Pixel 9a

Repair manual

Version 1.1

Google recommends that you seek professional assistance for all device repairs.

Self service repair isn't recommended unless you are an adult with the technical expertise to safely repair electronic devices. If you choose to perform self repair, you agree to assume the risk associated with such repair.

Use caution if you engage in repair.

Opening or repairing your device can present electric shock, device damage, fire, and personal injury risks, and other hazards. Before you service the product, read the full set of precautions in this document.

Welcome!

We are here to help.

At Google, we innovate, design, and build to create helpful and sustainable products.
Product longevity is important to us and repairability is part of that. Repair lets our products stay in-use and out of landfills.

If you have any questions or want support, please reach out.

support.google.com

This manual is organized into sections for easy and intuitive navigation.

Precautions

Safety is a top priority for Google. Users should work in a safe environment and have the skills and training necessary to complete the repairs safely.

Repair flows

Here, we have a flow chart of the most efficient repair methods.

Disassembly

Each section contains a list of prerequisite steps, tools, fixtures, and parts to complete the repair, in the order of device disassembly.

Assembly

For each disassembly, we provide a guide to reassemble. This may include rework steps for certain components.

Troubleshooting and software

Use the diagnostic steps and testing recommended in this section to identify the source of device problems and issues.

Glossary

All of the terms and acronyms you need to communicate with the same language.

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Troubleshooting

Useful link

Revision history

Version	Date	Change description
v1.0	March 2025	First release
v1.1	March 2025	1. Revise the wording from "display" to "back cover."@51 2. Revise picture to align the condition#2 battery removal process @67 3. Revise separate back cover wording @54 4. Revise wording for reclaim enclosure washer @114 5. Revise defined battery assemble condition."@146 6. Revise MLB washer go/no go picture @129 7. Revise wording "Remove the release liners on the top speaker & FPC" into 2 sentences.@122 8. Add notification "Secure the fixture on the working surface."@66 9. Add safety notice use caution @92 ,@86 ,@77 , @62 10. Add condition for when need to replace new conductive fabric @97 11. Add new step to present "applying AP111 on enclosure under Back Cover PSA".@116 12. Add wording "The assembly must be completed within 25 minutes after applying primer."@98 ,@99 ,@102 ,@116 ,@122 ,@144 ,@160 13. Add wording "Make sure protective films are removed before pressing."@108 ,@164 14. Add new step to check battery model before use new battery @144 15. Add new spare parts for rework enclosure Foam @27 ,@94 & rework instruction @111 16. Add step & picture to smooth the CG FPC assy process @P.108,@P.136 17. Delete screen calibration process 18. Update wording @150 to note gently attaching the mylar.

Pixel 9a repair manual

Precautions

Important: Before you begin

Be careful if you engage in repair

When you open or repair a device, be careful of electric shock, device damage, fire, and personal injury risks, and other hazards.

Always perform repairs in a clean work space with good ventilation and no combustible materials.

Ensure that there are no additional screws or small parts left in the device after assembly.

Always ensure that screws are fastened securely.

Before you service the product, read the full set of precautions in this document.

Use caution: Batteries should be carefully handled, and can be dangerous when damaged

- Before you attempt repair, fully discharge the device battery.
- Never bend, dent, puncture, or use tools to pry the battery.
- To prevent damage, store batteries in the replacement part packaging after removal as soon as possible.
- If a battery begins to vent, cover it in sand or use gloves and tongs to place the battery in a fire safe as soon as possible.
- Take care to prevent shorting of battery terminals or damage to the battery, as it can result in fire or overheating.
- Dispose of the battery according to local regulations.

Use caution: Pixel 9a contains a class 1 laser module

The design of the device includes optics and protective housing to ensure that there's no access to a level of laser radiation above class 1 during normal use or approved servicing.

Use of controls or adjustments and performance of procedures except specified here may result in exposure to hazardous radiation.

Important: Before you begin

Use caution:
Part handling – glass

- Wear protective gloves and safety glasses when you handle damaged parts.
- Use protective film when you remove damaged parts.
- After removal, store the damaged part in the replacement part packaging as soon as possible to prevent injury.

Tools and fixtures

We strongly recommend the use of Google-authorized tools and fixtures to repair a device in a safe and effective manner.

Use caution:

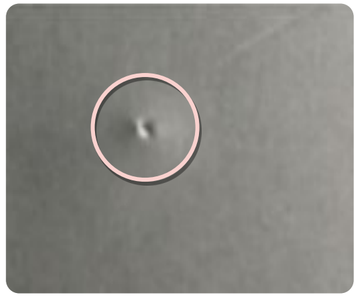
- We *don't* recommend that you perform repairs without the specified tools and fixtures.
- Improper use of tools and fixtures may result in injury to yourself, the user of the device or others, as well as damage to the product, tools, fixtures, replacement parts, or other spare parts.

Important: Before you disassemble the device

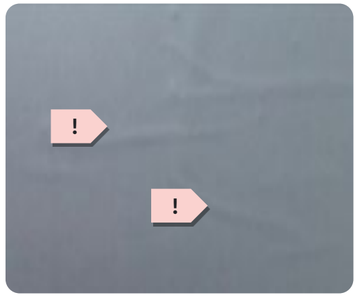
- Disconnect the device from all power sources before any disassembly.
- Before any disassembly ensure that the battery is fully discharged.
- *Don't* attempt disassembly if the phone battery shows signs of swelling or damage, or if the phone feels hot or emits a strong odor. Please reach out to Google customer support.
- Be careful not to expose the phone or its components to liquids after disassembly.

Use caution ⚠

Examples of unacceptable battery conditions that are not suitable for repair*

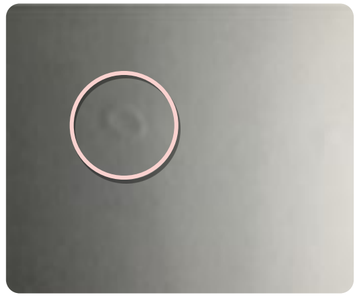


Pouch damage

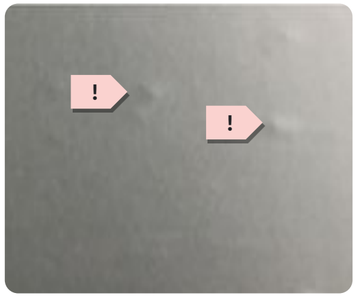


Line protrusion

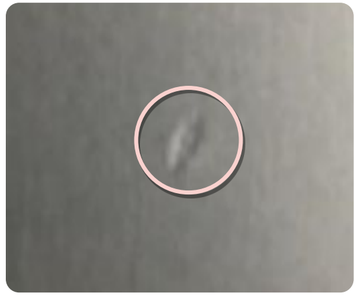
Scratch



Contamination mark

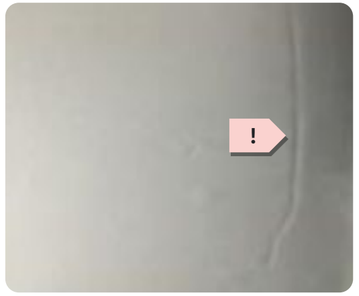


Dot protrusion

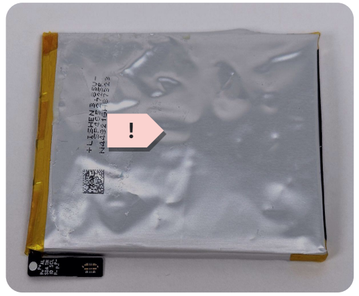


Dent

Bubbling



Imprinted line



Swelling or electrolyte leakage

*These are the few examples of potentially dangerous battery conditions but not all possible dangerous conditions. Please follow the general safety guidance outlined in this document.

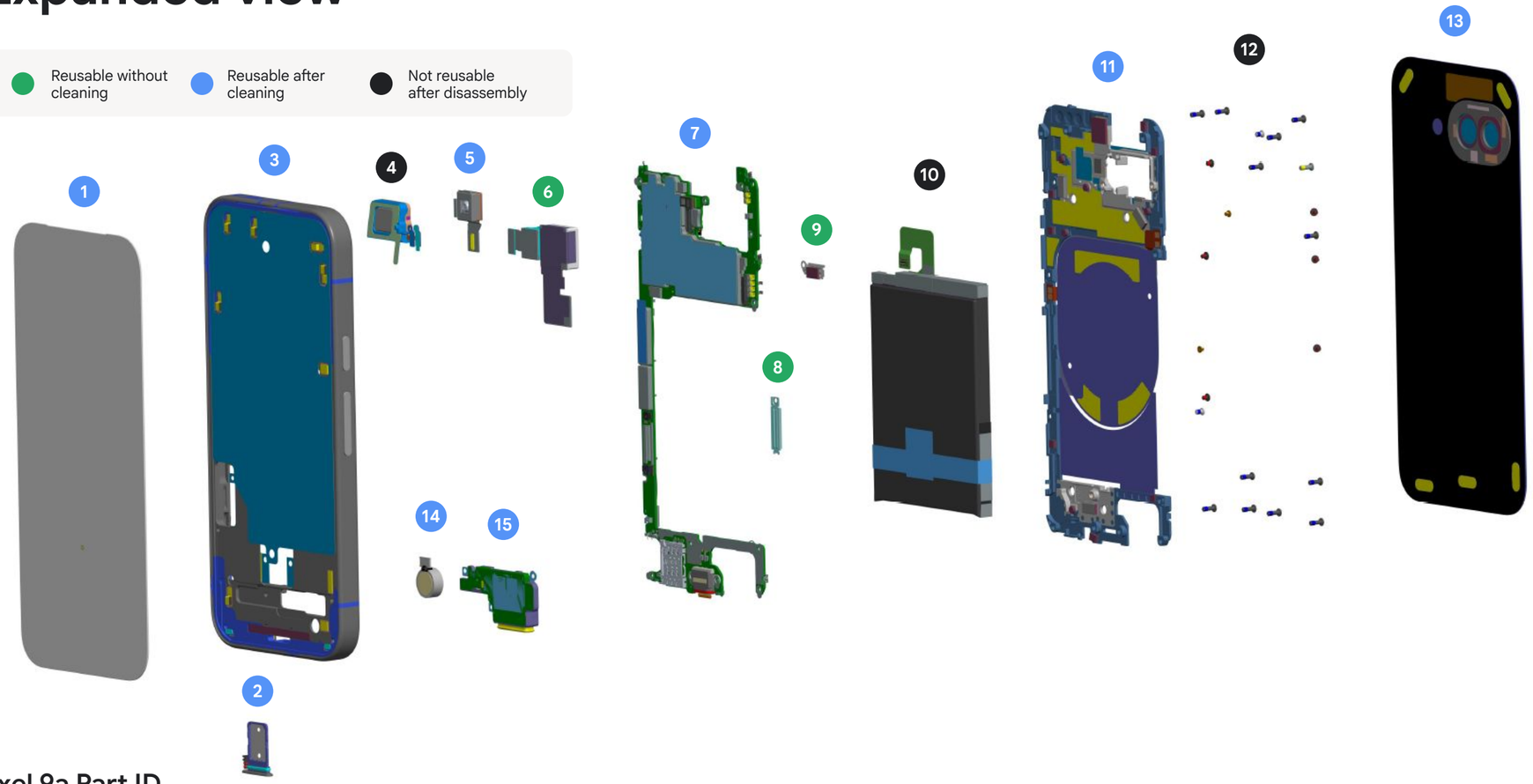
Pixel 9a repair manual

Introduction

Pixel 9a: Expanded view

Reuse indications

- Reusable without cleaning
- Reusable after cleaning
- Not reusable after disassembly



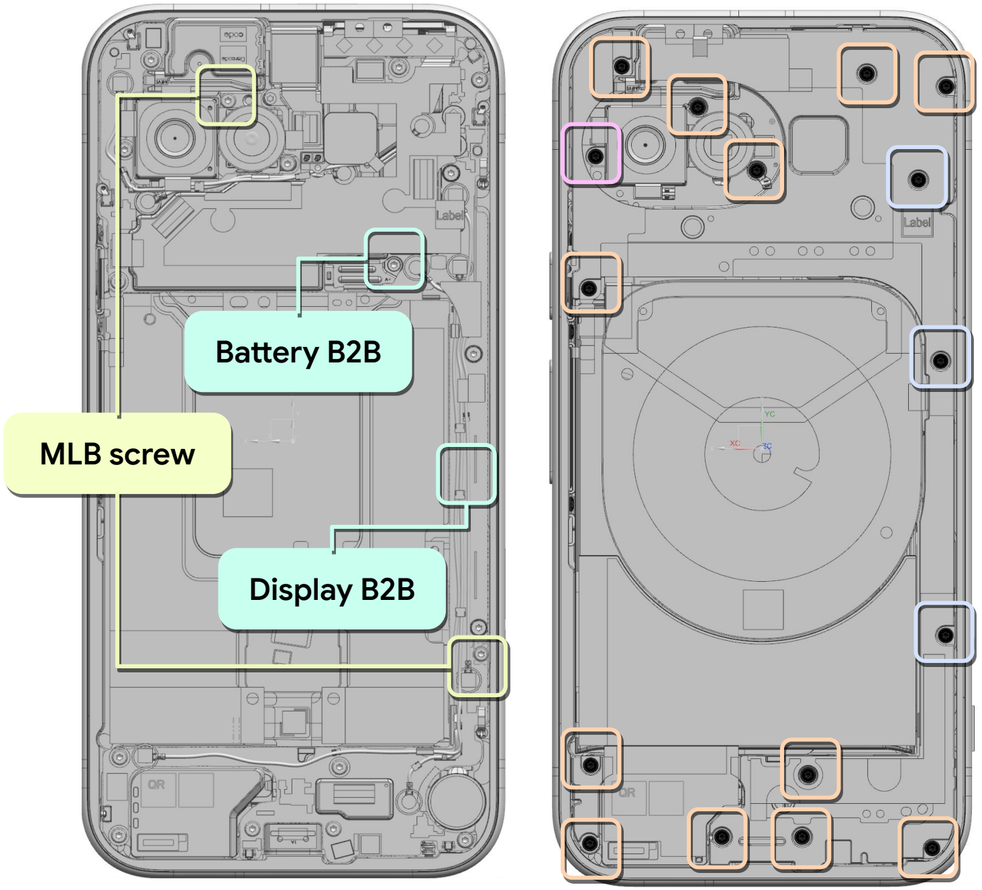
Pixel 9a Part ID

1	Display	8	Display B2B stamping plate	15	Bottom speaker
2	SIM tray	9	Battery B2B stamping plate		
3	Enclosure	10	Battery		
4	Top speaker	11	Inner housing		
5	Front camera	12	Screw		
6	Wide and ultra wide rear camera	13	Back cover		
7	Logic board	14	Vibrator		

Screw map

These are the screws used in the Pixel 9a:

Screw G250-07426-00	Screw G250-07427-00	Screw G250-07428-00	Screw G250-07429-00	Screw G250-07430-00
				
Torque 1.0 kgf±10%	**Torque 0.8 kgf±10%**	**Torque 1.0 kgf±10%**	**Torque 1.2 kgf±10%**	**Torque 1.2 kgf±10%**



Screws are a single use item

Screws are a single use item and if removed from the device, they should be replaced with a new screw.

After you remove, replace with a new screw

Each screw is critical for the safe continued operation of the phone. Replace each used screw with a new screw after removal, since thread locking adhesive can't be reactivated.

ESD protection

Electro static discharge (ESD) can damage components, so it's important to work in an ESD-safe environment during repair.

Follow these four steps to keep ESD safe:

Stay grounded

Repairs should be carried out on an ESD mat with the technician wearing a grounded ESD strap.

Avoid static buildup

Don't wear synthetic fibers such as fleeces that could generate static.

Protective bags

All ESD-sensitive parts should be packed in metalized protective bags during shipping.

Avoid touching pins

Users should avoid touching pins with ESD-safe tools to handle components.

Did you know?

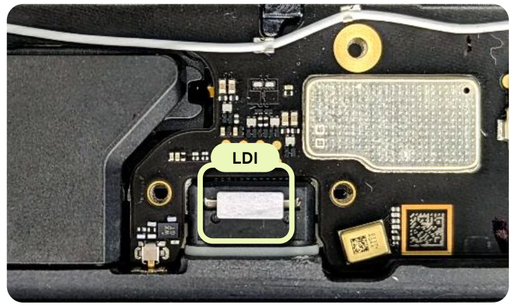
ESD is the sudden flow of electricity through two electrically charged objects. For example, ESD is a shock you feel when you walk on a carpet, and then touch a metal door handle.

Liquid damage indicators

Liquid damage indicators (LDI) are strips that change colors when a phone is exposed to water or other liquids.

- Exposure to liquids can lead to the device malfunction, such as overheating or a short circuit.
- There are two LDI on this device.
- If either of the indicators has turned red, the device is considered to be exposed to liquid.

Logic board LDI



On the charging port.

On the enclosure inside the SIM tray slot, visible without disassembly of the device.

Turn the Pixel on or off

Turn the power on or off

- To turn on a device when it's powered off, press and hold the power button for a few seconds. See where the power button is located.
- To power off phone when it's turned on:
  - *Press and hold the power and volume up buttons for a few seconds. Then, tap **Power off** on screen.*
  - *For further information, see Google help page.*

Tip: Charge the phone before you turn it on. Learn how to charge.

Turn the screen off and back on

- To turn the screen on and off when the phone is turned on, press the power button once.

Tip: On some Pixel phones, you can see the time and some other information even when the screen is off. Learn which Pixel phones and how to turn **Always show time and info** off or on.

Restart (reboot)

- On most phones, press the phone's power button for about 30 seconds, or until the phone restarts.
- On the screen, you may need to tap **Restart**.

Tools and fixtures

We recommend the use of Google-authorized tools and fixtures to repair a device in a safe and effective manner.

Note that some tools and fixtures require maintenance and calibration before you perform repairs.

Use caution:

- *Don't* perform repairs without Google-specified tools and fixtures.
- Improper use of tools and fixtures may result in injury to yourself, the user of the device or others, as well as damage to the product, tools, fixtures, replacement parts, or other spare parts.

Tools and fixtures

Google-approved fixtures: Pixel 9a

We strongly recommend the use of Google-approved fixtures that are Google tested and ensure high quality and safe repairs.

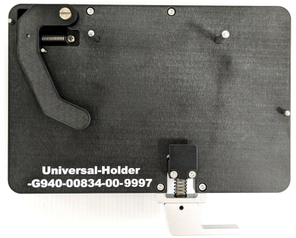
Universal press
G940-00733-00

Universal disassembly fixture
G940-00873-00
Alternate part numbers: G980-14551-00, G940-00734-00

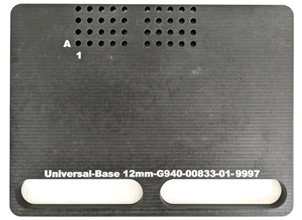
Spare universal device clip #1 - same with p9
G940-00876-00

Universal press plate 12 mm
G940-00736-00

Universal holder
G940-00834-00

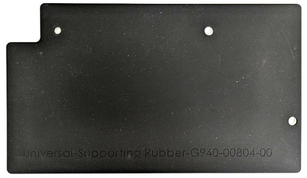


Universal base plate 12 mm
G940-00833-01



Universal holder limiting block
G940-00835-00

Universal supporting rubber
G940-00804-00



Pixel 9a battery press rubber
G940-00941-00

Pixel 9a back cover press rubber
G940-00942-00

Pixel 9a screen press rubber
G940-00943-00

Tools and fixtures

Common tools

Common tools are suggested to ensure high quality and safe repairs. These items *don't* need to be purchased from a Google-recommended supplier.

ESD wristband

ESD mat

ESD spudger

Plastic

ESD tweezers

Plastic

ESD pick

Plastic

Suction cup pliers

Suction cup _ opening plier

Screwdriver

Hex shank torx plus bit 3

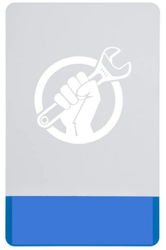
Adjustable torque screwdriver

Hex shank torx plus bit 3

SIM card ejection pin

Heating plate

Plastic card



Tools and fixtures

Common tools

Common tools are suggested to ensure high quality and safe repairs. These items *don't* need to be purchased from a Google-recommended supplier.

Electric glue removal tool

Feeler gauge

Screwdriver

Flathead screwdriver 2.0 mm

Tool for TSPK removal

Tools and fixtures

Consumables

Consumables are suggested to ensure high quality and safe repairs. These items *don't* need to be purchased from a Google-recommended supplier.

IPA

3M AP111 primer

Sankol lubricant CFD 409Z_v2

Anti-static ESD gloves

Finger cots

Dust-free cotton swabs

Dust-free cloth

Protective film

Optional: may help with damaged screens

Tools and fixtures

Safety items

Safety items are suggested to ensure high quality and safe repairs. These items *don't* need to be purchased from a Google-recommended supplier.

Safety glasses

Heat resistant protective gloves

Cut resistant protective gloves

Nitrile or lint-free gloves

Safety Sand bucket

Replacement parts

Important notice about replacement parts

- We strongly recommend the use of Google-authorized replacement parts.
- If Google-authorized replacement parts aren't used, performance within product specifications can't be assured.

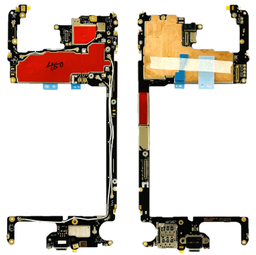
Use caution:

Use of replacement parts other than Google-authorized replacement parts, such as aftermarket batteries, may impact device safety, reliability, and performance.

Replacement parts

Reuse indications — Reusable without cleaning · Reusable after cleaning · Not reusable after disassembly

Logic board
Multiple part numbers



Display module
G949-01305-00 or
G949-01306-00

Enclosure
Multiple part numbers

Back cover
Multiple part numbers

Inner housing
G949-01319-00

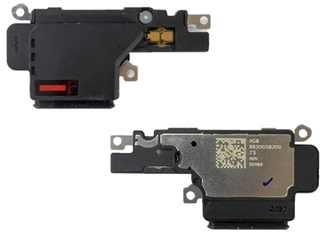
Front camera
G949-01320-00

Wide rear camera
G949-01321-00

Ultra wide rear camera
G949-01322-00

Top speaker
G863-00577-00

Bottom speaker
G863-00582-00



Vibrator
G710-02255-XX

Battery
G949-01323-00

Replacement parts

Reuse indications — Reusable without cleaning | Reusable after cleaning | Not reusable after disassembly

Screw
G250-07426-00

Screw
G250-07427-00

Screw
G250-07428-00

Screw
G250-07429-00

Screw
G250-07430-00

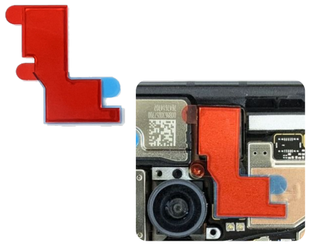
Sim tray
Multiple part numbers

Stamping plate battery
G730-08619-01

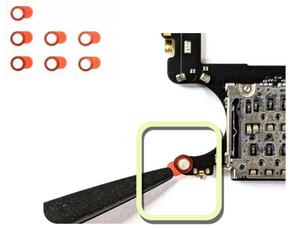
Stamping plate display BTB
G730-07370-02

P-sensor rubber
G806-12294-00

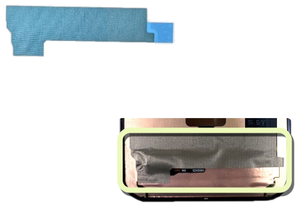
FCAM copper foil
G806-12330-01



Conductive fabric washer
G806-13124-00



Conductive fabric display
G806-12323-01

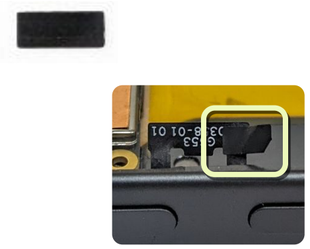


Replacement parts

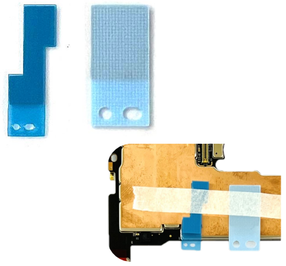
Reuse indications — Reusable without cleaning | Reusable after cleaning | Not reusable after disassembly

Adhesive enclosure to CG
G806-12226-04

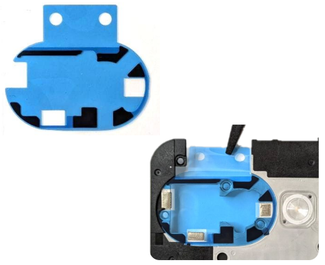
Sidekey FPC mylar
G806-12673-01



Thermal pad, MLB
G806-11970-01
G806-11971-01

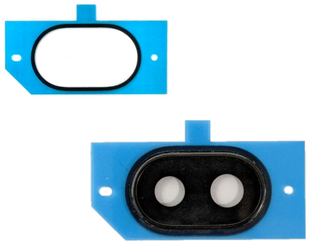


Inner housing adhesive
G806-12920-03



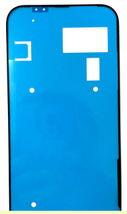
Battery adhesive L+R
G806-15065-00

Visor adhesive
G806-12180-01



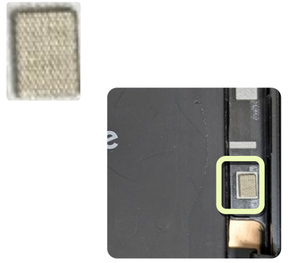
Vibrator PSA
G806-03299-01

Adhesive enclosure to BC
G806-12186-01

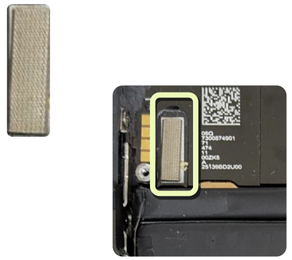


BC small adhesive
G806-14766-01

Conductive foam, MLB shield bottom
G806-08921-01



Conductive foam, Rcam
G806-06777-01



Conductive foam, MLB shield AGPS
G806-10464-01

You may need to know

To complete the assembly process, any repair case from back cover is required to have both G806-12186-01 and G806-14766-01 materials.

Glossary

Glossary

Acronym or term	Definition
ESD	**Electro Static Discharge** The sudden flow of electricity through two electrically charged objects.
IPA	**IsoPropyl Alcohol** Used to clean components and enclosures. It comes as pads or a solution.
FPC	**Flexible Printed Circuit** A type of low profile and flexible printed circuit.
OLED	**Organic Light-Emitting Diode** A type of flat panel display with an OLED to show images.
Sub6	**Sub-6 GHz** Refers to mid- and low-frequency bands under 6 GHz.
NG	**Not Good. Usually refers to a condition that isn't acceptable.**
SBOM	**Service Bill Of Materials**

Glossary

Acronym or term	Definition
Display module	The OLED, glass cover, and sometimes other components such as the fingerprint sensor. Also known as: cover glass (CG), screen, display
Logic board	The main electronic component in the device with the processor, memory, storage, and often Wi-Fi and bluetooth components are soldered on. Also known as: MLB, main logic board, main board, PCBA
Microphone	The component used to capture audio to make a call, video, or dictate some notes. Also known as: mic, mic 1 bracket
Enclosure	The housing that contains the buttons and provides protection for the logic board and other components. Also known as: housing (HSG), rear cover, back cover, bottom case, back glass (BG)
LDI	Liquid Damage Indicator An indicator that turns from white into another color, typically red, after contact with water. Also known as: Liquid damage indicator, LDI

Glossary

Acronym or term	Definition
Camera	Camera modules include the front camera and rear cameras. Also known as: CAM, FCAM, RCAM, UW RCAM
Pressure sensitive adhesive	The adhesive that is used to bond the enclosure and display module, battery and enclosure, or other parts. Also known as: PSA
UDFPS	Under Display FingerPrint Sensor Also known as: Fingerprint sensor
Release liner	Used to transport sensitive parts, which includes adhesives. It needs to be removed during installation for the device to function as intended.

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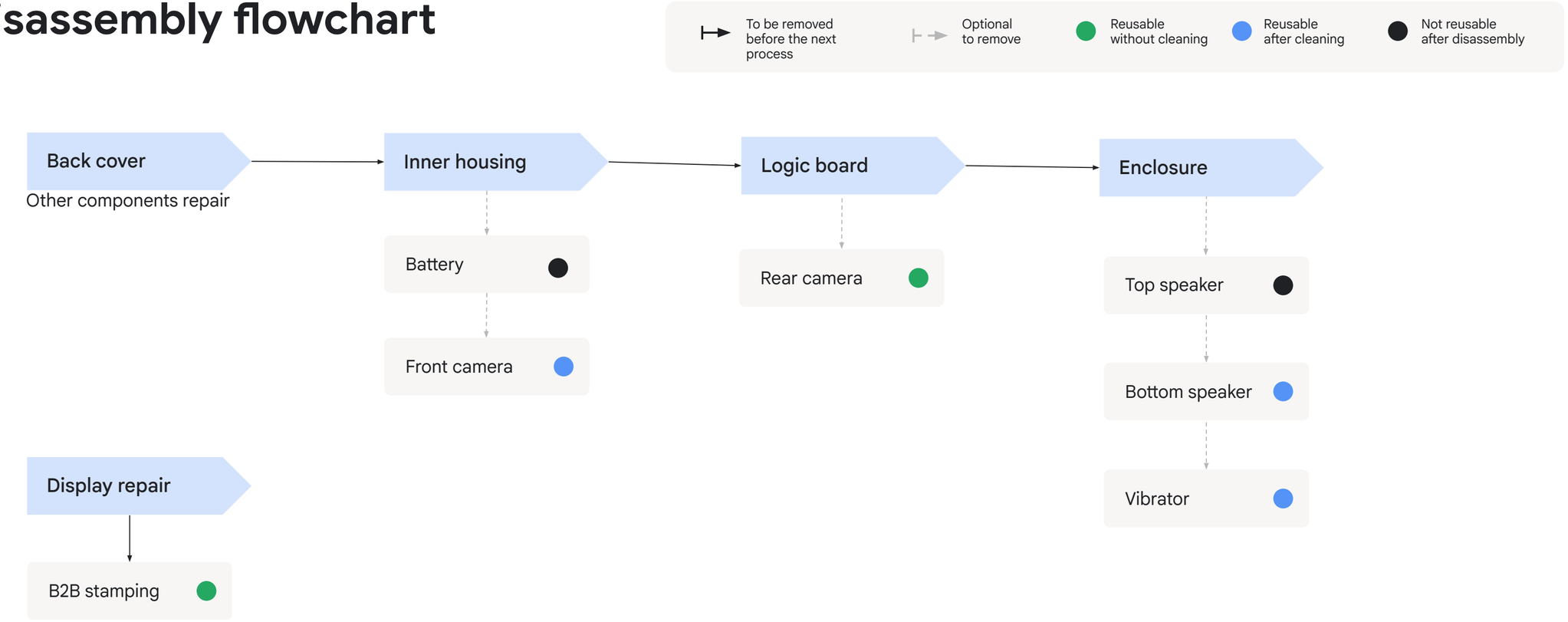
Repair flows

Disassembly order

Assembly order

Pixel 9a-disassembly flowchart



How to read this chart

To replace the battery:
Remove the back cover, inner housing, then the battery.

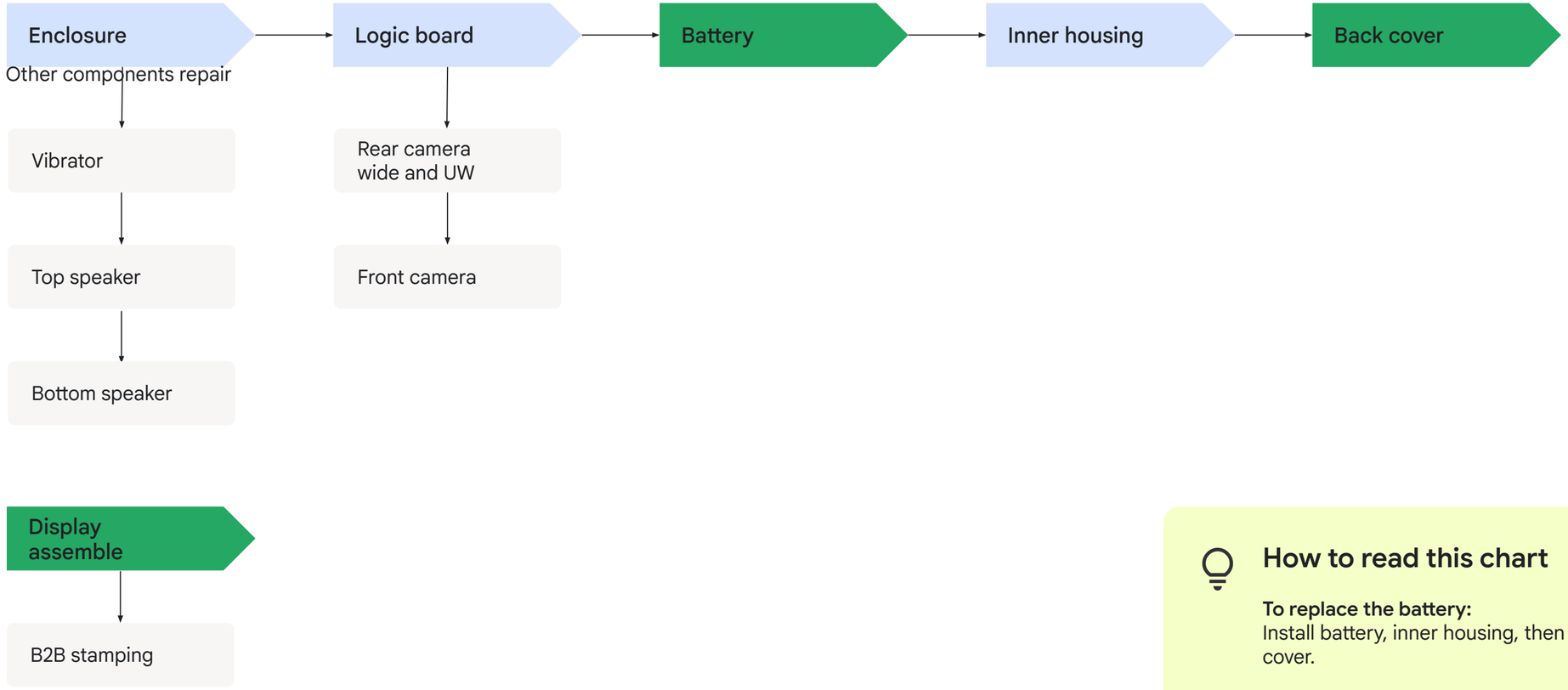
*MLB and battery are in the same layer. They can be removed independently.

To remove the logic board:
Remove the back cover, inner housing, then the logic board.

Pixel 9a-assembly flowchart

Assembled without a fixture

Assembled with a fixture



How to read this chart

To replace the battery:
Install battery, inner housing, then back cover.

To reinstall the logic board:
Install logic board, rear cameras, front camera, inner housing, and back cover.

Pixel 9a repair manual

Disassembly

Display

Back cover

Inner housing

Battery

Front camera

Logic board

Rear camera

Bottom speaker

Top speaker

Vibrator

Enclosure

Disassembly instructions

Display

Use caution

Use **safety gloves** to handle damaged displays because some can splinter during removal and cause injury.

Apply the **protective film** to the broken glass before removal.

Review all **safety precautions** before you begin work.

Prerequisites

Before you begin a repair, ensure to **power off** the device and disconnect any charging cables.

Tools

- Heat plate
- Universal disassembly fixture
- Universal press
- Universal base plate 12 mm
- Universal holder
- Universal holder limiting block
- Universal supporting rubber
- Pixel 9a screen press rubber
- Pixel 9a back cover press rubber
- Universal press plate 12 mm
- ESD tweezers
- ESD spudger
- ESD pick
- Cotton swabs
- 3M AP111 primer
- IPA

Parts

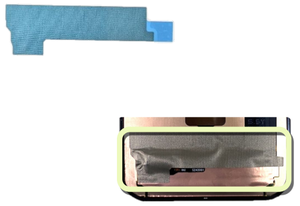
Display

Here's the list of parts for the display disassembly.

Reuse indications — Reusable without cleaning | Reusable after cleaning | Not reusable after disassembly

Display module
G949-01305-00 or
G949-01306-00

Conductive fabric display
G806-12323-01



Adhesive enclosure to CG
G806-12226-04

Stamping plate display BTB
G730-07370-02

Screw
G250-07428-00

Weaken the adhesives

- Set the heating plate to **176° F (80° C)**.
- Place the device, display facing down, on the heating plate for **10 minutes** to weaken the glue.

Use caution

Don't touch the heating plate. Any contact may cause burns.

Position the device

- Place the device in the **Universal disassembly fixture** with the display facing up and front camera facing the right hand side.

Fixture setup

- Secure the suction cup module with the designated sockets shown in Fig 1.
- The suction cups should be in full contact with the display as shown in Fig 3. Adjust the device as needed if the suction cup exceeds the back cover as shown in Fig 2.

Fig 1

Fig 2

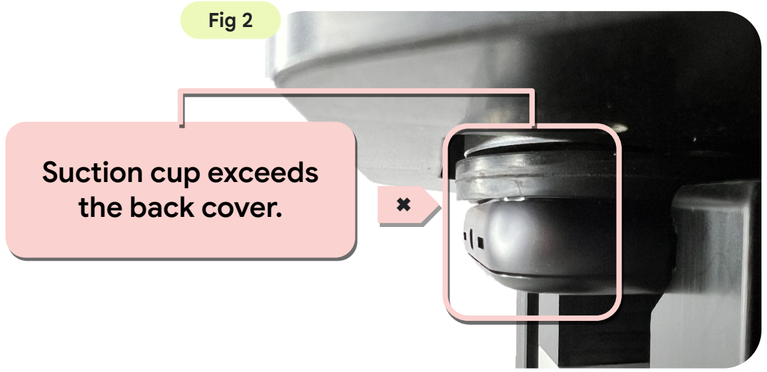
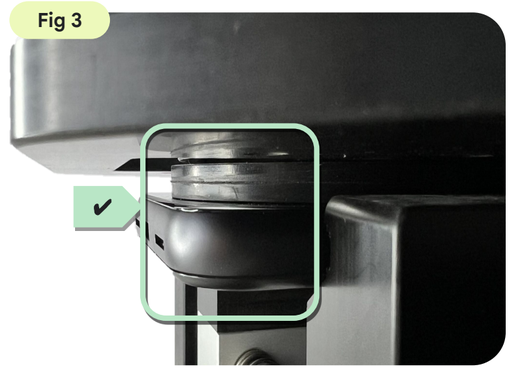


Fig 3

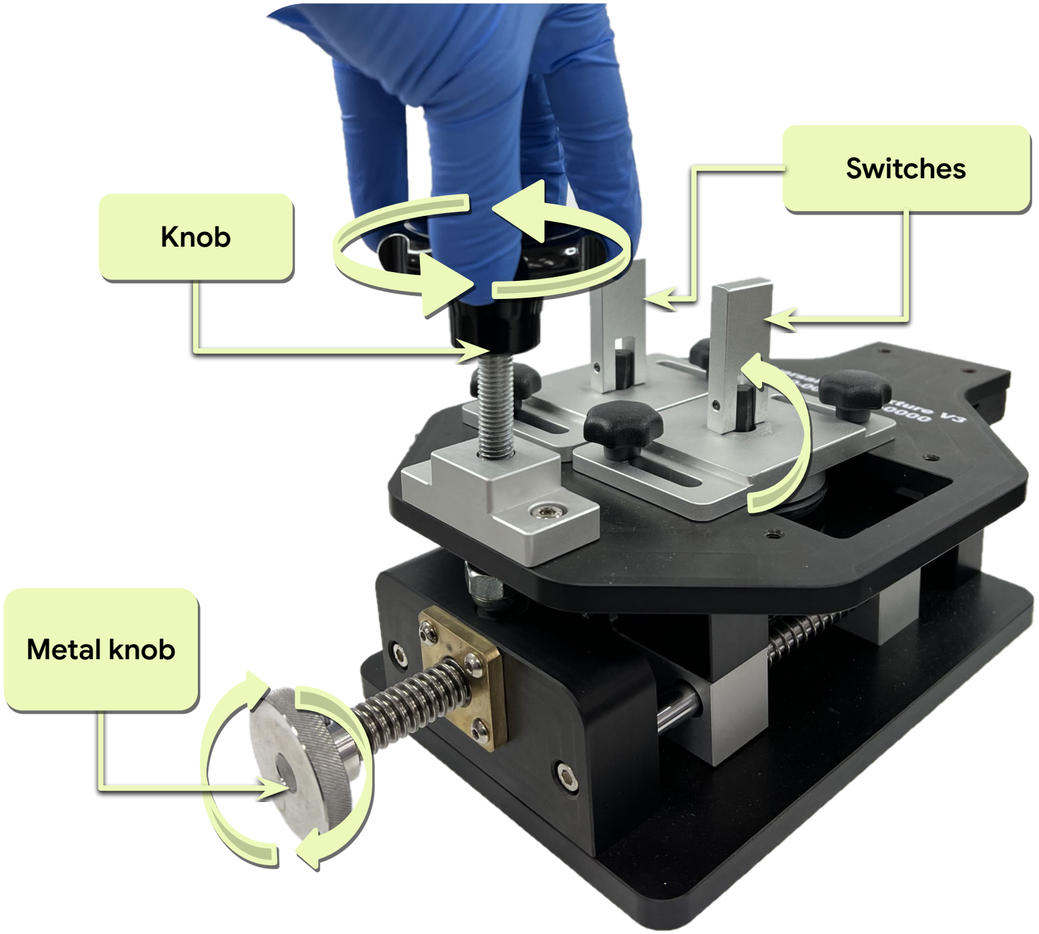


Use the fixture

- Turn the metal knob clockwise to fix the device in place.
- Press down firmly on the knob and flip the two switches on top to lock the suction cups to the display.
- **Slowly** turn the knob clockwise until you see an opening between display and enclosure.

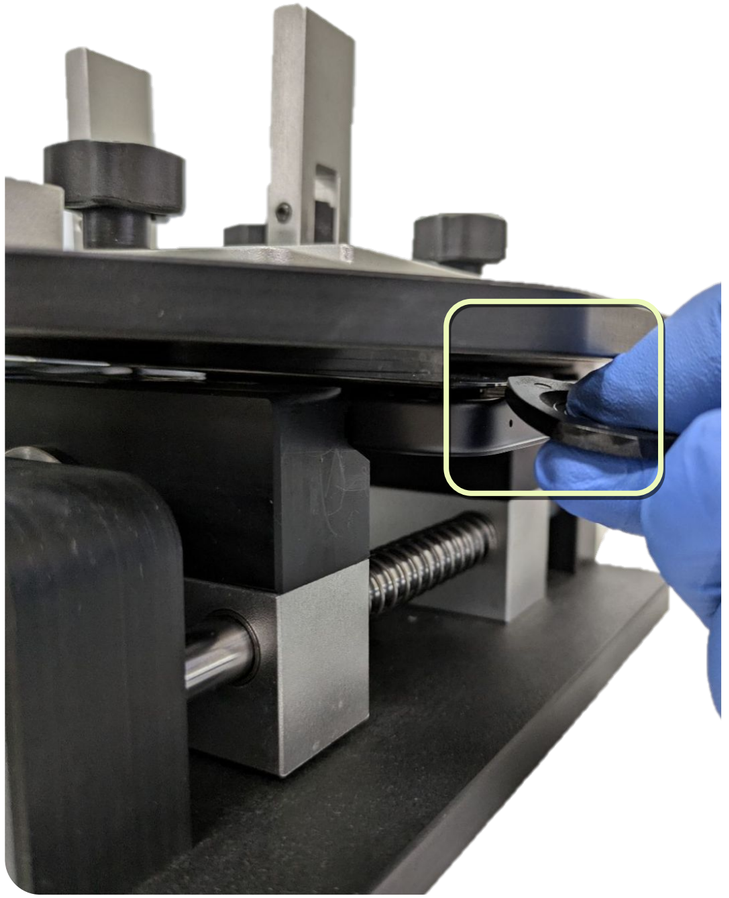
Note

Clean the suction cup and display surface before you proceed.



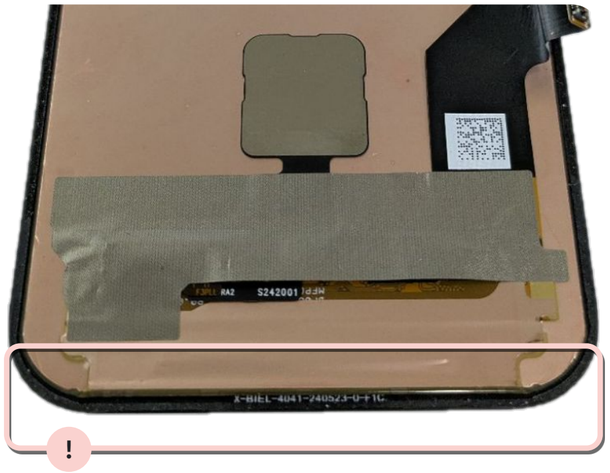
Use the fixture

- Insert an ESD pick at the opening and cut the adhesive immediately to prevent re-sealing.



Remove the adhesives

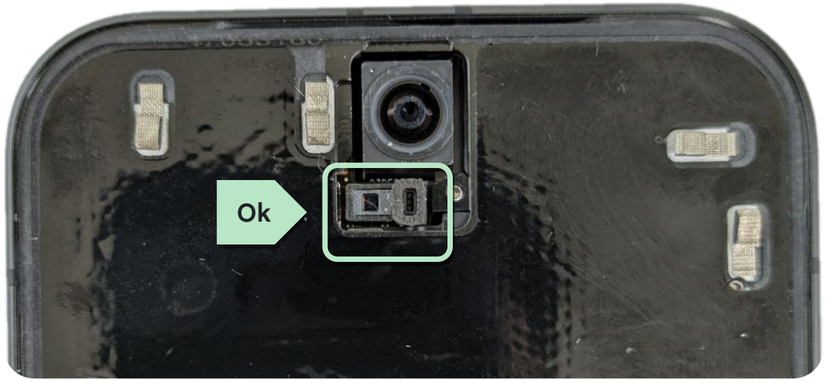
- Split CG from the enclosure by sliding ESD pick through three sides of display in no specific order.



> ⚠ **Use caution**
>
> Insertion deeper than 2 mm can damage the FPC and copper foil.

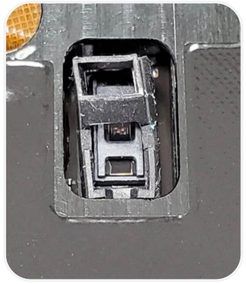
Inspect the P-sensor rubber

Ensure that the P-sensor rubber isn't damaged, missing, or skewed, and that it's placed in the correct position.



Missing

Skewed



Skewed

Skewed

Flip the display

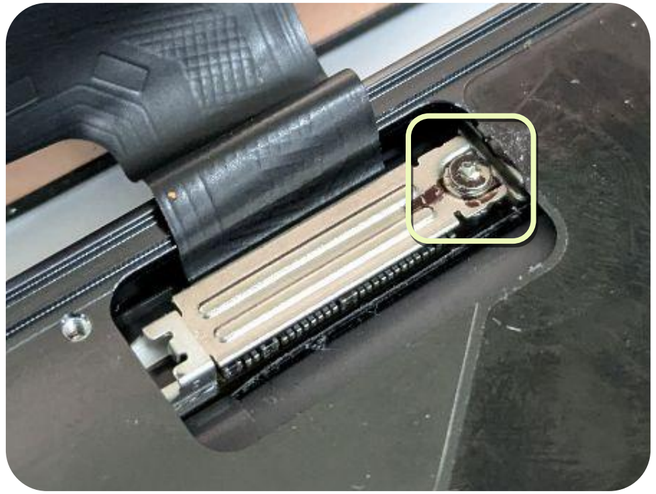
- Set the display in an upright position.

Use caution

Don't attempt to separate the display by force. It's still attached to the enclosure through a very fragile ribbon.

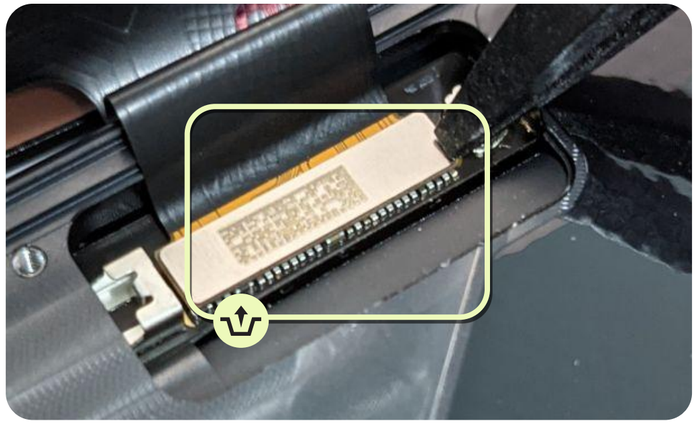
Remove the display metal plate

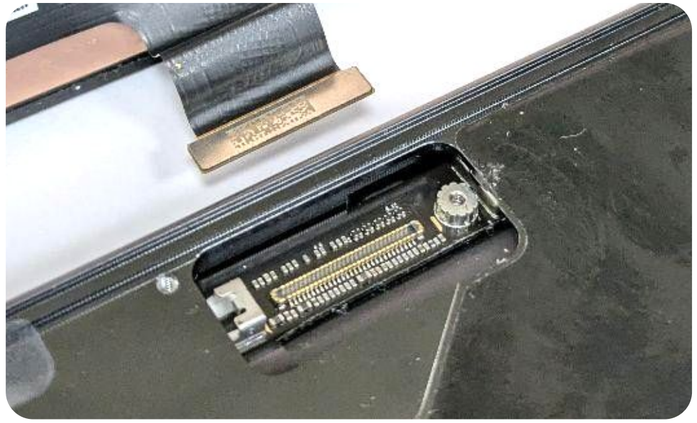
- Use a screwdriver to unfasten the screw that holds the stamping plate to the logic board.
- Use ESD tweezers to remove the metal plate.



Disconnect the display

- Use the ESD tweezers to unfasten the display from the logic board.





Finished! Need assembly instructions? ➜

Protect the screen (optional)

- Use protective film to cover the front camera socket.
- Use protective film to cover the front of the screen.

Use caution

1. Ensure that the camera socket is clear from dust and debris before you cover it with the protective film.
2. Wrap the touch panel side of the display module only. Wrapping the back side can damage the copper foil and the conductive fabric.

Disassembly instructions

Back cover

The display module is connected to the logic board, so be careful with the flex when you open up the device.

Use caution

Use safety gloves when you handle damaged displays as splinters during removal could cause injury.

Apply protective film to broken glass before removal.

Review all **safety precautions** before you begin work.

Prerequisites

Before you begin a repair, ensure that you **power off** the device and disconnect any charging cables.

Tools

- Heating plate
- Universal disassembly fixture
- Universal press
- Universal base plate 12 mm
- Universal holder
- Universal holder limiting block
- Universal supporting rubber
- Pixel 9a screen press rubber
- Pixel 9a back cover press rubber
- Universal press plate 12 mm
- ESD tweezers
- ESD spudger
- ESD pick
- Large suction cup
- Dust-free cotton swabs
- 3M AP111 primer
- IPA

Parts

Back cover replacement

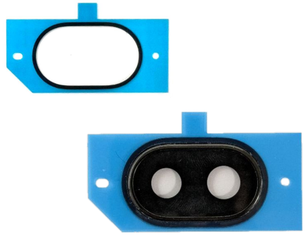
Here's the list of parts for the back cover disassembly.

Reuse indications Reusable without cleaning | Reusable after cleaning | Not reusable after disassembly

Back cover
Multiple part numbers

Adhesive enclosure to BC
G806-12186-01

Visor adhesive
G806-12180-01



BC five small adhesive
G806-14766-01

Weaken the adhesives

- Set the heating plate to **176° F (80° C)**.
- Place the device, back cover facing down, on the heating plate for **10 minutes** to weaken the glue.

Clamp on

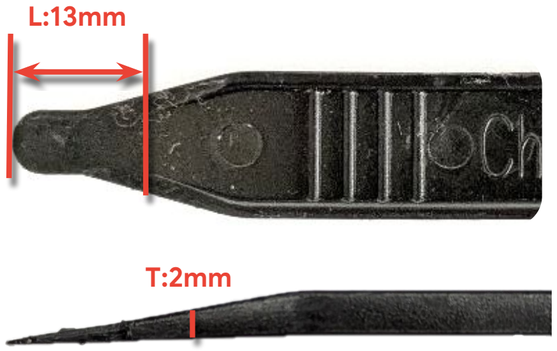
- Clamp both sides of the device with suction cup pliers.
- Place the suction cup towards the middle of the device.

Using Opening Suction Cup Pliers

- Use the suction cup to create a small gap around **0.1 to 0.2 mm** between back cover and enclosure.
- Insert the ESD spudger or the ESD pick into the gap to initiate separation.

Use caution

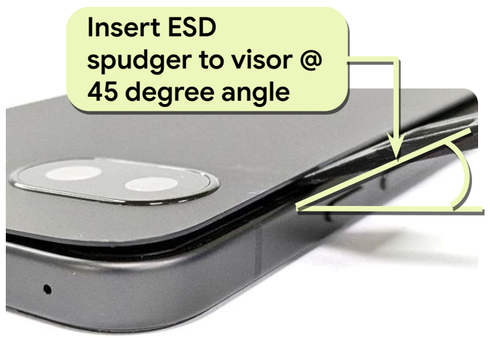
⚠ Insertion of the ESD spudger or ESD pick deeper than 13mm can potentially damage the back cover

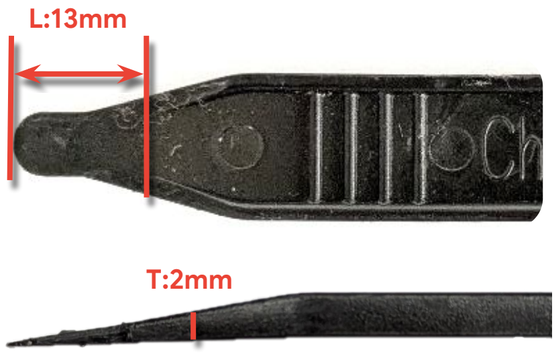


Finished! Need assembly instructions? ➜

Disconnect the back cover

- Insert and slide the ESD spudger around the back cover to eliminate PSA (Fig1 in yellow).
- Use the ESD spudger to trim off five individual PSA (Fig1 in red). Insertion depth should not exceed 13mm.
- Use the ESD spudger to eliminate the PSA around visor (Fig1 in green). Insertion depth should not exceed 37mm.





Disassembly instructions

Inner housing

Use caution

Review all **safety precautions** before you begin work.

Prerequisites

Here's the list of components that you should remove first:

- **Back cover**
- **Inner housing**

Tools

- Universal base plate 12 mm
- Universal holder
- Universal holder limiting block
- Universal supporting rubber
- Screwdriver
- Adjustable torque screwdriver
- ESD tweezers
- ESD spudger
- Cotton swabs
- IPA

Parts

Inner housing replacement

Here's the list of parts for the inner and antenna housing disassembly.

Reuse indications — Reusable without cleaning | Reusable after cleaning | Not reusable after disassembly

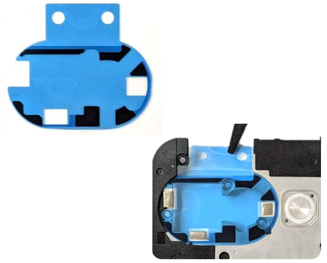
Inner housing
G949-01319-00

Screw
G250-07426-00

Screw
G250-07429-00

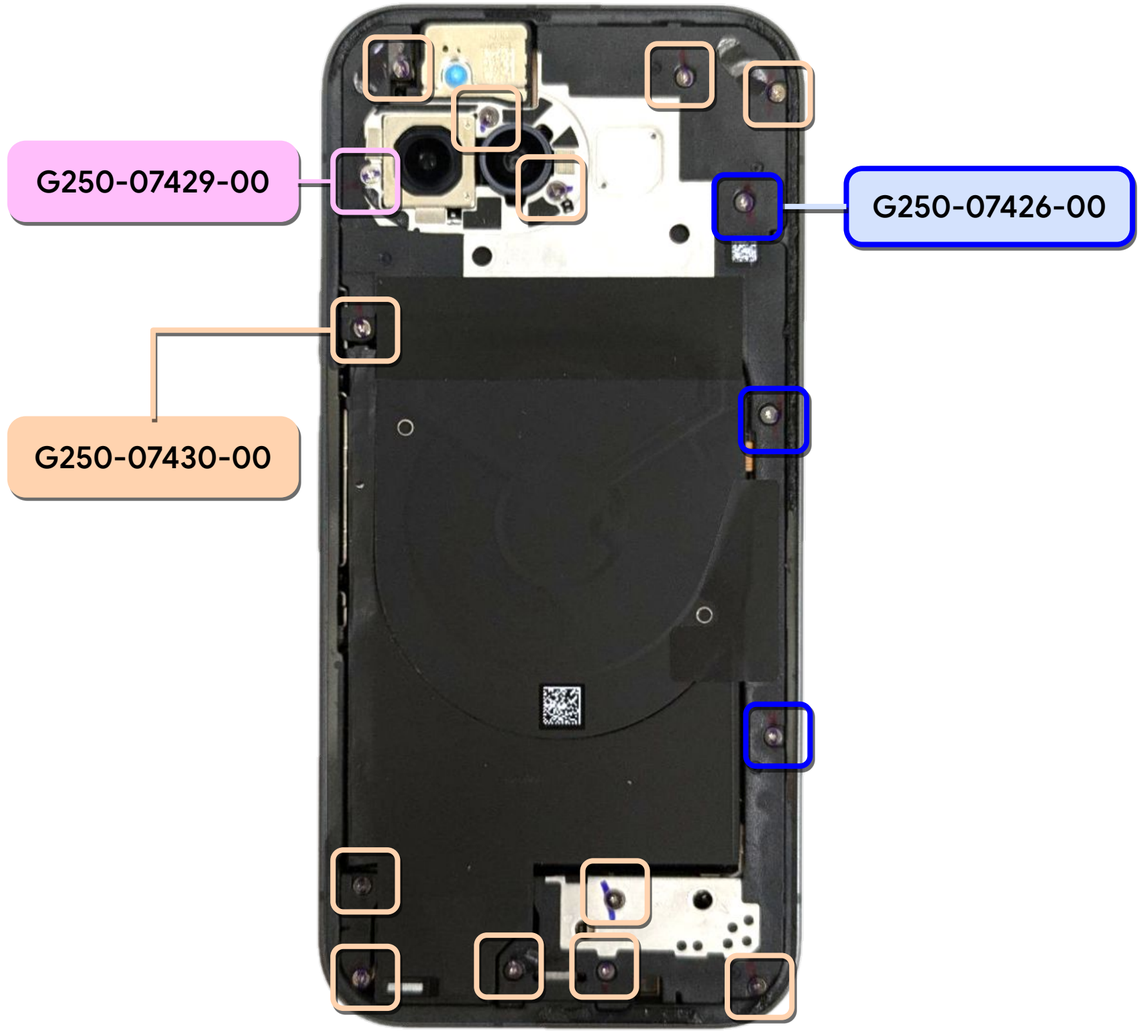
Screw
G250-07430-00

Inner housing adhesive
G806-12920-03



Remove the screws

Unscrew the 16 screws that attach the inner housing to the logic board.



Finished! Need assembly instructions? ➜

Remove the inner housing

Use ESD tweezers to lift up the inner housing.

Battery

Use caution

Review all **safety precautions** before you begin work.

Prerequisites

Here's the list of components that you should remove first:

- **Back cover**
- **Inner housing**

Tools

- Heat plate
- Universal press
- Universal disassembly fixture
- Universal base plate 12 mm
- Universal holder
- Universal holder limiting block
- Universal supporting rubber
- Pixel 9a battery press rubber
- Universal press plate 12 mm
- Screwdriver
- Adjustable torque screwdriver
- ESD tweezers
- ESD spudger
- Cotton swabs
- IPA

Parts

Battery

Here's the list of parts for the battery disassembly.

Reuse indications Reusable without cleaning | Reusable after cleaning | Not reusable after disassembly

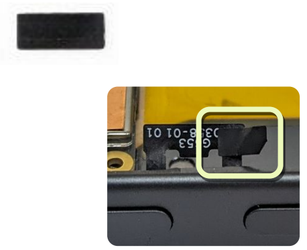
Replacement battery
G949-01323-00

Battery adhesive L+R
G806-15065-00

Stamping plate battery
G730-08619-01

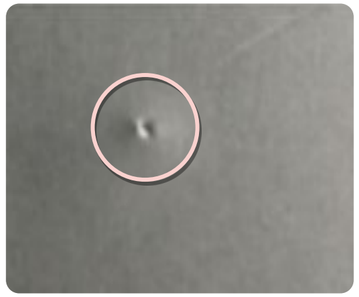
Screw*1
G250-07428-00

Sidekey FPC mylar
G806-12673-01

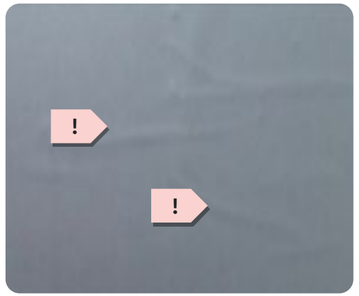


Use caution ⚠

Unacceptable battery conditions

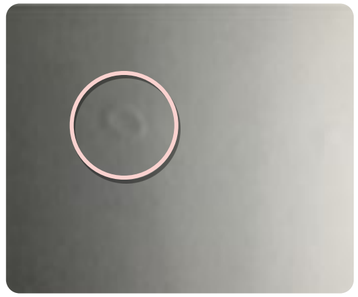


Pouch damage

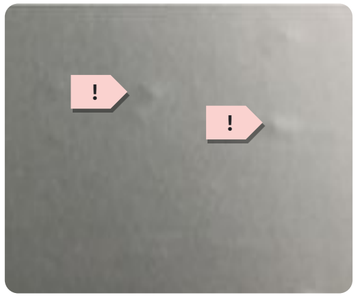


Line protrusion

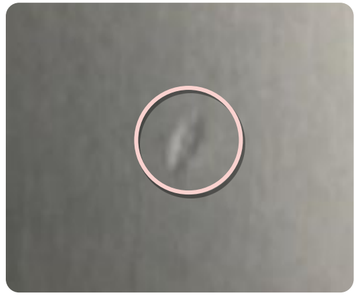
Scratch



Contamination mark

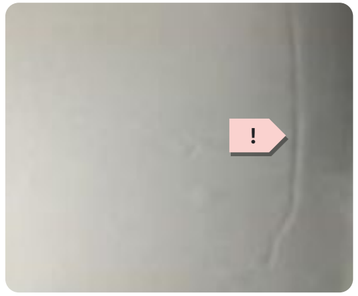


Dot protrusion

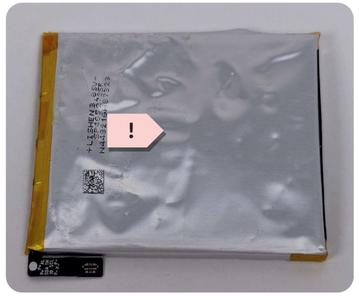


Dent

Bubbling



Imprinted line

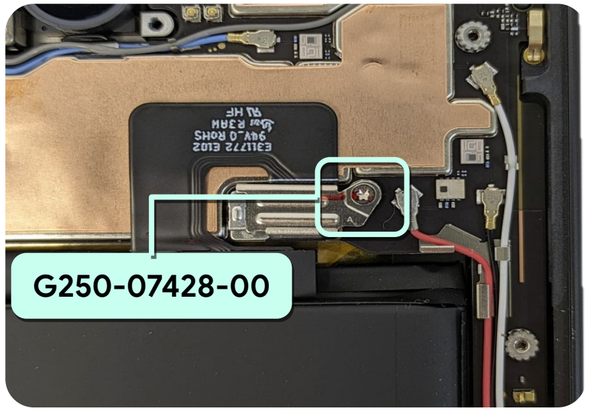


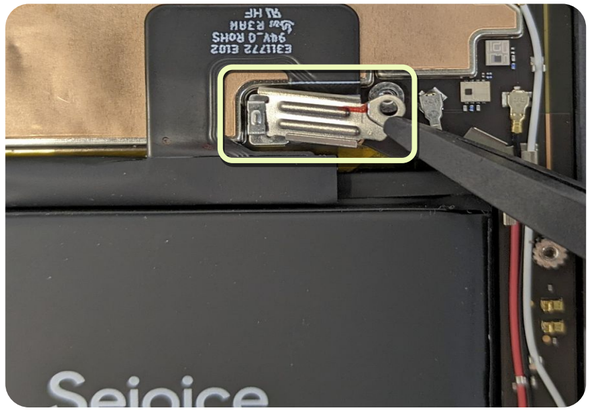
Swelling or electrolyte leakage

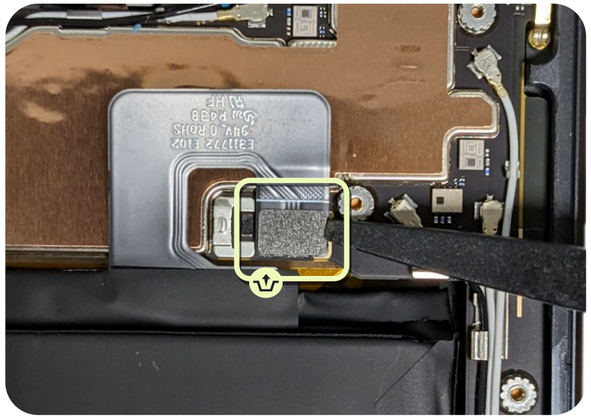
*These are a few examples of potentially dangerous battery conditions but not all possible dangerous conditions. Please follow the general safety guidance outlined in this document.

Remove the BTB stamping plate

- Unfasten the screw to disconnect the battery stamping plate from the logic board.
- Use the ESD tweezers to extract the BTB metal plate from the logic board, and disconnect the battery FPC.







Use caution

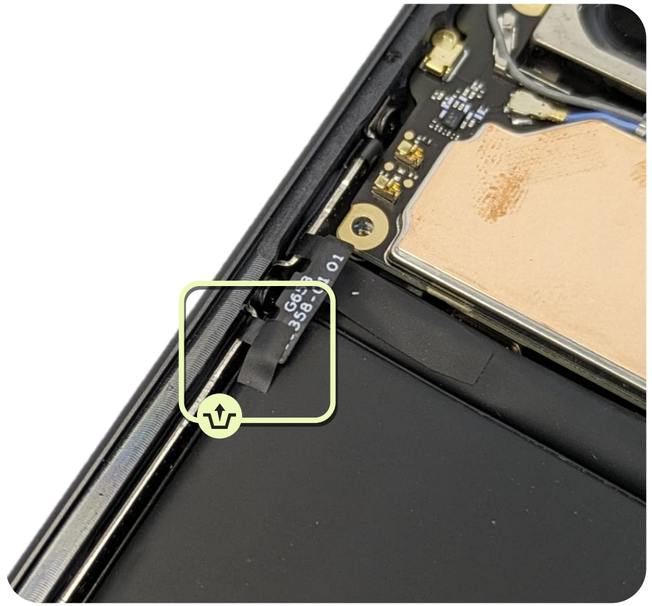
Keep small screws and sharp objects away from the battery & ensure battery discharge page#10 and cosmetic check from page#11

Use caution

Be careful. *Don't* touch any of the capacitors, resistors, and other parts nearby.

Remove the SLAM FPC mylar

Peel off the SLAM FPC mylar from the SLAM FPC by hand.



Use caution

Keep small screws and sharp objects away from the battery & ensure battery discharge page#10 and cosmetic check from page#11

Remove the battery - Condition 1

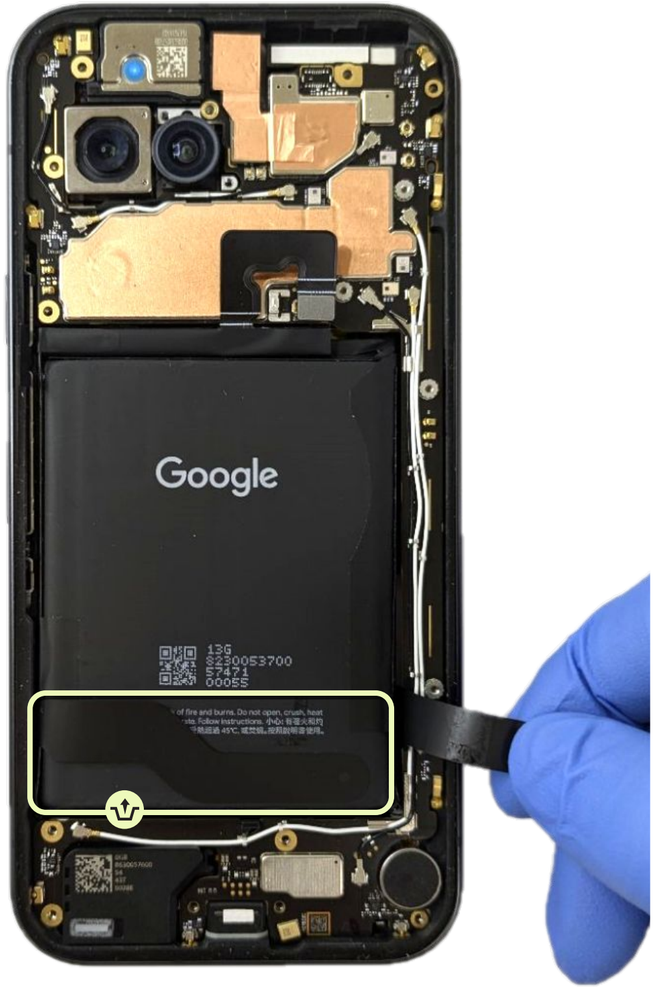
Use the pull jacket to remove the battery

Untighten the pull jacket by hand.

Use caution

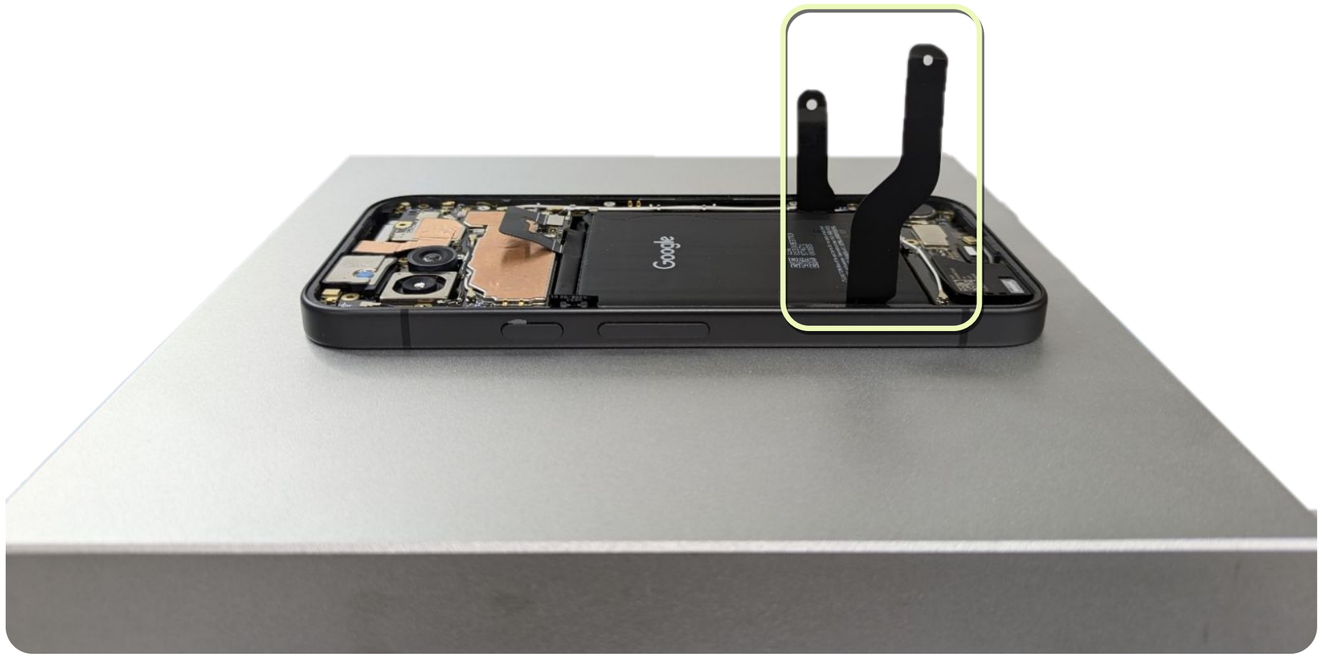
Keep small screws and sharp objects away from the battery & ensure battery discharge page#10 and cosmetic check from page#11

***Don't* reuse the part.**



Weaken the adhesive

Place the device on the heat plate with both sides of the pull jackets standing up. Set the heating plate to **176°F (80 °C)** for **10 minutes** to weaken the battery adhesive. Get an IPA and a plastic card ready for the next move.



Use caution

Don't touch the heating plate. Any contact may cause burns.

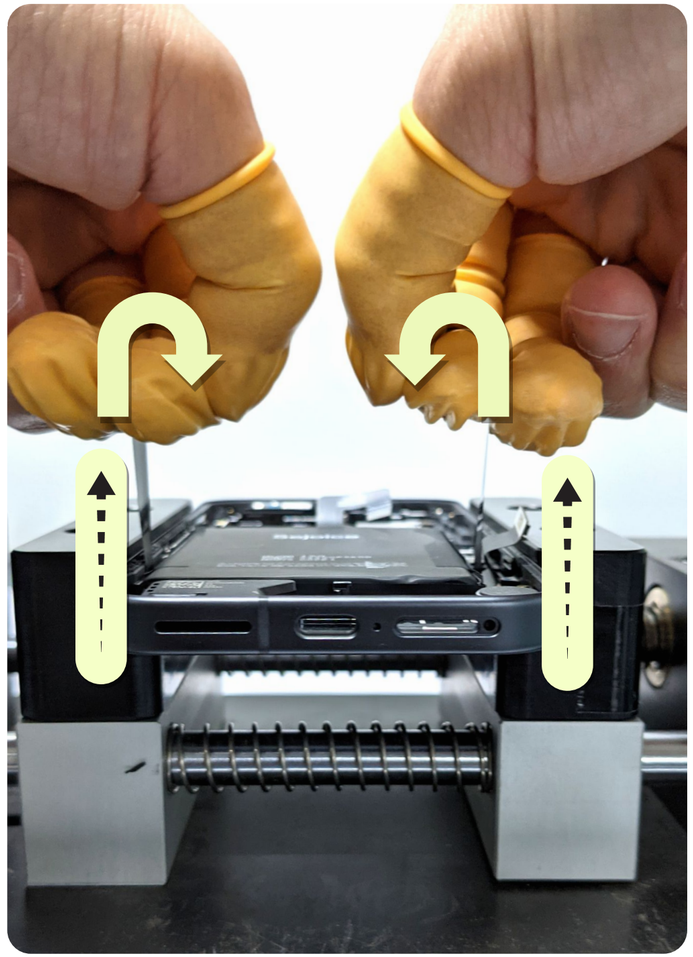
Finished! Need assembly instructions? ➜

Remove the battery - Condition 1 (continued)

- Secure the fixture on the working surface.

- Pull on both pull jacket tabs upward with equal force simultaneously to detach battery.

Lift the battery straight up.



Note

Firmly hold on to the pull jacket tabs using fingers.

Use caution

Keep small screws and sharp objects away from the battery & ensure battery discharge page#10 and cosmetic check from page#11

***Don't* reuse the battery.**

Remove the battery - Condition#2

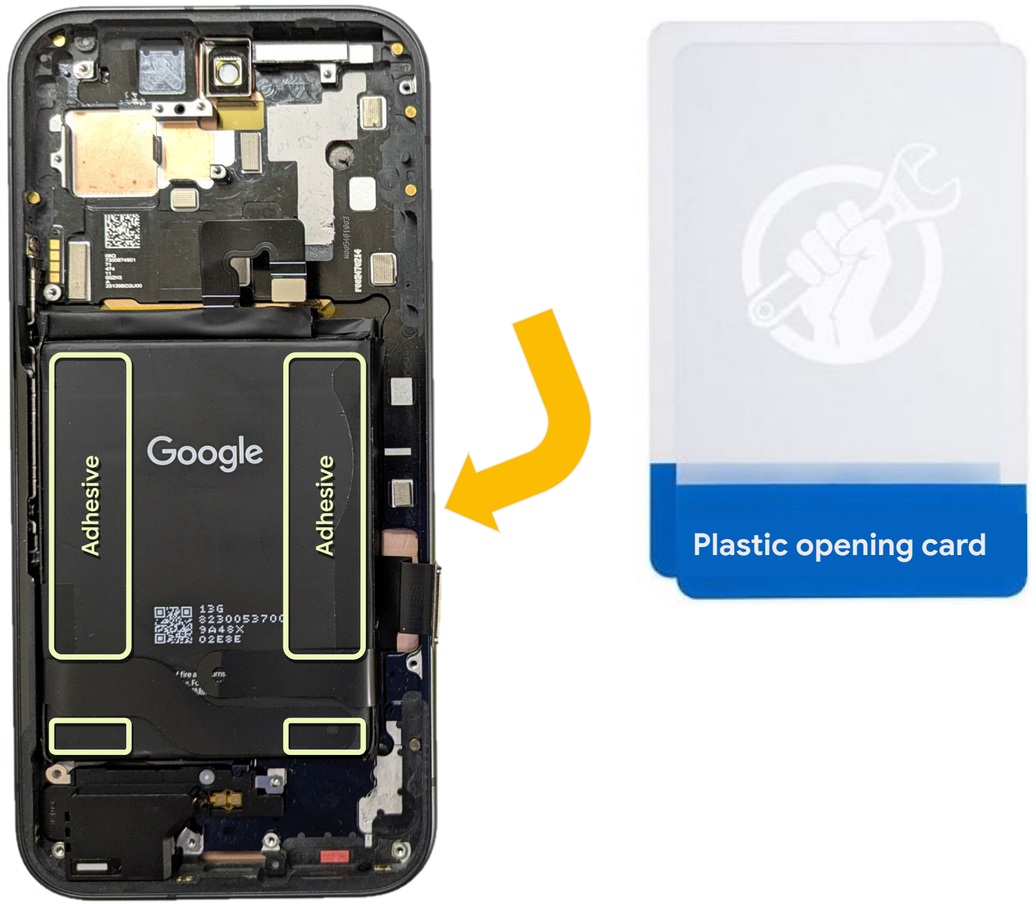
Using the plastic opening card to remove the battery

Objective: Use the **plastic opening card with IPA to remove battery PSA (adhesive)**.

Use caution

Keep small screws and sharp objects away from the battery & ensure battery discharge page#10 and cosmetic check from page#11

***Don't* reuse the battery.**



Remove the battery - Condition 2 (continued)

1. Secure the device on the holding fixture as shown in Fig 1.

2. Spray IPA on the edges of the plastic opening card as shown in Fig 2.

Fig 1

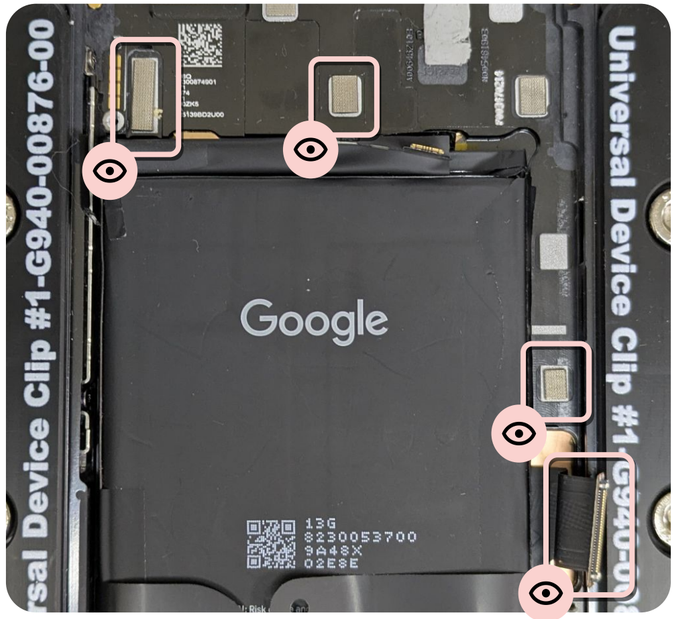
Fig 2

Damaged conductive foam? Need rework instructions? ➜

Remove the battery - Condition#2 (continued)

Insert the opening card the edge with IPA underneath the battery from the corner above vibrator. Slide it vertically to remove PSA.

- Spray more IPA if resistances are encountered.
- Replace the opening card if there are excessive PSA residues around the edges.
- The entire process takes around five minutes.



Use caution

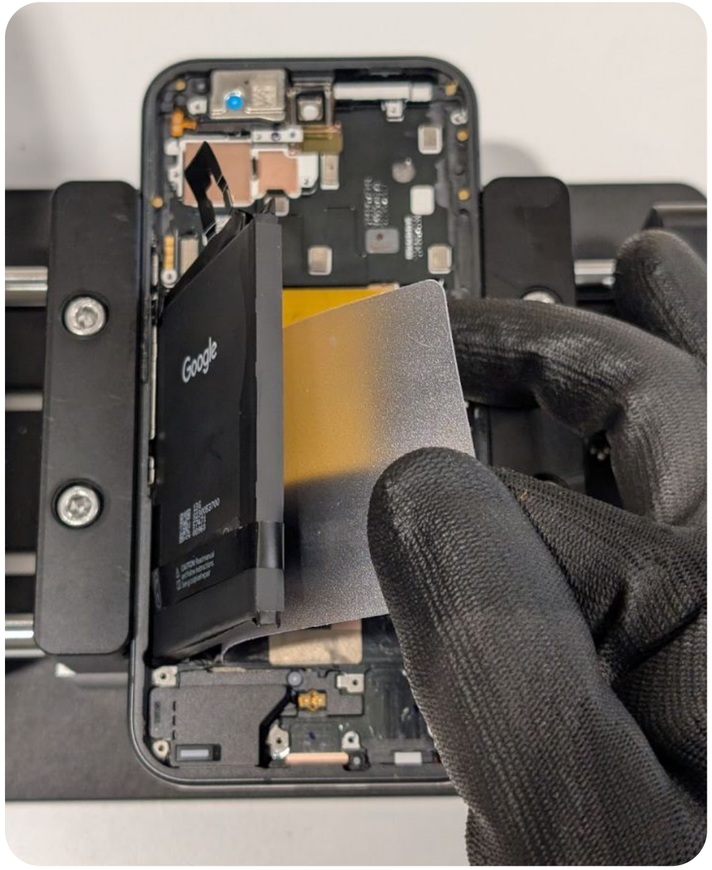
Ensure that the plastic opening card is above the CG FPC & 3 foam to prevent damage.

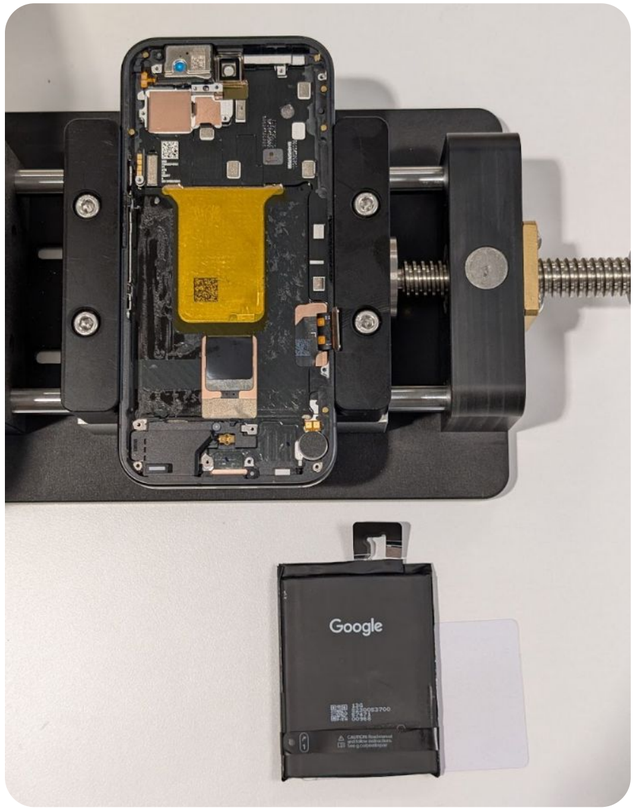
Finished! Need assembly instructions? ➜

Remove the battery - Condition#2 (continued)

Continue to slide the card toward side key, and detach the battery. Use the opening card to scrape off the remaining PSA on the enclosure.

- Spray more IPA if resistances are encountered.
- Replace the opening card if the edges become rough.
- Clean the PSA residues off the card with IPA.





Disassembly instructions

Front camera

Use caution

Review all **safety precautions** before you begin work.

Prerequisites

Here's the list of components that you should remove first:

- **Back cover**
- **Inner housing**
- **Logic board**

Tools

ESD tweezers

ESD spudger

Parts

Front camera

Here's the list of parts for the front camera disassembly.

Reuse indications

- Reusable without cleaning
- Reusable after cleaning
- Not reusable after disassembly

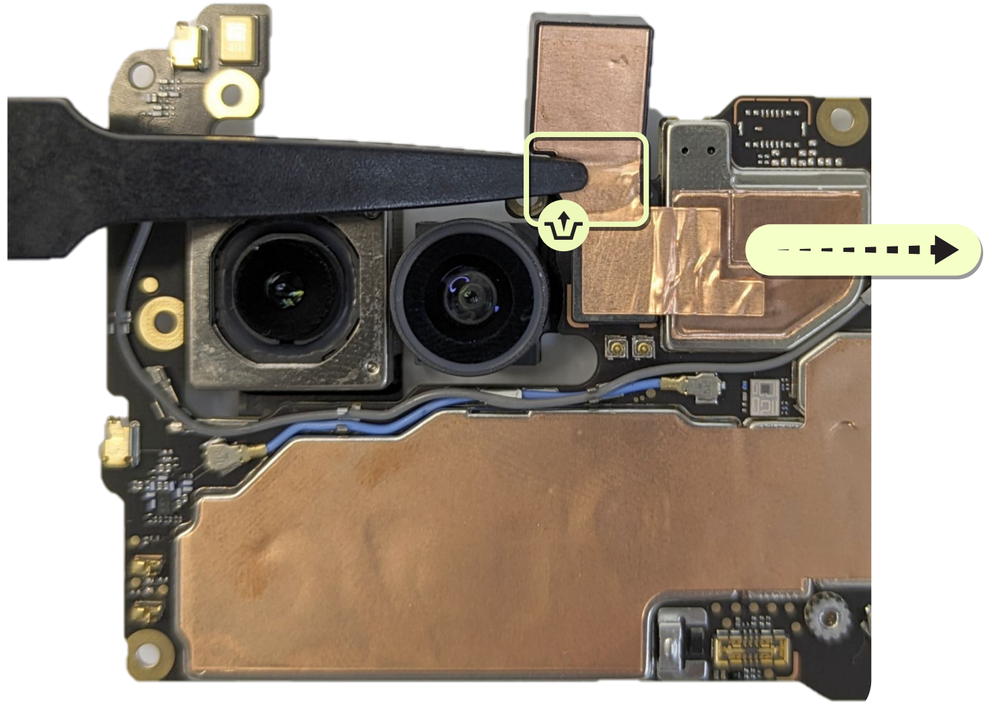
Front camera

G949-01320-00

Finished! Need assembly instructions? ➜

Remove the front camera

Use the ESD tweezer, and lift the front camera from the middle of foil shielding. Follow the direction illustrated in the picture to detach the camera from the logic board.



Disassembly instructions

Logic board

Use caution

Review all **safety precautions** before you begin.

Prerequisites

Here's is the list of components that you should remove first:

- **Back cover**
- **Inner housing**

Tools

Universal base plate 12 mm

Universal holder

Universal holder limiting block

Universal supporting rubber

Adjustable torque screwdriver

ESD spudger

ESD tweezers

Large suction cup

SIM card ejection pin

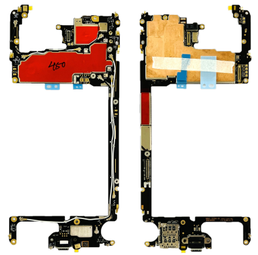
Parts

Logic board

Here's the list of parts for the logic board disassembly.

Reuse indications — Reusable without cleaning · Reusable after cleaning · Not reusable after disassembly

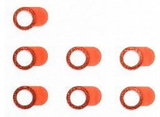
Logic board
Multiple part numbers



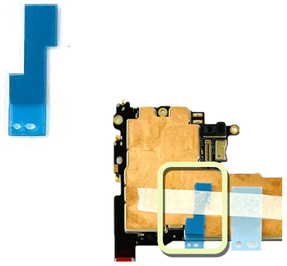
FCAM copper foil
G806-12330-01

Stamping plate display BTB
G730-07370-02

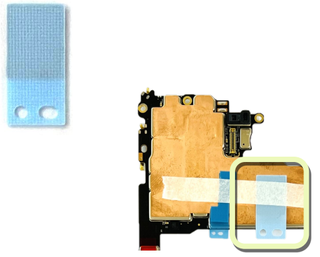
Conductive fabric washer
G806-13124-00



Thermal pad 1, MLB
G806-11970-01



Thermal pad 2, MLB
G806-11971-01

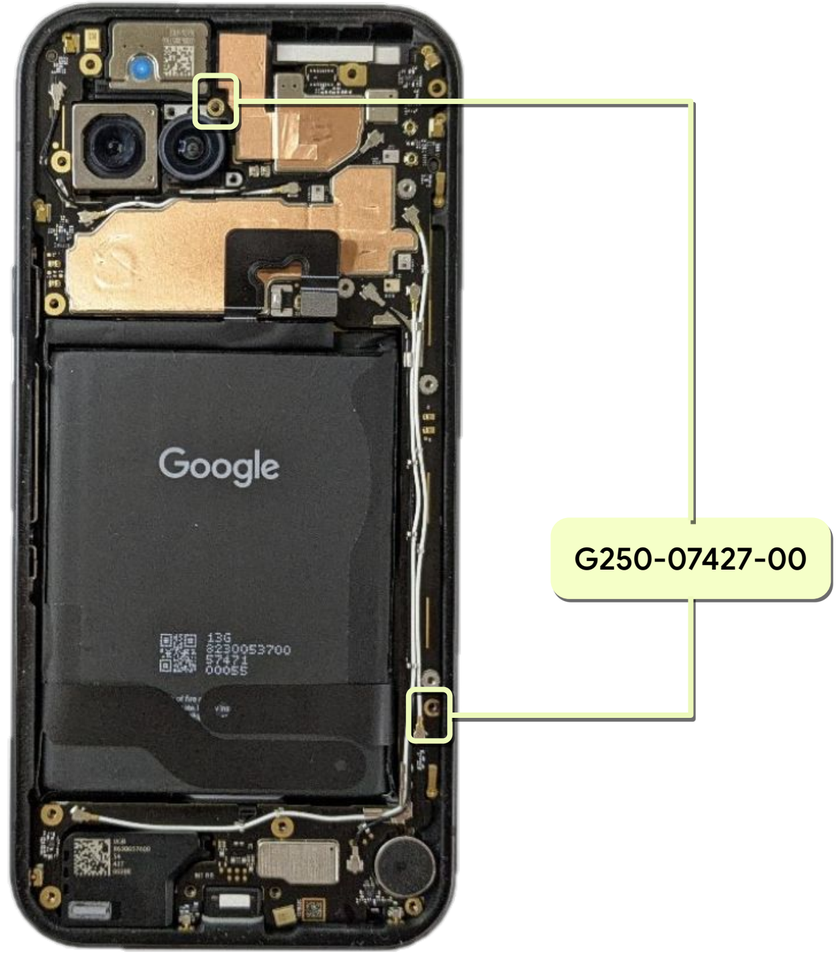


Remove sim tray

- Ensure that the device is turned off before you attempt this step.
- Use the SIM card ejection pin to remove the SIM tray from the device.

Remove logic board screws

Use a screwdriver to loosen two screws that hold the logic board.



Use caution

Keep small screws and sharp objects away from the battery & ensure battery discharge page#10 and cosmetic check from page#11

Remove the logic board

- Flip up the logic board from the screw hole above the camera with ESD tweezer as shown in Fig 1.
- Raise the logic board as shown in Fig 2.
- Detach the USB module from the socket first as shown in Fig 3.
- Hold the enclosure in place when you continue to separate the logic board from it as shown in Fig 4.

> ⚠ **Use caution**
>
> *Don't* attempt to extract the logic board by force. It's still connected to the display by a fragile FPC.

Fig 1

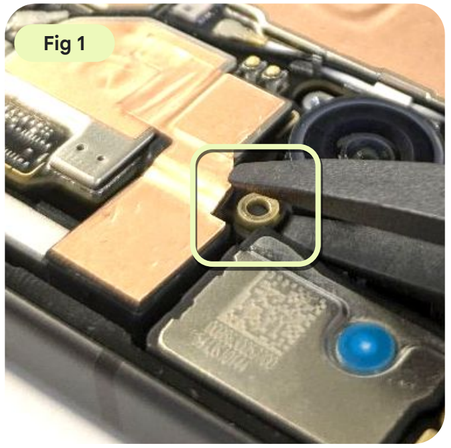


Fig 2

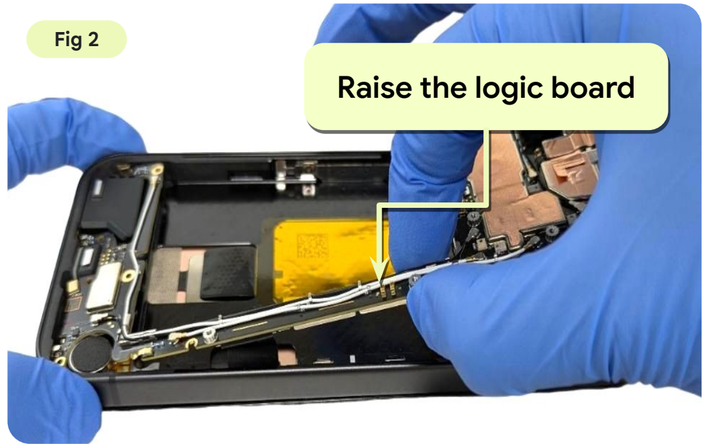


Fig 3

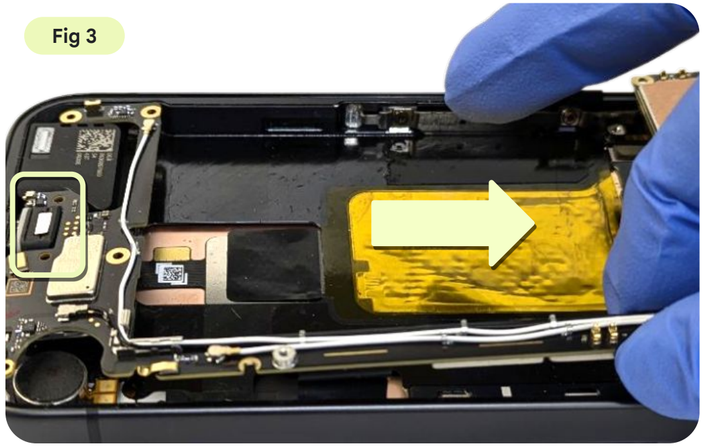
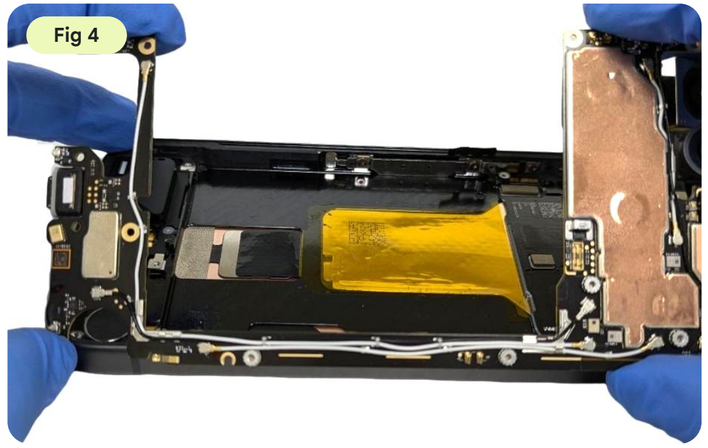


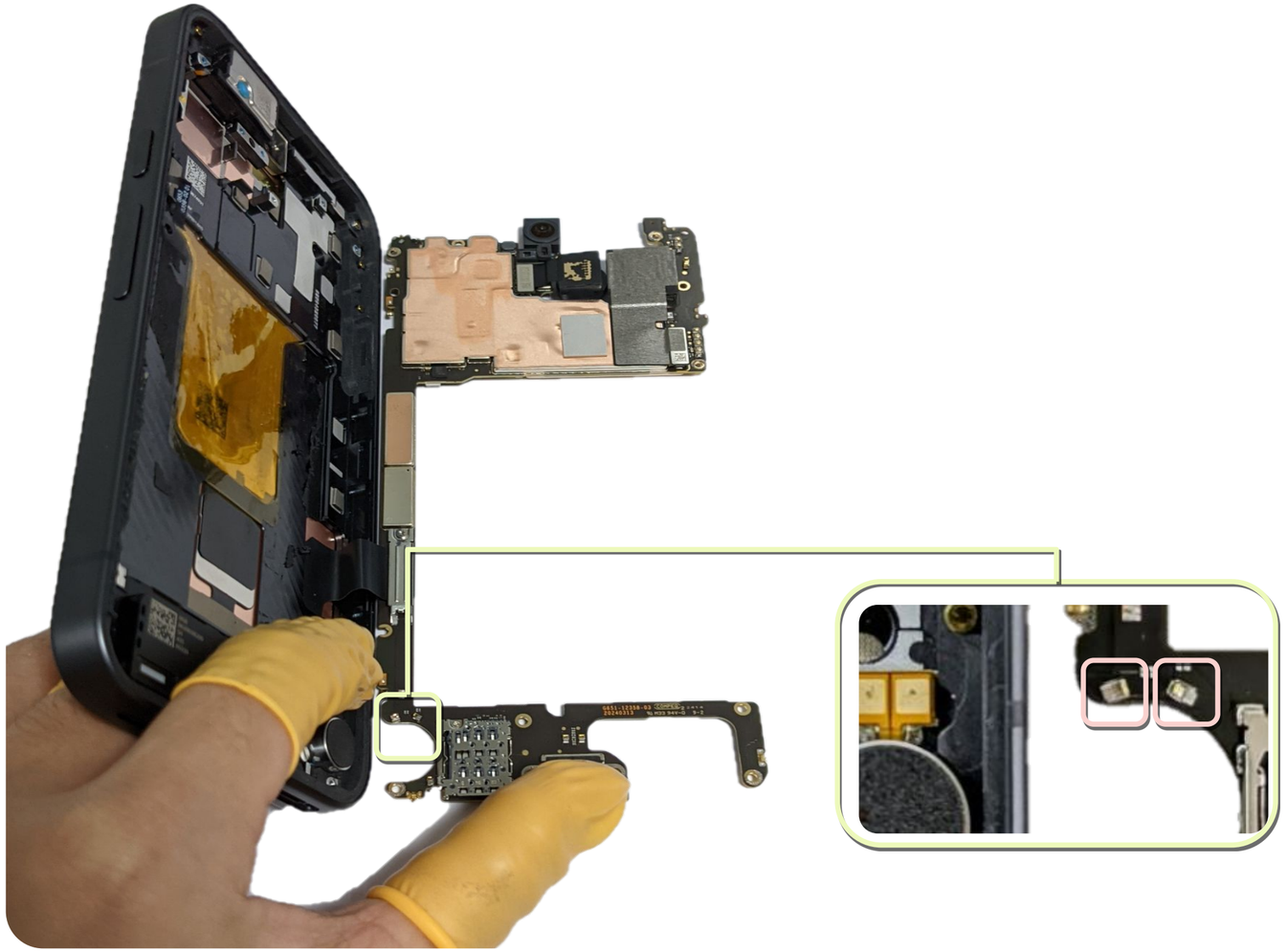
Fig 4



Extract the logic board

- Use a large suction cup to stand the enclosure up.

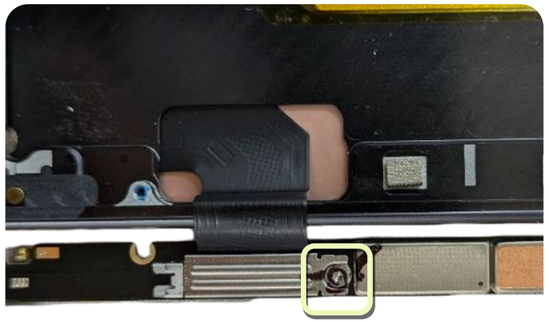
> ⚠ **Use caution**
>
> *Don't* reuse MLB *If the springs (in pink) are damaged.*

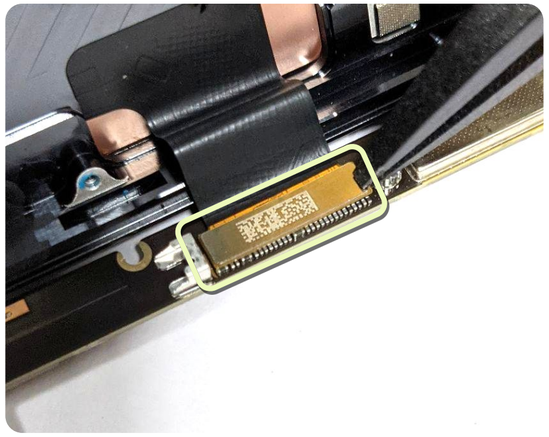


Finished! Need assembly instructions? ➜

Remove the display metal stamping plate

- Use a screwdriver to remove the screw connecting the stamping plate and the logic board.
- Use the ESD tweezers to extract the stamping plate from the logic board.
- Use ESD tweezers to disconnect the display from the logic board.





⚠ **Use caution**

Avoid any contacts with the capacitors, resistors, and other parts nearby.

Disassembly instructions

Rear camera

Use caution

Review all **safety precautions** before you begin work.

Prerequisites

Here's the list of components that you should remove first:

- **Back cover**
- **Inner housing**
- **Logic board**

Tools

ESD tweezers

ESD spudger

Parts

Rear camera

Here's the list of parts for the rear camera disassembly.

Reuse indications — Reusable without cleaning · Reusable after cleaning · Not reusable after disassembly

Wide rear camera
G949-01321-00

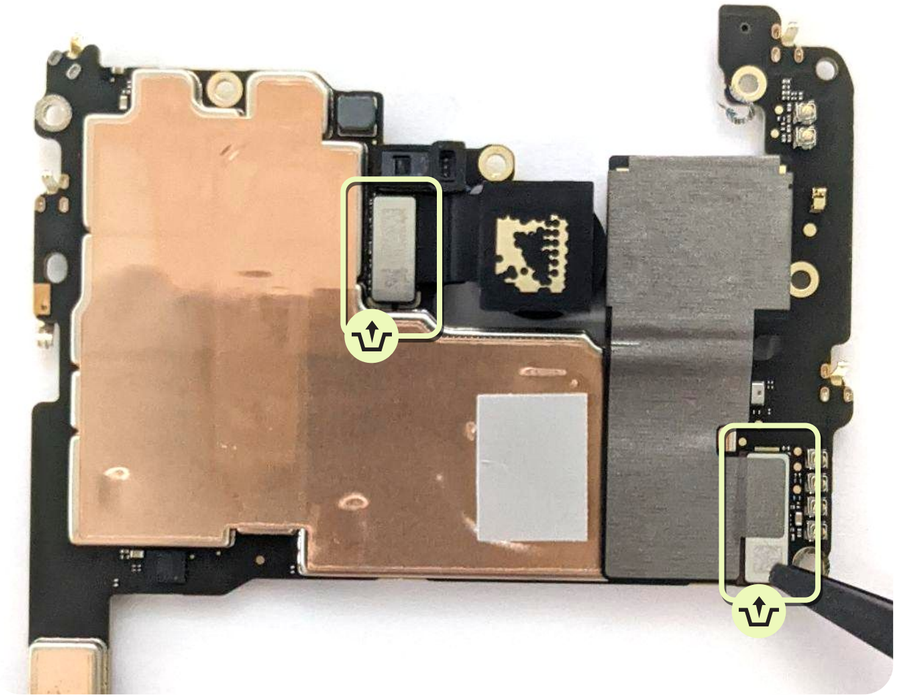
Ultra wide rear camera
G949-01322-00

P-sensor rubber
G806-12294-00

Finished! Need assembly instructions? ➜

Detach the WCAM and UWCAM

Use ESD spudger to disconnect the UW and wide camera from the logic board.



Disassembly instructions

Bottom speaker

Use caution

Review all **safety precautions** before you begin work.

Prerequisites

Here's the list of components that you should remove first:

- **Back cover**
- **Inner housing**
- **Top speaker**
- **Logic board**

Tools

Universal base plate 12 mm

Universal holder

Universal holder limiting block

Universal supporting rubber

ESD spudger

ESD tweezers

Parts

Bottom speaker

Here's the list of parts for the bottom speaker disassembly.

Reuse indications

- Reusable without cleaning
- Reusable after cleaning
- Not reusable after disassembly

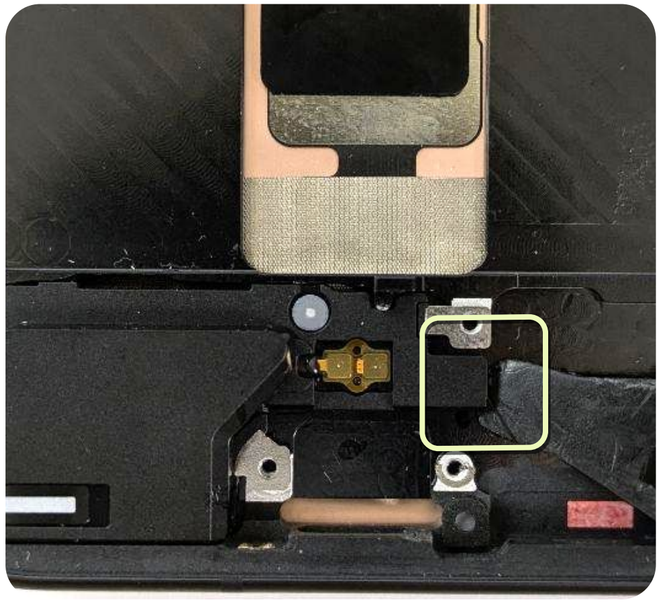
Bottom speaker

G863-00582-00

Finished! Need assembly instructions? ➜

Remove the bottom speaker

Use an ESD spudger to lift up the bottom speaker from the designated location.



Use caution

Keep small screws and sharp objects away from the battery & ensure battery discharge page#10 and cosmetic check from page#11

Disassembly instructions

Top speaker

Use caution

Review all **safety precautions** before you begin work.

Prerequisites

Here's the list of components that you should remove first:

- **Back cover**
- **Inner housing**
- **Logic board**

Tools

Universal base plate 12 mm

Universal holder

Universal holder limiting block

Universal supporting rubber

Adjustable torque screwdriver

ESD tweezers

Parts

Top speaker

Here's the list of parts for the top speaker disassembly.

Reuse indications

- Reusable without cleaning
- Reusable after cleaning
- Not reusable after disassembly

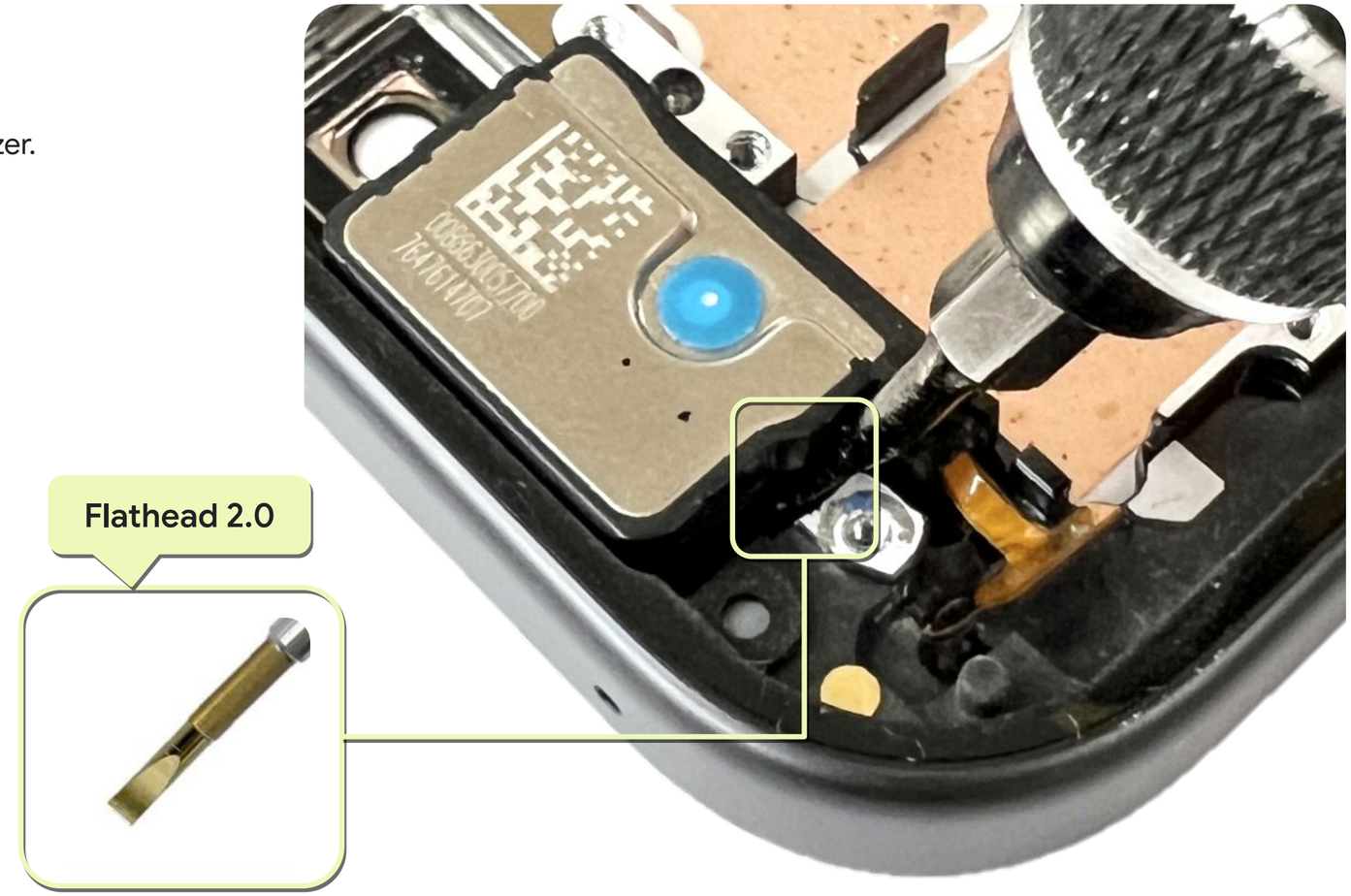
Top speaker

G863-00577-00

Finished! Need assembly instructions? ➜

Remove the top speaker

- Detach the top speaker FPC from the enclosure with an ESD tweezer.
- Lift up the top speaker with a flathead 2.0 tip.



Disassembly instructions

Vibrator

Use caution

Review all **safety precautions** before you begin work.

Prerequisites

Here's the list of components that you should remove first:

- **Back cover**
- **Inner housing**
- **Logic board**

Tools

- Universal base plate 12 mm
- Universal holder
- Universal holder limiting block
- Universal supporting rubber
- ESD spudger
- ESD tweezers
- Flathead screw
- IPA
- Cotton swabs

Parts

Vibrator

Here's the list of parts for the vibrator disassembly.

Reuse indications Reusable without cleaning | Reusable after cleaning | Not reusable after disassembly

Vibrator
G710-02255-XX

Vibrator PSA
G806-03299-01

Finished! Need assembly instructions? ➜

Remove the vibrator

- Apply IPA beneath vibrator to soften vibrator adhesive.
- Insert an ESD spudger into the gap between the vibrator and the enclosure to loosen the vibrator.
- Lift the vibrator with an ESD spudger.

Use caution

Keep small screws and sharp objects away from the battery & ensure battery discharge page#10 and cosmetic check from page#11

Enclosure

Use caution

Review all **safety precautions** before you begin work.

Prerequisites

Here's the list of components that you should remove first:

- **Back cover**
- **Inner housing**
- **Top speaker**
- **Logic board**
- **Bottom speaker**
- **Vibrator**
- **Battery**

Tools

- Universal base plate 12 mm
- Universal holder
- Universal holder limiting block
- Universal supporting rubber
- ESD spudger
- ESD tweezers
- IPA
- Cotton swabs

Parts

Finished! Need assembly instructions? ➜

Reuse indications — Reusable without cleaning | Reusable after cleaning | Not reusable after disassembly

Enclosure

Here's the list of parts for the enclosure disassembly.

Enclosure
Multiple part numbers

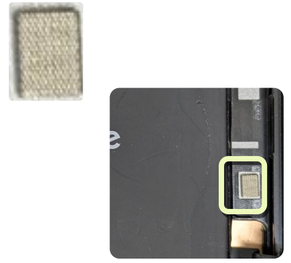
Battery adhesive L+R
G806-15065-00

Adhesive enclosure to BC
G806-12186-01

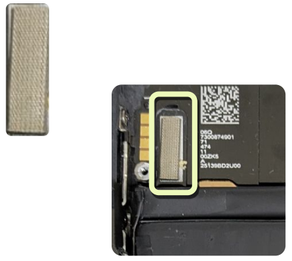
Adhesive enclosure to CG
G806-12226-04

Conductive fabric washer
G806-13124-00

Conductive foam, MLB shield bottom
G806-08921-01



Conductive foam, Rcam
G806-06777-01



Conductive foam, MLB shield AGPS
G806-10464-01

Pixel 9a repair manual

Assembly

Display

Enclosure

Vibrator

Top speaker

Bottom speaker

Rear camera

Logic board

Front camera

Battery

Inner housing

Back cover

Assembly instructions

Display

Rework the display

(for **a reused** display)

- Use plastic ESD tweezers to remove the damaged conductive fabric.

- Follow the dotted line in Fig1 to paste a new conductive fabric on the display. Flatten the surface after you remove the liner.

Note

Perform this step only if the conductive fabric is damaged during the display removal process.

Use caution

Don't damage the components underneath the conductive fabric.

Conductive fabric should stay clear from the edges, and never exceed the dotted lines.

Fig 1

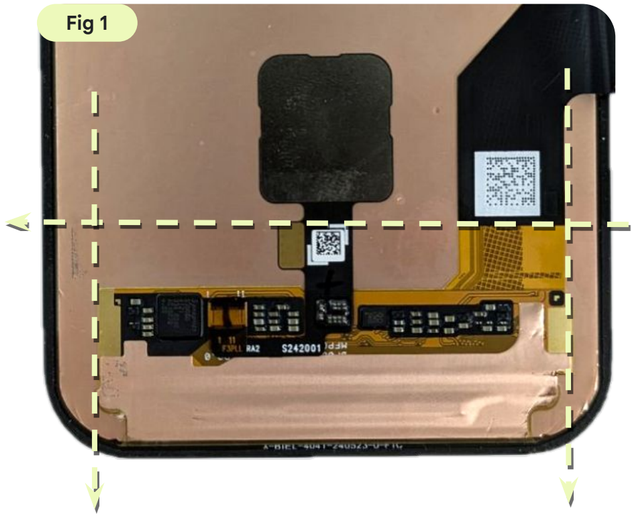
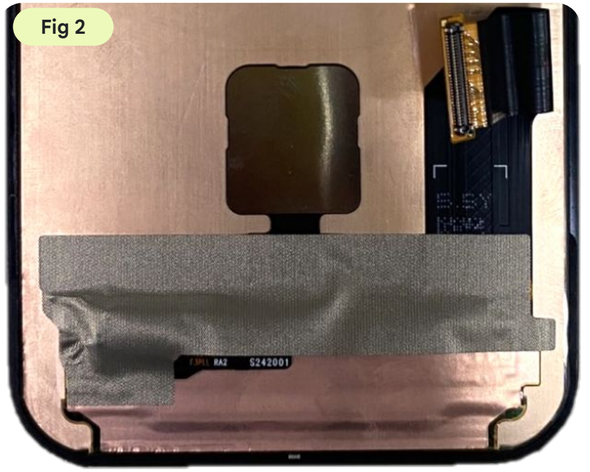


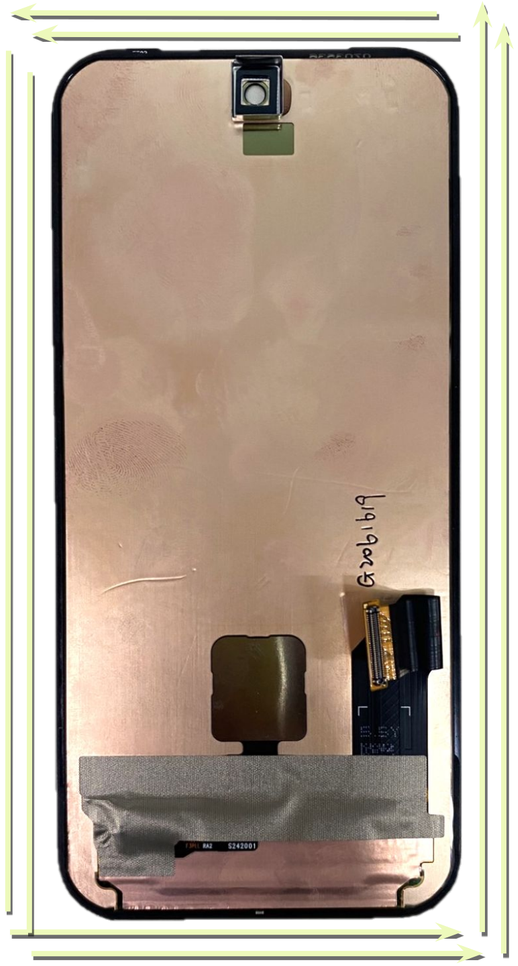
Fig 2



Rework the display

(for **a reused** display)

- Scrub off the adhesives around the outer edge of the display with an ESD spudger or electric glue remover tool.
- Wipe the surface with cotton swab and IPA to remove the remaining residues.
- Apply **AP111** around the edges **twice**.



x2

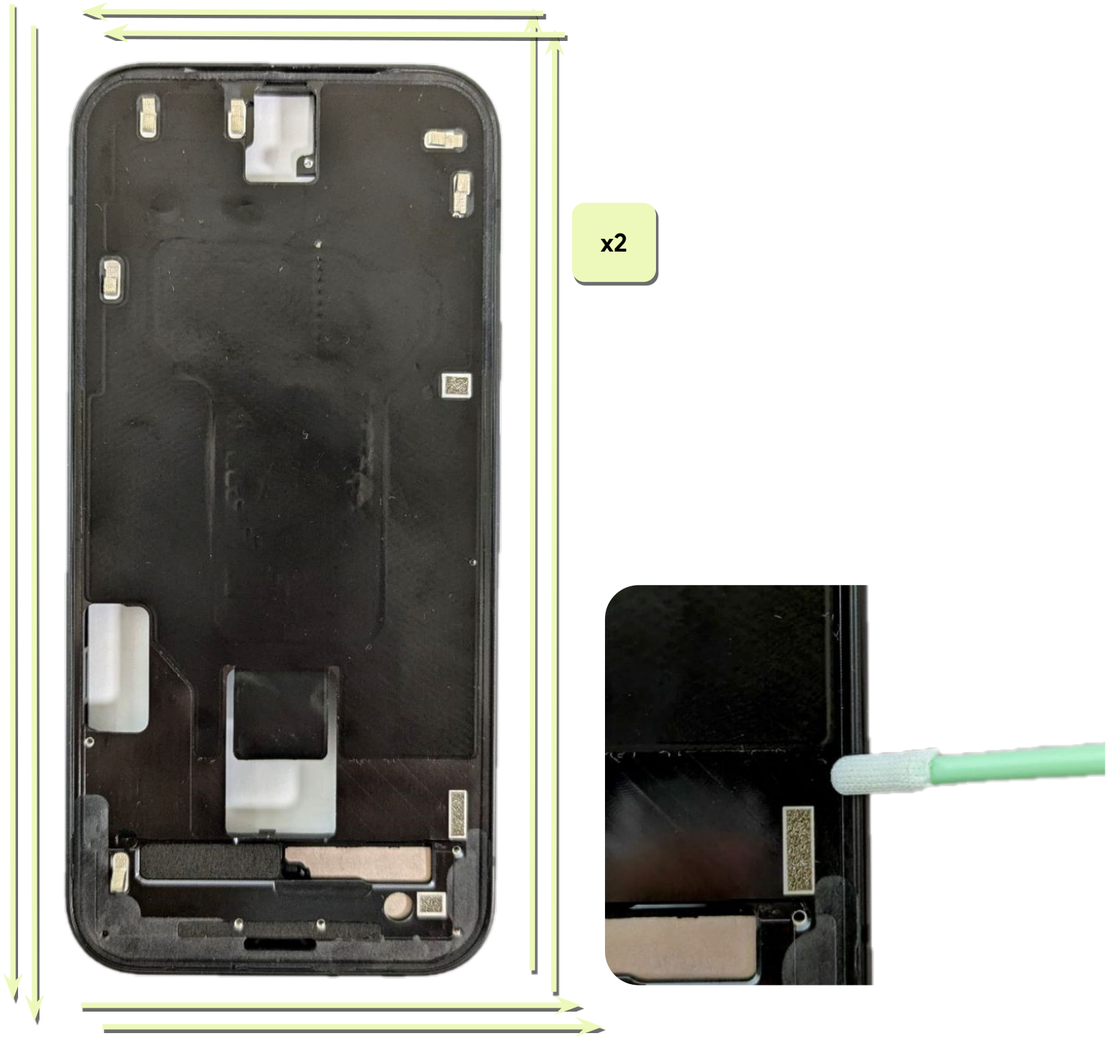
Use caution

1. Excessive primer or overflow can impact display/enclosure bonding. .
2. Apply primer in the same direction. *Don't* rub back and forth.
3. The display to enclosure assembly must be completed within 25 minutes after applying primer.

Apply AP111 on the enclosure

(for a **reused** enclosure)

Apply AP111 around the entire enclosure **twice**.



Caution

1. *Don't* apply excessive primer. It could overflow.
2. Apply primer in one direction. *Don't* rub back and forth.
3. The assembly must be completed within 25 minutes after applying primer.

Paste the display PSA onto the enclosure

(for **a reused** enclosure)

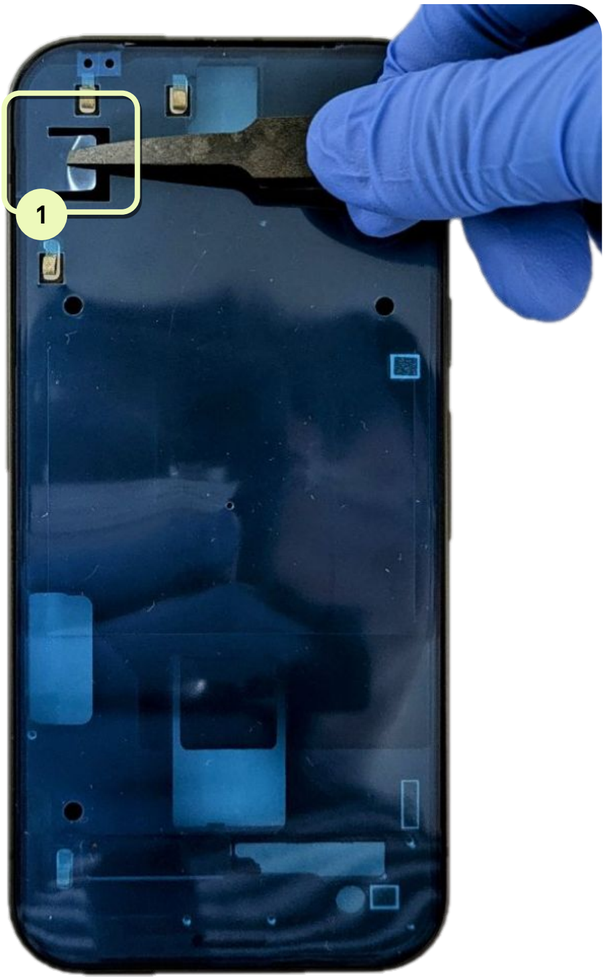
- Align the enclosure and the PSA, and the enclosure with the upper corners.
- After the alignment is confirmed, slowly lower the PSA onto the enclosure.
- Firmly apply pressure to complete the step.

Part: G806-12226-04 (Adhesive enclosure to CG)

Remove the release liners

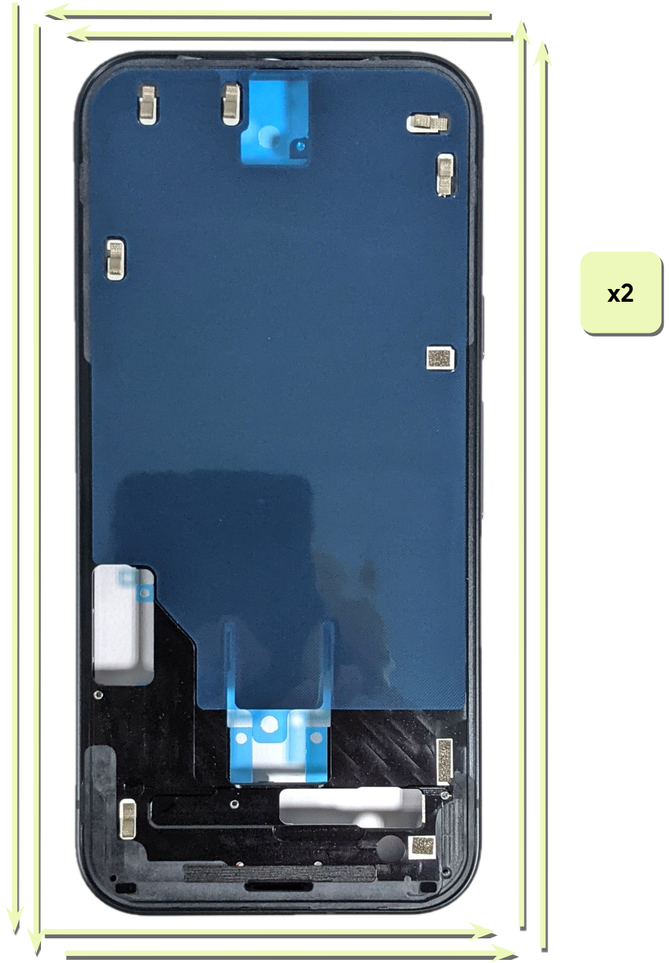
(for a **reused** enclosure)

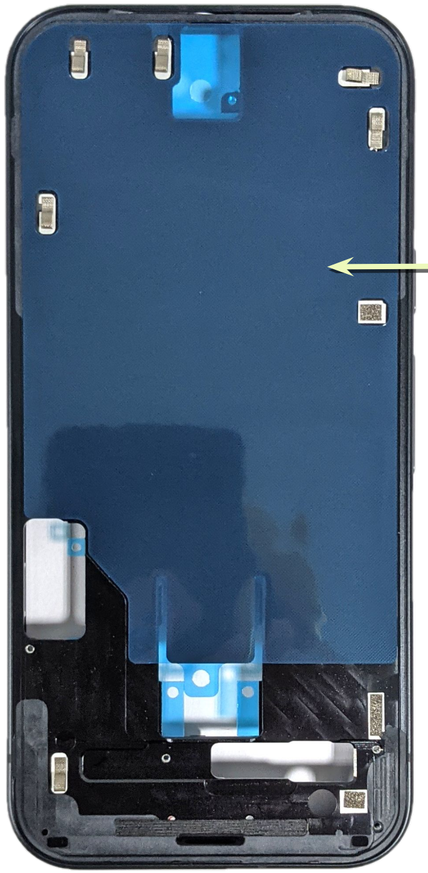
Slowly remove the two release liners from the enclosure with ESD tweezers.



Enclosure to the adhesive

- Apply AP111 around the entire enclosure **twice**.
- Slowly remove all of the release liners and protective film from the enclosure with ESD tweezers.



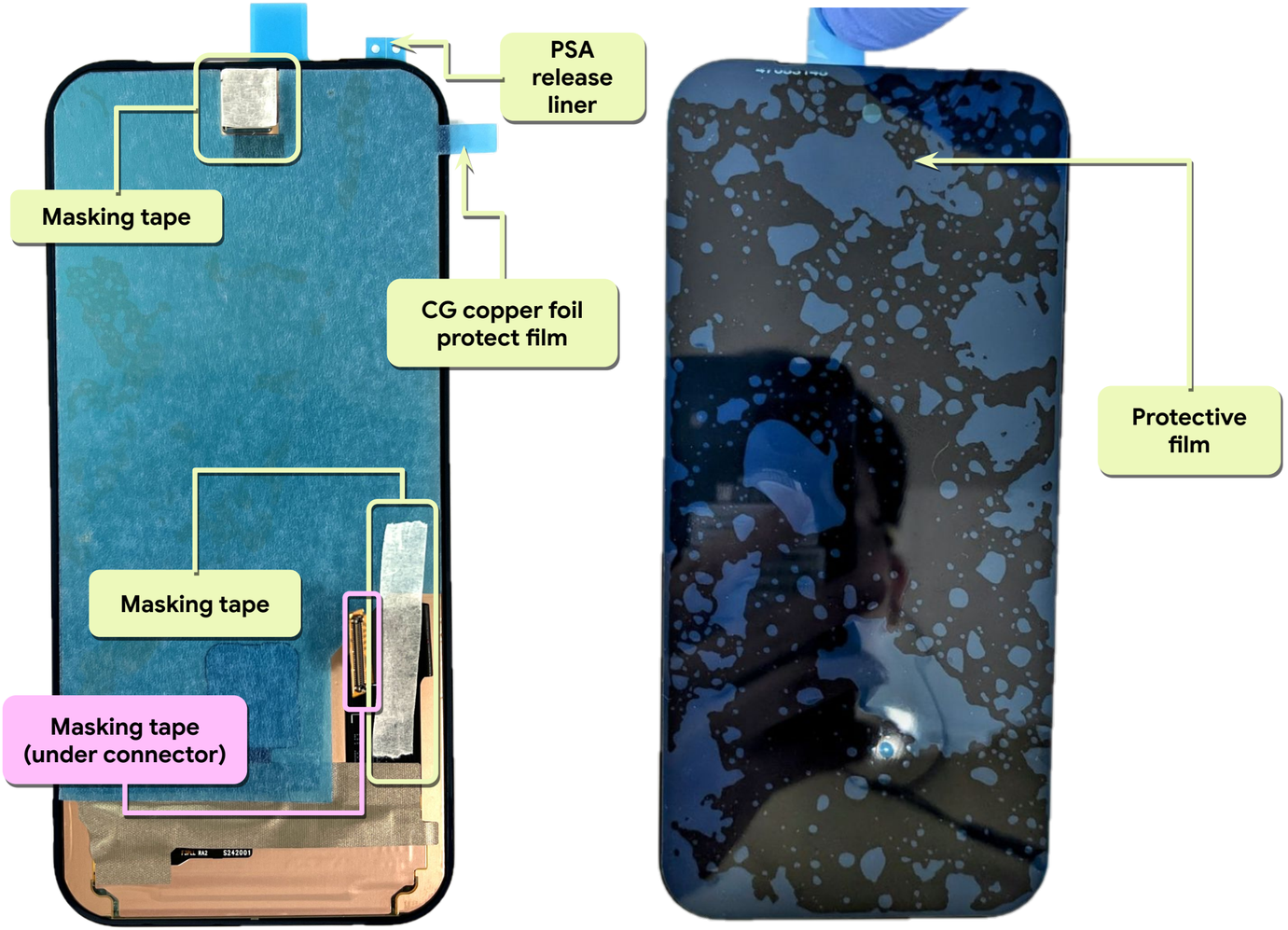


Caution

1. Excessive, overflow, or lack of primer can impact bonding.
2. Apply primer in the same direction. *Don't* rub back and forth.
3. The assembly must be completed within 25 minutes after applying primer.

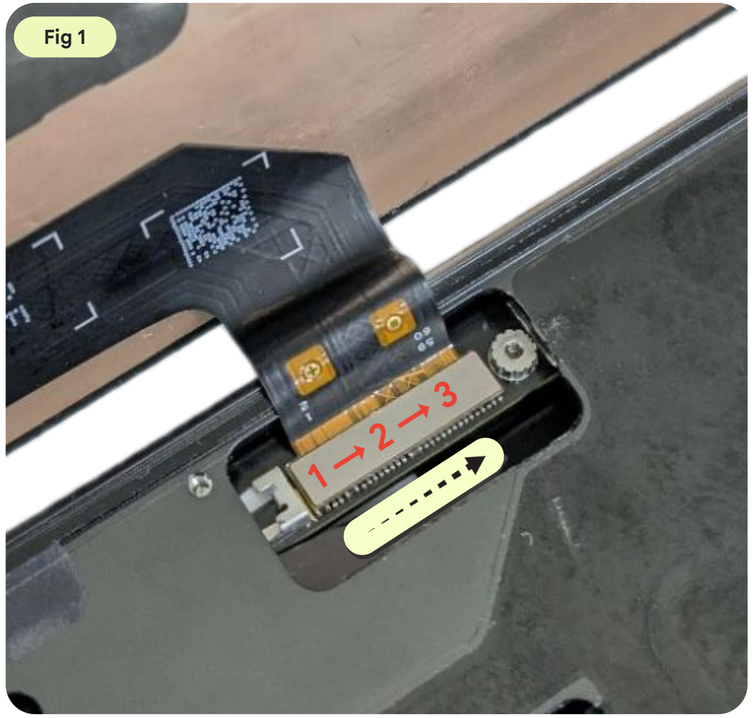
Remove the protective film, masking tape and release liner

Slowly remove all of the masking tape, protective film, and display module PSA release liner from the display with ESD tweezers.



Connect the display FPC

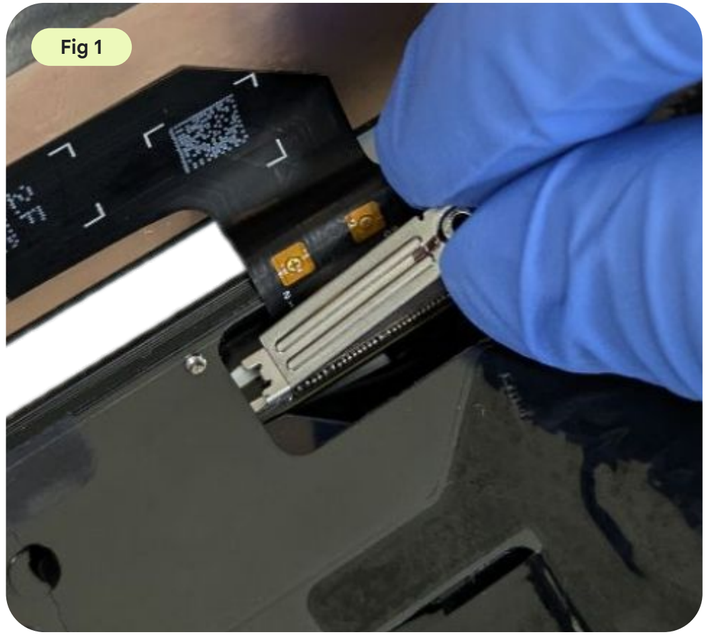
- Fasten the display FPC to the logic board and apply pressure following the designated order as shown in Fig 1.



Install the display stamping

- Insert the flat end of the display stamping into the socket facing the USB as shown in Fig 1.
- Fasten one screw on display stamping with torx plus 3IP screwdriver.

Part: G730-07370-02 (Stamping plate display BTB)



Inspect the P-sensor rubber

Ensure that the P-sensor rubber isn't damaged, missing, or skewed, and that it's placed in the correct position.

Install the UDFPS calibration

- Visit pixelrepair.withgoogle.com to download the UDFPS calibration software.

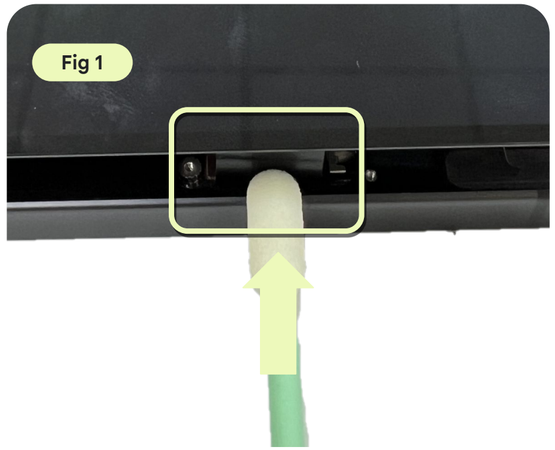
Note

This step is only needed if the display or the mainboard has been replaced.

Display assembly

- Push the display fpc inwards as shown in fig1.
- Assemble the display to the enclosure at all four corners simultaneously as shown in fig2.

> ⚠ **Caution**
>
> Make sure protective films are removed before assembling.



Finished! Need assembly instructions? ➜

Place the device in the fixture

Stack the universal holder onto the base with the **D3** positions.

Assembly the rest of the fixtures following the sequence: 1 ➜ 2 ➜ 3 ➜ 4 ➜ 5 ➜ 6

Part 1: G940-00833-01 (Universal base plate 12 mm)

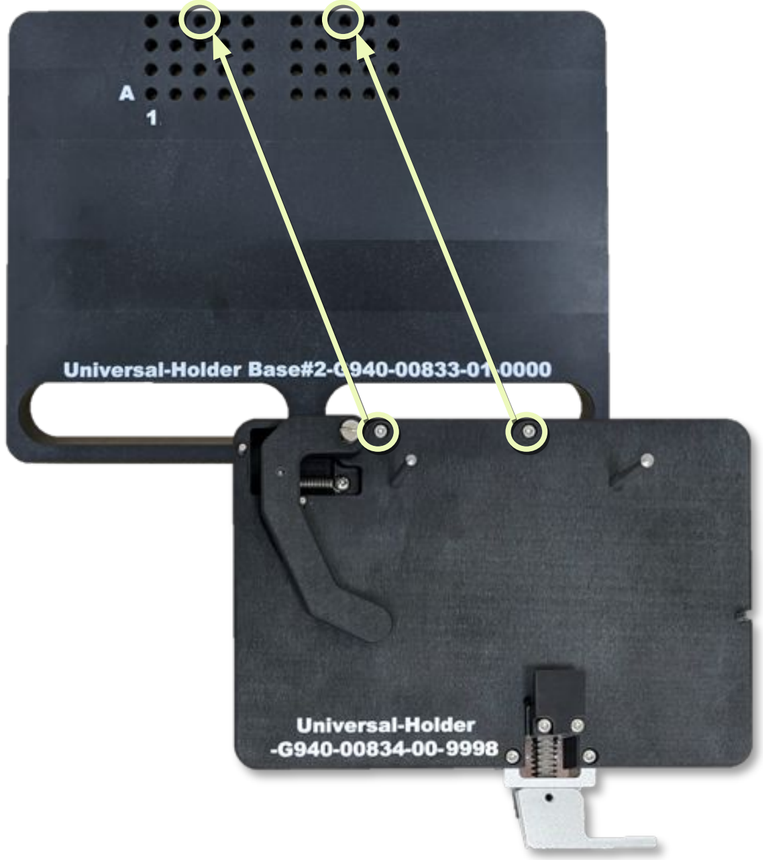
Part 2: G940-00834-00 (Universal holder)

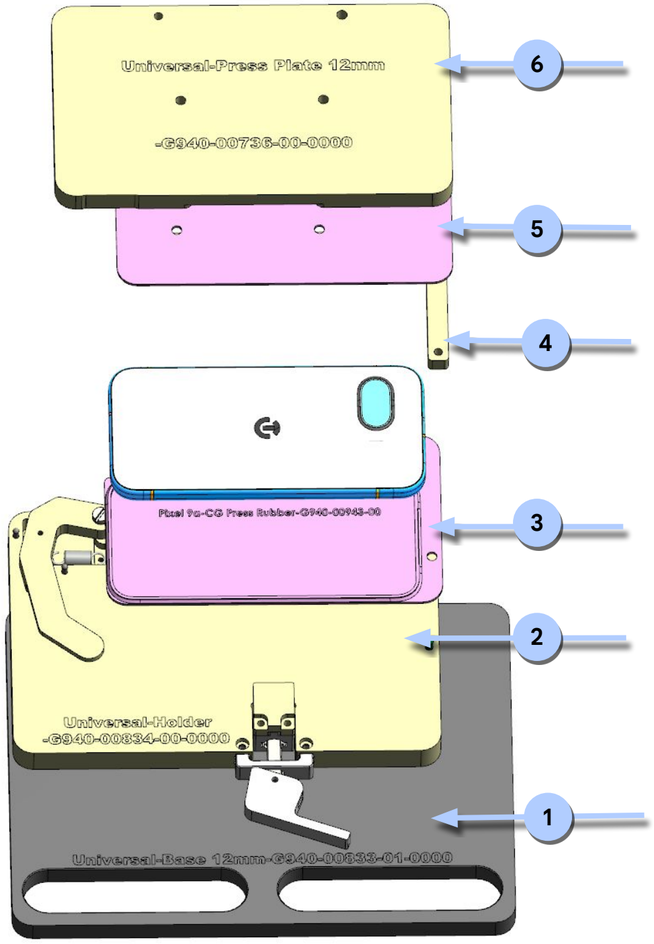
Part 3: G940-00943-00 (Pixel 9a screen press rubber)

Part 4: G940-00835-00 (Universal holder limiting block)

Part 5: G940-00942-00 (Pixel 9a back cover press rubber)

Part 6: G940-00736-00 (Universal press plate 12 mm)





Assembly instructions

Enclosure

Rework conductive foam

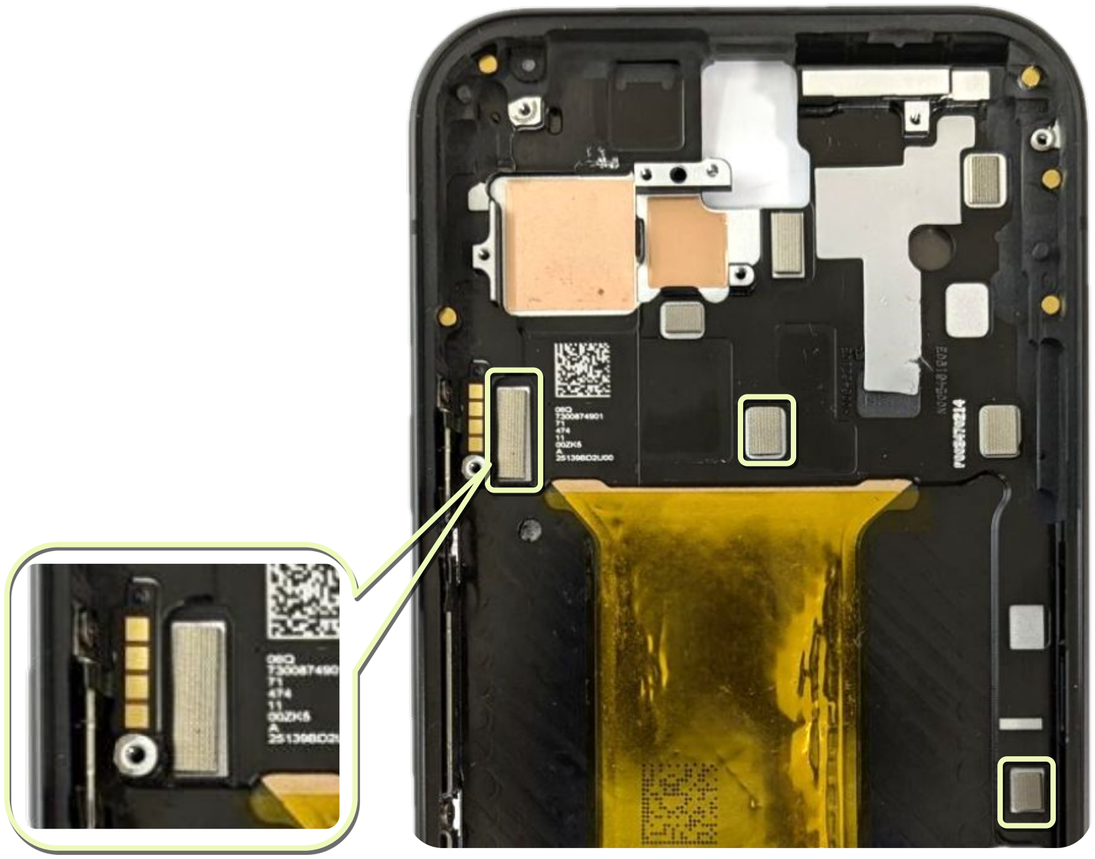
(for **reused** enclosure)

- Wipe the surface with cotton swab and IPA to remove the remaining residues.
- Use ESD tweezer to attach conductive foam to enclosure.
- Ensure conductive foam is attach inside the white area

Part: G806-08921-01 (Conductive foam, MLB shield bottom)

Part: G806-06777-01 (Conductive foam, Rcam)

Part: G806-10464-01 (Conductive foam, MLB shield AGPS)



Rework the battery area

(for **reused** enclosure)

- Remove any PSA residues, debris or loose screws from the enclosure.
- Wipe the surface with cotton swab and IPA to remove the remaining residues.
- Paste a new battery adhesive on the enclosure.
- Use the screw hole above the bottom speaker as an alignment point as shown in Fig 2.

Part: G806-15065-00 (Battery adhesive L+R)

Fig 1

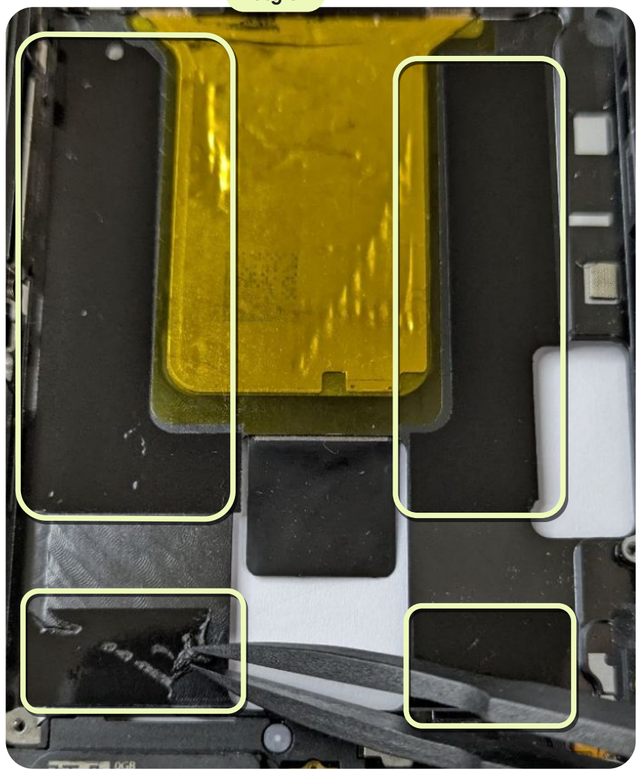
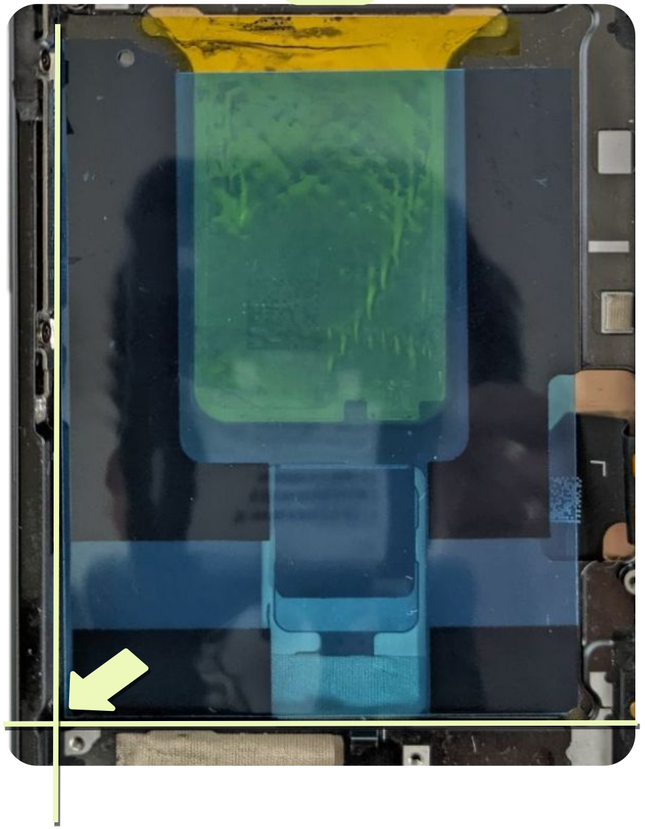


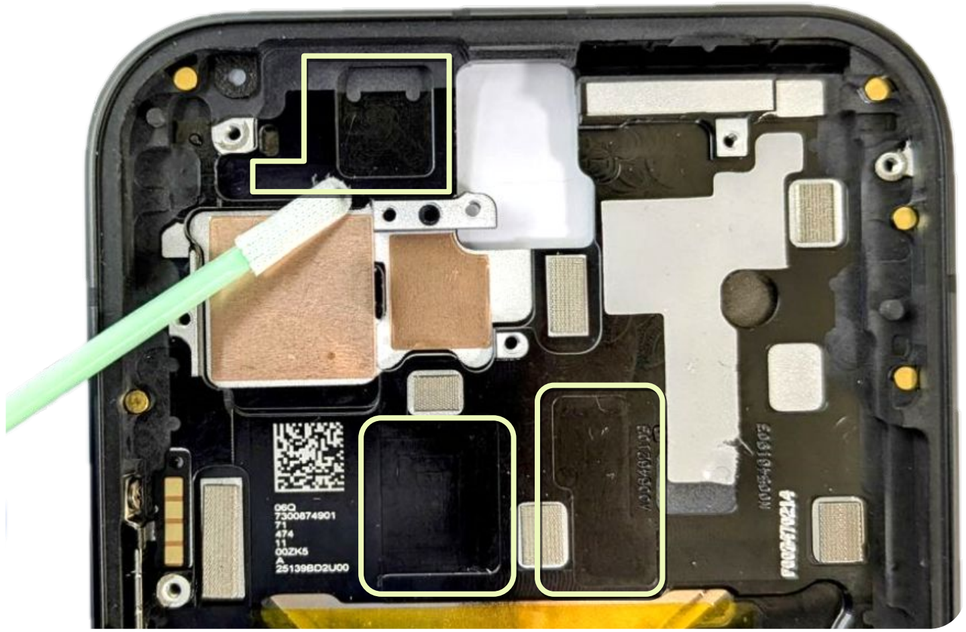
Fig 2



Rework the top speaker and thermal pad area

(for released enclosure)

- Wipe the surface with cotton swab and IPA to remove the remaining residues.



Rework the washer area

(for **reused** enclosure)

- Clean off the remaining residues at all 8 locations with cotton swab and IPA
- Paste a new conductive fabric washer at the location in blue if it shows sign of damages/worn.
- The 7 locations in yellow only require cleaning. Do NOT paste new washers at these locations. The corresponding washers are located on the logic board.

Part: G806-13124-00 (Conductive fabric washer)

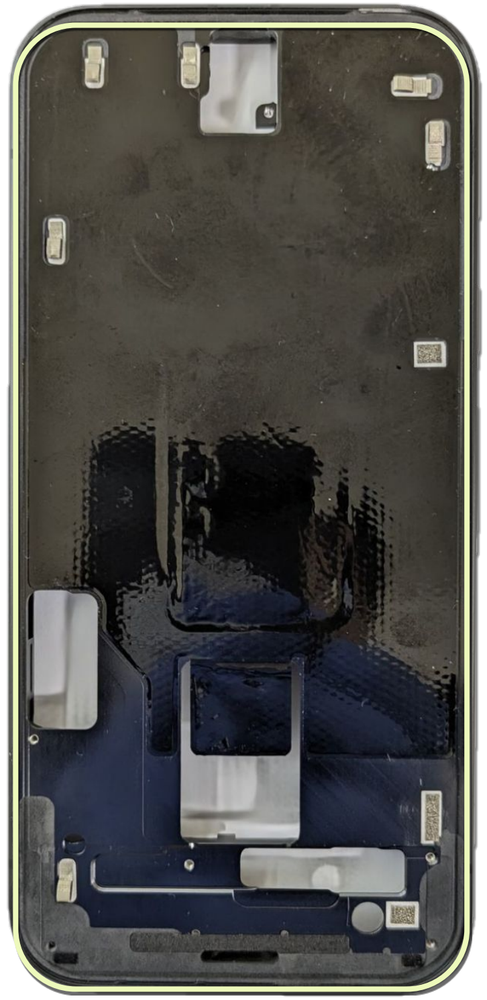
- **Washer cannot be in contact with the enclosure sidewall.**
- **Washer cannot cover the screw hole.**

Rework the enclosure PSA area

(for **reused** enclosure)

- Use an ESD spudger or electric glue remover tool to carefully clean the adhesive around the outer edge of the enclosure.
- Wipe the surface with cotton swab and IPA to remove the remaining residues.

Display side

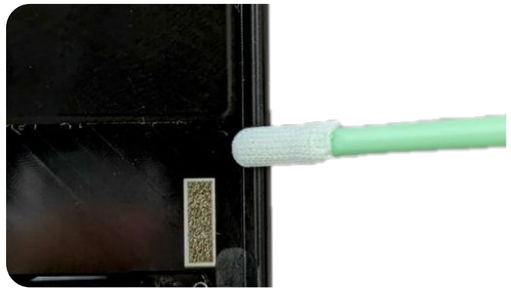


Back cover side

Apply AP111 on the enclosure

(for a **reused** enclosure)

Apply AP111 around the entire enclosure **twice**.



Caution

1. *Excessive, overflow, or lack of primer can impact bonding.*
2. *Apply primer in the same direction. Don't rub back and forth.*
3. *The assembly must be completed within 25 minutes after applying primer.*

Apply PSA on enclosure

(for **reused** enclosure)

- Align the opening on the PSA with the rear camera sockets.
- Stick the PSA at two upper corners of the enclosure first, followed by rest of the areas.
- Firmly apply pressure throughout the PSA to complete bonding.
- Remove the release liner by pulling the tab with an ESD tweezer as shown in Fig 2.

Part: G806-12186-01 (Adhesive enclosure to BC)

Fig 1

Fig 2

Assembly instructions

Vibrator

Rework the vibrator area

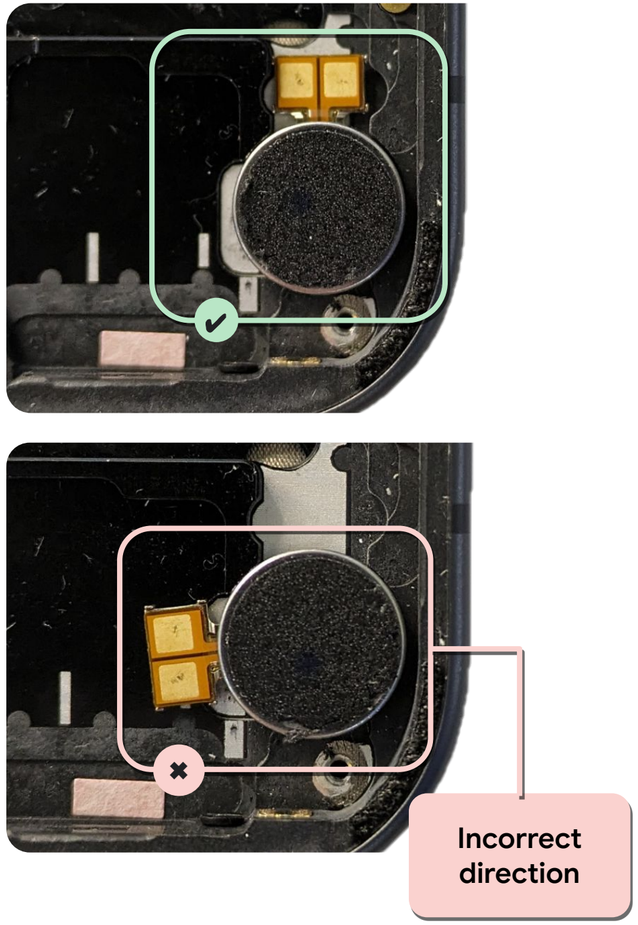
(for **reused** enclosure)

- Use an ESD spudger to scrub off the vibrator adhesive.
- Wipe the surface with cotton swab and IPA to remove the remaining residue.

Install the vibrator

- Remove the release liner from the vibrator adhesive first.
- Position the vibrator with the cutouts in the enclosure. FPC should face the camera side.
- Apply pressure on the vibrator to complete bonding.

Parts: G710-02255-XX (Vibrator)



Assembly instructions

Top speaker

Install Top SPK module

- Apply AP111 around the top speaker area **twice** before installation.(Fig1)
- Remove the release liners on the top speaker.
- Install top speaker vertically.(Fig2)
- Use an ESD Tweezer to remove the release liners on the FPC, position FPC to the enclosure and flatten the surface.(Fig3)
- Hand press on the top speaker **twice** to activate the PSA. (Fig4)

Part: G863-00577-00 (Top speaker)

> ⚠ **Caution**
>
> The assembly must be completed within 25 minutes after applying primer.

Fig 1

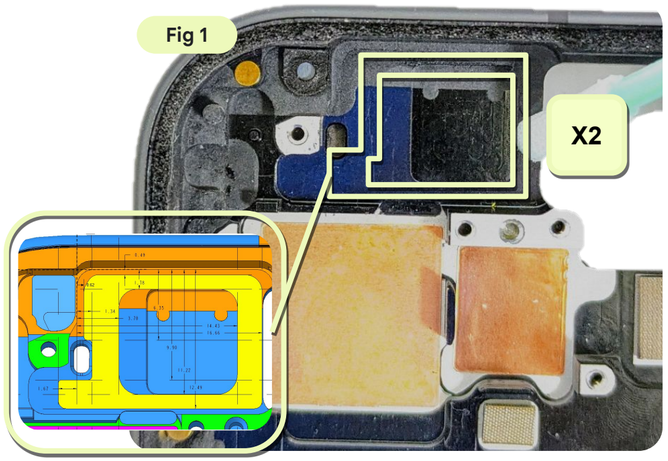


Fig 2

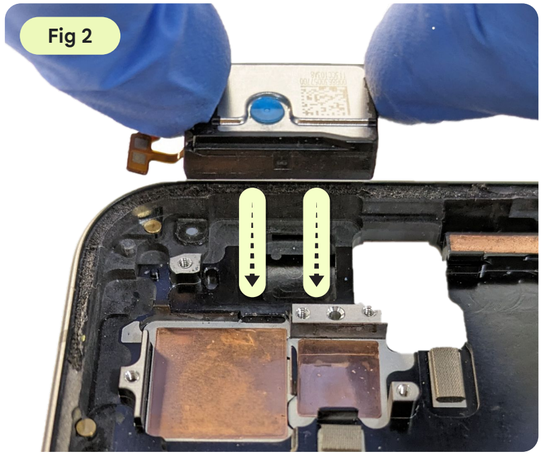


Fig 3

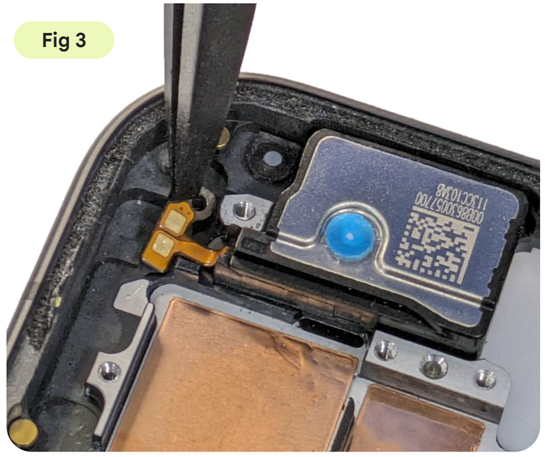
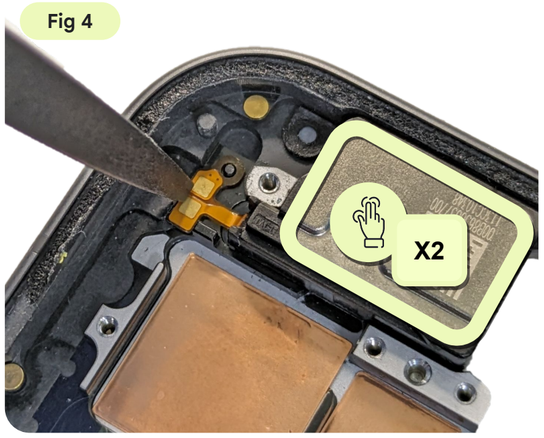


Fig 4



Assembly instructions

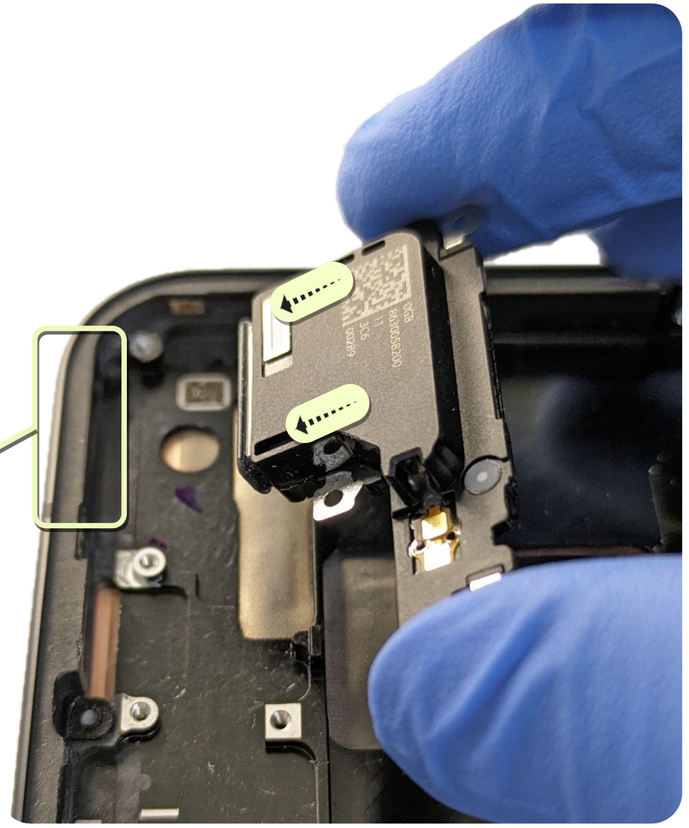
Bottom speaker

Install the bottom speaker

- Apply Sankol lubricant to the rubber seal on the bottom speaker.
- Insert the bottom speaker to the opening on the enclosure as shown in Fig 1.
- Position it behind the latch with two screw holes aligned with the enclosure as shown in Fig 2.
- Lightly press the bottom speaker to complete the installation.

Part: G863-00582-00 (Bottom speaker)

Fig 1



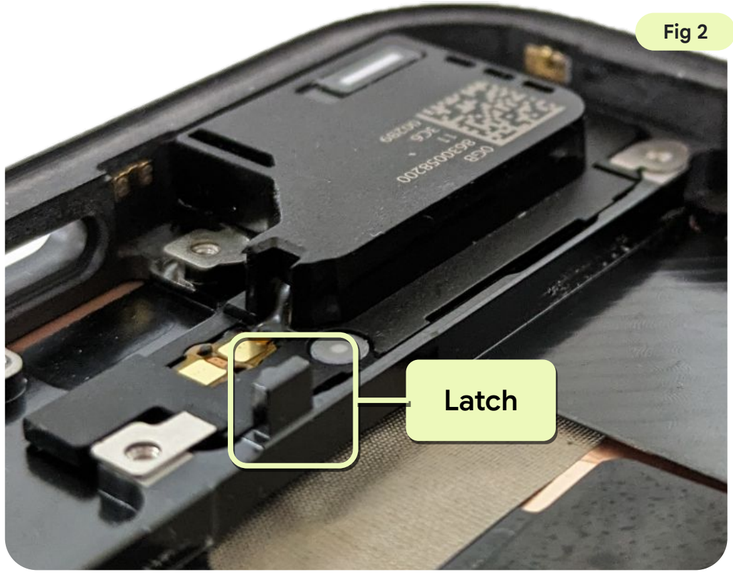


Fig 2

Assembly instructions

Rear camera

Assemble the RCAMs to MLB

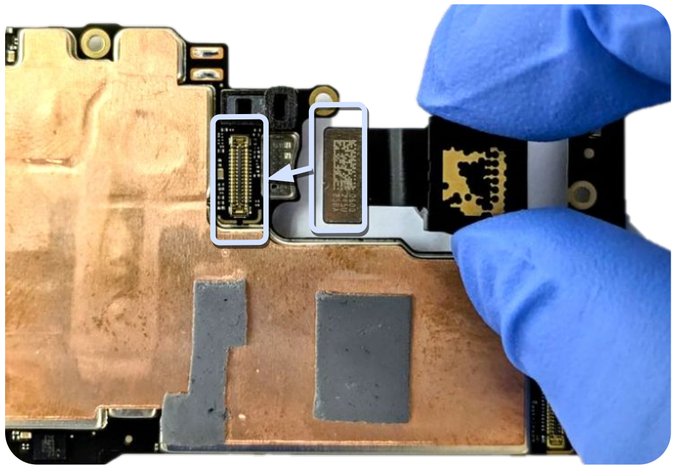
Note

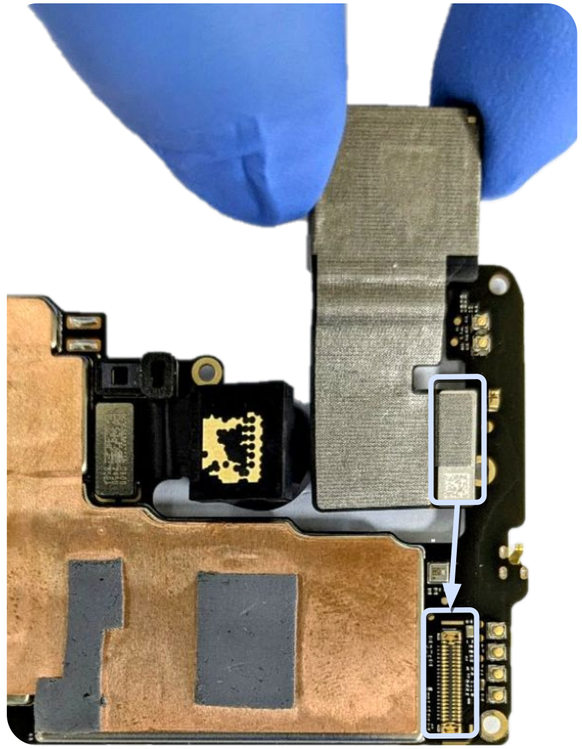
For a new logic board, remove the masking tape from the logic board before assemble the cameras.

- Assemble the cameras to the logic board.
- Attach the UW and wide camera BTB connectors to the logic board. Making sure they’re fully engaged properly.

Part: G949-01321-00 (Wide rear camera)

Part: G949-01322-00 (Ultra wide rear camera)





Use caution

Don’t touch the camera lenses.

Ensure that the connections are fully secured.

Install the P-sensor rubber

- Hold the rubber with ESD tweezers and drop it on the P-sensor as shown in Fig 1.
- Apply pressure to finish installation as shown in Fig 2.
- Ensure that the P-sensor rubber is facing the correct direction as shown in Fig 3.

Part: G806-12294-00 (P-sensor rubber)

Note

Replace the P-sensor rubber if it's damaged.

Fig 1

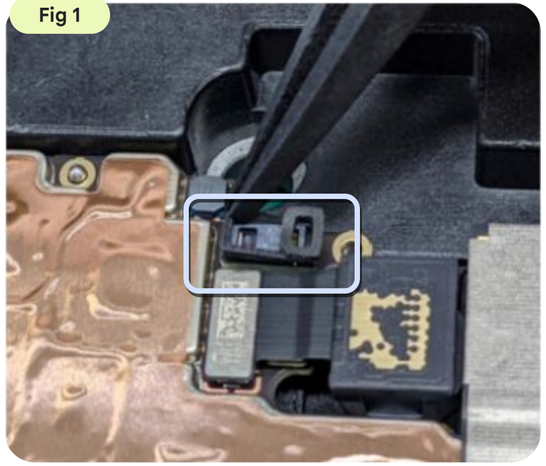


Fig 2

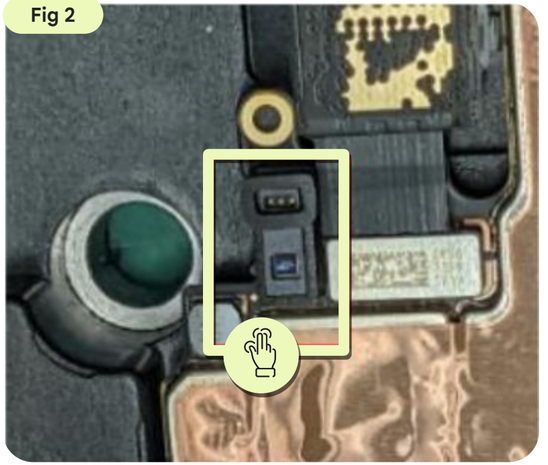
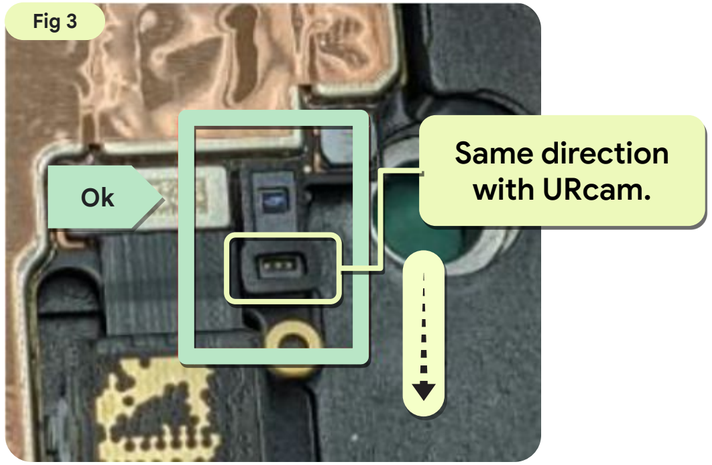


Fig 3



Assembly instructions

Logic board

Rework the logic board

(for a reused logic board)

Replace the conductive fabric washers if they are worn or damaged:

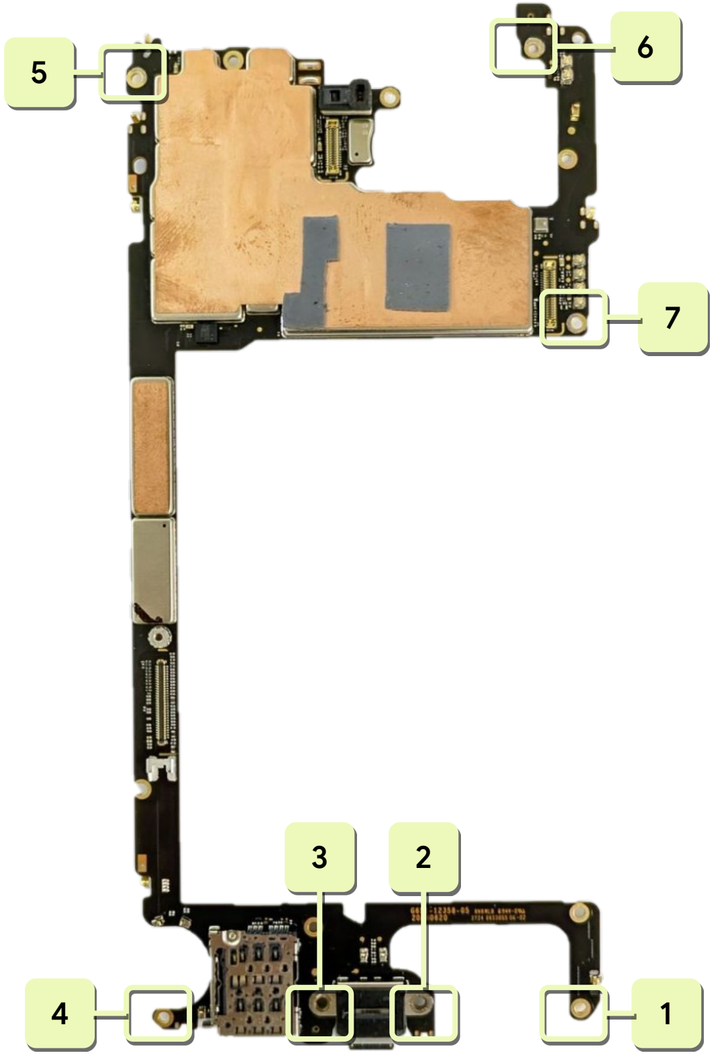
- Use an ESD spudger to scrub off the damaged conductive fabric washers first.
- Wipe the surface with cotton swab and IPA to eliminate the remaining residues.
- Paste new conductive fabric washer(s)*7 on the logic board and remove the release liner(s).

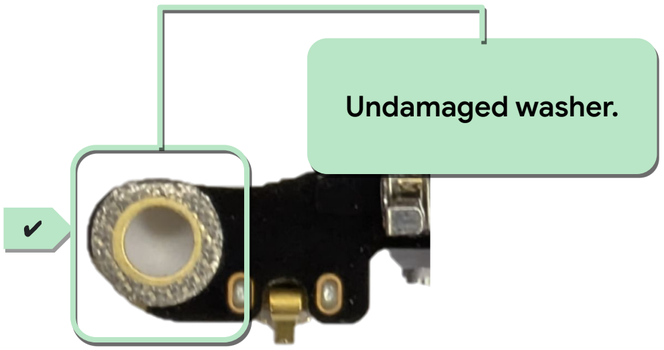
Part: G806-13124-00 (Conductive fabric washer)

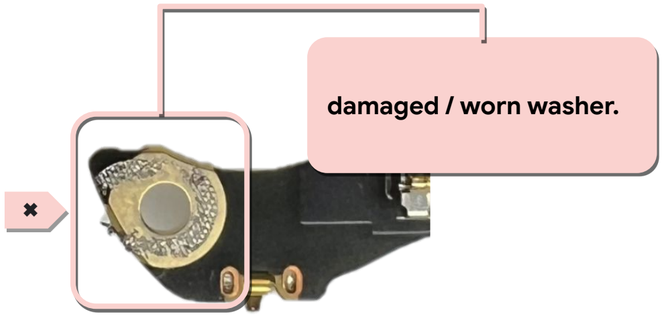
Caution

⚠ If the conductive fabric washer is worn or damaged. Clean up the area and apply a new one.

If the washer is in good condition, no action is needed.







Rework the thermal pad

(for a reused logic board)

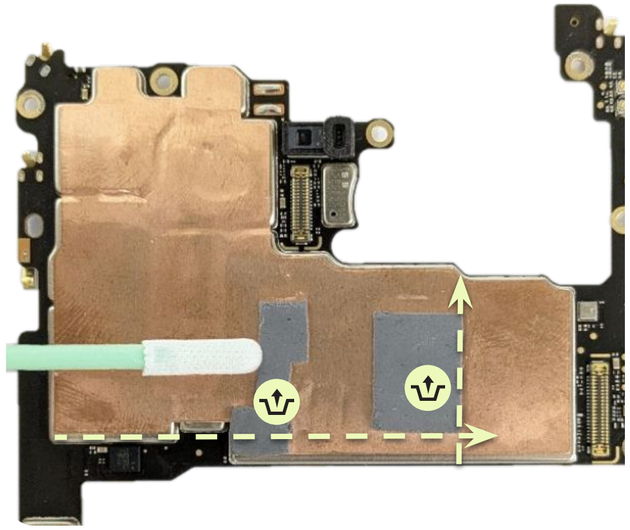
If the thermal pad is damaged:

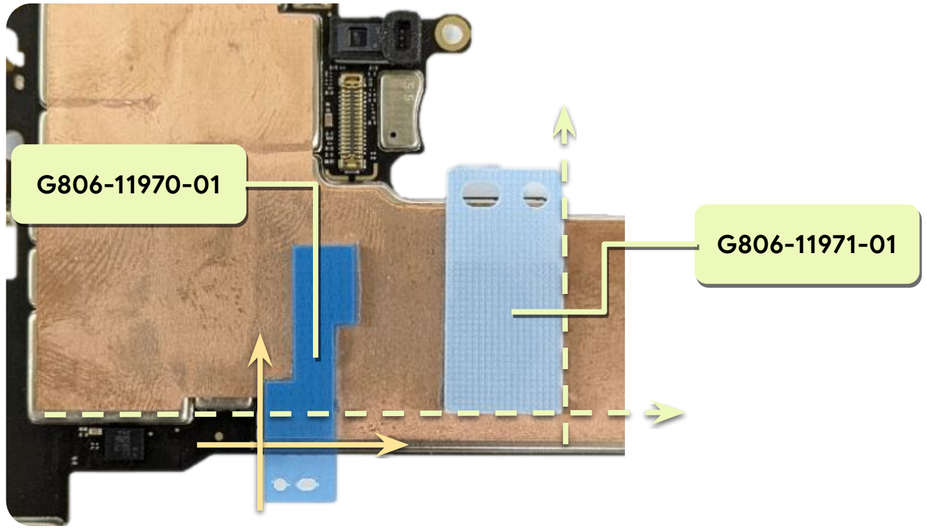
- Use cotton swabs to scrub off the thermal pad from the logic board.
- Wipe the surface with cotton swab and IPA to remove the remaining residues.

Use caution

⚠ If the thermal pad is damaged, clean up the area and apply a new one.

If it's in good condition, no action is needed.





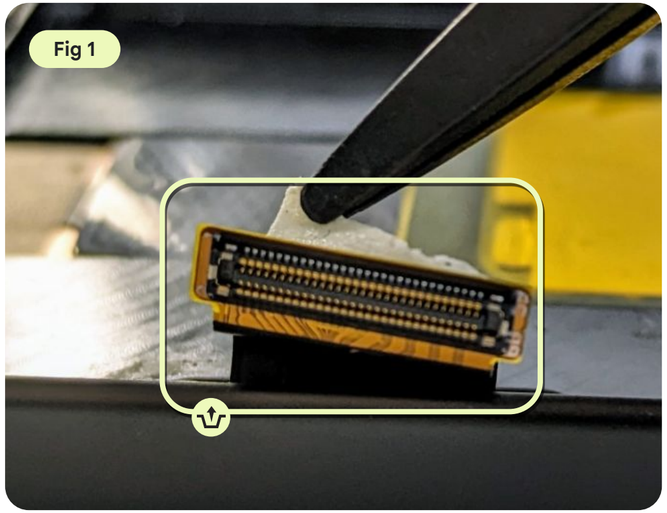
Remove the release liners and masking tape

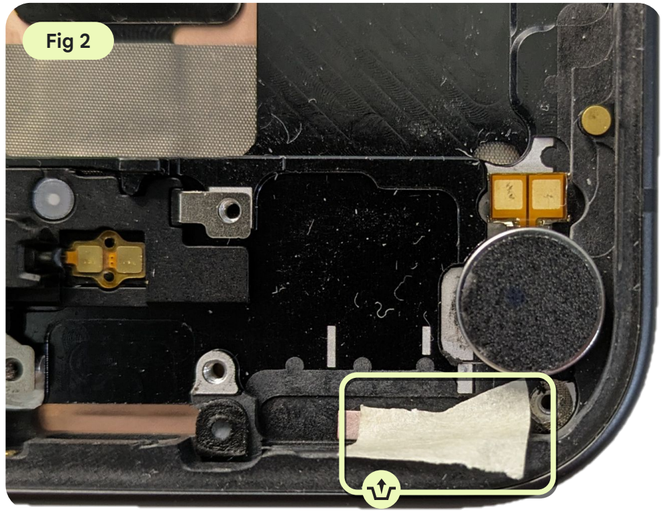
(for a new enclosure)

- Remove **seven** release liners and **one** masking tape that are on the enclosure.

Remove the masking tape

- Remove the masking tape from the display FPC as shown in Fig 1.
- Remove the masking tape right below vibrator as shown in Fig 2.





Remove the release liners and Kaptons

- Use ESD tweezers to remove the release liners, the yellow Kaptons and the masking tape from the logic board as shown in Fig 1 and Fig 2.

Fig 1

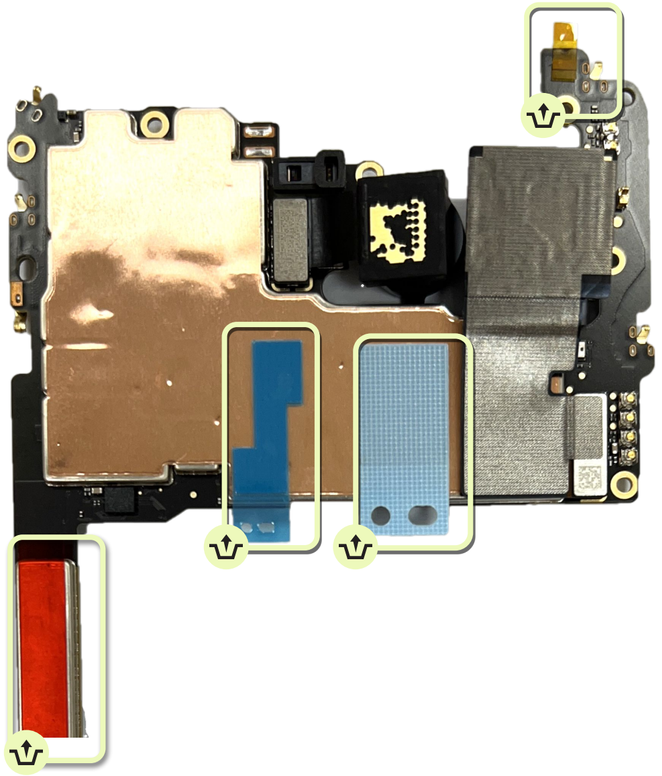
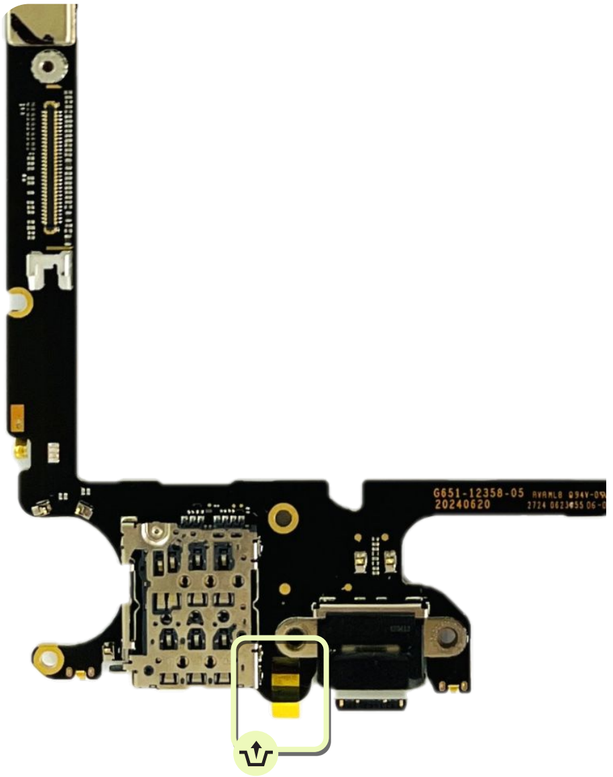


Fig 2



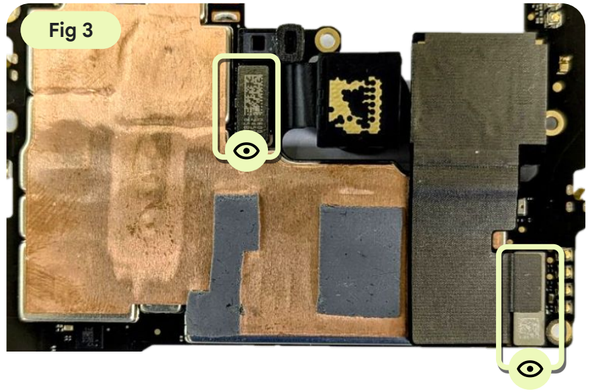
Connecting display module

- Use your hand to set the enclosure upright.
- Fasten the display FPC to the logic board and apply pressure following the designated order as shown in Fig 2.

Fig 1

Fig 2

Fig 3



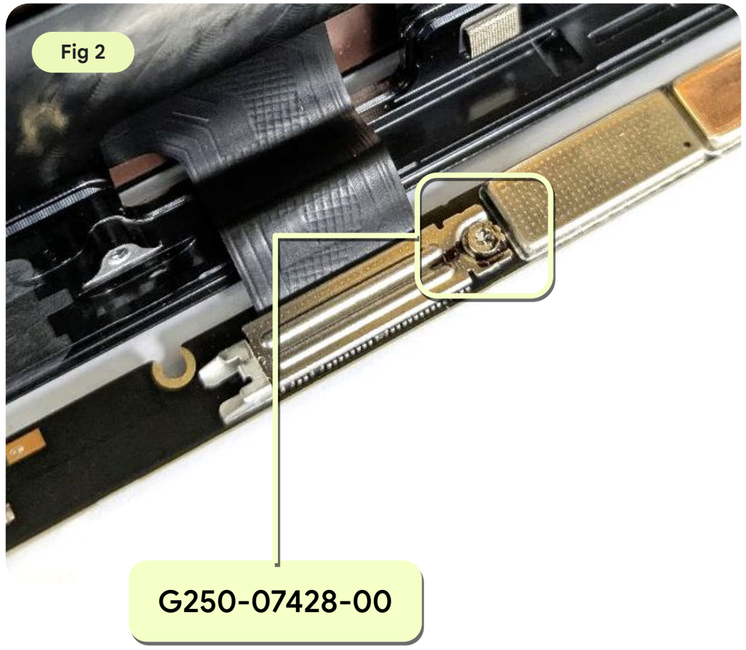
> **Use caution**
>
> Ensure that the cameras are fully secured to the logic board as shown in Fig 3.

Install the display stamping

- Insert the flat end of the display stamping into the socket on the logic board as shown in Fig 1.
- Fasten one screw on display stamping with torx plus 3IP screwdriver as shown in Fig 2.

Part: G730-07370-02 (Stamping plate display BTB)

Part: G250-07428-00*1 (Screw)



Assemble the logic board

- Push the display FPC inwards as shown in Fig 1.
- Insert the USB module on the logic board into the USB slot on the enclosure at 15 degree angle as shown in Fig 2.
- Carefully lower the logic board and position it into the enclosure. It should fit behind the latch as shown in Fig 3.
- Apply pressure on the logic board and you should hear a clicking sound as shown in Fig 3.

Fig 1

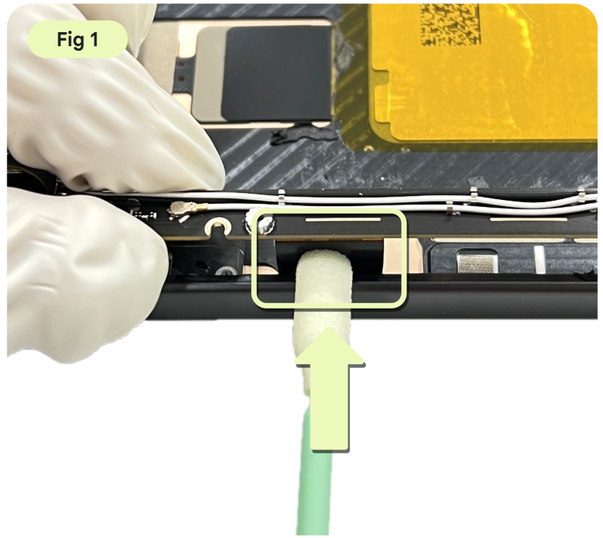


Fig 2

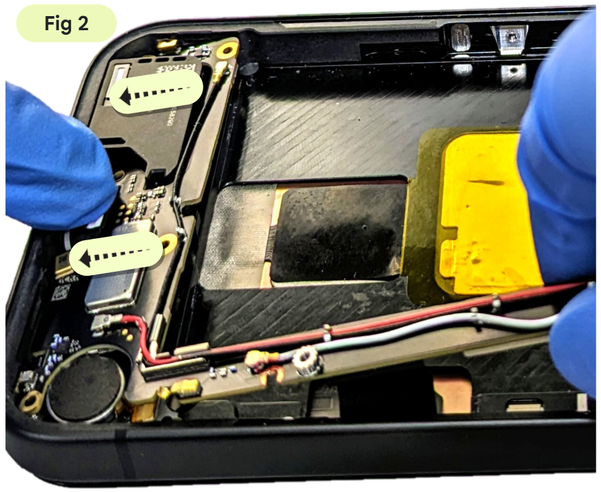
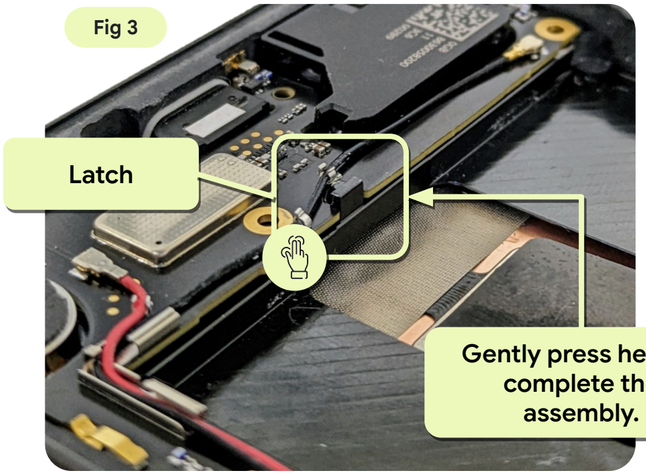


Fig 3



Install the sim tray

- Apply lubricant on the sim tray O-ring before installation as shown in Fig 1.
- Insert the sim tray into the slot as shown in Fig 2.
- The sim ejection hole should face the right hand side as shown in Fig 3.
- Use ESD tweezers to remove two release liners as shown in Fig 4.

Fig 1

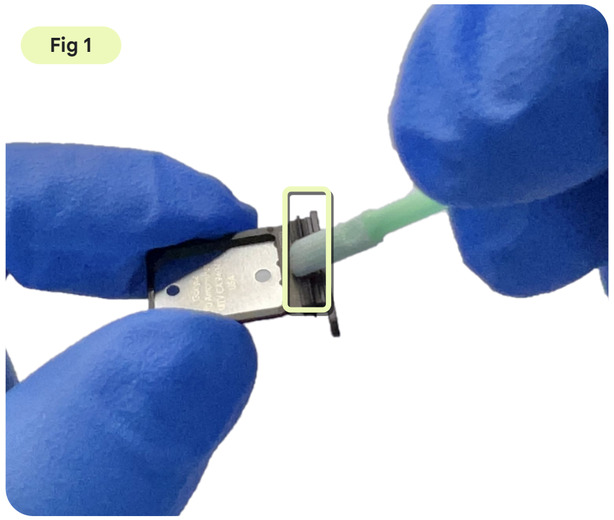


Fig 2

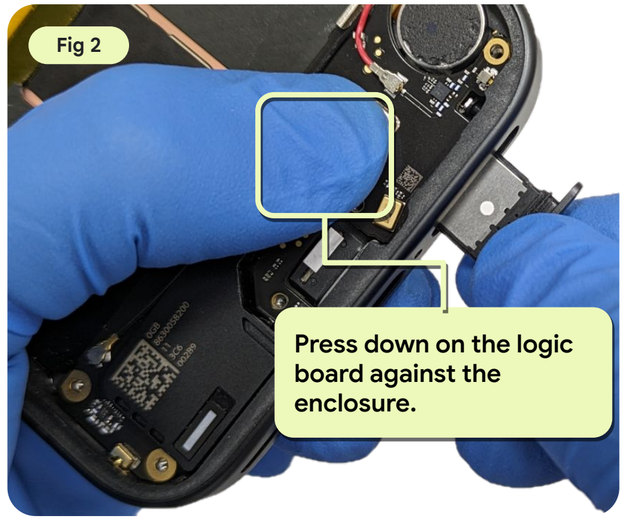
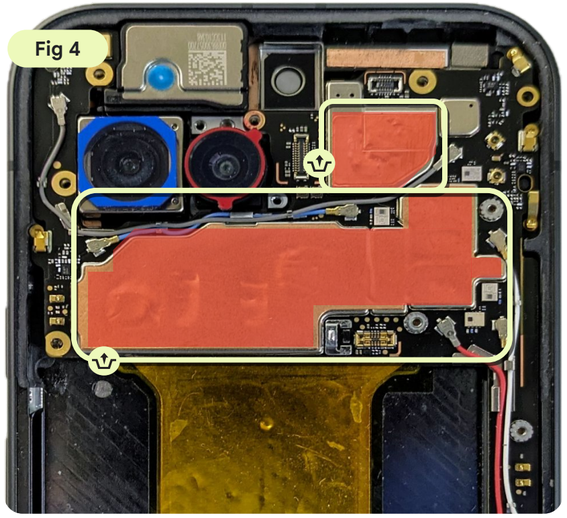


Fig 3

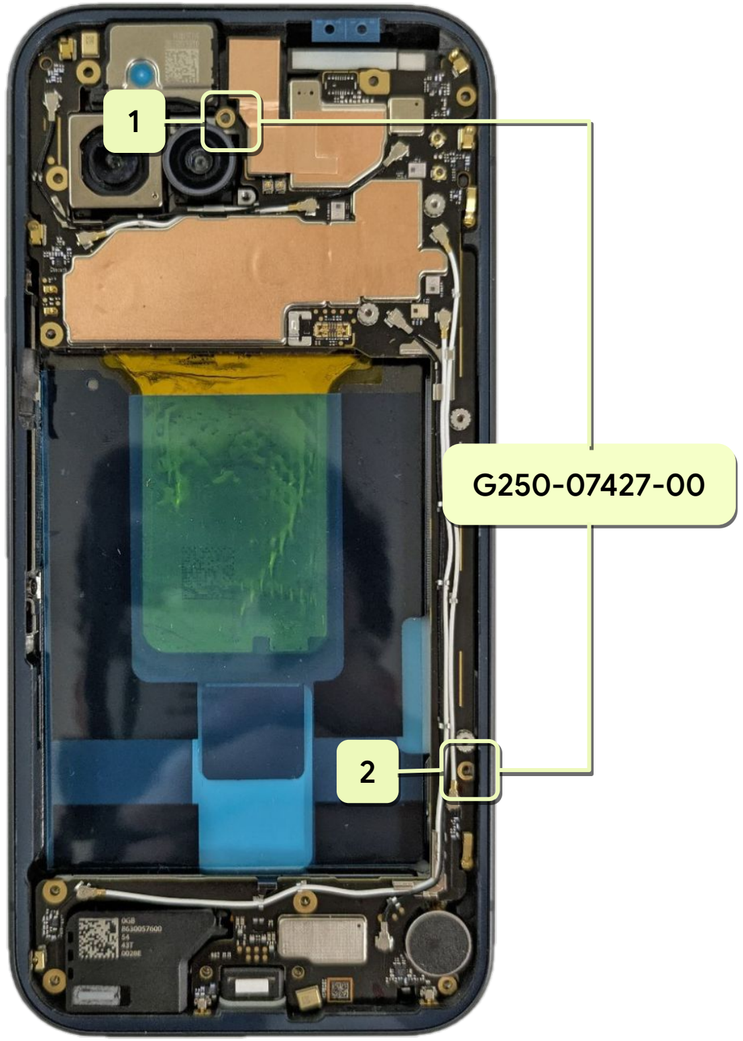
Fig 4



Fasten the logic board screws

Fasten two screws on the logic board with an adjustable torque screwdriver.

Part: G250-07427-00*2 (Screw)



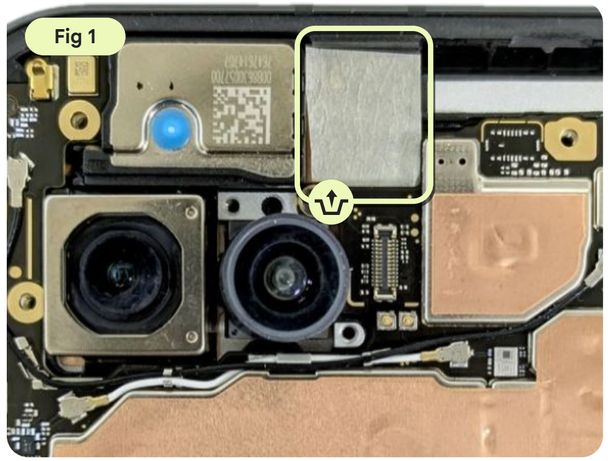
Assembly instructions

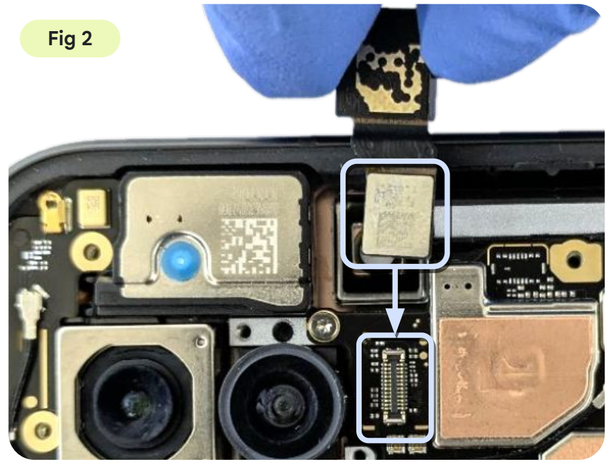
Front camera

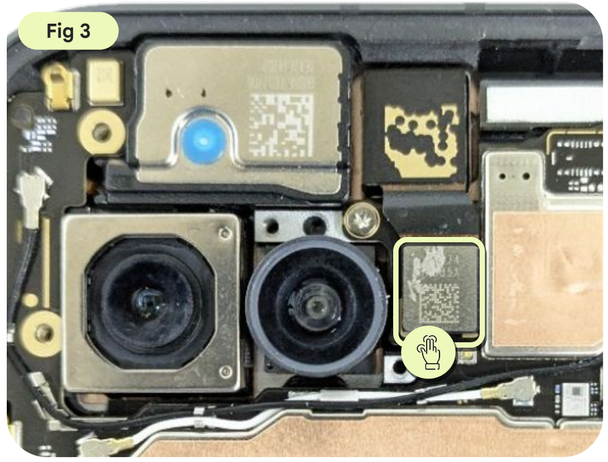
Assemble the front camera

- Remove the masking tape from the front camera holder as shown in Fig 1.
- Remove FCAM protective cap and fasten the front camera to the logic board as shown in Fig 2.
- Apply pressure on the connector to complete assembly as shown in Fig 3.

Part: G949-01320-00 (Front camera)





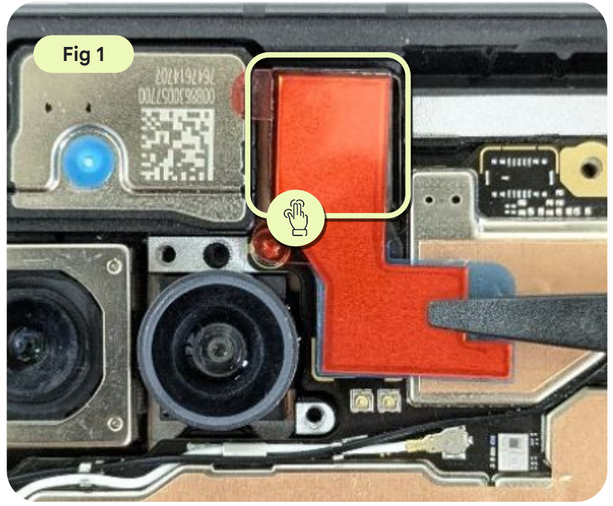


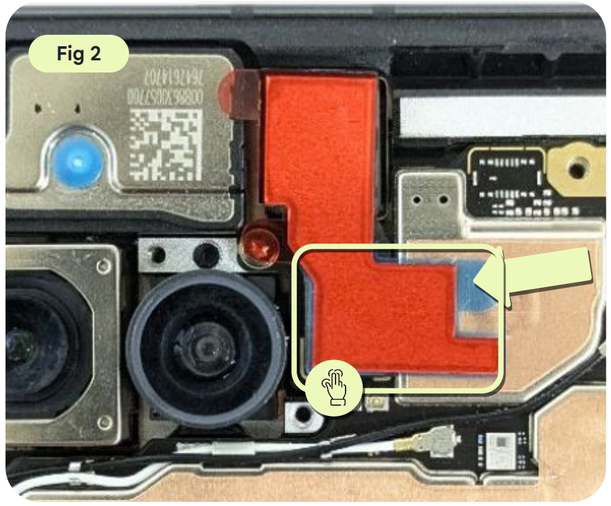
> ⚠ **Use caution**
>
> Ensure that connection is fully secured.

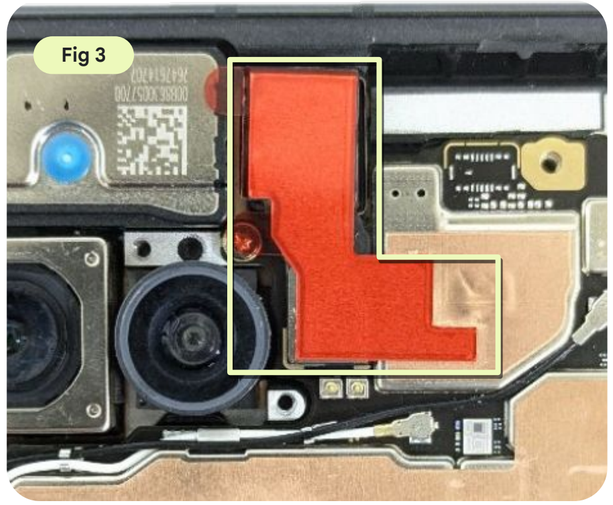
Paste the copper foil

- Transport copper foil with the ESD tweezer.
- Paste the copper foil on top of the front camera and bridge it with the logic board.
- Apply pressure on the front camera to activate adhesive as shown in Fig 1.
- Remove the blue release liner and apply pressure to activate adhesive as shown in Fig 2.
- Remove the red release liner from the copper foil as shown in Fig 3.

Part: G806-12330-01 (FCAM copper foil)







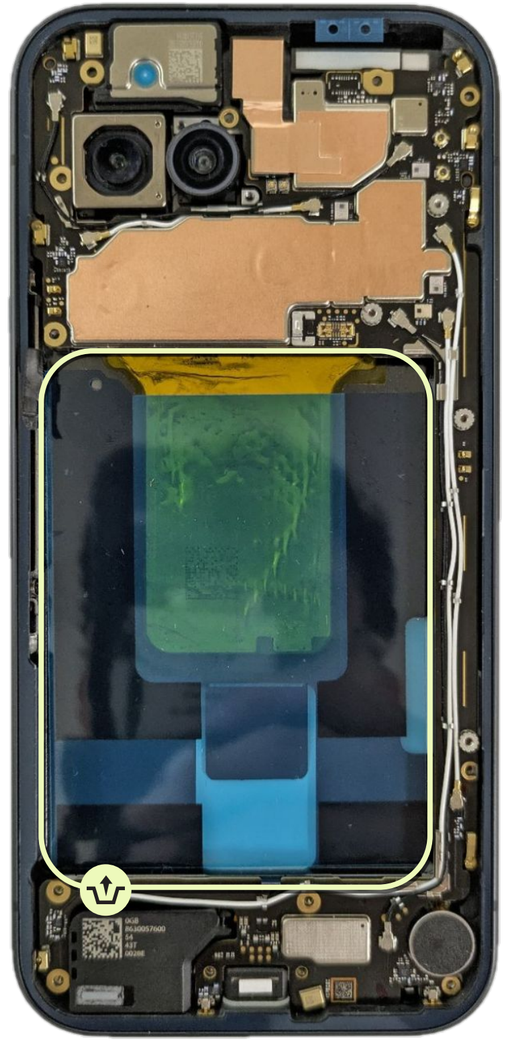
Assembly instructions

Battery

- How to reclaim the battery PSA?

Remove the release liners

- Remove any debris or loose objects from the enclosure.
- Remove the release liners from the enclosure with ESD tweezers.



Apply the 3M AP111 primer

1. Check the battery model **G526Q** name from the label as red mark pointed. If the model number is not G526Q, please do not use the battery.
2. Apply 3M AP111 primer at the four designated areas of the battery as shown in Fig1.

> ⚠ **Caution**
>
> 1. Perform cosmetic inspection on all replacement batteries before putting them in action.
> 2. The assembly must be completed within 25 minutes after applying primer.

Fig 1

Apply mylar on side key FPC

- Fold the side key FPC towards outside as shown in Fig 1 and Fig 2.
- Use ESD tweezer and paste mylar on the side key FPC as shown in Fig 3 and Fig 4.

Part: G806-12673-01 (Sidekey FPC mylar)

Fig 1

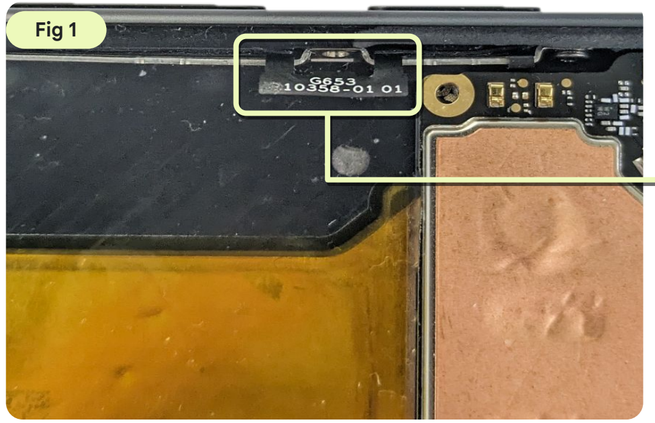


Fig 2

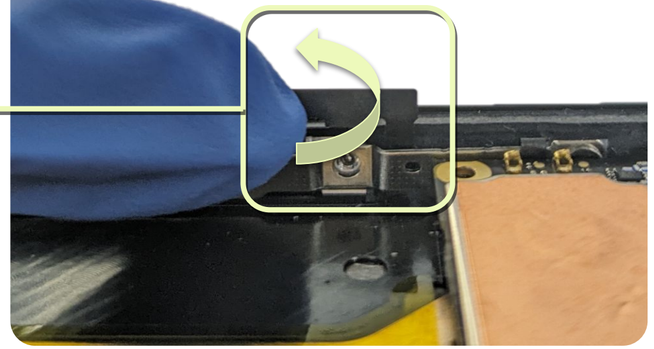


Fig 3

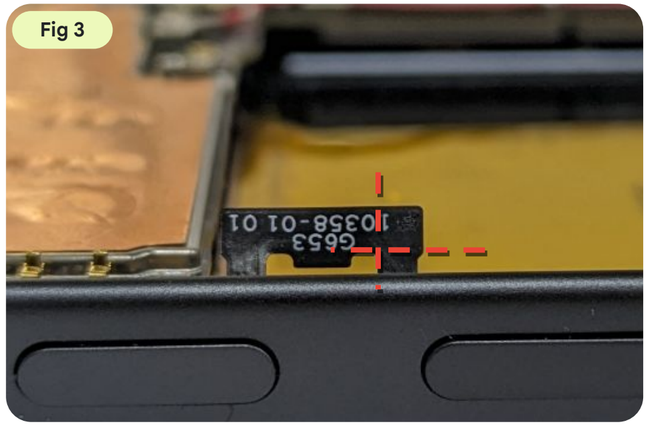
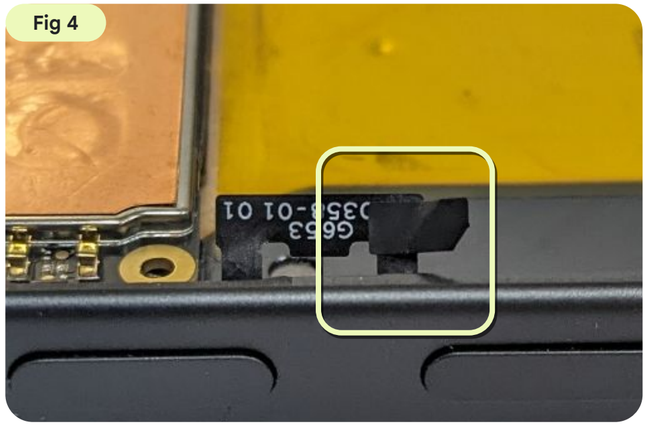


Fig 4



Battery installation

(with feeler gauge)

- Place two 0.05 mm feeler gauges against the Left (next to sidekey) & Bottom (above bottom spk) sidewalls.
- Use a suction bulb to carry the battery
- Align the battery with the dashed lines and set it down in the center as shown in Fig1.
- Gently press down on the battery with the suction bulb.

Part: G949-01323-00 (Replacement battery)

Part: G949-01333-00 (Replacement battery)

⚠ **Caution**

Don't skip this step.

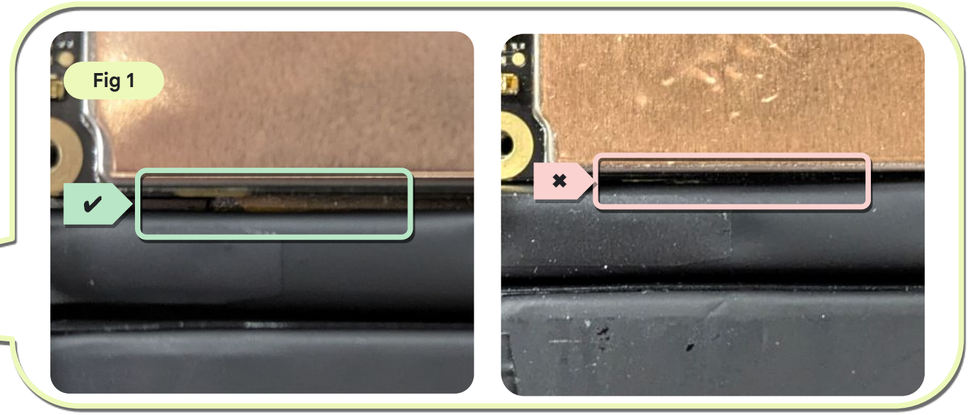
Battery spacing is crucial to product performance.

Pay extra care and align it correctly.

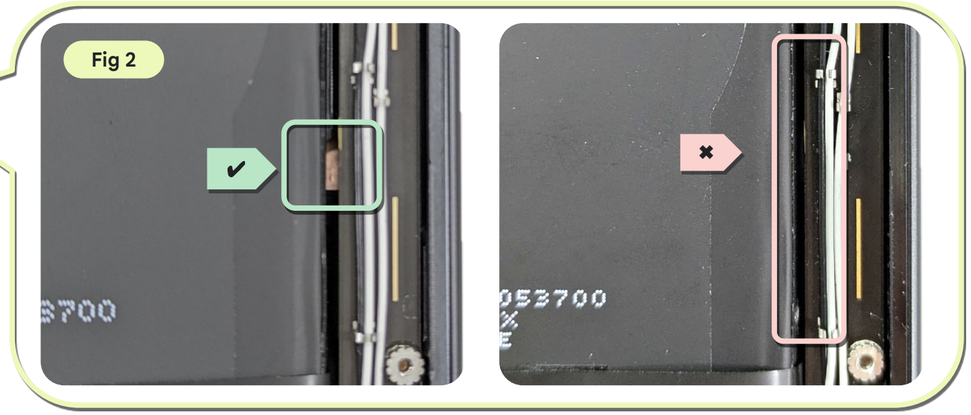
Inspect the battery

- Battery should keep a distance from the logic board.
- Vapor chamber must be visible after battery installation.(Fig1)
- Display copper foil must be visible after battery installation.(Fig2)

> **Caution**
>
> Redo the process with a new battery If your installation does not meet the above requirements.



Vapor chamber must be visible after battery installation.(Fig1)



Display copper foil must be visible after battery installation.(Fig2)

Battery press process

Stack the universal holder onto the base with the **C3** holes as shown in Fig 1.

Assembly the rest of the fixtures following the sequence as shown in Fig 2:
1 ➜ 2 ➜ 3 ➜ 4 ➜ 5 ➜ 6

Part 1: G940-00833-01 (Universal base plate 12 mm)

Part 2: G940-00834-00 (Universal holder)

Part 3: G940-00804-00 (Universal supporting rubber)

Part 4: G940-00835-00 (Universal holder limiting block)

Part 5: G940-00941-00 (Pixel 9a-battery press rubber)

Part 6: G940-00736-00 (Universal press plate 12 mm)

Fig 1

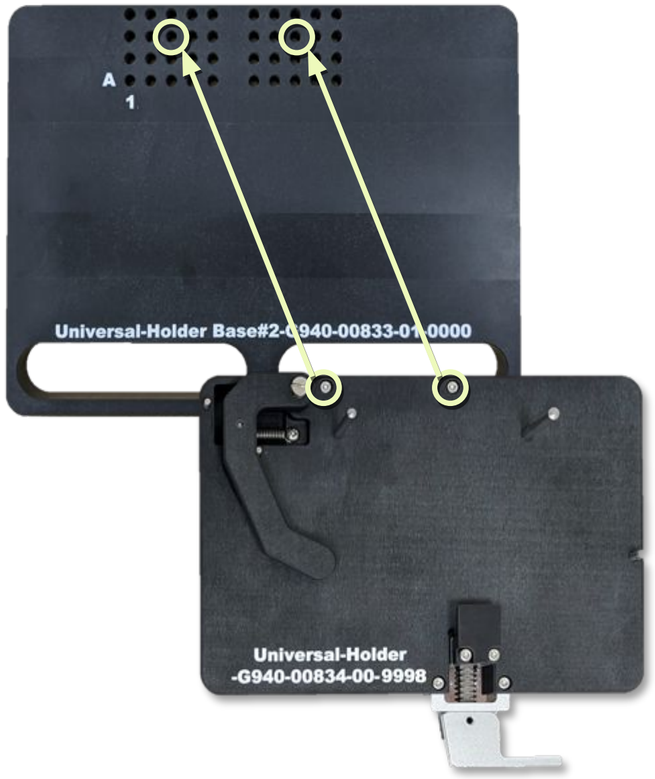
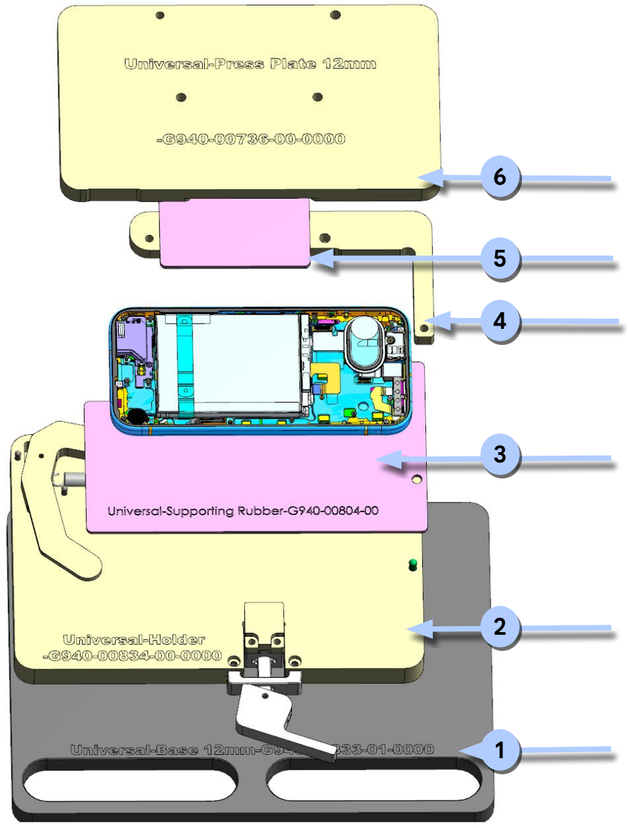


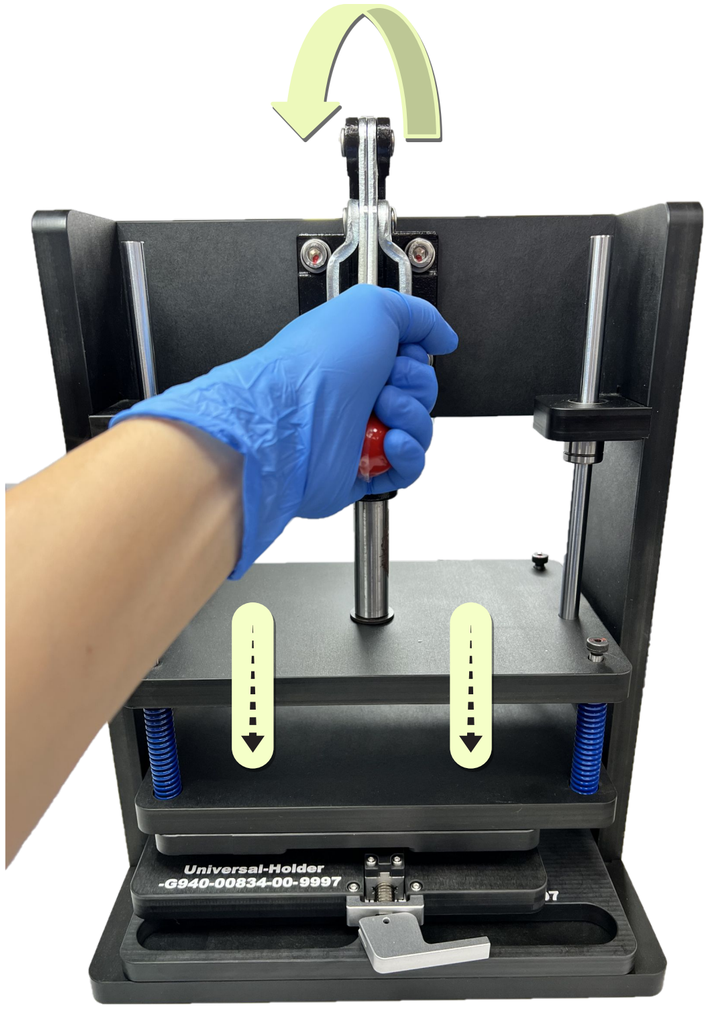
Fig 2



Battery press process

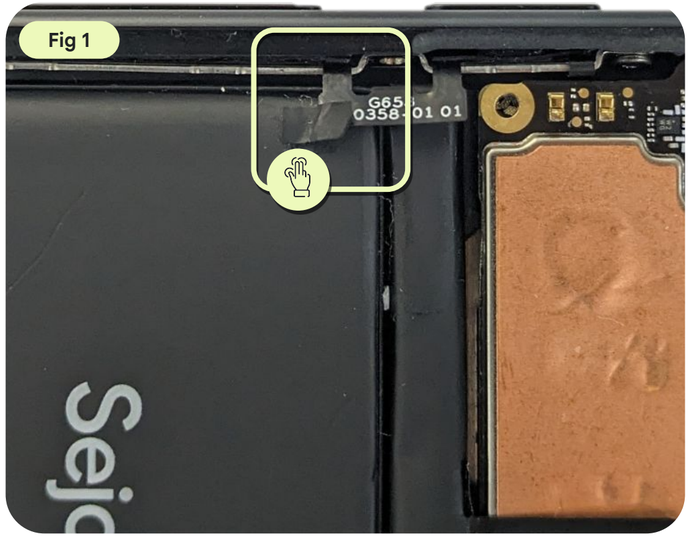
- Send the holder to the universal press with part number facing outside.
- Continue pressing down on the battery for **30 seconds.**

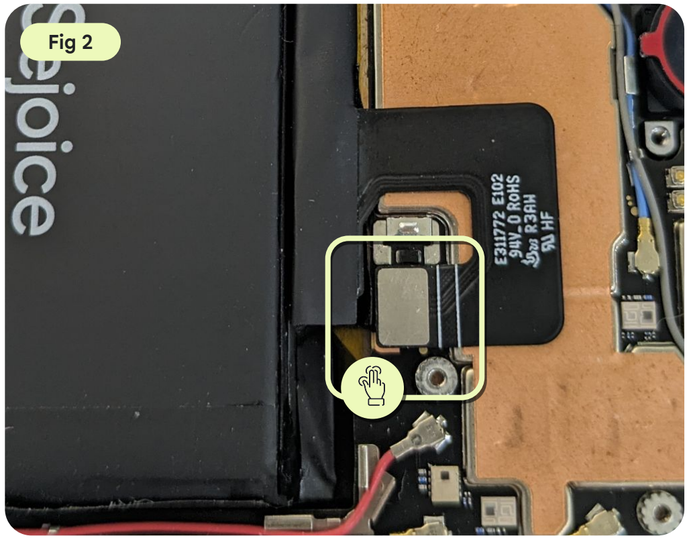
> ⚠ **Use caution**
>
> Keep hands clear during operation.



Attach battery connector and mylar

- Attach mylar as shown in Fig 1 gently to hold sidekey FPC to the battery Avoid using sharp objects or tools to apply the mylar.
- Fasten the battery FPC to the logic board.
- Apply pressure on the B2B connector to confirm the connection as shown in Fig 2.



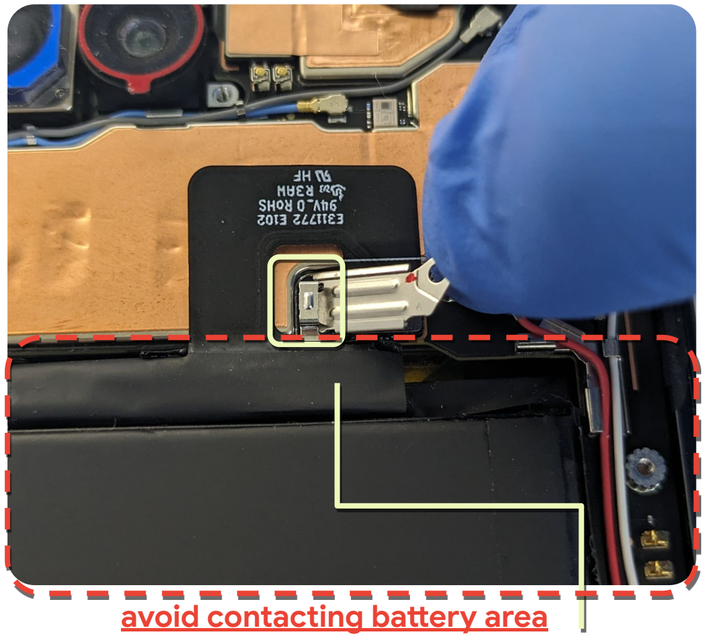


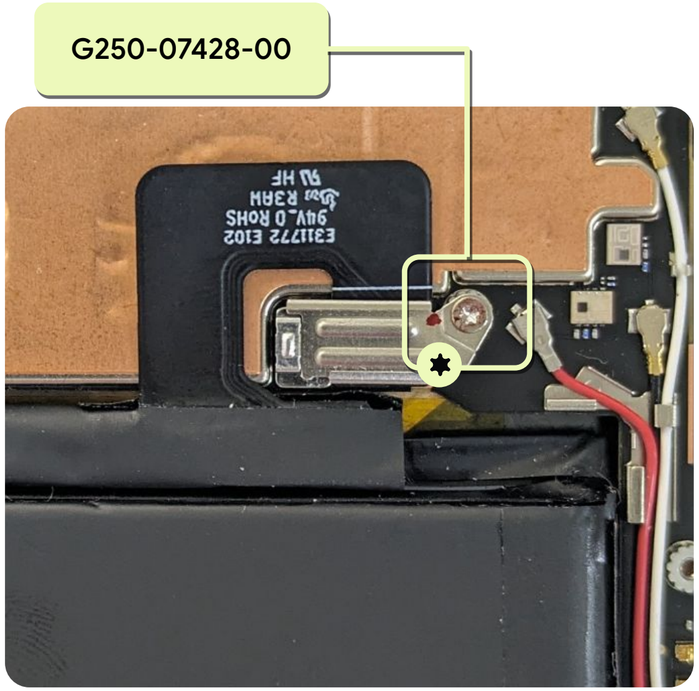
Install the BTB bracket

- Insert the stamping plate into the socket on the logic board.
- Fasten a screw on the stamping plate with an adjustable torque screwdriver.

Part: G730-08619-01 (Stamping plate battery)

Part: G250-07428-00*1 (Screw)





Assembly instructions

Inner housing

Rework the inner housing

(for a reused inner housing)

- Use an ESD spudger to scrub off the adhesive on the inner housing.
- Wipe the surface with cotton swab and IPA to remove the remaining residues.

Use caution

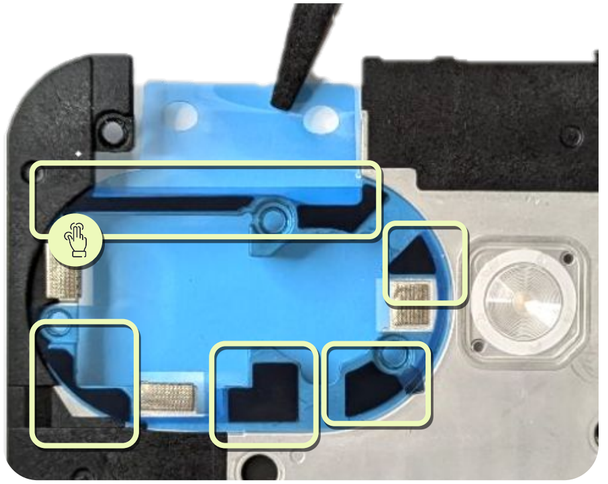
Don't damage the graphite sheet.

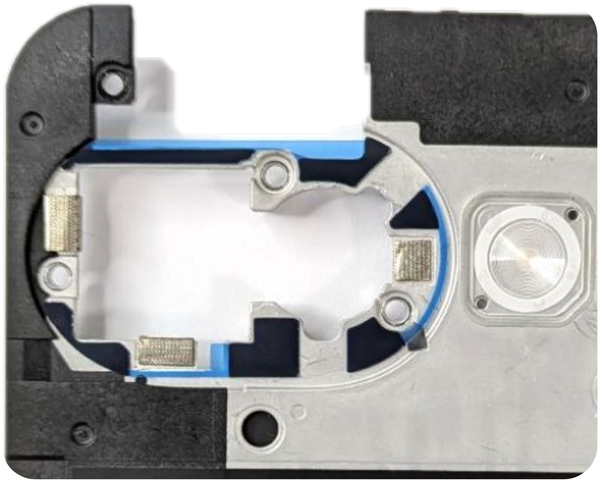
Paste adhesives on the inner housing

(for a reused inner housing)

- Paste a new adhesive on the inner housing with ESD tweezers, apply pressure to activate adhesive.
- Remove the outer release liner.

Part: G806-12920-03 (VISOR IH PSA-90_TG4)





Install inner housing

- Ensure that all of the snaps on the inner housing are securely clipped into the enclosure.

Part: G949-01319-00 (Inner housing)

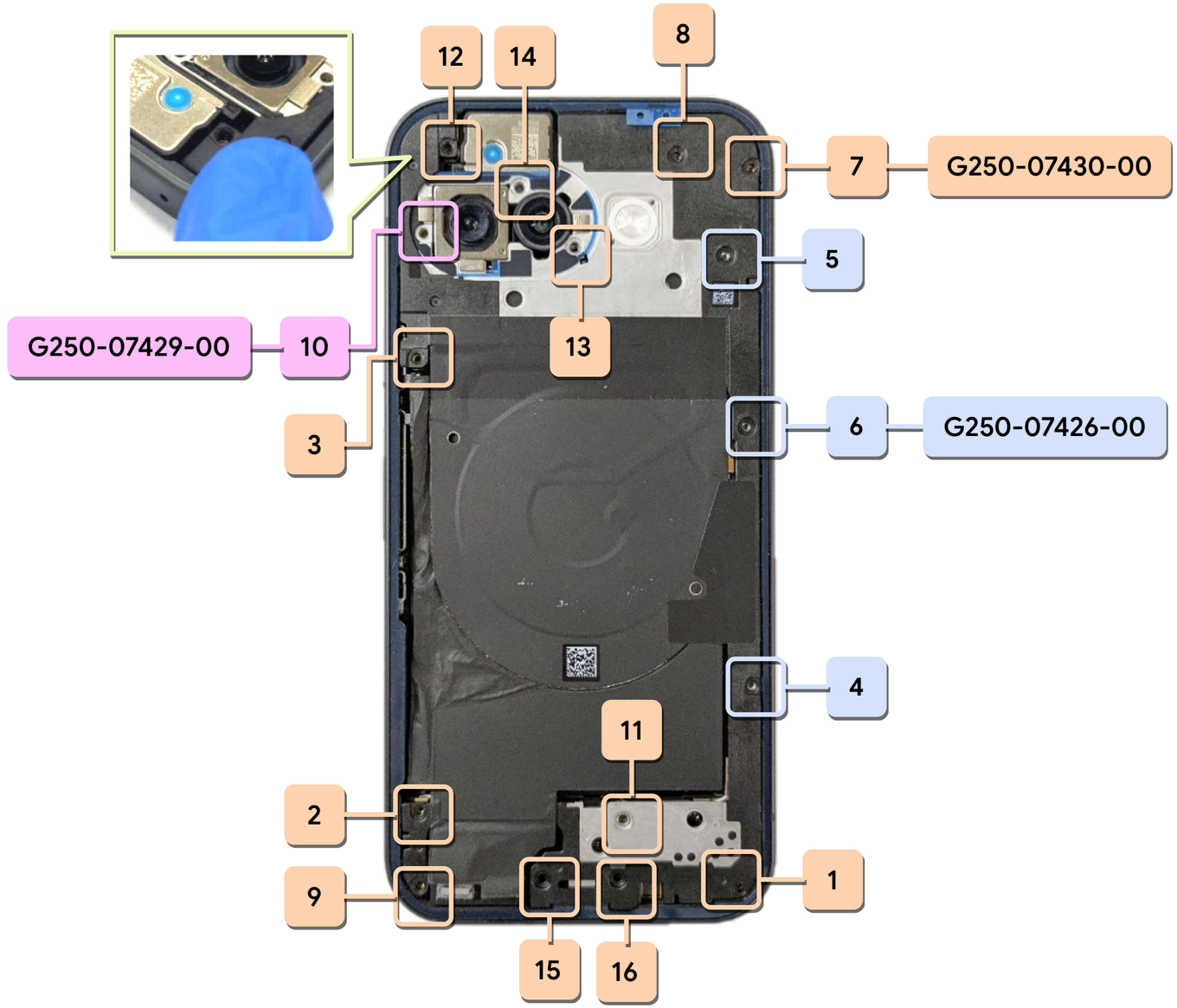
Fasten 16 screws

Fasten 16 screws on the inner housing with an adjustable torque screwdriver. For more details, see torque setting.

Part: G250-07426-00*3 (Screw)

Part: G250-07429-00*1 (Screw)

Part: G250-07430-00*12 (Screw)



Note

Press the inner housing when fasten the screw 12 as shown in figure.

Assembly instructions

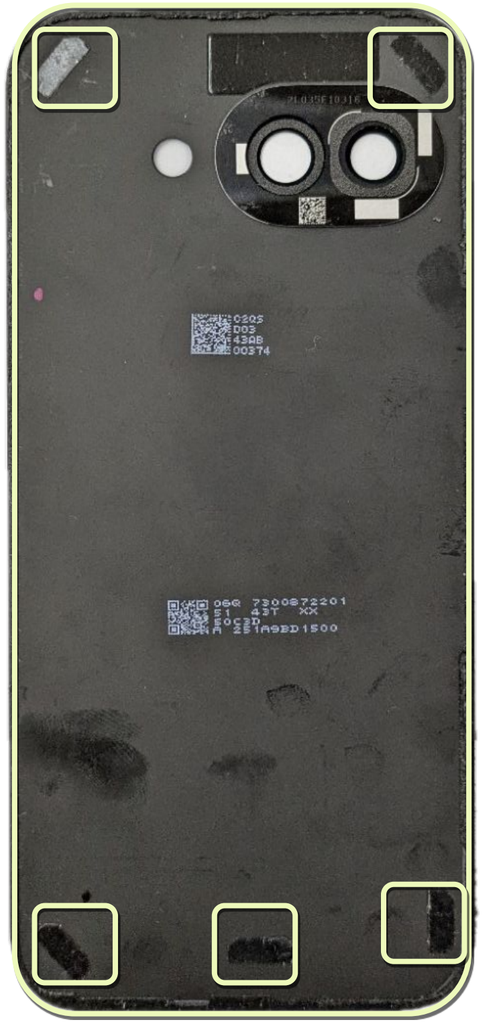
Back cover

Rework the back cover

(for a reused back cover)

- **Outer edge of back cover**: Remove adhesive residue from the outer edge of the back cover with an ESD spudger or electric glue remover tool.
- **Five adhesive areas**: Use ESD tweezers or cotton swabs to scrub off the adhesives on the back cover as shown in figure.
- **All areas**: Wipe the surface with cotton swab and IPA to remove the remaining residue.

Part: Multiple part numbers (Back cover)



Attach adhesives to the back cover

(To reuse back cover)

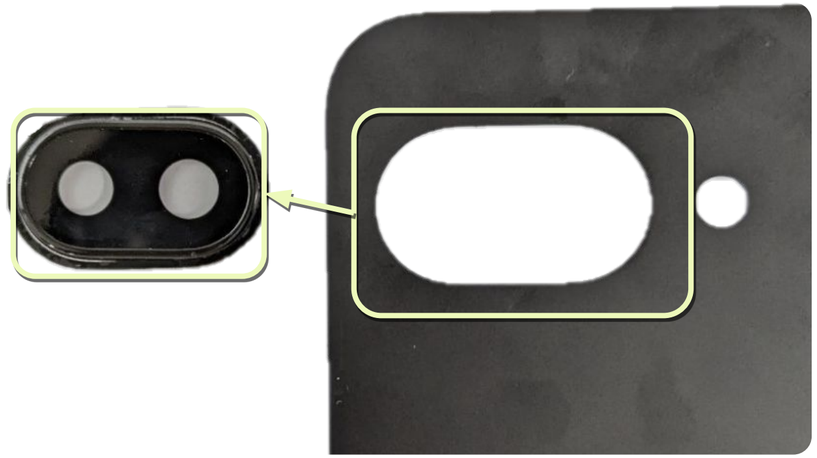
- Align the opening on the adhesives with the visor area (blue) as shown in Fig 1.
- Apply pressure firmly on the adhesives (yellow) to complete bonding.

Part: G806-14766-01 (BC small adhesive)

Rework the visor area

(once separated from BC)

1. Use IPA to clean off the residue from the visor and back cover.
2. Apply AP111 on the visor and attach a new PSA.
3. Assemble visor to back cover.
4. Apply pressure to complete the assembly.



Part: G806-12180-01 (Visor adhesive)

Note

Rework the visor only when it's separated from the back cover.

Caution

The assembly must be completed within 25 minutes after applying AP111.

Apply the 3M AP111 primer

(Both new and reused back cover)

Apply 3M AP111 primer around the entire back cover twice following the designated order.

Use caution

The assembly must be completed within 25 minutes after you apply primer.

Remove the release liners

- **New back cover:** A new back cover has a total of nine liners at the barcode side.
- **Reused back cover:** A reused back cover has only two liners.

Remove the release liners and the caps

- Remove both camera protective caps.
- Slowly remove the release liner from the enclosure.

> ⚠ **Use caution**
>
> Avoid any and all contacts with the camera lenses.

New parts

Reused parts

Assemble the back cover and enclosure

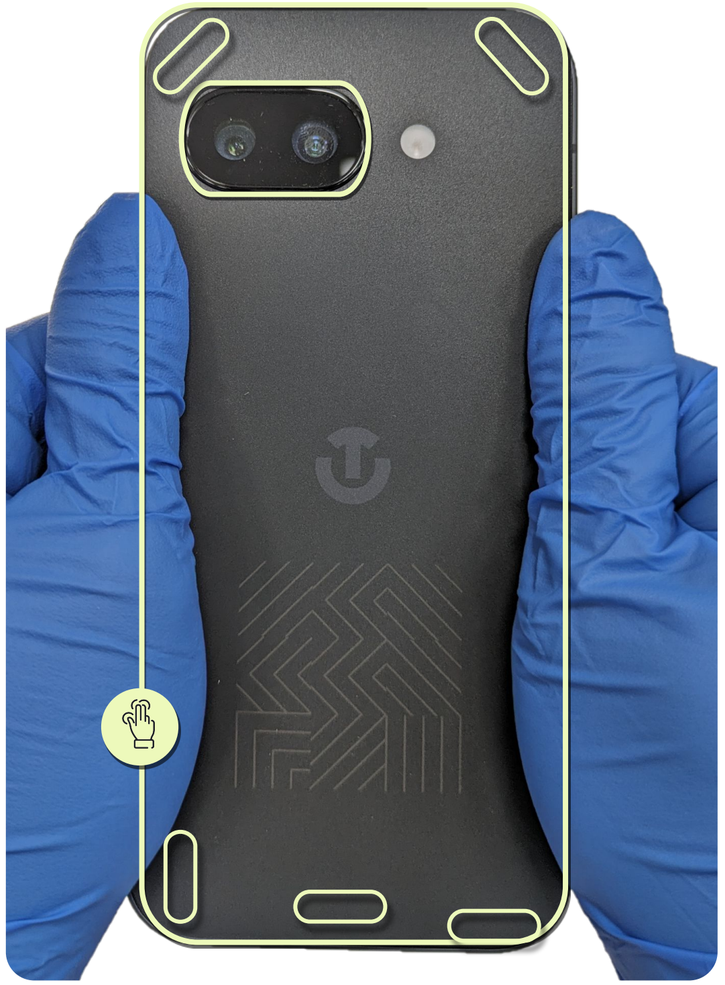
- Assemble the back cover to the enclosure at all four corners simultaneously.

Caution

1. Make sure that the back cover remains level during the installation.
2. Make sure all protective films are removed before assembling.

Activate the PSA

Gently press the back cover onto the device. Ensure that it’s correctly aligned to the frame and no adhesive is visible.



> ⚠ **Use caution**
>
> *Don’t* touch the power key.

Place the device in the fixture

Stack the universal holder onto the base with the **D3** positions.

Assembly the rest of the fixtures following the sequence:
1 ➜ 2 ➜ 3 ➜ 4 ➜ 5 ➜ 6

Part 1: G940-00833-01 (Universal base plate 12 mm)

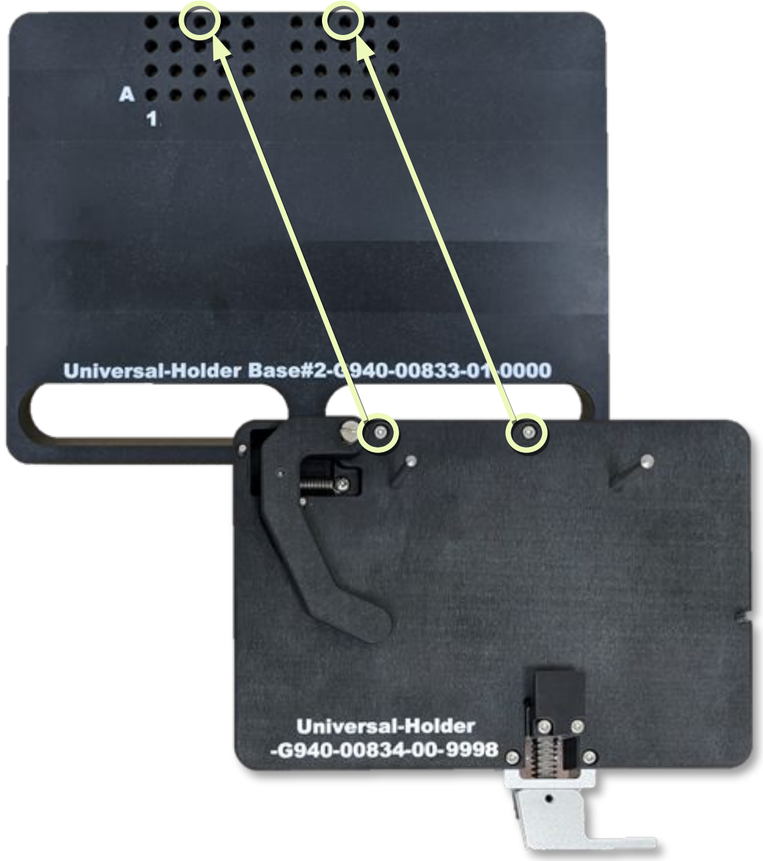
Part 2: G940-00834-00 (Universal holder)

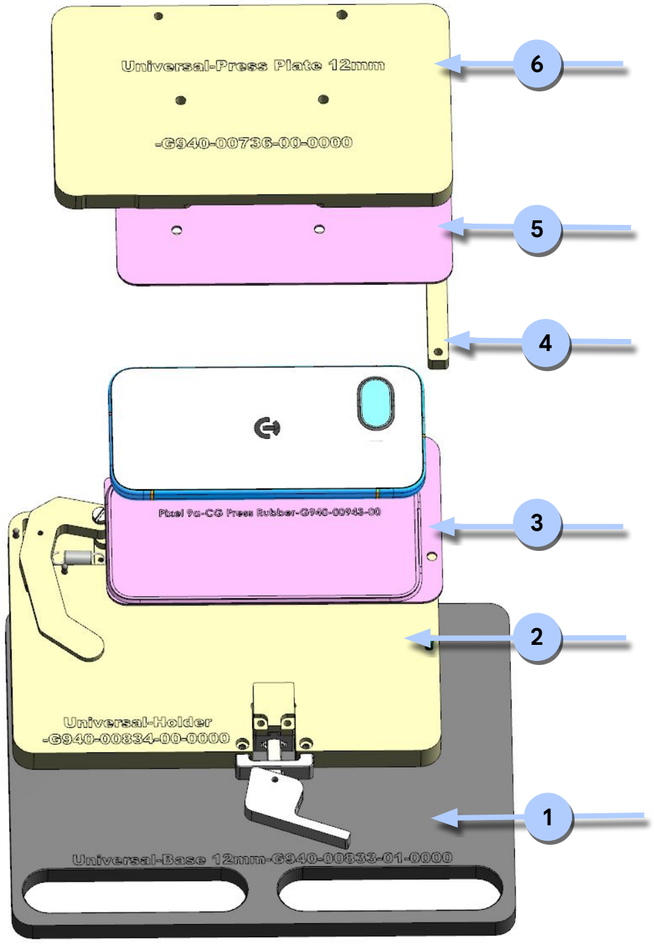
Part 3: G940-00943-00 (Pixel 9a screen press rubber)

Part 4: G940-00835-00 (Universal holder limiting block)

Part 5: G940-00942-00 (Pixel 9a back cover press rubber)

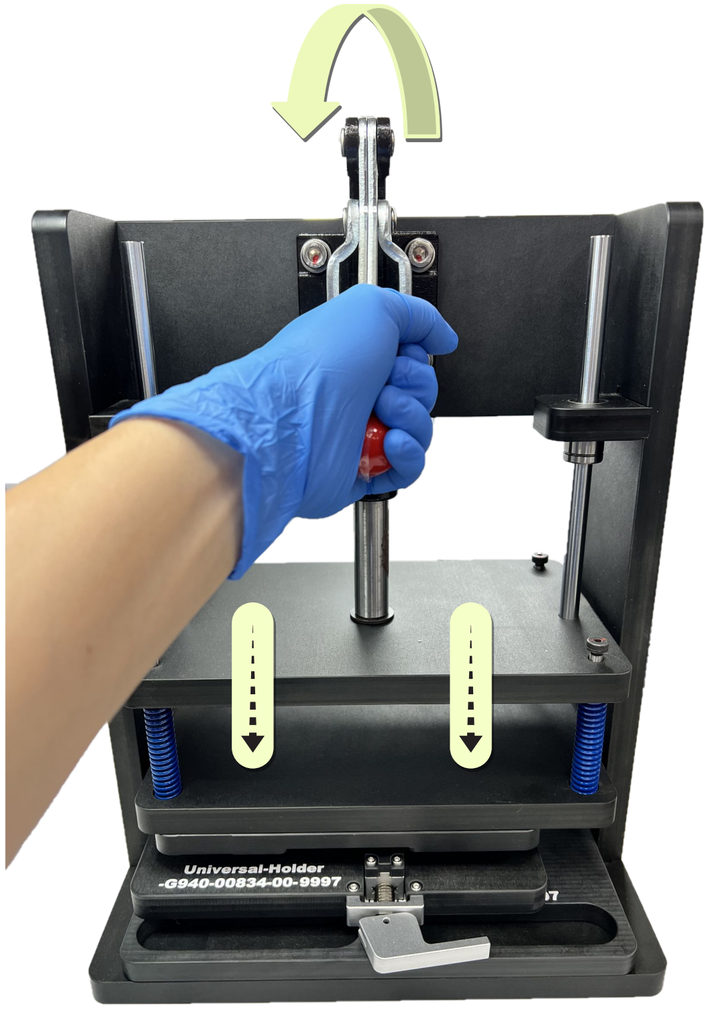
Part 6: G940-00736-00 (Universal press plate 12 mm)





Press the device

- Send the holder to the universal press with part number facing outside.
- Continue to press down on the device for **60 seconds**.



> ⚠ **Use caution**
>
> Keep hands clear during operation.

Pixel 9a repair manual

Troubleshooting

SoC block diagram

Connectors location

Power

Wireless charge

Mic 1

Mic 2

Top speaker

Bottom speaker

Vibrator

Display

Touch panel

RF (BT, WiFi, GPS, NFC)

Battery

Sensor

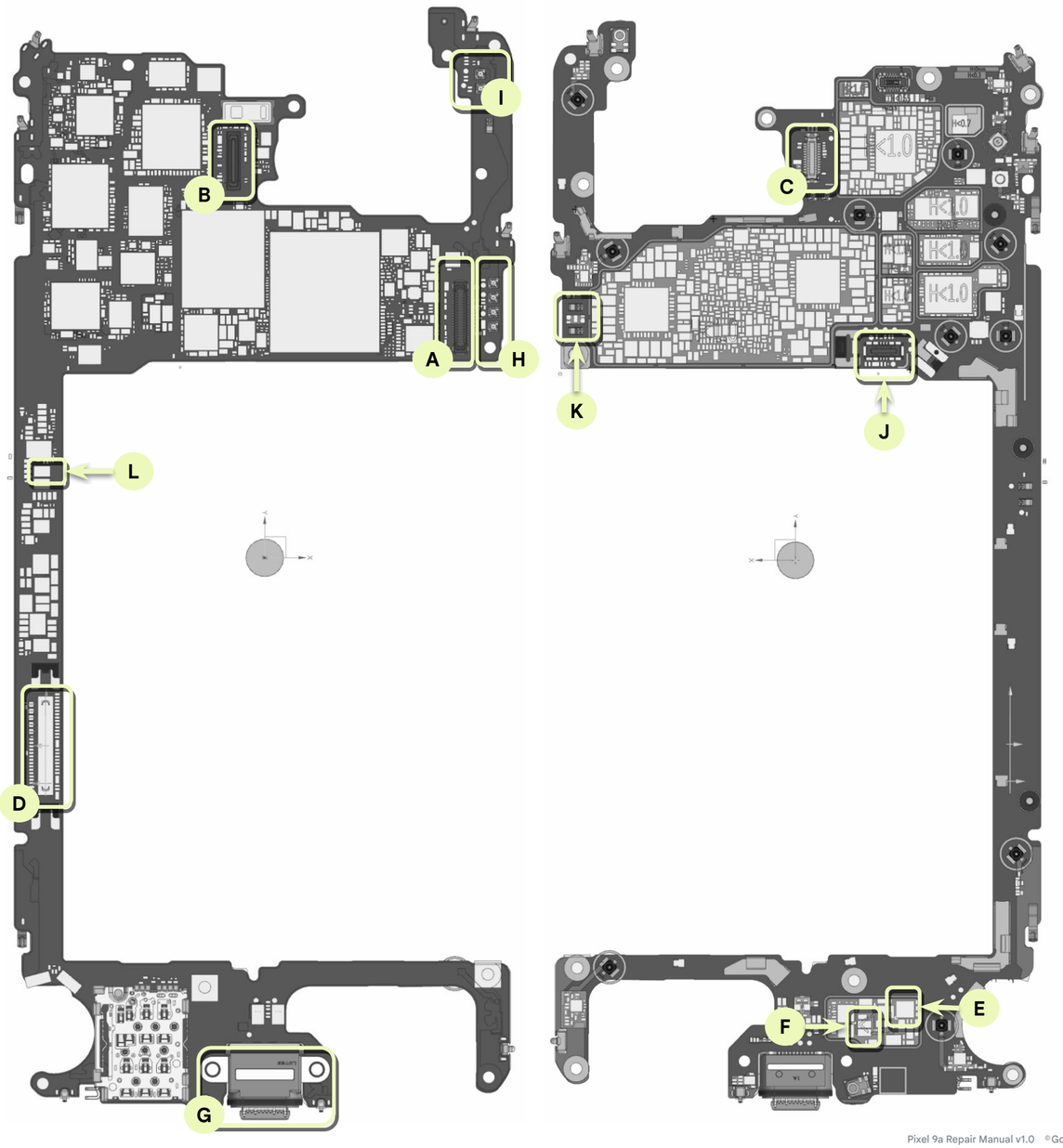
UDFPS

Camera

USB

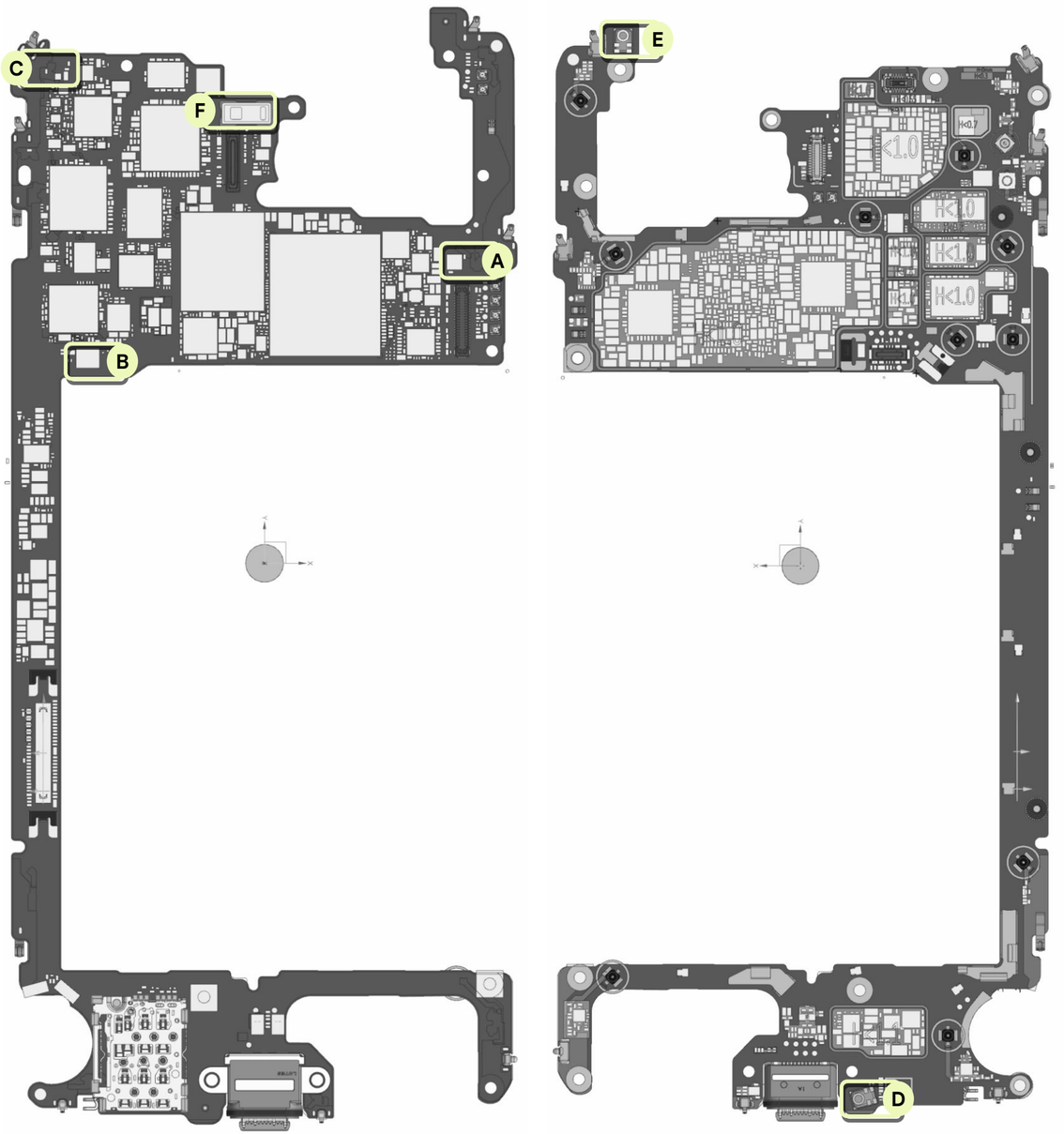
Connectors location

Location and description	
A	Wide rear camera (Main) connector
B	UW rear camera connector
C	Front camera connector
D	LCM connector
E	Vibrator spring connector
F	Bottom speaker spring connector
G	USB connector
H	Slam connector
I	Top speaker spring connector
J	Battery connector
K	NFC spring connector
L	WLC spring connector



Sensor and key feature location

Location and description	
A	Barometer
B	Gyroscope and accelerometer
C	Magnetometer
D	Mic 1
E	Mic 2
F	P-sensor or light sensor



Power

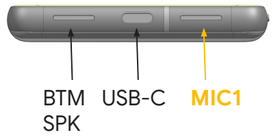
Symptom	Potential root cause	Procedure	
T001: Doesn’t power on **T002: Powers off suddenly** **T004: Wired charging failure**	Battery capacity problem	• Insert the USB cable and try to charge the device for at least 10 minutes, or a dummy battery, to see if the device is out of battery capacity. If not, go to the next step.	
	Connectivity problem	• Disassemble the enclosure, then reconnect the battery, USB, and display module connector to confirm whether it can be charged or power on. If not, go to the next step.	
	Module problem	• If all of the failure symptoms aren’t present, use a good logic board and battery to cross-check with the corresponding failing ones.	**Disassembly** • Logic board • Battery

Wireless charge

Symptom	Potential root cause	Procedure	
 **T003: Wireless charging failure**	Connectivity issue	• Check the contact condition between WC and pin contact pads. If there's no mark on the pin contact pads, it shows poor connectivity. • If marks are observed, clean the contact pad and test again.	
		• Check whether the connectivity between the WLC, NFC ANT pad, and logic board are normal. • If they aren't fully fastened, reassemble and then retest.	Connectors location
	Component issue	• Disassemble the main board and find whether the connectors' location (L and M) pad has fallen off.	**Disassembly** Logic board

Mic 1

Symptom	Potential root cause	Procedure
T010: Mic 1 - no sound **T011: Mic 1 - low sound** **T012: Mic 1 - distorted sound**	Mesh not clean	• Take a microscope to check whether the mesh is damaged, blocked, shifted, another foreign substance is on it, or the release liner is still attached. If yes, remove the foreign substance and change with a new mic 1 bracket. If not, go to the next step.
	SW problem	• Reflash to the latest version of the shipping ROM.
	Module problem	• Use a good logic board to cross-check with the failed hardware.



Disassembly

- Logic board
- Mic 1 bracket

Mic 2

Symptom	Potential root cause	Procedure	
T013: Mic 2 - no sound **T014: Mic 2 - low sound** **T015: Mic 2 - distorted**	Connectivity problem	• Check whether the connectivity between the SLAM FPC and logic board is normal. • If they aren't fully attached, reassemble and then retest. If you fail, go to the next step; if you pass, the repair process is done.	Note: SLAM FPC includes mic 2, flashlight, and key functions.
	Module problem	• Use a good enclosure and logic board to cross-check with the original ones.	**Disassembly** • Logic board • Enclosure

Top speaker

Symptom	Potential root cause	Procedure	
 **T019: Top speaker no sound** **T020: Top speaker low sound** **T021: Top speaker distorted sound**	Mesh not clean	• Inspect the top speaker mesh and use a soft ESD brush to remove any debris. • Test audio.	Top speaker mesh located between the top display module or mid-frame.
	Internal debris	• If sound quality is still poor, inspect the mesh and speaker with a microscope. • Disassemble the device and inspect the speaker. Use an ionizing air fan to remove any debris and test audio.	
	Connectivity issue	• Check whether the connectivity between the top SPK pad and logic board is normal. • If they aren't fully fastened, reassemble and then retest.	Connectors location
	Component issue	• If sound quality is still poor, use a good top speaker and logic board to cross-check with the original ones. • Replace the defective component.	**Disassembly** • Logic board • Top speaker

Bottom speaker

Symptom	Potential root cause	Procedure	
 **T023: Bottom speaker no sound** **T024: Bottom speaker low sound** **T025: Bottom speaker distorted sound**	Connectivity problem	• Check whether the bottom speaker assembly shifts. Or you can disassemble the bottom speaker and check whether membrane is damaged, or if there's debris. • If yes, then clean or change to a new bottom speaker and logic board. If not, go to the next step.	
	Component problem	• If all the failure symptoms are not present, use a good bottom speaker and logic board to cross-check with the corresponding failed hardware.	**Disassembly** • Logic board • Bottom speaker

Vibrator

Symptom	Potential root cause	Procedure
 **T026: Vibrator failure**	Module problem	• If all the failure symptoms aren’t present, use a good logic board and vibrator to cross-check with the corresponding failed hardware. **Disassembly** • Logic board • Vibrator

Display

Symptom	Potential root cause	Procedure	
 **T027: Display blank** **T028: Display dead pixel, dark spots, or foreign material** **T029: Display bright pixel, bright or colored spots** **T030: Display vertical or horizontal lines** **T031: Display black, white, or colored screen** **T032: Display flickering or abnormal** **T033: Display image quality** **T034: Display color mura** **T035: Display light leakage** **T036: Display backlight issue** **T037: Display shadow** **T038: Display permanent burnin** **T039: Display temporary burnin** **T040: Display single crack** **T041: Display multiple cracks** **T042: Display to enclosure gap** **T043: Display cosmetic defects**	Damage	Inspect display for damage and replace if necessary.	
	Connectivity issue	• Check whether the connectivity between the display connector and logic board is normal. • If they aren't fully attached, reassemble and then retest.	Connectors location
	Dead pixels Distorted graphics Flickering Color issues	• Remove the display module, fit a replacement part without adhesive, and test. • If the issue is resolved, apply adhesive and fit a new display module.	**Disassembly** • Display
	Component issue	• Use a good display and logic board to cross-check with the original ones. • Replace the defective component.	**Disassembly** • Logic board • Display

Touch panel

Symptom	Potential root cause	Procedure	
 **T044: Multi-touch poor response** **T045: Multi-touch no response** **T046: Multi-touch erratic response**	SW problem	• Ensure that the SW is updated to the latest version. • Ensure that the touch calibration process was followed 100% to the instructions.	
	Connectivity problem	• Check the function by triage test. • If it fails, disassemble the device and check the assembly condition of the display BTB connector. If the connectivity is poor, reassemble and retest.	Connectors location
	Module problem	• If all of the failure symptoms aren't present, use a good logic board and display module to cross-check with the corresponding failed ones.	**Disassembly** • Logic board • Display

RF (BT, WiFi, GPS, NFC)

Symptom	Potential root cause	Procedure	
 **T047: RF failure** **T048: Wi-Fi connectivity issues** **T049: Bluetooth connectivity** **T050: GPS failure** **T051: NFC connectivity issues**	Connectivity problem	• Check whether the screws are loose or the springs are damaged or disconnected. If not, go to the next step.	
	Module problem	• Use a good logic board, enclosure to cross-check with the corresponding failed ones.	**Disassembly** • Logic board • Enclosure

Battery

Symptom	Potential root cause	Procedure	
 **T053: Battery damage** **T054: Battery draining fast** **T055: Device overheats**	Connectivity issue	• Check whether the connectivity between the battery connector and logic board is normal. • If they aren't fully attached, reassemble and then retest.	Connectors location
	Component issue	• Use a good battery and logic board to cross-check with the original ones. • Replace the defective component.	**Disassembly** • Logic board • Battery

Sensor

Symptom	Potential root cause	Procedure	
 **T059: Proximity sensor failure** **T060: Ambient light sensor failure** **T061: Accelerometer sensor failure** **T062: Gyroscope sensor failure**	SW problem	Ensure that the SW is updated to the latest version.	
	Assembly issue	Check the P-sensor rubber to ensure that it’s in the correct position.	**Assembly** P-sensor rubber status
	Connectivity problem	Check the function by triage test. Ensure that there’s no foreign substance on the P-sensor area.	
	Module problem	• Disassemble and check that the appearance of the proximity sensor isn’t abnormal. • Use a good P-sensor rubber and logic board to cross-check with the corresponding failed ones. • Replace the defective components.	**Disassembly** • Logic board • Display (P-sensor rubber)

UDFPS

Symptom	Potential root cause	Procedure	
 **T064: Fingerprint sensor failure**	Damage	Inspect the display for damage and replace if necessary.	
	SW problem	Reinstall the UDFPS calibration software.	
	Connectivity issue	• Check whether the connectivity between the fingerprint connector and logic board is normal. • If they aren't fully fastened, reassemble and then retest.	Connectors location
	Component issue	• Use a good fingerprint module and logic board to cross-check with the original ones. • Replace the defective component.	**Disassembly** • Logic board • Display

Camera

Symptom	Potential root cause	Procedure	
 **T070: Camera crashes** **T071: Camera no preview** **T072: Camera AR failure** **T073: Camera rear photo quality** **T074: Camera rear video quality** **T075: Camera front photo quality** **T076: Camera front video quality** **T077: Camera flash doesn't work** **T078: Can't switch between cameras** **T079: Camera damage**	Cosmetic problem	• Inspect the camera lens area for damage. • Check the function by triage test. • Disassemble the device to check whether the camera connector is seated properly. Power on the unit and check whether the camera fails again.	
	Connectivity problem	Check the camera BTB and logic board side to identify whether the assembly is deformed or there're flex cracks. Reboot device again to check whether symptoms of the failure still exist.	Connectors location
	Module problem	If symptoms of failure still exist, cross-check the logic board itself or camera module to determine whether the symptom of failure is caused by the camera module or logic board.	**Disassembly** • Logic board • Front camera • Rear camera

USB

Symptom	Potential root cause	Procedure	
 **T085: USB-C failure**	Connectivity issue	• Inspect the USB port to see if any dust is inside. • Check whether the device can detect the USB adaptor. • Reconnect the battery and then boot up without charging with the USB power cable.	Connectors location
	Component issue	• Use a good logic board to cross-check with the original one. • Replace the logic board if needed.	**Disassembly** Logic board

Pixel 9a repair manual

Testing

Software tools

Description	Documentation
Update or reinstall the software on Pixel devices	Google Pixel Update and Software Repair