

TECHNICAL SERVICE BULLETIN 2023 F-150 Vehicles - 10R80/10R80 MHT Automatic Transmission Harsh/Delayed Engagement And/Or Harsh/Delayed Shift - TEAM KAM Data Collection

13 March 2024

24-2070

Model:

Ford	Transmission/Transaxle: 10R80
2023 F-150	Transmission/Transaxle: 10R80 MHT

Issue: Some 2023 F-150 vehicles equipped with a 10R80/10R80 MHT transmission may exhibit a harsh/delayed engagement and/or harsh/delayed shift, an illuminated MIL with DTC P0751, P0752, P0756, P0757, P0761, P0762, P0766, P0767, P0771, P0772, P2700, P2701, P2702, P2703, P2704, P2705, P2707, P2708, P0729, P0731, P0732, P0733, P0734, P0735, P0736, P076F, P07D9, P07F6 and/or P07F7 stored in the PCM or TCM. This may be due to the software in the PCM or TCM or sticking valves in the main control valve body. To correct the condition, follow the Service Procedure to submit a report a vehicle concern with the collected transmission early alert monitor keep-alive memory (TEAM KAM) data file and/or identify and correct the condition.

NOTE: This article is for information only. Determine the causal part number and use available labor times in Section 7 of the <u>SLTS</u> Manual or claim M-time in accordance with the Warranty and Policy Manual. Causal part number IN in this article refers to the information only status and is not able to be claimed.

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

- 2023 F-150
- · One of the following transmissions:
 - 10R80
 - 10R80 MHT
- At least one of the following conditions:
 - <u>DTC</u> P0751, P0752, P0756, P0757, P0761, P0762, P0766, P0767, P0771, P0772, P2700, P2701, P2702, P2703, P2704, P2705, P2707, P2708, P0729, P0731, P0732, P0733, P0734, P0735, P0736, P076F, P07D9, P07F6 and/or P07F7
 - Harsh engagement
 - Delayed engagement
 - Harsh shift
 - Delayed shift

Parts - Main Control Overhaul

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

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

Service Part Number	Claim Quantity	Package Order Quantity	Number in Package	Description
HL3Z-7A191-B	If Needed	If Needed	1	Fluid Pan Gasket (10R80)
L1MZ-7F396-A	If Needed	If Needed	1	Fluid Pan Gasket (10R80 MHT)
L1MZ-7A098-A	If Needed	If Needed	1	Fluid Filter (10R80)

L1MZ-7N265-A	If Needed (2 possible)	If Needed	1	Fluid Pan To Case Seals (10R80 MHT)
BL8Z-7G199-A	If Needed (2 possible)	If Needed	1	Hybrid Drive Unit Feed Tube Seals (10R80 MHT)
L1MZ-7A098-B	If Needed	If Needed	1	Fluid Filter (10R80 MHT)
L1MZ-7J135-A	If Needed	If Needed	1	Auxillary Pump Seal (10R80 MHT)
7T4Z-7Z302-A	If Needed	If Needed	1	Transmission Fluid Filter Seal
HL3Z-7J227-A	If Needed	If Needed	1	Auxiliary Pump Tube O-ring (10R80 Auto-Start-Stop)
HL3Z-7Z490-E	If Needed	If Needed	1	Chanel Plate
ML3Z-7Z490-B	If Needed	If Needed	1	Separator Plate (10R80 MHT)
L1MZ-7Z490-E	If Needed	If Needed	1	Separator Plate (10R80)

Warranty Status: Information Only.

Repair/Claim Coding

Causal Part:	7A100
Condition Code:	49

Service Procedure

NOTE: This article is for information only. Determine the causal part number and use available labor times in Section 7 of the <u>SLTS</u> Manual or claim M-time in accordance with the Warranty and Policy Manual. Causal part number IN in this article refers to the information only status and is not able to be claimed.

Transmission Early Alert Monitor Keep-Alive Memory (TEAM KAM) Data Collection

- 1. Using the latest software level of the FDRS scan tool, check for DTCs.
- 2. Are any of the DTCs listed in the Action statement of this article present?
 - (1). Yes proceed to PCM/TCM Software Step 1.
 - (2). No proceed to Step 3.

NOTE: Use the <u>IDS</u> scan tool to perform Steps 3 through 11. <u>FDRS</u> cannot be used to perform the data collection.

- 3. Connect the IDS scan tool to the vehicle. Do not start a session.
- 4. Navigate to the System Page by selecting the IDS Tab (blue ball-and-socket) at the top left of the screen.
- 5. Navigate to the System Utilities page by selecting the Swiss Army Knife icon from the tabs at the bottom of the screen.
- 6. On the right half of the screen, under Miscellaneous, select Update / Special Function. Select the Tick.
- 7. In the data entry box that appears, type in the code of the day from the chart at the end of this article. Select the tick.
- **8.** On the next screen, select TEAM KAM Data Selection and follow the prompts. Make sure not to select clear the team data.

- 9. Click the Report a Vehicle Concern link at the bottom of the Vehicle ID tab on the PTS website.
 - (1). When completing the form make sure to include TEAM KAM Data File in the Describe Repairs section of the form. After completing the report entry form and submitting the report, up to 5 attachments at one time can be added. Save the attachments to the computer being used.
- **10.** Locate the 1Fxxxxxxxxxxxxxxxx_TEAMKAMdata.txt file saved at C:\Users\Work Station\Documents. The saved file needs to be renamed, dropping the first 9 digits of the <u>VIN</u>. The file name cannot exceed 28 characters.
- 11. Attach the renamed file to the report that was just submitted.

PCM/TCM Software

- 1. Using the latest software level of the appropriate Ford diagnostic scan tool, check for later <u>PCM</u>/ <u>TCM</u> software version.
- 2. Is a later software version available?
 - (1). Yes reprogram the <u>PCM/ TCM</u> to the latest software. Perform the adaptive learning drive cycle. Refer to WSM, Section 307-01.
 - (2). No proceed to Step 4.
- **3.** Does the vehicle still exhibit the condition after reprogramming the <u>PCM/ TCM</u> and performing the adaptive learning drive cycle?
 - (1). Yes proceed to Step 4.
 - (2). No repair is complete.

NOTE: Advise the customer that 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.

- **4.** Are any of the following <u>DTC</u>s present: P0751, P0752, P0756, P0757, P0761, P0762, P0766, P0767, P0771, P0772, P2700, P2701, P2702, P2703, P2704, P2705, P2707, P2708, P0729, P0731, P0732, P0733, P0734, P0735, P0736, P076F, P07D9, P07F6 and/or P07F7?
 - (1). Yes proceed to Sticking Valves Main Control Valve Body, Step 2.
 - (2). No proceed to Sticking Valves Main Control Valve Body, Step 1.

Sticking Valves - Main Control Valve Body

- Determine the appropriate clutch(s) to be cycled related to the symptoms present. Refer to <u>WSM</u>, Section 307-01. Proceed to Step 3.
- 2. Determine the appropriate clutch(s) to be cycled related to <u>DTC</u>s present. Refer to <u>WSM</u>, Section 307-01.
- 3. Record and clear all <u>DTC</u>s 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 the **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 <u>FDRS</u>, 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 <u>WSM</u>, 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 proceed to Step 8.
 - (2). No repair is complete.

NOTE: Advise the customer that 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.

8. Overhaul (clean and inspect) the main control valve body and road test vehicle following the adaptive learning drive cycle. Refer to <u>WSM</u>, Section 307-01.

NOTE: Advise the customer that 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.

Code Of The Day

Use the chart below to determine the IDS code of the day.

Use the chart below t			
Code			
17839			
10542			
13445			
16548			
19851			
13354			
17057			
10960			
15063			
19366			
13869			
18572			
13475			
18578			
13881			
19384			
15087			
10990			
17093			
11704			
12008			
12512			
13216			
14120			
15224			
16528			
18032			
19736			
11640			
13744			
16048			
18552			
11256			
14160			
17264			
10568			
14072			

Date in 2024	Code
April 20	11680
April 21	15784
April 22	10088
April 23	14592
April 24	19296
April 25	14200
April 26	19304
April 27	14608
April 28	10112
April 29	15816
April 30	11720
May 1	12605
May 2	12910
May 3	13415
May 4	14120
May 5	15025
May 6	16130
May 7	17435
May 8	18940
May 9	10645
May 10	12550
May 11	14655
May 12	16960
May 13	19465
May 14	12170
May 15	15075
May 16	18180
May 17	11485
May 18	14990
May 19	18695
May 20	12600
May 21	16705
May 22	11010
May 23	15515
May 24	10220
May 25	15125
May 26	10230
May 27	15535
May 28	11040
May 29	16745
May 30	12650

Date in 2024	Code
May 31	18755

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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.