How to Troubleshoot Generic 1A USB Car Charger

Troubleshoot a generic car to USB-Micro charger. Test for proper output voltage, and test/replace internal components.

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INTRODUCTION

If you have a device that will not charge in the car, then this guide is designed to help you discover if the problem is with the adapter or with the device. The guide is not difficult, but you will be working with live 12 volt and 5 volt electricity, and requires knowledge of how your multimeter works.

TOOLS:

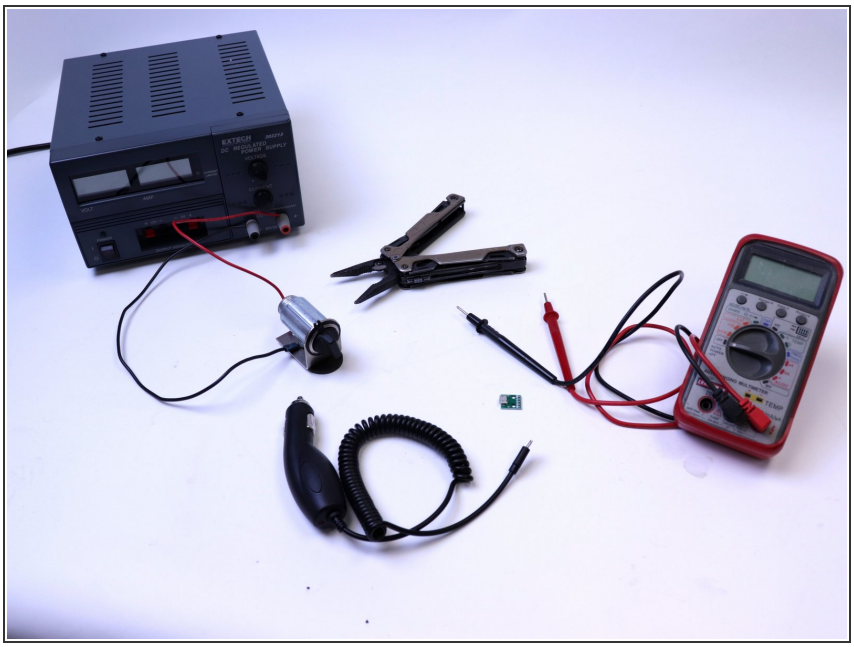
- 12v Power Supply (1)
- Slip Joint Pliers (1)
- Flathead Screwdriver (1)
- USB Micro Breakout Board (1)
- Multimeter (1)

PARTS:

- Fuse (2.5 amp, 125 volt) (1)

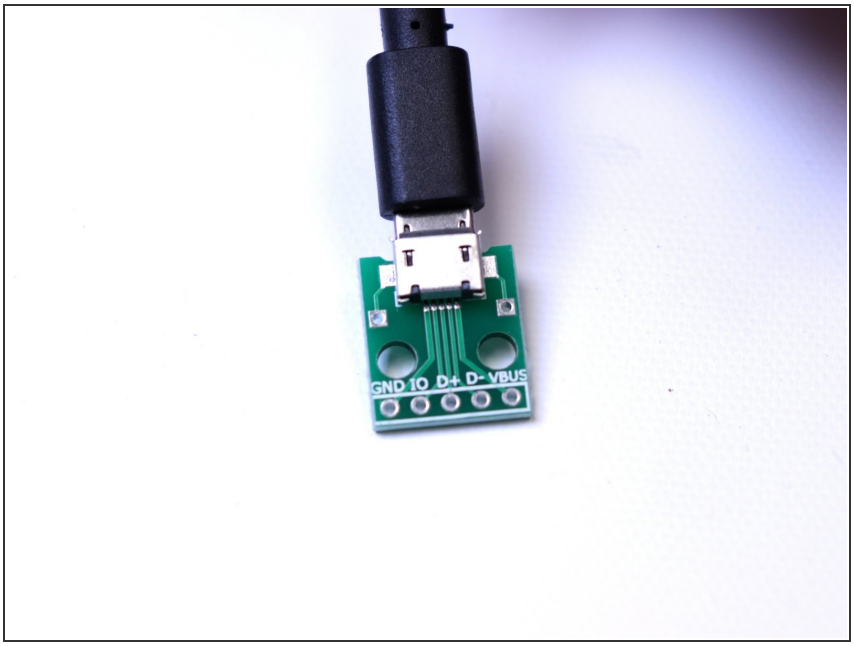
Match fuse from adapter

Step 1 — How to Troubleshoot Generic 1A USB Car Charger



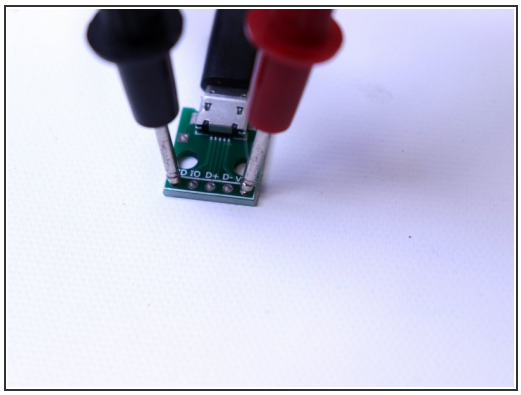
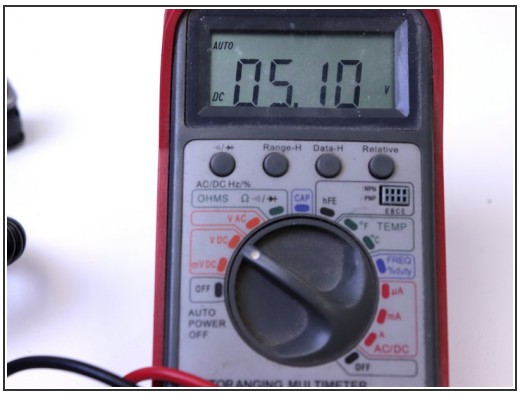
- First, assemble the team. Get the adapter, your 12 volt source, and your multimeter together.

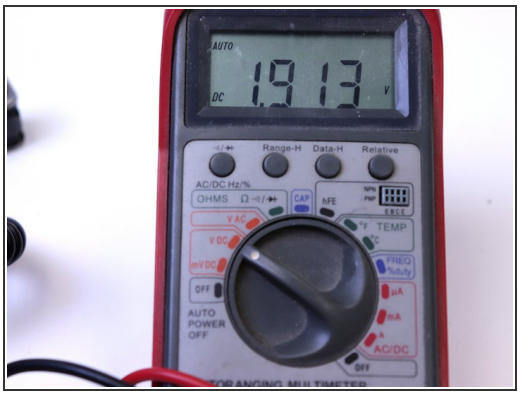
Step 2



- You next need to insert the USB Micro end into the breakout, and insert adapter into power source, set for 12V (or automatic if in vehicle)
- Caution: You are now working with energized electricity, it is low voltage, but it is enough to damage sensitive components.

Step 3



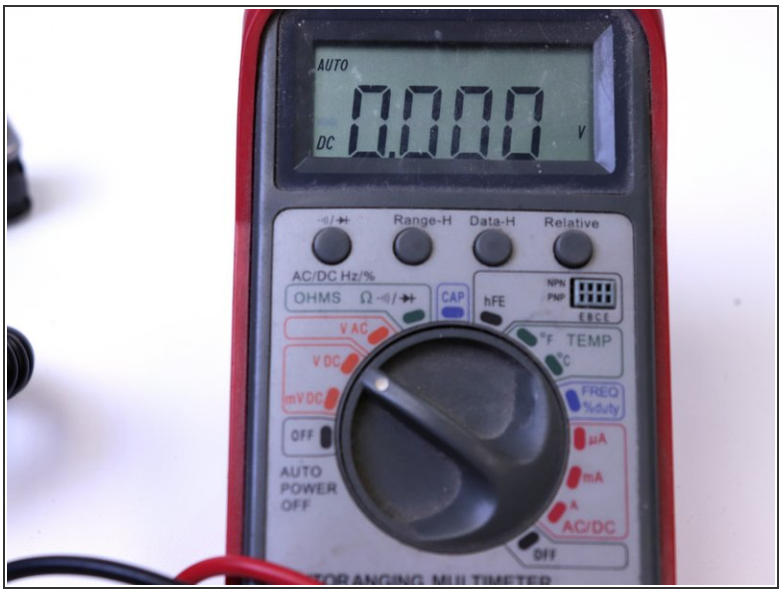
- Set Multimeter to VDC, and place leads as shown
- Voltage should be about 5V
- If the voltage is lower, check output of the power supply. If the power supply voltage is above 6V, then we will need to continue to Step 4

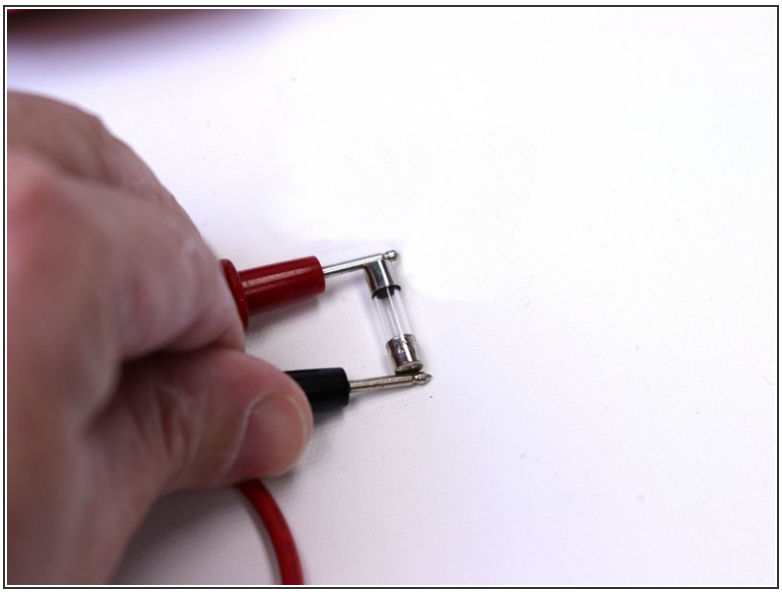
Step 4



- Unscrew the tip to uncover the fuse
- Remove fuse from charger
- Reminder: document the order of the tip/fuse to reassemble.

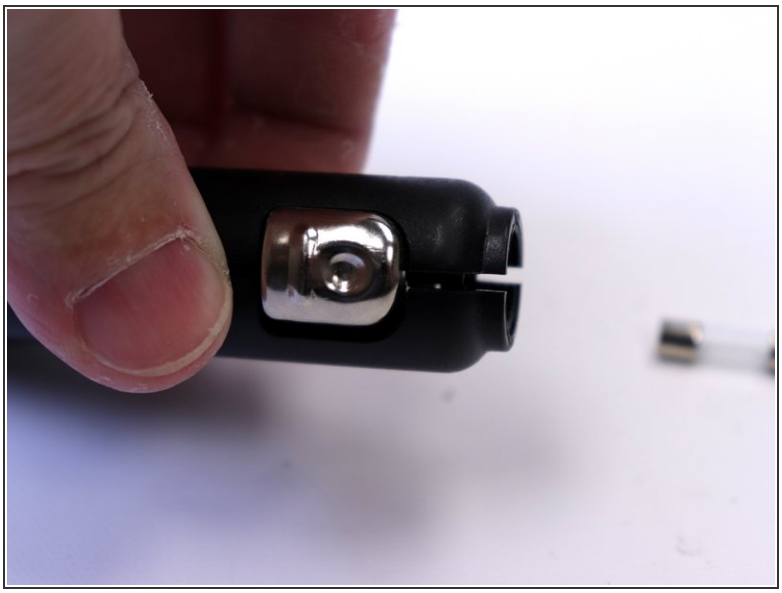
Step 5

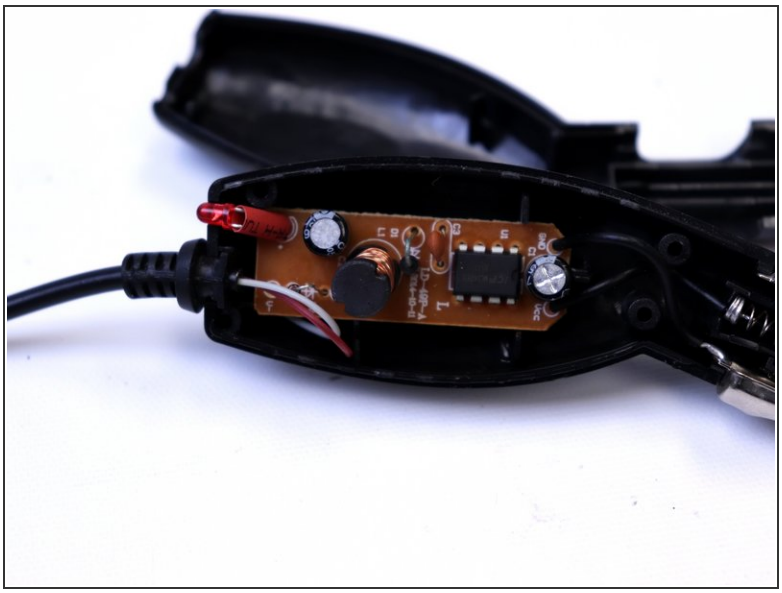




- Set multimeter to test continuity.
- Test to know how your meter reads a closed circuit.
- Test fuse with meter.
- Replace if fuse does not allow current to flow.

Step 6





- If the fuse is good, you may move on, opening the body of the charger.
- Take care, there may be small springs inside body.
- Look for small breaks in solder, or the small wires to have been broken. Repair of these types of problems are outside the scope of this iFixit guide, but if it is broken this far, you can't break it more!

To reassemble your device, follow these instructions in reverse order.

