

Repair manual

Hammer Energy X2

HS2507 | HS2507e

Contents

Introduction	3
Parts	4
Tools	6
Security	7
Disassembly	8
0 First steps	8
1 SIM tray	8
2 Rear cover	9
3 Battery	10
4 LCD display	11
5 Motherboard bracket	12
6 Motherboard	13
7 Front camera	14
8 Main camera	14
9 Buzzer	15
10 Sub-PCBA	16
11 USB-C	17
12 Speaker, LED	18

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.

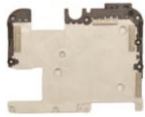
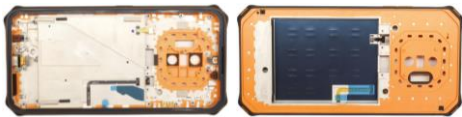
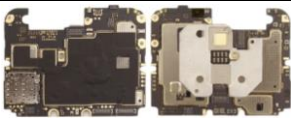
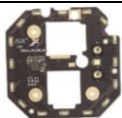
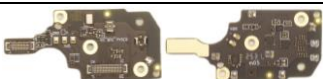
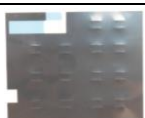


Failure to follow repair instructions, use of non-original parts or inappropriate tools may cause fire or other safety hazards and lead to property damage, personal injury or death.

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
NFC antenna	CZE006129	
Battery	CZE006110	
Buzzer	CZE006120	
Speaker	CZE006104	
Night camera	CZE006126	
Front camera	CZE006124	
Rear camera	CZE006125	
Battery cover	CZE006101	
LCD+TP	CZE006119	
Microphone membrane	CZE006137	
Additional microphone membrane	CZE006135	
Middle housing	CZE006111	
Rear housing	CZE006097	
Proximity sensor cover	CZE006114	
Speaker foam	CZE006105	
Motherboard	CZE006098	
LED	CZE006103	
Sub-PCBA	CZE006123	
Battery adhesive	CZE006132	
Front camera adhesive	CZE006134	

Battery cover adhesive	CZE006131	
LCD+TP adhesive	CZE006102	
RF cable 1	CZE006127	
Buzzer mesh with adhesive	CZE006140	
Speaker mesh	CZE006133	
Screw 1	CZE006115	
Screw 2	CZE006116	
Screw 3	CZE006117	
Main FPC	CZE006141	
Middle case conductive tape	CZE006118	
BB thermal pad	CZE006107	
BB thermal pad 2	CZE006108	
BB thermal pad 3	CZE006109	
RF thermal pad	CZE006106	
SIM tray	CZE006130	
Front camera gasket	CZE006142	
Microphone gasket	CZE006138	
Additional microphone gasket	CZE006136	
Battery connector cap	CZE006112	
LCD connector cap	CZE006113	
USB-C connector	CZE006139	

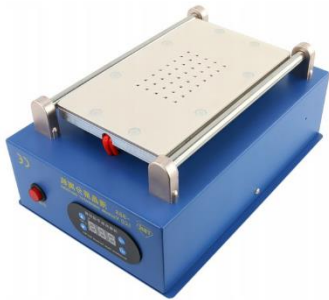
*Always use original manufacturer parts. Third-party parts may not function properly.

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
- Speaker
- LED

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

- LCD heater
- suction cup
- triangular opening tool

Steps

1. Using an LCD heater, evenly heat the rear cover surface to reduce the stickiness of the foam between the cover and the rest of the device.
2. Insert the opening tool between the cover and the case to create a gap.
3. 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.



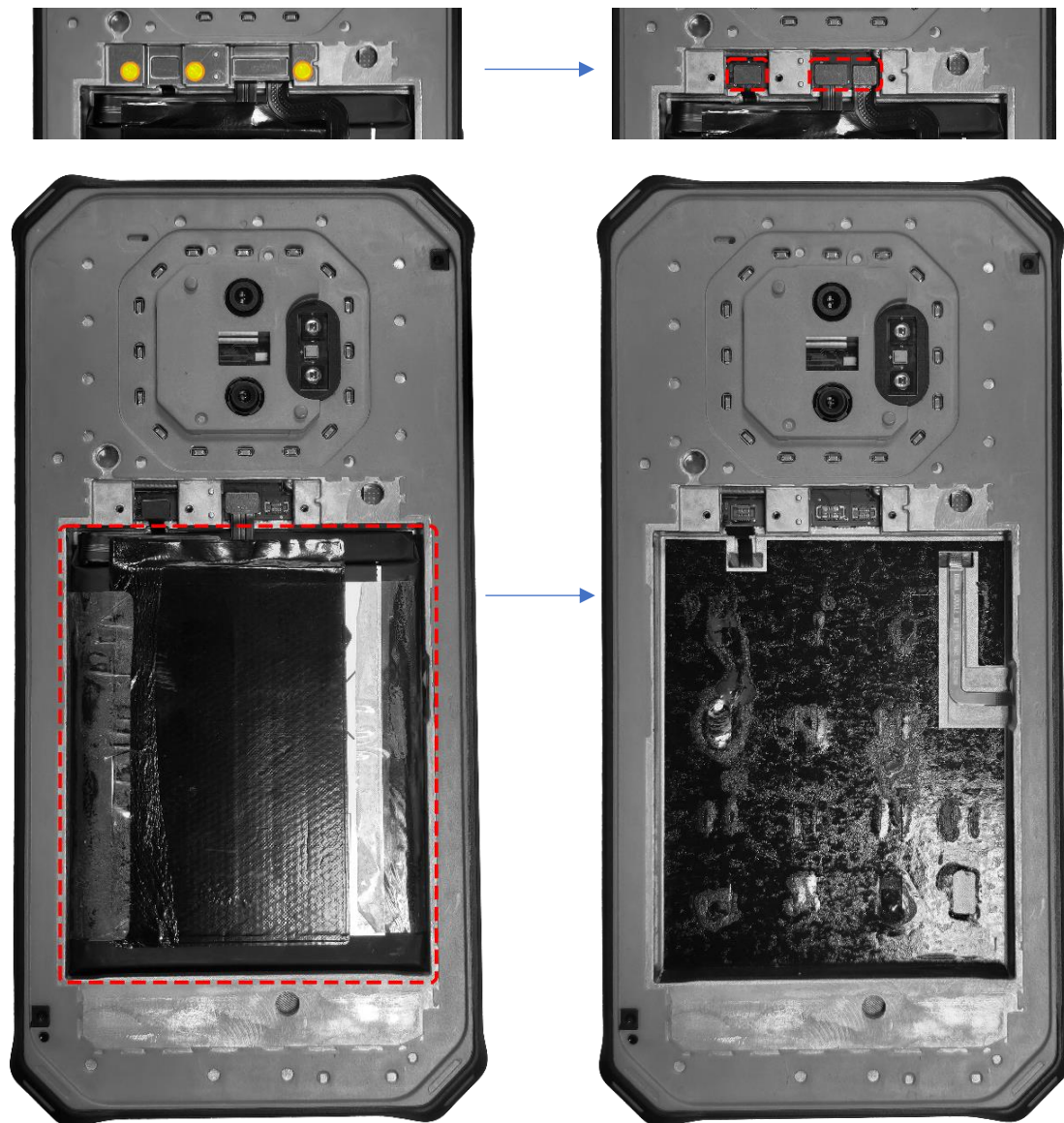
3| Battery

Required tools

- IPA (isopropyl alcohol)
- plastic opening tool
- Philips PH0 screwdriver
- antistatic tweezers

Steps

1. Find the 3 points where the screws are located.
2. Remove all screws using a screwdriver.
3. Disconnect the battery, NFC and button FPC connector using antistatic tweezers.
4. Use IPA (isopropyl alcohol) to loosen up the bond between the battery and its adhesive tape.
5. Place a plastic opening tool between the battery and housing and carefully lever the battery.
6. Carefully remove the battery from the case.



4| LCD display

Required tools

- LCD heater
- suction cup
- triangular opening tool
- Philips PH0 screwdriver
- antistatic tweezers

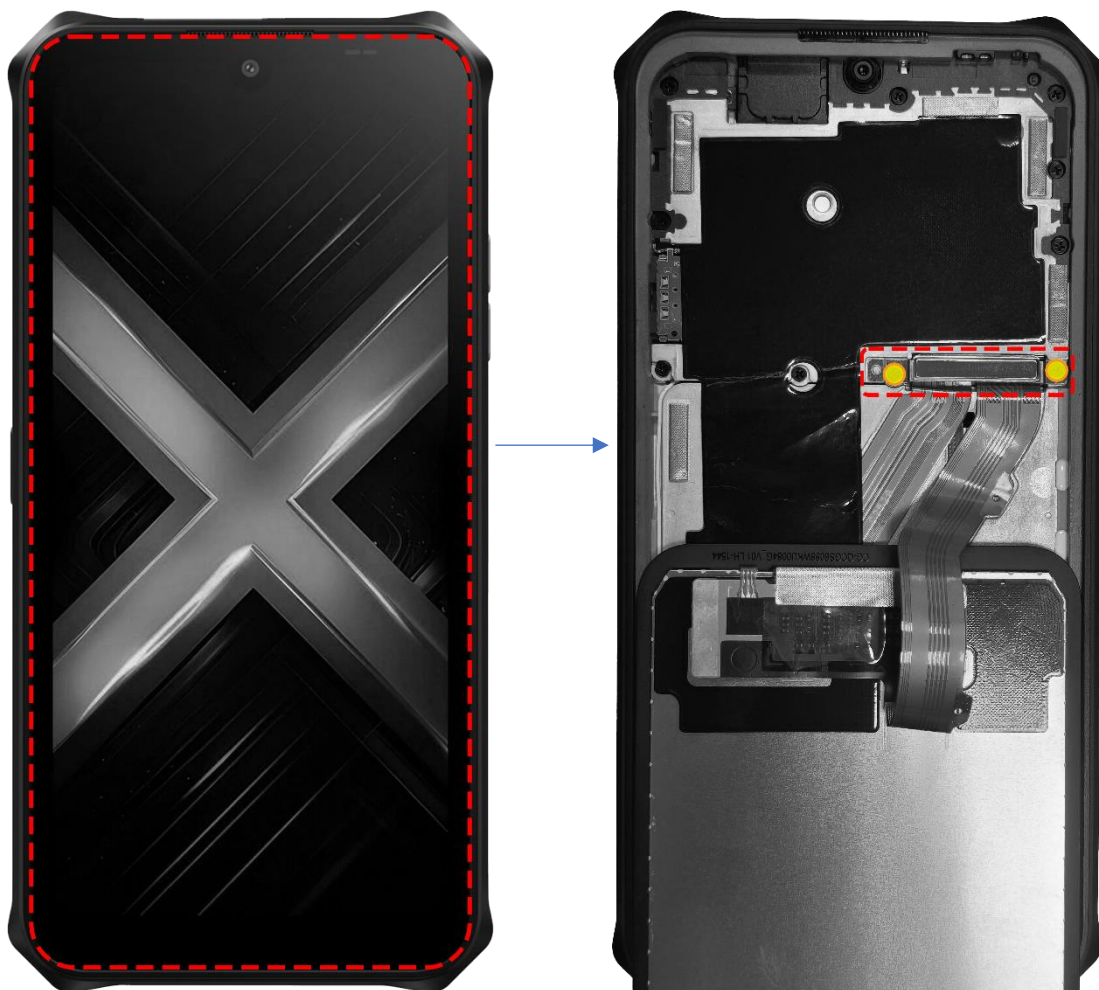
Steps

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 two screws using a screwdriver.
5. Remove the LCD connector cap using antistatic tweezers.
6. 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.



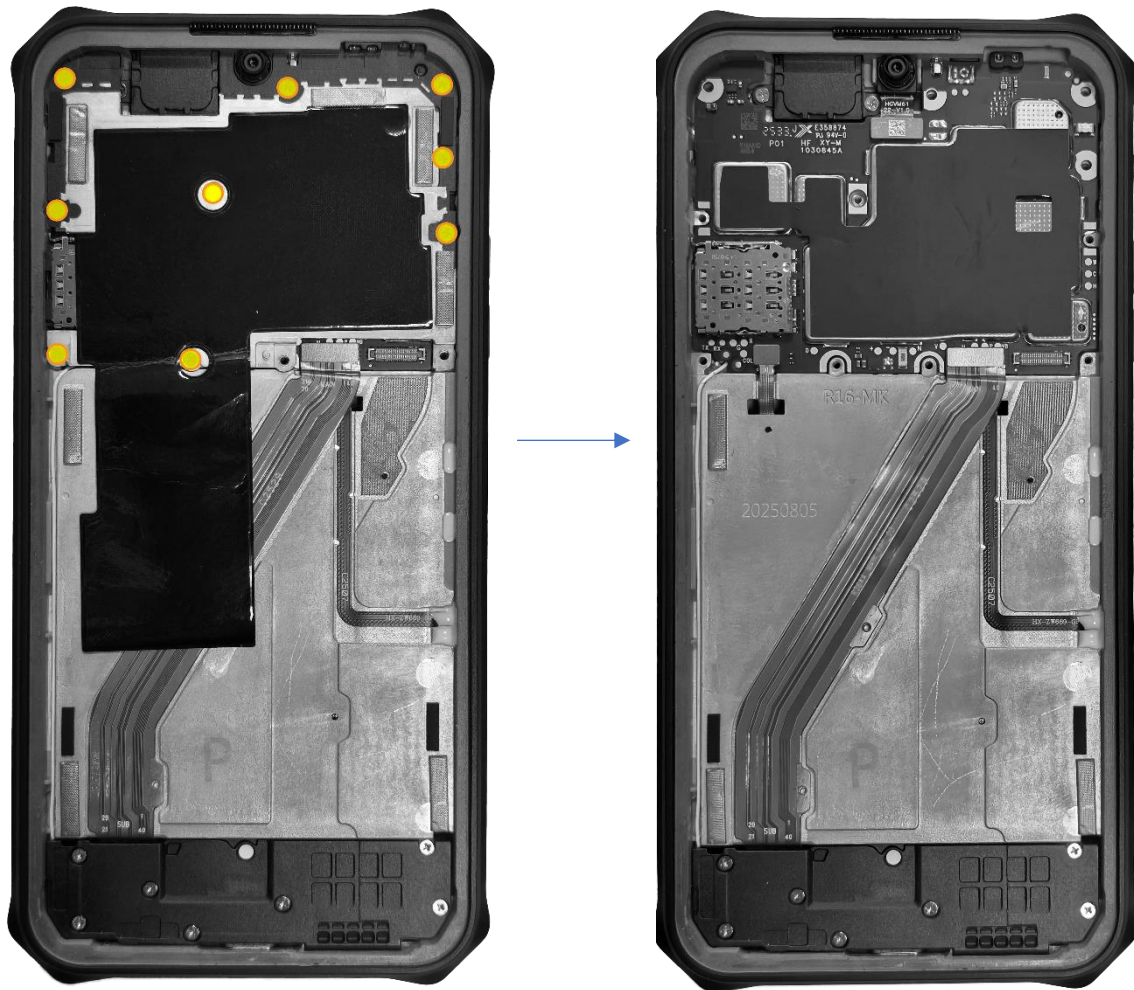
5| Motherboard bracket

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 and tilt the cover using antistatic tweezers.



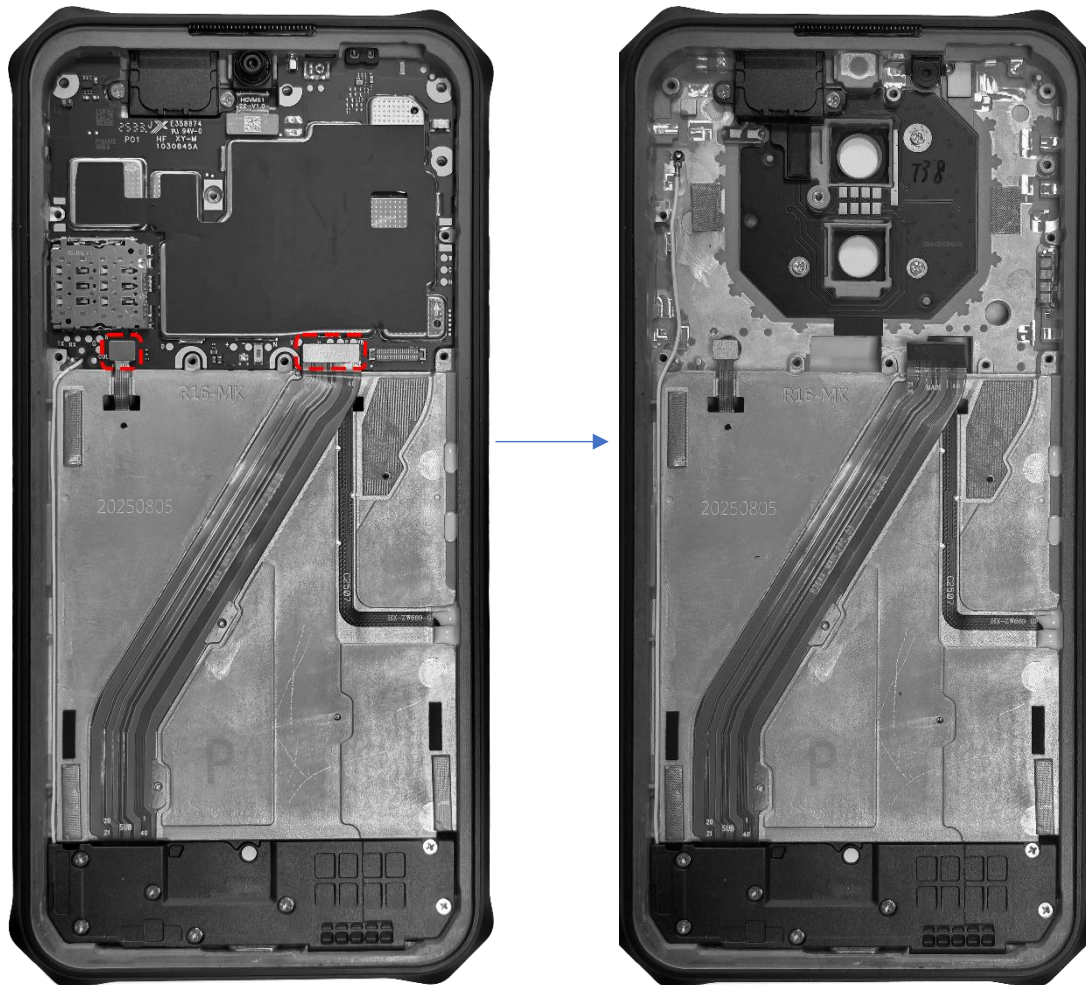
6| Motherboard

Required tools

- antistatic tweezers

Steps

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



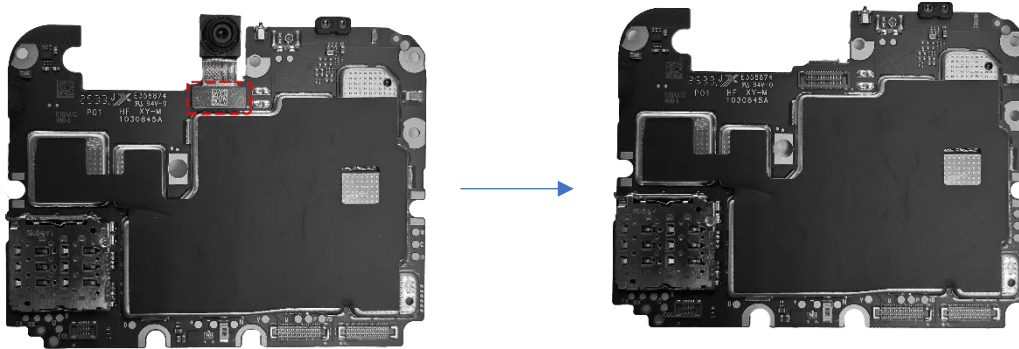
7| Front camera

Required tools

- antistatic tweezers

Steps

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



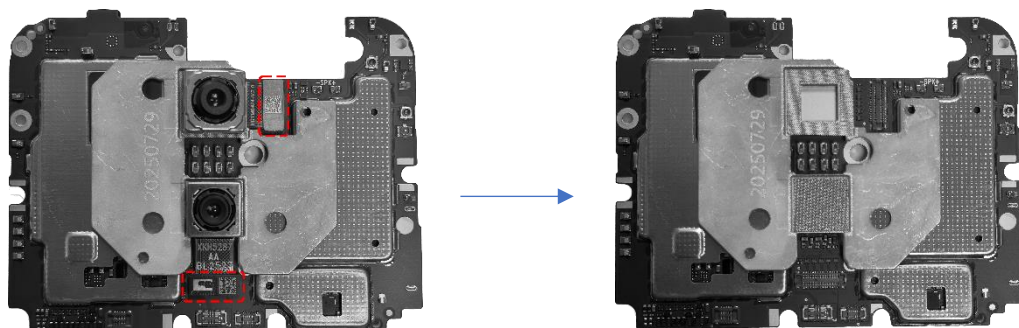
8| Main camera

Required tools

- antistatic tweezers

Steps

1. Disconnect the camera connector 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 8 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

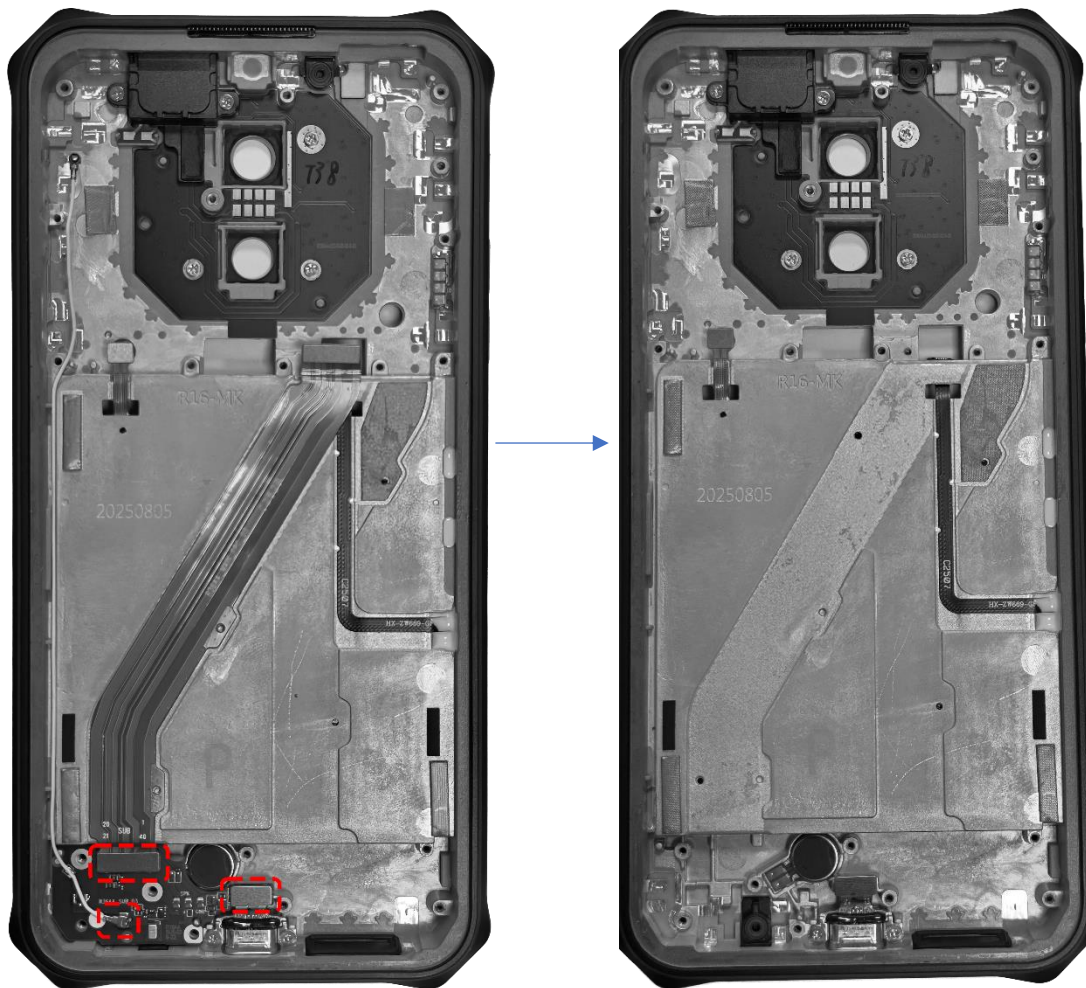
Includes: main microphone

Required tools

- Philips PH0 screwdriver
- antistatic tweezers

Steps

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



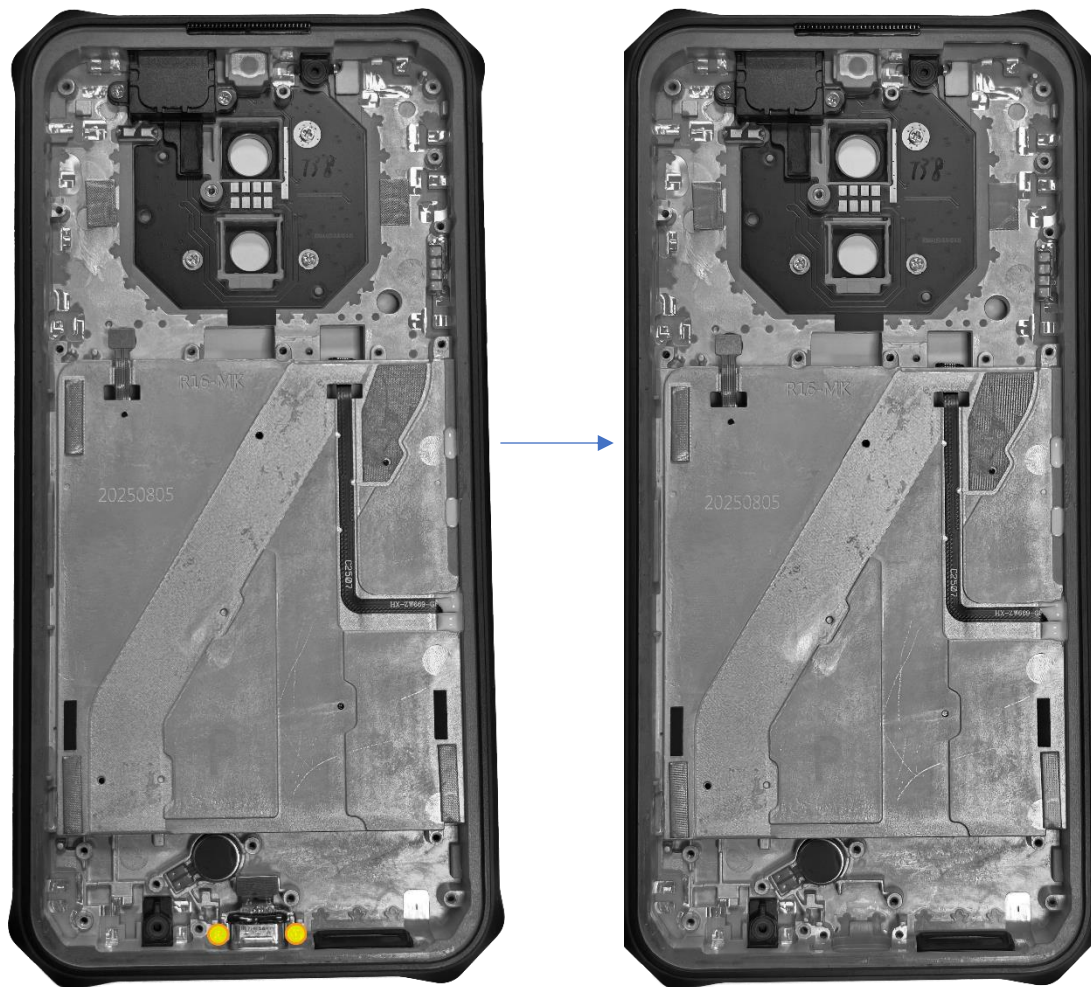
11| USB-C

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. Carefully grasp the USB-C with round-tipped tweezers and remove it from the case.



12| Speaker, LED

Required tools

- Philips PH0 screwdriver
- antistatic tweezers

Steps

1. Find the 5 points where the screws are located..
2. Remove all screws using a screwdriver.
3. Carefully grasp the speaker, then LED with round-tipped tweezers and remove it from the case.

