



October 2015

Dealer Service Instructions for:

Safety Recall R43 / NHTSA 15V-517 Battery Wire Harness

Models

2014 (DS) RAM Trucks (1500 series)

NOTE: This recall applies only to the above vehicles equipped with a 3.0L diesel engine (sales code EXF) and 4x2 drivetrain built at the Warren Assembly Plant (“S” in the 11th VIN Position) built from August 08, 2013 through June 13, 2014 (MDH 080802 through 061300).

2014 - 2015 (DS) RAM Trucks (1500 series)

NOTE: This recall applies only to the above vehicles equipped with a 3.0L diesel engine (sales code EXF) and 4x2 drivetrain built at the Saltillo Assembly Plant (“G” in the 11th VIN Position).

IMPORTANT: Some of the involved vehicles may be in dealer new vehicle inventory. Federal law requires you to complete this recall service on these vehicles before retail delivery. Dealers should also consider this requirement to apply to used vehicle inventory and should perform this recall on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

Subject

The battery (B+) wire harness on about 1,650 of the above vehicles may have been routed against the right engine mount frame bracket. Continuous battery wire harness contact with the right engine mount frame bracket could cause the battery wire harness sheathing to wear and create a high resistive short circuit. A high resistive short circuit could cause the vehicle to stall and/or an underhood electrical fire.

This condition could also cause miscellaneous fuses to blow, the Malfunction Indicator Lamp (MIL) to illuminate, a “No Start” condition, an engine stall followed by a “No Start” condition and/or the battery to go dead when the vehicle is parked overnight.

Repair

The battery wire harness must be inspected for a rub through of the wire harness. Trucks found with a damaged battery wire harness must have the battery wire harness replaced. Trucks found with no damage to the battery wire harness will have new battery wire harness routing clips installed. All involved trucks will receive revised battery wire harness routing to eliminate battery wire harness contact with the right engine mount frame bracket.

Parts Information

<u>Part Number</u>	<u>Description</u>
CBAFR431AA	Harness, Battery Wire

Due to the small number of involved vehicles expected to require a battery wire harness, no parts will be distributed initially. **A battery wire harness should be ordered only after inspection determines that repair is required.**

<u>Part Number</u>	<u>Description</u>
68307392AA	Clip, Off Set (one per vehicle)
68307393AA	Clip, Tower (one per vehicle)

Parts Return

No parts return required for this campaign.

Special Tools

The following special tools may be required to perform this repair:

- NPN
wiTECH VCI Pod Kit
- NPN
Laptop Computer
- NPN
wiTECH Software

Service Procedure

A. Wire Harness Inspection

1. Lift the vehicle on an appropriate hoist.
2. Remove and save the right tire/wheel assembly.
3. Remove and save the right front wheel opening plastic liner.
4. Inspect for battery wire harness contact at the engine mount frame bracket (Figure 1):
 - If there is no rub through of the aluminum reflective sleeve, continue with Step 5 of this procedure.
 - If there is a rub through of the aluminum reflective sleeve, continue with **Section B. Replace Engine Wire Harness.**

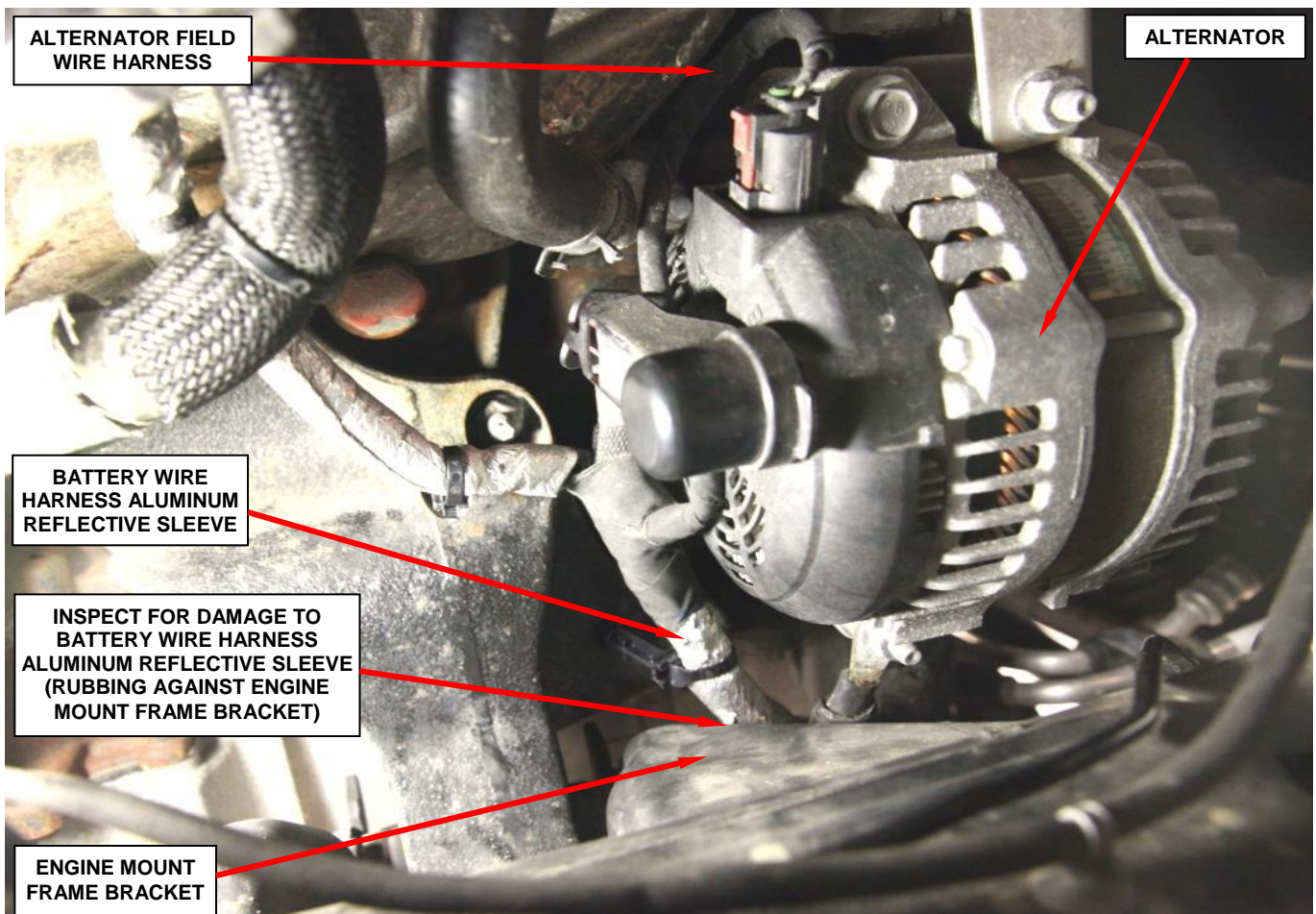


Figure 1 – Inspect Wire Harness for Damage at Engine Mount Frame Bracket

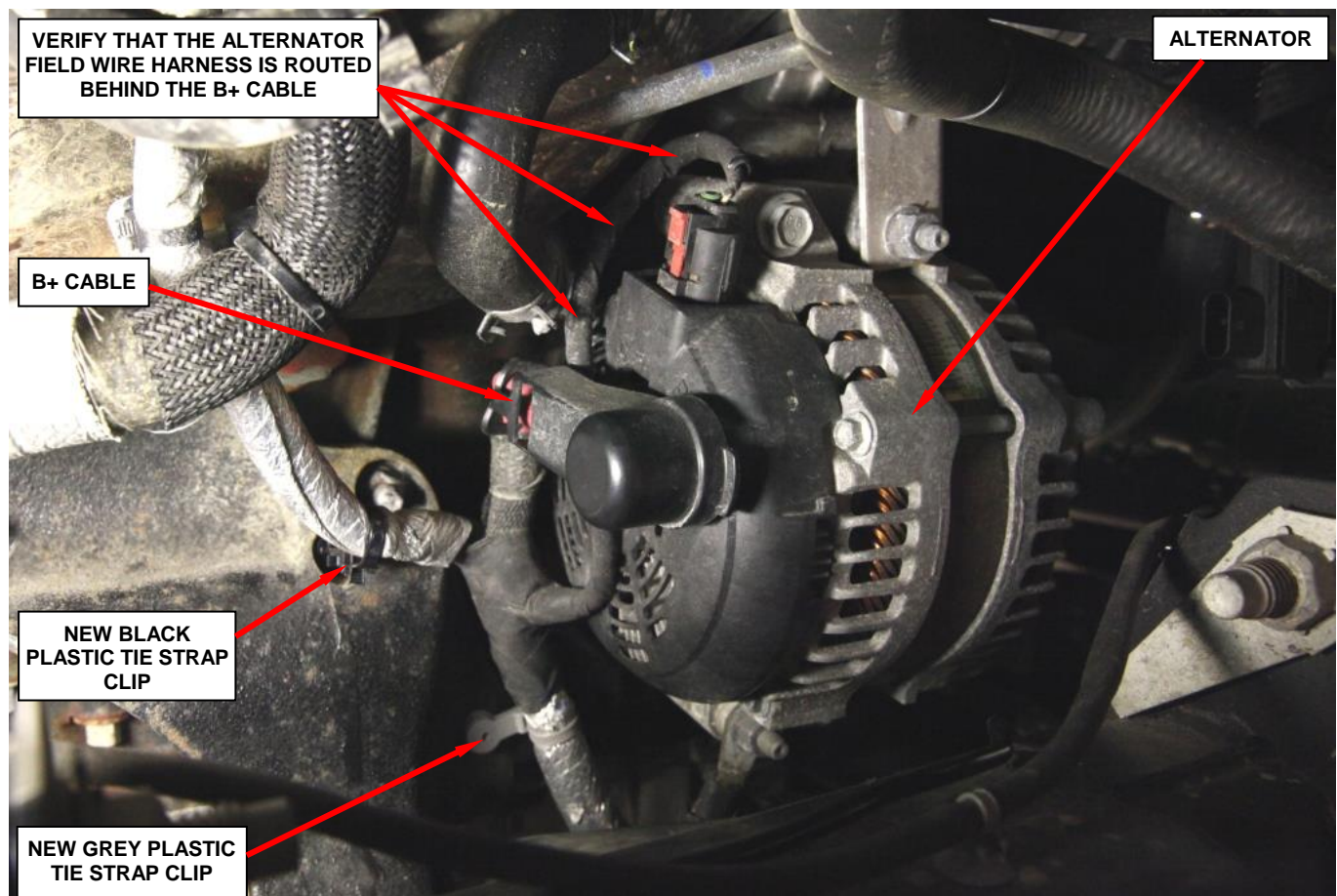
Service Procedure (Continued)

Figure 2 – Verify Alternator Field Wire Harness Routing and Install New Tie Strap Clips

5. Verify that the alternator field wire harness at the alternator is routed as shown in Figure 2. Reroute the alternator field wire harness if required.
6. Remove and discard the two original tie strap clips on the battery harness (Figure 2).
7. Install the two new wire harness clips as shown in Figure 2.
8. Install the right front wheel opening plastic liner.
9. Install the right tire/wheel assembly. Tighten the lug nuts to 130 ft. lbs. (176 N·m).
10. Lower the vehicle from the hoist.
11. Return the vehicle to the customer.

Service Procedure (Continued)

B. Replace Battery Wire Harness

NOTE: The following procedure is required if the engine wire harness requires replacement per the inspection in Section “A.” *Very few vehicles are expected to require this repair.*

1. Lower the vehicle from the hoist.
2. Disconnect and isolate the negative battery cable from the negative battery post.
3. Disconnect the battery feed wires at the positive battery post terminal studs (Figure 3).
4. Disconnect the positive battery terminal from the positive battery post (Figure 3).
5. Remove and save the Power Distribution Center (PDC) cover.
6. Disconnect the PDC battery B+ feed wire from the PDC feed stud (Figure 4).
7. Separate the PDC top panel from the PDC housing and disconnect the PDC electrical connector (Figure 4).

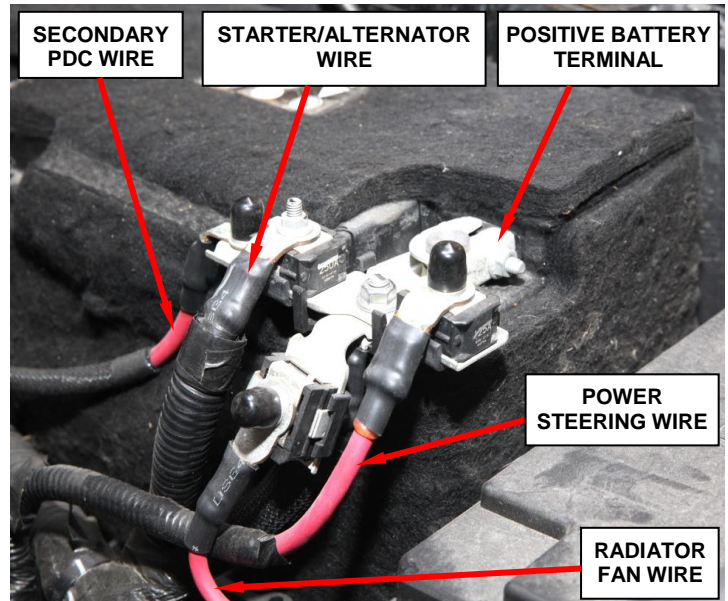


Figure 3 – Battery Positive Connections

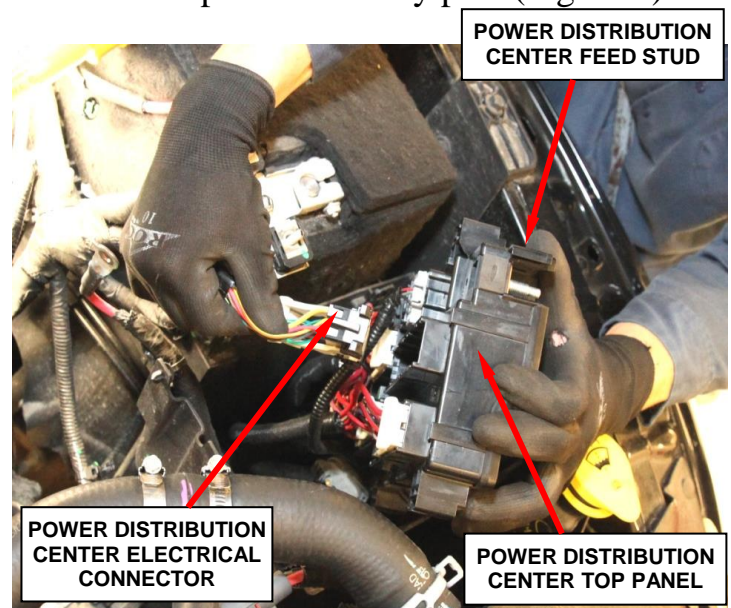


Figure 4 – PDC Electrical Connections

Service Procedure (Continued)

8. Disconnect the wire harness three-pin electrical connector (Figure 5).
9. Disconnect the A/C compressor clutch electrical connector.
10. Disconnect the Anti-Lock Brake System (ABS) control module electrical connector (Figure 5).
11. Disconnect the left front wheel speed sensor.
12. Disconnect the brake fluid level sensor electrical connector.
13. Disconnect the negative cables from the negative battery terminal (Figure 6).
14. Unclip the secondary Power Distribution Center (PDC) from the battery tray (Figure 6).

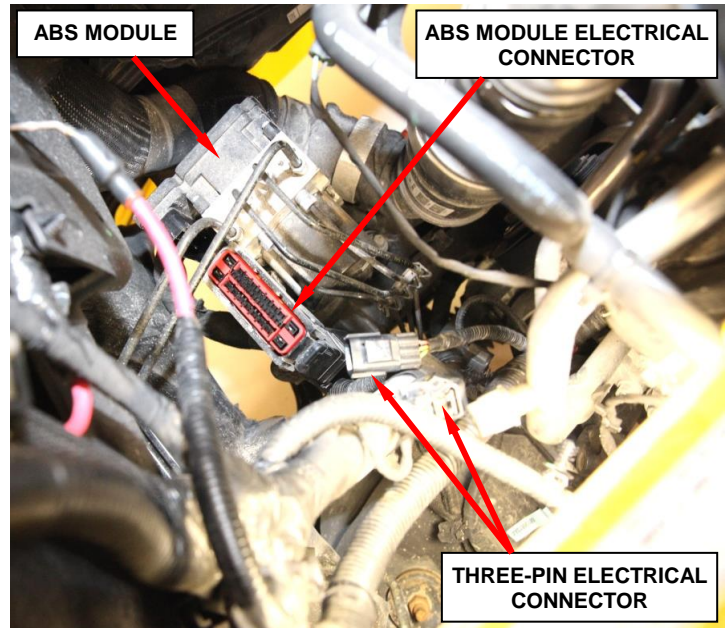


Figure 5 – ABS Connector

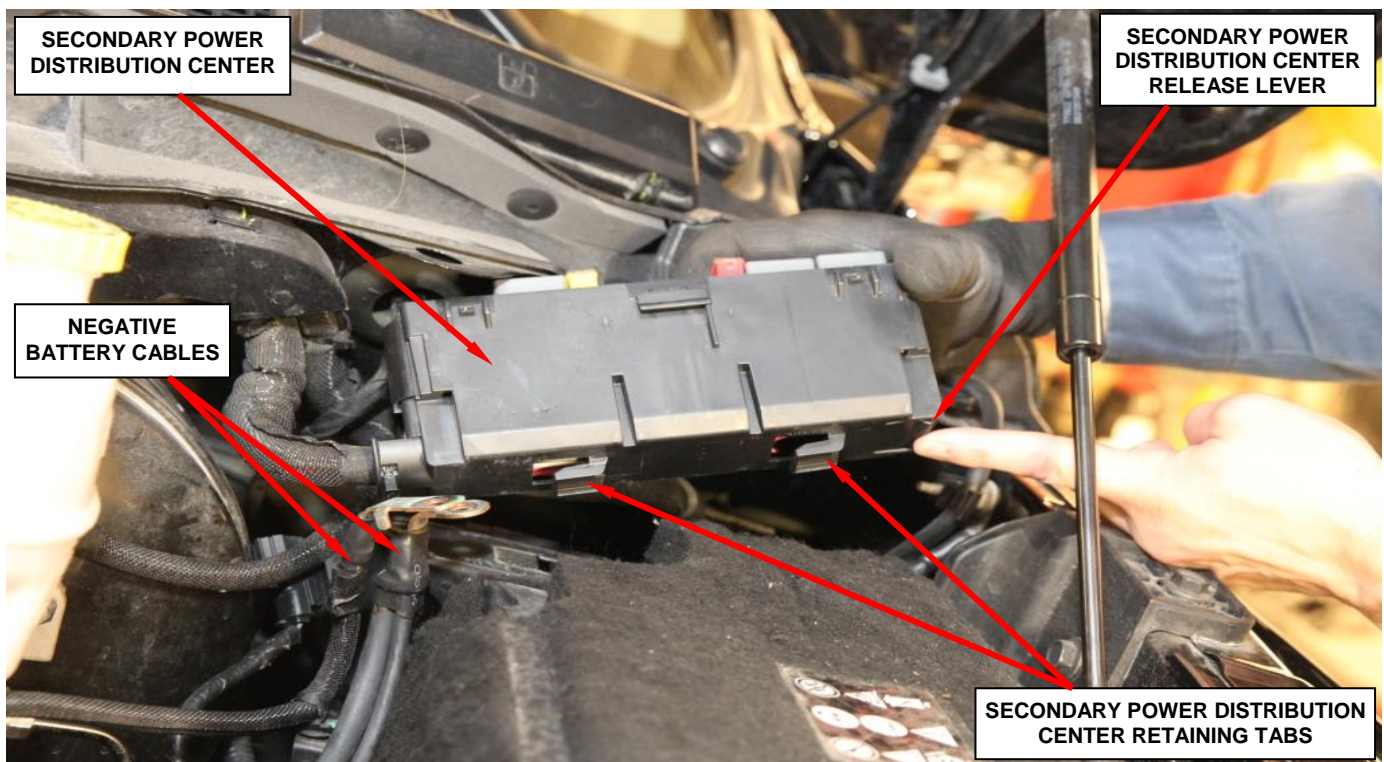


Figure 6 – Secondary Power Distribution Center

Service Procedure (Continued)

15. Disconnect the body-to-battery wire harness 34-way electrical connector located under the secondary PDC.
16. Disconnect the fender panel ground wire (Figure 7).
17. Lift the vehicle on the hoist.
18. Disconnect the frame ground wire from the left frame rail.
19. Disconnect the fuel pump electrical connector at the frame rail (Figure 8).

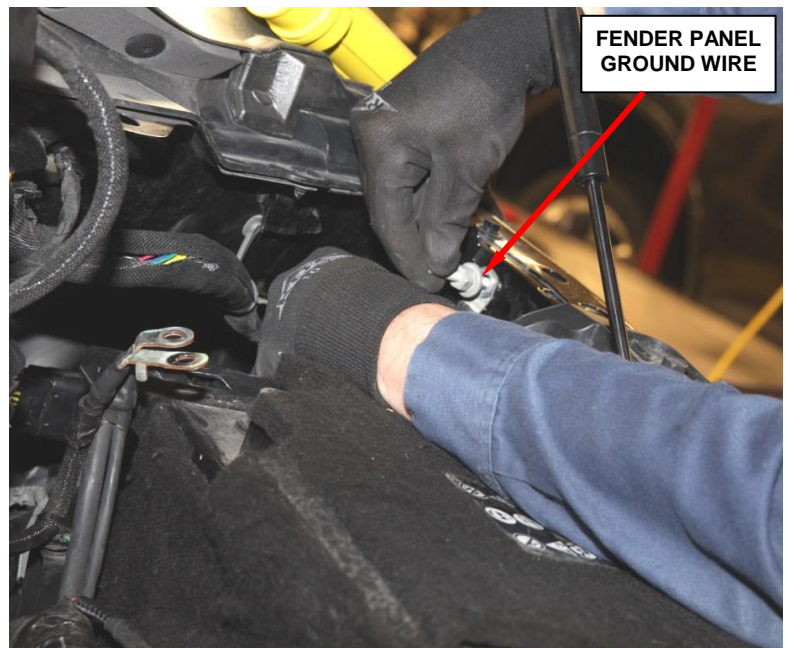


Figure 7 – Fender Panel Ground Wire

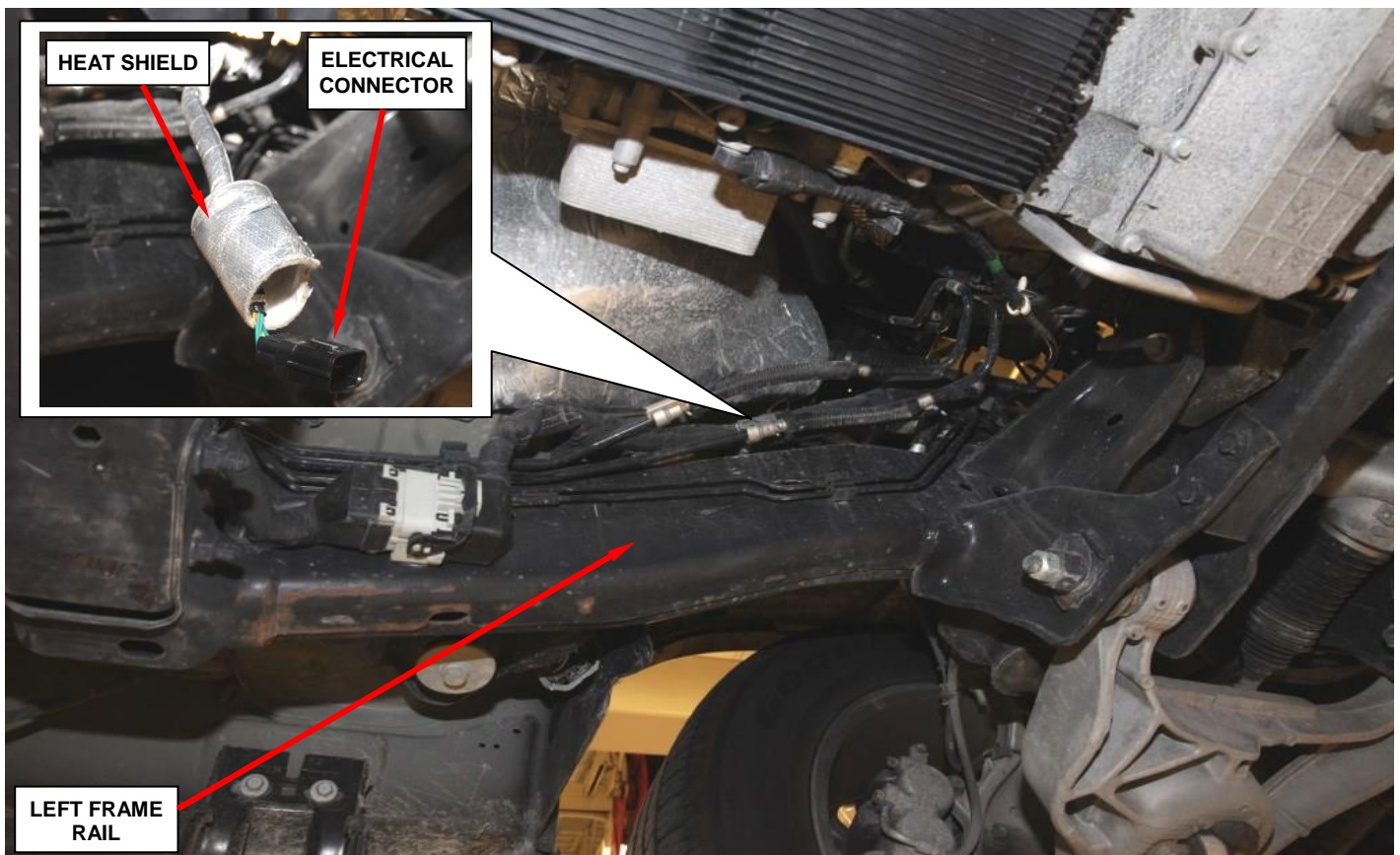


Figure 8 – Fuel Pump Electrical Connector

Service Procedure (Continued)

20. Disconnect the engine starter wiring.
21. Disconnect the oil temperature sensor electrical connector (Figure 9).
22. Disconnect the left side battery wire harness routing clips.
23. Remove and save the two oil pan wiring trough nuts.
24. Remove and save the transmission oil cooler tube bracket at the engine oil pan (Figure 10).

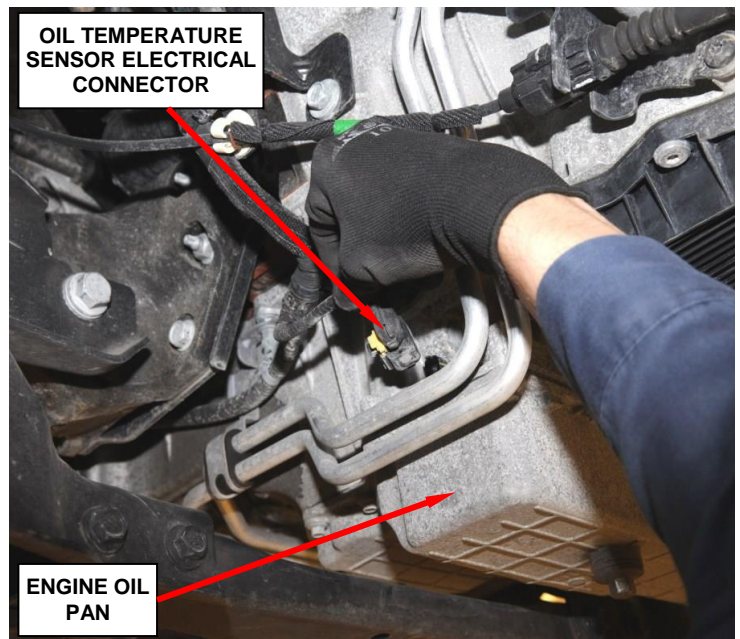


Figure 9 – Engine Oil Temperature Sensor

25. Remove and save the alternator ground nut and disconnect the ground wire.
26. Disconnect the alternator B+ wire at the back of the alternator.
27. Disconnect the alternator field wire electrical connector located on the backside of the alternator.

28. Disconnect the engine right side electrical connector.
29. Carefully remove the original battery wire harness from the vehicle.
30. Place the new battery wire harness into position in the vehicle.

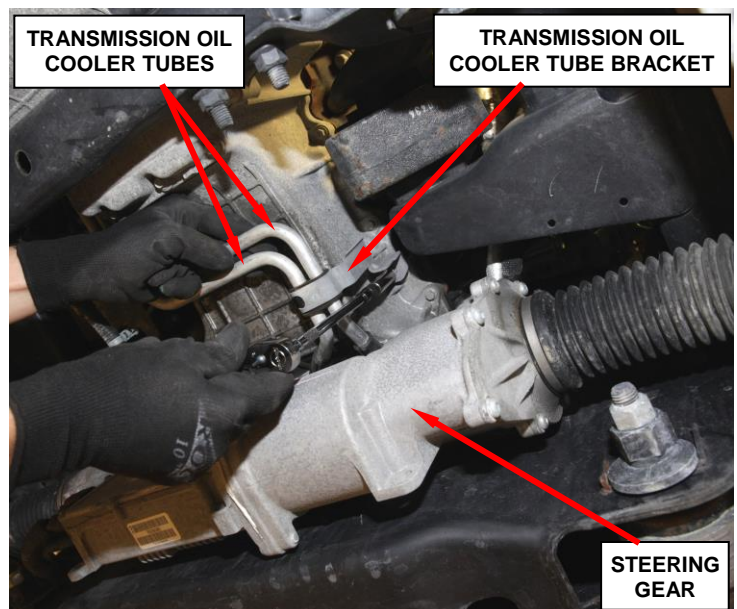


Figure 10 – Transmission Oil Cooler Bracket

31. Connect the engine right side electrical connector.
32. Connect the alternator field wire electrical connector located on the backside of the alternator.

Service Procedure (Continued)

33. Connect the alternator B+ wire at the back of the alternator. Tighten the alternator B+ wire retaining nut to 106 in. lbs. (12 N·m).
34. Connect the engine right side battery wire harness routing clips.
35. Connect the alternator ground wire to the alternator. Tighten the ground wire retaining nut to 97 in. lbs. (11 N·m).
36. Place the battery wiring harness trough into position and install the two trough retaining nuts. Tighten the nuts to 44 in. lbs. (5 N·m).
37. Connect the transmission oil cooler tube bracket to the engine oil pan (Figure 10).
38. Connect the oil temperature sensor electrical connector (Figure 9).
39. Connect the left side battery wire harness routing clips.
40. Connect the engine starter wiring. Tighten the Starter B+ wire retaining nut to 106 in. lbs. (12 N·m).
41. Transfer the fuel pump electrical connector heat shield from the original battery wire harness to the new battery wire harness (Figure 8).
42. Connect the fuel pump electrical connector at the frame rail (Figure 8).
43. Connect the frame rail ground wire to the left frame rail.
44. Lower the vehicle from the hoist.
45. Connect the fender panel ground wire (Figure 7). Tighten the fastener to 13 ft. lbs. (18 N·m).
46. Connect the body-to-battery wire harness 34-way electrical connector located under the secondary PDC.
47. Clip the secondary Power Distribution Center (PDC) to the battery tray (Figure 6).
48. Connect the negative battery cables to the negative battery terminal. Tighten the retaining nut to 132 in. lbs. (15 N·m).
49. Connect the brake fluid level sensor electrical connector.
50. Connect the left front wheel speed sensor electrical connector.
51. Connect the Anti-Lock Brake (ABS) control module electrical connector (Figure 5).
52. Connect the A/C compressor clutch electrical connector.

Service Procedure (Continued)

53. Connect the wire harness three-pin electrical connector (Figure 5).
54. Connect the Power Distribution Center (PDC) electrical connector to the bottom of the PDC top panel (Figure 4).
55. Snap the PDC top panel into the PDC housing.
56. Connect the PDC battery B+ feed wire to the PDC feed stud (Figure 11). Tighten the retaining nut to 106 in. lbs. (12 N·m).
57. Install the PDC cover.
58. Connect the positive battery terminal to the positive battery post. Tighten the battery terminal nut to 48 in. lbs. (5.4 N·m).
59. Connect the battery feed wires at the positive battery post terminal studs (Figure 11). Tighten the nuts to 80 in. lbs. (9 N·m).

CAUTION: Some of the B+ terminal positions for the battery feed wires have moved to different locations on the positive battery post terminal.

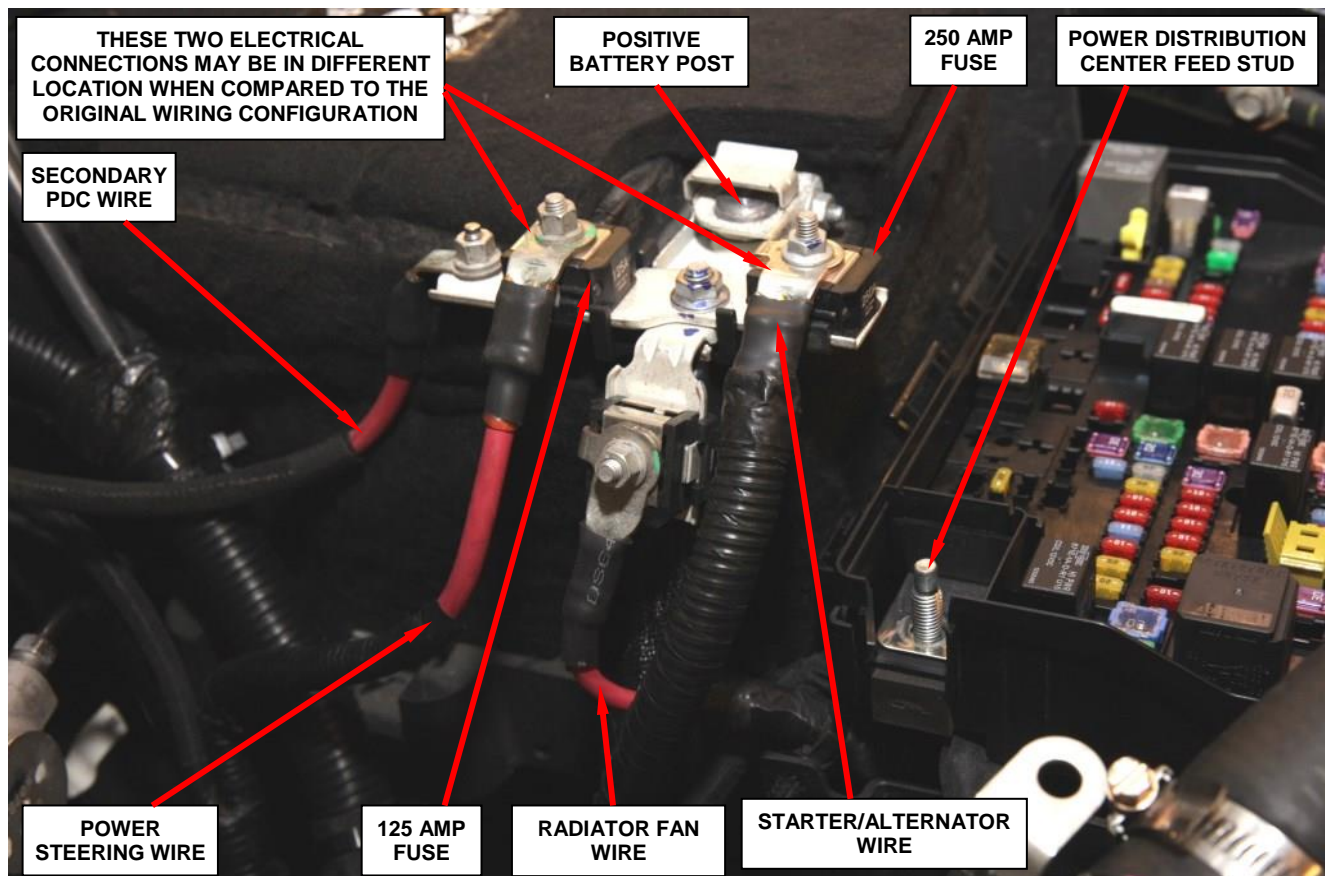


Figure 11 – Battery Positive Electrical Connections

Service Procedure (Continued)

60. Connect the negative battery cable to the negative battery post. Tighten the nut to 53 in. lbs. (6 N·m).

61. Visually inspect the entire new battery wire harness to ensure that it is routed properly. Adjust the battery wire harness as required to ensure proper routing.

62. Install the right front wheel opening plastic liner.

63. Install the right tire/wheel assembly. Tighten the lug nuts to 130 ft. lbs. (176 N·m).

64. Lower the vehicle from the hoist.

65. Connect the wiTECH scan tool to the vehicle and start a wiTECH session.

66. Using the wiTECH scan tool, clear all Diagnostic Trouble Codes (DTC's).

67. Remove the wiTECH scan tool from the vehicle.

68. Return the vehicle to the customer.

Completion Reporting and Reimbursement

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims submitted will be used by FCA to record recall service completions and provide dealer payments.

Use one of the following labor operation numbers and time allowances:

	Labor Operation Number	Time Allowance
Inspect battery wire harness and install new wire harness retaining clips	08-R4-31-82	0.4 hours
Inspect and replace battery wire harness	08-R4-31-83	1.7 hours

Add the cost of the recall parts package plus applicable dealer allowance to your claim.

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

Dealer Notification

To view this notification on DealerCONNECT, select “Global Recall System” on the Service tab, then click on the description of this notification.

Owner Notification and Service Scheduling

All involved vehicle owners known to FCA are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

Enclosed with each owner letter is an Owner Notification postcard to allow owners to update our records if applicable.

Vehicle Lists, Global Recall System, VIP and Dealer Follow Up

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed.

GRS provides involved dealers with an updated VIN list of their incomplete vehicles. The owner's name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the “**Service**” tab and then click on “**Global Recall System.**” Your dealer's VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

Dealers must perform this repair on all unsold vehicles before retail delivery. Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.

Additional Information

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.

Customer Services / Field Operations
FCA US LLC