

Repair manual

Hammer Blade V 5G

HS2301 | HS2301e

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Introduction

This manual contains technical instructions for replacing original manufacturer parts in your Hammer smartphone and is intended for end users and service providers with the knowledge, experience and tools required to repair electronic devices.

All functionality, features, specifications, and other product information provided in this document, including, but not limited to, the benefits, design, pricing, components, performance, availability, and capabilities of the product, are subject to change without notice or obligation. mPTech reserves the right to make changes to this manual and the product described herein at any time without obligation to notify you of such changes.

IMPORTANT!

Read the entire manual first. Do not continue if you are not comfortable performing repairs according to the instructions in this manual.



Failure to follow repair instructions, use of non-original parts or inappropriate tools may result in damage to the part/device or compromise its functionality and water resistance.



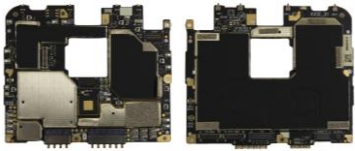
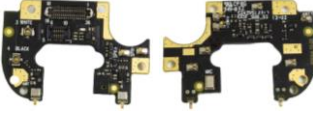
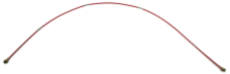
Failure to follow repair instructions, use of non-original parts or inappropriate tools may cause fire or other safety hazards and lead to property damage, personal injury or death.

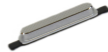
Warranty

Damage caused by repairs performed outside of an Authorized Service Center is not covered by the mPTech warranty. Such damage may result in future repairs being subject to out-of-warranty costs or the device becoming ineligible for future repairs performed by mPTech.

Parts

Product	Part ID	Image
Main antenna	CZE005328	
BM-75 battery	CZE005354	
Buzzer	CZE005371	
Light sensor	CZE005366	
Fingerprint reader	CZE005331	
Camera decoration	CZE005326	
Left decorative element black Left decorative element green	CZE005358 CZE005658	
Front camera	CZE005279	
Rear camera	CZE005355	
Night vision camera	CZE005356	
Light sensor channel	CZE005337	
Black battery cover Green battery cover	CZE005334 CZE005659	
LCD+TP	CZE005324	
Microphone membrane	CZE005784	
Volume button FPC	CZE005329	
Additional button FPC	CZE005330	

Center housing	CZE005321	
Black rear housing Green rear housing	CZE005322 CZE005651	
Light sensor cover	CZE005338	
Proximity sensor cover	CZE005336	
Speaker cover	CZE005378	
Connector foam	CZE005343	
Motherboard	CZE005320	
Sub-PCBA	CZE005340	
Light sensor adhesive	CZE005385	
Camera decoration adhesive	CZE005386	
LCD adhesive	CZE005353	
RF cable adhesive	CZE005344	
LED lens adhesive	CZE005383	
LED strip adhesive	CZE005382	
Speaker holder adhesive	CZE005379	
SIM 2 connector adhesive	CZE005384	
RF cable	CZE005367	
RF cable 2	CZE005368	
RF cable 3	CZE005369	
Antenna RF cable	CZE005370	

Additional button	CZE005333	
Volume button	CZE005332	
Speaker mesh	CZE005339	
Rear camera lens	CZE005380	
Night mode camera lens	CZE005381	
LED lens	CZE005323	
Screw 1	CZE005361	
Screw 2	CZE005362	
Screw 3	CZE005363	
Main FPC	CZE005359	
LED FPC	CZE005325	
BB copper tape	CZE005345	
RF conductive tape	CZE005347	
WiFi conductive tape	CZE005346	
SIM 1/SD connector	CZE005360	
USB-C connector	CZE005342	
BB thermal pad	CZE005350	
CHG thermal pad	CZE005352	
PA 1 thermal pad	CZE005348	
PA 2 thermal pad	CZE005349	
PMU thermal pad	CZE005351	
Speaker bracket	CZE005327	

Vibration	CZE005335	
LCD connector cover	CZE005341	
HF connector	CZE005365	
SIM 2 connector	CZE005364	

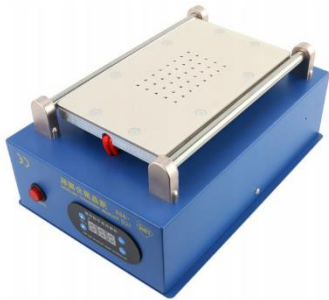
*Always use original manufacturer parts. Third-party parts may not function properly.

Tools

Tools not supplied by mPTech with the product can be purchased at electronics stores.

Use only demagnetized tools specifically designed for repairing small electronic devices, as most electronic components are sensitive to electromagnetic interference.

Repair tools

LCD heater	
Suction cup	
Triangular opening tool	
Antistatic tweezers (anti-ESD*)	
Plastic opening tool	
Philips PH0 screwdriver	
Microfiber cloth	
IPA cloths	
SIM card tray eject pin	

* ESD: electrostatic discharge

Security

During repairs, you must wear safety equipment at all times.

Safety glasses	
Antistatic gloves (anti-ESD*)	
Antistatic mat (anti-ESD*)	
Grounding strap (anti-ESD*)	

*ESD: electrostatic discharge



Perform repairs in a well-ventilated area.
The work area should be free of foreign objects and sharp materials.
Do not leave loose screws, extra screws, or small parts inside the device.
Use caution when using sharp tools near the battery.



The device contains a built-in lithium-ion battery. Improper battery replacement, improper handling of parts, failure to discharge the battery before repair, or failure to follow the instructions provided may result in battery overheating, swelling, venting, leakage, or a thermal runaway event. These events can cause fire, personal injury, death, data loss, or damage to the device, parts, or other property.



Before you begin repairs, completely discharge the battery. A discharged battery is less prone to thermal events. If you cannot determine the battery charge level, do not repair the device.

Disassembly

The device is disassembled in the following order:

- Rear cover
- Battery
- LCD display
- Motherboard bracket
- Motherboard
- Front camera
- Main camera
- Buzzer (*speaker*)
- Sub-PCBA (*microphone*)
- USB-C connector

0| First steps

Before starting repairs, always perform the following steps:

- Back up your device.
- Completely discharge the battery.
- Turn off the device.
- Disconnect all cables.
- Remove all additional accessories (e.g., cases).
- Organize and clean your work area.
- Put on an ESD wrist strap and attach it to a properly grounded ESD mat.



Ensure you are using the correct tools and parts for the model you are repairing.
Take your time. Read all instructions and warnings carefully.
The end of each tape/antenna must be aligned with the connector. Press each end into the connector until you hear a click to ensure that it is securely attached.

1| SIM tray



Disassembling the device with the SIM card tray in place may damage the device.

Required tools

- SIM card tray eject pin

Steps

1. Locate the SIM card tray.
2. Insert the SIM card eject tool into the hole next to the SIM card tray.
3. Push the SIM card eject tool toward the case to eject the SIM card tray.
4. Remove the SIM card tray.

2| Rear cover

Required tools

- triangular opening tool

Steps

1. Insert the opening tool between the cover and the case to create a gap.
2. Slide the tool along the edges of the device to separate the two parts.



The opening tool should be inserted halfway and positioned under the cover. Be careful not to damage or scratch the device.



3| Battery

Required tools

- None

Steps

1. Carefully remove the battery from the case.



4| LCD display

Required tools

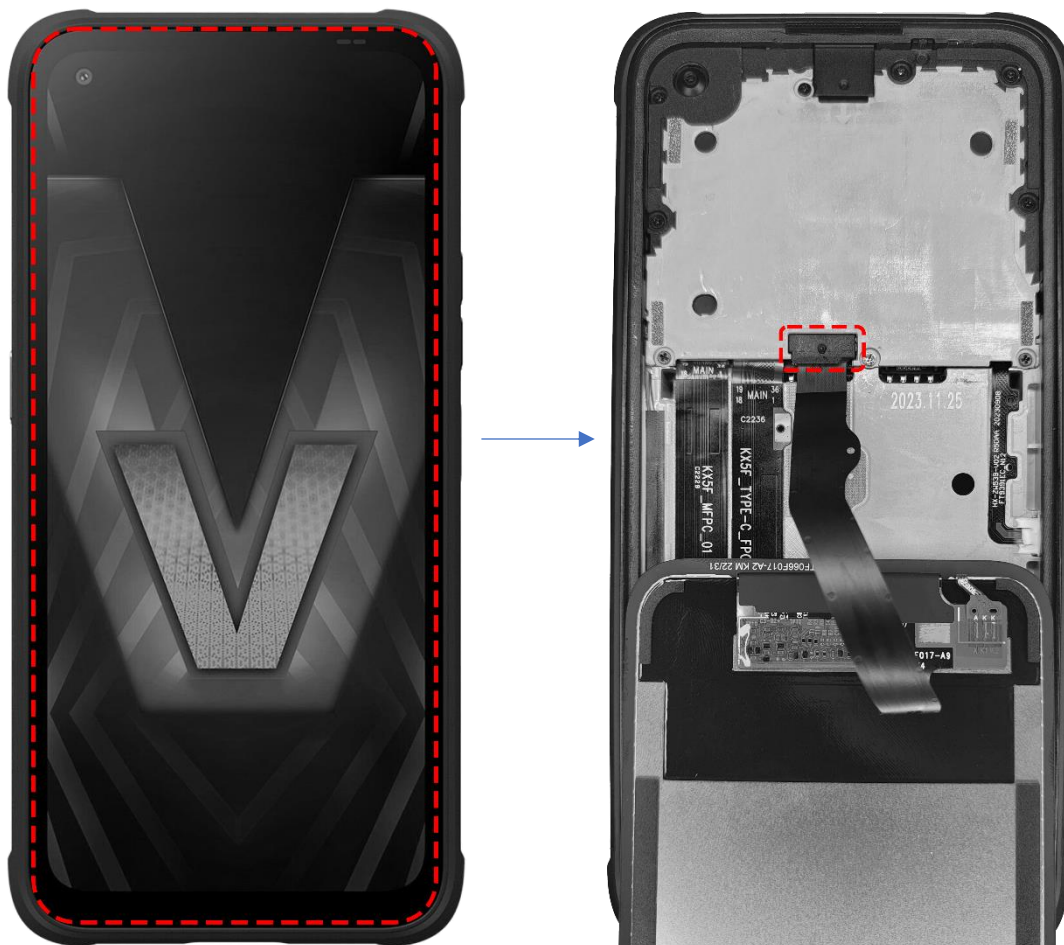
- LCD heater
- suction cup
- triangular opening tool
- antistatic tweezers

Steps

1. Using an LCD heater, evenly heat the LCD surface to reduce the stickiness of the foam between the LCD frame and the rest of the device.
2. Insert the opening tool between the LCD frame and the case to create a gap.
3. Slide the tool along the edges of the device to separate the two parts.
4. Remove the LCD connector cover using antistatic tweezers.
5. Carefully remove the LCD along with its FPC from the housing.



The opening tool should not be inserted deeper than the width of the LCD frame, otherwise the display will be damaged.
Be careful not to damage or scratch the device.



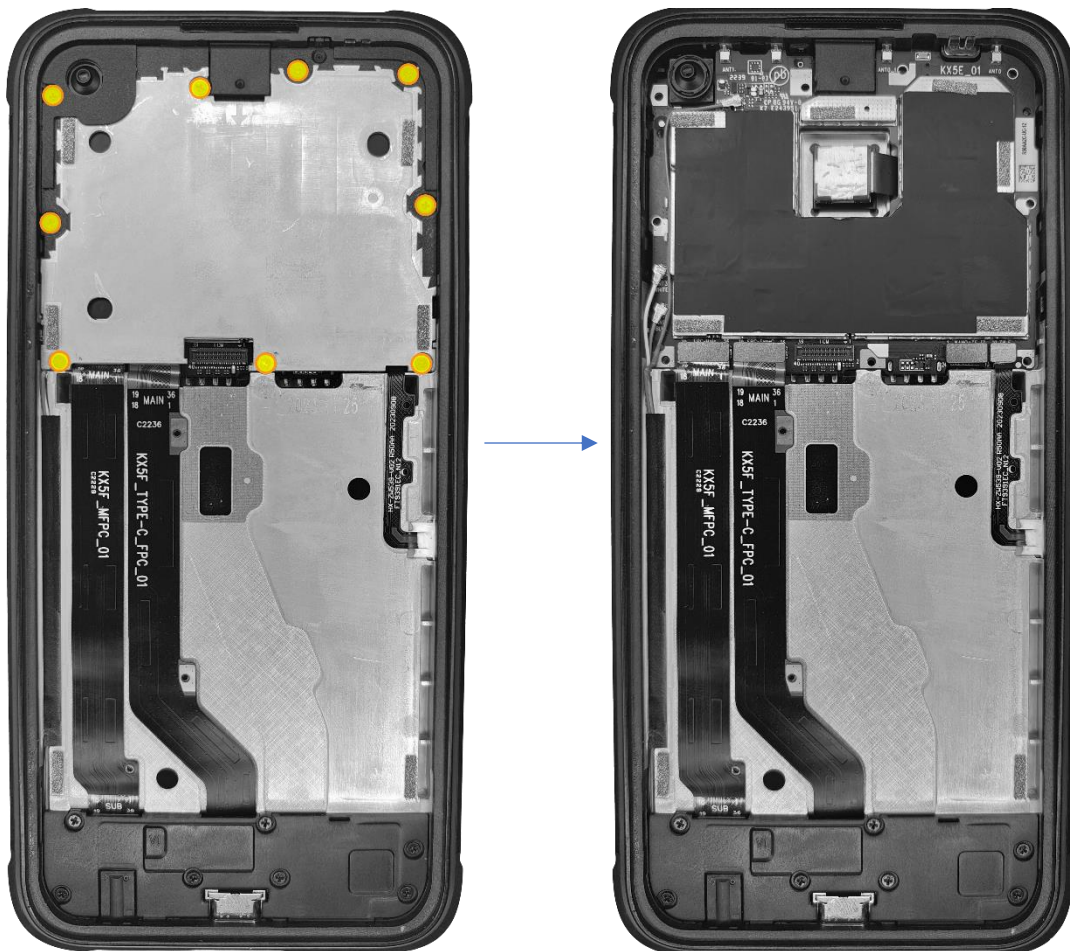
5| Motherboard bracket

Required tools

- Philips PH0 screwdriver
- antistatic tweezers

Steps

1. Find the 9 points where the screws are located.
2. Remove all screws using a screwdriver.
3. Lift the cover using antistatic tweezers.



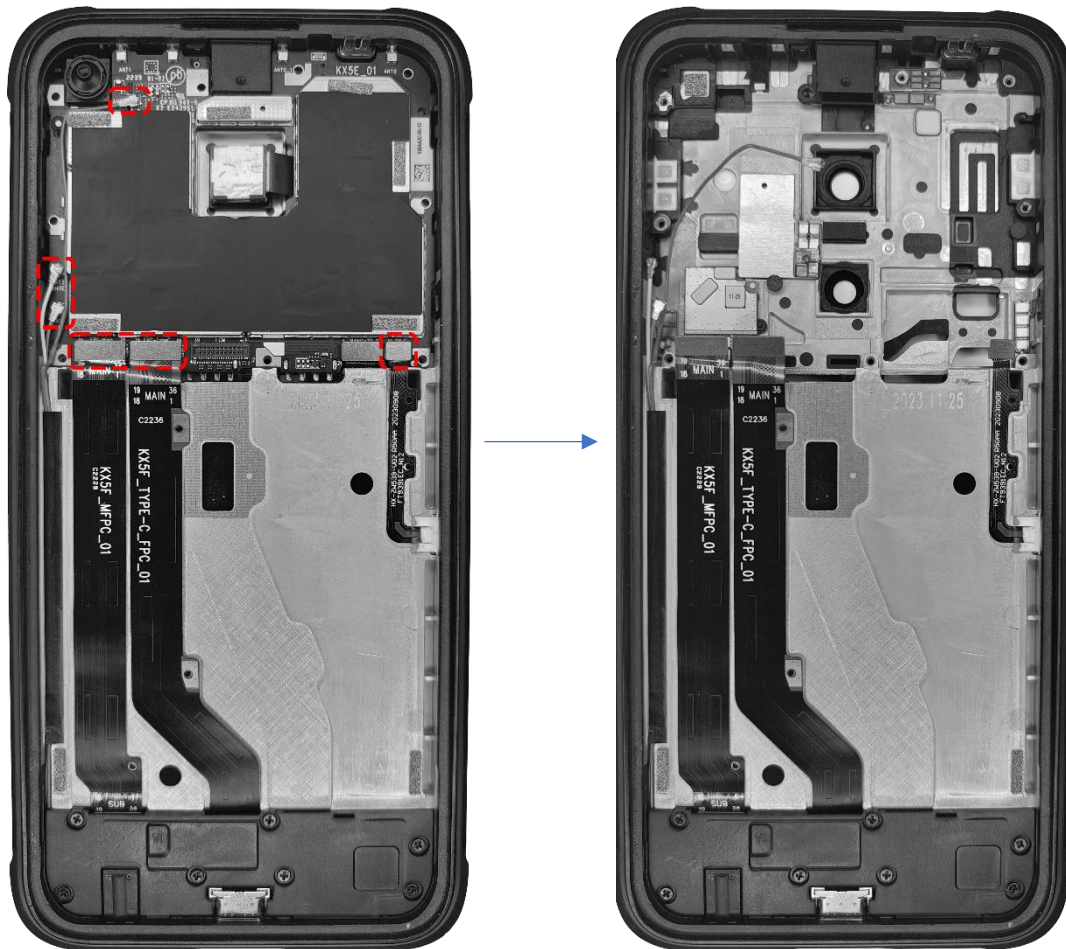
6| Motherboard

Required tools

- antistatic tweezers

Steps

1. Disconnect the sub-PCBA, USB-C and button connectors using antistatic tweezers.
2. Disconnect the three RF connectors using antistatic tweezers.
3. Carefully grasp the motherboard with round-tipped tweezers and remove it from the case.



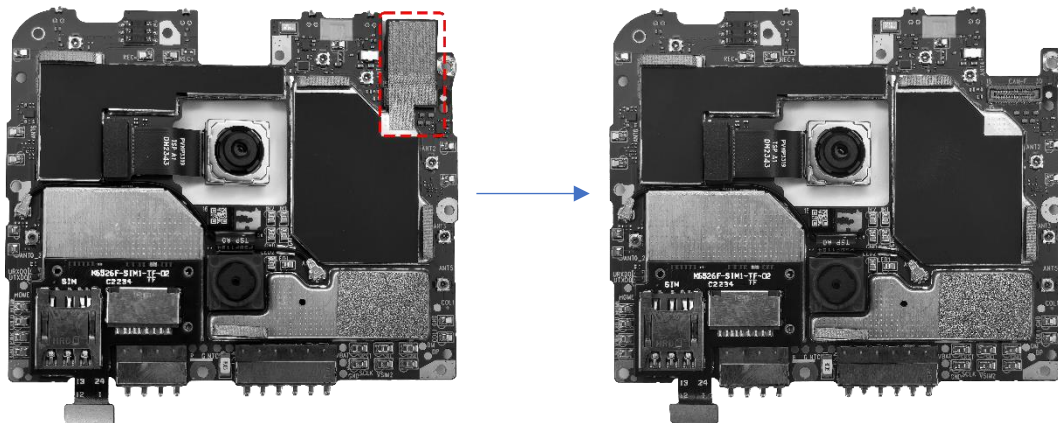
7| Front camera

Required tools

- antistatic tweezers

Steps

1. Peel off the tape holding the front camera using antistatic tweezers.
2. Disconnect the camera connector using antistatic tweezers.
3. Carefully grasp the camera with round-tipped tweezers and remove it from the housing.



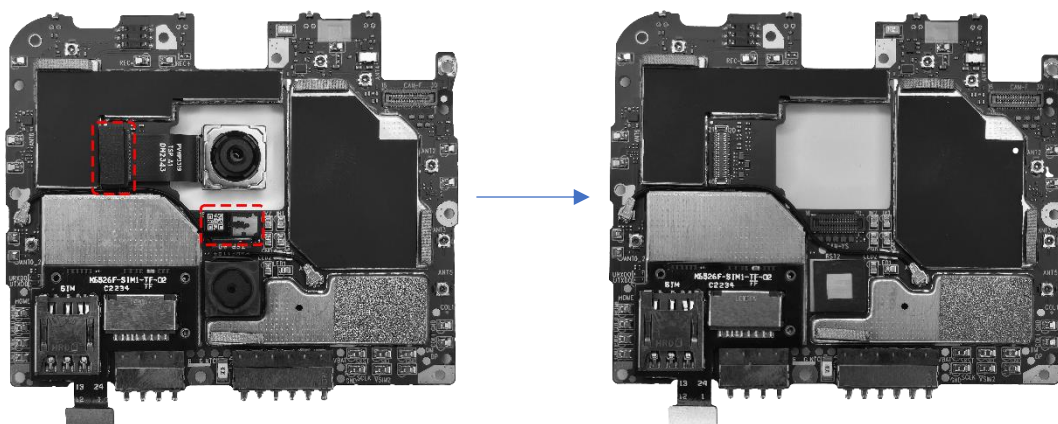
8| Main camera

Required tools

- antistatic tweezers

Steps

1. Disconnect the camera connectors on the other side using antistatic tweezers.
2. Carefully grasp the camera with round-tipped tweezers and remove it from the housing.



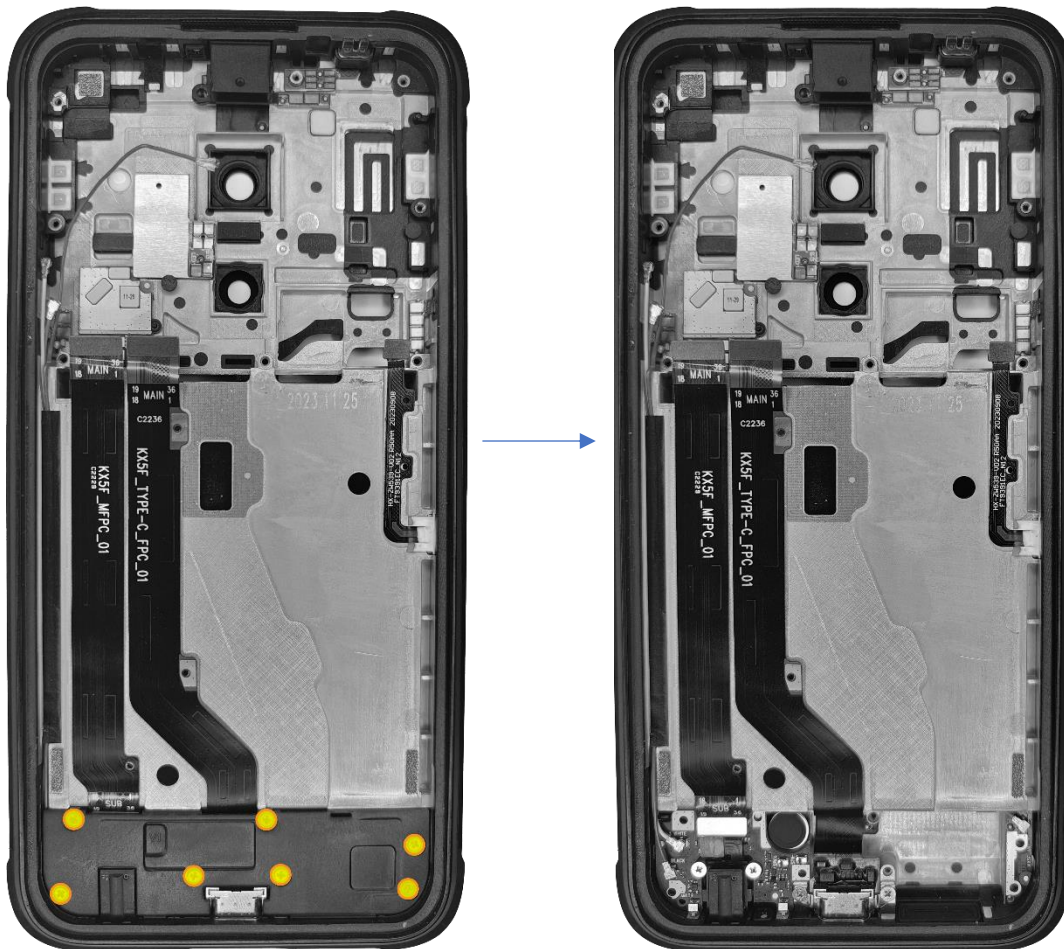
9| Buzzer

Required tools

- Philips PH0 screwdriver
- antistatic tweezers

Steps

1. Find the 7 points where the screws are located.
2. Remove all screws using a screwdriver.
3. Lift the box with the buzzer using antistatic tweezers and remove it from the device.



10| Sub-PCBA

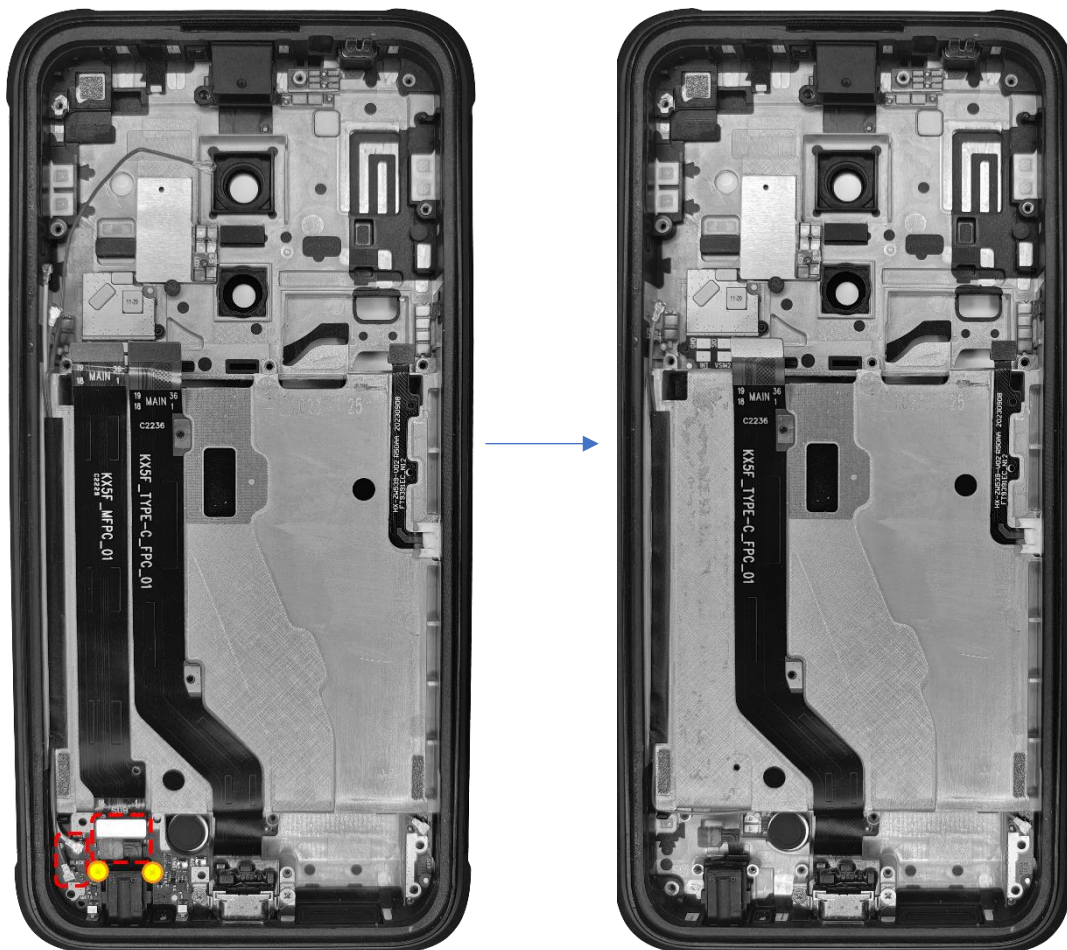
Includes: main microphone

Required tools

- Philips PH0 screwdriver
- antistatic tweezers

Steps

1. Find the 2 points where the screws are located.
2. Remove all screws using a screwdriver.
3. Disconnect the sub-PCBA and headphone connectors using antistatic tweezers.
4. Disconnect the two RF connectors using antistatic tweezers.
5. Carefully grasp the sub-PCBA with round-tipped tweezers and remove it from the case.



11| USB-C, HF

Required tools

- Philips PH0 screwdriver
- antistatic tweezers

Steps

1. Find the 2 points where the screws are located.
2. Remove all screws using a screwdriver.
3. Disconnect the RF connector using antistatic tweezers.
4. Carefully grasp the USB-C, HF and main antenna with round-tipped tweezers and remove it from the case.

