



June 2017

Dealer Service Instructions for:

Safety Recall T26 / NHTSA 17V-301 Left Front Half Shaft Engagement

Models

2017 (MP) Jeep® Compass

NOTE: This recall applies only to front-wheel-drive vehicles equipped with a 6-speed automatic transmission built from October 27, 2016 through April 07, 2017 (*MDH 102710 through 041714*).

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 left front half shaft on about 1,100 of the above vehicles may not be properly seated. This can cause a grinding noise if the half shaft is not fully seated, followed by a popping noise if the shaft breaks during vehicle operation. If the left front half shaft disengages from the transmission and/or breaks, your vehicle may experience a loss of motive power and the ability to shift, including the achievement of Park. This can cause a crash without warning.

Repair

Inspect the left front half shaft for engagement in the transmission and replace the left front half shaft if not properly engaged.

Alternate Transportation

Dealers should attempt to minimize customer inconvenience by placing the owner in a loaner vehicle if inspection determines that a left front half shaft is required and the vehicle must be held overnight.

Parts Information

NOTE: Dealers should determine if the left front half shaft is not engaged and requires replacement prior to ordering parts.

<u>Part Number</u>	Description
68293931AA	Half Shaft Assembly, Axle Left Front
06509898AA	Hub Nut
06104221AA	Pinch Bolt
06511467AA	Pinch Bolt Nut
06512149AA	Tie Rod Nut

Due to the small number of involved vehicles expected to require left front half shaft replacement, no parts will be distributed initially. Parts should be ordered only after inspection determines that left front half shaft replacement is required. Very few vehicles are expected to require left front half shaft replacement.

Parts Return

No parts return required for this campaign.

Special Tools

The following special tools are required to perform this repair:

- ➢ 10287-1 Staking Tool
- ➢ 9360 Ball Joint Remover

Service Procedure

A. Left Front Half Shaft Engagement Inspection

- 1. Raise and support the vehicle.
- 2. If equipped, remove the belly pan.
- 3. Visually inspect that the left front half shaft is fully engaged into the transmission side gear (Figure 1).



Figure 1 – Inspect Left Front Half Shaft Engagement Into Transmission

NOTE: Never pull on the half shaft or the inner or outer boots. This can cause damage to the boot and/or the Constant Velocity (CV) joint and/or tripod joint.

- 4. Hold the left front half shaft inboard tripod joint (transmission side) with both hands and axially pull the tripod joint toward the wheel direction (away from the transmission) to determine if the tripod joint is properly retained by the circlip in the transmission side gear. A half shaft tripod joint that is properly retained by the circlip will not move. A half shaft tripod joint that is NOT properly retained by the circlip will be easily moved while applying minimal axial force away from transmission (Figure 2).
 - ➤ If half shaft is found to be properly retained, continue with **Step 5**.
 - If half shaft is found to be NOT properly retained, proceed to section B. Left Front Half Shaft Replacement.



Figure 2 – Check Left Front Half Shaft Engagement Into Transmission

- 5. If equipped, install the belly pan.
- 6. Lower the vehicle.
- 7. Return the vehicle to the customer and claim the inspection LOP. This recall has been completed.

B. Left Front Half Shaft Replacement

NOTE: The following procedure is ONLY required if the left front half shaft requires replacement per the inspection in Section "A." Very few vehicles are expected to require this repair.

- 1. Remove and save the left front wheel lug bolts and the tire and wheel assembly.
- 2. Using a suitable punch, lift the two staked areas in the hub nut to avoid damaging the half shaft (Figure 3).
- 3. While a helper applies the brakes to keep the hub from rotating, remove the hub nut from the half shaft and DISCARD. The used hub not reusable nut is (Figure 3).
- 4. Unscrew the nut securing the outer tie rod end to the steering knuckle and **DISCARD**. The used tie rod end nut is not reusable (Figure 4).

PUNCH HUB NUT

Figure 3 – Unstake Hub Nut

Figure 4 – Outer Tie Rod End





PINCH BOLT

Service Procedure [Continued]

5. Using Ball Joint Remover 9360, separate the outer tie rod end from the steering knuckle (Figure 5).



Figure 5 – Disconnect Tie Rod From Knuckle

LOWER BALL JOINT

- <image>
 - Figure 6 Lower Ball Joint Pinch Bolt

6. Remove the ball joint pinch bolt and nut and DISCARD.
The used pinch bolt and nut are not reusable (Figure 6).

7. Disengage the ball joint from the steering knuckle.

8. Disengage the half shaft CV joint from the wheel hub (Figure 7).

NOTE: The half shaft CV joint may stick in the hub bearing during removal. A dead-blow or plastic hammer can be used to tap the half shaft CV joint inward and out of the hub bearing.



Figure 7 – Half Shaft CV Joint

9. Remove the half shaft tripod joint from the transmission side gear (Figure 8).

NOTE: Never pull on the half shaft, joint boot, or the outboard CV joint housing. Pull from the inner tripod joint housing.



Figure 8 – Half Shaft Tripod Joint

10. Remove and clean any debris from the transmission side gear housing splines. Inspect the splines for any damage (Figure 9).



Figure 9 – Clean/Inspect Transmission Side Gear Housing Splines

NOTE; Damage to the transmission side gear housing splines is NOT anticipated for this campaign. If any damage to the splines did occur caused by a half shaft that disengaged from the transmission side gear, the dealer must first check if a related LOP has been created for repairs prior to performing the repair. If no related LOP is found, the LOP review process must be followed to request a related Recall LOP be added as follows:

Submit a LOP Related Inquiry (located in DealerCONNECT > Service > Claim Administration) for evaluation and update.

- IF the request is approved the related Recall LOP will be added to the Labor Operations and you are to proceed with normal Recall claim entry process.
- IF the request is not approved submit the repair under Warranty (W) if the repair has been pre-authorized by your Area Manager or Business Center representative.

- 11. Inspect the ball joint boot and the boot tension ring for damage (Figure 10).
- 12. Lightly apply MOPAR Multi-Purpose grease to the transmission side gear and half shaft tripod joint splines prior to half shaft installation.

NOTE: Never handle the half shaft assembly by the inner or outer boots. This can cause damage to the boot, which will allow contaminants to enter the CV joint and/or tripod joint.



Figure 10 – Inspect Ball Joint Boot

13. Install the half shaft into the transmission while lightly twisting until the half shaft tripod joint slides all the way into the transmission and the tripod joint circlip engages with the transmission side gear (Figure 8).

NOTE: If the circlip is fully engaged, the tripod joint will not be removable from transmission by hand. Never pull on the half shaft or outer CV joint.

- 14. Position the half shaft outer CV joint end into the wheel hub (Figure 7).
- 15. Position the ball joint stud into the steering knuckle. Install a **NEW** nut and **NEW** pinch bolt, then tighten to 50 N⋅m (37 Ft. Lbs.) (Figure 6).

16. Connect the tie rod end to the steering knuckle and tighten the **NEW** nut to $40 \text{ N} \cdot \text{m} (30 \text{ Ft. Lbs.})$ (Figure 4).

NOTE: Always install a NEW hub nut. The original hub nut is one time use only and must be discarded when removed.

17. Install a NEW hub nut, then tighten the nut to 165 N⋅m (122 Ft. Lbs.) (Figure 11).

NOTE: Do not use air tools on the staking tool while staking the hub nut.

NOTE: The hub nut must be staked so that it looks similar to (Figure 12). Both edges must be split and bent into the shape shown. The staking must be opposite of the direction to tighten the nut (Figure 12).

18. Using Staking Tool 10287-1, align the leading cutting edge of the tool with the top left side channel on the axle. Tighten the fastener on the staking tool with hand tools until the threads bottom out completely (Figure 11).



Figure 11 – Staking Tool



Figure 12 – Hub Nut Properly Staked

- 19. Clean the wheel mounting surfaces of any corrosion or dirt.
- 20. Position the tire and wheel assembly against the hub and install the five wheel lug bolts.
- 21. Tighten the five wheel lug bolts in a star pattern to 135 N·m (100 Ft. Lbs.).
- 22. If equipped, install the belly pan.
- 23. Remove the support and lower the vehicle.
- 24. 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 paid 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>	<u>Allowance</u>
Inspect Left Front Half Shaft Engagement	02-T2-61-81	0.2 hours
Inspect and Replace Left Front Half Shaft	02-T2-61-82	0.6 hours

Add the cost of the parts plus applicable dealer allowance to your claim. In addition, enter "MATL" in the Part Number section of your claim with the applicable Material Allowance where appropriate.

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.

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 This notice applies to your vehicle,

T26/NHTSA 17V-301

LOGO

VEHICLE PICTURE

YOUR SCHEDULING OPTIONS

- 1. RECOMMENDED OPTION Call your authorized Chrysler / Dodge / Jeep_® / RAM Dealership
- 2. Call the FCA Recall Assistance Center at 1-800-853-1403. An agent can confirm part availability and help schedule an appointment
- 3. Visit our Recall Website, recalls.mopar.com or scan below.



You can find your nearest dealer and review all your scheduling options from this website. You will be asked to provide your Vehicle Identification Number (VIN) to protect and verify your identity. The last eight characters of your VIN are provided above.

DEALERSHIP INSTRUCTIONS

Please reference Safety Recall T26.

IMPORTANT SAFETY RECALL

Left Front Half Shaft Engagement

Dear [Name],

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

FCA has decided that a defect, which relates to motor vehicle safety, exists in certain [2017 model year (MP) Jeep Compass] front-wheel-drive vehicles equipped with a 6-speed automatic transmission.

It is extremely important to take steps now to repair your vehicle to ensure the safety of you and your passengers.

WHY DOES MY VEHICLE NEED REPAIRS?

The left front half shaft on your vehicle ^[1] may not be properly seated. This can cause a grinding noise if the half shaft is not fully seated, followed by a popping noise if the shaft breaks during vehicle operation. If the left front half shaft disengages from the transmission and/or breaks, your vehicle may experience a loss of motive power and the ability to shift, including the achievement of Park. **This can cause a crash without warning.**

NOTE: To prevent any unintended vehicle movement, always fully apply the parking brake before exiting the vehicle. If the vehicle is parked without using the parking brake, the vehicle may roll, despite being in 'Park.'

HOW DO I RESOLVE THIS IMPORTANT SAFETY ISSUE?

FCA will repair your vehicle ^[2] free of charge (parts and labor). To do this, your dealer will inspect the left front half shaft for engagement in the transmission and replace the left front half shaft if not properly engaged. In addition, your dealer will require your vehicle for proper check-in, preparation, and check-out during your visit. Your time is important to us; please be aware that these steps may require more time. The estimated repair time is one hour. We recommend that you schedule a service appointment to minimize your inconvenience. Please bring this letter with you to your dealership.

TO SCHEDULE YOUR FREE REPAIR CALL 1-800-853-1403 OR YOUR CHRYSLER, DODGE, JEEP OR RAM DEALER TODAY

WHAT IF I ALREADY PAID TO HAVE THIS REPAIR COMPLETED?

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.^[3] Once we receive and verify the required documents, reimbursement will be sent to you within 60 days. If you have had previous repairs performed and/or already received reimbursement, you may still need to have the recall repair performed.

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

Customer Assistance/Field Operations Fiat Chrysler Automobiles US LLC



Mr. Mrs. Customer 1234 Main Street Hometown, MI 48371

[1] If you no longer own this vehicle, please help us update our records. Call the FCA Recall Assistance Center at 1-800-853-1403 to update your information.

[2] 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.

[3] You can also mail in 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.

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