



Service Bulletin

File in Section: 06 - Engine

Bulletin No.: 03-06-04-017G

Date: March, 2014

INFORMATION

Subject: Information on Diesel Fuel Additives

Models: 2014-2015 Chevrolet Cruze
2015 and Prior GM Light Duty and Medium Duty Trucks
Equipped with 2.0L Diesel Engine or 6.6L Duramax® Diesel Engine
RPO — LB7 (VIN 1), LBZ (VIN D), LGH (VIN L), LLY (VIN 2), LML (VIN 8), LMM (VIN 6) or
LUZ (VIN Z)

This bulletin is being revised to remove old VIN and RPO information, remove the Isuzu Commercial Medium Duty Models and their engines, add Model Year 2014-2015 vehicles, add 2014-2015 Cruze RPO — LUZ and update the existing statement “must not contain alcohol or other water emulsifiers” to “must not contain any metal based additives, alcohol or other water emulsifiers”. Please discard Corporate Bulletin Number 03-06-04-017F.

Diesel Fuel Additives Are Not Required or Recommended

The use of diesel fuel additives are not required or recommended for the Cruze 2.0L diesel engine or the 6.6L Duramax® Diesel engine under normal conditions. The filtering system is designed to block water and contaminants without the use of additives. However, some customers may desire to use fuel additives to improve the characteristics of available diesel fuels.

Water Emulsifiers and Demulsifiers

If the customer desires to use a fuel additive, care must be taken in its selection. There are two common methods that fuel additives use to cope with water in the fuel.

- One method is through demulsification of water in the fuel. This method causes water particles to combine together to form larger particles, which drop out of suspension. This allows the fuel filter/water separator to separate the water from the fuel as it is designed to do.
- The other method of coping with water in the fuel is through emulsification. This method, often using alcohol as the emulsifier, keeps water particles suspended in the fuel. Emulsification of water in the fuel can allow water to get past the fuel filter/water separator, in most cases causing damage to other components of the fuel system.

Notice: Only alcohol free water demulsifiers should be used in General Motors diesel engines. GM Diesel Fuel Conditioner®, P/N♦88861009 (in Canada, P/N 88861038) is alcohol free and utilizes water demulsifiers to cope with water in the fuel. Other brands may be available in different areas. Be sure that any other brand that may be selected for use clearly states that they are alcohol free demulsifiers before using.

Common Diesel Fuel Concerns

Fuel Waxing/Icing

Fuel distributors blend #1 and #2 diesel fuels for seasonal requirements in a particular region. No other blending of fuels is recommended. However, a customer may desire to use a winter fuel additive to prevent fuel waxing or icing during extreme cold snaps. If a winter fuel additive is to be used, it must not contain any metal based additives, alcohol or other water emulsifiers that may compromise the water removal effectiveness of the fuel filtering system.

Bacteria and Fungi Growth

Bacteria and fungi growth can occur in diesel fuel when there is water present, especially during warmer weather. The best prevention against bacteria and fungi growth is to use clean fuel that is free of water. There are diesel fuel biocides available which are designed to kill bacterial growth in the fuel system. However, the dead bacteria can still cause blockages throughout the

fuel system. If bacterial growth is found in the fuel system, the proper method of removal is to flush the fuel system using the appropriate Service Manual procedures, replace the fuel filter element and refilling the tank with clean diesel fuel. If a customer desires to use a biocide after flushing the fuel system, it must not contain any metal based additives, alcohol or other water emulsifiers.

Low Cetane Number

The cetane number is one indicator of a diesel fuel's ability to ignite. There are many indicators of overall fuel quality such as cleanliness, specific gravity, volatility, viscosity, detergency, corrosion inhibiting abilities, and lubricity. Increasing the cetane number alone is not a fix for poor quality fuel. Additionally, increasing the cetane number beyond the engine's requirements will not increase performance. However, the cetane number of diesel fuel is not always consistent and some customers may desire to use a cetane improver to ensure full performance of their engine. If such an additive is to be used, it must not contain any metal based additives, alcohol or other water emulsifiers.

Poor Lubricity

The 2.0L diesel and the 6.6L Duramax® Diesel engines are designed to operate on today's low sulfur fuel without the use of additives. A fuel additive designed to increase lubricity is not a fix for poor quality or contaminated fuel, but some customers may desire to use a lubricity additive to aid in the longevity of their fuel system components. If such an additive is to be used, it must not contain any metal based additives, alcohol or other water emulsifiers.

Fuel Stability

Fuel Stability and degradation may be a concern for diesel fuels, especially for diesel fuel containing biodiesel. Use of aftermarket stability additives to improve quality of a degraded fuel is not a fix and use of such aftermarket stability additives by customers is discouraged due to concerns of proper mixing and fuel compatibility. However some customers may desire to use a stability additive to increase the shelf life of their fuel. If such an additive is to be used, it must not contain any metal based additives, alcohol or other water emulsifiers.

Fuel Source Issue

If a vehicle is properly maintained but has fuel contamination issues, consider obtaining fuel from a different source. Purchasing fuel from a high volume fuel retailer increases the chance that the fuel is fresh and of good quality.

Parts information

Part Number	Description
88861009 (in Canada, 88861038)	Conditioner, Diesel Fuel 325♦ml (11♦oz)

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