TECHNICAL SERVICE BULLETIN
Vibration/Shudder During Light Throttle Tip In At Highway Speeds (8,9,10 Gear) With No DTCs Present - Built On Or Before 12-May-2022

22-2224
09 June 2022

Model:

Ford 2021-2022 F-150	Engine: 2.7L EcoBoost Engine: 3.5L EcoBoost Engine: 3.5L PowerBoost Built on or before 12-May-2022

Issue: Some 2021-2022 F-150 vehicles equipped with a 2.7L EcoBoost, 3.5L EcoBoost, or 3.5L PowerBoost and built on or before 12-May-2022 may exhibit a vibration/shudder felt during light throttle tip in at highway speeds (8,9,10 gear) and no diagnostics trouble codes (DTCs) present. This may be due to various software parameters in the powertrain control module (PCM). To correct the condition, follow the Service Procedure to reprogram the PCM.

Action: Follow the Service Procedure to correct the condition if the vehicle meets all of the following criteria:

- 2021-2022 F-150
- Built on or before 12-May-2022
- Any one of the following engines:
  - 2.7L EcoBoost
  - 3.5L EcoBoost
  - 3.5L PowerBoost
- Vibration/shudder felt during light throttle tip in at highway speeds (8,9,10 gear) and no DTCs present

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
2021-2022 F-150 2.7L/3.5L EcoBoost: Reprogram The PCM Following The Service Procedure (Do Not Use With Any Other Labor Operations)	222224A	0.3 Hrs.
2021-2022 F-150 3.5L PowerBoost: Reprogram The PCM And Any Other Modules Required By The Software Update And Service Procedure (Do Not Use With Any Other Labor Operations)	MT222224	Actual Time

Repair/Claim Coding

Causal Part:	RECAL
Condition Code:	04

Service Procedure

NOTE: Some vibration felt during acceleration or throttle tip-in is characteristic to the vehicle. If a 0.5 order engine vibration is detected at/or below 0.02g when measured at the driver seat track, this is considered a normal characteristic of the vehicle and no repairs should be performed.

1. Is the vehicle equipped with a 3.5L PowerBoost engine?

(1). Yes - proceed to Step 2.

(2). No - reprogram the PCM using the latest software level of the appropriate Ford diagnostic scan tool. 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.

2. Reprogram the PCM using the latest software level of the appropriate Ford diagnostic scan tool. Follow all on-screen instructions carefully to complete all coordinated module software updates.

NOTE: When performing the PCM software update on the 3.5L PowerBoost engine, additional modules may receive software updates. Depending on vehicle features, the coordinated software update includes the PCM, secondary on-board diagnostic module C (SOBDMC), anti-lock brake system (ABS) module and/or battery energy control module (BECM).

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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