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## Service Information Bulletin

SUBJECT	DATE
SPN 3217	December 2017

### Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0191	DD Platform	SPN 3217/FMI 2 - (ACM)	Updated the typical enabling conditions, repair verification, added "clear codes" to steps that include reprogramming the ACM. Added steps to clarify ACM and fuel map levels.

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 3217/ FMI 2 - GHG17

### Lambda Reading Rationality Check

**Table 1.**

SPN 3217/FMI 2	
Description	Goal of this Diagnostic is to Detect the Engine Out Lambda Signal Lower Than Expected in Engine No-Fueling Mode
Monitored Parameter	Inlet NOx Sensor
Typical Enabling Conditions	<ul style="list-style-type: none"> <li>• Engine at 1100 to 1800 rpm</li> <li>• Accelerator at Zero Percent</li> <li>• In DEF Dosing Mode</li> <li>• Coolant Temp Above 65°C (149°F)</li> <li>• Ambient Air Temp Above -18°C (0°F)</li> <li>• Ambient Pressure Above 752 mbar (10.9 psi)</li> <li>• Not in Regen Mode</li> </ul>
Monitor Sequence	Inlet NOx Sensor
Execution Frequency	Continuous When Enabling Conditions Met
Typical Duration	10 Seconds
Dash Lamps	MIL
Engine Reaction	None
Verification	Road Test at Operating Temperature with Engine Above 1100 rpm, Above 40% Load, while Not in Regeneration.

Check as follows:

1. Connect DiagnosticLink<sup>®</sup>.
2. Turn the ignition ON (key ON, engine OFF).
3. Check for multiple fault codes. Are there any aftertreatment system fault codes present?
  - a. Yes; diagnose the other fault codes.
  - b. No; Go to step 4.
4. Check the Aftertreatment Control Module (ACM) software level. Is the ACM software level lower than 7.56.7.0?
  - a. Yes; update the ACM software to the latest available on the server.
  - b. No; Go to step 5.
5. Is the ACM software level 7.56.7.0?
  - a. Yes; Go to step 6.
  - b. No; clear the fault codes then update the ACM using the latest software available on the server. Verify repair.
6. Is the fuel map ZGS 002 or higher?
  - a. Yes; replace the SCR inlet NOx sensor. Refer to section "Removal of the Selective Catalytic Reduction Inlet NOx Sensor". Verify repair.
  - b. No; clear the fault codes, then update the ACM using the latest software available on the server. Verify repair.