

TCL 408 T507D1



Warning:

- All features, functions, specifications, and other product information provided in this document, including but not limited to the advantages, aesthetics, price, components, performance, availability and capacity of the product are subject to change without notice.
- TCL will not be responsible for any damage to the product, injury or other safety issues caused by the result of repair by an unauthorized service provider, user repair or unprofessional product repair.
- Any damage to the product resulted from an attempt to repair the product by any person or 3rd party other than TCL authorized service provider will not be covered by warranty.

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1 Precautions

- 1) Use only demagnetized tools specifically designed for small electronic repairs, most electronic parts are sensitive to electromagnetic forces.
- 2) Use only high quality screwdrivers when repairing products. Poor quality screwdrivers can easily damage the heads of the screws.
- 3) Always use genuine spare parts. Parts from third party may not function properly or even cause damage.
- 4) The parts below require calibration to ensure proper function after repair, please contact TCL authorized Repair Center.
Sensors (proximity, fingerprint), dual camera, touch screen panel, speaker, motherboard and more.
- 5) The IPXX degree of protection cannot be guaranteed in the event of repair by the user or by an unqualified person.
- 6) If the device suffered from water/liquid damage, you will have the option to have a repair, but this may exceed the value of the device, depending on level of damage.
- 7) If you need detailed diagnosis, please contact TCL authorized Repair Center.
- 8) Do not remove, damage, heat, short circuit, or disassemble the battery. If you need to replace the battery, camera, screen or motherboard, go to a TCL authorized Repair Center for repair.
- 9) Before any repair, backup personal information and important data, and then proceed with the repair.
- 10) Many semiconductors parts inside the device are sensitive to electrostatic discharges that can cause unrecoverable damages on the parts. Setup and stay in an Electrostatic Protected Area (EPA) to avoid electrostatic discharge before opening the device for repair.
- 11) Before repairing the device, you must be absolutely certain that the device is turned off.
- 12) Repair the device in a safe/explosion-proof environment. If the device is damaged, emits smoke or if you smell a burning odor, stop repairing/using the device immediately, use a fire extinguisher or fire-proof box, and contact TCL.
- 13) When removing the back cover, be careful not to damage the product, especially the battery.
Recommended safety equipment: Glasses/Gloves/Mask, etc.
- 14) Before assembly, make sure that there are no screws or foreign objects around the battery.
- 15) Before assembly, make sure that there are no abnormalities before reattaching the back cover.

2 General Product Information

Features/Hardware	Description
Design	Dimensions: 164.66x75.4x8.99mm; Weight: 190g
System	Android 12
Processor	Chipset: G25 (MT6762V/CB); CPU: 4xCortex-A53 @2.0GHz+4xCortex-A53 @1.5GHz; GPU: IMG GE8320 650MHz
Memory & Storage	4GB RAM +64GBROM; Support micro SD cards up to 512GB
Display	6.6" , TFT-IPS
Rear Camera	50 MP rear camera: PDAF, 1/2.55", 0.7um, F1.8, field of view 79.4°, 5P lens. 2 MP depth camera: FF, 1/5 ", 1.75µm, F2.4, field of view 88.8°, 3P lens
Front Camera	8MP front camera: FF, 1/4 ", 1.12µm, F2.0, field of view 77.5°, 4P lens
Battery	5000mAh (standard) Li-ion
Connectivity	2G bands: 850/900/1800/1900 3G bands: B1/2/5/8 4G bands: B1/3/5/7/8/20/28 802.11 a/b/g/n/ac Wi-Fi Wi-Fi Direct Mobile hotspot Bluetooth 5.1, Type-C Cable Dual SIM+T-Flash card
Sensors	GPS: support BDS/GPS/Glonass/Galileo,with A-GPS Accelerometer, proximity sensor
Accessories	5V2A Charger, Type C 2.0 Cable, Quick Guide / PSI

3 Maintenance preparation

3.1 Handset with at least 50% battery charges

3.2 Supported Micro SD card and SIM card, 5V2A Charger, Type C 2.0 Cable

3.3 PC with below configurations to do software update by using PC tool.

- CPU: Equal to Pentium 1.6 GHZ or above
- RAM: 4GB or above
- Hard Disk: 10GB or above
- Operation System: Win7/Win8/Win10
- USB port
- Internet connection with minimum internet speed of 8Mb/s

3.4 Backup the user data before repairing. There are two ways below for your reference.

Method 1: You need to add your Google account details first. Go to “Settings”-> “System”-> “Backup” -> Touch “Turn on” in the window which has now opened ->Touch “Back up now.”

* App data, SMS text messages, Device settings, Call history, and Contacts will be backed up.

Method 2: You can back up your data to another phone via the “Switch Phone” app, and then recover data when your phone has been repaired.

Swipe up in the home screen to find the search bar->enter “Switch Phone” ->Transfer the contents by following the instructions.

4 Factory Reset

Factory reset will reset your phone to restore it to its factory settings. This will delete all data including files and downloaded apps. Please backup the user data before doing factory reset.

4.1 Remove Google account before doing factory reset

If Google account is not removed before doing the factory reset, it is not possible to setup the device with another Google account at initial setup after the factory reset and it will require you to login your previous signed-in Google account. It is recommended that you log out of the Google account. Follow the below steps to remove your Google account from the device.

You can go to "Settings"-> "Accounts"->touch your google account-> "REMOVE ACCOUNT"->touch "REMOVE ACCOUNT".

4.2 Factory Reset

You can follow the below steps to perform factory reset when the phone is powered on.

Go to main menu -> "Settings"-> "System"-> "Reset"->"Erase all data (factory reset)"->Touch "Erase all data" in the open window ->"Erase all data".

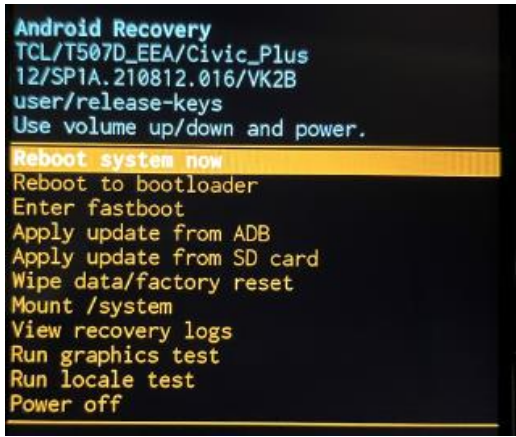
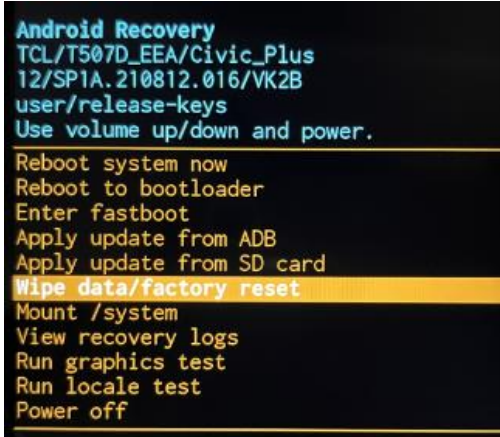
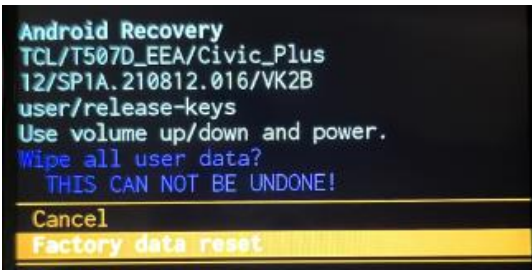
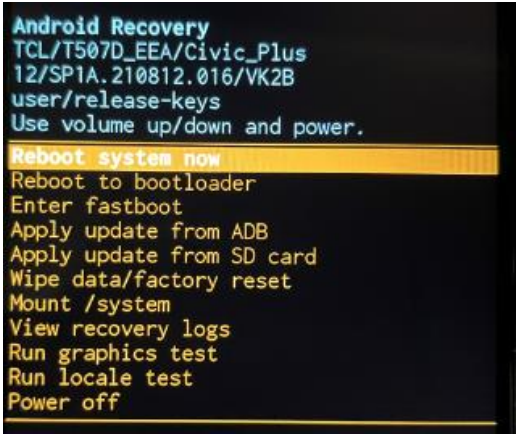
4.3 Recovery mode

How to use: Long press "Power" Key + "Volume up" key in power off mode to enter recovery mode.

When to use: When you cannot start your handset or when there is something wrong during switch on or when cannot charge.

Consumer personal data format: It will format consumer data, and the memory and settings of your product will return as released from factory.

Click-through steps:

1) Power off the device, long press “Power” Key + “Volume up” key until the LCD lights on;	2) Press “Volume” key to select “Wipe data/factory reset” and press “Power” key to confirm;
 Android Recovery TCL/T507D_EEA/Civic_Plus 12/SP1A.210812.016/VK2B user/release-keys Use volume up/down and power. Reboot system now Reboot to bootloader Enter fastboot Apply update from ADB Apply update from SD card Wipe data/factory reset Mount /system View recovery logs Run graphics test Run locale test Power off	 Android Recovery TCL/T507D_EEA/Civic_Plus 12/SP1A.210812.016/VK2B user/release-keys Use volume up/down and power. Reboot system now Reboot to bootloader Enter fastboot Apply update from ADB Apply update from SD card Wipe data/factory reset Mount /system View recovery logs Run graphics test Run locale test Power off
3) Select “Factory data reset” and press “Power” key to confirm;	4) Select “Reboot system now” and press “Power” key to confirm.
 Android Recovery TCL/T507D_EEA/Civic_Plus 12/SP1A.210812.016/VK2B user/release-keys Use volume up/down and power. Wipe all user data? THIS CAN NOT BE UNDONE! Cancel Factory data reset	 Android Recovery TCL/T507D_EEA/Civic_Plus 12/SP1A.210812.016/VK2B user/release-keys Use volume up/down and power. Reboot system now Reboot to bootloader Enter fastboot Apply update from ADB Apply update from SD card Wipe data/factory reset Mount /system View recovery logs Run graphics test Run locale test Power off

5 Software Update

It is suggested to upgrade the handset software to latest version for better performance. Before upgrade, please remember to backup your data and keep your phone fully charged.

5.1 Software update by FOTA

Firmware-Over-The-Air ("FOTA") is a way in which the firmware of a mobile device is updated wirelessly by the device's manufacturer. Firmware runs in the background without any input from the user, to make sure that the device's hardware runs properly. Head to your device's "Settings"-> "System"-> "System Update"

5.2 Software update by using Mobile Upgrade tool

- 1) Download the corresponding SW upgrade tool **Mobile_Upgrade_S_Gotu2_v1.3.2** from website:

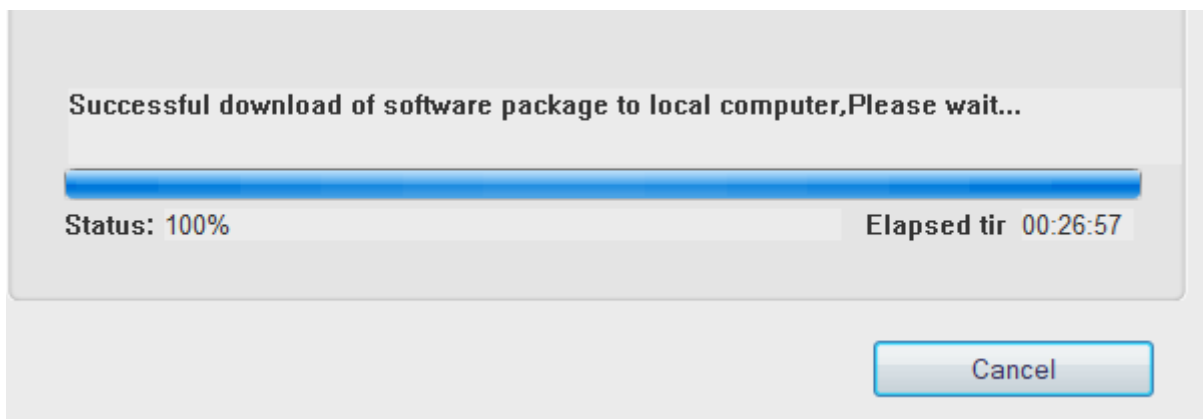
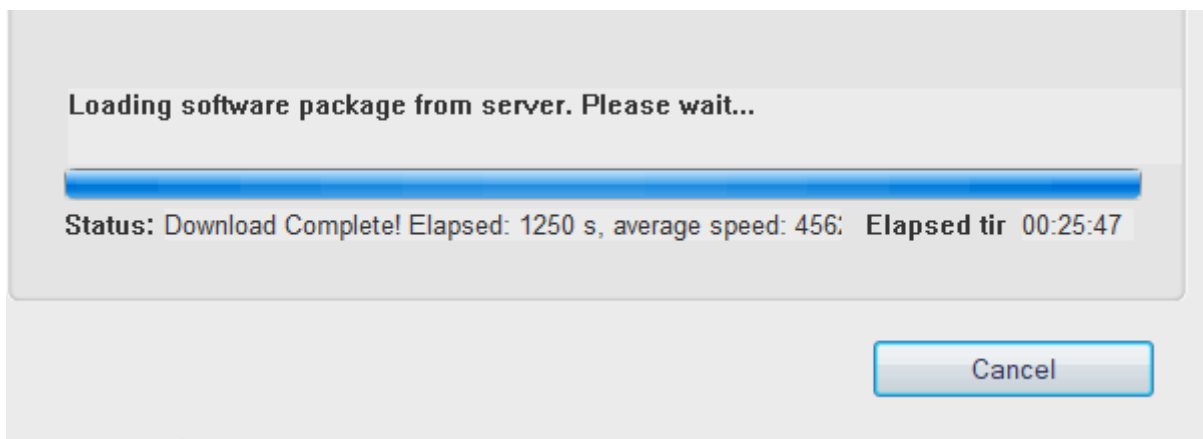
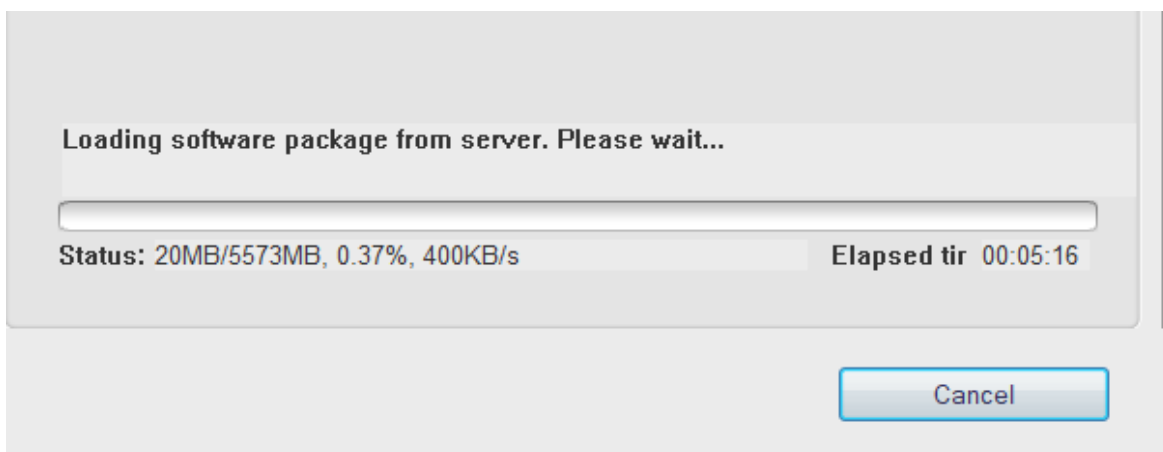
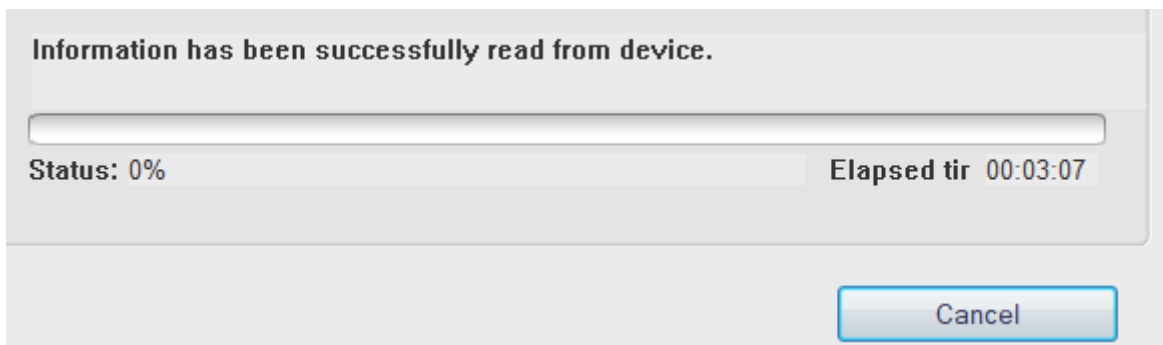
<https://www.tcl.com/global/en/service-support-mobile/tcl-408.html>

SOFTWARE

Mobile_Upgrade_S_Gotu2_v1.3.2



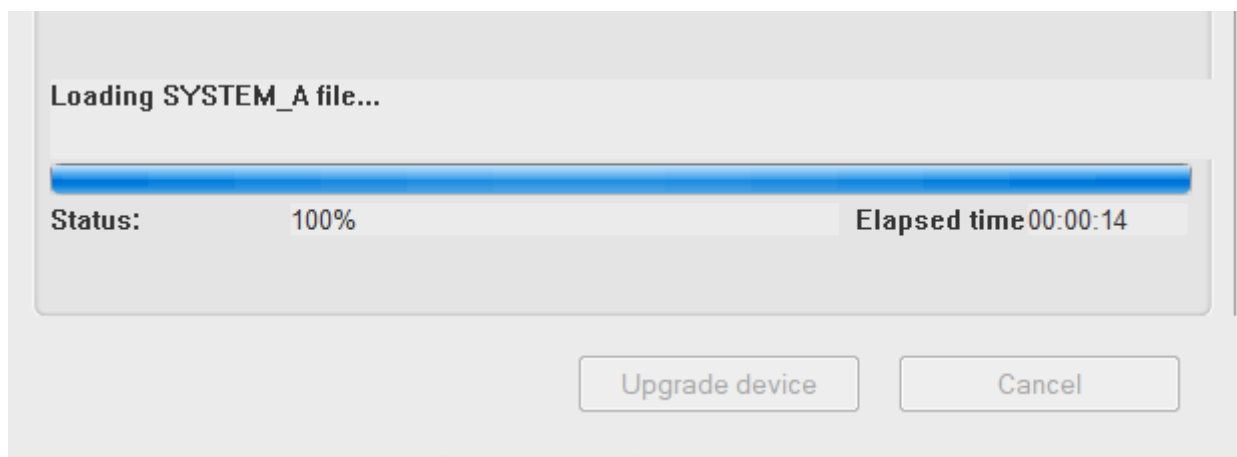
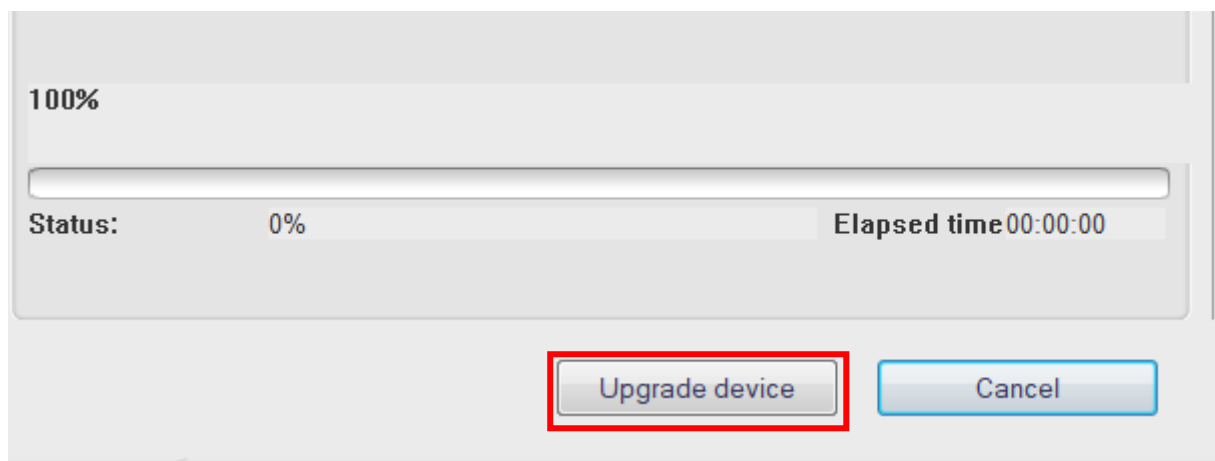
- 2) Open the download Mobile_Upgrade_S_Gotu2_v1.3.2 Setup.exe file and choose the language, install the tool according to the prompt.
- 3) After finish install the tool, click "Finish" and restart your computer.
- 4) Open the tool, choose the language, select the model "T507", click "Start"-> "Next" ->click "Yes"->Power off your phone and connect it to computer via USB cable and waiting for loading software package.

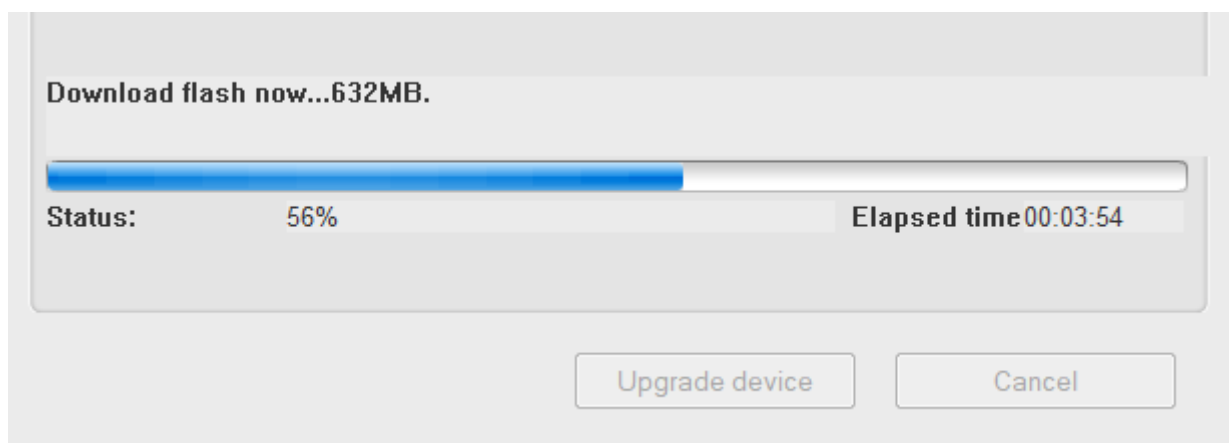


- 5) Click “OK” and disconnect your phone from USB cable when the tool pops up the prompt “Please disconnect your device from the USB cable to proceed”.

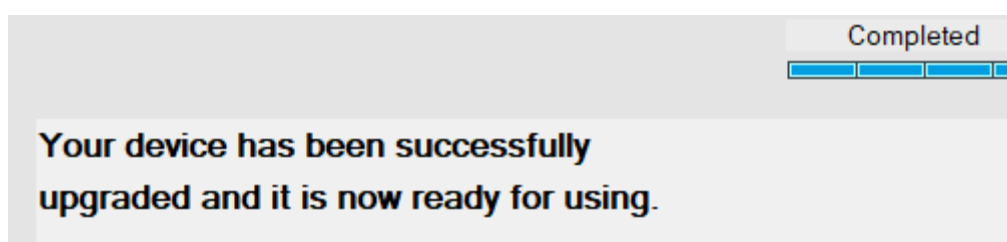
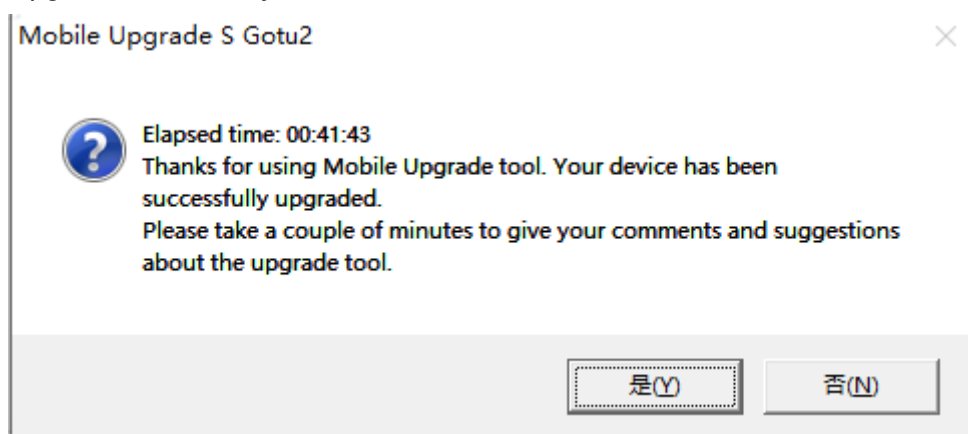


- 6) Click “Upgrade device” and connect your powered off phone to computer, waiting for upgrade.





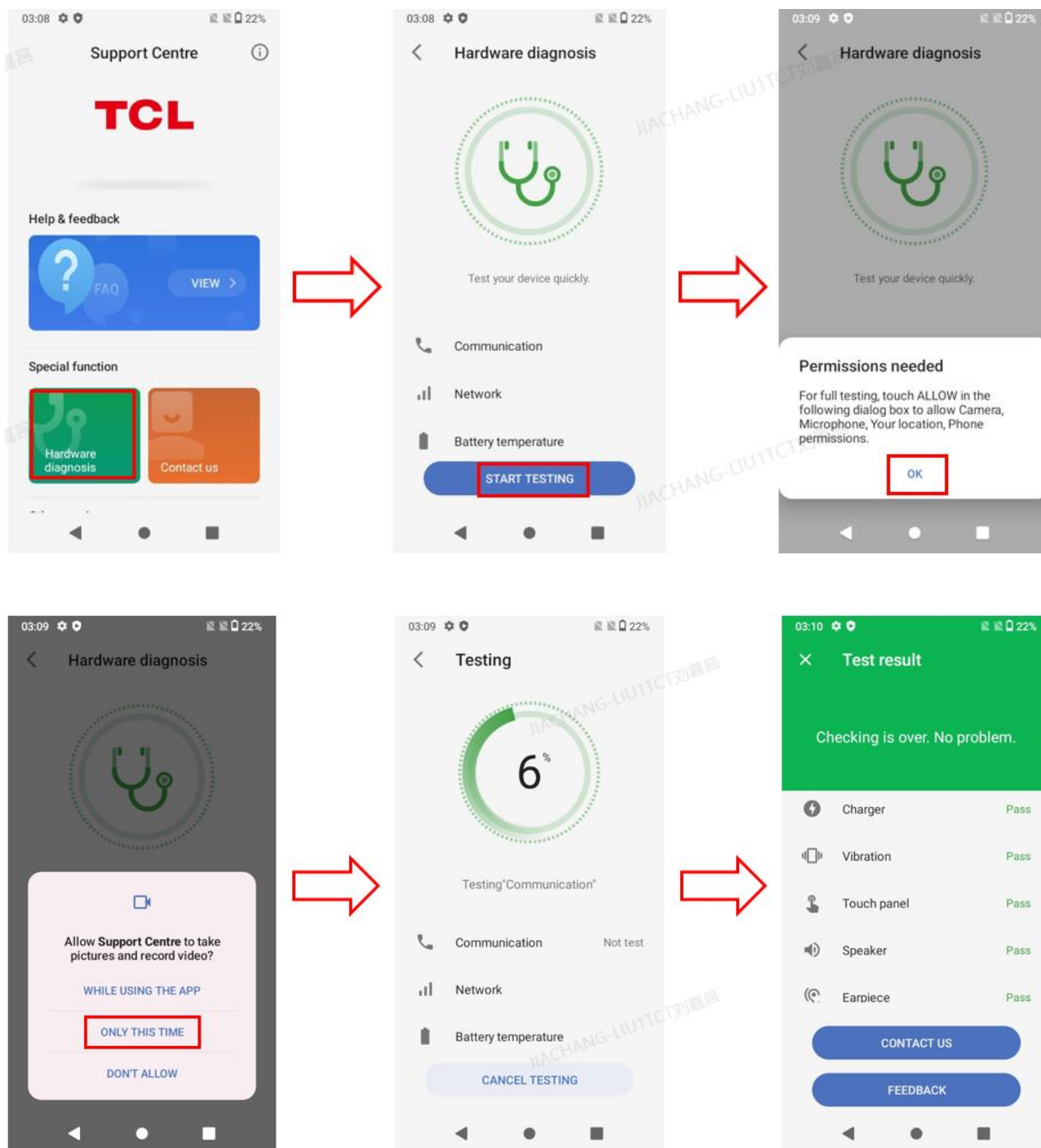
7) Upgrade successfully.



6 Function Test with Support Centre

- 1) Check that the Nano SD card are inserted correctly.
- 2) Power on the product to launch the auto test.
- 3) If the product displays "input NCK code", this means the software is Network locked or SIM locked, and can only be used with dedicated SIM card hence use the relevant SIM card or enter the phone NCK code if available.
- 4) Open the "Support Centre" app->Click "AGREE" -> "Hardware diagnosis"->"START TESTING" ->Authorize the permissions required for diagnostics->Follow the instructions to test.

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7 Troubleshooting

7.1 What should I do if my device reboots by itself?

- a) If the issue appears occasionally, it may be caused by anomalies in a file. It is recommended that you continue to use the device normally.
- b) Check if the issue occurs during charging. If yes, we recommend trying the official charger and data cable.
- c) If the issue occurs while using a third-party app, make sure the app is compatible with your device and Android version. Try uninstalling the third-party app.
- d) If the issue occurs while using the built-in app, try to reset or update your device.

7.2 What should I do if my device system lags or freezes?

- a) Try to restart your device.
- b) Charge your device until the battery level is at least 20%.
- c) Too many apps running in the background or the system cache not being cleared may cause a system lag. Touch the Menu key at the bottom corner of screen to view recently used applications. Touch "Clear all" to close the tasks.
- d) Uninstall unused apps from time to time to ensure that your device has sufficient storage space.
- e) If the issue occurs in third-party apps, please uninstall the third party apps responsible.
- f) If you are playing a game, watching online video or listening to online music, your device may lag or freeze because of a poor network connection. Enable Airplane mode for a few minutes, then disable it and check your network connection again. Alternatively, move to a location with a better network connection
- g) Try to reset or update your device.

7.3 What should I do if my device cannot charge or charges slowly?

- a) Check if there is any visible damage to the charger USB, the charger itself or the charging port of your device. If yes, back up your data and take your device and proof of purchase to our repair center to get more professional technical assistance.
- b) Charge the device with a TCL official charger for at least 30 minutes, then try again.

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- c) Verify whether there are any third-party power management software apps downloaded. If so, please uninstall these.
- d) Please don't use the device for a long time while it is charging.
- e) Try to reset or update your device.

7.4 What should I do if my device's battery drains under normal use?

- a) Check if the device is in a high or low temperature environment. If yes, we advise you to use it only under normal operating conditions.
- b) Deactivate Bluetooth, Wi-Fi, or GPS when not in use.
- c) The battery drains quickly when playing games and watching videos. This is normal when running large games for a long time or watching videos.
- d) Too many apps running in the background or the system cache not being cleared may cause battery draining. Touch the Menu key in the bottom corner of the screen to view recently used applications. Touch "Clear all" to close the apps.
- e) Try to reset or update your device.

7.5 What should I do if my device auto powers off?

- a) Power off your device and charge the device with a TCL official charger for at least 30 minutes, then try to power on again.
- b) If the issue occurs while using a third-party app, make sure the app is compatible with your device and Android version. Try uninstalling the third-party app.
- c) Try to reset or update your device.

7.6 What can I do if my device heats up?

A warning or sensation of heat in the device is the normal consequence of the CPU handling excessive data, which makes the battery warm. It is not harmful to the battery or device even if the device feels hot.

Use the following actions to make your device return to its normal temperature:

- a) It is suggested not to expose your phone in sunshine for a long period of time;

- b) Close large power consumption applications, such as music, chatting applications, GPS application, 3D gaming, video streaming etc.
- c) Reduce the brightness of the screen to lower the temperature.
- d) Avoid using your device while charging.
- e) Avoid using a protective case that does not dissipate heat. Remove your protective case if your device heats up.

7.7 What should I do if my device cannot power on?

- a) Charge the device with a TCL official charger for at least 30 minutes, and then try to power on again.
- b) Press and hold the power key for 10 to 15 seconds until the device vibrates, to perform a forced re-boot.
- c) Try to reset or update your device.

If the previously described options do not help, you can contact our hotline or repair center to get more professional technical assistance. Find the hotline or repair center information from the TCL website or APP “Support center”.

8 Contact of TCL hotline and service centers

If you are looking for official professional repair, please visit [HOTLINE & SERVICE CENTERS \(tcl.com\)](https://tcl.com) and search for the contact in your country/region.

9 Disassembly and reassembly

9.1 Disassembly tools

You may use the following tools during the disassembly and reassembly procedure:			
			
Plastic Plectrum	Anti ESD Tweezers	Plastic Spudger	Screws driver

9.2 Disassembly Process

Note: The complete disassembly guide is described as below for your reference, you can selectively (except disassembly and assembly method which needs to be followed carefully) do some of those steps according to the spare part which you need to replace.

➤ Follow is the complete disassembly process of TCL 408.

Step 1. Power off the device, remove SIM tray and Battery cover.		
Step 1.1 Power off the device ,remove the SIM tray ,cover electrostatic protective film on the screen.		

		
Step 1.2 Remove <u>battery Cover</u> using Plastic Plectrum.		
Step 1.3 Separate the Power_Key from the battery cover.	 Open the battery cover from the right side.	
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Step 2. Remove 19 Screws and Furnished Top Support, Furnished Bottom Support.

Step 2.1

Remove 19 screws by using Screws driver.



Screw Torque:
0.8±0.05kgf.cm

Step 2.2

Remove the Furnished Top Support and Furnished Bottom Support using Plastic Plectrum.



Step 3. Disconnect the connectors and Remove PCBA.

Step 3.1 Disconnect the Battery,LCD Connectors,R F cable. Remove the back camera.		
Step 3.2 Separate the Main PCBA and sub PCBA.		

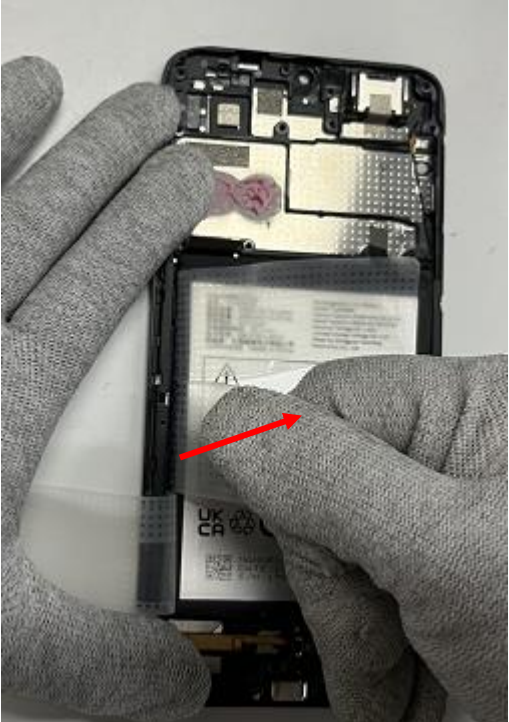


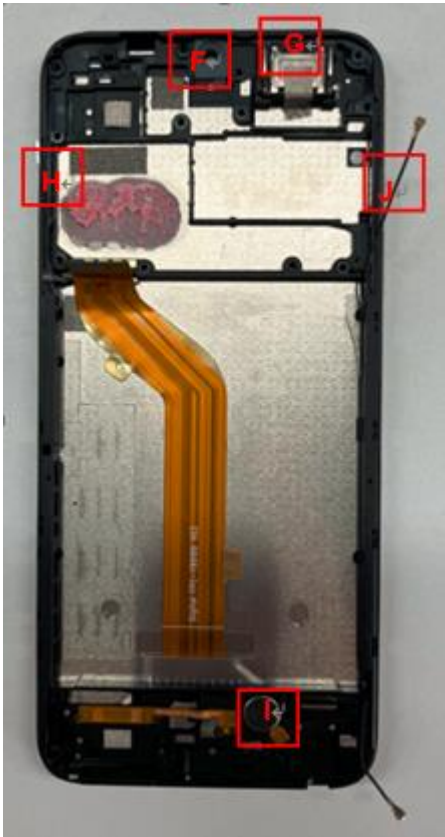
Step 4. Remove the battery.

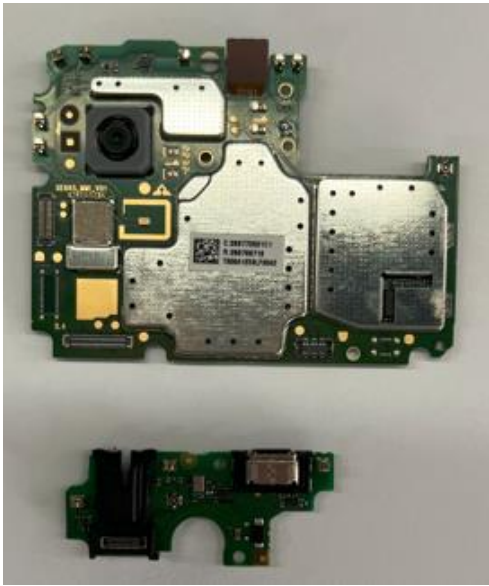
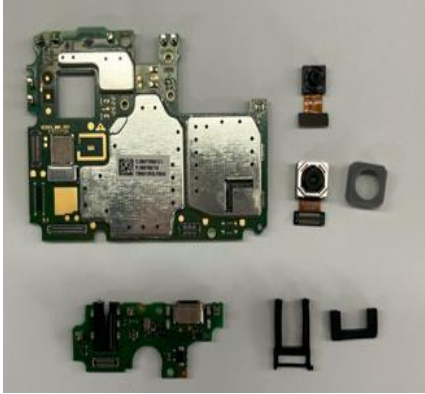
Step 4.1

Remove the Battery



		
		Warning: Improper operation on battery will cause high risk for fire or burning. Thus please follow up the battery disassembly guidance strictly. Strictly avoid using sharp tool to pry up battery. Fire extinguisher is needed for emergency.
Step 5. Separate some components.		

Step 5.1 Separate some components by using tweezers		
Step 5.2 Separate the Speaker on the Furnished Bottom Support		

Step 5.3 Separate Front camera_5M, Back camera_13M, 13M B_CAM_Rubber on the main PCBA. Separate the USB Rubber, Headset Rubber on the SUB PCBA.		
Step 5.4 Separate the Power_Key and Volume key on the battery cover.		

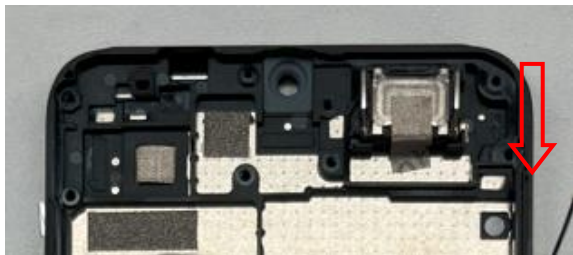
9.3 Reassembly process and tools

Reassembly process is reverse order of the disassembly process. But there are some precaution as follow:

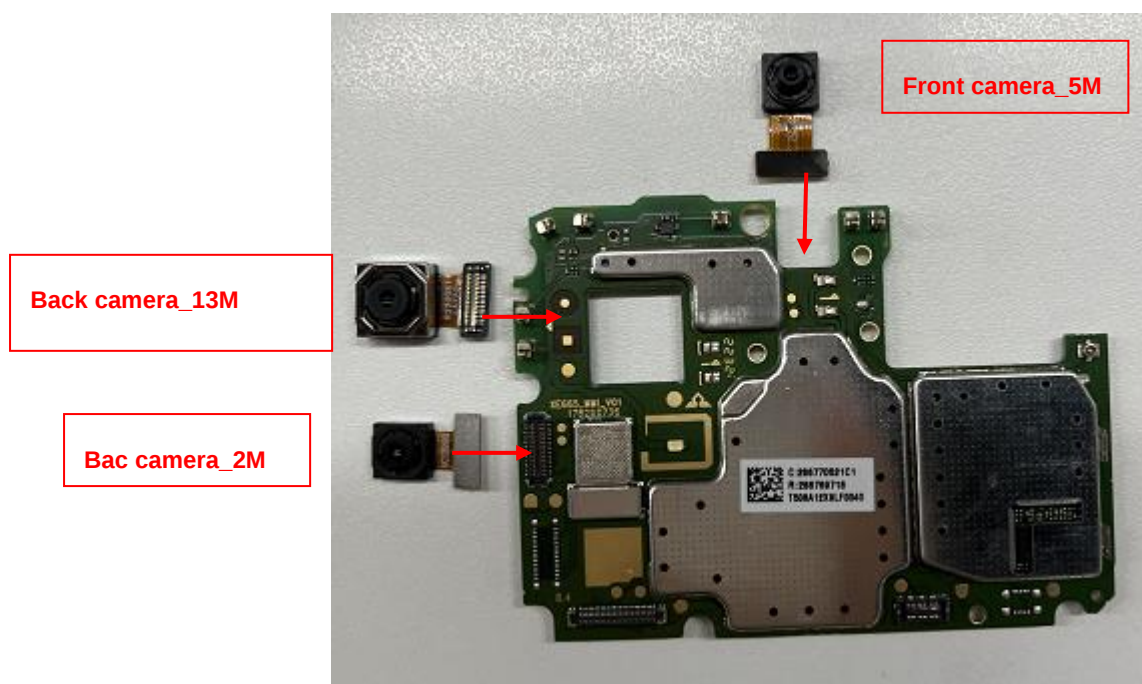
- 1) Double-side sponge tape, battery packing pet, all types of adhesive on battery cover must be replaced with new ones once it is disassembled.

Conductive cloth, high temperature adhesive, double-side adhesive tape, or other adhesive are selectively replaced, depend on breakage, stickiness conditions

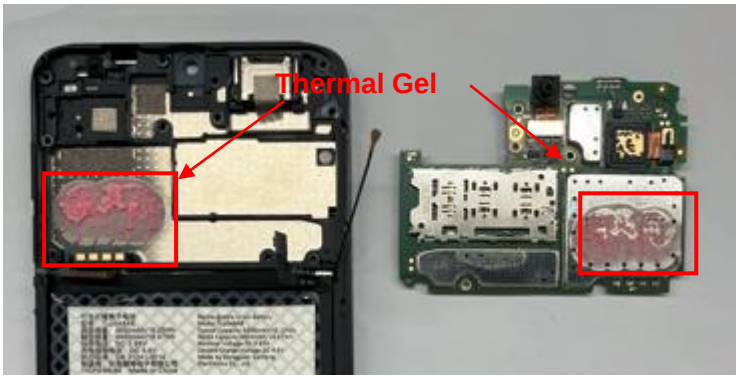
- 2) Pay attention to the direction of the Speakers

1.Speaker(on the Furnished Underfilling)	2.Speaker(on the Furnished Bottom Support)
	

- 3) Before assemble battery on the Furnished Underfilling, make sure the RF cable is well assembled on the Furnished Underfilling.
- 4) Assemble the cameras to the Main PCBA according to the following picture



- 5) Before assemble main PCBA on the Furnished Underfilling, make sure the FPC SIDEKEY, Back camera_13M, 13M B_CAM_Rubber, Front camera_5M, 5M FNT_CAM_Rubber are well assembled.
- 6) There is “thermal gel” between main PCBA and Furnished Underfilling. If a new main PCBA or Furnished Underfilling or both of them were repalced, new thermal gel should be filled.



Note:

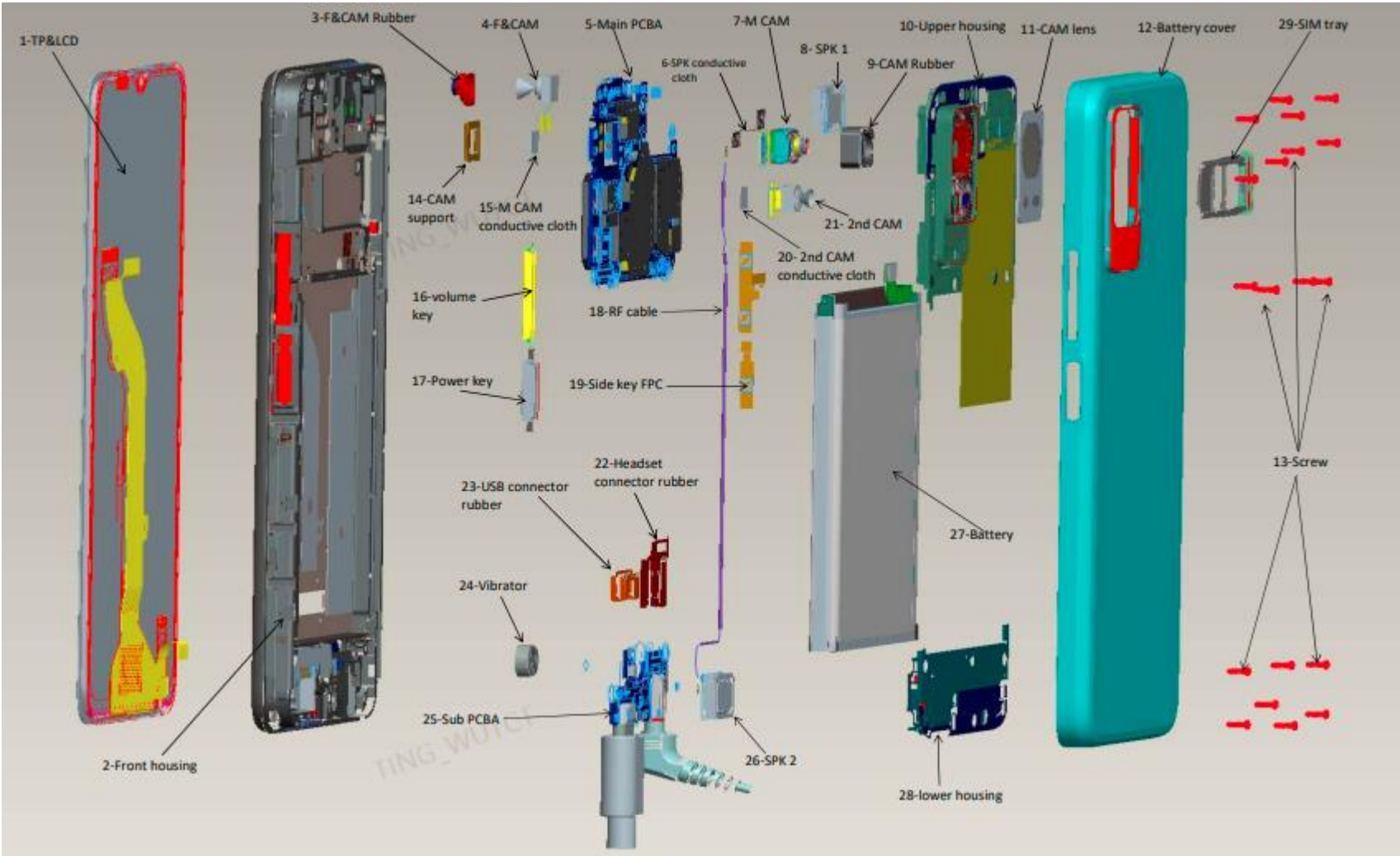
- ① a) New thermal gel must be added if both main PCBA and Furnished Underfilling were replaced
b) New thermal gel is selective to add if only main PCBA or Furnished Underfilling was replaced
- ② No need to clean the the original thermal gel.
- ③ Prepare the “Thermal Gel” locally because of shipment restricted.

Item	Spe.	Picture
Thermal Gel (Prepare locally)	Thermal conductivity higher than 3.5W	

- ④ it is suggested to add the new thermal gel on the Furnished Underfilling, around **320±10mg**

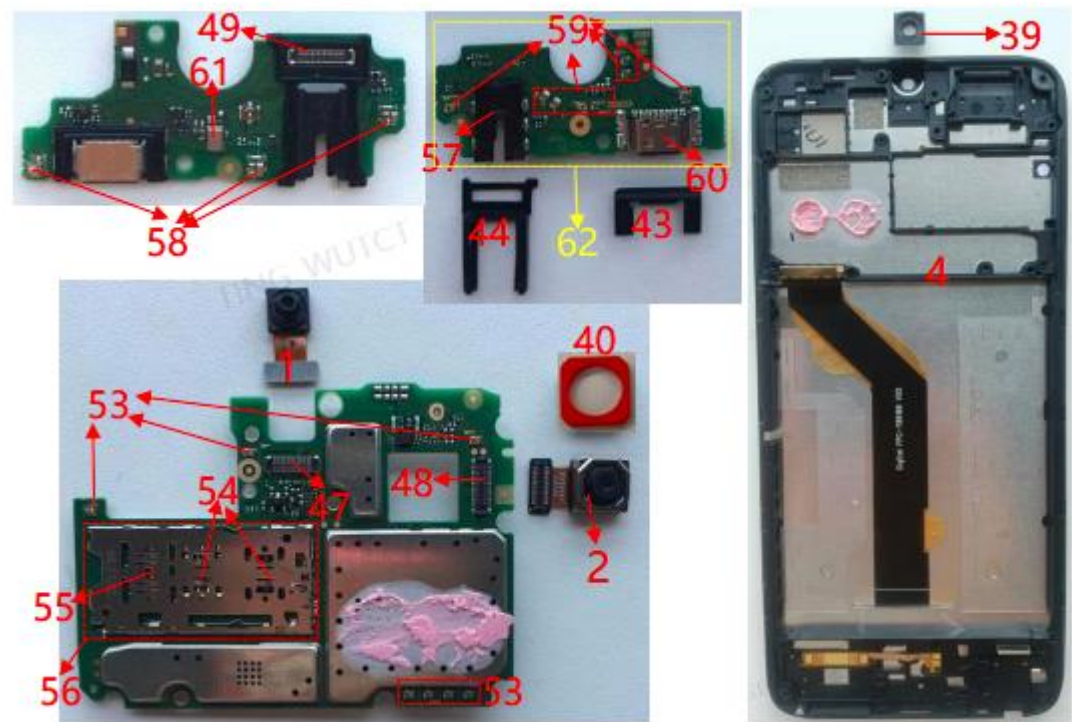


10 Explode View



11 Split View





1	Front camera_8M	34	Volume key	49	BTB conn 30pin
2	Back camera_50M	35	FPC SIDEKEY	50	BTB Conn 6pin
3	Bac camera_2M	36	13M CAM deco	51	antenna spring
4	Furnished Underfilling	37	RF Cable	52	Flash LED
5	Speaker	38	Motor	53	antenna spring
6	Battery	39	8M FNT_CAM_Rubber	54	3in3 nano-sim Card Connector
21	Battery adhesive1	40	50M Back_CAM_Rubber	55	3in3 T card Connector
22	Battery adhesive2	41	50M Camera Conductive Foam	56	3in3 SIM card connector Holder
23	Battery Package Film	42	SUB_Camera conductive velvet	57	Audio jack
24	Camera deco adhesive	43	USB Rubber	58	antenna spring
25	Up Speaker Electric Adhesive	44	Headset Rubber	59	antenna spring
30	Furnished Top Support	45	Screw	60	Type C
31	Furnished Bottom Support	46	BTB Conn 50pin	61	MIC
32	Battery Cover	47	BTB Conn 30pin	62	SUB PCBA
33	Power_Key	48	BTB Conn 30pin	64	Antenna spring

-END OF DOCUMENT-