



# BX88269

## Clear LED Bulb & Socket Tail Light Wiring Kit Installation Instructions

**WARNING:** *Improper wiring may result in blown fuses, damaged wiring, fire, and/or bodily injury. Blue Ox® recommends that a trained professional install the tail light wiring kit. Blue Ox® will not be responsible for any personal property damage or bodily injury caused by improper wiring or misuse of this product.*

### Tools Required

- |                       |                      |
|-----------------------|----------------------|
| Wire Terminal Crimper | Wire Stripper        |
| Small Wire Cutter     | Phillip Screw Driver |
| Electrical Tape       | 9/16" Drill Bit      |

### Parts List

Part No.	Qty.	Description
201-0654	1	#10-16 x 1" Self Tapping Screw
229-0540	1	8' 16 Ga. Brown Wire
229-0541	1	8' 16 Ga. Green Wire
294-0250	6	16-14 Ga. Butt Connector
294-0327	1	10-12 Ga. Ring Terminal
294-0562	1	26' Wiring Harness
294-0990	2	Clear LED Bulb & Socket Assy.

### Installation

- Starting in the engine compartment of the towed vehicle, run the 26 ft. harness through the fire wall, under the driver's side door sill plate, under the back seat, into the trunk area or run harness through engine compartment and beside frame rail to the back of vehicle. Depending on the motorhome set up, the wire at the front of the engine compartment should be wired into either a 4 or 6 pin connector that is mounted to the front of the towed vehicle.
- The bulb and sockets are installed into the backside of the vehicles tail light assemblies. The location should be as flat as possible, with enough clearance for the bulb on the inside and the socket on the back side. Use a 9/16" drill bit to drill a hole into each housing at the selected location.
- The black/red wire is the brake/ turn signal wire and the brown/white is the tail light wire. The white/green wire is used for the ground wire.

- Insert the bulb and socket into the holes by gently pushing them into place. Seal socket to tail light housing with a good silicone caulk.
- Run the black/red and brown/white wires from the passenger's side socket to the drivers side where the four wire loom is.
- Crimp the three brown/white wires together. Now crimp the green turn signal/brake wire from the four wire loom, the green wire and the black/red (brake/turn signal) wire from the passenger's side together. The white/green (ground) wires should be grounded to the frame with ring terminals and self tapping screws. The white wire from the four wire loom should be connected with the white/green wire from the driver's side socket then grounded. Refer to Figure 1.
- At the driver's side socket connect the black/red (brake/turn signal) wire and the yellow (brake/turn signal) wire from the four wire loom. See Figure 1.
- Place the wires out of the way. Test the system before attaching the tail light assemblies back onto the vehicle. To test the system, a 4-wire or 6-wire trailer plug must be installed on the front of the towed vehicle using the 4-wire harness installed. Once installed, plug the vehicles together with coach and test each turn signal and the brake lights. If lights do not work properly, there must be a loose connection, or a wiring error. Recheck to insure all connections were made correctly, especially the ground connections.

**NOTE:** If the towing vehicle is equipped with separate amber turn signals and red brake lights, a tail light converter (not included in wiring kit) is needed to convert the amber/red 5-wire system to the standard "red only" 4-wire system.

**NOTE:** A heavy duty flasher unit may be required in the towing vehicle to power the added circuit load of a towed vehicle.

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**TROUBLE SHOOTING**

**PROBLEM - LIGHTS ARE DIM AND/OR ACTIVATES ANOTHER LIGHT.**

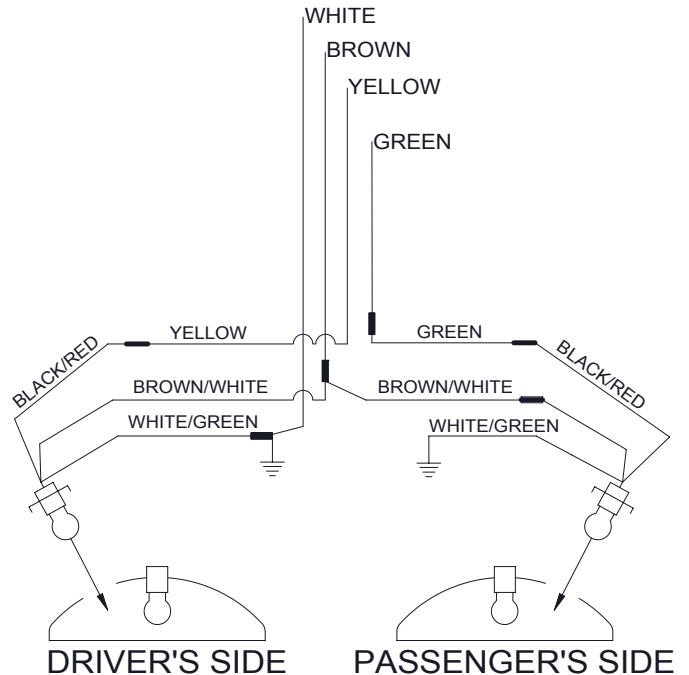
**POSSIBLE CAUSES/SOLUTIONS**

- Short circuit in the system on either or both vehicles
- Towing vehicle alternator too small
- Towing vehicle wiring is too light to handle extra power requirements
- Towing vehicle may require a heavy duty flasher unit to handle the extra load

**PROBLEM - DOESN'T WORK WHEN ACTIVATING BLINKER, TAIL LIGHTS OR BRAKES.**

**POSSIBLE CAUSES/SOLUTIONS**

- Wiring error to the bulb and sockets.
- Bad ground on either or both vehicles.
- Fuse in towing vehicle is blown. Check continuity of all wires to ground to assure harness is not short circuited
- Bad connection between female and male plugs
- Check for solid connection.
- Clean both four way connections.



Note: Original inventory of the wiring kits were received with red/green/white wiring. The newer inventory has the standard black/brown/white wiring.

Please reference the above diagram for proper wire colors.

