



YMMS: 2011 Freightliner M2 Series - M2-106  
 Engine: Cummins ISB6.7 CM2250 6 CYL  
 VIN: 1FVACWDT8BDBA0266

Apr 21, 2021

License:  
 Odometer:

## CODE DESCRIPTION

### CODES

- Fault Code: 295
- PID(P), SID(S): P108.
- SPN: 108.
- FMI: 2/2.
- Light: Amber.

### CAUSE

ECM detects an error in barometric pressure sensor signal.

### EFFECT

Progressive derate in Engine power.

### CIRCUIT DESCRIPTION

- Combination turbocharger compressor intake pressure/temperature sensor monitors ambient air pressure. Pressure measuring part of sensor responds to atmospheric pressure changes, based on elevation at which Engine is currently running.
- This sensor contains 5 Volt Supply circuit, a pressure sensor signal voltage and a return circuit.
- When vehicle operates at high altitudes, ECM detects low signal voltage while at sea level altitudes, high signal voltage is detected.

### COMPONENT LOCATION

Combination turbocharger compressor intake pressure/temperature sensor is positioned in OEM intake air piping.

### CONDITIONS FOR RUNNING DIAGNOSTICS

There are two components in this diagnostic; one runs immediately when Ignition off with Engine coolant temperature exceeding 158°F (70°C) and other component runs continuously if Engine is operating.

### CONDITIONS FOR SETTING FAULT CODES

ECM found compressor intake pressure reading is more or less than other absolute pressure sensors on Engine or sensor has an in range malfunction.

### ACTION TAKEN WHEN FAULT CODE IS ACTIVE

- ECM activates Amber Check Engine Light and/or MIL once diagnostic runs and fails.
- Used default value of compressor intake pressure reading.
- Injection of Diesel Exhaust Fluid into Aftertreatment System is disabled.
- Both active and stationary regeneration of diesel particulate filter will be disabled.
- EGR Valve will be closed.
- There will be reduction in Engine torque if Engine is operated for prolonged period with this fault active.

### CONDITIONS FOR CLEARING FAULT CODE

- To confirm repair, ensure Engine coolant temperature exceeds 158°F (70°C). Run Engine if required.
- Cycle Ignition on for thirty seconds, cycle to OFF position for thirty seconds. Start and operate Engine at idle for sixty seconds.
- Scan Tool will display code status, which will change to INACTIVE immediately when diagnostic runs and passes.
- ECM deactivates Amber Check Engine Light once diagnostic runs and passes.
- For OBD Engines, ECM deactivates MIL after three successive trips where diagnostic runs and passes.
- Erase active and inactive faults and deactivate MIL for OBD Engines using "Reset All Faults" command in Scan Tool.

### DIAGNOSTIC TIPS

- When key is OFF, Engine is warm, sensor readings for various Engine pressure sensors on Engine are compared with compressor intake pressure. If reading of compressor intake pressure sensor is different from other sensor, this code will occur. This code can also be set if reading of compressor intake pressure is higher or lower than possible limit.
- Possible causes:
  - Compressor intake pressure sensor is damaged.
  - Compressor intake pressure sensor signal or return lines contain high pressure.
  - Air filter is plugged or highly restricted especially at higher altitudes.

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

