Repair Manual for End User
TCL TAB 10L Gen 4
8483A1/A2

Notice:

A. Read the entire manual before any repairs. If you are not comfortable to perform the repairs as instructed in this manual, please do not proceed.

B. All features, functions, specifications, and other product information in this document, including but not limited to the price, components, performance, availability and capacity of the product are subject to change without notice.

C. This repair manual is provided only for out-of-warranty repair. If the product is under warranty, contact customer service before repairing it yourself or ordering a replacement part. Modification, customization or alteration of software or hardware by anyone not authorized by the manufacturer will void the warranty.

D. Information and instructions given in this document are intended for individuals with the knowledge and experience to repair electronic devices. TCL is not liable for any damage to the product, any injury, or any other product safety issue caused by repair attempt which does not follow the instructions or caused by any misunderstanding or wrong manipulation/utilization of any tools or installations. TCL is not liable for any damage to the product, any injury, or any other product safety issue caused by repair attempt using any tools or installations not supplied or setup by TCL.

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1 Precautions

- Use only demagnetized tools specifically designed for small electronic repairs, most electronic parts are sensitive to electromagnetic forces.

- Use only high quality screwdrivers when repairing products. Poor quality screwdrivers can easily damage the heads of the screws.

- Always use genuine spare parts. Parts from third-party may not function properly or even cause damages or accidents.

- The parts below may require calibration to ensure proper function after disassembly or repair, if you need to get more professional repair, contact TCL authorized Repair Center:
  Sensors (proximity, fingerprint), rear camera, touch screen module, speaker, motherboard.

- The performance of the device's water resistance and dust resistance cannot be guaranteed in the event of repair by the user or by an unqualified individual.

- If the device suffered from water/liquid damage, the cost of repairing the device may exceed the value of the device, depending on level of damage.

- Be careful not to damage the battery such as heating, denting, short circuit, or disassembling etc. If the battery is damaged or you need to get more professional repair, contact TCL authorized RC.

- Before any repair, backup personal information and important data.

- It is suggested to setup and stay in an Electrostatic Protected Area (EPA) to avoid electrostatic discharge that can cause unrecoverable damages on the device and parts during the repair.

- Before repairing the device, please ensure that the device is fully discharged and turned off.

- Prepare and wear appropriate safety equipment before carrying out repairs. Ensure the workspace is free from flammable materials, foreign objects, and sharp materials. Equip the area with necessary safety equipment such as fire extinguishers and protective gear.

- When removing the back cover, be careful not to damage the product parts and the battery.

- Before assembly, please ensure that there are no screws or foreign objects inside the device and around the battery.

- Before assembly, please ensure that there are no abnormalities before reattaching the back cover.

- When purchasing the product, the packing box is provided with user manual, quick guide, and other information. For more information about the product, please visit **www.tcl.com**.

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2 Instructional Icons and Notes

Failure to follow instructional notes could result in fire, injury, data loss, or damage to the device, parts, or other property.

⚠ Warning – highlights instructions to reduce risk of safety issues or personal injury, failure to follow the warning instructions may cause fire or other safety issues and lead to personal injury or death.

Always prioritize safety over cost savings. If uncertain, contact TCL https://www.tcl.com/mobile-support or seek help from professional repairer.

ⓘ Caution – highlights instructions to reduce the risk of data loss or damage to the device or other equipment.

Notice – Other instructional information, tips, notes for successfully completing procedures.

3 ESD (Electrostatic Discharge) Safety

What is ESD?

ESD (Electrostatic Discharge) is the rapid, spontaneous transfer of current (in another word, electrostatic charge) induced by a high electrostatic field. It can damage electronic components. ESD damage may be a latent defect that may escape immediate detection, but may cause the device to fail prematurely.

How do you prevent electrostatic discharge?

All conductors in the environment, including personnel, shall be bonded or electrically connected and attached to a known ground or contrived ground.
Using ESD safety (Anti-static) equipment such as an anti-static wrist strap and gloves, anti-static tools and ESD safe mat when repairing the device can mitigate the risk of ESD event.

4 Broken Glass Safety

The display and Furnished Middle Casing of the device utilize glass materials, which may fracture if subjected to:

- Drops onto hard surfaces
- Crushing, bending, or deformation
- Other types of hard impact

⚠ Warning –Avoid handling broken glass or sharp glass shards without proper protective equipment

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(e.g., cut-resistant gloves and safety goggles), as sharp edges pose safety risks.

5 Battery Safety

⛔ <mark>Warning</mark>

This device contains a built-in lithium-ion battery with soft battery cells. Battery safety is primary concern when repairing a device with built-in lithium-ion battery.

Only technicians with the appropriate knowledge, experience, and specialized tools should attempt to replace or repair built-in lithium-ion batteries.

Only install new, genuine battery. Used battery can become damaged during the removal process, increasing the risk of hazardous events. DO NOT attempt to reuse battery.

Improper handling of battery can lead to battery overheating, swelling, venting, leaking, or a battery thermal event, which may result in fire, injury, death, data loss, or damage to the device, parts, and surrounding property.

5.1 Best Practices to handle batteries

⛔ <mark>Warning</mark> To prevent harmful incidents when handling batteries, adhere to safety guidelines and maintain a safety-focused workspace.

- **Workspace Safety:**

Ensure the workspace is free from flammable materials, foreign objects, and sharp materials.

Equip the area with necessary safety equipment such as fire extinguishers and protective gear.

- **Avoid Physical Damage:**

Be careful when using sharp tools near the battery. Don't throw, drop, puncture, crush or damage the battery cells to prevent triggering a battery thermal event or the release of noxious fumes.

- **Prevent Short Circuits:**

Don't use tools that conduct electricity and ensure battery terminals do not come into contact with metal objects or conductive surfaces during handling.

- **Temperature Control:**

Keep the ambient temperature within the battery's operating range.

Provide adequate ventilation to prevent overheating.

- **Assembly Precautions:**

Don't leave any abnormal objects (e.g., debris, loose screws, extra screws, etc.) inside the device before reassembling.

- **Proper Disposal:**

Dispose of or recycle waste batteries in accordance with local environmental laws and guidelines.

5.2 How to handle a battery thermal event?

⚠️ **Warning** A **battery thermal event** is a sudden chemical reaction inside a lithium-ion battery that releases stored energy rapidly, potentially causing outgassing and fire. This can result from physical damage, improper handling or replacement, or exposure to temperatures outside the battery's safe operating range.

Act immediately when you notice any signs of a battery thermal events to ensure personal and environmental safety.

Signs of a Battery Thermal Event:

1) Smoking, sparking, or soot emission from the battery or device.

2) The battery pouch rapidly swelling or puffing out.

3) Hissing or popping sounds emanating from the battery or device.

Immediate Actions to Take:

1) **Smother the Fire:** Quickly cover the battery or device with plenty of clean, dry sand to contain the reaction.

2) **Contact Authorities:** Call local fire services for additional assistance.

3) **Evacuate and Ventilate:** Leave the area for 30 minutes to allow smoke to dissipate and ensure the environment is safe.

4) **Handle with Protection:** After 30 minutes, wear heat-resistant gloves and safety glasses with side shields before removing the device from the sand.

5) **Clean the Area:** First wipe the affected area with water, then use an ESD-safe cleaning solution to ensure safety.

6) **Proper Disposal:** Dispose of the damaged battery or device and any debris in accordance with local environmental laws and guidelines.

6 Factory Reset

⊘ **Caution**: Factory reset will format the device to restore the device to its factory default settings. This will erase all user data including but not limited to files and downloaded apps in the device. Before performing factory reset, remember to back up all important data stored in the device. TCL is not responsible for the loss of data stored in the device.

6.1 Remove Google account before doing factory reset

If you need to setup the device with another Google account at the initial setup after factory reset, Google account need to be removed before doing the factory reset, otherwise it will require you to login the previous signed-in Google account. You can follow the below steps to remove the Google account from the device.

Launch Settings app -> Accounts ->tap on the google account-> Remove account -> tap on REMOVE ACCOUNT.

6.2 Factory Reset

You can follow the below steps to perform factory reset if the phone can be powered on.

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

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7 Software Update

It is suggested to upgrade the handset software to latest version for better performance.

Before upgrade, please remember to back up the data and keep the phone fully charged.

7.1 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.

Launch the device's "Settings" app and tap on "System"-> "System Update"-> "CHECK FOR UPDATES".

7.2 Software update by Mobile Upgrade tool

1) On the computer, download the corresponding Mobile Upgrade tool from TCL website https://www.tcl.com/mobile-support -> choose your product on the page -> click on Download under the corresponding Software tag.

2) Read and agree to the terms and conditions, and follow the on-screen instructions to install the tool on the computer.

3) Restart the computer after the tool installation.

4) Launch the tool and select the device model in the dropdown list.

5) Read the on-screen instructions and precautions to click through "Start"-> "Next" -> "Yes".

6) Power off the device and connect it to computer via USB cable

7) The software update will start.

8) Click "OK" and disconnect the device from USB cable when the tool pops up the prompt "Please disconnect your device from the USB cable to proceed".

9) Click "Upgrade device" and connect your powered off device to computer, waiting for upgrade.

   🛈 Caution: Do not disconnect the device from the computer during the upgrade process unless there is pop up message from the tool.

10) When upgrade is completed, it will pop up a message window saying "Elapsed time: XX:XX:XX. Thanks for using Mobile Upgrade tool. Your device has been successfully upgraded."

8 Function Test with Support Centre

1) Check if Nano SD card has been 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 on-screen instructions to test.

9 Basic Troubleshooting

You can use our troubleshooting on TCL official website as reference for some frequently met issue.

① Visit https://www.tcl.com/mobile-support

② Scroll down to "Troubleshooting" section and click on "View more"

③ Select the type of product and follow the step-by-step checking questions and options.

Notice: 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".

10 Contact of TCL hotline and service centers

If you are looking for official professional repair from TCL, please visit **HOTLINE** & **SERVICE CENTERS** to search for the contact in your country/region.

11 Disassembly and reassembly

11.1 Basic tools

⚠️ <mark>Warning</mark>:

Wear proper protective equipment for your safety when repairing devices. In the disassembly and assembly steps, additional tools may be required. Refer to specific steps for details.

Tool/ Equipment	Description	Example Image
Safety glasses with side shields	Prevents accidents during repair (protective equipment)	
Cut-resistant Gloves	Prevents accidents during repair (protective equipment)	
Safety Mask	Prevents accidents during repair (protective equipment)	
ESD wrist strap	Mitigate the risk of ESD event (recommended)	
ESD Safe Mat	Mitigate the risk of ESD event (recommended)	
SIM-eject Pin	To eject SIM tray	
Plastic Plectrum	To disassemble back cover and other parts	

Anti ESD Tweezers	To disconnect connectors, cables, and other parts. **Notice:** Use tweezers made of plastic or rubber material when parts may be easy to be damaged by sharp tool.	
Cross-head Screwdriver	To remove cross-head screws. Size: PH0	
Hot air gun	To heat the display assembly edges.	
Suction cup	To separate the display assembly.	

11.2 Disassembly for replacement

Before disassembling:

Always perform the following steps before starting a repair:

1) Back up the device's data.

2) Discharge the battery fully.

3) Turn off the device.

4) Disconnect all cables.

5) Remove all cases and covers.

6) Clear and clean your workspace.

7) Put on an ESD wrist strap and attach it to a properly grounded ESD mat.

8) The product's composition may vary depending on the country, region, or carrier.

For all cases of broken glass

Please refer to "**4 Broken Glass Safety**" first.

To prevent broken glass scattering, attach an acrylic protective cover to the screen.

Screen glass cannot be separated alone from the screen module. If the glass is broken, the whole screen module must be replaced.

If you are having difficulty doing the repair, take the device to professional repair or TCL authorized repair center for help.
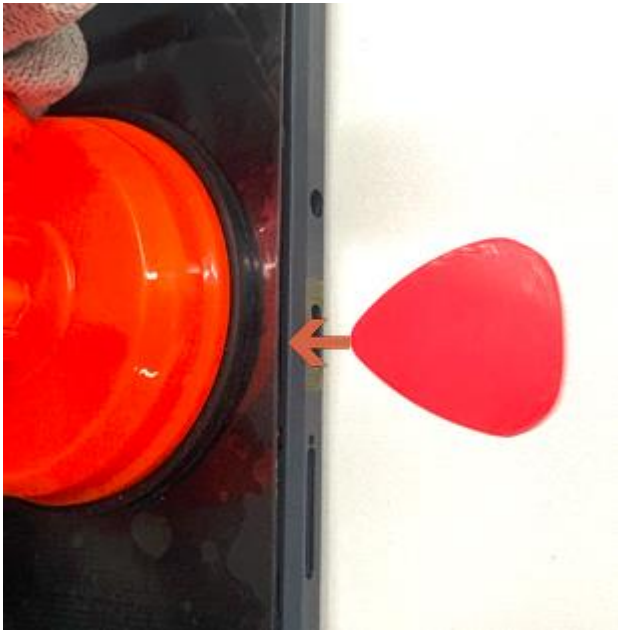
SIM Tray and Memory Card Tray

To pop remove the SIM tray, insert a SIM-eject pin into the hole beside the tray. Push in towards the device, but don't force it. If you are having difficulty ejecting the SIM tray, take the device to professional repair or TCL authorized repair center for help.
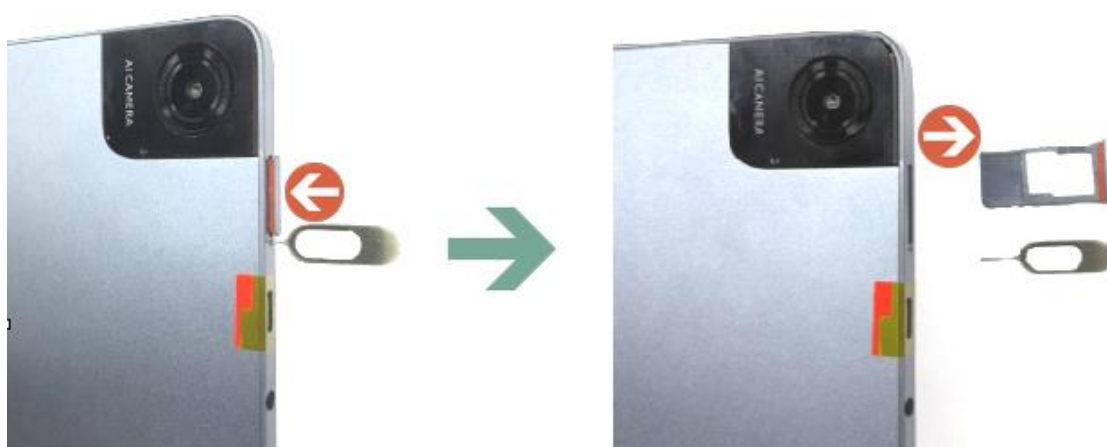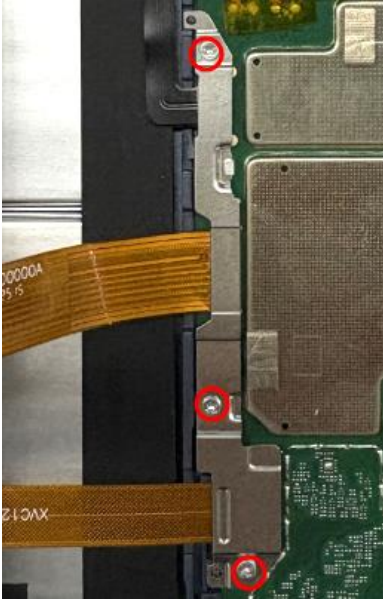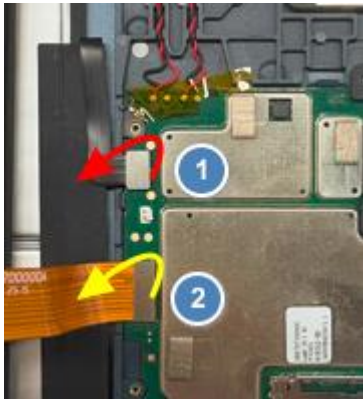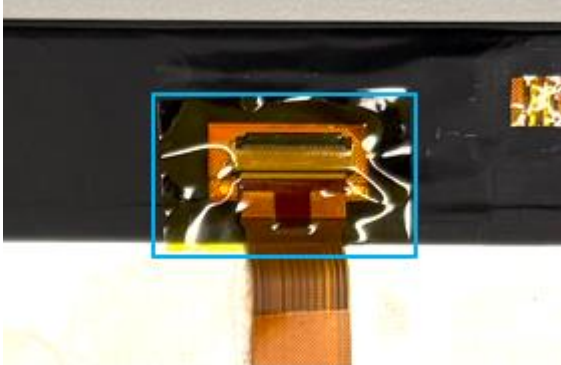

Display Assembly

Remove **SIM Tray and Memory Card Tray** before you begin.

Heating with a hot air gun in the position shown. Heating temperature:75 ℃ heating time: 5- 8 minutes		

Pull up on the suction cup at USB side to separate the LCD + Touch Panel from enclosure. Insert a Plastic Plectrum in the gap between the LCD + Touch Panel and Furnished Middle Casing.	
Slide the plastic plectrum along the edge of the screen according to figure's arrow direction. 🛈 **Caution** : Be careful not to insert the plastic plectrum too deeply to avoid damage the LCD + Touch Panel at marked location. If you are having difficulty doing the repair, take the device to professional repair or TCL authorized repair center for help.	

Lift the LCD + Touch Panel off the Furnished Middle Casing from USB port side. ![info icon] **Caution** : Don't pull the LCD + Touch Panel apart completely to avoid damage the LCM FPC.		
Remove cross-head screws from LCD BTB Fix STEEL. Remove the LCD BTB Fix STEEL.		**PN: BMA1421252C3** **Qty:3** **Torque: 0.8kgf.cm**

Disconnect below connectors. ① Battery connector(must be disconnected first) ② Display connector	
LCD + Touch Panel removal.	
Remove the LCD connector Mylar.	

Disconnect LCM FPC connector and remove the LCM FPC.		
Display Assembly removal.		

11.3 Reassembly process.

To reassemble the device, follow above disassembly instructions in reverse order.

There are some important notes listed below for some steps.

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

   Conductive tapes and copper tapes are selectively replaced, depend on breakage, stickiness conditions.

2) Don't leave any abnormal objects (i.e. debris, loose screws, extra screws, etc.) inside the device before re-assembling.

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