



Pixel Tablet Repair Manual

Version 2



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.



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 precautions in this document.

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

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



Precautions

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



Repair flows

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



Disassembly

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



Assembly

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



Troubleshooting & Testing

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



Glossary

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

Table of contents



Precautions

- Electrical Precautions
- Battery Conditions
- Battery Handling
- Glass Handling
- Safety Equipment



Introduction

- Expanded Views
- Screw Map
- Repair Flow Notice
- ESD Protection
- Tools and Fixtures
- Replacement parts



Repair flows

- Disassembly order
- Assembly order



Disassembly

- Display Module
- USB-C Module
- Speaker Module
- MLB Module
- Rear Camera
- Battery Module
- Enclosure Module



Assembly

- Enclosure Module
- MLB Module
- Battery Module
- Speaker Module
- USB-C Module
- Rear Camera
- Display Module

Table of contents



Troubleshooting

- Connectors Location
- Power
- Mic1
- Mic2
- Mic3
- Top Left Speaker
- Top Right Speaker
- Bottom Left Speaker
- Bottom Right Speaker
- Display
- Battery
- FPS (Power Button)
- Volume Button
- Rear Camera
- Front Camera
- USB
- UWB

Revision history

Version	Date	Change description
v1	Dec,11, 2024	First release
v2	June 5, 2024	Removed proprietary references Added disclaimers Updated tools and fixtures names and part numbers



Pixel Tablet Repair Manual

Precautions

Important: Before you begin



Be careful if you engage in repair

Opening or repairing a device could 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 that there're no additional screws or small parts left in the device after assembly.

Always ensure that screws are securely fastened.

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



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

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

Important: Before you begin



Caution: Part handling – glass

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



Tools and fixtures

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

Caution:

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



Important: Before you disassemble the device

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

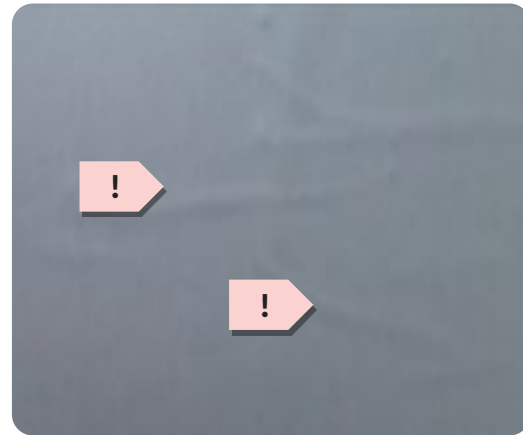
Caution



Examples of unacceptable battery conditions - Not suitable for repair*



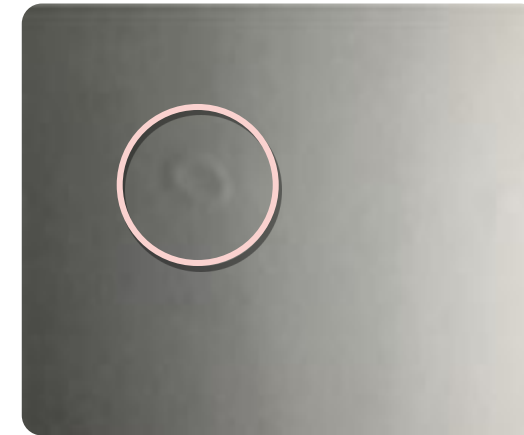
Pouch damage



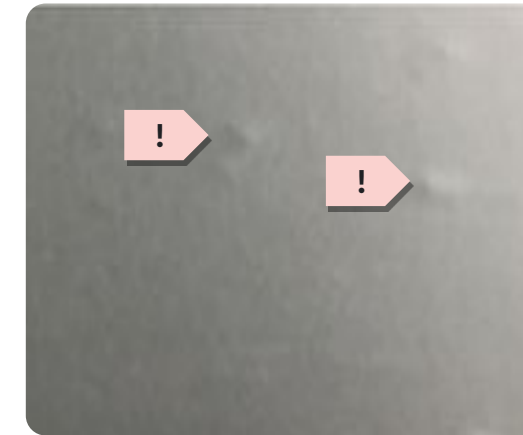
Line protrusion



Scratch



Contamination mark



Dot protrusion



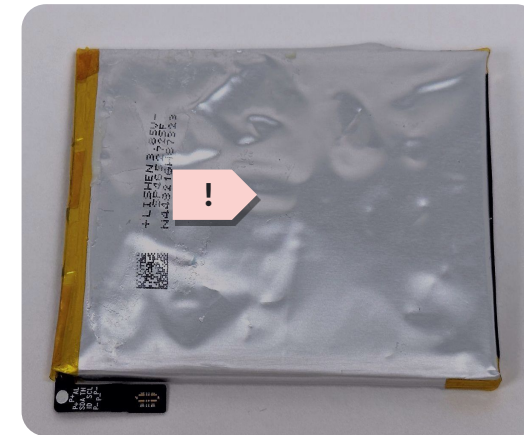
Dent



Bubbling



Imprinted line



Swelling or electrolyte leakage

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



Pixel Tablet Repair Manual

Introduction

Expanded Views

Tools and Fixtures

Screw Map

Replacement parts

Repair Flow Notice

ESD Protection

Pixel Tablet: Expanded view

Reuse indications



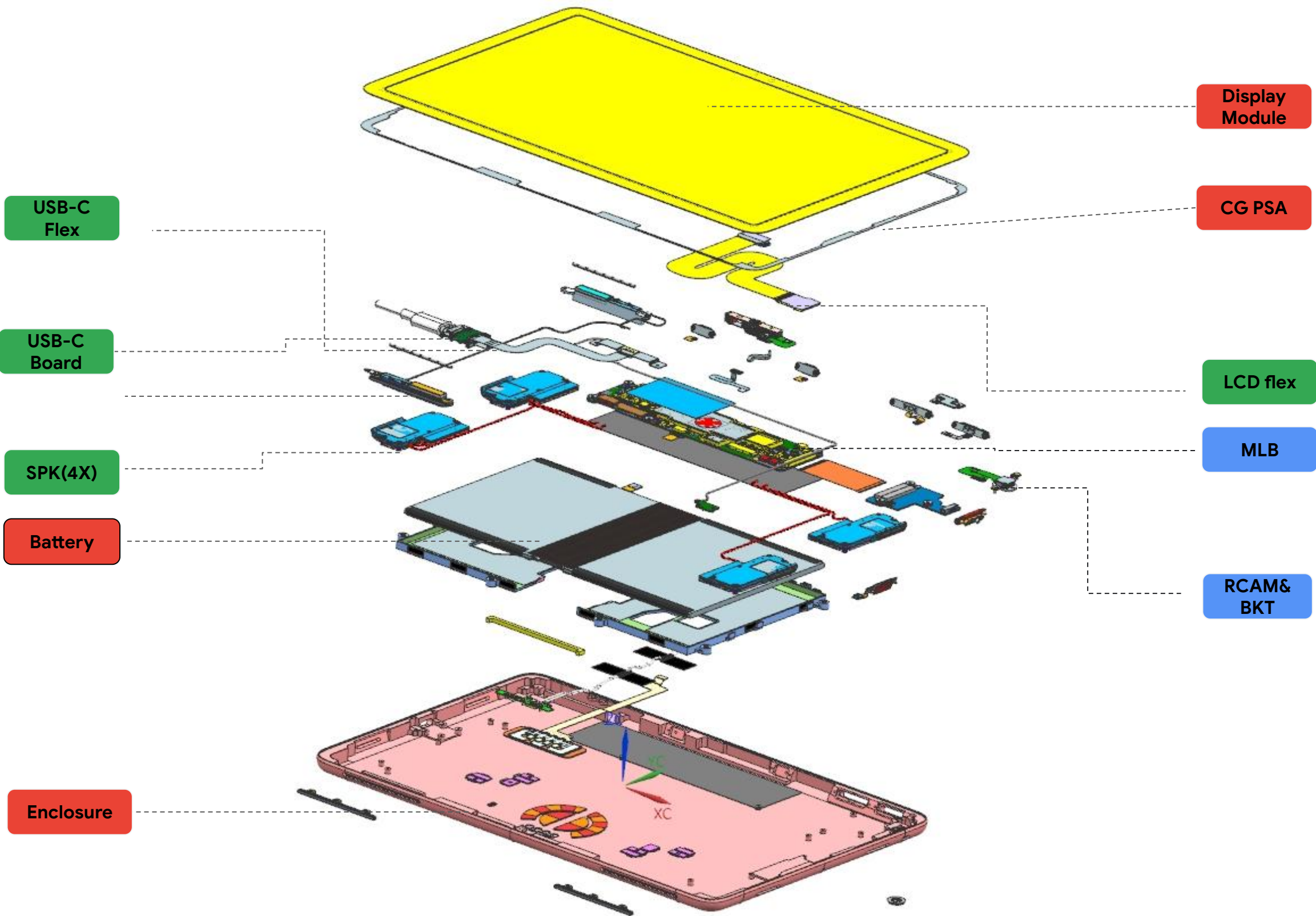
Reusable without
Cleaning



Reusable after
Cleaning









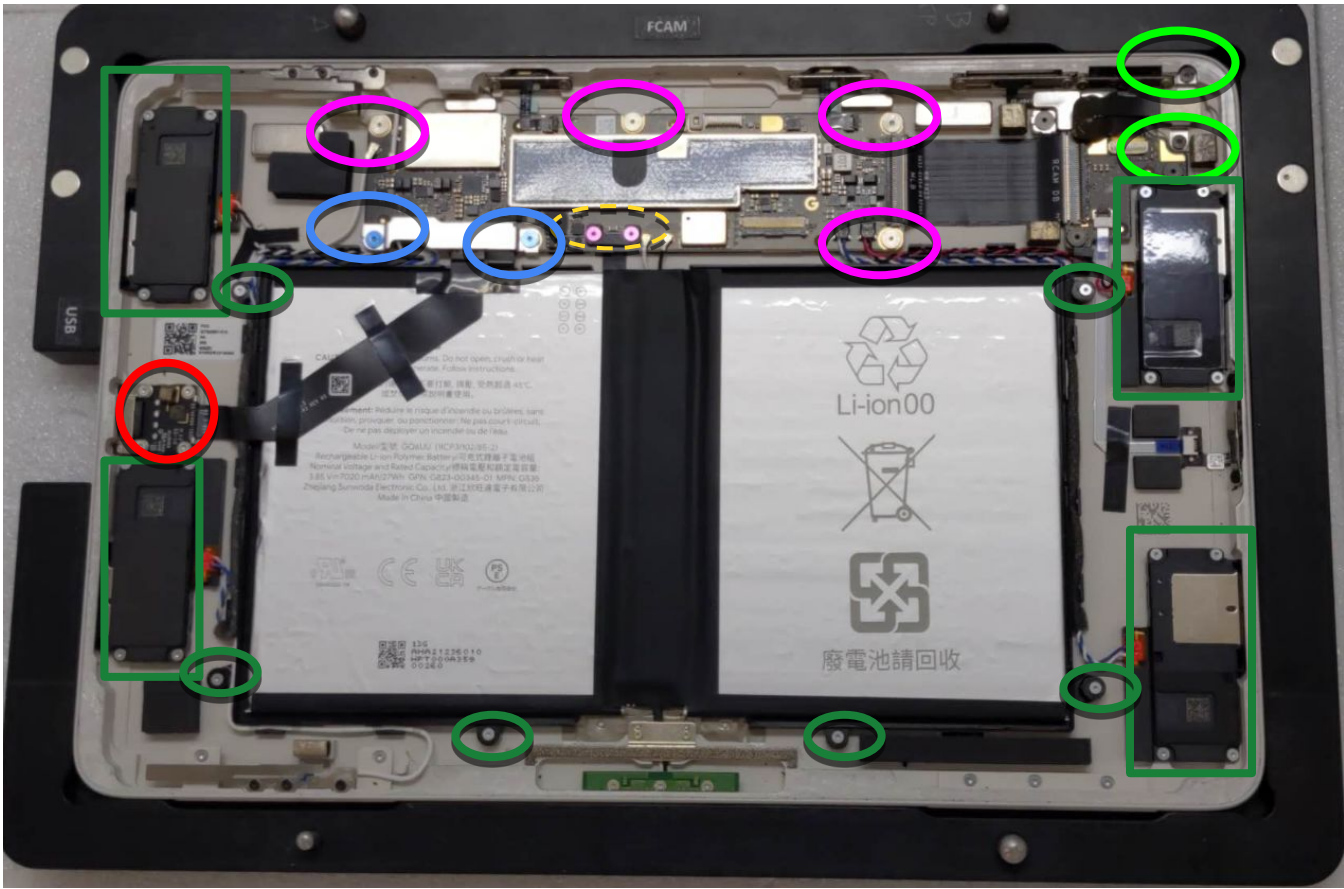
Not Reusable
after disassembly



Screw map

These are the screws used in the Pixel Tablet:

Screw G250-06412-00	Screw G250-06526-00	Screw G250-06167-00	Screw G250-06325-00	Screw G250-06470-00	Screw G250-06388-00
					



Screws are a single use item

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



After removal, always replace with a new screw

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

Repair flow notice



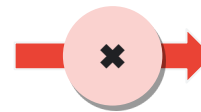
No cables at boot up

After any repair that opens the tablet, do not connect any USB cable at the first time boot up.



Cables can be used after boot up

Once above process completed, the technician may resume the Triage, OQC, or OBA process.



USB cable



ESD protection

ESD (Electro Static Discharge) can damage components so it is important to work in an ESD safe environment when carrying out repairs.

Follow these 4 steps to keep ESD-safe:



Stay grounded

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



Avoid static buildup

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



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.



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.



Tools and fixtures

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



Caution:

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

Google-approved fixtures: Pixel Tablet

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

Pixel Tablet Holder
G940-00761-00



Pixel Tablet Battery Assy Fixture
G940-00762-00



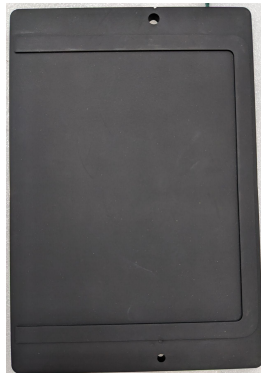
Pixel Tablet Battery Press Rubber
G940-00763-00



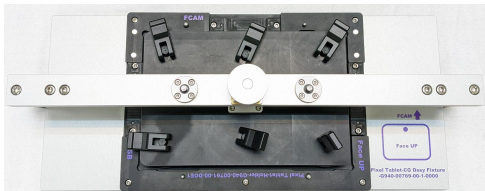
Pixel Tablet CG Supporting Fixture
G940-00767-00



Pixel Tablet CG Press Rubber
G940-00768-00



Pixel Tablet CG Disassembly Fixture
G940-00769-00



Pixel Tablet Thermal Grease Align
G940-00776-00



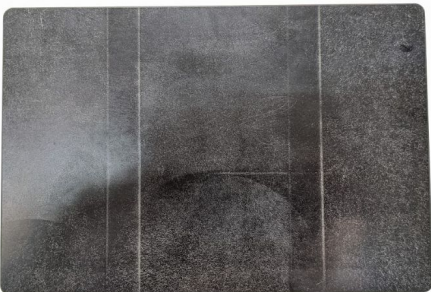


Google-approved fixtures: Pixel Tablet

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

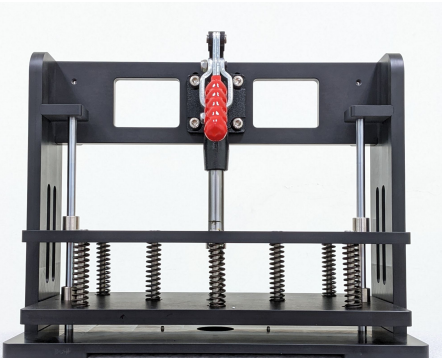
Universal Press Plate (15mm)

G940-00771-00



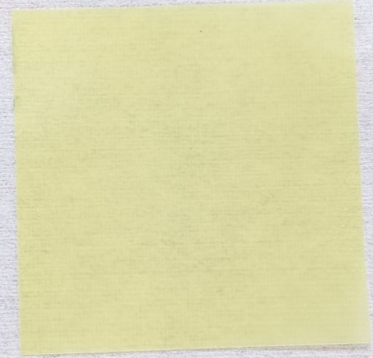
Universal Press Fixture

G940-00770-00



Universal Disassembly Piece (0.2mm)

G940-00777-00



Universal Disassembly ESD Stick

G940-00782-00



Common tools

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

ESD wristband



Heat Plate



USB-C to
USB-C cable



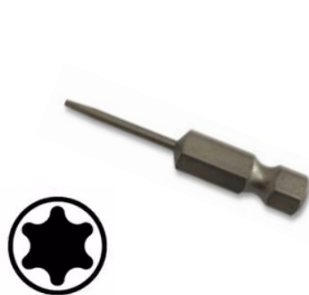
18W USB-C power
adapter



Adjustable torque
screwdriver



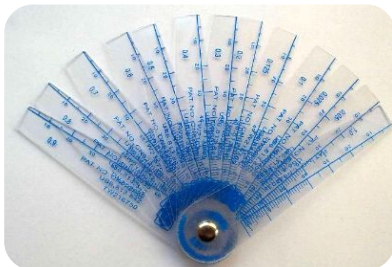
Screwdriver hex shank
torx plus bit no.3



ESD pointed stick
Plastic



Feeler gauge



Ionizing air fan



Table C-Clamp



ESD Tweezers
Plastic



Mating/Unmating
Tool



Standard consumables

Standard consumables are needed to ensure high quality and safe repairs. These items can be purchased from any vendor.

IPA



3M AP111 primer



Sankol lubricant
CFD 409Z_v2



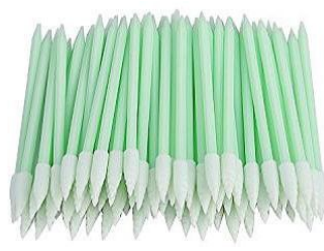
Anti-static ESD gloves



ESD finger cots



Dust-free cotton swabs



Dust-free cloth



Fishing Line
(Thickness 0.4mm,
9kg/30lb)



Protective film



Masking tape





Safety items

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

Safety glasses



Heat resistant protective gloves



Cut resistant protective gloves



Nitrile or lint-free gloves





Replacement parts

Important notice about replacement parts

- The use of Google-authorized replacement parts is strongly recommended.
- Performance within product specifications can't be assured if Google-authorized replacement parts aren't used.



Caution:

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

Replacement parts

Reuse indications



Reusable without cleaning



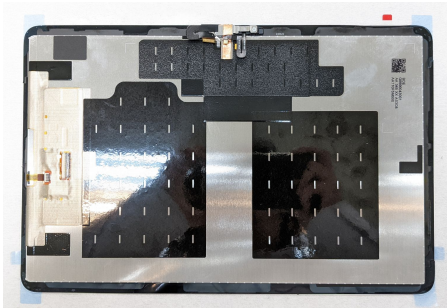
Reusable after cleaning



Not reusable after disassembly

Display module

Multiple Part Numbers



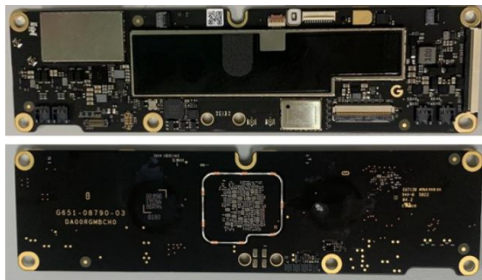
Battery module

G949-00446-00



MLB Module

Multiple Part Numbers



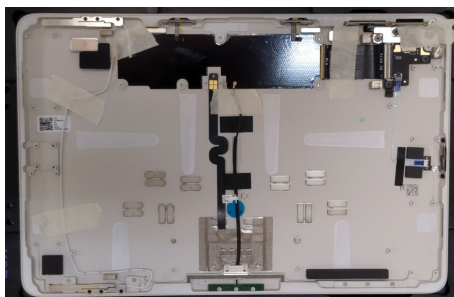
USB-C Module

G949-00449-00



Enclosure module

Multiple Part Numbers



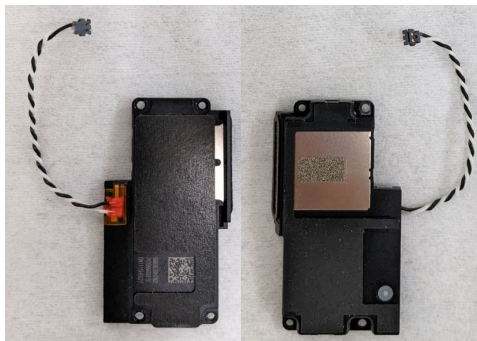
Rear Camera

G840-00435-03



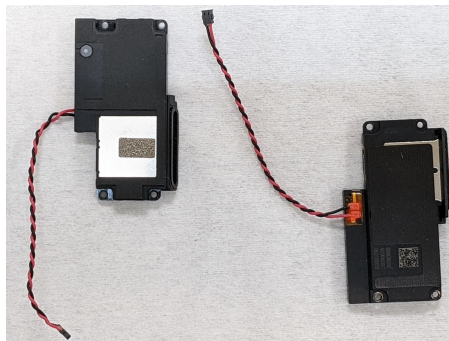
TOP-left Speaker

G863-00428-02



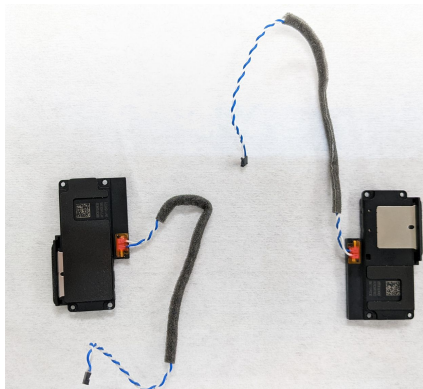
TOP-right Speaker

G863-00429-02



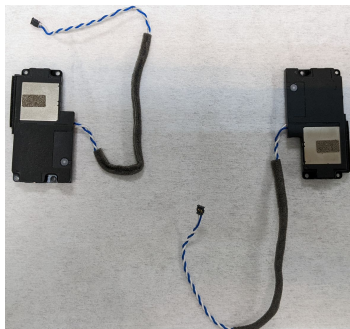
Bottom-left Speaker

G863-00463-02



Bottom-right Speaker

G863-00464-02



Display Flex

G652-01823-04



Washer

G806-06374-01



Replacement parts

Reuse indications



Reusable without cleaning



Reusable after cleaning



Not reusable after disassembly

RCAM Tape

G806-06439-01



RCAM flex foam

G806-07204-01



SPK Tape

G806-07205-01



SPK Foam

G806-08941-01



USB-C Tape

G806-07241-02



Conductive foam

G806-07936-00



Battery cowling

G730-06210-01



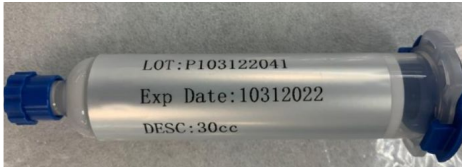
Display flex kapton

G806-06991-01



7W thermal gel

G160-01336-00



508 thermal gel

G864-00512-01



Screw

G250-06412-00



Screw

G250-06388-00



Replacement parts

Reuse indications

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

Screw
G250-06526-00



Screw
G250-06167-00



Screw
G250-06325-00



Screw
G250-06470-00



RCAM Bracket
G730-06253-04



Display Flex Foam
G806-08671-01





Glossary

Glossary

Acronym / Term	Definition
ESD	Electro Static Discharge The sudden flow of electricity through two electrically charged objects.
IPA	Isopropyl Alcohol (99.8%) 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.
CG	Cover Glass A type of cover and that contains Flam board and 2nd mic.
Display	The OLED, glass cover, and sometimes include other components such as the fingerprint sensor Also known as: <div>cover glass (CG)</div> <div>screen</div> <div>display</div>
MLB(Main Logic Board)	The main electronic component in the device with the processor, memory, storage, and often Wi-Fi and Bluetooth components all soldered on Also known as: <div>MLB</div> <div>main logic board</div> <div>main board</div> <div>PCBA</div>
Microphone	The component used for capturing audio to make a call, video or dictate some notes Also known as: <div>mic</div> <div>mic bracket</div>

Glossary

Acronym / Term	Definition
Camera	<p>Camera modules, include front camera and rear camera(s).</p> <p>Also known as: FCAMRCAM</p>
Pressure Sensitive Adhesive	<p>The adhesive that are used to bond enclosure and display module, battery and enclosure, or other parts.</p> <p>Also known as: PSA</p>



Pixel Tablet Repair Manual

Repair flows

Disassembly order

Assembly order

Pixel Tablet disassembly flowchart



To be removed
before the next
process



Optional
to remove



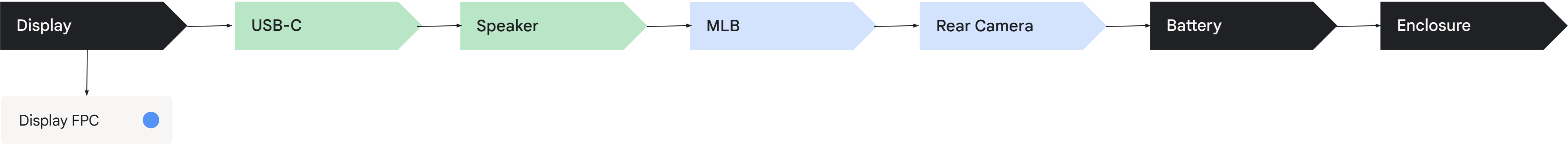
Reusable
without cleaning



Reusable
after cleaning



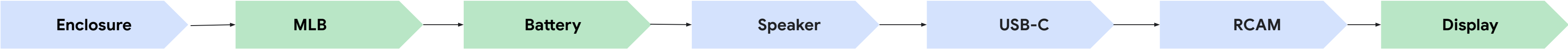
Not reusable
after disassembly



Pixel Tablet assembly flowchart

Assembled without a fixture

Assembled with a fixture





Pixel Tablet Repair Manual

Disassembly

Display module

Rear camera

USB-C module

Battery module

Speaker module

Enclosure module

MLB Module



Disassembly
instructions

Display Module



Use caution

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

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

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



Prerequisites

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



Tools

Heat Plate

CG Disassembly Fixture

Pixel Tablet-Holder

Universal Disassembly Piece(0.2mm)

ESD Tweezers

ESD Stick

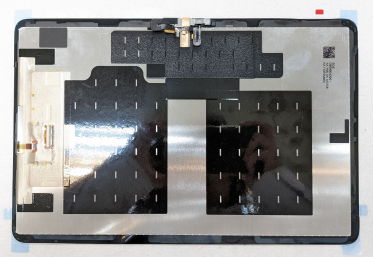
[Parts](#)

Display Module replacement

Here's the list of parts for the Display Module disassembly.

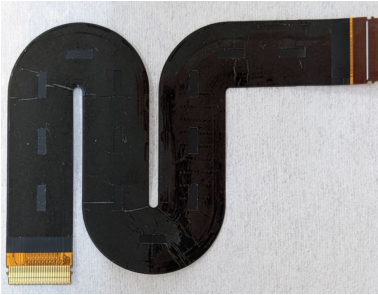
Display module

G949-00440-00



Display flex

G652-01823-04



Display flex kapton

G806-06991-01



Soften the adhesive

Face to the **Heat plate** set to **149°F/65 °C** for **15 mins** to soften the adhesive.



Use Caution

Ensure the **Visor** area is not touching the **Heat plate**.

Heating plate is a hot surface.
Use caution as it has the potential to cause burns.



Use fixture

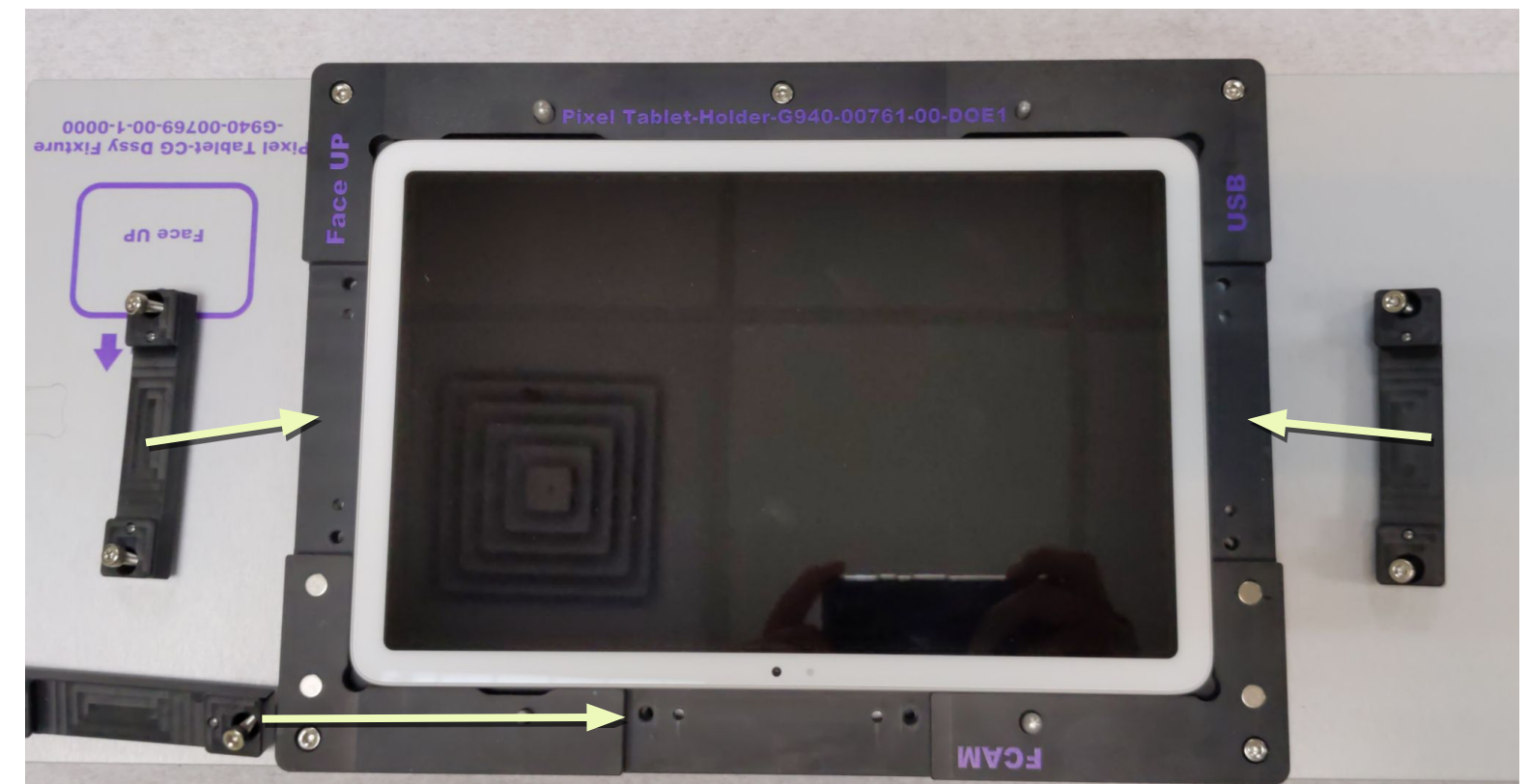
- Place the device on the holder of **Universal Disassembly Fixture**
- Install 3 stops at the corresponding positions of the bracket.



Note

Remove the CG protective film to allow the suction cup attach to the CG.

Clean the holder and suction cup area with the dust free cloth with IPA before using it.



Cover fixture

- Close the lid and align the suction cup underneath with the CG (Fig 1).
- Lift up the suction cup (Fig 2).
- Rise about 1 cm.



Use Caution

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

Review all safety precautions before beginning work.

Fig 1



Fig 2



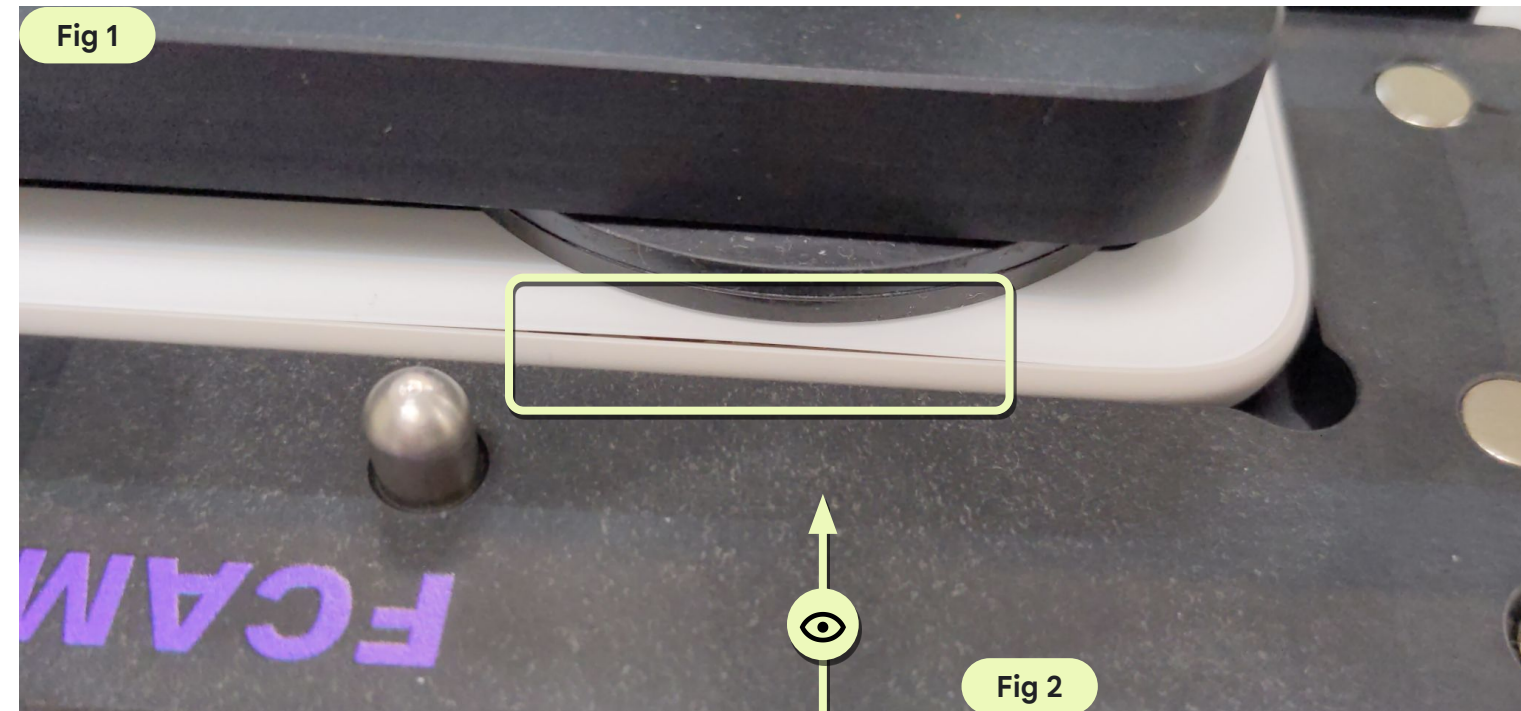
Use fixture

- Slowly rotate the knob to separate the **CG** from the **Enclosure** (Fig 1).
- Insert the **ESD Piece** (0.2mm) into the gap to separate the top-right side thoroughly. Then slide around the right side to bottom side, then left side to top side (Fig 2).
- As they separated from the Enclosure side, insert the **ESD Piece** to prevent the adhesive from sticking back.



Use Caution

Be careful not to push the ESD Stick beyond the adhesive surface to avoid damaging the logic board, battery or internal components.



As long as there's a gap, insert the ESD Piece to slide.

(If it cannot be easily slide, you can slowly rotate the fixture, but the gap should be less than 4mm)



Separate BG

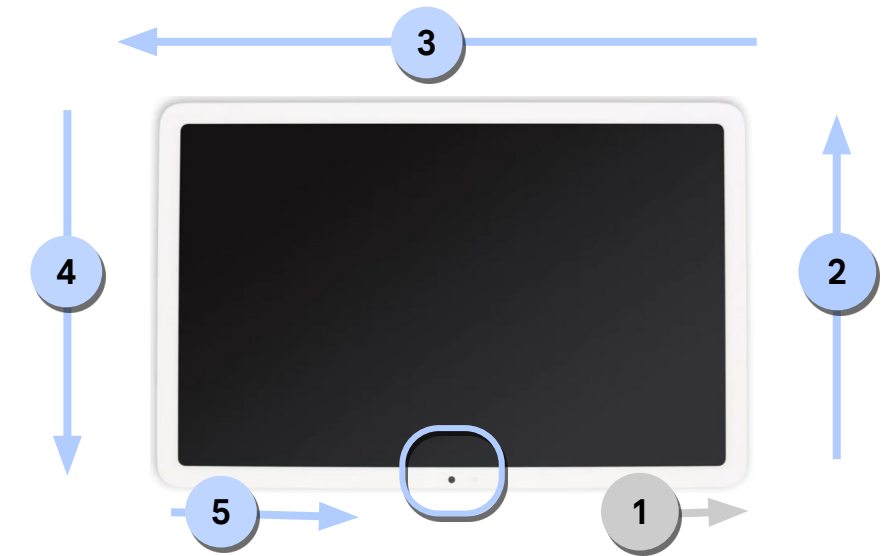
Manually slide the sequence:

1 → 2 → 3 → 4 → remove top block → 5. (Anti-clockwise) with ESD Pick (0.2mm).



Use Caution

Watch out FCCD area to avoid damage the spring.



Disassemble Sequence:

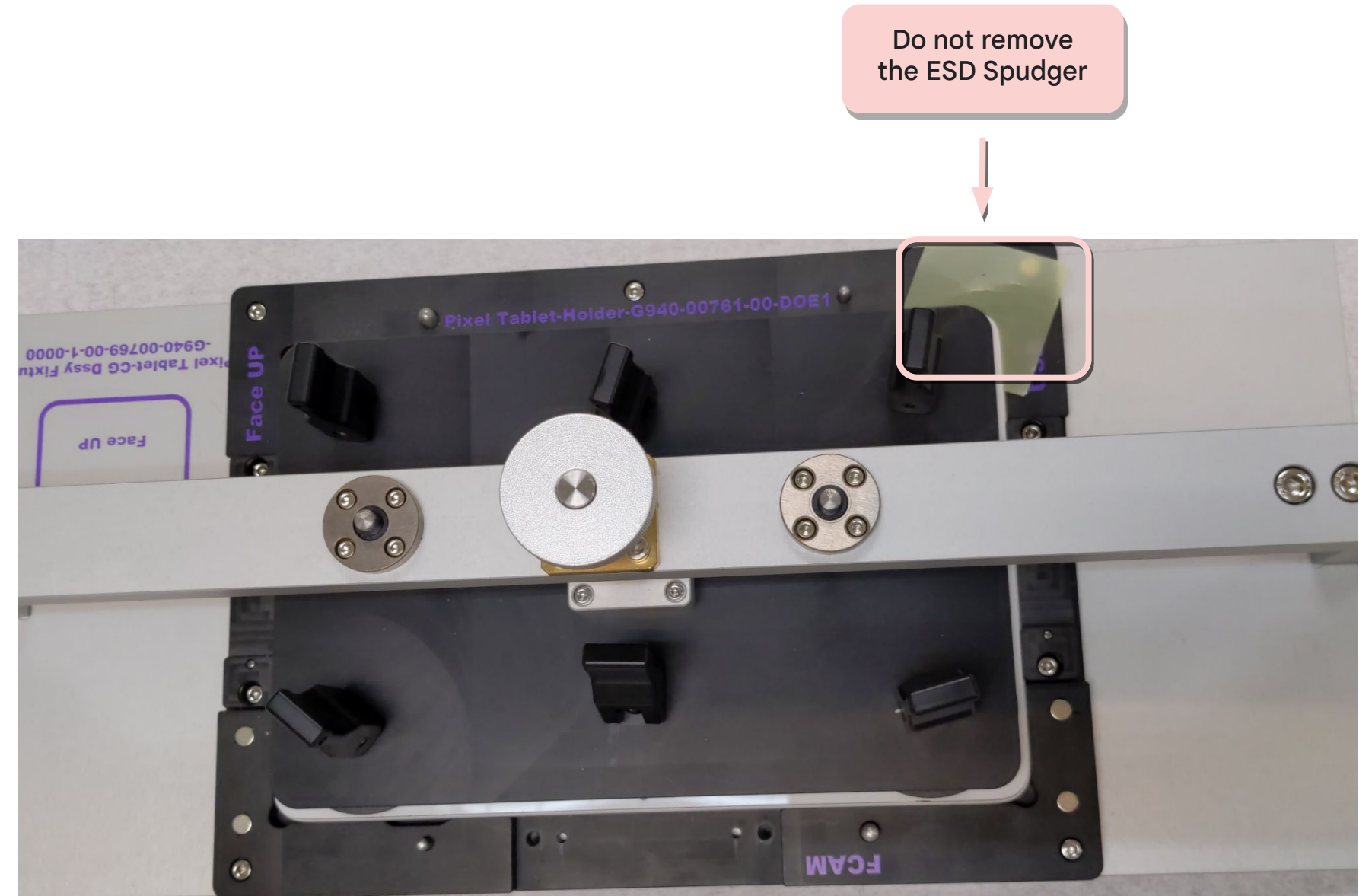
1 (in fixture) → 2 → 3 → 4 → 5 (out of fixture)

0.2mm



Release suction cup and lid

- Insert the ESD Piece (0.2mm) into the gap on the lower left corner
- Release the suction cup, and open the lid.
- Do not remove the **ESD Piece** from the device.



Disconnect Display flex/ALS/FCAM connector

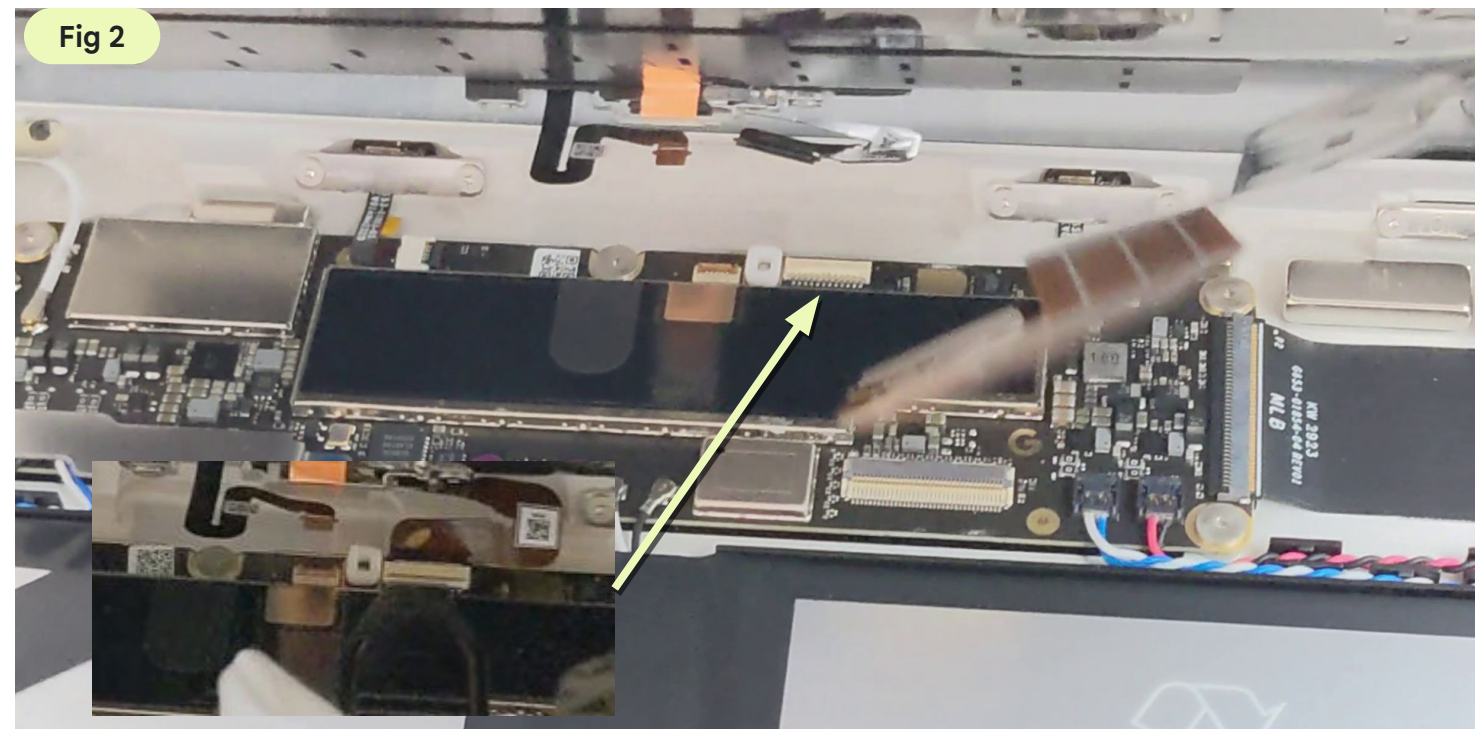
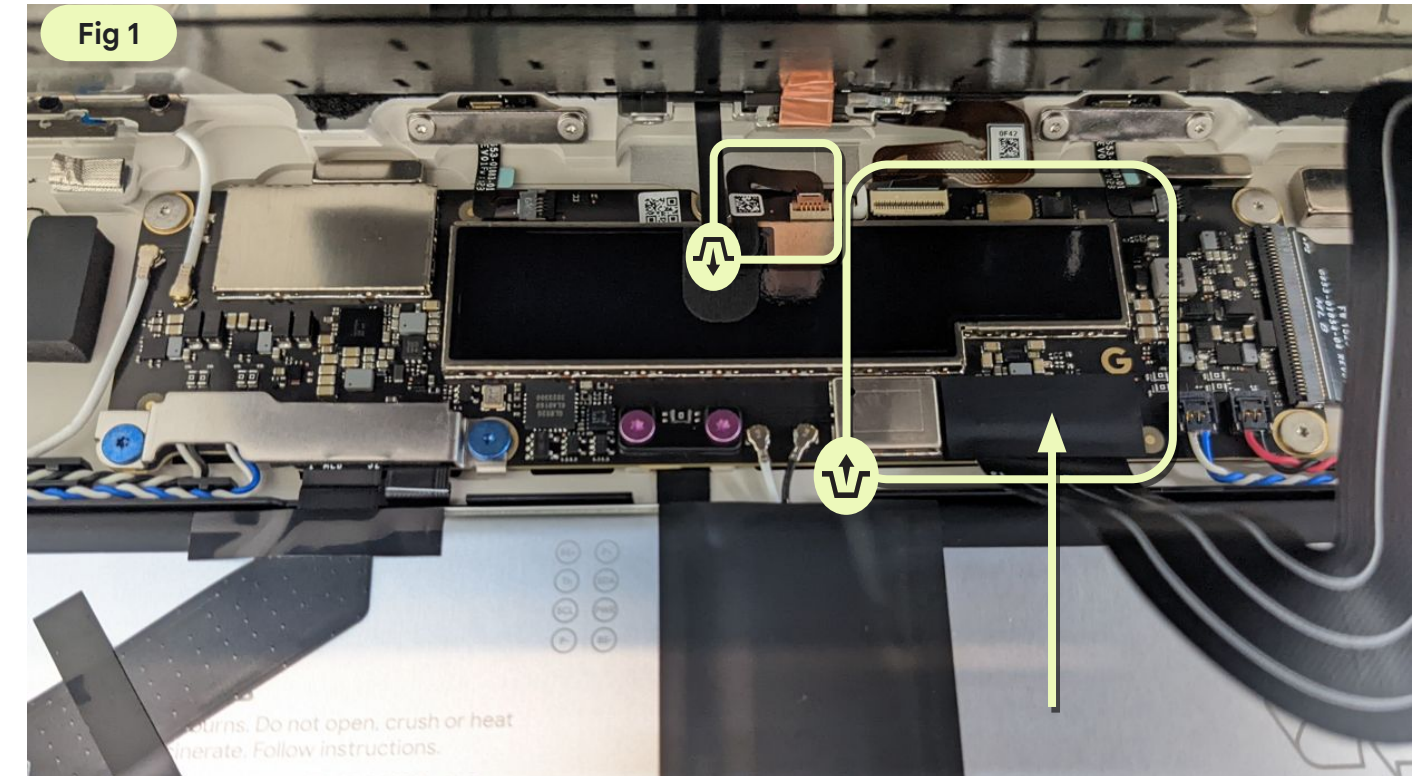
- Remove the **Display flex kapton** and **Display flex** with the **ESD Tweezers** (Fig 1).
- Loosen the **ALS/FCAM connector** with the **ESD Spudger**(Fig 2).

Part: G806-06991-01 (Display flex Kapton)



Note

Using the **ESD Spudger** avoids damage to the components.

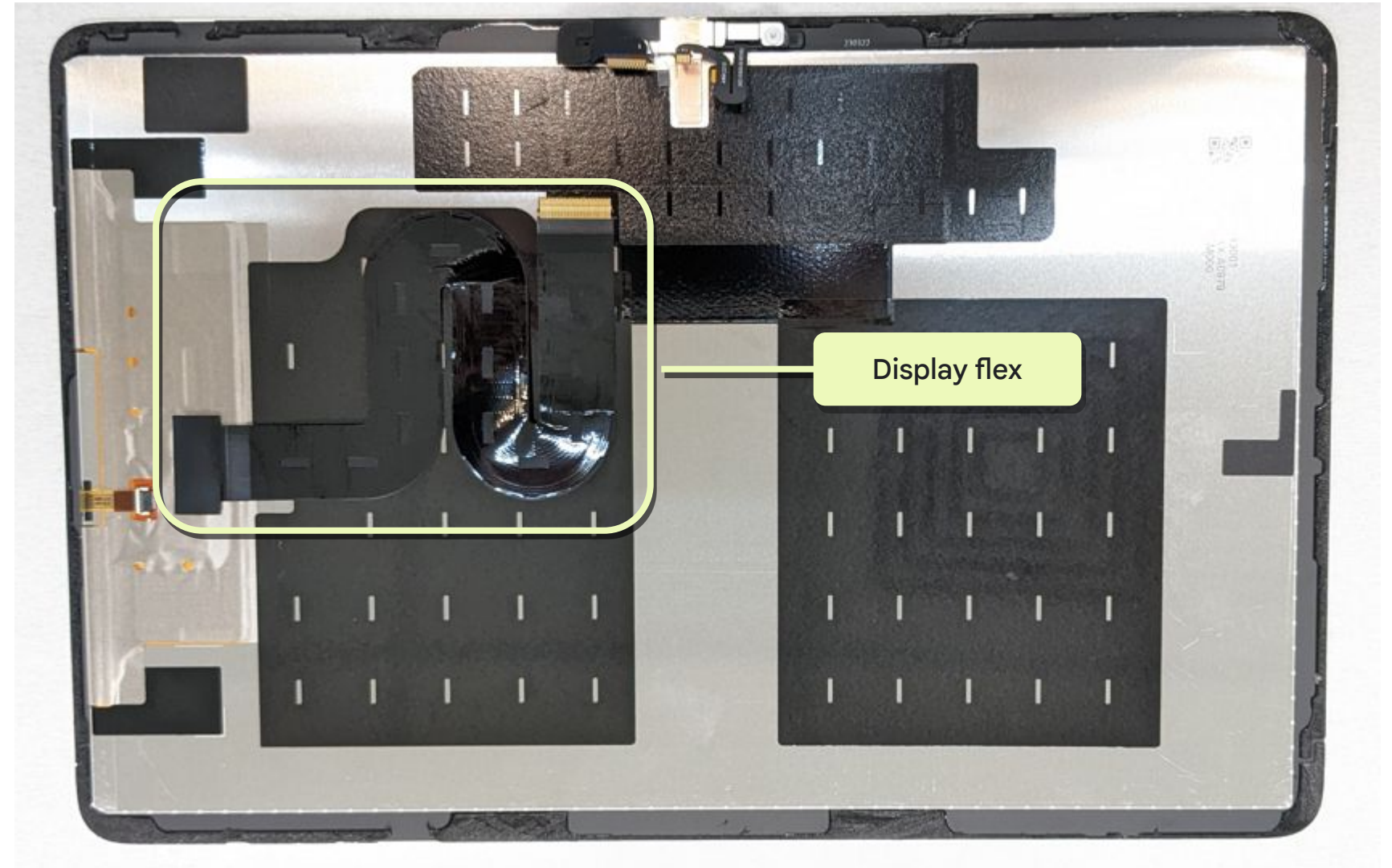


Finished! Need assembly instructions? →

Remove Display module

Remove the **display module** from Enclosure.

Part: G949-00440-00 (Display module)



Display flex tape removal

- Lift the **flex kapton** and then remove slowly by ESD tweezer.
- Remove display flex from display module

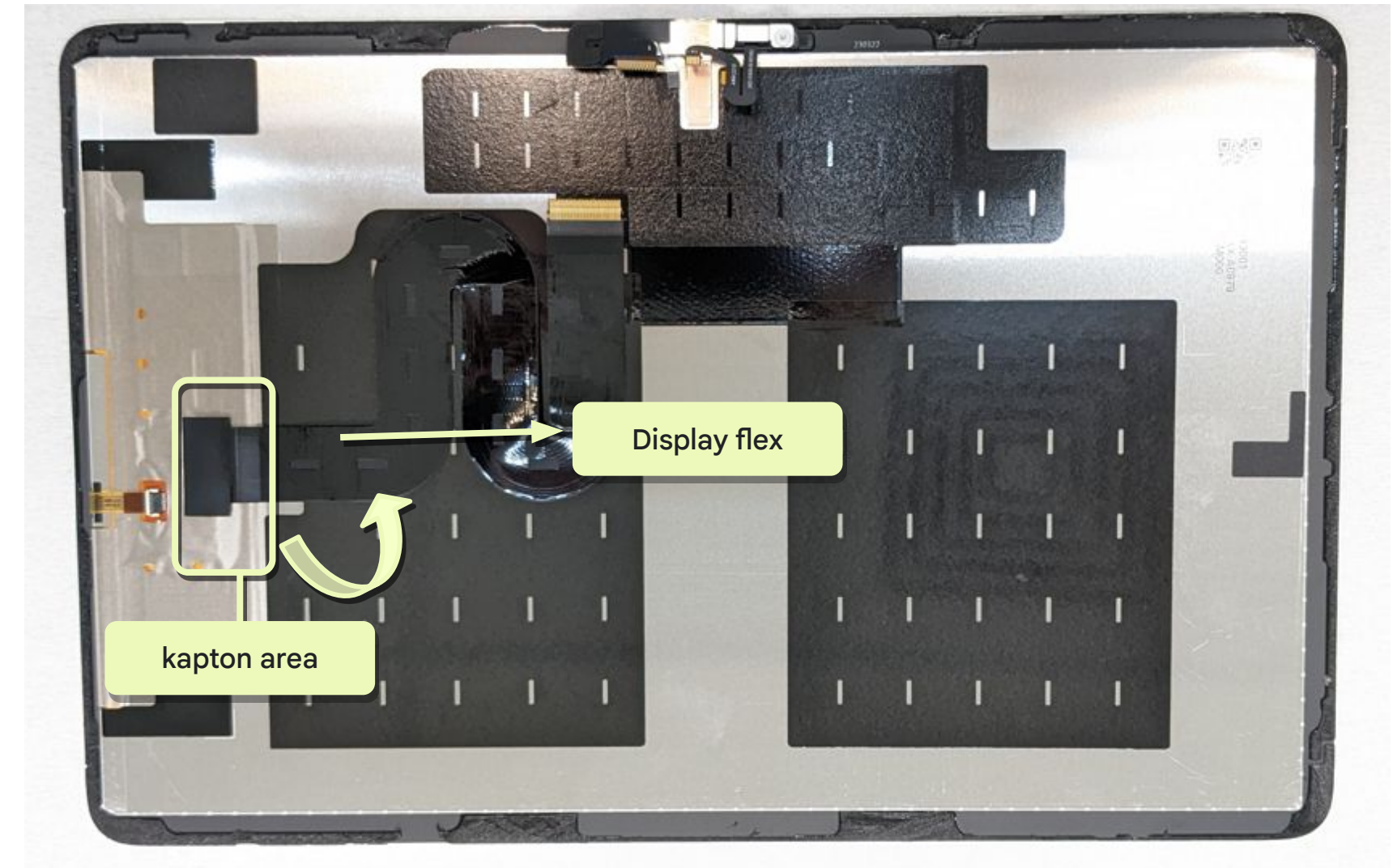
Part: G652-01823-04 (Display flex)

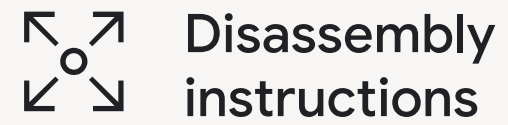
Part: G806-06991-01 (Display flex Kapton)



Note

Do not reuse display part.





Disassembly instructions

USB-C



Use caution!

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

Apply protective film to broken glass before removal.

Review all **safety precautions** before beginning work.



Prerequisites

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

- **Display module**



Tools

Pixel Tablet-Holder

Torx Plus 3IP screwdriver

ESD Tweezers

ESD Stick

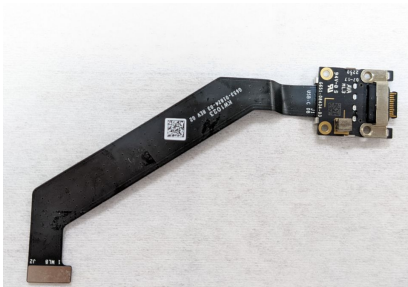
[Parts](#)

USB-C replacement

Here's the list of parts for the USB-C disassembly.

USB-C module

G949-00449-00



Battery cowling

G730-06210-01



RB Tape

G806-07241-02



Conductive foam

G806-07936-00



Battery cowling Screws

G250-06526-00



USB-C Screws

G250-06167-00



Remove battery cowling

- Remove 2 Screws with a Torx Plus 3IP screwdriver (Fig1).
- Then remove the **battery cowling** (Fig2).

Part: G250-06526-00 * 2 (Screw)

Part:G730-06210-01(Battery cowling)



Use Caution

Be careful when using the screwdriver, do not accidentally 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.

Fig 1

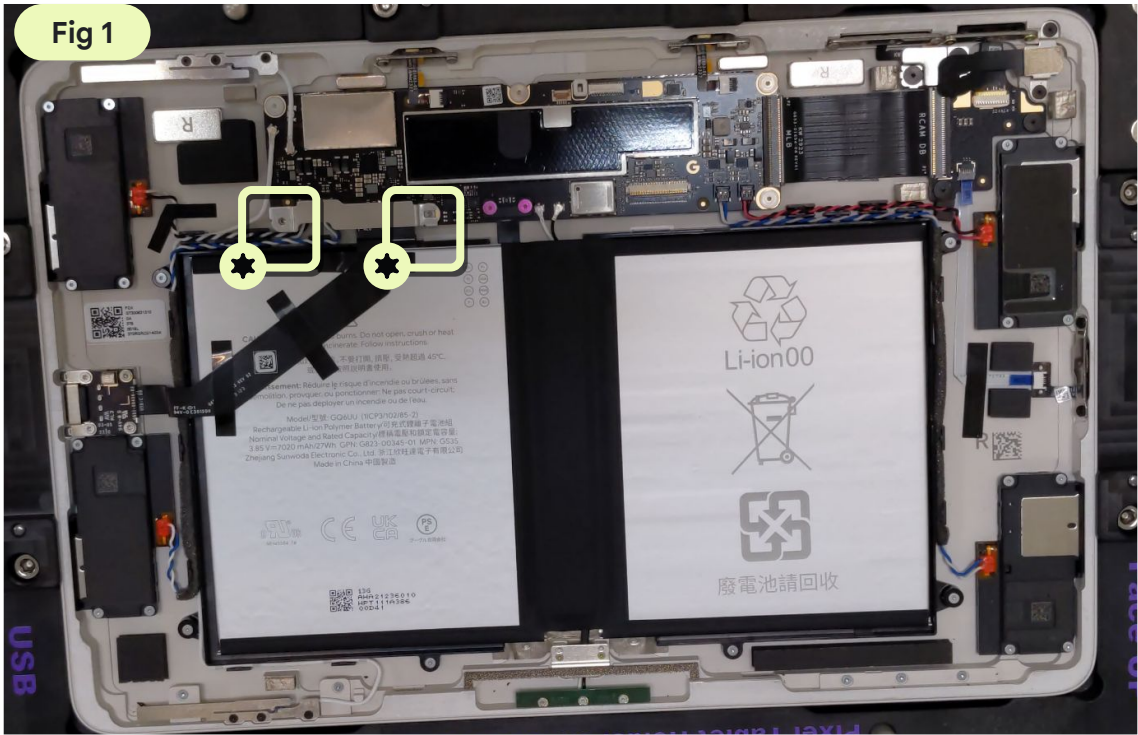


Fig 2



Disconnect Battery flex and USB-C flex

Loosen the Battery connector and the USB-C connector from the **MLB** with an **ESD tweezers**.



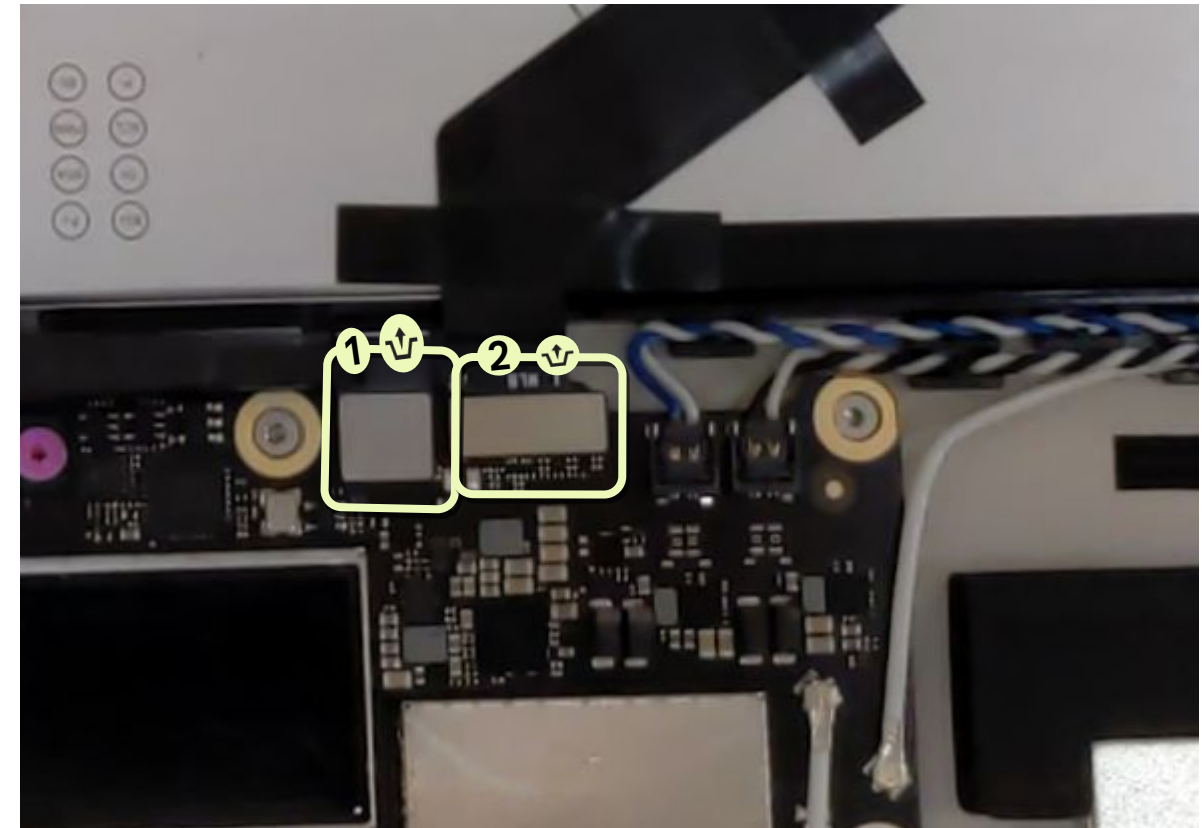
Note

Using the **ESD Tweezers** avoids damage the components.



Use Caution

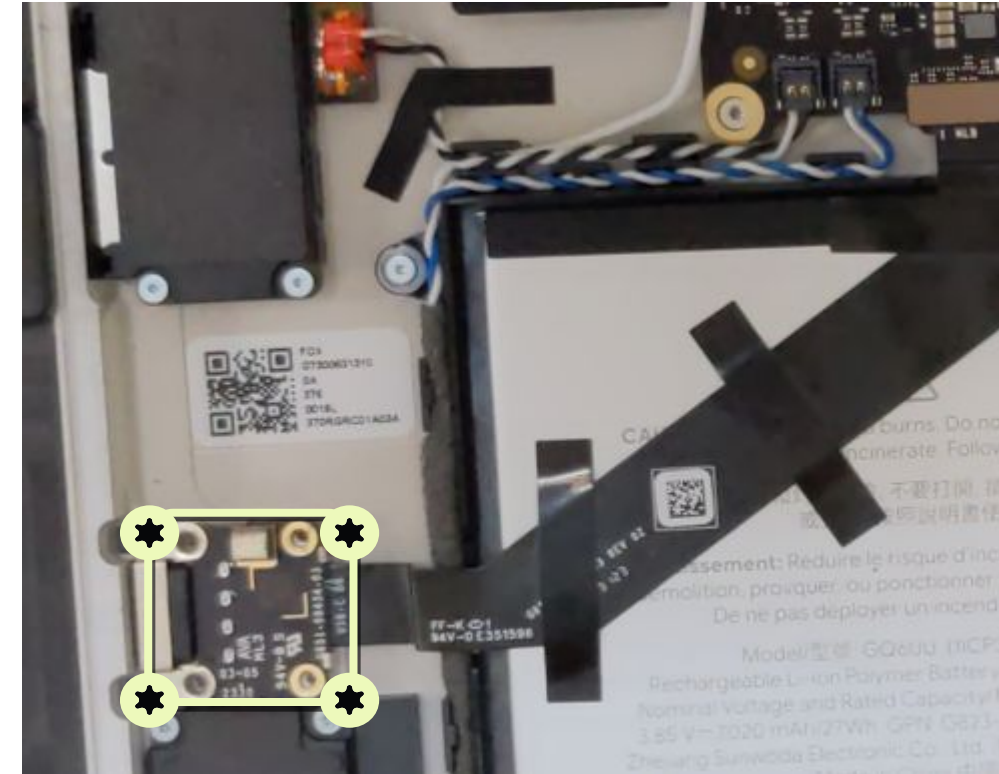
Avoid the short circuit of Battery connector.



Remove screws

- Remove the **USB-C module** screws with a **Torx Plus 3IP** screwdriver

Part: G250-06167-00*4 (Screw)



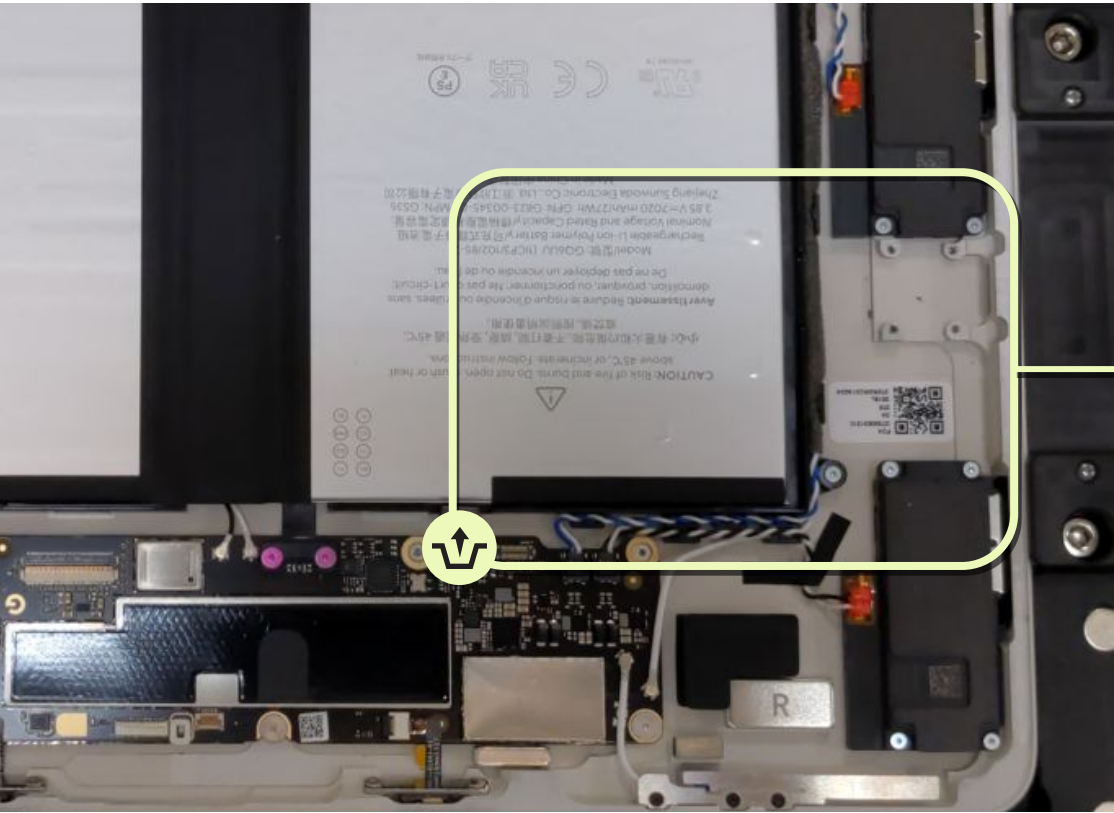
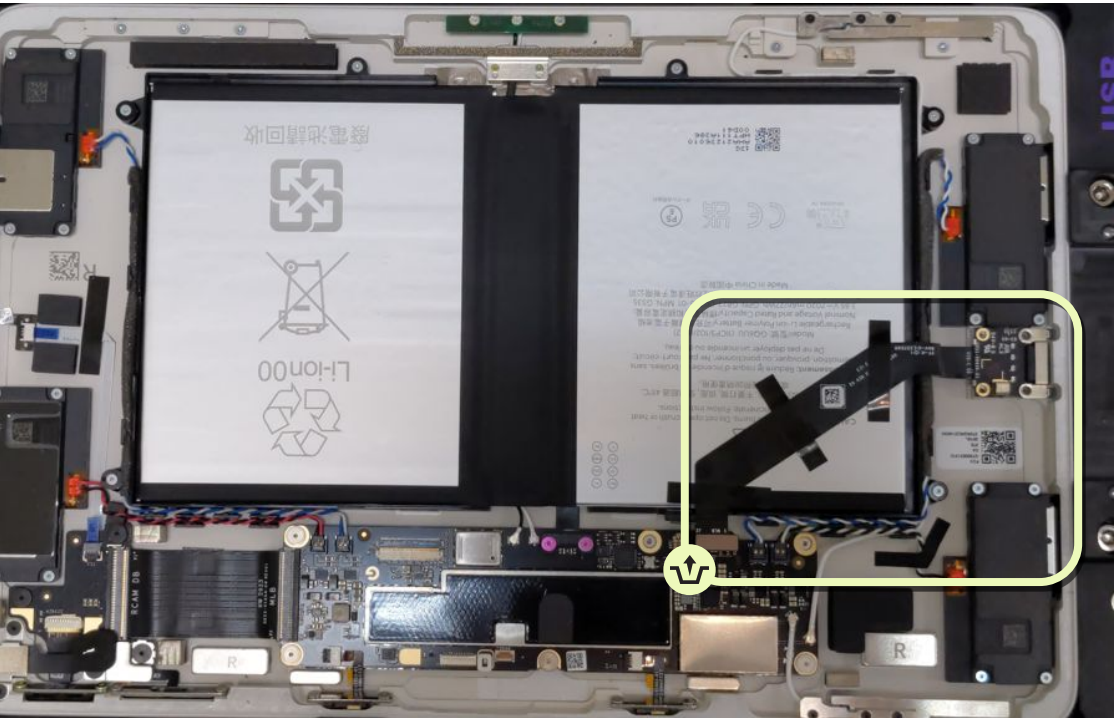
[Finished! Need assembly instructions? →](#)

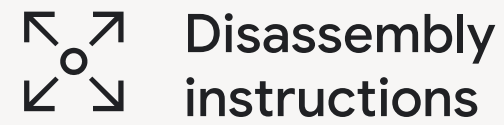
Remove USB-C module

- Tear off the RB tape from the Battery with **ESD Tweezers**.
- Remove **USB-C module** from enclosure module.
- Remove **RB tape** from **USB-C module**.

Part: G949-00449-00(USB-C module)

Part: G806-07241-02(RB tape)





Disassembly
instructions

Speaker Module



Use caution!

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

Apply protective film to broken glass before removal.

Review all [safety precautions](#) before beginning work.



Prerequisites

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

- **Display module**
- **USB-C module**



Tools

Pixel Tablet-Holder

Torx Plus 3IP screwdriver

ESD Tweezers

ESD Stick

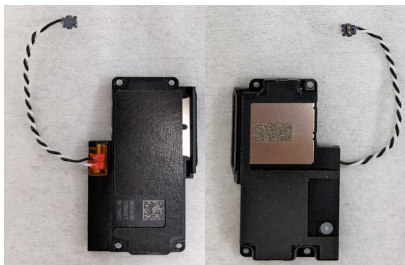
[Parts](#)

Speaker replacement

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

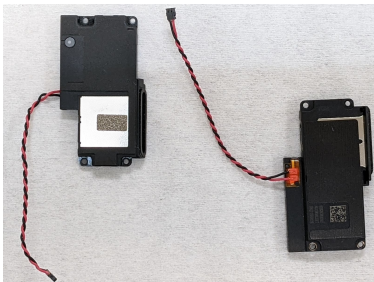
TOP-left Speaker

G863-00428-02



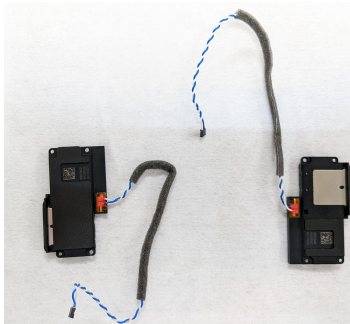
TOP-right Speaker

G863-00429-02



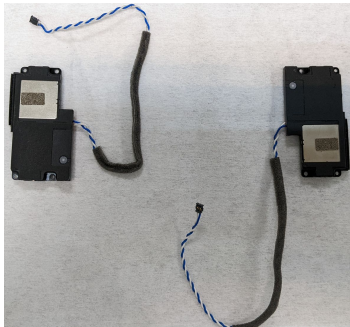
Bottom-left Speaker

G863-00463-02



Bottom-right Speaker

G863-00464-02



Speaker Tape

G806-07205-01



SPK Foam

G806-08941-01



Screw*16

G250-06470-00



Disconnect 4x speaker cable connector

- Disconnect 4x speaker cable connector with **ESD Tweezers**.
- Loosen 4x speaker cable from battery carrier.

Part: G863-00428-02 (TOP-Left speaker)

Part: G863-00429-02 (TOP-Right speaker)

Part: G863-00463-02 (Bottom-Left speaker)

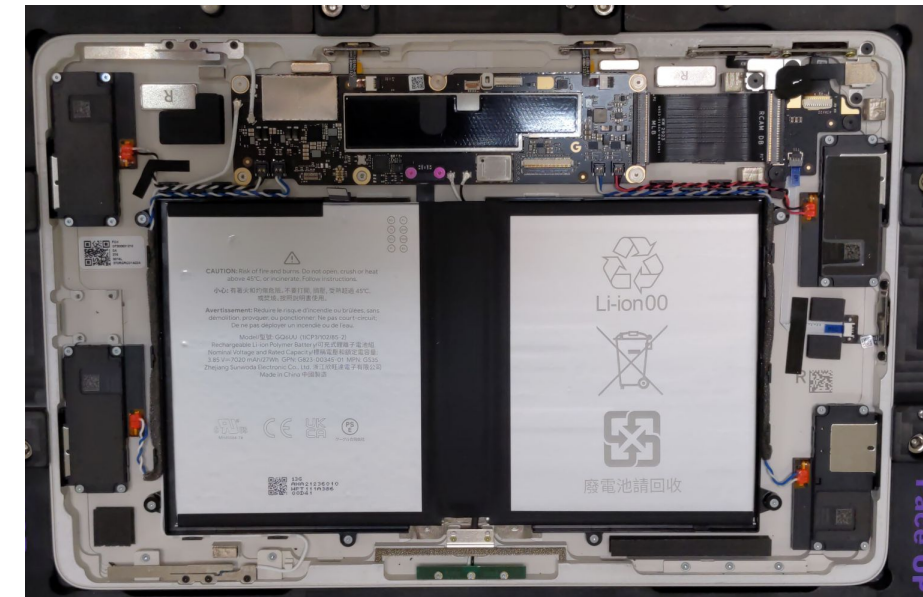
Part: G863-00464-02 (Bottom-Right speaker)



Note

Using the **ESD Tweezers** avoids damage the components.

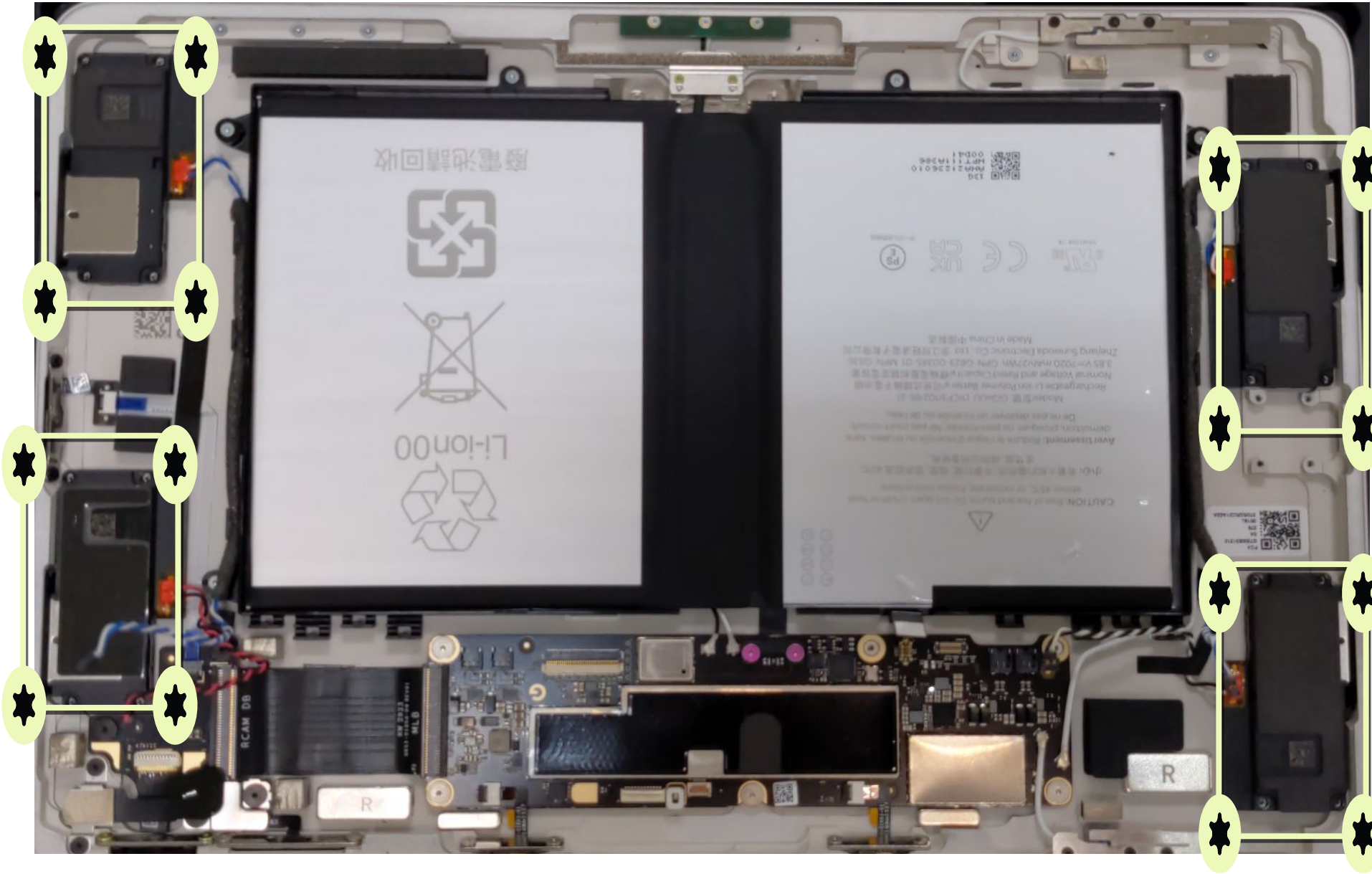
Take the **SPK connector** vertically upward



Remove 4x speaker screws

Remove the **screws** with a Torx Plus 2IP screwdriver.

Part: G250-06470-00*16 (Screw)



Finished! Need assembly instructions? →

Remove 4x speaker

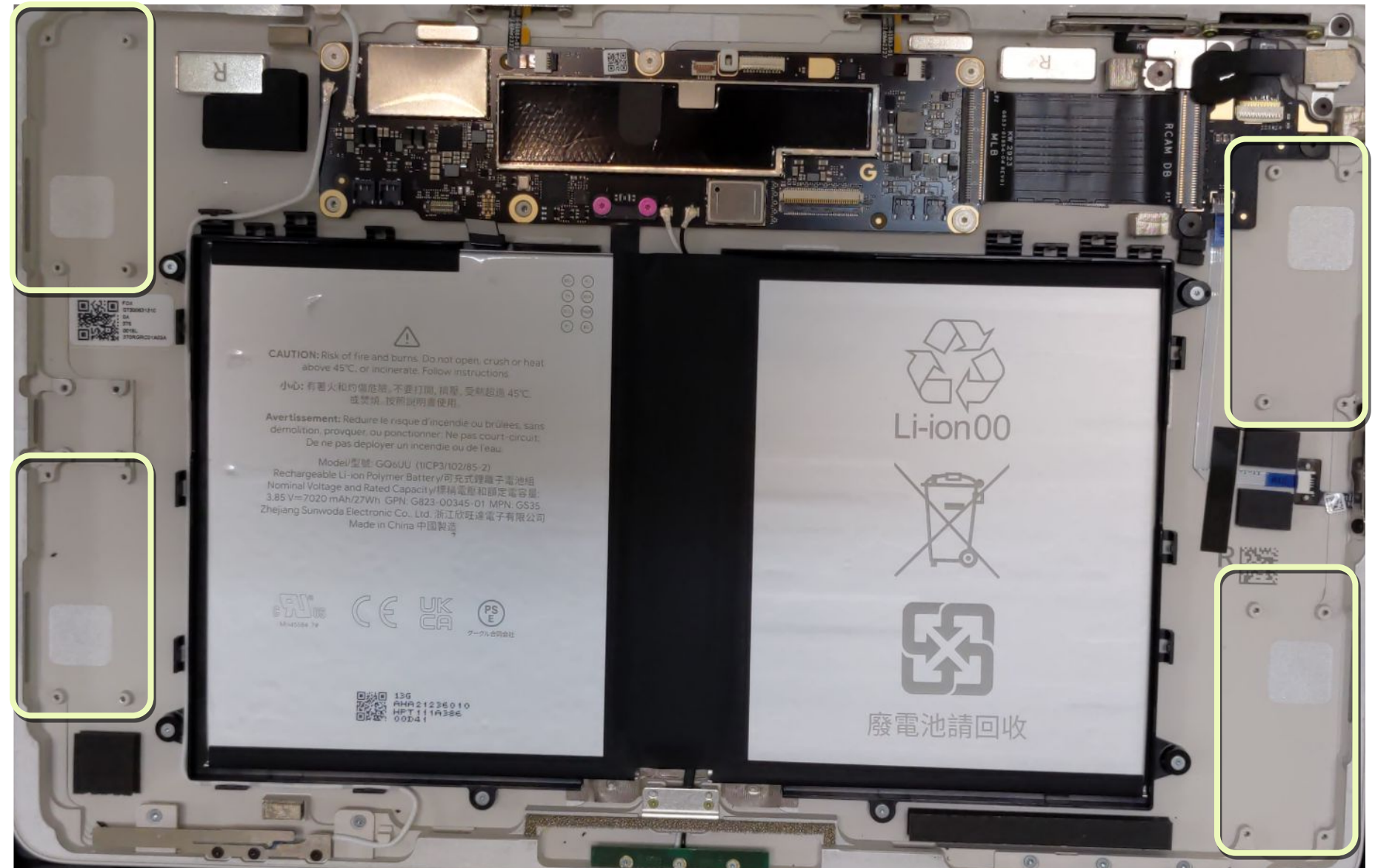
- Remove speaker tape from top-left speaker cable.
- Remove the 4x speaker clockwise from bottom-left to bottom right.

Part: G863-00428-02 (TOP-Left speaker)

Part: G863-00429-02 (TOP-Right speaker)

Part: G863-00463-02 (Bottom-Left speaker)

Part: G863-00464-02 (Bottom-Right speaker)





Disassembly
instructions

MLB Module



Use caution!

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

Apply protective film to broken glass before removal.

Review all [safety precautions](#) before beginning work.



Prerequisites

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

- **Display module**
- **USB-C module**



Tools

Pixel Tablet-Holder

Torx Plus 3IP screwdriver

ESD Tweezers

ESD Stick

[Parts](#)

MLB replacement

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

MLB Module

G949-00447-00



Washer

G806-06374-01



Screw*4

G250-06412-00



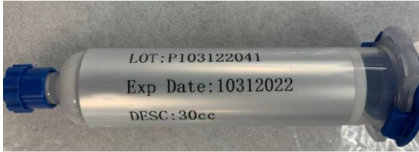
Screw*2

G250-06388-00



7W thermal gel

G160-01279-00



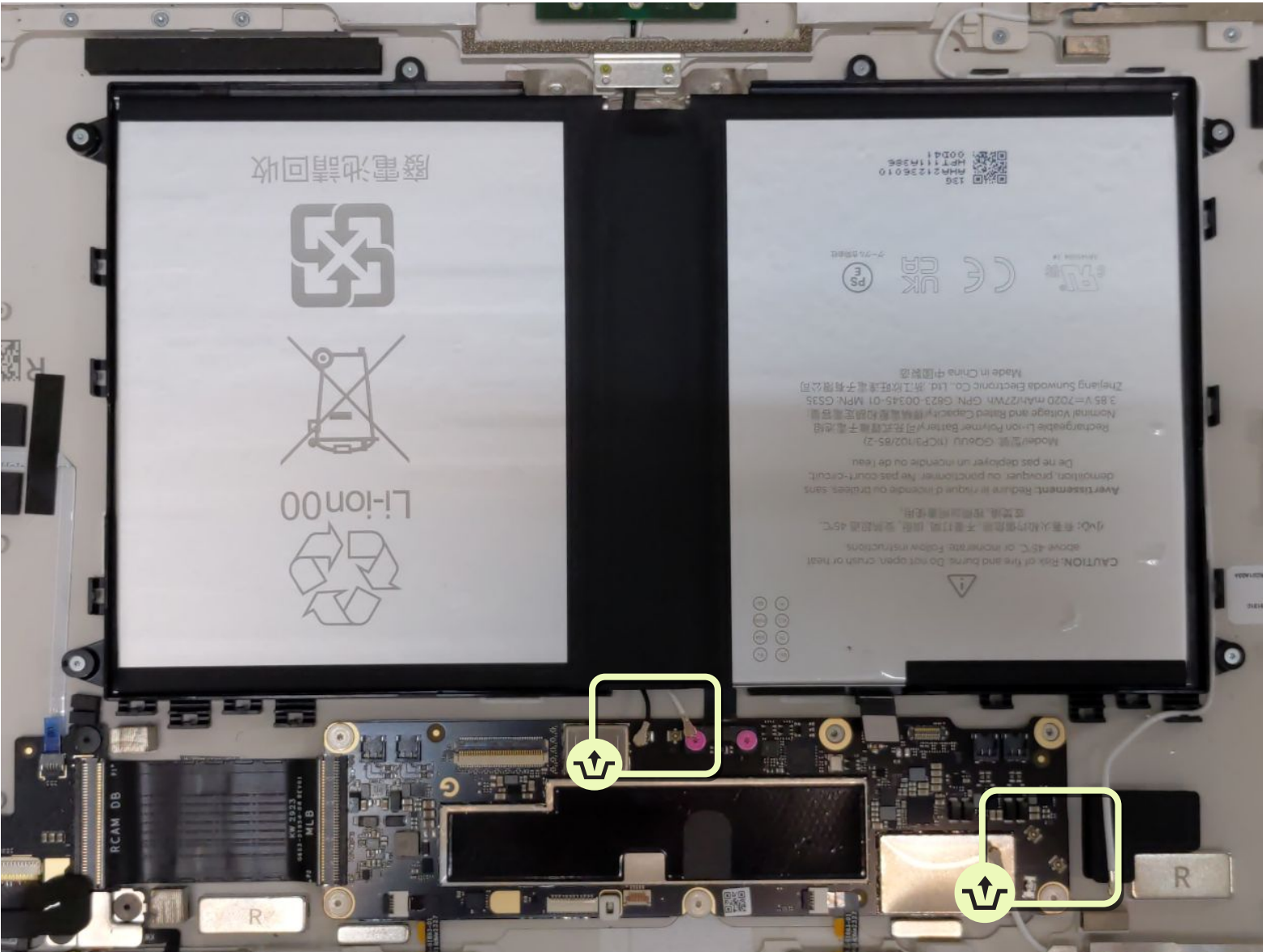
Disconnect Antenna connector

Loosen the Top & bottom & UWB connector from the MLB with a **mating/unmating tool**.



Note

Using the **mating/unmating tool** avoids damage the components.



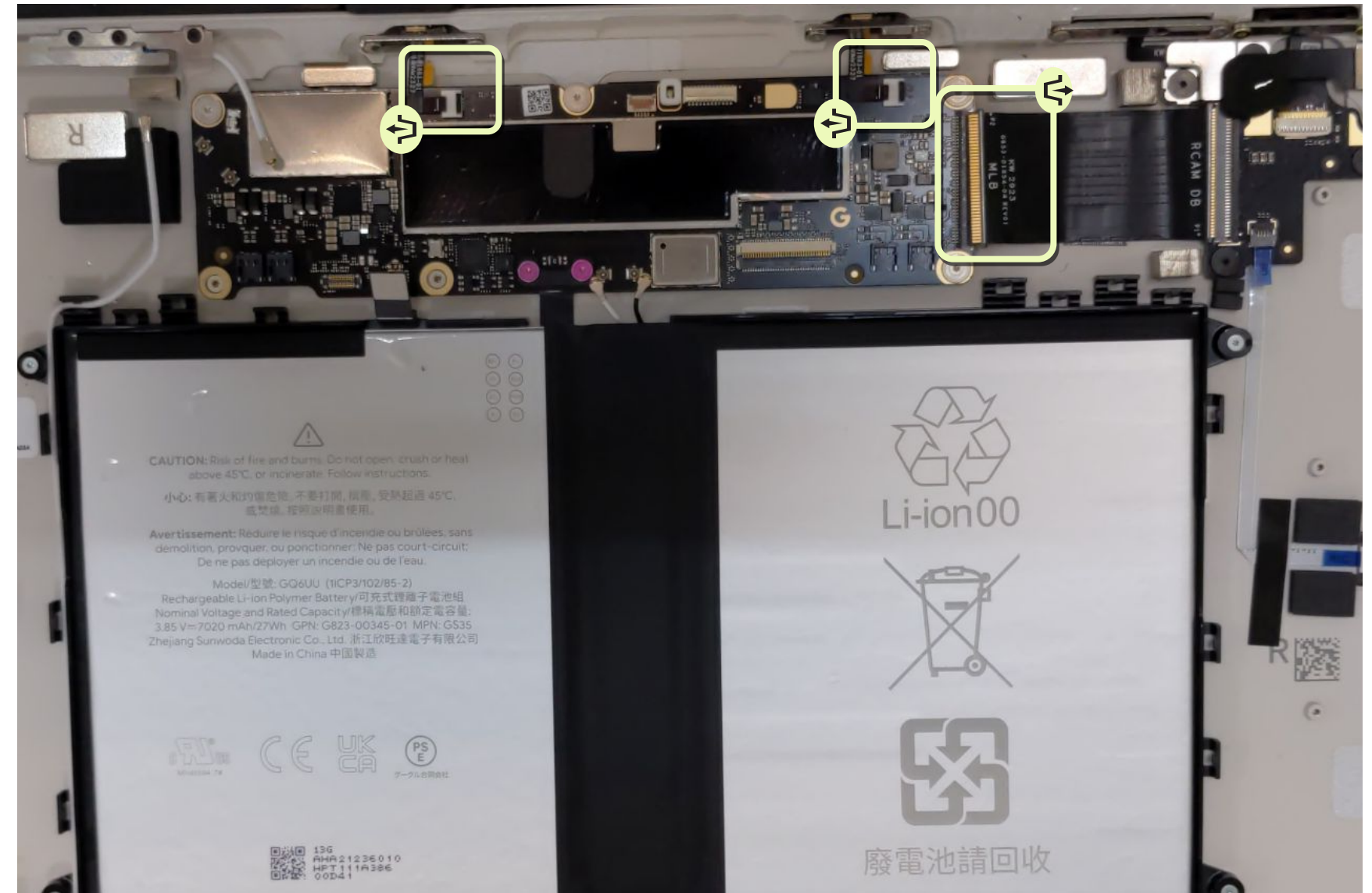
Disconnect TOP MIC Flex /DB-MLB Flex connector

- Remove the **top MIC flex** from **MLB module** with the **ESD Tweezers**.
- Remove the **DB-MLB flex connector** with the **ESD Tweezers**.



Note

Using the **ESD tweezers** avoids damage the components.

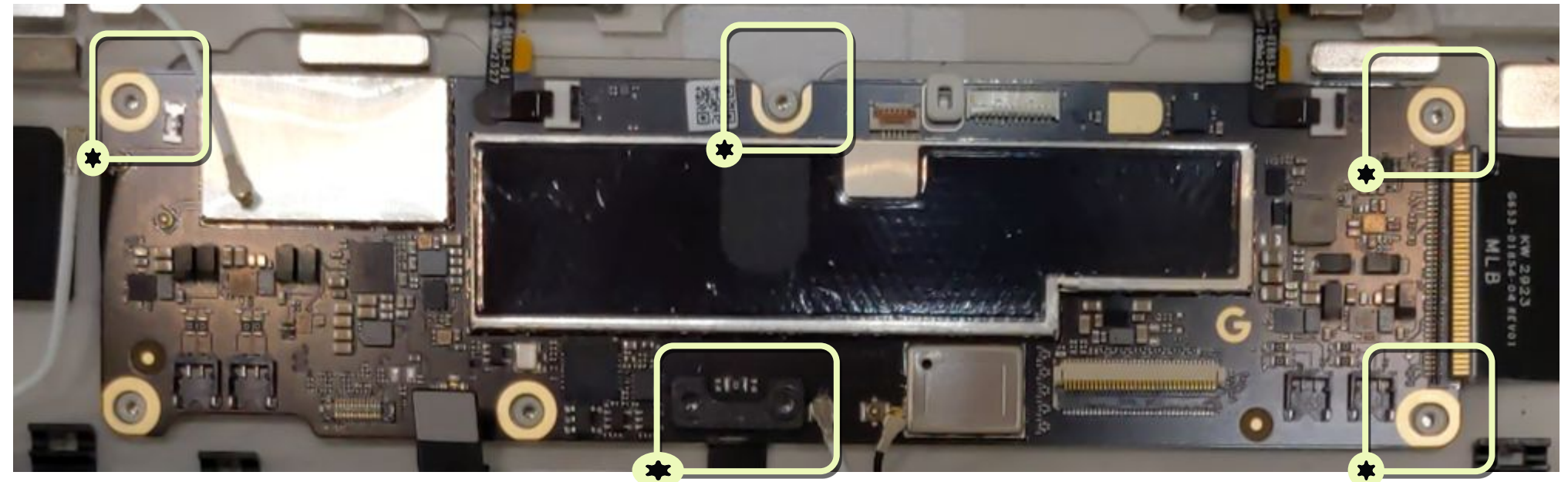


Remove 6x MLB screws

- Remove the 2 washer screws on MLB with a Torx Plus 3IP screwdriver.
- Remove the 4 no-magnetic MLB screws with a Torx Plus 3IP screwdriver.

Part: G250-06412-00*4 (MLB Screws)

Part:G250-06388-00*2 (Washer Screws)



Finished! Need assembly instructions? →

Remove MLB module

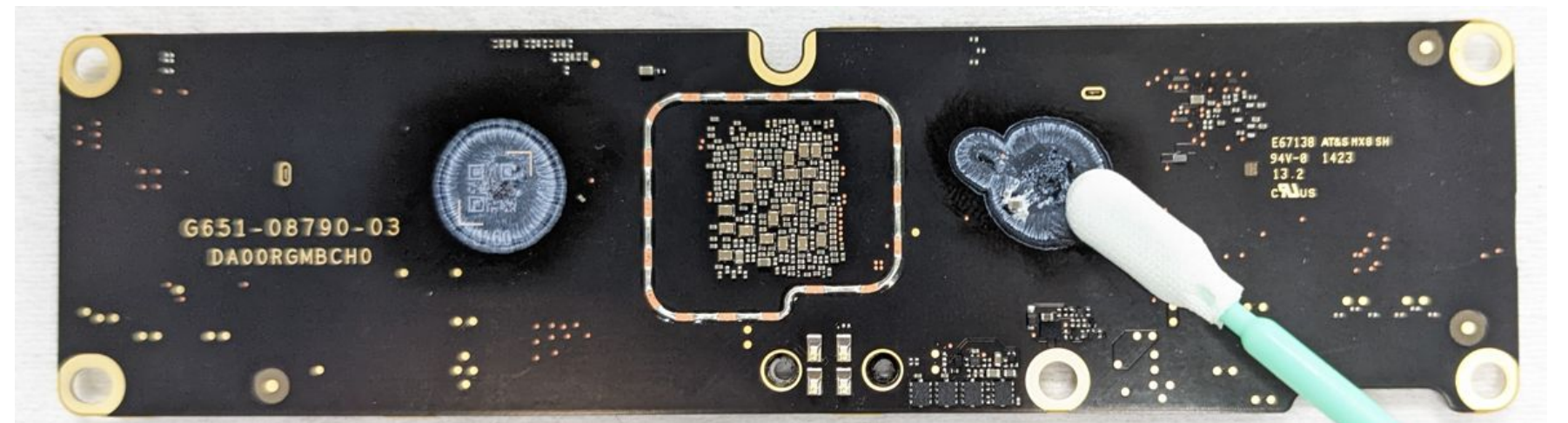
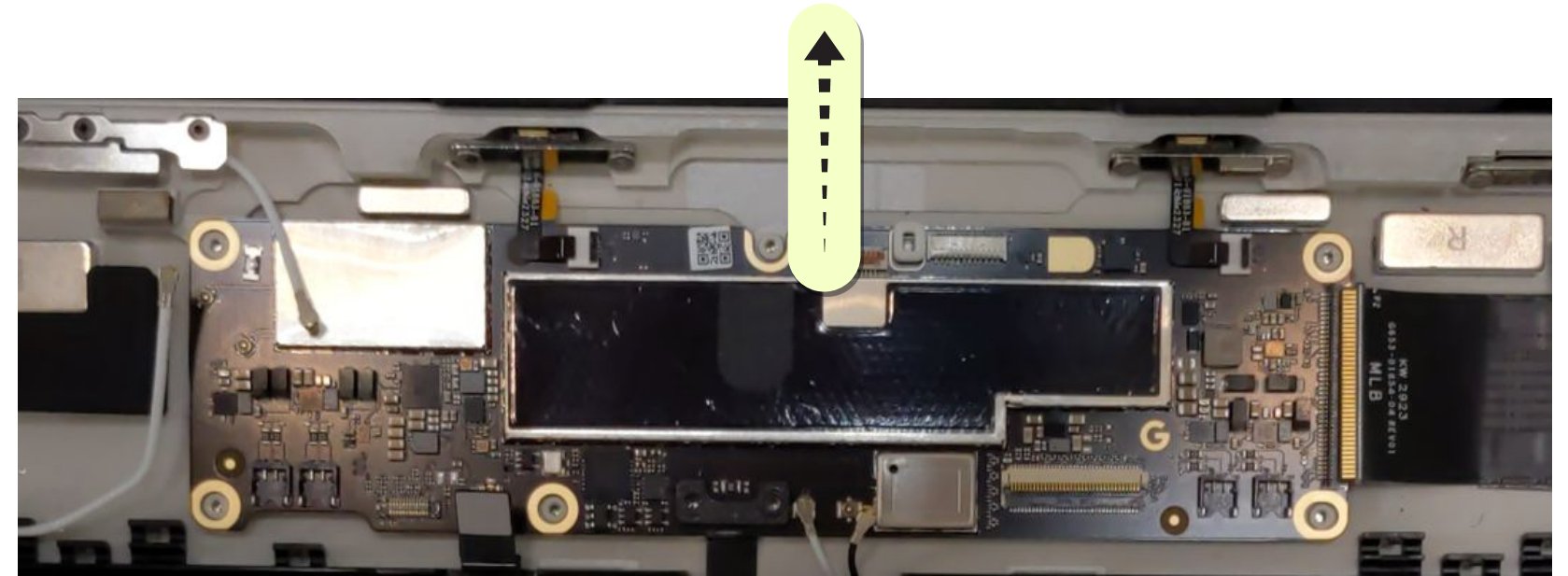
- Lift the **MLB module** from the area shown by **the arrow**.
- Clean the 7w thermal gel on MLB module back with a dust-free cotton swabs

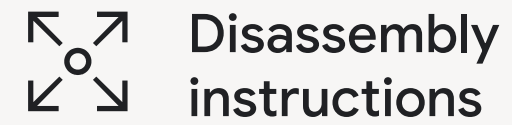
Part: G949-00447-00 (MLB Module)



Use Caution

Be careful to avoid damaging components on the **MLB**.





Rear camera



Use caution!

Review all [safety precautions](#) before beginning work.



Prerequisites

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

- **Display module**



Tools

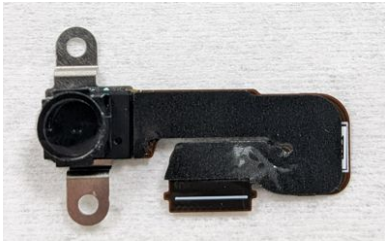
Pixel Tablet-Holder
Torx Plus 3IP screwdriver
ESD Tweezers
ESD Stick

[Parts](#)

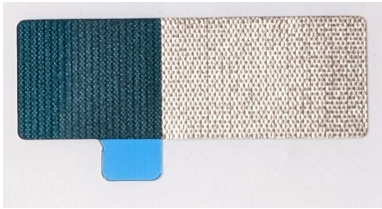
Rear camera

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

Rear Camera
G840-00435-03



RCAM tape
G806-06439-01



RCAM Bracket
G730-06253-04



RCAM foam
G806-07204-01



Screw*2
G250-06325-00



Disconnect rear cam

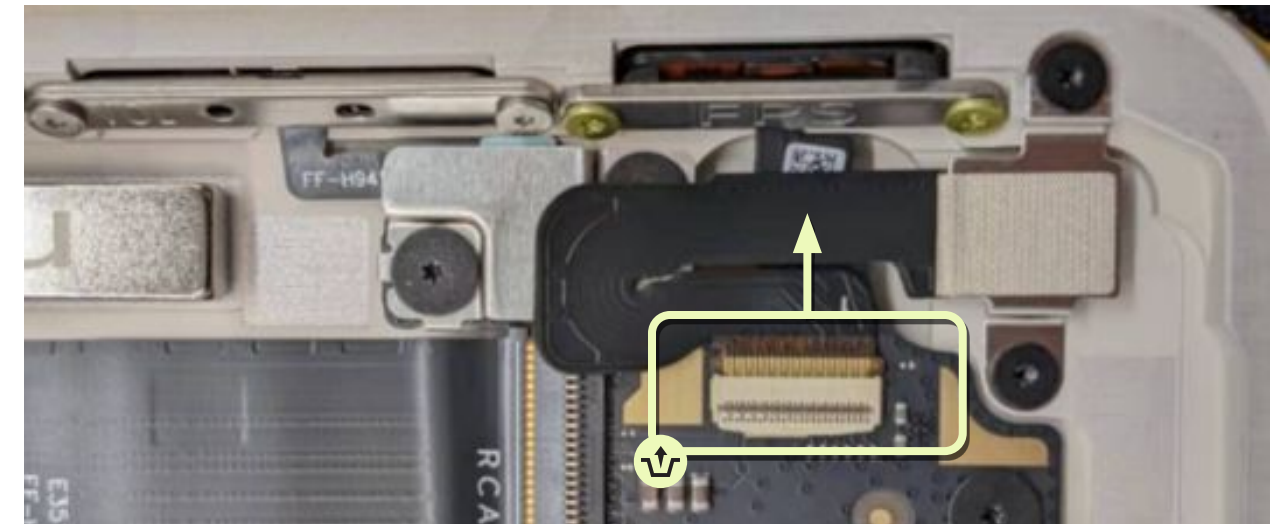
Loosen **Rear Camera** connectors and disconnect from the **Daughter Board** with a **ESD Tweezers**.

Part: G840-00435-03 (Rear Camera)



Note

Using the **Universal fish line** avoids damage the components.

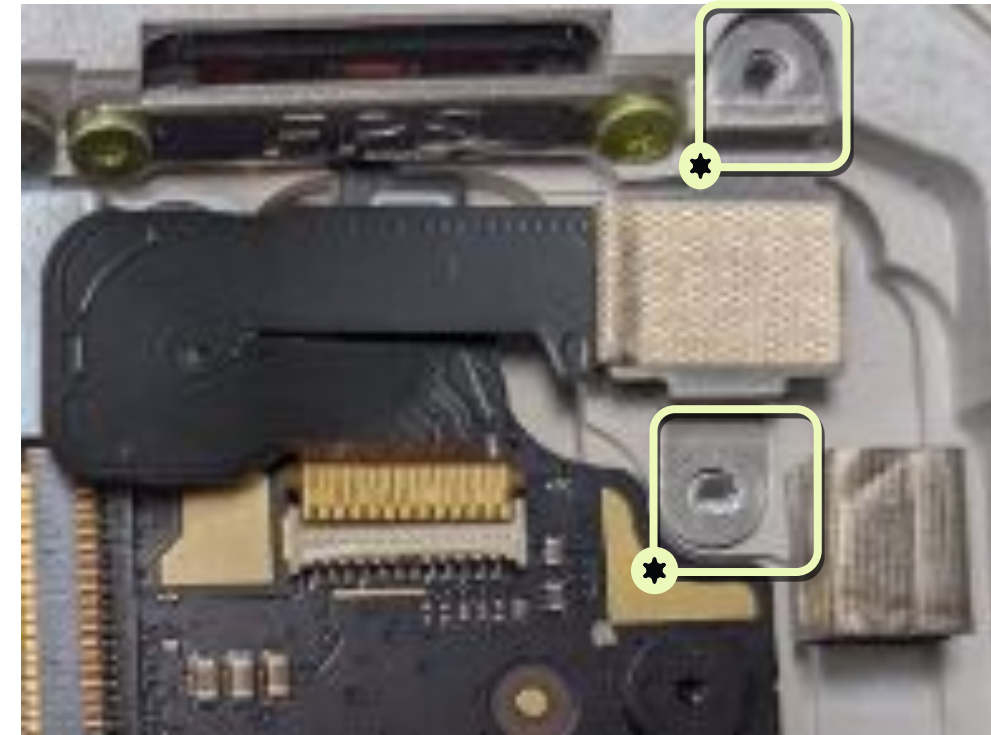


Finished! Need assembly instructions? →

Remove RCAM

- Remove the 2 **RCAM screws** on MLB with a **Torx Plus 3IP screwdriver**.
- Remove the **RCAM module** from **Enclosure module**.

Part: G250-06325-00*2 (RCAM Screws)



Camera protection

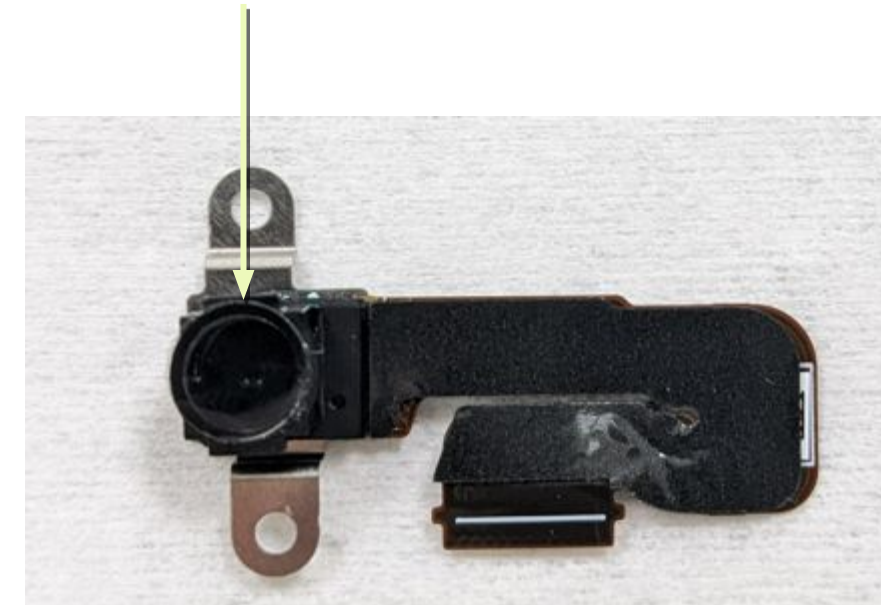
Apply **RCAM Cap** over the **Rear Camera**.

Part: G840-00435-03 (Rear Camera)



Use Caution

Ensure that the environment is clean for this process.



Clean Rcam area

- Remove the RCAM BKT and RCAM tape.(Fig.1)
- Clean the residual glue out of the RCAM BKT with an **Cotton swab** . (Fig.2)

Parts: G730-06253-04 (Rcam bracket)



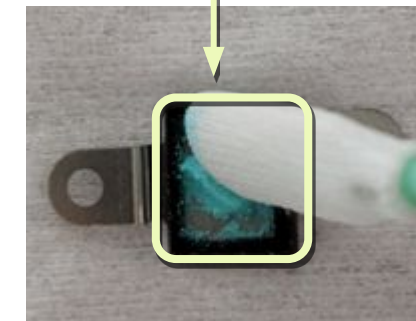
Use Caution

Ensure the inside slot have no residual glue.

Fig 1



Fig 2





Battery



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.

Confirm Before Proceeding

- Battery is fully discharged
- Inspect the battery if the tablet battery shows signs of swelling or damage, or if the tablet feels hot or emits strong odor, do not attempt disassembly.
- Take care not to expose the tablet or its components to liquids once disassembled.



Battery



Use caution!

Review all **safety precautions** before beginning work.



Prerequisites

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

- **Display module**
- **USB-C module**



Tools

Pixel Tablet-Holder
Pixel Tablet-Battery Assy Fixture
Torx Plus 2IP screwdriver
ESD Tweezers
ESD Stick

[Parts](#)

Battery

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

Battery Module

G949-00446-00



Battery Screws

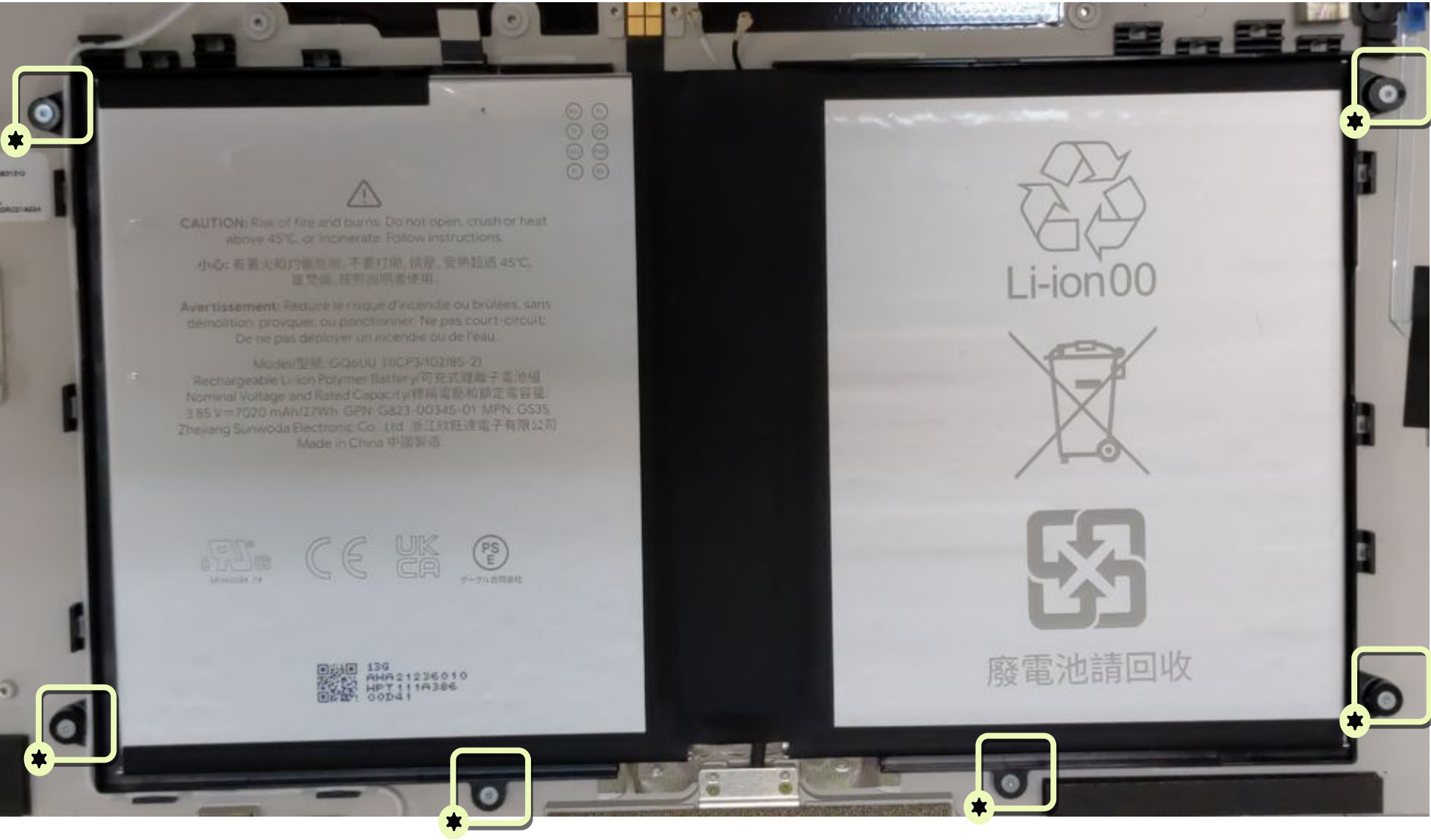
G250-06470-00



Remove 6x Battery screws

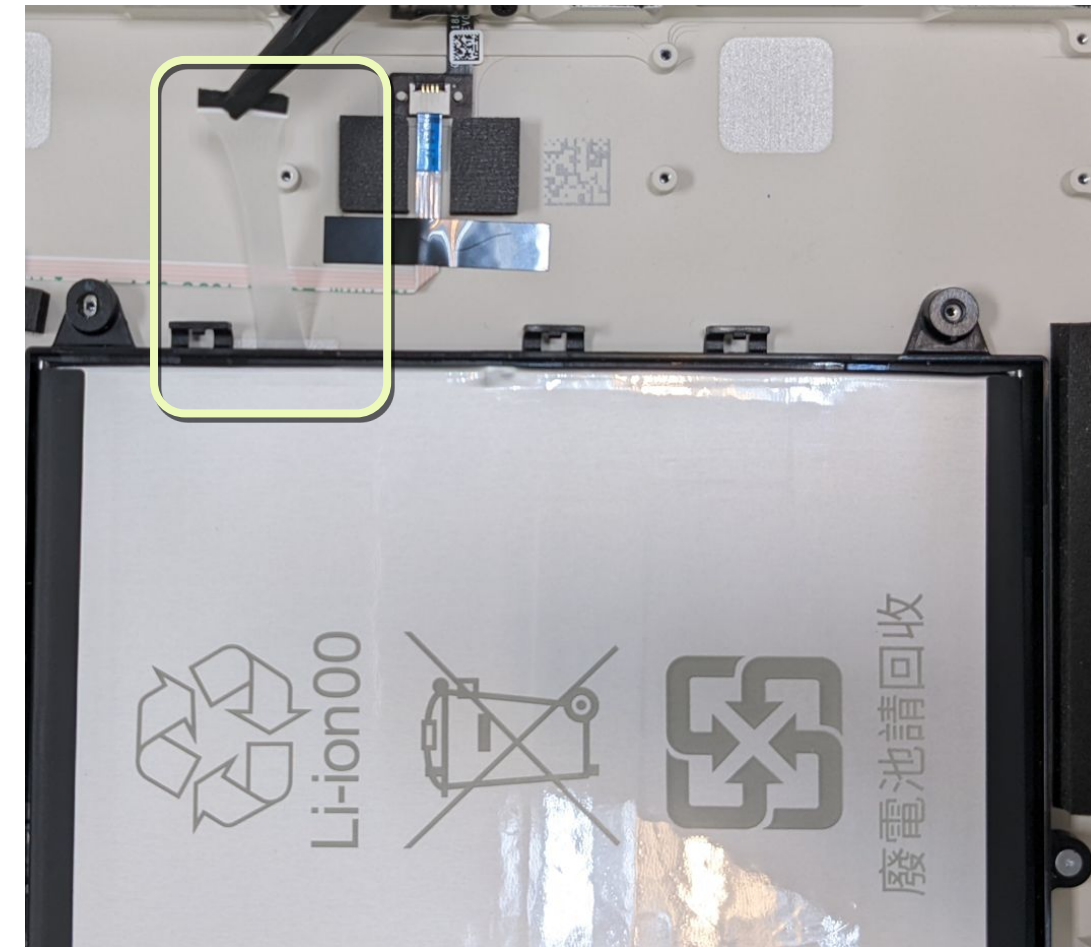
Remove the 6 battery screws with a Torx Plus 2IP screwdriver.

Part:G250-06470-00*6 (Battery Screws)



Remove 6x reworkable PSA

Remove the **6x reworkable PSA** by using **ESD Tweezers**.



Finished! Need assembly instructions? →

Remove battery

Remove the **battery** with a **Battery Assy Fixture** and store it safely.

Part: G949-00446-00 (Battery Module)



Use Caution

Keep small screws and sharp objects away from the Battery.

Do not reuse the part.





Disassembly
instructions

Enclosure Module



Use caution!

Review all **safety precautions** before beginning work.



Prerequisites

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

- **Display module**
- **USB-C module**
- **Spreaker module**
- **Battery module**
- **Rear camera**



Tools

Pixel Tablet-Holder

Heat Plate

CG Disassembly Fixture

Universal Disassembly Piece(0.2mm)

Pixel Tablet-Battery Assy Fixture

Torx Plus 2IP screwdriver

Torx Plus 3IP screwdriver

ESD Tweezers

ESD Stick

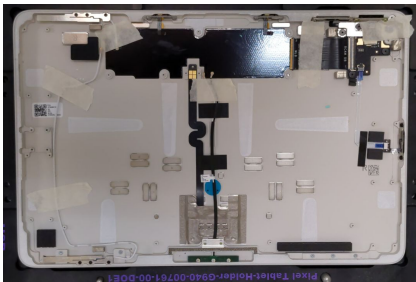
[Parts](#)

Enclosure Module

Here's the list of parts for the Enclosure Module disassembly.

Enclosure Module

G949-00445-00





Pixel Tablet Repair Manual

Assembly

Enclosure Module

USB-C Module

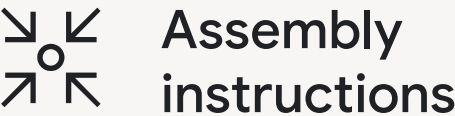
MLB Module

Rear camera

Battery Module

Display Module

Speaker Module



Enclosure Module

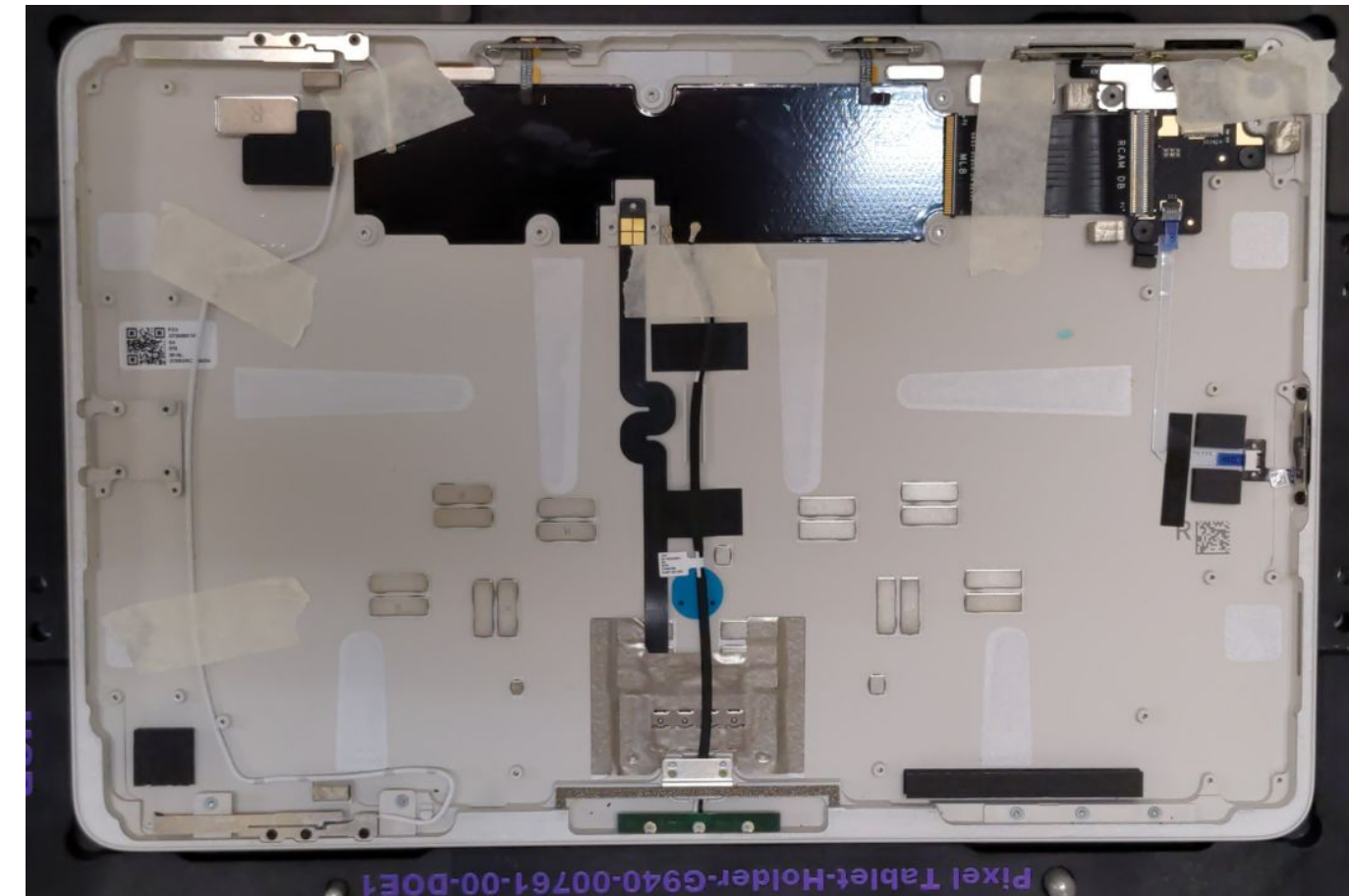
Use Pixel Tablet-holder

- Remove the **Pixel Tablet-Holder** from **Pixel Tablet- CG Disassembly Fixture**.
- Place the new enclosure module into the **Pixel Tablet-Holder**.



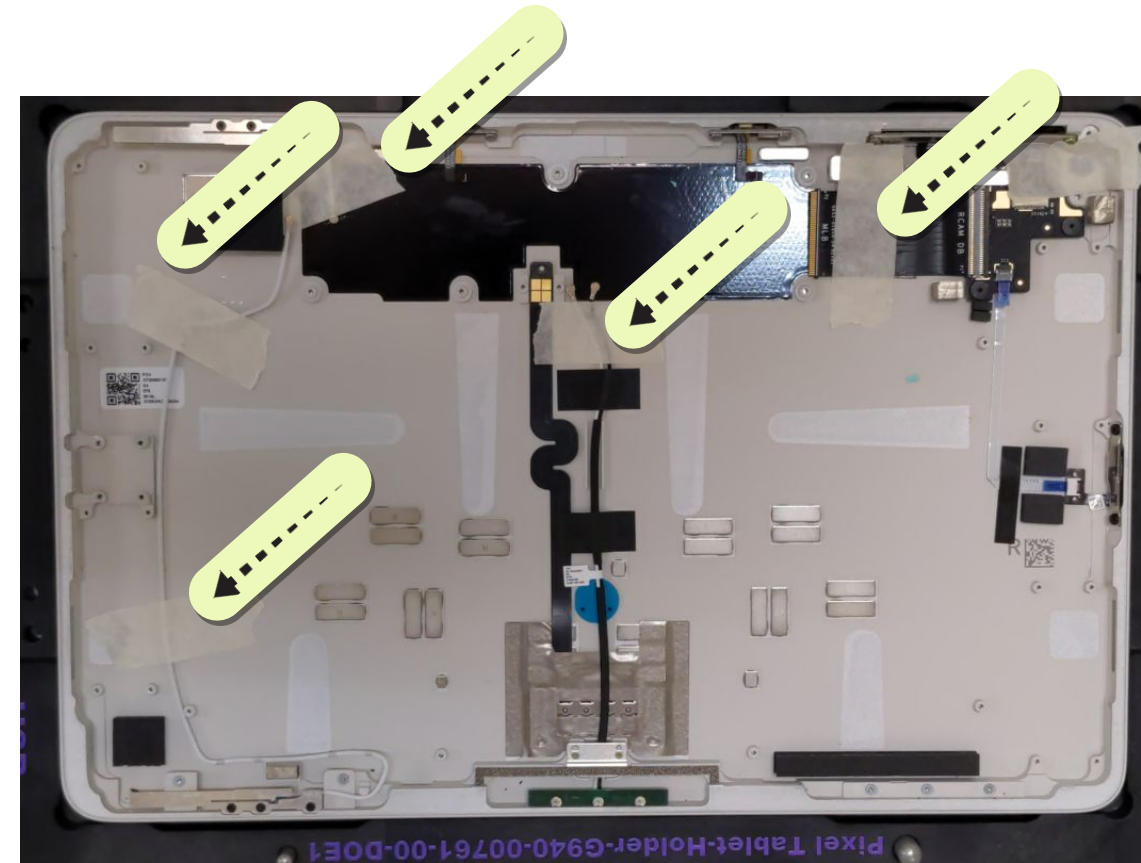
Note

Take out the device vertically.



Remove the tape

Remove the tape on **Enclosure module**.





Assembly
instructions

MLB Module

Apply 7W thermal grease

- Place the Pixel Tablet Thermal Grease Align on the enclosure– as indicated in the picture.
- Squeeze a fair amount of Thermal Grease inside the round hole.
*Amount of grease (by weight): $0.35\text{g} \pm 10\%$ /hole (around filled with round holes)
- Wipe the Thermal Grease with ESD Spudger to cover the round holes.
- Remove the Pixel Tablet Thermal Grease Align by lifting it straight up.

Part: G160-01279-00(7W thermal gel)

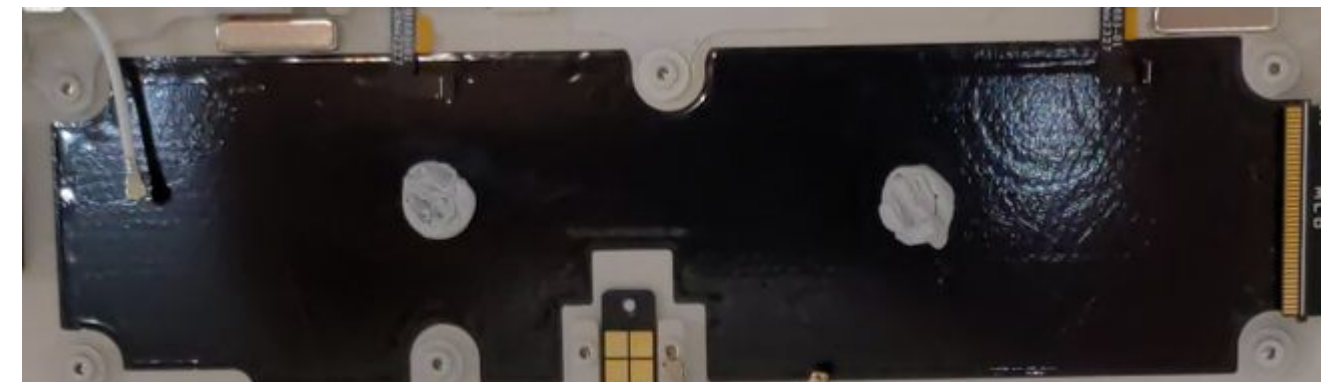
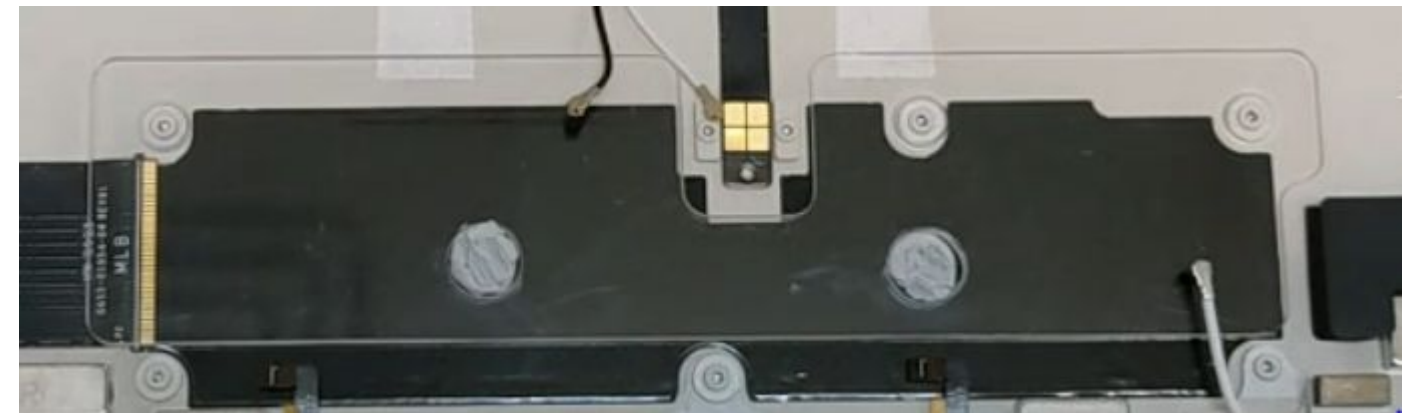


Use Caution

Review all safety precautions before beginning work.

Be sure to clean the Pixel Tablet Thermal Grease Align & ESD spudger after each use.

Do not get conductive Thermal Grease on any of the nearby components.



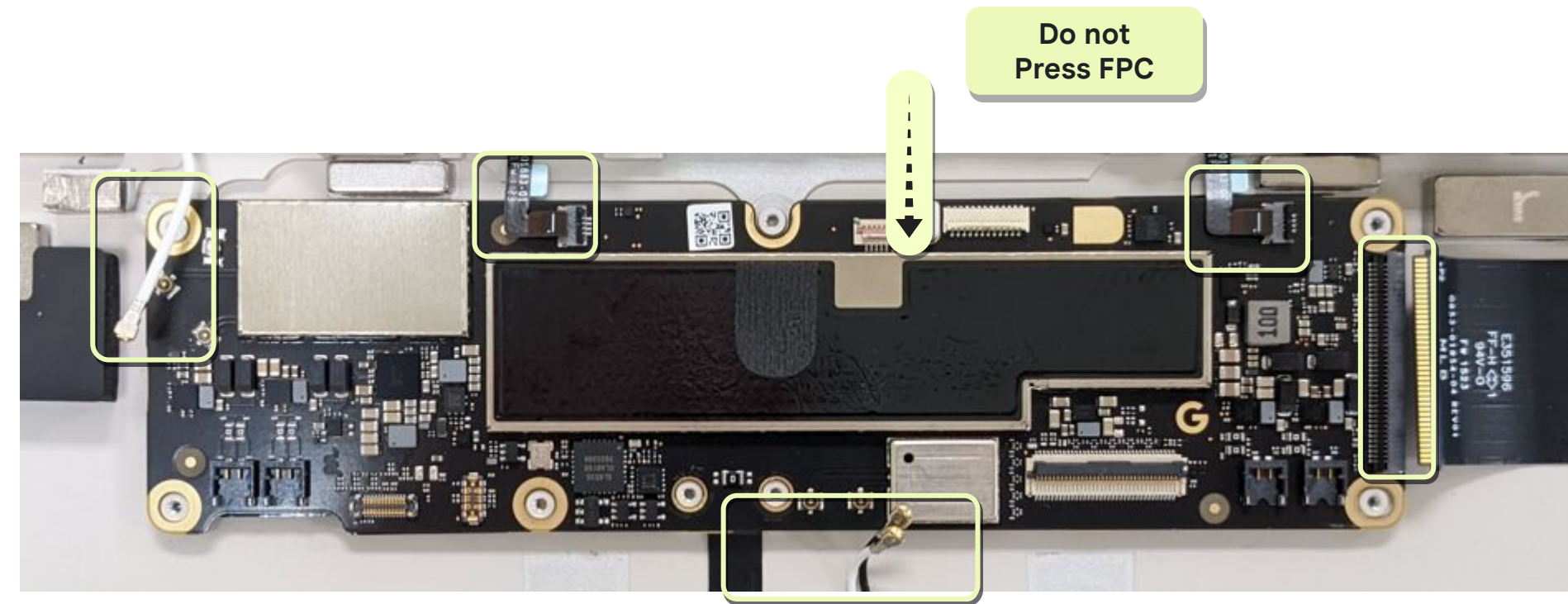
Assemble MLB Module

Push downwards towards the MLB Module and straight down to push the **MLB Module** into the Screw holes.



Use Caution

Be careful not to press the FPC under MLB.



Screw in MLB

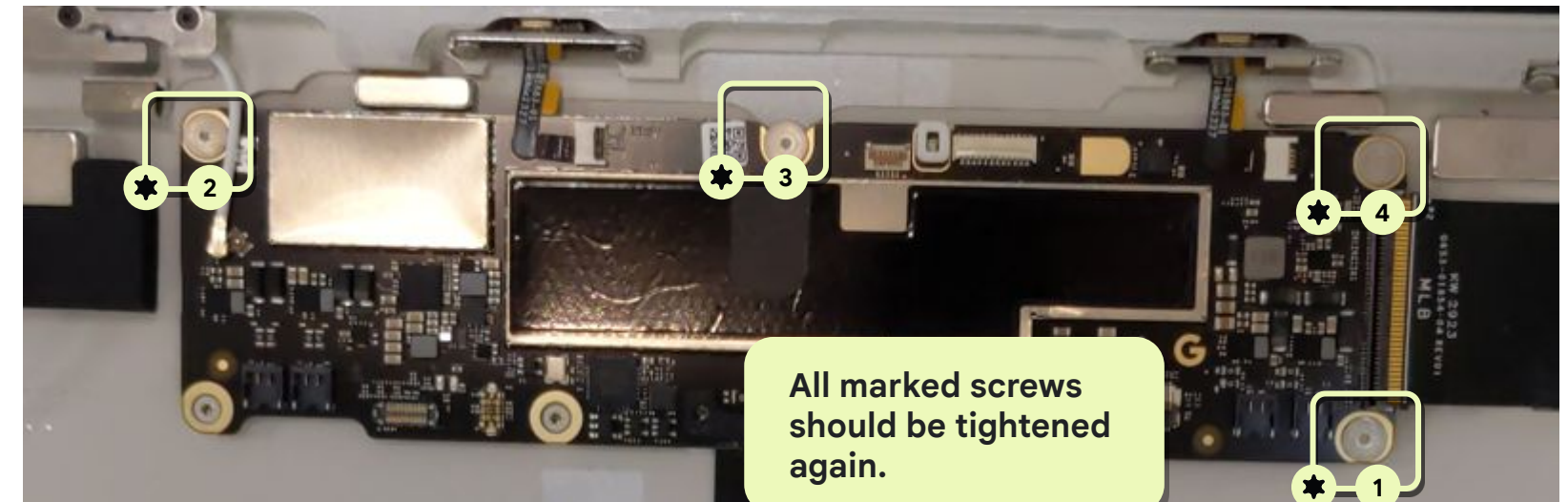
- Tighten the **Non-magnetic Screw** with a **Torx Plus (3IP)** screwdriver in sequence.

Torque force: $1.3 \pm 8.5\%$ kgf-cm

- Re-tighten the **Screws**, as figure shown.

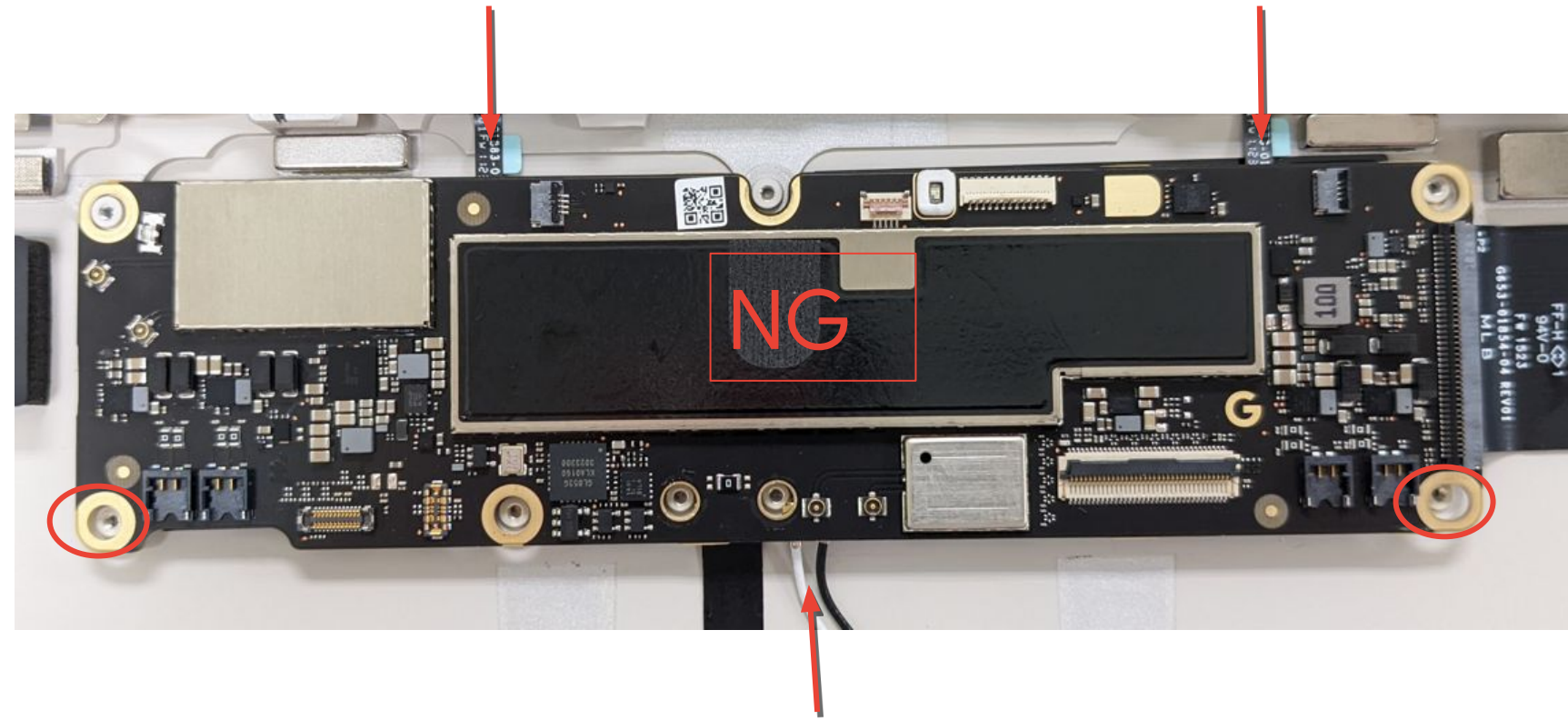
Torque force: $1.3 \pm 8.5\%$ kgf-cm

Part: GG250-06412-00*4 (Screw)



Check seating

- Press down and Make sure FPC is on MLB.
- The MLB Module should perfectly aligned with the screw hole, as shown above.



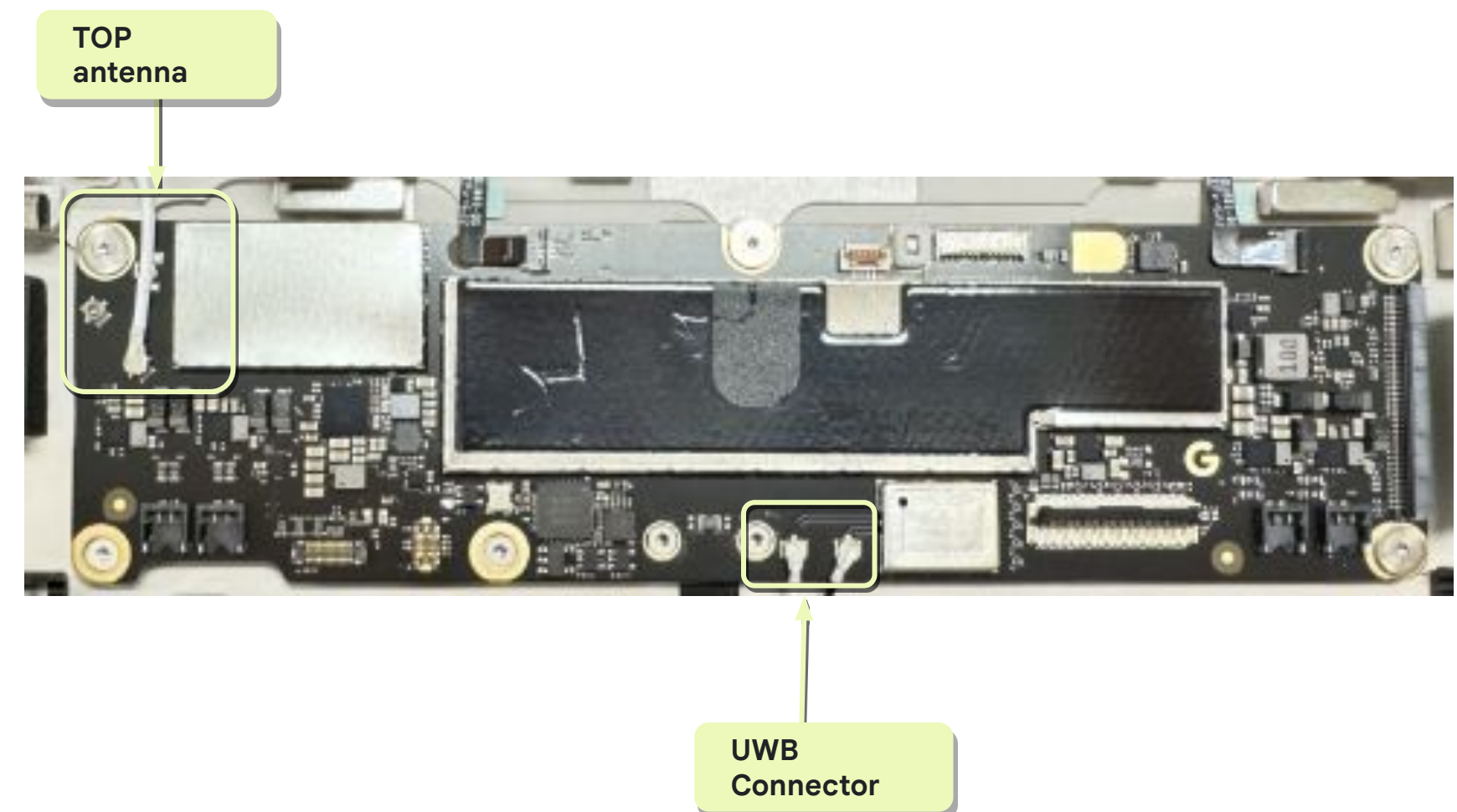
Attach connectors

- Attach the **UWB, Top antenna Connector** to the **MLB Module** with a mating/unmating tool.
- Applying pressure evenly across the connectors to ensure they are fully engaged. Viewing from different angles to assist the alignment.



Note

Check every connector is attached fully to the **MLB**.



Screw in Washer

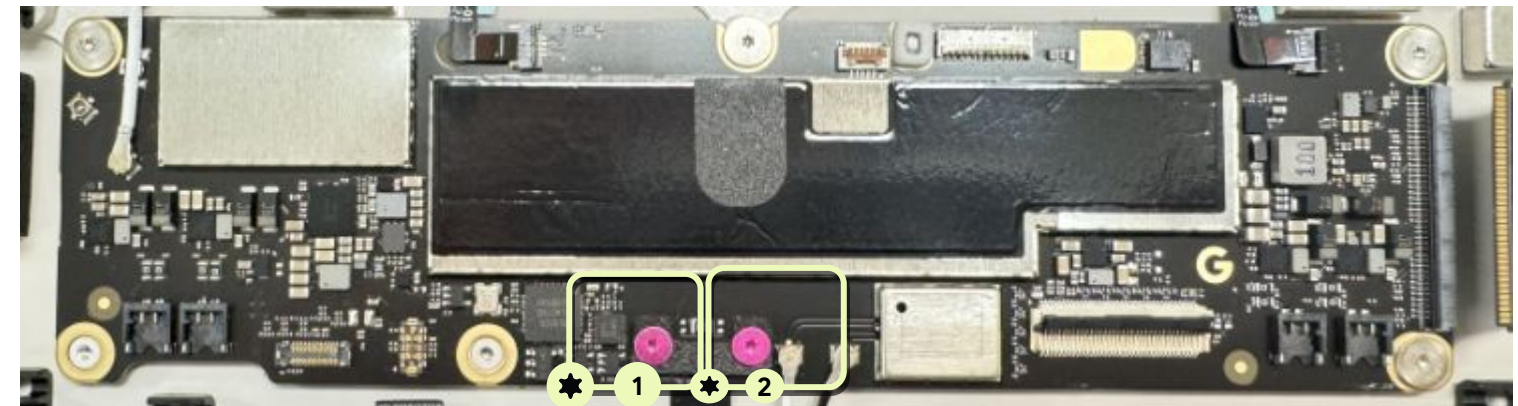
- Tighten the **Screw** with a **Torx Plus (3IP) screwdriver** in sequence.

Torque force: $1.1 \pm 6\%$ kgf-cm

- Re-tighten the **Screws**, as figure shown.

Torque force: $1.1 \pm 6\%$ kgf-cm

Part: G250-06388-00*2 (Screw)



All marked screws should be tightened again.

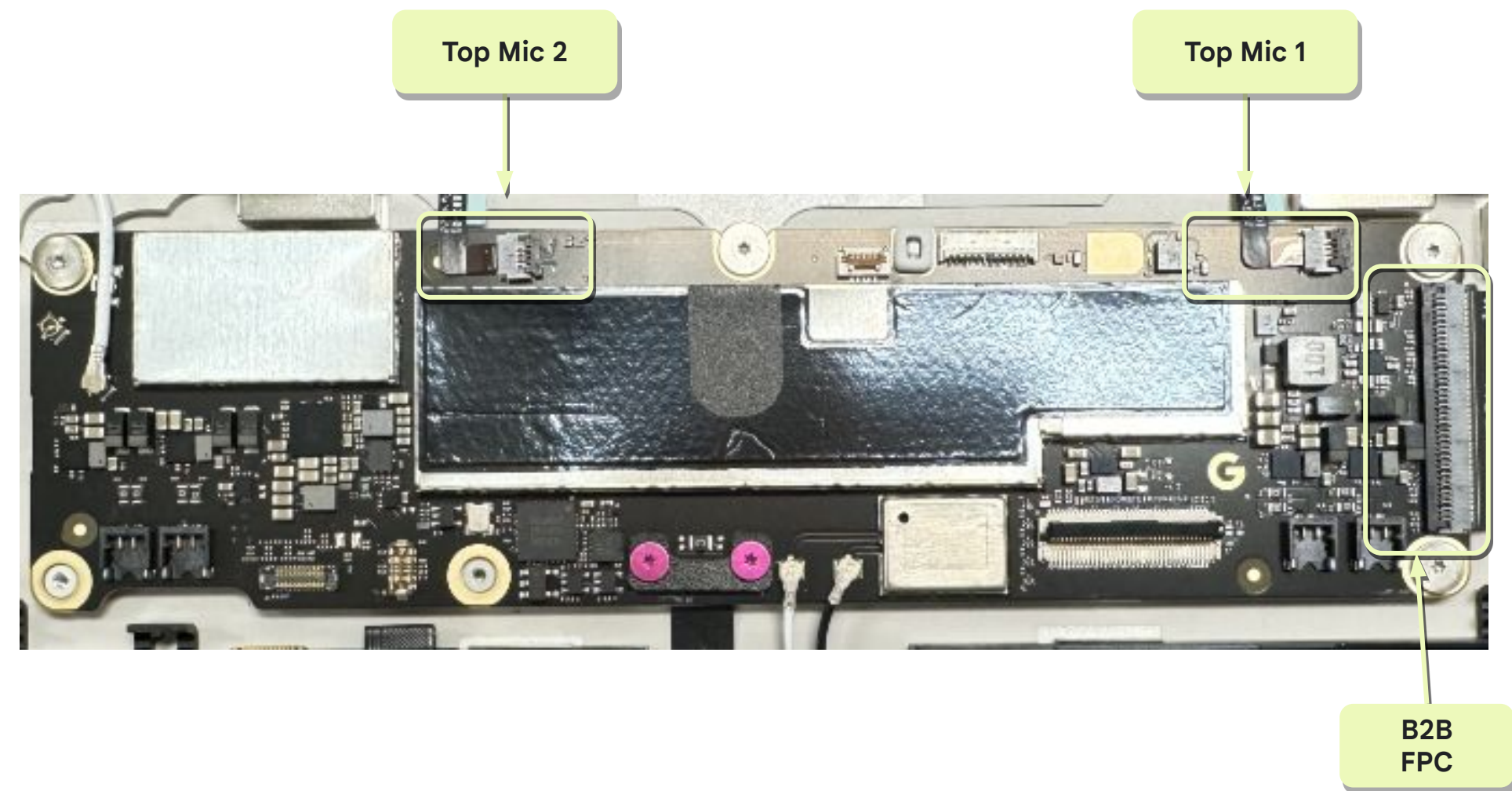
Attach connectors

- Attach the **Top Mic 2**, **Top Mic1** and **B2B FPC Connector** to the **Logic Board** with a ESD tweezers.
- Applying pressure evenly across the connectors to ensure they are fully engaged. Viewing from different angles to assist the alignment.



Note

Check every connector is attached fully to the **Main Logic Board**.





Assembly
instructions

Battery Module

Tear off the liner

- Suck the battery module with a Battery Assy Fixture.
- Tear off 6x Battery PSA liner. **Ensure Battery cosmetic checks are completed.**

Part: G949-00446-00(Battery Module)



Use Caution

Review all safety precautions before beginning work.



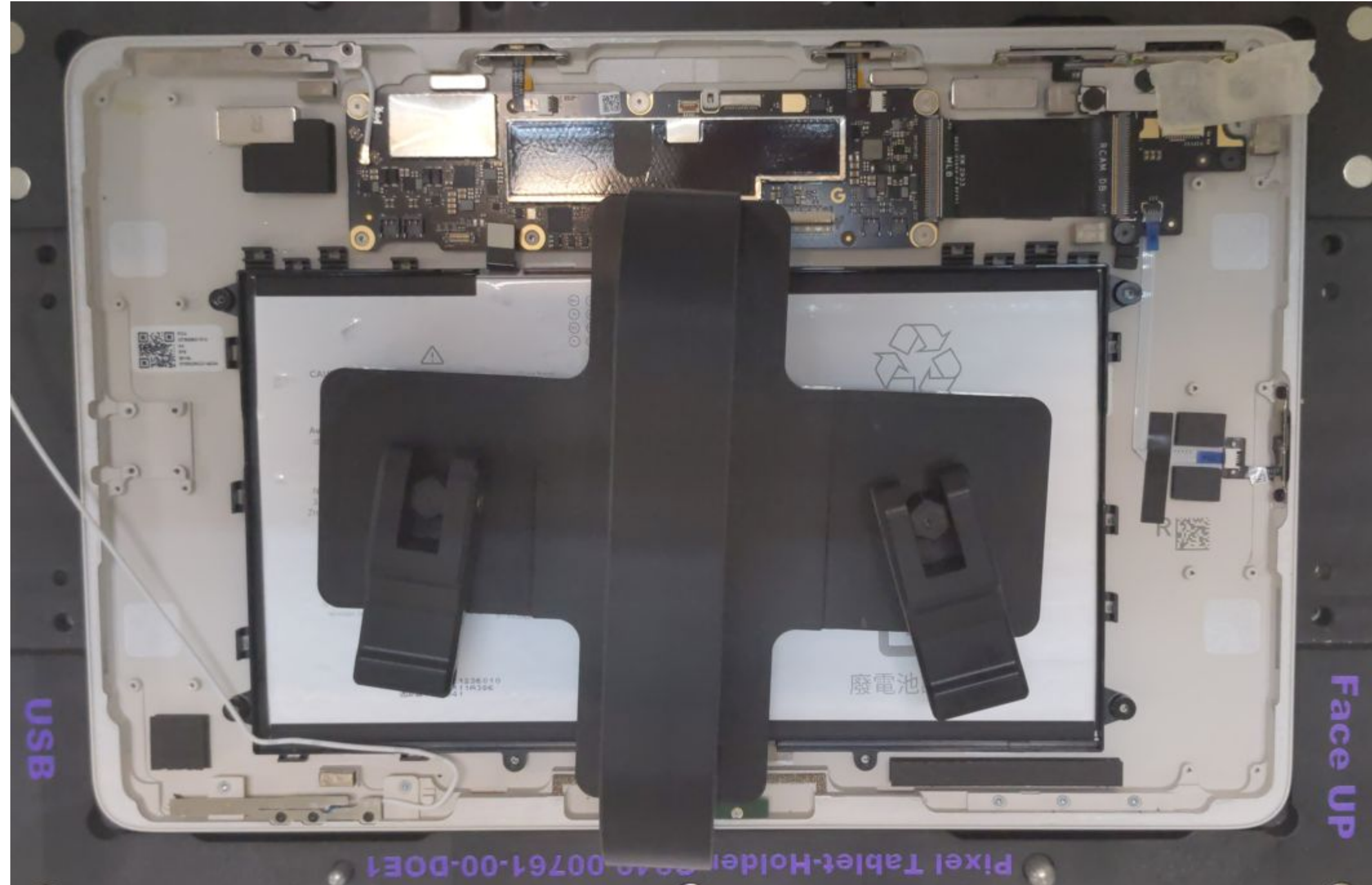
Align battery

Align the battery screw holes of the enclosure, install the **Battery** into the enclosure module.



Use Caution

Review all [safety precautions](#) before beginning work.



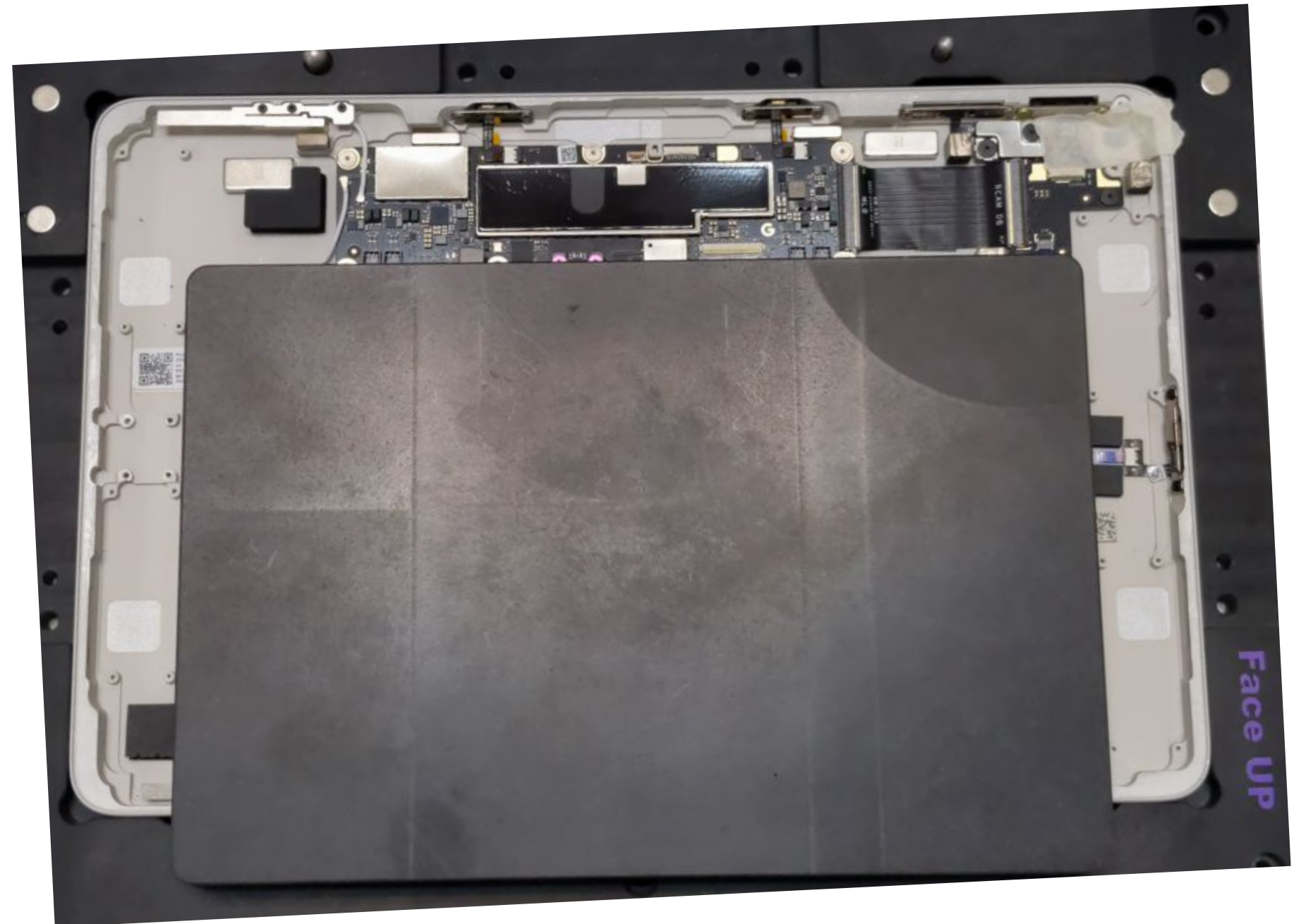
Prepare to press

- Place the **Pixel Tablet-Battery Press Rubber** on the **Pixel Tablet-Holder**. The 2 alignment pins are to avoid placing the wrong position.
- Place the **Universal Press Plate (15mm)** on the **Pixel Tablet-Battery Press Rubber**.



Use Caution

Review all [safety precautions](#) before beginning work.



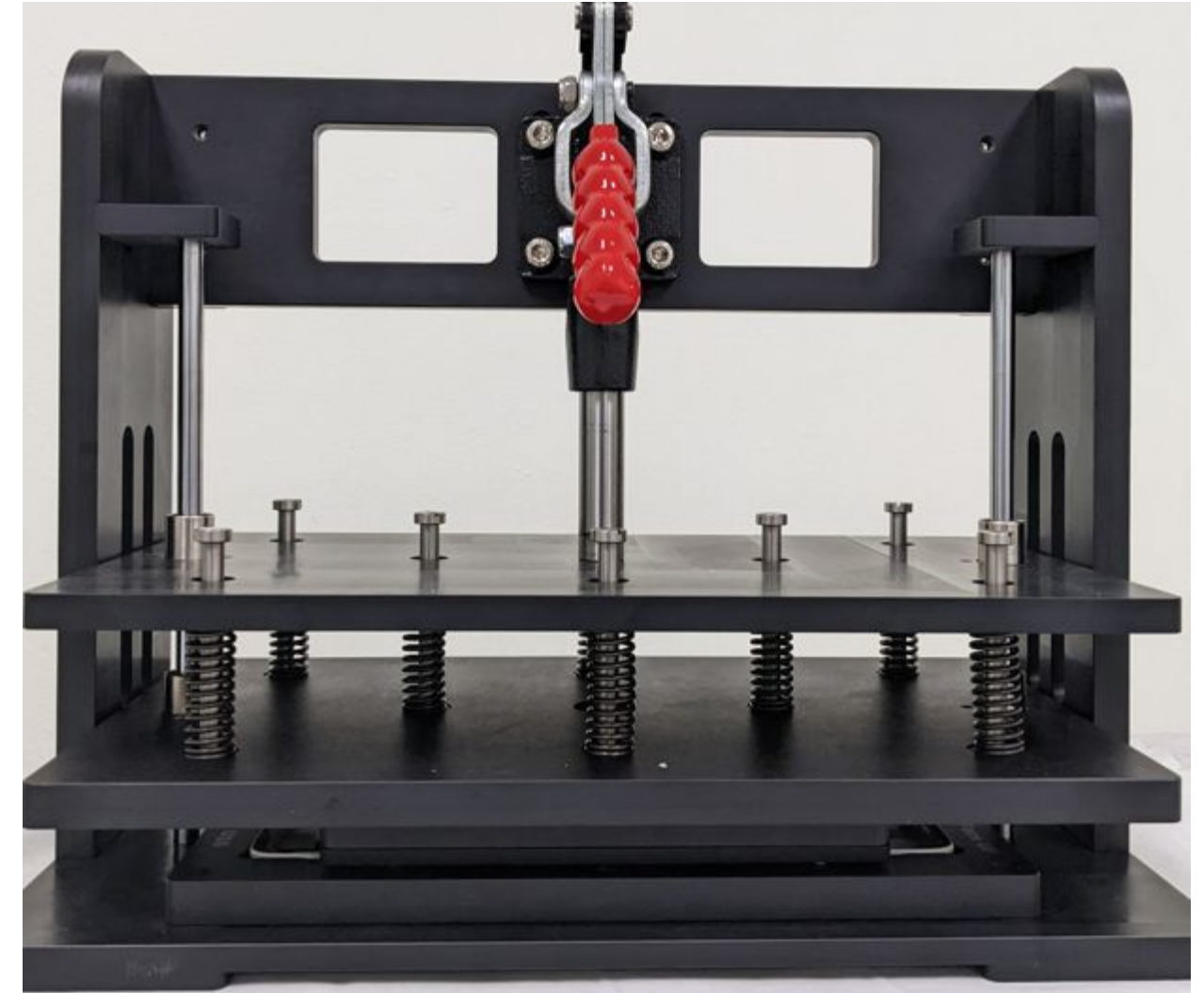
Press together in fixture

- Place the **Pixel Tablet-Holder** in the **Universal Press Fixture**.
- Press the handle down for **10 seconds**.



Use Caution

Pinch point. Keeps hands clear during operation.



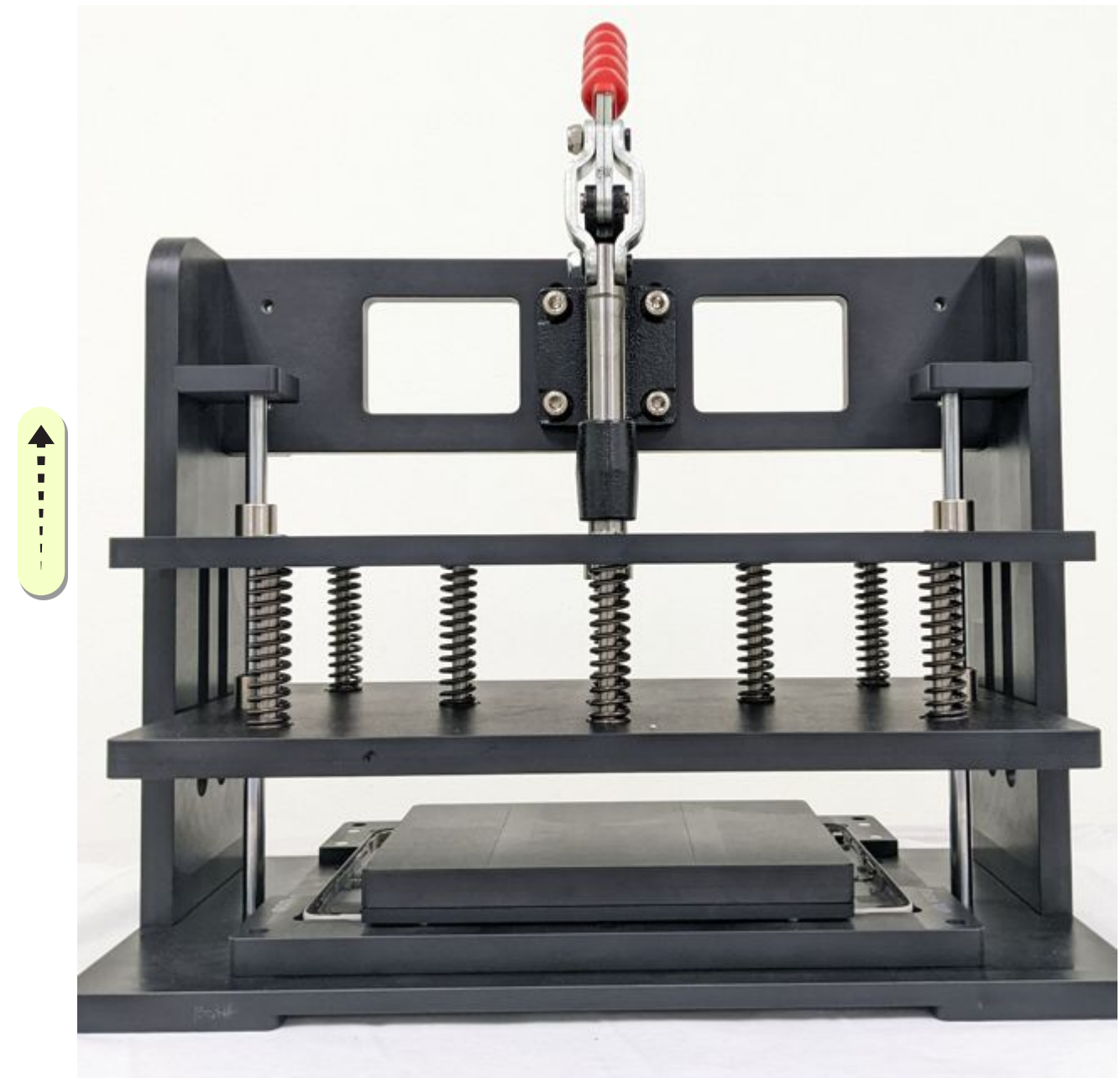
Remove the holder

Return the handle to the original position and remove the Pixel Tablet-Holder.



Use Caution

Pinch point. Keeps hands clear during operation.



Screw in Battery

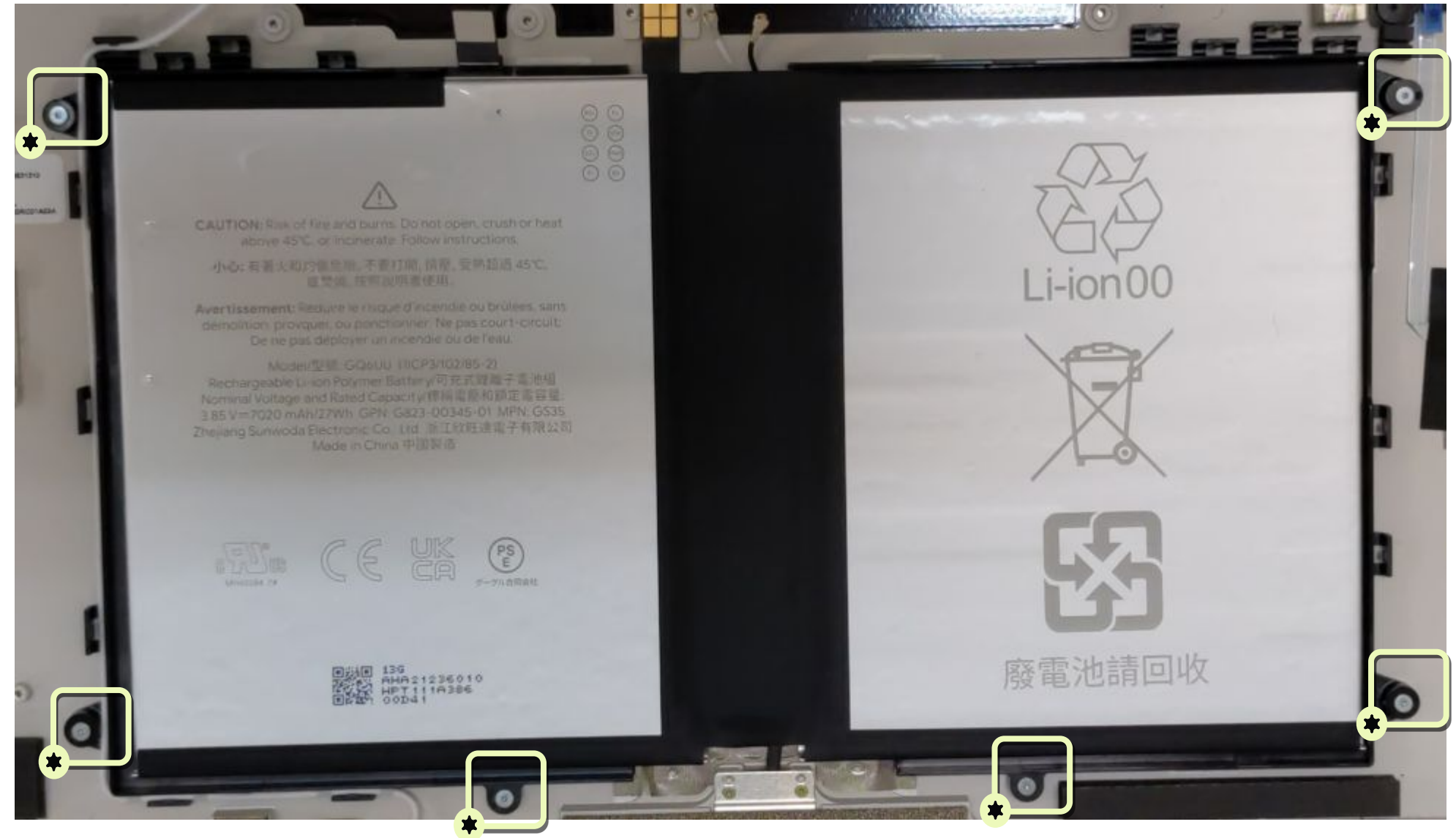
- Tighten the **Screw** with a **Torx Plus (2IP)** screwdriver in sequence.

Torque force: $0.9 \pm 10\%$ kgf-cm

- Re-tighten the **Screws**, as **figure shown**.

Torque force: $0.9 \pm 10\%$ kgf-cm

Part: G250-06470-00*6 (Screw)



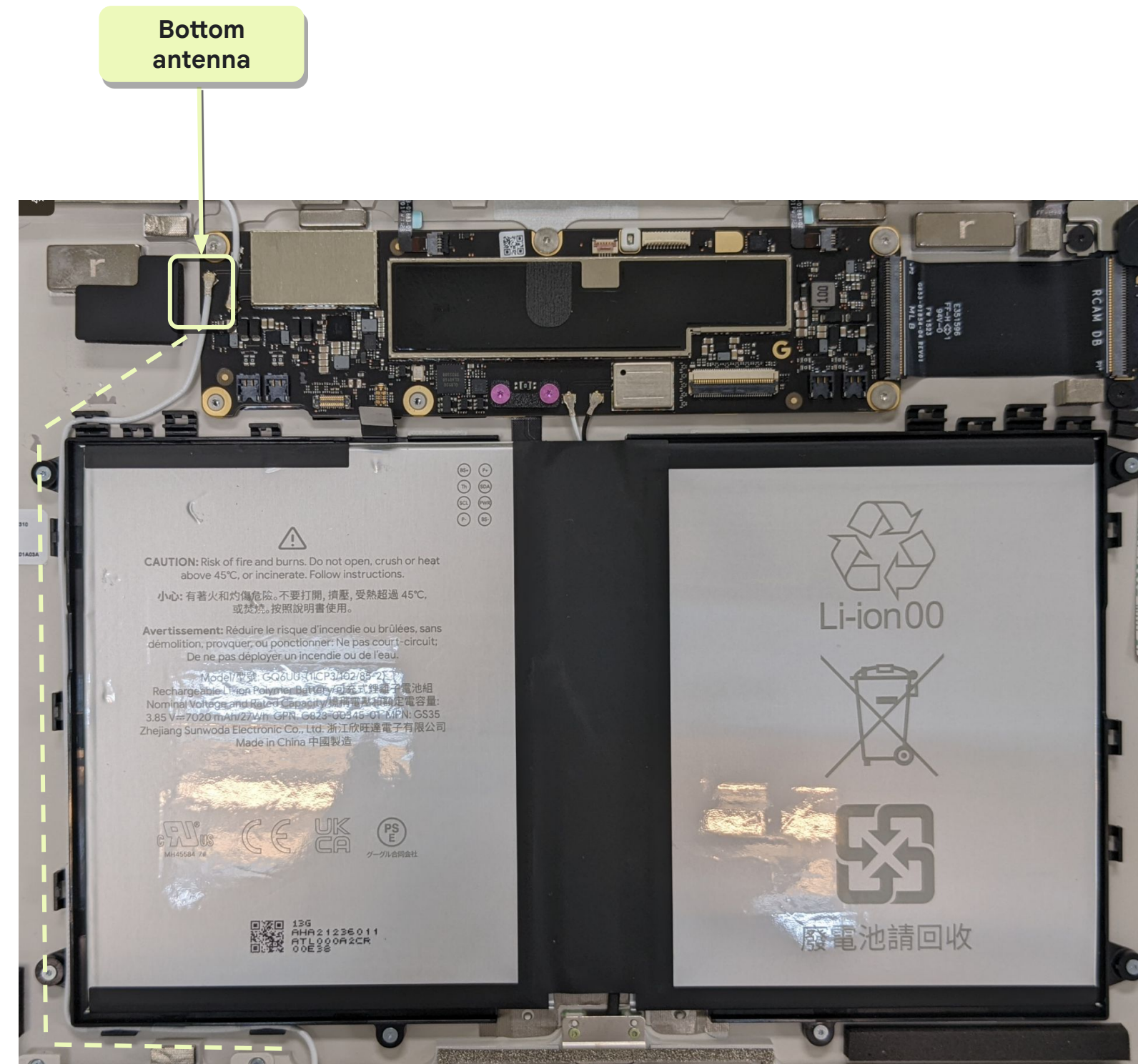
Attach connectors

- Route and Attach the **Bottom antenna Connector** to the **Main Logic Board**.
- Applying pressure evenly across the connectors to ensure they are fully engaged. Viewing from different angles to assist the alignment.



Note

Check every connector is attached fully to the **Main Logic Board**.





Assembly
instructions

Speaker Module

Insert 4x speaker

Assemble the 4x **Speaker** to slot into the **Enclosure**.

Part: G863-00428-02 (TOP-Left speaker)

Part: G863-00429-02 (TOP-Right speaker)

Part: G863-00463-02 (Bottom-Left speaker)

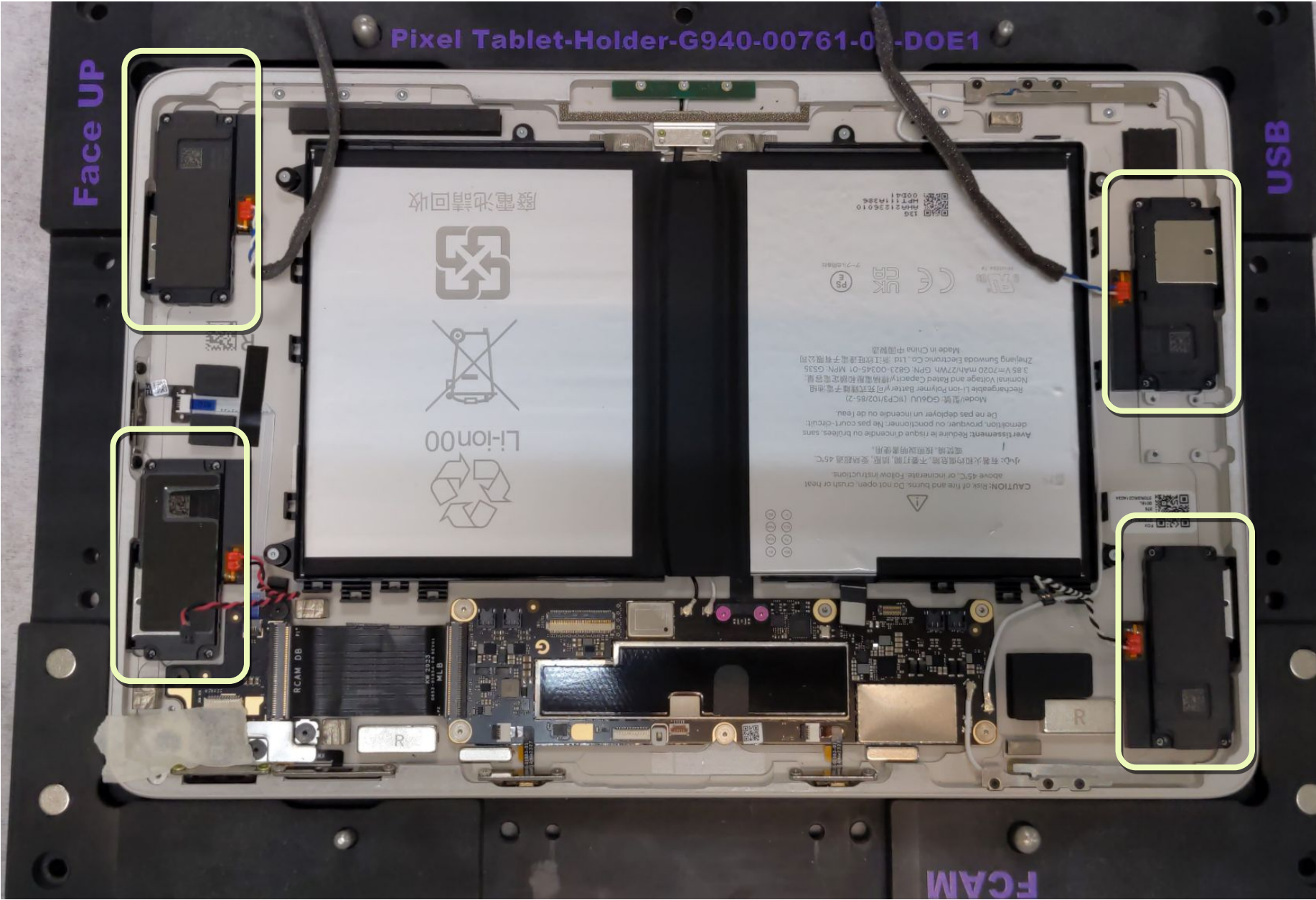
Part: G863-00464-02 (Bottom-Right speaker)



Note

Make sure the speaker goes under the enclosure rim.

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



Screw in 4x speakers

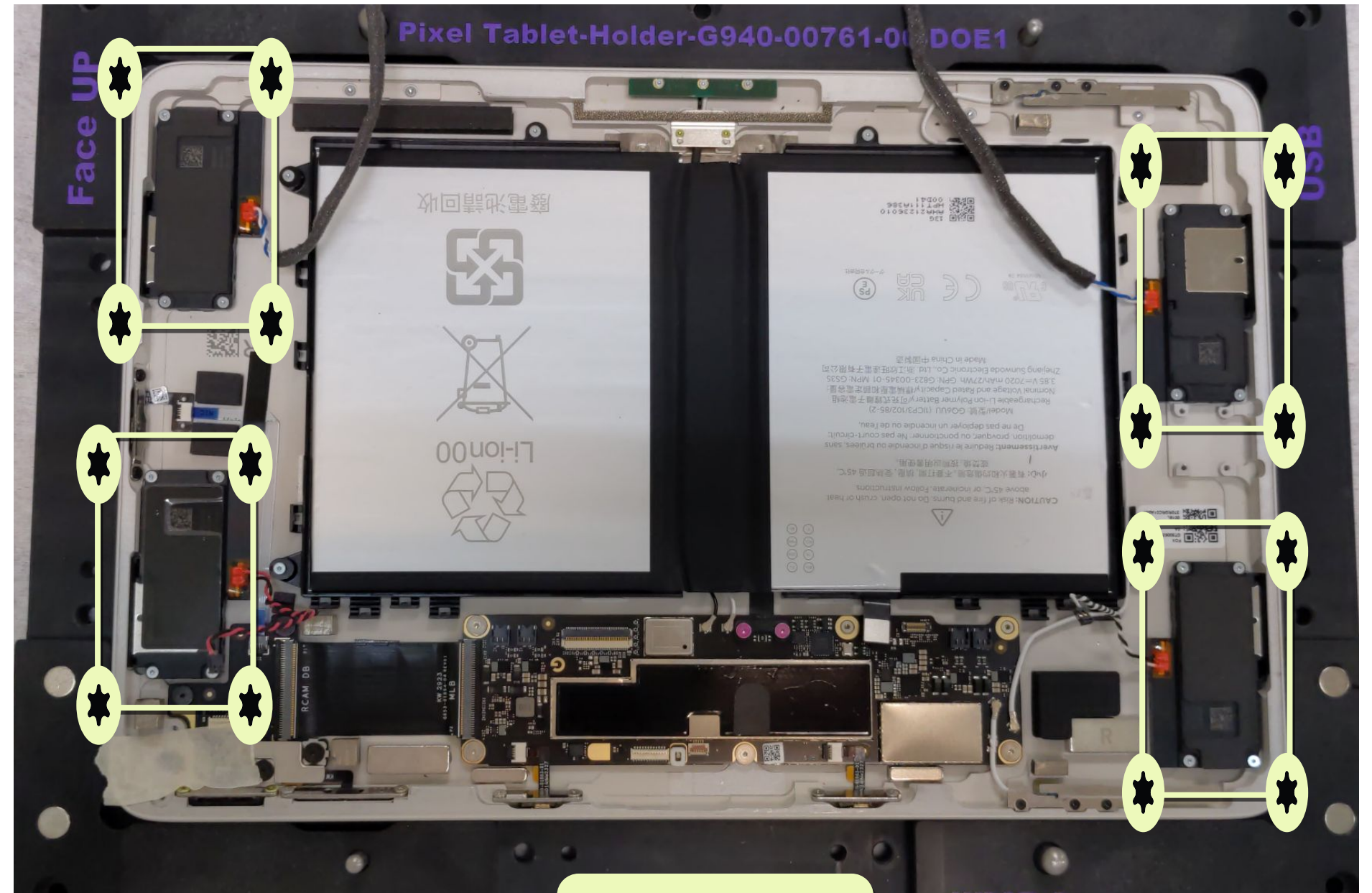
- Tighten the **Screw** with a **Torx Plus (2IP)** screwdriver in sequence.

Torque force: $0.9 \pm 6\%$ kgf-cm

- Re-tighten the **Screws**, as figure shown.

Torque force: $0.9 \pm 6\%$ kgf-cm

Part: G250-06470-00 *16 (Screw)



All marked screws should be tightened again.

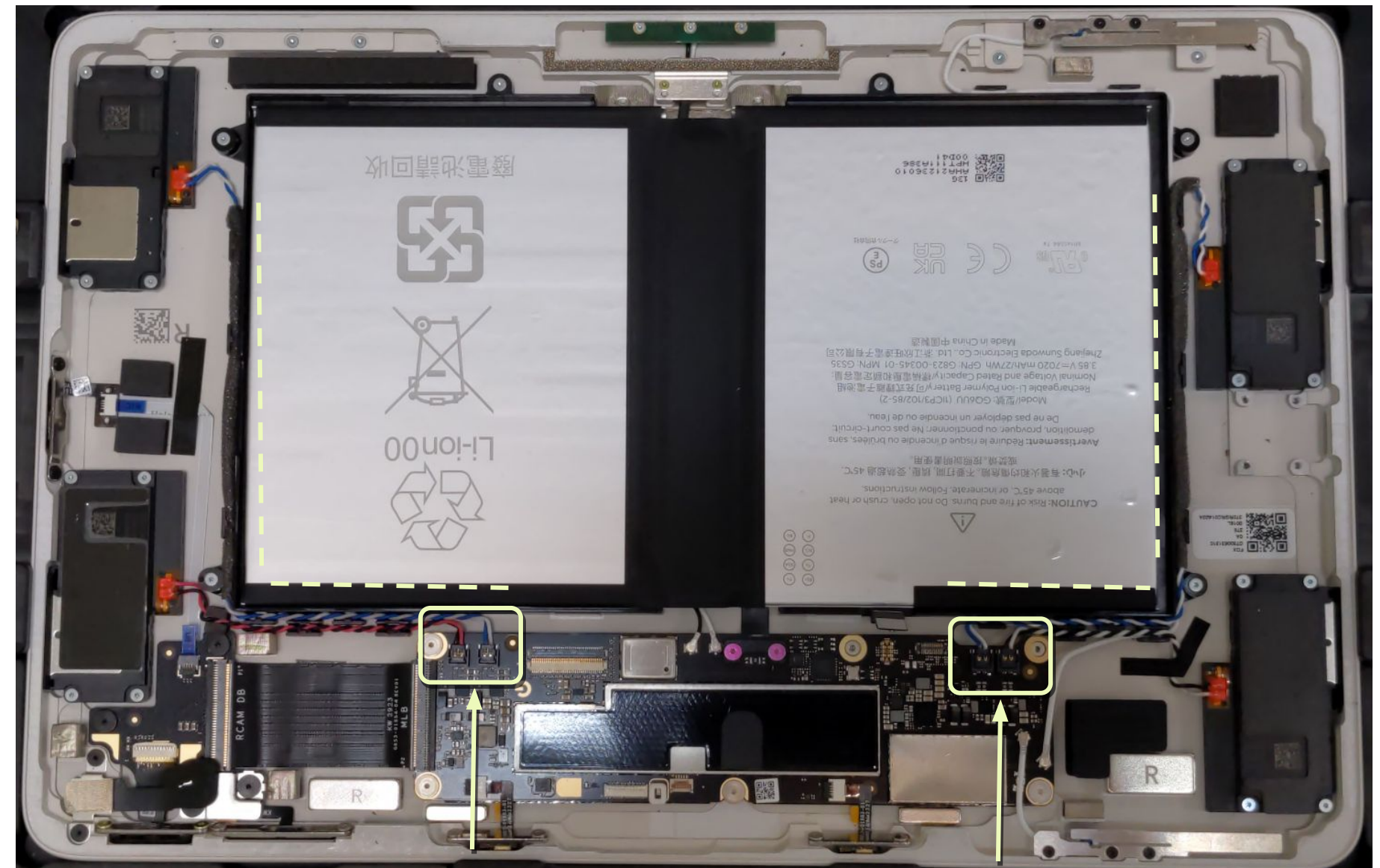
Attach connectors

- Connect and Route the **Speaker Connector** to the **Main Logic Board**.
- Applying pressure evenly across the connectors to ensure they are fully engaged. Viewing from different angles to assist the alignment.



Note

Check every connector is attached fully to the **Main Logic Board**.



Speaker connector

Speaker connector



Assembly
instructions

USB-C Module

Re-using USB-C

Assemble the USB-C according to the positioning posts on the Enclosure.

Part: G949-00449-00(USB-C module)



Screw in USB-C Module

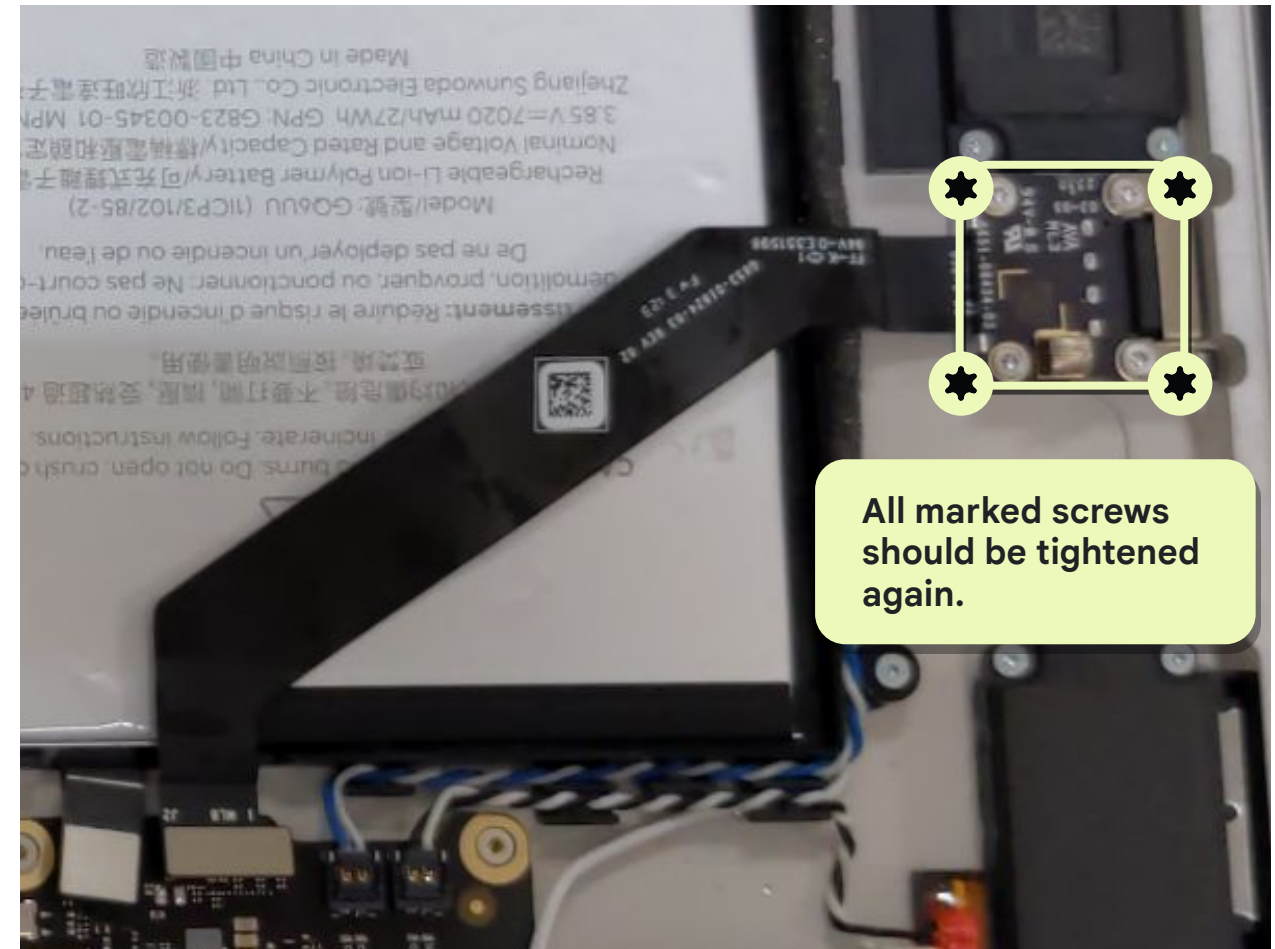
- Tighten the **Screw** with a **Torx Plus (3IP)** screwdriver in sequence.

Torque force: $1.5 \pm 8.5 \text{kgf-cm}$

- Re-tighten the **Screws**, as figure shown.

Torque force: $1.5 \pm 8.5 \text{kgf-cm}$

Part: G250-06167-00*4 (Screw)



Assemble USB-C flex

- Connect USB-C flex onto MLB.
- Attach 3x tape on USB-C Flex.
- If use new USB-C module need attach 1x foam on USB-C board.

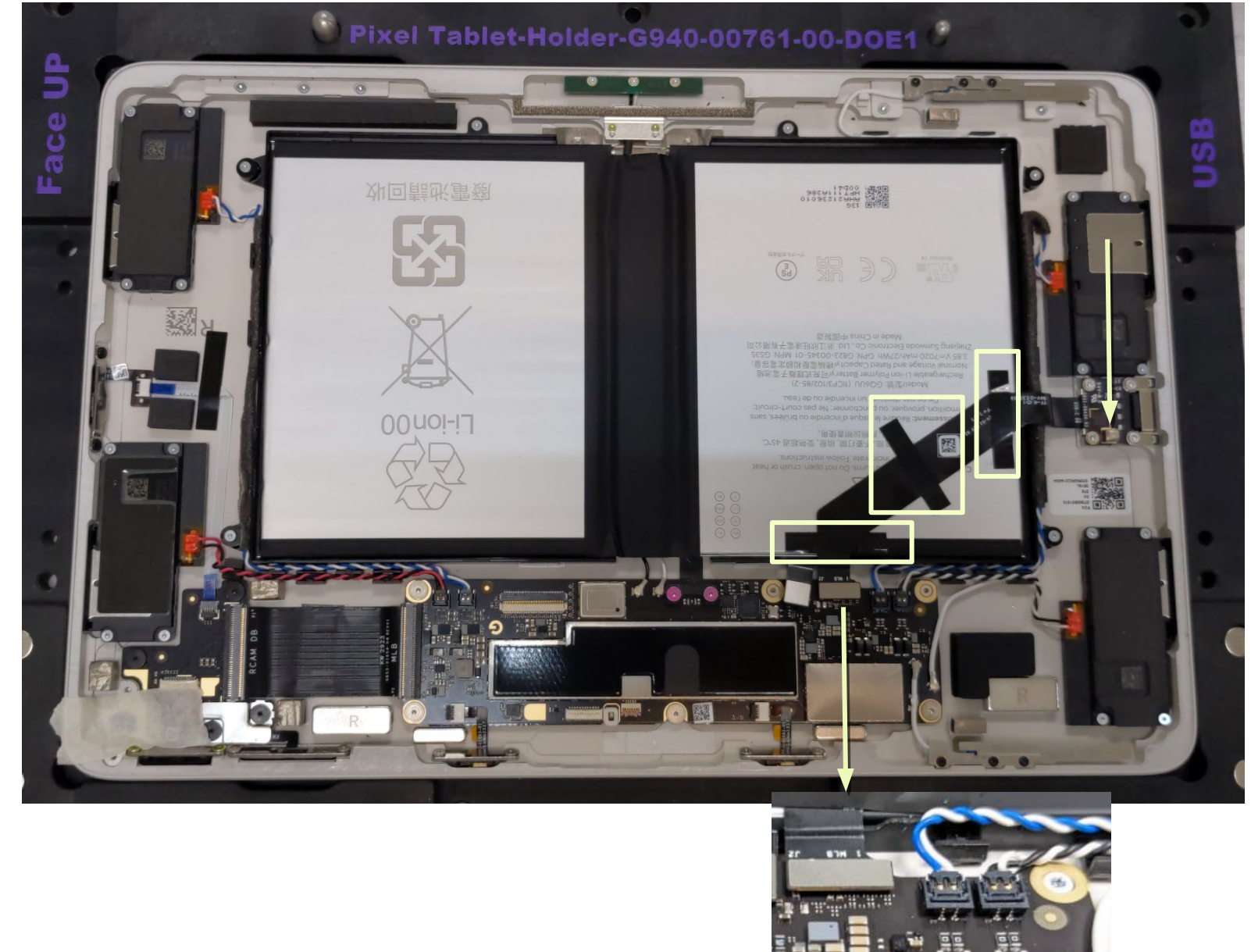
Part: G806-07241-02(RB Tape)

Part: G806-07936-00(Conductive foam)



Note

Check connector is attached fully to the Logic Board.





Assembly
instructions

Rear camera

Apply 508 thermal grease

Dispense 508 thermal grease onto RCAM BKT

Part: G864-00512-01 (508 thermal gel)

Part: G730-06253-04 (RCAM BKT)

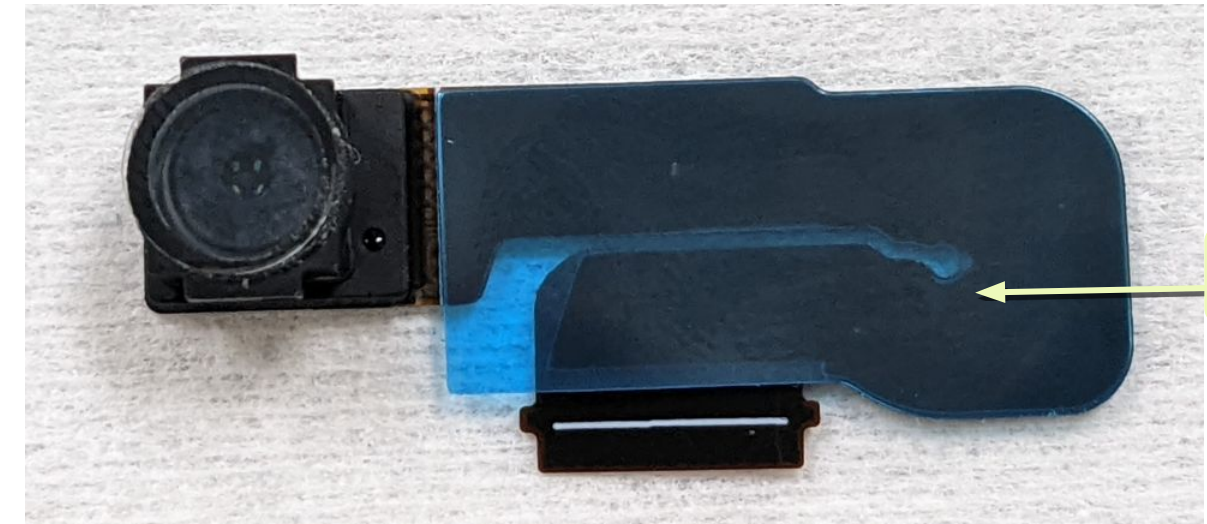


Reuse rear camera

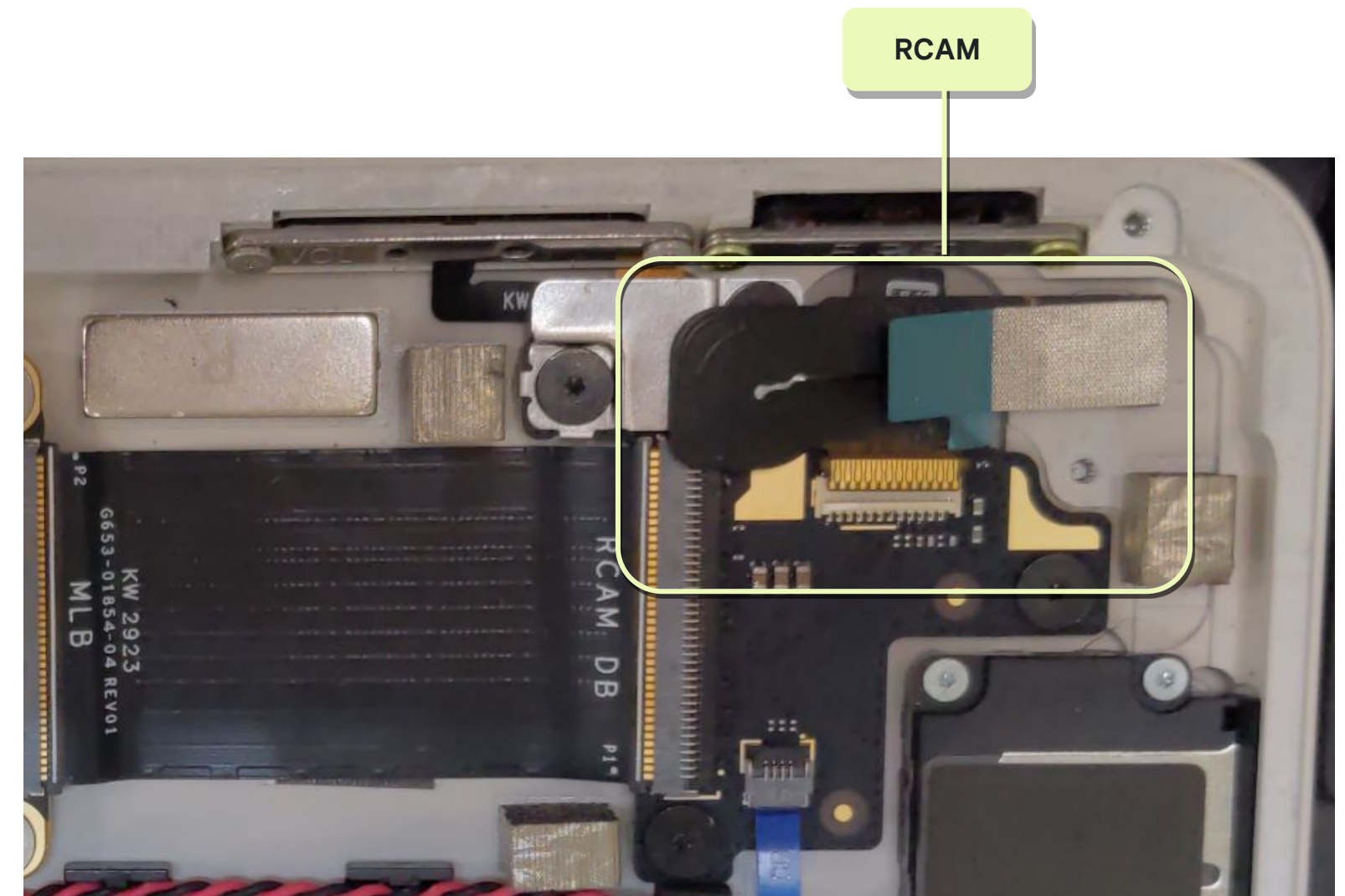
- If use new Rear Camera need attach 1x rcam foam on RCAM.
- Stick a tape on the RCAM.
- Place the **RCAM** into the **Enclosure Module**.

Part: G840-00435-03 (Rear Camera)

Part: G840-00435-03 (RCAM Tape)



RCAM
foam

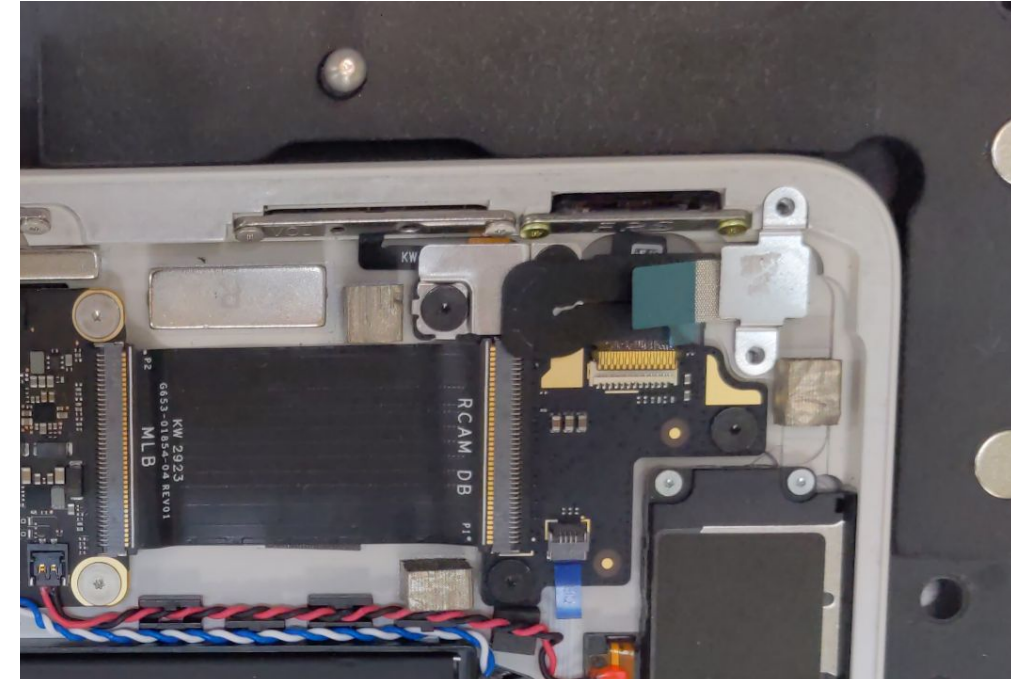


RCAM

Assemble Rcam BKT

Put RCAM BKT into Enclosure module.

Part: G730-06253-04 (RCAM BKT)



Screw in rear camera

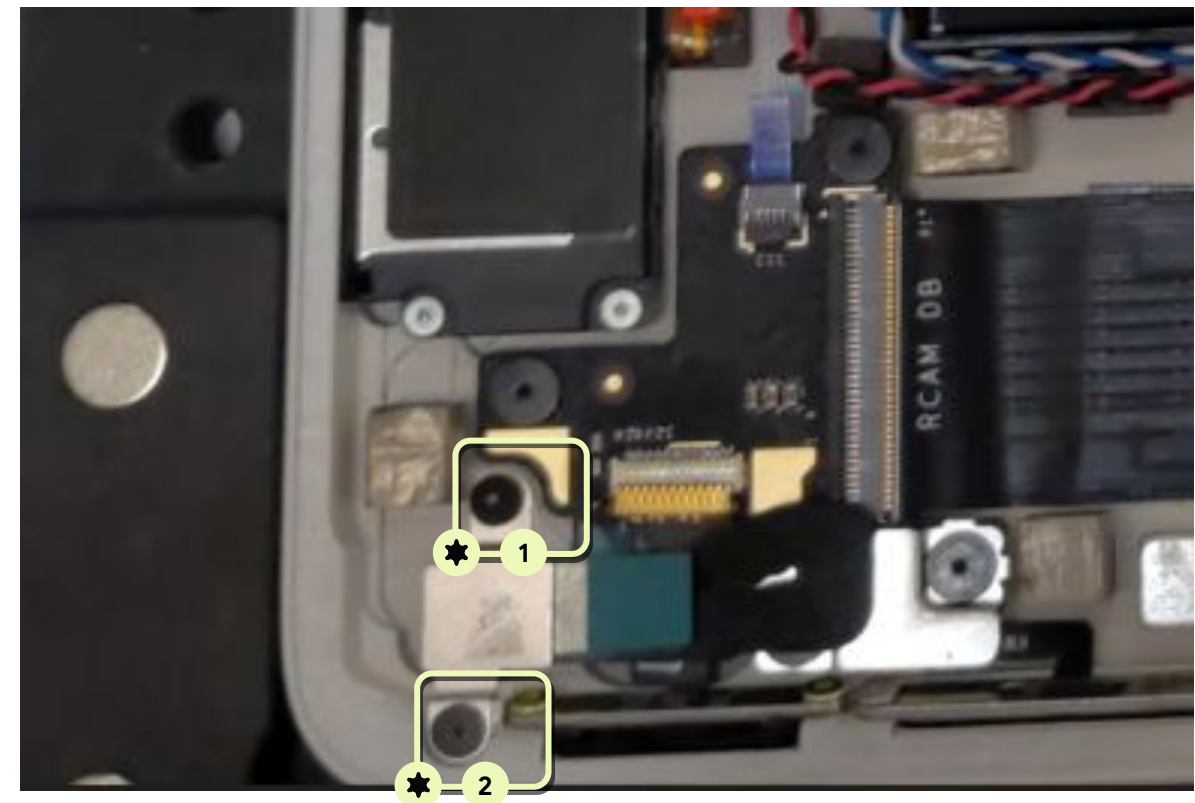
- Tighten the **Screw** with a **Torx Plus (3IP)** screwdriver in sequence.

Torque force: : $1.3 \pm 8.5\%$ kgf-cm

- Re-tighten the **Screws**, as figure shown.

Torque force: : $1.3 \pm 8.5\%$ kgf-cm

Part: G250-06325-00*2 (Screw)



All marked screws
should be tightened
again.

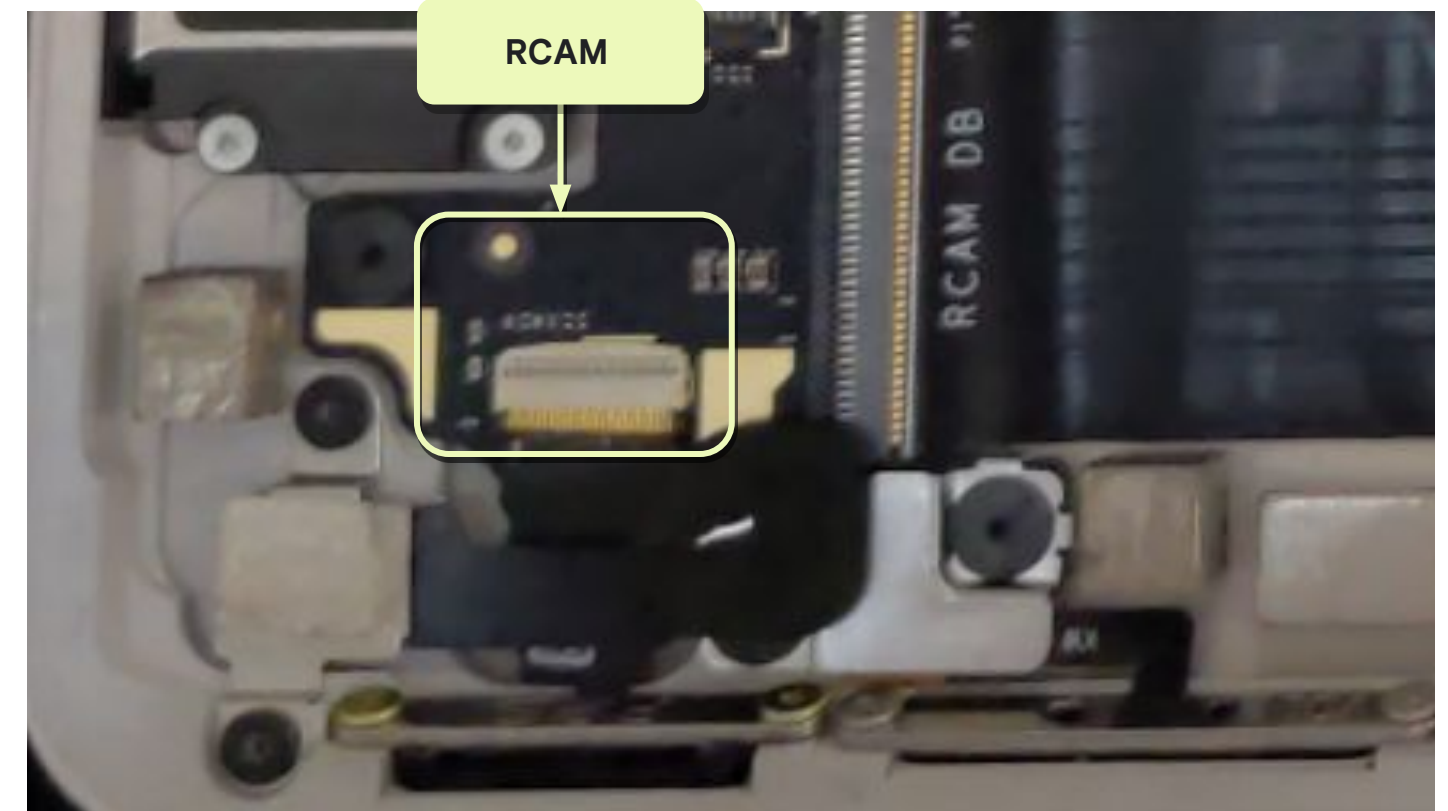
Attach connectors

- Attach the **RCAM Connector** to the **Daughter Board**.
- Release tape liner and attach tape onto bracket surface.



Note

Check connector is attached fully to the **Daughter Board**.



Assemble Battery flex

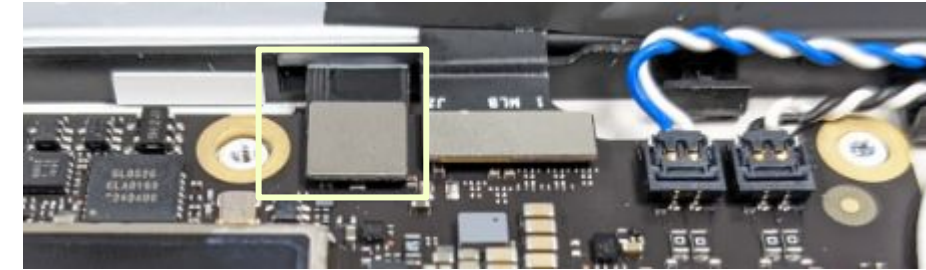
- Connect Battery flex onto MLB.
- Assemble battery cowling onto MLB.

Part: G730-06210-01(Battery cowling)



Note

Check connector is attached fully to the Logic Board.



Screw in battery cowling

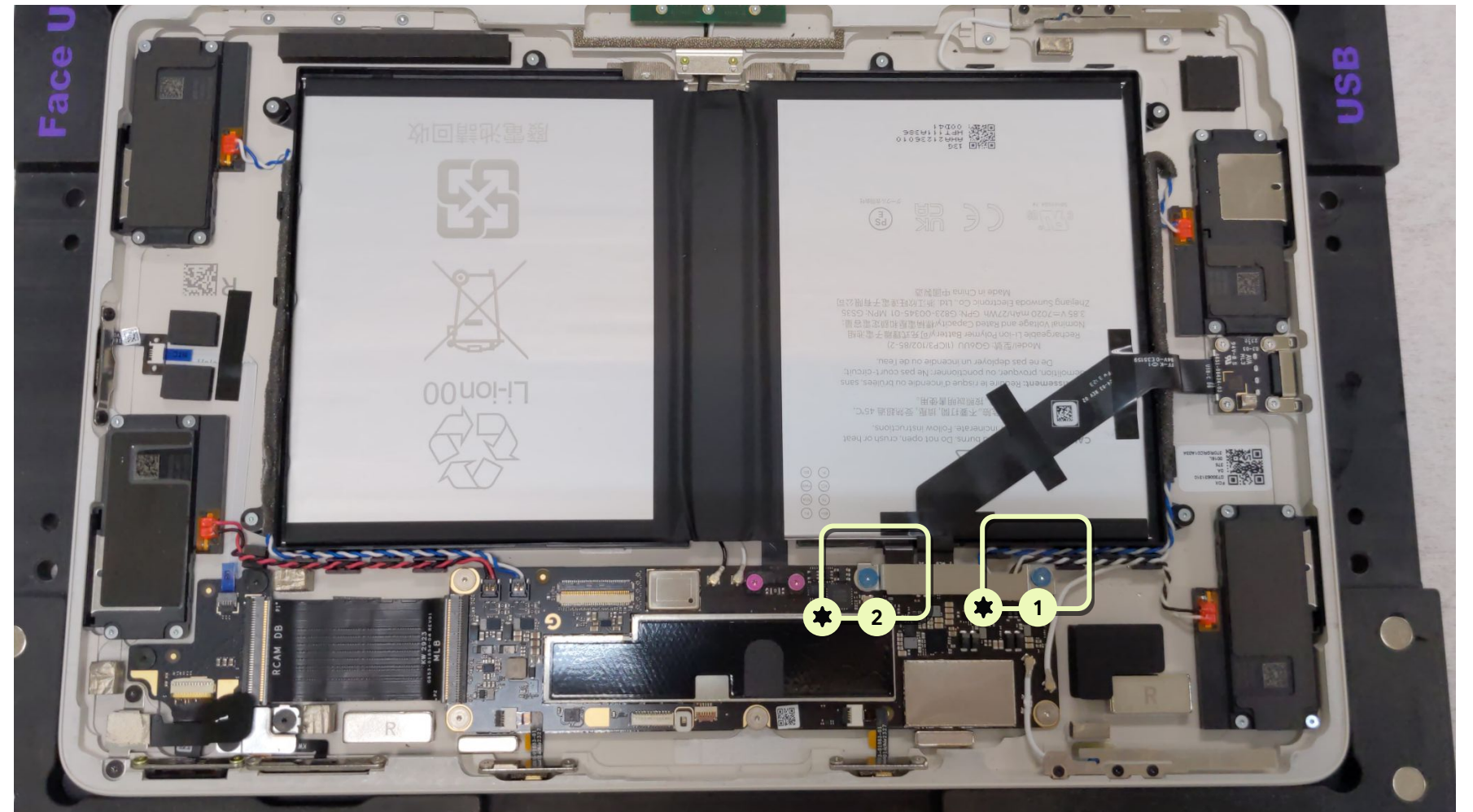
- Tighten the **Screw** with a **Torx Plus (3IP)** screwdriver in sequence.

Torque force: : $1.3 \pm 8.5\%$ kgf-cm

- Re-tighten the **Screws**, as figure shown.

Torque force: : $1.3 \pm 8.5\%$ kgf-cm

Part: G250-06526-00*2 (Screw)





Assembly
instructions

Display Module

Assemble Display flex

- Stick the display flex foam onto the display flex and release foam liner
- Insert Display flex to display module.If reuse display flex,skip previous step
- Paste a display flex kapton on display connector

Part: G949-00440-00 (Display Module)

Part: G652-01823-04 (Display flex)

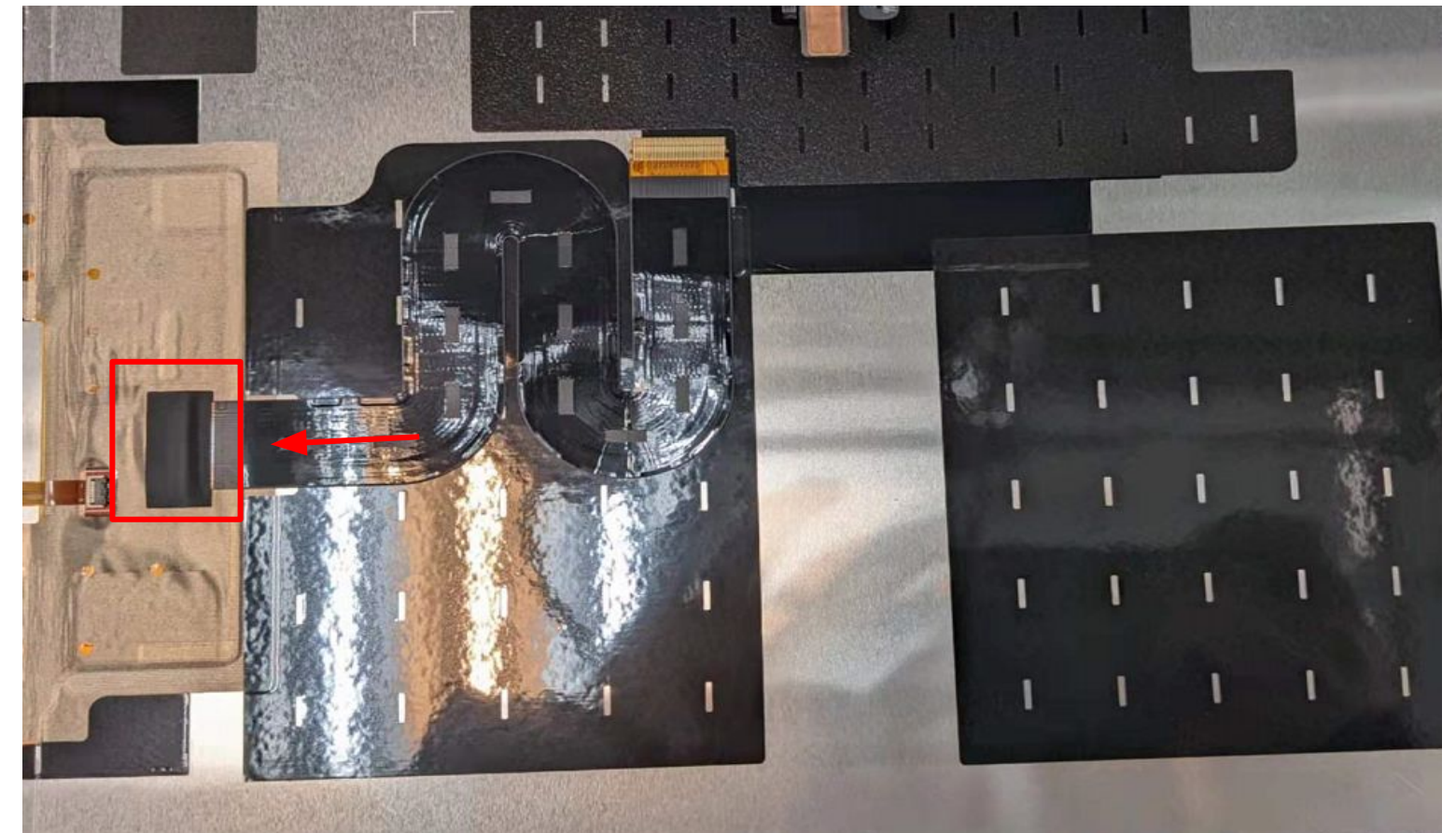
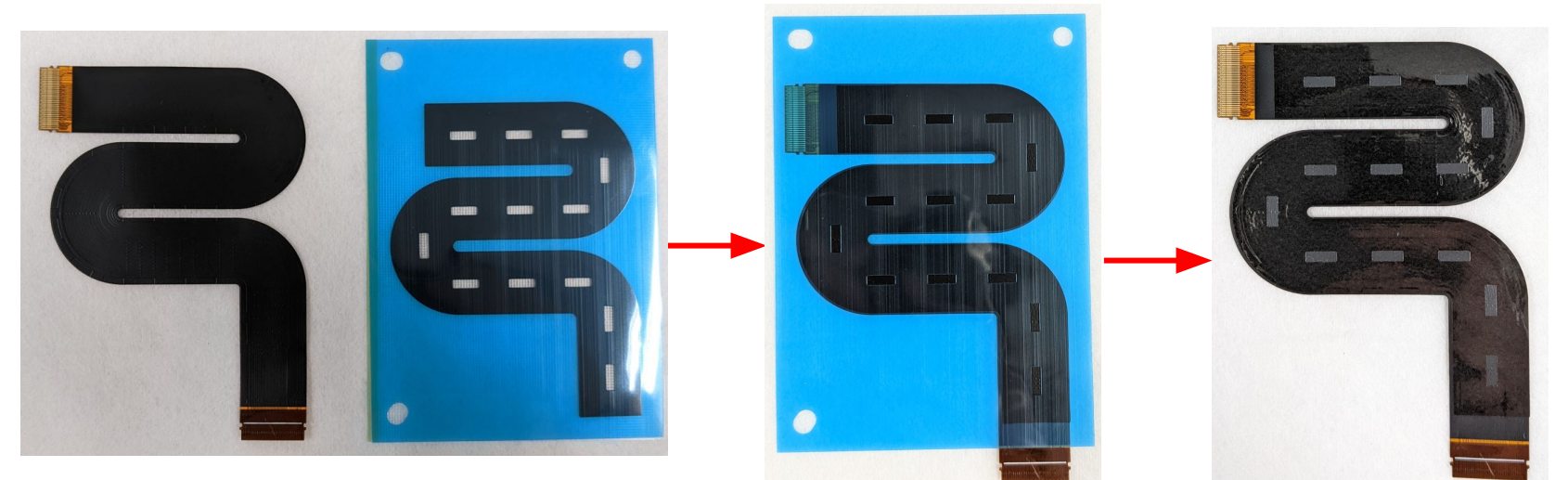
Part: G806-06991-01 (Display flex Kapton)

Part: G806-08671-01 (Display flex foam)



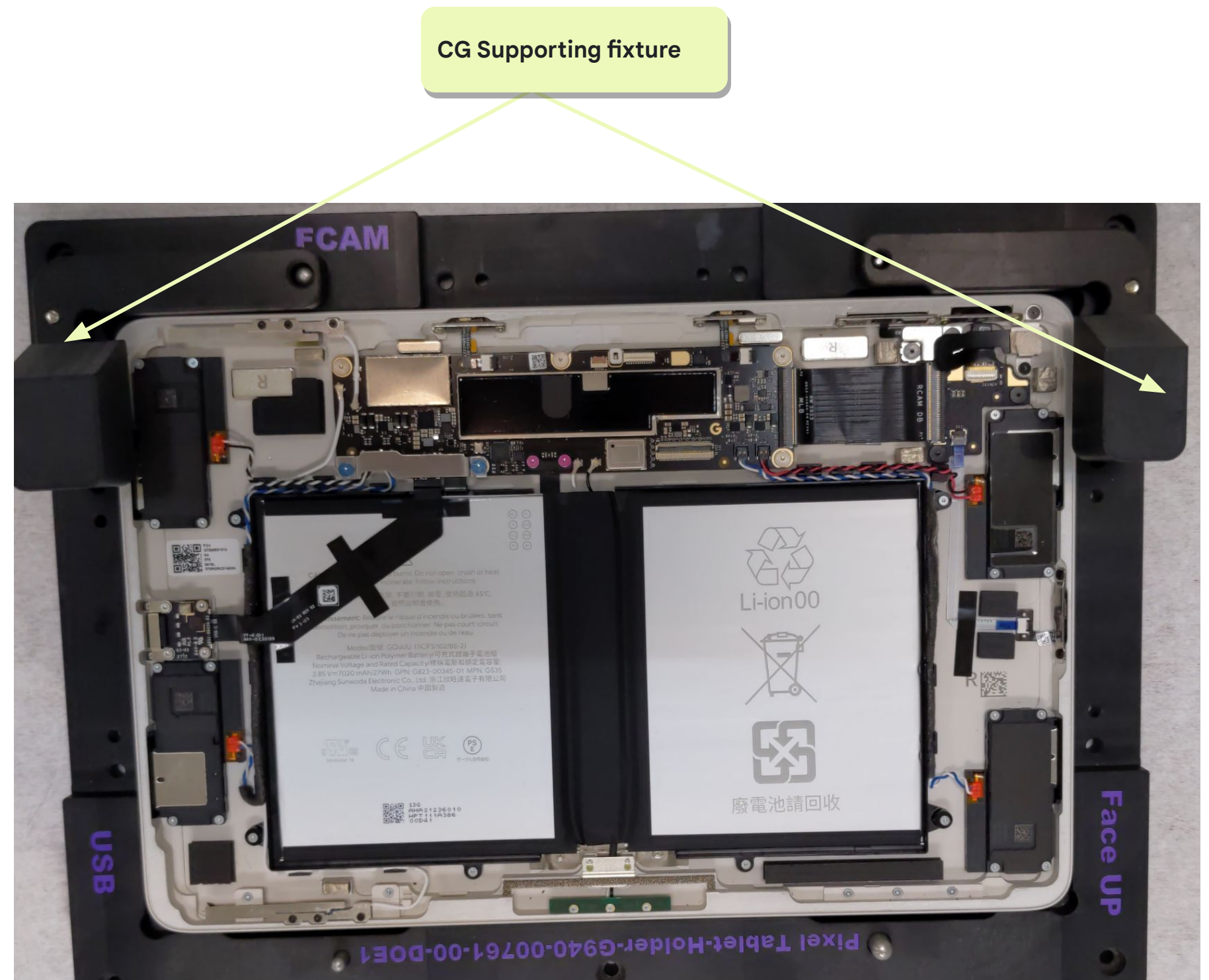
Note

Check connector is attached fully to the Display.



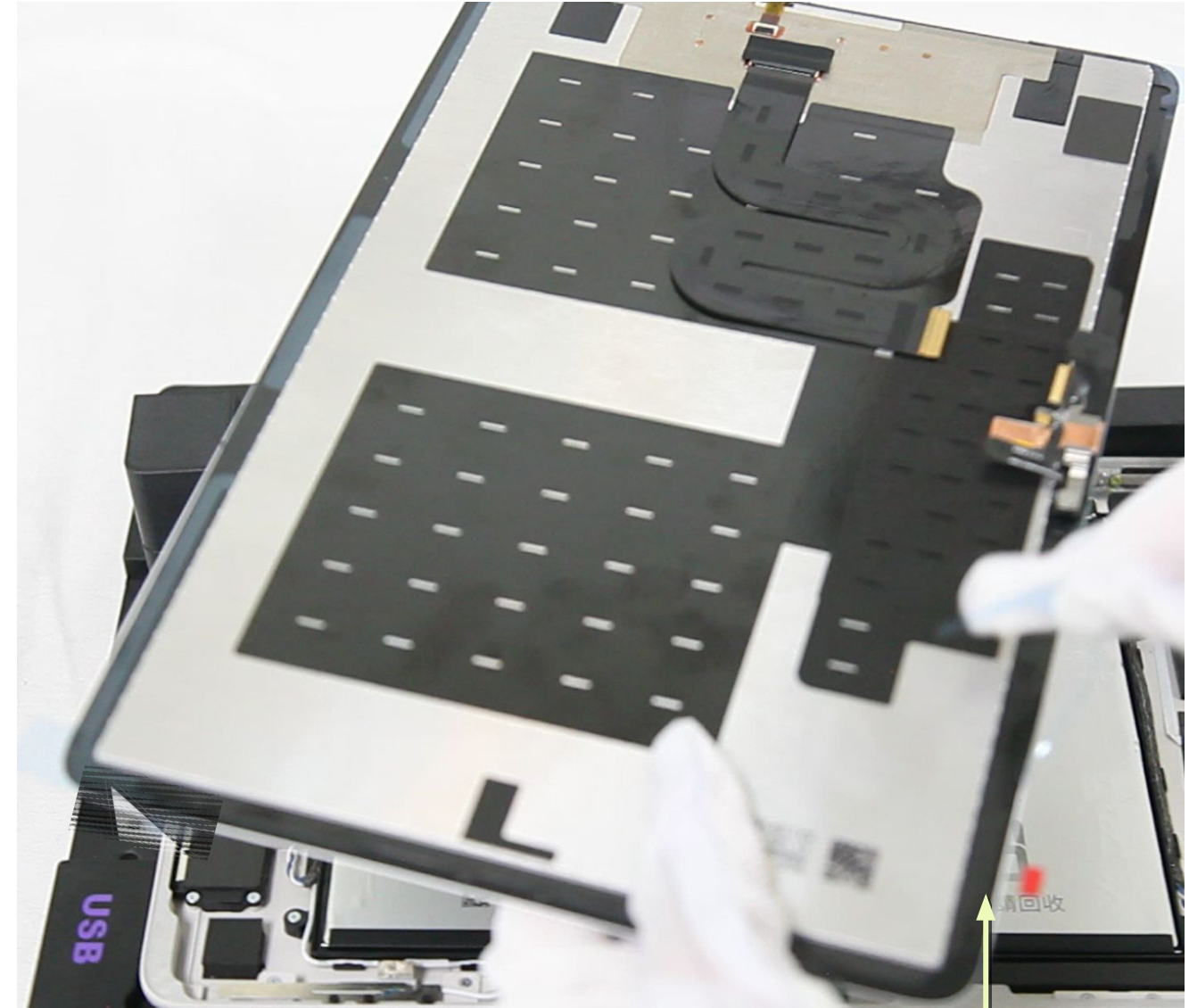
Use CG Supporting Fixture

- Place the Enclosure module into the **Pixel Tablet-Holder**.
- Place the CG Supporting Fixture onto the **Pixel Tablet-Holder**.



Remove the top liner

- Cut the tab, slowly pull the liner to avoid lifting the adhesive, with the pull tab from bottom side.
- Place the **LCD Module** onto CG supporting fixture.



Pick the tab here

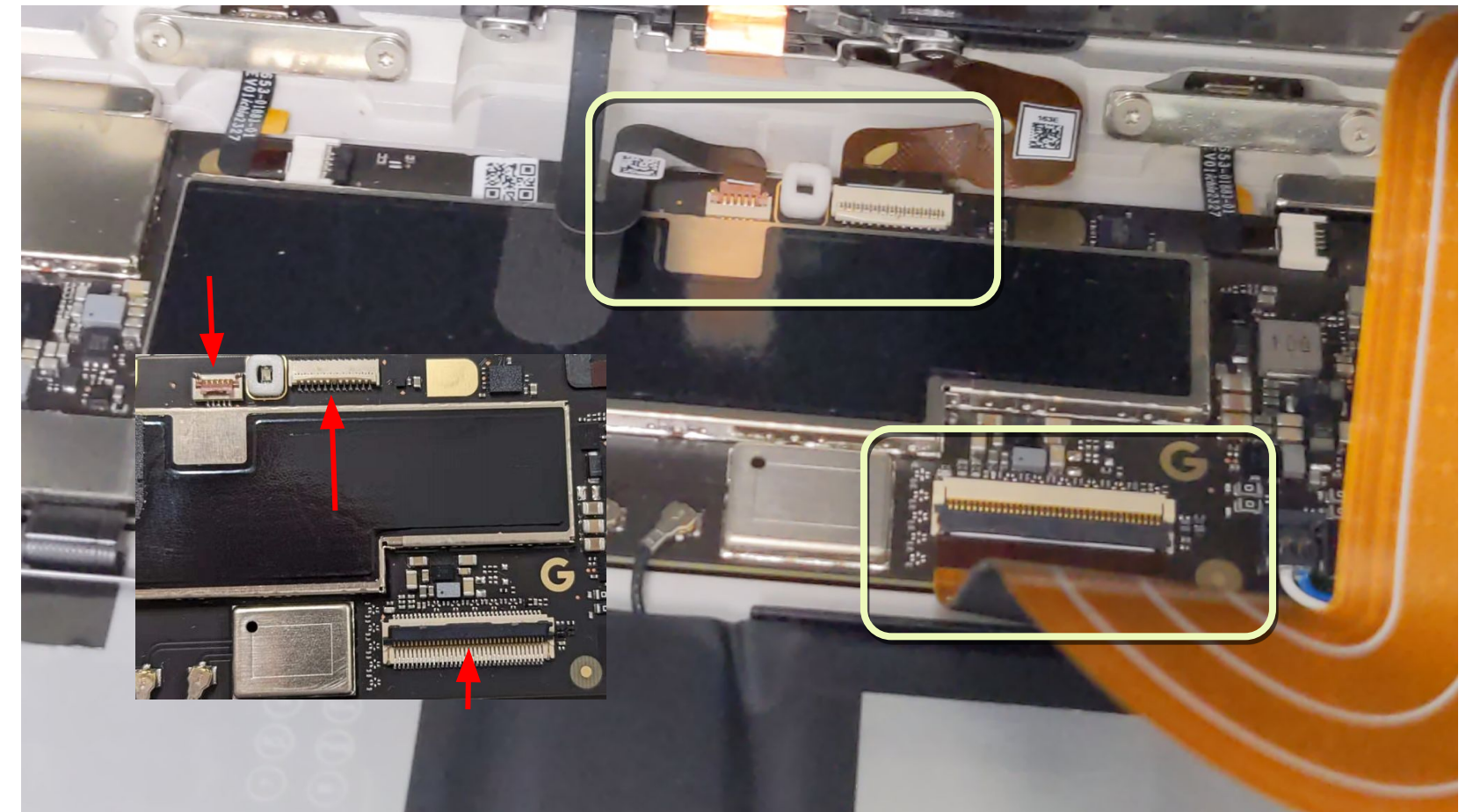
Connect flex

Connect the ALS & FCAM flex & Display flex to the MLB, applying even pressure across the connector to ensure it is fully engaged.



Use Caution

Check every connector is attached fully to the **Main Lower Board**.



Attach display flex tape

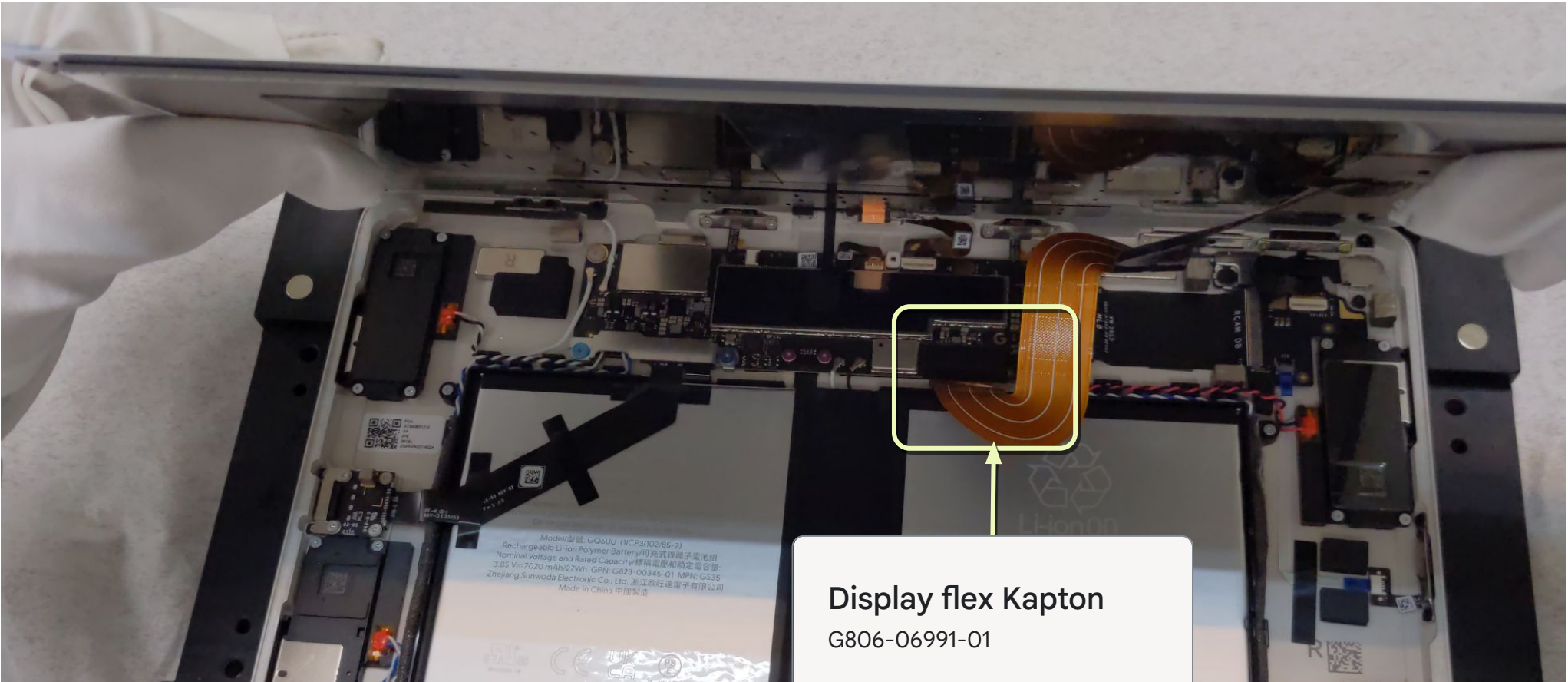
Paste a display flex kapton on MLB connector.

Part: G806-06991-01 (Display flex Kapton)



Use Caution

Make sure display flex connector is OK

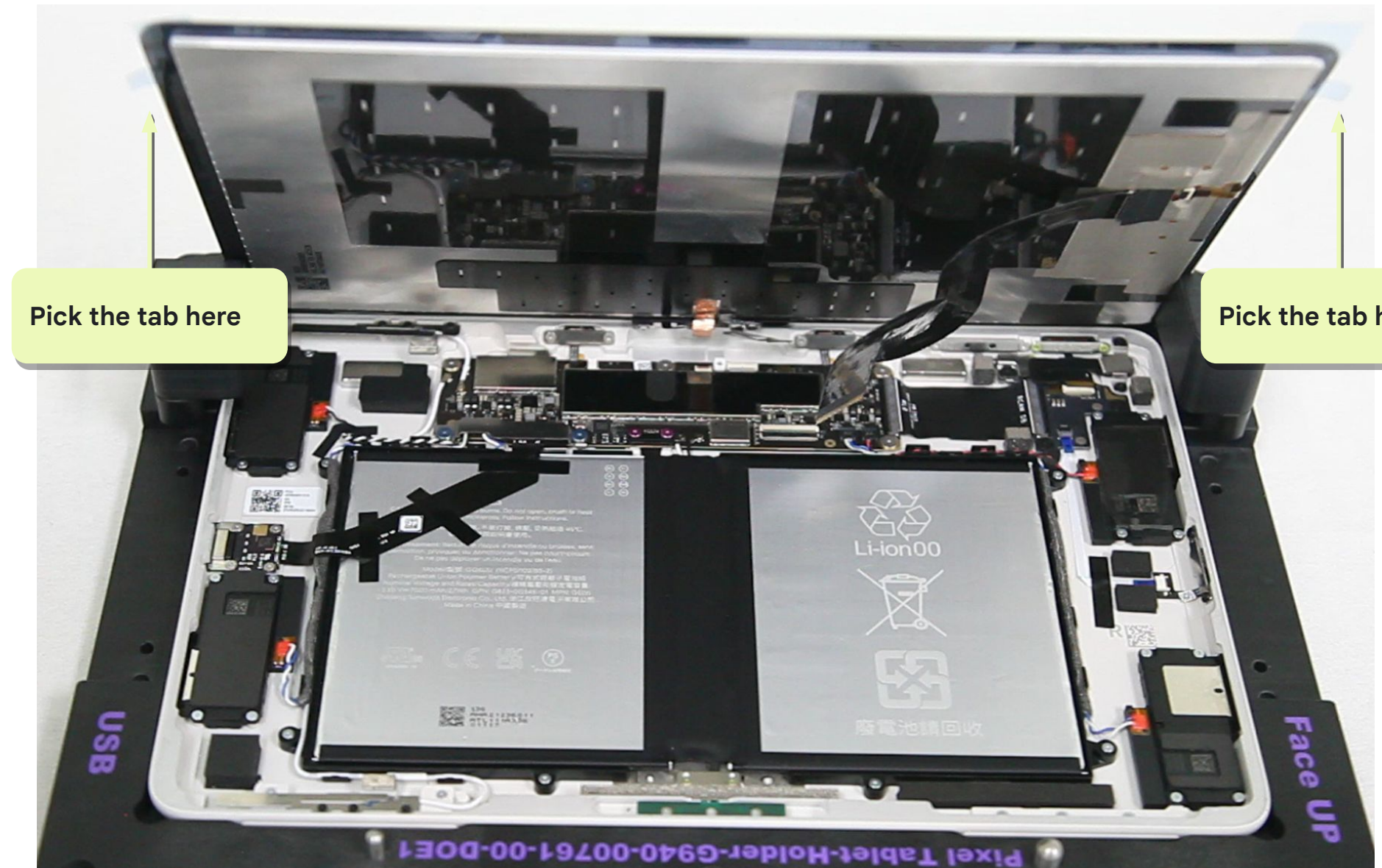


Display flex Kapton
G806-06991-01



Remove Left & Right CG PSA liner

Cut the tab, grab the Left & Right CG PSA liner and carefully pull it away.



Check devices

Power on to check if the device is working properly, Power off device after checking.



Use Caution

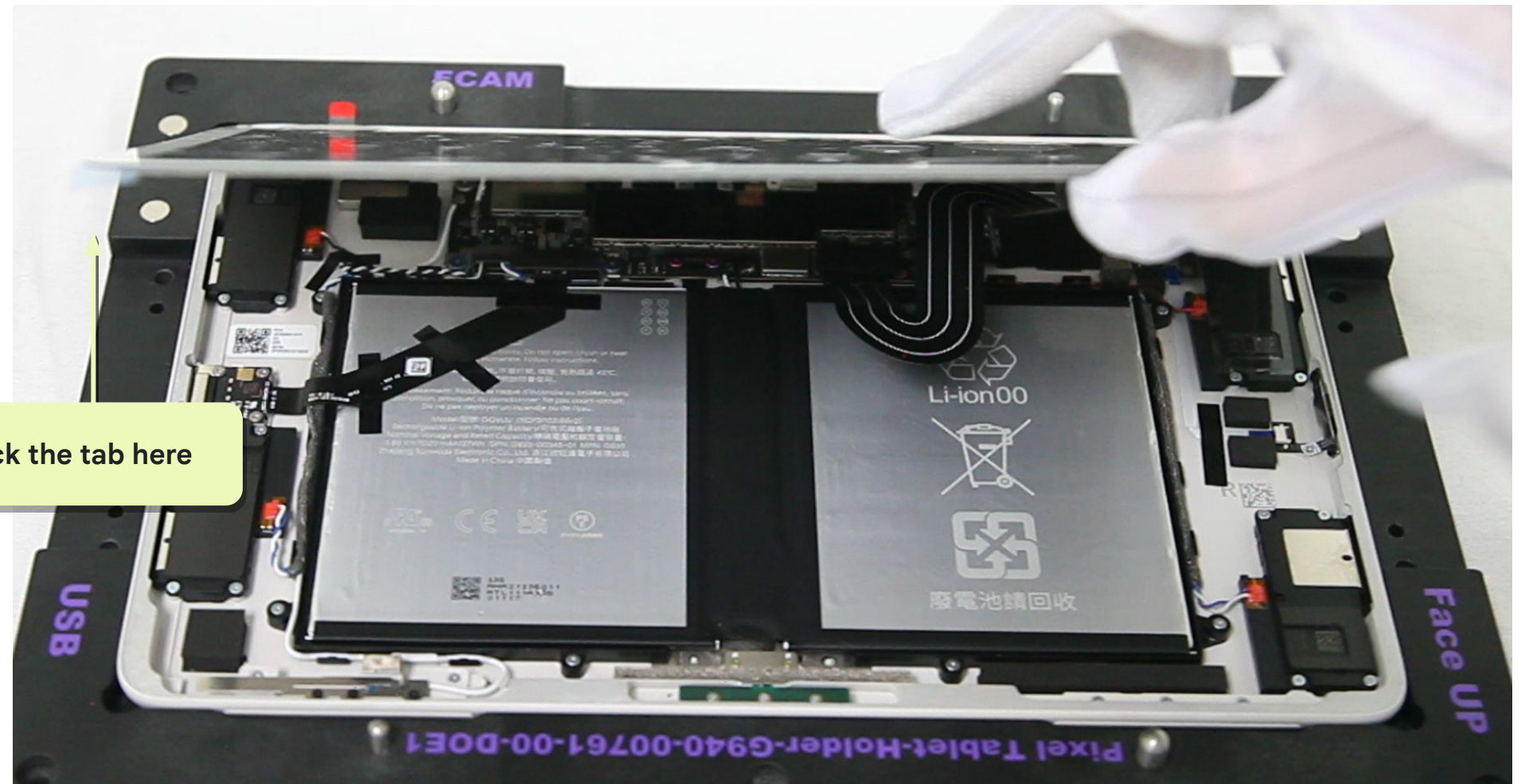
Do not touch the LCD until it turns to **Welcome page** since touch panel self calibration is in progress.



Remove Bottom CG PSA liner

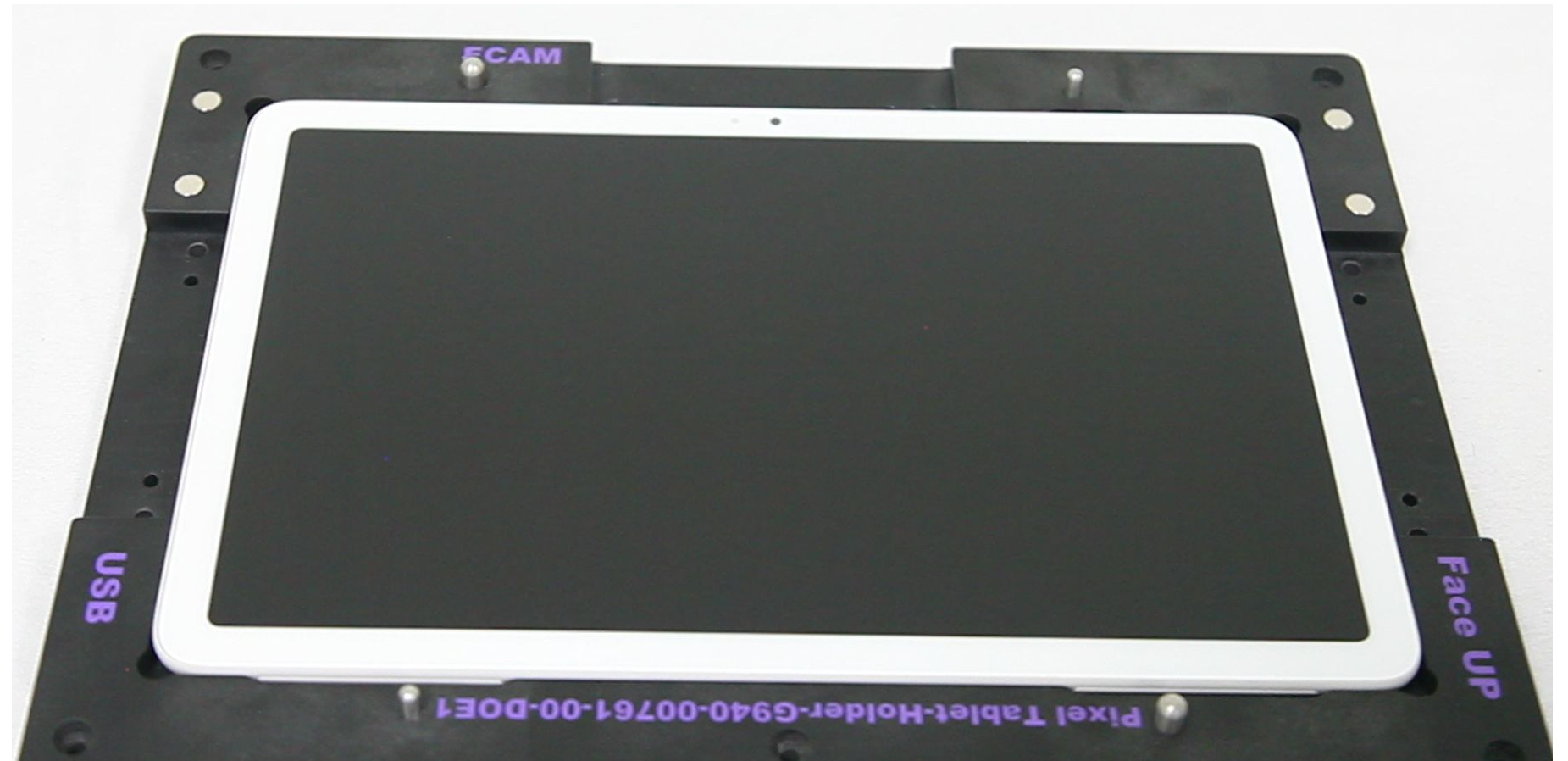
Cut the tab, grab the Bottom CG PSA liner and carefully pull it away.

Pick the tab here



Fix down display

Align the **Display** on the **Enclosure** vertically.



Press in holder

Press around the **Display side** with both hands.



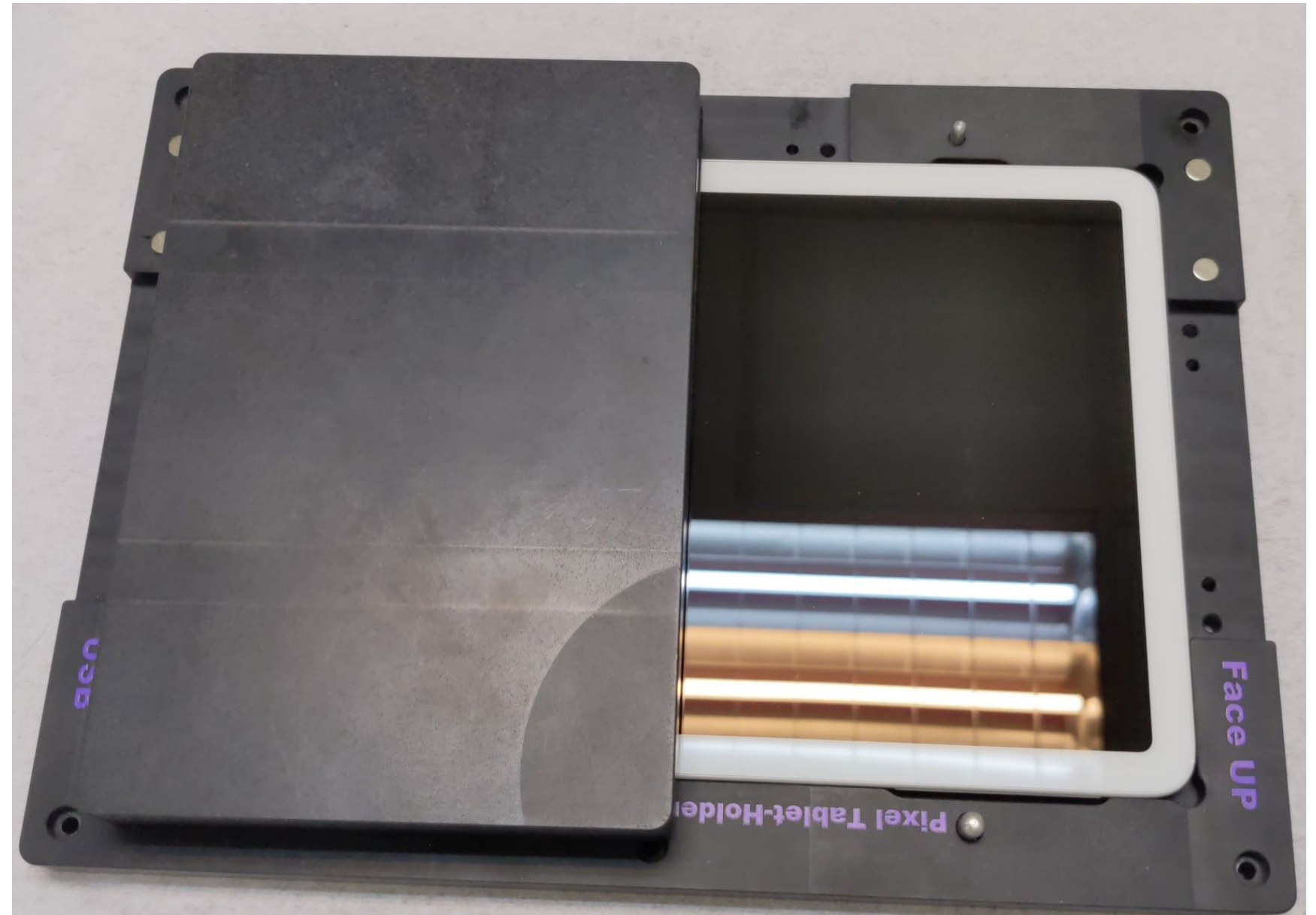
Note

Press the top side middle first, and then follow on 2 long sides and bottom side.



Place in holder

- Place the **Pixel Tablet-CG press rubber** on the **Pixel Tablet-Holder**.
- Do not place on the wrong alignment pins .
- Place the **Universal Press Plate (15mm)** on the **Pixel Tablet-CG Press Rubber**.



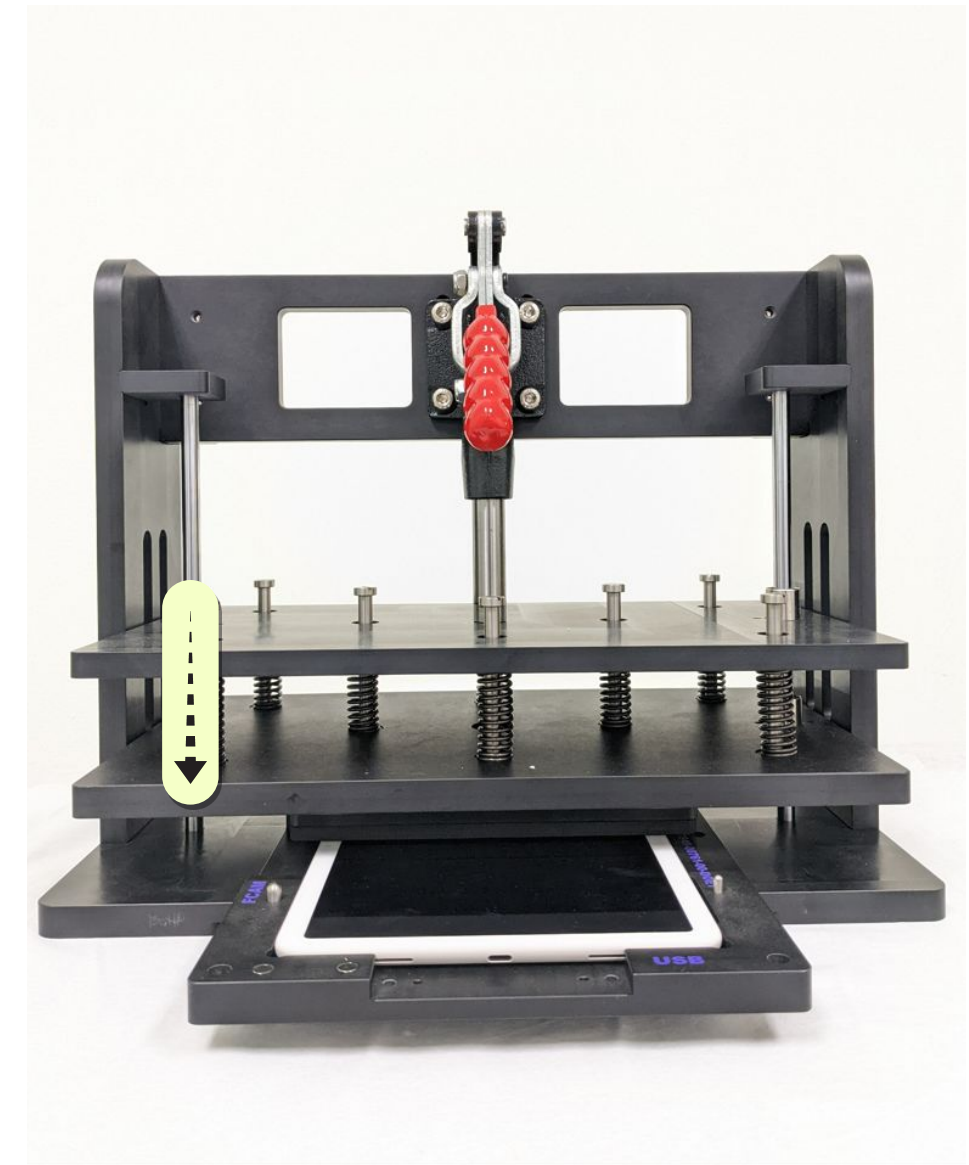
Place in holder

- Place the **Pixel Tablet-Holder** in the Universal Press Fixture.
- Press the handle down for 10 seconds.



Use Caution

Pinch point. Keeps hands clear during operation.



Take out the device

Take out the device carefully from **Pixel Tablet-Holder**.



Use Caution

Pinch point. Keeps hands clear during operation.





Pixel Tablet Repair Manual

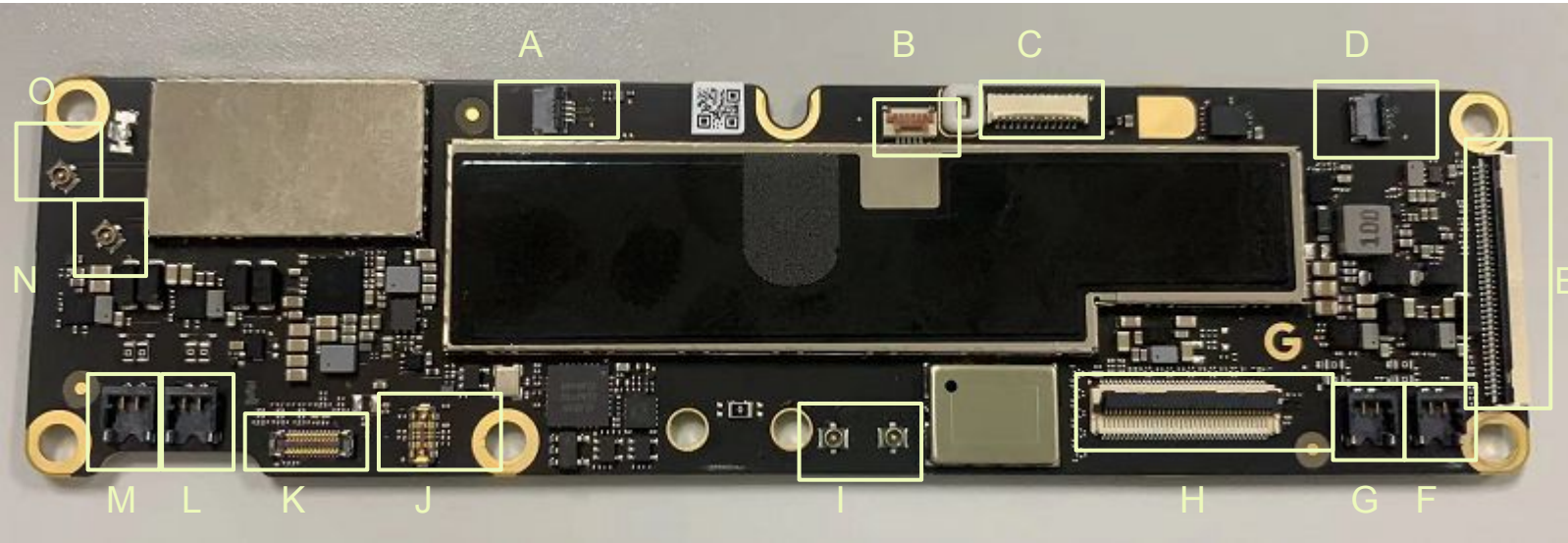
Troubleshooting

Connectors Location	Top Left Speaker	Battery	USB
Power	Top Right Speaker	FPS (Power Button)	UWB
Mic1	Bottom Left Speaker	Volume Button	
Mic2	Bottom Right Speaker	Rear Camera	
Mic3	Display	Front Camera	


Connectors location

Location & Description


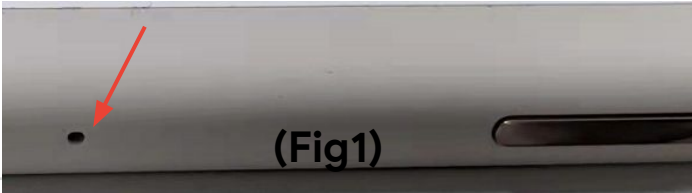




A	Top MIC connector
B	ALS connector
C	Front camera connector
D	Top MIC connector
E	MLB-DB connector
F	Top-Right SPK connector
G	Bottom-Right SPK connector
H	Display flex connector
I	UWB connector
J	Battery connector
K	USB-C connector
L	Bottom-Left SPK connector
M	TOP-Left SPK connector
N	Top antenna connector
O	Bottom antenna connector





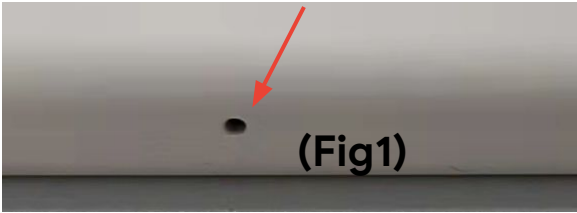


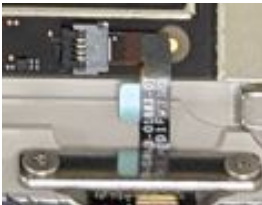
Power

Symptom	Potential Root Cause	Procedure
 001: Does not power on 002: Powers off suddenly 053: Battery damage 054: Battery draining fast	Damage	<ul style="list-style-type: none">Inspect USB-C connector for debris preventing charging.Inspect device if damage.Inspect liquid damage indicators.
	Battery Capacity Problem	<ul style="list-style-type: none">Insert the USB cable and try to charge the device at least 10 minutes or dummy battery to see if the device is out of battery capacity. <p>If not, go to the next step.</p>
	Connectivity problem	<ul style="list-style-type: none">Check if connectivity between Battery connector and MLB are normal.If they are not fully attached, re-assemble and then retest.
	Module Problem	<ul style="list-style-type: none">Use a good Battery and MLB to cross check with original ones.Replace the defective component.
		Disassembly <ul style="list-style-type: none">Display ModuleMLB ModuleBattery Module


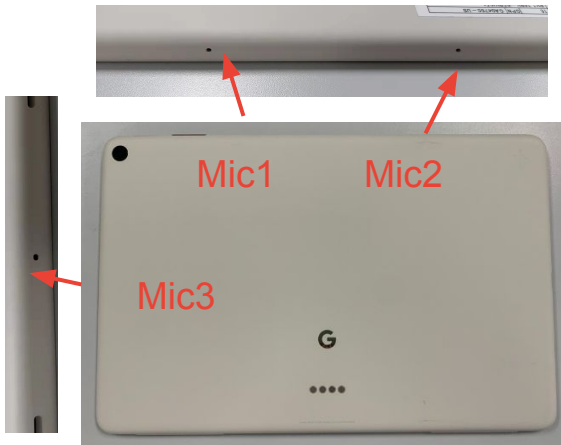




Mic 1

Symptom	Potential Root Cause	Procedure	
 010: Mic 1 no sound 011: Mic 1 low sound 012: Mic 1 distorted sound	Mesh not clean	<ul style="list-style-type: none">• Use a microscope and check the mesh for damage or blockage. (Fig1)• Clean the hole and test audio.	
	Assembly Problem	<ul style="list-style-type: none">• Disassemble the device, check Mic1 bracket is fully seated. (Fig2)• Check if the mic1 hole is shift. (Fig3) If not, go to the next step.• Test audio again.	<div></div> <div>(Fig2)(Fig3)</div>
	Component issue	<ul style="list-style-type: none">• Use a good Enclosure module to cross check with original ones.• If issue is resolved, fit new Enclosure module.	Disassembly <ul style="list-style-type: none">• Display Module• Enclosure Module
 <div><div>1</div>Mic1</div> <div><div>2</div>Mic2</div> <div><div>3</div>Mic3</div>	Connectivity issue	<ul style="list-style-type: none">• Check if connectivity between MIC1 Flex and MLB connector are normal.(Fig4)• If they are not fully buckled, re-assemble and then retest.	Connectors location  (Fig4)




Mic 2

Symptom	Potential Root Cause	Procedure	
<div></div> <div>013: Mic 2 no sound</div> <div>014: Mic 2 low sound</div> <div>015: Mic 2 distorted sound</div> <div></div> <div><div>1 Mic1</div><div>2 Mic2</div><div>3 Mic3</div></div>	Mesh not clean	<ul style="list-style-type: none">Use a microscope and check the mesh for damage or blockage. (Fig1)Clean the hole and test audio.	
	Assembly Problem	<ul style="list-style-type: none">Disassemble the device, check Mic 2 bracket is fully seated. (Fig2)Check if the Mic 2 hole is shift. (Fig3) If not, go to the next step.Test audio again.	<div></div> <div><div>(Fig2)</div><div>(Fig3)</div></div>
	Component issue	<ul style="list-style-type: none">Use a good Enclosure module to cross check with original ones.If issue is resolved, fit new Enclosure module.	<div>Disassembly</div> <ul style="list-style-type: none">Display ModuleEnclosure Module
	Connectivity issue	<ul style="list-style-type: none">Check if connectivity between MIC 2 Flex and MLB connector are normal.(Fig4)If they are not fully buckled, re-assemble and then retest.	<div>Connectors location</div>  <div>(Fig4)</div>




Mic 3

Symptom	Potential Root Cause	Procedure	
<div></div> <div>016: Mic 3 no sound</div> <div>017: Mic 3 low sound</div> <div>018: Mic 3 distorted sound</div> <div></div> <div><div>1 Mic1</div><div>2 Mic2</div><div>3 Mic3</div></div>	Mesh not clean	<ul style="list-style-type: none">• Use a microscope and check the mesh for damage or blockage. (Fig1)• Clean the hole and test audio.	 <div>(Fig1)</div>
	Assembly Problem	<ul style="list-style-type: none">• Disassemble the device, check Mic3 bracket is fully seated. (Fig2)• Check if the Mic3 hole is shift. (Fig3) If not, go to the next step.• Test audio again.	<div></div> <div><div>(Fig2)</div><div>(Fig3)</div></div>
	Component issue	<ul style="list-style-type: none">• Use a good Enclosure module to cross check with original ones.• If issue is resolved, fit new Enclosure module.	<div>Disassembly</div> <ul style="list-style-type: none">• Display Module• Enclosure Module
	Connectivity issue	<ul style="list-style-type: none">• Check if connectivity between MIC3 Flex and MLB connector are normal.(Fig4)• If they are not fully buckled, re-assemble and then retest.	<div>Connectors location</div>  <div>(Fig4)</div>




TOP-Left Speaker

Symptom	Potential Root Cause	Procedure	
 019: TOP-Left Speaker no sound 020: TOP-Left Speaker low sound 021: TOP-Left Speaker distorted sound	Mesh Problem	<ul style="list-style-type: none">• Visually inspect the exterior of the Tablet check for a polluted mesh on the TOP-Left Speaker port. And use a soft ESD brush to remove any debris.• Test audio.	 Polluted
	Internal debris	<ul style="list-style-type: none">• If sound quality is still poor, inspect the mesh and speaker with a microscope.• Disassemble the device and inspect the speaker. Use an ionizing air fan to remove any debris and test audio.	
	Connectivity problem	<ul style="list-style-type: none">• Check if connectivity between TOP-Left SPK connector and MLB are normal.• If they are not fully buckled, re-assemble and then retest.	<u>Connectors Location</u> 
	Module Problem	<ul style="list-style-type: none">• If sound quality is still poor, use a good TOP-Left Speaker and MLB to cross check with original ones• Replace the defective component.	Disassembly <ul style="list-style-type: none">• <u>MLB</u>• <u>Speaker Module</u>




TOP-Right Speaker

Symptom	Potential Root Cause	Procedure	
 022: TOP-Right Speaker no sound 023: TOP-Right Speaker low sound 024: TOP-Right Speaker distorted sound	Mesh Problem	<ul style="list-style-type: none">Visually inspect the exterior of the Tablet check for a polluted mesh on the TOP-Left Speaker port. And use a soft ESD brush to remove any debris.Test audio.	 Polluted
	Internal debris	<ul style="list-style-type: none">If sound quality is still poor, inspect the mesh and speaker with a microscope.Disassemble the device and inspect the speaker. Use an ionizing air fan to remove any debris and test audio.	
	Connectivity problem	<ul style="list-style-type: none">Check if connectivity between TOP-Left SPK connector and MLB are normal.If they are not fully buckled, re-assemble and then retest.	<u>Connectors Location</u> 
	Module Problem	<ul style="list-style-type: none">If sound quality is still poor, use a good TOP-Left Speaker and MLB to cross check with original onesReplace the defective component.	Disassembly <ul style="list-style-type: none"><u>MLB</u><u>Speaker Module</u>


Bottom-Left Speaker

Symptom	Potential Root Cause	Procedure	
 151: Bottom-Left Speaker no sound 152: Bottom-Left Speaker low sound 153: Bottom-Left Speaker distorted sound	Mesh Problem	<ul style="list-style-type: none">Visually inspect the exterior of the Tablet check for a polluted mesh on the TOP-Left Speaker port. And use a soft ESD brush to remove any debris.Test audio.	 Polluted
	Internal debris	<ul style="list-style-type: none">If sound quality is still poor, inspect the mesh and speaker with a microscope.Disassemble the device and inspect the speaker. Use an ionizing air fan to remove any debris and test audio.	
	Connectivity problem	<ul style="list-style-type: none">Check if connectivity between TOP-Left SPK connector and MLB are normal.If they are not fully buckled, re-assemble and then retest.	<u>Connectors Location</u> 
	Module Problem	<ul style="list-style-type: none">If sound quality is still poor, use a good TOP-Left Speaker and MLB to cross check with original onesReplace the defective component.	Disassembly <ul style="list-style-type: none"><u>MLB</u><u>Speaker Module</u>


Bottom-Right Speaker

Symptom	Potential Root Cause	Procedure	
 154: Bottom-Right Speaker no sound 155: Bottom-Right Speaker low sound 156: Bottom-Right Speaker distorted sound	Mesh Problem	<ul style="list-style-type: none">Visually inspect the exterior of the Tablet check for a polluted mesh on the TOP-Left Speaker port. And use a soft ESD brush to remove any debris.Test audio.	
	Internal debris	<ul style="list-style-type: none">If sound quality is still poor, inspect the mesh and speaker with a microscope.Disassemble the device and inspect the speaker. Use an ionizing air fan to remove any debris and test audio.	
	Connectivity problem	<ul style="list-style-type: none">Check if connectivity between TOP-Left SPK connector and MLB are normal.If they are not fully buckled, re-assemble and then retest.	<u>Connectors Location</u> 
	Module Problem	<ul style="list-style-type: none">If sound quality is still poor, use a good TOP-Left Speaker and MLB to cross check with original onesReplace the defective component.	Disassembly <ul style="list-style-type: none"><u>MLB</u><u>Speaker Module</u>


Display

Symptom	Potential Root Cause	Procedure
 027: Display blank	Damage	Inspect display for damage and replace if necessary
028: Display dead Pixel Tablet, dark spots or foreign material 029: Display bright Pixel Tablet, bright or colored spots 030: Display vertical or horizontal lines	Connectivity problem	<ul style="list-style-type: none">Check if connectivity between Display connector and MLB are normal.If they are not fully buckled, re-assemble and then retest. Connectors Location
031: Display black, white or colored screen 032: Display flickering/abnormal 033: Display image quality 034: Display color mura 035: Display light leakage 036: Display backlight issue 037: Display shadow	Dead Pixel Tablets Distorted graphics Flickering Color issues	<ul style="list-style-type: none">Use a good Display module to cross check with original ones.If issue is resolved, apply adhesive and fit new Outer Display module. Disassembly <ul style="list-style-type: none">Display
044: Multi-touch poor response 045: Multi-touch no response 046: Multi-touch erratic response	Component issue	<ul style="list-style-type: none">Use a good Display module to cross check with original ones.If issue is resolved, fit new Display module.Use a good MLB module to cross check with original ones.If issue is resolved, fit new MLB module. Disassembly <ul style="list-style-type: none">Display Module


Battery

Symptom	Potential Root Cause	Procedure	
<div></div> <div>053: Battery damage</div> <div>054: Battery draining fast</div> <div>055: Device overheats</div>	Connectivity problem	<ul style="list-style-type: none">Check if Battery FPC connector and MLB are normal.If they are not fully attached, re-assemble and then retest.	Connectors Location
	Module problem	<ul style="list-style-type: none">Use a good Battery and MLB to cross check with original ones.When confirmed the battery is abnormal, replace the two batteries together.	<div>Disassembly</div> <ul style="list-style-type: none">MLBBattery


FPS (power button)

Symptom	Potential Root Cause	Procedure	
<div></div> <div>064: Fingerprint sensor failure</div> <div>068: Power button failure</div>	Connectivity issue	<ul style="list-style-type: none">• Check if connectivity between Fingerprint connector and Logic board are normal.• If they are not fully buckled, re-assemble and then retest.	Connectors Location
	Component issue	<ul style="list-style-type: none">• Use a good Enclosure module and MLB to cross check with original ones.• Replace the defective component.	<div>Disassembly</div> <ul style="list-style-type: none">• MLB Module• Enclosure Module


Volume button

Symptom	Potential Root Cause	Procedure
<div></div> <div>069: Volume button failure</div>	Connectivity issue	<ul style="list-style-type: none">• Check if connectivity between Side key module and Logic board are normal. Connectors Location• If they are not fully assembled, re-assemble and then retest.
	Component issue	<div><div><ul style="list-style-type: none">• Use a good Enclosure module and MLB to cross check with original ones.• Replace the defective component.</div><div><div>Disassembly</div><ul style="list-style-type: none">• MLB Module• Enclosure Module</div></div>


Rear camera

Symptom	Potential Root Cause	Procedure
 T073: Camera Rear Photo quality T074: Camera Rear Video quality T078: Cannot switch between cameras T079: Camera damage T114: Main RCAM no preview	SW Problem	Make sure SW already updated to latest version.
	Cosmetic Problem	<ul style="list-style-type: none">Inspect whether the camera lens area is damage.Check the function by triage test.Disassemble the device to check if camera connector is seated properly. Power on unit and check camera fail symptom again.
	Connectivity Problem	Check Rear camera BTB and MLB side to identify if assy is deformed or flex crack and reboot device again to check if fail symptom exists. Connectors Location
	Module Problem	If fail symptom is still exists, cross check Logic board itself or camera module to determine if fail symptom caused by camera module or Logic board. Disassembly <ul style="list-style-type: none">MLB ModuleRear camera


Front camera

Symptom	Potential Root Cause	Procedure	
<div></div> <div>T075: Camera Front Photo quality</div> <div>T076: Camera Front Video quality</div> <div>T078: Cannot switch between cameras</div> <div>T079: Camera damage</div> <div>T113: FCAM no preview</div>	Cosmetic Problem	<ul style="list-style-type: none">Inspect the camera lens area for damage.Check the function by triage test.Disassemble the device to check if camera connector is seated properly. Power on unit and check camera fail symptom again.	
	Connectivity Problem	Check Outer front camera BTB, Upper board and Upper bridge connector side to identify if assy is deformed or flex crack and reboot device again to check if fail symptom exists.	Connectors Location
	Module Problem	If fail symptom is still exists, use a good Logic board, Outer camera module and Inner display sub to cross check to cross check with original ones.	<div>Disassembly<ul style="list-style-type: none">Upper boardOuter Front Camera</div>

USB

Symptom	Potential Root Cause	Procedure	
<div></div> <div>085: USBc_ failure</div>	Connectivity Problem	<ul style="list-style-type: none">• ICheck if USB-C FPC connector and MLB are normal.• If they are not fully attached, re-assemble and then retest.• 	Connectors Location
	Module Problem	<ul style="list-style-type: none">• Use a good Battery and MLB to cross check with original ones.	Disassembly USB-C Module

UWB

Symptom	Potential Root Cause	Procedure	
<div></div> <div>181: Ultra-wideband(UWB) failure</div>	Connectivity problem	<ul style="list-style-type: none">• Check if connectivity between UWB and MLB are normal.• If they are not fully buckled, re-assemble and then retest.	Connectors Location
	Module Problem	<ul style="list-style-type: none">• Use a good Enclosure module and MLB to cross check with original ones.• Replace the defective component.	<div>Disassembly</div> <ul style="list-style-type: none">• Enclosure module• MLB Module