

# For Release: Aug. 1, 2005

# CHEVROLET CORVETTE

## New for 2006 (September 2005 start of production)

- · 6-speed Paddle Shift automatic transmission available on Coupe and Convertible
- Three-spoke, 370 mm (9.4 in) diameter steering wheel
- · Advanced dual-stage frontal air bags with GM Passenger Sensing System
- · XM Satellite Radio included with Bose stereo (48 states)
- Two exterior colors: Velocity Yellow Tintcoat and Monterey Red Metallic Tintcoat
- Titanium gray interior color
- · Storm Gray convertible top color

## Corvette Z06 vehicle highlights

- · Corvette Z06 fixed-roof hatchback coupe
- · LS7 7.0L (427 cu in) V-8 engine with 505 hp (377 kw) and 7000-rpm redline
- Front P275/35ZR18 and rear P325/30ZR19 extended mobility Eagle F1 Supercar tires
- Five-spoke painted aluminum wheels: 18 x 9.5-inch front; 19 x 12-inch rear (polished wheels available)
- Unique front fascia with upper inlet, specific grille, fenders, quarters and rear spoiler
- Aluminized stainless-steel, dual-mode 3-inch exhaust with 4-inch polished stainless steel tips
- · Special Ebony seats available with red or gray accents with Z06 embroidery
- · All-aluminum frame structure with magnesium engine cradle
- · Carbon-fiber fenders and floor panels
- Dry sump engine oil system, oil cooler, power steering cooler, transmission cooler and axle cooler

- · Rear-mounted battery for improved weight distribution
- Six-piston high-performance cross-drilled front brakes and 4-piston cross-drilled rear brakes
- · Front splitter, front and rear wheel opening extensions

#### Model Lineup

	Eng	ines	Transmissions	
	LS2 6.0L V-8	LS7 7.0L V-8	6−spd manual	6−spd Paddle
				Shift
				automatic
Corvette Coupe	S	_	S	0
Corvette Convertible	S	_	S	0
Corvette Z06	-	S	S	_
Key:				
Standard s				
Optional o				

Not available -

# 2006 CORVETTE: Z06 HITS THE GROUND RUNNING; NEW SIX-SPEED AUTOMATIC AVAILABLE FOR COUPE AND CONVERTIBLE

Model year 2006 will always be known as the year the 505-horsepower\* Z06 was let loose on the sports car world. With its 505-horsepower (377 kw) LS7 7.0L engine, racing-bred suspension, hydroformed aluminum frame and unique bodywork, the Z06 is the fastest, most technologically advanced production model in Corvette's 53-year history.

Performance enhancements also are found on '06 Coupe and Convertible models, with the availability of a new electronically controlled 6-Speed Paddle Shift transmission with automatic modes. The transmission has three driving modes - Drive, Sport and Paddle Shift - and a wide, 6.04:1 overall ratio that enables a balance of stirring acceleration and excellent fuel economy.

Other changes for 2006 Corvettes include a new three-spoke, 370-mm-diameter (9.4 inches) steering wheel. The wheel is smaller in diameter than the previous steering

wheel, allowing the driver to maintain a "tighter" feel on the wheel and help improve turn-in response. The three-spoke design is characteristic of a sporty design that is being implemented in other performance-oriented Chevrolet vehicles.

Here's a look at the rest of Corvette's changes for '06:

**GM Passenger Sensing System** – Replacing the previous manually controlled air bag switch, all '06 Corvettes come with advanced dual-stage frontal air bags with GM's Passenger Sensing System (PSS). PSS uses the latest sensing technology to turn the front passenger air bag on or off. If the sensor system detects an unoccupied front passenger seat or the presence of a smaller occupant, the front passenger air bag is designed to automatically turn off so it would not deploy in the event of a frontal collision. A status indicator on the inside rearview mirror alerts occupants that the passenger air bag is on or off.

XM Satellite Radio combined with Bose audio – For vehicles sold in the 48 contiguous states, XM Satellite Radio is included with the uplevel Bose audio system. The XM radio antenna is "hidden," allowing for a smoother exterior appearance.

**New exterior colors** – Velocity Yellow Tintcoat and Monterey Red Metallic Tintcoat join the Corvette's color palette, replacing Millennium Yellow and Magnetic Red Metallic. (Monterey Red Metallic Tintcoat is not available on Z06.) The color changes were implemented on late-2005 models.

**New interior color** – Titanium Grey replaces Steel Grey as one of Corvette's interior color choices.

**New convertible top color** – Storm Grey replaces Grey as a color choice for convertible tops.

#### 6-Speed Paddle Shift automatic details

The new electronically controlled 6–Speed Paddle Shift automatic transmission is one of the most technologically advanced transmissions in the industry, featuring clutch to clutch operation, manual control shift operation and an integrated 32–bit electronic controller. A wide, 6.04:1 overall ratio helps deliver exciting acceleration performance along with excellent fuel economy.

The six forward gears have smaller "steps" between them, which enhances the feeling of performance and smoothness. The smaller steps also enable a steep, 4.02:1 first gear, which provides an improved-performance launch feel when compared with the previous four-speed automatic's 3.06:1 first gear. There are two overdrive gears: a 0.85:1 ratio in fifth gear and a 0.67:1 ratio in sixth. The final drive ratio of Corvette models equipped with the new transmission is 2.56:1.

Technological sophistication is exemplified by two electronically controlled automatic modes, Drive and Sport; plus manual Paddle Shift. The Drive mode follows a specific shift schedule of predetermined shift points, while the Sport mode enables Performance Algorithm Shifting (PAS). PAS modifies shift patterns when performance driving is recognized by the controller. The Drive mode optimizes shifts for smoothness, while the Sport mode enables firmer shifts for better performance. With the Paddle Shift mode, gear changes are made with manual control paddles located on the steering wheel.

The performance and functions of the six-speed paddle shift transmission with automatic modes are guided by an integrated controller. The controller is located inside the transmission, reducing complexity. A new 300-mm torque converter, new rear bell housing, new driveline support and revised-length driveshaft also support the transmission's integration into the Corvette.

#### Coupe and convertible details

The 2006 Corvette's new features and refinements enhance a groundbreaking sports car that was all-new in 2005. It is a performance car that is home in virtually any environment, whether daily commuting or weekend racing. Coupe and Convertible models come with the LS2 6.0L V-8 engine that produces 400 horsepower (298 kw) and 400 lb.-ft. of torque (542 Nm). It is matched to a rear transaxle that helps improve vehicle weight balance – a six-speed manual is standard and the new six-speed paddle shift transmission with automatic modes is available. The front and rear short/long arm suspensions reflect the most competition-influenced suspension tuning in the Corvette's history.

Dramatic fender forms and exposed headlamps combine with the grille to create a strong visual identity for the Corvette, while the tapered rear deck and fascia improve high-speed performance. The lean rear design sports round taillamps and center-exit

exhaust. The fixed Xenon high-intensity discharge headlamps provide superior lighting performance. With a 0.286 coefficient of drag, the Coupe models are the most aerodynamic Corvettes ever.

The 2006 Corvette Convertible features an optional power-operated soft top; an easy-to-operate manual top is standard. Both configurations use a five-layer fabric that conceals the underlying structure for a good top-up appearance, plus it helps preserve the car's excellent aerodynamics and reduces road noise.

Corvette's interior is inspired by the car's dual-cockpit heritage. High-quality materials, craftsmanship and functionality help deliver premium quality meant to enhance performance driving. The instrument panel and doors are covered with cast-skin foam-in-place trim that looks like a leather-wrapped, padded panel. It is warm and inviting and has double the life of conventional trim materials.

An AM/FM radio with CD player and MP3 capability is standard. New technology enhances conventional radio reception. An improved optional Bose audio system with an in-dash six-disc changer and XM Satellite Radio (continental U.S. only) add to the choices available to the audiophile owner.

A full-function OnStar system is available and an onboard navigation system is available. Using a 6.5-inch (165 mm) color touch-screen display, the DVD-based system contains all the map data for the 48 contiguous states and most of Canada on one disc.

OnStar-equipped Corvette models feature OnStar dual-mode (analog-digital) equipment. OnStar's digital equipment also includes enhanced hands-free voice recognition capabilities including more intuitive continuous digit dialing and improved voice recognition accuracy. OnStar is the leading provider of in-vehicle safety, security and information services in the United States and Canada . Using the GPS satellite network and wireless technology, OnStar features core safety services and OnStar Hands-Free Calling that allows drivers to make and receive voice-activated phone calls using an externally mounted antenna for greater reception.

Corvette Coupe and Convertible have a hydroformed steel rail backbone structure, which features cored composite floors, an enclosed center tunnel, rear-mounted transmission and aluminum cockpit structure. Suspension cradles, control arms, knuckles, springs, dampers, bushings, stabilizer bars and steering gear have all been redesigned. New Goodyear Extended Mobility Tires (EMT) take advantage of the latest sidewall design and compound technology for run-flat capabilities.

Three suspension choices allow drivers to choose the setup that best suits their driving style. The standard suspension is tuned for a balance of ride comfort and precise handling. Corvette is now more poised at even higher handling levels, yet easier to drive.

The optional Magnetic Selective Ride Control suspension features magneto-rheological dampers able to detect road surfaces and adjust the damping rates to those surfaces almost instantly for optimal ride control. The system has been improved to deliver more differentiation between the system's "Tour" and "Sport" settings.

The Z51 Performance Package brings Coupe and Covertible performance very close to the widely admired C5 Z06. The Z51 offers more aggressive dampers and springs, larger stabilizer bars, Goodyear Eagle F1 Supercar EMT tires, enhanced cooling and larger cross-drilled brake rotors (13.4 inches/340 mm in front and 13 inches/330 mm in rear) for optimum track performance while still providing a comfortable ride.

With each suspension, three standard dynamic chassis control systems – anti-lock braking, traction control, and Active Handling – operate in concert. In all, the new dynamic chassis control systems are smarter, less intrusive and more adept at making the total driving experience precisely what drivers have come to expect from their Corvette.

#### Corvette Z06 details

The 2006 Corvette Z06 comprises an unprecedented level of capability and technology, making it one of the best performance values on the market. And with an unmistakably muscular appearance, the '06 Z06 has a visual attitude that always looks ready to demonstrate Corvette's winning attitude to any challenger around the globe.

"The new Z06 is the dividend from competing so successfully in endurance racing," said Dave Hill, Corvette's chief engineer. "It combines the strong attributes of the

new, sixth-generation Corvette with the spirit, technology and know-how from the race program to form an American supercar with outstanding credentials."

The Z06's new LS7 7.0L engines delivers 505 horsepower (377 kw) in an approximately 3,130-pound (1,420 kg) package – a combination that delivers 0–60 performance of 3.7 seconds in first gear, quarter-mile times of 11.7 seconds at 125 mph and a top speed of 198 mph (as recorded on Germany's Autobahn). It also provides maximum lateral acceleration of 1.04 g and 60–0 braking in 111.3 feet; it also circuited Germany's famed N ü rburgring in a time of 7:43. Along with astounding performance, Corvette Z06 also returns surprising fuel economy of 26 mpg on the highway.

Links between racing and the production Z06 are both direct and indirect, as the vehicle was developed in conjunction with the C6–R. The technology transfer includes the application of lessons that could only have been learned after countless laps of endurance racing – everything from suspension geometry to aerodynamics. What engineers developed in the Z06 is a totally unique vehicle that has powertrain, body structure and chassis system features that are distinct from other Corvette models. In fact, the Z06 has a different *body structure* compared to Corvette Coupe and Convertible.

Previous Z06 models, from the original 1963 model to the 2001–04 editions, incorporated suspension and/or engine upgrades that complemented existing Corvette systems. None was as comprehensively revised as the 2006 Z06 is compared to previous Z06 models. The specifics include:

- LS7 7.0-liter/427-cubic-inch Gen IV V-8 with lightweight reciprocating components
- 505 horsepower (377 kw)\* @6300 rpm
- 470 lb.-ft. of torque (637 Nm) @ 4800 rpm
- 7000 rpm redline
- Titanium connecting rods and intake valves
- Dry-sump engine lubrication system
- Aluminum structure with one-piece hydroformed perimeter rails frame, magnesium front cradle and magnesium roof panel
- Fixed roof design optimizes body rigidity and aerodynamics
- Carbon-fiber composite front fenders, front wheelhouses and floor panels

- Unique front fascia incorporating a larger grille, cold-air scoop and lower air splitter
- Wide-body rear fenders and a unique rear spoiler incorporated with the CHMSL
- Huge 14-inch (355-mm) cross-drilled front disc brakes with six-piston calipers and 13.4-inch (340-mm) cross-drilled rear rotors with four-piston calipers
- 18 x 9.5-inch front wheels with 275/35ZR18 tires and 19 x 12-inch rear wheels with 325/30ZR19 tires
- Three-inch-diameter exhaust with bi-mode mufflers and larger polished stainless steel tips
- Engine, transmission and differential oil coolers; and steering cooler
- Rear-mounted battery to improve weight distribution
- Unique interior features including revised gauge cluster, lightweight two-tone seats with more supportive bolsters
- Curb weight of 3,130 pounds / 1,420 kg (estimated)
- Three inches (76.2 mm) wider than other Corvette models

## Inside the LS7

The all-new LS7 in the '06 Z06 reintroduces the 427-cubic-inch engine to the Corvette lineup. Unlike the previous 427 engine, which was a big-block design, the new 7.0-liter LS7 is a small-block V-8 - the largest-displacement small-block ever produced by Chevrolet and GM, and a tribute to its 50 years as a performance icon.

With 505 horsepower (377 kw) and 470 lb.-ft. of torque (637 Nm), it also is the most powerful passenger car engine ever produced by Chevrolet and GM. The LS7 is easily identified under the hood by red engine covers with black lettering. The LS7 shares the same basic Gen IV V-8 architecture as the Corvette's 6.0-liter LS2, but it uses a different cylinder block casting with pressed-in steel cylinder liners to accommodate the engine's wide, 104.8-mm-wide cylinder bores. Compared with the LS2, the LS7 also has a different front cover, oil pan, exhaust manifolds and cylinder heads – among many other components.

Internally, the LS7's reciprocating components make use of racing-derived lightweight technology, including titanium connecting rods and intake valves, to help boost horsepower and rpm capability. The rpm fuel shut-off limit is 7000 rpm. The LS7's details include:

- Dry-sump oiling system
- Unique cylinder block casting with large, 104.8-mm bores and pressed-in cylinder liners
- Forged steel main bearing caps
- Forged steel crankshaft
- Titanium connecting rods with 101.6-mm stroke
- Cast aluminum flat-top pistons
- 11.0:1 compression
- High-lift camshaft
- Racing-derived CNC-ported aluminum cylinder heads with titanium intake valves and sodium-filled exhaust valves
- Low-restriction air intake system
- Hydroformed exhaust headers with unique "quad flow" collector flanges.

One of the clearest examples of the LS7's race-bred technology is its use of titanium connecting rods. They weigh just 464 grams apiece, almost 30 percent less than the rods in the LS2 V-8. Besides lightweight, which enhances high-rpm performance and rpm range, titanium makes the rods extremely durable.

The LS7's CNC-ported aluminum cylinder heads are all-new and designed to meet the high airflow demands of the engine's 7.0-liter displacement, as it ingests approximately 100 cubic feet more air per minute than the Corvette's 6.0-liter LS2 V-8 - an 18-percent increase in airflow. Consequently, a hydraulic roller camshaft with .591/.591-inch valve lift is used to allow plenty of air to circulate in and out of the engine.

To ensure optimal, uninterrupted airflow, the LS7's heads have straight, tunnel-like intake runners. Very large by production-vehicle standards – even racing standards – they are designed to maintain fast airflow velocity, providing excellent torque at low rpm and exhilarating horsepower at high rpm. The heads feature 70-cc combustion chambers that are fed by huge, 56-mm-diameter titanium intake valves. The lightweight titanium valves weigh 21grams less than the stainless steel valves used in the LS2, despite the valve head having 22 percent more area. They are complemented by 41-mm sodium-filled exhaust valves, vs. 39.4-mm valves in the LS2. To accommodate the large valve face diameters, the heads' valve seats are siamesed; and, taken from experience with the engines of C5-R racecars, the LS7's valve

angles are held at 12 degrees – vs. 15 degrees for the LS2 – to enhance airflow through the ports.

The LS7 has a dry-sump oiling system designed to keep the engine fully lubricated during the high cornering loads the Corvette Z06 is capable of producing. An engine compartment-mounted 8-quart reservoir delivers oil at a constant pressure to a conventional-style oil pump pick-up at the bottom of the engine. The pressurized oil feed keeps the oil pick-up continually immersed in oil at cornering loads exceeding 1 g.

Oil circulates through the engine and down to the oil pan, where it is sent back to the reservoir via a scavenge pump. The large-capacity reservoir, combined with a high efficiency air-to-oil cooler, provides necessary engine oil cooling under the demands of the engine's power output. With the dry-sump system, oil is added to the engine via the reservoir tank – which includes the oil level dipstick.

The LS7's dry-sump system was developed and tested on racetracks in the United States and Europe , including Germany 's famed Nürburgring. And while common in racing cars, the Corvette Z06 is one of just a handful of production vehicles – and the only production Corvette – ever to incorporate such a high-performance oiling system.

#### Z06 drivetrain and chassis

The Corvette Z06's powertrain and drivetrain systems are matched to the LS7's performance capability. The light, four-into-one headers discharge in to new, close-coupled catalytic converters and through to new "bi-modal" mufflers. The mufflers each feature a vacuum-actuated outlet valve, which controls exhaust noise during low-load operation but opens for maximum power.

At the rear of the LS7 engine, a single-mass flywheel and lightweight, high-capacity clutch channel torque to the rear transaxle. The six-speed manual transmission has been strengthened to handle the LS7's increased torque load. The transmission includes a pump that sends transmission fluid to the front radiator for cooling. Upon its return, the fluid removes additional heat from the differential lube before returning to the transmission. The six-speed transmission connects to a limited-slip differential, with enlarged ring and pinion gears. Stronger axle half-shafts with tougher universal joints transmit power to the rear wheels.

The Z06 has a unique aluminum body structure for optimum stiffness and light weight for the fixed-roof bodystyle. Perimeter rails are one-piece hydroformed aluminum members featuring cast suspension nodes, which replace many welded steel components on other Corvette models. Other castings, stampings and extrusions are combined into the innovative structure with state-of-the-art manufacturing technologies.

Advanced structural composites featuring carbon fiber are bonded to the aluminum structure. The wider front wheelhouses, for example, are carbon composites and the passenger compartment floors combine carbon-fiber skins with an ultra-lightweight balsa wood core.

The Z06 has a new magnesium cradle that serves as the attachment point for the engine and some front suspension components. Magnesium is lighter than aluminum yet incredibly strong. The magnesium cradle helps improve the front-to-rear weight distribution, as do carbon-fiber front fenders and wheelhouses. Engineers also moved the battery from underhood to a position in the rear cargo area, behind one of the rear wheels.

The mass reductions are offset by some added performance enablers, including dry-sump lubrication, exhaust system with outlet valves, larger wheels and tires, larger brakes and larger roll stabilizers.

#### Suspension and brakes

The Z06 retains the 105.7-inch (2686-mm) wheelbase of other Corvette models, as well as the short-long arm suspension and transverse leaf spring design, but it rides on all-new wheels, tires, brakes, as well as its own rear spring and roll stabilizer.

The firmer suspension works harmoniously with large  $18 \times 9.5$ -inch cast-spun aluminum wheels and 275/35ZR18 tires in the front, and  $19 \times 12$ -inch cast-spun aluminum wheels with 325/30ZR19 tires in the rear – the largest wheel-and-tire combination ever offered on a Corvette. The tires use the latest extended-mobility technology from Goodyear to provide a satisfactory ride, but still allow the vehicle to achieve lateral acceleration of more than 1 g. The extended-mobility tires eliminate the need – and weight – for a spare tire and jack or inflator kit, while also reducing the chance of a sudden loss of handling capability. Complementing the suspension system and large rolling stock is an equally capable four-wheel disc brake system, consisting of 14-inch (355-mm) vented and cross-drilled front rotors and 13.4-inch (340-mm) vented and cross-drilled rear rotors. For comparison, Corvette Coupe and Convertible models have 12.8-inch (325-mm) front and 12-inch (305-mm) rear rotors, while the '06 Corvette with the Z51 sport package has 13.4-inch (340-mm) and 13-inch (330-mm) rotors.

The front rotors are acted upon by huge, red-painted six-piston calipers that use six individual brake pads. Individual brake pads are used because they deliver more equalized wear compared to what would otherwise be a pair of very long single-piece pads. For the rear brakes, four-piston calipers with four individual brake pads are used. A Delphi four-channel ABS system is standard, as is a very competent active handling system – complete with a Competitive Driving mode.

The large brakes bring an excellent level of stopping capability with the Z06, and with their four-wheel brake cooling, they provide excellent fade resistance and lining life during track duties.

### Design details

The new Z06 has an unmistakable and aggressive appearance, with design cues that include:

- A wide front fascia with a large, forward-facing grille opening, a splitter along the bottom and wheel opening extensions along the sides to provide aerodynamic downforce
- A cold air scoop in front of the hood that integrates an air inlet system for the engine
- The trailing edge of the front wheel opening is radiused to achieve improved drag, but protects the body finish with a tough molding, and a large air extractor is located behind the wheel
- A fixed-roof bodystyle optimizes body rigidity and mass
- Wider rear fenders with flares cover the massive rear tires and a brake cooling scoop in front of the wheels visually balances the fender extractor
- A tall rear spoiler houses the CHMSL on the top of the rear fascia
- 10-spoke wheels (18-inch, front; 19-inch, rear)
- Four larger stainless steel exhaust outlets

• New-design Z06 badging on the carbon fiber front fenders

The aerodynamics of the Z06's exterior were shaped by the experiences of the Corvette racing program, where high-speed stability and cornering capability are paramount. And while the racecars use large rear wings, the Z06's elevated spoiler provides sufficient downforce to balance the road-worthy front splitter without adversely affecting aerodynamic drag. The Z06's Cd is .31.

For all its race-inspired functionality, the Z06 is designed to be a daily driveable high-performance vehicle. To that end, comfort and convenience are held to a very high standard. High-Intensity Discharge llighting, fog lamps, leather seating, dual-zone air conditioning, cabin air filtration and head-up display (HUD) with track mode and g-meter are standard.

The Z06 also has a revised gauge cluster that displays the Z06 logo on the 7000-redline tachometer and has a new readout on the oil pressure gauge to reflect the higher standard pressure of the dry-sump oiling system. And, like other 2006 Corvettes, the Z06 has a new, smaller-diameter 370-mm three-spoke steering wheel that provides a more agile, performance-oriented feel. The seats feature two-tone leather surfaces, with Z06-logo embroidery and contrasting stitching.

Z06 options include a Bose audio system with an in-dash six-CD changer, polished wheels, a telescoping steering wheel, heated seats, side air bags, a navigation system with GPS, universal home remote and XM Satellite Radio.

But for all its comfort, engineers did sacrifice a few components in the quest for lower weight and higher performance. Seat side bolsters are fixed and more supportive to better hold the driver when cornering and they weigh less. The passenger seat features manual controls, saving the weight of a power-adjust motor, and the Z06's acoustic package is revised to reduce weight and allow more aural feedback of the powertrain.

\* Horsepower and torque SAE certified. A new voluntary power and torque certification procedure developed by the SAE Engine Test Code committee was approved March 31, 2005. This procedure (J2723) ensures fair, accurate ratings for horsepower and torque by allowing manufacturers to certify their engines through third-party witness testing. GM was the first auto manufacturer to begin using the procedure and expects to use it for all newly rated engines in the future.

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# **SPECIFICATIONS**

Overview	
Models:	Chevrolet Corvette Coupe, Convertible and Z06
Body styles / driveline:	2-door hatchback coupe with removable roof; rear-wheel drive (Coupe and Convertible) 2-door hatchback coupe with fixed roof; rear-wheel drive (Z06)
Construction:	composite body panels, hydroformed steel frame with aluminum and magnesium structural and chassis components (coupe); composite and carbon-fiber body panels, hydroformed aluminum frame with aluminum and magnesium structural and chassis components (Z06)
Manufacturing location:	Bowling Green , Kentucky

Engines	6.0L V-8 LS2		7.0L V-8 LS7 (Z06)		
Displacement (cu in / cc):	364 / 5967		427 / 7011		
Bore & stroke (in / mm):	4 x 3.62 / 101.6 x 92		4.125 x 4 / 104.8 x 101.6		
Block material:	cast aluminum		cast aluminum		
Cylinder head material:	cast aluminum		cast aluminum		
Valvetrain:	overhead valve, 2 valves per cylinder		overhead valve, 2 valves per cylinder		
Fuel delivery:	SFI (sequential fuel injection)		SFI (sequential fuel injection)		
Compression ratio:	10.9:1		11:1		
Horsepower (hp / kw @ rpm):	400 / 298 @ 6000		505 / 377 @ 6300*		
Torque (lb-ft / Nm @ rpm):	400 / 540 @ 4400		470 / 637 @ 4800*		
Recommended fuel:	premium recommended		premium required		
Estimated fuel economy	manual: 18 / 28 / 22.5 automatic: 17 / 27 / 21.5		16 / 26 / 20.5		
(mpg city / hwy / combined):					
Transmissions	6−speed manual	6-speed manual, w/ optional Z51 Performance Package		6-speed paddle-shift automatic	
Application:	std	opt		opt	
Gear ratios (:1):					
First:	2.66 2.97		4.02		
Second:	1.78	2.07		2.36	

1.43

1.00

0.71

0.57

3.28

1.53

1.15

0.85

0.67

3.06

1.30

1.00

0.74

0.50

2.90

Third:

Fifth:

Sixth:

Reverse:

Fourth:

Final drive ratio:		3.42	3.42	2.56		
Chassis / Cour		pe and Convertible	•	Z06		
Suspension	Suspension					
Front: short/long arm ( SLA		t/long arm(SLA)	)	short/long arm ( SLA )		
	doub	ole wishbone, cast		double wishbone, cast		
	aluminum upper & lower		er	aluminum upper & lower		
	cont	control arms,		control arms,		
	tran	transverse-mounted		transverse-mounted		
	com	composite leaf spring,		composite leaf spring,		
	monotube shock absorbe		ber	monotube shock absorber		
Rear:	shor	t/long arm(SLA)	)	short/long arm ( SLA )		
	doub	ble wishbone, cast		double wishbone, cast		
	alum	uminum upper & lower		aluminum upper & lower		
	cont	ontrol arms,		control arms,		
trans		nsverse-mounted		transverse-mounted		
	com	nposite leaf spring,		composite leaf spring,		
monotube shock a		otube shock absor	ber	monotube shock absorber		
Traction control:	elec	ctronic traction control;		electronic traction control;		
Activ		ve Handling		Active Handling		
Brakes	Coupe and Convertible		Z06	Z06		
Type: front power ABS;		ind rear	fron	t and rear power-assisted dis	c with	
		-assisted disc with	ABS with 6-piston front and 4-pi		ston	
		cross-drilled rotors	s rear	calipers, cross-drilled rotors		
	with Z	51 package				
Rotor diameter x	front: 12.8 x 1.26 / 325 x		fron	t: 14 x 1.3 / 355 x 32		
thickness (in /	32		rear	rear: 13.4 x 1 / 340 x 26		
mm):	m): rear: 12 x 1 / 305 x 26;					
	Z51 Pe	erformance				
	Packa	ge:				
	front:	13.4 x 1.26 / 340 >	:			
	32					
	rear: 1	3 x 1 / 330 x 26				
Wheels & Tires						
Wheel size:	front:	18 inch x 8.5 inch	fron	t: 18 inch x 9.5 inch		
	rear: 1	9 inch x 10 inch	rear: 19 inch x 12 inch			

Tires: Goodyea		ar Eagle F1	Goodyear Eagle F1 Supercar Extended		
	Superca	r (w/Z51)	Mobility		
	Extende	d Mobility	front: P275/35ZR18		
	front: P2	245/40ZR18 rear:		: P325/30ZR19	
	rear: P2	85/35ZR19			
Dimensions		Coupe and Convertible		Z06	
Wheelbase (in / mm):		105.7 / 2685		105.7 / 2685	
Overall length (in	/ mm):	174.6 / 4435		175.6 / 4460	
Overall width (in /	′ mm):	72.6 / 1844		75.9 / 1928	
Overall height (in	/ mm):	49 / 1244		49 / 1244	
Curb weight (lb /	kg):	Coupe: 3179 / 1442		3130 / 1419.7	
		Conv.: 3199 / 145	51		
Interior					
Seating capacity		2			
Interior volume (cu ft / L):		:52 / 1475 (all models)			
Headroom (in / mm):		38 / 962 (all models)			
Legroom (in / mm):		43 / 1092 (all models)			
Shoulder room (in / mm):		55 / 1397 (all models)			
Hip room (in / mm):		54 / 1371 (all models)			
Capacities					
Cargo volume Cou		Coupe and Z06: 22 / 634			
(cu ft / L):		Convertible: 11 / 295 (top up); 7.5 / 212 (top down)			
Fuel tank (gal / L): 18 / 68.		18 / 68.1			
Engine oil (qt / L):		Coupe and Convertible: 5.5 / 5.2 Z06: 8 / 7.5			

\* Horsepower and torque SAE certified. A new voluntary power and torque certification procedure developed by the SAE Engine Test Code committee was approved March 31, 2005. This procedure (J2723) ensures fair, accurate ratings for horsepower and torque by allowing manufacturers to certify their engines through third-party witness testing. GM was the first auto manufacturer to begin using the procedure and expects to use it for all newly rated engines in the future.

Note: Information shown is current at time of publication.