



TECHNICAL SERVICE BULLETIN

10R60/10R80 - Harsh Engagement/Harsh Shift/Delayed Shift With Or Without DTCs

22-2102

04 May 2022

This bulletin supersedes 21-2316.

Model:

Ford 2020 Explorer
2020 Police Interceptor Utility
Lincoln 2020 Aviator

Summary

This article supersedes TSB 21-2316 to update the Part List.

Issue: Some 2020 Explorer/Aviator/Police Interceptor Utility vehicles equipped with a 10R60/10R80 automatic transmission may exhibit a harsh engagement/harsh shift/delayed shift with or without an illuminated malfunction indicator lamp (MIL) or diagnostic trouble codes (DTCs) P0729, P0731, P0732, P0733, P0734, P0735, P0736, P076F, P07D9, P07F6, P07F7, P2700, P2701, P2702, P2703, P2704 and/or P2705 stored in the powertrain control module (PCM). This may be due to sticking valves in the main control valve body. To correct the condition, follow the Service Procedure steps to perform the PCM - Transmission Accelerated Main Control Break In routine for the appropriate clutch(s) and/or overhaul main control valve body.

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

- 2020 Explorer/Aviator/Police Interceptor Utility
- 10R60/10R80 automatic transmission
- At least one of the following symptoms:
 - Harsh engagement
 - Harsh shift
 - Delayed shift

Parts

Parts To Replace If The Main Control Is Overhauled

Service Part Number	Quantity	Description	Unit of Issue	Piece Quantity
XT-12-QULV	As Needed	Motorcraft® MERCON® ULV Automatic Transmission Fluid		
W712658-S439	1	Solenoid Retaining Plate Bolt	4	2
HL3Z-7G007-A	6	Solenoid Retaining Clips	1	6

Parts

Parts To Inspect And Replace Only If Necessary During Main Control Overhaul

Service Part Number	Quantity	Description
HL3Z-7A191-B	If Needed	Fluid Pan Gasket
LP5Z-7A098-A	If Needed	Fluid Filter (10R60)
L1MZ-7A098-A	If Needed	Fluid Filter (10R80)
HL3Z-7J227-A	If Needed	Auxiliary Pump Tube O-ring

7T4Z-7Z302-A	If Needed	Transmission Fluid Filter Seal
HL3Z-7Z490-E	If Needed	Channel Plate
L1MZ-7Z490-B	If Needed	Separator Plate (10R60)
L1MZ-7Z490-F	If Needed	Separator Plate (10R80)

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
2020 Explorer, Aviator 10R60 Transmission: Retrieve DTCs, Check Build Date And Perform The Transmission Accelerated Main Control Break-In Routine Repair Complete (Do Not Use With Any Other Labor Operations)	222102A	2.0 Hrs.
2020 Explorer, Aviator 10R60 Transmission: Retrieve DTCs, Check Build Date, Perform The Transmission Accelerated Main Control Break-In Routine And Overhaul The Main Control Valve Body (Do Not Use With Any Other Labor Operations)	222102B	5.8 Hrs.
2020 Explorer 10R80 Transmission: Retrieve DTCs, Check Build Date And Perform The Transmission Accelerated Main Control Break-In Routine Repair Complete (Do Not Use With Any Other Labor Operations)	222102C	2.0 Hrs.
2020 Explorer 10R80 Transmission: Retrieve DTCs, Check Build Date, Perform The Transmission Accelerated Main Control Break-In Routine And Overhaul The Main Control Valve Body (Do Not Use With Any Other Labor Operations)	222102D	5.8 Hrs.

Repair/Claim Coding

Causal Part:	7A100
Condition Code:	49

Service Procedure

- Is the vehicle a 2020 Explorer/Aviator, equipped with a 10R60 transmission, built on or before 19-May-2020 and exhibiting a harsh 7-6 gear downshift?
 - Yes - this article does not apply. Refer to other service articles for this condition.
 - No - proceed to Step 2.
- Are any transmission related DTCs present?
 - Yes - determine the appropriate clutch(s) to be cycled related to DTCs present. Refer to Workshop Manual (WSM), Section 307-01.
 - No - determine the appropriate clutch(s) to be cycled related to symptoms present. Refer to WSM, Section 307-01.
- Record and clear all DTCs present before performing the PCM - Transmission Accelerated Main Control Break In routine.



CAUTION: Failure to use a frame engaging lift could damage the vehicle.

4. Prepare vehicle for PCM - Transmission Accelerated Main Control Break In routine by positioning on a frame-engaging lift with wheels off the ground to prevent vehicle movement.
5. Using the latest software level of the Ford Diagnosis and Repair System (FDRS), perform the PCM - Transmission Accelerated Main Control Break In routine 3 times on the appropriate clutch(s) determined to be cycled.
6. Perform the adaptive learning drive cycle. Refer to WSM, Section 307-01.
7. Does the vehicle still exhibit the condition after performing the PCM - Transmission Accelerated Main Control Break In routine and adaptive learning drive cycle?
 - (1). Yes - overhaul (clean and inspect) the main control valve body. Refer to WSM, Section 307-01.
 - (2). No - repair is complete.

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.