RV TOW Harness Wiring Kit INSTALLATION INSTRUCTIONS

Fits: Ford F-150

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 tailgate and using a 8mm socket remove bolts holding taillights on driver and passenger side shown in **Figure 1**. Gently pull taillights away from vehicle taking care not to damage the alignment tabs.



Figure 1

3. Locate vehicle's factory wiring harness connectors shown in **Figure 2**. The connectors will be similar to those on RV harness. Separate connectors from both sides and set aside. Inspect connectors for dirt and debris and clean if necessary. Note the top wire harness portion is identified with a marker tape when re-installing.



Figure 2

- **4.** Unplug the taillight pigtails from the RV harness at the 2-pin connectors on both sides.
- **5.** Starting on driver's side position RV harness connector ends containing Yellow wires between separated vehicle harness connectors shown in **Figure 3**. Insert the longer portion of harness into the top set of taillight connectors and remaining one into the bottom set of taillight connectors. Press connectors firmly into vehicle connectors until they lock into place. Pull on connectors to ensure locks are engaged.



Figure 3

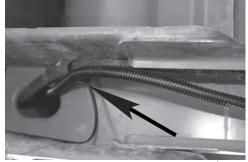
6. Locate a clean and accessible mounting location on the vehicle near the RV harness ends within reach of white wire and ring terminal. Remove any debris or undercoating to expose a clean metal surface and drill a 3/32" hole.

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 2-pin connector down through opening in taillight pocket and insert into 4-Flat harness. Press connectors firmly into vehicle connectors until they lock into place. Pull on connectors to ensure locks are engaged.

8. Route 2-pin connector containing the **Brown** and **Green** wires along rear of vehicle to passenger side along factory wire harness and secure with cable ties shown in **Figure 4**.



Figure

- **9.** Repeat **Steps 5 and 7** for connector plugging to taillight assembly and mating 2-pin connectors together. Secure any loose wires with cable ties provided.
- **10.** Back on driver's side cut the cable ties on 4-Flat portion of harness. Route the 4-flat connector along the side of the spare tire towards front of vehicle harness along frame rail.
- **11.** Continue routing towards front of vehicle along factory wire harness and secure with cable ties shown in **Figure 5**.



Figure 5

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.

12. Inside engine compartment route a fish tape down through opening behind driver's side wheel well area. Secure 4-flat connector and pull into engine compartment and secure 4-flat harness to factory wire harness shown in **Figure 6**.



Figure

13. From inside engine compartment route RV harness 4-flat to front shown in **Figure 7**.



Figure 7

- **14.** Route down behind shield near radiator to location on frame at front of vehicle shown in **Figure 8**.
- **15.** Locate a suitable position to mount the 4-Flat bracket shown in **Figure 8.** 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 8

16. 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 Ford F-150. 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.

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