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Service Information Bulletin

SUBJECT	DATE
SPN 411/FMI 3	August 2012

Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0084	EPA10/ GHG14 DD Platform	SPN 411/FMI 3	Updated information.



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This diagnostic is typically Exhaust Gas Recirculation (EGR) Delta P Sensor Circuit Failed High.

Table 1.

SPN 411/FMI 3	
Description	EGR Delta Pressure Sensor Circuit High
Monitored Parameter	EGR Delta Pressure Sensor
Typical Enabling Conditions	Always Enabled
Monitor Sequence	None
Execution Frequency	Always Enabled
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL
Engine Reaction	Derate 25%
Verification	Engine Idle (1 minute)

1. Turn the ignition ON (key ON, engine OFF).
2. Using DDDL/DDRS Voltages Tab, monitor EGR delta p voltage (pin 109).
3. Is the EGR delta p voltage between 0.55 and 0.83 volts?
 - a. Yes, Go to step 7.
 - b. No, Go to step 4.
4. Remove the EGR delta p sensor from the mounting pad; leave electrical harness connected. Refer to section "Removal of the Delta P Sensor" .
5. Is the EGR delta p voltage between 0.55 and 0.83 volts?
 - a. Yes, Go to step 6.
 - b. No, Go to step 7.
6. Inspect the EGR venturi pipe's delta p pressure ports for blockage.
 - a. If excessive build up or blockage is found, clean the venture pipe and reinstall the sensor. Refer to section "Cleaning of the Exhaust Gas Recirculation Venturi Pipe Delta P Sensor Ports" . Refer to section "Installation of the Delta P Sensor" .
 - b. If no blockage is found, Go to step 7.
7. Disconnect the EGR delta p sensor harness connector.
8. Inspect the EGR delta p sensor harness connector for loose, bent, spread, rusted or corroded pins.
 - a. If pin damage is found, repair as necessary.
 - b. If no damage is found, Go to step 9.
9. Using DDDL/DDRS Voltages tab, monitor EGR delta p voltage (key ON, engine OFF) (pin 109).
10. Is the EGR delta p voltage 0 volts with sensor disconnected?
 - a. Yes, Go to step 11.
 - b. No, repair the shorted wires between pins 109 and 117 of the MCM2 120-pin connector.
11. Turn ignition OFF. Measure the resistance between pin 2 of the EGR delta p sensor connector and ground.
 - a. If the resistance is greater than 3 ohms, repair the open ground circuit between pin 2 of the EGR delta p sensor connector and 103 of the MCM2 120-pin connector.
 - b. If the resistance is less than 3 ohms, replace the EGR delta P sensor. Refer to section "Removal of the Delta P Sensor" . Inspect the EGR venturi pipe's delta p pressure ports for excessive build up or blockage. Verify repairs.