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GMC

# All-New 2019 Silverado 1500 and Sierra 1500 Ready to Work





For 2019, the Silverado 1500 and Sierra 1500 are all-new pickups with new powertrains, mixed material construction, and a wealth of enhanced safety and convenience features. The 2019 Silverado 1500 is available in eight trim levels while the 2019 Sierra 1500 is available in six trim levels.

### **Four Engine Choices**

The 4.3L V6 (RPO LV3) and 5.3L V8 (RPO L82) are carryover engines from the 2018 model year. The 4.3L V6 produces 285 horsepower and 305 lb.-ft. of torque. The 5.3L V8 generates 355 horsepower and 383 lb.-ft. of torque. Both engines feature direct injection, variable valve timing and Active Fuel Management, which turns off four cylinders, depending on operating conditions.

New engines for 2019 are the 5.3L V8 (RPO L84) and the 6.2L V8 (RPO L87).



New 5.3L V8 (L84)

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**Customer Care and Aftersales** 

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The 5.3L V8 has a power output of 355 horsepower and 383 lb.-ft. of torque. The 6.2L V8 develops 420 horsepower and 460 lb.-ft. of torque.

**TIP:** When using GDS2, be sure the vehicle is built correctly. To check that the vehicle is configured for the new 2019 Silverado 1500 or Sierra 1500, check the engine RPO codes and the infotainment RPO codes. The only infotainment RPO codes available on the new trucks are RPO IOT, IOS and IOR.

The new powerful, yet efficient, V8 engines are equipped with direct injection, variable valve timing, and automatic Stop/Start technology that turns off the engine when the vehicle comes to a stop to help improve fuel economy in city driving. Plus, the engines feature the new Dynamic Fuel

Management system, which actively turns off any number of cylinders in a variety of combinations, running on one to eight cylinders.

The automatic engine Stop/Start feature can be turned on/off using the Stop/Start disable switch on the center of the instrument panel. The system is enabled each time the vehicle is started.



New 6.2L V8 (L87)

	Silverado	
Trim Level	Engine (RPO)	Transmission (RPO)
– Work Truck (WT)	4.3L V6 (LV3)	
<ul> <li>– Custom</li> <li>– Custom Trail</li> <li>Boss</li> </ul>	5.3L V8 (L82)	6L80 6-speed automatic (MYC)
– LT – RST – LT Trail Boss	5.3 L V8 (L84)	8L90 8-speed automatic (MQE)
– LTZ	5.3L V8 (L84)	8L90 8-speed automatic (MQE)
– High Country	6.2L V8 (L87)	10L80 10-speed automatic (MQB)
	Sierra	
Trim Level	Engine (RPO)	Transmission (RPO)
– Sierra	4.3L V6 (LV3) 5.3L V8 (L82)	6L80 6-speed automatic (MYC)
– SLE – Elevation	5.3 L V8 (L84)	8L90 8-speed automatic (MQE)
– SLT	5.3L V8 (L84)	8L90 8-speed automatic (MQE)
– AT4	6.2L V8 (L87)	10L80 10-speed

5.3L V8 (L84)

6.2L V8 (L87)

automatic (MQB)

10L80 10-speed

automatic (MQB)

(MQE)

8L90 8-speed automatic

**TIP:** The fuel pump will prime for approximately two seconds when any door is opened or the passive entry lock/unlock button is pressed on the outside door handle. The fuel pump will not prime every time a door is opened. It takes approximately 10 minutes between prime cycles.

# **Engine Oil**

Use dexos1° – GEN 2 full synthetic SAE 5W-30 engine oil in the 4.3L V6 engine. For the 5.3L and 6.2L V8 engines, use dexos1° - GEN 2 full synthetic SAE 0W-20 engine oil.

### **Transmissions**

The 4.3L V6 (RPO LV3) and 5.3L V8 (RPO L82) engines are paired with the 6L80 6-speed automatic transmission (RPO MYC). This transmission uses DEXRON-VI automatic transmission fluid.

The 5.3L V8 (RPO L84) engine is mated to the 8L90 8-speed automatic transmission, which used DEXRON-HP automatic transmission fluid.

The 6.2L engine (RPO L87) is equipped with the 10L80 10-speed automatic transmission. This transmission uses DEXRON ULV automatic transmission fluid.

Both 8L90 8-speed transmission and 10L80 10-speed transmission use a centrifugal pendulum absorber (CPA) to help counteract torsional vibration that occurs when the engine cylinders are deactivated, providing for smooth and quiet drivetrain operation.



10L80 10-speed automatic transmission

### Frame

The frame of the new trucks is fully boxed, with 80 percent made from high strength steel that varies from two to five millimeters in thickness for optimized performance while minimizing weight. The result is that the frame on the new trucks is 88 pounds (40 kg) lighter than its predecessor, but delivers 10 percent greater torsional rigidity.

### **Body Structure**

The body structure uses a mixed materials strategy. All moving metal — hood, doors and tailgate — is aluminum.

All cab fixed metal is steel and high strength steel materials. The pickup bed may be either steel or, available on Sierra models with the Carbon Pro Box (RPO E3Z), a hybrid of carbon fiber and steel.

### Axles

There are two different axle suppliers — American Axle Manufacturing (AAM) and General Motors Components Holding (GMCH) — for 2019 Silverado and Sierra. Depending on equipment, some trucks may have different front and rear axles. The AAM axles are RPO SU4 (front) and SU7 (rear). The GMCH axles are RPO SU5 (front) and SU8 (rear).

– Denali



The body structure uses a mixed materials strategy.

The axle source RPO must be referenced for all parts, including axle lubricant, to ensure the correct parts are used. When ordering parts, be sure to search by VIN.

Both GMCH axles have a GM Mark of Excellence emblem on the housing.



GM emblem on housing.

#### **Brakes**

The vehicles are equipped with a ZF TRW Integrated Brake Control (IBC). The IBC is a 1-piece module that eliminates the master cylinder, vacuum pump and associated hoses while incorporating electronic stability control, traction control and an electric motor to push hydraulic fluid to brakes at all four corners. The brake system uses DOT4 Hydraulic Brake Fluid.

The parking brake function is integrated into the Electronic Brake Control Module (EBCM), which is commanded using the Electric Parking Brake switch on the left side of the instrument panel. When applied, the parking brake makes a whirring noise and is more noticeable when the ignition is off. The parking brake automatically releases any time the vehicle is in any gear and the accelerator is depressed. If there is insufficient electrical power, the electric parking brake cannot be applied or released.

### **Driver Assistance Systems**

Depending on equipment, the new Silverado and Sierra feature a number of active safety and driver awareness systems that provide a safer driving environment. Available systems include:

- Safety Alert Seat
- Rear Camera Mirror

- Surround Vision 360-degree camera with Hitch Guidance and Hitch View
- Lane Change Alert with Side Blind Zone Alert
- Front and Rear Park Assist
- Rear Cross Traffic Alert
- Lane Keep Assist with Lane Departure Warning
- Front Pedestrian Braking
- Forward Collision Alert
- Forward Automatic Braking



Silverado cabin

#### **Power Tailgate**

The new trucks feature several different tailgates that offer a range of functionality. All tailgates are aluminum, which makes them light and easy to operate. A 120 volt/400 watt inverter with a boxmounted outlet also is available at the rear of the cargo box.

Some Silverado models offer a full power tailgate with an electric motor and gear reduction in the bottom of the tailgate. It also has a pair of power-assist closure latches that pull the tailgate closed.

The power open feature can be operated using the key fob, the touchpad on the tailgate, or a switch on the center of the instrument panel. To power close the tailgate using the key fob or instrument panel switch, press and hold the button until the tailgate closes. There are force switches that reverse the motor if any resistance is felt, and it won't close if something is resting on it.



Power tailgate switch

To remove the power tailgate, unplug the power and camera connection near the middle of the base of the tailgate and then remove the retaining bolt at the right-side pivot (the motor reacts against this solid mount when raising and lowering the gate). The left side is a free rotating pivot.

### **MultiPro Tailgate**

The available MultiPro tailgate on the Sierra offers flexibility for owners with six positions that provide enhanced loading and unloading capabilities and easy access to the cargo box. There are two touchpad buttons on the tailgate. The bottom button releases the full tailgate while the top



Multi-Pro tailgate

button releases only the upper portion, or inner gate, of the tailgate. The inner gate can be used as a workbench or provide more space for longer cargo with the tailgate closed.

**TIP:** Do not lower the inner gate with the tailgate open if a hitch ball or trailer is attached.

## **Trailering System**



The trailering app offers a variety of trailering information.

The available Sierra Pro Grade Trailering System and Chevrolet Advanced Trailering System (RPO ZL6) includes an all-new trailering app on the infotainment system featuring a pre-departure checklist, maintenance reminders, trailer light test, trailer electrical diagnostics and available trailer tire pressure and temperature monitoring (RPO PTT). In addition, the available side view cameras and a trailer-mounted HD camera also provide additional assistance when driving down the road or in Reverse. As part of the trailer tire pressure monitor system (RPO PTT), four additional tire pressure monitor sensors are included in the Loose Ship Components package for installation on up to four trailer tires.

### **Lift Points**



\_ift points

**TIP:** Prior to servicing the vehicle using a lift hoist, the vehicle power assist steps must be disabled to prevent accidental activation. Use lift pads/spacers to provide proper clearance between the lift hoist arms and the vehicle's fixed or power assist steps. After servicing the vehicle, be sure to enable the power assist steps.

For lifting the vehicle, various lift points are recommended. For the front locations, the two approved lifting points are the circular jack pad (#1) and the widest point of the frame rail (#2), which requires an adapter from the hoist

manufacturer.

The lift points are:

- 1. Circular jack pad
- 2. Widest point of the frame rail; requires adapter that is wider than the frame rail when using a hoist. Contact your hoist manufacturer for the appropriate adapter.
- 3. Rear frame contact points
- 4. Rear axle contact points
- 5. Differential contact points

The hoist pads must not contact the rocker panels, the floor pan or, at the front pad location, the front fenders.

Lift pad adapters for Challenger and Rotary lifts are available through GM Dealer Equipment.



Circular jack pad



Front rail lift pad adapter

When lifting at the differential (#5) with a floor jack, avoid point loading the center section of the axle, which is aluminum on most rear axles. Use a floor jack with a rubber pad or wood block to prevent damage.

### **Special Tools**

The following new tools were released for the 2019 Silverado 1500 and Sierra 1500.

For more information on the new 2019 Silverado 1500 and Sierra 1500, refer to Bulletin #18-NA-227.

S Thanks to Dave MacGillis and Sherman Dixon

Tool Number	Description
EN-52511	FA-AFM OCV Remover
DT-52529	Gauge Plate, Pinion Shim (front axle)
DT-52555	Installer, Side Bearing (front axle)
DT-52556	Installer, Outer Pinion Bearing Cup (front axle)
DT-52506	Pinion Flange Holder and Remover
DT-52297	Axle Service Fixture
DT-52494	Pinion Bearing Cup Installer
DT-52574	Installer, Bushing
J-45858-4B	Remover, Inner Pinion Bearing Cup
J-45858-2C	Installer, Inner Pinion Bearing Cup
EN-51007-10	Engine Support Fixture Adapter Feet
J-39648	LH Output Shaft Bearing and Seal Installer

# Corvette Break-In Oil Change Information

2014-2019 Corvette models equipped with the 6.2L V8 engine (RPO LT1, LT4, LT5) with a dry sump oil system (RPO Z52) require an engine oil change immediately after the 500 mile (800 km) break-in period.



If the vehicle is driven continuously at a high engine speed with the first factory oil fill, silicone sealants in the engine's gaskets may degrade the anti-foaming properties of the oil. This may lead to oil leaking out from the air cleaner assembly due to the oil foaming condition. The oil foam does not affect the engine's durability, but changing the oil at 500 miles will help prevent oil foaming in the future because the silicone sealants are removed with the original oil.

Once the break-in oil change is performed and the Oil Life Monitor is reset, owners should follow the Oil Life Monitoring system for all future oil change needs.

### Mobil 1 Oil

Only use Mobil 1 when performing an oil change on any Corvette under the Chevrolet Complete Care program.

Mobil 1 dexos2<sup>™</sup> 0W-40 released for 2019 model year engines can be used in 2014-2019 Corvettes with the LT1, LT4 and LT5 engines.



A. Dry sump engine oil tank fill cap B. Engine oil dipstick

TIP: When tracking the 2019 Corvette ZR1, it is required to install Mobil 1 15W-50 oil. Once the track event is finished and the vehicle is to be driven on the road, the oil should be changed back to Mobil 1 dexos2 0W-40. During a track event, if the Driver Information Center displays the Engine Oil Hot message, the vehicle should be stopped and allowed to idle until it cools down.

Up to two oil changes are covered as part of the 2019 Chevrolet Complete Care program (three oil changes for the 2018 program) (U.S.), which covers 2 years/24,000 miles (40,000 km) of select required maintenance. In Canada, refer to the latest HOL's regarding the 2-Year Lube-Oil-Filter Program.

#### S Thanks to Jeff Strausser

# GDS2 Core Software Update Adds VIN Copy Function

The latest update to the GDS2 core software (Version 20.1) in TIS2Web includes changes to the VIN functionality on the Vehicle Selection screen and access to multiple diagnostic packages.

On the Vehicle Selection screen, a Copy VIN button is now available on the bottom of the screen. Select the button to copy the current VIN to the clipboard so it can be pasted into other applications instead of retyping it.

N:	1GYS4DKJ3JR000000	Read VIN	Clear Vehicle Selection	Copy VIN
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New Copy VIN button

In addition, GDS2 will now check to see if the installed diagnostic package matches the current VIN. For example, a prompt will be displayed if both GM Global and GM China packages are installed AND if GDS2 is connected to a vehicle that is supported by both packages, such as the Camaro. Once confirmed, GDS2 will not ask again about multiple packages if a session with the VIN exists.

The diagnostic package switching feature can be turned off by selecting the Disable Diagnostic Package Switching option in the Preferences on the GDS2 home screen.

### **Installing the Update**

The GDS2 core software update is available by selecting the GDS2 icon in TIS2Web.

When updating to a new core version, many firewalls/antivirus programs will recognize it as a new application. It may be necessary to engage your local IT support to ensure GDS2 is entered as an exception in these programs to allow normal functionality. GDS2 users also need full administrative rights to install the update. If issues are encountered with GDS2 not functioning

Danias	
Dabics	
Font Size	
<ul> <li>Save last selected font size</li> </ul>	
<ul> <li>Reset font size at start-up</li> </ul>	
Units	
<ul> <li>Use last selected units</li> </ul>	
Reset units at start-up	
Navigate Without Device Selected by default	
Tooltips Hide Tooltips	
Automatically Answer RPO Questions	
Column Width and Order	
Reset Column Width and Order	
Reset	
Multiple Diagnostic Package Subscribers Only	
Disable Diagnostic Package Switching	

Multiple diagnostic package option

properly, right click on the GDS2 icon on the desktop and select "Run as administrator."

For assistance, contact the Techline Customer Support Center (TCSC) at 1-800-828-6860 (English) or 1-800-503-3222 (French).

Thanks to Chris Henley

# Rear Compartment Water Leak May Lead to Electrical Issues

Water may be found in the rear compartment well on some 2018-2019 Regal Sportback models. There also may be several electrical conditions, including an incorrect front passenger airbag on/off indicator, poor microphone and OnStar functionality, faulty interior lighting, and improper sunroof operation.

The electrical conditions may be due to water entering the rear compartment area through an improperly installed rear liftgate wiring harness grommet. Water may be bypassing the grommet and running down the harness onto the X400/



Improperly installed grommet

X401 connectors. Inspect the connectors for corrosion.

The liftgate and body-side grommets on the left and right side of the liftgate should be checked to ensure the grommets are installed and sealing properly.

In addition, look for any inadvertent sealant deposited under the grommet boot sealing surface. If any excess sealant is found, remove it before reinstalling the grommet.

#### Thanks to Lori Brohl



Liftgate grommet locations



Excess sealant

# GM Announces Diagnostic Time Allowance Changes

As a result of technician feedback, GM is implementing a new Diagnostic Time Strategy. This new process is designed to provide adequate time for technicians to diagnose the most difficult conditions.

# **Increase in Diagnostic Time**

Beginning July 1, diagnostic time changed from a flat 0.3 to a variable 0.1–1.0 time on over 1,100 labor operations. The increase was applied to labor operations that traditionally have had the highest amount and percentage



of Other Labor Hours (OLH), such as electrical and module diagnosis. Other operations also have been reviewed. For example, the labor time for evacuation and recharge of the R1234YF air conditioning system has been increased from 0.5 hours to 1.2 hours.

In addition, diagnostic time was removed on 93 labor operations that are easy to identify, such as those involving trim and light bulb replacement. If additional labor time is needed on these items, the current OLH process should be followed.

## **Claim Submissions**

Variable diagnostic time of 0.1–1.0 can be submitted in the Diagnosis Time field instead of the 0.3 time. Technicians are required to punch on and punch off for all diagnostic time. As always, diagnostic time must include supporting documentation, including proper cause and correction comments.

Labor operations aside from modules not in the following categories remain at 0.3:

- 54 Power and Signal
- 40 Engine Propulsion
- 34 Driver Information and Entertainment
- 20 Body Systems

Any additional time needed for operations that did not have an increase applied should follow the current OLH process. U.S. dealerships can self-authorize up to 0.5 hours of OLH. Potentially, a claim submission could be approved without review with up to 1.5 hours of diagnostic time, including the OLH.

## **Labor Time Guide**

The Labor Time Guide (LTG) will reflect these new changes. There will be two new add times in the LTG — one for U.S./Canada indicating 0.1–1.0 and an-



84 - Transmission

50 – Hybrid

64 - Safety and Security

5430070 Ignition and Start Switch Housing Replacement		
ABAB 2005. (230/10		ffective Di
Base	LABOR TIME:	0.6
Nagnosis Time: You may claim up to the allowable labor hours depending on actual time to perform electrical diagno	sis. ADD TIME:	0.3
SICanada Only: you may claim up to the allowable labor hours depending on actual time to perform	m electrical diagnosis.	0.1 - 1.0

other that excludes U.S./Canada and reflects the current 0.3 for other Regions/Countries.

The benefits to the new Diagnostic Time Strategy are expected to be many:

- An increase in vehicles fixed right the first time
- Increased customer satisfaction
- Less repeat repairs
- A reduction in excessive warranty part replacements.

S Thanks to Eric Kenar



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