

## Trailer Isolator for CANBUS Electrical Systems

**Pt # TWC004**

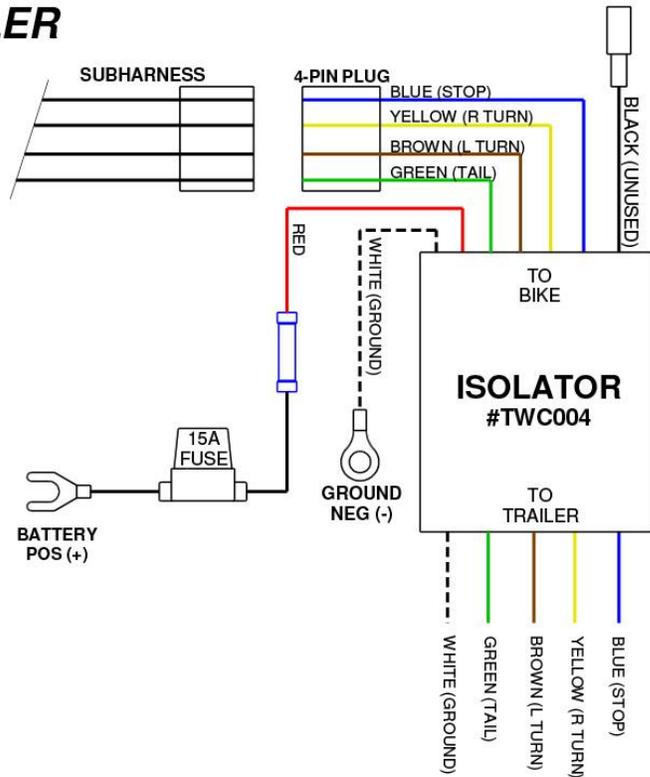
### INSTALLATION INSTRUCTIONS

**NOTE:** This Isolator is designed to work with CANBUS computerized low voltage electrical systems and **MUST BE USED on 2018 and newer Honda Gold Wing, late model BMW's** and some others. It may be used on non-CANBUS models as well. It is designed to draw the additional power needed for the trailer's lighting directly from the battery, not thru the brake, tail, or turn signal circuits of the motorcycle. The isolator senses when power is applied to these circuits and activates the trailer lighting accordingly. It is a solid-state electronic device that will protect the motorcycle's advanced electrical systems. It will supply up to 15 amps to the trailer

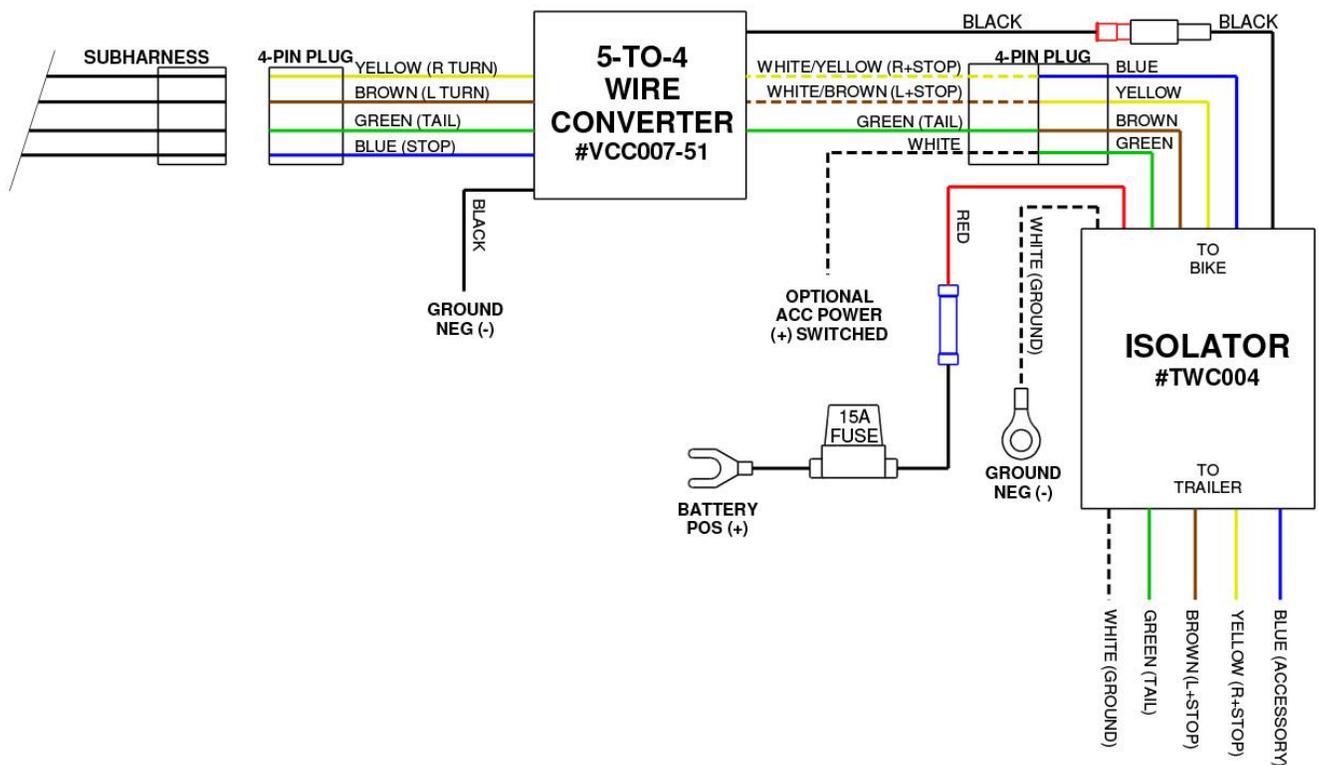
**NOTE!** The isolator is designed for trailers with a five-wire system, which, like the motorcycle will have separate turn signal bulbs. If the trailer you will be towing has a four-wire system (combined brake and stop lights) you will also need to add a five-to-four wire convertor in line before the isolator (not supplied) RIVCO pt# VCC007-51 which will plug into the isolator.

1. The trailer isolator comes with a connector which plugs in to one of our sub harness connectors which will plug directly into the motorcycles wire harness (and our 5 to 4 wire convertor if needed. On models we do not offer a sub-harness for you can remove this plug and use Scotch-Loc wire taps (not supplied) to connect the wires from the motorcycles tail/brake and turn signal wires to those on the isolator or 5 to 4 wire convertor (if your trailer is a four wire system).
2. Connect your sub-harness per the instructions supplied with it. For a 5 wire trailer connect the plug from the sub-harness to the plug on the Isolator. For a 4 wire trailer connect the plug from the sub-harness to the 5 to 4 wire convertor then to the Isolator Also connect the smaller single Black wire from the 5 to 4 convertor to the mating Black wire on the Isolator.
3. Using one or more of the supplied cable ties secure the Isolator and or 5 to 4 convertor in a location so as not be pinched or pressed on when the seat is replaced.
4. . Find a suitable location to attach the LONGER WHITE GROUND WIRE o the frame or battery (-) to ensure a good ground.
5. Route the red wire from the isolator to the battery positive (+) terminal. Using the provided fuse holder, cut and strip the red wire to desired length. Crimp it to the fuse holder and attach it to the battery positive (+) terminal. Temporarily remove the fuse from it's holder while making the remaining connections.
6. Route the isolator trailer wires through the rear of the bike to the bottom of the receiver or hitch, secure with the provided cable ties. The Trailer connector plug is not provided, due to the diversity of trailer connectors or plugs available. Follow the color code/function using the supplied wiring diagram to make the proper connections to your particular trailer connector and trailer. Also if using a loose plug (one that is not mounted rigidly to the motorcycle) leaving enough wire to connect to your trailers plug and allow for turning.
7. Replace the fuse in its holder then test your trailer lighting functions either by plugging in your trailer or with a test light at the appropriate colored wires on your connector.

# TWC004 CAN-BUS ISOLATOR UNIT WIRING DIAGRAM 5-WIRE TRAILER



# VCC007-51 + TWC004 CAN-BUS ISOLATOR UNIT WIRING DIAGRAM 4-WIRE TRAILER



**BEFORE EVERY RIDE, MAKE SURE THAT THE TRAILER LIGHTS ARE FUNCTIONING PROPERLY.**