X400 SERVICE MANUAL

Sonim Technologies

Updated Ver.	Effective date	Prepared by	Brief of Amendments
1.0	12 - 5 - 2025	Chen Jitong	Initial version

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1.0 INTRODUCTION

1. PURPOSE

This manual provides the standardized operating instructions for X400 repairs.

2. REGULATORY INFORMATION

A. SECURITY

This wireless device, (the "Device") contains software owned by Sonim Technologies, Inc. ("Sonim") and its third party suppliers and licensors (collectively, the "Software"). As user of this Device, Sonim grants you a non-exclusive, non-transferable, non-assignable license to use the software & hardware solely in conjunction with the Device on which it is installed and/or delivered with. Nothing herein shall be construed as a sale of the Software & hardware to any third party.

You shall not reproduce, modify, distribute, reverse engineer, decompile, otherwise alter or use any other means to discover the source code of the Software, hardware or any component of the Software/hardware. For avoidance of doubt, you are at all times entitled to transfer all rights and obligations to the Software to a third party, solely together with the Device with which you received the Software, provided always that such third party agrees in writing to be bound by these rules. The validity, construction and performance of the license shall be governed by the laws of Delaware, United States & the manufacturer will not be responsible for any charges that result from unauthorized use.

B. PHONE CARE

Each Sonim phone has a designated IP class for dust and water protection, according to the IEC Ingress Protection (IP) Standard. This means that the phone is dust protected and can be submerged into 2 m deep water for up to 60 minutes. Immersion in deeper water can damage it and must be avoided.

Sonim phones are solid and built for heavy duty use. Its design protects against disassembly or mechanical damage when subjected to forces equal to free fall from the height of 2 meters. Subjecting the phone to stronger impact and forces can damage it and must be avoided.

C. MAINTAINENCE LIMITATIONS

Maintenance limitations on this model must be performed only by the manufacturer or its authorized agent. The user may not make any changes and/or repairs expect as specifically noted in this manual. Therefore, note that authorized alternations or repair may affect the regulatory status of the system and may void any remaining warranty.

D. ELECTROSTATIC SENSITIVE DEVICES

ATTENTION
Boards which contain Electrostatic Sensitive Devices (ESD) are indicated by the sign.
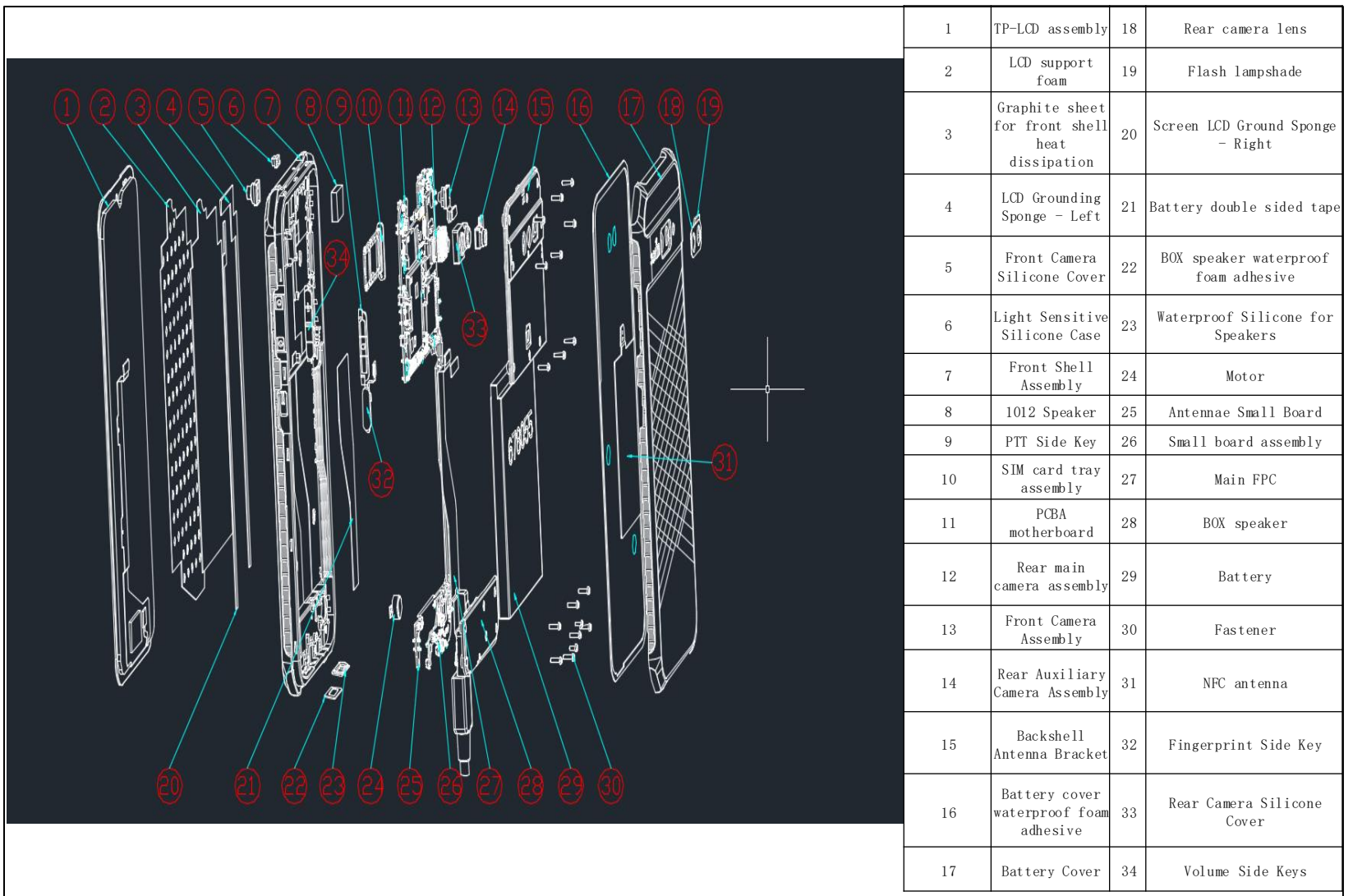
Following has to be taken while handling the ESD boards
1. Service personnel should ground themselves by using a wrist strap while working on the boards
2. When repairs are made to a system board, they should spread the floor with anti-static mat which is also grounded.
3. Use a suitable, grounded soldering iron.
4. Keep sensitive parts in protective packages until these are used.

2.0 REQUIREMENTS

REQUIREMENTS TO PERFORM THE ASSEMBLY & DISASSEMBLY OF HANDSETS	
Sales pack or Spare parts of the handset.	
Tools	Tweezers, Phillips screwdriver,Heated platform, pry bar, Ejection Pin
ESD Gloves, shoes, Aprons, Wrist band	Antistatic Finger Sleeves
Clean sol or Isopropyl Alcohol [IPA]	
Hot air blower	
Soldering Iron	

3.0 EXPLODED VIEW OF X400

|			
1	TP-LCD assembly	18	Rear camera lens
2	LCD support foam	19	Flash lampshade
3	Graphite sheet for front shell heat dissipation	20	Screen LCD Ground Sponge – Right
4	LCD Grounding Sponge – Left	21	Battery double sided tape
5	Front Camera Silicone Cover	22	BOX speaker waterproof foam adhesive
6	Light Sensitive Silicone Case	23	Waterproof Silicone for Speakers
7	Front Shell Assembly	24	Motor
8	1012 Speaker	25	Antennae Small Board
9	PTT Side Key	26	Small board assembly
10	SIM card tray assembly	27	Main FPC
11	PCBA motherboard	28	BOX speaker
12	Rear main camera assembly	29	Battery
13	Front Camera Assembly	30	Fastener
14	Rear Auxiliary Camera Assembly	31	NFC antenna
15	Backshell Antenna Bracket	32	Fingerprint Side Key
16	Battery cover waterproof foam adhesive	33	Rear Camera Silicone Cover
17	Battery Cover	34	Volume Side Keys

4.0 HANDSET DISASSEMBLY

1. Place the device screen-side up on a 90-100 degree heating platform for 5-10 minutes, wait for the adhesive backing to soften and then use a pry bar to pry off the battery back cover from the four corners.(Pay attention to prevent deformation of the back cover)

2. Remove the battery back cover, lay the device flat with the screen facing down, and then use a Phillips screwdriver to remove the 9 motherboard back cover screws marked in the diagram.

3. Remove the back cover of the motherboard, first remove the battery FPC(1), and then carefully remove the USB(2), screen(3), power switch(4), front camera(5), and rear auxiliary camera(6) FPCs that are connected to the motherboard.Remove the front camera and rear auxiliary camera
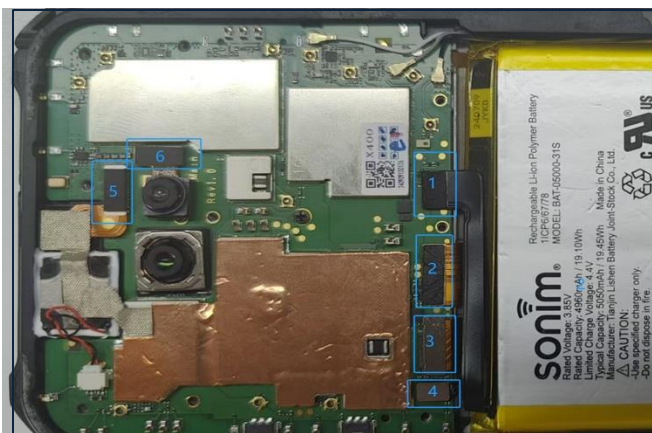
NOTE：
Main vice board screws specifications:
M1.4X3.0mm, cap diameter 2.5mm, cap height 0.8mm, cross machine teeth, black, rust resistance to fall

Shell material screw specifications:
M1.4X4.5mm, cap diameter 2.5mm, cap height 0.8mm, cross machine teeth, black, rust-resistant and fall-resistant

4. Unscrew the motherboard fixing screws(1) with a Phillips-type screwdriver, carefully remove the 3 antenna connectors(2) and the audio amplifier connecting cable(3) with tweezers, and remove the card tray(4) with a card removal pin.
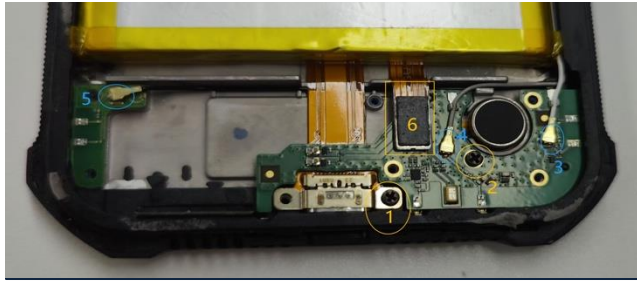

5. Use a pry bar to gently pry up the motherboard from the location shown in the figure, then carefully remove the motherboard.


6. Use a Phillips screwdriver to unscrew the 7 screws shown in the illustration and remove the back cover.

7. Remove the screws(1,2), FPC(6), and antenna port connecting wires(3,4,5) shown in the figure, following the same procedure as before.

8.Disconnect the battery FPC and place the phone screen side down on a heating pad at 80 degrees for 3-5 minutes, then pry the battery out with a pry bar.
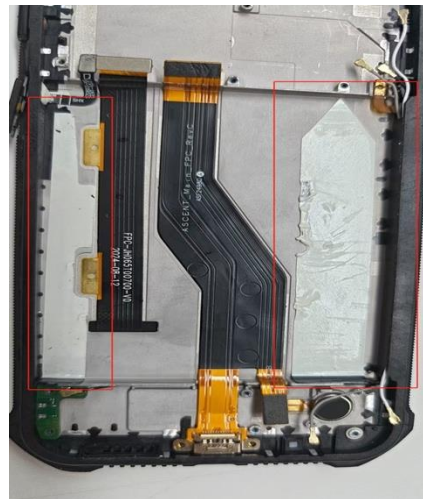
NOTE:
Prohibition of reuse of removed batteries!

9.Disassembly is complete as shown.
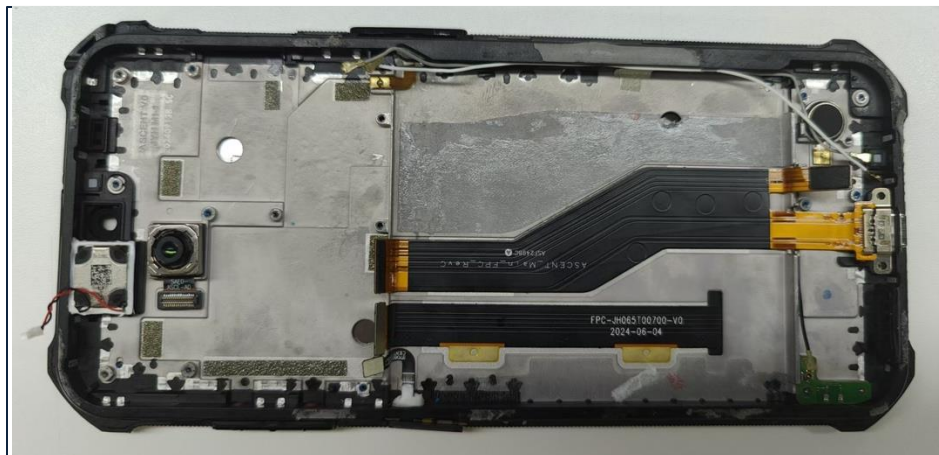
5.0 MAT TEST OPERATING INSTRUCTIONS

MAT test is performed to test the functionality of mobile parameters. MAT test failure on particular parameter will allow you to decide which part needs to be replaced.

REQUIREMENTS:

1. Gloves
2. Distilled Water droplet bottle
3. Lint-free cloth
4. One Active SIM Card
5. Clean SD Card
6. Wi-Fi Access
7. NFC Tech Tiles
8. One Ejection Pin
9. OTG to Type-C Cable
10. Headset (Type-C)
11. Model-specific Phillips Screwdriver
12. Type-C Cable
13. Model-Specific Back Cover
14. Model-Specific Battery
15. 2nd Phone

Sonim SIM Removal / Screwdriver Tool

Insert the two SIM cards and SD card into the device prior to MAT test to check and verify its functionality.

MANUAL AUTOMATION TEST [MAT] PROCEDURE:
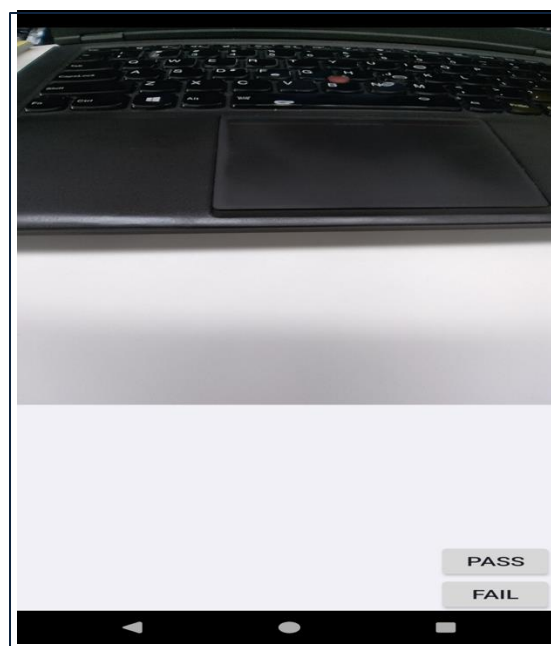
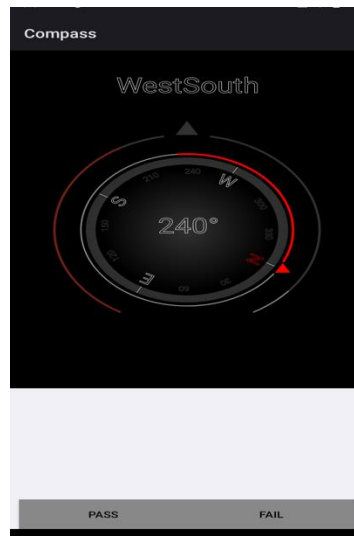Enter "***#7890#**" on the phone dialer to get into Test mode. Select D e v i c e   T e s t .

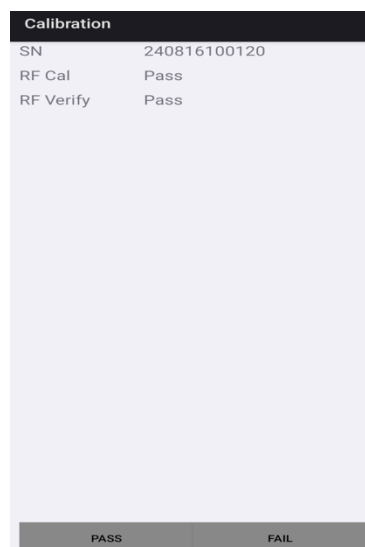
Click to enter automatic test mode
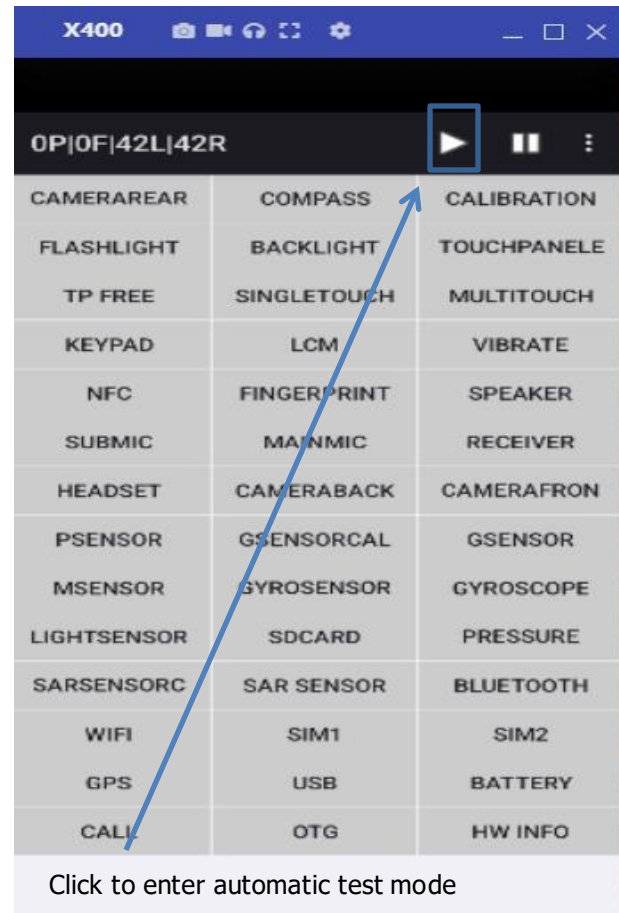
General Test:

1. Rear Auxiliary Camera - Select "Take Picture" and if an image is captured, return "PASS", otherwise click "Fail".

2. Compass - Check for proper compass function. If it's ok, then tap "PASS" or else tap "Fail".

3. Calibration check - The system automatically detects whether the test passes or not.

4. Flashlight - Check that the flash on the back of the phone is lit. If it's ok, then tap "PASS" or else tap "Fail".
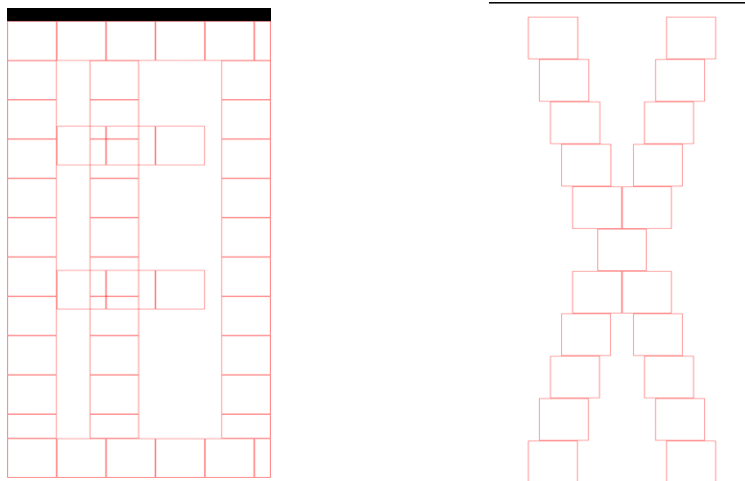

flash

Is the Flashlight on?

NO   YES

5. Backlight - Whether LCD screen is blinking. If it is blinking, then tap "PASS" or else tap "Fail"

设置亮度值=250

PASS   FAIL

6. Touch Panel Tes - Slide the pattern according to the track shown on the screen.If the TP function is normal, the device will return to the main menu.

7. TP-FREE TEST - Follow the prompts and slide the screen freely.If the TP function is normal, then tap "PASS" or else tap "Fail".

CLICK HERE TO START THE TP-FREE TEST
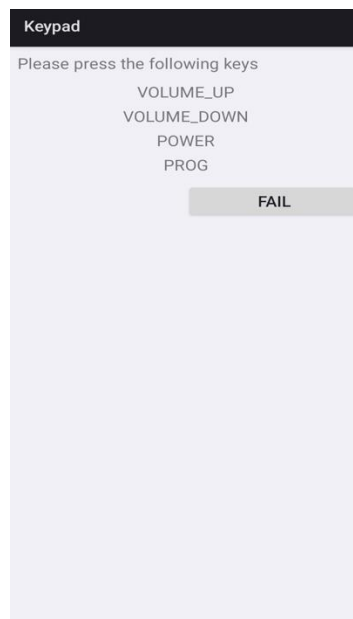
PASS   FAIL
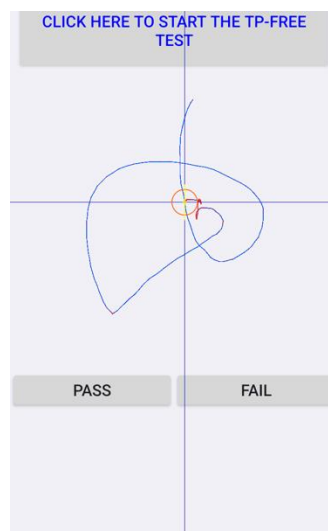
8. Single-touch Test - Click on the numbers or letters in sequence as required. If it's ok then tap "PASS" or else tap "Fail".
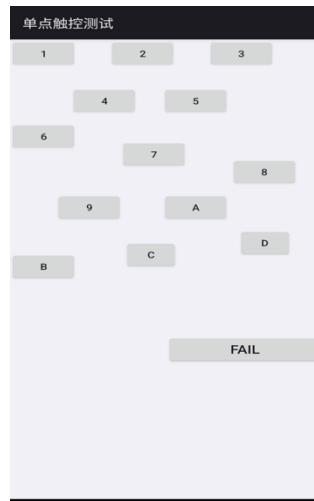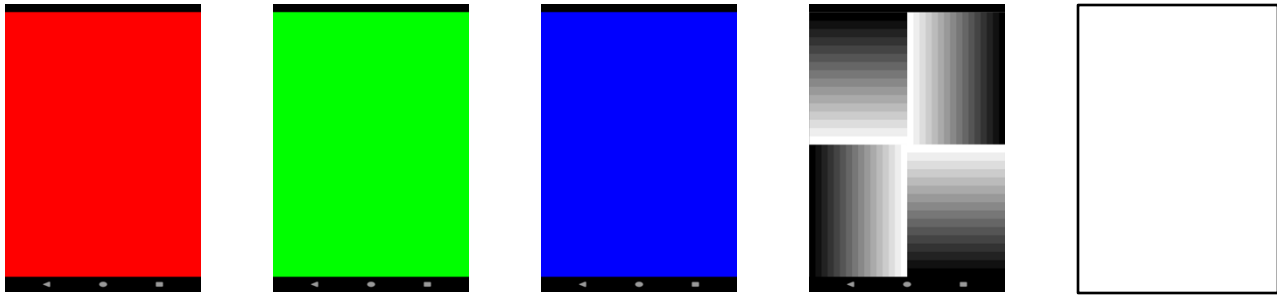

**9. Multi-Touch Test -** Multiple finger swipes on the screen. If it's ok, then tap "PASS" or else tap "Fail".
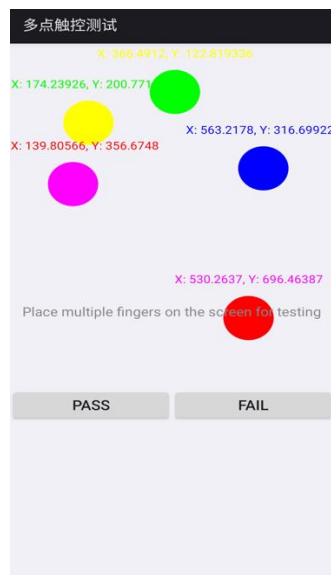
10. Keypad - Press each button on the device to check if their functions are ok, then tap "PASS" or else tap "Fail".
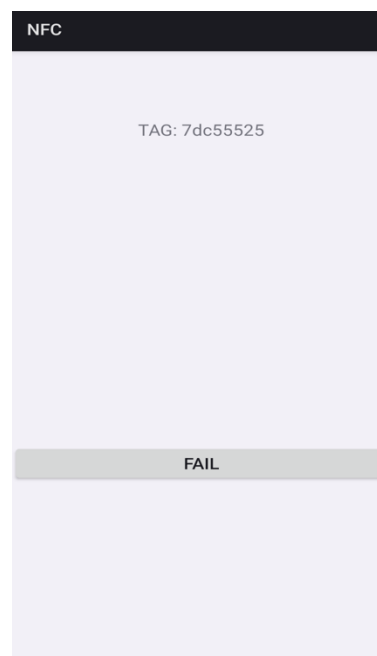
11. LCM TEST - Tap the screen to change the color sequentially, If it's ok then tap to choose "PASS" or else tap "Fail".
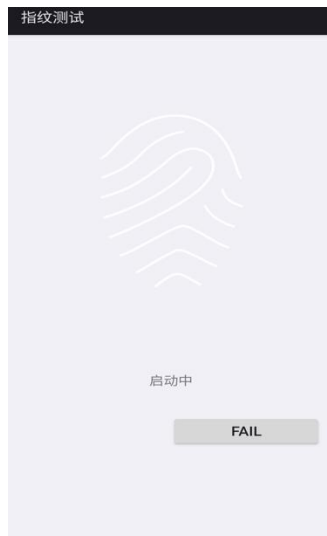

12. Vibrator Test - Check vibration is normal then tap "PASS" or else tap "Fail".
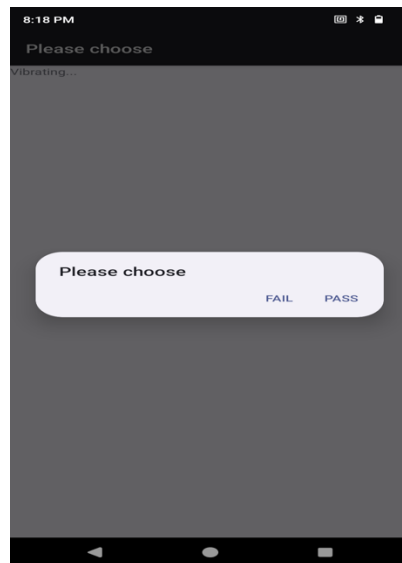
13. NFC - Try scanning with a NFC tag to check the NFC connectivity. If it's ok, then tap "PASS" or else tap "Fail".

14. Fingerprint Test - Scan the finger on the sensor to check the fingerprint sensor. If it's ok, then tap "PASS" or else tap "Fail".

15. Speaker Test - Check if the sound is normal. If normal, click PASS, otherwise click Fail.
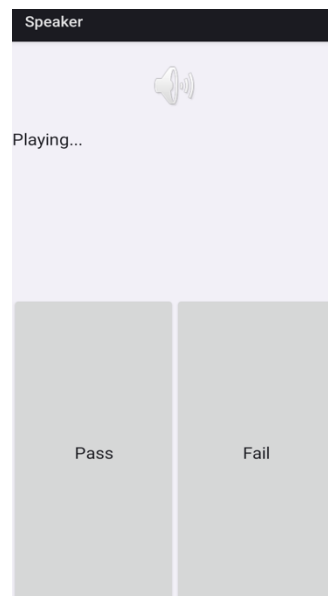
16. SubMic Test - Say a sentence after clicking the "Record" button, then click "Stop". If it's ok, then tap "PASS" or else tap "Fail".

17. MainMic Test - Say a sentence after clicking the "Record" button, then click "Stop". If it's ok, then tap "PASS" or else tap "Fail".
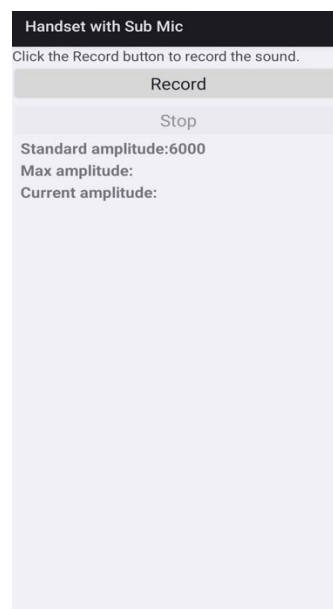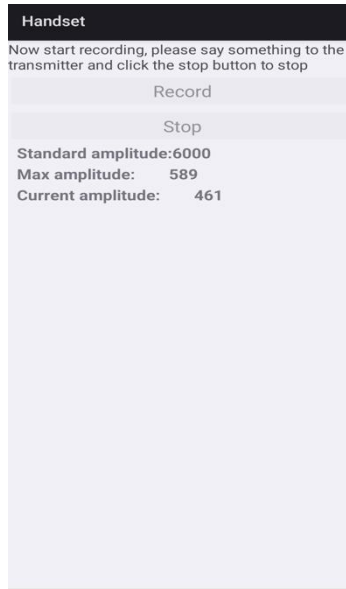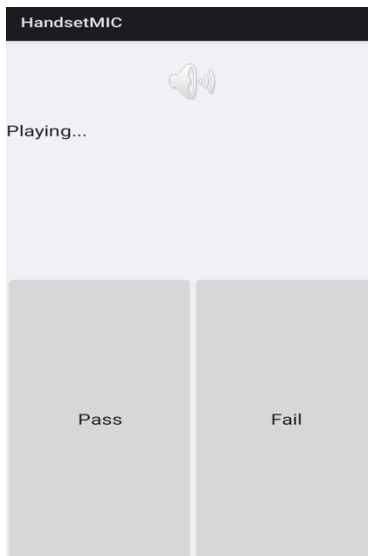
Handset
Now start recording, please say something to the transmitter and click the stop button to stop
Record
Stop
Standard amplitude:6000
Max amplitude: 589
Current amplitude: 461

18. Receiver Test - Check if the sound is normal. If normal, click PASS, otherwise click Fail.

HandsetMIC
Playing...

Pass	Fail

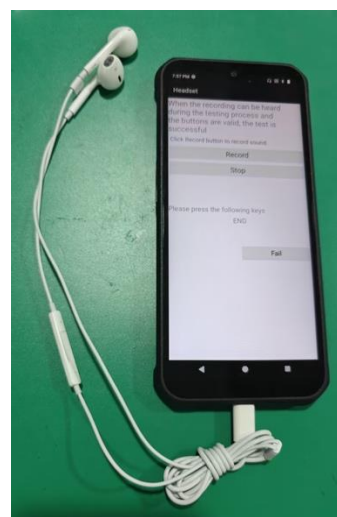**19.Headset Test -**Insert the earphones and say a sentence after clicking the "Record" button, then click "Stop". If it's ok, then tap "PASS" or else tap "Fail".

Headset
When the recording can be heard during the testing process and the buttons are valid, the test is successful
Click Record button to record sound.
Record
Stop
Please press the following keys
END
FAIL
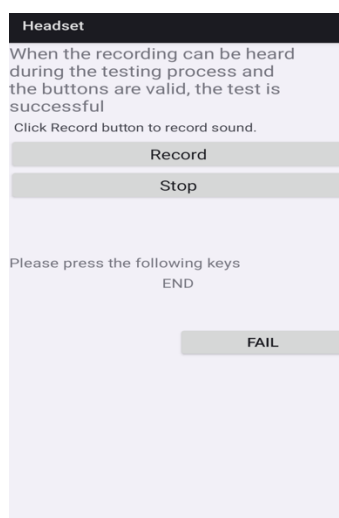
20. Rear Main Camera Test - Select "Take Picture" and if an image is captured, return "PASS", otherwise click "Fail".
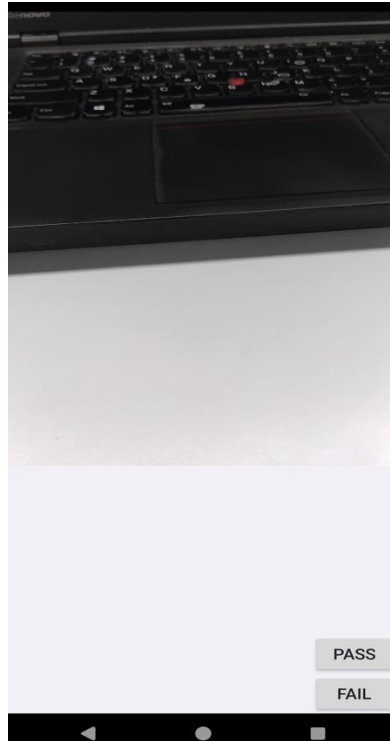
21. Front Camera Test - Select "Take Picture" and if an image is captured, return "PASS", otherwise click "Fail".
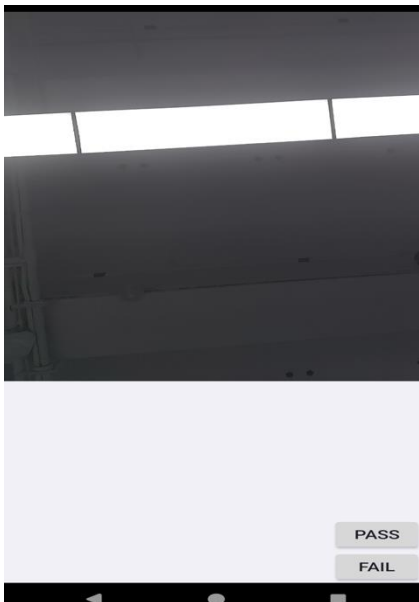
22. Proximity Sensor - Approach the sensor with your hand and click "PASS" if the test value is 0. .
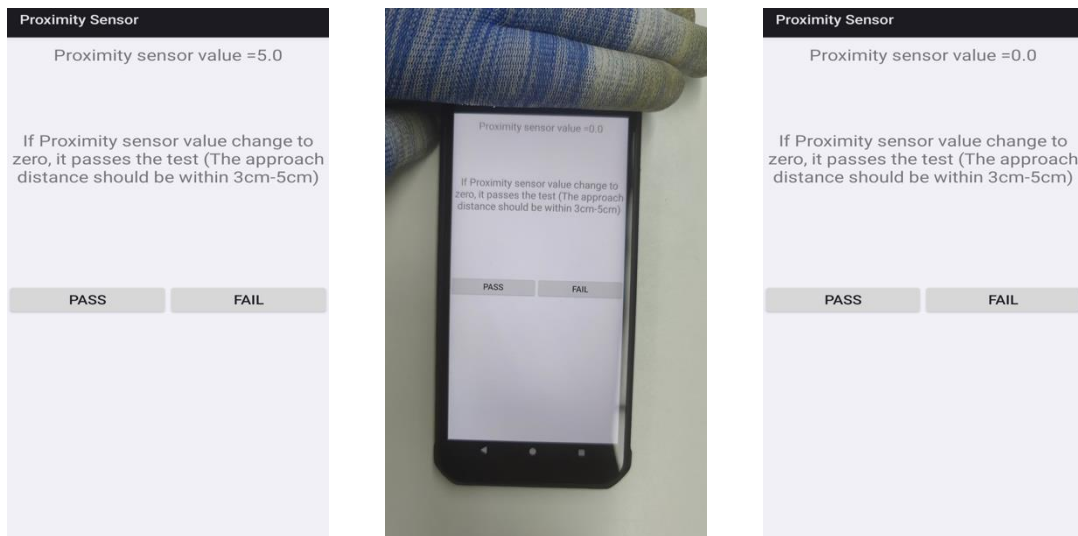
23. Gravity Calibration - The system automatically detects whether the test passes or not.
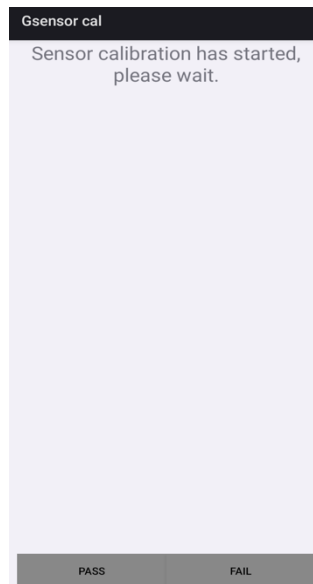
24. Gravity Sensor - The mobile unit moves in all directions and can read X, Y and Z values. If normal, click "PASS", otherwise click "Fail".
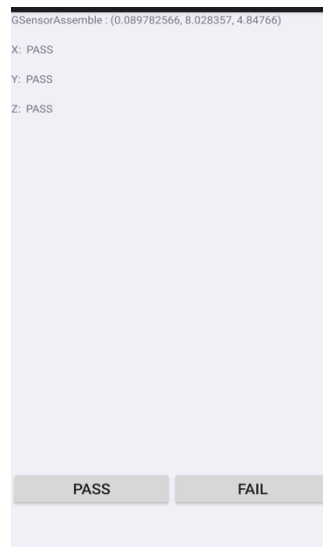
25. Magnetic Sensor - The system automatically detects whether the test passes or not. If normal, click "PASS".
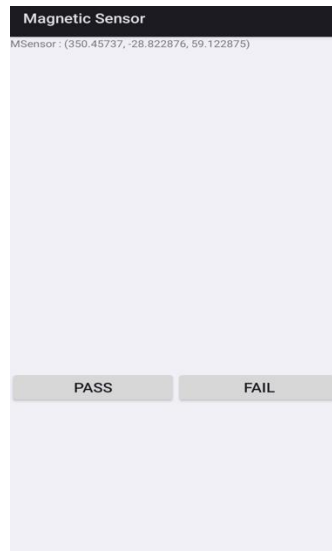
26. Gyroscope Calibration - The system automatically detects whether the test passes or not.
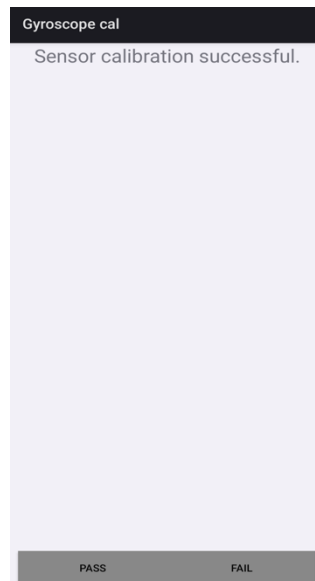
27. Gyroscope - It shows the X,Y & Z axis value when the phone moved in different direction. If it's ok, then tap "PASS" or else tap "Fail".
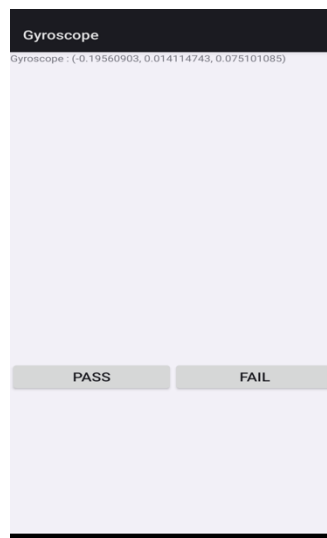
28. Light Sensor - Check for pass in strong light and weak light conditions.
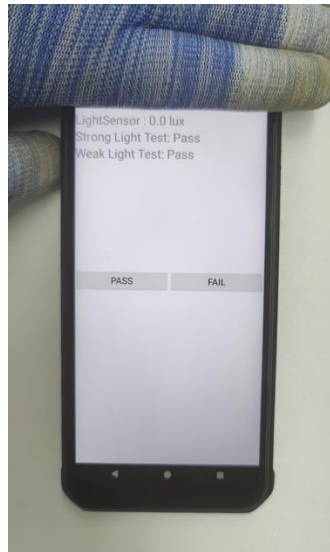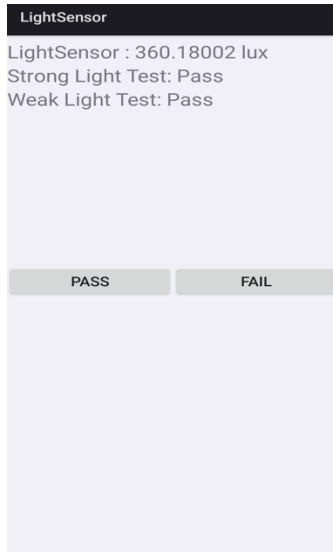
29. SD CARD Test - The system automatically detects whether the test passes or not.
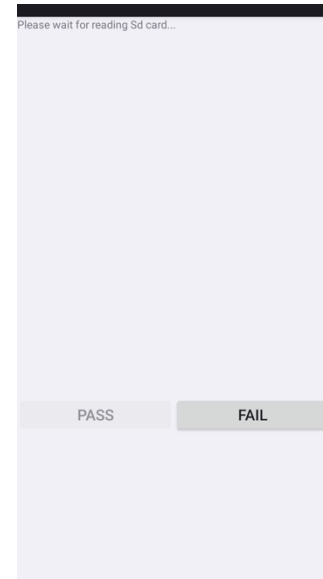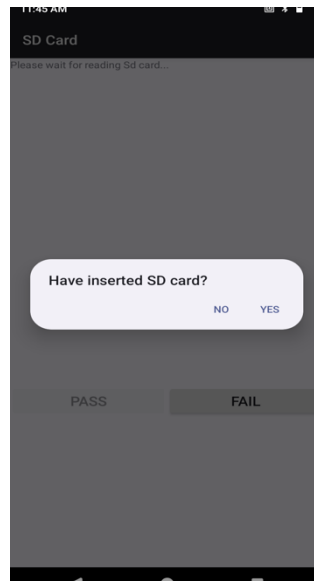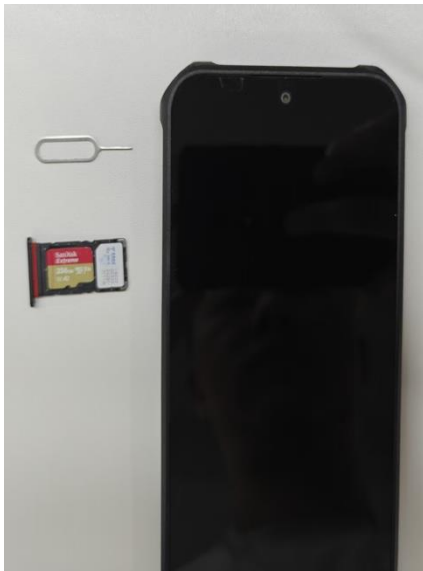
30. Pressure Test - The system automatically detects whether the test passes or not.
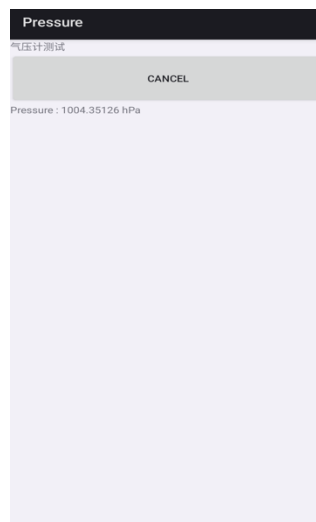
31. SAR Cal - Follow the system prompts to tap the screen and insert the USB, the system automatically detects whether the test passes or not.

Sar Cal	Sar Cal	Sar Cal
Sensor calibration has started, please wait.	The first step of calibration is successful. Please insert the USB and then click the Start button for the second calibration.	The second step of calibration is successful. Please remove the USB and then click the Start button for the third calibration.
START CAL	START CAL	START CAL
PASS FAIL	PASS FAIL	PASS FAIL
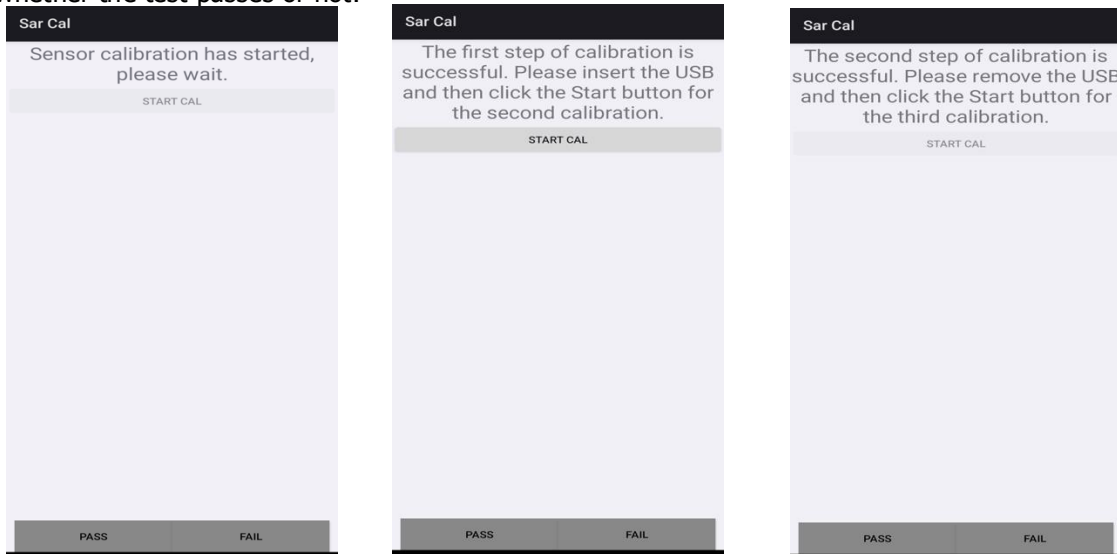
32. SAR Sensor - Follow the system prompts to gently press the designated spot on the side of the phone. If it's ok then tap "PASS" or else tap "Fail".
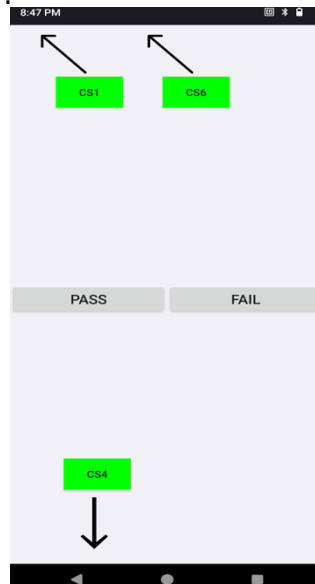
33. Bluetooth - Check the Bluetooth connectivity. If it's ok, then tap "PASS" or else tap "Fail".

Bluetooth

ADMIN-PC
E8:B1:FC:5A:5D:DD

null
C2:09:0F:06:34:18

null
66:15:E9:4A:8D:CC

null
28:FF:B2:A6:A8:E4

null
7D:D1:3C:12:0A:7E

null
57:6F:4D:FF:B3:46

Pass   Cancel
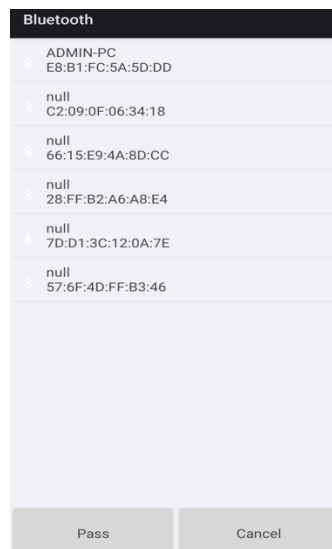
34. WIFI - Scan for WIFI connection. If it's ok, then tap "PASS" or else tap "Fail".

WiFi		
HWTEST002-5G	-62 dBm	5G
UNICAIR 8F Guest	-64 dBm	2.4G
UNICAIR 9F Guest	-42 dBm	2.4G
UNICAIR 9F 2.4G	-39 dBm	2.4G
HWTEST002-2.4G	-63 dBm	2.4G
GL-SFT1200-2.5G	-50 dBm	2.4G
UNICAIR 9F	-50 dBm	5G
GL-SFT1200-5G	-55 dBm	5G
ChinaNet-Jerr	-76 dBm	2.4G
TP-LINK_2.4G_A935	-83 dBm	2.4G
UNICAIR 8F 2.4G	-71 dBm	2.4G
PASS		FAIL

35. SIM1&2 - The system automatically detects whether the test passes or not.

SIM1

SIM2

36. GPS Test - Check if the GPS location is shown accordingly. If it's ok, then tap "PASS" or else tap "Fail".

GPS
Location unknown or locating...
- id 16 Snr:33.5
- id 29 Snr:42.2
- id 194 Snr:31.9
- id 195 Snr:38.4
- id 5 Snr:30.8

PASS   FAIL

37. USB - Plug the USB forward and reverse into the device separately and check if it functions properly. If it's ok, then tap "PASS" or else tap "Fail".
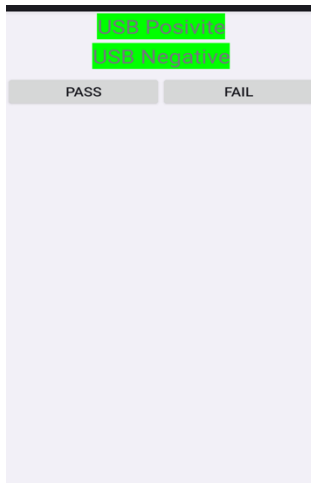
38. Battery Test - Connect the charger to see if the status is charging. If it's ok, then tap "PASS" or else tap "Fail".
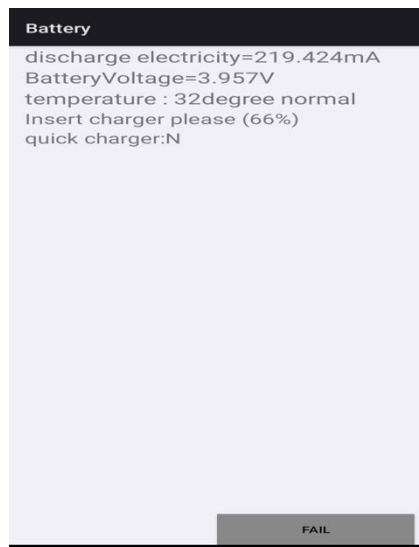
39. Call - machine dials out the call, and tests the quality of the call and check whether it is normal. If it's ok, then tap "PASS" or else tap "Fail".
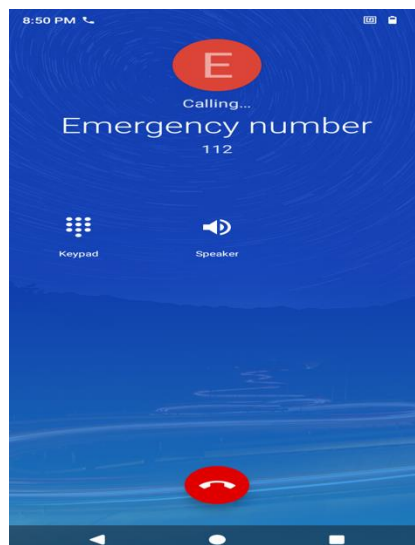
40. OTG - Connect the phone using an OTG device. If it is normal, click "PASS", otherwise click "Fail".
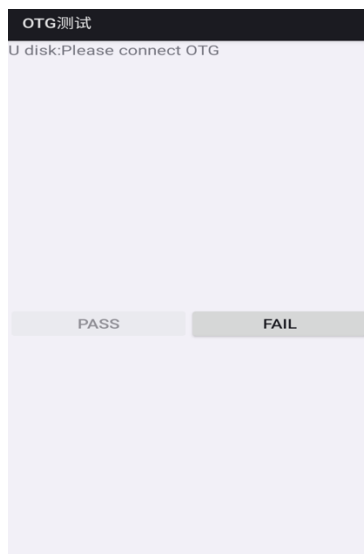
41. Version - Check CSW, ISW version, IMEI, BT, WIFI. if normal, tap "PASS", otherwise tap "Fail".
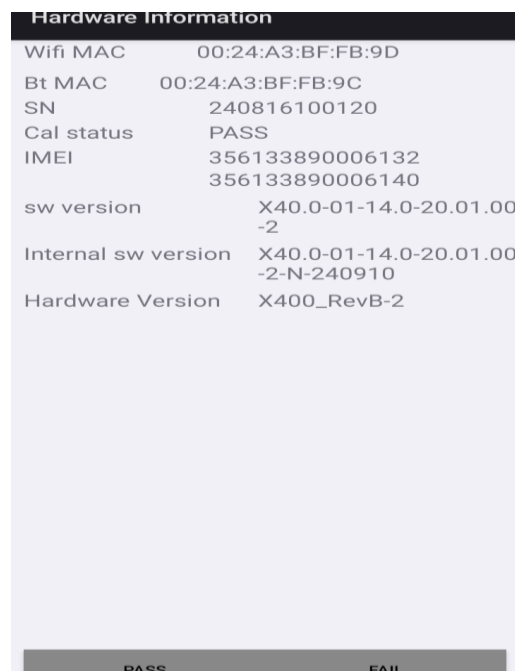
6.0 TROUBLESHOOTING

6.1 RECEIVER PROBLEM

RECEIVER ASSEMBLY PART:

a. Assemble the receiver to front housing in the right direction.
b. Examine the receiver pin, replace the receiver if those pins are damaged or deformed.
c. Replace the receiver mesh (dustproof) if it's damaged, as it provides dust & waterproof protection.

> **#** Clean the receiver pad and check the incoming voice.
> **#** Ensure the receiver mesh is not damaged before replacement as it results in incoming voice distortion.

receiver   receiver pads   receiver mesh
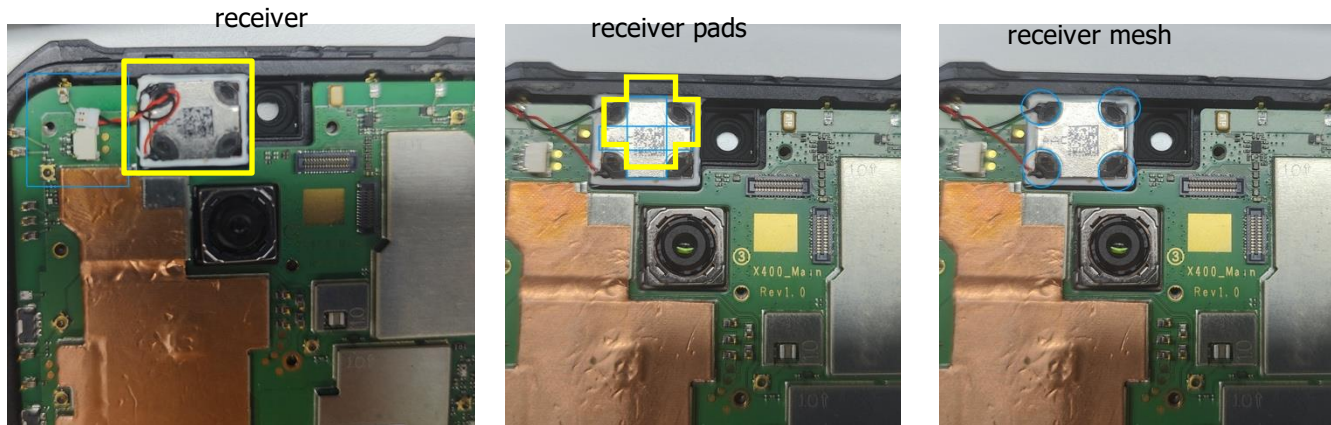
OBSERVED PROBLEMS:-

a. No/low incoming Voice
b. Distortion in incoming voice.

TROUBLESHOOTING CHECKING FLOW:-

START

Check the receiver is working — **NO** → Replace the Receiver

YES

Disturbance in incoming voice — **YES** → Replace the Front housing/receiver mesh

NO

Check the receiver status — **NO** → Replace the PCBA

YES

Receiver will work properly
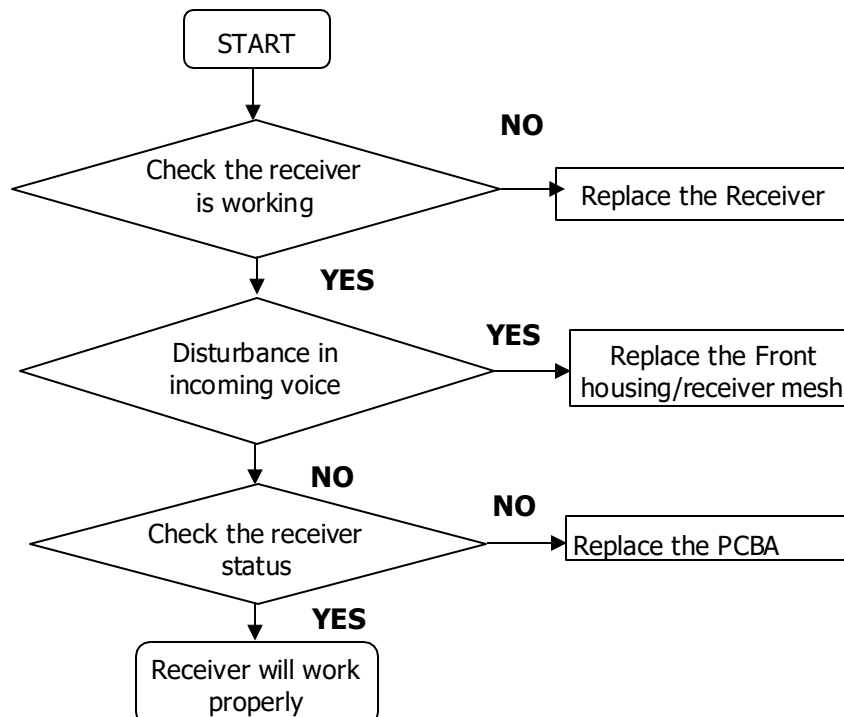
6.2 LOUD SPEAKER /RINGER/HF SPEAKER PROBLEM

RINGER ASSEMBLY PART:-

a. The speakers fixed to front housing and connected to PCBA.
b. Replace the speaker mesh if it's damaged as it's provided for dustproof protection.

Ensure the speaker holes are not blocked as it reduces the speaker volume.

Speaker connectors

OBSERVED PROBLEMS:-

a. Loud speaker do not work or noise distortion in loud speaker voice.
b. No ringing volume or noise or low ringing volume.

TROUBLESHOOTING CHECKING FLOW:-
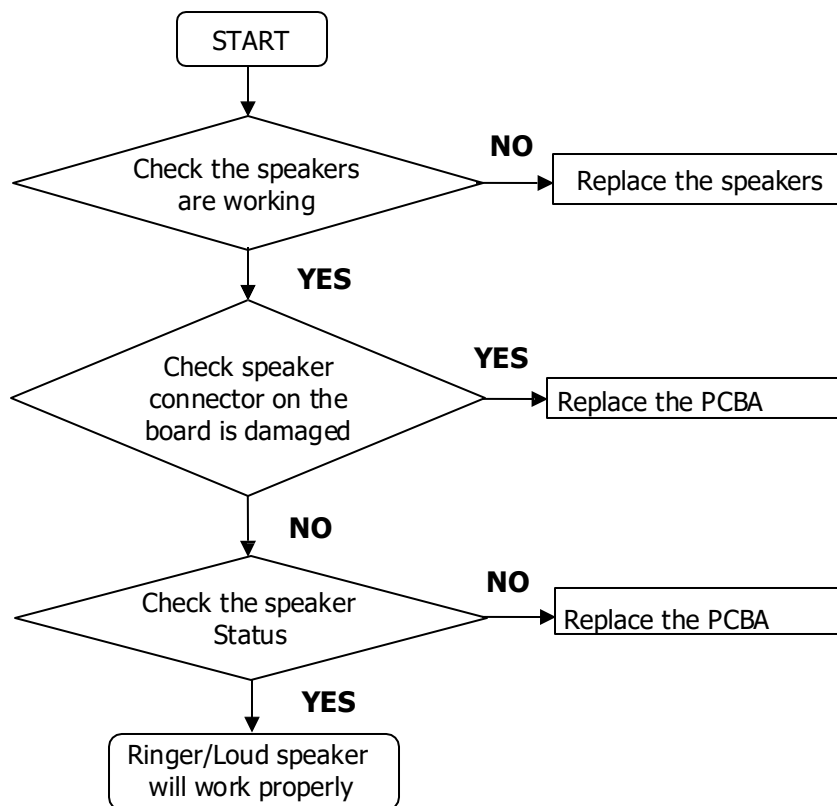
6.3 CHARGING PROBLEM

CHARGING SECTION ASSEMBLY PART:-

a. Type C USB/charging connector is screwed to front housing that can be easily replaced, battery connector is soldered to the PCBA.

> **#** Replace the Type C USB charging connector, if it is damaged.
> **#** Replace the PCBA, if the USB connector on PCBA is damaged.

Type C USB/charging FPC socket

USB FPC connector
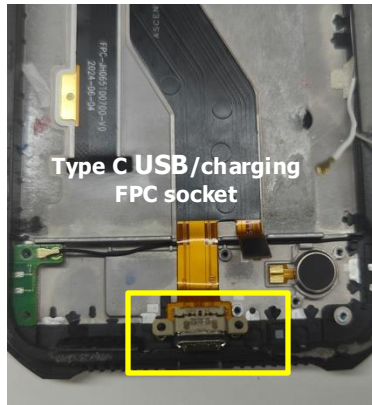
OBSERVED PROBLEMS:-

a. Handset not charging/charging intermittently.

TROUBLESHOOTING CHECKING FLOW:-

START

Handset is charging — **NO** → Replace the battery/charger

YES

Check Type C USB connector is damaged — **YES** → Replace the Type C USB connector FPC

NO

Check battery connector pins for damaged — **YES** → Replace the PCBA/battery

NO

Check the handset charging status — **NO** → Replace the PCBA

YES

Handset will charge properly
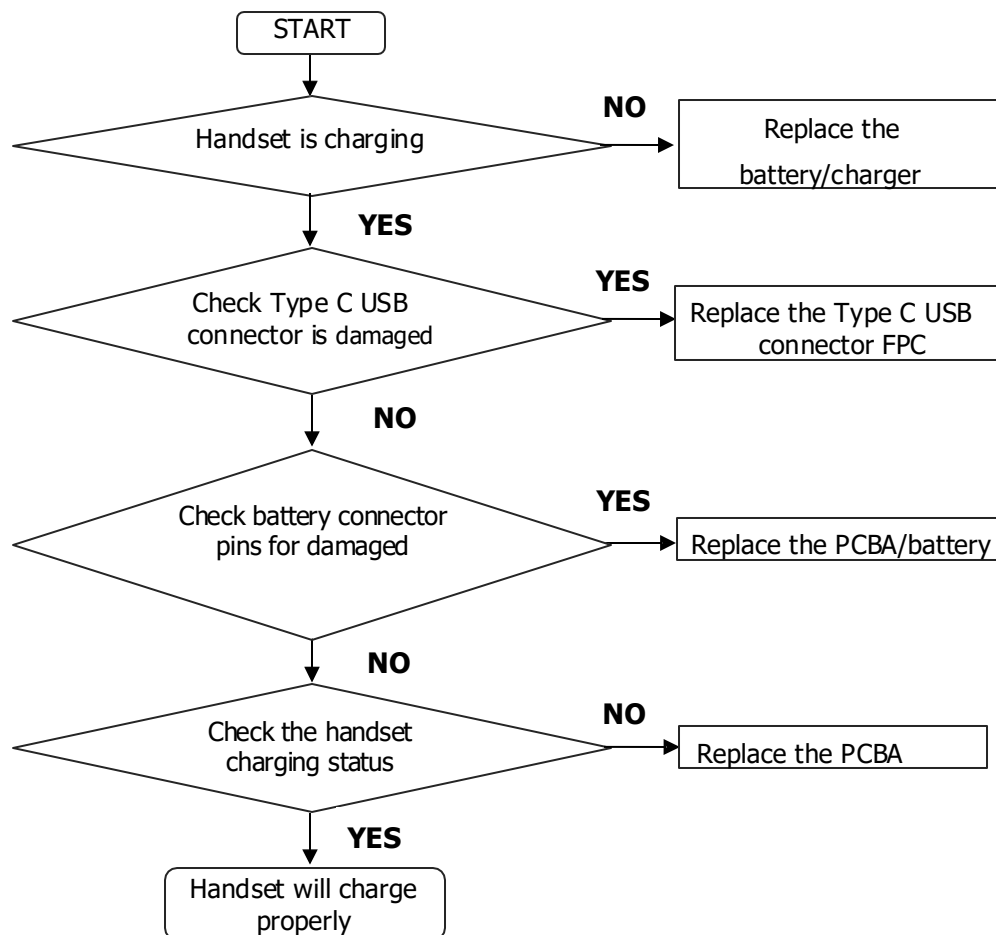
6.4 HEADSET OR EARPHONE PROBLEM

EARPHONE ASSEMBLY PART:-

a. Secure Audio connector PCBA is assembled to FPC and connected to front housing.
b. External accessory - Requires a type-C connector wired headset.
c. Ensure the FPC cable is assembled properly to PCBA pressing PIN connector.

> **#** Change the Secure Audio connector & FPC for headset related audio problems.

Headphone connector
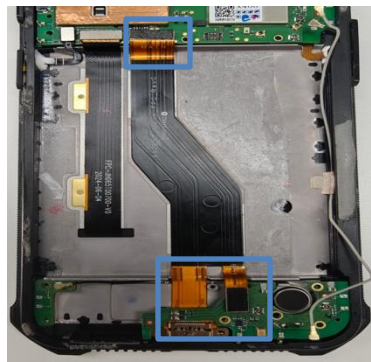
Headphone FPC connector

OBSERVED PROBLEMS:-

a. No/low Incoming & outgoing voice in Earphone
b. Headset symbol shown without inserting the Headset.

TROUBLESHOOTING CHECKING FLOW:-

```
                    START
                      |
                      v
              Headset is working  ---NO---> Replace the headset
                      |
                     YES
                      |
                      v
          Check Secure Audio CONN   ---YES---> Replace the Secure
              is defective                     Audio PCBA/FPC
                      |                         cable/rear housing
                     NO
                      |
                      v
          Check earphone jack pin   ---YES---> Replace the PCBA
          CONN is damaged/defective
                      |
                     NO
                      |
                      v
          Check headset is working  ---NO---> Replace the PCBA
                      |
                     YES
                      |
                      v
          Headset/Earphone will
            function properly
```
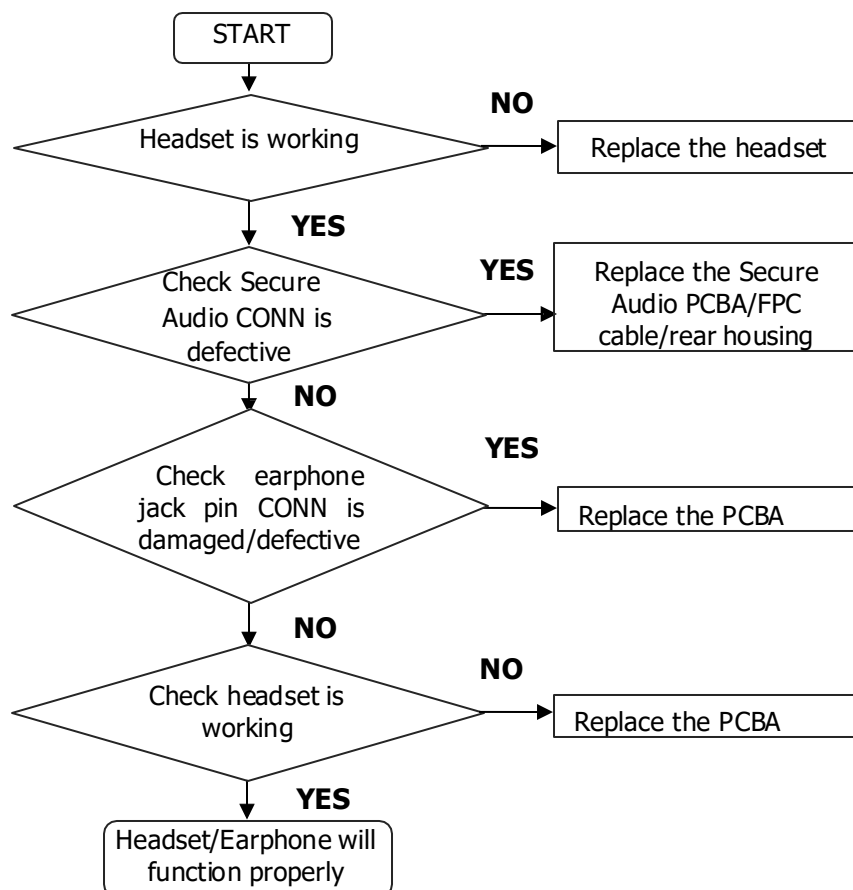
6.5 FLASHLIGHT

FLASHLIGHT ASSEMBLY PART:-

a. The flash and BAR sensor are mounted on the back cover of the motherboard and are connected to the PCBA through Pin connector.

Replace the flashlight FPC for torch related problems. Check the FPC cable is assembled properly to PCBA pin connector. Replace the PCBA if still the issue persists.

Replace PCBA, if Pin connector is defective or any damages noticed on it.
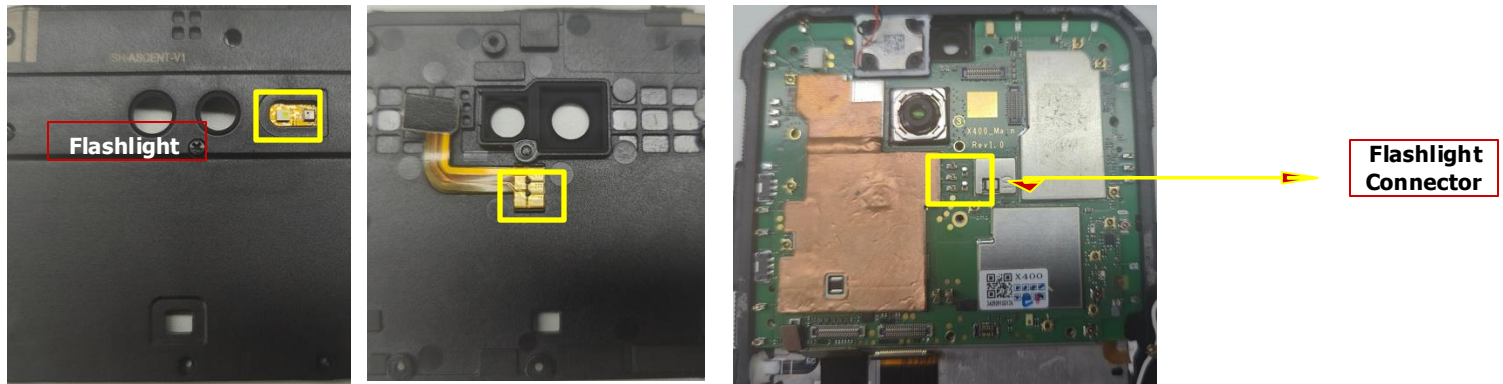
OBSERVED PROBLEMS:-

a. Flashlight not working
b. Camera flash not working.

TROUBLESHOOTING CHECKING FLOW:-
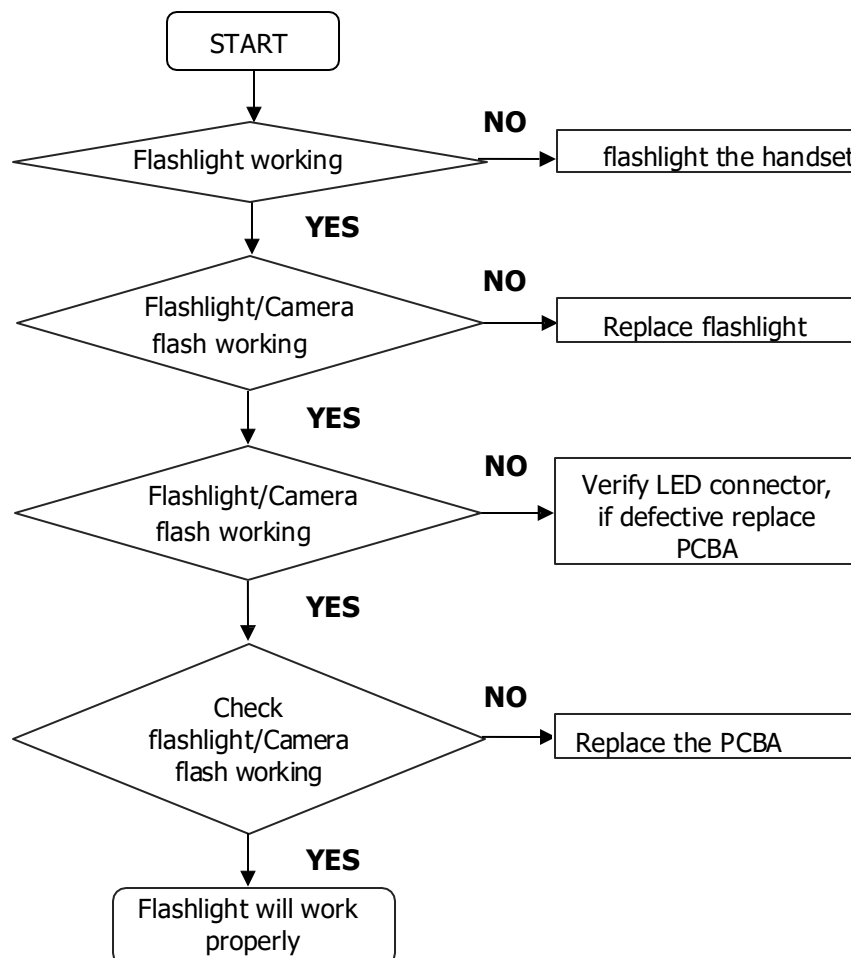
6.6 DISPLAY PROBLEM

LCD ASSEMBLY PART:-

a. LCD & touch screen are glued to front housing.

> # Replace the front housing if any dots or color patches are observed on the display as the LCD is glued to FH.
> # Flash the handset for DIM/Blur display/white display. If issue persists, replace the front housing/PCBA.   #
> Replace the PCBA if the components around the display connector found missing or damaged.
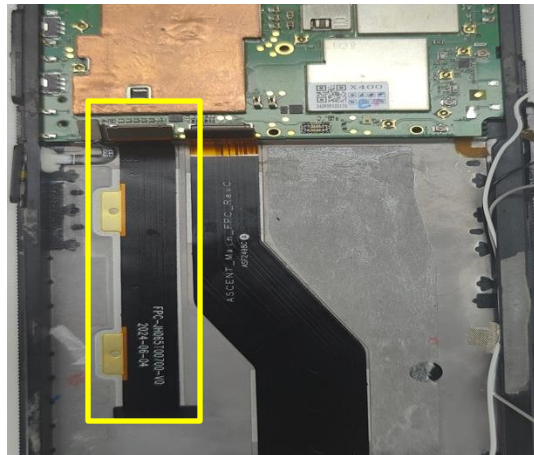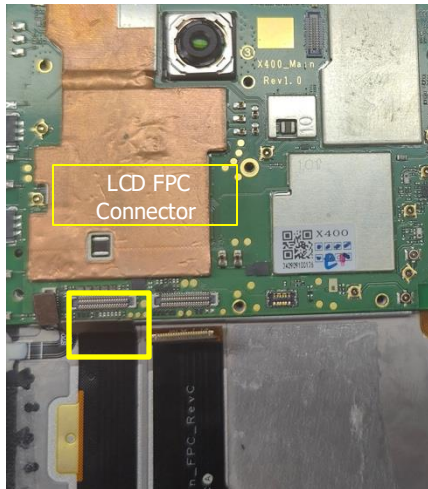
OBSERVED PROBLEMS:-

a.   No or blur or dim or flickering display.
b.   Dots or colored patches on the display.

TROUBLESHOOTING CHECKING FLOW:-

START

Check the status of Display — **NO** → Replace the front housing

YES

Check the LCD backlight is working — **NO** → Flash the handset and replace the FH

YES

Check display connector is good — **NO** → Replace the FH/PCBA accordingly

YES

Display is working — **NO** → Replace the PCBA

YES

Display will work properly
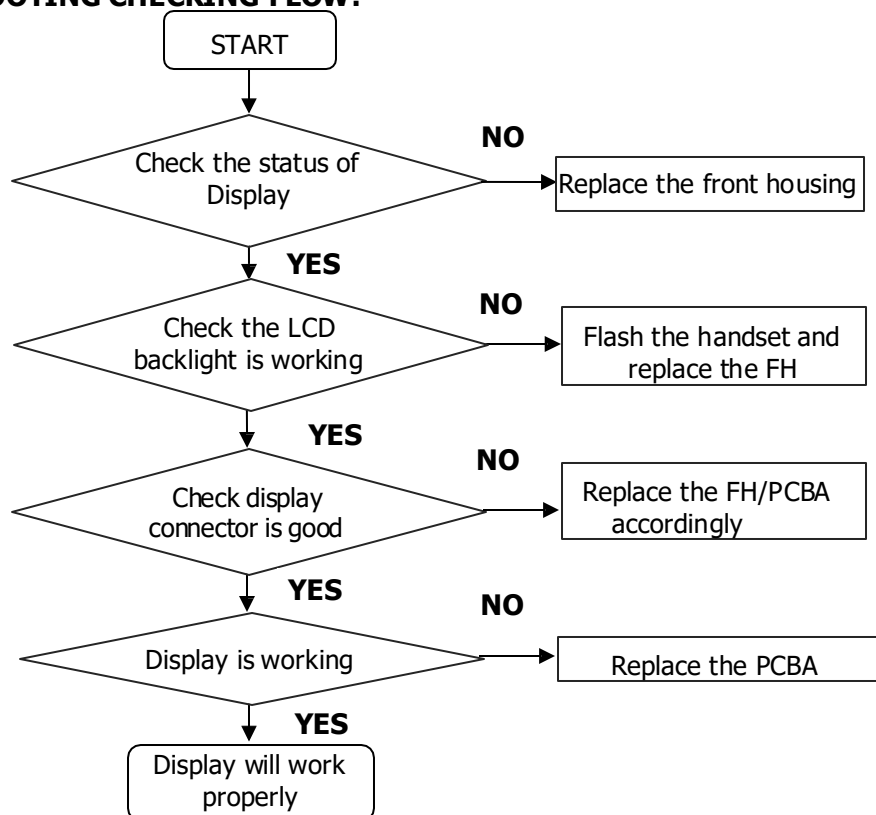
6.7 SIM CARD PROBLEM

SIM CARD ASSEMBLY PART:-

a. X400 supports dual SIM cards. SIM Card connectors are soldered to PCBA.
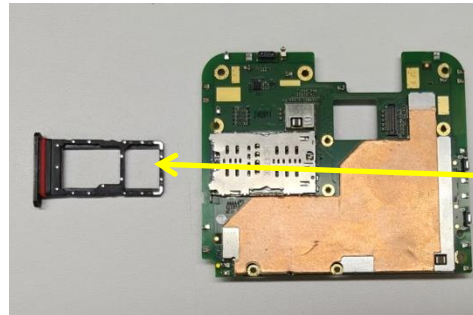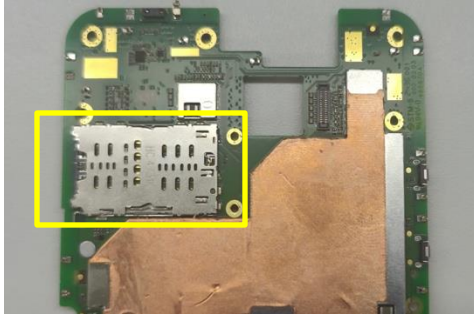
SIM&SD Card Tray

OBSERVED PROBLEMS:-

a. SIM card not detected or SIM errors.
NOTE: Insert the SIM card into the metal plate of the SIM card holder, and then close the card holder.
TROUBLESHOOTING CHECKING FLOW:-

START

Check the SIM card is inserted properly — **NO** → Reinsert the SIM card and verify the SIM function

YES

Check SIM CONNs are damaged — **YES** → Replace the PCBA

NO

SIM card not detected — **YES** → Flash the device & verify the problem

NO

Flash the handset & verify the problem — **NO** → Replace the PCBA

YES

Sim card will function properly
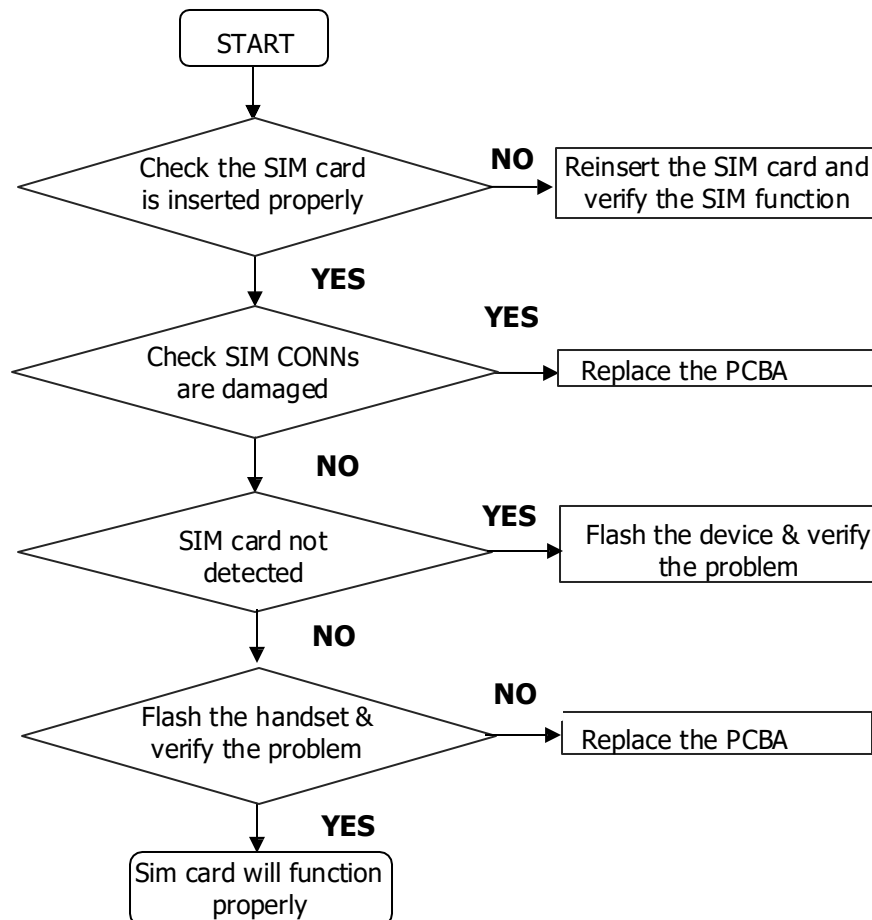
6.8 VIBRATOR PROBLEM

VIBRATOR ASSEMBLY PART:-

a. The X400 vibrator is assembled on the front housing.
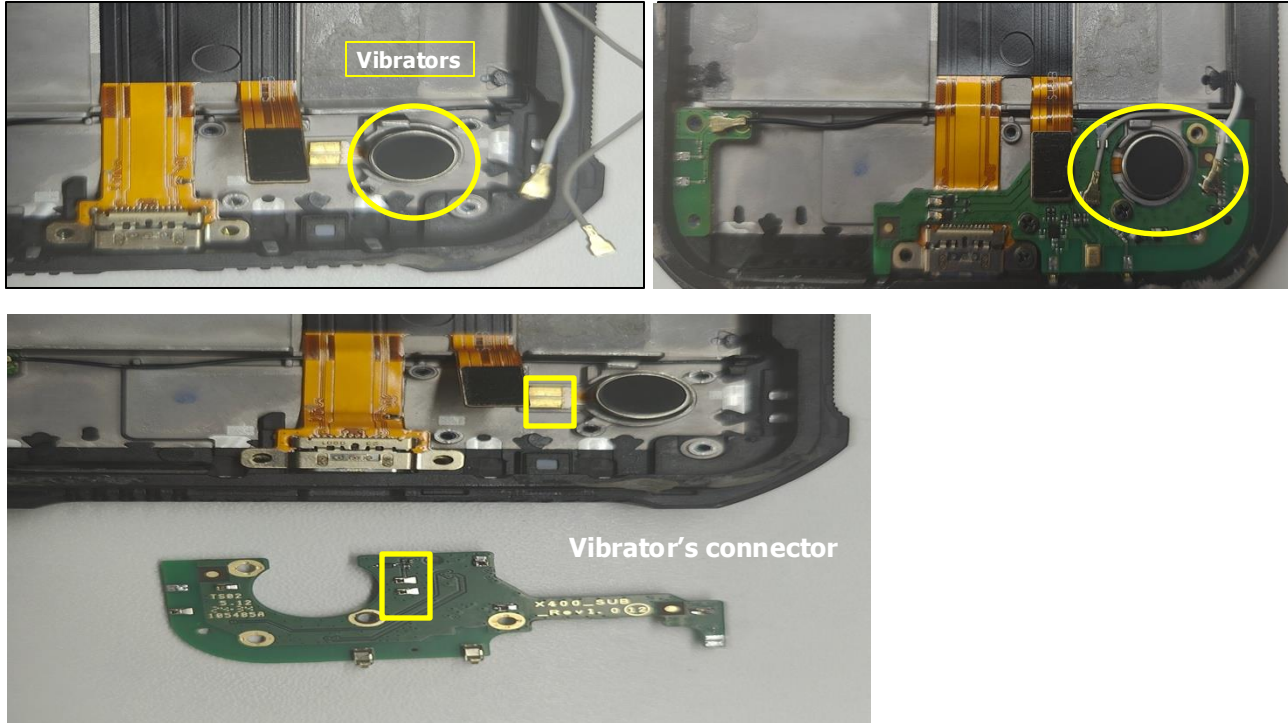
OBSERVED PROBLEMS:-

a. Vibrator not working.

TROUBLESHOOTING CHECKING FLOW:-
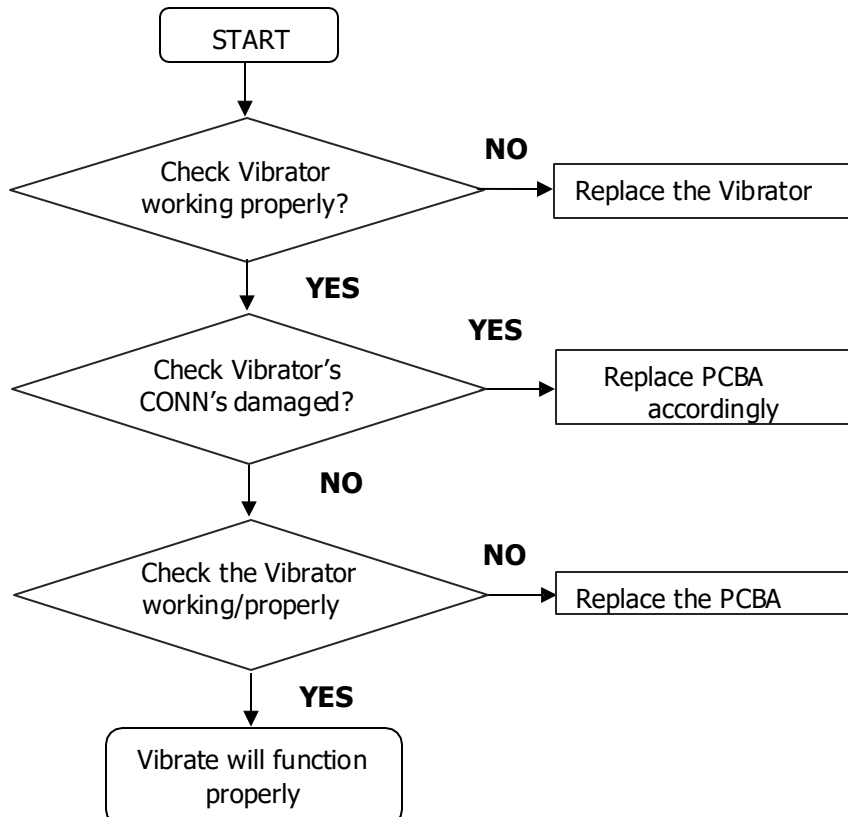
6.9 CAMERA PROBLEM

CAMERA ASSEMBLY PART:-

a. Rear main camera assembled on front case, rear secondary camera and front camera assembled on PCBA

> **#** Handsets resets when camera is switched ON, check the camera connector is damaged or camera is defective. Replace the camera and flash the handset. If still issue persists, replace the PCBA.

Main back camera

Main back camera connector

Front Camera

Sub back camera

Front Camera connector

Sub back camera connector
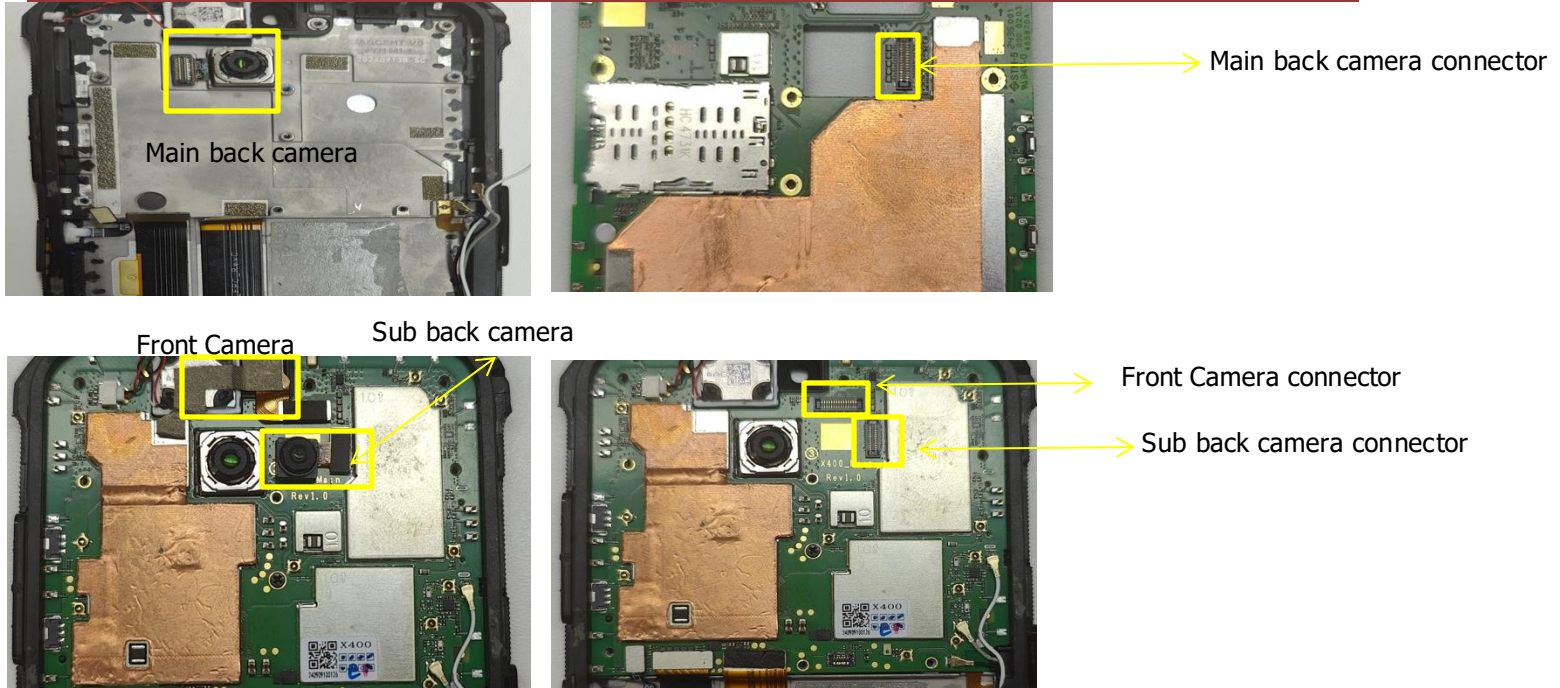
OBSERVED PROBLEMS:-

a. Camera blur or poor picture/video quality.
b. Handsets resets when camera is switched ON.
c. Camera flash light not working/Camera not working.

TROUBLESHOOTING CHECKING FLOW:-

Proprietary & Confidential Sonim Technologies
SON-241029 Ver. No 1.0
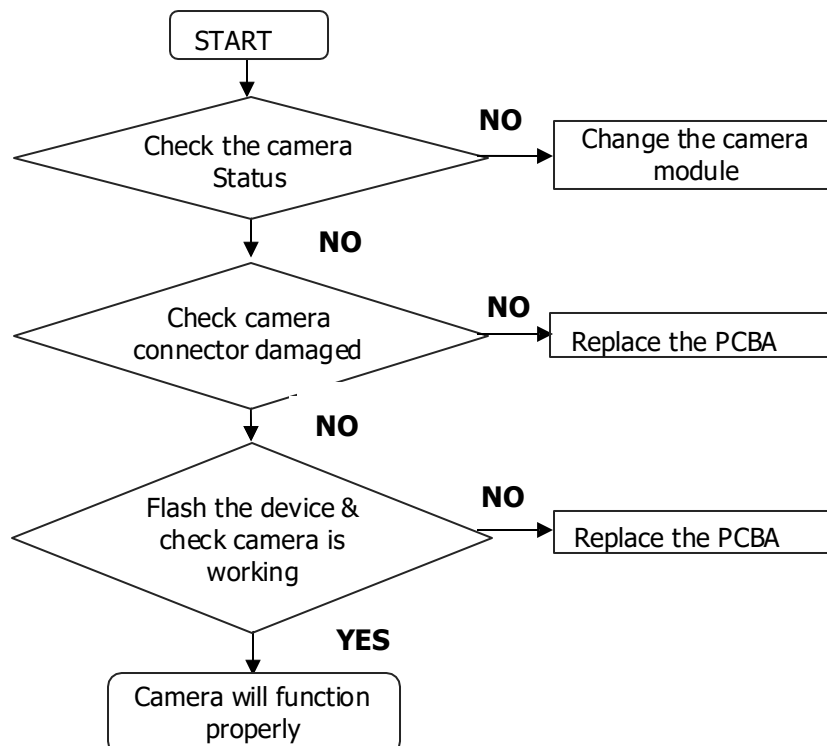
6.10 MEMORY CARD PROBLEM

SD CARD ASSEMBLY PART:-

a. Memory Card connector is soldered to the PCBA.

> **#** Verify the defect with a good memory card, if it's working well then format the customer memory card.
> **#** If none of memory/storage issues is noticed then flash the handset and verify the problem.

Note: Insert the memory card into the metal plate of the SD card holder, and then close the card holder
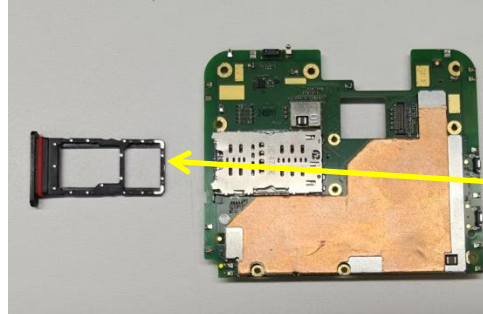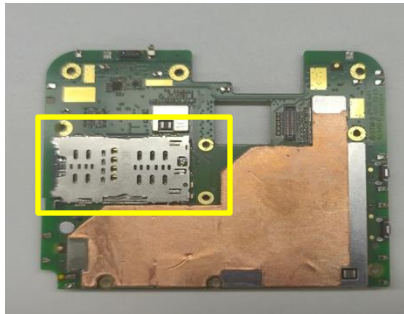
SIM&SD Card Tray

OBSERVED PROBLEMS:-

a. Memory card could not detected.
b. Memory card could not be reading/writing.

TROUBLESHOOTING CHECKING FLOW:-

```
                    START

            Check SD card is        NO      Reinsert the SD card &
            inserted & locked    ───────►      lock it properly
               properly

                 YES

            Check SD card lock      YES      Replace the SD Card
              /connector       ───────►    connector lock/PCBA
               damaged

                 NO

            Flash the handset &     NO
            check the status    ───────►     Replace the PCBA

                 YES

            SD card will function
                properly
```
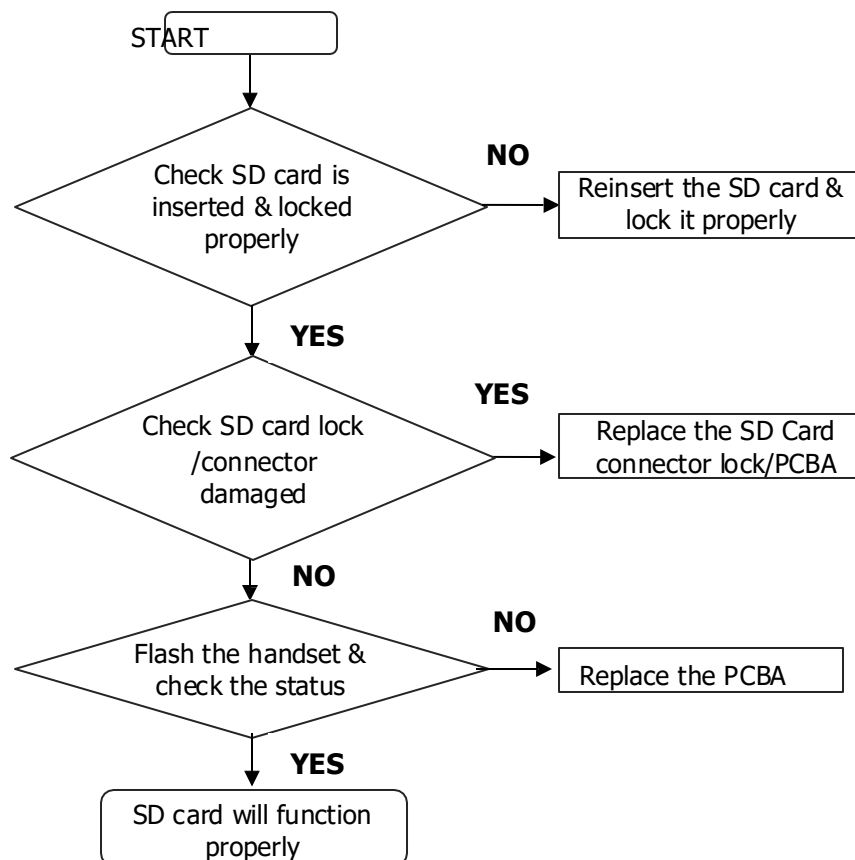
6.11 NETWORK PROBLEM

MAIN ANTENNA ASSEMBLY PART:-

a. Main antenna is fixed to PCBA through antenna contact pins & screw. Ensure the RF switch and main antenna pin contacts are not damaged before assembling the handset as it results in network issues.
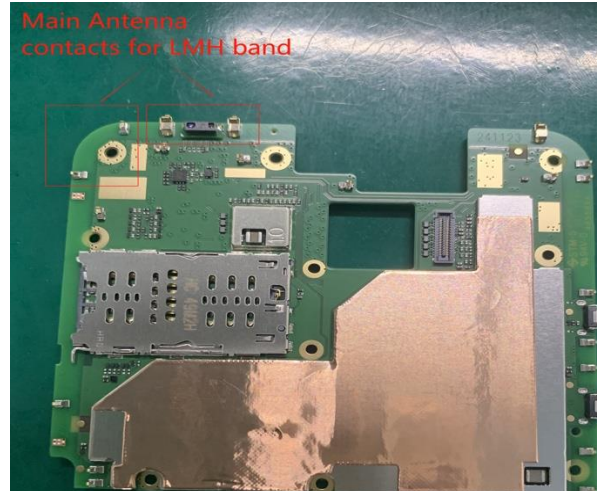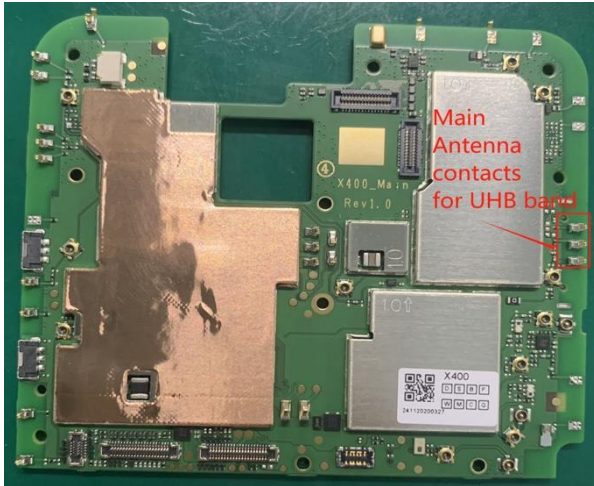
DIVERSITY ANTENNA ASSEMBLY PART:-

X400 supports two diversity antennas. Two diversity antennas are implemented to improve the receiving ability of 4G LTE signals.
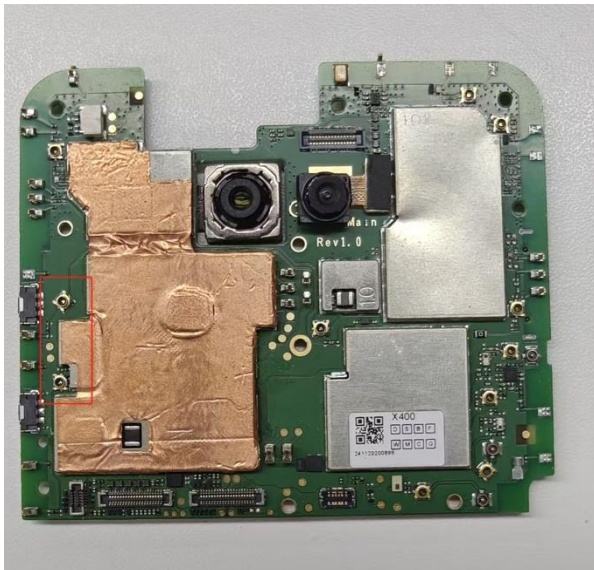
Flash the device and verify the problem for intermittent network problems, low signal strength & call drop issues. If issue persists replace the rear housing as the antennas are glued to it.

OBSERVED POBLEMS:-

    a.   No Network
    b.   Low signal strength
    c.   Call drop
    d.   Data downloading not happening/data downloading speed is low.

TROUBLESHOOTING CHECKING FLOW:-

```
                    ┌──────────┐
                    │  START   │
                    └────┬─────┘
                         │
                         ▼                    YES
                 ◇ Check No/Low ◇ ─────────────────►  ┌─────────────────────────┐
                   network?                           │  Replace main antenna   │
                         │                            └─────────────────────────┘
                         │ NO
                         ▼                    YES
                 ◇ Check antennas ◇ ───────────────►  ┌─────────────────────────┐
                   contacts pins                      │    Replace the PCBA     │
                   damaged                            └─────────────────────────┘
                         │
                         │ NO
                         ▼                    YES
                 ◇ Network ◇ ──────────────────────►  ┌─────────────────────────┐
                   reception/data                     │    Change diversity     │
                   problem?                           │    antenna/rear         │
                         │                            │    housing              │
                         │ NO                         └─────────────────────────┘
                         ▼                    NO
                 ◇ Flash & perform the ◇ ───────────►  ┌─────────────────────────┐
                   RF Test, check the                 │    Replace the PCBA     │
                   network status                     └─────────────────────────┘
                         │
                         │ YES
                         ▼
                 ┌─────────────────────────┐
                 │  Network will function  │
                 │       properly          │
                 └─────────────────────────┘
```
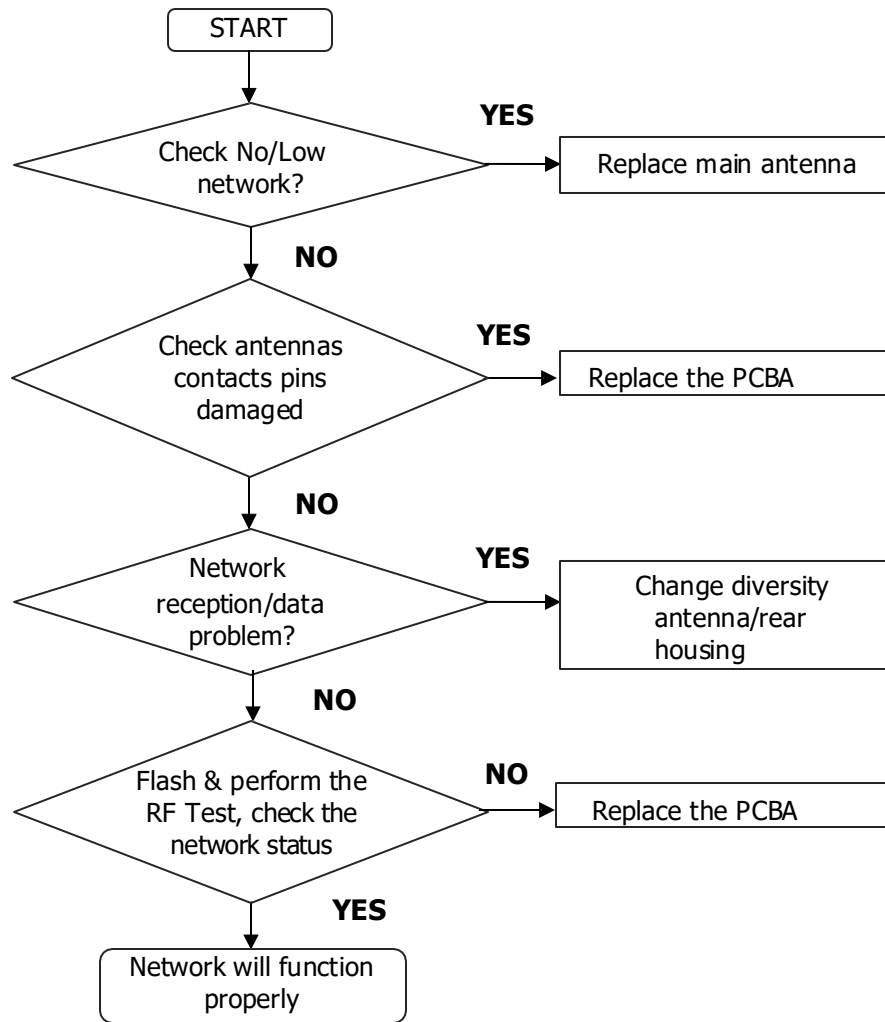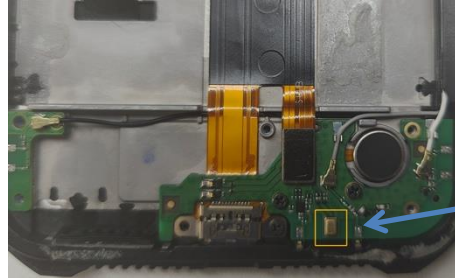
6.12 MICROPHONE [MIC] PROBLEM

MIC ASSEMBLY PART:-

a. X400 supports two MICROPHONES M1(SUB), M2(MAIN).

b. Sub MIC on PCBA, Main MIC on a small board

> **#** Ensure the MIC holes and mesh not blocked in the front & rear housing as it results in outgoing voice problems like voice low, noise and echo problems.

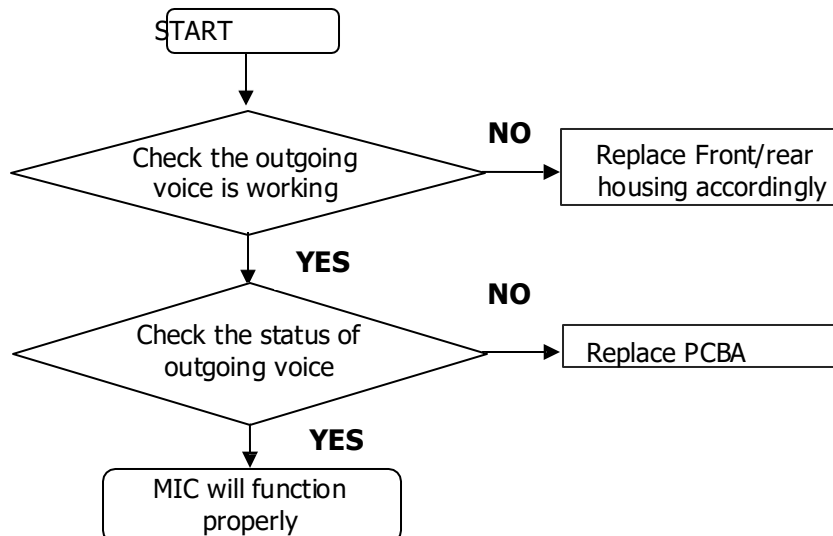**OBSERVED PROBLEMS:-**
a. No/Low outgoing voice.
b. Distortion in outgoing voice.

TROUBLESHOOTING CHECKING FLOW:-

START

Check the outgoing voice is working — NO → Replace Front/rear housing accordingly

YES

Check the status of outgoing voice — NO → Replace PCBA

YES

MIC will function properly


7.0   HANDSET ASSEMBLY

1. Install the front, rear, and secondary cameras to the connectors on the board. Please note that the camera connector must be fully inserted during installation.

2. Install the motherboard into the front chassis, then use a Phillips screwdriver to screw in the motherboard fixing screws (1), use tweezers to install the 3 antenna connectors (2) and the audio amplifier connecting wires (3), and then install the bayonet (4). Pay attention to the mounting position and direction, and finally connect the FPC (5).

3.Install the small circuit board by screwing in the screws (1, 2), fixing the antenna (3, 4, 5), connecting the FPC (6), and finally locking the small circuit board bracket.
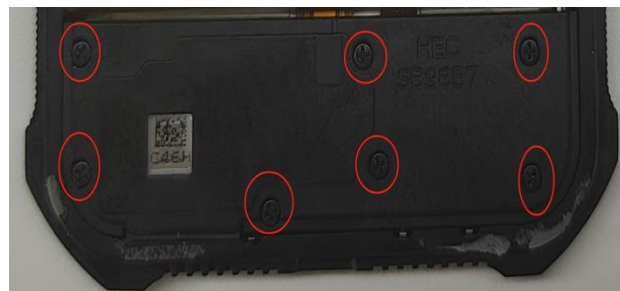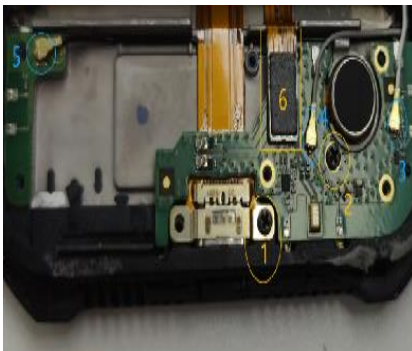
4. Remove release paper 1 and 2 from the front case, check and clean the battery compartment, insert the battery and secure the battery FPC as shown, then press the phone into the battery retainer and start the battery retainer up.

start

5. Place the motherboard back cover and lay the device flat with the screen facing down, then use a Phillips screwdriver to tighten the 9 motherboard back cover screws as shown in the figure.

6. Ensure that the 3 side buttons are correctly installed on the front case, peel off the battery cover adhesive sticker, snap on the battery cover in the direction shown in the figure, press the corners and place it into the battery cover press-fit retainer, and then turn on the power of the device to complete the assembly.

Start   Emergency stop