

SAMSUNG

REPAIR GUIDE

SM-A376B
SM-A376B/DS
SM-A376U
SM-A376U1

English. 03/2026. Rev.1.1

www.samsung.com

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Usage Notices

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

Precautions for Repair

Samsung is not liable for any damage or defect determined to be caused by repair by a non-authorized carrier, self repair or non-professional repair of the device. Samsung is not liable for any resulting damage to the device, or any injury or other device safety issue caused by any attempt to repair the device which does not follow these repair and maintenance instructions.

Any damage to the device or defect caused by an attempt to repair the device by any person other than a Samsung certified carrier will not be covered by the warranty.

- Use only demagnetised tools that are specifically designed for small electronic repairs, as most electronic parts are sensitive to electromagnetic forces.
- Use only high quality screwdrivers when servicing devices. Low quality screwdrivers can easily damage the heads of screws.
- Always use genuine replacement parts. Third-party replacement parts may not function properly and could cause a fire or injury.
- Some parts, such as sensors (laser AF/proximity/fingerprint), the rear camera, the TSP (touch panel), speakers, and other components, may need calibration to guarantee their performance after repair.
- The performance of the device's water and dust resistance cannot be guaranteed when it is repaired by the user or another unskilled worker.
- If you need to access the failure data of your device or need to get a more detailed diagnosis, visit a Samsung Service Centre.
- If you need to replace unsold parts, visit a Samsung Service Centre and receive further instruction.
- Before conducting repairs, remember to make backup copies of all important data stored in the device.




- Make sure to wear the appropriate safety equipment before carrying out repairs. Samsung is not responsible for injuries that may occur because of not wearing the proper safety equipment. Refer to [Tools for Disassembly and Assembly](#) for a list of tools that you will need for assembling and disassembling the device.
- Repair the device in a safe place.
- Before repairing the device, make sure the device is turned off. To turn off the device, press the Volume Down button and the Side button at the same time, or open the notification panel and tap the Power icon.
- If the device is damaged, emits smoke, or if you smell something burning, stop using the device immediately and contact Samsung.
- It is recommended to use safety equipment such as glasses, gloves, and a mask when repairing the device.
- Be careful not to damage the device when removing the back cover.
- Before assembly, ensure that there are no screws or foreign objects around the battery.
- During assembly, check if there are any abnormalities before reattaching the back cover, and be careful not to damage the battery by hitting or denting it. If the battery is damaged, visit a Samsung Service Centre.
- Do not place the device directly into a microwave and heat it.
- Before repairing your device, make sure its battery is fully discharged.
- Visit www.samsung.com to view the device information, related material, and safety information.

ESD (Electrostatic Discharge) Precautions

It is the sudden flow of electricity between two electrically charged objects caused by contact, an electrical short, or dielectric breakdown. ESD can cause negative effects on mobile devices, especially electrical parts.

- It is recommended to use ESD safety (Anti-static) equipment such as an anti-static wrist strap and gloves, and an ESD safe mat when repairing the device.
- Increase the airflow to the work area to decrease the chance of accidental static electricity discharges, as the potential for static electricity discharge may be increased in low-humidity environments, such as air-conditioned rooms.

Instructional Icons


-  **Warning:** situations that could cause injury to yourself or others
-  **Caution:** situations that could cause damage to your device or other equipment
-  **Notice:** notes, usage tips, or additional information

Software Update

Updating Software through FOTA

Update your device's software through the firmware over-the-air (FOTA) service. You can also schedule software updates.

Launch the **Settings** app and tap **Software update** → **Download and install**.


- **Install now:** Install updates.
 - **Schedule install:** Set the time to install updates automatically.
-  • You may incur additional charges when updating the software through a mobile network.
- If the latest software has been downloaded to the device, these options will not appear.

Software Update Failure

If your device becomes disconnected from a network before the update is complete, the update may fail. Reconnect to a network and complete the update.

Updating Software through Smart Switch

You can use Smart Switch to update your device's software to the latest version. You must download the desktop version of the Smart Switch app from www.samsung.com/smartswitch.



-  • This feature may not be supported on some devices or computers.
- Limitations apply. Visit www.samsung.com/smartswitch for details. Samsung takes copyright seriously.

- 1 On the computer, visit www.samsung.com/smartswitch to download Smart Switch.
- 2 On the computer, launch **Smart Switch**.
- 3 Connect your device to the computer using the device's USB cable.
- 4 Click **Update**.

- 5 Read the on-screen instructions and click **Continue**.
- 6 Read the precautions about the update and click **OK**.
- 7 Read and agree to the terms and conditions.
The update will start.



Recovering from a Software Update Failure


If a software update is interrupted because of an error on your device or computer, your device may fail to operate normally. If this occurs, you can perform a factory data reset on your device for emergency recovery.

-  Before performing the factory data reset, remember to make backup copies of all important data stored in the device. Samsung is not responsible for the loss of data stored in the device.
- 1 Disconnect your device from the computer and launch **Smart Switch** again on the computer.
 - 2 Click  → **Emergency Software Recovery and Reset**.
The device list will appear.
 - 3 Click the device that experienced a software update error and click **Device reset** → **OK**.
The device will perform a factory data reset.

Recovering on Another Computer


If the emergency recovery process continues to fail on the computer where the software update failed, you can repair your device on another computer using the recovery code. This will include a factory data reset of your device.

- 
 - Before performing the factory data reset, remember to make backup copies of all important data stored in the device. Samsung is not responsible for the loss of data stored in the device.
 - The recovery code can be found only on the computer where the software update has failed.
- 1 On the computer where the software update has failed, launch **Smart Switch**.
 - 2 Click  → **Emergency Software Recovery and Reset**.

- 3 On the devices list, click the device that failed to update the software and check the recovery code.
- 4 On another computer, launch **Smart Switch**.
- 5 Click  → **Emergency Software Recovery and Reset** → **Emergency code recovery**.
- 6 Enter the recovery code and click **OK**.
- 7 Follow the on-screen instructions to put your device into recovery mode and complete the emergency recovery.

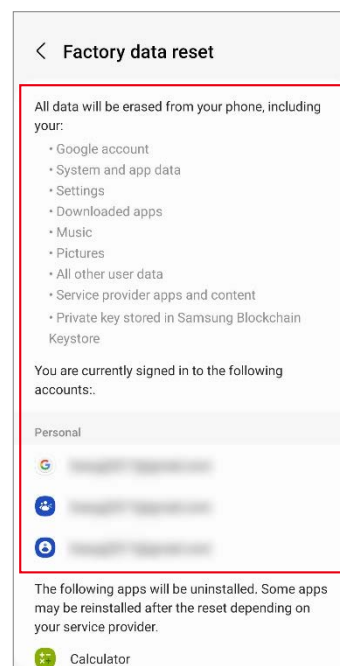
Performing a Factory Data Reset

The factory data reset restores the device's default settings. This erases all data, including files and downloaded apps, from the device.

-  Before performing the factory data reset, remember to make backup copies of all important data stored in the device. Samsung is not responsible for the loss of data stored in the device.

Make sure your device's battery level is sufficient, as losing power during a factory reset may result in system problems.

- 1 Launch the **Settings** app and tap **General management** → **Reset** → **Factory data reset**.
- 2 Read the on-screen instructions and check which account you are signed in with. If your device is signed in to your Google account, log out of your Google account. If you do not log out of your Google account, logging in to another account after the factory data reset will not be possible, because your device will be locked.



3 Tap **Reset** → **Delete all**.

All data will be deleted when rebooting.




During a factory data reset, the device may repeat rebooting and the logo may be displayed for a long time.

Quality Test

Quality Test Using the Samsung Members App

It is recommended to evaluate your device through the Samsung Members app after it has been repaired to guarantee its performance. If the test results show any abnormalities or that another malfunction has occurred because of the repair, visit a Samsung Service Centre to receive further instruction. Any malfunctions caused by your repair may incur additional repair charges.

-  • The Samsung Members app is subject to update without any prior notice.
- To use this feature, you must sign in to your Samsung account.
- Some features may not be available depending on the carrier or model.

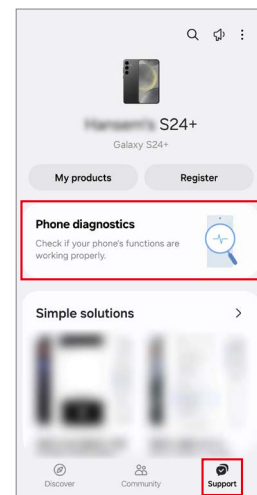
Device Diagnostics

- 1 Launch the **Samsung Members** app.

If you do not have the app, download it from the **Galaxy Store** or **Play Store**.

- 2 Tap **Support** → **Phone diagnostics**.

The diagnostics screen will appear and you can check the test status and items.

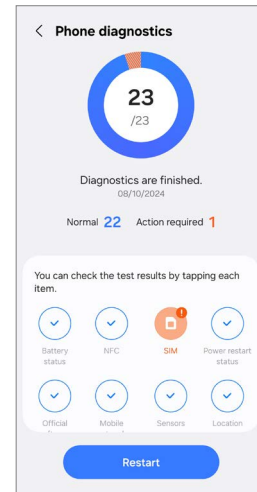


3 Tap **Test all**.

The device performs a test on all items.

When the test is finished, you can check the test results.

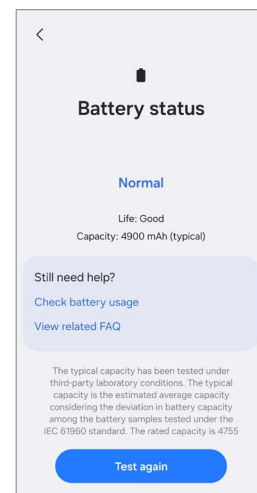
- Tick mark: Working normally
- Exclamation mark: Needs further inspection
- The test proceeds automatically, but you may need to follow the on-screen instructions depending on the test item. Keep an eye on the screen during testing to ensure smooth progress.
- If the exclamation mark appears on any test items after finishing the test, tap them to find the solutions. If the problem persists, visit a Samsung Service Centre.



Test Items

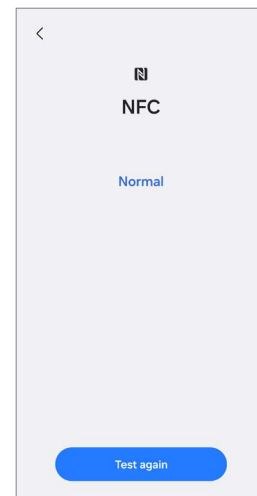
Battery status

Check the battery life and capacity.



NFC

Check whether the near field communication (NFC) feature is working normally.

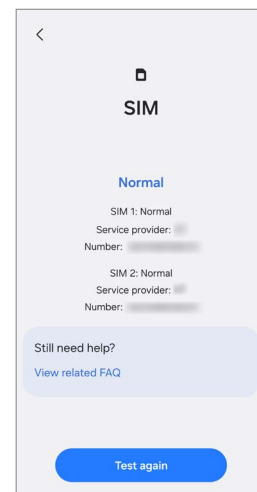


SIM

Check whether the SIM is working normally.

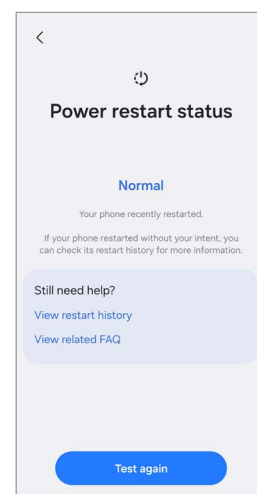


If the test result is not **Normal**, remove the SIM card from the SIM card tray and replace it. If possible, try again with another SIM card.



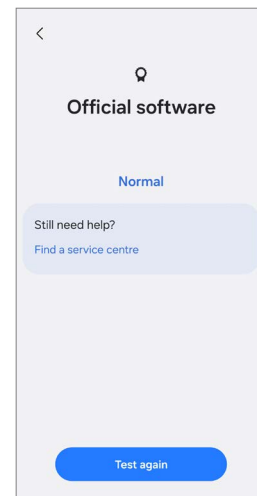
Power restart status

Check whether the device has restarted within the last 7 days.



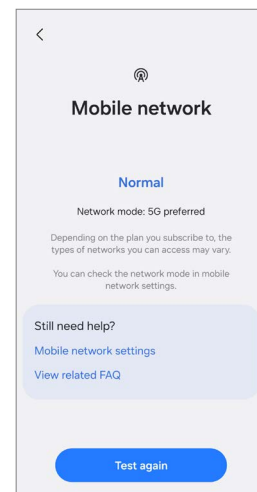
Official software

Check whether the official software is being used.



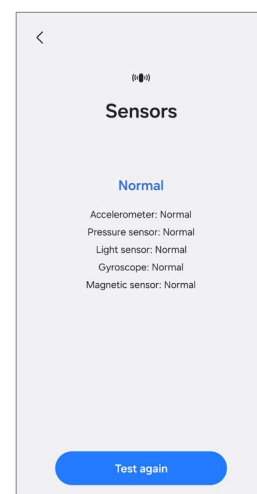
Mobile network

Check whether your mobile network is working normally.




Sensors

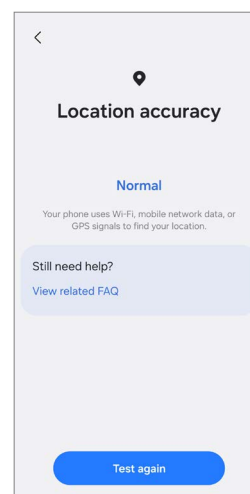
Check whether the sensors are working normally.



Location accuracy


Check whether the location feature is working normally.

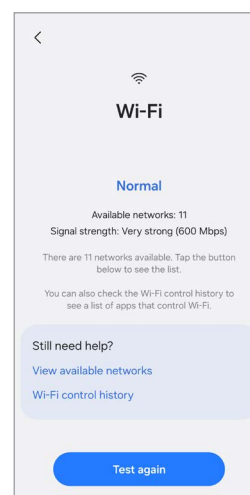
-  The results might be more accurate when you test outside.



Wi-Fi


Check whether the Wi-Fi feature is working normally.

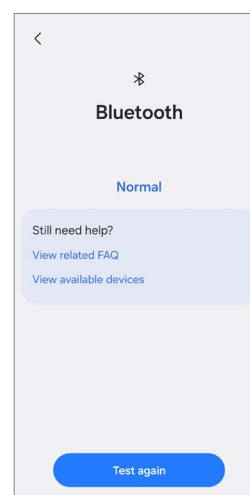
-  To test this feature, the Wi-Fi feature must be activated.



Bluetooth

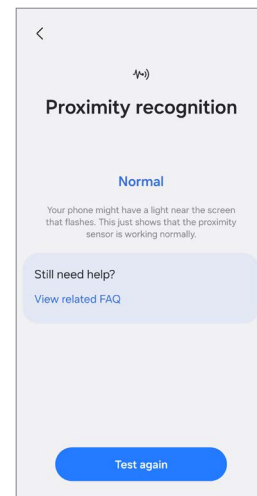
Check whether Bluetooth can search for other Bluetooth devices.

-  To test this feature, the Bluetooth feature must be activated.



Proximity recognition

Check whether the proximity recognition feature is working normally.

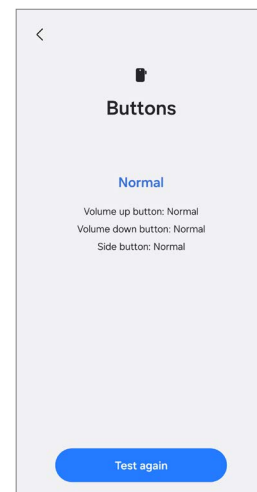


Buttons

Check whether the buttons are working normally.

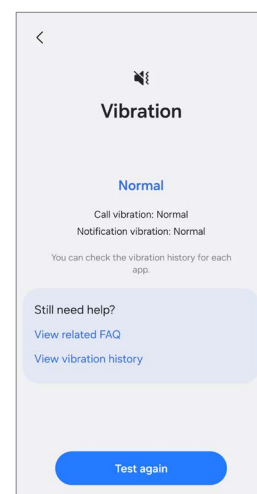


Make sure that the buttons are not contaminated to get more accurate test results.




Vibration

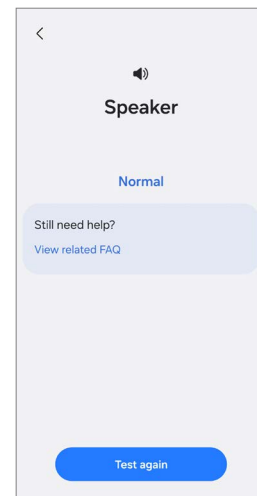
Check whether the vibration feature is working normally.



Speaker



Check whether the speakers are working normally.

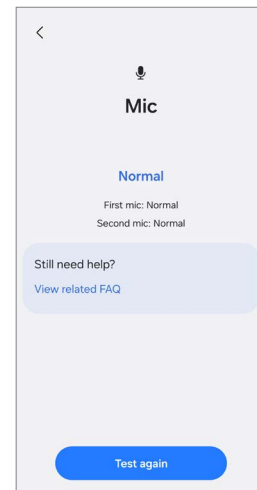
-  If you cannot hear the sound well, check whether the media volume is turned up and if the speaker is obstructed by foreign objects, the case, or the protective film.



Mic


Check whether the microphones are working normally.

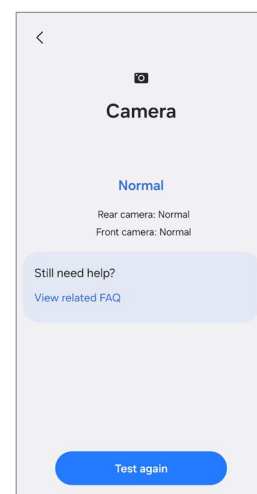
-  The number of tests may vary depending on the model.
-  If you cannot hear anything after recording, check whether the media volume is turned up and if the microphone or speaker is obstructed by foreign objects, the case, or the protective film.



Camera


Check whether the cameras are working normally.

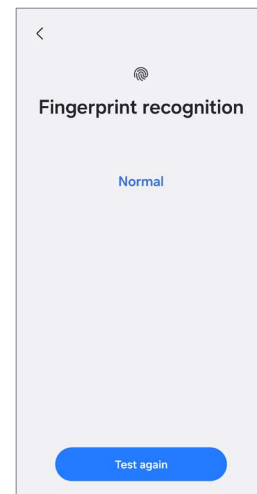
-  To test this more accurately, check if the camera is obstructed by foreign objects, the case, or the protective film.



Fingerprint recognition


Check whether the fingerprint recognition sensor is working normally.

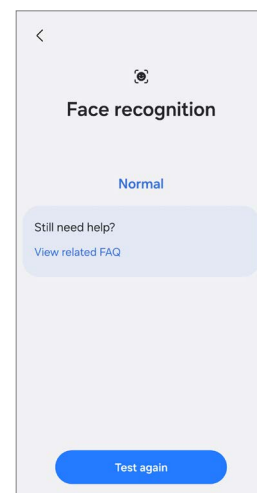
-  To test this feature, your fingerprint must be registered.



Face recognition


Check whether the face recognition sensor is working normally.

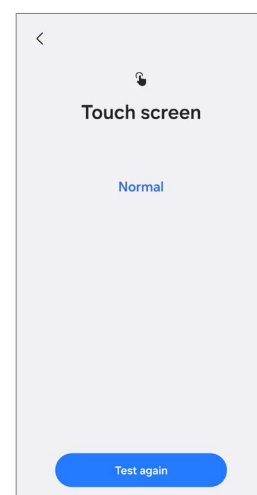
-  To test this feature, your face must be registered.



Touch screen

Check whether touch inputs are recognised normally in all areas of the screen.

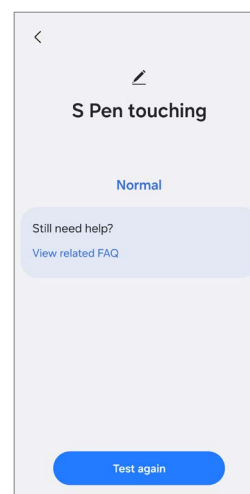
-  Make sure that the screen is clean to get more accurate test results.



S Pen touching

Check whether the S Pen is recognised in all areas of the touch screen.

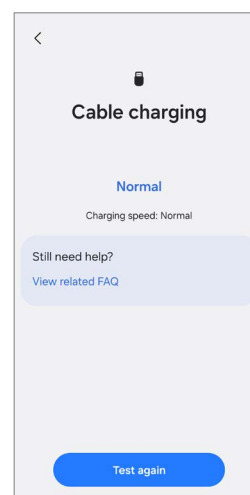
- Make sure that the screen is clean to get more accurate test results.
- This test is only available for the S Pen supported models.



Cable charging

Check whether the cable charging feature is working normally.

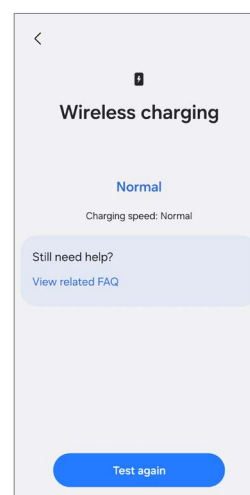
- Use only Samsung-approved chargers.



Wireless charging


Check whether the wireless charging feature is working normally.

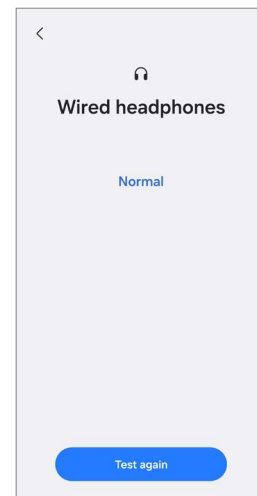
- Use only Samsung-approved wireless chargers.



Wired headphones


Check whether the headphone jack recognises the headphones normally.

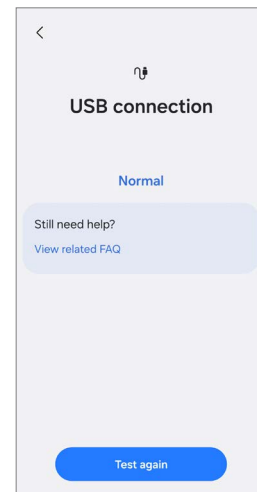
-  To test this feature, you must connect headphones.



USB connection

Check whether the multipurpose jack recognises the USB cable normally.

-  To test this feature, the USB cable must be connected to a computer.



Calibrations

Calibrations

In order to guarantee the stable and correct performance of components or sensors, it is required to conduct calibrations through the **Self Repair Assistant** app after repair.

If the calibration results show any malfunctions, visit a Samsung Service Centre for further action. Any malfunctions caused by your repair may incur additional repair charges.



- The **Self Repair Assistant** app is subject to update without any prior notice.
- In order to conduct the accurate calibrations after repair, visit a Samsung Service Centre or website to buy calibration equipment if you do not have any.

Used Parts and Calibration Functions in Supported Models

The calibration functions are automatically conducted based on the selected parts.

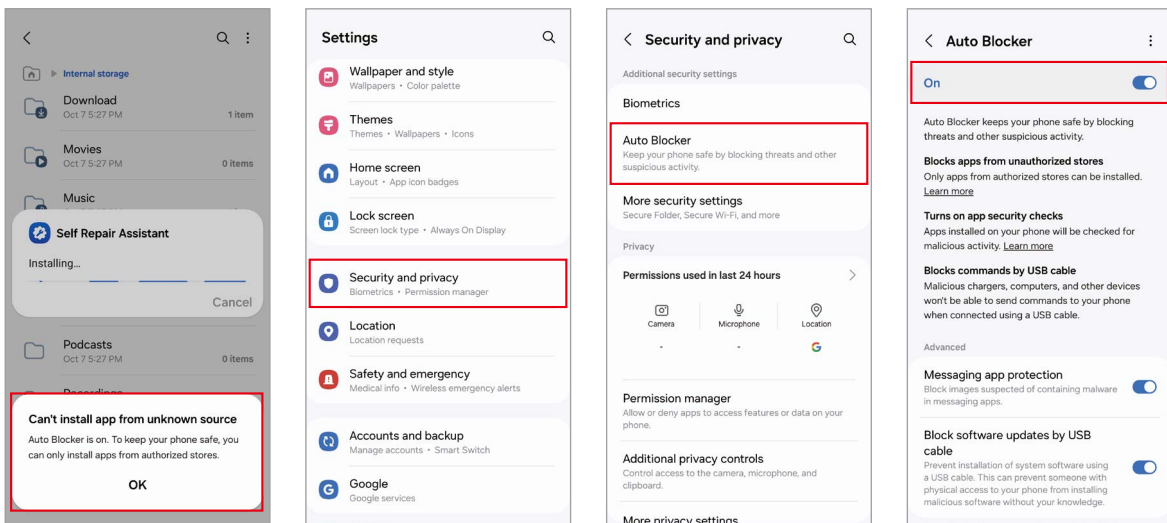
	Screen	Battery	Back Glass	Charging Port	Speaker
Optical Fingerprint Cal.	Yes	No	No	No	No
Range Sensor Cal.	Yes	Yes	Yes	Yes	Yes
Battery Cycle Resets.	No	Yes	No	No	No
Touch Screen Panel Cal.	Yes	No	No	No	No
Speaker Cal.	No	No	No	No	Yes
Under-display Camera Cal.	Yes	No	No	No	No
Digital Hall Sensor Cal.	Yes	No	No	No	No

- Depending on the model, the screen module may include batteries. So when the screen module is replaced, the battery also has to be selected and a battery cycle reset must be performed.
- In the Fold models, touch screen panel calibration is performed for both the main and cover screens.
- Digital hall sensor calibration is only for the Fold and Flip models and under-display camera calibration is only for the Fold models.

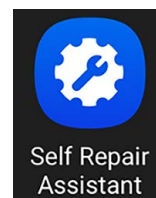
Using the Self Repair Assistant App

1 Download the **Self Repair Assistant** app from **Galaxy Store**.

- For US devices, you need to install the APK file for the **Self Repair Assistant** app manually. However, if the **Auto Blocker** function which is provided from Android OS 14 (U OS) is turned on, you cannot install any APK files manually through the **My Files** app. In this case, launch the **Settings** app, tap **Security and privacy** → **Auto Blocker**, and then tap the switch to turn it off to install the **Self Repair Assistant** app.

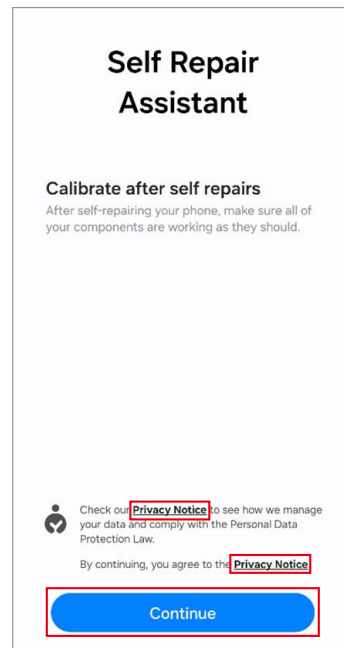
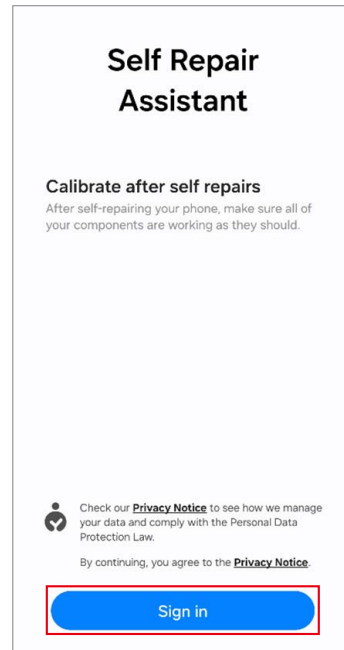


2 Launch the **Self Repair Assistant** app.

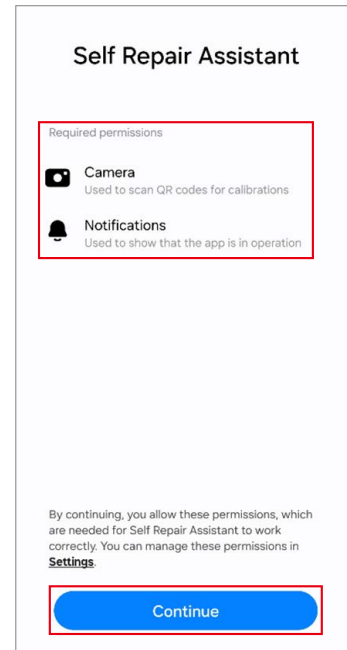


3 Read Privacy Notice and tap **Continue**.

- If you are not signed in to your Samsung account, a button will appear to sign in.
- If you select the link to read the full Privacy Notice, you will be directed to our site.



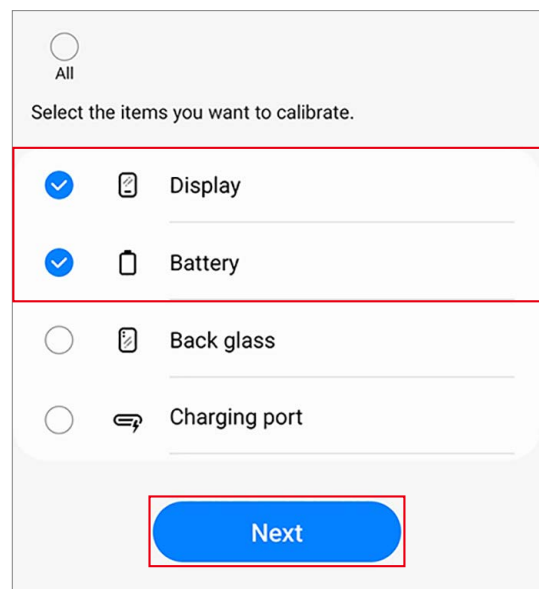
4 Check permissions and tap **Continue**.




5 Select the part that you have replaced and tap **Next**.



- The required calibrations will be conducted automatically.
- If the device does not have certain components or sensors associated with the part that has been replaced, relative calibration will be skipped automatically.



6 Read the on-screen instructions and tap **Start**.

 Refer to [Optical Fingerprint Sensor Calibration](#), [Resetting the Battery Cycle Count](#), [Range Sensor Calibration](#), [Touch Screen Panel Calibration](#), [Speaker Calibration](#), [Under-display Camera Calibration \(Fold Models Only\)](#), and [Digital Hall Sensor Calibration \(Fold and Flip Models Only\)](#) for more information.

Optical fingerprint sensor calibration

This calibration is needed after replacing the phone's screen.

You'll need to place different colored rubber squares on the screen when prompted.

Start

Skip

Camera range sensor calibration

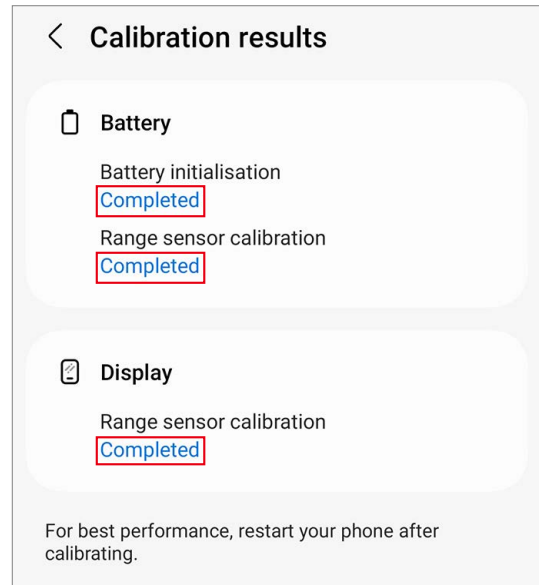
This calibration needs to be done in the dark. Move to a dark room before starting this calibration.

Start

Skip

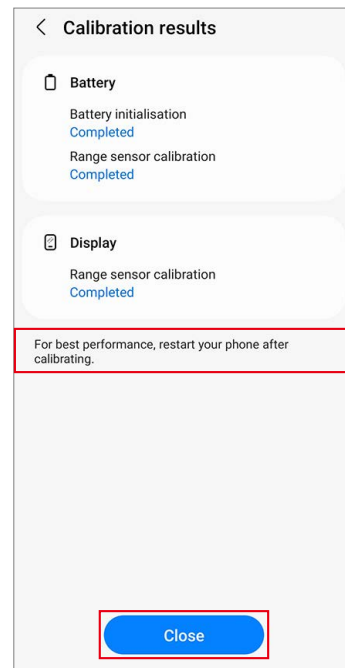
7 Check the results of each calibration item.

- **Completed:** Calibration was done normally.
- **Failed:** Calibration failed.
- **Skipped:** Calibration was skipped.



8 On the calibration results page, tap **Close** to close the app.

Restart your device to finish calibrating.



Optical Fingerprint Sensor Calibration

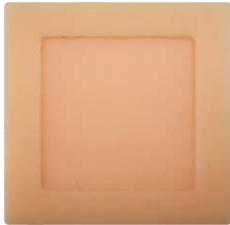
Whenever the screen is replaced, the optical fingerprint sensor must be calibrated to guarantee optimised fingerprint sensor performance for devices that have it.

Optical fingerprint sensor calibration is available through the **Self Repair Assistant** app.



- This feature may not be available depending on the model. The availability of this feature can be automatically checked in the Self Repair Assistant app, so please follow the guidance of the Self Repair Assistant app.
- Three rubbers (the white calibration box, the black calibration box, and the 3D fingerprint dummy rubber) are required to start this calibration.

White calibration box



Black calibration box



3D fingerprint dummy rubber

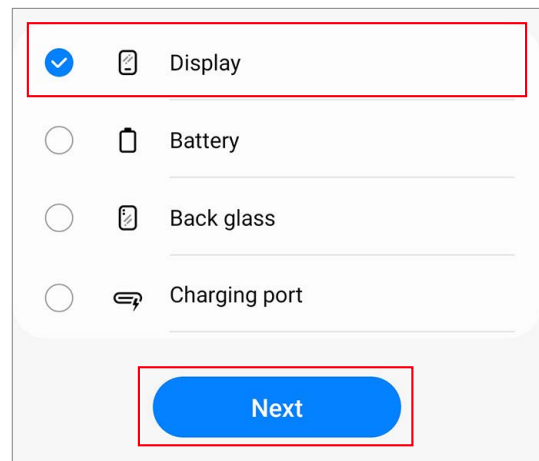


1 Launch the **Self Repair Assistant** app.

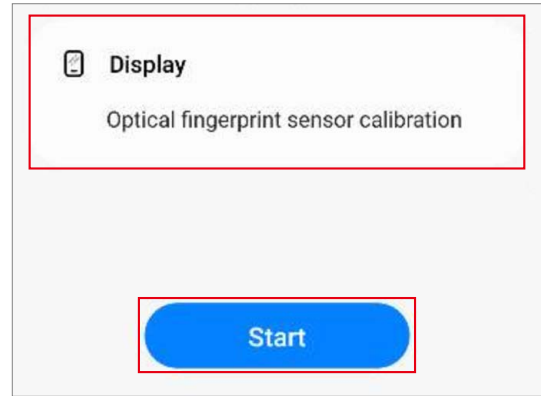
2 Tap **Display** → **Next**.




- The required calibration or test items will be processed automatically.
- If the device does not have certain components or sensors associated with the part that has been replaced, relative calibration will be skipped automatically.

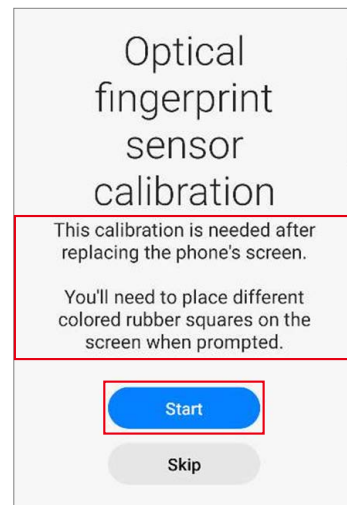


- 3 Check the part and calibration and then tap **Start**.




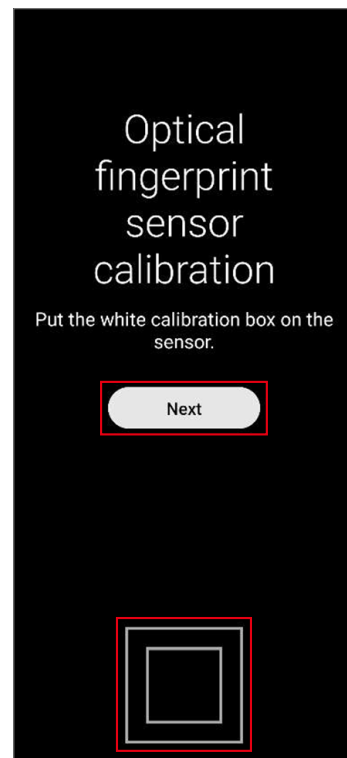
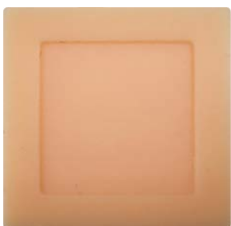
- 4 Read the on-screen instructions and tap **Start**.

-  The white calibration box must be prepared before you start.



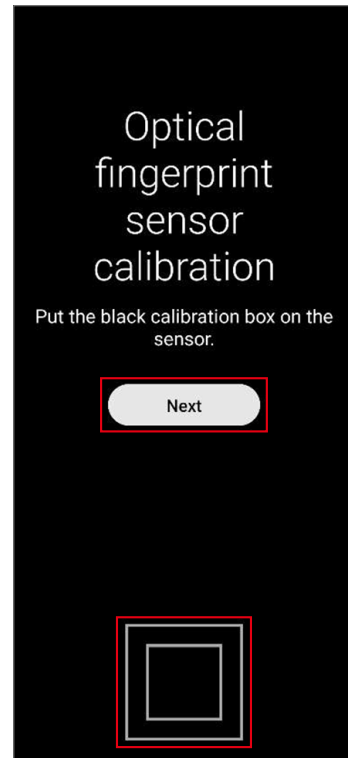
- 5 Put the white calibration box on the sensor area (below the square side) and push the rubber by applying force with your finger. Tap **Next** and keep pushing the rubber with your finger until you see the success message.

-  The bottom side of the rubber that is shaped like a square should be located on the square guide line.



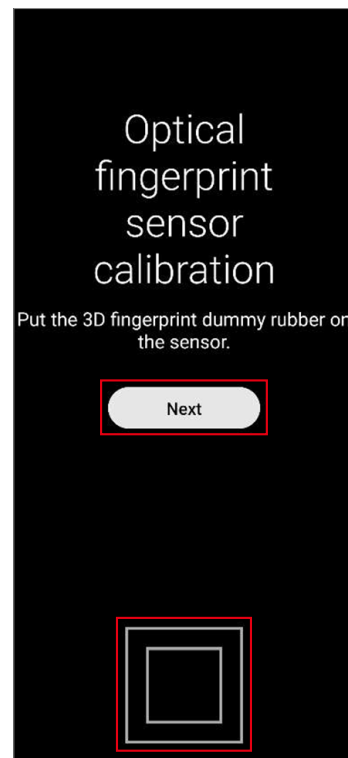
6 Put the black calibration box on the sensor area (below the square side) and push the rubber by applying force with your finger. Tap **Next** and keep pushing the rubber with your finger until you see the success message.

- ✍ • The black calibration box must be prepared before you start.
- The bottom side of the rubber that is shaped like a square should be located on the square guide line.




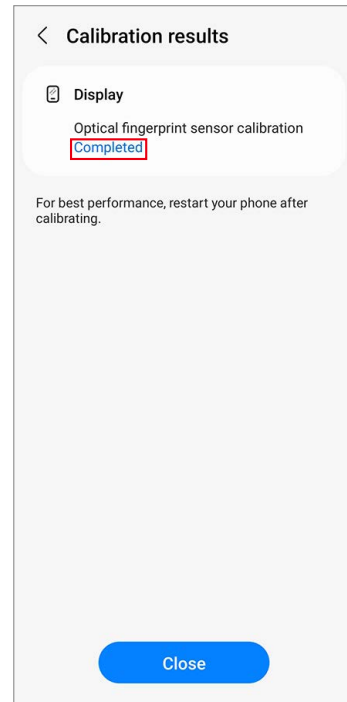
7 Put the 3D fingerprint dummy rubber on the sensor area (below the square side) and push the rubber by applying force with your finger. Tap **Next** and keep pushing the rubber with your finger until you see the success message.

- ✍ • The 3D fingerprint dummy rubber must be prepared before you start.
- The bottom side of the rubber that is shaped like a square should be located on the square guide line. (Do not place the pattern horizontally on the 3D fingerprint dummy rubber.)



8 Check the result of the calibration.

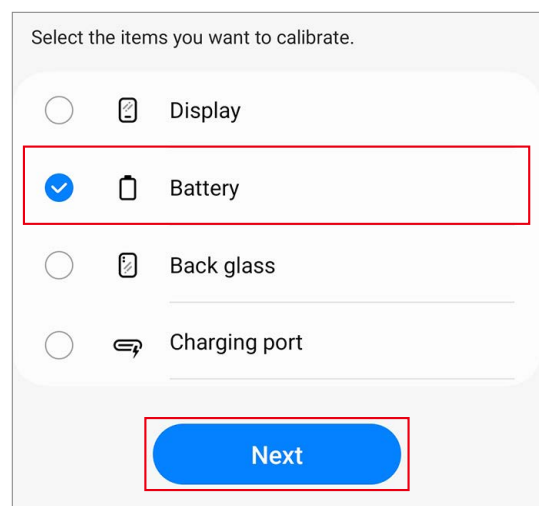
 **Completed** appears only when the calibration is successfully completed. If **Completed** does not appear, try calibrating again.



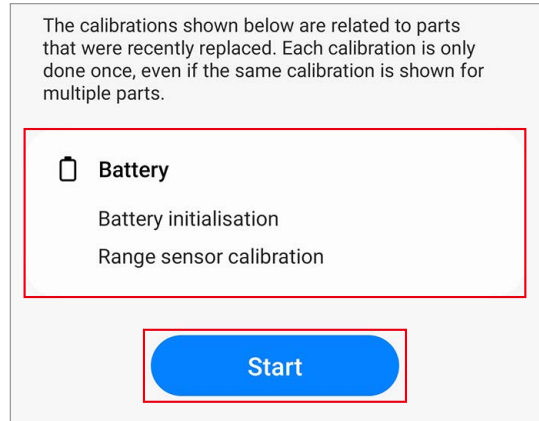
Resetting the Battery Cycle Count

The battery cycle count should be reset whenever your device's battery is replaced.

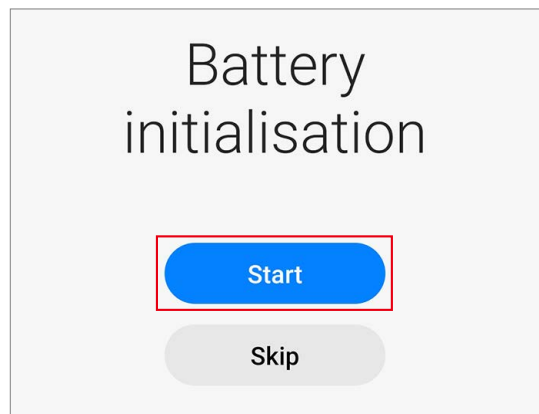
- 1 Launch the **Self Repair Assistant** app.
- 2 Select the part that you have replaced. Tap **Battery** → **Next**.



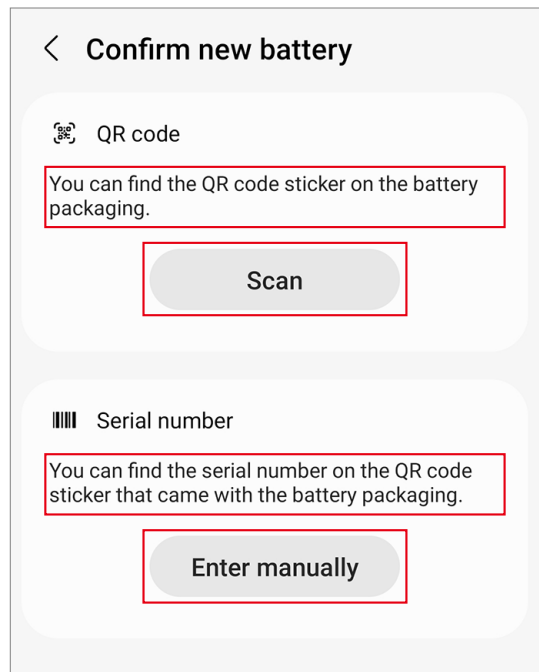
3 Check part and calibration and tap **Start**.



4 Tap **Start**.




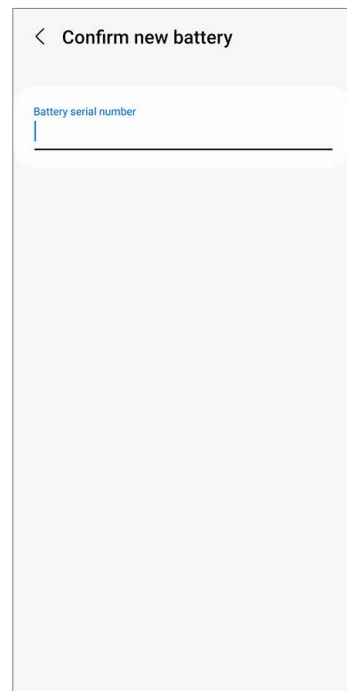
5 Read the on-screen instructions and tap **Scan** to scan the QR code, or tap **Enter manually** to enter the serial number manually.



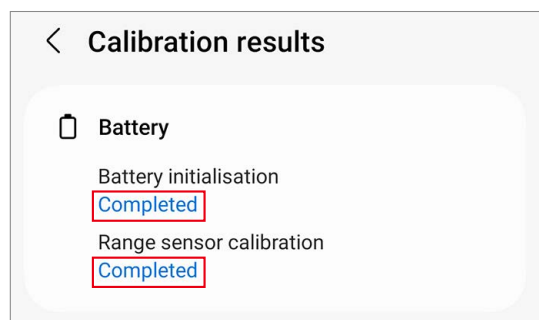
6 Scan the QR code or enter the serial number that appears on the battery package.

The reset will begin.

 This image is an example of the QR code. Make sure to scan the QR code on the battery package.




7 Check the calibration results.



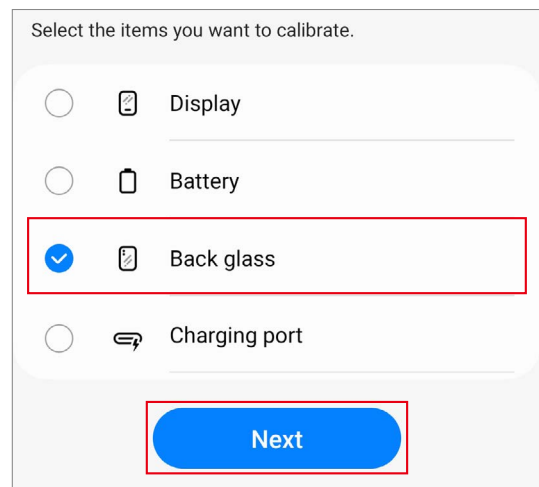
Range Sensor Calibration

When replacing screens, batteries, back glasses, or charging ports, range sensor calibration is required to ensure the range sensors of devices equipped with them are optimised.

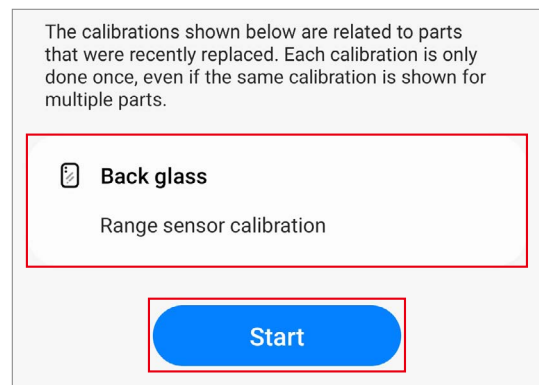
Range sensor calibration is available through the **Self Repair Assistant** app.

 Some content may differ from your device depending on the region, service provider, model specifications, or device's software.

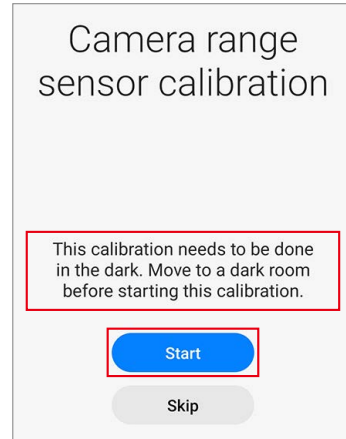
- 1 Launch the **Self Repair Assistant** app.
- 2 Select the part that you have replaced and tap **Next**.



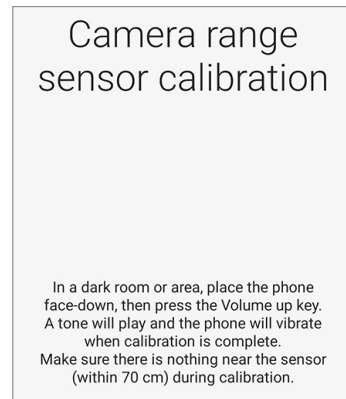
- 3 Check part and calibration and tap **Start**.



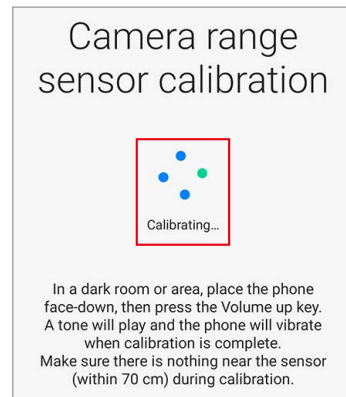
- 4 Read the on-screen instructions and tap **Start**.



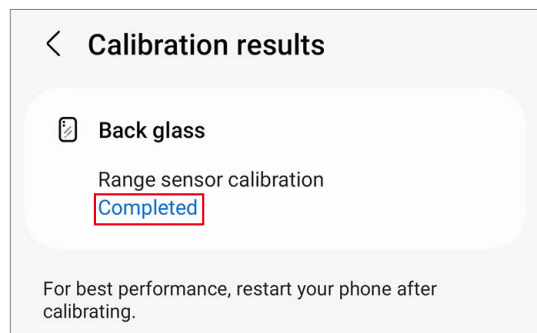
- 5 In a dark room or area, place the phone face-down, then press the Volume button.



- 6 The calibration will perform automatically. A tone will play when calibration is complete.



- 7 Check the calibration result.



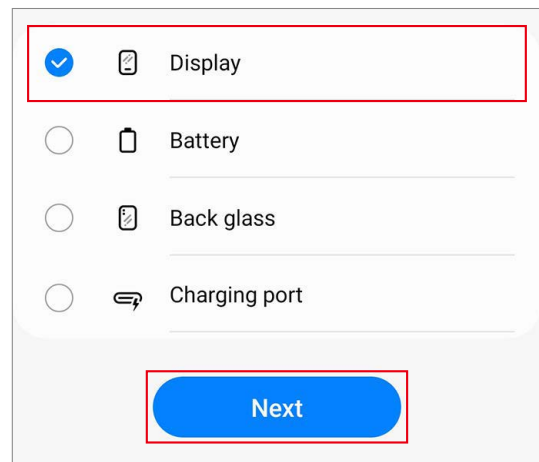
Touch Screen Panel Calibration

When replacing screens, touch screen panel calibration is required to ensure accurate touch input.

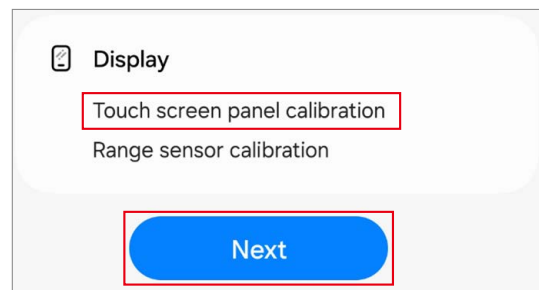
Touch screen panel calibration is available through the **Self Repair Assistant** app.

 In the Fold models, touch screen panel calibration is performed for both the main and cover screens.

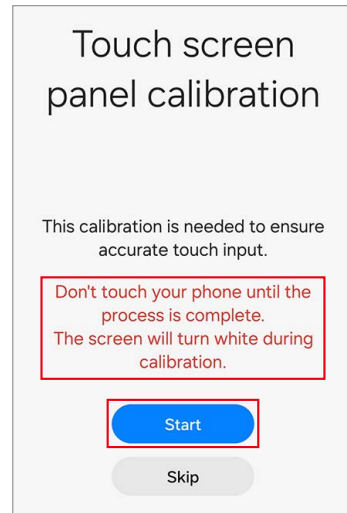
- 1 Launch the **Self Repair Assistant** app.
- 2 Select the part that you have replaced and tap **Next**.



- 3 Check part and calibration and tap **Next**.



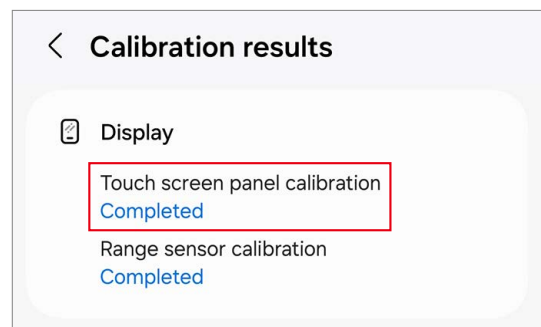
- 4 Read the on-screen instructions and tap **Start**.



- 5 The calibration will perform automatically and the screen will turn white during calibration.



- 6 Check the calibration result.

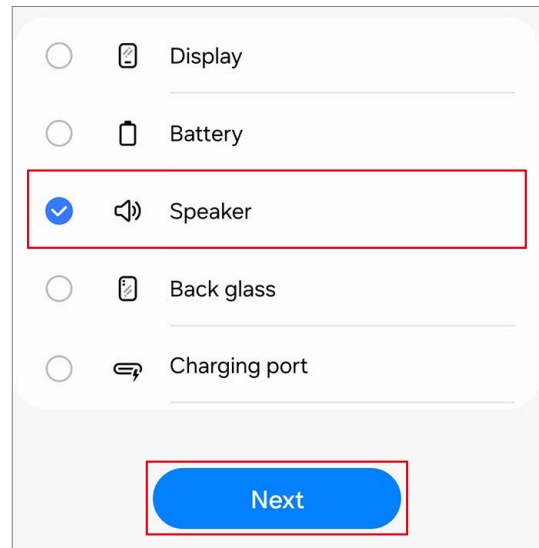


Speaker Calibration

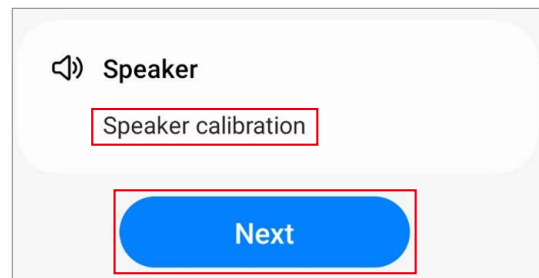
When replacing speakers, the speaker must be calibrated to guarantee optimised speaker performance for devices that have it.

Speaker calibration is available through the **Self Repair Assistant** app.

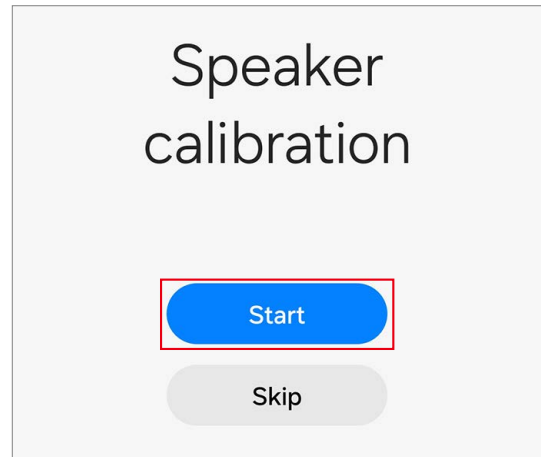
- 1 Launch the **Self Repair Assistant** app.
- 2 Select the part that you have replaced and tap **Next**.



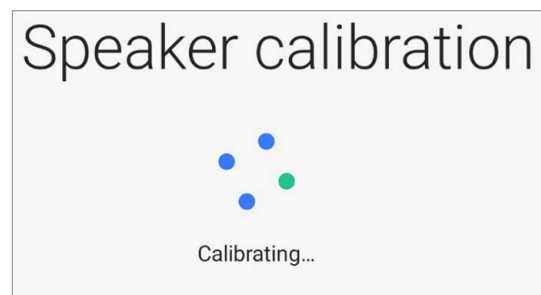
- 3 Check part and calibration and tap **Next**.



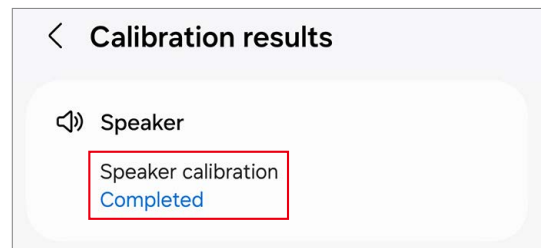
4 Tap **Start**.



5 The calibration will perform automatically.




6 Check the calibration result.



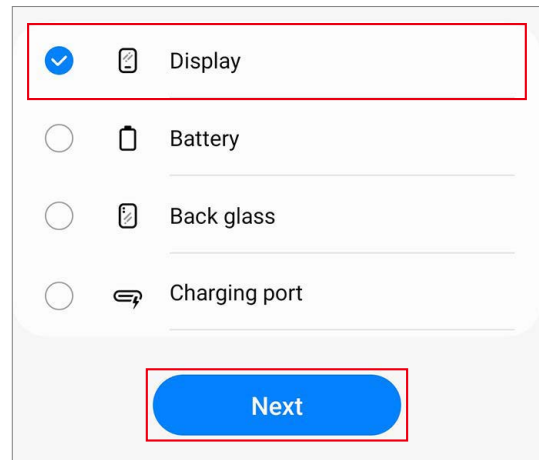
Under-display Camera Calibration (Fold Models Only)

Whenever the screen is replaced, the under-display camera must be calibrated to guarantee optimised under-display camera performance for devices that have it.

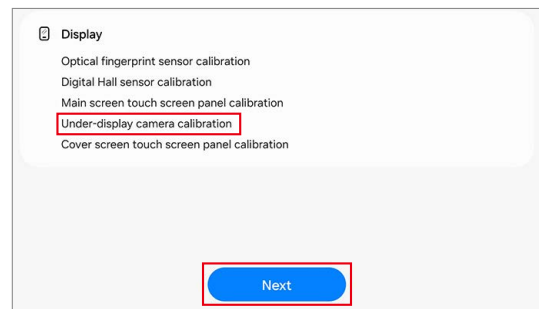
Under-display camera calibration is available through the **Self Repair Assistant** app.

 This feature may not be available depending on the model. The availability of this feature can be automatically checked in the Self Repair Assistant app, so please follow the guidance of the Self Repair Assistant app.

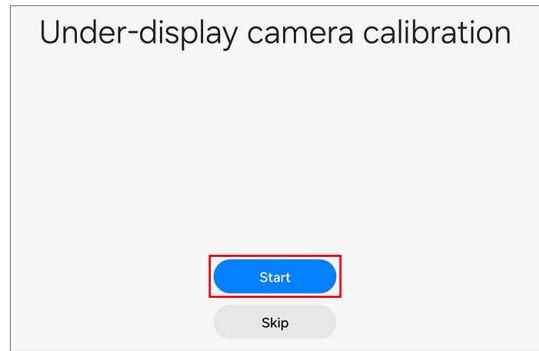
- 1 Launch the **Self Repair Assistant** app.
- 2 Select the part that you have replaced and tap **Next**.



- 3 Check part and calibration and tap **Next**.

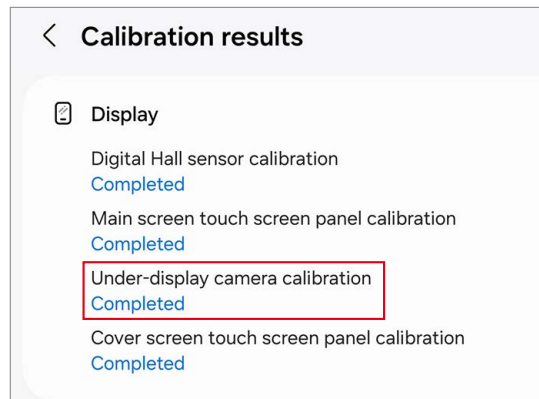


4 Tap **Start**.



5 The calibration will perform automatically.

6 Check the calibration result.



Digital Hall Sensor Calibration (Fold and Flip Models Only)

Whenever the screen is replaced, the digital hall sensor must be calibrated to guarantee optimised digital hall sensor performance for devices that have it.

Digital hall sensor calibration is available through the **Self Repair Assistant** app.



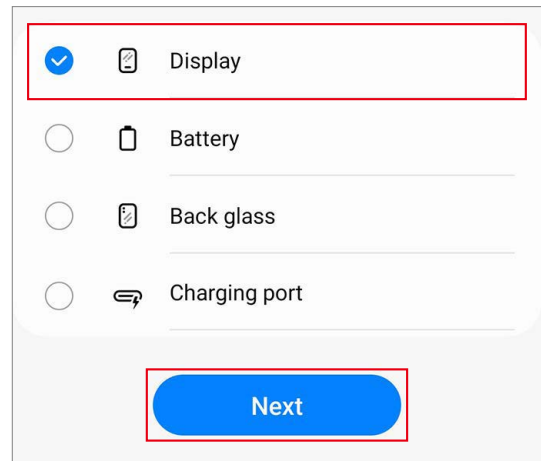
- This feature may not be available depending on the model. The availability of this feature can be automatically checked in the Self Repair Assistant app, so please follow the guidance of the Self Repair Assistant app.
- **For Fold models:** If the main screen does not turn on after being replaced (the main screen is off and the cover screen is on when the device is unfolded), follow the steps below to perform digital hall sensor calibration. The boot screen (the screen where the Samsung and carrier logos appear) will appear normally and then turn off, so it is not a hardware failure.

- 1) Fold the device and launch the **Self Repair Assistant** app on the cover screen.
- 2) Move to the digital hall sensor calibration screen, unfold the device, and then press the Volume Up button or the Volume Down button.
- 3) You will hear a vibration, and the calibration will be performed automatically.

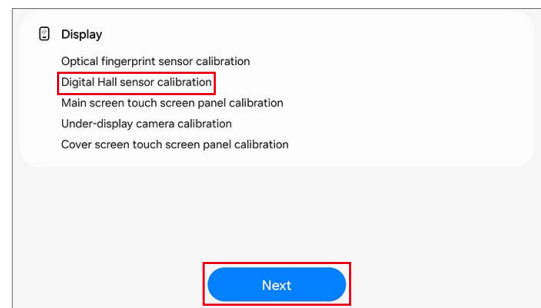
When calibration is complete, the main screen will turn on normally.

- **For Flip models:** If the main screen does not turn on after being replaced (the main screen is off and the cover screen is on when the device is unfolded), follow the steps below to force the main screen to turn on and perform digital hall sensor calibration. The boot screen (the screen where the Samsung and carrier logos appear) will appear normally and then turn off, so it is not a hardware failure.
- 1) Connect the USB cable to the device, and connect the other end of the USB cable to the USB power adapter or your computer.
 - 2) While pressing and holding the Side button, press the Volume Up button once and the Volume Down button twice.
 - 3) When the main screen turns on, perform digital hall sensor calibration.

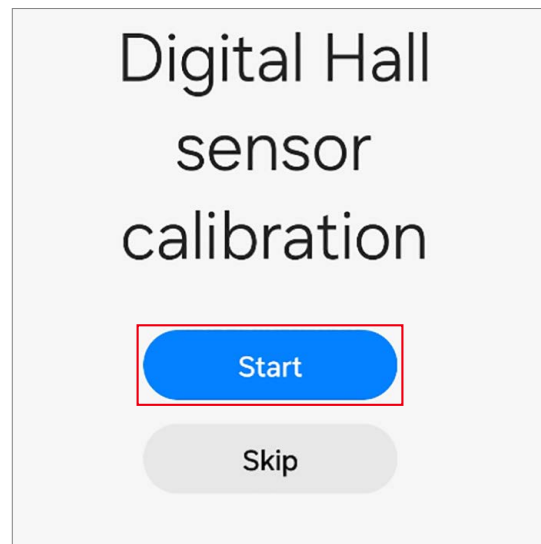
- 1 Launch the **Self Repair Assistant** app.
- 2 Select the part that you have replaced and tap **Next**.



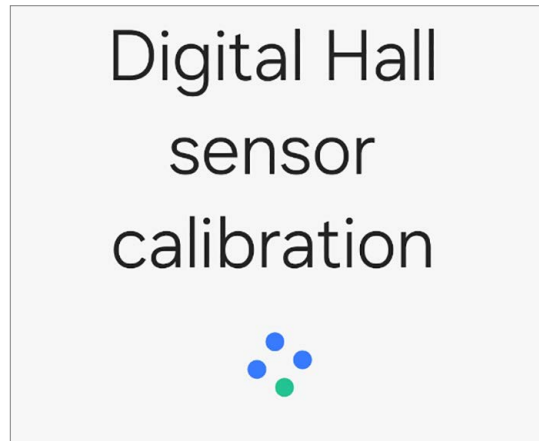
- 3 Check part and calibration and tap **Next**.



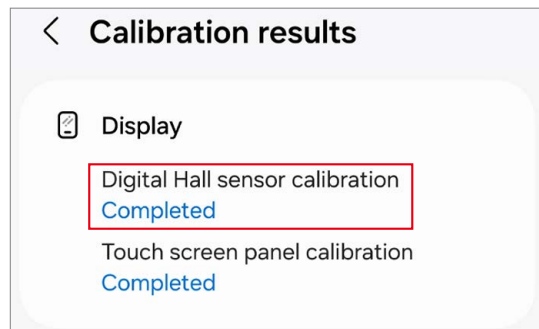
- 4 Tap **Start**.




5 The calibration will perform automatically.



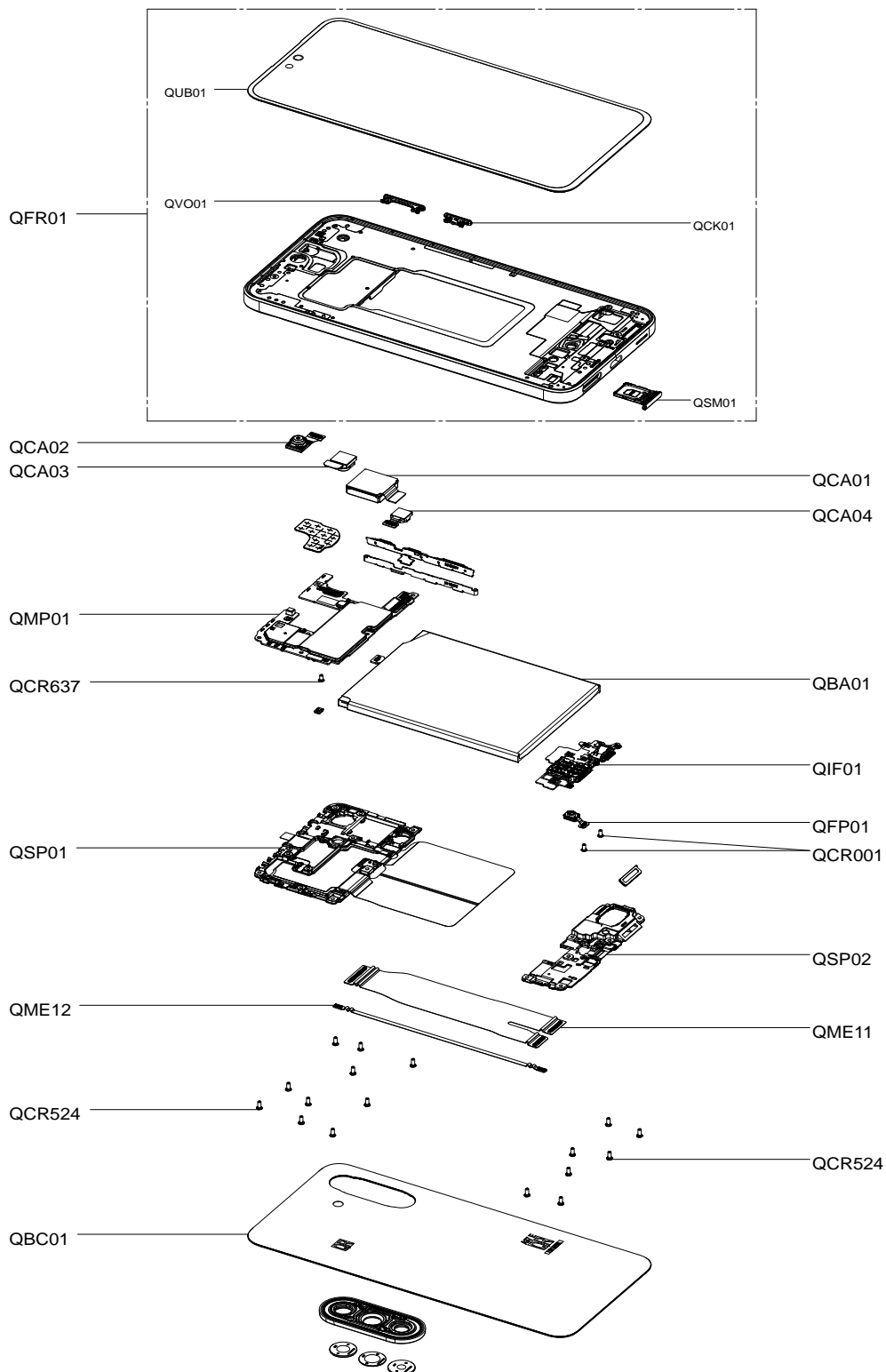
6 Check the calibration result.



Exploded View and Parts List

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

Exploded View




Parts List





Number	Name
QCR524	Screw 3524
QCR637	Screw 3637
QCA03	Rear Camera (Ultra Wide)
QCA04	Rear Camera (Macro)
QCA02	Front Camera
QCA01	Rear Camera (Wide)
QSP01	Top Speaker
QCR001	Screw 3554
QFP01	Fingerprint Recognition Sensor
QIF01	Charging Port
QSP02	Bottom Speaker
QV001	Volume Button
QCK01	Side Button
QSM01	SIM Card Tray
QMP01	Main Board (PBA)
QFR01	Screen Module
QBA01	Battery
QME11	Main Flex Cable 2 (Charging Port to Main Board)
QME12	Main Flex Cable 1 (Charging Port to Main Board)
QBC01	Back Cover
QUB01	Screen








Disassembly and Assembly



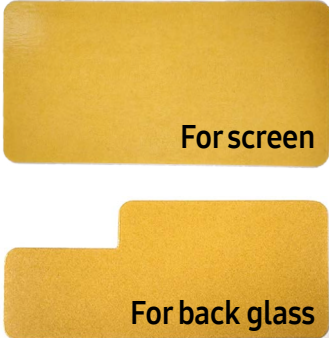
Tools for Disassembly and Assembly







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





-  Availability of rental services for toolkits with a complete set of tools for self repair service may vary depending on the country and is currently available only in limited countries.





Tool & Part Code	Image	Description
Safety Goggles		Prevents accidents during repair (protective equipment)
Safety Gloves (ESD safe, cut-resistant)		Prevents accidents during repair (protective equipment)
Safety Mask		Prevents accidents during repair (protective equipment)
Anti-static Wrist Strap		Prevents electrostatic damage (recommended)

Tool & Part Code	Image	Description
ESD Safe Mat	 A roll of grey anti-static mat with a black border and a yellow grounding wire with a black plug.	Prevents electrostatic damage (recommended)
Ejection Pin	 A blue plastic pin with a looped handle and a thin metal tip.	Pin for ejecting the SIM card tray
Cross-head Screwdriver	 A black-handled screwdriver with a silver metal shaft and a cross-shaped tip.	Tool for screwing in cross-head screws
Opening Pick	 A black, triangular-shaped plastic pick.	Tool for disassembling the back cover, screen, and other parts
Opening Tool	 A long, thin, black plastic tool.	Tool for disassembling the connector and other parts
Suction Cup	 Two suction cups: one red with a handle and one clear with a metal ring handle.	Tool for disassembling the back cover, screen, and other parts  For separable handle suction cups, be careful not to injure yourself as the handle can be parted during use.

Tool & Part Code	Image	Description
ESD Safe Tweezers and Round Tip Metal Tweezers		<p>Tool for handling connectors, cables, and other parts</p> <ul style="list-style-type: none"> ✍ • Because it is possible to damage parts or components when using sharp tweezers, use tweezers made with plastic or rubber material. • When removing a Vibrator Motor, it is required to use the round tip metal tweezers.
Heating Bag		<p>Tool for disassembling the back cover, screen, and other parts</p>
Acrylic Protective Cover for Broken Glass		<p>Prevents injuries and scattering caused by broken glass</p>

Tool & Part Code	Image	Description
<p>Calibration Rubber for Optical Fingerprint Sensor</p>		<p>Tool to calibrate the optical fingerprint sensor after replacing the screen</p> <p> This tool is available to use by the rental of tool kit that contains a complete set of the tools for self repair service.</p>
<p>Press Fixture</p>		<p>Tool for pressing the back cover, screen, or battery</p> <p> This tool is available to use by the rental of tool kit that contains a complete set of the tools for self repair service.</p>
<p>Bottom Press Tray</p>		<p>Tool to place the device when pressing the back cover, screen, or battery using the press fixture</p> <p> • This tool is available to use by the rental of tool kit that contains a complete set of the tools for self repair service.</p> <p>• You can choose the one side of the bottom press tray depending on the back cover, screen, or battery.</p>

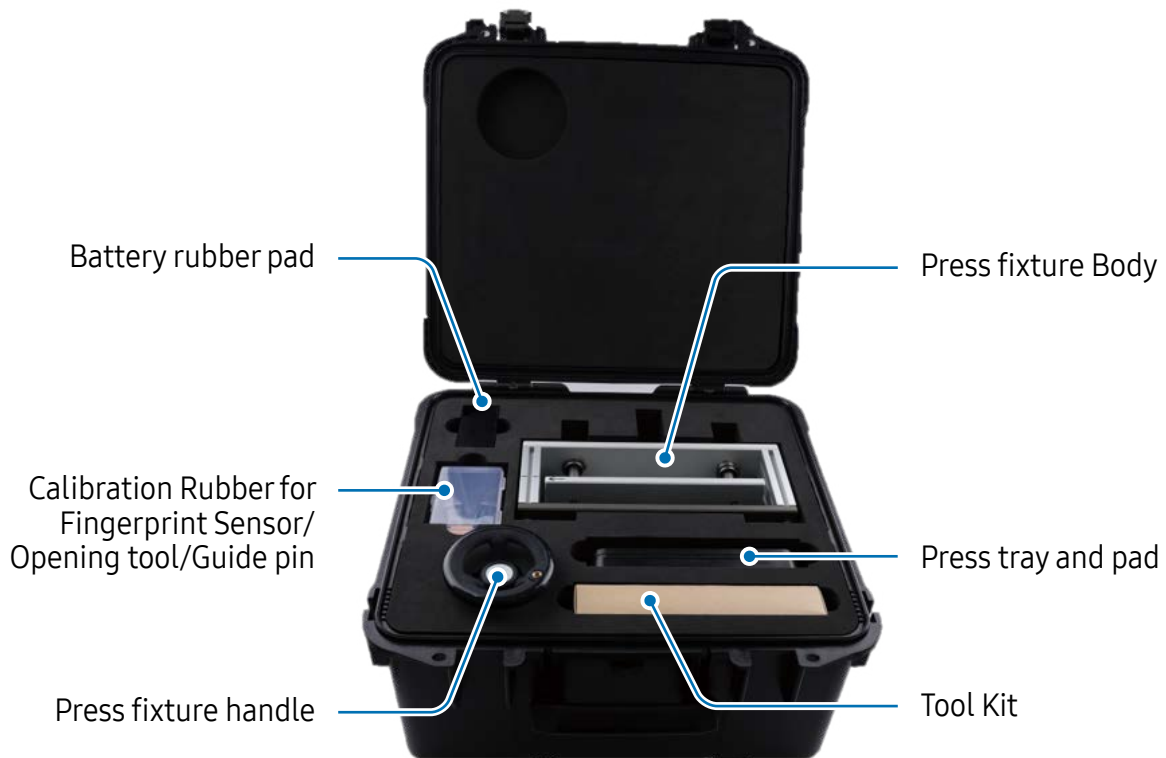
Tool & Part Code	Image	Description
Top Press Tray		<p>Tool to cover the bottom press tray when pressing the back cover or screen using the press fixture</p> <p> This tool is available to use by the rental of tool kit that contains a complete set of the tools for self repair service.</p>
Top Rubber Pad		<p>Tool to place into the top press tray when pressing the back cover or screen using the press fixture</p> <p> • This tool is available to use by the rental of tool kit that contains a complete set of the tools for self repair service.</p> <p>• The rubber pads for the screen and back cover are different from each other.</p>

Tool & Part Code	Image	Description
Battery Rubber Pad		<p data-bbox="919 277 1378 412">Tool to cover the battery when pressing the battery using the press fixture</p> <p data-bbox="919 430 1465 609"> This tool is available to use by the rental of tool kit that contains a complete set of the tools for self repair service.</p>
Press Stamp		<p data-bbox="919 716 1401 752">Tool for pressing the back cover</p> <p data-bbox="919 770 1465 1003"> Availability of the bundled press stamp may vary depending on the country and is currently available only in limited countries.</p>

Composition of Rental Toolkit






A detailed list of items in the toolkit is included below.







- The rental toolkit contains a complete set of the tools for self repair service and its composition may vary depending on the device.
- Availability of rental service may vary depending on the country and are currently available only in limited countries.
- The actual rented tool kit packaging may have different packaging than shown.



Fasteners (Adhesives and Materials) for Assembly

The fasteners composition may vary depending on the repair parts, country, region, or carrier.

Item	Quantity	Image	Description
Back Cover Adhesive Tape	1		Double sided adhesive tape for attaching the back cover to metal frame
Screen Connector Adhesive Tape	1		Double sided adhesive tape for attaching the screen module connector
Screw 3637	1		Screw for the main board
Screw 3524	17		Screws for the rear
Screw 3554	2		Screws for the charging port

Item	Quantity	Image	Description
Screen Side Adhesive Tape	1		<p>Double sided adhesive tape for attaching the sides of the screen to metal frame</p> <p> This tape is only available when the screen itself is repaired.</p>
Screen Left Adhesive tape	1		<p>Double sided adhesive tape for attaching the left of the screen to metal frame</p> <p> This tape is only available when the screen itself is repaired.</p>
Screen Right Adhesive tape	1		<p>Double sided adhesive tape for attaching the right of the screen to metal frame</p> <p> This tape is only available when the screen itself is repaired.</p>

Disassembly and Reassembly for replacement



- The product's composition may vary depending on the country, region, or carrier.
- Repairable parts may vary depending on the country or region.

Before disassembling:

- Unplug and turn off device before disassembling.
- Wear an anti-static wrist strap and connect it to the grounded ESD safe mat.

Before reassembling:


- Remove the adhesive tape residues perfectly.
- Prepare all existing screws of this device and adhesive tapes.
- Wear an anti-static wrist strap and connect it to the grounded ESD safe mat.
- Leaving screws inside the device may damage internal components, such as the battery. When assembling, be extra careful not to leave any unassembled screws inside the device.

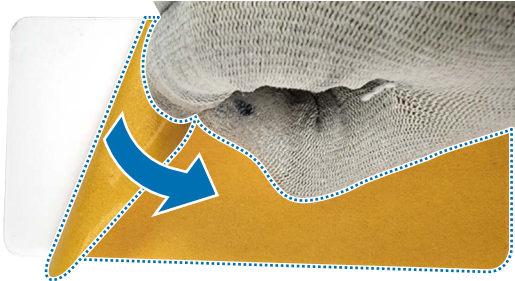
For all cases of broken glass:

- 1 Wear safety goggles and cut-resistant gloves.
- 2 Remove the release film of the acrylic protective cover.
- 3 To prevent injuries and scattering caused by broken glass, attach an acrylic protective cover.



If your device's glass breaks, be careful not to injure your hands or other body parts on debris.

- 4 Press the acrylic protective cover with strong force so that it is strongly attached to the glass.
-  Wait more than 5 minutes until the bond between the acrylic protective cover and the glass is strengthened.



- 5 Follow the disassembly steps in this guide.

SIM Card Tray

Disassembly

Prepare the device to repair by yourself. Insert the ejection pin into the hole of the SIM card tray to loosen the tray and pull out the tray gently from the tray slot.



Reassembly

- ⚠ Leaving screws inside the device may damage internal components, such as the battery. When assembling, be extra careful not to leave any unassembled screws inside the device.

Insert the SIM card tray back into the slot. Ensure that there are no abnormalities.



Back Cover

Disassembly


⚠ When removing the back cover, ensure that the device is fixed on a flat surface.

1 Heat the microwaveable heating bag and apply it on the back cover for 3 minutes to soften the adhesive.


- ⚠
 - It is possible for the device or battery to be damaged by heat.
 - Do not heat the device in a microwave. Doing so could cause an explosion.
 - If your device's glass breaks, the debris can cause injury to your hands or other body parts. For your safety, attach an acrylic protective cover before disassembling the device.
- ⚠
 - Follow the heating bag's instructions for heating. The recommended time for heating the bag is 50 seconds in a 1000 W microwave and 70 seconds in a 700 W microwave. (Correct temperature for use: 55-65 °C.)
 - Be careful not to damage the device through excessive heat. (It is recommended to disassemble the device in an area with a temperature gauge.)




2 Place the suction cup in the centre of the left edge of the back cover, and lift it upward carefully.

 For separable handle suction cups, be careful not to injure yourself as the handle can be parted during use.



-  As the back cover can be damaged by excessive force, be careful not to damage the back cover.
- Be careful that the suction cup does not adhere to the area where the tape or sticker is attached.

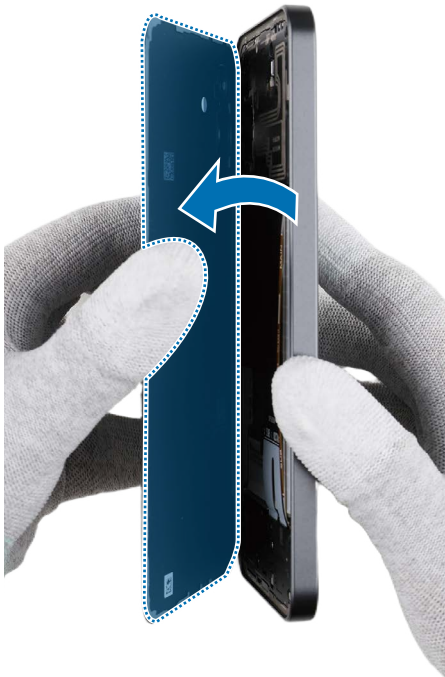
 If you have trouble creating a gap, heat the microwaveable heating bag additionally, and apply it on the back cover to further soften the adhesive. When reheating, it should be heated no longer than 30 seconds.



3 While pulling up the suction cup with strong, steady force to create the gap between the back cover and the metal frame place the opening pick in the gap between the back cover and the metal frame and slide the opening pick back and forth along the edge to slice through the adhesive. Repeat this on all sides of the back cover and slice through the adhesive. Lift up the back cover slowly and remove it gently from the device.

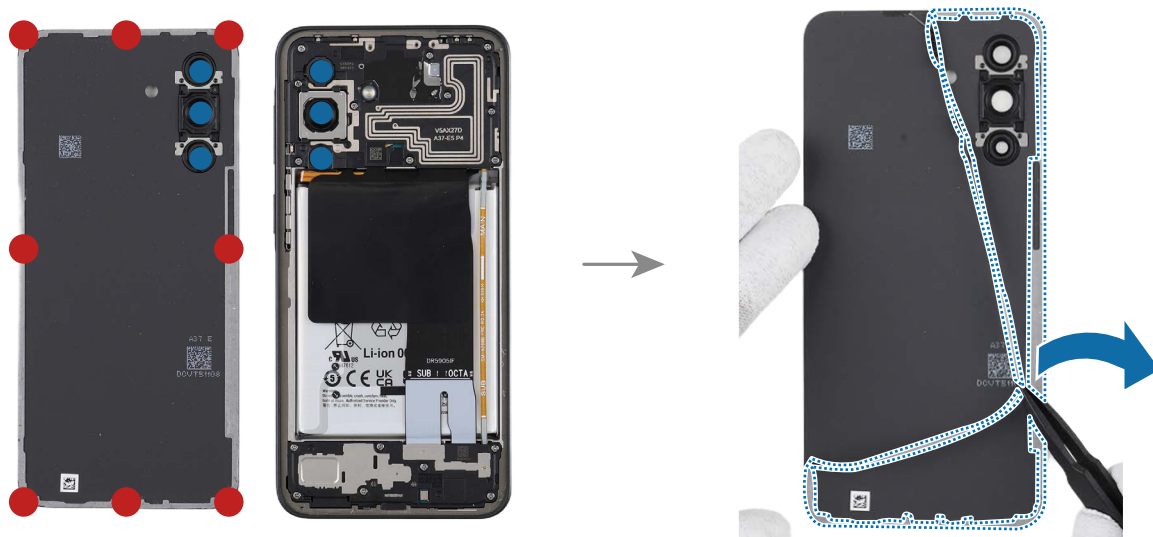
- ⚠ • As the back cover can be damaged by excessive force, be careful not to damage the back cover.
- As the internal circuitry can be damaged, do not insert the opening pick more than 3 mm.
- Be careful not to put your fingertips or any foreign objects on the rear cameras or back cover lens (●).
- ✍ • Make sure to leave the opening pick inserted in the edges to prevent the adhesive from resealing. It is recommended that a larger area of the opening pick be inserted.
- If you have trouble creating a gap, heat the microwaveable heating bag additionally, and apply it on the back cover to further soften the adhesive. When reheating, it should be heated no longer than 30 seconds





Reassembly

- ⚠ Leaving screws inside the device may damage internal components, such as the battery. When assembling, be extra careful not to leave any unassembled screws inside the device.
 - ⚠ Before attaching the back cover, make absolutely sure that there are no screws, miscellaneous parts, or other foreign objects on the inside of the device (among the battery, PBA, etc.).
- 1 Remove all adhesive tapes (●) on the separated back cover if you use the existing back cover as it is.
 - ⚠ • Be careful not to put your fingertips or any foreign objects on the rear camera or back cover lens (●).
 - Make sure to remove any residual tapes (●) attached to the inside of the back cover before reassembling the device.
- 📄 Apply additional heat with a microwaveable heating bag if you're having trouble separating the adhesive.



2 Now you can attach the new back cover adhesive tape using the bottom press tray. Remove the bottom press tray and guide pins from the rental tool kit packaging.

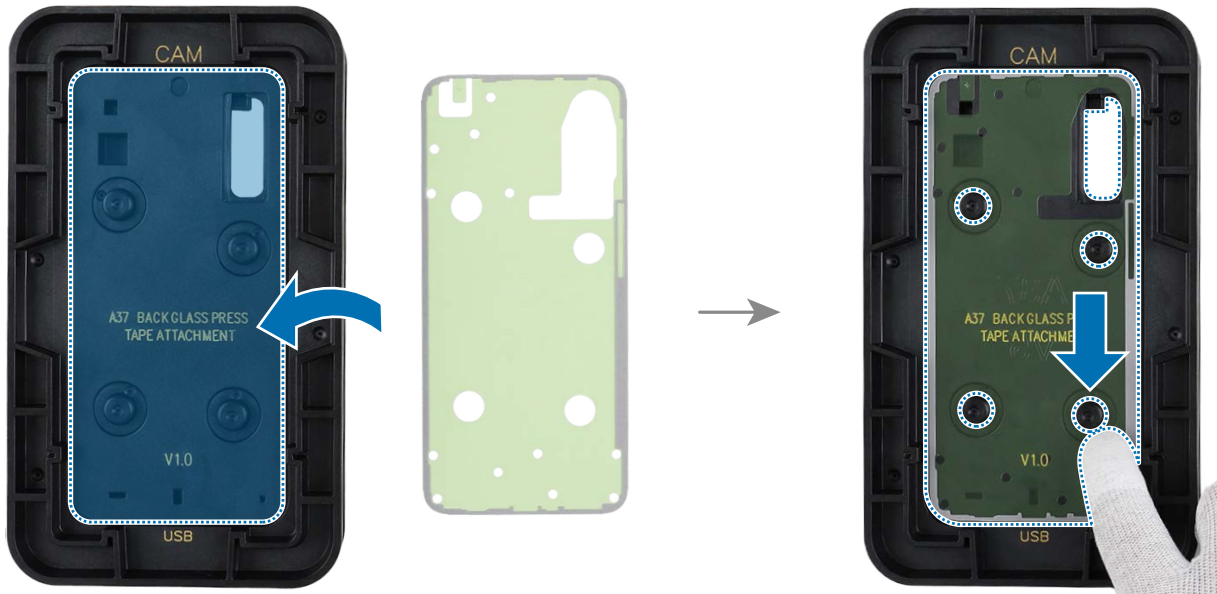
- ☞ • This tool is only available to use by the rental of tool kit that contains a complete set of the tools for self repair service.
- Availability of rental service may vary depending on the country and is currently available only in limited countries.
- A rented tool kit packaging may have different packaging than shown.



3 Place the bottom press tray with the tape attachment surface facing up and insert the guide pins into the holes of bottom tray.



- 4 Remove the transparent film of the new back cover adhesive tape. Using your fingers or tweezers, align the adhesive tape holes precisely to the guide pins of the bottom tray and place the tape on the tray. Press the areas around the holes of the tape with your fingers so that the tape can fit perfectly into the tray.



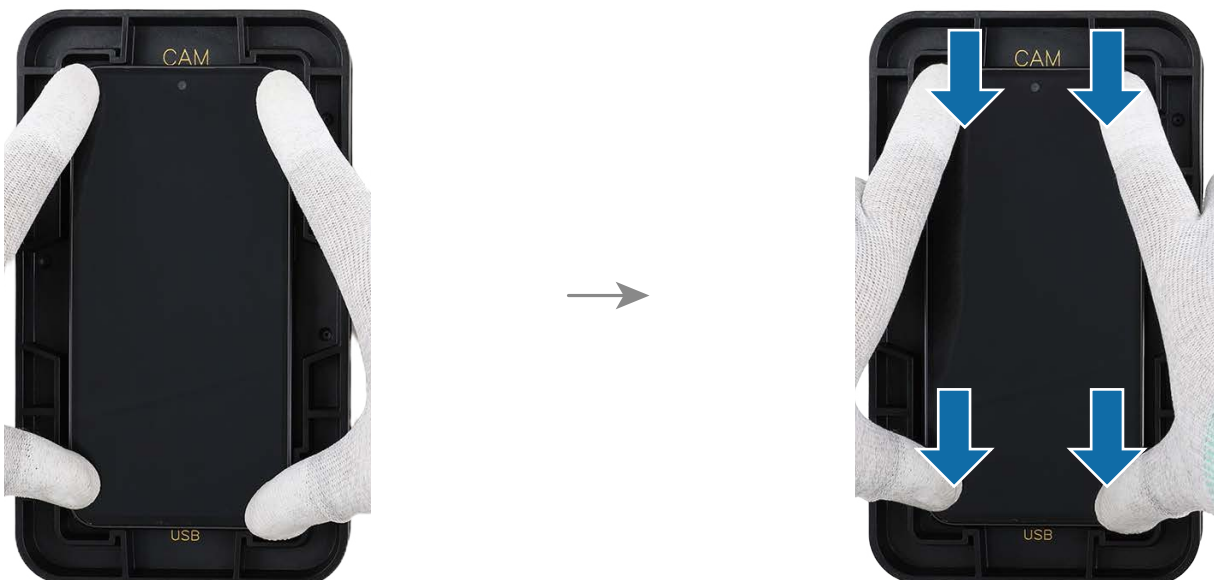
5 Carefully place the device horizontally on the tray with the screen facing up.

⚠ Be careful that the tape may be attached incorrectly if you tilt the device and place it in the tray.



6 Place your fingers on each corner of the device and press down the device throughout for about 3 seconds so that the tape can be attached well.

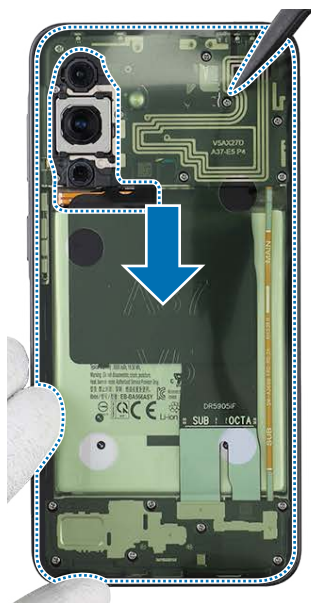
⚠ Guide pins should be pressed at the same time.



7 Remove the device carefully from the tray.

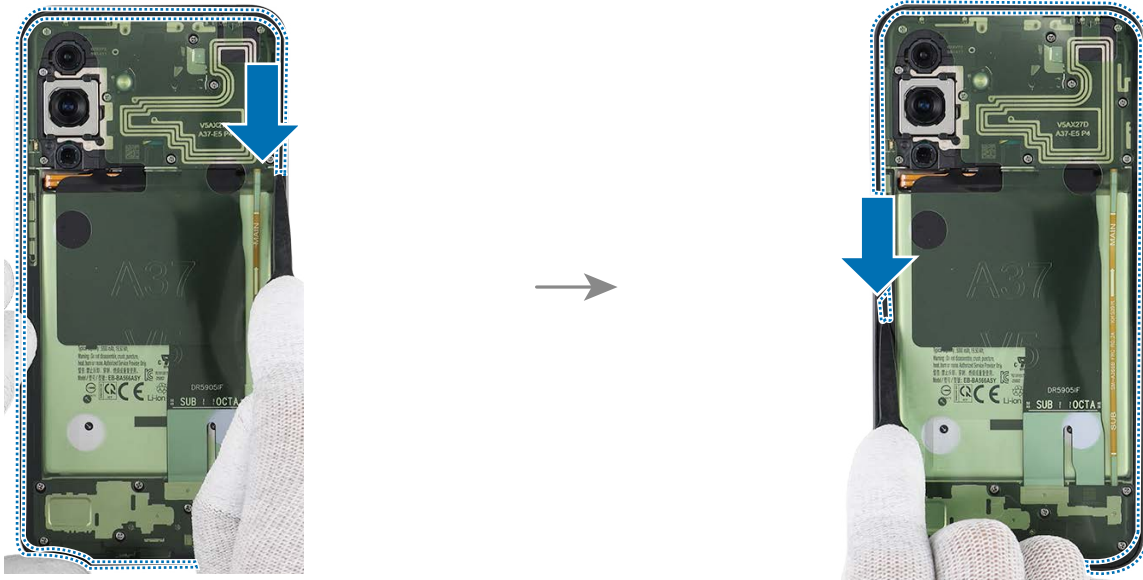


Availability of rental service may vary depending on the country and is currently available only in limited countries. If the rental tool kit packaging is not available, remove the transparent film of the new back cover adhesive tape. Using the tweezers, align the adhesive tape precisely on the metal frame and attach it.



8 Using the tweezers and your fingers, gently press around the edges to ensure a secure fit.


⚠ Make sure the tape is attached correctly.



9 Using the tweezers or your fingers, remove release film of the adhesive tape with grabbing the film handle.

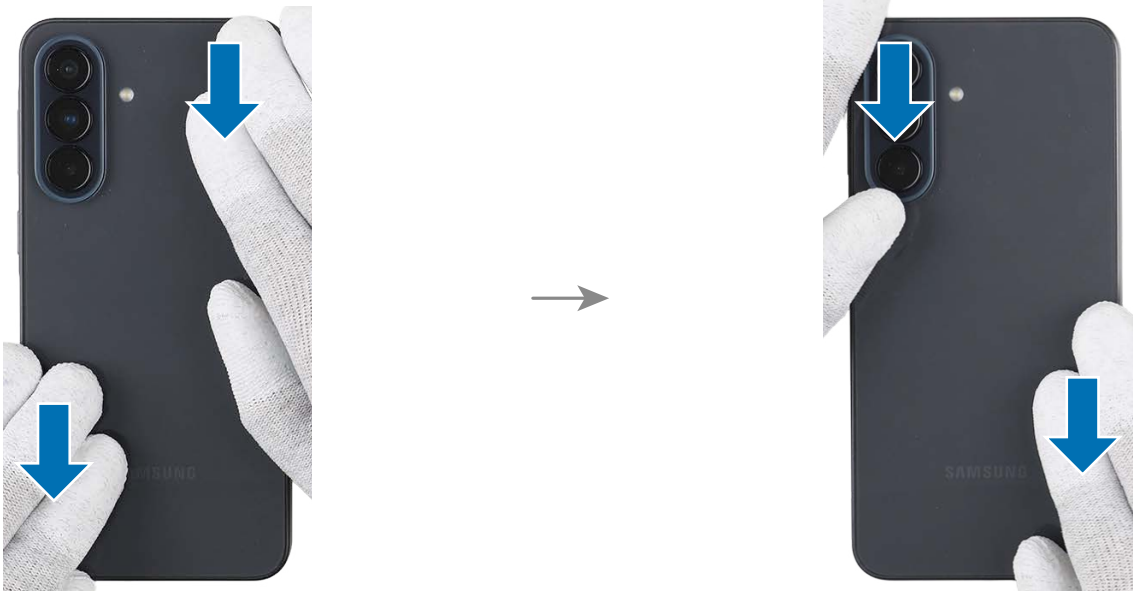


10 Attach the back cover and press down on the edges of the back cover. Check the gap between back cover and the metal frame.

 If you feel some gap, remove the back cover and attach it again. Some foreign materials can be inside the device



11 Press down the edges of the back cover evenly in order to attach the back cover perfectly. Ensure that there are no abnormalities.




12 If you can rent a toolkit for self-repair service, or if the press stamp is bundled with the repair parts you ordered, check for the steps of the [Back Cover Press](#). You can further press the fully assembled back cover using the appropriate tool.



- The toolkit is only available to use by the rental of tool kit that contains a complete set of the tools for self repair service.
- Availability of rental service and the bundle tool may vary depending on the country and are currently available only in limited countries.


Top Speaker


 The top speaker is built into the rear top.

Disassembly

 Remove the [Back Cover](#) first before you begin.

1 Check the 10 screws on the top of the rear and remove them using a cross-head screwdriver.

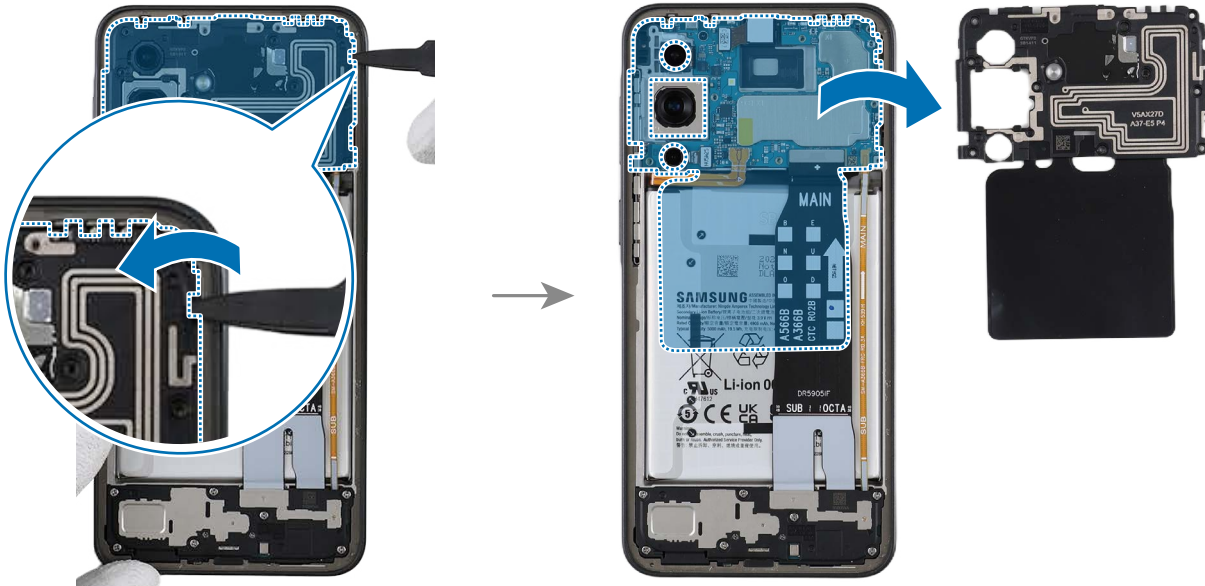
 Be careful not to damage the main board and the near components.

 Check the number of screws that have been removed, and store them carefully to make sure that no unassembled screws are left inside the device during assembly.



2 Using the tweezers, lift up on the separator groove of the rear top and remove it carefully.

⚠ Be careful not to damage the main board and the near components.

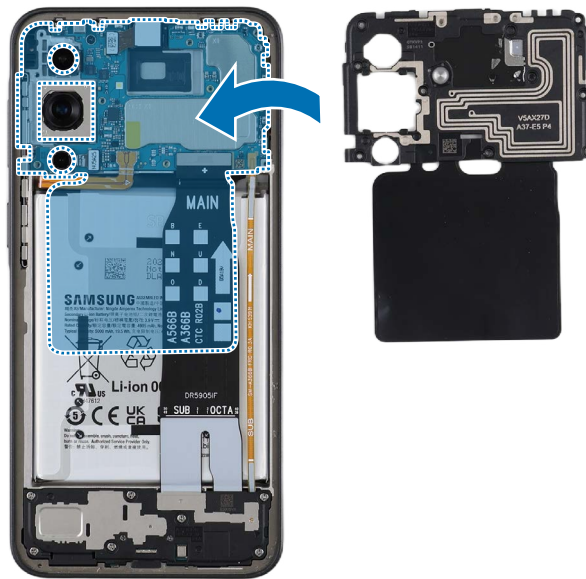


Reassembly

! Leaving screws inside the device may damage internal components, such as the battery. When assembling, be extra careful not to leave any unassembled screws inside the device.

1 Using the tweezers, position the rear top in the correct location and gently press it down to secure it in place.

! Be careful not to damage the main board and near components.

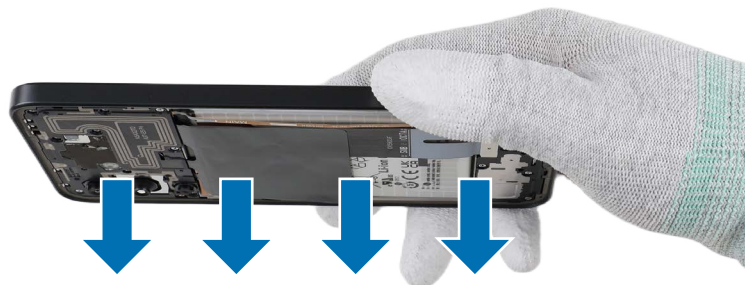


- 2 Check the screw 3524 (10 ea) at the 10 different points on the top of rear and fasten them using a cross-head screwdriver.

⚠ Be careful not to damage the main board and the near components.



- 3 Check carefully with your fingers to see if there are any screws or other foreign substances inside the device (battery, PBA, cable, etc.). Shake the device lightly with the back of the device facing down to remove any remaining screws.



📌 Reassemble the [Back Cover](#) to complete assembly.


Bottom Speaker


 The bottom speaker is built into the rear bottom.

Disassembly

 Remove the [Back Cover](#) first before you begin.

1 Check the 7 screws on the bottom of the rear and remove them using a cross-head screwdriver.

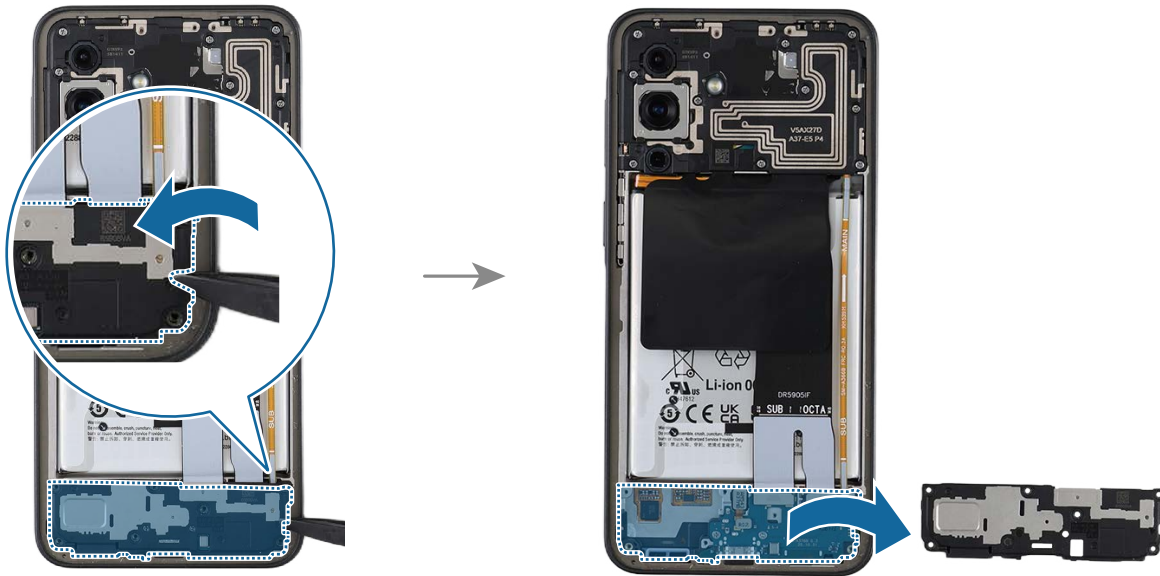
 Be careful not to damage the main board and the near components.

 Check the number of screws that have been removed, and store them carefully to make sure that no unassembled screws are left inside the device during assembly.




2 Using the tweezers, lift up on the separator groove of the rear bottom and remove it carefully.


⚠ Be careful not to damage the charging port and the near components.



Reassembly

 Leaving screws inside the device may damage internal components, such as the battery. When assembling, be extra careful not to leave any unassembled screws inside the device.

1 Using the tweezers, position the rear bottom in the correct location and gently press it down to secure it in place.

 Be careful not to damage the charging port and near components.

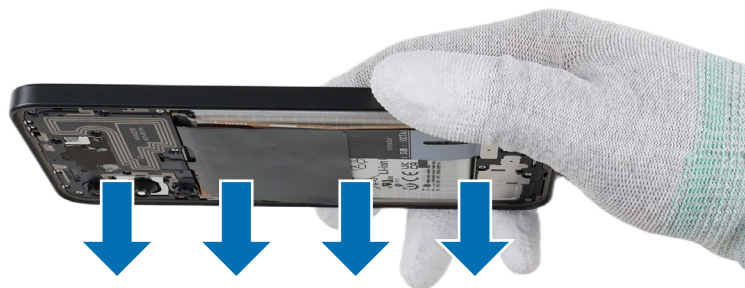


- 2 Check the screw 3524 (7 ea) at the 7 different points on the bottom of rear and fasten them using a cross-head screwdriver.

⚠ Be careful not to damage the charging port and the near components.




- 3 Check carefully with your fingers to see if there are any screws or other foreign substances inside the device (battery, PBA, cable, etc.). Shake the device lightly with the back of the device facing down to remove any remaining screws.



📝 Reassemble the [Back Cover](#) to complete assembly.


Charging Port and Microphone

 The microphone is built into the charging port module.

Disassembly

 Remove the [SIM Card Tray](#) and [Back Cover](#) first before you begin.

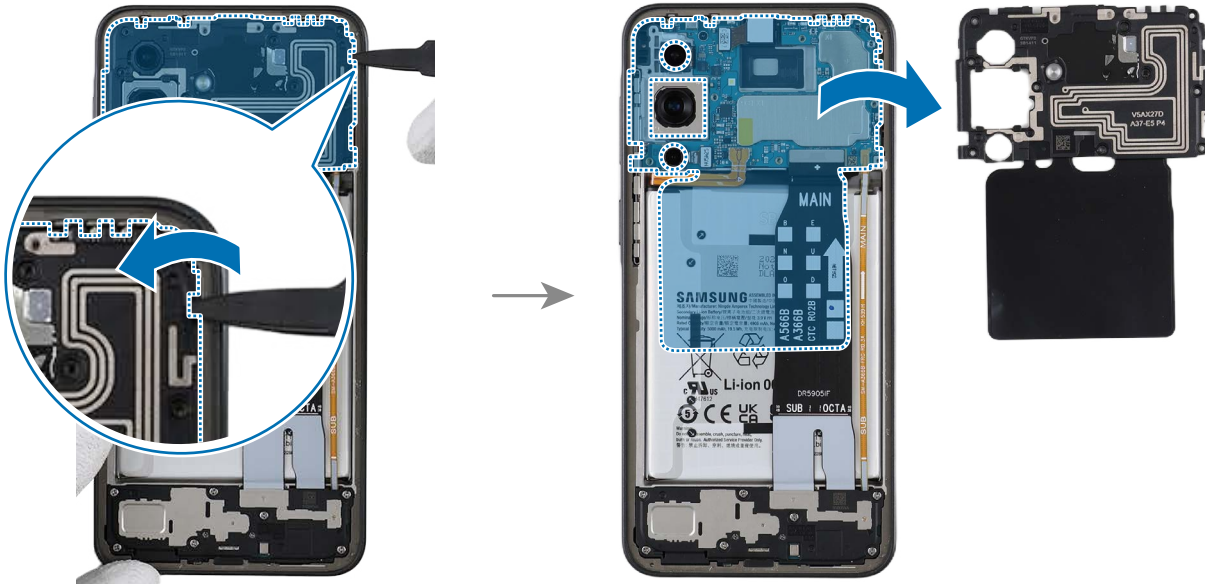
1 Check the 17 screws on the top and bottom of the rear and remove them using a cross-head screwdriver.

 Check the number of screws that have been removed, and store them carefully to make sure that no unassembled screws are left inside the device during assembly.



2 Using the tweezers, lift up on the separator groove of the rear top and remove it carefully.

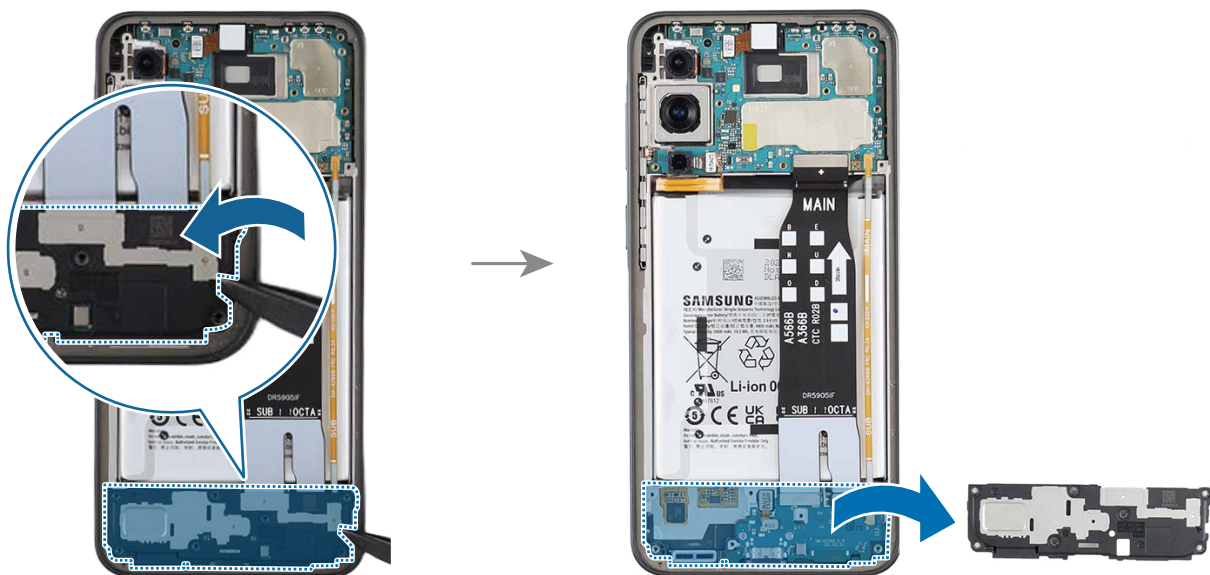
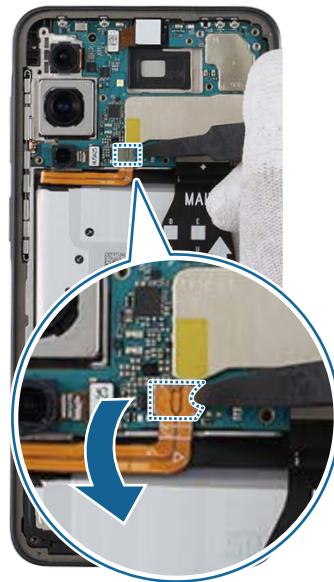
⚠ Be careful not to damage the main board and the near components.



3 Using the tweezers, disconnect the battery connector from the main board. Then lift up on the separator groove of rear bottom and remove it carefully.

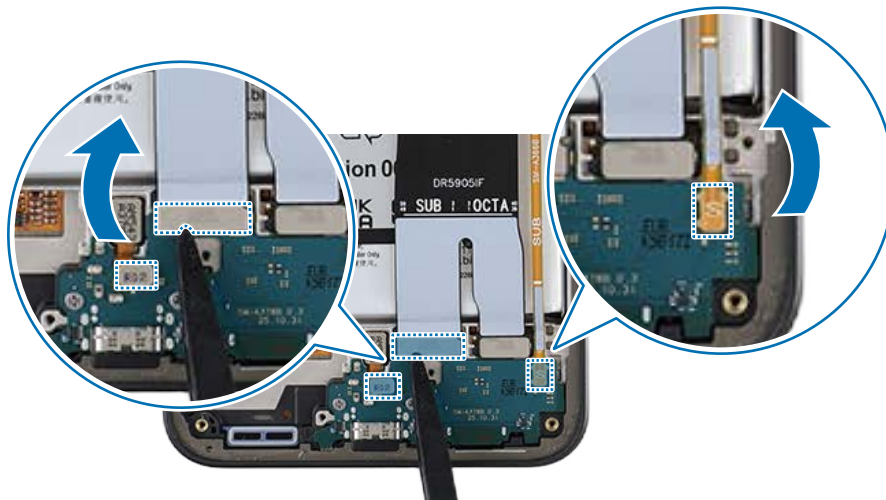
- ⚠ • Make sure to first disconnect the battery connector for your own safety.
- Be careful not to damage the battery.

- ⚠ Be careful not to damage the charging port and the near components.



4 Disconnect the 3 connectors from the charging port using the tweezers.

⚠ Be careful not to damage the charging port and the near components.



5 Check the 2 screws on the charging port and remove them using a cross-head screwdriver.

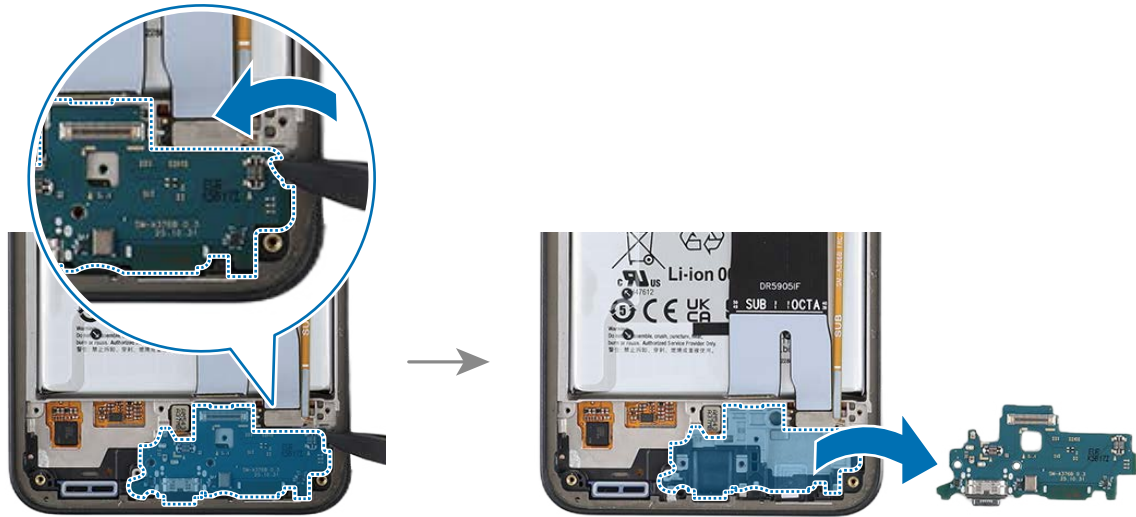
⚠ Be careful not to damage the charging port and the near components.

📋 Check the number of screws that have been removed, and store them carefully to make sure that no unassembled screws are left inside the device during assembly.



6 Using the tweezers, lift up on the separator groove of the charging port module, and remove the charging port module carefully.

⚠ Be careful not to damage the charging port and the near components.

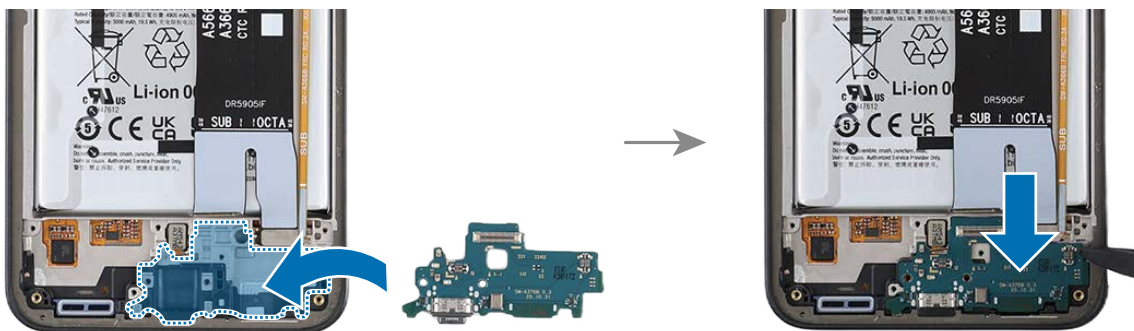


Reassembly

! Leaving screws inside the device may damage internal components, such as the battery. When assembling, be extra careful not to leave any unassembled screws inside the device.

1 Using the tweezers, insert the new charging port module to the bottom metal frame of the device and press down on it in its position smoothly.

! Be careful not to damage the charging port and the near components.



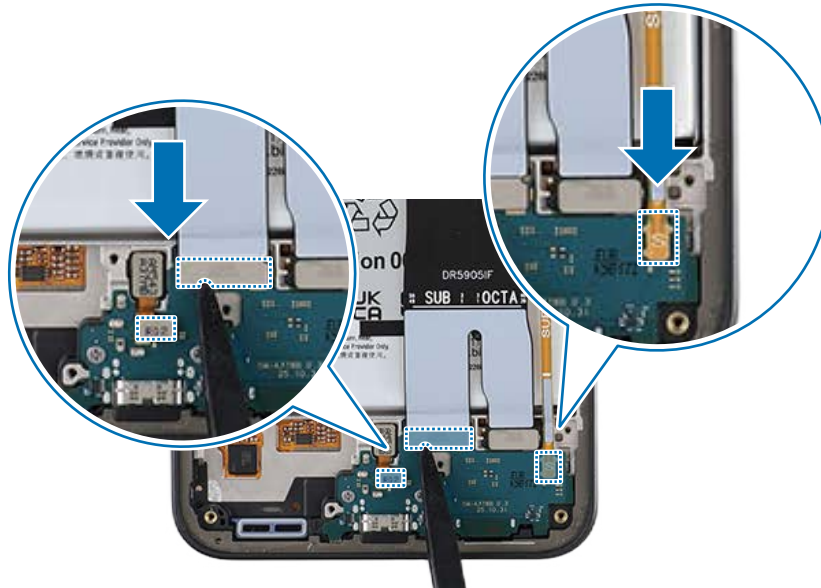
2 Check the screw 3554 (2 ea) at the 2 different points on the charging port and fasten them using a cross-head screwdriver.

! Be careful not to damage the charging port and the near components.



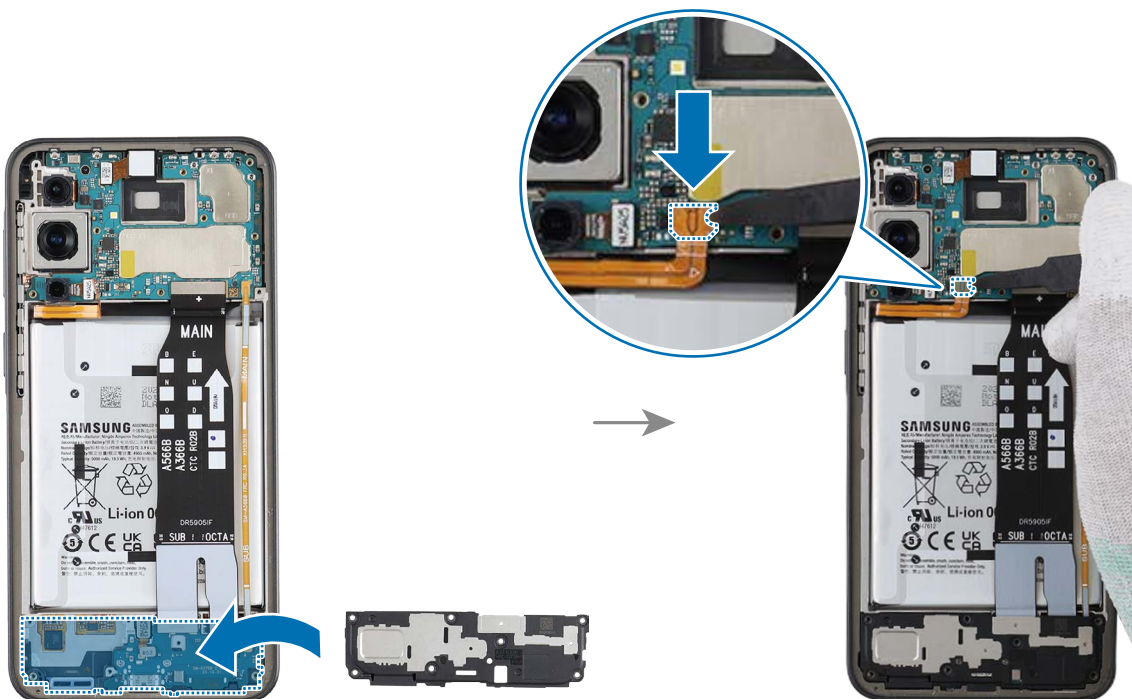
3 Connect the 3 connectors to the charging port.

- ⚠ • Be careful not to damage the cable.
- Be careful not to damage the charging port and near components.



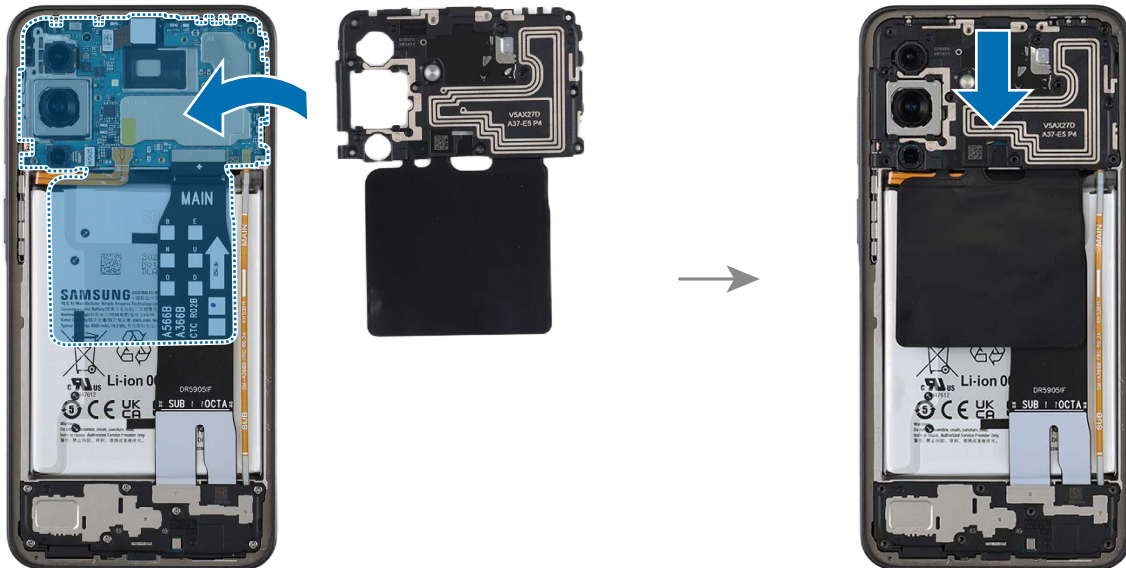
4 Using the tweezers, position the rear bottom in the correct location and gently press it down to secure it in place. Connect the battery connector to the main board.

- ⚠ • Be careful not to damage the charging port and near components.
- Be careful not to damage the battery connector and near components.



- Using the tweezers, position the rear top in the correct location and gently press it down to secure it in place.

⚠ Be careful not to damage the main board and near components.

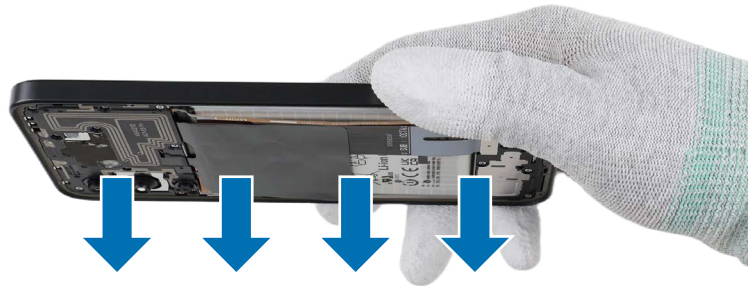


- Check the screw 3524 (17 ea) at the 17 different points on the top of rear and fasten them using a cross-head screwdriver.

⚠ Be careful not to damage the charging port and the near components.



- 7 Check carefully with your fingers to see if there are any screws or other foreign substances inside the device (battery, PBA, cable, etc.). Shake the device lightly with the back of the device facing down to remove any remaining screws.



-  Reassemble the [Back Cover](#) and [SIM Card Tray](#) to complete assembly.



Front Camera

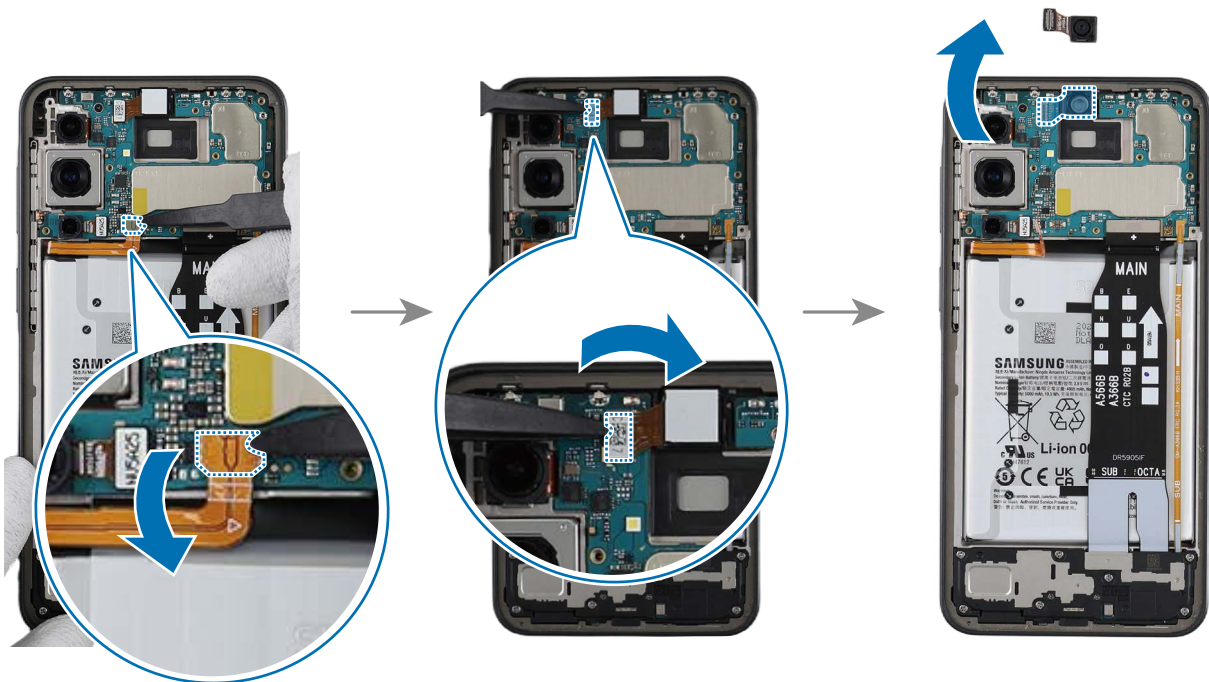
Disassembly

 Remove the [Back Cover](#) and [Top Speaker](#) first before you begin.

Using the tweezers, disconnect the battery connector first from the main board.

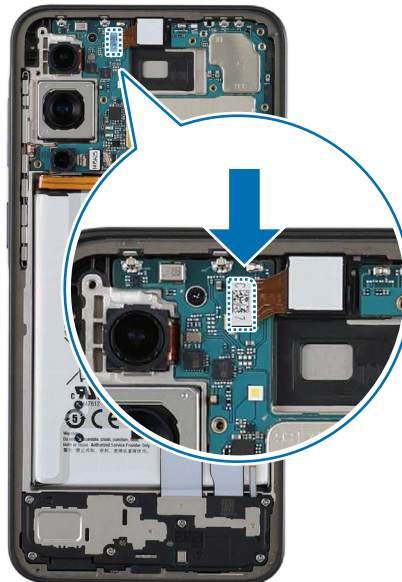
Separate the front camera connector from main board and remove the front camera carefully from device. Leave the camera lens facing up.

-  • Make sure to first disconnect the battery connector for your own safety.
- Be careful not to damage the battery.
-  • Be careful not to touch the camera lens while handling it.
- Be careful not to damage the camera and the near components.



Reassembly

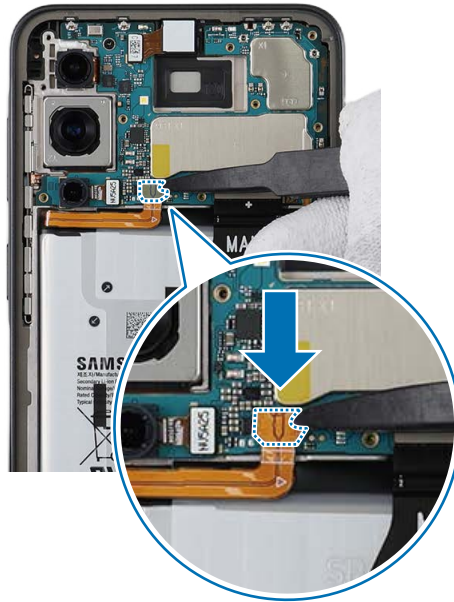
- ⚠ • Leaving screws inside the device may damage internal components, such as the battery.
 - When assembling, be extra careful not to leave any unassembled screws inside the device.
- 1 Using the tweezers or your fingers, place the new front camera in the camera hole so that the lens faces forward and gently insert. Then, connect the camera connector carefully on the main board.
- ⚠ • Be careful not to damage the camera lens and the near components.
 - Be careful not to damage the main board.
 - Be careful not to damage and scratch the camera module.



2 Connect the battery connector to the main board.

⚠ Be careful not to damage the battery.

⚠ Be careful not to damage the battery connector and near components.




📦 Reassemble the [Top Speaker](#) and [Back Cover](#) to complete assembly.


Rear Camera

Disassembly

 Remove the [Back Cover](#) and [Top Speaker](#) first before you begin.

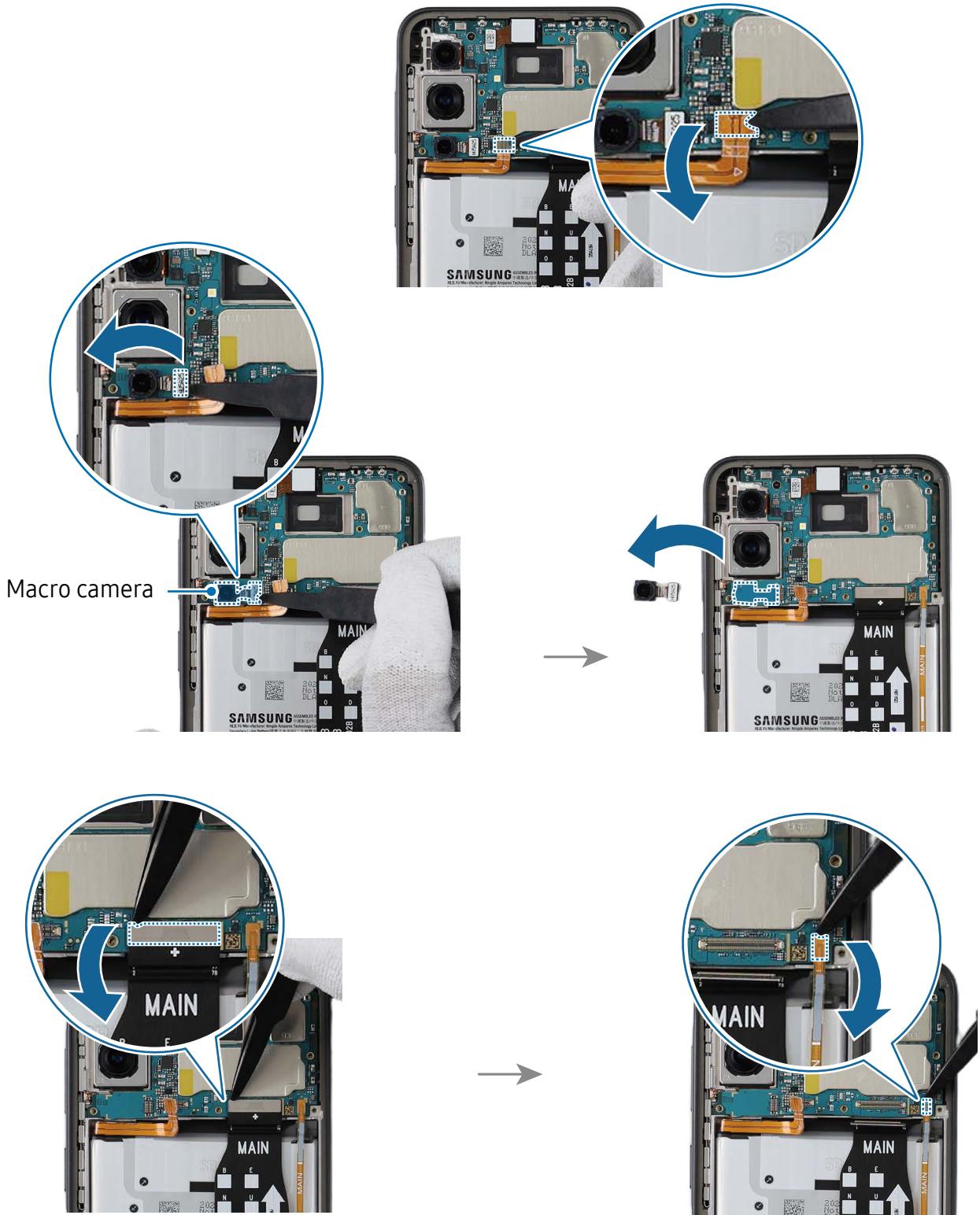
1 Using the tweezers, disconnect the battery connector first from the main board. If you need to replace the macro camera, disconnect the macro camera connector from the main board and carefully remove the macro camera from the device. Leave the camera lens facing up. Disconnect the 2 connectors from the main board.

 • Make sure to first disconnect the battery connector for your own safety.
• Be careful not to damage the battery.

 • Be careful not to touch the camera lens while handling it.
• Be careful not to damage the camera and the near components.

 Only remove the macro camera when you need to replace it.

Disassembly and Assembly



2 Check the 1 screw on the main board and remove them using a cross-head screwdriver.

⚠ Be careful not to damage the main board and the near components.

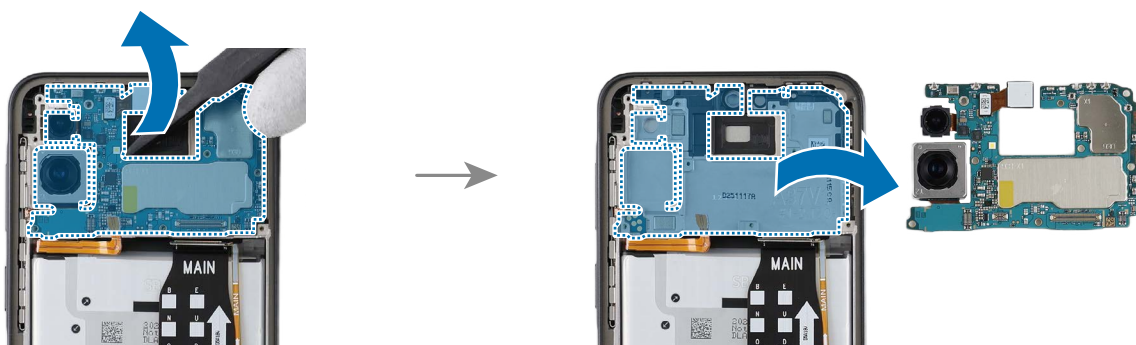
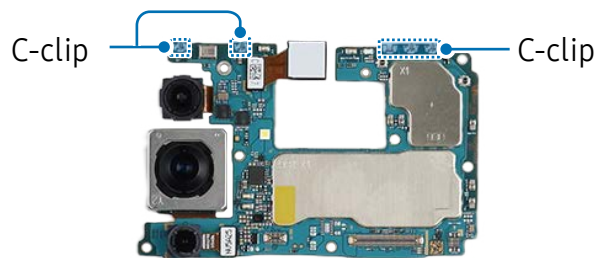
📝 Check the number of screws that have been removed, and store them carefully to make sure that no unassembled screws are left inside the device during assembly.



3 Using the tweezers, lift up on the separator groove of the main board and remove it carefully.

⚠ Be careful not to damage the battery.

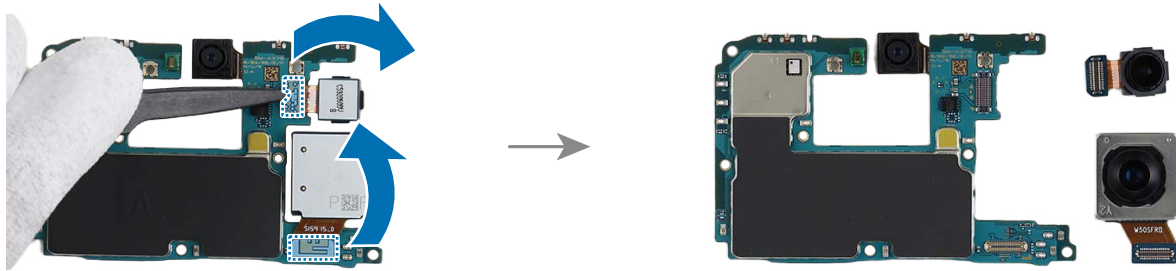
- ⚠ • Be careful not to damage the top C-clip.
- Be careful not to damage the main board and near components.



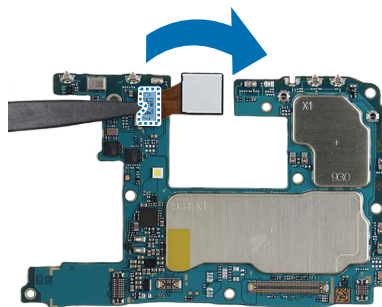
4 Using the tweezers, separate the rear camera connectors from the main board and remove the rear camera carefully from the device. Leave the camera lens facing up.

- ⚠ • Be careful not to touch the camera lens while removing the camera.
- Be careful not to damage the camera and the near components.
- Be careful not to damage the main board.

🛠 Separate and replace only the problematic camera.



🛠 If you need to disassemble the main board only, remove the front camera.



Reassembly


- ⚠ • Leaving screws inside the device may damage internal components, such as the battery.
- When assembling, be extra careful not to leave any unassembled screws inside the device.


1 Connect the rear camera connectors to the main board.

- ⚠ • Be careful not to drop the camera while connecting the connector.
- Be careful not to damage the camera lens and near components.
- Be careful not to damage the main board.

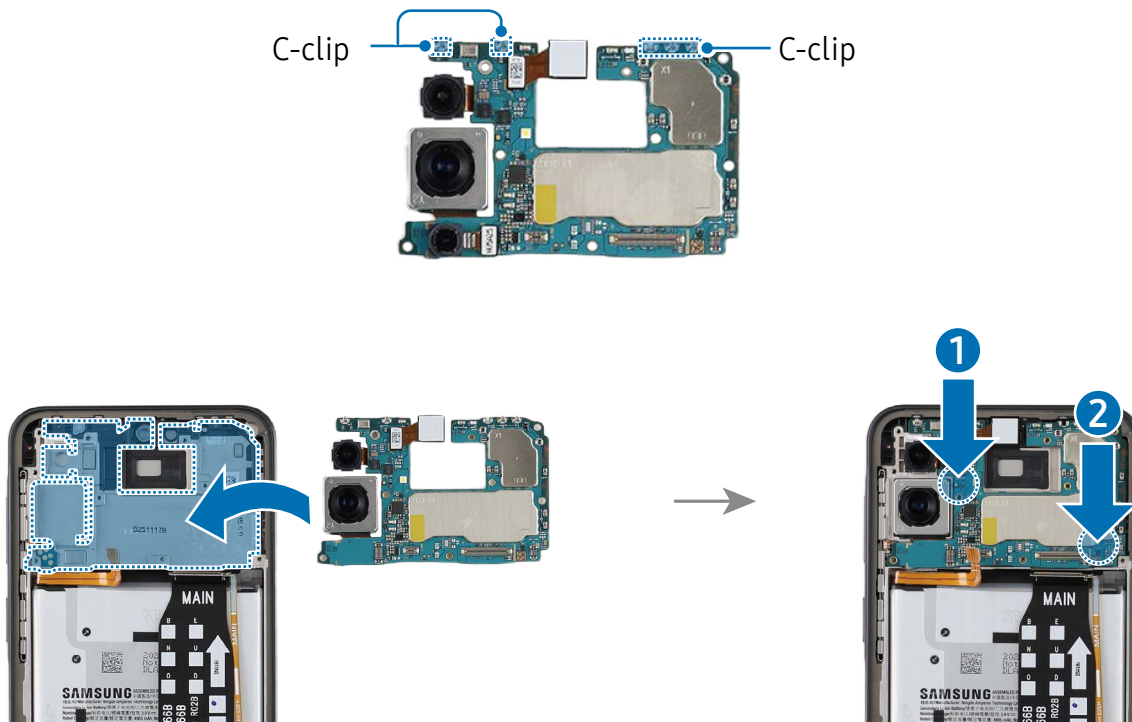


2 Align the main board module onto the device frame. After attaching the upper part of the main board diagonally on the metal frame, assemble the lower part.

 Be careful not to damage the battery.

 • Be careful not to damage the top C-clip.

• Be careful not to damage the main board and near components.



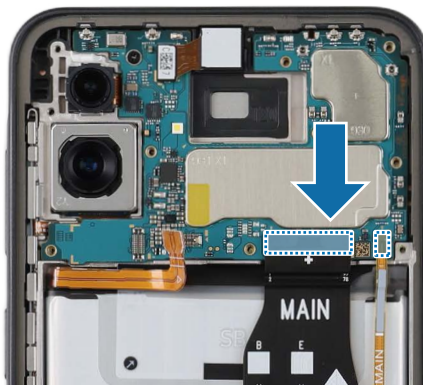
- 3 Check the screw 3637 (1 ea) at the different point on the main board and fasten the 1 screw using a cross-head screwdriver.

⚠ Be careful not to damage the main board and the near components

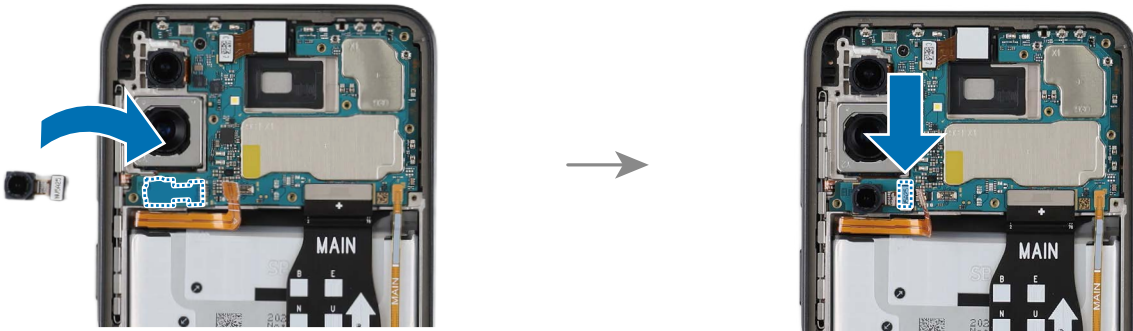


- 4 Connect the 2 FPCB cable connectors on the main board.

⚠ Be careful not to damage the main board and near components.

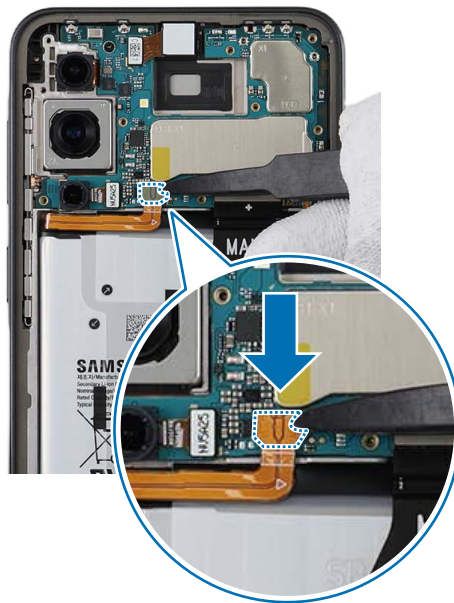


- 5 If you have removed the macro camera, connect the macro camera connector to the main board.



- 6 Connect the battery connector to the main board.

- ⚠ Be careful not to damage the battery.
- ⚠ Be careful not to damage the battery connector and near components.



- 👉 Reassemble the [Top Speaker](#) and [Back Cover](#) to complete assembly.

Button

Disassembly

To remove the Volume button or the Side button, lightly press one end of the button with your fingers so that the other end protrudes. Push the tip of the protruding button up carefully with a round-tip metal tweezers and lift it up until you can grab it with your fingers. Grab the button with your fingers and pull out it carefully from the device.

⚠ When holding the buttons with a tweezers, be very careful not to damage or scratch the device.

📌 If you have trouble separating the buttons with your tweezers, please try using a sharper and thinner tool.


<Volume Button>



<Side Button>



Reassembly

 Leaving screws inside the device may damage internal components, such as the battery. When assembling, be extra careful not to leave any unassembled screws inside the device.

1 Remove the release film of the new Volume button. Use your fingers to grab the Volume button and insert the button on the slot carefully.

 Be careful not to damage the button and device.



2 Press down the Volume button softly and evenly so that the button can be completely assembled. Press the Volume button to make sure it clicks. It should have the same sound and feel as before disassembly.



3 Remove the release film of the new Side button. Use your fingers to grab the Side button and insert the button on the slot carefully.


⚠ Be careful not to damage the button and device.



4 Press down the Side button softly and evenly so that the button can be completely assembled. Press the Side button to make sure it clicks. It should have the same sound and feel as before disassembly.



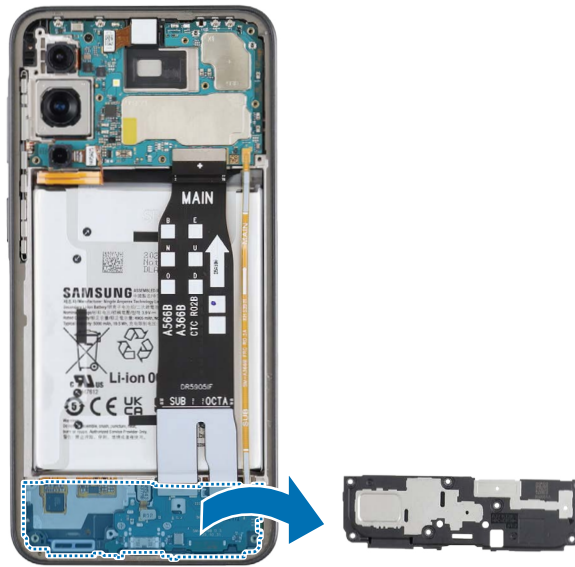
Screen Module

 The screen module consists of the screen, metal bracket, and battery.

Disassembly

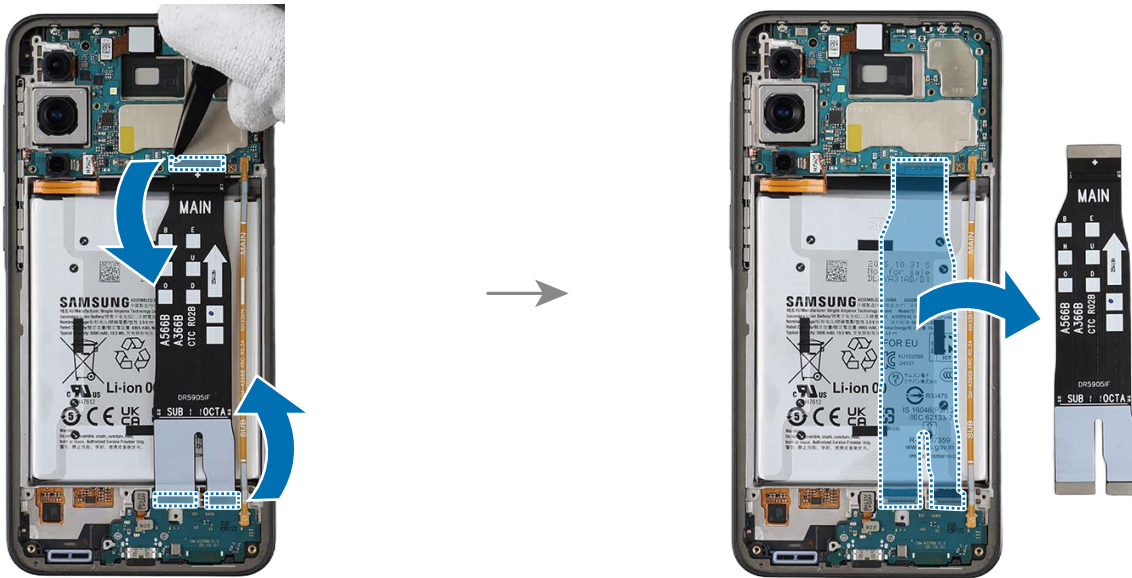
 Remove the [SIM Card Tray](#) and [Back Cover](#) first before you begin.

- 1 Check for the disassembly steps of the [Charging Port and Microphone](#) and completely separate up to the rear bottom.



2 Using tweezers, disconnect the 3 flex cable connectors and remove the flex cable completely.

- ⚠ • When removing the connectors, be careful not to damage the cable.
- Be careful not to damage the near components.



3 Using tweezers, disconnect the 2 flex cable connectors and remove the flex cable completely.



4 Check the 1 screw on the main board and remove them using a cross-head screwdriver.

⚠ Be careful not to damage the main board and the near components.

📝 Check the number of screws that have been removed, and store them carefully to make sure that no unassembled screws are left inside the device during assembly.

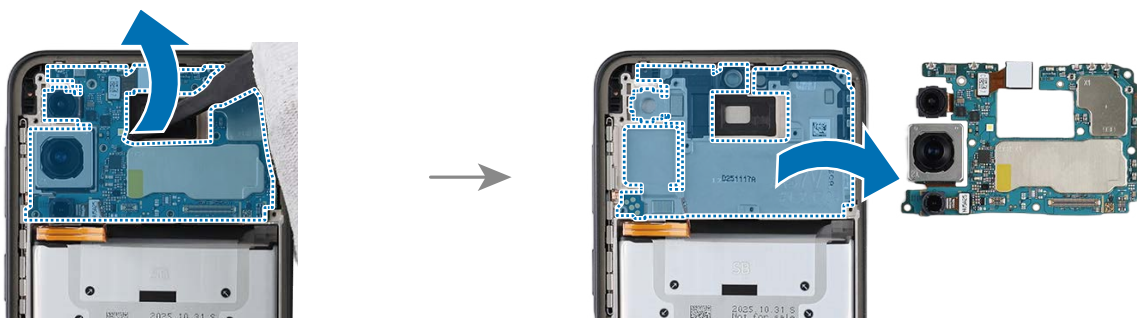
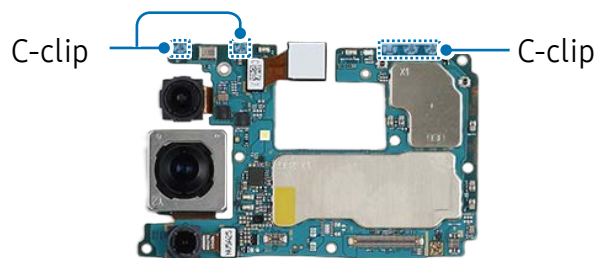


5 Using the tweezers, lift up on the separator groove of the main board and remove it carefully.

⚠ Be careful not to damage the battery.

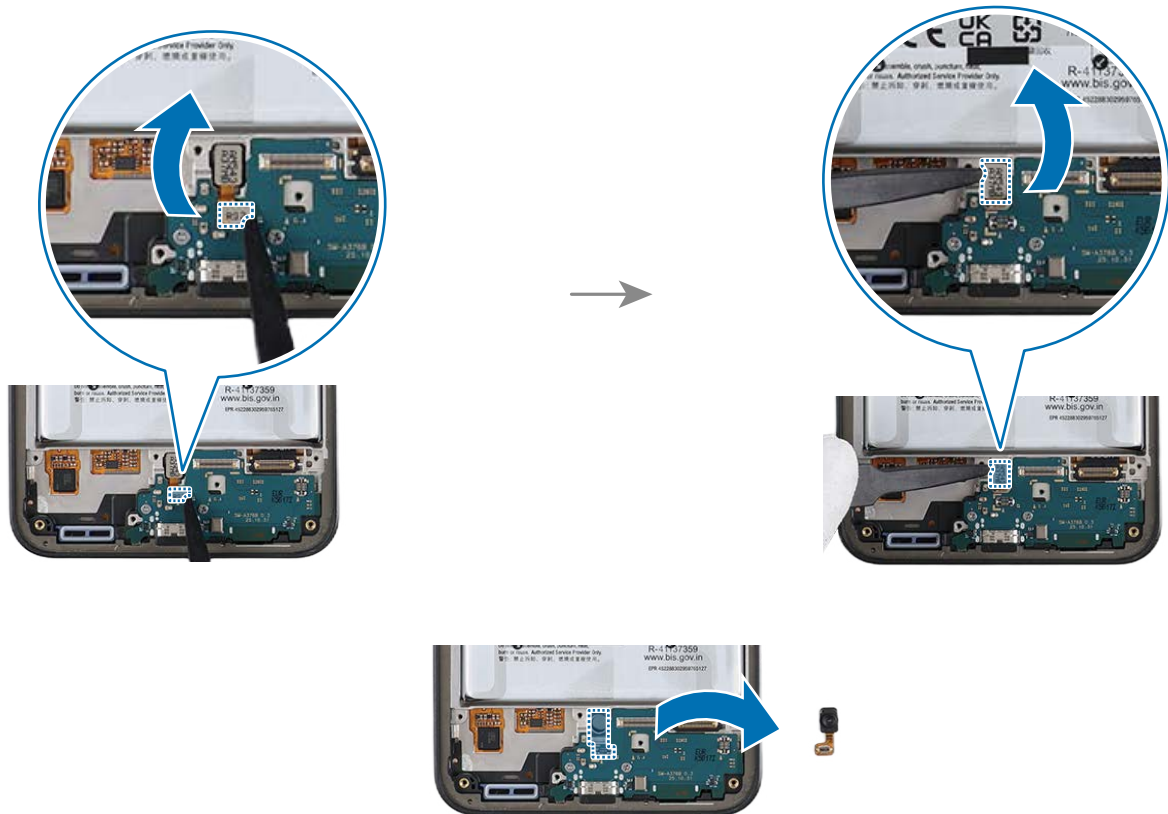
⚠

- Be careful not to damage the top C-clip.
- Be careful not to damage the main board and near components.



6 Using the tweezers, separate the connector of the fingerprint recognition sensor carefully from the charging port and remove the fingerprint recognition sensor completely, and leave the sensor facing up.

- ⚠ • Be careful not to damage the fingerprint recognition sensor.
- Be careful not to damage the charging port and the near components.



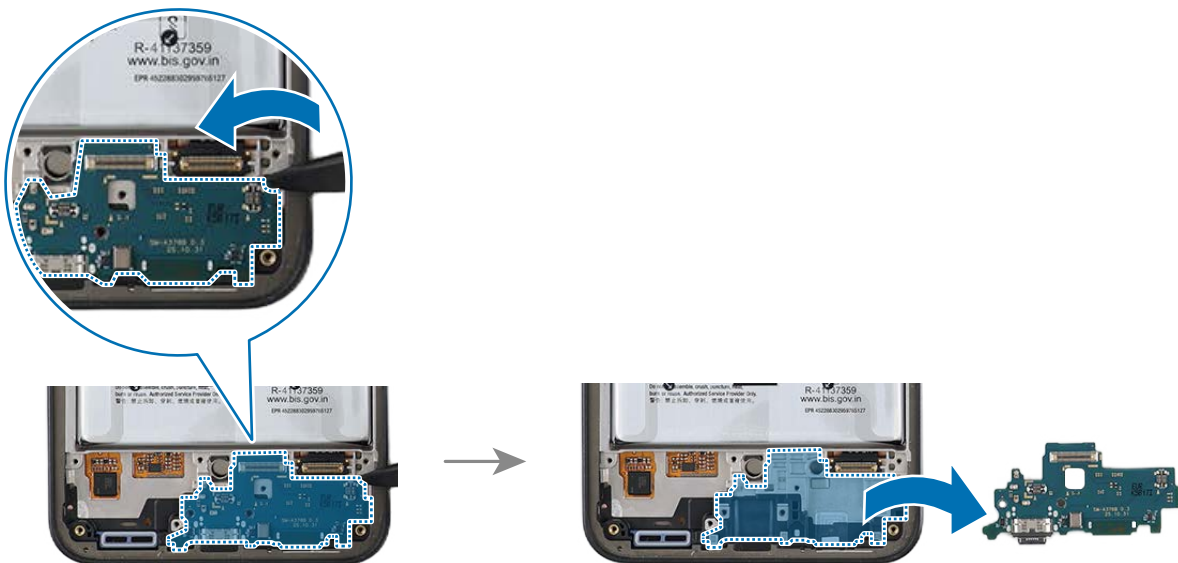
7 Check the 2 screws on the charging port and remove them using a cross-head screwdriver.

- ⚠ Be careful not to damage the charging port and the near components.
- 📝 Check the number of screws that have been removed, and store them carefully to make sure that no unassembled screws are left inside the device during assembly.



8 Using the tweezers, lift up on the separator groove of the charging port module, and remove the charging port module carefully.

- ⚠ Be careful not to damage the battery.
- ⚠ Be careful not to damage the charging port and the near components.

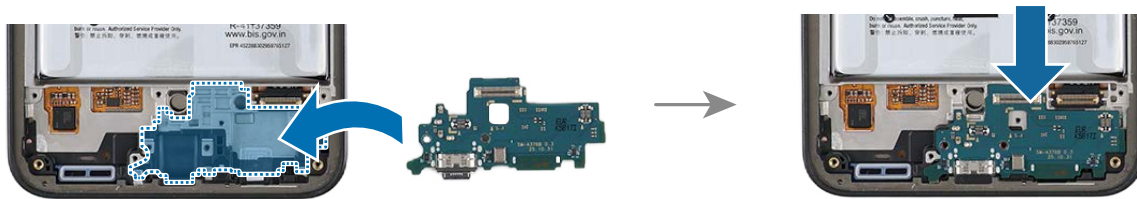


Reassembly

⚠ Leaving screws inside the device may damage internal components, such as the battery. When assembling, be extra careful not to leave any unassembled screws inside the device.

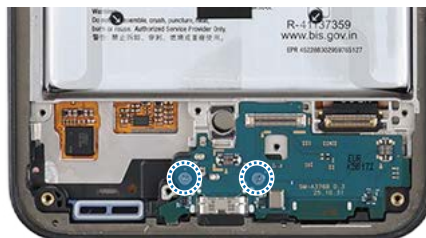
1 Using the tweezers, insert the charging port module to the bottom metal frame of device and press down on it in its position smoothly.

⚠ Be careful not to damage the charging port and the near components.



2 Check the screw 3554 (2 ea) at the different points on the charging port and fasten the 2 screws using a cross-head screwdriver.

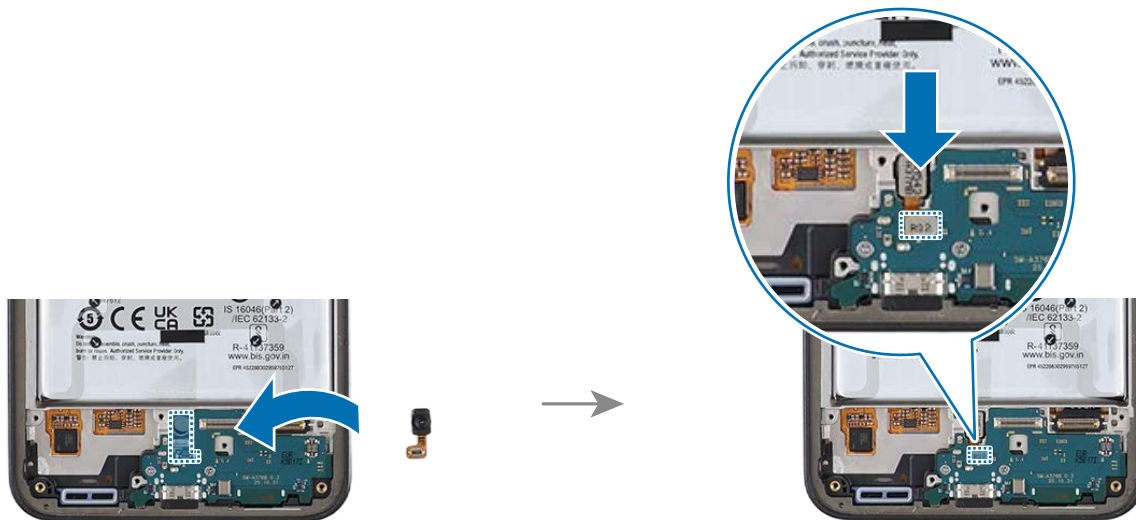
⚠ Be careful not to damage the charging port module side contact.




3 Assemble the fingerprint recognition sensor to the exact position and connect its connector carefully to the charging port.


⚠ Be careful not to damage the battery.

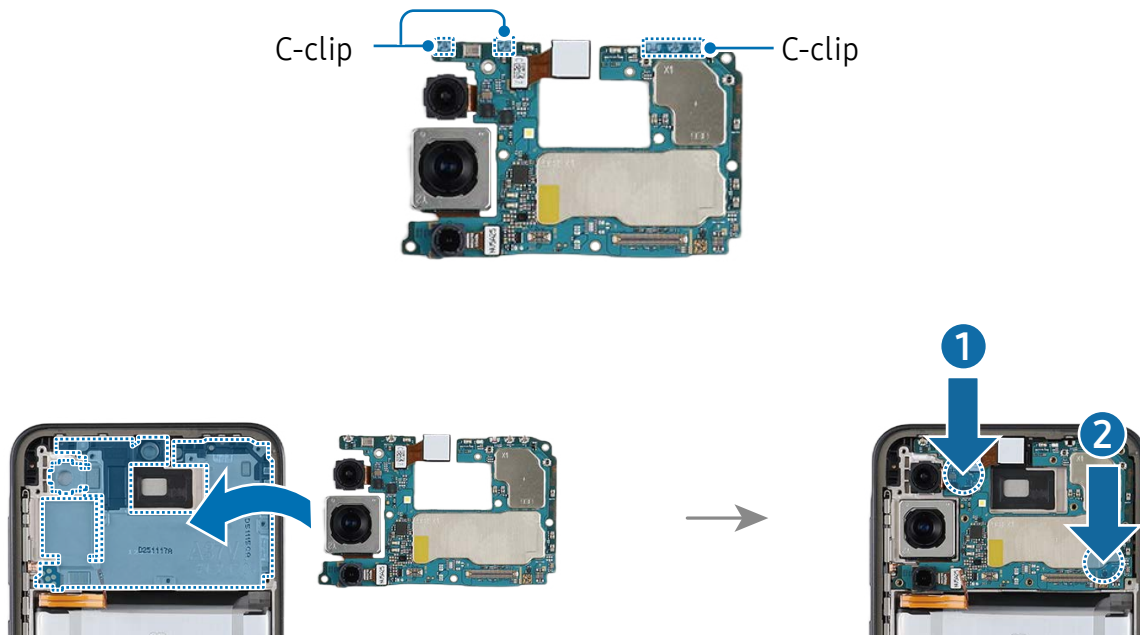
- ⚠ • Be careful not to damage the fingerprint recognition sensor.
- Be careful not to damage the charging port and the near components.




4 Align the main board module onto the device frame. After attaching the upper part of the main board diagonally on the metal frame, assemble the lower part.

 Be careful not to damage the battery.

-  • Be careful not to damage the top C-clip.
- Be careful not to damage the main board and near components.



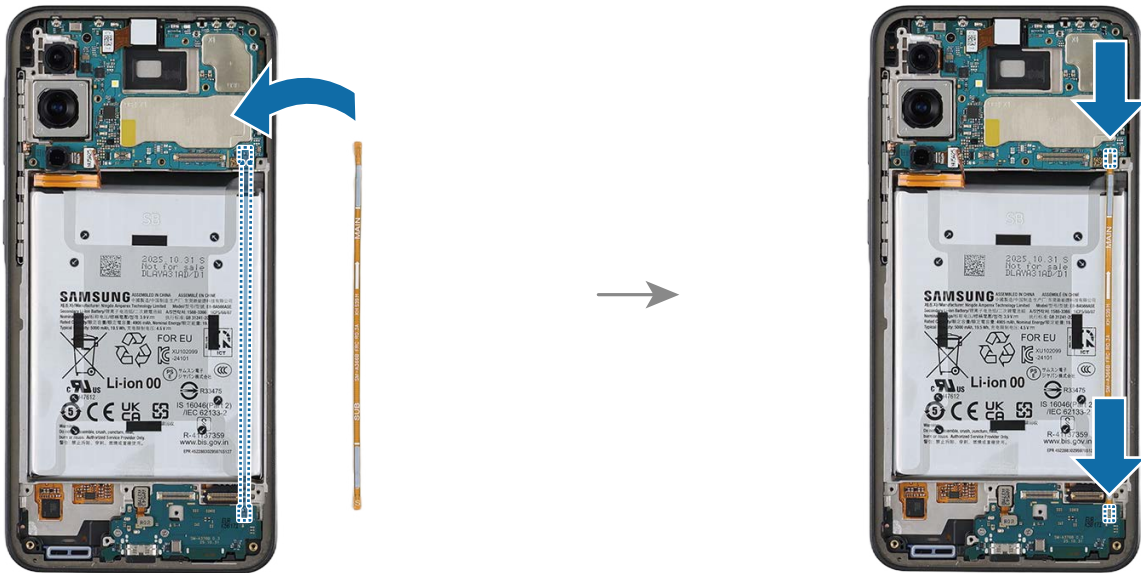
5 Check the screw 3637 (1 ea) at the different point on the main board and fasten the 1 screw using a cross-head screwdriver.

 Be careful not to damage the main board and the near components.

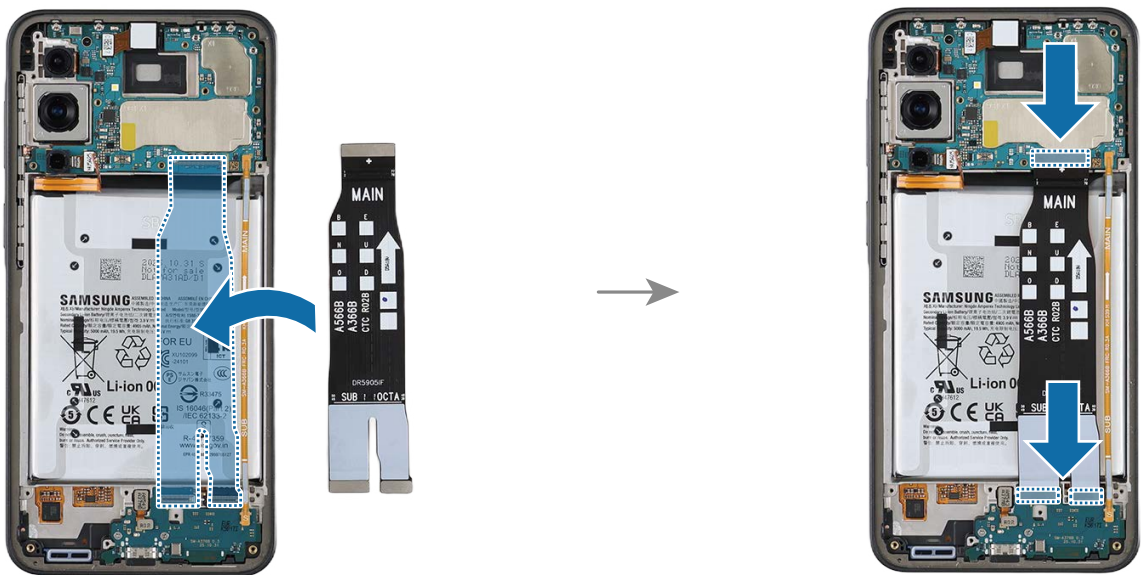


6 Place the flex cable to the device frame and connect the 2 connectors carefully.

- ⚠ • Be careful not to damage the main board and the near components.
- When connecting the connectors, be careful not to damage the cable.



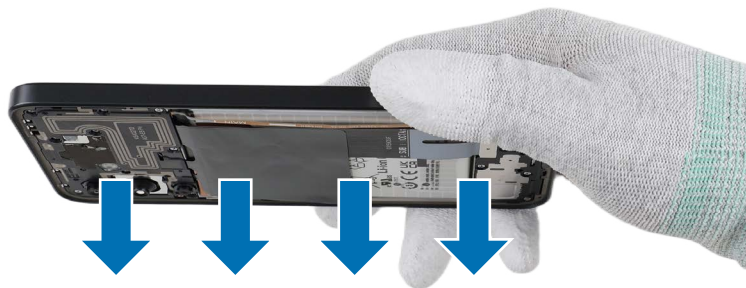
7 Place the flex cable to the device frame and connect the 3 connectors carefully.



- 8 Check for the reassembly steps of the [Charging Port and Microphone](#) and completely reassemble up to the rear bottom and top.



- 9 Check carefully with your fingers to see if there are any screws or other foreign substances inside the device (battery, PBA, cable, etc.). Shake the device lightly with the back of the device facing down to remove any remaining screws.



-  Reassemble the [Back Cover](#) and [SIM Card Tray](#) to complete assembly.

Screen

- ⚠ The screen should be replaced only by the specialised technicians with the knowledge and experience to repair electronic devices.

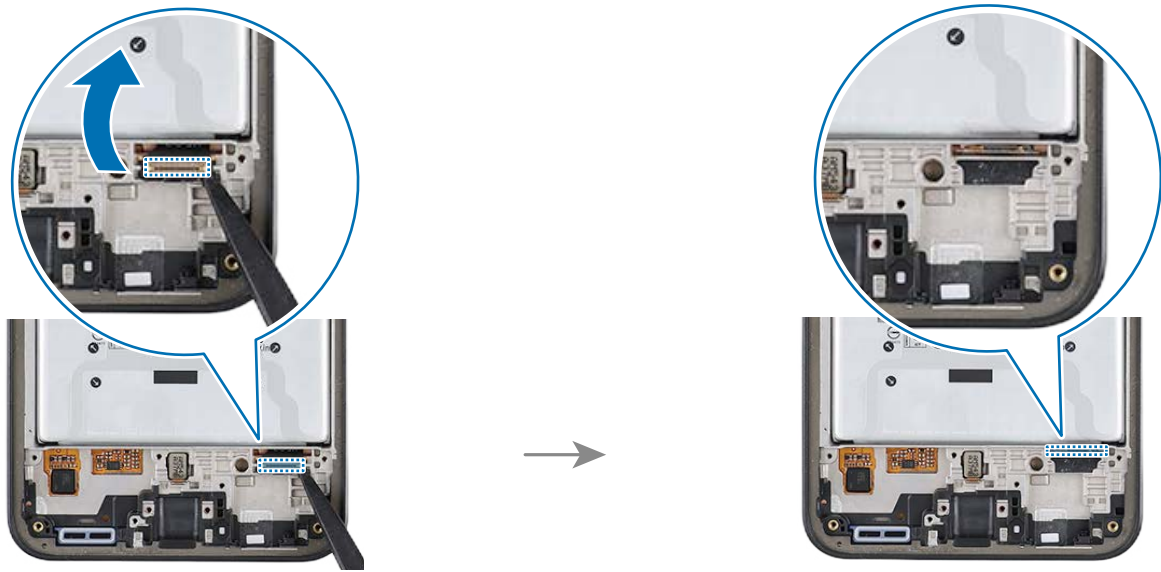
Disassembly

- ⚠ When removing the screen, ensure that the device is fixed on a flat surface.

- 1 Check for the disassembly steps of the [Screen Module](#) and completely separate the charging port module.



- 2 Using the tweezers, separate the screen connector carefully from the screen module.





3 Heat the microwaveable heating bag and apply it to both the front and back of the device bottom for 4 minutes.


- ⚠ • It is possible for the device or battery to be damaged by heat.
- Do not heat the device in a microwave. Doing so could cause an explosion.
- If your device's glass breaks, the debris can cause injury to your hands or other body parts. For your safety, attach an acrylic protective cover before disassembling the device.
- ⚠ • The recommended time for heating the bag is 50 seconds in a 1000 W microwave and 70 seconds in a 700 W microwave. (Correct temperature for use: 55-65 °C.) Follow the heating bag's instructions for heating.
- Be careful not to damage the device through excessive heat. (It is recommended to disassemble the device in an area with temperature gauge.)



4 Put the device down so that the half of device bottom comes out of the desk. Then, press the screen chip part at the bottom with the back of the plastic tweezers and separate the bottom edges of screen carefully from the device frame.


 Be careful to not damage the battery.

 Be careful not to damage the device and the near components.

 If you have trouble creating a gap, heat the microwaveable heating bag additionally, and apply it on the screen to further soften the adhesive. When reheating, it should be heated no longer than 30 seconds.

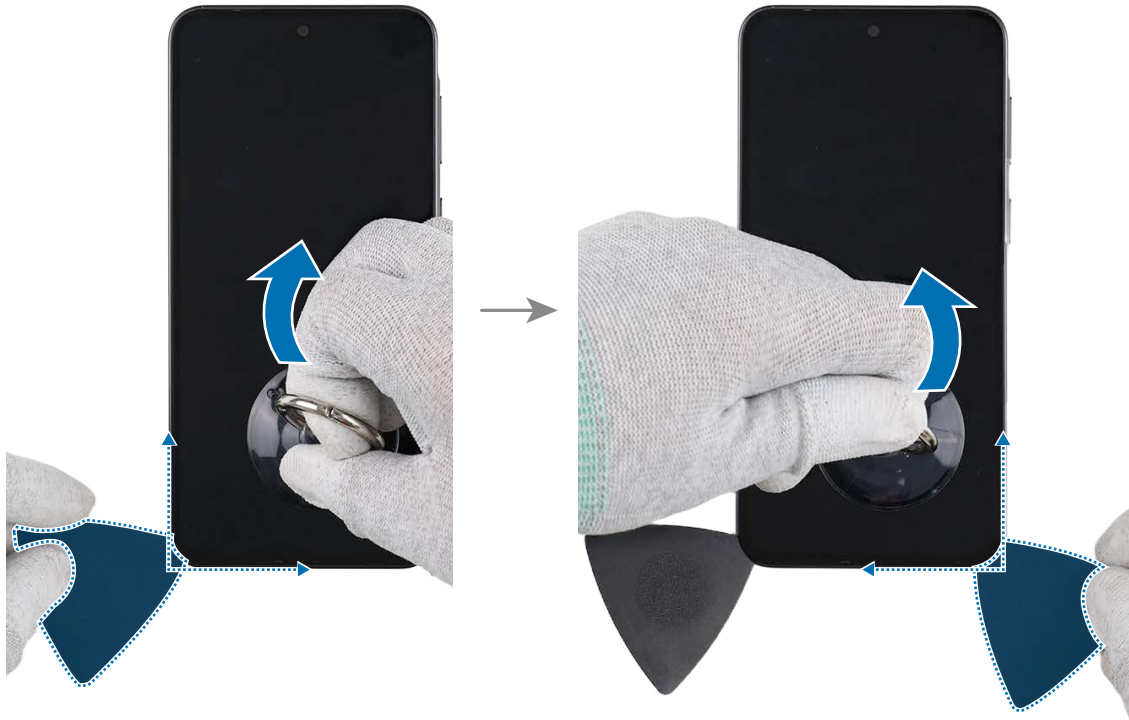


5 Place the suction cup in the centre of the bottom edge of the screen, and lift it upwards carefully.

 For separable handle suction cups, be careful not to injure yourself as the handle can be parted during use.




- 6 Place the opening pick in the gap between the bottom right edge of the screen and the device frame and slice through the adhesive of screen edge. Repeat this on the bottom left edge of the screen.
- Make sure to leave the opening pick inserted in the edges to prevent the adhesive from resealing.



7 Heat the microwaveable heating bag and apply it on the screen for 3 minutes to soften the adhesive.

- ⚠ • It is possible for the device or battery to be damaged by heat.
- Do not heat the device in a microwave. Doing so could cause an explosion.
- If your device's glass breaks, the debris can cause injury to your hands or other body parts. For your safety, attach an acrylic protective cover before disassembling the device.
- ⚠ • The recommended time for heating the bag is 50 seconds in a 1000W microwave and 70 seconds in a 700W microwave. (Correct temperature for use: 55-65 °C.) Follow the heating bag's instructions for heating.
- Be careful not to damage the device through excessive heat. (It is recommended to disassemble the device in an area with temperature gauge.)



- 8 Place the suction cup at the bottom of the screen and gently pull it upwards with a slow and steady force to detach the screen from the device frame. Lift up the screen slowly and remove it completely from the device.
-  If you have trouble creating a gap, heat the microwaveable heating bag additionally, and apply it on the screen to further soften the adhesive. When reheating, it should be heated no longer than 30 seconds.



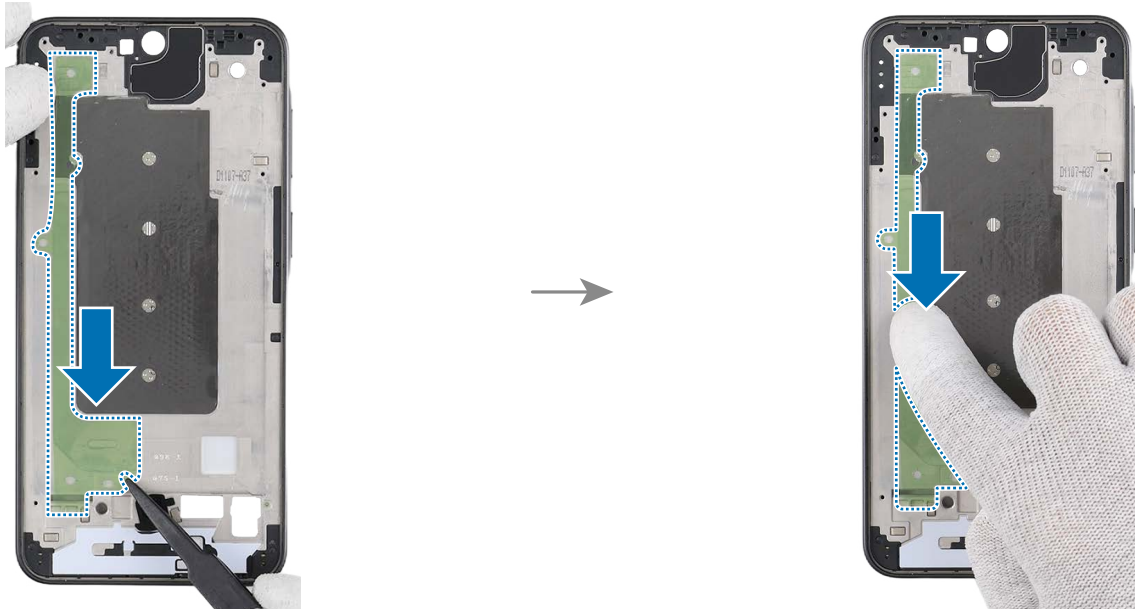
Reassembly

- ⚠ Leaving screws inside the device may damage internal components, such as the battery. When assembling, be extra careful not to leave any unassembled screws inside the device.
 - ⚠ Before attaching the screen, make absolutely sure that there are no screws, miscellaneous parts, or other foreign objects on the inside of the device (among the battery, PBA, etc.).
- 1 Using the tweezers and your fingers, remove all adhesive tapes on the metal frame.
- ⚠ • Make sure to remove any residual tapes attached to the metal frame before reassembling the new screen.
 - Be careful not to damage the device and the near components.



- 2 Remove the transparent film of the new screen left adhesive tape. Using the tweezers, align the adhesive tape precisely on the device frame and attach it. Gently press around the tape to ensure a secure fit.

⚠ Be careful not to damage the device and the near components.



- 3 Remove the transparent film of the new screen right adhesive tape. Using the tweezers, align the adhesive tape precisely on the metal frame and attach it. Gently press around the tape to ensure a secure fit.

⚠ Be careful not to damage the device and the near components.



4 Now you can attach the new screen side adhesive tape using the bottom press tray. Remove the bottom press tray and guide pins from the rental tool kit packaging.

- ✎ • This tool is only available to use by the rental of tool kit that contains a complete set of the tools for self repair service.
- Availability of rental service may vary depending on the country and is currently available only in limited countries.
- A rented tool kit packaging may have different packaging than shown.



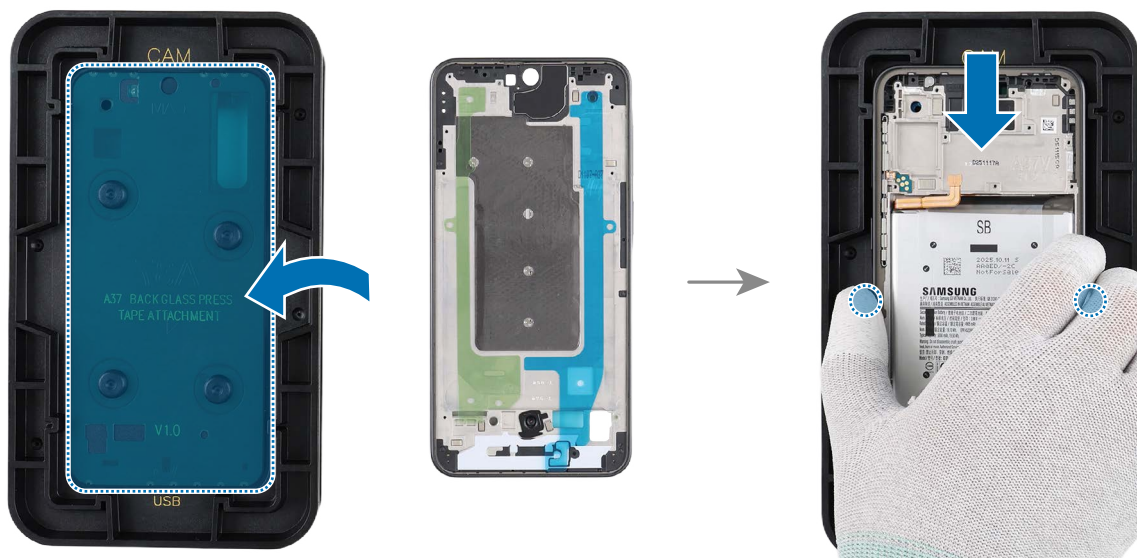
5 Place the bottom press tray with the tape attachment surface facing up and insert the guide pins into the holes of bottom tray.



- Remove the transparent film of the new screen side adhesive tape. Using your fingers or tweezers, align the adhesive tape holes precisely to the guide pins of the bottom tray and place the tape on the tray. Press the areas around the holes of the tape with your fingers so that the tape can fit perfectly into the tray.

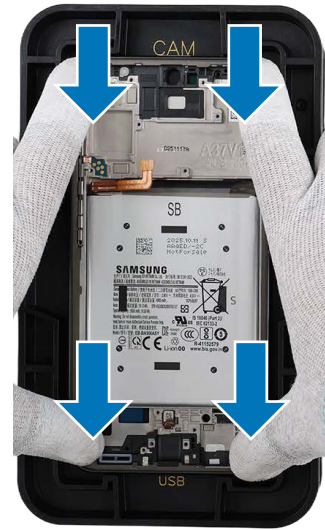


- Carefully place the device horizontally on the tray with the screen facing down.
 - Be careful that the tape may be attached incorrectly if you tilt the device and place it in the tray.




8 Place your fingers on each corner of the device and press down the device throughout for about 3 seconds so that the tape can be attached well.

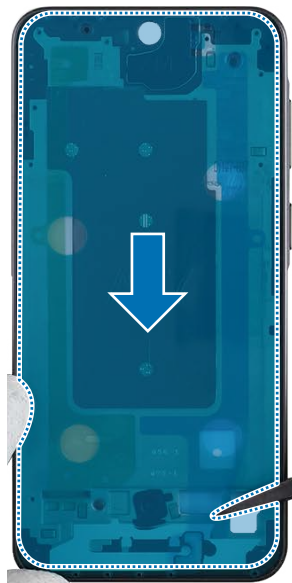
⚠ Guide pins should be pressed at the same time.



9 Remove the device carefully from the tray.



 Availability of rental service may vary depending on the country and is currently available only in limited countries. If the rental tool kit packaging is not available, remove the transparent film of the new screen side adhesive tape. Using the tweezers, align the adhesive tape precisely on the metal frame and attach it.

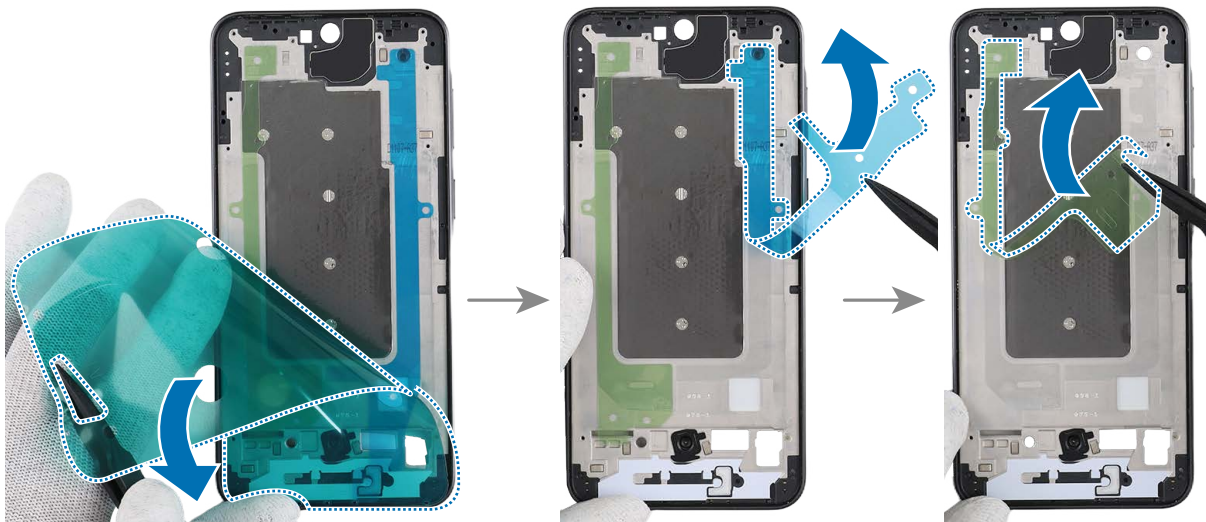


10 Using the tweezers and your fingers, gently press around the edges of tape to ensure a secure fit.

⚠ Make sure the tape is attached correctly.



11 Using the tweezers and your fingers, remove all release films of the attached adhesive tapes one by one.

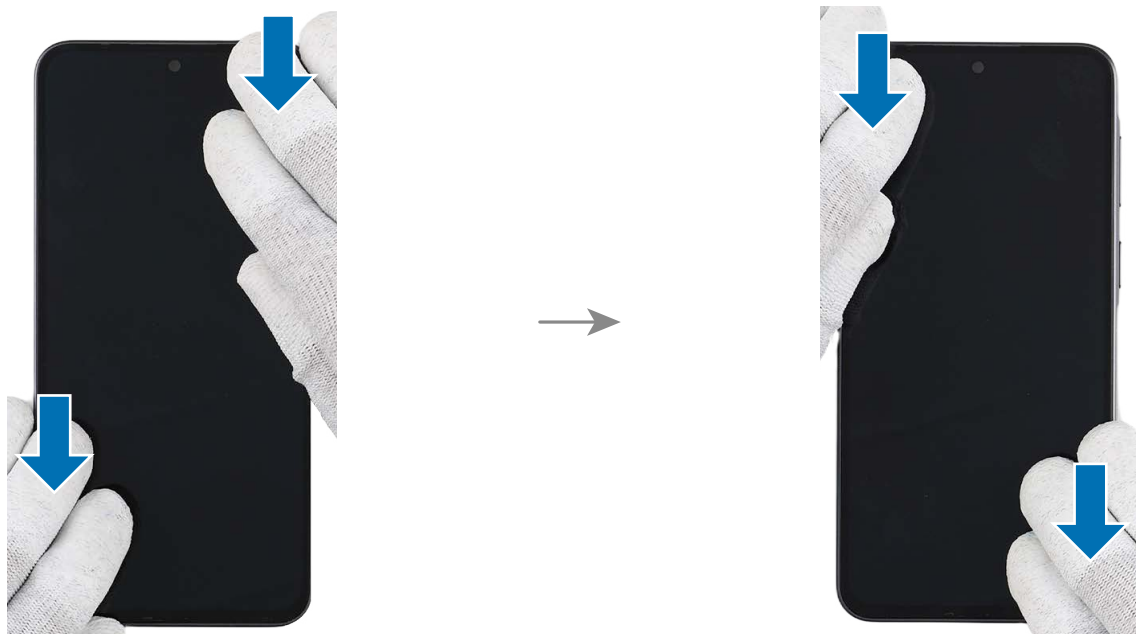


- 12 Carefully insert the screen connector of the new screen into the screen connector hole of the device frame and attach the screen slowly.



13 Press down the screen evenly in order to attach the screen perfectly. Ensure that there are no abnormalities.

- ✎ If you feel some gap, remove the screen and attach it again. Some foreign materials can be inside the device.

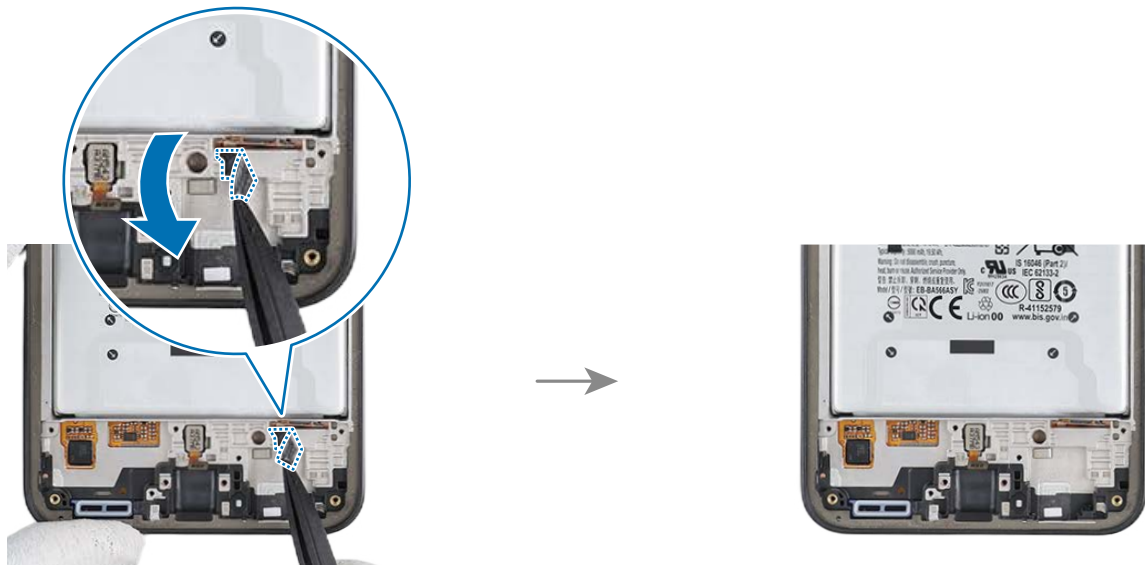


14 If you can rent a toolkit for self-repair service, check for the steps of the [Screen Press](#). You can further press the fully assembled screen using the appropriate tool.

- ✎ • The toolkit is only available to use by the rental of tool kit that contains a complete set of the tools for self repair service.
- Availability of rental service may vary depending on the country and are currently available only in limited countries.

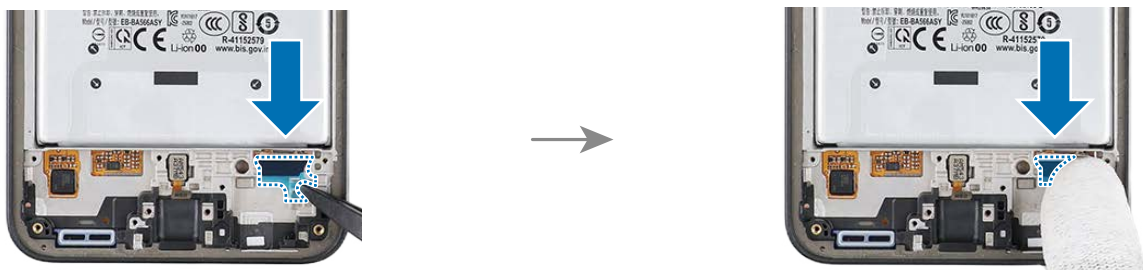
15 Using the tweezers, remove the existing screen connector adhesive tape carefully.

⚠ Be careful not to damage the device and the near components.

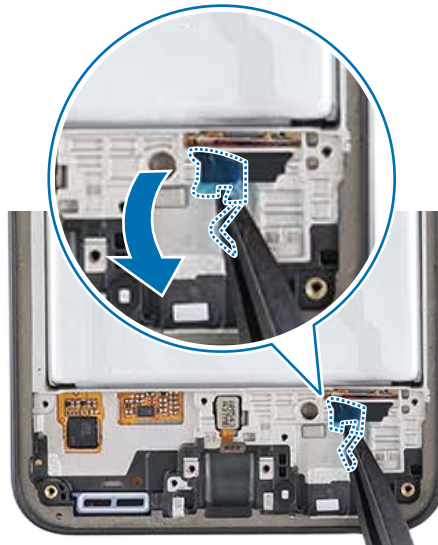


16 Remove the clear film of the new screen connector adhesive tape and attach it to the screen module with the tweezers. Gently press down the tape so that the tape can be attached well.

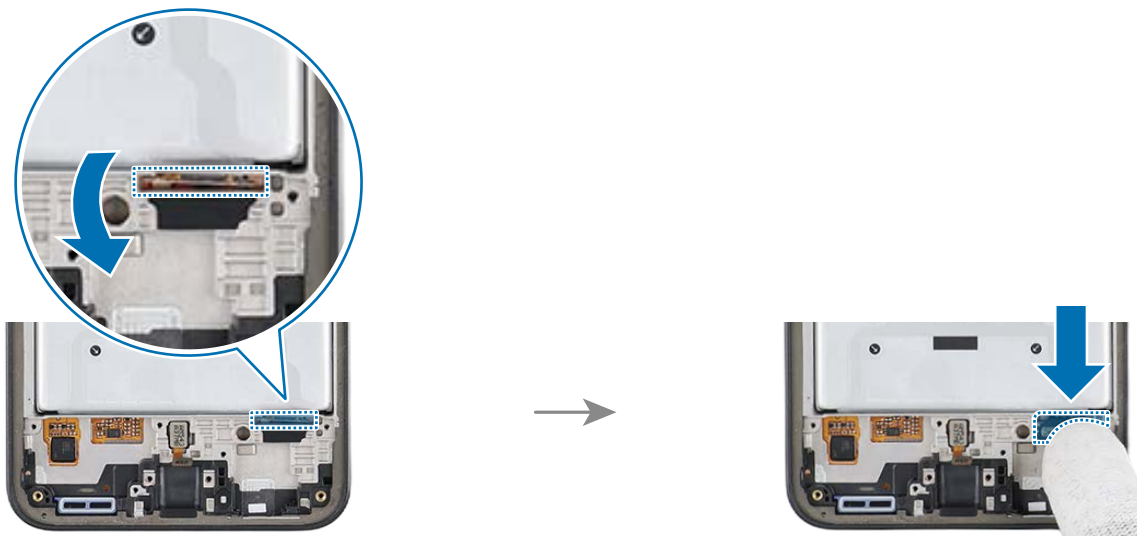
⚠ Be careful not to damage the device and the near components.



17 Remove the release film from the adhesive tape.



18 Attach the screen connector to the screen module with the tweezers or your fingers and gently press down the connector with your fingers so that it can be attached well.



- 19 Check for the reassembly steps of the [Screen Module](#) and completely reassemble the all disassembled parts including the back cover.



Battery

- ⚠ • The battery should be replaced only by the specialised technicians with the knowledge and experience to repair electronic devices.
- The separated battery may be damaged. Do not use it again.


Disassembly


- ✍ Remove the [Back Cover](#) first before you begin.

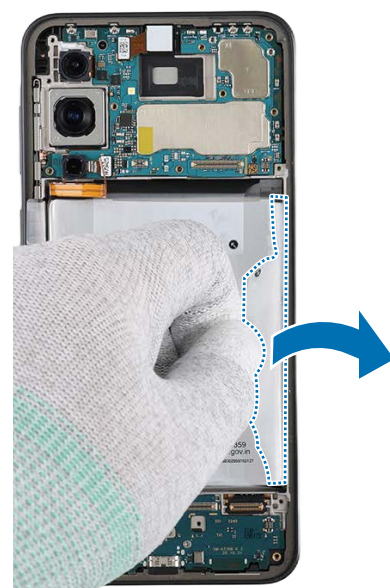
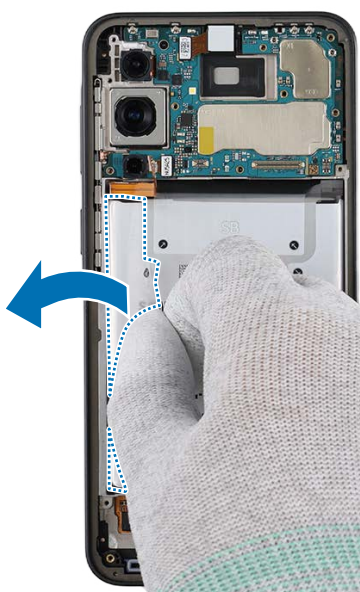
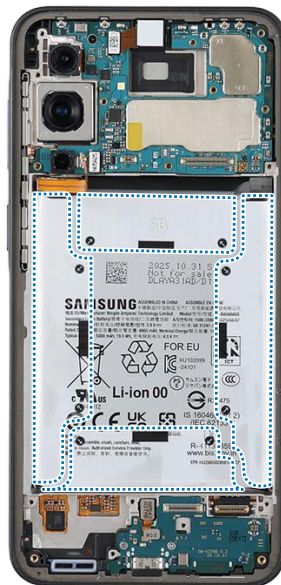
- 1 Check for the disassembly steps of the [Screen Module](#) and completely separate up to the flex cable.



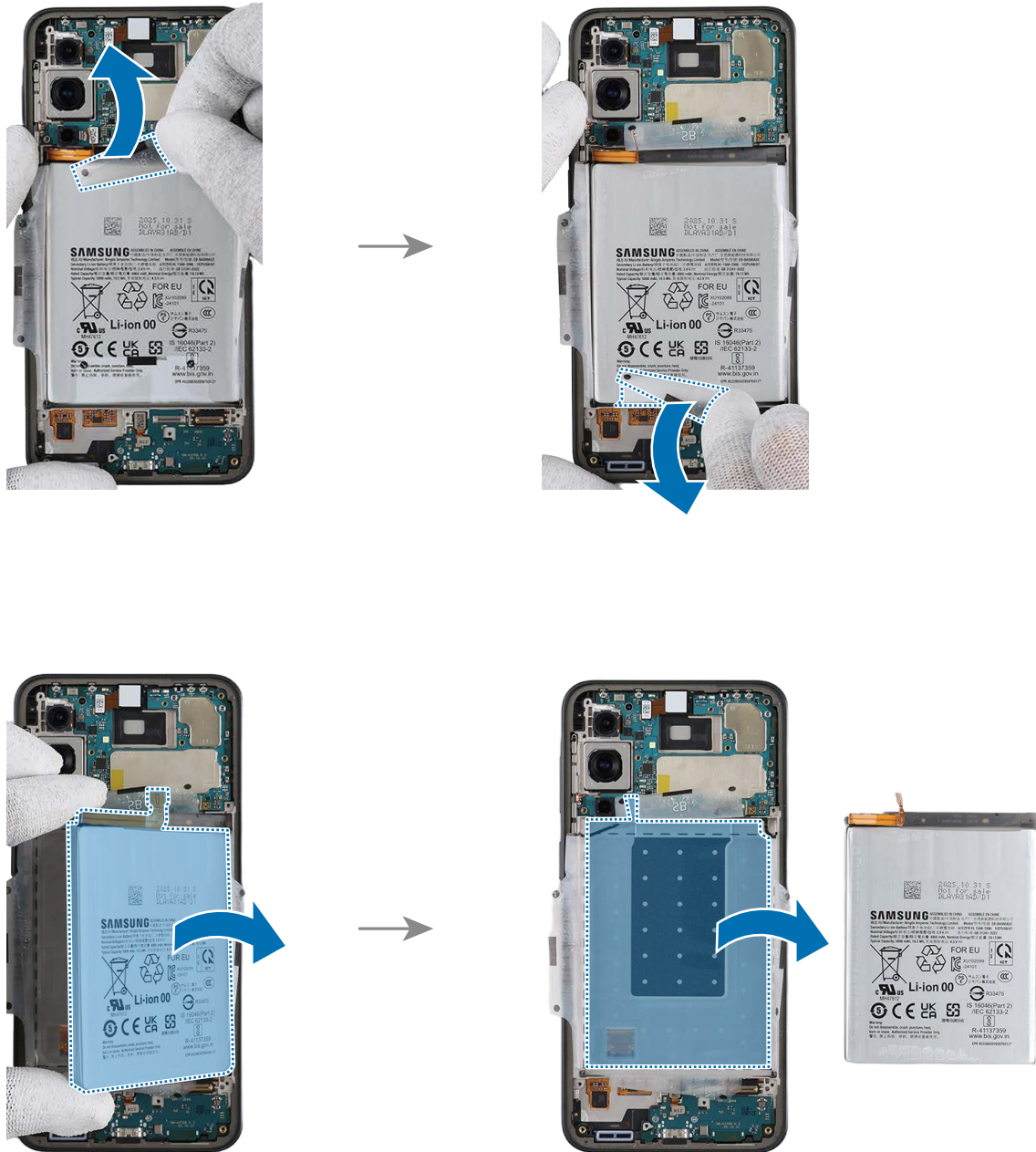
- Using your fingers, grab the 4 tape handles attached to the sides of the battery and separate them carefully from the battery. Then, grab the battery with your fingers and pull it up carefully. Slowly lift up the battery from the device and remove it completely.

 The separated battery may be damaged. Do not use it again.


 As the adhesive securing the battery is very strong, remove the battery slowly and carefully.




Disassembly and Assembly

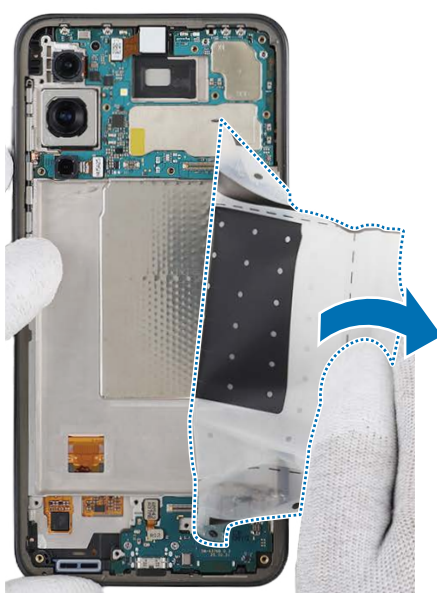


Reassembly


 Leaving screws inside the device may damage internal components, such as the battery. When assembling, be extra careful not to leave any unassembled screws inside the device.


1 Using the tweezers and your fingers, remove all the remaining adhesive tapes on the metal frame.

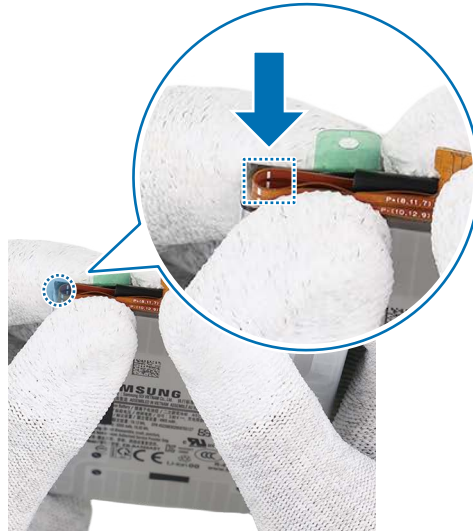
-  Make sure to remove any residual tapes attached to the metal frame before reassembling the new battery.
- Be careful not to damage the device and the near components.




2 Check the white lines on the new battery FPCB cable and carefully fold the cable between the white lines using your fingers.

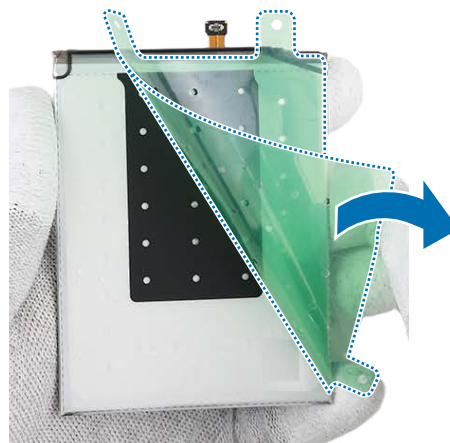
 Be careful not to damage the battery.

 As the cable can be damaged by excessive force, be careful not to damage the cable when folding it.



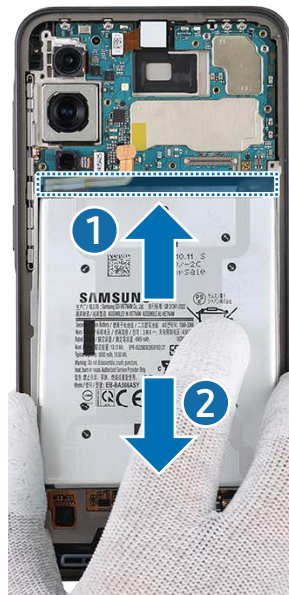
3 Using the tweezers or your fingers, carefully remove the release film from the new battery.

 Be careful not to damage the battery.

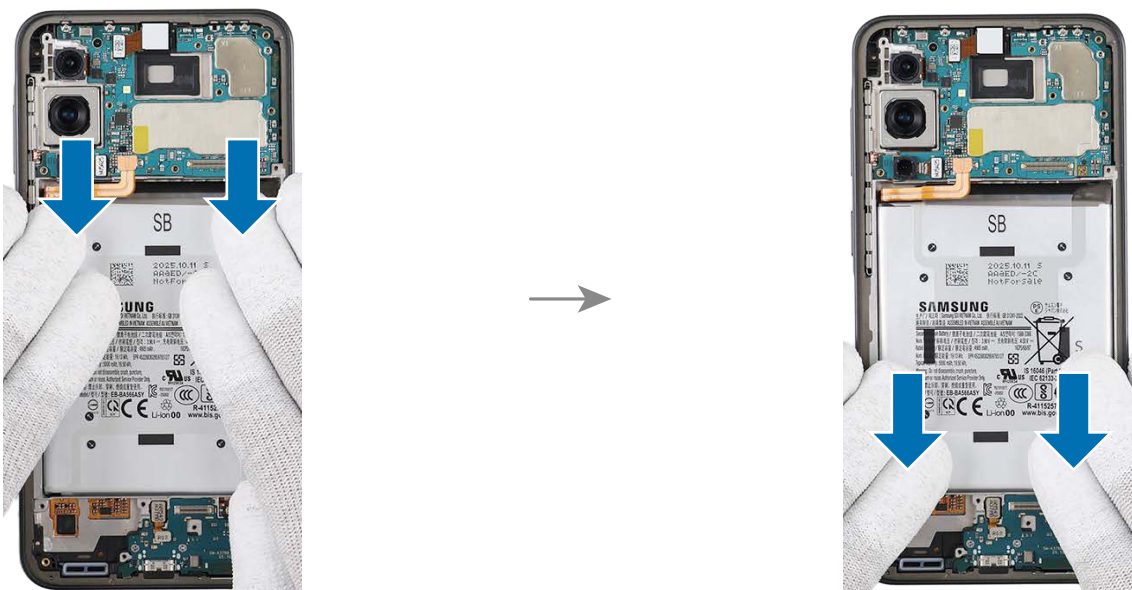


4 With the battery connector on the left, carefully place the battery based on the upper left side of the battery. Assemble the battery to the exact position of the metal frame using your fingers.

- ⚠ Be careful not to damage the battery.
- ⚠ • FPCB cables and connectors have to be positioned outside so as not to interfere when assembling the battery.
- Be careful not to damage the near components.



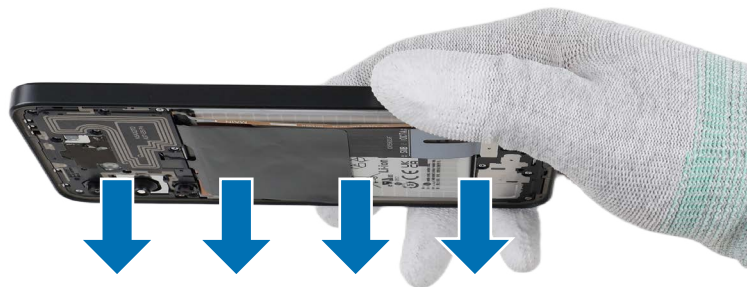
5 Press the battery with your fingers softly so that the battery can be attached well.



- 6 Check for the steps of the [Battery Press](#). You can further press the fully assembled battery using the appropriate tool.
- 7 Check for the reassembly steps of the [Screen Module](#) and completely reassemble up to the rear bottom and top.



- 8 Check carefully with your fingers to see if there are any screws or other foreign substances inside the device (battery, PBA, cable, etc.). Shake the device lightly with the back of the device facing down to remove any remaining screws.



-  Reassemble the [Back Cover](#) to complete assembly.

After reassembling

- Check whether the parts or sensors in the device work properly with the Self Repair Assistant app after repairing and assembling your device. Refer to [Calibrations](#) for more information.
- Visit a Samsung Service Centre when finding some issues from the calibration results. However, you may incur additional charges if the device has a malfunction because of DIY repairs.

Press



- The **Press** step is a process for responding to Repair Regulations implemented in some regions and may not be an essential process in other areas.
- Availability of bundle tool may vary depending on the country and is currently available only in limited countries.
- The press toolkit is only available to use by the rental of tool kit that contains a complete set of the tools for self repair service. Availability of rental service for this toolkits may vary depending on the country and is currently available only in limited countries.
- Some images of the press fixture may show a different Galaxy model, but the procedure is the same.

Before pressing,


- Using the press toolkit or bundle tool, you can further press the fully assembled back cover, screen, or battery.
- Prepare all necessary press tools and make sure to wear the appropriate safety equipment for your safety.
- Ensure that the device is fixed on a soft and flat surface.


Back Cover Press

 Appropriate tool for pressing depends on the parts repaired.

Using the stamp

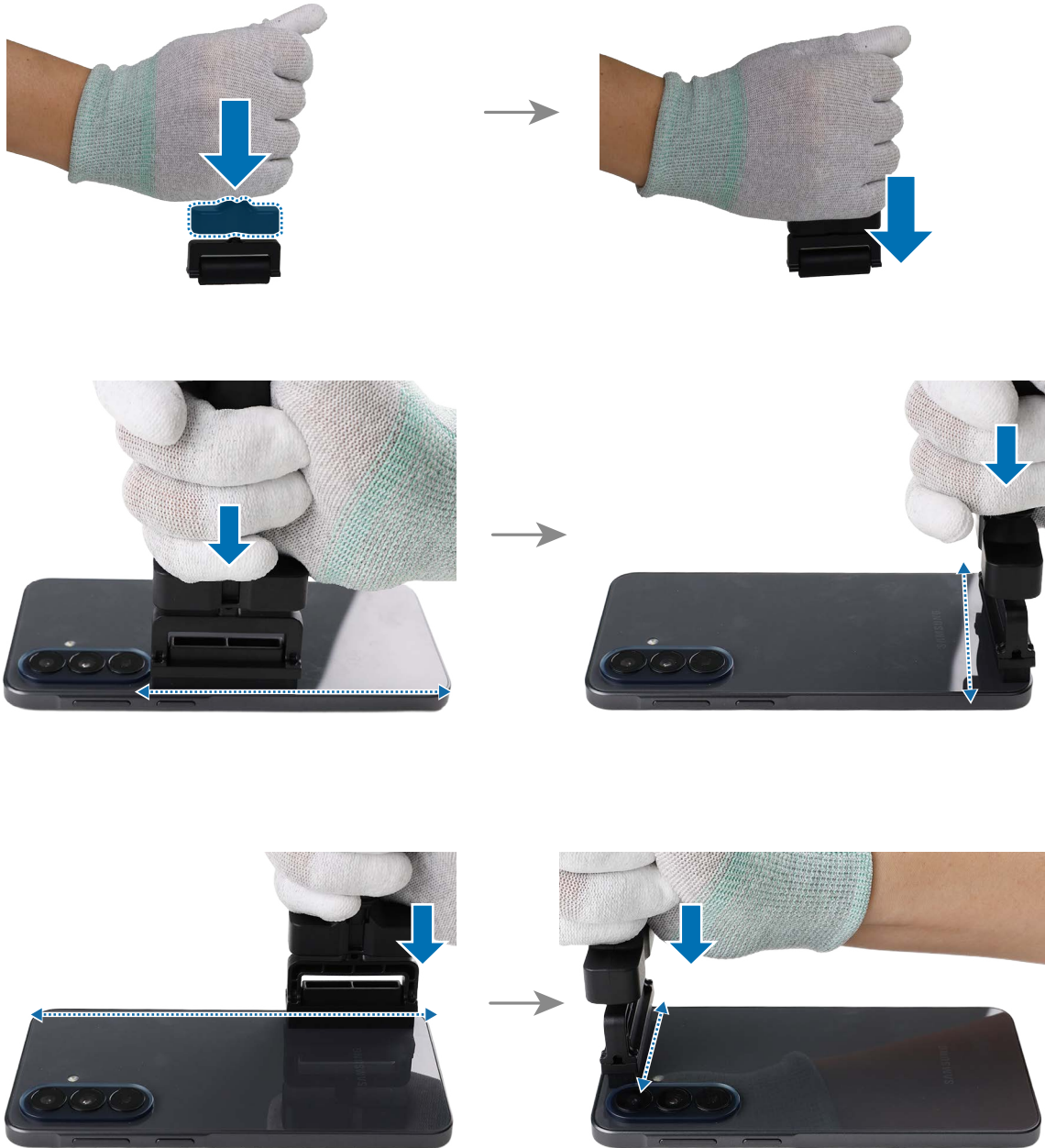
 Keep your hands out of the stamp.

-  • Be sure to use while the spring of stamp is pressed.
- Be careful not to damage the camera part.
- As the back cover can be damaged by excessive force, be careful not to damage the back cover.
- Be sure to place the surface of stamp horizontally on the back cover.

 When repairing only a single back cover, the press stamp can be bundled with the ordered parts.

- 1 With the stamp's spring pressed, press the all edges of the back cover with a press stamp for 5 seconds each. According to the stamp size, repeat this without missing at all edges of the back cover except for the camera part so that the back cover is pressed well.





2 With the stamp's spring pressed, press the outer edges of the camera with a press stamp for 5 seconds each. Carefully press the edge around the camera using the edge of the stamp.


⚠ Be careful not to damage the camera part by the stamp.



- 3 Press down outer edges of the camera softly using your fingers so that the back cover can be attached well.




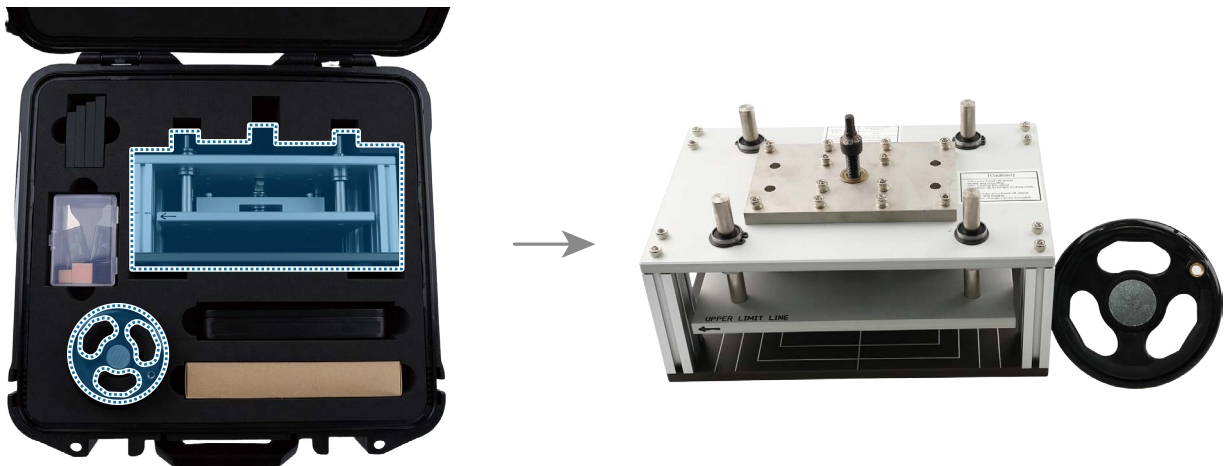
Using the toolkit

 If you have disassembled and assembled the back cover to repair other parts, you can use the rental toolkit to press the back cover further.

1 Now you can press the fully assembled back cover using the press fixture. Remove the press fixture body and its handle from the rental tool kit packaging.

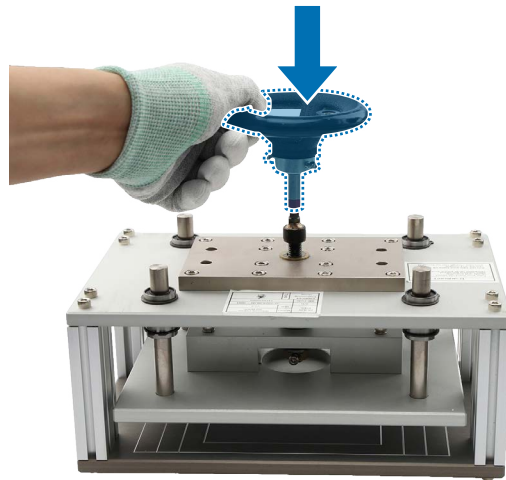
 Keep your hands out of the press fixture to avoid mechanical pinching and injury.

-  • This tool is only available to use by the rental of tool kit that contains a complete set of the tools for self repair service.
- Availability of rental service may vary depending on the country and is currently available only in limited countries.
 - A rented tool kit packaging may have different packaging than shown.



2 Carefully position the torque limit handle horizontally at the top of the press fixture.

 Keep your hands out of the press fixture to avoid mechanical pinching and injury.



3 Remove the bottom press tray, top press tray, and top rubber pad for the back cover from the rental tool kit packaging.



- 4 Leave the bottom press tray so that the side for the back cover is visible. Then, place the device into the tray facing down.
- ⚠ Be sure to remove the guide pins before proceeding. To prevent any potential issues, ensure that the guide pins are fully removed prior to pressing.
 - 📝 You can choose the one side of the bottom press tray depending on the back cover, screen, or battery.



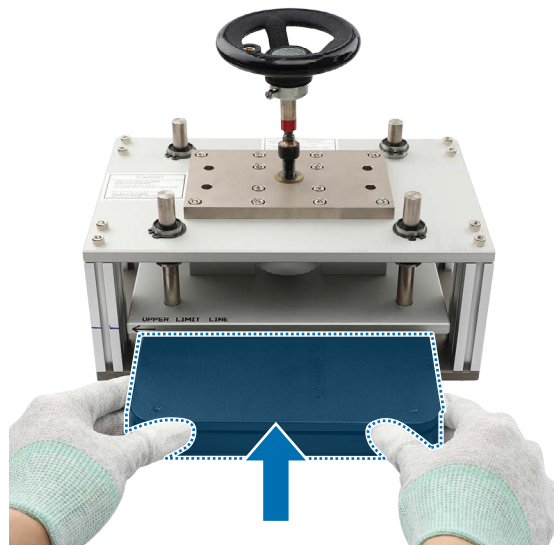
- 5 Insert the top rubber pad into the top press tray. Press down the edges of the rubber pad entirely using your fingers and make sure that the pad is pressed in completely.



- Carefully place the top press tray over the bottom press tray.




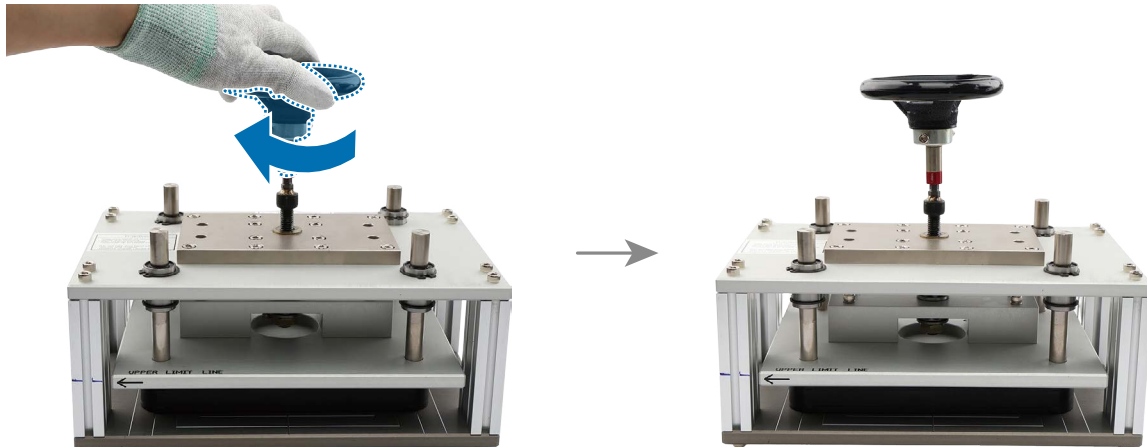
- Position the entire back cover press tray with the device horizontally in the centre of the press fixture.



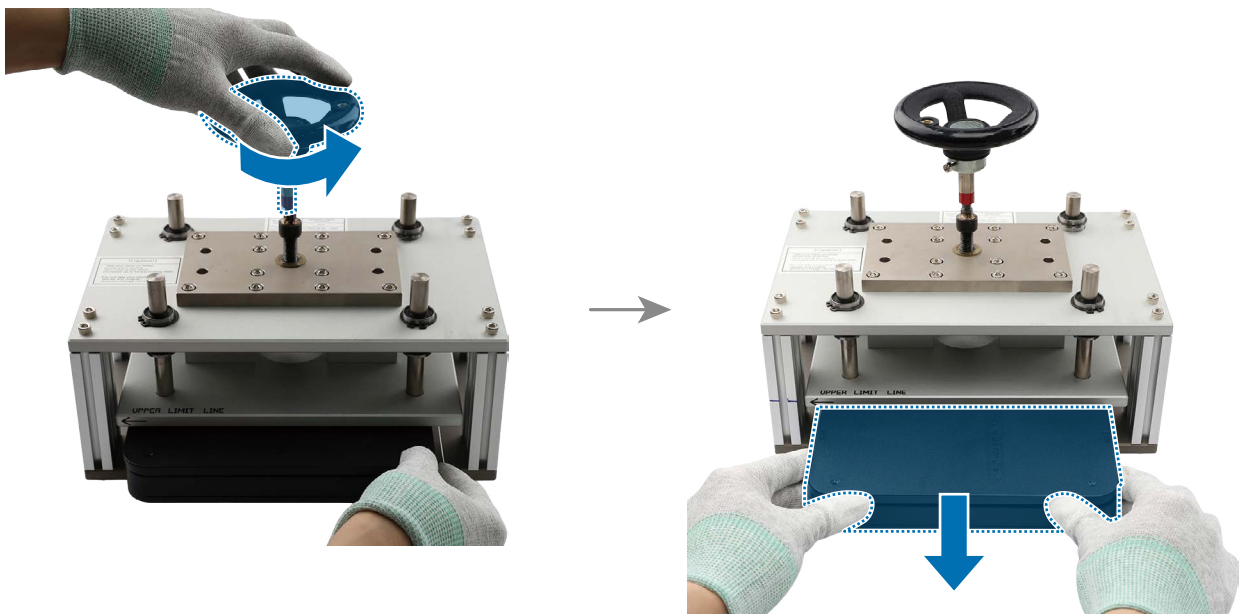
8 Rotate the torque limit handle to the clockwise until it makes a sound. In that press state, stay the tray for 1 minute.

 Keep your hands out of the press fixture to avoid mechanical pinching and injury.

 When you reach the required maximum force (1 N), a sound is made from the handle if you turn the handle.



9 When the press is completed after 1 minute, rotate the torque limit handle to the anticlockwise and remove the tray from the press fixture.




10 Remove the device carefully from the tray.

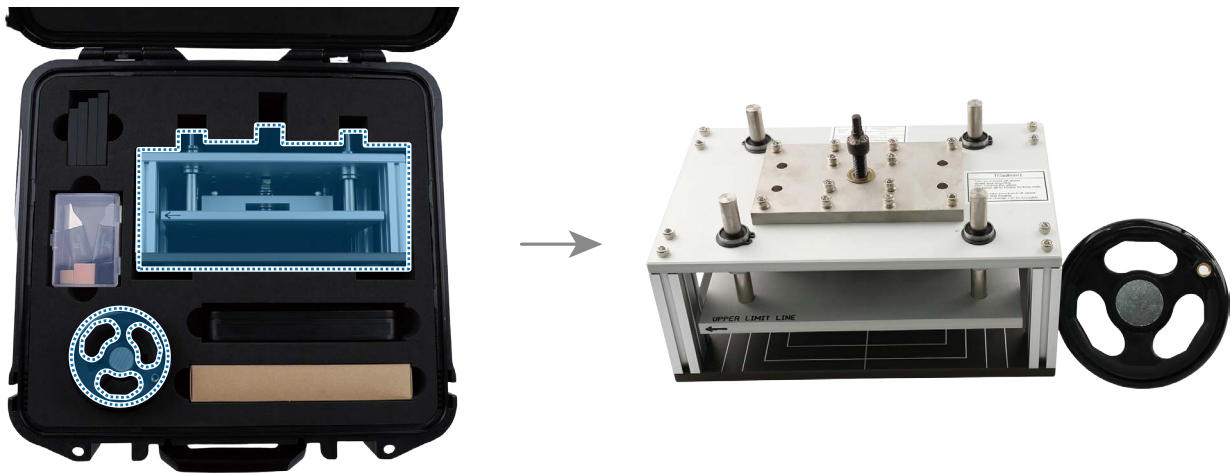


Screen Press

1 Now you can press the fully assembled screen using the press fixture. Remove the press fixture body and its handle from the rental tool kit packaging.

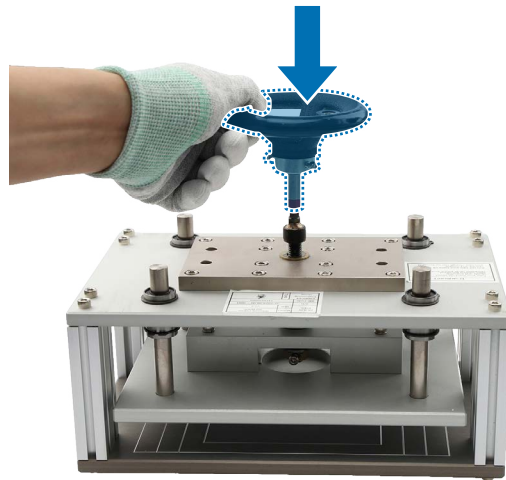
 Keep your hands out of the press fixture to avoid mechanical pinching and injury.

-  • This tool is only available to use by the rental of tool kit that contains a complete set of the tools for self repair service.
- Availability of rental service may vary depending on the country and is currently available only in limited countries.
 - A rented tool kit packaging may have different packaging than shown.



2 Carefully position the torque limit handle horizontally at the top of the press fixture.

 Keep your hands out of the press fixture to avoid mechanical pinching and injury.



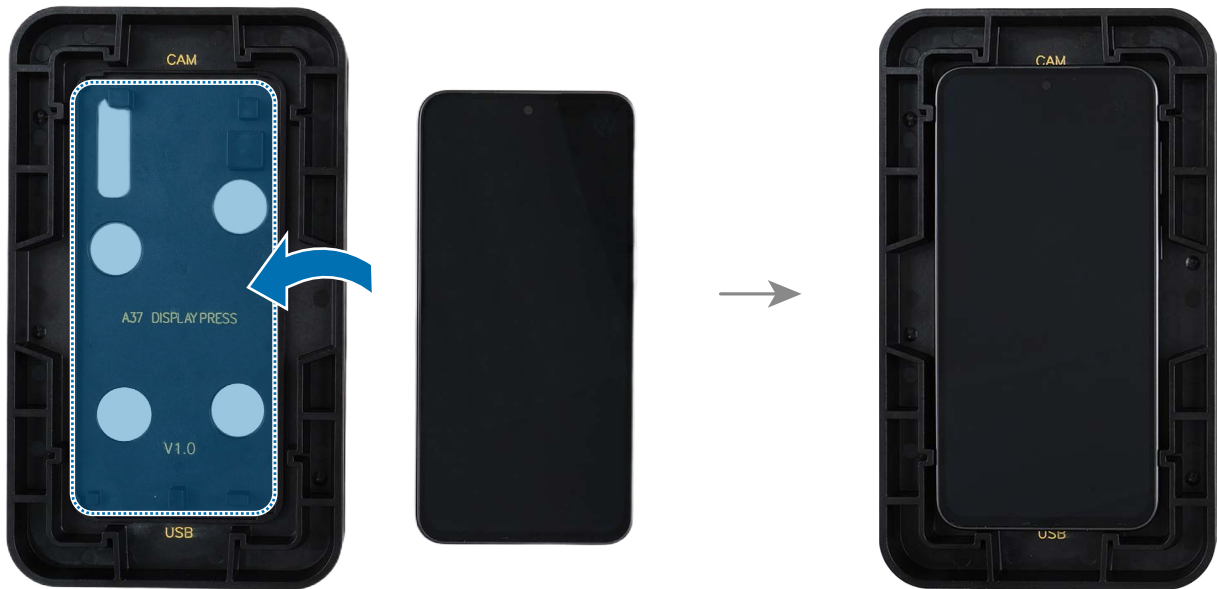
3 Remove the bottom press tray, top press tray, and top rubber pad for the screen from the rental tool kit packaging.



4 Leave the bottom press tray so that the side for the screen is visible. And place the device into the tray facing up.

⚠ Be sure to remove the guide pins before proceeding. To prevent any potential issues, ensure that the guide pins are fully removed prior to pressing.

📝 You can choose the one side of the bottom press tray depending on the back cover, screen, or battery.



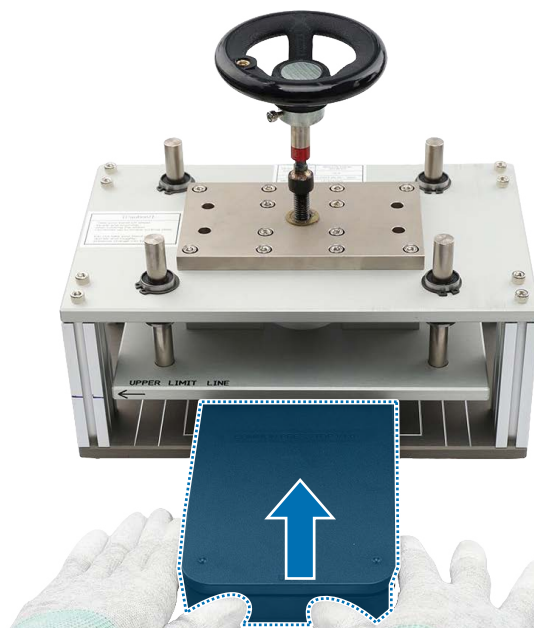
- 5 Insert the top rubber pad into the top press tray. Press down the edges of rubber pad entirely using your fingers and make sure that the pad is pressed in completely.



6 Carefully place the top press tray over the bottom press tray.




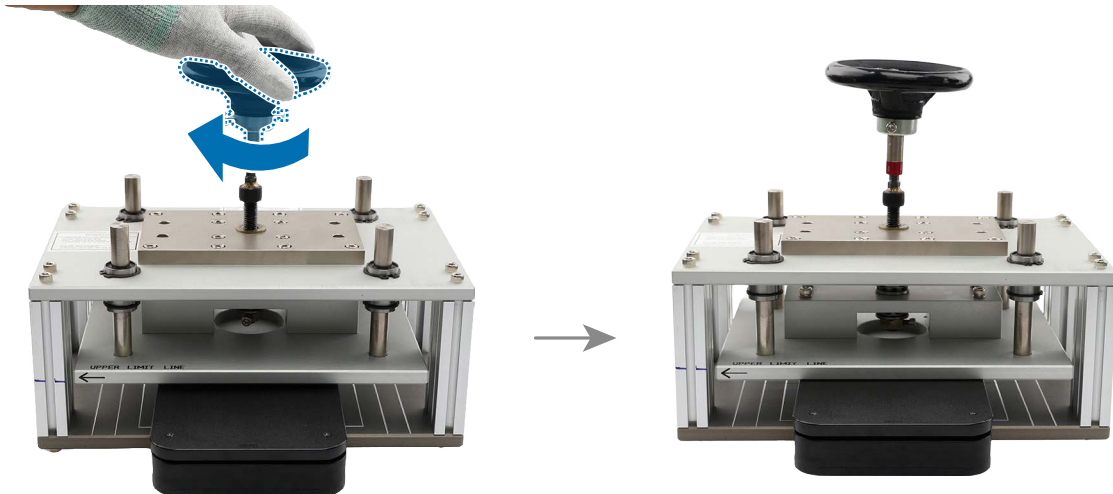
7 Position the top 2/3 of the screen press tray with the device lengthwise in the centre of the press fixture.



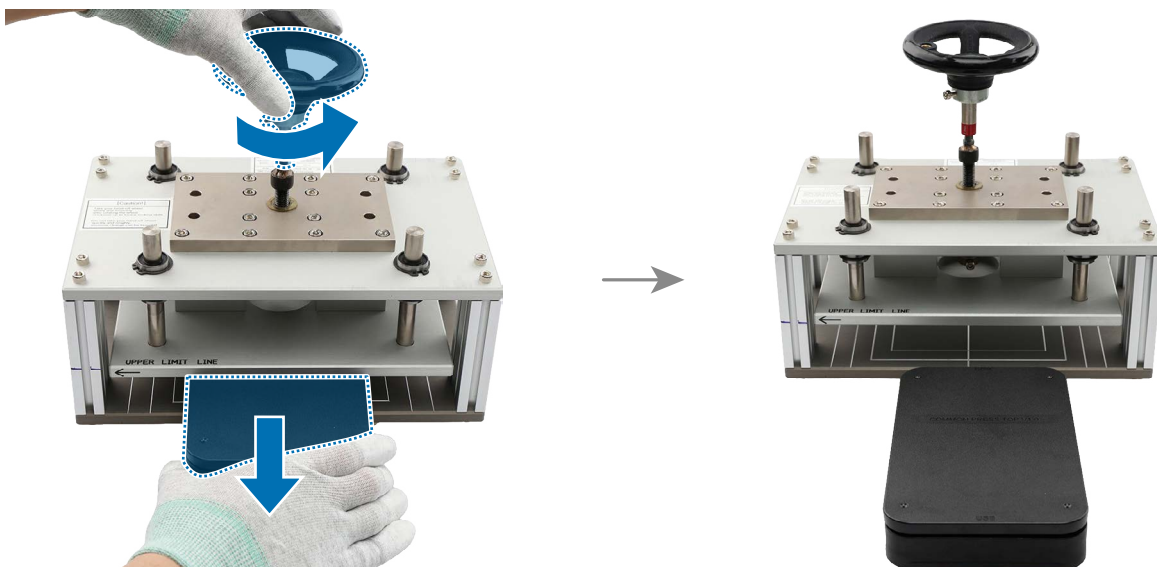
8 Rotate the torque limit handle to the clockwise until it makes a sound. In that press state, stay the tray for 30 seconds.

 Keep your hands out of the press fixture to avoid mechanical pinching and injury.

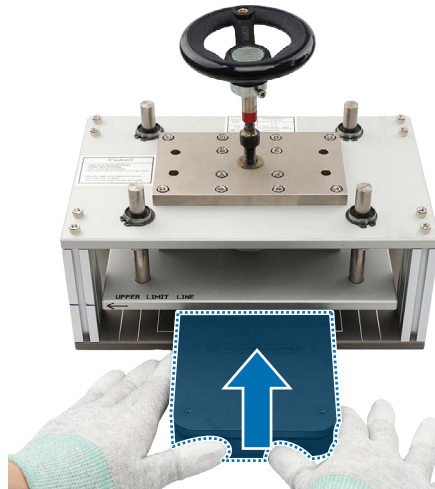
 When you reach the required maximum force (1 N), a sound is made from the handle if you turn the handle.



9 When the press is completed after 30 seconds, rotate the torque limit handle to the anticlockwise and remove the tray from the press fixture.

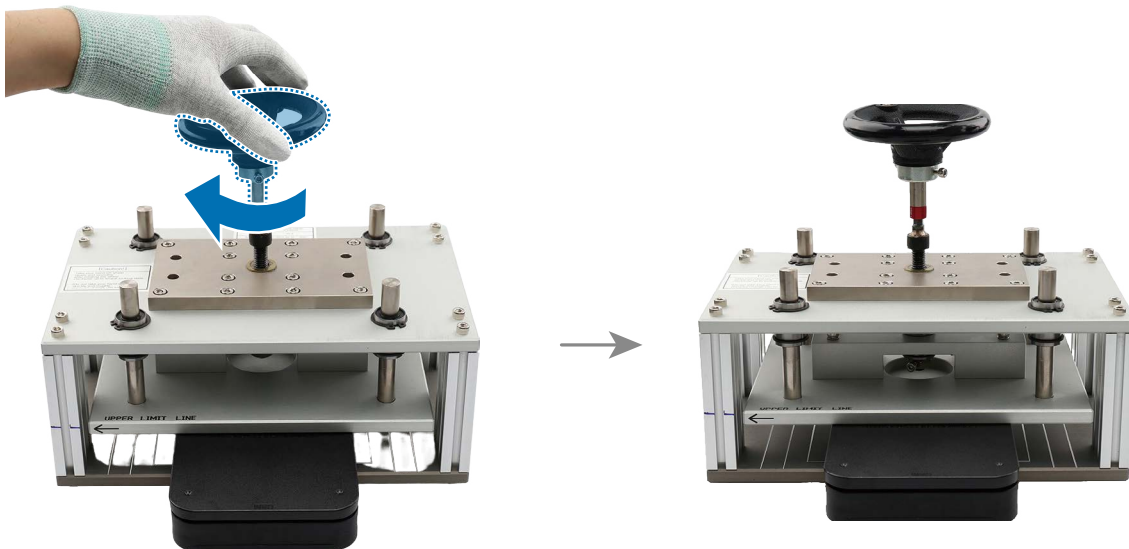


- 10 Position the bottom 2/3 of the screen press tray with the device lengthwise in the centre of the press fixture.

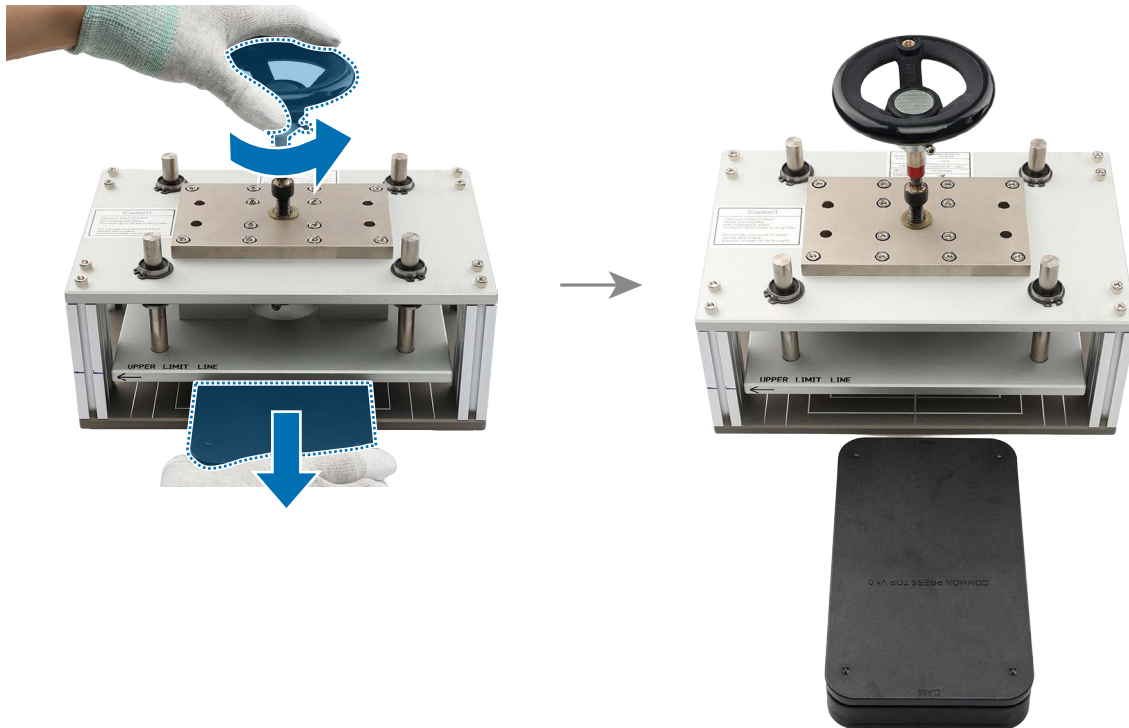


- 11 Rotate the torque limit handle to the clockwise until it makes a sound. In that press state, stay the tray again for 30 seconds.

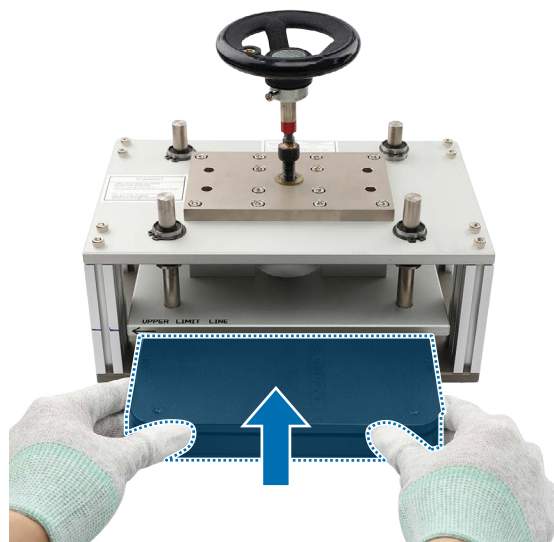
 Keep your hands out of the press fixture to avoid mechanical pinching and injury.



- 12 When the second press is completed after 30 seconds, rotate the torque limit handle to the anticlockwise and remove the tray from the press fixture.

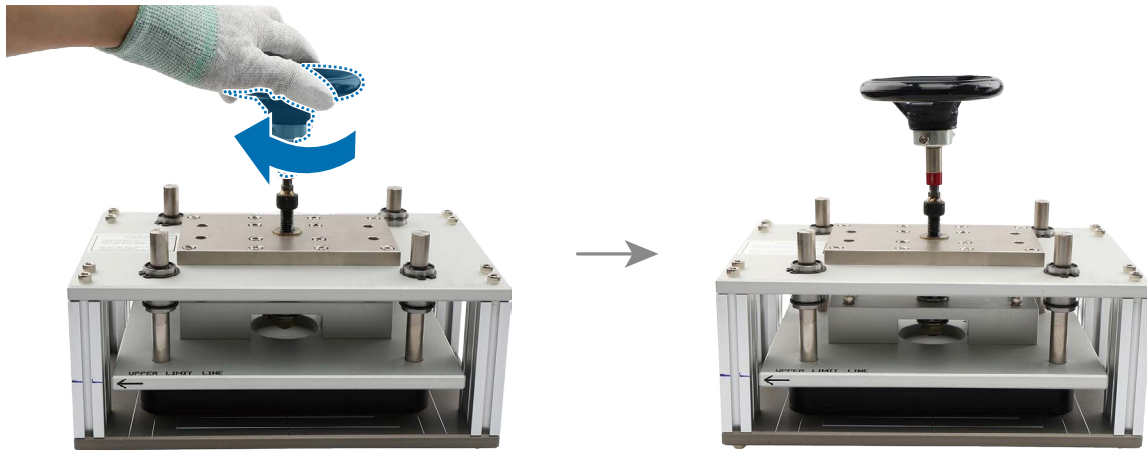


- 13 Position the entire screen press tray with the device horizontally in the centre of the press fixture.

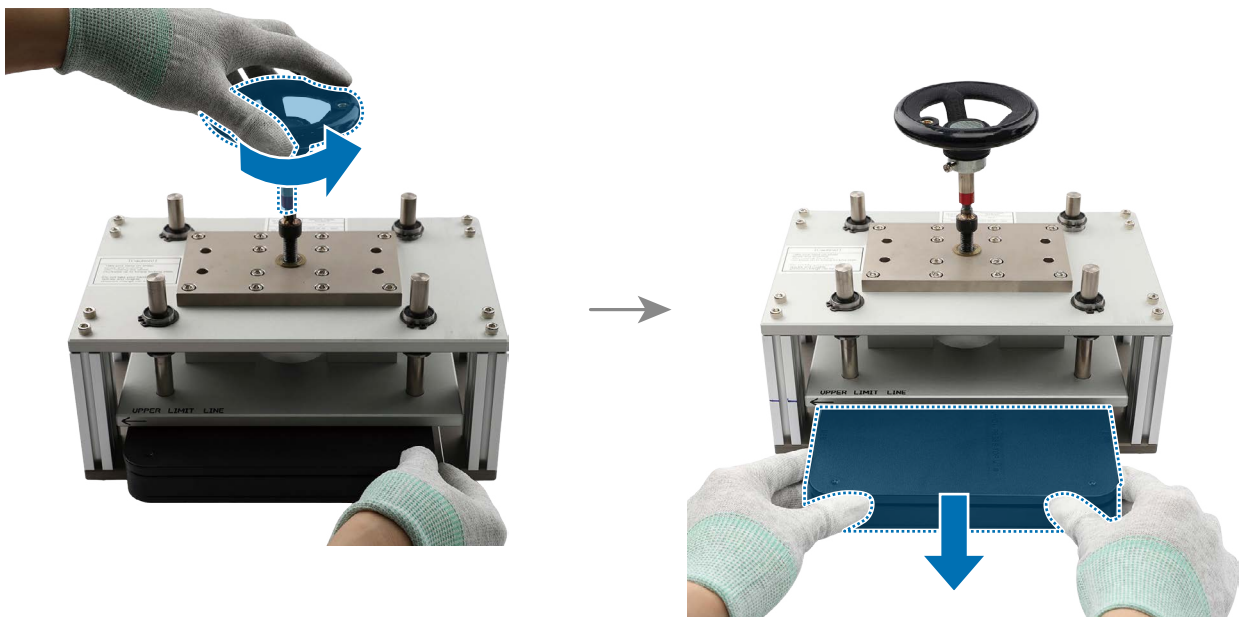


14 Rotate the torque limit handle to the clockwise until it makes a sound. In that press state, stay the tray for 30 seconds.

 Keep your hands out of the press fixture to avoid mechanical pinching and injury.



15 When the third press is completed after 30 seconds, rotate the torque limit handle to the anticlockwise and remove the tray from the press fixture.




16 Remove the device carefully from the tray.

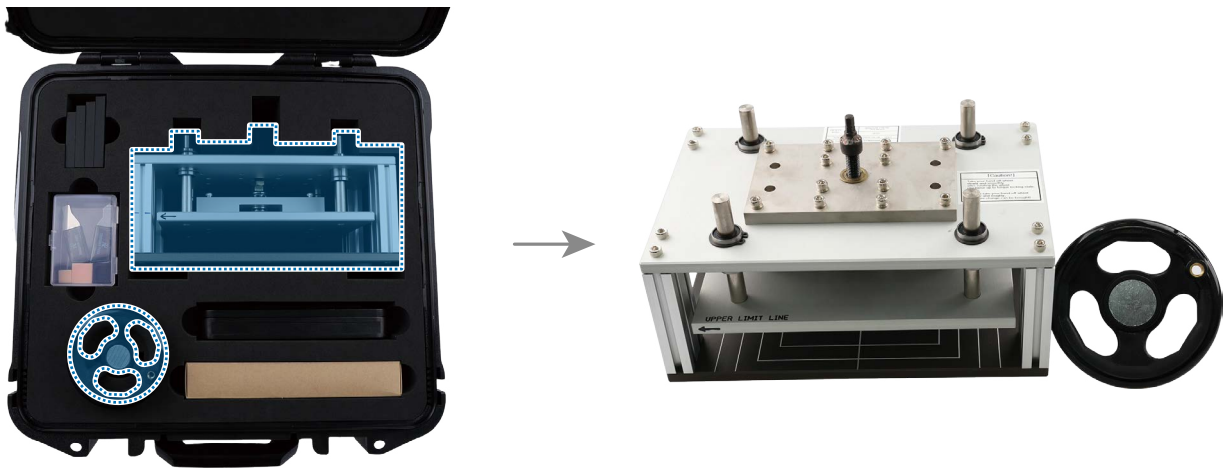


Battery Press

1 Now you can press the fully assembled battery using the press fixture. Remove the press fixture body and its handle from the rental tool kit packaging.

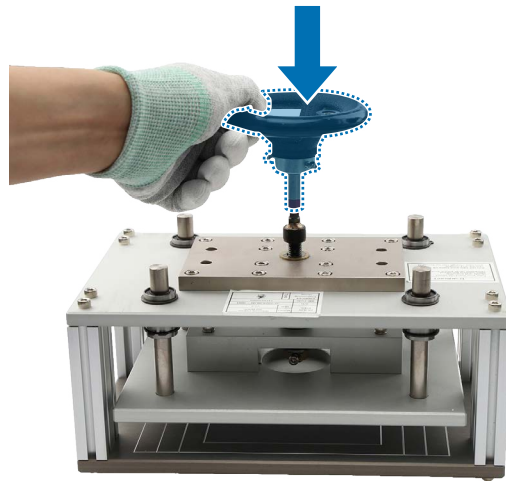
 Keep your hands out of the press fixture to avoid mechanical pinching and injury.

-  • This tool is only available to use by the rental of tool kit that contains a complete set of the tools for self repair service.
- Availability of rental service may vary depending on the country and is currently available only in limited countries.
 - A rented tool kit packaging may have different packaging than shown.



2 Carefully position the torque limit handle horizontally at the top of the press fixture.

 Keep your hands out of the press fixture to avoid mechanical pinching and injury.



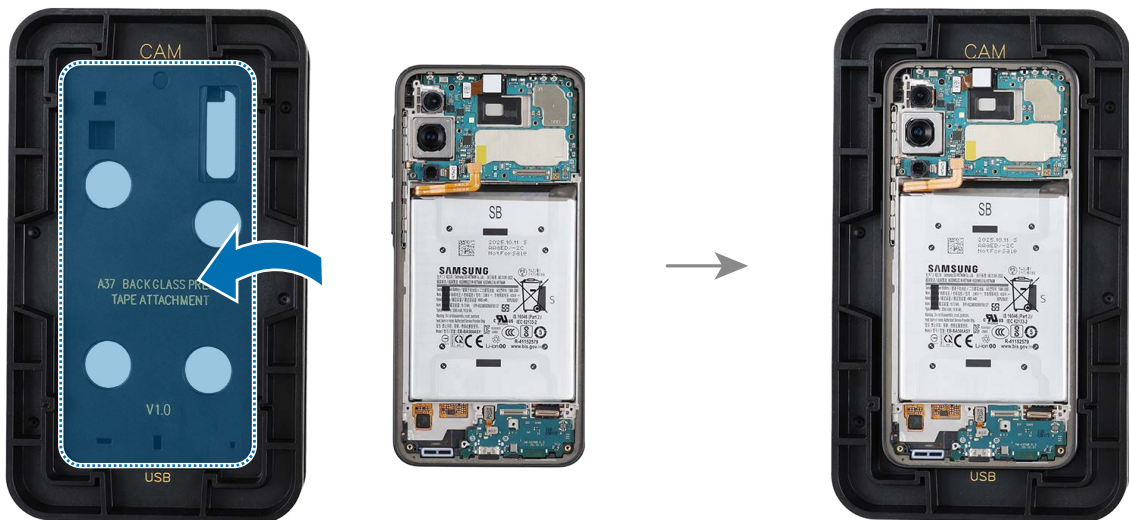
3 Remove the bottom press tray and the battery rubber pads from the rental tool kit packaging.



4 Leave the bottom press tray so that the side for the battery is visible. Then, place the device into the tray facing down.

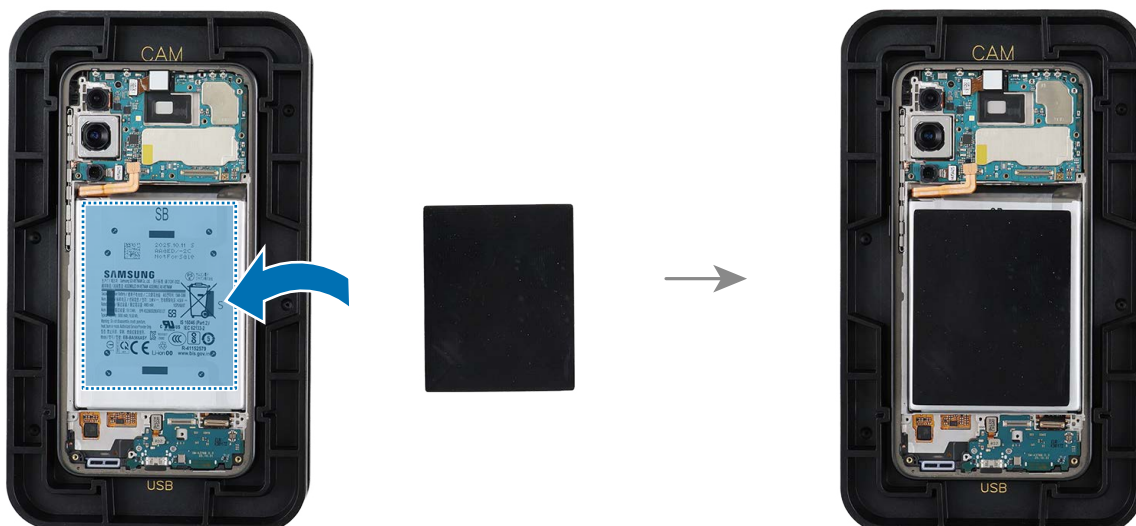
⚠ Be sure to remove the guide pins before proceeding. To prevent any potential issues, ensure that the guide pins are fully removed prior to pressing.

📄 You can choose the one side of the bottom press tray depending on the back cover, screen, or battery.



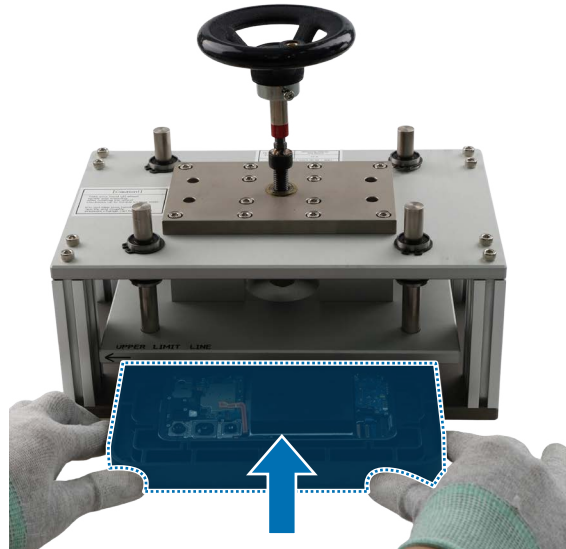
5 Choose a battery-sized pad from the provided battery rubber pads and place it carefully on the battery.

⚠ Be careful not to cover the battery rubber pad beyond the battery size.



6 Position the entire bottom press tray with the device horizontally in the centre of the press fixture.

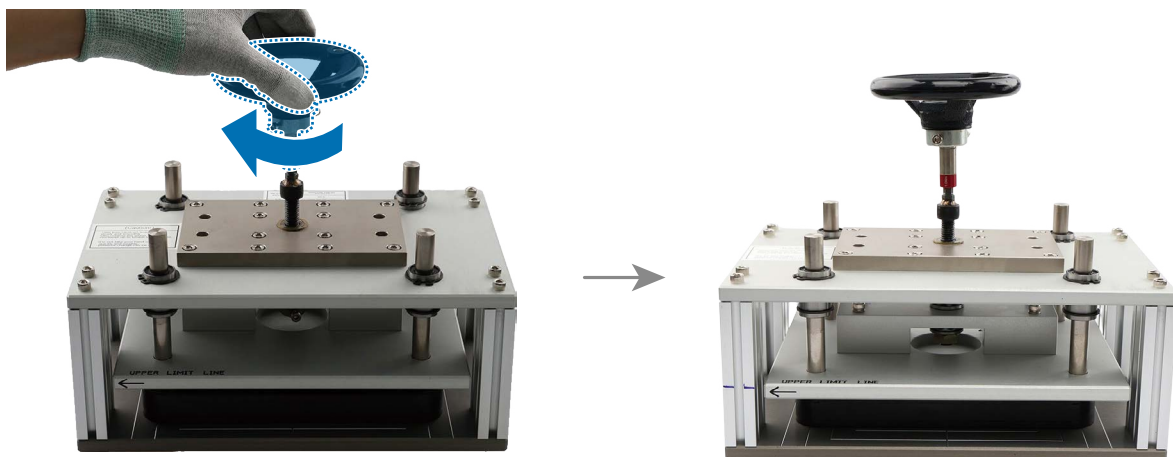
⚠ Be careful not to move the battery pad out of position.



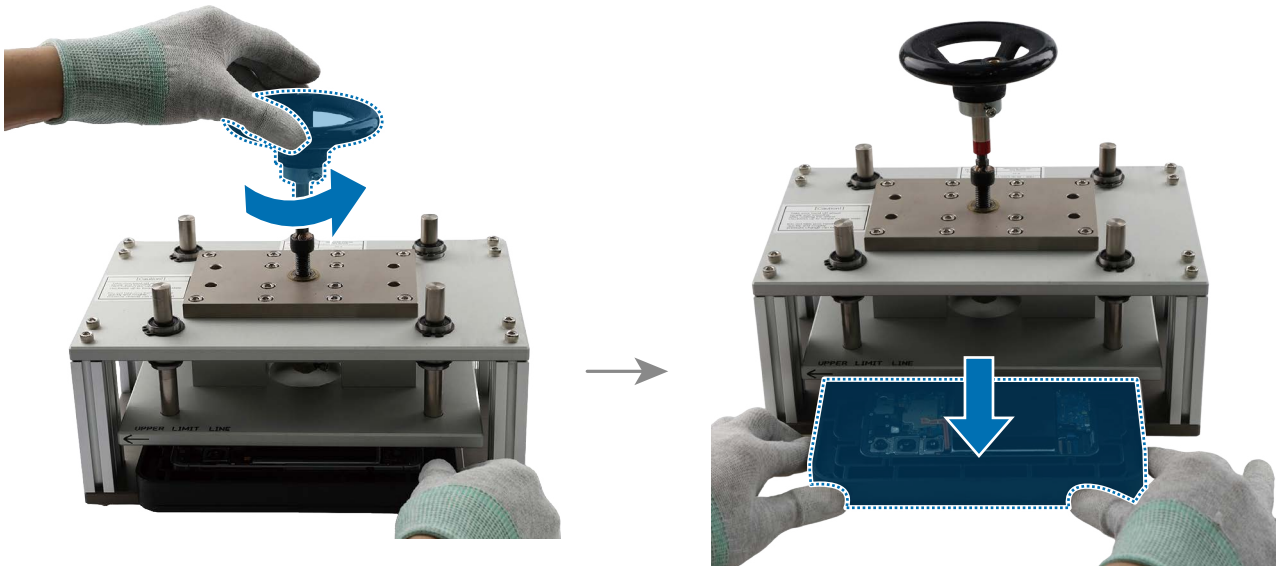
7 Rotate the torque limit handle to the clockwise until it makes a sound. In that press state, stay the tray for 5 seconds.

⚠ Keep your hands out of the press fixture to avoid mechanical pinching and injury.

✔ When you reach the required maximum force (1 N), a sound is made from the handle if you turn the handle.



- 8 When the press is completed after 5 seconds, rotate the torque limit handle to the anticlockwise and remove the tray from the press fixture.

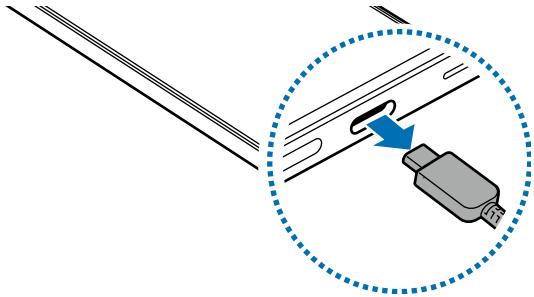


- 9 Remove the device and the rubber pad carefully from the tray.



Directive 2012/19/EU Annex VII Components

Directive 2012/19/EU Annex VII requirements apply to the following components.

Component	Samsung Part Name	Removal Instructions
Printed circuit board if the surface is greater than 10 square centimetres	Main Board (PBA)	Check for the disassembly steps of the Rear Camera and separate the main board.
Liquid crystal display of a surface greater than 100 square centimetres and all those back-lighted with gas discharge lamps	Screen	Check for the disassembly steps of the Screen and separate the screen.
Battery	Battery	Check for the disassembly steps of the Battery and separate the battery.
External Electric Cable	USB Cable	Disconnect the USB cable. 

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