Chevrolet Product Information

2014 CHEVROLET CORVETTE STINGRAY

Vehicle Highlights:

- Coupe and convertible models built on all-new, lightweight aluminum frame
- New LT1 V-8 with SAE-certified 455 hp (339 kW) and 460 lb.-ft. (624 Nm) – and 460 hp (343 kW) / 465 lb.-ft. (630 Nm) with available performance exhaust
- Most efficient sports car on the market, with EPA-estimated 17 mpg city and 29 mpg highway
- All-new seven-speed manual transmission with Active Rev Match technology
- Drive Mode Selector tailors up to 12 vehicle attributes to fit the driver's environment
- Standard carbon fiber hoods on all models, and removable roof panel for coupes, supports a world-class power-to-weight ratio

RETURN OF THE STINGRAY: THE 2014 CHEVROLET CORVETTE

Chevrolet is redefining modern performance with the all-new Corvette Stingray. And only a Corvette with the perfect balance of technology, design and performance can wear the iconic Stingray designation.

The 2014 Corvette Stingray is the most powerful standard Corvette model ever, with an SAE-certified 455 horsepower (339 kW) and 460 lb.-ft. of torque (624 Nm) – and 460 horsepower (343 kW) and 465 lb.-ft. (630 Nm) with the available performance exhaust system. It is also the most capable standard Corvette ever, with Z51-equipped models able to accelerate from 0-60 in 3.8 seconds, run the quarter-mile in 12 seconds at 119 mph, achieve 1.03g in cornering grip and stop from 60 mph in 107 feet.

The new Corvette Stingray backs its performance capability with the greatest efficiency of any sports car on the market, delivering an EPA-estimated 17 mpg city driving and 29 mpg on the highway with the all-new seven-speed manual transmissions. No other car offers more than 455 horsepower and greater than 29 mpg on the highway.

"Like the '63 Sting Ray, the best Corvettes embodied performance leadership, delivering cutting-edge technologies, breathtaking design and awe-inspiring driving experiences," said General Motors North America President Mark Reuss. "The all-new Corvette goes farther than ever, thanks to today's advancements in design, technology and engineering."

The all-new Corvette Stingray shares only two parts with the previous-generation Corvette. It incorporates an all-new frame structure and chassis, a new powertrain and supporting technologies and a completely new exterior and interior designs.

The Stingray Coupe starts at $51,995 (including destination) and the Convertible is priced at $56,995 (including destination). They share identical chassis tuning and performance technologies. They also share nearly-identical curb weights, as the only structural changes for the convertible model are limited to accommodations for the folding top and repositioned safety belt mounts.

Corvette Stingray highlights include:

- An interior that offers genuine carbon fiber and aluminum trim, hand-wrapped leather materials, dual eight-inch configurable driver/infotainment screens, and two new seat choices – each featuring a lightweight magnesium frame for exceptional support
- Advanced driver technologies, including a five-position Drive Mode Selector that tailors 12 vehicle attributes to fit the driver's environment and a new seven-speed manual transmission with Active Rev Matching that anticipates gear selections and matches engine speed for perfect shifts every time
- An all-new 6.2L LT1 V-8 engine combines advanced technologies, including direct injection, Active Fuel Management, continuously variable valve timing and an advanced combustion system that delivers more power while using less fuel
- Lightweight materials, including an aluminum frame; carbon fiber hood and removable roof panel on coupes; composite fenders, doors and rear quarter panels; carbon-nano composite underbody panels and a new aluminum frame help shift weight rearward for an optimal 50/50 weight balance that supports a world-class power-to-weight ratio
- A sculpted exterior features advanced high-intensity discharge and light-emitting diode lighting and racing-proven aerodynamics that balance low drag for efficiency and performance elements for improved stability and track capability
- An all-new, fully electronic top on the convertible that can be lowered remotely using the key fob and operates at up to 30 mph
- Track-capable Z51 Performance Package, including an electronic limited-slip differential; dry-sump oiling system; integral brake, differential and transmission cooling; as well as specific wheels, tires, brakes and a unique aero package that improves high-speed stability.

"Stingray is one of the hallowed names in automotive history," said Ed Welburn, GM vice president of global design. "We knew we couldn't use the Stingray name unless the new car truly lived up to the legacy. The result is a new Corvette Stingray that breaks from tradition, while remaining instantly recognizable as a Corvette the world over."

The new Corvette Stingray is built at GM's Bowling Green, Ky., assembly plant, which underwent a $131-million upgrade, including approximately $52 million for a new body shop to manufacture the aluminum frame in-house for the first time.

"We believe the Corvette represents the future of modern performance cars because it delivers more power, more driving excitement and better fuel efficiency," said Tadge Juechter, Corvette chief engineer. "The result is better performance by every measure. The 2014 Corvette delivers the fastest acceleration, the most cornering grip, the most track capability, the best braking performance *and* what we expect to be the best fuel economy ever for a standard Corvette."

Handcrafted, high-tech interior

The new Corvette Stingray interior blends fine materials and craftsmanship with advanced technologies that contribute to a more connected and more engaging driving experience, said Helen Emsley, interior design director.

“Every feature and detail in the interior is designed to enhance the driver’s connection to the Corvette,” Emsley said. “It starts with the fighter jet-inspired wraparound cockpit; continues to build with the smaller steering wheel, more supportive seats, and high-definition, configurable screens, and is finished in gorgeous materials.”

The smaller, 14.1-inch-diameter (360 mm) steering wheel fosters a more direct, immediate feel to directional inputs. The attention to the driver extends to the smallest details, including the flat, precise stitching on the steering wheel designed to provide a smooth, consistent feel.

Precise and elegant stitching also is seen in the available Napa leather trim on the all-new seats. Two seating choices will be offered: a GT seat for all-around comfort and a Competition Sport seat with more aggressive side bolstering that provides greater support on the track.

The frame structure for both seats is made of magnesium for greater strength and less weight than comparable steel frames. They’re also more rigid, contributing to the enhanced feeling of support during performance driving.

Additional performance-enhancing details in the interior resulted from designers’ “field trips” to GM’s Proving Ground in Milford, Mich., where high-performance driving experiences spurred the design and implementation of several features, including a steel-reinforced grab bar on the center console for the passenger and soft-touch materials on the edge of the console, where the driver naturally braces during high-load cornering.

High-performance driving also influenced elements of the configurable display screens and available head-up display, which vary depending on the driving mode, including the Track display inspired by the C6.R.

The performance-supporting elements inside the new Corvette Stingray are complemented by unprecedented attention to detail and build quality, including the sweeping arch motif over the driver cockpit trim and the seamless transition of the line from the instrument panel to the door.

All models feature a fully-wrapped interior, where every surface is covered with premium, soft-touch materials. Available materials, depending on the trim level, include Napa leather, aluminum, carbon fiber and micro-suede.

A blend of hand craftsmanship and machined precision is intended to ensure the fit, finish and ambience of the cabin is first-rate. The leather-wrapped instrument panel, for example, features hand-selected and hand-stretched materials for better grain matching with stitching performed by robots that deliver perfect seams.

There’s even a micro-LED screen for the passenger’s climate control placed below the vent on the dash, away from the performance features on the instrument panel.

“To ensure the high quality of the interior, we spent time working on the line alongside the team that builds the Corvette every day at Bowling Green Assembly Plant,” said Ryan Vaughn, interior design manager. “And thanks to that collaboration between design, engineering and manufacturing, we were able to make adjustments that allowed us to maintain the integrity of the design, improve the assembly process and ultimately deliver what we believe to be a world-class interior.”

Driver-oriented technologies

At the core of the Corvette Stingray’s driver-focused technologies is the cockpit-mounted Driver Mode Selector, which allows drivers to optimize the car for their driving preference and road conditions via five settings: Weather, Eco, Tour, Sport and Track.

“The all-new Corvette Stingray is really three cars in one: It provides the comfort and functionality of a long-distance GT car, the connectedness and infotainment of a daily driver and the acceleration, grip and braking of a capable track car,” said Harlan Charles, product manager. “With the Driver Mode Selector, we wanted to give drivers an easy way to tailor virtually every aspect of the car to fit their driving environment. The result is a more rewarding, more confident experience, whether you’re commuting in a downpour or charging through the corkscrew at Laguna Seca.”

The Driver Mode Selector is easy to use via a rotary knob near the shifter. The Tour mode is the default setting for everyday driving; Weather mode is designed primarily for added confidence while driving in rain and snow; Eco mode is for achieving optimal fuel economy; Sport mode is for spirited road driving and Track mode is for track use.

“Early in the development process, we spent time on the track, driving Corvettes hard. That experience shaped many parts of the interior, such as the instrument display in Track mode,” said Vaughn. “At 120 mph, you experience a sort of tunnel vision, as you concentrate on the next turn. At that moment, you don’t need to know the next song playing on the radio.”

Twelve performance parameters are adjusted with the selection of each mode, including:

- **Gauge cluster configuration:** The Tour, Eco and Weather modes feature displays for trip data, audio and navigation; Sport mode shows classic, easy-to-read sports car gauges; and Track mode's configuration shows a gauge design based on the Corvette Racing C6.R race car display with lap timer
- **ETC (Electronic Throttle Control):** Adjusts the throttle input curve for the selected mode for improved responsiveness
- **Paddle-shift automatic transmission**: Adjusts shift comfort and shift points
- **Active Fuel Management:** in normal mode, the LT1 engine uses V-8 power; in Eco mode the engine can operate in V-4 mode to improve fuel economy until aggressive acceleration is called for
- **Exhaust (active exhaust system):** The system adjusts the timing of the electronically controlled exhaust valves to enhance audible feedback from the V-8 depending on the drive mode
- **Electronic limited-slip differential (Z51):** Adjusts the rate at which the limited slip engages, to balance between steering response and stability in different driving conditions; more aggressive performance in Sport and Track modes
- **Steering:** Assist effort is adjusted in the modes to provide the driver with the correct steering feel for the driving condition
- **Magnetic Ride Control:** Adjusts shock damping based on road conditions, from optimized comfort to performance driving
- **Launch control:** Available in Track mode for manual and automatic transmissions, providing maximum off-the-line acceleration
- **Active handling (StabiliTrak stability control):** A "competitive" setting is available in Track mode and is more suited for on-track conditions. It can also be disabled, giving the driver complete control
- **Traction control:** Weather mode tailors traction control and engine torque for driving in inclement conditions
- **Performance Traction Management:** Available in Track mode and offers five settings of torque reduction and brake intervention for track driving.

Three configurable displays, including a pair of eight-inch screens and color head-up display, deliver personalized information and convey the different performance parameters of each drive mode.

The two eight-inch screens offer excellent visibility in direct sunlight, with 650 cd/m2 of brightness for the one integrated into the instrument cluster and 1,000 cd/m2 of brightness for the one in the center stack, making them among the brightest screens in the industry. The screen in the center stack also features touch-screen control with gesture recognition and can be lowered to reveal a hidden storage compartment that includes a USB input for device charging or uploads.

The Corvette Stingray delivers an advanced infotainment system, featuring Chevrolet MyLink and high-definition radio, as well as enhanced OnStar with 3D navigation maps. Additional USB ports in the center console, a stand-alone audio input jack and an SD card slot provide seamless connectivity.

An available premium 10-speaker audio system includes a bass box and two subwoofers – and speakers with rare-earth magnets that deliver greater sound quality with reduced weight and size.

Every line counts on Corvette Stingray's functionally elegant exterior

Corvette Stingray's provocative exterior styling is as functional as it is elegant, said Ken Parkinson, executive director of global design.

"Developing a new Corvette, while every designer's dream, is not an easy task," Parkinson said. "The goal was a bold design statement that embraced the advanced technology of the car, while enhancing its overall performance in everything from the wind tunnel to the track. The result is a new Corvette Stingray – a fantastic car that breaks new ground yet remains true to the fundamental elements that make a Corvette a Corvette."

While no single detail is repeated from previous generations, the new Corvette Stingray includes the distinctive profile defined by a long dash-to-axle ratio – a low, lean proportion emphasized even more on the convertible – and the greenhouse evoking the canopy of a fighter jet with dual-element taillamps. On this foundation, designers built a form vocabulary from two very different sources: aerospace and nature.

"For the new Corvette to be called a Stingray, it had to deliver an incredible, purposeful visual impact – just as the original did in 1963," said Tom Peters, exterior design director. "That visual impact is evident in fighter jets and the Stingray animal itself. Their beauty comes from their purpose, designed to cut through air or water as quickly and efficiently as possible. As with aircraft and living forms, every surface of the Corvette Stingray is purposeful, executed with beauty and proportion."

Lighting is a signature element of the Corvette Stingray's design and reinforces its high-tech aesthetic. At the front, indirect white LED lamps form a distinctive daytime styling cue. They are set in black-chrome lamp housings with standard HID projector headlamps. The turn signals feature edge-lit amber LED lighting.

All-new, dual-element taillamps represent the greatest departure from tradition and are among the car's most dramatic elements. The three-dimensional, sculpted lenses house innovative indirect LED lighting. The state-of-the-art lighting uses hidden LED lamps that cast their light up from the bottom of the housing into a reverse reflector, creating an even glow. LED lamps are also used for the white backup lamps. The taillamps integrate functional aircraft-style air outlets for the available differential and transmission coolers.

"From the front or rear, the signature lighting brings the new Corvette to life," said Peters. "It looks beautiful, intriguing, and more than a little intimidating. It gives the Corvette a nighttime appearance unlike anything else on the street."

The Corvette Stingray convertible features an all-new, fully electronic top that can be lowered remotely using the key fob. The top can also be opened or closed on the go, at speeds of up to 30 mph (50 km/h). Its folding mechanism is all-new and enables the top to be lowered in 21 seconds.

With the top up, the convertible is designed for a refined driving experience. A thick fabric top, along with sound-absorbing padding and a glass rear window, contributes to a quiet cabin and premium appearance.

With the top down, the Corvette Stingray's signature profile is further accentuated. Behind the seat backs, dual black trim panels enhance the character lines of the tonneau cover. Corvette Stingray's signature "waterfall" design originates in the valley between the seats, bringing the exterior color into the interior.

When it comes to aerodynamics, the new Stingray is in a league of its own. Advanced computer-aided modeling programs predict and track airflow over, under and through the new Corvette's body. Engineers and designers also relied on data gleaned from the Corvette Racing program – the most successful program ever in the American Le Mans Series and the 2012 GT class champion – to help balance front and rear grip for high-speed stability.

Many hours were spent in the wind tunnel hand-sculpting surfaces for aesthetics and performance. Functional exterior elements on all models include a new grille/radiator arrangement, hood vents and front fender cove vents. Venting air out of the hood reduces total front-end lift for improved steering response at high speeds, while the fender vents relieve underhood air pressure to reduce aerodynamic drag.

All Corvette Stingray models with the Z51 package also feature integral coolers for the rear differential and transmission (the transmission cooler is also included with the optional automatic transmission). For coupe models, the air intakes are integrated on the rear quarter panels, similar to the NACA ducts on the Corvette Racing C6.R. For convertible models, the air intakes are integrated into the underbody.

Airflow through the differential and transmission heat exchangers exits through the aircraft-inspired taillamp vents and lower-rear fascia air outlets. The Z51 Performance Package also includes brake-cooling ducts, a unique rear spoiler and additional air deflectors for enhanced track capability.

"Every square inch of the 2014 Corvette's exterior is designed to enhance high-performance driving," said Kirk Bennion, exterior design manager. "The team delivered a great balance of low drag for efficiency and performance elements for improved stability and track capability – all in a sculpted design that excites in all the ways that a Corvette has for six decades."

Engineered to race, built for the road

Both coupe and convertible versions of the new Corvette Stingray take advantage of lightweight materials, advanced manufacturing techniques and technology transfer from the Corvette Racing program to produce an ideal 50/50 weight balance and to deliver world-class power-to-weight ratios.

The technologically advanced foundation is an all-new aluminum frame structure that is 99 pounds (45 kg) lighter, and is 57-percent stiffer than the previous-generation convertible. The result is a frame that is so strong, no structural reinforcements are needed for the convertible model. The only changes are limited to accommodations for the folding top and repositioned safety belt mounts.

Compared to the previous generation, which used continuous hydroformed main frame rails with a constant 2mm wall thickness, the new Corvette's frame features main rails composed of five customized aluminum segments, including aluminum extrusions at each end, a center main rail section and hollow-cast nodes at the suspension interface points. Each segment's gauge varies in thickness from 2mm to 11mm, tailored – along with the shape – by the simulation software to optimize the strength requirements for each frame section with minimal weight.

The aluminum frame is manufactured using innovative manufacturing processes at GM's Bowling Green, Ky., assembly plant. The state-of-the-art facility employs several advanced joining technologies to ensure dimensional accuracy within 0.75 mm. Each frame features:

- 354 spot-welds using a GM-patented process that uses a unique electrode designed specifically for aluminum
- 188 Flowdrill-machined fasteners, which are installed by a high-speed drill that extrudes the frame material to create a strong, integral collar that is tapped for bolt-on fasteners
- 113 feet of structural adhesives, used in conjunction with welding and fasteners to increase overall frame stiffness
- 37 feet of laser welds, which join frame sections via a precise beam of high energy that minimizes heat beyond the weld area for improved structural accuracy.

The frame's greater strength and lower weight are complemented by chassis elements also designed for low-mass strength, including hollow-cast aluminum front and rear cradles that are approximately 25-percent lighter and 20-percent stiffer than the solid cradles used on the previous structure.

The innovative use of materials includes a standard carbon fiber hood on all Corvette Stingray models, and carbon fiber roof panel on all coupes. In addition, underbody panels are created with carbon-nano composite technology, an advanced blend of traditional composite material and carbon fiber for reduced weight and improved strength. Fenders, doors, rear quarter panels and the rear hatch panel are made with lighter-density Sheet Molded Compound than the previous generation.

More power with greater efficiency

The lightweight elements of the Stingray contribute to the ideal 50/50 weight balance. Combined with its SAE-certified 455 horsepower (339 kW), the new Corvette delivers a better power-to-weight ratio than the Porsche 911 Carrera or Audi R8.

Those 455 horses are generated by an all-new LT1 6.2L Small Block V-8 engine, which also produces 460 lb.-ft. of torque (624 Nm). More importantly, it generates 50 lb.-ft. more low-rpm torque than the previous 6.2L engine, matching the 7.0L LS7 engine from the 2013 Corvette Z06 from 1,000 to 4,000 rpm.

The engine's performance comes from combining advanced technologies such as direct injection, Active Fuel Management and continuously variable valve timing with an advanced combustion system. More than 10 million hours of computational analysis went into the new Small Block's design, including more than 6 million hours alone on the combustion system.

The LT1 is backed by a choice of active exhaust systems that are less restrictive than the previous generation, due in part to an increase in diameter from 2.5 inches to 2.75 inches. The standard system offers a 13-percent improvement in airflow and features a pair of butterfly valves that contribute to greater refinement at cruising speeds when the engine is operating in fuel-saving V-4 mode.

An available performance variable-mode active exhaust system offers a 27-percent improvement in airflow. It features two additional valves that open to a lower-restriction path through the mufflers. When open, these valves increase engine performance and produce a more powerful exhaust note. It also raises the engine's output to 460 horsepower (343 kW) and 465 lb.-ft. of torque (630 Nm).

The LT1 is offered with an all-new seven-speed manual transmission with Active Rev Matching. It incorporates rev-matching technology for upshifts and downshifts. This driver-selectable feature can be easily engaged or disengaged via paddles on the steering wheel. The seven-speed is used with a new dual-mass flywheel and dual-disc clutch, which deliver greater shift quality and feel through lower inertia. The transmission with the Z51 Performance Package includes specific close-ratio gearing for more aggressive driving.

"Active Rev Matching makes the new Corvette easier and more fun to drive in performance conditions," said Jeuchter. "It anticipates the next gear selection and electronically 'blips' the throttle to match engine speed for a seamless gear change."

The seven-speed is offered exclusively in Europe. In North America and other global markets, a six-speed paddle-shift automatic transmission is also offered. It is optimized for use with Active Fuel Management and features a lower-inertia torque converter for improved shift quality and shift speeds. In addition, shift feel and shift points can be adjusted through the Driver Mode Selector.

The Corvette retains its distinctive rear transaxle layout for optimal weight balance.

More direct, more connected driving feel

The new Corvette Stingray's chassis and suspension are designed to take advantage of the lighter, stiffer structure. The reduced structural flex allowed engineers to more precisely tune the suspension and steering for a more nimble and responsive driving experience. The components and their calibrations – from the brake size and damper rates to the steering system – are identical between coupes and convertible.

"An important goal for the team was to create a more intimate and connected driving experience for the new Corvette Stingray," said Mike Bailey, chassis vehicle system engineer. "Because they share common chassis tuning, power-to-weight ratios and structural rigidity, the coupe and convertible feel almost identical behind the wheel."

While the Corvette Stingray retains the racing-proven short/long-arm suspension design, front and rear, the components are all-new. Improvements to the suspension include hollow lower control arms that save approximately nine pounds (4 kg) per vehicle and new aluminum rear toe links that save 2.4 pounds (1.1 kg) over previous steel links.

The Corvette Stingray rides on new 18 x 8.5-inch front and 19 x 10-inch rear wheels, while models with the Z51 Performance Package roll on 19 x 8.5-inch front and 20 x 10-inch rear forged aluminum wheels. New Michelin Pilot Super Sport run-flat tires developed specifically for the seventh-generation Corvette deliver comparable levels of grip than the wider tires of previous models.

As a result, the Corvette Stingray with the Z51 Performance Package is capable of 1.03g in cornering acceleration – comparable to the 2013 Corvette Z06 (1.04). Significantly, that is achieved with narrower and lighter wheels and tires. The reduced "footprint" reduces rolling resistance, steering effort and road noise, contributing to a more nimble feel, more immediate steering response and greater touring comfort and efficiency.

Dimensionally, the new Corvette's wheelbase is approximately an inch longer than the previous generation, with front and rear tracks that are almost an inch wider. Those changes provide a more stable feel, particularly at high speeds, while the turning radius is decreased by approximately two feet for greater maneuverability in tight turns.

The Corvette Stingray features standard 35mm-piston Bilstein monotube shocks that connect to dual-path aluminum shock mounts that separate the shock rod and shock body load paths. The Z51 Performance Package comes with 45mm-piston Bilstein dampers for more aggressive body control and track capability. Z51 is available with the third-generation Magnetic Ride Control, which features a new twin-wire/dual-coil damper system that reacts 40 percent faster, enabling improved ride comfort and body control.

The new electric power steering system offers variable ratios and variable effort to tailor responsiveness and feel for each driving situation. It also delivers more precise control and feedback to the driver, along with greater variability of effort for high-performance driving and greater on-center sensitivity and linearity. Steering feel was further improved by increasing steering column stiffness by 150 percent, increasing intermediate shaft torsional stiffness by 600 percent, and mounting the steering gear to the front cradle structure. As a result, the steering system is five times stiffer than the previous generation.

A smart electronic limited-slip differential (eLSD) is included in the Z51 Performance Package and continuously makes the most of the torque split between the rear wheels. The system features a hydraulically actuated clutch that can infinitely vary clutch engagement and can respond from open to full engagement in tenths of a second. It shifts torque based on a unique algorithm that factors in vehicle speed, steering input and throttle position to improve steering feel, handling balance and traction.

"The electronic limited-slip differential transforms the Stingray by optimizing handling for the driving situation," said Bailey. "By continuously modulating the torque split between the rear wheels, the eLSD can improve traction accelerating out of corner, improve stability on the highway and enhance steering turn-in and responsiveness."

The eLSD is fully integrated with Electronic Stability Control and Performance Traction Management systems. Its calibrations vary among three modes, based on the Drive Mode Selector setting:

- Mode 1 is the default setting for normal driving and emphasizes vehicle stability
- Mode 2 is engaged when electronic stability control is turned off in the Sport or Track modes. This calibration enables more nimble turn-in and traction while accelerating out of a corner
- Mode 3 is automatically selected when Performance Traction Management is engaged. This calibration has the same function as Mode 2, but is fine-tuned to work with Performance Traction Management.

Standard Brembo brakes, with four-piston fixed calipers derived from racing, deliver exceptional stopping power on the street or track. System highlights include:

- 12.6-inch (320 mm) front rotors and 13.3-inch (338 mm) rear rotors are standard and have 35-percent more swept area than previous-generation brakes. Consequently, stopping distance is improved 9 percent
- Dual-cast, slotted 13.6-inch (345 mm) front rotors and 13.3-inch (338 mm) slotted rear rotors are included with Z51 Performance Package. They have 6-percent more swept area than the previous-generation Grand Sport and are cooled front and rear for improved track capability. Consequently, stopping distance is improved 5 percent
- All brake packages have fixed four-piston front and rear calipers that are stiffer for more even pad wear, reduced drag and improved modulation.

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2014 CHEVROLET CORVETTE STINGRAY SPECIFICATIONS

Overview

Model:	Chevrolet Corvette Stingray
Body styles / driveline:	2-door hatchback coupe with removable roof panel or 2-door convertible; 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

	LT1 6.2L V-8
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:	direct injection
Lubrication system:	wet sump (Stingray) dry sump (Stingray with Z51)
Compression ratio:	11.5:1
Horsepower ☹ hp / kW @ rpm):	455 / 339 @ 6000 (SAE-certified) 460 / 343 (with available performance exhaust)
Torque (lb-ft / Nm @ rpm):	460 / 624 @ 4600 (SAE-certified) 465 / 630 (with available performance exhaust)
Max. engine speed (rpm):	6,600
Recommended fuel:	premium recommended, not required
EPA-estimatedfuel economy (city / hwy):	17 / 29 (manual) TBD (automatic)

Transmissions

Type:	seven-speed manual with Active Rev Match	seven-speed manual with Active Rev Match w/Z51	six-speed paddle-shift automatic
Gear ratios (:1)			
First:	2.66	2.97	4.03
Second:	1.78	2.07	2.36
Third:	1.30	1.43	1.53
Fourth:	1.00	1.00	1.15
Fifth:	0.74	0.71	0.85
Sixth:	0.50	0.57	0.67
Seventh:	0.42	0.48	N/A
Reverse:	2.90	2.90	3.06
Final drive ratio:	3.42	3.42	2.56 (2.73 w/ Z51)

Chassis / Suspension

Front:	short/long arm (SLA) double wishbone, cast aluminum upper and lower control arms, transverse-mounted composite spring, monotube shock absorber
Rear:	short/long arm (SLA) double wishbone, cast aluminum upper and lower control arms, transverse-mounted composite spring, monotube shock absorber
Active handling:	Magnetic Selective Ride Control (avail. with Z51)
Traction control:	StabiliTrak electronic stability control
Steering type:	variable-ratio rack-and-pinion with electric power assist
Steering gear ratio:	12.0 to 16.4
Turns lock to lock	2.53
Turning circle, curb to curb (ft / m):	37.7 / 11.5

Brakes

Type:	front and rear power-assisted discs with four-piston fixed front and rear calipers (slotted rotors with Z51)
Rotor diameter (in / mm):	front: 12.6 / 320 (13.6 / 345 with Z51) rear: 13.3 / 338
Rotor thickness (in / mm):	front: 1.18 / 30 (including Z51) rear: 0.90 / 23

Wheels / Tires

Wheel size:	front: 18-inch x 8.5-inch rear: 19-inch x 10-inch front: 19-inch x 8.5-inch (with Z51) rear: 20-inch x 10-inch (with Z51)
Tires:	Michelin Pilot Super Sport run-flat front: P245/40R18 rear: P285/35R19 front: P245/35R19(with Z51) rear: P285/30R20(with Z51)

Dimensions

Exterior

Wheelbase (in / mm):	106.7 / 2710
Overall length (in / mm):	176.9 / 4493
Overall width (in / mm):	73.9 / 1877
Overall height (in / mm):	48.6 / 1235 (coupe) 48.6 / 1235 (convertible)
Track (in / mm):	63 / 1600 (front) 61.7 / 1567 (rear)
Curb weight (lb / kg):	3298 / 1499 (coupe) 3362 / 1529 (convertible)
Weight distribution (% front / rear):	50 / 50

Interior

Seating capacity	2
Headroom (in / mm):	38 / 962
Leg room (in / mm):	43 / 1092
Shoulder room (in / mm):	55 / 1397
Hip room (in / mm):	54 / 1371

Capacities

Interior volume (cu ft / L):	52 / 1475
Cargo volume (cu ft / L):	Coupe: 15 / 425 Convertible: 10 / 283
Fuel capacity (gal / L):	18.5 / 70
Engine oil (qt / L):	7 / 6.6 9.75 / 9.2 (with Z51)
Engine cooling system (qt / L):	11.3 / 10.7

Note: Information shown is current at time of publication. Please visit http://media.gm.com for updates.