Diesel Exhaust Fluid (DEF) is required to maintain normal vehicle operation and emissions compliance on 2010-2017 Express and Savana; 2011-2017 Silverado and Sierra 2500-3500 HD; 2014-2015, 2017 Cruze; and 2016-2017 Colorado and Canyon models equipped with a diesel engine (RPOs L5P, LML, LGH, LUZ, LWN, LH7). DEF usage will vary depending on driving style, trailer towing, loaded vehicle weight, weather, idle time and PTO use. It’s recommended to refill the DEF tank at the first opportunity after a low warning message in order to avoid any vehicle speed limitations.

Below OK Level

The DEF level indicator is displayed on the Driver Information Center (DIC) along with a series of messages regarding the amount of DEF that is available. Typically, when the DIC shows the DEF to be at any level below OK, at least 2.5 gallons (9.5 L) can be added to the DEF tank (this has not yet been verified on the 2017 Cruze). The amount needed to top off the tank will vary.

DEF has a shelf life of two years. However, this can be reduced if the fluid is exposed to direct sunlight or temperatures above 86°F (30°C) for sustained periods. All DEF packaging is labeled with a production date.
Filling the Tank
The DEF fill location, identified by the blue fill cap, is different on several models:
- 2010-2017 Express, Savana; 2016-2017 Colorado, Canyon;
  2017 Cruze – Behind the fuel fill door
- 2014-2015 Cruze – Under the trunk floor
- 2011-2017 Silverado, Sierra – Underhood

After filling the DEF tank, there may be a short delay before the increased level of fluid is detected and the DIC is updated.

If the vehicle speed has been limited and DEF has been added, it may take up to 30 seconds after starting the engine with the vehicle stopped for the Exhaust Fluid Empty Refill Now message to clear. If the vehicle is driven prior to the DIC message clearing, the vehicle speed will still be limited. If the DIC message clears while driving, the speed limitation will be removed gradually.

On diesel models equipped with RPOs L5P, LH7 or LWN, a Service Emission System message may display on the DIC after filling the DEF tank with the ignition on. This message may appear when using a mobile fill cart with an automatic nozzle or filling up at a commercial trunk service station with DEF dispensing equipment. DTC P206B (Reductant Quality Sensor Circuit Performance) may be set. Some DEF filling equipment use pumps that create a high level of temporary aeration of the DEF fluid, which temporarily affects the operation of the in-tank DEF quality sensor. After the aeration quickly dissipates, the sensor will return to normal operation. However, if the ignition is on, the DIC message may be displayed. The ignition should be kept on until the Service Emission System message clears.

DEF in Cold Weather
DEF freezes when exposed to temperatures below 12°F (-11°C). In cold conditions, it is normal for DEF to freeze. The tank and delivery lines are heated to thaw frozen DEF.

When filling the tank in cold conditions, the vehicle may not recognize the new fluid level until the tank thaws. In certain cold conditions, it is possible to find some frozen DEF in the DEF fill pipe opening. When driving in extremely cold areas, it is recommended to fill the DEF tank prior to cold temperature exposure.

AutoStop Active during Low-Speed Maneuvers

The 2016-2017 ATS and CTS feature the Auto Engine Stop/Start (AutoStop) system (RPO KL9), which turns off the engine when the brakes are applied and the vehicle is at a complete stop (depending on operating conditions). When the brake pedal is released or the accelerator pedal is applied, the engine will restart.

When AutoStop is active, it may interfere with low-speed maneuvers and while parking the vehicle. This is a normal characteristic of the system and no repairs should be made.

If drivers find the operation of the AutoStop feature to be objectionable in certain situations, it can be disabled using the AutoStop button. The system should be disabled before attempting the low-speed maneuvers.

On CTS models, the AutoStop button is located next to the infotainment screen. On ATS models, the button is located on the center console by the shift lever. When the system is disabled, the button indicator will not be illuminated and the AutoStop symbol on the instrument cluster will change from green to white with a slash through it.
Multi-Media Interface Tester Tool Update

The Multi-Media Interface Tester (EL-50334-20), which can be used to verify auxiliary, USB and Bluetooth connectivity between a device and a GM infotainment system, has recently received several updates that are available through a new software download.

When diagnosing an infotainment system condition, the Multi-Media Interface Tester (MIT) offers the ability to deliver pass or fail testing on several systems, which provides a known good device for accurate and reliable diagnosis. The MIT will confirm Bluetooth pairing with the vehicle and can place a test call to confirm the Bluetooth system is working properly. The MIT outputs four distinct audio files to test the Bluetooth, Auxiliary/Line-In, and USB functions of the audio system. The operation of each test function is confirmed by a confirmation message played back through the vehicle’s audio system.

Updated Software

Features of the updated software include:

- New support of Secure Simple Phone pairing, which is the only way to pair a phone with the Info 3.0 Infotainment System that will be first available on the 2017 CTS. Secure Simple Pairing is a more seamless handshake between the mobile phone and the Infotainment system using a 6 digit PIN instead of the previously used 4 digit PIN.
- FAT32 USB compatibility, which many of the Next Generation Infotainment (NGI) and new Infotainment Systems use to communicate to the external USB drive. The previous MIT software was FAT16, which may have caused issues with the newer systems. These issues are eliminated with the new FAT32 protocol.

The software update is available at www.gmdesolutions.com/downloads/(U.S.) or www.des-canada.ca (Canada).

To update the MIT:
1. Log in to the website.
2. Select the latest MIT update.
3. Click the Download MIT Update/Utility link.
4. Select Run to run the download file.
5. Follow the on-screen instructions to update the MIT.
6. When the software update has completed, the MIT is updated.

Truck and Snow Plow Headlamp Flicker

When equipped with snow plow equipment, the headlamps of the truck or snow plow may flicker or be inoperative on some 2014 Silverado 1500 and Sierra 1500 models and 2015-2017 Silverado and Sierra models. This condition may occur on either the left or right lamp assembly. DTCs B2575 (Headlamps Control Circuit) and B2699 (Right Headlamp Control Circuit) may be set.

Some snow plow manufacturers offer a headlamp changeover module for switching between the truck’s headlamps and the snow plow’s headlamps. Depending on the type of headlamps on the truck and how they are controlled, the headlamp changeover module may not operate correctly with the truck’s headlamp system, which can cause either or both of the truck and/or snow plow headlamps to flicker during changeover.

This condition is not related to the truck’s headlamp system. Contact the snow plow manufacturer for information on the headlamp changeover system.


GM Upfitter Website

The GM Upfitter Integration website — gmupfitter.com — offers a variety of valuable information and assistance for technicians and other personnel.

Here, you’ll find body builder manuals; technical bulletins covering design changes, upfitter modifications and other issues; generic Incomplete Vehicle Documents (IVD) for Chevrolet Express, Silverado, Colorado and GMC Savana, Sierra, Canyon and others, and best practice manuals with engineering recommendations and guidelines for Special Vehicle Manufacturers. There is also a section on FAQs as well as links to some helpful sites, such as GM Fleet, Chevrolet Commercial Vehicles, GM Mobility and more.

Thanks to Jim Will
Avoid Turbocharger Damage during Service Work

When performing underhood service work on the 2016 Cascada, use care to avoid damage to any turbocharger components on the 1.6L engine (RPO LWC).

Recently, turbochargers returned under warranty have had damage to the wastegate actuator solenoid vacuum port fittings and bypass valve port fittings. Service parts are available for the bypass valve, wastegate solenoid and wastegate actuator in kits.

Do not replace the turbocharger assembly for damage to these components.

**TIP:** In addition to the 1.6L engine, this information applies to all four cylinder engines equipped with a turbocharger.

(Thanks to Javier Hinojos)

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Service Know-How

**10217.08V Emerging Issues – January 13, 2017**

The latest service topics from Brand Quality and Engineering are reviewed, including highlights of the Rear Seat Reminder feature and how to update the software in several diagnostic tools.

**To view Emerging Issues seminars:**
- Log in to www.centerlearning.com
  - Select Resources > Video on Demand > GM STC > Search Videos; or
  - Select Catalog to search for the course number, and then select View > Take or Continue Course