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## Service Information Bulletin

| SUBJECT           | DATE         |
|-------------------|--------------|
| SPN 3471 FMI 3, 5 | January 2013 |

### Additions, Revisions, or Updates

| Publication Number / Title | Platform    | Section Title  | Change               |
|----------------------------|-------------|----------------|----------------------|
| DDC-SVC-MAN-0084           | DD Platform | SPN 3471 FMI 3 | Updated diagnostics. |
|                            |             | SPN 3471 FMI 5 |                      |



13400 Outer Drive, West, Detroit, Michigan 48239-4001  
 Telephone: 313-592-5000  
[www.demanddetroit.com](http://www.demanddetroit.com)

## 2 SPN 3471/FMI 3 - ALL YEARS

This diagnostic is typically Hydrocarbon (HC) Electronic Dosing Valve (EDV) Circuit Failed High.

**Table 1.**

| SPN 3471/FMI 3              |                                                   |
|-----------------------------|---------------------------------------------------|
| Description                 | Electronic Dosing Valve (EDV) Circuit Failed High |
| Monitored Parameter         | Electronic Dosing Valve (EDV) Circuit             |
| Typical Enabling Conditions | Doser Enabled                                     |
| Monitor Sequence            | None                                              |
| Execution Frequency         | Doser Enabled                                     |
| Typical Duration            | 2 Seconds                                         |
| Dash Lamps                  | MIL, CEL                                          |
| Engine Reaction             | Derate 10%                                        |
| Verification                | Engine Idle (1 minute)                            |

1. Disconnect the Electronic Dosing Valve (EDV) connector.
2. Turn the ignition ON (key ON, engine OFF).
3. Measure the voltage between pin 1 of the EDV connector and ground (battery ground lug by starter).
  - a. If the voltage is greater than 4.5 volts, repair the short to power between pin 1 of the EDV connector and pin 65 of the Motor Control Module (MCM) 120-pin connector.
  - b. If the voltage is less than 4.5 volts, Go to step 4.
4. Turn the ignition switch to the OFF position.
5. Disconnect the MCM 120-pin connector.
6. Measure the resistance between pin 1 and pin 2 of the EDV connector.
  - a. If the resistance is less than 10K ohms, repair short between pins 1 and 2 of the EDV connector and pins 64 and 65 of the MCM 120-pin connector.
  - b. If the resistance is greater than 10K ohms, replace the Metering Unit.
7. Using DDDL/DDRS 7.08 SP2 or newer, perform "Purge Hydrocarbon Doser" service routine to verify repairs.

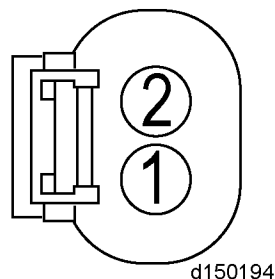
### 3 SPN 3471/FMI 5 - ALL YEARS

This diagnostic is typically Hydrocarbon (HC) Doser Circuit Failed Open.

**Table 2.**

| SPN 3471/FMI 5              |                              |
|-----------------------------|------------------------------|
| Description                 | HC Doser Circuit Failed Open |
| Monitored Parameter         | HC Doser Circuit             |
| Typical Enabling Conditions | Always Enabled               |
| Monitor Sequence            | None                         |
| Execution Frequency         | Always Enabled               |
| Typical Duration            | 2 Seconds                    |
| Dash Lamps                  | MIL, CEL                     |
| Engine Reaction             | Derate 10%                   |
| Verification                | Engine Idle                  |

1. Turn the ignition switch ON (key ON, engine OFF).
2. Check for multiple codes.
  - a. If the fault code SPN 3482/FMI 5 is active, in addition to SPN 3471/FMI 5, repair open circuit between pin 64 of the Motor Control Module (MCM) 120-pin connector and pin 2 of the Electronic Dosing Valve (EDV) and pin 2 of the Fuel Cutoff Valve (FCV) sensors.
  - b. If the only fault code SPN 3471/FMI 5 is active, Go to step 3.
3. Turn the ignition OFF (key OFF, engine OFF).
4. Disconnect the EDV.
5. Measure the resistance across pin 1 and pin 2 of the EDV.



- a. If the resistance is greater than 18 ohms, replace the EDV.
  - b. If the resistance is less than 10 ohms, Go to step 6.
6. Turn the ignition ON (key ON, engine OFF).
7. Measure the voltage between pin 2 of the EDV harness connector and ground (battery ground lug by starter).
  - a. If the voltage is between 11.5 and 12.5 volts, then repair the open between pin 1 of the EDV harness connector and pin 65 of the MCM 120-pin connector.
  - b. If the voltage is less than 4.5 volts, repair open circuit between pin 2 of the EDV harness connector and pin 64 of the MCM 120-pin connector.
8. Using DDDL/DDRS 7.08 SP2 or newer, perform "Purge Hydrocarbon Doser" service routine to verify repairs.