

P0306

Subject: 97-05 Vehicles with 4.8 5.3 5.7 and 6.0 Gen III V8 Engines and Misfires on One Bank - kw CEL diagnostics driveability DTC P0171 P0172 P0174 P0175 P0300 P0301 P0302 P0303 P0304 P0305 P0306 P0307 P0308 #PIP3056 - (07/12/2004)

Models: (00-05 Cadillac Escalade - C6 and K6) and (02-05 Chevrolet Avalanche - C1, C2 K1 and K2) and (99-05 Chevrolet Silverado - C1, C2 K1 and K2) and (00-05 Chevrolet Suburban - C1, C2, K1 and K2) and (00-05 Chevrolet Tahoe - C1 and K1) and (99-05 GMC Sierra C1, C2 K1 and K2) and (00-05 GMC Yukon - C1, C2, K1 and K2) and (03-05 Chevrolet Express G1, G2, G3, H1, H2) and (03-05 GMC Savana G1, G2, G3, H1, H2) and (04-05 Buick Rainier S1, T1) and (03-05 Chevrolet Trail Blazer EXT S1, T1) and (03-05 GMC Envoy XL XUV S1, T1) and (03-05 Hummer H2) and (04-05 Cadillac CTS-V DB) and (98-02 Chevrolet Camaro FB) and (97-04 Chevrolet Corvette YB) and (98-02 Pontiac Firebird FB) and (04-05 Pontiac GTO VB)

The following diagnosis might be helpful if the vehicle exhibits the described symptoms.

Condition/Concern:

Check Engine Light with a P0300 due to 2 - 4 cylinders misfiring on the same bank of the engine. DTCs P0171, P0172, P0174 or P0175 may also set for the misfiring bank.

Recommendation/Instructions:

If the published misfire diagnostic does not isolate the cause, perform the following suggestions as necessary:

- Perform a **fuel injector** balance test for all 8 cylinders. If a fuel injector concern exists, it is possible to misfuel an entire bank of the engine, causing multiple cylinders on the same bank to misfire even though the root cause is a single fuel injector.
- Inspect O2 sensor connections on the misfiring bank for corrosion or water intrusion. If water intrusion is found on the right bank, it may be due to the AC Evaporator Condensation dripping onto the O2 sensor harness. If this condition is found, reposition and shield the harness to prevent a repeat concern and repair the connections.
- Check for excessive exhaust backpressure using the restricted exhaust diagnosis.
- Swap the Position 1 O2 sensors side to side to see if the misfires move to the other bank of the engine. If so, replace the O2 sensor.

Please follow this diagnosis process thoroughly and complete each step. If the condition exhibited is resolved without completing every step, the remaining steps do not need to be performed.

NOTE: GM bulletins are intended for use by professional technicians, NOT a "do-it-yourselfer". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, DO NOT assume that the bulletin applies to your vehicle, or that your vehicle will have that condition.