TECH LINK

September 2019, Volume 21, No. 17

Camaro Model Updates

Diesel Exhaust Brake Operation

see page 4

New Duramax Diesel 3.0L 6-Cylinder Engine

see page 6

2020 Camaro Model Updates

A new LT1 V8 performance model (RPO 1LZ) leads the changes for the 2020 Camaro lineup along with a new available 10-speed automatic transmission on V6 models. Here's a look at some of the updates made for the 2020 model year.

NEW LT1

The new LT1 model, powered by the 455 horsepower 6.2L V8 engine (RPO LT1) and paired with a standard 6-speed manual transmission (RPO MM6) or available 10-speed automatic transmission (RPO MI2), is the most affordable V8 sports car on the market. The LT1 can be identified by the LT1 fender badge, V8 vented hood and LT front fascia.

2020 Camaro LT1

It also features 20-inch x 8.5-inch wheels at all four corners and all-season tires. Other standard equipment includes heavy-duty brakes with Brembo Performance 4-piston front calipers and a non-MR sport suspension.

The LT1 features 20-inch wheels.

TIP: The LT1 model features an automatic transmission cooler; however, it is not equipped with other performance cooling features. Therefore, the LT1 model is not track capable.

10-SPEED AUTOMATIC TRANSMISSION

The 10L60 10-speed automatic transmission (RPO MI1) is available on 3.6L V6 (RPO LGX) Camaro LT models, replacing the 8L45 8-speed automatic transmission. The 10L60 automatic transmission does not offer the Custom Launch Control and Line Lock features that are available with the 10L80 (RPO MI2) and 10L90 (RPO MI4) 10-speed automatic transmissions available on models with the 6.2L V8 (RPOs LT1, LT4).

The 10-speed transmission is a fully automatic, rear-wheel drive, electronically-controlled transmission. There are different variants of the transmission, all based on torque capacity. Architecture is common between the variants, and component differences are primarily related to size.

The ten speed ratios are generated using four simple planetary gearsets, two brake clutches, and four rotating clutches. The on-axis transmission architecture uses a squashed torque converter, an off-axis pump and four close coupled gearsets.

SS FRONT FASCIA

The front fascia on SS model is updated for the 2020 model year. The center bumper beam cover and the components under the headlamps are now body color while the bowtie emblem moves to the upper grille.

BRAKE FLUID

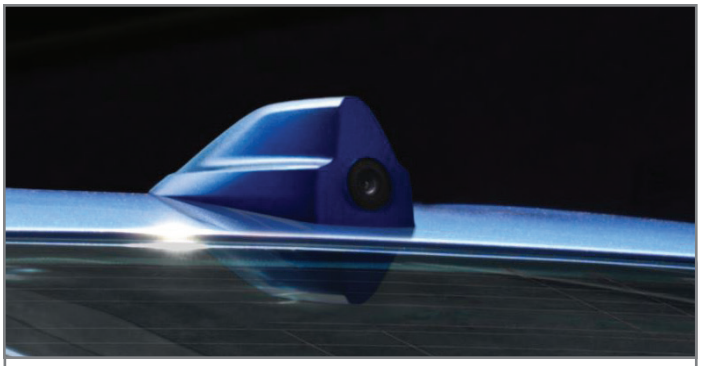
All 2020 Camaros use DOT 4 brake fluid. Do not use silicone or DOT 5 brake fluids.

REAR CAMERA MIRROR

The camera for the available full display mirror on coupe models has been moved from the center spoiler stanchion to the roof antenna for the 2020 model year. The new location provides a larger field of vision and allow it to be offered on 2SS, 3LT, and ZL1 models.

CONTINUED ON PAGE 3

New SS front fascia



Camera location for the full display mirror option is now in the roof antenna.

INFOTAINMENT

The mid-level radio (RPO IOS) and up-level radio (RPO IOT) were updated for 2020 with a more personalized intuitive user interface with functionality designed to be similar to popular apps and smartphones. The systems provide the ability to download apps as well as identify the user and set up the vehicle based on each user's preferences.

TIRE FILL ALERT

The Tire Fill Alert feature provides visual and audible alerts outside of the vehicle to help when inflating an underinflated tire to the recommended cold tire pressure. When the recommended pressure is reached, the horn sounds once and the turn signal lamp will stop flashing and briefly turn solid. If the turn signal lamp does not flash within 15 seconds after starting to inflate the tire, the Tire Fill Alert system has not been activated or may not be operating properly.

Due to the Tire Fill Alert feature, the tire pressure monitor sensor part numbers have changed for 2020.

PDI ITEMS

During the pre-delivery inspection (PDI), there are several special inspection items to follow on the 2020 Camaro, including:

Stripe Packages – Do not use polish or wax on the stripes/hood wrap on vehicles with stripe packages (RPO B03, B04, C30, C2U, DW7, DUV, DUU, DVV, DW8) or a hood wrap (RPO DSM). It will distort the appearance.

SS Models – Control arm brake cooling deflectors and smaller brake shields are included in the loose-shipped items package. The deflectors hang low and are for track use only.

ZL1/ZL1 1LE Models – Install the air dam deflector and front tire air deflector kits (strakes and tire strips). The power steering ducts are for track use only. Refer to Bulletin #16-NA-369.

Chassis – Install the rear control arm suspension link covers using the mounting kit and instructions in the loose-shipped item package.

1LE Models – Install the spoiler winglets included in the loose-shipped items package (equipped with the RPO D5S spoiler). Instructions are in the Accessories manual in the Service Information.

V8 1LE/ZL1 Models – Remove the spring stuffers and place in the glove box for the customer. This does not apply to the ZL1 1LE (RPO A1Z).

For additional information on the 2020 Camaro, refer to Bulletin #19-NA-169.

▶ Thanks to Ann Briedis and Sherman Dixon

Diesel Exhaust Brake Operation

The diesel exhaust brake available on 2020 Silverado and Sierra light-duty and HD models equipped with the 3.0L Duramax diesel engine (RPO LM2) or 6.6L Duramax diesel engine (RPO L5P) enhances the vehicle brake system by using engine braking and automatically downshifting the transmission to help slow the vehicle. All of which can be helpful when towing or hauling heavy loads while also reducing brake wear.

When the diesel exhaust brake is active, transmission downshifts may be automatically selected to increase engine speed, which increases the effectiveness of the exhaust brake. The number of downshifts selected is determined by the length of time the brakes are applied and the rate the vehicle is slowing. The system delivers the correct amount of braking to assist in vehicle control. The heavier the vehicle load, the more active the engine exhaust brake will be.

The system will not downshift the transmission if the vehicle is in Range Selection Mode (limits the transmission to the top gear selected and lower gears).

Activating the diesel exhaust brake system differs based on the engine.

3.0L DIESEL ENGINE

The diesel exhaust brake function on the 3.0L diesel engine is part of the Tow/Haul Mode Grade Braking system. Tow/Haul Mode Grade Braking is only enabled while the Tow/Haul Mode is selected.

Turn the Driver Mode knob to the left to activate/deactivate the Tow/Haul Mode.

On vehicles equipped with Driver Mode Control, Tow/Haul Mode can be activated/deactivated by turning the Driver Mode knob to the left. When selected, the Tow/Haul Mode symbol will illuminate in the instrument cluster.

If the vehicle is turned off with Tow/Haul Mode active for less than four hours, Tow/Haul will remain active after the vehicle has been turned on again. Otherwise, the vehicle will start in Normal Mode.

For vehicles without Driver Mode Control, press the Tow/Haul button on the center of the instrument panel.

TIP: The Automatic Engine Stop/Start system is unavailable when the Tow/Haul Mode is active.

6.6L DIESEL ENGINE

The diesel exhaust brake is activated on vehicles with the 6.6L diesel engine by pressing the Diesel Exhaust Brake button on the center of the instrument panel. The button indicator will turn on when the exhaust brake is activated.

The exhaust brake will activate more often when the Tow/Haul Mode is selected.

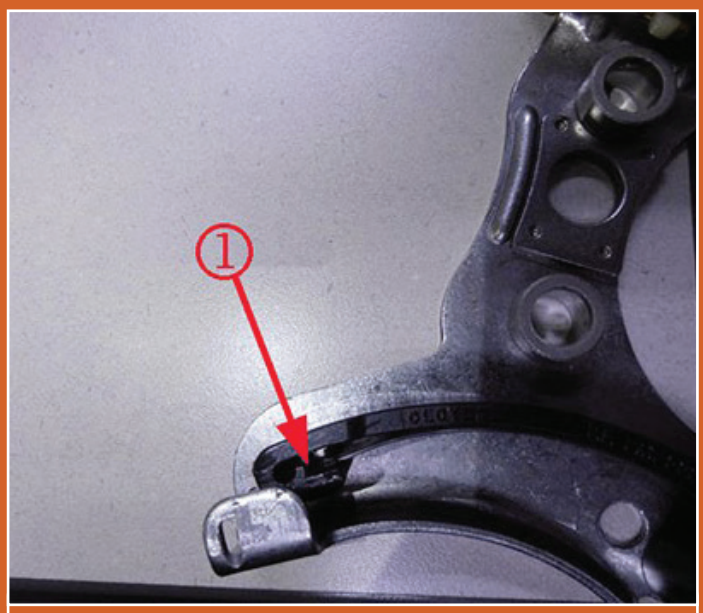
Press the Diesel Exhaust Brake button on the center of the instrument panel to activate/deactivate the exhaust brake.

The diesel exhaust brake system will not remain active on the next ignition cycle. The instrument panel button must be pressed each time the vehicle is started for the system to be active.

▶ Thanks to Tim Pierce, Dave MacGillis, and Kevin Minor

Low Oil Pressure Conditions

There may be no or low oil pressure along with DTC P06DD (Engine Oil Pressure Control Solenoid Valve Performance) set on some 2014-2019 Silverado LD, Sierra LD; 2015-2019 Escalade, Tahoe, Suburban, Yukon; 2016-2019 CTS-V, Camaro, and Corvette models equipped with the 4.3L V6 engine (RPO LV3), 5.3L V8 engine (RPO L83), 6.2L V8 engine (RPO L86), 6.2L V8 engine (RPO LT1), or 6.2L V8 engine (RPO LT4). These conditions may be caused the by the oil pump control valve stuck off and commanding high oil pressures (95 psi) and/or the oil pump face may be damaged.



Short spring not reaching the pivot

If these conditions are found, the tensioner spring in the timing chain guide may be "short" and not fully seated into the guide pivot end. Cycling the oil pump control valve will not cause any changes in the oil pump response. Replace the timing chain tensioner guide.

In addition, a broken tensioner shoe may allow the spring to rub a hole in the oil pump. If the oil pump face is damaged or worn, replace the oil pump. Also inspect the bearings for damage due to debris from the oil pump.

Broken tensioner shoe

Oil pump damage

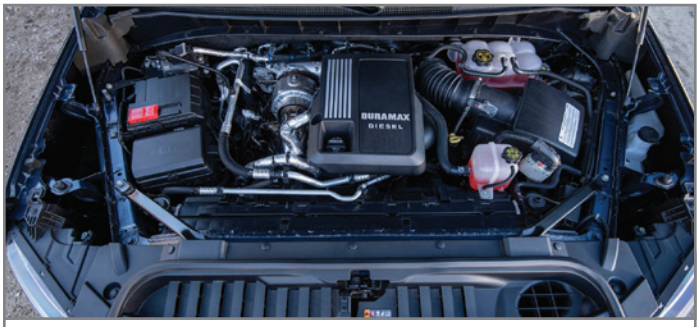
Refer to #PIP5407A for additional information.

▶ Thanks to Richard Renshaw

New Duramax Diesel 3.0L 6-Cylinder Engine

All-new turbo diesel powers up Silverado 1500, Sierra 1500.

The all-new Duramax® Diesel 3.0L inline 6-cylinder turbocharged engine (RPO LM2) delivers plenty of power — producing 282 horsepower and 450 lb.-ft. of torque — along with impressive fuel economy — an estimated 30 mpg (7.8L/100km) highway on 2WD models — in an efficient package. Available on 2020 Silverado 1500 and Sierra 1500 models, it's paired with the 10L80 10-speed automatic transmission (RPO MQB).



Duramax Diesel 3.0L turbocharged engine

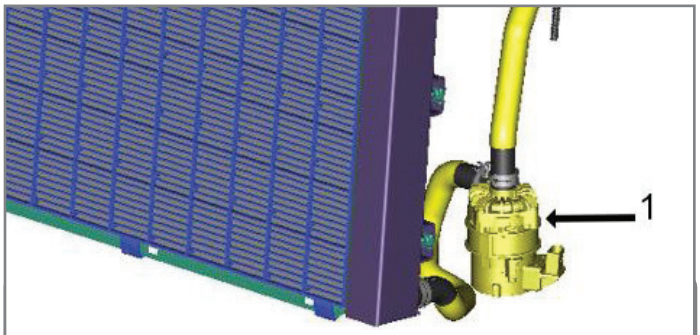
TURBOCHARGED PERFORMANCE

The dual overhead camshaft (DOHC) engine uses an aluminum block with six pressed-in iron sleeves and a high pressure diesel fuel injection system. The lower oil pan is made of dual-layer stamped aluminum.

The 3.0L diesel engine uses SAE 0W-20 dexosD diesel engine oil. Do not add anything to the oil.

The turbocharger is a variable nozzle design with an electric vane actuator attached to the exhaust manifold. The Variable Geometry Turbine (VGT) body assembly contains a contact-less inductive VGT position sensing element that is managed by a customized integrated circuit. The VGT position sensor provides a signal voltage that changes relative to the VGT vanes angle. The customized integrated circuit translates the voltage based position information into serial data using Single Edge Nibble Transmission (SENT) protocol. The VGT position sensor information is transmitted between the VGT body and the Engine Control Module (ECM) on the signal/serial data circuit. The ECM decodes the serial data signal and is used as voltages for the VGT position sensor.

The intake manifold houses the integrated intercooler. The intercooler system includes an air cooler/heat exchanger built into the intake, a charge air cooler (CAC) radiator assembled in the front fascia, and an electric coolant pump. The CAC coolant pump provides operational and diagnostic feedback to the ECM.



CAC coolant pump

The fuel system features a 3-phase electric fuel pump in the fuel tank that is controlled by the fuel pump driver control module and the ECM. Fuel is pumped from the fuel tank to the fuel filter assembly, which consists of a fuel filter/water separator, fuel heater, fuel temperature sensor, and a water in fuel sensor.

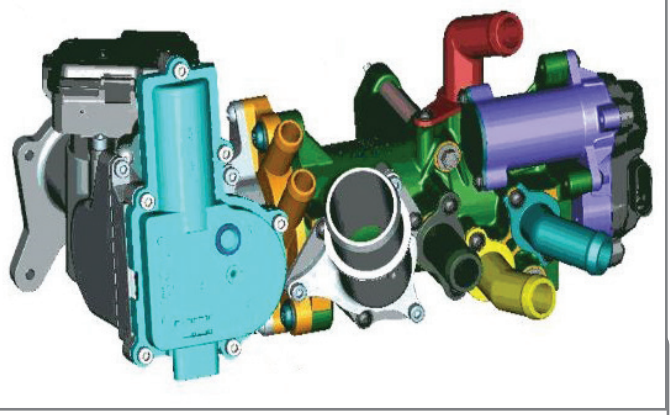
The ECM controls the fuel injection timing and has the ability to learn injector timing performance. Under the correct operating conditions, the ECM will pulse each injector individually and measure the changes in rotational speed of the crankshaft using the input from the crankshaft position sensor. The ECM will run this diagnostic at one fuel rail pressure operating point for each injector. The ECM stores the injector timing value.

CONTINUED ON PAGE 7

ACTIVE THERMAL MANAGEMENT

The Active Thermal Management (ATM) system on the 3.0L diesel engine distributes coolant through the engine in a targeted manner, sending heat where it's needed to warm up the engine and reduce friction. It also promotes quicker heating of the passenger compartment and enhanced engine cooling during high power operation. The system uses a conventional engine-driven coolant pump while the ECM controls the ATM system using feedback from various coolant temperature sensors.

The engine coolant flow control valve assembly that is part of the ATM system uses two chambers to control coolant flow. The first chamber controls the coolant flow rate across the radiator and bypass. The second chamber controls the flow to the transmission and engine oil cooler as needed, providing heated coolant from the EGR/turbocharger return circuit or cold coolant directly from the pump outlet.

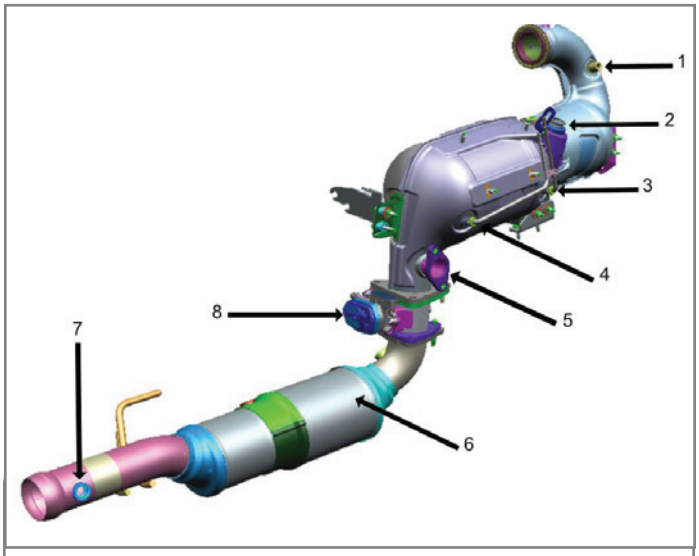


Engine coolant flow control valve

EXHAUST AFTERTREATMENT SYSTEM

The exhaust aftertreatment system is designed to reduce the levels of hydrocarbons (HC), carbon monoxide (CO), oxides of nitrogen (NOx), and particulate matter (PM) pollutants remaining in the engine's exhaust gases before they exit via the vehicle's exhaust tailpipe. NOx is controlled by a Selective Catalytic Reduction (SCR) converter combined with precise injections of Diesel Exhaust Fluid (DEF), while PM is controlled by a diesel particulate filter (DPF). To reduce packaging volume and manufacturing cost, the SCR catalyst on the DPF is coated to form an SCR-coated DPF, or a Selective Catalytic Reduction on Filter (SCRoF). The close coupled DOC along with the SCR on Filter are integrated into one assembly.

In the DPF, particulate matter consisting of extremely small particles of carbon remaining after combustion are removed from the exhaust gas by the large surface area of the DPF. DEF is injected into the exhaust gases prior to entering the SCRoF stage.



1. Exhaust temperature sensor
2. DEF injector mounting flange
3. Exhaust pressure differential sensor pipe
4. Exhaust pressure differential sensor pipe
5. EGR flange
6. NOx catalytic converter assembly
7. Particulate matter boss
8. Exhaust back pressure valve

Within the SCRoF, NOx is converted to nitrogen (N2), carbon dioxide (CO2), and water vapor (H20) through a catalytic reduction fueled by the injected DEF.

The DEF fill, identified by a blue cap, is located behind the fuel fill door. After filling the DEF tank, unless the DEF tank was empty, there may be a short delay before the increased fluid level is detected and the DEF level indicated on the Driver Information Center is updated.

DEF fill location

CONTINUED ON PAGE 8

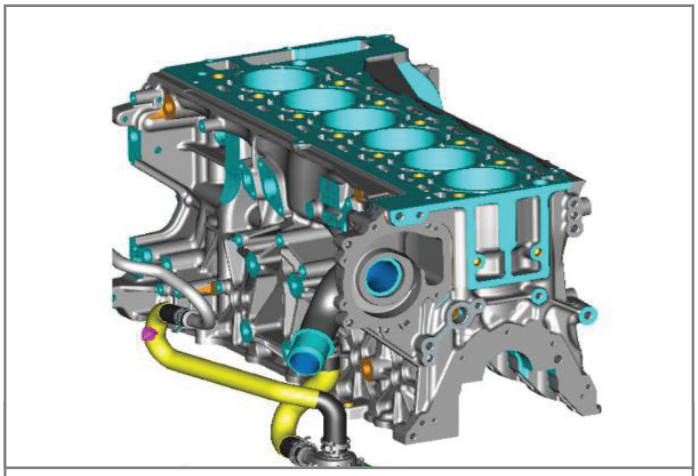
AUTOMATIC ENGINE STOP/START SYSTEM

Designed to help conserve fuel, the Automatic Engine Stop/Start system may turn off the engine when the brakes are applied and the vehicle is at a complete stop, if the required operating conditions are met. The tachometer will read Auto Stop.

The Stop/Start system can be disabled and enabled by pressing the Stop/Start switch on the center of the instrument panel. The system is enabled each time the vehicle is started.

Automatic Engine Stop/Start disable switch

An auxiliary electric engine coolant pump motor continually circulates engine coolant through the heater core while the Stop/Start system has shut down the engine and the ambient temperature is colder than 59°F (15°C) to maintain the passenger compartment temperature.



Auxiliary electric engine coolant pump

The 3.0L diesel engine also features an active engine mount system to enable an optimal balance between vehicle Noise Vibration and Harshness (NVH) performance and vehicle dynamics, including during Automatic Engine Stop/Start events. There is a single solenoid on each active engine mount that is energized during an ignition event and switched on for idle and driving events. The solenoid valves are supplied with battery voltage through a single fuse and are controlled by the ECM.

NORMAL SOUNDS AFTER ENGINE SHUT-OFF

After the 3.0L diesel engine has been shut off, several sounds may be heard in the engine bay. These sounds may be caused by the following components performing a cleaning cycle:

- Turbocharger linkage
- Exhaust throttle valve
- Intake manifold swirl valve

The sounds are normal operating characteristics of the vehicle and do not impact the designed performance or reliability of the vehicle.

Refer to Bulletin 19-NA-188 for additional information.

Turbocharger linkage

SPECIAL TOOLS

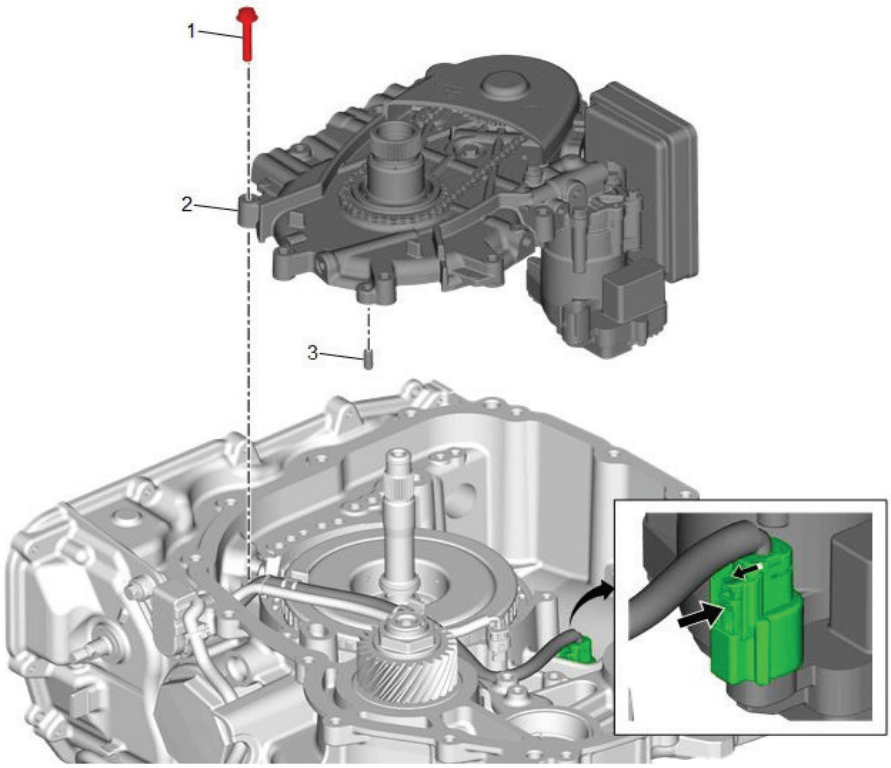
The following new tools were released for the 3.0L diesel engine:

Tool Number	Description
EN-52445	Camshaft Tool
EN-52446	Rear Crankshaft Seal Installer
EN-52448	High Pressure Fuel Pump Tool
EN-52449	Engine Stand Adapter
EN-52451	Fuel Injector Remover
EN-52452	Installer, Front Crankshaft Seal
EN-52474	Engine Lift Bracket Assembly
EN-52579	Crankshaft Rotator Tool
EN-52586	Fixing Pin, Crankshaft Timing
EN-50717-20	Valve Spring Compressor Adapter

For more details about the new 3.0L Duramax diesel engine, refer to Bulletin #19-NA-180.

Thanks to Javier Hinojos and Sherman Dixon

AUXILIARY
Transmission Fluid Pump Performance



Auxiliary transmission fluid pump

Some 2019 Malibu models equipped with the VT40 CVT automatic transmission (RPO MRG) may have an illuminated Check Engine lamp and the Automatic Engine Stop/Start system is not working. DTC P2797 (Auxiliary Transmission Fluid Pump Performance) may be set in the Transmission Control Module (TCM). These conditions may be the result of an internal failure in the auxiliary transmission fluid pump.

If DTC P2797 is the only code set, replace the auxiliary transmission fluid pump. If any other DTCs are set, follow the appropriate Service Information diagnostic procedures.

When removing the auxiliary transmission fluid pump, grasp the turbine shaft and remove the forward clutch and pump assembly as one piece. Keep the clutch assembly inserted in the pump to protect the shaft seals so they will not need to be replaced. Disconnect the connector by sliding the connector lock up and then pressing on the tab to pull out the connector. Refer to Automatic Transmission Fluid Pump Removal in the Service Information.

For details on installing the auxiliary pump, refer to Transmission Fluid Pump Disassemble in the Service Information. The auxiliary pump comes from the Warranty Parts Center (WPC) with a "B" seal ring, item #162, already installed.

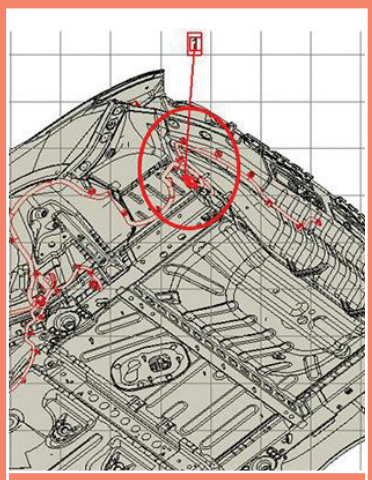
To order the auxiliary pump from the WPC, use the TSP Dealer Request Form on GlobalConnect.

Refer to #PIP5672 for additional information.

▶ Thanks to Terry Neuendorf

Multiple DIC Messages and Loss of Low Speed LAN Communication

Some 2016-2019 Volt models may experience a no start condition, multiple Driver Information Center (DIC) messages, and/or a loss of low speed Local Area Network (LAN) communication. If any of these conditions are present, there may be possible water intrusion in the X450 connector located in the left rear fascia area.



X450 connector in the left rear fascia area

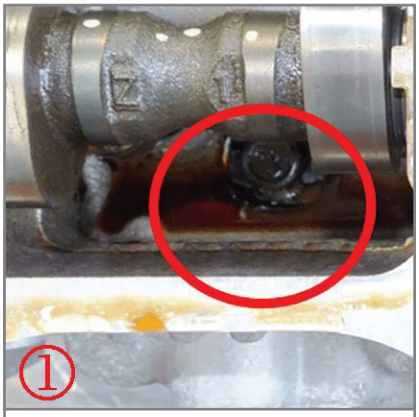
Rear lamp harness at the body harness

Check the X450 connector — where the rear lamp harness plugs into the body harness — for any signs of moisture damage. If any damage is found, repair the circuits as needed following the appropriate Service Information for terminal replacement or connector with leads assembly replacement.

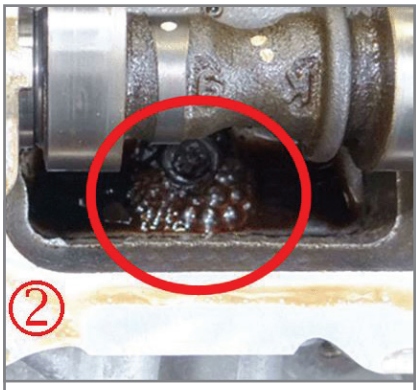
▶ Thanks to Paul Radzwilowicz

Possible Engine Oil Contamination Conditions

Some 2019 Enclave and Traverse models may have an illuminated Check Engine MIL along with an engine ticking noise, coolant loss or very dark colored oil in 3.6L V6 engines (RPO LFY) with low mileage. DTCs P0016 (Crankshaft Position - Intake Camshaft Position Not Plausible Bank 1), P0017 (Crankshaft Position - Exhaust Camshaft Position Not Plausible Bank 1), P0018 (Crankshaft Position - Intake Camshaft Position Not Plausible Bank 2), or P0019 (Crankshaft Position - Exhaust Camshaft Position Not Plausible Bank 2) may be set.



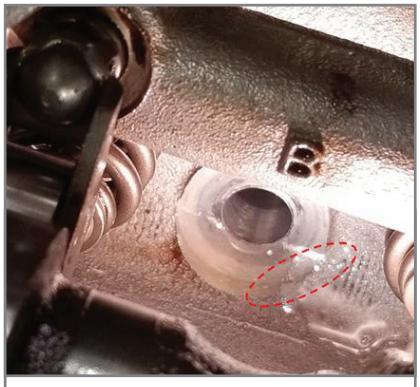
Moderate leak



Extreme leak

These conditions may be caused by coolant contaminating the engine oil due to internal porosity on the cylinder head at the outer bolt area. Check the engine oil for a dark color or sticky feeling. The engine oil condition has a major impact on the camshaft actuator system. Debris or oil contamination can interfere with the camshaft position actuator solenoid valve and the mechanical camshaft actuator operation.

If these conditions are found, remove both camshaft covers for access to the top of the cylinder heads. Pressure test the cooling system with up to 20 PSI (138 kPa) while watching the center two head bolt area on the exhaust side of the heads. Observe the area for approximately 15 to 30 minutes, looking for a leak that may be moderate or extreme from the affected area.



Location of possible porosity on the head bolt cutout area

If bubbles or coolant foaming is seen in the center two head bolt area, the cause may be porosity on the head bolt cutout area or column, which will require replacement of the affected cylinder head.

Refer to #PIP5674 for additional information.

▶ Thanks to Aron Wilson

Updated Engine Oil Capacities Chart

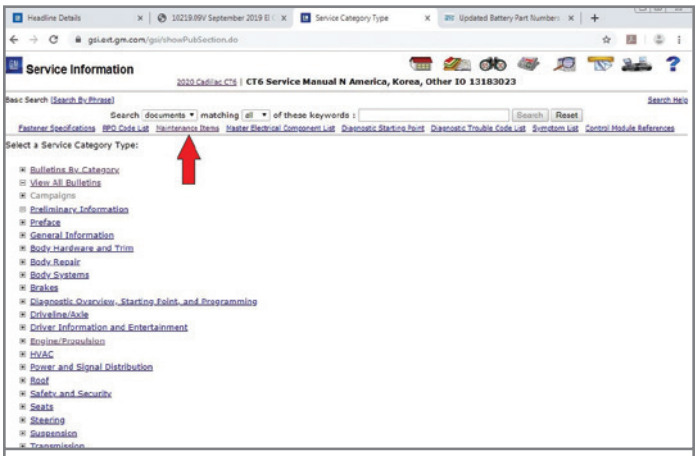
An updated Engine Oil Capacities chart for the 2019-2020 model years is now available under the Reference Chart menu on the TechLink website and is also included in this issue of TechLink. The chart includes engine, RPO, specifications (liters and quarts) and oil viscosity for 2019 and 2020 Chevrolet, Buick, GMC and Cadillac models.

2020 TECHLINK

CHEVROLET	2020 ENGINE OIL CAPACITIES (WITH FILTER) – U.S. and Canada only				
MODEL	ENGINE	RPO	SPEC - LITERS	SPEC - QUARTS	VISCOSITY
Blazer	2.0L L4	LSY	5.0	5.3	*0W-20*
	2.5L L4 FWD	LCV	4.7	5.0	*5W-20*
	2.5L L4 AWD	LCV	5.7	6.0	*5W-20*
	3.6L V6	LGX	5.7	6.0	5W-30
Camaro	2.0L L4	LTG	4.7	5.0	5W-30
		LTG with Y4Q	5.2	5.5	5W-30
	3.6L V6	LGX	5.7	6.0	5W-30
	6.2L V8	LT1, LT4	9.5	10.0	*0W-40*
Colorado	2.5L L4	LCV	4.7	5.0	*5W-20*
	2.8L L4 Diesel	LWN	5.6	6.0	*dexos2 5W-30*
	3.6L V6	LGZ	5.7	6.0	5W-30
Corvette	Information currently not available				
Equinox	1.5L L4 FWD	LYX	4.0	4.2	*0W-20*
	1.5L L4 AWD	LYX	5.0	5.3	*0W-20*
	1.6L L4 Diesel	LH7	5.0	5.3	*dexos2 5W-30*
	2.0L L4 FWD	LTG	4.7	5.0	5W-30
	2.0L L4 AWD	LTG	5.7	6.0	5W-30
Express	2.8L L4 Diesel	LWN	5.6	6.0	*dexos2 5W-30*
	4.3L V6	LV1	5.7	6.0	5W-30
	6.0L V8	L96	5.7	6.0	5W-30
	6.0L V8 CNG	LC8	5.7	6.0	5W-30
Impala	3.6L V6	LFX	5.7	6.0	5W-30
Low Cab Forward	5.2L L4 Diesel	I1B	11.0	11.6	*10W-40*
	6.0L V8	L96	5.7	6.0	5W-30
	6.0L V8 CNG	LC8	5.7	6.0	5W-30
Malibu	1.5L L4	LFV	4.0	4.2	*0W-20*

TIP: Refer to the owner's manual for cold temperature operation oil viscosities.

For more information on the appropriate engine oil for a particular engine application, check the Approximate Fluid Capacities section and the Fluid and Lubricant Recommendations section



Maintenance link in the Service Information

under the Maintenance Items link at the top of the Service Category Type page in the appropriate Service Information.

The Maintenance Items link also provides quick access to information on GM Oil Life System resetting, tire rotation, air filter replacement, spark plug replacement, brake pad inspection, and other common maintenance items.

▶ Thanks to Mark Spencer

TECHLINK

GM TechLink is published for all GM retail technicians and service consultants to provide timely information to help increase knowledge about GM products and improve the performance of the service department.

Publisher:
John Meade
GM Customer Care and Aftersales

Editor:
Lisa G. Scott
GM Customer Care and Aftersales

Technical Editor:
Mark Spencer
mspencer@gpstrategies.com

Production Manager:
Marie Meredith

Creative Design:
5by5 Design LLC
dkelly@5by5dzign.com

Write to:
TechLink
PO Box 500, Troy, MI 48007-0500

GM TechLink on the Web:
GM GlobalConnect

CHEVROLET	2020 ENGINE OIL CAPACITIES (WITH FILTER) – U.S. and Canada only				
MODEL	**ENGINE**	**RPO**	**SPEC - LITERS**	**SPEC - QUARTS**	**VISCOSITY**
Blazer	2.0L L4	LSY	5.0	5.3	*0W-20*
	2.5L L4 FWD	LCV	4.7	5.0	*5W-20*
	2.5L L4 AWD	LCV	5.7	6.0	*5W-20*
	3.6L V6	LGX	5.7	6.0	5W-30
Camaro	2.0L L4	LTG	4.7	5.0	5W-30
		LTG with Y4Q	5.2	5.5	5W-30
	3.6L V6	LGX	5.7	6.0	5W-30
	6.2L V8	LT1, LT4	9.5	10.0	*0W-40*
Colorado	2.5L L4	LCV	4.7	5.0	*5W-20*
	2.8L L4 Diesel	LWN	5.6	6.0	*dexos2 5W-30*
	3.6L V6	LGZ	5.7	6.0	5W-30
Corvette	6.2L V8	LT2	7.1	7.5	*0W-40*
Equinox	1.5L L4 FWD	LYX	4.0	4.2	*0W-20*
	1.5L L4 AWD	LYX	5.0	5.3	*0W-20*
	1.6L L4 Diesel	LH7	5.0	5.3	*dexos2 5W-30*
	2.0L L4 FWD	LTG	4.7	5.0	5W-30
	2.0L L4 AWD	LTG	5.7	6.0	5W-30
Express	2.8L L4 Diesel	LWN	5.6	6.0	*dexos2 5W-30*
	4.3L V6	LV1	5.7	6.0	5W-30
	6.0L V8	L96	5.7	6.0	5W-30
	6.0L V8 CNG	LC8	5.7	6.0	5W-30
Impala	3.6L V6	LFX	5.7	6.0	5W-30
Low Cab Forward	5.2L L4 Diesel	I1B	11.0	11.6	*10W-40*
	6.0L V8	L96	5.7	6.0	5W-30
	6.0L V8 CNG	LC8	5.7	6.0	5W-30
Malibu	1.5L L4	LFV	4.0	4.2	*0W-20*
	2.0L L4	LTG	4.7	5.0	5W-30
Silverado 1500	2.7L L4	L3B	5.7	6.0	5W-30
	3.0L L6 Diesel	LM2	6.6	7.0	*dexosD 0W-20*
	4.3L V6	LV3	5.7	6.0	5W-30
	5.3L V8	L82, L84	7.6	8.0	*0W-20*
	6.2L V8	L87	7.6	8.0	*0W-20*
Silverado HD 2500/3500	6.6L V8	L8T	7.6	8.0	*0W-20*
	6.6L V8 Diesel	L5P	9.5	10.0	*15W-40*
Silverado HD 4500/5500/6500	6.6L V8 Diesel	L5D	9.5	10.0	*15W-40*
Sonic	1.4L L4	LUV	4.0	4.25	5W-30
Spark	1.4L L4	LV7	4.0	4.25	*0W-20*
Tahoe/Suburban	5.3L V8	L83	7.6	8.0	*0W-20*
	6.2L V8	L86	7.6	8.0	*0W-20*
Traverse	3.6L V6	LFY	5.7	6.0	5W-30
Trax	1.4L L4	LUV	4.0	4.25	5W-30

Refer to the Owner Manual for Cold Temperature Operation oil viscosities.

BUICK	2020 ENGINE OIL CAPACITIES (WITH FILTER) – U.S. and Canada only				
MODEL	**ENGINE**	**RPO**	**SPEC - LITERS**	**SPEC - QUARTS**	**VISCOSITY**
Enclave	3.6L V6	LFY	5.7	6.0	5W-30
Encore	1.4L L4	LUV	4.0	4.25	5W-30
Encore GX	1.2L L3	LIH	4.0	4.2	5W-30
	1.3L L3	L3T	4.5	4.8	*0W-20*
Envision	2.0L L4 FWD	LTG	4.7	5.0	5W-30
	2.0L L4 AWD	LTG	5.7	6.0	5W-30
	2.5L L4 FWD	LCV	4.7	5.0	*0W-20*
	2.5L L4 AWD	LCV	5.7	6.0	*0W-20*
Regal	2.0L L4 FWD	LTG	4.7	5.0	5W-30
	2.0L L4 AWD	LTG	5.7	6.0	5W-30
	3.6L V6	LGX	5.7	6.0	5W-30

GMC	2020 ENGINE OIL CAPACITIES (WITH FILTER) – U.S. and Canada only				
MODEL	**ENGINE**	**RPO**	**SPEC - LITERS**	**SPEC - QUARTS**	**VISCOSITY**
Acadia	2.0L L4	LSY	5.0	5.3	*0W-20*
	2.5L L4 FWD	LCV	4.7	5.0	*5W-20*
	2.5L L4 AWD	LCV	5.7	6.0	*5W-20*
	3.6L V6	LGX	5.7	6.0	5W-30
Canyon	2.5L L4	LCV	4.7	5.0	*5W-20*
	2.8L L4 Diesel	LWN	5.6	6.0	*dexos2 5W-30*
	3.6L V6	LGZ	5.7	6.0	5W-30
Savana	2.8L L4 Diesel	LWN	5.6	6.0	*dexos2 5W-30*
	4.3L V6	LV1	5.7	6.0	5W-30
	6.0L V8	L96	5.7	6.0	5W-30
	6.0L V8 CNG	LC8	5.7	6.0	5W-30
Sierra 1500	2.7L L4	L3B	5.7	6.0	5W-30
	3.0L L6 Diesel	LM2	6.6	7.0	*dexosD 0W-20*
	4.3L V6	LV3	5.7	6.0	5W-30
	5.3L V8	L82, L84	7.6	8.0	*0W-20*
	6.2L V8	L87	7.6	8.0	*0W-20*
Sierra HD 2500/3500	6.6L V8	L8T	7.6	8.0	*0W-20*
	6.6L V8 Diesel	L5P	9.5	10.0	*15W-40*
Terrain	1.5L L4 FWD	LYX	4.0	4.2	*0W-20*
	1.5L L4 AWD	LYX	5.0	5.3	*0W-20*
	1.6L L4 Diesel	LH7	5.0	5.3	*dexos2 5W-30*
	2.0L L4 FWD	LTG	4.7	5.0	5W-30
	2.0L L4 AWD	LTG	5.7	6.0	5W-30
Yukon/XL	5.3L V8	L83	7.6	8.0	*0W-20*
	6.2L V8	L86	7.6	8.0	*0W-20*

CADILLAC	2020 ENGINE OIL CAPACITIES (WITH FILTER) – U.S. and Canada only				
MODEL	**ENGINE**	**RPO**	**SPEC - LITERS**	**SPEC - QUARTS**	**VISCOSITY**
CT5	Information currently not available				
CT6	3.6L V6	LGX	5.7	6.0	5W-30
	4.2L V8	LTA	8.5	9.0	*0W-40*
CT6-V	4.2L V8	LTA	8.5	9.0	*0W-40*
Escalade/ESV	6.2L V8	L86	7.6	8.0	*0W-20*
XT4	2.0L L4	LSY	5.0	5.3	*0W-20*
XT5	2.0L L4	LSY	5.0	5.3	*0W-20*
	3.6L V6	LGX	5.7	6.0	5W-30
XT6	3.6L V6	LGX	5.7	6.0	5W-30

CHEVROLET	2019 ENGINE OIL CAPACITIES (WITH FILTER) – U.S. and Canada only				
MODEL	**ENGINE**	**RPO**	**SPEC - LITERS**	**SPEC - QUARTS**	**VISCOSITY**
Blazer	2.5L L4 FWD	LCV	4.7	5.0	*5W-20*
	2.5L L4 AWD	LCV	5.7	6.0	*5W-20*
	3.6L V6	LGX	5.7	6.0	5W-30
Camaro	2.0L L4	LTG	4.7	5.0	5W-30
		LTG with Y4Q	5.2	5.5	5W-30
	3.6L V6	LGX	5.7	6.0	5W-30
	6.2L V8	LT1, LT4	9.5	10.0	*0W-40*
Colorado	2.5L L4	LCV	4.7	5.0	*5W-20*
	2.8L L4 Diesel	LWN	5.6	6.0	*dexos2 5W-30*
	3.6L V6	LGZ	5.7	6.0	5W-30
Corvette	6.2L V8	LT1	6.6	7.0	*0W-40*
	6.2L V8 Z51/GS	LT1 with Z52	9.3	9.8	*0W-40*
	6.2L V8 Z06	LT4	9.3	9.8	*0W-40*
	6.2L V8 ZR1	LT5	9.3	9.8	*0W-40*
Cruze	1.4L L4	LE2	4.0	4.2	*0W-20*
	1.6L L4 Diesel	LH7	5.0	5.3	*dexos2 5W-30*
Equinox	1.5L L4 FWD	LYX	4.0	4.2	*0W-20*
	1.5L L4 AWD	LYX	5.0	5.3	*0W-20*
	1.6L L4 Diesel	LH7	5.0	5.3	*dexos2 5W-30*
	2.0L L4 FWD	LTG	4.7	5.0	5W-30
	2.0L L4 AWD	LTG	5.7	6.0	5W-30
Express	2.8L L4 Diesel	LWN	5.6	6.0	*dexos2 5W-30*
	4.3L V6	LV1	5.7	6.0	5W-30
	6.0L V8	L96	5.7	6.0	5W-30
	6.0L V8 CNG	LC8	5.7	6.0	5W-30
Impala	2.5L L4	LCV	4.7	5.0	*5W-20*
	3.6L V6	LFX	5.7	6.0	5W-30
Low Cab Forward	5.2L L4 Diesel	I1B	11.0	11.6	*10W-40*
	6.0L V8	L96	5.7	6.0	5W-30
	6.0L V8 CNG	LC8	5.7	6.0	5W-30
Malibu	1.5L L4	LFV	4.0	4.2	*0W-20*
	1.8L L4 Hybrid	LKN	5.0	5.3	*5W-20*
	2.0L L4	LTG	4.7	5.0	5W-30
Silverado 1500	2.7L L4	L3B	5.7	6.0	5W-30
	4.3L V6	LV3	5.7	6.0	5W-30
	5.3L V8	L82, L84	7.6	8.0	*0W-20*
	6.2L V8	L87	7.6	8.0	*0W-20*
Silverado LD	5.3L V8	L83	7.6	8.0	*0W-20*
Silverado HD 2500/3500	6.0L V8	L96	5.7	6.0	5W-30
	6.0L V8 CNG	LC8	5.7	6.0	5W-30
	6.6L V8 Diesel	L5P	9.5	10.0	*15W-40*
Silverado HD 4500/5500/6500	6.6L V8 Diesel	L5D	9.5	10.0	*15W-40*
Sonic	1.4L L4	LUV	4.0	4.25	5W-30
Spark	1.4L L4	LV7	4.0	4.25	*0W-20*
Tahoe/Suburban	5.3L V8	L83	7.6	8.0	*0W-20*
	6.2L V8	L86	7.6	8.0	*0W-20*
Traverse	2.0L L4 FWD	LTG	4.7	5.0	5W-30
	3.6L V6	LFY	5.7	6.0	5W-30
Trax	1.4L L4	LUV	4.0	4.25	5W-30
Volt	1.5L L4	L3A	4.0	4.25	*0W-20*

BUICK	2019 ENGINE OIL CAPACITIES (WITH FILTER) – U.S. and Canada only				
MODEL	**ENGINE (RPO)**	**RPO**	**SPEC - LITERS**	**SPEC - QUARTS**	**VISCOSITY**
Cascada	1.6L L4	LWC	5.5	5.8	5W-30
Enclave	3.6L V6	LFY	5.7	6.0	5W-30
Encore	1.4L L4	LUV	4.0	4.25	5W-30
	1.4L L4	LE2	4.0	4.25	*0W-20*
Envision	2.0L L4 FWD	LTG	4.7	5.0	5W-30
	2.0L L4 AWD	LTG	5.7	6.0	5W-30
	2.5L L4 FWD	LCV	4.7	5.0	*0W-20*
	2.5L L4 AWD	LCV	5.7	6.0	*0W-20*
LaCrosse	2.5L L4	LHN	5.7	6.0	*0W-20*
	3.6L V6	LGX	5.7	6.0	5W-30
Regal	2.0L L4 FWD	LTG	4.7	5.0	5W-30
	2.0L L4 AWD	LTG	5.7	6.0	5W-30
	3.6L V6	LGX	5.7	6.0	5W-30

GMC	2019 ENGINE OIL CAPACITIES (WITH FILTER) – U.S. and Canada only				
MODEL	**ENGINE**	**RPO**	**SPEC - LITERS**	**SPEC - QUARTS**	**VISCOSITY**
Acadia	2.5L L4 FWD	LCV	4.7	5.0	*5W-20*
	2.5L L4 AWD	LCV	5.7	6.0	*5W-20*
	3.6L V6	LGX	5.7	6.0	5W-30
Canyon	2.5L L4	LCV	4.7	5.0	*5W-20*
	2.8L L4 Diesel	LWN	5.6	6.0	*dexos2 5W-30*
	3.6L V6	LGZ	5.7	6.0	5W-30
Savana	2.8L L4 Diesel	LWN	5.6	6.0	*dexos2 5W-30*
	4.3L V6	LV1	5.7	6.0	5W-30
	6.0L V8	L96	5.7	6.0	5W-30
	6.0L V8 CNG	LC8	5.7	6.0	5W-30
Sierra 1500	2.7L L4	L3B	5.7	6.0	5W-30
	4.3L V6	LV3	5.7	6.0	5W-30
	5.3L V8	L82, L84	7.6	8.0	*0W-20*
	6.2L V8	L87	7.6	8.0	*0W-20*
Sierra HD 2500/3500	6.0L V8	L96	5.7	6.0	5W-30
	6.0L V8 CNG	LC8	5.7	6.0	5W-30
	6.6L V8 Diesel	L5P	9.5	10.0	*15W-40*
Sierra Limited	5.3L V8	L83	7.6	8.0	*0W-20*
Terrain	1.5L L4 FWD	LYX	4.0	4.2	*0W-20*
	1.5L L4 AWD	LYX	5.0	5.3	*0W-20*
	1.6L L4 Diesel	LH7	5.0	5.3	*dexos2 5W-30*
	2.0L L4 FWD	LTG	4.7	5.0	5W-30
	2.0L L4 AWD	LTG	5.7	6.0	5W-30
Yukon/XL	5.3L V8	L83	7.6	8.0	*0W-20*
	6.2L V8	L86	7.6	8.0	*0W-20*

CADILLAC	2019 ENGINE OIL CAPACITIES (WITH FILTER) – U.S. and Canada only				
MODEL	**ENGINE**	**RPO**	**SPEC - LITERS**	**SPEC - QUARTS**	**VISCOSITY**
ATS Coupe	2.0L L4 RWD	LTG	4.7	5.0	5W-30
	2.0L L4 AWD	LTG	5.7	6.0	5W-30
	3.6L V6 RWD	LGX	5.2	5.5	5W-30
	3.6L V6 AWD	LGX	6.15	6.5	5W-30
ATS-V Coupe	3.6L V6	LF4	6.6	7.0	5W-30
CTS	2.0L L4 RWD	LTG	4.7	5.0	5W-30
	2.0L L4 AWD	LTG	5.7	6.0	5W-30
	3.6L V6 RWD	LGX	5.2	5.5	5W-30
	3.6L V6 AWD	LGX	6.15	6.5	5W-30
	3.6L V6 Turbo	LF3	6.6	7.0	5W-30
CTS-V	6.2L V8	LT4	9.5	10.0	5W-30
CT6	2.0L L4	LSY	5.0	5.3	*0W-20*
	3.0L V6 AWD	LGW	5.7	6.0	5W-30
	3.6L V6 AWD	LGX	5.7	6.0	5W-30
	4.2L V8	LTA	8.5	9.0	*0W-40*
Escalade/ESV	6.2L V8	L86	7.6	8.0	*0W-20*
XTS	3.6L V6	LFX	5.7	6.0	5W-30
	3.6L V6 Turbo	LF3	6.6	7.0	5W-30
XT4	2.0L L4	LSY	5.0	5.3	*0W-20*
XT5	3.6L V6	LGX	5.7	6.0	5W-30