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.
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.
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.
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.
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.
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, route a fish tape down, over the top of driver’s side well.
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.*
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.