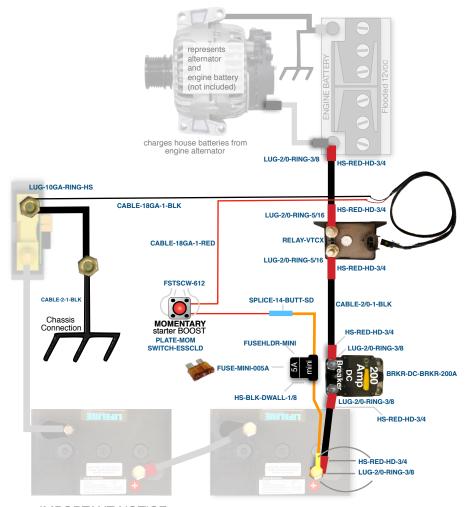


Alternator Charging

The alternator charging kit uses a device called a Cyrix that interrupts the circuit connecting your starter battery and your house battery bank. When your vehicle isn't running, this connection will be open, to allow your two battery banks to sit at their separate resting voltages. When the ignition is started and the alternator starts sending current, the Cyrix will detect the higher voltage on the starter battery and close the connection between the battery banks. Since the alternator charge will be at a higher voltage than both battery banks, current will only be flowing into batteries from the alternator, not from one battery to another. The boost button overrides the alternator voltage sense of the Cyrix and manually connects the battery banks. This is fine for short periods of time and it is used in situations when your starter battery is dead and you need to use your house battery to start your ignition.



IMPORTANT NOTICE:

All the "greyed out" items were previously installed. You will need to interact with them in this phase.

- 1. **Position components** so cable routes can be planned.
- 2. **Connect the 2ga cable** between either that starter battery positive, the positive output of the alternator, or some other attachment point with continuity to those two points. Make the connection to whatever position allows for the easiest cable route to your house battery bank. (Do not connect the cable to the house battery bank yet.)
- 3. **Install the DC breaker** along the 2ga cable in an easily accessible location near the house battery. Polarity is important, meaning that the LOAD post of the breaker should go to the house battery bank, matching the diagram. Keep the breaker in the OFF position for now.
- 4. **Install the Cyrix** between the alternator/starter battery and the breaker. Plug in the pigtail.
- 5. **Install the boost button** in a location accessible from the driver's seat (you will be holding it while you turn your ignition key). Connect a red wire between one lead of the boost button (polarity doesn't matter) and the red wire in the pigtail coming off the Cyrix.
- 6. **Connect a black wire** between the load side of the shunt and the black wire in the pigtail coming off the Cyrix.
- 7. **Install the fuse holder** (with the fuse removed) onto the positive battery terminal, and splice a red wire on the other end of the fuse holder. Connect the other end of that red wire to the remaining lead on the boost button.
- 8. **Activate the system** by checking that all the connections are correct and tight, permanently mounting components, installing the fuse and turning ON the breaker.
- 9. **Test the system** by turning on the ignition and verifying with the battery monitor that current is flowing into the house battery bank. Then, turn off the system and push the boost button for a couple seconds to see current flowing out of the house battery.