Signal Decoder For Trailers With A 5 Wire Lighting System For Harley-Davidson Tour Models Installation Instructions #HD007-50

Pt# HD007-50

Required on:
2014 FLH models including
Classic and Ultra Classic
Ultra Classic LTD
Street Glides, Road Glides
Tri Glides
Fite all CVO Screening Foo

Fits all CVO, Screaming Eagle versions of these models with the exception of Ultra LTD CVO

The above listed 2014 models are equipped with the new Can-bus style wiring. This new wiring combines the brake and turn signal functions together on a single wire from a computer module to the tail lights. Also, this system will not support the additional load of trailer lights to the existing wiring and it puts out a signal that can be used only on a trailer with a four wire system unless a signal decoder is used also.

The decoder will plug directly into the sub-harness and will separate the combined brake and stop Can-bus signal allowing it to correctly operate a trailer with a 5 wire lighting system. A mating plug to the trailer will also be required.

YOU WILL also need a wiring sub-harness to make the connection from the motorcycles wire harness to the plug on the decoder. This is RIVCO Pt# HD007-50.

YOU MUST also use an isolator, our # Gl18007-IU. This will draw all the power for the trailer lights directly from the battery and not adversely affect the Can-bus System or computer. This will plug directly into the signal decoder.

- 1. Remove the seat and locate the tail light wires plug connector. This will be a plug that matches that of the sub-harness and is located at the front edge of the fender on motorcycles, and under the frame cross member that supports the seat on Tri Glides.
- 2. Referring to the supplied wiring diagram, plug the sub-harness into the bike at the tail light connection.
- 3. Plug the decoder box into the sub harness.

- 4. Plug the isolator into the decoder box.
- 5. Connect the black ground wires from the decoder box and isolator to a solid ground on the frame.
- 6. Connect the red wire from the isolator to the battery (+) positive terminal using the fuse wire supplied.
- 7. Route the wires from the isolator down to the hitch securing as needed with the supplied cable ties and connect a plug that matches that on the trailer to the output wires of the isolator.
- 8. Using a test light or meter check the functions of the wires at the plug attaching the ground wire on the plug to the ground wire of your light or meter and the positive (+) to the other wires as you check them.

There are very few actual 5 wire plugs, most will have a six wire plug with one wire or terminal not being used and there are many types of these. If you do not have a male plug to connect to the motorcycles wiring that matches that on the trailer we recommend the following. Replace the existing plug on their trailer with either our TWC001 or TWC002 plugs; this includes both the male end for the trailer and the female end for the motorcycle.

Thank you for purchasing a RIVCO Product!



TRAILERS WITH A 4-WIRE SYSTEM (COMBINED TURN SIGNAL & BRAKE LIGHTS)





