2020 - 2021 Corvette: GM TechLink: Internal Transmission Faults Not Serviceable at the Dealership

Internal Transmission Faults Not Serviceable at the Dealership

April 13, 2021

GM TechLink

A Service Transmission message or a Service Engine Soon message may be displayed on the Driver Information Center of some 2020-2021 Corvettes equipped with the DCT TR9080 transmission (RPO M1L) (Fig. 18) along with DTCs P2838 (Shift Fork 2 Position Sensor Circuit Low), P2839 (Shift Fork 2 Position Sensor Circuit High) or P283A (Shift Fork 2 Position Sensor Circuit Intermittent).



Fig. 18

If any combination of these DTCs have set (current or in history), check circuit integrity on circuit 7812 between the Transmission Control Module (TCM) (Fig. 19, #1) and the transmission. Check the terminal tension as well as for a possible short to ground.

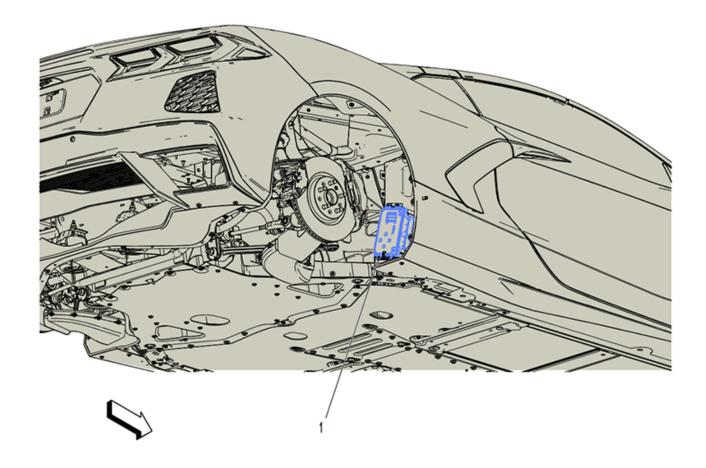


Fig. 19

If any issues are found, repair as needed and verify proper vehicle operation. If no issues are noted, the transmission would need to be replaced as anything related to the Odd Sensor Module (OSM) is not serviced.

The Odd Sensor Module (Fig. 20) is located in the shift fork assembly and contains the transmission input shaft speed sensor – odd gears and the shift fork 1 position sensor and shift fork 2 position sensor. The TCM uses the output speed sensor signal along with the even and odd input shaft speed sensor signals to determine transmission line pressure, shift patterns, and the correct gear ratio.



Fig. 20

DTCs P1955 and P0867

In any instance where the vehicle has a current or history DTC P1955 and P0867 stored, the transmission fluid level should be checked and cleaning procedures followed according to Bulletin #21-NA-033. If DTCs P1955 and P0867 return, it is related to a loss of system pressure condition that is being investigated by Engineering.

TIP: DTC P1955 usually will not set as the only code. If it is among several codes stored, it is likely the cause of the other DTCs. A Main Control Valve (MCV) replacement will not repair vehicles with DTC P1955 set.

Refer to the latest version of #PIP5709 for more information on Dual Clutch Transmission part restrictions.

- Thanks to Steve Schipansky

Online URL:

https://www.corvetteactioncenter.com/tech/knowledgebase/article/2020-2021-corvette-gm-techlink-internal-transmission-faults-not-serviceable-at-the-dealership-1508.html