

# CalCars PriusPlus PHEV Conversion

Revision 3 - October 30, 2007

Wiring diagram based on CalCars open source documents and notes provided by a variety of individuals. Wiring roughly and presumably represents the wiring for PHEV #76, Darren Overby's Prius. This drawing has not been verified and may contain serious errors. Raw Data Drawings at <http://www.priusplus.org> should be referred to and should take priority over this drawing.

This is not an educational document and author does not warrant the accuracy or safety of anything shown on this drawing. The safest way to get a Plug-In Hybrid is to pressure the automakers into making one. PHEV conversions are experimental and are primarily done to show the public and automakers that this technology exists now and can be used to increase mileage and reduce greenhouse emissions. This drawing is merely the personal notes for one particular conversion. Sole use of this drawing to create a conversion is not recommended. Author recommends checking with more experienced people.

Readers using this document must agree to the CalCars General Disclaimer below.

**General Disclaimer**  
 HV (High Voltage) DC (Direct Current) Warning: Traction Battery Packs, Motors, Chargers, and other HV sources could cause serious injury or death if proper precautions are not taken while working on or around such High Voltage Direct Current sources.

**Diminished Crash Worthiness:** Adding additional weight and mass to the rear of your vehicle reduces the safety of the vehicle in event of an accident and could negatively affect the vehicles performance or handling. A PHEV conversion could cause an accident that would otherwise have minor injuries or no injuries to have serious injuries or fatalities.

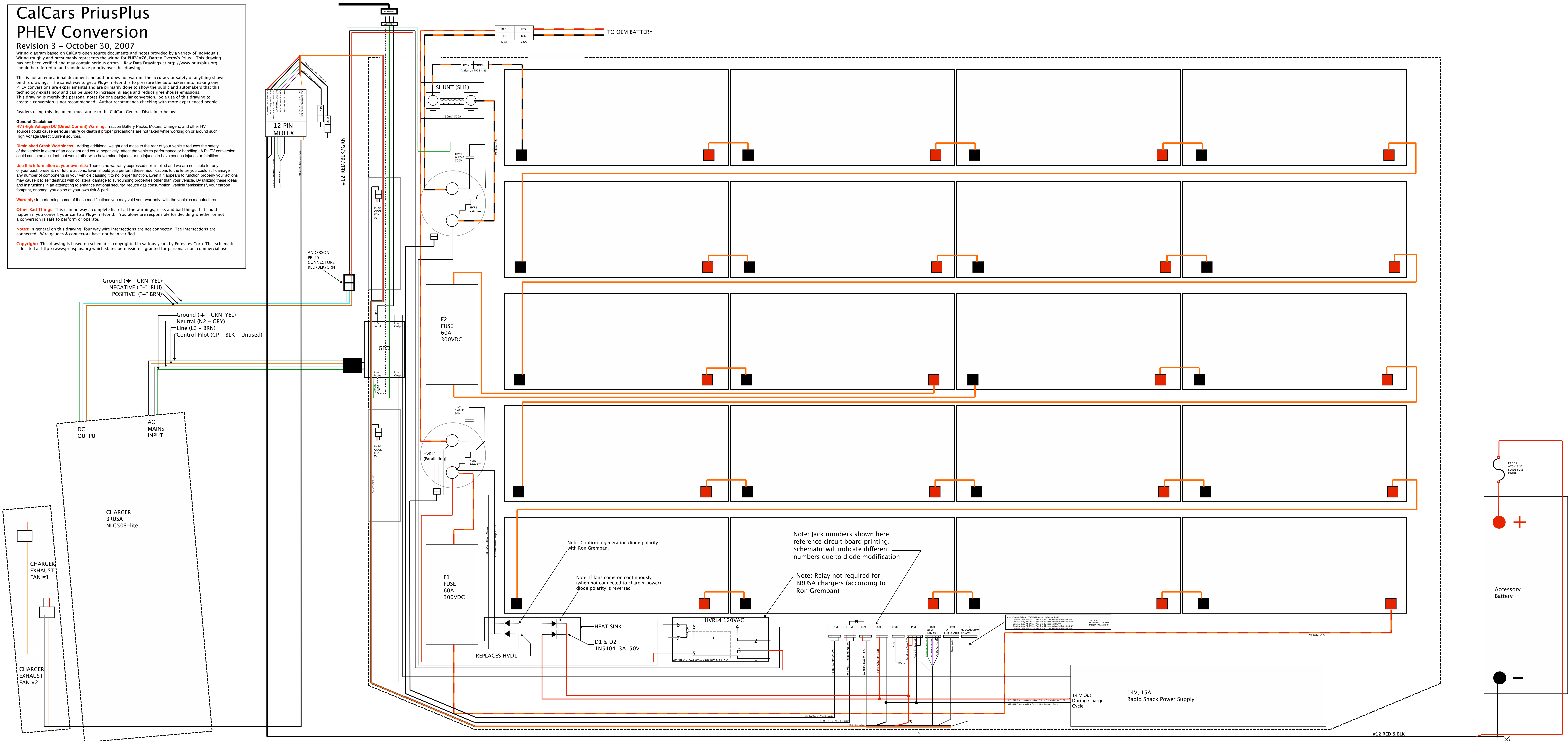
**Use this information at your own risk:** There is no warranty expressed nor implied and we are not liable for any of your past, present, nor future actions. Even should you perform these modifications to the letter you could still damage any number of components in your vehicle causing it to no longer function. Even if it appears to function properly your actions may cause it to self destruct with collateral damage to surrounding properties other than your vehicle. By utilizing these ideas and instructions in an attempt to enhance national security, reduce gas consumption, vehicle "emissions", your carbon footprint, or smog, you do so at your own risk & peril.

**Warning:** In performing some of these modifications you may void your warranty with the vehicles manufacturer.

**Other Bad Things:** This is in no way a complete list of all the warnings, risks and bad things that could happen if you convert your car to a Plug-In Hybrid. You alone are responsible for deciding whether or not a conversion is safe to perform or operate.

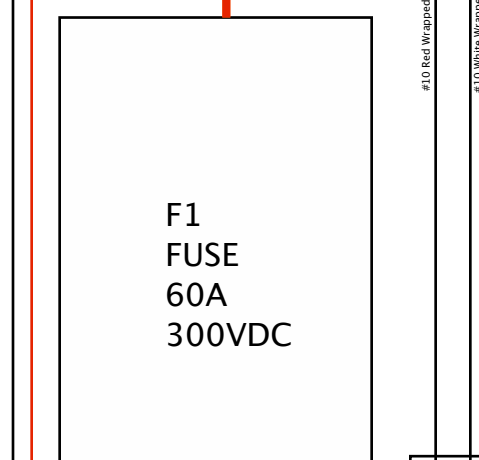
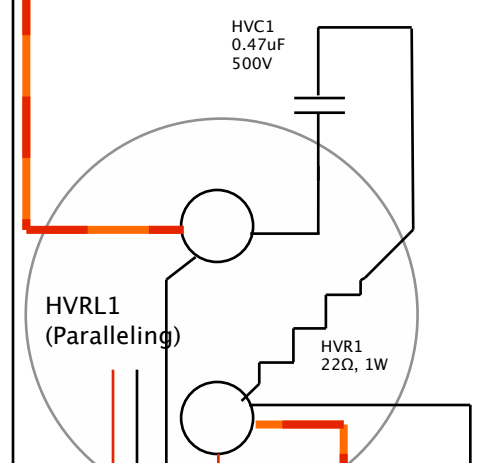
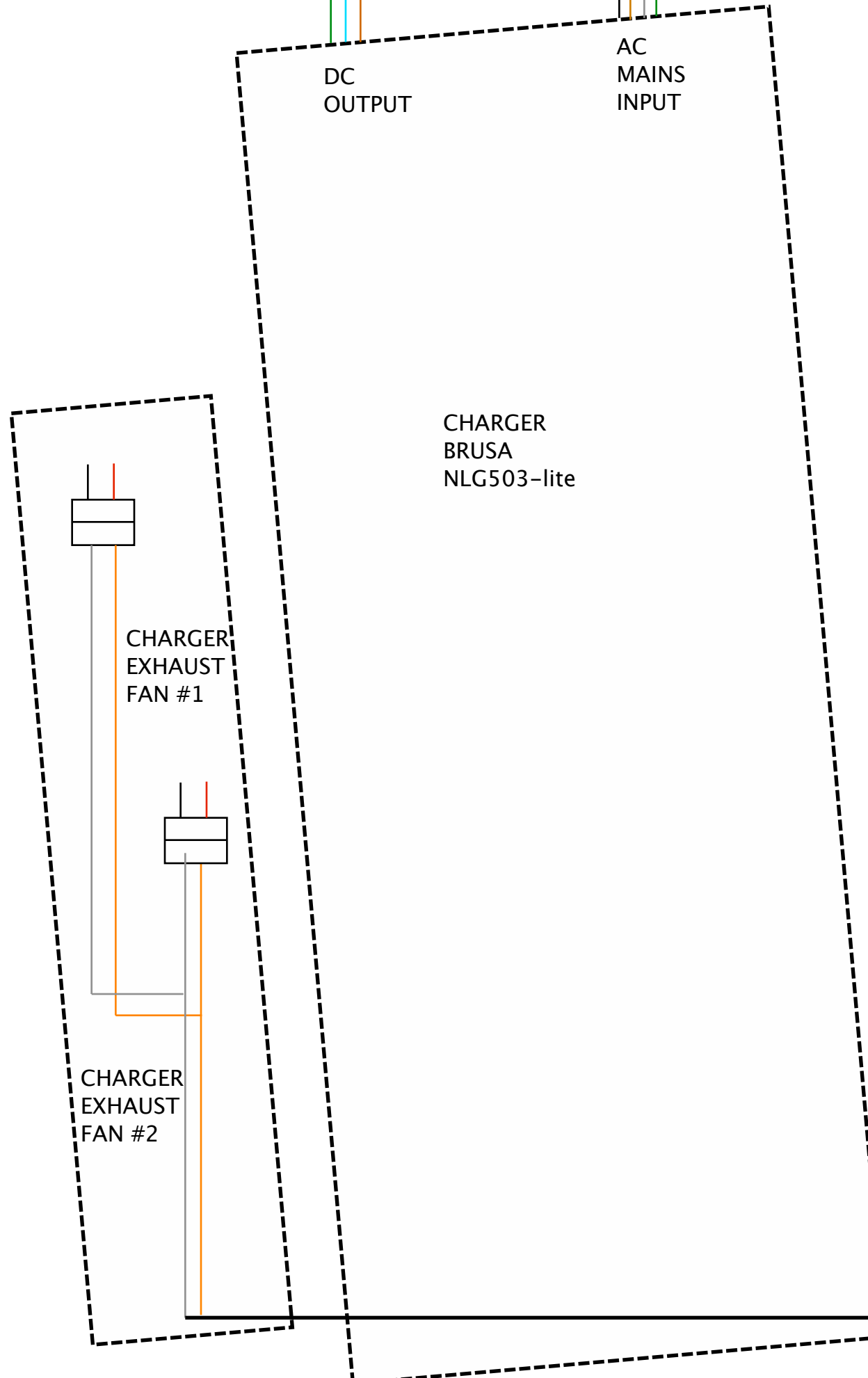
**Notes:** In general on this drawing, four way wire intersections are not connected. Tee intersections are connected. Wire gauges & connectors have not been verified.

**Copyright:** This drawing is based on schematics copyrighted in various years by Foresites Corp. This schematic is located at <http://www.priusplus.org> which states permission is granted for personal, non-commercial use.



Ground (↕ - GRN-YEL)  
 NEGATIVE ("-" BLU)  
 POSITIVE ("+" BRN)

Ground (↕ - GRN-YEL)  
 Neutral (N2 - GRY)  
 Line (L2 - BRN)  
 Control Pilot (CP - BLK - Unused)



Note: Confirm regeneration diode polarity with Ron Gremban.

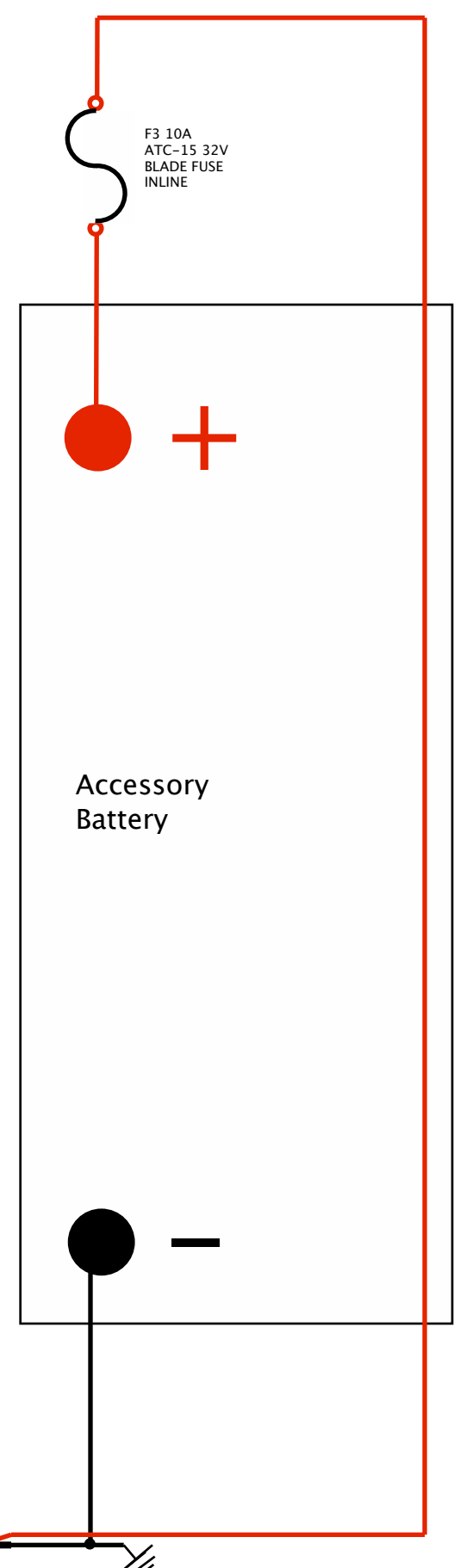
Note: If fans come on continuously (when not connected to charger power) diode polarity is reversed

Note: Jack numbers shown here reference circuit board printing. Schematic will indicate different numbers due to diode modification

Note: Relay not required for BRUSA chargers (according to Ron Gremban)

14 V Out During Charge Cycle

14V, 15A Radio Shack Power Supply



#12 RED & BLK