Trailer Wiring Tips

Trailers are required to have at least running lights, turn signals and brake lights. To provide the power and a hook-up for these, the tow vehicle's wires are tapped into. This is accomplished through either a T-One connector (if available for your vehicle) or through hardwiring. The T-One Connector is pre-wired to a 4-pole flat that can adapt to a 6 or 7 way round connector. Hardwiring requires the installer to locate the proper wires in the tow vehicle. To help in this task consult the owner's manual or the chart at the bottom of the page.

Connectors

Various connectors are available from four to seven pins to allow for the transfer of power for the lighting as well as auxiliary functions such as electric trailer brake control, backup lights, etc. Choose a connector that has the required number of pins for the functions required. Also, mount the connector on the vehicle. Not only will it display a clean look, but a mount is helpful in avoiding the potential problems associated with leaving a connector dangling.

4-Way Connectors
4-Way connectors are available allowing the basic hookup of the three lighting functions (running, turn, and brake) plus one pin is provided for a ground wire.

4-Way Flat Trailer Connector
* Most Common

4-Way Flat Truck Connector

4-Way Round Trailer Connector

4-Way Round Truck Connector

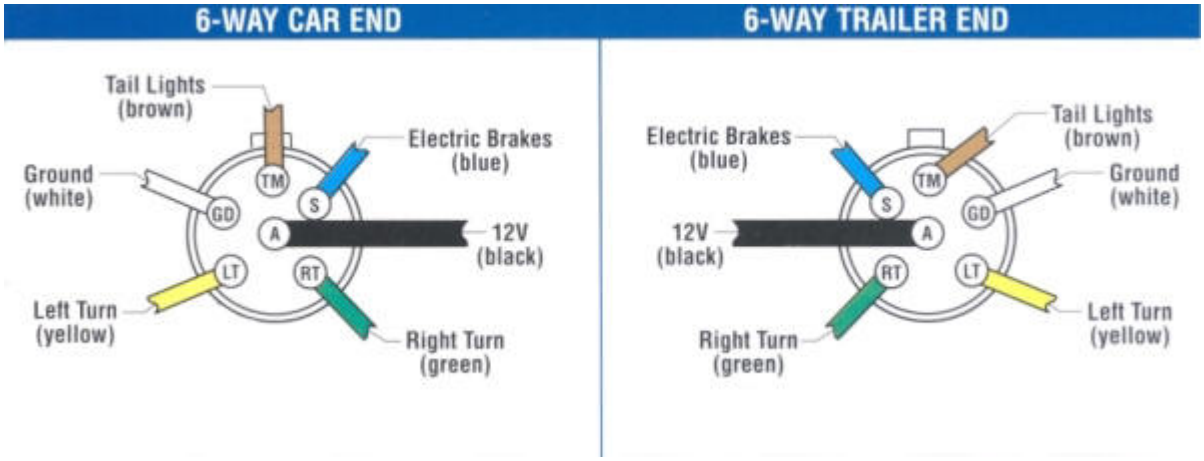
6-Way Connectors
6-Way connectors are available allowing the basic hookup of the three lighting functions (running, turn, and brake) and besides the ground, two extra pins are available to provide two additional functions.

6-Way Round Trailer End

6-Way Truck End

6-Way Square Trailer & Truck Connectors

The Diagram below shows the proper way to wire the connector to your trailer or vehicle.



Note: The black (12V) and Blue (Electric Brakes) may be reversed to suit trailer. Horse Trailers may use the center pin for 12V hot lead, R.V. trailers use the center pin for electric brakes.

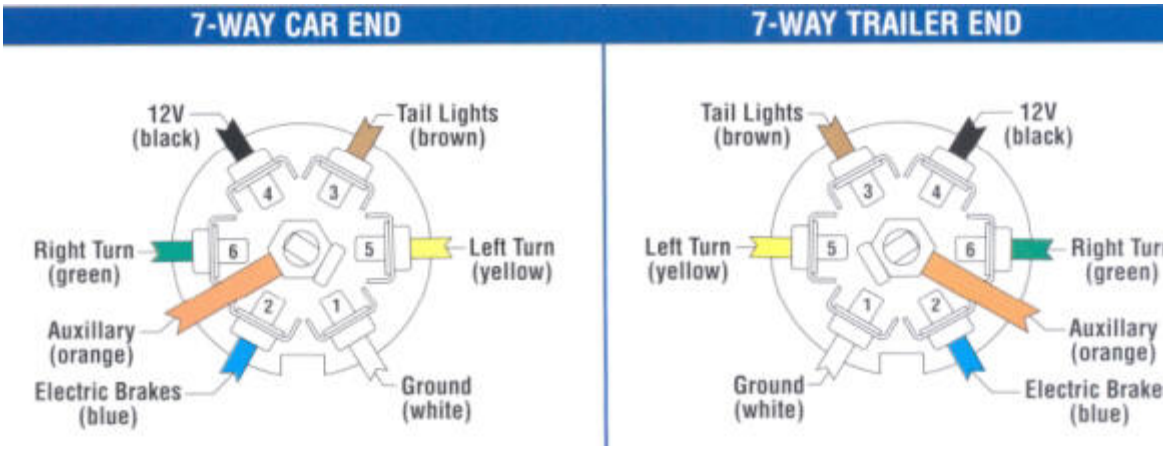
7-Way Connectors
Besides the three main lighting functions, additional pins for auxiliary power, trailer battery charging etc. are available.

7-Way Trailer End

7-Way Truck End

7-Way Plastic Connectors.

The Diagram below shows the proper way to wire the connector to your trailer or vehicle.



5-Way Connectors
5-Way connectors are available allowing the basic hookup of the three lighting functions (running, turn, and brake) and besides the ground, one pin is available to provide support for another function. Usually the 5-Way Flat is used for trailers with surge brakes. The additional wire is tapped into the backup lights to disengage the trailer's brakes when the vehicle is reversing.


5-Way Flat Trailer End


5-Way Flat Truck End


5-Way Round Trailer End


5-Way Round Truck End

How to Wire 4, 5 or 6 Way Connectors

Wire Color By Manufacturer								
Vehicle Manufacturer								
Dual Purpose Bulb System								
Wire Function	Wire Color	GMC	Ford	Chrysler	Jeep	Toyota	Honda	Mazda
RIGHT TURN & BRAKE LIGHTS	Green	Green	Orange W/ Blue Stripe	Brown	Brown	Green W/ Yellow Stripe	Green W/ Yellow Stripe	Green W/ Yellow Stripe
LEFT TURN & BRAKE LIGHTS	Yellow	Yellow	Lt Green Orange Stripe	Dk Green	Grey W/ Black Stripe	Green W/ Black Stripe	Green W/ Blue Stripe	Black Stripe
TAIL LIGHTS	Brown	Brown	Brown	Black W/ Yellow Stripe or Black	Blue	Red W/ Green	Red W/ Black Stripe	Green or Black Stripe
GROUND	White	Black	Black or Grey	Black	Black & Black	Black or White	Black	Black
Single Purpose Bulb System								
BRAKE LIGHTS	Use Converter	Pink or Lt Blue	Red W/ Green Stripe	White	Blue W/ Black Stripe	Green W/ Red or White Stripe	Green W/ White Stripe	Green or Green W/ Red Stripe
BACKUP LIGHTS	Red	Lt Green	Black W/ Pink	Violet	Brown	-	-	-
ELECTRIC TRAILER BRAKES	Connect To Blue Wire From Brake Controller							

Vehicle manufacturers have intermittently changed wiring colors over the years. It is recommended that a circuit tester be used on the tow vehicles wiring harness to verify that the correct wire has been located for the proper function.