



YMMS: 2014 Freightliner Cascadia - 125  
 Engine: Detroit Diesel DD15 DDEC 13 6 CYL  
 VIN:

Jul 20, 2020  
 License:  
 Odometer:

## FAULT CODE TESTS

**NOTE:** Some Fault Codes also apply to older engine years.

### FAULT CODE TESTS > SPN 5488 FMI 5: CURRENT BELOW NORMAL OR OPEN CIRCUIT > DESCRIPTION

DEF Line Heater 5 Circuit Failed Open.  
 SPN 5488 FMI 5 DESCRIPTION

Application	Specification
Code Description	Line Heater 5 Circuit Failed Open
Monitored Parameter	Line Heater 5 Circuit
Typical Enabling Conditions	Always on
Monitor Sequence	None
Execution Frequency	Continuous when enabling conditions met
Typical Duration	Two seconds
Dash Lights	MIL, CEL
Engine Reaction	None
Verification	Output Component Test

### DEF LINE HEATERS DESCRIPTION

Line Heater 1	Doser To Tank DEF Line (Long-Line Extension Only)
Line Heater 2	Tank To Pump DEF Line
Line Heater 3	Pump To Doser DEF Line (Long-Line Extension Only)
Line Heater 4	Pump To Doser DEF Line
Line Heater 5	Doser To Tank DEF Line

**NOTE:** For Fault Code Diagnostics, see Testing .

## **FAULT CODE TESTS > SPN 5488 FMI 5: CURRENT BELOW NORMAL OR OPEN CIRCUIT > TESTING**

**NOTE:** For Fault Code Description, see Description .

1. Disconnect and inspect line heater 5 harness connector. Inspect for signs of spread, damaged, corroded, bent or unseated (pushed out) terminals and signs of moisture or wire damage in harness connector.
  - A. If any damage is found, repair as required. To verify repairs, run Output Component Test using Scan Tool with latest software.
  - B. If no damage is found, go to next step.
2. With ignition ON (engine OFF), measure voltage from line heater 5 harness side connector terminal 2 to battery ground. Inspect if voltage is more than 11.5 Volts.
  - A. If more than 11.5 Volts, go to next step.
  - B. If less than 11.5 Volts, repair wire from DEF line heater harness side connector terminal 2 to ACM 120-terminal connector terminal 39. Verify repairs by running Output Component Test using Scan Tool with latest software.
3. With ignition OFF, disconnect ACM 120-terminal connector. Inspect for signs of spread, damaged, corroded, bent or unseated (pushed out) terminals and signs of moisture or wire damage in harness connector.
  - A. If any damage is found, repair as required. To verify repairs, run Output Component Test using Scan Tool with latest software.
  - B. If no damage is found, go to next step.
4. Measure resistance from line heater 5 harness side connector terminal 1 to ACM 120-terminal harness side connector terminal 16. Inspect if resistance is more than 5 Ohms.
  - A. If more than 5 Ohms, repair wire open from terminal 1 to terminal 16.
  - B. If less than 5 Ohms, replace line heater 5.