



STAR ONLINE PUBLICATION



Case Number: S2321000008

Release Date: September 2023

Symptom/Vehicle Issue: Malfunction Indicator Lamp (MIL) Illumination, Diagnostic Trouble Codes (DTCs) P0731 – Gear 1 Shift Incorrect Ratio, And/Or P07D9 – Gear Shift Incorrect Ratio, Set.

Discussion: Some customers may experience a MIL illumination. In addition, they may also experience a harsh transmission shift condition. Upon investigation, the technician may find DTCs P0731 and/or P07D9 set in the Transmission Control Module (TCM). Vehicles with this condition will have relatively low miles on them.

The concern may be due to the shift adaptives not being properly set at the factory. If the technician is working on a vehicle with the above condition, please perform the following repair procedure before replacing any parts.

Repair Procedure:

1. Clear all DTCs that may be set.
2. Using wiTECH, perform the transmission “Reset Adaptives” routine located under TCM “Misc. Functions” and follow all on-screen prompts.
3. Using wiTECH, perform the transmission “QuickLearn” routine located under TCM “Misc. Functions” and follow all on-screen prompts.
4. Take the vehicle on a thorough test drive and re-evaluate the concern. Did the DTCs reset or harsh shift condition return?
 - a. Yes>>> This document no longer applies. Please follow normal published diagnostics for the concern.
 - b. No>>> Repairs are complete. No further action is necessary.

This document does not authorize warranty repairs. This communication documents a record of past experiences. STAR Online does not provide any conclusions about what is wrong with the vehicle. Rather, it captures all previous cases known that appear to be similar or related to the vehicle symptom / condition. You are the expert, and you are responsible for deciding on the appropriate course of action.

Contact STAR Center, or your Technical Assistance Center Via TechConnect, eCONTACT or Service Library entry if no solution is found.