



February 2020

Dealer Service Instructions for:

Safety Recall W03 / NHTSA 20V-043 Transmission Valve Body

Remedy Available

2019 - 2020 (DJ) Ram 2500 Pickup (D2) Ram 3500 Pickup

NOTE: This recall applies only to the above vehicles equipped with a 6-Speed Automatic 68RFE Transmission (sales code DG7).

NOTE: Some vehicles above may have been identified as not involved in this recall and therefore have been excluded from this recall.

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 transmission on about 85,000 of the above vehicles may experience a buildup of pressure and heat inside the transmission which may result in transmission fluid being expelled from the dipstick tube. Expelled transmission fluid may come in contact with the turbocharger, or other ignition sources within the engine compartment and lead to a vehicle fire. A vehicle fire can result in increased risk of occupant injury and injury to persons outside the vehicle, as well as property damage.

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Repair

Replace the lower transmission valve body separator plate and reprogram the Powertrain Control Module (PCM).

Parts Information

Part Number

Description

CSKLW031AA

Part Package

Each package contains the following components:

<u>Quantity</u>	Description
1	Separator Plate, Lower Valve Body
1	Ball, Check
1	Fastener, Lower Valve Body Separator Plate

Part NumberDescriptionCSKLW032AAPart Package

Each package contains the following components:

Quantity Description

1 Gasket, Transmission Pan

NOTE: The above repair kit (Gasket, Transmission Pan) should only be used for vehicles that have <u>over 50 miles.</u>

68218057AC ATF+4, Standard MS-9602-F (6 Quarts Required)

68218054AB 220 Qt, Drum, AFT+4, Transmission Fluid MS-9602-F

NOTE: Dealers are encouraged to use bulk transmission oil to perform this recall.

Special Tools

The following special tools are required to perform this repair:

> NPN	wiTECH micro pod II
> NPN	Laptop Computer
> NPN	wiTECH Software

Service Procedure

A. Lower Valve Body Removal Procedure

- 1. Disconnect the Intelligent Battery Sensor (IBS) and isolate the negative battery cable(s).
- 2. Raise and support the vehicle.
- 3. Wipe off any dirt, dust, or other debris from around the transmission oil pan gasket area.
- 4. Position a drain pan under the transmission oil pan.
- 5. Loosen all 15 fasteners to allow the transmission pan to slightly separate from the transmission, leave one fastener in on each side allow the fluid to leak out.
- 6. While holding the bottom of the transmission pan remove the remaining fasteners.
- 7. Remove the transmission pan gasket and **DISCARD If the vehicle has over <u>50</u>** <u>Miles</u>, (80 Kilometers) (Figure 1).



Figure 1 – Transmission Pan

8. Using a pick or small flat blade screw driver, carefully unseat the locking tab then grasp the housing connector and disconnect the wiring harness connector from the torque converter clutch solenoid (Figure 2).

NOTE: Use caution not to damage the electrical wiring harness connector.



Figure 2 – Wiring Harness Connector

9. Remove the 9 Lower Valve Body fasteners, keep the valve body level, slowly remove the valve body taking care to catch check ball that may fall out immediately, set the lower valve body and check ball on a clean surface for reuse (Figure 3).

NOTE: Use catch pan to avoid losing check ball as lower valve body is moved away from main valve body.



Figure 3 – Lower Valve Body

NOTE: If the check ball is dropped use a new one that is provided in the repair kit.

- 10. The Check Ball may or may not be on top of the mating separator plate hole as the lower valve body is removed from main valve body (Figure 4).
- 11. Remove Lower Valve Body Separator Plate fastener (Figure 4).
- 12. Remove, **bend** and **discard** the separator plate (Figure 4).
- 13. Confirm presence of a second Check Ball in the Lower Valve Body cavity (Figure 5).

NOTE: Do not remove this check ball from the lower valve body, keep the lower valve body facing upward to avoid the check ball from falling out of position (Figure 5).



Figure 4 – Check Ball



Figure 5 – Lower Valve Body

14. Verify the accumulator is in the correct position flat side facing up in lower valve body housing (Figure 6).

> NOTE: Accumulator could stick to separator plate as separator plate is being removed from valve lower body housing, reinstall accumulator if it comes position out of as illustrated in Figure 6.

- 15. Install the **NEW** Lower Valve Body Separator Plate, align to the lower valve body housing guide pins (Figure 7).
- 16. Hand start the NEW Lower Valve Body Separator Plate fastener and torque to 6.5 N⋅m (57.5 in. lbs.) (Figure 7).



Figure 6 - Accumulator



Figure 7 – Guide Pins

NOTE: It is recommended to torque the fastener using a digital torque wrench.

17. Set the lower valve body aside on clean surface.

18. Pack the main valve body check ball hole with just enough petroleum jelly (Vaseline) or equivalent to retain check ball, insert check ball back into the Vaseline packed hole and assure the ball is held in position by the Vaseline (Figure 9).



Figure 9 – Check Ball Installed

19. Re-install Lower Valve Body to main Transmission Valve Body, hand starting and seating all of the fasteners then tighten to 7.3 N⋅m (64.6 in. lbs.) according to specified pattern illustrated in (Figure 10).

IMPORTANT: Tightening sequence procedure MUST be followed to assure correct lower valve body mounting, failure to follow the tightening sequence may result in transmission malfunction.

NOTE: It is recommended to torque the fasteners using a digital torque wrench.



Figure 10 – Tightening Sequence

20. Tighten the main valve body fastener to 7.3 N·m (64.6 in. lbs.) (Figure 11).

NOTE: Tightening of the fastener is to improve sealing between main valve body and lower valve body.

21. <u>Important</u>: Repeat tightening the 9 Lower Valve Body fasteners to 7.3 N⋅m (64.6 in. lbs.) using the sequence illustrated in (Figure 10).

> NOTE: It is recommended to torque the fasteners using a digital torque wrench.



Figure 11 – Main Valve Body Fastener

22. Reconnect the electrical wiring harness connector back onto the torque converter clutch solenoid by grasping ensuring it is fully connected with a gentle push-pull-push test (Figure 12).



Figure 12 – Electrical Wiring Harness Connector

- 23. Using mineral spirits or equivalent clean the transmission pan and the 3 magnets, assure that all the mineral spirits or equivalent have been wiped out and allowed to dry before installing the transmission pan (Figure 1).
- 24. Install a **NEW** transmission oil pan gasket **ONLY** on vehicles that have <u>over 50</u> <u>miles</u> (80 Kilometers) (Figure 1).
- 25. Install the transmission oil pan and bolts and tighten the 15 fasteners in crisscross pattern to $9N \cdot m$ (80 in. lbs.).
- 26. Wipe any residual transmission fluid on the outside of oil pan, transmission and adjoining components.
- 27. Lower the vehicle.
- 28. Connect the battery negative cable(s) to negative post and tighten to 7 N·m (62 in. lbs.) reconnect the Intelligent Battery Sensor (IBS).
- 29. Add approximately 5 Quarts of MOPAR® ATF+4 Automatic Transmission Fluid.
- 30. Start vehicle and allow the transmission to reach operating temperature then check transmission fluid level, adjust the fluid level according to the specified procedure and using the 68RFE dipstick fluid level chart (Figure 13).

NOTE: Transmission fluid temperature must be at least $160^{\circ}F$ (71°C) to set fluid level. This may take up to 20 minutes' idle time in Park.



Figure 13 – Fluid Level Chart

- 31. Raise the vehicle and verify the transmission does not have any fluid leaks.
- 32. Proceed to section **B. Reprogram Powertrain Control Module.**

B. Reprogram Powertrain Control Module.

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. If the reprogramming flash for the PCM is aborted or interrupted, repeat the procedure. The PCM must be at the latest calibration level after completing this emissions recall.

1. Install a battery charger and verify that the charging rate provides 13.0 to 13.5 volts. Do not allow the charger to time out during the flash process. Set the battery charger timer (if so equipped) to continuous charge.

NOTE: Use an accurate stand-alone voltmeter. The battery charger volt meter may not be sufficiently accurate. Voltages outside of the specified range will cause an unsuccessful flash. If voltage reading is too high, apply an electrical load by activating the park or headlamps and/or HVAC blower motor to lower the voltage.

- 2. Connect the wiTECH micro pod II to the vehicle data link connector.
- 3. Place the ignition in the "**RUN**" position.
- 4. Open the wiTECH diagnostic application.
- 5. Starting at the "Select Tool" screen, highlight the row/tool for the micro pod II device you are using. Then select "Next" at bottom right side of the screen.
- 6. Enter your "**User id**" and "**Password**", then select "**Finish**" at the bottom of the screen.
- 7. From the "Vehicle View" screen, click on the "Powertrain Control Module (PCM)" icon.

- 8. From the "PCM View" screen, select the "flash tab" then compare the "Current PCM Flash Number" with the "New Flash Number" listed on the "sort table".
 - If the "Current PCM Flash Number" is the same as the "New Flash Number", continue to Step 13.
 - If the "Current PCM Flash Number" is not the same as the "New Flash Number", continue to Step 9.
- 9. With the cursor over the desired flash file, select file.
- 10. From the "Flash Special Instructions" screen select ok.
- 11. From the flash agreement page, agree to the terms.
- 12. Reprograming will initiate until completed.
- 13. From the "Misc. Functions Tab".
- 14. Select "Quick Learn" follow the wiTECH "Screen Prompt" instructions to complete the Quick learn process.
- 15. Clear all the Diagnostic Trouble Codes (DTCs).
- 16. Turn the ignition to the "**OFF**" position and remove the wiTECH micro pod II and battery charger from the vehicle.
- 17. Check the transmission fluid level and add as needed.
- 18. Continue to **Complete Proof of Correction Form for California Residents**.
- 19. Return the vehicle to the customer.

Complete Proof of Correction Form for California Residents

This recall is subject to the <u>State of California Registration Renewal/Emissions</u> <u>Recall Enforcement Program</u>. Complete a Vehicle Emission Recall Proof of Correction Form (<u>Form No. 81-016-1053</u>) and supply it to vehicle owners residing in the state of California for proof that this recall has been performed when they renew the vehicle registration.

Process Steps to obtain the California Proof of Correction form:

- a. Access the "DealerCONNECT" website.
- b. Select the "Service" tab.
- c. Under the "Publications" heading, select the "ePublishing" link.
- d. Sign in using your **Dealer Code** and **Password**.
- e. Select the "Proof of Correction form".

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 the following labor operation number and time allowance:

	Labor Operation <u>Number</u>	Time <u>Allowance</u>
Replace Lower Valve Body Separator Plate and reprogram PCM	21-W0-31-82	1.8 hours
Floor Plan Reimbursement	95-95-95-97	Calculate See Below

Floor Plan Reimbursement represents the vehicle's average daily allowance (see table below) multiplied by the number of days the vehicle was in dealer inventory and not available for sale. This reimbursement is limited to the number of days from the date of the stop sale to the date that the remedy was made available. Note: If the vehicle was received by your dealership (KZX date) AFTER the stop sale date, you will use the KZX date instead of the stop sale date. For this Recall, the stop sale was initiated on **02/01/2020** and the remedy was made available on **02/18/2020**, therefore, the number of days cannot exceed **17** days.

Vehicle	Average Daily Allowance
2019 - 2020 (DJ) Ram 2500 Pickup	
2019 - 2020 (D2) Ram 3500 Pickup	

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.

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