

# Pixel 10 Pro XL Repair manual

Version 1.1, August 2025



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.

When you open or repair your device, be careful of electric shock, device damage, fire and personal injury risks, and other hazards. Before you service the product, read the full set of precautions in this document.

## Welcome!

## We are here to help.

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

If you have any questions or need 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 necessary skills and training to safely complete repairs.



#### 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 required to complete the repair.



#### Assembly

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



#### Troubleshooting and testing

To identify the source of device problems and issues, use the diagnostic steps and testing recommended in this section.



#### Glossary

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

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Liquid damage indicators



Disassembly order Assembly order



#### Disassembly

Display BG sub

Front camera

mmWave module

ANT4 board

Battery

Logic board

Rear camera

Top speaker

Chin board

Bottom speaker

Vibrator

Enclosure



#### <sup>3</sup>√<sup>k</sup> Assembly

Enclosure Top speaker

**RCAM** 

Logic board

ANT4 board mmWave module

Front camera

Display

Vibrator

Bottom speaker

Chin board

Battery

BG sub



#### Troubleshooting

Sensor and key feature

location

Connectors location

Power

Wireless charge

Mic1

Mic2

Mic3

Top speaker

Bottom speaker

Vibrator

Display

NFC

Proximity sensor

**UDFPS** 

**RCAM** 

**FCAM** 

USB-C

mmWave module



#### Software

Software tools

## **Revision history**

Version	Date	Change description
V1.0	July, 2025	First release
V1.1	August, 2025	<ol> <li>Add torque spec. P12</li> <li>Revise Insert the opening pick and align it with the 4 mm mark. P50.</li> <li>Add a note "This step is only required when replace SPAM flex or RCAM". P90</li> <li>Identify the area to apply IPA. P115</li> <li>Add a picture of the mic3 mesh with the alignment line. P135</li> <li>Revise route the coaxial cable position. P154</li> <li>Identify CG liner area. P164</li> <li>Add shear PSA alignment line. P167</li> <li>Add Remove the CJ flex PSA liner. P184</li> <li>Add the direction of removing the white liner. P189</li> <li>Correct Tcode for wired charging and battery drain. P216</li> <li>Correct Mic2 low sound to T014. P219</li> <li>Revise LDI quantity and photo. P15</li> <li>Add new thermal grease (G160-01481-00). P26, P80, P128</li> <li>Change battery assembly liner picture. P23, P189</li> <li>Add one page for bottom speaker removal. P102</li> </ol>



Pixel 10 Pro XL repair manual

## Precautions

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### Important: Before you begin



## Be careful if you engage in repair

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

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

Ensure that there are no additional screws or small parts are 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.



#### Use caution:

#### Batteries should be carefully handled, and could be dangerous when damaged

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



## Use caution: Pixel 10 Pro XL 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 and performance of procedures other than those specified herein might result in hazardous radiation exposure.

.

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### Important: Before you begin



#### Use caution:

part handling – glass

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



## Tools and fixtures

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

#### Use caution

- We don't recommend that you perform repairs without the specified tools and fixtures.
- Improper use of tools and fixtures might result in injury to yourself, the user of the device or other third parties, along with damage to the product, tools, fixtures, replacement parts, or other spare parts.



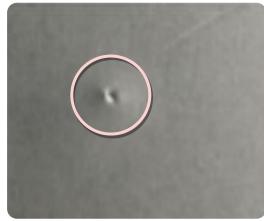
## Important: Before you disassemble the device

- 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 <a href="mailto:swelling">swelling</a>, damage</a>, or if the phone feels hot or emits a strong odor, <a href="mailto:don't">don't</a> attempt disassembly. Please reach out to Google <a href="mailto:customer support">customer support</a>.
- Take care not to expose the phone or its components to liquids after disassembly.

Repair flows Assembly Troubleshooting Software Welcome **Precautions** Introduction Disassembly

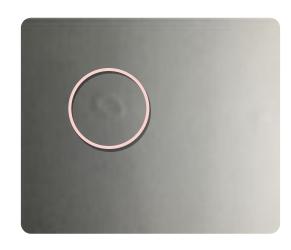


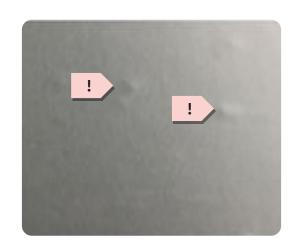
## Examples of unacceptable battery conditions that are not suitable for repair\*











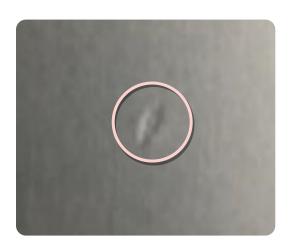
Pouch damage

Line protrusion

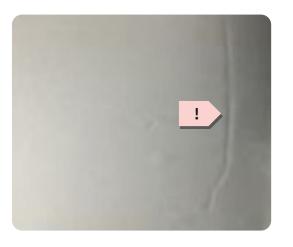
Scratch

Contamination mark

Dot protrusion









Dent

**Bubbling** 

Imprinted line

Swelling or electrolyte leakage

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



Pixel 10 Pro XL repair manual

## Introduction

Expanded view Turn the Pixel on and off

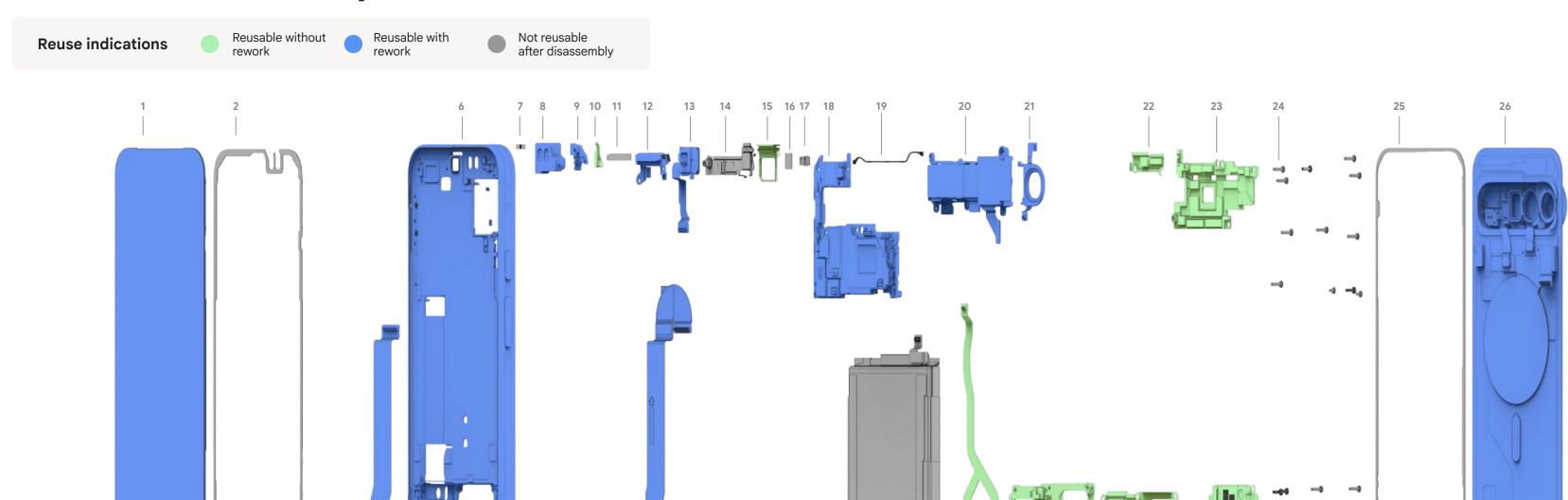
Screw map Tools and fixtures

Screen calibration Replacement parts

ESD protection Glossary

Liquid damage indicators

## Pixel 10 Pro XL: expanded view



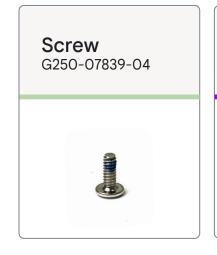
#### Pixel 10 Pro XL part ID

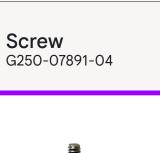
1	<ul><li>Display module</li></ul>	8 Top speaker	15 SIM tray	22 BG cowling 29 CLB cowling
2	<ul><li>Display adhesive</li></ul>	9 • ANT4 board	16 Thermal TIM	23 MLB cowling 30 Chin board
3	<ul><li>Display cowling</li></ul>	10 • ANT4 cowling	17 P-sensor foam	24 Screw 31 RJ flex
4	<ul><li>DJ flex PSA</li></ul>	11 • Thermal pad_mmWave	18 • Logic board	25 BG adhesive 32 Battery
5	<ul><li>DJ flex</li></ul>	12 • mmWave module	19 Coaxial cable	<b>26</b> • BG sub <b>33</b> • CJ flex
6	<ul><li>Enclosure</li></ul>	<b>13</b> • FCAM	20 • RCAM	27 Bottom speaker
7	<ul><li>Top speaker pad</li></ul>	14 FCAM cowling	21 SPAM flex	28 OVibrator

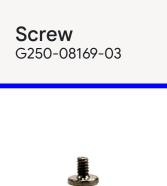
Repair flows Troubleshooting Software Welcome Precautions Introduction Disassembly Assembly

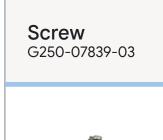
## Screw map

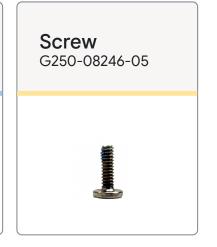
These are the screws used in the Pixel 10 Pro XL:

















#### 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.

Torque Spec: (1.5/1.8) ±0.05kgf-cm



#### 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.



## Touch screen calibration process

#### **Important:**

#### Before you boot up the device

- Nothing should touch the display. This includes protective films, cases, fingers, tape, labels, scratch covers, adhesives, and debris.
- Devices should be on a flat surface. Don't hold it in your hands.

After the above conditions are met, press the power button to power-on the device. *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 might not work as intended.

## **ESD** protection

Electro Static Discharge (ESD) could 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.



#### **Protective bags**

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



#### Avoid touching pins

Use ESD-safe tools to handle components to avoid touching the pins.



#### Did you know?

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

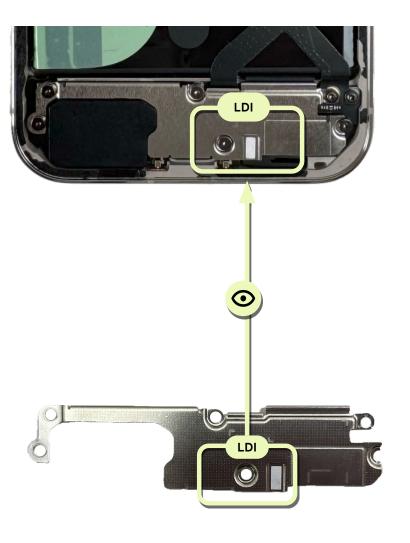
## Liquid damage indicators

Liquid Damage Indicators (LDIs) are strips that change colors when a phone has been exposed to water or other liquids.

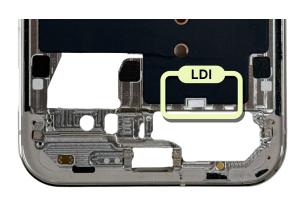
- Exposure to liquids could lead to the device malfunctioning, such as overheating or short circuits.
- There are three LDIs on this device.
- If either indicator has turned red, the device is considered to have been exposed to liquid.



The SIM card tray slot on the enclosure is visible without disassembly of the device.



On the CLB cowling, near the charge port.



On the enclosure (CG side).

### Turn the Pixel on and 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. <u>See where</u> 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.
- Tap **Power off** on screen.
- For more information, see <u>Google</u> <u>help page</u>.

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



### Turn the screen off and back on

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

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



#### Restart or 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**.



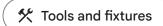
## **Tools and fixtures**

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



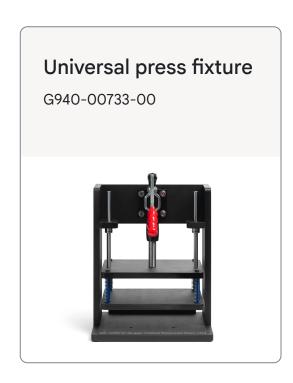
#### **Use caution**

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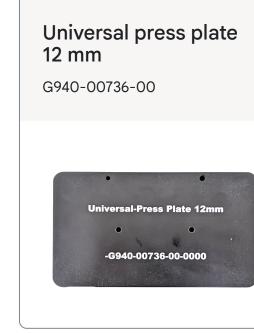
### Google-approved fixtures: Pixel 10 Pro XL

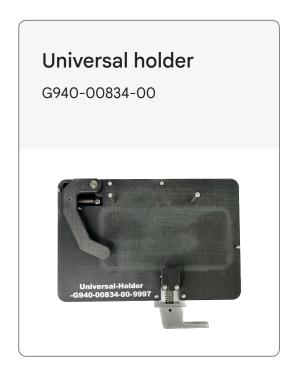
Google-approved fixtures are Google tested and are strongly encouraged to ensure high quality and safe repairs.



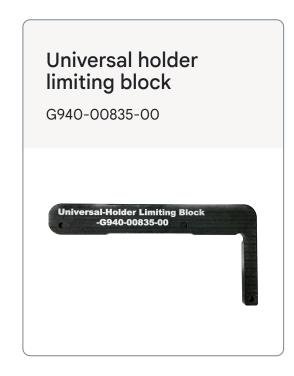


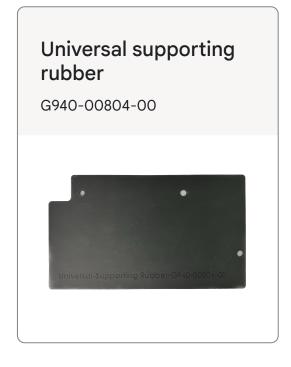


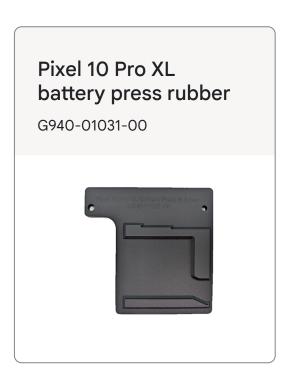


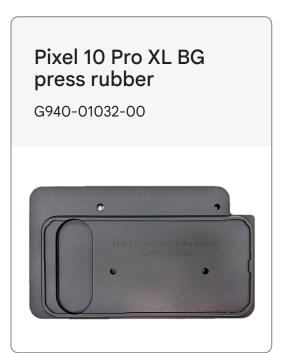




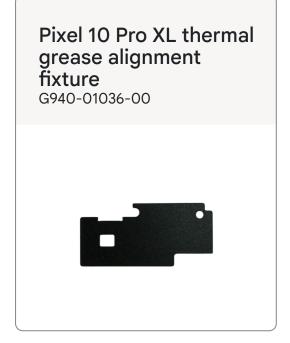


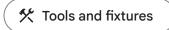










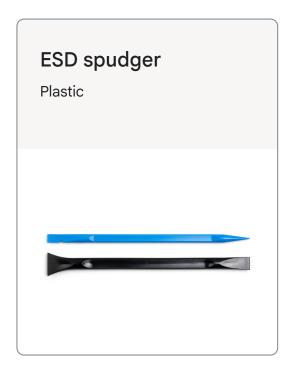


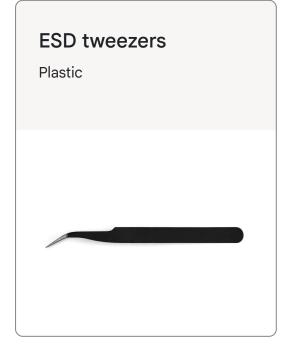
#### **Standard tools**

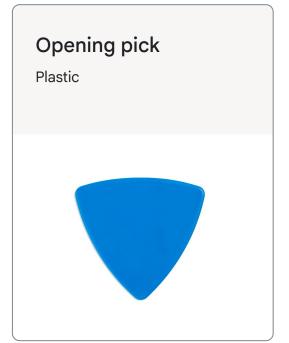
Standard tools are suggested to ensure high quality and safe repairs. These items *don't* need to be purchased from a Google-recommended supplier.





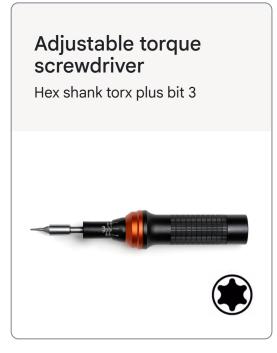




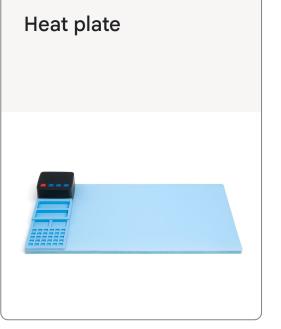


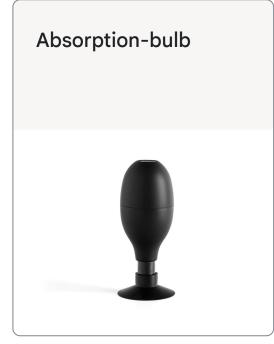














#### Standard consumables

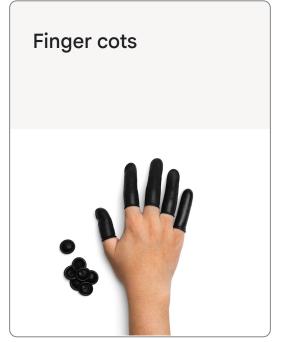
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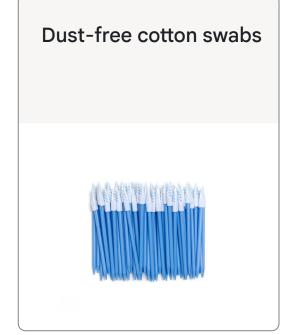


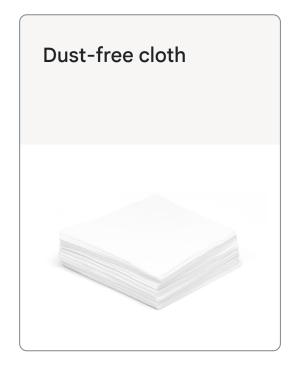




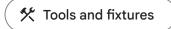






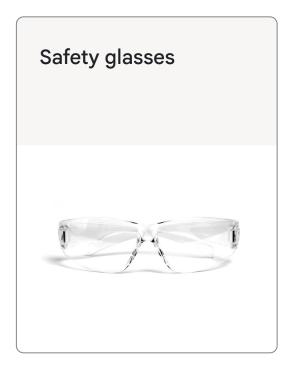




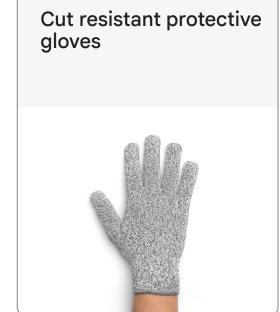


## Safety items

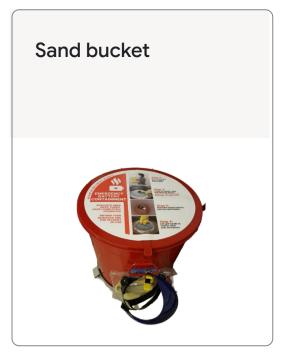
Safety items are suggested to ensure high quality and safe repairs. These items *don't* need to be purchased from a Google-recommended supplier.













## Replacement parts

#### Important notice about replacement parts

- The use of Google-authorized replacement parts is strongly recommended.
- If Google-authorized replacement parts are not used then performance within product specifications can't be assured.

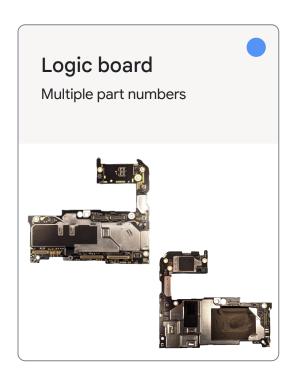


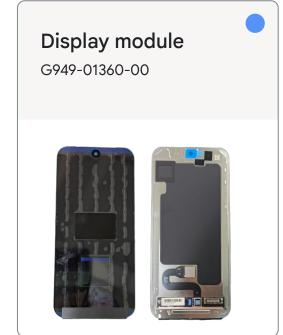
#### **Use caution**

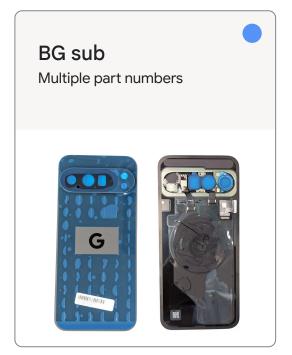
Use of replacement parts other than Google-authorized replacement parts, such as aftermarket batteries, might impact device safety, reliability, and performance.

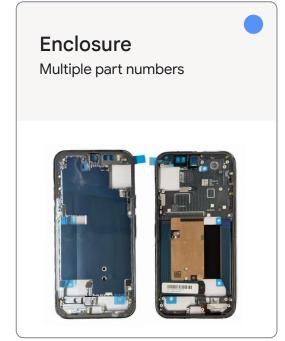
### Replacement parts

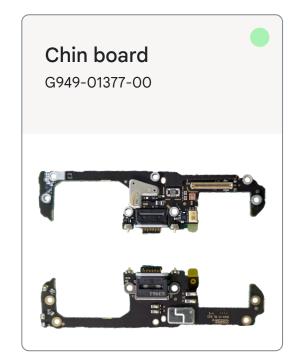
Not reusable after disassembly Reusable without Reusable after **Reuse indications** cleaning

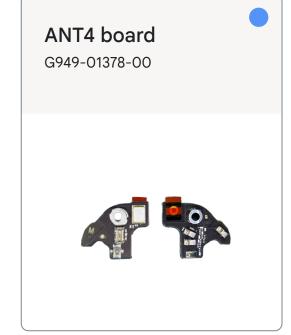


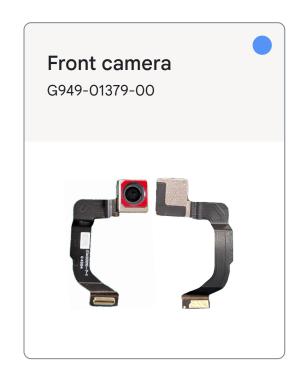


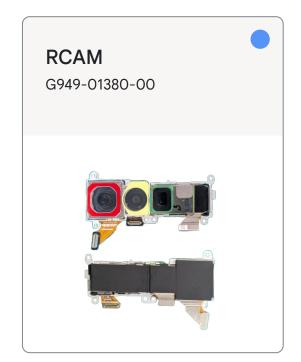


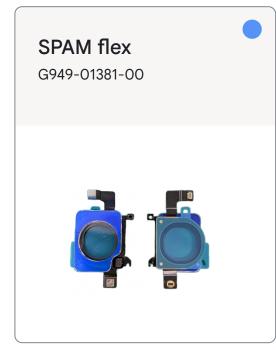




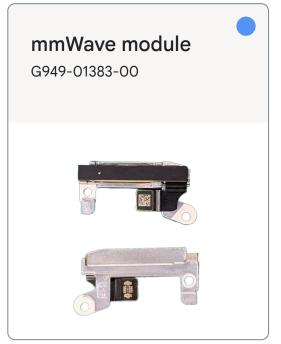


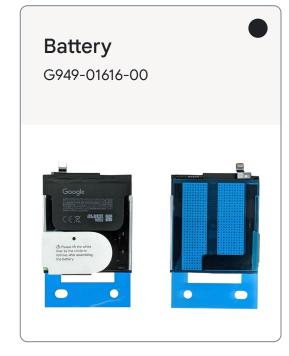




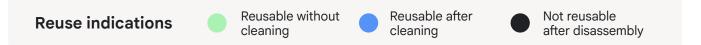








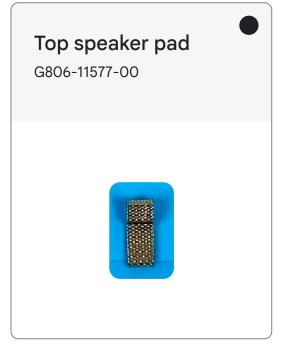
### Replacement parts



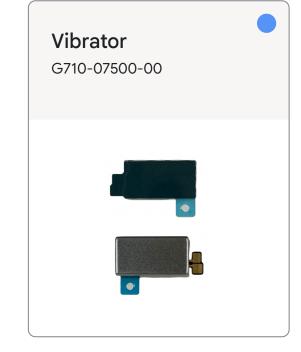


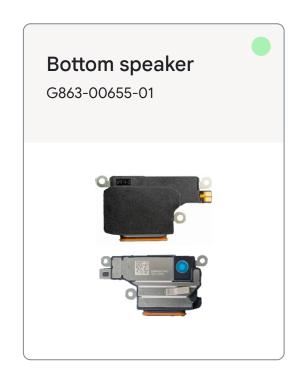


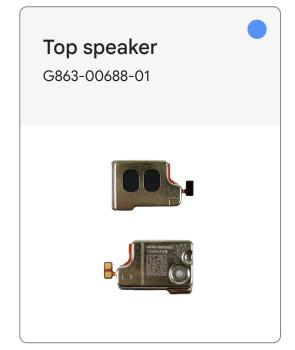


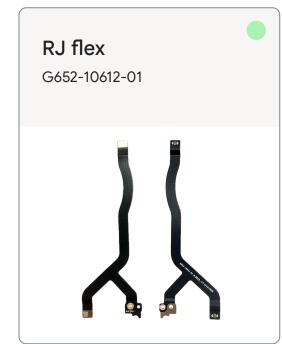


















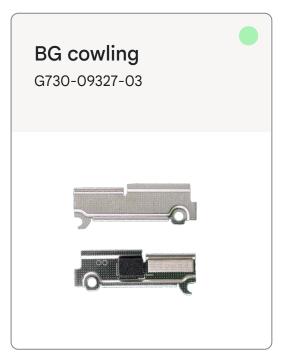
### Replacement parts

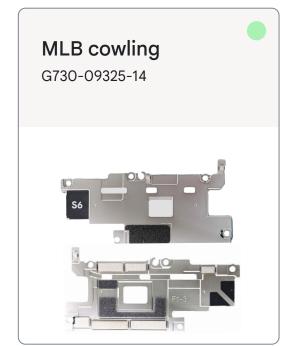


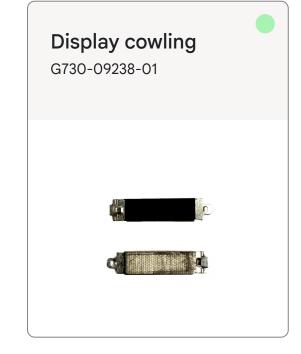




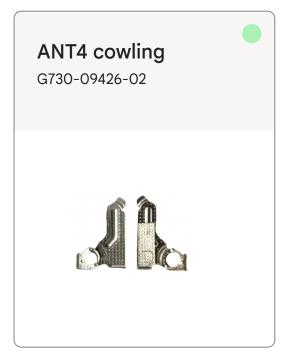


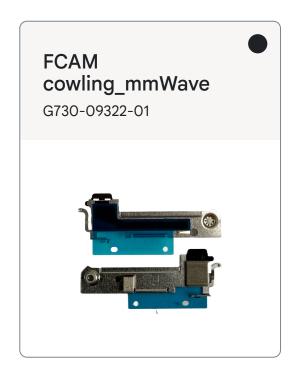




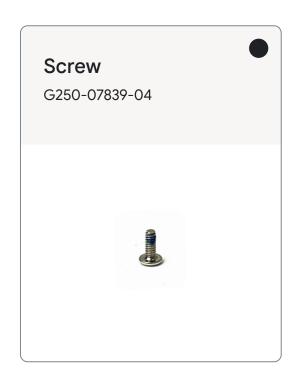


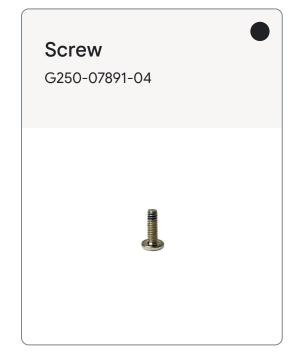






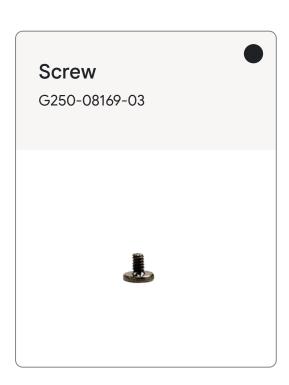


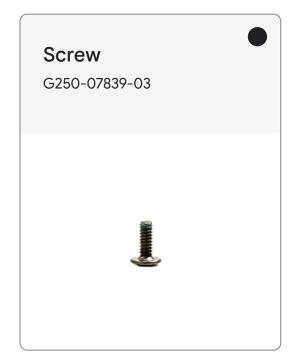


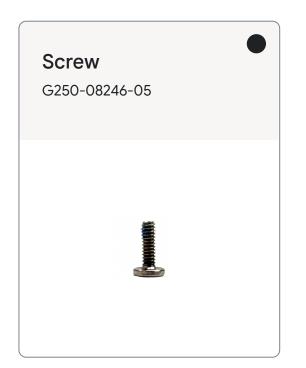


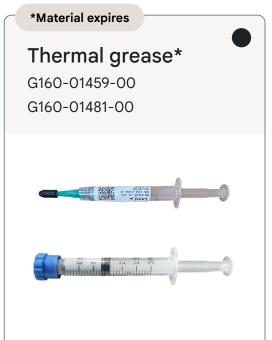
## Replacement parts



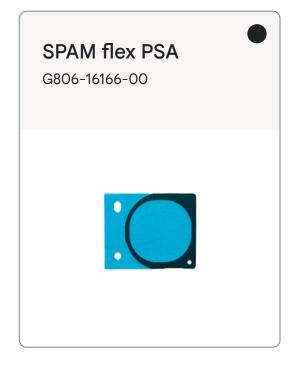








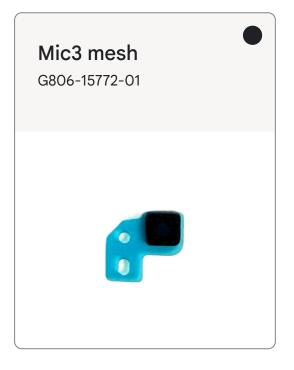








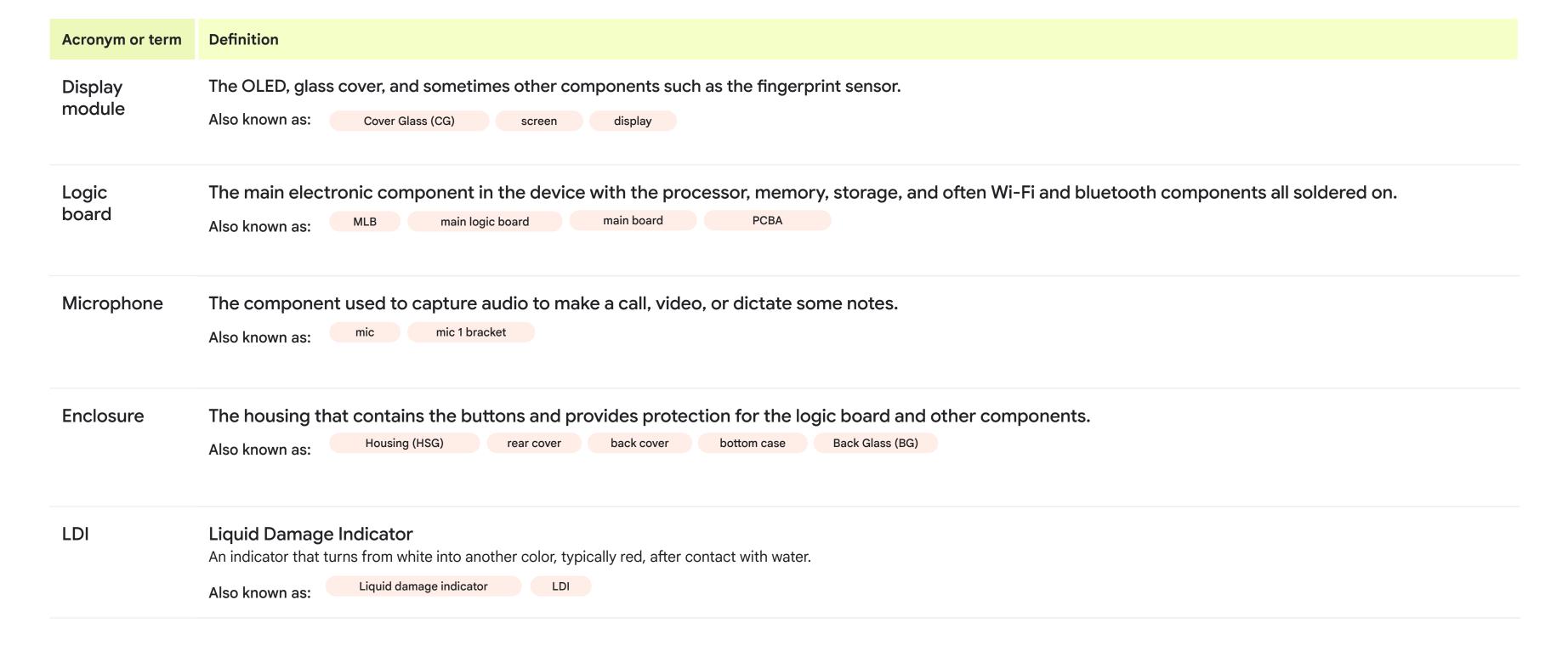


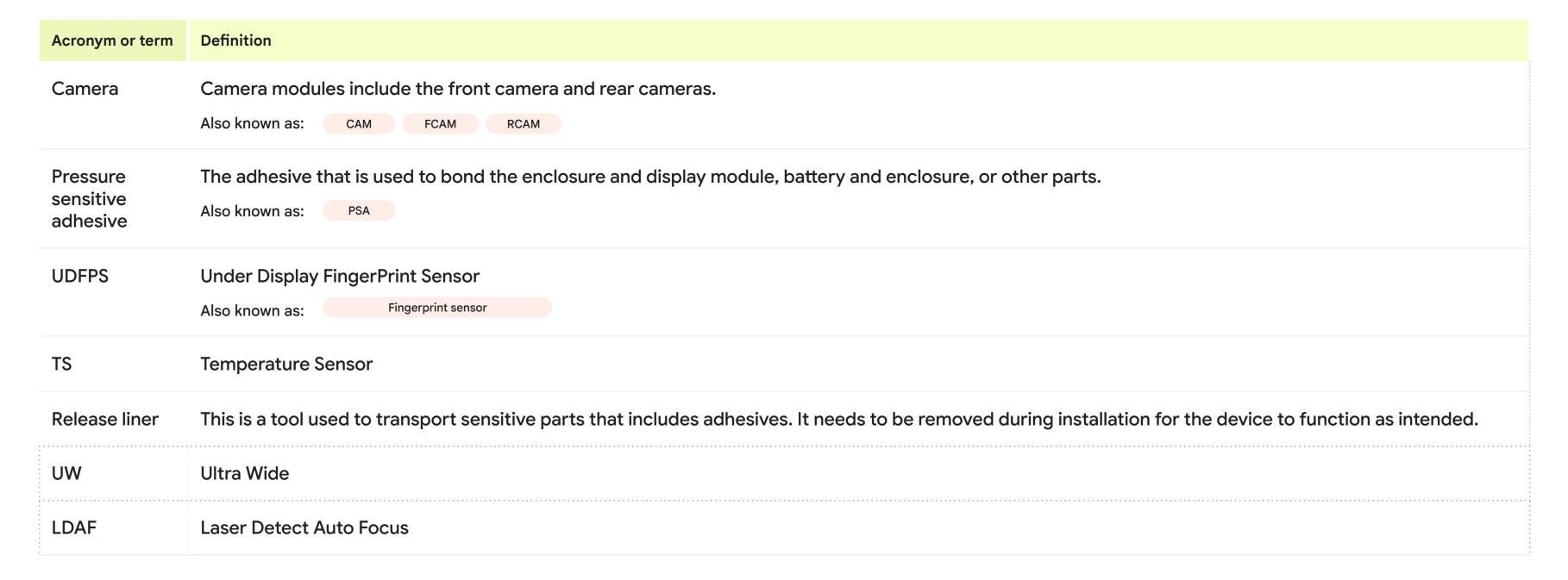






Acronym or term	Definition
ESD	Electro Static Discharge The sudden flow of electricity through two electrically charged objects.
IPA	Isopropyl Alcohol Used to clean components and enclosures. Comes as pads or a solution.
FPC	Flexible Printed Circuit A type of low profile and flexible printed circuit.
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, to provide fast, 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 is not acceptable.
SBOM	Service Bill Of Materials







Pixel 10 Pro XL repair manual

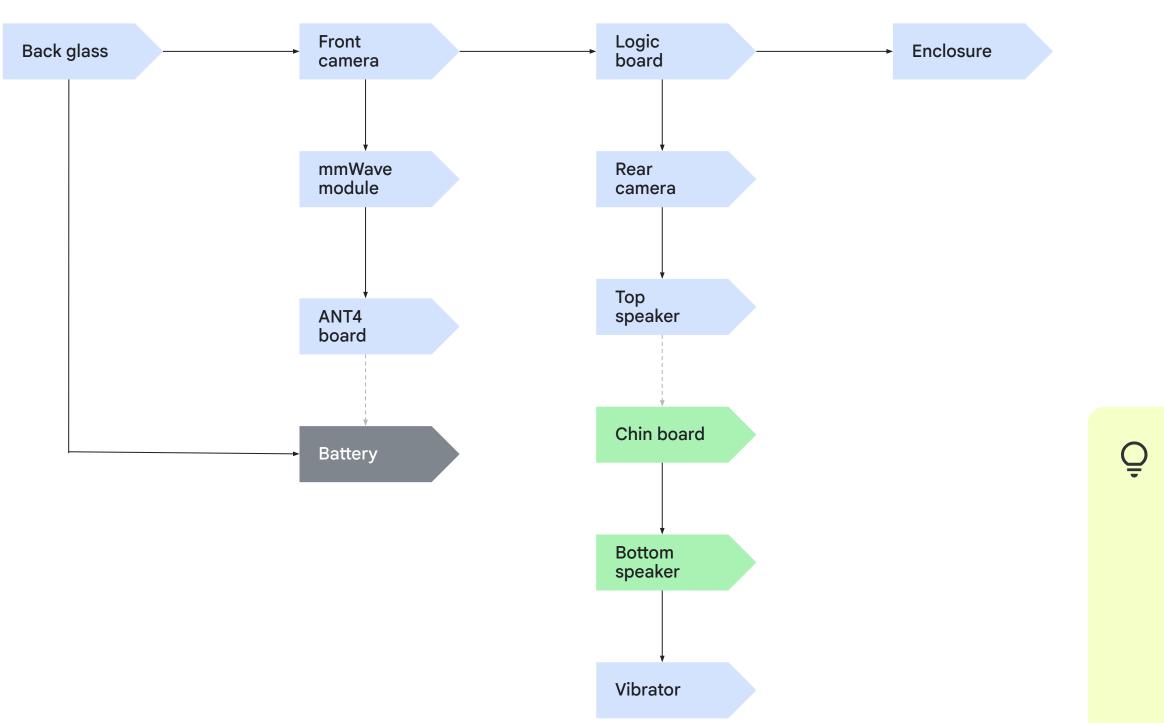
## Repair flows

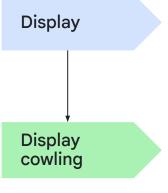
Disassembly order

Assembly order

## Pixel 10 Pro XLdisassembly flowchart







#### How to read this chart

To remove the battery:

remove the back glass, then the battery.

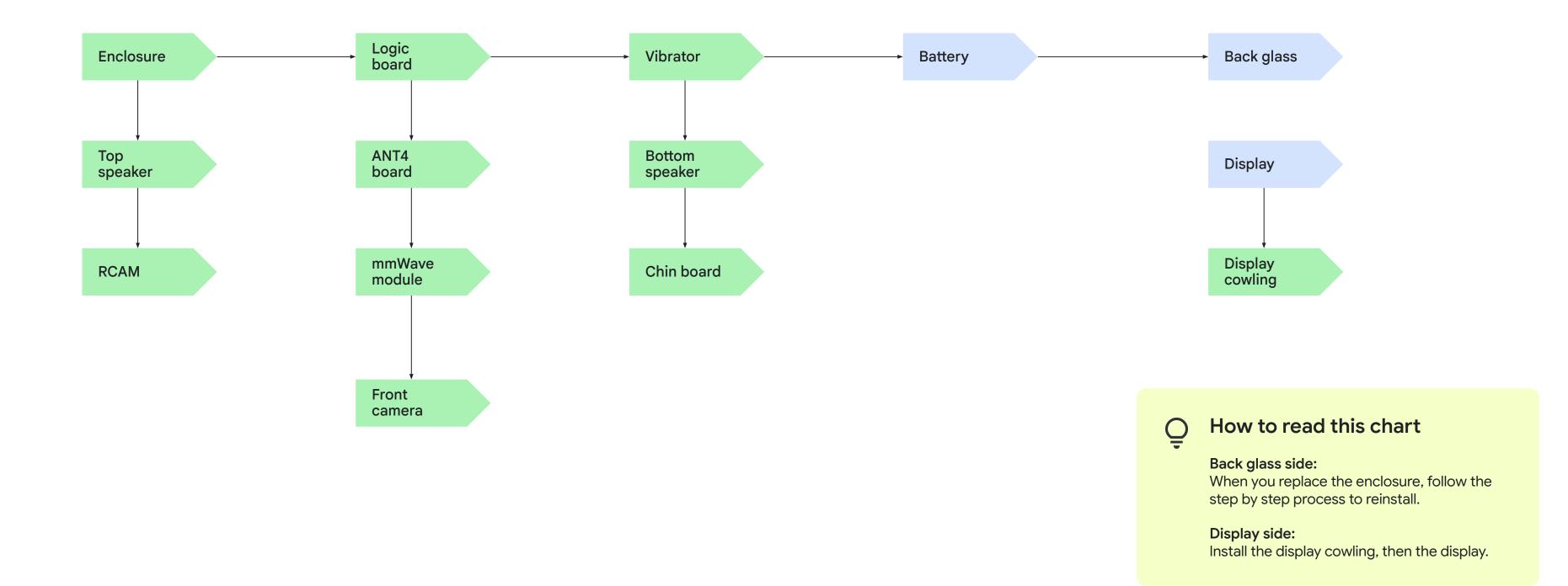
To remove the logic board:

remove the back glass, front camera, mmWave module, ANT4 board, then the logic board.

To remove the chin board remove the back glass, then the chin board.

## Pixel 10 Pro XLassembly flowchart







Pixel 10 Pro XL repair manual

## Disassembly

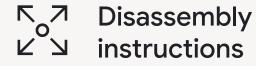
Display Battery Bottom speaker

BG sub Logic board Vibrator

FCAM RCAM Enclosure

mmWave module Top speaker

ANT4 board Chin board



## Display

The display module is connected to the chin board. Be careful with the flex when you open the device as the display module is connected to the chin board.



#### **Use caution**

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

Apply protective film to broken glass before removal.

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



#### **Prerequisites**

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



#### **Tools**

Heat plate

Universal disassembly fixture V3

Universal base 12 mm

Universal holder

Universal holder limiting block

Universal press plate 12 mm

Universal press fixture

Pixel 10 Pro XL BG press rubber

Pixel 10 Pro XL CG press rubber

Absorption-bulb

ESD tweezers

ESD spudger

3M AP111 primer

Dust-free cotton swabs

IPA and cloth



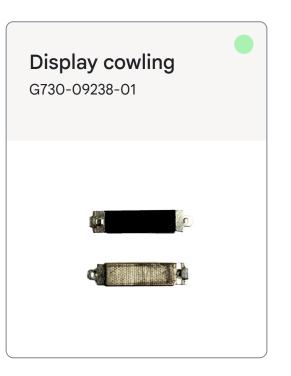
## **Display**

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









Reusable without cleaning

**Reuse indications** 

Reusable after cleaning

Not reusable after disassembly

### Soften the adhesive

Set the heat plate to 140°F (60°C) and place the phone back on it for 10 minutes to soften the adhesive.



#### Use caution

The heat plate is hot and could cause burns.

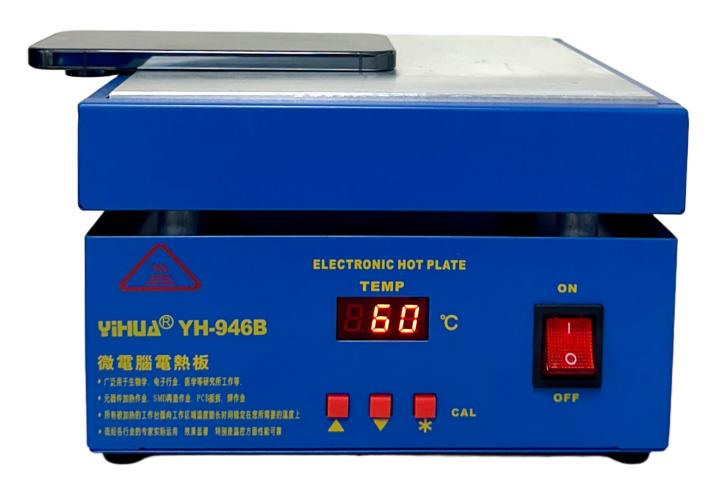
Use safety gloves to handle damaged displays, as they could splinter and cause injury. Apply a protective liner to broken glass before removal.

Review all <u>safety precautions</u> before you begin work.



#### Note

Don't heat the visor area.



Battery

Enclosure

# Mark the ESD spudger

- Use the ESD spudger to carefully separate the **display** from the **enclosure**.
- Measure 4 mm from the tip and mark the ESD spudger with a permanent marker for reference, to ensure clear visibility as adhesive widths vary.



#### Use caution

Avoid deep insertion that might damage the device.



Enclosure

Vibrator

### Use the fixture

- Fix the suction cup on the rightmost position as shown in Fig 1.
- Position the device on the holder of the universal disassembly fixture V3, to ensure that the phone visor aligns with the edge of the fixture as shown in Fig 2.



#### Note

Remove the display front protective film to attach the suction cup.

A groove prevents accidental press of the power button.





#### Place the power key inside the groove.





# Prepare for disassembly

Before you close the lid, dampen a **dust-free cotton swab** with **IPA** and apply it in the gap between the **display** and the **enclosure** on the top side.



Display

sub Front camera

mmWave module

ANT4 board

Battery

Rear ca

Logic board

Top speaker

Chin board Bottom speaker

Vibrator

r Enclosure

# Separate the display

- Close the lid and lift the suction cup as shown in Fig 1.
- Slowly rotate the knob to separate the **display module** from the **enclosure**.
- Use the **ESD spudger** with **IPA** to cut the adhesive off the top side when there's a gap.
- Insert a release liner to prevent reattachment as shown in Fig 2.

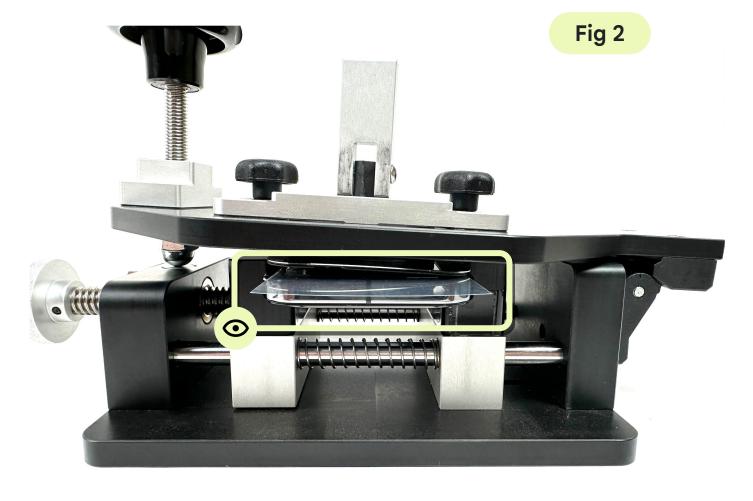


#### Use caution

Use safety gloves to handle damaged displays, as they could splinter and cause injury. Apply a protective liner to broken glass before removal.

Review all <u>safety precautions</u> before you work.





Display isplay BG sub Front camera mmWave module ANT4 board Battery Logic board Rear camera Top speaker Chin board Bottom speaker Vibrator Enclosure

# Separate the display adhesive

- Insert the spudger into the device's top side.
- Remove the device from the **universal disassembly fixture V3**.
- Manually slide the edges with the proper amount of **IPA**.
- Slide it parallel to the display down the left and right sides as shown in Fig 2.
- Pry at a 45 degrees angle on the bottom side to avoid insertion between the display and trim as shown in Fig 3.



#### Use caution

Avoid damaging the display spring and driver IC areas as shown in Fig 1.

Insert the ESD spudger **no further than 4 mm**.

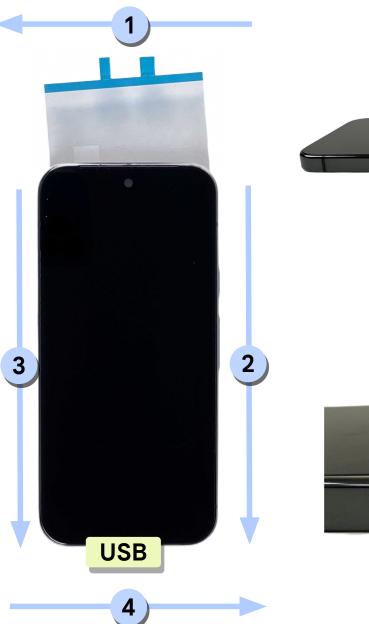


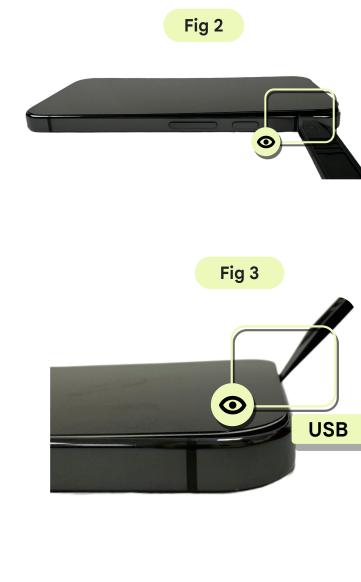
## Disassembly sequence

1 (in the fixture; insert the ESD spudger to the top) → 2 (right) → 3 (left) → 4 (bottom)

To prevent the adhesive from sticking back, avoid removing the release liner.







# Prop the display

- Use the absorption-bulb to hold the display.
- Avoid touching the **graphite**.



#### Use caution

Avoid stretching the **display flex** to prevent damage.

Be cautious not damage the **spring**, **FoF** and **graphite** during the process.

Be careful not to get cut by the **metal trim**.



Display BG sub Front camera mmWave module ANT4 board Battery Logic board Rear camera Top speaker Chin board Bottom speaker Vibrator Enclosure

# Remove the cowling

- Gently push the **display cowling** to release the latch.
- Push it to the right with your **hand** to eject it.

**Part: G730-09238-01** (display cowling)



#### Note

Be careful not to damage the **DJ** flex when you remove the display cowling.



Display BG sub Front camera mmWave module ANT4 board Battery Logic board Rear camera Top speaker Chin board Bottom speaker Vibrator Enclosure

Repair flows Software Welcome Precautions Introduction Disassembly Assembly Troubleshooting

Finished! Want assembly instructions? →

# Disconnect the display

- Detach the display connector with the ESD spudger.
- Slowly peel off the **DJ flex PSA** manually by pulling DJ flex towards the display connector.
- Remove the display module.

Part: G949-01360-00 (display module)

Part: G806-14563-01 (DJ flex PSA)



#### Note

Use an ESD spudger to avoid damage to the components.



Display

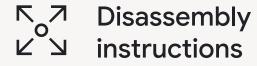
mmWave module

ANT4 board

Chin board Bottom speaker

Vibrator

Enclosure



# **BG** sub

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



#### **Use caution**

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.



Universal base 12 mm

Universal holder

Universal holder limiting block

Universal press plate 12 mm

Universal press fixture

Pixel 10 Pro XL CG press rubber

Pixel 10 Pro XL BG press rubber

Absorption-bulb

Small suction cup

Opening pick

Torx plus 3IP screwdriver

**ESD** tweezers

ESD spudger

3M AP111 primer

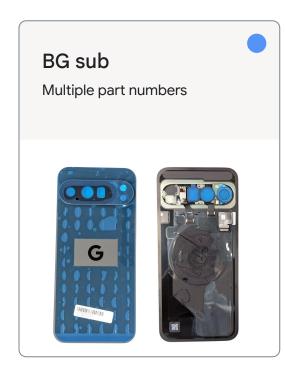
Dust-free cotton swabs

IPA and cloth

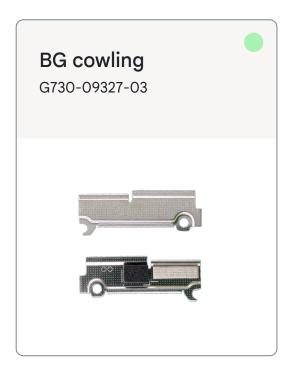


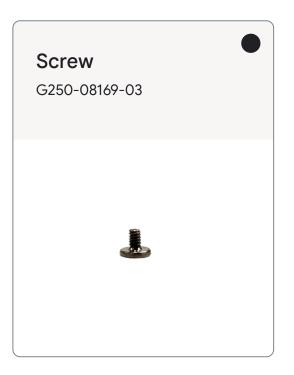
### BG sub

Here's the list of parts for the BG sub disassembly:









Reusable without cleaning

**Reuse indications** 

Reusable after cleaning

Not reusable after disassembly

# Mark the opening pick

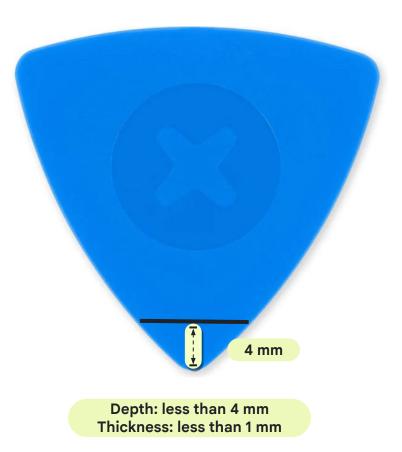
Measure 4 mm and 2 mm from the tip and mark the opening pick.



#### Use caution

Ensure proper marking to minimize damage.

A thicker opening pick might crack the back glass.



BG sub Front camera mmWave module ANT4 board Battery Logic board Rear camera Top speaker Chin board Bottom speaker Vibrator Enclosure

# Apply the small suction cup

Place a small suction cup close to the USB side.



BG sub Front camera mmWave module ANT4 board Battery Logic board Rear camera Top speaker Chin board Bottom speaker Vibrator Enclosure

Repair flows Disassembly Troubleshooting Software Welcome Precautions Introduction Assembly

# Separate the BG

- Hold the device with one hand and pull up the **small** suction cup firmly with the other until a gap forms between the BG and the enclosure.
- Insert the **opening pick** and align it with the **4 mm** mark.



#### Note

If you can't create a gap, heat the **BG** side of the **enclosure** on a heat plate at 10°F (60°C) for 10 minutes and try again.







# Separate the BG adhesive

Slide the pick clockwise through the edges.



### Disassembly sequence

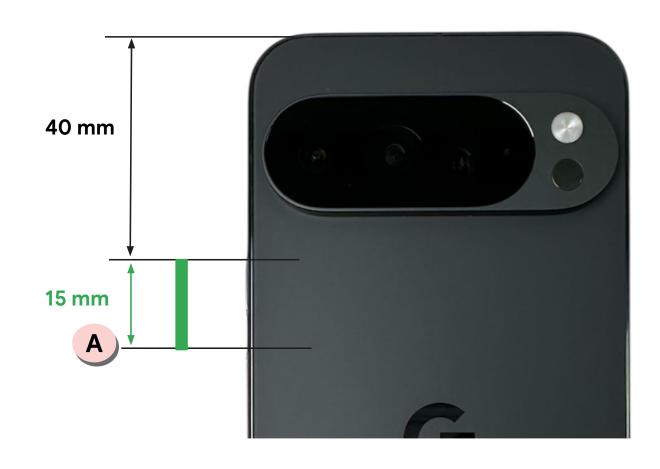
1 (insert opening pick to bottom)

→ 2 (left) → 3 (top) → 4 (right)



#### Use caution

Ensure that opening pick is inserted no further than **2 mm** in area A.





BG sub Front camera mmWave module ANT4 board Battery Logic board Rear camera Top speaker Chin board Bottom speaker Vibrator Enclosure

Repair flows Welcome Precautions Introduction Disassembly Assembly Troubleshooting Software

# Remove the BG cowling

- Use the absorption-bulb to hold the BG.
- Remove two BG cowling screws with a torx plus 3IP screwdriver.
- Remove the **BG cowling** with **ESD tweezers**.

Part: G250-08169-03\*2 (screw)

**Part: G730-09327-03** (BG cowling)



#### 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 and damage the battery or the product.



#### Note

Be careful not to stretch the **BG flex** to prevent damage.

Don't reuse the screws.



mmWave module

Chin board

Bottom speaker

Vibrator

Enclosure

Finished! Want assembly instructions? →

## Remove the BG sub

- Detach the **BG sub** and **battery connectors** from the **logic board** with an **ESD spudger**.
- Remove the **BG sub**.

Part: multiple part numbers (BG sub)



### Note

Use the ESD spudger to avoid damage to the components.



BG sub Front camera mmWave module ANT4 board Battery Logic board Rear camera Top speaker Chin board Bottom speaker Vibrator Enclosure



# Front camera

The front camera isn't fastened to the enclosure, it's simply 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



Torx plus 3IP screwdriver

ESD spudger

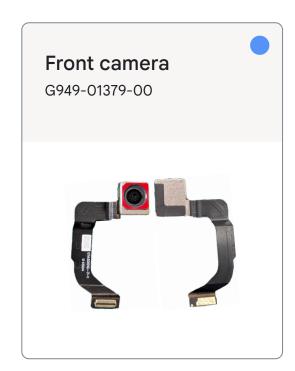
ESD tweezers

IPA and cloth



### Front camera

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







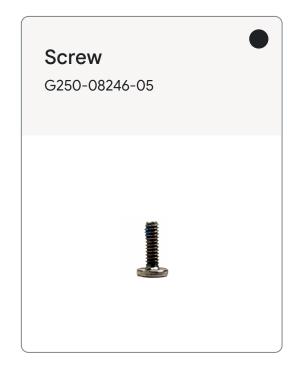




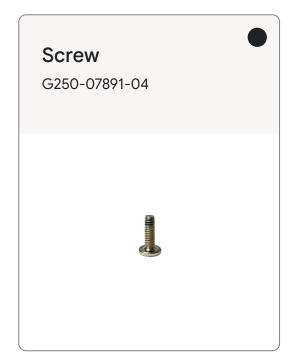
Reusable without cleaning

**Reuse indications** 

Reusable after cleaning



Not reusable after disassembly



Repair flows Troubleshooting Software Welcome Precautions Introduction Disassembly Assembly

# Remove the MLB cowling

- Remove the four MLB cowling screws with a torx plus 3IP screwdriver.
- Remove the MLB cowling with ESD tweezers.

Part: G250-08246-05\*4 (screw)

Part: G730-09325-14 (MLB cowling)



#### 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

Don't reuse the screws.



Enclosure

### Remove the screw

Remove the FCAM cowling screw with a torx plus 3IP screwdriver.

Part: G250-07891-04 (screw)



#### 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 and damage the battery or the product.



### Note

Don't reuse the part.



Display BG sub **Front camera** mmWave module ANT4 board Battery Logic board Rear camera Top speaker Chin board Bottom speaker Vibrator Enclosure

# Remove the FCAM cowling

- Hold an **ESD spudger** against the **hook**.
- Push the FCAM cowling upward to remove the FCAM cowling.

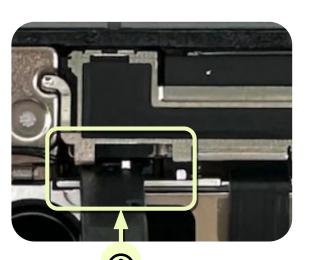
Part: G730-09322-01 (FCAM cowling-mmWave)

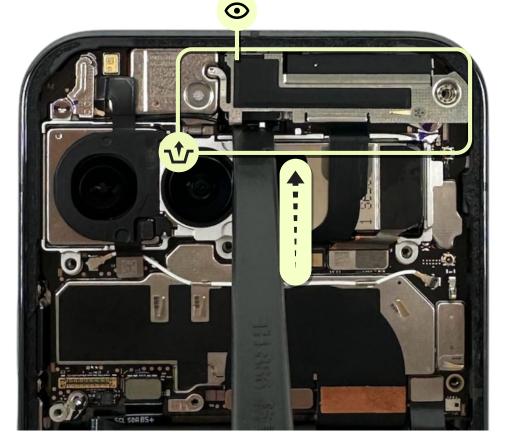
Part: G730-09322-11 (FCAM cowling-sub6)



Note

Don't reuse the part.





splay BG sub Front camera

nera mmWave module

ANT4 board

Battery

Logic board

Rear camera

Top speaker

Chin board

Bottom speaker

Vibrator

Enclosure

Finished! Want assembly instructions? →

## Remove the front camera

- Detach the FCAM connector with an ESD spudger.
- Remove the **front camera** with an **ESD spudger**.

Part: G949-01379-00(front camera)



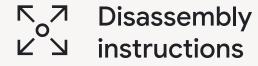
#### Use caution

Be cautious not to touch the **front camera lens**.

Don't grab the flex to remove the **front camera**.



isplay BG sub **Front camera** mmWave module ANT4 board Battery Logic board Rear camera Top speaker Chin board Bottom speaker Vibrator Enclosure



# mmWave module

Millimeter waves (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 you should remove first:

- BG sub
- Front camera



Torx plus 3IP screwdriver

ESD spudger

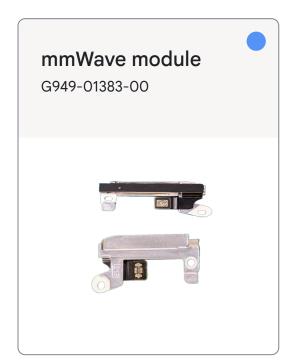
**ESD** tweezers

IPA and cloth



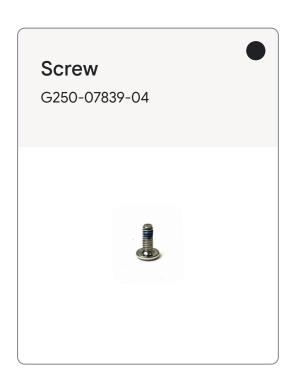
### mmWave module

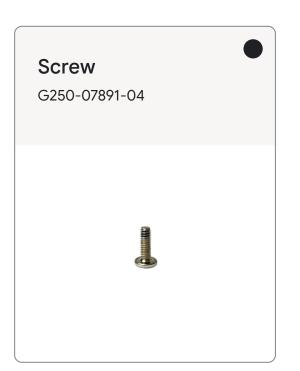
Here's the list of parts for the mmWave module disassembly:











Reusable without

cleaning

**Reuse indications** 

Reusable after

cleaning

Not reusable after disassembly

## Disconnect the mmWave

Detach the mmWave module connector with the ESD spudger.



#### Note

This step is only present for the mmWave SKU.

Use the ESD spudger to avoid damage to the components.



splay BG sub Front camera **mmWave module** ANT4 board Battery Logic board Rear camera Top speaker Chin board Bottom speaker Vibrator Enclosure

Finished! Want assembly instructions? →

# Remove the mmWave module or COAX cowling\_Sub6

- Remove the two mmWave module screws or COAX cowling screw with a torx plus 3IP screwdriver.
- Remove the mmWave module or COAX cowling\_Sub6 with ESD tweezers.

Part: G250-07839-04 (screw)

Part: G250-07891-04 (screw)

Part: G949-01383-00 (mmWave module)

Part: G850-00697-01 (COAX cowling Sub6)



#### 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 and damage the battery or the product.



Note

Don't reuse the screws.



mmWave SKU

A: G250-07839-04

B: G250-07891-04



Sub6 SKU

A: G250-07839-04\*2

Front camera

mmWave module

Chin board

Bottom speaker

Vibrator

Enclosure



# **ANT4** board



#### **Use caution**

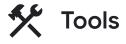
Review all **safety precautions** before you begin work.



### Prerequisites

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

BG sub



Torx plus 3IP screwdriver

ESD tweezers

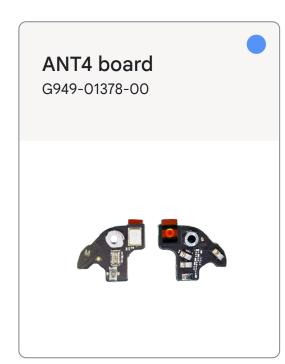
ESD spudger

IPA and cloth

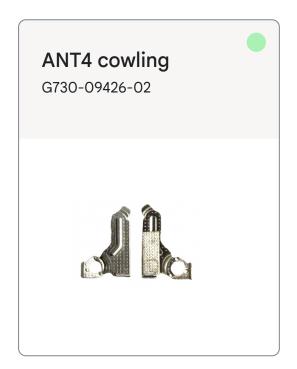


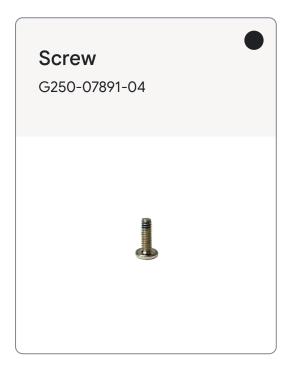
### **ANT4** board

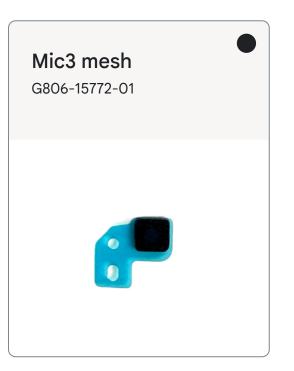
Here's the list of parts for the ANT4 board disassembly:











Reusable without cleaning

**Reuse indications** 

Reusable after cleaning

Not reusable after disassembly

## Remove the ANT4 cowling

- Remove the ANT4 cowling screw with a torx plus 3IP screwdriver.
- Remove the ANT4 cowling with ESD tweezers.

Part: G250-07891-04 (screw)

Part: G730-09426-02 (ANT4 cowling)



#### 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 and damage the battery or the product.



#### Note

Don't reuse the screw.



ay BG sub Front camera mmWave module **ANT4 board** Battery Logic board Rear camera Top speaker Chin board Bottom speaker

Enclosure

Vibrator

## Disconnect the SPAM

Detach the **SPAM connector** from the **ANT4 board** with the **ESD spudger**.



#### Note

Use the ESD spudger to avoid damage to the components.



lay BG sub Front camera mmWave module **ANT4 board** Battery Logic board Rear camera Top speaker Chin board Bottom speaker Vibrator Enclosure

### Remove the coaxial cable

- Unbuckle the **coaxial cable** with an **ESD spudger**.
- Remove the coaxial cable.

Part: G821-01174-02 (coaxial cable)



#### Use caution

Be careful to avoid damage to components on the **logic board** and **ANT4 board**.



#### Note

Don't reuse the part.



Display BG sub Front camera mmWave module **ANT4 board** Battery Logic board Rear camera Top speaker Chin board Bottom speaker Vibrator Enclosure

Repair flows Disassembly Troubleshooting Software Welcome Precautions Introduction Assembly

### Remove the screw

Remove the ANT4 board screw with the torx plus 3IP screwdriver.

Part: G250-07891-04 (screw)



#### 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 and damage the battery or the product.



Note

Don't reuse the screw.



ANT4 board Vibrator Enclosure Front camera mmWave module Battery Logic board Top speaker Chin board Bottom speaker

Finished! Want assembly instructions? →

### Remove the ANT4 board

Insert the narrow end of an **ESD spudger** through the boss hole and press down to pivot and lift the **ANT4** board.

Part: G949-01378-00 (ANT4 board)



#### Note

Use the ESD spudger to avoid damage to the components.

Don't wear gloves when you handle the **ANT4 board**.





play BG sub Front camera mmWave module **ANT4 board** Battery Logic board Rear camera Top speaker Chin board Bottom speaker Vibrator Enclosure



# Battery



#### Use caution

Use caution if you engage in repair.

When you open or repair the device, be careful of 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.

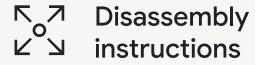
### **Battery handling**

- Never bend, dent, puncture, or use tools to pry the battery.
- Store batteries in the replacement part packaging as soon as possible after removal to prevent damage.
- If a battery begins to vent, cover it in sand or use gloves and tongs to place the battery in a fire safe container as soon as possible.
- Take care to prevent shorting of battery terminals or battery damage, as it could cause fire or overheating.
- Dispose of the battery in accordance with local regulations.

#### Confirm before you proceed

- The battery is fully discharged and the device is disconnected from all power sources.
- Inspect the battery to see that the phone battery shows signs of <u>swelling</u>, <u>damage</u>. If the phone feels hot or emits a strong odor, <u>don't</u> attempt disassembly. Reach out to Google customer support.
- Take care not to expose the phone or its components to liquids after disassembly.

Repair flows Troubleshooting Software Welcome Precautions Introduction Disassembly Assembly



# Battery

It's recommended to use the wrap to remove the battery. If you use other methods, it might 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



Universal base 12 mm

Universal holder

Universal holder limiting block

Universal supporting rubber

Universal press Plate 12 mm

Universal press fixture

Universal supporting rubber

Pixel 10 Pro XL battery press rubber

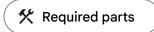
Absorption-bulb

3M AP111 primer

Dust-free cotton swabs

Finger cots

IPA and cloth

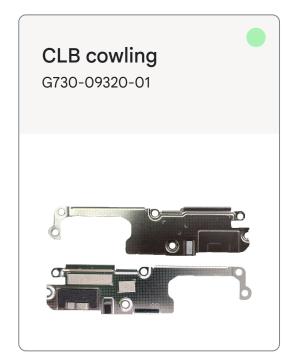


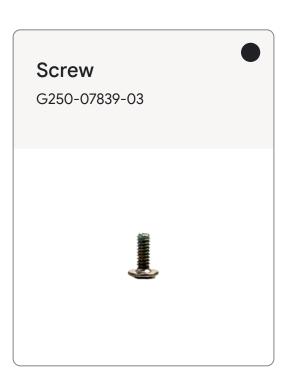
# **Battery**

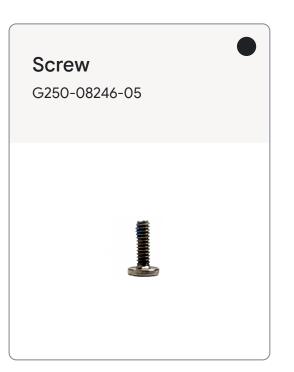
Here's the list of parts for the battery disassembly:











Reusable without cleaning

**Reuse indications** 

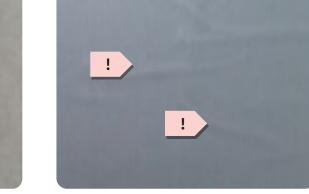
Reusable after cleaning

Not reusable after disassembly

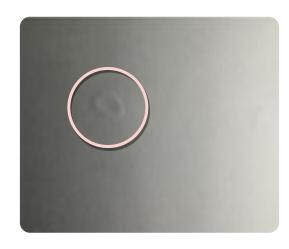


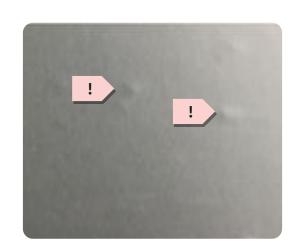
# Examples of unacceptable battery conditions that aren't suitable for repair.











Pouch damage

Dent

Line protrusion

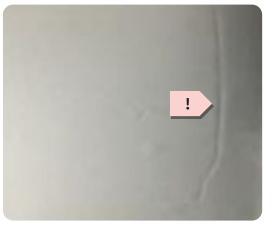
Scratch

Contamination mark

Dot protrusion









Bubbling

Imprinted line

Swelling or electrolyte leakage

<sup>\*</sup>These are examples of potentially dangerous battery conditions but *don't* reflect all possible dangerous conditions. Follow the general safety guidance outlined in this document.

# Remove the CLB cowling

- Remove the RF and five CLB cowlings screws with the torx plus 3IP screwdriver.
- Remove the CLB cowling with ESD tweezers.

Part: G250-08246-05\*5 (screw)

Part: G250-07839-03 (screw)

Part: G730-09320-01 (CLB cowling)



#### 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 and damage the battery or the product.



#### Note

Don't reuse the screws.



A: G250-08246-05

B: G250-07839-03

Display

G sub

Front camera

mmWave module

ANT4 board

Battery

Logic board

Rear camera

Top speaker

Chin board

3ottom speake

Vibrator

Enclosure

Repair flows Troubleshooting Software Welcome Precautions Introduction Disassembly Assembly

## Remove the RJ flex

- Detach the RJ flex connectors with an ESD spudger.
- Remove RJ flex screw with a torx plus 3IP screwdriver.
- Remove the **RJ flex**.

Part: G652-10612-01 (RJ flex)

Part: G250-07839-03 (screw)



#### 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 and damage the battery or the product.



Note

Don't reuse the screw.



# Remove the battery

- Wear the ESD finger cots or gloves to prevent slipping.
- If needed, use **ESD tweezers** to unstick the **green battery tab**.
- When you hold the device with your left hand, peel open the green battery tab with your right hand as shown in **Fig 1**.
- Make sure to carefully peel off the entire left wing of the battery wrap as shown in Fig 2.

Part: G949-01616-00 (battery)



#### Use caution

Avoid touching the rear camera lenses, bottom speaker, volume button, and other components.

Keep small screws and sharp objects away from the **battery**.

Fig 1

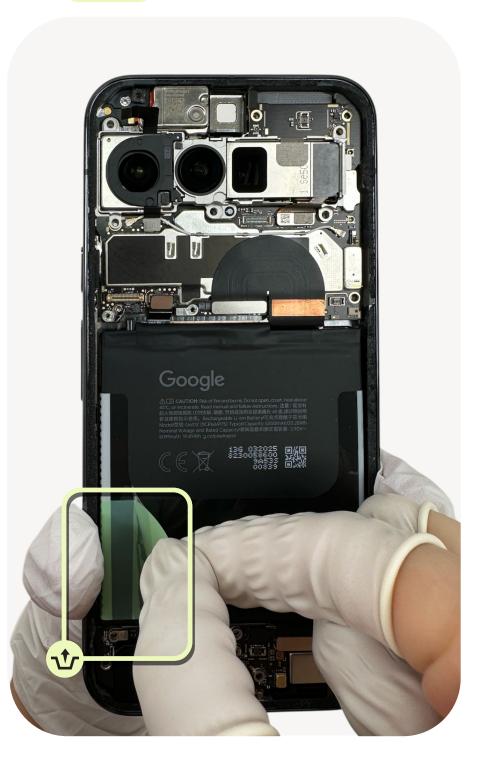


Fig 2



Display

G sub Front

Front camera

mmWave module

ANT4 board

**Battery** Logic board

Rear camer

Top speaker

Chin board

Bottom speaker

Vibrator

Enclosure

Finished! Want assembly instructions? →

# Remove the battery

- Hold the device securely with your left hand, with the left thumb located
  near the lower bottom speaker. Grab the green battery tab with your
  right hand as shown in Fig 1.
- Slowly and firmly, pull the tab perpendicular to the device to lift the left edge of the battery as shown in Fig 2. Pull until you hear the adhesive break.
- Tear battery completely from the back side of the wrap as shown in Fig 3.
- While you hold the battery, slowly peel the battery wrap away from the enclosure as shown in **Fig 4**.
- Carefully remove and dispose of the **battery and battery wrap** safely.

Part: G949-01616-00 (battery)



#### Use caution

Avoid touching the rear camera lenses, bottom speaker, volume button, and other components.

Keep small screws and sharp objects away from the **battery**.



#### Note

Don't reuse the part.

Pull the left side of the wrap **perpendicularly** to the device to remove the battery.





Fig 2



Fig 3



Fig 4



isplay

G sub

Front camera

mmWave module

ANT4 board Battery

Logic board

Rear camera

Ton speaker

Chin board

Bottom speaker

r Vibrator

or Enclosure



# Logic board

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

Be aware that a replacement SIM tray might not have the IMEI number present.



#### **Use caution**

Review all <u>safety precautions</u> before you begin work.



### **Prerequisites**

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

- BG sub
- Front camera
- mmWave module
- ANT4 board



#### Tools

Pixel 10 Pro XL thermal grease alignment fixture

Torx plus 3IP screwdriver

ESD spudger

ESD tweezers

SIM card ejection pin

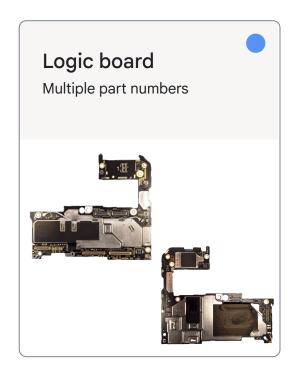
IPA and cloth

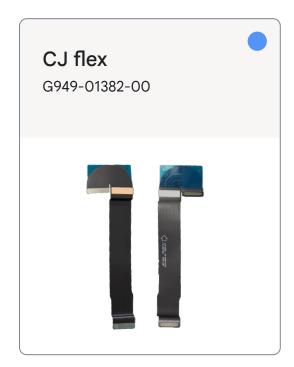
Dust-free cotton swabs



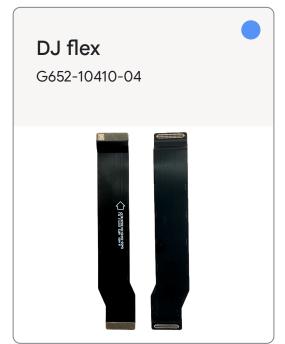
# Logic board

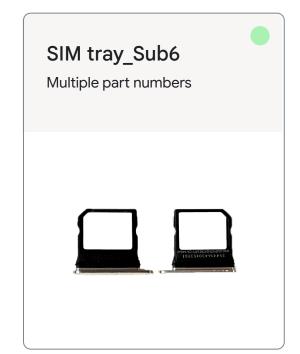
Here's the list of parts for the logic board disassembly:











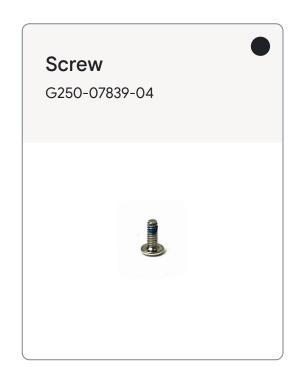
Reusable without cleaning

**Reuse indications** 

Reusable after cleaning



Not reusable after disassembly







# Remove the CJ flex

- Disconnect two CJ flex connectors with ESD spudger.
- Gently remove the **CJ flex**.

Part: G949-01382-00 (CJ flex)

Part: G806-14188-01 (CJ flex PSA)



#### Note

Use an ESD spudger to avoid damage to the components.



# Remove the DJ flex

- Disconnect the **DJ flex connector** with **ESD spudger**.
- Gently remove the **DJ flex**.

Part: G652-10410-04 (DJ flex)



#### Note

Use an ESD spudger to avoid damage to the components.



## Remove the screw

Remove the logic board screw with a torx plus 3IP screwdriver.

Part: G250-07839-04 (screw)



#### Use caution

Be careful when you use the screwdriver.

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



#### Note

Don't reuse the screw.



# Remove the SIM tray

Remove the SIM tray with the SIM card ejection pin.

Part: multiple part numbers (SIM tray)



#### Note

This step is only present for the sub6 SKU.



# Remove the MLB

Remove the logic board with ESD tweezers.

Part: multiple part numbers (logic board)



#### Use caution

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



#### Note

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



Finished! Want assembly instructions? →

# Remove the P-sensor foam

Remove the **P-sensor foam** with **ESD tweezers**.

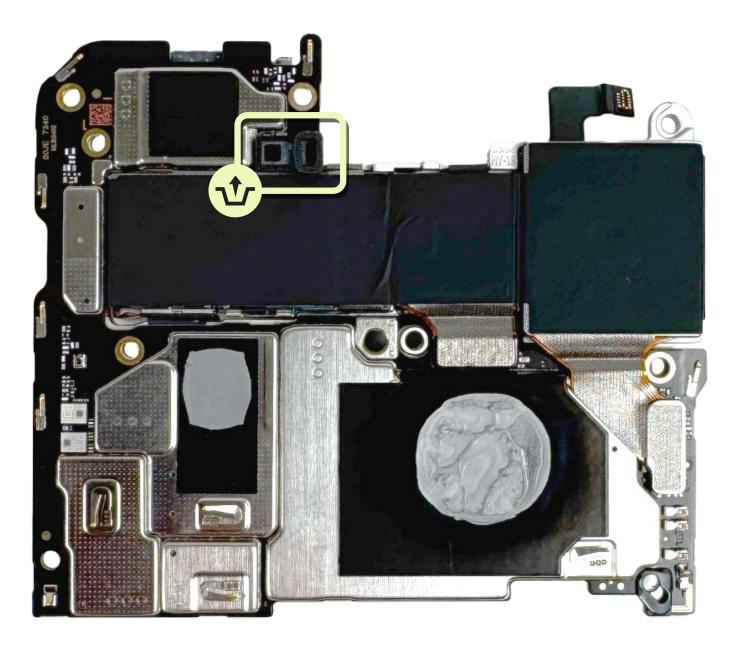
Part: G806-13064-01 (P-sensor foam)

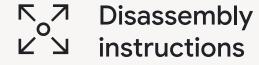


#### Note

Don't reuse the part.

This step is only to replace the P-sensor foam if it's deformed.





# 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 remove first:

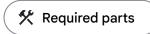
- BG sub
- Front camera
- mmWave module
- ANT4 board
- Logic board



ESD spudger

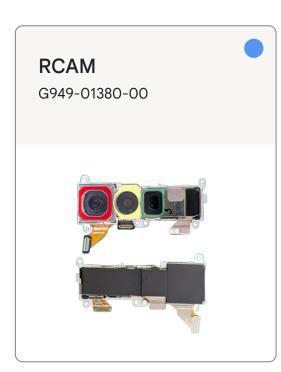
ESD tweezers

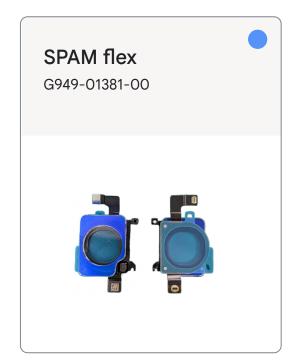
IPA and cloth



### Rear camera

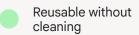
Here's the list of parts for the rear camera disassembly:

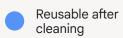






Reuse indications





Not reusable after disassembly

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## Remove the rear camera

- Detach the **three rear camera connectors** and **SPAM flex connector** on both sides of the **logic board** with **ESD spudger** as shown in Fig 1 and Fig 2.
- Remove the **rear camera** with **ESD tweezers** as shown in Fig 3.

Part: G949-01380-00 (rear camera)



#### Use caution

Avoid touching the **rear camera lenses** and damage components on the **logic board**.

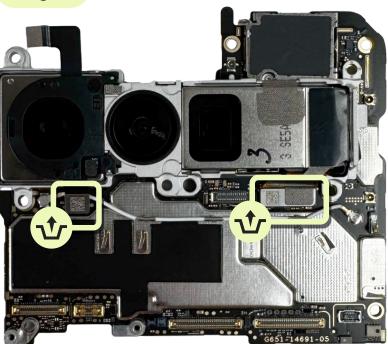


#### Note

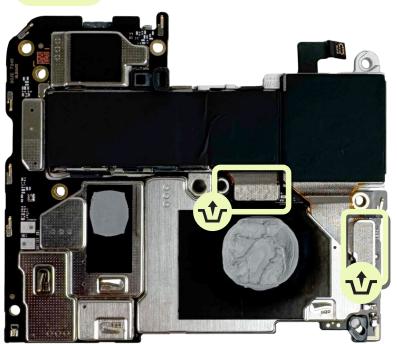
Use the ESD spudger to avoid damage to the components.

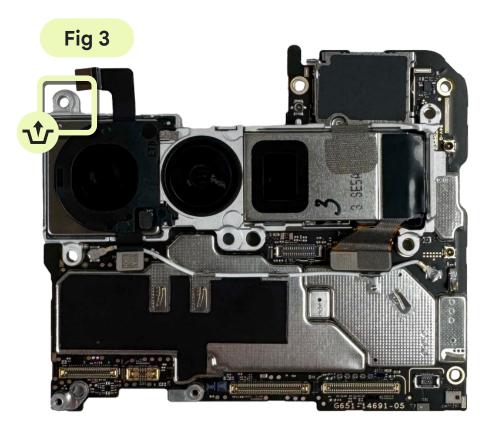
Don't wear gloves when you handle the **logic board**.











Finished! Want assembly instructions? →

# Remove the SPAM flex

Insert the **ESD spudger** between the **rear camera module** and the **SPAM flex** to remove the flex.

Part: G949-01381-00 (SPAM flex)



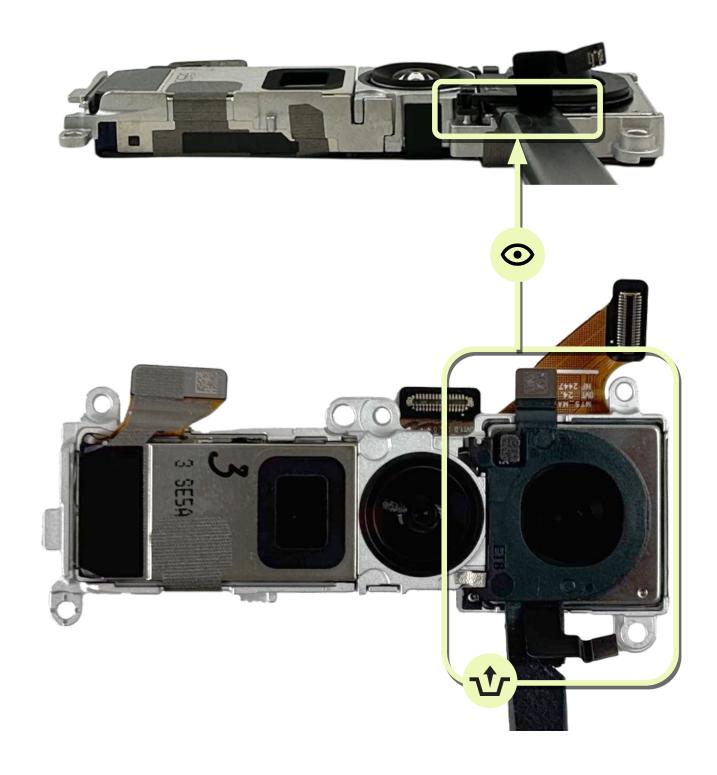
#### Use caution

Avoid touching the **rear camera lenses**.



#### Note

This step is only required when replace SPAM flex or RCAM.





# Top speaker

The top speaker is used both as an ear speaker to make calls and a second loudspeaker for music and video playback.



#### **Use caution**

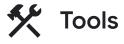
Review all **safety precautions** before you begin work.



### **Prerequisites**

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

- BG sub
- Front camera
- mmWave module
- ANT4 board
- Logic board



ESD spudger

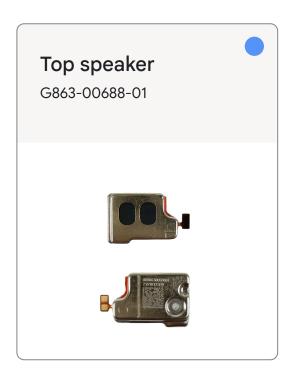
**ESD** tweezers

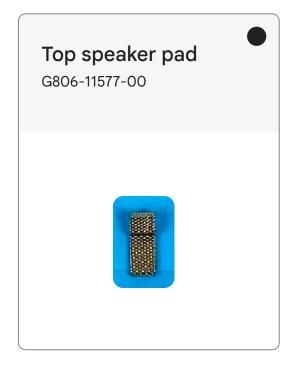
IPA and cloth

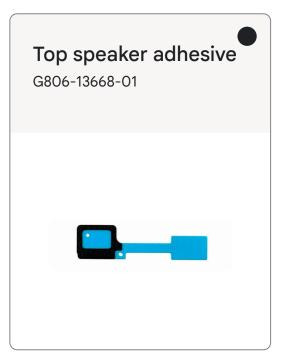


# Top speaker

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







Reuse indications

Reusable without cleaning

Reusable after cleaning

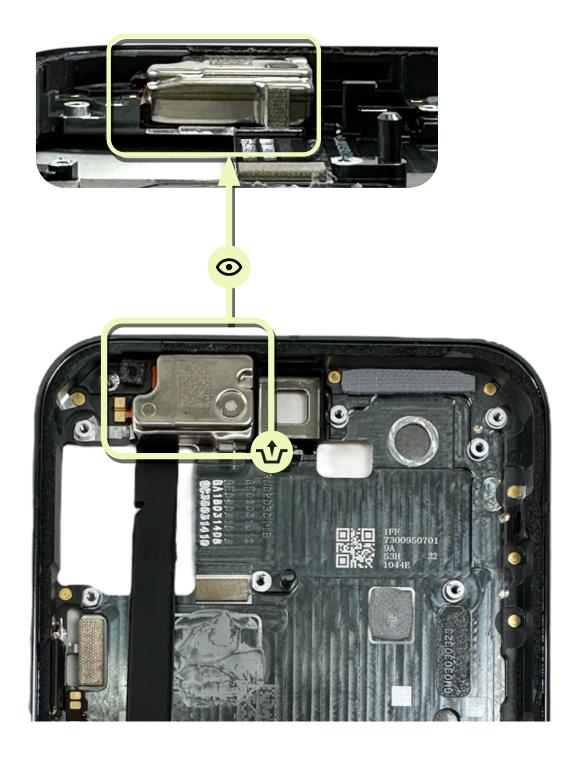
Not reusable after disassembly

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# Remove the top speaker

Insert an **ESD spudger** into the gap between the **top speaker** and the **enclosure** and pry up the **top speaker**.

Part: G863-00688-01 (top speaker)



Finished! Want assembly instructions? →

# Remove the top speaker pad

Remove the top speaker pad with an ESD spudger.

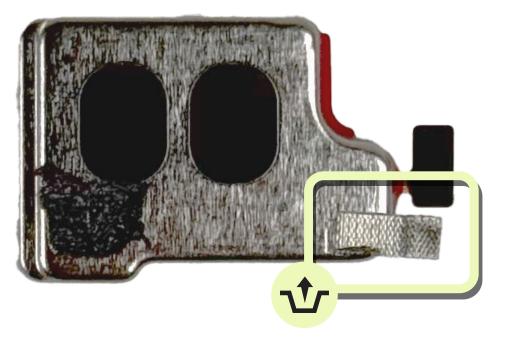
**Part: G806-11577-00** (top speaker pad)

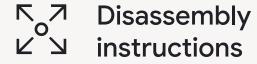


#### Note

Don't reuse the part.

This step replaces the deformed top speaker pad.





# Chin board

The chin board is communicated with the components, such as the USB port and 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



Torx plus 3IP screwdriver

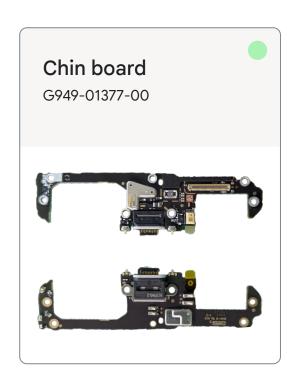
ESD spudger

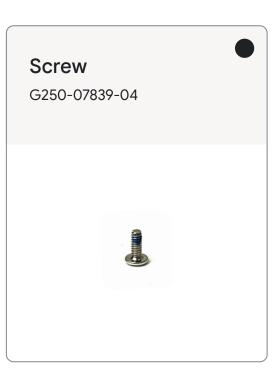
ESD tweezers



## **Chin board**

Here's the list of parts for the chin board disassembly:





Reuse indications

Reusable without cleaning

Reusable after cleaning

Not reusable after disassembly

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# Remove the screw

Remove the **chin board screw** with the **torx plus 3IP screwdriver**.

Part: G250-07839-04 (screw)



#### Use caution

Be careful when you use the screwdriver.

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



#### ) Note

Don't reuse the screw.



Finished! Want assembly instructions? →

# Remove the chin board

Insert the ESD spudger between the chin board and the retaining wall to pry it up.

Part: G949-01377-00 (chin board)



#### Use caution

Be careful to avoid damage to the components on the **chin board**.



#### Note

Don't wear gloves when you handle the **chin board**.





# **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
- Chin board



ESD spudger

ESD tweezers

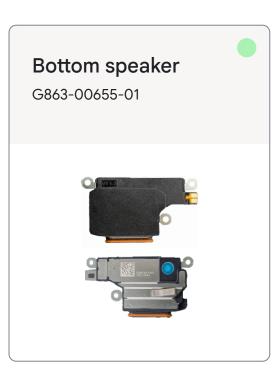
Dust-free cotton swabs

Sankol lubricant CFD 09Z\_V2

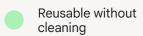


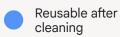
# **Bottom speaker**

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



**Reuse indications** 





Not reusable after disassembly

# Remove the bottom speaker

Push the **bottom speaker** from the **CG side** to remove the **bottom speaker**.

Part: G863-00655-01 (bottom speaker)



Finished! Want assembly instructions? →

# Remove the bottom speaker

To remove the bottom speaker with display assembled, insert the narrow end of an **ESD spudger** into the boss hole and lift the **bottom speaker**.

Part: G863-00655-01 (bottom speaker)



#### Note

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

This step is only for bottom speaker repair from the **BG side**.







# Vibrator

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



#### **Use caution**

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



### **Prerequisites**

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

- BG sub
- Chin board
- Bottom speaker



**ESD** tweezers

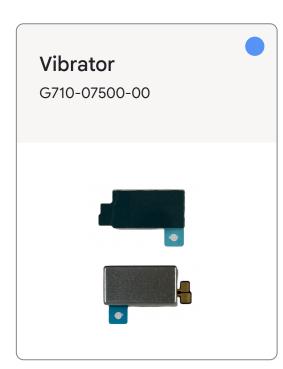
ESD spudger

IPA and cloth



# **Vibrator**

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





Reuse indications

Reusable without cleaning

Reusable after cleaning

Not reusable after disassembly

Finished! Want assembly instructions? →

# Remove the vibrator

Remove the **vibrator** with an **ESD spudger**.

Part: G710-07500-00 (vibrator)





# Enclosure

If you reuse the enclosure, 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:

- Display
- BG sub
- FCAM
- mmWave module
- ANT4 board
- Battery
- Logic board
- RCAM
- Top speaker
- Chin board
- Bottom speaker
- Vibrator



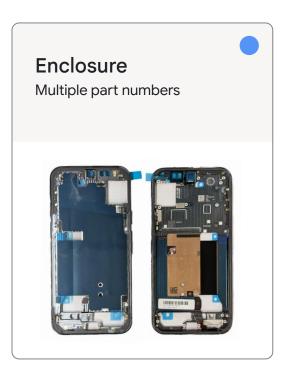
Dust-free cotton swabs

IPA and cloth

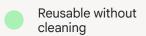


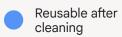
## **Enclosure**

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



Reuse indications





Not reusable after disassembly



Pixel 10 Pro XL repair manual

# Assembly

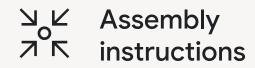
Enclosure mmWave module Chin board

Top speaker FCAM Battery

RCAM Display BG sub

Logic board Vibrator

ANT4 board Bottom speaker



# Enclosure

### Reuse the enclosure

- Inspect the **enclosure** for **adhesive** residue.
- If possible, carefully peel off the **adhesive** by hand in large sections.
- Use the **ESD spudger** to remove any remaining glue from the **enclosure**.
- Clean **thermal grease** and **mmWave TIM residue** from the **enclosure** with the **ESD spudger**.
- Where needed, use a **dust-free cloth** with **IPA** to clean the surface thoroughly.

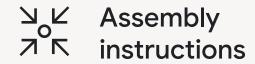
Part: multiple part numbers (enclosure)



#### Note

Make sure that the side band protect film is removed when you use a new enclosure.





# Top speaker

## Clean the enclosure

Enclosure

- Clean the enclosure's adhesive residue with ESD tweezers.
- Use a dust-free cloth with IPA to clean the affected surface.

Part: multiple part numbers (enclosure)



# Attach the top speaker adhesive

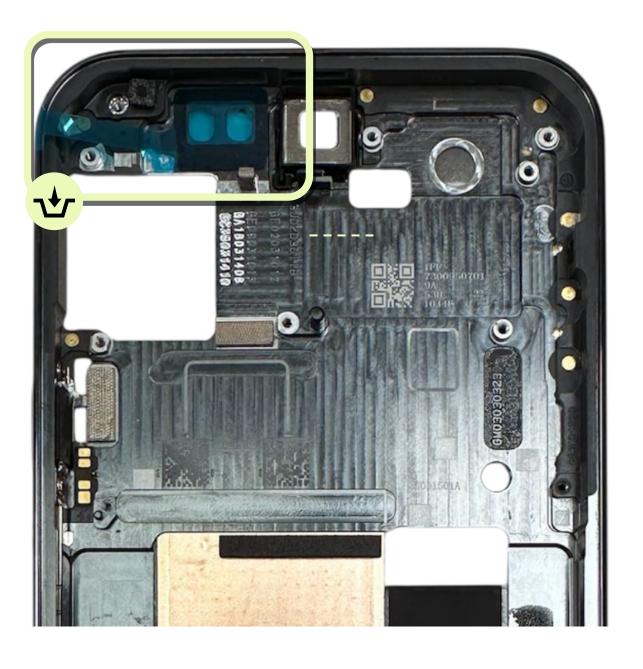
Attach the top speaker adhesive to the top with ESD tweezers.

**Part: G806-13668-01** (top speaker adhesive)



#### **Use caution**

Don't cover the speaker ports with the top speaker adhesive.



## Attach the FoF

- Align from the **dashed line** on the enclosure Fig 1.
- Attach the **FoF** with **ESD tweezers** as shown in Fig 2 and Fig 3.

Parts: G806-11578-00 (FoF)

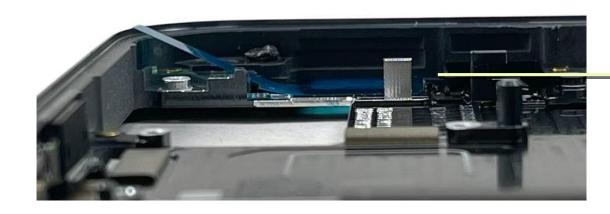


#### Note

This step is only present if the **FoF** is deformed or missing.

Otherwise, it could be reused.

Fig 1



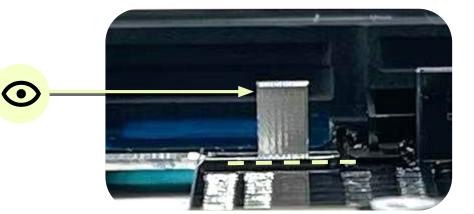
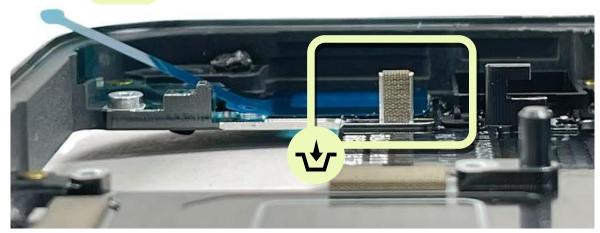
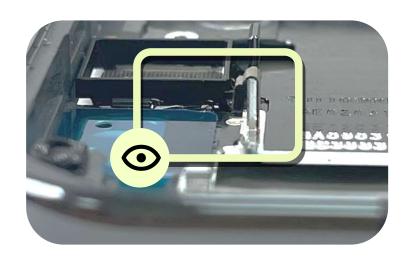


Fig 2

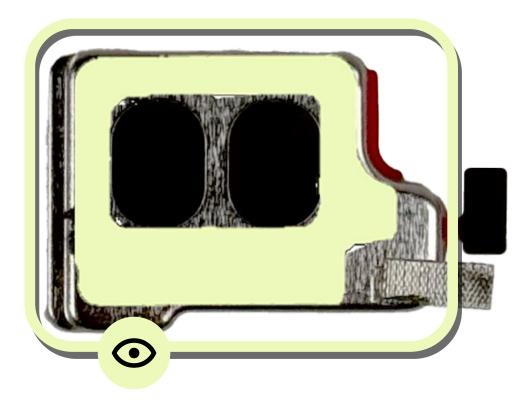




# Reuse the top speaker

- Clean the **top speaker**'s **adhesive** residue with **ESD tweezers**.
- Use a dust-free cloth with IPA to clean the affected surface.

Part: G863-00688-01 (top speaker)



# Attach the top speaker pad

Use **ESD tweezers** to align and adhere the **top speaker pad** to the embossed lines on the **top speaker**.

Part: G806-11577-00 (top speaker pad)

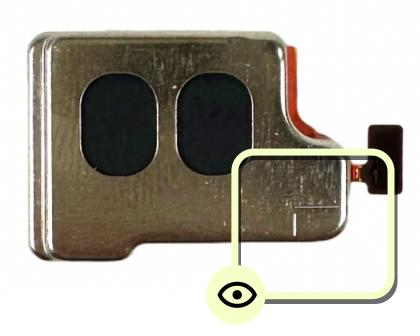


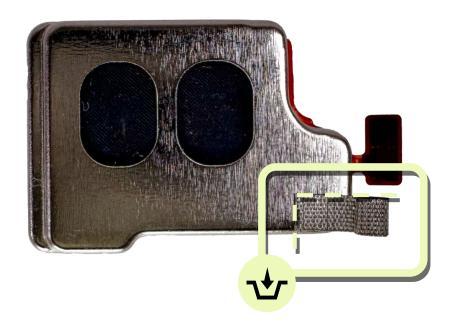
#### Note

Undamaged top speaker pad could be reused.

Damaged top speaker pad needs to be replaced.

Enclosure





# Assemble the top speaker

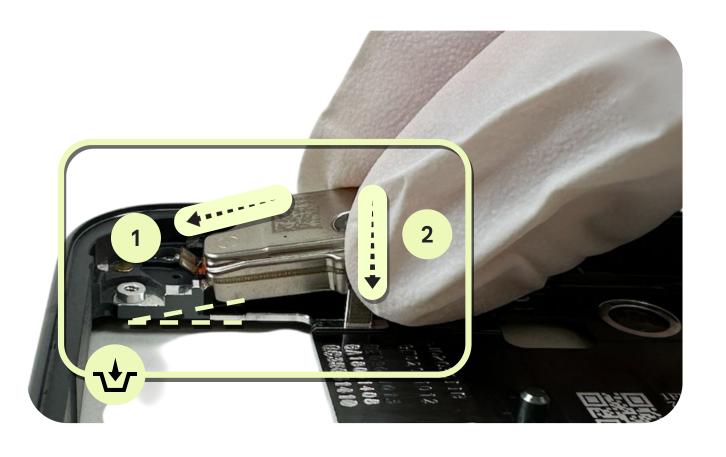
- Gently tear off the top speaker PSA liner.
- Press for 6 seconds manually to ensure adhesion.

Part: G863-00688-01 (top speaker)



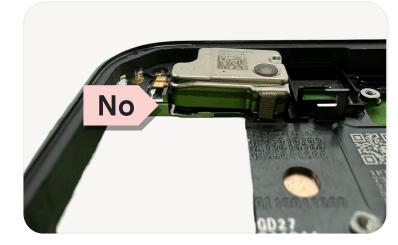
#### Note

If the PSA is accidentally removed along with the liner, replace it.

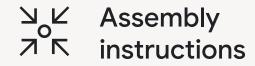




Pad is between the top speaker and the enclosure.



Pad is under the top speaker.



# Rear camera

### Reuse the rear camera

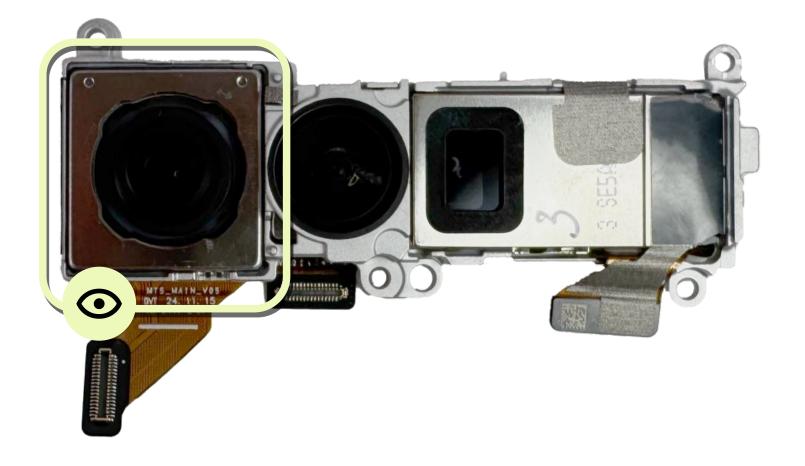
- Clean the residue on the rear camera with ESD tweezers.
- Use a dust-free cloth with IPA to clean the surface where needed.

Part: G949-01380-00 (rear camera)



#### Use caution

Be careful to avoid touching the **rear camera lens**.



Welcome Repair flows **Assembly** Troubleshooting Software Precautions Introduction Disassembly

# Check the logic board

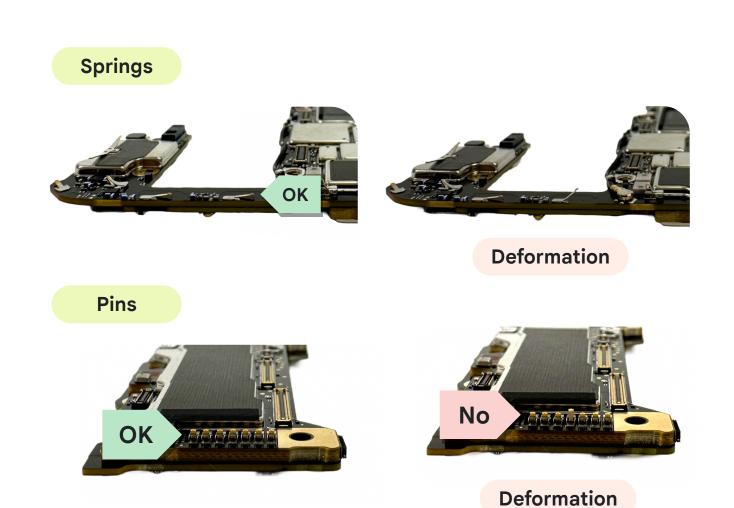
### **General rules**

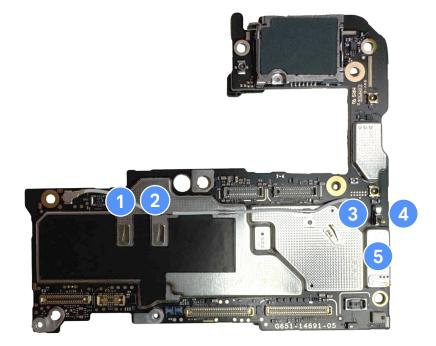


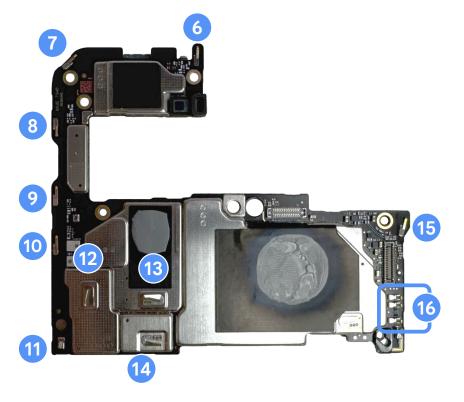
#### Use caution

Before you attach the rear camera to the logic board, inspect the springs for any deformation.

During assembly, be **particularly** cautious to prevent any damage to the springs.







Repair flows Welcome Precautions Introduction Disassembly Assembly Troubleshooting Software

# Reuse the logic board

- Clean any thermal grease and thermal TIM residue from the logic board with an ESD spudger.
- Use a dust-free cloth with IPA to clean the surface where needed.
- Replace the **Thermal TIM**.

Part: multiple part numbers (logic board)



#### Use caution

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

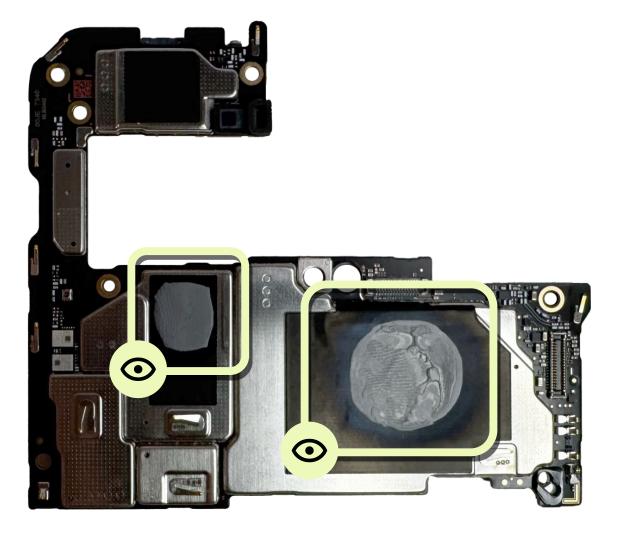


#### Note

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

Undamaged thermal TIM could be reused.

Otherwise, they might need to be replaced.



Repair flows **Assembly** Troubleshooting Software Welcome Precautions Introduction Disassembly

## Assemble the rear camera

Assemble the **rear camera** to the **logic board** at an angle to make sure that **flexes** go on both sides of the **logic board**.

Part: G949-01380-00 (rear camera)

Part: multiple part numbers (logic board)



#### **Use caution**

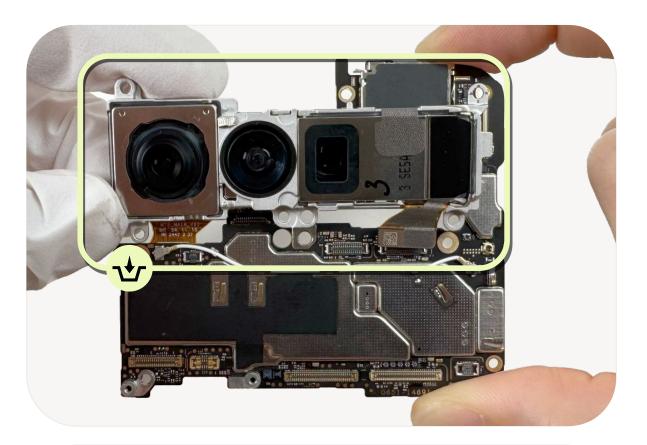
Be careful to avoid damage to the components on the logic board.

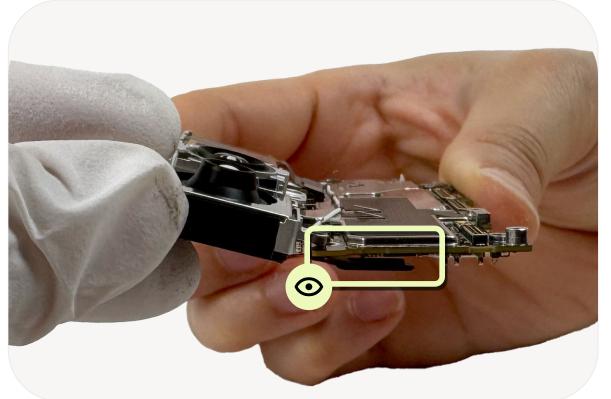


#### Note

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

Don't touch the rear camera lenses.





Rear camera Logic board

ANT4 board

mmWave module

Front camera

Vibrator Bottom speaker Chin board

Battery

BG sub

### Buckle the rear camera

Buckle the three rear camera connectors to the logic board.

Part: G949-01380-00 (rear camera)

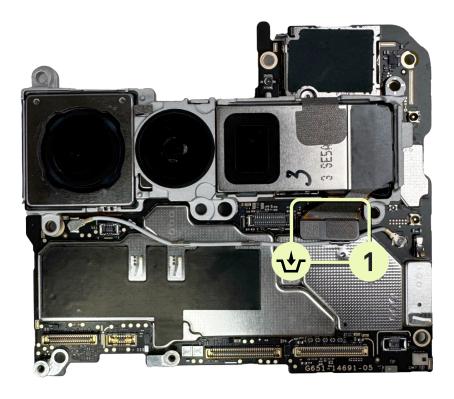
Part: multiple part numbers (logic board)

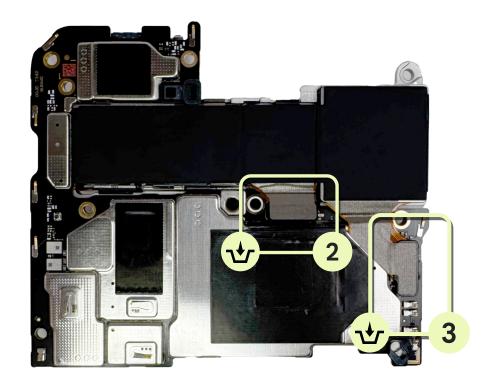


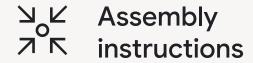
#### Note

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

Don't touch the rear camera lenses.







# Logic board

# Check the logic board

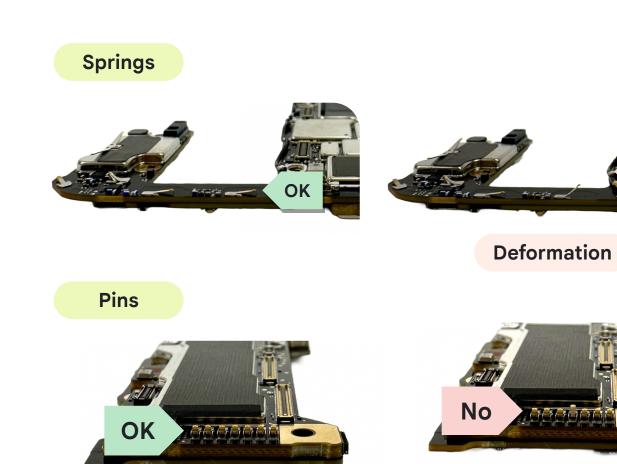
### **General rules**

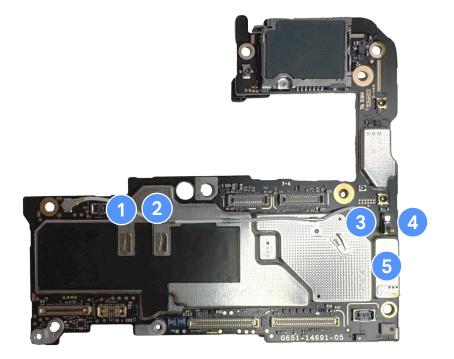


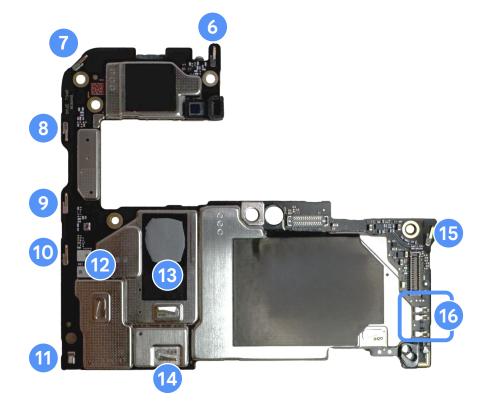
#### Use caution

Before you attach the **rear** camera to the **logic board**, inspect the springs for any deformation.

During assembly, be **particularly cautious** to prevent any damage to the springs.







**Deformation** 

### Attach the P-sensor foam

Attach the **P-sensor foam** to the **logic board** with **ESD tweezers**.

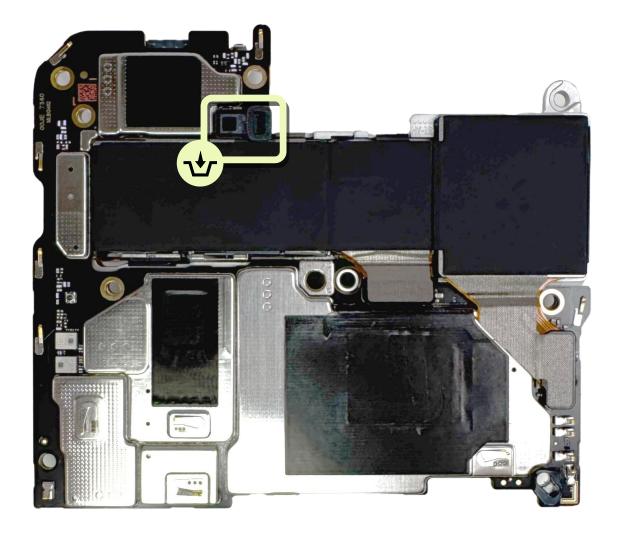
Part: G806-13064-01 (P-sensor foam)

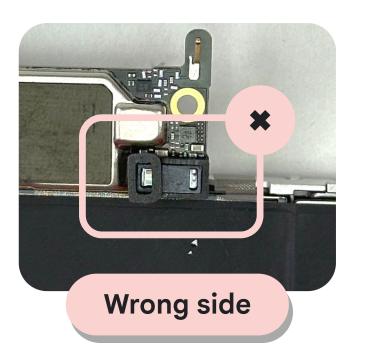


#### Note

Skip this step if the **P-sensor foam** isn't removed or deformed during disassembly.

Use a new **foam** when you replace the **logic board**.







# **Apply the thermal TIM**

Attach the **thermal TIM** to the designed position on the **logic board** with **ESD tweezers**.

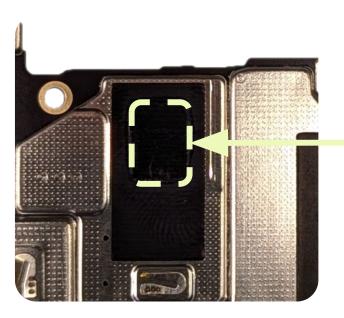
Part: G864-01063-01 (thermal TIM)

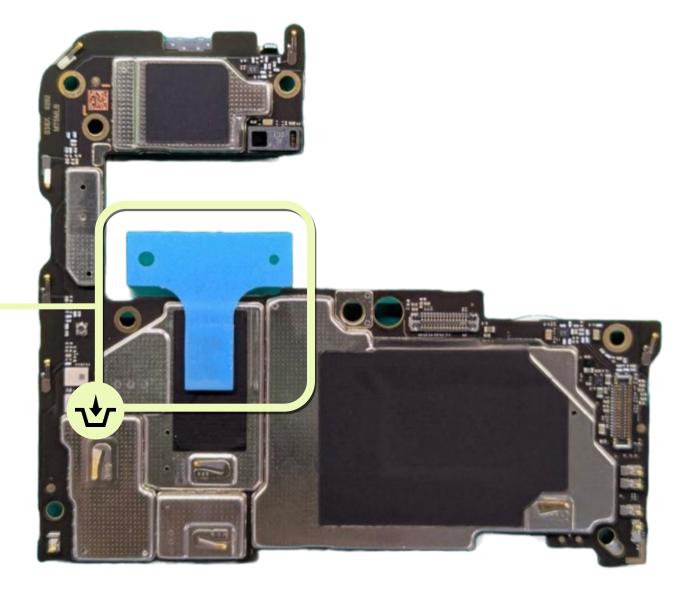


#### Note

Skip this step if the **thermal TIM** is not removed or deformed during disassembly.

Use a new **TIM**, when you replace the **logic board**.





# Apply the thermal grease

- Place the **Pixel 10 Pro XL thermal grease alignment fixture** on the enclosure, make sure it goes around the positioning post and boss hole as shown in Fig 1.
- Fill the cutout on the fixture with **thermal grease**.
- Distribute the grease evenly with an **opening pick**, move it in a single direction as shown in Fig 2.
- Lift the fixture straight up to avoid contamination as shown in Fig 3.

**Part: G160-01459-00** (thermal grease)

Part: G160-01481-00 (thermal grease)



#### Use caution

Don't press the graphite.

Review safety precautions before you begin work.

Clean the **Pixel 10 Pro XL thermal grease alignment fixture** and **opening pick** after each use.

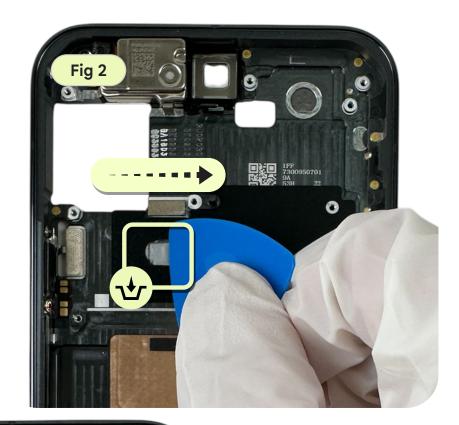
Avoid applying conductive thermal grease to nearby components.



#### Note

Use a cotton swab to clean up any excess thermal grease.







# Assemble the logic board

Assemble the **logic board** to the **enclosure** from the top side at an angle.

Part: multiple part numbers (logic board)



#### Use caution

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



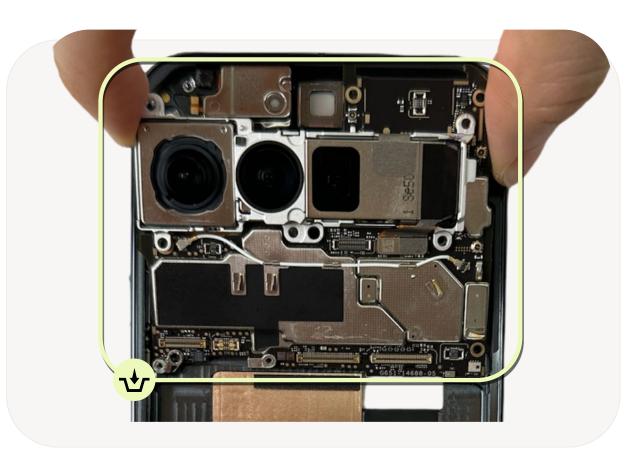
#### Note

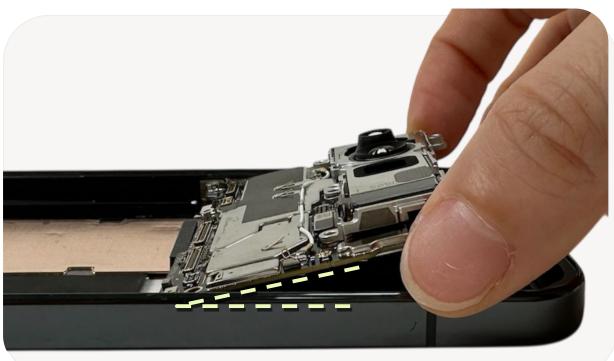
# Don't wear gloves when you handle the **logic board**.

the boss hole.

Make sure that the logic board is properly installed by ensuring the positioning post goes through







Enclosure Top spea

peaker Rear camera

Logic board

ANT4 board

mmWave module

Front camera

Display

Vibrator

Bottom speaker

Chin board

Battery

BG sub

# Install the SIM tray

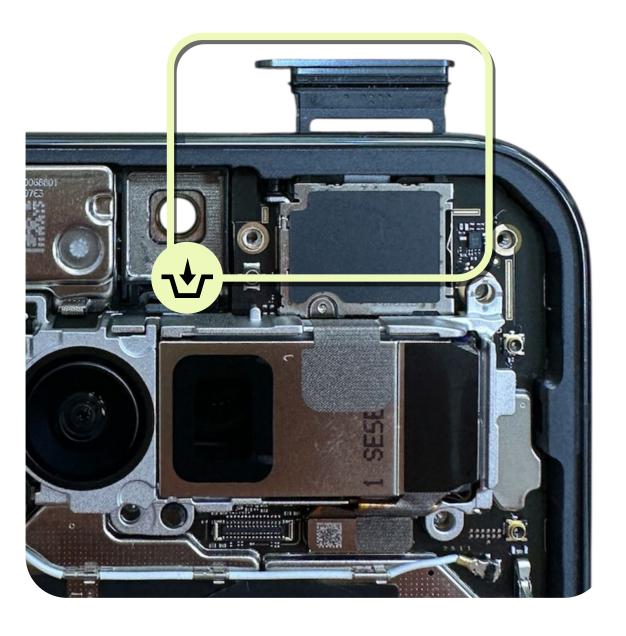
Insert the **SIM tray** into the slot.

Part: multiple part numbers (SIM tray)



#### Note

This step is only present for the **sub6 SKU**.



### Fasten the screw

Fasten the logic board screw with a torx plus 3IP screwdriver.

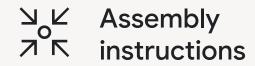
Part: G250-07839-04 (screw)



#### Use caution

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





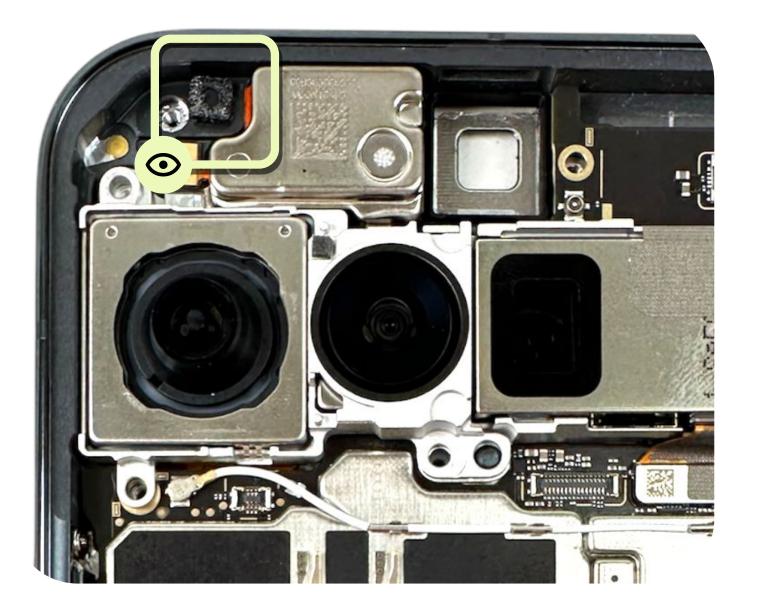
# **ANT4** board

## Clean the enclosure

Enclosure

- Clean the **mic3 mesh** residue on the **enclosure** with **ESD tweezers**.
- Use a **dust-free cloth** with **IPA** to clean the surface where needed.

Part: multiple part numbers (enclosure)



Logic board ANT4 board mmWave module Front camera Display Vibrator Bottom speaker Chin board Battery BG sub

### Reuse the ANT4 board

- Clean the **mic3 mesh** residue on the **ANT4 board** with **ESD tweezers**.
- Use a dust-free cloth with IPA to clean the surface.

Part: G949-01378-00 (ANT4 board)



#### Use caution

Be careful to avoid damage to the components on the **ANT4** board.



#### Note

Don't wear gloves when you handle the **ANT4 board**.

Enclosure



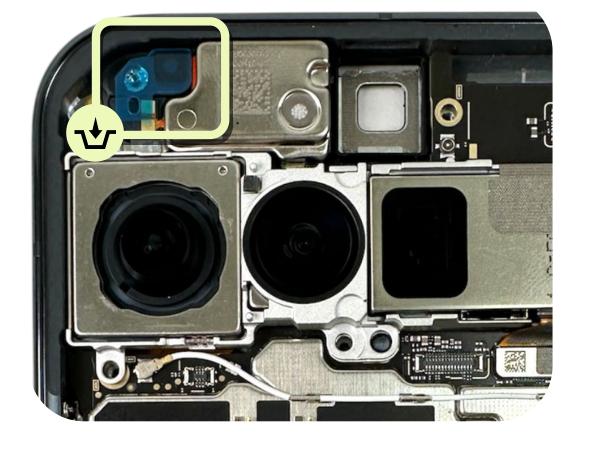
Logic board ANT4 board mmWave module Front camera Display Vibrator Bottom speaker Chin board Battery BG sub

# Replace the mic3 mesh

Attach the mic3 mesh with ESD tweezers.

Part: G806-15772-01 (mic3 mesh)





### Assemble the ANT4 board

Grab the **ANT4 board** securely along with the hook with **ESD tweezers** and attach it to the **enclosure**.

Part: G949-01378-00 (ANT4 board)



#### Use caution

Ensure that the **mic3 mesh liner** is removed before assembly.

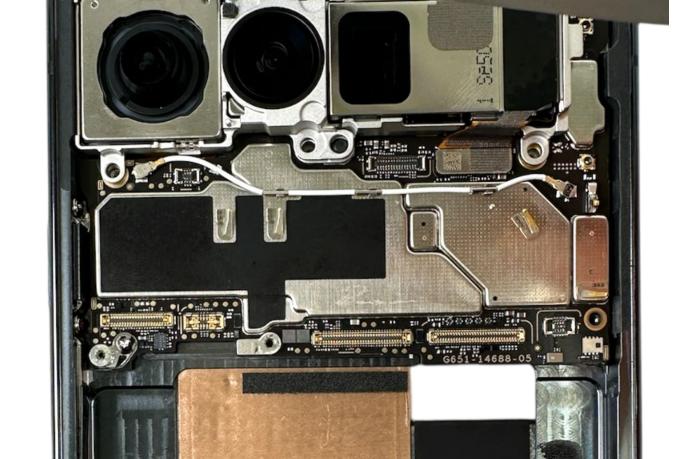
Be careful to avoid damage to components on the **ANT4 board**.



#### Note

Don't wear gloves when you handle the **ANT4 board**.





Display

### Secure the ANT4 board

Fasten the ANT4 board screw with a torx plus 3IP screwdriver.

Part: G250-07891-04 (screw)



#### Use caution

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

Enclosure



### Buckle the coaxial cable

Buckle the **coaxial cable connectors** with an **ESD spudger**.

Part: G821-01174-02 (coaxial cable)



#### Note

Ensure that the connector is in the **right position**.

Check if the cable is fully attached to the **logic board** and the **ANT4 board**.

Enclosure



Logic board ANT4 board mmWave module Front camera Display Vibrator Bottom speaker Chin board Battery BG sub

### Reuse that SPAM flex

- Clean the adhesive residue on the **SPAM flex** with **ESD tweezers**.
- Use a dust-free cloth with IPA to clean the surface.
- Attach the **SPAM flex PSA** to the reused SPAM flex according to the outline.

Part: G949-01381-00 (SPAM flex)

Part: G806-16166-00 (SPAM flex PSA)





### Assemble the SPAM flex

- Apply the **SPAM flex** around the leftmost **camera**.
- Buckle the two SPAM flex connectors.

Part: G949-01381-00 (SPAM flex)



#### Use caution

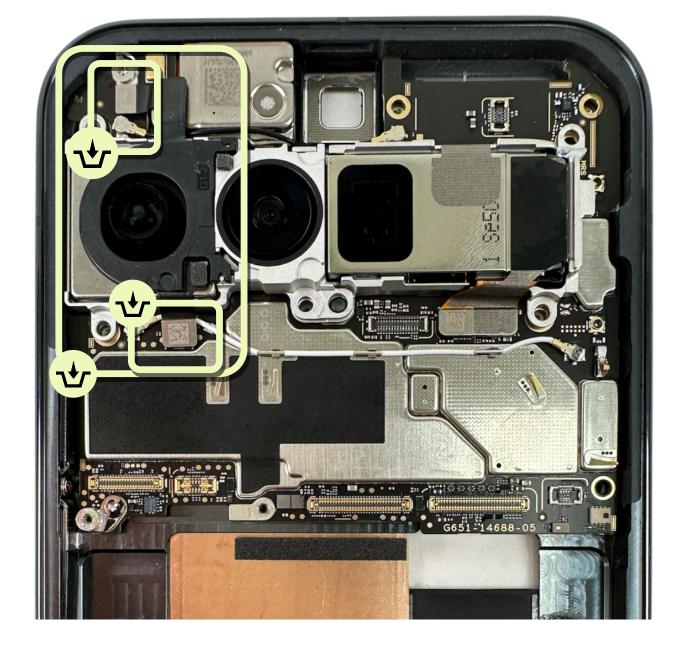
Remove the **SPAM flex** adhesive liner before assembly.

Avoid touching the rear camera lenses.



#### Note

Check if both **connectors** are fully attached to the **logic board** and the **ANT4 board**.

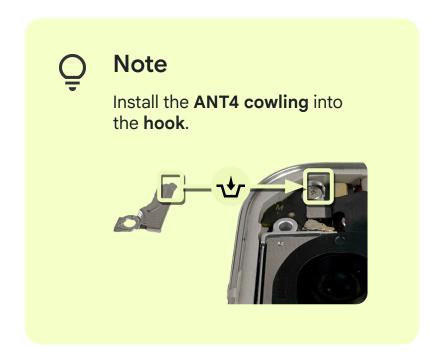


Logic board ANT4 board mmWave module Front camera Display Vibrator Bottom speaker Chin board Battery BG sub

# Assemble the ANT4 cowling

Assemble the ANT4 cowling with ESD tweezers.

Part: G730-09426-02 (ANT4 cowling)





### Fasten the screw

Fasten the ANT4 cowling screw with the torx plus 3IP screwdriver.

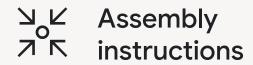
Part: G250-07891-04 (screw)



#### **Use caution**

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





# mmWave module

### Reuse the mmWave module

- Clean the **mmWave TIM** residue with the **ESD spudger**.
- Use a dust-free cloth with IPA where needed.

Part: G949-01383-00 (mmWave module)



#### Note

This step is only present for the **mmWave SKU**.



# Apply the thermal pad\_mmWave

- Align the **thermal pad\_mmWave** with **ESD tweezers** and press gently with your hand.
- Carefully remove the **liner**.

**Part: G864-01053-01** (thermal pad\_mmWave)

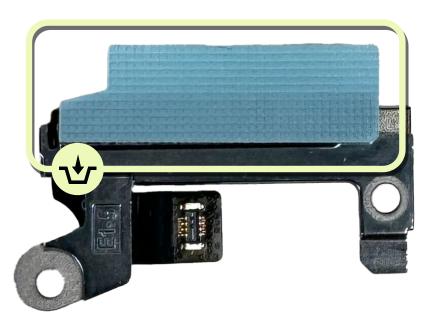


#### Note

Undamaged **mmWave TIM** could be reused.

Otherwise, they might need to be replaced.

This step is only present for the **mmWave SKU**.



# Assemble the mmWave module or coaxial cable cowling

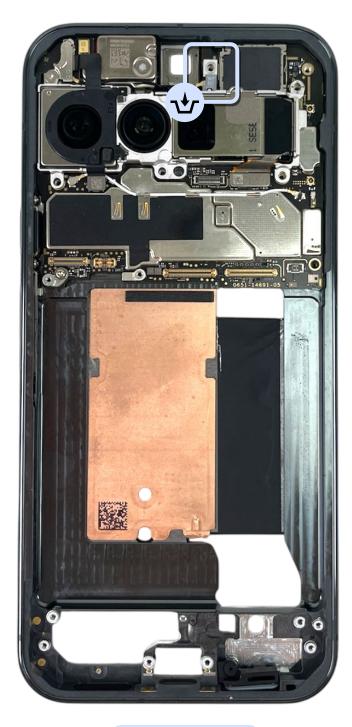
Assemble the mmWave module or the coaxial cable cowling.

Part: G949-01383-00 (mmWave module)

Part: G850-00697-01 (coaxial cable cowling)



mmWave SKU



Sub6 SKU

### Connect the mmWave module

Buckle the mmWave module connector.

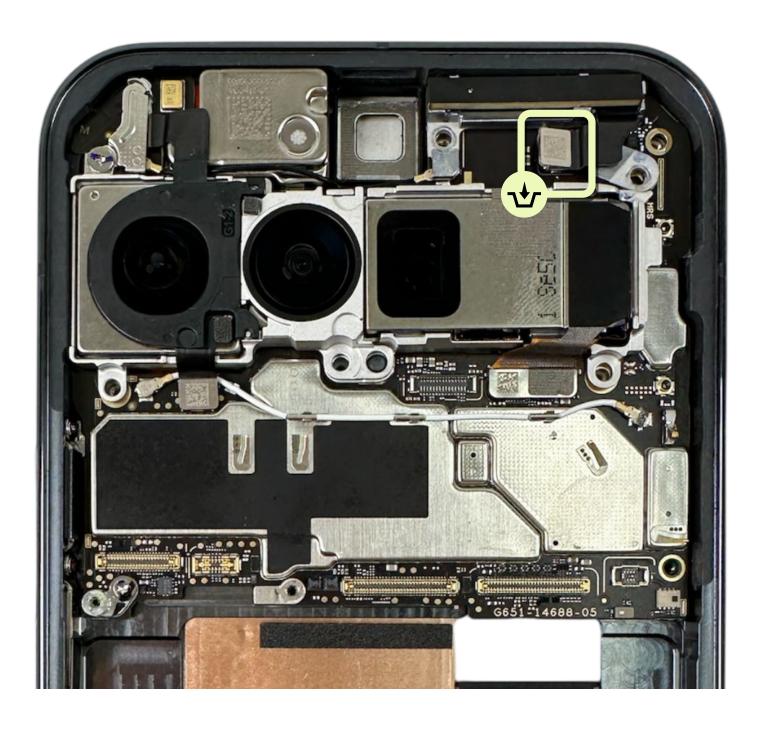
Part: G949-01383-00 (mmWave module)



#### Note

Check that the **connector** is fully attached to the **logic board**.

This step is only present for the mmWave SKU.



### Fasten the screws

Fasten the mmWave module or coaxial cable cowling screws with a torx plus 3IP screwdriver.

Part: G250-07839-04 (screw)

Part: G250-07891-04 (screw)



#### Use caution

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



mmWave SKU

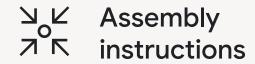
A: G250-07839-04

B: G250-07891-04



Sub6 SKU

A: G250-07839-04\*2



# Front camera

### Clean the enclosure

- Clean the adhesive residue on the **enclosure** with **ESD tweezers**.
- Use a dust-free cloth with IPA to clean the surface.

Part: multiple part numbers (enclosure)



#### Note

Undamaged **FCAM adhesive** could be reused.

Otherwise, it might need to be replaced.



### Reuse the front camera

- Clean the adhesive residue on the **front camera** with **ESD tweezers**.
- Use a dust-free cloth with IPA to clean the surface.

Part: G949-01379-00 (front camera)



#### Use caution

Be careful to avoid touching the **front camera lens**.



### Attach the FCAM adhesive

- Attach the **FCAM adhesive** to the **enclosure** with **ESD tweezers**.
- Apply a gentle pressure to ensure proper attachment.

Part: G806-14192-01 (FCAM adhesive)



### Insert the front camera

- Tear off the **liner** and assemble the **front camera** to the **enclosure**.
- Apply gentle pressure on the **camera** area to ensure proper attachment.
- Connect the **front camera** to the **logic board**.

Part: G949-01379-00 (front camera)



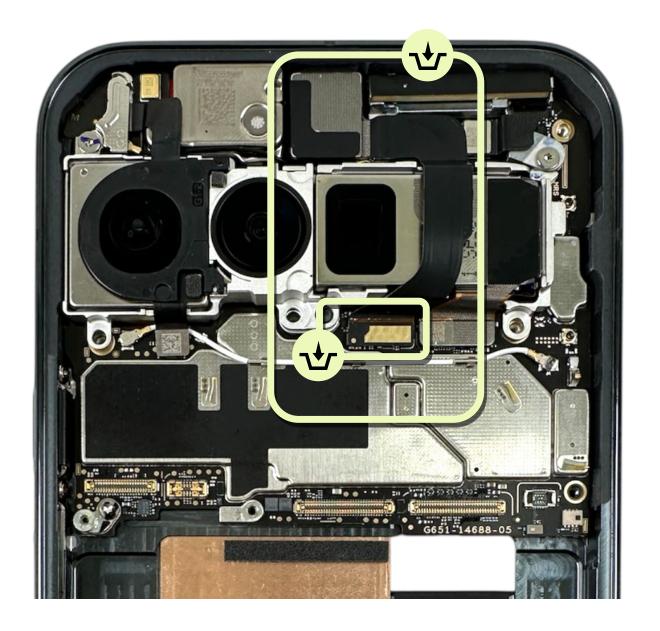
#### Use caution

Be careful to avoid touching the **front camera lens**.



#### Note

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



### Assemble the FCAM cowling

- Gently push and route the **coaxial cable** under **top speaker** and **front camera module** bottom side.
- Assemble the **FCAM cowling** to the **enclosure** at an angle to the top.

Part: G730-09322-01 (FCAM cowling\_mmWave)

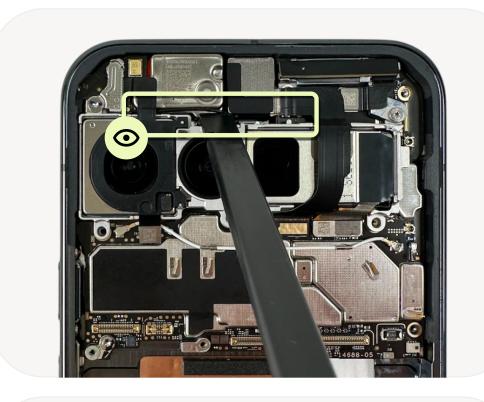
Part: G730-09322-11 (FCAM cowling\_Sub6)



#### Note

Make sure that the **FCAM cowling** goes into the enclosure slot.







### Fasten the screw

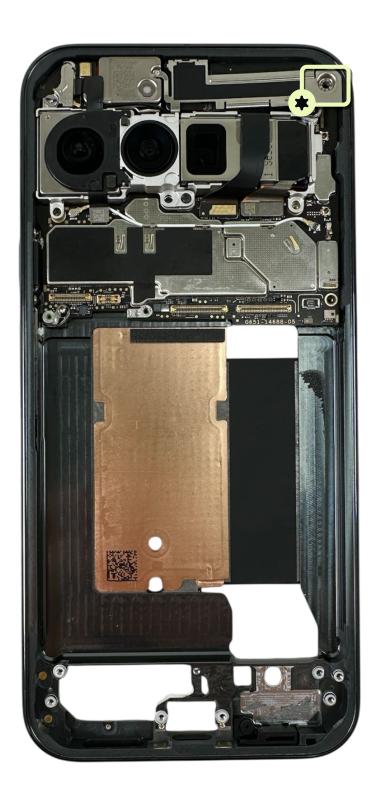
Secure the FCAM cowling screw with a torx plus 3IP screwdriver.

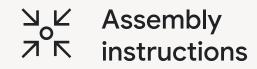
Part: G250-07891-04 (screw)



#### Use caution

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





# Display

### Reuse the enclosure

- Inspect the **enclosure** for any adhesive residue.
- Carefully and slowly peel off the adhesive by hand in one piece.
- Use an **ESD spudger** to clean it. If needed, use a **dust-free cloth** with **IPA** to clean the surface.

Part: multiple part numbers (enclosure)



# Apply the primer on enclosure

- Apply IPA around the edges of the enclosure with a dust-free cotton swab.
- Apply 3M 111 primer around the edges of the enclosure with a dust-free cotton swab.

Part: multiple part numbers (enclosure)



#### Use caution

After the **primer** is applied, complete assembly within 25 minutes.



### Align the adhesive

- Slowly remove the larger liner from the **adhesive sheet** to expose the adhesive.
- Place the adhesive according to the outline of the enclosure.

Part: G806-15948-01 (display adhesive)



#### Use caution

Don't touch the adhesive.

If it gets dirty, replace it with a new one.

During assembly, handle the springs with care to avoid causing damage.



#### Note

Make sure that the **adhesive** fits properly onto the **enclosure**.



sure Top speaker Rear camera Logic board ANT4 board mmWave module Front camera **Display** Vibrator Bottom speaker Chin board Battery

BG sub

### Activate the adhesive (first time)

Gently press around the edges of the **enclosure** with the **ESD spudger** to strengthen the bond between the **enclosure** and the **adhesive**.



# Remove the liner (first layer)

Carefully pull the tab to remove the **liner**'s first layer. Avoid lifting the **adhesive**.



Use caution

Don't remove the second layer of the liner.



### Activate the adhesive (second time)

Gently press around the edges of the **enclosure** with the **ESD spudger** to strengthen the bond between the **enclosure** and the **adhesive**.



# Check the display



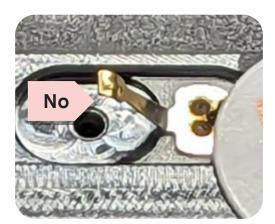
#### Use caution

Before you assemble, inspect the **display** for any spring deformation.

During assembly, handle the springs with care to avoid damage.

### **General rules**

#### **Spring**







Enclosure

op speaker

Rear camer

Logic board

ANT4 board mr

mmWave module

Front camera **Display** 

Vibrator

Bottom speaker

Chin board

Battery

BG sub

Repair flows Software Welcome Precautions Introduction Disassembly Assembly Troubleshooting

# Prepare the display

- If you use a new display, remove the shim at the bottom, label, P-sensor and **FCAM liners.**
- Inspect the reused display for any adhesive residue.
- Carefully and slowly peel off the adhesive with your hand in one piece.
- Use the ESD spudger to clean it. If needed, use a dust-free cloth with IPA to clean the surface.

Part: G949-01360-00 (display module)





**Reused display** 

**New display** 

Logic board

mmWave module

Front camera

Display

Battery

BG sub

# Apply the primer on display

- Apply **IPA** around the edges of the **display module** with a **dust-free cotton swab**.
- Apply 3M 111 primer around the edges of the display module with a dust-free cotton swab.

Part: G949-01360-00 (display module)



#### **Use caution**

When you apply IPA and AP111 primer to the display module, avoid touching the copper and the sponge areas.

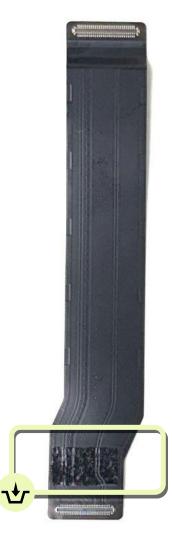
After the primer is applied, complete assembly in 25 minutes.



### Reuse the DJ flex

- Clean any **DJ shear PSA** residue from the **DJ flex** with an **ESD spudger**.
- Use a dust-free cloth with IPA to clean the surface where needed.

Part: G652-10410-04 (DJ flex)



### Connect the DJ flex

- Apply the **DJ flex PSA** to the **DJ flex** and position it to the lower right corner of the slanted indent on the **flex**.
- Connect the DJ flex to the display module.

Part: G652-10410-04 (DJ flex)

Part: G806-14563-01 (DJ flex PSA)



#### Use caution

Don't remove the liner yet.

Avoid scratching the flex against the **graphite**.

Pressure should be applied straight downward on the connector, not against any part of the flex.

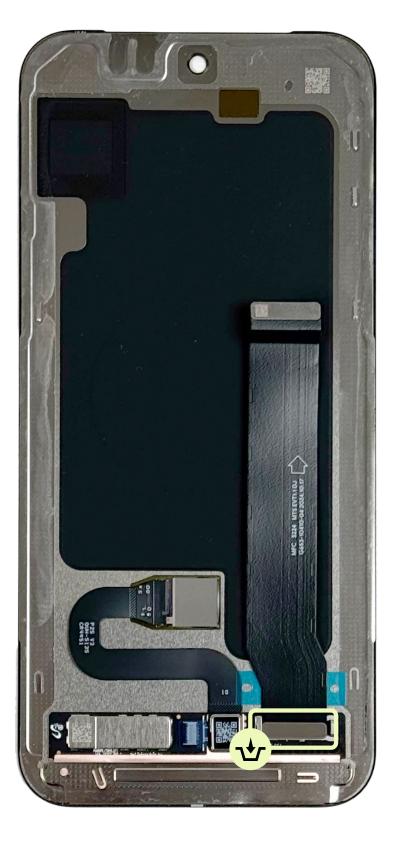


#### Note

Avoid damage to the springs.

Be mindful of the orientation of the flex.





Enclosure

op speaker

Rear camera

Logic board

ANT4 board

mmWave module

Front camera

**Display** Vibrator

Bottom speaker

Chin board

Battery

BG sub

Repair flows Software Welcome Precautions Introduction Disassembly Assembly Troubleshooting

# Insert the display cowling

- Gently push the display cowling inside the left hook to snap it into place.
- Remove the DJ flex PSA liner and gently press on the adhesive area to ensure attachment.

Part: G730-09238-01 (display cowling)



#### Use caution

Avoid scratching the flex against the **graphite**.



ANT4 board Display BG sub Logic board mmWave module Vibrator Bottom speaker Chin board Battery Front camera

# Remove the liner (second layer)

Carefully pull the tab to remove the **liner**'s second layer. Avoid lifting the **adhesive**.



### Position the DJ flex

Insert the loose end of the **DJ flex** into the opening on the **enclosure**.



#### Use caution

Don't touch the adhesive.

Avoid scratching the flex against the **graphite**.

Make sure that the flex **doesn't** go through the lower opening to avoid graphite breakage.



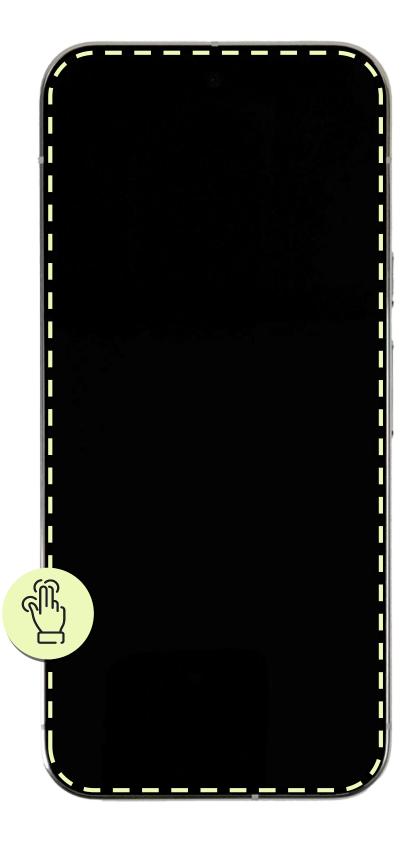
### Activate the adhesive

- Attach the **display module** to the **enclosure** by aligning and lowering it vertically.
- Press along the **display bezel** with both hands to ensure proper attachment.



#### Use caution

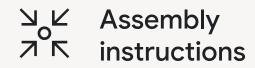
Begin by pressing the center of the top edge, then continue along the two longer sides, and finish with the bottom edge.



# Connect the display

Connect the **DJ flex** to the **logic board**, applying even pressure across the connector.





# Vibrator

# Prepare for vibrator attachment

- Remove any **adhesive** residue in the vibrator slot with the **ESD spudger**.
- Use a dust-free cloth with IPA to clean the surface where needed.

Part: multiple part numbers (enclosure)

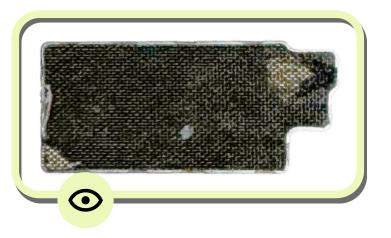


### Reuse the vibrator

- Clean the residue on the vibrator with ESD tweezers.
- Use a dust-free cloth with IPA to clean the surface where needed.
- Replace the **vibrator PSA**.

Part: G710-07500-00 (vibrator)

Part: G806-13155-00 (vibrator PSA)



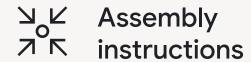


### Attach the vibrator

- Remove the vibrator PSA liner.
- Slot the **vibrator** into place according to the upper right corner.
- Press for **5 seconds** manually.

Part: G710-07500-00 (vibrator)

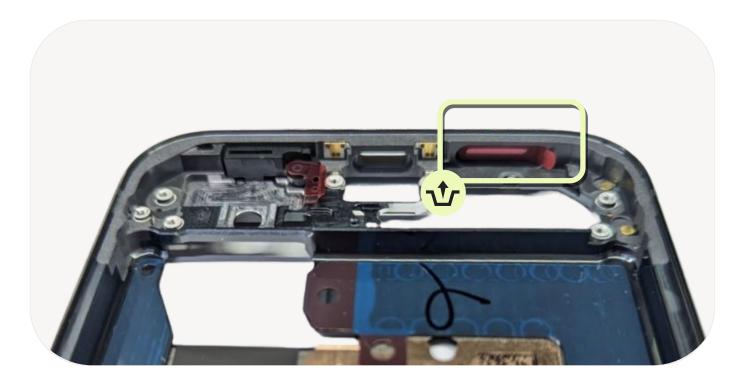




# **Bottom speaker**

# Apply the dry lube

- Remove the **metal mesh liner** on the **enclosure**.
- Apple dry lube to the **bottom speaker** port.





# Embed the bottom speaker

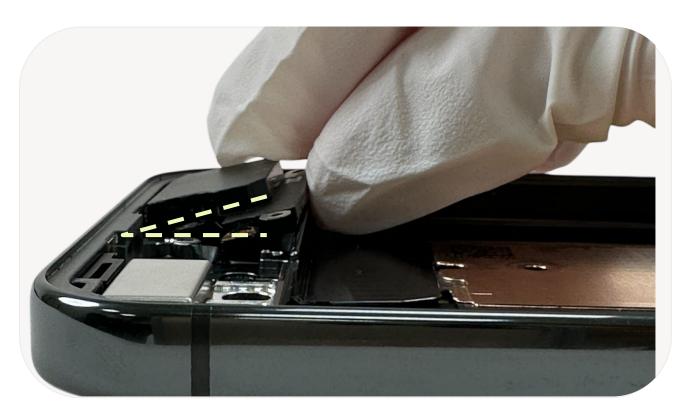
Slot the **bottom speaker** into the **enclosure** at an angle.

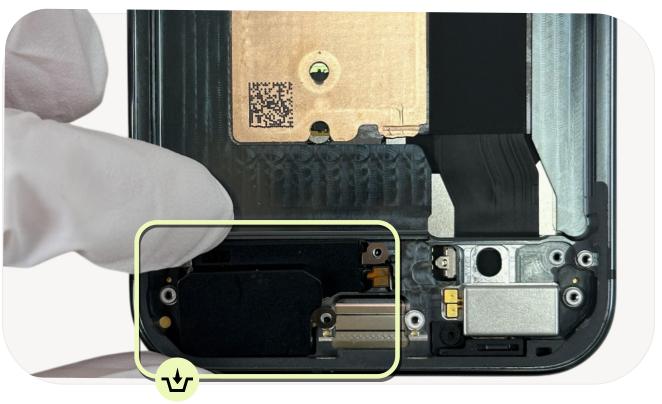
Part: G863-00655-01 (bottom speaker)



#### Note

Make sure that the **bottom speaker** goes under the enclosure rim.





Enclosure

Top speaker

ear camera

Logic board

ANT4 board

mmWave module

Front camera

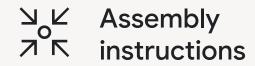
ay Vibrator

Bottom speaker

Chin board

Battery

BG sub



# Chin board

## Check the chin board

#### .

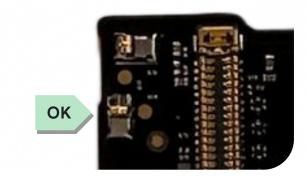
#### Use caution

Before you assemble the **chin board**, check for springs and pins deformation.

Be **particularly cautious** to prevent any damage to the springs.

#### **General rules**

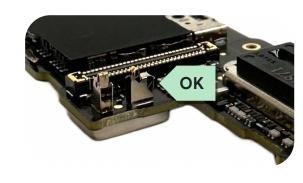
#### Bird view

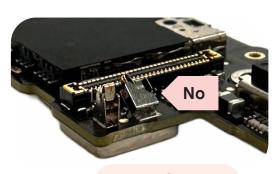




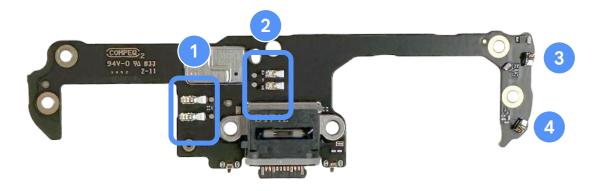
Missing

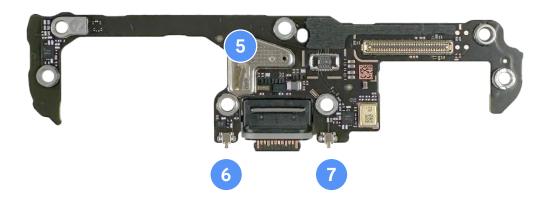
#### Side view











Enclosure

op speaker

Rear camera

Logic board

ANT4 board

mmWave module

Front camera

Display

Vibrator Bottom speaker

Chin board

Battery

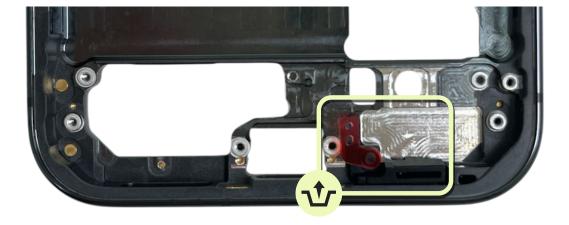
BG sub

## Prepare the chin board

- When you use a new **enclosure**, remove the **mic1 bracket liner**.
- When you replace the chin board, remove the mic1 Kapton from the new chin board.

Part: multiple part numbers (enclosure)

Part: G949-01377-00 (chin board)





#### Use caution

Be careful to avoid damage to the components on the **chin board**.

Make sure that **all liners** are removed before assembly.



#### Note

Don't wear gloves when you handle the **chin board**.



BG sub

Battery

## Install the chin board

- Install the **chin board** downward at a slight angle to make sure that the USB port goes inside the slot on the **enclosure**.
- Fix the **chin board screw** with a **torx plus 3IP screwdriver**.

Part: G250-07839-04 (screw)

Part: G949-01377-00 (chin board)



#### Use caution

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



#### Note

Don't wear gloves when you handle the **chin board**.

Push gently to ensure that the **chin board** goes under the retaining wall and that the lower two springs touch the metal sheets on the **enclosure**.



Display

## Reuse the CJ flex

- Clean the residue on the CJ flex with ESD tweezers.
- Use a dust-free cloth with IPA to clean the surface where needed.
- Replace the **CJ flex PSA** to the very top of the curve.

Part: G949-01382-00 (CJ flex)

Part: G806-14188-01 (CJ flex PSA)





Enclosure Top speaker Rear camera Logic board ANT4 board mmWave module Front camera Display Vibrator Bottom speaker **Chin board** Battery BG sub

## Connect the chin board

- Remove the **CJ flex PSA liner** and gently press on the adhesive area to ensure attachment.
- Connect the **chin board** to the **logic board** with the **CJ flex**.

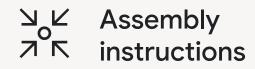


#### Note

Ensure that **CJ flex connectors** are fully attached to both the **logic board** and the **chin board**.



closure Top speaker Rear camera Logic board ANT4 board mmWave module Front camera Display Vibrator Bottom speaker **Chin board** Battery BG sub-



## Battery

## Clean the residue

- Remove any adhesive residue in the **battery** area with the **ESD spudger**.
- Apply **IPA** with a **dust-free cloth** where needed.

Part: multiple part numbers (enclosure)



d **Battery** BG sub

## Apply the primer on enclosure

- Before installation, remove any debris or loose screws from the enclosure.
- Apply IPA on the enclosure with a dust-free cotton swab.
- Apply 3M 111 primer onto the enclosure with a dust-free cotton swab.

Part: multiple part numbers (enclosure)



#### Use caution

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



Battery

ANT4 board

## Align the battery

- Confirm the **battery** model to be **G6X1Z**. If the model number is not G6X1Z, don't use the battery.
- Use a absorption-bulb to pick up the battery.
- Align the white liner to the lower left corner of the depression.
- Gently press the **battery** down with the **suction bulb**.
- Remove the white liner from the top side to lift it up after assembling the battery.

Part: G949-01616-00 (battery)



#### Use caution

Review safety precautions before work.



#### Note

The white liner makes sure the battery is in the correct position.

Don't remove it prior installation.





Repair flows Welcome Precautions Introduction Disassembly Assembly Troubleshooting Software

## Prepare to press

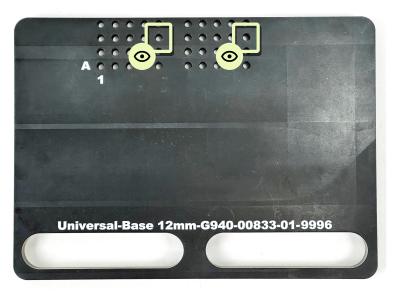
- Place the universal holder in the C5 position on the universal base 12 mm.
- Place the universal supporting rubber and the universal holder limiting block through the positioning posts on the universal holder in this order, as shown in Fig 1.
- Place the **device** and **lock** it as shown in Fig 2.
- Place the Pixel 10 Pro XL battery press rubber through the positioning posts as shown in Fig 3.



#### Note

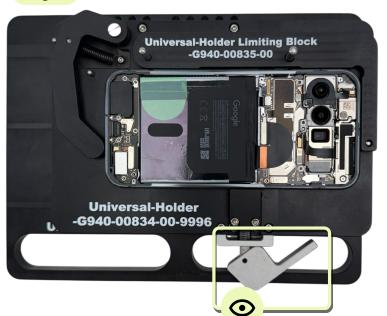
Make sure that the universal holder is in the right position.

Ensure that the **display** is already assembled.













## Prepare to press

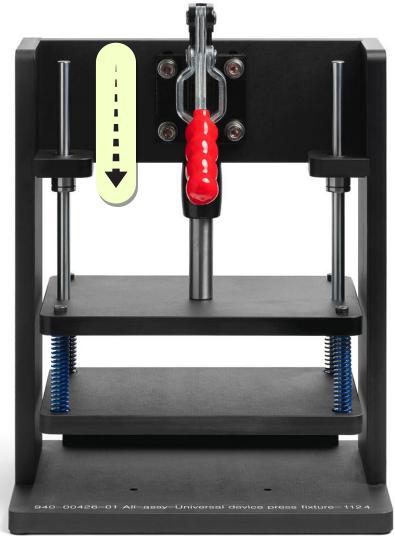
- Place the universal press plate 12 mm on the universal base 12 mm.
- Place the stack in the **universal press fixture**.
- Press the handle down for **30 seconds**.
- Restore the handle to the original position and remove the stack.



#### Use caution

Keep hands clear during operation.





Enclosure

Top speaker

Rear camera

Logic board

ANT4 board

mmWave module

Front camera

Display Vibrator

Bottom speaker

Chin board

Battery

BG sub

Welcome Repair flows Assembly Troubleshooting Software Precautions Introduction Disassembly

## Attach the RJ flex

Connect the **chin board** to the **logic board** with the **RJ flex**.

Part: G652-10612-01 (RJ flex)



#### Note

Ensure that the **RJ flex** connectors are fully attached to both the **logic board** and the chin board.



Battery

Display

## Secure the CLB cowling

- Place the CLB cowling in position with ESD tweezers, making sure the screw holes align with those of the components below.
- Fasten the **five CLB cowling screws** and **two RJ flex screws** in a sequence with a **torx plus 3IP screwdriver**.

Part: G730-09320-01 (CLB cowling)

Part: G250-08246-05\*5 (screw)

Part: G250-07839-03\*2 (screw)



#### **Use caution**

Be careful to avoid damage to the components on the **chin board**.

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 and damage the battery or the product.



A: G250-08246-05

B: G250-07839-03

nclosure

Top speaker

Rear camer

Logic board

ANT4 board

mmWave module

Front camera

Display

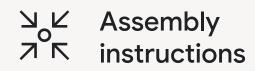
Vibrator

Bottom speaker

Chin board

Battery

BG sub



# BG sub

## Place the MLB cowling

- Place the **MLB cowling** in position with **ESD tweezers**, making sure the screw holes align with those of the components below.
- Fasten the 4 MLB cowling screws in a sequence with a torx plus 3IP screwdriver.

Part: G730-09325-14 (MLB cowling)

Part: G250-08246-05\*4 (screw)



#### 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 and damage to the battery or the product.



Display

## Apply the primer on enclosure

- Apply IPA around the edges of the enclosure with a dust-free cotton swab.
- Apply **3M 111 primer** around the edges of the **enclosure** with a **dust-free cotton swab**.

Part: multiple part numbers (enclosure)



#### **Use caution**

After the **primer** is applied, complete assembly within 25 minutes.



## Connect the battery

- Buckle the **battery connector**.
- Power on to check if the device works properly, power off the device after you check it.



#### Note

Ensure that the **battery connector** is fully attached to the **logic board**.





Display

## Align the adhesive

- Slowly remove the larger liner from the **adhesive sheet** to expose the adhesive.
- Place the adhesive according to the outline of the enclosure.

Part: G806-15981-01 (BG adhesive)



#### Use caution

Don't touch the adhesive.

If it gets dirty, replace it with a new one.

During assembly, handle the springs with care to avoid damage.



#### Note

Make sure that the **adhesive** fits properly onto the **enclosure**.



BG sub

## Activate the adhesive (first time)

Gently press around the edges of the **enclosure** with an **ESD spudger** to strengthen the bond between the **enclosure** and the **adhesive**.



#### Use caution

Don't touch the RCAM area during the process.



BG sub

## Remove the liner (first layer)

Carefully pull the tab to remove the liner's first layer. Avoid lifting the adhesive.



#### Use caution

*Don't* touch the **RCAM area** during the process.

Don't remove the second layer of the liner.



BG sub

ANT4 board

## Activate the adhesive (second time)

Gently press around the edges of the **enclosure** with the **ESD spudger** to strengthen the bond between the **enclosure** and the **adhesive**.



#### Use caution

Don't touch the RCAM area during the process.



BG sub

Battery

## Prepare the BG sub

- When you use a new **BG sub**, remove the **RCAM protective films**.
- Inspect the reused **BG sub** for any adhesive residue.
- Carefully and slowly peel off the adhesive by hand in one piece.
- Use the **ESD spudger** to clean it. Use a **dust-free cloth** with **IPA** to clean the surface if needed.

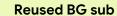
Part: multiple part numbers (BG sub)



#### Use caution

Be careful to avoid touching the **rear camera lens**.







New BG sub

Enclosure

Top speaker

Rear camera

Logic board

ANT4 board

mmWave module

Front camera

Vibrator

Bottom speaker

Chin board

Battery

ery BG sub

## Apply the primer on BG sub

- Apply **IPA** around the edges of the **BG sub** with a **dust-free cotton swab**.
- Apply 3M 111 primer around the edges of the BG sub with a dust-free cotton swab.

Part: multiple part numbers (BG sub)



#### Use caution

After the **primer** is applied, complete assembly within 25 minutes.



## Connect the BG sub

- Use the absorption-bulb to prop up the BG sub.
- Connect the BG flex to the logic board, applying even pressure across the connector.



#### Use caution

Pressure should be applied straight downward on the connector, not against any other part of the flex.



BG sub

Chin board

## Insert the BG cowling

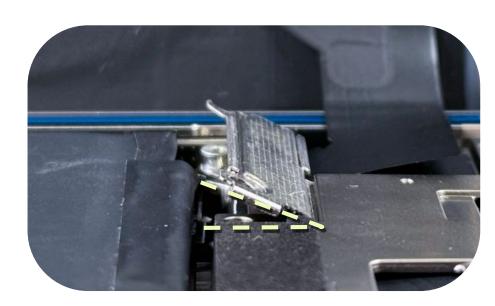
Install the **BG cowling** upward at an angle so the tongue goes inside the groove.

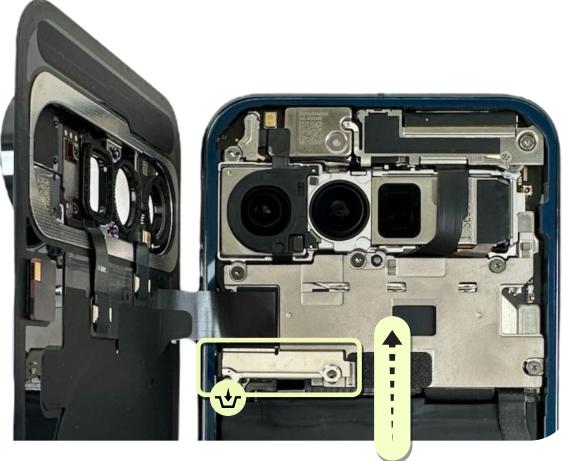
Part: G730-09327-03 (BG cowling)



#### Use caution

Avoid damage to the BG sub flex.







## Tighten the screws

Fasten two BG cowling screws with a torx plus 3IP screwdriver.

Part: G250-08169-03\*2 (screw)



#### 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 and damage the battery or the product.



Enclosure

Top speaker

Rear camera

Logic board

ANT4 board

mmWave module

Front camera

Display Vibrator

Bottom speaker

Chin board

Battery



## Remove the liner (second layer)

Carefully pull the tab to remove the **liner's** second layer. Avoid lifting the **adhesive**.



#### Use caution

Avoid damage to the **BG sub flex**.

Don't touch the **RCAM area** during the process.



Top speaker Rear camera Logic board ANT4 board mmWave module Front camera Display Vibrator Bottom speaker Chin board Battery BG sub

## Attach the BG sub

- Align and lower the **BG sub** to the **enclosure**.
- Press along the **BG bezels** with both hands to ensure proper attachment.



#### Note

To begin, press the center of the top edge, then continue along the two longer sides, and finish with the bottom edge.

Don't press directly on the visor area in this process.



BG sub

## Prepare to press

- Place the **Pixel universal holder** in the **B1 position** on the **Pixel universal base.**
- Place the Pixel universal supporting rubber and the Pixel universal holder limiting block through the positioning posts on the Pixel universal holder in this order, as shown in Fig 1.
- Place the **device** and **lock** it as shown in Fig 2.
- Place the **Pixel 10 Pro XL BG press rubber** through the positioning posts as shown in Fig 3.



#### Note

Make sure that the Pixel universal holder is in the right position.







Fig 2







## Prepare to press

- Place the universal press plate 12 mm on the universal base.
- Place the stack in the **Pixel universal press fixture**.
- Press the handle down for **45 seconds**.
- Restore the handle to the original position and remove the stack.



#### Use caution

Keep hands clear during operation.





Battery BG sub



Pixel 10 Pro XL repair manual

# Troubleshooting

Sensor location Mic3 Proximity sensor

Connectors and feature location Top speaker UDFPS

Power Bottom speaker Rear camera

Wireless charge Vibrator Front camera

Mic1 Display USB-C

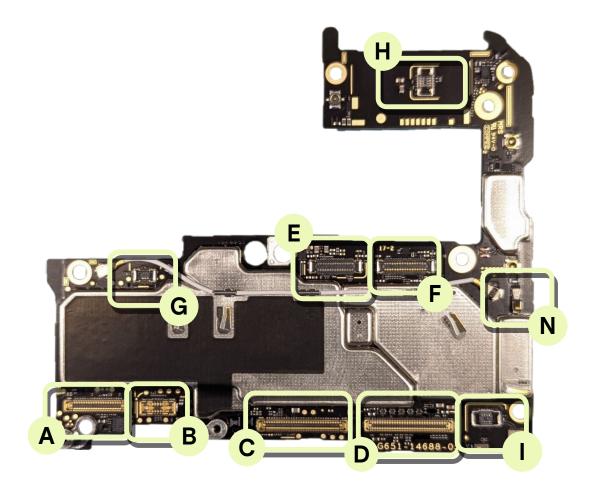
Mic2 NFC mmWave module

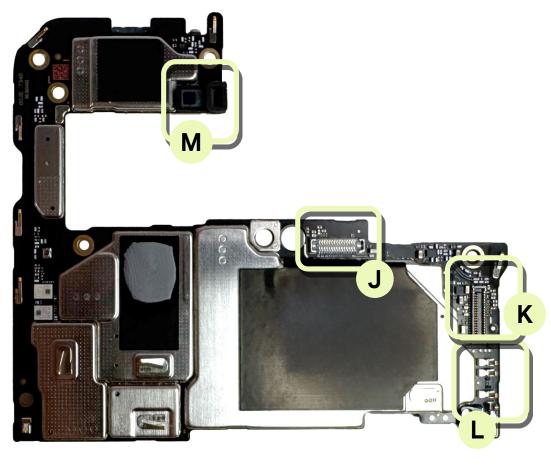
## **Sensor location**

No	Function	Logic board	Chin board	BG sub
1	Light sensor	0		
2	P sensor	0		
3	Barometer	0		
4	Gyroscope	0		
5	Accelerometer	0		
6	Rainbow			Ο
7	LDAF			Ο
8	Magnetic 2		0	
9	BTS			0

#### **Connectors and feature location**

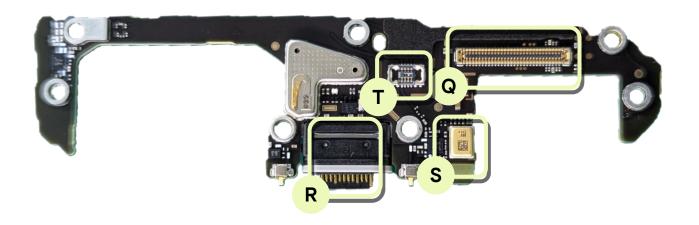
## **Location and description BG** connector Battery connector CJ connector DJ connector FCAM connector Tele camera connector SPAM connector G mmWave module connector RJ flex connector Rear camera UW connector Rear camera main connector Sidekey spring P-sensor or light sensor **UWB** spring

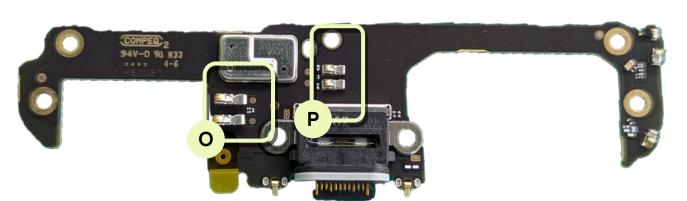


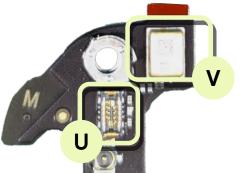


## Connectors and feature location (continued)

## **Location and description** Vibrator spring Bottom speaker spring CJ flex connector **USB** port Mic1 S RJ flex connector SPAM connector Mic3 Top speaker spring









## Connectors and feature location (continued)

# Location and description X DJ flex connector Y UWB Z BG connector a Mic2 b Rainbow c BTS







## **Power**

Symptom	Potential root cause	Procedure	
T001: doesn't power on	Damage	<ul> <li>Inspect the USB-C connector for debris preventing charging.</li> <li>Inspect device for damage.</li> <li>Inspect LDI.</li> </ul>	
T002: powers off suddenly T004: wired charging failure T053: battery damage	Display	<ul> <li>Remove the display module and seat a new one. Charge for 10 minutes to see if the device could power on.</li> </ul>	Disassembly  • Display
T054: battery draining fast T055: device overheats	Connectivity issue	<ul> <li>Remove the BG cowling. Check if the connectivity between the battery connector and the logic board are normal. If they're not fully buckled, reassemble and then test again.</li> </ul>	Connectors location
	Component issue	<ul> <li>Use a good battery and logic board to cross-check with original ones.</li> <li>Replace the defective component.</li> </ul>	Disassembly  Battery  Logic board

## Wireless charge

Symptom	Potential root cause	Procedure	
	Connectivity issue	<ul> <li>Check if the connectivity between BG sub and the logic board is normal.</li> <li>If they aren't fully buckled, reassemble and then test again.</li> </ul>	Connectors location
T003: wireless charging failure			
	Component issue	Use a good <b>BG sub</b> and <b>logic board</b> to cross-check with original ones.	Disassembly
		Replace the defective component.	BG sub
			Logic board

## Mic1

1 Mic1

2 Mic2

3 Mic3

Symptom	Potential root cause	Procedure	
<b>Q</b>	Mesh not clean	<ul> <li>Use a microscope and check the mesh for damage or blockage.</li> <li>Clean the mesh and test audio.</li> </ul>	
T010: mic1 no sound T011: mic1 low sound T012: mic1 distorted sound	Assembly problem	<ul> <li>Disassemble the device, check that the mic1 bracket is fully seated.</li> <li>Check if the chin board mic1 liner and the enclosure mic1 mesh liner is removed.  If it's removed, go to the next step.</li> <li>Test audio again.</li> </ul>	
	Component issue	<ul> <li>Use a good chin board and enclosure to cross-check with original ones.</li> <li>Replace the defective component.</li> </ul>	<ul><li>Disassembly</li><li>Chin board</li><li>Enclosure</li></ul>

## Mic2

Symptom	Potential root cause	Procedure	
<b>Q</b>	Connectivity issue	<ul> <li>Check if the connectivity between the BG sub and the logic board is normal.</li> <li>If they aren't fully buckled, reassemble and then test again.</li> </ul>	Connectors location
T013: mic2 no sound T014: mic2 low sound	Component issue	Use a good <b>BG sub</b> and <b>logic board</b> to cross-check with original ones.	Disassembly
T015: mic2 distorted sound		Replace the defective component.	BG sub
			Logic board



- 1 Mic1
- 2 Mic2
- 3 Mic3

#### Mic3

Symptom	Potential root cause	Procedure	
T016: mic3 - no sound T017: mic3 - low sound T018: mic3 - distorted sound	Connectivity issue	<ul> <li>Check if the connectivity between the SPAM flex, ANT4 board, and logic board are normal.</li> <li>If they aren't fully buckled, reassemble and then test again.</li> </ul>	Connectors location
	Assembly problem	<ul> <li>Check if the enclosure mic3 mesh liner and the ANT4 board mic3 liner are removed.         If they're removed, go to the next step.     </li> <li>Test audio again.</li> </ul>	
1 Mic1 2 Mic2 3 Mic3	Component issue	<ul> <li>Inspect whether the mic3 component is damaged.</li> <li>Use a good ANT board, LDAF and logic board to cross-check with original ones.</li> <li>Replace the defective component.</li> </ul>	Disassembly  SPAM flex  ANT4 board  Logic board

# Top speaker

Symptom	Potential root cause	Procedure	
<b>P</b>	Damage	<ul> <li>Inspect whether the ANT4 board spring and top speaker pad is broken or squeezed.</li> </ul>	
	Internal debris	Disassemble the device and inspect the <b>top speaker</b> .	
T019: top speaker low sound T021: top speaker distorted sound	Connectivity issue	<ul> <li>Check the contact condition between the SPAM flex, top speaker pin contact pad, and the ANT4 board.         If there's no mark on the pin contact pad, it shows poor connectivity.     </li> <li>If marks are observed, clean the pin contact pad and test again.</li> </ul>	Connectors location
	Component issue	<ul> <li>If sound quality is still poor, use a good SPAM flex, top speaker, and ANT4 board to cross-check with original ones</li> <li>Replace the defective component.</li> </ul>	<ul><li>Disassembly</li><li>SPAM flex</li><li>Top speaker</li><li>ANT4 board</li></ul>

## **Bottom speaker**

Symptom	Potential root cause	Procedure	
<b>\$</b>	Mesh problem	<ul> <li>Visually inspect the exterior of the phone to check for a polluted mesh on the bottom speaker port. Use a soft ESD brush to remove any debris.</li> <li>Test audio.</li> </ul>	
T023: bottom speaker no sound T02: bottom speaker low sound T025: bottom speaker distorted sound	Internal debris	<ul> <li>If sound quality is still poor, inspect the mesh and the bottom speaker with a microscope.</li> <li>Disassemble the device and inspect the bottom speaker.</li> </ul>	
	Connectivity issue	<ul> <li>Check the contact condition between the bottom speaker and the chin board pin contact pad.         If there's no mark on the pin contact pad, it shows poor connectivity.     </li> <li>If marks are observed, clean the pin contact pad and test again.</li> </ul>	Connectors location
	Component issue	<ul> <li>If sound quality is still poor, use a good bottom speaker and chin board to cross-check with original ones</li> <li>Replace the defective component.</li> </ul>	<ul><li>Disassembly</li><li>Bottom speaker</li><li>Chin board</li></ul>

#### **Vibrator**

Symptom	Potential root cause	Procedure	
T026: vibrator failure	Connectivity issue	<ul> <li>Check the contact condition between the vibrator pad and the chin board pin contact pad. If there's no mark on the pin contact pad, it shows poor connectivity.</li> <li>If marks are observed, clean the pin contact pad and test again.</li> <li>Test vibrator again. Check the function by triage test.</li> </ul>	Connectors location
	Component issue	<ul> <li>Use a good vibrator and chin board to cross-check with original ones.</li> <li>Replace the defective component.</li> </ul>	Disassembly  • Vibrator  • Chin board

# Display

Symptom	Potential root cause	Procedure	
	Damage	Inspect the <b>display</b> for damage and replace if necessary.	
T027: display blank T028: display dead pixel, dark spots or foreign material			
TO29: display bright pixel, bright or colored spots  TO30: display vertical or horizontal lines  TO31: display black, white or colored screen	Connectivity issue	<ul> <li>Check if the connectivity between the display connector, DJ flex, and the logic board is normal.</li> <li>If they aren't fully buckled, reassemble and then test again.</li> </ul>	Connectors location
T032: display flickering or abnormal T033: display image quality T03: display color mura T035: display light leakage T036: display backlight issue T037: display shadow T038: display permanent burn-in T039: display temporary burn-in	Dead pixels Distorted graphics Flickering Color issues	<ul> <li>Remove the display module, fit a replacement part without adhesive and test.</li> <li>If the issue is resolved, apply adhesive and fit a new display module.</li> </ul>	Disassembly  • Display

## Display (continued)

Symptom	Potential root cause	Procedure	
	Touch screen fingerprint sensor	<ul> <li>Remove the display module, fit a replacement part without adhesive and test.</li> <li>If the issue is resolved, apply adhesive and fit a new display module.</li> </ul>	Disassembly  • Display
T00: display single crack T01: display multiple cracks T03: display cosmetic defects			
T0: multi-touch poor response  T05: multi-touch no response  T06: multi-touch erratic response	Component issue	<ul> <li>Use a good display and logic board to cross-check with original ones.</li> <li>Replace the defective component.</li> </ul>	Disassembly  • Display  • Logic board

#### **NFC**

Symptom	Potential root cause	Procedure	
(1)	Connectivity issue	<ul> <li>Check if the connectivity between BG sub and the logic board is normal.</li> <li>If they aren't fully buckled, reassemble and then test again.</li> </ul>	Connectors location
T051: NFC connectivity Issues			
	Component issue	Use a good <b>BG sub</b> and <b>logic board</b> to cross-check with original ones.	Disassembly
		Replace the defective component.	BG sub
			Logic board

## **Proximity sensor**

Symptom	Potential root cause	Procedure	
$\widehat{\Xi}$	Assembly issue	Check if the <b>p-sensor foam</b> is posted flat or not.	Assembly  • P-sensor foam
T059: proximity sensor failure	Component issue	<ul> <li>Disassemble and check the appearance of the p-sensor foam without abnormality.</li> <li>Use a good p-sensor foam to the logic board to cross-check with the original ones.</li> <li>Replace the defective component.</li> </ul>	Disassembly  • Logic board

#### **UDFPS**

Symptom	Potential root cause	Procedure	
To6: fingerprint sensor failure	Interference Issue	Remove any screen protector prior to testing related to display function.	
	Damage	<ul> <li>Inspect the display for damage and replace if necessary.</li> <li>Inspect the UDFPS area. If there's dirt or debris, clean it with a dust-free cloth.</li> </ul>	
	Connectivity issue	<ul> <li>Check if the connectivity between the display connector and the logic board is normal.</li> <li>If they aren't fully buckled, reassemble and then test again.</li> </ul>	Connectors location
	Component issue	<ul> <li>Use a good display and logic board to cross-check with original ones.</li> <li>Replace the defective component.</li> </ul>	Disassembly  • Display  • Logic board

#### Rear camera

Symptom	Potential root cause	Procedure	
T072: camera AR failure T073: camera rear photo quality T074: camera rear video quality	Damage	<ul> <li>Inspect the camera lens area for damage.</li> <li>Check the function by triage test.</li> <li>Disassemble the device to check that the camera connector is seated properly.</li> <li>Power on the unit and check that the camera fails again.</li> </ul>	
T077: camera flash not working  Connectivity issue  T078: can't switch between cameras  T079: camera damage  T111: main RCAM crashes	Connectivity issue	<ul> <li>Check if the connectivity between the rear camera connector and the logic board is normal.</li> <li>If they aren't fully buckled, reassemble and then test again.</li> </ul>	Connectors location
T112: UW RCAM crashes T114: main RCAM no preview T115: UW RCAM no preview T116: UW RCAM photo quality T117: UW RCAM video quality T196: tele RCAM crashes	Component issue	<ul> <li>Use a good rear camera and logic board to cross-check with original ones.</li> <li>Replace the defective component.</li> </ul>	Disassembly  Rear camera  Logic board
T197: tele RCAM no preview T198: tele rear camera photo quality T199: tele rear camera video quality	Main UW Tele		

#### 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	Damage	Inspect the <b>display</b> and the <b>front camera</b> for damage.	
	Connectivity issue	<ul> <li>Check if the connectivity between the front camera connector and the logic board is normal.</li> <li>If they aren't fully buckled, reassemble and then test again.</li> </ul>	Connectors location
	Component issue	<ul> <li>Use a good front camera and logic board to cross-check with original ones.</li> <li>Replace the defective component.</li> </ul>	Disassembly  • Front camera  • Logic board

## **USB-C**

Symptom	Potential root cause	Procedure	
T083: USB-C port corrosion T08: USB-C port damage T085: USB-C failure	Damage	<ul> <li>Inspect the USB-C connector for debris preventing charging.</li> <li>Inspect the device for damage.</li> <li>Inspect the LDI.</li> </ul>	
	Connectivity issue	<ul> <li>Check if the connectivity between the CJ flex connector and the chin board is normal. If they aren't fully buckled, reassemble and then test again.</li> <li>Check if the connectivity between the CJ flex connector and the logic board is normal.</li> <li>If they aren't fully buckled, reassemble and then test again.</li> </ul>	Connectors location
	Component issue	<ul> <li>Use a good CJ flex and chin board to cross-check with original ones.</li> <li>Replace the defective component.</li> <li>Use a good CJ flex and logic board to cross-check with original ones.</li> <li>Replace the defective component.</li> </ul>	Disassembly  CJ flex  Chin board  Logic board

#### mmWave module

Symptom	Potential root cause	Procedure	
((•))	Damage	Inspect the mmWave module for damage.	
T105: 5G_low_med_band_failure T106: 5G_high_band_failure	Connectivity issue	<ul> <li>Check if the connectivity between the mmWave connector and the logic board is normal.</li> <li>If they aren't fully buckled, reassemble and then test again.</li> </ul>	Connectors location
	Component issue	<ul> <li>Connect a new mmWave module to test.</li> <li>If the issue is resolved, proceed with the mmWave module replacement and assemble device.</li> <li>If the mmWave module issue remains, replace the logic board.</li> </ul>	<ul><li>Disassembly</li><li>mmWave module</li><li>Logic board</li></ul>



Pixel 10 Pro XL repair manual

# Software

#### **Software tools**

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