New performance calibrations are available from Chevrolet Performance for 2014-2018 Corvettes and 2017-2019 Camaros that deliver greater handling on the track as well as during daily driving. The calibrations have been developed through continuous on-track and street development to enable enhanced performance from the outstanding capabilities of the Corvette and Camaro models.

The Corvette Magnetorheological (MR) Performance Damper Calibrations are available for several C7 Corvette models equipped with the MR damper system.

For Camaros, the Electronic Limited Slip Differential (eLSD) Performance Calibration is available for SS 1LE models.

Before programming the MR Suspension Control Module on Corvette models or the Chassis Control Module on Camaro models, contact the Techline Customer Support continued on page 2
Center (TCSC) for programming requirements and a Vehicle Configuration Index (VCI). The VCI is valid only for the specific VIN provided by the technician.

**Corvette MR Performance Damper Calibrations**

The performance calibrations for MR-equipped Corvettes allow for precise control under a wide variety of situations to fine tune the vehicle’s response. The calibrations:

- Are independently tuned for the respective chassis
- Update Tour, Sport, and Track modes that impact isolation and integration as well as balance ride motions at all speeds
- Include independent compression and rebound calibration for front and rear dampers

During GM testing with a 2016 Corvette Z06 and 2017 Corvette Grand Sport, the new calibrations contributed to a one second improvement in lap times around the GM 2.9-mile (4.7 km) Milford Road Course.

Each driving mode on the Corvette — Tour, Sport, and Track — receive specific algorithms and tuning strategies with the new performance calibrations. In Tour and Sport modes, the calibrations provide improved structural feel on rough surfaces and greater compliance at speeds under 25 mph (40 km/h) along with a more precise response to steering inputs. Sport mode also will exhibit significantly more body motion control than Tour mode. In Track mode, the response to driver inputs will be more linear near the limit of adhesion, with enhanced precision at initial turn-in and better capability to sustain the car’s heading under throttle application, delivering more fluid maneuverability while cornering for enhanced driver confidence.

Not all models can be upgraded. Applications for the performance calibrations include the following Corvette models. Each calibration includes updates for all three driving modes, except the calibration for 2014-2018 Z51, which includes updates to the Tour and Sport modes only.

<table>
<thead>
<tr>
<th>Model Year</th>
<th>Trim Level</th>
<th>Tour</th>
<th>Sport</th>
<th>Track</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-2018</td>
<td>Z06 with Z07</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2015-2018</td>
<td>Z06 without Z07</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2017-2018</td>
<td>Grand Sport with Z07</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2017-2018</td>
<td>Grand Sport without Z07</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2016-2018</td>
<td>Base</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>2014-2018</td>
<td>Z51</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

To install the calibrations, reprogram the MR Suspension Control Module using the Service Programming System (SPS). Reprogramming for 2014-2015 models also includes MR Suspension Control Module software and utility file updates along with the calibration files. Refer to Service Document ID 4873206 for more information.

During the control module setup process a rear ride height measurement will be requested, which is measured from the wheel center to the fender directly above the wheel center.

**IMPORTANT:** In order to get the maximum performance and consistency out of the updated calibration, allow the vehicle to sit for 8 to 10 hours after the update. The MR damper system has a built-in temperature offset correction as part of the calibration. Allowing the vehicle to sit will allow the damper temperatures to normalize and the temperature offset in the calibration to accurately reset. The vehicle is still functional without this process. However, the temperature offset correction will be less accurate, resulting in a less optimized operation until the damper temperatures are allowed to normalize.

**Camaro eLSD Performance Calibration**

The performance calibration for the eLSD on Camaros enables faster turn-in and faster power application on turn-exit. The calibration decouples the differential at a faster rate based on accelerator pedal position and steering wheel angle to enable faster yaw rotation at corner entry. Upon corner exit, the eLSD will couple faster than normal rates to enable power to be delivered sooner to both rear wheels.

The updated calibration is only enabled when traction control and electronic stability control (ESC) are disabled. Drivers can turn off traction control and ESC by pressing and holding the traction control button for five seconds.

To install the calibrations, reprogram the Chassis Control Module using the Service Programming System (SPS). Module software and utility files are updated along with the calibration files. Clear any DTCs that set during reprogramming. Refer to Service Document ID 5068565 for more information.

Updating the applicable models with these performance calibrations from Chevrolet Performance maintains the vehicle’s warranty.

Thanks to Kara Brotebeck and Adrienne Peters
New Keyed Ignition System on 2019 Models

Starting with the 2019 model year, all Buick, Chevrolet and GMC models — excluding 2019 Silverado legacy models; Sierra legacy models; and Express and Savana models — with a keyed ignition will have a Push-to-Turn-Off Ignition. The 2019 Silverado legacy models, Sierra legacy models, and Express and Savana will be updated with the new ignition system later in the model year.

The new key cylinder

The new keyed ignition system is designed to make the key cylinder more robust to unintended rotation while the vehicle is on. The cylinder and housing look the same as previous model years with the same four traditional cylinder positions (Lock/Off, Accessory, On/Run, Start), but it requires the driver to push in the key in order to turn the cylinder counter-clockwise to turn off the vehicle. If the key is not pushed inward, the key will not turn. There are no changes to starting the vehicle.

A hang tag explaining operation will be placed in vehicles at the assembly plant. The tag should remain in the vehicle so that the customer sees it. The operation of the ignition system also should be covered with customers during vehicle delivery.

Because the operation only requires a slight push inward, it is very possible that many customers may not even notice it. Many drivers automatically push the key inward when operating the ignition switch.

The cylinder and housing for the Push-to-Turn-Off Ignition are different than previous model years and cannot be swapped to an earlier model. Additionally, with the new design, the cylinder is only serviceable fully assembled. The tumblers can no longer be serviced within a cylinder. The cylinder must be ordered with the key code to match the Original Equipment (OE).

TIP: There is no change to the RPO between the model years with and without the Push-to-Turn-Off Ignition.

If a customer cannot rotate the key out of the Lock/Off position, it may be due to the steering binding with the front wheels turned off center, which can cause the ignition to stick in the Lock/Off position. Do not confuse this common occurrence with a malfunction of the Push-to-Turn-Off Ignition. Turning the steering wheel from right to left while turning the key to the Accessory position should resolve the binding condition.

(#) Thanks to Bob Wittmann

New AFIT Software Now Available

A new software update (CH-47976-250) for the CH-47976 Active Fuel Injector Tester (AFIT) is now available for download that adds 2019 model year applications.

The software release includes the following:
• 86 2019 model year vehicle applications
• Database support for new applications that use existing cables
• Database support for new applications that use in-line adapters
• Database support for new applications that are now using SENT
• Database support for new applications that are now using KL9
• Firmware to support new G7 & G8 Cables and special crank procedure for certain applications per GM Service Information

In addition, the software release continues to support the SIDI engine applications that use essential SIDI adapter harnesses.

Software Download

The CH-47976-250 AFIT software update is available from the GM Dealer Equipment website. Download the software through the Service Workbench selection of “Essential Tools – Software Updates” in GM GlobalConnect (U.S. only). Select the link for “AFIT (Active Fuel Injector Tester) Software Update – Database V13.00 MCU Firmware V3.40, DMU Firmware V1.20, PC App V4.00_July 2018” and follow the instructions.

In Canada, the software is available for download through the Service Application selection of GM Special Tools & Equipment – Software Updates in GM GlobalConnect. AFIT Update Instructions also are available on the website under the Support Documents link.

For questions regarding the software release, contact Bosch Automotive Service Solutions Technical Support at 1-800-GM-TOOLS (1-800-468-6657).

(#) Thanks to Chuck Berecz and Todd Hayes
Push to Talk Button Operation

The push to talk button on the steering wheel is used to answer an incoming call or activate voice recognition with the infotainment system on some GM models. However, on other models without built-in voice recognition, the push to talk button will only connect to OnStar or the voice recognition of a connected mobile phone.

2018-2019 Sonic, Trax, Terrain, and 2019 Encore, Regal, Camaro, Colorado, Cruze, Equinox, Malibu, Silverado, Canyon and Sierra models equipped with Infotainment 3 systems (RPO IOR) do not have voice recognition capability with the infotainment system. The voice recognition commands are dependent on the phone paired to the vehicle. The push to talk button will answer OnStar hands-free calls. This is normal operation for the IOR infotainment system.

Audio Sources

In addition, it may appear that USB names cannot be deleted from the infotainment display after a USB drive has been removed from the USB port. The infotainment system displays the last three sources on the audio screen, such as AM, FM, SiriusXM, a Bluetooth device streaming music, or a USB drive. The last three sources used will be listed even after the source is removed from the system. The name of a USB drive that was connected will be removed from the audio screen after three other audio sources are selected, such as AM, FM, SiriusXM, etc.

(*) Thanks to Jeremy Richardson

The audio screen lists the last three audio sources used.
Latest Global EPC Update Provides Search Enhancements

The latest update to the GM Global Electronic Parts Catalog (EPC) includes several new features that make it easier to find the right parts, including new compliance alerts, better alignment between supplemental groups and illustrations, language search enhancements, and more consistent date formats. GM dealerships can access the EPC through the GM GlobalConnect Parts Workbench.

**Compliance Alerts**

To help dealerships comply with California’s Proposition 65, users will see a warning icon next to parts that contain chemicals that are known carcinogens. Select the icon to open the Part Details window with the full text of the warning.

**Group to Illustration Alignment**

To make it easier to find the right part fast, the updated Illustration Index lists only the illustrations for the specific supplemental group that is selected. For example, selecting Group 04 – Transfer Case only lists illustrations for the transfer case group, not all illustrations for Group 04, which also includes brakes and transmissions.

**Search Enhancements**

Narrowed information is now retained in a search when search filters are changed. In the past, the narrowed information was lost when the filter was changed. For example, after turning off the Year filter, the search results will include parts from all years, but will still show only those that match the narrowed entry.

In addition, part names with accented characters in French or Spanish will be shown in the results list regardless if the search term included the accent.

**Date Formats**

The last update to the EPC included with the latest release is that all dates within the EPC application are now displayed consistently in the same DD-MMM-YYYY format (e.g., 22-May-2018).

For assistance or technical support on using any features of the Global Electronic Parts Catalog, send an email to gmpartscatalog@gm.com or contact the GM EPC Technical Support help desk at 1-888-994-6372.

Thanks to Mary Daly

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**Service Know-How**

**10218.07V – Emerging Issues – July 12, 2018**

The latest service topics from GM Brand Quality and Engineering are covered, including how labor times are calculated and a preview of the new 2019 Silverado and Sierra light-duty trucks.

To view Emerging Issues seminars:
- Enter Emerging Issues in the Search box.
- Select the desired Emerging Issues seminar course title.
- Click the Launch button.