

Doro Aurora A30/A31

Repair Manual DSB-0560

English



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1. Repair disclaimer

Self-service repair is not recommended unless you have the necessary technical knowledge and experience to safely handle electronic components. Attempting repairs without proper expertise can result in damage to the device, personal injury, or voiding of any applicable warranty.

By choosing to proceed with a self-repair, you acknowledge and accept all risks and responsibilities associated with the process.

2. About this document

This document provides step-by-step instructions for repairing and maintaining the [device name]. It is designed to support both professional technicians and private individuals who wish to perform their own repairs.

2.1 Scope

This guide covers:

- Safe disassembly and reassembly procedures
- Replacement of specific hardware components
- Basic troubleshooting and visual inspections

This guide does **not** cover:

- Advanced electrical diagnostics
- Software-level repairs or firmware issues
- Modifications outside manufacturer specifications

2.2 Who can use this document

This guide is intended for:

- Technicians and repair professionals
- End customers interested in do-it-yourself repairs, as encouraged by the EcoDesign directive
- Recycling workers for safe disassembly of components before disposal or material recovery

2.3 How the guide is structured

The document is divided into the following main sections:

- Safety Information
- Required tools and materials
- Component-specific replacements
- Disassembly Procedures
- Assembly Instructions
- Troubleshooting

Each chapter includes checklists, simple step-by-step instructions, and references to related sections within this document.

3. General precautions

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

3.1 Use caution before you start to repair



CAUTION

Opening or repairing a device could cause electric shock, device damage, fire, personal injury risks, and other hazards.

- Make sure that the work surface is clean and free of debris to prevent contamination of internal components.
- Wear an ESD wrist strap to prevent electrostatic discharge damage to sensitive electronic components.
- Always perform repairs in a clean, dry space with good ventilation and no combustible materials.
- Make sure no cables or components are damaged during removal. Damaged cables and components must be replaced.
- Ensure that there are no additional screws or small parts left in the device after assembly.
- Always ensure that screws are securely fastened.
- Disconnect the device from all power sources before any disassembly.

3.2 Batteries

Batteries should be handled with care, and could be dangerous if not in normal condition.

**CAUTION**

- Discharge the battery before you attempt repair.
- Never bend, dent, puncture, or use tools to pry the battery.
- To prevent damage, store replaced batteries in the replacement packaging directly after being replaced.
- If the battery shows signs of swelling or damage, or if the device feels hot or emits a strong odour, don't attempt disassembly. Please reach out to Doro support.
- If a battery starts to vent, cover it in sand or use gloves and pliers to dispose the battery in a fire safe container as soon as possible.
- Be careful with the following unacceptable battery conditions: pouch damage, line protrusion, scratch, contamination mark, dot protrusion, dent, bubbling, imprinted line, swelling or electrolyte leakage.
- Do not shortcut the battery terminals or damage the battery, as it could result in fire or overheating.
- Do not throw the old battery in regular trash. Dispose of the battery according to local regulations.

3.3 Glass handling

**CAUTION**

- Wear protective gloves and safety glasses when you handle broken glass parts.
- Apply protective film when you remove damaged glass parts.
- Place the damaged glass part in the spare part packaging directly after replacement to prevent injury.

3.4 Tools and fixtures

The use of correct tools and fixtures is strongly recommended for all device repairs.

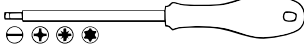


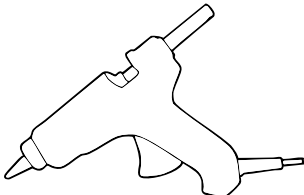


**CAUTION**

- We don't recommend repairs without the correct tools and fixtures.
- Improper use of tools and fixtures may result in injury, damage to the product, tools, fixtures, or spare parts.

4. Tools and materials required

4.1 Tools

The tools listed are basic tools that can be used to do a repair, reuse or upgrade.

Tool type	Illustration (informative example)	Reference
Screwdriver (for slotted heads, cross recess or hexalobular recess heads)		ISO 2380, ISO 8764, ISO 10664
Prying lever		
Tweezers		
Hot glue gun		
Plectrum		
Suction cup with keyring		

4.2 Materials

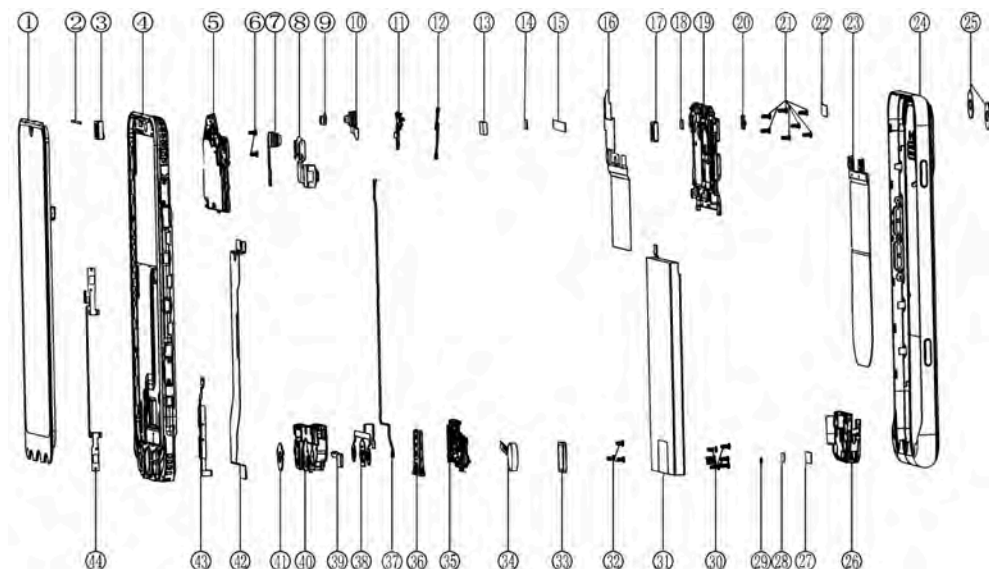
Material type	Reference
Isopropanol	Commonly available isopropanol (IPA), $\geq 70\%$ concentration

5. Spare parts

This document does not include the complete Spare Parts List. The Spare Parts List covers all components of the product and can be found at:

<https://www.doro.com/repair/>

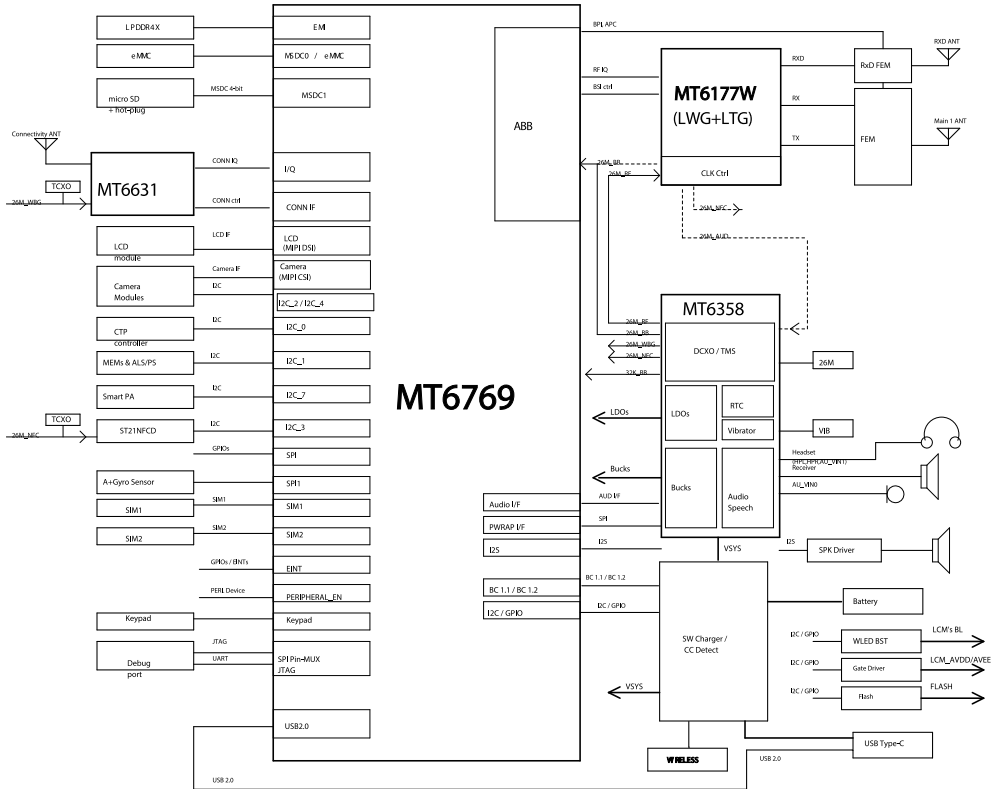
6. Exploded view



No	Part name	Qty
1	LCD	1
2	Diffusion film [B466-0251-UW0]	1
3	Receiver	1
4	Front shell component [B126-0414-B0Z0]	1
5	PCBA ASSY	1
6	Motherboard screws [E239-0228-FT0]	1
7	Wide angle camera 5M	1
8	Rear main camera 50M	1
9	Rubber sleeve front camera	1
10	Front camera 5M	1
11	Pilot lamp PCB	1
12	Pilot lamp board RF cable	1
13	Flash board cooling silicone	1
14	Rear camera cooling silicone	1
15	Rear camera connector foam [H182-0664-UW0]	1
16	Graphite sheet	1

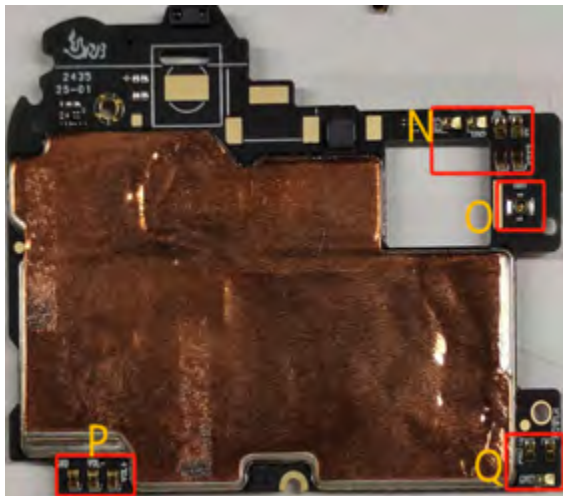
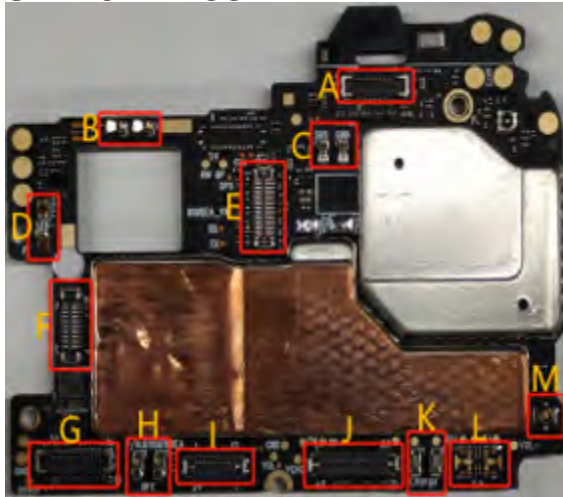
No	Part name	Qty
17	Rubber sleeve wide angle camera	1
18	Receiver ground conductive foam	1
19	Rear housing ASSY	1
20	Flash PCB	1
21	Screw1 lock case	1
22	USB ground conductive sponge	1
23	NFC antenna Charging coil	1
24	Battery Cover ASSY	5
25	Camera lens	1
26	Antenna bracket ASSY	1
27	Connector foam	1
28	Front key FPC foam	1
29	Antenna bracket RF base foam	1
30	Screw1 lock case	16
31	Battery	1
32	Motherboard screws [E239-0228-FT0]	4
33	Speaker rubber sleeve	1
34	Motor	1
35	USB PCB	1
36	SIM card tray	1
37	Coaxial cable [AE41-0185-900]	1
38	Front key FPC	
39	Motor conductive cloth	
40	Speaker ASSY	
41	Light guide plate	
42	Main FPC	
43	Volume key FPC	
44	Power Camera button FPC	

7. Block diagram



8. Parts location

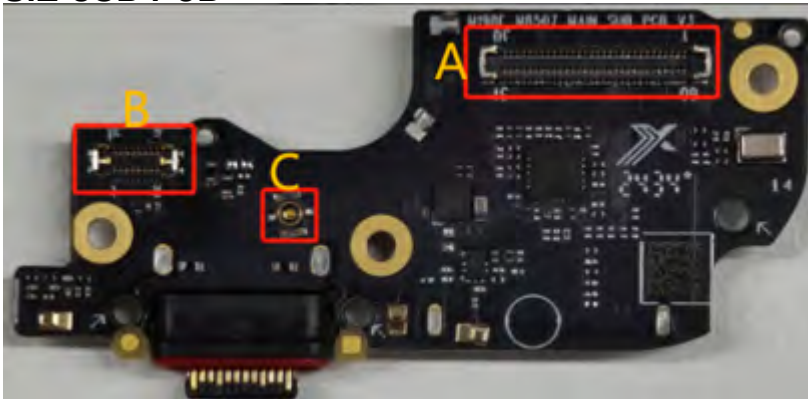
8.1 PCBA ASSY

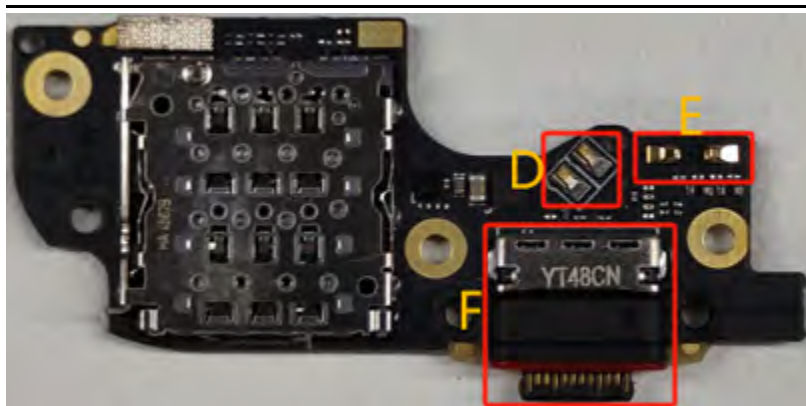


Location	Description
A	Front Camera Connector
B	Earpiece (Receiver) Pad
C	SOS Button pad

Location	Description
D	Flashlight Pad
E	Rear Main Camera Connector
F	Rear Secondary Camera Connector
G	LCD Connector
H	NFC Pad
I	Main FPC Connector - 1
J	Main FPC Connector - 2
K	Wireless Charging Pad
L	Battery Connector
M	RF Cable Connector
N	Breathing LED Pad
O	Breathing LED Board RF Cable Connector
P	Volume Key Pad
Q	Power Button Pad

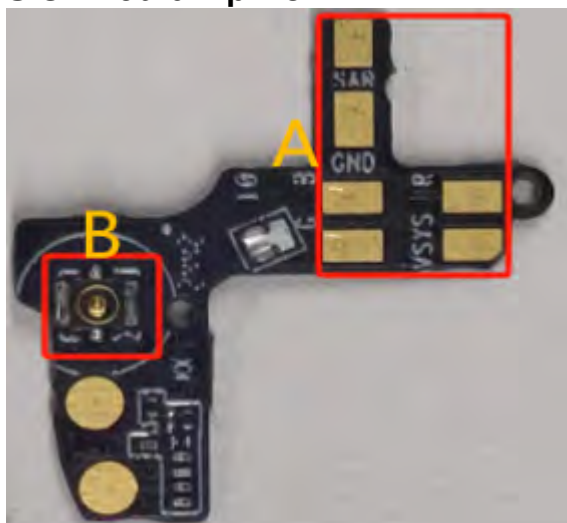
8.2 USB PCB





Location	Description
A	Main FPC Connector
B	Front Button FPC Connector
C	RF Cable Connector
D	Vibration Motor Pad
E	Speaker Pad
F	USB Port

8.3 Pilot lamp PCB



Location	Description
A	Breathing LED Pad
B	Breathing LED Board & RF Cable Connector

9. How to turn on and off the Doro Aurora A30/A31

9.1 Turn on the Aurora A30/A31

1. Press and hold the power button until the display lights up.

9.2 Turn the screen on and off

1. When the phone is on, press the power button once to turn the screen on or off.

9.3 Turn off the Aurora A30/A31

1. Press and hold the Power button until the options menu opens.
2. In the options menu, tap Power off (optionally, press Restart to restart or Lockdown).

10. Repair instructions

10.1 How to replace the Battery

10.1.1 Purpose

This procedure explains how to replace the **Battery** of the device.

10.1.2 Prerequisites

The following disassembly sections needs to be done before continuing.

- *Disassemble the SIM card tray*, p.25
- *Disassemble the Battery Cover ASSY*, p.27
- *Disassemble the Rear housing ASSY*, p.31

10.1.3 Tools and equipment

No tools are required for this procedure. Tools used in earlier procedures are listed in their respective chapters.

10.1.4 Spare parts

Qty	Spare part	Information
1	Battery	

10.1.5 Safety and precautions

- Do not puncture, crush, or bend the battery. A damaged battery can leak, catch fire, or even explode.
- Do not throw the old battery in regular trash. Recycle it according to local regulations for electronic waste and batteries.

10.1.6 Procedure overview

The **Battery** is enclosed in multiple layers of protective film. Start by removing the visible top layer of protective film. When removing the **Battery**, use the tab of protective film located underneath the battery to help lift it out.

10.1.7 Step-by-step instructions

1. Disconnect the battery connector.



2. Locate the remaining plastic strip on the protective film. This is the tab used for **Battery** removal.



3. Firmly pull the remaining plastic strip to lift the **Battery** out of the battery compartment.



4. Lift off the **Battery** that needs to be replaced.



5. Position the replacement **Battery** in the battery compartment of the device.



6. Connect the **Battery** to the designated connector (marked red) on the **PCBA ASSY**.



10.1.8 Reassembly reference

To complete the full assembly of the device, the following sections must be completed:

- *Assemble the Rear housing ASSY, p.75*
- *Assemble the Battery Cover ASSY, p.80*
- *Assemble the SIM card tray, p.84*

10.1.9 Troubleshooting and tips

10.2 How to replace the Display (LCD)

10.2.1 Purpose

This procedure explains how to replace the **Display (LCD)** of the device.

10.2.2 Prerequisites

The following disassembly sections needs to be done before continuing.

- *Disassemble the SIM card tray, p.25*
- *Disassemble the Battery Cover ASSY, p.27*

- *Disassemble the Rear housing ASSY, p.31*
- *Disassemble the Front camera 5M and the Wide angle camera 5M, p.33*
- *Disassemble the PCBA ASSY, p.36*
- *Disassemble the Antenna bracket ASSY, p.38*
- *Disassemble the USB PCB, p.40*
- *Disassemble the Front key FPC, p.43*
- *Disassemble the Motor and the Motor conductive cloth, p.45*
- *Disassemble the Battery, p.47*
- *Disassemble the Front housing ASSY, p.50*

10.2.3 Tools and equipment

No tools are required for this procedure. Tools used in earlier procedures are listed in their respective chapters.

10.2.4 Spare parts

Qty	Spare part	Information
1	Front housing ASSY	

10.2.5 Safety and precautions

- Do not puncture, crush, or bend the battery. A damaged battery can leak, catch fire, or even explode.
- Do not throw the old battery in regular trash. Recycle it according to local regulations for electronic waste and batteries.

10.2.6 Procedure overview

The **Display (LCD)** is attached to the **Front housing ASSY**. To replace the **Display (LCD)**, the **Front housing ASSY** needs to be replaced.

10.2.7 Step-by-step instructions

Replace the old **Front housing ASSY** (including **Display (LCD)**) with the new **Front housing ASSY**.

10.2.8 Reassembly reference

To complete the full assembly of the device, the following sections must be completed:

- *Assemble the Front housing ASSY, p.54*
- *Assemble the PCBA ASSY, p.57*

- *Assemble the Front camera 5M and the Wide angle camera 5M, p.60*
- *Assemble the Front key FPC and the Motor, p.62*
- *Assemble the USB PCB, p.65*
- *Assemble the Main FPC and the RF cable, p.67*
- *Assemble the Battery, p.69*
- *Assemble the Antenna bracket ASSY, p.73*
- *Assemble the Rear housing ASSY, p.75*
- *Assemble the Battery Cover ASSY, p.80*
- *Assemble the SIM card tray, p.84*

10.2.9 Troubleshooting and tips

11. Disassembly

11.1 Disassemble the SIM card tray

11.1.1 Purpose

Removing the SIM card tray is typically the first step in every repair on a smartphone.

11.1.2 Tools and equipment

No tools are required for this procedure. Tools used in earlier procedures are listed in their respective chapters.

11.1.3 Spare parts

Qty	Spare part	Information
1	SIM card tray	

11.1.4 Safety and precautions

See *General precautions*, p.6.

11.1.5 Pre-removal checklist

- Turn off the phone, see *How to turn on and off the Doro Aurora A30/A31*, p.17.
- Disconnect from charger or any peripherals.

11.1.6 Procedure overview

Use your finger or a similar tool to carefully pull out the **SIM card tray**.

11.1.7 Step-by-step instructions

1. Locate the groove of the **SIM card tray**.
2. Carefully pull out the **SIM card tray** using your finger or a suitable non-metallic tool.



CAUTION

Do not insert a needle or other sharp object into any hole on the device. The **SIM card tray** is designed to be removed by pulling only, no special tool is required.

11.1.8 After-removal checks

- Place the SIM card and any memory card in a safe location to avoid loss or damage.
- Check that the tray is not bent or cracked, and that no debris remains in the SIM slot.

11.1.9 Troubleshooting tips

11.1.10 Related information

- *Assemble the SIM card tray, p.84*

11.2 Disassemble the Battery Cover ASSY

11.2.1 Purpose

Removing the **Battery Cover ASSY** is typically one of the first steps in almost every internal repair on a smartphone. Most components like the battery, motherboard, camera, buttons, charging port, etc. are housed beneath the **Battery Cover ASSY**. You need to remove it to get to these.

11.2.2 Tools and equipment

Type	Reference
Plectrum	

11.2.3 Spare parts

Qty	Spare part	Information
1	Battery Cover ASSY	
1	Sealing foam battery cover	
1	Camera lens	

11.2.4 Safety and precautions

See *General precautions*, p.6.

11.2.5 Pre-removal checklist

Before proceeding with this disassembly, please ensure you have read and completed the following chapters:

- *Disassemble the SIM card tray*, p.25

11.2.6 Procedure overview

The **Battery Cover ASSY** is loosened by inserting a **Plectrum** between the **Battery Cover ASSY** and the device and carefully sliding it along the edges.

11.2.7 Step-by-step instructions

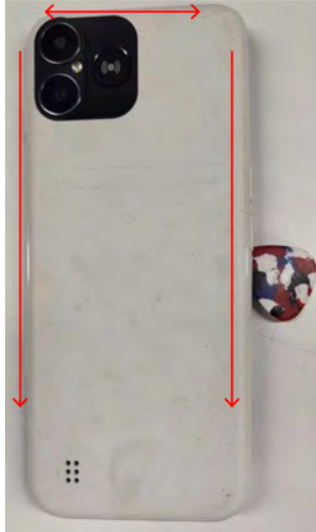
1. Insert the **Plectrum** approximately 2 mm into the gap between the **Battery Cover ASSY** and the device.



CAUTION

Inserting the **Prying lever** more than 2 mm may damage internal components.

2. Carefully pull out the **Battery Cover ASSY** using your finger or a suitable non-metallic tool.



3. Once the top and side edges are loosened, firmly push the **Battery Cover ASSY** toward the bottom of the device.



4. Once fully loosened, carefully lift off the **Battery Cover ASSY**.
5. Use a pen, without the cartridge, to push out the rear lens from the back of the **Battery Cover ASSY**.



11.2.8 After-removal checks

- Inspect the inside. Ensure no cables or components are damaged during removal.
- Inspect the **Sealing foam battery cover** (marked in the red box). If damaged, clean the affected area and replace the material as needed.



- Check that the tray is not bent or cracked, and that no debris remains in the SIM slot.

Note!

The **Sealing foam battery cover** at the bottom of the **Battery Cover ASSY** is particularly easy to damage if the **Plectrum** is inserted too far during disassembly. Inspect this area closely and ensure no tearing or deformation has occurred.

11.2.9 Troubleshooting tips

- When removing the **Battery Cover ASSY**, use the correct technique to avoid damage. Do not force the cover open, as it has a curved design that can crack or deform under pressure. Follow the step-by-step instructions carefully to remove the cover safely.

11.2.10 Related information

- *Assemble the Battery Cover ASSY, p.80*

11.3 Disassemble the Rear housing ASSY

11.3.1 Purpose

Removing the **Rear housing ASSY** is typically one of the first steps in almost every internal repair on a smartphone. Most components like the battery, motherboard, camera, buttons, charging port, etc. are housed beneath the **Rear housing ASSY**. You need to remove it to get to these.

11.3.2 Tools and equipment

Type	Reference
Screwdriver	ISO 2380, ISO 8764, ISO 10664
Prying lever	

11.3.3 Spare parts

Qty	Spare part	Information
1	Rear housing ASSY	
1	Flash PCB	
7	Screw1 lock case	
1	NFC antenna Charging coil	

11.3.4 Safety and precautions

- Wear an ESD wrist strap to prevent electrostatic discharge that can damage sensitive components.
- See *General precautions*, p.6.

11.3.5 Pre-removal checklist

Before proceeding with this disassembly, please ensure you have read and completed the following chapters:

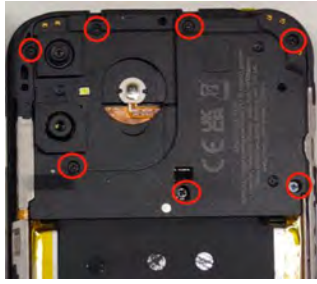
- *Disassemble the SIM card tray*, p.25
- *Disassemble the Battery Cover ASSY*, p.27

11.3.6 Procedure overview

The **Rear housing ASSY** is loosened by removing the **Screw1 lock case**.

11.3.7 Step-by-step instructions

1. Remove the **Screw1 lock case** marked red.



2. Lift off the **Rear housing ASSY**.



11.3.8 After-removal checks

- Check that no dust and debris remains in the **Rear housing ASSY**.

11.3.9 Troubleshooting tips

- When removing the **Rear housing ASSY**, use the correct technique to avoid damage. Do not force the cover open, as it has a curved design that can crack or deform under pressure. Follow the step-by-step instructions carefully to remove the cover safely.

11.3.10 Related information

- *Assemble the Rear housing ASSY*, p.75

11.4 Disassemble the Front camera 5M and the Wide angle camera 5M

11.4.1 Purpose

Removing the **Graphite sheet** provides access to cameras located behind it.

11.4.2 Tools and equipment

Not applicable.

11.4.3 Spare parts

Qty	Spare part	Information
1	Front camera 5M	
1	Wide angle camera 5M	
1	Graphite sheet	
1	Rubber sleeve front camera	
1	Rubber sleeve wide angle camera	

11.4.4 Safety and precautions

See *General precautions*, p.6.

11.4.5 Pre-removal checklist

Before proceeding with this disassembly, please ensure you have read and completed the following chapters:

- *Disassemble the SIM card tray*, p.25
- *Disassemble the Battery Cover ASSY*, p.27
- *Disassemble the Rear housing ASSY*, p.31

11.4.6 Procedure overview

Removing the **Graphite sheet** gives access to the FPC connectors for the **Front camera 5M** and the **Wide angle camera 5M**, allowing them to be disconnected.

11.4.7 Step-by-step instructions

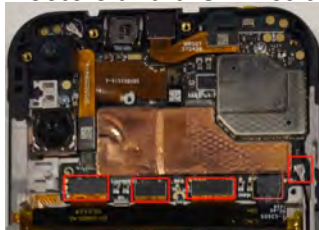
1. Remove the **Graphite sheet**.



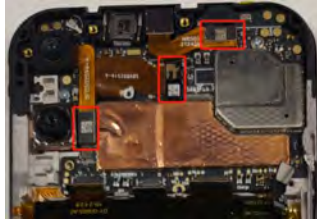
2. Disconnect the **Battery** connector.



3. Disconnect the **FPC connectors** and the **RF cable** connector.



4. Disconnect the **Front camera 5M** and the **Wide angle camera 5M** connectors.



5. Lift off the **Front camera 5M** and the **Wide angle camera 5M**.



11.4.8 After-removal checks

11.4.9 Troubleshooting tips

11.4.10 Related information

- *Assemble the Front camera 5M and the Wide angle camera 5M, p.60*

11.5 Disassemble the PCBA ASSY

11.5.1 Purpose

Removing the **PCBA ASSY** provides access to the components located behind it, and allows for replacing the **PCBA ASSY** itself.

11.5.2 Tools and equipment

Type	Reference
Screwdriver	

11.5.3 Spare parts

11.5.3.1 Spare parts

Qty	Spare part	Information
1	PCBA ASSY	
1	Pilot lamp PCB	
1	Pilot lamp board RF cable	
1	Sensor rubber sleeve	
2	Screw2 lock board	

11.5.4 Safety and precautions

See *General precautions*, p.6.

11.5.5 Pre-removal checklist

Before proceeding with this disassembly, please ensure you have read and completed the following chapters:

- *Disassemble the SIM card tray*, p.25
- *Disassemble the Battery Cover ASSY*, p.27
- *Disassemble the Rear housing ASSY*, p.31
- *Disassemble the Front camera 5M and the Wide angle camera 5M*, p.33

11.5.6 Procedure overview

The **PCBA ASSY** is loosened by removing the **Screw2 lock board** and disconnecting the **Pilot lamp board RF cable**.

11.5.7 Step-by-step instructions

1. Remove the two **Screw2 lock board**.



2. Disconnect the **Pilot lamp board RF cable**.



3. Lift off the **PCBA ASSY**.



11.5.8 After-removal checks

11.5.9 Troubleshooting tips

11.5.10 Related information

- *Assemble the PCBA ASSY, p.57*

11.6 Disassemble the Antenna bracket ASSY

11.6.1 Purpose

Disassembling the **Antenna bracket ASSY** can be done to replace malfunctioning components or to access and repair connections underneath it.

11.6.2 Tools and equipment

Type	Reference
Screwdriver	ISO 2380, ISO 8764, ISO 10664

11.6.3 Spare parts

Qty	Spare part	Information
1	Antenna bracket ASSY	
7	Screw1 lock case	
1	Antenna bracket RF base foam	
1	Connector foam	
1	Front key FPC	

11.6.4 Safety and precautions

See *General precautions*, p.6.

11.6.5 Pre-removal checklist

Before proceeding with this disassembly, please ensure you have read and completed the following chapters:

- *Disassemble the SIM card tray*, p.25
- *Disassemble the Battery Cover ASSY*, p.27
- *Disassemble the Rear housing ASSY*, p.31

11.6.6 Procedure overview

This procedure outlines the steps to loosen the **Antenna bracket ASSY** by removing the **Screw1 lock case**.

11.6.7 Step-by-step instructions

1. Remove the **Screw1 lock case**.



2. Remove the **Antenna bracket ASSY**.



11.6.8 After-removal checks

11.6.9 Troubleshooting tips

11.6.10 Related information

- *Assemble the Antenna bracket ASSY, p.73*

11.7 Disassemble the USB PCB

11.7.1 Purpose

Removing the **USB PCB** grants access to the components located behind it and enables replacement of the **USB PCB** itself.

11.7.2 Tools and equipment

Type	Reference
Screwdriver	ISO 2380, ISO 8764, ISO 10664
Tweezers	

11.7.3 Spare parts

Qty	Spare part	Information
1	USB PCB	
1	RF cable	
3	Screw2 lock board	
1	Speaker ASSY	
1	Small board conductive foam	

11.7.4 Safety and precautions

See *General precautions*, p.6.

11.7.5 Pre-removal checklist

Before proceeding with this disassembly, please ensure you have read and completed the following chapters:

- *Disassemble the SIM card tray*, p.25
- *Disassemble the Battery Cover ASSY*, p.27
- *Disassemble the Rear housing ASSY*, p.31
- *Disassemble the Antenna bracket ASSY*, p.38

11.7.6 Procedure overview

The **USB PCB** is loosened by first disconnecting all the connected cables.

11.7.7 Step-by-step instructions

1. Remove the connectors and the **RF cable** from the **USB PCB**.



2. Remove the **RF cable**.



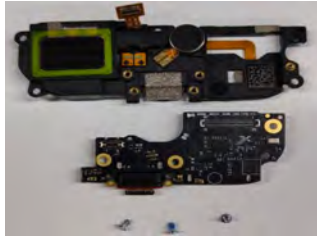
3. Lift off the **USB PCB** (marked red).



4. Remove the **Screw2 lock board**.



5. Separate the **Speaker ASSY** and the **USB PCB**.

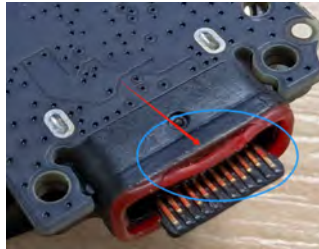


6. Remove the **Small board conductive foam** from the **Speaker ASSY**.



11.7.8 After-removal checks

- If there is any damage to the silicone, the **USB PCB** must be replaced.



11.7.9 Troubleshooting tips

11.7.10 Related information

- *Assemble the USB PCB*, p.65

11.8 Disassemble the Front key FPC

11.8.1 Purpose

Removing the **Front key FPC** and the **Light guide plate** enables replacement of these parts.

11.8.2 Tools and equipment

Type	Reference
Prying lever	
Tweezers	

11.8.3 Spare parts

Qty	Spare part	Information
1	Front key FPC	
1	Light guide plate	

11.8.4 Safety and precautions

See *General precautions*, p.6.

11.8.5 Pre-removal checklist

Before proceeding with this disassembly, please ensure you have read and completed the following chapters:

- *Disassemble the SIM card tray*, p.25
- *Disassemble the Battery Cover ASSY*, p.27
- *Disassemble the Rear housing ASSY*, p.31
- *Disassemble the USB PCB*, p.40

11.8.6 Procedure overview

11.8.7 Step-by-step instructions

1. Remove the **Front key FPC** from the **USB PCB**.





2. Remove the **Light guide plate** from the **USB PCB**.



11.8.8 After-removal checks

11.8.9 Troubleshooting tips

11.8.10 Related information

- *Assemble the Front key FPC and the Motor, p.62*

11.9 Disassemble the Motor and the Motor conductive cloth

11.9.1 Purpose

Removing the **Motor** and the **Motor conductive cloth** enables replacement of these parts.

11.9.2 Tools and equipment

Type	Reference
Prying lever	
Tweezers	

11.9.3 Spare parts

Qty	Spare part	Information
1	Motor	
1	Motor conductive cloth	
1	Speaker rubber sleeve	

11.9.4 Safety and precautions

See *General precautions*, p.6.

11.9.5 Pre-removal checklist

Before proceeding with this disassembly, please ensure you have read and completed the following chapters:

- *Disassemble the SIM card tray*, p.25
- *Disassemble the Battery Cover ASSY*, p.27
- *Disassemble the Rear housing ASSY*, p.31
- *Disassemble the PCBA ASSY*, p.36
- *Disassemble the USB PCB*, p.40
- *Disassemble the Front key FPC*, p.43

11.9.6 Procedure overview

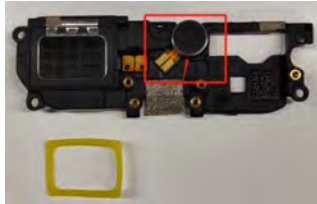
The **Speaker rubber sleeve** is first removed and then the **Motor** is disconnected and removed. Finally, the **Motor conductive cloth** is removed.

11.9.7 Step-by-step instructions

1. Remove the **Speaker rubber sleeve** using **Tweezers**.



2. First, disconnect the **Motor FPC** and then pry up the **Motor** using a **Prying lever**.



3. Remove the **Motor conductive cloth** using **Tweezers**.



11.9.8 After-removal checks

11.9.9 Troubleshooting tips

11.9.10 Related information

- *Assemble the Front key FPC and the Motor, p.62*

11.10 Disassemble the Battery

11.10.1 Purpose

This procedure explains how to remove the **Battery** to get access to the parts behind it.

To simply change the battery, please refer to *How to replace the Battery*, p.18 instead.

11.10.2 Tools and equipment

Type	Reference
Prying lever	

11.10.3 Spare parts

Qty	Spare part	Information
1	Battery	
1	Battery adhesive A	
1	Battery adhesive B	
1	Battery adhesive C	

11.10.4 Safety and precautions

- Do not puncture, crush, or bend the battery. A damaged battery can leak, catch fire, or even explode.
- Do not throw the old battery in regular trash. Recycle it according to local regulations for electronic waste and batteries.
- See *General precautions*, p.6.

11.10.5 Pre-removal checklist

Before proceeding with this disassembly, please ensure you have read and completed the following chapters:

- *Disassemble the SIM card tray*, p.25
- *Disassemble the Battery Cover ASSY*, p.27
- *Disassemble the Rear housing ASSY*, p.31

11.10.6 Procedure overview

The **Battery** is enclosed in multiple layers of protective film. When removing the **Battery**, use the tab of protective film located underneath the battery to help lift it out.

11.10.7 Step-by-step instructions

1. Locate the center plastic strip on the protective film. This is the strip used for **Battery** removal.



2. Firmly pull the remaining plastic strip to lift the **Battery** out of the battery compartment.



3. Lift off the **Battery**.



11.10.8 After-removal checks

- Check that the battery is not punctured, crushed, or bent. A damaged battery can leak, catch fire, or even explode.

11.10.9 Troubleshooting tips

11.10.10 Related information

- *Assemble the Battery*, p.69

11.11 Disassemble the Front housing ASSY

11.11.1 Purpose

These steps describe how to disassemble the **Front housing ASSY** into individual components. While this procedure may not be necessary for all repairs, it is essential when needing to access parts like the rear **Rear main camera 50M** and the buttons, which can be replaced independently.

11.11.2 Tools and equipment

Type	Reference
Prying lever	
Tweezers	

11.11.3 Spare parts

Qty	Spare part	Information
1	Front housing ASSY	
1	Rear main camera 50M	
1	Rear camera cooling silicone	
1	Receiver	
1	Volume key FPC	
1	Power Camera button FPC	
1	Main FPC	
1	Pilot lamp PCB	

11.11.4 Safety and precautions

See *General precautions*, p.6.

11.11.5 Pre-removal checklist

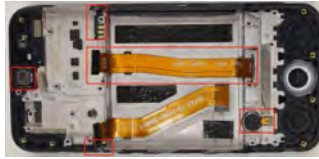
Before proceeding with this disassembly, please ensure you have read and completed the following chapters:

- *Disassemble the SIM card tray*, p.25
- *Disassemble the Battery Cover ASSY*, p.27
- *Disassemble the Rear housing ASSY*, p.31
- *Disassemble the PCBA ASSY*, p.36
- *Disassemble the USB PCB*, p.40

- *Disassemble the Battery, p.47*

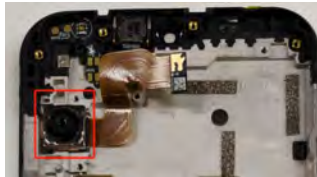
11.11.6 Procedure overview

There are several parts that can be disassembled from the **Front housing ASSY** and they can be removed separately in no particular order.

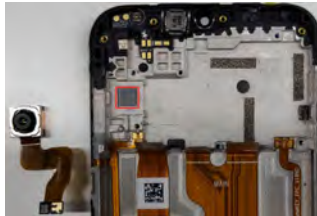


11.11.7 Step-by-step instructions

1. Use a **Prying lever** to gently pry the **Rear main camera 50M** upward.



2. Remove the **Rear camera cooling silicone** using **Tweezers**.



3. Use a **Prying lever** or **Tweezers** to pry up the **Receiver**.



4. Use a **Prying lever** or **Tweezers** to remove the **Pilot lamp PCB**.



5. Use **Tweezers** to remove the **Volume key FPC**.



6. Use **Tweezers** to remove the **Power Camera button FPC**.



7. Remove the **Main FPC**.



11.11.8 After-removal checks

11.11.9 Troubleshooting tips

11.11.10 Related information

- *Assemble the Front housing ASSY, p.54*

12. Assembly

12.1 Assemble the Front housing ASSY

12.1.1 Purpose

Describes how to correctly reinstall the parts on the **Front housing ASSY** after internal repairs or inspections.

12.1.2 Tools and equipment

No tools are required for this procedure. Tools used in earlier procedures are listed in their respective chapters.

12.1.3 Spare parts

Qty	Spare part	Information
1	Front housing ASSY	
1	Rear main camera 50M	
1	Rear camera cooling silicone	
1	Receiver	
1	Volume key FPC	
1	Power Camera button FPC	
1	Main FPC	
1	Pilot lamp PCB	

12.1.4 Safety and precautions

See *General precautions*, p.6.

12.1.5 Preassembly checklist

- **Front housing ASSY** is free from dust or debris.

12.1.6 Procedure overview

This procedure outlines the sequential steps to reassemble the **Front housing ASSY**. Each part must be correctly aligned to ensure full functionality and avoid damage during reassembly.

12.1.7 Step-by-step instructions

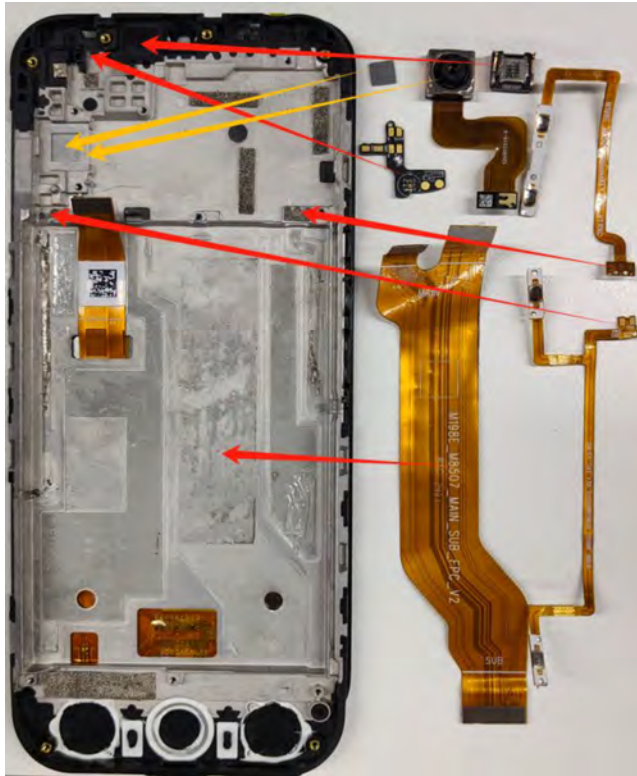
1. Assemble the **Receiver** on the **Front housing ASSY** and make sure that it is aligned according to the image.

Note!

The positioning of the **Receiver** needs to be correct (see the image) to ensure functionality.



2. Assemble the **Rear camera cooling silicone** on the **Front housing ASSY**, then assemble the **Rear main camera 50M** on the **Front housing ASSY**.
3. Assemble the **Volume key FPC** on the **Front housing ASSY**.
4. Assemble the **Power Camera button FPC** on the **Front housing ASSY**.
5. Assemble the **Main FPC** on the **Front housing ASSY**.
6. Assemble the **Pilot lamp PCB** on the **Front housing ASSY**.





12.1.8 Post-assembly checks

- All components are secure fixed in place.
- Check that there are now loose cables or connectors.

12.1.9 Troubleshooting and tips

12.1.10 Related information

- *Disassemble the Front housing ASSY, p.50*

12.2 Assemble the PCBA ASSY

12.2.1 Purpose

Description of how to correctly reassemble the **PCBA ASSY** after disassembling or changing any of the parts.

12.2.2 Tools and equipment

No tools are required for this procedure. Tools used in earlier procedures are listed in their respective chapters.

12.2.3 Spare parts

Qty	Spare part	Information
1	PCBA ASSY	
1	Pilot lamp board RF cable	
1	Sensor rubber sleeve	
2	Screw2 lock board	

12.2.4 Safety and precautions

See *General precautions*, p.6.

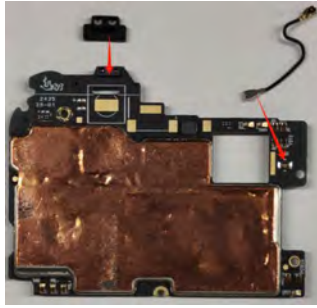
12.2.5 Preassemble checklist

12.2.6 Procedure overview

Assemble the **Sensor rubber sleeve**, connect the **Pilot lamp board RF cable**, and then fasten the PCBA ASSY with the **Screw2 lock board**.

12.2.7 Step-by-step instructions

1. Assemble the **Sensor rubber sleeve** on the **PCBA ASSY** and connect the **Pilot lamp board RF cable**.



2. Position the **PCBA ASSY** in the **Front housing ASSY**.



3. Connect the **Pilot lamp board RF cable** to the **PCBA ASSY** and arrange it according to the image.



4. Fasten the **PCBA ASSY** with the **Screw2 lock board**.



12.2.8 Post-assembly checks

- All components are secure fixed in place.
- Check that there are now loose cables or connectors

12.2.9 Troubleshooting and tips

12.2.10 Related information

- *Disassemble the PCBA ASSY*, p.36

12.3 Assemble the Front camera 5M and the Wide angle camera 5M

12.3.1 Purpose

Description of how to correctly reassemble the **Front camera 5M** and the **Wide angle camera 5M** after repair.

12.3.2 Tools and equipment

Type	Reference
Screwdriver	

12.3.3 Spare parts

Qty	Spare part	Information
1	Front camera 5M	
1	Wide angle camera 5M	
1	Graphite sheet	
1	Rubber sleeve front camera	
1	Rubber sleeve wide angle camera	

12.3.4 Safety and precautions

See *General precautions*, p.6.

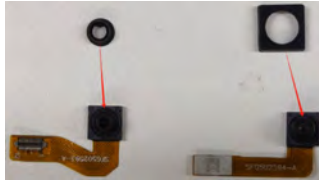
12.3.5 Preassembly checklist

12.3.6 Procedure overview

Assemble the rubber sleeves on the **Front camera 5M** and the **Wide angle camera 5M** and assemble them on the **PCBA ASSY**. Connect the **FPC's**.

12.3.7 Step-by-step instructions

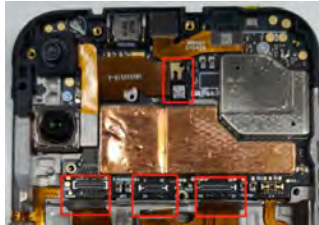
1. Assemble the **Rubber sleeve front camera** on the **Front camera 5M**.
Assemble the **Rubber sleeve wide angle camera** on the **Wide angle camera 5M**.



2. Assemble the **Front camera 5M** on the **PCBA ASSY**.
Assemble the **Wide angle camera 5M** on the **PCBA ASSY**.



3. Connect the **FPC's**.



12.3.8 Post-assembly checks

12.3.9 Troubleshooting and tips

12.3.10 Related information

- *Disassemble the Front camera 5M and the Wide angle camera 5M, p.33*

12.4 Assemble the Front key FPC and the Motor

12.4.1 Purpose

The purpose of this section is to provide detailed instructions for reassembling the **Front key FPC**, the **Motor**, and the parts and cables that are connected to them.

12.4.2 Tools and equipment

Type	Reference
Screwdriver	ISO 2380, ISO 8764, ISO 10664

12.4.3 Spare parts

Qty	Spare part	Information
1	Front key FPC	
1	Light guide plate	
1	Motor	
1	Motor conductive cloth	
1	Speaker rubber sleeve	

12.4.4 Safety and precautions

- Ensure that the work surface is clean and free of debris to prevent contamination of internal components.
- Wear an ESD wrist strap to prevent electrostatic discharge damage to sensitive electronic components.
- See *General precautions*, p.6.

12.4.5 Preassemble checklist

12.4.6 Procedure overview

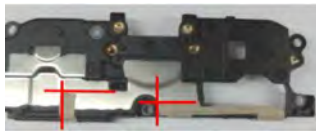
The **Front key FPC** is reassembled by aligning, positioning, and securing components in the specified order. The reassembly sequence ensures that all connections are securely fastened and properly aligned to prevent malfunction.

12.4.7 Step-by-step instructions

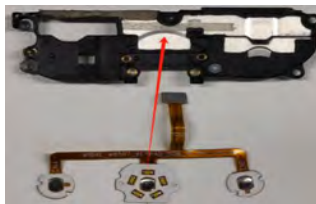
1. Assemble the **Speaker rubber sleeve**.

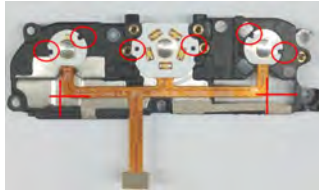


2. Glue the **Motor conductive cloth** in positions according to the images.

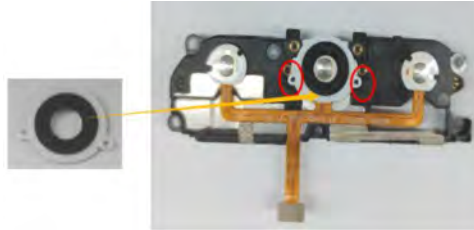


3. Align the **Front key FPC** to the **Speaker ASSY** according to the image and use glue to fasten it.

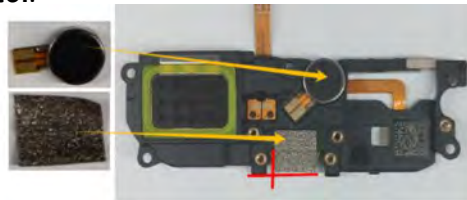




4. Align and glue the **Light guide plate** to the **Speaker ASSY**.



5. Use glue to fasten the **Motor conductive cloth** to the **Speaker ASSY**.
Assemble the **Motor**.



12.4.8 Post-assembly checks

12.4.9 Troubleshooting and tips

12.4.10 Related information

- *Disassemble the Front key FPC, p.43*
- *Disassemble the Motor and the Motor conductive cloth, p.45*

12.5 Assemble the USB PCB

12.5.1 Purpose

Description of how to correctly reassemble the **USB PCB** after repair.

12.5.2 Tools and equipment

Type	Reference
Screwdriver	
Glue	

12.5.3 Spare parts

Qty	Spare part	Information
1	USB PCB	
1	RF cable	
3	Screw2 lock board	
1	Speaker ASSY	
1	Small board conductive foam	

12.5.4 Safety and precautions

See *General precautions*, p.6.

12.5.5 Preassembly checklist

12.5.6 Procedure overview

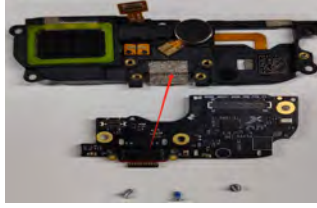
This procedure describes how to prepare the **USB PCB** and how to fasten it on the **Speaker ASSY**. The assembly is then assembled in the **Front housing ASSY**.

12.5.7 Step-by-step instructions

1. Glue the **Small board conductive foam** to the **USB PCB**.



2. Position the **USB PCB** on the **Speaker ASSY** and make sure to align the screw holes.



3. Fasten the **USB PCB** with the **Screw2 lock board**.



4. Connect the **FPC**.



5. Assemble the **USB PCB** and **Speaker ASSY** assembly to the **Front housing ASSY**.



12.5.8 Post-assembly checks

12.5.9 Troubleshooting and tips

12.5.10 Related information

- *Disassemble the USB PCB*, p.40

12.6 Assemble the Main FPC and the RF cable

12.6.1 Purpose

Description of how to correctly connect the **Main FPC** and the **RF cable**

12.6.2 Tools and equipment

Type	Reference
Prying lever	
Glue	

12.6.3 Spare parts

Qty	Spare part	Information
1	Main FPC	
3	RF cable	

12.6.4 Safety and precautions

See *General precautions*, p.6.

12.6.5 Preassembly checklist

12.6.6 Procedure overview

This procedure outlines the steps to connect the **Main FPC** and the **RF cable**.

12.6.7 Step-by-step instructions

1. Connect the **RF cable** to the **PCBA ASSY** and the **USB PCB**.



2. Arrange the **RF cable** according to the image.



3. Arrange the **RF cable** according to the image.



4. Connect the **Main FPC** to the **PCBA ASSY**.



12.6.8 Post-assembly checks

12.6.9 Troubleshooting and tips

12.6.10 Related information

- *Disassemble the Front housing ASSY, p.50*

12.7 Assemble the Battery

12.7.1 Purpose

Description of how to correctly reassemble the **Battery**. This is usually done after disassembling or changing any of the parts.

12.7.2 Tools and equipment

No tools are required for this procedure. Tools used in earlier procedures are listed in their respective chapters.

12.7.3 Spare parts

Qty	Spare part	Information
1	Battery	

12.7.4 Safety and precautions

- Do not puncture, crush, or bend the battery. A damaged battery can leak, catch fire, or even explode.
- Do not throw the old battery in regular trash. Recycle it according to local regulations for electronic waste and batteries.
- See *General precautions*, p.6.

12.7.5 Preassembly checklist

12.7.6 Procedure overview

This procedure outlines the steps to position the **Battery**, secure it with the protective film, and connect it to the **PCBA ASSY**.

12.7.7 Step-by-step instructions

1. Position the **Battery** in the battery compartment.



2. Connect the **Battery FPC** to the designated connector (marked red) on the **PCBA ASSY**.



3. Glue the **Graphite sheet** to the **PCBA ASSY**.





12.7.8 Post-assembly checks

12.7.9 Troubleshooting and tips

12.7.10 Related information

- *Disassemble the Battery, p.47*

12.8 Assemble the Antenna bracket ASSY

12.8.1 Purpose

Description of how to correctly reassemble the **Antenna bracket ASSY**.

12.8.2 Tools and equipment

Type	Reference
Screwdriver	

12.8.3 Spare parts

Qty	Spare part	Information
1	Antenna bracket ASSY	
7	Screw1 lock case	
1	Antenna bracket RF base foam	
1	Connector foam	
1	Front key FPC	

12.8.4 Safety and precautions

See *General precautions*, p.6.

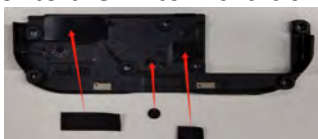
12.8.5 Preassembly checklist

12.8.6 Procedure overview

The assembly process involves first positioning the **Antenna bracket RF base foam**, the **Connector foam** and the **Front key FPC** onto the **Antenna bracket ASSY**. Then, the **Antenna bracket ASSY** is assembled onto the device.

12.8.7 Step-by-step instructions

1. Assemble the **Antenna bracket RF base foam**, the **Connector foam** and the **Front key FPC** onto the **Antenna bracket ASSY**.



2. Position the **Antenna bracket ASSY** on the device and make sure to align the screw holes.



3. Fasten the **Antenna bracket ASSY** with the **Screw1** lock case.



12.8.8 Post-assembly checks

12.8.9 Troubleshooting and tips

12.8.10 Related information

- *Disassemble the Antenna bracket ASSY, p.38*

12.9 Assemble the Rear housing ASSY

12.9.1 Purpose

Description of how to correctly reassemble the **Rear housing ASSY**.

12.9.2 Tools and equipment

Type	Reference
Screwdriver	

12.9.3 Spare parts

Qty	Spare part	Information
1	Rear housing ASSY	
1	Flash PCB	
1	Graphite sheet	
1	Receiver ground conductive foam	
1	Flash board cooling silicone	
1	NFC antenna Charging coil	
1	NFC antenna Charging coil	

12.9.4 Safety and precautions

See *General precautions*, p.6.

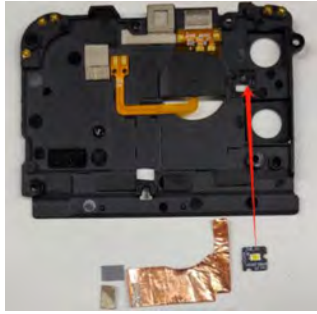
12.9.5 Preassemble checklist

12.9.6 Procedure overview

The reassembly process involves first attaching the **Flash PCB** and other parts to the **Rear housing ASSY**. Finally, the assembly is fastened in place using **Screw1 lock case**.

12.9.7 Step-by-step instructions

1. Assemble the **Flash PCB** on the **Rear housing ASSY**.



2. Assemble the **Graphite sheet** on the **Rear housing ASSY**.



3. Glue the **Receiver ground conductive foam** and the **Flash board cooling silicone** onto the **Rear housing ASSY**.



4. Glue the **NFC antenna Charging coil** to the **Rear housing ASSY**.



5. Position the **Rear housing ASSY** onto the device and make sure to align the screw holes.



6. Fasten the **Rear housing ASSY** with the **Screw1** lock case.



12.9.8 Post-assembly checks

12.9.9 Troubleshooting and tips

12.9.10 Related information

- *Disassemble the Rear housing ASSY, p.31*

12.10 Assemble the Battery Cover ASSY

12.10.1 Purpose

Assembling the **Battery Cover ASSY** restores the back of the phone.

12.10.2 Tools and equipment

No tools are required for this procedure. Tools used in earlier procedures are listed in their respective chapters.

12.10.3 Spare parts

Qty	Spare part	Information
1	Battery Cover ASSY	
1	Sealing foam battery cover	
1	Camera lens	

12.10.4 Safety and precautions

See *General precautions*, p.6.

12.10.5 Preassemble checklist

- Inspect the **Sealing foam battery cover** (marked in the red box).
If damaged, clean the affected area and replace the material as needed.

**Note!**

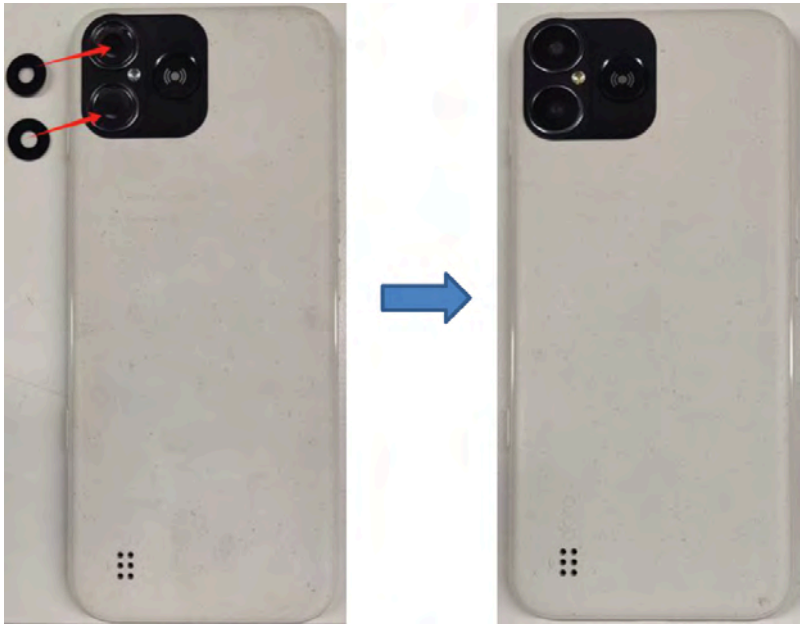
The **Sealing foam battery cover** at the bottom of the **Battery Cover ASSY** is particularly easy to damage if the **Plectrum** is inserted too far during disassembly. Inspect this area closely and ensure no tearing or deformation has occurred.

12.10.6 Procedure overview

This procedure outlines the steps to align and secure the **Battery Cover ASSY** onto the device.

12.10.7 Step-by-step instructions

1. Glue the **Camera lens** onto the designated area on the **Battery Cover ASSY**.



2. Align the device with the **Battery Cover ASSY**. Start by positioning and securing the bottom edge by pushing in place.



3. Press the rest of the **Battery Cover ASSY** into place.



12.10.8 Post-assembly checks

- Confirm that the **Battery Cover ASSY** is fully seated and flush with the device frame, with no visible gaps along the edges.

-
- Press any external buttons (e.g., power button, volume keys) to verify they move freely and are not obstructed by the cover.
 - Verify that openings for ports (USB, audio jack, SIM tray, etc.) are correctly aligned and not blocked by the back cover.

12.10.9 Troubleshooting and tips

Issue	Possible cause	Solution
Back cover doesn't snap in fully	Clip misalignment	Remove and try again, starting at one corner

12.10.10 Related information

- *Disassemble the Battery Cover ASSY*, p.27

12.11 Assemble the SIM card tray

12.11.1 Purpose

This is typically the final step in completing the full assembly of the smartphone.

12.11.2 Tools and equipment

Not applicable.

12.11.3 Spare parts

Qty	Spare part	Information
1	SIM card tray	

12.11.4 Safety and precautions

See *General precautions*, p.6.

12.11.5 Preassembly checklist

12.11.6 Procedure overview

This procedure outlines the steps to insert the **SIM card tray** and ensure it is properly aligned with the device surface.

12.11.7 Step-by-step instructions

1. Locate the groove of the **SIM card tray**.
2. Insert the **SIM card tray** and make sure that it is flush with the surface of the device.

12.11.8 Post-assembly checks

12.11.9 Troubleshooting and tips

12.11.10 Related information

- *Disassemble the SIM card tray*, p.25

13. Troubleshooting



CAUTION

This section is for technicians and repair professionals only.

You can retrieve diagnostic information by running a failure analysis on the device. This process identifies faults and error codes that help determine the appropriate repair actions.

To run the failure analysis tool:

1. Open the **Dialer** (Phone app).
2. Enter ***##*38#*##**.
3. Select **Item test** to test a specific function or component, then follow the on-screen instructions.

Press the back button to exit the tool.

13.1 Reset software

For the full manual with all functions and features, see *Appendix*, p.86.

13.2 Device boot options

1. Make sure your device is turned off.
2. Press and hold the **Power button** and the **Volume Up button**. Keep them both pressed until the **Select Boot Mode**-screen appears, which could take up to five seconds (it might take the phone up to one minute to enter the system recovery).
3. Use the **Volume Up button** to select **Recovery Mode**, then use the **Volume Down button** to confirm .
4. Use the **Volume Up** or **Volume Down button** to select **Wipe data/factory reset**, then use the **Power button** to confirm .
5. Use the **Volume Up** or **Volume Down button** to select **Factory data reset**. Again, confirm tapping the **Power button**.
Once the action is complete, all the way at the bottom left, in white small text, the message **Data wipe complete** will briefly appear. The **Recovery system menu** will appear once again.
6. Use the **Volume Up** or **Volume Down button** to select **Reboot system now**.
7. Press the **Power button** to confirm and wait for your device to restart.

14. Appendix

The Aurora A30/A31 user manual covers phone functions, settings, and instructions on how to update the software and firmware. The manual is available at: <https://www.doro.com/>

Additional related documentation is available online at: <https://www.doro.com/repair/>

English

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