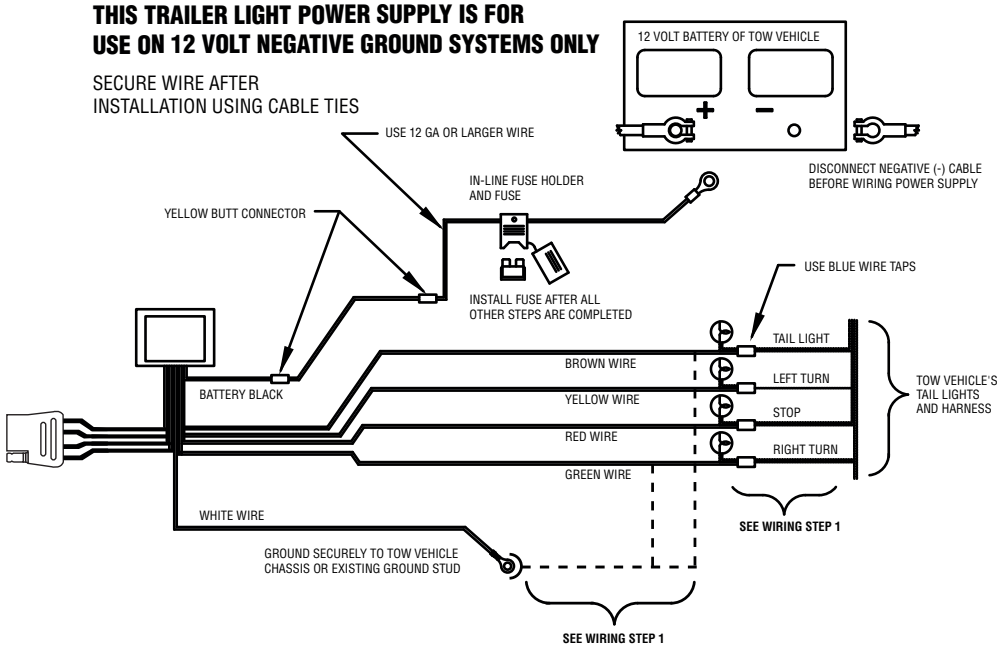
Installation Instructions

Circuit Protected Converter

THIS TRAILER LIGHT POWER SUPPLY IS FOR USE ON 12 VOLT NEGATIVE GROUND SYSTEMS ONLY

SECURE WIRE AFTER INSTALLATION USING CABLE TIES



TOOLS REQUIRED:

Drill (3/32" Drill Bit), Philips Head Screwdriver, Wire Crimpers, Test-probe, Wire Cutters, Socket Wrench Set

NOTE: Steps 4 though 10

Kits will require a wiring kit for installation that may be sold separately.

1. ⚠ CAUTION DETERMINE IF THE TOW VEHICLE IS A 2 WIRE OR 3 WIRE SYSTEM AND ALSO DETERMINE THE VEHICLE CODE BEFORE PROCEEDING TO STEP 2.

A	AE	AP	B	BE	BP	BM-1	BM-2	BM-3	BM-4

A **AE** **AP**

2 WIRE SYSTEM

Same bulb for stop and turn signals.

NOTE

Some vehicles have a separate bulb for stoplights but also have a combination bulb for turn and stop **(such as 2008 Ford Taurus sedans)**. These cars should be wired as 2 wire systems, using the wires going to the common bulbs.

Attach the crimp on spade terminal provided to the **red** "stop" wire and ground it along with the **white** wire (mounting step 3).

B **BE** **BP**

3 WIRE SYSTEM

Separate bulbs for stop and turn signals.
Both Red or Amber turn signals.
Install per diagram / illustration.

BM-1

3 WIRE SYSTEM

Some vehicles combine stop and tail light functions onto 1 circuit **(such as Mercedes R-class)**. These vehicles will require that you attach the trailer light power module **red** "stop" wire to that same circuit on the vehicle and then ground the **brown** "tail light" circuit.

BM-2

3 WIRE SYSTEM

Some vehicles combine stop and tail light functions onto 1 circuit and then also have an additional tail light function wire that is independent of the stop **(such as the BMW X5)**. These vehicles will require that you attach the trailer light power module **red** "stop" wire to the same combined circuit on the vehicle and then attach the **brown** "tail light" circuit to the independent circuit on the vehicle.

BM-3

3 WIRE SYSTEM

Some vehicles combine stop, turn and tail light functions onto 1 circuit and then also have an additional combined stop and tail light circuit **(such as the VW GTI)**. These vehicles will require that you attach the trailer light power module **red** "stop" wire to the 2 function vehicle circuit and attach the trailer light power module turn functions to the 3 functions vehicle circuit (**yellow** = driver side, **green** = passenger side). Then ground the trailer light power module **brown** "tail light" circuit.

BM-4

3 WIRE SYSTEM

Some vehicles combine stop, turn and tail light functions onto 1 circuit on each side of the vehicle **(such as the VW Touareq)**. These vehicles will require that you attach the trailer light power module **yellow** wire to the driver's side 3 function vehicle circuit, the **green** wire to the passenger's side 3 function vehicle circuit. Then ground the trailer light power module **red & brown** circuits.

2. Determine a suitable location for mounting the circuit protected convertor in an out of the way spot near the left tail light in the trunk or on the frame rail, if mounted under the vehicle.
3. Locate a suitable grounding point near the convertor such as an existing ground stud or drill a 3/32" hole and secure the **white** wire using the eyelet and screw provided. (Do not drill into vehicle floor or bed.) Clean dirt and rustproofing from area.

⚠ CAUTION

Verify what is behind any surface prior to drilling to avoid damage to the vehicle and/or personal injury. Do not drill into any exposed surfaces.

4. Disconnect and isolate the vehicle's negative (-) battery terminal.

⚠ WARNING

Read and follow all warnings and cautions printed on the tow vehicle's battery.

5. Using an in-line fuse holder, crimp a ring terminal to one end (3/8" for top terminal or 1/2" for side terminal).
6. Attach the fuse holder (with the fuse removed) to the positive (+) terminal of the battery.
7. Route 12 gauge (or larger gauge) wire from the fuse holder to the convertor passing under or through the vehicle.

NOTE

When passing the wire through sheet metal always go through an existing grommet, add a grommet or use silicone rubber to insulate the wire from the hole.

8. Attach the 12 ga. wire to the fuse holder and converter with butt connectors as shown in the figure.
9. Reconnect the tow vehicles (-) battery cable.

⚠ CAUTION

See tow vehicle's owners manual for any special battery reconnection instructions.

10. When using a circuit tester, carefully probe one wire at a time. Determine each of the vehicle functions as shown in the illustration.

⚠ CAUTION

Do not probe across two wires or across wire and vehicle structure.

11. Attach the trailer wiring to the vehicle as shown in the illustration using wire splices.

⚠ CAUTION

When splicing use appropriate gauge wire splices.

12. Install the 15-amp fuse into fuse holder.

⚠ WARNING

Read and follow all warnings and cautions printed on the tow vehicle's battery.

TESTING PROCEDURE

With the ground wire connected and all of the other circuits attached, attach the ground lead of a circuit tester to the exposed ground terminal of the 4-flat end. Activate the tow vehicle's left turn, right turn, tail and stop lights one at a time. Probe the three receptacles of the 4-flat end to confirm proper functions.

⚠ WARNING

All connections must be complete for the convertor to function properly. Test and verify installation with a test light or trailer once installed. For initial test, reset vehicle electrical system by temporarily removing the key from the ignition.

13. Secure all loose wiring with cable ties.

⚠ WARNING

Overloading circuit can cause fires. DO NOT exceed lower of towing manufacturer rating or:

- Max. stop/turn light: 2 per side (4.2 amps)
- Max. tail lights: (7.5 amps)

Read vehicle's owners manual & instruction sheet for additional information.