

Pixel 8 Repair manual

Version 2.0



Welcome

Precautions

Introduction

Disassembly

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

Self service repair is not 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.

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Use caution if engaging in repair.

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

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

Welcome! We are here to help.

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

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

support.google.com

Precautions

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



Disassembly

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

Troubleshooting & Software

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



Repair flows

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



$\overset{{\sf V}}{\scriptstyle \neg \kappa}$ Assembly

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



Glossary

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

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Disassembly Order

Assembly Order



Display **Graphite Sheet** Mid-frame **Bottom Speaker** Front Camera Rear Camera

mmWave Module Battery Logic Board Top Speaker Mic 1 Bracket Enclosure





Enclosure Mic 1 Bracket Top Speaker Logic Board Battery mmWave Module

Rear Camera Front Camera **Bottom Speaker** Mid-frame **Graphite Sheet** Display

Troubleshooting

Connectors Location
Power
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Mic 1
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Top Speaker
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Vibrator Display NFC **Proximity Sensor** UDFPS Rear Camera Front Camera mmWave Module



Software tools

Revision history

Version	Date	Change description
v1.0	August, 2023	First release
v2.0	November, 2023	New format release

Disassembly



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Precautions

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Important: Before you begin

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Be careful if engaging in repair

Opening and/or repairing a device can present 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 no additional screws or small parts are left in the device after assembly.

Always ensure that screws are securely fastened.

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

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Caution:

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

- Fully discharge device battery before attempting 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, immediately cover in sand or use gloves and tongs to place battery in a fire safe.
- Take care to prevent shorting of battery terminals or damaging the battery, as fire or overheating could result.
- Dispose of the battery in a manner in accordance with local regulations.



Caution: Pixel 8 contains a Class 1 laser module

The design of the device incorporates optics and protective housing such that there is no access to a level of laser radiation above Class 1 during normal use or approved servicing.

Laser modules in this product comply with 21 CFR 1040.10 and 1040.11; except for conformance with IEC 60825-1 Ed. 3., as described in Laser Notice No. 56, dated May 8, 2019.

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Laser Module:

Made in Austria. ams AG, Tobelbader Str. 30, 8141 Oberpremstätten, Austria

Page 2 of 2

Important: Before you begin

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Caution: Part handling – Glass

- Wear protective gloves and safety glasses when handling damaged parts.
- Use protective film when removing damaged parts.
- Once removed, immediately store the damaged part in the replacement part packaging to prevent injury.

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Tools and fixtures

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

Caution:

- We don't recommend performing repairs without the specified tools and fixtures.
- Improper use of tools and fixtures may result in injury to yourself, the user of the device or other third parties, as well as damage to the product, tools, fixtures, replacement parts and/or other spare parts.

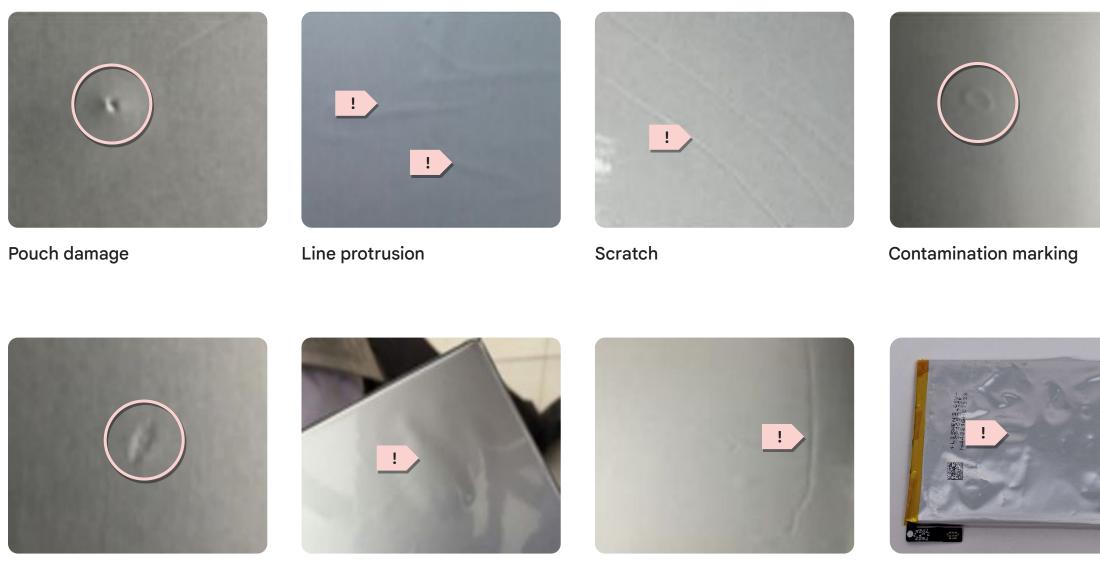


Important: **Before Disassembling** the Device

- Disconnect the device from all power sources before any disassembly.
- Make sure the battery is fully discharged before any disassembly.
- If the phone battery shows signs of swelling or damage, or if the phone feels hot or emits strong odor, don't attempt disassembly. Please reach out to Google customer support.
- Take care not to expose the phone or its components to liquids once disassembled.



Examples of unacceptable battery conditions - Not suitable for repair*



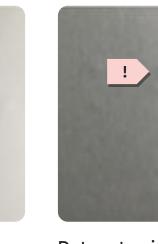
Dent

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 general safety guidance outlined in this document.



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Dot protrusion



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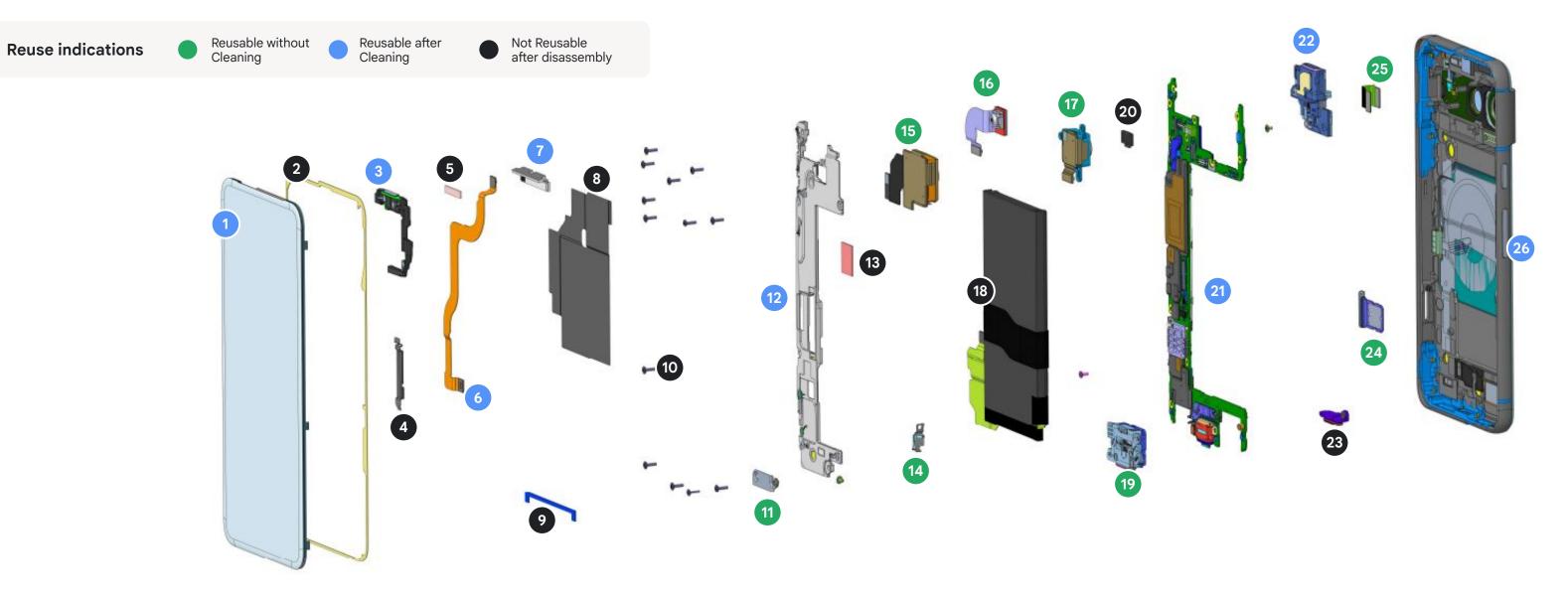
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Screen Calibration	Replacement Parts
ESD Protection	Glossary

Liquid Damage Indicators

Pixel 8: Expanded view



Pixel 8 Part ID

1	 Display Module 	8	 Graphite Sheet 	15	Rear Camera
2	CG-Trim PSA	9	DIC SHIM	16	Front Camera
3	 Heatsink 	10	Screws	17	Rear Camera UW
4	 Display cowling 	11	 USB-C cowling 	18	 Battery
5	 mmWave Thermal Pad 	12	 Mid-frame 	19	Bottom Speaker
6	mmWave Flex	13	 SOC Thermal Pad 	20	 P-sensor Grommet
7	5G Module	14	ANT 7 Bracket	21	Logic Board

22	Top Speaker
23	 Mic 1 Bracket
24	SIM Tray
25	BIF Flex
26	Enclosure

Welcome

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Disassembly

Screw map

These are the screws used in the Pixel 8:



Screws are a single use item

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

After removal, replace with a new screw

Each screw is critical to the safe continued operation of the phone. Since thread locking adhesive can not be reactivated - replace each used screw with a new screw after removal.



Touch screen calibration process

Important!

Complete the following before booting up the device:

- Nothing can be touching the display (this includes *protective films*, cases, fingers, tape, labels, scratch cover, adhesives, debris, etc.)
- Device should be on a flat surface, and can not be held in your hands.

Once the above conditions are met, the device can be powered on by pressing the power button. Don't touch the device until it is fully booted into the user operating system.



Display touch calibration

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

Touch function

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The touch function of the screen may not work as intended, if this process is not followed.

ESD protection

ESD (Electro Static Discharge) can damage components so it is important to work in an ESD safe environment during repair.

Follow these 4 steps to keep ESD-safe:



Stay grounded

Repairs should be carried out on an ESD mat, while the person repairing the device wears a grounded ESD strap.

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Avoid static buildup

Users should avoid wearing synthetic fibers such as fleeces that can generate static.

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Protective bags

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

× Avoid touching pins

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

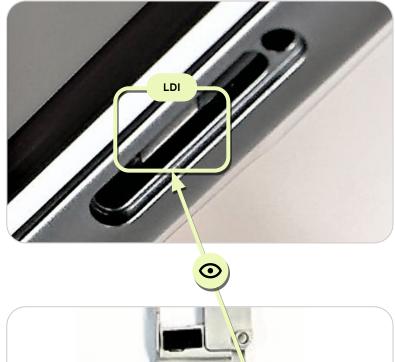
Did you know?

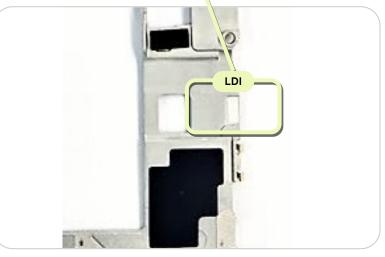
ESD is the sudden flow of electricity through two electrically charged objects. For example, walking across a carpet, then touching a metal door handle and feeling a shock is ESD.

Liquid damage indicators

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

- Exposure to liquids may lead to the device malfunctioning, such as overheating or short circuits.
- There are two Liquid Damage Indicators (LDI) on this device.
- The device is considered to have been exposed to liquid, if either indicator has turned red.





In the SIM card tray slot(on the Mid-frame) visible without disassembling the device.



On Mid-frame, near charge port

Turning Pixel on / off

(\mathbf{b})

Turn the power on or off

- To turn on a device when it's powered off, press and hold the Power button for a few seconds. See where the Power button is located.
- To power off phone when it's turned on:
- To power off phone, press and hold the Power and volume up buttons for a few seconds. Then, tap Power off on screen.
- For further information, see this Google Help page (<u>link</u>).

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

Turn screen off and back on

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

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



Restart (reboot)

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

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Tools and fixtures

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

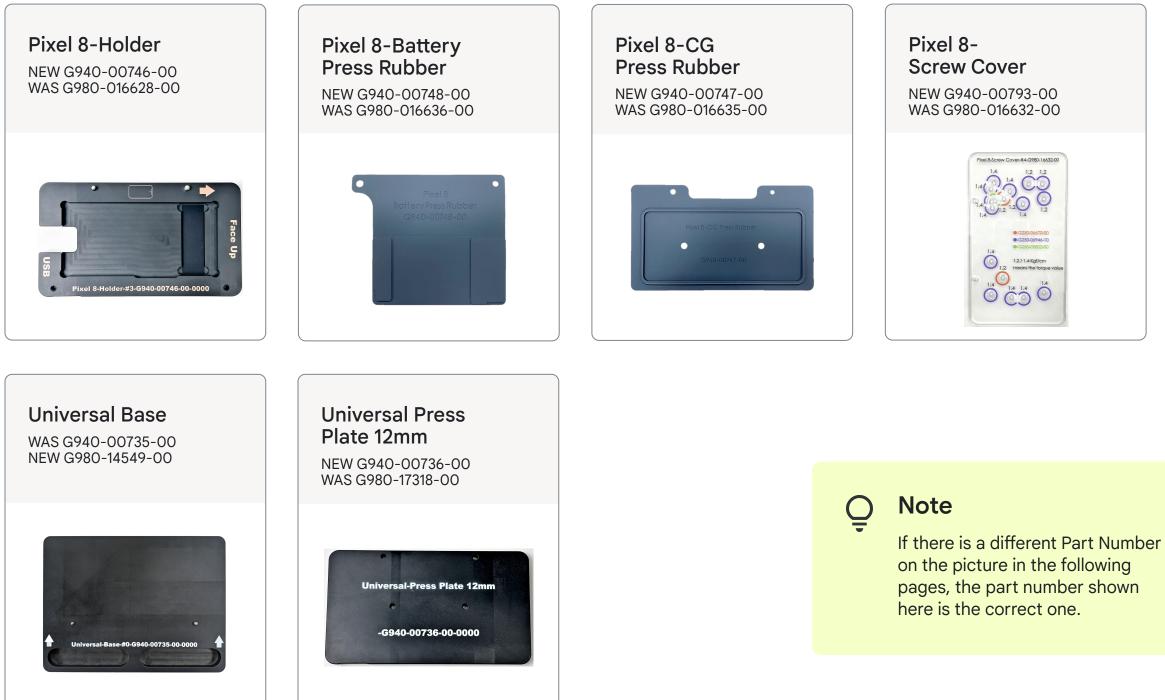
A Caution:

- We don't recommend performing repairs without specified tools and fixtures.
- Improper use of tools and fixtures may result in injury to yourself, the user of the device or other third parties, as well as damage to the product, tools, fixtures, replacement parts and/or other spare parts.

% Tools and fixtures

Google approved fixtures: Pixel 8

high quality and safe repairs.



Google approved fixtures are Google tested and are strongly encouraged to ensure



Universal Press NEW G940-00733-00 WAS 940-00426-01



Universal Disassembly Fixture

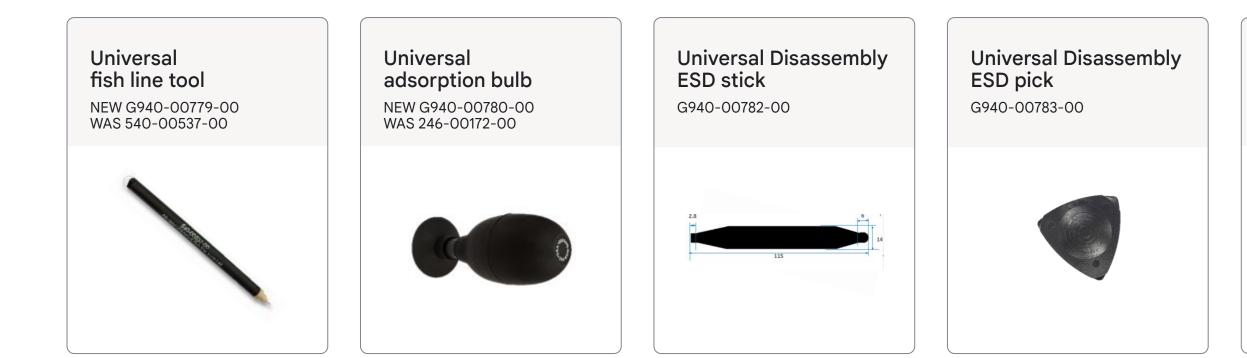
NEW G940-00734-00 WAS G980-14551-00



% Tools and fixtures

Google approved fixtures: Pixel 8

Google approved fixtures are Google high quality and safe repairs.





O Note

Additional protective films and caps may be pictured in this manual, but are not needed to achieve a successful repair.

Google approved fixtures are Google tested and are strongly encouraged to ensure

Universal Scraper

WAS G940-00784-00 NEW 540-00568-00



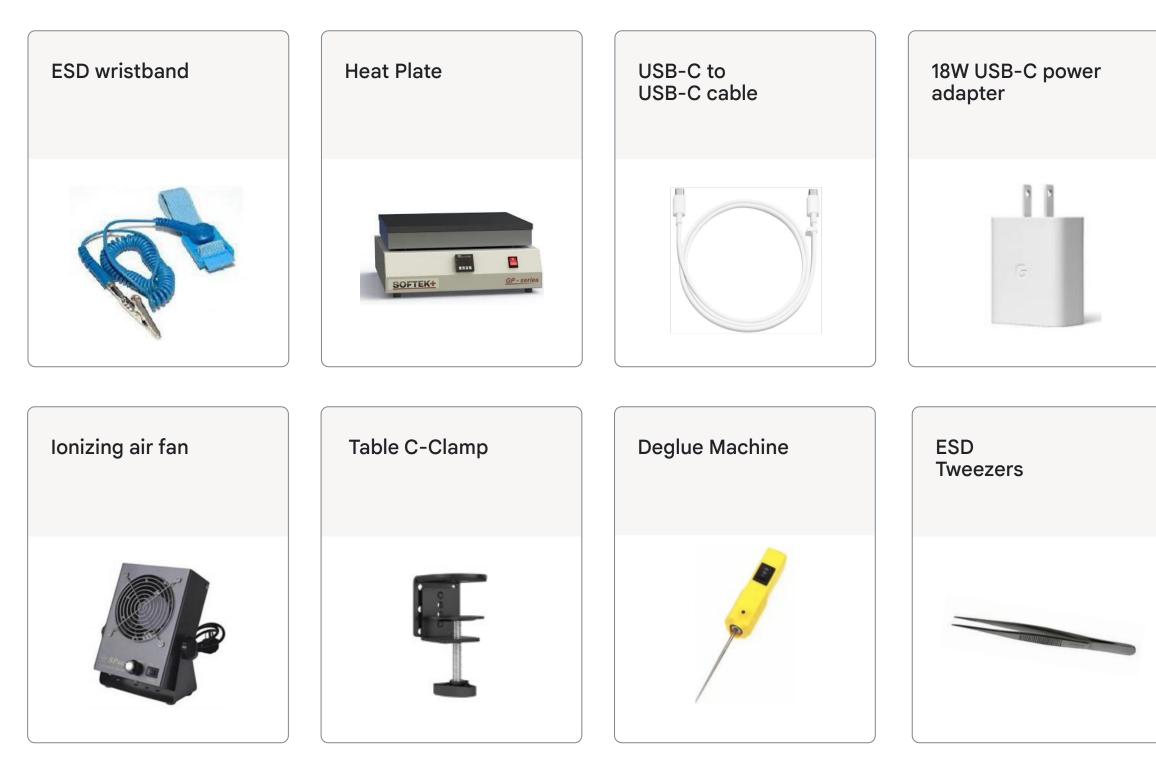


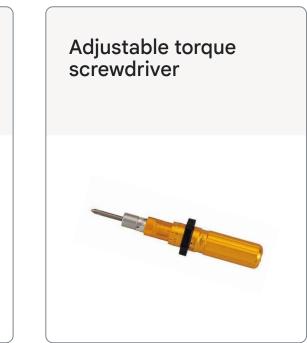


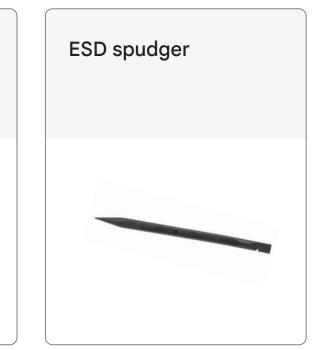
% Tools and fixtures

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.







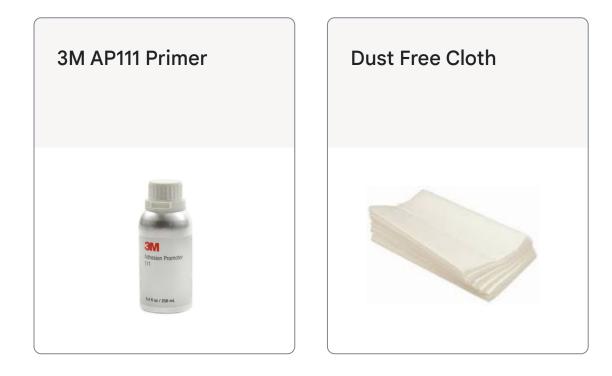


% Tools and Fixtures

Standard Consumables

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

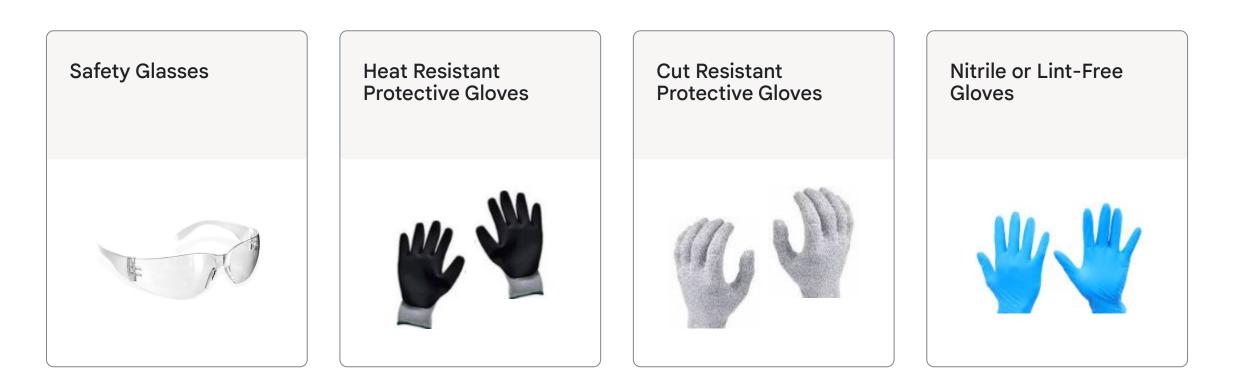




st Tools and fixtures

Safety items

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



Precautions

st Tools and fixtures

Repair Fixture Recommendations

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

Type of Repair	Fixtures Recommended
All Repairs	Pixel 8 Tool Bundle, Universal Press, Universal Disassembly Fixture, Universal Bas Bulb, Universal Disassembly ESD stick, Universal Disassembly ESD pick, Universa Film

Base, Universal Press Plate 12mm, Universal Fish line Tool, Universal Adsorption ersal Scraper, Screwdriver Hex Shank Torx Plus Bit no.3, Universal Protective

*¢ Replacement parts

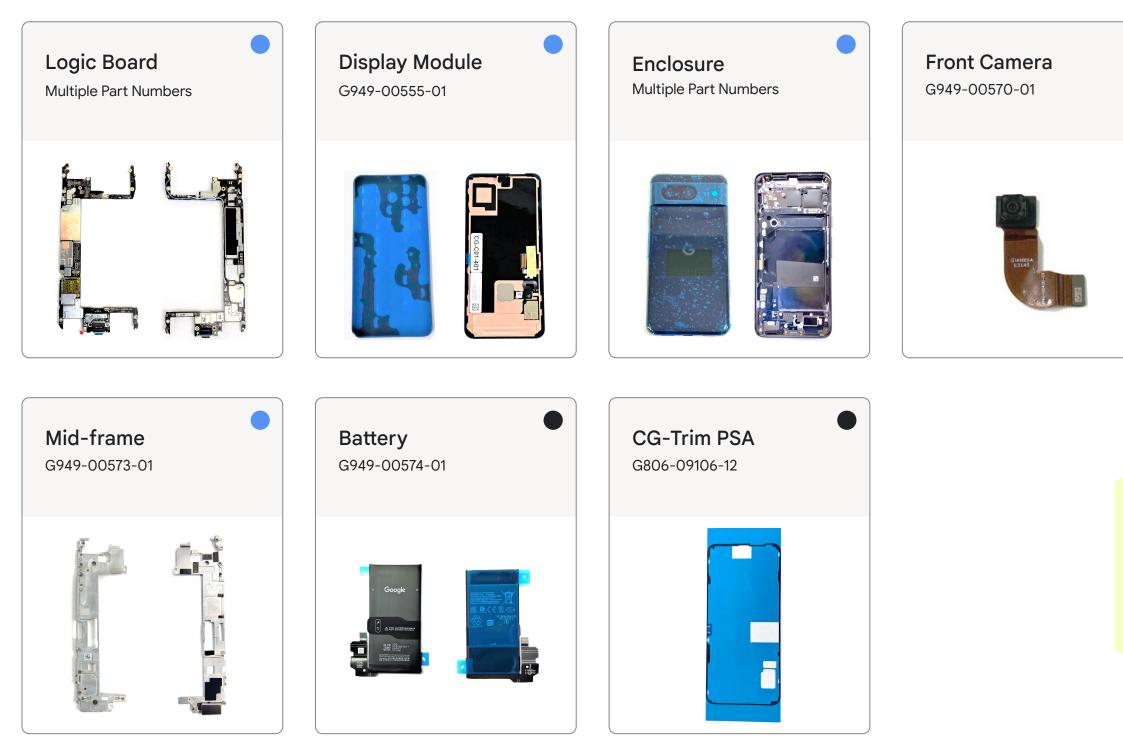
Important notice about replacement parts

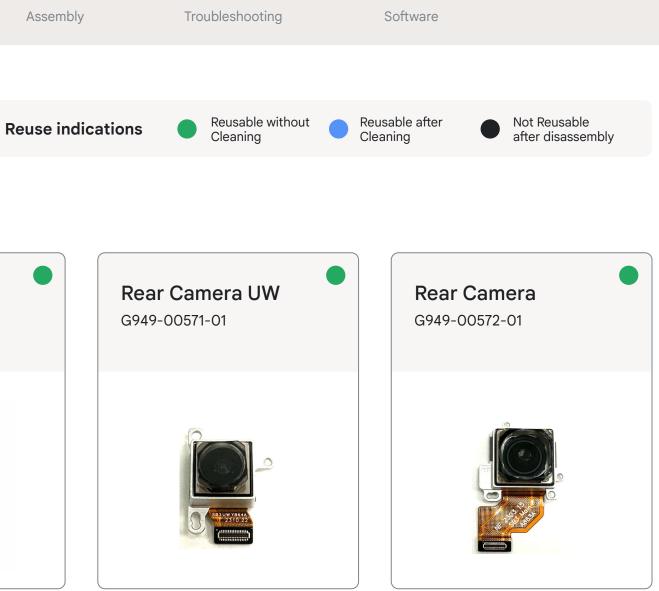
- The use of Google authorized replacement parts is strongly recommended.
- Performance within product specifications cannot be assured if Google authorized replacement parts are not used.

A Caution:

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

Replacement parts

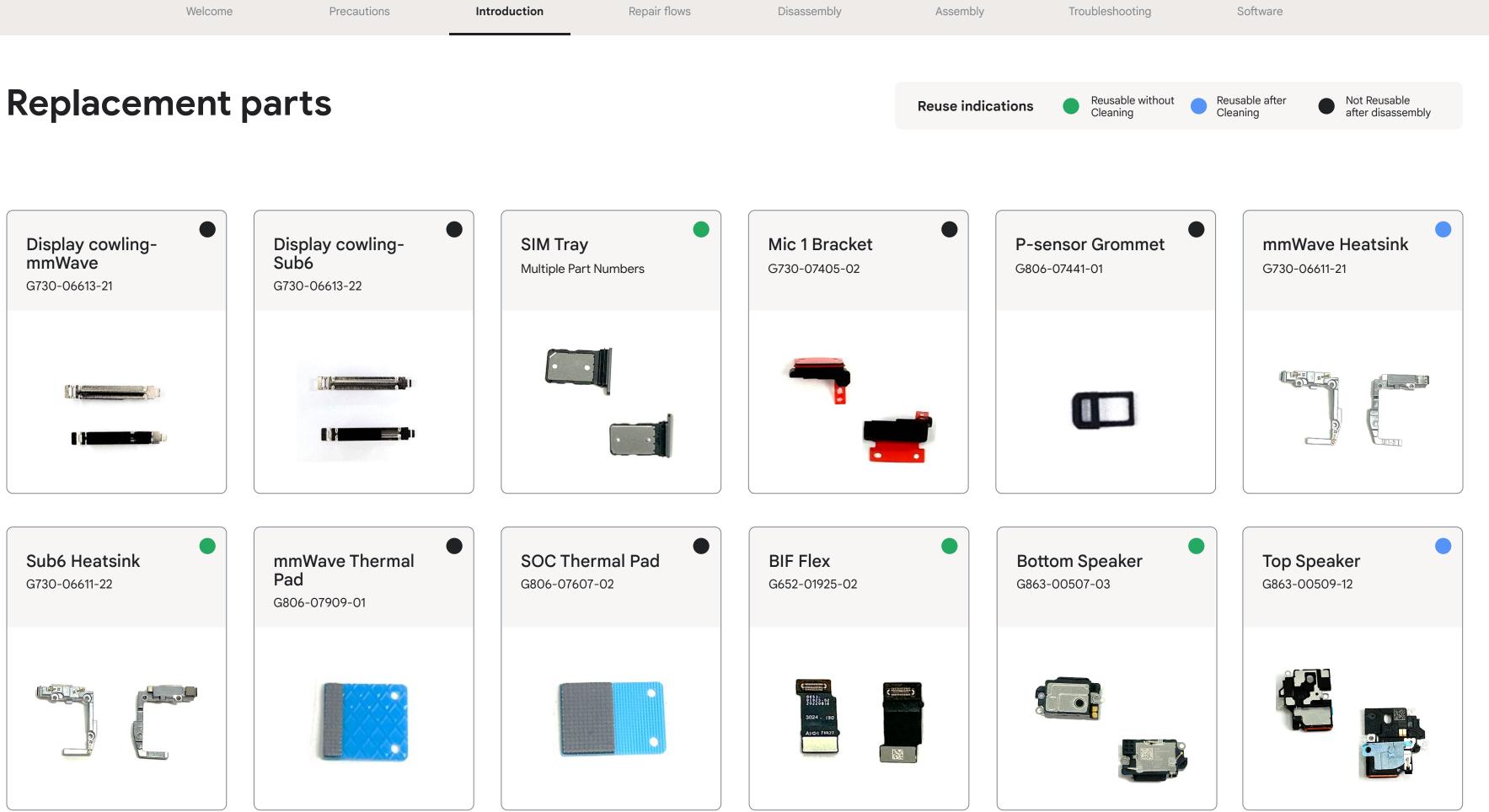


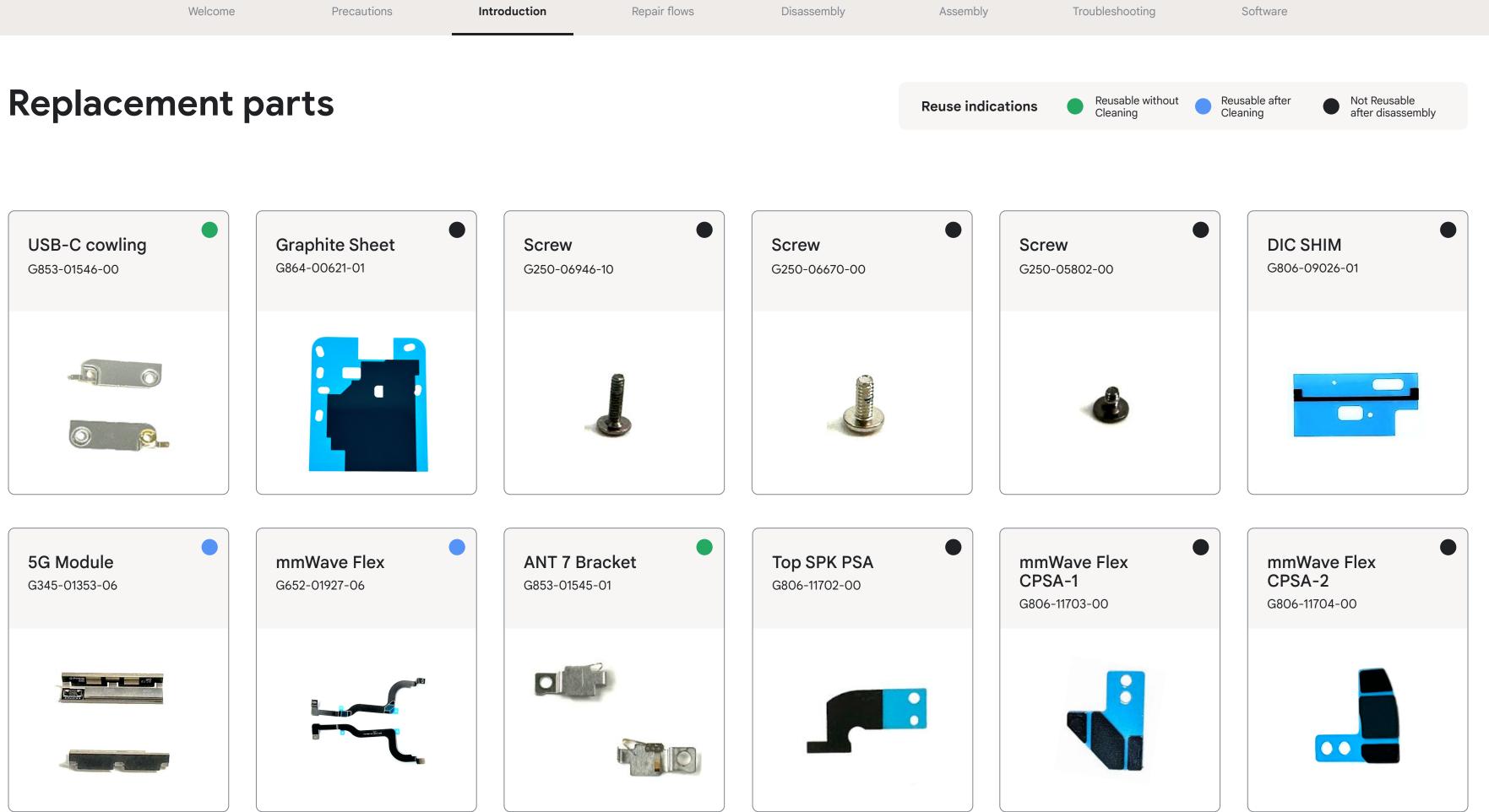


Did you know?

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The Trim PSA is pre-attached onto the Display Module (G949-00555-01).





Disassembly



AE Glossary

We	lcome	

Disassembly

Glossary

Acronym / Term	Definition
ESD	Electro Static Discharge The sudden flow of electricity through two electrically charged objects.
IPA	Isopropyl Alcohol (99.8% recommended) Used for cleaning 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 (OLED) A type of flat panel display which OLED to show images.
mmWave	Millimeter Wave The radio waves used to build a 5G network, providing fast, reliable mobile data.
Sub6	Sub-6GHz Refers to mid and low-frequency bands under 6GHz
NG	Not good - usually referring to a condition that is not acceptable
SBOM	Service Bill of Materials

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	Welcome	Precautions	Introduction	Repair flows	Disassembly	As
Glossary						

Acronym / Term	Definition
Display Module	The OLED, glass cover, and sometimes other components such as the fingerprint sensor Also known as: cover glass (CG) screen display
Logic Board	The main electronic component in the device with the processor, memory, storage, and often Also known as: MLB main logic board main board PCBA
Microphone	The component used for capturing audio to make a call, video or dictate some notes Also known as: mic mic 1 bracket
Enclosure	The housing that contains the buttons and provides protection for the logic board and other contains the buttons and provides protection for the logic board and other contains the button and provides protection for the logic board and other contains the button and provides protection for the logic board and other contains the button and provides protection for the logic board and other contains the button and provides protection for the logic board and other contains the button and provides protection for the logic board and other contains the button and provides protection for the logic board and other contains the button and provides protection for the logic board and other contains the button and provides protection for the logic board and other contains the button and provides protection for the logic board and other contains the button and provides protection for the logic board and other contains the button and provides protection for the logic board and other contains the button and provides protection for the logic board and other contains the button and provides protection for the logic board and other contains the button and provides protection for the logic board and provides provides protection for the logic board and provides protection for the logic board and provides provides provides provides provides provides provides provides provides protection for the logic board and provides provides provides provid
LDI	Liquid Damage Indicator An indicator that turns from white into another color, typically red, after contact with water. Also known as: Liquid damage indicator LDI

Wi-Fi and Bluetooth components all soldered on

components

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Acronym / Term	Definition	
Camera	Camera modules, include front camera and rear camera(s).Also known as:CAMFCAMRCAM	
Pressure Sensitive Adhesive	The adhesive that are used to bond enclosure and display module, battery and enclosure, or or Also known as: PSA	
UDFPS	Under Display FingerPrint Sensor Also known as: Fingerprint sensor	
Release Liner	This is a tool for transporting sensitive parts, including adhesives. It needs to be removed duri	

other parts.

ring installation for the device to function as intended.

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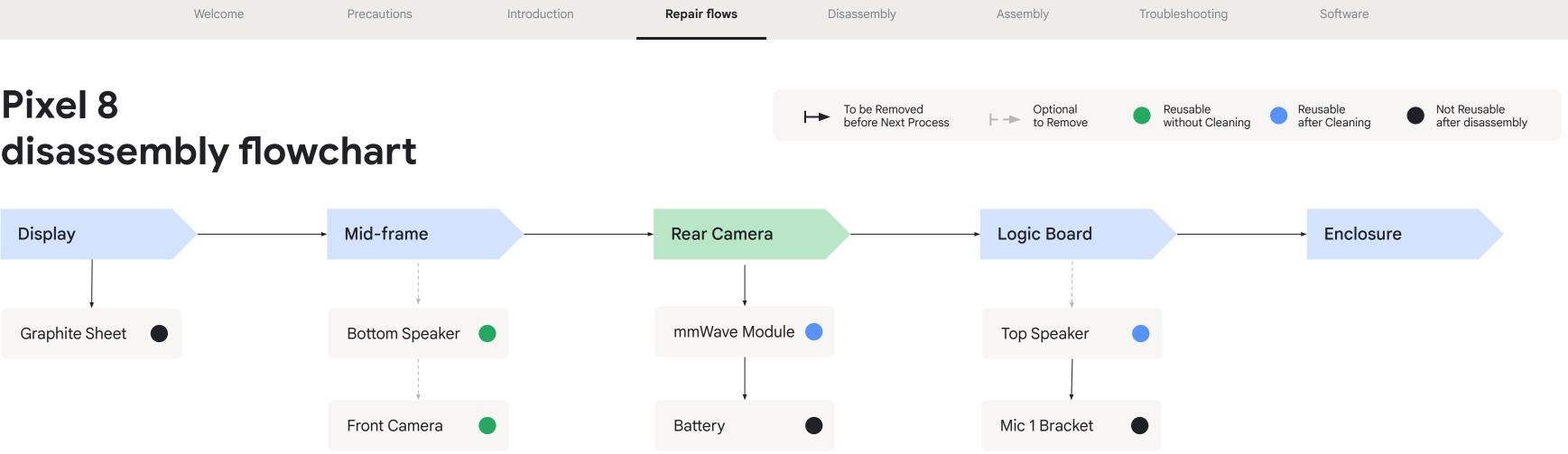
Repair flows

Disassembly Order

Assembly Order

Pixel 8 disassembly flowchart







How to read this chart

To replace the Battery:

Remove the Display, Graphite Sheet, Mid-frame, then the Battery.

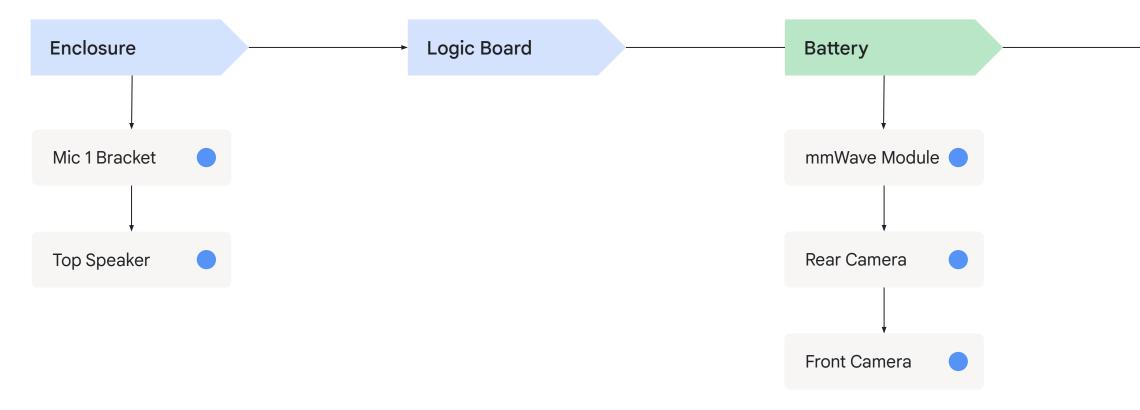
To remove the Logic Board:

Remove the Display, Graphite Sheet, Mid-frame, Bottom Speaker, Front Camera, Rear Camera, mmWave Module, Battery, then the Logic Board.

NOTE Ō

Rear Camera, Front Camera and Battery are on the same layer, you can replace each of them without interference.

Pixel 8 assembly flowchart



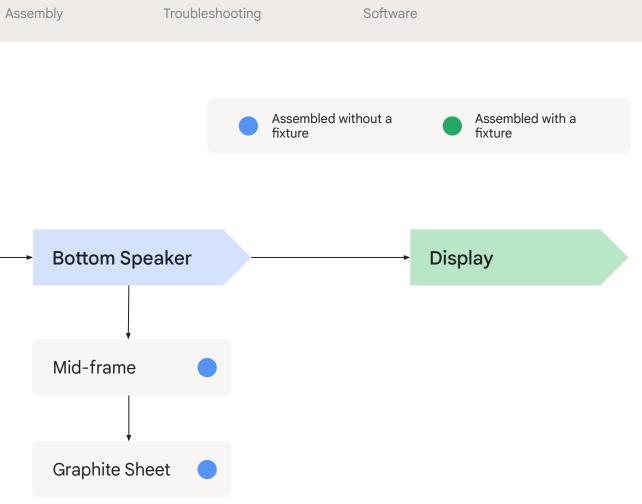


To reinstall the battery:

Battery, Mid-frame, Graphite Sheet, then Display.

To reinstall the logic board:

Logic Board, Battery, mmWave, Rear Camera, Front Camera, Mid-frame, Bottom Speaker, Graphite, then Display.



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Disassembly

Display	Front Camera	Logic Board
Graphite Sheet	Rear Camera	Top Speaker
Mid-frame	mmWave Module	Mic 1 Bracket
Bottom Speaker	Battery	Enclosure

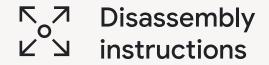
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Display

The Display Module is connected to the Logic Board, so be careful with the flex when opening the device.

Use caution!

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

Apply protective film to broken glass before removal.

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



Prerequisites

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



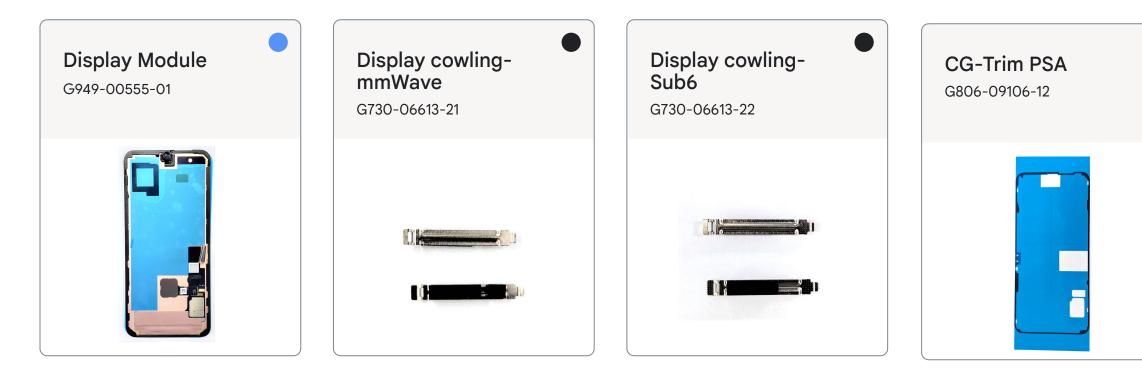
Heat Plate Universal Disassem Ionizing Air Fan Pixel 8-CG Press-# Pixel 8-Holder Pixel 8-PSA Align-# Pixel 8-CG Press R Universal Base Universal Press Pla

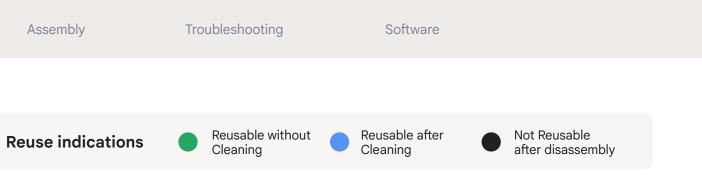
	Adjustable torque screwdriver
nbly Fixture	Screwdriver Hex Shank Torx Plus Bit no.3
#2	Universal fish line tool
	Universal adsorption bulb
#5	Universal Disassembly ESD pick
Rubber	Universal Disassembly ESD stick
	ESD Tweezers
ate 12mm	3M AP111 Primer
	Deglue Machine

🛠 Parts

Display

The parts listed are for the Display disassembly.







Soften adhesive

Set the heat plate to 122°F/50 °C, and place the phone face down on the heat plate for 10 mins to soften the adhesive.



Use Caution

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

/ Use Caution

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

Review all **<u>safety precautions</u>** before beginning work.



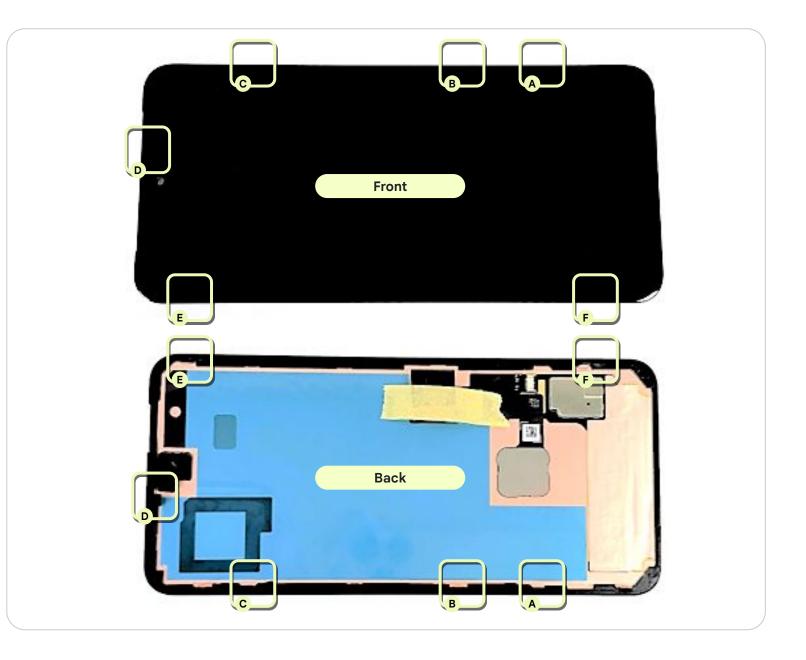
Precautions

Introduction

Disassembly

Locate snaps

- Before removing the **Display Module**, take note that there are 6 snaps underneath (refer to the relative position).
- Avoid damaging the snaps during the disassembly process.



Introduction

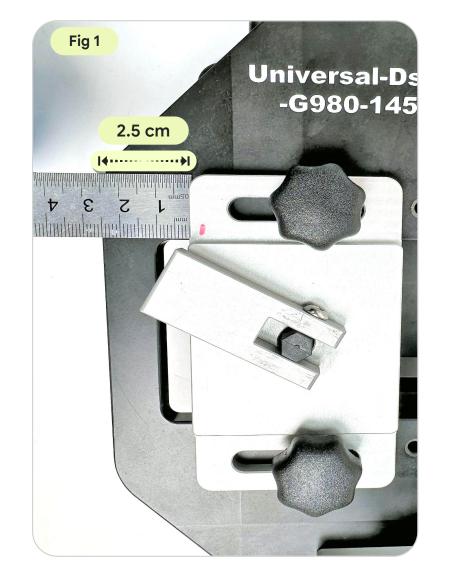
Use fixture

- Adjust suction cup distance to 2.5 cm (Fig 1) from the edge of the hinged top.
- Place the device on the holder of Universal **Disassembly Fixture**. To avoid damage, don't put the visor area of the phone inside the clamps. (Fig 2).



Note

There is a groove which can help avoid pressing the power button accidentally.





Mic 1 Bracket Enclosure Logic Board Top Speaker

Adjust fixture

Ensure the **Two Universal Clips** are tightened using the screws on the top and bottom, before using the **Universal Disassembly Fixture**.



Note

Make sure to use the Universal Disassembly Fixture for Pixel 8.





Logic Board

Top Speaker

Mic 1 Bracket

Enclosure

Prepare for disassembly

Before closing the hinged top, dampen the gap between the **Display** and the **Enclosure** on the USB side with a proper amount of IPA with an **Universal Disassembly ESD stick**.





Mic 1 Bracket Enclosure Logic Board Top Speaker

Precautions

Introduction

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Disassembly

Cover fixture

- Release the hinged top and align the suction cup underneath with the **Display**, and lift up the suction cup (Fig 1).
- From the USB side, observe the separation (Fig 2).



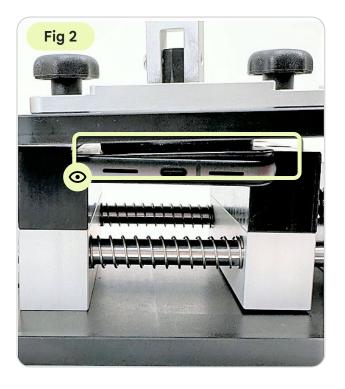
Use Caution

Use safety gloves to handle damaged displays as it might splinter during removal and could cause injury.

Apply **Universal Protective Film** to broken glass before removal.

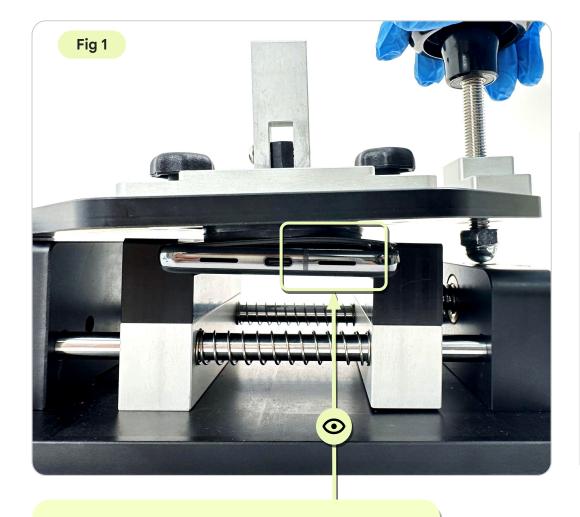
Review all <u>safety precautions</u> before beginning work.





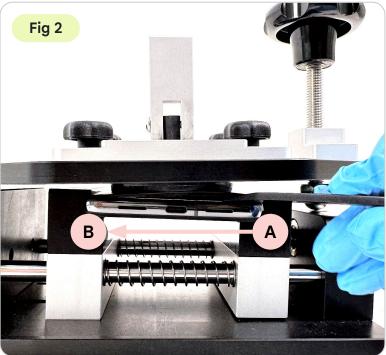
Separate Display

- Slowly rotate the knob to separate the **Display Module** from the **Enclosure** (Fig 1).
- Once there's a gap (≦ 5mm), slide through the opening using an **Universal Disassembly ESD stick** with a proper amount of IPA (Fig 2).



Once there's a gap, insert the Universal Disassembly ESD stick and slide over.

(If it cannot pass through easily, you can slowly rotate the fixture, but the gap should be less than 5mm wide.)



Pry thoroughly from A to B

Logic Board

Top Speaker

Mic 1 Bracket

Enclosure

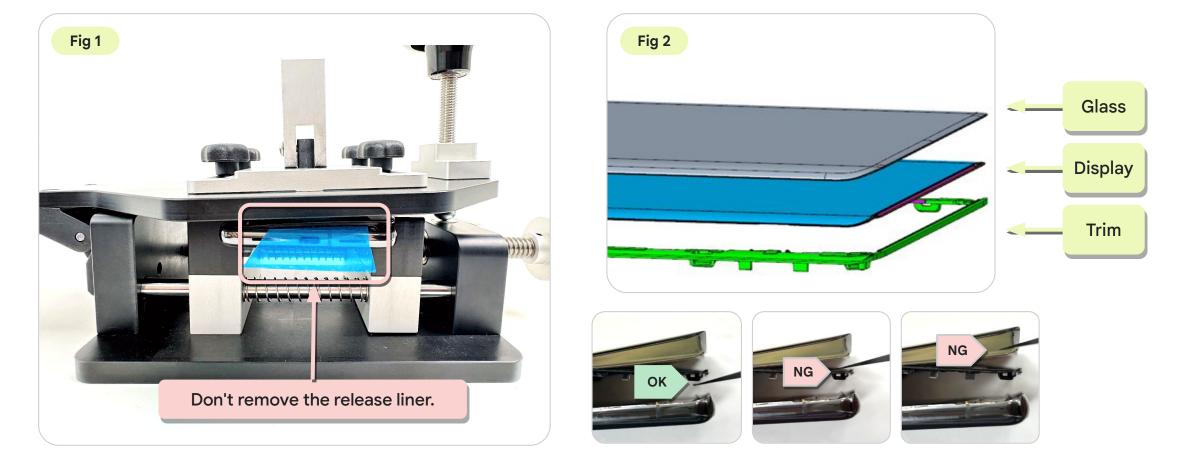
Separate Display-continued

- As they separate on the USB side, insert a release liner to prevent the adhesive from sticking back (Fig 1).
- Don't push **Universal Disassembly ESD stick** into the device to avoid insertion between **Glass**, **Display** and **Trim**. Refer to the NG and OK pictures (Fig 2).



Use Caution

Be careful not to push the Universal Disassembly ESD stick beyond the adhesive surface to avoid damaging the Display, Battery, or any other internal components.



Repair flows

Disassembly

Open hinged top

Release the suction cup, and open the hinged top.



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Introduction

Slide to open

- Dip the 3.5-mm corner of the **Universal Disassembly ESD pick** in a proper amount of IPA.
- With the flat side down, slit following sequence $2 \rightarrow 3 \rightarrow 4$.
- Pry at an angle to avoid insertion between **Display** and **Trim** (Fig 1).





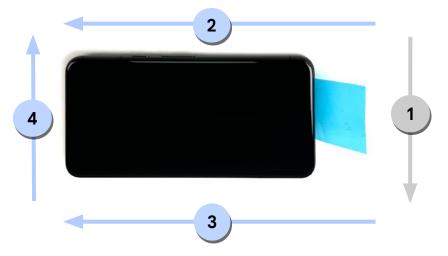
Use Caution

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Control the depth of insertion to avoid damaging the <u>Snaps</u> and <u>Springs</u>.

Don't use alcohol.

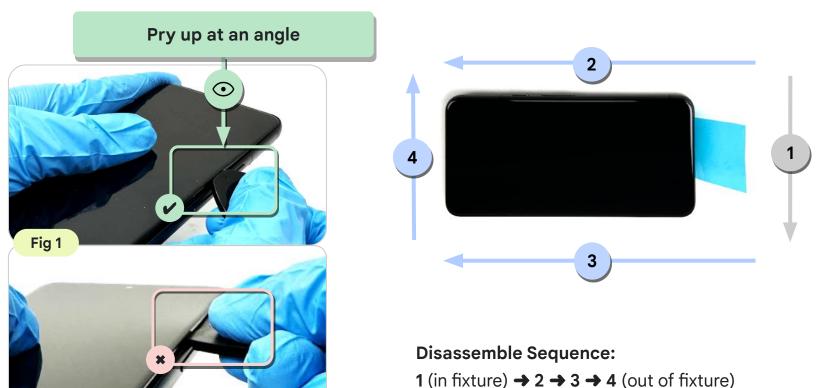
Display Graphite Sheet Mid-frame Bottom Speaker Front Camera Rear Camera mmWave Module Battery

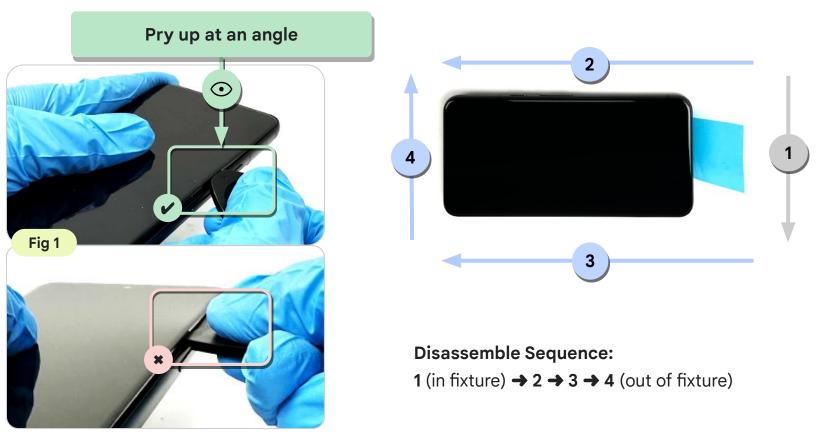


Disassemble Sequence: 1 (in fixture) → 2 → 3 → 4 (out of fixture)

Slide to open-continued

- Slide along sides 2 and 3 at an angle with the Universal Disassembly ESD pick (Fig 1).
- Around the corners, slide to the stopper, and pry up (Fig 2).







Mid-frame Front Camera

Use Caution

Don't use alcohol.

<u>Springs</u>.

Don't slide horizontally.

Control the depth of insertion to avoid damaging the <u>Snaps</u> and

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Bottom Speaker

Rear Camera

mmWave Module Battery Logic Board

Top Speaker

Mic 1 Bracket

Enclosure

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Hold Display

- Use the **Universal adsorption bulb** to hold the **Display**.
- Avoid touching the **Copper Foil**.



Note

Be careful not to stretch the Display Flex to prevent damage.

Also be careful not to touch the spring during the process.



Logic Board Top Speaker Mic 1 Bracket Enclosure

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Remove cowling

Detach the **Display cowling** with a **Universal Disassembly ESD stick**.

Part: G730-06613-21 (Display cowling-mmWave)

Part: G730-06613-22 (Display cowling-Sub6)



Note

Don't reuse the part.



Repair flows

Disassembly

Disconnect Display

- Loosen the **Display Connector** with the **Pixel fish line tool**.
- Remove the **Display Module**.



Note

Use the **Pixel fish line tool** to avoid damaging the components.



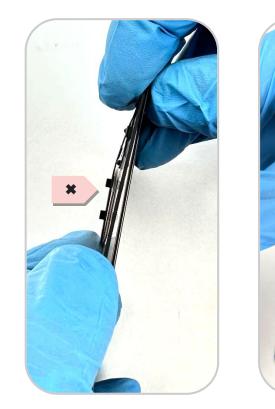
Logic Board Top Speaker Mic 1 Bracket Enclosure

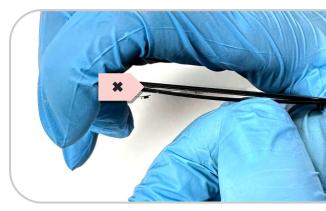
Pixel 8 Repair Manual v2.0 ©Google 2023 | Page 51

Finished! Need assembly instructions? →

Check trim

• Check the Trim status to ensure the trim is not peeling away from the display.





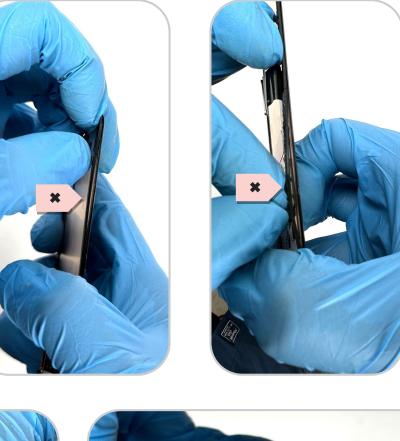


Q N

Note

If the trim is separated from the display, the part may may need to be replaced to function as intended.

General Rules

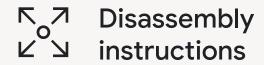




Introduction

Repair flows

Disassembly



Graphite Sheet

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

Use caution!

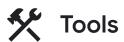
Review all safety precautions before beginning work.



Prerequisites

Remove the following components first:

• Display



Pixel 8-Holder Universal fish line tool ESD Tweezers Universal Scraper

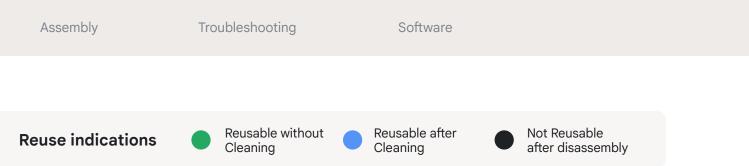
Pixel 8 Repair Manual v2.0 ©Google 2023 | Page 53

🛠 Parts

Graphite Sheet

The parts listed are for the Graphite Sheet disassembly.





Disconnect 5G Module

- Loosen the **mmWave Connector** and disconnect it from the **Logic Board** with the **Universal fish line tool**.
- Part of the flex is adhered to the **Mid-frame**, so slowly peel it away.



Note

Use the **Universal fish line tool** to avoid damaging the components.

The mmWave Flex is only needed for the mmWave Sku.







Finished! Need assembly instructions? →

Remove Graphite Sheet

- **mmWave fpc** needs to be lifted **by hand**. Pick up the **Graphite Sheet** with **ESD Tweezers**.
- Remove the Graphite Sheet with ESD Tweezers.

Part: G864-00621-01 (Graphite Sheet)



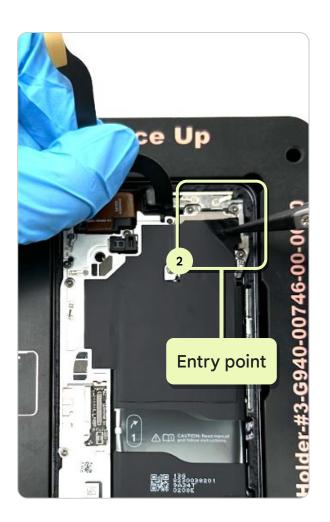
Use Caution

Be careful not to puncture the battery.

Don't reuse the part.





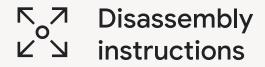


Precautions

Introduction

Repair flows

Disassembly



Mid-frame

The Mid-frame ensures connectors remain engaged with the Logic Board and acts as a heatsink.

Use caution!

Review all safety precautions before beginning work.



Prerequisites

Remove the following components first:

- Display
- Graphite Sheet



Pixel 8-Holder

Pixel 8-Screw Cover

Adjustable torque screwdriver

Screwdriver Hex Shank Torx Plus Bit no.3

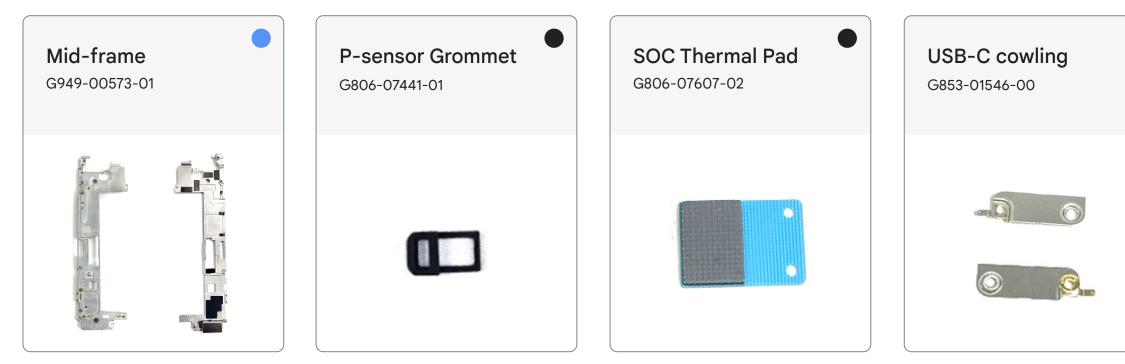
Universal Disassembly ESD stick

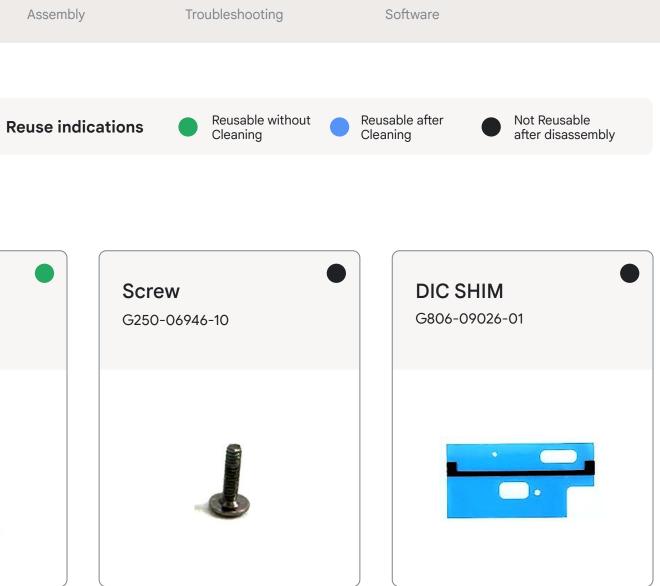
ESD Tweezers

🛠 Parts

Mid-frame

The parts listed are for the Mid-frame disassembly.





Remove DIC SHIM

Remove **DIC SHIM** with **ESD Tweezers**.

Part: G806-09026-01 (DIC SHIM)



Use Caution

Don't reuse the part.



Logic Board Top Speaker Mic 1 Bracket Enclosure

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Remove screws

- Place the **Pixel 8-Screw Cover**.
- Remove 10 Mid-frame Screws with a Adjustable torque screwdriver with Screwdriver Hex Shank Torx Plus Bit no.3, and remove the Pixel 8-Screw Cover.

Part: G250-06946-10 *10 (Screw)

Use Caution

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

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

Display

Graphite Sheet

O Note

Don't reuse the parts.



Logic Board Top Speaker Mic 1 Bracket Enclosure

Battery

Remove USB-C cowling

Remove the USB-C cowling with ESD Tweezers.

Part: G853-01546-00 (USB-C cowling)



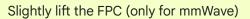
Remove Mid-frame

• **mmWave fpc** needs to be lifted by hand.

Display

• Remove Mid-frame with ESD Tweezers from top.

Part: G949-00573-01 (Mid-frame)





Logic Board

Top Speaker

Mic 1 Bracket

Enclosure

Disconnect Battery

Loosen the **Battery** connector, and disconnect the **Battery** from the **Logic Board** with the **Universal fish line tool**.



Note

Use the **Universal fish line tool** to avoid damaging the components.





Logic Board Top Speaker Mic 1 Bracket Enclosure

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Finished! Need assembly instructions? →

Remove P-sensor Grommet, if deformed

Remove the **P-sensor Grommet** from the Logic Board.

Part: G806-07441-01 (P-sensor Grommet)

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Note

Don't reuse the part.

Note that this step is only for replacing the P-sensor Grommet if it's deformed.



Precautions

Introduction

Repair flows

Disassembly



Bottom Speaker

The Bottom Speaker is adhered to the Enclosure. Be careful not to damage the speaker membrane.

Use caution! Ŵ

Review all safety precautions before beginning work.



Prerequisites

Remove the following components first:

- Display
- Graphite Sheet
- Mid-frame



Pixel 8-Holder

Pixel 8-Screw Cover

Adjustable torque screwdriver

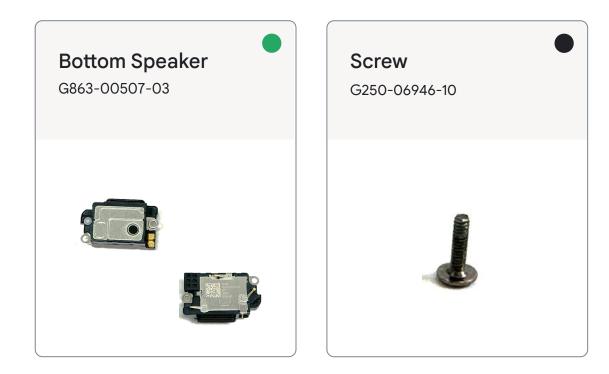
Screwdriver Hex Shank Torx Plus Bit no.3

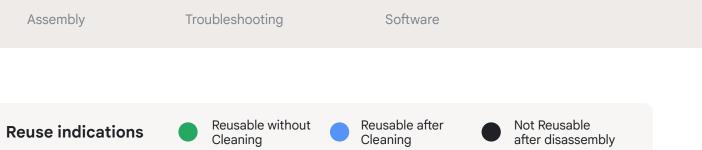
ESD spudger

🛠 Parts

Bottom Speaker

The parts listed are for the Bottom Speaker disassembly.





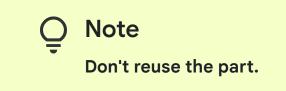
Precautions

Introduction

Remove screw

- Place the **Pixel 8-Screw Cover** on the **Pixel 8-Holder**.
- Remove the Bottom Speaker Screw with a Adjustable torque screwdriver with Screwdriver Hex Shank Torx Plus Bit no.3, and remove the Pixel 8-Screw Cover.

Part: G250-06946-10 (Screw)





Finished! Need assembly instructions? →

Remove Bottom Speaker

Remove the **Bottom Speaker** with a **Universal Disassembly ESD stick**.

Part: G863-00507-03 (Bottom Speaker)

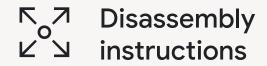


Precautions

Introduction

Repair flows

Disassembly



Front Camera

The Front Camera is not fastened to the Enclosure. It is simply connected to the Logic Board.

Use caution! Ŵ

Review all safety precautions before beginning work.



Prerequisites

Remove the following components first:

- Display
- Graphite Sheet
- Mid-frame



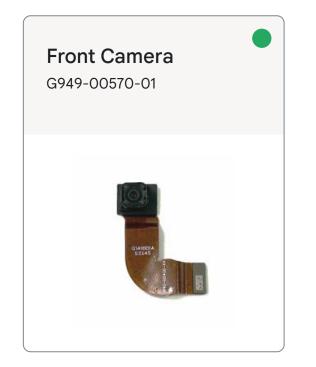
Pixel 8-Holder Universal fish line tool

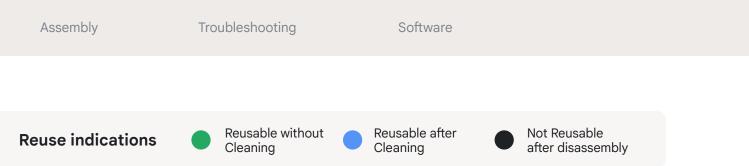
Disassembly

🛠 Parts

Front Camera

The parts listed are for the Front Camera disassembly.





Finished! Need assembly instructions? →

Remove Front Camera

- Part of the **Front Camera fpc** is adhered to the **Top Speaker**, so slowly peel it away (Fig 1).
- Loosen the Front Camera Connector from the Logic Board with the Universal fish line tool (Fig 2).

Part: G949-00570-01 (Front Camera)

O Note

Using the Universal fish line tool avoids damaging the components.







Logic Board Top Speaker Mic 1 Bracket Enclosure

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Precautions

Introduction

Repair flows

Disassembly

Disassembly instructions

Rear Camera

This generation is allowed to replace separate Rear Camera.

Use caution!

Review all safety precautions before beginning work.



Prerequisites

Remove the following components first:

- Display
- Graphite Sheet
- Mid-frame



Pixel 8-Holder

Pixel 8-Screw Cover

Universal fish line tool

Adjustable torque screwdriver

Screwdriver Hex Shank Torx Plus Bit no.3

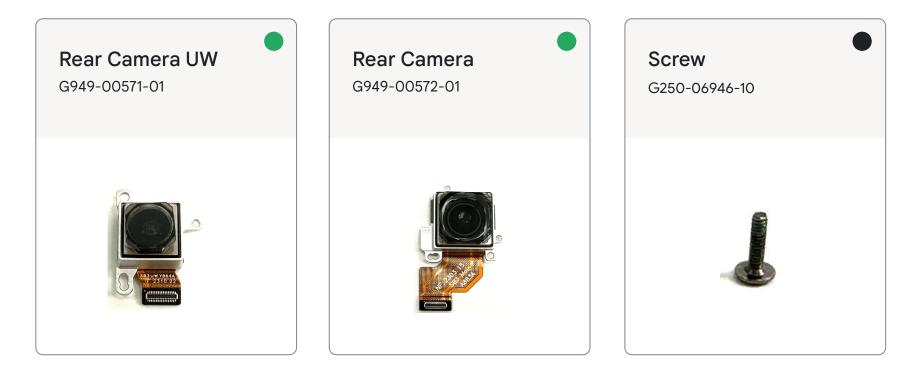
ESD Tweezers

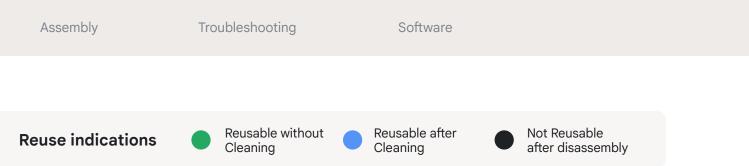
lonizing air fan

🛠 Parts

Rear Camera

The parts listed are for the Rear Camera disassembly.

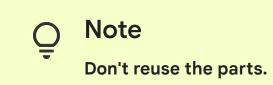




Remove screws

- Place the **Pixel 8-Screw Cover** on the **Pixel 8-Holder**.
- Remove the 2 Rear Camera Screws with a Adjustable torque screwdriver with Screwdriver Hex Shank Torx Plus Bit no.3, and remove the Pixel 8-Screw Cover.

Part: G250-06946-10 *2 (Screw)





Remove Rear Camera

- Loosen the **Rear Camera connector** from the **Logic Board** with a **Universal fish line tool**.
- Remove the **Rear Camera** with **ESD Tweezers**.

Part: G949-00572-01 (Rear Camera)



Use Caution

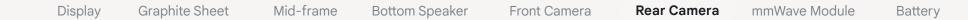
Ensure the environment is clean for this process.

Make sure the camera socket is clear of dust and debris.

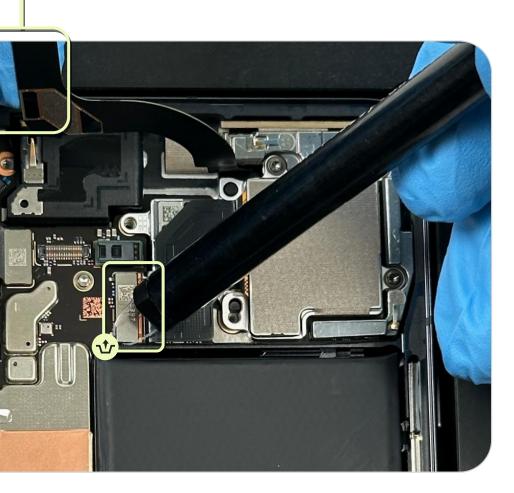
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Note

Use the **Universal fish line tool** to avoid damaging the components.



Slightly lift the FPC (only for mmWave)



Remove Rear Camera UW

- Loosen the **Rear Camera UW connector** from the **Logic Board** with a **Universal fish line tool**.
- Remove the **Rear Camera UW** with **ESD Tweezers**.

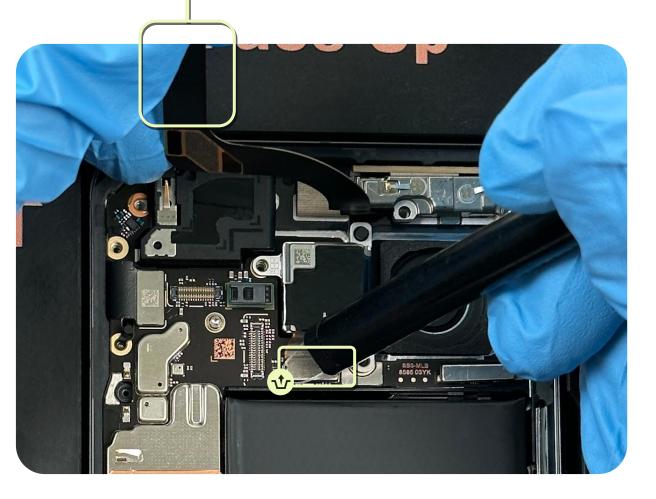
Part: G949-00571-01 (Rear Camera UW)



Use Caution

Ensure the environment is clean for this process.

Make sure the camera socket is clear of dust and debris.



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Note

Use the **Universal fish line tool** to avoid damaging the components.

Slightly lift the FPC (only for mmWave)

Precautions

Introduction

Repair flows

Disassembly

Disassembly instructions

mmWave Module

Millimeter waves (mmWave) are the radio waves used to build a 5G network, providing fast, reliable mobile data with low latency for the latest devices.

Use caution! Ŵ

Review all safety precautions before beginning work.



Remove the following components first:

- Display
- Graphite Sheet
- Mid-frame
- Rear Camera

K Tools

Pixel 8-Holder

Pixel 8-Screw Cover

Adjustable torque screwdriver

Screwdriver Hex Shank Torx Plus Bit no.3

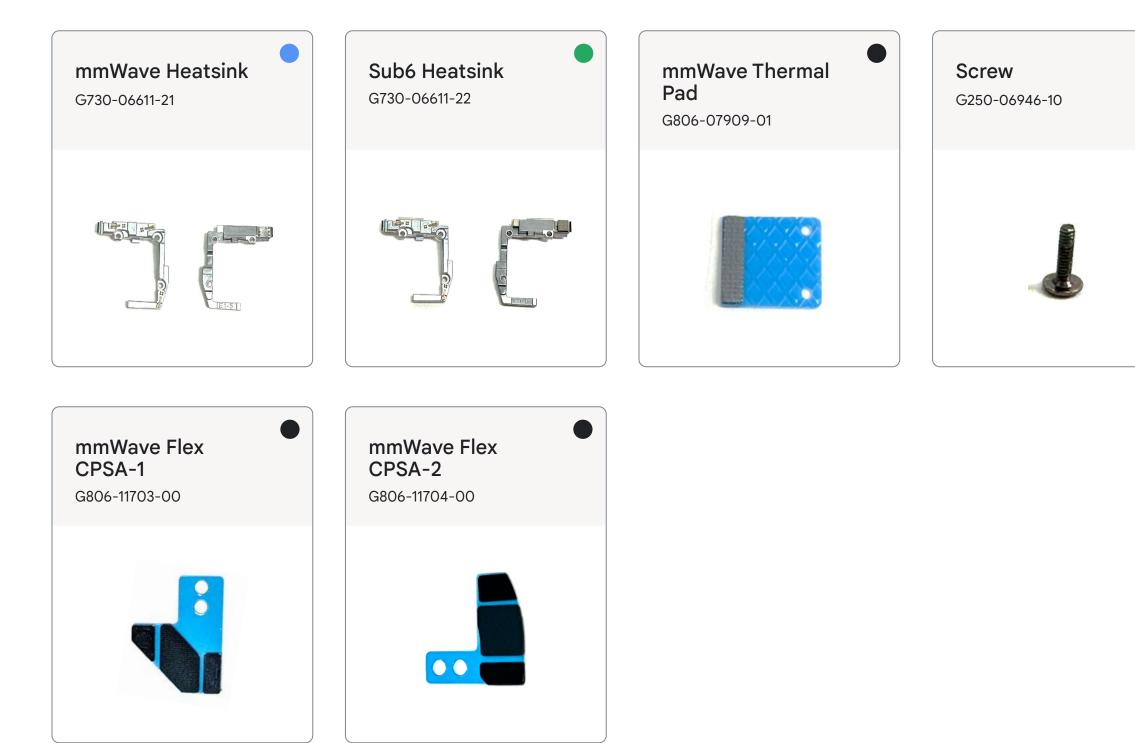
Universal Disassembly ESD stick

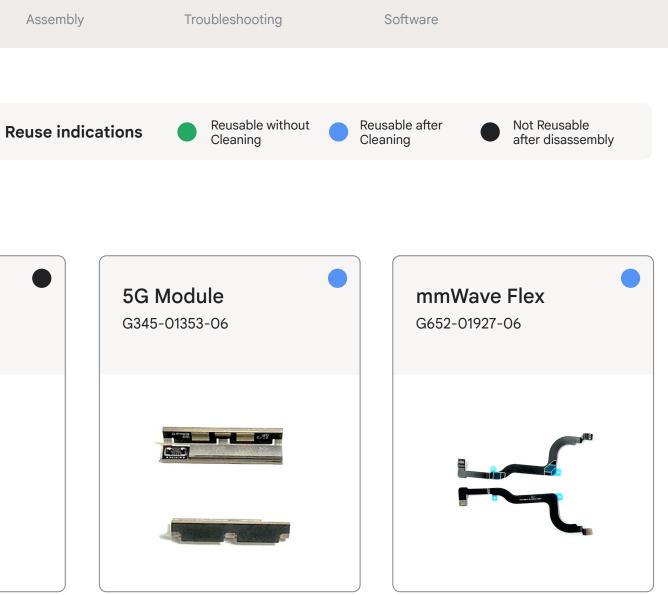
ESD Tweezers

🛠 Parts

mmWave Module

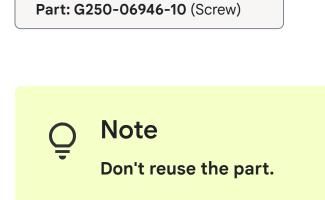
The parts listed are for the mmWave Module disassembly.





Remove screw

- Place the **Pixel 8-Screw Cover** on the **Pixel 8-Holder**.
- Remove the Heatsink Screw with a Adjustable torque screwdriver with Screwdriver Hex Shank Torx Plus Bit no.3, and remove the Pixel 8-Screw Cover.





Remove Heatsink

Lift the **mmWave Bracket** with **ESD Tweezers**.

Part: G730-06611-21 (mmWave Heatsink)

Part: G730-06611-22 (Sub6 Heatsink)





Logic Board Top Speaker Mic 1 Bracket Enclosure

Finished! Need assembly instructions? →

Remove 5G Module

Remove the **5G Module** and **mmWave Flex** together from the **Enclosure**.

Part: G345-01353-06 (5G Module)

Part: G652-01927-06 (mmWave Flex)



Note

This step is only needed for the mmWave Sku.



Battery

\land Use caution!

Use caution if engaging in repair.

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

Before servicing 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, immediately cover in sand or use gloves and tongs to place battery in a fire safe.
- Take care to prevent shorting of battery terminals or damaging the battery, as fire or overheating could result.
- Dispose of the battery in a manner in accordance with local regulations.

Confirm Before Proceeding

- Battery is fully discharged and the device is disconnected from all power sources.
- Inspect the battery if the phone battery shows signs of <u>swelling or damage</u>, or if the phone feels hot or emits strong odor, don't attempt disassembly. Please reach out to Google customer support.
- Take care not to expose the phone or its components to liquids once disassembled.

Disassembly

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Battery

It's recommended to use the Universal Disassembly Fixture to hold the device during the Battery removal process.

Use caution!

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



Prerequisites

Remove the following components first:

- Display
- Graphite Sheet
- Mid-frame



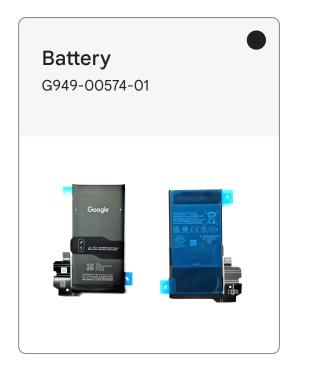
Heat Plate Universal Disassembly Fixture Universal Base Universal Press Universal Press Plate 12mm Pixel 8-Bat Press-#1 Pixel 8-Holder Pixel 8-Battery Press Rubber Universal adsorption bulb

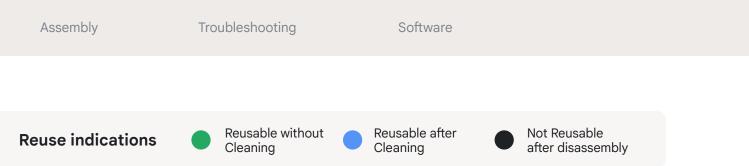
	Table C-Clamp
nbly Fixture	ESD Tweezers
	Feeler gauge
	lonizing air fan
ate 12mm	3M AP111 Primer
#1	

🛠 Parts

Battery

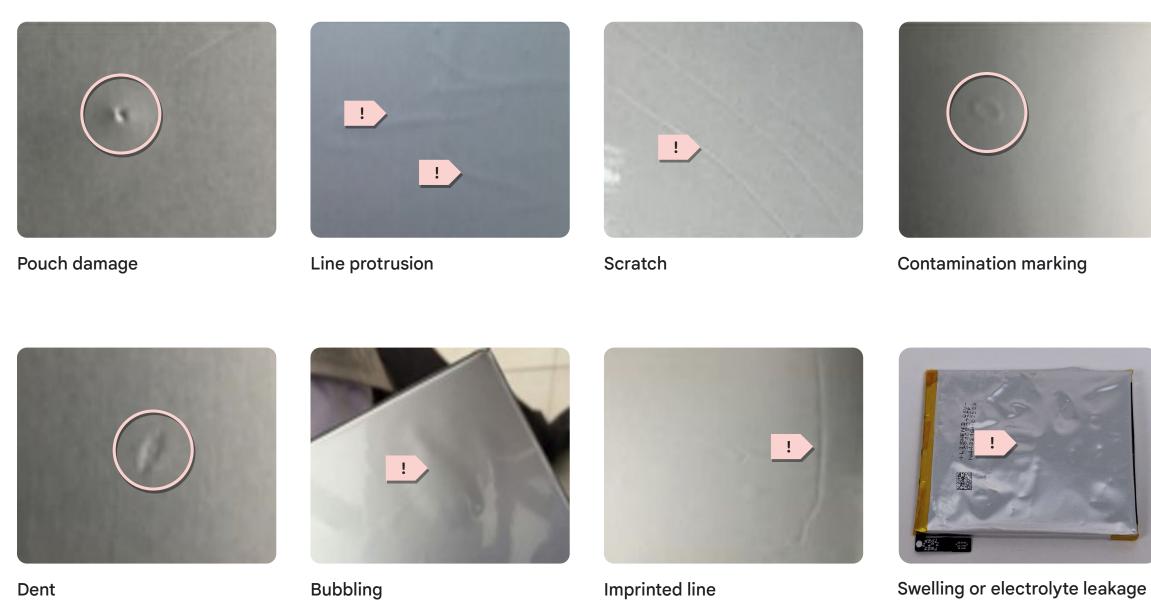
The parts listed are for the Battery disassembly.



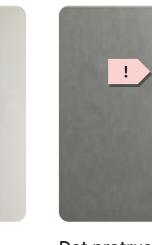




Examples of unacceptable battery conditions - Not suitable for repair*



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



!

Dot protrusion



Peel back pull jacket

Peel back the pull jacket on the battery following the instructions printed on the tabs using **ESD Tweezers**.

Part: G949-00574-01 (Battery)





Adjust pull jacket

- Wearing **ESD Finger cots** can help to increase friction, making the pull jacket easier to grip.
- Move the pull jacket horizontally toward the top of the phone, stopping when the arrows on the pull jacket are at or below the arrows on the **Battery** (Fig 1).

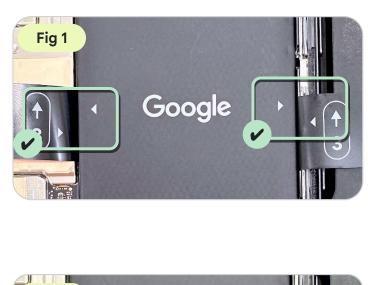


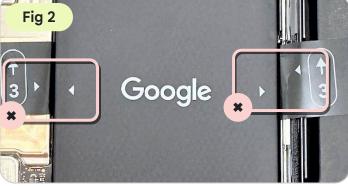
Use Caution

The intent of the pull jacket is to provide leverage to pull on the Battery, NOT to cut through the adhesive.

When moving the pull jacket, make sure the arrows on the jacket don't exceed those on the Battery.







Logic Board Top Speaker Mic 1 Bracket Enclosure

Soften adhesive

Place the device back down on the **Heat Plate** set to **158°F/70 °C for 10 mins** to soften the **Battery** adhesive evenly. To ensure even heating, don't rest the camera visor area on the heating surface.



Use Caution

Heat plate is a Hot Surface. Use caution as it could cause burns.



Precautions

Introduction

Repair flows

Disassembly

Clamp fixture

- Place the **Universal Disassembly Fixture** on a flat surface and fasten down with a clamp.
- Align the **Table C-Clamp** with the fixture, and make sure the clamp is fastened tightly.



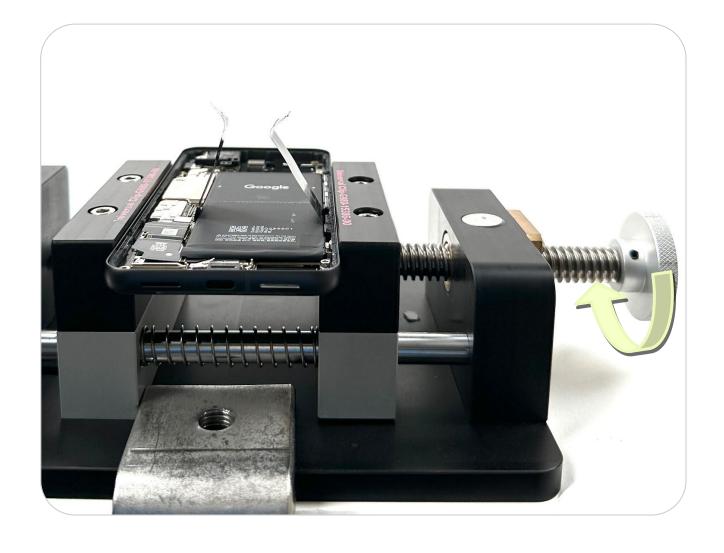
Logic Board Top Speaker Mic 1 Bracket Enclosure

Precautions

Introduction

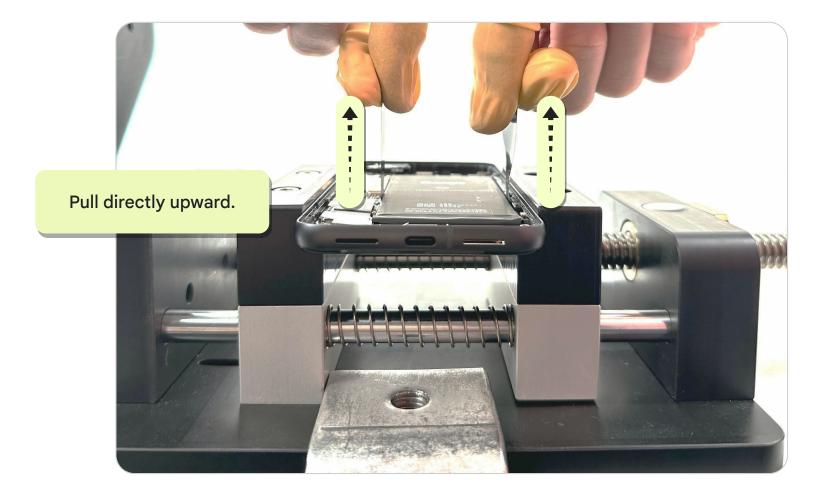
Secure device

- Use the **Universal Disassembly Fixture** to remove the **Battery**.
- Place the device on the **Fixture** and adjust so the device is centered.
- Turn the handle clockwise to lock the device in position.



Lift Battery

- Wearing **ESD Finger cots** can help to increase friction and make the pull jacket easier to grip.
- Pull both sides of the jacket upward, perpendicular to the device, to remove the **Battery**.



Use Caution

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The battery may be easier to remove if you lift the battery as soon as the device leaves the heat plate.

Logic Board Top Speaker Mic 1 Bracket Enclosure

Finished! Need assembly instructions? →

Remove Battery

- Gently remove the **Battery**.
- Store the battery safely and dispose of the battery in a manner in accordance with local regulations.

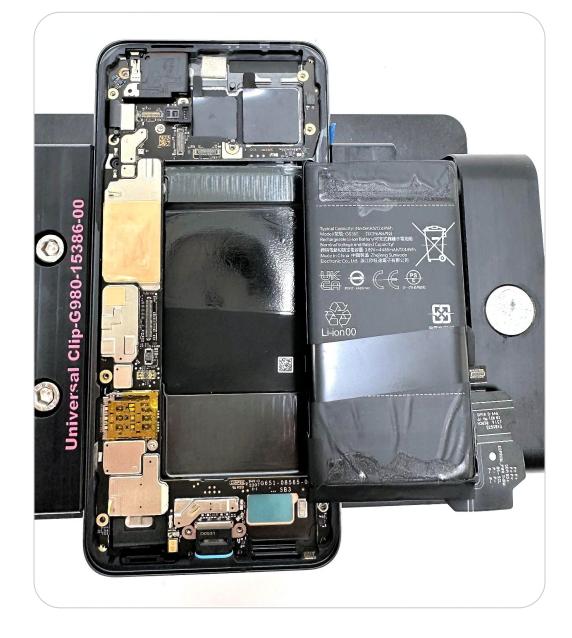
Part: G949-00574-01 (Battery)



Use Caution

Keep small screws and sharp objects away from the Battery.

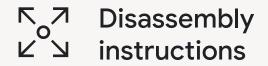
For your safety, we don't recommend reinstalling the battery after removal. After removal, install a new battery.



Precautions

Introduction

Repair flows



Logic Board

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

Use caution! /i/

Review all safety precautions before beginning work.



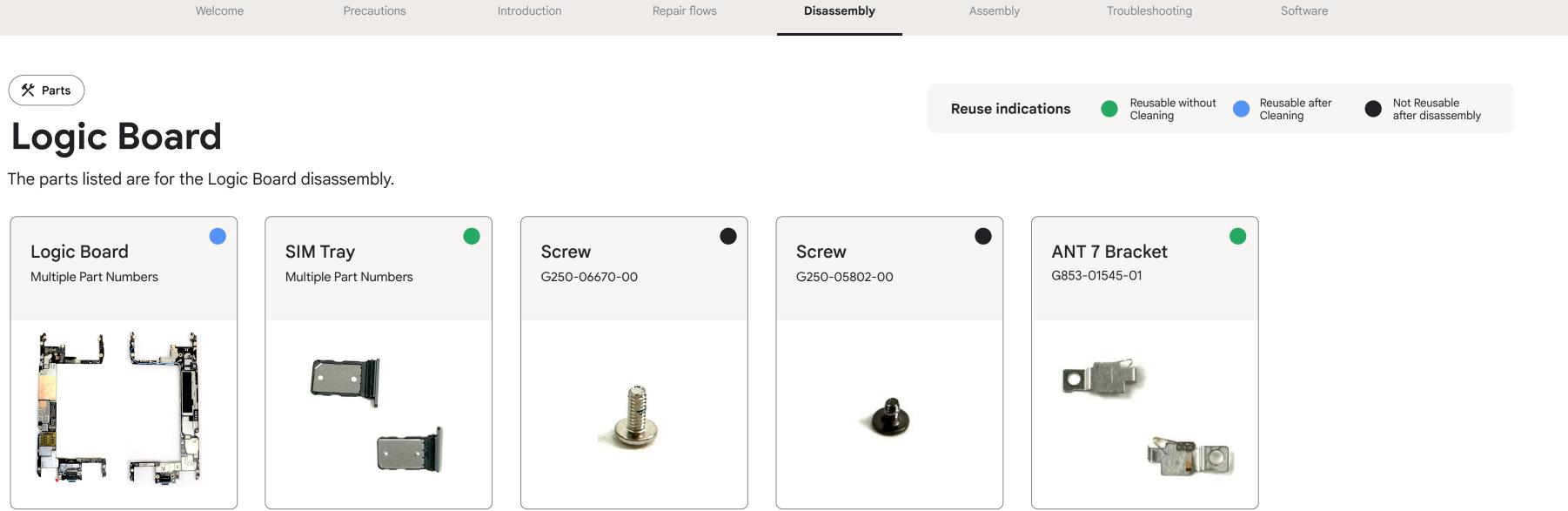
Prerequisites

Remove the following components first:

- Display
- Graphite Sheet
- Mid-frame
- Bottom Speaker
- Front Camera
- Rear Camera
- mmWave Module
- Battery



Pixel 8-Holder Pixel 8-Screw Cover Universal fish line tool Adjustable torque screwdriver Screwdriver Hex Shank Torx Plus Bit no.3 Universal Disassembly ESD stick ESD Tweezers IPA and cloth Dust-free Cotton swabs Sankol lubricant CFD 409Z V2

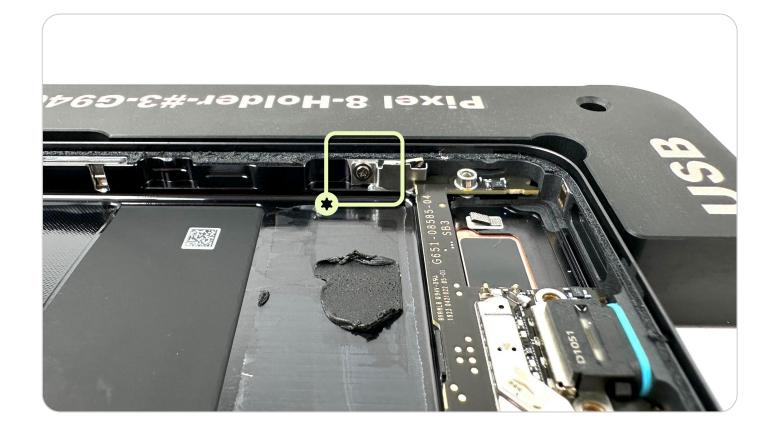


Remove screw

Remove the ANT 7 Screw with a Adjustable torque screwdriver with Screwdriver Hex Shank Torx Plus Bit no.3, and remove the Pixel 8-Screw Cover.

Part: G250-05802-00 (Screw)





Logic Board

Top Speaker

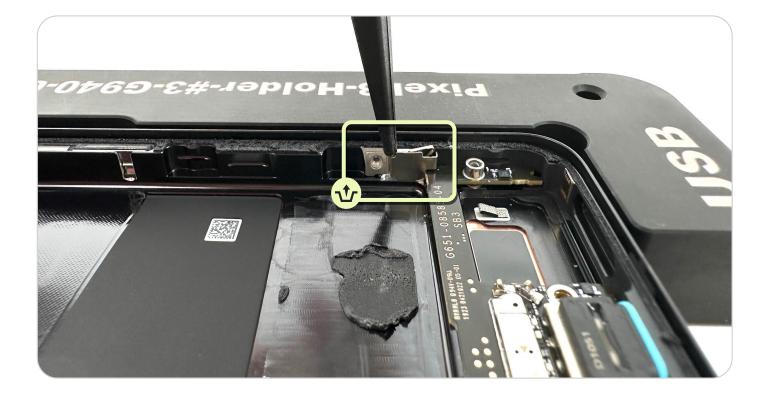
Mic 1 Bracket

Enclosure

Remove ANT 7 Bracket

• Remove the ANT 7 Bracket with the ESD Tweezers.

Part: G853-01545-01 (ANT 7 Bracket)



Logic Board

Top Speaker

Mic 1 Bracket

Enclosure

Disassembly

Remove SIM Tray

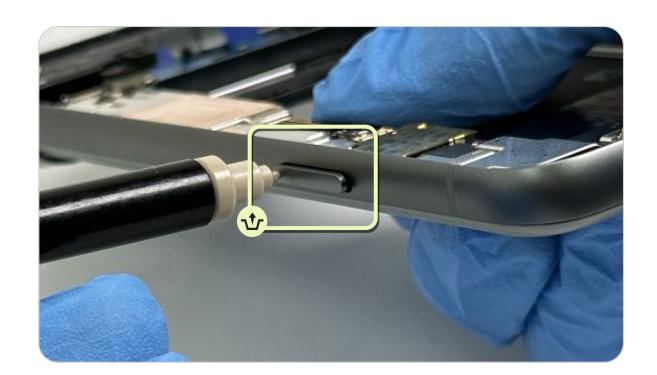
Remove the SIM Tray with the Universal fish line tool.

Part: Multiple Part Numbers (SIM Tray)



Use Caution

Be careful to avoid scratching the Enclosure.



Logic Board

Top Speaker

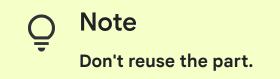
Mic 1 Bracket

Enclosure

Remove screws

- Place the **Pixel 8-Screw Cover** on the **Pixel 8-Holder**.
- Remove 2 Logic Board Screws with a Adjustable torque screwdriver with Screwdriver Hex Shank Torx Plus Bit no.3, and remove the Pixel 8-Screw Cover.









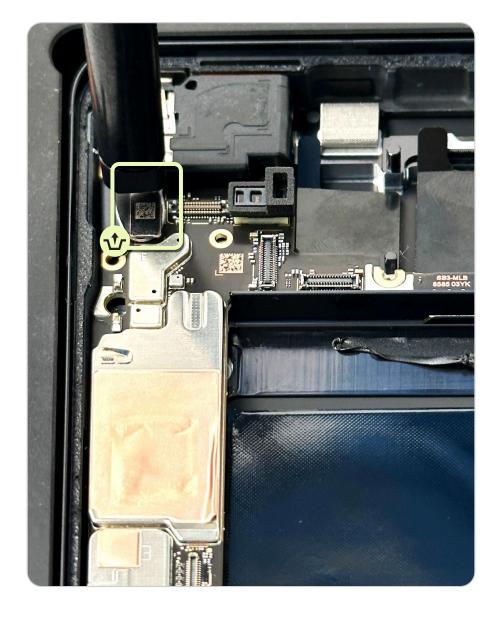
Disconnect Logic Board

Loosen the **BIF Flex** with the **Universal fish line tool**.



Note

Use the Universal fish line tool to avoid damaging the components.



Logic Board Top Speaker Mic 1 Bracket Enclosure

Finished! Need assembly instructions? →

Remove Logic Board

- Pry the Logic Board upward with an Universal Disassembly ESD stick.
- Holding the indicated part, lift the top side first to remove the **Logic Board**.

Part: Multiple Part Numbers (Logic Board)



Use Caution

Be careful to avoid damaging components on the Logic Board.



Note

Don't wear gloves when handling the Logic Board.





Logic Board Top Speaker Mic 1 Bracket Enclosure

Precautions

Introduction

Repair flows

Disassembly instructions

Top Speaker

The Top Speaker is used both as an ear speaker for making calls and a second loudspeaker for music and video playback.

Use caution! À

Review all safety precautions before beginning work.



Prerequisites

Remove the following components first:

- Display
- Graphite Sheet
- Mid-frame
- Bottom Speaker
- mmWave Module
- Battery
- Logic Board



Pixel 8-Holder

Pixel 8-Screw Cover

Adjustable torque screwdriver

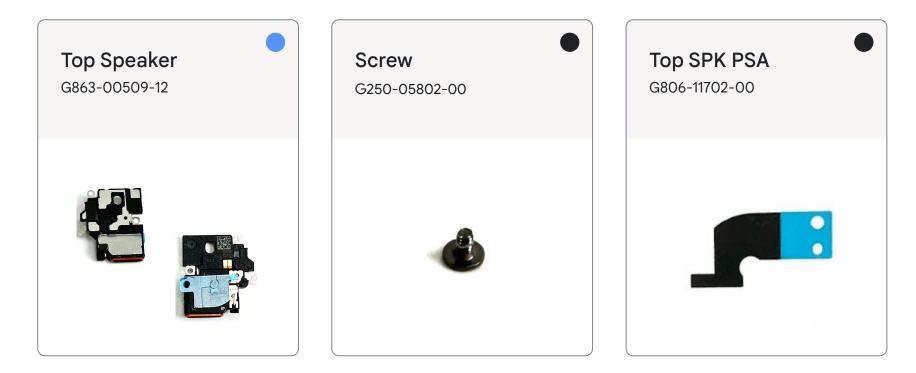
Screwdriver Hex Shank Torx Plus Bit no.3

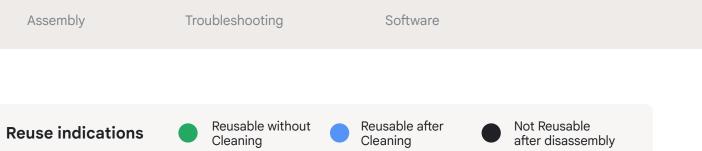
Universal Disassembly ESD stick

🛠 Parts

Top Speaker

The parts listed are for the Top Speaker disassembly.

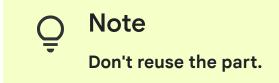




Remove screw

- Place the Pixel 8-Screw Cover on the Pixel 8-Holder.
- Remove Top Speaker Screw with a Adjustable torque screwdriver with Screwdriver Hex Shank Torx Plus Bit no.3, and remove the Pixel 8-Screw Cover.







Logic Board Top Speaker Mic 1 Bracket

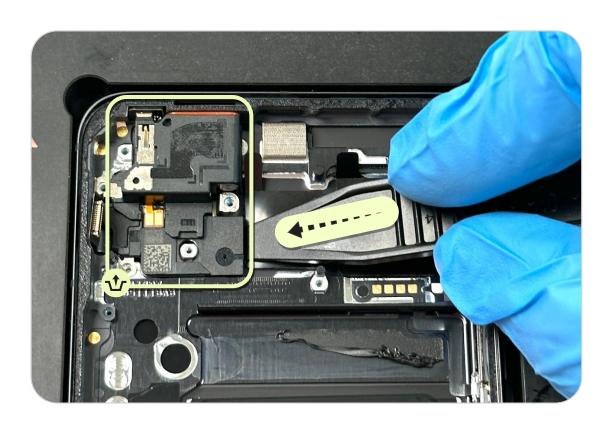
Enclosure

Finished! Need assembly instructions? →

Remove Top Speaker

Remove the **Top Speaker** with the **Universal Disassembly ESD stick**.

Part: G863-00509-12 (Top Speaker)



Logic Board

Top Speaker

Mic 1 Bracket

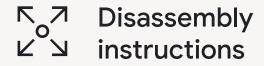
Enclosure

Precautions

Introduction

Repair flows

Disassembly



Mic 1 Bracket

The Mic 1 is adhered to the Enclosure. This component is not re-used. If it is removed, replace with a new part.

Use caution! À

Review all safety precautions before beginning work.



Prerequisites

Remove the following components first:

- Display
- Graphite Sheet
- Mid-frame
- Bottom Speaker
- mmWave Module
- Battery
- Logic Board

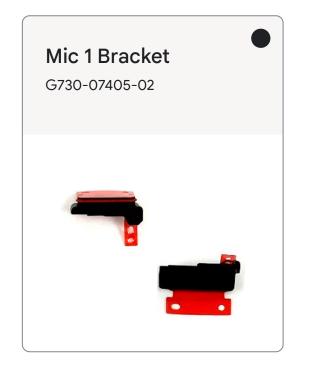


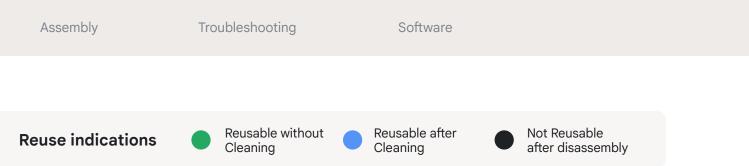
Pixel 8-Holder ESD spudger Dust-free Cotton swabs Sankol lubricant CFD 409Z_V2

🛠 Parts

Mic 1 Bracket

The parts listed are for the Mic 1 Bracket disassembly.





Finished! Need assembly instructions? →

Remove Mic 1 Bracket

Remove the **Mic 1 Bracket** with the **ESD spudger**.

Part: G730-07405-02 (Mic 1 Bracket)



Don't reuse the part.





Logic Board

Top Speaker

Mic 1 Bracket

Enclosure

Disassembly

Enclosure

If re-using the Enclosure, ensure that any thermal paste or adhesive residue is completely removed.

Use caution! Ŵ

Review all safety precautions before beginning work.



Prerequisites

Remove the following components first:

- Display
- Graphite Sheet
- Mid-frame
- Bottom Speaker
- mmWave Module
- Battery
- Logic Board
- Top Speaker
- Mic 1 Bracket



Pixel 8-Holder

Universal fish line tool

ESD spudger

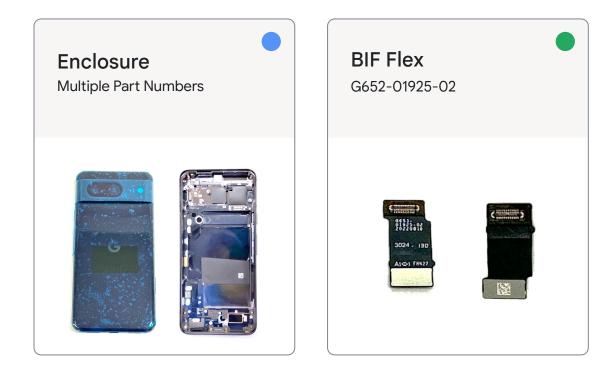
IPA and cloth

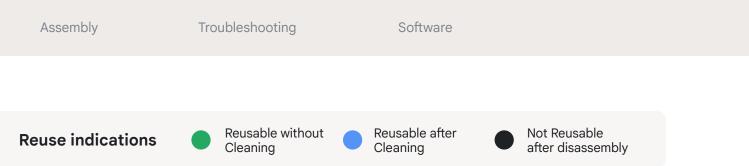
Deglue Machine

🛠 Parts

Enclosure

The parts listed are for the Enclosure disassembly.





Repair flows

Disassembly

Enclosure difference



mmWave





Sub6

Finished! Need assembly instructions? →

Remove BIF Flex

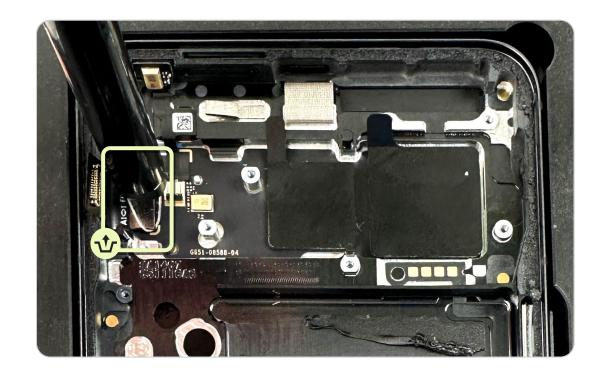
- Loosen the **BIF Flex** from the **Flam Board** with the **Universal fish line tool**.
- Remove the **BIF Flex**.

Part: G652-01925-02 (BIF Flex)



Note

Use the **Universal fish line tool** to avoid damaging the components.



Top Speaker

Mic 1 Bracket



Welcome

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Disassembly

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Pixel 8 Repair Manual

Assembly

Enclosure	Battery	Bottom Speaker
Mic 1 Bracket	mmWave Module	Mid-frame
Top Speaker	Rear Camera	Graphite Sheet
Logic Board	Front Camera	Display

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Disassembly

^凶ビ Assembly オ ^K instructions

Enclosure

Assembly

Troubleshooting

Software

Re-using Enclosure

- Inspect the **Enclosure** for adhesive residue.
- It is recommended to carefully and slowly peel off the adhesive in one piece by hand. Use an **ESD spudger** or **Deglue Machine** to clean the residual adhesive off the **Enclosure**.
- Use a **Dust Free Cloth** with **IPA** to clean the surface where needed.



Note

Place the device on a heat plate at 122°F /50 °C for 2 mins for easier removal.





Bottom Speaker

Mid-frame

Graphite Sheet

Re-using Enclosure-continued

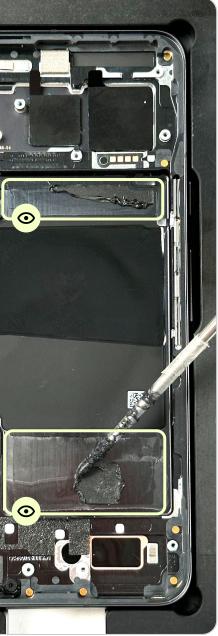
- Remove any residue in the **Battery** area with an **ESD spudger** or **Deglue Machine**.
- Apply IPA with Dust Free Cloth afterward.



Note

Place the device on a heat plate at 122°F /50 °C for 2 mins for easier removal.





Attach BIF Flex

Attach the **BIF Flex connector** to the **Flam Board**.

Part: G652-01925-02 (BIF Flex)



Bottom Speaker Mi

Mid-frame

Graphite Sheet

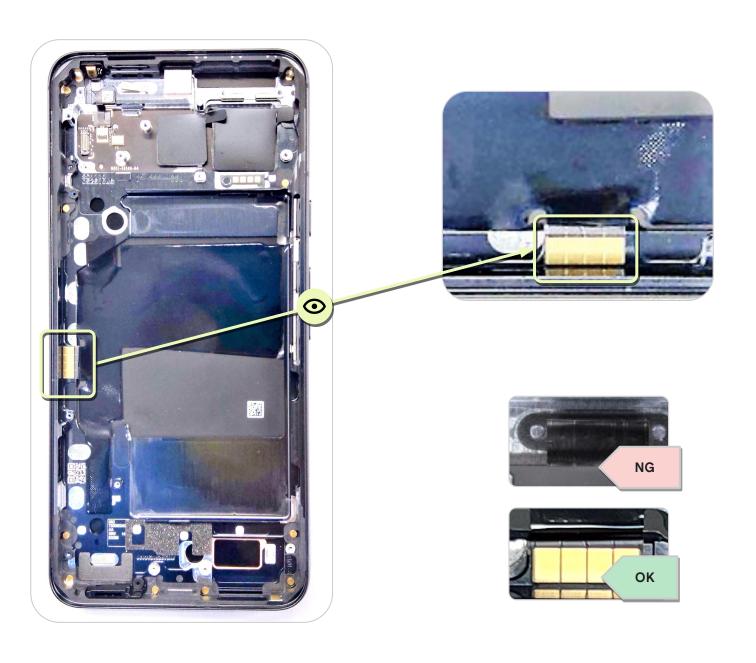
Welcome

Precautions

Introduction

Check Pad

- Inspect the Wireless Charger & NFC Pad. Make sure it is not covered or obstructed by the Graphite Sheet or other components,
- Inspect the flex tail. Make sure it aligns with the **Enclosure** edge.



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Precautions

Introduction

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1

^凶ビ Assembly オ ^K instructions

Mic 1 Bracket

Assembly

Troubleshooting

Software

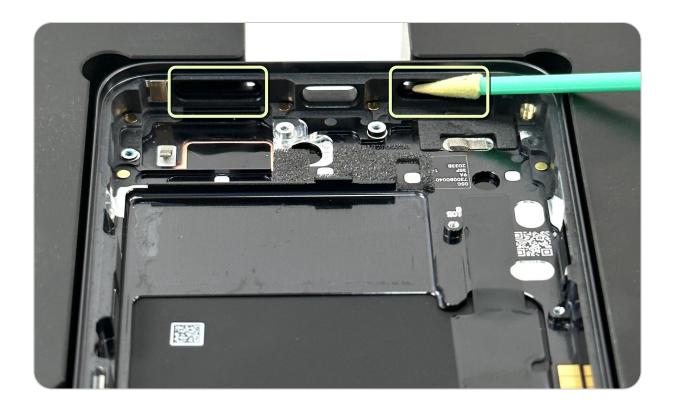
Lubricate area

Apply Sankol lubricant CFD 409Z_V2 with a Dust-free cotton swab around the mic grill and Bottom Speaker.



Note

Angle or bend the Dust-free cotton swab to go inside the holes for thorough application.



Bottom Speaker

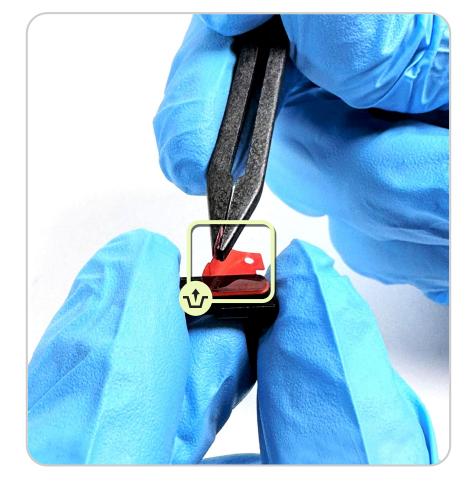
Mid-frame

Graphite Sheet

Remove Release Liner

Remove the designated **Mic 1 Bracket** release liner with **ESD Tweezers**.

Part: G730-07405-02 (Mic 1 Bracket)



Bottom Speaker

Mid-frame

Graphite Sheet

Insert new Mic 1 Bracket

- Insert the new **Mic 1 Bracket**. Ensure it is snapped past the **Enclosure** rim.
- Press for 3 seconds with an Universal Disassembly ESD stick.



Use Caution

Avoid touching the Mic 1 membrane during assembly.



Bottom Speaker

Mid-frame

Graphite Sheet

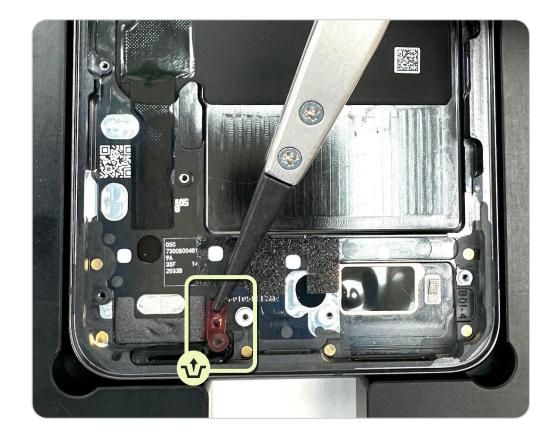
Remove Release Liner

Use **ESD Tweezers** to remove the second release liner on the **Mic 1 Bracket**.



Use Caution

Avoid touching the Mic 1 membrane during assembly.



Bottom Speaker

Mid-frame

Graphite Sheet

Welcome

Precautions

Introduction

Repair flows

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^凶ビ Assembly オト instructions

Top Speaker

Assembly

Troubleshooting

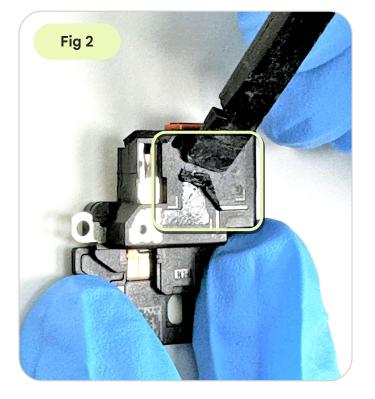
Software

Re-using Top Speaker

- Use a **ESD spudger** to clean the residual adhesive off the **Top Speaker** (Fig 2).
- Use a **Dust Free Cloth** with **IPA** to clean the surface as needed.

Part: G863-00509-12 (Top Speaker)





Bottom Speaker Mid-frame

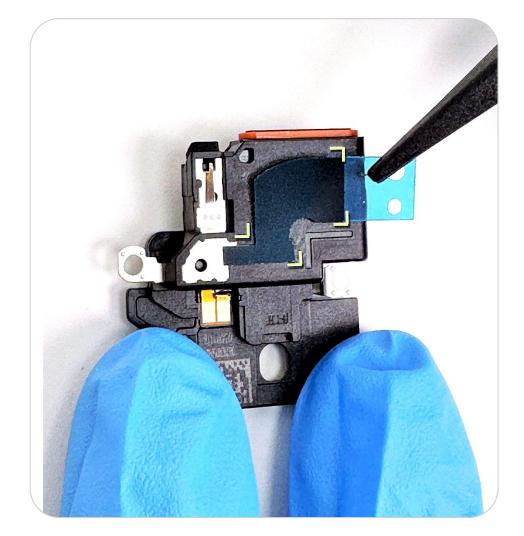
Graphite Sheet

Adhere Top Speaker PSA

Attach **Top Speaker PSA** to the **Top Speaker** by the line with an **ESD Tweezers**.

Parts: G863-00509-12 (Top Speaker)

Parts: G806-11702-00 (Top SPK PSA)



Bottom Speaker Mid-frame Graphite Sheet

Insert Top Speaker

- Check if the spring is deformed (Fig 1).
- Insert **Top Speaker** into the slot on the **Enclosure** at an angle of approximately 15°, making sure it fits properly. Hand press it into place (Fig 2).

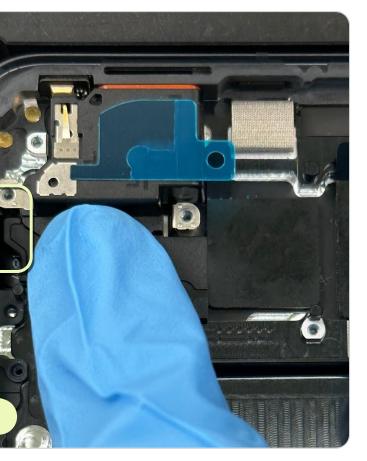
Parts: G863-00509-12 (Top Speaker)

O Note

Make sure the speaker sits under the enclosure rim.



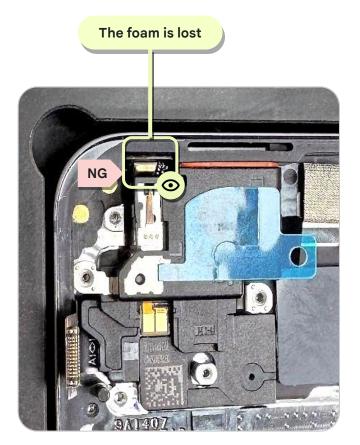
Make sure the BIF Flex does not interfere with assembly



Check Top Speaker

Check the foam status after assembling the **Top Speaker**.

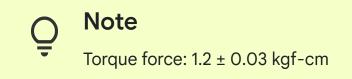




Tighten screw

- Place the Pixel 8-Screw Cover on the Pixel 8-Holder.
- Tighten the **Top Speaker Screw** with a **Adjustable torque screwdriver** with **Screwdriver Hex Shank Torx Plus Bit no.3**, then remove the **Pixel 8-Screw Cover**.

Part: G250-05802-00 (Screw)





^凶ビ Assembly オト instructions

Logic Board

Assembly

Troubleshooting

Software

Logic Board check

General Rules

Top view



Use Caution

Before assembling the MLB, check for spring deformation.

Pay **extra attention** to the springs during assembly to avoid damaging them.

Damaged springs may cause incomplete grounding. The part may need to be replaced to work as intended.





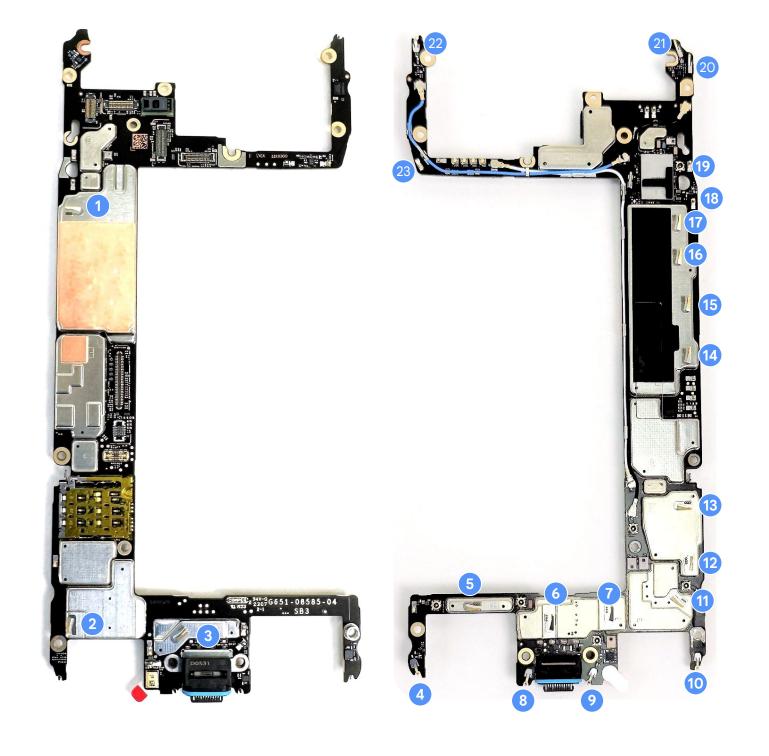
Top view



Side view







Bottom Speaker Mid-frame Graphite Sheet

eet Display

Re-using Logic Board

- Clean any thermal pad residue from the Logic Board with an ESD spudger.
- If there is any residue, use a **Dust Free Cloth** with **IPA** to gently clean the surface.

Part: Multiple Part Numbers (Logic Board)



Bottom Speaker

Mid-frame

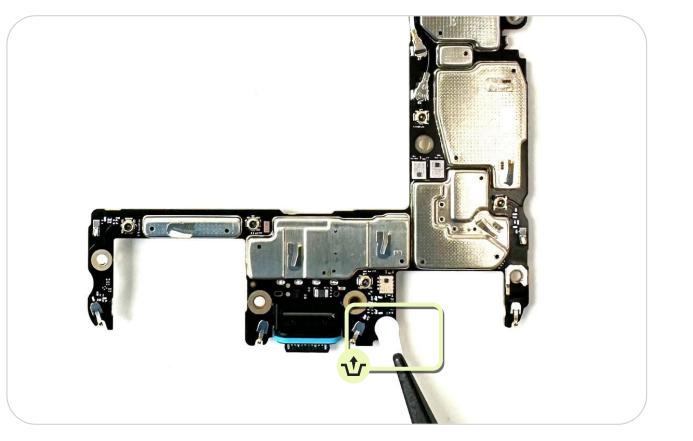
Graphite Sheet

Remove protective liner

If there is a Mic protective liner attached to the **Logic Board**, remove it using **ESD Tweezers**.



Note Don't reuse the protective liner.



Assemble Logic Board

- Lift the **BIF Flex** in the **Enclosure** by hand to avoid trapping it under the **Logic Board**.
- First, push the **Logic Board** downwards towards the USB port of the **Enclosure**.
- Then, push the Logic Board straight down flush against the retaining wall.



Use Caution

Be careful to avoid damaging components on the Logic Board.



Note

Don't wear gloves when handling the Logic Board.



Bottom Speaker

Mid-frame

Graphite Sheet

Welcome

Precautions

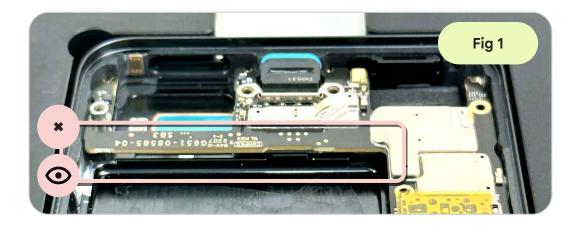
Introduction

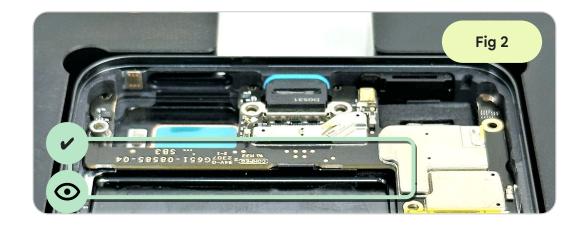
Repair flows

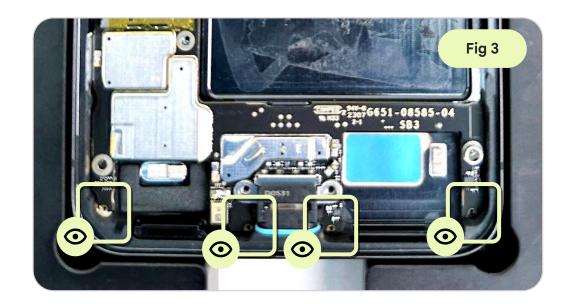
Disassembly

Check seating

- After pressing the **Logic Board** down, it should sit against the retaining wall (Fig 1 & 2).
- Ensure **4 ANT Contacts** are visible through slots on the **Logic Board** (Fig 3).







Bottom Speaker

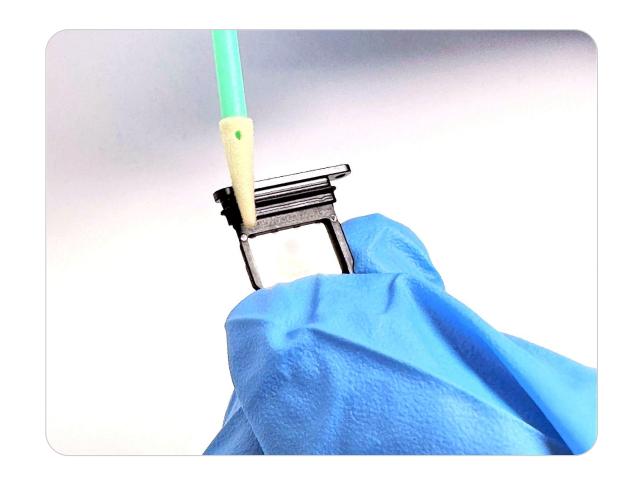
Mid-frame

Graphite Sheet

Prepare SIM Tray

Apply Sankol lubricant CFD 409Z_V2 to the rubber on the SIM Tray with a Dust-free cotton swab.

Part: Multiple Part Number (SIM tray)

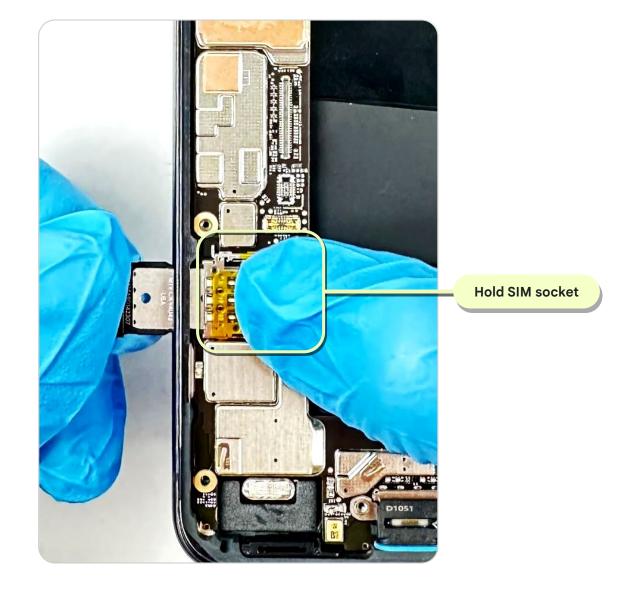


Bottom Speaker Mid-frame Graphite Sheet

et Display

Insert SIM Tray

Lightly hold the Logic Board and insert the SIM Tray with your hand.



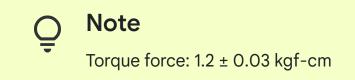
Bottom Speaker Mid-frame

Graphite Sheet

Tighten Screw

- Place the Pixel 8-Screw Cover on the Pixel 8-Holder.
- Tighten the 2 Logic Board Screws with a Adjustable torque screwdriver with Screwdriver Hex Shank Torx Plus Bit no.3, then remove the Pixel 8-Screw Cover.

Part: G250-06670-00 *2 (Screw)





Bottom Speaker Mid-frame Graphite Sheet

Attach BIF Flex

Attach the **BIF Flex** on the **Enclosure** to the **Logic Board**.



Note

Check every connector is fully attached to the Logic Board.



Bottom Speaker Mid-frame Graphite Sheet

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Attach ANT 7 Bracket

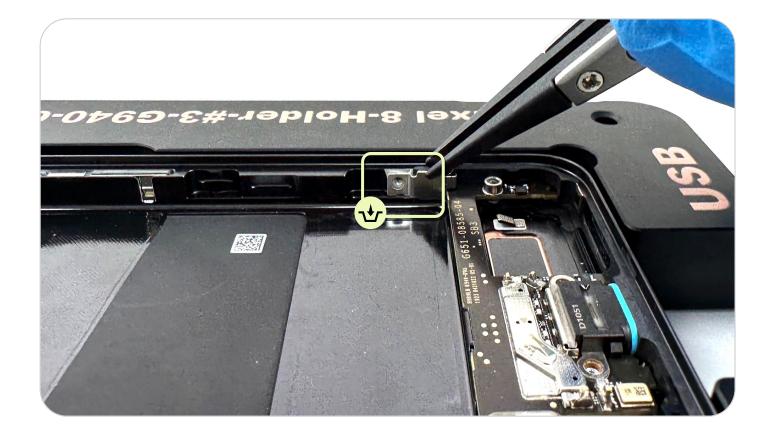
Attach the ANT 7 Bracket to the Enclosure.

Part: G853-01545-01 (ANT 7 Bracket)



Note

Inspect the spring status (ANT 7 Spring Location)



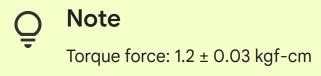
Bottom Speaker Mid-frame Graphite Sheet

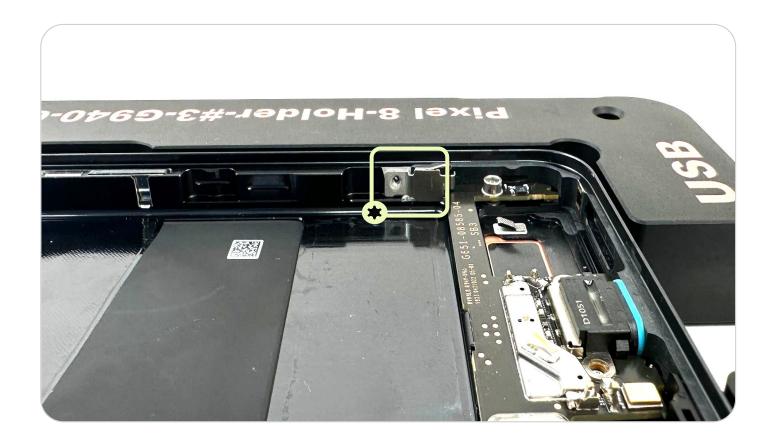
Pixel 8 Repair Manual v2.0 ©Google 2023 | Page 139

Tighten screw

Fasten the ANT 7 Bracket Screw with a Adjustable torque screwdriver with Screwdriver Hex Shank Torx Plus Bit no.3.

Part: G250-05802-00 (Screw)





Bottom Speaker Mid

Mid-frame

Graphite Sheet

Welcome

Precautions

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Disassembly

^凶 ∠ Assembly オ ⊂ instructions

Battery

Assembly

Troubleshooting

Software

Clean Enclosure

- Before installation, remove any debris/loose screws from the Enclosure.
- Apply IPA on the Enclosure with a Dust-free cotton swab. Use an lonizing air fan to blow over.
- Apply **3M 111 Primer** (per product instructions) on the **Enclosure** with a **Dust-free cotton swab**. Use an **Ionizing air fan** to blow over.



Use Caution

Once Primer has been applied, complete assembly in 25 mins.



Bottom Speaker Mid-frame

Graphite Sheet

Align Battery

Place 1.1mm Feeler gauge in the center, against the wall.

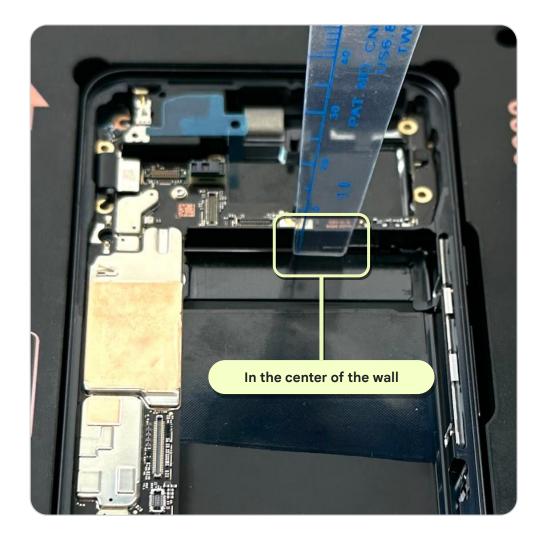


Use Caution

Don't skip this step.

Battery spacing is important for product performance.

Use extra care to align correctly.



Align Battery-continued

- Use the **Universal adsorption bulb** to pick up the **Battery** and remove the release liner.
- Align the **Battery** with the dashed lines (Fig 1).
- Gently press the **Battery** down with the **Universal adsorption bulb** (Fig 2).
- Remove the Universal adsorption bulb.

Part: G949-00574-01 (Battery)





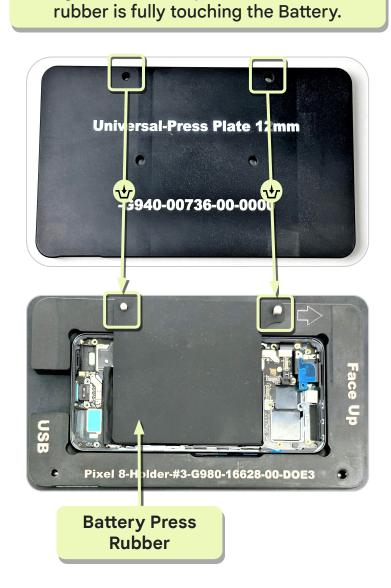
Bottom Speaker

Mid-frame

Graphite Sheet

Prepare to press

- Using the alignment pins, place the **Pixel 8-Battery Press Rubber** on top of the device, followed by the **Universal Press Plate 12mm** to create a stack.
- Place the stack on the Universal Base.



Align with the two pins. Make sure the



Place in fixture

- Place the Universal Base and stack into the Universal Press.
- Press the handle down for **10 seconds**.
- Restore the handle to the original position and remove the device.



Use Caution Pinch point. Keep hands clear during operation.



Precautions

Introduction

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^凶ビ Assembly オト instructions

mmWave Module

Assembly

Troubleshooting

Software

Re-using 5G Module

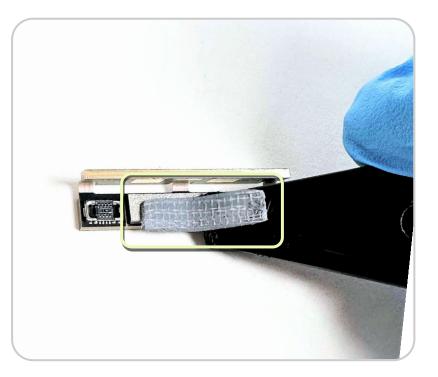
Clean residue from 5G Module with the Universal Disassembly ESD stick.

Part: G345-01353-06 (5G Module)



Note

This step is only needed for the mmWave Sku.



Re-using mmWave Flex

Remove all residue from the 2 locations on the mmWave Flex.

Part: G652-01927-06 (mmWave Flex)

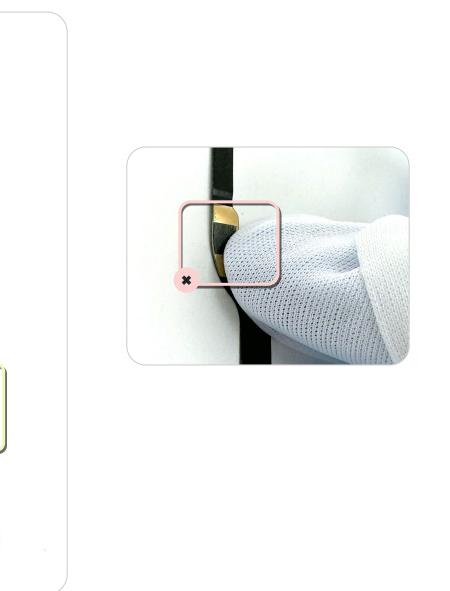
Note

This step is only needed for the mmWave Sku.

Use Caution

Be car puncti

Be careful not to damage or puncture the cable. It is fragile and may not work as intended, if damaged.



Bottom Speaker

Mid-frame

Adhere mmWave Flex CPSA

Attach the 2 CPSA to the designated locations.

Part: G652-01927-06 (mmWave Flex)

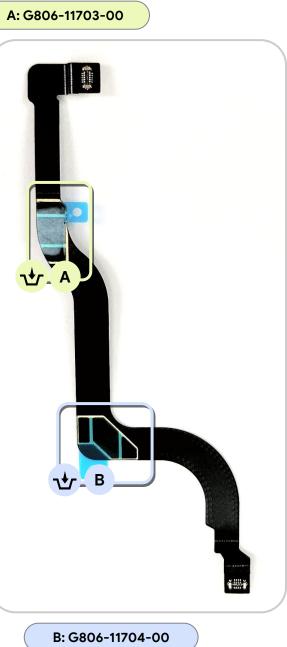
Part: G806-11703-00 (mmWave Flex CPSA-1)

Part: G806-11704-00 (mmWave Flex CPSA-2)



Note

This step is only needed for the mmWave Sku.



Mid-frame

Graphite Sheet

Assemble mmWave Flex

Attach the **mmWave Flex** to the **5G Module**.

Part: G345-01353-06 (5G Module)

Part: G652-01927-06 (mmWave Flex)

Οļ

Note

This step is only needed for the mmWave Sku.



Insert mmWave Flex

Attach the **mmWave Module** and **mmWave Flex** to the **Enclosure**.

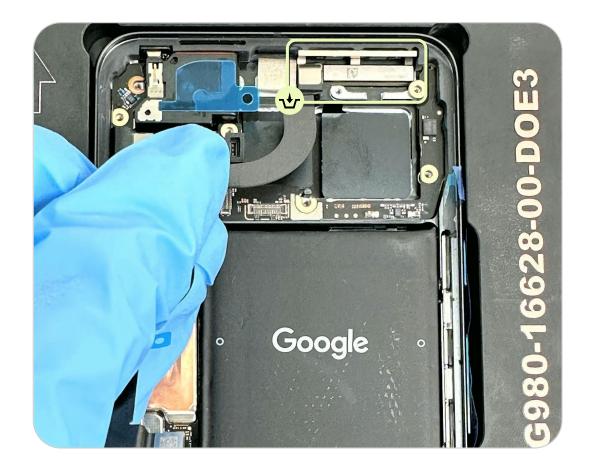
Part: G345-01353-06 (5G module)

Part: G652-01927-06 (mmWave Flex)

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Note

This step is only needed for the mmWave Sku.



Bottom Speaker

Mid-frame

Graphite Sheet

Apply Thermal Pad

Align the **mmWave Thermal Pad** with the outline on **mmWave Heatsink**.

Part: G730-06611-21 (mmWave Heatsink)

Part: G806-07909-01 (mmWave Thermal Pad)

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Note

This step is only needed for the mmWave Sku.

Inspect the spring status (Heatsink Spring Location)



Precautions

Introduction

Repair flows

Insert Heatsink

- Tear off the blue release liner before affixing the **Heatsink** (Fig 1).
- Insert the **Heatsink** at an angle (Fig 2 & 3).

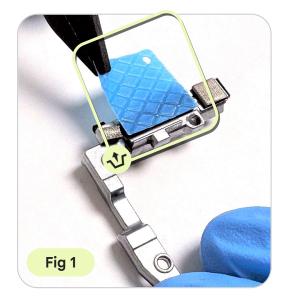
Part: G730-06611-21 (mmWave Heatsink)

Part: G730-06611-22 (Sub6 Heatsink)



Note

The blue release liner needs to be removed only for the mmWave Sku.







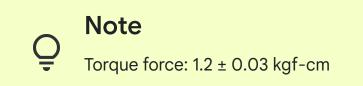
Precautions

Introduction

Tighten screw

- Place the **Pixel 8-Screw Cover** on the **Pixel 8-Holder**.
- Tighten the Heatsink Screw with a Adjustable torque screwdriver with Screwdriver Hex Shank Torx Plus Bit no.3, then remove the Pixel 8-Screw Cover.

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Precautions

Introduction

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^凶ビ Assembly オト instructions

Rear Camera

Assembly

Troubleshooting

Software

Connect Rear Camera UW

Apply even pressure to attach the **RCAM UW Connector** to the **Logic Board**.

Part: G949-00571-01 (Rear Camera UW)

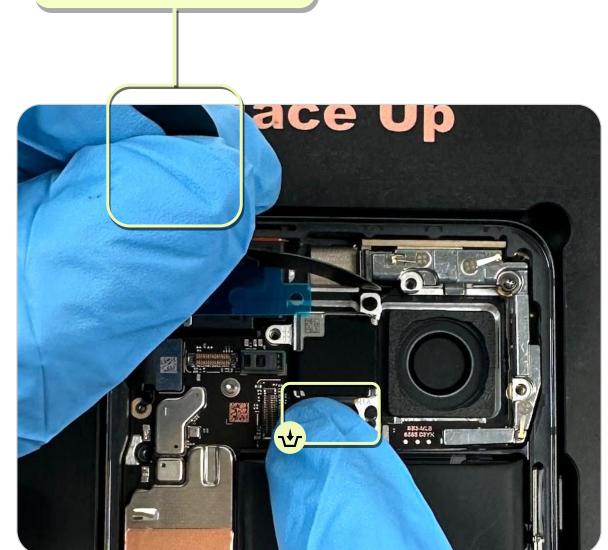


Use Caution

Ensure that the environment is clean for this process.

O Note

Check every connector is fully attached to the Logic Board.



Assembly

Troubleshooting

Software

Slightly lift the FPC (only for mmWave)

1

Connect Rear Camera

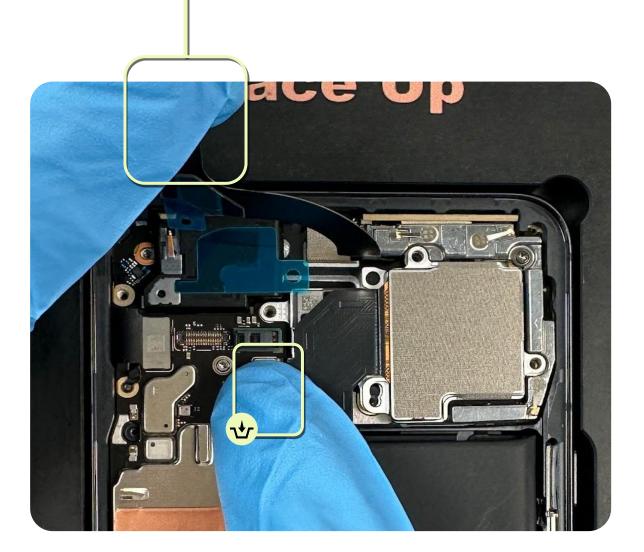
Apply even pressure to attach the RCAM Connector to the Logic Board.

Part: G949-00572-01 (Rear Camera)



Note

Check every connector is fully attached to the Logic Board.



Assembly

Troubleshooting

Software

Slightly lift the FPC (only for mmWave)

Tighten screws

- Place the **Pixel 8-Screw Cover** on the **Pixel 8-Holder**.
- Tighten the 2 Rear Camera Screws with a Adjustable torque screwdriver with Screwdriver Hex Shank Torx Plus Bit no.3, then remove the Pixel 8-Screw Cover.

Part: G250-06946-10 *2 (Screw)





Bottom Speaker Mid-frame

Graphite Sheet

Precautions

Introduction

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Disassembly

^凶ビ Assembly オト instructions

Front Camera

Assembly

Troubleshooting

Software

Attach Front Camera

- Remove release liner with ESD Tweezers (Fig 1).
- Slightly lifting the **mmWave** fpc, connect the **FCAM** Connector to the **Logic Board** (Fig 2).
- Adhere FCAM fpc per the red rubber ring location.
- Press down for 3 seconds to fully activate **Top Speaker** PSA (Fig 3 & 4). Make sure the flex adheres seamlessly to **the Top Speaker** (Fig 5 & 6).





Part: G949-00570-01 (Front Camera)



Use Caution

Ensure that the environment is clean for this process.

Q Note

Check every connector is fully attached to the Logic Board.









Bottom Speaker N

Mid-frame

Graphite Sheet

Precautions

Introduction

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Disassembly

^凶ピ Assembly オ ^K instructions

Bottom Speaker

Assembly

Troubleshooting

Software

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Attach Bottom Speaker

- Inspect the spring status (Bottom Speaker spring location).
- Slot the **Bottom Speaker** into the **Enclosure**.
- Insert the **Bottom Speaker** at an angle.

Part: G863-00507-03 (Bottom Speaker)



Note

Make sure the speaker goes under the enclosure rim.

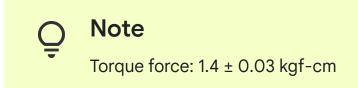




Tighten screw

- Place the **Pixel 8-Screw Cover** on the **Pixel 8-Holder**.
- Tighten the Bottom Speaker Screw with a Adjustable torque screwdriver with Screwdriver Hex Shank Torx Plus Bit no.3, then remove the Pixel 8-Screw Cover.

Part: G250-06946-10 (Screw)





Bottom Speaker

Mid-frame

Graphite Sheet

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Mid-frame

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Re-using Mid-frame

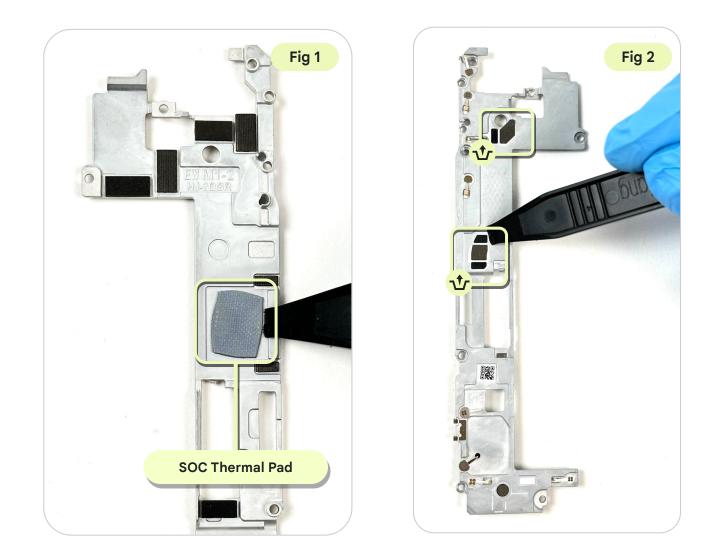
- Inspect to ensure the **Thermal Pad** is on the bottom side of the **Mid-frame** (Fig 1) and is undamaged.
- If it is missing or damaged, use an **ESD Spudger** with **IPA** to clean all residue from the **Mid-frame** (Fig 1 & Fig 2).



Note

An undamaged Thermal Pad can be reused.

Otherwise, it will need to be replaced.



Bottom Speaker

Mid-frame

Graphite Sheet

Apply Thermal Pad

Align the **Thermal Pad** with the outline on the **Mid-frame**. Remove the release liner after application.

Part: G806-07607-02 (SOC Thermal Pad)



<u>/</u>!\

Note

This step is only need for a new or a cleaned Mid-frame for reuse.



Apply the Thermal Pad according to the outline.

Use Caution

Don't forget to remove the release liner after installation.



Bottom Speaker

Mid-frame

Graphite Sheet

Connect Battery

Connect the **Battery Flex** to the **Logic Board**.



Note

Check every connector is fully attached to the Logic Board.

The mmWave flex is only needed for the mmWave Sku.



Bottom Speaker

Mid-frame

Graphite Sheet

Precautions

Introduction

Repair flows

Fit Mid-frame

- Gently lift the **mmWave Flex**.
- Assemble the **Mid-frame** per the positioning posts on the **Logic** Board.

Part: G949-00573-01 (Mid-frame)



Assembly

Software

Bottom Speaker

Mid-frame

Graphite Sheet

Fasten Mid-frame

- Place the **Pixel 8-Screw Cover** on the **Pixel 8-Holder**.
- Tighten the 8 Mid-frame Screws with a Adjustable torque screwdriver with Screwdriver Hex Shank Torx Plus Bit no.3, take out the Pixel 8-Screw Cover.

Part: G250-06946-10 *8 (Screw)

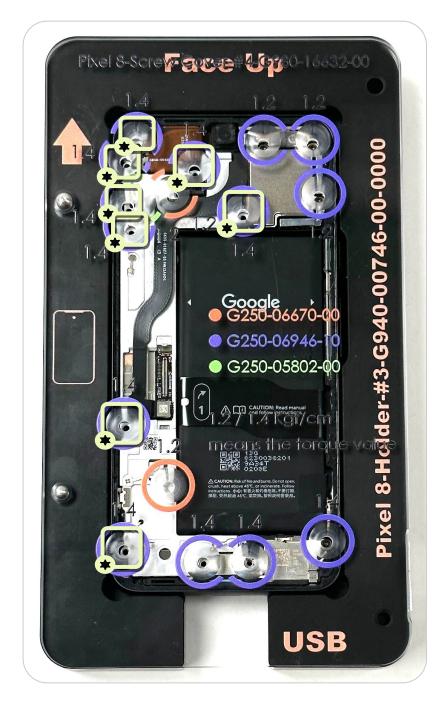
Note Torque force: 1.4 ± 0.03 kgf-cm

 \wedge

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Use Caution

Be careful when using the screwdriver to not damage the adjacent battery.



Bottom Speaker

Mid-frame

Graphite Sheet

Fasten USB-C cowling

- Assemble the **USB-C cowling** according to the two positioning posts on the **Mid-frame** and **Bottom Speaker**.
- Place the **Pixel 8-Screw Cover** on the **Pixel 8-Holder**.
- Tighten the 2 USB-C cowling Screws with a Adjustable torque screwdriver with Screwdriver Hex Shank Torx Plus Bit no.3, and remove the Pixel 8-Screw Cover.

Part: G853-01546-00 (USB-C cowling)

Part: G250-06946-10 *2 (Screw)



Use Caution

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

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

Note

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Torque force: 1.4 ± 0.03 kgf-cm





Bottom Speaker

Mid-frame

Graphite Sheet

Adhere DIC SHIM

- Align the **DIC SHIM** with the **2 Laser Engraving Lines** on the **Mid-frame** and **Bottom Speaker**.
- Use **ESD Tweezers** to slowly tear off the release liner.

Part: G806-09026-01 (DIC SHIM)





Bottom Speaker

Mid-frame

Graphite Sheet

Disassembly

Attach P-sensor Grommet

Attach P-sensor Grommet to the Logic board with ESD Tweezers.

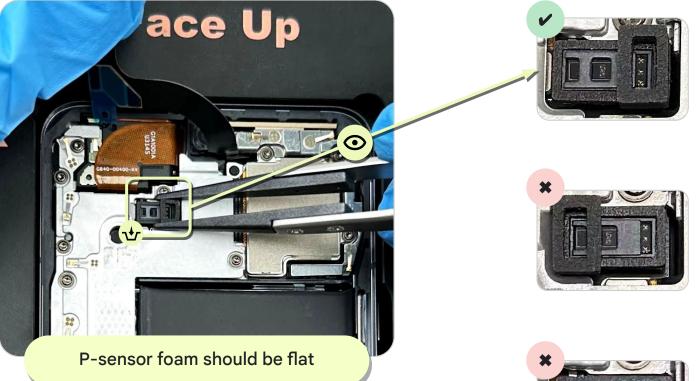
Part: G806-07441-01 (P-sensor Grommet)

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Note

Check P-sensor Grommet to ensure it is flat.

Skip this step, if the P-sensor grommet was not removed from the logic board during disassembly.





Use Caution

Use a new grommet when replacing the MLB. **Don't reuse the old P-sensor** grommet.



Bottom Speaker

Mid-frame

Graphite Sheet

Precautions

Introduction

Repair flows

Disassembly

[∨]∠ Assembly スペ instructions

Graphite Sheet

Assembly

Troubleshooting

Software

Inspect Springs

• Inspect the **Springs** at the numbered locations.







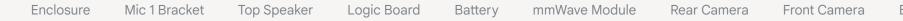






Locations

1	Top Speaker	5	Mid-frame D	9	Mid-frame H	13	ANT7 bracket
2	Mid-frame A	6	Mid-frame E	10	Bottom Speaker C	14	Heatsink C
3	Mid-frame B	7	Mid-frame F	11	Bottom Speaker B	15	Heatsink B
4	Mid-frame C	8	Mid-frame G	12	Bottom Speaker A	16	Heatsink A







Bottom Speaker

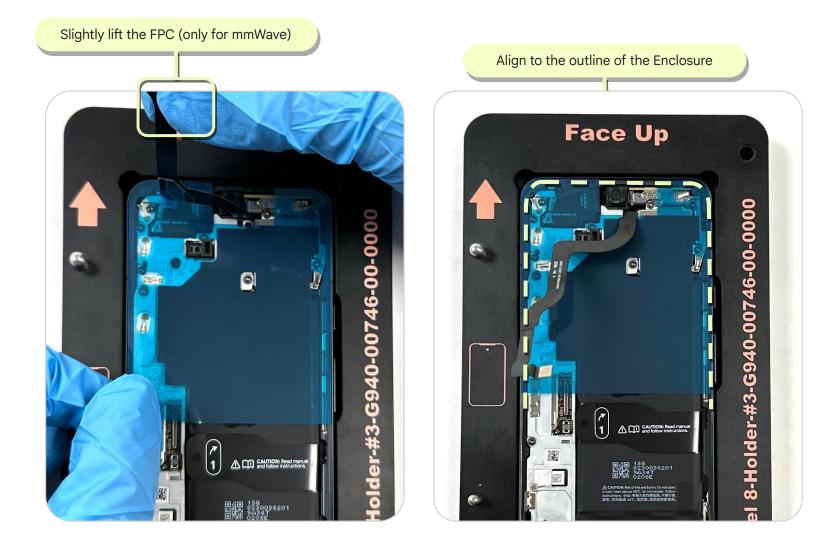
Mid-frame Graphite Sheet

1

Apply Graphite Sheet

Part: G864-00621-01 (Graphite Sheet)

• With the device in the **Pixel 8-Holder**, place the **Graphite Sheet**, aligning it with the outline of **Enclosure**.



Bottom Speaker

Mid-frame

Graphite Sheet

Adhere Graphite Sheet

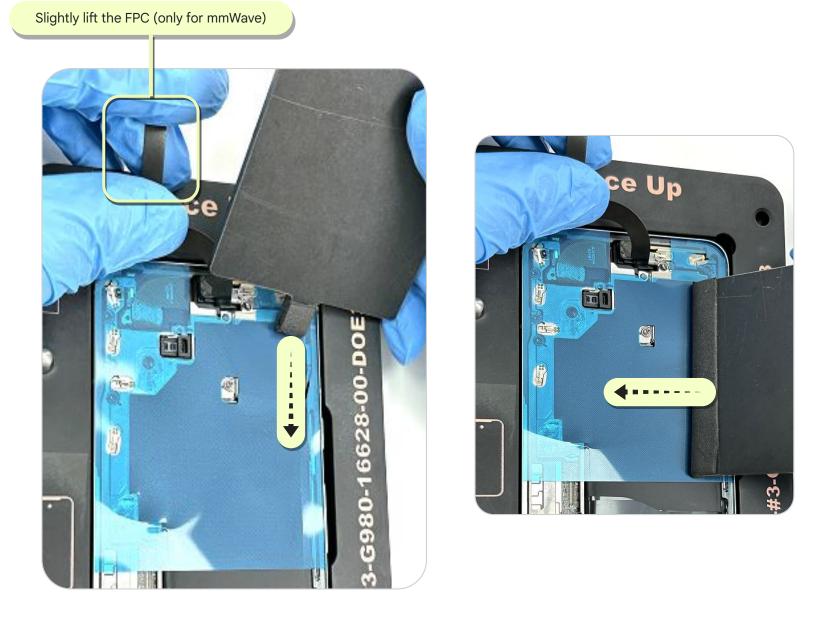
- Run the **Universal Scraper** over the **Graphite Sheet** to smooth out any air pockets. Use the smaller end where needed.
- Take extra care when applying pressure to the battery area.



Use Caution

Select the appropriate end of the Universal Scraper to smooth the sheet.

Avoid pressing on top of gaskets and springs, as it may deform them.



Bottom Speaker

Mid-frame

Graphite Sheet

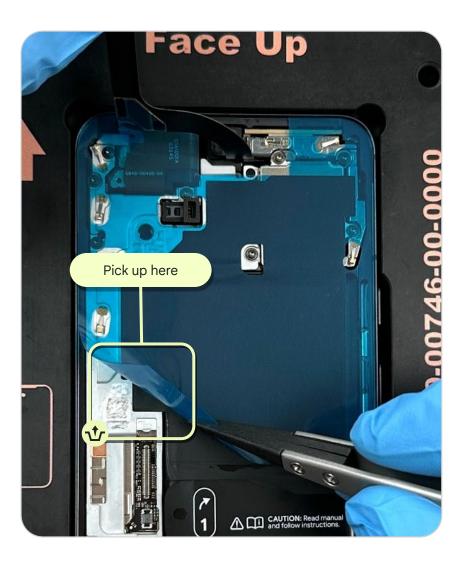
Remove release liner

Peel off the release liner with **ESD Tweezers**.

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Use Caution

Avoid pressing on top of gaskets and springs, as it may deform them.



Bottom Speaker

Mid-frame

Graphite Sheet

Attach mmWave Flex

- Tear off the **2 CPSA release liners**. (Fig 1).
- Align flex with the outline, and press down with an **ESD spudger** to activate the PSA (Fig 2).



Note

This step is only needed for the mmWave Sku.





Bottom Speaker

Mid-frame

Graphite Sheet

Connect mmWave Module

Connect **mmWave Flex** to the **Logic Board**.



Note

Check every connector is fully attached to the Logic Board.

This step is only needed for the mmWave Sku.



Bottom Speaker

Mid-frame

Graphite Sheet

Welcome

Precautions

Introduction

Repair flows

Disassembly

^凶ビ Assembly オト instructions

Display

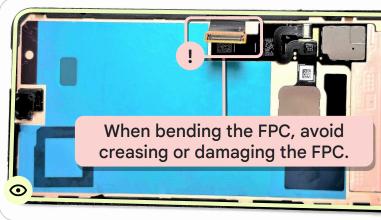
Assembly

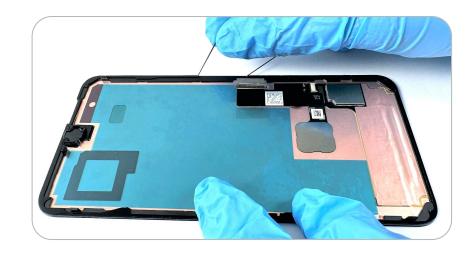
Troubleshooting

Software

Re-using Display

- Inspect the **Display** for adhesive residue.
- Apply Masking Tape to the Flex.
- It is recommended to carefully and slowly peel off the adhesive by hand in one piece. Use an **ESD spudger** or **Deglue Machine** to clean it.
- Use a **Dust-Free Cloth** to clean the surface with **IPA** where needed.









Bottom Speaker

Mid-frame G

Graphite Sheet



Introduction

Apply primer on Display

- Apply IPA around the edges of the **Display Module** using a **Dust-free cotton swab**. Use an **Ionizing air fan** to blow over.
- Apply **3M 111 Primer** around the edges of the **Display Module** using a **Dust-free cotton swab**. Use an **Ionizing air fan** to blow over.

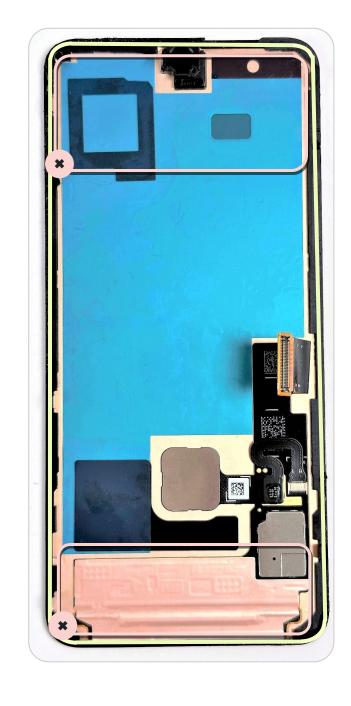
Part: G949-00555-01 (Display Module)



Use Caution

When applying IPA & AP111 primer to the Display Module, avoid touching the copper and sponge areas.

Once Primer has been applied, complete assembly in 25 mins.



Bottom Speaker

Mid-frame Gr

Graphite Sheet



Remove release liner

Slowly remove the release **liner** from the **Adhesive** by hand.

Part: G806-09106-12 (CG-Trim PSA)



Use Caution

Don't touch the adhesive.

If it gets dirty, change for another one.



Bottom Speaker

Mid-frame Gr

Graphite Sheet



Align adhesive

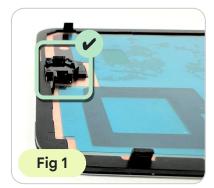
- Make sure **FCAM release liner** does not interfere with **CG Trim** (Fig 1).
- Place the Adhesive with the **3 Snaps** on CG Trim by hand (Fig 2).

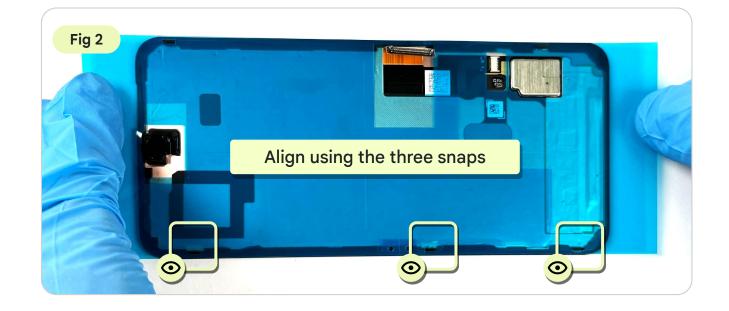


Use Caution

Don't touch the adhesive.

If it gets dirty, change for another one.

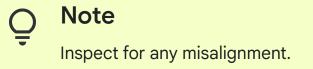


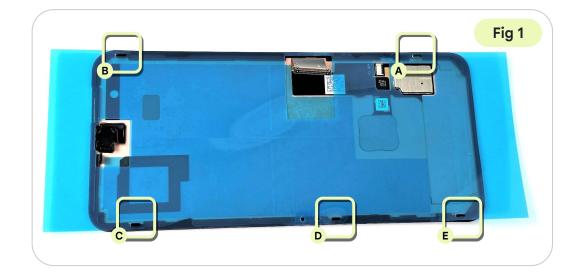


Bottom Speaker Mid-frame Graphite Sheet Display

Adhesive to Display

- Make sure the Adhesive is completely seated into the 5 Snaps (Fig 1).
- Use the Universal Disassembly ESD stick to activate the Adhesive (Fig 2).







Bottom Speaker

Mid-frame G

Graphite Sheet

Display

Remove release liner (1st layer)

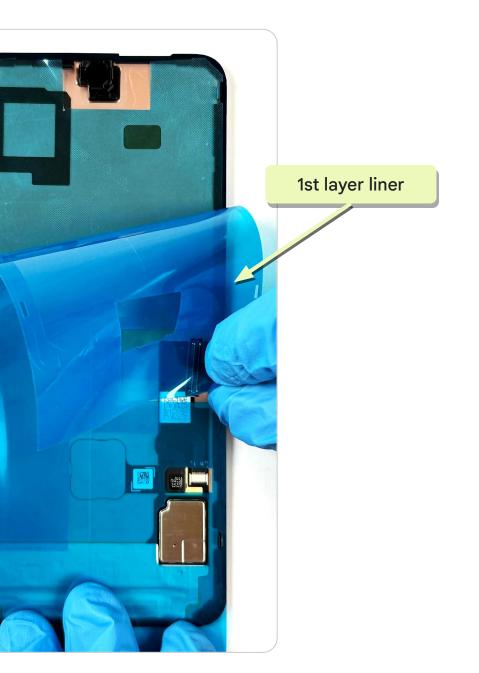
Slowly pull the release liner to avoid lifting the adhesive.



Use Caution

Don't remove the 2nd layer of the release liner yet.

2nd layer liner



Bottom Speaker

Mid-frame Gra

Graphite Sheet



Apply Primer on Enclosure

- Apply IPA around the edges of the Enclosure using a **Dust-free cotton swab**. Use an **Ionizing air fan** to blow over.
- Apply **3M 111 Primer** around the edges of the **Enclosure** using a **Dust-free cotton swab**. Use an **Ionizing air fan** to blow over.



Use Caution

Once Primer has been applied, complete assembly in 25 mins.





Bottom Speaker

Mid-frame G

Graphite Sheet



Align Display

- Before attaching the **Display Module**, visually check the **Springs**.
- Use the **Universal adsorption bulb** to prop up the **Display Module**.



Use Caution

When attaching the display, don't damage or deform the springs.



Bottom Speaker

Mid-frame Gr

Graphite Sheet



Connect Display

Connect the **Display Flex** to the **Logic Board**, applying even pressure across the connector to ensure it is fully engaged.



Note

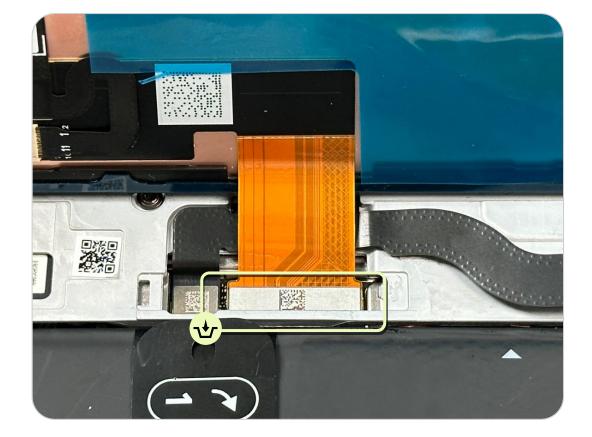
Be careful to avoid damaging the springs (being especially diligent near where the Display contacts the Enclosure).



Use Caution

Avoid scratching the outside of the display flex against the Mid-frame.

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



Bottom Speaker

Mid-frame Gr

Graphite Sheet

Display

Check Display

- Remove the Universal adsorption bulb and any protective film.
- Power on to check if the device is working properly. Don't touch the device until it is fully booted up.
- Power off device after checking.



Use Caution

Don't touch any part of the device until it boots fully, since during the bootup process the touch panel self calibration may be in progress.





Bottom Speaker

Mid-frame Gr

Graphite Sheet



Install UDFPS Calibration

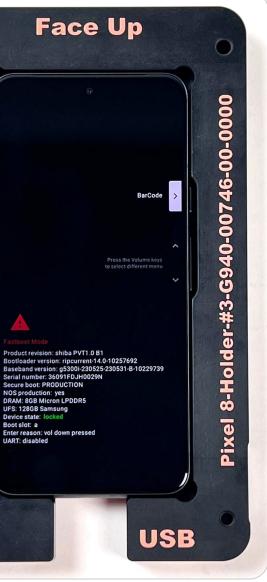
- Reboot device into the Fastboot Mode.
- Connect the device with a USB-C cable to a computer, and visit <u>pixelrepair.withgoogle.com</u> to download the UDFPS calibration software.



Use Caution

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





Bottom Speaker

Mid-frame G

Graphite Sheet



Attach Display cowling

Attach a new **Display cowling** over the connector.

Part: G730-06613-21 (Display cowling-mmWave)

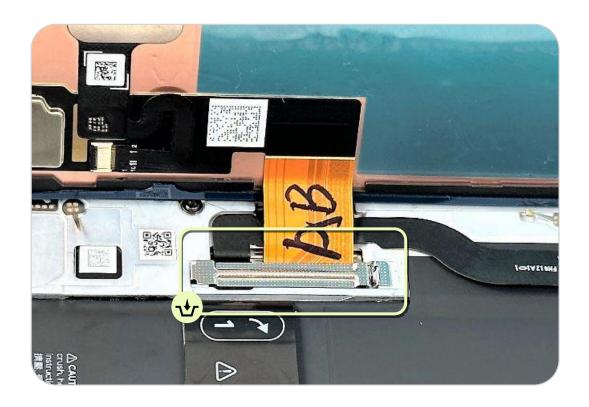
Part: G730-06613-22 (Display cowling-Sub6)



Use Caution

Avoid scratching the outer surface of the flex against the midframe.

Make sure the trim snaps don't contact the adhesive.



Bottom Speaker

Mid-frame Gr

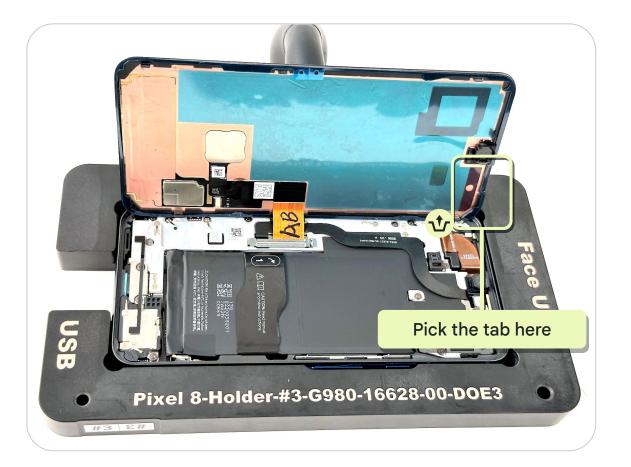
Graphite Sheet

Display

Introduction

Remove protective film

If there is protective film applied to the **Display Module**, use the **Universal adsorption bulb** to lift up the **Display Module** and remove the protective film using **ESD Tweezers**.



Mid-frame Gra

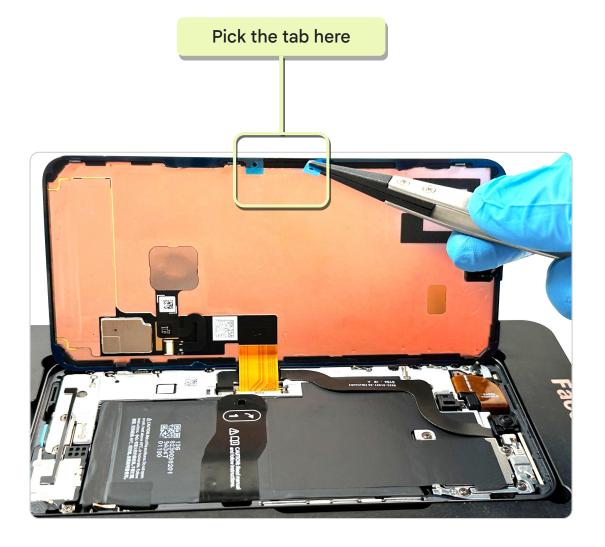
Graphite Sheet

Display

Introduction

Remove release liner

Use **ESD Tweezers** to grab the **PSA release Liner** and carefully peel it off.



Bottom Speaker

Mid-frame G

Graphite Sheet



Attach Display

- Attach the **Display Module** onto the **Enclosure** vertically.
- Remove from the **Pixel 8-Holder** and press around the display bezel with both hands.

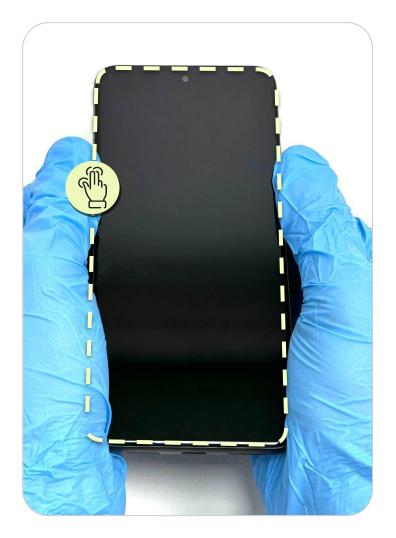


Note

Press the center of the top side first, followed by 2 longer sides and the bottom side.

Don't press the FCAM fpc area.





Bottom Speaker

Mid-frame Gra

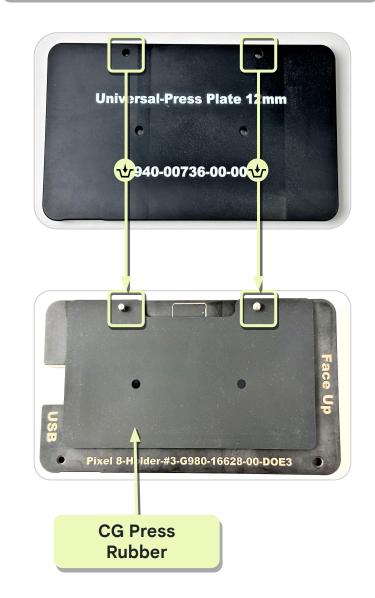
Graphite Sheet

Display

Prepare to press

- Set the device back in the **Pixel 8-Holder**.
- Put the **Pixel 8-CG Press Rubber** on top, followed by the **Universal Press Plate 12mm**.
- Place the stack on the **Universal Base**.

Align with the two pins. Make sure the rubber is firmly attached to the Display.





Bottom Speaker Mid-frame Graphite Sheet Display

Welcome

Press in fixture

- Place the stack in the **Universal Press** and press the handle down for **30 seconds**.
- Restore the handle to the original position and remove the device.



Use Caution Pinch point.

Keeps hands clear during operation.



Bottom Speaker

Mid-frame Graphite Sheet

eet **Display**

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Pixel 8 Repair Manual

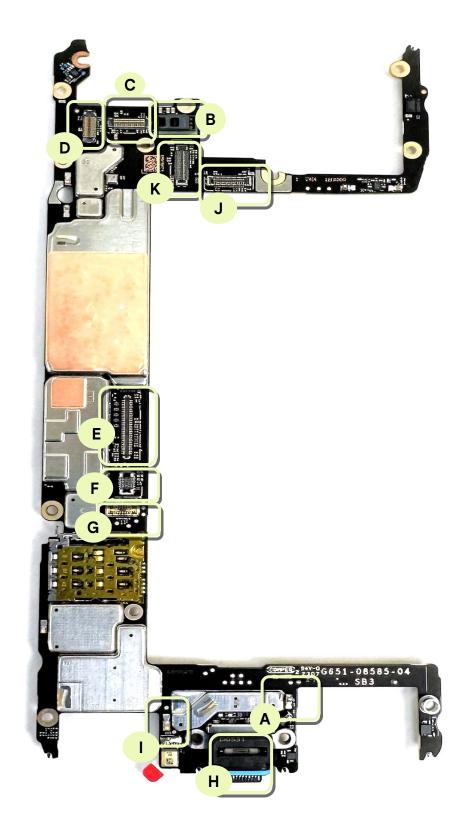
Troubleshooting

Connectors Location	Top Speaker	UDFPS
Power	Bottom Speaker	Rear Camera
Wireless Charge	Vibrator	Front Camera
Mic 1	Display	mmWave Module
Mic 2	NFC	
Mic 3	Proximity Sensor	

Connectors location

Location & Description

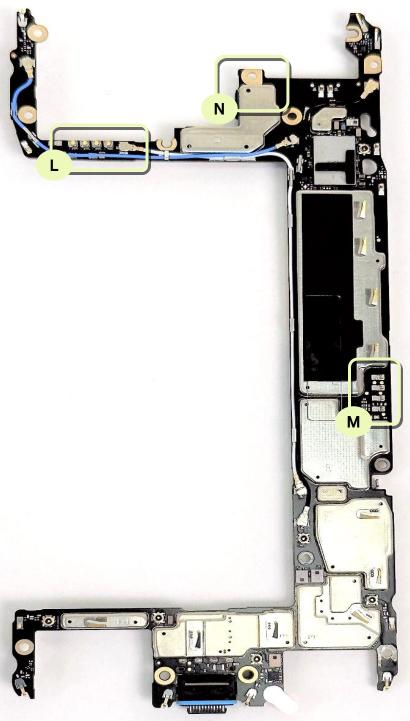
- A Bottom Speaker Pad
- B P-sensor/Light Sensor
- **C** Front Camera Connector
- D Flam Board Connector(BIF Flex)
- E Display Connector
- **F** mmWave Connector
- **G** Battery Connector
- H USB Port
- I Vibrator Pad
- J Rear Camera Ultra Wide Connector
- K Rear Camera Main Connector

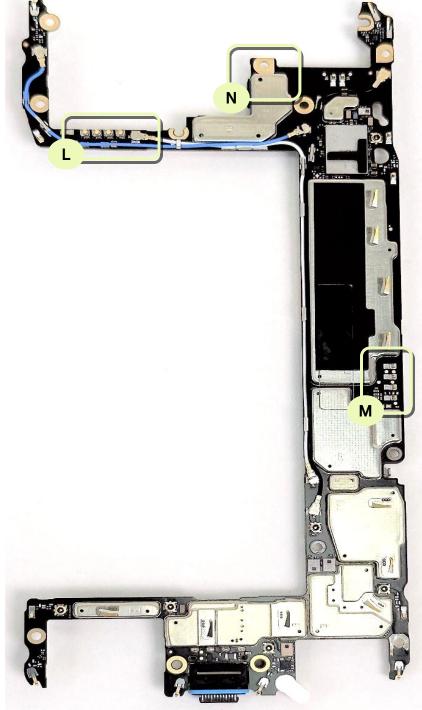


Connectors location

Location & Description

- Sidekey Pad L
- Wireless Charger & NFC Pad Μ
- Top Speaker Pad Ν





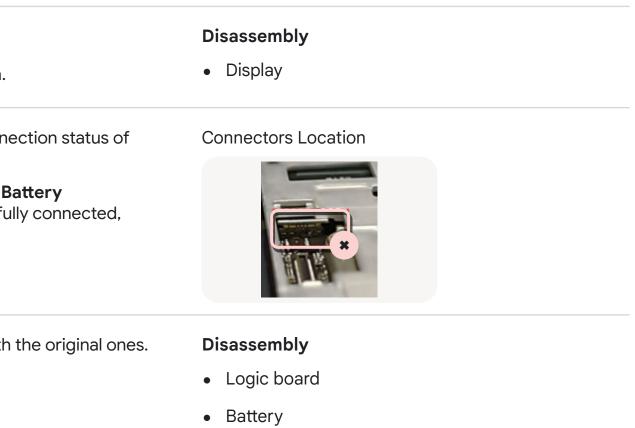
Power

Symptom	Potential Root Cause	Procedure
4	Damage	 Inspect the USB-C connector for debris preventing chargin Inspect the device for damage. Check if the liquid damage indicators are activated.
T001: Does not power on T002: Powers off suddenly T004: Wired charging failure	Display	 Remove the Display Module and install a new one. Charge for 10 minutes to see if the device can power on.
T053: Battery damage T054: Battery draining fast T083: USB-C port corrosion T084: USB-C port damage T085: USB-C failure	Connectivity issue	 Before removing the Mid-frame, visually check the connerthe battery BTB. Remove the Mid-frame, check if connectivity between Baconnector and Logic board are normal. If they are not full re-assemble and then retest.
	Component issue	• Use a good Battery and Logic Board to cross check with

• Use a good **Battery** and **Logic Board** to cross check with the original ones.

• Replace the defective component.

ging.



Wireless Charge

Symptom	Potential Root Cause	Procedure
	Connectivity issue	 Check the contact condition between Wireless Charger an pads. If there is no mark on the pin contact pads, it shows connectivity.
		 If marks are observed, clean the contact pad and test again
T003: Wireless charging failure		 Check if connectivity between Wireless Charger, NFC Pa Board are normal.
		• If they are not fully connected, re-assemble and then retes

Component issue

- Use a good **Enclosure** and **Logic Board** to cross check with the original ones.
- Replace the defective component.

and Pin contact /s poor

gain.

Pad, and Logic

est.



Connectors Location

- Logic board
- Enclosure

Mic 1

Symptom	Potential Root Cause	Procedure
Ŷ	Mesh not clean	 Use a microscope and check the mesh for damage or block Clean the mesh and then test the audio again.
T010: Mic 1 - no sound T011: Mic 1 - low sound T012: Mic 1 - distorted sound	Assembly Problem	 Disassemble the device, check Mic 1 bracket is fully seate Check if the MLB Mic 1 protective liner is removed (Fig 2) the next step. Test audio again.
	Component issue	 Check the Mic 1 Bracket for delamination at the PET corne (Fig 3). Use a good Mic 1 Bracket and Logic Board to cross check original ones. Replace the defective component.
 Mic 1 Mic 2 Mic 3 		

ockage (Fig 1).



ated.

2). If not, go to



ner at the bottom

ck with the



- Logic board
- Mic 1 bracket

Welcome	Precautions	Introduction	Repair flows	Disassembly

	Welcome	Precautions	Introduction	Repair flows	Disassembly	Assembly	Troubleshooting	Software
Mic 2								
Symptom		Potential Root Caus	se Proce	dure				
U T013: Mic 2 - no sound T014: Mic 2 - low sound T015: Mic 2 - distorted	d	Connectivity issue	Boa	rd are normal.	etween the Flam Board (ed, re-assemble and the		Connectors Locat	ion
	2	Component issue	or	e a good Enclosure and les. place the defective com	d Logic Board to cross c	heck with the original	Disassembly • Logic board • Enclosure	
1 Mic 1								
2 Mic 2								
3 Mic 3								

	Welcome	Precautions	Introduction	Repair flows	Disassembly	Assembly	Troubleshooting	Software
Mic 3								
Symptom		Potential Root Caus	e Procedur	e				
Ŷ		Connectivity issue	board a	are normal.	reen the Flam board cor re-assemble and then re		Connectors Locati	on
T016: Mic 3 - no sound								

		Welcome	Precautions	Introduction	Repair flows	Disassembly	Assembly	Troubleshooting	Software	
Mi	ic 3									
Sym	nptom		Potential Root Caus	e Proce	dure					
T01 ⁻	6: Mic 3 - no sound 7: Mic 3 - low sound	ł	Connectivity issue	boa	rd are normal.	tween the Flam board c ed, re-assemble and then		Connectors Loca	tion	
3	8: Mic 3 - distorted	sound 2	Component issue	• Use	ect whether the Mic 3 co a good Enclosure and L lace the defective comp	ogic board to cross che	ck with the original or	Disassembly nes. • Logic board • Enclosure	ł	
2	Mic 1 Mic 2 Mic 3									

	Welcome	Precautions	Introduction	Repair flows	Disassembly	Assembly	Troubleshooting	Software
Top Sp	eaker							
Symptom		Potential Root Cau	se Proc	edure				
U T019: Top Spea	aker no sound	Mesh not clean	de	spect the Top Speaker N bris. st the audio again.	Mesh and use a soft ESD	Brush to remove any		
	aker low sound aker distorted sound	Internal debris	• Di		; inspect the mesh and s nd inspect the speaker. U en test the audio again.	-	-	
		Connectivity issue		-	veen the Top SPK Pad ar		mal. Connectors Loc	ation
cross check wit			sound quality is still poc ross check with original eplace the defective cor		«er and Logic Board to	Disassembly • Logic boa • Top Speak		

Bottom Speaker

Symptom	Potential Root Cause	Procedure
Ŷ	Mesh Problem	 Visually inspect the exterior of the phone. Check for pollut the Bottom Speaker port. Use a soft ESD Brush to remove Test audio again.
T023: Bottom Speaker no sound T024: Bottom Speaker low sound T025: Bottom Speaker distorted sound	Internal debris	 If the sound quality is still poor, inspect the mesh and speat Microscope. Disassemble the device and inspect the speaker. Use an icoremove any debris and then test the audio again.
	Connectivity issue	 Check if connectivity between the Bottom SPK Pad and L normal. If they are not fully connected, re-assemble and then retested
	Component issue	 If sound quality is still poor, use a good Bottom Speaker at cross check with original ones Replace the defective component.

utants on the mesh of ve any debris.	Pollutants	
eaker with a		
ionizing air fan to		
Logic Board are est.	Connectors Location	
and Logic Board to	DisassemblyLogic boardBottom Speaker	

Welco	me
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		Welcome	Precautions	Introduction	Repair flows	Disassembly	Assembly	Troubleshooting	Software	
Vi	brator									
Sym	nptom		Potential Root Caus	se Proce	edure					
					eck the Vibrator Pad bet at the vibrator again.	ocation				
			Component issue		e a good Mid-frame and place the defective com	d Logic Board to cross ch ponent.	neck with the original c	ones. Disassembly • Logic b • Mid-fra	oard	

Display

Symptom	Potential Root Cause	Procedure		
	Damage	Inspect display for damage and replace if necessary.		
T027: Display blank T028: Display dead pixel, dark spots or foreign material				
 T029: Display bright pixel, bright or colored spots T030: Display vertical or horizontal lines T031: Display black, white or colored screen T032: Display flickering/abnormal 	Connectivity issue	 Check if connectivity between the Display Connector ar normal. If they are not fully connected, re-assemble and then ret 		
 T033: Display image quality T034: Display color mura T035: Display light leakage T036: Display backlight issue T037: Display shadow T038: Display permanent burnin 	Dead pixels Distorted Graphics Flickering Color issues	 Remove the Display module, test a replacement part (for purposes only: it is suggested to do this without removing liner). If issue is resolved, apply the adhesive and install the new part of the second sec		

T039: Display temporary burnin

and Logic Board are

Connectors Location

test.

t (for testing oving the release

Disassembly

• Display

e new **Display**.

Display-continued

Symptom	Potential Root Cause	Procedure
	Touch screen Fingerprint sensor	 Remove the Display module, test a replacement part (for testing purposes only: it is suggested to do this without removing the release liner).
T040: Display single crack T041: Display multiple cracks T043: Display cosmetic defects		• If issue is resolved, apply the adhesive and install the new Display .
T044: Multi-touch poor response T045: Multi-touch no response T046: Multi-touch erratic response	Component issue	 Use a good Display and Logic Board to cross check with the original ones. Replace the defective component.

Disassembly

• Display

- Logic board
- Display

Welcome	Precautions	Introduction	Repair flows	Disassembly

Welcom	1e	Precautions	Introduction	Repair flows	Disassembly	Assembly	Troubleshooting	Software	
NFC									
Symptom		Potential Root Caus	e Proced	ure					
(1) T051: NFC connectivity Issues	Connectivity issue ssues		th • If • C no	 there is no mark on the pin contact pads, it shows poor connectivity. If marks are observed, clean the contact pad and test again. Check if the connectivity between the WC, NFC Pad, and Logic Board are normal. 				Location	
	-	Component issue	OI	se a good Enclosure and nes. eplace the defective com	-	heck with the origina	I Disassemb • Logic bo • Enclosur	bard	

Proximity Sensor

Symptom	Potential Root Cause	Procedure
	Assembly issue	Check the P-sensor Grommet is installed correctly.

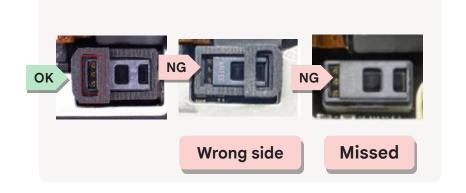
T059: Proximity sensor failure

Component issue

- Disassemble and check the appearance of the Proximity sensor to ensure there is no abnormality.
- Use a good **P-sensor Grommet** and **Logic Board** to check.
- Replace the defective component.

Assembly





- Logic board
- Mid-frame(P-sensor grommet)

We	lcome

UDFPS

Symptom	Potential Root Cause	Procedure
()	Interference Issue	Remove any screen protector prior to display function testing
T064: Fingerprint sensor failure	Damage	Inspect display for damage and replace if necessary.
	Connectivity issue	 Check if connectivity between the Display connector and board are normal.
		Check if connectivity between the Display Flex Connecto normal.
		 If they are not fully connected, re-assemble and then retered
	Component issue	 Use a good Display and Logic board to cross check with original ones.

• Replace the defective component.

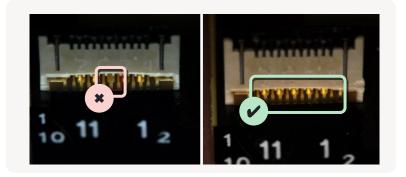
ing.

nd Logic

Connectors Location

ctor and UDFPS are

etest.



- Logic board
- Display

Rear Camera

Symptom	Potential Root Cause	Procedure		
	Damage	Inspect the Display and camera(s) for damage.		
T072: Camera AR failure T073: Camera Rear Photo quality T074: Camera Rear Video quality	Connectivity issue	 Check if connectivity between the Rear Camera Connect are normal. If they are not fully connected, re-assemble and then retes 		
 T077: Camera flash not working T078: Cannot switch between cameras T079: Camera damage T111: Main RCAM crashes T112: UW RCAM crashes T114: Main RCAM no preview T115:UW RCAM no preview T115:UW RCAM no preview T116: Ultrawide Rear Camera Photo quality T117: Ultrawide Rear Camera video quality 	Image quality	 Remove Display Module, connect a new Rear Camera to If issue is resolved, proceed with the Rear Camera replace device. Some NG module cosmetic pictures are provided f 		
	No image	If camera issue remains, replace the Logic Board.		

ector and Logic Board Connectors Location

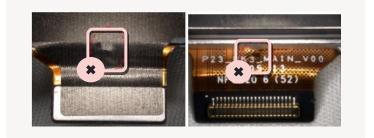
test.

to test.

acement and assemble d for reference.

Disassembly

• Rear camera



Disassembly

• Logic board

	Welcome	Precautions	Introduction	Repair flows	Disassembly	Assembly	Troubleshooting	Software	
Front Ca	mera								
Symptom		Potential Root Cau	se	Procedure					
		Damage		Inspect the Display and came	era(s) for damage.				
T076: Camera Fron	rashes	Connectivity issue		 Check if connectivity betw Board are normal. If they are not fully connectivity 			Connectors Lo	ocation	
T079: Camera dam T110: FCAM crashe T113: FCAM no prev		Image quality		 Connect a new Front carr If issue is resolved, proceed assemble device. 		era replacement and	DisassemblyFront Came		
		No image		If camera issue remains, repla	ace the Logic Board .		Disassembly Logic boar 		

	Welcome	Precautions	Introduction	Repair flows	Disassembly	Assembly	Troubleshooting	Software
mmWave	Module							
Symptom		Potential Root Caus	se Proce	dure				
((•)) T105: 5G_low_med_ban	d_failure	Connectivity issue	• Ch no	eck if connectivity bety rmal.	nd check mmWave Flex ween the mmWave Con octed, re-assemble and th	nector and Logic Boar	Connectors Lo	ocation
T106: 5G_high_band_fa	ilure	Component issue	• If is de	vice.	e to test. ed with the mmWave rep , replace the Logic Boar d		Disassembly le the • mmWave • Logic board	

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Pixel 8 Repair Manual



Software tools

Description	Documentation
Update or reinstall the software on Pixel devices (see link for additional details)	LINK