

# Doro Leva E10/11

## Repair Manual DFB-0600

English



# Contents

|                                                                             |    |
|-----------------------------------------------------------------------------|----|
| 1. Repair disclaimer .....                                                  | 4  |
| 2. About this document .....                                                | 5  |
| 2.1 Scope .....                                                             | 5  |
| 2.2 Who Can Use This Document .....                                         | 5  |
| 2.3 How the Guide Is Structured .....                                       | 5  |
| 3. General precautions .....                                                | 5  |
| 3.1 Use caution before you start to repair .....                            | 6  |
| 3.2 Batteries .....                                                         | 6  |
| 3.3 Glass handling .....                                                    | 7  |
| 3.4 Tools and fixtures .....                                                | 7  |
| 4. Tools and materials required .....                                       | 8  |
| 4.1 Basic tools .....                                                       | 8  |
| 4.2 Materials .....                                                         | 10 |
| 5. Spare parts list .....                                                   | 10 |
| 6. Exploded view .....                                                      | 11 |
| 7. How to turn on and off the Doro Leva E10/11 .....                        | 12 |
| 8. Repair instructions .....                                                | 13 |
| 8.1 How to replace the Battery LEVA DBAE-1150A .....                        | 13 |
| 8.2 How to replace the LCD 2.4 .....                                        | 16 |
| 9. Disassembly .....                                                        | 20 |
| 9.1 Disassemble the Battery Cover .....                                     | 20 |
| 9.2 Disassemble the Battery LEVA DBAE-1150A .....                           | 23 |
| 9.3 Disassemble the Assembly Lower housing .....                            | 25 |
| 9.4 Disassemble the PCBA Assembly HW1011 .....                              | 28 |
| 9.5 Disassemble the Upper housing assembly .....                            | 31 |
| 9.6 Disassemble the components from the PCBA Assembly<br>HW1011 .....       | 34 |
| 9.7 Disassemble the LCD 2.4 .....                                           | 38 |
| 9.8 Disassemble the Sealing rubber cradle connectors and Dome<br>foil ..... | 41 |
| 9.9 Disassemble the Speaker and Motor .....                                 | 45 |
| 10. Assembly .....                                                          | 47 |
| 10.1 Assemble the Speaker and Motor .....                                   | 47 |
| 10.2 Assemble the Sealing rubber cradle connectors and Dome foil ..         | 50 |
| 10.3 Assemble the LCD 2.4 .....                                             | 53 |
| 10.4 Assemble the components of the PCBA Assembly HW1011 .....              | 56 |

---

|                                                |    |
|------------------------------------------------|----|
| 10.5 Assemble the Upper housing assembly.....  | 59 |
| 10.6 Assemble the PCBA Assembly HW1011 .....   | 62 |
| 10.7 Assemble the Assembly Lower housing ..... | 64 |
| 10.8 Assemble the Battery LEVA DBAE-1150A..... | 67 |
| 10.9 Assemble the Battery Cover .....          | 69 |
| 11. Troubleshooting .....                      | 71 |
| 11.1 Reset software .....                      | 71 |
| 12. Appendix .....                             | 71 |
| 12.1 Parts location .....                      | 72 |
| 12.2 Block diagram.....                        | 73 |

# **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 Leva E10/11 . 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

### 2.3 How the Guide Is Structured

The document is divided into the following main sections:

- General precautions
- Tools and materials required
- 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.

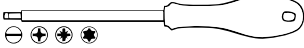
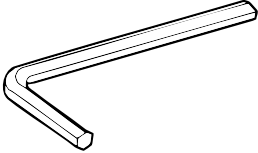
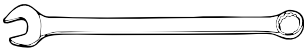
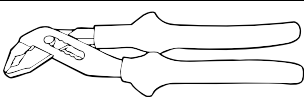
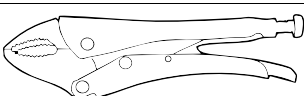
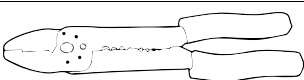
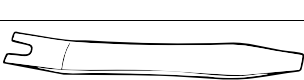
**CAUTION**

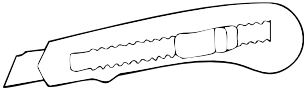
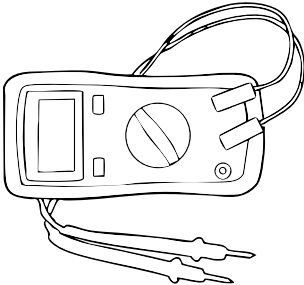
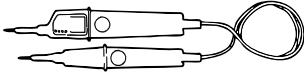
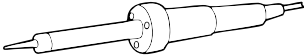
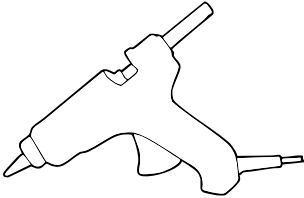
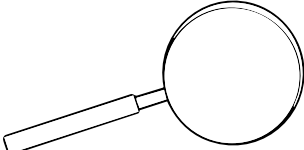
- We don't recommend repairs without the correct tools and fixtures.
- Improper use of tools and fixtures may result in injury, damage to the product, tools, fixtures, or spare parts.

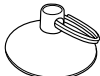
## 4. Tools and materials required

### 4.1 Basic tools

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

| Tool type                                                                 | Illustration<br>(informative example)                                               | Reference                     |
|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------|
| Screwdriver (for slotted heads, cross recess or hexalobular recess heads) |    | ISO 2380, ISO 8764, ISO 10664 |
| Hexagon socket key                                                        |    | ISO 2936                      |
| Combination wrench                                                        |    | ISO 7738                      |
| Combination pliers                                                        |    | ISO 5746                      |
| Half round nose pliers                                                    |    | ISO 5745                      |
| Diagonal cutters                                                          |   | ISO 5749                      |
| Multigrip pliers (multiple slip joint pliers)                             |  | ISO 8976                      |
| Locking pliers                                                            |  |                               |
| Combination pliers for wire stripping and terminal crimping               |  |                               |
| Prying lever                                                              |  |                               |

| Tool type                                      | Illustration<br>(informative example)                                               | Reference |
|------------------------------------------------|-------------------------------------------------------------------------------------|-----------|
| Tweezers                                       |    |           |
| Hammer, steel head                             |    | ISO 15601 |
| Utility knife (cutter)<br>with snap-off blades |    |           |
| Multimeter                                     |    |           |
| Voltage tester                                 |    |           |
| Soldering iron                                 |    |           |
| Hot glue gun                                   |   |           |
| Magnifying glass                               |  |           |

|                          |                                                                                   |  |
|--------------------------|-----------------------------------------------------------------------------------|--|
| Pick                     |   |  |
| Suction cup with keyring |  |  |

## 4.2 Materials

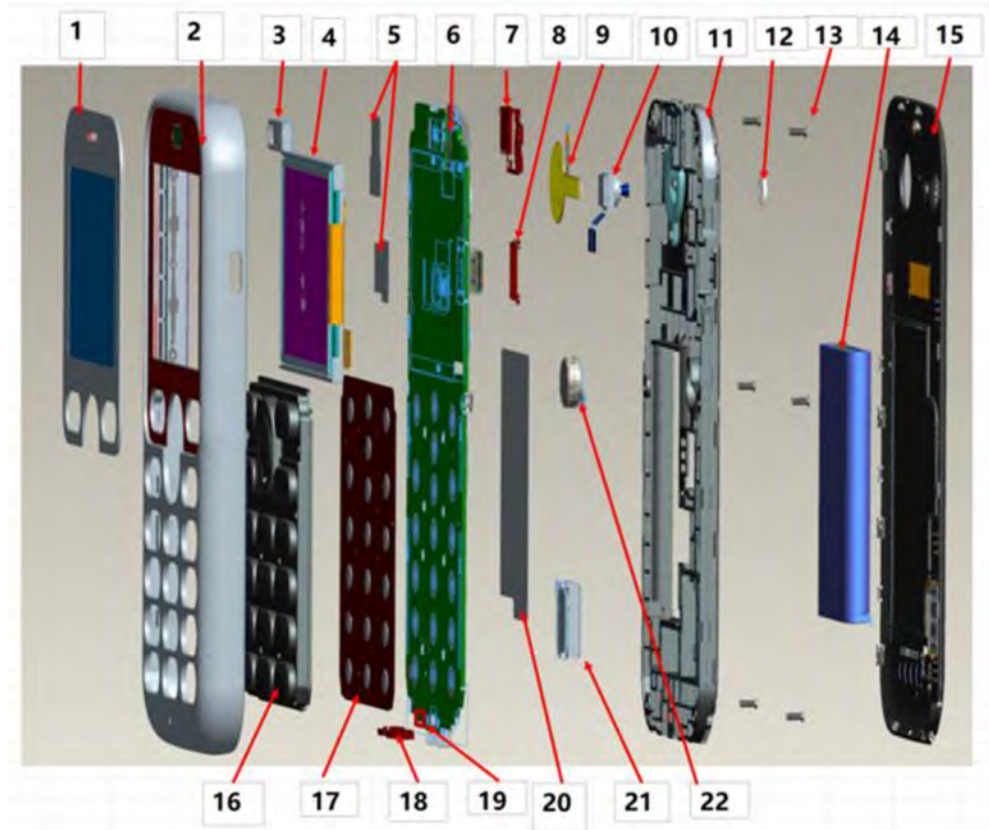
| Material type | Illustration<br>(informative example) | Reference |
|---------------|---------------------------------------|-----------|
| Isopropanol   |                                       |           |

## 5. Spare parts list

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 WIN GX2773 GLASS BK Doro RoHS | 1   |
| 2  | Upper housing assembly            | 1   |
| 3  | Receiver                          | 1   |
| 4  | LCD 2.4                           | 1   |
| 5  | USB mylar                         | 1   |
| 6  | PCBA Assembly HW1011              | 1   |
| 7  | Sealing rubber 3.5mm jack         | 1   |
| 8  | Sealing rubber USB jack           | 1   |
| 9  | FPC SOS                           | 1   |
| 10 | Camera                            | 1   |

| No | Part name                        | Qty |
|----|----------------------------------|-----|
| 11 | Assembly Lower housing           | 1   |
| 12 | B camera lens                    | 1   |
| 13 | Screw 1.6*0.45*3.5               | 6   |
| 14 | Battery LEVA DBAE-1150A          | 1   |
| 15 | Battery Cover                    | 1   |
| 16 | Keypad                           | 1   |
| 17 | Dome foil                        | 1   |
| 18 | Sealing rubber cradle connectors | 1   |
| 19 | Main Microphone Foam             | 1   |
| 20 | IMEI paper                       | 1   |
| 21 | Speaker                          | 1   |
| 22 | Motor                            | 1   |

## 7. How to turn on and off the Doro Leva E10/11

Before performing any repair, the device must be turned off to prevent damage to internal components and to ensure safety during disassembly.

After the repair is completed and the device is fully reassembled, you will need to turn it on again to verify that it is functioning as expected.

### Turn on the phone

1. Press and hold  until the display lights up.

### Turn off the phone

1. Press and hold .
2. Press **OK** to turn off the phone.

---

## 8. Repair instructions

### 8.1 How to replace the Battery LEVA DBAE-1150A

#### 8.1.1 Purpose

This procedure explains how to replace the **Battery LEVA DBAE-1150A** of the device.

#### 8.1.2 Prerequisites

The following disassembly sections needs to be done before continuing

- *Disassemble the Battery Cover*, p.20

#### 8.1.3 Tools and equipment

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

#### 8.1.4 Spare parts

| Qty | Spare part                     | Information |
|-----|--------------------------------|-------------|
| 1   | <b>Battery LEVA DBAE-1150A</b> |             |

#### 8.1.5 Safety and precautions

See *General precautions*, p.5.

- Do not puncture or bend the **Battery LEVA DBAE-1150A**.
- Do not throw the old battery in regular trash. Recycle it according to local regulations for electronic waste and batteries.

#### 8.1.6 Procedure overview

This procedure shows how to remove the **Battery LEVA DBAE-1150A** and install a new. No tools are needed.

#### 8.1.7 Step-by-step instructions

##### Remove the Battery LEVA DBAE-1150A

1. Insert your finger into the notch above the **Battery LEVA DBAE-1150A**.



2. Push the **Battery LEVA DBAE-1150A** outward, then lift it out.

### Note!

You can now access the **SIM card** slot, if a SIM card is installed. To remove the **SIM card**, slide it sideways out of the slot. To install a new **SIM card**, slide it into the empty slot.

### Install a new battery

- Align the **Battery LEVA DBAE-1150A** with its compartment, with the contacts facing inward.
- Slide the **Battery LEVA DBAE-1150A** into place.



### 8.1.8 Reassembly reference

### 8.1.9 Troubleshooting and tips

## 8.2 How to replace the LCD 2.4

### 8.2.1 Purpose

Replace the **LCD 2.4** if it is cracked, unresponsive, or has display issues such as dead pixels or backlight failure.

### 8.2.2 Prerequisites

The following disassembly sections needs to be done before continuing

- *Disassemble the Battery Cover*, p.20.
- *Disassemble the Battery LEVA DBAE-1150A*, p.23
- *Disassemble the Assembly Lower housing*, p.25
- *Disassemble the PCBA Assembly HW1011*, p.28

### 8.2.3 Tools and equipment

| Type         | Illustration<br>(informative example) | Reference |
|--------------|---------------------------------------|-----------|
| Tweezers     |                                       |           |
| Prying lever |                                       |           |

### 8.2.4 Spare parts

| Qty | Spare part | Information |
|-----|------------|-------------|
| 1   | LCD 2.4    |             |

### 8.2.5 Safety and precautions

See *General precautions*, p.5.

- Avoid touching the display surface to prevent smudges or damage.

### 8.2.6 Procedure overview

To replace the LCD, first disconnect the flex cable. Then remove the damaged LCD. Install the new LCD and reconnect the flex cable.

### 8.2.7 Step-by-step instructions

#### Remove the LCD

1. Open the ZIF connector that holds the **LCD 2.4** flex cable in place. Use **Tweezers**.



2. Disconnect the flex cable and feed it through the opening to the front side.
3. Separate the **LCD 2.4** from the **PCBA Assembly HW1011** using a Prying lever.

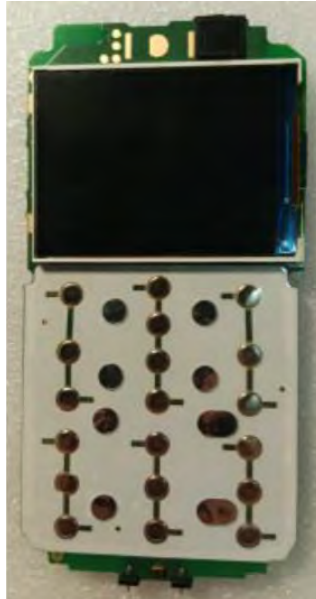


## Install the new LCD

1. Feed the new **LCD 2.4** flex cable through the opening to the back side of the **PCBA Assembly HW1011**.



2. Place the new **LCD 2.4** onto the **PCBA Assembly HW1011**.



3. Insert the flex cable into the ZIF connector. Align the white line on the cable with the edge of the connector to ensure correct insertion depth.



4. Close the ZIF connector to secure the cable.



## 8.2.8 Reassembly reference

## 8.2.9 Troubleshooting and tips

---

## 9. Disassembly

### 9.1 Disassemble the Battery Cover

#### 9.1.1 Purpose

Removing the **Battery Cover** is typically the first step in disassembling the phone. It allows access to the **Battery LEVA DBAE-1150A**, **SIM card**, and internal screws that secure the **Assembly Lower housing**.

#### 9.1.2 Tools and equipment

| Type         | Illustration<br>(informative example) | Reference                                            |
|--------------|---------------------------------------|------------------------------------------------------|
| Prying lever |                                       | Can be replaced by a plastic <b>Pick</b> or plectrum |

#### 9.1.3 Spare parts

| Qty | Spare part    | Information |
|-----|---------------|-------------|
| 1   | Battery Cover |             |

#### 9.1.4 Safety and precautions

See *General precautions*, p.5.

- Do not insert the tool too deep to avoid scratching internal components.
- Avoid forcing the cover to prevent breaking plastic clips.

#### 9.1.5 Pre-removal checklist

- Turn off the phone.
- Disconnect from charger or any peripherals.

#### 9.1.6 Procedure overview

Remove the back cover by inserting a **Prying lever** into the side notch and gently releasing the clips along the edges.

#### 9.1.7 Step-by-step instructions

1. Turn the phone so that the back side faces up.
2. Locate the notch on the left side of the phone.



3. Insert a **Prying lever** into the notch and gently slide it along the edges to lift the **Battery Cover**.



### 9.1.8 After-removal checks

- Check that no clips are broken.

### 9.1.9 Troubleshooting tips

- **The Battery Cover is hard to remove:** Make sure you are using the notch on the left side of the phone. Slide the Prying lever gently along the edge.

### 9.1.10 Related information

---

## 9.2 Disassemble the Battery LEVA DBAE-1150A

### 9.2.1 Purpose

Removing the **Battery LEVA DBAE-1150A** is necessary to safely continue with internal repairs. It disconnects the power source and prevents short circuits or electrical damage. The battery also blocks access to components like the **SIM card** and other internal parts.

### 9.2.2 Tools and equipment

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

### 9.2.3 Spare parts

| Qty | Spare part              | Information |
|-----|-------------------------|-------------|
| 1   | Battery LEVA DBAE-1150A |             |

### 9.2.4 Safety and precautions

See *General precautions*, p.5.

- Do not puncture or bend the **Battery LEVA DBAE-1150A**.
- Avoid contact with the battery terminals.

### 9.2.5 Pre-removal checklist

- Turn off the phone.
- *Disassemble the Battery Cover*, p.20.

### 9.2.6 Procedure overview

### 9.2.7 Step-by-step instructions

1. Insert your finger into the notch above the **Battery LEVA DBAE-1150A**.



2. Push the **Battery LEVA DBAE-1150A** outward, then lift it out.

### Note!

You can now access the **SIM card**, if one is installed. To remove the **SIM card**, slide it sideways into the battery compartment.

## 9.2.8 After-removal checks

- Make sure the battery compartment is clean and undamaged.
- Check the **Battery LEVA DBAE-1150A** for any signs of swelling or damage.

## 9.2.9 Troubleshooting tips

### 9.2.10 Related information

## 9.3 Disassemble the Assembly Lower housing

### 9.3.1 Purpose

Removing the **Assembly Lower housing** is required to access and replace internal components. It is a key step in most repairs after the battery has been removed.

### 9.3.2 Tools and equipment

| Type         | Illustration<br>(informative example) | Reference                                |
|--------------|---------------------------------------|------------------------------------------|
| Screwdriver  |                                       |                                          |
| Prying lever |                                       | Can be replaced by a<br>Pick or plectrum |

### 9.3.3 Spare parts

| Qty | Spare part             | Information |
|-----|------------------------|-------------|
| 1   | Assembly Lower housing |             |
| 6   | Screw 1.6*0.45*3.5     |             |

### 9.3.4 Safety and precautions

See *General precautions*, p.5.

- Do not use metal tools to pry open the housing, as they may damage the casing or internal components.
- Avoid applying excessive force that could crack the plastic.

### 9.3.5 Pre-removal checklist

- Turn off the phone.
- *Disassemble the Battery Cover*, p.20.
- *Disassemble the Battery LEVA DBAE-1150A*, p.23.

### 9.3.6 Procedure overview

The **Assembly Lower housing** is held in place by six screws and plastic clips. The screws must be removed first, the housing can then be gently pried open using a **Prying lever**.

### 9.3.7 Step-by-step instructions

1. Remove the six (6) **Screw 1.6\*0.45\*3.5**.



2. Insert the **Prying lever** at the bottom of the device and gently pry open the **Assembly Lower housing**. Start at the bottom, continue along the sides, and work your way around.



3. Remove the **Assembly Lower housing**.



### 9.3.8 After-removal checks

- Inspect the **Assembly Lower housing** for cracks or damage.

### 9.3.9 Troubleshooting tips

- **The screws are hard to remove:** Use the correct screwdriver size and apply downward pressure while turning.

### 9.3.10 Related information

---

## 9.4 Disassemble the PCBA Assembly HW1011

### 9.4.1 Purpose

Removing the **PCBA Assembly HW1011** allows access to the **LCD 2.4**, **Keypad** and other internal parts. It is a required step in full disassembly or when replacing the **PCBA Assembly HW1011** itself.

### 9.4.2 Tools and equipment

| Type     | Illustration<br>(informative example) | Reference |
|----------|---------------------------------------|-----------|
| Tweezers |                                       |           |

### 9.4.3 Spare parts

| Qty | Spare part           | Information |
|-----|----------------------|-------------|
| 1   | PCBA Assembly HW1011 |             |

### 9.4.4 Safety and precautions

See *General precautions*, p.5.

- Avoid touching components directly.

### 9.4.5 Pre-removal checklist

- Turn off the phone.
- *Disassemble the Battery Cover*, p.20.
- *Disassemble the Battery LEVA DBAE-1150A*, p.23
- *Disassemble the Assembly Lower housing*, p.25

### 9.4.6 Procedure overview

In this step, you remove the **PCBA Assembly HW1011** from the **Upper housing assembly**. The **PCBA Assembly HW1011** can be lifted using **Tweezers**.

### 9.4.7 Step-by-step instructions

1. Grip the edge of the **PCBA Assembly HW1011** using **Tweezers**.



2. Lift the **PCBA Assembly HW1011** from the **Upper housing assembly**.



#### 9.4.8 After-removal checks

- Check that the **PCBA Assembly HW1011** is intact and undamaged.

## **9.4.9 Troubleshooting tips**

### **9.4.10 Related information**

---

## 9.5 Disassemble the Upper housing assembly

### 9.5.1 Purpose

Removing the **Upper housing assembly** gives access to the **Receiver** and **Keypad**, and is necessary to complete the disassembly of the device or replace damaged front components.

### 9.5.2 Tools and equipment

| Type     | Illustration<br>(informative example) | Reference |
|----------|---------------------------------------|-----------|
| Tweezers |                                       |           |

### 9.5.3 Spare parts

| Qty | Spare part             | Information |
|-----|------------------------|-------------|
| 1   | Upper housing assembly |             |
| 1   | Keypad                 |             |
| 1   | Receiver               |             |

### 9.5.4 Safety and precautions

See *General precautions*, p.5.

- Avoid applying excessive force when prying.

### 9.5.5 Pre-removal checklist

- Turn off the phone.
- *Disassemble the Battery Cover*, p.20.
- *Disassemble the Battery LEVA DBAE-1150A*, p.23
- *Disassemble the Assembly Lower housing*, p.25
- *Disassemble the PCBA Assembly HW1011*, p.28

### 9.5.6 Procedure overview

In this step, you remove the **Keypad** and the **Receiver** from the **Upper housing assembly**.

### 9.5.7 Step-by-step instructions

1. Remove the **Keypad** from the **Upper housing assembly**.



2. Grip the **Receiver** using **Tweezers**.



3. Pry the **Receiver** loose carefully and remove it.



### 9.5.8 After-removal checks

- Check that the **Receiver** is intact and undamaged.

### 9.5.9 Troubleshooting tips

### 9.5.10 Related information

## 9.6 Disassemble the components from the PCBA Assembly HW1011

### 9.6.1 Purpose

Removing these components is necessary when replacing individual parts connected to the **PCBA Assembly HW1011**. Disassembling them allows for targeted replacement or further breakdown of the device.

### 9.6.2 Tools and equipment

| Type     | Illustration<br>(informative example) | Reference |
|----------|---------------------------------------|-----------|
| Tweezers |                                       |           |

### 9.6.3 Spare parts

| Qty | Spare part                | Information |
|-----|---------------------------|-------------|
| 1   | Camera                    |             |
| 1   | FPC SOS                   |             |
| 1   | Sealing rubber USB jack   |             |
| 1   | Sealing rubber 3.5mm jack |             |

### 9.6.4 Safety and precautions

See *General precautions*, p.5.

- Avoid pulling on cables or components with force.
- Do not touch connector pins or contact surfaces.

### 9.6.5 Pre-removal checklist

- Turn off the phone.
- *Disassemble the Battery Cover*, p.20.
- *Disassemble the Battery LEVA DBAE-1150A*, p.23
- *Disassemble the Assembly Lower housing*, p.25
- *Disassemble the PCBA Assembly HW1011*, p.28

### 9.6.6 Procedure overview

This section covers the removal of small but critical components from the **PCBA Assembly HW1011**. The **Camera** and **FPC SOS** are connected using

ZIF connectors. The **Sealing rubber USB jack** and **Sealing rubber 3.5mm jack** can be gently lifted using **Tweezers**.

## 9.6.7 Step-by-step instructions

### 9.6.7.1 Remove the Camera

1. Open the ZIF connector that holds the **Camera** flex cable in place. Use **Tweezers**.



2. Disconnect the flex cable.
3. Remove the **Camera** using **Tweezers**.



### 9.6.7.2 Remove the FPC SOS

1. Open the ZIF connector that holds the **FPC SOS** flex cable in place. Use **Tweezers**.



2. Disconnect the flex cable.
3. Remove the **FPC SOS** using **Tweezers**.



### 9.6.7.3 Remove the Sealing rubber USB jack and the Sealing rubber 3.5mm jack

1. Grip the **Sealing rubber USB jack** with **Tweezers** and lift it from its position.



2. Grip the **Sealing rubber 3.5mm jack** with **Tweezers** and lift it from its position.



### 9.6.8 After-removal checks

- Check that all ZIF connectors are undamaged.
- Check that rubber parts are intact and not deformed.

### 9.6.9 Troubleshooting tips

- **The flex cable does not come out easily:** Make sure the ZIF connector is fully open.
- **The connector is hard to open:** Use a finer-tipped **Tweezers** and apply gentle upward pressure.

### 9.6.10 Related information

---

## 9.7 Disassemble the LCD 2.4

### 9.7.1 Purpose

Removing the **LCD 2.4** is necessary when replacing a broken or malfunctioning screen, or when disassembling the phone completely.

### 9.7.2 Tools and equipment

| Type         | Illustration<br>(informative example) | Reference |
|--------------|---------------------------------------|-----------|
| Tweezers     |                                       |           |
| Prying lever |                                       |           |

### 9.7.3 Spare parts

| Qty | Spare part | Information |
|-----|------------|-------------|
| 1   | LCD 2.4    |             |

### 9.7.4 Safety and precautions

See *General precautions*, p.5.

- Avoid touching the display surface to prevent smudges or damage.

### 9.7.5 Pre-removal checklist

- Turn off the phone.
- *Disassemble the Battery Cover*, p.20.
- *Disassemble the Battery LEVA DBAE-1150A*, p.23
- *Disassemble the Assembly Lower housing*, p.25
- *Disassemble the PCBA Assembly HW1011*, p.28

### 9.7.6 Procedure overview

In this step, you disconnect the **LCD 2.4** flex cable from the **PCBA Assembly HW1011** and remove the **LCD 2.4** itself.

### 9.7.7 Step-by-step instructions

1. Open the ZIF connector that holds the **LCD 2.4** flex cable in place. Use **Tweezers**.



2. Disconnect the flex cable and feed it through the opening to the front side.
3. Separate the **LCD 2.4** from the **PCBA Assembly HW1011** using a **Prying lever**.



### 9.7.8 After-removal checks

- Check that the flex cable is not torn or bent.

### 9.7.9 Troubleshooting tips

- **The flex cable does not come out easily:** Make sure the ZIF connector is fully open.
- **The cable is hard to grip:** Use angled **Tweezers** for better control

### 9.7.10 Related information

## 9.8 Disassemble the Sealing rubber cradle connectors and Dome foil

### 9.8.1 Purpose

Removing the **Sealing rubber cradle connectors** and **Dome foil** is necessary to access and replace components beneath them, or to fully disassemble the front section of the phone.

### 9.8.2 Tools and equipment

| Type     | Illustration<br>(informative example) | Reference |
|----------|---------------------------------------|-----------|
| Tweezers |                                       |           |

### 9.8.3 Spare parts

| Qty | Spare part                       | Information |
|-----|----------------------------------|-------------|
| 1   | Sealing rubber cradle connectors |             |
| 1   | Dome foil                        |             |

### 9.8.4 Safety and precautions

See *General precautions*, p.5.

- Avoid touching adhesive surfaces with fingers.

### 9.8.5 Pre-removal checklist

- Turn off the phone.
- *Disassemble the Battery Cover*, p.20.
- *Disassemble the Battery LEVA DBAE-1150A*, p.23
- *Disassemble the Assembly Lower housing*, p.25
- *Disassemble the PCBA Assembly HW1011*, p.28

### 9.8.6 Procedure overview

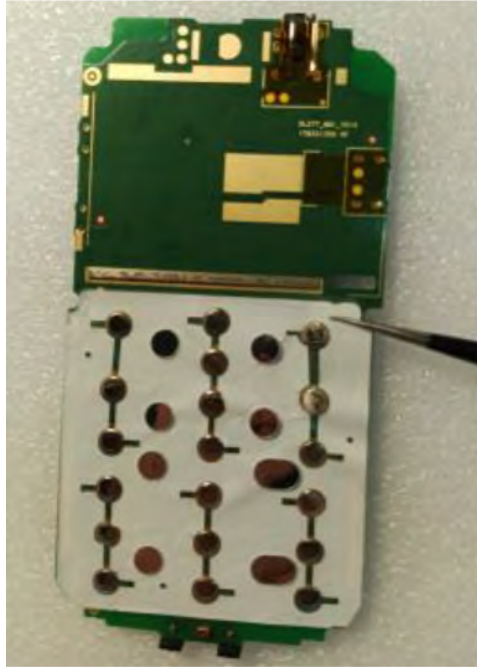
In this step, you remove the **Dome foil** and **Sealing rubber cradle connectors** from the **PCBA Assembly HW1011**.

---

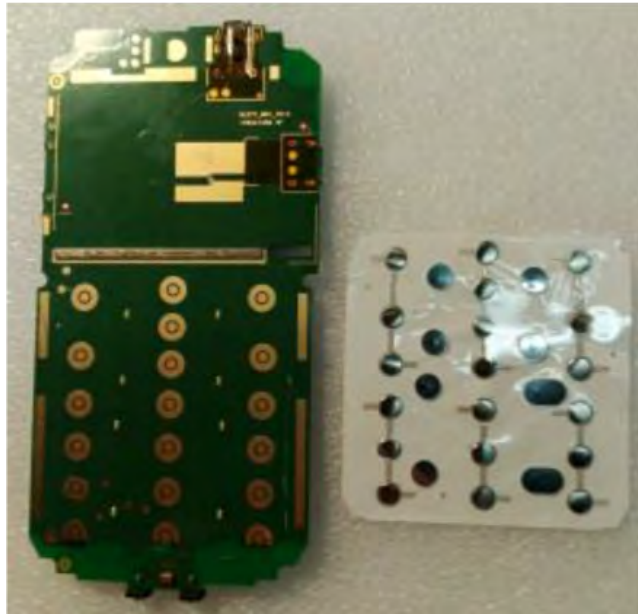
## 9.8.7 Step-by-step instructions

### Remove the Dome foil

1. Grip one of the upper corners of the **Dome foil** using **Tweezers**.



2. Pull the **Dome foil** carefully downwards until it is fully removed.



## Remove the Sealing rubber cradle connectors

1. Remove the **Sealing rubber cradle connectors** using **Tweezers**.



### **9.8.8 After-removal checks**

- Check that no adhesive residue remains on the **PCBA Assembly HW1011**.

### **9.8.9 Troubleshooting tips**

- **The Dome foil does not come loose:** Try lifting a different corner.

### **9.8.10 Related information**

---

## 9.9 Disassemble the Speaker and Motor

### 9.9.1 Purpose

Removing the **Speaker** and **Motor** is necessary when replacing defective components or performing a full disassembly of the phone.

### 9.9.2 Tools and equipment

| Type     | Illustration<br>(informative example) | Reference |
|----------|---------------------------------------|-----------|
| Tweezers |                                       |           |

### 9.9.3 Spare parts

| Qty | Spare part | Information |
|-----|------------|-------------|
| 1   | Speaker    |             |
| 1   | Motor      |             |

### 9.9.4 Safety and precautions

See *General precautions*, p.5.

- Avoid applying excessive force when prying.

### 9.9.5 Pre-removal checklist

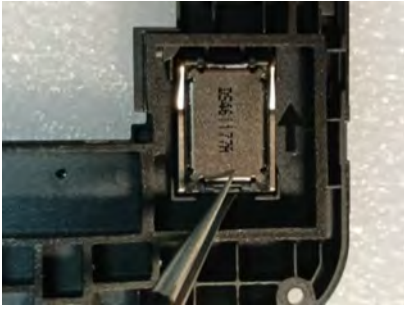
- Turn off the phone.
- *Disassemble the Battery Cover*, p.20.
- *Disassemble the Battery LEVA DBAE-1150A*, p.23
- *Disassemble the Assembly Lower housing*, p.25

### 9.9.6 Procedure overview

In this step, you remove the **Speaker** and **Motor** from the rear housing. Both components are placed in cavities and can be lifted out using **Tweezers**.

### 9.9.7 Step-by-step instructions

1. Remove the **Speaker** from the **Assembly Lower housing** by using **Tweezers**.



2. Remove the **Motor** from the **Assembly Lower housing** by using **Tweezers**.



### 9.9.8 After-removal checks

- Check the cavities in the **Assembly Lower housing** for dust, debris, or adhesive.
- Ensure the **Speaker** and **Motor** are intact and not damaged.

### 9.9.9 Troubleshooting tips

- **The component feels stuck:** Rock it gently from side to side before lifting

### 9.9.10 Related information

---

## 10. Assembly

### 10.1 Assemble the Speaker and Motor

#### 10.1.1 Purpose

Describes how to correctly reinstall the **Speaker** and **Motor** after internal repairs or inspections.

#### 10.1.2 Tools and equipment

| Type     | Illustration<br>(informative example) | Reference |
|----------|---------------------------------------|-----------|
| Tweezers |                                       |           |

#### 10.1.3 Spare parts

| Qty | Spare part | Information |
|-----|------------|-------------|
| 1   | Speaker    |             |
| 1   | Motor      |             |

#### 10.1.4 Safety and precautions

See *General precautions*, p.5.

#### 10.1.5 Preassembly checklist

#### 10.1.6 Procedure overview

In this step, you place the **Speaker** and **Motor** back into their designated slots in the **Assembly Lower housing**.

#### 10.1.7 Step-by-step instructions

1. Place the **Motor** into its slot in the **Assembly Lower housing** using **Tweezers**.



2. Place the **Speaker** into its slot in the **Assembly Lower housing** using **Tweezers**.



### 10.1.8 Post-assembly checks

- Ensure that neither part is loose or tilted.

### **10.1.9 Troubleshooting and tips**

- **The component does not sit properly:** Check for debris or misalignment in the slot.

### **10.1.10 Related information**

## 10.2 Assemble the Sealing rubber cradle connectors and Dome foil

### 10.2.1 Purpose

Describes how to correctly reinstall the **Sealing rubber cradle connectors** and **Dome foil** after internal repairs or inspections

### 10.2.2 Tools and equipment

| Type     | Illustration<br>(informative example) | Reference |
|----------|---------------------------------------|-----------|
| Tweezers |                                       |           |

### 10.2.3 Spare parts

| Qty | Spare part                       | Information |
|-----|----------------------------------|-------------|
| 1   | Sealing rubber cradle connectors |             |
| 1   | Dome foil                        |             |

### 10.2.4 Safety and precautions

See *General precautions*, p.5.

- Ensure correct orientation before placement.
- Avoid touching adhesive areas or contact points with fingers.

### 10.2.5 Preassembly checklist

### 10.2.6 Procedure overview

In this step, you reattach the **Sealing rubber cradle connectors** and the **Dome foil** onto the **PCBA Assembly HW1011**.

### 10.2.7 Step-by-step instructions

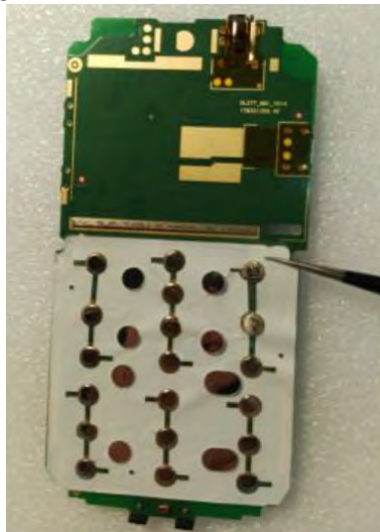
#### Install the Sealing rubber cradle connectors

1. Place the **Sealing rubber cradle connectors** onto the **PCBA Assembly HW1011** using **Tweezers**.



## Install the Dome foil

1. Align the **Dome foil** with its position on the **PCBA Assembly HW1011**.
2. Press the **Dome foil** down, starting from one side and working across to ensure full adhesion.



## 10.2.8 Post-assembly checks

### 10.2.9 Troubleshooting and tips

- Check that the **Dome foil** lies flat and does not lift at the edges.

### 10.2.10 Related information

---

## 10.3 Assemble the LCD 2.4

### 10.3.1 Purpose

Describes how to correctly reinstall the **LCD 2.4** after internal repairs or inspections.

### 10.3.2 Tools and equipment

| Type     | Illustration<br>(informative example) | Reference |
|----------|---------------------------------------|-----------|
| Tweezers |                                       |           |

### 10.3.3 Spare parts

| Qty | Spare part | Information |
|-----|------------|-------------|
| 1   | LCD 2.4    |             |

### 10.3.4 Safety and precautions

See *General precautions*, p.5.

- Do not bend or press the **LCD 2.4** panel.
- Avoid touching the display surface and contact points.
- Ensure the flex cable is not twisted during installation.

### 10.3.5 Preassembly checklist

### 10.3.6 Procedure overview

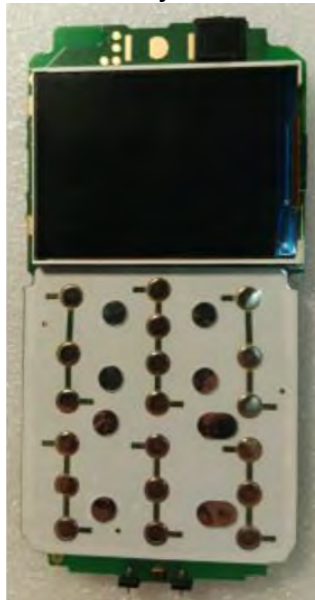
In this step, you place the **LCD 2.4** back onto the **PCBA Assembly HW1011** and reconnect the flex cable using the ZIF connector.

### 10.3.7 Step-by-step instructions

1. Feed the **LCD 2.4** flex cable through the opening to the back side of the **PCBA Assembly HW1011**.



2. Place the **LCD 2.4** on the **PCBA Assembly HW1011**. Align it using the locator lines on the **PCBA Assembly HW1011**.



3. Insert the flex cable into the ZIF connector. Align the white line on the cable with the edge of the connector to ensure correct insertion depth.



4. Close the ZIF connector to secure the cable.



### 10.3.8 Post-assembly checks

- Check that the flex cable is fully inserted and the ZIF connector is closed.
- Check that the LCD is aligned and seated properly.

### 10.3.9 Troubleshooting and tips

- **The cable does not go in fully:** Check that the ZIF connector is fully open before inserting it.
- **You see smudges or dust:** Gently clean the **LCD 2.4** surface before continuing reassembly.

### 10.3.10 Related information

---

## 10.4 Assemble the components of the PCBA Assembly HW1011

### 10.4.1 Purpose

Describes how to correctly reinstall the **Camera**, **FPC SOS** , **Sealing rubber USB jack** and **Sealing rubber 3.5mm jack** after internal repairs or inspections.

### 10.4.2 Tools and equipment

| Type     | Illustration<br>(informative example) | Reference |
|----------|---------------------------------------|-----------|
| Tweezers |                                       |           |

### 10.4.3 Spare parts

| Qty | Spare part                | Information |
|-----|---------------------------|-------------|
| 1   | Camera                    |             |
| 1   | FPC SOS                   |             |
| 1   | Sealing rubber USB jack   |             |
| 1   | Sealing rubber 3.5mm jack |             |

### 10.4.4 Safety and precautions

See *General precautions*, p.5.

- Make sure all components are aligned before pressing them into place.
- Ensure the flex cable is not twisted during installation.

### 10.4.5 Preassembly checklist

### 10.4.6 Procedure overview

In this step, you reinstall the **Camera**, **FPC SOS**, **Sealing rubber USB jack** and **Sealing rubber 3.5mm jack** onto the **PCBA Assembly HW1011**. Flex cable components are inserted into ZIF connectors. Rubber parts are placed directly onto their positions on the board.

## 10.4.7 Step-by-step instructions

### 10.4.7.1 Install the Sealing rubber USB jack and Sealing rubber 3.5mm jack

1. Place the **Sealing rubber USB jack** and **Sealing rubber 3.5mm jack** onto their positions on the **PCBA Assembly HW1011** using **Tweezers**.



### 10.4.7.2 Install the FPC SOS

1. Place the **FPC SOS** on the **PCBA Assembly HW1011** using **Tweezers**.
2. Insert the flex cable into the ZIF connector. Align the white line on the cable with the edge of the connector to ensure correct insertion depth.



#### 10.4.7.3 Install the Camera

1. Place the **Camera** on the **PCBA Assembly HW1011** using **Tweezers**.
2. Insert the flex cable into the ZIF connector. Align the white line on the cable with the edge of the connector to ensure correct insertion depth.



3. Close the ZIF connector to secure the cable.

#### 10.4.8 Post-assembly checks

- Ensure that each flex cable is inserted up to the white line.
- Ensure that each ZIF connector is closed.

#### 10.4.9 Troubleshooting and tips

- **The flex cable does not stay in place:** Ensure the ZIF connector is fully open before inserting it.
- **The rubber parts do not sit flat:** Check for dirt or misalignment and re-position carefully.

#### 10.4.10 Related information

---

## 10.5 Assemble the Upper housing assembly

### 10.5.1 Purpose

Describes how to correctly reinstall the **Upper housing assembly** after internal repairs or inspections

### 10.5.2 Tools and equipment

| Type     | Illustration<br>(informative example) | Reference |
|----------|---------------------------------------|-----------|
| Tweezers |                                       |           |

### 10.5.3 Spare parts

| Qty | Spare part             | Information |
|-----|------------------------|-------------|
| 1   | Upper housing assembly |             |
| 1   | Keypad                 |             |
| 1   | Receiver               |             |

### 10.5.4 Safety and precautions

See *General precautions*, p.5.

### 10.5.5 Preassemble checklist

### 10.5.6 Procedure overview

In this step, you reinstall the **Keypad** and the **Receiver** onto the front housing. The **Keypad** is placed into position, and the **Receiver** is inserted into its slot and pressed gently into place.

### 10.5.7 Step-by-step instructions

#### Install the Receiver

1. Place the **Receiver** into its slot in the **Upper housing assembly** and gently press it into place using **Tweezers**.



## Install the Keypad

1. Place the **Keypad** into the **Upper housing assembly** using **Tweezers**.



## 10.5.8 Post-assembly checks

- Check that the **Keypad** is flat and aligned.

- Check that the **Receiver** is seated in its slot and aligned with the housing.

### 10.5.9 Troubleshooting and tips

- **The Receiver is misaligned:** Remove and adjust with **Tweezers** before pressing down.
- **The Receiver does not stay in place:** Ensure the housing is clean and press gently until it adheres.

### 10.5.10 Related information

---

## 10.6 Assemble the PCBA Assembly HW1011

### 10.6.1 Purpose

Describes how to correctly reinstall the **PCBA Assembly HW1011** after internal repairs or inspections.

### 10.6.2 Tools and equipment

| Type     | Illustration<br>(informative example) | Reference |
|----------|---------------------------------------|-----------|
| Tweezers |                                       |           |

### 10.6.3 Spare parts

| Qty | Spare part           | Information |
|-----|----------------------|-------------|
| 1   | PCBA Assembly HW1011 |             |

### 10.6.4 Safety and precautions

See *General precautions*, p.5.

- Avoid touching component surfaces or contact points.

### 10.6.5 Preassembly checklist

### 10.6.6 Procedure overview

In this step, you place the **PCBA Assembly HW1011** back into the **Upper housing assembly**.

### 10.6.7 Step-by-step instructions

1. Place the **PCBA Assembly HW1011** into the **Upper housing assembly** using **Tweezers**.



2. Make sure the **PCBA Assembly HW1011** sits evenly and is properly aligned with the frame.

#### 10.6.8 Post-assembly checks

- Check that the **PCBA Assembly HW1011** is flat and aligned with the housing.

#### 10.6.9 Troubleshooting and tips

- **The PCBA Assembly HW1011 does not sit flat:** Check for debris or mis-aligned parts beneath it.
- **The PCBA Assembly HW1011 is difficult to position:** Tilt it slightly and lower it carefully into place.

#### 10.6.10 Related information

---

## 10.7 Assemble the Assembly Lower housing

### 10.7.1 Purpose

Describes how to correctly reinstall the **Assembly Lower housing** after internal repairs or inspections.

### 10.7.2 Tools and equipment

| Type     | Illustration<br>(informative example) | Reference |
|----------|---------------------------------------|-----------|
| Tweezers |                                       |           |

### 10.7.3 Spare parts

| Qty | Spare part         | Information |
|-----|--------------------|-------------|
| 1   | Screwdriver        |             |
| 6   | Screw 1.6*0.45*3.5 |             |

### 10.7.4 Safety and precautions

See *General precautions*, p.5.

- Avoid pinching any parts when pressing **Assembly Lower housing** into place.
- Use only gentle, even pressure to avoid damaging clips or plastic edges.

### 10.7.5 Preassemble checklist

### 10.7.6 Procedure overview

In this step, you attach the **Assembly Lower housing** back onto the phone. It is secured with plastic clips and screws.

### 10.7.7 Step-by-step instructions

1. Align the **Assembly Lower housing** with the rest of the phone.
2. Press it gently into place, starting from one side and working around the edges until all clips are engaged.



3. Insert and tighten the six (6) screws to secure the **Assembly Lower housing**.



### 10.7.8 Post-assembly checks

- Check that all screws are installed.
- Ensure that the housing is fully closed and no parts are pinched.

### 10.7.9 Troubleshooting and tips

- **The Assembly Lower housing does not close properly:** Check for mis-aligned components or cables obstructing the fit.
- **A clip does not snap into place:** Apply gentle pressure closer to the clip and check alignment.

### 10.7.10 Related information

---

## 10.8 Assemble the Battery LEVA DBAE-1150A

### 10.8.1 Purpose

Describes how to correctly reinstall the **Battery LEVA DBAE-1150A** after internal repairs or inspections.

### 10.8.2 Tools and equipment

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

### 10.8.3 Spare parts

| Qty | Spare part              | Information |
|-----|-------------------------|-------------|
| 1   | Battery LEVA DBAE-1150A |             |

### 10.8.4 Safety and precautions

See *General precautions*, p.5.

- Check that the **Battery LEVA DBAE-1150A** is clean and undamaged before installation.
- Align the **Battery LEVA DBAE-1150A** correctly to avoid damaging the contacts.

### 10.8.5 Preassembly checklist

### 10.8.6 Procedure overview

In this step, you insert the **Battery LEVA DBAE-1150A** back into the phone. The **Battery LEVA DBAE-1150A** slides into position and clicks into place without tools.

### 10.8.7 Step-by-step instructions

#### Note!

If you want to install a SIM card, slide the SIM card into its slot before reattaching the **Battery LEVA DBAE-1150A**.

- Align the **Battery LEVA DBAE-1150A** with its compartment, with the contacts facing inward.
- Slide the **Battery LEVA DBAE-1150A** into place.



### 10.8.8 Post-assembly checks

### 10.8.9 Troubleshooting and tips

- **The Battery LEVA DBAE-1150A does not fit:** Check that it is oriented correctly.

### 10.8.10 Related information

---

## 10.9 Assemble the Battery Cover

### 10.9.1 Purpose

Describes how to correctly reinstall the **Battery Cover** after internal repairs or inspections.

### 10.9.2 Tools and equipment

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

### 10.9.3 Spare parts

| Qty | Spare part    | Information |
|-----|---------------|-------------|
| 1   | Battery Cover |             |

### 10.9.4 Safety and precautions

See *General precautions*, p.5.

- Do not use excessive force when pressing the **Battery Cover** into place.

### 10.9.5 Preassemble checklist

### 10.9.6 Procedure overview

In this step, you reattach the **Battery Cover** cover by aligning it with the back of the phone and pressing along the edges until all clips snap into place.

### 10.9.7 Step-by-step instructions

1. Align the **Battery Cover** with the back of the phone.
2. Press along the edges until all clips click into place.



### 10.9.8 Post-assembly checks

### 10.9.9 Troubleshooting and tips

- **The Battery Cover does not snap into place:** Check for obstructions or misalignment.
- **One side will not close:** Press gently and evenly around the edge until it locks.

### 10.9.10 Related information

---

## 11. 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. Press **\*#15963#** .
2. Select **Item test** to test a specific function or component, then follow the on-screen instructions.

Press **Return** to exit the tool.

### 11.1 Reset software

For the full manual with all functions and features, see *Appendix*, p.71.

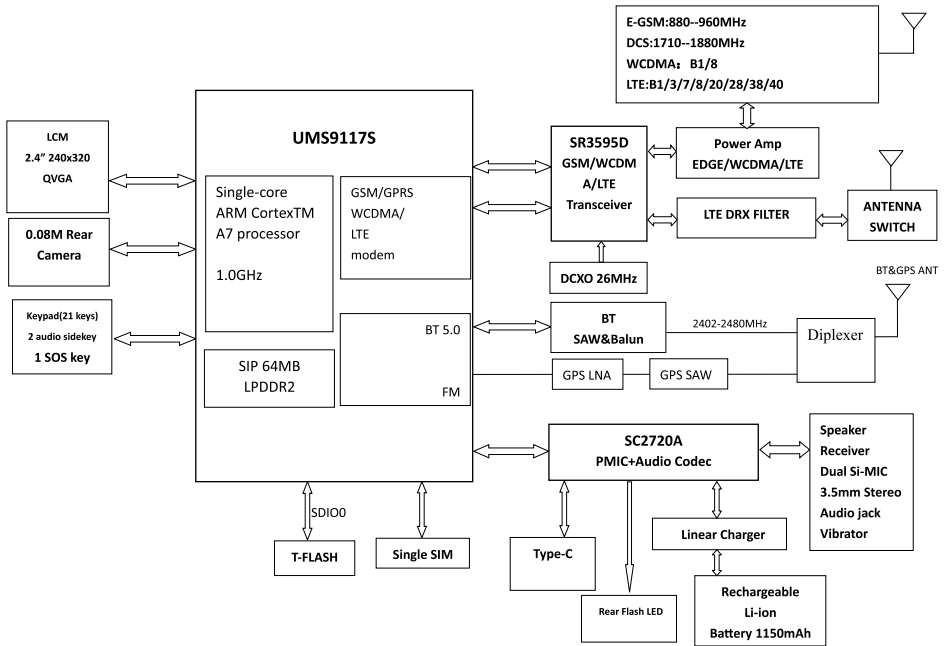
## 12. Appendix

The Leva E10/11 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/>



## 12.2 Block diagram



English

Version 1.0

©2025 Doro AB. All rights reserved.

[www.doro.com](http://www.doro.com)

REV 23281 – STR