



Advanced 24v Automatic Starting Harness

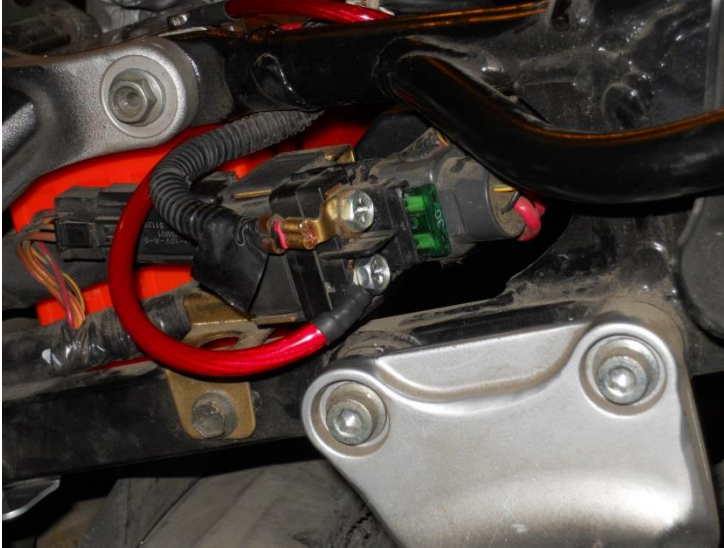
These instructions are for setting up the Advanced 24v Automatic Starting Harness as sold by Tiger Racing. The harness is intended to be connected to the TBB-1324 2nd battery system. It is already assumed the tail section of your bike has been removed and the 2nd battery is mounted and fully charged. In your kit you will find 1 Advanced Starting Harness, two Zip-Ties and one scotch lock wire crimp.



1. Secure the 24v relay to the tail battery (as pictured below) using the supplied zip ties. Loop the long wires under the battery and run them up the tail, towards the front of the bike. Connect the tail battery.



2. On the left side of the tail section, remove the plastic cover that protects the starter solenoid. Disconnect the starter cable from the starter solenoid (lower cable) and the starter. Remove the cable from the bike. Save the black plastic boot that covers the starter nut/bolt. It will be re-used when connecting the new starter cable. Route the shorter 8 gauge cable across the bike behind the battery to the starter solenoid. Connect it to the lower starter solenoid terminal as pictured.



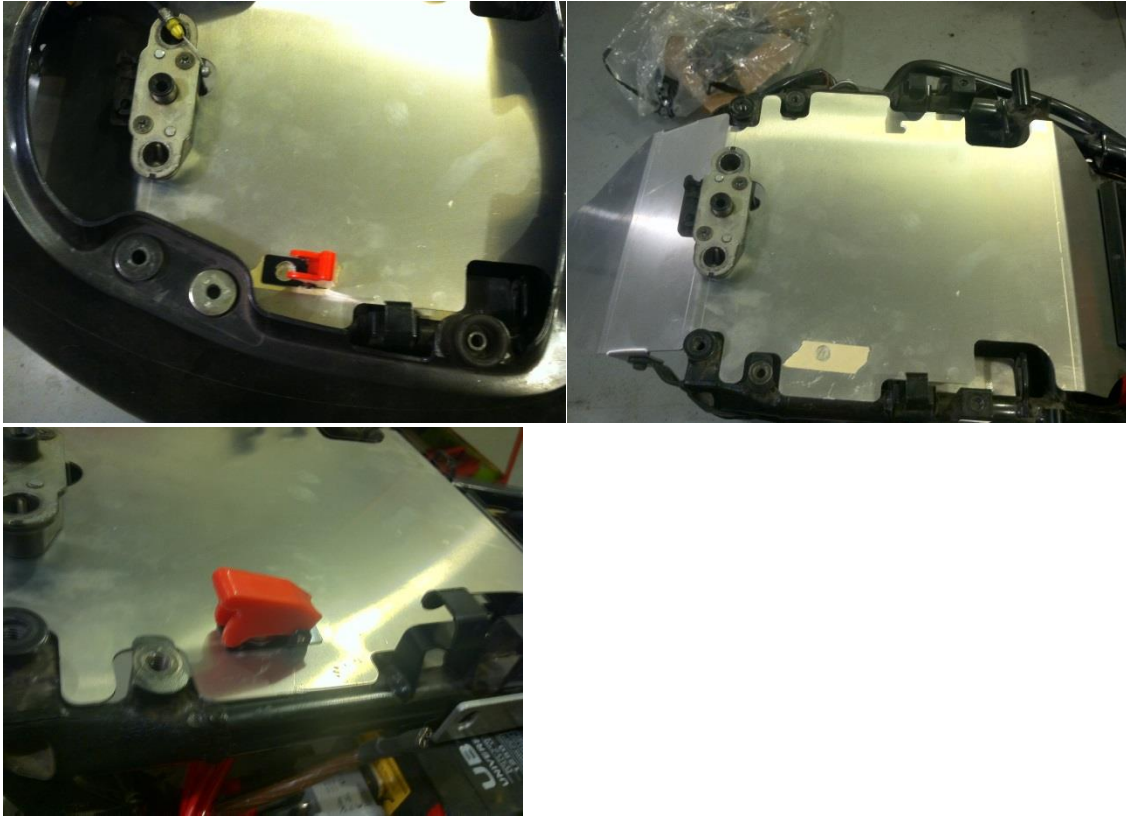
3. The longest 8 gauge wire will connect to the starter. Route the starter cable to the starter. Make sure it will not be pinched under the tank or along any other moving parts. Using the factory wire restraints under the tank, secure the new starter cable along the right side of the frame. Connect it using the factory nut/bolt on the starter, using the plastic boot left from the removed starter cable.



4. Remove the bolt from the negative (-) side of the primary battery and connect the single black wire to the negative side. Secure the bolt.
5. Remove the bolt from the positive (+) side of the primary battery and connect the single 10g red wire. Secure the bolt.

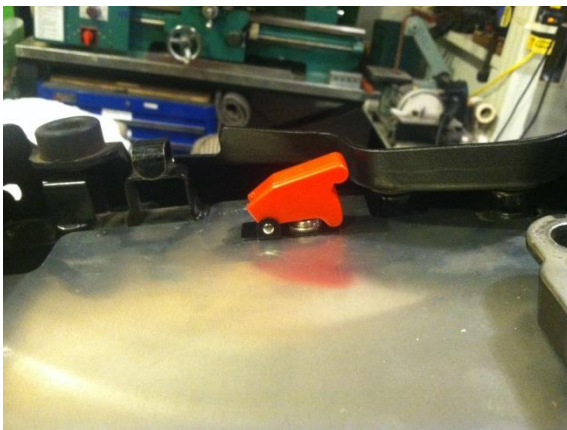


6. Remove the safety cover from the switch. Temporarily install the tail to verify fit. Using tape and a pencil, mark the position of the safety switch as pictured. It must run along the frame rail but not interfere with the battery or the 24v starter relay. Once the hole is marked, remove the tail to verify that the switch does not interfere with the rest of the hardware. Using a $31/64$ " drill bit, drill a hole. A $1/2$ " bit will work but the hole will be sloppy and you may need a washer on the lower side. Assemble the switch. The safety cover can only go on 1 direction. The default position is for 24v starting. It is recommended to secure the locking nuts with a dab of Loctite to prevent it from coming loose during bike operation.



7. Lastly, connect is the longest thin wire. This wire must be connected to a switched ignition power source using the provided scotch-lock connector. This will allow charging of the secondary battery during operation of the bike. If connected to a constant 12v source, both batteries will slowly drain of power.

8. Test the system, Part 1. With the switch in the closed position, turn the key on. A click should be heard. If not, go back to step 7 before proceeding. Start the bike. The starter should audibly spin at a much higher speed and the bike will start very quickly.



9. Test the system, Part 2. With the switch in the open position, turn the key on. Again, a click should be heard. If not, go back to step 7. Start the bike. The bike should start with the factory original 12v starter. This is only intended as a fail-safe measure in the event that the 24v system does not operate as intended. If the 2nd battery is dead or a wire come loose/broken, this will allow you to start the bike.

