

# INSTALLATION MANUAL

## Level of Difficulty

### Easy

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.

## Electrical Ratings

Signal circuits	3.0-amps per side
Tail / Running Circuits	6.0-amps total

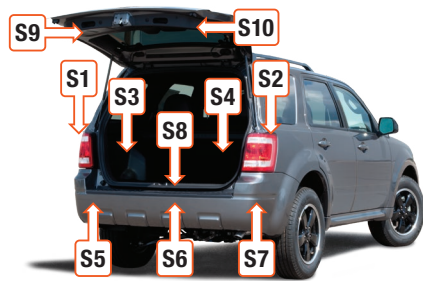
Check vehicle owner's manual or contact the vehicle manufacturer for more information.

## Wiring Location(s)

S1 and S2

## Wiring Location Guide\* for SUVs and Vans (S)

S1	Behind driver side taillight housing
S2	Behind passenger side taillight housing
S3	Behind driver side rear access panel
S4	Behind passenger side rear access panel
S5	Behind driver side rear bumper
S6	Behind center of rear bumper
S7	Behind passenger side rear bumper
S8	Under rear floor panel
S9	Behind driver side rear access panel
S10	Behind passenger side rear access panel



\* Representative vehicle shown

## Tools Required

Ratchet	Panel trim removal tool
Socket, 10mm	Cutting tool
Socket extension	Wire crimper
Flathead screwdriver	Wire stripper
Fish wire	Electrical tape

## ⚠ WARNING

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

The battery connection must be fuse-protected, 10-amp max. Exceeding the product rating can cause loss of warranty, overheating and potential fire.

## 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

Open the vehicle hatch. Use a small flathead screwdriver to remove the taillight trim cover.

Use a 10mm socket to remove the two bolts securing the taillight and one bolt securing the bumper cover.



### Step 3

Remove the taillights by pulling straight rearward. Separate the three connectors from the taillight housing, taking care not to damage the locking tabs. Set the taillight aside.

#### **NOTICE**

Pay attention to the location of each connector removed. Two of the connectors are the same and could potentially be reinstalled incorrectly.



#### Step 4

Use a panel trim removal tool to loosen the bumper cover from the body of the vehicle. Pull the bumper cover back, using a 10mm socket to remove the fastener securing the bumper mount. Once the bolt is loose, the bumper cover mount can be removed.



#### Step 5

Separate the connectors from the taillight housing taking care not to damage the locking tabs. Set the jumper harness off to the side.

Repeat steps 2 through 5 on the other side of the vehicle.



#### Step 6

On the driver side, route the fish wire down in between the body and the bumper cover. From under the vehicle, remove the four push fasteners that secure the trim covering and pull aside. Locate and attach the fish wire to the housing with the yellow wire. Pull the wire back up and attach to the factory harness. Make sure the connectors are fully inserted with locking tabs in place.



#### How to Fishwire

**A)** Fish wire is a way to push or pull an electrical wire through a blind hole. Make sure the wire is long enough to stick out on the other side.

Insert the fish wire through the blind hole and locate it on the other side.

**B)** Use tape to secure the harness to the fish wire and pull back up.

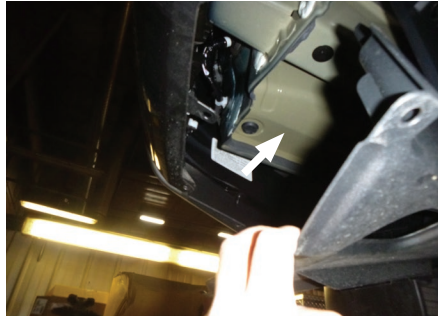
The fish wire or harness may get hung up on something, if this happens you may have to push back down, wiggle it around or twist the wire to loosen it from what it's hung up on.

Fish wire could be anything from a cut-up wire hanger, stiff wire, rope or string depending on what is needed for the installation.



### Step 7

Locate a flat spot inside the vehicle, near the taillight. Adhere the black converter box using the provided double-sided tape.



### Step 8

Locate a suitable grounding point near the connector such as an existing screw with nut in the vehicle frame or drill a 3/32" pilot hole for the provided screw. The area should be free of rust, dirt and paint. Secure the white ground wire using the ring terminal and provided screw.

#### **⚠ WARNING**

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

### Step 9

Route the green wire above the bumper supports. Secure any loose wires with the provided cable ties.

On the passenger side, route the fish wire down in between the body and the bumper cover. From under the vehicle, locate and attach the fish wire to the housing with the green wire. Pull the wire back up and attach to the factory harness. Make sure the connectors are fully inserted with locking tabs in place.



### Step 10

Route the black power wire from the vehicle battery as shown on the provided 'Powered Converter Lead Instruction Sheet'.

#### **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.

### Step 11

Route the 4-flat to the trailer hitch and mount in an easy-to-access location. Secure any loose wires with the provided cable ties.

Reinstall all items removed during install. If it was disconnected at the beginning of the installation, reconnect the negative battery terminal. Install the provided 4-flat dust cover to help prevent corrosion.

# POWERED CONVERTER LEAD INSTRUCTION SHEET

## FICHE DE CONSIGNES DU CONVERTISSEUR D'ALIMENTATION

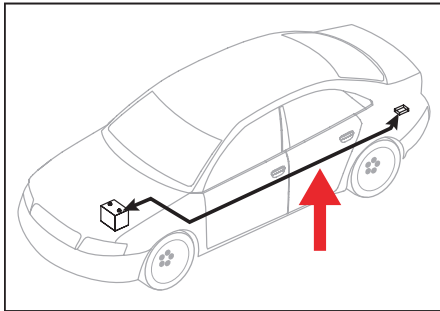
### HOJA DE INSTRUCCIONES DEL CONDUCTOR DEL ADAPTADOR ALIMENTADO POR BATERÍA

#### **NOTICE** AVIS / AVISO

Illustrations are for reference only. Battery location may differ depending on the vehicle.

Les images ne sont fournies qu'à des fins de référence. L'emplacement de la batterie peut varier en fonction du véhicule.

Las ilustraciones son solo para referencia. La ubicación de la batería puede variar según el vehículo.



#### **WARNING** AVERTISSEMENT / ADVERTENCIA

Route 12 GA wire to vehicle battery location, taking care to avoid any pinch points and hot or rotating components.

Acheminer le câble de calibre 12 à la batterie du véhicule en prenant soin d'éviter les points de pincement et les éléments chauds ou pivotants.

Pase el cable calibre 12 hacia la ubicación de la batería del vehículo, con cuidado de evitar atascos y componentes calientes o giratorios.

#### **WARNING** AVERTISSEMENT / ADVERTENCIA

To avoid personal injury or property damage, check for miscellaneous items that may be behind or under any surface before drilling.

Pour éviter les blessures et les dommages matériels, vérifier les divers articles qui peuvent se trouver derrière ou sous la surface avant de percer.

Para evitar lesiones personales o daños materiales, verifique que no haya ningún elemento detrás o debajo de la superficie antes de perforar.

#### **NOTICE** AVIS / AVISO

1. This converter system is to be used only on 12 volt negative ground systems.
2. Secure power wire to vehicle chassis using cable ties provided.
3. When passing the power wire through sheet metal, use an existing grommet, add a grommet or use silicone to protect the power wire from sharp edges.
4. Overall T-connector design may differ from illustration. The illustration should be used for power lead instruction only. Illustration is not to scale.

1. Ce système de convertisseur ne doit être utilisé qu'avec une prise de masse de polarité négative de 12 volts.
2. Fixer le câble d'alimentation au châssis du véhicule à l'aide des courroies d'attache de câble fournies.
3. Utiliser un œillet existant, ajouter un œillet ou appliquer du silicone pour protéger le câble d'alimentation des rebords tranchants au moment de le passer à travers la tôle.
4. La disposition générale du connecteur en T peut différer de l'illustration. Celle-ci ne doit être utilisée que pour le convertisseur d'alimentation. L'illustration n'est pas à l'échelle.

1. Este sistema de adaptadores solo se debe utilizar con sistemas con polo negativo a masa de 12 voltios.
2. Sujete el cable de alimentación al chasis del vehículo utilizando los sujetacables suministrados.
3. Al pasar el cable de alimentación por la lámina de metal, utilice la arandela pasacable existente, agregue una arandela pasacable o utilice silicona para proteger el cable de alimentación de los bordes filosos.
4. El diseño general del conector T puede ser distinto de la ilustración. La ilustración solo se debe utilizar para la instrucción del conductor de alimentación. La ilustración no está a escala.

