



# TECHNICAL SERVICE BULLETIN

## 10R60 Automatic Transmission - Harsh 7-6 Gear Downshift - Built On Or Before 9-Aug-2022

**22-2411**

02 March  
2023

**Model:**

<b>Ford</b> 2022 Bronco	Transmission/Transaxle: 10R60 Built on or before 9-Aug-2022
2022 Explorer	Transmission/Transaxle: 10R60 Built on or before 9-Aug-2022
<b>Lincoln</b> 2022 Aviator	Transmission/Transaxle: 10R60 Built on or before 9-Aug-2022

**Issue:** Some 2022 Explorer/Aviator/Bronco vehicles built on or before 9-Aug-2022 and equipped with a 10R60 automatic transmission may exhibit a harsh 7-6 gear downshift. This may be caused by the A clutch piston return spring snap ring becoming dislodged. To correct the condition, follow the Service Procedure to replace the front support assembly and A clutch components.

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

- 2022 Explorer/Aviator/Bronco
- Built on or before 9-Aug-2022
- 10R60 automatic transmission
- Harsh 7-6 gear downshift

**Parts**

**Explorer/Aviator 10R60 Parts**

Service Part Number	Quantity	Description	Unit of Issue	Piece Quantity
L1MZ-6L612-A	1	Catalytic Converter Gasket (2.3L)	1	1
L1MZ-6L612-B	2	Catalytic Converter Gasket (3.0L)	1	2
W520214-S440	1	Transmission Mount Nut	2	2
W714265-S442	1	Catalytic Converter Nuts (3.3L)	4	4
W715618-S437	3.3L requires 1, 2.3L and 3.0L require 2	Torque Converter Nuts	4	3.3L requires 4 pieces, 2.3L and 3.0L require 6 pieces
W716375-S900	2	Transfer Case Mounting Bolts (4WD)	5	8
W716979-S439	1	Rear Subframe Bolts	4	2
W719413-S439	1	Middle Subframe Bolts	4	2
W719431-S439	1	Transmission Mount Bolts	4	2 for RWD, 3 for 4WD

W719511-S439	1 or 2	Driveshaft Flex Coupling Bolts	4	3 Pieces Required If Driveshaft Is Disconnected At Only One End, 6 Pieces Required If Coupler Or Driveshaft Alignment Bush Are Replaced
W719699-S442	2 For 3.0L, 3 For 2.3L, 4 For 3.3L	Catalytic Converter Nuts	1	2 For 3.0L, 3 For 2.3L, 4 For 3.3L
LP5Z-7B066-M	1	A Clutch Pressure Plate	1	1
LP5Z-7B070-C	1	A Clutch Cushion Spring	1	1
LP5Z-7F219-A	1	A Clutch Friction Plate	1	4
LP5Z-7F220-A	1	A Clutch Separator Plate	1	3
LP5Z-7G159-A	1	A Clutch Separating Springs	1	4
LC3Z-7H223-A	12	Front Support Bolt Seal	1	12
HL3Z-7G199-A	1	Auxiliary Pump Tube Seal (Auto-Stop-Start Vehicles)	1	1
L1MZ-3B478-A	1	Front Driveshaft Boot Clamp (4WD)	1	1
KB3Z-6L612-A	1	Catalytic Converter Gasket (2.3L)	1	1
L1MZ-4421-A	1	Front Driveshaft Boot (4WD)	1	1
LB5Z-3B498-A	1	Front Axle Pinion Stem Circlip (4WD)	1	1
L1MZ-4A015-B	1	Front Axle Pinion Stem O-ring	1	1
MB3Z-9450-B	1 For 2.7L, 2 For 3.0L	Exhaust Flexible Pipe Flange Gasket	1	1 For 2.7L, 2 For 3.0L
MB3Z-7G186-A	1	Transmission Filter	1	1
W500121-S439	2	Transfer Case Bolts	4	8
W500213-S442	1	Park Manual Release Bracket Bolt	4	2
W525174-S300	1	Plastic Skid Bar Rivet (3.0L Police Vehicles Only)	10	4
W721083-S439	1	Transmission Crossmember Bolts	4	4
LP5Z-7A130-D	1	Front Support Assembly	1	1
W720576-S439	4	Transmission Support Insulator Bolt	1	4
5L3Z-19A506-A	As Needed	Slip Yoke Grease (2.3L 4WD)		
TA-29	As Needed	Motorcraft® Ultra Silicone Sealant (4WD)		

XG-11	As Needed	Motorcraft® High Temperature 4x4 Front Axle and Wheel Bearing Grease		
XG-3-A	As Needed	Motorcraft® Silicone Brake Caliper Grease and Dielectric Compound		
XL-1	As Needed	Motorcraft® Penetrating and Lock Lubricant		
XL-2	As Needed	Motorcraft® High Temperature Nickel Anti-Seize Lubricant		
XL-5-A	As Needed	Motorcraft® Multi-Purpose Grease Spray		
XT-10-QLVC	As Needed	Motorcraft® MERCON® LV Automatic Transmission Fluid (Transfer Case) (All Markets Except Canada)		
CXT-10-LV6	As Needed	Motorcraft® MERCON® LV Automatic Transmission Fluid (Transfer Case) (Canada Only)		
XT-12-QULV	As Needed	Motorcraft® MERCON® ULV Automatic Transmission Fluid		
PM-4-A	As Needed	Motorcraft® Metal Brake Parts Cleaner		
XG-1-E1	As Needed	Motorcraft® Premium Long-Life Grease		
ZC-20	As Needed	Motorcraft® Engine Shampoo and Degreaser		
ZC-30-A	As Needed	Motorcraft® Silicone Gasket Remover		
ZC-31-B	As Needed	Motorcraft® Metal Surface Prep Wipes		

## Parts

### Explorer/Aviator Parts To Inspect And Replace Only If Needed

Service Part Number	Quantity	Description	Unit of Issue	Piece Quantity
7L1Z-7J227-A	If Needed	Fluid Cooler O-ring Seals	2	4
7T4Z-7Z302-A	If Needed	Filter Seal	4	2
HL3Z-7A191-B	If Needed	Transmission Pan Gasket	1	1
HL3Z-7J227-A	If Needed	Fluid Auxiliary Pump Tube O-ring (Auto-Stop-Start Vehicles)	1	1
L1MZ-3B498-F	If Needed	Rear Axle Pinion Stem Circlip	1	1
W525585-S300	If Needed	Engine Block Dowel Pins (3.0L)	1	2
W701183-S300	If Needed	Engine Block Dowel Pins (2.3L)	4	2
W716963-S900	If Needed	Catalytic Converter Studs (3.3L)	4	4

W717822-S439	If Needed	Driveshaft Center Bearing Bracket Bolts	4	2
W718758-S300	If Needed	Engine Block Dowel Pins (3.3L)	4	2
L1MZ-4782-A	If Needed	Flex Coupling	1	1
W719698-S900	If Needed	Catalytic Converter Studs	1	2 For 3.0L, 3 For 2.3L

## Parts

### Bronco 10R60 Parts

Service Part Number	Quantity	Description	Unit of Issue	Piece Quantity
HL3Z-7A098-A	1	Transmission Filter	1	1
W520214-S440	1	Stabilizer Bar Bracket Nuts	2	2
W714265-S442	1	Catalytic Converter Nuts	4	2.7L Requires 2 pieces. 2.3L requires 3 pieces
W715618-S437	2.7L requires 1, 2.3L requires 2	Torque Converter Nuts	4	2.7L requires 4 pieces, 2.3L requires 6 pieces
LP5Z-7B066-M	1	A Clutch Pressure Plate	1	1
LP5Z-7B070-C	1	A Clutch Cushion Spring	1	1
LP5Z-7F219-A	1	A Clutch Friction Plate	1	4
LP5Z-7F220-A	1	A Clutch Separator Plate	1	3
LP5Z-7G159-A	1	A Clutch Separating Springs	1	4
LC3Z-7H223-A	12	Front Support Bolt Seal	1	12
HL3Z-7G199-A	1	Auxiliary Pump Tube Seal (Auto-Stop-Start Vehicles)	1	1
JB3Z-4B496-B	6	Front Driveshaft CV Joint-To-Flange Bolts And Retaining Straps	1	6
LB3Z-4B496-A	4	Rear Driveshaft CV Joint-To-Transfer Case Flange Cup Bolts And Retaining Straps	1	4
MB3Z-5C226-A	1	Exhaust Manifold Gasket (2.7L)	1	1
MB3Z-5C226-B	2	Exhaust Manifold Gasket (3.0L)	1	2
W520103-S442	1	Exhaust Flexible Pipe Flange Nuts (2.3L)	4	2
W520515-S442	1	Transmission Support Crossmember Nuts (Non-Raptor)	4	4
W713314-S439	1	Exhaust Hanger Bracket Bolts (2.3L & 2.7L)	4	2

W714409-S439	1	Steering Column Lower Shaft Coupler Retainers (2.3L)	4	2
W717376-S439B	1	Stabilizer Bar Undershield Bolts	4	4
W720545-S442	1	Transmission Fluid Heat Exchanger Bolt	4	1 For 2.7L/3.0L, 4 For 2.3L
W720940-S440	1	Stabilizer Bar Link Upper Nuts (Vehicles with Sway Bar Disconnect)	4	2
W721041-S439	1	Stabilizer Bar Bracket Mounting Stud	4	2
W721255-S442	1	Shift Cable Bracket Bolts	4	2
W721449-S439	1	Stabilizer Bar Bracket Bolts	4	2
LP5Z-7A130-D	1	Front Support Assembly	1	1
W500642-S439	4	Transmission Support Insulator Bolt	1	4
XL-5-A	As Needed	Motorcraft® Multi-Purpose Grease Spray		
XT-10-QLVC	As Needed	Motorcraft® MERCON® LV Automatic Transmission Fluid (Transfer Case) (All Markets Except Canada)		
CXT-10-LV6	As Needed	Motorcraft® MERCON® LV Automatic Transmission Fluid (Transfer Case) (Canada Only)		
XT-12-QULV	As Needed	Motorcraft® MERCON® ULV Automatic Transmission Fluid		

## Parts

### Bronco Parts To Inspect And Replace Only If Needed

Service Part Number	Quantity	Description	Unit of Issue	Piece Quantity
7T4Z-7Z302-A	If Needed	Filter Seal	4	2
HL3Z-7A191-B	If Needed	Transmission Pan Gasket	1	1
HL3Z-7J227-A	If Needed	Fluid Auxiliary Pump Tube O-ring (Auto-Stop-Start Vehicles)	1	1
JB3Z-7J227-A	If Needed	Transmission Fluid Heat Exchanger O-ring Seals (2.3L)	1	4
L1MZ-4650-A	If Needed	Driveshaft Alignment Bushing	1	1
MB3Z-5484-A	If Needed	Front Stabilizer Bar Bushing (Vehicles with Sway Bar Disconnect)	1	2
MB3Z-5A231-C	If Needed	Exhaust Flexible Pipe Clamp (2.3L)	1	1
W525585-S300	If Needed	Engine Block Dowel Pins (3.0L)	1	2
W701183-S300	If Needed	Engine Block Dowel Pins (2.3L)	4	2

W712458-S900	If Needed	Exhaust Studs	4	2 For 2.7L, 3 For 2.3L, 4 For 3.0L
7L1Z-7J227-A	If Needed	Transmission Fluid Cooler Tube O-ring Seals (2.7L & 3.0L)	2	4

## Parts

### 10R60 Selective Parts (As Needed)

Service Part Number	Quantity	Description	Unit of Issue	Piece Quantity
LP5Z-7A527-L	If Needed	T-3 Shim (Selective) 2.90-3.00mm	1	1
LP5Z-7A527-M	If Needed	T-3 Shim (Selective) 3.05-3.15mm	1	1
LP5Z-7A527-N	If Needed	T-3 Shim (Selective) 3.20-3.30mm	1	1
LP5Z-7A527-P	If Needed	T-3 Shim (Selective) 3.35-3.45mm	1	1
LP5Z-7A527-Q	If Needed	T-3 Shim (Selective) 3.50-3.60mm	1	1
LP5Z-7A527-R	If Needed	T-3 Shim (Selective) 3.65-3.75mm	1	1
LP5Z-7A527-S	If Needed	T-3 Shim (Selective) 3.80-3.90mm	1	1
LP5Z-7A527-T	If Needed	T-3 Shim (Selective) 3.95-4.05mm	1	1
LP5Z-7A527-U	If Needed	T-3 Shim (Selective) 4.10-4.20mm	1	1
LP5Z-7A527-V	If Needed	T-3 Shim (Selective) 4.25-4.35mm	1	1
LP5Z-7B066-E	If Needed	A Clutch Apply Plate (Selective) 3.55-3.75mm	1	1
LP5Z-7B066-F	If Needed	A Clutch Apply Plate (Selective) 3.75-3.95mm	1	1
LP5Z-7B066-G	If Needed	A Clutch Apply Plate (Selective) 3.95-4.15mm	1	1
LP5Z-7B066-H	If Needed	A Clutch Apply Plate (Selective) 4.15-4.35mm	1	1
LP5Z-7B066-J	If Needed	A Clutch Apply Plate (Selective) 4.35-4.55mm	1	1
LP5Z-7B066-K	If Needed	A Clutch Apply Plate (Selective) 4.55-4.75mm	1	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 Aviator RWD: Diagnose And Replace The A-Clutch And Front Support Assembly (Do Not Use With Any Other Labor Operations)	222411A	7.5 Hrs.
2022 Aviator AWD: Diagnose And Replace The A-Clutch And Front Support Assembly (Do Not Use With Any Other Labor Operations)	222411B	8.0 Hrs.
2022 Bronco Raptor 3.0L EcoBoost: Diagnose And Replace The A-Clutch And Front Support Assembly (Do Not Use With Any Other Labor Operations)	222411C	10.1 Hrs.
2022 Explorer 4WD 2.3L EcoBoost: Diagnose And Replace The A-Clutch And Front Support Assembly (Do Not Use With Any Other Labor Operations)	222411D	9.6 Hrs.

2022 Explorer RWD 2.3L EcoBoost: Diagnose And Replace The A-Clutch And Front Support Assembly (Do Not Use With Any Other Labor Operations)	222411E	9.1 Hrs.
2022 Explorer 4WD 3.3L TiVCT: Diagnose And Replace The A-Clutch And Front Support Assembly (Do Not Use With Any Other Labor Operations)	222411F	9.2 Hrs.
2022 Explorer 4WD 3.0L EcoBoost: Diagnose And Replace The A-Clutch And Front Support Assembly (Do Not Use With Any Other Labor Operations)	222411G	8.1 Hrs.
2022 Bronco 2.7L EcoBoost With Sway Bar Disconnect: Diagnose And Replace The A-Clutch And Front Support Assembly (Do Not Use With Any Other Labor Operations)	222411H	11.4 Hrs.
2022 Bronco 2.3L EcoBoost With Sway Bar Disconnect: Diagnose And Replace The A-Clutch And Front Support Assembly (Do Not Use With Any Other Labor Operations)	222411J	12.3 Hrs.
2022 Bronco 2.3L EcoBoost Without Sway Bar Disconnect EcoBoost: Diagnose And Replace The A-Clutch And Front Support Assembly (Do Not Use With Any Other Labor Operations)	222411K	11.7 Hrs.
2022 Bronco 2.7L EcoBoost Without Sway Bar Disconnect EcoBoost: Diagnose And Replace The A-Clutch And Front Support Assembly (Do Not Use With Any Other Labor Operations)	222411L	10.8 Hrs.

### Repair/Claim Coding

Causal Part:	7A130
Condition Code:	07

### Service Procedure

- Using the SelectShift mode, perform a manual 7-6 gear downshift. Is a harsh shift present?
  - Yes - proceed to Step 2.
  - No - this article does not apply. Refer to the Workshop Manual (WSM), Section 307-01 for normal diagnostics.
- Remove and discard the front support assembly. Perform only the necessary steps to remove and service the front support assembly. Refer to WSM Section 307-01.
  - It is only necessary to remove the torque converter, the main control, and the transmission fluid pump to remove the front support.
- Remove and discard the A clutch assembly from the transmission case. Refer to WSM, Section 307-01.
- Install the A clutch assembly and perform the A clutch clearance measurement. Refer to WSM, Section 307-01.
- Install front support assembly and perform the T3 selective shim measurement. Refer to WSM, Section 307-01.
- To install, reverse the removal procedure.

© 2023 Ford Motor Company

All rights reserved.

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.