

TCL 40 SE T610K/K2



Dark Gray

Twilight Purple

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: 167.91*76.5*8.45mm; Weight: 190g
System	TCL UI 5.0; Android 13
Processor	Chipset: MTK G37; CPU: 4 x Cortex-A53 @ 2.3GHz+4 x Cortex-A53 @ 1.8GHz; GPU: IMG GE8320 680MHz
Memory & Storage	4GB RAM +128GBROM (for T610K), 6GB RAM +256GBROM (for T610K2); Support micro SD cards up to 1TB
Display	6.75 inch, TFT-IPS, HD+ 1600x720 pixels, 90Hz refresh rate
Rear Camera	50M (main) +2M (Depth)+2M (Macro): PDAF + FF + FF, 1/2.55+1/5+1/5, 0.7um+1.75um+1.75um, F1.8+F2.4+F2.4, field of view 79.4°+88.8°+88.8°, 5P+3P+3P.
Front Camera	8MP front camera: FF, 1/4", 1.12um, F2.0, field of view 80.2°, 4P lens
Battery	5010mAh (standard) Li-ion
Connectivity	2G bands: GSM 850/900/1800/1900 3G bands: UMTS B1/2/5/8 4G bands: LTE B1/3/5/7/8/13/20/28/38/40/41(2496-2690MHz) 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/Gaileo, with A-GPS Accelerometer, proximity sensor, Light Sensor, Fingerprint module
Accessories	5V3A Charger, Type-C cable, Quick Guide / PSI, SIM tooling pin

3 Maintenance preparation

3.1 Handset with at least 50% battery charges

3.2 Supported Micro SD card and SIM card, 5V3A Charger, Type-C 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.

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.

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".

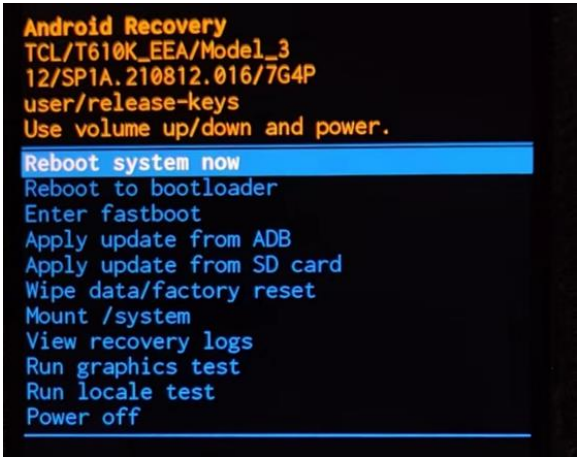
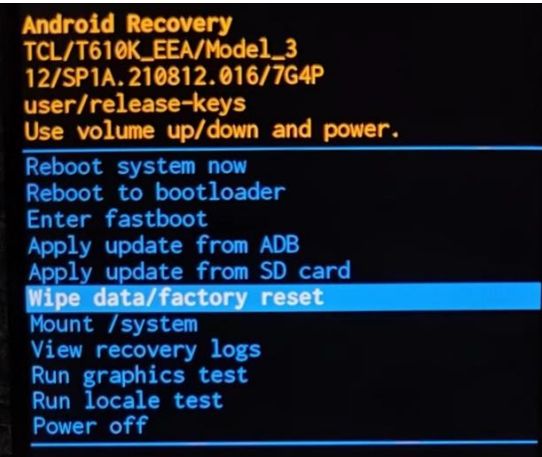
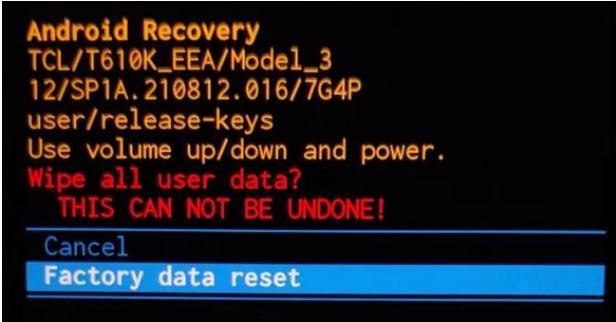
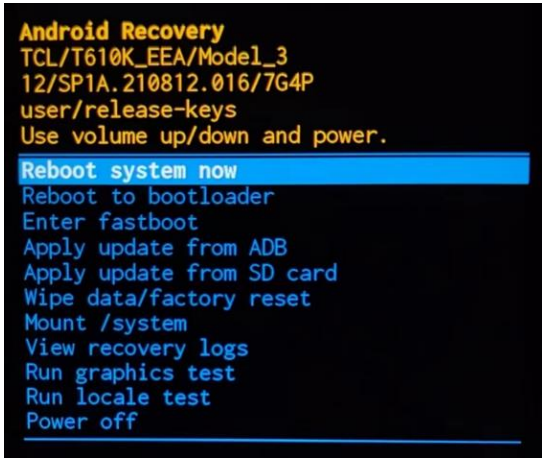
4.3 Recovery mode

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/T610K_EEA/Model_3 12/SP1A.210812.016/7G4P 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/T610K_EEA/Model_3 12/SP1A.210812.016/7G4P 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/T610K_EEA/Model_3 12/SP1A.210812.016/7G4P 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/T610K_EEA/Model_3 12/SP1A.210812.016/7G4P 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.

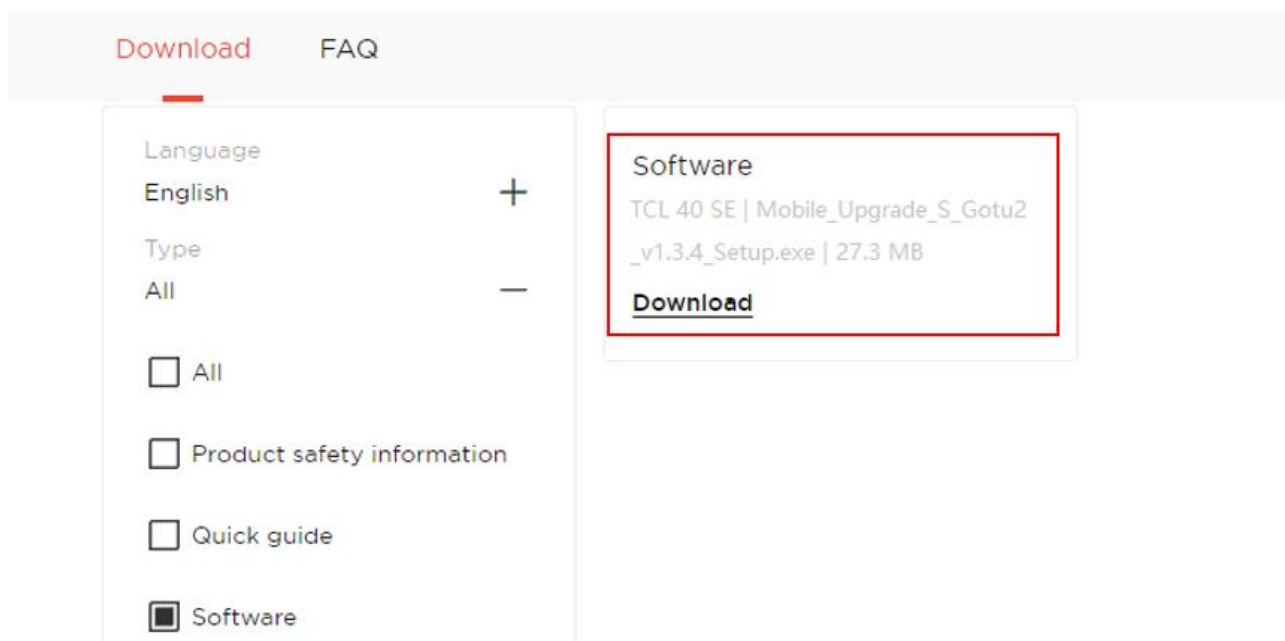
5.1 Software update by FOTA

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" -> "Updates" or "System Update"

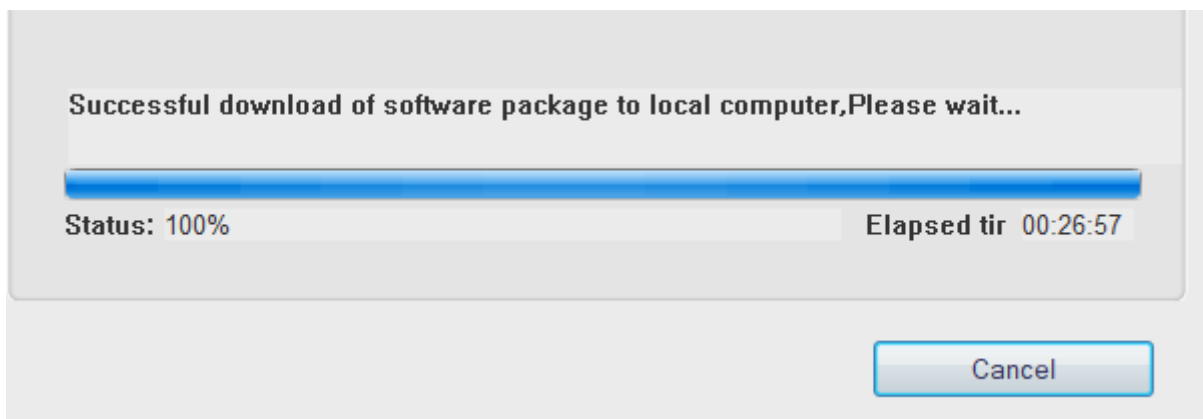
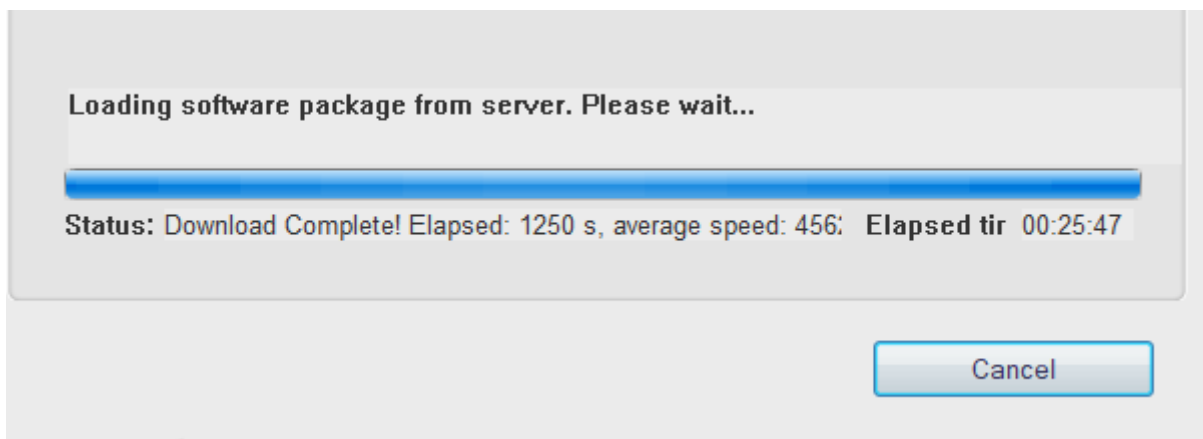
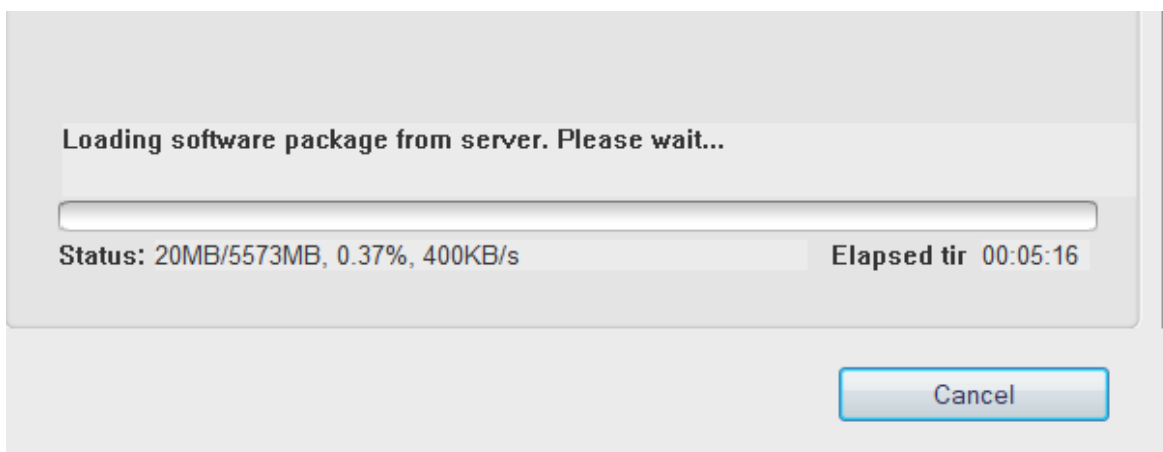
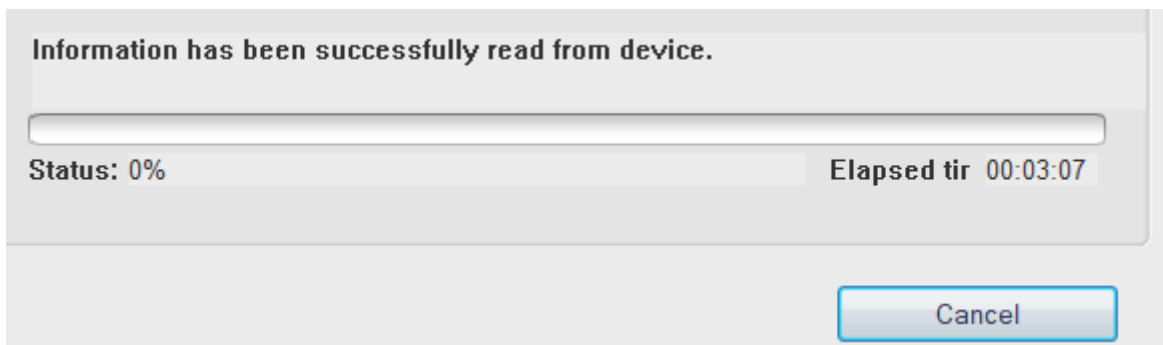
5.2 Software update by using Mobile Upgrade tool

- 1) Download the corresponding SW upgrade tool **Mobile_Upgrade_S_Gotu2_v1.3.4** from website:

<https://www.tcl.com/global/en/support-mobile/model.TCL%2B40%2BSE.html>



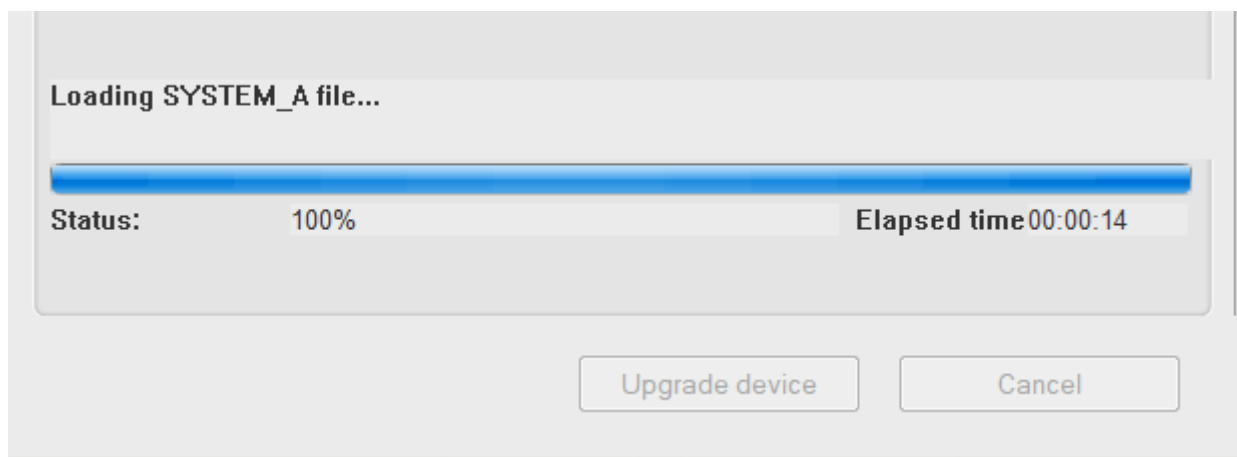
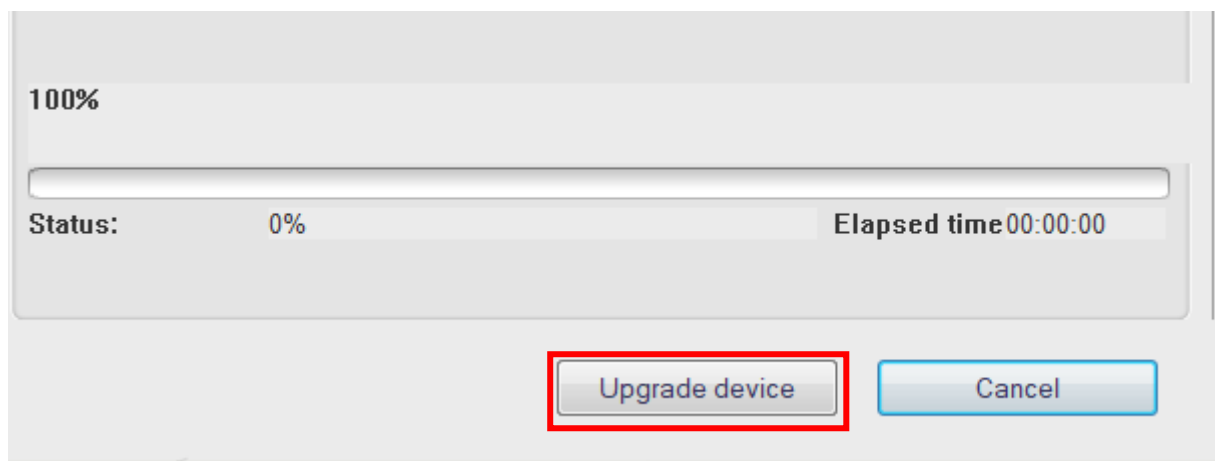
- 2) Open the download Mobile_Upgrade_S_Gotu2_v1.3.4 Setup.exe file and choose the language, install the tool according to the prompt.
- 3) After finish install the tool, click "Finish" and restart your computer.
- 4) Open the tool, choose the language, select the model "T610", click "Start" -> "Next" -> click "Yes" -> Power off your phone and connect it to computer via USB cable and waiting for loading software package.

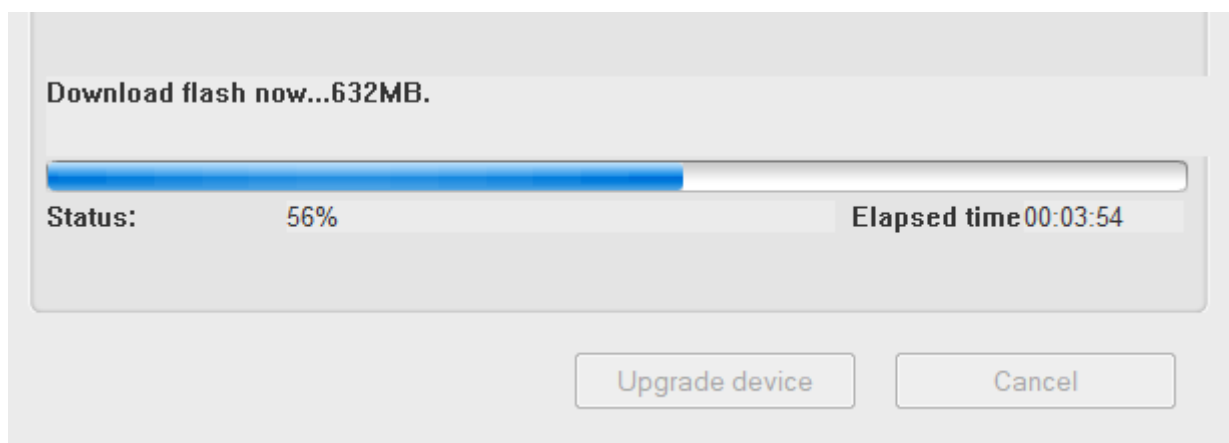


- 5) Click “OK” and disconnect your phone from USB cable when the tool pops up the prompt “Please disconnect your device from the USB cable to proceed”.

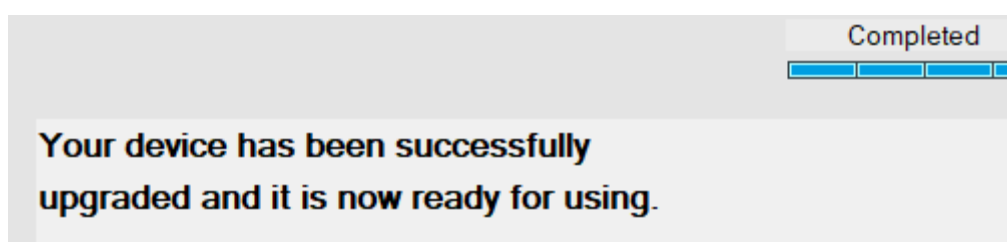
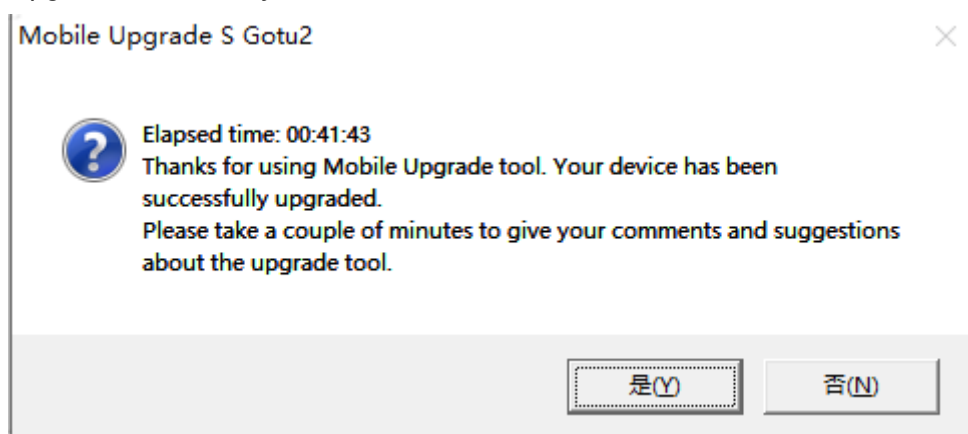


- 6) Click “Upgrade device” and connect your powered off phone to computer, waiting for upgrade.





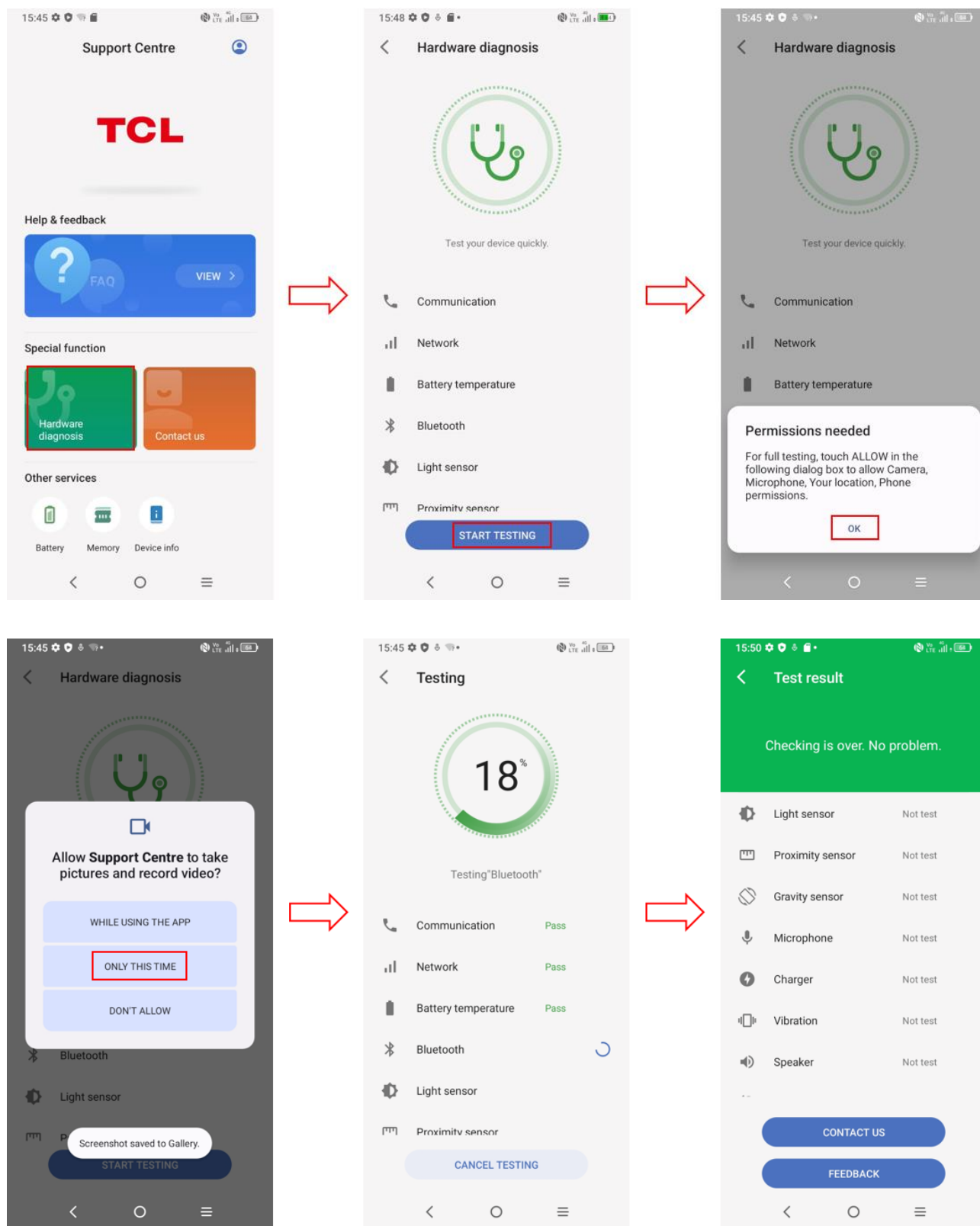
7) Upgrade successfully.



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 fingerprint unlock function works slowly or fails?

- a) Pattern, PIN or Password security unlocking is required after the device restarts. Fingerprint unlock does not function at this point but it will work again after unlocking using another method.
- b) Make sure there are no stains such as water or sweat on the fingerprint sensor. If there are, wipe the surface and try again.
- c) Try to re-enter your fingerprint to your device by accessing "Settings"-> "Security & biometrics"->"Fingerprint"
- d) Try to reset or update your device.

7.5 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.

7.6 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.

7.7 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.

7.8 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://www.tcl.com/hotline-service-centers) and search for the contact in your country/region.

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9 Disassembly and reassembly

9.1 Disassembly tools

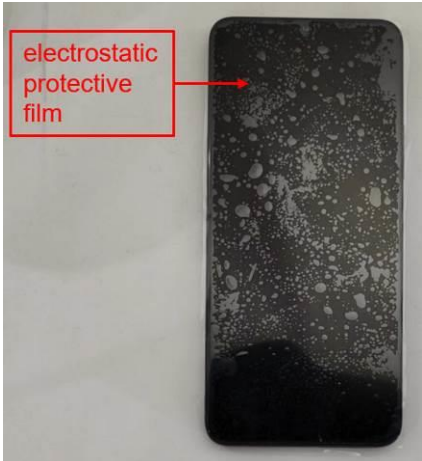
You may use the following tools during the disassembly and reassembly procedure:			
			
Plastic Plectrum	Anti ESD Tweezers	Plastic Spudger	Screws driver
			
Electric screws driver	SIM card pin		

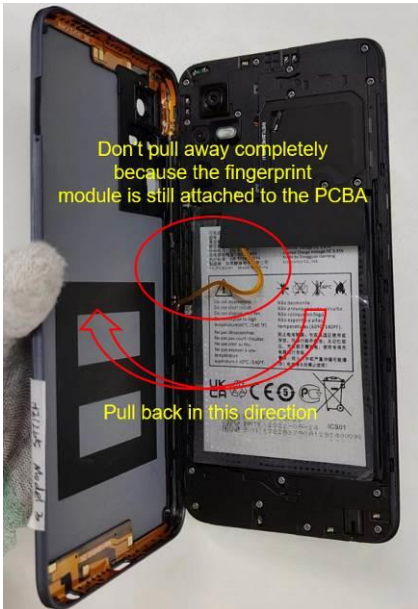
9.2 Disassembly Process

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 40 SE.

Step 1. Power off the device and remove battery cover, SIM Card tray.

Step 1.1 Power off the device and cover electrostatic protective film on the screen.		
		
Step 1.2 Remove <u>Sim</u> card tray using SIM card pin.		

Step 1.3 Remove <u>battery cover</u> using Plastic Plectrum.		
		
Step 1.4 Disconnect the <u>Fingerprinces</u> using Anti ESD Tweezers.		

Step 1.5 Remove <u>19</u> screws on REAR_HOUSING_ASSY1&2.		 Screw Torque: 0.7±0.1kgf.cm
Step 2. Remove REAR_HOUSING_ASSY1&2 and Disconnect connectors.		
Step 2.1 Remove the REAR_HOUSING_ASSY1&2 using Plastic Plectrum.		

Step 2.2

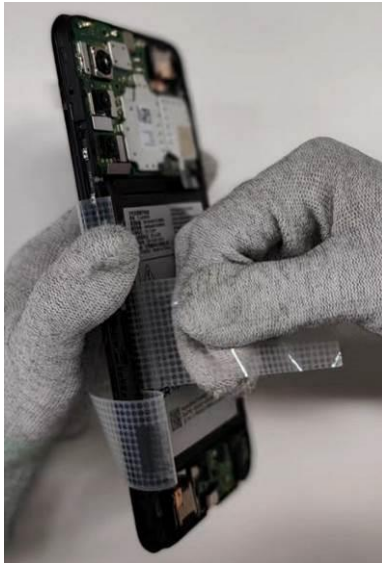
Disconnect connectors.

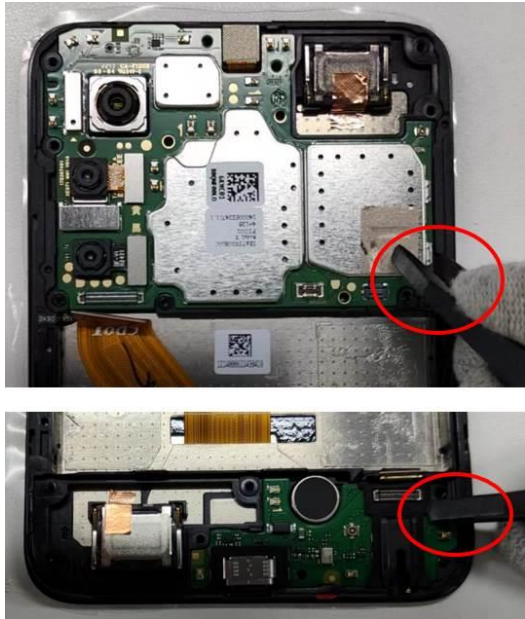
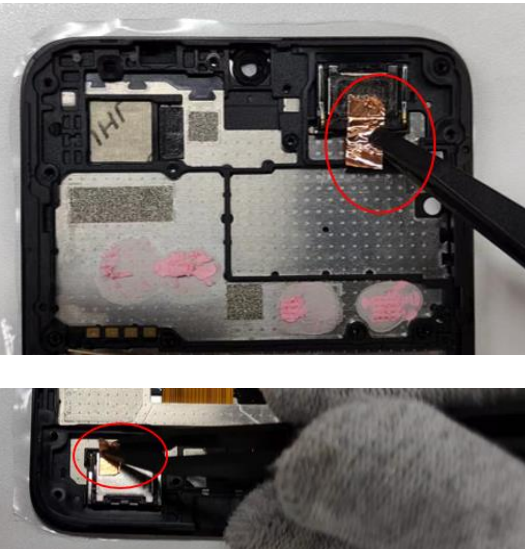
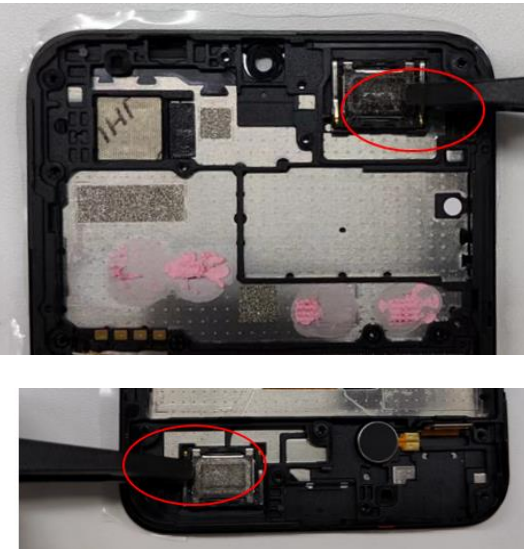
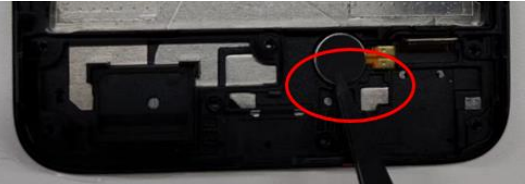
Note: The order to separate the connectors is mandatory:
Battery Connector-> Other Connectors.

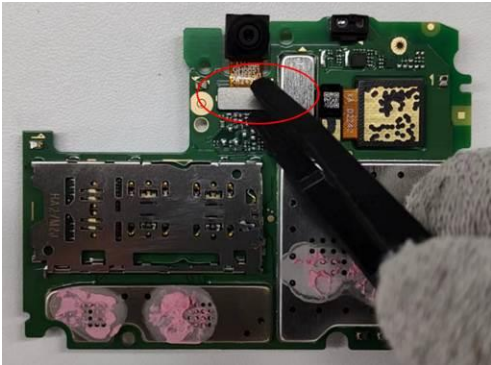
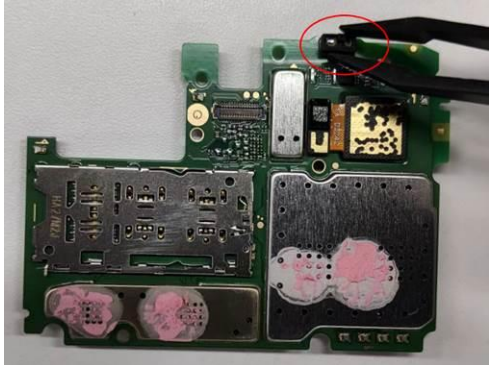
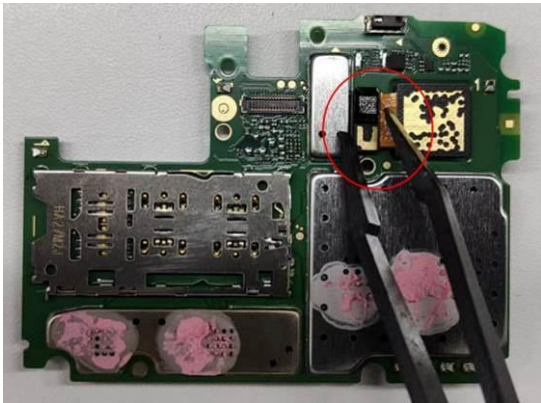


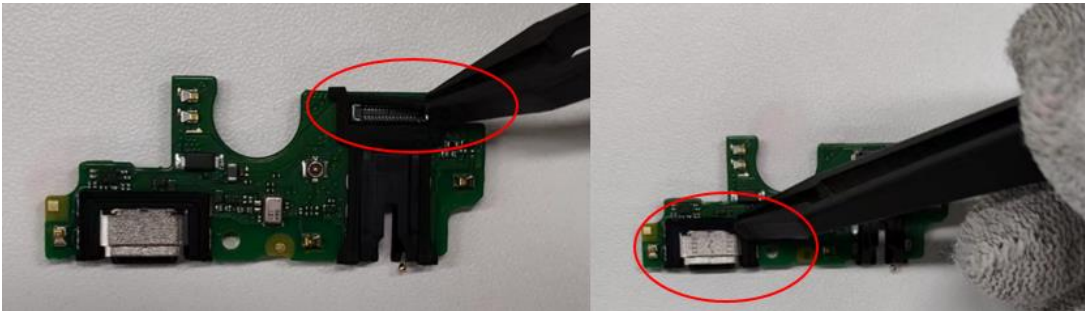
Step 2.3 Remove <u>RF CABLE</u> using Anti ESD Tweezers. Note: Do not separate the RF cables by hand, as it is easy to unplug RF connectors. Use tweezers to pry from the metal section.			
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Step 3. Remove battery and Main & Sub PCBA.

Step 3.1 Remove <u>battery</u>.	 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.	 
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Step 3.2 Remove the <u>Main & Sub PCBA</u>.		
Step 4. Remove some components.		
Step 4.1 Remove <u>GRAPHITE_F</u> <u>OR LOW SPK</u> <u>K</u>, <u>GRAPHITE_F</u> <u>OR upp SPK</u> and <u>Speakers</u>.		
Step 4.2 Remove the <u>Motor</u>.		

Step 4.3 Remove the <u>SIDE KEY FPC ASM.</u>		
Step 4.4 Remove <u>cameras,</u> <u>RUBBER FO</u> <u>R UPP CAM</u> and <u>RUBBER FO</u> <u>R_ps.</u>		
		
		

Step 4.5 Remove <u>RUBBER_FO</u> <u>R_MICRO_U</u> <u>SB</u> and <u>RUBBER_FO</u> <u>R_AUDIO_JA</u> <u>CK</u>.	
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9.3 Reassembly process and tools

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

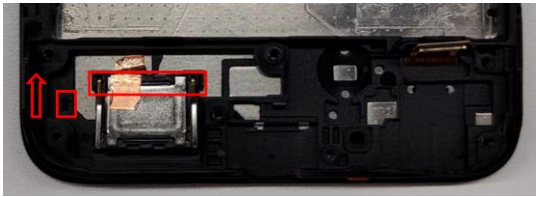
- 1) Double-side sponge tape, Battery packing pet, all types of adhesive on battery cover must be replaced with new ones once it is disassembled.

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

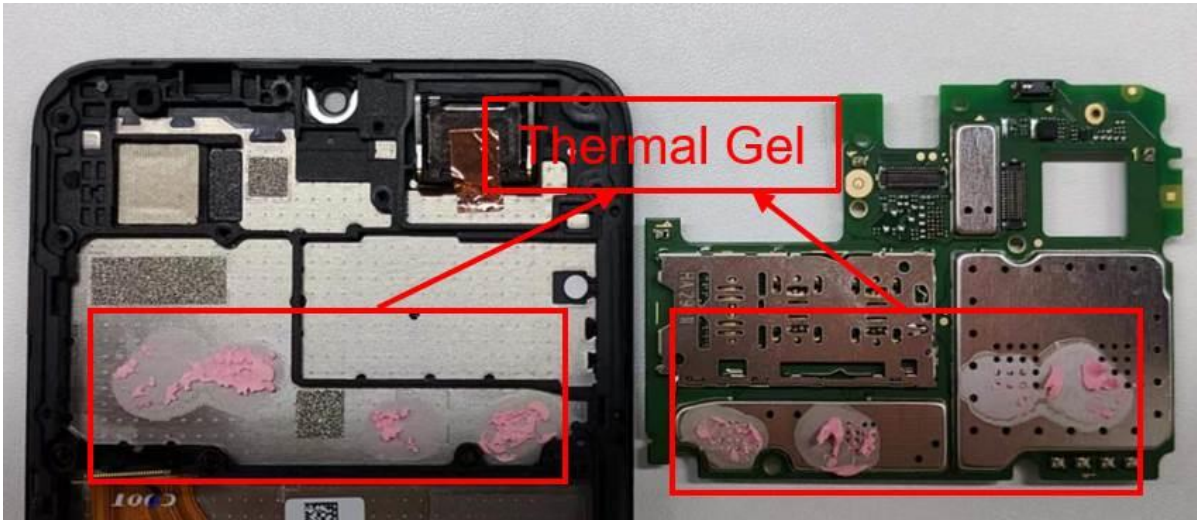
➤The battery-package-film (PN: 286806003) must be swap with new ones for the assembly.

Note: The adhesive must be clean before assembly.

- 2) Pay attention to the direction of the SPRAKER (Please install the GRAPHITE_FOR_LOW_SPK and GRAPHITE_FOR_upp_SPK).

① SPRAKER 	② SPRAKER 
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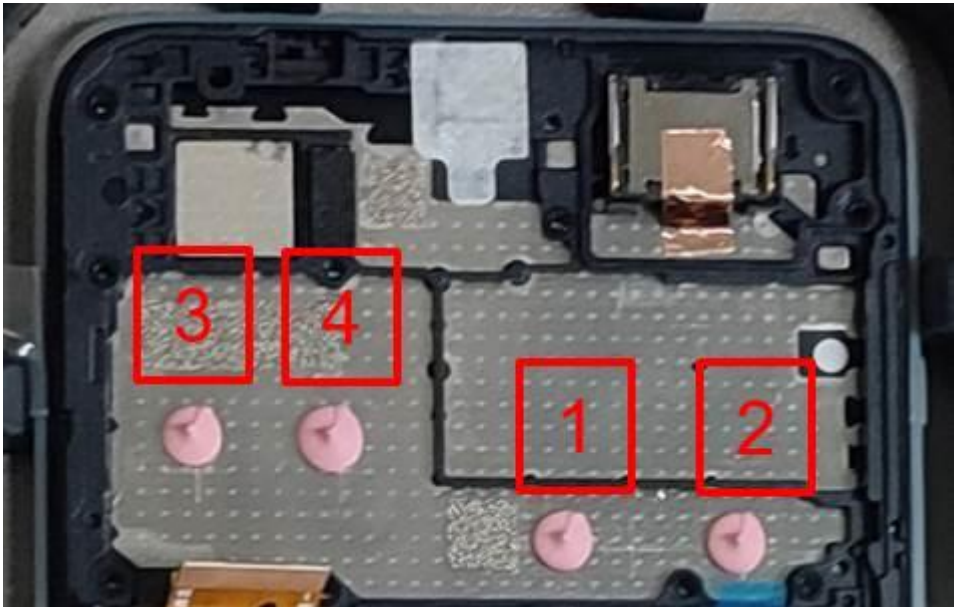
- 3) There is “Thermal Gel” between main PCBA and TP-frame-pre-assembly. If a new main PCBA or TP-frame-pre-assembly or both of them were repalced, new thermal gel should be filled.



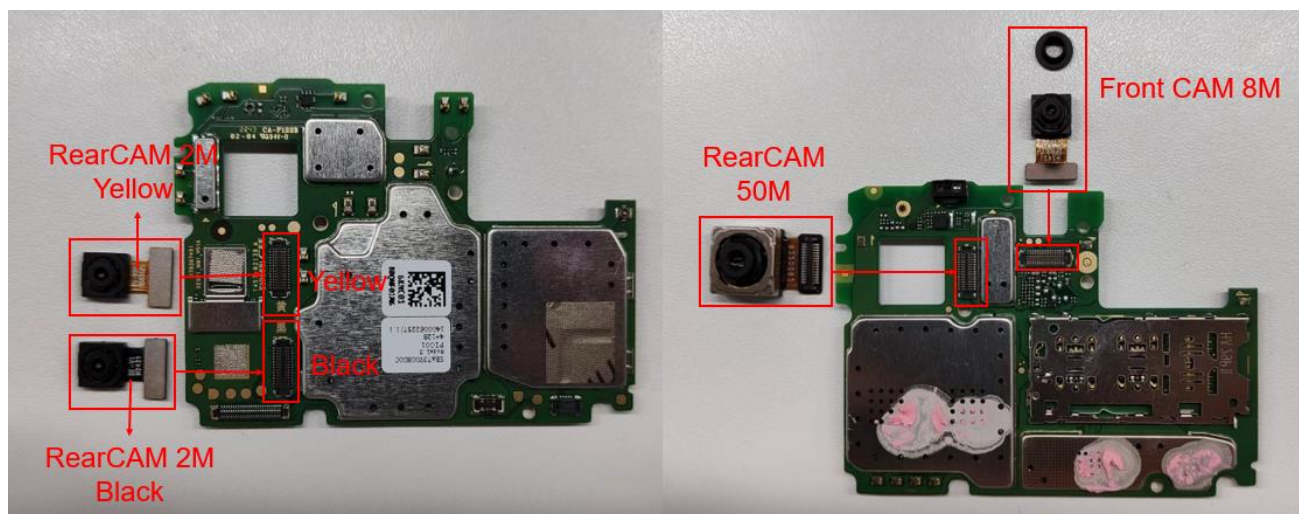
Note: No need to clean the the original thermal gel when fill new thermanl gel. Prepare the “Thermal Gel” locally because of shipment restricted.

Item	Spe.	Picture
Thermal Gel (Prepare locally)	Thermal conductivity higher than 3.0W	

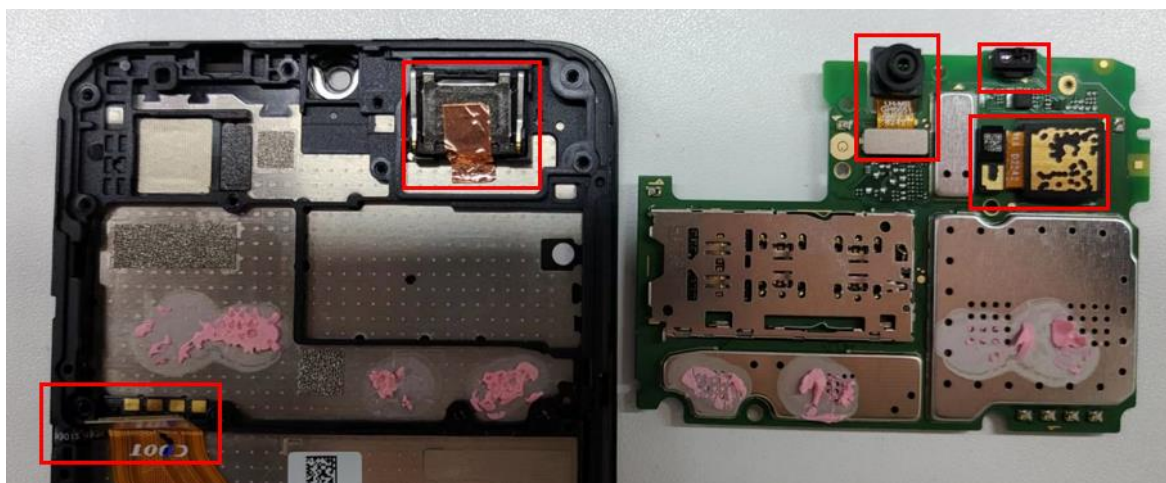
It is suggested to add the new thermal gel on TP-frame-pre-assembly directly opposite the main PCBA. The dosage is 100mg for position 1,2 and 150mg for position 3,4 as marked in the figure.



- 4) Assemble the cameras and matching rubbers to the Main PCBA according to the following tag tips.



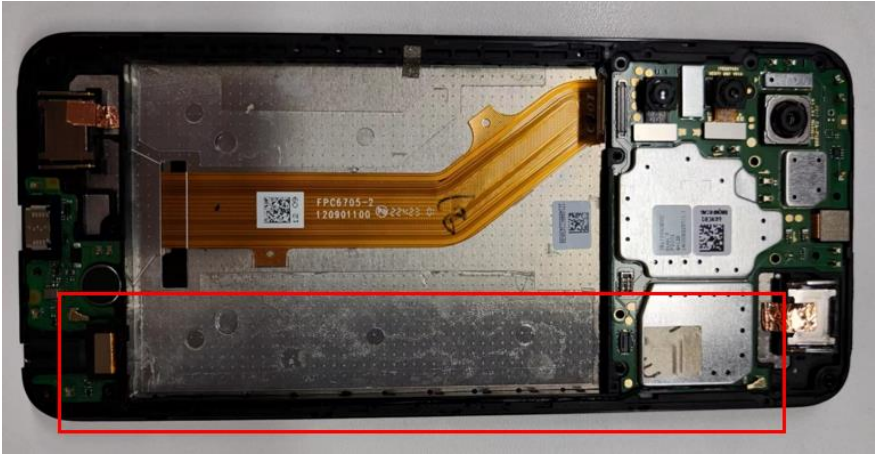
- 5) Before assembling the Main PCBA, assemble the RUBBER_FOR_ps, RearCAM 50M, Front CAM 8M and its rubber. Pay attention to the direction of the RUBBER_FOR_UPP_CAM. Assemble the Speaker and SIDE_KEY_FPC_ASM on the Furnished Underfilling.



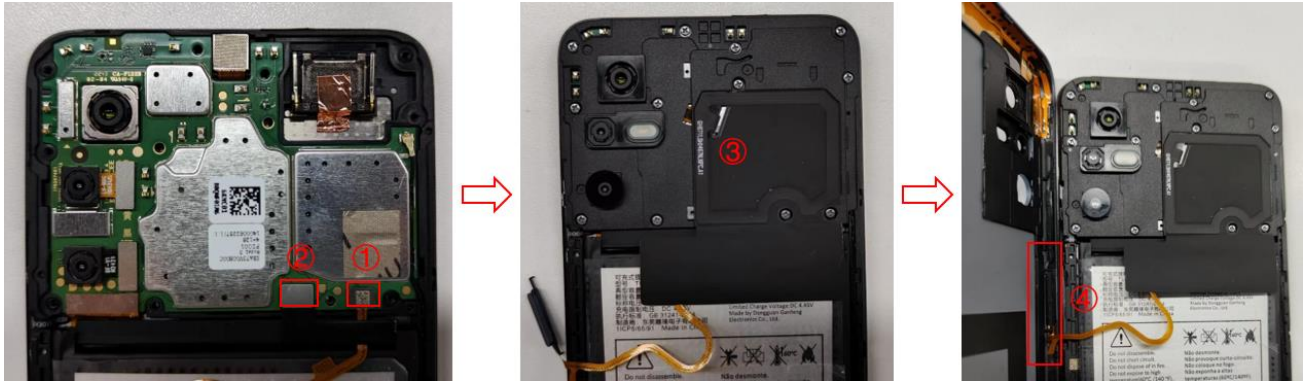
- 6) Before assembling the Sub PCBA, assemble the Speaker, Motor, RUBBER_FOR_MICRO_USB and RUBBER_FOR_AUDIO_JACK.



- 7) Pay attention to the trace of the RF_CABLE and the position of the RF Connector.



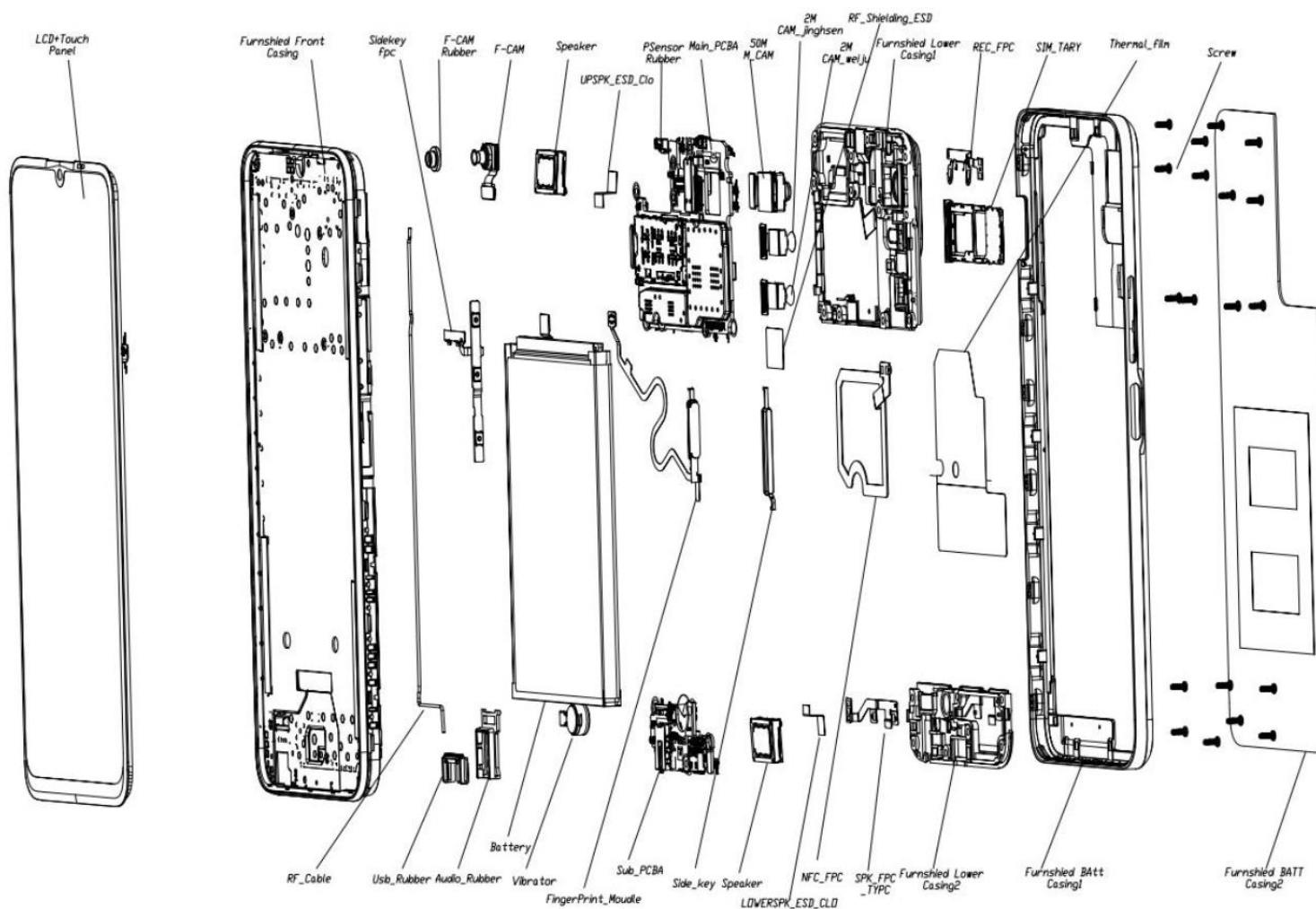
8) Assemble the Fingerprinces as shown in the figure.



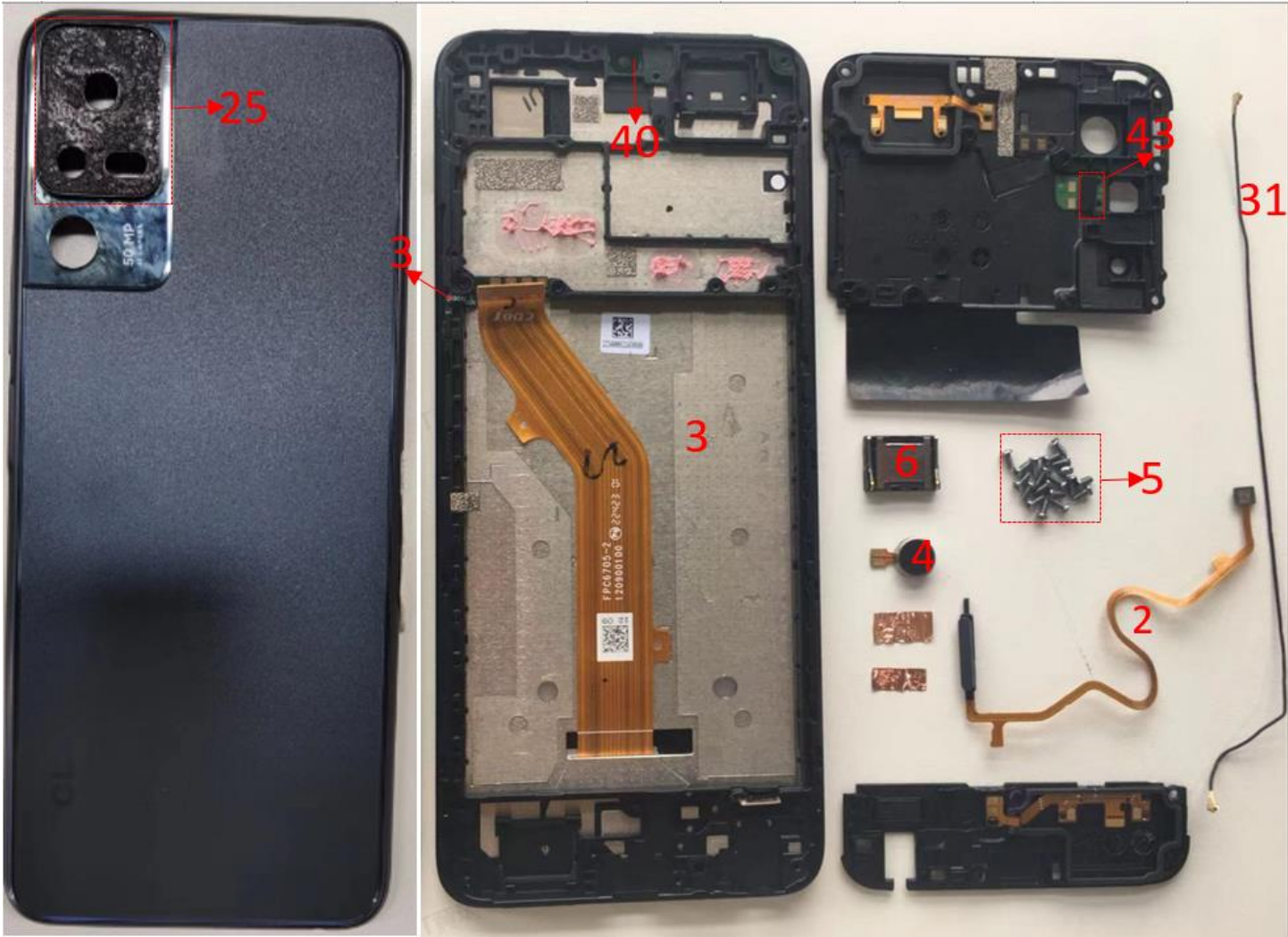
9) Assemble the screws (Screw Torque: 0.7±0.1kgf.cm).

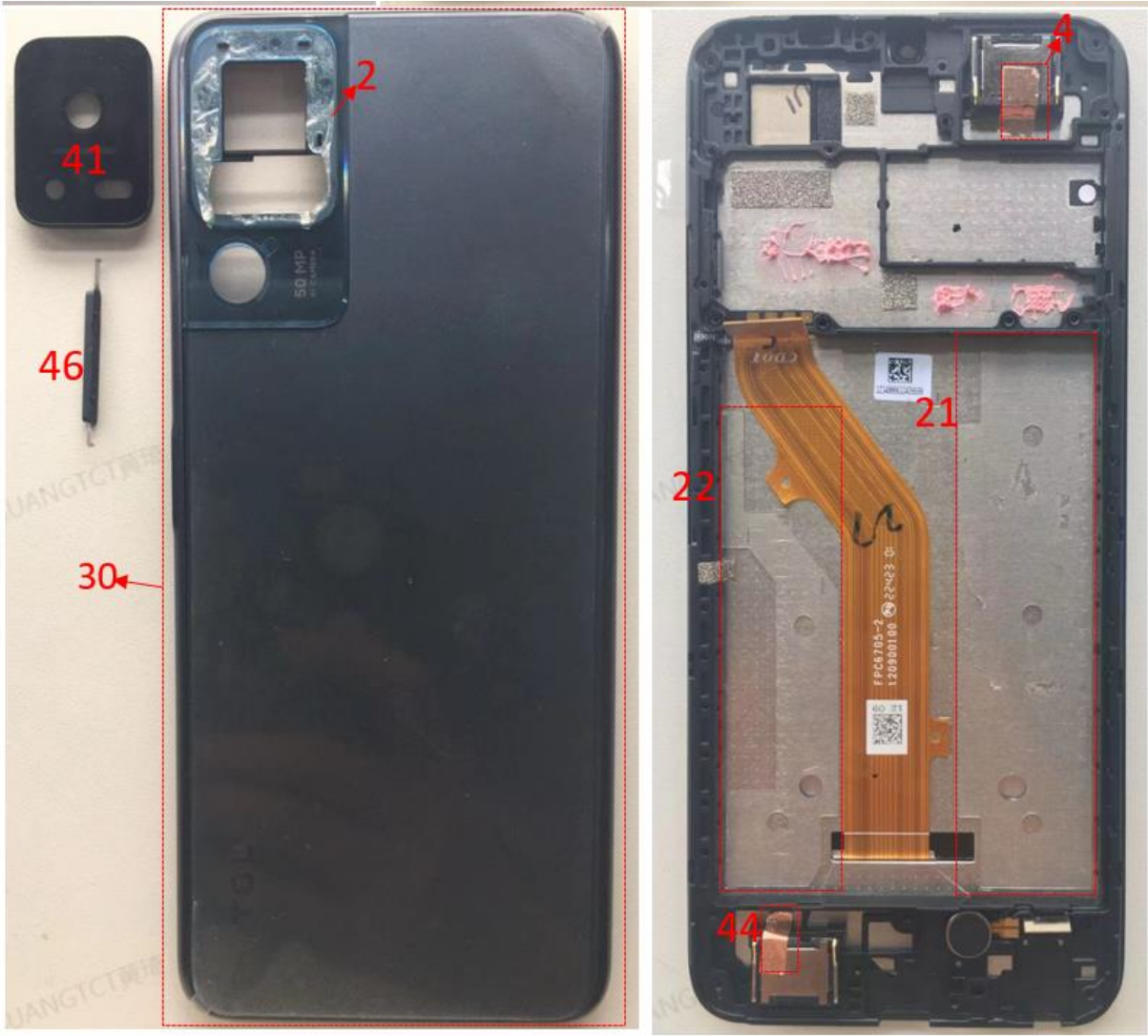


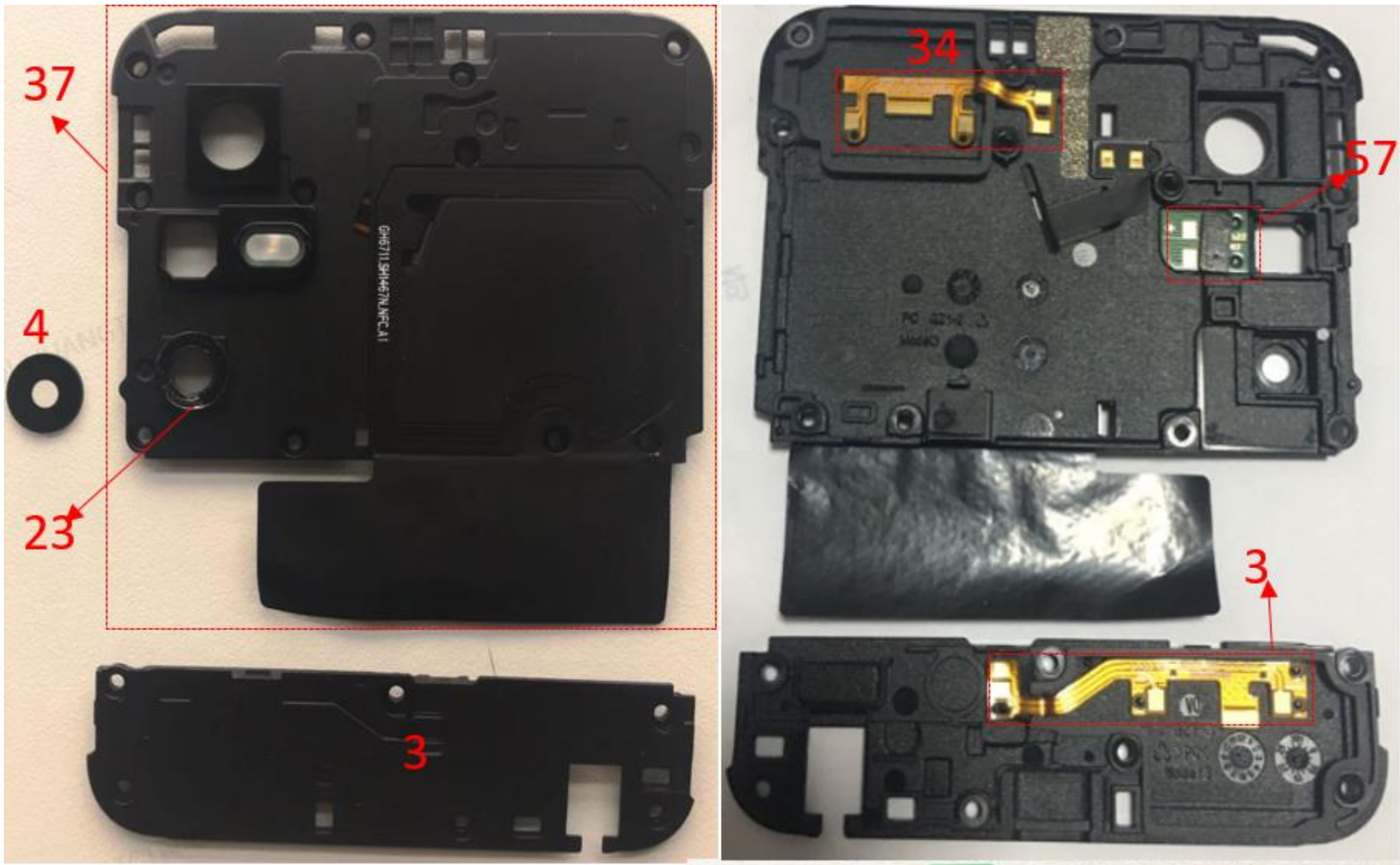
10 Explode View

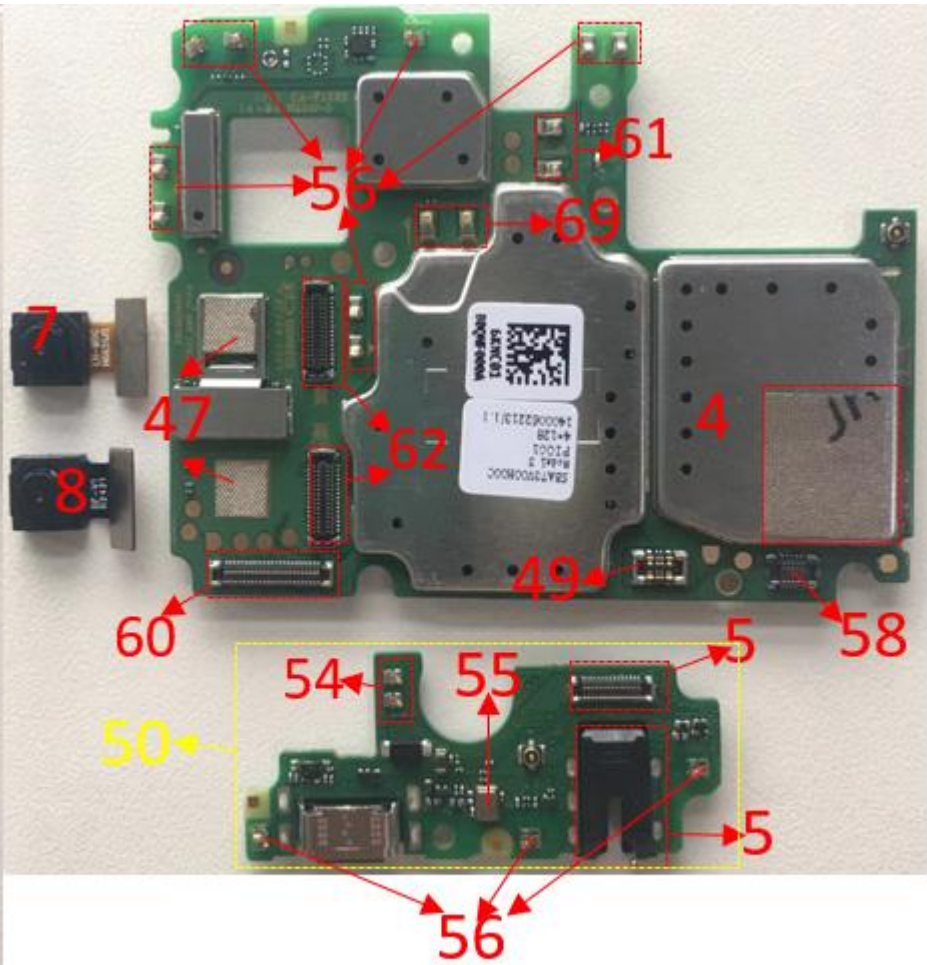
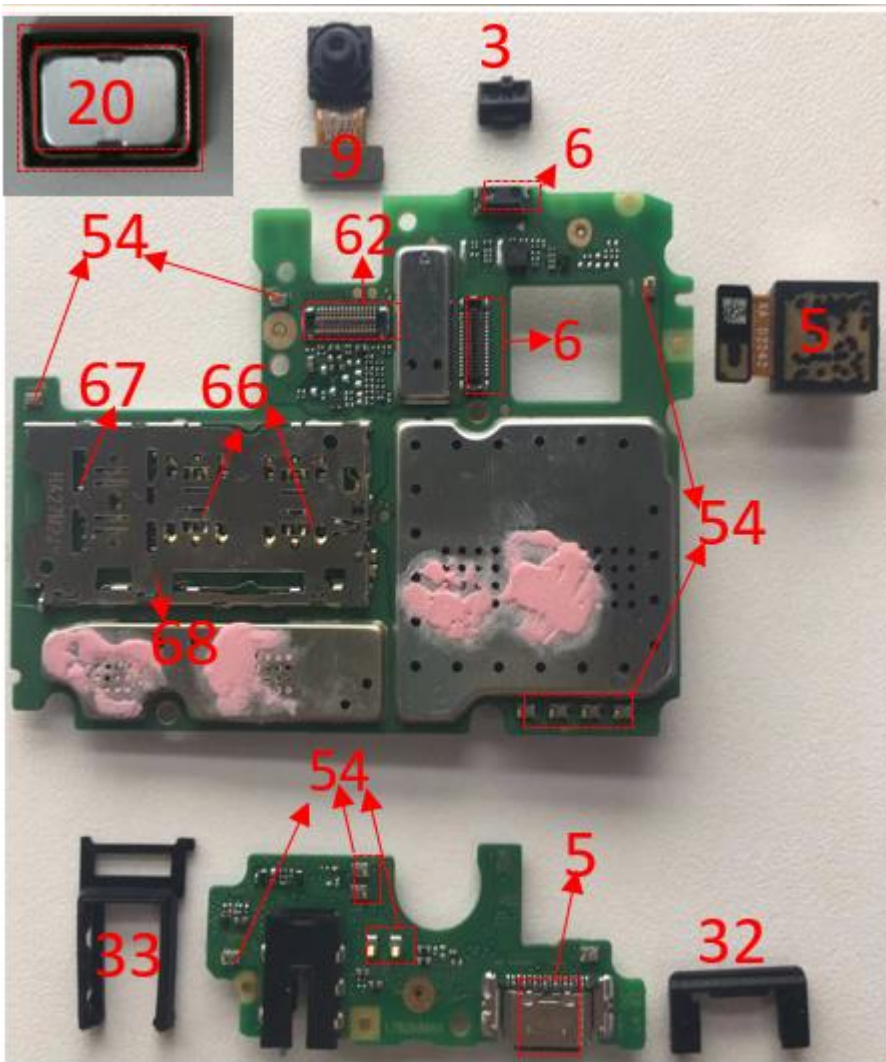


11 Split View









2	Fingerprint	33	RUBBER_FOR_AUDIO_JACK	51	BTB Conn,30pin
3	Furnished Underfilling	34	upper_spk_fpc	52	AUDIO JACK
4	Motor	35	lower_spk_fpc	53	Type C,16pin
5	RearCAM 50M	36	SIDE_KEY_FPC_ASM	54	Antenna Spring
6	Speaker	37	REAR_HOUSING_ASSY1	55	MEMS MIC
7	RearCAM 2M	38	REAR_HOUSING_ASSY2	56	Antenna Spring
8	RearCAM 2M	39	RUBBER_FOR_ps	57	Flashlight SUB PCBA
9	Front CAM 8M	40	RUBBER_FOR_UPP_CAM	58	BTB Conn,10pin
20	Speaker_STEEL_FOAM	41	REAR_MAIN_CAMERA_LENS	59	Screw
21	BATTERY_STICKER_1	42	REAR_SUB_CAMERA_LENS	60	BTB Conn,50pin
22	BATTERY_STICKER_2	43	FOAM_FOR_SUB_CAM_BT B	61	Antenna Spring
23	SUB_CAM_LENS_STICKER	44	GRAPHITE_FOR_LOW_SPK	62	BTB Conn,30pin
24	MAIN_CAM_LENS_STICKER	45	GRAPHITE_FOR_upp_SPK	63	BTB Conn,30pin
25	CAM_DECO_1_STICKER	46	SIDE KEY	64	Proximity-sensor
26	Battery PET film	47	COPPER_FOR_SUB_CAM	66	3IN3 nano-SIM,6pin
30	Battery cover	48	COPPER_FOR_RF	67	3IN3 T CARD
31	RF_CABLE	49	Battery Conn	68	3IN3 SHIELD
32	RUBBER_FOR_MICRO_USB	50	SUB PCBA	69	Antenna Spring

-END OF DOCUMENT-