



Troubleshooting power issues

- Motorhome leveling systems

X047

Version
062525

Typical Tools Needed



- Voltage meter
- Phillips Screwdriver (#1)
- Impact driver or drill
- 5/16" Hex bit driver



Trouble Shooting for Power issues



1. Start with testing voltage on the battery supply to the system. Most systems are powered by the RV house batteries, some large diesel applications are to the chassis batteries. Batteries to be tested “under load” for accurate results. Press retract on the control and check the voltage while the pump is running, voltage will drop as the pump runs.

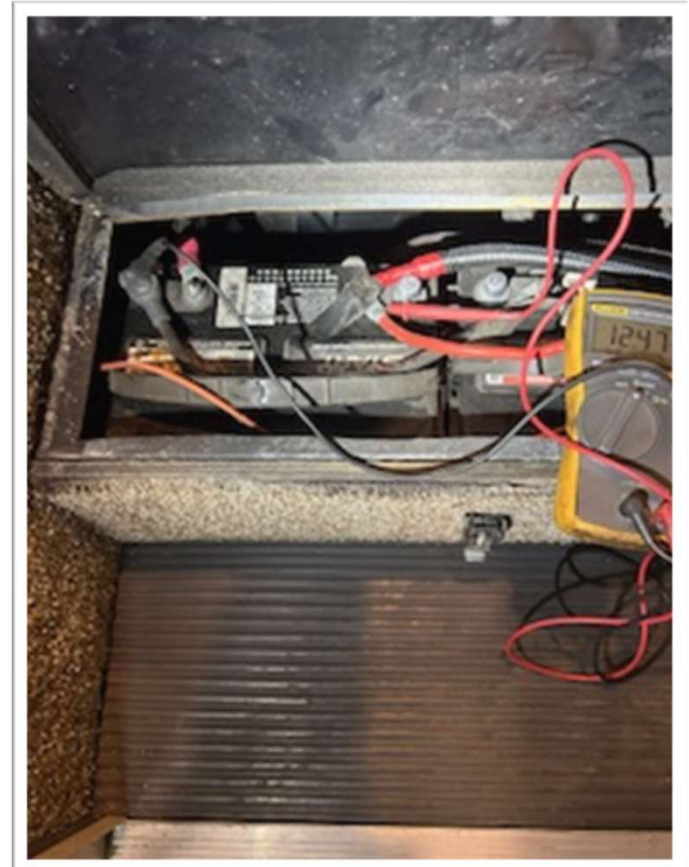
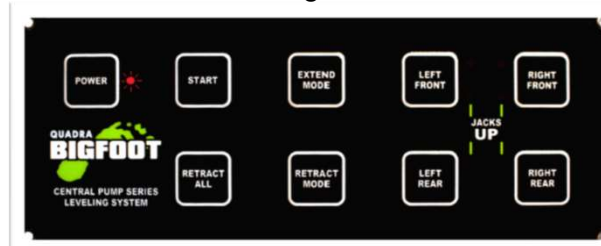
2. If the voltage drops below 9.5 volts, your Bigfoot system will enter a “low voltage mode” and prompt a fault code. Either the top FRONT RIGHT and bottom REAR LEFT LED's will flash (Fig.A) or the red POWER button LED will flash (Fig.B) depending on the controller you have.

3. Start your engine, generator or plug-in to service to help charge your house batteries, this is not an immediate charge but will slowly increase voltage to the system. If you need to leave, EMERGENCY RETRACT or retracting in Manual Mode will be your best option.

Fig.A



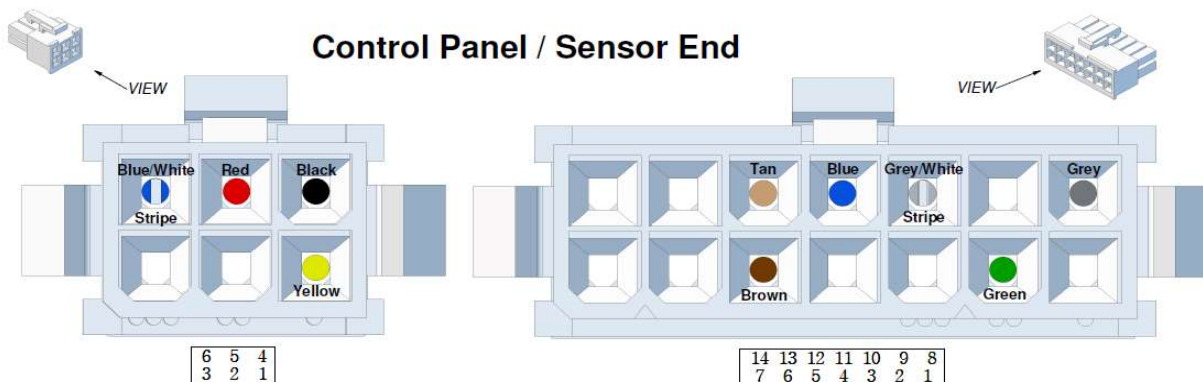
Fig.B



Checking power at the Panel



1. Make sure you clear the fault code on the controller by removing the four mounting screws on the front of the control panel and unplugging the small connector for 30 seconds, and plug back in. Check to see if fault code has cleared, if not proceed.
2. With the controller out, if your controller has a 6-pin and 14-pin connector, skip to step 3. If your controller has a small 8-pin connector then you will need to locate the leveling sensor (black & white box), follow the 8-pin interface cable from the back of your control panel to find the sensor. Typically located on the floor of a cabinet near entry step, under vehicle dash or driver seat, inside a storage bay with other electronics, etc.
3. Remove the 6-pin connector and test for voltage on the red wire, utilize the black for ground. If the control is receiving 12v there may be an issue with the controls. If you are not getting 12v then further investigation is required from the battery cable, connections, etc.



Checking power at the Pump

1. If you are getting a low voltage signal from the controller and have verified the RV battery supply is good, the voltage to the controller is good. Then investigation to the pump is required.
2. For central pump systems, check the fuse as shown, replace 15amp if needed.
3. Check battery cable connections to the pump(s) at the copper strip.
4. If good voltage is reaching the pumps, but pump assembly has a weak ground, an auxiliary ground cable may be required to attach from a stud from each solenoid to the vehicle frame.
5. If all connections are good at the pump and to the controls, further investigation of the system breaker is required.

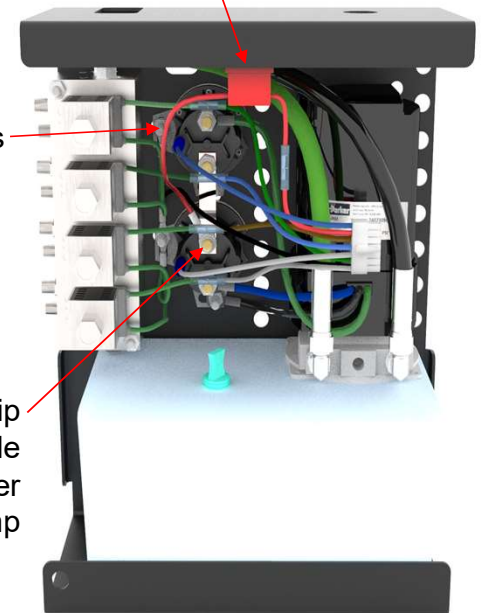


This is where your **15amp** fuse is located



Ground studs

Studs with copper strip where the battery cable from the breaker connects to the pump



Checking power on the breaker

1. Between our pump(s) and the battery supply is a 80 or 120amp breaker.
2. Typically located in or near the house battery box. If class-A or similar size diesel, check near chassis battery box.
3. Check voltage on both AUX and BATTERY studs, should be 12v.
4. If you are only getting 12v on your BATTERY side of the breaker, that means the breaker has failed and needs replaced.

