



# Duracell CEF14N NiMH Battery Charger - Not charging

Charger will not charge. Two battery test methods given to eliminate battery as issue. Reader then stepped through disassembly to replace. capacitor C5.

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## INTRODUCTION

**CAUTION: AC VOLTAGES.** Discharge capacitor before removing, if possible. If not, please leave device unplugged for two to three days before attempting repair. Capacitors can give you a nasty and/or dangerous shock.

### TOOLS:

- Pro Tech Toolkit (1)

## Step 1 — Remove two screws on top rear of case. Remove two screws on bottom rear of case.



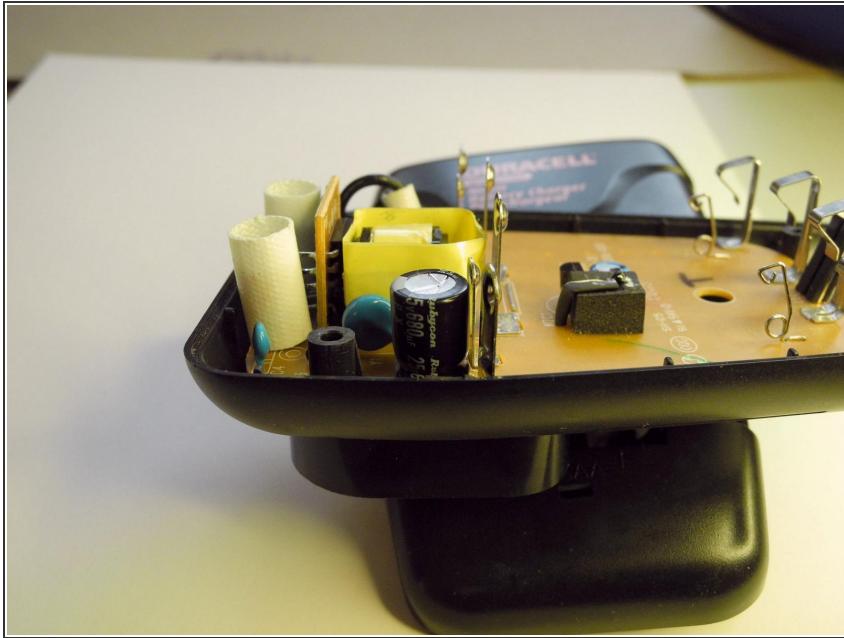
- Use small screwdriver to remove four screws on top rear corners of case.
- Use small screwdriver to remove four screws on bottom rear corner of case.

## Step 2 — Gently separate front and rear of case.



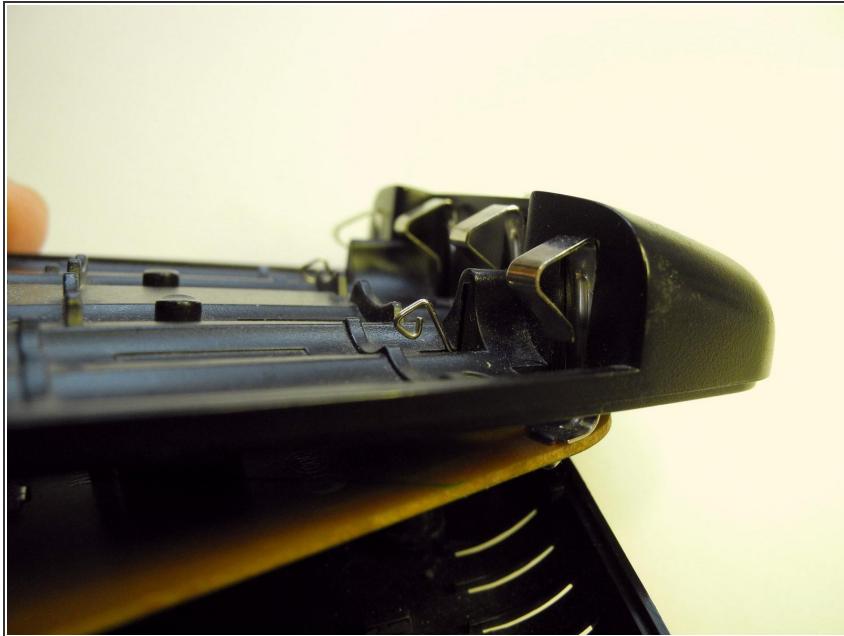
- Use your hands to gently pry apart the front and rear halves of the case, being **VERY** careful not to strain the wiring inside the white sleeve (as shown in picture).
- Do **NOT** force the case apart or you could break something or tear the wire in the white sleeve.

## Step 3 — On beige side of board, check capacitor C5



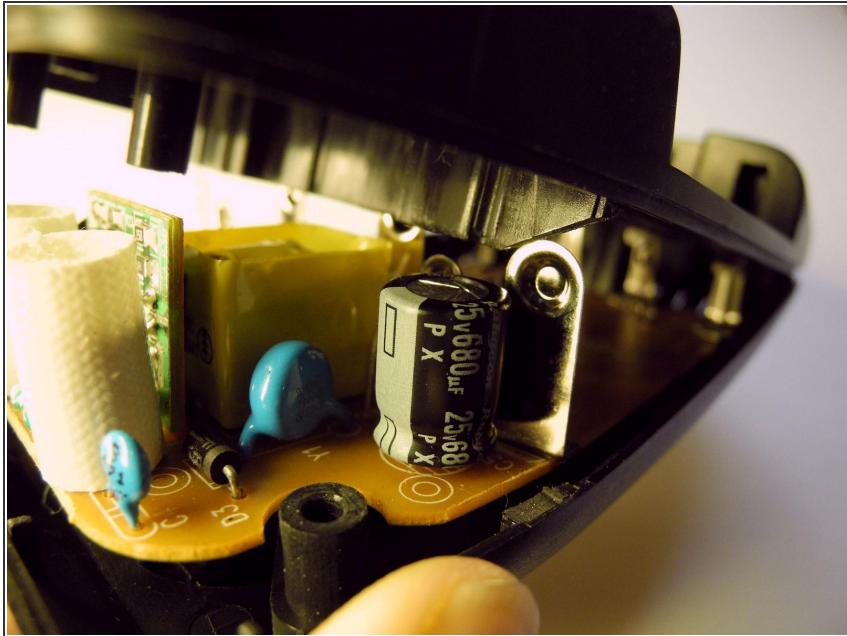
- Check Capacitor C5 (a black, 680uF 20V radial model) for burn marks, bulging etc.
- If it is defective, desolder it and then discharge it with a suitable resistor. (Not needed if unit has been unplugged for 3 days).
- Replace it with a similar value cap, such as a 25V Rubycon. Note the original was a cheap "LM" brand model. (See photo showing board with replaced cap.)

## Step 4



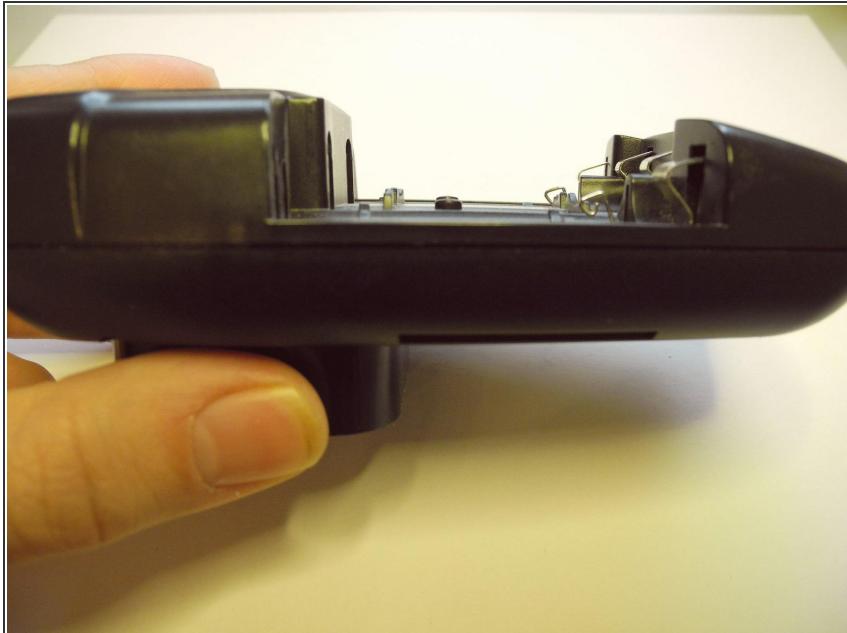
- Once the new capacitor has been soldered in place, insert the PCB through the front half of the case, such that the LED and the battery contacts go through first and come out fully on the other side of the case, (as seen in photo).

## Step 5



- Now SLOWLY and carefully push the front half of the case down onto the PCB and bottom case half, making sure there is clearance between the plastic tab extruding from the case front near the battery contact. The tab must come down IN FRONT OF the metal terminal.
- You may have to nudge the case front up/down/left/right to get it to close snugly.

## Step 6



- Verify that the plastic tab inside the case front has cleared the metal terminal on the PCB.
- The case front and rear should now join seamlessly together, like in this photo.
- Reassemble by tightening all four rear case screws.

## Step 7



- Test the charger by inserting two known good, compatible batteries of same type into symmetrical slots and watching LED status. RED=BATTERIES CHARGING, GREEN=Finished charging, RED FLASHING=battery or charger problem