

# Troubleshooting Guide

## for CTEK MULTI US 7002 (pt# 56-353)

### **No LED is lit when the charger is connected only to the battery**

Explanation: The plug has to be connected for the LED's to be lit.

### **No LED is lit when the charger is connected only to the power outlet**

Explanation: One of the LED's at the lower row should light up when the charger is connected to the power outlet.

Test: Make sure that there is power from the power outlet. If the charger is still not lit the charger can be faulty.

### **No LED's are lit on the top row when the charger is connected to both the power outlet and the battery**

The LED's on the lowest row are lit and you can change charging mode. None of the LED's the top row on is indicating charging status. Explanation: The battery voltage could be under 1,5V.

Test: Try to charge the battery in Supply mode for approximately 5 min. Then try regular charging.

Test: Test the charger on a fresh battery. If nothing happens the charger may be faulty.

### **is lit for 4 hours and then turns into error mode**

If the battery voltage is not above 12,5V after 4h the charger will turn into error mode, because the voltage has not increased in the way it should have done. Explanation 1: The battery is too large in relation to the capacity of the charger.

Test: Make sure that the battery/batteries size is not larger than the recommendations for Multi XS 7000 (150Ah).

Test: Try to restart the charger because the charger might need more time to charge the battery.

Explanation 2: Larger loads are connected to the battery

Test: Disconnect the battery and try to charge it without the loads.

Test: Try to restart the charger because the charger might need more time to charge the battery.

Explanation 3: If the battery is warm and/or is boiling heavily during the charging, it is most likely due to a defective cell in the battery.

Test: Change the battery

### **is flashing for 4 hours, then turns into error mode**

Explanation: The battery is probably too sulphated to revive. The battery is faulty and it is time to change it.

### **is lit and then turns into error mode**

The analysis phase is testing if the battery can retain the charge given. Explanation 1: Large loads are connected to the battery and are draining the voltage

Test: Disconnect the battery and try charging again.

Explanation 2: The battery cannot retain the charge given.

Test: The battery needs replacing.

### **The error LED is lit**

Explanation 1: Reverse polarity

Test: Make sure that the + cable/clamp is connected to the + terminal and the - cable/clamp is connected to the - terminal.

Explanation 2: The clamps are short circuited

Explanation 3: For chargers of the older type the error mode is flashing when only the plug is connected.