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## Service Information Bulletin

SUBJECT	DATE
SPN 4364/FMI 18 - GHG14	January 2013

### Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0084	DD Platform	SPN 4364/FMI 18 - GHG14	This procedure has been updated.



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## 2 SPN 4364/FMI 18 – GHG14

This diagnostic is typically SCR NOx Conversion Efficiency Low.

**Table 1.**

SPN 4364/FMI 18	
Description	SCR NOx Conversion Efficiency Very Low
Monitored Parameter	SCR NOx Conversion Efficiency
Typical Enabling Conditions	DEF Dosing Valve On, 1000 - 1500 rpm, 15 - 100% load
Monitor Sequence	None
Execution Frequency	Continuous when enabling conditions met
Typical Duration	30 Minutes
Dash Lamps	MIL
Engine Reaction	None
Verification	Parked Regen

1. Connect DDDL/DDRS 7.08 SP2 or newer.
2. Turn ignition ON (key ON, engine OFF).
3. Check for multiple codes.
  - a. If other codes are active in addition to SPN 4364/FMI 18, troubleshoot those first.
  - b. If only SPN 4364/FMI 18 is present, Go to step 4.
4. Turn ignition OFF (key OFF, engine OFF).
5. Using DEF test strip A0005850202 to check for diesel fuel or oil contamination of the DEF fluid. Do the test strips indicate contamination?
  - a. Yes; refer to appropriate OEM manual for DEF tank cleaning/flushing procedure.
  - b. No; Go to step 6.
6. Using a refractometer from the DEF Test Kit W060589001900, measure the DEF percentage. Is DEF percentage between 28% and 36%?
  - a. Yes; Go to step 7.
  - b. No; clean/flush the DEF tank, then Go to step 9. Refer to section "Flushing of the Diesel Exhaust Fluid System".
7. Visually check all DEF lines for physical damage (kinks, cracks, leaks or disconnects).
  - a. If damage is found, repair as necessary, Go to step 9.
  - b. If no damage is found, Go to step 8.
8. Unbolt DEF Dosing Unit from aftertreatment only. Do not disconnect DEF hoses or electrical connector. Refer to section "Removal of the GHG14 Dosing System Doser"
9. Turn ignition ON (key ON, engine OFF).
10. Perform a DEF quantity test service routine and record the amount of DEF fluid dispensed. Is the dispensed DEF fluid level between 108-132 mL (3.7-4.5 oz.)?
  - a. Yes; reinstall DEF Dosing Unit. Perform Selective Catalytic Reduction Airless Dosing System (SCR ADS) Self-Check Routine. Go to step 11.
  - b. No; replace Dosing Unit. Refer to section "Removal of the Diesel Exhaust Fluid Metering Unit". Verify repairs by running SCR ADS Self-Check Routine.
11. Was the self-check successful?
  - a. Yes; Go to step 12.
  - b. No; contact the Customer Support Center at (800) 445-1980 for further instruction.
12. Monitor (chart) the following parameters.
  - ASL102 Engine Speed
  - AS018 SCR Inlet Temperature
  - AS019 SCR Outlet Temperature
  - AS035 SCR Inlet NOx sensor
  - AS036 SCR Outlet NOx sensor

- AS101 NOx Conversion Efficiency

**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.

13. Start engine and perform a parked regeneration. Refer to section "Performing a Parked Regeneration". Does the NOx conversion efficiency rise and stay above 85% (0.85) during the regeneration?
  - a. Yes; clear fault codes and release vehicle.
  - b. No; send the log files to the Detroit™ Customer Support Center at (800) 445-1980 for further analysis and instruction.