







July 2017, Volume 19, No. 13

## 2018 Camaro ZL1 1LE Performs on the Track



The new 2018 Camaro ZL1 1LE is the ultimate Camaro model for a day at a closed-course track event. The ZL1 1LE Extreme Track Performance Package features a racing-based suspension and aero technologies that make the most of the supercharged 6.2L V8 engine.

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## PC Analyzer Tool Easily Checks Techline PC Specs

The GM Dealership Infrastructure Guidelines (DIG) and Dealership Security Guidelines (DSG) were recently updated with additional information to help dealerships in maintaining their overall IT infrastructure. The guidelines published provide a detailed specification of Good (minimum), Better (PCs purchased in the last year or two) and Best (refer to when purchasing new) for personal computers (PC) used in dealership service departments.

On September 1, the Techline Customer Support Center (TCSC) will enforce the standard practice that to receive support for the Techline applications (TIS2Web, GDS2, MDI/MDI 2, SI, etc.), the PC must meet or exceed the minimum required specifications.

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## PC Analyzer Tool Easily Checks Techline PC Specs

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The DIG document (U.S.) is available on the GM Dealer Services website.

In Canada, The DIG document is available in GM GlobalConnect under SUPPORT.



Example of PC Analyzer results

#### **PC Analyzer Tool**

To easily compare the specifications of PCs currently in use in the service department to the updated requirements, use the Techline PC Analyzer tool that is available from the Utility Tab in TIS2Web. This tool gathers all relevant specifications from the PC and presents them in a concise summary.

Once the PC Analyzer is installed on the PC, click the Techline System Analyzer icon on the desktop to run the application. It will provide a summary of the PC specs, including the Pass/Fail status of the PC system, hardware requirements, anti-virus software and other data.

TCSC can assist with interpreting the results of the PCs in your dealership and what is needed to meet current requirements.

TIP: TCSC will support a technician owned computer if it meets the minimum specification or higher.

If you have any questions related to Dealership Infrastructure Guidelines, contact TCSC at 1-800-828-6860 (English) or 1-800-503-3222 (French).

Thanks to Lisa Scott

## 2018 Camaro ZL1 1LE Performs on the Track -

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#### **Powertrain**

The supercharged 6.2L V8 engine (RPO LT4) produces 650 horse-power and 650 lb.-ft. of torque. Power is boosted by the Eaton supercharger intercooler bricks sitting higher in the supercharger housing, improving efficiency, and the unique Tri-Y design of the exhaust

manifolds, which improve torque production.

The V8 engine is paired with the TREMEC 6060 6-speed manual transmission (RPO MH3), which is equipped with Active Rev Match (ARM). Active Rev Match aids in smoother



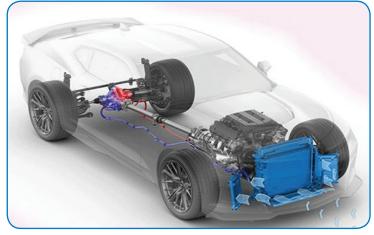
Supercharged 6.2L V8 engine

shifting by matching engine speed to the next selected gear. The system is activated or deactivated by pressing either of the paddles marked REV MATCH on the steering wheel.

To keep the demands of the track in check, the cooling system includes a high-performance radiator with dual auxiliary outboard radiators and standard engine oil, transmission and rear differential coolers.

#### Chassis

The ZL1 1LE was engineered for the track and has a curb weight that is 60 lbs. (27 kg) lighter than a standard ZL1 coupe, thanks to features such as lighter wheels and dampers, thinner glass in the rear window, and a fixed-back rear seat. Compared to the ZL1, approximately 60-70% of the chassis of the ZL1 1LE is different.



The cooling system is designed for extreme driving conditions.

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### 2018 Camaro ZL1 1LE Performs on the Track -

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The Brembo® 6-piston fixed cast aluminum front calipers and 4-piston fixed cast aluminum rear calipers provide precise braking control while resisting fade. The two-piece front rotors cannot be refinished.

The Electronic Limited-Slip Differential (eLSD) and the Performance Traction Management system help improve "turn in" response and corner exit speeds while the solid-mounted front and rear cradle mounts provide a faster response from the chassis to the driver, enhancing driver reaction to the road.



Brembo 6-piston front caliper

The front aero package and rear wing of the ZL1 1LE produces additional downforce for better traction. The front aero pack-



Rear high-mounted carbon fiber double-sickle wing

age includes a splitter, air deflectors and dive planes on the front fascia. While at the rear is a high-mounted carbon fiber double-sickle wing that produces 300 lbs. (136 kg) of downforce at 150 mph (241 km/h).

Controlling all of that grip are the front and rear Multimatic DSSV® (Dynamic Suspension Spool Valve) dampers. The dampers have been calibrated for the car's weight and tires. They are 23 lbs. (10.5 kg) lighter than the Magnetic Ride Control system on the ZL1.

The ZL1 1LE features light-weight forged aluminum wheels fitted with Goodyear Eagle F1 Supercar 3R tires — 305/30ZR19 front and 325/30ZR19 rear — that deliver a maximum lateral grip of 1.10g. The wider wheels provide an overall footprint that is approximately 10 percent larger than the ZL1, but the wheel and tire package



Multimatic DSSV dampers

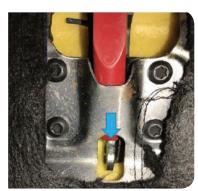
weighs about 3.3 lbs. (1.5 kg) less per corner.

TIP: High performance summer tires have rubber compounds that lose flexibility and may develop surface cracks in the tread area

at temperatures below 20°F ( $-7^{\circ}\text{C}$ ). Always store high performance summer tires indoors and at temperatures above 20°F ( $-7^{\circ}\text{C}$ ) when not in use.

#### **Fixed-Back Rear Seat**





Use a plastic trim tool to release the fixed rear seatback.

The rear seat on the ZL1 1LE is a fixed seat in order to reduce weight. The seatback does not fold. If it's necessary to remove the seatback, use a plastic trim tool between the seatback cushion and the rear window trim panel to release the latch from the seat frame.

#### **Optimizing Performance**

The ZL1 1LE features several performance modes, set by the driver, that are designed to allow increased performance in a closed course track environment. Competitive Driving Mode, Performance Traction Management, and Launch Control can be accessed by pressing the Traction Control button twice quickly while in Sport or Track mode. Each mode regulates and optimizes the engine, brakes, and suspension performance while limiting the amount of electronic stability control intervention.

The Chevrolet Performance Data Recorder is available to record video, audio and real-time performance data of a driving session. The data is recorded onto an SD memory card. The SD card reader is below the instrument panel to the left of the steering wheel, just above the hood release lever.

#### **Pre-Delivery Inspection**

Some loose-shipped parts of the ZL1 1LE are to be installed by the customer. The following parts are to be installed during the Pre-Delivery Inspection (PDI) process:

- · Front air dam/deflector
- Rear suspension control arm attachment kit
- Front tire front air deflector kit (strake)
- Front tire front air deflector kit (tire strips)

Refer to Bulletin #16-NA-369 for more information.

#### **Hand Washing Only**

The ZL1 1LE is not compatible with automatic car washes. It must be hand washed. Do not use any detergent, soap, or cleaners on the matte finish vinyl hood wrap.

For more information on the 2018 Camaro ZL1 1LE, refer to Bulletin #17-NA-251.

Thanks to Sherman Dixon and Ann Briedis

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## Preparing a Camaro ZL1 1LE for a Track Event

The 2018 Camaro ZL1 1LE is designed for closed-course track events. But before hitting the race course, several preparations should be made in order to get the ZL1 1LE ready to perform in a competitive driving environment. Owners should be aware that these specifications are for the track only and should not be used during normal, everyday driving.

TIP: High-performance features are intended for use only on closed tracks by experienced and qualified drivers and should not be used on public roads. High-speed driving, aggressive cornering, hard braking, and other high-performance driving actions can be dangerous.

#### **Engine Oil**

For track events and competitive driving, change the engine oil to MOBIL 1 15W-50. Do not use 0W-40 engine oil or another viscosity. After four hours of accumulative track use, change the engine oil. After a track event, change the oil back to the engine oil listed in the Owner's Manual.

When checking the engine oil level, 30 minutes of run time is considered warm to make sure all oil drains back into the pan in order to get an accurate reading.

#### **Brake Fluid**

Brake fluid should be changed to DOT 4 fluid for a track event.

#### **Rear Axle Fluid**

The rear axle fluid must have accumulated 1,500 miles (2,414 km) of break-in before being used in track driving.

#### **Front Struts**

The front struts can be adjusted for track events. The original position is the street position. The front strut top mount can be turned 180 degrees for the track position, which provides additional negative camber.



TRACK CAMBER text is visible with the front struts in the track position.

In the track position, the TRACK CAMBER text will be visible and a second set of top mount holes will align with the strut tower holes. Verify and adjust the vehicle alignment per track alignment specifications to optimize vehicle performance for the track event.

The front struts also 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 (1.4 mm).

#### **Wheel Alignment**

Track wheel alignment specifications are for a vehicle at curb weight conditions, meaning a full tank of fuel and zero ballast. Racing and competitive driving wheel alignment settings may cause excessive tire wear.

Verify and re-adjust the vehicle alignment as needed following the track event.

#### Rear Stabilizer Bar

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.



The rear stabilizer bar ends have three attachment positions.

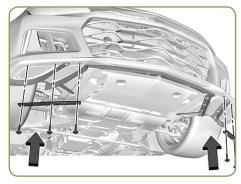
#### **Tire Pressure**

Tire pressure specifications will vary based on driving style, track, temperature, and weather conditions. Limit the vehicle weight to a maximum of the driver and one passenger, with no additional cargo. The Driver Information Center on the instrument cluster can be used to show the current tire temperature status and tire pressures.

Before leaving the track event, reset tire pressures to the recommended inflation pressures on the Tire and Loading Information Label.

#### **Underbody Air Deflector**

The underbody air deflector tire dam kit provided with the ZL1 1LE reduces the amount of aerodynamic lift on the front axle for better handling on a closed course. The original tire dams must be reinstalled after a track event.



Underbody air deflector tire dam

#### **Water Deflector**

When operating the ZL1 1LE on a closed course in hot temperatures, remove the underhood water deflector to increase airflow and improve cooling. The deflector is secured by three bolts. Replace the water deflector immediately after track use to protect the engine compartment from water intrusion.

#### Safety Belt

The lap shoulder belt has an Automatic Locking Retractor feature, which is useful in performance driving when the driver wants to be held in the seat more tightly to take advantage of the aggressive bolstering of the seat. When the retractor lock is set, the belt can be tightened but not pulled out of the retractor. After locking the belt, adjusting the position of the seat allows for the safety belt to be tighter across the driver's body.

For more information on the 2018 Camaro ZL1 1LE, refer to Bulletin #17-NA-251.

( Thanks to Sherman Dixon and Ann Briedis

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# New Special Tools Software Update Download Process

Some GM special service tools, such as the Active Fuel Injector Tester (AFIT) and Pico Scope NVH Tool, require occasional software updates in order to ensure the tool functions properly, offers the latest features, and is applicable to new GM models and systems.

The latest software updates for special service tools are available on the Home page of the special service tools website, www.gmtoolsandequipment.com.

There are different download procedures for GM dealerships and aftermarket users.

#### Software Download

The software should be accessed through GM GlobalConnect from the Service Workbench selection of "Special Tools & Software Updates." Accessing the software download through the link on GM GlobalConnect enables dealerships to acquire the download at

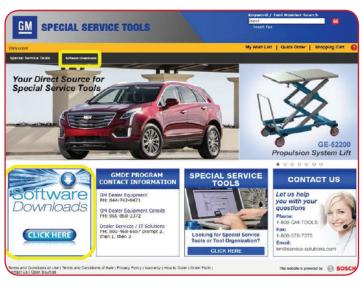
no-charge since payment will be made through essential tools/parts account billing; if applicable.

Go directly to the Software Downloads page on the special service tools website. Search for the parent tool number for the hardware. not the software update number. For example, EL-50334-100A (Multimedia Interface Tester hardware), not the software item number, such as EL-50334-SW2. The software item number will not be found via keyword

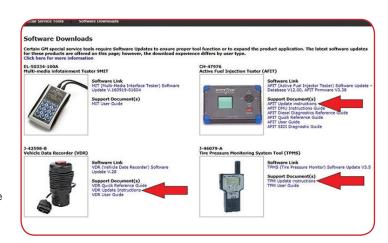
To download the update, click the software link listed for the hardware and follow the instructions.

search.

Always refer to the Update Instructions found under the list of Support Documents for more information, if available. The



Software downloads links



Refer to the Update Instructions, if available.

Update Instructions cover the steps that should be taken before as well as during the update process to avoid any errors and properly update the tool.

Links to the user guides for the tools also are provided.

#### Thanks to Chuck Berecz



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General Motors service tips are intended for use by professional technicians, not a "do-it-yourselfer." They are written to inform those 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, do not assume that the information applies to your vehicle or that your vehicle will have that condition. See a General Motors dealer servicing your brand of General Motors vehicle for information on whether your vehicle may benefit from the information.

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## Viewing Emerging Issues Seminars on the new Center of Learning

The new GM Center of Learning (U.S.) — www.centeroflearning.com — offers users a number of ways to find and view training opportunities, including the familiar Emerging Issues seminars that are available online each month.

On the Home page, the new Center of Learning shows helpful information on your learning path, current classes and resources as well as the full online catalog and an easy to use search function.

Service technical users also are provided with more detailed information about their learning paths and progress.

#### **Search and Browse**

Search for courses by name, course number or keyword using the Search box. Use the filters on the left to narrow your search results. Click the tabs above the search results to view related learning paths and resource support materials.

Select the Browse Catalog tab to browse the courses in the catalog. Click a category to view a list of courses related to that topic.

#### **View Emerging Issues Seminars**

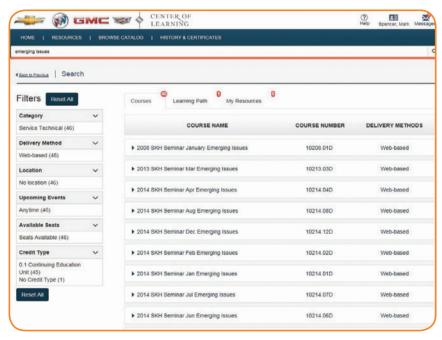
After logging into the Center of Learning:

- · Enter "Emerging Issues" in the search box
- Select the desired Emerging Issues seminar course title. The courses are listed alphabetically.
- Click the Launch button

#### **TechTube Videos**

To view one of the informative TechTube videos, select the GM TechTube link at the bottom of the Home page. The short videos, which run about 10 minutes or less, offer quick and concise reviews of specific repair procedures.

Thanks to Mike Sculthorpe



Search for courses by name, course number or keyword using the Search box

### Service Know-How

#### 10217.08V Emerging Issues - August 10, 2017

The latest service topics from Brand Quality and Engineering are reviewed, including a review of proper lift and hoist maintenance and some tips on using the Data Bus Diagnostic Tool.

#### 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.

