

SBP E-SHIFTER KIT ELECTRICAL CONNECTIONS

After you have your motor mounted (other instruction sheets and Jim's video) and all mechanical systems are go, it's time to make the five electrical connections in four (4) steps.

This should be really easy, if not, you may be doing something wrong. There is really only one way these connectors mate. STOP and ASK if there is any confusion at all.

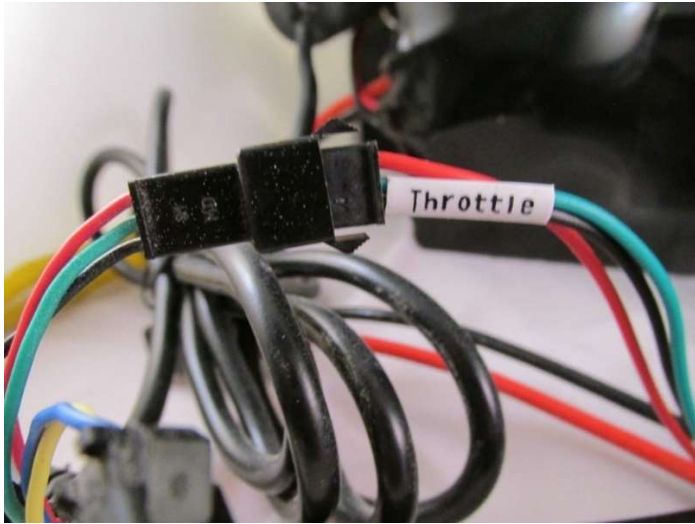
⇒ **Please** do **NOT** touch, attempt to connect, or mess with the many other unnecessary wires and connectors on your controller. You will damage your controller.

(1) Plug your motor into your controller. There is only one mating set for the motor, so easy to find – the plug is water resistant, so it should be snug fit. Feel free (not required) to use just a little silicone lubricant (don't use petroleum lubricant) on the plastic shell of the connector as shown in the picture in the area between the arrows. Line the arrows up and push the mating halves together. It will take some force.

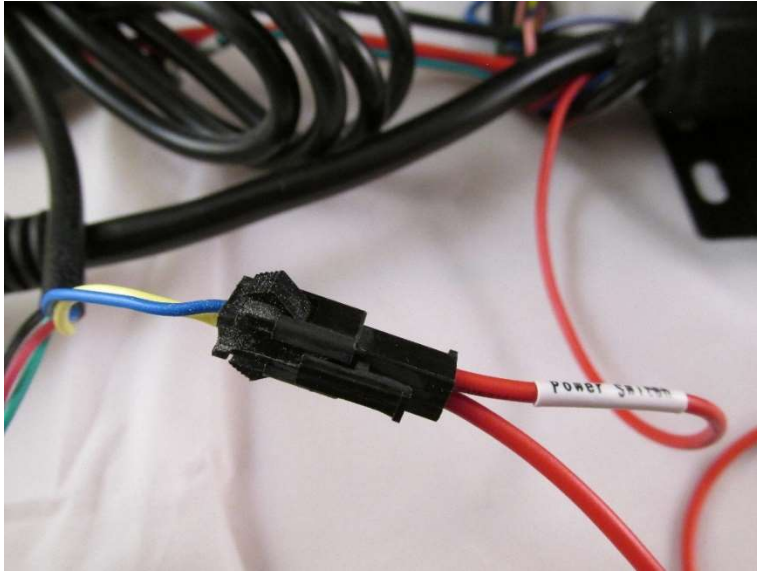


(2) Next, plug in two throttle connections. One is 3 wires for actual throttle control and simply plugs into the mating connector on the controller, the other is for the key switch and allows power to be turned on. Power comes from your battery (+V) to the bullet connector (following step) to this two prong plug. +V up to the key switch, then when switch is ON to the controller

First plug in the 3 wire throttle connector (Controller side is labelled **THROTTLE**):



And plug in the two wire power switch connector from the controller to the throttle. This connector wire set is labeled **POWER SWITCH**.

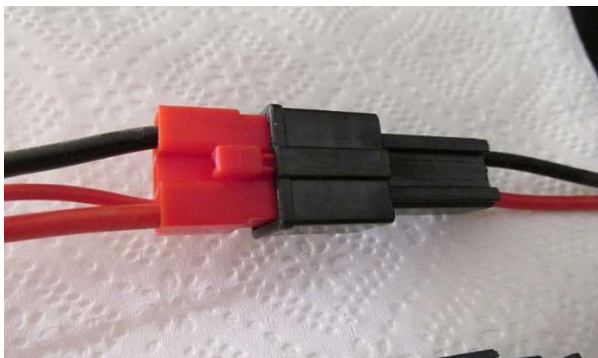


Almost done!

(3) Plug the battery into the controller. Typical battery pack* with supplied full pig tail:

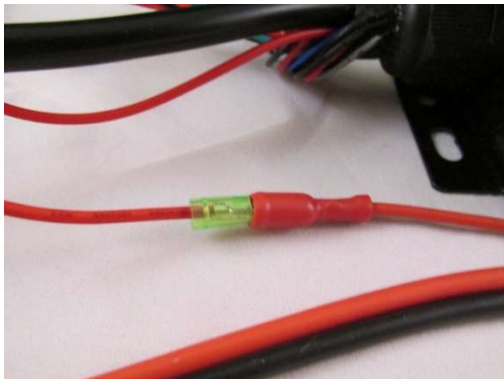
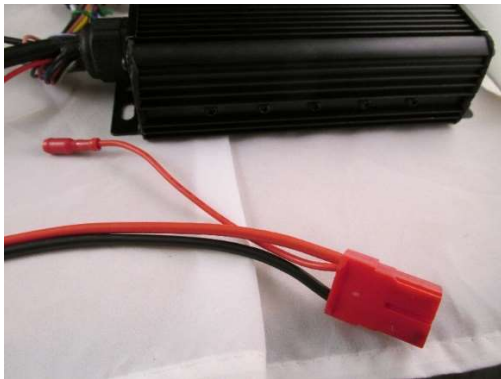
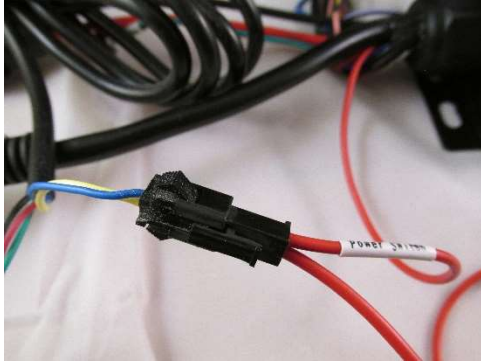


IT WILL SPARK AND **ARC**. This is normal! The FETs in the controller charge up with a lot of current.



(4) Connect the bullet connector. This is so you have power (V+) to your key switch as mentioned earlier. This is a critical connection. First see the two wire POWER

SWITCH connection that you already made then simply plug the single wire bullet connector (lime green terminal insulator below) to the short V+ battery single “pig tail wire” bullet plug connector as shown below (sometimes these wires are black/other color)



That's it. If you have a good battery, the throttle should read out the correct V+ (~36V-72V) when switched on with the key switch. IF you don't have power, stop and very carefully step through these instructions again.

*Battery pack will need the supplied wire harness installed - spliced in to mate with controller as batteries may come unterminated (no connector) or with a different connector. Optional would be to change connector on controller to match battery.