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.

Electrical Ratings

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

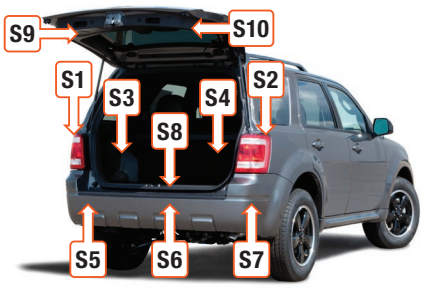
Check vehicle owner's manual or contact the vehicle manufacturer for more information.

Wiring Location(s)

S3 and S4

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	Wire cutter
Socket, 10 mm	Wire crimper
Socket extension	Wire stripper
Small flathead screwdriver	Panel trim removal tool
Electrical tape	--

⚠ WARNING

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

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

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.

Product Registration and Warranty

CURT Group stands behind our products with industry-leading warranties.
Provide feedback and help us to improve our products by registering your purchase at:
warranty.curtgroup.com/surveys

Step 1 (All vehicles)

⚠ WARNING

Be sure not to lay tools a crossed the positive (typically noted with Red covers or a Red "+" symbol) this can cause a ground to short causing sparks, and or electrical shocks.

Locate the vehicle battery. Look up the battery location in the owner's manual of your vehicle. Disconnect the negative battery terminal. Be sure to fasten this wire down and away from the battery when completing the installation process.

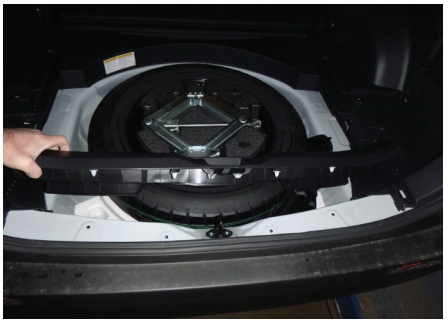

RAV4


Outlander PHEV

Step 2 (RAV4)

Open the rear hatch of the vehicle. Remove the floor covering and rear cargo area cover. Remove both side covers.

Remove the scuff panel by pulling out on the bottom and then up. Take care not to damage the alignment tabs on the back.



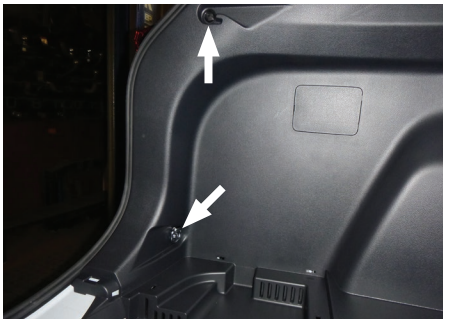
Step 2 (Outlander PHEV)

Open the rear hatch of the vehicle. Using a panel trim tool, carefully remove the driver-side taillight trim cover. Using a Phillips head screwdriver, remove two (2) taillight fasteners.

Step 3 (RAV4)

Locate the push fasteners on the top of the lower sidewall trim. Using a small flathead screwdriver, release the push fastener lock and pull out. Repeat this process on the passenger side.

Using a 10mm socket, remove the cargo hook and the bolt inside the mounting hole for the hatch security visor. Repeat this process on the passenger side.



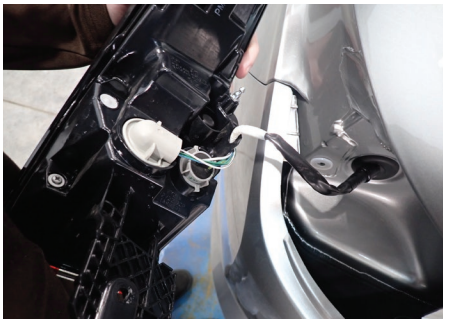
Step 3 (Outlander PHEV)

Pull the taillight straight back. Remove the grommet around the wiring and set it aside.

Locate the taillight wiring harness. 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.

Repeat steps 2 and 3 on the passenger side of the vehicle.

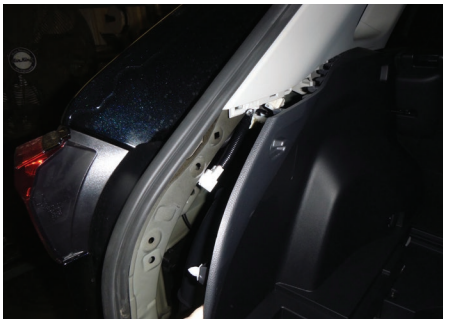


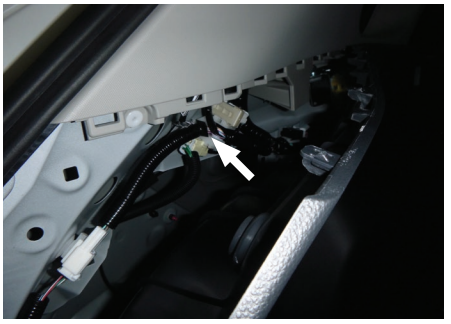
Step 4 (RAV4)

On the driver side, use a panel trim removal tool to release the side panel fasteners from the bottom up. Release the lower side wall trim from the upper side wall trim. Pull back the lower side wall panel.

Locate the taillight wiring harness. 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.

Insert the custom wiring end with yellow wire between the separated connectors. Make sure the connectors are fully inserted with locking tabs in place.



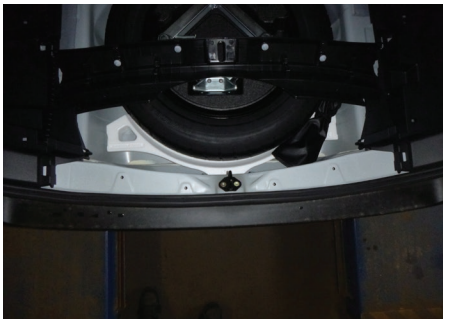


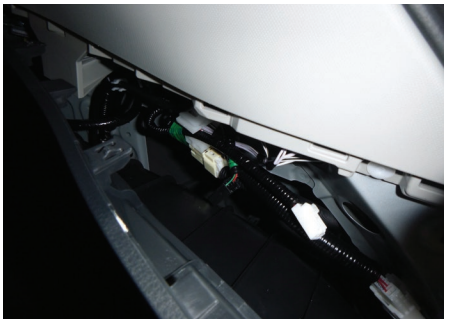
Step 4 (Outlander PHEV)

On the driver side, insert the custom wiring end with yellow wire between the separated connectors. Make sure the connectors are fully inserted with locking tabs in place.

Step 5 (RAV4)

Route the custom wiring end with the green wire to the passenger side behind the removed scuff panels. Repeat step 4 on the passenger side using the wiring end with the green wire.





How to Fishwire

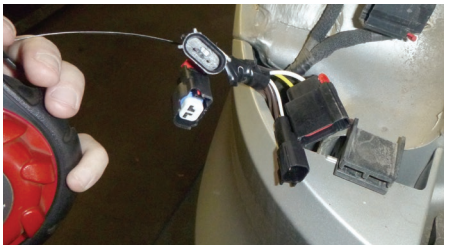
A) Fish wire is a way to push or pull an electrical wire through a blind hole. Make sure the wire is long enough to stick out on the other side.

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 5 (Outlander PHEV)

From underneath the vehicle, route a fishwire up to the driver-side taillight cavity. Locate the green wire and 4-flat wire and attach the green wire to the fishwire lead. Pull it under the vehicle bumper and route the green wire to the passenger side. Route another fishwire through the passenger side taillight cavity and down. Attach this fishwire to the green wire and pull it up and through the taillight.

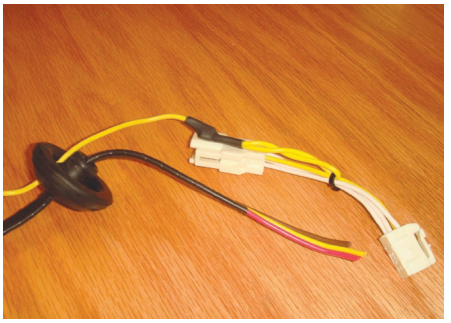
Insert the custom wiring end with the green wire between the separated connectors. Make sure the connectors are fully inserted with locking tabs in place.

Step 6 (Outlander PHEV)

Locate the grommets removed from where the vehicle's taillight wiring passes though from inside the cabin to the taillight cavity. Cut a slit in the grommet large enough to route the new custom wiring end through.

Insert the custom wiring end through the grommet and reseat the grommet. Use the provided sealant to seal the cut in the grommet and around all the wires.

Locate a flat spot inside the vehicle, near the taillight. Adhere the black converter box using the provided double-sided tape. Failure to mount the box in a protected area can cause loss of warranty, product failure, overheating and potential fire.



Step 7 (All vehicles)

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 8 (All vehicles)

Route the black power wire from the vehicle battery as shown below in the 'Powered Converter Lead Instruction Sheet' and reconnect the negative battery terminal disconnected in step 1.

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.

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

Step 9 (RAV4)

When in use, route the 4-flat to the center of the vehicle and out of the hatch to the trailer, being careful to stay clear of the hatch's latching mechanism. When not in use, roll up the 4-flat and store it in a convenient, out of the way location. Secure any loose wires with provided cable ties.

Step 9 (Outlander PHEV)

Route the 4-flat to the center of the vehicle next to the receiver tube and secure it with a zip tie.
Zip tie the green wires routed in step 5 to the back of the bumper.

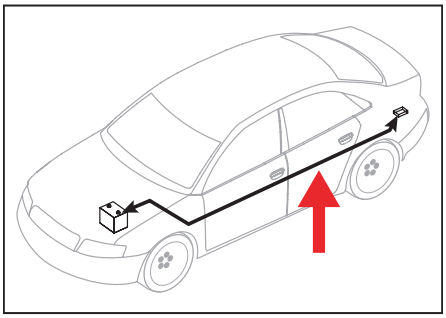
POWERED CONVERTER LEAD INSTRUCTION SHEET
FICHE DE CONSIGNES DU CONVERTISSEUR D'ALIMENTATION
HOJA DE INSTRUCCIONES DEL CONDUCTOR DEL ADAPTADOR ALIMENTADO POR BATERÍA

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.