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## Service Information Bulletin

SUBJECT	DATE
SPN 4334/FMI 7 - EPA10	July 2013

### Additions, Revisions, or Updates

Publication Number / Title	Platform	Section Title	Change
DDC-SVC-MAN-0084	DD Platform	SPN 4334/FMI 7 - EPA10	Added steps 18 through 21 to procedure.



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## 2 SPN 4334/FMI 7 - EPA10

This diagnostic is typically DEF Pressure Low.

**Table 1.**

SPN 4334/FMI 7	
Description	DEF Pressure Low
Monitored Parameter	DEF Pressure
Typical Enabling Conditions	Pressure Limiting Unit On, Dosing Enabled
Monitor Sequence	None
Execution Frequency	Continuous when enabling conditions met
Typical Duration	60 Seconds
Dash Lamps	MIL, CEL
Engine Reaction	Derate 25%
Verification	SCR Quantity Test

1. Check Diesel Exhaust Fluid (DEF) fluid for contamination (quality, clarity and smell).
  - a. If contamination is found, contact the Customer Support Center at 800-445-1980 for further instruction.
  - b. If no contamination is found, Go to step 2.
2. Connect DDDL/DDRS 7.05SP2 or newer.
3. Are any other Selective Catalyst Reduction (SCR) component or circuit faults also present on the items listed below?
  - Pressure Limiting Unit (PLU)
  - DEF pump
  - DEF pressure sensor
  - DEF air pressure sensor
  - DEF tank level/zone faults
  - a. Yes; repair those faults first. Go to step 18.
  - b. No; Go to step 4.



### 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

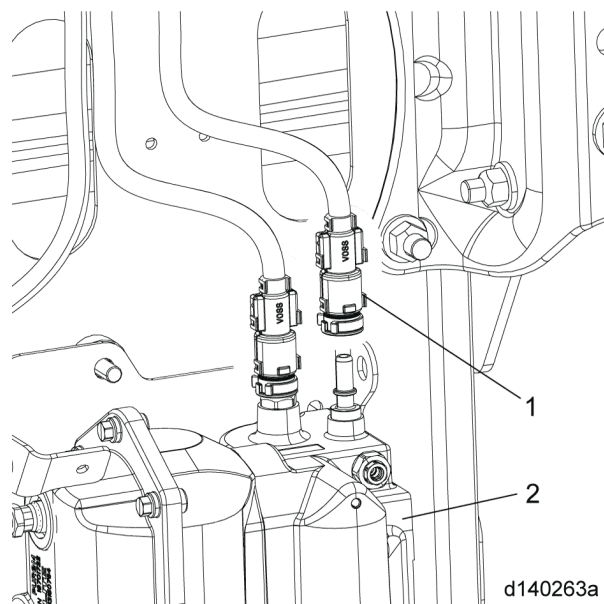
To avoid injury before starting and running the engine, ensure the vehicle is parked on a level surface, parking brake is set, and the wheels are blocked.

4. Start engine and ensure vehicle air pressure is above 689 kPa (100 psi).
5. Does the vehicle air pressure reach and maintain at least 689 kPa (100 psi)?
  - a. Yes; Go to step 6.
  - b. No; refer to Original Equipment Manufacturer (OEM) literature for air compressor diagnostic and leak checks.
6. Turn ignition OFF; wait five minutes for purge cycle to complete.
7. Disconnect the air supply line to the DEF pump.

**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.

8. Connect an appropriate air pressure gauge (0 to 1379 kPa) (0 to 200 psi) to the DEF pump air supply line.
9. Turn the Key ON, Engine OFF.
10. While monitoring the air pressure gauge, perform SCR air pressure test (60 second duration).
11. Is the air pressure between 517 and 586 kPa (75 and 85 psi)?
  - a. Yes; reconnect DEF pump air line. Go to step 13.
  - b. No; Go to step 12.
12. Visually/audibly inspect air feed lines for leaks, kinks, cracks or melting from air tank to Pressure Limiting Unit (PLU) and from pressure limiting unit to DEF pump and metering unit.
  - a. If damage is found, repair as necessary. Go to step 18.
  - b. If no damage is found, Go to step 13.
13. Turn the ignition ON (key ON, engine OFF); compare DEF pressure to Barometric air pressure (Baro) and DEF air pressure.
14. Is DEF pressure within 28 kPa (4 psi) of Barometric air pressure (Baro) and DEF air pressure?
  - a. Yes; Go to step 15.
  - b. No; replace the DEF pressure sensor and verify ACM software level is version (8.7 ZGS002 or higher). Go to step 18.
15. Disconnect the DEF tank return line (1) from the DEF pump (2).



16. Observe the DEF tank return outlet fitting on the pump while running the SCR air pressure test (60-second duration).
17. Does DEF fluid discharge from the pump return outlet during the test?
  - a. Yes, replace the DEF pump pneumatic switching valve. Refer to section "Removal of the Diesel Exhaust Fluid Pump Module Pneumatic Switching Valve".
  - b. No, reconnect the DEF pump tank return line. Go to step 18.
18. Disconnect the DEF pump inlet line. Attach a clear rubber hose over the DEF pump inlet port and place the other end in a clean container with fresh water.
19. Perform an SCR air pressure test and monitor the DEF pressure.
20. Does the DEF pressure reach 496 kPa (72 psi)?
  - a. Yes; Go to step 21.
  - b. No; replace the DEF pump.
21. Inspect the DEF pump suction line for damage and restrictions. Is the DEF line damaged or restricted?

- a. Yes; replace the DEF pump suction line and verify repair.
- b. No; inspect the DEF tank header for restrictions. Repair as necessary.