

Doro Leva X10

Repair Manual DFB-0580

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 Leva X10. 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.

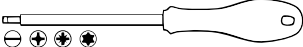
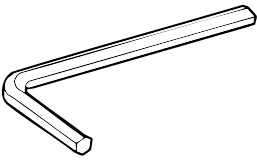
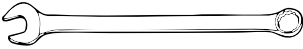



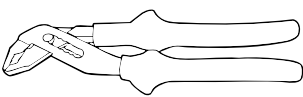
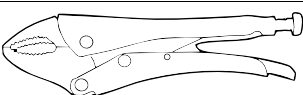


**CAUTION**



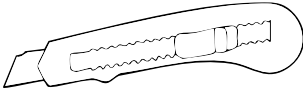
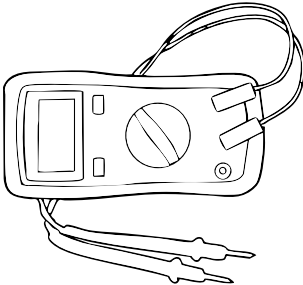
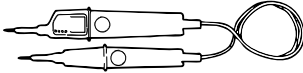
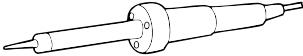
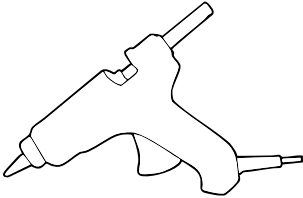
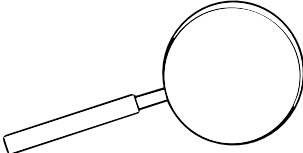
- We don't recommend repairs without the correct tools and fixtures.
- Improper use of tools and fixtures may result in injury, damage to the product, tools, fixtures, or spare parts.



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

Pick		
Suction cup with keyring		

4.2 Materials

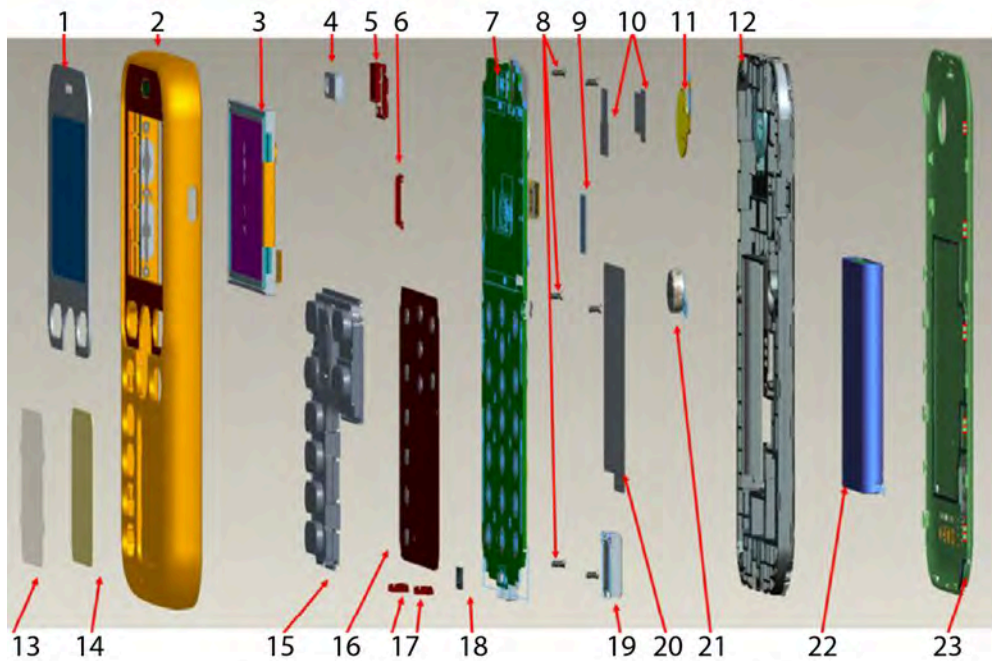
Material type	Illustration (informative example)	Reference
Isopropanol		

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 GX2771 GLASS BK Doro RoHS	1
2	Assembly Upper housing	1
3	LCD 2.4	1
4	Receiver	1
5	Sealing rubber 3.5mm jack	1
6	Sealing rubber USB jack	1
7	PCBA Assembly HW2011	1
8	Screw T1.6*4.0	6
9	RF shielding esd	1
10	USB mylar	1
11	FPC SOS	1
12	Lower housing assembly	1
13	Sheet plastic cover	1

No	Part name	Qty
14	Sheet paper	1
15	Keypad	1
16	Dome	1
17	Sealing rubber cradle connectors	1
18	Main Microphone Foam	1
19	Speaker	1
20	IMEI paper	1
21	Motor	1
22	Battery LEVA DBAE-1150A	1
23	Battery Cover	1

7. How to turn on and off the Doro Leva X10

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 the power button until the display lights up.

Turn off the phone

1. Press and hold the power button.
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	Battery LEVA DBAE-1150A	

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 Lower housing assembly*, p.25
- *Disassemble the PCBA Assembly HW2011*, p.28

8.2.3 Tools and equipment

Type	Illustration (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 HW2011** using a Prying lever.

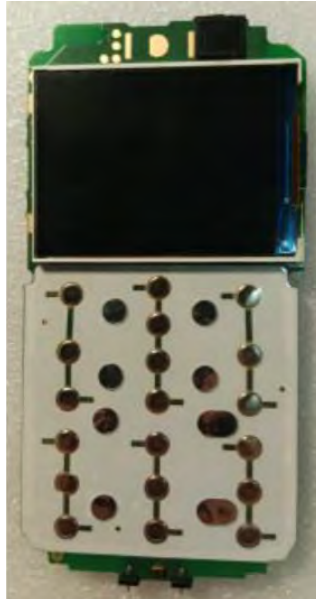


Install the new LCD

1. Feed the new **LCD 2.4** flex cable through the opening to the back side of the **PCBA Assembly HW2011**.



2. Place the new **LCD 2.4** onto the **PCBA Assembly HW2011**.



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 **Lower housing assembly**.

9.1.2 Tools and equipment

Type	Illustration (informative example)	Reference
Prying lever		Can be replaced by a plastic Pick 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 Lower housing assembly

9.3.1 Purpose

Removing the **Lower housing assembly** 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 (informative example)	Reference
Screwdriver		
Prying lever		Can be replaced by a Pick or plectrum

9.3.3 Spare parts

Qty	Spare part	Information
1	Lower housing assembly	
6	Screw T1.6*4.0	

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 **Lower housing assembly** 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 T1.6*4.0**.



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



3. Remove the **Lower housing assembly**.



9.3.8 After-removal checks

- Inspect the **Lower housing assembly** 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 HW2011

9.4.1 Purpose

Removing the **PCBA Assembly HW2011** 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 HW2011** itself.

9.4.2 Tools and equipment

Type	Illustration (informative example)	Reference
Tweezers		

9.4.3 Spare parts

Qty	Spare part	Information
1	PCBA Assembly HW2011	

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 Lower housing assembly*, p.25

9.4.6 Procedure overview

In this step, you remove the **PCBA Assembly HW2011** from the **Assembly Upper housing**. The **PCBA Assembly HW2011** can be lifted using **Tweezers**.

9.4.7 Step-by-step instructions

1. Grip the edge of the using **Tweezers**.



2. Lift the **PCBA Assembly HW2011** from the **Assembly Upper housing**.



9.4.8 After-removal checks

- Check that the **PCBA Assembly HW2011** is intact and undamaged.

9.4.9 Troubleshooting tips

9.4.10 Related information

9.5 Disassemble the Assembly Upper housing

9.5.1 Purpose

Removing the **Assembly Upper housing** 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 (informative example)	Reference
Tweezers		

9.5.3 Spare parts

Qty	Spare part	Information
1	Assembly Upper housing	
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 Lower housing assembly*, p.25
- *Disassemble the PCBA Assembly HW2011*, p.28

9.5.6 Procedure overview

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

9.5.7 Step-by-step instructions

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



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 HW2011

9.6.1 Purpose

Removing these components is necessary when replacing individual parts connected to the **PCBA Assembly HW2011**. Disassembling them allows for targeted replacement or further breakdown of the device.

9.6.2 Tools and equipment

Type	Illustration (informative example)	Reference
Tweezers		

9.6.3 Spare parts

Qty	Spare part	Information
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 Lower housing assembly*, p.25
- *Disassemble the PCBA Assembly HW2011*, p.28

9.6.6 Procedure overview

This section covers the removal of small but critical components from the **PCBA Assembly HW2011**. The **FPC SOS** is connected with a ZIF connector which must be unlocked before removal. 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 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**.



9.6.7.2 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 the ZIF connector is 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 (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 Lower housing assembly*, p.25
- *Disassemble the PCBA Assembly HW2011*, p.28

9.7.6 Procedure overview

In this step, you disconnect the **LCD 2.4** flex cable from the **PCBA Assembly HW2011** 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 HW2011** 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

9.8.1 Purpose

Removing the **Sealing rubber cradle connectors** and **Dome** 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 (informative example)	Reference
Tweezers		

9.8.3 Spare parts

Qty	Spare part	Information
1	Sealing rubber cradle connectors	
1	Dome	

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 Lower housing assembly*, p.25
- *Disassemble the PCBA Assembly HW2011*, p.28

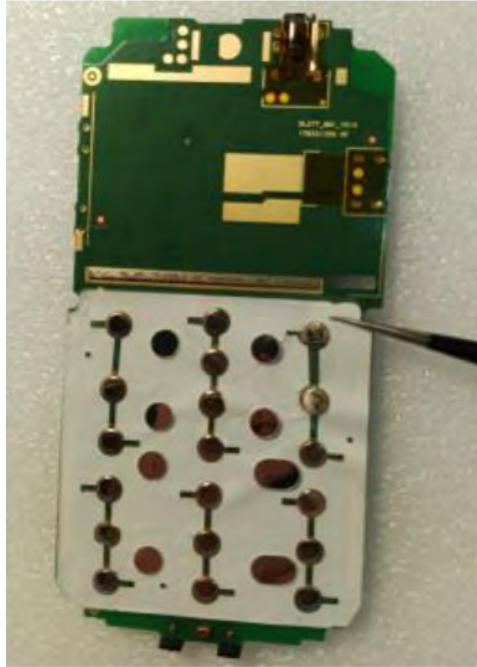
9.8.6 Procedure overview

In this step, you remove the **Dome** and **Sealing rubber cradle connectors** from the **PCBA Assembly HW2011**.

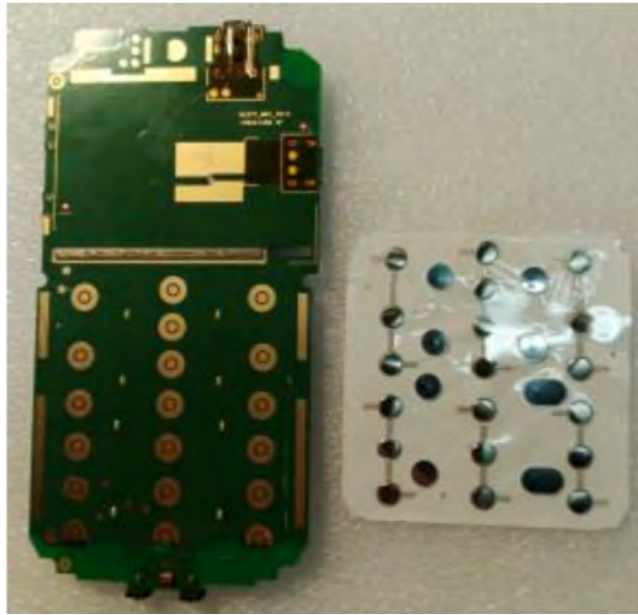
9.8.7 Step-by-step instructions

Remove the Dome

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



2. Pull the **Dome** 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 HW2011**.

9.8.9 Troubleshooting tips

- **The Dome 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 (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

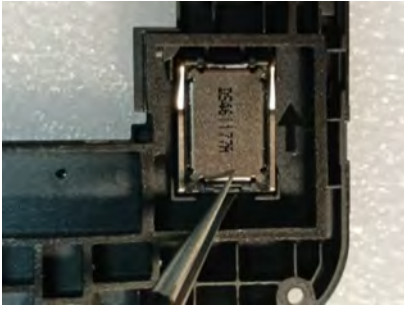
- Turn off the phone.
- *Disassemble the Battery Cover*, p.20.
- *Disassemble the Battery LEVA DBAE-1150A*, p.23
- *Disassemble the Lower housing assembly*, p.25

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 **Lower housing assembly** by using **Tweezers**.



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



9.9.8 After-removal checks

- Check the cavities in the **Lower housing assembly** 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

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 (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 **Lower housing assembly**.

10.1.7 Step-by-step instructions

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



2. Place the **Speaker** into its slot in the **Lower housing assembly** 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

10.2.1 Purpose

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

10.2.2 Tools and equipment

Type	Illustration (informative example)	Reference
Tweezers		

10.2.3 Spare parts

Qty	Spare part	Information
1	Sealing rubber cradle connectors	
1	Dome	

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** onto the **PCBA Assembly HW2011**.

10.2.7 Step-by-step instructions

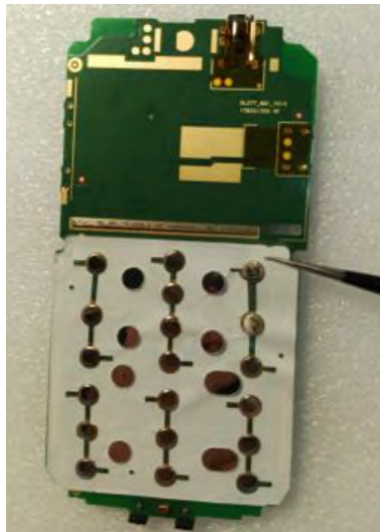
Install the Sealing rubber cradle connectors

1. Place the **Sealing rubber cradle connectors** onto the **PCBA Assembly HW2011** using **Tweezers**.



Install the Dome

1. Align the **Dome** with its position on the **PCBA Assembly HW2011**.
2. Press the **Dome** 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** 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 (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

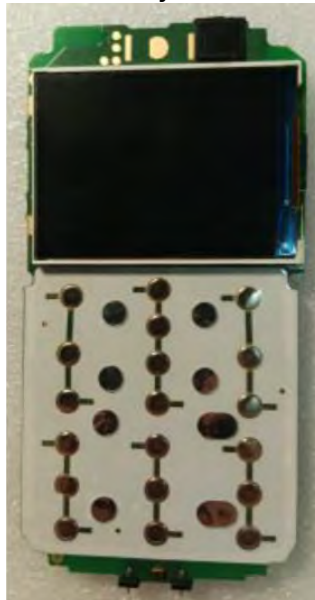
In this step, you place the **LCD 2.4** back onto the **PCBA Assembly HW2011** and reconnect the flex cable using the ZIF connector.

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 HW2011**.



2. Place the **LCD 2.4** on the **PCBA Assembly HW2011**. Align it using the locator lines on the **PCBA Assembly HW2011**.



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 HW2011

10.4.1 Purpose

Describes how to correctly reinstall the **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 (informative example)	Reference
Twizzers		

10.4.3 Spare parts

Qty	Spare part	Information
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 Preassemble checklist

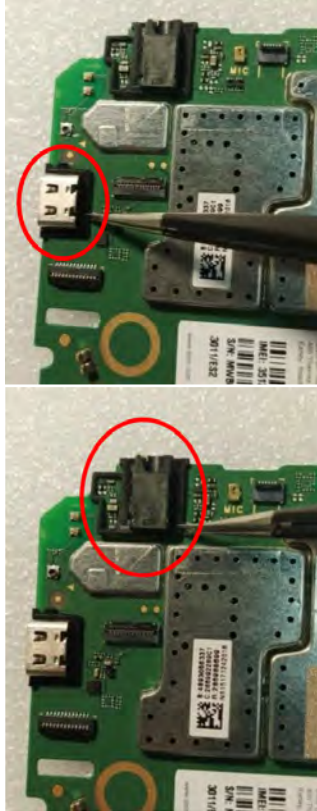
10.4.6 Procedure overview

In this step, you reinstall the , **FPC SOS**, **Sealing rubber USB jack** and **Sealing rubber 3.5mm jack** onto the . 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 HW2011** using **Tweezers**.



10.4.7.2 Install the FPC SOS

1. Place the **FPC SOS** on the **PCBA Assembly HW2011** 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.



10.4.8 Post-assembly checks

- Ensure that the flex cable is inserted up to the white line.
- Ensure that the 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 reposition carefully.

10.4.10 Related information

10.5 Assemble the Assembly Upper housing

10.5.1 Purpose

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

10.5.2 Tools and equipment

Type	Illustration (informative example)	Reference
Tweezers		

10.5.3 Spare parts

Qty	Spare part	Information
1	Assembly Upper housing	
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 **Assembly Upper housing** and gently press it into place using **Tweezers**.



Install the Keypad

1. Place the **Keypad** into the **Assembly Upper housing** 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 HW2011

10.6.1 Purpose

Describes how to correctly reinstall the **PCBA Assembly HW2011** after internal repairs or inspections.

10.6.2 Tools and equipment

Type	Illustration (informative example)	Reference
Tweezers		

10.6.3 Spare parts

Qty	Spare part	Information
1	PCBA Assembly HW2011	

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 HW2011** back into the **Assembly Upper housing**.

10.6.7 Step-by-step instructions

1. Place the **PCBA Assembly HW2011** into the **Assembly Upper housing** using **Tweezers**.



2. Make sure the **PCBA Assembly HW2011** sits evenly and is properly aligned with the frame.

10.6.8 Post-assembly checks

- Check that the **PCBA Assembly HW2011** is flat and aligned with the housing.

10.6.9 Troubleshooting and tips

- **The PCBA Assembly HW2011 does not sit flat:** Check for debris or misaligned parts beneath it.
- **The PCBA Assembly HW2011 is difficult to position:** Tilt it slightly and lower it carefully into place.

10.6.10 Related information

10.7 Assemble the Lower housing assembly

10.7.1 Purpose

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

10.7.2 Tools and equipment

Type	Illustration (informative example)	Reference
Tweezers		

10.7.3 Spare parts

Qty	Spare part	Information
1	Screwdriver	
6	Screw T1.6*4.0	

10.7.4 Safety and precautions

See *General precautions*, p.5.

- Avoid pinching any parts when pressing **Lower housing assembly** 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 **Lower housing assembly** back onto the phone. It is secured with plastic clips and screws.

10.7.7 Step-by-step instructions

1. Align the **Lower housing assembly** 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 **Lower housing assembly**.



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 Lower housing assembly 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      (END→END→UP→DOWN→END).
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

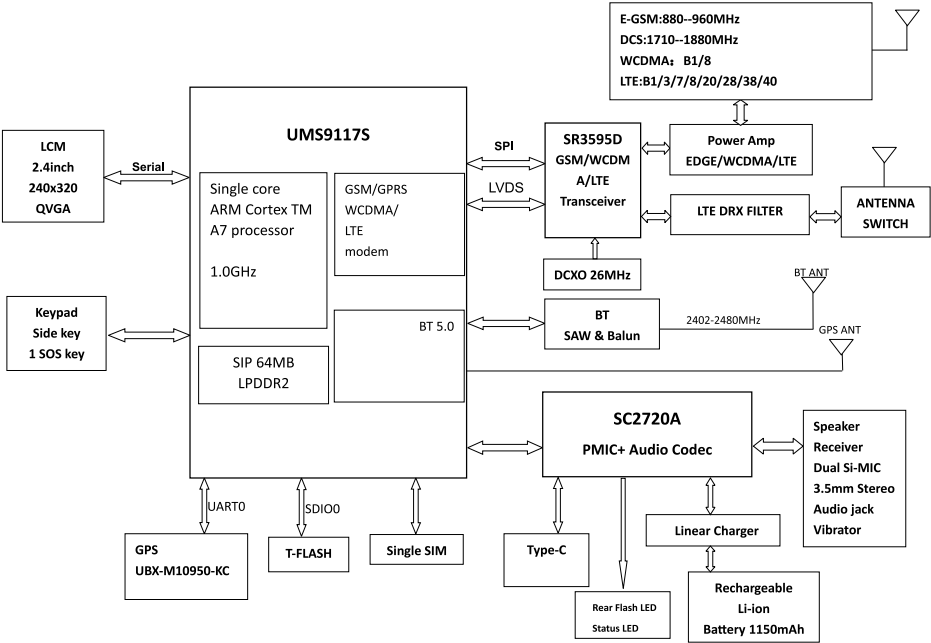
For the full manual with all functions and features, see *Appendix*, p.70.

12. Appendix

The Leva X10 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

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