

1 03 56-17



Service Information Bulletin

SUBJECT	DATE
SPN 520251 (MCM) (GHG17) SPN 520252 (MCM) (GHG17)	March 2017

Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0193	GHG17	SPN 520251/FMI 4	These are new sections.
	Medium Duty	SPN 520252/FMI 3	

DiagnosticLink users: Please update the troubleshooting guides in DiagnosticLink with this newest version. To update the tool troubleshooting guide, open DiagnosticLink and from the Help – Troubleshooting Guides menu, select the appropriate troubleshooting manual, then click Update.



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2 SPN 520251/FMI 4 - GHG17

Pressure Control Valve (PCV) High Side Error

Table 1.

SPN 520251/FMI 4	
Description	Pressure Control Valve (PCV) High Side Error
Monitored Parameter	Pressure Control Valve (PCV) Circuit
Typical Enabling Conditions	Always ON
Monitor Sequence	None
Execution Frequency	Continuous When Enabling Conditions Met
Typical Duration	Two Seconds
Dash Lamps	MIL, CEL
Engine Reaction	Derate 30%
Verification	Parked Regen



WARNING: PERSONAL INJURY

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

- Always start and operate an engine in a well ventilated area.
- If operating an engine in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with the exhaust system or emission control system.



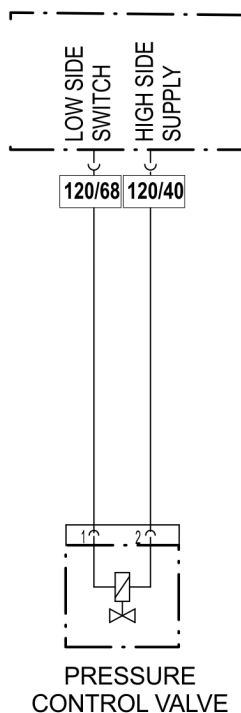
WARNING: PERSONAL INJURY

To avoid injury before starting and running the engine, ensure the vehicle is parked on a level surface, parking brake is set, and the wheels are blocked.



WARNING: ENGINE EXHAUST

To avoid injury from inhaling engine exhaust, always operate the engine in a well-ventilated area. Engine exhaust is toxic.



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Check as follows:

1. Disconnect the PCV connector.
2. Inspect the harness connector for bent, spread, or corroded pins. Is any damage found?
 - a. Yes; repair as necessary.
 - b. No; Go to step 3.
3. Disconnect the Motor Control Module (MCM) 120-pin connector.
4. Inspect the harness connector for bent, spread, or corroded pins. Is any damage found?
 - a. Yes; repair as necessary.
 - b. No; Go to step 5.
5. Measure the resistance between pin 1 of the PCV connector and pin 68 of the MCM 120-pin connector. Is the resistance greater than five ohms?
 - a. Yes; repair the open circuit between pin 1 of the PCV connector and pin 68 of the MCM 120-pin connector. Verify repairs.
 - b. No; Go to step 6.
6. Measure the resistance between pin 2 of the PCV connector and pin 40 of the MCM 120-pin connector. Is the resistance greater than five ohms?
 - a. Yes; repair the open circuit between pin 2 of the PCV connector and pin 40 of the MCM 120-pin connector. Verify repairs.
 - b. No; Go to step 7.
7. Measure the resistance between pins 1 and 2 of the PCV connector. Is the resistance greater than 10k ohms?
 - a. Yes; replace the fuel rail.
For DD5; Refer to section "Removal of the Fuel Rail"
For DD8; Refer to section "Removal of the Fuel Rail"
 - b. No; repair the short circuit between pins 1 and 2 of the PCV harness. Verify repairs.

3 SPN 520252/FMI 3 - GHG17

Pressure Control Valve (PCV) Low Side Error

Table 2.

SPN 520252/FMI 3	
Description	Pressure Control Valve (PCV) Low Side Error
Monitored Parameter	Pressure Control Valve (PCV) Circuit
Typical Enabling Conditions	Always ON
Monitor Sequence	None
Execution Frequency	Continuous When Enabling Conditions Met
Typical Duration	Two Seconds
Dash Lamps	MIL, CEL
Engine Reaction	Derate 30%
Verification	Parked Regen



WARNING: PERSONAL INJURY

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects, and other reproductive harm.

- Always start and operate an engine in a well ventilated area.
- If operating an engine in an enclosed area, vent the exhaust to the outside.
- Do not modify or tamper with the exhaust system or emission control system.



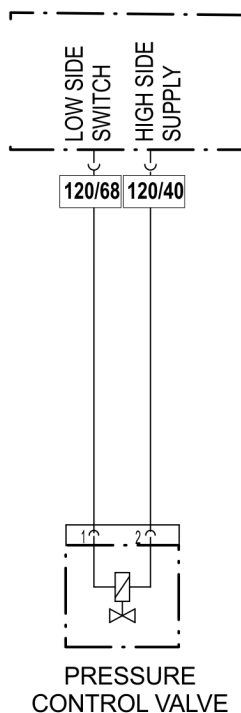
WARNING: PERSONAL INJURY

To avoid injury before starting and running the engine, ensure the vehicle is parked on a level surface, parking brake is set, and the wheels are blocked.



WARNING: ENGINE EXHAUST

To avoid injury from inhaling engine exhaust, always operate the engine in a well-ventilated area. Engine exhaust is toxic.



d150478

Check as follows:

1. Disconnect the PCV connector.
2. Inspect the harness connector for bent, spread, or corroded pins. Is any damage found?
 - a. Yes; repair as necessary.
 - b. No; Go to step 3.
3. Disconnect the Motor Control Module (MCM) 120-pin connector.
4. Inspect the harness connector for bent, spread, or corroded pins. Is any damage found?
 - a. Yes; repair as necessary.
 - b. No; Go to step 5.
5. Measure the resistance between pin 1 of the PCV and battery ground. Is the resistance less than 10k ohms?
 - a. Yes; repair the short to ground between pin 1 of the PCV harness connector and pin 68 of the MCM 120-pin connector. Verify repairs.
 - b. No; Go to step 6.
6. Measure the resistance between pin 2 of the PCV and battery ground. Is the resistance less than 10k ohms?
 - a. Yes; repair the short to ground between pin 2 of the PCV harness connector and pin 40 of the MCM 120-pin connector. Verify repairs.
 - b. No; replace the fuel rail. Verify repairs.
 For DD5; Refer to section "Removal of the Fuel Rail"
 For DD8; Refer to section "Removal of the Fuel Rail"