SALEEN

OPERATIONS DESCRIPTION SHEET

SALEEN MANUFACTURING

SALEEN CONFIDENTIAL

Date	#	Change Description:	AP

Model Year: 2007	ODS Release Date:	# of Operators: 1	
Operations Description: S331 Class IV Wiring Harness Installation	Workstation #: TBD	ODS #: 08-ODS5084	Engineer Responsible: AKG

Location	Hardware	Torques	Units

Time required to complete procedure:
Hr. # Min.

Tools Required:
8 mm socket, ¼" drive
¼" drive ratchet

Parts	Description	(Qty)
08-1704-C16492*	HARNESS AIR SUSPENSION S331	1

Materials Required:

The diagram at right shows a plan view (looking down at the truck) of the wiring harness routing, starting at the battery and working around the front of the engine bay to the driver's side wheel well, chassis rail and rear suspension, finally culminating at the air compressor & manifold assembly.

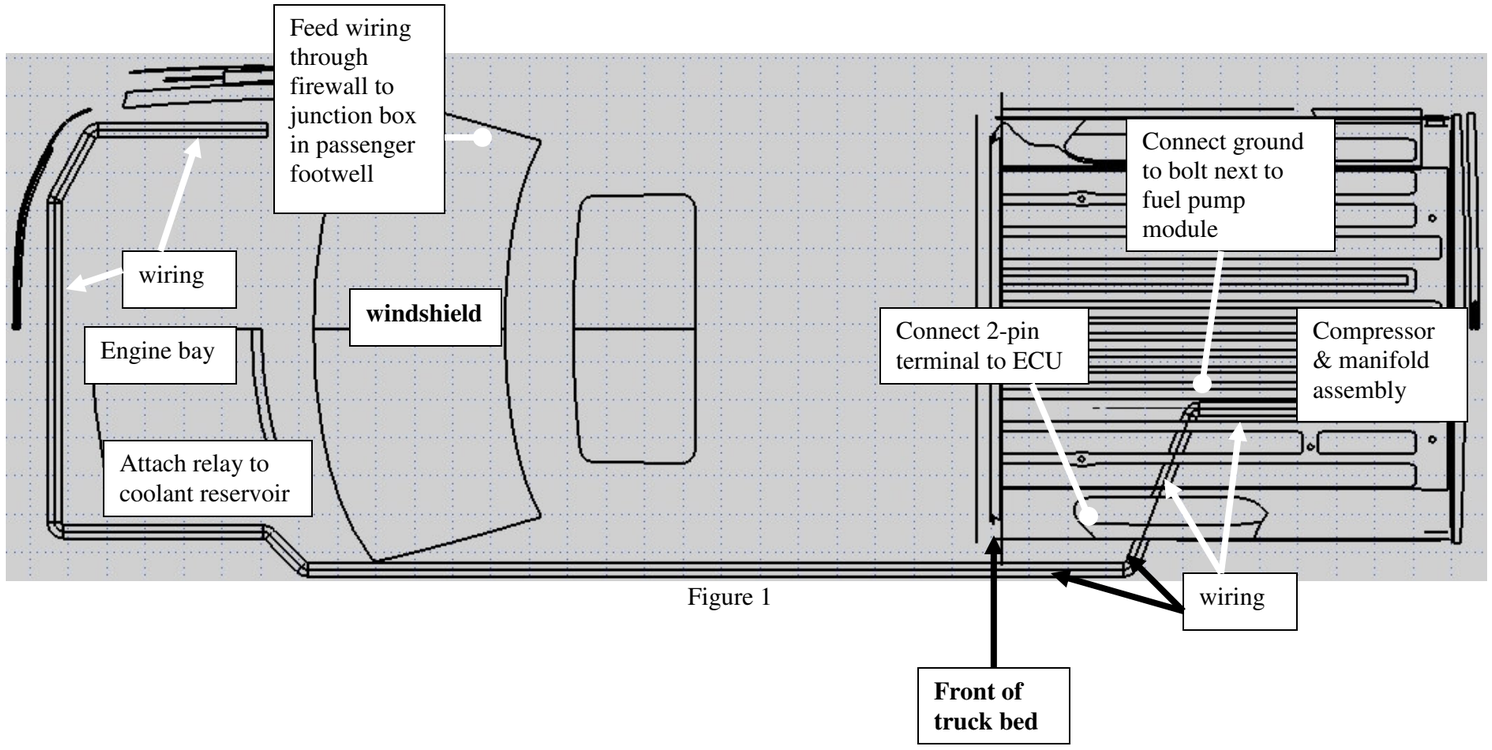


Figure 1

Order of operations:

1. Ensure the negative battery terminal is disconnected.

2. Insert the wires for the Class IV harness into the grommet on the passenger side of the PCM as shown in Figure1 (grommet shown inserted into firewall in Figure 2). The wire should follow the water pump wires into the interior of the truck.

3. To obtain key-on power for the system, insert the key-on power wire into the same butt connector splice used for the water pump relay (the White/Purple wire in **pin 23** of the 24-pin connector of the smart junction box). (Figures 3, 4) For 3V trucks, the relay will not be used and only the key-on wire will be spliced in.

4. Remove the nut from the battery positive terminal using an 8 mm socket on 1/4" drive ratchet, install the Class IV harness power wire ring terminal onto the battery stud, then replace the nut and tighten. (Figure 5)

5. Remove the battery positive terminal. Remove the battery from the tray, route the harness along the fender behind where the battery sits, then zip-tie the harness to existing factory harnesses. (Figure 6)

6. Route the harness behind the washer fluid reservoir, then through the opening in the core support behind the passenger side headlight. (Figure 7)

7. Route the harness along the upper core support, above the radiator (along the water pump harness if the truck is supercharged), and zip tie to existing harnesses every 6 inches. (Figure 8)

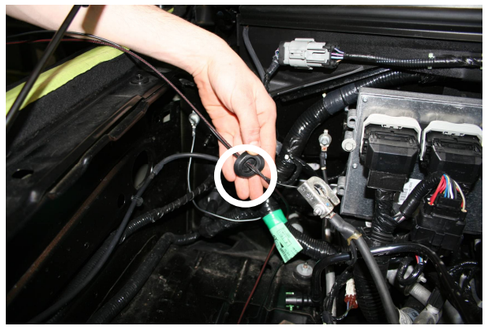
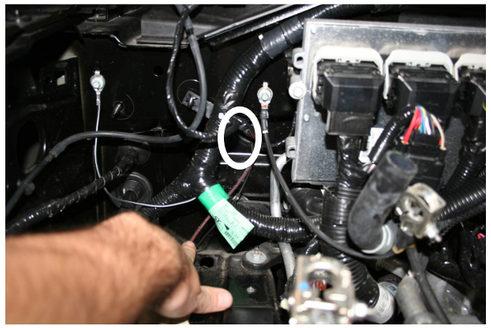


Figure 1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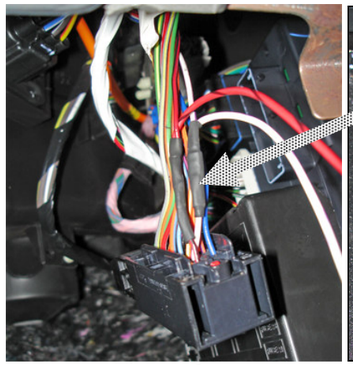
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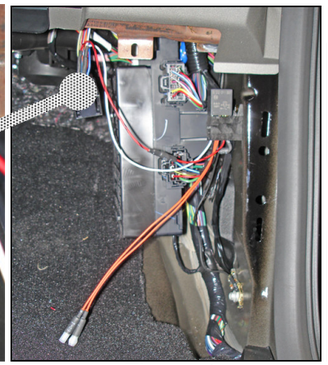
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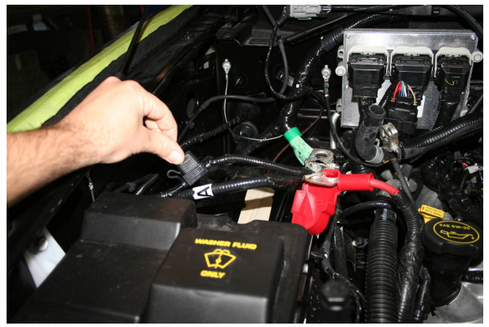
Figure 5

Figure 6

Figure 7

Figure 8

8. Just after the radiator, route the harness over the core support into the engine bay. (Figure 9)

9. Using an 8 mm socket on ¼" drive ratchet, secure the relay tab using the front bolt on the engine coolant recovery tank. (Figure10)

10. Route the harness down the fender, underneath the brake booster, to the driver's side frame rail. (Figures 11 - 13)

11. Run the harness above the factory harness, and secure with zip ties every 6 inches along the frame rail. (Figures 13 - 15)

12. Route the harness inboard of the frame rail between the damper and the air spring. (Figures 15, 16)

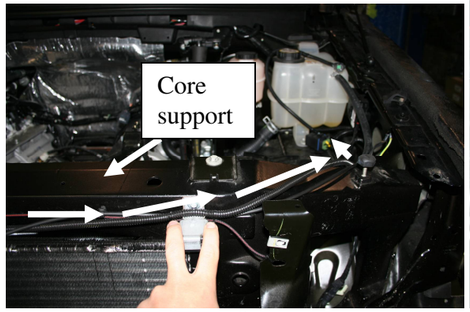

Figure 9

Figure 10

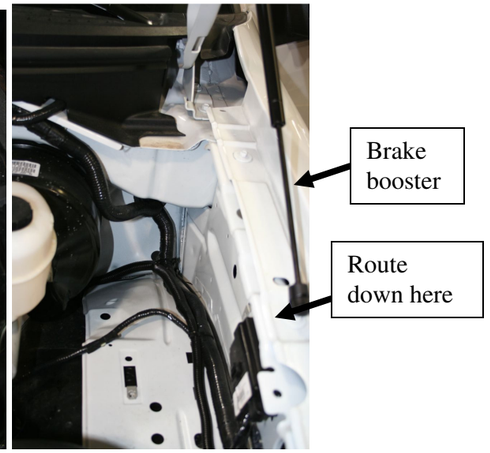

Figure 11

Figure 12

Figure 13

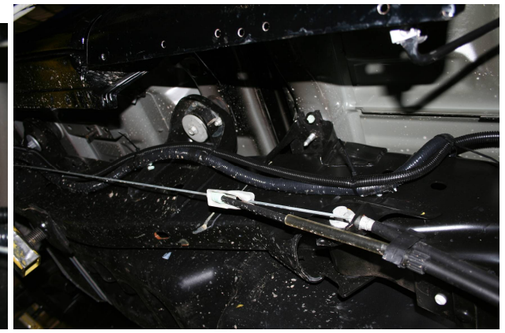
Figure 14

Figure 15

Figure 16

14. Connect the gray terminal on the harness to the gray terminal on the ECU on the driver's side air spring assembly. (Figure 17)

15. Route the harness inboard of the driver's air spring assembly. (Figure 18)

16. Route the harness past the air compressor assembly and the next horizontal crossmember, along the driver's frame rail, then fold on itself and route back to the air compressor. (Figure 19)

17. Connect the 2-pin connector to the 2-pin connector from the air compressor. (Figure 20)

18. Connect the spade terminal to the spade terminal on the red compressor power wire. (Figure 20)

19. Using an 8 mm socket on ¼" drive ratchet, connect the ground wire from the harness and the ground from the compressor to the bolt on top of the chassis rail above fuel pump module. (Figure 19)
    - NOTE: the bolt is not easily visible

20. Secure the harness to the stock harness with zip ties every 4-6 inches.

21. Replace the battery and secure both terminals, positive first.

Figure 17

Figure 18

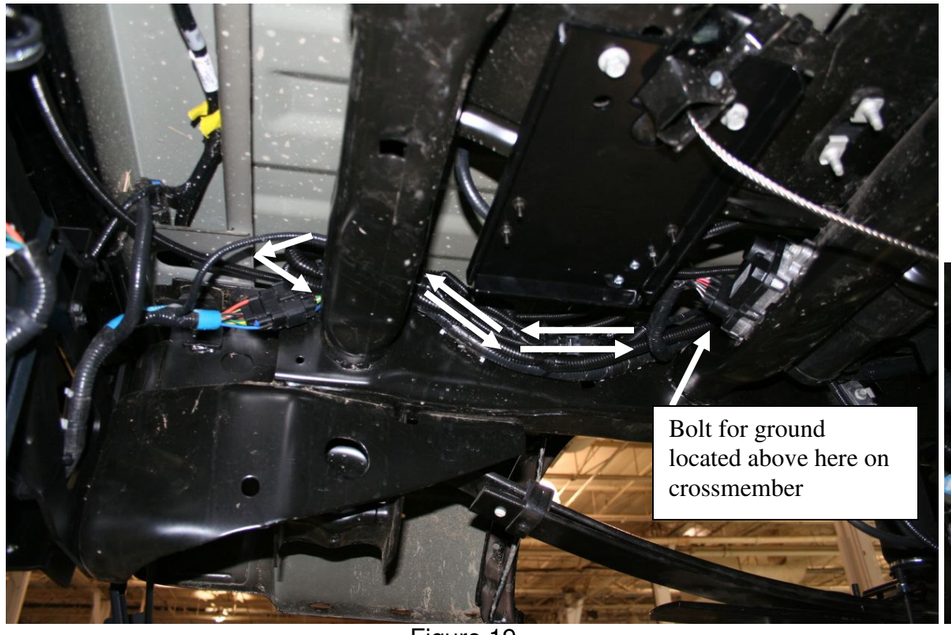

Figure 19

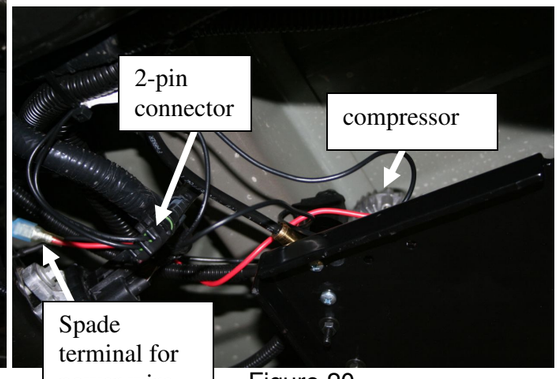

Figure 20