

2019 Camaro Touts New Looks, More Technology



The Camaro features a number of refinements for 2019, including a new front and rear fascia and a variety of technology enhancements, while still offering outstanding performance. The 2019 Camaro is available in seven different trim levels: LS, 1LT, 2LT, 3LT, 1SS, 2SS, and ZL1 models.

2019 Models

The new base LS coupe features the turbocharged 2.0L 4-cylinder engine (RPO LTG) mated to the Tremec 6-speed manual transmission or optional 8L45 automatic transmission.

LT coupe and convertible models are equipped with the 2.0L turbo engine or the optional 3.6L V6 engine (RPO LGX) along with the Tremec 6-speed manual transmission or optional 8L45 automatic transmission. The 1LE Track Performance Package is optional on vehicles equipped with a manual transmission.

SS coupe and convertible models feature the 6.2L V8 engine (RPO LT1) paired with the Tremec 6-speed manual transmission or the new optional 10L80 10-speed automatic transmission (RPO MF6). SS models with a manual transmission also are available with the 1LE Track Performance Package. Additional options include several driver assistance features, Magnetic Ride Control, and Launch Control.

The powerful ZL1 coupe and convertible models pack the supercharged 6.2L V8 engine (RPO LT4) with the Tremec 6-speed manual transmission or optional 10L80 10-speed automatic transmission. The ZL1 also is equipped with an Electronic Limited Slip Differential, Launch Control, and Recaro™ performance seats. The 1LE Extreme Track Performance Package, available

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Customer Care and Aftersales

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on vehicles with the manual transmission, offers a number of track-ready features, including a performance suspension with DSSV dampers, carbon fiber hood insert and rear spoiler, a unique front splitter and front dive planes, and a fixed rear seat.

The 10-speed automatic transmission is calibrated with a Performance Algorithm Lift (PAL) feature. When operating in Tour, Sport, and Track modes, it holds the gears longer when lifting off the throttle for better power out of a corner. The transmission also has a Smart Decrement feature that provides feedback to the driver in the form of a small downshift when the Driver Mode is changed.

New Looks

A number of visual changes have been made to the Camaro. The most noticeable change is the new front fascia on all models except the ZL1 and ZL1-1LE. The new looks include LED headlamps, functional side air vents (on LT models with the RS package and SS models), and redesigned hoods with a taller center section. SS models also have a functional hood air extractor.



New LED headlamps



Functional hood air extractor on SS models

On 1LE models, the new hood wrap more closely matches the black outside mirrors instead of the flat black appearance of the 2018 hood wrap. The new hood wrap will be used to service 2017 and 2018 1LE models.

The rear fascia on all models also has been updated with a new design that includes LED taillamps.

Technology Updates

The optional Rear Camera Mirror (RPO DRZ) integrated into the inside rearview mirror provides a wider, less obstructed field of view. The lever on the bottom of the mirror switches the display from a traditional rearview mirror to the rear camera. Brightness, tilt and



New LED taillamps

zoom functions can be adjusted using the buttons on the bottom of the mirror. The rear camera is mounted in the rear spoiler.

The 2.0L turbo engine and V6 engine have a new Engine Air Filter Life system, which shows an estimate of the engine air filter remaining useful life and the state of the system on the Driver Information Center. Engine Air Filter Life 95% means 95% of the current air filter life remains. The air filter life is calculated by the Engine Control Module (ECM). The system does not use a sensor. When replacement is necessary, a message is displayed on the DIC. The Air Filter Life display must be reset after engine air filter replacement.

Forward Collision Alert (RPO UEU) is available on 3LT, 2SS and ZL1 models (coupe only). It is not available if the vehicle is equipped with the Performance Data Recorder (PDR) because both cameras use the same location behind the rearview mirror. The system will detect when a front-end collision situation is imminent while following a detected vehicle. The Forward Collision Alert system can be turned off using the button on the steering wheel. The system turns on at each key cycle.

The infotainment systems feature 7-inch (178 mm) (RPO IOR) or 8-inch (203 mm) (RPO IOS, IOT) diagonal color touch screens. The IOT system includes embedded navigation.

The IOS and IOT systems also support two active Bluetooth users. The system connects to the phone that is set to First to Connect (select the information icon next to the phone name after pairing the phone). The secondary phone can only receive calls.



8-inch infotainment screen

Track Ready

TIP: Only coupe SS, ZL1 and models equipped with 1LE track packages (RPOs A1X, A1Y, A1Z) are considered track capable.

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2019 Camaro ZL1

On the drag strip, the Launch Control feature on SS and ZL1 models allows the driver to adjust both launch RPM and rear wheel slippage through the Driver Information Center (DIC). The DIC also has a Brake Pressure bar graph. In addition, the Line Lock feature locks the front wheels to enable the rear wheels to spin to warm the tires for maximum grip. All specific conditions must be met to perform Line Lock. The burnout must be completed within 15 seconds.

Refer to the Camaro High Performance Owner's Manual Supplement and the Track Prep Guide found on the Chevrolet Owner's Center website for complete details on preparing the vehicle for a day at the track.

For more information on the new 2019 Camaro, refer to Bulletin #18-NA-290.

☺ Thanks to Ann Briedis and Sherman Dixon

New EL-52552 COAX FAKRA Cable Adapter Kit

As more new vehicle components feature coaxial (COAX) cables in high frequency applications, including cellular and GPS antennas, Wi-Fi, and image display cameras, a new kit has been released from GM Tools and Equipment for testing coaxial cables. The EL-52552 COAX FAKRA

Cable Adapter Kit can help in diagnosing a variety of coax cables, including Wi-Fi, cameras, headliner cables, A-pillar cables and more. Diagnosing coax cables routed through the headliner, for example, is made easier with the kit.

The EL-52552 Kit covers all known cable configurations equipped with FAKRA (Fachkreis Automobil, a German standard) connectors. The adapters included with the kit are designed with universal FAKRA connectors, Z Code, in order to connect to all color-coded FAKRA connectors on the coax cables in the vehicle.



EL-52552 Kit

The test connectors have built in resistors (both male and female FAKRA universal connectors). The resistor values are set for error proofing: green color code – 51 Ohm NOM; orange color code – 300 Ohm NOM.

EL-52552 COAX FAKRA Cable Adapter Kit		
EL-52552-1	Cable, FAKRA Plus Pinout	
EL-52552-2	Cable, FAKRA Jack Pinout	
EL-52552-3	Cable, FAKRA Plug Load Test	
EL-52552-4	Cable, FAKRA Jack Load Test	
EL-52552-5	Cable, FAKRA 2W Plug Pinout	
EL-52552-6	Cable, FAKRA 2W Jack Pinout	
EL-52552-7	Cable, FAKRA 2W Plug Load Test	
EL-52552-8	Cable, FAKRA 2W Jack Load Test	

For more information and to review special pricing, log in to GM GlobalConnect, select Service from the Departments menu, and then select the Special Service Tools website link.

☺ Thanks to Chuck Berecz

High Voltage Battery Section Exchange

High voltage lithium-ion battery sections for 2011-2019 Volt; 2012-2016 LaCrosse eAssist; 2012-2017 Regal eAssist; 2013-2014 Malibu Eco; 2014 Impala Eco; 2014-2016 ELR; 2016-2019 Malibu E2 HEV; and 2017-2019 Bolt EV models are no longer under TAC restriction and can now be exchanged when required during repairs. Full battery packs remain on restriction.

The replacement battery section may be new or refurbished. Refurbished sections will have a battery capacity that closely matches the remaining sections in the vehicle.

Battery sections are ordered from the GM Battery Service Center (U.S.) or through York Electronics (Canada). Prior to ordering, be sure to have all necessary information related to the vehicle, including any set DTCs, the Capacity Code (from the GDS2 HPCM2 data/voltage data screen), and the battery pack identification number. Refer to Bulletin #18-NA-236 for complete details before ordering battery sections.



Bolt EV high voltage battery pack

Battery Section Requirements

Some models have specific requirements that must be followed before placing an order for that model.

2017-2019 Bolt EV Requirements – Bolt EV sections for U.S. models will be custom balanced by the GM Battery Service Center. However, a short, final balancing must be performed once installed into the battery pack.

Bolt EV models built before VIN 1G1FW6S09H4180682 must be serviced as an entire pack and are not eligible for section replacement for quality purposes.

2011-2012 Volt Requirements – Volt section orders require a chemistry determination procedure to be completed. Some cells from the 2011-2012 model years are incompatible with each other. Follow the chemistry determination procedure in Service Information doc. I.D. 4877428. Contact the GM Battery Service Center for battery section availability.

Malibu Hybrid, Eco, and eAssist Requirements – For the 2016-2019 Malibu Hybrid, individual sections are not yet available for service. For an individual cell concern, the battery pack must be replaced. Refer to Bulletin #18-NA-084 for additional information on battery concerns.

Battery Section Returns

TIP: The battery must be returned in the original exchange shipping container. Never ship a damaged or compromised battery without prior approval.

The GM Battery Service Center will provide a return bill of lading for return shipping for U.S. dealerships. Batteries are not to be returned to the Warranty Parts Center (WPC). Follow the return instructions included with your particular shipment. If you receive a special parts return request from the WPC for part review by engineering, the WPC Bill of Lading will supersede the paper BOL originally included in the shipment and provide the proper address. A copy of the repair order must be included in the battery return.

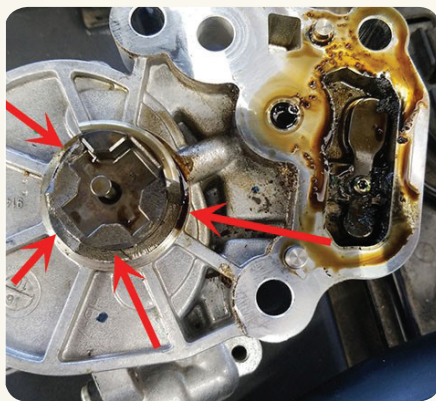
In Canada, refer to the latest GM Parts Bulletin for information on returning EV batteries and sections, which can be found under Parts Bulletins & Resources in the application section of the Parts Department page on GM GlobalConnect.

🙏 Thanks to Lane Rezek

Exhaust Camshaft Reluctor Orientation

Some 2016-2019 Encore and Cruze models equipped with the 1.4L 4-cylinder engine (RPO LE2), 2016-2019 Malibu models equipped with the 1.5L 4-cylinder engine (RPO LFV), and 2018-2019 Equinox and Terrain models equipped with the 1.5L 4-cylinder engine (RPO LYX) may have a crank, no start or extended crank condition. Follow the diagnostics in the appropriate Service Information for an Engine Cranks But Does Not Run condition. If a cause is not found, the exhaust camshaft reluctor may be out of phase.

Remove the cam cover assembly to confirm the exhaust camshaft reluctor orientation.



Check the vacuum pump drive lugs.

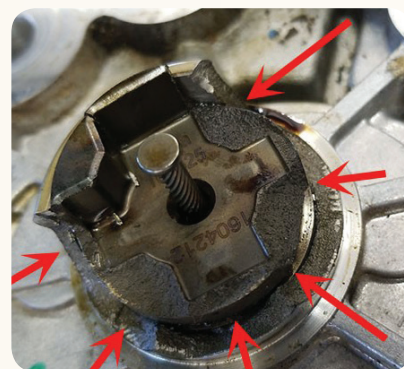
During disassembly, also check the vacuum pump drive lugs for any damage.

To check the orientation of the exhaust camshaft reluctor, rotate the camshaft so the 2D matrix on the camshaft hex is in the 12 o'clock position.

With the 2D matrix in the 12 o'clock position, the small tang on the camshaft reluctor ring should be in line with the 2D matrix.

Verify the small tang is in the correct position and is in the proper relationship with the exhaust camshaft reluctor wheel.

If the exhaust camshaft reluctor is out of position or the vacuum pump drive lugs are damaged, it will be necessary to replace the exhaust camshaft and the vacuum pump.



Damaged vacuum pump drive lugs

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ECM Software Updates for New V8 Engines

Some 2019 Silverado 1500 and Sierra 1500 trucks may have an Engine Control Module (ECM) condition that requires reprogramming with the latest software calibrations now available. These conditions are covered in Bulletins #18-NA-289 and #18-NA-292.

Cylinder Deactivation DTCs

The Check Engine lamp may be illuminated on some 2019 Silverado 1500 and Sierra 1500 models equipped with the 5.3L V8 engine (RPO L82), the new 5.3L V8 engine (RPO L84) or the new 6.2L V8 engine (RPO L87) along with one or more of the following DTCs set in the ECM: P3498, P3499, P349A, P349B, P349C, P349D, P349E, and P349F (Cylinder Deactivation Performance). These conditions may be due to a fault with the Dynamic Fuel Management oil control



6.2L V8 engine

solenoids. Reprogram the K20 ECM with the latest calibrations available in TIS2Web.

Refer to Bulletin #18-NA-289 for more information.

Check Engine Lamp

On some 2019 Silverado 1500 and Sierra 1500 models equipped with the new 5.3L V8 engine (RPO L84) or new 6.2L V8 (RPO L87) engine, the Check Engine lamp also may be illuminated, but without any accompanying drivability or performance concerns. If only the Check Engine MIL is on, it may be necessary to reprogram the K20 ECM with the latest calibrations available in TIS2Web. DTC P0300 (Engine Misfire Detected) also may be set in the ECM.



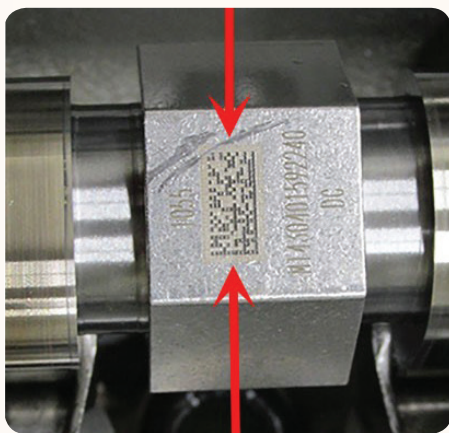
Check Engine lamp

Refer to Bulletin #18-NA-292 for more information.

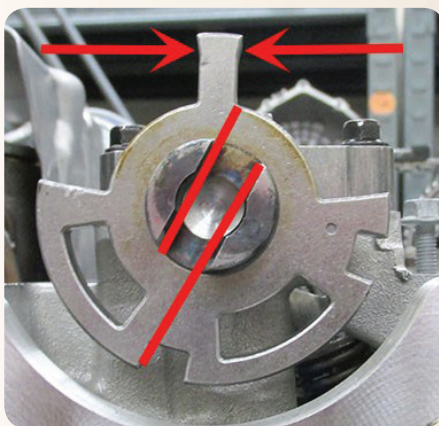
These repairs only apply to the new 2019 Silverado 1500 and Sierra 1500 models identified in the service bulletins. Refer to the bulletins for VIN breakpoints. Do not perform the ECM programming if additional diagnosis indicates there are other drivability or performance conditions.

🙏 Thanks to Tracy Lucas

Exhaust Camshaft Reluctor Orientation – continued from page 4



2D matrix on the exhaust camshaft

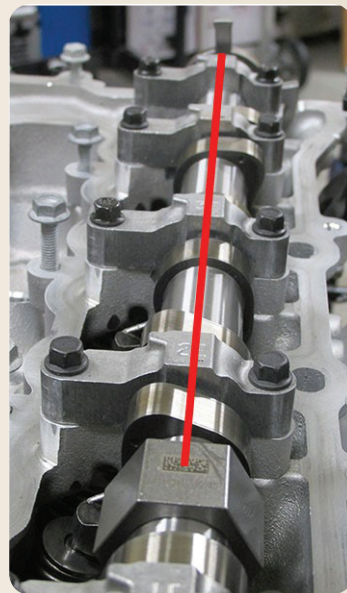


Small tang on the camshaft reluctor ring

If replacing the vacuum pump, be sure to remove the broken vacuum pump drive lugs and any other metal debris during repairs.

For additional information, refer to #PIP5598.

🙏 Thanks to Robert Halas



Proper relationship between the 2D matrix and the tang on the exhaust cam reluctor wheel.

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Updated Shock Diagnostics Call for Replacing Only the Damaged Shock, Not Pairs

GM has recently updated the diagnostic procedures for suspension systems in the Service Information on some 2019 models. The new information provides guidelines on strut and shock absorber replacement for leaking concerns, suspension noise, ride performance issues, uneven ride/trim height, and Service Suspension System or Service Ride Control messages displayed on the Driver Information Center.

The new diagnostic procedures point out that shocks/struts are designed and intended to operate independently of each other and should be serviced individually to avoid unnecessary repairs. If only one shock or strut has been found to be the cause of a suspension condition, only the shock or strut that has failed should be replaced.

Shocks/struts should only be replaced as a pair if diagnosis shows that both components have failed.

The Service Information has been updated for 2015-2019 Tahoe, Suburban, Yukon, Escalade, and XTS models. All other vehicle platforms will be updated for the 2020 model year.

Testing Results

Supplier reviews of recent shocks and struts that have been replaced in pairs under warranty have found a high number of components that show acceptable performance results during testing.

GM Engineering has determined that shocks and struts should be diagnosed and replaced as needed independently of each other as shock/strut technology and production have improved, no longer requiring shocks and struts to be replaced in pairs on a vehicle.

Shock/Strut Inspection

When inspecting the suspension, the shock or strut does not have to be removed from the vehicle. Visually inspect each shock/strut for external fluid leaks. A light film or residue on the top portion (approximately 1/3) of the lower shock or strut tube, originating from the shaft seal, is normal.

If the vehicle is equipped with an electronic suspension control system, ensure the system is working properly before replacing a shock or strut.

During shock/strut testing, if the corner of the vehicle does not exceed two cycles after pushing down on the corner three times, the shock or strut is performing properly.

For additional shock/strut diagnostic procedures, refer to the updated Service Information diagnostics for 2015-2019 Tahoe, Suburban, Yukon, Escalade, and XTS models. All other vehicle platforms will be updated for the 2020 model year.

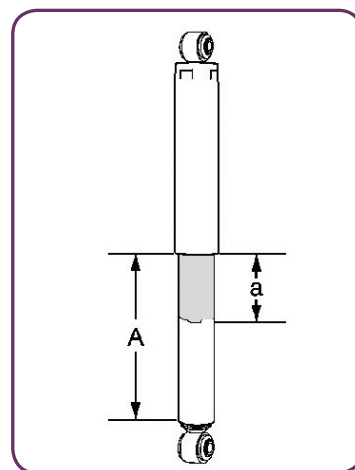
These additional diagnostic procedures include the use of chassis ears, measurement of trim height, uneven ride height, clunks, squeaks and pops.

For additional information, refer to Bulletin #18-NA-315.

Thanks to Tom Holecsek



Replace only the failed shock, not both on an axle.



Normal residue on the shock tube

V8 Engine Misfire Condition

The Check Engine lamp may be illuminated and DTCs P0282 (Cylinder 8 Injector Control Circuit Low Voltage) and P0300 (Engine Misfire Detected) may be set on some 2015-2019 Escalade models equipped with the 6.2L V8 engine (RPO L86) and some 2015-2019 Suburban, Tahoe, and Yukon models equipped with the 5.3L V8 engine (RPO L83) or 6.2L V8 engine (RPO L86). The DTCs may be current or set in history. These conditions may be caused by a damaged wiring harness near the transmission bell housing.



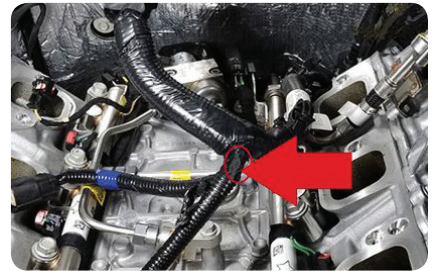
Harness rubbing on the transmission bell housing.

If performing the Service Information diagnostic checks does not isolate the cause of the condition, remove the intake manifold to inspect the #8 injector wiring area where the Bank 2 injector harness breaks out of the main engine harness. Check for hard contact with the transmission bell housing.

It may be necessary to remove the transmission crossmember, lower the transmission, and pull the wiring harness up into the engine compartment to locate the chafed wire.

At the branch of the harness, there will be a rub-through mark where the harness is chafing on the bell housing. Open the harness to repair the wiring as needed.

🙏 Thanks to Tracy Lucas



Look for a rub-through mark near the branch of the harness.



Open the harness to make any wiring repairs.

Oil Leak after 2.5L Engine Cylinder Head Replacement

After the cylinder head has been replaced on some 2014-2015 Impala and Malibu models equipped with the 2.5L 4-cylinder engine (RPO LKW), an external oil leak may be found, random misfires may occur on all cylinders when the camshaft is on low lift with light throttle, and DTCs P16D0 (Intake Rocker Arm Solenoid Valve 2 Stuck Off) and P0300 (Engine Misfire Detected) may be set. If these conditions are found, check for the presence of several oil galley plugs.

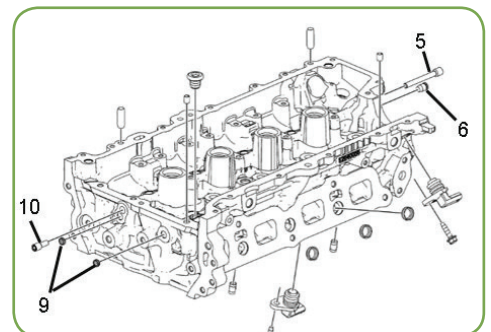
If the cylinder head has an external oil leak, verify that oil galley plugs #5 and #6 have been installed.

If DTC P16D0 and/or P0300 are set or a random misfire occurs on all cylinders only when the camshaft lobe is on low lift, verify that oil galley plug #10 has been installed. The #10 oil galley plug, located in the cylinder head behind the timing cover, would have an oil leak that is internal to the engine.

In addition, check that oil galley plugs #9 are installed. These plugs should have come installed in the new cylinder head.

For additional information, refer to #PIP5302A.

🙏 Thanks to David Rutkowski



Check that oil galley plugs are properly installed.

Service Know-How

10218.10V – Emerging Issues – October 11, 2018

The monthly GM Service Know-How Emerging Issues seminars provide service/technical information on current issues and GM certified repairs. The latest service topics from GM Brand Quality and Engineering covered this month include a loose steering condition on some HD trucks and the basics of measuring voltage drop.

To view Emerging Issues seminars:

- Log into www.centeroflearning.com.
- Enter Emerging Issues in the Search box.
- Select the desired Emerging Issues seminar course title.
- Click the Launch button.

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