Pixel 9 Pro Fold
Repair manual

Version 2.0

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 could 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 really important to us and repairability is part of that. Repair enables our products to 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, in the order of device disassembly, of prerequisite steps, tools, fixtures, and parts to complete the repair.

Assembly

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

Troubleshooting and testing

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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Revision history

Version	Date	Change description
v1.0	July, 2024	First release
v2.0	August, 2024	1. Add pick thickness, @Page 69, 211. 2. Add LED pad press and replace instruction of BG, @Page 199. 3. Add rework part LED CPSA G806-09190-00. @Page 32, 67. 4. Correct 5G thermal PAD GPN from G806-00652-00 to G864-00652-00. @Page 31 , 86 5. Correct trim GPN from G730-08751-00/ G730-08752-00 to G730-08751-01/ G730-08752-01. @Page 32, 39, 52, 53 ~ 57. 6. Add apply one round 3M AP111. @Page 191, 199, 288, 292, 301. 7. Correct screw GPN from G250-07521-00 to G250-06985-01. @Page 209. 8. Revise screw G250-06985-01 * 2 and add screw GPN G250-07521-00 to the list. @Page 218. 9. Revise the IF FPC picture. @Page 154. 10. Add more tips for peeling the user PF. @Page 43. 11. Revise base/ flip trim assembly sequence, pictures and adding more tips. @Page 52, 53, 54, 55, 56, 57. 12. Add picture about clean OD rubber residual of upper board. @Page 267. 13. Correct Upper board picture and reuse indication. @Page 26, 228. 14. Revise class 1 laser module statement. @Page 8. 15. Remove P201/P294/P303 checking display portion and combine the tip "Power on to check if the device works properly and power off the device after you check" to page 200, 293, 300.

Pixel 9 Pro Fold repair manual

Precautions

Page 1 of 2

Important: Before you begin

⚠️

Be careful if you engage in repair

Opening or repairing a device could present electric shock, device damage, fire, 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 securely fastened.

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

🔋

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

- Fully discharge the device battery before you attempt repair.

- 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 could result in fire or overheating.

- Dispose of the battery according to local regulations.

☀️

Caution:
Pixel 9 Pro Fold contains a class 1 laser module

The design of the device incorporates optics and protective housing such 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 or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Page 2 of 2

Important: Before you begin

⚠️

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

The use of Google-authorized tools and fixtures is strongly recommended to repair a device in a safe and effective manner.

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.

- Make sure that the battery is fully discharged before any disassembly.

- If the phone battery shows signs of swelling or damage, or if the phone feels hot or emits a strong odor, *don't* attempt disassembly. Please reach out to Google customer support.

- Take care not to expose the phone or its components to liquids after disassembly.

Caution ⚠

Examples of unacceptable battery conditions - Not suitable for repair*

Pouch damage
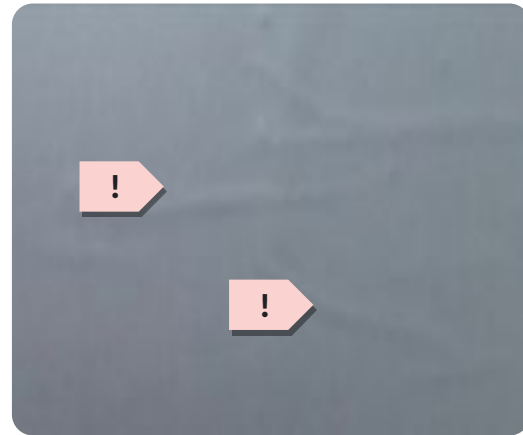
Line protrusion
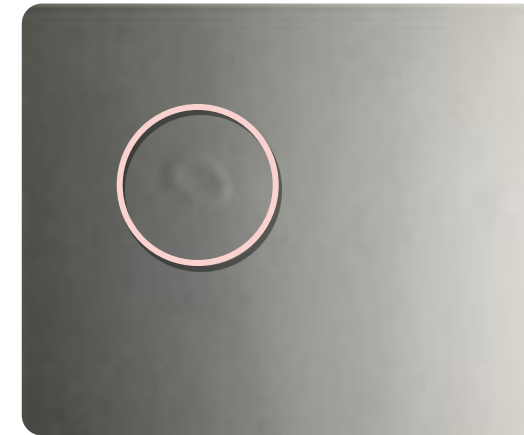
Scratch

Contamination mark
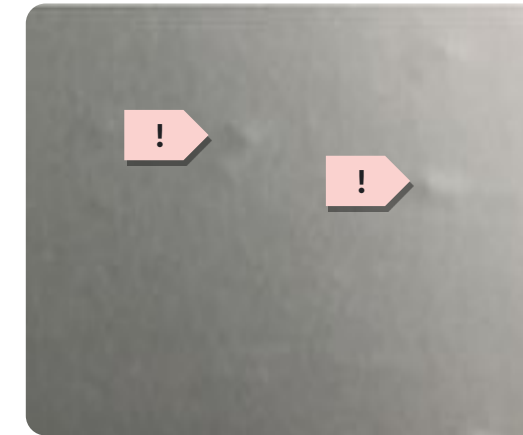
Dot protrusion

Dent

Bubbling

Imprinted line
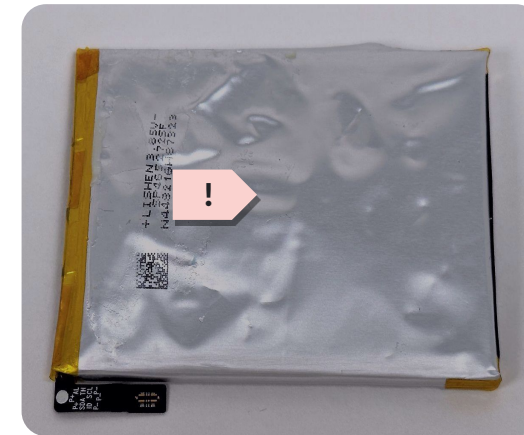
Swelling or electrolyte leakage

*These are examples of potentially dangerous battery conditions but *don't* reflect all possible dangerous conditions. Please follow the general safety guidance outlined in this document.

(i)

Pixel 9 Pro Fold repair manual

Introduction

Expanded views	Liquid damage indicators
Screw map	Turn Pixel on or off
Screen calibration	Tools and fixtures
Repair flow notice	Replacement parts
ESD protection	Glossary

Pixel 9 Pro Fold: Expanded view

Reuse indications
- 🟢 Reusable without cleaning
- 🔵 Reusable after cleaning
- ⚫ Not reusable after disassembly

Pixel 9 Pro Fold part ID
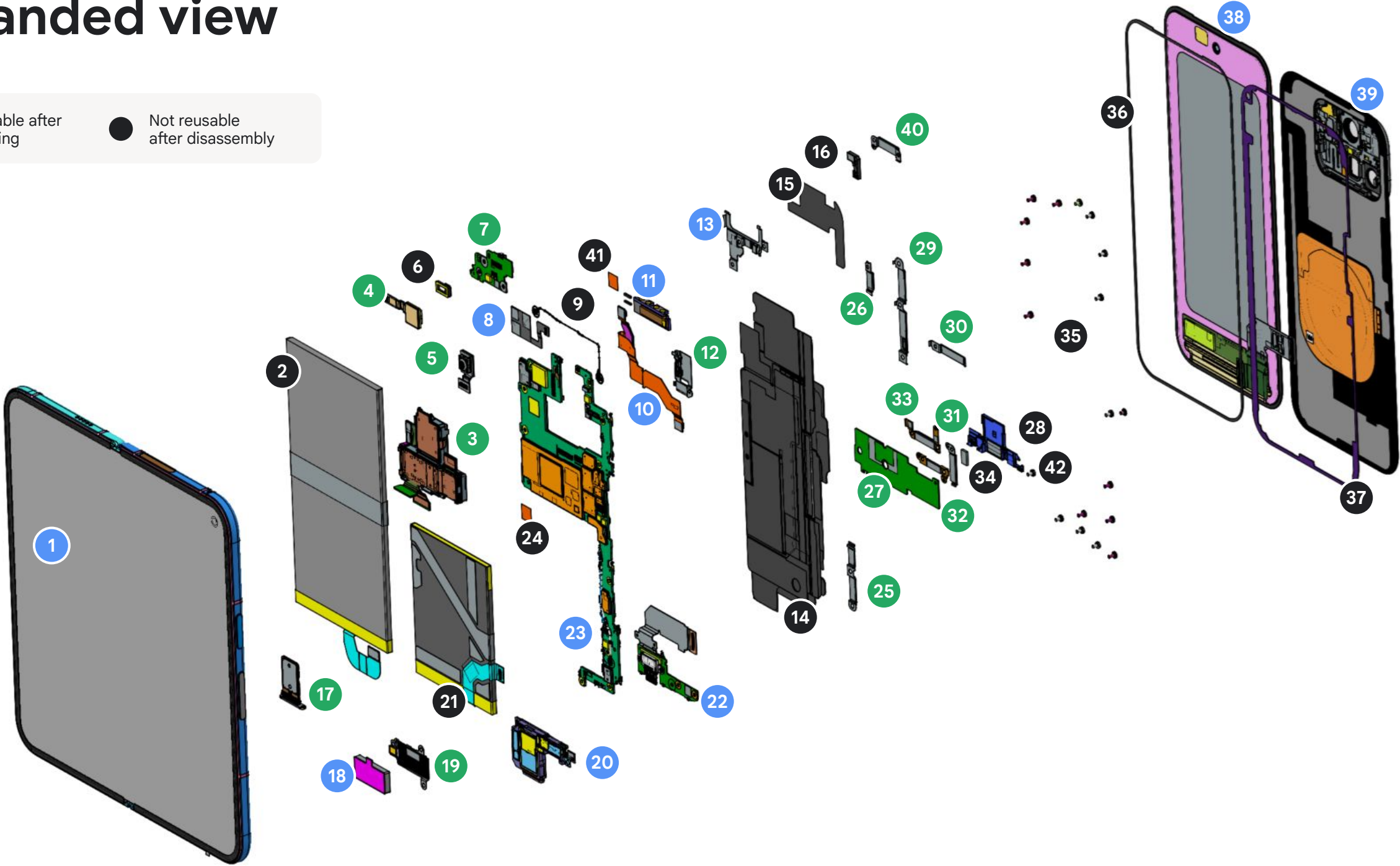
#	Part	#	Part	#	Part	#	Part	#	Part	#	Part
1	Inner display sub	8	UWB	15	Graphite sheet top SPK	22	USB board	29	Base top bridge cowling	36	OD PSA
2	Flip battery	9	Coaxial cable	16	OD rubber	23	Logic board	30	Base bottom bridge cowling	37	BG PSA
3	Rear camera	10	IF FPC	17	SIM tray	24	FPS mylar	31	OD cowling	38	OD sub
4	Outer FCAM	11	mmWave module	18	Vibrator	25	Base battery cowling	32	Flip bottom bridge cowling	39	BG sub
5	Inner FCAM	12	FCAM cowling	19	Vibrator cowling	26	BG cowling	33	Flip battery cowling	40	Flip top bridge cowling
6	PL rubber	13	mmWave cowling	20	Bottom speaker	27	Lower board	34	OD cowling FOF	41	5G B2B sponge
7	Upper board	14	Graphite sheet MLB	21	Base battery	28	Rubber support	35	Screw	42	OD left bottom FOF

Screw map

These are the screws used in the Pixel 9 Pro Fold:

Screw G250-06985-01	Screw G250-06988-01	Screw G250-06989-01	Screw G250-07521-00	Screw G250-06986-00
Torque 0.9 kgf	Torque 0.9 kgf	Torque 0.9 kgf	Torque 0.9 kgf	Torque 0.9 kgf
Torque 1.2 kgf	Torque 1.2 kgf	Torque 1.2 kgf		

⚠️ **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 removal, always replace with a new screw**

Each screw is critical to the safe continued operation of the phone. As the thread locking adhesive can't be reactivated, always replace it with a new screw after removal.

Pixel touch screen calibration process*

Is <u>NOT</u> required for this product, Pixel 9 Pro Fold

[*Reminder: This process is still required for previous products Pixel 1 - Pixel 8 Pro devices, including generation 1 of Pixel Fold]

Complete the following
before you boot up the device:

- Except inner display (ID) pre-installed user protective film, nothing should touch the inner and outer display. For example, other protective films, cases, fingers, tape, labels, scratch cover, adhesives, debris, etc.

- Device should be in unfold mode and open it completely.

- Devices should be on a flat surface. *Don't* hold it in your hands.

After the above conditions are met, the device should be
powered on by pressing the power button. *Don't* touch the device until it's fully booted into the user operating system.

Display touch calibration

After any repair that requires you to open the phone, complete the display touch calibration during first boot.

Touch function

If this process isn't followed, the touch function of the screen may not work as intended.

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

Carry out repairs on an ESD mat, when the person who repairs the device wears a grounded ESD strap.

Avoid static buildup

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

Did you know?

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

Protective bags

Pack all ESD-sensitive parts in metalized protective bags during shipping.

Avoid touching pins

Don't touch pins with use of ESD-safe tools to handle components.

Liquid damage indicators

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

- Exposure to liquids could lead to the device malfunction, such as overheating or a short circuit.

- There are **three LDIs** on this device.

- If either indicator has turned red, the device is exposed to liquid.

On the logic board,
near the base battery cowling.
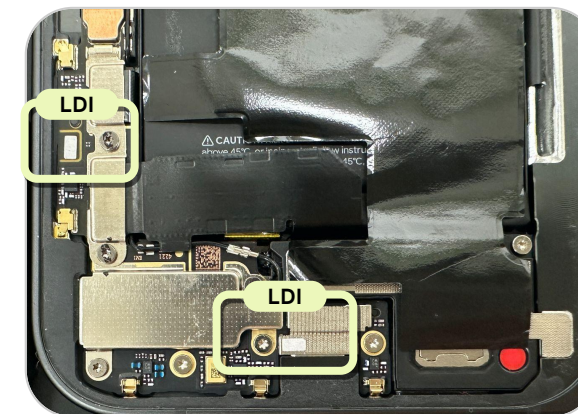
On USB board,
near charge port.
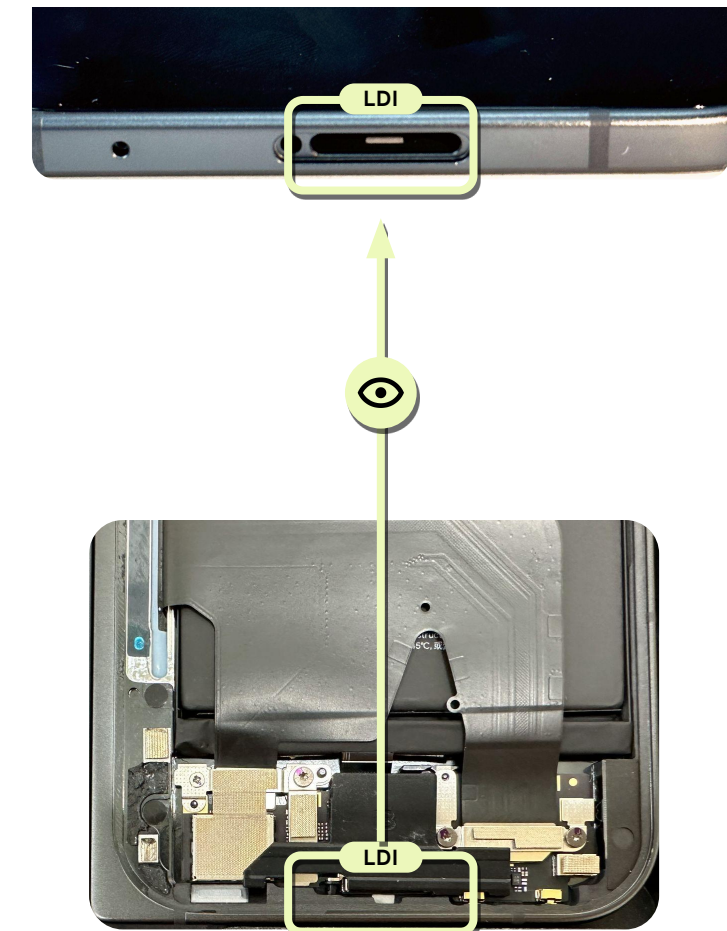
In the SIM card tray (on the flip enclosure)
visible without disassembling the device.

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 the phone when it's turned on:

  - *To power off the phone, press and hold the power and volume up buttons for a few seconds. Then, tap* **Power off** *on screen.*

  - *For further information, see this Google help page (link).*

Tip: Before you turn on phone, charge it. Learn how to charge.

Restart (reboot)

1. On most phones, press the phone's power button for about 30 seconds, or until the phone restarts.

2. On the screen, you might need to tap **Restart**.

Tools and fixtures

It's strongly recommended to use Google-authorized tools and fixtures to repair a device in a safe and effective manner.

⚠ **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.

🛠 Tools and fixtures

Google-approved fixtures: Pixel 9 Pro Fold

Google-approved fixtures are Google-tested and are strongly encouraged to ensure high quality and safe repairs.

Universal press
G940-00733-00

Universal press plate 12 mm
G940-00736-00

Universal base plate 12 mm
G940-00833-01

Universal large scraper
G940-00850-00

Fixture board
G940-00932-00
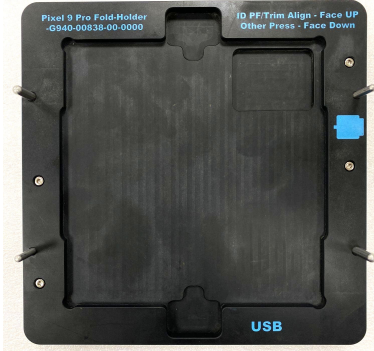
⚒ Tools and fixtures

Google-approved fixtures: Pixel 9 Pro Fold

Google-approved fixtures are Google-tested and are strongly encouraged to ensure high quality and safe repairs.
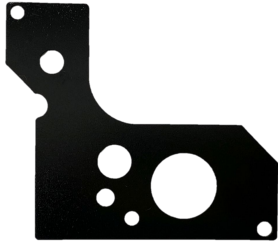
Pixel 9 Pro Fold- main holder and ID PF or trim align
G940-00838-00

Pixel 9 Pro Fold- thermal grease alignment fixture
G940-00853-00

Pixel 9 Pro Fold- battery press rubber (Base side)
G940-00840-00
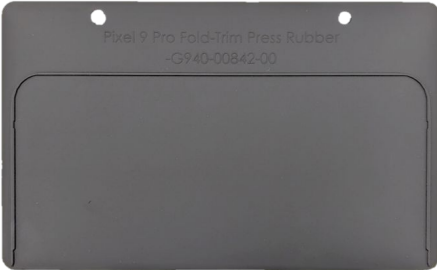
Pixel 9 Pro Fold- battery press rubber (Flip side)
G940-00841-00

Pixel 9 Pro Fold- trim press rubber
G940-00842-00

Pixel 9 Pro Fold- BG press rubber
G940-00843-00

Pixel 9 Pro Fold- OD press rubber
G940-00844-00

⚒ 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

Large suction cup
Approximately 5 cm diameter

Screwdriver
Hex shank torx plus bit 3

Adjustable torque screwdriver
Hex shank torx plus bit 3

SIM card ejection pin

Heat plate

Absorption-bulb

Feeler gauge
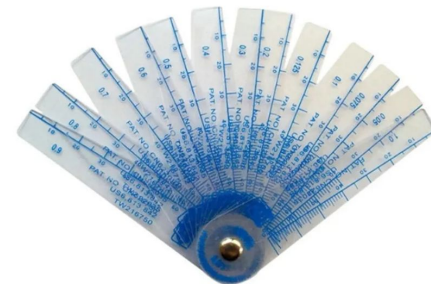
⚒ Tools and fixtures

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	Dust-free cotton swabs	Anti-static ESD gloves	ESD finger cots	Screen protector accessories

Dust-free cloth	Kapton tape	Protective film *Optional: May help with damaged screens.*	Masking tape *Optional: May help with battery replacement.*

⚒ 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

⚒ Tools and fixtures

Repair fixture recommendations

Google-approved fixtures are Google-tested and are strongly encouraged to ensure high quality and safe repairs.

Type of repair	Fixtures recommended
All Pixel 9 Pro Fold repairs	Pixel 9 Pro Fold inner display, flip battery, base battery tool bundle, universal press, universal disassembly fixture, universal base, universal fish line tool, universal adsorption bulb, universal disassembly spudger, universal disassembly opening pick, universal scraper, screwdriver hex shank torx plus bit no.3, universal protective film
Pixel 9 Pro Fold outer display *(This repair only)*	Pixel 9 Pro Fold outer display tool bundle, universal press, universal disassembly fixture, universal base, universal fish line tool, universal adsorption bulb, universal disassembly spudger, universal disassembly opening pick, universal scraper, screwdriver hex shank torx plus bit no.3, universal protective film
Pixel 9 Pro Fold back glass *(This repair only)*	Pixel 9 Pro Fold back glass tool bundle, universal press, universal disassembly fixture, universal base, universal fish line tool, universal adsorption bulb, universal disassembly spudger, universal disassembly opening pick, screwdriver hex shank torx plus bit no.3

Replacement parts

Important notice about replacement parts

- The use of Google-authorized replacement parts is strongly recommended.

- Performance within product specifications can't be assured if Google-authorized replacement parts aren't used.

⚠️ **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 	**Inner display sub** 🔵 Multiple part numbers

Logic board 🔵
Multiple part numbers
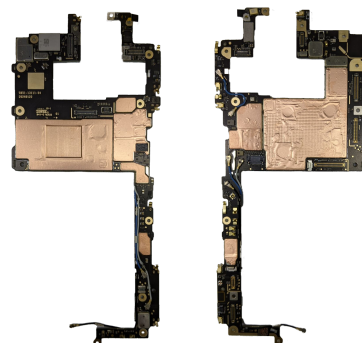
Inner display sub 🔵
Multiple part numbers

BG sub 🔵
Multiple part numbers

Outer display 🔵
G949-00911-00

Outer FCAM 🟢
G949-00912-00

Inner FCAM 🟢
G949-00913-00

Rear camera 🟢
G949-00914-00
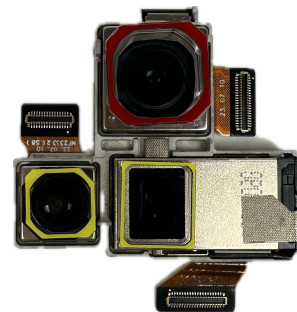
Lower board 🟢
G949-00915-00
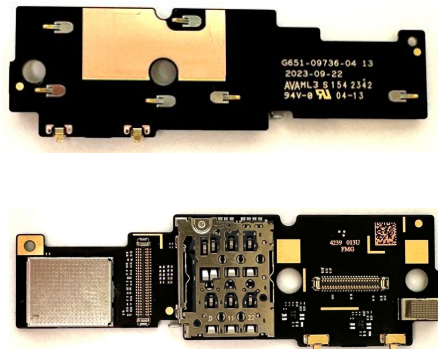
Upper board 🔵
G949-00916-00
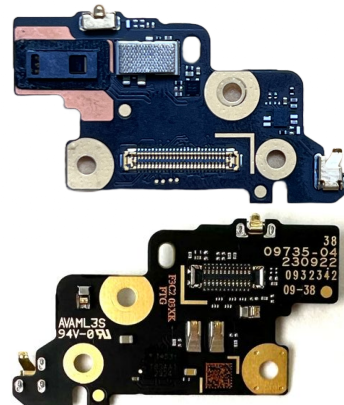
USB board 🔵
G949-00917-00
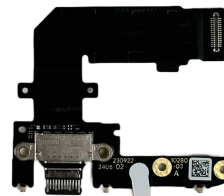
Flip battery ⚫
G949-00919-00

Base battery ⚫
G949-00920-00

Replacement parts

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

mmWave module ● G949-00921-00	**Sidekey module** ● *(included in inner display sub)* G949-00922-00	**Fingerprint module** ● *(included in inner display sub)* Multiple part numbers
Coaxial cable RCAM ● G821-00916-00	**Screw** ● G250-06985-01	**Screw** ● G250-06988-01
Screw ● G250-06989-01	**Screw** ● G250-07521-00	**IF FPC** ● G652-10207-04
UWB FPC ● G867-00405-00	**SIM tray** ● Multiple part numbers	**Vibrator** ● G690-12013-00
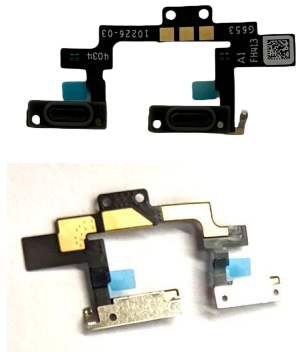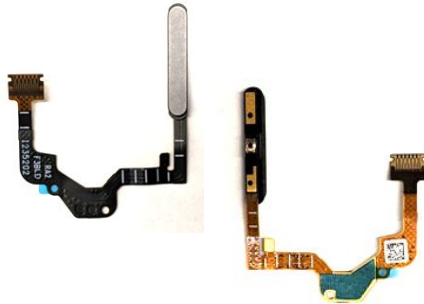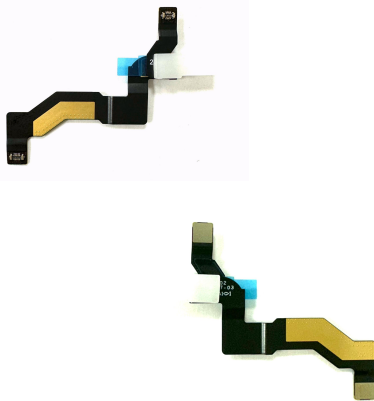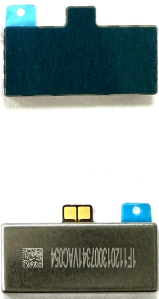
Replacement parts

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

Bottom speaker
G863-00533-00
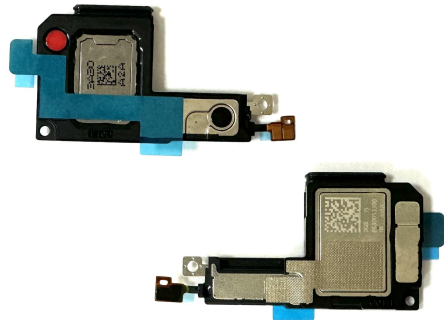
FPS mylar
G806-09565-00

PL rubber
G806-09080-00

OD cowling FOF
G806-09273-00
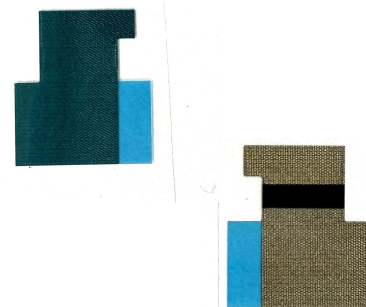
OD left-bottom FOF
G806-11369-00

OD rubber
G804-01242-00

OD rubber support
G804-01205-00

5G B2B sponge
G806-09501-00

OD PSA
G806-09152-02

BG PSA
G806-09151-02

Graphite sheet top speaker
G864-00664-00

Graphite sheet MLB
G864-00666-00

Replacement parts

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

Vibrator cowling
G730-07489-00
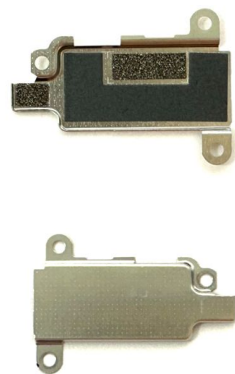
mmWave cowling
G730-07648-00
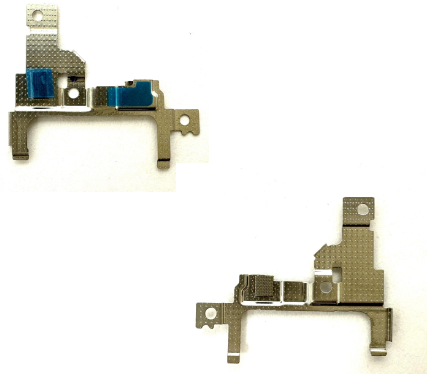
Flip bottom bridge cowling
G730-07495-00
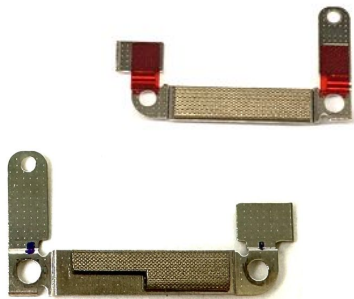
Flip top bridge cowling
G730-07493-00

Base top bridge cowling
G730-07491-00

Base bottom bridge cowling
G730-07492-00

Flip battery cowling
G730-07496-00
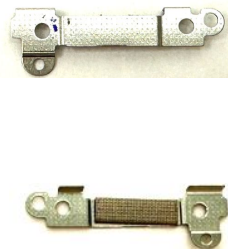
Base battery cowling
G730-07488-00

OD cowling
G730-07494-00

BG cowling
G730-07485-00

FCAM cowling
G730-07486-00
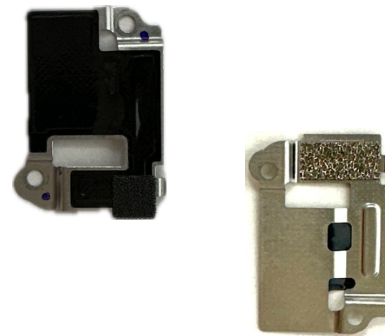
Coaxial cable USB
G821-00917-00

Replacement parts

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

Flip battery PSA ●	
G806-12710-00	
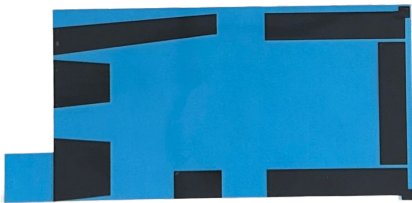
| **Base battery PSA** ● |
| G806-12711-00 |

Flip battery FPC PSA ●
G806-09264-00

Flip battery B2B PSA ●
G806-09325-00

OD left-BTM PSA ●
G806-12520-00

mmWave cowling PSA ●
G806-09400-00

IF FPC CPSA 1 ●
G806-09341-00

IF FPC CPSA 2 ●
G806-09340-00

USB FPC PSA ●
G806-09354-00

Mic 1 mesh ●
G806-09254-00

Mic 3 mesh ●
G806-09255-00

UWB foam ●
G806-09266-00
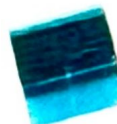
Replacement parts

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

Vibrator PSA
G806-11994-00

PAD PSA
G806-12230-00

Conductive fabric
G806-11656-00
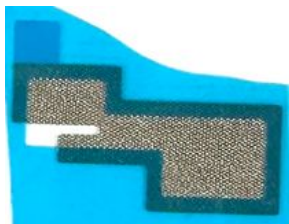
Conductive fabric 1
G806-11655-00
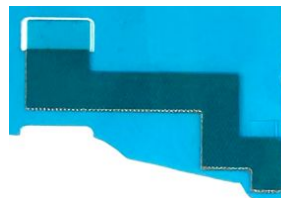
Base york PSA
G806-09445-00

PAD PSA
G806-12231-00

Conductive fabric
G806-11654-00
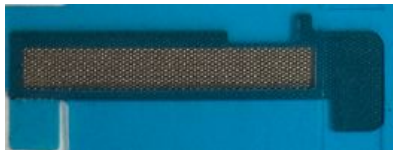
Flip york PSA
G806-09443-00

Top speaker
G863-00534-00
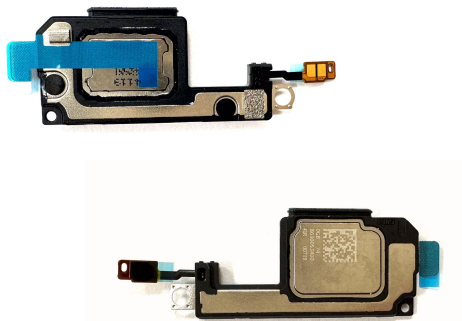
5G thermal PAD
G864-00652-00
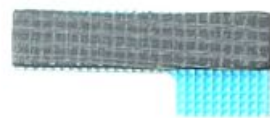
Screw
G250-06986-00

FPS metal support
G730-09502-00

Replacement parts

Reuse indications
- 🟢 Reusable without cleaning
- 🔵 Reusable after cleaning
- ⚫ Not reusable after disassembly

FPS support
G730-07484-00

PWR key support
G852-04487-00

VOL key support_up
G852-03810-00

VOL key support_down
G852-03811-00

VOL key FPC CPSA
G806-09383-00

Inner FCAM PSA sponge
G806-09256-00

User PF
G806-09346-99

Guide sticker
G806-13134-00

Service trim base
G730-08752-01
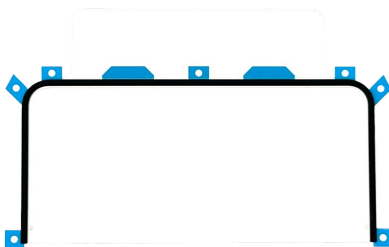
Service trim flip
G730-08751-01
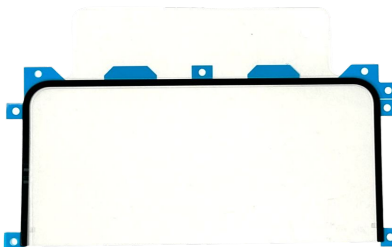
*Material expires

Thermal grease*
G160-01058-00

LED CPSA
G806-09190-00

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.
mmWave	**Millimeter Wave** The radio waves used to build a 5G network, that provides fast and reliable mobile data.
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 all 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
Pressure sensitive adhesive	The adhesive that's 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.
PF	Protective Film, usually used to refer to a film that can remain on the device during daily use.

Inner display protective film swap

ID protective film

The user ID PF is intended to provide additional protection to the inner display during use of the device.

⚠️ **Use caution**

Use safety gloves to handle damaged back glass as some splinter during removal and 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, be sure to **power off** the device and disconnect any charging cables.

🛠️ **Tools**

Pixel universal base

Pixel 9 Pro Fold-main holder

Pixel universal press plate 12 mm

Universal scraper-large

Trim press rubber

Screen protector accessories

Dust cleaning tool
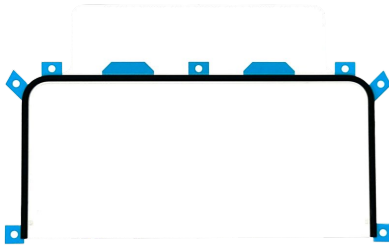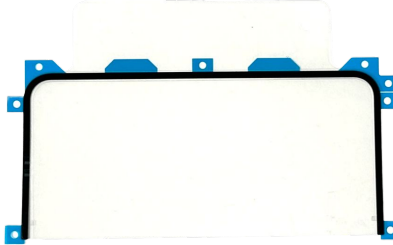
⚒ Parts

ID protective film replacement

Here's the list of parts for the ID protective film disassembly.

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

User PF
G806-09346-99

Guide sticker
G806-13134-00

Service trim base
G730-08752-01

Service trim flip
G730-08751-01

Service trim difference

Metal pad

Base trim

Blue liner

Flip trim

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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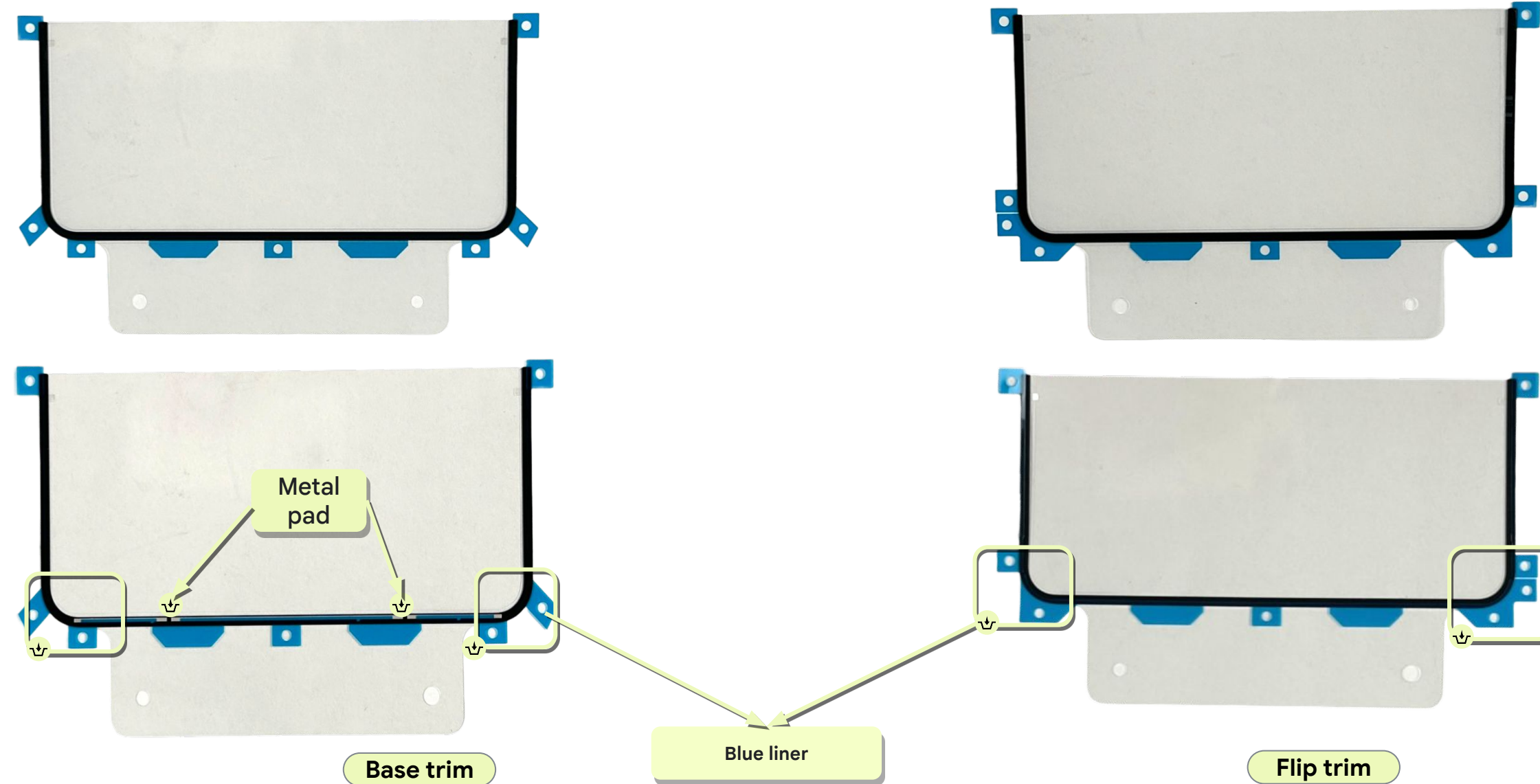
Prepare to use

- Place the **Pixel 9 Pro Fold main holder and ID PF or trim align** in the **B1 position** on the **universal base.**

Note

Always place the Pixel 9 Pro Fold holder in the B1 position for any pressing step.

Universal-Base 12mm-G940-00833-01-9996

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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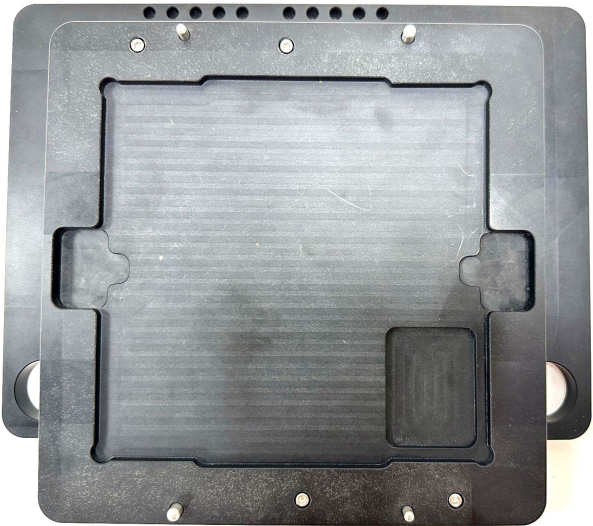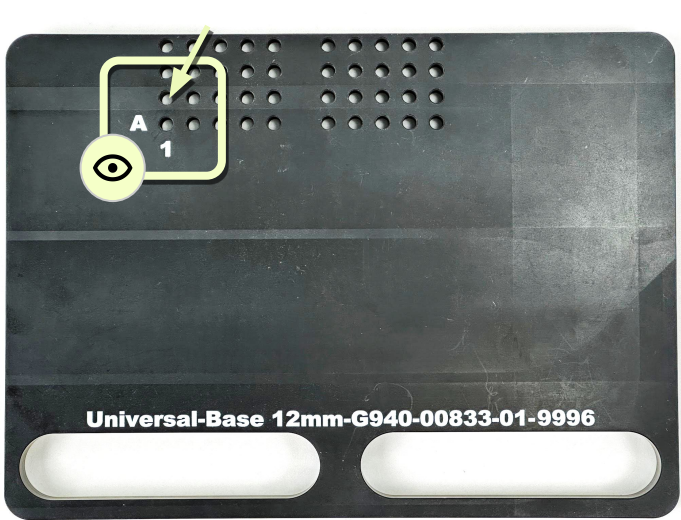
Remove the base and the flip trim

- Make sure that the device is turned off.

- Place the device in the **Pixel 9 Pro Fold main holder** with the inner display facing upwards.

- Use the spudger to lift up the edge of both the base and flip trim, that begins near the folding hinge area.

- Remove the base trim by hand.

- Remove the flip trim by hand.

- Use the spudger to clean the residual glue off the **enclosure**.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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Remove the user PF

- Insert the edge of the guide sticker plastic into the notched cut out as shown in Fig 1. If you've trouble to see the notch, it's recommended to use a magnifying glass or other tool.

- Insert the plastic deeper to peel the user protective film as shown in Fig 2.

- Slowly peel the user protective film off the inner display.

- **Tear off the user PF with the guide sticker liner slowly while holding down the ID with the other hand, as shown in Fig 3. Move the other hand along as you peel the user PF. Be careful not to damage the screen.**

⚠️ **Use caution**

There's notch shape on the lower left side of the user PF. Make sure that you peel off the user PF from this position. Otherwise, the inner display may be damaged.

Guide sticker under user PF.

OK
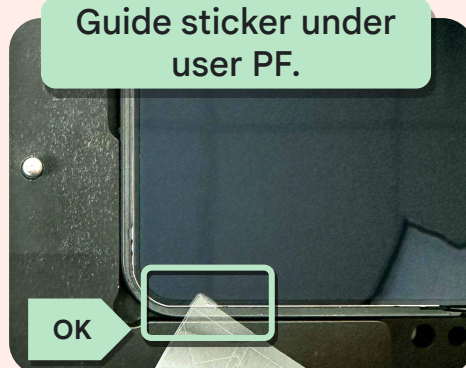
Guide sticker under inner display.

No

Fig 1

Notch

👁 OK

Fig 2

Fig 3

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub
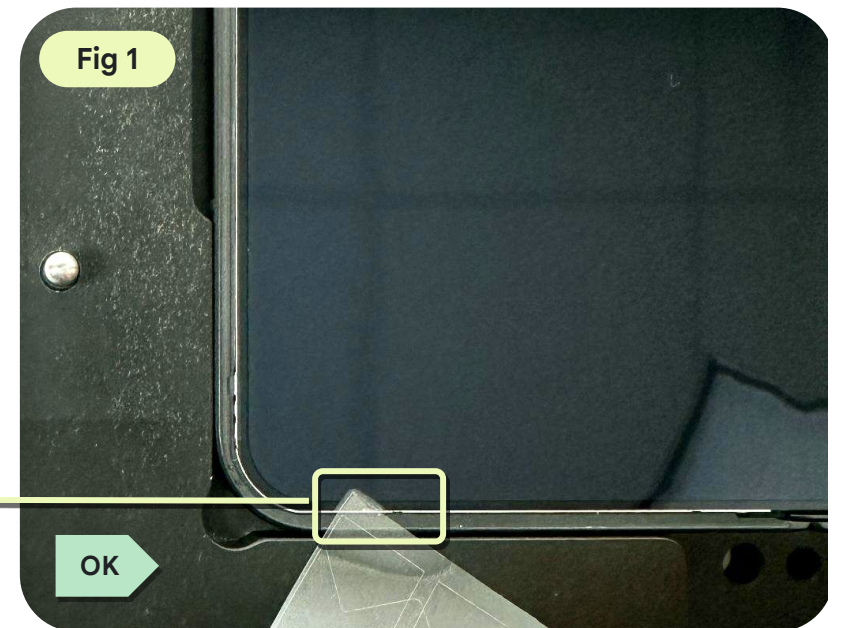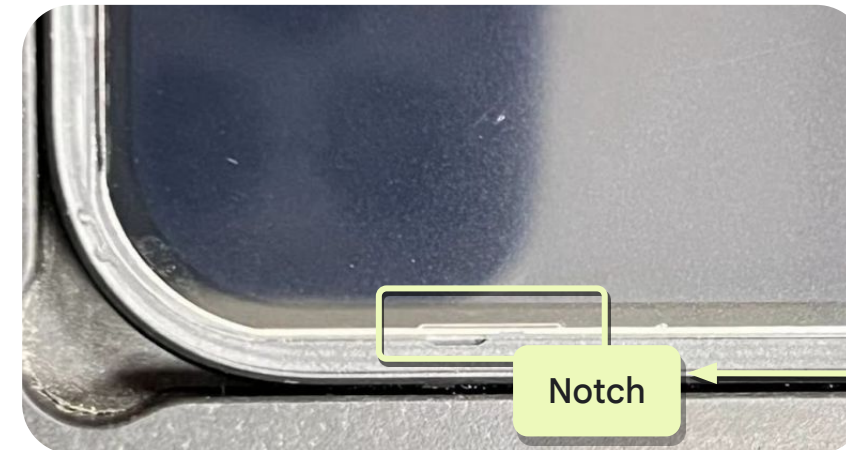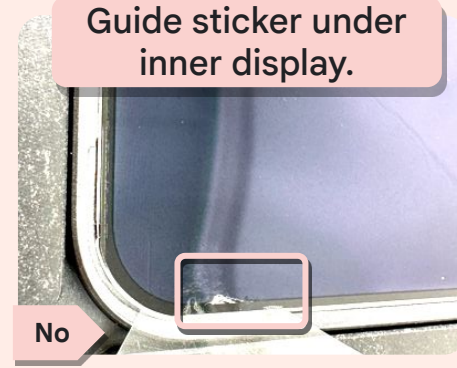
Clean the display

- Use IPA and a dust-free cloth to clean the dust and residue on the screen.

- Use a dust cleaning tool and **screen protector accessories** to remove all dust from the display.

> ⚠ **Use caution**
>
> Ensure that the environment is clean for this process.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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Remove the release liners

- Slowly peel off the **front liner 2** and the **back liner 2** from the **user PF**.

> **Part: G806-09346-99** (User PF)

⚠️ **Use caution**

Ensure that the environment is clean for this process.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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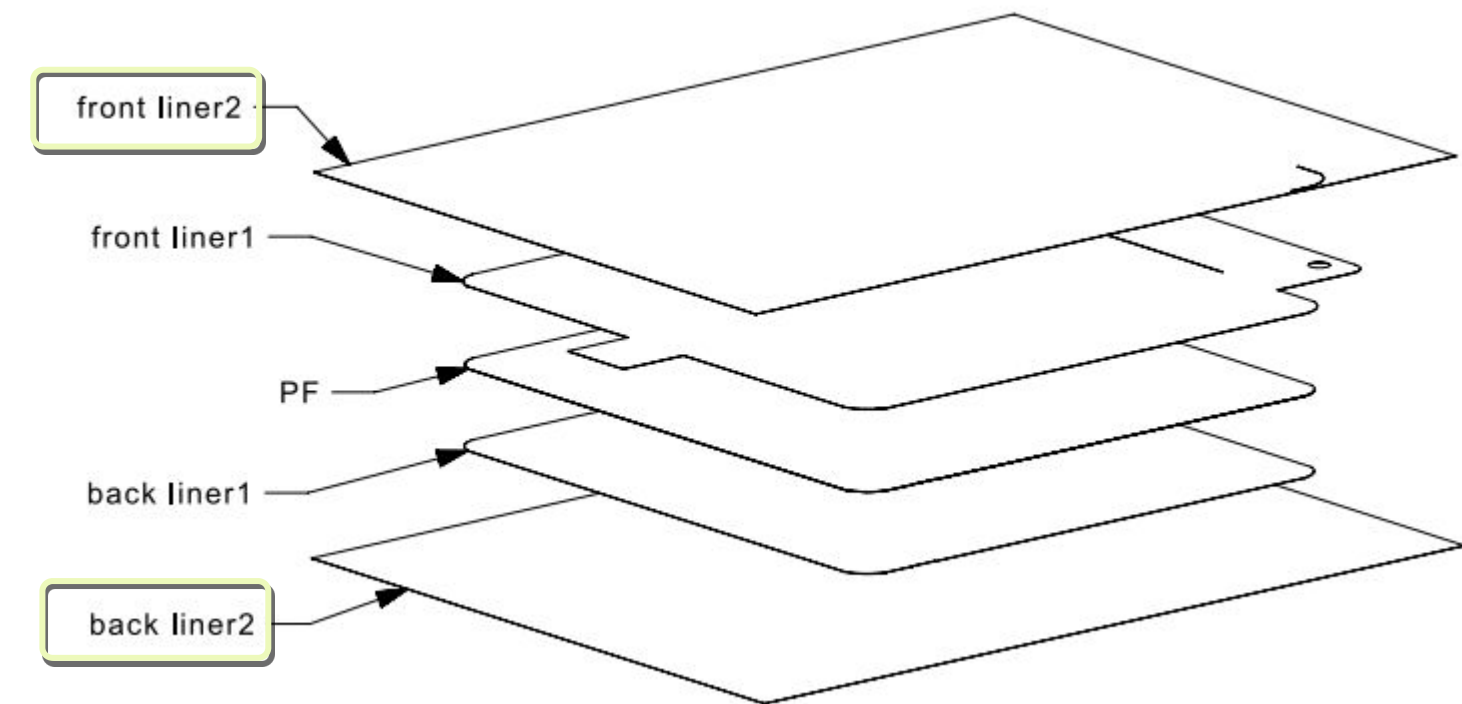
Remove the back liner 1

- Use your finger to feel the step between the front liner 1, PF, and back liner 1, and then confirm the back liner 1 side as shown in Fig 1.

- Adhere a piece of guide sticker on the corner of **back liner 1**. Slowly peel the tape off at a 45° angle as shown in Fig 1.

- Pay extra attention to ensure that only one layer is removed (back liner 1 only) from the **user PF**.

Part: G806-09346-99 (User PF)

front liner2
front liner1
PF
back liner1
back liner2

⚠️ **Use caution**

Ensure that the environment is clean for this process.

Fig 1

OK
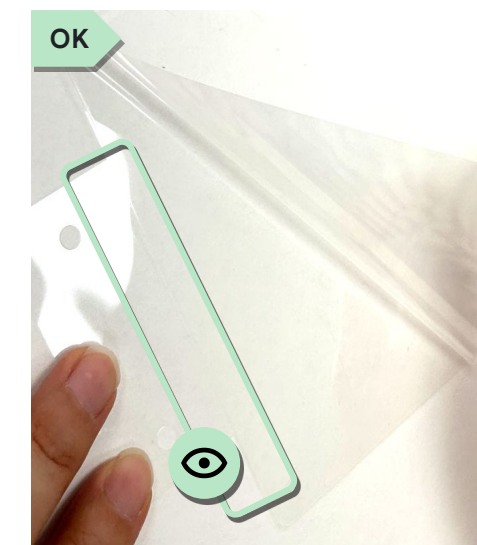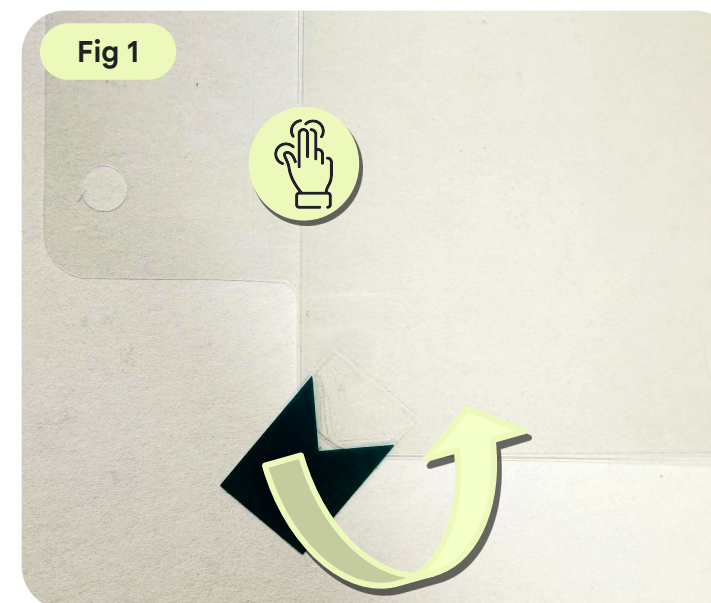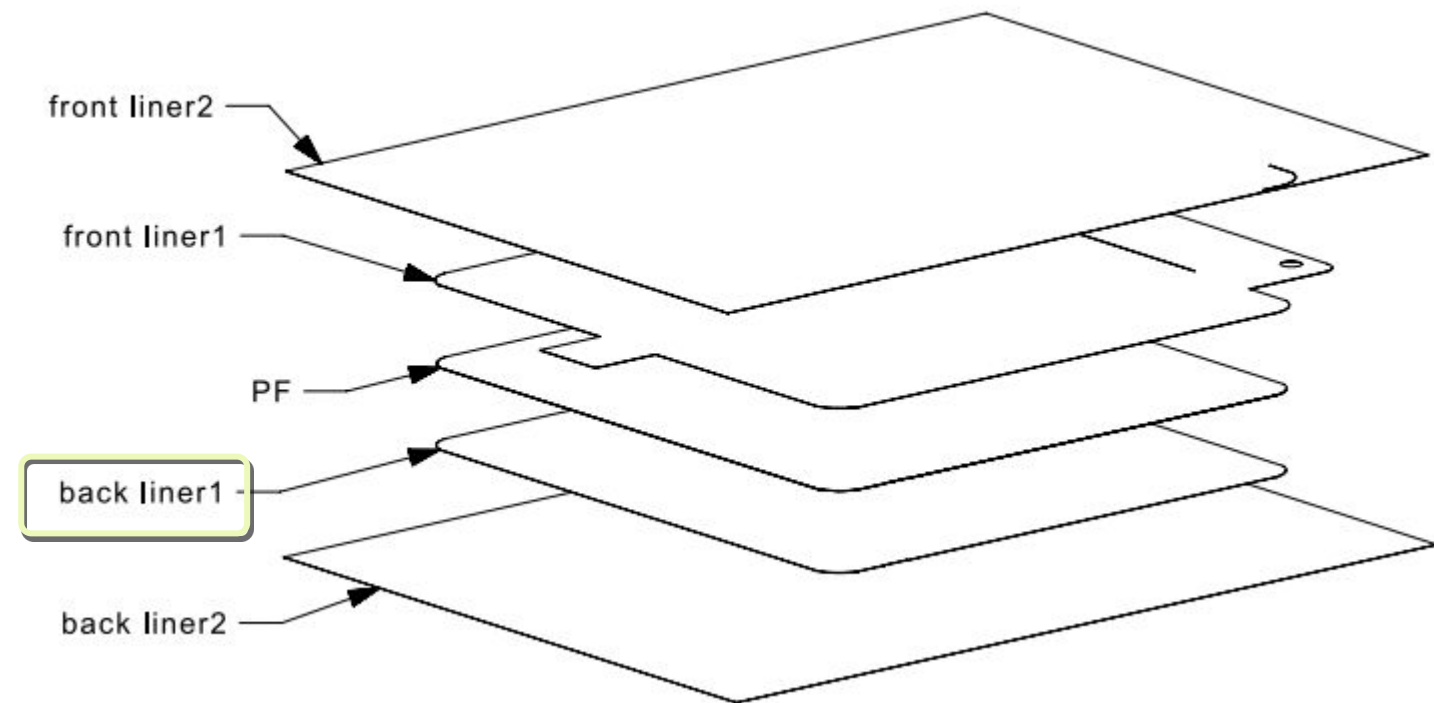
Front liner 1 with user PF.

No
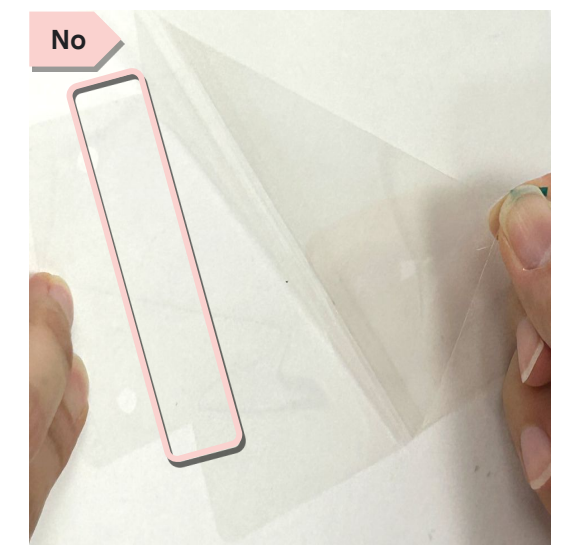
Front liner 1 without user PF.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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Align the PF onto the fixture

- Locate the two **Pixel 9 Pro Fold main holder** alignment pins that're closest to the inner display FCAM.

- Lay the **user PF** completely flat against the holder so that there are no bumps or wrinkles in the guide plastic around the pins.

Part: G806-09346-99 (User PF)

⚠️ **Use caution**

Ensure that the environment is clean for this process.

Notch

Outer FCAM

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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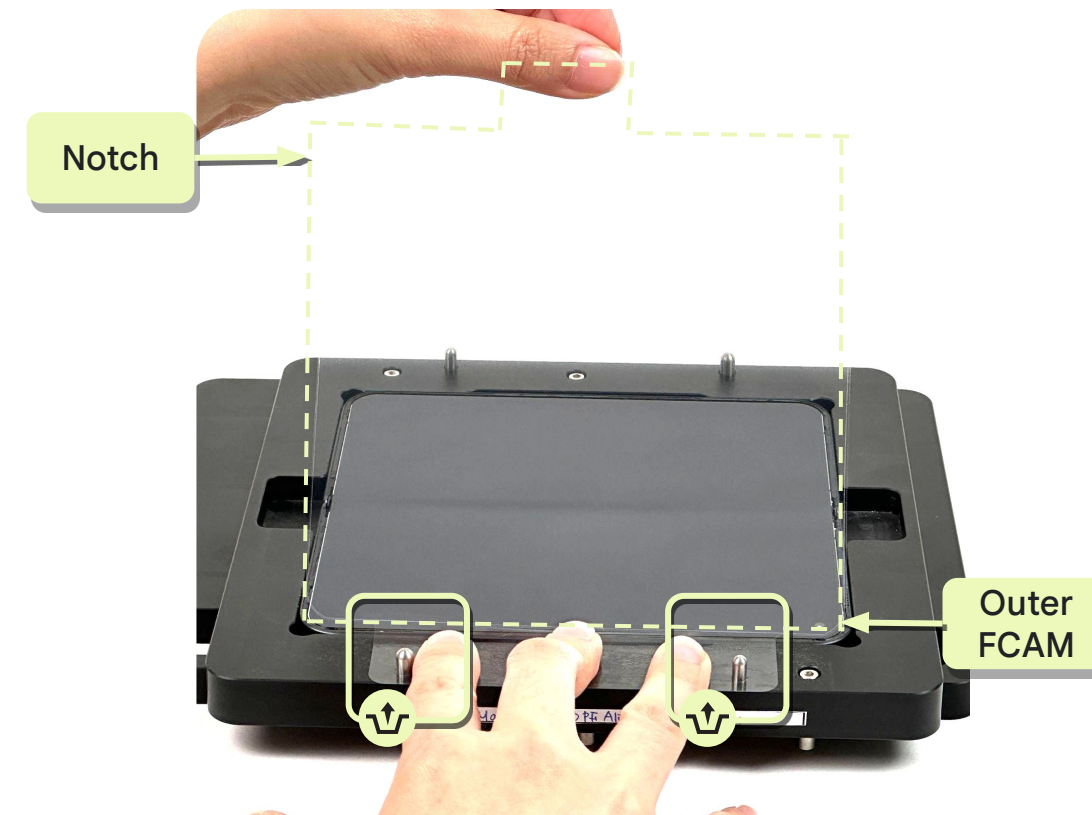
Adhere the PF

- Very gently use one hand to angle the **user PF** at approximately 75° angle in relation to the inner display.

- With the other hand, align the **universal scraper-large** to the center of the screen before you begin to adhere the PF.

- Use moderate pressure with the **universal scraper-large** to slowly lay down the user PF onto the screen.
  Prevent back and forth movements, as much as possible.

Start at the edge.

Part: G806-09346-99 (User PF)

OK

No

⚠️ **Use caution**

Ensure that the environment is clean for this process.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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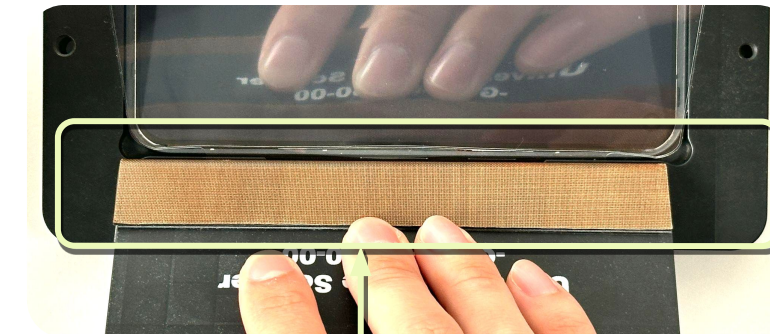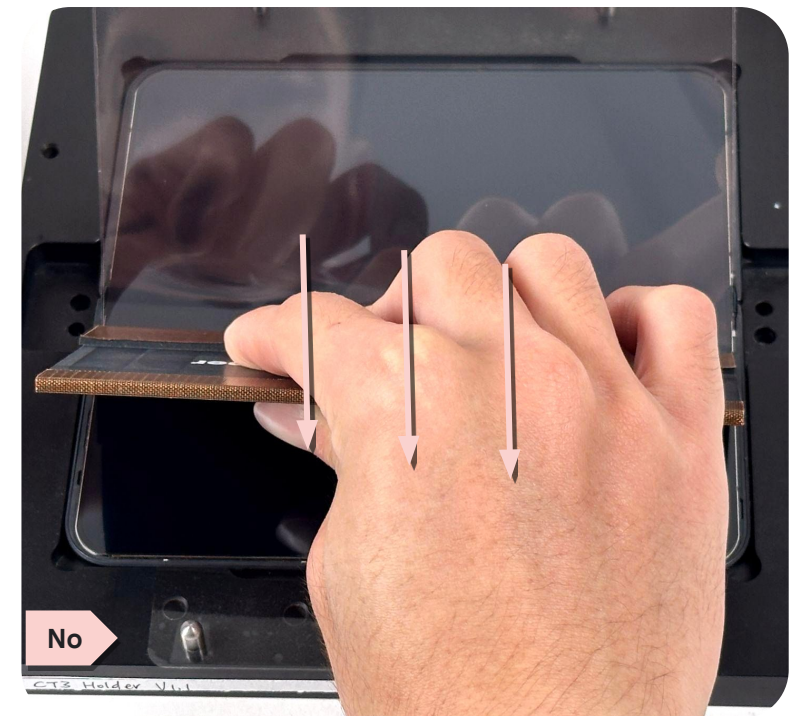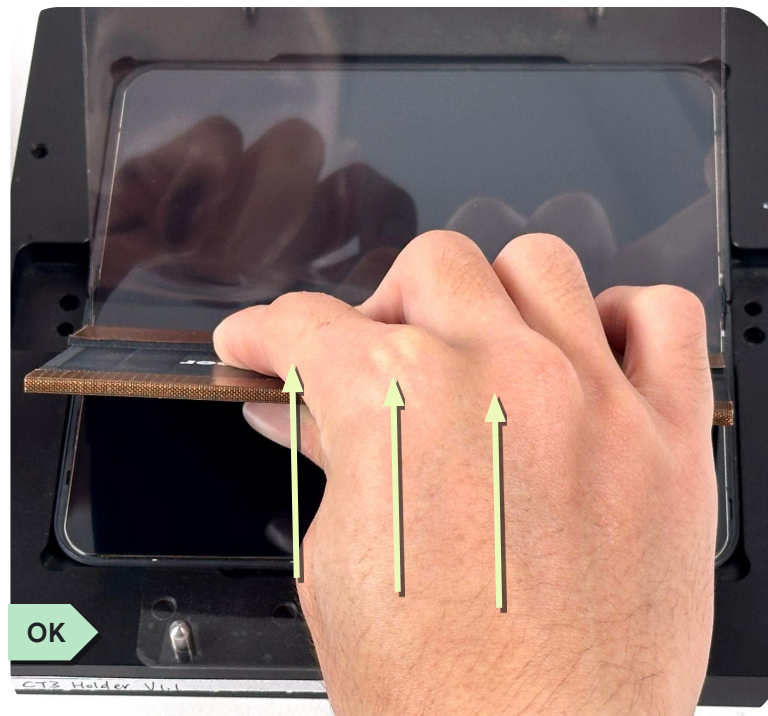
Adhere the PF

- Continue to gently push the **universal scraper-large** along the top of the **user PF** to push bubbles outward toward the edges of the PF as shown in Fig 1.

- Use a **cleaning cloth** to gently press the hinge area as shown in Fig 2, and the four sides to ensure that the **user PF** adheres well as shown in Fig 3.

Part: G806-09346-99 (User PF)

⚠️ **Use caution**

Ensure that the environment is clean for this process.

Fig 1

Fig 2

Fig 3

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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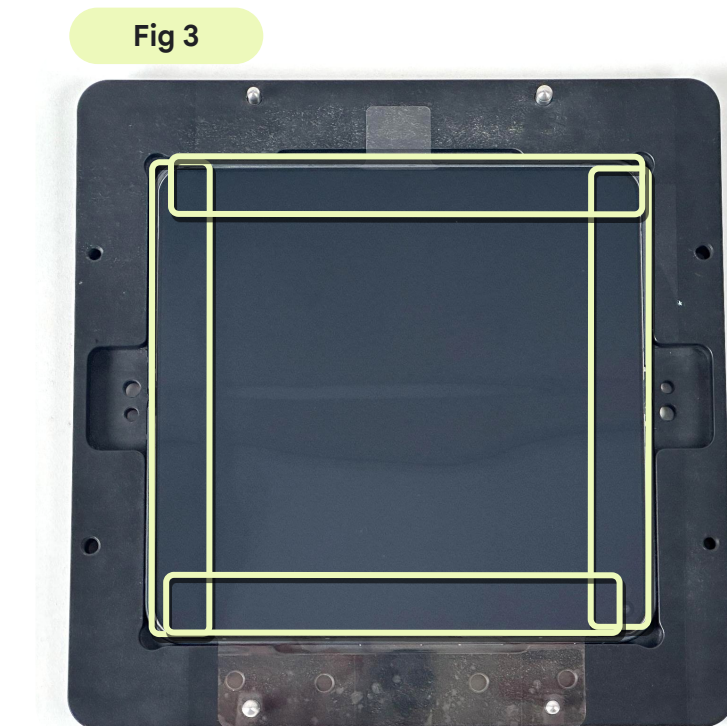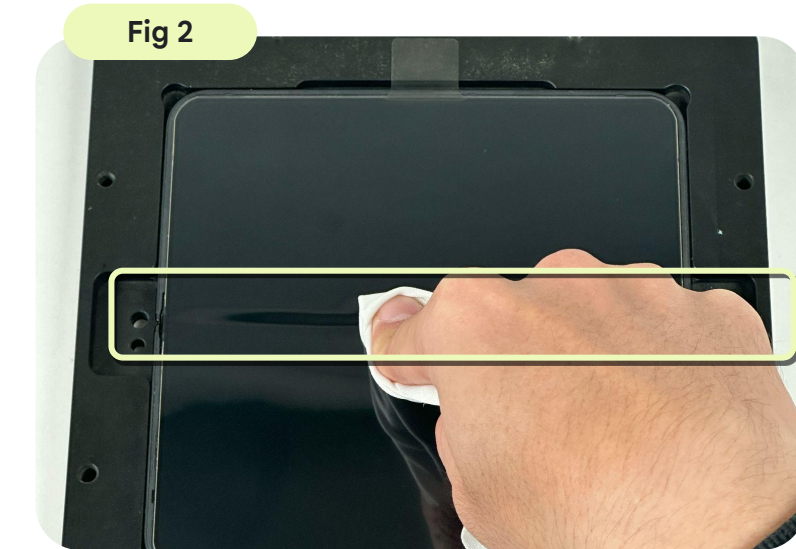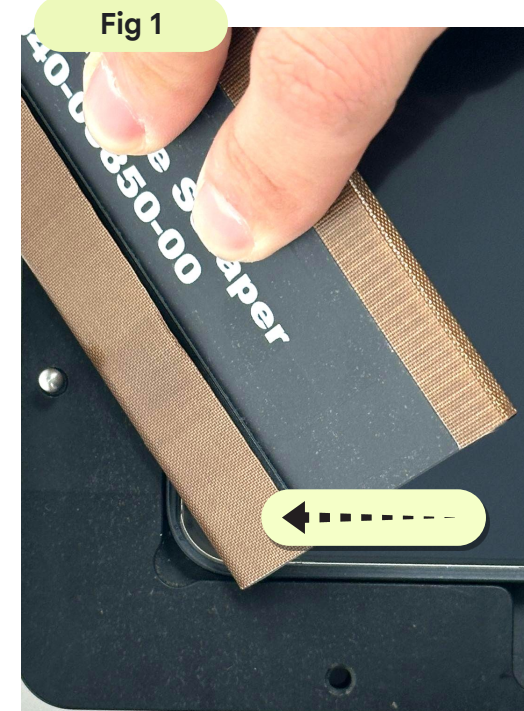
Remove the liner

- After the **user PF** is adhered to the inner display, wait for 5 minutes.

- After 5 minutes, peel off the front liner 1, and leave only the PF attached to the display.

Part: G806-09346-99 (User PF)

⚠️ **Use caution**

After the front liner 1 is removed, the PF is easily scratched. *Don't* use the universal scraper, other tools, or try to remove any blemishes after the liner removal.
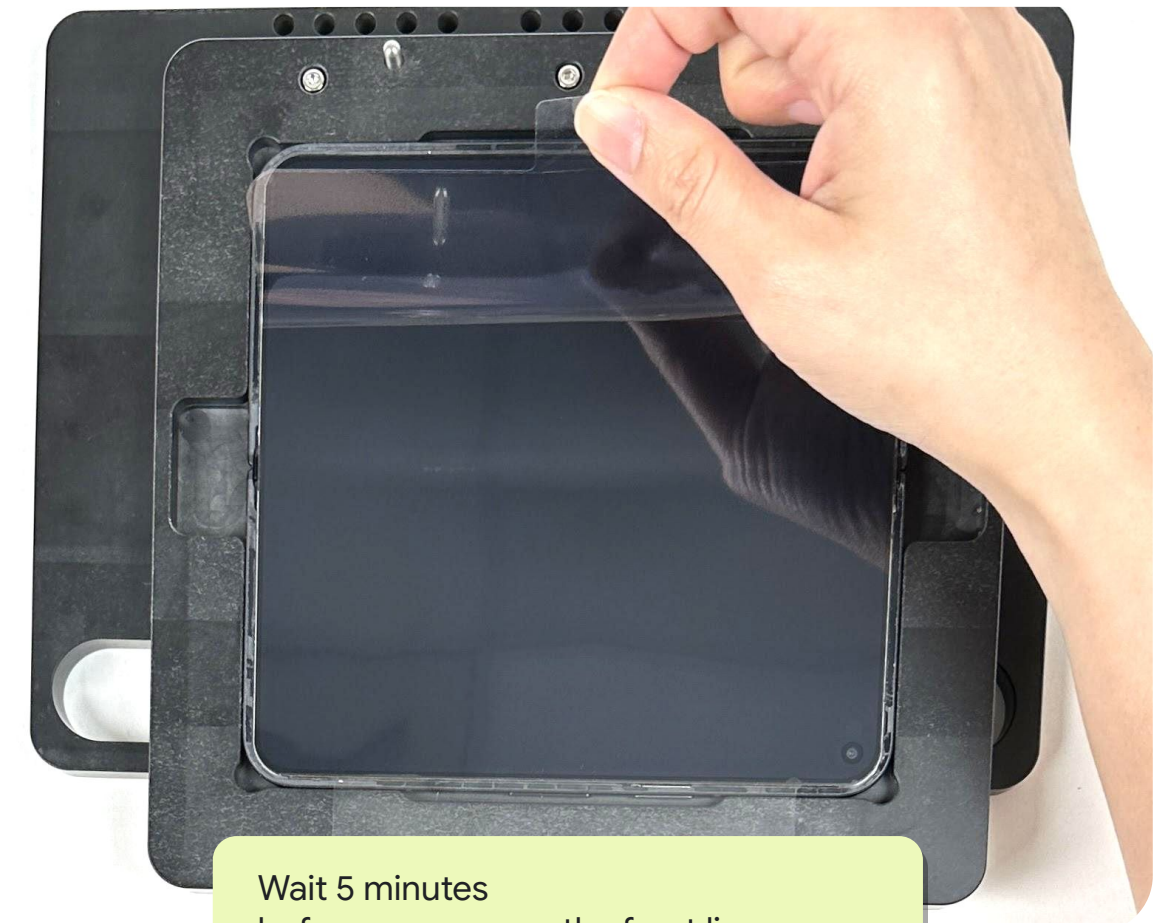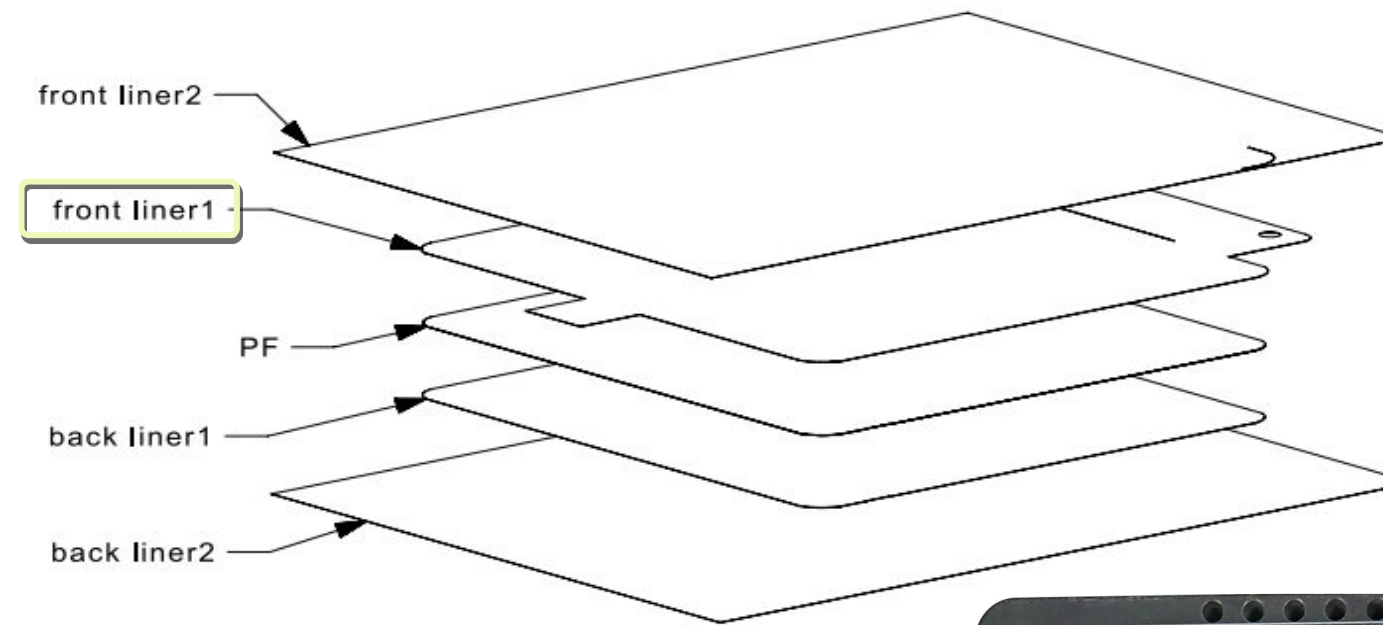
Wait 5 minutes
before you remove the front liner.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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Keep the device unfolded

- Keep the device unfolded for at least 1 hour before you fold it.

- Don't fold the device or continue repair during the 1 hour after the user PF application.

- Don't use scrapers, cleaning cloths, or any tools on the screen during the 1 hour dwell time.

⚠️ **Use caution**

Keep the device unfolded for at least 1 hour after PF application

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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Remove the flip trim liner

- Slowly peel off the outer liner from the flip trim. Move the other hand along as you peel off the outer liner. Be careful not to touch the trim and blue liner.(Fig 1)

- Press the trim when use **ESD tweezers** to grab the first blue release liners carefully and repeat the same steps for 2nd and 3rd blue release liner. (Fig 2)

Part: G730-08751-01 (Service trim flip)

⚠️ **Use caution**

Ensure that the environment is clean for this process.

Fig 1

Fig 2

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 52
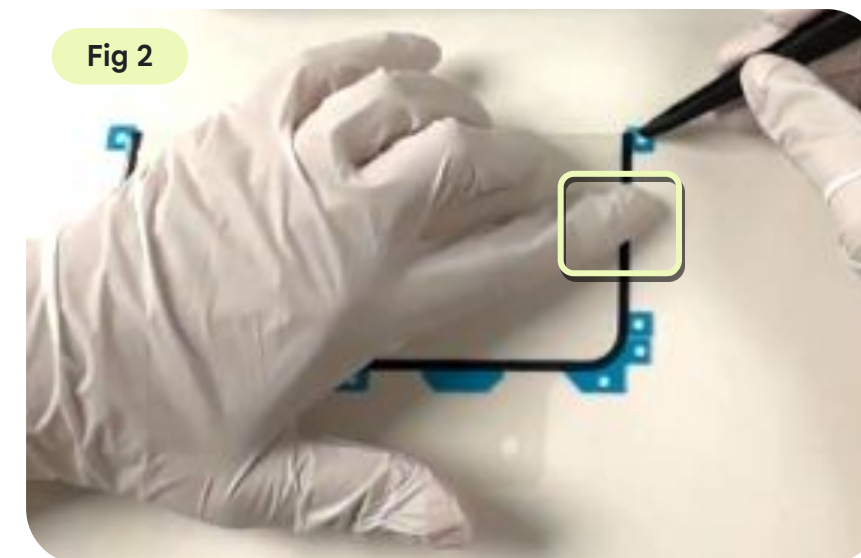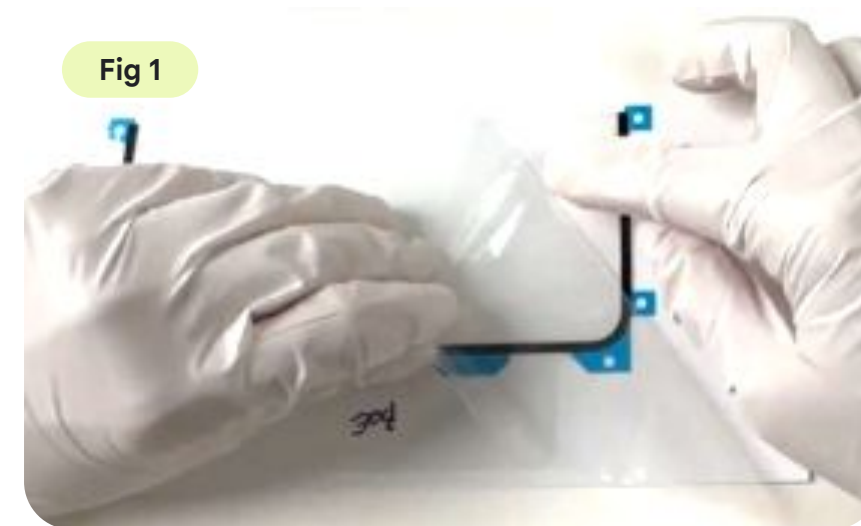
Place the flip trim

- Align the **flip trim** on the two **Pixel 9 Pro Fold main holder** alignment pins without any shift or floating.

Part: G730-08751-01 (Service trim flip)

⚠ **Use caution**

Ensure that the environment is clean for this process.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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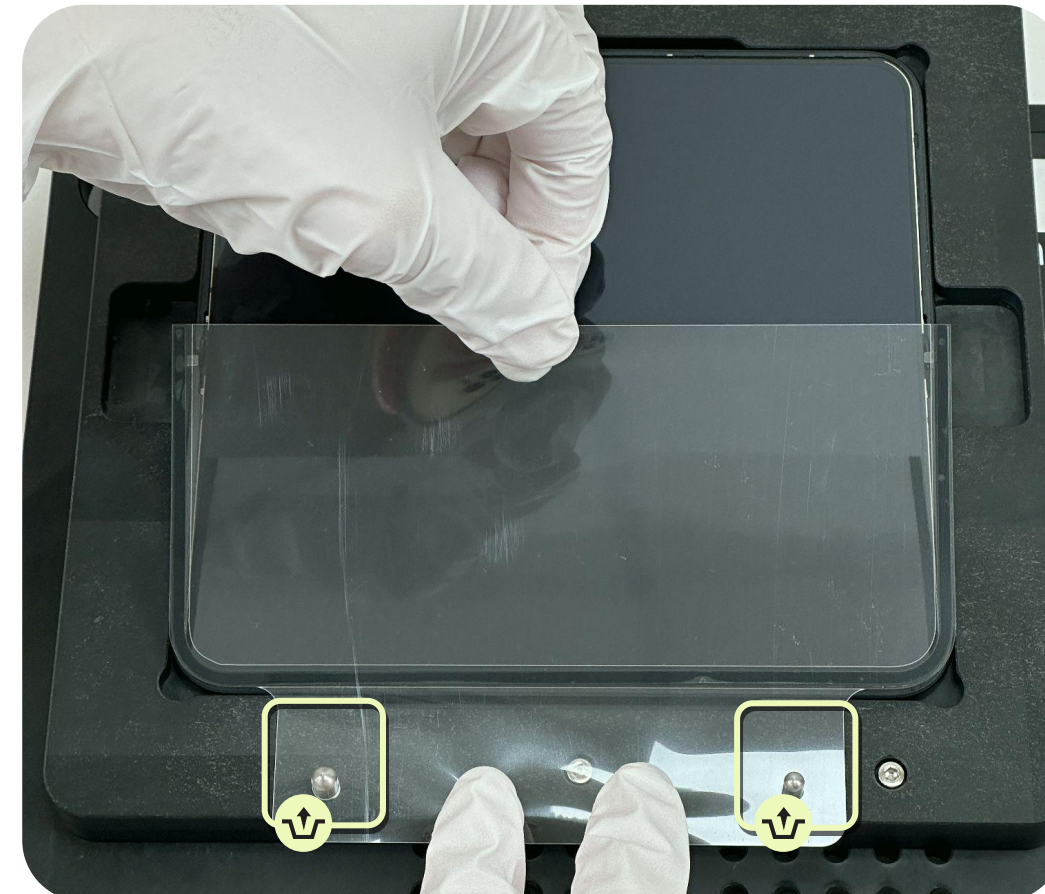
Assemble the flip trim

- Allow the flip trim to adhere naturally, press the edges near the hinge on both sides as shown in Fig 1.

- Push outward from the arrow to ensure that the trim is in the groove as shown in Fig 2.

Part: G730-08751-01 (Service trim flip)

⚠️ **Use caution**

Ensure that the environment is clean for this process.

Fig 1

Fig 2

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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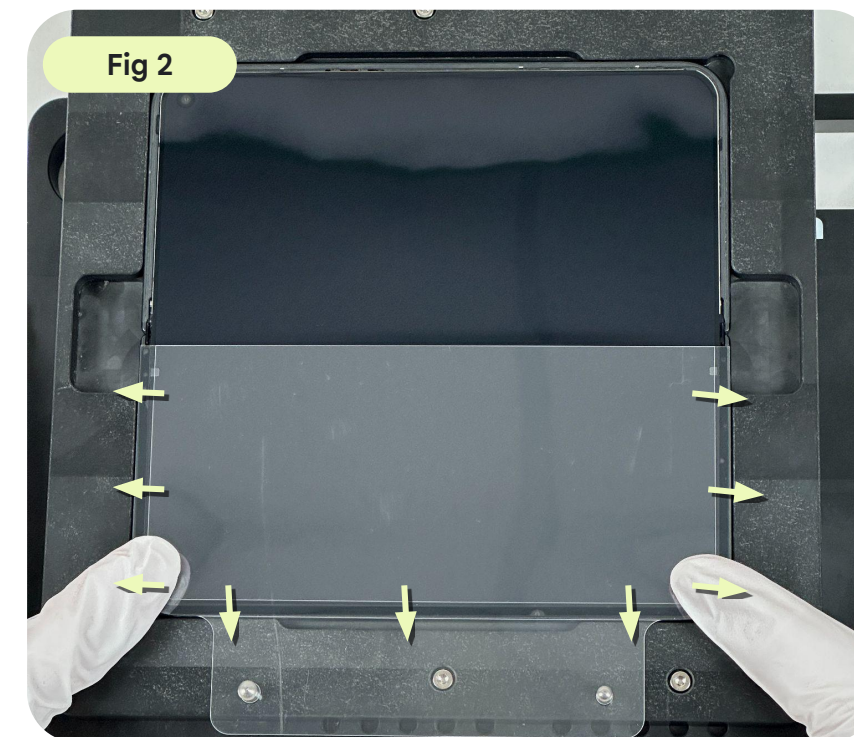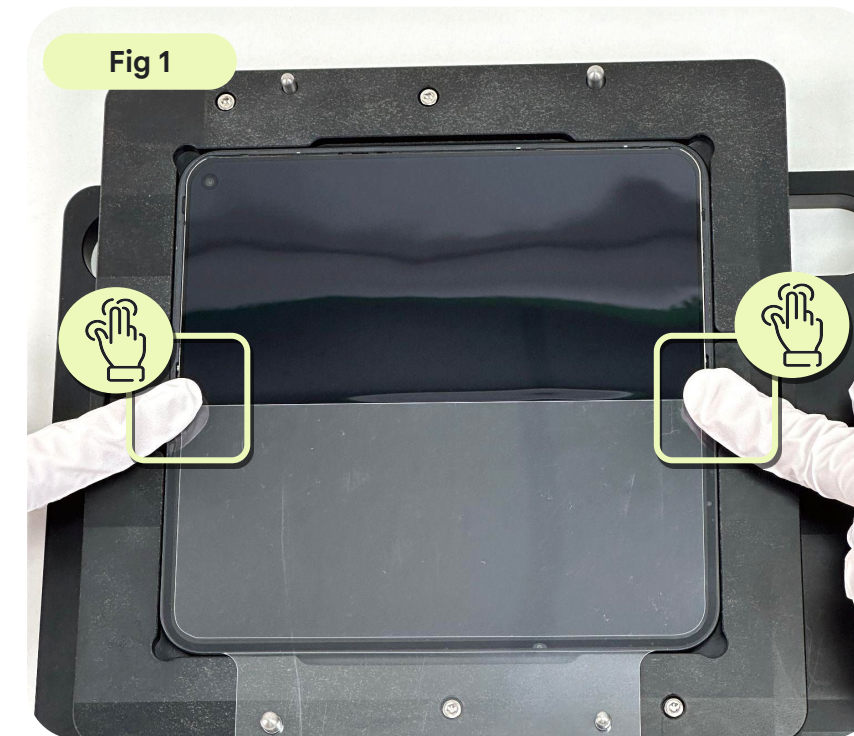
Remove the base trim release liner

- Slowly peel off the outer liner from the flip trim. Move the other hand along as you peel off the outer liner. Be careful not to touch the trim and blue liner.(Fig 1)

- Press the trim when use ESD tweezers to grab the first blue release liners carefully and repeat the same steps for 2nd and 3rd blue release liner. (Fig 2)

Fig 1

Part: G730-08752-01 (Service trim base)

⚠️ **Use caution**

Ensure that the environment is clean for this process.

Fig 2

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 55
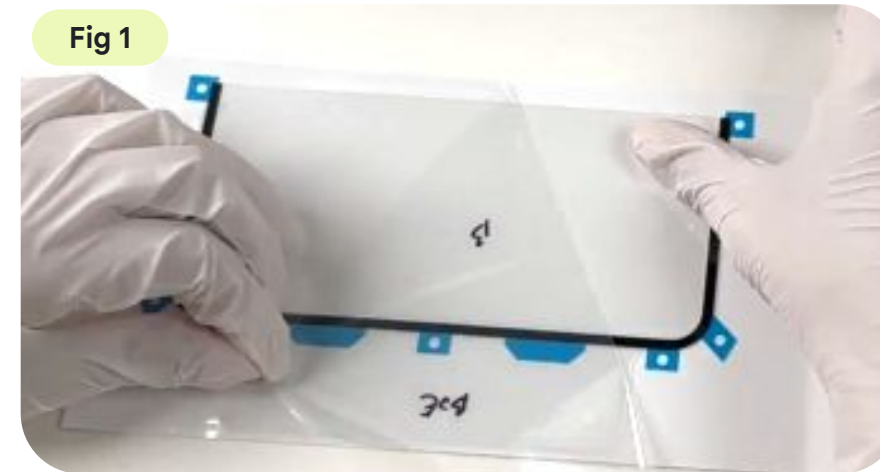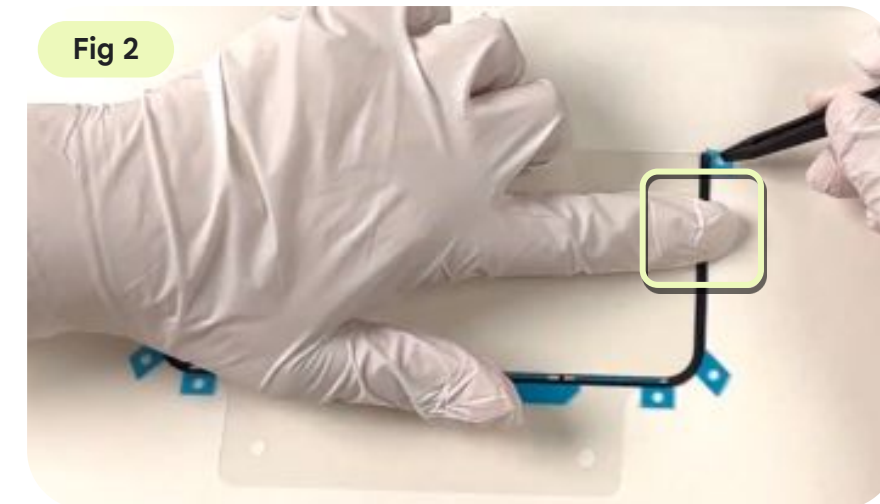
Place the base trim

- Align the **base trim** onto the two **Pixel 9 Pro Fold main holder** alignment pins without any shift or floating.

Part: G730-08752-01 (Service trim base)

⚠ **Use caution**

Ensure that the environment is clean for this process.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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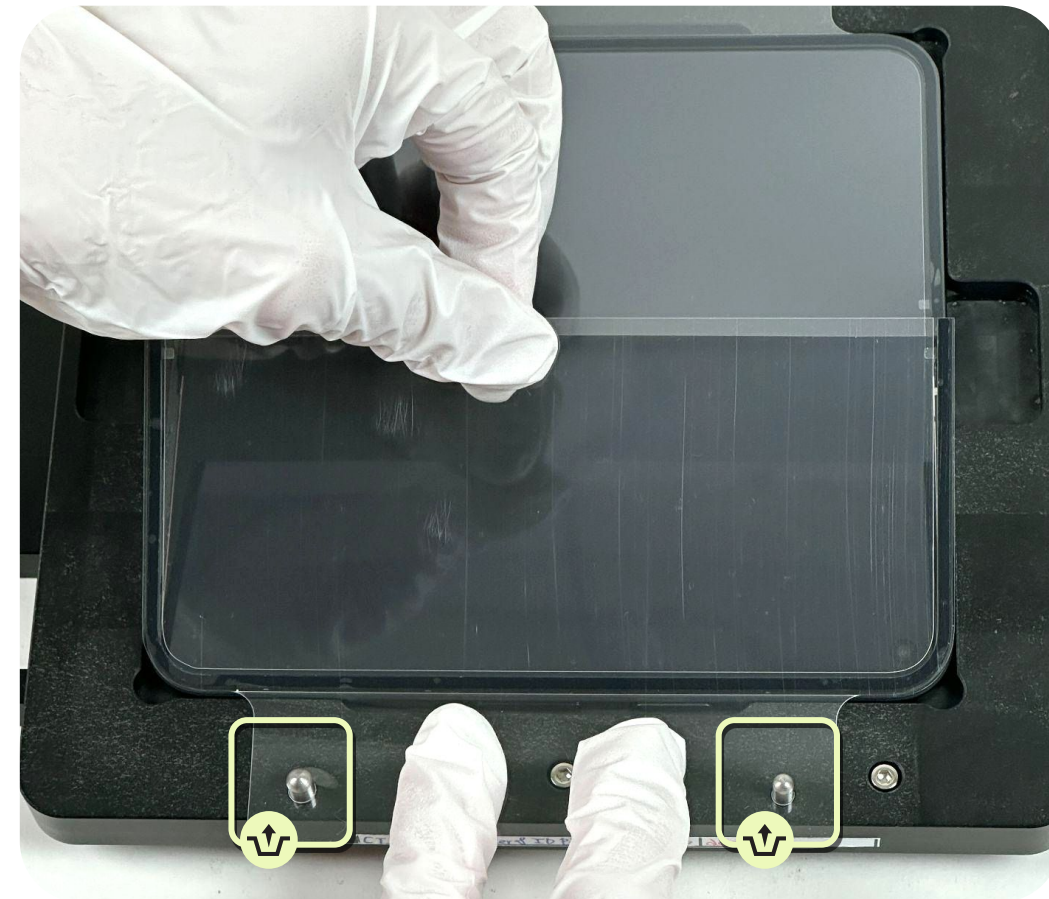
Assemble the base trim

- Let the base trim adhere naturally, press the heads on both sides as shown in Fig 1.

- Push outward from the arrow to ensure that the trim is in the groove as shown in Fig 2.

Part: G730-08752-01 (Service trim base)

⚠ **Use caution**

Ensure that the environment is clean for this process.

Fig 1

Fig 2

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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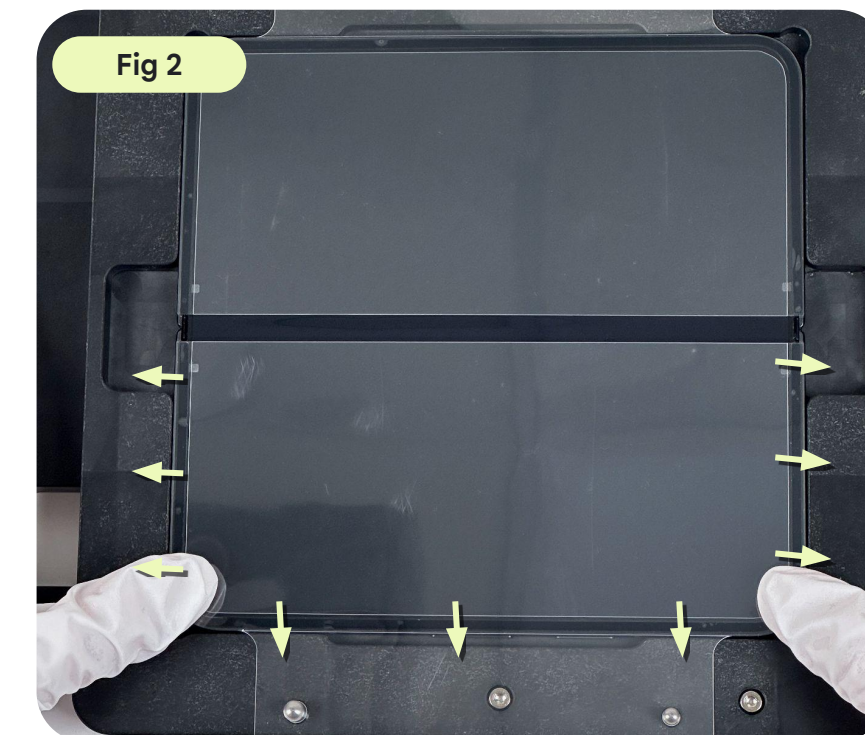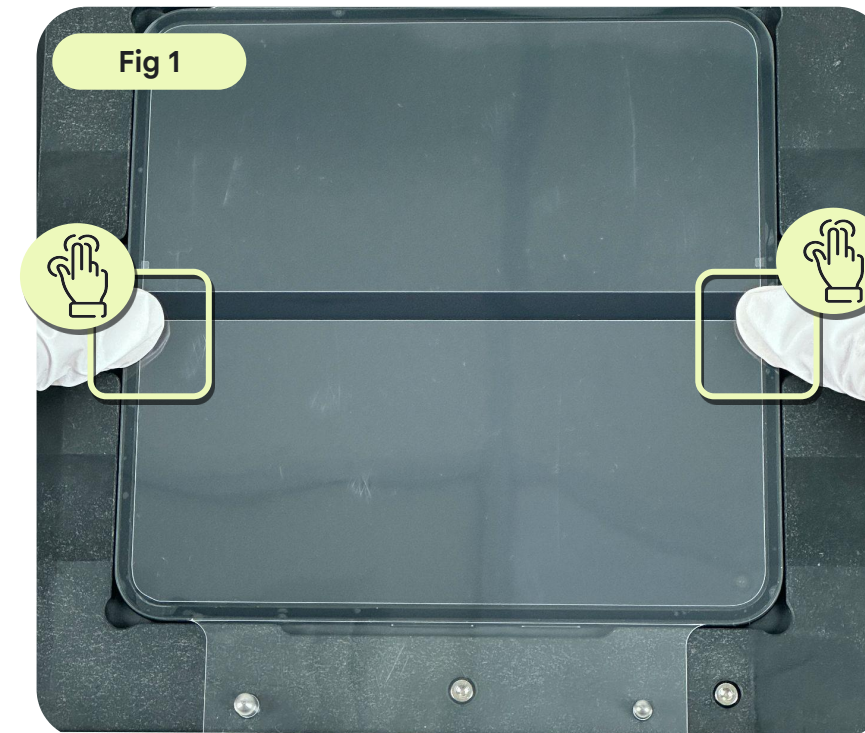
Press the base and the flip trim

- Place the **Pixel 9 Pro Fold trim press rubber** on the **Pixel 9 Pro Fold main holder** as shown in Fig 1.

- Place the **universal press plate 12 mm** on the **Pixel 9 Pro Fold trim press rubber** as shown in Fig 2.

- Place it in **the universal press fixture** and press the handle down for 20 seconds.

- Repeat the above three steps for flip trim.

⚠️ **Use caution**

Keep hands clear during operation.

Fig 1

Universal base

Fig 2

Universal-Press Plate 12mm

-G940-00736-00-0000

Fig 3

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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Tear off the liner

- Peel off the liners from the main holder.

- Make sure that there's no liner on the base trim and the flip trim.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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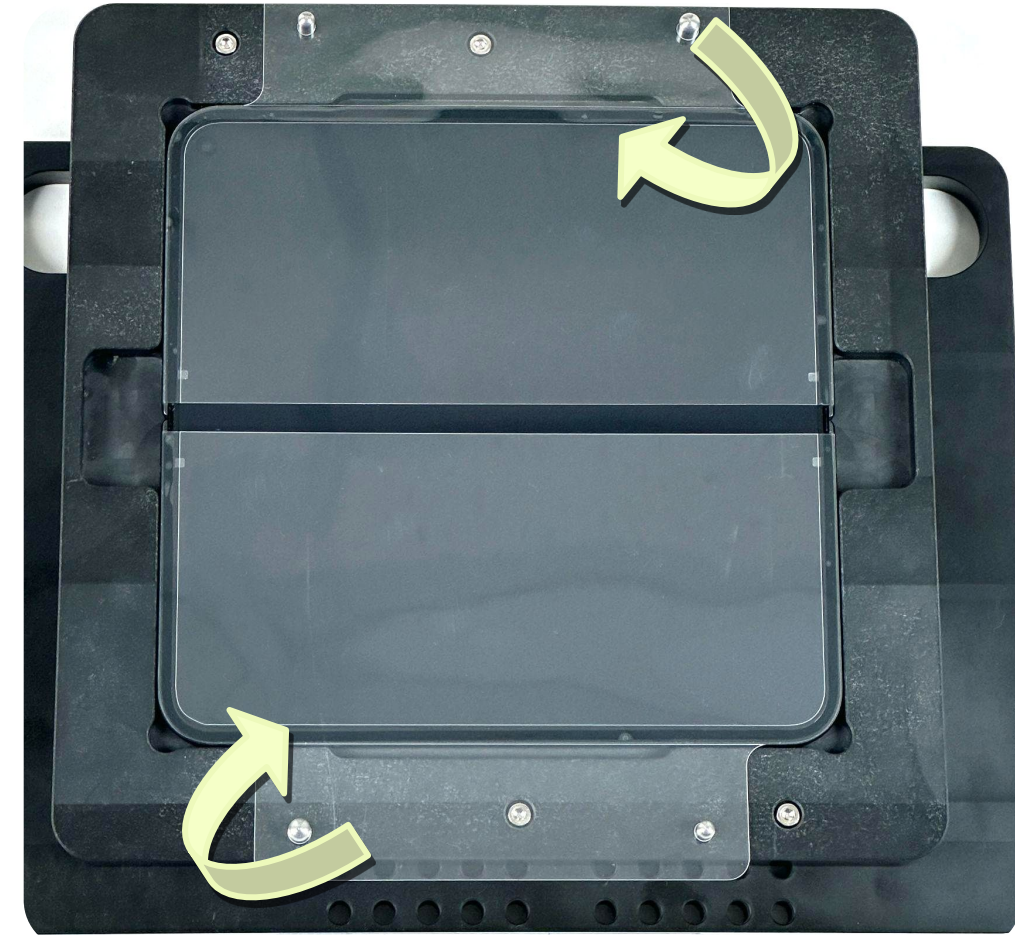
Pixel 9 Pro Fold repair manual

Repair flows

Disassembly order

Assembly order

Pixel 9 Pro Fold-base side (BG) disassembly flowchart

⊢▶	Must be removed before next Process	⊢▶	Optional to remove
🟢	Reusable without reclaim	🔵	Reusable with reclaim
⚫	Not reusable after disassembly		

BG sub → Base battery cowling → Inner front camera → Logic board → Inner display sub (Base side)

- Graphite sheet ⚫
- UWB FPC 🔵 → mmWave module 🔵
- IF FPC 🔵
- Rear camera 🟢
- Bottom speaker 🔵
- USB board 🔵
- Base battery ⚫
- Vibrator 🔵
- Side key and FPS 🔵

💡 **Base battery removal:**

To optimize for base battery removal and replacement:
Remove the BG sub, graphite sheet, base battery cowling, base battery.

Pixel 9 Pro Fold-flip side (OD) disassembly flowchart

▶ Should be removed before next process	⊢ ⇢ Optional to remove	🟢 Reusable without reclaim	🔵 Reusable with reclaim	⚫ Not reusable after disassembly

Outer display → Lower board → Flip battery → Inner display sub (Flip side)

Outer display → Flip battery and bottom bridge cowling 🟢

Lower board → Upper board 🟢

Upper board → Outer front camera 🟢

Inner display sub (Flip side) → Top speaker 🔵
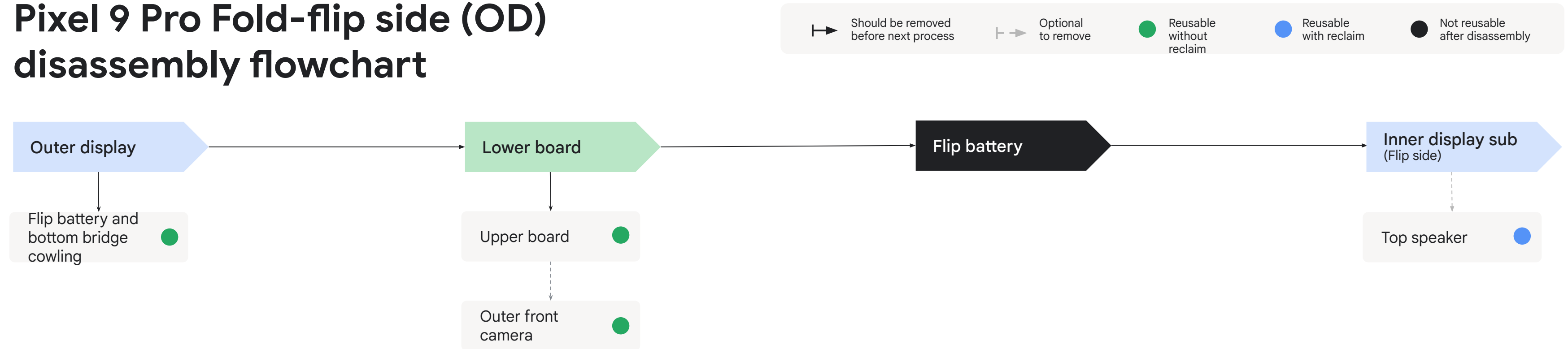
💡 **How to read this chart**

To replace the flip battery:
Remove the outer display, flip battery, bottom bridge cowling, lower board, then the flip battery.

💡 **Note**

Lower board and upper board are on the same layer. You may remove them independently.

Pixel 9 Pro Fold-base side (BG) assembly flowchart

● Assembled without fixture   ● Assembled with fixture

| Inner display sub (Base side) | → | Logic board | → | Base battery | → | BG sub |

Inner display sub (Base side) column:

- Side key and FPS ●
- USB board ●
- Vibrator ●
- Bottom speaker ●
- Rear camera ●
- IF FPC ●

Logic board column:

- Inner front camera ●
- mmWave module ●
- UWB FPC ●

Base battery column:

- Base battery cowling ●
- Graphite sheet ●
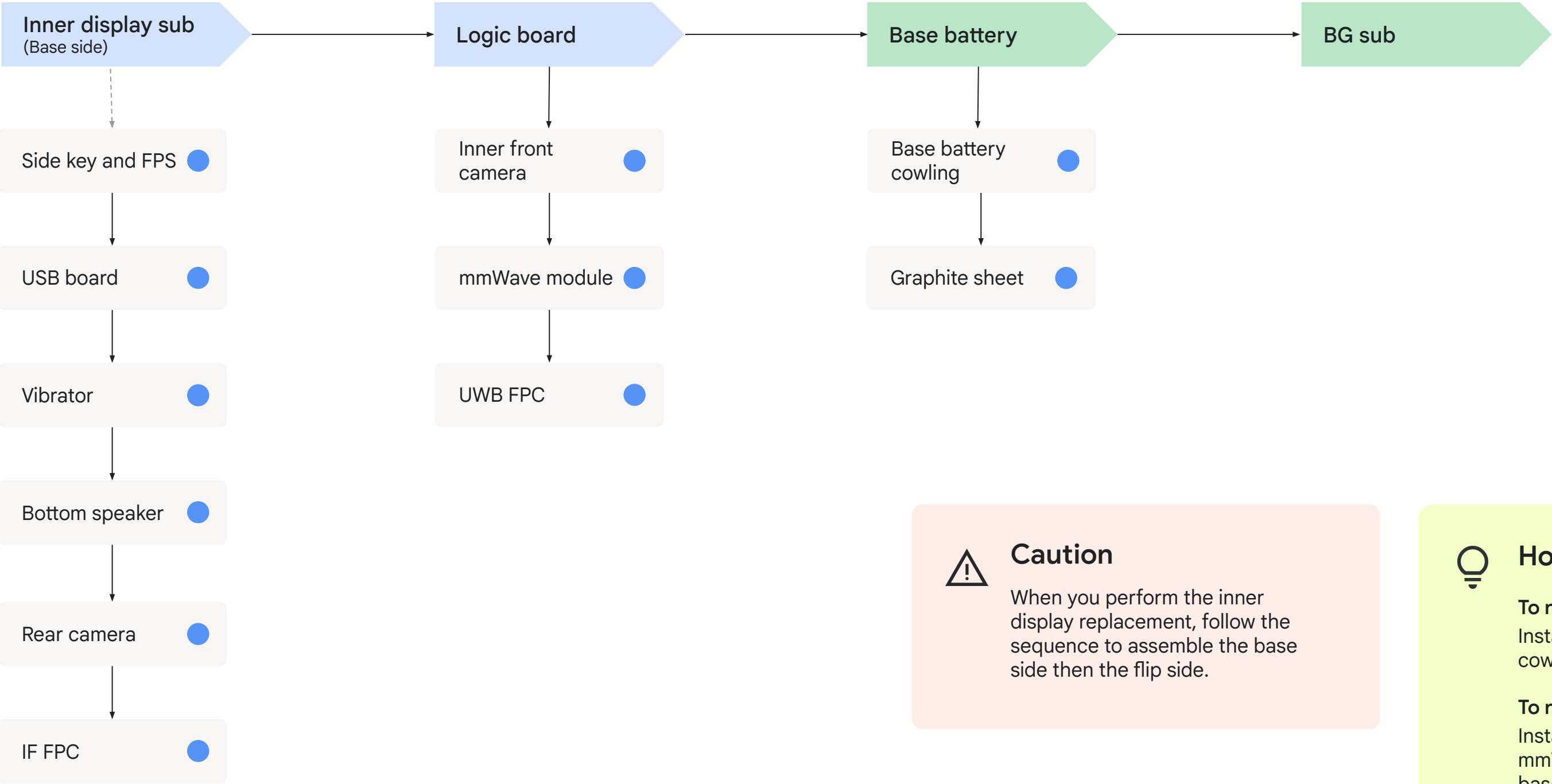
⚠ **Caution**

When you perform the inner display replacement, follow the sequence to assemble the base side then the flip side.

💡 **How to read this chart**

To reinstall the base battery:
Install the base battery, base battery cowling, graphite sheet, then the BG sub.

To reinstall the logic board:
Install the logic board, inner front camera, mmWave module, UWB FPC, base battery, base battery cowling, graphite sheet, then the BG sub.

Pixel 9 Pro Fold-flip side (OD) assembly flowchart

● Assembled without fixture   ● Assembled with fixture

Inner display sub (Flip side) → Flip battery → Lower board → Outer display

Inner display sub (Flip side) ⇢ Top speaker ●

Top speaker → Outer front camera ●

Outer front camera → Upper board ●

Lower board → Flip bottom bridge and battery cowling ●
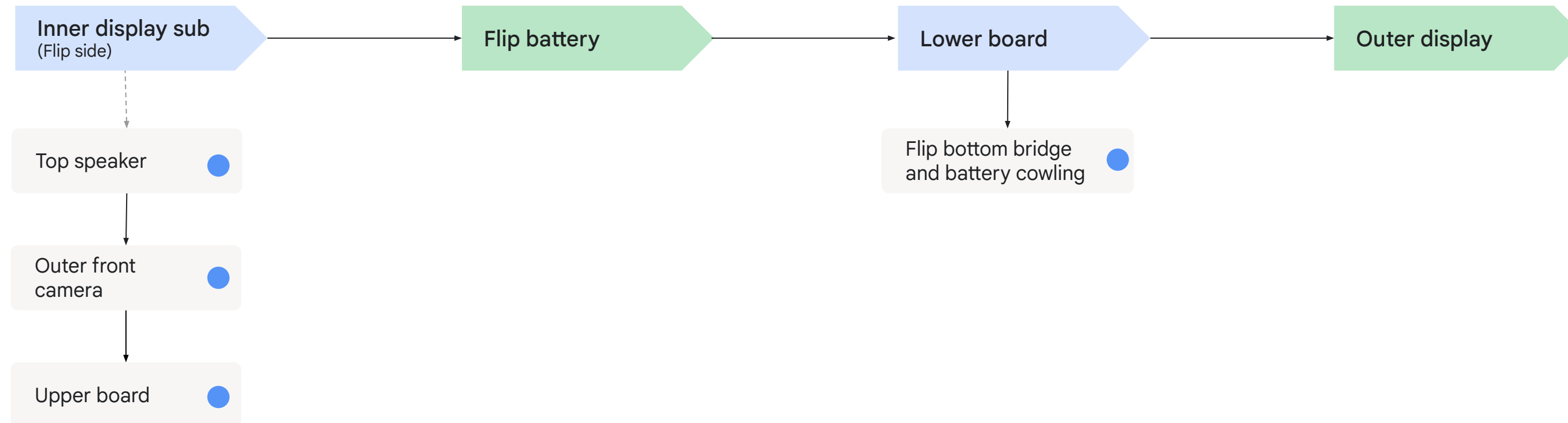
⚠ **Caution**

When you perform the inner display replacement, follow the sequence to assembly base side then the flip side.

💡 **How to read this chart**

To reinstall the flip battery:
Install the flip battery, lower board, flip bottom bridge, battery cowling, then the outer display.

To reinstall the lower board:
Install the lower board, flip bottom bridge, battery cowling, then the outer display.

Pixel 9 Pro Fold repair manual

Disassembly-base

BG sub	mmWave module	Bottom speaker
Graphite sheet	Inner front camera	USB board
Base battery cowling	Logic board	Base battery
UWB FPC	IF FPC	Vibrator
	Rear camera	Inner display sub

Disassembly instructions

BG sub

The base bottom cowling ensures that connectors remain engaged with the logic board and acts as a heatsink.

⚠ Use caution

Use safety gloves to handle damaged back glass as some splinter during removal could cause injury.

Apply protective film to the broken glass before removal.

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

✓ Prerequisites

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

🛠 Tools

Pixel 9 Pro Fold-main holder

Pixel 9 Pro Fold-BG press rubber

Pixel universal base

Universal press pate 12 mm

Universal press fixture

Torx plus 3IP screwdriver

Tweezers

Spudger

Opening pick

Big suction cup

3M AP111 primer

Absorption-bulb

⚒ Required parts

BG sub replacement
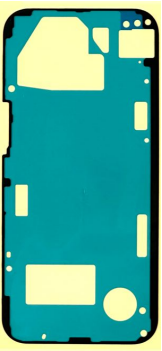
Here's the list of parts for the BG sub disassembly.

Reuse indications   🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly

BG sub 🔵	BG PSA ⚫	BG cowling 🟢	Screw ⚫	LED CPSA ⚫
Multiple part numbers	G806-07178-01	G730-07485-00	G250-06988-01	G806-09190-00

Avoid the spring damage

- Before you remove the BG sub, be aware that there are springs underneath (refer to the figure for locations).

- Avoid damage to the springs during the disassembly process.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 68
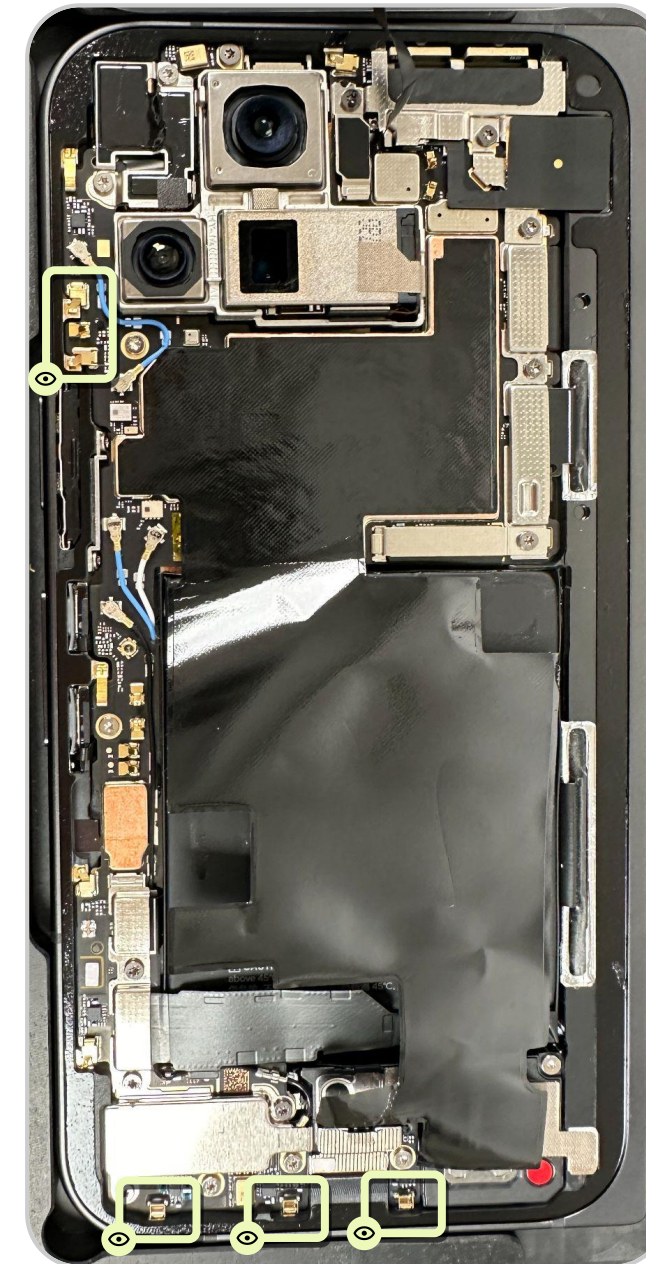
Mark your opening picks

- Use opening picks to separate the BG from the enclosure. If inserted too far, a pick can cause damage to the device.

- There are two different widths of adhesive on the device and these are used in the next steps.

- Measure 4.5 mm and 3.5 mm from the tip and mark the opening pick with a permanent mark.

⚠️ **Use caution**

Follow the steps to mark your pick and prevent damage.

3.5 mm

4.5 mm

Thickness: Less than 1 mm

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 69
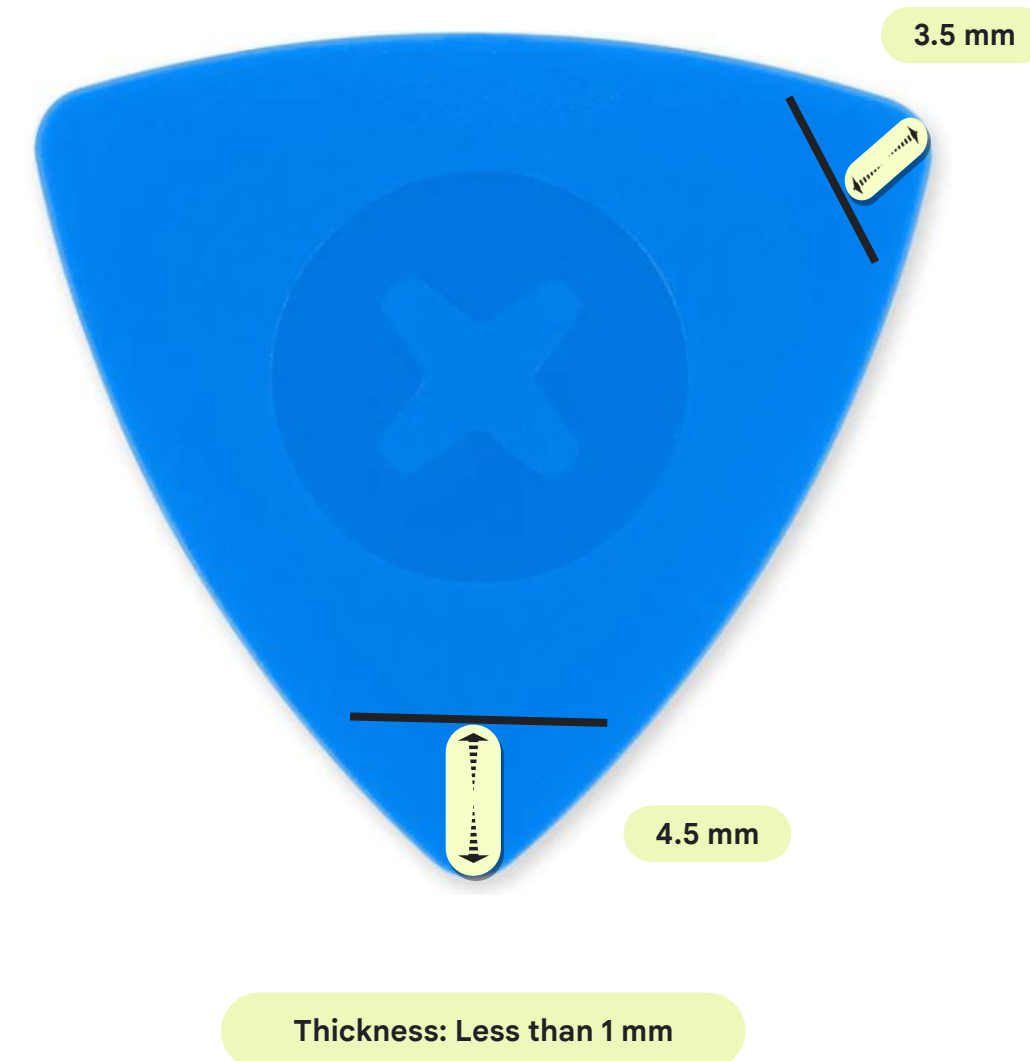
Separate the BG

- Apply a suction cup to the BG, as close to the USB side as shown in Fig 1.

- Hold the device with one hand and pull up the large suction cup with another hand strongly, until a gap between the BG and the enclosure. *Don't* let the device open as shown in Fig 2.

- Insert an opening pick into the gap as shown in Fig 3.

⚠️ **Use caution**

Don't insert your opening pick deeper than 3.5 mm when you separate the adhesive, as you risk damage to the spring contacts.

No

Fig 1

USB side

Fig 2

Fig 3

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 70
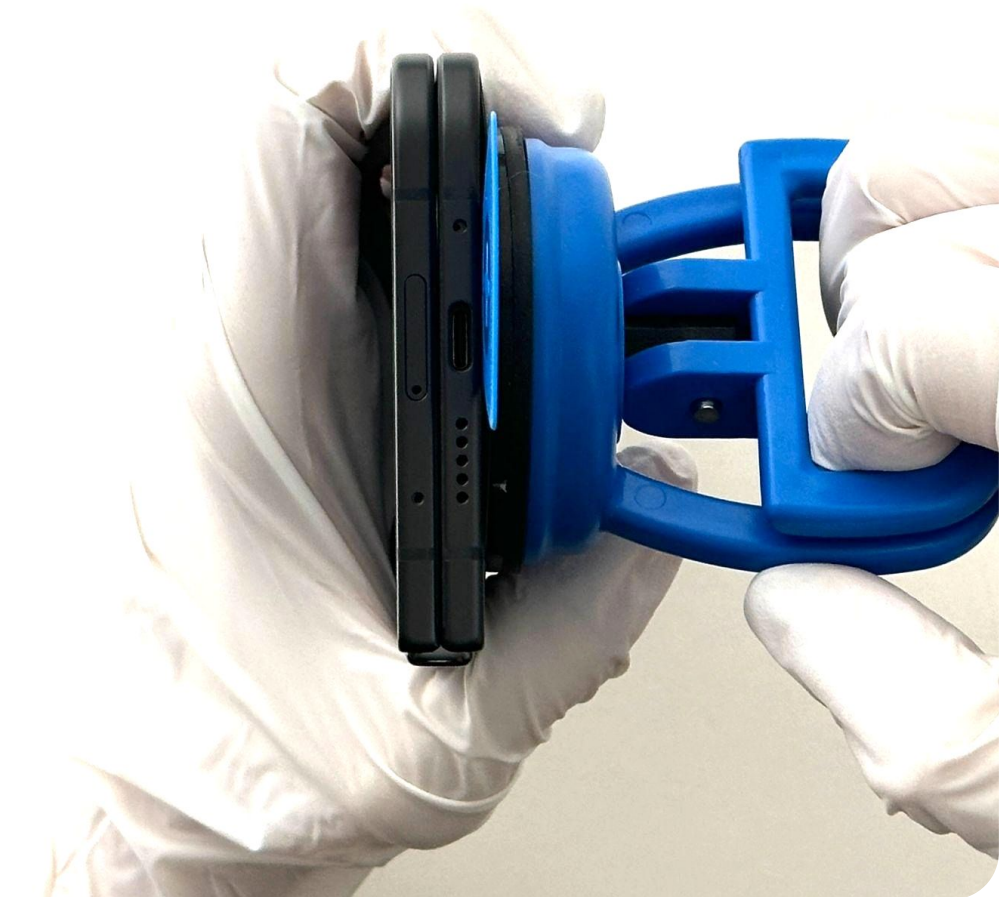
Separate the BG adhesive

Manually slide clockwise in the sequence:

Cut adhesive on the left edge where PSA is smaller, then open toward the hinge to separate the larger adhesive side.

Disassemble sequence:

1 (insert opening pick with 3.5 mm) ➜ **2** (3.5 mm)➜ **3** (3.5 mm) ➜
4 (3.5 mm) ➜ **5** (4.5 mm)

⚠️ **Use caution**

Be careful around power key area
to avoid damage to the spring.

Disassemble sequence:

1 (insert the pick) ➜ 2 ➜ 3 ➜ 4 ➜ 5

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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Prop up the BG

After the device is open, use the **large suction cup** to hold the BG.

⚠️ **Use caution**

Don't fully remove the BG yet, as it's still connected to the device by the flam board flex.
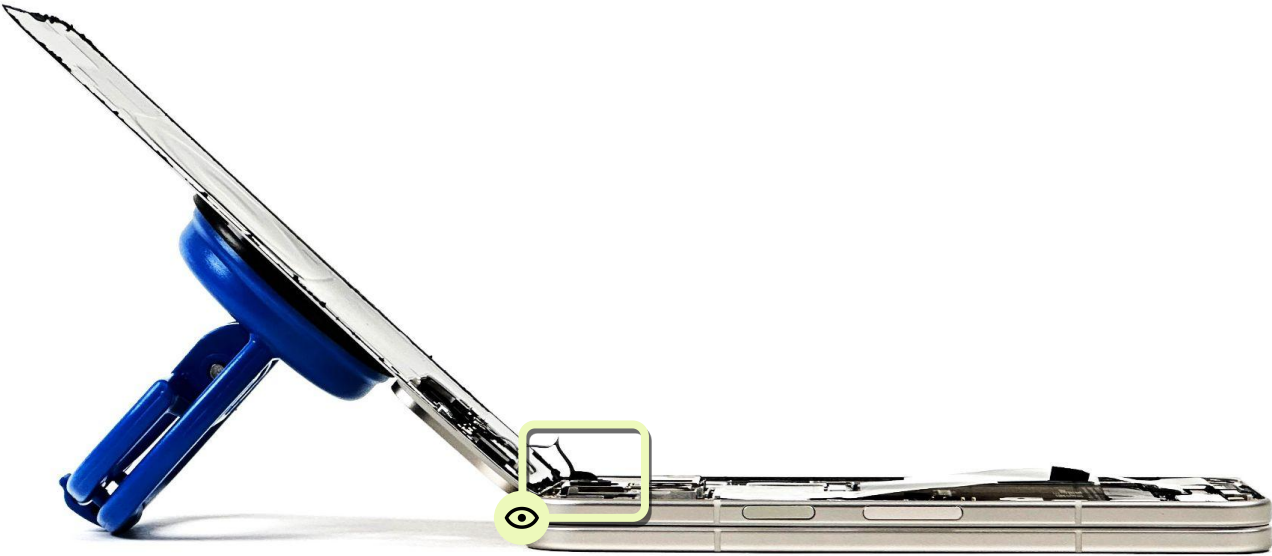
BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 72

Remove the flam FPC cowling

- Remove the flam FPC cowling **screw** with the **torx plus 3IP screwdriver.**

- Remove the **flam FPC cowling.**

Part: G250-06988-01 (Screw)

Part: G730-07485-00 (Flam FPC cowling)

⚠️ ## Use caution

Don't **reuse the screw.**

Be careful not to damage the adjacent battery, flam board flex, components, and springs.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 73
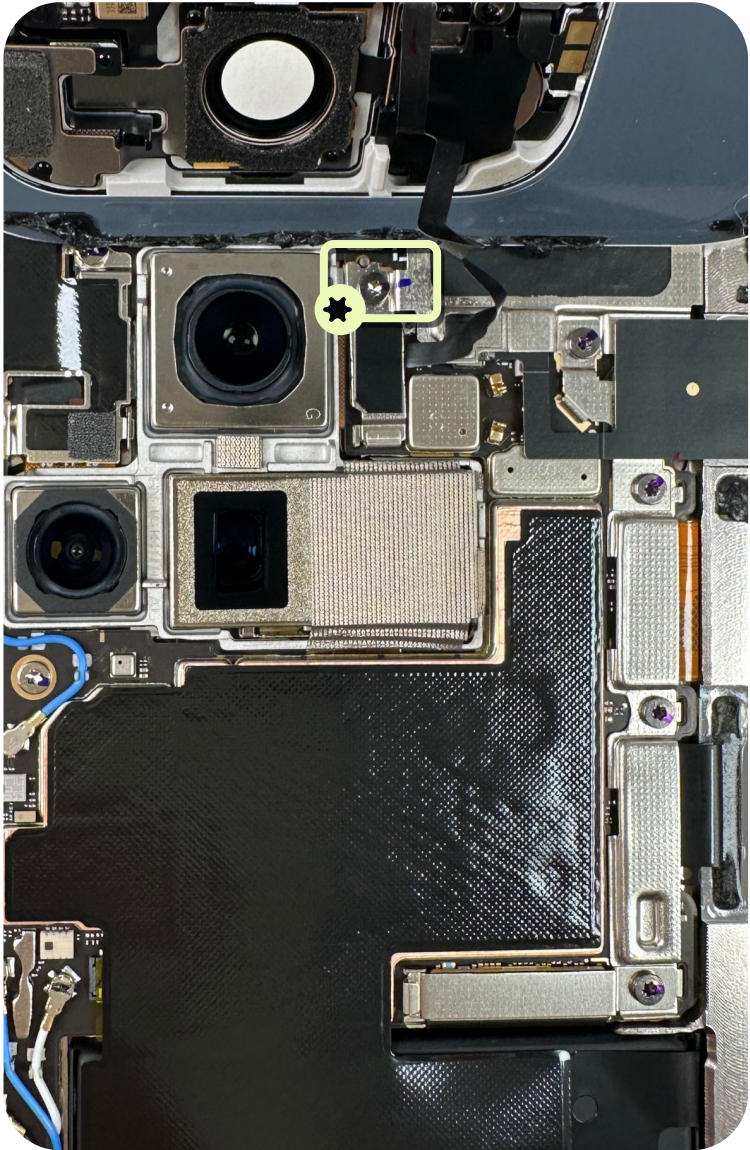
Disassembly
instructions

Graphite sheet

Graphite sheets are used to conduct heat
and provide electromagnetic shielding.

⚠️ Use caution

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

✓ Prerequisites

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

- **BG sub**

🛠️ Tools

Pixel 9 Pro Fold-main holder

Pixel universal base

Pixel 9 Pro Fold-BG PSA align

Absorption-bulb

Tweezers

⚒ Required parts

Graphite sheet

Here's the list of parts for the graphite sheet disassembly.

Reuse indications   ● Reusable without reclaim   ● Reusable with reclaim   ● Not reusable after disassembly

Graphite sheet
G864-00666-00

●

BG Sub   **Graphite Sheet**   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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Finished! Need assembly instructions? ➜

Remove the graphite

- Peel the bottom of the **graphite sheet** toward the top of the device slowly by hand.

- Part of the sheet is lightly adhered to the copper foil on the **logic board.** So slowly peel it away and ensure that there are no breaks in the copper foil.

Part: G864-00666-00 (Graphite sheet)

⚠️ **Use caution**

Be careful not to puncture the battery.

Don't reuse the part.
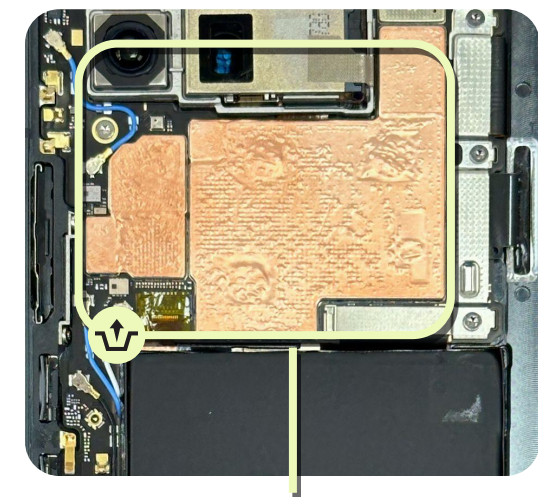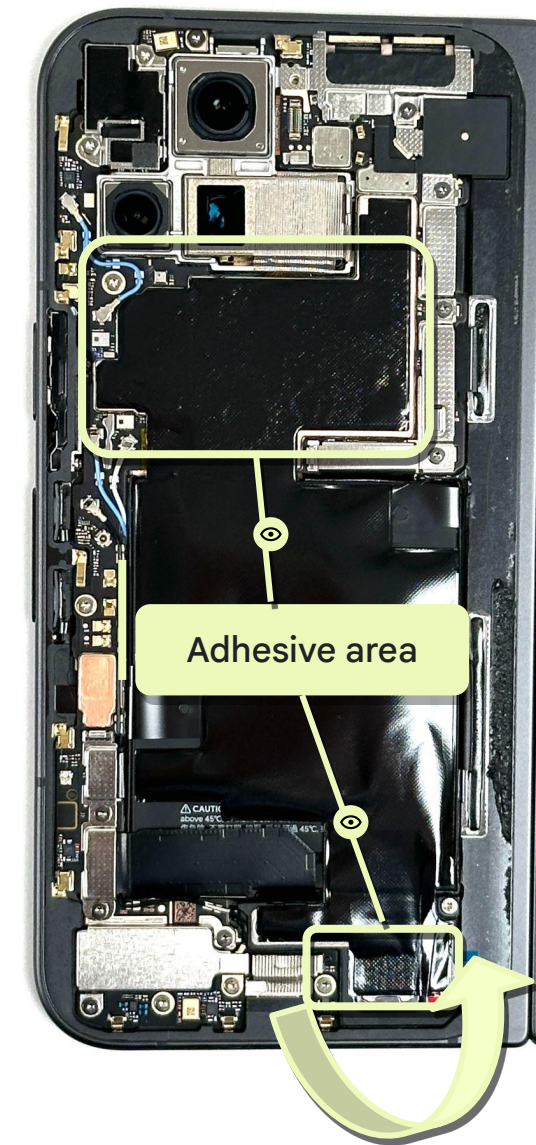
Adhesive area

Copper foil area

BG Sub   **Graphite Sheet**   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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Disassembly
instructions

Base battery cowling

The base battery cowling ensures that connectors remain engaged with the logic board and acts as a heat sink.

⚠️ **Use caution**

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

✓ **Prerequisites**

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

- **BG sub**

🛠️ **Tools**

Pixel 9 Pro Fold-main holder

Pixel universal base

Tweezers

Spudger

Torx plus 3IP screwdriver

🔧 Required parts

Base battery cowling

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

Reuse indications   🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly

Base battery cowling 🟢	Screw*6 ⚫	mmWave cowling 🔵	Base top bridge cowling 🟢	Base bottom bridge cowling 🟢	Fixture board 🟢
G730-07488-00	G250-06988-01	G730-07648-00	G730-07491-00	G730-07492-00	G940-00932-00

Remove the screws

- Separate the UWB FPC from the enclosure, there are two foams under it, so slowly peel it away as shown in Fig 1.

- Remove **six screws** with the **torx plus 3IP screwdriver.**

- Remove the **base battery cowling, mmWave cowling, base top bridge cowling, and the bottom bridge cowling.**

Part: G250-06988-01 *6 (Screws)

Part: G730-07488-00 (Base battery cowling)

Part: G730-07648-00 (mmWave cowling)

Part: G730-07491-00 (Base top bridge cowling)

Part: G730-07492-00 (Base bottom bridge cowling)

Fig 1

2 foams area

⚠️ **Use caution**

Be careful when you use the screwdriver. *Don't* **accidentally damage the adjacent battery.**

Incorrect use of the screwdriver could cause injury to you or others or damage to the battery or the product.

💡 **Note**

Don't reuse the screws.

BG Sub   Graphite Sheet   **Base Battery Cowling**   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 79
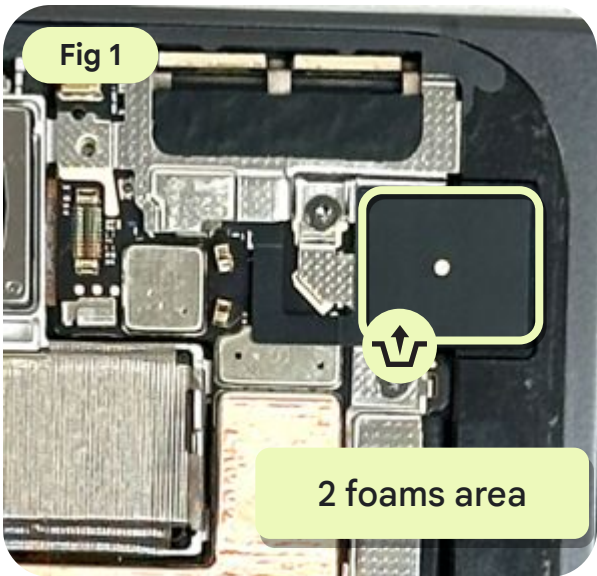
Disconnect the base battery

- Loosen the base battery B2B connector and the USB board B2B connector from the **logic board.**

> ### Note
>
> Use the spudger to avoid damage to the components.

BG Sub   Graphite Sheet   **Base Battery Cowling**   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 80
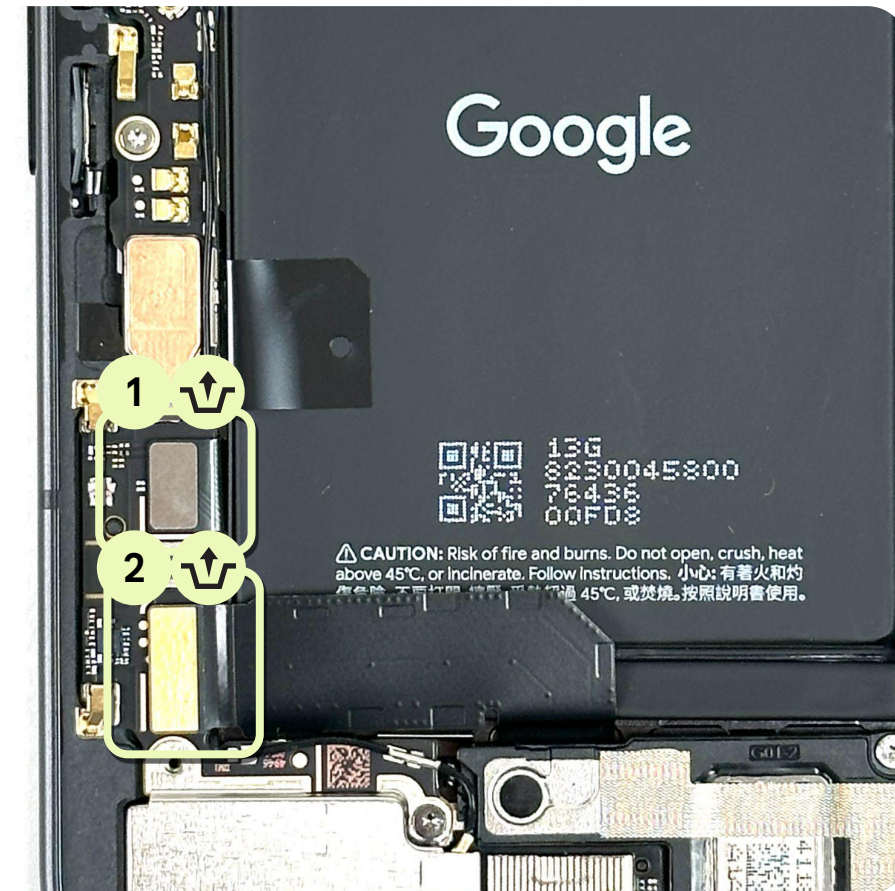
Finished! Need assembly instructions? ➜

Disconnect the bottom bridge FPC

- Disconnect the bottom bridge FPC B2B connector from the **logic board with the spudger** as shown in Fig 1.

- Connect the fixture board to the bottom bridge FPC B2B connector, and the right light turns on. Then press the button, the red light is turned off.

- Disconnect the fixture board.

> **Part: G940-00932-00** (Fixture board)

💡 **Note**

Use the spudger to avoid damage to the components.

⚠️ **Use caution**

Connect the fixture board to turn off the power from the flip side while you just proceed to the base side's parts replacement, only except BG itself.

Fig 1

BG Sub   Graphite Sheet   **Base Battery Cowling**   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub
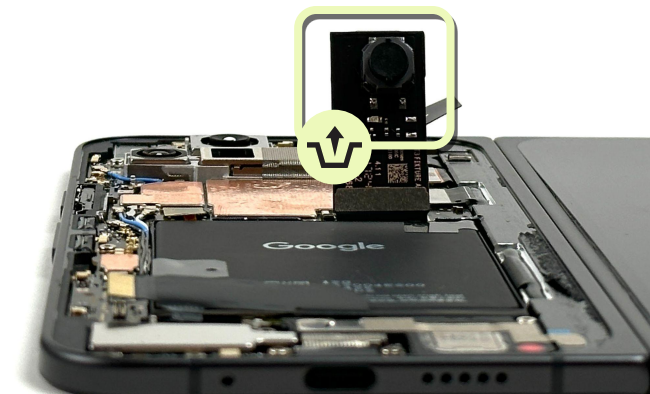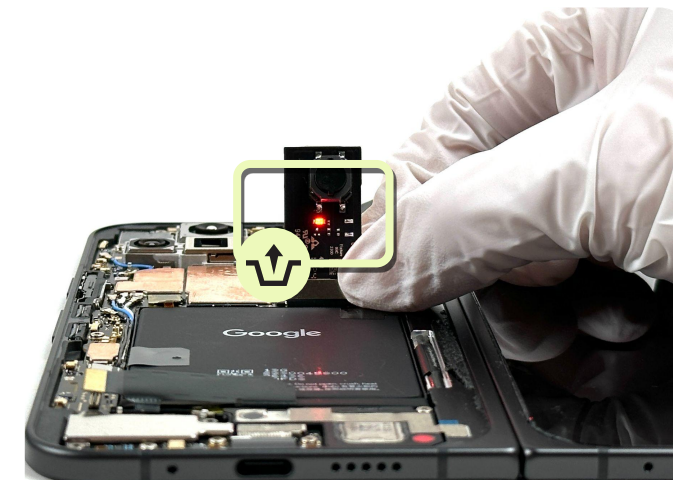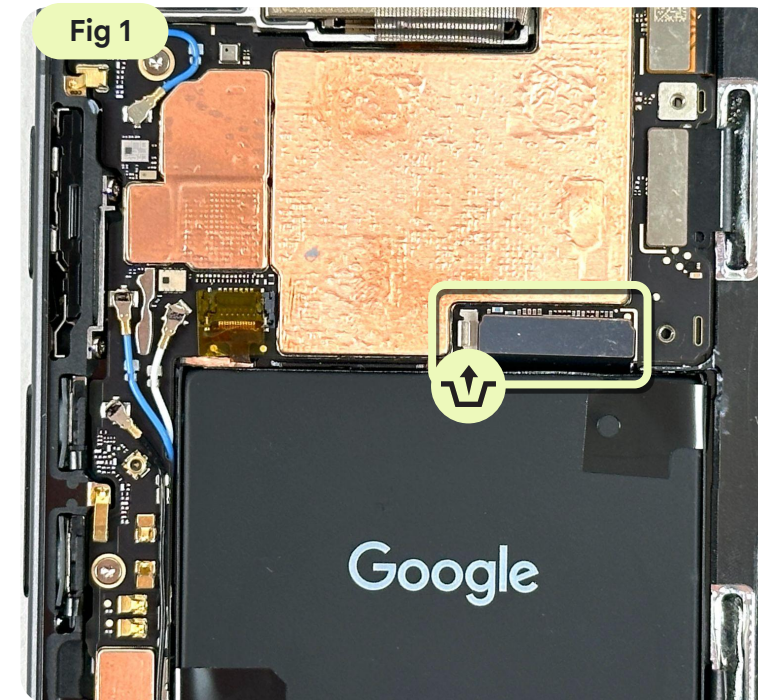
Disassembly
instructions

UWB FPC

UWB FPC is connected to the **logic board.**

⚠ Use caution

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

✓ Prerequisites

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

BG sub

🛠 Tools

Pixel 9 Pro Fold-main holder

Pixel universal base

Tweezers

Spudger

Torx plus 3IP screwdriver

IPA and cloth

🛠 Required parts

UWB FPC

Here's the list of parts for the UWB FPC disassembly.

Reuse indications   🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly

UWB FPC
G867-00405-00

UWB foam
G806-09266-00

mmWave cowling PSA
G806-09400-00

Finished! Need assembly instructions? ➜

Disconnect the UWB

- Loosen the **UWB** flex connector from the **logic board with the spudger**.

- Remove the **UWB FPC**.

Part: G867-00405-00 (UWB FPC)

💡 **Note**

Use the spudger to avoid damage to the components.

BG Sub   Graphite Sheet   Base Battery Cowling   **UWB FPC**   nmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 84
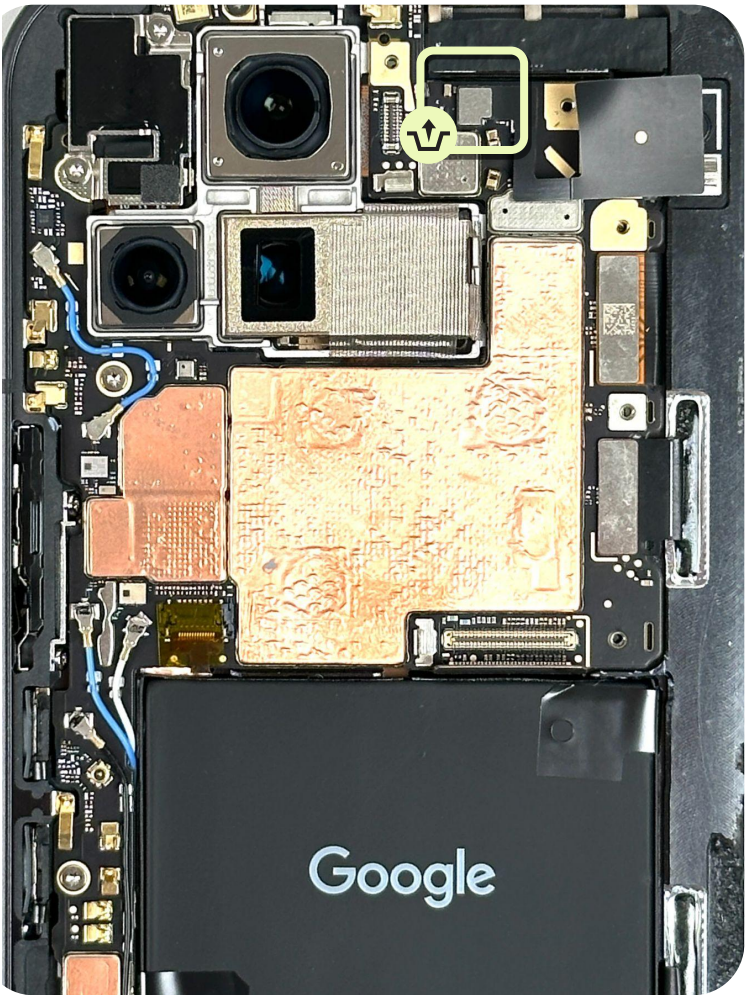
Disassembly
instructions

mmWave module

mmWave are the radio waves used to build a 5G network, that provides fast and reliable mobile data with low latency for the latest devices.

Use caution

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

Prerequisites

Here's the list of components that should be removed first:

- **BG sub**
- **UWB FPC**

Tools

Pixel 9 Pro Fold-main holder

Pixel universal base

Tweezers

Spudger

IPA and cloth

🔧 Required parts

mmWave module

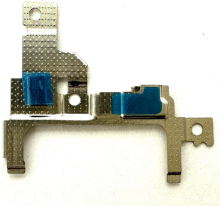Here's the list of parts for the mmWave module disassembly.

Reuse indications   🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly

mmWave module 🔵
G949-00921-00

FPS mylar ⚫
G806-09565-00

5G B2B sponge ⚫
G806-09501-00

5G thermal PAD ⚫
G864-00652-00

Remove the mmWave module

mmWave module is lightly adhered to the enclosure. Insert the spudger to detach the **mmWave module** from the **IF FPC B2B connector.**

Part: G949-00921-00 (mmWave module)

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   **mmWave module**   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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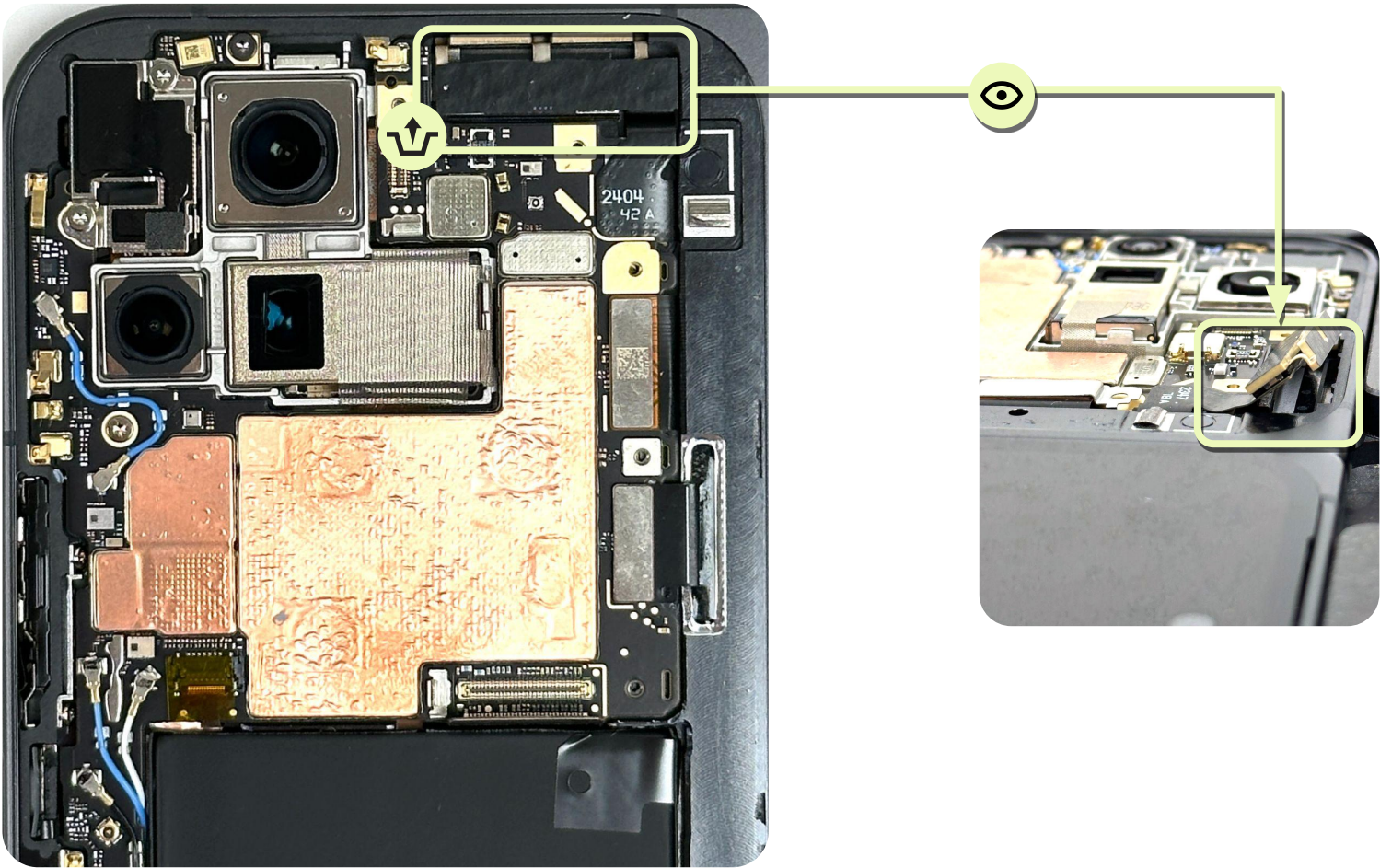
Finished! Need assembly instructions? ➜

Disconnect the top bridge FPC, inner display, and the FPS

- Disconnect the top bridge FPC B2B connector and the inner display B2B connector from the **logic board** with the spudger.

- Remove the yellow mylar of the FPS.

- Open the black zif connector with the spudger as shown in Fig 1. Release FPS FPC from the **logic board** as shown in Fig 2. Pull out the FPC with tweezers as shown in Fig 3.

Part: G806-09565-00 (FPS mylar)

💡 **Note**

Don't reuse the FPS mylar.

Use the spudger to avoid damage to the components.

⚠️ **Use caution**

Don't break the FPS FPC from the connector.

Fig 1

Fig 2

Fig 3

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   **mmWave module**   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub
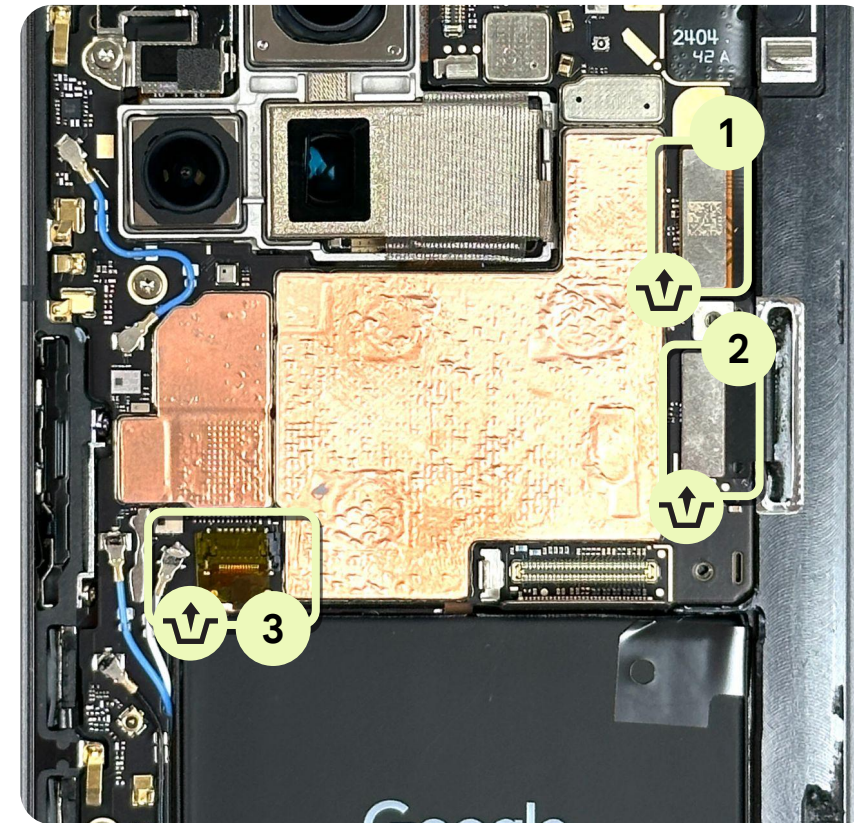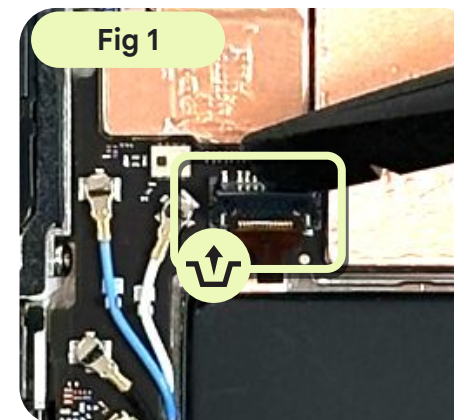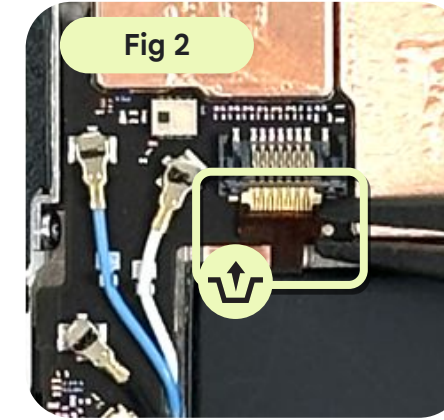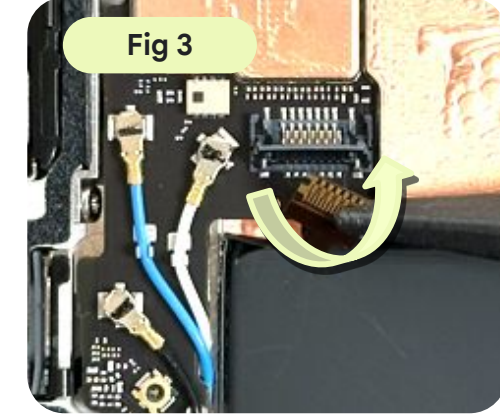
Disassembly
instructions

Inner front camera

The inner front camera is fastened to the enclosure and connected to the logic board.

Use caution

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

Prerequisites

Here's the list of components that should be removed first:

- **BG sub**
- **Inner FCAM**

Tools

Pixel 9 Pro Fold-main holder

Pixel universal base

Torx plus 3IP screwdriver

Tweezers

Spudger

🛠 Required parts

Inner front camera

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

Reuse indications   🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly

Inner front camera 🟢	FCAM cowling 🟢	Screw*2 ⚫	Inner FCAM PSA sponge ⚫
G949-00913-00	G730-07486-00	G250-06989-01	G806-09256-00

Remove the screws

- Remove two **FCAM cowling** screws with the **torx plus 3IP screwdriver.**
- Remove the FCAM cowling**.**

Part: G250-06989-01*2 (Screw)

Part: G730-07486-00 (FCAM cowling)

> ◯ Note
>
> ***Don't* reuse the screws.**

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   **Inner Front Camera**   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 91
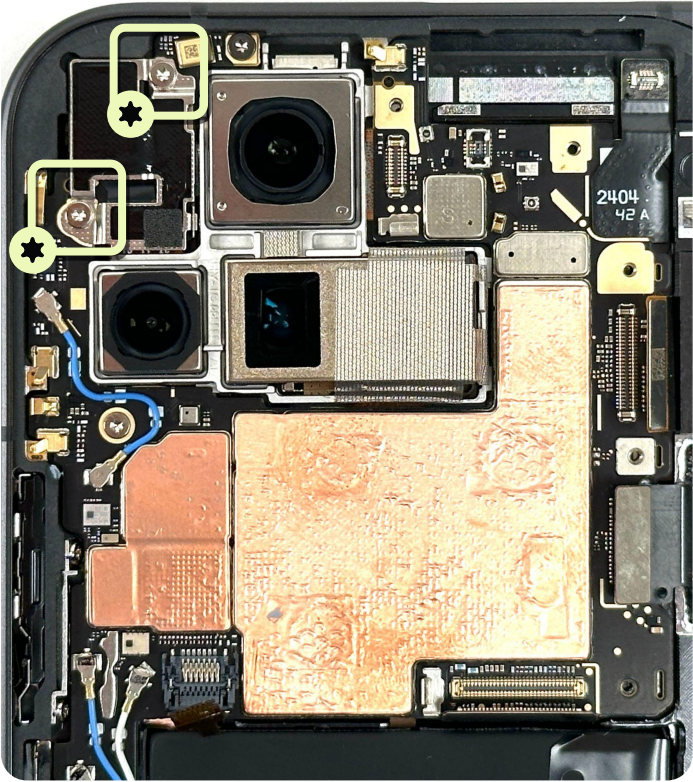
Finished! Need assembly instructions? ➜

Disconnect the inner FCAM

- Disconnect the **inner front camera** connector with the **spudger.**

- Remove the **inner front camera.**

Part: G949-00913-00 (Inner front camera)

💡 Note

Use the **spudger to** avoid damage to the components.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   **Inner Front Camera**   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 92
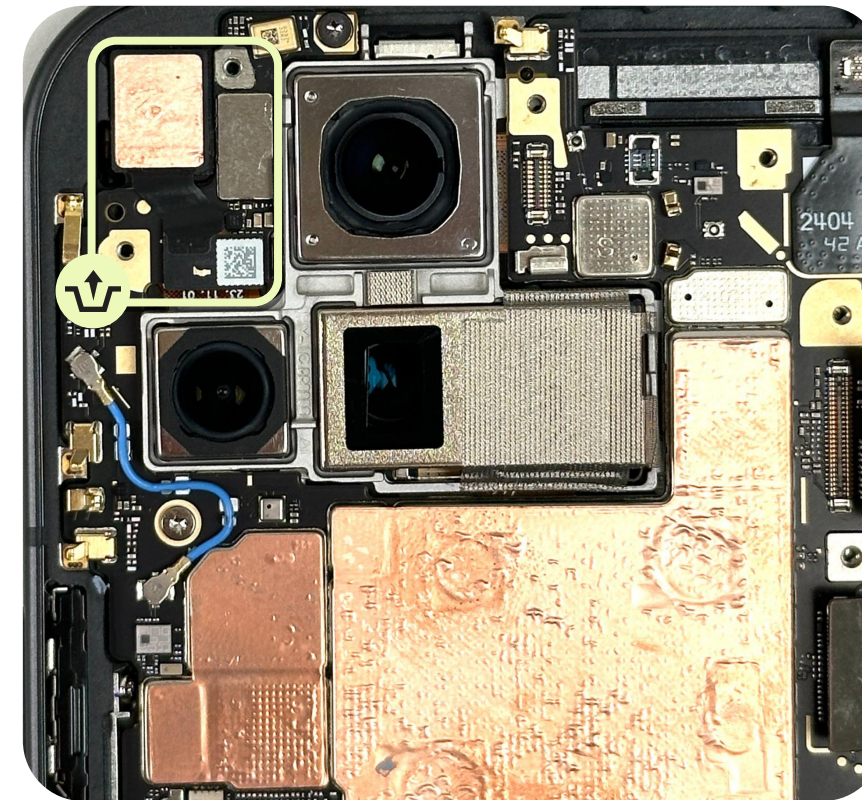
Disassembly
instructions

Logic board

The logic board consists of the memory, storage, processor, and communication components such as Wi-Fi and mmW.

⚠ Use caution

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

⊘ Prerequisites

Here's the list of components that should be removed first:

- **BG sub**
- **Graphite sheet**
- **Base battery cowling**
- **UWB FPC**
- **mmWave module**
- **Inner front camera**

🛠 Tools

Pixel 9 Pro Fold-main holder

Pixel universal base

Pixel 9 Pro Fold-thermal grease align

Torx plus 3IP screwdriver

Coaxial cable tool

Tweezers

Spudger

Dust-free cotton swabs

IPA and cloth

⚒ Required parts

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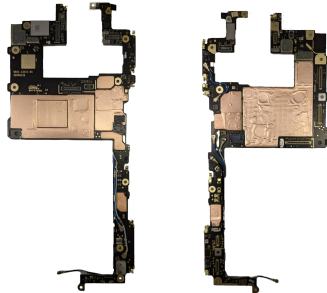
Here's the list of parts for the logic board disassembly.

Reuse indications   🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly
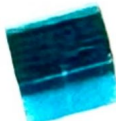
Logic board 🔵
Multiple part numbers

Screw*2 ⚫
G250-06988-01

Screw*2 ⚫
G250-06989-01

Screw ⚫
G250-06985-01

Vibrator cowling 🟢
G730-07489-00

Mic protective liner ⚫
G806-03591-01

USB coaxial cable ⚫
G821-00917-00

Thermal grease ⚫
G160-01058-00

Remove the MLB screws and the vibrator cowling

- Remove the **three logic board screws** and the **two vibrator cowling screws** with the **torx plus 3IP screwdriver**.

- Remove vibrator cowling.

| Part: G250-06989-01 *2 (Screw) |

| Part: G250-06988-01 *2 (Screw) |

| Part: G250-06985-01 (Screw) |

| Part: G730-07489-00 (Vibrator cowling) |

> ## Note
>
> *Don't* **reuse the screws.**

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   **Logic Board**   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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Unattach the cable

Unattach the **USB coaxial cable ANT2 connector** from the **USB board** with **tweezers**.

Part: G821-00917-00 (USB coaxial cable)

Note

Don't reuse the USB coaxial cable.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   **Logic Board**   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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Finished! Need assembly instructions? ➡

Remove the logic board

- Insert the flat end of the **spudger** under the top of the logic board, near the RCAM recess. Pry up to release the logic board.

- Be careful to not allow **thermal grease** to contact other components.

| Part: Multiple part numbers (Logic board) |

⚠ Use caution

Be careful to avoid damage to the components on the logic board.

Part of the logic board is adhered to thermal grease.
Use caution during removal.
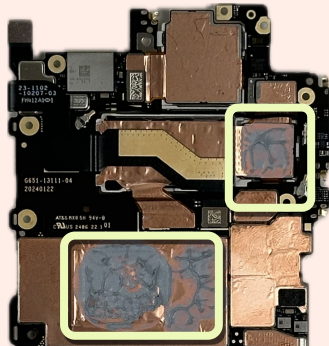
💡 Note

Don't wear gloves when you handle the logic board.

Grip the logic board with your fingers.

OK

Entry point.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   **Logic Board**   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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Disassembly
instructions

IF FPC

IF FPC is used for high frequency signal transfer,
and provides a reliable data transfer between the mmWave module
and the logic board.

⚠ Use caution

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

✓ Prerequisites

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

- **BG sub**
- **Graphite sheet**
- **Base battery cowling**
- **UWB FPC**
- **mmWave module**
- **Inner front camera**
- **Logic board**

⚒ Tools

Tweezers

Spudger

IPA and cloth

⚒ Required parts

IF FPC replacement

Here's the list of parts for the IF FPC disassembly.

Reuse indications   ● Reusable without reclaim   ● Reusable with reclaim   ● Not reusable after disassembly

IF FPC ●
G652-10207-04

IF FPC CPSA 1 ●
G806-09341-00

IF FPC CPSA 2 ●
G806-09340-00

Finished! Need assembly instructions? ➜

Remove the IF FPC

- Loosen the connector with the **spudger** to disconnect from the **logic board**.

- The **IF FPC** is adhered to the front and the back of the **logic board** with the adhesive, slowly peel it away.

Part: G652-10207-04 (IF FPC)

CPSA area

Front side

Back side

💡 **Note**

Use the **spudger** to avoid damage to the components.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   **IF FPC**   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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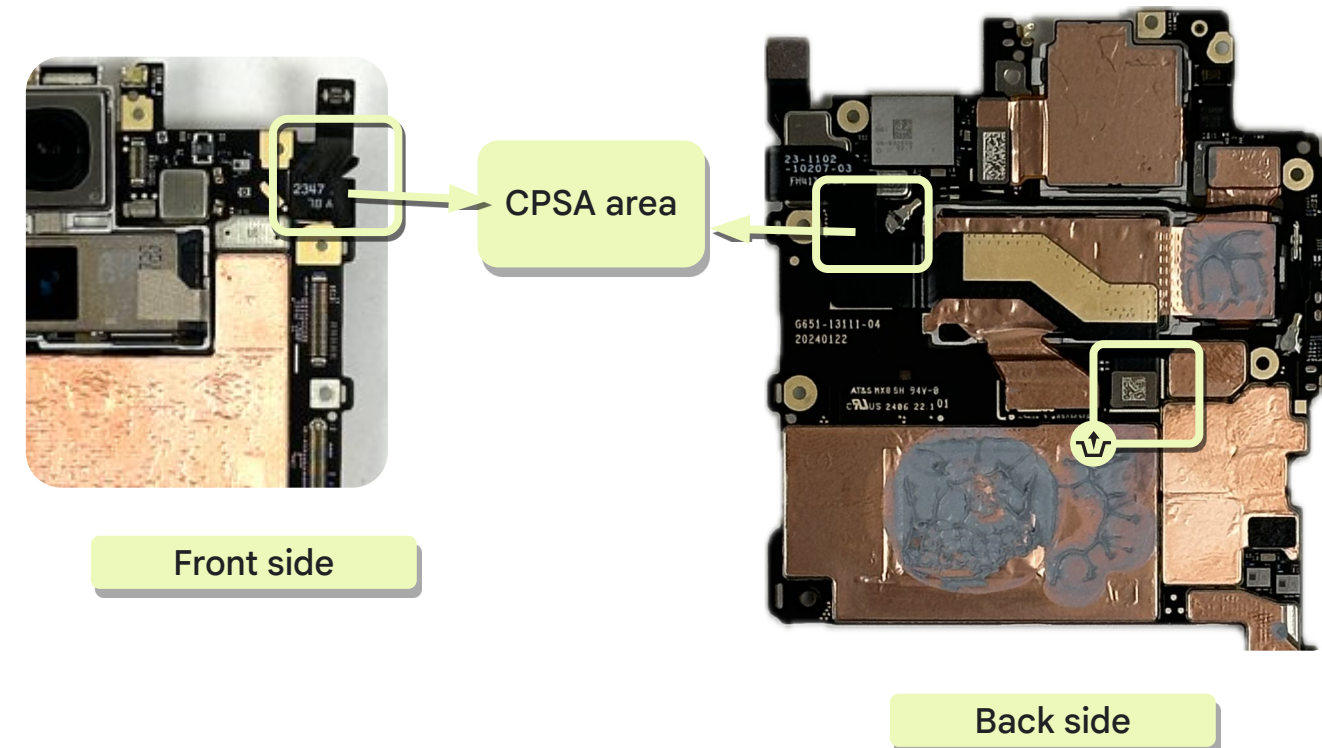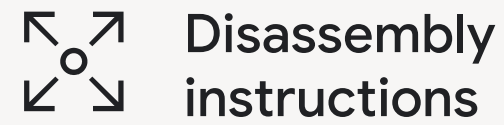
Disassembly instructions

Rear camera

The rear camera module carries all the rear cameras.
It isn't possible to replace a single camera and lens.

⚠ Use caution

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

✓ Prerequisites

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

- **BG sub**
- **Graphite sheet**
- **Base battery cowling**
- **UWB FPC**
- **mmWave module**
- **Inner front camera**
- **Logic board**
- **IF FPC**

⚒ Tools

Spudger

Tweezers
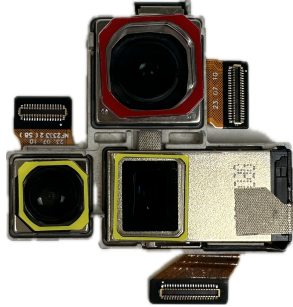
⚒ Required parts

Rear camera

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

Reuse indications   🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly

Rear camera 🟢
G949-00914-00

Coaxial cable RCAM ⚫
G821-00916-01

Remove the cable

- Remove the two **RCAM coaxial cable ANT3 connectors** from the **logic board** with **tweezers**.

- Release the **coaxial cable** from the channels.

Part: **G821-00916-00** (Coaxial cable RCAM)

> ○ **Note**
>
> *Don't* reuse the coaxial cable.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   **Rear Camera**   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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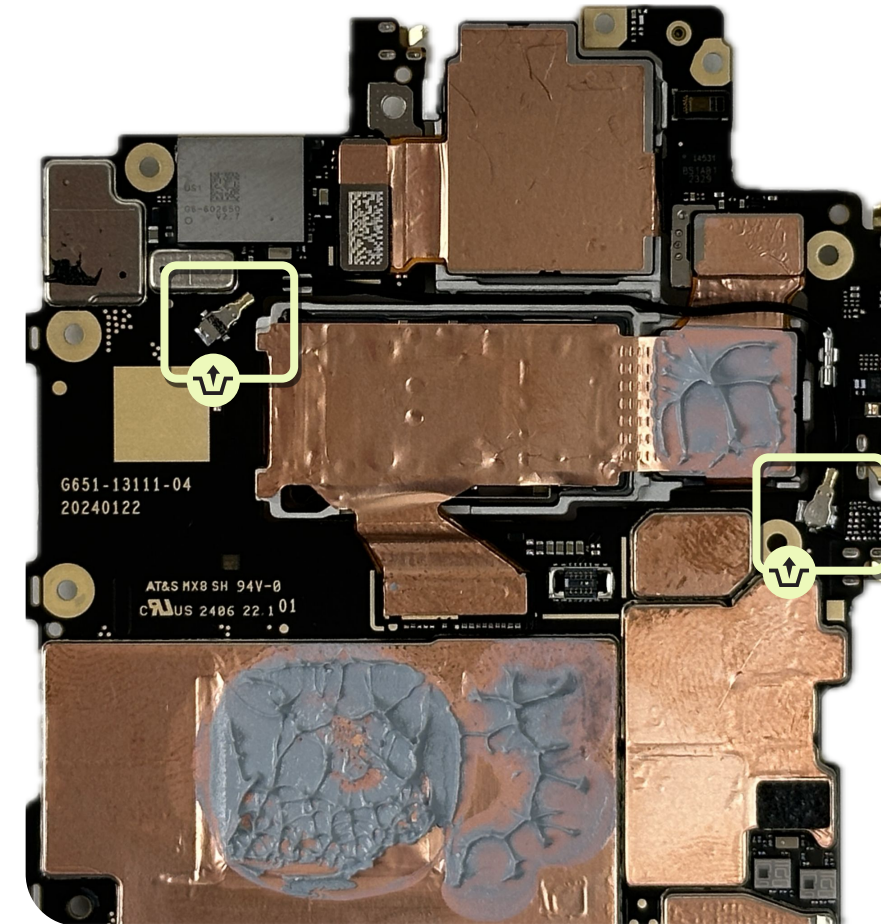
Finished! Need assembly instructions? ➜

Disconnect the rear cam

Loosen the three **rear camera** connectors and disconnect from the **logic board** with the **spudger.**

Part: G949-00914-00 (Rear camera)

💡 **Note**

Use the spudger to avoid damage to the components.

WIDE

UW

TELE

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   **Rear Camera**   Bottom Speaker   USB Board   Base Battery   Vibrator   Inner Display Sub

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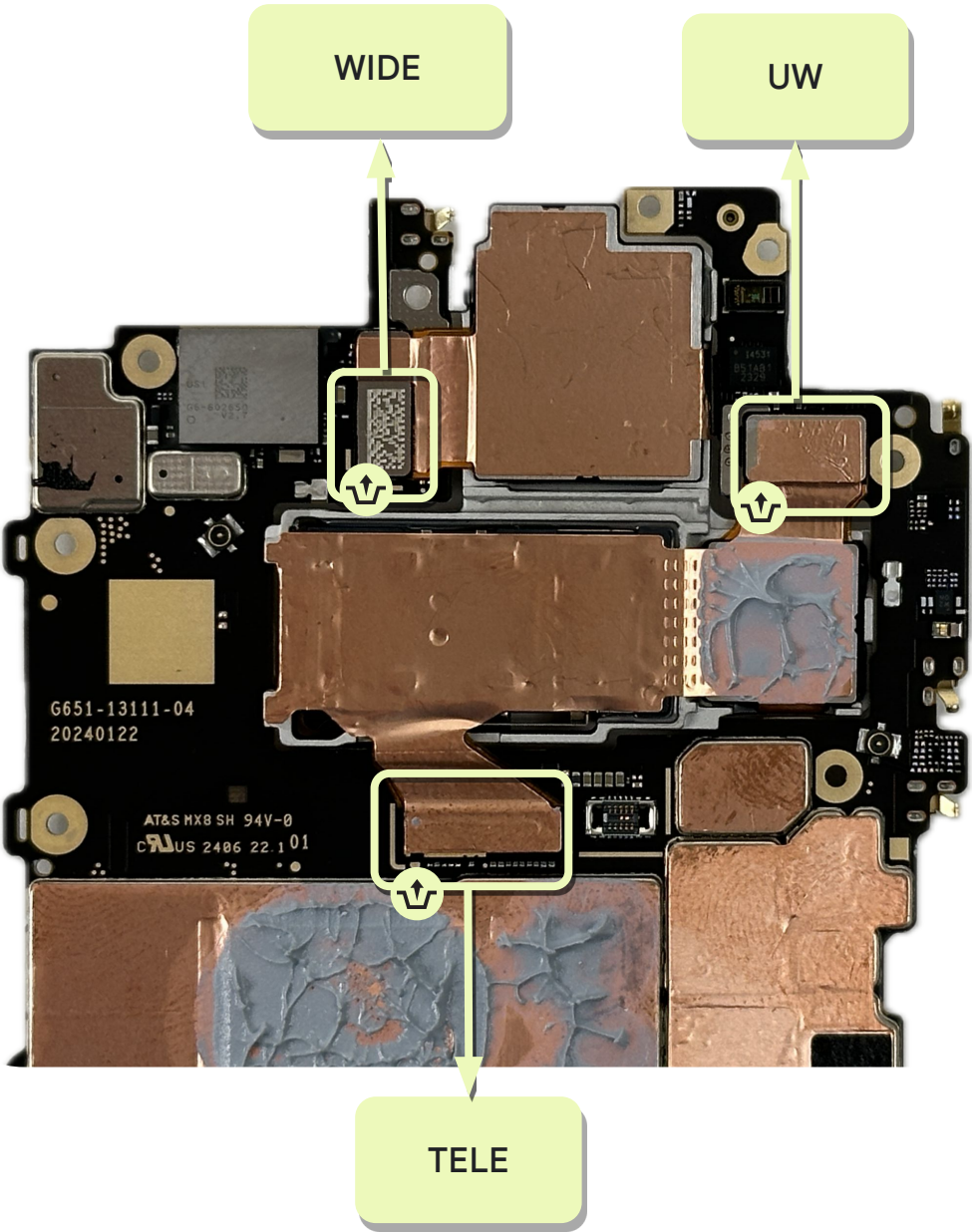
Disassembly
instructions

Bottom speaker

The bottom speaker is adhered to the enclosure.
Be careful not to damage the speaker membrane.

⚠ Use caution

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

✓ Prerequisites

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

- **BG sub**
- **Graphite sheet**
- **Base battery cowling**
- **UWB FPC**
- **mmWave module**
- **Inner front camera**
- **Logic board**

⚒ Tools

Pixel 9 Pro Fold-main holder

Pixel universal base

Tweezers

Spudger

Torx plus 3IP screwdriver

IPA and cloth

Dust-free cotton swabs

⚒ Required parts

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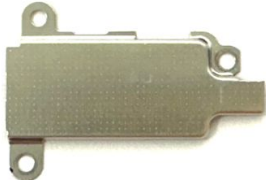
Here's the list of parts for the bottom speaker disassembly.

Reuse indications   🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly

Bottom speaker	Screw	PAD PSA	Conductive fabric	Conductive fabric 1	Base york PSA
G863-00533-00	G250-06989-01	G806-12230-00	G806-11656-00	G806-11655-00	G806-09445-00

Remove the screw

- Remove the **screw** with the **torx plus 3IP screwdriver**.

- Remove the **conductive fabric** with the **spudger** or **tweezers** starting at the corner.

Part: G250-06989-01 (Screw)

Note

Don't reuse the screw or conductive fabric.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   **Bottom Speaker**   USB Board   Base Battery   Vibrator   Inner Display Sub

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Finished! Need assembly instructions? ➔

Remove the bottom speaker

- Twist the point of the spudger to pry up the pad as shown in Fig 1.

- Twist the spudger to separate the adhesive that secures the bottom speaker as shown in Fig 2.

Part: G863-00533-00 (Bottom speaker)

Fig 1

⚠️ **Use caution**

Be careful to avoid damage to the components on the **bottom speaker**.

Fig 2

Entry point

CPSA area

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   **Bottom Speaker**   USB Board   Base Battery   Vibrator   Inner Display Sub

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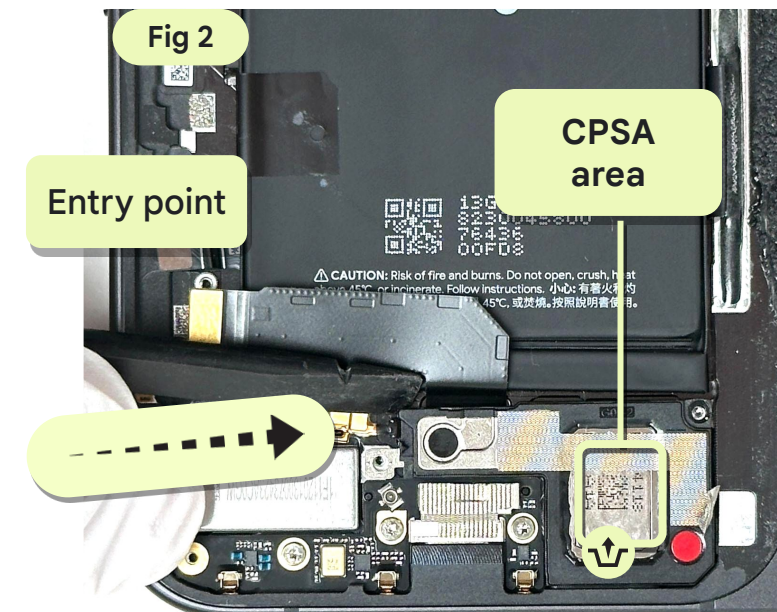
Disassembly
instructions

USB board

The USB board is adhered to the enclosure.
Be careful not to damage the board.

⚠ Use caution

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

⊘ Prerequisites

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

- **BG sub**
- **Graphite sheet**
- **Base battery cowling**
- **UWB FPC**
- **mmWave module**
- **Inner front camera**
- **Logic board**
- **Bottom speaker**

⚒ Tools

Pixel 9 Pro Fold-main holder

Pixel universal base

Torx plus 3IP screwdriver

Tweezers

Spudger

IPA and cloth

Dust-free cotton swabs

🛠 Required parts

USB board

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

Reuse indications   🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly

USB board
G949-00917-00

🔵

Screw
G250-06989-01

⚫

Mic protective liner
G806-03591-01

⚫

Finished! Need assembly instructions? ➜

Remove the screws

- Remove the **three screws** with the **torx plus 3IP screwdriver**.

- Tear off the USB board.

- Part of the flex is adhered to the **enclosure**, slowly peel it away.

Part: G250-06989-01 *3 (Screw)

Part: G949-00917-00 (USB board**)**

💡 **Note**

Don't reuse the screws.

CPSA area

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   **USB Board**   Base Battery   Vibrator   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 111

Base battery

⚠ Use caution

**Use caution if
you engage in repair.**

Opening or repairing a device can present electric shock, device damage, fire, personal injury risks, and other hazards.

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

Confirm before you proceed

- Battery is fully discharged.

- Inspect the battery if the phone battery shows signs of swelling or damage, or if the phone feels hot or emits strong odor, *don't* attempt disassembly.

- Make sure not to expose the phone or its components to liquids after disassembly.

Base battery

It's recommended to remove the battery by pull jacket.
If ASP uses other methods, it may damage the device.

⚠ Use caution

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

⊘ Prerequisites

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

- **BG sub**
- **Graphite sheet**
- **Base battery cowling**
- **UWB FPC**
- **mmWave module**
- **Inner front camera**
- **Logic board**
- **Bottom speaker**

⚒ Tools

Heat plate

Pixel 9 Pro Fold-main holder

Pixel universal base

Universal press plate 12 mm

Battery press rubber (base side)

Universal press fixture

Absorption-bulb

Feeler gauge

Tweezers

⚒ Required parts

Base battery

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

Battery base
G949-00920-00

●

Caution ⚠

Unacceptable battery conditions

Pouch damage
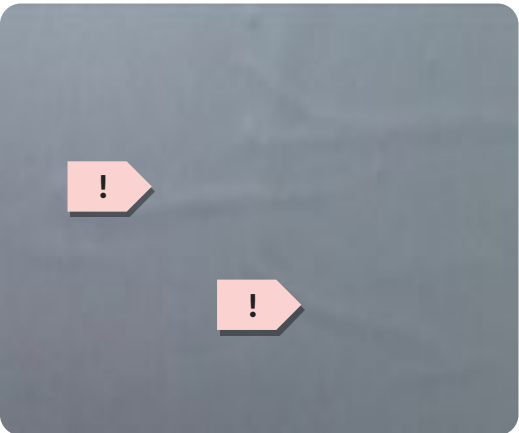
Line protrusion
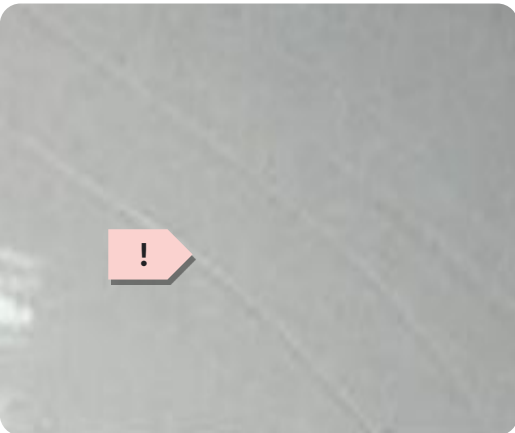
Scratch

Contamination mark
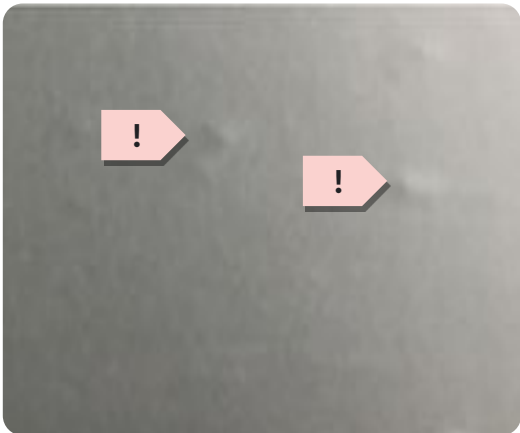
Dot protrusion

Dent

Bubbling
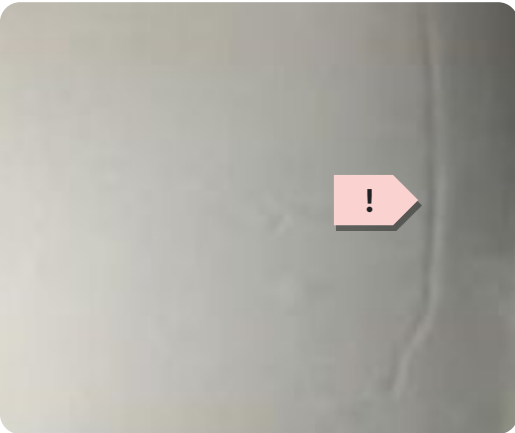
Imprinted line

Swelling or electrolyte leakage

Separate the pull jacket

Use a pair of blunt nose tweezers, or your fingers to peel the pull jacket away from the battery.

> ⚠ **Use caution**
>
> Be careful not to puncture the battery.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   **Base Battery**   Vibrator   Inner Display Sub

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Soften the glue

With the device unfolded, place it with the **ID** face down on the **heat plate** set to **158℉ (70℃) for 5 minutes** to soften the **base battery** adhesive.

> ⚠️ **Use caution**
>
> Heat plate is a hot surface.
> Use caution as it could cause burns.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   **Base Battery**   Vibrator   Inner Display Sub

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Adjust the pull jacket

- Move the left pull jacket and scrape off the adhesive between the base battery and the enclosure to position A as shown in Fig 1.

- Slowly pull up the right pull jacket and adjust it on both sides.

⚠️ **Use caution**

The intent of the pull jacket is to pull on the battery.

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   **Base Battery**   Vibrator   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 118
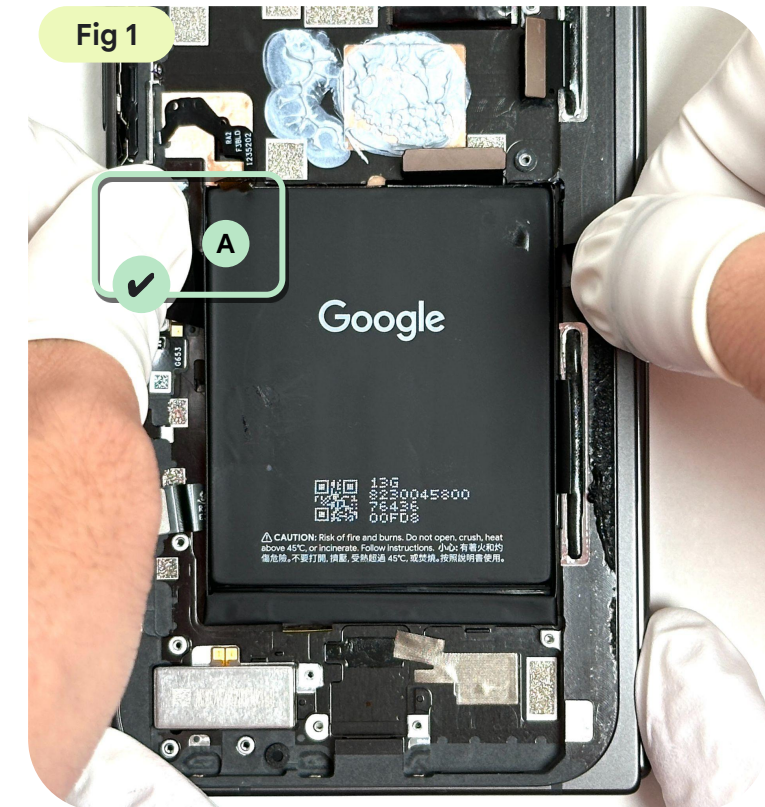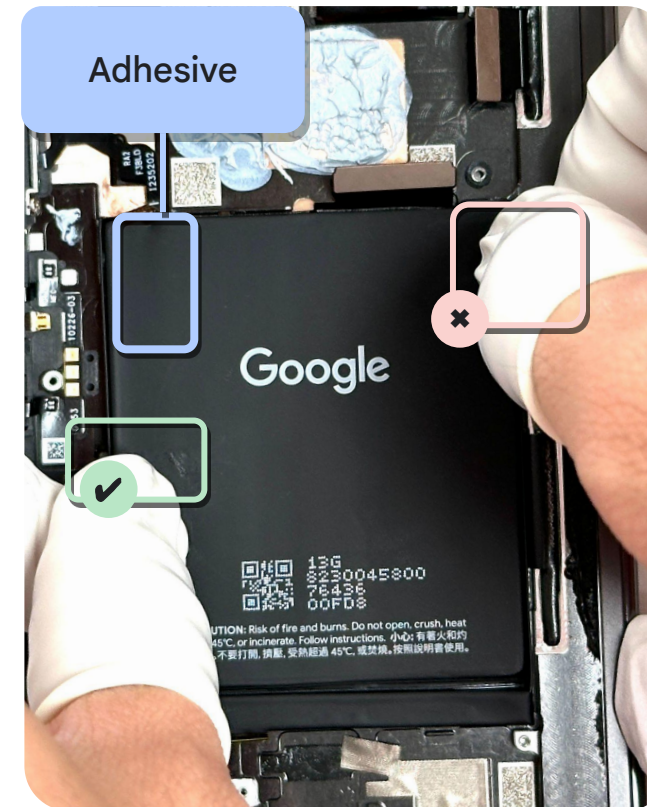
Finished! Need assembly instructions? ➜

Remove the battery

- Fold the device. Wear the **ESD finger cots** to increase friction to prevent the pull jacket from slipping.

- Grip the ends of the pull jacket with your fingers. Pull straight up with constant, steady force to separate the adhesive under the battery.

- Gently remove the **base battery** and store it safely.

Part: G949-00920-00 (Base battery)

Pull straight up with constant.

⚠️ **Use caution**

The battery is easier to remove if you lift the battery as soon as the device leaves the heat plate before adhesive curing.

⚠️ **Use caution**

Keep small screws and sharp objects clear of the battery.

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

No

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   **Base Battery**   Vibrator   Inner Display Sub
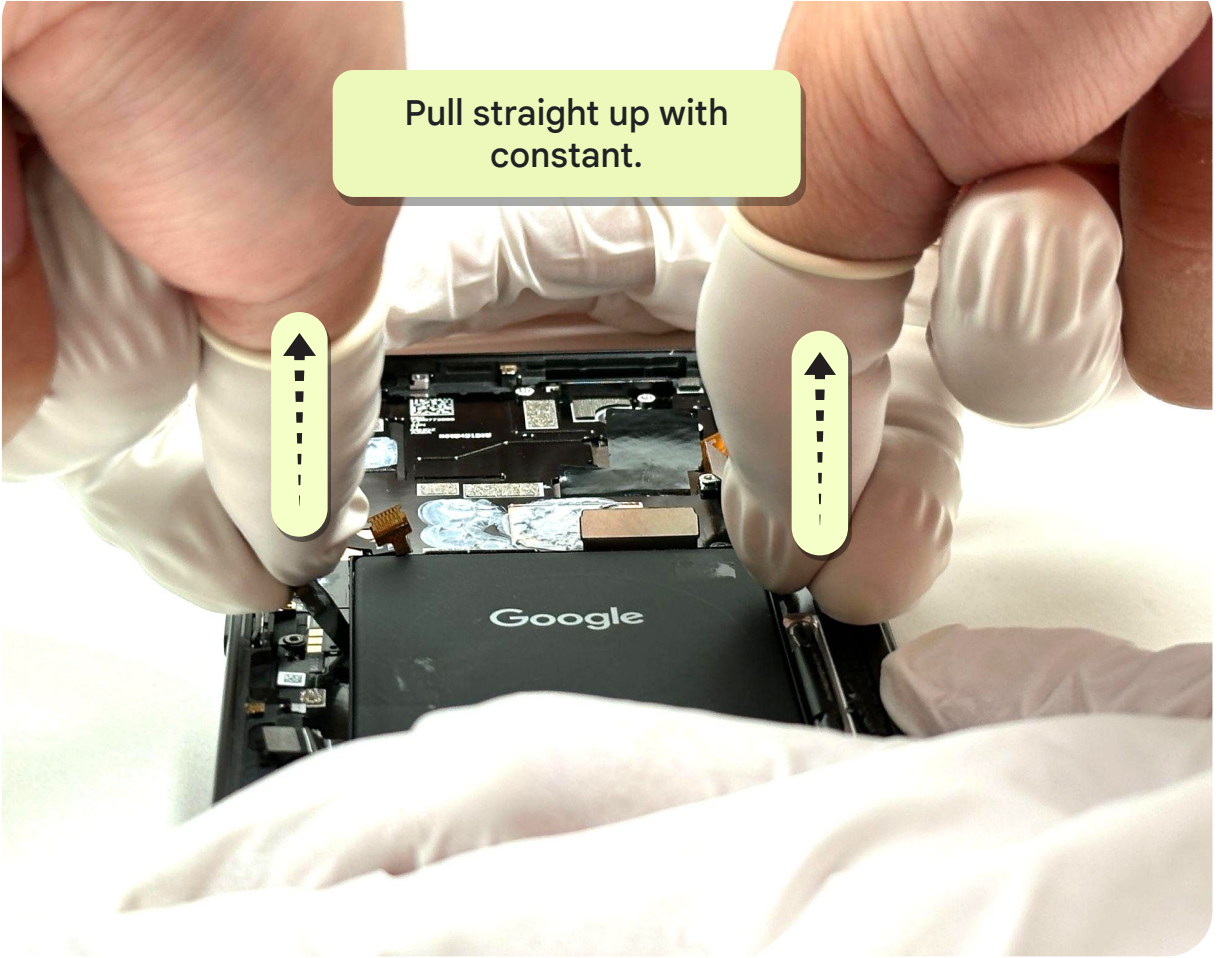
Vibrator

The vibrator is adhered to the enclosure. If it's removed, replace with a new PSA and conductive tape.

Use caution

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

Prerequisites

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

- **BG sub**
- **Graphite sheet**
- **Base battery cowling**
- **UWB FPC**
- **mmWave module**
- **Inner front camera**
- **Logic board**
- **Bottom speaker**
- **USB board**

Tools

Pixel 9 Pro Fold-main holder

Pixel universal base
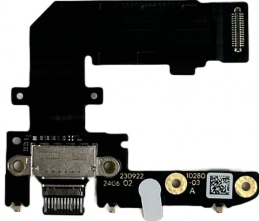
Spudger

Tweezers

IPA and cloth
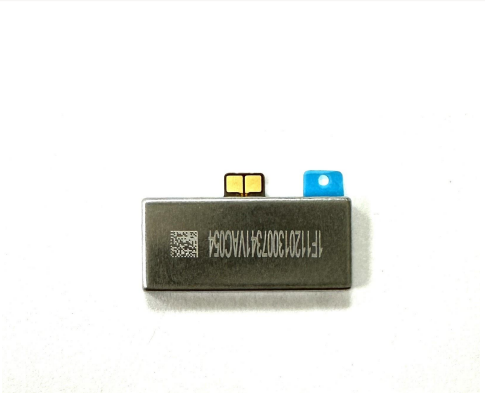
🔧 Required parts

Vibrator

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

Reuse indications 🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly

Vibrator
G690-12013-00 🔵

Vibrator PSA
G806-11994-00 ⚫

Finished! Need assembly instructions? ➔

Remove the vibrator

- Apply IPA with the **spudger**.

- Pry up and separate the vibrator adhesive with the flat end of the spudger to dislodge it from its recess.

Part: G690-12013-00 (Vibrator)

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   **Vibrator**   Inner Display Sub

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Inner display sub (Base side)

If you reuse the ID sub, ensure that any thermal paste
or adhesive residue is completely removed.

⚠ Use caution

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

⊘ Prerequisites

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

- **BG sub**
- **Graphite sheet**
- **Base battery cowling**
- **UWB FPC**
- **mmWave module**
- **Inner front camera**
- **Logic board**
- **Bottom speaker**
- **USB board**
- **Base battery**
- **Vibrator**

⚒ Tools

Pixel 9 Pro Fold-main holder

Pixel universal base

Tweezers

Spudger

Dust-free cotton swabs

IPA and cloth

🔧 Required parts

Inner display sub (base side)

Reuse indications   🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly

If you reuse the enclosure, ensure that any thermal paste or adhesive residue is completely removed.

ID sub 🔵	Sidekey module ⚫	Fingerprint module ⚫	Screw*2 ⚫	Base battery PSA ⚫	USB FPC PSA ⚫
Multiple part numbers	G949-00922-00	Multiple part numbers	G250-06986-00	G806-12711-01	G806-09354-00

Mic 1 mesh ⚫	Mic 3 mesh ⚫	FPS metal support 🟢	Power key bracket 🟢	FPS support ⚫	VOL key support_up 🟢
G806-09254-00	G806-09255-00	G730-09502-00	G852-04487-00	G730-07484-00	G852-03810-00

⚒ Required parts

Inner display sub (base side)

If you reuse the enclosure, ensure that any thermal paste or adhesive residue is completely removed.

Reuse indications   🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly

VOL key support_down 🟢
G852-03811-00

VOL key FPC CPSA ⚫
G806-09383-00

Remove the screws

- Remove the **two FPS support screws** with the **torx plus 3IP screwdriver** as shown in Fig 1.

- Push the FPS support inward with the flat end of the **spudger**.

Part: G250-06986-00*2 (Screw)

Part: G730-07484-00 (FPS Support)

> ### Note
>
> ***Don't* reuse the screw and the FPS support.**
>
> The inner display sub includes the FPS. **Only perform this and the next step if the FPS is damaged.**

Fig 1

Fig 2

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   **Inner Display Sub**

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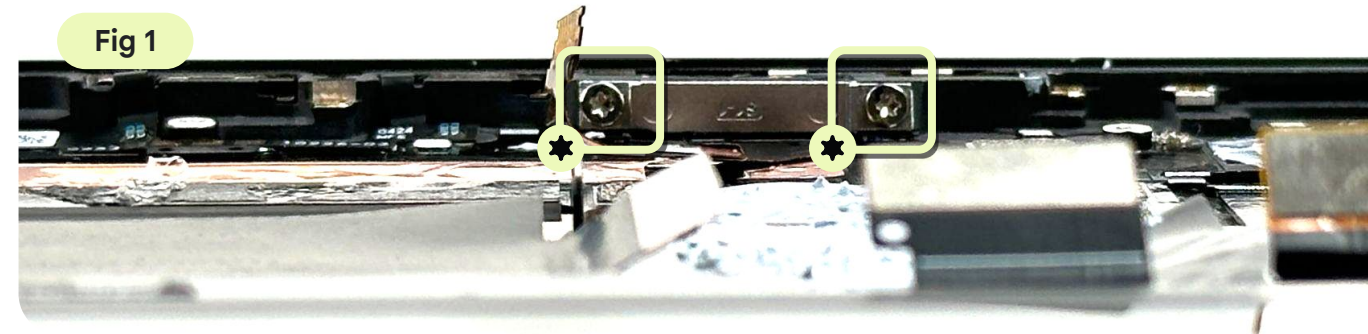
Remove the FPS (power button)

- Gently pry up and remove the **power key bracket** and the **FPS metal support** with **tweezers** as shown in Fig 1.

- Release the FPS FPC slowly. Push the FPS inward to remove the **FPS** module as shown in Fig 2.

Part: G730-09502-00 (FPS metal support)

Part: G852-04487-00 (Power key bracket)

Part: Multiple part numbers (FPS)

Fig 1

Fig 2

CPSA area

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   **Inner Display Sub**

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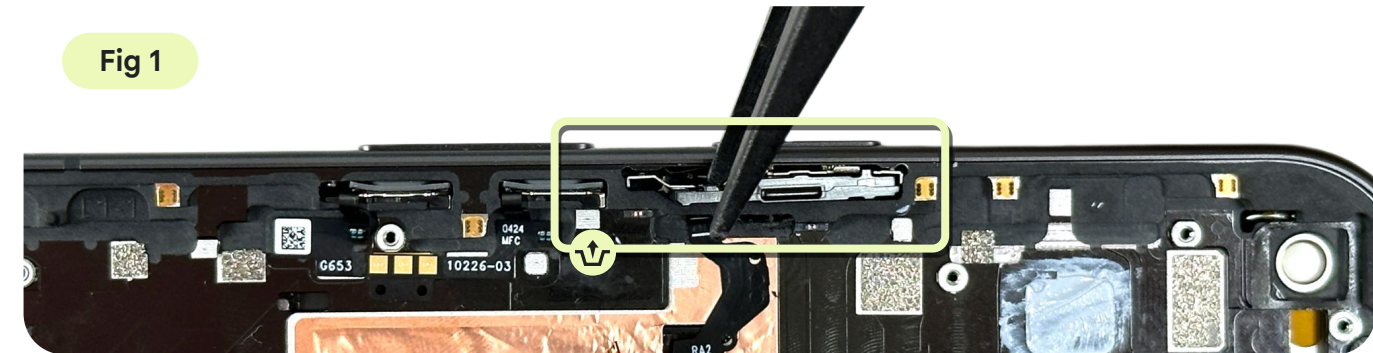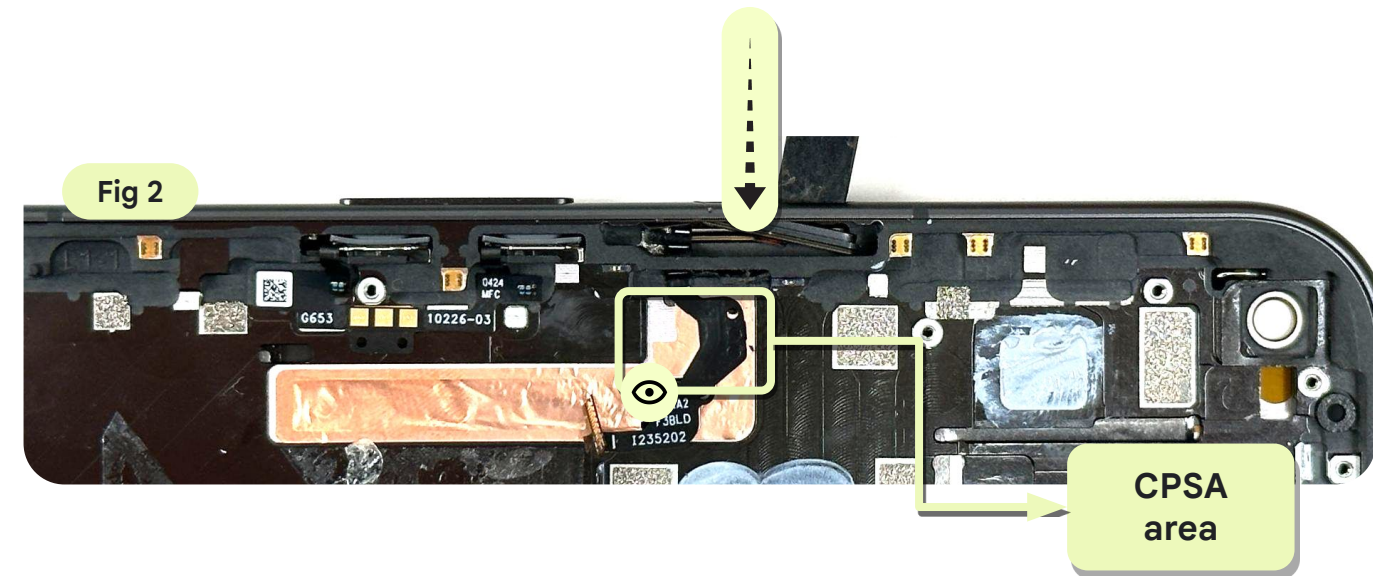
Finished! Need assembly instructions? ➜

Remove the sidekey

- Release the sidekey FPC from the enclosure as shown in Fig 1.

- Gently pull upward on the FPC to remove the **sidekey module** as shown in Fig 2.

- Remove volume key support up and down with tweezers as shown in Fig 3.

Part: **G949-00922-00** (Sidekey module)

Part: **G852-03810-00** (VOL key support_up)

Part: **G852-03811-00** (VOL key support_down)

💡 Note

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

The inner display sub includes the sidekey. **Only perform this step if the sidekey is damaged.**

Fig 1

CPSA area

Fig 2

Fig 3

BG Sub   Graphite Sheet   Base Battery Cowling   UWB FPC   mmWave Module   Inner Front Camera   Logic Board   IF FPC   Rear Camera   Bottom Speaker   USB Board   Base Battery   Vibrator   **Inner Display Sub**

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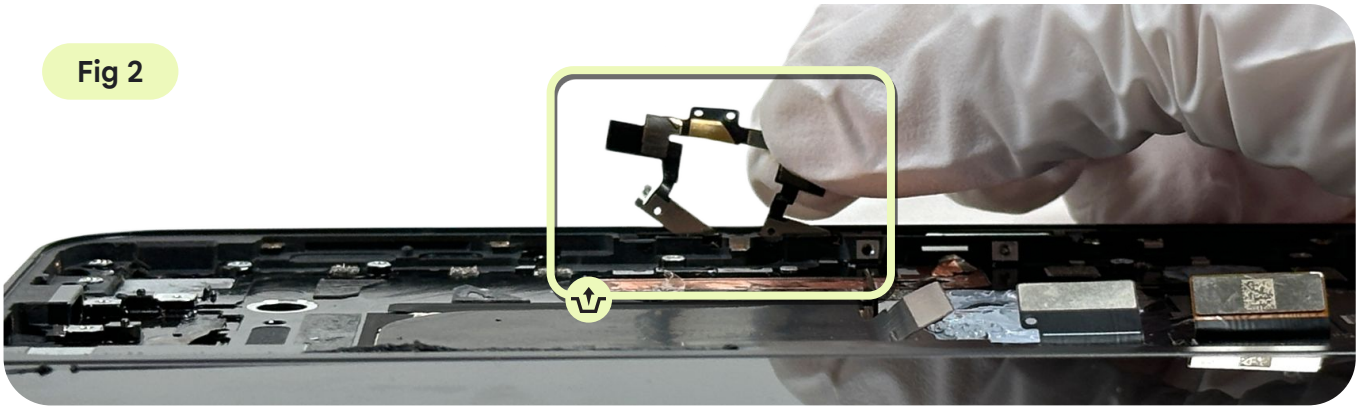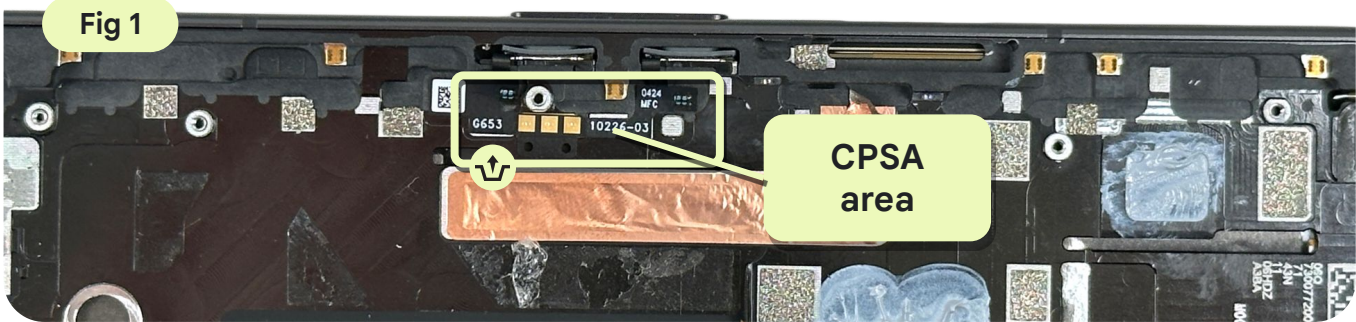
Pixel 9 Pro Fold repair manual

Assembly-base

Inner display sub	IF FPC	Base battery
USB board	Logic board	Base battery cowling
Vibrator	Inner front camera	Graphite sheet
Bottom speaker	mmWave module	BG sub
Rear camera	UWB FPC	

Assembly
instructions

Inner display sub   Base side

Reuse the ID sub or the new ID sub

- Use the **spudger** to clean the residual glue of the **enclosure**. Use your fingers or tweezers to remove big chunks of adhesive. Use a dust-free cloth with **IPA** to clean the surface where needed.

- Use the flat end of the spudger to scrape away the thermal grease from the enclosure areas. For any residue, gently clean the surface with a dust-free cloth.

- Tear off all the masking tapes (no. 1 ~ 3) on the base enclosure for the new ID sub.

- Remove the wrap on the hinge for the new ID sub.

| Part: G806-09256-00 (Inner FCAM PSA sponge) |

⚠️ **Use caution**

Don't get conductive thermal grease on other components.

***Don't* use IPA to clean thermal grease.**

💡 **Note**

Change a new one if the inner FCAM PSA sponge damage or broken as shown in Fig 1.

Paste the **PSA** sponge along the upper left corner as shown in Fig 2.

Fig 1

Fig 2

Reuse ID sub

New ID sub

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

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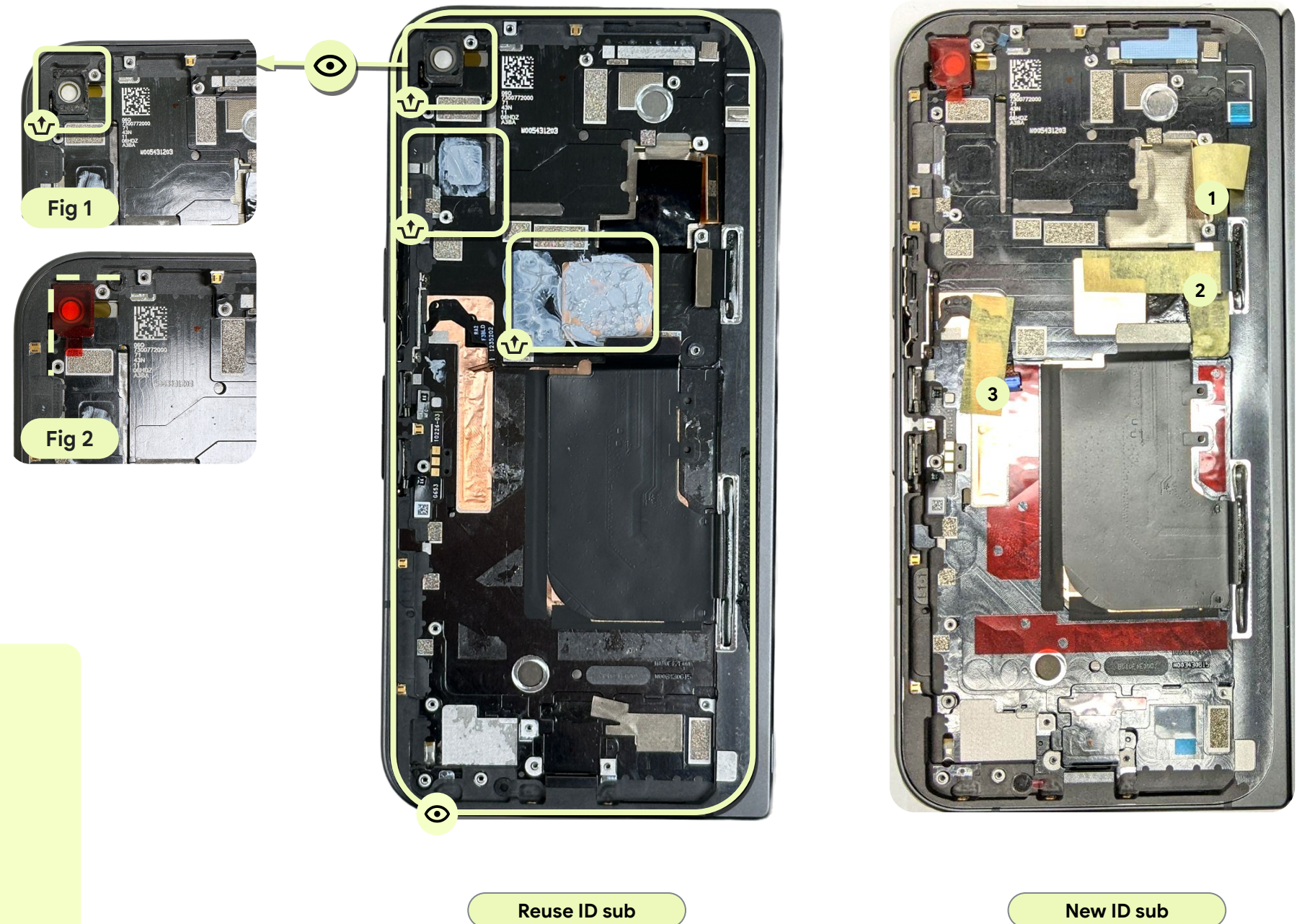
Clean the thermal grease area

- Use the flat end of the spudger to scrape away the old thermal grease from the **logic board** areas.

- For any residue, gently clean the surface with a dust-free cloth.

⚠️ **Use caution**

Don't get conductive thermal grease on other components.

***Don't* use IPA.**

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 132
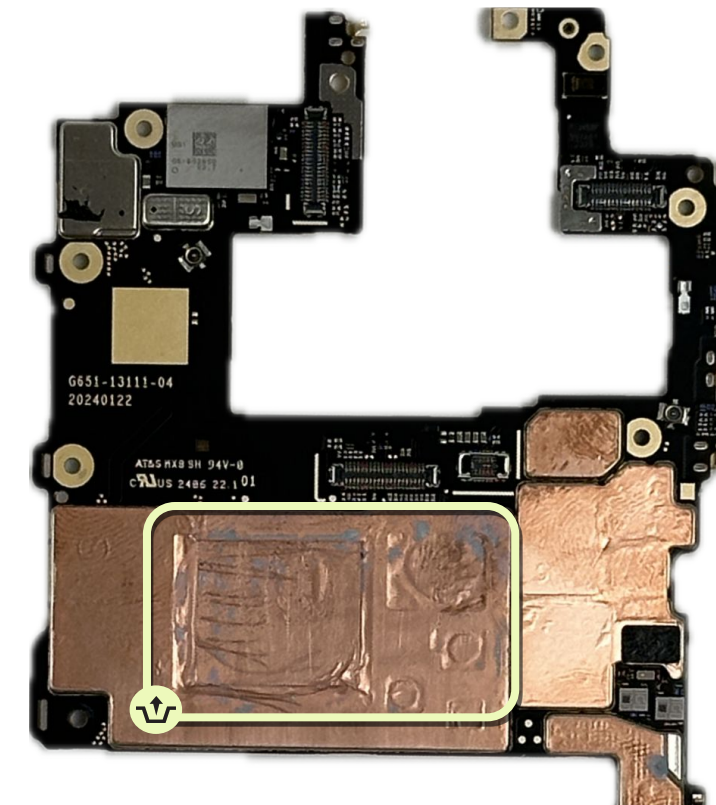
Clean the battery and the USB FPC PSA residual

- Use the flat end of the spudger to scrape up, and remove any residue from the enclosure of the **base battery and the USB FPC** area.

- Use your fingers or tweezers to remove big chunks of adhesive. Repeat for any adhesive on it.

- Use a dust-free cloth to clean the **base battery and the USB FPC** area with IPA.

> ### Note
>
> The inner display sub includes the base battery PSA and the USB FPC PSA. Only perform this after the base battery and the USB board is removed.
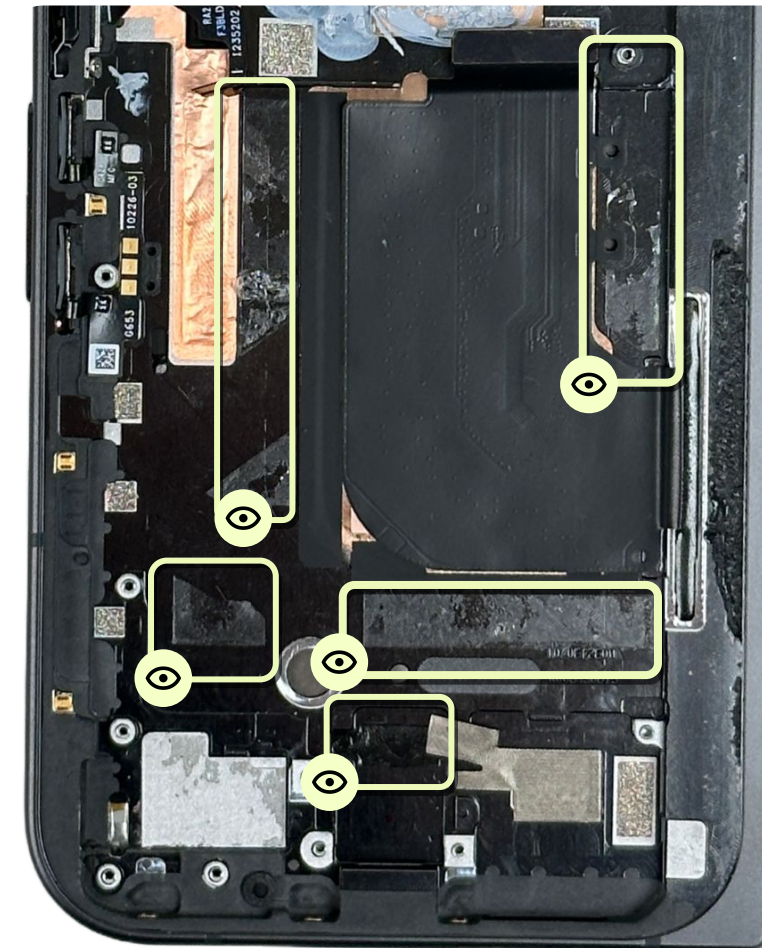
Paste the base battery and the USB FPC PSA

- Paste the **base battery PSA** along the upper right corner.

- Paste the **USB FPC PSA** to the designated position.

- Run the spudger over the PSA to strengthen adherence.

Part: G806-12711-00 (Base battery PSA)

Part: G806-09354-00 (USB FPC PSA)

💡 **Note**

Don't remove the release liner just yet.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 134
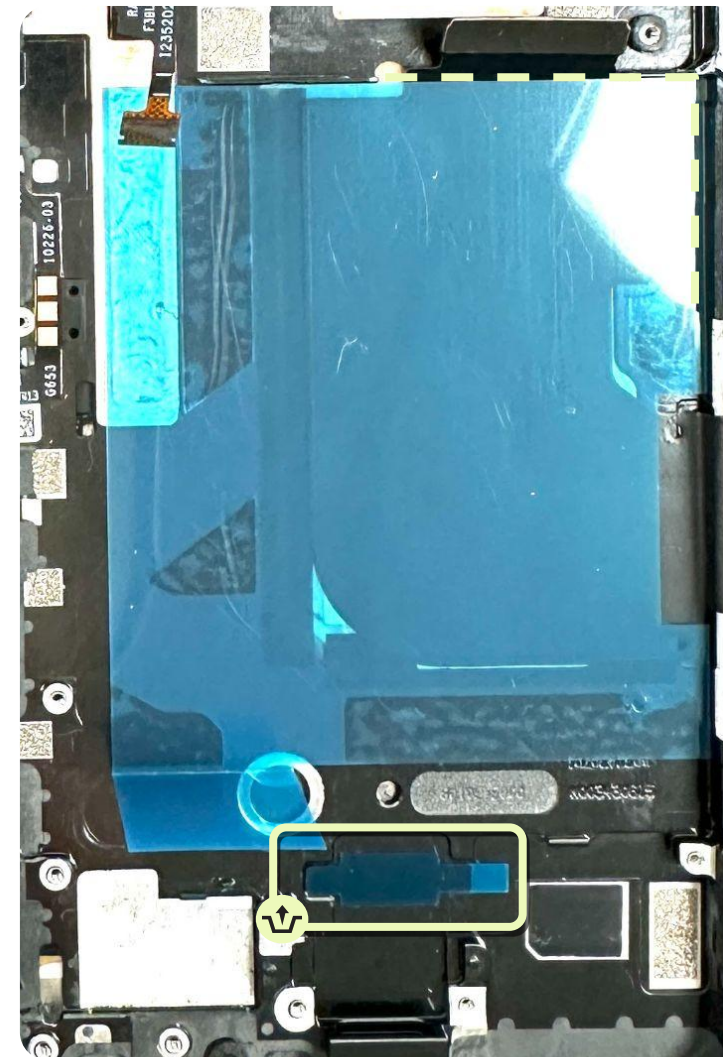
Assemble the FPS (power button)

- Fold the flex and insert the FPS flex from the slot through the middle frame as shown in Fig 1.

- Push outward to install the power button with the spudger as shown in Fig 2. Make sure that the white line is aligned with the shell.

- Tear off the liner and align the two fixing hole as shown in Fig 3.

Part: **Multiple part numbers** (FPS)

> **Note**
>
> The inner display sub includes the FPS and the sidekey. Only perform this and the next three steps if the FPS and the sidekey is damaged.
>
> Clean the rubber surface with dust-free cotton swabs before installation.

Fig 1

Fig 2

Fig 3

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 135
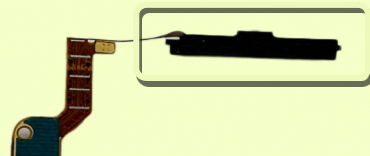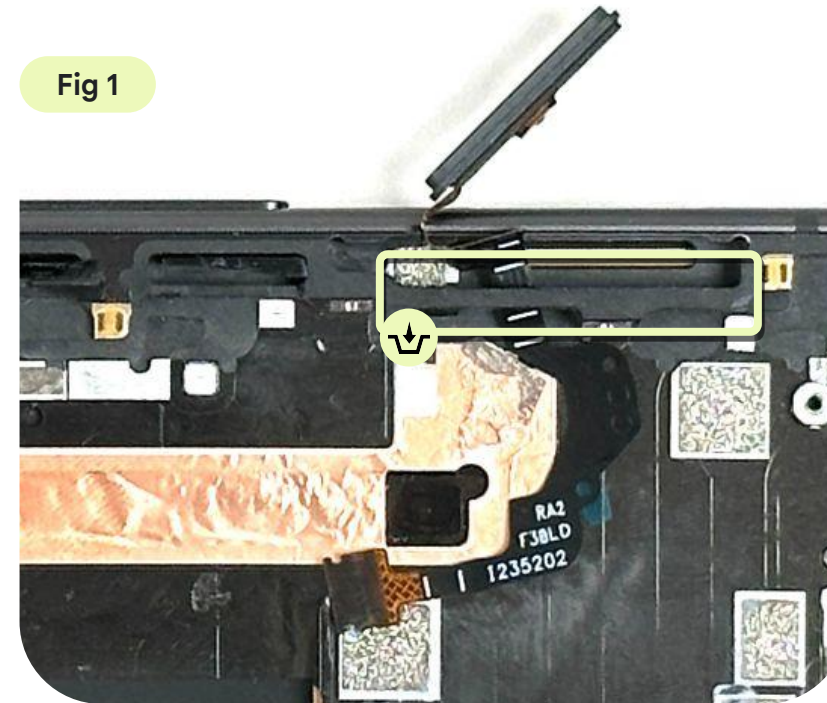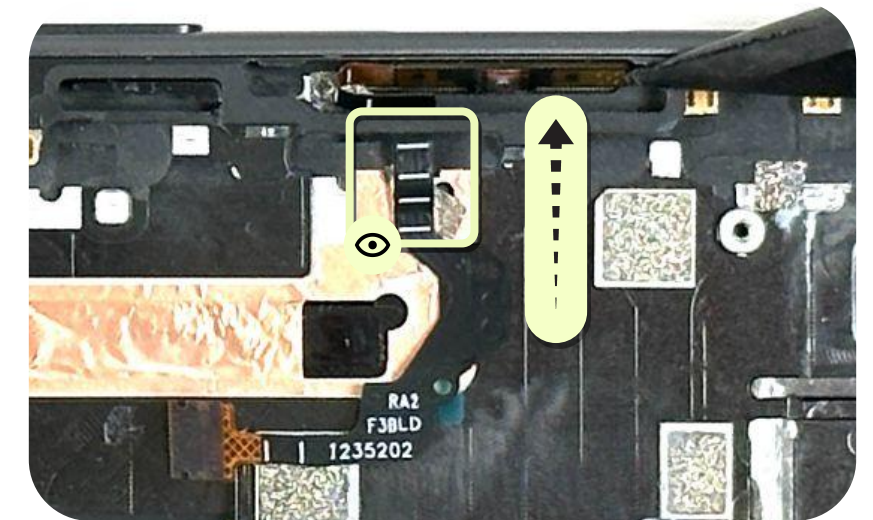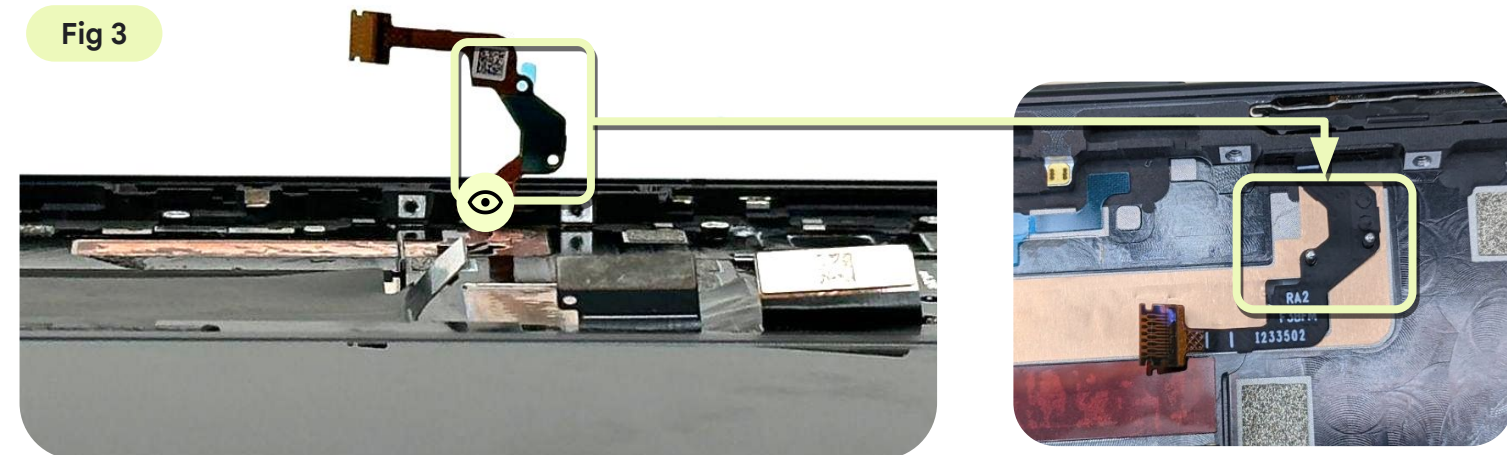
Assemble the FPS (power button)

- Install the FPS support into the slot of the middle frame, then insert the power key bracket into the gap to fix the power button as shown in Fig 1.

- Assemble the FPS metal support to the designated position as shown in Fig 2.

- Tighten the **screws** with the **torx plus (3IP) screwdriver** in a sequence as shown in Fig 2.

Part: **G852-04487-00** (Power key bracket)

Part: **G730-07484-00** (FPS support)

Part: **G730-09502-00** (FPS metal support)

Part: **G250-06986-00*2** (Screw)

Note

Torque force: 0.9 ± 0.09 kgf-cm

Fig 1

Fig 2

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 136
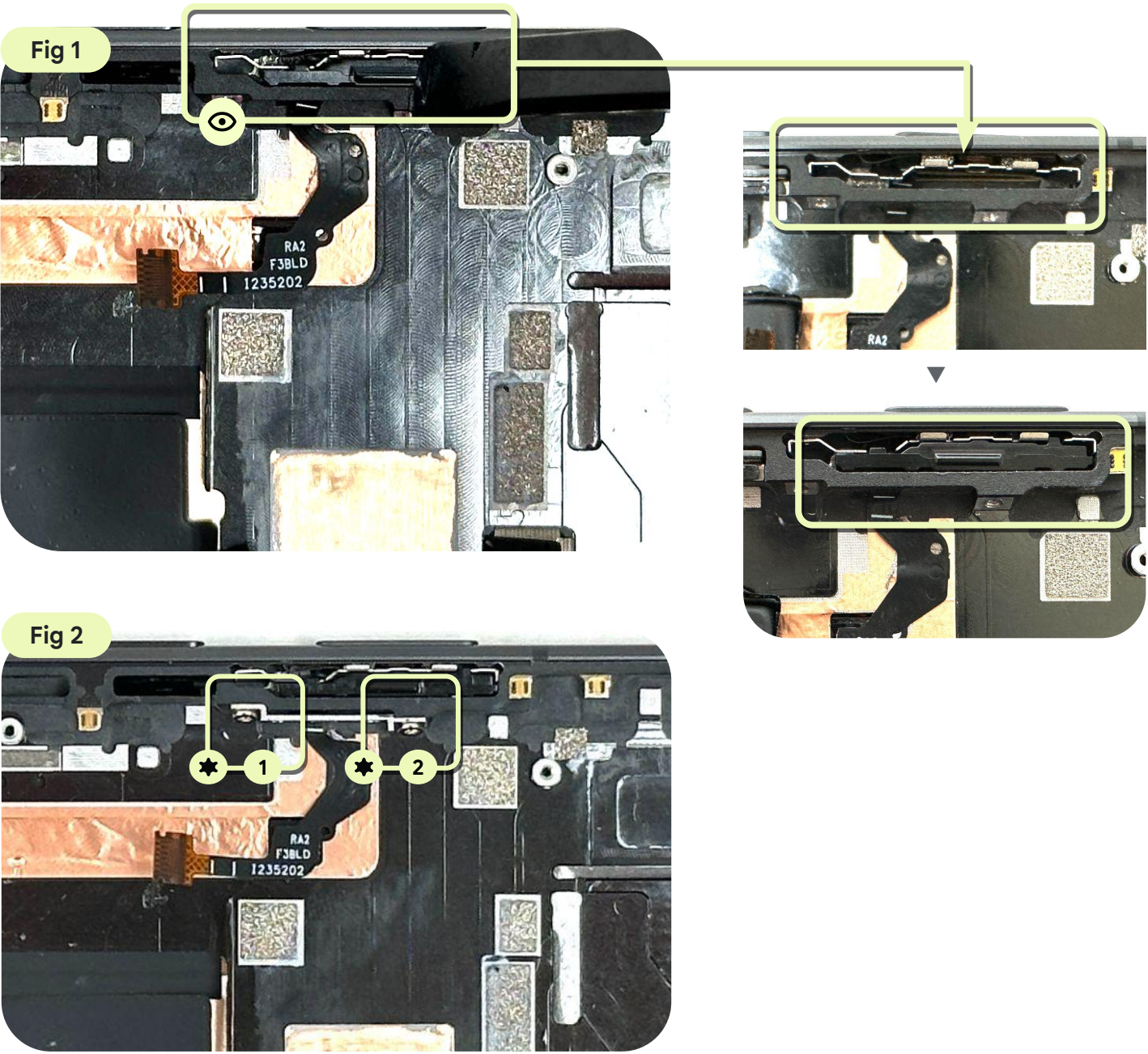
Assemble the sidekey

- Paste the **VOL key FPC CPSA** to the designated position as shown in Fig 1.

- Install the sidekey FPC to the middle frame as shown in Fig 2.

- Insert the **VOL** key support up and down into the gap to fix the volume button as shown in Fig 3.

- Tear off the liners, fold the FPC and align the two fixing holes as shown in Fig 4.

Part:G806-09383-00 (VOL key FPC CPSA)

Part:G949-00922-00 (Sidekey)

Part: G852-03810-00 (VOL key support_up)

Part: G852-03811-00 (VOL key support_down)

> **Note**
>
> Clean the rubber surface with dust-free cotton swabs before installation.
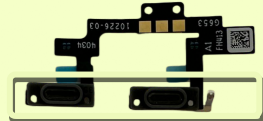
Fig 1
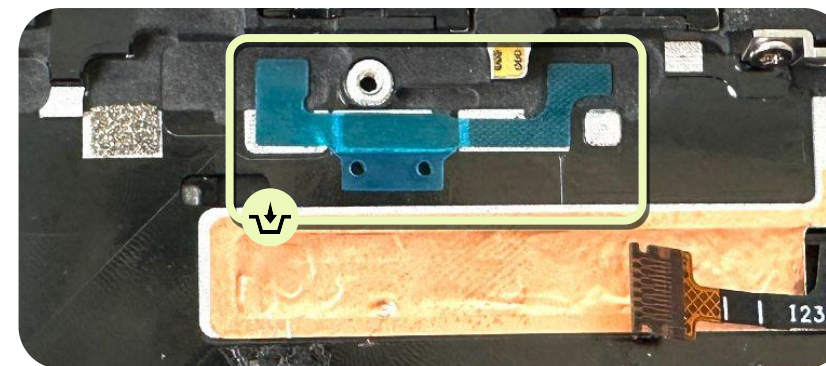
Fig 2
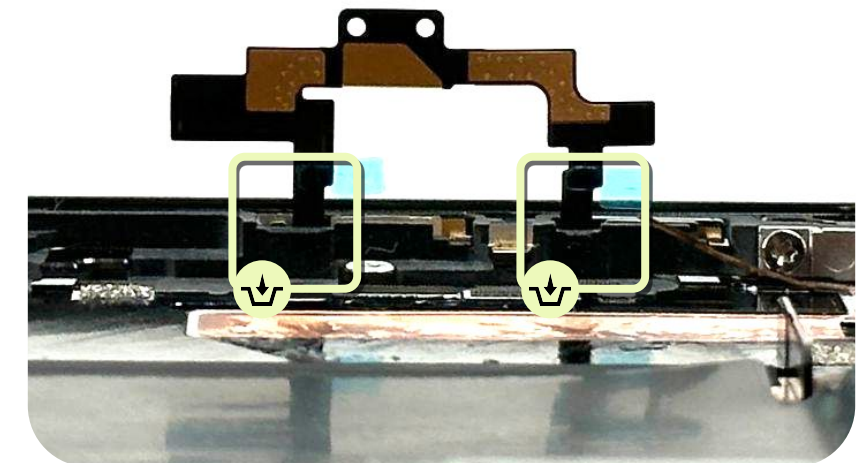
Fig 3
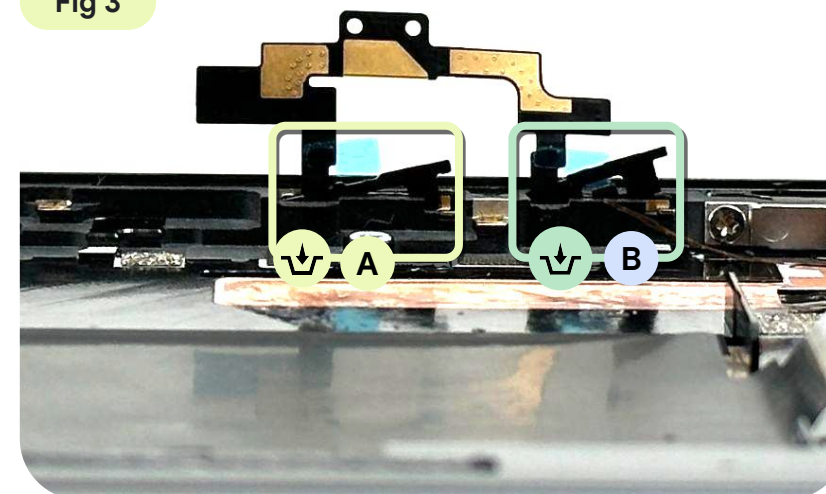
A: G852-03811-00   B: G852-03810-00

Fig 4

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 137
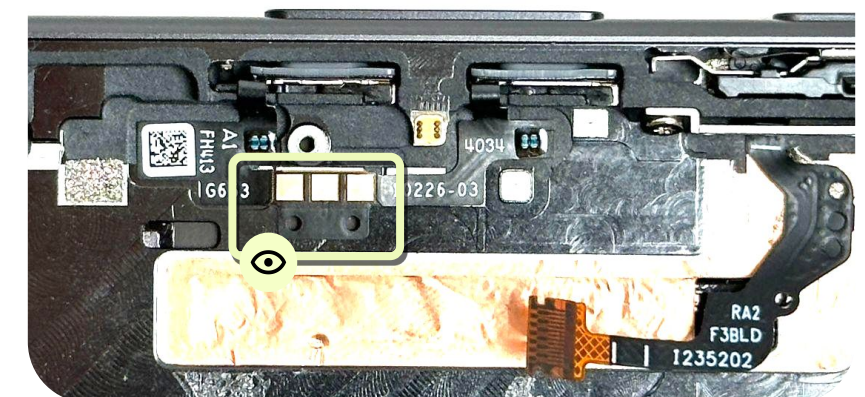
Paste the mic 1 and the mic 3 meshes

- Remove the damaged mic 1 and mic 3 meshes.

- Wrap the spudger with a dust-free cloth. Dip it in IPA and clean up any residue.

- Attach new meshes.

Part: G806-09254-00 (Mic 1 mesh)

Part: G806-09255-00 (Mic 3 mesh)

⚠️ **Use caution**

Check the two meshes and change to new ones in case of damage.

Ensure that the environment is clean for this process.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 138
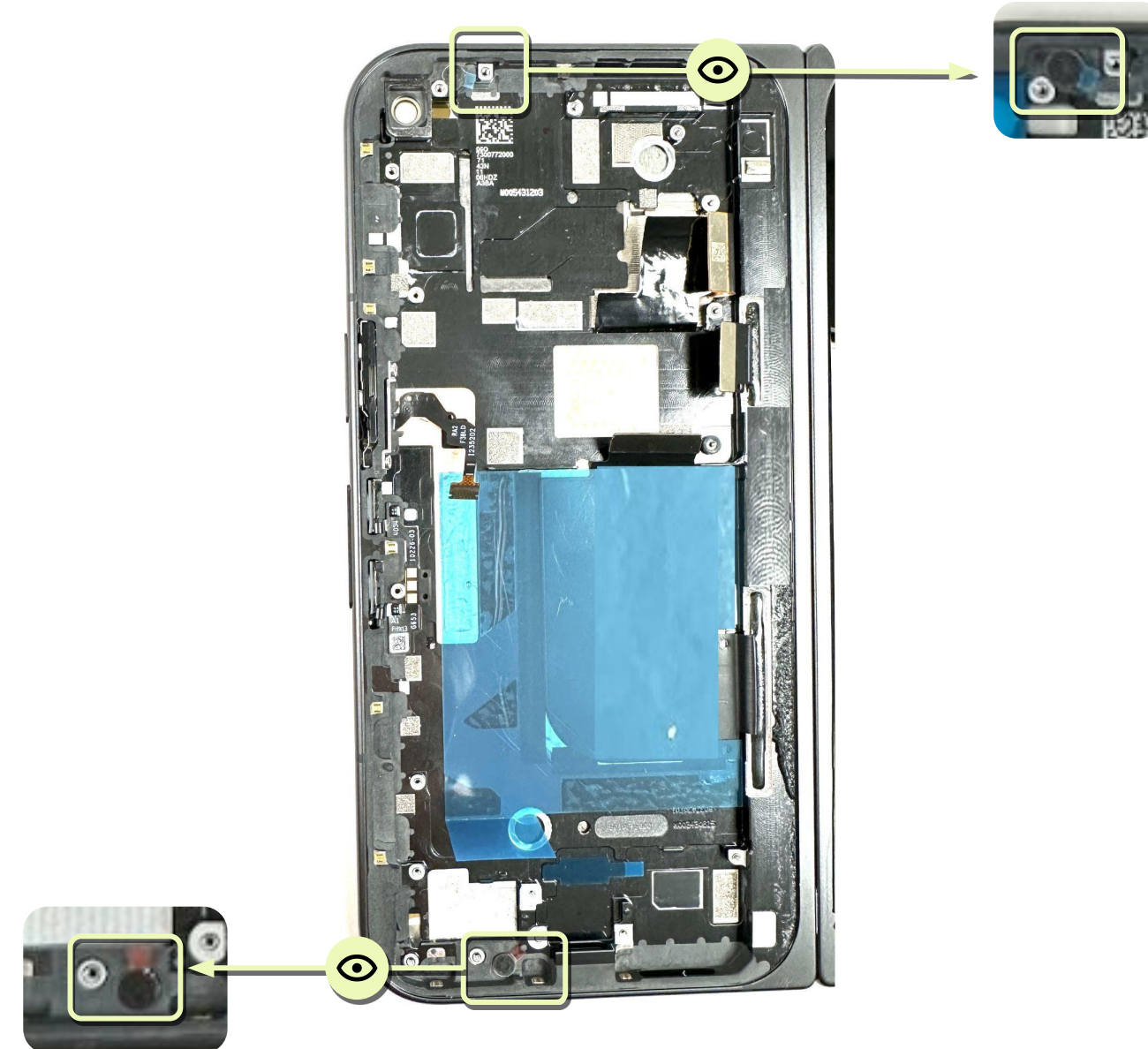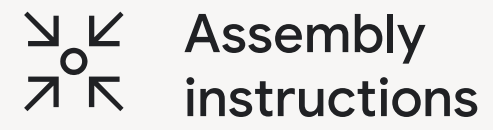
Assembly
instructions

USB board

Assemble the USB board

- Tear off the two liners, one for the USB FPC and the other for the mic 1 hole as shown in Fig 1.

- Place the liner to cover mic 1 hole, and place the **USB board** into the **enclosure** at an angle as shown in Fig 2.

- Remove the liner and align the two fixing holes as shown in Fig 3, then press the USB board. *Don't* press the USB FPC as shown in Fig 4.

Part: G949-00917-00 (USB board)

Note

Clean the rubber surface with dust-free cotton swabs before installation.

Tear off the protective liner.
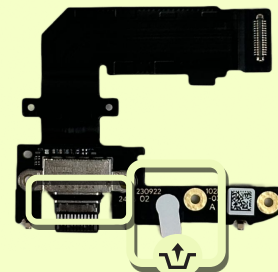
⚠ **Use caution**

Don't touch the mic 1 area.

Fig 1

Fig 2

Fig 3

Fig 4

Inner Display Sub   **USB Board**   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub
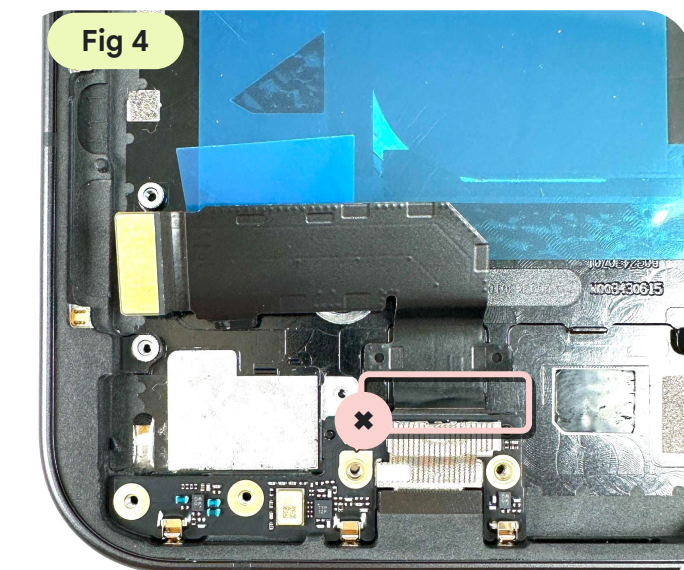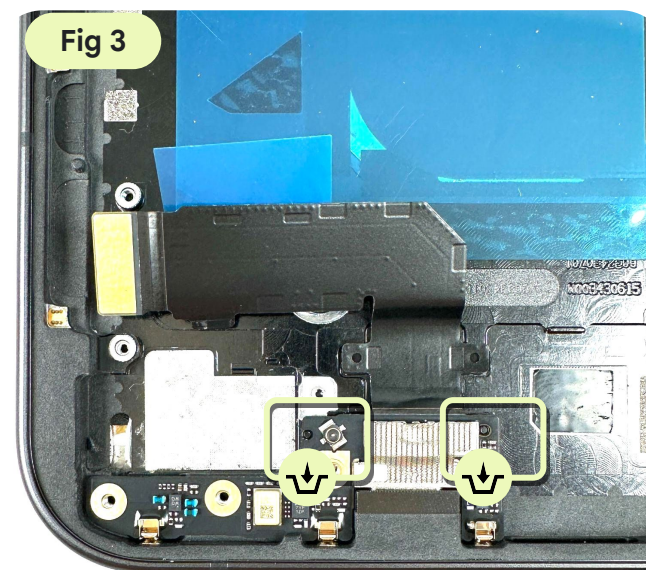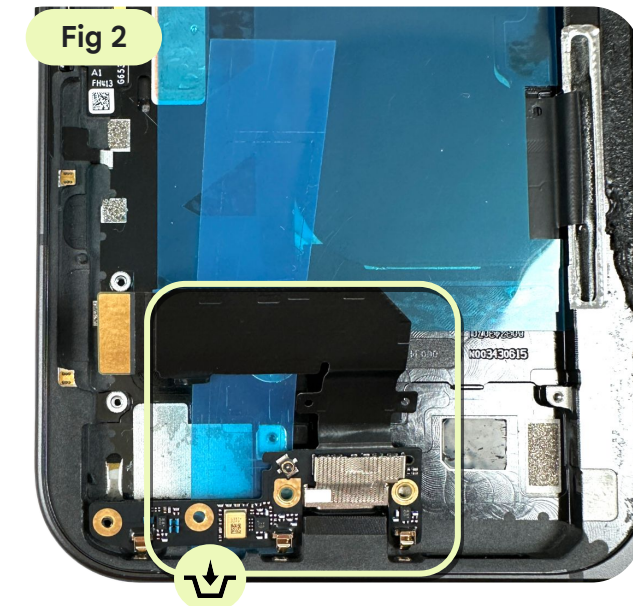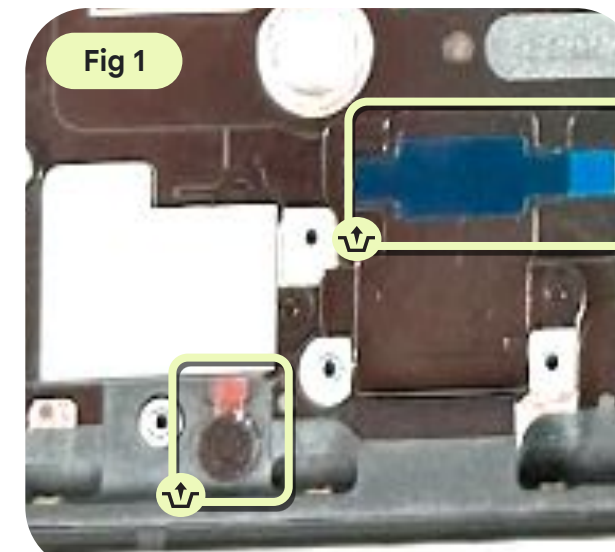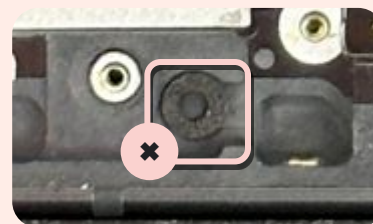
Tighten the screws in the USB board

- Tighten the **screws** with the **torx plus (3IP) screwdriver** in a sequence.

- Tighten the screws a second time to secure them in place.

Part: G250-06989-01*3 (Screw)

Tighten all screws twice.

Note

Torque force: 1.2 ± 0.1 kgf-cm

Inner Display Sub   **USB Board**   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

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Assembly
instructions

Vibrator

Reuse the vibrator

- Remove the adhesive with the **spudger**.

- Wrap the spudger with a dust-free cloth. Dip it in IPA and clean up any residue.

- Attach the adhesive along the lower side as shown in Fig 1.

Part: G806-11994-01 (Vibrator CPSA)

Part: G690-12013-00 (Vibrator)

Fig 1

Inner Display Sub   USB Board   **Vibrator**   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 143
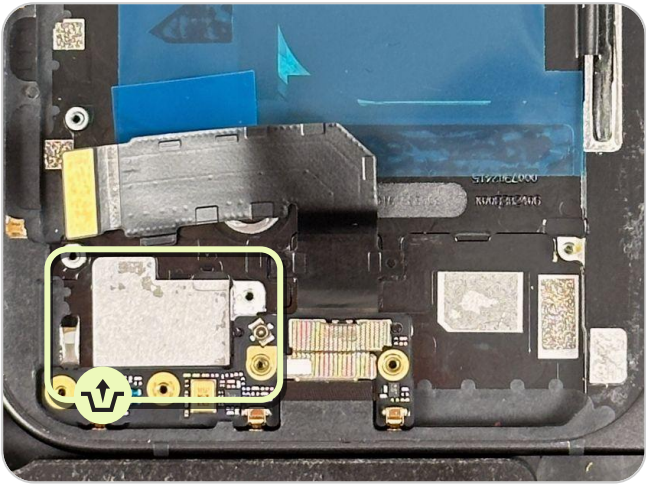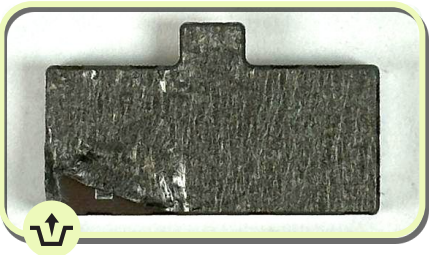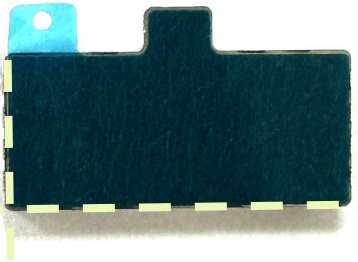
Install the vibrator

- Remove the liner and install the **vibrator** into the **enclosure** to match the outline.

- Press down on the vibrator for **5** seconds to activate the adhesive.

> Part: **G690-12013-00** (Vibrator)

Inner Display Sub   USB Board   **Vibrator**   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 144
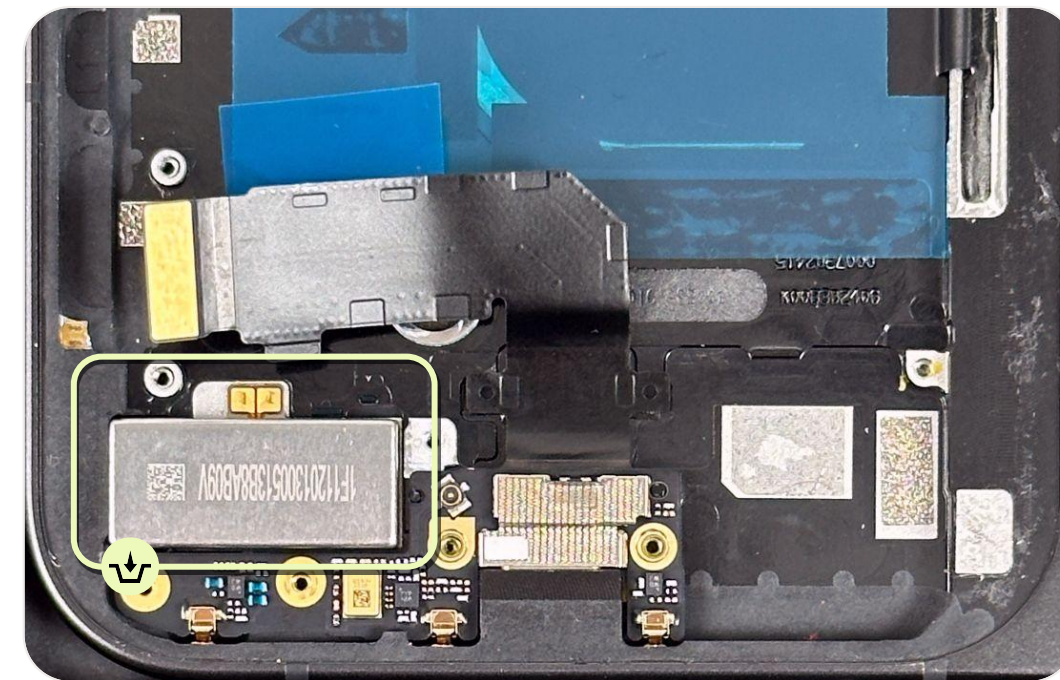
Assembly
instructions

Bottom speaker

Clean the bottom speaker residual

- Remove the adhesive with the **spudger** as shown in Fig 1, Fig 2, and Fig 3.

- Wrap the spudger with a dust-free cloth. Dip it in IPA to clean up any residue.

Fig 1

Fig 2

Fig 3

Inner Display Sub   USB Board   Vibrator   **Bottom Speaker**   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 146
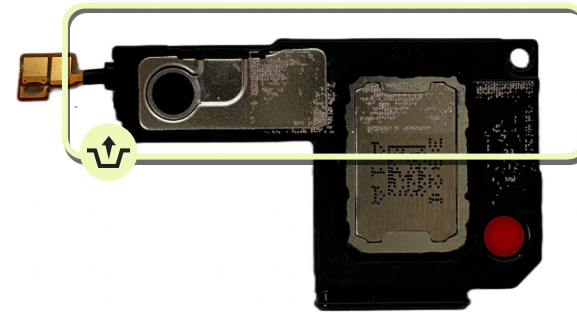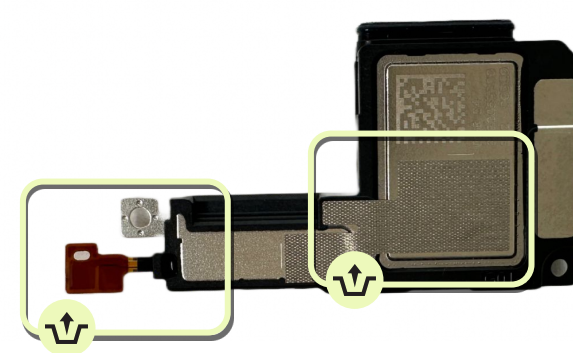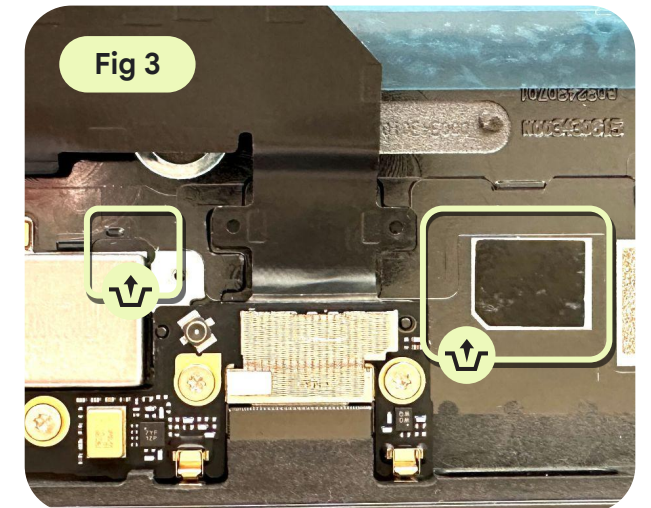
Reuse the bottom speaker

- Attach the three PSA's to the bottom speaker and one PSA to base enclosure, refer to the figures for locations.
- Tear off the liners.

Part: G806-11655-00 (Conductive fabric 1)

Part: G806-11656-00 (Conductive fabric)

Part: G806-12230-00 (PAD PSA)

Part: G806-09445-00 (Base york PSA)

A: G806-11655-00

B: G806-12230-00

C: G806-11656-00

D:G806-09445-00

Inner Display Sub   USB Board   Vibrator   **Bottom Speaker**   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub
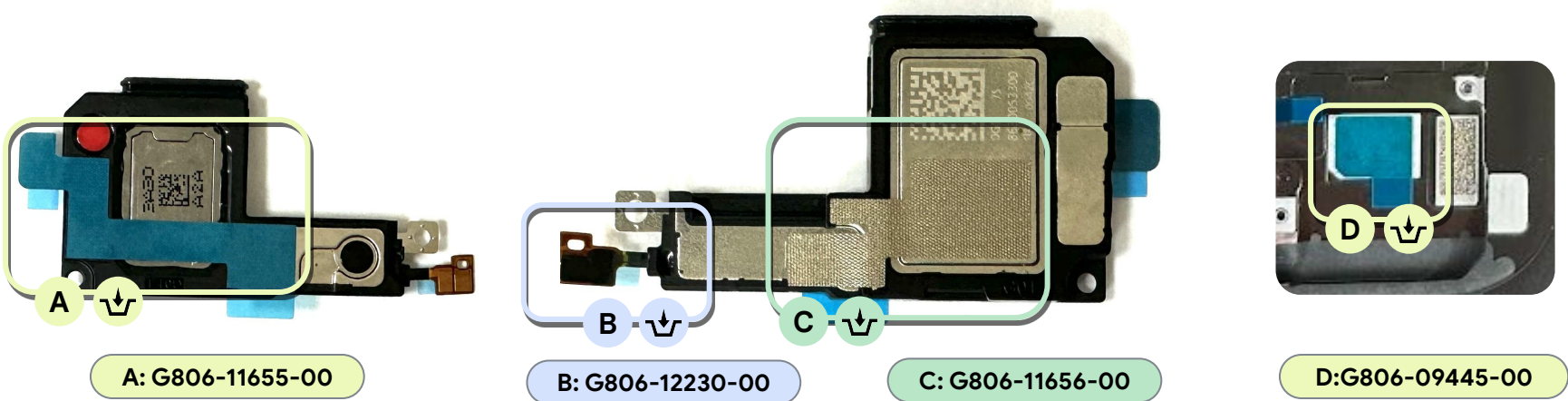
Attach the bottom speaker

- Slot the **bottom speaker** at an angle inside the **enclosure** as shown in Fig 1.

- Press down for **6** seconds.

- Tighten the **screw** with the **torx plus (3IP) screwdriver**.

- Tighten the screw a second time to secure them in place.

- Tear off the blue liner and attach the conductive fabric to the designated position as shown in Fig 2.

Part: G863-00533-00 (Bottom speaker)

Part: G250-06989-01 (Screw)

> ### Note
>
> Make sure that the speaker goes completely under the enclosure rim.
>
> Clean the rubber surface with dust-free cotton swabs before installation.

> ### Note
>
> Torque force: 0.9 ± 0.09 kgf-cm

Fig 1
Tighten the screw twice.

Fig 2

Inner Display Sub   USB Board   Vibrator   **Bottom Speaker**   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 148
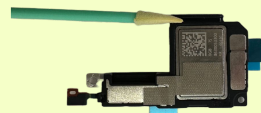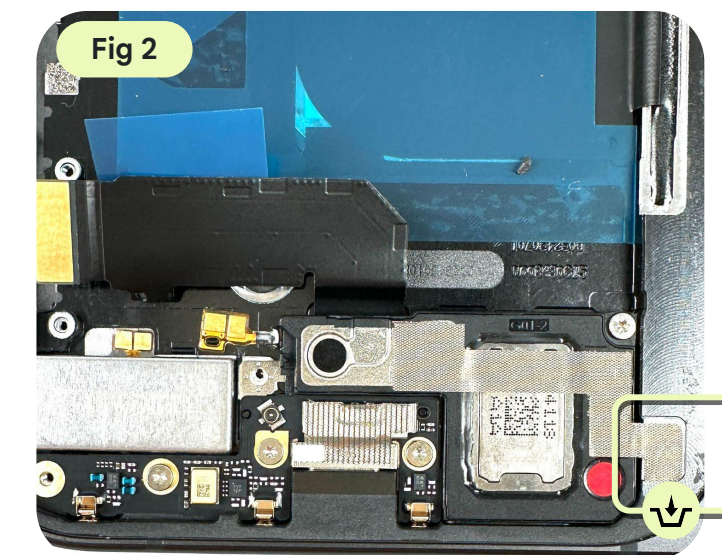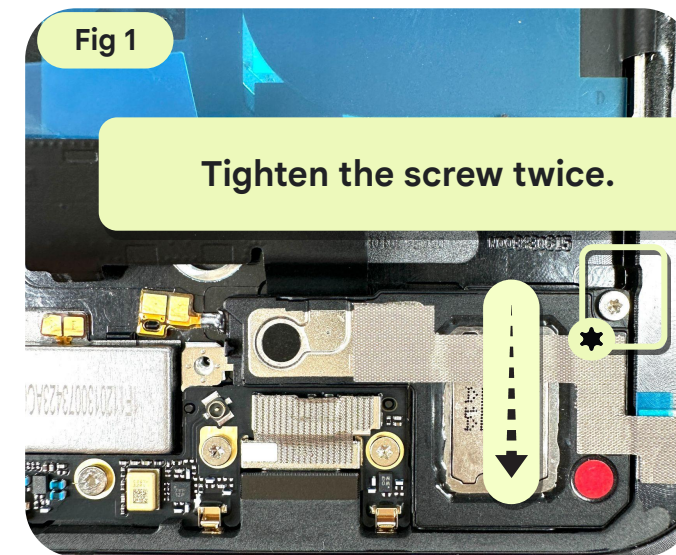
Assembly
instructions

Rear camera

Attach the rear cameras

- Attach the three rear camera connectors to the **logic board**, and apply pressure evenly across the connectors to ensure that they are fully engaged.

Part: G949-00914-00 (Rear camera)

WIDE

UW

TELE

Note

Check every connector is fully attached to the logic board.

View from different angles to aid in alignment.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   **Rear Camera**   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 150
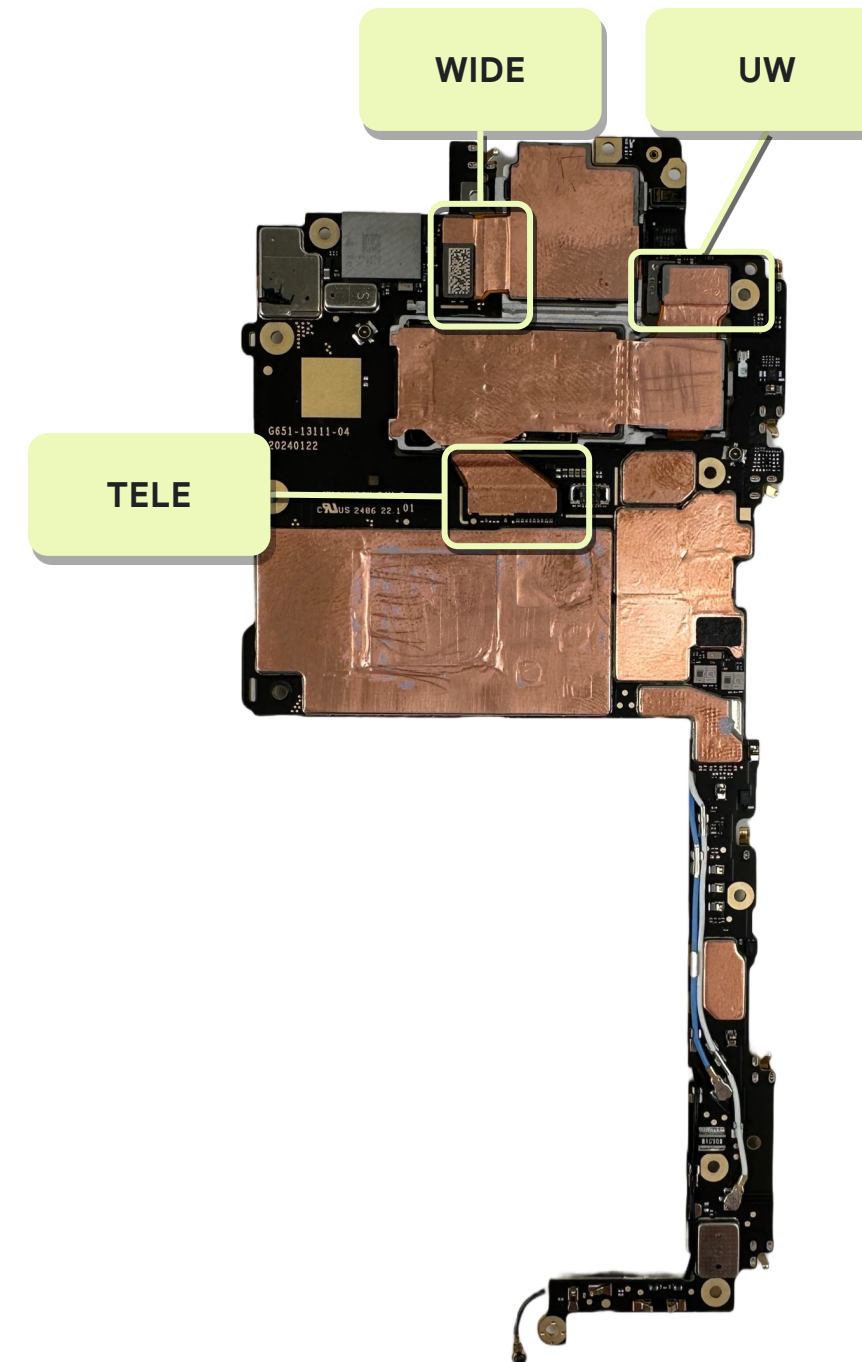
Attach the RCAM cable

- Attach the **coaxial cable RCAM (long)** to the **logic board** with **tweezers**.

- Gently press the **coaxial cable RCAM** into the channel on the logic board with **tweezers**.

Part: G821-00916-00 (Coaxial cable RCAM)

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   **Rear Camera**   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 151
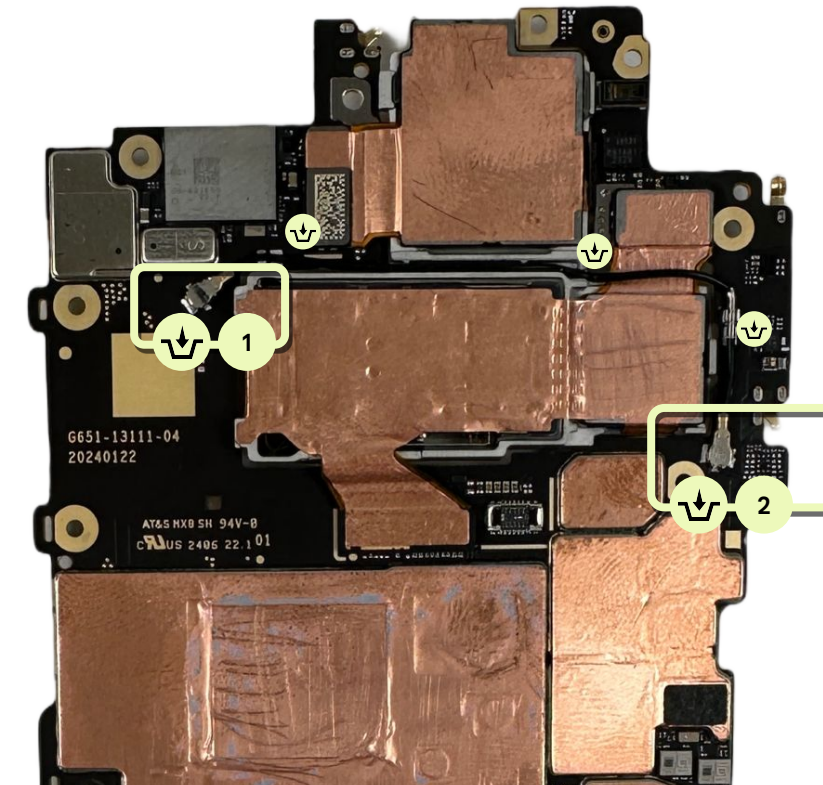
Assembly
instructions

IF FPC

Reuse the IF FPC
(only for a reused IF FPC)

- Remove the adhesive with the **spudger** from two locations on the IF FPC.

- Wrap the ESD spudger with a dust-free cloth. Dip it in IPA to clean up any residue on the logic board and the IF FPC.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   **IF FPC**   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 153
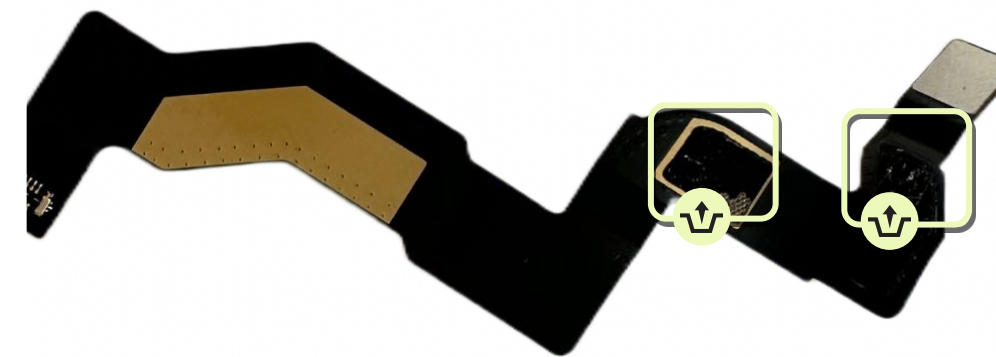
Reuse the IF FPC

(only for a reused IF FPC)

Stick the CPSA to the designated position.

Parts: G652-10207-04 (IF FPC)

Parts: G806-09341-00 (IF CPSA-1)

Parts: G806-09340-00 (IF CPSA-2)

B: G806-09340-00   A: G806-09341-00
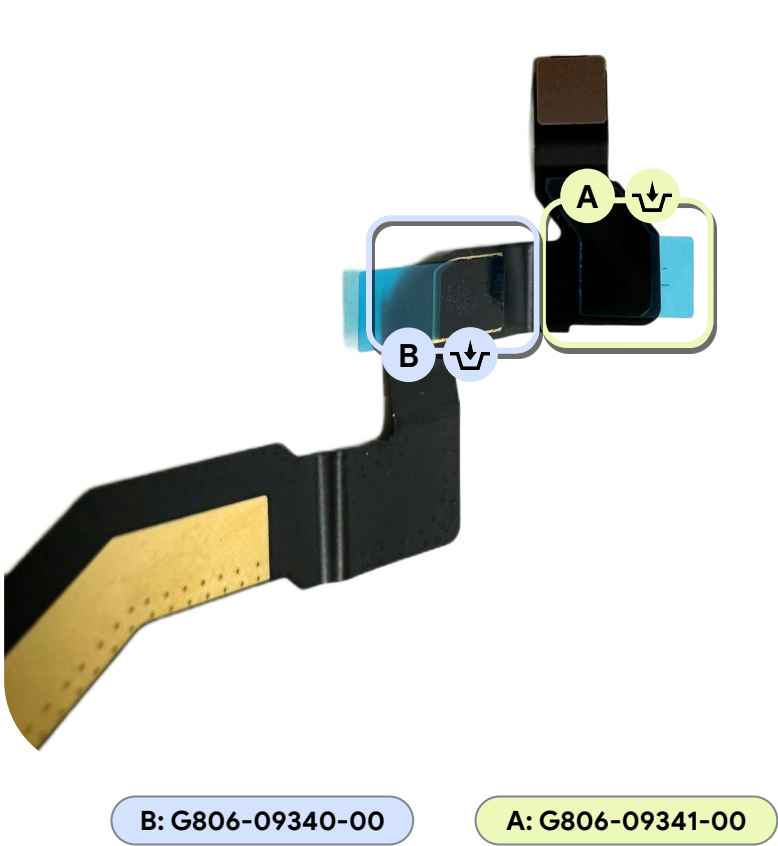
Attach the IF FPC

- Tear off the liner of the IF CPSA-2 and connect the IF FPC to the logic board.

- Press down for **5** seconds.

Note

Check if every connector is fully attached to the logic board.

Note

Don't remove the release liner of the IF CPSA 1 just yet. Tear off after mmWave module assembly.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   **IF FPC**   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 155
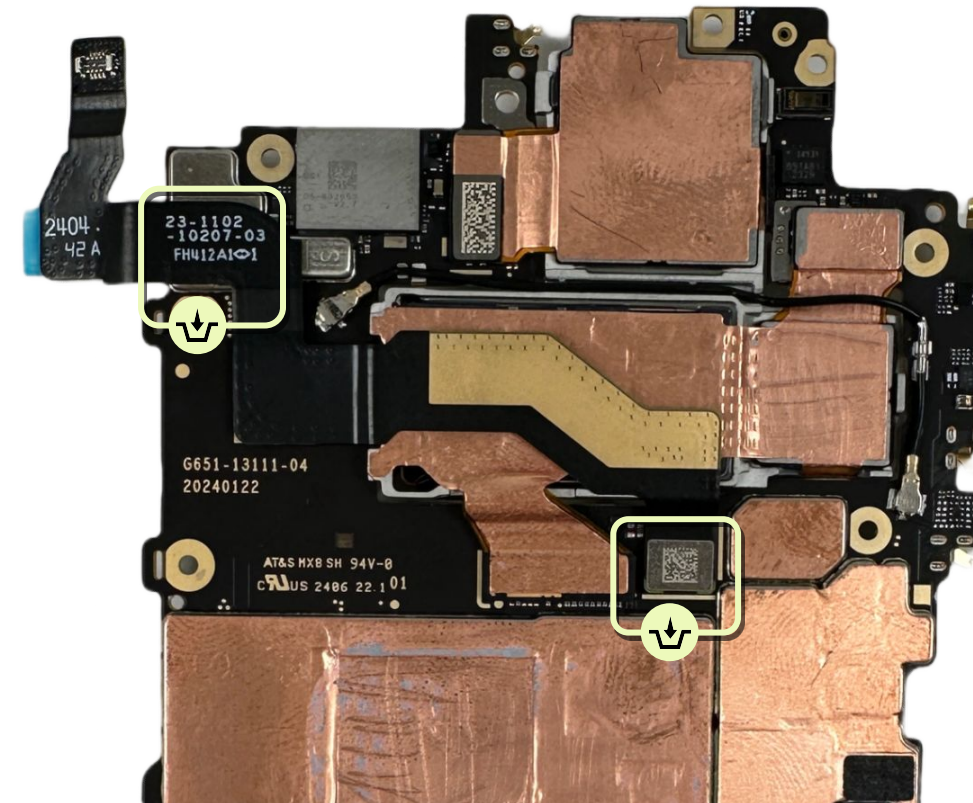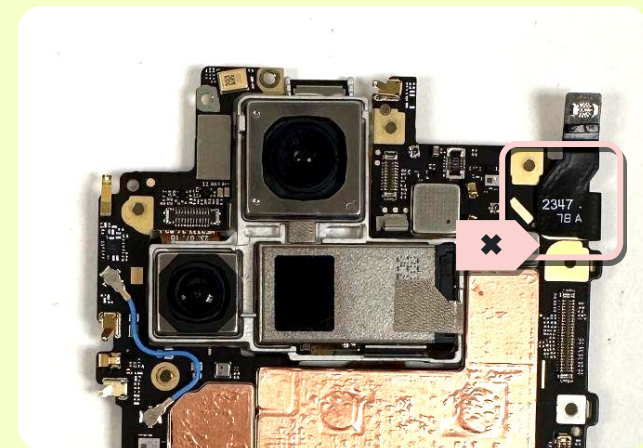
Assembly
instructions

Logic board

Check the logic board

General rules

Use caution

Before you assemble the logic board, check for spring deformation and damage to components near the edges. **Pay extra attention to the springs during assembly to avoid damage to them.**

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   **Logic Board**   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 157
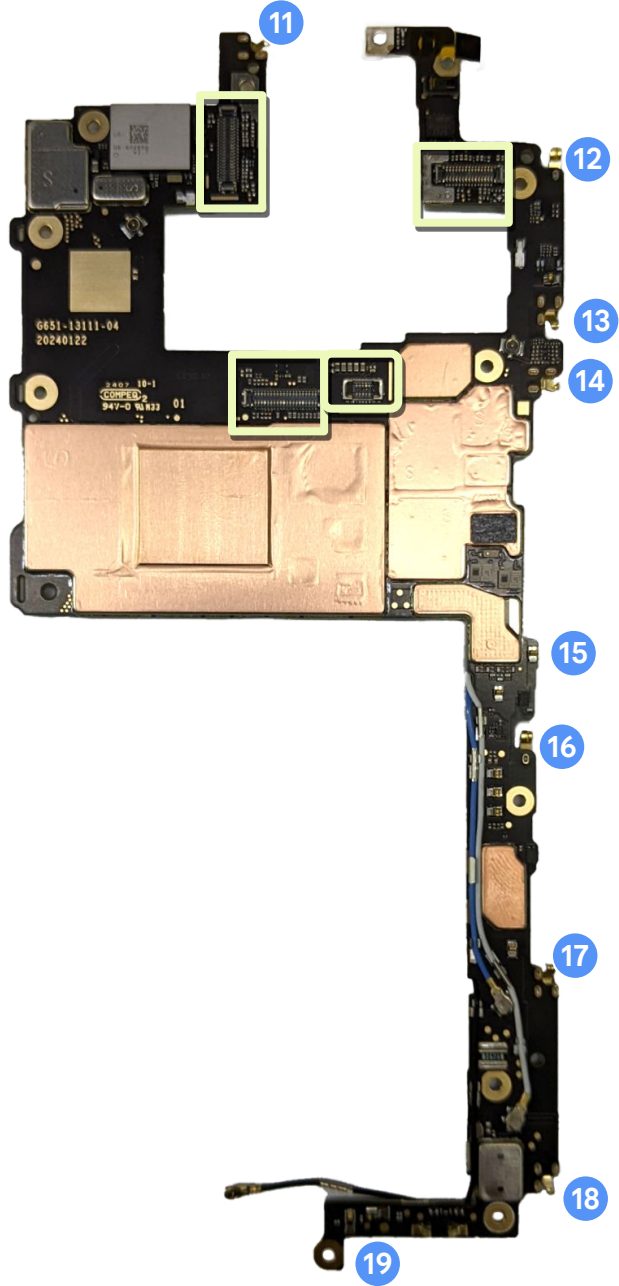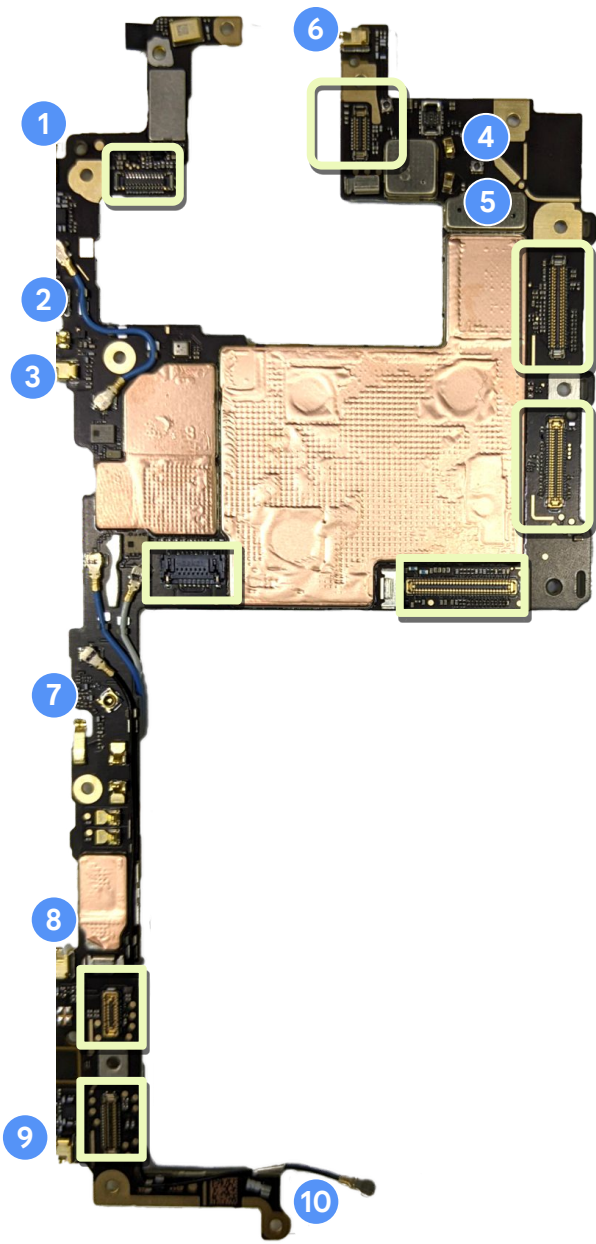
Attach the coaxial cable USB

- Attach the **coaxial cable USB connector** to the **logic board** with **tweezers**, as shown in **Fig 1.**

- Gently press the **coaxial cable USB** cable into the channel on the logic board with **tweezers** as shown in **Fig 1.**

- Turn to the back side, insert the **coaxial cable USB** to the tunnel of the logic board with **tweezers** as shown in **Fig 2.**

Part: G821-00917-00 (Coaxial cable USB)

💡 **Note**

The logic board includes the coaxial cable USB. Perform this step only if the cable is unbuckled.

Front

Fig 1

Back

Fig 2

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   **Logic Board**   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub
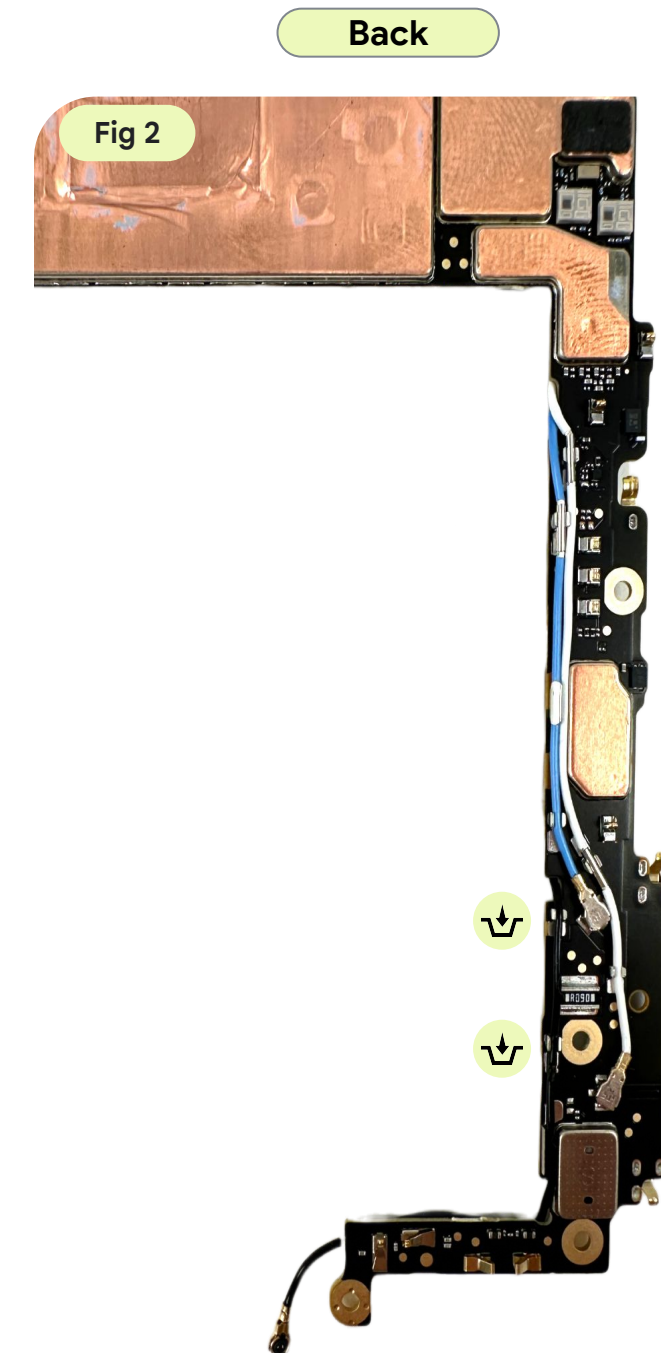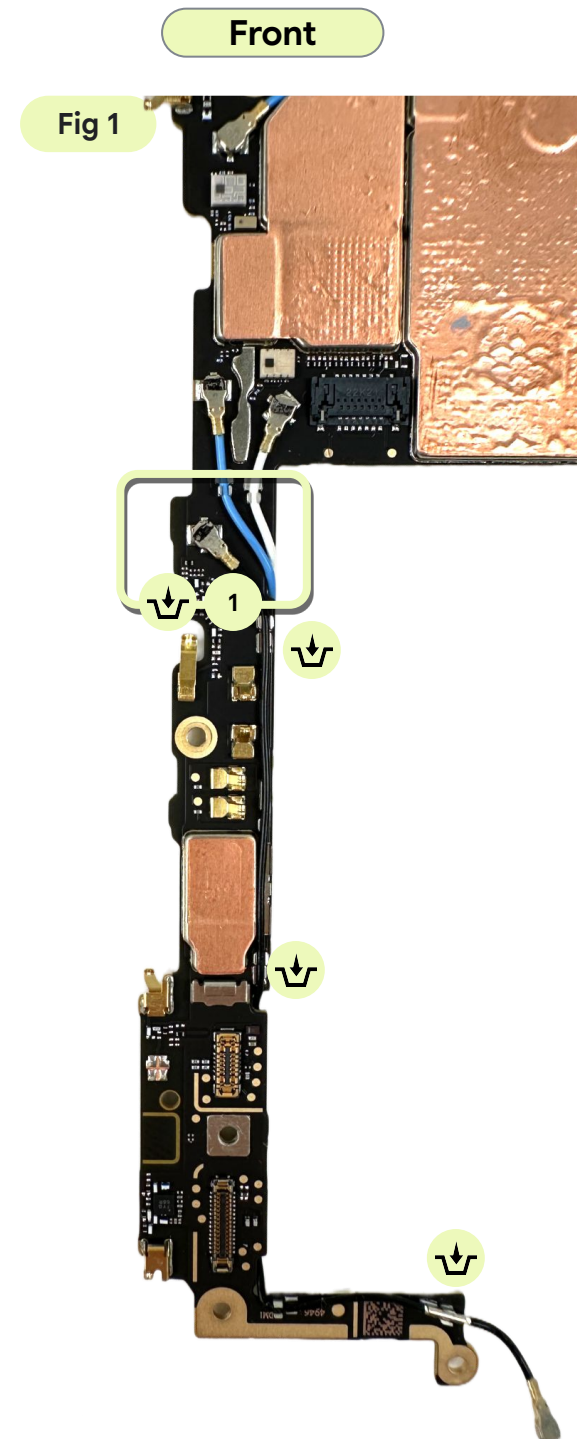
Protect the connectors

- Use the masking tape to prevent the connectors getting thermal grease.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   **Logic Board**   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 159
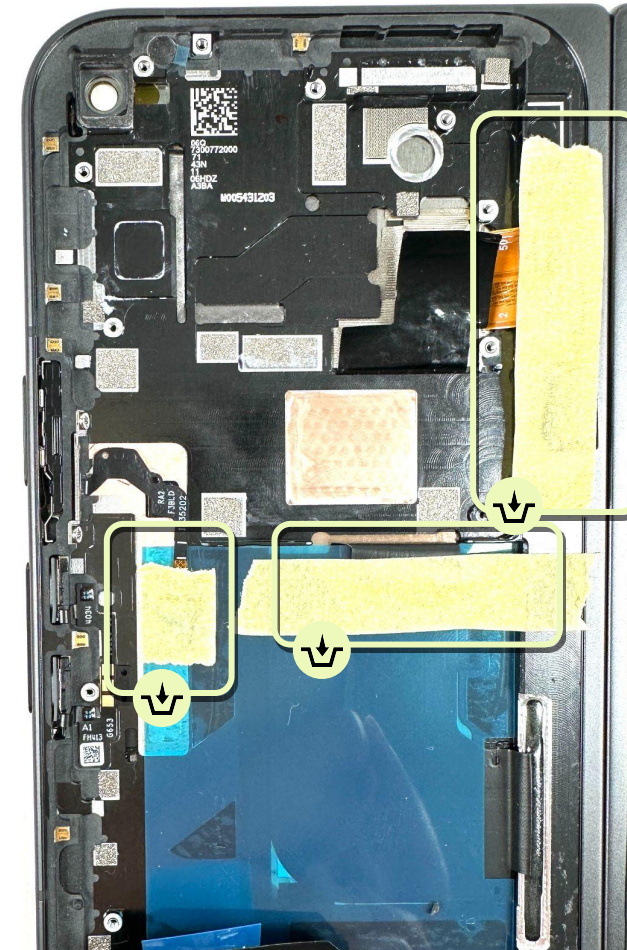
Apply the thermal grease

- Place the **Pixel 9 Pro Fold thermal grease align** on the enclosure. *Don't* to press the black graphite.

- Apply a small bead (0.3 g ± 5%) of the thermal grease inside each cutout.

- Pass the ESD spudger or the EVA sponge in a single direction to distribute the thermal grease across all the cutouts.

- Lift the Pixel 9 Pro Fold thermal grease to align straight up.
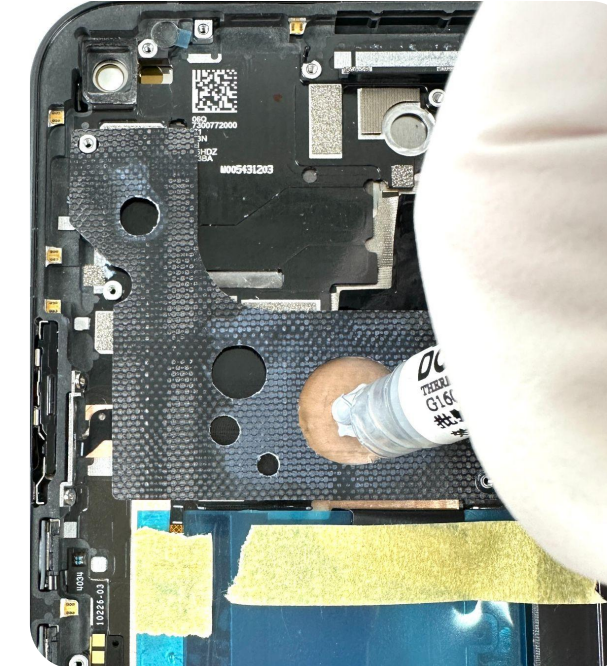
Part: G160-01058-00 (Thermal grease)

⚠️ **Use caution**

Review all safety precautions before you begin work.

Ensure to clean the Pixel 9 Pro Fold thermal grease align and the ESD spudger after each use.

***Don't* get the conductive thermal grease on any of the nearby components.**

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   **Logic Board**   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 160
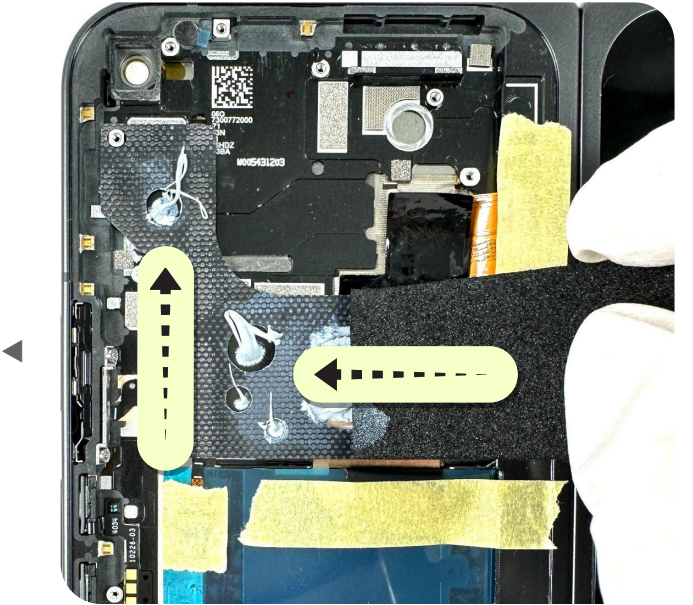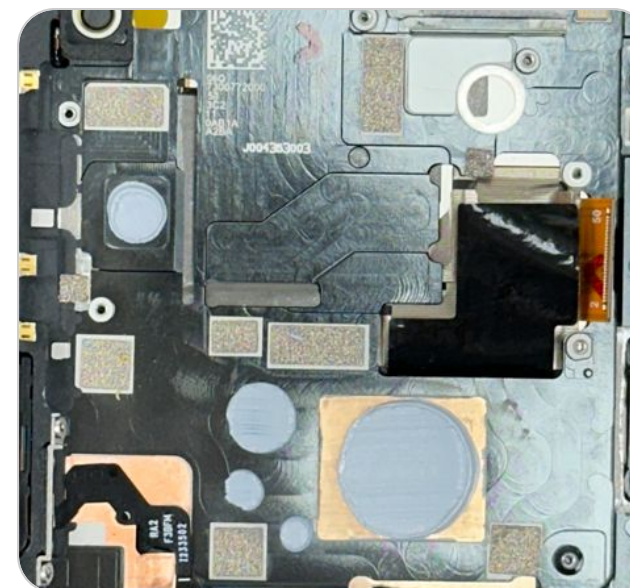
Lift the connectors

Lift the **FPS**, **inner display**, **base top bridge, base bottom bridge connectors,** and the **USB board FPC** to avoid them trapped under the **logic board.**

💡 **Note**

Remove all the masking tape from the inner display, base top bridge, base bottom bridge, FPS connector, and leave the inner front camera liner in place.

Inner display

Base top bridge

Base bottom bridge

FPS

USB board

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   **Logic Board**   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 161
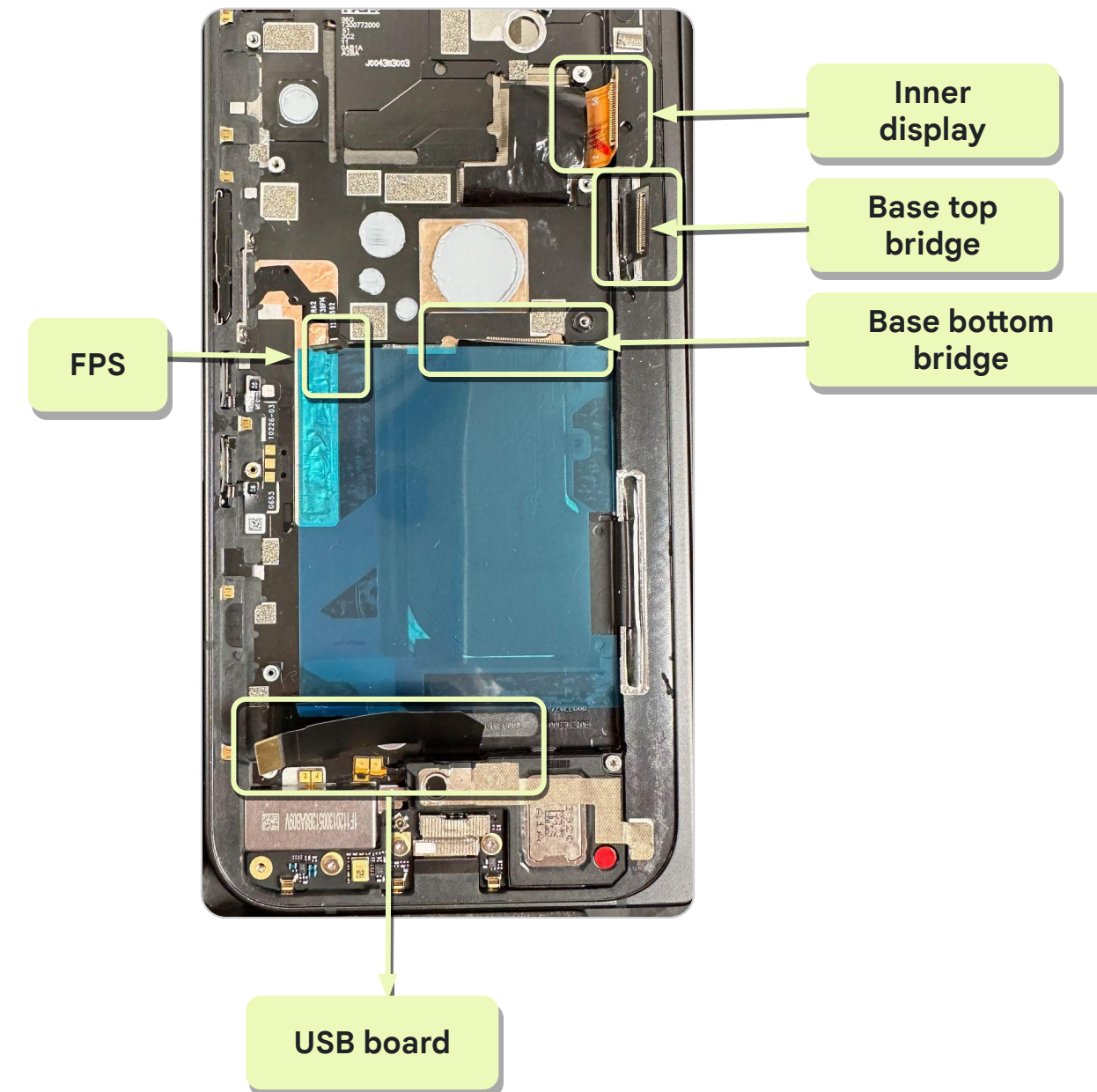
Assemble the logic board

- Remove the mic protective liner on the logic board and the mic 3 hole liner as shown in Fig 1.

- Place the **logic board** and align the two springs upward toward the top of the **enclosure** as shown in Fig 2.

- Lay the logic board flat. Make sure that the logic board sits against the alignment pins as shown in Fig 3.

Fig 1

Mic protective liner

Mic 3 hole liner

Fig 2

Fig 3

⚠ Use caution

Be careful to avoid damage to the components on the logic board.

Don't apply pressure to the mic 3 area.

💡 Note

Don't wear gloves when you handle the logic board.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   **Logic Board**   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

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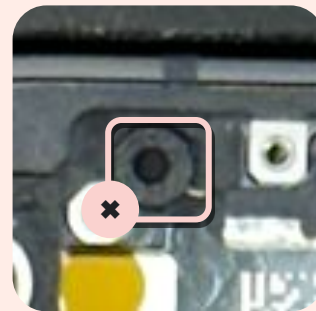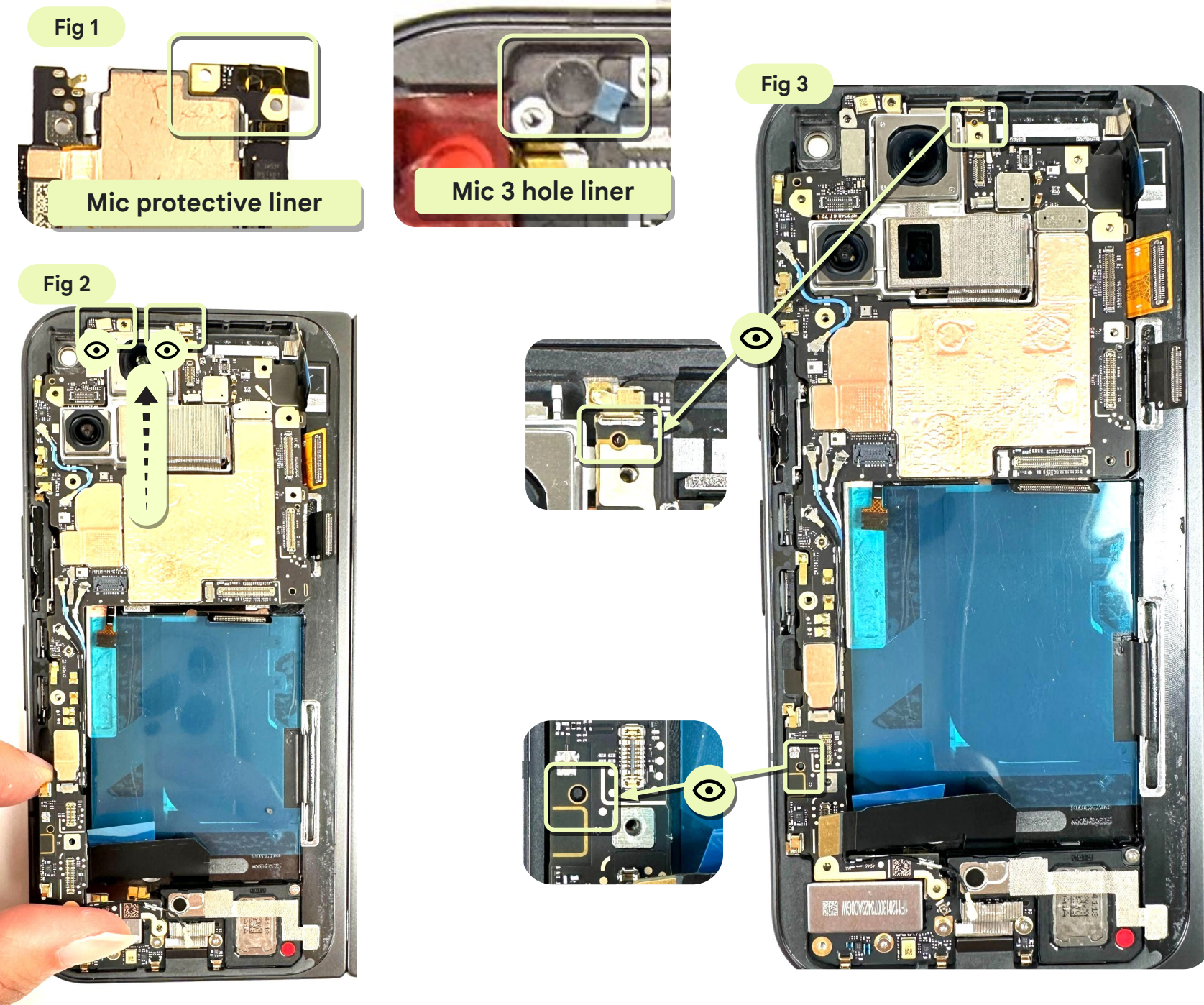
Attach the connectors

- Attach the **inner display**, **base top bridge, base bottom bridge connector** to the **logic board** in a sequence.

- Apply even pressure across the connectors to ensure they're fully engaged.

Inner display

Base top bridge

Base bottom bridge

> ### Note
>
> Check if every connector is fully attached to the **logic board.**
>
> View from different angles to aid in alignment.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   **Logic Board**   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

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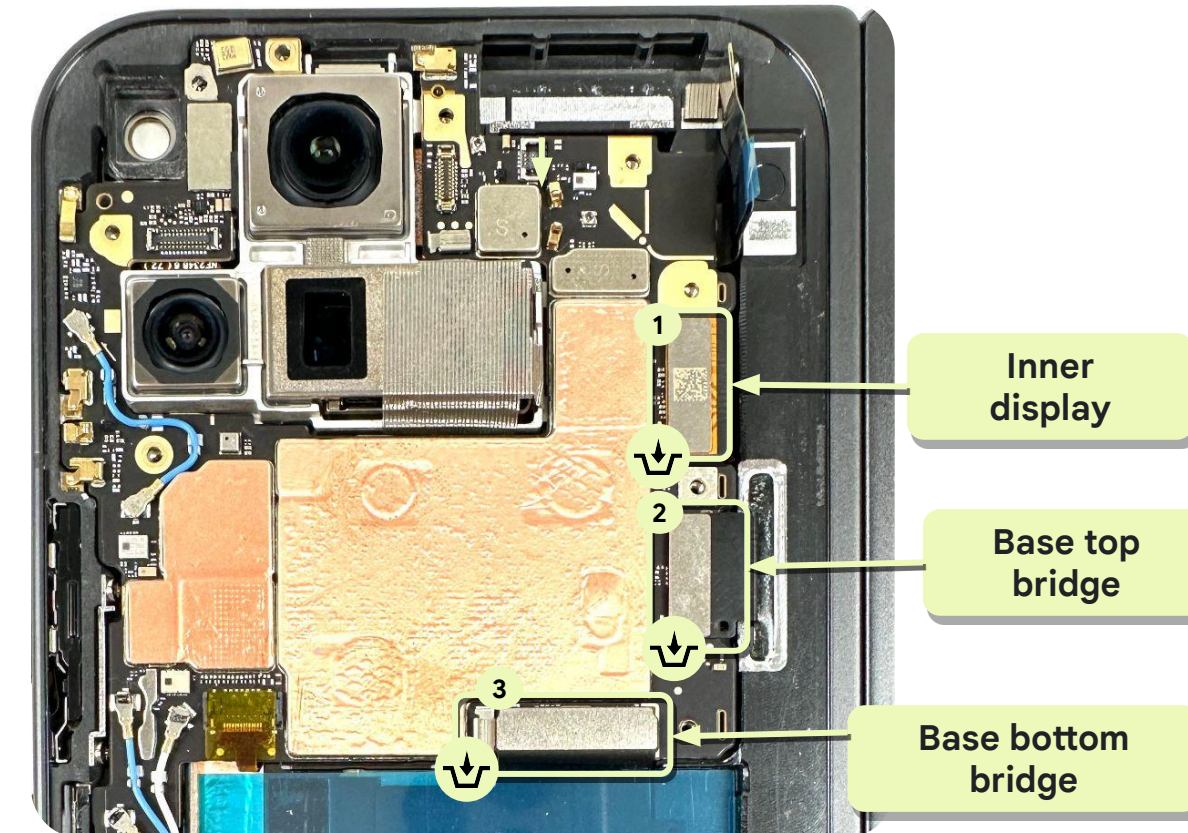
Attach the FPS zif connector

- Insert the fingerprint connector into the zif connector as shown in Fig 1.

- Lock the zif connector as shown in Fig 2.

- Apply the yellow mylar on the connector as shown in Fig 3.

Part: **G806-09565-00** (FPS mylar)

Fig 1

Fig 2

Fig 3

Note

Check if the FPS connector is fully inserted into the **logic board**.
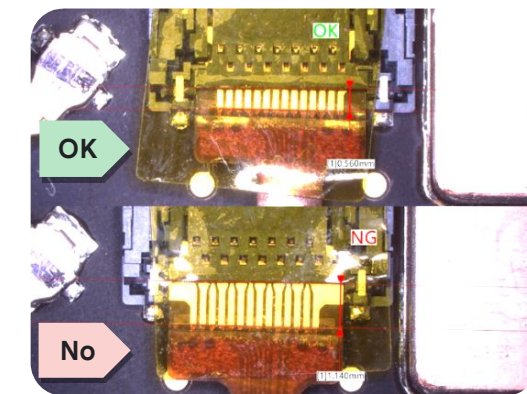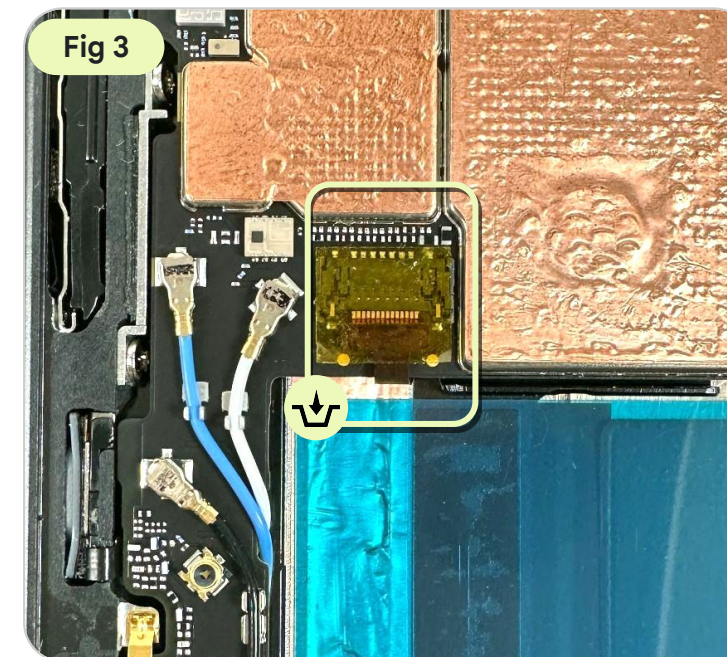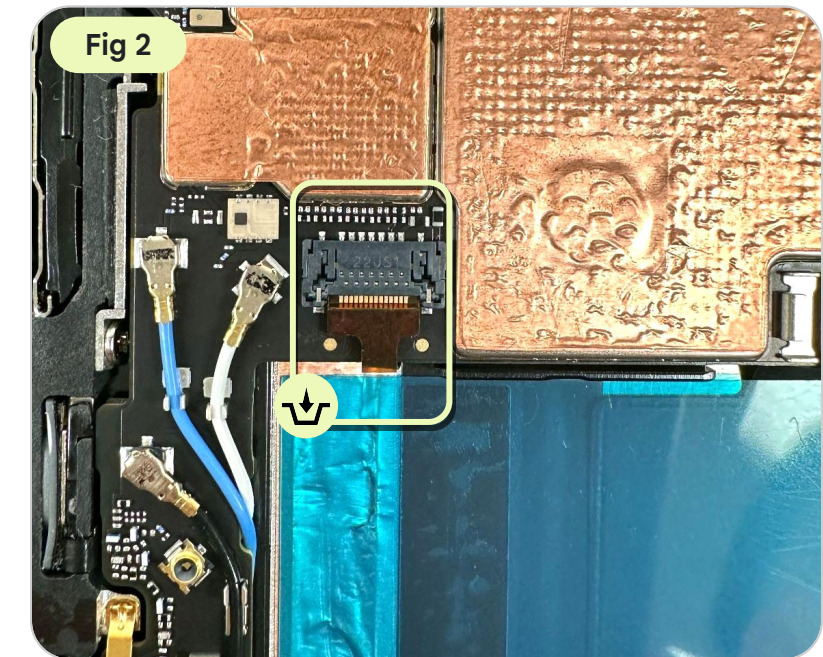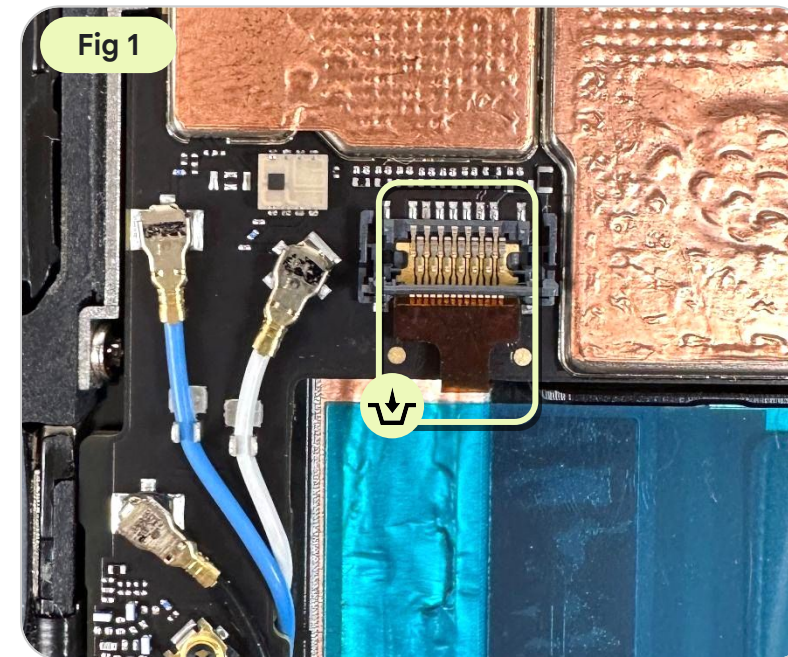
Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   **Logic Board**   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

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Screw in the logic board

- Tighten the **screw** with the **torx plus 3IP screwdriver** in a sequence.

- Tighten the screws for a second time to secure them in place.

Part: G250-06989-01*2 (Screw)

> 💡 **Note**
>
> #1 Torque force: 1.2 ± 0.1 kgf-cm
>
> #2 Torque force: 0.9 ± 0.09 kgf-cm

Tighten both the screws twice.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   **Logic Board**   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 165
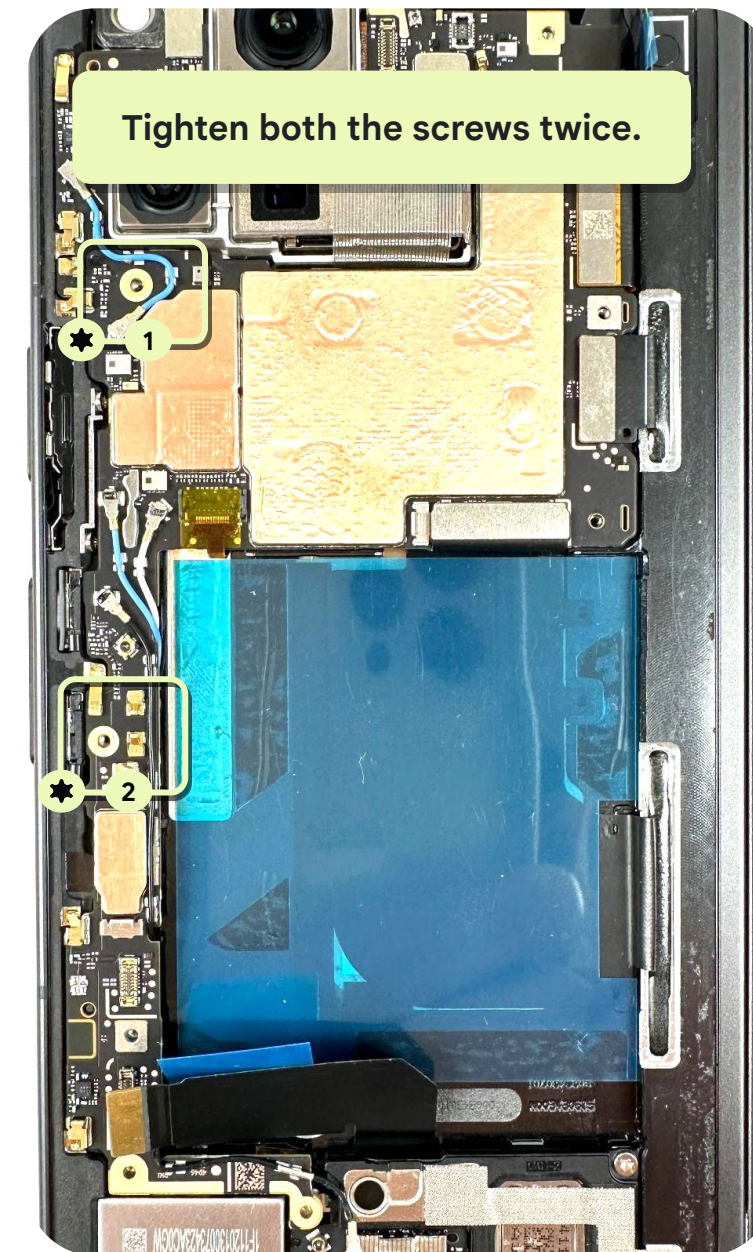
Attach the cable

- Attach the **coaxial cable_USB** to the **USB board** with **tweezers**.

- Inset the **coaxial cable_USB** to the tunnel of the logic board with **tweezers**.

Part: G821-00917-00 (Coaxial cable USB)

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   **Logic Board**   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

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Assemble the vibrator cowling

- Assemble the vibrator cowling to the designated position.

- Tighten the **screws** with the **torx plus 3IP screwdriver** in a sequence.

- Tighten the screws for a second time to secure them in place.

Part: G730-07489-00 (Vibrator cowling)

Part: G250-06988-01*2 (Screw)

Tighten both the screws twice.

💡 **Note**

Torque force: 1.2 ± 0.1 kgf-cm

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   **Logic Board**   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

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Screw in the logic board

- Tighten the **screws** with the **torx plus 3IP screwdriver** in a sequence.

- Tighten the screws for a second time to secure them in place.

Part: G250-06985-01 (Screw)

Tighten the screw twice.

> 💡 **Note**
>
> Torque force: 1.2 ± 0.1 kgf-cm

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   **Logic Board**   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

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Assembly
instructions

Inner front camera

Attach the inner FCAM

- Remove the inner FCAM cap and the protective film before you install.

- Assemble the inner FCAM into the **enclosure** slot.

- Attach the inner FCAM connector to the **logic board**.

Part: G949-00913-00 (Inner front camera)

> ## Note
>
> Check if every connector is fully attached to the logic board.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   **Inner Front Camera**   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

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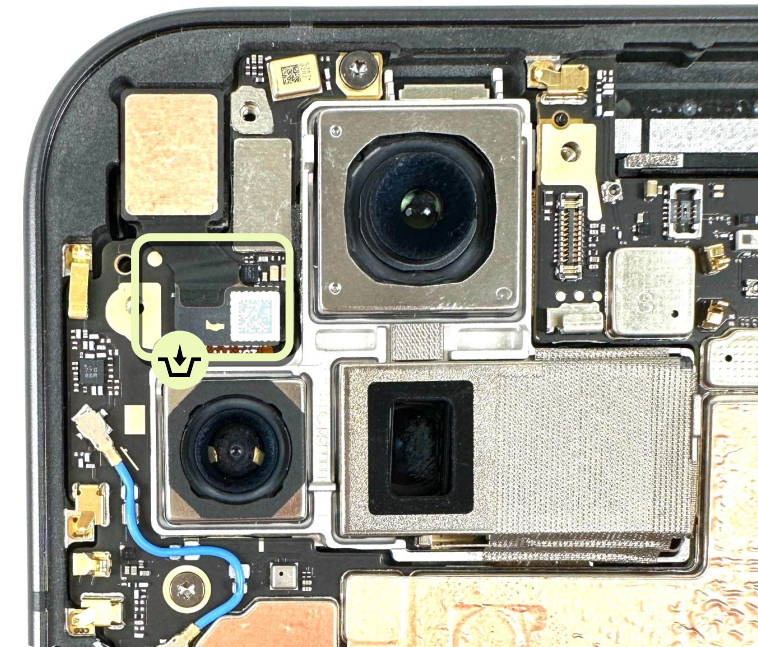
Screw the inner FCAM cowling

- Assemble the inner FCAM cowling to the logic board.

- Tighten the **screws** with the **torx plus 3IP screwdriver** in a sequence.

- Tighten the screws for a second time to secure them in place.

Part: G730-07486-00 (Inner FCAM cowling)

Part: G250-06989-01*2 (Screw)

Tighten both screws twice.

○ Note

Install the FCAM cowling into the hook. Refer to the relative position.

○ Note

Torque force: 1.2 ± 0.1 kgf-cm

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   **Inner Front Camera**   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

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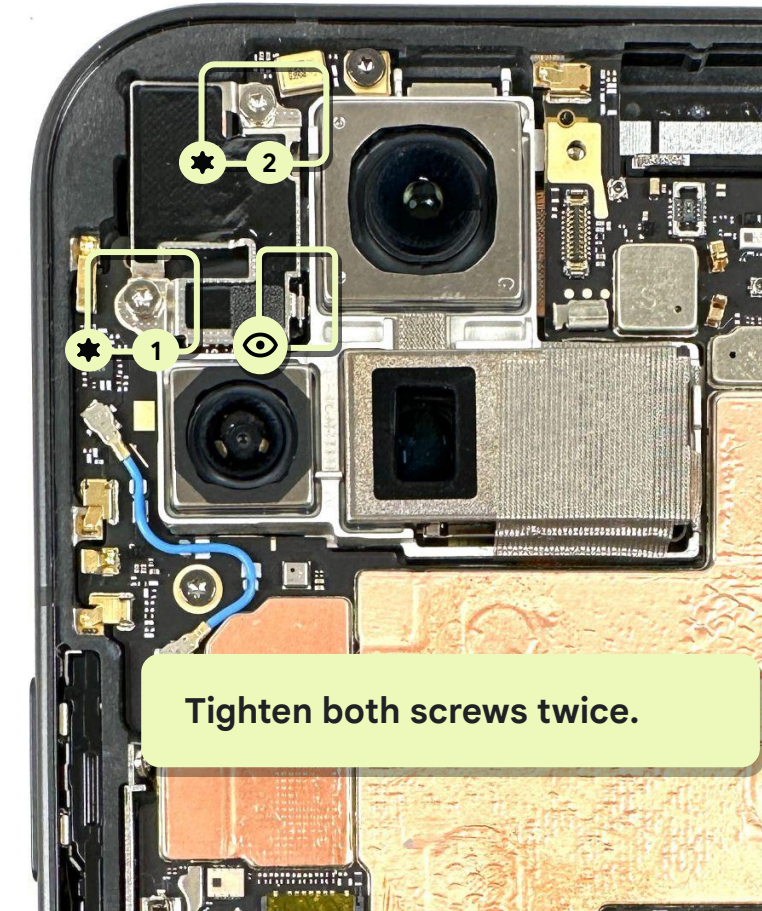
Assemble the base top or the bottom bridge cowling

- Assemble the **base top bridge cowling** then the **bottom bridge cowling** onto the logic board.

- Tighten the **screws** with the **torx plus 3IP screwdriver** in a sequence.

- Tighten the screws for a second time to secure them in place.

Part: G730-07491-00 (Base top bridge cowling)

Part: G730-07492-00 (Base bottom bridge cowling)

Part: G250-06988-01*2 (Screw)

Tighten both screws twice.

> ○ **Note**
>
> Install the bottom bridge cowling into the hook. Refer to the relative position.

> ○ **Note**
>
> Torque force: 1.2 ± 0.1 kgf-cm

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   **Inner Front Camera**   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub
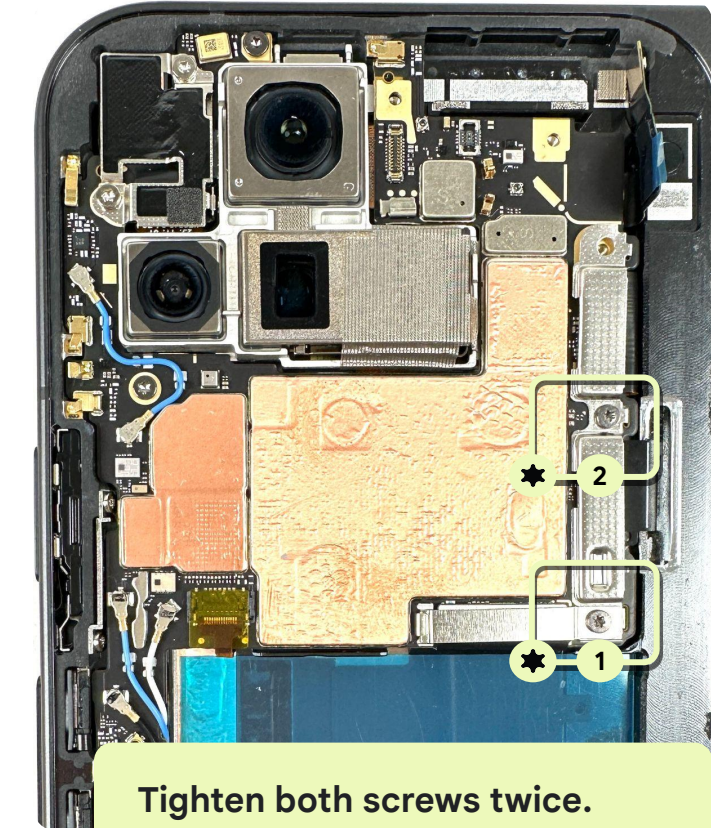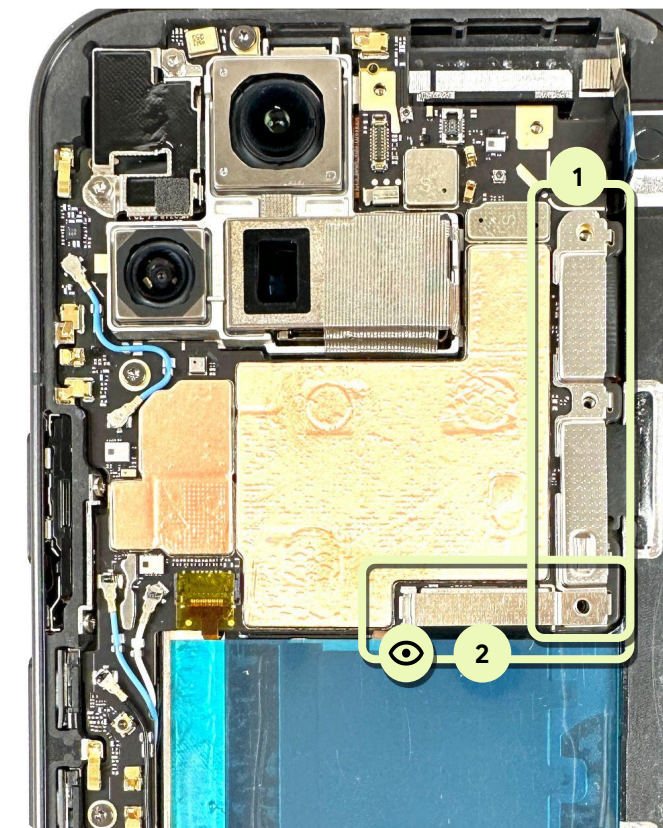
Assembly
instructions

mmWave module

Reuse the mmWave module

- Remove the B2B sponge PSA residue of the connector, old thermal pad on mmWave module, and the enclosure with some alcohol to clean residue as shown in Fig 1.

- Stick the B2B sponge PSA to the connector as shown in Fig 2. Tear off the red liner.

- Apply the new mmWave thermal pad to the respective spots on the enclosure as shown in Fig 3. Press down the adhesive and ensure a good seal.

- Grip the pull tab and peel off the blue liner to expose the adhesive.

- Peel off the blue liner of the IF FPC as shown in Fig 4.

Part: **G806-09501-00** (5G B2B sponge)

Part: **G864-00652-00** (5G thermal pad)

Fig 1
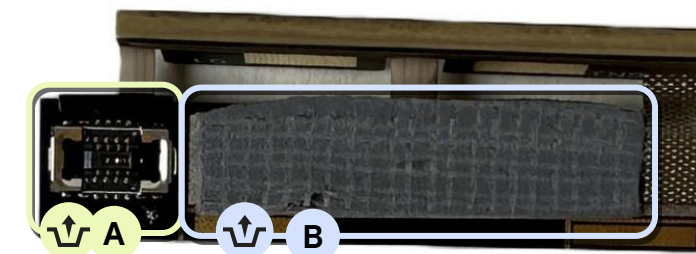
A: G806-09501-00   B: G864-00652-00

Fig 2

Fig 3

Fig 4

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   **mmWave Module**   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub
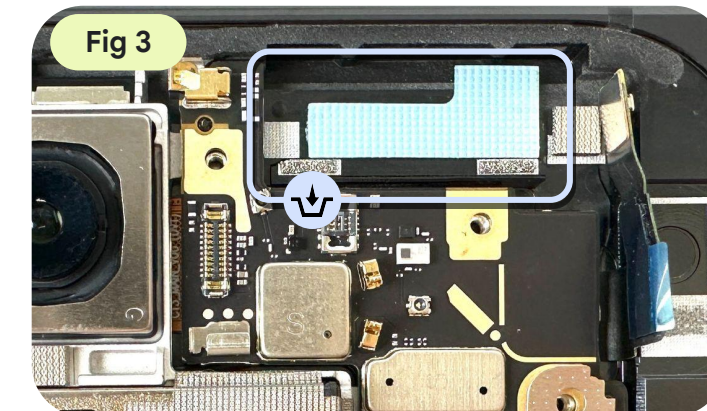
Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 174
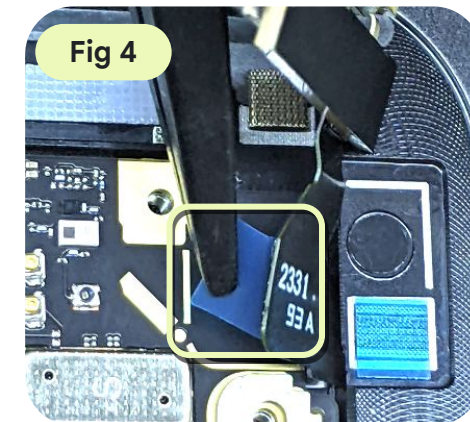
Connect to the IF FPC

- Connect the mmWave module to the IF FPC connector.
- Press **5** seconds manually.

Part: G949-00921-00 (mmWave module)

> 💡 **Note**
> Check if every connector is fully attached.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   **mmWave Module**   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 175
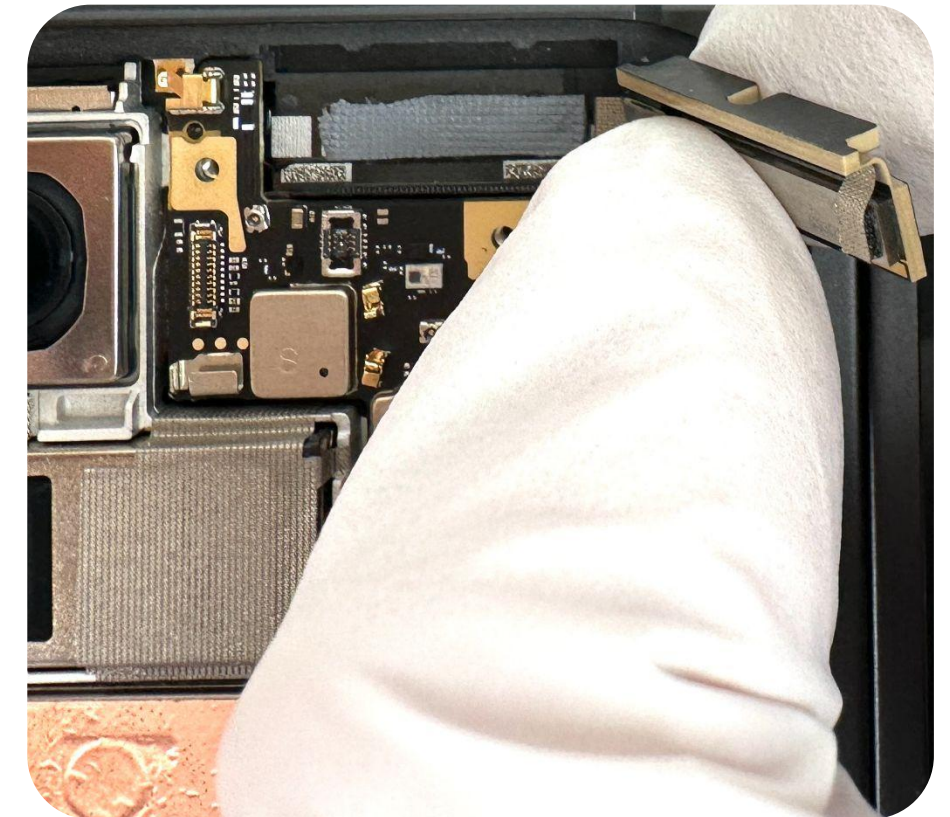
Assemble the mmWave module

- Install the **mmWave module** in its recess in the enclosure.

- Press down the **mmWave module** and the IF FPC for **5** seconds manually.

OK

No

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   **mmWave Module**   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 176
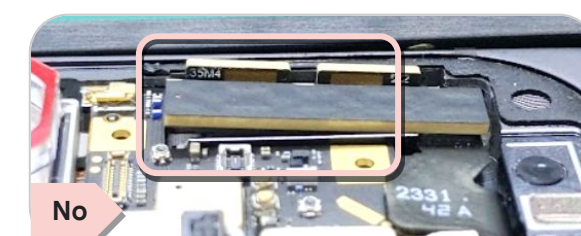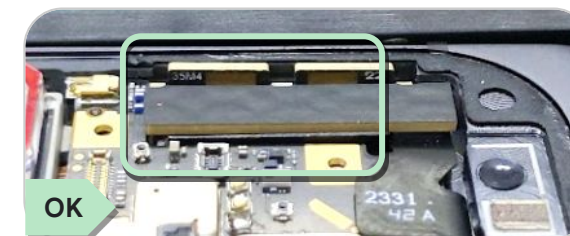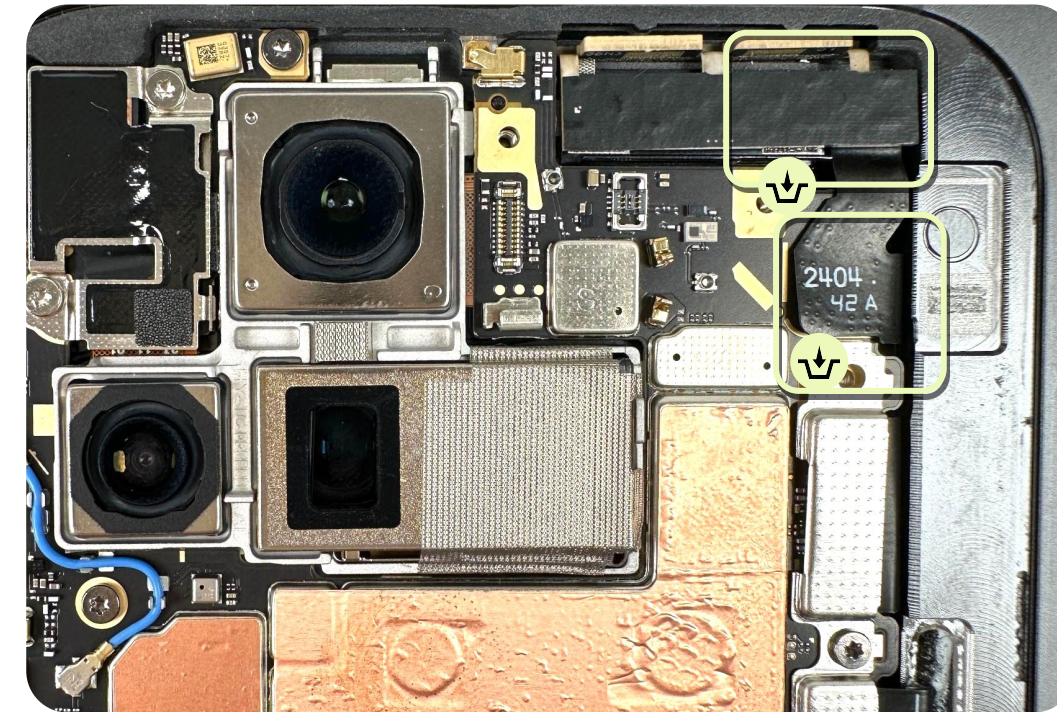
Assembly
instructions

UWB FPC

Clean the UWB foam and the PSA residue

- Remove the PSA residue of the mmWave cowling, old UWB foams on mmWave cowling, and the enclosure with some alcohol to clean residue as shown in Fig 1 and Fig 2.

Fig 1

Fig 2

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   **UWB FPC**   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

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Reuse the mmWave cowling

- Attach the PSA and paste the UWB foams to the designated position as shown in Fig 1 and Fig 2.
- Tear off the blue liner of the UWB foams (B) only.

Part: G730-07648-00 (mmWave cowling)

Part: G806-09400-00 (mmWave cowling PSA)

Part: G806-09266-00*2 (UWB foam)
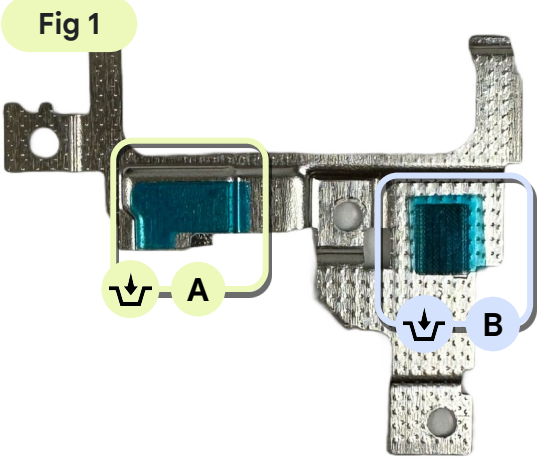
Fig 1

A: G806-09400-00   B: G806-09266-00

Fig 2

B: G806-09266-00

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   **UWB FPC**   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 179
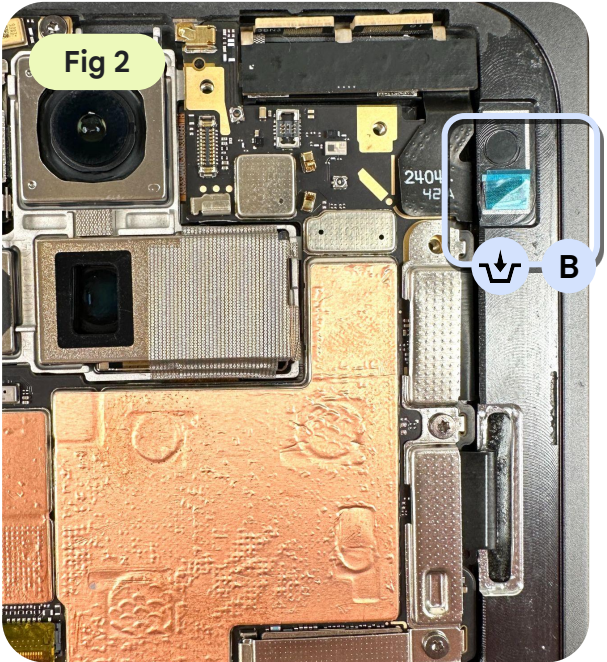
Assemble the UWB FPC

- Connect the UWB to the logic board as shown in Fig 1.

- Install the mmWave cowling to the designated position and press the FPC as shown in Fig 2.

Part: **G867-00405-00** (UWB FPC)

Part: **G730-07648-00** (mmWave cowling)

Note

Check if every connector is fully attached to the logic board.

Note

Install the mmWave cowling into the hook. Refer to the relative position.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   **UWB FPC**   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 180
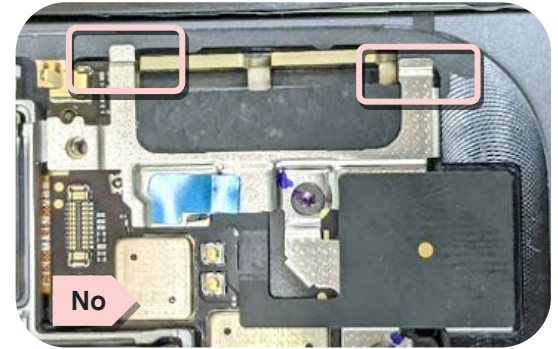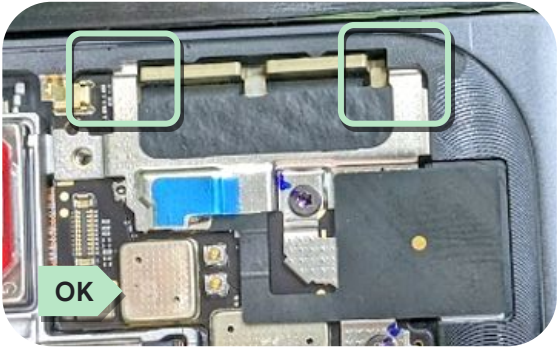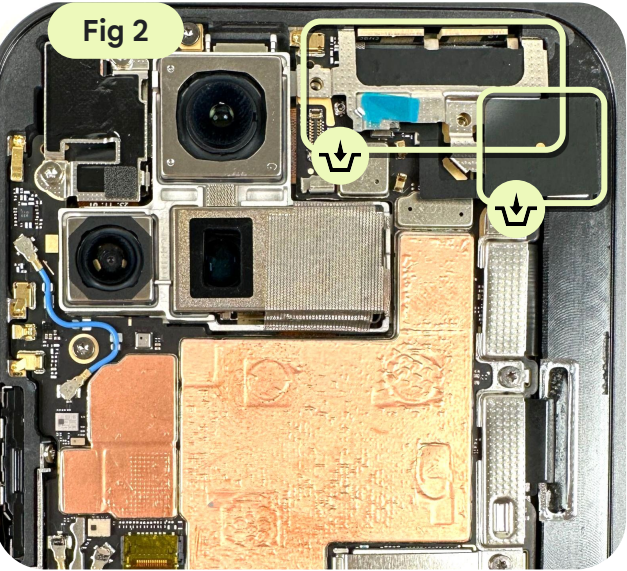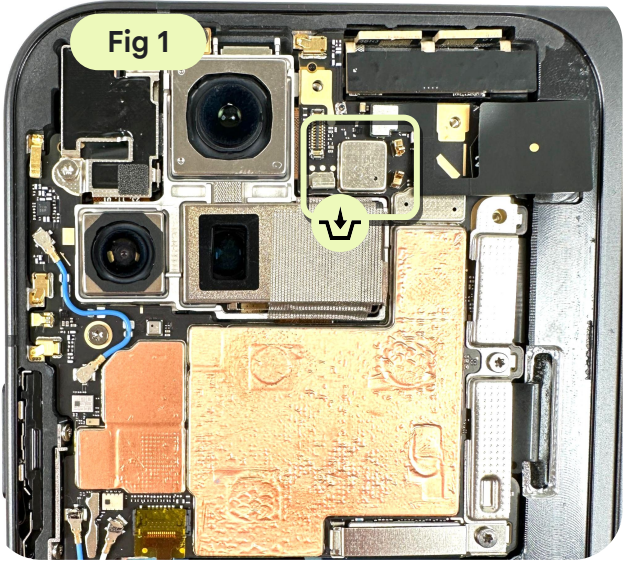
Fasten the mmWave cowling

- Fasten the **mmWave cowling screws** with the **torx plus 3IP screwdriver in a sequence.**

- Tighten the screws for a second time to secure them in place.

Part: G250-06988-01*2 (Screw)

Tighten all screws twice.

Note

Torque force: 1.2 ± 0.1 kgf-cm

Note

Make sure that the mmWave cowling is on the top of the base top bridge cowling.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   **UWB FPC**   Base Battery   Base Battery Cowling   Graphite Sheet   BG sub

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Assembly
instructions

Base battery

Tear off the liner

- Before the base battery installation, remove any debris and loose screws from the enclosure.

- Peel off the new adhesive strip and apply the sticky side to the enclosure.

- Use the spudger or your fingers, to press down the adhesive and adhere it to the enclosure. Peel off the blue liner.

- If you use a new ID sub, remove three liners as shown in Fig 1.

⚠️ **Use caution**

Review all safety precautions before you begin work.

Ensure that the battery cosmetic checks are completed.

Grip the tab here.

Reuse ID sub

Fig 1

New ID sub

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   **Base Battery**   Base Battery Cowling   Graphite Sheet   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 183
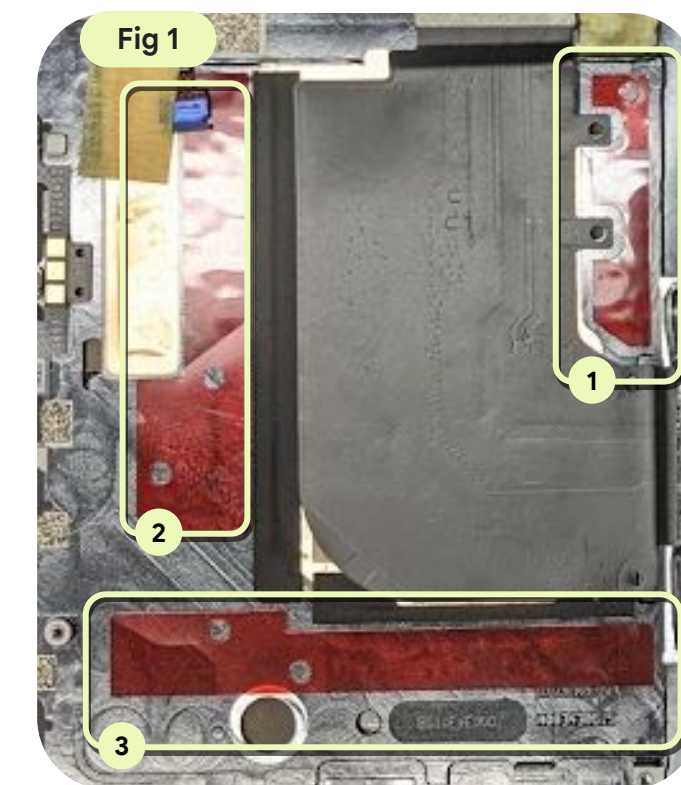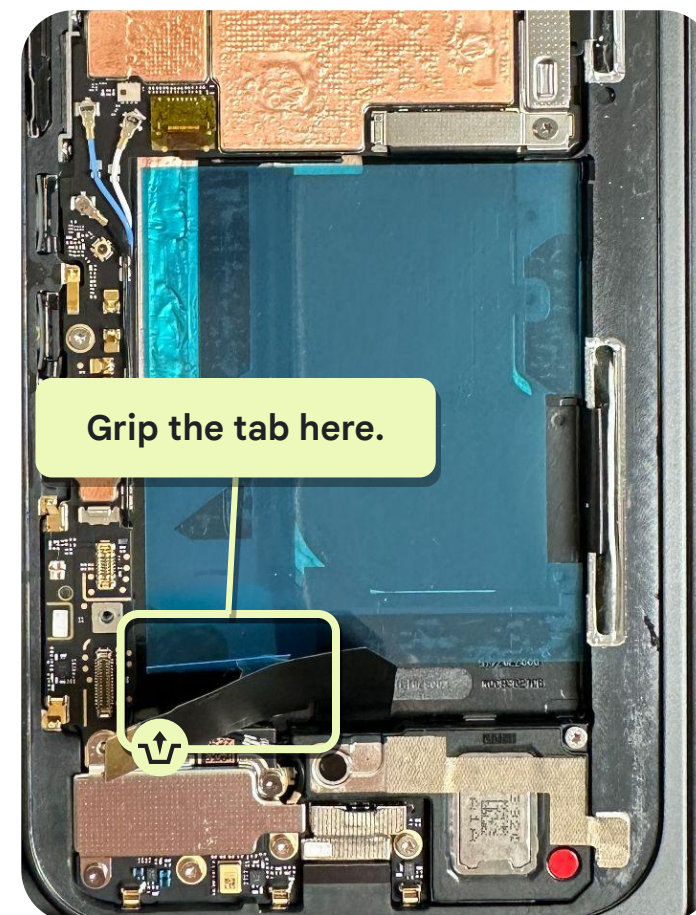
Align the base battery

- Place two feeler gauges with 0.1 mm thickness as L shape and align to the right-top corner.

⚠️ **Use caution**

Review all safety precautions before you begin work.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   **Base Battery**   Base Battery Cowling   Graphite Sheet   BG sub

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Align the base battery

- Install the **base battery** into the enclosure toward the upper-right corner with an **absorption-bulb**. Ensure that the **battery** cosmetic checks are completed.

- Remove the feeler gauges and absorption-bulb.

Part: G849-00920-00 (Base battery)

⚠ **Use caution**

Review all safety precautions before you begin work.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   **Base Battery**   Base Battery Cowling   Graphite Sheet   BG sub

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Press the base battery

- Place the **Pixel 9 Pro Fold-holder** on the **universal base**.

- Use the masking tape to fix the USB board FPC to avoid the press as shown in Fig 1.

- Place the **Pixel 9 Pro Fold-bat press (base)** on the **Pixel 9 Pro Fold-holder** as shown in Fig 1.

- Place the **universal press plate 12 mm** on the **Pixel 9 Pro Fold base battery press rubber** as shown in Fig 2.

- Place the it in the **universal press fixture**. Press the handle down for **25** seconds as shown in Fig 3.

Fig 1

USB board FPC

Universal base

Fig 2

Universal-Press Plate 12mm

-G940-00736-00-9996

Fig 3
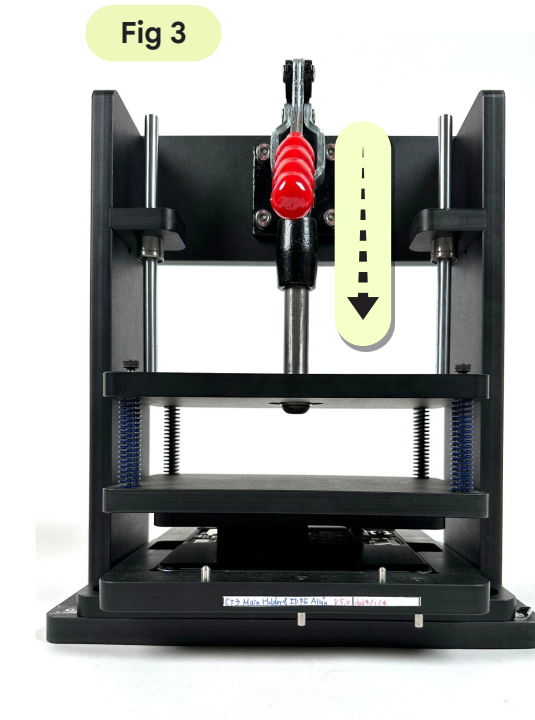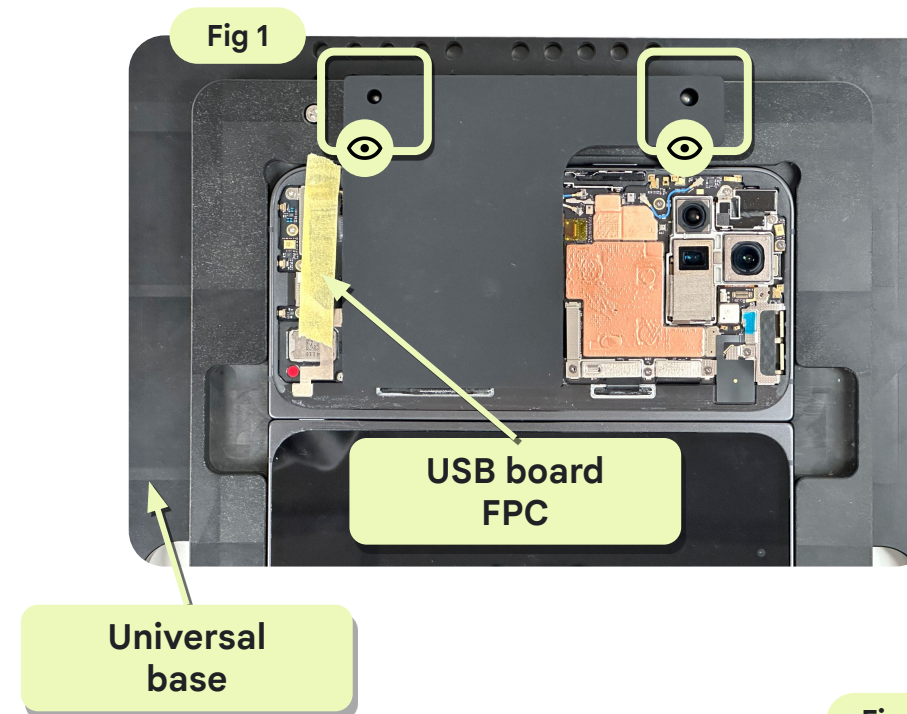
⚠ **Use caution**
Keep hands clear during operation.

💡 **Note**
For any steps related to press, always place the Pixel 9 Pro Fold holder in the B1 position.

Inner Display Sub　　USB Board　　Vibrator　　Bottom Speaker　　Rear Camera　　IF FPC　　Logic Board　　Inner Front Camera　　mmWave Module　　UWB FPC　　**Base Battery**　　Base Battery Cowling　　Graphite Sheet　　BG sub

Pixel 9 Pro Fold Repair Manual v1.0　　©Google 2024　|　Page 186

Assembly
instructions
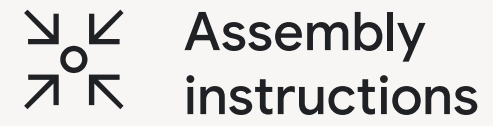
Base battery cowling

Connect to the logic board

- Connect the **USB board and the base battery FPC** to the **logic board** in a sequence.

💡 **Note**

Check if every connector is fully attached to the logic board.

Base battery

2

USB board

1

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   **Base Bottom Cowling**   Graphite Sheet   BG sub

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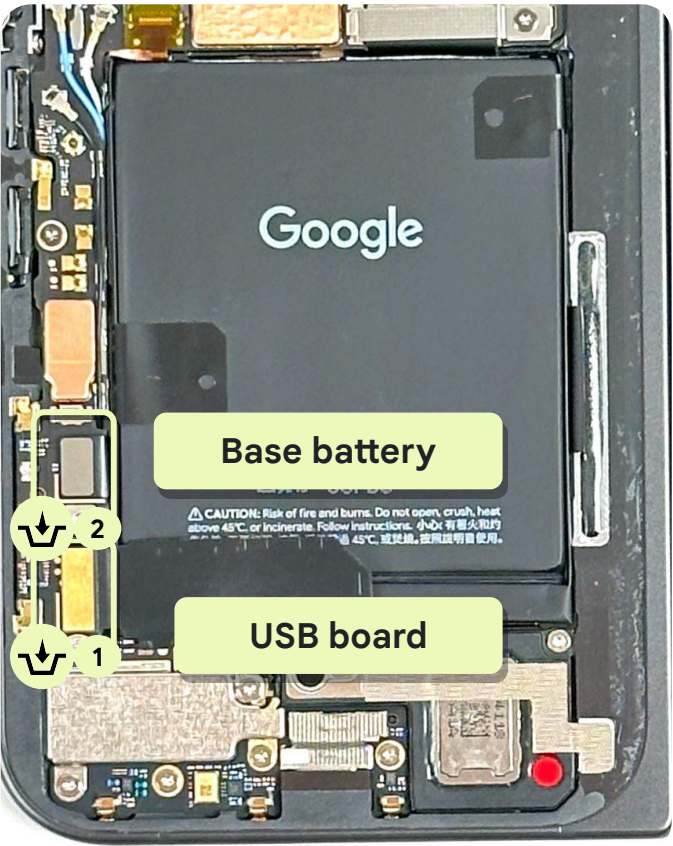
Assemble the base bottom cowling

- Assemble the **base battery cowling** to the enclosure.

- Tighten the **two screws** with the **torx plus 3IP screwdriver in a sequence**.

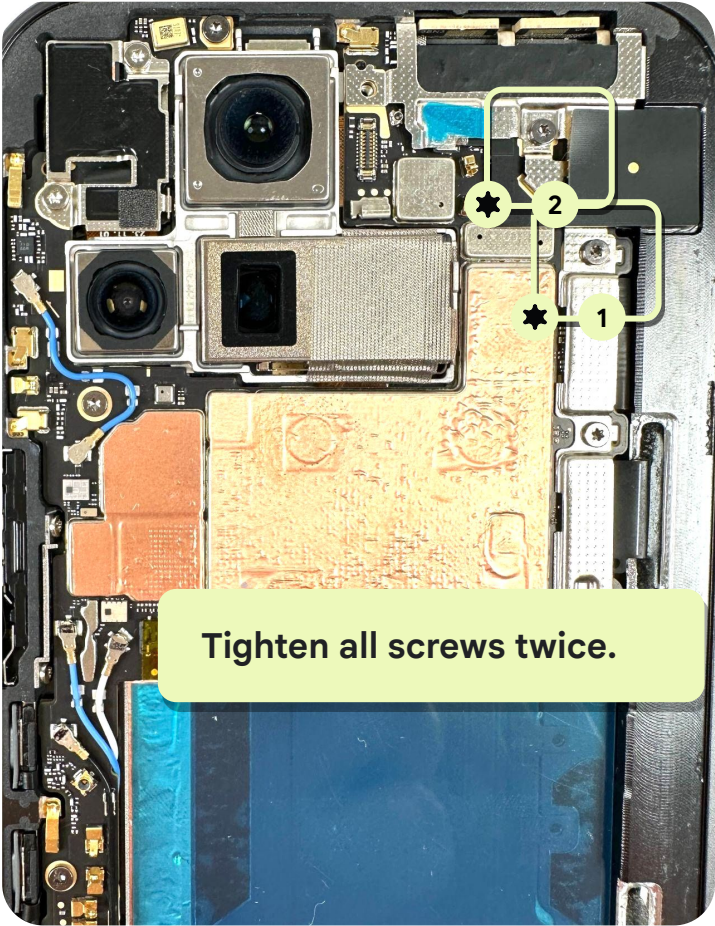- Tighten the screws for a second time to secure them in place.

> **Part: G730-07488-00** (Base battery cowling)

> **Part: G250-06988-01*2 (Screws)**

Tighten all screws twice.

⚠ **Use caution**

Be careful when you use the screwdriver.
Don't damage the adjacent battery.

Incorrect use of the screwdriver could cause injury to you or others or damage to the battery or the product.

💡 **Note**

Install the base battery cowling into the hook. Refer to the relative position.

💡 **Note**

Torque force: 1.2 ± 0.1 kgf-cm

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   **Base Bottom Cowling**   Graphite Sheet   BG sub

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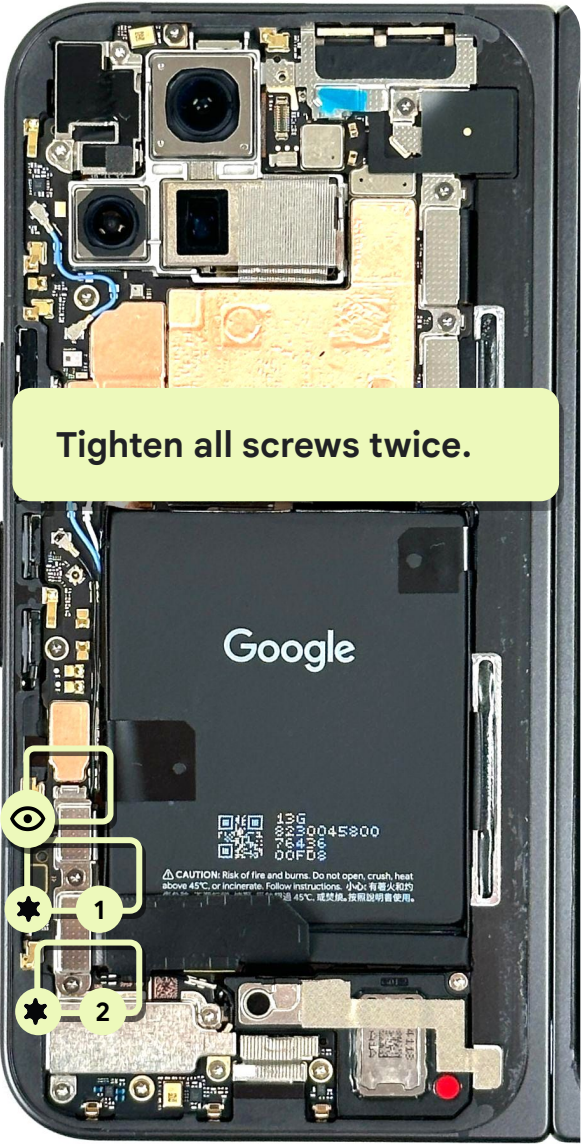
Assembly
instructions

Graphite sheet

Apply 3M AP111 primer

- Apply **IPA** around the edges of the **enclosure and the middle frame close to the FPS area** with **dust-free cotton swabs**.

- Apply one round **3M AP111 primer** around the edges of the **enclosure** with **dust-free cotton swabs**.

⚠️ **Use caution**

After the primer is applied, complete assembly in 25 minutes.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   **Graphite Sheet**   BG sub

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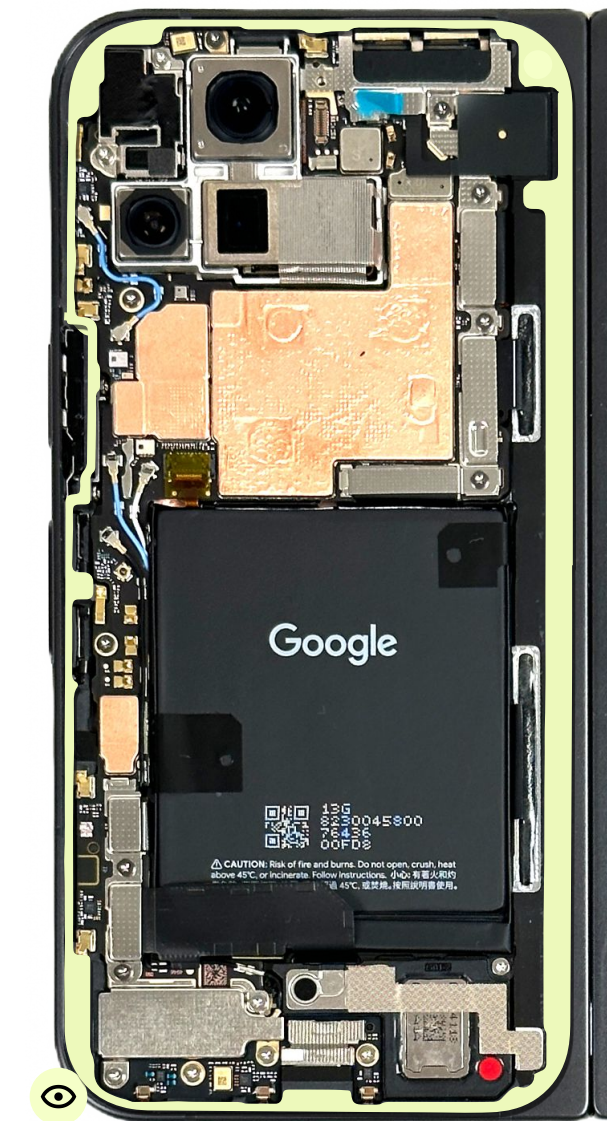
Align the BG PSA

- Slowly remove the larger liner from the back of the **adhesive sheet** to expose the adhesive.

- Hold the adhesive sheet and place it over your phone to find the proper alignment. Place the **adhesive** at the top side of the enclosure with your hand.

Part: G806-09151-02 (BG PSA)

⚠️ **Use caution**

Don't touch the adhesive.
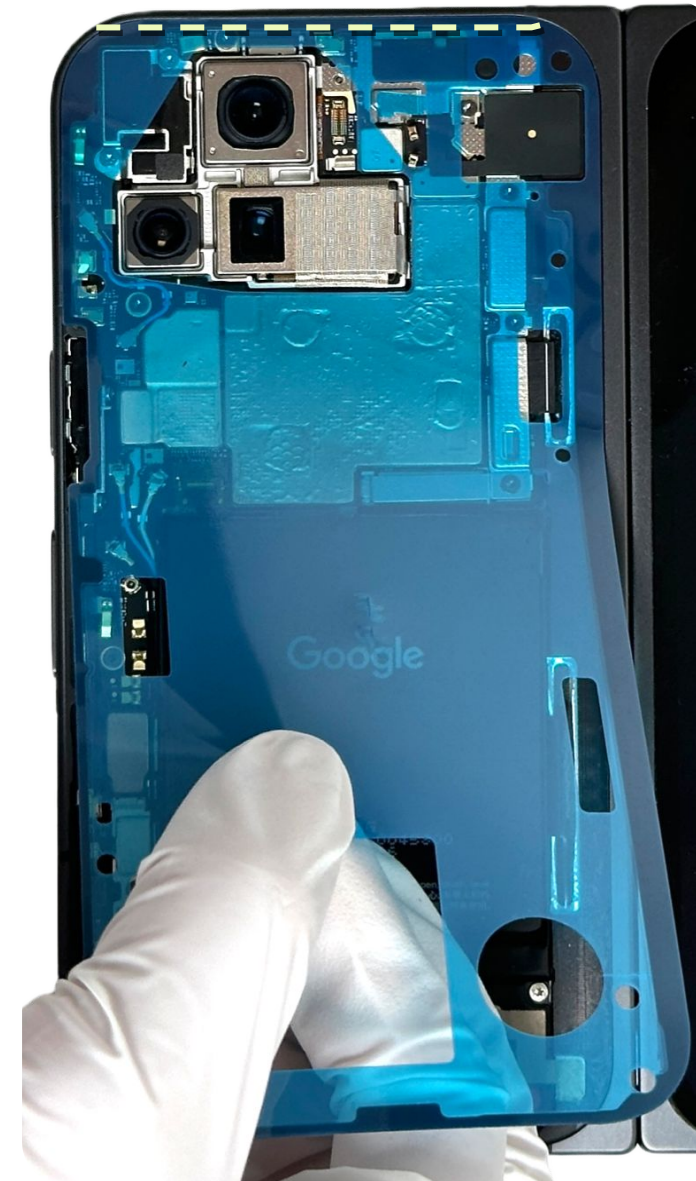
If it gets dirty, change to another one.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   **Graphite Sheet**   BG sub

Adhesive to the enclosure

- Make sure that the **adhesive** is completely seated onto the **enclosure**.

- Use the **spudger** to activate the **adhesive**.

Note

Inspect for any misalignment.

If the PSA is misaligned, apply a new one.
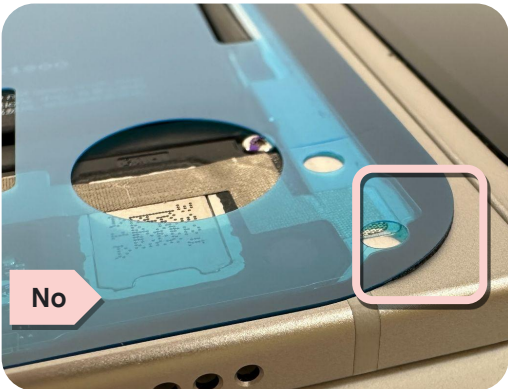
No

Float

No

Tilt

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   **Graphite Sheet**   BG sub

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Remove the liner (first layer)

Pull the tab carefully to remove the liner.

Avoid lifting the adhesive.

⚠️ **Use caution**

Don't remove the second layer of the liner.

First layer liner

Grip the tab here.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   **Graphite Sheet**   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 194
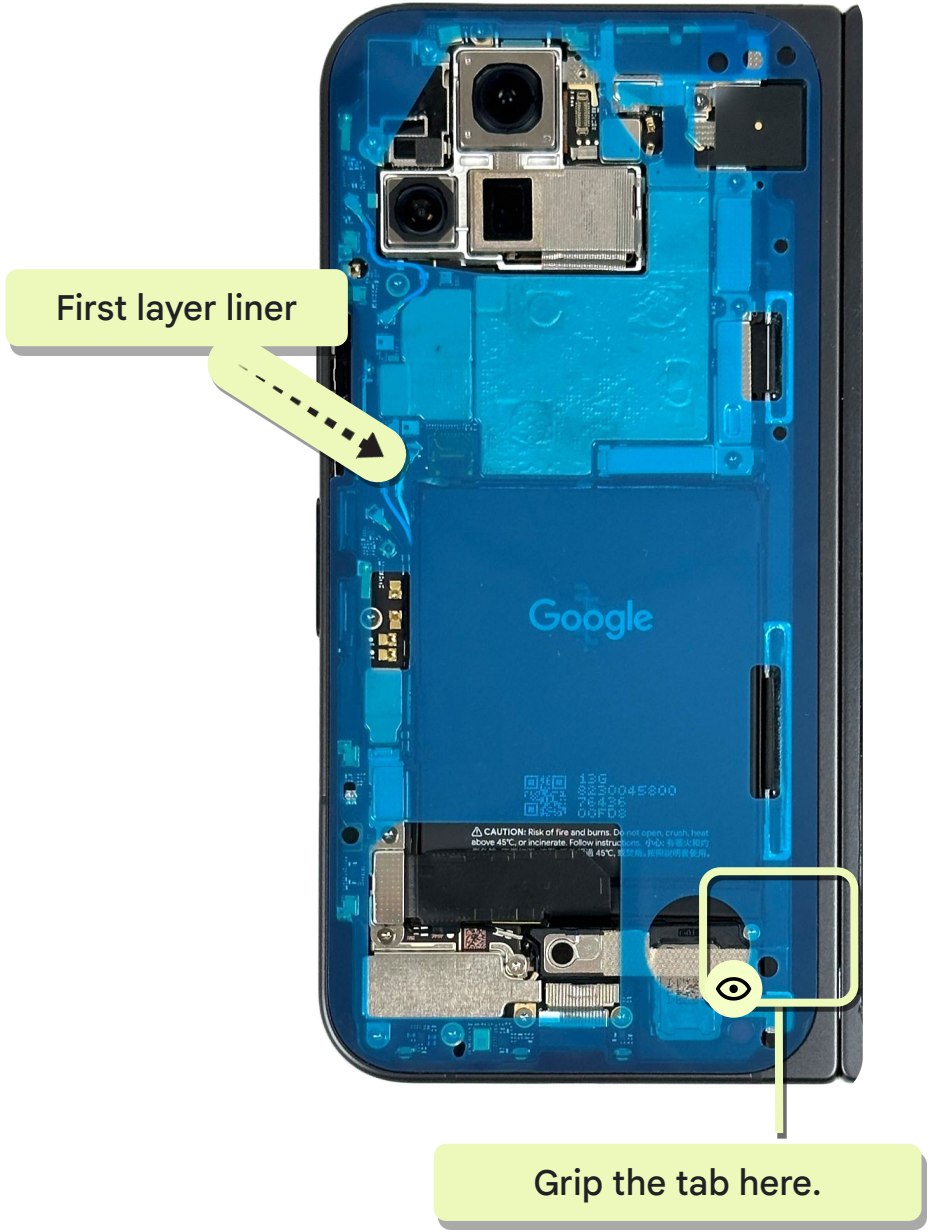
Adhere the graphite sheet

- Align the **graphite sheet** to the outline.

- Part of the sheet is adhesive. Press the **graphite sheet** to make sure that there are no air pockets.

Part: G864-00666-00 (Graphite sheet)

Adhesive area

Remove the liner

- Remove the bottom side liner and press it on the bottom speaker as shown in Fig 1.

- Release the big liner slowly as shown in Fig 2.

> ⚠️ **Use caution**
> Ensure that there are no wrinkles or warps.

Fig 1

Fig 2

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   **Graphite Sheet**   BG sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 196
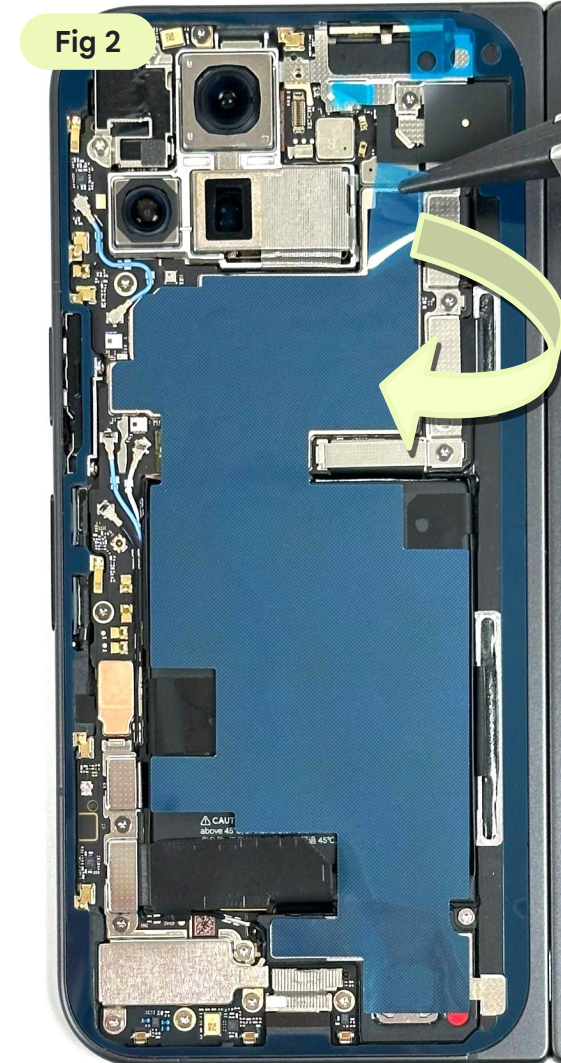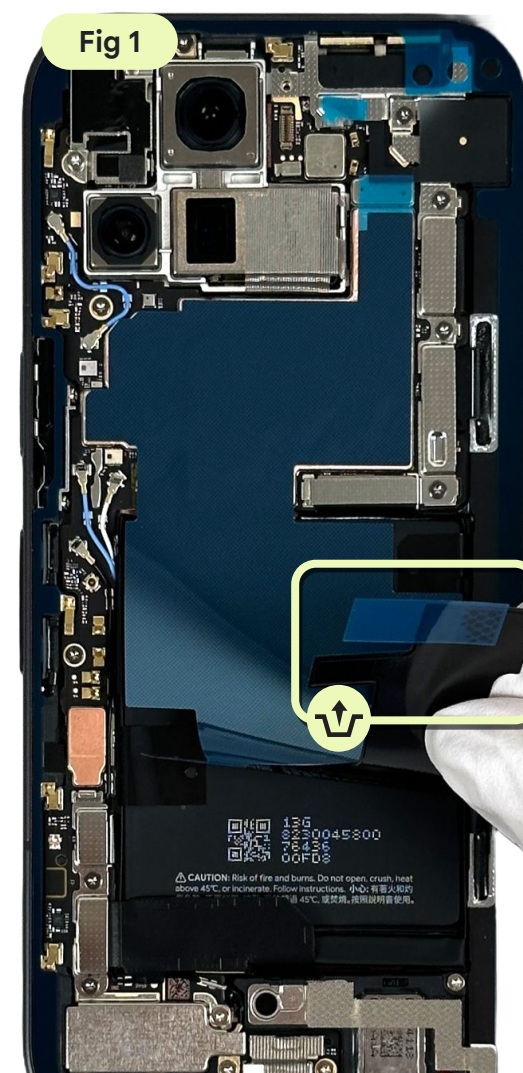
Assembly
instructions

BG sub

Reuse the BG

- Use the **spudger** to clean the residual glue and the BG support PSA off the **BG**.

- Use your fingers or tweezers to remove big chunks of adhesive. Repeat for any adhesive on it.

- If there's any residue, use a dust-free cloth with **IPA** to clean the surface.

Part: Multiple part number (BG sub)

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   **BG Sub**

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Apply AP111 primer on BG

- Apply **IPA** around the edges of the BG sub with dust-free **cotton swabs.**

- Apply one round **3M AP111 primer** around the edges of the **BG sub** with **dust-free cotton swabs.**

- Press the LED pad before BG sub assembly, if the pad still lift-up, remove the old adhesive and stick the new CPSA to the designated position(Fig 1). Tear off the blue liner and press the LED pad to the designated position.(Fig 2)

Fig 1

Fig 2
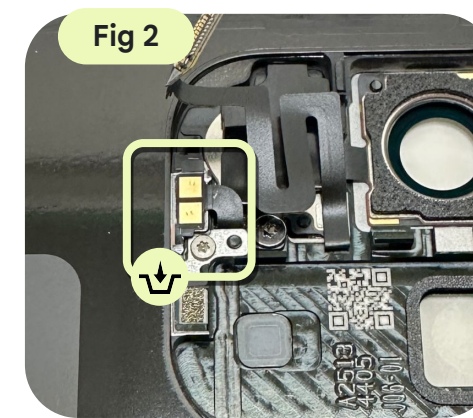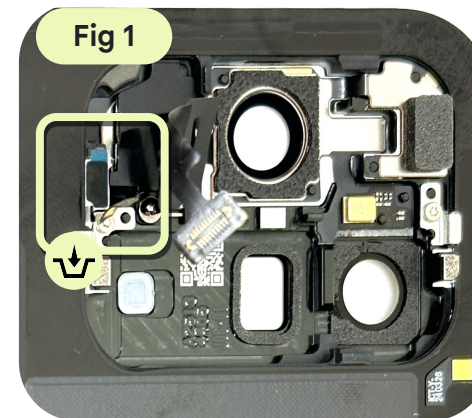
> **Part: Multiple part number** (BG sub)

> **Part: G806-09190-00** (LED CPSA)

⚠️ **Use caution**

After the primer is applied, complete assembly in 25 minutes.

⚠️ **Use caution**

PAD flatness
OK

PAD lift up
No

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   **BG Sub**

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 199
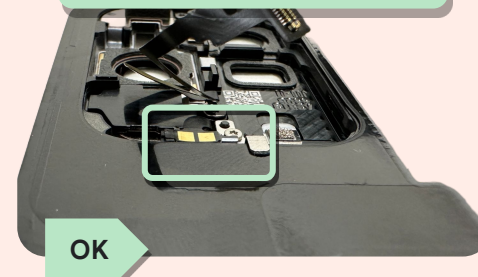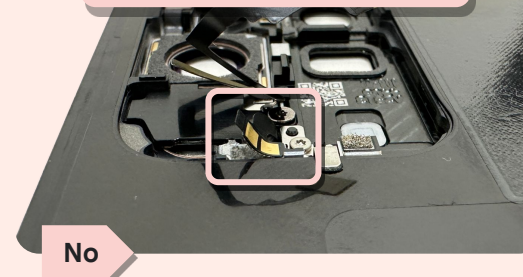
Connect the flam board FPC

- Prop up the **BG sub** and place the BG on top of the enclosure.

- Apply even pressure across the connector to connect the **flam board FPC** to the **logic board with tweezers,** and ensure that it's fully engaged.

- Tear off the blue liner on the mmWave cowling as shown in Fig 1, and fix the FPC to the designated position as shown in Fig 2.

- Power on to check if the device works properly and power off the device after you check.

⚠️ **Use caution**

When you attach the BG, *don't* damage or deform the FPC and the flash pad.

Check if every connector is fully attached to the **logic board**.

Fig 1

Fig 2

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   **BG Sub**

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 200
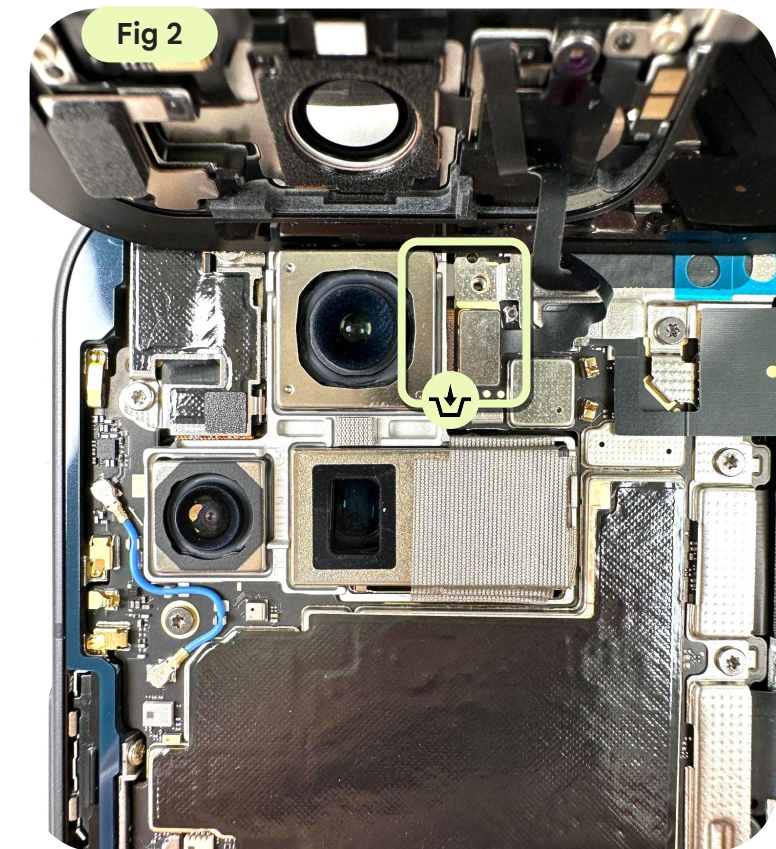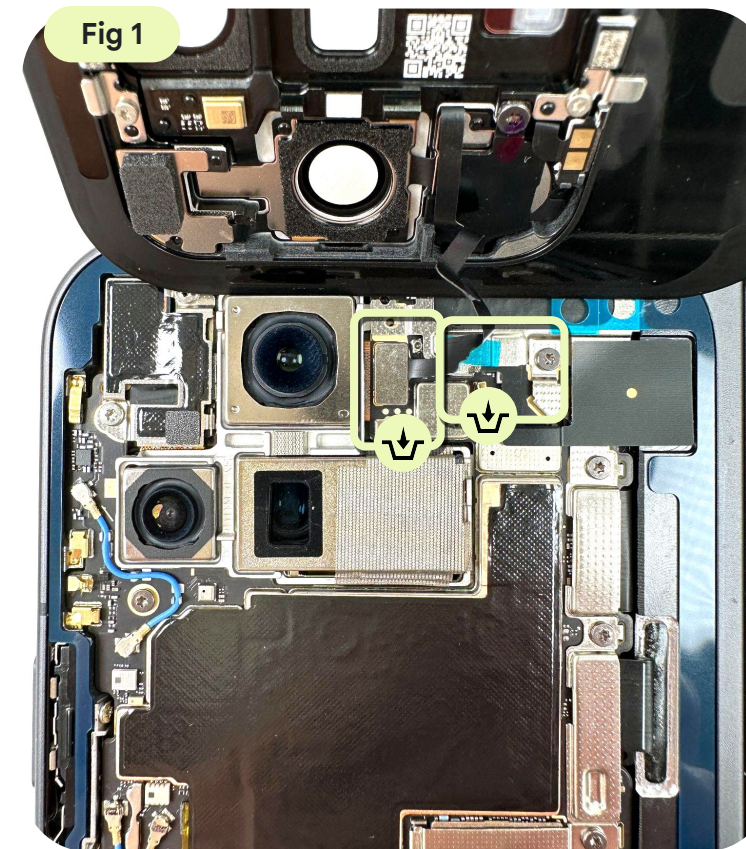
Fasten the BG cowling

- Attach the BG cowling and install from bottom to top.

- Fasten the **BG cowling screw** with the **torx plus 3IP screwdriver.**

Part: G730-07485-00 (BG cowling)

Part: G250-06988-01 (Screw)

⚠️ **Use caution**

Make sure that the BG cowling sits under the hook.

💡 **Note**

Torque force: 1.2 ± 0.1 kgf-cm

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   **BG Sub**

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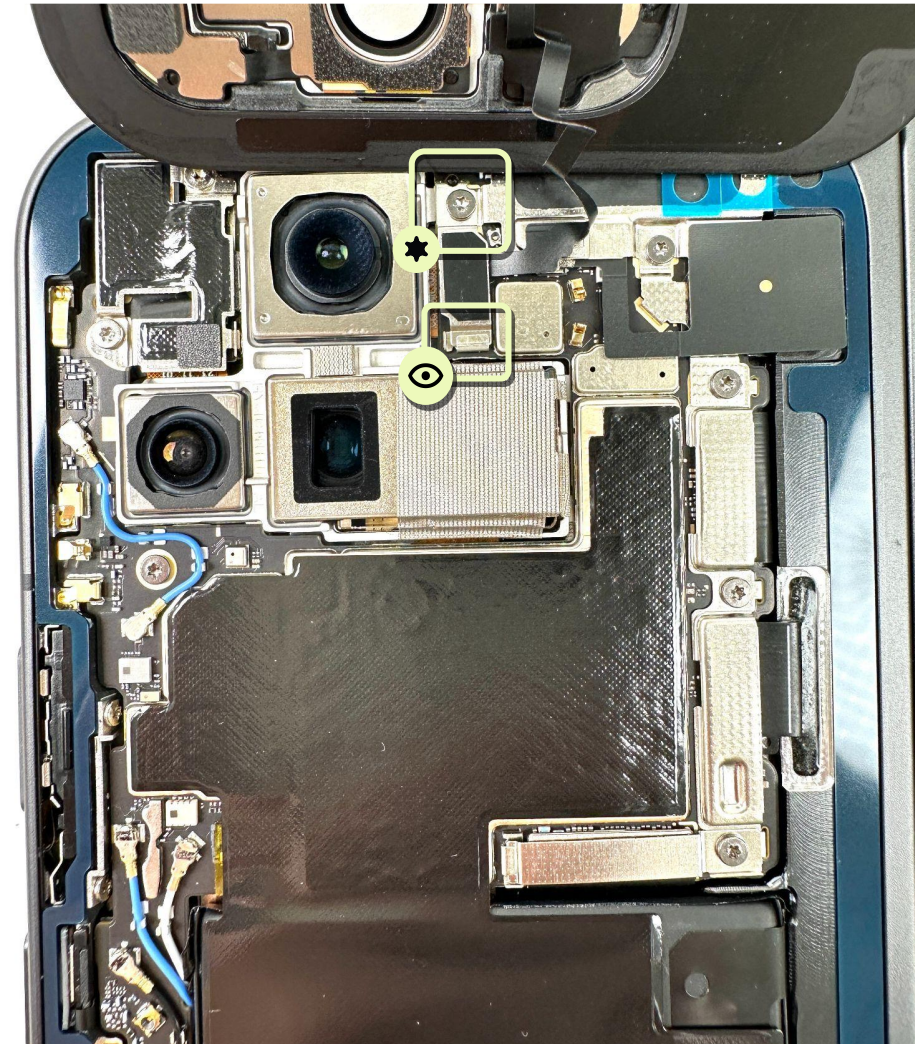
Remove the liner

Use **tweezers** to grab the PSA **liner** and carefully pull it away.

Part: G806-09151-02 (BG PSA)

Grip the tab here.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   **BG Sub**

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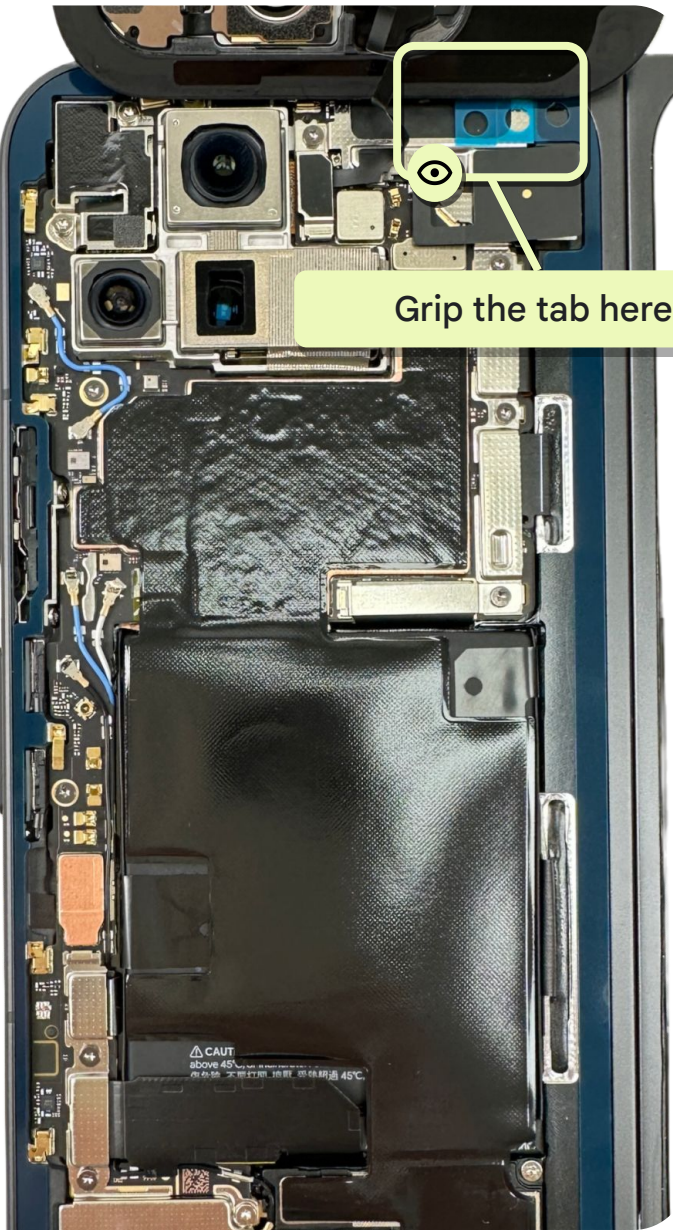
Remove the film or the cap

Remove the rear cam cap or the BG flam area liners if you use a new BG sub and a RCAM.

⚠️ **Use caution**

Ensure that the environment is clean for this process.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   **BG Sub**

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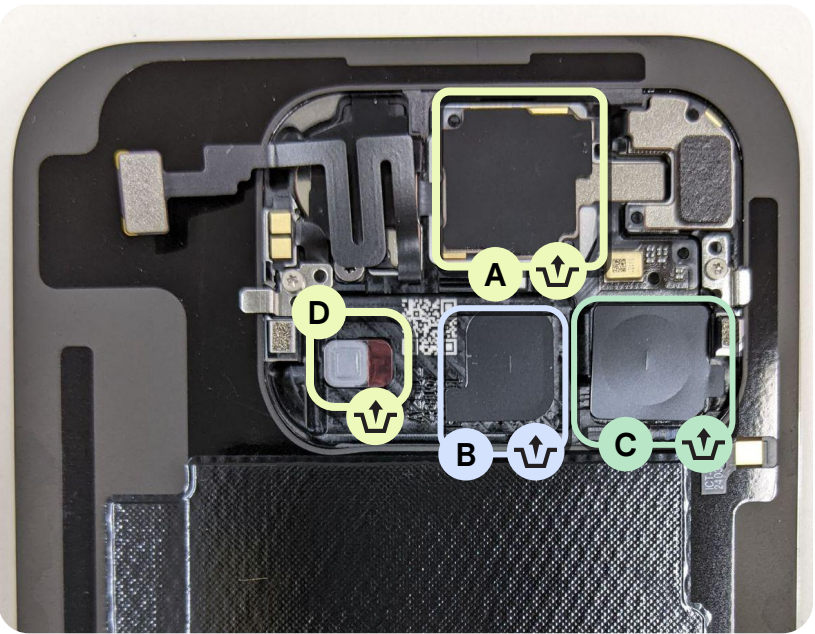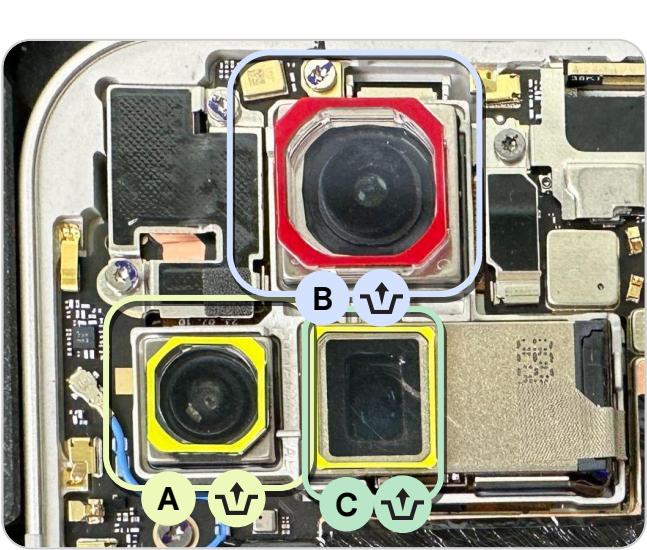
Press in the holder

- Align the **BG sub** on the **enclosure vertically.**

- Press around the BG sub with both hands.

Note

Press the top side middle first, and then follow on two long sides and bottom side.

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   **BG Sub**

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Press the BG

- Place the **Pixel 9 Pro Fold holder** on the **universal base**.

- Place the **Pixel 9 Pro Fold BG press rubber** on top of the **Pixel 9 Pro Fold holder** as shown in Fig 1.

- Place the **universal press plate 12 mm** on the **Pixel 9 Pro Fold BG press rubber** as shown in Fig 2.

- Place it in the **universal press fixture** and press the handle down for **45** seconds as shown in Fig 3.

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

💡 **Note**
Always place the Pixel 9 Pro Fold holder in the B1 position for any pressing step.

Fig 1

Universal base

Fig 2

Universal-Press Plate 12mm

-G940-00736-00-9996

Fig 3

Inner Display Sub   USB Board   Vibrator   Bottom Speaker   Rear Camera   IF FPC   Logic Board   Inner Front Camera   mmWave Module   UWB FPC   Base Battery   Base Battery Cowling   Graphite Sheet   **BG Sub**

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Pixel 9 Pro Fold repair manual

Disassembly flip

Outer display   Outer front camera

Flip battery and bottom bridge cowling   Flip battery

Lower board   Top speaker

Upper board   Inner display sub

Disassembly instructions

Outer display

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

⚠ Use caution

Use **safety gloves** to 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, make sure to **power off** the device and disconnect any charging cables.

⚒ Tools

Pixel 9 Pro Fold main holder

Pixel 9 Pro Fold OD press rubber

Pixel universal base

Universal press plate 12 mm

Universal press fixture

Opening pick

Large suction cup

Torx plus 3IP screwdriver

Tweezers

Spudger

3M AP111 primer

Absorption bulb

IPA and cloth

Dust-free cotton swabs

🛠 Required parts

Outer display

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

Reuse indications   🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly

Outer display 🟢	Screw ⚫	OD rubber support ⚫	OD cowling 🟢	OD PSA ⚫	OD left bottom FOF ⚫
G949-00911-00	G250-06985-01	G804-01205-00	G730-07494-00	G806-09152-02	G806-11369-00

Locate the driver IC

- Before you remove the **outer display module**, be aware that there's a **driver IC** underneath.

- Avoid any damage to the **driver IC (COF area)** during the disassembly process.

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

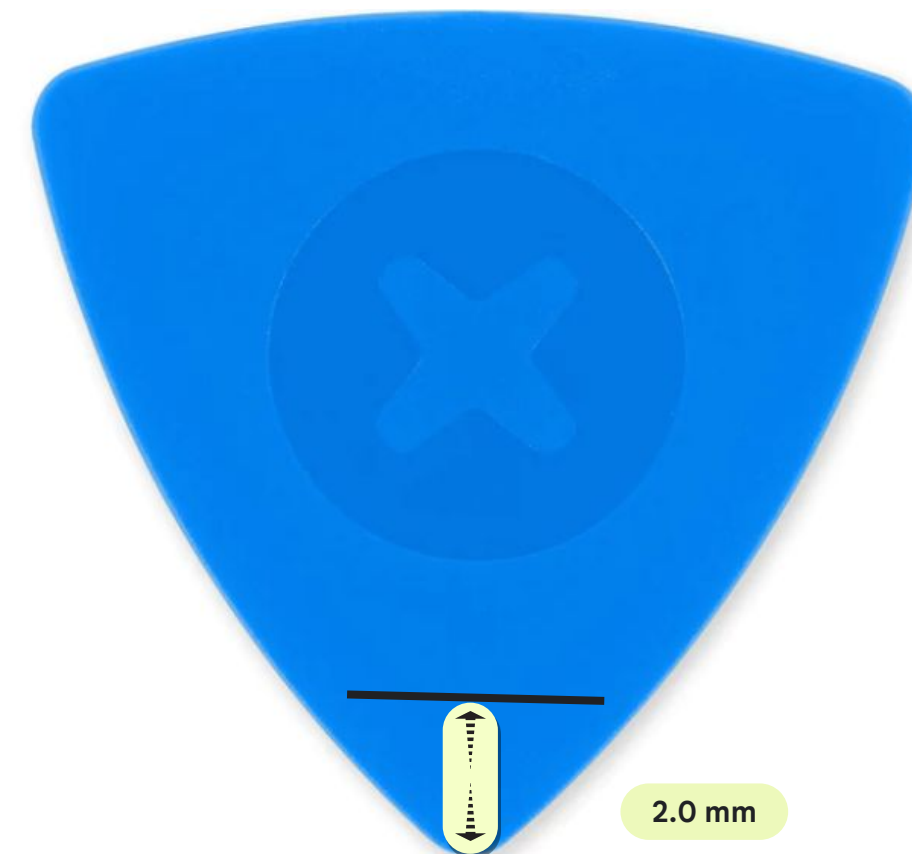Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 209

Mark your opening picks

- Use opening picks to separate the OD from the enclosure. If inserted too far, a pick can damage your device.

- Measure 2 mm from the tip and mark the opening pick with a permanent mark.

2.0 mm

Thickness: Less than 1 mm

⚠️ **Use caution**

Follow the step to mark your pick and prevent damage.

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

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Separate the OD

- Apply a suction cup to the OD, as close to FCAM side as shown in Fig 1.

- Use one hand to firmly hold the device. With the other hand, strongly pull up the large suction cup to create a gap between the OD and the enclosure as shown in Fig 2. Make sure that the device is not open.

- Insert the opening pick into the gap as shown in Fig 3.

⚠️ **Use caution**

Don't insert your opening pick deeper than 2 mm when you separate adhesive, as you risk damage to the display.

No

Fig 1

FCAM side

Fig 2

Fig 3

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub
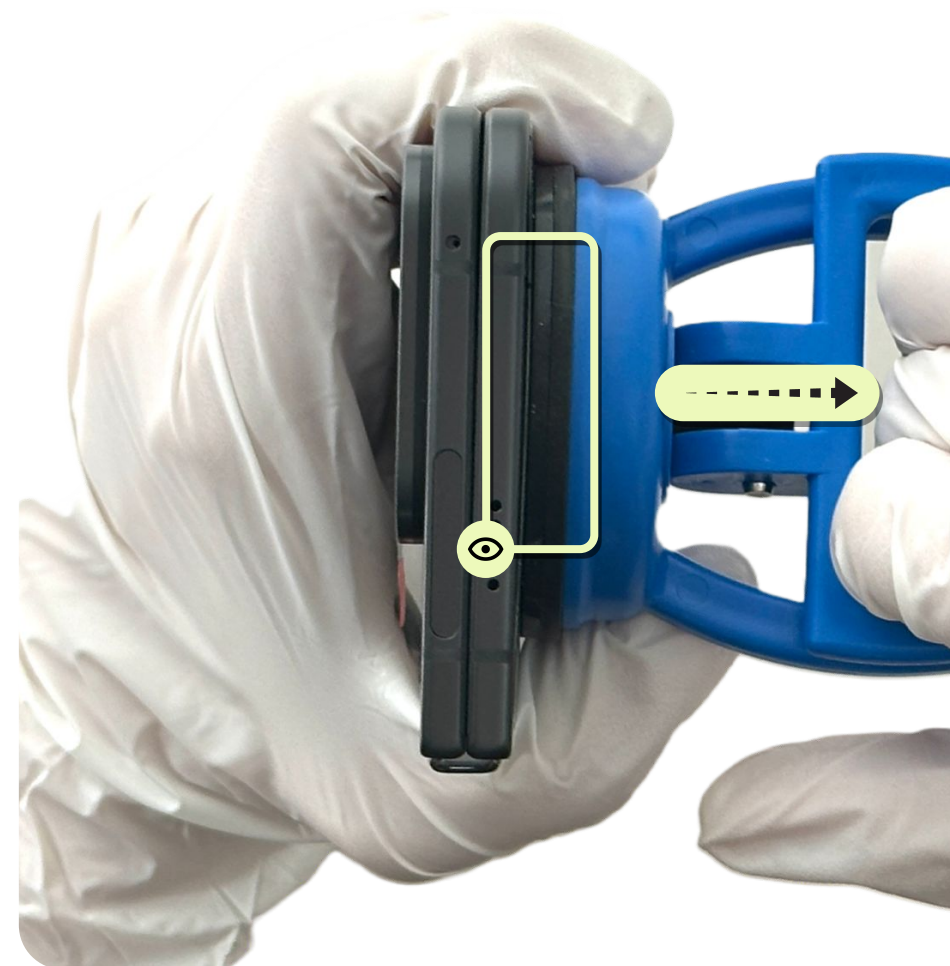
Separate the OD

Manually slide the sequence:

Cut adhesive on the right edge where the PSA is smaller, then open toward the hinge to separate the additional adhesive area at no. 6.
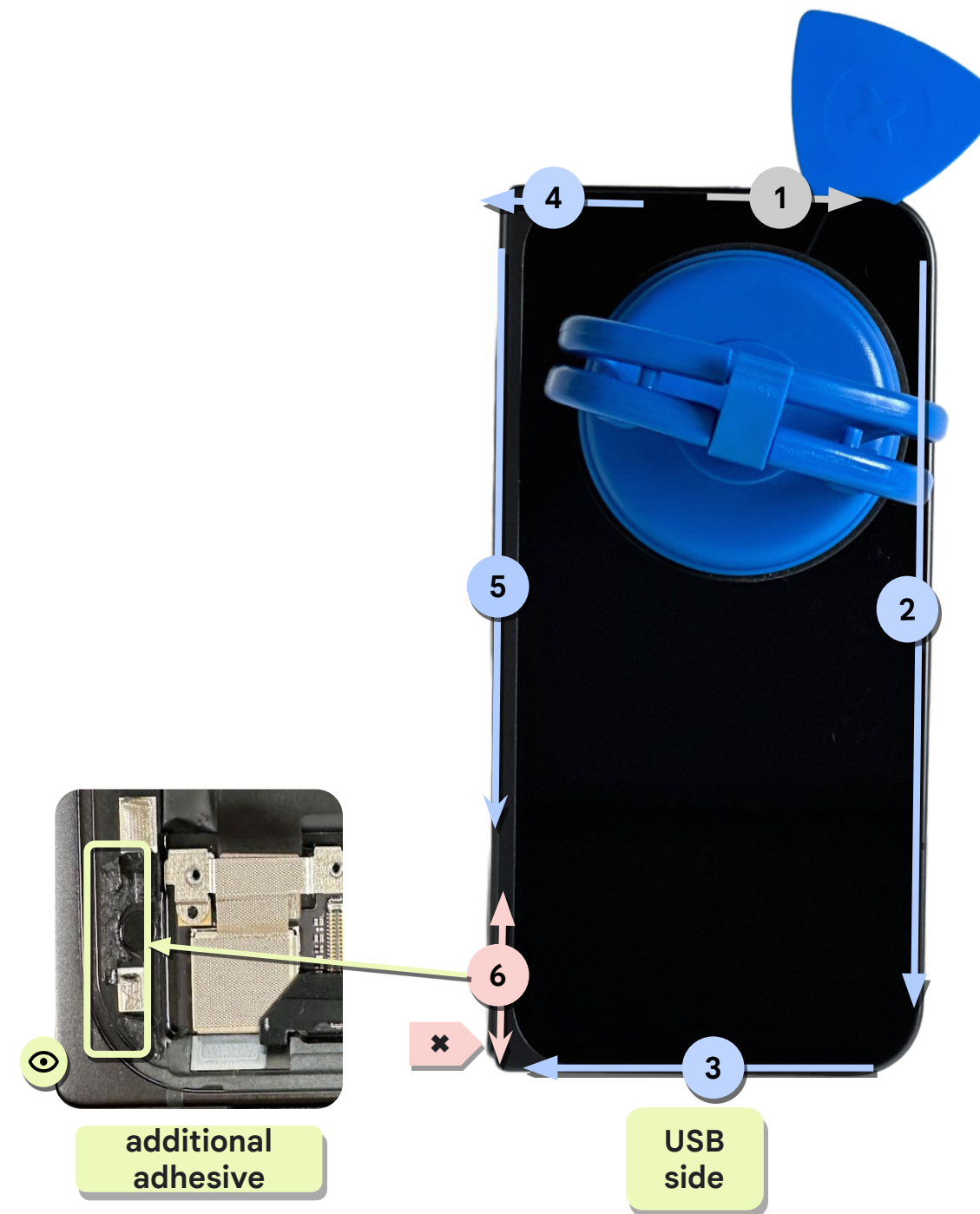
Disassemble sequence:

1 (insert the pick) ➔ 2 ➔ 3 ➔ 4 ➔ 5 with **opening pick** (2.0 mm)

⚠️ **Use caution**

Don't insert your opening pick through line 6 area to avoid the display damage.

additional adhesive

USB side

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

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Hold the OD

Turn over the OD. After the device is open, use the **suction cup** to hold the OD.
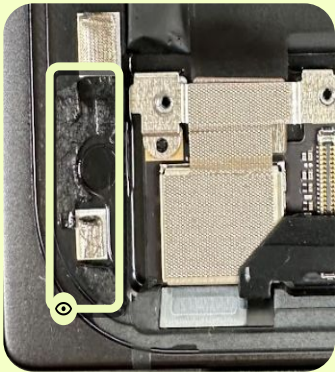

Use caution

Don't fully remove the OD yet, as it's still connected to the device by the OD flex.

Note

There's an additional adhesive near OD FPC, insert the spudger to separate the OD and the enclosure.

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 213

Remove the screw

- Remove the OD cowling **screw** with the **torx plus 3IP screwdriver** as shown in Fig 1.

- If the **OD rubber support** is damaged, remove it**.** If the rubber isn't damaged, leave it installed.

- Remove the **OD cowling** with the **OD left bottom FOF** as shown in Fig 2.

- Peel the grey conductive tape (OD left bottom FOF) off.

Part: G250-06985-01 (Screw)

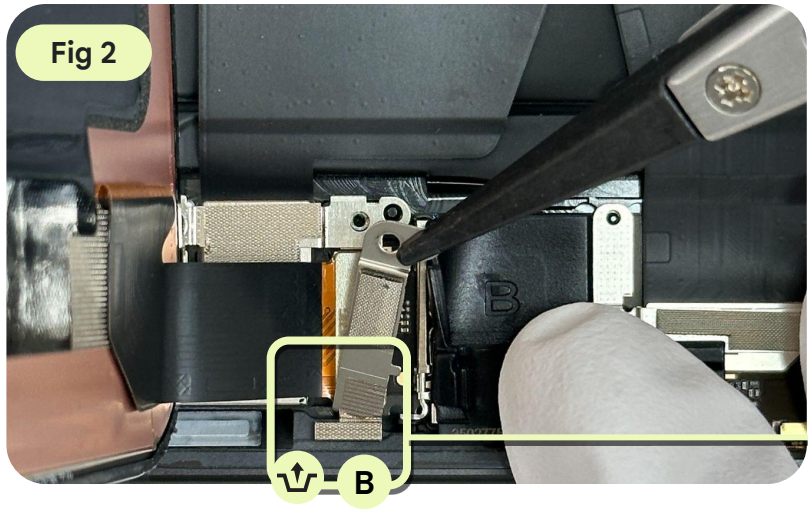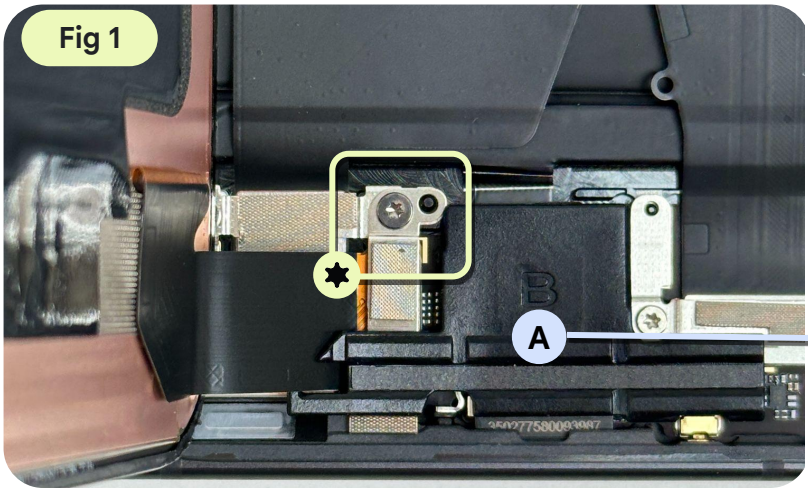Part: G730-07494-00 (OD cowling)

Part: G804-01205-00 (OD rubber support)

Part: G806-11369-00 (OD left bottom FOF)

Fig 1

A: G804-01205-00

Fig 2

B: G806-11369-00

> 💡 **Note**
>
> *Don't* reuse the screw or the rubber support after you remove the FOF.

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

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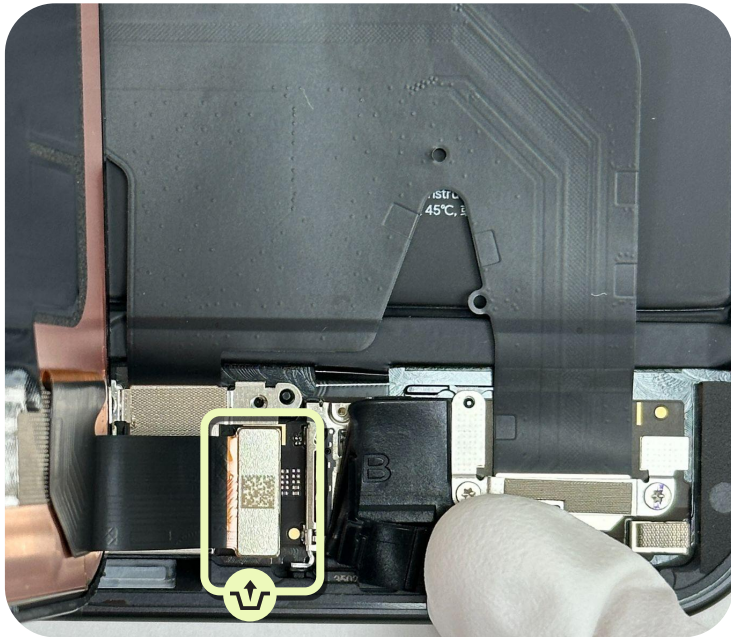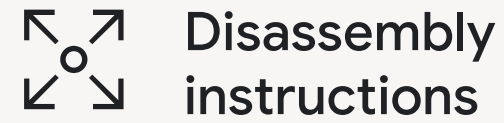**Finished!** Need assembly instructions? ➜

Disconnect the OD

Loosen the **OD** B2B connector with the **spudger** and then remove the **OD**.

Note

Use the spudger to avoid damage to the components.

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

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Disassembly
instructions

Flip battery and bottom bridge cowling

Flip battery and bottom bridge cowling ensures that the connectors
remain engaged with the flip battery and acts as a heatsink.

⚠ Use caution

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

✓ Prerequisites

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

Outer display

⚒ Tools

Pixel 9 Pro Fold main holder

Pixel universal base

Torx plus 3IP screwdriver

Tweezers

Spudger

⚒ Required parts

Flip battery and bottom bridge cowling

Here's the list of parts for the flip battery and the bottom bridge cowling disassembly.

Reuse indications   🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly

Flip battery cowling 🟢
G730-07496-00

Screw*2 ⚫
G250-06985-01

Screw ⚫
G250-07521-00

Flip bottom bridge cowling 🟢
G730-07495-00

OD cowling FOF ⚫
G806-09273-00
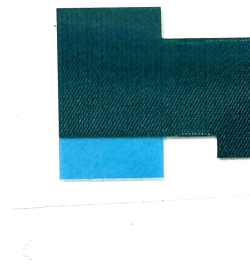
Remove the flip battery cowling

- Remove the flip battery cowling **screw** with the **torx plus 3IP screwdriver**.

- Remove the **flip battery cowling with the OD cowling FOF,** leave it on the lower board if you reuse the lower board as shown in Fig 1.
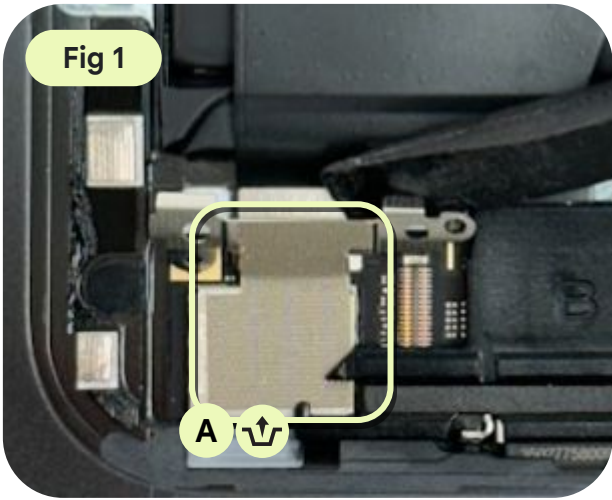
Part: G250-07521-00 (Screw)

Part: G730-07496-00 (Flip battery cowling)

Part: G806-09273-00 (OD cowling FOF)

> **Note**
> *Don't* reuse the screw or the OD cowling FOF after removal.

Fig 1

A: G806-09273-00

Outer Display   **Flip Battery/Bottom Bridge Cowling**   Lower Board   Upper Board   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

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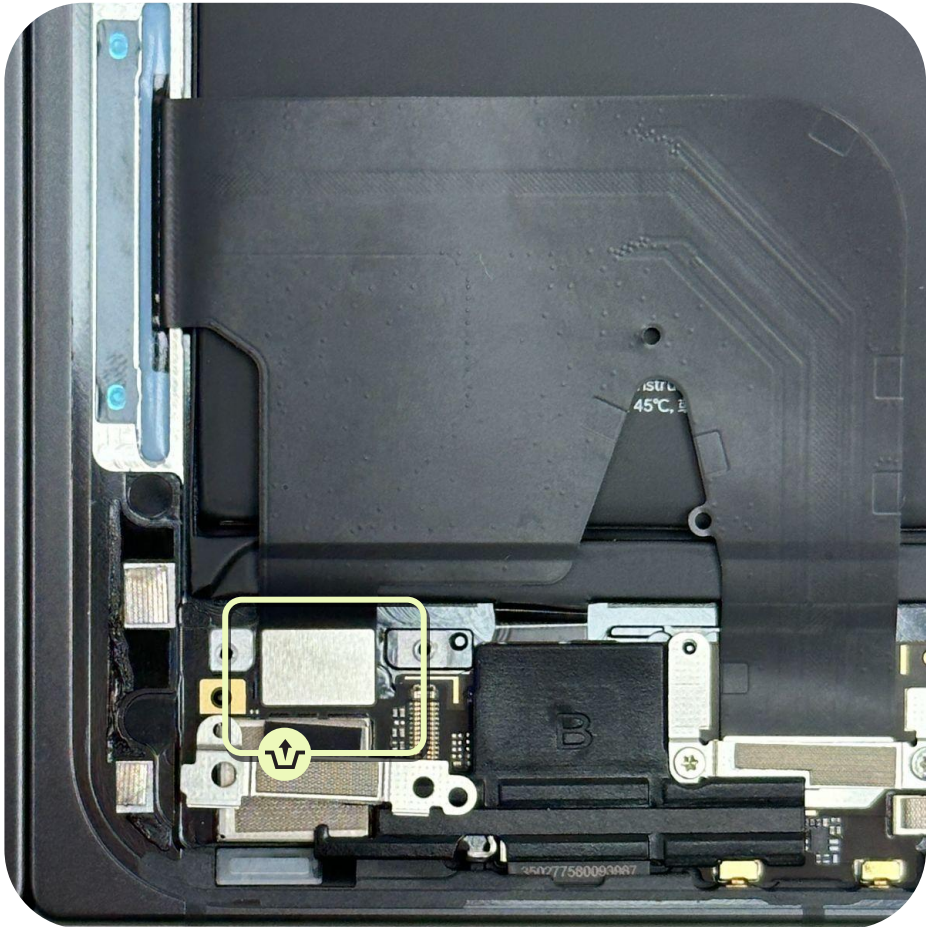
Disconnect the flip battery

Loosen the **flip battery** B2B connector with the **spudger**.

> 💡 **Note**
>
> Use the spudger to avoid damage to the components.

Outer Display   **Flip Battery/Bottom Bridge Cowling**   Lower Board   Upper Board   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

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Remove the screws

- Remove the two flip bottom bridge cowling **screws** with the **torx plus 3IP screwdriver**.

- Remove the **flip bottom bridge cowling**.

Part: G250-06985-01*2 (Screws)

Part: G730-07495-00 (Flip bottom bridge cowling)

Note

Don't reuse the screws.

Reuse the cowling if the CPSA isn't broken or damaged.

Outer Display   **Flip Battery/Bottom Bridge Cowling**   Lower Board   Upper Board   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

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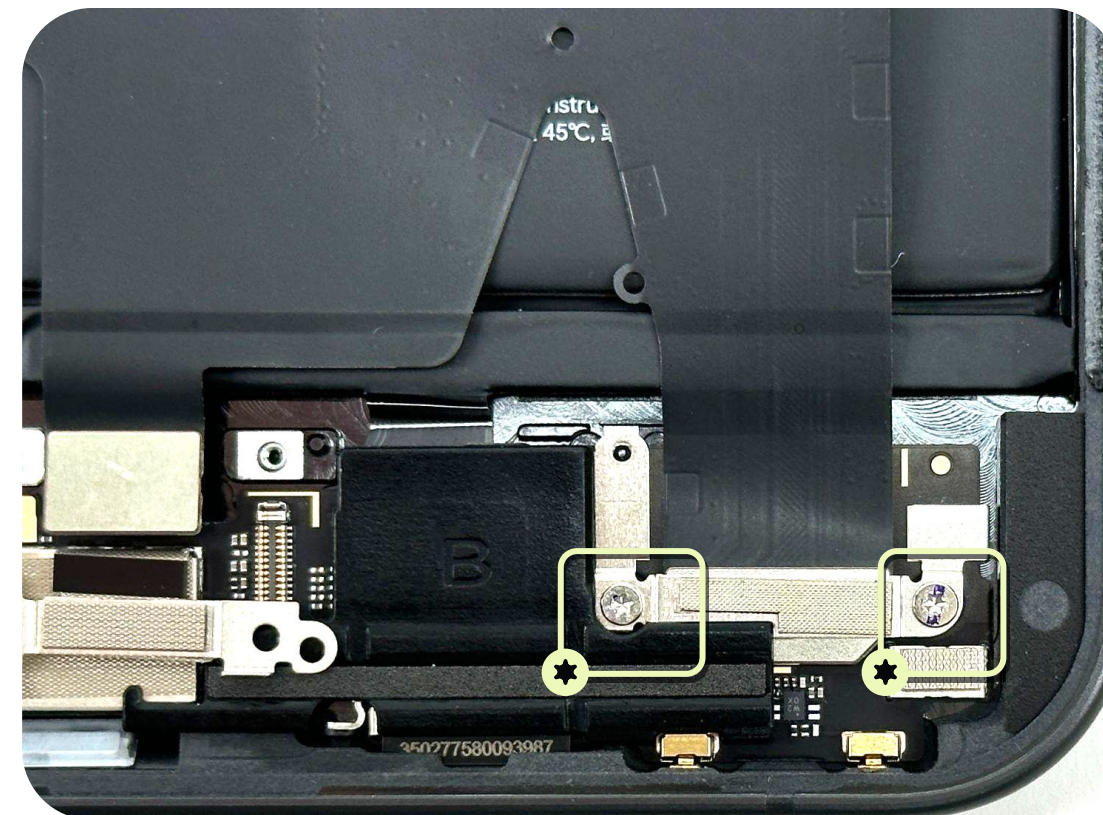
Finished! Need assembly instructions? ➜

Disconnect the flip bottom bridge

Loosen the **flip bottom bridge** B2B connector with the **spudger**.

> ### Note
> Use the spudger to avoid damage to the components.

Outer Display   **Flip Battery/Bottom Bridge Cowling**   Lower Board   Upper Board   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

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Disassembly
instructions

Lower board

The lower board communicates with the components such as the SIM card and the outer display.
Be aware that a replacement SIM tray doesn't have the IMEI number present.

⚠ Use caution

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

⊘ Prerequisites

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

- **Outer display**

⚒ Tools

Pixel 9 Pro Fold main holder

Pixel universal base

Torx plus 3IP screwdriver

Spudger

SIM card pin

Dust-free cotton swabs

⚒ Required parts

Lower board

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

Reuse indications   🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly

Lower board 🟢
G949-00915-00
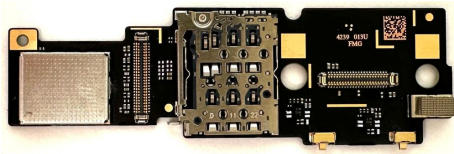
SIM tray 🟢
Multiple part numbers

Remove the SIM tray

- Remove the **SIM tray** with a SIM card pin.

- Press firmly to eject the SIM tray.

Part: Multiple part numbers (SIM tray)
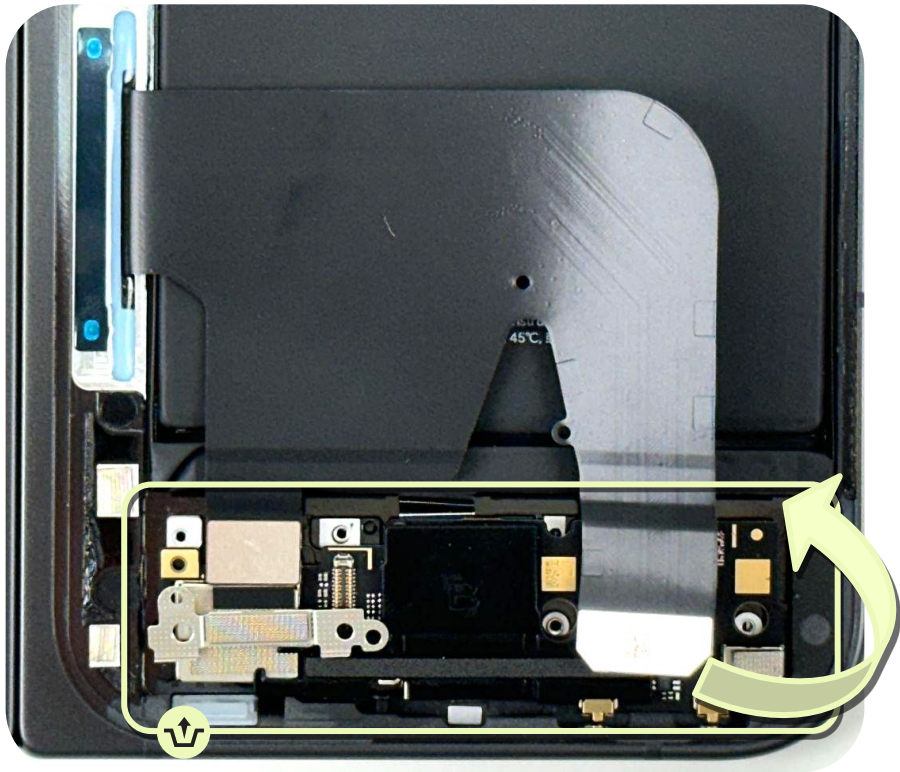
⚠️ **Use caution**

Be careful to avoid scratching the **enclosure**.

Outer Display   Flip Battery/Bottom Bridge Cowling   **Lower Board**   Upper Board   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 224
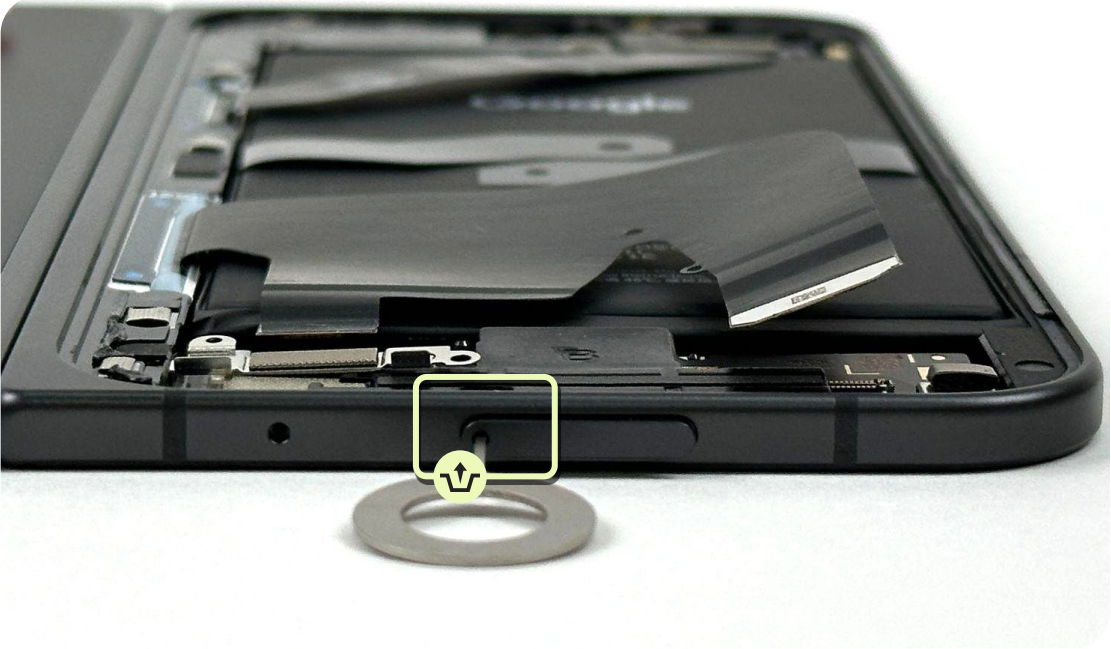
Finished! Need assembly instructions? ➜

Remove the lower board

Remove the lower board from the **upper right corner**.

Part: G949-00915-00 (Lower board)

Outer Display   Flip Battery/Bottom Bridge Cowling   **Lower Board**   Upper Board   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

Disassembly
instructions

Upper board

The upper board consists of the p sensor, light sensor, and the communication components such as the upper bridge FPC and the outer front camera.

⚠ Use caution

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

⊘ Prerequisites

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

- **Outer display**

⚒ Tools

Pixel 9 Pro Fold main holder

Pixel universal base

Torx plus 3IP screwdriver

Spudger

Tweezers

⚒ Required parts
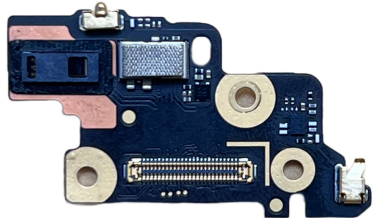
Upper board

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

Reuse indications ● Reusable without reclaim   ● Reusable with reclaim   ● Not reusable after disassembly

Upper board ●
G949-00916-00

PL rubber ●
G806-09080-00

OD rubber ●
G804-01242-00

Flip top bridge cowling ●
G730-07493-00

Remove the rubber

- Remove the OD rubber.

Part: G804-01242-00 (OD rubber)

💡 **Note**

Don't reuse the part
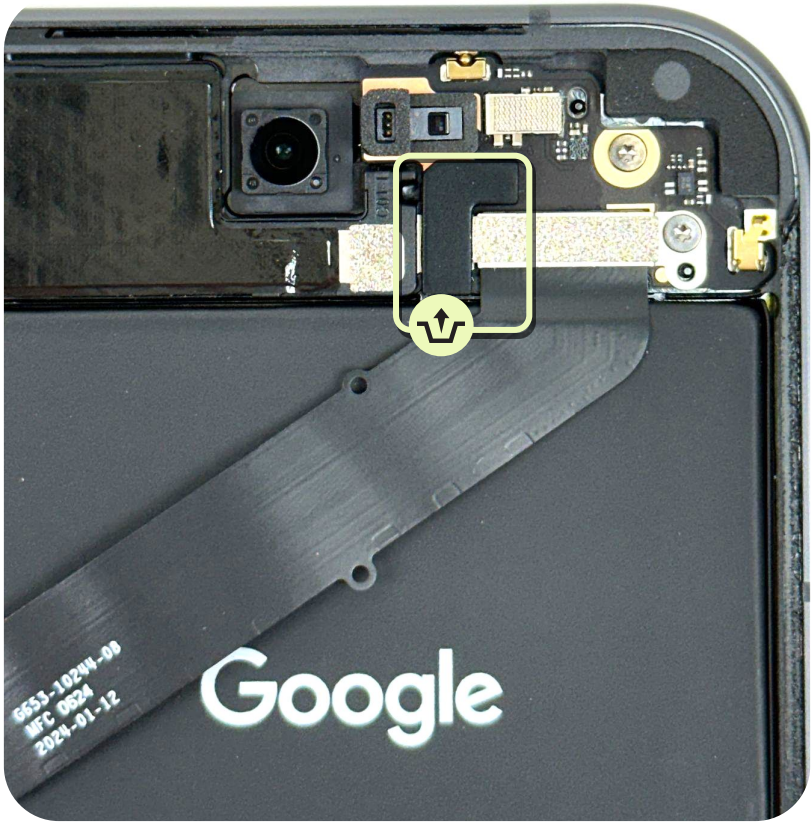
Remove the screws

- Remove the **top bridge cowling** screws with the **torx plus 3IP screwdriver**.
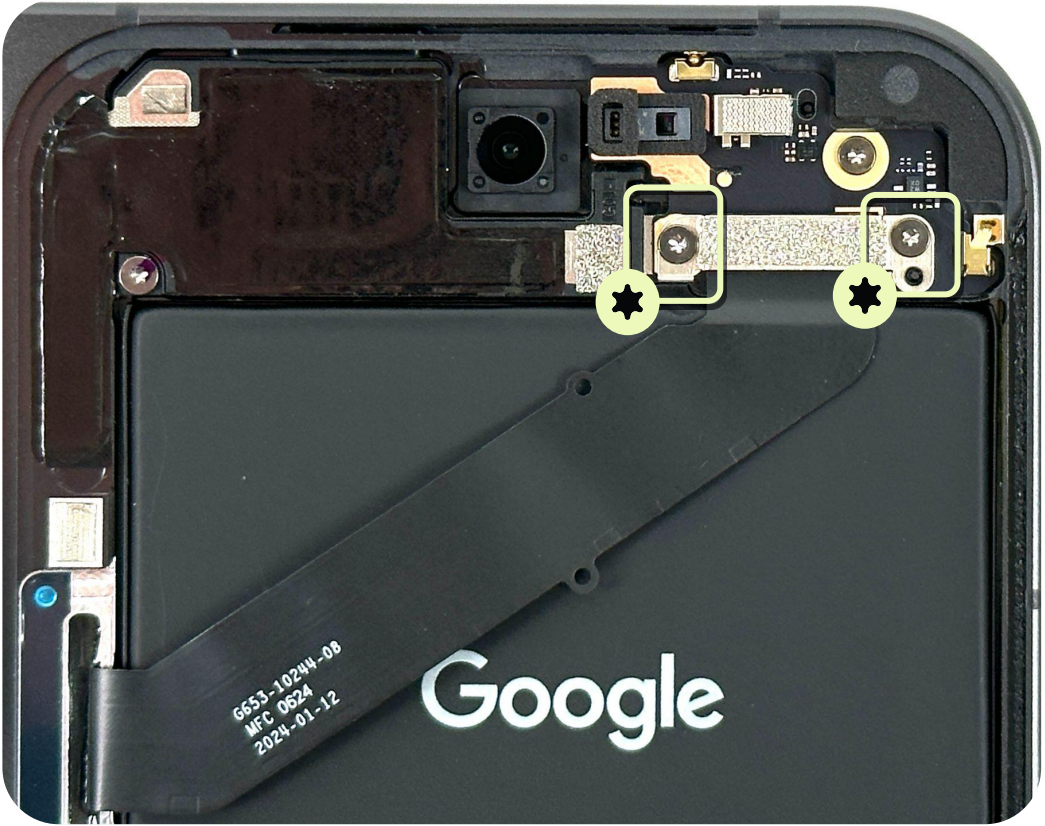
- Remove the **flip top bridge cowling**.

Part: G250-06985-01*2 (Screws)

Part: G730-07493-00 (Flip top bridge cowling)
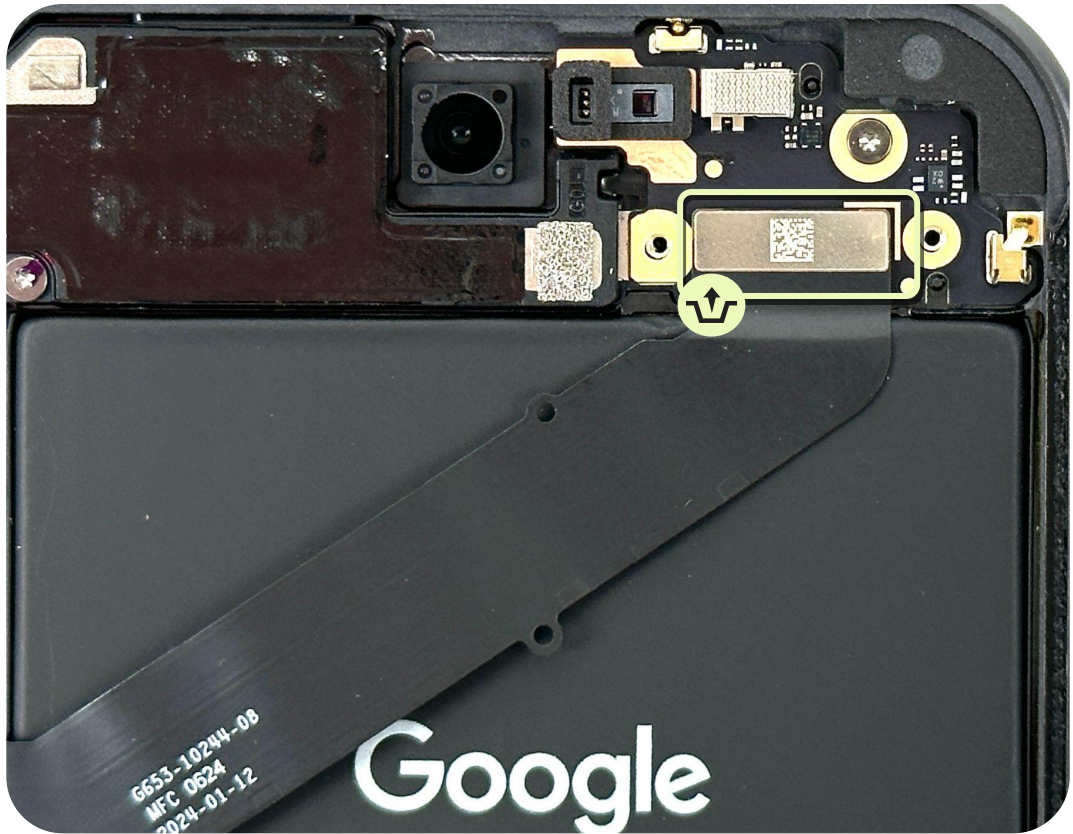
> ## Note
>
> *Don't* reuse the screws

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   **Upper Board**   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

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Disconnect the flip top bridge

Loosen the **flip top bridge** B2B connector with the **spudger**.

> ### Note
> Use the spudge to avoid damage to the components.

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   **Upper Board**   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

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Remove the screw and the upper board

- Remove the **upper board** screw with the **torx plus 3IP screwdriver**.

- Lift up and remove the **upper board** with the **spudger**.

Part: G250-06985-01 (Screw)

Part: G949-00916-00 (Upper board)

Note

Don't reuse the screw.

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   **Upper Board**   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

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Finished! Need assembly instructions? ➔

Inspect the P sensor rubber

Inspect the P sensor rubber.

If the **P sensor rubber** is damaged, remove it. If the P sensor rubber isn't damaged, leave it in place.
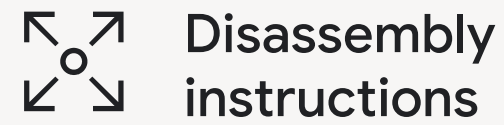
Part: G806-09080-00 (P sensor rubber)

💡 **Note**

Don't reuse the P sensor rubber after removal.

⚠️ **Use caution**

Skip this step if the P sensor rubber has no damage or broken.

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   **Upper Board**   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

Disassembly
instructions
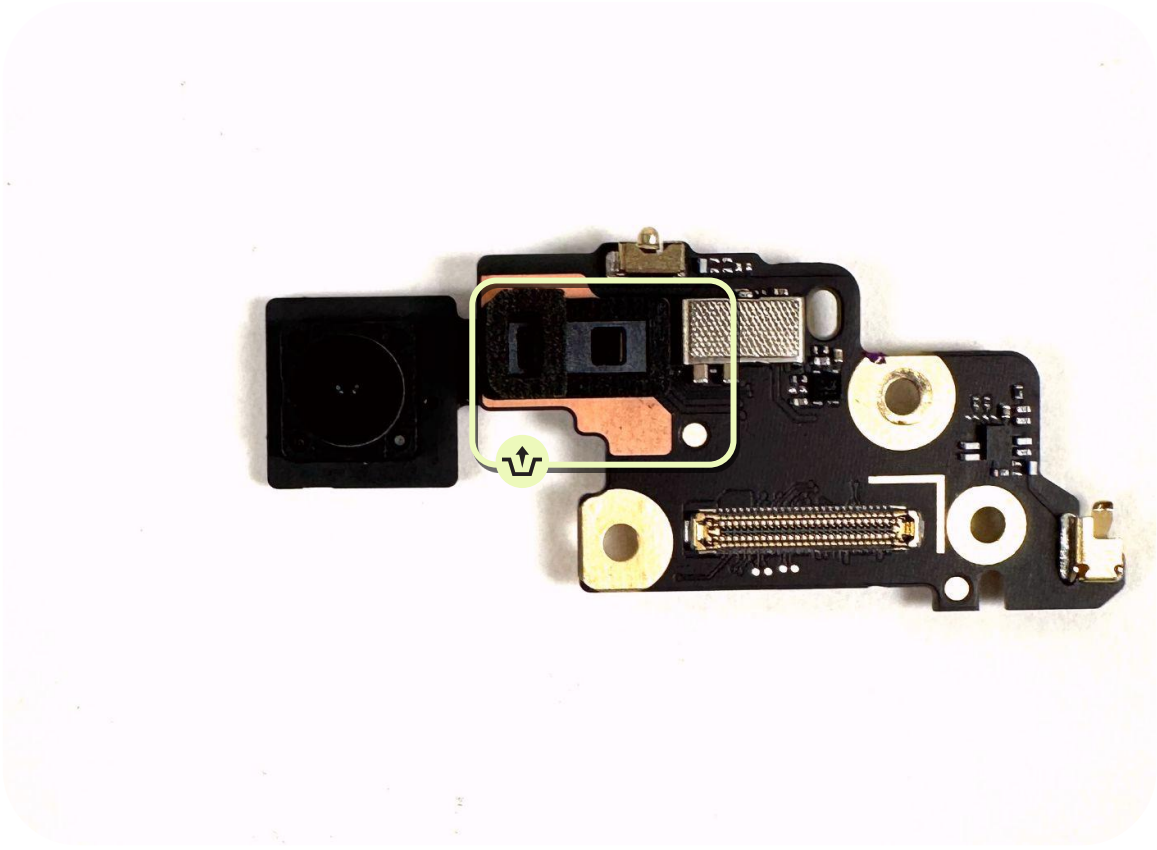
Outer front camera

The outer front camera isn't fastened to the
enclosure, it's simply connected to the upper board.

⚠ Use caution

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

⊘ Prerequisites

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

- **Outer display**
- **Upper board**

🛠 Tools

Spudger

⚒ Required parts

Outer front camera

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

Reuse indications   🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly

Outer FCAM
G949-00912-00

🟢

Finished! Need assembly instructions? ➔

Remove the outer front camera

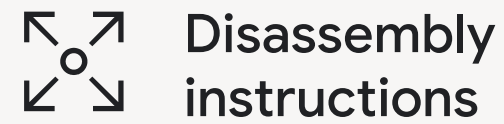Loosen the **outer front camera** connector, and disconnect from the **upper board** with the **spudger.**

Part: G949-00912-00 (Outer front camera)

💡 **Note**

Use the spudger to avoid damage to the components.

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   **Outer Front Camera**   Flip Battery   Top Speaker   Inner Display Sub

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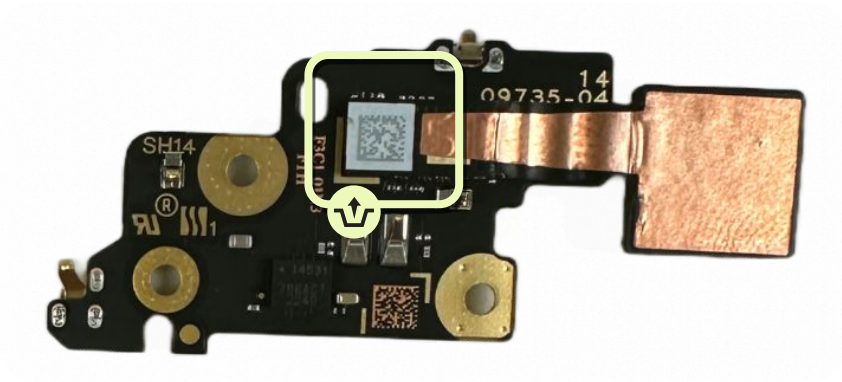
Disassembly
instructions

Flip battery

⚠ Use caution

**Use caution if you
engage in repair.**

Opening or repairing a 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.

⚠ Confirm before you proceed

- Battery is fully discharged.

- Inspect the battery if the phone battery
  shows signs of **swelling or damage**, or if the
  phone feels hot or emits a strong odor, *don't*
  attempt disassembly.

- Take care not to expose the phone or its
  components to liquids after disassembly.

Disassembly
instructions

Flip battery

It's recommended to remove the battery by pull jacket.

If ASP uses other methods, it may damage the device.

⚠ **Use caution**

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

✓ **Prerequisites**

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

- **Outer display**
- **Lower board**

🛠 **Tools**

Heat plate

Pixel 9 Pro Fold main holder

Pixel universal base

Universal press plate 12 mm

Battery press rubber (Flip side)

Universal press fixture

Absorption bulb

Feeler gauge

Tweezers

⚒ Required parts

Flip battery

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

Battery flip

G949-00919-00

Caution ⚠
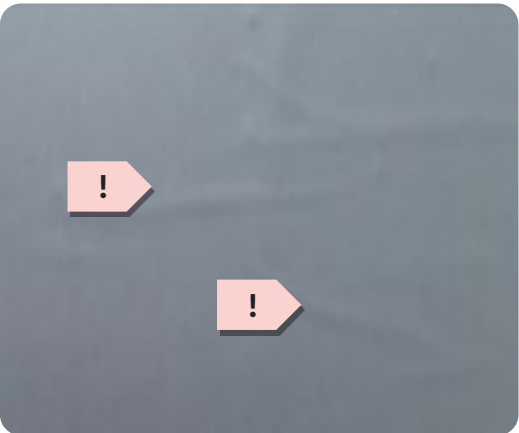
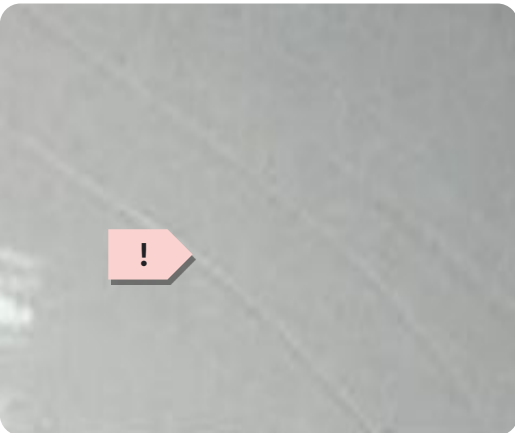# Unacceptable battery conditions
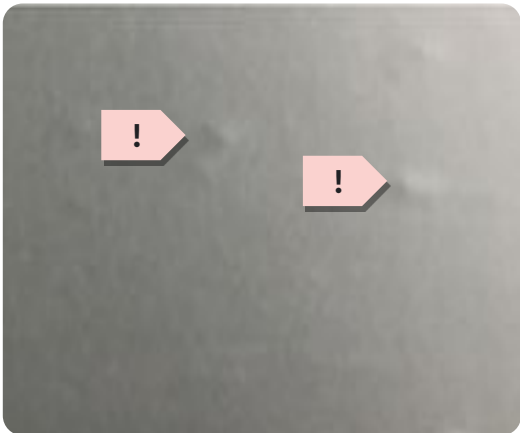
Battery cosmetic check

Pouch damage
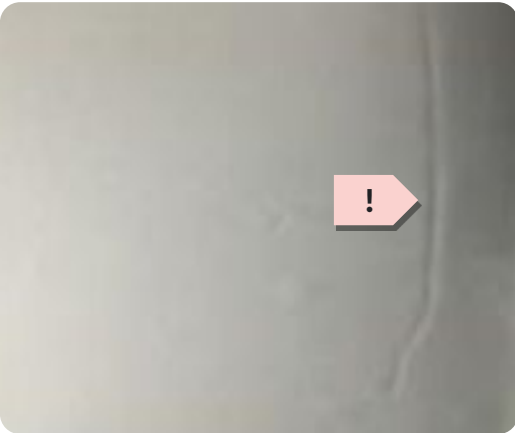

Line protrusion

Scratch

Contamination mark

Dot protrusion

Dent

Bubbling

Imprinted line

Swelling or electrolyte leakage

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   **Flip Battery**   Top Speaker   Inner Display Sub

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Release the flip battery FPC

Release the flip battery FPC.

⚠️ **Use caution**

Be careful not to puncture the battery.

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   **Flip Battery**   Top Speaker   Inner Display Sub

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Separate the pull jacket

Use a pair of blunt nose tweezers or your fingers to peel the pull jacket away from the battery.

⚠️ **Use caution**

Be careful not to puncture the battery.

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   **Flip Battery**   Top Speaker   Inner Display Sub

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Soften the glue

With the device unfolded, place the **ID** face down on the **heat plate** set to **158℉ (70℃) for 5 minutes** to soften the **flip battery** adhesive.

> ⚠️ **Use caution**
>
> Heat plate is a hot surface. Use caution as it could cause burns.

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   **Flip Battery**   Top Speaker   Inner Display Sub

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Adjust the pull jacket

- Move the left and right pull jacket and cut through the adhesive between the flip battery and the enclosure to position B, and then go back to original position A as shown in Fig 1.

- Only move the pull jacket toward the top of the phone.

⚠️ **Use caution**

Don't move the pull jacket toward the bottom of the phone or it may damage the thermal graphite sheet underneath the battery.

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   **Flip Battery**   Top Speaker   Inner Display Sub

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 243
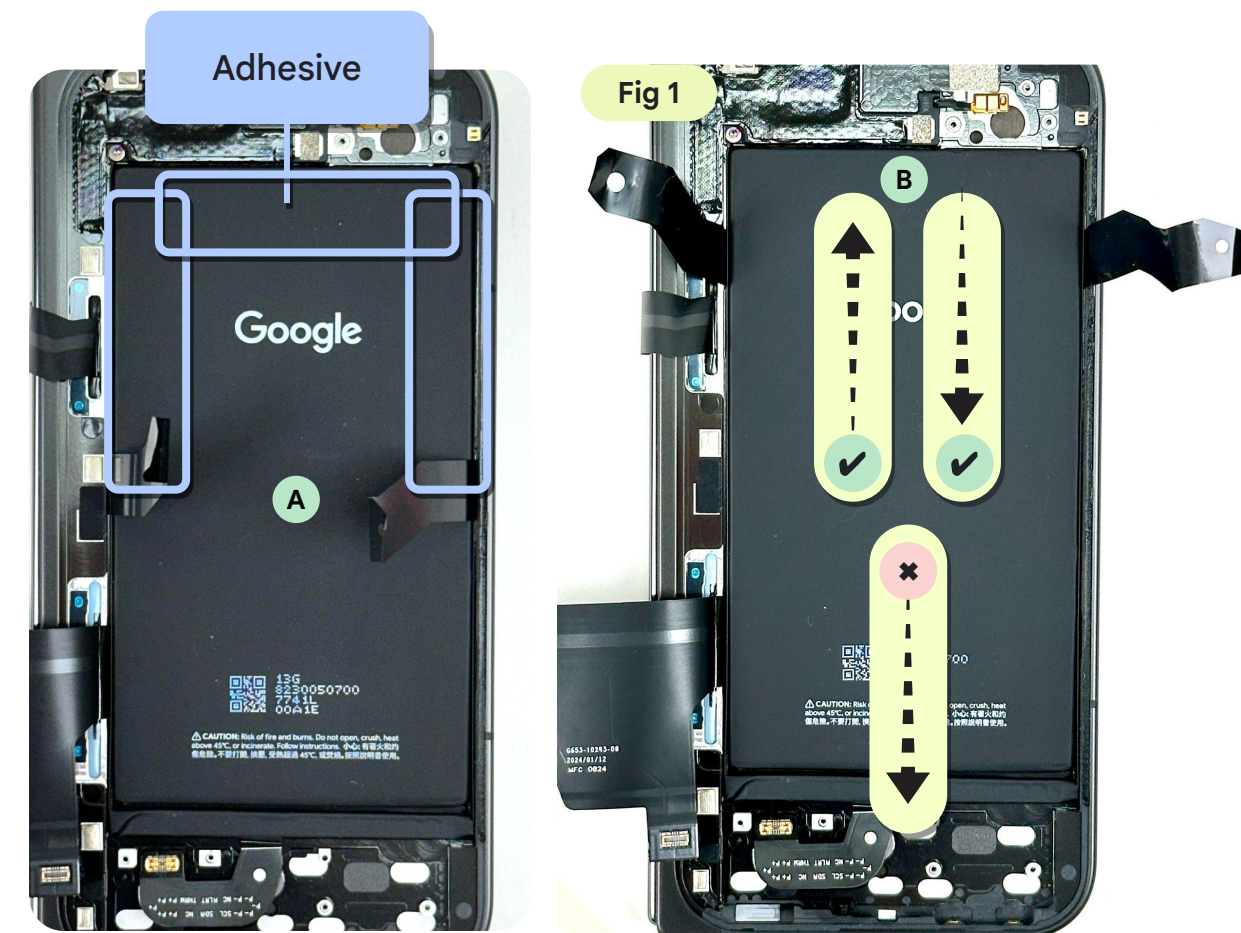
Finished! Need assembly instructions? ➜

Remove the battery

- Fold the phone. Wear the **ESD finger cots** to increase friction to prevent the pull jacket from slipping.

- Grip the ends of the pull jacket with your fingers. Pull straight up with constant, steady force to separate the adhesive under the battery.

- Gently remove the **flip battery** and store it safely.

Part: G949-00919-00 (Flip battery)

Pull straight up with constant.

No

⚠ **Use caution**

The battery is easier to remove if you lift the battery as soon as the device leaves the heat plate before adhesive curing.

⚠ **Use caution**

Keep small screws and sharp objects clear of the battery.

Don't **reuse the part.**

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   **Flip Battery**   Top Speaker   Inner Display Sub

Disassembly
instructions

Top speaker

The top speaker is used as an speaker for a third speaker for music and video.

⚠ Use caution

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

⊘ Prerequisites

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

- **Outer display**
- **Upper board**

⚒ Tools

Pixel 9 Pro Fold main holder

Pixel universal base

Torx plus 3IP screwdriver

Spudger

Tweezers

IPA and cloth

Dust-free cotton swabs

🛠 Required parts

Top speaker

Here's the list of parts for the top speaker disassembly.
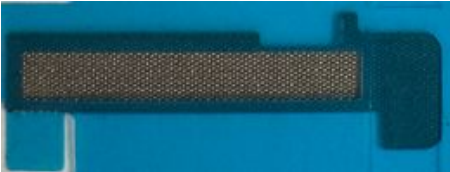
Reuse indications ● Reusable without reclaim   ● Reusable with reclaim   ● Not reusable after disassembly

Graphite sheet top speaker ●	PAD PSA ●	Conductive fabric ●	Flip york PSA ●	Top speaker ●
G864-00664-00	G806-12231-00	G806-11654-00	G806-09443-00	G863-00534-00
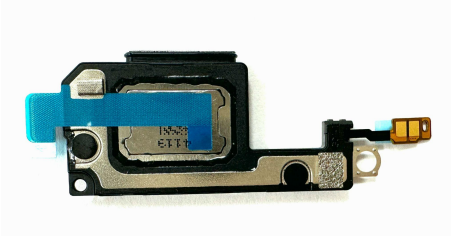
Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   Flip Battery   **Top Speaker**   Inner Display Sub

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Remove the top speaker graphite

Peel up the **graphite sheet** with the spudger from the corner and remove slowly by hand.

Part: G864-00664-00 (Graphite sheet)

💡 **Note**

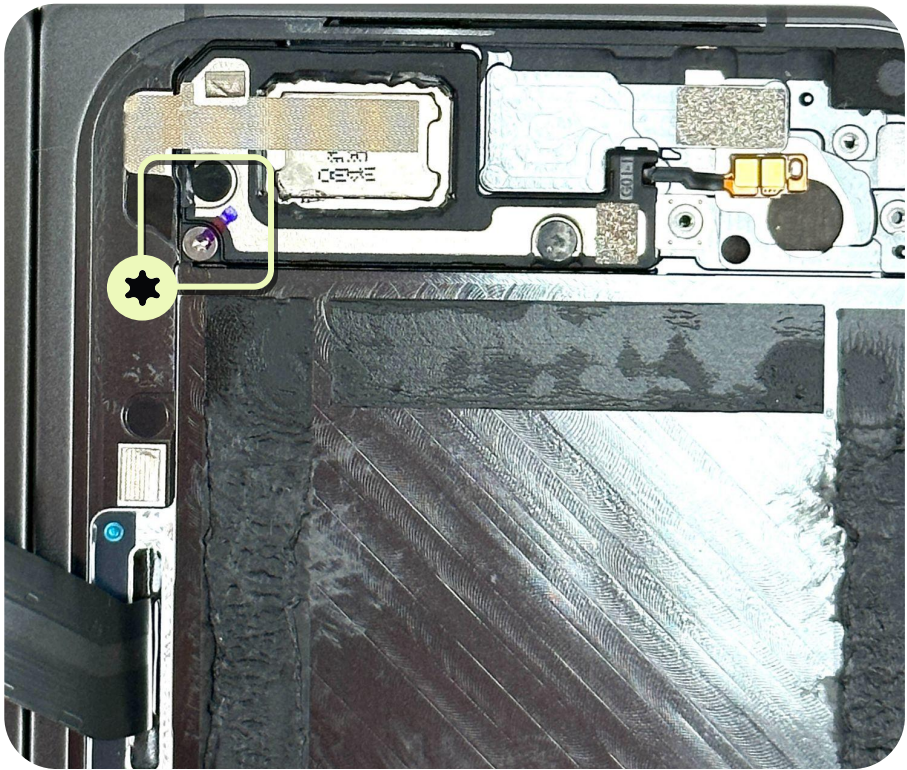*Don't* reuse the graphite sheet.

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   Flip Battery   **Top Speaker**   Inner Display Sub

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Remove the screw

- Remove the **top speaker** screw with the **torx plus 3IP screwdriver**.

Part: G250-06985-01 (Screw)

💡 **Note**

Don't reuse the screw.

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   Flip Battery   **Top Speaker**   Inner Display Sub

Finished! Need assembly instructions? ➜

Remove the top speaker

- Tear off the **conductive fabric** with the **spudger** from the corner as shown in Fig 1.

- Insert the **spudger to** pry up the gold contacting pad as shown in Fig 2.

- Insert the **spudger** to pry up the top speaker as shown in Fig 3.

Part: G863-00534-00 (Top speaker)

Part: G806-11654-00 (Conductive fabric)

> ◯ **Note**
>
> ***Don't*** **reuse the part of conductive fabric.**

Fig 1

Fig 2

Fig 3

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   Flip Battery   **Top Speaker**   Inner Display Sub

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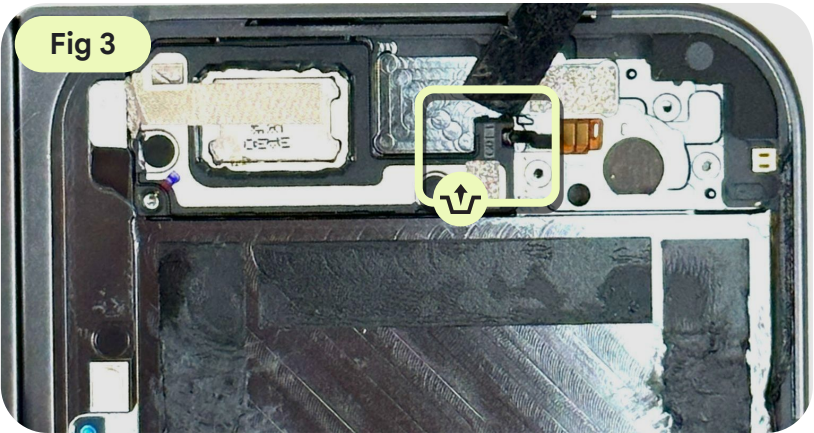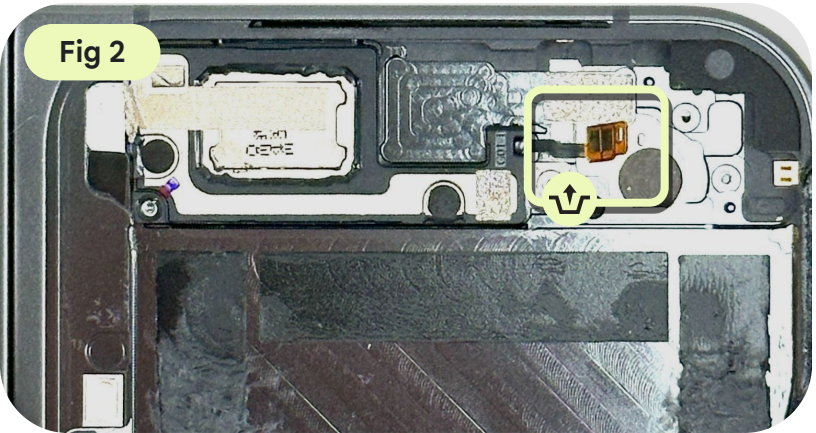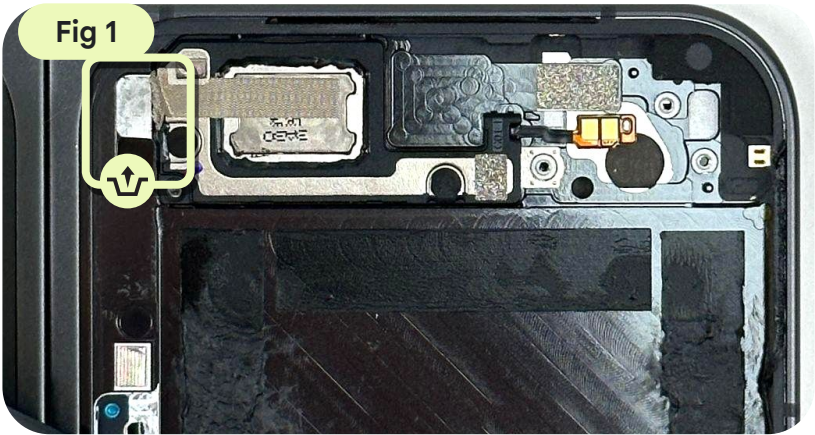
Disassembly instructions

Inner display sub (Flip side)

If you reuse the inner display sub (flip side), ensure that any adhesive residue is completely removed.

⚠ Use caution

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

⊘ Prerequisites

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

- **Outer display**
- **Lower board**
- **Upper board**
- **Flip battery**

⚒ Tools

Pixel 9 Pro Fold main holder

Pixel universal base

Tweezers

Spudger

IPA and cloth

🛠 Required parts
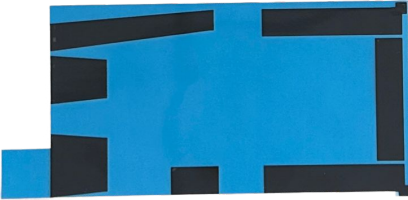
Inner display sub (flip side)

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

Reuse indications   🟢 Reusable without reclaim   🔵 Reusable with reclaim   ⚫ Not reusable after disassembly

Inner display sub 🔵	Flip battery PSA ⚫	Flip battery FPC PSA ⚫	Flip battery B2B PSA ⚫	OD left-BTM PSA ⚫
Multiple part numbers	G806-12710-010	G806-09264-00	G806-09325-00	G806-12520-00

Outer Display   Flip Battery/Bottom Bridge Cowling   Lower Board   Upper Board   Outer Front Camera   Flip Battery   Top Speaker   Inner Display Sub

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Pixel 9 Pro Fold repair manual

Assembly flip

Inner display sub   Flip battery

Top speaker   Lower board

Outer front camera   Flip bottom bridge and battery cowling

Upper board   Outer display

Assembly
instructions

Inner display sub Flip side

Reuse the ID sub or a new ID sub

- Use the **spudger** to clean the residual glue out of the **enclosure**.

- If there's any residue remaining, use a dust-free cloth with **IPA** to clean the surface.

- *Don't* tear off the masking tapes and the labels on the flip enclosure for new ID sub at this step.

- Remove the wrap on the hinge for the new ID sub.

⚠ **Use caution**

Be careful to avoid damage to the sealing and the foam on the enclosure side during deglue the residual glue.

💡 **Note**

The yellow highlight is where the residual adhesive exists.

Reuse ID sub   New ID sub

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

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Reuse the enclosure

Replace the PSA to the designated position.

| **Part: G806-12520-00** (OD left-BTM PSA) |

Note

The inner display sub includes the PSA. Perform this step only if the OD sub is disassembled.

Don't remove the release liner just yet.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 255
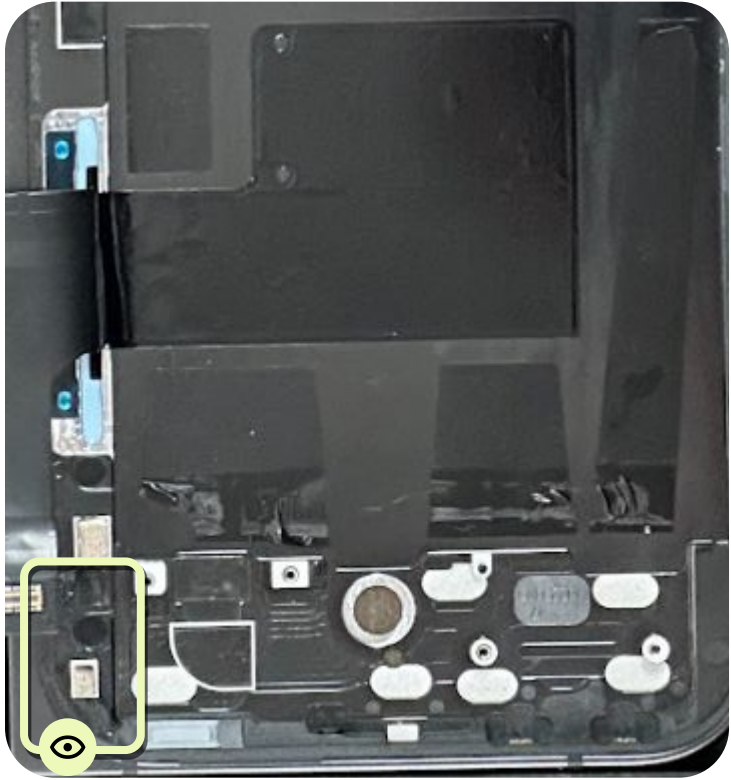
Clean the battery area

- Use the flat end of the spudger to scrape up and remove any residue from the enclosure of the **flip battery and the FPC** area.

- Use your fingers or tweezers to remove big chunks of adhesive. Repeat for any adhesive on it.

- Use a dust-free cloth to clean the **flip battery and the FPC** area with IPA.

> **Note**
>
> The inner display sub includes the flip battery PSA. Perform this and the next step only if the PSA is damaged.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

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Paste the flip battery PSA

- Paste the **flip battery PSA** along the upper-right corner.

- Run the spudger over the PSA to strengthen adherence.

Part: G806-12710-00 (Flip battery PSA)
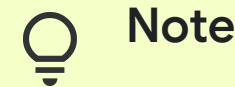
> ## Note
>
> *Don't* remove the release liner just yet.
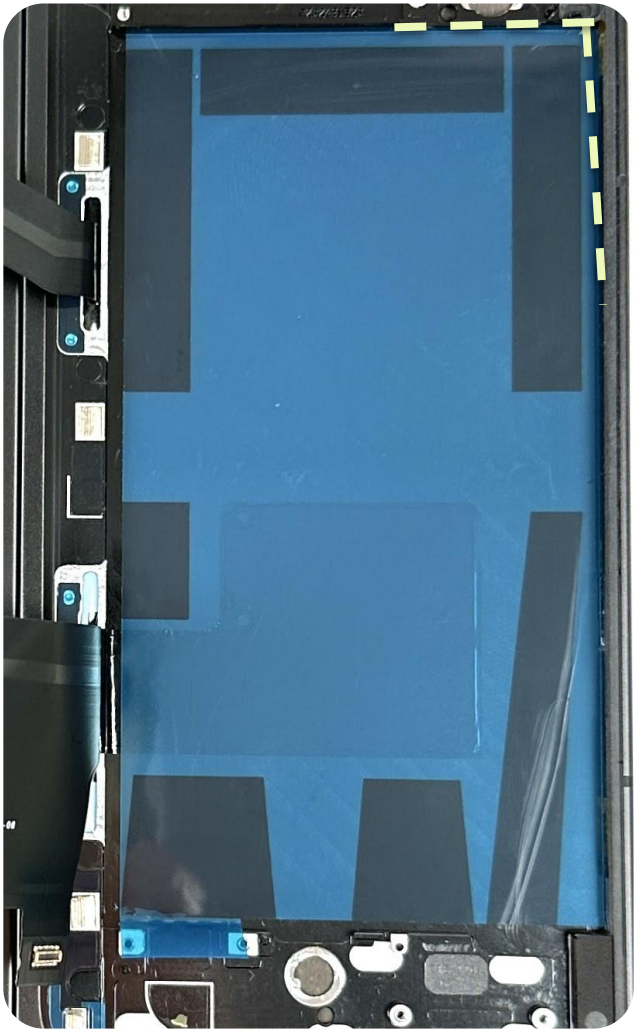
Paste the flip battery FPC PSA

Paste the flip battery FPC's PSA to the designated position. The release paper can't be removed after you stick it as shown in figure.

Part: **G806-09264-00** (Flip battery FPC PSA)

Part: **G806-09325-00** (Flip battery B2B PSA)

A: G806-09325-00

B: G806-09264-00

💡 Note

Note that the inner display sub includes the flip battery FPC PSA. This and the next step is only to change the flip battery if it's damaged.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 258
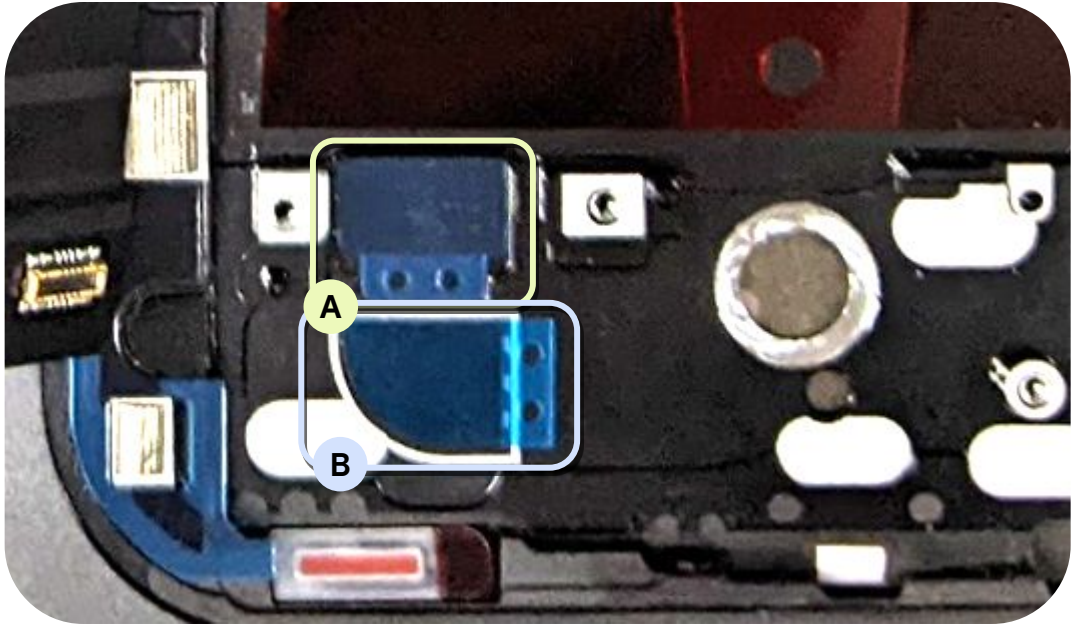
Assembly
instructions

Top speaker

Reuse the top speaker

- Remove the adhesive by the **spudger**.

- Wrap the spudger with a dust-free cloth with IPA to clean up the residual.

- Stick the CPSA and the PSA according to the outline as shown in Fig 1, Fig 2, and Fig 3.

Part: G806-12231-00 (PAD PSA**)**

Part: G806-09443-00 (Flip york CPSA)

Part: G806-11654-00 (Conductive fabric)

> **Note**
>
> The inner display sub includes the top speaker. Perform this step only if the top speaker is damaged.
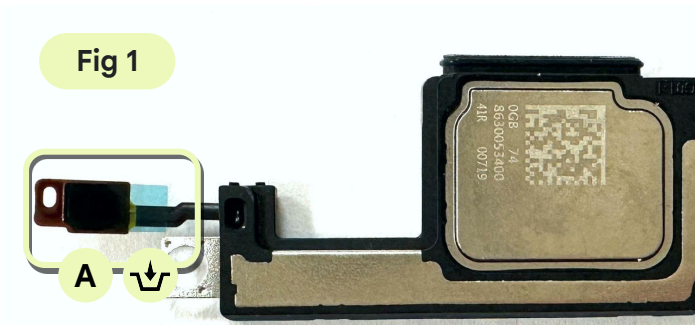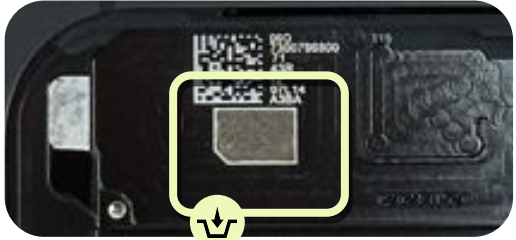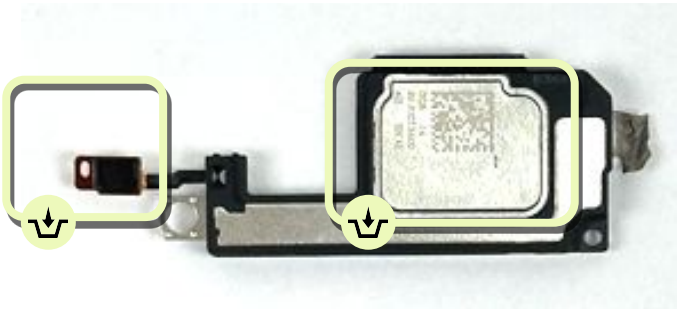
Fig 1

Fig 2

A: G806-12231-00
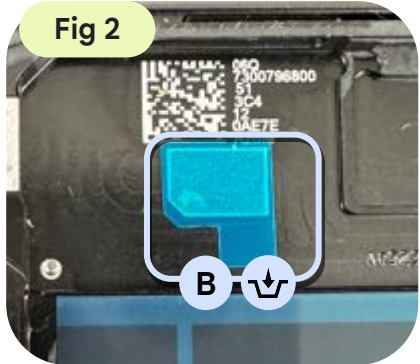
B: G806-09443-00

C: G806-11654-00

Inner Display Sub   **Top Speaker**   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   Outer Display
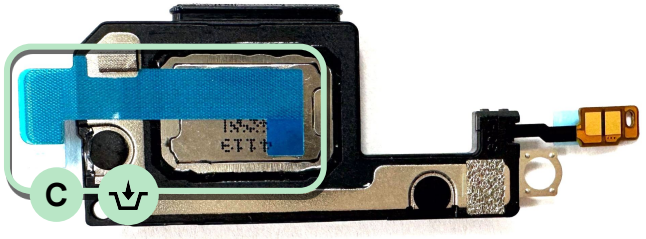
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Attach the top speaker

- Tear off the liners.

- Install the **top speaker** to the **enclosure** and press it to make sure that it fits completely as shown in Fig 1.

- Fix the pad according to the designated position. Tighten the **screw** with the **torx plus 3IP screwdriver as** as shown in Fig 2.

- Tear off the blue liner and adhere the conductive fabric as shown in Fig 3.

Part: G250-06985-01 (Screw)

Part: G863-00534-00 (Top speaker)

Fig 1

Fig 2

Fig 3

💡 **Note**

The inner display sub includes the top speaker. Perform this step only if the top speaker is damaged.

💡 **Note**

Make sure that the speaker goes under the enclosure rim.

Clean the rubber surface with dust-free cotton swabs before the installation.

💡 **Note**

Torque force: 0.9 ± 0.09 kgf-cm

Inner Display Sub   **Top Speaker**   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

Pixel 9 Pro Fold Repair Manual v1.0   ©Google 2024 | Page 261
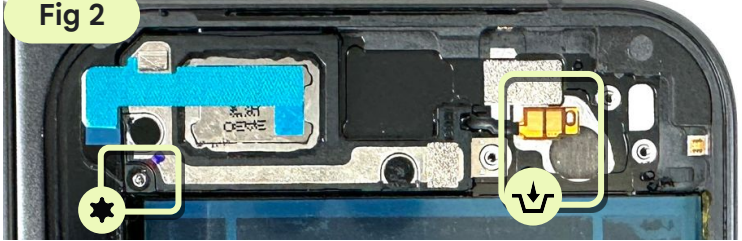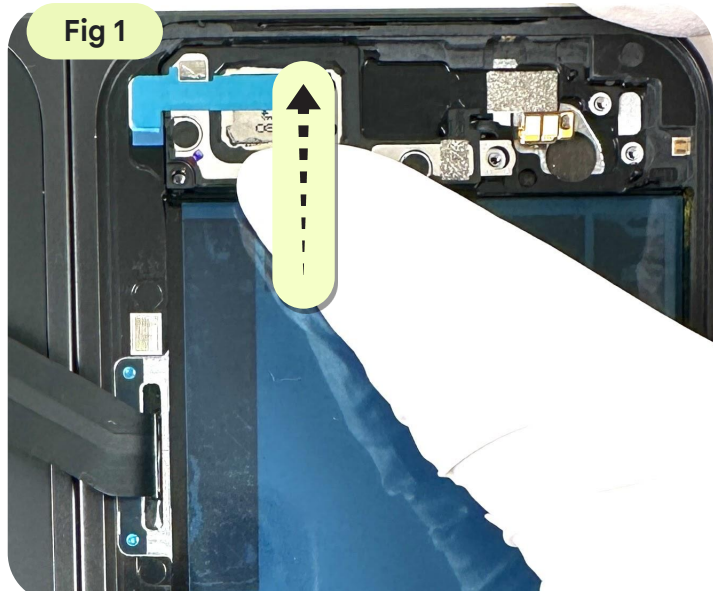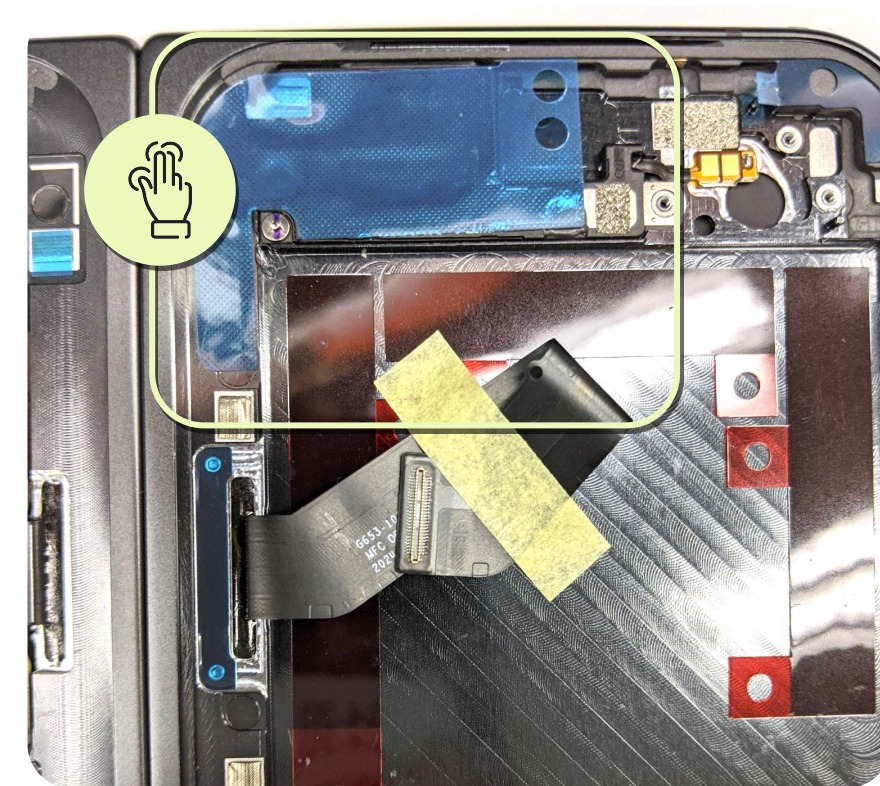
Adhere the graphite sheet

- Align the **graphite sheet** to the outline.

- Press the **graphite sheet** to make sure that there are no air pockets.

- Remove the release liner slowly.

Part: G864-00664-00 (Graphite sheet)

⚠️ **Use caution**

Ensure that there are no wrinkles or warps.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

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Assembly
instructions

Outer front camera

Attach the outer front camera

Attach the outer FCAM connector to the **upper board**.

Part: **G949-00912-00** (Outer front camera)

💡 **Note**

Check every connector is fully attached to the **upper board.**

Inner Display Sub   Top Speaker   **Outer Front Camera**   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 264
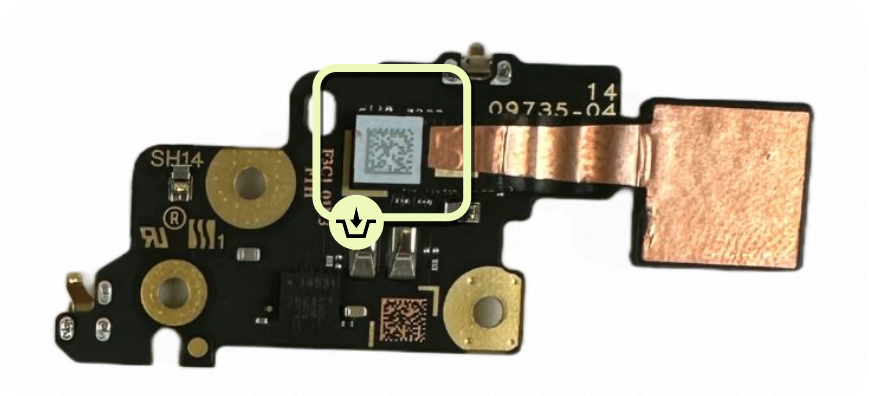
Assembly
instructions

Upper board

Assemble the upper board

- Tear off the liner if you use the new ID sub as shown in Fig 1.
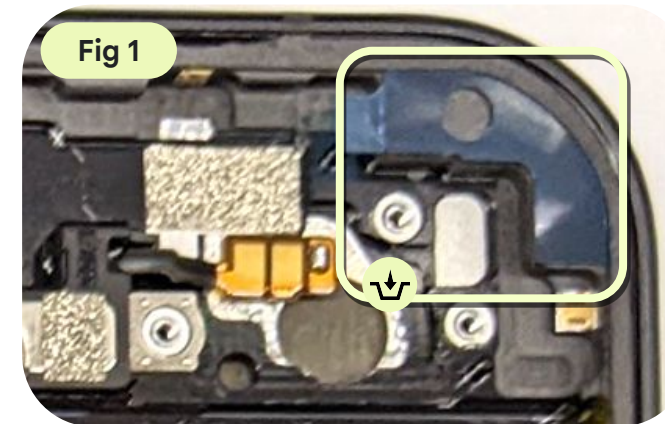
- Install the **upper board** to the enclosure.

Part: G949-00916-00 (Upper board)

Note

Clean residual of the OD rubber from the upper board if needed as shown in Fig 2.

Note

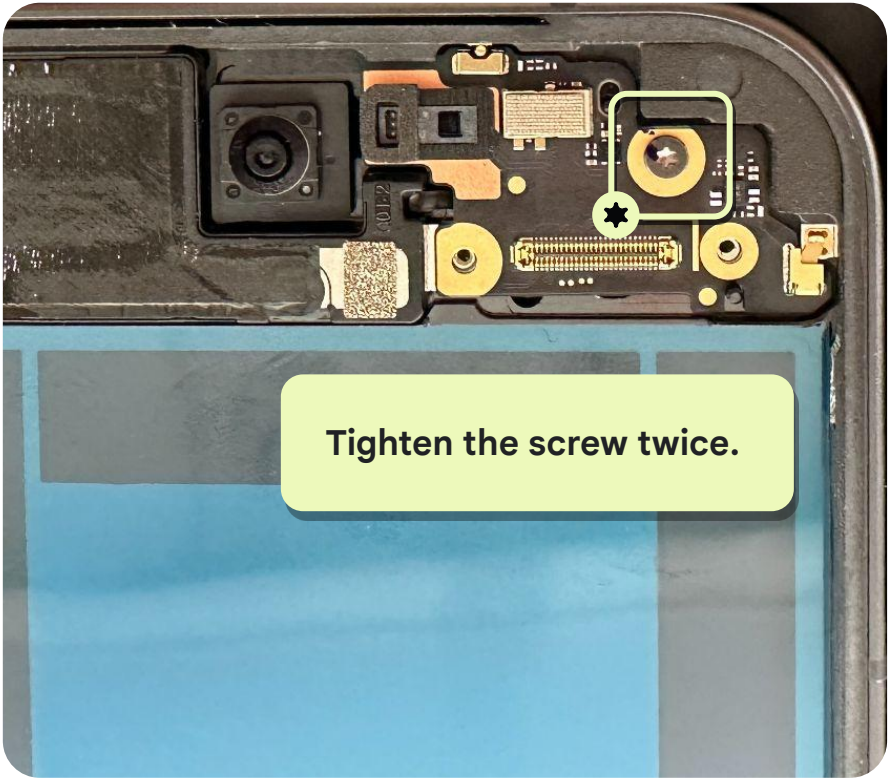Install the upper board under the hook. Refer to the relative position.

Fig 1

Fig 2

Inner Display Sub   Top Speaker   Outer Front Camera   **Upper Board**   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 266
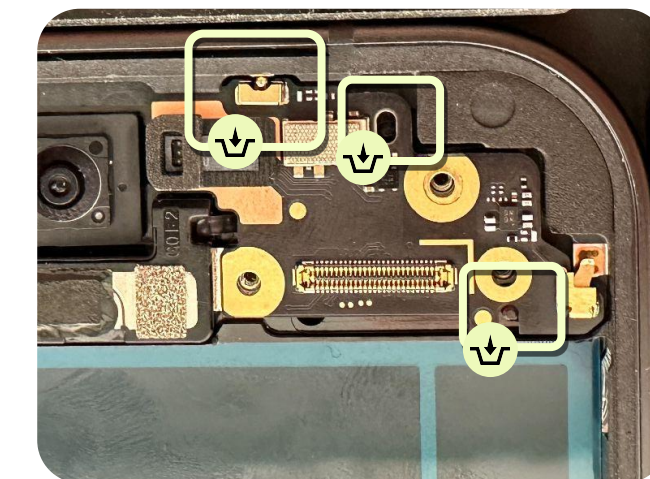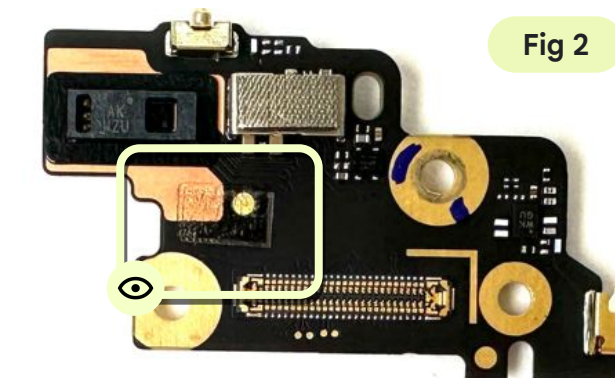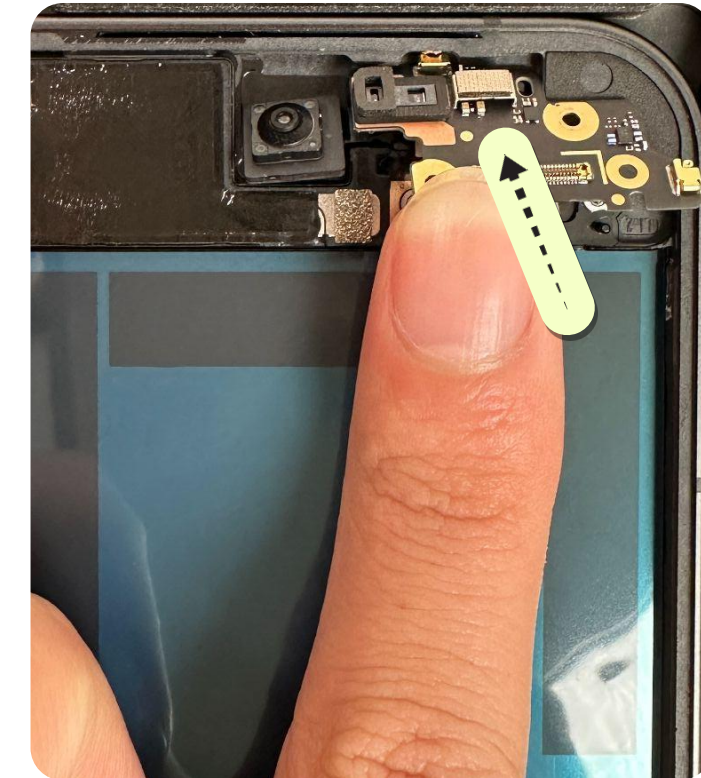
Fasten the upper board

- Fasten the **upper board screw** with the **torx plus 3IP screwdriver**.

- Tighten the screws for a second time to secure them in place.

Part: G250-06985-01 (Screw)

Tighten the screw twice.

> ## Note
> Torque force: 0.9 ± 0.09 kgf-cm

Inner Display Sub   Top Speaker   Outer Front Camera   **Upper Board**   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 267
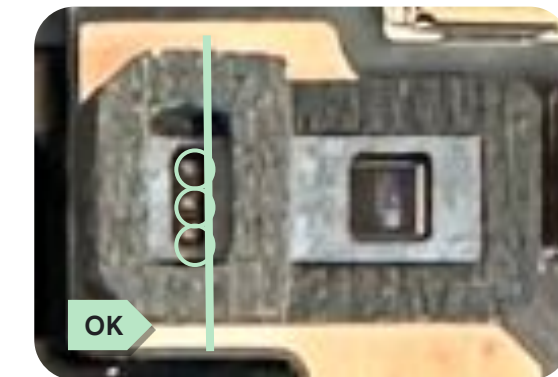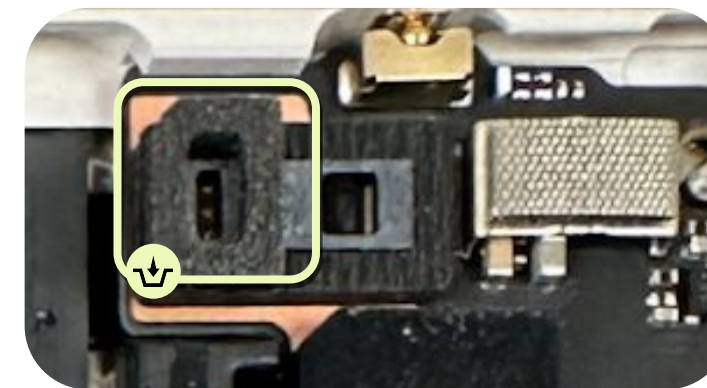
Assemble the P sensor rubber

- Assemble the **P sensor rubber** to the upper board.

- Check whether the rubber is deviated, missing as shown in Fig 1, Fig 2, and Fig 3.

Part: G806-09080-00 (P sensor rubber)

💡 **Note**

Skip this step if the rubber isn't damaged or broken.

Fig 1

Fig 2

Fig 3

Inner Display Sub   Top Speaker   Outer Front Camera   **Upper Board**   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 268
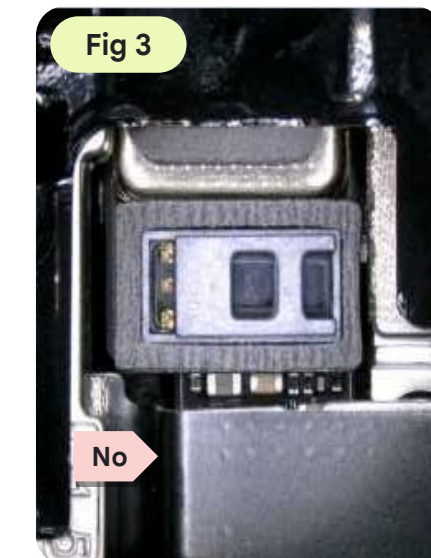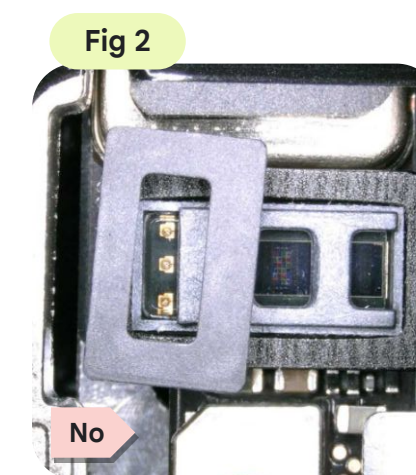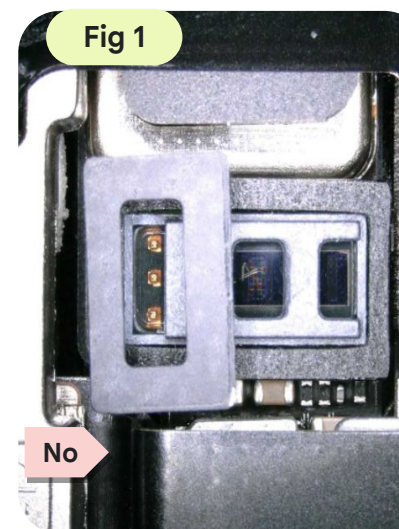
Assembly
instructions

Flip battery

Tear off the liners

- Before installation, remove any debris or loose screws from the **enclosure**.

- Peel off the new adhesive strip and apply the sticky side to the enclosure.

- Use the spudger or your fingers, to press down the adhesive and adhere it to the enclosure. Peel off the blue liner.

- Peel off the liners and the masking tape (no. 1 ~9) if you use a new ID sub as shown in Fig 1.

⚠️ **Use caution**

Review all safety precautions before you begin work.

Ensure that the battery cosmetic checks are completed.

Grip the tab here.

Fig 1

Reuse ID sub

New ID sub

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   **Flip Battery**   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

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Align the flip battery

- Place the two feeler gauges with 0.1 mm thickness as L shape and align to the right top corner.

⚠ Use caution

Review all safety precautions before you begin work.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   **Flip Battery**   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

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Align the flip battery

- Install the **flip battery** into the enclosure toward the upper right corner with absorption-bulb. Ensure that the **battery** cosmetic checks are complete.

- Remove the feeler gauges and the absorption-bulb.

> **Part: G949-00919-00** (Flip battery)

⚠️ **Use caution**

Review all safety precautions before you begin work.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   **Flip Battery**   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

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Press the flip battery

- Place the **Pixel 9 Pro Fold holder** on the **universal base**.

- Place the **Pixel 9 Pro Fold bat press (Flip)** on the **Pixel 9 Pro Fold-holder** as shown in Fig 1.

- Place the **universal press plate 12 mm** on the **Pixel 9 Pro Fold flip battery press rubber** as shown in Fig 2.

- Place it in the **universal press fixture**. Press the handle down for **25** seconds as shown in Fig 3.

Fig 1

Fig 2

Universal base

Universal-Press Plate 12mm

-G940-00736-00-9996

Fig 3

⚠ Use caution
Keep hands clear during operation.

○ Note
Always place the Pixel 9 Pro Fold holder in the B1 position for any pressing step.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   **Flip Battery**   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

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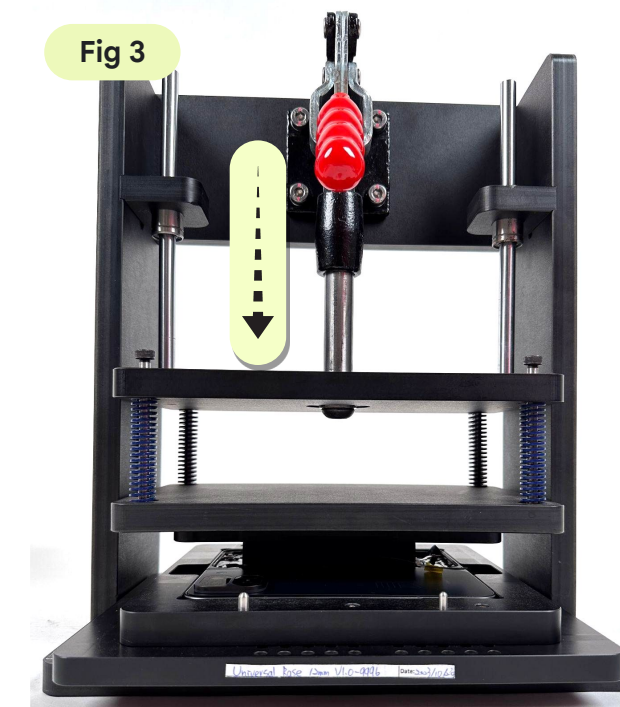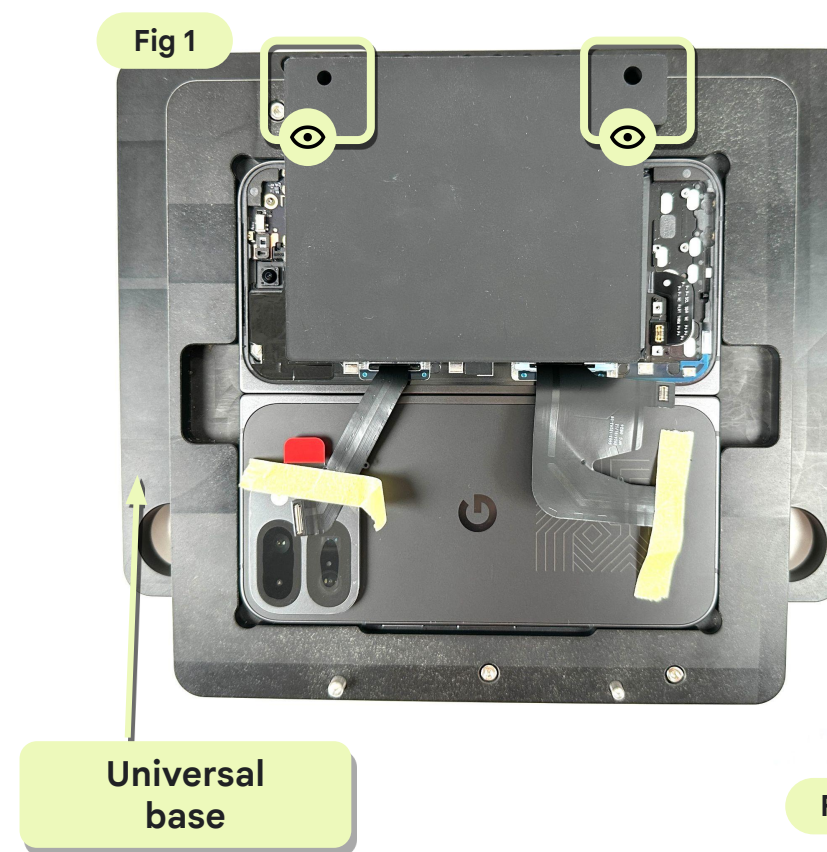
Connect the top bridge FPC

- Attach the **top bridge B2B connector** to the **upper board.**

- Carefully align the connector with its socket, then press down with your fingertips.

> ○ **Note**
>
> Check every connector is fully attached to the **upper board**.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   **Flip Battery**   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

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Assemble the flip top bridge cowling

- Assemble the **flip top bridge cowling** to the enclosure from the **right side**.
- Tighten the **screws** with the **torx plus 3IP screwdriver**.

- Tighten the screws for a second time to secure them in place.

Part: G730-07493-00 (Flip top bridge cowling)

Part: G250-06985-01*2 (Screws)

Tighten both the screws twice.

Note

Install the flip top bridge cowling into the hook. Refer to the relative position.

Note

Torque force: 0.9 ± 0.09 kgf-cm

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   **Flip Battery**   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

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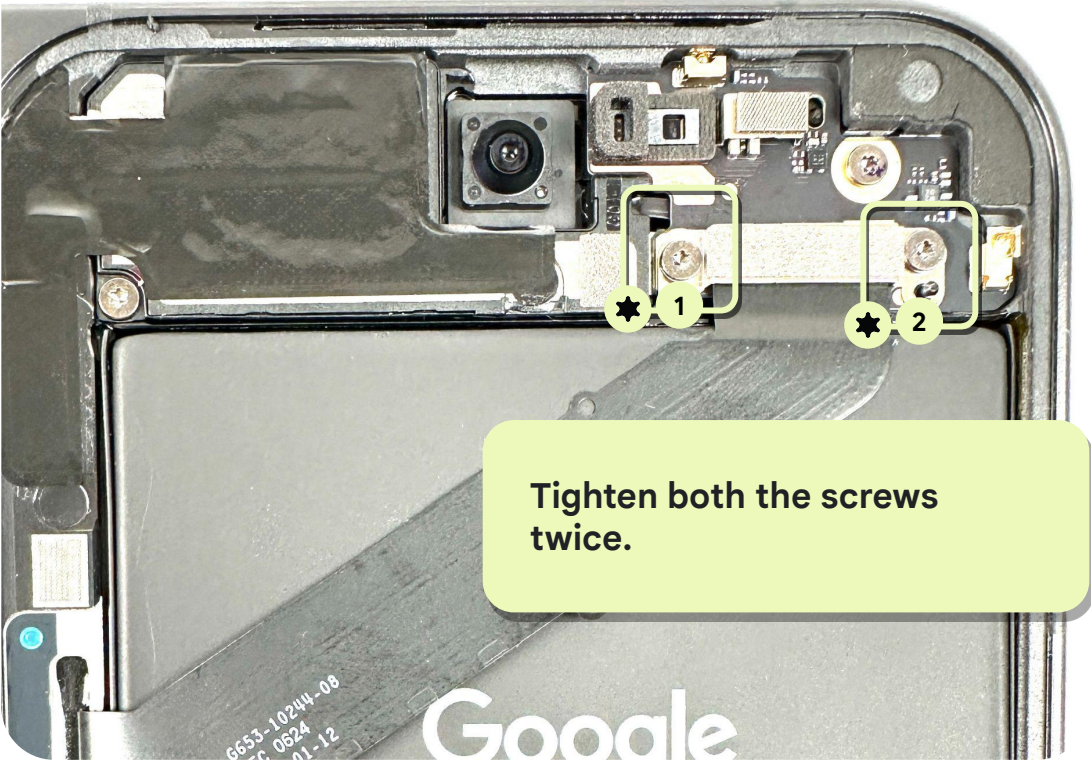
Attach the OD rubber

Attach the **OD rubber support** onto the **upper board.**

Part: **G804-01242-00** (OD rubber)

⚠️ **Use caution**

Make sure that the rubber is assembled in place.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   **Flip Battery**   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

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Connect the flip battery

- Tear off the **liners** (no. 1 ~ 3) from the enclosure as shown in Fig 1.

- Attach the **flip battery connector** to the designated position as shown in Fig 2. Then press the **flip battery FPC** onto the **enclosure** as shown in Fig 3.

- Press the battery FPC with the spudger as shown in Fig 4.

Fig 1

Fig 2

Fig 3

Fig 4

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   **Flip Battery**   Lower Board   Flip Bottom bridge & battery cowling   Outer Display

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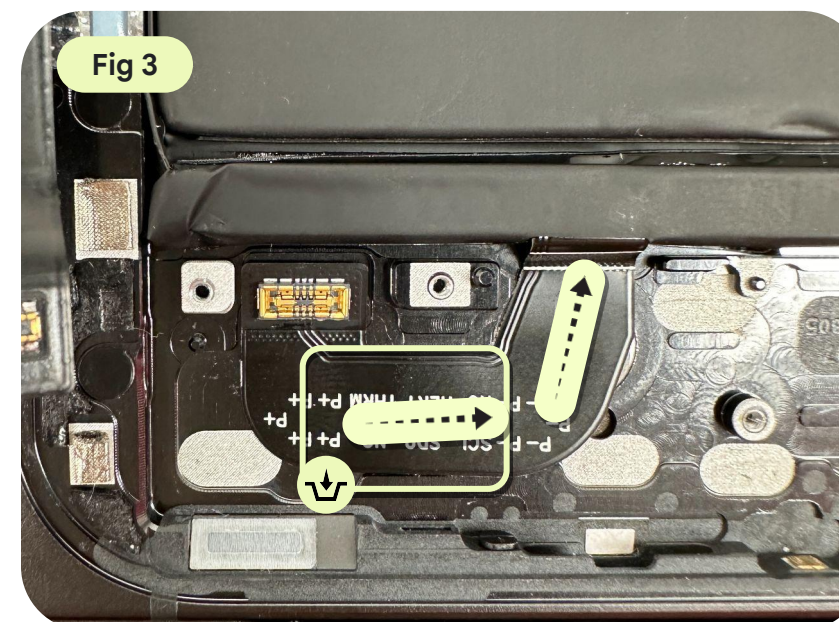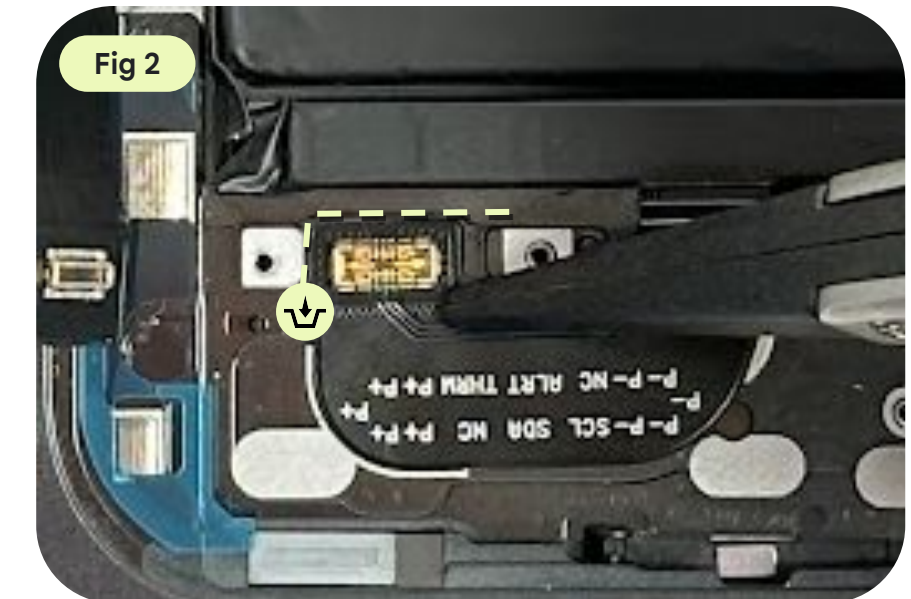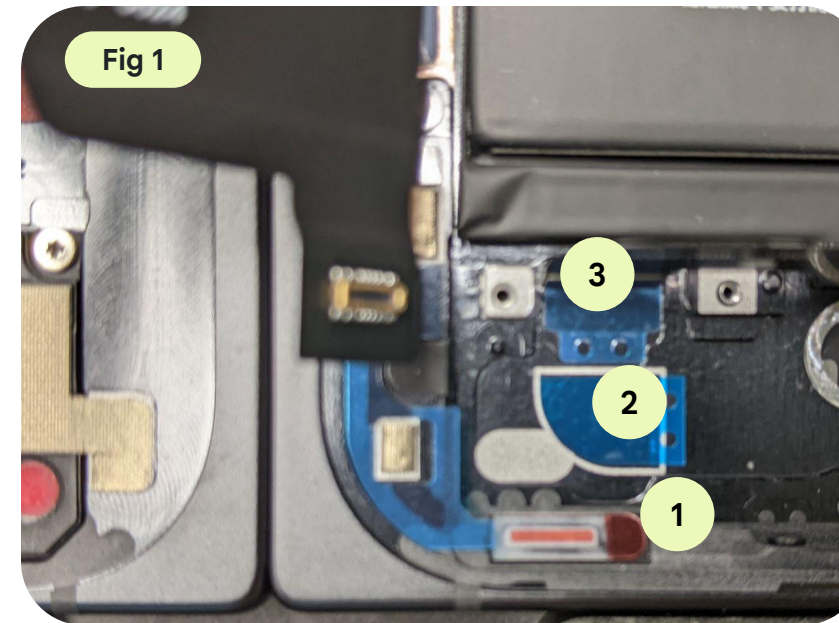
Assembly
instructions

Lower board

Assemble the lower board

- Assemble the **lower board** to the enclosure.

- Make sure that the two springs are in contact with the metal sheet from the enclosure.

Part: G949-00915-00 (Lower board)

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   **Lower Board**   Flip Bottom bridge & battery cowling   Outer Display

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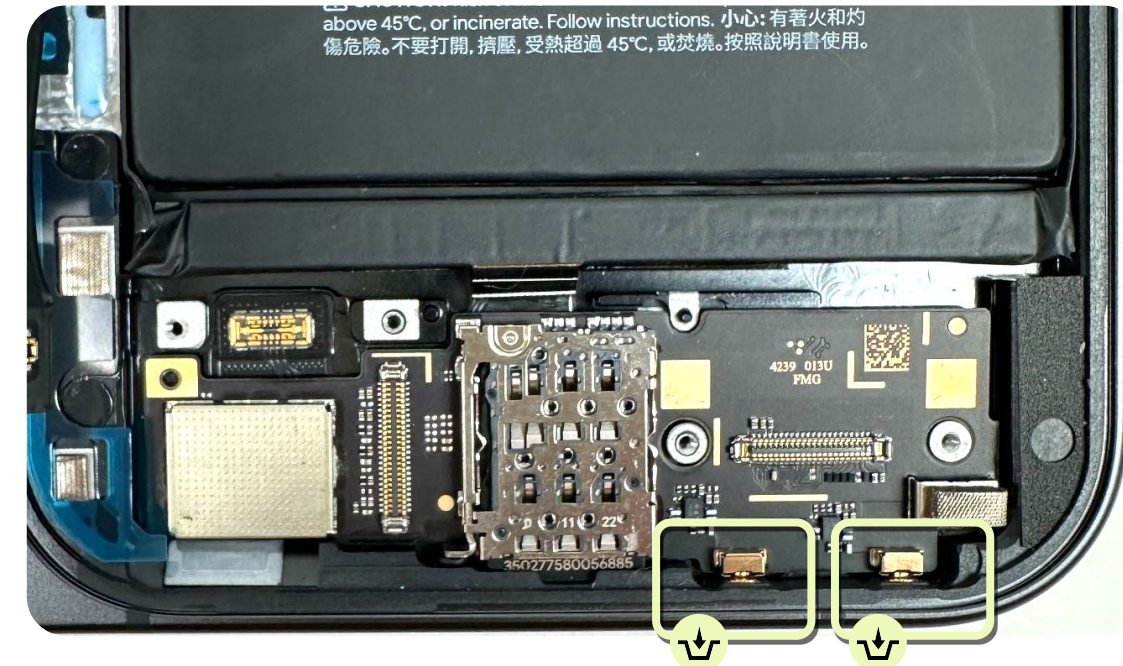
Insert the SIM tray

Hold the **lower board** and insert the **SIM tray** with your hand.

> **Part: Multiple part numbers** (SIM tray)

> 💡 **Note**
>
> Clean the rubber surface with dust-free cotton swabs before the installation.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   **Lower Board**   Flip Bottom bridge & battery cowling   Outer Display

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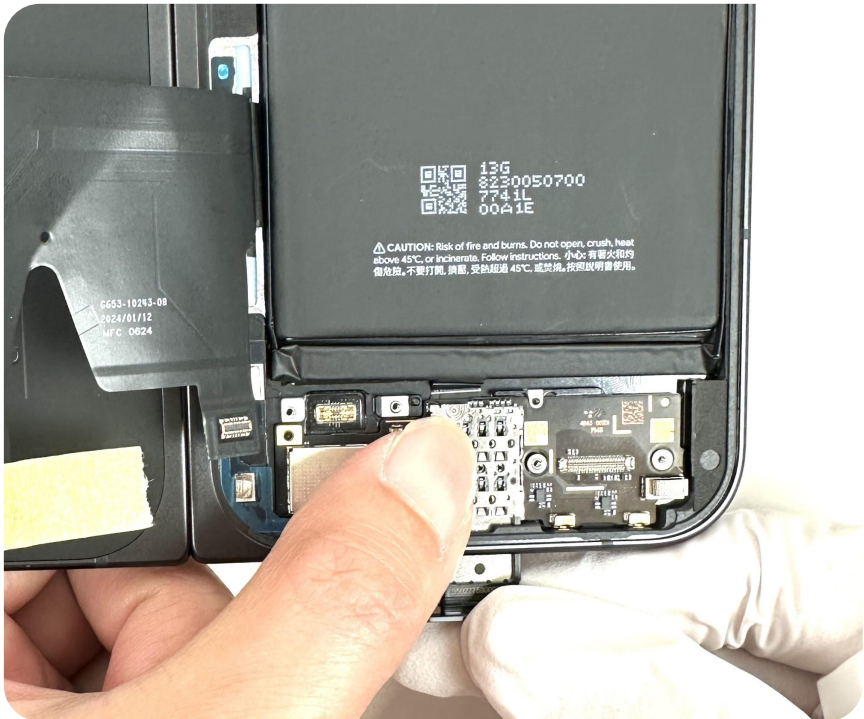
Connect to the lower board

Attach the **bottom bridge B2B connectors** to the **lower board** and the **flip battery.**

> **Note**
>
> Check that every connector is fully attached to **the lower board and the flip battery.**
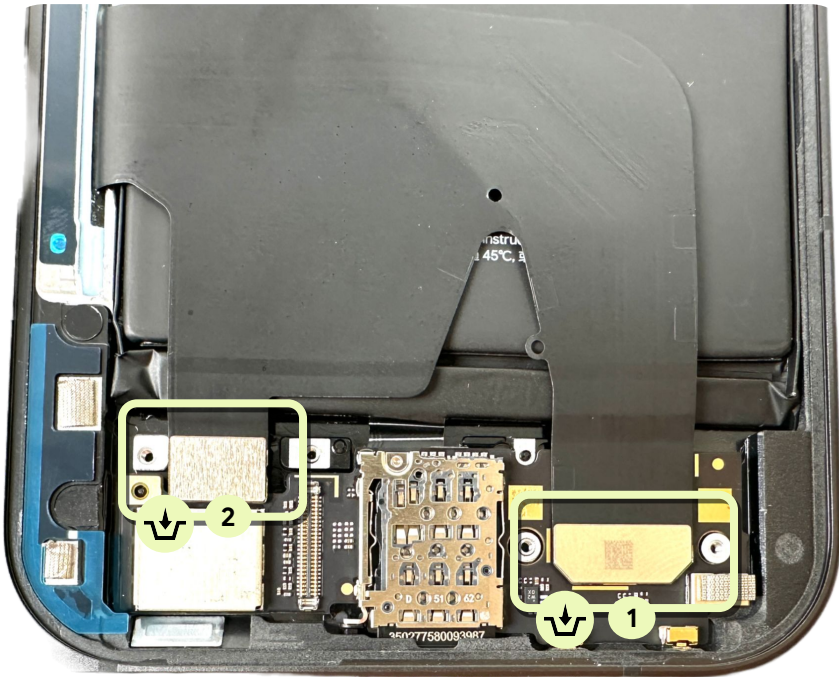
Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   **Lower Board**   Flip Bottom bridge & battery cowling   Outer Display

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Assembly
instructions

Flip battery and bottom bridge cowling

Assemble the flip bottom bridge cowling

- Tear off the two liners of the flip bottom bridge cowling as shown in Fig 1.

- Assemble the **flip bottom bridge cowling** to the lower board from the **right side**.

- Fasten the **two lower board screws** with the **torx plus 3IP screwdriver**.

- Tighten the screws for a second time to secure them in place.

Fig 1

Part: G730-07495-00 (Flip bottom bridge cowling)

Part: G250-06985-01*2 (Screws)

⚠️ **Use caution**

Be careful when you use the screwdriver. _Don't_ **accidentally damage the adjacent battery.**

Incorrect use of the screwdriver could cause injury to you or others or damage to the battery or the product.
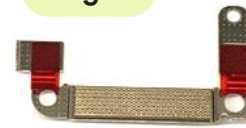
💡 **Note**

Install the flip bottom bridge cowling into the hook. Refer to the relative position.

💡 **Note**

Torque force: 0.9 ± 0.09 kgf-cm

Tighten both the screws twice.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   **Flip Bottom bridge & battery cowling**   Outer Display
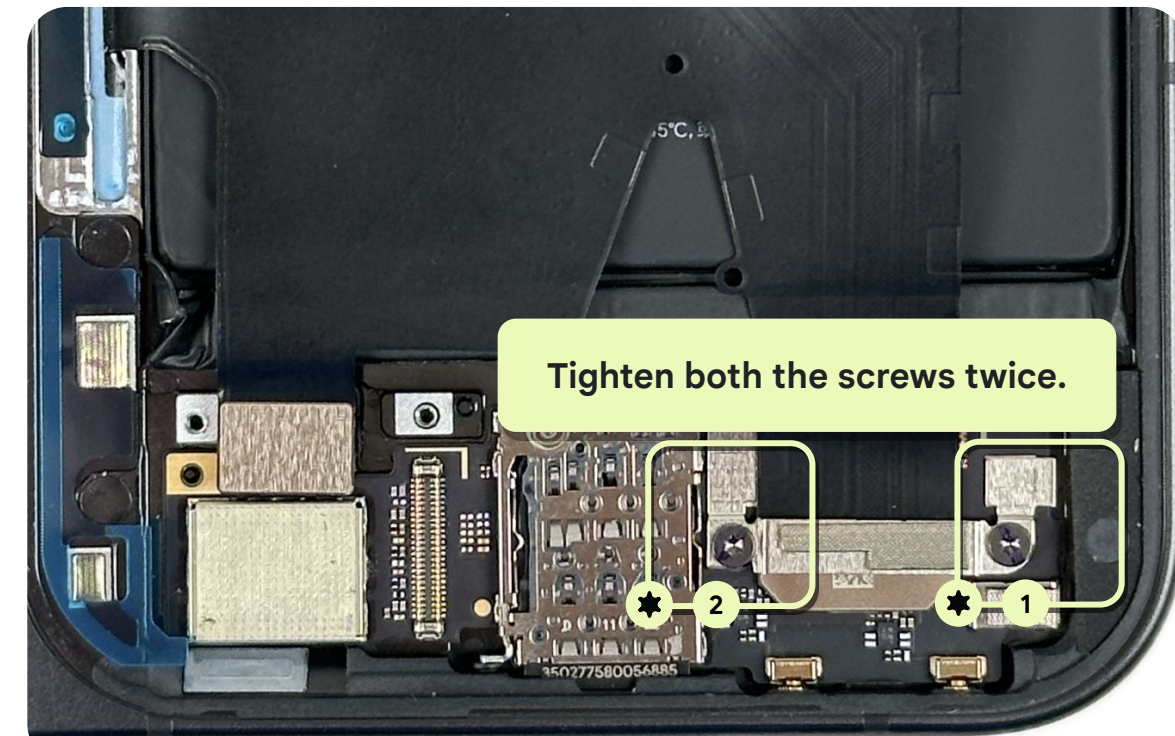
Fasten the flip battery cowling

- Assemble the **flip battery cowling**.

- Fasten the **flip battery cowling screw** with the **torx plus 3IP screwdriver**.

- Tighten the **screw twice**.

- Attach the OD cowling FOF on the cowling if the FOF is peeled off. Tear off the blue liner.

Part: **G730-07496-00** (Flip battery cowling)

Part: **G250-07521-00** (Screw)

Part: **G806-09273-00** (OD cowling FOF)

Tighten the screw twice.

⚠ Use caution

Be careful when you use the screwdriver. _Don't_ accidentally damage the adjacent battery.

Incorrect use of the screwdriver could cause injury to you or others or damage to the battery or the product.

💡 Note

Install the flip battery cowling into the hook. Refer to the relative position.

💡 Note

Torque force: 0.9 ± 0.09 kgf-cm
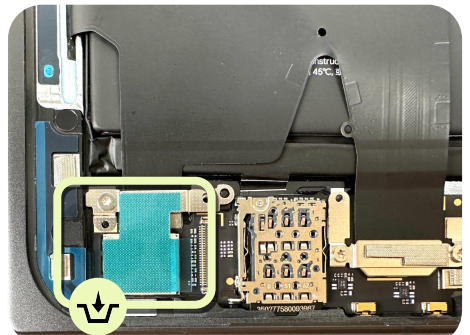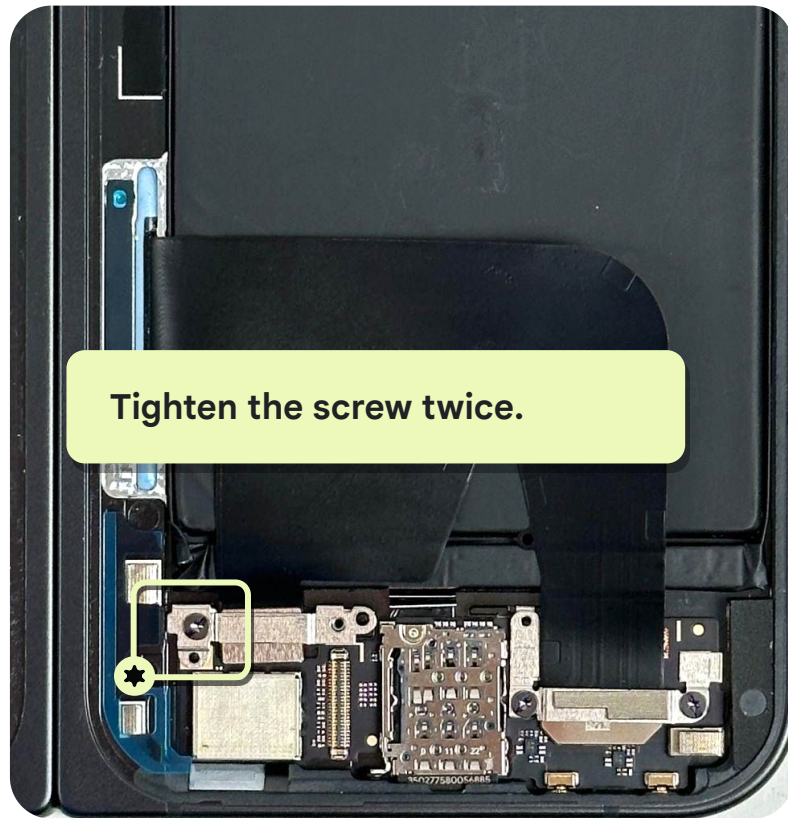
Assembly
instructions

Outer display

Solution 1: Reuse the outer display

Reuse the outer display

Reuse the OD

- Use the **spudger** to clean the residual glue out of the **OD**.

- Use your fingers or tweezers to remove big chunks of adhesive. Repeat for any adhesive on it.

- If there's any residue, use a dust-free cloth with **IPA** to clean the surface.

> **Note**
>
> The highlight is where the residual adhesive exists.

> ⚠️ **Use caution**
>
> *Don't* use the deglue machine on the driver IC area.
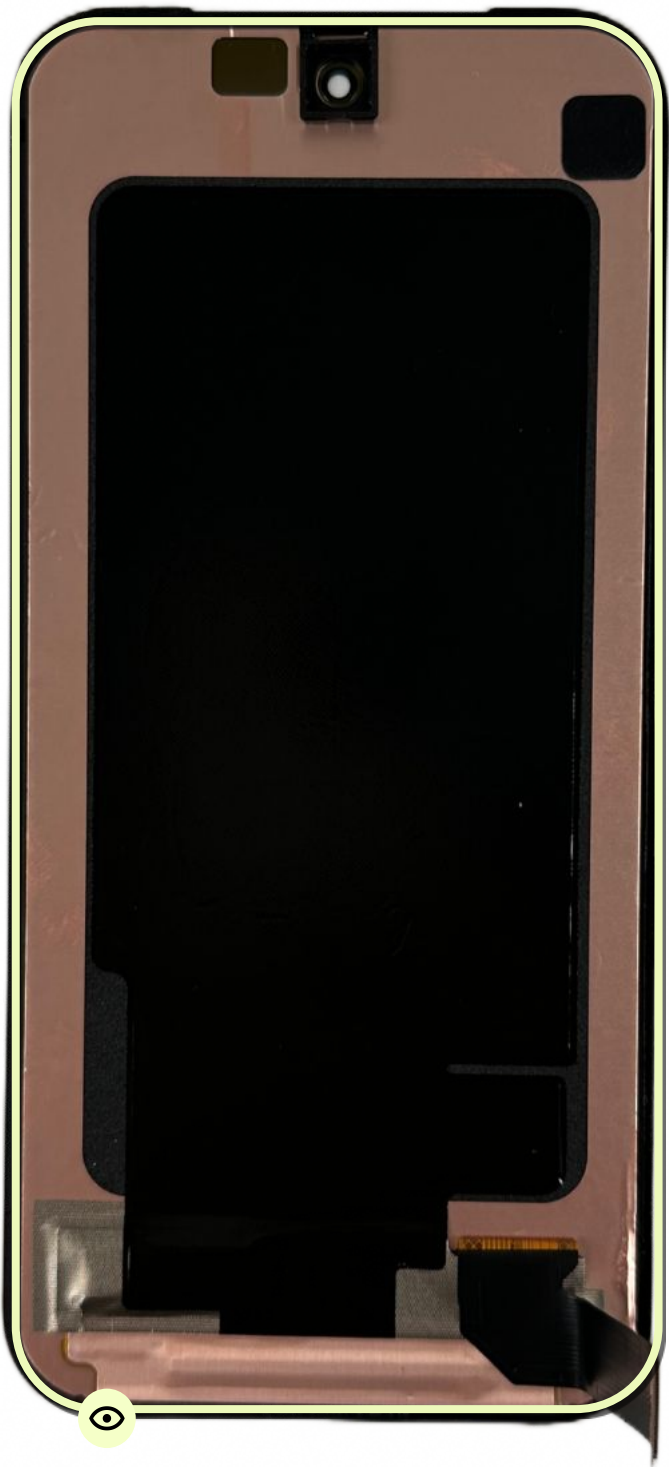
Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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Reuse the outer display

Apply the 3M AP111 primer

- Apply **IPA** around the edges of the **enclosure** with **dust-free cotton swabs.**

- Apply one round **3M AP111 primer** around the edges of the **enclosure** with **dust-free cotton swabs.**

⚠️ **Use caution**

After the **primer** is applied, complete assembly in 25 minutes.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   ○ **Outer Display**

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Re-using outer display

Align the OD PSA

- Slowly remove the larger liner from the back of the **adhesive sheet** to expose the adhesive.

- Hold the adhesive sheet and place it over your phone to find the proper alignment. Place the **adhesive** onto the enclosure top side by hand.

Part: G806-09152-02 (OD PSA)

⚠️ **Use caution**

Don't **touch the adhesive.**

If it gets dirty, change to another one.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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Re-using outer display

Adhesive to the enclosure

- Make sure that the **adhesive** is completely seated onto the **enclosure**.

- Use the **spudger** to activate the **adhesive**.

Note

Inspect for any misalignment.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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Re-using outer display

Remove the liner (first layer)

Pull the tab carefully to remove the liner.

Avoid lifting the adhesive.

⚠️ **Use caution**

Don't remove the second layer of the liner.

First layer liner

Grip the tab here.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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Re-using outer display

Apply the 3M AP111 primer on the OD

- Apply **IPA** around the edges of the **OD sub** with **dust-free cotton swabs**.

- Apply one round **3M AP111 primer** around the edges of the **OD sub** with **dust-free cotton swabs**.

⚠️ **Use caution**

After the **primer** is applied, complete assembly in 25 minutes.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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Reuse the outer display

Connect the OD sub

- Use the **universal adsorption-bulb** to prop up the **OD**.

- Apply even pressure across the connector to connect the **OD flex** to the **lower board,** and ensure that it's fully engaged.
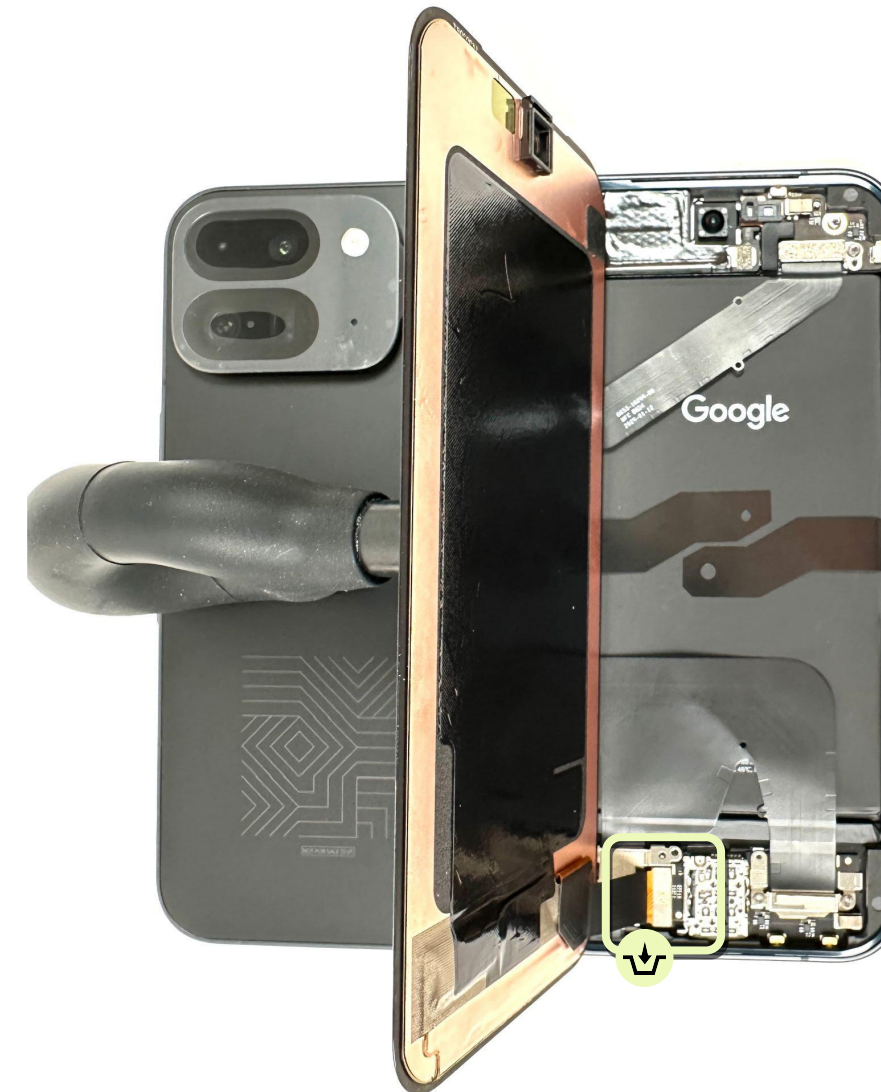
Part: G949-00911-00 (OD sub)

⚠️ **Use caution**

At the step to attach the OD, *don't* damage or deform the driver IC (COF).

Check if every connector is fully attached to the **lower board**.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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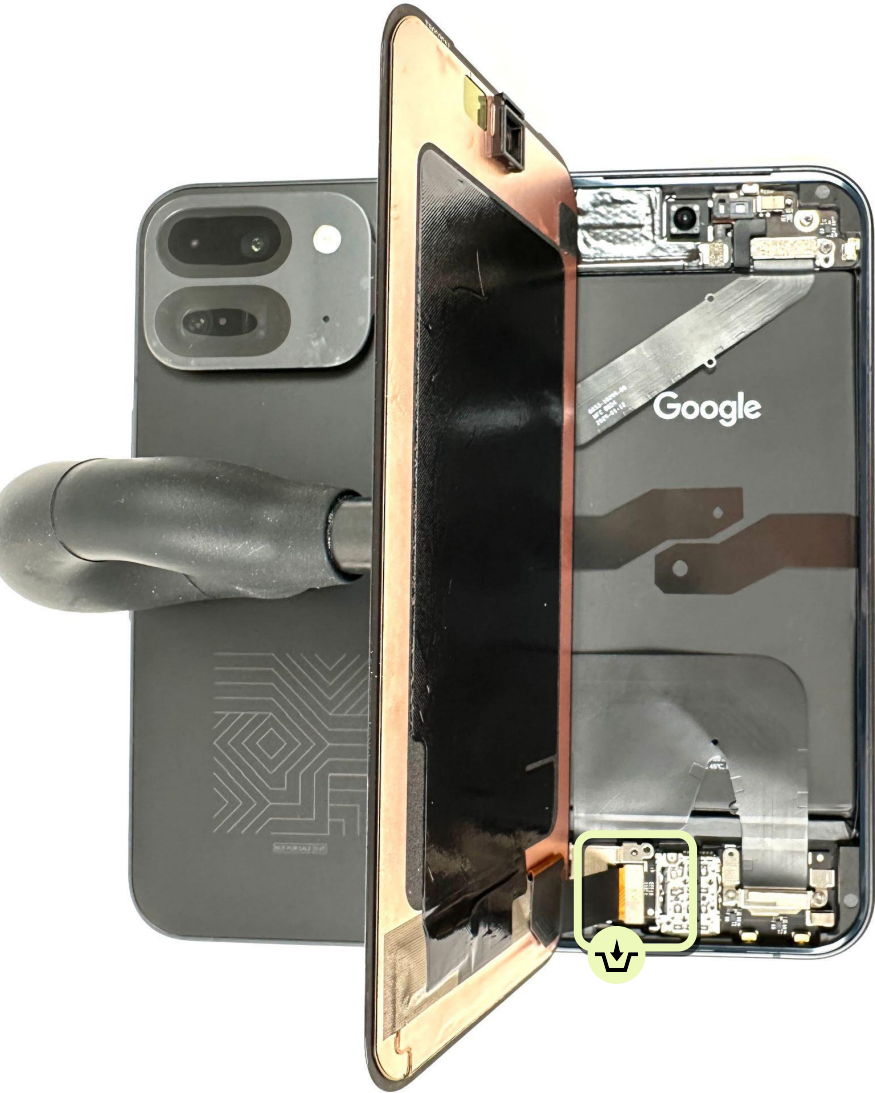
Reuse the outer display

Fasten the OD cowling

- Install the **OD cowling** to the lower board.

- Fasten the **flip battery cowling screw** with the **torx plus 3IP screwdriver.**

- Tighten the **screw twice**.
- Power on to check if the device works properly and power off the device after you check.

Part: G730-07494-00 (OD cowling)

Part: G250-06985-01 (Screw)

⚠️ **Use caution**

Be careful when you use the screwdriver. _Don't_ accidentally damage the adjacent battery.

Incorrect use of the screwdriver could cause injury to you or others or damage to the battery or the product.
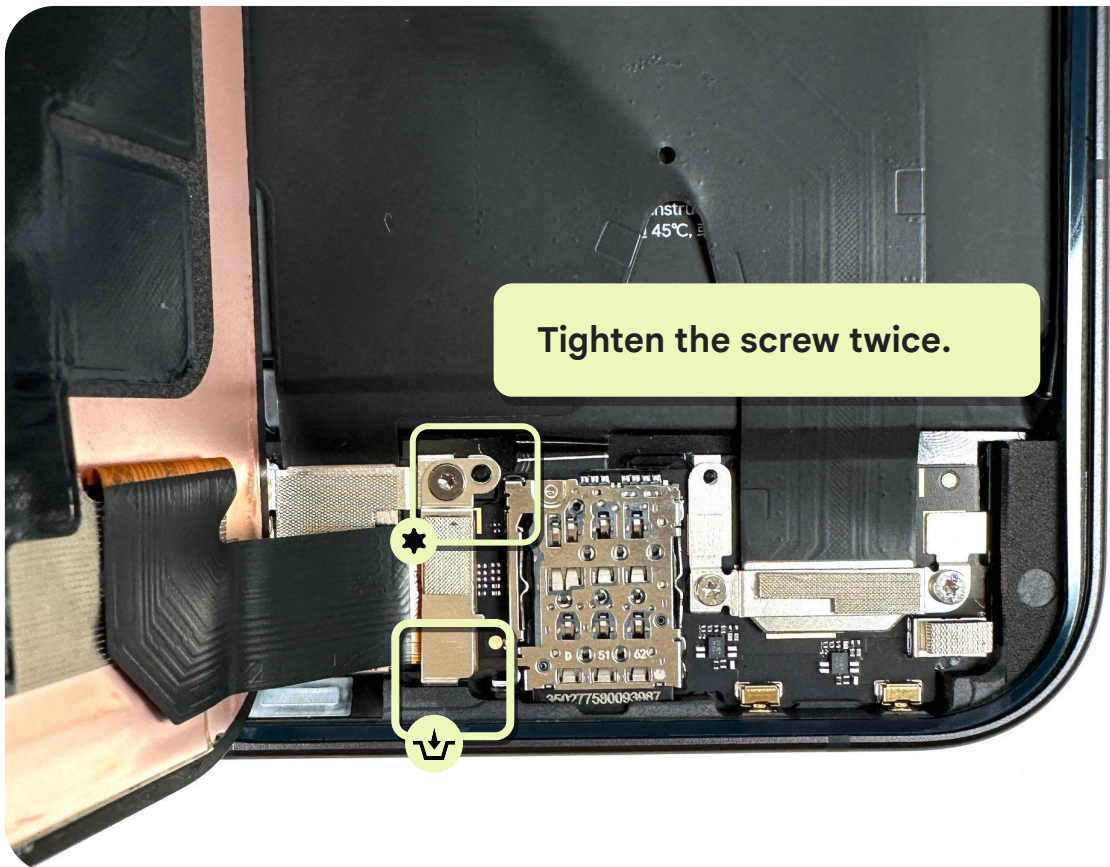
⚠️ **Use caution**

Align the two alignment posts.

💡 **Note**

Torque force: 0.9 ± 0.09 kgf-cm

Tighten the screw twice.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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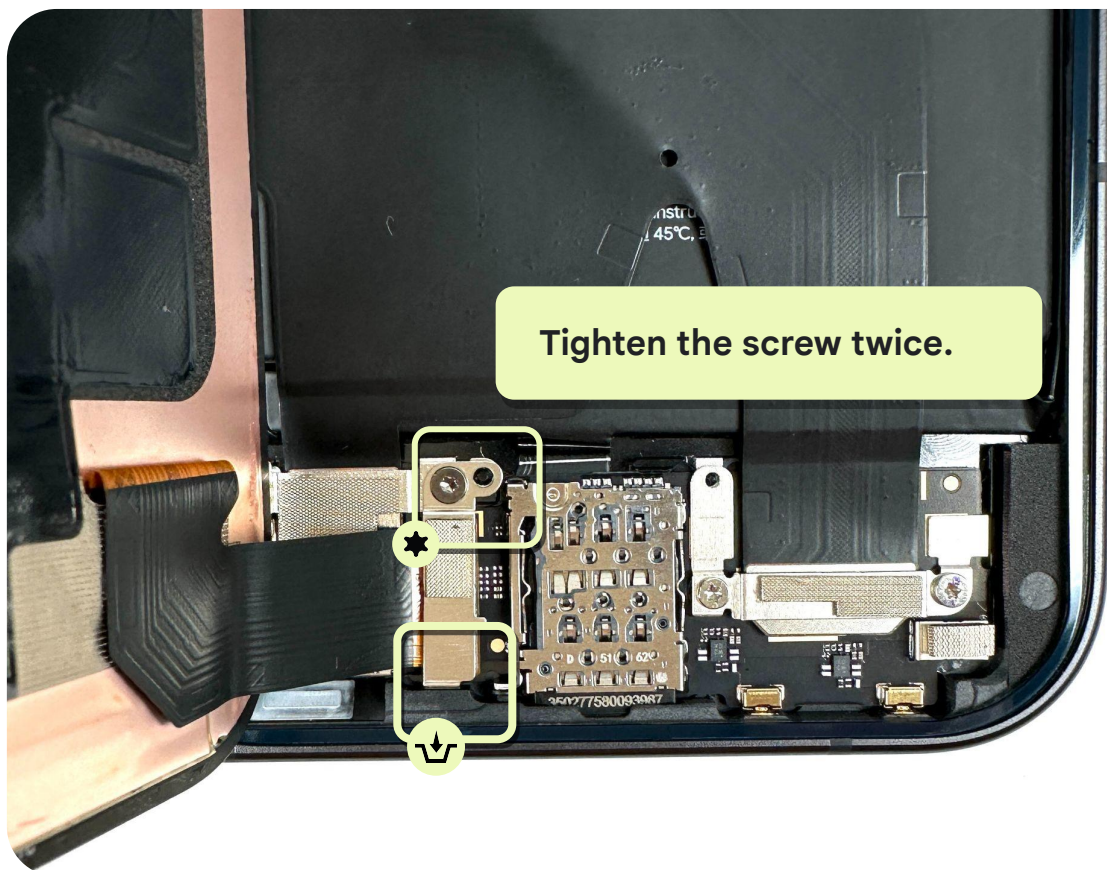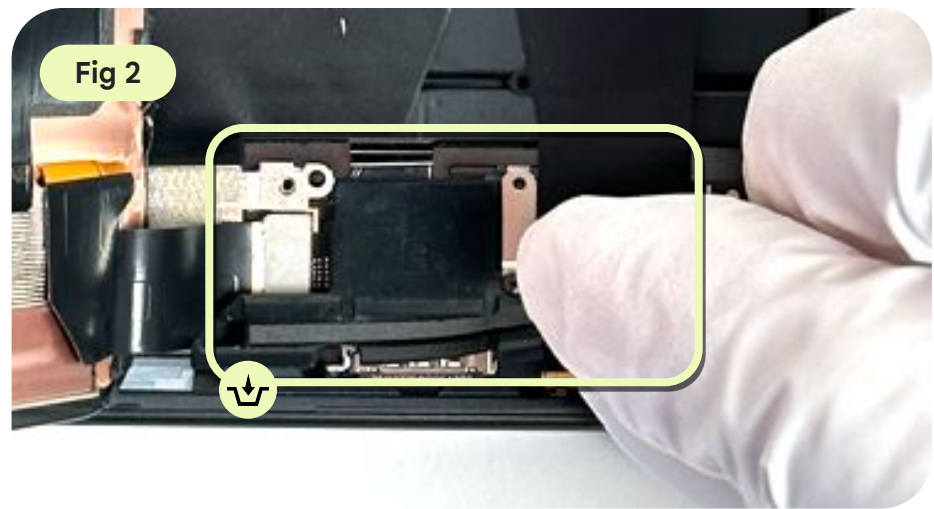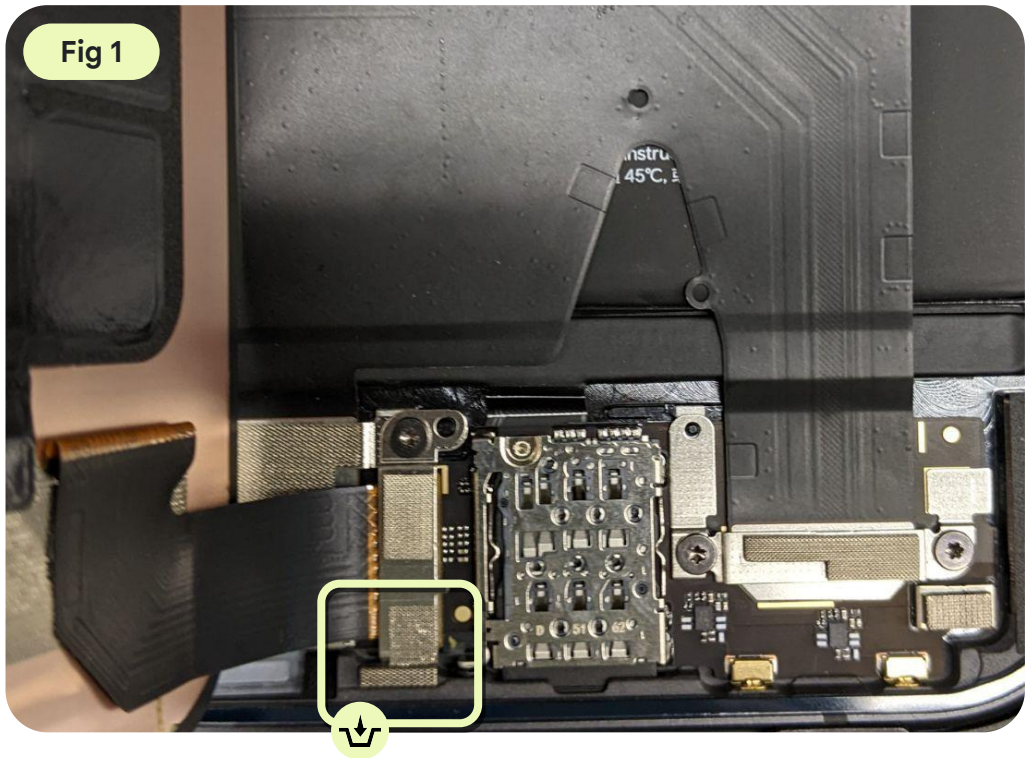
Reuse the outer display

Attach the FOF and the rubber

- Install the **OD left bottom FOF** to the designated position as shown in Fig 1.
- Install the **OD rubber support** from the upper side to the designated position as shown in Fig 2.

Part: G806-11369-00 (OD left-bottom FOF)

Part: G804-01205-00 (OD rubber support)

Fig 1

Fig 2

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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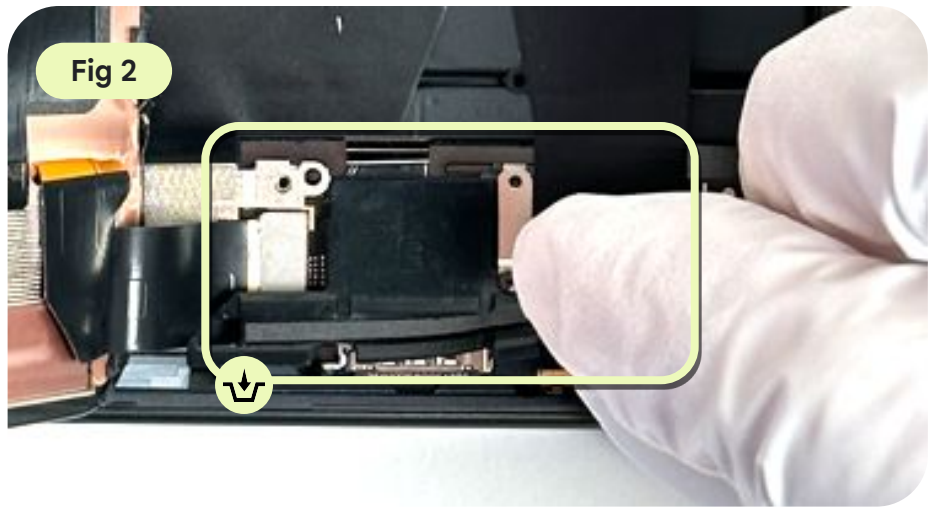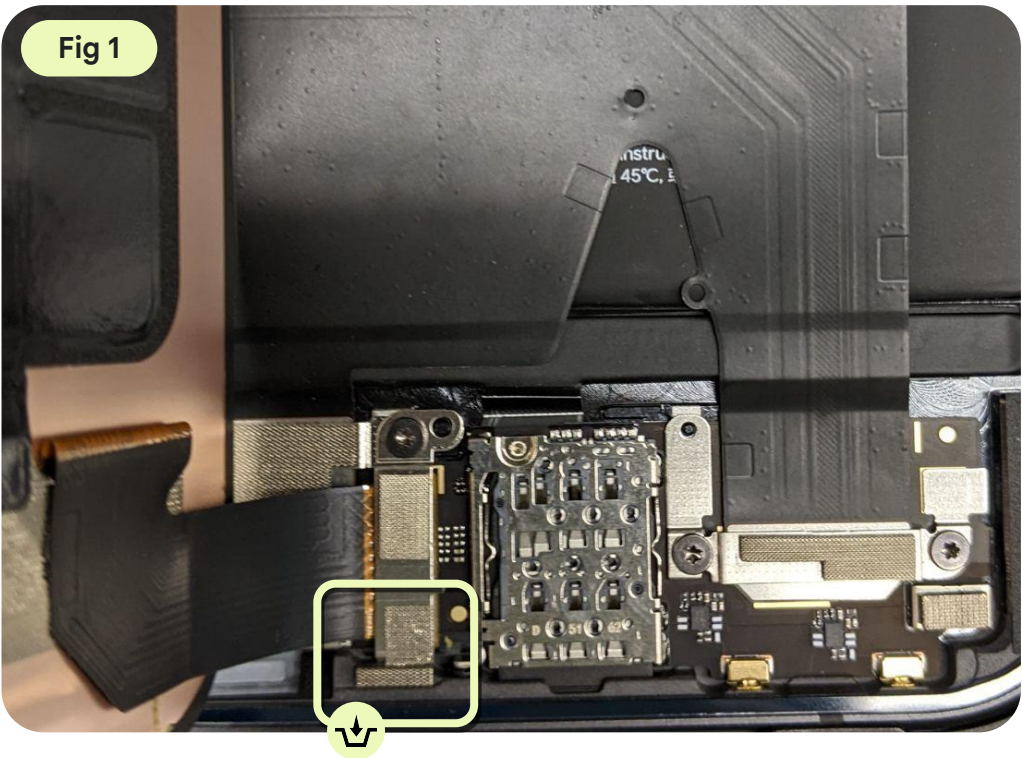
Reuse the outer display

Remove the liner

- Use **tweezers** to cut the tab, grab the OD PSA **liner** and carefully pull it away.

- Tear off the liner of the OD left-BTM PSA.

Part: **G806-09152-02** (OD PSA)

Part: **G806-12520-00** (OD left-BTM PSA)

Grip the tab here.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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Reuse the outer
display

Press in the holder

- Align the outer FCAM holder of the **OD sub** with the outer FCAM, then place the whole OD sub on the **enclosure vertically** as shown in Fig1.

- Remove the **adsorption bulb.**

- Press around the OD sub with both hands.

Fig 1

> ### Note
>
> Press the top side middle first, and then follow on two long sides and bottom side.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

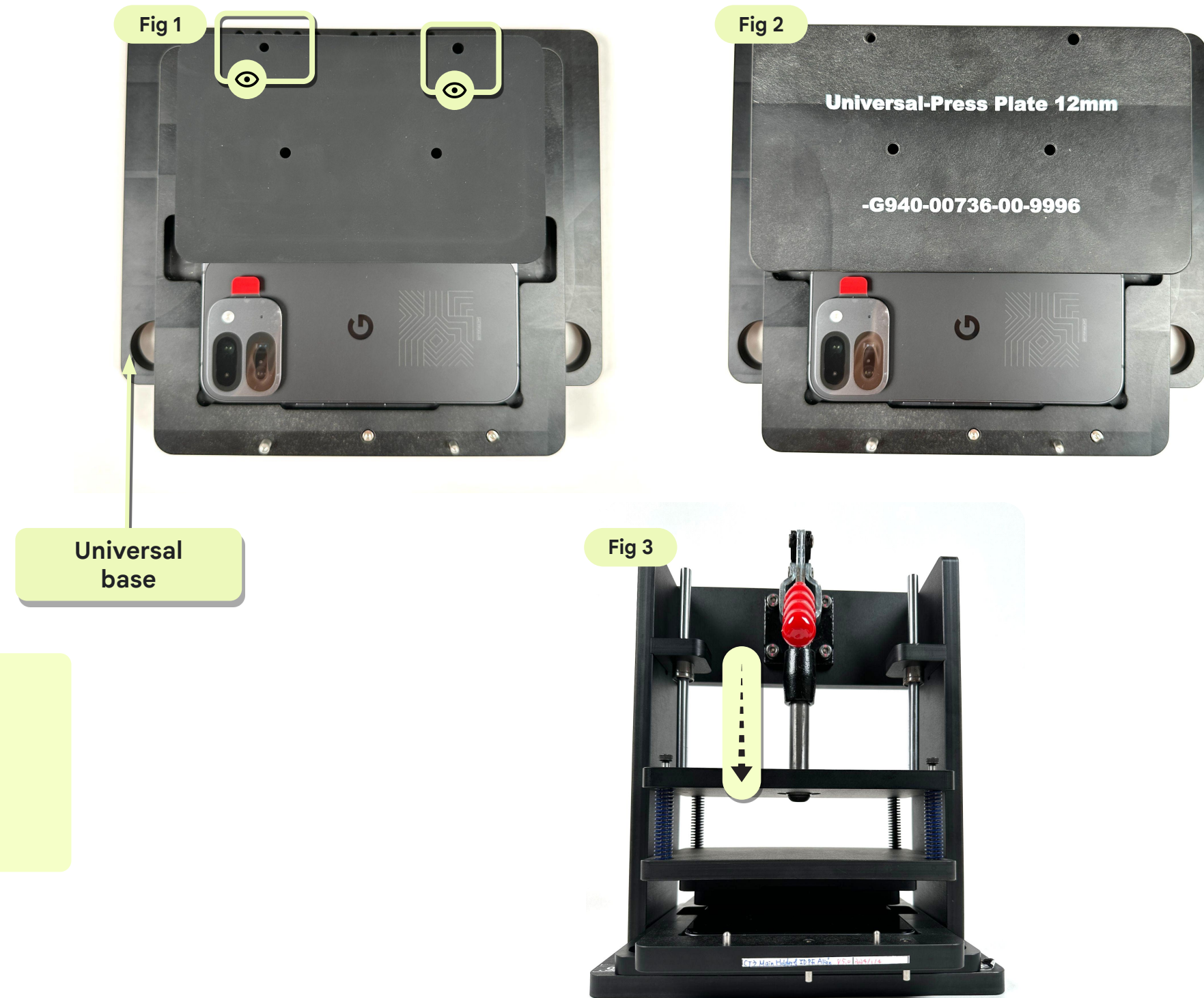Pixel 9 Pro Fold Repair Manual v1.0   ®Google 2024 | Page 296

Reuse the outer display

Press the OD

- Place the **Pixel 9 Pro Fold holder** on the **universal base**.

- Place the **Pixel 9 Pro Fold OD press rubber** on top of the **Pixel 9 Pro Fold holder** as shown in Fig 1.

- Place the **universal press plate 12 mm** on the **Pixel 9 Pro Fold OD press rubber** as shown in Fig 2.

- Place it in the **universal press fixture** and press the handle down for **45** seconds as shown in Fig 3.

Fig 1

Universal base

Fig 2

Universal-Press Plate 12mm

-G940-00736-00-9996

Fig 3

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

💡 **Note**
Always place the Pixel 9 Pro Fold holder in the B1 position for any pressing step.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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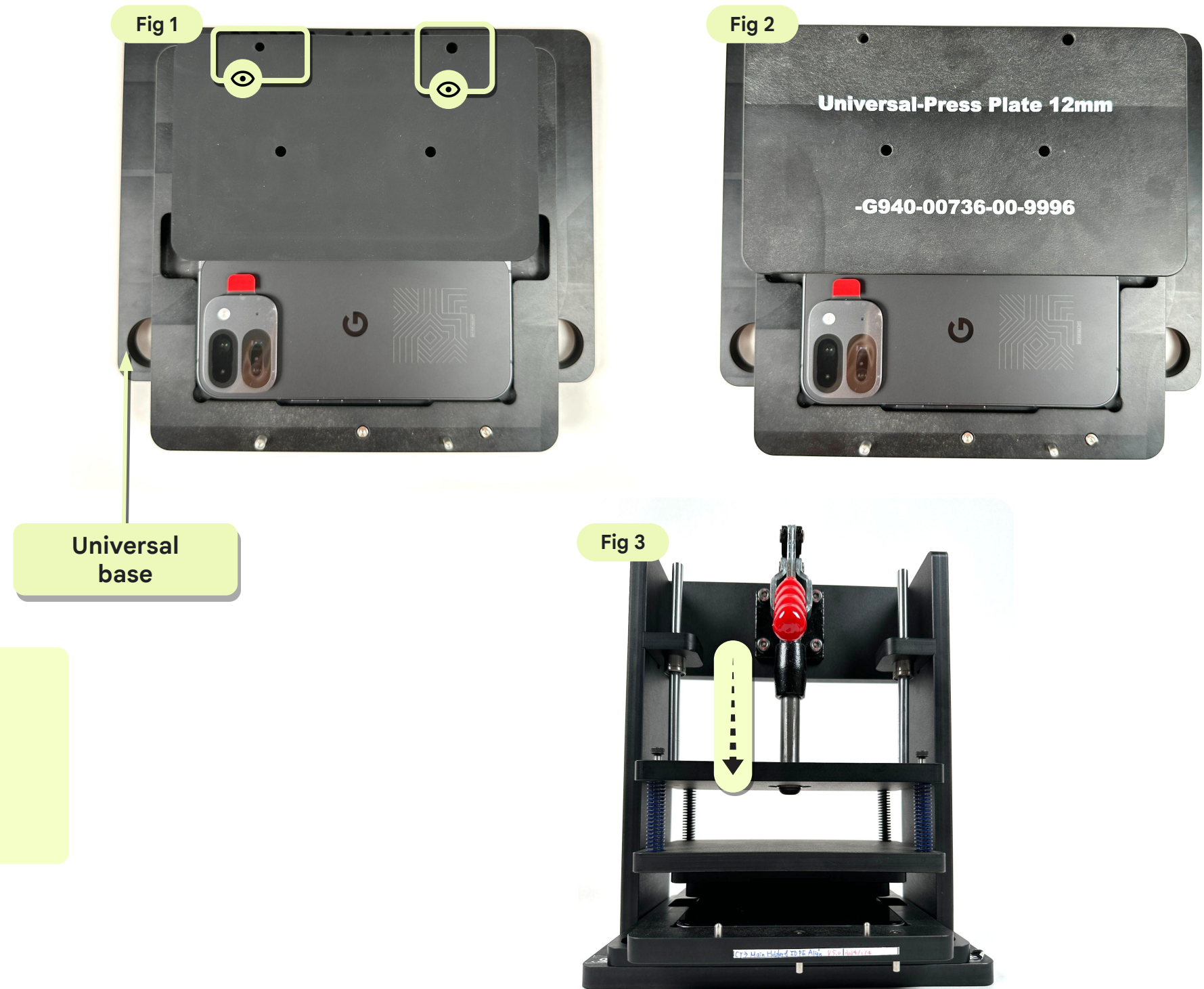
Assembly
instructions

Outer display

Solution 2: Use a new outer display sub

Use a new outer display sub

Apply 3M AP111 primer

- Apply **IPA** around the edges of the **enclosure** with **dust-free cotton swabs.**

- Apply one round **3M AP111 primer** around the edges of the **enclosure** with a **dust-free cotton swab.**

⚠️ **Use caution**

After the **primer** is applied, complete the assembly in 25 minutes.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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Use a new outer display sub

Connect the OD sub

- Use the **universal adsorption bulb** to prop up the **OD** as shown in **Fig 1**.

- Apply even pressure across the connector to connect the **OD flex** to the **lower board**, and ensure that it's fully engaged.

- Power on to check if the device works properly and power off the device after you check.

Part: G949-00911-00 (OD sub)

⚠️ **Use caution**

The step to attach the OD, *don't* damage or deform the driver IC (COF).

Check every connector is fully attached to the **lower board**.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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Use a new outer display sub ✕

Fasten the OD cowling

- Install the **OD cowling** to the lower board.

- Fasten the **flip battery cowling screw** with the **torx plus 3IP**.

- Tighten the **screw twice**.

Part: G730-07494-00 (OD cowling)

Part: G250-06985-01 (Screw)

⚠️ **Use caution**

Be careful when you use the screwdriver, and *don't* accidentally damage the adjacent battery.

Incorrect use of the screwdriver could cause injury to you or others or damage to the battery or the product.

⚠️ **Use caution**

Align the two alignment posts.

💡 **Note**

Torque force: 0.9 ± 0.09 kgf-cm

Tighten the screw twice.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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Use a new outer display sub

Attach the FOF and the rubber

- Install the **OD left bottom FOF** to the designated position as shown in Fig 1.
- Install the **OD rubber support** from the upper side to the designated position as shown in Fig 2.

Part: G806-11369-00 (OD left-bottom FOF)

Part: G804-01205-00 (OD rubber support)

Fig 1

Fig 2

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

Use a new outer display sub

Remove the liner

- Use **tweezers** to cut the tab and grab the PSA **liner** and carefully pull it away.

- Tear off the liner of OD left-BTM PSA.

Part: G806-12520-00 (OD left-BTM PSA)

Grip the tab here.

Grip the tab here.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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Use a new outer display sub

Remove the film and the cap   Slide 65

Remove the **outer FCAM cap**, **outer FCAM film,** and **sponge liner** as shown in Fig 1.

Part: G852-02645-01 (Outer FCAM cap)

Part: G806-09217-01 (OD copper film)

⚠️ **Use caution**

Ensure that the environment is clean for this process.

Pick the tab here.

Fig 1

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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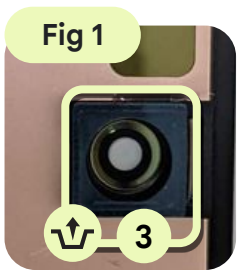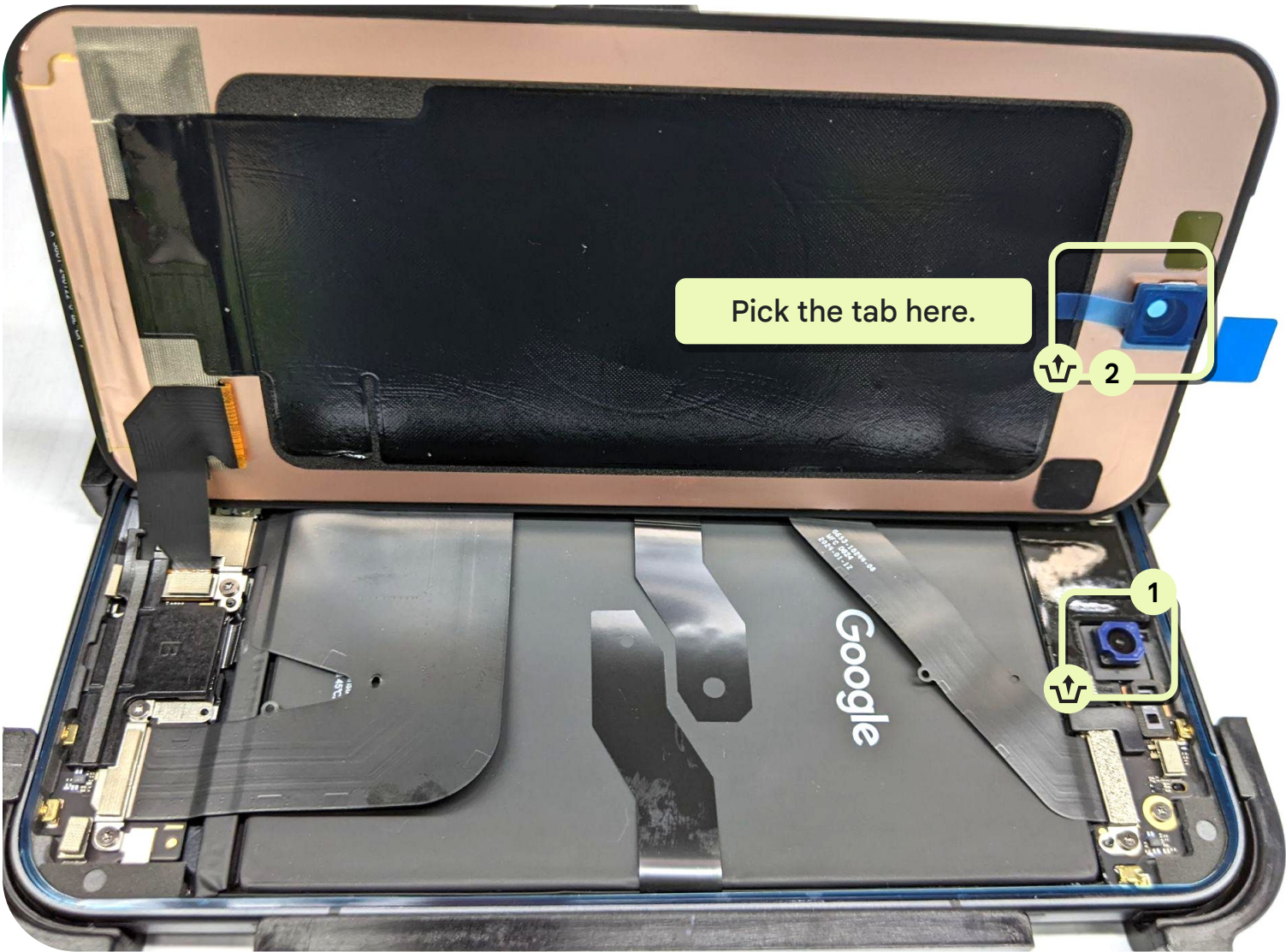
Use a new outer display sub

Press in the holder

Fig 1

- Align the outer FCAM holder of the **OD sub** before you place the whole on the **enclosure vertically.**

- Remove the **universal adsorption bulb.**

- Press around the OD sub with both hands.

Note

Press the top middle side first, and then follow on two long sides and bottom side.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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Use a new outer display sub ⋇

Press the OD

- Place the **Pixel 9 Pro Fold holder** on the **universal base**.

- Place the **Pixel 9 Pro Fold OD press rubber** on top of the **Pixel 9 Pro Fold-holder** as shown in Fig 1.

- Place the **universal press plate 12 mm** on the **Pixel 9 Pro Fold OD press rubber** as shown in Fig 2.

- Place it in the **universal press fixture** and press the handle down for **45** seconds as shown in Fig 3.

Fig 1

Fig 2

Universal-Press Plate 12mm

-G940-00736-00-9996

Universal base

Fig 3

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

○ Note
Always place the Pixel 9 Pro Fold holder in the B1 position for any pressing step.

Inner Display Sub   Top Speaker   Outer Front Camera   Upper Board   Flip Battery   Lower Board   Flip Bottom bridge & battery cowling   **Outer Display**

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Pixel 9 Pro Fold repair manual

Troubleshooting

SoC block diagram	Bottom speaker	FPS (power button)	Inner display
Connectors location	Vibrator	Volume button	Inner display touch panel
Power	Outer display	Rear camera	UWB
Wireless charge	Outer display touch panel	Outer front camera	Hinge
Mic 1	RF (BT, WiFi, GPS, NFC)	Inner front camera	
Mic 2	Battery	USB	
Mic 3	SIM	mmWave	
Top speaker	Sensor		

SoC block diagram
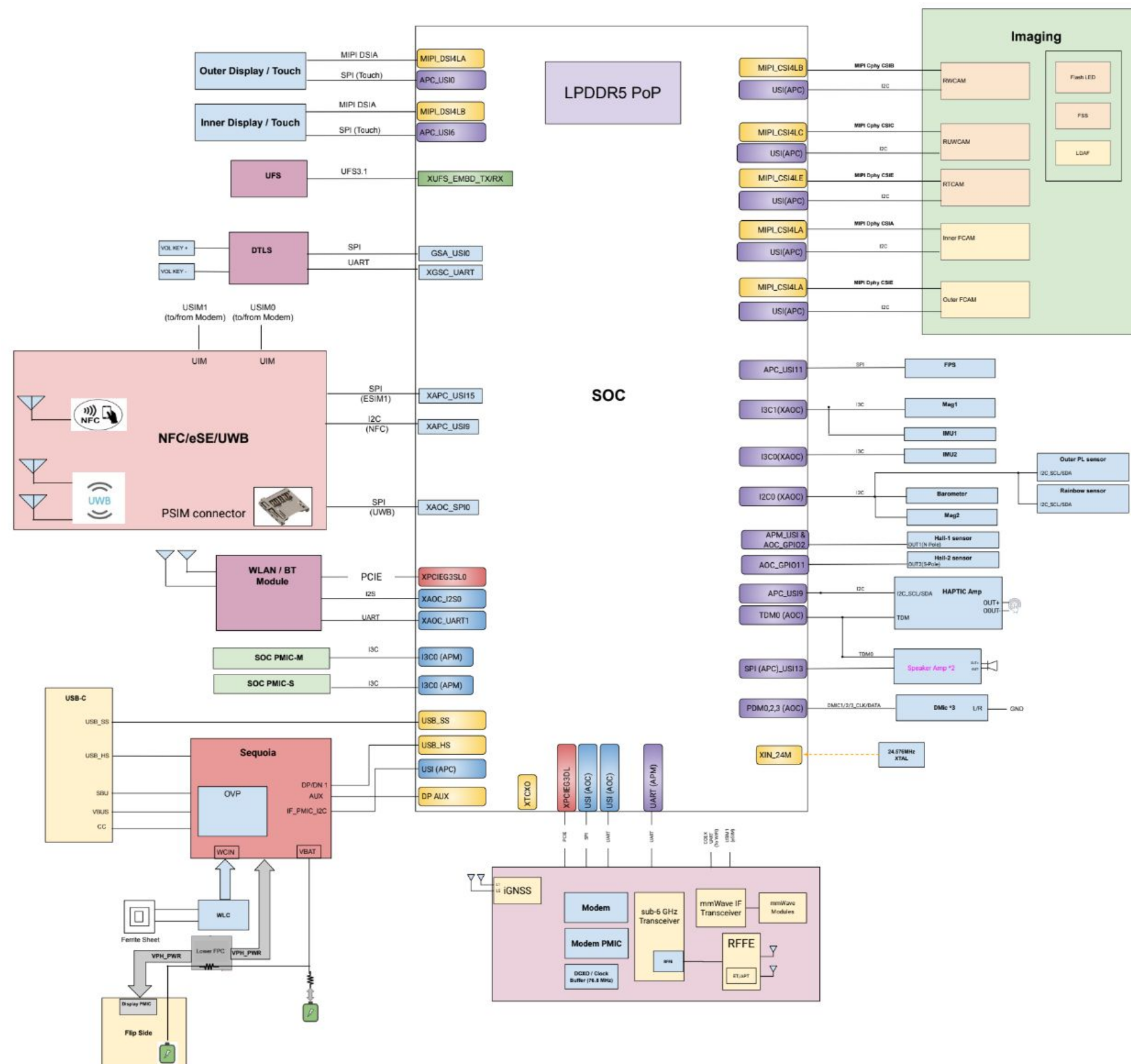
Connectors location

Location and description	
A	Inner front camera connector
B	Upper bridge FPC connector
C	Inner display connector
D	FPS (power button) connector
E	Bottom bridge FPC connector (include flip battery pins)
F	Base battery connector
G	USB board connector
H	UWB connector
I	Flam board connector
J	NFC/WLC spring
K	ANT3 spring
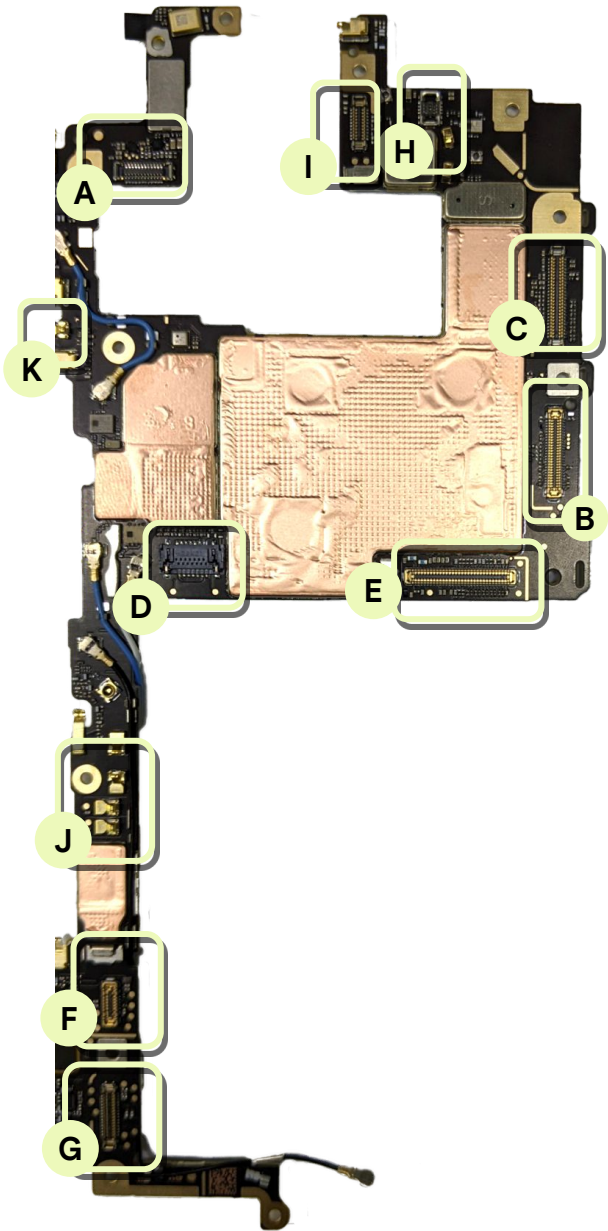
Connectors location

Location and description

L	IF FPC connector
M	Bottom SPK spring
N	WIDE camera connector
O	TELE camera connector
P	UW camera connector
Q	Vibrator spring
R	Sidekey spring
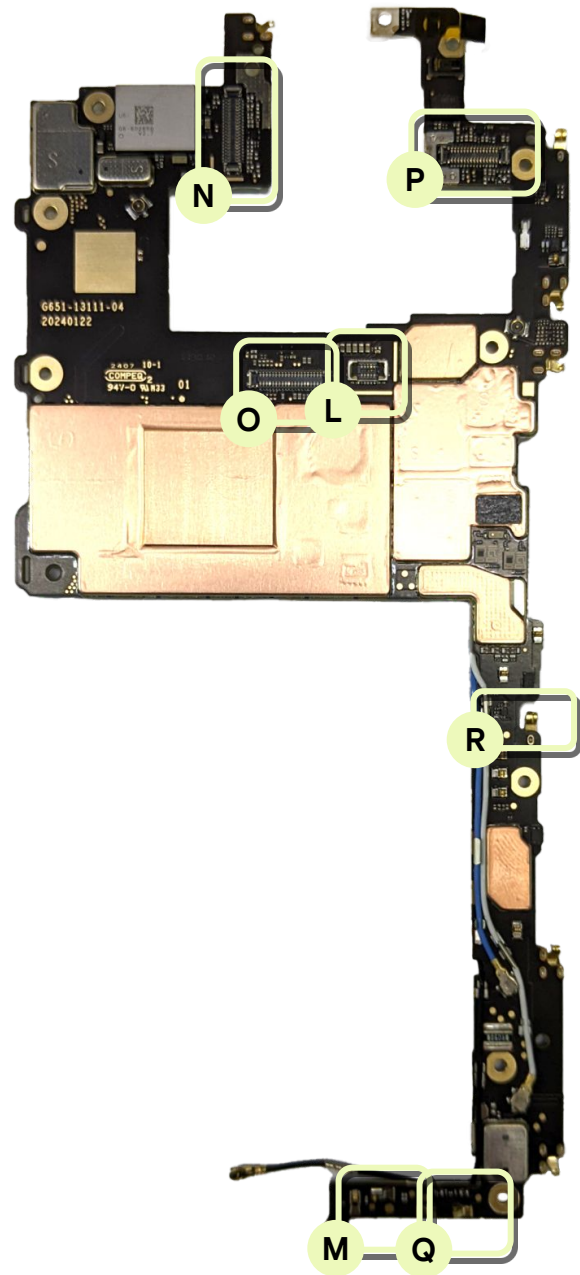
Connectors location

Location and description	
S	Outer front camera connector
T	Upper bridge FPC connector
U	Top speaker spring
V	Lower bridge FPC connector
W	Outer display connector
X	Upper bridge FPC connector (flip side) (to T)
Y	Upper bridge FPC connector (base side) (to B)
Z	Bottom bridge FPC connector (base side) (to E)
a	Inner display FPC connector (to C)
b	Bottom bridge FPC connector_1 (flip side) (to V)
c	Bottom bridge FPC connector_2 (flip side) (to flip battery)
d	Phone antenna pad
e	NFC/WLC contact pad
f	Flam board FPC connector (to I)
g	USB board connector (to G)

Power

Symptom	Potential root cause	Procedure	
⚡ **T001:** Doesn't power on **T002:** Powers off suddenly **T004:** Wired charging failure	Damage	• Inspect the USB-C connector for debris preventing charging. • Inspect the device if it's damaged. • Inspect the liquid damage indicators.	
	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	• Check if the base side's connectivity between the base battery connector, bottom bridge FPC connector (for flip battery), USB board, and logic board is normal. • Check if flip side's connectivity between the flip battery connector and the bottom bridge FPC connector is normal. • If they aren't fully attached, reassemble and then retest.	Connectors location
	Module problem	• Use a good USB board, base or flip battery, logic board and inner display sub to cross check with the original ones. • Replace the defective component.	**Disassembly** • USB board • Logic board • Base battery • Flip battery

Wireless charge

Symptom	Potential root cause	Procedure	
⚡ ⬭ **T003:** Wireless charging failure	Connectivity problem	• Check if the connectivity between the BG sub's WC pad and the logic board is normal. 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.	Connectors location
	Module problem	• Use a good BG sub and logic board to cross check with original ones. • Replace the defective component.	Disassembly • Logic board • BG sub

Mic 1

Symptom	Potential root cause	Procedure	
T010: Mic 1 no sound **T011:** Mic 1 low sound **T012:** Mic 1 distorted sound ① Mic 1 ② Mic 2 ③ Mic 3	Mesh not clean	• Take a microscope to check the mic hole, for example block by burrs or overflowing glue. • Clean the hole and test audio.	
	Assembly problem	• Disassemble the device and check mic 1 mesh is fully seated as shown in Fig 1. • Check if the USB board mic 1 liner is removed as shown in Fig 2. If not, go to the next step. • Test mic 1 again.	**(Fig 1)** **(Fig 2)**
	Module problem	• Use a good USB board to cross check with the original ones. • Replace the defective component.	**Disassembly** USB board
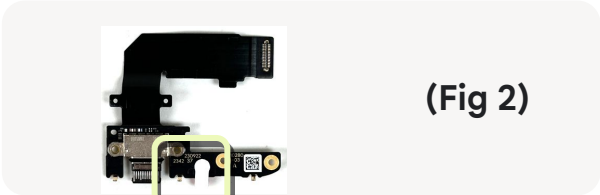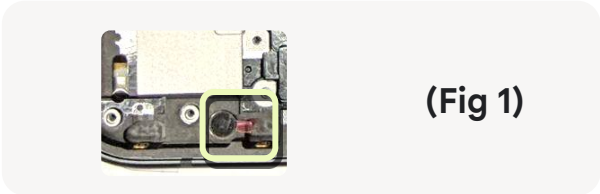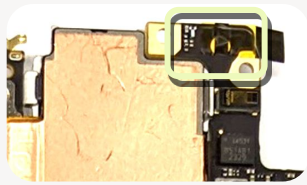
Mic 2

Symptom	Potential root cause	Procedure	
  T013: Mic 2 no sound **T014:** Mic 2 low sound **T015:** Mic 2 distorted sound **1** Mic 1 **2** Mic 2 **3** Mic 3	Connectivity problem	• Check if the connectivity between the flam board connector and the logic board is normal. • If they aren't fully attached, reassemble and then retest.	Connectors location
	Module problem	• Use a good BG sub and logic board to cross check with the original ones. • Replace the defective component.	**Disassembly** • Logic board • BG sub

Top speaker

Symptom	Potential root cause	Procedure	
🎤 **T019:** Top speaker no sound **T020:** Top speaker low sound **T021:** Top speaker distorted sound	Connectivity problem	• Check if the connectivity between the top speaker pad and the upper board is normal. If there's no mark on the pin contact pads, it shows poor connectivity. • If they aren't fully attached, reassemble and then retest.	Connectors location
	Module problem	• If the sound quality is still poor, use a good top speaker, upper board, and inner display sub to cross check with the original ones. • Replace the defective component.	**Disassembly** • Upper board • Top speaker

Mic 3

Symptom	Potential root cause	Procedure	
TO16: Mic 3 - no sound **TO17:** Mic 3 - low sound **TO18:** Mic 3 - distorted sound	Mesh not clean	• Take a microscope to check the mic hole, for example block by burrs or overflowing glue. • Clean the hole and test audio.	
	Assembly problem	• Disassemble the device and check mic 3 mesh is fully seated as shown in Fig 1. • Check if the logic board mic 3 liner is removed as shown in Fig 2. If not, go to the next step. • Test mic 3 again.	**(Fig 1)** **(Fig 2)**
	Module problem	• Use a good logic board to cross check with the original ones. • Replace the defective component.	**Disassembly** Logic board

1 Mic 1

2 Mic 2

3 Mic 3

Bottom speaker

Symptom	Potential root cause	Procedure	
  TO23: Bottom speaker no sound **TO24:** Bottom speaker low sound **TO25:** Bottom speaker distorted sound	Mesh problem	• Visually inspect the exterior of the phone and check for a polluted mesh on the bottom speaker port. Use a soft ESD brush to remove any debris. • Test audio.	
	Internal debris	• If the sound quality is still poor, inspect the mesh and the speaker with a microscope. • Disassemble the device and inspect the speaker. Remove any debris and test audio.	
	Connectivity problem	• Check if the connectivity between the bottom speaker pad and the logic board is normal. If there's no mark on the pin contact pads, it shows poor connectivity. • If they aren't fully attached, reassemble and then retest.	Connectors location
	Module problem	• If the sound quality is still poor, use a good bottom speaker and logic board to cross check with the original ones. • Replace the defective component.	**Disassembly** • Logic board • Bottom speaker

Vibrator

Symptom	Potential root cause	Procedure	
 T026: Vibrator failure	Connectivity problem	• Check if the connectivity between the vibrator pad and the logic board is normal. If there's no mark on the pin contact pads, it shows poor connectivity. • Test the vibrator again. Check the function by triage test.	Connectors location
	Component problem	• Use a good vibrator and logic board to cross check with the original ones. • Replace the defective component.	**Disassembly** • Logic board • Vibrator

Outer 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	Damage	Inspect the display for damage and replace if necessary.	
	Connectivity problem	• Check if the connectivity between the outer display connector, lower board, and lower bridge connector is normal. • If they aren't fully attached, reassemble and then retest.	Connectors location
	Dead pixels Distorted graphics Flickering Color issues	• Remove the outer display module, fit a replacement part without adhesive and test. • If the issue is resolved, apply adhesive and fit a new outer display module.	**Disassembly** • Outer display

Outer display (cont.)

Symptom	Potential root cause	Procedure	
 T040: Display single crack **T041:** Display multiple cracks **T042:** Display to back cover gap **T043:** Display cosmetic defects	Dimple issues	Remove the outer display module to check the display copper like the below figure.	**Disassembly** Outer display
	Component problem	• Use a good outer display, lower board, and inner display sub to cross check with the original ones. • Replace the defective component.	**Disassembly** • Lower board • Outer display

Outer display touch panel

Symptom	Potential root cause	Procedure	
T044: Multi-touch poor response T045: Multi-touch no response T046: Multi-touch erratic response	Connectivity problem	• Check if the connectivity between the outer display connector and the lower board is normal. • If they aren't fully attached, reassemble and then retest.	Connectors location
	Touch screen Fingerprint sensor	• Remove the outer display module, fit a replacement part without the adhesive and test. • If the issue is resolved, apply the adhesive and fit a new outer display module.	**Disassembly** Outer display
	Dead pixels Distorted graphics Flickering Color issues	• Use a good outer display, lower board, and inner display sub to cross check with the original ones. • Replace the defective component.	**Disassembly** • Lower board • Outer 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 if the screws are loose, springs are damaged, and coaxial cable of USB is unbuckled. • Check if the connectivity between the BG sub, inner display sub, and logic board is normal. 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. • If not, go to the next step.	Connectors location
	Module problem	• Use a good BG sub, logic board, and inner display sub to cross check with corresponding failure ones.	**Disassembly** • BG sub • Logic board • ID sub

Battery

Symptom	Potential root cause	Procedure	
  T053: Battery damage **T054:** Battery draining fast **T055:** Device overheats	Connectivity problem	• Check if the base side's connectivity between the base battery connector, bottom bridge FPC connector (for flip battery), and logic board is normal. • Check if the flip side connectivity between the flip battery connector and the bottom bridge FPC connector is normal. • If they aren't fully attached, reassemble and then retest.	Connectors location
	Module problem	• Use a good base battery, USB board, and logic board to cross check with original ones. • Use a good flip battery and inner display sub to cross check with the original ones. • When it's confirmed that the battery is abnormal, replace the two batteries together.	**Disassembly** • USB board • Logic board • Base battery • Flip battery

SIM

Symptom	Potential root cause	Procedure	
T056: SIM failure	Connectivity problem	• Check if the connectivity between the SIM slot and the SIM tray is normal. • If they aren't fully attached, reassemble and then retest.	Connectors location
	Component problem	• Use a good lower board and inner display sub to cross check with the original ones. • Replace the defective component.	**Disassembly** Logic board

Sensor

Symptom	Potential root cause	Procedure	
T059: Proximity sensor failure **T060:** Ambient light sensor failure **T061:** Accelerometer sensor failure **T062:** Gyroscope sensor failure **T063:** Hall sensor failure **T066:** Pressure sensor failure **T099:** Rainbow sensor defect **T108:** LDAF laser module **T118:** Magnetometer failure **T148:** Magnetometer_2 failure **T149:** Accelerometer sensor_2 failure **T150:** Gyroscope sensor_2 failure **T155:** Ambient light sensor_2 failure	SW problem	Make sure that the SW is already updated to the latest version.	
	Assembly issue	Check the P-sensor rubber to ensure that it's in the correct position (Make sure that there's no foreign substance that covers the **P-sensor** area)	**Assembly** P-sensor rubber status
	Connectivity problem	Check the function by triage test.	
	Module problem	• Check if the rainbow sensor of the back cover drops down as shown in Fig 1. • Disassemble and check the appearance of the proximity sensor, so that it isn't abnormal. • Use a good upper board, logic board, and inner display sub to cross check with the P-sensor, light sensor 1, and the light sensor 2 failure. • Use a good upper board, logic board, and inner display sub to cross check with the accelerometer 2 and the gyro sensor 2 failure. • Use a good BG sub to cross check with the rainbow or the flicker sensor and the LDAF failure. • Replace the defective components. **Note** P-sensor, light sensor 1, accelerometer 2, and gyro sensor 2 at the upper board. Light sensor 2, accelerometer 1, gyro sensor 1, magnetic sensor 1 and 2 (E-compass), hall sensor, and barometer at the logic board. Rainbow sensor and LDAF at the BG sub.	**Disassembly** • Upper board (P-sensor rubber) • Logic board • BG sub

Sensor location

No	Function	Logic board	Upper board	BG sub	USB board
1	Light sensor 1		O		
2	Light sensor 2	O			
3	P sensor		O		
4	Barometer	O			
5	Gyroscope 1	O			
6	Gyroscope 2		O		
7	Accelerometer 1	O			
8	Accelerometer 2		O		
9	Rainbow			O	
10	LDAF			O	
11	Magnetic sensor 1	O			
12	Magnetic sensor 2	O			
13	Hall sensor	O			

FPS (power button)

Symptom	Potential root cause	Procedure	
⏻ **T064:** Fingerprint sensor failure **T068:** Power button failure	Connectivity issue	• Check if the connectivity between the fingerprint connector and the logic board are normal. • If they aren't fully attached, 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 • FPS (Inner display sub)

Volume button

Symptom	Potential root cause	Procedure	
  T069: Volume button failure	Connectivity issue	• Check if the connectivity between the sidekey module and the logic board is normal. • If they aren't fully assembled, reassemble and then retest.	Connectors location
	Component issue	• Use a good sidekey module and logic board to cross check with the original ones. • Replace the defective component.	**Disassembly** • Logic board • Sidekey (Inner display sub)

Rear camera

Symptom	Potential root cause	Procedure	
  T072: Camera AR failure **T073:** Camera rear photo quality **T074:** Camera rear video quality **T077:** Camera flash not working **T078:** Can't switch between cameras **T079:** Camera damage **T111:** Main RCAM crashes **T112:** UW RCAM crashes **T114:** Main RCAM no preview **T115:** UW RCAM no preview **T116:** Ultrawide rear camera photo quality **T117:** Ultrawide rear camera video quality	SW problem	Make sure that the SW is already updated to the latest version.	
	Cosmetic problem	• Inspect whether the camera lens area is damaged. • Check the function by triage test. • Disassemble the device to check if the camera connector is seated properly. Power on the unit and check the camera fail symptom again.	
	Connectivity problem	Check the rear camera BTB and the logic board side to identify if the assembly is deformed or flex crack, and reboot the device again to check if the fail symptom exists.	Connectors location
	Module problem	If the fail symptom still exists, cross check the logic board itself or the camera module to determine if fail symptom is caused by the camera module or the logic board.	**Disassembly** • Logic board • Rear camera

Outer front camera

Symptom	Potential root cause	Procedure	
T075: Camera front photo quality **T076:** Camera front video quality **T078:** Can't switch between cameras **T079:** Camera damage **T110:** FCAM crashes **T113:** FCAM no preview	Cosmetic problem	• Inspect the camera lens area for damage. • Check the function by triage test. • Disassemble the device to check if the camera connector is seated properly. Power on the unit and check the camera failure symptom again.	
	Connectivity problem	Check the outer front camera BTB, upper board, and upper bridge connector side to identify if the assembly is deformed or flex crack, and reboot the device again to check if the fail symptom exists.	Connectors location
	Module problem	If the fail symptom still exists, use a good logic board, outer camera module, and inner display sub to cross check to cross check with original ones.	**Disassembly** • Upper board • Outer front camera

Inner front camera

Symptom	Potential root cause	Procedure	
T078: Can't switch between cameras **T079:** Camera damage **T156:** Camera front inner photo quality **T157:** Camera front inner video quality **T158:** Inner FCAM crashes **T159:** Inner FCAM no preview	Cosmetic problem	• Inspect the camera lens area for damage. • Check the function by triage test. • Disassemble the device to check if the camera connector is seated properly. Power on the unit and check the camera failure symptom again.	
	Connectivity problem	Check the inner front camera BTB and the logic board side to identify if assembly is deformed or flex crack, and reboot device again to check if the fail symptom exists.	Connectors location
	Module problem	If the fail symptom still exists, cross check the logic board itself or the camera module to determine if the fail symptom is caused by the camera module or the logic board.	**Disassembly** • Inner front camera

USB

Symptom	Potential root cause	Procedure	
 TO85: USB-C failure	Connectivity problem	• Check the function by triage test. • Disassemble the device to check if the USB board is seated properly. Power on the unit, and check the failure symptoms again.	Connectors location
	Module problem	Check the USB board BTB and the logic board side to identify if the assembly is deformed or flex crack, and reboot the device again to check if the fail symptom exists.	**Disassembly** USB board

mmWave

Symptom	Potential root cause	Procedure	
  T105: 5G_low med band failure **T106:** 5G high band failure	Connectivity problem	• Inspect the mmWave module and check if the IF FPC is correctly seated. • Check if the connectivity between the IF FPC and the logic board is normal. • Check if the connectivity between the inner display sub and the logic board is normal. • If they aren't fully attached, reassemble and then retest.	Connectors location
	Module problem	Use a good mmWave module, IF FPC, and logic board to cross check with the original ones.	**Disassembly** • mmWave • IF FPC • Logic board

Inner display

Symptom	Potential root cause	Procedure	
☐ **T160:** Inner display blank **T161:** Inner display dead pixel, dark spots, or foreign material **T162:** Inner display bright pixel, bright, or colored spots **T163:** Inner display vertical or horizontal lines **T164:** Inner display black, white, or colored screen **T165:** Inner display flickering or abnormal **T166:** Inner display image quality **T167:** Inner display color mura **T168:** Inner display light leakage **T169:** Inner display backlight issue **T170:** Inner display shadow **T171:** Inner display permanent burnin **T172:** Inner display temporary burnin **T173:** Inner display display single crack **T174:** Inner display displays multiple cracks **T175:** Inner_display_displays cosmetic defects **T176:** Inner display screen is broken but display is working	Damage	Inspect the inner display for damage and replace if necessary.	
	Connectivity problem	• Check if the connectivity between the inner display connector and the logic board is normal. • If they aren't fully attached, reassemble and then retest.	
	Dead pixels Distorted graphics Flickering Color issues	• Remove the inner display sub module, fit a replacement part without the adhesive and test. • If the issue is resolved, apply adhesive and fit a new inner display sub module.	
	Module problem	• If fail symptom still exists, use a good inner display sub and logic board to cross check with the original ones. • Replace the defective component.	**Disassembly** • Logic board • Inner display sub

Inner display touch panel

Symptom	Potential root cause	Procedure	
  T177: Inner display multi-touch poor response **T178:** Inner display multi-touch no response **T179:** Inner display multi-touch erratic response	Connectivity problem	• Check if the connectivity between the inner display connector and the logic board is normal. • If they aren't fully attached, reassemble and then retest.	Connectors location
	Touch screen Fingerprint sensor	• Remove the inner display sub module, fit a replacement part without adhesive and test. • If the issue is resolved, apply adhesive and fit a new inner display sub module.	**Disassembly** Inner display sub
	Module problem	• Use a good inner display sub and logic board to cross check With the original ones. • Replace the defective component.	**Disassembly** • Logic board • Inner display sub

UWB

Symptom	Potential root cause	Procedure	
  T181: Ultra-wideband (UWB) failure	Connectivity problem	• Check if the connectivity between the UWB and the logic board is normal. • If they aren't fully attached, reassemble and then retest.	Connectors location
	Module problem	• Use a good UWB FPC and logic board to cross check with the original ones. • Replace the defective component.	**Disassembly** • UWB FPC • Logic board

Hinge

Symptom	Potential root cause	Procedure	
  T188: Hinge function abnormal **T189:** Hinge function abnormal CID	Component problem	• Follow the table below to check if the hinge function is abnormal. • Use a good inner display sub to cross check with the original ones. • Replace the defective component.	**Disassembly** Inner display sub

Check item	Verification method	Verification photo	
Open angle	Unfold the device completely, then put the device on the main holder (ID face down and up) to check if the hinge area have any hump or sunk.	 ID face down	 ID face up
Hinge torque	Put the device on the desk and open it at around 45° and 135° angle to check if the device can hold at 45° and 135°.	 45° angle	 135° angle
Hinge noise	Remove the ID process PF before the test. Find a quiet area to listen at 30 cm distance to check if there's noise during folding and unfolding action three times.		

Pixel 9 Pro Fold repair manual

Software

Software tools

Description	Documentation
"WIC" Pixel software tool	SURA link

Description	Documentation
"Depot" Pixel software tool (also for config device, NFC cal_JP only)	RMA tool link