TECHNICAL SERVICE BULLETIN 5.0L - Manual Transmission - Inability To Drive In First And Second Gear

18-2267 30 August 2018

Model:

Ford 2018-2019 Mustang

Issue: Some 2018-2019 Mustang vehicles equipped with a 5.0L engine and a manual transmission may exhibit an inability to drive the vehicle in first and/or second gear. This may be due to a broken 1-2 shift fork.

Action: Follow the Service Procedure steps to correct the condition.

Parts

Part Number	Description	Quantity
JR3Z-7230-E	1-2 Shift Fork	1
JR3Z-7052-A	Oil Seal	
JR3Z-7124-C	1st/2nd Gear Synchronizer Hub And Sleeve	
JR3Z-7102-A	Mainshaft 2nd Speed Gear	
BR3Z-5B266-A	Exhaust Gasket	1
W719298-S439	Bolt M12 X 56 mm	3
FR3Z-4B496-B	Bolt And Washer, M10 x 1.5 mm	3
W717822-S439	Bolt M10 x 19 mm	2
W705443-S900	Nut M10 x 1.5 mm	
TA-25-B	Motorcraft® Threadlock and Sealer	1
XG-11	Motorcraft® High Temperature 4x4 Front Axle And Wheel Bearing Grease	1
XL-2	Motorcraft® High Temperature Nickel Anti-Seize Lubricant	1
XL-1	Motorcraft® Penetrating And Lock Lubricant	1
XT-11-QDC	Motorcraft® Dual Clutch Transmission Fluid	3
TA-26	Motorcraft® Threadlock 262	1
TA-16	Motorcraft® Gasket Maker	1

Warranty Status: Eligible Under Provisions Of New Vehicle Limited Warranty Coverage Warranty/ESP coverage limits/policies/prior approvals are not altered by a TSB. Warranty/ESP coverage limits are determined by the identified causal part and verified using the OASIS part coverage tool.

Labor Times

Description	Operation No.	Time
2018-2019 Mustang Coupe 5.0L With Manual Transmission: Replace The 1-2 Shift Fork And Second Gear Includes Time To Remove And Install Transmission (Do Not Use With Any Other Labor Operations)		5.5 Hrs.
2018-2019 Mustang Convertible 5.0L With Manual Transmission: Replace The 1-2 Shift Fork And Second Gear Includes Time To Remove And Install Transmission (Do Not Use With Any Other Labor Operations)		6.1 Hrs.

Repair/Claim Coding

Causal Part: 7230

Condition Code: 01

Tool List

Drive	Tool Name
1/4"	Ratchet
1/4"	Torque Wrench
1/4"	10 mm Socket
1/4"	8 mm Deep Socket
1/4"	Torx® T20
3/8"	Power Tool
3/8"	Torque Wrench
3/8"	Ratchet
3/8"	Air Ratchet
3/8"	30" Extension
3/8"	10 mm Socket
3/8"	15 mm Socket
3/8"	10 mm Deep Socket
3/8"	13 mm Deep Socket
3/8"	10 mm Swivel Socket
3/8"	13 mm Swivel Socket
3/8"	Torx® T30
3/8"	Torx® T40
3/8"	7 mm Allen Key
1/2"	Power Tool
1/2"	Torque Wrench
1/2"	Breaker Bar
1/2"	15 mm Socket
1/2"	18 mm Socket
1/2"	30 mm Deep Socket
	21 mm Open End Wrench
	Trim Tool
	Paint Marker
	Pry Bar
	Wire Brush
	Pocket Screwdriver
	Hammer
	Snap Ring Pliers
	Feeler Gauge
	Exhaust Stand
	Block Of Wood
	Drain Pan
	Transmission Jack

Drive	Tool Name
	2-Jaw Puller
	Bearing Separator
	Heat Gun
	Shop Rag
	Fluid Suction Device
	Vacuum Pump Kit

Tool Number	Essential Special Service Tool
307-003	Transmission Holding Fixture
308-938	Companion Flange Nut Remover/Installer
308-810	Syncro Gear Pack Remover
205-153	Adapter For 303-224 (Handle)
308-809	Syncro Gear Pack Installer
308-808	Rear Flange Installer
308-811	Rear Seal Installer
308-812	Detent Remover
416-D002	Vacuum Pump Kit

Service Procedure

- 1. Does the shifter move into the first and second gear positions when attempting to engage these gears but the vehicle will not move?
 - (1). Yes proceed to Step 2.
 - (2). No this article does not apply. Refer to Workshop Manual (WSM), Section 308-03A for normal diagnostics.
- 2. Remove the transmission from the vehicle. Refer to WSM, Section 308-03A.
- **3.** Disassemble the transmission to the point where the 1-2 shift fork and 2nd gear can be accessed. Refer to the transmission disassembly procedure in WSM, Section 308-03A. Perform Steps 1 and 2 of this procedure then perform Steps 10 through 29. Do not proceed to Step 30.
 - (1). Steps 14 and 15 are only necessary for 2018 vehicles.

(2). In Step 17, only remove the shift rail detents in the rear transmission housing. It is not necessary to remove the other shift rail detents.

- Replace the 1st/2nd shift fork, the mainshaft 2nd gear, and the 1st/2nd gear synchronizer hub and sleeve. Refer to WSM, Section 308-03A.
- **5.** Reassemble the transmission. Refer to the transmission assembly procedure in WSM, Section 308-03A and perform Steps 18 through 52.
 - (1). Steps 46 and 47 are only necessary for 2018 vehicles.
- 6. Install the transmission into the vehicle. Refer to WSM, Section 308-03A.

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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.