



## ATS Technician's Guide

**NUMBER:** 08 ATS-1   **S.M. REF.:** 22   **ENGINE:** ATS   **DATE:** February 2008

**SUBJECT:** SPN 4077

**PUBLICATION:** DDC-SVC-MAN-0036 (7SE63)

SPN 4077/FMI 14 has changed.

**SPN 4077/FMI 14**

This diagnostic condition is typically Doser Fuel Line Pressure failed self test.

### **CHECK DOSER FUEL LINE PRESSURE FAILED SELF TEST**

Check as follows:

1. Visually inspect Doser Block assembly and Fuel Doser Valve fuel lines for external leaks.

**NOTE:**

One drop of fuel can cause a failure.

[a] If external leaks are present, repair as necessary. Verify repairs.

[b] If no external leaks are present, go to step 2.

2. Connect DDDL 7.0 or later version.

 **CAUTION:**  
**EXHAUST FUMES**

**To avoid injury or injury to bystanders from fumes, engine or vehicle fuel system service operations should be performed in a well ventilated area.**

3. Start engine.
4. Using DDDL 7.0 or later version, perform a Fuel Doser Purge Service Routine.

**NOTE:**

Perform the Fuel Doser Purge Service Routine only once.

5. Once the fuel cutoff gets to 100%, begin monitoring the Fuel Compensation Pressure and Doser Fuel Line Pressure.

**NOTE:**

The pressures listed in this procedure for Fuel Compensation Pressure are absolute pressures, which is gauge pressure plus approximately 100 kPa (14.5 psi).

- [a] If Fuel Compensation Pressure is greater than or equal to 993 kPa (144 psi), replace the Doser Block assembly and go to step 7.
- [b] If Fuel Compensation Pressure is less than 69 kPa (10 psi), replace the Doser Block assembly and go to step 7.
- [c] If Fuel Compensation Pressure is between 69 – 448 kPa (10 – 65 psi), refer to section "No or Low Fuel Pressure Test" in *EPA07 Series 60 DDEC VI Troubleshooting Guide* (DDC-SVC-MAN-0009), section "Monitoring Low Pressure Fuel System Pressures" in *EPA07 DD15 DDEC VI Troubleshooting Guide* (DDC-SVC-MAN-0029), section "No or Low Fuel Pressure Test" in *EPA07 MBE 4000 DDEC VI Troubleshooting Guide* (DDC-SVC-MAN-0010), or section "No or Low Fuel Pressure Test" in *EPA07 MBE 900 DDEC VI Troubleshooting Guide* (DDC-SVC-MAN-0015). Make repairs as needed and go to step 6.
- [d] If Fuel Compensation Pressure is between 665 – 993 kPa (95 – 144 psi), perform a high fuel pressure test; refer to section "High Fuel Pressure Test" in *EPA07 Series 60 DDEC VI Troubleshooting Guide* (DDC-SVC-MAN-0009), section "High Amplifier/Needle Return Flow (Version 4 Fuel System)" in *EPA07 DD15 DDEC VI Troubleshooting Guide* (DDC-SVC-MAN-0029), section "High Fuel Pressure Test" in *EPA07 MBE 4000 DDEC VI Troubleshooting Guide* (DDC-SVC-MAN-0010), or section "High Fuel Pressure Test" in *EPA07 MBE 900 DDEC VI Troubleshooting Guide* (DDC-SVC-MAN-0015). Make repairs as needed and go to step 6.
- [e] If Fuel Compensation Pressure is between 448 – 665 kPa (65 – 95 psi), replace the Fuel Doser Valve and go to step 6.

 **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.**

6. Perform a parked regeneration.
  - [a] If 4077/14 becomes active during regeneration (regeneration will abort), replace the Doser Block assembly and go to step 7.
  - [b] If regeneration successfully completes, clear active codes and verify repairs.
7. Perform a parked regeneration.
  - [a] If 4077/14 becomes active during regeneration, repeat 1 through step 5. If 4077/14 still becomes active, contact the Detroit Diesel Customer Support Center at 313-592-5800.
  - [b] If regeneration successfully completes, clear active codes and verify repairs.

#### **ADDITIONAL SERVICE INFORMATION**

Additional service information is available in the Detroit Diesel *ATS Technician's Guide*, DDC-SVC-MAN-0036. The next revision to this manual will include the revised information.

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