

# **Service Bulletin**

# INFORMATION

### Subject: 2019 Camaro ZL1-1LE with 10-Speed Automatic Transmission New Model Features

Brand:	Model:	Model Year:		VIN:		Engino	Transmission:
		From:	To:	From:	To:	Engine:	fransmission.
Chevrolet	Camaro ZL1-1LE	2019		_	_	6.2L — RPO LT4	10-Speed 10L90 Automatic GEN 1 — RPO MGL

Involved Countries/Regions	United States. Canada and Middle East
involved obditines/regions	Sinted States, Sanda and Middle Last

# **Overview**



#### 2019 Camaro ZL1–1LE

#### **Bulletin Purpose**

Beginning Mid-February 2019, the 2019 Camaro ZL1-1LE will be available with the 10-speed 10L90 automatic transmission. The ZL1-1LE Extreme Track Performance Package is the ultimate Camaro **Track-Day** model taking the track-focused 1LE legacy to an unprecedented level. With racing-based suspension and aero technologies, as well as Goodyear Eagle® F1 Supercar® 3R summer-only tires, the ZL1-1LE represents the most extreme track-focused Camaro. Unique calibrations were developed for the 10-speed automatic transmission, Electronic Limited Slip Differential (ELSD) and the Performance Traction Management (PTM) system for the 2019 ZL1-1LE model.

## 10-Speed 10L90 Automatic Transmission — RPO MGL

#### **Transmission Fluid Level**

The 10-speed automatic transmission, should have the transmission fluid set to the track specific fluid level prior to track usage. Any transmission fluid level set or change should be performed at your dealer. Transmission fluid should be changed after every 15 hours of track usage.

#### Sport Mode and Track Mode

While driving in Sport mode and Track Mode, if tap shift has not been activated, the transmission determines when the vehicle is being driven in a competitive manner. The transmission may remain in a gear longer than it would in the normal driving mode based on throttle input and vehicle lateral acceleration. If there is a rapid reduction in throttle from heavy throttle position at high rpm, the transmission will maintain the current gear up to near redline rpm. While braking, the transmission will automatically downshift to the next lower gear keeping engine speed above approximately 3,000 rpm. If the vehicle is then driven for a short time at a steady speed, and without high cornering loads, the transmission will upshift one gear at a time, until 10th gear. After shifting to 10th gear, or coming to a complete stop, the transmission will return to normal Sport Mode shifting.

#### Caution: Manually shifting (aka tap-shifting) the 10-speed transmission during track events can lead to slower track times and may induce higher transmission temperatures.

#### **Unique Track Mode Shift Pattern**

The ZL1-1LE 10-speed automatic transmission is programmed with a special "Track Mode" shift pattern that will command upshifts at higher engine rpm, and will rev match **ALL** downshifts when coasting to a stop. This shift pattern is different than the *regular* ZL1, and provides the customer who buys the ZL1-1LE automatic a very inspired race car driving experience when driving around town. Upshifts will typically occur around 3,000 rpm, and downshifts will be commanded around 2,000 rpm under "normal" driving conditions.

## **Chassis - Suspension**

#### Chassis

Approximately 60-70% of the chassis on the ZL1-1LE is different when compared to the ZL1. For additional information, refer to #17-NA-251: 2018 ZL1 1LE New Model Features Bulletin in SI.

#### Suspension — RPO FEA

The front strut top mount can be positioned two ways. The original setting is in the street position, but it can be turned 180° to the track position for additional negative camber on the front. The front struts have a threaded spring seat that allows adjustment of the preload on the front springs. The vehicle corner weights and front trim heights can be adjusted. The spring seat can be adjusted approximately 0.4 inch (10 mm) up or down from the nominal position. Each complete turn of the spring perch will change the vehicle height approximately 0.06 inch (1.5 mm). Do not allow the spring seat to contact the black dust boot when adjusting in the maximum upward direction.

The rear stabilizer bar ends have three attachment positions that allow the rear roll stiffness of the vehicle to be adjusted. The stabilizer bar stiffness increases approximately 15% using the rearward holes, or decreases approximately 10% using the forward holes.

Additional track performance is provided by the Dynamic Suspension Spool Valve (DSSV<sup>™</sup>) dampers and the way they are mounted to the Camaro. The front struts are manufactured with aluminum bodies instead of steel. The rear damper tuning is different for the ZL1-1LE Automatic Transmission vs. the Manual Transmission car in order to accommodate the quicker shifts in weight transfer.

# ZL1-1LE DSSV™ Dampers Hard-Mounted to Shock Towers

The ZL1-1LE DSSV<sup>™</sup> dampers are hard-mounted to the shock towers without rubber isolation, providing more rigidity and precise control. Along with increased track performance, this can enable additional noise transfer to the front vehicle structure compared to conventional rubber isolated damper mounting in the ZL1 and other car variants. This is normal due to the design and mounting of the DSSV<sup>™</sup> damper.

# **Track Information**

#### **Power Steering Deflectors**

Power steering deflectors are included in the package of loose shipped items found in the trunk. For additional information, refer to bulletin #16-NA-369 for items to be installed at time of PDI. The power steering deflectors should be installed for track purposes only and **NOT** during PDI. The deflectors provide additional underbody cooling during track events. Installation of the power steering deflectors will require the engine side shields to be removed. The engine side shields and fasteners should be retained and reinstalled after the track event, to protect the engine compartment from additional water intrusion.

# Track Events and Competitive Driving — Engine Oil Requirements

For track events and competitive driving **DO NOT use SAE 0W-40 oil in the ZL1-1LE**. For track events and competitive driving, the engine oil **MUST BE CHANGED to MOBIL 1™ 15W-50**. Change the engine oil after four hours of accumulative track usage. After track usage, the engine oil must be changed back to the engine oil recommended in the Chevrolet Camaro High Performance Owner Manual Supplement.

#### Track Prep Guide

Owners can refer to the 2019 Chevrolet Camaro Track Preparation Guide published on the Chevrolet Owners website.

The Track Preparation Guide covers the following topics:

- Break-In Schedule
- Brake Burnish Procedure
- Tire Deflectors and Splash Shields
- Tire Pressures and Alignment Settings
- Fluid Requirements/Maintenance Schedule
- Suspension Adjustments
- Suspension Tuning Recommendations

# **Custom Launch Control**

#### **Custom Launch Control RPM Setting**

The rpm range for a Custom Launch Control setting allows the driver to adjust down to 800 rpm. It is recommended the rpm setting for Launch Control is set at no less than 1,200 rpm. A Launch Control setting of less than 1,200 rpm will produce an unpleasant sound.

# **Version Information**

Version	1
Modified	Released February 25, 2019

## **Trademark Footnotes**

DSSV™ and DSSV Damping Technology™, are Trademarks of Multimatic Inc.

Goodyear Eagle® F1 SuperCar® 3R Tires are Registered Trademarks of the Goodyear Tire and Rubber Company Mobil 1<sup>™</sup> is a Trademark of ExxonMobil Oil Corporation

GM bulletins are intended for use by professional technicians, NOT a "<u>do-it-yourselfer</u>". They are written to inform these technicians of conditions that may occur on some vehicles, or to provide information that could assist in the proper service of a vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do a job properly and safely. If a condition is described, <u>DO NOT</u> assume that the bulletin applies to your vehicle, or that your vehicle will have that condition. See your GM dealer for information on whether your vehicle may benefit from the information.



WE SUPPORT VOLUNTARY TECHNICIAN CERTIFICATION