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Service Information Bulletin

SUBJECT	DATE
SPN 4077/FMI 3 and 4 - ALL YEARS	January 2013

Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0084	DD Platform	SPN 4077/FMI 3 - ALL YEARS	These procedures have been updated.
		SPN 4077/FMI 4 - ALL YEARS	



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2 SPN 4077/FMI 3 - ALL YEARS

This diagnostic is typically Hydrocarbon (HC) Doser Fuel Line Pressure (FLP) Sensor Circuit Failed High.

Table 1.

SPN 4077/FMI 3	
Description	Hydrocarbon (HC) Doser Fuel Line Pressure (FLP) Sensor Circuit failed high
Monitored Parameter	Hydrocarbon (HC) Doser Fuel Line Pressure Sensor
Typical Enabling Conditions	Always Enabled
Monitor Sequence	None
Execution Frequency	Always Enabled
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL
Engine Reaction	None
Verification	Engine Idle (1 minute)

1. Check for multiple codes.
 - a. If SPN 4077/FMI 3 and SPN 94/FMI 3 are present, repair the open in circuit between pin 104 of the Motor Control Module (MCM) 120-pin connector and pin 4 (DD15CT) (pin 2 DD15 only) of the HC doser Fuel Line Pressure (FLP) sensors.
 - b. If only SPN 4077/FMI 3 is present Go to step 2.
2. Disconnect FLP sensor connector.
3. Turn the ignition ON (key ON, engine OFF).
4. Connect DDDL 7.08 SP2 or newer. Does the code go inactive with the FLP sensor disconnected?
 - a. Yes; replace the FLP sensor.
 - b. No; Go to step 5.
5. Turn the ignition OFF (key OFF, engine OFF).
6. Disconnect the MCM 120-pin connector.
7. Measure the resistance across pins 1 and 2 (DD15CT) (1 and 4 DD15 only) of the FLP sensor connector.
 - a. If the resistance is less than 10K Ω , repair the short between pins 82 and 111 of the MCM 120-pin connector.
 - b. If the resistance is greater than 10K Ω , Go to step 8.
8. Measure the resistance between pin 104 of the MCM 120-pin connector and pin 4 (DD15CT) (pin 2 DD15 only) of the FLP sensor connector.
 - a. If the resistance is less than 5 Ω , repair the short to power between pin 82 of the MCM 120-pin connector and pin 1 (DD15CT) (pin 4 DD15 only) of the FLP sensor connector.
 - b. If the resistance is greater than 5 Ω , repair the open circuit between pin 104 of the MCM 120-pin connector and pin 4 (DD15CT) (pin 2 DD15 only) of the FLP sensor connector.

3 SPN 4077/FMI 4 - ALL YEARS

This diagnostic is typically Hydrocarbon (HC) Doser Fuel Line Pressure (FLP) Sensor Circuit Failed Low.

Table 2.

SPN 4077/FMI 4	
Description	Hydrocarbon (HC) Doser Fuel Line Pressure (FLP) Sensor Circuit Failed Low
Monitored Parameter	Hydrocarbon (HC) Doser Fuel Line Pressure Sensor
Typical Enabling Conditions	Always Enabled
Monitor Sequence	None
Execution Frequency	Always Enabled
Typical Duration	2 Seconds
Dash Lamps	MIL, CEL
Engine Reaction	None
Verification	Engine Idle (1 minute)

1. Check for multiple codes.
 - a. If SPN 100/FMI 4, SPN 4077/FMI 4, and SPN 3480/FMI 4 are present, Go to step 2.
 - b. If SPN 4077/FMI 4 and SPN 3480/FMI 4 are present, repair short to power between pin 104 of the MCM2 120-pin connector and the fuel line and FLP sensor. Clear codes. Verify repairs.
 - c. If only SPN 4077/FMI 4 is present, Go to step 2.
2. Disconnect the FLP sensor.
3. Turn the ignition ON (key ON, engine OFF).
4. Connect DDDL 7.08 SP2 or newer. Does the code go inactive with the FLP sensor disconnected?
 - a. Yes; replace the FLP sensor.
 - b. No; Go to step 5.
5. Turn the ignition OFF (key OFF, engine OFF).
6. Disconnect the MCM 120-pin connector.
7. Measure the resistance across pins 1 and 4 (DD15CT) (pins 2 and 4 DD15 only) of the FLP sensor connector.
 - a. If the resistance is less than 10K Ω , repair the short between pins 104 and 111 of the MCM 120-pin connector.
 - b. If the resistance is greater than 10K Ω , Go to step 8.
8. Measure the resistance across pins 2 and 4 (DD15CT) (pins 1 and 2 DD15 only) of the FLP sensor connector.
 - a. If the resistance is less than 10K Ω , repair the short between pins 104 and 82 of the MCM 120-pin connector.
 - b. If the resistance is greater than 10K Ω , Go to step 9.
9. Measure the resistance between pin 2 (DD15CT) (pin 1 DD15 only) of the FLP sensor harness connector and ground (battery ground lug by starter).
 - a. If resistance is less than 10K Ω , repair short to ground between pin 82 of the MCM 120-pin connector and the FLP sensor harness connector.
 - b. If the resistance is greater than 10K Ω , Go to step 10.
10. Measure the resistance between pin 1 (DD15CT) (pin 4 DD15 only) of the FLP sensor harness connector and ground (battery ground lug by starter).
 - a. If resistance is less than 10K Ω , repair the short to ground between pin 111 of the MCM 120-pin connector and the FLP sensor harness connector.
 - b. If the resistance is greater than 10K Ω , repair open circuit between pin 82 of the MCM 120-pin connector and pin 1 (DD15CT) (pin 4 DD15 only) of the FLP sensor harness connector.