has the best proximity sensing parameters.