Making a Battery Tender….Give Your Tired Bike A Jolt!

Here is the scenario. I got a bunch of battery chargers. I am tired of taking off my battery cover when I want to use my neglected bike. I am cheap, handy, and got some time on my hands.

Answer; Make Yourself A Battery Tender Cheap!

What You Need

1. Battery charger
2. 14 gage red & black or white wire 40” of each
3. Shrink wrap, solder,
4. 4) each: 16-14 ga 1/4" ring terminal
5. 1) each: Hoppy® 2 pole flat connector set or SAE 2 pole plug
6. 1) each: fuse holder blade type for 3 amp to 30 amp with fuse
7. 2) each: tie wraps
8. 2) each: ¼” x 20 x ¾” bolts, nuts, flat & lock washers
9. 1) each: 3” piece of ¾” electrical conduit

How To Do It

1. Cut a piece of ¾” electrical conduit 3” in length

2. Cut the 2 pole flat connector wire and splice the corresponding 20” colored wire to the plug. Make sure the (+) red plug side connected to the battery is the one that is shielded (***not exposed***) by inset into rubber plug.
3. Attach two ring terminals onto the battery side harness (figure #1). Notice the white side of the plug **(-) is** exposed, ***not*** the red (+). Shrink-wrap connections and shrink-wrap the harness.
4. Drill 3 holes into the electrical conduit, 1 in the center and 2 on the opposite side ¾” from the ends.
5. Now for the remaining 2 pole flat connector, splice the corresponding 20” colored wire to the plug. See fig. #2. Attach the fuse holder with fuse to the (+) red side wire. Make sure the (-) black or white plug side connected to the battery charger/battery tender **is** the one **that is shielded** by inset into rubber plug. Heat shrink splices and wiring harness.
6. Thread the wires into the center hole in the conduit.
7. Attach two ring terminals onto the battery side harness (figure #1). Notice the white side of the plug (-) is ***NOT*** exposed, the red (+) **is** exposed in Fig. #2. Shrink wrap connections and shrink wrap the harness.

8. Attach the two ring terminals to the inserted wires. See photo #2. Attach the two ring terminals to the bolts and push the bots in and up from the center of the conduit and attach the nuts, flat & lock washers to the bolts on the outside of the conduit.
9. Tie wrap wires securely to the conduit & tape to color code the leads.
10. In the situation where you are going to use this lead for auxiliary power from the bike side, install an additional fuse holder with fuse to the (+) red side wire leading to the battery on the bike side. Never use a lead from the battery directly without installing a fuse. Whats up with the two fuses in the circuit. Don't be so cheap, you can still add more bikes to this charging system for less than 2 bucks each. This whole project cost me $9.36 cash from Advance Auto Parts.