

Changes from 2001 to 2002

New for 2002 Z06

LS6 engine (Z06 model) receives 20 horsepower increase, to 405 hp, and receives 15 foot pounds more torque for a total of 400 lbs. ft. of torque

Pre-cat deletion

Revised rear shock valving

Aluminum front and rear stabilizer bar links

Aluminum transmission cooler case

Magnesium wheels no longer available (coupe and convertible)

Z06 wheels are now cast aluminum, not forged aluminum

Head-Up Display (HUD) now standard

Cam/Valve/Spring change

Electron Blue exterior color

Model Lineup Engine Transmission

Coupe 5.7-liter V8 w/ 4-speed automatic (S) 350 hp (LS1) 6-speed manual (O)

Convertible 5.7-liter V8 w/ 4-speed automatic (S) 350 hp (LS1) 6-speed manual (O)

Z06e 5.7-liter V8 w/ 6-speed manual 405 hp (LS6)

For Release: June 20, 2001

CHEVROLET BUILDS THE QUICKEST Z06 CORVETTE EVER, AT 405 HP, AND REFINES COUPE AND CONVERTIBLE

DETROIT - For nearly 50 years, the Corvette has had a special place in America's garage. Crafted from a precise blend of power, performance, style and comfort, Corvette's success has been based on a willingness to embrace advancing technology while remaining true to its heritage. Today's Corvette exemplifies this philosophy like no other.

More Power

Last year's introduction of the Z06 Corvette, based on the former hardtop model and the legendary 1960s Z06 option package, is aimed at true performance enthusiasts at the upper end of the high-performance market. And now, an extra boost of 20 hp, to 405, makes Z06 the quickest production Corvette ever.

This upgrade to the LS6 engine's output is the result of new hollow stem valves, a higher-lift camshaft, a low restriction mass air flow (MAF) sensor and a new low restriction air cleaner design. Eliminating the PUP converter from the exhaust system enables better flow of spent gasses and reduces vehicle weight, without compromising Corvette's NLEV (National Low Emission Vehicle) status.

Suspension Upgrades

The Z06-specific FE4 High-Performance suspension system features a larger front

stabilizer bar, a stiffer rear leaf spring and specific camber settings - all calibrated for maximum control during high-speed operation. The 2002 model year Z06 also has new rear shock valving for a more controlled ride.

Although retaining the same design and color finish, the unique aluminum Z06 wheels are now produced using a cast rather than a forged process. The magnesium wheel option for Coupes and Convertibles is no longer available.

Maximum Agility

The foundation of Corvette's agile handling is hydroformed frame rails. Its four-wheel independent front suspension features cast aluminum upper and lower A-arms. The Z06 and models equipped with the available Z51 package now have aluminum front stabilizer bar links for lighter weight. A transverse leaf spring system is used for the independent rear suspension.

All Corvettes have the second-generation Active Handling system as standard equipment. The system features dynamic rear brake proportioning to prevent rear wheel lockup; rear brake stability control to assist the driver in maintaining control under light braking and high acceleration conditions; integral traction control calibrated to allow drivers to experience the vehicle's power and handling while maintaining control over excessive wheelspin. It also has an on/off switch and a "Competitive Mode" which allows the driver to disengage the traction control feature without giving up Active Handling's other benefits.

Additional Refinements

Now standard on Z06, the Corvette's Head-Up Display (HUD) projects vehicle speed and many other gauges digitally on the windshield ahead of the steering wheel, enabling drivers to keep their eyes on the road. HUD remains an option on Coupes and Convertibles.

For 2002, the transmission cooler case is constructed of lightweight cast aluminum, replacing the previous stainless steel design.

Corvette's exterior color palette adds Electron Blue, replacing Navy Blue Metallic previously offered on Coupes and Convertibles. Electron Blue also takes the place of Speedway White as one of five choices on the Z06.

2002 CHEVROLET CORVETTE SPECIFICATIONS

Overview

Model: Chevrolet Corvette: Coupe, Convertible, Z06 (hardtop)

Body Style/driveline/configuration: Two-door hatchback coupe, convertible and fixed-roof coupe, rear-drive, front-engine

Body material: Composite

EPA vehicle class: Two seater

Manufacturing facility: Bowling Green, Kentucky

Key competitors: Audi TT, BMW Z3, Dodge Viper, Porsche Boxster and Boxster S, Porsche 911

Engines

5.7L (LS1) V8 5.7L (LS6) V8

V8 Application: STD on Coupe, Convertible STD on Z06

Type: 5.7-liter OHV

Block Material: Cast aluminum

Displacement (cu in/cc): 350 / 5665

Bore x stroke (in/mm): 3.90 x 3.62 / 99.0 x 92.0

Cylinder head material: Cast aluminum

Valvetrain: Overhead valve, two valves per cylinder

Fuel delivery: SFI

Compression ratio: 10.1:1 10.5:1

Horsepower/kilowatts: 350 / 261 @ 5600 rpm 405 / 302 @ 6000 rpm

Torque (lb-ft/Nm) 375 / 508 @4400 (manual)

360 / 489 @4000 (automatic) 400 / 542 @ 4800 rpm

Recommended Fuel 91 Octane

Maximum Engine Speed 6000 rpm 6500 rpm

Emission control system: Catalytic converter AIR

EPA Estimated Fuel economy (mpg city/hwy/comb) 19/28/23 (manual transmission on coupe and convertible

18/25/21 (automatic transmission on coupe and convertible) 19/28/23 (manual transmission Z06)

Transmissions

4-speed automatic 6-Speed manual 6-Speed manual

Application: Std. on coupe and conv. Opt. on coupe Std. on Z06 only.

1st Gear 3.06 2.66 2.97

2nd Gear 1.63 1.78 2.07

3rd Gear 1.00 1.30 1.43

4th Gear 0.70 1.00 1.00

5th Gear -- 0.74 0.84

6th Gear -- 0.50 0.56

Reverse 2.29 2.90 3.28

Final drive 2.73 (std) / 3.15 (opt) 3.42 3.42

Chassis/Suspension

Front: Short/long arm (SLA) double wishbone, cast aluminum upper & lower control arms, transverse-mounted composite leaf spring, monotube shock absorber

Rear: Short/long arm (SLA) double wishbone, cast aluminum upper & lower control arms, transverse-mounted composite leaf spring, monotube shock absorber

Stabilizer Bar diameter (mm/in): Std. - 19.1 / .75, F45: - 19.1 / .75, Z51: - 21.7 / .85, FE4: - 21.7 / .85

Traction control: Electronic Traction Control, Active Handling

Steering type: Speed sensitive power-assisted rack-and-pinion

Steering ratio: 16.1:1
Turns lock-to-lock: 2.66
Turning circle (feet / meters): 40.2 / 12.1

Brakes

Type: Power-assisted disc with ABS, front and rear
Front: 12.6 x 1.26-inch (325 x 32-mm)
Rear: 11.8 x 1.0-inch (305 x 6-mm)
Swept Area: Front-263 sq. in., 1696 sq. cm
Rear-158 sq. in., 1018 sq. cm

Wheels

Coupe and Convertible: Z06
Front: 17 X 8.5 17 X 9.5
Rear: 18 X 9.5 18 X 10.5
Type: Cast Aluminum (Std) Forged Aluminum, High Polish (Opt.) Cast Spun Aluminum
Tires
Front: P245/45ZR-17 P265/40ZR-17
Rear: P275/40ZR-18 P295/35ZR-18
Type: Goodyear Eagle F1 GS, extended mobility Goodyear Eagle F1 SC, Asymmetric
Tread

Exterior Dimensions

Coupe Convertible Z06
Wheelbase (in/mm): 104.5 / 2655.5
Overall length (in/mm): 179.7 / 4565.6
Width (in/mm): 73.6 / 1869.4
Height (in/mm): 47.7/ 1211.5 47.8 / 1214.7 47.7 / 1211.5
Front Track (in/mm): 61.9 / 1572.3 61.9 / 1572.3 62.4 / 1584.5
Rear Track (in/mm): 62.0 / 1574.5 62.0 / 1574.5 62.6 / 1589.5
Curb Weight (lbs/kg): 3246 / 1458 3248 / 1456 3118 / 1414
Weight Distribution (f/r): 51 / 49 53 / 47

Interior Dimensions

Seating capacity: 2
Head room, front (in/mm): 37.9 / 963 37.8 / 960
Shoulder room, front (in/mm): 55.3 / 1405
Hip room, front (in/mm): 54.2 / 1377
Capacities
Cargo volume (cu ft/liters): 24.8 / 702 13.9 / 394 13.3 / 377
Fuel tank capacity (gals/liters): 18.5 / 70.0
Engine oil w/ filter (qts/liters): 6.5 / 6.15
Engine coolant (qts/liters): 11.5 / 10.9 (automatic) 11.8 / 11.2 (manual)

CORVETTE TESTING DESIGNED TO RETAIN "AMERICA'S FAVORITE SPORTS CAR" ICON STATUS

WARREN, Mich. - Chevrolet Corvette has been called "America's favorite sports car" for

its ability to deliver proven power and performance in a production model. At Chevrolet, we take great pride in Corvette's status and work diligently to ensure it will remain a source of automotive awe and inspiration for years to come. That is why Corvette is subjected to the same general durability testing as all other General Motors vehicles. Then, it's tested even further, with three additional tests - 250 miles of autocross, 24 hours on the racetrack and top speed at wide-open throttle - to ensure that America's sports car is ready for high-performance use.

Autocross

The autocross portion of the testing includes 250 miles on an autocross course. It takes about five fuel tank loads to complete the 250 miles, with a total vehicle inspection at every fuel stop. Instrumentation monitors everything, from oil pressure to transmission temperature. This test is a precursor to the 24 hours on a race track.

24 Hours on the Racetrack

After the autocross test, Corvette spends 24 hours at competition speeds on a road course.

"It's really the equivalent of 24 individual sprint races, each lasting one hour," explains Mike Neal, Corvette ride and handling chassis development. "It takes about an hour at track speed to consume a tank of fuel. The car then comes in; we check and top off fluids, replace brakes and tires, download our instrumentation and send the car out again. We do this until the car has completed 24 hours on the track."

The 2.2-mile road course used to validate the '02 Z06 consists of a 120-mph straightaway, 90-mph sweeping curves and 40-mph hairpins. The drivers make 12 shifts per lap and brake 10 times per lap. "Compared to the 2001 Z06, the 2002 model is half a second faster around our test track," adds Neal.

Throughout the testing, equipment monitors and records 30 channels of thermal information from critical components and fluids. In addition to the temperature readings, other pertinent data is collected and analyzed, including, oil pressure, engine rpm, vehicle speed, lateral acceleration, as well as fore and aft acceleration.

"For the Corvette, this additional testing is essential in validating the robustness of the vehicle for racing application," explains Neal. "In the case of the 2002 Z06, the track-testing phase was key in helping us determine that a new clutch design was needed."

The clutch of the 2001 Z06 had already been enhanced to deal with the increased power of the LS6 (over the LS1); with the additional power of the 2002 LS6, a new clutch design was developed to ensure long life and good performance.

"Our 24 hours of at racing speeds is an invaluable complement to our normal durability testing," says Dave Hill, Performance Cars vehicle line executive and Corvette chief engineer. "It's one test that is severe enough to give Corvette the robustness our owners expect. It's what makes Corvette stand out among the competition."

Top Speed Wide-Open Throttle

To simulate high-speed, autobahn conditions, Corvette is subjected to a wide-open throttle test on our five-mile circle track at the Milford Proving Grounds in Milford, Michigan. Starting with a full tank of gas, the car is driven flat-out at its 171-mph top speed until the fuel tank is empty - approximately 30 minutes. The test validates the car's ability to withstand extreme thermal loads reliably.

Validating Performance

"It's important to keep in mind that with Corvette - and especially with the Z06 - buyers are purchasing a vehicle that has been thoroughly tested under all conditions," emphasizes Dave Hill. "Our rigorous testing ensures that the Corvette can be put through its paces on the race track and still serve as reliable transportation in everyday situations. This testing further adds to Corvette's legend as America's favorite sports car."

2002 Z06 CORVETTE IMPROVES ON PERFECTION

WARREN, Mich. - To say that the 2001 Chevrolet Z06 Corvette was launched to wide-ranging acclaim is an understatement, the Z06 has won the hearts of Corvette aficionados everywhere. For many, the 2001 Z06 represented as close to perfection as has ever been achieved in a sports car. It has been received with unprecedented praise for its ability to deliver performance, agility, and control - all wrapped in a visually stunning package. For 2002, Chevrolet engineers have provided a new definition of perfection.

Corvette has been synonymous with performance for nearly 50 years. Proving that you can never have too much of a good thing, GM engineers extracted an additional 20 horsepower from the LS6 engine that debuted in 2001. For 2002, the LS6 delivers an awe-inspiring 405 horsepower at 6,000 rpm.

"We could have chosen to remain satisfied with our achievements for 2001, instead, we set our sights on breaking the 400-horsepower barrier," said Dave Hill, Performance Cars vehicle line executive and Corvette chief engineer. "At 405 horsepower, the LS6 will match the highest peak power level of the legendary 5.7-liter DOHC LT5, which powered the ZR1 Corvette."

More Torque = Better Performance

"When you hear customers talking about wanting more power, what they really mean is that they want more torque. It's torque that gets you going, whether launching from a standstill, or accelerating out of a corner. At 385, last year's Z06 was already in an elite class. For 2002, we've upped the ante with another 15 pounds-feet of torque, for a total of 400 pounds-feet at 4,800 rpm. The result is one that must be experienced to be appreciated," said Hill.

The Z06 will continue to be outfitted with the unique six-speed manual transmission for 2002. It will enable skilled drivers to achieve 0-60 mph times of 3.9 seconds and to cover a quarter mile in 12.4 seconds at 116 mph. By comparison, the 2001 powertrain combination achieved 0-60 mph in 4.0 seconds and the quarter mile in 12.6 seconds at 114 mph.

LS6 Clutch Improvements

To withstand the greater torque output of the new engine, the LS6 clutch was redesigned. Clamp load has been increased seven percent and durability has been augmented by the following enhancements:

The clutch-driven disc was redesigned, with the flange plate thickness increased by 20 percent - from 5 mm to 6 mm . The damper springs were redesigned to increase wind-up rate, from 33 Newton-meter degrees to 35 Newton-meter degrees . Premium alloy steel wire is now used for the damper springs.

These changes ensure long life and good performance for the LS6 clutch.

World-Class Agility and Handling

"While the 2002 Z06 is the quickest Vette to date, the Corvette team never lost sight of the fact that the Z06 is a total performance package. With this goal in mind, the suspension has been improved to keep the Z06 the well balanced sports car that it is, and the standard against which all other sports cars are measured," said Hill.

The valving of the Z06's rear dampers was also revised, allowing for smoother, more efficient transfer of the additional horsepower and torque to the pavement.

"Revising the damping allowed us to improve the track performance of the Z06, as well as its everyday ride quality," said Mike Neal, Corvette ride and handling development engineer.

In addition to generating more power, Corvette engineers also scrutinized every possible means to reduce vehicle mass, which in turn results in improved vehicle handling. Their efforts resulted in:

Cast aluminum front stabilizer links (versus rolled rod steel links), resulting in a 0.2 kg (0.44 lbs.) weight saving

Cast-spun aluminum wheels (versus forged aluminum), for a total mass savings of 0.6 kg (1.3 pounds)

These are further enhancements to the world-class FE4 suspension system that debuted in 2001.

A Solid Foundation

"The 2002 Z06 Corvette is the complete package, a vehicle that can be driven at the limit with supreme confidence. It's a true driver' s car, designed to provide the driver with the information and feedback required for enthusiastic driving," said Hill.

This latest Z06 builds upon the solid foundation established by the previous model-year offering, one that had already raised performance to a whole new level. The 2001 Z06 introduced a standard Second-Generation Active Handling system, providing a great deal of assistance to the Corvette driver and an added level of safety to occupants.

The 2001 Corvette coupe, convertible and Z06 models broke new ground in the areas of refinement, with better noise isolation, better idle quality, reduced maintenance costs and improved fuel economy.

Greater emphasis on performance is further enabled with a standard Head-Up Display (HUD) for 2002 Z06 models. It provides critical vehicle information - including tachometer, vehicle speed, oil pressure, coolant temperature and fuel gauges, among others - promoting a "hands on the wheel, eyes on the road," philosophy.

"We realize that the Z06 is not for everyone. But, for the extreme performance enthusiasts, the race-bred 2002 Z06 provides them with a vehicle that challenges the threshold of performance and handling, with absolutely no compromises," stated Tadge Juechter, Performance Cars assistant chief engineer. "The 2002 Z06 is a total performance package!"

VETTE FANS RECEIVE HISTORIC POWER BOOST

PONTIAC, Mich. - The 2002 5.7-liter Overhead Valve (OHV) LS6 engine for the Z06 Corvette will be rated at 405 horsepower. The increase of 20 horsepower equates to 71 horsepower per liter in this 5665 cc engine - the highest output yet in a Gen III small-block.

The new LS6 V8 delivers 405 horsepower at 6000 rpm and 400 lb-ft of torque at 4800 rpm. To achieve this additional power the engine received modifications including a revised air cleaner housing, low restriction Mass Air Flow (MAF) sensor, lightweight valves, higher lift camshaft and an exhaust alteration.

The component modifications that enable the additional 20 horsepower and 15 lb-ft of torque (compared to 2001) all focus on getting more air into and out of the engine. Increasing the volume of air in and out ultimately creates more power.

Air first enters through the air cleaner housing. The new air box opening to the air cleaner increases by approximately 6.65 square inches (43 cm²). This additional Volume contributes to more horsepower.

The new MAF sensor no longer has pre-sensor grid work known as air channels. Induction air thus flows less restricted through the mass air flow sensor and into the intake manifold.

Gases flowing into and out of the combustion chamber pass by new hollow stem valves. The stems of the exhaust valves are filled with a liquid sodium alloy. Since the exhaust valves operate at a much higher temperature than the intake valves, the liquid alloy enables better transference of heat from the exhaust valves to the valve guides and then to the engine coolant. The valves reduce valvetrain mass by approximately 368 grams. This lighter weight allows the valves to keep contact with the cam at higher speeds.

The new cam profile is the greatest contributor for the increased power. The new profile allows the intake and exhaust valves to open .7 mm further. This key change enables more air to be pumped in and out, which equates to more power. Each camshaft is induction hardened and straightened to an accuracy of ten microns to ensure it spins true in the engine. All 16 lobes are inspected using opto-electrical technology with submicron level precision.

For 2002, the ZO6 will eliminate the use of dual pup catalytic converters found immediately downstream from the exhaust manifolds. Eliminating these converters allows for increased exhaust flow out of the engine. The under floor catalytic converters have been modified to make up for the pup converters and still meet NLEV emissions standards.

With 405 horsepower the LS6 will match the highest peak power level of the legendary 5.7-liter DOHC LT5 which powered the ZR1 Corvette from 1990-1995. For OHV V8 fans and the engineering community this is a significant milestone.

The LS6 was made possible by using the Gen III architecture introduced in the 1997 LS1. This new small-block variation included features such as a deep skirt aluminum block, cross-bolted mains, internally balanced crank, electronic throttle control and coil-near-plug ignition. The Gen III small block retained the simplicity of OHV design and built in appropriate advanced engine technologies.

Commenting on the new power level Assistant Chief Engineer John Juriga said: "With the advent of the '02 OHV LS6, GM Powertrain continues to prove its ability to deliver power and performance in a small package and exceed customer expectations."

SAM WINEGARDEN INTERVIEW ON THE 2002 LS6

Sam Winegarten, chief engineer for GM Powertrain's small block team, was recently interviewed on the launch of the 2002 LS6. The LS6 is the 5.7L V8 engine for the ZO6 Corvette which will break the 400 horsepower mark. Sam has been chief engineer for the small block program for over three years.

1. Can you describe what it's like to work on the small block program?

If you talk about imaging and brands and that kind of thing there's nothing longer living, better recognized than the small block Chevy. When you come to work here your working on an icon. You're also working on the heart and soul of the Corvette and almost every truck we make. Virtually half of GM's North American volume and a large part of its profits centers around the small block. It's fun but it's pretty sobering. You're in charge of a legend.

We've been really energized around here with the introduction of the new LS6. Producing horsepower is always exciting and generates a tremendous amount of enthusiasm. The ability to match the LT5 certainly generated a lot of enthusiasm for the team, I mean it's another step, another level of performance in the history of the small block and the team

was pretty enthusiastic about going after that. It was a lot of fun.

2. With 405 HP in the LS6 you've surpassed a lot of the muscle car era's gross power levels [1968 L79 327 - 350 HP, 1969 L46 350 - 350 gross horsepower, 1970 LT1 350 - 370 gross horsepower] with these kinds of numbers - that's definitely an achievement...

John Juriga (assistant chief engineer) and his team have done a really nice job with what you could call the ruthless pursuit of horsepower. The small block team has done an excellent job of bringing every bit of horsepower they could out of it. To say the least, the accomplishment is thrilling to be a part of.

3. You've achieved comparable power to the legendary LT5 with an OHV design. Any comments on this historic achievement and its impact on the industry?

It's just one more step in a long and very storied and successful history of the small block. The team is just continuing to perform at an outstanding pace. From an industry perspective I think one thing it tells you is that there is more than one way you can design an engine to achieve the power. The conventional wisdom out there will tell you that you need to have a four valve overhead cam arrangement and that is just simply not the case. You can make it work either way and I think John and the team have shown that. From an industry perspective it just tells you that the push rod small block has a bright future, and there's more where that came from.

4. Do you think this power boost will resonate well with the Vette fans?

Absolutely. 20 HP doesn't ring like it's a really big number but when you actually drive the vehicle, to quote Dave (Dave Hill, Corvette Chief Engineer and VLE), "it makes the car really come alive."

5. Did you meet the Corvette team's requirement for power and torque levels?

Yes, actually we exceeded them a little bit. The objective was 400 we got 405.

6. Having been the Chief Engineer for GM's Premium V engine family [which includes the Cadillac's Northstar and Oldsmobile's 4.0L and 3.5L engines] for 10 years, what type of engineering processes are carrying over into the small block?

There's a lot of synergy in several areas, one of them is our Bill of Design. Bill of Design is basically a guideline of best engineering practices established over our collective life to get the best possible design. Now granted one family of engine is a four valve and one is a two valve push rod, one's overhead cam and one's cam-in-block. Many elements of the Bill of Design on things like cylinder head design, block design and piston design carry over regardless of a particular architecture, so there's a lot of similarities there. One of my favorite examples is the structure on the bottom end of both the Vette and the Premium V. While there are two different solutions there, one's a deep skirt with a six bolt arrangement and one's a bed plate, both of them are just outstanding from bottom

end structure and both followed our Bill of Design. The small block is probably the most robust lower end I've ever seen, bullet proof. The team did just a superb job there.

7. What do you think the guiding philosophy should be in the development of engines for the Corvette?

Well the first thing, the Corvette has to be the best performance value on the road, period - so of course you have to concentrate on the power. The other thing that you have to do is integrate the engine into the vehicle. If you just make raw power and don't get it integrated into the vehicle correctly then it's not going to be very pleasing and frankly the vehicle won't be very exciting. Working with the Corvette team has been a pretty rewarding experience because together we've been able not only to make that kind of legendary performance number but package it in a vehicle that's actually very refined for the level of performance that you're getting. The overriding principle is: It's got to be done in a quality manner, making the horsepower then breaking engines is not a good plan.

8. For '02 the LS6 increased 20 HP. Why didn't you just give that last year when the LS6 was introduced?

To be bluntly honest with you, we weren't quite ready. There were some valvetrain issues we needed to work on. Reducing the mass of the valves and working with the aggressive ramp rates on the cam were challenging. There were other challenges obviously but I think the valvetrain was the trickiest to get solved and balanced. We're not going to do this thing if we don't have a quality solution in hand. Not having resolved those issues in the final weeks before '01 production we agreed to do it as a two step process, '01 and '02. So it was purely a case of when we were ready. We're still not selling wine here before it's time.

9. Did you ever consider expanding the bore or stroke ever?

Some of the learning from the power development in this program is destined to show up in future model years.

10. The rpm limit of 6600 rpm is impressive for this pushrod V8. Why is the LS1 (in the base Corvette) fuel cutoff at 6200?

We've reached a threshold around 6200 rpm where we needed to reduce the weight of the valves to avoid fluttering. When you have a heavier valvetrain one of the things you trade away is some of the higher rpm capabilities and you end up having to limit the speed, thus the lower speed of the LS1. It's a trade off of how much power you want to make versus how much fuel economy and/or how smooth and quiet you want it to be and that's a balance we struck with Dave's team.

11. The LS6 beauty covers are red, distinguishing it from the LS1. Was there any discussion on visually distinguishing the 2002 from the 2001 LS6?

No. However the engine is getting credit on the exterior of the car. There will be a badge with "405" integrated into the ZO6 logo.

12. What is the volume projection for the 2002 LS6?

We will start at 20 percent of production at Bowling Green, and see what the demand is for this special model. Either way, the St. Catharines engine facility will be locked in and produce what we need.

13. Did removing the pup converters create more emissions?

No, we took care of that by improving the under-floor converter. Converter technologies is one of the good technical stories unfolding across all GM Powertrain that we were able to take advantage of. It obviously helped us with our power by cutting the back pressure in the exhaust system which is always a good thing to do.

14. Will this version of the LS6 still operate fine with regular fuel? Is premium fuel still recommended?

Yes, premium is still recommended and yes, it operates just fine with regular - the ESC [Electronic Spark Control] system adapts to it. There is of course a slight degradation in performance. The two areas where you'll lose a little performance is at low speed heavy load and then at top end. Pulling the spark back will reduce the torque a little. Driving around town you won't really notice. On the track yes, but around town just use a little more pedal because there's a lot there.

15. What's your favorite year Corvette?

The '02 ZO6. If you can't get out of that car with a grin on your face you're in the wrong business.

16. Then what's your second favorite?

The 1963 Stingray. Historically, that's the one I like best.

Original 02 ZO6 Car & Driver test.

Was browsing around and found this nice little test of our baby..Posted some pretty good numbers..

http://www.caranddriver.com/article...5&page_number=1

In 2003, Chevy's steel, aluminum, resin, and glass-fiber wondercar will turn 50. That's an impressive feat for a car few thought would make it out of the Eisenhower decade. We are already living in fear of the commemorative decal package in which GM must be

planning to mummify America's favorite sports car.

Message to GM and Chevy: Just don't do it! From our viewpoint, they're already celebrating. Why else would the bow-tie crew add 20 horsepower to the most powerful Corvette without significantly raising the price? That's right, the Z06 Corvette now pounds the pavement with 405 horsepower. The base price climbs only \$1650 (pretax) to an out-the-door price of \$50,844.

Oh, sure, you can buy a car with more horsepower, but expect to shell out greenbacks quicker than Phillips at a topless carwash. The next rung on the horsepower and price ladder is the \$74,050 460-hp Dodge Viper GTS ACR (soon to be upgraded with a 500-hp model, but no word on price) followed by the \$118,098 415-hp Porsche 911 Turbo. To hear Chevy engineers tell it, wringing 20 more horses from the aluminum V-8 was far from rocket science. They installed a larger air-cleaner, a less-restrictive mass airflow sensor, and a higher-lift camshaft to pump more air through the engine. In addition, the intake-valve stems are now hollow (for lighter weight), and the exhaust-valve stems are filled with a liquid sodium alloy to aid cooling. Finally, exhaust back pressure was reduced by the removal of the small and restrictive catalytic converters that were mounted in the exhaust manifolds. New, more effective downstream cats allow the Z06 to meet NLEV standards. Horsepower increases to 405 hp at 6000 rpm, and torque goes up 15 pound-feet to 400 at 4800 rpm.

This incremental horsepower allowance is typical of Chevy, and we wouldn't be surprised if it's saving another power injection in case Corvette sales tank in the next few years. But horsepower is only one side of the performance equation. The other side, weight, is not likely to change until the next-generation C6 rolls out. In this characteristic, however, the Vette is already quite impressive. Despite an extremely roomy interior and usable trunk, the 2002 Z06 weighs 3181 pounds, about 300 pounds less than the Porsche Turbo and 250 pounds shy of the Viper GTS.

A weird thing happened the first time we tested the newly fortified Z06 ("Supertuner Challenge," September 2001). The 405-hp 2002 Z06 was surprisingly less spry than the 385-hp 2001 Z06. We guessed that a slippery launch surface was to blame, so we acquired another example for more tests.

We were right. The updated Z06 obliterates the previous one. Zero to 60 mph your thing? The new car scampers there in four seconds flat, 0.3 second quicker than the quickest '01 Z06 we tested and only 0.1 behind the four-wheel-drive 911 Turbo.

In the quarter-mile there's an even bigger difference. The new car did it in 12.4 seconds at 116 mph, whereas the 385-hp car needed 12.7 seconds to hit 113 mph. For an only five-percent increase in power, the new Z06 certainly extracts quite a bit. For the record, both cars we're comparing here were tested by the same driver using the same test equipment.

A ringer? Perhaps, but Chevy claims the car will sprint to 60 mph in 3.9 seconds—0.1 second quicker than what we achieved. We couldn't match the company's times for the 2001 Z06, either, but this time we're much closer, exactly matching the time and speed

predicted for the quarter-mile. During our "Supertuner Challenge," we learned that at least one GM guy, John Heinrich, can bang off clutchless upshifts. It's very possible our 60-mph time is a tick off simply because we use the clutch for every upshift.

As one would expect, braking remains excellent, with only 160 feet required to stop from 70 mph, and the latest Z06 spins around the skidpad with 0.96 g of grip. Chevy says the only chassis change involved tinkering with the rear shocks. Although midcorner bumps send the back end skittering, the Z06 is as compliant as sports cars get.

Twenty more ponies didn't transform this car; they only strengthened what we already knew: The Z06 is a keeper at any price. There's more performance available than anyone but the gifted or highly skilled can take advantage of, yet the Z06 is still comfortable and quiet enough that your guest won't require bribes to ride along. Despite its extra poundage, we'd prefer the prettier hatchback body, with its more flexible luggage space, to the notchback shape all Z06s are saddled with. That and the somewhat flimsy seats are all there is to complain about. Otherwise, Chevy has hit a home run that keeps sailing farther out of the park.

A Hib Halverson article on the new 2002 Z06 with pictures!

<http://www.c5registry.com/2k2z06/>

An engine and 2002 C5 specs

Here is a link to all the general specs from the corvette action center.

<http://www.corvetteactioncenter.com...ory.php?catId=6>