

## 43485 - Vehicle Wiring Installation Instructions Toyota Sienna 2004-2009

- 1. Open rear hatch, lift rear seats, to access the taillight assembly bolts, the rear threshold plate and side panels.
- Carefully remove the vehicle's rear taillight housings pulling to the side of vehicle after removing the two bolts that hold each taillight in place.
- 3. Remove vehicle rear threshold by unscrewing the three cargo bolts prying the threshold away from the vehicle.
- 4. Carefully pull back drivers side trim panel, being careful not to break any clips or tabs to install the converter module assembly and access the driver's side taillight wiring.
- 5. On the driver's side, route the Hopkins<sup>®</sup> T-connector harness ends containing the yellow wire out from inside the vehicle through the taillight opening.
- 6. Disconnect the vehicle's wiring harness connector from the taillight assembly, being careful not to damage the locking tabs. Plug the T-Connector's harness between these separated halves and re-install taillight assembly.
- 7. On the drivers side in padded area locate and secure the T-Connector converter module with ny-ties (provided) to prevent damage or rattling, being careful to avoid areas that would cut or pinch the wire.
- 8. Locate a suitable grounding point near the converter box. Drill a 3/32" hole and secure white wire with ring terminal screw (provided.) Clean dirt, paint and rust proofing from area under ring terminal for good ground contact. Do not drill into any exposed exterior surfaces. (Do not drill into vehicle floor or bed.)
- 9. Route the 4-way flat connector harness out from under the driver's side panel into the cargo well area.
- 10. Route the T-Connector containing the green wire below the threshold cover to the passenger's side taillight housing through the vehicle jack compartment and up & out taillight wiring opening. Attach each end of the T-Connector containing the green wire to the mating vehicle taillight connectors. Ensure that the connectors are fully inserted with locking tabs in place and re-install taillight assembly.
- 11. Disconnect the vehicle's Negative (-) battery cable.
- 12. Attach the red power feed wire provided by crimping the yellow butt splice on the converter module assembly. Route the red power feed wire out of the lower rear driver side panel to a small black cargo well plug. Pull back cargo well carpeting to access the plug. Remove the small plug and the larger plug below it under the vehicle. Route the Red 12 ga. wire thru these holes to the underside of the vehicle. Make a slit in both rubber plugs and replace them with the wire going thru them. Route the wire to the vehicle battery on the driver's side of the vehicle and secure to vehicle along the way with nyties (provided). Be careful to avoid any areas that would cut or pinch the wire.
- 13. Install the fuse assembly with the yellow butt splice onto the red 12 ga. power feed wire crimping the yellow butt splice to hold it in place.
- 14. Attach the fuse assembly yellow ring terminal to the positive 12VDC battery cable clamp bolt. Reconnect the vehicle's Negative (-) battery.
- 15. Secure all loose wiring behind the panels on both the driver's side and passenger side.
- 16. Re-install plastic trim panels, threshold, storage covers, floor covering and other items removed during installation. Be careful to avoid any areas that would cut or pinch the wire.
- 17. Route the 4-way flat harness out under the rear door to near the center of the rear hatch opening. At the rear hatch opening position the 4-wire cable on the flat surface to the right or left of the door latching mechanism so that it will let the 4-wire flat hang out undamaged from under the rear hatch door when closed. (Note: The cable with 4-way flat can be coiled up and stored in rear driver side panel pocket when not needed for towing.)
- 18. Attach the 4-way flat dust cover (provided) to the 4-way flat connector.
- 19. Apply a small amount of grease (provided) to the 4-way flat terminals to prevent corrosion.
- 20. Plug completed wire harness into the trailer 4-way flat connector.
- 21. Test all functions with the engine running to ensure proper operation.

## TIPS:

Grease applied to the wiring terminals on a regular basis will help prevent corrosion.

Always unplug boat trailer connector before backing trailer into the water.

Need Help? (English Only) 1-800-835-0129 techsupport@hopkinsmfg.com www.hopkinstowingsolutions.com