



TECHNICAL SERVICE BULLETIN

10R60/10R80/10R80 MHT Automatic Transmission - Fluid Leak At The Selector Shaft Seal - Built On Or Before 31-Jul-2022

23-2138

15 May 2023

Model:

Ford
2022 Bronco
2022 Expedition
2022 Explorer
2022 F-150
2022 Mustang
2022 Ranger
2022 Transit
Lincoln
2022 Aviator
2022 Navigator

Issue: Some 2022 Aviator/Bronco/Expedition/Explorer/F-150/Mustang/Navigator/Ranger/Transit vehicles built on or before 31-Jul-2022 equipped with a 10R60/10R80/10R80 MHT automatic transmission may exhibit a fluid leak from the selector shaft seal. This may be caused by a crack in the manual shaft. To correct this condition, follow the Service Procedure to replace the manual shaft, the manual shaft-to-sensor roll pin and the selector shaft seal.

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

- 2022 Aviator/Bronco/Expedition/Explorer/F-150/Mustang/Navigator/Ranger/Transit
- Built on or before 31-Jul-2022
- 10R60/10R80/10R80 MHT automatic transmission
- Transmission fluid leak at the selector shaft seal area

Parts

Service Part Number	Quantity	Description	Unit of Issue	Piece Quantity
7L1Z-7J227-A	2	Fluid Cooler O-ring Seals (10R60)	2	4
FL3Z-6775-D	1	Self-Adhesive Heat Shield (F-150 MHT)	1	1
HL3Z-7C493-A	1	Manual Shaft	1	1
HL3Z-7F337-A	1	Selector Shaft Seal	1	1
HL3Z-7G100-B	1	Manual Shaft To Transmission Range Roll Pin	1	1
JL1Z-7N134-A	1	Park Override Lever Bolt (Expedition/Navigator)	1	1
ML3Z-5C226-A	2	Exhaust Manifold Gasket (F-150 MHT)	1	2
W505434-S439	1	Lower Load Push Bar Retainers (Transit)	4	4
W520114-S442	1	Transmission Support Crossmember Nuts (F-150 MHT)	4	4
W520214-S440	1	Sway Bar Nuts (Bronco Equipped With Sway Bar Disconnect)	2	2
W520215-S442	1	Front Subframe Forward Nuts And Tie Rod Nuts (Transit)	4	4
W520514-S440	4	Left And Right Catalytic Converter Nuts (Transit And F-150 MHT)	1	4

W709771-S440	2	Transmission Mount Nuts (F-150 MHT)	1	2
W710660-S441	1	Transmission Support Insulator Nuts (Transit)	4	2
W711076-S442	1	Lower Ball Joint Nut (Transit)	4	2
W711137-S442	1	Steering Column Shaft Bolt (Transit)	4	1
W711140-S901	3	Transmission Insulator Bolts And Washers (F-150 RWD)	1	3
W712503-S440	2	Front Stabilizer Bar Link Rod Nuts (Transit)	1	2
W714418-S439	1	Transmission Support Crossmember Bolts (F-150 MHT)	4	4
W715131-S442	1	Transmission Fluid Cooler Tube Bolt (Explorer/Aviator MHT)	4	1
W716331-S439	1	Transmission Crossmember Bolts (Transit)	4	4
W718353-S900	1	Transmission Insulator Bolts (F-150 4WD)	4	4
W718943-S439	1	Front Subframe Rearward Bolts (Transit)	4	2
W720545-S442	1	Transmission Fluid Heat Exchanger Tube Bolt (Bronco)	4	1
W721255-S442	1	Selector Lever Cable Bracket Bolts (Bronco)	4	2
W721449-S439	1	Sway Bar Bolts (Bronco Equipped With Sway Bar Disconnect)	4	2
W506434-S439	2	Lower Load Push Bar Retainers	4	8
W717376-S439B	1	Stabilizer Bar Bolts Undershield (If Equipped)	4	4
JB3Z-4B496-B	6	CV Joint Bolts And Retaining Straps	1	6
W720940-S440	1	Stabilizer Bar Link Upper Nuts (Bronco Equipped With Sway Bar Disconnect)	4	2
W721041-S439	1	Stabilizer Bar Stud (Bronco Equipped With Sway Bar Disconnect)	4	2
W716936-S442	2	Stabilizer Bar Bracket Nuts	1	2
W719427-S439	1	Stabilizer Bar Bracket Bolts	4	2
AB3Z-4B496-A	6	CV Joint Flange Bolts And Retaining Straps	1	6
XT-12-QULV	As Needed	Motorcraft® MERCON® ULV Automatic Transmission Fluid		
VC-13DL-G	As Needed	Motorcraft® Yellow Prediluted Antifreeze/Coolant (Transit And F-150 MHT) (All Markets Except Canada)		
CVC-13DL-G	As Needed	Motorcraft® Yellow Prediluted Antifreeze/Coolant (Transit And F-150 MHT) (Canada Only)		

Parts

Parts To Inspect And Replace Only If Necessary

Service Part Number	Quantity	Description	Unit of Issue
5L7Z-7J324-A	If Needed	Transmission Fluid Tube Backing Rings (Explorer/Aviator 10R80 MHT)	2
5L7Z-7D285-A	If Needed	Transmission Fluid Tube Seals (Explorer/Aviator MHT)	2
7T4Z-7Z302-A	If Needed	Transmission Fluid Filter Seal	1
BL8Z-7G199-A	If Needed	Hybrid Drive Unit Feed Tube Seals (MHT)	1
HL3Z-7A098-A	If Needed	Transmission Fluid Filter (Bronco/Ranger)	1

HL3Z-7A191-B	If Needed	Transmission Fluid Pan Gasket (10R60 And 10R80)	1
L1MZ-7A098-A	If Needed	Transmission Fluid Filter (F-150/Expedition/Navigator/Mustang/Explorer 10R80)	1
L1MZ-7A098-B	If Needed	Transmission Fluid Filter (MHT)	1
L1MZ-7F396-A	If Needed	Transmission Fluid Pan Gasket (MHT)	1
L1MZ-7J135-A	If Needed	Transmission Fluid Auxiliary Pump Seal (MHT)	1
L1MZ-7N265-A	If Needed	Transmission Fluid Pan To Transmission Case Seals (MHT)	1
LJ9Z-7J227-A	If Needed	Transmission Fluid Cooler Tube Seals (Transit)	1
LK4Z-7A098-A	If Needed	Transmission Fluid Filter (Transit 10R80)	1
MB3Z-7G186-A	If Needed	Transmission Fluid Filter (Explorer/Aviator 10R60)	1
W716963-S900	If Needed	Catalytic Converter Studs (Transit 3.5L Duratec VCT)	4
W719583-S900	If Needed	Right Catalytic Converter Studs (Transit 3.5L EcoBoost)	4
W720627-S900	If Needed	Left Catalytic Converter Studs (Transit 3.5L EcoBoost)	4
MB3Z-5484-A	If Needed	Front Stabilizer Bar Bushings (Bronco Equipped With Sway Bar Disconnect)	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
2022 Mustang 10R80: Replace The Manual Shaft, Roll Pin And Seal Following The Service Procedure (Do Not Use With Any Other Labor Operations)	232138A	2.7 Hrs.
2022 Expedition/Navigator: Replace The Manual Shaft, Roll Pin And Seal Following The Service Procedure (Do Not Use With Any Other Labor Operations)	232138B	2.8 Hrs.
2022 Aviator/Explorer 10R60 FWD/AWD: Replace The Manual Shaft, Roll Pin And Seal Following The Service Procedure (Do Not Use With Any Other Labor Operations)	232138C	2.9 Hrs.
2022 Bronco 2.3L EcoBoost: Replace The Manual Shaft, Roll Pin And Seal Following The Service Procedure (Do Not Use With Any Other Labor Operations)	232138D	3.1 Hrs.
2022 Bronco 2.7L/3.0L EcoBoost: Replace The Manual Shaft, Roll Pin And Seal Following The Service Procedure (Do Not Use With Any Other Labor Operations Outside Of This Article) (Can Be Claimed With Operation F)	232138E	3.8 Hrs.

2022 Bronco Additional Time If Equipped With Electronic Sway Bar Disconnect (Do Not Use With Any Other Labor Operations Outside Of This Article) (Can Be Claimed With Operation D Or E)	232138F	0.8 Hrs.
2022 Explorer 10R80: Replace The Manual Shaft, Roll Pin And Seal Following The Service Procedure (Do Not Use With Any Other Labor Operations)	232138G	2.8 Hrs.
2022 Explorer/Aviator 10R80-MHT, 2022 F-150 4X2/4X4 10R80: Replace The Manual Shaft, Roll Pin And Seal Following The Service Procedure (Do Not Use With Any Other Labor Operations)	232138H	3.0 Hrs.
2022 F-150 4X4/4X2 10R80-MHT: Replace The Manual Shaft, Roll Pin And Seal Following The Service Procedure (Do Not Use With Any Other Labor Operations)	232138J	5.5 Hrs.
2022 Ranger 4X2 10R80: Replace The Manual Shaft, Roll Pin And Seal Following The Service Procedure (Do Not Use With Any Other Labor Operations)	232138K	3.0 Hrs.
2022 Ranger 4X4 10R80: Replace The Manual Shaft, Roll Pin And Seal Following The Service Procedure (Do Not Use With Any Other Labor Operations)	232138L	3.6 Hrs.
2022 Transit AWD 3.5L TiVCT: Replace The Manual Shaft, Roll Pin And Seal Following The Service Procedure (Do Not Use With Any Other Labor Operations Outside Of This Article) (Can Be Claimed With Operations P, Q And R)	232138M	5.8 Hrs.
2022 Transit RWD 3.5L TiVCT, 2022 Transit 3.5L EcoBoost RWD/AWD: Replace The Manual Shaft, Roll Pin And Seal Following The Service Procedure ((Do Not Use With Any Other Labor Operations Outside Of This Article) (Can Be Claimed With Operations P, Q And R)	232138N	5.6 Hrs.
2022 Transit: Additional Time To Remove And Install Running Boards When Necessary (Can Be Claimed With Operations M, N Q And R)	232138P	0.3 Hrs.
2022 Transit: Additional Time To Check And Correct Front Toe (Can Be Claimed With Operations M, N And P)	232138Q	0.8 Hrs.
2022 Transit With Lane Departure: Additional Time To Check And Correct Front Toe (Can Be Claimed With Operations M, N And P)	232138R	1.2 Hrs.

Repair/Claim Coding

Causal Part:	7C493
Condition Code:	01

Service Procedure

- Remove and discard the manual shaft, the manual shaft-to-sensor roll pin and the selector shaft seal. Refer to Workshop Manual (WSM), Section 307-01, Removal and Installation, Transmission Range (TR) Sensor and Selector Shaft Seal procedures.
 - It is not necessary to remove the TR sensor or disconnect the park pawl actuator rod.
- Remove and discard the selector shaft seal. Refer to WSM, Section 307-01, Removal and Installation, Selector Shaft Seal, Removal.
- Install the new selector shaft seal. Refer to WSM, Section 307-01, Removal and Installation, Selector Shaft Seal, Installation.
- Install the new manual shaft and the manual shaft-to-sensor roll pin. Refer to WSM, Section 307-01, Removal and Installation, Transmission Range (TR) Sensor, Installation.
- Reassemble the transmission. Refer to WSM, Section 307-01, Removal and Installation, Transmission Range (TR) Sensor, Installation.

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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.

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