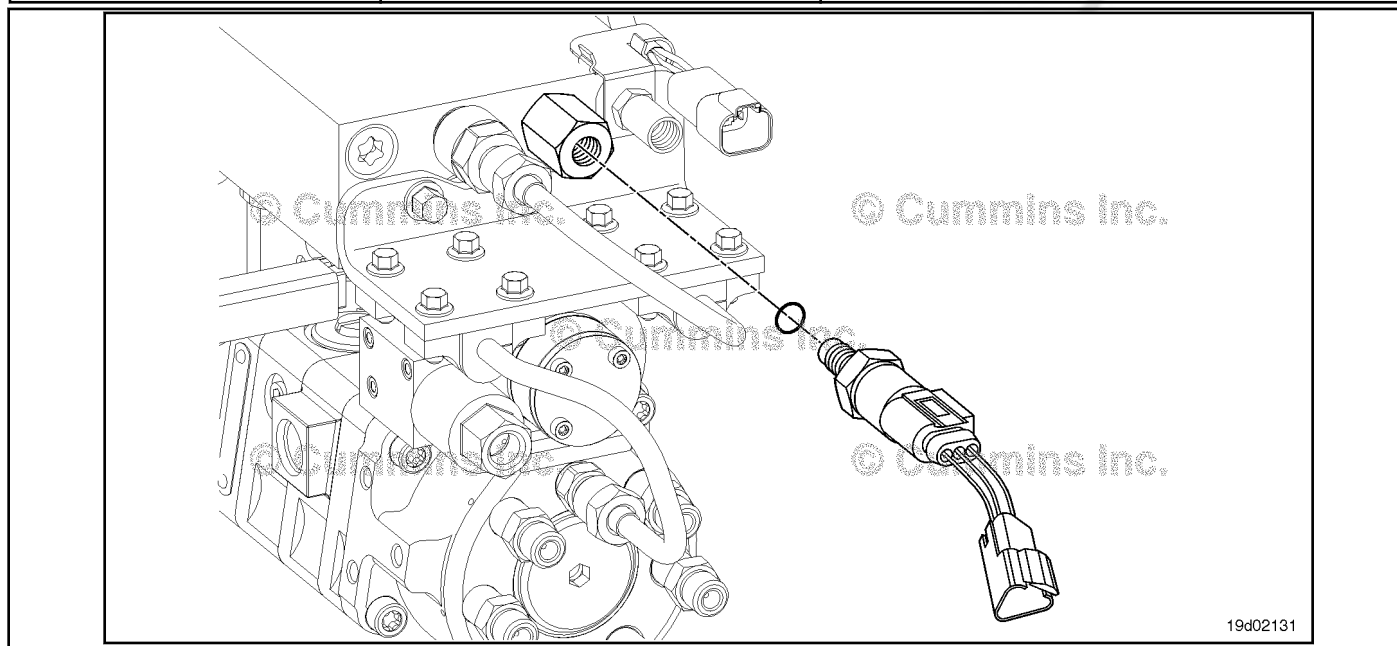


Fault Code 456

Fuel Pressure Sensor Circuit

CODES	REASON	EFFECT
Fault Code: 456 PID(P), SID(S): P094 SPN: 94 FMI: 10 Lamp: Yellow SRT:	Fuel Pressure Sensor Circuit. Fuel pressure sensor stuck in range while engine is operating or fuel pressure sensor reading erratic in range.	Engine power derate; engine can run rough or die.



Cummins® Accumulator Pump System (CAPS) Injection Pump

Circuit Description:

The fuel pressure sensor contains supply, signal, and return pins. The engine control module (ECM) provides 5 volts to the fuel pressure sensor for a supply voltage. The ECM supplies a shared ground from the fuel pressure sensor circuit. The signal voltage is variable depending on the pressure that is being generated inside the fuel pump accumulator.

This 5 volt power supply is a shared supply. Other sensors on this circuit include the engine speed sensor, engine position sensor, oil pressure sensor, intake manifold pressure sensor, and ambient air pressure sensor.

The shared ground for the fuel pressure sensor also connects to the injection control valve identifier, temperature sensor, intake manifold air temperature sensor, engine position sensor, oil pressure sensor, intake manifold pressure sensor, and ambient air pressure sensor.

Component Location:

The fuel pressure sensor is located on the top rear of the fuel pump. The pressure sensor can be identified by its mounting location, rear center of the CAPS accumulator module.

Shop Talk:

Possible causes of this fault code include:

- Damaged fuel pressure sensor wiring (pig tail harness), sensor connections (pin fretting), or engine harness issues (shorts) which can cause the pressure signal to erratically spike up or down

- Excessive fuel inlet restriction
- Damaged fuel lift pump
- Internal sensor malfunction.

Refer to Troubleshooting Fault Code t05-456.

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