

## Installation Instructions

### Circuit Protected Convertor



#### TOOLS REQUIRED:

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

#### NOTE: Steps 4 through 10

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

#### 1. CAUTION

Determine if the tow vehicle has a 2 wire or 3 wire system.

#### 2 WIRE SYSTEM

a) Same bulb for stop and turn signals

#### NOTE

Some vehicles have a separate bulb for stop signal but also have a combination bulb for stop and turn (**such as 1992-95 Ford Taurus sedans**). These cars should be wired as 2 wire systems, using the wires going to the common bulbs.

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

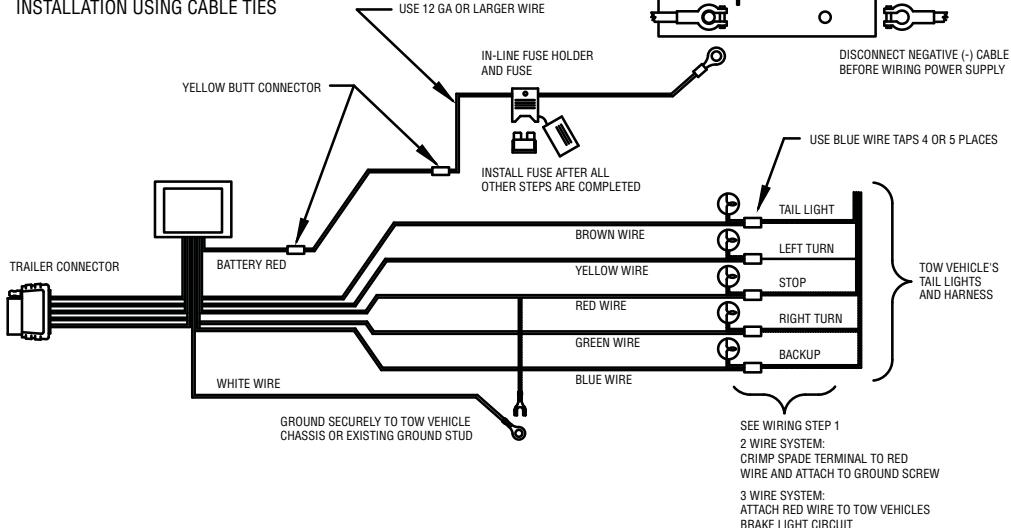
#### 3 WIRE SYSTEM

a) Amber turn signals.

b) Separate bulbs for stop and turn signals (both red).

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

SECURE WIRE AFTER INSTALLATION USING CABLE TIES



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.

#### CAUTION

When mounting under the vehicle, always make sure that the unit is in a protected area and can not be damaged from road debris or objects driven over.

The Convertor shall also be mounted so that the wiring is directed downward. If it is impossible to direct downward, wiring should be directed to the side.

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.

#### CAUTION

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

5. Using ring terminal (3/8" for top terminal or 1/2" for side terminal), attach an in-line fuse holder (with fuse removed) to the Positive (+) terminal of the battery.

#### NOTE

Cut the in-line fuse holder loop wiring.

6. Attach the 12 gauge wire to the fuse holder with yellow butt connector.

7. Route 12 gauge (or larger gauge) wire from the fuse holder to the convertor passing under or through the vehicle.

#### CAUTION

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 **black** 12 ga. wire to the **red** wire from the T-Connector black box with the supplied yellow butt connector.

Reconnect the tow vehicle's Negative (-) battery cable.

#### WARNING

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

9. 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.

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

#### WARNING

When splicing use appropriate gauge wire splices.

11. Install the 20-amp fuse into the fuse holder.

#### 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 5-Flat end. Activate the tow vehicle's left turn, right turn, tail, backup and stop lights one at a time. Probe the four receptacles of the 5-Flat end to confirm proper functions.

12. Secure all loose wires with cable ties.

#### WARNING

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

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

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