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Smart Diode Wiring Kit

for Jeeps with LED bulbs and Proximity Sensors (ParkSense)

part number 152789

All specifications are subject to change without notice.

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Installation Instructions

Parts

- (1) 4-wire wiring harness, 27 feet in length
- (2) white wires, 1 foot in length
- (2) Smart Diodes for LED bulbs
- (1) 10-12 gauge butt connector (yellow)
- (3) ring terminals
- (1) 3-foot length of split loom (11) wire ties
- (3) Tek screws

Read the instructions before installing the kit components, and wire the towed vehicle according to the instructions and illustrations. Failure to understand how to install this product could result in an electrical malfunction or other collateral or consequential damage.



Note: This kit fits several different Jeep models and years. As a result, the photos shown and some instructions on how to access the taillights may vary slightly between applications. This kit solves the issue of the Jeep's electronics activating while being towed, potentially resulting in a dead battery.

Step A

1. Gain access to the vehicle's wiring. On the driver's side, remove the plastic access cover (Fig.1). Remove the exposed 10mm bolt (Fig.2).

2. Pull out the taillight and unplug the wiring harness (Fig.3). Note: Gladiator models will also need two 8mm screws removed in order to release the taillight.





3. Expose the wiring harness as shown (Fig.4). Note: Use care to ensure you do not cut the wire.



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4. Using a test light or voltmeter, find the taillight wire (Fig.5) and then cut it. *Note: Do NOT cut the brake light wire or the turn signal wire.*



5. Use the supplied terminals (Fig.6) and connect the Smart Diode as shown in Figures 7 and 8.







CAUTION

Failure to attach the diodes as indicated in the wiring diagrams will create a backfeed through the vehicle's electrical system, which may damage one or both of the vehicles' electrical systems.

6. Use the included ring terminal and Tek screw to ground the white wire to the chassis (Fig.9).

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



CAUTION

Refer to the vehicle owner's manual before attaching the ground wire. Some models may stipulate that ground wires must be attached at specific locations.

Significant damage to the vehicle's electrical system, as well as other consequential, non-warranty damage will occur if the ground wire is not attached at one of these points.

7. Zip tie the wires to organize and secure the harness to avoid a potential short (Fig.10 – next page).

8. Repeat the process on the passenger side.

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*WIRE COLORS VARY. ALWAYS USE A TEST LIGHT TO ASCERTAIN TAILLIGHT WIRE.





Step B Route the wiring harness

1. Carefully route the four-wire harness to the front of the vehicle. Before you begin, plan a route to the front of the vehicle 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).

Plan a route that will 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.

2. Where appropriate, use a section of the included split loom to protect the wires; use one or more of the included wire ties to secure the wiring in place.

Step C Attach the wiring harness

1. At the front of the vehicle, loop 10" to 12" of wire. This will help should any troubleshooting be required. Now, connect the four-wire plug to the electrical socket according to its wiring schematic.

Step D Test the vehicle for driving

Fig.11

1. Start the vehicle and operate the vehicle's brake, turn signals and taillights to verify the lighting system still functions correctly for driving mode.

Step E

Test the vehicle for towing

1. Use the RV, or a test box, to energize each taillight function to ensure they operate correctly.

Note: When wired properly, only the outer ring of lights on each taillight will illuminate to signal the brakes, turn or taillight (Fig.11). If a supplemental braking system is attached, the center lights may also illuminate.



*WIRE COLORS VARY. ALWAYS USE A TEST LIGHT TO ASCERTAIN TAILLIGHT WIRE.