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# LED bulb and socket kit

part number 152-LED

# **Installation Instructions**

All specifications are subject to change without notice.

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Read all instructions before installing the kit components. Failure to understand how to properly install the kit could result in property damage, personal injury or even death.



### **Required Tools**

- 1" hole saw or rotary cutting tool drill
- wire stripper wire crimper test light

## **Parts List**

- a 27-foot four-wire electrical harness
- (2) LED and socket assemblies (1) ring terminal
- (3) yellow butt connectors and (3) blue butt connectors
- (1) self-tapping screw (13) wire ties
- three feet of 1/2" split loom

### **Installation Instructions**

- 1. The LED sockets are installed into the back of both taillight assemblies. Gaining access to the taillights varies from vehicle to vehicle, but for many vehicles you can accomplish this by removing an interior trim panel; for many pickup trucks and SUVs you must unbolt the taillight from the outside.
- 2. Look for a location to mount the LED sockets inside the taillight housings. The mounting point should be as flat as possible and must meet the following conditions: 1) the LED sockets must be installed underneath red lenses; and 2) there must be at least ¼" clearance between the LEDs and the lenses.



Install the LED bulb sockets underneath red lenses. If the sockets are installed under amber or clear lenses,

drivers behind the towed vehicle will not be alerted when the motorhome stops, which may cause a collision.

### **CAUTION**

Unless there is at least  $\frac{1}{4}$ " of clearance between the bulb and the lens, the lens will melt and/or discolor.

**3.** Drill one-inch circular holes through the back of the taillight housings at the mounting points you have selected.

The holes must be circular, in order to hold the sockets in place. A hole saw works best, but the shape and location of some taillights may require a rotary cutting tool.



Be certain not to cut into any wires or other components. Severe electrical damage or injury may result.

**4.** Bend the spring-loaded tabs that encircle the sockets outward slightly, then snap the bulb sockets into the holes.

If the tabs are not bent, road vibrations will cause the sockets to fall out of the holes. For this reason, make certain the sockets are securely attached before continuing.

Note: if one of the holes is not completely circular, bend one or more of the tabs farther to accommodate the shape of the hole.

**5.** Use the butt connectors to attach the four-wire electrical harness to the LED sockets. Figure 1 is ROADMASTER's recommended wiring schematic.

Attach the appropriate wires to either one of the sockets. Then separate the wires, peel back the appropriate wire(s) to the other side and attach them in the same manner.

Note: use the larger yellow connectors for two-wire connections; use the smaller blue connectors for single-wire connections.

continued on next page

## **IMPORTANT NOTICE!**

## **Safety Definitions**

These instructions contain information that is very important to know and understand. This information is provided for **safety** and to **prevent equipment problems**. To help recognize this information, observe the following symbols:



WARNING indicates a potentially hazardous situation which, if not avoided, could result in property damage, serious personal injury or even death.



CAUTION indicates a potentially hazardous situation which, if not avoided, may result in property damage, or minor or moderate personal injury.

### **CAUTION**

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, may result in property damage.

#### NOTE

Refers to important information and is placed in italic type. It is recommended that you take special notice of these items. continued from preceding page

**6.** Use the ring terminal and the self-tapping screw to ground the towed vehicle, as shown in Figure 1.

To avoid grounding problems, attach the wire to any good chassis ground, preferably directly to the frame.

### CAUTION

Failure to establish a good ground between the towed vehicle and motorhome could cause aftermarket accessories to malfunction, damage to both vehicle's electrical systems, and other consequential damage.

7. Route the other end of the wiring harness to the front of the vehicle. Use a route that avoids the possibility of fraying or melting the wiring against moving parts, sharp edges, the fuel lines or hot components. (If the OEM wiring harness is accessible, consider routing the harness alongside it.)

Where sharp edges cannot be avoided, use a section of the included wire loom to protect the wiring; use one or more wire ties to secure the wiring in place.

# **WARNING**

Route the wiring to avoid moving parts, sharp edges, the fuel lines or hot components such as the engine or exhaust system.

Wiring exposed by moving parts, sharp edges or hot components may cause a short circuit, which can result in damage to the vehicle's electrical system as well as other, consequential damage.

Wiring which is attached in close proximity to the fuel lines may ignite the fuel.

- **8.** If it was necessary to drill a hole, seal it with silicone sealant after you have routed the harness through.
- **9.** At the front of the towed vehicle, connect the 4-wire harness to the power cord's electrical socket, following the instructions that came with the power cord kit.

Note: an electrical socket for the front of the towed vehicle is not included, as they typically come with the power cord that connects electricity between the vehicles.

- **10.** Use a wire tie to secure the end of the harness at the front of the vehicle.
- **11.** Test for proper operation before reinstalling the taillight assemblies.
- **12.** It is the owner's responsibility to check the lights for proper operation each time before towing. Do not tow the vehicle if the lighting system is not functioning properly.

