



# Service Bulletin

## INFORMATION

**Subject:** Repeat P228C Setting On High Feature V6 Engines While Using E85 Fuel

**Models:** 2011-2016 Buick LaCrosse  
2013 Cadillac ATS Sedan  
2011-2013 Cadillac SRX  
2012-2015 Chevrolet Caprice PPV  
2013-2015 Captiva Sport (Fleet Only)  
2011-2014 Chevrolet Equinox  
2012-2016 Chevrolet Impala Limited ( Including Fleet and PPV)  
2014-2016 Chevrolet Impala  
2011-2014 GMC Terrain  
Equipped with HFV6 engine RPO LF1, LFW, or LFX  
And RPO FHS: Vehicle Fuel — E85 (85% ethanol max.)

***This PI was superseded to update Recommendation/Instructions. Please discard PIP5385.***

The following diagnosis might be helpful if the vehicle exhibits the symptom(s) described in this PI.

### Condition/Concern

You may have a customer come in with an SES light on or reduced engine power message came on and was cleared after cycling the key.

If you find a P228C set as current or history, and a prior history of High Pressure Fuel Pump replacement, and the customer has been using E85 fuel,

This PI would apply.

**Note:** Starting with Model Year 2012 vehicles, FlexFuel vehicles may also be identified by the following Vehicle Fuel RPO Codes:

- FHO: Vehicle Fuel — E10 (10% ethanol or less)
- FHS: Vehicle Fuel — E85 (85% ethanol max.)

### Recommendation/Instructions

At this time there is "No Verified Repair" for this concern.

If the code is current then follow SI direction for repairing the concern.

If the code is set in history and there are no current drivability concerns, proceed with the following.

1. Take a large fuel sample and let it sit for a couple of hours looking for contamination.
2. Ensure actual and desired fuel pressures in the scan tool are very close to the same.
3. If contamination is found in the tank then completely flush the fuel system and add e-10 fuel.  
Also you may need to check the strainer in the fuel tank for concerns of build up or blockage

**Note:** Contamination in the fuel is not warrantable.

4. Remove the high pressure fuel pump inlet line from both ends.
  - a) Using regulated air down to about 60 psi or lower, blow through the inlet (vehicle) side of this pipe / hose.
  - b) Check for restriction in the check valve built into this hose.
  - c) If restricted then replace the pipe / hose assembly, run a tank of premium fuel through the vehicle and reevaluate the concern.
  - d) If no restriction present continue with PI.

**Note:** Please box the inlet line with the HPFP when sending pump back or retain line so it can be requested back if replaced without pump.

5. Replace the high pressure fuel pump and all related lines per SI instructions.
6. Run a tank of premium fuel through the system to clean all components.
7. Reevaluate the vehicle

Please follow this diagnostic or repair 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.

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