

P2762, P2763, or P2764 Torque Converter Clutch (TCC) Pressure Control Solenoid System

Diagnostic Instructions

- Perform the Diagnostic System Check – Vehicle on page 6-60 prior to using this diagnostic procedure.
- Review Strategy Based Diagnosis on page 6-57 for an overview of the diagnostic approach.
- Diagnostic Procedure Instructions on page 6-58 provides an overview of each diagnostic category.

DTC Descriptors

DTC P2762: Torque Converter Clutch (TCC) Pressure Control Solenoid System Performance

DTC P2763: Torque Converter Clutch (TCC) Pressure Control Solenoid Control Circuit High Voltage

DTC P2764: Torque Converter Clutch (TCC) Pressure Control Solenoid Control Circuit Low Voltage

Circuit/System Description

The torque converter clutch (TCC) pressure control solenoid is part of the control solenoid (w/body and TCM) valve assembly and is not serviced separately. The TCM supplies 12 volts to the TCC pressure control solenoid through the high side driver 2 circuit. The TCM controls the TCC solenoid through the TCC solenoid control circuit. The normally low TCC pressure control solenoid flows fluid to the TCC when commanded ON and exhausts fluid when commanded OFF. The TCC solenoid regulates the transmission fluid pressure to the TCC.

Conditions for Running the DTC

P2762

- DTC P2762 has not failed this ignition cycle.

- The engine speed is greater than 500 RPM for 5 seconds or greater.
- The ignition voltage is between 8.6–19.0 volts.

P2763

- DTC P2763 has not failed this ignition cycle.
- The engine speed is greater than 500 RPM for 5 seconds or greater.
- The ignition voltage is between 8.6 volts and 19.0 volts.
- The high side driver is enabled.

P2764

- DTC P2764 has not failed this ignition cycle.
- The engine speed is greater than 500 RPM for 5 seconds or greater.
- The ignition voltage is between 8.6–19.0 volts.
- The high side driver is enabled.

Conditions for Setting the DTC

P2762

The TCM detects an invalid voltage in the TCC pressure control solenoid circuit for 4.4 seconds or greater in a 5.0 second sample.

P2763

The TCM detects high voltage on the TCC pressure control solenoid control circuit for 4.4 seconds or greater in a 5.0 second sample.

P2764

The TCM detects low voltage on the TCC pressure control solenoid control circuit for 4.4 seconds or greater in a 5.0 second sample.

Action Taken When the DTC Sets

P2762

DTC P2762 is a Type C DTC.

P2763 and P2764

- DTCs P2763 and P2764 are Type A DTCs.
- The TCM inhibits TCC.
- The TCM commands maximum line pressure.
- The TCM freezes transmission adaptive functions.
- The TCM forces High Side Drive 1 and 2 OFF.

Conditions for Clearing the DIC/DTC

- DTC P2762 is a Type C DTC.
- DTCs P2763 and P2764 are Type A DTCs.

Reference Information

Description and Operation

Transmission General Description on page 17-278

DTC Type Reference

Powertrain Diagnostic Trouble Code (DTC) Type Definitions on page 6-61

Scan Tool Reference

Control Module References on page 6-1 for scan tool information

Circuit Verification

- 1). Ensure the transmission fluid temperature is between 50–80°C (122–176°F).
- 2). Perform the Control Solenoid Valve and Transmission Control Module Assembly Cleaning on page 17-99 to dislodge debris and free up the valves.
- 3). Operate the vehicle in 2nd gear long enough to ensure at least a 3°C (5°F) rise in TCM temperature, then operate the vehicle to ensure TCC engagement for 5 seconds.
- 4). Operate the vehicle within the Conditions for Running the DTC to verify the DTC does not reset. You may also operate the vehicle within the conditions that you observed from the Freeze Frame/Failure Records data.

If the DTC does not reset, replace the control solenoid (w/body and TCM) valve assembly.

Repair Instructions

Important:

- Perform the Service Fast Learn Adapts on page 17-102 following all transmission related repairs.
- Before replacing the TCM, perform the Control Solenoid Valve and Transmission Control Module Assembly Inspection on page 17-98. Perform the Diagnostic Repair Verification on page 6-86 after completing the diagnostic procedure.

- Control Solenoid Valve and Transmission Control Module Assembly Cleaning on page 17-99
- Control Module References on page 6-1 for control solenoid (w/body and TCM) valve assembly replacement, setup, and programming

LAUNCH