

HD007-49
Trailer Wiring Sub-Harness
For Harley-Davidson Tour Models
Installation Instructions

The HD007-49 sub-Harness provides a plug in connection between the motorcycle's wire harness and trailer wiring components.

With the HD007-49 as set from our factory (shown in the supplied wiring diagrams 1 & 2) note leads 2, 3, 4, 5 are connected and leads 1 and 6 are not used to fit 2014 and newer FLH models including:

Classic and Ultra Classic, Ultra Classic LTD, Street Glides, Road Glides, Tri Glides and all CVO, Screaming Eagle versions of these models **(except Freewheeler Trike models and 2010-2013 Road Glide Ultra models)**.

For use on 2010-2013 Street Glide and Road Glide models you must connect leads 1,3,5,6 with leads 2 and 4 not used as shown on the supplied wiring diagrams 3 and 4 for 2010-2013 Street Glide, Road Glide.

YOU MUST ALSO USE RIVCO isolator # 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 as well as supply full power and brightness to the trailer lighting. This will plug directly into the sub harness.

YOU MAY ALSO NEED a four-to-five wire decoder box # HD007-50 to connect to a trailer with a five-wire system on 2014 and newer models. Or a four-to-five wire convertor # EC07664 to connect to a trailer with a four-wire system on 2010-2013 Street Glide and Road Glides. These will plug it in between the sub-harness and the GL18007-IU isolator.

TRAILER PLUGS: We do not include the plug, as there are too many variations. However, if you do not have a matched set of trailer plugs already, we recommend using our #TWC001 or #TWC002 trailer plugs sets. These trailer plug sets include both a male end for the trailer and a female end for the motorcycle.

NOTE: 2014 and newer Harley-Davidson models have a new four-wire CAN-bus tail, brake, and turn signal wiring system. This new wiring combines the brake and turn signal functions on a single wire sent from a computer module to the lights. The CAN-bus system will not support any additional load to power trailer lights therefore, it is necessary to use a GL18007-IU isolator. Because this new wiring is a four-wire system, you must use an HD007-50 decoder box when wiring to a five-wire trailer.

So now, on to what you need:

For 2014 and newer models with a four-wire trailer system, refer to wiring diagram #1. You will need an HD007-48 sub-harness and GL18007-IU Isolator.

For 2014 and newer models with a five-wire trailer system, refer to wiring diagram #2. You will need an HD007-48 sub harness, HD007-50 decoder box, and GL18007-IU Isolator.

For 2010-2013 Street Glide and Road Glide with a four-wire trailer system, refer to wiring diagram #3. You will need an HD007-48 sub harness, EC07664 five-to-four wire convertor, and GL18007-IU Isolator.

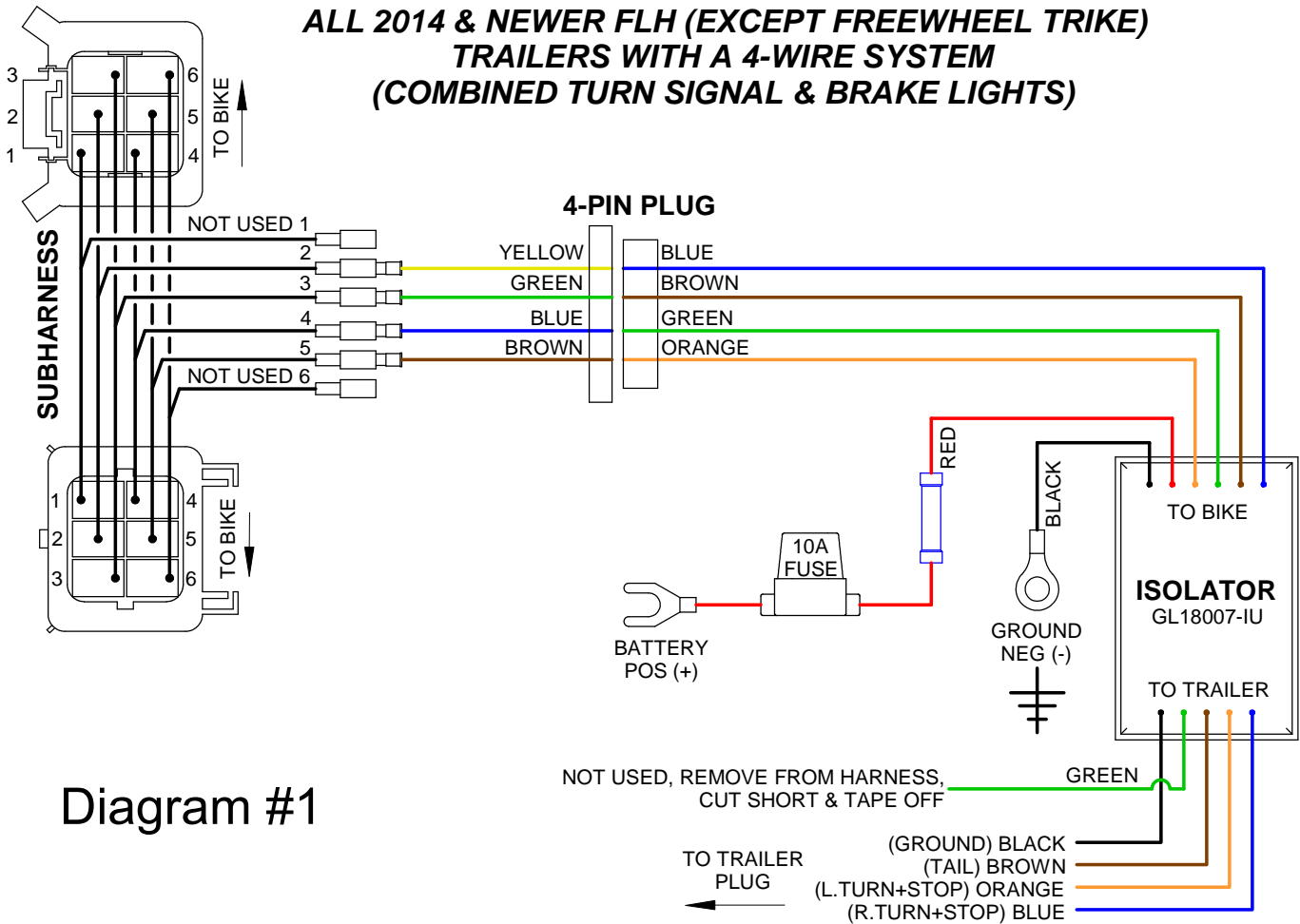
For 2010-2013 Street Glide and Road Glide with a five-wire trailer system, refer to wiring diagram #4. You will need an HD007-48 sub harness and GL18007-IU Isolator.

1. Remove the seat and left saddlebag. To locate the tail light wires, look for a plug with ends that match the plugs on the HD007-49 sub-harness. This plug is located at the front edge of the rear fender on most models. However, 2010-2013 Street and road Glides have this plug under the left side cover and on Tri-Glide models, the plug will be where the Tour Pack meets the rear of the seat. To determine if you have found the correct plug, simply unplug the connectors and turn on the ignition –if the taillights are still on you have unplugged the wrong connector.
2. Referring to the supplied wiring diagram, plug the HD007-49 sub-harness into the bike at the tail light connection located in step 1. Make the required changes to wires 1 and 6 **ONLY** if installing on a 2010-2013 Street and Road Glide model as shown.
3. Plug the EC07664 five-to-four wire convertor or HD007-50 decoder box or into the sub harness, if required for your application. Connect the ground wire to the frame. **Caution the EC07664 or HD007-50 MUST BE GROUNDED before switching the motorcycle ignition on! DO NOT power on the motorcycle ignition before grounding these components or you will damage them!**
4. Plug the GL18007-IU isolator into the previously installed HD007-49 sub-harness, HD007-50 decoder box, or the EC07664 five-to-four wire convertor. Connect the ground wire from the GL18007-IU isolator to the frame. Connect the red wire from the GL18007-IU isolator to the battery (+) positive terminal using the supplied fused wire.
5. Route the wires from the isolator down to the hitch, securing as needed with the supplied cable ties. Connect a plug that matches that of the trailer to the output wires of the isolator.
6. Using a test light or meter, check the functions of the wires at the plug by attaching the ground wire on the plug to the ground wire of your light or meter and the positive (+) lead on your test light or meter to other wires to check them individually.
7. Secure the wiring and components under the seat or side cover using the supplied cable ties. Replace the seat (and side cover if removed).

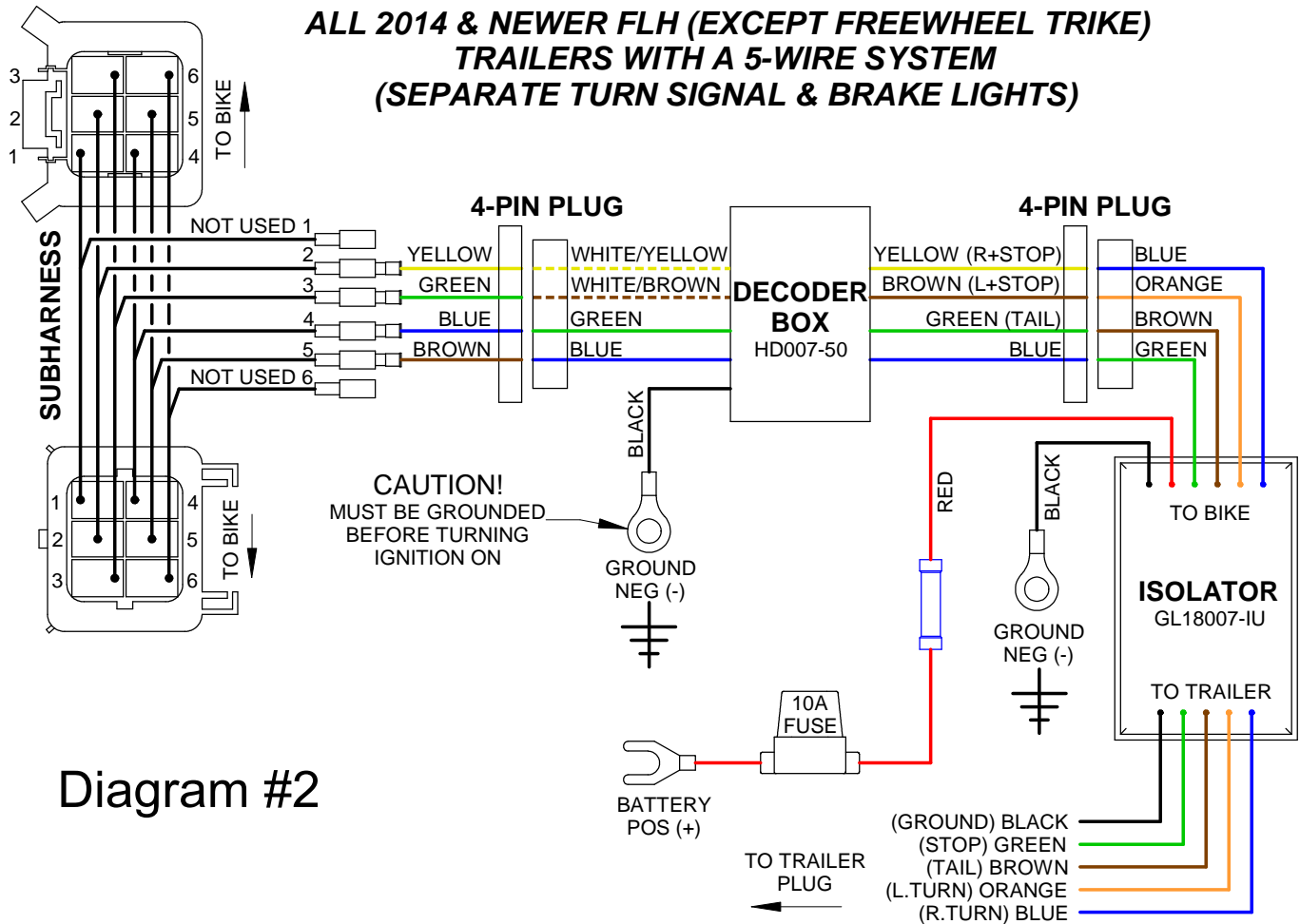
Thank you for purchasing a RIVCO Product!



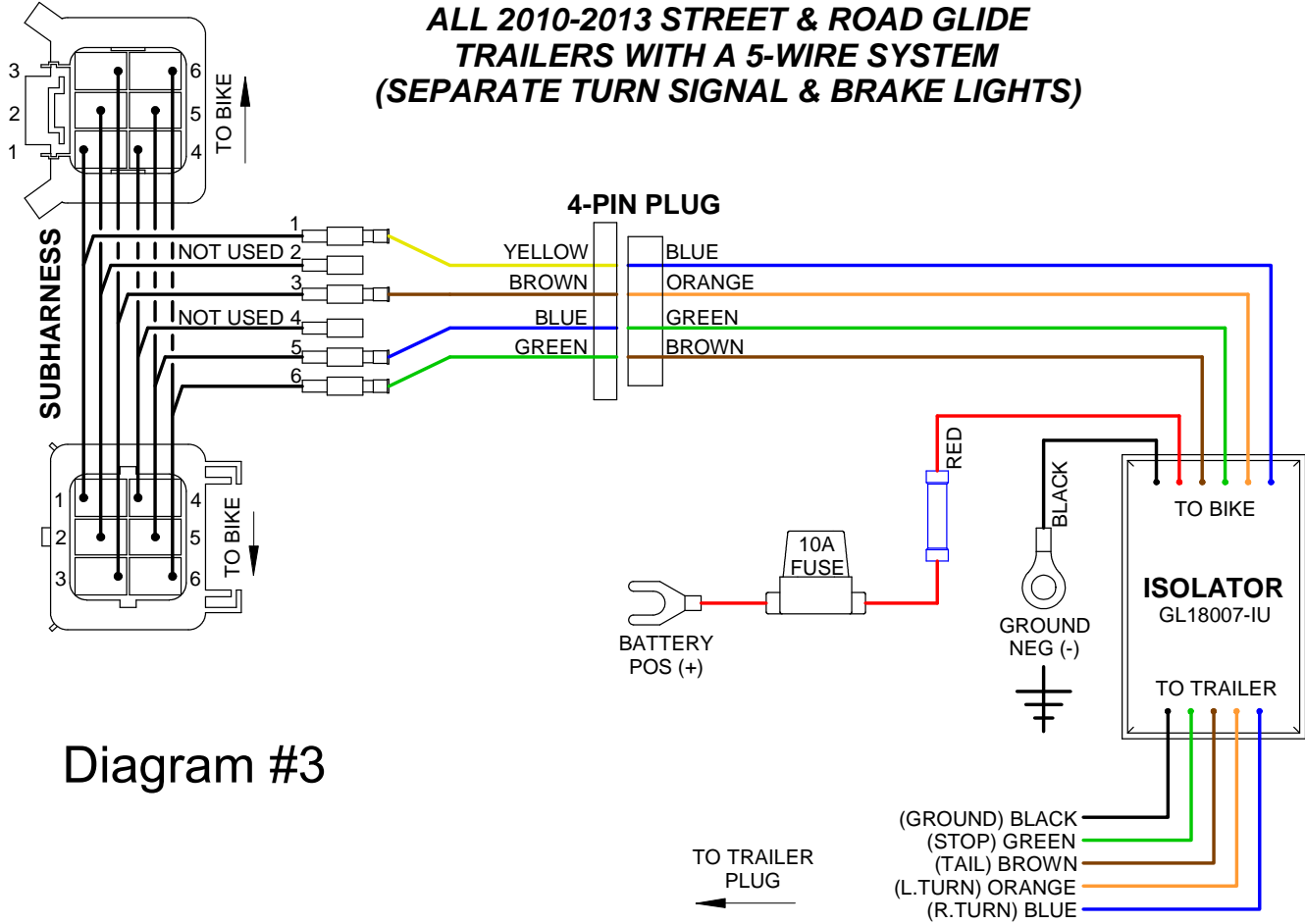
**ALL 2014 & NEWER FLH (EXCEPT FREEWHEEL TRIKE)
TRAILERS WITH A 4-WIRE SYSTEM
(COMBINED TURN SIGNAL & BRAKE LIGHTS)**



**ALL 2014 & NEWER FLH (EXCEPT FREEWHEEL TRIKE)
TRAILERS WITH A 5-WIRE SYSTEM
(SEPARATE TURN SIGNAL & BRAKE LIGHTS)**



**ALL 2010-2013 STREET & ROAD GLIDE
TRAILERS WITH A 5-WIRE SYSTEM
(SEPARATE TURN SIGNAL & BRAKE LIGHTS)**



**ALL 2010-2013 STREET & ROAD GLIDE
TRAILERS WITH A 4-WIRE SYSTEM
(COMBINED TURN SIGNAL & BRAKE LIGHTS)**

