



LITHIUM BATTERY TROUBLESHOOTING

CHECK BATTERY CONNECTIONS

- Make sure the battery connections are clean and tight to the battery terminals.
- Make sure the ground wire is tight to the chassis.
- Always wear rubber gloves - do not let rings or jewelry touch the post - this is a danger!

MAKE SURE THE 12V DISCONNECT SWITCH IS TURNED "ON"

- 12v disconnect switch typically located in cabinet or by side entrance door.

IF YOUR TRAILER IS EQUIPPED WITH BATTLE BORN LITHIUM BATTERIES:

- Make sure the battery heat switch is "ON" when using in cold environments.
- Battle Born batteries have temperature sensors and if the temperature is below 41° the battery system will not work unless the battery heat switch is "ON".
- Heat switch is labeled and located near batteries.

IF YOUR TRAILER IS EQUIPPED WITH RICH SOLAR LITHIUM BATTERIES:

- The heat sensor is automatic.

DO NOT LET YOUR LITHIUM BATTERIES FULLY LOSE CHARGE

- Make sure there is no debris or snow on top of the solar panel that might prevent charging.
- Check batteries every two months and maintain charge as needed.

EXTREME BATTERY DEPLETION - "LOW VOLTAGE MODE"

- If the lithium battery is depleted below 11.5 volts – it will go into "Low Voltage Mode" and cannot be charged.
- Follow Instruction below for how to "Jump" a battery.

TO "JUMP" A BATTERY THAT IS IN "LOW VOLTAGE MODE"

- Disconnect all connections from all batteries.
- Wait for 30 minutes and then check the voltage of each battery individually. Label each battery and write down the voltage.
- If a battery has a voltage over 11.5V, charge it with a lithium charger.
- If the battery's voltage is below 11.5V, connect it to a car, like you would jump a car battery, and let it idle for 15 minutes.
- After 15 minutes, turn the car off and check the battery voltage. If it's over 11.5V, charge that battery alone with a lithium charger. If the voltage is still below 11.5V, contact tech support.
- Before wiring batteries back together, let them sit alone for 30 minutes and check their voltage. If they have a voltage over 13.4V, they are complete. If not, charge them again and repeat this step.
- Once you fully charge each battery individually, you can wire them back together into the system.

REVIEW THE USER INTERFACE PANEL FOR WARNING SIGNALS:

- Solid Triangle with Electrical Current Symbol = Short in wire or application
 - Press Triangle, then "Continue" to see fault item and location
- Flashing Triangle with Exclamation Point = Battery Sync issue
 - Press Triangle for more information

FOR MORE SPECIFIC DETAILS ABOUT BATTLE BORN BATTERY SPECS AND MAINTENANCE:

- Visit BattleBornBatteries.com or to speak to a Battle Born expert, call 855-292-2831

FOR MORE SPECIFIC DETAILS ABOUT RICH SOLAR BATTERY SPECS AND MAINTENANCE:

- Visit RichSolar.com or to speak to a Rich Solar expert, call 800-831-9889