

## DTC P0601-P0604 or P062F

### Diagnostic Instructions

- Perform the [Diagnostic System Check - Vehicle](#) prior to using this diagnostic procedure.
- Review [Strategy Based Diagnosis](#) for an overview of the diagnostic approach.
- [Diagnostic Procedure Instructions](#) 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 carried out inside the control solenoid (w/body and TCM) valve assembly and no external circuits are involved.

### Conditions for Running the DTC

- The control solenoid (w/body and TCM) valve assembly runs the program to detect an internal fault when the key is ON or the engine is running.
- Ignition voltage is between 8.6–18.0 volts – DTC P062F only.

### Conditions for Setting the DTC

#### **P0601**

The read only memory (ROM) test has failed 5 or more times.

#### **P0602**

The transmission control module (TCM) has detected no start program.

#### **P0603**

The TCM has detected a memory checksum error.

#### **P0604**

The TCM random access memory (RAM) test has failed 5 or more times.

#### **P062F**

The TCM has detected non-volatile memory is incorrect during power-down.

#### **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.

#### **Diagnostic Aids**

When attempting to set TCM internal DTCs let the engine run for at least 1 minute and then shut the engine off for at least 30 seconds. Following this procedure will allow a complete TCM shutdown. Reprogram the TCM and retest the DTC to see if the DTC resets.

#### **Reference Information**

##### **Description and Operation**

[Electronic Component Description](#)

##### **DTC Type Reference**

[Powertrain Diagnostic Trouble Code \(DTC\) Type Definitions](#)

#### **Circuit/System Verification**

1. Start the engine.
2. Let the engine run for 1 minute, then shut the engine OFF for at least 30 seconds.
3. Retest for DTCs P0601, P0602, P0603, P0604, and P062F.

#### **Circuit/System Testing**

Reprogram the TCM and recheck for DTCs.

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

#### **Repair Instructions**

- Perform the [Reset Transmission Adapts](#) if internal transmission repairs are performed.
- Perform the [Diagnostic Repair Verification](#) after completing the diagnostic procedure.