28 - DTC-Based Diagnostics/MODULE, Powertrain Control (PCM), 6.7L Diesel/Diagnosis and Testing

P2262-TURBOCHARGER BOOST PRESSURE NOT DETECTED - MECHANICAL

For a complete wiring diagram, refer to the Wiring Information.

NOTE:

If there are DTCs present with P2262, P226B, P226C, or P2563, address P2262, P226B, P226C, or P2563 before attempting to repair the other fault codes. If however, these DTCs are accompanied by DTC P0471, both DTCs should be addressed and repaired.

Theory of Operation

The Variable Geometry Turbocharger (VGT) is electronically activated by the Powertrain Turbo Actuator. The Turbo Actuator is a smart device and receives information via the J1939 BUS from the Powertrain Control Module (PCM). The Turbo Actuator performs its own diagnostics and reports failures back to the PCM using the J1939 BUS. The PCM then decodes the error message and converts it to a fault code. The PCM lights the MIL lamp immediately after the diagnostic runs and fails. The PCM will turn off the MIL lamp immediately after this diagnostic runs and passes in four consecutive drive cycles.

When Monitored:

Continuously with ignition on.

• Set Condition:

The commanded position and the actual position do not match over a calibrated time.

Possible Causes

SOOT BUILD UP ON TURBOCHARGER

TURBOCHARGER

Always perform the Pre-Diagnostic Troubleshooting procedure before proceeding. (Refer to 28 - DTC-Based Diagnostics/MODULE, Powertrain Control (PCM) - Standard Procedure).

1. VEHICLE CONFIGURATION

1. The repair procedure is different depending on whether the vehicle is a Pick Up or Chassis Cab.

Is the vehicle a Pick Up or Chassis Cab?

Pick • Go To 2

Up

Chassis • Go To 4

Cab

2. OTHER DTCS PRESENT

1. Turn ignition on.

2. With the scan tool, read DTCs.

Are there any communication DTCs related to the J1939 Datalink present?

- Yes Diagnose and repair the communication DTCs before proceeding.
 - Perform the POWERTRAIN VERIFICATION TEST 6.7L. (Refer to 28 DTC-Based Diagnostics/ MODULE, Powertrain Control (PCM) - Standard Procedure).

No • Go To 3

3. TURBOCHARGER CLEANING

NOTE: Do not erase the DTC before attempting to run the VG Turbocharger Cleaning procedure. The procedure can only run if the P2262, P226B, P226C, or P2563 are present (active, pending or stored).

- 1. Reconnect the Turbo Actuator harness connector.
- 2. Turn ignition on.
- 3. With the scan tool, navigate to miscellaneous functions and initialize the VG Turbocharger Cleaning Procedure. Follow the directions on the scan tool completely.

NOTE: When the procedure is initialized you will see one of two messages on the screen.

Which message displayed on the tool?

Turbo
The Turbocharger does not need cleaning, or cleaning of the Turbocharger will not fix the stick condition.
If DTC P2262, P226B, P226C, or P2563 are active or pending, replace the Turbocharger assembly. If the DTC is stored, erase the DTC. Perform the DIESEL AFTERTREATMENT VALIDATION - 6.7L Procedure.
(Refer to 28 - DTC-Based Diagnostics/MODULE, Powertrain Control (PCM) - Standard Procedure).
to be cleaned;

The Turbocharger cleaning has initiated. Fasten the cleaning tool to the vehicle and follow the instructions on the screen completely. After the first attempt at cleaning is completed the test will run again automatically and determine if the Turbocharger has been cleaned. The scan tool can make up to three attempts to clean the Turbocharger before failing it. After the cleaning procedure has finished, the scan tool will display the results.
at If the scan tool displays VG Turbocharger cleaning was successful, the repair is complete. If the scan tool displays VG Turbocharger cleaning was unsuccessful, replace the Turbocharger assembly in accordance with the service information.

for 5 minutes prior Perform the DIESEL AFTERTREATMENT VALIDATION - 6.7L Procedure. (Refer to 28 - DTC-Based Diagnostics/MODULE, Powertrain Control (PCM) - Standard Procedure).

to injecting the

cleaner;

4. OTHER DTCS PRESENT

- 1. Turn ignition on.
- 2. With the scan tool, read DTCs.

Are there any communication DTCs related to the J1939 Datalink present?

Yes
Diagnose and repair those DTCs before replacing the Turbocharger assembly.

- No Replace the Turbocharger assembly in accordance with the service information.
 - Perform the DIESEL AFTERTREATMENT VALIDATION 6.7L Procedure. (Refer to 28 DTC-Based Diagnostics/MODULE, Powertrain Control (PCM) Standard Procedure).