

1989 'KING OF THE HILL' CORVETTE

New 400 horsepower 'Ultravette' could upset the supercar pecking order, which is likely the exact reason that General Motors has approved it

By George Damon Levy

Imagine something that could restore your faith in the American car. Imagine something that could restore *everyone's* faith in the American car.

Welcome to the heretofore secret world of the "King of the Hill" Corvette.

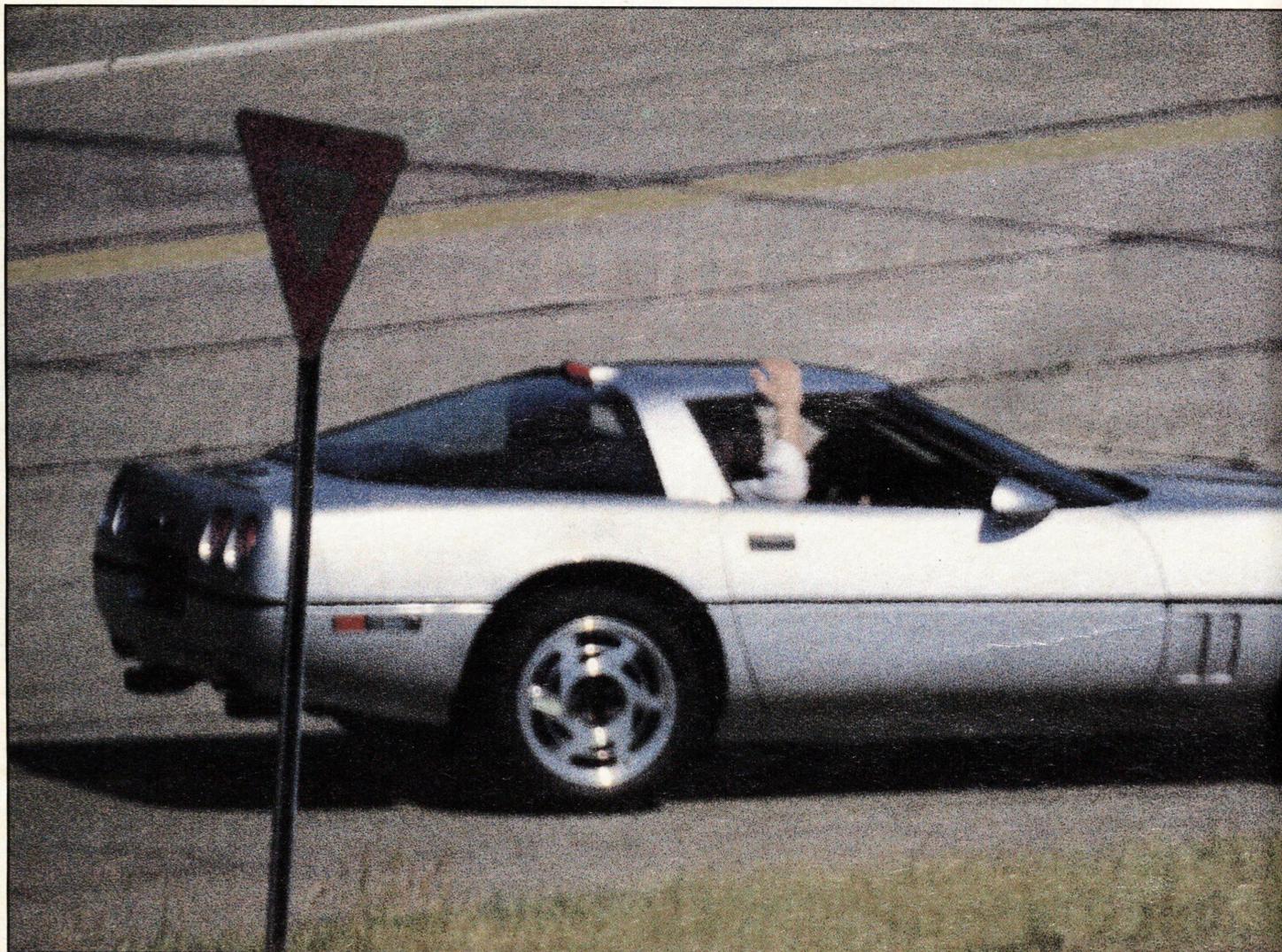
"King of the Hill" is the code name of a hush-hush project begun at Chevrolet some

five years ago. Its goal was to create an optimized version of the latest generation Corvette, a sort of "Ultravette" that would outperform the top foreign supercars, yet cost one-half, perhaps one-third as much.

Targets for drivetrain performance were the first things the engineers established. The engine, it was decided, would have 400

horsepower. It would have an output of 400 lbs ft of torque. 400 and 400? Can you imagine the kind of brute acceleration such a car would achieve?

We'll make it easy for you: Zero-to-60 mph in the four second range. The quarter mile in 13 seconds flat, perhaps the high 12s. A top speed of 180 mph-plus.



All this from a car that you will be able to buy at a Chevrolet dealership within two years, perhaps as early as next summer.

"I've never been in a production car with this kind of acceleration," said one source who'd driven a prototype and asked not to be identified. It is performance, he said, on the order of "a 1.0-liter superbike."

Which is wholly understandable, given the hardware. The "King" will be powered by a Chevy "LT-5" V8, basically the existing Corvette 5.7 liter V8 equipped with Lotus-engineered twin-cam four-valve heads. The engine will be mated to a six-speed ZF transmission. (The current car makes do with an unloved Doug Nash-built "four-plus-three" arrangement.) It will drive the rear wheels via a 3.54 axle ratio.

Insiders report that the engine is not yet delivering the intended 400 horsepower in emissions-legal form—currently it's developing in the vicinity of 375—but work continues. One source says the car may appear on schedule next summer with slightly less than 400 hp. Another, who notes Corvette chief engineer Dave McLellan's obsession

with "nice round numbers," says the car won't be released until the magic "Double 400" power ratings are a reality.

The "King" Corvette will look much like the current car. From the front, it will be hard to tell the difference. But look closely at the photos and you'll see why it's also referred to internally as the "Wide Body." The bodywork starts to expand at the middle of the doors and keeps widening. At the rear wheel openings, the bodywork extends a full three inches beyond the current car's, one and a half inches on each side. This is done to accommodate massive 315/35x17 (you read correctly) Goodyear "gatorback" tires specifically created to cope with the car's tremendous power. (Or try to. Insiders report that even with these tires, the "King" will smoke its 11 inch-wide wheels easily.)

The tires, unprecedented on an American production car, help the new model achieve impressive cornering performance. Sources deep within the General Motors Tech Center whisper about skidpad readings of 1.2-1.3g. (The current 'Vette—at about 0.95-1.0g on the same skidpad—is about as good as any car on the market.)

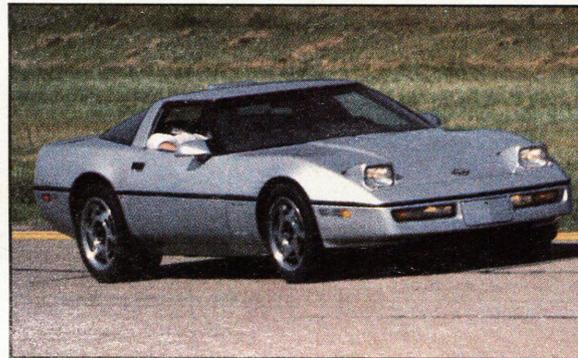
In an effort to counteract wheelspin, some sources say that Corvette engineers had hoped to offer the new model with electronic traction control, an enhancement of the Corvette's anti-lock braking system. Just

as abs prevents wheels from spinning too slowly under braking (and locking up), traction control uses the same basic hardware and software to keep wheels from spinning too quickly under acceleration. However, the development of the new system appears to be behind schedule. It is unlikely to be introduced with the car.

More likely to appear, but still unconfirmed, is Delco's latest "active" shock absorber system. This system, dubbed CCR 2000, uses microprocessor controlled shock absorbers in a conventional suspension arrangement. The microprocessor instantaneously monitors driving conditions and selects among eight shock settings accordingly. It is said to be considerably more effective than earlier adjustable shock systems pioneered by Mazda and Nissan.

Certain to appear is a beefed-up anti-lock brake system, derived from pieces developed for Showroom Stock competition, although this may not be exclusive to the "King of the Hill."

Some observers are surprised by the relative conservativeness of the new model's styling. At the rear, there's no question it's a different car. In addition to the extra width, the shape of the tail is convex rather than concave and fitted with squarish taillights rather than the Corvette's traditional round lenses. Even at the front, those who



New Corvette model will feature 400 horsepower, 400 lbs ft torque thanks to a 32-valve Lotus-engineered V8. "It sounds," said our photographer, "like rolling thunder." Photo below shows widened rear bodywork, new taillights and massive 315/35 Goodyear radials. Nose (left) is unchanged



have seen it up close say it has a different look; it is more tapered and arrow-like, rather than the traditional Corvette "Coke bottle" shape. But the front bodywork on the half-dozen prototypes we've seen is identical to that of the current Corvette, and sources close to the project insist the bodywork will remain as it appears here.

The new model will be sold alongside the present car and positioned as a top of the line model. Sources within Chevrolet say the list price will be \$45-50,000.

Perhaps the most interesting thing about the "King of the Hill" project is why it exists at all. The Corvette Group's files are littered with rejected plans for cars as wild as this one—even wilder. Remember the mid-engine Aerovette of the early '70s? It was proposed as a mid-'70s replacement for the existing car, but was shot down for the simple reason that General Motors was selling all the Corvettes it expected to sell. Why spend the additional money?

Today, General Motors is in a different position. It does not need to sell any more Corvettes, but it needs to improve its image. We suspect that one reason this project was approved is because it can help demonstrate that General Motors is a builder of truly world class cars without qualification.

And if the "King of the Hill" is half the car it's intended to be, it will do that job in about the same amount of time as it takes for it to go from zero to 60... ■

NOT TO BE OVERSHADOWED...

There's another super Corvette, the Twin-Turbo, and Callaway is turning up the wick on it for 1988

While Chevrolet engineers in Detroit are busy putting the finishing touches on their "King of the Hill" Corvette, work continues in Old Lyme, Conn., on the Callaway "Twin-Turbo."

The Twin-Turbo is the result of a Chevrolet-funded program initiated by former Chevy chief engineer Don Runkle. The intent was to create a Corvette that would be available as a regular production option (RPO) and out-accelerate any car in the U.S. Two-hundred examples were made ready for sale last fall, and offered at a list price of \$47,400. Each was equipped with a twin-turbocharged version of the Corvette's 5.7 liter V8. Maximum horsepower was 345—some 100 hp above that of the regular Corvette. Zero-to-60 performance was in the sub-five second range.

The response was overwhelming. The cars sold out so quickly (within six weeks of the program's announcement all 200 were spoken for) that the company has decided to double production for 1988. By

January 1 distribution will be extended to include all 50 states, Canada and Europe.

The '88 Twin-Turbo will offer uprated performance. Horsepower will be up by 20 to 365 hp at 4000 rpm. Torque will also rise, to 490 lbs ft at 2800 rpm (up 25 from 1987). Gone will be the two tacky-looking NACA ducts that cluttered the nose of the '87 car. Air for the intercoolers will come from the same under-nose high pressure area that feeds the radiator. It will travel through specially constructed duct work bonded to the underside of the hood.

Also new for '88 (and known to be something that GM is looking at for future production applications) will be the Hybrid cooling system (AW, March 30). This system replaces a traditional water/glycol mix with a special fluid that can withstand temperatures in excess of 300 degrees without boil-over—a plus with a high-output turbo engine. Coolant flow is reversed in the Hybrid system (coolant flows from the top *down*) to give a more uniform tem-

Follow the leader just became a little harder to play.



To those cars that try to perform like a Volkswagen GTI. And try to handle like a GTI. And try to be as much fun.

We have some disheartening news.

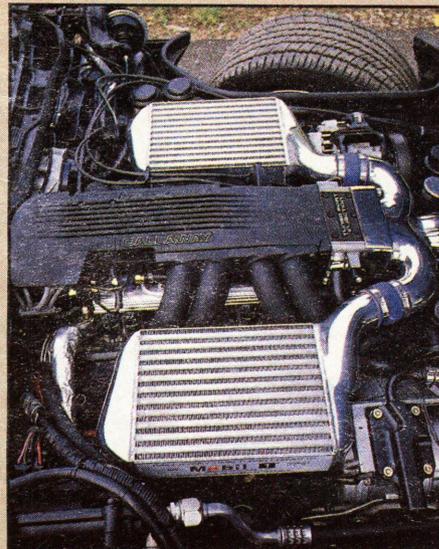
Introducing the new 16-Valve GTI. Faster. More powerful. And, in the SCCA's season-opening Pro-Rally, a grueling 4-day event, a rally-prepared GTI was the winner in its class.

Where was the competition? Well once again, they were behind us all the way.



**Introducing
the GTI 16V.**





perature distribution, and thus enhance output. Unlike normal cooling systems, the Hybrid system runs unpressurized.

Larger tires and brakes (Goodyear P245/ZR40-17 tires coupled with brakes developed for showroom stock racing) will be added to handle the car's 170 mph-plus top speed. The package can be rounded out by the addition of Chevrolet's new IMSA GTO-style body package, which we previewed in last week's issue.

Callaway is taking orders for the '88 cars now. Delivery, the firm says, will begin in September.

If you get the feeling that the Callaway

Larger tires and brakes will help handle performance potential of '88 Callaway Twin-Turbo. Power is up to 365 hp and an astounding 490 lbs ft of torque

group has been cast in the role of a kind of advance team for the Corvette engineering staff, you're not alone. Many of the lessons learned through the Callaway Twin-Turbo Corvette program have been applied to the factory's upcoming 32-valve rocket.

And when that stout device makes its long-awaited debut, don't expect the Callaway group to just fold up its tent. People inside of General Motor's Tech Center

claim to have seen Callaway's proposal for a 1989 Twin-Turbo package, and what they describe is mind-boggling.

How does a 32-valve, twin turbo (you didn't think that they were going to let all of that knowledge go to waste, now did you?) 500 horsepower, 200 mph Corvette grab you?

King Corvette, indeed.

—Christopher A. Sawyer

