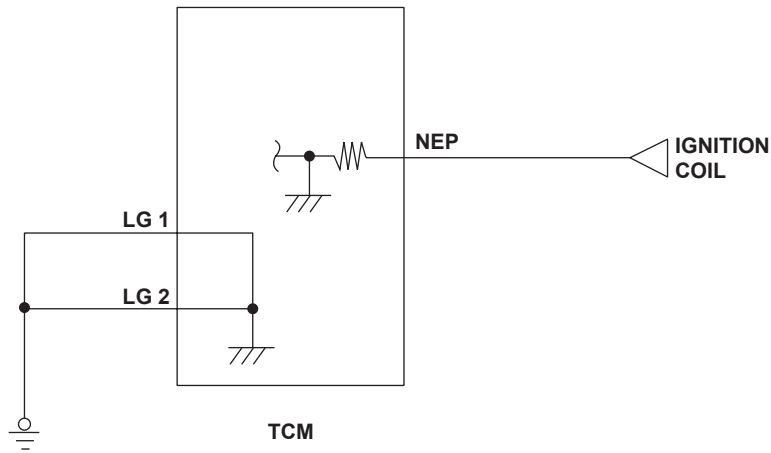# Advanced Diagnostics

DTC P0725: Engine Speed Input Circuit Malfunction

P0725-0101

General Description

The transmission control module (TCM) converts the engine ignition signal into an engine speed signal. The CVT drive pulley speed sensor detects the number of revolutions of the gear on the drive pulley and outputs a pulsing signal to the TCM. The TCM converts the pulsing signal into the drive pulley speed. If the engine speed is lower than the value estimated based on the drive pulley speed when the shift lever is in D, L, or R position, a malfunction is detected and a DTC is stored.

Monitor Execution, Sequence, Duration, DTC Type

Execution	Under the Enable Conditions
Sequence	None
Duration	15 seconds
DTC Type	One drive cycle, MIL ON, D indicator blinks

Enable Conditions

Condition	Minimum	Maximum
Drive pulley speed	600 rpm*	—
	300 rpm**	
Shift lever position	D, L, or R	

* : When the shift lever is in D or L position.
** : When the shift lever is in R position.

Malfunction Threshold

The drive pulley speed > the engine speed estimated by the TCM by a factor of 1.8 for at least 15 seconds.

Driving Pattern

Start the engine. Hold the engine at 600 rpm or more in D position for at least 15 seconds.

- If you have difficulty duplicating the DTC, retest after turning off electrical components such as the audio system and the A/C.
- Drive the vehicle in this manner only if the traffic regulations and ambient conditions allow.

Diagnosis Details

Conditions for illuminating the MIL
When a malfunction is detected, the MIL comes on and the DTC and the freeze frame data are stored.

Conditions for clearing the MIL
The MIL, the DTC, and the freeze frame data can be cleared by using the scan tool Clear command or by disconnecting the battery.