

INSTALLATION INSTRUCTIONS

⚠ WARNING: DO NOT EXCEED PRODUCT RATING OR TOW VEHICLE LAMP LOAD RATING, WHICHEVER IS LOWER

APPLICATIONS

Make	Model
Toyota	RAV4

WIRING LOCATION GUIDE

SUVS, MINI & FULL-SIZED VANS (S)

Representative vehicle shown below

S3 - Behind driver side rear access panel

S4 - Behind passenger side rear access panel



NOTICE

All steps must be followed to ensure the wiring harness will function properly. Once installed, test for proper function by using a test light or connecting a properly wired trailer.

TOOLS NEEDED

- | | |
|-------------------|-------------------------|
| Ratchet | T-30 Torx bit |
| Ratchet extension | Phillips screwdriver |
| 1/4" socket | Flat blade screwdriver |
| 10mm socket | Panel trim removal tool |
| 12mm socket | Cutting tool |
| 3/32" drill bit | Fish wire |

WARNING

The battery connection must be fuse-protected, 10-amp max. Exceeding the product rating can cause loss of warranty, overheating and potential fire. Do not exceed product rating or tow vehicle lamp load rating, whichever is lower.

Signal Circuits - 6.0 amps per side

Tail / Running Circuits - 6.0 amps total

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

INSTALLATION / SAFETY INSTRUCTIONS

Step 1

Open the vehicle tailgate. Remove all trunk floor coverings (A).

Step 2

Remove the spare tire (B).

Step 3

Remove the side storage tray by removing the two push fasteners securing it in place (C).

Step 4

Remove the fasteners securing the rear scuff panel. Remove the scuff panel by pulling out on the bottom and then up. Take care not to damage the alignment tabs on the back (D).

Step 5

Remove the front storage tray by removing the four fasteners securing it in place (E).

Step 6

Starting on the driver side, remove the three upper fasteners (F) and two cargo tie downs from the side trim panel (G).

Step 7


Pull outward on the side trim panel to locate the vehicle taillight wiring harness connectors. Take care not to damage any of the alignment tabs on the back (H). The connectors will be similar to those on the RV harness. Separate the connectors from the taillight housing taking care not to damage the locking tabs.

Step 8

Insert the RV wiring harness end with the yellow wire between the separated connectors. Make sure the connectors are fully inserted with locking tabs in place (I).

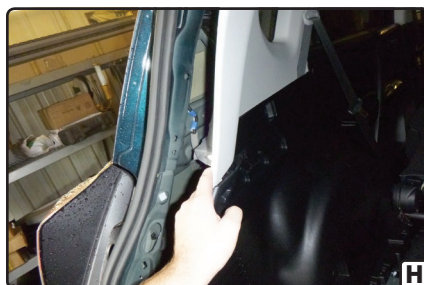
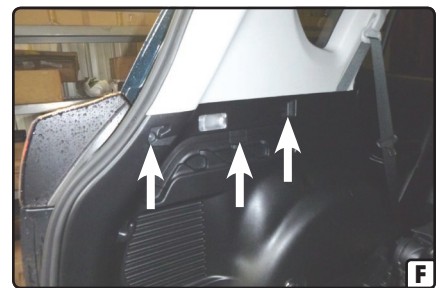
Step 9

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 10

Route the RV wiring harness end with the green wire down behind the interior side panel and out along the rear wall of vehicle to the passenger side. Repeat steps 6-8 on the passenger side using the harness end with the green wire.



INSTALLATION / SAFETY INSTRUCTIONS

Step 11


Locate the plastic cover or grommet with wires passing through on the drive-side side wall panel. Remove the grommet and cut a slit large enough to route the RV harness through (J1,J2). Route the 4-flat of the RV harness through the hole in the driver-side wall panel (K). Seat the grommet or cap back in place after the entire 4-flat is through the hole. Use the provided sealant on the seated grommet or cap where the RV harness wires passes through the slit in the grommet or cap.

Step 12

Route the 4-flat underneath the vehicle towards the driver-side rear tire well area. Secure to the factory wire harness with the provided cable ties until you reach the driver-side side front wheel well.

Step 13

Using a fish wire, route the 4-flat over the driver-side rear wheel well. Continue routing the 4-flat towards the front of the vehicle, securing to brake line brackets along the way.


 **WARNING:** Make sure to avoid areas that contain moving parts or could cut, pinch or burn the wires when routing the 4-flat harness to the front of the vehicle. Failure to follow these warnings may cause property damage, personal injury or loss of life.

Step 14

Open the hood. From inside the engine compartment, route a fish wire down and over the top of the driver-side wheel well. It may be necessary to remove additional clips and / or screws from the wheel well cover. Secure the 4-flat to the fish wire at the other side of the driver-side front wheel well and pull the 4-flat up into the engine compartment.

Step 15

Locate a suitable flat position to mount the trailer-end 4-flat bracket. Using the bracket as a template, mark the two holes and drill two 3/32" holes. Attach the bracket using the two provided screws. Secure the 4-flat in the mounting bracket.

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Step 16

With the 4-flat extension plugged into the RV harness on one end and the RV on the other, perform a function test. These functions will only work on the brake / taillight combination lamp. When not in use store the 4-flat extension in the vehicle.

4-flat harness color codes:

White - Ground Green - Right Turn / Brake
Brown - Taillights Yellow - Left Turn / Brake

Step 17

If all functions work on the tow vehicle, reinstall all items removed during install. Install the provided 4-flat dust cover to help prevent corrosion. Use cable ties as needed to secure any loose wires.

Note: This RV harness also includes a connection point labeled "FOR TRAILER TOW USE ONLY: CONVERTER #58920 REQUIRED." If you decide to leave your RV harness installed on the vehicle at all times and want to tow a trailer, plug in the 4-flat harness (#58920 sold separately) and you are ready to tow.

