PRODEMAND

YMMS: 2008 Chrysler Town & Country Touring
Engine: 3.8L Eng
VIN:

Jan 25, 2021
License:
Odometer:

P0171-FUEL SYSTEM 1/1 LEAN

Additional Wiring

For complete wiring diagrams refer to:
SYSTEM WIRING DIAGRAMS for Grand Caravan.
SYSTEM WIRING DIAGRAMS for Town & Country.

Monitor Conditions

When Monitored:
With the engine running in closed loop, the ambient/battery temperature above -7 C (20 F) and altitude below 8500 ft.

Set Conditions

- **Set Condition:**
  The PCM monitors the Adaptive Memory factor (a combination of Short Term Adaptive and Long Term Adaptive). If the total fuel addition exceeds a calibrated threshold for an extended period, a fuel system lean fault is stored. If the total fuel subtraction exceeds a calibrated threshold, a fuel system rich fault is stored. Two Trip Fault. Three good trips to turn off the MIL

Possible Causes

Possible Causes
INTERMITTENT DTC
EXHAUST SYSTEM LEAK
FUEL DELIVERY SYSTEM
ECT SENSOR, WIRING, OR CONNECTORS
MAP SENSOR, WIRING, OR CONNECTORS
O2 SENSOR, WIRING, OR CONNECTORS
ENGINE MECHANICAL SYSTEM
POWERTRAIN CONTROL MODULE (PCM)

Always perform the PRE-DIAGNOSTIC TROUBLESHOOTING PROCEDURE before proceeding.

Diagnostic Test

1. **DTC IS ACTIVE**
   Diagnose and repair any other active component or circuit DTCs before continuing with this procedure.
   Turn the ignition on.
   With the scan tool, select View DTCs. Copy DTC and Freeze Frame information.

Start the engine and allow it to reach operating temperature.

WARNING: *When the engine is operating, do not stand in direct line with the fan. Do not put your hands near the pulleys, belts, or fan. Do not wear loose clothing. Failure to follow these instructions can result in personal injury or death.*

NOTE: *Attempt to operate the vehicle under conditions similar to which the DTC was set.*

NOTE: *It may be necessary to test drive the vehicle within the DTC monitoring conditions in order for this DTC to set.*

With a scan tool, select View DTCs.
Is the status Active for this DTC?
Yes

1. Go to 2.

No

1. Refer to the *CHECKING FOR AN INTERMITTENT DTC Diagnostic Procedure.

2. **CHECKING THE EXHAUST SYSTEM FOR LEAKS**
   Perform the diagnostic procedure for *CHECKING THE EXHAUST SYSTEM FOR LEAKS .
   Were any problems found?
   Yes

   1. Repair as necessary in accordance with the Service Information.
   2. Perform PCM VERIFICATION TEST .

   No

   1. Go to 3.

3. **CHECKING THE FUEL DELIVERY SYSTEM**
   Perform the diagnostic procedure for *CHECKING THE FUEL DELIVERY SYSTEM .
   Were any problems found?
   Yes

   1. Repair as necessary in accordance with the Service Information.
   2. Perform PCM VERIFICATION TEST .

   No

   1. Go to 4.

4. **CHECKING THE ENGINE COOLANT TEMPERATURE SENSOR OPERATION**
   Perform the diagnostic procedure for *CHECKING THE ENGINE COOLANT TEMPERATURE SENSOR OPERATION .
   Were any problems found?
   Yes
   1. Repair as necessary in accordance with the Service Information.
   2. Perform PCM VERIFICATION TEST .

   No
   1. Go to 5.
5. **CHECKING THE MAP SENSOR OPERATION**
   Perform the diagnostic procedure for *CHECKING THE MAP SENSOR OPERATION .
   Were any problems found?
   Yes
   1. Repair as necessary in accordance with the Service Information.
   2. Perform PCM VERIFICATION TEST .

   No
   1. Go to 6.
6. **CHECKING THE OXYGEN SENSOR OPERATION**
   Perform the diagnostic procedure for *CHECKING THE OXYGEN SENSOR OPERATION .
   Were any problems found?
   Yes
   1. Repair as necessary in accordance with the Service Information.
   2. Perform PCM VERIFICATION TEST .

   No
   1. Go to 7.
7. **CHECKING THE ENGINE MECHANICAL SYSTEM**
   Perform the diagnostic procedure for *CHECKING THE ENGINE MECHANICAL SYSTEM .
   Were any problems found?
   Yes
   1. Repair as necessary in accordance with the Service Information.
   2. Perform PCM VERIFICATION TEST .

   No
   1. Go to 8.
8. **POWERTRAIN CONTROL MODULE (PCM)**
   Using the wiring diagram/schematic as a guide, inspect the wiring and connectors relative to the components tested in this procedure.
   Look for any chafed, pierced, pinched, or partially broken wires.
   Look for broken, bent, pushed out or corroded terminals.
   Monitor the scan tool data relative to the components tested in this procedure and wiggle test the wiring and connectors.

Look for the data to change or for a DTC to set during the wiggle test.
Refer to any Technical Service Bulletins that may apply.
Were any problems found?
Yes

1. Repair as necessary.
2. Perform PCM VERIFICATION TEST .

No

1. Replace and program the Powertrain Control Module (PCM) in accordance with the Service Information.
2. Perform PCM VERIFICATION TEST .