P0601-P0604 or P062FTransmission Control Module (TCM) Memory

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 P0601: Transmission Control Module (TCM) Read Only Memory (ROM)

DTC P0602: Transmission Control Module (TCM) Not Programmed

DTC P0603: Transmission Control Module (TCM) Long Term Memory Reset DTC P0604: Transmission Control Module (TCM) Random Access Memory

(RAM)

DTC P062F: Transmission Control Module (TCM) Long Term Memory

Performance

Circuit/System Description

This is an internal fault detection of the control solenoid (w/body and TCM) valve assembly. This fault is handled inside the control solenoid (w/body and TCM) valve assembly and no external circuits are involved.

Conditions for Running the DTC

The ignition is ON.

Conditions for Setting the DTC

The control solenoid (w/body and TCM) valve assembly has detected an internal malfunction.

Action Taken When the DTC Sets

- DTCs P0601, P0602, P0603, P0604, and P062F are Type A DTCs.
- The TCM shifts to a default gear, shuts down, and turns OFF.

Conditions for Clearing the DTC

DTCs P0601, P0602, P0603, P0604, and P062F are Type A DTCs.

Reference Information

Description and Operation

Electronic Component Description on page 17-279 for control solenoid (w/body and TCM) valve assembly

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

- Engine running for at least 1 minute.
- 2). Ignition OFF for 30 seconds.
- Ignition ON, verify that DTC P0602 is not set.

If the DTC is set, program the transmission control module (TCM). If the DTC resets, replace the control solenoid (w/body and TCM) valve assembly.

 Observe the DTC information with a scan tool. DTCs P0601, P0603, P0604, and P062F should not set.

If a DTC sets, replace the control solenoid (w/body and TCM) valve assembly.

 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.

Repair Instructions

Important: Perform the Service Fast Learn Adapts on page 17-102 any time a

transmission related component is serviced. Perform the Diagnostic Repair Verification on page 6-86 after completing the diagnostic procedure. Control Module References on page 6-1 for control solenoid (w/body and TCM) valve assembly replacement, setup, and programming