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## Service Information Bulletin

SUBJECT	DATE
SPN 4374 (ACM) (GHG14)	October 2014

### Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0084	GHG14 DD Platform	4374/FMI 0 - GHG14	This FMI has been heavily revised.



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## 2 SPN 4374/FMI 0 – GHG14

Under Pressurized Diesel Exhaust Fluid System

**Table 1.**

SPN 4374/FMI 0	
Description	This code sets when the Diesel Exhaust Fluid (DEF) Pump Speed is Higher than Normal for a given DEF Pressure
Monitored Parameter	DEF Pump Speed, DEF Pressure
Monitor Sequence	None
Execution Frequency	Continuous when enabling conditions met
Typical Duration	Continuous until resolved
Dash Lamps	MIL, CEL
Engine Reaction	Derate 25%
Verification	SCR ADS Self Check

Possible causes:

- Restriction in the DEF line between the DEF tank and the DEF pump
- Restriction in the DEF line between the DEF pump and the DEF dosing unit
- Air in the DEF line between the DEF tank and the DEF pump
- Restriction in the DEF pump
- Failed DEF pump

Check as follows:

1. Connect DiagnosticLink<sup>®</sup>.
2. Turn the ignition ON (key ON, engine OFF).
3. Check for multiple codes. Are codes SPN 4334/FMI 3, 4, SPN 4375/FMI 3, 4, or SPN 3361/FMI 3, 4, 5 also present?
  - a. Yes; diagnose and repair the other fault codes first. Verify repair.
  - b. No; Go to step 4.
4. Compare the AS110: ADS DEF pressure 2 reading to the barometric pressure sensor reading. Are the readings within 5 psi of each other?
  - a. Yes; Go to step 5.
  - b. No; replace the DEF dosing unit. Refer to section "Removal of the GHG14 Dosing System Doser". Verify repair.
5. Turn the ignition OFF.
6. Using DEF test strip A0005850202, check for diesel fuel or oil contamination of the DEF fluid. Does the test strip indicate contamination?
  - a. Yes; replace the following components and refill the system with new DEF:
    - DEF tank
    - DEF tank header
    - DEF supply line from the DEF tank to the DEF pump
    - DEF line from the DEF pump to the DEF dosing unit
    - DEF return line from the DEF dosing unit to the DEF tank
    - DEF pump
    - DEF dosing unit
  - b. No; Go to step 7.



### WARNING: EYE INJURY

To avoid injury from flying debris when using compressed air, wear adequate eye protection (face shield or safety goggles) and do not exceed 276 kPa (40 psi) air pressure.

7. Inspect the DEF line that runs from the DEF pump to the DEF dosing unit. Is the DEF line damaged, pinched, or kinked?
  - a. Yes; replace the DEF line from the DEF pump to the DEF dosing unit.
  - b. No; Go to step 8.
8. Inspect the DEF line that runs from the DEF tank to the DEF pump. Is the DEF line damaged, pinched, or kinked?
  - a. Yes; replace the DEF line from the DEF tank to the DEF pump.
  - b. No; Go to step 9.
9. Use the graduated cylinder in DEF test kit W060589001900. Put the graduated cylinder in a secondary suitable container that will catch any overflowing DEF.
10. Disconnect the DEF supply line from the DEF dosing unit. Insert the end of the DEF supply line into the graduated cylinder.
11. Use DiagnosticLink and perform the Selective Catalyst Reduction Airless Dosing System (SCR ADS) self-check routine. Is there DEF flow from the DEF line into the beaker?
  - a. Yes; Go to step 13.
  - b. No; stop the ADS self-check routine. Go to step 12.
12. Disconnect the DEF supply line connector from the DEF tank to the DEF pump at the DEF pump. Does DEF fluid gravity feed from the DEF tank out the supply line?
  - a. Yes; Go to step 14.
  - b. No; inspect the DEF header in the DEF tank for a restriction.
13. While the ADS self-check routine is running, visually check for air bubbles coming from the DEF line that is placed inside the graduated cylinder. Are air bubbles visible coming from the DEF line?
  - a. Yes; replace the DEF supply line from the DEF tank to the DEF pump. Verify repair.
  - b. No; Go to step 14.
14. Using the DEF/Doser Kit (RS SUPPLY KIT - available through eParts catalog), replace the DEF pump module filter. Refer to section "Installation of the GHG14 Diesel Exhaust Fluid Pump Module Filter". Go to step 15.
15. Replace the DEF pump inlet screen. Refer to section "Installation of the Diesel Exhaust Fluid Pump Module Filter Screen". Go to step 16.
16. Replace DEF Pressure Relief Valve (PRV). Refer to section "Removal of the Diesel Exhaust Fluid Pump Pressure Relief Valve". Go to step 17.
17. Replace DEF dosing unit inlet screen. Refer to section "Removal of the GHG14 Diesel Exhaust Fluid Dosing Unit Inlet Screen". Go to step 18.
18. Perform Selective Catalytic Reduction Airless Dosing System (SCR ADS) Self-Check Routine. Did the SCR ADS test pass?
  - a. Yes; clear the codes and release the vehicle.
  - b. No; replace the DEF pump. Refer to section "Removal of the GHG14 Diesel Exhaust Fluid Pump Module".