

- fuel pressure regulator (mechanical returnless fuel systems) causes excessive fuel pressure (system rich at all airflows), fuel pressure is intermittent, going to pump deadhead pressure, then returning to normal after the engine is turned off and restarted.
- fuel injector leaks (injector delivers extra fuel).
- evaporative emission (EVAP) purge valve leak (introduces extra fuel).
- fuel rail pressure (FRP) sensor (electronic returnless fuel systems) concern causes the sensor to indicate a lower pressure than actual. The PCM commands a higher duty cycle to the fuel pump control module, causing high fuel pressure (system rich at all airflows).

ADAPTIVE FUEL DIAGNOSTIC TROUBLE CODE (DTC) DIAGNOSTIC TECHNIQUES > INTAKE AIR SYSTEM

A restriction within any of the intake air system components may be significant enough to affect the ability of the PCM adaptive fuel control.

ADAPTIVE FUEL DIAGNOSTIC TROUBLE CODE (DTC) DIAGNOSTIC TECHNIQUES > BASE ENGINE

Engine oil contaminated with fuel can contribute to a rich running engine.