

Trailer Wiring

2008 Yamaha Royal Star Venture

Procedure to add trailer wiring:

Step 1 – Remove driver seat. The Connector is a 6-conductor Molex type connector tucked to the back of the battery. It is milky white in color.

Step -2 – Identify wire colors and purpose. Yamaha uses a proprietary color code that DOES NOT match industry standards of trailer connector wiring. Use the table below to identify:

Yamaha Factory
Harness

Wire Color	Code	Function
Black	B	Ground
Yellow	Y	Brake Light
Blue	L	Running Lights
Brown	Ch	Left Signal
Green	Dg	Right Signal

Typical 5-Wire Trailer

Wire Color	Function
White	Ground
Red	Brake Light
Brown	Running Lights
Yellow	Left Signal
Green	Right Signal

Typical 4-Wire Trailer

Wire Color	Function
White	Ground
Brown	Running Lights
Yellow	Left Signal/Stop
Green	Right Signal/Stop

The “4-Wire Trailer” is the standard for lite-weight trailers without brakes, back-up lights, and battery charging. It uses the old-American standard for brakes, tail lights, and signals of the 1970’s, where the brake lights and turn signals are integrated.

The “5-Wire Trailer” is the modern standard of most cars today. It came from Europe/Asia, where the brake lights are separate from turn signals. This is the format that the Yamaha uses, but the wire colors are NOT the same. Running lights are the same as “tail lights” and side marking lights.

Step – 3 – Tap into the appropriate color code to make the connection in accordance with the above table. To convert from 5 to 4-wire any trailer 5 to 4 wire converter will work. These can be obtained from Amazon or other suppliers including auto part stores. The taps can be made on either side of the connector. Making the taps with a service loop ending with butt-connectors or spade-connectors is preferred so that “converters” are not

permanently attached and may be removed for repair, testing, or maintenance.



Figure 2



Standard Type of Connector

Step – 4 – Remove the rear passenger seat. Run a wire service loop (see Figure 2) under the passenger seat to a location that the trailer connector can mate with it. Keep it short so it's out of view. A Velcro tie can keep it hidden when not in use. The trailer cord can be long. They also make 4-Wire “flat connector” extension cords if necessary. The Helmet lock works good to hold the trailer cord while towing. There is little need for it when the trailer can hold the helmets.

Time saver: There are harnesses that can be purchased to plug in between the factory Molex connector. These come in various prices and do not require any tapping or cutting of wires. If you are a bit skittish they may be the ticket for you. Nonetheless the above procedure works fine and is cheaper. Richard Luff