Transmission Drive Cycle Test

NOTE: Always drive the vehicle in a safe manner according to driving conditions and obey all traffic laws, do not exceed posted limits.

NOTE: The Transmission Drive Cycle Test must be followed exactly. Transmission failure must occur 4 times consecutively for a shift error DTC to be set, and 5 times consecutively for a continuous Torque Converter Clutch (TCC) DTC to set.

NOTE: When carrying out the Transmission Drive Cycle Test, use the Solenoid Operation Chart for correct solenoid operation. Refer to Pinpoint Tests — OSC Equipped Vehicle in this section.

After carrying out the Transmission Drive Cycle Test check for DTCs.

- 1. Check for DTCs. Refer to the Diagnostic Trouble Code (DTC) Charts in this section.
- 2. Warm engine to normal operating temperature.
- 3. Make sure transmission fluid level is correct.
- 4. With the transmission in the (D) position, moderately accelerate from stop to 80 km/h (50 mph). This allows the transmission to shift into 5th gear. Hold speed and throttle steady for a minimum of 15 seconds.
- 5. With the transmission in 5th gear and maintaining steady speed and throttle opening, lightly apply and release the brake to operate the stop lamps. Then hold speed and throttle steady for a minimum of 5 seconds.
- 6. Brake to a stop and remain stopped for a minimum of 20 seconds.
- 7. Repeat Steps 4 through 6 at least 5 times consecutively.
- 8. Check for DTCs.

After On-Board Diagnostic (OBD)

NOTE: The vehicle wiring harness, PCM and non-transmission sensors may affect transmission operations. Repair these concerns first.

After the On-Board Diagnostic (OBD) procedures are completed, repair all DTCs.

Begin with non-transmission related DTCs, then repair any transmission related DTCs. Refer to the <u>Diagnostic Trouble Code (DTC) Charts</u> in this section for information on condition and symptoms. This chart will be helpful in referring to the correct manual(s) and aids in diagnosing internal transmission concerns and external non-transmission inputs. The pinpoint tests are used in diagnosing transmission electrical concerns. Make sure that the vehicle wiring harness and the PCM are diagnosed as well. The Powertrain Control/Emissions Diagnosis (PC/ED) manual will aid in diagnosing non-transmission electronic components.

Before Pinpoint Tests

NOTE: Prior to entering pinpoint tests, check the PCM wiring harness for correct connections, bent or broken pins, corrosion, loose wires, correct routing, correct seals and their condition. Check the PCM, sensors and actuators for damage. Refer to the Powertrain Control/Emissions Diagnosis (PC/ED) manual.

NOTE: If a concern still exists after electrical diagnosis, refer to <u>Diagnosis By Symptom</u> in this section.

If DTCs appear while performing the transmission drive cycle test, refer to the <u>Diagnostic Trouble Code (DTC)</u> <u>Charts</u> in this section for the appropriate repair procedure. Prior to entering pinpoint tests, refer to any TSBs for transmission concerns.