

# INSTALLATION MANUAL

### Level of Difficulty

Difficult

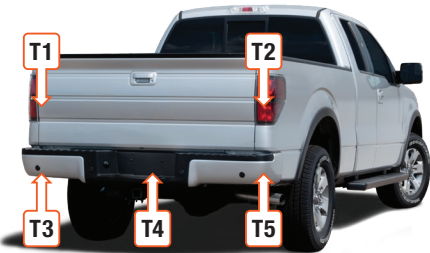
Installation difficulty levels are based on time and effort involved and may vary depending on the installer level of expertise, condition of the vehicle and proper tools and equipment.

### Wiring Location(s)

T3

### Wiring Location Guide\* for Trucks (T)

T1	Behind driver side taillight housing
T2	Behind passenger side taillight housing
T3	Behind driver side rear bumper
T4	Behind center of rear bumper fascia
T5	Behind passenger side rear bumper



\* Representative vehicle shown

### Tools Required

Ratchet	Ratchet extension
Socket, 10mm	Flathead screwdriver
Wire cutter	Wire stripper
Test light or multimeter	Wire crimper
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### ⚠ WARNING

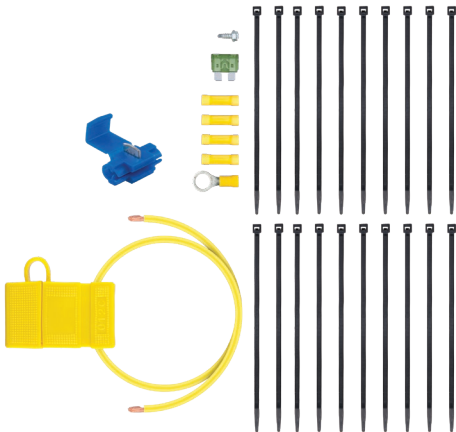
Do not exceed product rating or tow vehicle lamp load rating, whichever is lower.

Be sure not to lay tools across the positive terminal (typically noted with red covers or a red '+' symbol). This can cause a ground to short leading to sparks and/or electrical shocks.

### Product Photo



### Hardware Photo



### NOTICE

Before you begin installation, read all instructions thoroughly.

Proper tools will improve the quality of installation and reduce the time required.

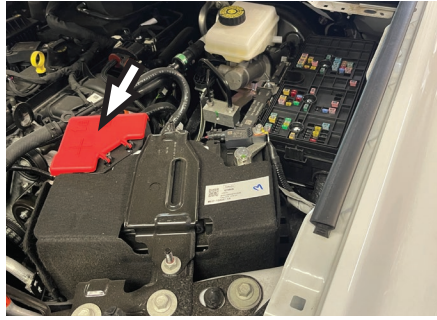
All steps must be followed to ensure the product will function properly. Once installed, test for proper function by using a test light or connecting a properly wired trailer.

### Maintenance

Periodic inspection of all wires and connections should be performed to ensure there is no visible damage or loose connections.

### Step 1

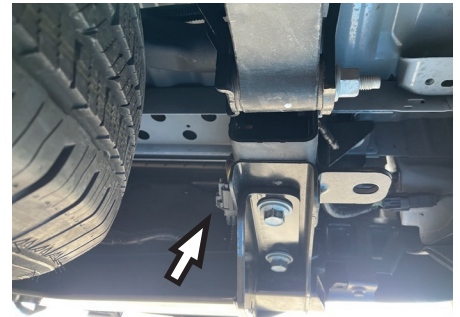
Locate the vehicle's battery in the engine compartment on the driver side and disconnect the negative battery terminal. Be sure to fasten this wire down and away from the battery while completing the installation process.



### Step 2

When replacing an existing harness or to install a new harness, locate the harness on the driver side behind the rear bumper. Remove the dust cover and/or disconnect the existing harness. Press down on the housing lock and pull away from the mating connector taking care not to damage the locking tabs. Remove the existing harness from the vehicle and set aside.

**Note:** This harness will not be used once a new harness is installed.

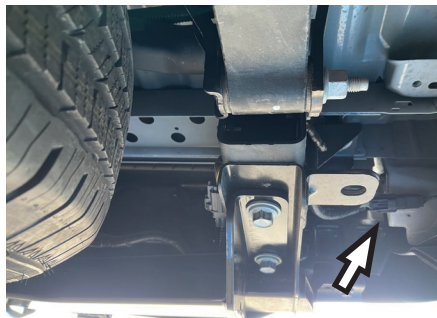


### Step 3

Install the custom 7-way harness into the mating connector that was used to power the existing harness. Make sure the connectors are fully inserted with locking tabs in place.

### Step 4

Locate the taillight connector behind the bumper near the tow plug. Using a test light or multimeter, locate the reverse/back-up wire. Route the red blunt-cut wire from the 7-way custom harness to the taillight connector. Using one of the provided snap locks, attach the red wire to the reverse/backup wire.



### Step 5

Locate a grounding point such as an existing screw or bolt in the frame of the vehicle or drill a 3/32" pilot hole. The area should be free from rust, dirt, and paint (abrasive pad/paper to remove rust and paint). Secure the white ground wire with the ring terminal on the existing fastener or with the provided ground screw.

#### ⚠ CAUTION

Check for miscellaneous items that may be hidden behind or under any surface before drilling to avoid damage and/or personal injury



### Step 6

Locate the black and blue blunt-cut wires on the custom 7-way harness. Using the supplied butt connectors, attach the black wire from the custom harness to the black wire on the jacketed duplex wire. Attach the blue wire from the custom harness to the blue wire on the jacketed duplex wire.

### Step 7

Route the black and blue jacketed duplex wire to the front of the vehicle by routing under the vehicle and along the frame rail. Route the wire up through to the engine compartment on the driver side.

#### NOTICE

Secure the power wire to the vehicle chassis using the provided cable ties. When passing the wire through sheet metal, use an existing grommet, add a new grommet, or use silicone to protect the power wire from sharp edges.

#### ⚠ WARNING

Avoid any hot components, fuel tank, and moving parts that may cause damage to the wire.

### Step 8

Route the black wire to the positive (+12 volt) battery post. Using the supplied butt connector, attach the fuse holder. Attach the supplied ring terminal to the other end of the fuse holder. Attach the ring terminal to the positive (+12 volt) side of the battery connection. Insert the supplied 30 amp fuse into the fuse holder and close the protective cap.

### Step 9A

The blue wire is used for the trailer brake output function. If installing a brake controller, follow the manufacturer's instructions for installation. Route the blue wire to the firewall of the vehicle and into the vehicle cab to attach it to the electric brake output wire (typically blue) on the brake controller using the supplied butt connector.

### Step 9B

If blue wire is not used, tape the end with electrical tape and secure the wire with one of the provided cable ties.

### Step 10

Route the 7-way custom harness from the driver side along the bumper to the center of the vehicle. Mount it near the hitch and connect the 7-way plug into the custom harness plug. Make sure the connectors are fully inserted with locking tabs in place.



### Step 11

Reconnect the negative battery terminal.

#### NOTICE

Once 12 volt power wire is connected to the harness verify that the harness is functioning by attaching the battery and testing with a test light, 4-flat tester or a functioning trailer.

Use cable ties as needed to keep the custom harness mounted in place.

Reinstall all items removed during install. Install the provided 4-flat dust cover to help prevent corrosion.