

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 5.0-amps per side

Tail / Running Circuits 7.5-amps total

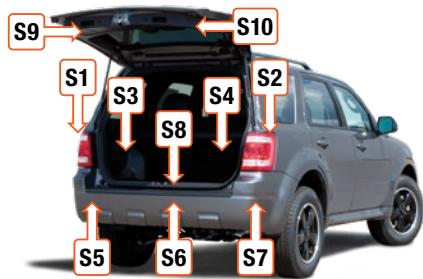
Check vehicle owner's manual or contact the vehicle manufacturer for more information.

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

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.

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.

Tools Required

Phillips screwdriver	Cutting tool
Flathead screwdriver	Wire crimper
Panel trim removal tool	Wire stripper

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 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

Using a trim tool or small flathead screwdriver, remove the taillight trim covers on both sides of the vehicle. **Note:** The lower side of the trim piece has a groove that will allow the tool a pry point.

Using a phillips head screwdriver, remove the taillight fasteners on both sides of the vehicle.

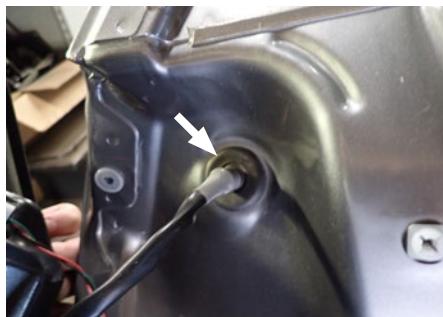


Step 3

Carefully remove the taillight straight back from the vehicle. Gently pull out the grommet.

Locate the vehicle taillight wiring connectors. The connectors will be similar to those on your new custom wiring product. Separate the connectors from the taillight housing taking care not to damage the locking tabs.

Set the taillight aside in a safe place and repeat on the other side of the vehicle.



How to Fishwire

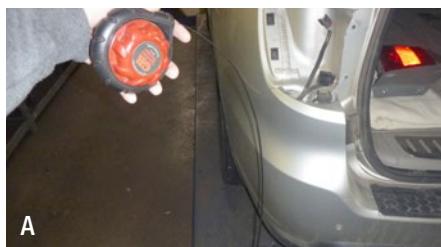
A) Fish wire is a way to push or pull an electrical wire through a blind hole. Make sure the wire is long enough to stick out on the other side.

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 4

Starting on the driver side, drop the fishwire down between the bumper cover and the body of the vehicle. From under the vehicle, attach the custom wiring end with the yellow wire to the fishwire and pull up into the factory taillight connector. Attach the custom wiring harness to the vehicle taillight harness.



Step 5

Route the green wire over to the passenger side. Zip tie as needed along the rear bumper.

Repeat step 4 using the green wire.

Reconnect the taillights to the T-end of the custom wiring harness.



Step 6

On the driver side of the vehicle, locate a flat spot on the vehicle. Adhere the black converter box using the provided double-sided tape and / or zip ties. Follow the instructions on the last page of this manual to connect power and test.

Secure any loose wires with the provided cable ties.



Step 7

On the driver side, 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

NOTICE

Once the custom harness is installed verify that the harness is functioning by attaching the 4-flat to any trailer with a functioning lights. The taillights on the vehicle to be towed should function along with the taillights on the vehicle that is powering them.



Step 8

Locate the grommet behind the taillight where the vehicle's taillight wiring passes through from inside the cabin to the taillight. Remove the grommet and cut a slit large enough to route the new custom wiring end though.

Route the custom wiring end with the brown and red wires out through the grommet opening and though the slit in the grommet. Insert the custom wiring end with brown and red wires between the separated connectors. Make sure the connectors are fully inserted with locking tabs in place.

Reseat the grommet. Use the provided sealant to seal the cut in the grommet and around all the wires.



Step 9

Route the 4-flat along the rear bumper, using cable ties as needed to secure any loose wires. Mount the 4-flat near the receiver tube.

Reinstall all items removed during install. If it was disconnected at the beginning of the installation, reconnect the negative battery terminal. Route the black power wire from the vehicle battery as shown on the last page of this manual. Install the provided 4-flat dust cover to help prevent corrosion.

POWERED CONVERTER LEAD INSTRUCTION SHEET

FICHE DE CONSIGNES DU CONVERTISSEUR D'ALIMENTATION

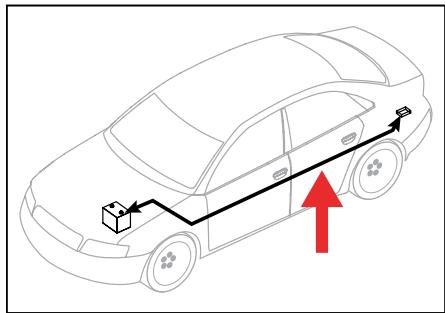
HOJA DE INSTRUCCIONES DEL CONDUCTOR DEL ADAPTADOR ALIMENTADO POR BATERÍA

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.

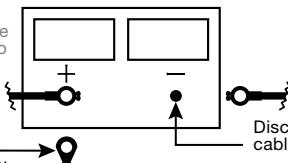
1. Este sistema de adaptadores solo se debe utilizar con sistemas con polo negativo a masa de 12 voltios.

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.

Vehicle battery
Batterie du véhicule
Batería del vehículo



Use ring terminal for battery connection

Utiliser une cosse à anneau pour effectuer la connexion à la batterie

Utilizar el terminal de anillo para la conexión de la batería

Fuse holder with 10 amp fuse max (install fuse after all other steps are complete)

Porte-fusible avec fusible de 10 A max (installer le fusible après avoir effectué toutes les autres étapes)

Portafusible con fusible de 10 A máx. (instalar fusible una vez completados los otros pasos)

Green - Right turn
Red - Brake
Yellow - Left turn
Brown - Taillight

Vert - Clignotant droit
Rouge - Frein
Jaune - Clignotant gauche
Brun - Feu arrière

Verde - Giro a la derecha
Rojo - Freno
Amarillo - Giro a la izquierda
Marrón - Luces traseras

Generic housings shown for reference only
Les boîtes génériques ne sont fournies qu'à des fins de référence
Se muestran carcasa genéricas, solo para referencia

Disconnect negative battery (-) cable before wiring the power wire

Déconnecter le câble négatif (-) de la batterie avant d'installer le câble d'alimentation

Desconectar el cable negativo (-) de la batería antes de conectar el cable de alimentación

Butt connector
Raccord bout à bout
Conector a tope

12 GA wire or larger
Câble de calibre 12 ou plus
Cable calibre 12 o mayor

Route black wire to positive battery (+)

Conneter le câble noir à la borne positive (+) de la batterie

Pasar el cable negro hacia el polo positivo (+) de la batería

If using the converter as a powered module for a two-wire system, the red brake wire must be grounded

Si le convertisseur est utilisé comme module d'alimentation pour un système à deux fils, le câble de freinage rouge doit être mis à la masse

Si se utiliza el adaptador como un módulo energizado para un sistema bifilar, el cable rojo del freno debe estar conectado a tierra

Mount converter using the provided double-sided tape

Installer le convertisseur à l'aide du ruban adhésif double face fourni

Montar el adaptador utilizando la cinta de doble cara suministrada



Butt connector
Raccord bout à bout
Conector a tope

Converter
Convertisseur
Adaptador

Attach the ring terminal of the white ground wire to vehicle body using the screw provided (drill 3/32" hole if necessary)

Attacher la cosse à anneau du fil de terre blanc à la carrosserie du véhicule à l'aide de la vis fournie (percer un trou de 3/32 po au besoin)

Conectar el terminal de anillo del cable a tierra blanco a la carcasa del vehículo utilizando el tornillo suministrado (haga una perforación de 3/32" si es necesario)