



May 2016

Dealer Service Instructions for:

Safety Recall S19 / NHTSA 16V-167 Electric Power Steering Unit

Models

2015 - 2016 (DS) RAM Truck

NOTE: This recall applies only to the above vehicles built from January 22, 2015 through September 12, 2015 (MDH 012202 through 091221).

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 Electric Power Steering (EPS) unit on about 440 of the above vehicles may have been built with contamination on the circuit board. Contamination on the EPS unit circuit board may cause a short circuit of the control circuit components. This may result in intermittent or permanent loss of power steering assist. This could alter the vehicle's handling characteristics and cause a crash.

Repair

The EPS unit must be replaced on all involved vehicles.

Parts Information

<u>Part Number</u>	<u>Description</u>
68242957AG	Unit, Electric Power Steering (DS41) (sales codes 5ZK and 5ZE) or (DS62) (sales codes 5ZJ and 5ZF) or (DS91) (sales codes 5AX and 5ZE) or (DS98) (sales code 5AX and 5ZG)
68242958AF	Unit, Electric Power Steering (DS61) (sales codes 5ZJ and 5ZE)
68256617AC	Unit, Electric Power Steering (DS98) (sales codes 5AX, 5ZG and AWL)
06508531AA	Bolt, Pinch (all models)

Each dealer to whom vehicles in the recall were assigned will receive enough Electric Power Steering units to service about 20% of those vehicles.

<u>Sales Code</u>	<u>Description</u>
5ZJ	Regular Cab
5ZK	Quad Cab
5AX	Crew Cab
5ZE	6 ft. Cargo Box
5ZF	8 ft. Cargo Box
5ZG	5 ft. Cargo Box
AWL	Off Road Package

Service Procedure

1. Lock the steering wheel in the straight ahead position.
2. Disconnect and isolate the negative battery cable.

NOTE: If the vehicle is equipped with an Intelligent Battery Sensor (IBS), disconnect the IBS electrical connector first before disconnecting the negative battery cable.

3. Partially raise the vehicle on an appropriate hoist.
4. Remove and save the front tires and wheels.

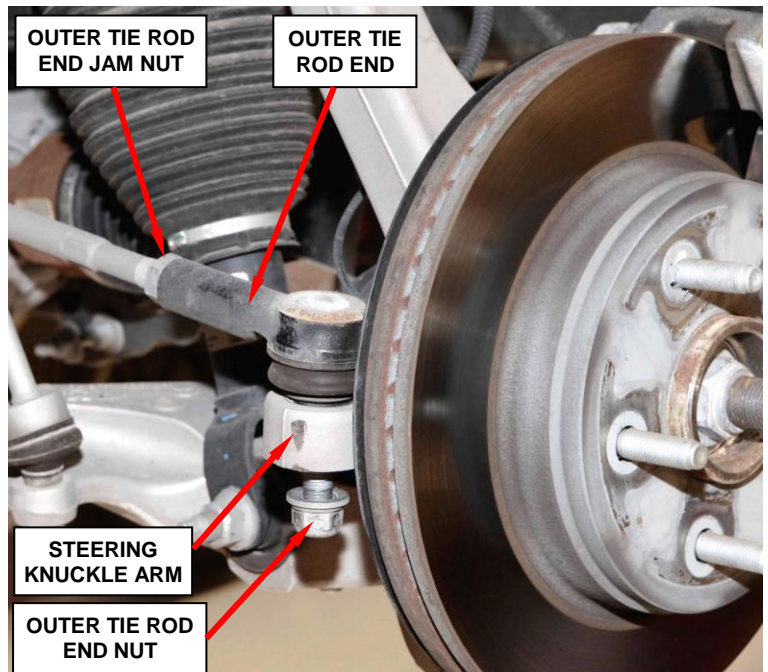


Figure 1 – Outer Tie Rod End Nut (left side shown)

5. **For 4x2 vehicles**, loosen the left outer tie rod end jam nut (Figure 1).
6. Remove and save the right and left side outer tie rod nuts (Figure 1).
7. Using **Special Tool 9360** or equivalent, separate both outer tie rod ends from the steering knuckle arms.
8. **For 4x2 vehicles**, remove and discard the left outer tie rod end.

NOTE: Removing the left tie rod end will give clearance required to remove the EPS unit from the vehicle.

9. Raise vehicle completely on the hoist.

Service Procedure (Continued)

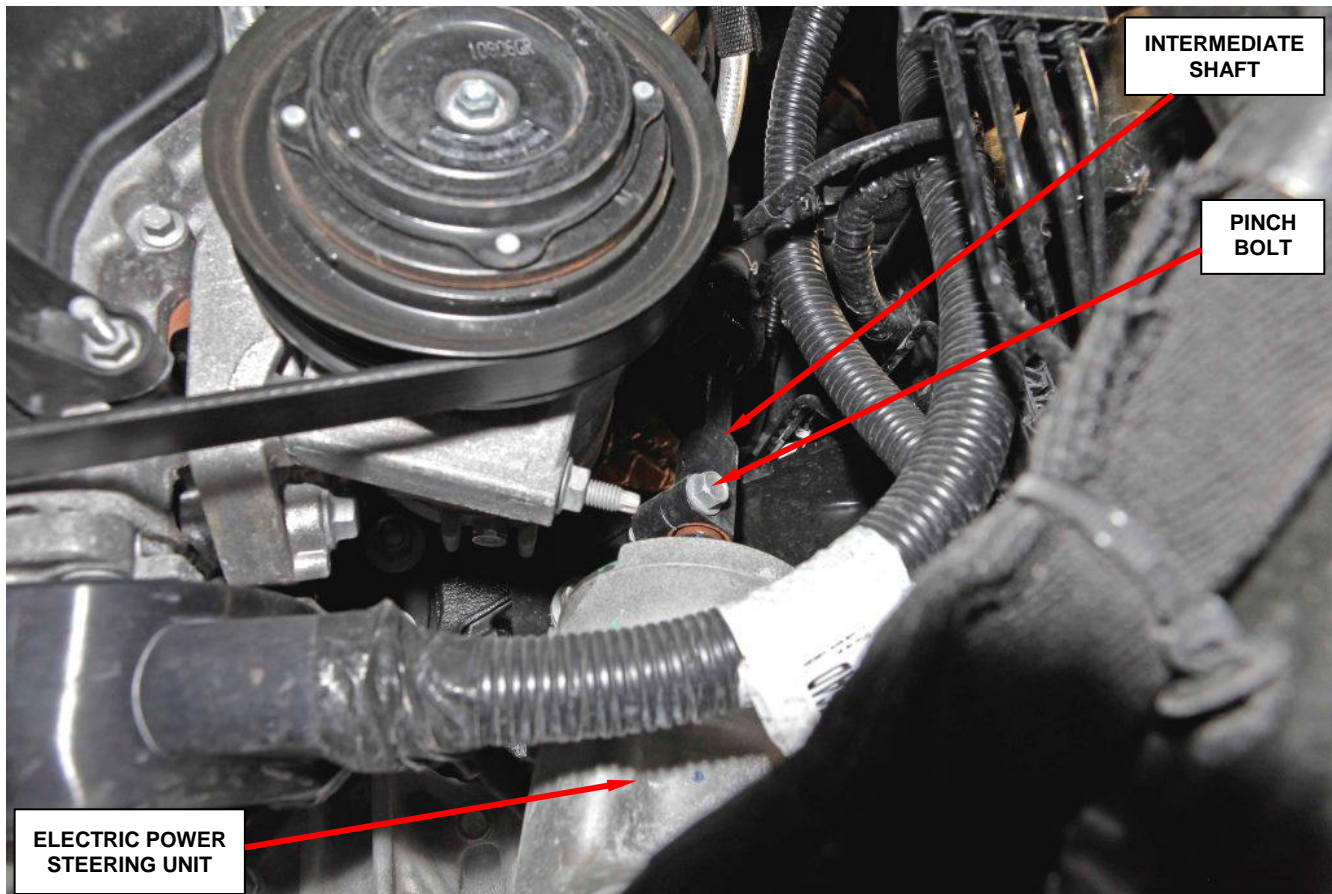


Figure 2 – Steering Column Shaft-to-Electric Power Steering (EPS) Unit Shaft Pinch Bolt

10. Remove and discard the original pinch bolt at the intermediate shaft (Figure 2).

11. Separate the steering column shaft from the EPS unit shaft.

Service Procedure (Continued)

12. Disconnect the two electrical connectors located at Electric Power Steering (EPS) unit (Figure 3).
13. Remove and save the two EPS unit mounting bolts (Figure 4).
14. **For 4x2 vehicles**, turn the EPS unit steering shaft to the full right turn position.

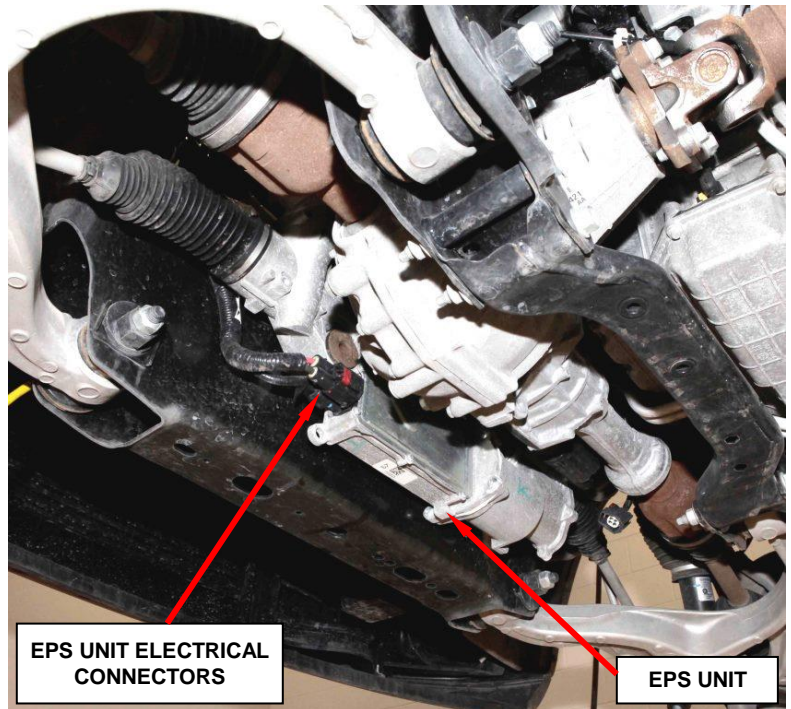


Figure 3 – EPS Unit Electrical Connectors

NOTE: Turning the EPS unit to the full right turn position will give clearance required to remove the EPS unit from the vehicle.

15. Remove and discard the original EPS unit from the vehicle.
NOTE: No other vehicle components need to be removed to gain clearance for EPS unit removal.
16. **For 4x2 vehicles**, remove and save the left tie rod end from the **new** EPS unit.
17. **For 4x2 vehicles**, turn the **new** EPS unit steering shaft to the full right turn position.

Service Procedure (Continued)

18. Position the new Electric Power Steering (EPS) unit to the front crossmember.

19. Install the two EPS unit mounting bolts and tighten them to 133 ft. lbs. (180 N·m) plus $\frac{1}{4}$ of a turn (Figure 4).

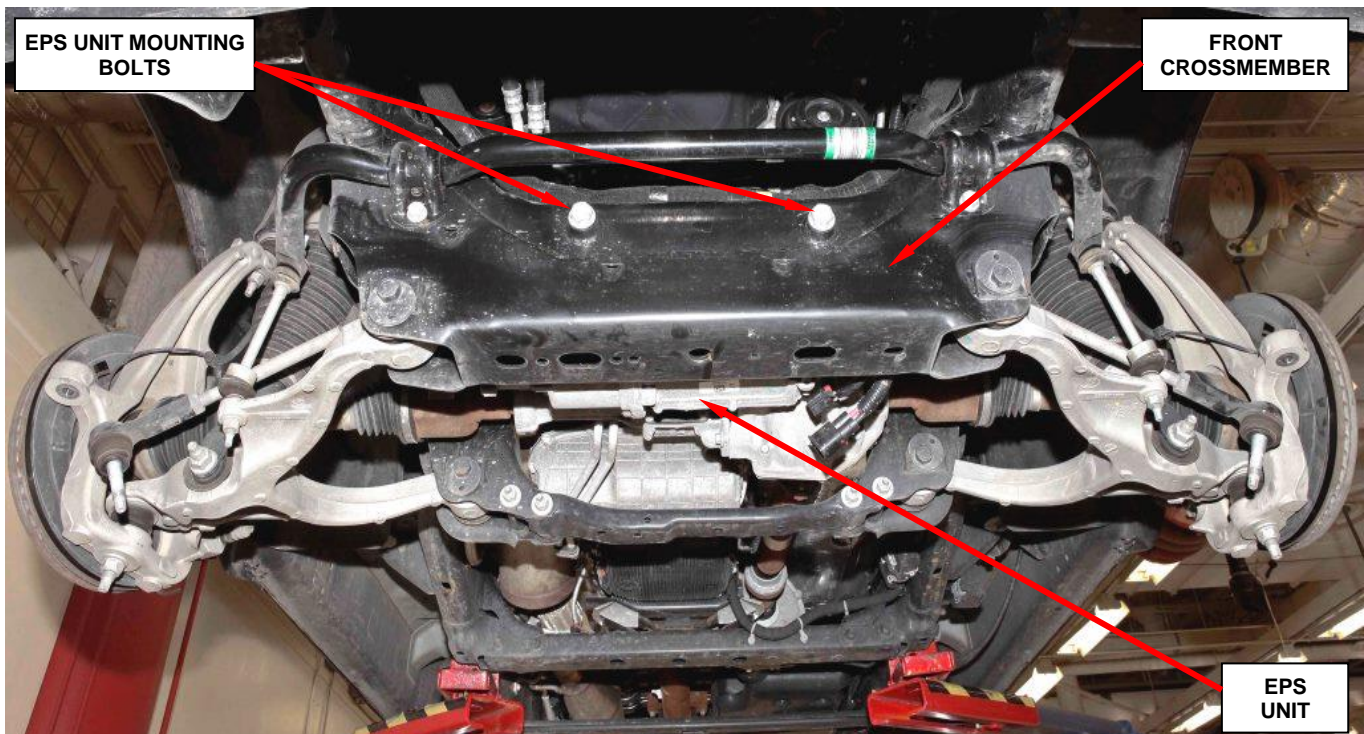


Figure 4 – Electric Power Steering Unit Mounting Bolts (4x4 Shown)

Service Procedure (Continued)

20. Connect the two electrical connectors at EPS unit.
21. **For 4x2 vehicles**, center the steering gear by turning the EPS unit steering shaft from lock-to-lock, counting the turns. Then turn the steering shaft half the turns that are required to go lock-to-lock.
22. Slide the intermediate shaft onto the EPS unit shaft and install a **New** intermediate shaft pinch bolt. Tighten the pinch bolt to 37 ft. lbs. (50 N·m).
23. Clean and dry the tie rod end studs and the tapers in the steering knuckle arms.
24. **For 4x2 vehicles**, install the new left tie rod end (removed in Step 16) to the new EPS unit.
25. Install the tie rod ends into the steering knuckles. Tighten the tie rod end knuckle nut to 29 ft. lbs. (40 N·m) plus ¼ turn.
26. Partially lower the vehicle from the hoist.
27. Install the front tires and wheels. Tighten the lug nuts to 130 ft. lbs. (176 N·m).
28. Lower the vehicle from the hoist.
29. Connect the negative battery cable.
30. **If equipped with an Intelligent Battery Sensor (IBS)**, connect the IBS connector.
31. Place the truck on an alignment rack and set toe alignment.

NOTE: Follow the alignment rack manufacturer's instructions to complete the alignment.

Alignment Specifications

- without air suspension - total toe $+0.10^{\circ}$ (0.00° to $+0.20^{\circ}$)
- with air suspension NRH - total toe $+0.22^{\circ}$ ($+0.12^{\circ}$ to $+0.32^{\circ}$)
- with air suspension Aero – total toe $+0.10^{\circ}$ (0.00° to $+0.20^{\circ}$)

Service Procedure (Continued)

32. Connect a wiTECH scan tool to the vehicle and start a wiTECH session.
33. Clear all Diagnostic Trouble Codes (DTC's).
34. Place the ignition to the “**RUN**” position.
35. Place the ignition to “**OFF**” position until EPS module powers down.
36. To complete the calibration, place the ignition to the “**RUN**” position and clear DTC's again if required.
37. From the “**Vehicle View**” screen select the “**EPS**” icon.
38. Select the “**Misc. Functions**” tab.
39. Select “**Clear Steering Pull Compensation**”.
40. Follow the screen prompts to complete the task.
41. Remove the wiTECH scan tool from the vehicle.
42. Clear all DTC's again if required.
43. Road test the vehicle to verify alignment results.
44. 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 the following labor operation number and time allowance:

	<u>Labor Operation Number</u>	<u>Time Allowance</u>
Replace electric power steering unit (4x4) (includes toe set)	19-S1-91-82	1.3 hours
Replace electric power steering unit (4x2) (includes toe set)	19-S1-91-83	1.4 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

IMPORTANT SAFETY RECALL

S19 / NHTSA 16V-167

This notice applies to your vehicle (VIN: xxxxxxxxxxxxxxxxxxxx).

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act.

Dear: (Name)

FCA has decided that a defect, which relates to motor vehicle safety, exists in certain **2015 and 2016 model year 1500 series RAM trucks**.

The problem is... The Electric Power Steering (EPS) unit on your vehicle may have been built with contamination on the circuit board. Contamination on the EPS unit circuit board may cause a short circuit of the control circuit components. This may result in intermittent or permanent loss of power steering assist. This could alter the vehicle's handling characteristics and cause a crash.

What your dealer will do... FCA will repair your vehicle free of charge. To do this, your dealer will replace the EPS unit. The work will take about three hours to complete. However, additional time may be necessary depending on service schedules.

What you must do to ensure your safety... Simply contact your Chrysler, Jeep, Dodge or RAM dealer right away to schedule a service appointment. Ask the dealer to hold the parts for your vehicle or to order them before your appointment. **Please bring this letter with you to your dealer.**

If you need help... If you have questions or concerns which your dealer is unable to resolve, please contact the FCA Group Recall Assistance Center at either fcarecalls.com or 1-800-853-1403.

Please help us update our records by filling out the attached prepaid postcard if any of the conditions listed on the card apply to you or your vehicle. If you have further questions go to fcarecalls.com.

If you have already experienced this specific condition and have paid to have it repaired, you may visit www.fcarecallreimbursement.com to submit your reimbursement request online or you can mail your original receipts and proof of payment to the following address for reimbursement consideration: **FCA Customer Assistance, P.O. Box 21-8004, Auburn Hills, MI 48321-8007, Attention: Recall Reimbursement**. Once we receive and verify the required documents, reimbursement will be sent to you within 60 days. If you've had previous repairs and/or reimbursement you may still need to have the recall repair performed on your vehicle.

If your dealer fails or is unable to remedy this defect without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave., S.E., Washington, DC 20590, or you can call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY 1-800-424-9153), or go to safercar.gov.

We're sorry for any inconvenience, but we are sincerely concerned about your safety. Thank you for your attention to this important matter.

Customer Services / Field Operations
FCA US LLC

Note to lessors receiving this recall: Federal regulation requires that you forward this recall notice to the lessee within 10 days.