

## INSTALLATION INSTRUCTIONS FOR TRAILERS "UNDER 80" INCHES WIDE FEATURING SUBMERSIBLE TAIL LIGHTS

Congratulations on your purchase of a light and wire kit featuring highly reliable components manufactured by **WESBAR** Corporation. This system has been designed for your convenience without having to disconnect your trailer before backing into the water. When installed properly, your lighting will have years of use with little maintenance required to provide safety for you and other motorists.

### Some Hints Before Beginning

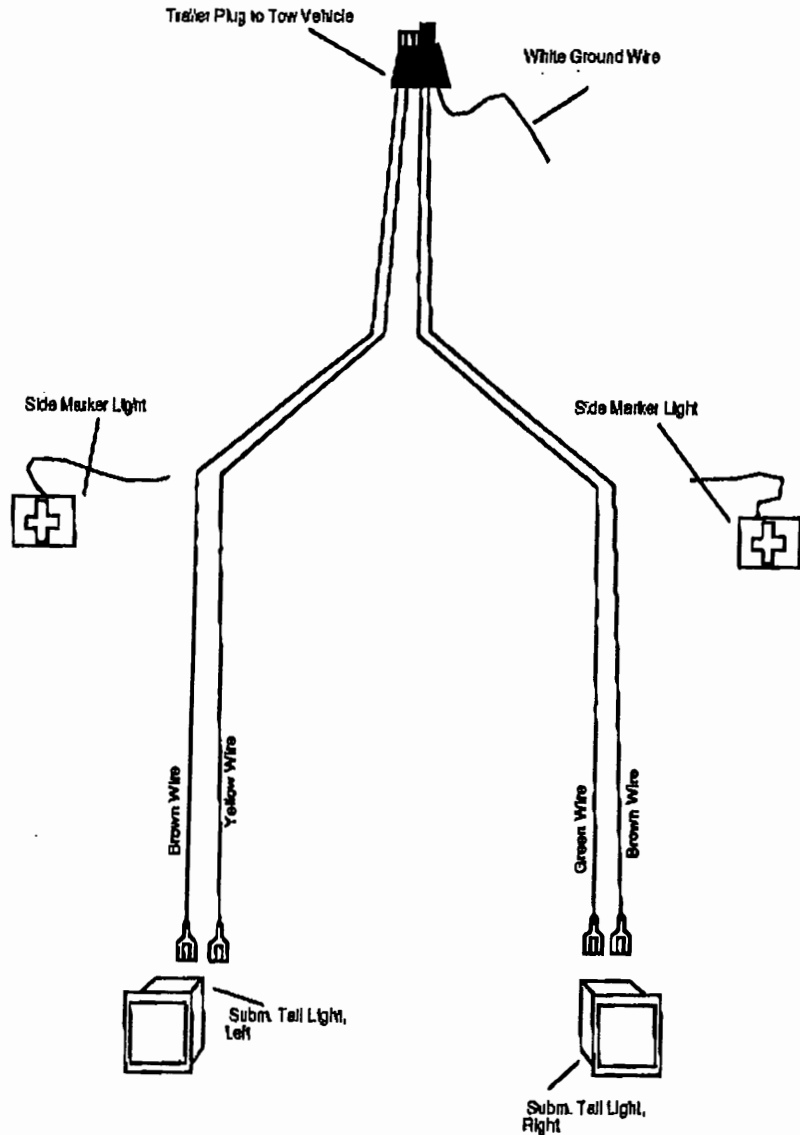
1. Many flashers for automobile and truck turn signals will not work normally with the additional load of trailer turn signals. If normal flasher operation does not occur (lights blink dimly or too fast) when your trailer lights are connected, your standard flasher should be replaced with a heavy duty flasher available through most auto parts stores.

2. If the tow vehicle is equipped with a rear facing amber turn signal (approximately 90% of all foreign made cars and trucks) or red signals that are separate from the brake lights, an electronic tail lamp converter is required. It may be obtained from your local marine dealer or order **WESBAR** #7295 or #7280 Electronic Tail Lamp Converter or equivalent.

3. It is imperative that the **WHITE** ground wire of both the trunk connector and the trailer harness be firmly attached to the tow vehicle and the trailer, respectively. Failure to do so will impede the proper functioning of the lighting system.

4. Each time you connect your trailer to your tow vehicle, check the wiring for cuts and abrasion, as well as the condition of both harness plugs. Replace when necessary.

5. Always carry spare light bulbs and fuses for emergencies.



**Standard Light Bulbs Used Are:**

- #1157 - Stop/Turn Tail Functions
- #57 - Amber Side Markers
- #194 - Red Side Markers

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## Wiring of Tow Vehicle

**NOTE:** Please consult your tow vehicle operations manual for a wiring diagram or with your vehicle service department for the correct wire color codes to ensure proper connections for the following:

The trunk connector should be installed in the trunk compartment of the vehicle or under truck bed by:

1. Make certain that the vehicle lights are "off".
2. Securely connect(splice) the **YELLOW** wire to left turn signal & stop light.
3. Securely connect(splice) the **GREEN** wire to right turn signal & stop light.
4. Securely connect(splice) the **BROWN** wire to the tail light wire.
5. Securely connect the **WHITE** ground wire to the vehicle frame or a metal body panel.

### Wiring the Trailer

(Please review the illustration that follows)

1. Prior to installation of the new wire harness on the trailer frame, lay out your new harness near your trailer. (Note: **BROWN/GREEN** on the right/curb side of the trailer and **BROWN/YELLOW** on the left/street side). Depending upon the type of trailer that you are wiring, you will need to either secure the harness to the trailer frame using wire clips, or pull the harness through the enclosed tubular frame members.
3. Working both sides of the trailer, string the new harness ends from the coupler down the appropriate sides to the rear of the trailer frame. If a tube type trailer, you may want to remove the tail light brackets at the rear of the trailer.
4. Leave approximately 12" of trailer harness out of the trailer tongue (at front of the trailer) and secure the **WHITE** ground wire to one of the coupler mounting bolts or utilize a metal screw to secure it directly to the trailer frame.
5. Attach the **BROWN** wire of the sidemarker lights to the **BROWN** wires of the harness using the blue "scotch-locks" provided. Mount the sidemarker lights and secure the excess wire to, or into the trailer frame.

6. At the rear of the trailer, if called for, feed the wire harness through the holes of the tail light brackets and remount the brackets to the trailer frame. You are now ready to install the two tail lights.

7. Note that the ends of the harness come equipped with "fast-on" style connectors. Looking inside of the tail lights will reveal two blades that fit into the connectors on the harness. Each of those blades is labeled with a small **B**, **G**, or **Y**.

8. Making certain that the locking tab on the back of the "fast-on" terminal is facing the rear of the tail light, slide the **BROWN** wire connector on to the **B** tab and the **YELLOW** wire connector on to the **Y** tab. Repeat this procedure for the **BROWN/GREEN** wire.

9. Secure the clear "bottom" lens to the bottom of each tail light making sure that the locking tabs are secure and that a "snap-fit" does occur. **NOTE:** Be careful not to pinch wires, routing them in the slots provided on the rear of the light housing.

10. Attach tail lights to the mounting brackets making sure that wiring is routed in slots and not pinched. The license plate bracket is to be mounted on the left side tail light mounting bolts.

### Testing Circuitry Procedure

1. Turn on headlights. The tail lights with integrated side markers, and the amber side marker lights should be on.
2. Have someone depress the brake pedal. Brake lights on the tow vehicle and the trailer should work simultaneously.
3. Turn the ignition of the tow vehicle on and put turn signal in left position. Left turn lights on tow vehicle and trailer should flash simultaneously. Repeat for the right side. If turn signals on trailer function opposite that of tow vehicle, it is probable that the trunk connector wires are reversed.
4. Should any of the above not light, check for loose connections, improper grounding throughout the system, pinched wires or light bulb failure.