Dash Wiring, Power Module, and Crossmember Installation Instructions

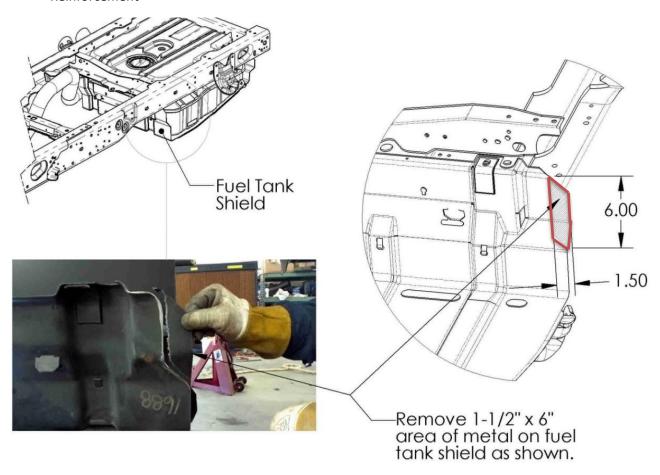
Please follow these instructions in lieu of those stated in the installation manual while installing.

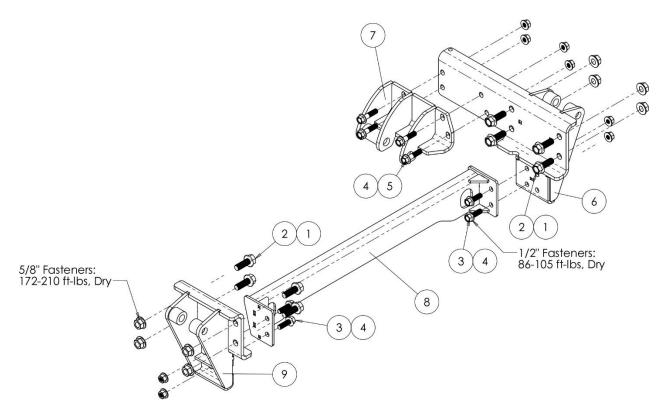
Crossmember Installation

Substitute Crossmember Reinforcement shown below in place of Crossmember Reinforcement referenced in Manual for 2010 and prior models.

Was (to be replaced)		Now (replaced by)	
Part Number	Description	Part Number	Description
10782-007	Crossmember Reinforcement	10782-010	Crossmember Reinforcement

- -Use torque values and patterns as shown in installation manuals.
- -Cut away OEM rear fuel tank shield as shown to allow room for installing Crossmember Reinforcement





Axle Clamp Components						
ITEM NO.	QTY.	PART NUMBER	DESCRIPTION			
1	8	10012-008	LFN 5/8-11 Gr G, Black Phos			
2	8	10874-175	HFB 5/8-11x1.750, Gr. 8, BO			
3	4	10885-150	HFB 1/2-13x1.500, Gr. 8, BO			
4	8	10012-007	LFN 1/2-13, Gr. G, Black Phos			
5	4	10885-200	HFB 1/2-13x2.000, Gr. 8, BO			
6	1	10790-022	Wldmnt, USM, RH			
7	1	10789-012	Wldmnt, Track Rod Mnt			
8	1	10782-010	Crossmember Reinforcement			
9	1	10790-023	Wldmnt, USM, LH			

Power Module Part Number

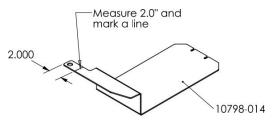
For the DS147FS2-10 substitute Power Module Assembly shown below in place of Power Module Assembly referenced in Manual for 2010 and prior models.

Was		Now	
Part Number	Description	Part Number	Description
10941-014	Power Module Assembly	11208-005	Power Module Assembly

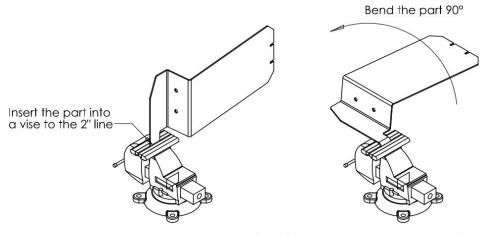
Power Module Installation

Prior to installing Power Module Mounting kit, it is necessary to make a modification to the Reservoir Pan as outlined below. After modification is made, follow instructions below in conjunction with the instructions outlined in the manual.

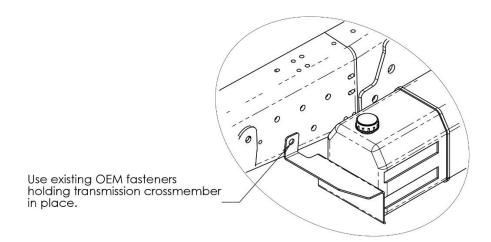
Step 1: Mark the bend line:



Step 2: Bend the part in a Vise:



The power module attaches to the side of the frame as shown. Otherwise, follow instructions with Kit 11111 outlined in the manual.



- -Install Power Module under Cab on driver side.
- -Use brackets as shown to attach to framerail. (some components hidden to show detail)

Dash Harness Installation

Substitute installation instructions below in place of *Dash Electrical Harness Installation* referenced in Manual for 2010 and prior models.

Dash Electrical Harness Installation:

- 1. Locate the dash harness.
- Locate and identify the following 18ga wires in the external wiring harness branch passed through the firewall:

Red (Battery Power)
Yellow (Ignition)
Black (Ground)
White (CAN High)
White/Black (CAN Low)
Violet/White (Speed)
Pink/Black (Brake)

 Connect each wire to the corresponding wire in the dash harness using appropriate butt splices. Match wire colors. Heat shrink sealing is optional.



Remove Side Kick Panel

Remove Sill Panel

Pull up weather stripping

Figure 1. Accessing inside of side kick panel.

- 4. Remove plastic sill panel. See Figure 1.
- 5. Pull weather stripping from front edge and sill of the driver side door opening.
- 6. Remove outboard side kick panel, from around parking brake.
- 7. Locate dash harness.
- 8. Attach ring terminal J32 to ground screw.



Figure 2. Location of ground connection.

Locate the OEM customer access upfitter wiring, under the dash, behind the brake pedal. See Figure 2.



Figure 3. Customer Access wires.

- 10. Remove some of the electrical tape to reveal the blunt-cut wires.
- 11. In the OEM Upfitter wiring bundle, locate the "VS OUT", Violet/Orange, wire and strip end.
- Splice the Violet/Orange to the dash harness Violet/White (W55) wire, using the appropriate butt splice and crimp.
 Reference the Dash Harness Schematic.
- 13. In the OEM upfitter wiring bundle, locate the "RUN/ACC", White/Blue, wire and strip end.
- 14. Splice the White/Blue end to the dash harness Yellow only (W58) wire, using the

- appropriate butt splice, and crimp.
 Reference the Dash Harness Schematic.
- 15. In the OEM upfitter wiring bundle, locate the "TRO P", Blue/Grey, wire and strip end.
- Splice the Blue/Grey end to the dash harness Yellow/Black (W61) wire, using the appropriate butt splice, and crimp.
 Reference the Dash Harness Schematic.
- 17. In the OEM upfitter wiring bundle locate the Red 16-18ga wire.
- 18. Cut the Red Wire
- 19. Strip one end of the Red wire and insert into the heat shrinkable butt splice and crimp.
- 20. Strip the Dash Harness Red wire and other end of the vehicle Red wire and twist together. Insert the twisted pair into the other end of the heat shrinkable butt splice and crimp.
- 21. Heat the insulation of the butt splice to seal the connection.
- 22. Re-sheath the vehicle wiring and rewrap with appropriate electrical tape.
- 23. Locate the Pink/Black wire in the Dash Harness.
- 24. Route the Pink/Black wire to the center console area of the dash.
- 25. Locate the trailer brake controller harness behind the center console panel.
- 26. Locate the Blue/Orange wire in the brake controller harness.
- 27. Cut the Blue/Orange wire.
- 28. Strip one end of the Blue/Orange wire and insert into the heat shrinkable butt splice and crimp.
- 29. Strip the other end of the Blue/Orange wire and the Pink/Black wire from the Dash Harness.
- 30. Twist the two wires together and insert in the other end of the butt splice and crimp.
- 31. Heat the insulator to seal.
- 32. Re-sheath any wires and replace removed panels.