

# INSTALLATION MANUAL

## Level of Difficulty

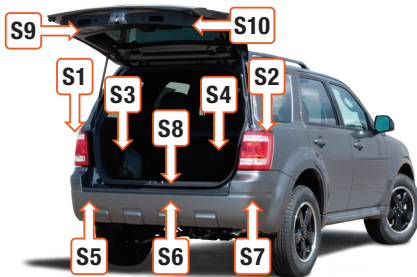
Moderate

## 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	Panel trim removal tool
Socket, 10mm	Cutting tool
Socket extension	--

## ⚠ WARNING

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

## 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. 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.



### Step 2

Open the hatch and set the seat to the folded position. This will allow the side wall panels to be removed.



### Step 3

Remove the floor board exposing the spare tire. Move the cargo tie-down hooks in the skid plate to the upright position. Use the panel trim removal tool to remove the skid plate. Disconnect the hatch sensor mounted to the rear of the panel and carefully lift the skid plate off.



#### Step 4

Starting on the passenger side, remove the cargo net hooks. These hooks will have threads securing them into place on the side panels.



#### Step 5

Loosen the rear panel push fasteners up to the felt head liner until you reach the rear window.

On the rear side door, use a panel trim removal tool to remove the door sill plate and the rear panel push fastener in the floor. Loosen the push fasteners in the rear panel, working your way back along the rear side window.



#### Step 6

Once the panel is loose, lift up on the panel and slide it up and out at an angle. Pull the seat belt out enough to get it around the panel. An access cover will pop out that allows for access to the seatbelt set this aside.

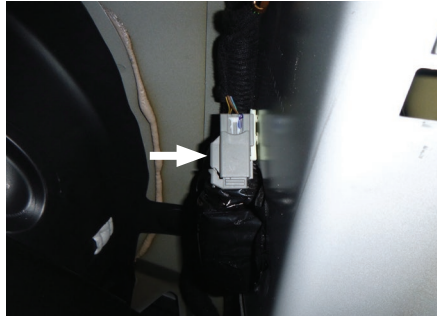
#### Step 7

Once the panel is removed, disconnect the sub-woofer from the harness (green connector). With a 10mm socket, remove the three bolts securing the sub-woofer in place. Remove the sub-woofer.



### Step 8

Locate the gray housing similar to that of the custom RV harness. Separate the connectors, taking care not to damage the locking tabs. Insert the custom RV harness end with the green wire between the separated connectors. Make sure the connectors are fully inserted with locking tabs in place.

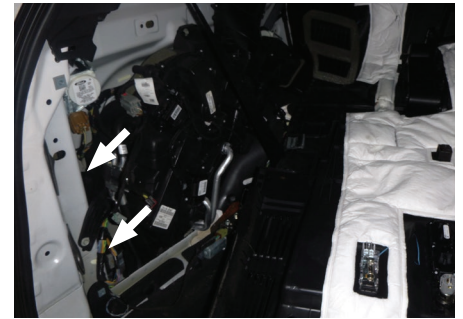


### Step 9

Repeat steps 4 through 6 on the driver side. Locate the connector with the yellow wire on the custom RV harness. Route the wire down the passenger side and along the back lower edge of the vehicle, under the skid plate and up to the driver side.

Secure any loose wires with the provided cable ties. Be sure to keep the wiring away from hot spots, pinch points or moving objects.

Repeat step 8 with the yellow wire on the driver side.



### Step 10

Locate a grounding point near the box 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**

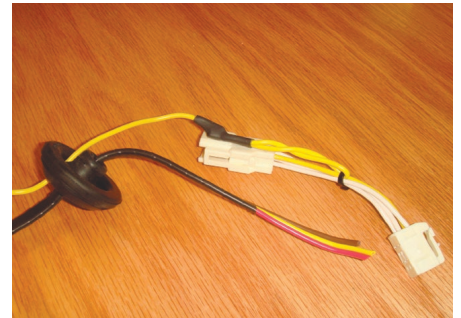
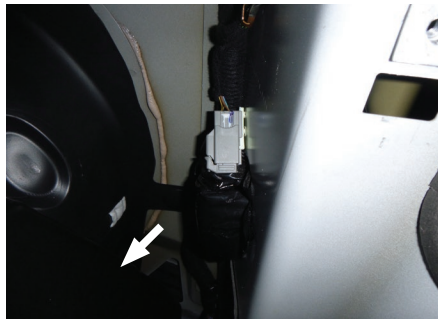
Once the custom wiring harness is installed, verify that the harness is functioning by attaching the 4-flat to any vehicle with functioning trailer lights. The taillights on the tow vehicle should function along with the taillights on the towing vehicle.

### Step 11

Locate the grommet on the passenger side of the vehicle below the sub-woofer (also seen from under the vehicle). Remove the grommet and cut a slit large enough to route the new custom RV harness end through.

Route the 4-flat wiring out through the grommet opening and through the slit in the grommet.

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



### Step 12

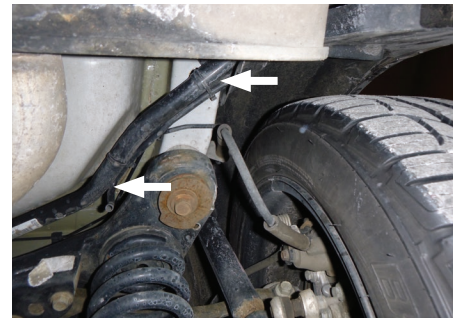
Reinstall the interior panels.

#### NOTICE

When placing the side panels back into the vehicle, be sure that the panels do not get jammed on the seat or seat belt mount. This will prevent the panel to reinstall.

### Step 13

Route the 4-flat along the fuel fill tube, above the rear drive line and suspension to the rear of the fuel tank. Continue to route along the tank and passenger-side sub frame to the front of the tank. Use the provided cable ties to loosely secure the wire as needed.



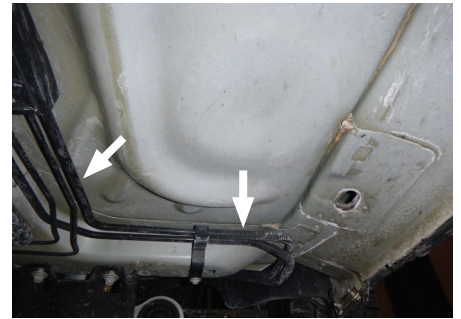
### Step 14

From the front of the tank, route the 4-flat wire around and in-between the fuel emissions canisters. Proceed to follow the brake lines to just behind the front tire.



### Step 15

From the driver-side engine compartment, use a fish wire between the inner fender and the exterior fender to route the 4-flat up to the engine compartment. Locate the end of the fish wire just behind the inner fender / wheel well. Attach the 4-flat to the fish wire and pull to the top side of the engine compartment.



### Step 16 - How to use fish wire

**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.

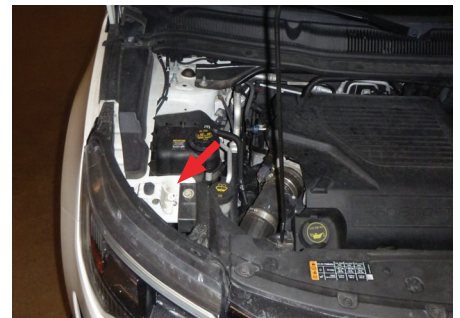
The fish wire or harness may get hung up on something, if this happens you may have to push back down, wiggle it around or twist the wire to loosen it from what it's hung up on.

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 17

Use a panel trim removal tool to remove the trim cover. Route the 4-flat wire along the driver-side inner fender under the removed cover. Zip tie as needed to the front of the vehicle. Route to just behind the passenger-side head light and mount to the inner fender.



### Step 18

Secure any excess wire so that it is not drooping or dangling, but not so tight that it causes unnecessary strain to the wire which could lead to breakage over time. After removing slack from the 4-flat wire, tighten any zip ties and add as needed. Use a zip tie to fasten any excess wire to a solid spot along the driver-side inner fender.

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.