



September 2015

Dealer Service Instructions for:

# Safety Recall R36 / NHTSA 15V-459 Steering Wheel Wiring

# Models

2012 - 2014	(DS)	RAM 1500 Pickup
2012 - 2014	(DJ)	RAM 2500 Pickup
2012 - 2014	(D2)	RAM 3500 Pickup
2012 - 2014	(DD)	RAM 3500 Cab Chassis
2012 - 2014	(DP)	RAM 4500/5500 Cab Chassis

*NOTE:* This recall applies only to the above vehicles equipped with an Electronic Vehicle Information Center (EVIC) (sales code LAZ) built through October 07, 2014 (MDH 100721).

**IMPORTANT:** Some of the involved vehicles may be in dealer used vehicle inventory. Dealers should complete this recall service on these vehicles before retail delivery. Dealers should also perform this recall on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

# Subject

The steering wheel wire harness on about 1,060,000 of the above vehicles may become chaffed by the driver airbag module retainer spring ends. A chaffed steering wheel wire harness could cause an electrical short and/or an inadvertent driver airbag deployment. Inadvertent driver airbag deployment, during certain driving conditions, may increase the risk of a crash and/or vehicle occupant injury.

# Repair

The steering wheel wire harness will be inspected, and if needed repaired. The steering wheel wire harness will be rerouted and secured to prevent wire chaffing and protective caps will be installed onto the airbag retainer spring ends.

# **Parts Information**

Part NumberDescriptionCBXFR361AACap, Rubber (two per vehicle)NOTE: Minimum SalesQuantity (MSQ) of 50. One kit can repair 25 vehicles.

04856500 Wire Tie, 5.375'' (one per vehicle) NOTE: Minimum Sales Quantity (MSQ) of 50. One kit can repair 50 vehicles.

# **Parts Return**

No parts return required for this campaign.

# **Special Tools**

The following special tools are required to perform this repair:

> NPN	wiTECH VCI Pod Kit
> NPN	Laptop Computer
> NPN	wiTECH Software
▶ 10187	DAB Removal Tool

#### **Service Procedure**

#### A. Steering Wheel Wiring and Rubber Caps

WARNING: To avoid serious or fatal injury on vehicles equipped with airbags, disable the Supplemental Restraint System (SRS) before performing this service procedure.

Disconnect and isolate the battery negative (ground) cable, then wait two minutes for the system capacitor to discharge before performing this procedure. This is the only sure way to disable the SRS. Failure to take the proper precautions could result in accidental airbag deployment.

At no time should any source of electricity be permitted near the

Figure 1 – Upper Shroud Screw Locations

inflator on the back of a non-deployed airbag. When carrying a non-deployed airbag, the trim cover or airbag cushion side of the unit should be pointed away from the body to minimize injury in the event of an accidental deployment.

- 1. Disconnect and isolate the negative battery cable. Wait two minutes for the system capacitor to discharge before further service.
- 2. Remove the two upper shroud screws from the steering column and remove the upper shroud (Figure 1).
- 3. Release the steering column tilt lever and lower the column to its most downward position for easiest driver airbag removal access.
- 4. There are three driver airbag (DAB) retainer access holes on the instrument panel side of the hub of the steering wheel, located at the two o'clock, six o'clock and ten o'clock positions. The steering wheel must be rotated to bring each of these access holes up to the twelve o'clock position of the steering column one at a time for removal access.



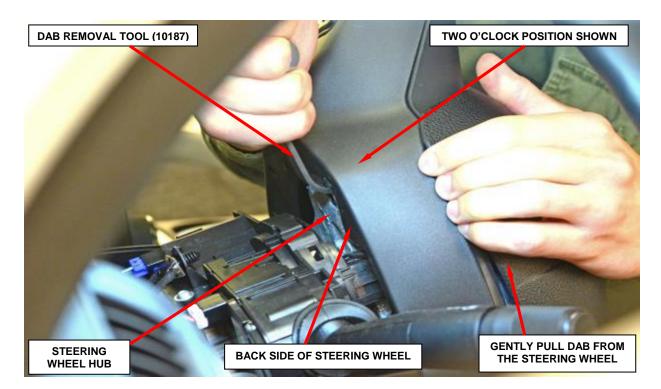


Figure 2 – DAB Removal Tool (10187)

- 5. Insert the short blade (Tip A) of the DAB Removal Tool (Special Tool Number 10187) or the blade of an equivalent prying tool into either of the upper (two o'clock or ten o'clock) access holes of the steering wheel hub rear trim cover, being certain to place the blade of the tool on the inboard (steering wheel hub) side of the airbag snap retainer wire loop (Figure 2).
- 6. Push the handle of the tool downward for the blade to pry the snap retainer wire loop upward far enough to disengage the loop from the hook of the steering wheel armature. At the same time, gently pull the DAB away from the steering wheel to prevent the retainer from snapping back into place over the hook once it is disengaged (Figure 2).
- 7. Repeat Steps 5 and 6 at the other upper (two o'clock or ten o'clock) access hole to disengage the other upper snap retainer wire loop.
- 8. Repeat Steps 5 and 6 at the lower (six o'clock) access hole to disengage the lower snap retainer wire loop. The lower snap retainer wire loop has a distinctive V-shape and must always be installed onto the six o'clock hook of the steering wheel armature.

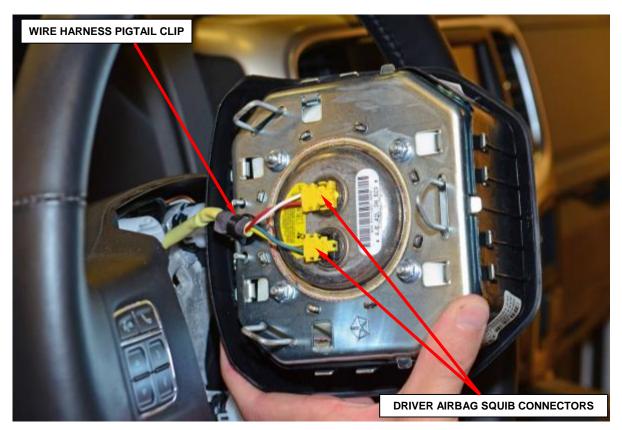


Figure 3 – Driver Airbag Squib Connectors

- 9. Disconnect the two driver airbag squib connectors. Depress the latches on each side of the connector insulator and pull the insulators straight out from the driver airbag inflator to disconnect them from the connector receptacles (Figure 3).
- 10. Disengage the wire harness pigtail clip from the housing and remove the driver airbag (Figure 3).

11. Disconnect the steering wheel wire harness six way connector (Figure 4).

12. Inspect the wiring harness for chaffing or damage on the six way pigtail and repair as necessary (Figure 4).

NOTE: If bare wire or chaffing is present, tape the wire using vinyl electrical tape.

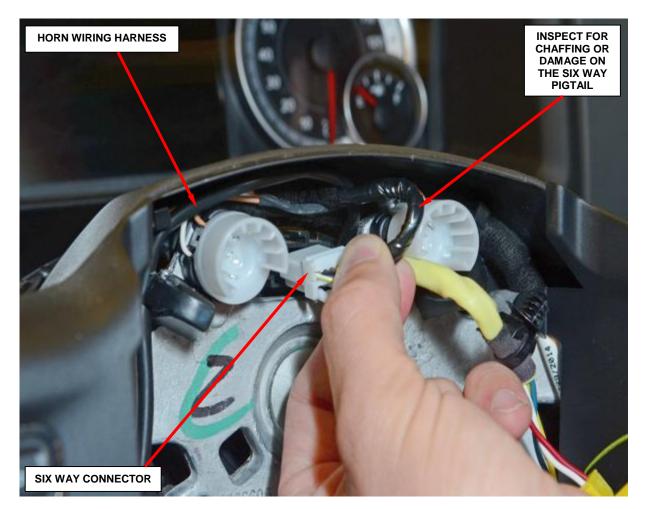
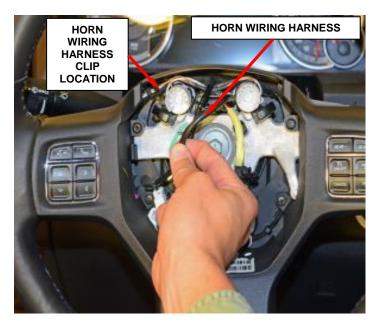


Figure 4 – Inspect For Wire Pigtail Damage

13. Unclip the horn wiring harness and move it down to gain access to the steering wheel harness (Figure 5).



14. Measure 45mm from the back of the six way connector and mark the wire pigtail for reference in step 15 (Figure 6).

Figure 5 – Horn Wiring Harness

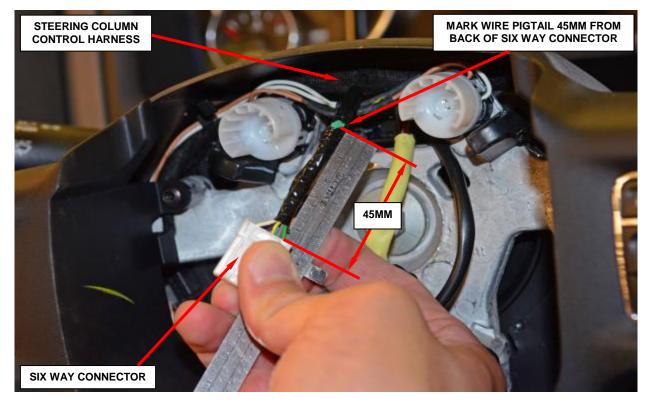


Figure 6 – Mark Wire Harness for Reference

15. Bundle the wire pigtail together to the steering column control harness with the supplied wire tie. Use the mark on the wire harness from step 14 as a reference to assure the final length of the wire harness is 45 mm from the steering column control harness. (Figure 7).

16. Cut off the excess wire tie tail.

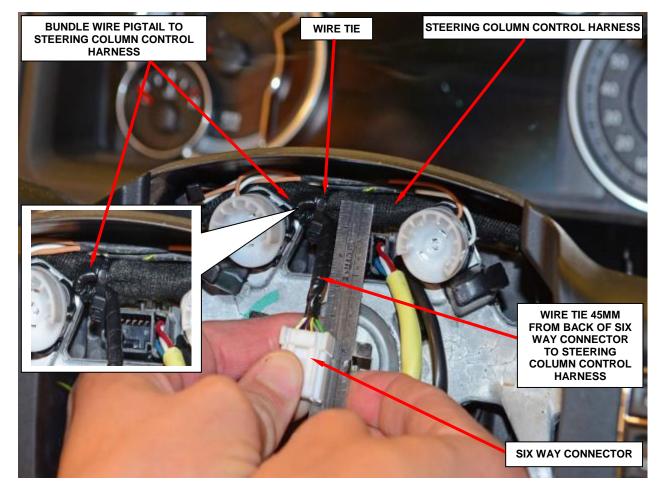


Figure 7 – Wire Tie Installation

- 17. Position the horn wiring back into the clip (Figure 5).
- Connect the steering wheel wire harness six way connector (Figure 4).
- 19. Install the two rubber caps to the two posts on the back side of the driver airbag module (Figure 8).

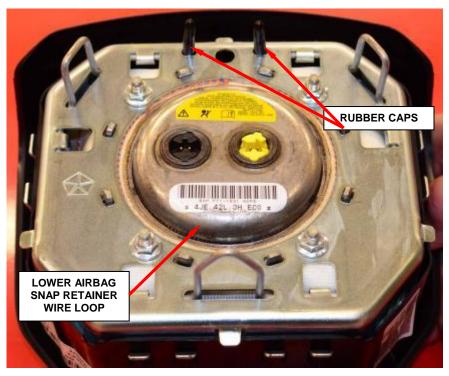


Figure 8 – Rubber Caps

NOTE: Fully seat the rubber caps onto the posts. The rubber caps are designed to be slightly longer than the posts.

- 20. Engage the wire harness pigtail clip to the housing (Figure 3).
- 21. Carefully position the driver airbag into the hub cavity of the steering wheel and connect the two driver airbag squib connectors to the airbag inflator connector receptacles by pressing straight in on the connector. Be certain to engage each keyed and color-coded connector to the matching connector receptacle. Be certain that each connector is fully engaged in its receptacle by listening carefully for a distinct, audible click as the connector latches snap into place (Figure 3).

CAUTION: Be certain that the clockspring pigtail wires and the steering wheel wire harness are not pinched between the DAB and the horn switch, the steering wheel armature or, on vehicles equipped with a diesel engine, the steering wheel damper weight.

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#### Service Procedure Continued

22. Engage the lower airbag snap retainer wire loop onto the lower hook of the steering wheel armature. The lower snap retainer wire loop has a distinctive V-shape and must always be installed onto the six o'clock hook of the steering wheel armature (Figure 8).

23. Roll the driver airbag upwards and press firmly and evenly over the two upper snap retainer wire loop locations simultaneously until they snap into place over the two upper hooks of the steering wheel armature.

24. Reinstall the upper shroud onto the steering column (Figure 1).

25. Continue with Section B. Supplemental Restraint System (SRS) Verification Test.

#### **B.** Supplemental Restraint System (SRS) Verification Test

NOTE: During the following test, the negative battery cable remains disconnected and isolated during steps 1 and 2 of the Supplemental Restraint System (SRS) Verification Test.

NOTE: The wiTECH scan tool must be used to perform this recall. The wiTECH software is required to be at the latest release level before performing this procedure.

- 1. Connect the wiTECH VCI pod to the vehicle data link connector located under the steering column.
- 2. Turn the ignition switch to the "ON" position and exit the vehicle and close the doors.
- 3. Check to be certain that nobody is in the vehicle, then connect the battery negative cable(s).
- 4. Open the wiTECH Diagnostic application.
- 5. Starting at the "Select Tool" screen, select the row/tool for the wiPOD device you are using, then select "Next".
- 6. Enter your "User id" and "Password", then select "Finish".
- 7. Clear all DTC's in all modules using the wiTECH scan tool.

NOTE: Any active Diagnostic Trouble Codes (DTC's) may require an additional key cycle from "ON" to "OFF" to change DTC status from "active" to "stored".

- 8. Turn the ignition switch to the "OFF" position for about 15 seconds, and then back to the "ON" position. Observe the airbag indicator in the instrument cluster.
  - The airbag indicator in the instrument cluster should illuminate for six to eight seconds, and then go out. This indicates that the SRS is functioning normally and that the repairs are complete. Turn the ignition to the "OFF" position, remove the wiPOD and return the vehicle to the customer.
  - If the airbag indicator fails to light or the light and stays ON, there is still an active SRS fault or malfunction. Refer to the appropriate diagnostic information to diagnose the problem.
- 9. Close the hood, remove the wiTECH VCI pod.

10. 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 <u>one</u> of the following labor operation numbers and time allowances:

	Labor Operation <u>Number</u>	Time <u>Allowance</u>
Inspect steering wheel wiring, install steering wheel airbag back-cover post covers and reroute steering wheel wiring	08-R3-61-82	0.4 hours
Inspect and repair steering wheel wiring, install steering wheel airbag back-cover post covers, and reroute steering wheel wiring	08-R3-61-83	0.5 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 <u>updated</u> VIN list of <u>their incomplete</u> 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** <u>must</u> perform this repair on all unsold vehicles <u>before</u> 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