



# Preliminary Information

## PIP3472C In Line Truck Engine Misfires On End Cylinders

### Models

Brand:	Model:	Model Years:	VIN:		Engine:	Transmissions:
			from	to		
Buick	Ranier	2005 - 2007	All	All	4.2 LL8	All
Chevrolet	Colorado	2006 - 2012	All	All	2.8L LK5, 2.9L LLV, 3.5L L52, 3.7L LLR	All
Chevrolet	Trailblazer	2005 - 2009	All	All	4.2L LL8	All
GMC	Canyon	2006 - 2012	All	All	2.8L LK5, 2.9L LLV, 3.5L L52, 3.7L LLR	All
GMC	Envoy	2005 - 2009	All	All	4.2L LL8	All
Hummer	H3	2006 - 2010	All	All	3.5L L52, 3.7L LLR	All

### Supersession Statement

This PI was superseded to update Recommendations\Instructions. Please discard PIP3472B.

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

### Condition / Concern

A customer may comment that the engine misfires, possibly coming to a stop or on acceleration.

### Recommendations / Instructions

This may be caused by contaminated fuel. Fuel contamination may cause a misfire on cylinder 1 during or shortly after deceleration, or on the opposite end cylinder during or following hard acceleration.

Due to the return-less fuel rail system that this engine is equipped with, fuel does not return to the fuel tank from the fuel rail. As a result, fuel contaminates may become trapped in the fuel rail and eventually pass through the number 1 fuel injector during deceleration and through the opposite end fuel injector on acceleration.

The injector at the end will depend on the RPO of the engine (4, 5 or 6 cylinder in-line engine). If the vehicle is driven for an extended time with contamination in the fuel rail a sticking valve will also result.

1) The inside of the fuel rail and fuel tank should be inspected for signs of fuel contamination. If fuel contamination is present, refer to the "Fuel System Cleaning" procedure in SI and clean the inside of the fuel tank, fuel lines and fuel rail. Once the entire fuel system is cleaned and reassembled, clean the fuel injectors by following the "Fuel Injector Cleaning Procedure" in SI.

2) Some dealers have reported repeat misfire concerns on these cylinders caused by sticking valves after cleaning the fuel system. If the valves are sticking do not replace the cylinder head or valves until first attempting to clean them. This should be done by using the cleaning procedures listed in the latest version of [16-NA-383](#).

During delivery; advise the customer to only use one of the Top Tier Gasolines listed at <http://www.toptiergas.com> and/or in the latest version of [05-06-04-022](#) to minimize future deposits. It can also be recommended to add a bottle of GM Fuel System Treatment Plus at every oil change as mentioned in the latest version of [04-06-04-051](#).

**NOTE: If the entire fuel system is not flushed and the fuel tank removed cleaned and emptied a repeat concern will result.**

**NOTE: Repairs made as a result of fuel contamination should not be considered a warranty repair.**

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.

