P0961-P0963 Line Pressure Control (PC) 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 P0961: Line Pressure Control (PC) Solenoid System Performance **DTC P0962:** Line Pressure Control (PC) Solenoid Control Circuit Low Voltage **DTC P0963:** Line Pressure Control (PC) Solenoid Control Circuit High Voltage

Circuit/System Description

The line pressure control (PC) solenoid is part of the control solenoid (w/body and TCM) valve assembly and is not serviced separately. The line PC solenoid regulates the transmission fluid line pressure. The TCM varies the current to the normally high line PC solenoid valve from 0.1 amp for maximum line pressure, to 1.1 amps for minimum line pressure.

Conditions for Running the DTC

- The engine speed is greater than 500 RPM for 5 seconds.
- The ignition voltage is between 8.6 volts and 19.0 volts.
- The line PC solenoid is commanded ON.

Conditions for Setting the DTC

P0961

The TCM detects an invalid voltage in the line PC solenoid control circuit for 4.4 seconds in a 5.0 second sample.

P0962

The TCM detects low voltage on the line PC solenoid control circuit for 300 milliseconds in a 375 millisecond sample.

P0963

The TCM detects high voltage on the line PC solenoid control circuit for 300 milliseconds in a 375 millisecond sample.

Action Taken When the DTC Sets

P0961

- DTC P0961 is a Type C DTC.
- The TCM freezes transmission adaptive functions.

P0962

- DTC P0962 is a Type A DTC.
- The TCM defaults the transmission to 3rd gear if the current gear is 1st, 2nd, or 3rd, or 5th gear if the current gear if 4th, 5th, or 6th gear.
- The TCM inhibits the torque converter
- clutch (TCC).
- The TCM commands maximum line pressure.
- The TCM freezes transmission adaptive functions.

P0963

- DTC P0963 is a Type C DTC.
- The TCM freezes transmission adaptive functions.
- The TCM commands maximum line pressure.

Conditions for Clearing the DIC/DTC

- DTCs P0961 and P0963 are Type C DTCs.
- DTC P0962 is a Type A DTC.

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/System Verification

- Ensure the transmission fluid temperature is between 50–80°C (122–176°F).
- 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 in Park 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