

# BATTERY TERMINAL OPTIMIZATION MEASURES QUICK GUIDE

## Symptoms

Several e-bikes have increasingly encountered problems with the battery connector. As soon as moisture or dirt gets into the battery connector or friction corrosion occurs – e.g. because of too much play between the battery and the frame – a range of system failures can occur. The most commonly affected battery types are Ultratube and Supercore.

The following steps must be taken so as to avoid these problems!



## Affected battery types



Ultratube



Supercore

## 1. Adjust the battery – tolerance issues

The battery mounts must be set precisely to ensure that the batteries have as little possibility of movement in the frame as possible. Please check them for minimal play before delivering the e-bikes.

We recommend adjusting the battery in all directions to a minimum play of less than 1.0 mm. In addition, the contacts of the battery and battery connector should interlock as completely as possible.

**Please note:** The following points / measures will be ineffective unless the battery tolerances are set to a minimum.

## 2. Clean of contacts of the battery and battery connector (affects all batteries)

Clean and degrease contacts of the battery connector and battery thoroughly. This is best done with contact cleaner. Then blow out the battery terminal with compressed air without leaving any residue.

## 3. Battery connector and comb seal installation

Careful installation of the FIT battery connector comb seal on the cleaned battery connector.

- 1 Remove adhesive strips on the rear.
- 2 Gently push the comb seal down into the battery connector using the protective cap for connectors (or the assembly tool).
- 3 Insert and remove the battery to check that the comb seal has been fully pressed in without twisting the strips between the sword contacts.

**Important:** If the battery does not completely depress the comb seal, the battery position must be corrected or the battery mount adjusted accordingly.

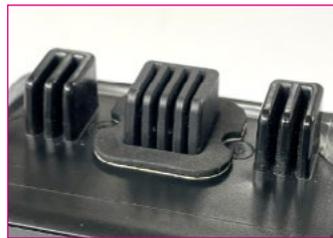
Pictures on the next page:

### 3. Battery connector and comb seal installation



### 4. Installation of battery seal (only for batteries: Supercore, Ultratube)

Begin by cleaning and degreasing the plastic surface to which the battery seal is then to be attached. Remove the adhesive tape from the **battery seal** and carefully stick the seal to the battery. The seal should be installed in such a way that the screws remain free.



### 5. Apply pole spray to contacts of the battery and battery connector

After the battery seal has been fully installed, spray the dry and clean contacts of the battery and battery connector on both sides evenly and economically with **pole spray**. The blue color of the spray facilitates dosing. Depending on the ambient conditions, the drying time is around 5 minutes, or wait until the battery is used so that the pole spray can develop the optimal effect.



Article	Image	Availability
<b>5016490</b> FIT comb seal for battery connector  Seal fits with: Ultratube, Supercore		<b>Available in the FIT e-shop.</b>
<b>501679</b> FIT assembly tool for comb seal		<b>Available in the FIT e-shop.</b>
<b>501650</b> FIT battery seal  Seal fits with: Ultratube, Supercore		<b>Available in the FIT e-shop.</b>
<b>501630</b> Atlantic pole spray		<b>Available in the FIT e-shop.</b>
<b>501422</b> FIT protective cap for connectors		<b>Available in the FIT e-shop.</b>

**Comment:** These instructions can be downloaded at any time from the FIT e-shop under the heading "OPERATING INSTRUCTIONS".