Revised July 2016

Dealer Service Instructions for:

Safety Recall S32 / NHTSA 16V-301
Front Halfshafts

NOTE: Revised parts return section. Revised step 7 to remove and return the halfshaft for core charge reimbursement.

Models

2016 (DS) RAM 1500 Pickup

NOTE: This recall applies only to the above vehicles equipped with four wheel drive ***(sales code 514)*** *built from February 19, 2016 through March 01, 2016* ***(MDH 021922 through 030111)***.

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 front halfshafts on about 90 of the above vehicles may not have been heat treated properly during the manufacturing process. An improperly heat treated halfshaft could fracture without warning. A fractured halfshaft could damage underbody components and cause a crash without warning.

Repair

Both front halfshafts must be replaced.

Parts Information

Due to the small number of involved vehicles (approximately 99 total vehicles) and limited part supply, no parts will be distributed initially. Dealers **should not order parts for stocking purposes. Only order parts at the time appointments are scheduled** to assure that the part is available when the customer arrives.

Part Number	Description
RL028398AA	**Halfshaft, Right and Left (2 per vehicle)**
06506557AA	**Nut, Upper Ball Joint (2 per vehicle)**
06506587AA	**Nut, Lower Ball Joint (2 per vehicle)**
06506557AA	**Nut, Tie Rod End (2 per vehicle)**
06506454AA	**Nut, Halfshaft (2 per vehicle)**
06506599AA	**Bolt, Caliper Adaptor (4 per vehicle)**

Parts Return

Return all halfshafts to your PDC following the standard core return policy. Dealers will be reimbursed for the cores and all halfshafts will be discarded by the PDC.

Special Tools

The following special tool is required to perform this repair:

- 9360 Ball Joint Remover
- 8677 Ball Joint Remover

Service Procedure

Replace Front Halfshafts

1. Disconnect and isolate the negative battery cable.

2. With the vehicle in neutral, position the vehicle on a hoist and raise the vehicle to an appropriate height.

3. Remove the left front wheel and tire assembly.

4. Remove and **discard** the left half shaft nut from the shaft (Figure 1).

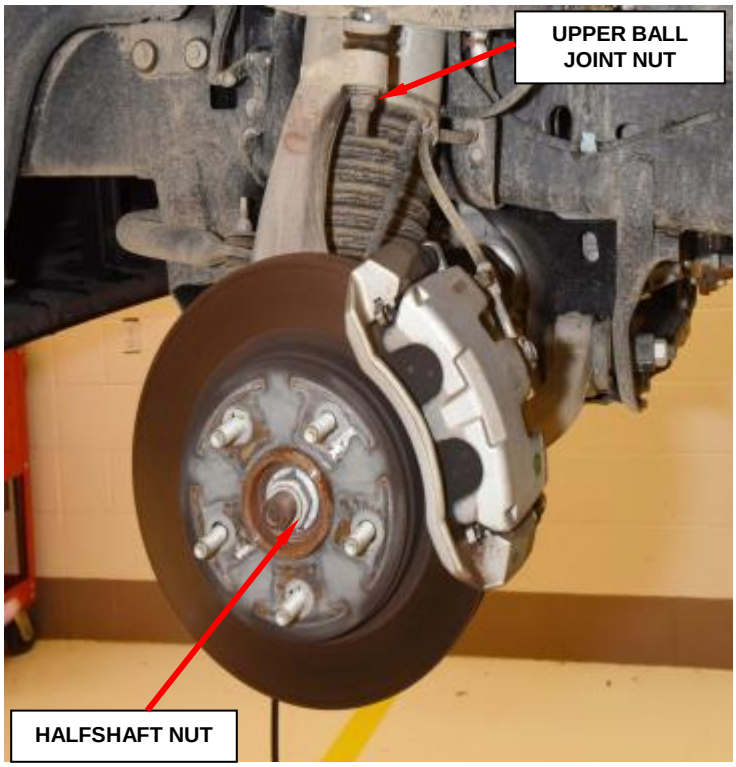

Figure 1 – Halfshaft Nut

5. Use the following steps to remove the left side steering knuckle.

   a. Remove and **discard** the two left side caliper adaptor bolts from the steering knuckle, remove caliper adapter assembly, and hang aside (Figure 2).

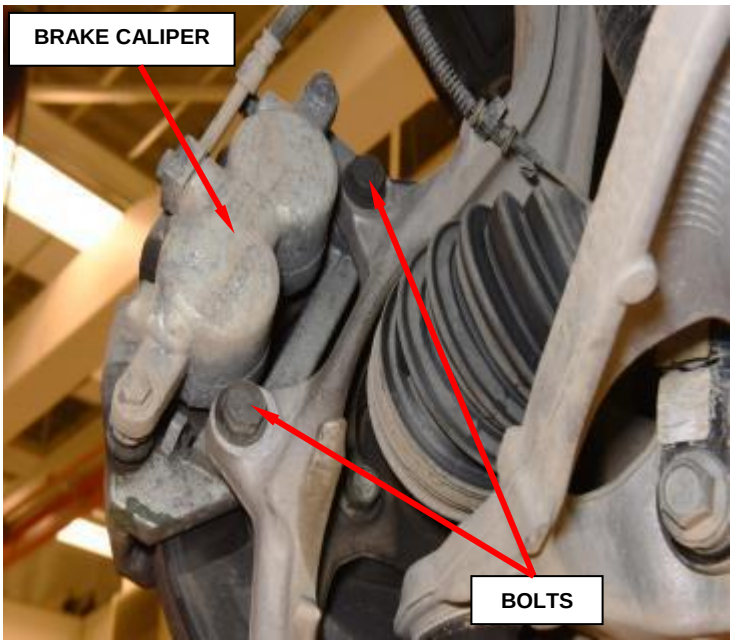

Figure 2 – Caliper Adaptor Bolts

Service Procedure (Continued)

b. Using a paint marker or equivalent, mark the brake rotor position to the hub/bearing and remove the left side rotor from the hub/bearing.

c. Disconnect the left side wheel speed sensor electrical connector from the engine harness.

d. Release the left side wheel speed sensor wiring pigtail from the clips (Figure 3).

e. Remove the wiring from the clips and disconnect the electrical connector.

f. Remove and **discard** the left side tie rod end nut from the ball stud (Figure 4).

g. Separate the left side tie rod ball stud from the knuckle with Ball Joint Remover 9360.

h. Remove and **discard** the left side upper ball joint nut. Separate the ball joint from the knuckle with Ball Joint Remover 9360 (Figure 3).

CAUTION: When installing puller to separate the ball joint, be careful not to damage the ball joint seal.

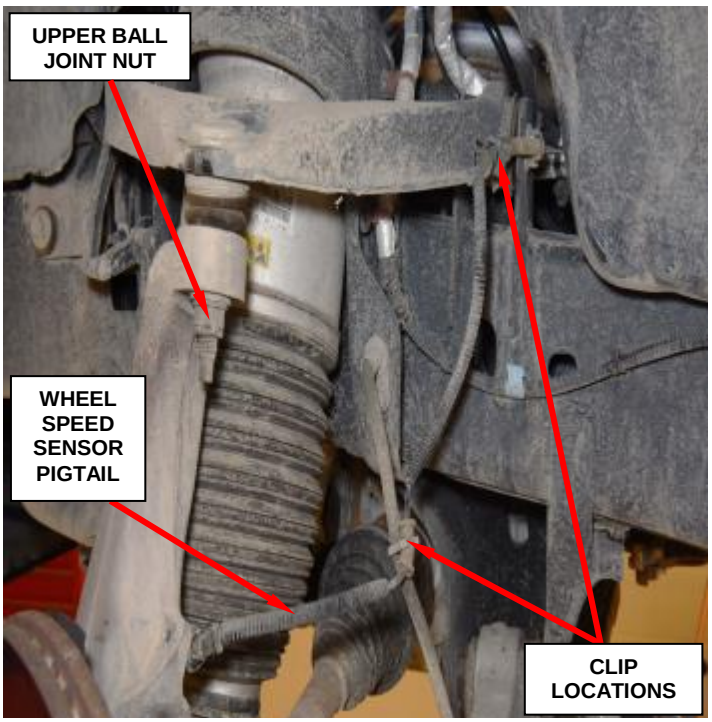

Figure 3 – Wheel Speed Sensor

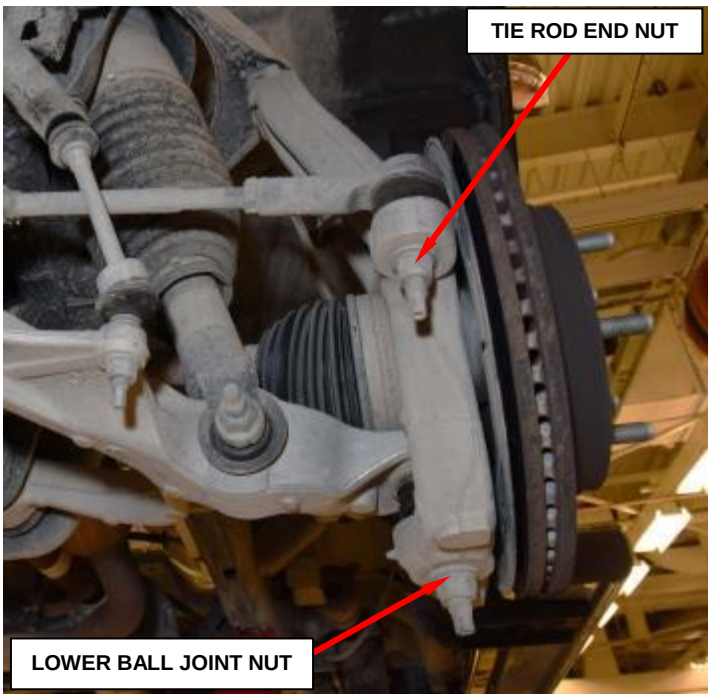

Figure 4 – Tie Rod End Nut

Service Procedure (Continued)

i. Support the outboard side of the lower control arm to support vehicle weight.

j. Remove and **discard** the lower ball joint nut. Separate the ball joint from the knuckle with Ball Joint Remover 8677 (Figure 5).

k. Remove the steering knuckle from the vehicle (Figure 5).

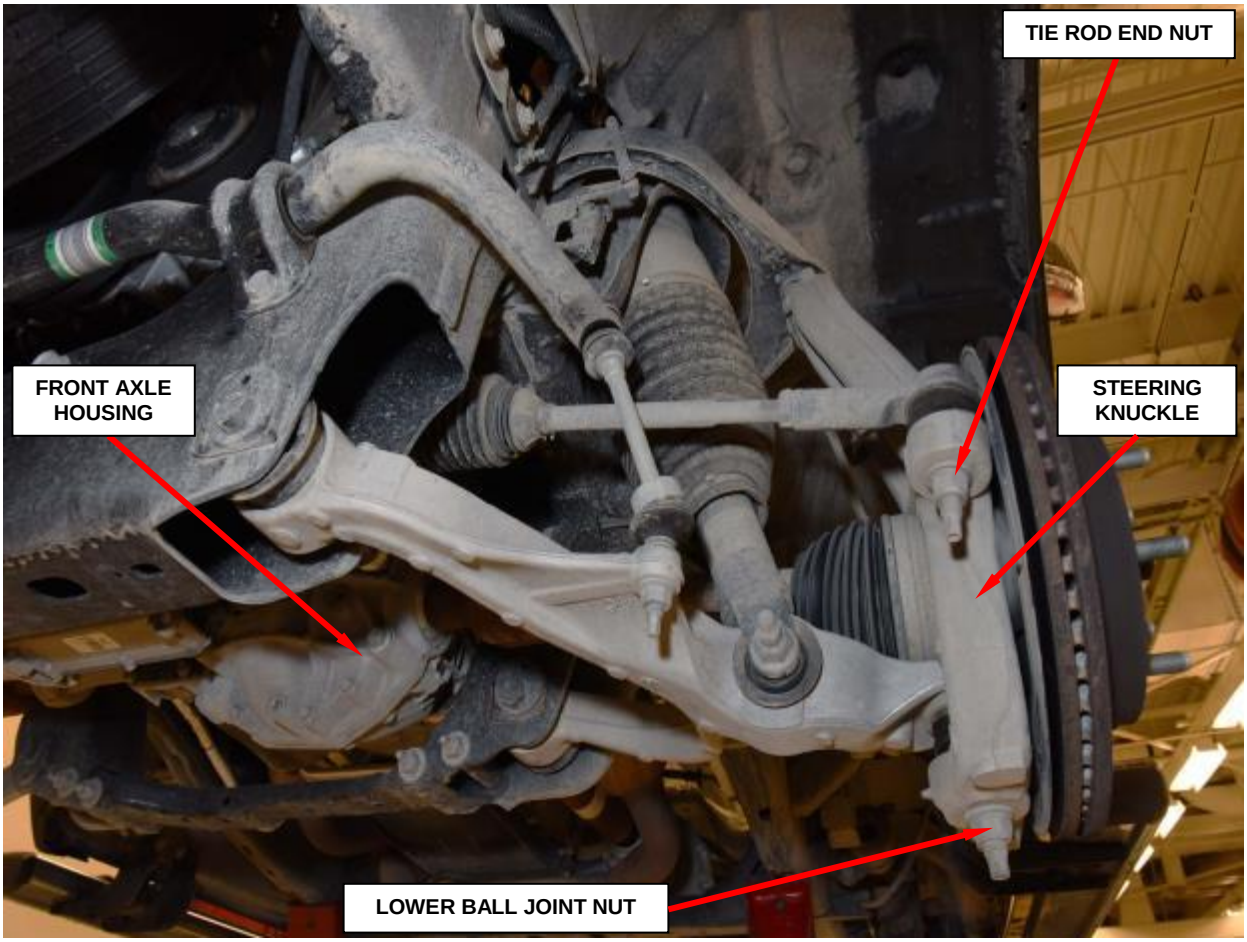

Figure 5 – Lower Ball Joint Nut

Service Procedure (Continued)

6. Disengage the inner C/V joint from the axle shaft with a pry bar between the C/V housing and axle housing (Figure 6).

7. Remove the left side halfshaft from vehicle and return the halfshaft for core charge reimbursement.

8. Install the left side halfshaft on axle shaft. Push inner C/V firmly to axle shaft snap ring into the inner C/V housing.

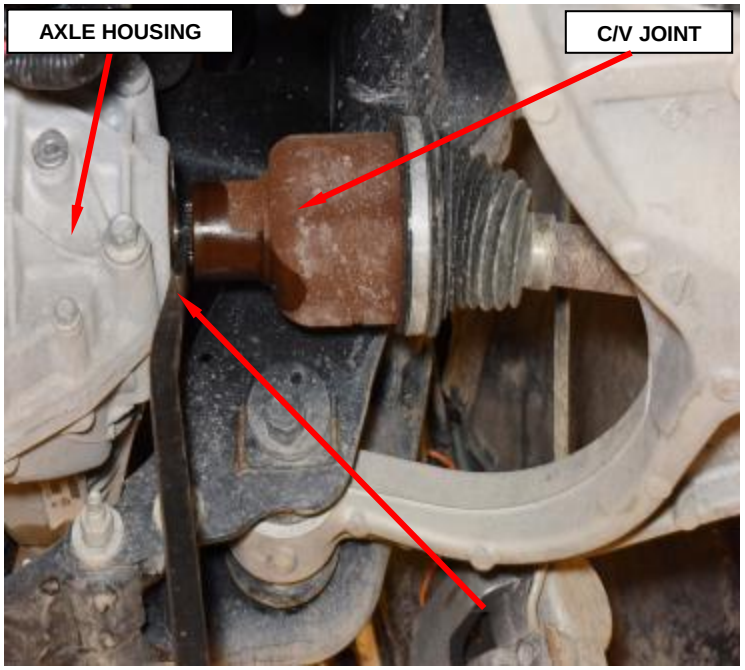

Figure 6 – C/V Joint

9. Clean hub bearing bore, hub bearing mating surface and halfshaft splines.

10. Apply a light coating of grease to the front axle shaft output splines.

11. Install the left side halfshaft spline into the knuckle hub/bearing (Figure 7).

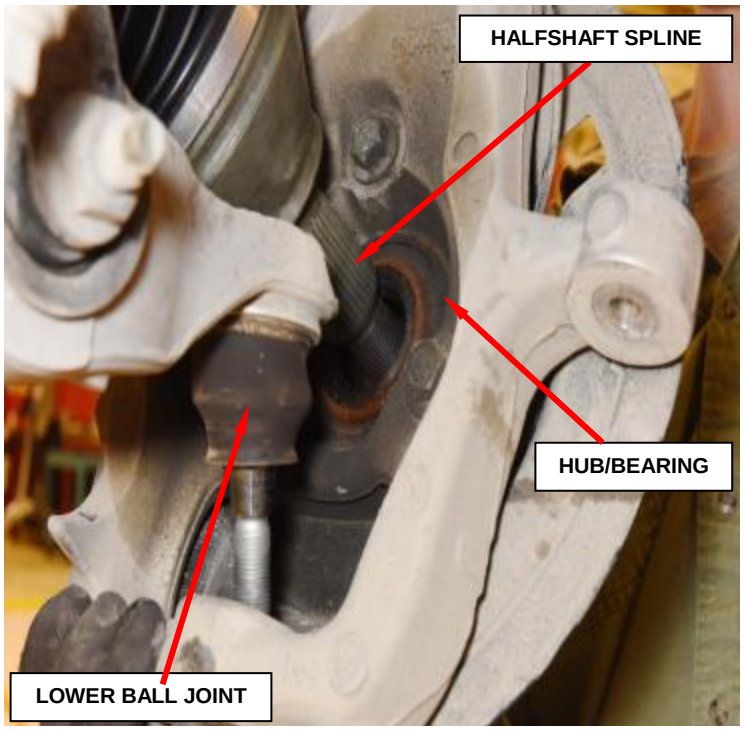

Figure 7 – Halfshaft to Knuckle

Service Procedure (Continued)

CAUTION: The ball joint stud taper must be CLEAN and DRY before installing into the knuckle. Clean the stud taper with mineral spirits to remove dirt and grease.

12. Use the following steps to install the left side steering knuckle.

    a. Install the knuckle onto the upper and lower ball joints.

    b. Install the **NEW** upper and lower ball joint nuts (Figures 3, 4 and 5).

    c. Tighten the upper ball joint nut to 40 ft. lbs. Plus 200° (54 N•m Plus 200°) (Figure 4).

    d. Tighten the lower ball joint nut to 38 ft. lbs. Plus 90° (51 N•m Plus 90°) (Figure 5).

    e. Install the tie rod end and tighten the **NEW** nut to 22 ft. lbs. Plus 90° (30 N•m Plus 90°) (Figure 4).

13. Install the rotor onto the hub/bearing. Index the rotor to the hub/bearing matching up the paint marks.

14. Align the adapter and caliper to the steering knuckle, install the **NEW** adapter bolts and tighten to 130 ft. lbs. (176 N•m) (Figure 2).

15. Clip the wheel speed sensor wiring pigtail to the retaining clips (Figure 3).

16. Connect the wheel speed sensor electrical connector to the engine harness.

Service Procedure (Continued)

17. Install the **NEW** halfshaft nut and tighten to 185 ft. lbs. (251 N•m) (Figure 1).

18. **Repeat steps 3 through 17 to replace the right side halfshaft.**

19. Install the wheel and tire assemblies and tighten flanged lug nuts to 140 ft. lbs. (190 N•m) or cone lug nuts to 130 ft. lbs. (176 N•m).

20. Remove the support and lower the vehicle.

21. Apply the brakes several times to seat the brake pads. Be sure to obtain a firm pedal before moving the vehicle.

22. Connect the negative battery cable.

23. 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:

	Labor Operation Number	Time Allowance
Replace right and left front halfshafts	02-S3-21-82	0.8 hours

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

FIAT CHRYSLER AUTOMOBILES

FRONT HALFSHAFTS

IMPORTANT SAFETY RECALL

S32 / NHTSA 16V-301

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

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 **2016 model year RAM 1500 Pickup trucks.**

The problem is...	**The front halfshafts on your vehicle may not have been heat treated properly during the manufacturing process. An improperly heat treated halfshaft could fracture without warning. A fractured halfshaft could damage underbody components and cause a crash without warning.**
What your dealer will do...	**FCA will repair your vehicle free of charge.** To do this, your dealer will replace both front halfshafts. The work will take about 1 hour 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.