Power Booster Battery Components

Bullet Connectors

Power Booster Battery

Power Discharge Cable



11.1V Booster Battery AC Adapter with 110V outlet plug Yellow XT60 Connectors

Charge Cable (plugs into AC Adapter)

Installation Synopsis:

The 12V Power Booster Battery needs to be installed in series with the Sondors stock 36V cylindrical battery. To accomplish this, the RED wire is cut between the stock triangular battery and the motor controller (the aluminum box). Blue bullet connectors are crimped onto the cut ends so that the Power Booster Discharge Cable can be connected in. The Power Discharge Cable has special built-in diodes to guard against reverse charging by the stock 36V triangular battery just in the case where the 12V Power Booster Battery runs out of charge before the 36V stock battery.

Tools Needed:

- 4mm Allen hex wrench
- · Wire crimper/stripper/cutter

Good

Combination crimper/ stripper/cutter



Best

<u>Crimper for insulated</u> terminal connectors



(click link to view on Amazon)

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Installation Instuctions (use the Power Discharge Cable)

Install ONLY in a 36V Sondors eBike with the original Motor Controller (the rectangular aluminum box next to the black triangular battery)!

- 0. Read the Lithium Battery Safety Instructions at the end of this document
- 1. Turn OFF the Sondors battery through the port on the right side of the triangular battery enclosure.



- 2. Unscrew the chrome battery connector from the Sondors battery (triangular black plastic box) and prepare to crimp the blue bullet connectors on the RED power wire.
- 3. Cut the RED wire halfway between the chrome battery connector and the motor controller (the rectangular aluminum box).
- 4. Strip 1/4" of insulation from <u>each end</u> of the RED wire where it was cut.



- 5. Starting with the RED wire coming from the chrome battery connector, stick the bare wire all the way into the MALE bullet connector (the connector only half covered in blue insulation) so the wire insulation is part way into the connector.
- 6. Use a Crimper to squish the connector onto the wire. Use the blue (16-14) or red position on the crimper. Tug on the bullet connector to test your crimp job when done. If any connector is not secure you MUST obtain and use fresh new bullet connectors and try again!



7. Repeat the crimping on the end of the bare end of the RED wire coming from the controller using the FEMALE bullet connector (the connector completely covered in blue insulation). Tug on the bullet connector to test your crimp job when done. The connectors should look like the photo to the left.

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- 8. Using a 4mm hex wrench remove the 4 screws holding the controller to the battery box. Slide the controller down to make room for the Booster Battery. You won't need the screws with the Booster Battery in place.
- 9. Connect the RED wire from the Booster Battery Power Discharge Cable to the RED wire going to the controller.



- 10. Connect the BLACK wire from the Power Discharge Cable to the RED wire from the battery.
- 11. Connect the Power Booster Battery to the Power Discharge Cable using the Yellow XT60 connectors. All your connections should look like the photo at left (an enlargement is on page 5).

Never use the Power Booster Battery without the special Power Discharge Cable. This could destroy the Booster Battery and a fire may result!



- 12. Reconnect the chrome battery connector to the Sondors battery. The lower mounting flange of the controller will fit BEHIND the chrome battery connector.
- 13. Fit the Booster Battery into the battery box above the loose controller. It will be a very snug fit.



Your battery compartment should look similar to the photo at left. Tuck the cables away, close the compartment and turn ON the Sondors battery.

14. Enjoy your new 48V battery!

NOTE: When using the Power Booster Battery, the thumb throttle will be a little more sensitive because of the higher voltage. So open the throttle slowly when at a stop to avoid overloading the motor controller. If the controller does get overloaded it will shut off and then come back on again in a few seconds.

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Charging Instuctions

- 1. Turn OFF the Sondors battery through the port on the right side of the triangular battery compartment.
- 2. Unplug the Yellow XT60 Connector on the Booster Battery going to the red & black Power Discharge Cable.



Optional: Remove the Booster Battery from the Sondors eBike.

- 3. Plug in the Booster Battery Yellow XT60 Connector into the XT60 connector of the coax Charge Cable.
- 4. Plug the 12.6V Booster Battery AC Adapter into the coax Charge Cable. DO NOT USE THE SONDORS 42V (36V) CHARGER TO CHARGE THE 12V POWER BOOSTER BATTERY! This will destroy the Booster Battery and a fire may result!



When the LED light on the AC Adapter turns from RED to GREEN the Booster Battery is fully charged.

Reverse the steps above to reconnect the Booster Battery to the red & black Power Discharge Cable.

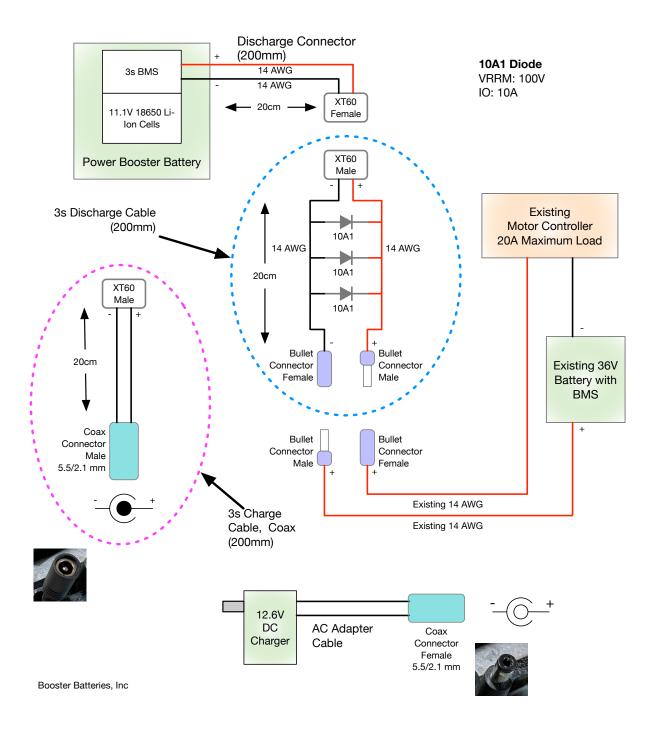
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12V Power Booster Battery



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LITHIUM BATTERY SAFETY INSTRUCTIONS

You must read these safety instructions and warnings before using or charging your batteries. If you do not agree with these conditions, you must return the battery immediately to the seller before use.

Lithium Polymer and Li-ion batteries are volatile. Failure to read and follow the below instructions may result in fire, personal injury and damage to property if charged or used improperly. By purchasing Booster Batteries, Inc Lithium Polymer and Li-ion batteries, the buyer assumes all risks associated with lithium batteries.

Li-Ion and Polymer battery & packs may explode and cause fire if misused. All persons performing the installation of Booster Batteries for their intended use must be experienced professionals and assume all responsibility for proper installation, as well as have the capability to provide services in the event of an emergency.

- 1. When charging Battery Pack, put the battery in a fire proof container. Don't leave battery pack and charger on wood or carpet, or leave it unattended.
- 2. Keep Li-Ion & Polymer battery packs away from children.
- 3. Never make wrong polarity connection when charging and discharging battery packs. Always double check polarity of battery's connector to ensure proper polarity. Always check first with a Volt-Ohm multimeter.
- 4. Lithium batteries have a cycle life, replace old batteries with new ones when they reach the end of their service life or when two years old, whichever occurs first.
- 5. Testing battery condition is your own responsibility. Test the lithium battery received before using to ensure battery can be operated properly and safely. Refer to the UL safety test standard for lithium batteries and packs. For more information, contact Underwriters Laboratories directly.

General Guidelines and Warnings

- 1. Use specific Lithium Polymer/Li-ion charger only. Do not use a NiMH or a NiCd charger-Failure to do so may a cause fire which may result in personal injury and/or property damage.
- 2. Never charge batteries unattended. When charging lithium batteries you should always remain in constant observation to monitor the charging process and react to potential problems that may occur.
- 3. It is your responsibility solely to ensure that the charger you are using to charge the batteries works properly. Always monitor charging process to assure batteries are being charged properly. Failure to do so may result in fire.
- 4. If at any time you witness a battery starting to balloon, swell up, smoke or hot, discontinue charging process immediately, disconnect the battery and observe it in a safe place for approximately 15 minutes. This may cause the battery to leak, and the reaction with air may cause the chemicals to ignite, resulting in fire.

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- 5. Since delayed chemical reaction can occur, it is best to observe the battery as a safety precaution in a safe area outside of any building or vehicle and away from any combustible material.
- 6. Wire lead shorts can cause fire! If you accidentally short the wires, the battery must be placed in a safe area for observation for approximately 15 minutes. Additionally, if a short occurs and contact is made with metal (such as rings on your hand), severe injuries may occur due to the electrical conductibility of metal.
- 7. A battery can still ignite even after 10 minutes.
- 8. In the event of a strong jolt to the battery, such as from a vehicle crash, you must remove battery for observation and place in a safe open area away from any combustible material for approximately 15 minutes. Never drop the batteries.
- 8. If for any reason you need to cut the terminal wires take care to cut each wire separately to ensure the wires to not touch each, otherwise or a short may occur and potentially cause a fire.
- 9. Never store or charge battery pack inside inside a closed space during extreme temperatures, since extreme temperature could ignite a fire.

Charging Process

- 1. Never charge batteries unattended.
- 2. Put battery in the fireproof container and charge in an isolated area, away from other flammable materials. Always have fire extinguisher for emergency use.
- 3. Let battery cool down to ambient temperature before charging.
- 4. Do not charge battery packs in series. Charge each battery pack individually. Failure to do so may result in incorrect battery recognition and charging functions. Overcharging may occur which can result in fire.

Storage & Transportation

- 1. Store battery at room temperature between 40 and 80 degrees F for best results.
- 2. Do not expose battery pack to direct sunlight (heat) for extended periods.
- 3. When transporting or temporarily storing in a vehicle, temperature range should be greater than 20 degrees F but no more than 150 degrees F.

Storing battery at temperatures greater than 170 degrees F for extended periods of time (more than 2 hours) may cause damage to battery and a possible fire.

Battery Life

Batteries that lose 20% of their capacity must be removed from service and disposed of properly. Discharge the battery to 3V/Cell, making sure output wires are insulated, then wrap battery in a bag for disposal.

Product Warranty

Product warranty is limited to original defects in material and workmanship. Warranty does not cover collateral damage. Misuse, abuse, incorrect charging and other inappropriate use of this product are not covered under warranty.

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