

2020 Corvette: GM TechLink: Servicing the Front Leveling System

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GM TechLink

There may be a Service Front Leveling System message displayed on the Driver Information Center on some 2020 Corvette models. DTC U3000 SYM49 (Control Module Internal Malfunction) also may be set.

If these conditions are found, reprogram the Front Suspension Lifting/Lowering Hydraulic Power Pack Module with the latest calibration. Refer to K218 Front Suspension Lifting/Lowering Hydraulic Power Pack Module: Programming and Setup in the appropriate Service Information.

TIP: If the Same Calibration/Software Warning is noted on the Service Programming System (SPS) screen, select OK and follow the screen instructions. After a successful programming event, the Warranty Claim Code (WCC) will be displayed on the SPS Summary screen.

Front Leveling System

The Front Ride Height Control (FRHC) system is designed to raise the front of the vehicle out of trim (nominal unraised position of the suspension) position during low-speed driving scenarios in order to help avoid objects on the ground and reduce the potential for damage to the front spoiler. (Fig. 14) The increased ground clearance can help to navigate speed bumps and steep driveways as well as to clear frame contact hoists or floor jacks during a service event.

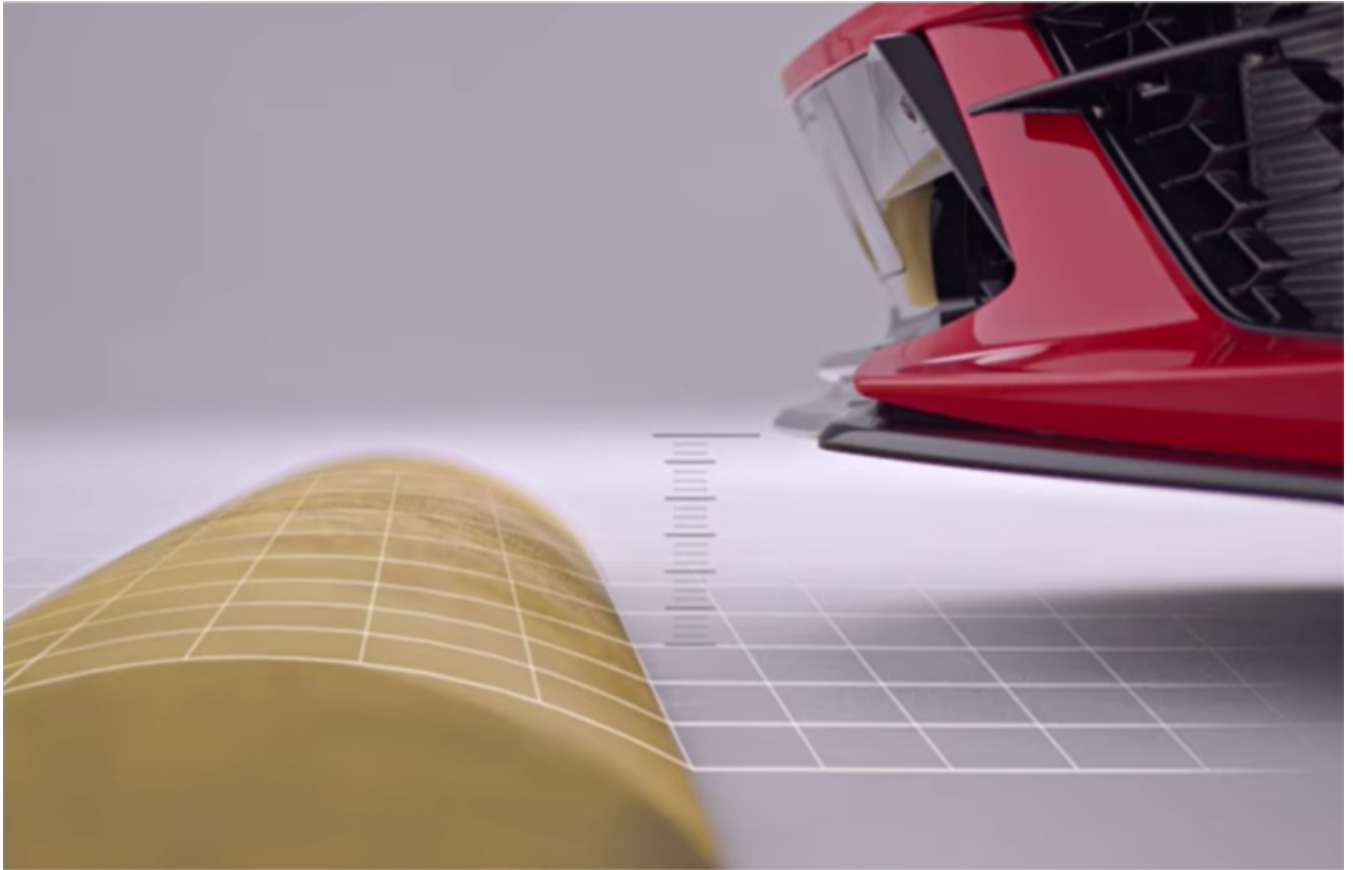


Fig. 14

The FRHC system consists of front shock absorbers with built in two-position lift actuators, hoses, lines, hydraulic fluid reservoir and an electro-hydraulic control unit. The benefit of the system is to provide increased ground clearance to navigate speed bumps, steep driveways or service events to clear drive on hoists, frame contact hoists or floor jacks.

The vehicle is raised or lowered primarily by using the Lift/Lower Select Switch on the center console. (Fig. 15)



Fig. 15

The electrical components of the front leveling system include:

- S86 Vehicle Stability Control System Switch
- Front Ride Height Leveling Subsystems – K218 Front Suspension Lifting/Leveling Hydraulic Power Pack Module, Fluid Reservoir, Front Ride Height Hydraulic Control Unit (HCU), and Front Ride Height Left/Right Front Actuator (includes displacement sensor)
- P16 Instrument Cluster
- K20 Engine Control Module
- K160 Brake System Control Module

Refer to Bulletin #20-NA-140 for additional information.

– Thanks to Jeff Strausser

Online URL: <https://www.corvetteactioncenter.com/tech/knowledgebase/article.php?id=1430>