

## Available Corvette Suspensions

Three suspension choices allow Corvette drivers to choose the setup that best suits their style of driving. Each of the choices – Corvette Standard, Magnetic Selective Ride Control and Z51 Performance package – provides outstanding handling. Each also offers drivers the ability to tailor the car's handling traits to their specific preferences.

THE STANDARD SUSPENSION is tuned for comfortable ride balance and precise handling. The optional MAGNETIC SELECTIVE RIDE CONTROL suspension enhances standard suspension by adding magneto-rheological dampers that are able to detect road surfaces and adjust to them almost instantly for optimal ride and body control.

The optional Z51 PERFORMANCE PACKAGE is a competition-ready system for the true performance enthusiast. It offers more aggressive dampers and springs, larger stabilizer bars, Goodyear Supercar tires\* with an asymmetrical tread pattern, and larger, cross-drilled brake rotors for outstanding handling performance that is still comfortable for daily driving. Beyond the suspension bits, the Z51 is a total system that takes the “regular” C6 to near-exotic levels of performance. It features gear ratios similar to the Z06 for maximum acceleration performance, and includes coolers added for aggressive, track-oriented use.

\*The Corvette Z51 package applies the latest advances in tire technology from Goodyear. GM's long-standing relationship with Goodyear has resulted in the development of Extended Mobility Tires that improve handling capability and ride quality. The new compounds and sidewall design permit impact absorption yet resist the heat generated by zero-pressure use while providing the tremendous grip that Corvette buyers require for top performance. The design of the new sidewall is bump- and impact-compliant, which improves ride comfort while reducing noise and isolating the car from road surface imperfections.

Goodyear supplies two different tires, depending on the suspension package. A standard directional-tread tire is offered for Standard and F55 Magnetic Selective Ride Control for balance between handling and ride. The Z51 package – the choice for the serious enthusiast – features an asymmetrical-tread tire for maximum handling. The wheel and tire sizes are equal despite the slightly narrower width of the new tires.

With its increased horsepower and top speed, heartier braking is critical to the overall performance. The C6's re-engineered brake systems provide improved durability and excellent performance.

The new brake system has improved heat dissipation and durability for better overall performance capability. For Standard and F55 models, the brake rotors are 12.8 inches in front and 12.0 inches in the rear. However, the rotors themselves have been thoroughly redesigned. The front rotors weigh two pounds more than the C5 and generate less heat against the brake pads, which improves wear and reduces fade. In all brake applications, the front calipers utilize dual pistons and the rear use single pistons.

The Z51 Package extends the braking capability with larger rotors (13.4 inches in front and 13.0 inches in the rear) that are cross-drilled.

The anti-lock braking system detects and intervenes to prevent wheel lockup during braking and features four channels plus a steering sensor. ABS is tied into the Active Handling stability system and shares sensors for steering angle, wheel speed and acceleration and deceleration in all directions. Traction control initiates individual wheel braking and/or engine torque reduction after sensing excessive wheel spin. The optional Magnetic Selective Ride System integrates with these systems to enhance handling and body control based on input from changing road surfaces.

True to Corvette's performance heritage, and unlike more intrusive systems used by competitors, the Corvette Team developed the calibration based on how Corvette drivers actually drive their cars.

"We felt it was better to calibrate the system around our knowledge of what our customers are going to do, rather than a system that intervenes heavily and slows them down," says Dave Hill, chief engineer of the Corvette and vehicle line executive for GM Performance Cars. "Our intent was to encourage Corvette drivers to keep the system on. We wanted our Active Handling System to work with the drivers in their spirited driving, rather than against them."

Overall, the C6's dynamic chassis control systems are smarter, less intrusive and more adept at making the total driving experience precisely what Corvette owners have come to expect from their car.