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Service Information Bulletin

SUBJECT	DATE
SPN 3464 (MCM) (GHG14)	June 2017

Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0084	GHG14 DD Heavy Duty	SPN 3464/FMI 16 - GHG14	This procedure has been updated for the GHG14 engine platform. Includes the updated links for replacement of the wastegate on the DD13 engine.

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 3464/FMI 16 – GHG14

Intake Manifold Pressure Too High (Restricted Mode)

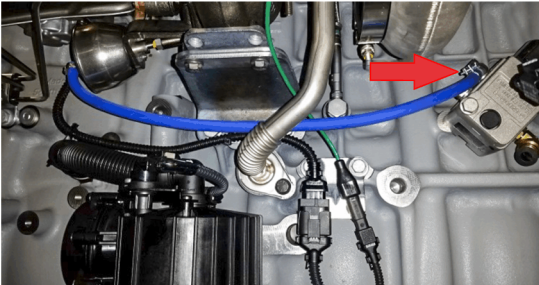
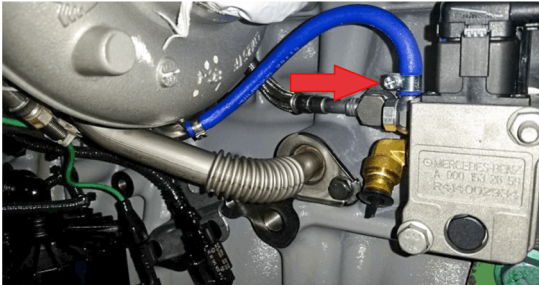
Table 1.

SPN 3464/FMI 16	
Description	This Fault Code Sets When the Intake Manifold Pressure is Higher Than Expected While the Vehicle is in Regeneration
Monitored Parameter	Intake Manifold Pressure
Typical Enabling Conditions	Engine Coolant Temperature greater than 65°C (149°F)
Monitor Sequence	None
Execution Frequency	Continuous When Enabling Conditions Met
Typical Duration	15 Seconds
Dash Lamps	MIL, CEL
Engine Reaction	None
Verification	Engine Coolant Greater than 65 °C (149°F) Drive at Steady Highway Speed With Loaded Trailer Engine rpm Greater than 1130 for a Minimum of Five Minutes

Check as follows:

1. Connect DiagnosticLink[®].
2. Turn the ignition ON (key ON, engine OFF).
3. Check for multiple fault codes. Are there any intake manifold pressure circuit or air system fault codes present?
 - a. Yes; diagnose the other fault codes first.
 - b. No; Go to step 4.
4. Check the Motor Control Module (MCM) software level. Is the MCM software level 2.1.1.47 ZGS 4 or greater?
 - a. Yes; Go to step 5.
 - b. No, update the MCM software using the latest server information. Verify repair. if the fault code returns, Go to step 5.
5. Compare the barometric pressure reading in DiagnosticLink to the local barometric pressure for your area. Is the reading within .07 bar (1 psi)?
 - a. Yes; Go to step 6.
 - b. No; replace the MCM.
6. Using DiagnosticLink, compare the intake manifold pressure reading to the barometric pressure reading. Are the readings within .10 bar (1.5 psi) of each other?
 - a. Yes; Go to step 9.
 - b. No; Go to step 7.
7. Turn the ignition OFF.
8. Disconnect and inspect the intake manifold pressure sensor electrical connector. Is there corrosion, fretting, or damage present?
 - a. Yes; replace the electrical connector and intake manifold pressure sensor. Verify repair.
 - b. No; replace the intake manifold pressure sensor. Verify repair.
9. Is the vehicle equipped with a DD15AT or DD13 engine?
 - a. Yes; Go to step 10.
 - b. No; replace the turbocharger. Refer to section "Removal of the DD15 and the DD16 Turbocharger". Verify repair.
10. Remove the rubber air line at the turbocharger wastegate solenoid.

Table 2.

DD15 AT	DD13
 <p style="text-align: right;">d090224</p>	 <p style="text-align: right;">d090225</p>

11. Connect a suitable gauge that can read up to 689 kPa (100 psi) and fit a ¼ inch rubber air line to the wastegate solenoid. Secure the rubber air line to the gauge and wastegate solenoid with clamps.

**WARNING: ENGINE EXHAUST**

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

**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: HOT EXHAUST**

During parked regeneration the exhaust gases will be extremely HOT and could cause a fire if directed at combustible materials. The vehicle must be parked outside.

12. Start and run the engine until the vehicle air pressure reaches 827 kPa (120 psi).
13. Stop the engine.
14. Turn the ignition ON (key ON, engine OFF).
15. Use DiagnosticLink to activate the turbo control wastegate in the I/O tab. Command the turbo control to 95%. Is the reading on the gauge between 262 and 296 kPa (38 and 43 psi)?
 - a. Yes; Go to step 17.
 - b. No; Go to step 16.
16. Disconnect and inspect the wastegate solenoid electrical connector. Is there corrosion, fretting or damage present?
 - a. Yes; repair as necessary. Verify repair.
 - b. No; replace the turbocharger wastegate actuator.
17. Is the vehicle equipped with a DD13 engine?
 - a. Yes; determine if the turbocharger and/or the wastegate needs to be replaced. Verify repair.
Refer to section "Removal of the GHG14 DD13 Turbocharger Wastegate Actuator"
Refer to section "Inspection of the GHG14 DD13 Turbocharger Wastegate Actuator"
Refer to section "Installation and Adjustment of the GHG14 DD13 Turbocharger Wastegate Actuator"
 - b. No; replace the turbocharger. Refer to section "Removal of the GHG14 DD15 Asymmetrical Turbocharger".
Verify repair.