



Chevrolet Performance – Corvette Magnetic Ride Suspension Calibration Upgrade UPDATED

Updated Date: Jan 31, 2018 18:00 ET

Chevrolet, Buick, GMC and Cadillac U.S. Dealers:

Chevrolet Performance announced the launch of "Corvette Magnetic Ride Suspension Calibration Upgrade" to the Chevrolet Performance Parts program in October 2017. This message has been updated to include additional product information, dealer installation details, newly added calibration references, and attributes.

Availability: See chart below for availability.

Warranty Information: Reflashing the MR (Magnetic Ride) Suspension Control Module with this calibration maintains the vehicle's warranty.

"For nearly half a century, Chevrolet Performance has been the resource for enthusiasts. Chevy has a decades-long winning track record that today extends to virtually every form of motorsports. And while that legacy looks great in a trophy case, it also influences the vehicles we design, the engines we build and the performance parts you install."

Product Information:

Our Corvette development engineers now have new tools which help them better analyze MRC (Magnetic Ride Calibration) data recorded on the bench, on the road, and on the track. These tools have resulted in major improvements in Tour, Sport, and Track modes for all MRC vehicles. The improvements are so significant that all 2019 MRC Corvettes will include the new calibration. Chevrolet Performance is now making these new calibrations available to all customers already in possession of a 2014-2018 7th Generation Corvette with MRC (see Calibration Reference Table).

The Corvette MRC Suspension Calibration Upgrades greatly improve ride quality and handling feel, and have been rigorously validated and tested to ensure all chassis systems work together seamlessly.

Each Tour, Sport, and Track calibration is independently tuned for its respective chassis. The new calibrations exhibit a much more refined balance of the heave, pitch, roll, wheel, handling, and temperature compensation algorithms.

In Tour and Sport Modes the driver will feel major improvements in impact isolation and integration. Ride motion and balance are also greatly enhanced. Parking lot and low-speed (25 mph and less) ride motions are more compliant and less jarring. Sport mode also improves the handling precision and balance. Like Tour mode, Sport mode will exhibit the same impact and body motion improvements over the original Sport mode.

In Track Mode, the balance and response to driver inputs are more linear, and vehicle dynamics, based on throttle response, have been greatly improved. The customer should notice more linear behavior near and at the limit of adhesion.

Additionally, for 2015 and 2016 Z06 customers who have the Z07 package, there is an option to update the Tour and Sport calibrations and keep the Track calibration. This is intended for a customer who may prefer to keep the on-track calibration as is while benefiting from the tour and sport updates.

See below for a more complete detailed explanation of the improvements in each mode.

Dealer Installation Details:

To reprogram the "Corvette Magnetic Ride Suspension Calibration" please call Techline Customer Support Center (TCSC) at 1-800-828-6860 for programming requirements and instructions. Please be ready to provide the 17-digit VIN prior to calling. Please see detailed steps below:

Step 1 – Obtain VIN of vehicle for reprogramming.

Step 2 – Call TCSC at 1-800-828-6860.

Step 3 – Flash Calibration and complete Setup Process using the Service Programming System. Model Year 2014-2016 vehicles refer to Document ID 3633837, Model Year 2017-2018 vehicles refer to Document ID 4593366.

Step 4 – Refer to installation instructions in SI Document ID 4873206, for specific product details.

Step 5 – The labor for download and the re-flash of the module is to be charged to labor OP code 0602448 at an allowable 0.3hr.

Step 6 – Collect MSRP \$350.00 from customer which covers ALL COST, including Labor for the download and re-flash of the module. NOTE: This upgraded suspension calibration is a customer-pay transaction and should not be submitted as a warranty claim. The only submission to General Motors is for 0.3hr Labor per Step 5.

Step 7 – Dealer Piece Cost for Calibration will be billed to the BARS/Open Account monthly via Techline. Dealer Statement will include the 17-digit VIN, Part Number Reference "CORVSUSP" and Dealer Piece Cost.

Step 8 – To get the maximum performance and consistency out of the updated calibration, please allow the vehicle to sit for 8 to 10 hours after the update and prior to spirited driving.

NOTE:

The MRC damper system has a built-in temperature offset correction as part of the calibration. Chevrolet Performance recommends allowing the vehicle to sit for 8 to 10 hours after flash of Calibration and prior to spirited driving. This step does not need to be done at the dealership and can be done at the customer's convenience. 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 prior to sitting for 8-10 hours. However, the temperature offset correction will be less accurate, resulting in a less optimized operation until the damper temperatures normalize.

CALIBRATION REFERENCE TABLE

Model Year	Trim Level	Suspension RPO	Availability
2015	Z06 with Z07 Customer to specify if they wish to include Track Mode Change or No Track Mode Change with new Calibration for this Trim	FE7	NOW
2016	Z06 with Z07 Customer to specify if they wish to include Track Mode Change or No Track Mode Change with new Calibration for this Trim	FE7	NOW
2017	Z06 with Z07	FE7	End of Q1 2018
2018	Z06 with Z07	FE7	End of Q1 2018
2015	Z06 without Z07	FE6	NOW
2016	Z06 without Z07	FE6	NOW
2017	Z06 without Z07	FE6	NOW
2018	Z06 without Z07	FE6	End of Q1 2018
2017	Grand Sport with Z07	FE7	End of Q1 2018
2018	Grand Sport with Z07	FE7	End of Q1 2018
2017	Grand Sport without Z07	FE6	End of Q1 2018
2018	Grand Sport without Z07	FE6	End of Q1 2018
2014	Z51 (Tour and Sport Mode Only FE4)	FE4	NOW
2015	Z51 (Tour and Sport Mode Only)	FE4	NOW
2016	Z51 (Tour and Sport Mode Only)	FE4	NOW

2017	Z51 (Tour and Sport Mode Only)	FE4	End of Q1 2018
2018	Z51 (Tour and Sport Mode Only)	FE4	End of Q1 2018
2016	Base	FE2	NOW
2017	Base	FE2	NOW
2018	Base	FE2	End of Q1 2018

Attributes for the New MR Calibration Updates - Tour Mode:

Applies to

2016 to 2018 Base+F55

2014 to 2017 Z51

2017 Grand Sport

2017 Grand Sport w/Z07

2015 to 2017 Z06

2015 to 2017 Z06w/Z07

For 2018 MRC vehicles, please see footnote:

- Major Improvements in impact isolation and integration – Impacts are softer, and less harsh. When the vehicle does encounter rough roads, the structural feel is greatly improved.
- Major improvements in ride motions at all speeds. Much more balanced and less abrupt. The car is more poised in compression and rebound, resulting in a flatter ride. This is not implying stiffer body motions, but the vehicle exhibits a more composed ride.
- Parking lot and low speed (25mph and less) ride motions are more compliant and less jarring.
- Handling is more responsive and much more precise. The response of the vehicle is more exact responding to the driver steering inputs.
- For 2018 vehicles, some of the final improvements being implemented for the MRC upgrades were part of the 2018 production release. Thus, the improvements for 2018 vehicles are also very significant but not quite as dramatic as the 2014 to 2017 packages.

Attributes for the New MR Calibration Updates - Sport Mode:

Applies to

2016 to 2018 Base+F55

2014 to 2017 Z51

2017 Grand Sport

2017 Grand Sport w/Z07

2015 to 2017 Z06

2015 to 2017 Z06w/Z07

For 2018 MRC vehicles, please see footnote:

- Sport also has major improvements in impact isolation and integration. With these new improvements, the impact isolation and integration is better than the Tour mode with the original production calibrations. – Impacts are softer, and less harsh. When the vehicle does encounter rough roads, the structural feel is greatly improved.
- Major improvements in ride motions at all speeds. Much more balanced and less abrupt. The car is more poised in compression and rebound, resulting in a flatter ride. The Sport mode exhibits significantly more body motion control than Tour.
- Handling is more responsive and much more precise. The response of the vehicle is more exact responding to the driver steering inputs whether using Sport mode as a daily driver, or carving through a mountain road.
- Parking lot and low speed (25mph and less) ride motions are more compliant and less jarring.
- For 2018 vehicles, some of the final improvements being implemented for the MRC upgrades were part of the 2018 production release. Thus, the improvements for 2018 vehicles are also very significant but not quite as dramatic as the 2014 to 2017 packages.

Attributes for the New MR Calibration Updates - Track Mode:

Applies to

2017 & 2018 Grand Sport


2015 to 2018 Z06

2015 to 2016 Z06 w/Z07

For 2017 and 2018 Grand Sport wZ07, & Z06 with Z07, please see footnote:

- The new track mode is better balanced and response to driver inputs are much more linear near and at the limit of adhesion. With the new Track calibration, the redistribution of the damping makes the car more fluid as it is cornered. The rotation of the car is more precise at initial turn in, and maintains its path through the turn. As the driver applies throttle, the car sustains its heading much better.
- The new Track calibrations increases driver confidence. This, coupled with the vehicle being better balanced during the cornering maneuvers resulted in an average of a 1 second lap time improvement over the original calibration.
- Revised temperature compensation tables. As the fluid heated up, during long continuous and repeated runs, sometimes over 100 degrees Celsius (212 degrees Fahrenheit), the damping was effected, not only on an absolute basis, but also the front to rear effecting the balance of the car. New temperature compensation tables were developed to make the balance of the car much more exact regardless of the damper fluid temperature.
- For 2017 and 2018 Grand Sport wZ07, & Z06 with Z07. The new Chevrolet Performance Track foundation calibrations were in the 2017 and 2018 Grand Sport wZ07, & Z06 with Z07 production vehicles with the exception of the revised temperature compensation tables

discussed above. The new Chevrolet Performance calibrations for 2017 and 2018 Grand Sport wZ07, & Z06 with Z07 now include the updated temperature compensation.

 01-31-18 Copy of this message GCUS-9-4986 V2.0 - Chev Perf Corvette Magnetic Ride Suspension Calibration Upgrade UPDATED.pdf

About this Article

Reference Number: GCUS-9-4986

Published to: Service; Parts

Version: 1.0

Keywords: Corvette, Calibration, Magnetic Ride, Suspension, Z06, Z51, Z07, Grand Sport, Track Mode, Sport Mode, Tour Mode

Original Published Date: Oct 30, 2017 15:30 ET

Expires: Oct 31, 2018 00:00 ET

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