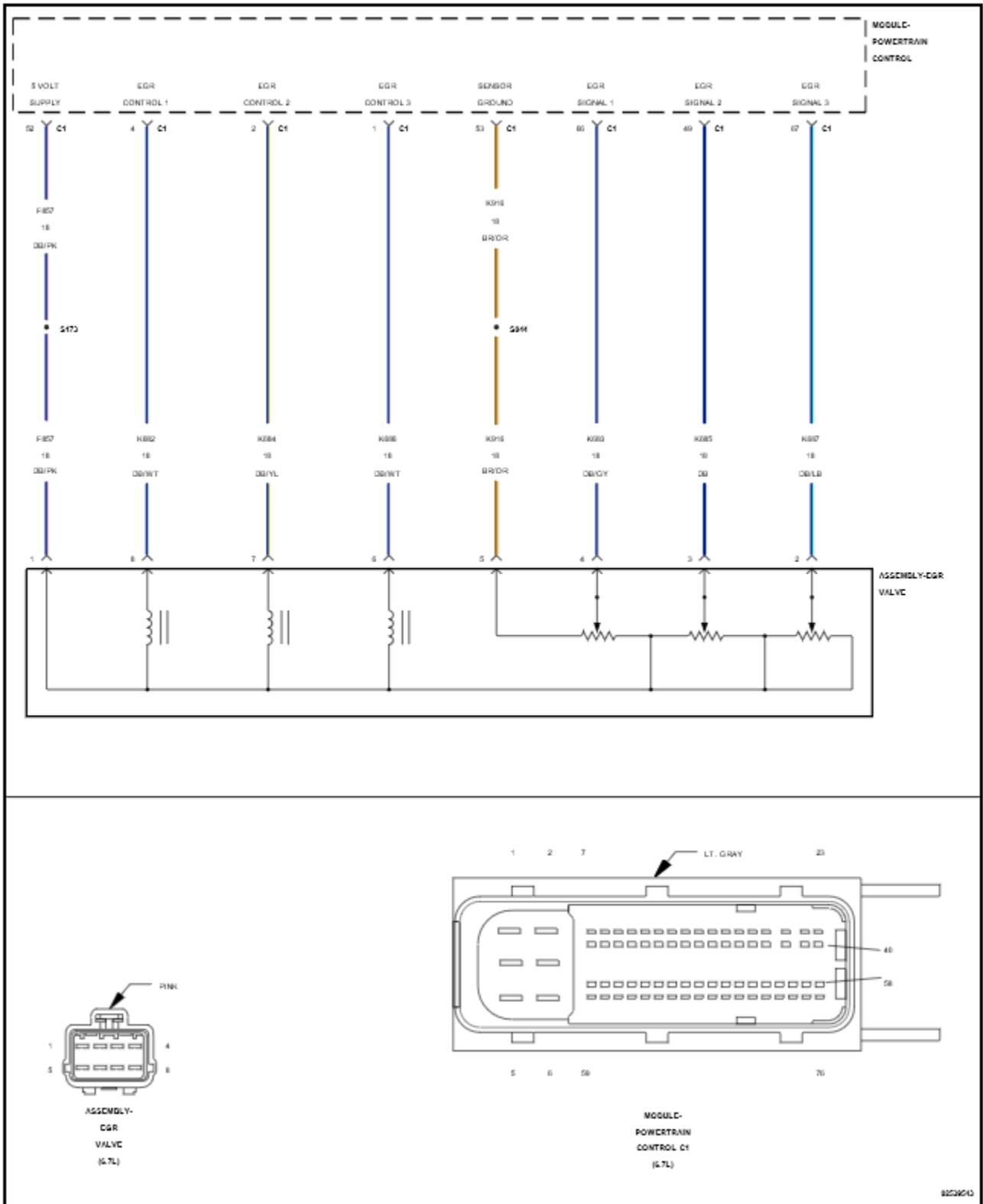


P049D-EGR CONTROL POSITION EXCEEDED LEARNING LIMIT



See PDF Image: P049D-EGR Control Position Exceeded Learning Limit Wiring Diagram.pdf for enhanced view

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

Theory of Operation

When the Exhaust Gas Recirculation (EGR) Valve is opening to a position and uses too much current to achieve that position, the diagnostic will fail. Also at every key on, the EGR valve tries to recalibrate it's position. The valve shaft will move until it comes into contact with the valve. If the distance the valve shaft must move is different by a calibrated amount than the original learned movement the diagnostic fails. The valve will perform this auto zero function at every key on and every time the valve is commanded closed throughout the engine operating cycle. The Powertrain Control Module (PCM) will illuminate the MIL lamp after the diagnostic runs and fails in two consecutive drive cycles. The PCM will also turn on the ETC lamp. During this time the PCM will no longer control the EGR valve. The MIL lamp will turn off once the diagnostic runs and passes in four consecutive drive cycles.

When Monitored:

At key on, while engine running.

Set Condition:

Motor effort exceeds a calibrated level or auto zero function fails.

Possible Causes

EGR VALVE

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

1. OTHER EGR VALVE DTCS PRESENT

1. Ignition on, engine not running.
2. With the scan tool, read DTCs.

Are there any EGR circuit DTCs present?

Yes

Repair the other EGR Valve DTCs before proceeding.

No

Remove and clean the EGR Valve with Mopar EGR system cleaner.
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2.EGR VALVE

1. Ignition on, engine not running.
2. With the scan tool, erase DTC.
3. Test drive the vehicle.
4. With the scan tool, read DTCs.

Did DTC P049D return?

Yes

Replace the EGR Valve in accordance with the service information.
Perform the POWERTRAIN VERIFICATION TEST - 6.7L. (Refer to 28 - DTC-Based Diagnostics/MODULE, Powertrain Control (PCM) - Standard Procedure).

No

Repair complete.
Perform the POWERTRAIN VERIFICATION TEST - 6.7L. (Refer to 28 - DTC-Based Diagnostics/MODULE, Powertrain Control (PCM) - Standard Procedure).