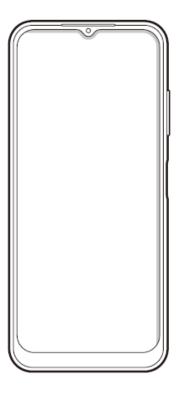
SAMSUNG

Mobile Device SM-A127F

SERVICE Manual For Customer



- 1. Precautions
- 2. Specification
- 3. Exploded View and Parts list
- 4. SW Update
- 5. Disassembly and Assembly
- 6. Quality Test

Notice: All functionality, features, specifications, and other product information provided in this document, including but not limited to, benefits, design, pricing, components, performance, availability, and capabilities of the product are subject to change without notice. Samsung reserves the right to alter this document or the product described herein at anytime, without obligation to provide notification of such changes.

1. Precautions

1-1. Repair Precaution

Following the repair by a non-authorised service provider, self-repair or non-professional repair of the product, Samsung is not liable for any damage to the product, any injury or any other product safety issue caused by any attempt to repair the product which does not carefully follow these repair and maintenance instructions.

Any damage to the product caused by an attempt to repair the product by any person other than a Samsung certified service provider will not be covered by the warranty.

- 1. Use only demagnetised tools that are specifically designed for small electronic repairs, as most electronic parts are sensitive to electromagnetic forces.
- 2. Use only high quality screwdrivers when servicing products. Low quality screwdrivers can easily damage the heads of screws
- 3. Always use the genuine replacement part. Third-party replacement parts may not function properly.
- 4. Below parts need a calibration to guarantee their performance after repair.
 Sensors (Ranging/Proximity/Finger Print), Rear CAM, TSP(Touch Panel), Speaker, PBA and others.
- 5. IPXX performance cannot be guaranteed when it repaired by user or non-skillful person.
- 6. If need to access failure data of your device or need to get more detailed diagnosis, please visit 'Samsung Authorised repair centre.
- 7. If you need to replace the battery and PBA, go to a Samsung service centre and receive instructions.
- 8. Before repairing, save personal information and important DATA and repair it.
- 9. Refer to Tools for repair for a list" of tools that you will use for assembling/disassembling the device.
- Be sure to wear the appropriate safety equipment before carrying out repairs.

If you do not wear the proper safety equipment, you will bear responsibility for any injuries that may occur.

- 10. Repair the device in a safe place.
- 11. Before repairing the device, be absolutely certain the device is turned off.

- Press the 'Volume Down Key' and 'Side Key' at the same time, or open the 'Notification panel' and hit the Power symbol.

- 12. If the device is damaged, emits smoke, or you smell something burning, immediately stop using the device and contact Samsung.
- 13. When removing the Back Cover, be careful to not damage the product.
 - Recommended safety equipment: Glasses/Gloves/Mask etc.
- 14. Before assembly, ensure that there are no screws or foreign objects around the battery.
- 15. Before assembly, check if there are any abnormalities before reattaching the Back cover.
- (If the battery is damaged, visit a Samsung service centre.)
- 16. Do not place the device directly in to the microwave and heat it.

✓ Tip

Visit www.samsung.com to view the device information, related material, and safety information. The items supplied with the device can be purchased from a Samsung Service Centre or the Samsung website.

1. Precautions

1-2. ESD(Electrostatically Sensitive Devices) Precaution

Many semiconductors and ESDs in electronic devices are particularly sensitive to static discharge and can be easily damaged by it. Properly shield the work environment from accidental electrostatic discharge before opening packages containing ESDs.

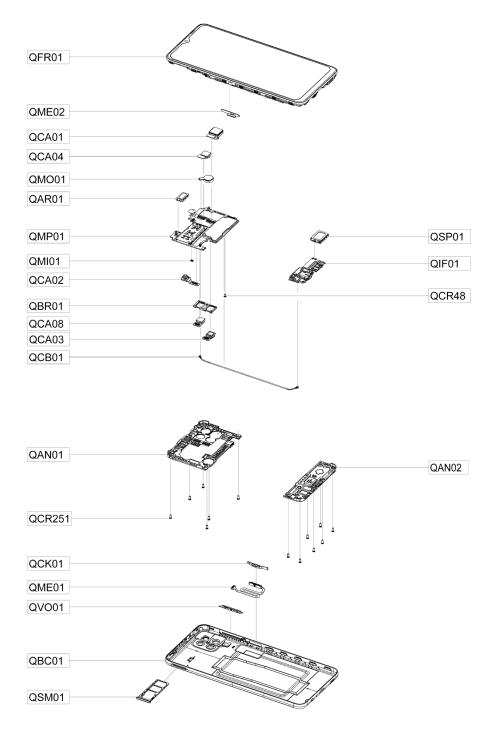
The potential for static electricity discharge may be increased in low humidity environments, such as air-conditioned rooms. Increase the airflow to the working area to decrease the chance of accidental static electricity discharges.

2. Specification

ltem	Description
OS	Android R OS V11.0
Network	2G, 3G, 4G
Battery	5,000 mAh
Processor	Samsung S5E3830XG0 2.0Ghz Quad + 2.0Ghz Quad
Connectivity	GPS, Glonass, BT 5.0 full support, USB 2.0, WiFi 11 b/g/n (2.4G), NFC
Camera	Rear - Wide : 48MP, A/F, F2.0 - Ultra Wide : 5MP, F2.2 - Bokeh : 2MP, F2.4 - Macro : 2MP, F2.4 Front : 8MP, F2.2
Display	6.5" TFT, 1600 x 720, HD+
RAM	3GB / 4GB
ROM	32GB / 64GB / 128GB
Sensor	Accelerometer, Fingerprint Sensor, Grip Sensor, Virtual Light Sensing, Virtual Proximity Sensing

3. Exploded View and Parts List

3-1. Exploded View



3. Exploded View and Parts List

3-2. Parts list

Number	Name	SEC CODE
QCR251	SCREW-TAPPING	6002-001657
QCR48	SCREW-MACHINE	6001-001460
QMI01	MIC MEMS	3003-001215
QCA08	ASSY CAMERA-2M FF 1/5"_A125F_MACRO	GH96-14006A
QCA04	ASSY CAMERA-5M FF 1/5"_A125F	GH96-14014A
QCA03	ASSY CAMERA-2M FF 1/5"_A125F_BOKEH	GH96-14017A
QCA02	ASSY VT CAMERA-8M FF 1/4"_A125F	GH96-14023A
QCA01	ASSY CAMERA-WIDE 48M 1/2" (SM-M127F)	GH96-14179A
QSP01	SPEAKER	3001-002856
QAR01	AUDIO-RECEIVER	3009-001705
QCR251	SCREW-TAPPING	6002-001657
QMO01	MOTOR DC-SM_A013F	GH31-00788A
QCB01	COAXIAL CABLE-A6060,117MM, BLUE	GH39-02043A
QAN02	ANTENNA-MAIN (SM-A125F)	GH42-06699A
QIF01	ASSY SUB PBA-SM-A127F	GH96-14636A
QME02	UNIT-SIDE KEY (SM-M515F)	GH59-15363A
QBR01	ASSY BRACKET-MAIN CAM	GH98-46123A
QME01	ASSY US FP-FINGERPRINT SENSOR	GH96-14087A
QCK01	ASSY BRACKET-POWER KEY	GH98-46232A
QVO01	ASSY KEY-VOL	GH98-46273A
QAN01	MEA ANTENNA-INNER TOP_NFC	GH97-25989A
QSM01	ASSY SIM TRAY-DS	GH98-46124A
QFR01	SVC ASSY SMT-LCD(E/ZK)SM-A125F,SER	GH82-24490A
QBC01	SVC COVER ASSY-REAR_A127_ZK_VN_CIS	GH82-26220A
QMP01	SVC PBA-MAIN(COMM)SM-A127F_3+32GB,SER	GH82-26231A

4-1-1. How to update software by FOTA

1. Run Setting

2. Software update: Provide update information to Setting Noti tips if have an Update item.

3. Check Wi-Fi Switch: Downloading via mobile networks may result in additional charges. If possible, download via a Wi-Fi network instead.

4. Download and install.

- 5. Version Check notification
- 6. If you have a version of software to update, the 'Install now', 'Schedule Install' button is activated.
- Install now.
- Schedule Install: Schedule install is automatically updated at the set time.
- 7. Update complete notification: The software update is complete.
- 8. Check additional updates: Click the Download and install button to check additional updates.
- 9. Check the latest software: If it's not the latest software, Step 6. You can run it again.

Software update Network Error

Your phone was disconnected from the network before the download was complete.

The download will continue when your phone reconnects to a network.

4-1-2. Updating software

With Smart Switch, you can easily update your device's software to the latest version. When you connect your device to your computer and start Smart Switch, Smart Switch automatically searches for available updates. If any updates are available, the Update button appears under your device name.

To update your device's software, follow these steps:

1. On the start screen of Smart Switch, click Update.

A new software version is available.



- 2. Read the software update information and click Continue.
- 3. Read the precautions and click All confirmed.
- 4. Read the Consent to collection and use of personal information terms and click All confirmed.
- 5. When the update is complete, click OK.

Recovering from software update failure

If the software update is interrupted due to an error on your device or computer, your device may fail to operate normally. At this time, you can use the emergency software recovery function to repair your device.

To update your device's software, follow these steps:

- 1. Disconnect your device from your computer and restart Smart Switch.
- 2. At the top of the Smart Switch window, click **MORE** \rightarrow **Emergency Software Recovery**.
- 3. In the list of update failures, click **Emergency recovery** next to the device you want to repair.
- 4. Follow the on-screen instructions to put your device into recovery mode and click OK.
- 5. When the emergency recovery is complete, click $\ensuremath{\textbf{OK}}$.

4-1-3. Recovering on another computer

If the emergency recovery continues to fail on the computer where the software update failed, you can repair your device on another computer using the recovery code. First, you must locate and write down the recovery code. The recovery code can only be found on the computer where the software update failed.

To locate the recovery code, follow these steps:

1. On the computer where the software update failed, start Smart Switch.

2. At the top of the Smart Switch window, click **MORE** \rightarrow **Emergency Software Recovery**.

3. In the Emergency Software Recovery tab, in the list of update failures, look for the recovery code under the name of the device you want to repair and write it down somewhere.

To recover using another computer, follow these steps:

- 1. Start Smart Switch on another computer.
- 2. At the top of the Smart Switch window, click **MORE** \rightarrow **Emergency Software Recovery**.
- 3. In the Emergency Software Recovery tab, click Emergency recovery using the recovery code.
- 4. Enter the recovery code in the Recovery code box and then click OK.
- 5. In the Emergency Software Recovery dialog box, click Emergency recovery.
- 6. Follow the on-screen instructions to put your device into recovery mode and click OK.
- 7. When the emergency recovery is complete, click OK.

4-2. How to reset by Factory Reset

Q. What is the Factory Reset?

It will reset your phone to restore to its factory default setting. This will erase all data, including files and downloaded apps.

To do 'Factory reset' on your device, follow next steps:

Step 1		Run Setting If you need software updates, run the settings.
Step 2	General management Language and input, Date and time, Reset	General management Select 'General management'.
Step 3	Reset	Reset Select 'Reset'.
Step 4	Factory data reset Reset your phone to its factory default settings. This will erase all data, including files and downloaded apps.	Factory data reset Select 'Factory data reset'
Step 5	 Factory data reset All data will be erased from your phone, including your: Google account System and app data Settings Downloaded apps Music Pictures All other user data Service provider apps and content The decryption key for files on the SD card (You will not be able to use encrypted files on the SD card after you reset your device to factory defaults.) 	Check information. Read and check the precautions when initialising the factory.
Step 6	You are currently signed in to the following accounts: @gmail.com The following apps will be uninstalled. Some apps may be reinstalled after the reset depending on your service provider.	Check accounts. Check the entered account information. If you do not log out for Google account, After Factory data reset, login to another account is not possible because the phone is locked. Google account is recommended to log out.

Step 7	Tip You can use <u>Smart Switch</u> to back up your data to an SD card or USB storage device before resetting your phone.	Reference tip Recommended data backup currently in use
Step 8	Reset	Reset Select ' Reset '.
Step 9	 Factory data reset All your personal information and downloaded apps will be erased and can't be recovered. Data that has been backed up to the SD card won't be erased. You can restore SD card data using Smart Switch after the reset. 	Last guide of reset Check the last guide.
Step 10	Delete all	Run Delete all . If you execute ' Delete all ', all data is deleted when rebooting. During Factory data reset, reboot can be repeated. The logo may be displayed for a long time. Please wait for setup wizard to run. Check the battery level before Factory data reset, If the battery level is low, connect the charger. There is a problem with system when power is turned off during factory data reset.
Step 11		Reset running Reset is running. Don't do anything else.
Step 12	Let's go! English (United States) 🔹	Finish factory data reset When the setup wizard screen is displayed, Factory data reset completed.

5-1. Tools for repair

Tool & Part Code	Image	Description
Safety glasses		Prevents accidents during repair (protective equipment)
Safety Gloves		Prevents accidents during repair (protective equipment)
Safety Mask	Aura ** 93324 Keisender //***	Prevents accidents during repair (protective equipment)
SIM Tray Ejector Pin		Pin for ejecting the SIM Card Tray
(+) Screw Driver		Cross-head screwdriver

X When repairing devices, you absolutely must wear protective equipment for your safety.

Opening Pick	Tool for disassembling the Back cover and other parts
Opening Tool	Tool for disassembling the Connector and other parts
Suction Cup	Tool for disassembling the Back cover, Battery, and other parts
Tweezers	Tool for handling connectors, cables, and other parts

5-2. Disassembly

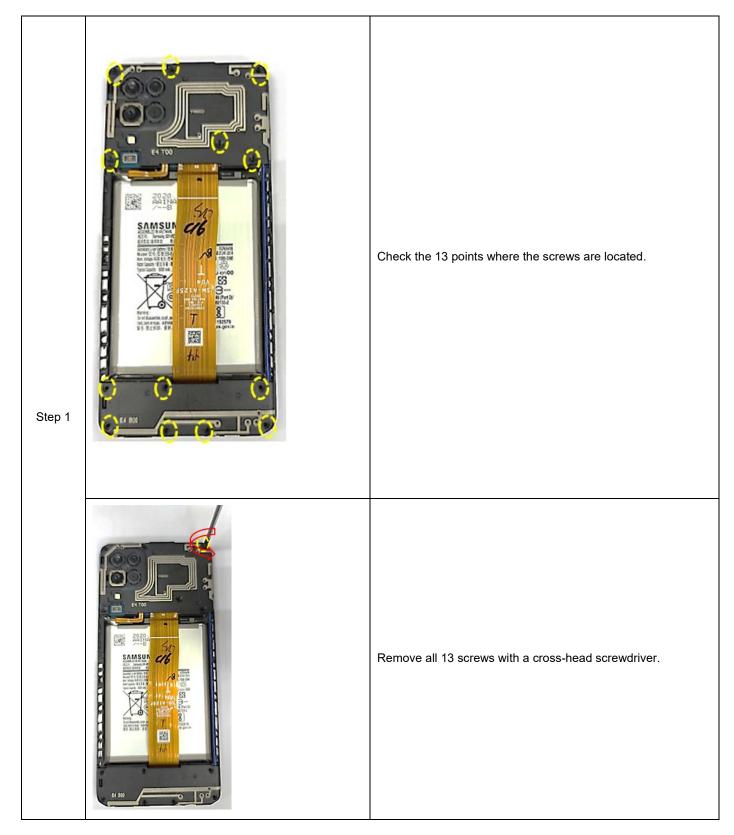
5-2-1. Back Cover Remove

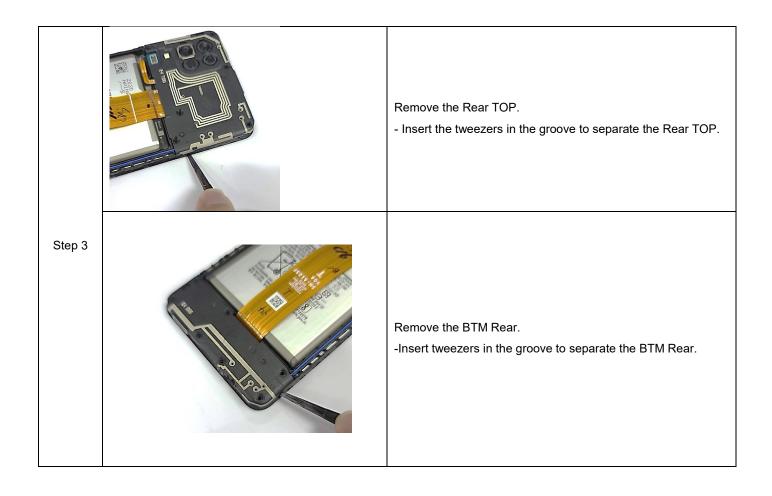
Warning

ning It is possible for the device or battery to be damaged by heat.

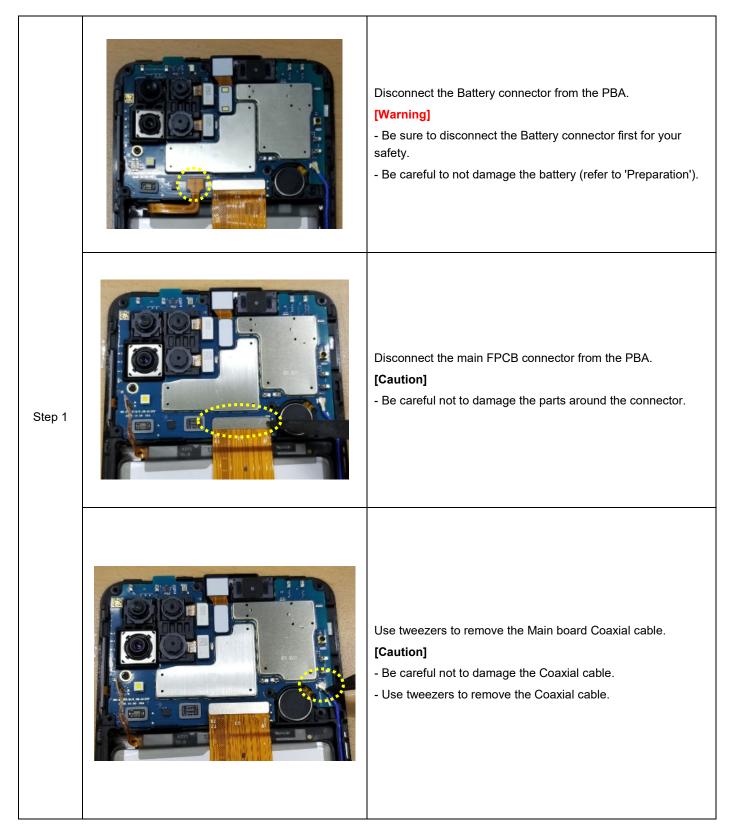


5-2-2. Rear TOP & BTM Rear Remove





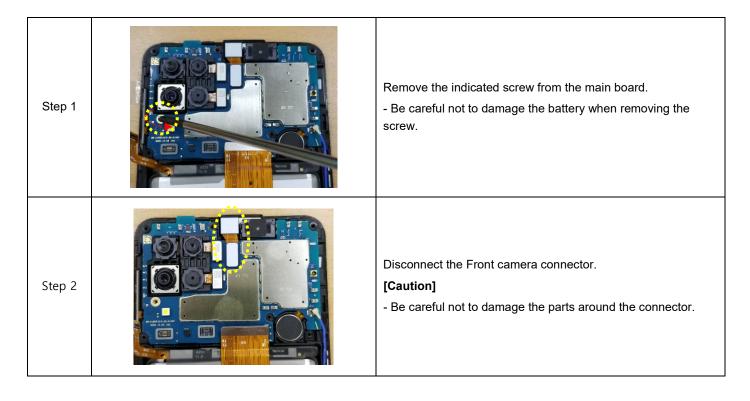
5-2-3. Battery Connector & Main FPCB Connector Remove



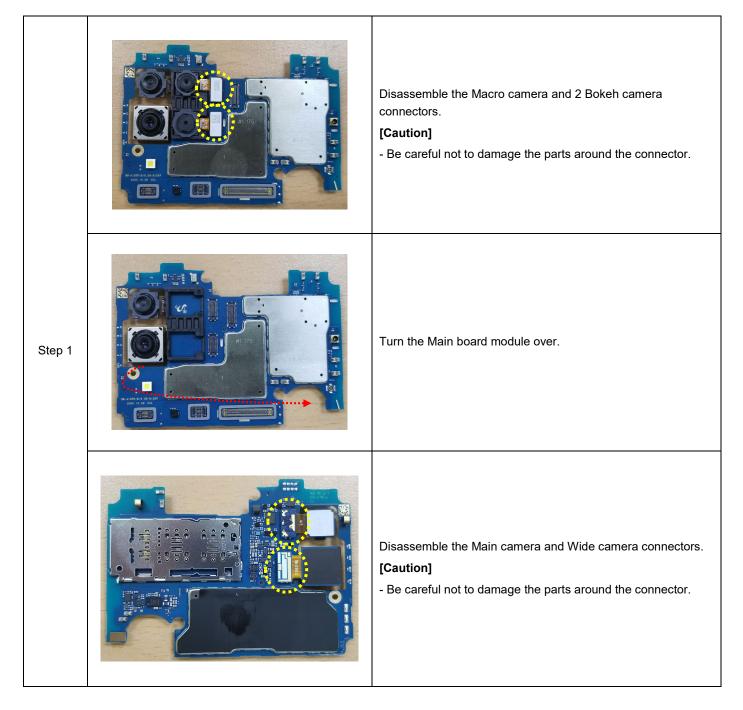
5-2-4. Main Board Remove

Marning

The PBA can only be replaced at an authorised repair shop If the PBA is faulty, contact Samsung for further action.



5-2-5. Rear Camera Remove



5-2-6. Receiver Remove



Using tweezers, lift the disassembly groove upward and to the left from the bottom to detach the Receiver from the terminal.

[Caution]



- Be careful not to damage the receiver.

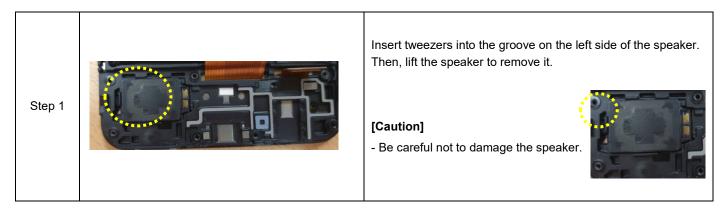
5-2-7. Vibrator Remove



5-2-8. Charging Assembly Remove

Step 1	Disconnect the LED connector on the right. [Caution] - Be careful not to damage the parts around the connector.
Step 2	Using tweezers, lift the Charging assembly from the bottom. Detach the charging assembly from the terminal. [Caution] - Be careful not to damage nearby components.

5-2-9. Speaker Remove

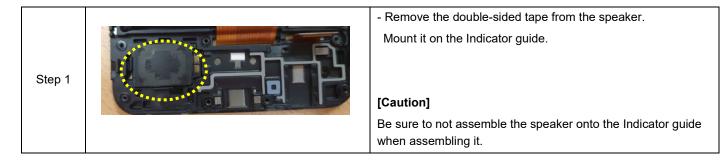


5-2-10. Battery Remove

: If the battery needs to be changed, visit a Samsung service centre and receive further action.

5-3. Assembly

5-3-1. Speaker Assembly



5-3-2. Charging Assembly

Step 1	After first attaching the bottom of the Charging assembly to the bottom part of the Display module's using the two screw bosses, assemble the TOP part. [Caution] - Be careful not to damage the SMR gasket on the rear of the Charging Assembly.
Step 2	Assemble the upper LCD connector. [Caution] - Be careful not to damage the connector or nearby components.

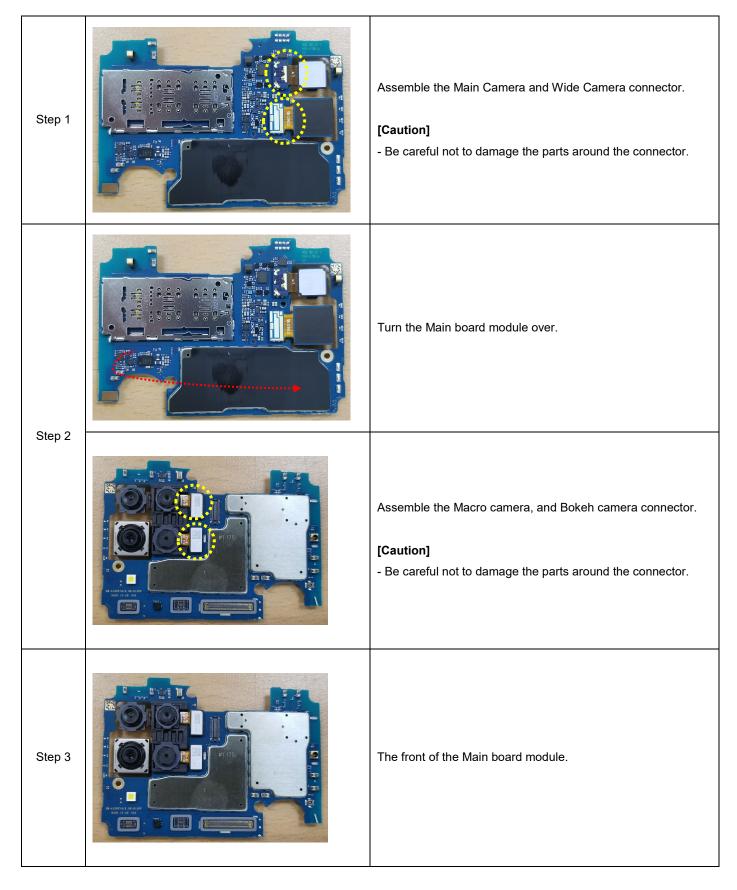
5-3-3. Vibrator Assembly

Step 1	Wipe off any remaining residue before connecting the motor.
Step 2	Assemble the vibrator. [Caution] - Be sure to push the vibrator far enough into the slot.

5-3-4. Receiver Assembly

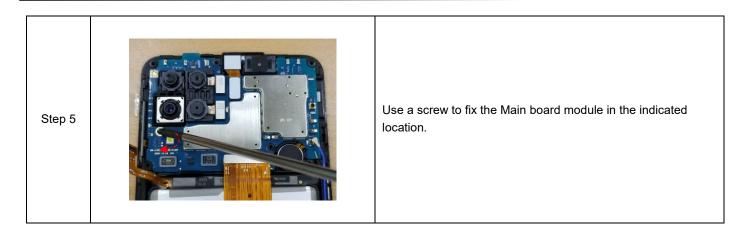


5-3-5. Rear Camera Assembly

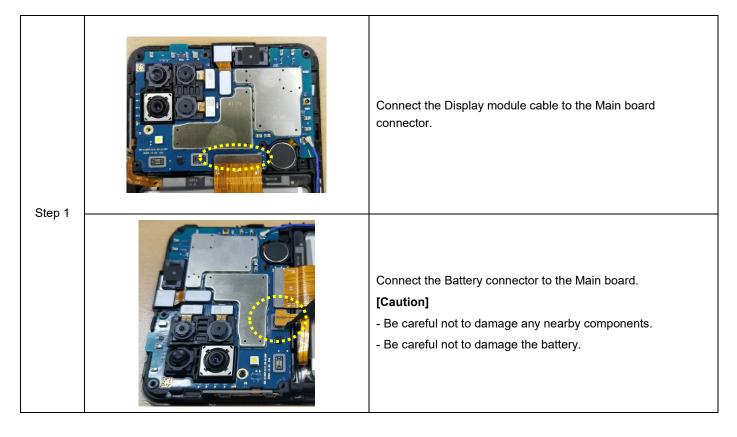


5-3-6. Main Board Module Assembly

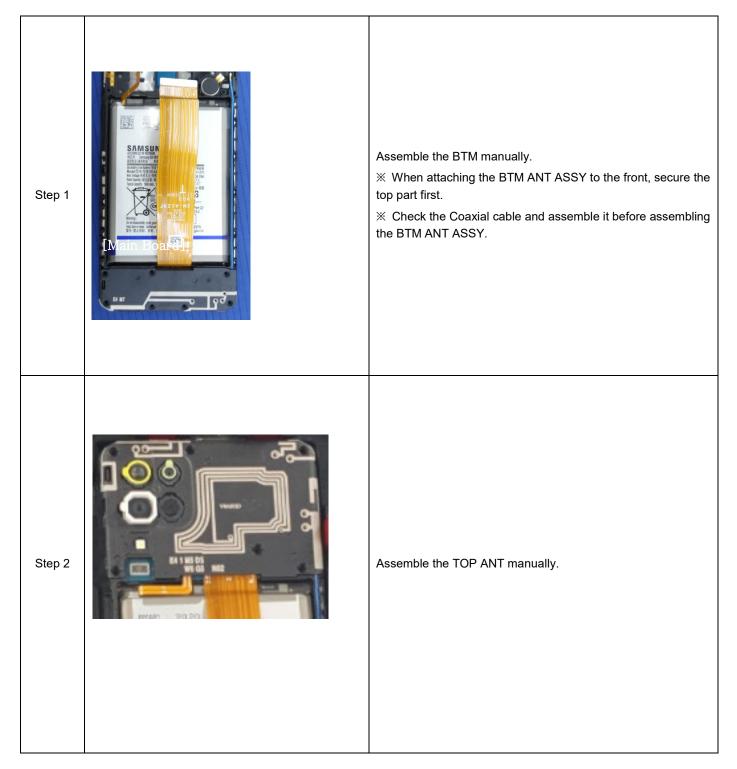
Step 1	Connect the lower part of the Main board module to the Display module diagonally, and then assemble the top part.
Step 2	Assemble the Front camera connector. [Caution] - Be careful not to damage the parts around the connector.
Step 3	Use tweezers to connect the coaxial cable to the Main board module.
Step 4	Use a tweezers to connect the Coaxial cable to the Charging assembly.

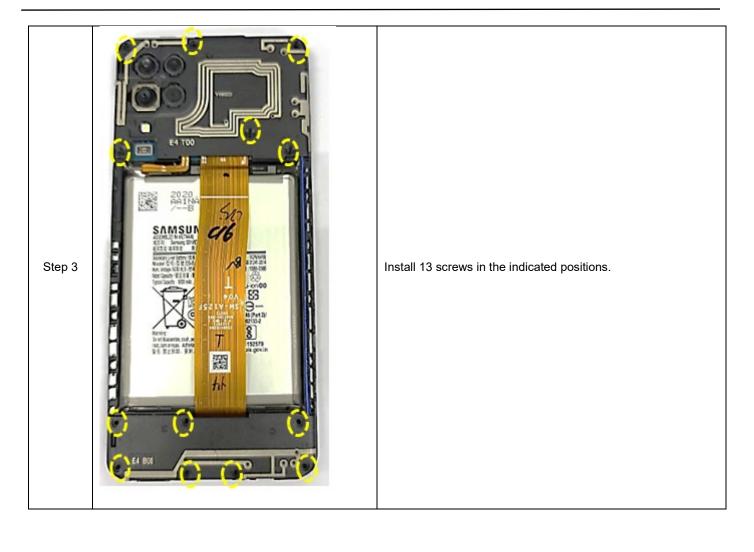


5-3-7. FPCB Assembly

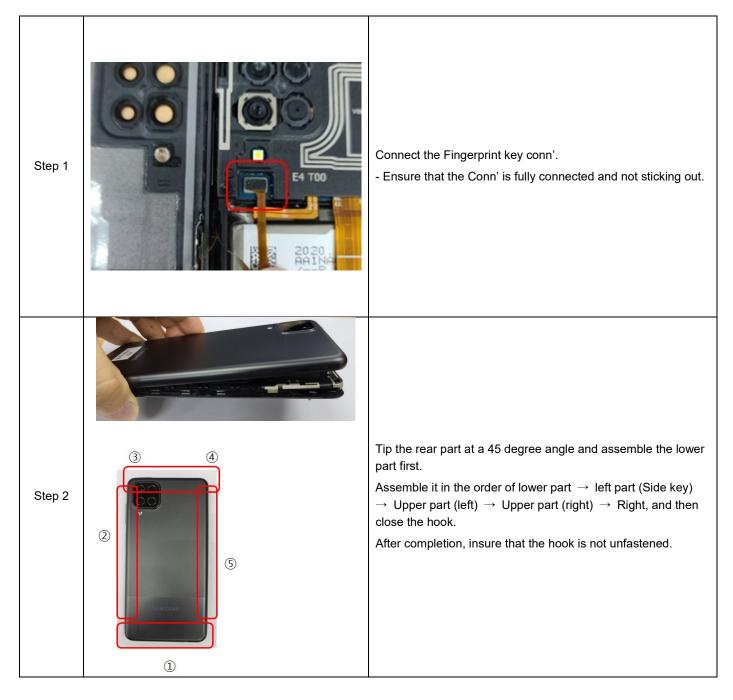


5-3-8. Rear TOP & BTM Rear Assembly





5-3-9. Back Cover Assembly



5-3-10. SIM Tray Assembly

Step 1	Insert the SIM Tray.
Finish	After finishing the last step, ensure that there are no abnormalities.

6. Samsung Members

In order to guarantee the safe use of products, it is recommended to conduct through Samsung Members after repair. If the test results show any abnormalities or that another malfunction has occurred from the repair, please visit a Samsung service centre to receive further action.

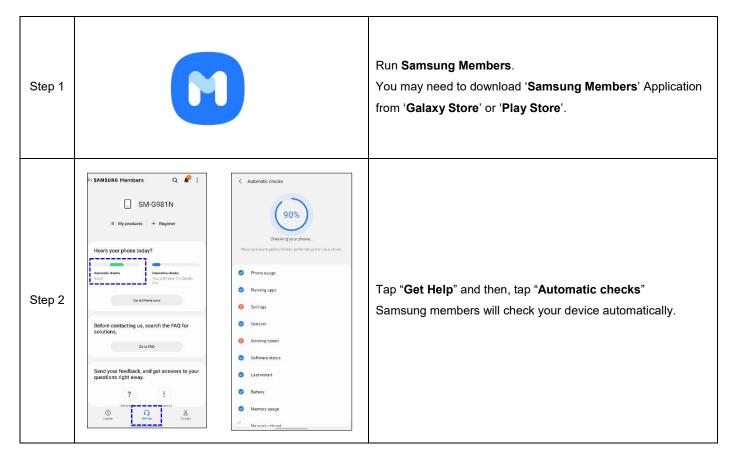
Any malfunctions caused by your repair may incur additional repair charges.

※ In order to improve the device, the Samsung members app may update the UI and functions without any prior notice.

✓ Tip

Making an inquiry about a product or sending your opinion in will require logging in with a Samsung account.

6-1. Automatic checks

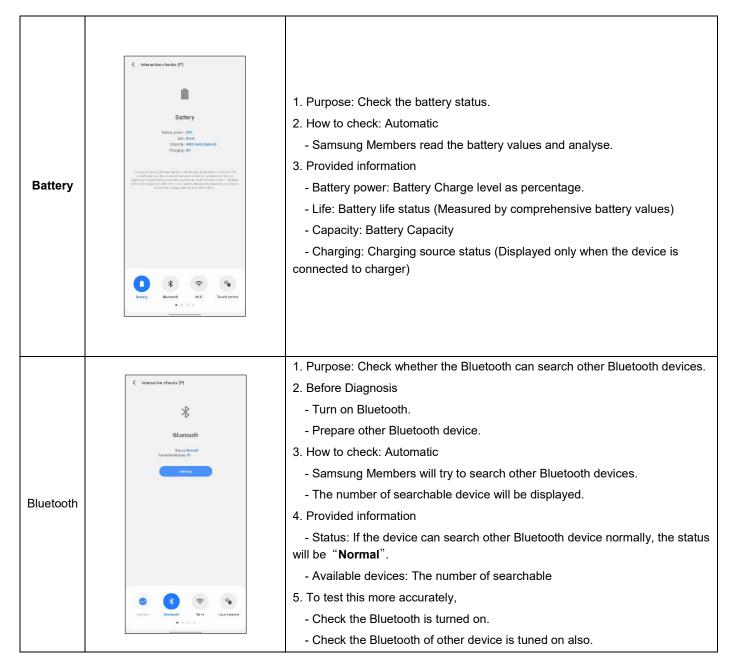


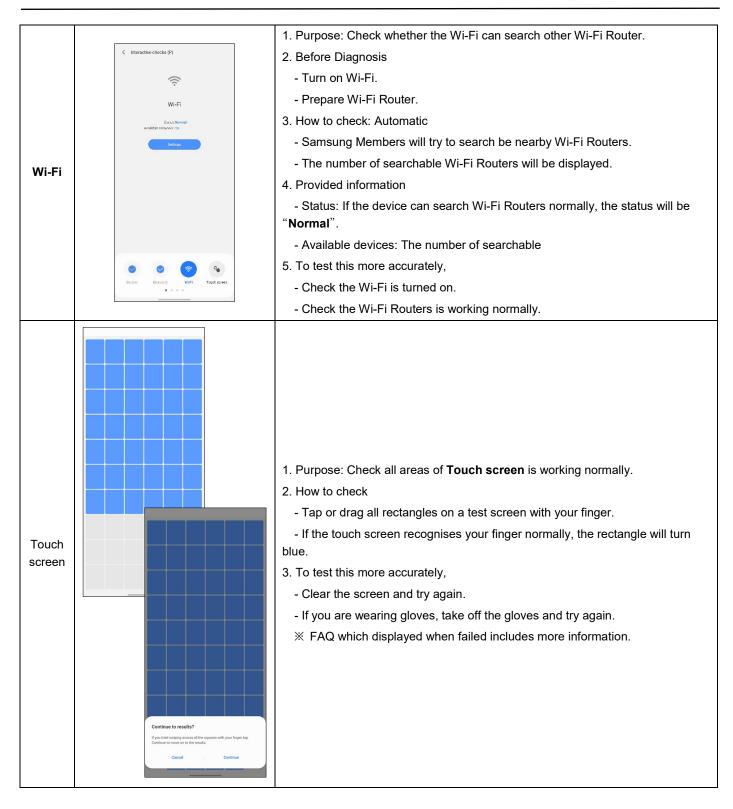
	Automatic checks Learn how to keep your phone healthy. Improvements available (2) Setting? Setting	Check the test result. 1. Blue coloured(Check Mark): Looking good and no issue 2. Red coloured(Exclamation Mark): Need to further checking - Follow the instruction from the App.
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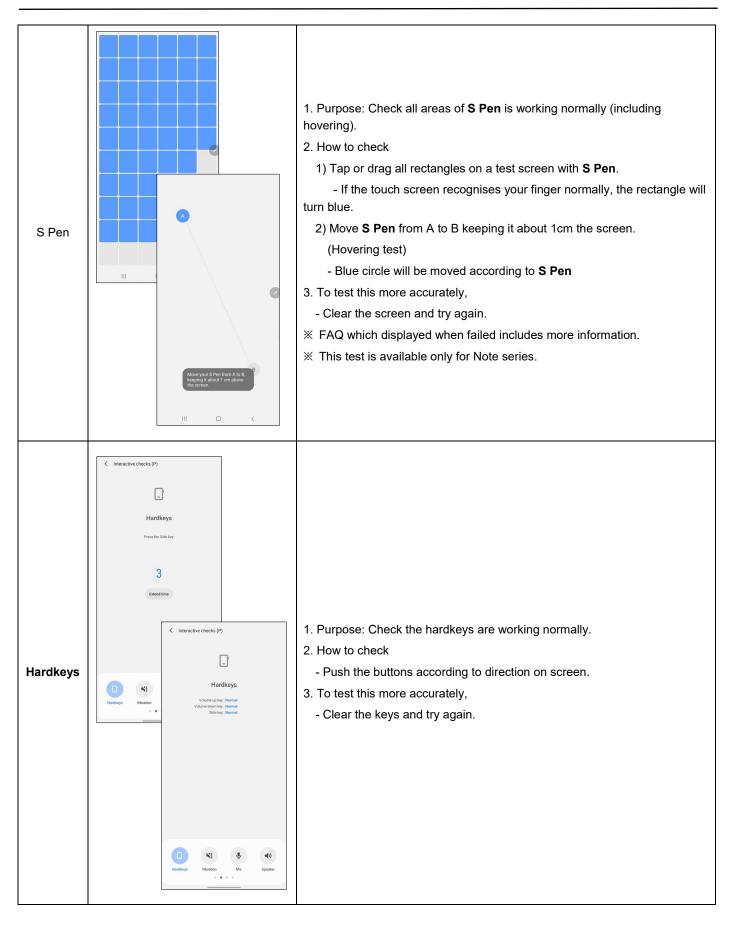
6-2. Interactive checks

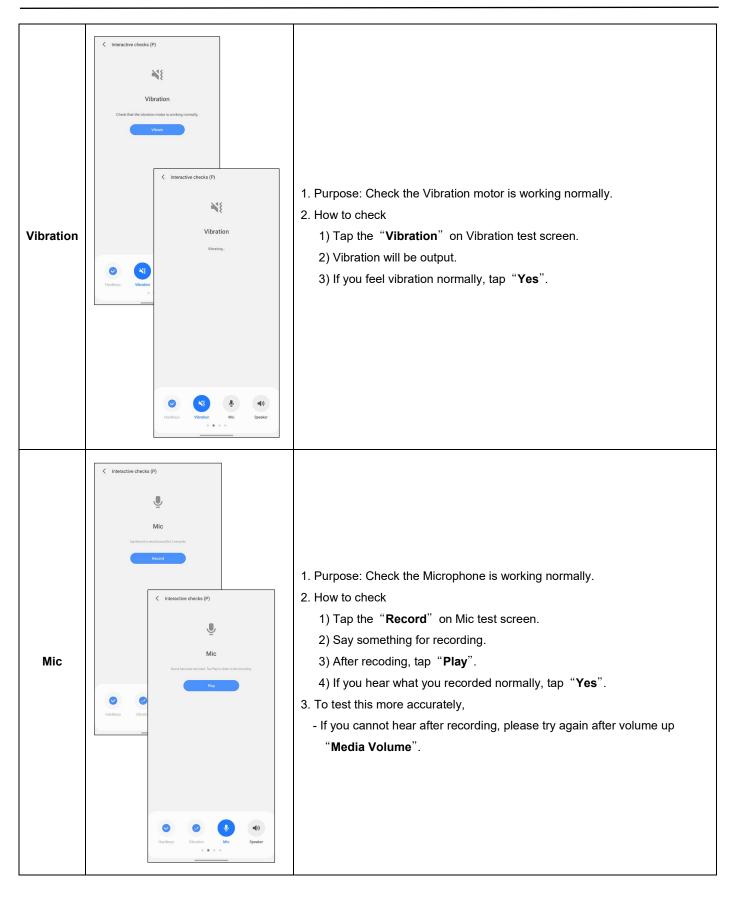
Step 1		Run Samsung Members Need to Log in
Step 2	PI SAMSUNG Members Q P SM-6981N SM-6981N If My products + Register How's your phone today? P Mumeridades VIII More today? P More today? P Case Money to today? P More today? P Case Money to today? P Send your feedba	Tap " Get Help " and select test items.
Step 3	 trenctive checks (?) Engerprint scamer Furgerint scamer Generative and was (?) a was not an and the scame of the	 1. When everything is OK, only "Normal" will be displayed. 2. When something is abnormal, solutions will be displayed on the bottom and failed item will be emphasised with red circle and exclamation mark on Interactive checks screen.

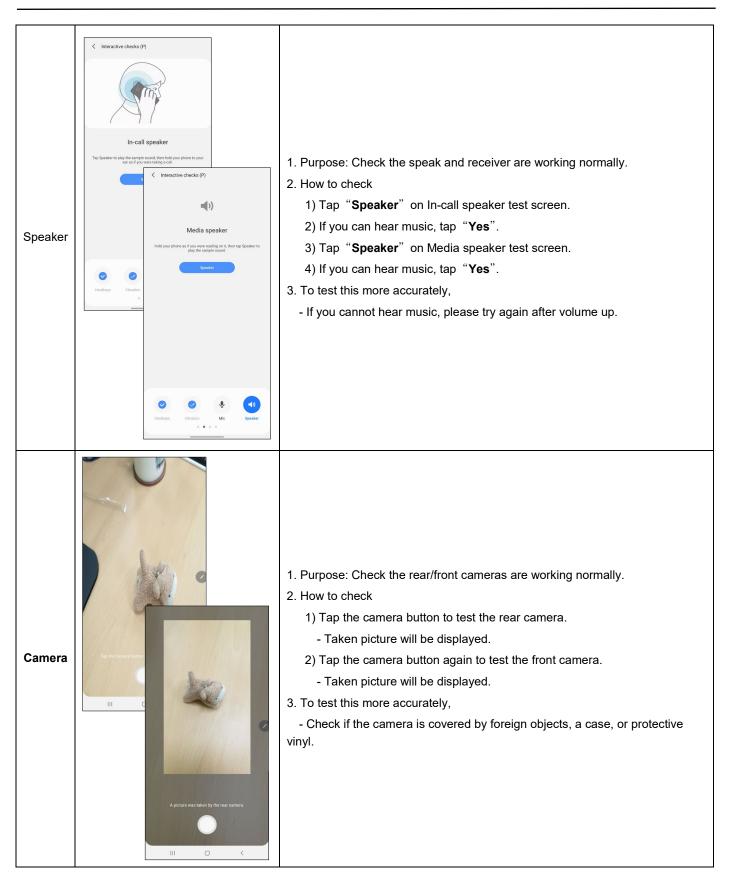
6-3. Description of test items

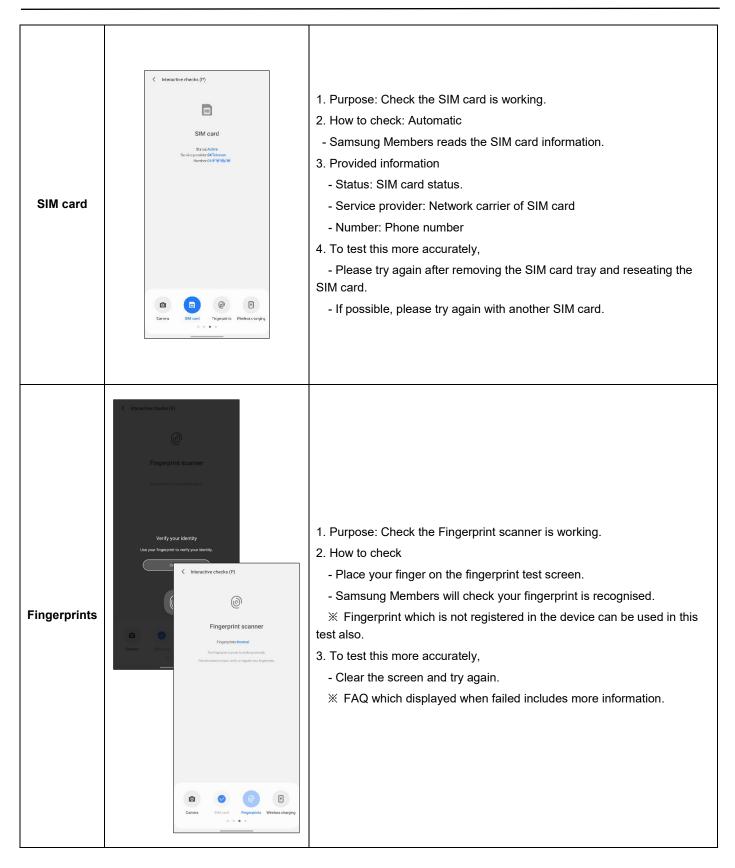




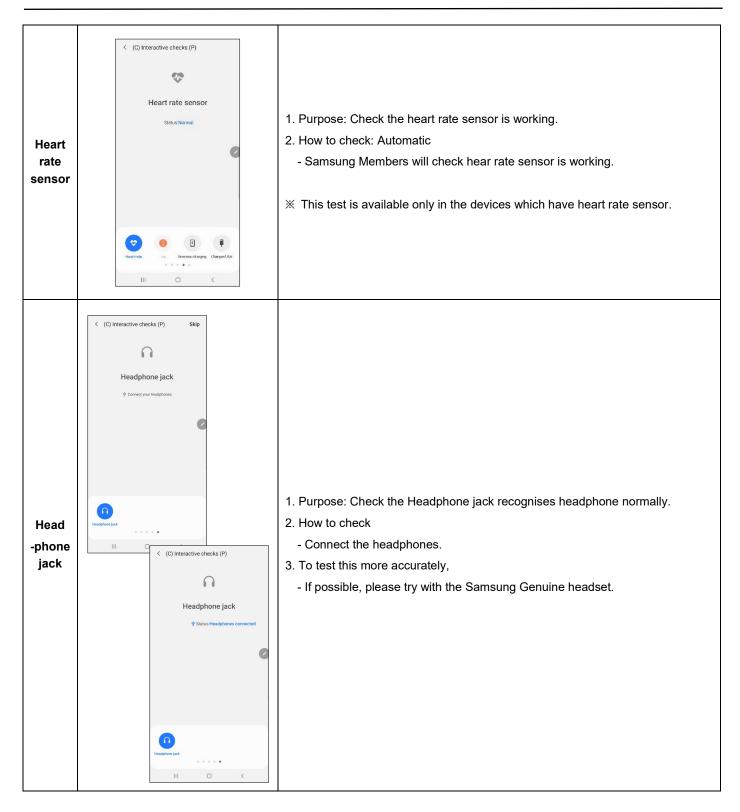








Iris	(c) Interactive checks (P) Iris Iris Iris Iris Interaction required To test the tris scarner, your need to register your To test the tris scarner, your need to register your To test the tris scarner, your need to register your To test the tris scarner, your need to register your To test the tris scarner, your need to register your To test the tris scarner, your need to register your To test the tris scarner, your need to register your To test the tris scarner, your need to register your To test the tris scarner, your need to register your To test the tris scarner, your need to register your To test the tris scarner, your need to test the test is To test the tris scarner, your need to test the test is To test the tris scarner, your need to test the test is To test the tris scarner, your need to test the test is To test the tris scarner, your need to test the test is To test the tris scarner, your need to test the test is To test the tris scarner, your need to test the test is To test the test test to test test is To test the test test test test test is To test test is </th <th> Purpose: Check the Iris recognition is working. How to check Register your Iris in Biometrics and security settings. Open Iris test screen and scan your iris. X This test is available only in the devices which have Iris scanner. </th>	 Purpose: Check the Iris recognition is working. How to check Register your Iris in Biometrics and security settings. Open Iris test screen and scan your iris. X This test is available only in the devices which have Iris scanner.
Charger /USB port	Interactive checks (P) Sip Charger/USB port • Orners a sharper or still device. • Orners a sharper or still device. • Orners a sharper or still device. • Orners a sharper or still device. • Orners a sharper or still device. • Orners a sharper or still device. • Orners a sharper or still device. • Orners a sharper or still device. • Orners a sharper or still device. • Orners a sharper or still device. • Orners a sharper or still device. Charger/USB port • Orners of at charger connected	 Purpose: Check the port recognise the charger and USB cable normally. How to check Open the Charger/USB port test screen Connect charger or USB cable. Check the Status is correct. To test this more accurately, USB cable must be connected PC or charger. (Standalone USB cable cannot be recognised) If possible, please try again with Samsung genuine charger.



Wireless charging	((c) Interactive checks (P) Skip () (C) () (C)	 Purpose: Check the Wireless charging working. Before Diagnosis Prepare Wireless charger. How to check Put the device on a wireless charger. To test this more accurately, If possible, please try with the Samsung Genuine charger.
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SAMSUNG

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