



TECHNICAL SERVICE BULLETIN

8F35 Transmission - Slipping, Harsh Engagement, Various Diagnostic Trouble Codes (DTCs) - Built On Or Before 20-Dec-2021

22-2281

28 November
2022

Model:

Ford 2019-2021 Transit Connect	Transmission/Transaxle: 8F35 Built on or before 20-Dec-2021
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Issue: Some 2019-2021 Transit Connect vehicles built on or before 20-Dec-2021 and equipped with the 8F35 transmission may exhibit transmission slipping concerns, harsh engagements and various clutch diagnostic trouble codes (DTCs). Some vehicles may also have torque converter clutch DTCs. This may be due to worn needle bearings in the output planet carrier assembly. To correct the condition, follow the Service Procedure to overhaul the transmission and replace the planetary gearset.

Action: Follow the Service Procedure to correct the condition on vehicles that meet all of the following criteria:

- 2019-2021 Transit Connect
- Built on or before 20-Dec-2021
- 8F35 transmission
- Clutch DTCs, transmission slipping and harsh engagements

Parts

Service Part Number	Quantity	Description	Unit of Issue	Piece Quantity
JM5Z-7N473-C	1	Output Planetary Carrier	1	1
JM5Z-7153-D	1	Overhaul Seal Kit	1	1
JM5Z-7A019-A	1	Output Planetary Sun Shell	1	1
CCPZ-3B477-G	2	Axle Wheel Hub Nut	1	2
W520203-S442	1	Tie Rod Nut	4	2
W520515-S442	1	Ball Joint Nut	4	2
W719924-S439	1	Ball Joint Bolt	4	2
W715618-S437	1	Torque Converter Nut	4	4
W717349-S442	1	Roll Restrictor Bolt	4	1
W500545-S900	1	Roll Restrictor Bolt	4	1

AE5Z-4B422-A	2	Axle Retaining Circlip	1	2
YS4Z-3N324-AA	1	Right Halfshaft Retaining Strap	1	1
W520102-S442	1	Right Halfshaft Retaining Strap Nut	4	2
9L8Z-7L027-A	2	Magnet	1	2
JM5Z-7B164-A	1	Clutch Plate	5	1
JM5Z-7B442-A	1	Clutch Plate	5	1
9L8Z-7G100-B	1	Manual Shaft Roll Pin	1	1
JM5Z-7G007-A	1 Per Affected Clutch Solenoid	Solenoid Retainer Clip	1	1 Per Affected Clutch Solenoid
XT-12-QULV	As Needed	Motorcraft® MERCON® ULV Automatic Transmission Fluid		
VC-13-G	As Needed	Motorcraft® Yellow Concentrated Antifreeze/Coolant (All Markets Except Canada)		
CVC-13-G	As Needed	Motorcraft® Yellow Concentrated Antifreeze/Coolant (Canada Only)		
VC-13DL-G	As Needed	Motorcraft® Yellow Prediluted Antifreeze/Coolant (All Markets Except Canada)		
CVC-13DL-G	As Needed	Motorcraft® Yellow Prediluted Antifreeze/Coolant (Canada Only)		

Parts

Parts To Inspect And Replace Only If Necessary

Service Part Number	Quantity	Description	Unit of Issue
JM5Z-7A103-D	If Needed	Transmission Fluid Pump	1
JM5Z-7902-S	If Needed	Torque Converter	1
JM5Z-7G100-B	If Needed	Roll Pin - Park Pawl Guide	1

Quantity refers to the amount of the service part number required to repair the vehicle.

Unit of Issue refers to the number of individual pieces included in a service part number package.

Piece Quantity refers to the total number of individual pieces required to repair the vehicle.

As Needed indicates the amount of the part may vary and/or is not a whole number. Parts can be billed out as non-whole numbers, including less than 1.

If Needed indicates the part is not mandatory.

Warranty Status: Eligible under provisions of New Vehicle Limited Warranty (NVLW)/Service Part Warranty (SPW)/Special Service Part (SSP)/Extended Service Plan (ESP) coverage. Limits/policies/prior approvals are not altered by a TSB. NVLW/SPW/SSP/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

Labor Times

Description	Operation No.	Time

2019-2021 Transit Connect 2.0L Duratec: Retrieve DTCs, Inspect And Overhaul Transmission Following The Service Procedure Includes Time To Back-Flush Fluid Cooler And Reprogram The PCM (Do Not Use With Any Other Labor Operations)	222281A	16.4 Hrs.
2019-2021 Transit Connect 2.0L Duratec: Retrieve DTCs, Inspect And Overhaul Transmission Following The Service Procedure Includes Time To Back-Flush Fluid Cooler, Flush The Torque Converter And Reprogram The PCM (Do Not Use With Any Other Labor Operations)	222281B	17.5 Hrs.

Repair/Claim Coding

Causal Part:	7N473
Condition Code:	D4

Service Procedure

1. Connect the appropriate diagnostic scan tool to the data link connector (DLC). Retrieve and record all DTCs.
2. Were any of following DTCs retrieved: P0730, P0757, P2701, P0752, P2700, P0771, P2704, P0751, P0756, P2700, P2701, P0727, P0741 and/or P1744?
 - (1). Yes - proceed to Step 3.
 - (2). No - this article does not apply. Refer to Workshop Manual (WSM), Section 307-01 for normal diagnostics.
3. Remove the transmission. Refer to WSM, Section 307-01.
4. Overhaul the transmission utilizing the updated output planet carrier assembly. Refer to WSM, Section 307-01.
 - (1). The service overhaul seal kit contains seals and gaskets. Match all of the removed seals and gaskets. Some seals and gaskets in the kit will not be required for certain models. Discard any unused components.
 - (2). Clean all of the internal components thoroughly. Replace any friction material which may have embedded metal pieces.
5. Were any of the following torque converter DTCs retrieved during Step 1: P0741, P1741, P1744, P1743?
 - (1). Yes - proceed to Step 6.
 - (2). No - proceed to Step 7.
6. Inspect the pump stator to input shaft bushing. Is the bushing worn?
 - (1). Yes - replace the transmission fluid pump and the torque converter. Refer to WSM, Section 307-01. Proceed to Step 8.
 - (2). No - reuse the transmission fluid pump. Proceed to Step 7.
7. Perform the torque converter flush and cleaning procedure. Refer to WSM, Section 307-01.
8. Disassemble and clean the main control valve body. Refer to WSM, Section 307-01.
 - (1). If the transmission had any burnt clutch material, thoroughly inspect and verify the controlling casting integrated direct acting solenoid (CIDAS) valves and torque converter control valves move freely.
9. Perform a transmission fluid cooler back-flush and cleaning. Refer to WSM, Section 307-01.
10. Reinstall the transmission. Refer to WSM, Section 307-01.
11. Reprogram the powertrain control module (PCM) using the latest software level of the Ford Diagnosis and Repair System (FDRS) scan tool.

NOTE: Advise the customer this vehicle is equipped with an adaptive transmission shift strategy which allows the vehicle's computer to learn the transmission's unique parameters and improve shift quality. When the adaptive strategy is reset, the computer will begin a relearning process. This relearning process may result in firmer than normal upshifts and downshifts for several days.

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NOTE: The information in Technical Service Bulletins is intended for use by trained, professional technicians with the knowledge, tools, and equipment to do the job properly and safely. It informs these technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by "do-it-yourselfers". Do not assume that a condition described affects your car or truck. Contact a Ford or Lincoln dealership to determine whether the Bulletin applies to your vehicle. Warranty Policy and Extended Service Plan documentation determine Warranty and/or Extended Service Plan coverage unless stated otherwise in the TSB article. The information in this Technical Service Bulletin (TSB) was current at the time of printing. Ford Motor Company reserves the right to supersede this information with updates. The most recent information is available through Ford Motor Company's on-line technical resources.