

RV TOW Harness Wiring Kit INSTALLATION INSTRUCTIONS

Fits: 2006 - 2012 Toyota RAV4

- Kit Includes:
- (1) Wiring Harness with 4-Flat Connector
 - (1) 48" 4-Flat Extension
 - (20) 15" Cable Tie
 - (1) 4-Flat Bracket
 - (3) #8 Self-Tapping Ground Screw

RV TOW HARNESS INSTALLATION INSTRUCTIONS

1. Read instructions thoroughly before beginning.
2. Open rear door and remove floor coverings, storage covers and rear threshold by pulling up shown in **Figure 1** taking care not to damage clips.

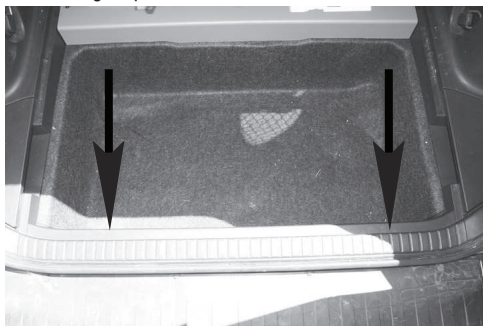


Figure 1

3. On both sides use a phillips screwdriver remove screws shown in **Figure 2A**. Use a 10mm socket remove bolt in cargo tie down shown in **Figure 2B**.

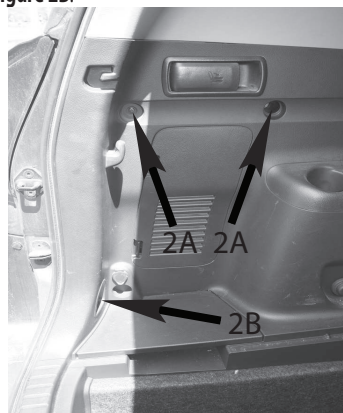


Figure 2

4. Carefully pull side panels back to reveal tail light connectors shown in **Figure 3**. The connectors will be similar to those on RV harness. Carefully separate the vehicle connectors, taking care not to damage the locking tabs. Inspect connectors for dirt and debris and clean if necessary.
5. Starting on driver's side position RV harness connectors ends containing **Yellow** wires between separated vehicle harness connectors. Press connectors firmly into vehicle connectors until they lock into place. Pull on connectors to ensure locks are engaged.

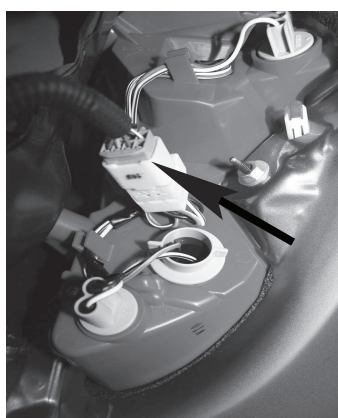


Figure 3

6. Locate a clean and accessible mounting location on the vehicle near the RV harness ends within reach of white wire and ring terminal. Remove any debris or undercoating to expose a clean metal surface and drill a 3/32" hole.

Caution: Take care not to drill through the body or any exposed surface.

Attach ring terminal on White wire using ground screw provided.

7. Route portion of RV Harness with connectors containing **Green** wires underneath side wall panel and along rear wall of vehicle. Route connector ends to vehicle's connectors and repeat Step 5 for connector plugging.

8. Remove plastic cover on driver's side side wall panel and locate rubber hole plug shown in **Figure 4**. Remove and discard. Cut the cable ties on 4-Flat portion of harness. Route the 4-Flat portion of the RV harness through the hole and seat grommet on RV harness.



Figure 4

9. Route 4-Flat towards driver's rear tire well area securing to factory wire harness with cable ties provided shown in **Figure 5** until you reach the driver's side front wheel well.



Figure 5

10. Using a fish tape route 4-Flat over driver's rear wheel well. Continue routing 4-Flat towards of vehicle securing to brake line brackets shown in **Figure 6**.

Caution: Make sure to avoid areas that contain moving parts or could cut, pinch or burn the wires when routing the 4-flat harness towards the front of the vehicle. Also avoid routing harness near the fuel lines as it may cause the fuel to ignite. Failure to follow these warnings may cause property damage, personal injury or loss of life.

11. From inside the engine compartment shown in **Figure 8**,

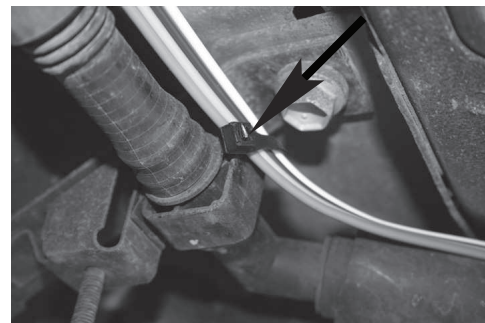


Figure 7

Note: It may be necessary to remove additional clips and screws from wheel well cover. Secure the 4-Flat to the fish tape at other side of driver's front wheel well and pull up and into the engine compartment.

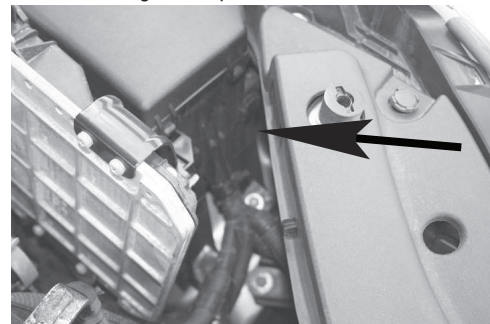


Figure 8

12. Route 4-Flat to area flat surface in engine compartment. Locate a suitable position to mount the 4-Flat bracket shown in **Figure 9**. Using the bracket as a template mark the two holes and drill two 3/32" holes and attach the bracket using the two remaining screws.

Caution: Take care not to drill through the body or any exposed surface.



Figure 9

13. With the 4-flat extension plugged into the RV harness on one end and the motorhome on the other, test that the functions work on the Toyota RAV4. These functions will only work on the brake/tail combination lamp.

4-Flat Harness Color Code:

- White - Ground
- Brown - Tail Lights
- Green - Right Turn and Brake Signal
- Yellow - Left Turn and Brake Signal

When not in use store the 4-flat extension in the vehicles glove box.

14. At the rear of the vehicle secure any loose wires using cable ties provided. Re-install items removed during installation.

NOTE: THIS RV HARNESS ALSO INCLUDES A CONNECTION POINT LABELED "FOR TRAILER TOW USE ONLY: CONVERTER 85350 REQUIRED." IF YOU DECIDE TO LEAVE YOUR RV HARNESS ON THE VEHICLE AT ALL TIMES AND WANT TO TOW A TRAILER SIMPLY PLUG IN 4-FLAT HARNESS PART NUMBER 85350 AND YOU'RE READY TO TOW.