

2010 PCED  
 Gasoline Engines  
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SECTION 4: Powertrain DTC Charts and Descriptions

[Diagnostic Trouble Code \(DTC\) Charts and Descriptions](#)

**P0171 - System Too Lean (Bank 1)**

**Description:** The adaptive fuel strategy continuously monitors the fuel delivery hardware. The test fails when the adaptive fuel tables reach a rich calibrated limit. Refer to Section 1, [Powertrain Control Software](#), Fuel Trim for more information.

**Possible Causes:**

Fuel System:

- Ethanol content in the fuel
- Fuel filter plugged or dirty
- Damaged or worn fuel pump
- Leaking fuel pump check valve
- Leaking or contaminated fuel injectors
- Low fuel pressure or running out of fuel
- Evaporative emission (EVAP) canister purge valve is leaking when the canister is clean
- Fuel supply line restricted
- Fuel rail pressure (FRP) sensor bias

Exhaust System:

- Exhaust leaks in the exhaust manifold gasket or mating gaskets before or near the heated oxygen sensor (HO2S)

EGR System:

- Vacuum hose disconnected on exhaust gas recirculation (EGR) system module (ESM) applications
- EGR valve tube or gasket leak
- EGR vacuum regulator solenoid leak

Intake Air System:

- Air leaks after the mass air flow (MAF) sensor
- Vacuum leaks
- Positive crankcase ventilation (PCV) system is leaking or the valve is stuck open
- Incorrectly seated engine oil dipstick
- Intake air turbulence due to incorrect air filter
- Damaged or contaminated MAF sensor

**Diagnostic Aids:** View the freeze frame data to determine the operating conditions when the DTC was set. Observe the LONGFT1 and LONGFT2 PIDs. Refer to Section 2, [Adaptive Fuel Diagnostic Trouble Code \(DTC\) Diagnostic Techniques](#), for more information and the appropriate pinpoint test for specific concern identification.

Application	Key On Engine Off	Key On Engine Running	Continuous Memory
All	—	—	GO to Pinpoint Test <a href="#">H</a> .