

Part Number: PT228-48045

Kit Contents

Item #	Quantity Reqd.	Description
1	1	Hitch Assembly
2	1	Wiring Harness
3	1	Hardware Bag
4	1	Hitch Cover
5	1	DIO Installation Instructions
6	1	Ball Mount

Hardware Bag Contents

Item #	Quantity Reqd.	Description
1	13	M10 x 1.25 x 30 mm Bolt
2	1	M10 x 1.25 Flange Nut

Additional Items Required For Installation

Item #	Quantity Reqd.	Description
1		
2		

Conflicts

Note: Vehicles with "active cruise control"

Recommended Tools

Personal & Vehicle Protection	Notes
Safety Glasses	
Vehicle Protection	Cloth (Shop Towel)
Blankets	
Special Tools	Notes
L.E.D. Tester	S.S.T. 00002-62195 or equivalent
Installation Tools	Notes
Ratchet	
Socket	12 mm - deep well
Socket	14 mm - deep well
Socket	15 mm - deep well
Extension	4"
Extension	6" min.
Torque Wrench	0-50 lbf-ft reading
Panel Pry Tool #1	S.S.T. 00002-06001-01
Gasket Scraper	
Special Chemicals	Notes
Body Sealer	3M™ Ultra-Pro Body Sealant

NOTE: Part number of this accessory may not be the same as the part number shown.

General Applicability

Note: All 2005 - Lexus RX330, except those with "active cruise control"
All 2006 - Lexus RX400h, except those with "active cruise control"

Recommended Sequence of Application


Item #	Accessory
1	Receiver Hitch
2	Wiring Harness Kit
3	


*Mandatory


Vehicle Service Parts (may be required for reassembly)


Item #	Quantity Reqd.	Description
1		
2		
3		

Legend

 **STOP:** Damage to the vehicle may occur. Do not proceed until process has been complied with.

 **OPERATOR SAFETY:** Use caution to avoid risk of injury.

 **CAUTION:** A process that must be carefully observed in order to reduce the risk of damage to the accessory/vehicle and to ensure a quality installation.

 **TOOLS & EQUIPMENT:** Used in Figures calls out the specific tools and equipment recommended for this process.

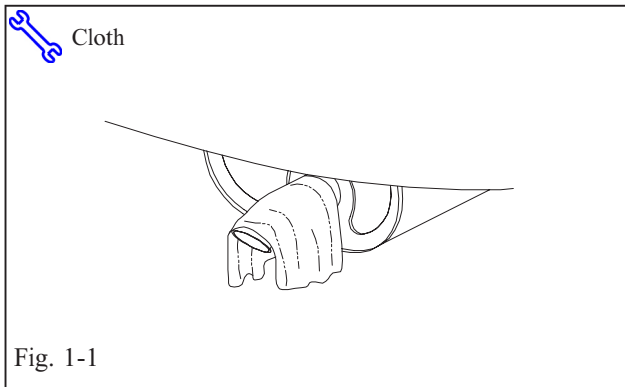
Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

These guidelines can be found in the "Accessory Installation Practices" document.

This document covers such items as:-

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Safety (eye protection, rechecking torque procedure, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.).

Please see your Lexus dealer for a copy of this document.



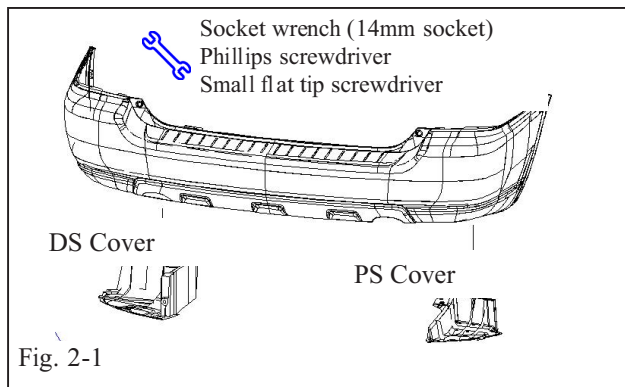
1. Protect Exhaust Pipe.

STOP (a) Cover exhaust pipe with clean shop towel. (Fig. 1-1)

+ **NOTE:** Muffler/Tail pipe may be sharp and/or hot.

2. Remove Plastic Covers (RX400h ONLY).

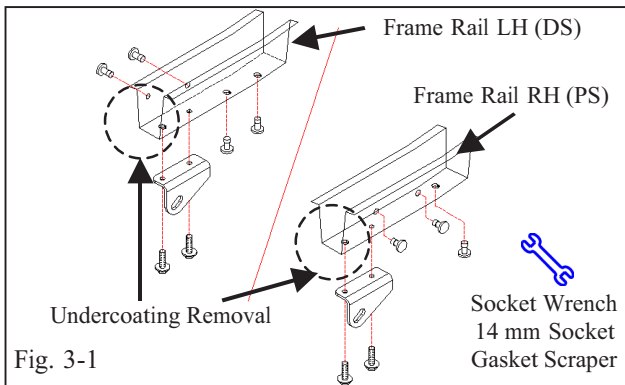
(a) Remove and discard DS and PS plastic covers (Fig. 2-1)

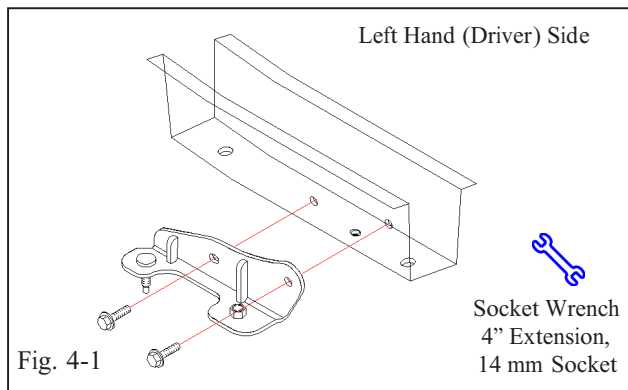


3. Remove Tie-Downs & Hole Plugs.


(a) Remove and discard tie-downs, four (4) bolts and seven (7) domed rubber plugs from vehicle. (Fig. 3-1)

STOP (b) Remove any excess undercoating that inhibits the bracket from mounting flush to the frame rail. Protect any bare areas with 3M™ Autobody Sealant.





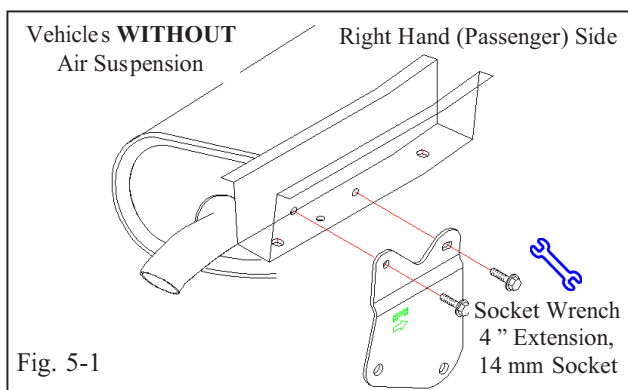
4. Attach Driver Side Support Bracket.


- (a) Install driver side support bracket in position (Fig. 4-1).
- (b) Install two (2) M10 bolts (provided in hardware kit) until part is flush with frame. (Fig. 4-1)
-  (c) Tighten the two (2) M10 bolts to 37 lbf-ft (50 N-m). (Fig. 4-1)

5. Attach Passenger Side Support Bracket.



FOR VEHICLES WITHOUT AIR SUSPENSION OPTION ONLY.

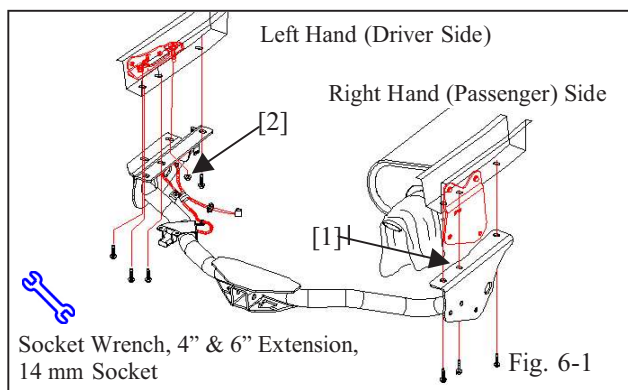
(Steps 5. a. to 5. c..)

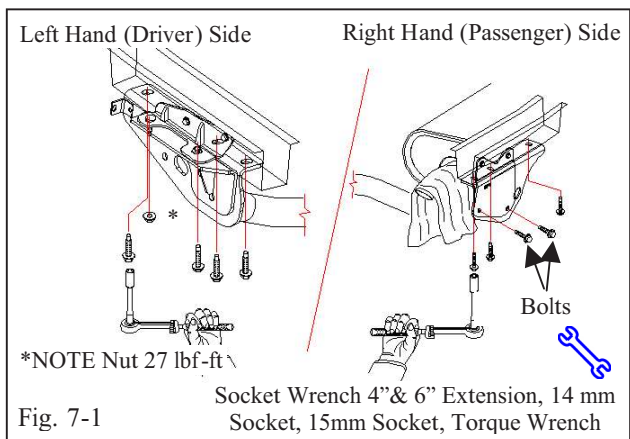


- (a) Install passenger side support bracket in position. (Fig. 5-1)
- (b) Install two (2) M10 bolts (provided in hardware kit) until part is flush with frame.
-  (c) Tighten the two (2) M10 bolts to 37 lbf-ft (50 N-m).

6. Install Hitch into Position.

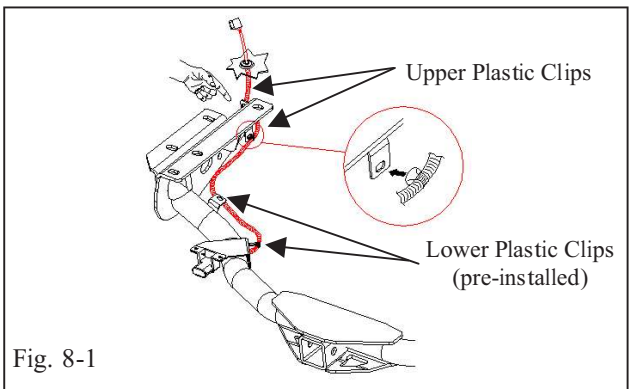
-  (a) Slide hitch over muffler pipe into installed position. (Fig. 6 1)
-  (b) Be careful to avoid hitting the heat shield, muffler, and fascia. Hand start M10 bolts and nut (provided in hardware kit.)
 - (1) Hand start first M10 bolt in datum hole ([1] .) (Fig. 6-1)
 - (2) Hand start the M10 nut on sub-datum weld bolt ([2].) (Fig. 6-1)
 - (3) Hand start M10 bolts in remaining six (6) positions. (Fig. 6-1)
- (c) Slide hitch towards the passenger side bracket to close or minimize any gaps.





7. Tighten Remaining M10 Bolts.

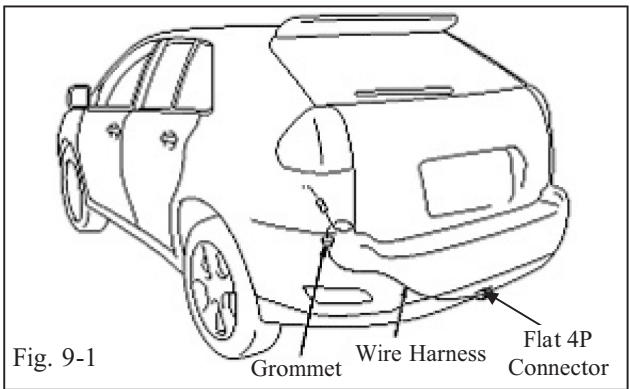
- (a) Install two (2) M10 bolts through the passenger side support bracket. (Fig. 7-1)
- ⚠ (b) Tighten all nine (9) M10 bolts (14 mm) to 37 lbf-ft (50 N-m.) (Fig. 7-1)
- ⚠ (c) Tighten the M10 nut (15 mm) to 27 lbf-ft (36 N-m.) (Fig. 7-1)
- (d) Remove shop towel from exhaust pipe.



8. Install Wiring to Open Clip on Hitch.

- (a) Snap the two (2) upper plastic clips on the wire harness into the attachment points on the driver side hitch bracket. (Fig. 8-1)

NOTE: The two (2) lower wire harness clips are preinstalled to the hitch.

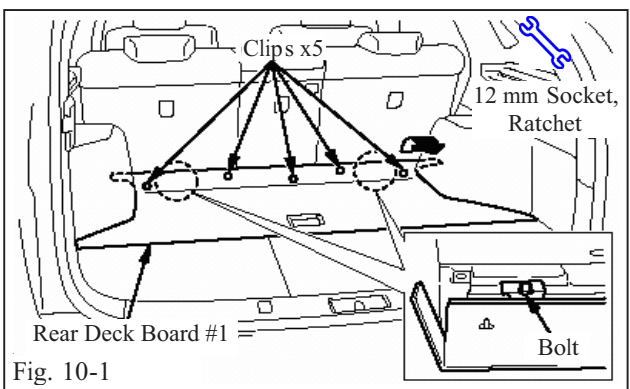


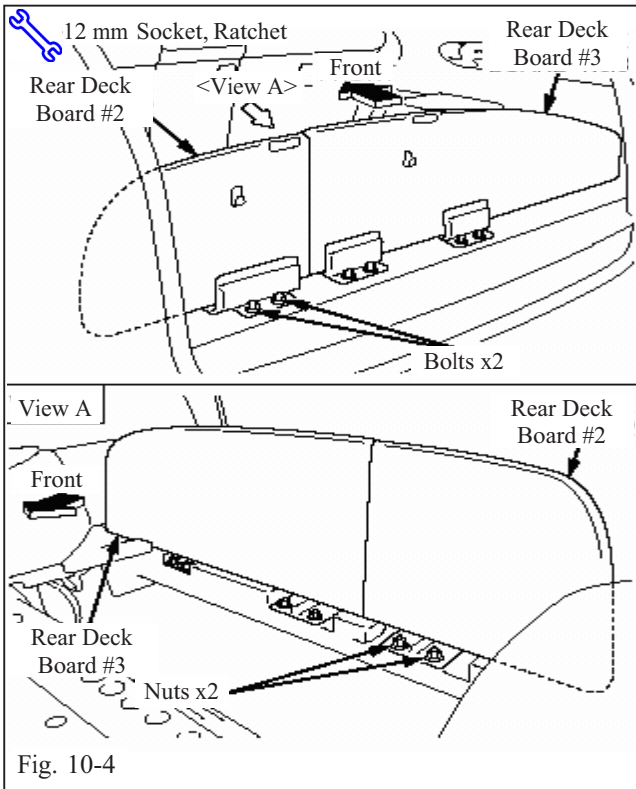
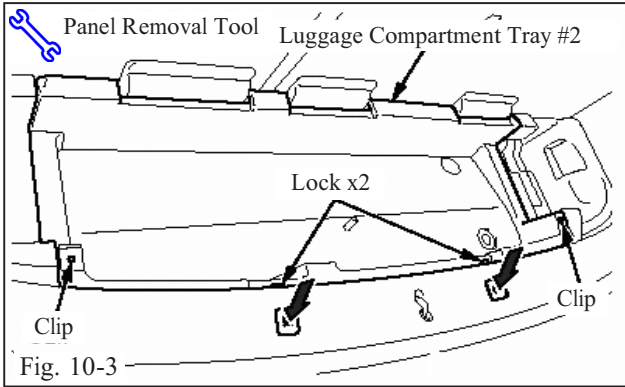
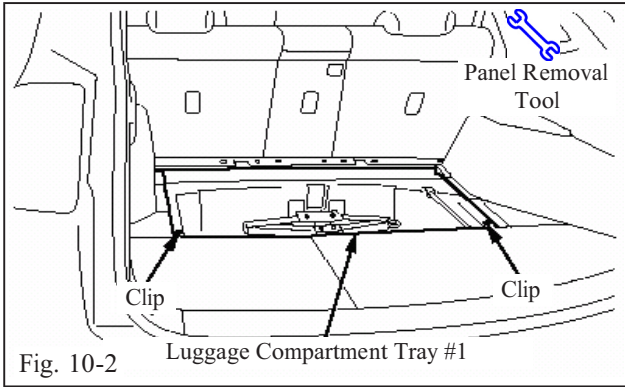
9. Wiring Installation Preparation.

- (a) Routing location and components of the wire harness are shown in Fig. 9-1.

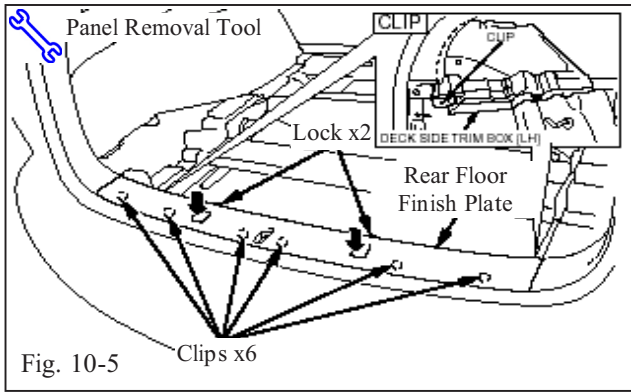
10. Parts Removal.

- (a) Rear Deck Board No. 1
 - (1) Remove rear deck board No. 1. (Fig 10-1)

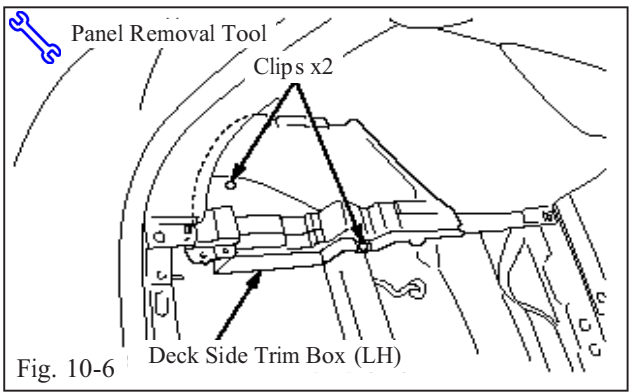




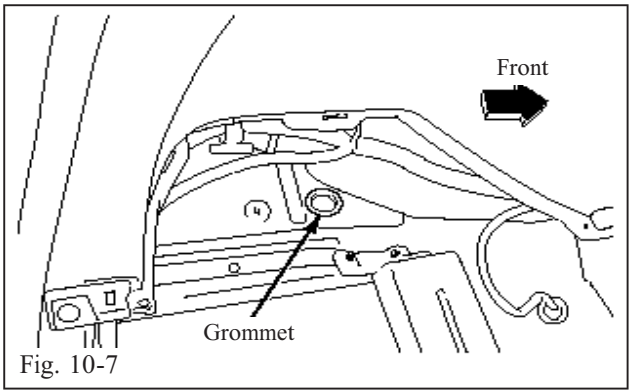
- (b) Luggage Compartment tray No. 1.
 - (1) Remove luggage compartment tray.
(Fig 10-2)
- (c) Luggage compartment tray No. 2.
 - (1) Remove luggage compartment tray No. 2
(Fig 10-3)
- (d) Rear deck board No. 2.
 - (1) Remove rear deck board No. 2.
(Fig. 10-4)



- (e) Rear floor finish plate.
 - (1) Remove rear floor finish plate. (Fig. 10-5)



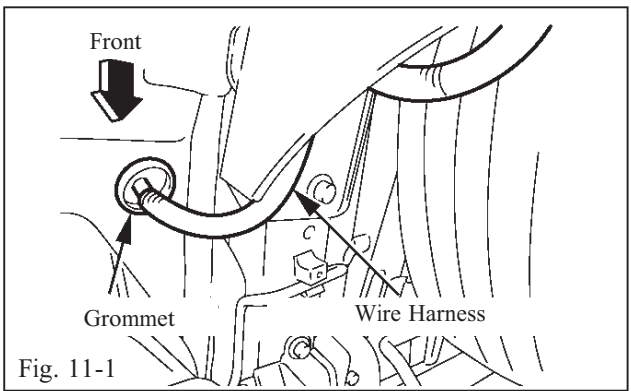
- (f) Deck side trim box (LH).
 - (1) Remove deck side trim box (LH). (Fig 10-6)



- (g) Grommet
 - (1) Remove vehicle grommet and discard. (Fig 10-7)

11. Installation.

- (a) Fit and secure the wire harness grommet into the vehicle grommet hole. (Fig. 11-1)



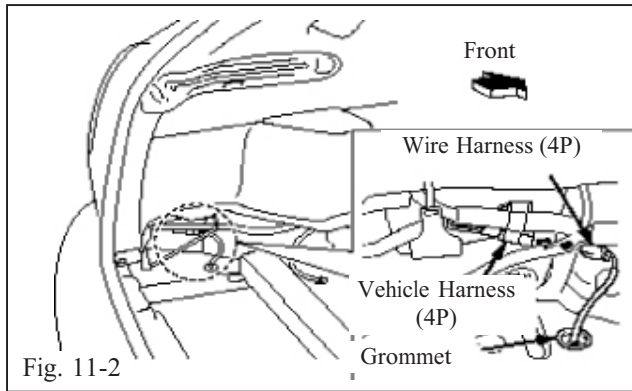



Fig. 11-2

(b) Vehicle side (4P) connector.

(1) Connect the vehicle harness (4P) to the wire harness (4P). (Fig 11-2)


12. Functional Tests.

 (a) Complete Functional Verification (Checklist Section).

13. Reassembly.



(a) Check that emergency fuel door release lever is routed correctly and operational.

(b) Reinstallation.

 (1) After functional verification, reinstall all temporarily removed parts/panels.

Checklist - these points **MUST** be checked to ensure a quality installation.

Check:

-  **Caution:** Be sure the exhaust gas is completely ventilated when engine running.
-  **Caution:** Be sure the vehicle is in "Park" and that the parking brake is applied.
- Inspection Torque (M10 bolts)
- Inspection Torque (M10 nut).
- Hitch Plug.
- Shop towel.

Look For:

- 37 +/- 5 lbf-ft (50 +/- 7 N-m)
- 25 lbf-ft to 30 lbf-ft.
- Placed in glove box
- Removed from exhaust pipe

Accessory (Wire Harness) Function Checks

With the Special Service Tool (SST) (Part Number 00002-62195) attached to the trailer sub wire harness plug and with the engine running, perform the following steps:

The following checks are to be performed with the ignition switch on and the engine running.

- Turn on headlamps
- Turn on left turn signal.
- Turn on right turn signal.
- Turn on left turn signal and apply foot brake.
- Turn on right turn signal and apply foot brake.
- Turn on hazard lights switch.
- With hazard light switch on, apply the foot brake.
- Turn off the hazard light switch, apply the foot brake.

- Tail light on SST is lit.
- Left turn/stop light on SST is flashing.
- Right turn/stop light on SST is flashing.
- Left turn/stop light on SST is flashing and right stop/turn light on SST is lit.
- Right turn/stop light on SST is flashing and left stop/turn light on SST is lit.
- Both turn/stop lights on SST are flashing.
- Both turn/stop lights on SST are flashing.
- Both turn/stop lights on the SST are lit

Checklist - these points **MUST** be checked to ensure a quality installation.

Check:

The following checks are to be performed with the ignition switch off and the engine stopped.

- Turn on headlamps
- Apply foot brake.
- Turn on left turn signal.
- Turn on right turn signal.
- Turn on left turn signal and apply foot brake.
- Turn on right turn signal and apply foot brake.
- With hazard light switch on, apply the foot brake.
- Turn off the hazard light switch, apply the foot brake.

Look For:

- Tail light on SST is lit.
- Both turn/stop lights on SST are lit.
- Left turn/stop light on SST not lit.
- Right turn/stop light on SST not lit.
- Both turn/stop lights are lit and not flashing on SST.
- Both turn/stop lights are lit and not flashing on SST.
- Both turn/stop lights on the SST are flashing.
- Both turn/stop lights on SST are lit.

Vehicle Function Checks

The following checks are to be performed with the ignition switch on and the engine running.

- Turn on headlamps
- Turn on left turn signal.
- Turn on right turn signal.
- Check lamp failure light (on the dash).
- Turn on left turn signal and apply foot brake.

- Marker and tail lights are lit.
- Left turn/stop light is flashing.
- Right turn/stop light is flashing.
- The lamp failure light is NOT lit.
- Left turn light is flashing and both right and left stop lights are lit.

Checklist - these points **MUST** be checked to ensure a quality installation.

Check:

- Turn on right turn signal and apply foot brake.
- Turn on hazard lights switch.
- With hazard light switch on, apply the foot brake.
- Turn off the hazard light switch, apply the foot brake.

The following checks are to be performed with the ignition switch off and the engine stopped.

- Turn on headlamps.
- Apply foot brake.
- Turn on left turn signal.
- Turn on right turn signal.
- Turn on left turn signal and apply foot brake.
- Turn on right turn signal and apply foot brake.
- With hazard light switch on, apply the foot brake.
- Turn off the hazard light switch, apply the foot brake.

- Emergency fuel door release lever

The following check should be performed after panel reinstallation

- Operation of rear deck board #2

Look For:

- Right turn light is flashing and both right and left stop lights are lit.
- Both turn lights are flashing.
- Both turn lights are flashing and both stop lights are lit.
- Both stop lights are lit.

- Marker and tail lights are lit.
- Both stop lights are lit.
- Left turn light should not be lit.
- Right turn light should not be lit.
- Both stop lights are lit and left turn light is not flashing.
- Both stop lights are lit and right turn light is not flashing.
- Both turn lights are flashing and both stop lights are lit.
- Both stop lights are lit, but not flashing.

- Fuel door release lever is routed correctly and operational.

- Deck board opens and closes without binding.