

For immediate release

## CHEVROLET CORVETTE ZR1

### New for 2011:

- Exterior colors: Inferno Orange and Supersonic Blue
- Available contrasting-color headlamps
- Interior custom color stitching available
- USB port and input jack included with navigation radio

Please see separate releases for Corvette and Grand Sport, and Corvette Z06.

### Model Lineup

	Engine	Transmission
Corvette ZR1	6.2L supercharged V-8 (LS9) s	Tremec TR6060 six-speed manual s

### Key

Standard s

## 2011 CORVETTE ZR1: MORE PERSONLIZATION CHOICES ENHANCE WORLD-CHALLENGING PERFORMANCE

The supercharged Corvette ZR1 is a bona fide cultural phenomenon. After entering the market in 2009, it quickly challenged – and beat – expectations on how an American supercar could stand up to the world’s premier competitors at a much lower price. In the two years since, a passionate community of enthusiasts around the globe has helped make it an instant icon in the digital age. Consider the following:

- A Google search of “Corvette ZR1” returns about 933,000 results
- A YouTube video showing a British magazine’s acceleration test of the Corvette ZR1 vs. a Porsche 911 GT2 has been viewed about 3.7 million times
- There are nearly 9,000 ZR1 photo posts on Flickr.com
- Nürburgring 7:26.4-minute record run viewed nearly 1 million times on YouTube.

With its performance and cultural credentials intact, the Corvette ZR1 enters its third year of production with minor changes aimed at broadening the personalization options for customers. That includes a pair of new exterior colors – Inferno Orange and Supersonic Blue – which brings the exterior color roster to 10; available contrasting-color

headlamps, offered in Cyber Gray, Black and Blade Silver; and a new interior custom color stitching option.

It's beneath the skin, of course, where the ZR1 earns its street cred. Highlights include:

- LS9 supercharged 6.2L V-8 rated at 638 horsepower (476 kW), and 604 lb.-ft. of torque (819 Nm)
- Six-speed, close-ratio, race-proven manual transmission
- High-capacity dual-disc clutch
- Higher-capacity and specific-diameter axle half-shafts; enhanced torque tube
- Specific suspension tuning provides more than 1g cornering grip
- Twenty-spoke 19-inch front and 20-inch rear wheels
- Michelin Pilot Sport 2 tires – P285/30ZR19 in front and P335/25ZR20 in the rear – developed specifically for the ZR1
- Standard Brembo carbon-ceramic, drilled disc brake rotors – 15.5-inch-diameter (394-mm) in the front and 15-inch-diameter (380-mm) in the rear
- Blue-painted brake calipers
- Standard Magnetic Selective Ride Control with track-level suspension
- Launch Control system with Performance Traction Management technology
- Wider, carbon-fiber front fenders with ZR1-specific dual ports
- Carbon-fiber hood with a raised, polycarbonate window – offering a view of the intercooler below it
- Carbon-fiber roof panel, roof bow, front fascia splitter and rocker moldings with clear-coated, visible carbon-fiber weave
- ZR1-specific full-width rear spoiler with raised outboard sections
- Specific gauge cluster with boost gauge (also displayed on the head-up display) and 220-mph (370 km/h) speedometer readout
- Curb weight of 3,333 pounds (1,512 kg).

The specialized components of the new ZR1 work harmoniously to deliver the most powerful and fastest automobile ever produced by General Motors. It has a top speed of 205 mph (330 km/h).

### **Supercharged LS9 engine**

The supercharged LS9 6.2L small-block engine is the power behind the ZR1's performance. A sixth-generation Eaton supercharger helps the LS9 make big power and torque at lower rpm and carries it in a wide arc to 6,600 rpm, as it pushes enough air to help the engine maintain power through the upper levels of the rpm band – the area where supercharged performance tends to diminish. Heavy-duty and lightweight reciprocating components enable the engine's confident high-rpm performance.

The Roots-type supercharger uses a unique, four-lobe rotor design. It is augmented with an integrated charge cooling system that reduces inlet air temperature for maximum performance.

The LS9 is hand-assembled at GM's Performance Build Center in Wixom, Mich., and incorporates special processes typically seen in racing engines to produce a highly refined and precise product. For example, cast iron cylinder liners are inserted in the aluminum block and are finish-bored and honed with a deck plate installed. The deck plate simulates the pressure and minute dimensional variances applied to the block when the cylinder heads are installed. This ensures a higher degree of accuracy that promotes maximum cylinder head sealing, piston ring fit and overall engine performance.

### **Transmission and axle**

The LS9 engine is backed by an upgraded, stronger six-speed manual transmission and a twin-disc clutch that provide exceptional clamping power, while maintaining an easy clutch pedal effort. ZR1-specific gearing in the transmission provides a steep first-gear ratio that helps launch the car, and top speed is achieved in sixth gear.

The twin-disc clutch system employs a pair of discs, which spread out the engine's torque load over a wider area. This enables tremendous clamping power when the clutch is engaged, while also helping to dissipate heat better and extend the life of the clutch.

The twin-disc clutch system also contributes to the ZR1's exceptional driving quality, with smooth and easy shifting. The twin-disc system's design allows higher torque capacity with inertia and pedal effort similar to the Corvette Z06. It enables a 25-percent reduction

in inertia, thanks to smaller, 260-mm plates; the Corvette Z06's uses a 290-mm single-disc system.

The rear axle also is stronger in the ZR1 and features asymmetrical axle-shaft diameters – 33 mm on the right side and 40 mm on the left – that were developed after careful testing to provide optimal torque management. The axles are mounted on a more horizontal plane that correlates with the wider width of the rear wheels and tires.

### **Performance Traction Management**

Performance Traction Management (PTM) technology is an advanced system that is part of the ZR1's Launch Control feature, which optimizes traction for greater and more consistent on-track performance.

The PTM system holds a predetermined engine speed while the driver pushes the throttle to the floor. That allows the driver to quickly release the clutch and the system modulates engine torque 100 times per second to maximize the available traction. The system is capable of approaching a skilled driver's best effort and repeats it consistently.

PTM also integrates the ZR1's traction control, active handling and selective ride control systems to enhance race track driving consistency and overall performance. When full throttle is applied upon exiting a corner, it automatically manages acceleration dynamics.

### **Ride and handling**

The ZR1 is built on the same aluminum-intensive chassis as the Corvette Z06 and features similar independent SLA front and rear suspensions, with aluminum upper and lower control arms. Where the ZR1 differs is the suspension tuning, which was optimized for the car's steamroller-wide front and rear tires.

Magnetic Selective Ride Control is standard and tuned specifically for the ZR1. The system's ability to deliver a compliant ride with nearly instantaneous damping adjustments enabled engineers to develop a surprisingly supple ride quality in a supercar that still delivers cornering grip of more than 1g.

From a high-performance perspective, Magnetic Selective Ride Control helps the rear axle remain planted during launch for smooth, hop-free acceleration. It also helps suppress axle movement when cornering on broken or uneven pavement.

### **Brakes, wheels and tires**

Commensurate with the ZR1's engine output is the braking system, headlined by Brembo carbon-ceramic brake rotors. Found on only a few exotics and more expensive supercars, carbon-ceramic brake rotors are made of a carbon-fiber-reinforced ceramic silicon carbide material. The advantages of these rotors are low mass and resistance to wear and heat. In fact, the rotors should never show corrosion or require replacement for the life of the vehicle, when used in normal driving.

The vented and cross-drilled rotors on the ZR1 measure 15.5 inches (394 mm) in diameter in the front and 15 inches (380 mm) in diameter in the rear – making them among the largest carbon-ceramic rotors available on any production vehicle.

Clamping down on the high-tech rotors are six-piston front calipers and four-piston rear calipers, each painted a ZR1-exclusive blue. The brakes are visible through the ZR1's exclusive wheels: 20-spoke alloy rims that measure 19 x 10 inches in diameter in the front and 20 x 12 inches in the rear. A Sterling Silver paint finish is standard; chrome and Competition Gray versions are optional. The wheels are wrapped in Michelin Pilot Sport 2 tires developed specifically for the ZR1, measuring P285/30ZR19 in front and P335/25ZR20 in the rear.

### **Exclusive exterior**

The ZR1 is instantly recognizable, with perhaps the most identifiable feature a raised, all-carbon-fiber hood that incorporates a clear, polycarbonate window. The window provides a view of the top of the engine's intercooler, with the legend "LS9 SUPERCHARGED" embossed on the left and right sides, and an engine cover with the Corvette crossed flags logo debossed at the front.

The underside of the hood has a visible carbon-fiber-weave. Visible carbon-fiber is used on the roof, roof bow, rocker molding and front splitter. These exterior components are

protected by a specially developed glossy, UV-resistant clear coat that resists yellowing and wear.

Widened, carbon-fiber front fenders with specific, dual lower ports; and a full-width, body-color rear spoiler incorporating the center high-mounted stop lamp are also unique to the ZR1. All of the exterior features were developed to enhance high-speed stability and driver control.

### **Interior details**

The ZR1 interior builds on the brand's dual-cockpit heritage, with high-quality materials, craftsmanship and functionality that support the premium-quality performance. The ZR1 cabin differs from the Corvette and Corvette Z06 with the following:

- ZR1-logo sill plates
- ZR1-logo headrest embroidery
- Specific gauge cluster with "ZR1" logo on the tachometer and a 220-mph (370 km/h) readout on the speedometer
- Boost gauge added to the instrument cluster and head-up display.

The standard ZR1 (RPO 1ZR) comes with accoutrements based on the Z06, including lightweight seats and lightweight content. The uplevel interior package (RPO 3ZR) includes power-adjustable, heated and leather-trimmed sport seats (embroidered with the ZR1 logo); Bose premium audio system; navigation system; Bluetooth connectivity; power telescoping steering column; custom leather-wrapped interior available in four colors; and more.

Optional custom interior color stitching is new for 2011.

### **By the numbers**

ZR1 models are distinguished from other Corvette models by their vehicle identification number, or VIN. Each carries a unique, identifying VIN digit, as well as a sequential build number. These identifiers make it easy to determine the build number of a specific car – information treasured by enthusiasts and collectors. For example, a ZR1 with a VIN ending in "0150" would indicate it is the 150th ZR1 built for the model year.

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## SPECIFICATIONS

### Overview

Model:	Chevrolet Corvette ZR1
Body styles / driveline:	2-door hatchback coupe with fixed roof; rear-wheel drive
Construction:	composite and carbon-fiber body panels, hydroformed aluminum frame with aluminum and magnesium structural and chassis components
Manufacturing location:	Bowling Green, Ky.

### Engine

	<b>6.2L SUPERCHARGED V-8 (LS9)</b>
Displacement (cu in / cc):	376 / 6162
Bore & stroke (in / mm):	4.06 x 3.62 / 103.25 x 92
Block material:	cast aluminum
Cylinder head material:	cast aluminum
Valvetrain:	overhead valve, two valves per cylinder
Fuel delivery:	SFI (sequential fuel injection)
Compression ratio:	9.1:1
Horsepower / kW:	638 / 476 @ 6500*
Torque (lb-ft / Nm):	604 / 819 @ 3800*
Recommended fuel:	premium required
EPA-estimated fuel economy (city / hwy):	14 / 20

### Transmission

	<b>Tremec TR6060 close-ratio six-speed manual</b>
Gear ratios (:1):	
First:	2.29
Second:	1.61
Third:	1.21
Fourth:	1.00
Fifth:	0.82
Sixth:	0.68
Reverse:	3.11
Final drive ratio:	3.42

### Chassis / Suspension

Front:	short/long arm (SLA) double wishbone, cast aluminum upper and lower control arms, transverse-mounted composite leaf spring, monotube shock absorber
Rear:	short/long arm (SLA) double wishbone, cast aluminum upper and lower control arms, transverse-mounted composite leaf spring, monotube shock absorber
Traction control:	electronic traction control; active handling (Magnetic Selective Ride Control)



## Brakes

Type:	front and rear power-assisted carbon-ceramic disc with 6-piston front and four-piston rear calipers, cross-drilled rotors; ABS std.
Rotor diameter (in / mm):	front: 15.5 / 394 rear: 15 / 380
Brake swept area (sq in / mm):	front: 355 / 2290 rear: 309 / 1994

## Wheels / Tires

Wheel size:	front: 19-inch x 10-inch rear: 20-inch x 12-inch
Tires:	Michelin Pilot Sport 2 front: P285/30ZR19 rear: P335/25ZR20

## Dimensions

### Exterior

Wheelbase (in / mm):	105.7 / 2685
Overall length (in / mm):	176.2 / 4476
Overall width (in / mm):	75.9 / 1929
Overall height (in / mm):	48.7 / 1236
Curb weight (lb / kg):	3333 / 1512
Weight distribution (% front / rear):	51 / 49

### Interior

Seating capacity	2
Interior volume (cu ft / L):	52 / 1475
Headroom (in / mm):	38 / 962
Legroom (in / mm):	43 / 1092
Shoulder room (in / mm):	55 / 1397
Hip room (in / mm):	54 / 1371

### Capacities

Cargo volume (cu ft / L):	22 / 634
Fuel tank (gal / L):	18 / 68.1
Engine oil (qt / L):	10.5 / 9.9

\*SAE certified.

Note: Information shown is current at time of publication.