



INSTALLATION MANUAL

RHE-10009

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)

Driver side, under hood

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
Wire crimper	Test light or multimeter

Product Registration and Warranty

Ranch Hand stands behind our products with industry-leading warranties. To get copies of the product warranties, register your purchase or provide feedback, visit: warranty.curtgroup.com/surveys

⚠ 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.

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



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 battery(s) in the engine compartment. The batteries are located on both sides in diesel trucks, and the passenger side on typical gas models. Check the vehicle owners manual to confirm location. Disconnect the negative battery terminal(s). Be sure to fasten the wire(s) down and away from the battery(s) during installation.



Step 2

Starting on the passenger side of the vehicle, locate the connectors on the rear inside frame rail. The connectors will match the connectors on the custom harness. Separate the connectors, taking care not to damage the locking tabs. Install the custom harness in-between the factory wiring. Make sure the connectors are fully inserted with their locking tabs in place.



Step 3

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 4

Locate a flat clean surface that is out of the path of spray and debris from the rear wheels and road. Adhere the black converter box using the provided double-sided tape and/or zip-ties. Failure to mount the box in a protected area can cause loss of warranty, product failure, overheating and potential fire.

Step 5

Route the black power wire from the battery as shown in 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.

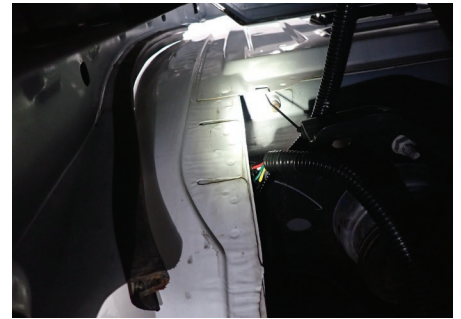
Step 6

Route the wiring down under the vehicle towards the cab and to the headache rack. Secure the wire with cable ties to hold the harness in place and keep it away from hot or moving parts.



Step 7

Once the headache rack is installed, route the light harness end from the headache rack between the cab and the box. Attach both of the mating connectors from each harness, ensuring the tabs are locked in place.



POWERED CONVERTER LEAD INSTRUCTION SHEET

FICHE DE CONSIGNES DU CONVERTISSEUR D'ALIMENTATION

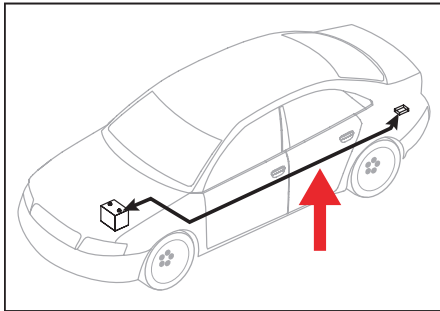
HOJA DE INSTRUCCIONES DEL CONDUCTOR DEL ADAPTADOR ALIMENTADO POR BATERÍA

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.

