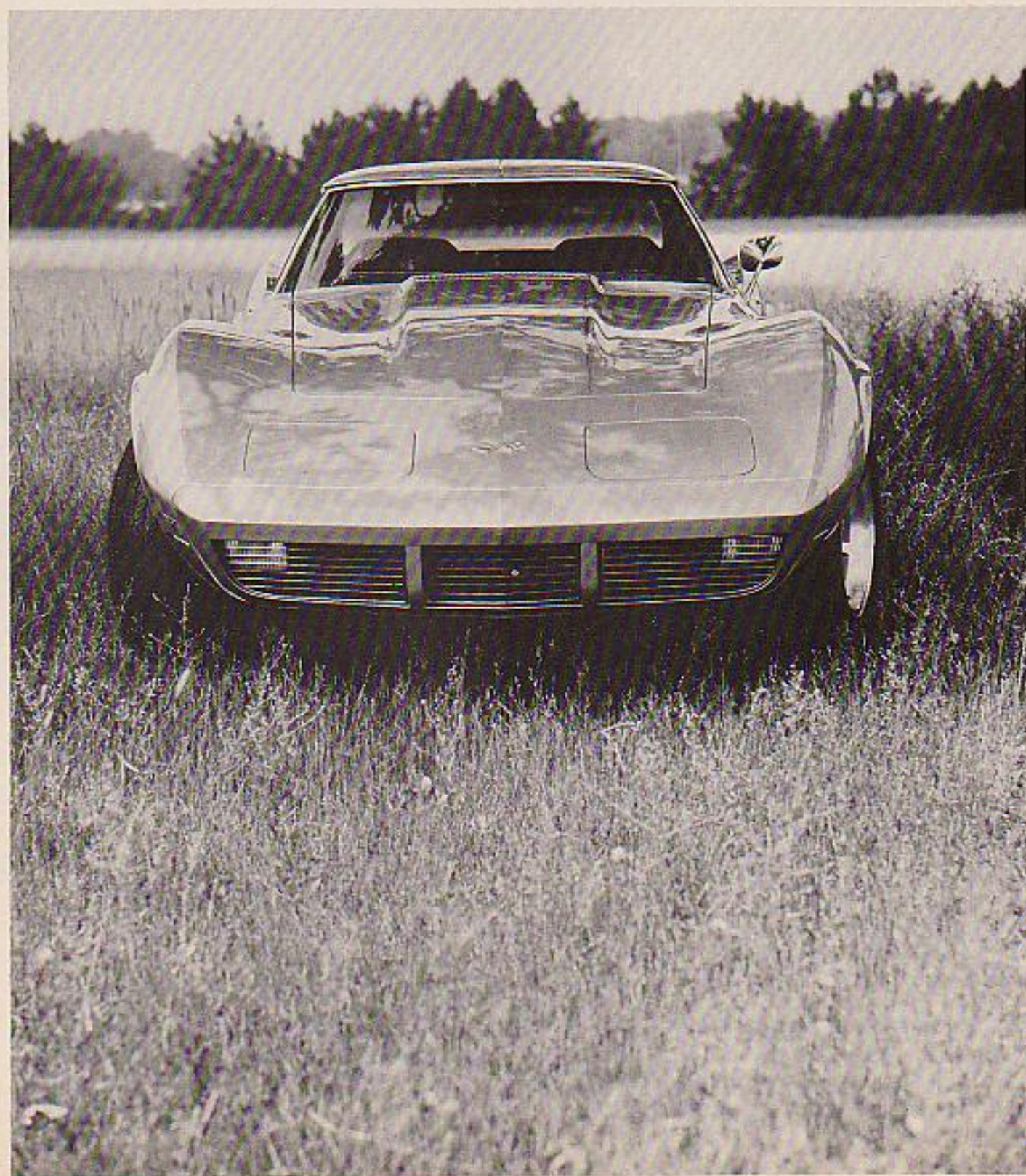


ROAD TEST:  
**Chevrolet Corvette**

The Corvette isn't just America's only sports car.  
It's America's last zoomy car/By Eric Dahlquist



The fact of the matter is that the Corvette is still the zoomiest car in America. You know it when you're on the way to Detroit's Metro Airport and you pass a Ford Squire full of kids and they press to the side windows to get a better look at this Silver Metallic Mako Shark, train-lengthening the old man's Bekins moving van of a station wagon. Just the way Speed Racer would do it. Fading off ahead, obviously over the speed limit. It's the Marty Milner/George Mahans Route 66 show all over again.

You know it again on the Ventura Freeway when some kid in a red Mazda mini-truck almost spins the head off his shoulders as he says to the girl next to him—you can read his lips—"That's the new 'Vette!"

Sure, you see a Pantera occasionally and maybe one Ferrari or a Lamborghini a year, but those are the cars of the chosen few, and this is America, where if we're privi-

casualties. If safety regulations and public anti-speed sentiment couldn't kill it, surely escalating insurance rates would.

But of course you already know the 'Vette is alive and well, and that for 1973 it not only meets the new 5-mph no-damage (to "safety related items") bumpers, but looks cleaner in the bargain.

Thanks to the "Omar" bolt.

Putting a '73 'Vette up on a hoist, Zora Arkus-Duntov, the Chevrolet engineer legendary as "the father of the Corvette," showed me an inconspicuous 3/8-inch bolt connecting the urethane-plastic covered front bumper (body-paint covered) to the slightly beefed-up frame. Upon impact, this bolt extrudes itself through a 5/16-inch die, dissipating most of the energy of the collision in the process. Simple, cheap, and light—about 35 pounds.

Duntov, a White Russian by birth, a sometime race driver by avocation, and one

parts, along with generous stuffings of fiberglass insulation under foot as well as hood. Still, Duntov was not totally enthralled with the initial '73 production run because the assembly-line workers had not properly installed all of the sound package, and our test car was not as quiet as it was supposed to be. But a lot of the old fiberglass body squeaks and groans had been filtered out of the cockpit, along with some of the bone-rattling ride on rough surfaces. Surprisingly, the car still has its traditionally good road feel.

The car had optional leather interior with the luxuriant look and smell it should have, but somehow the leg room, which has never been extravagant in Corvettes, feels even more limited. In the translation from vinyl to leather, Duntov said, the seat designers have lost more than an inch of leg room. But Duntov couldn't figure out where, or even why the space was lost. So, if you're



Virtually unchanged since 1968, '73 Corvette is revamped substantially to meet federal safety requirements; comes off cleaner than the original version in the process. Grill-less side vents, new nose and hood bulge account for major changes. New alloy wheels reduce unsprung weight by 40 lbs.

leged, we're not supposed to flaunt it, much less covet it.

If there has ever been a point to the Corvette since the original Blue Flame Six engine was replaced by something with hair on its chest, it is simply that, by and large, no other sports car has been as good, or looked as wild for less than twice the price.

The Corvette is so typically American. Superficially, it is as exotic as a Swiss mermaid: acceleration only a dragster can match, independent suspension and disc brakes for all four wheels (features no other American car has), a Porsche Targa-like lift-off roof, a futuristic fiberglass body, and enough gauges in the cockpit to keep track of a small war. But underneath beats the reliable heart of an Impala. And affordable. Anyone who well and truly wants to own a Corvette can (and usually does); GMAC will see to that. A very successful formula, thank you.

Well, if you believe everything you read in the funny papers, Detroit—not to mention America—has turned its back on "zoomy" cars; hot cars are dead, etc., etc. If true, the Corvette would likely be one of the first

of the few real "personalities" at General Motors (which frowns on anything but the low corporate profile) was obviously pleased with himself.

With a barely perceptible hiss, the hydraulic hoist deposited the '73 test car—a silver 'Vette powered by the big, 454 cubic inch V-8 (option LS-4)—back on the ground, and Duntov and I set off for a trial spin around GM's proving grounds in Milford, Michigan.

The first thing I noticed was the fact that the new car was light-years ahead of the 'Vettes we tested last June in terms of road noise (or its absence) and ride comfort. Duntov said that the substitution of GR-15 radial-ply tires for last year's bias-belted tires were responsible. Additionally, although the new tires somewhat diminished the car's sheer cornering power on dry pavement, wet-driving characteristics were improved by the new radials.

The new tires required some slight recalibration of the suspension, as well as the addition of 2-piece rubber-biscuit body mounts. Inside the body, asphalt sound deadener has been applied to almost all

more than 6-foot-1, be advised to opt for standard upholstery.

The LS-4 is rated at 280 horsepower at 4400 rpm, while torque is 395-lbs.-ft. at 3200 rpm. Simply stated, the 454 Corvette is now quicker through the gears overall and noticeably improved at the low end, a sensation quickly underscored during acceleration runs. For example, where our 1972 LS-5 did 0-30 in 3.1 seconds, the '73 LS-4 hit 30 in 2.7 seconds. Zero to 75 mph was 10.1 seconds in last year's LS-5, and 9.7 in this year's LS-4.

The reason for this performance surge is a minor camshaft timing and lift revision and the new cowl-induction hood that is standard on all models. Cold outside air enters at the high-pressure area at the base of the windshield and is routed to the carburetor via an underhood duct. In the duct, an electrically operated solenoid modulates air flow according to throttle opening. The horsepower benefits of cold-air induction have been loudly trumpeted since the Pontiac Ram Air GTO. But the high temperatures under the 'Vette's hood—a result of meeting new exhaust emissions requirements—was

as much a factor in Chevrolet's decision to adopt the new induction arrangement. This is one of those twilight areas where what's good for emissions is also good for performance.

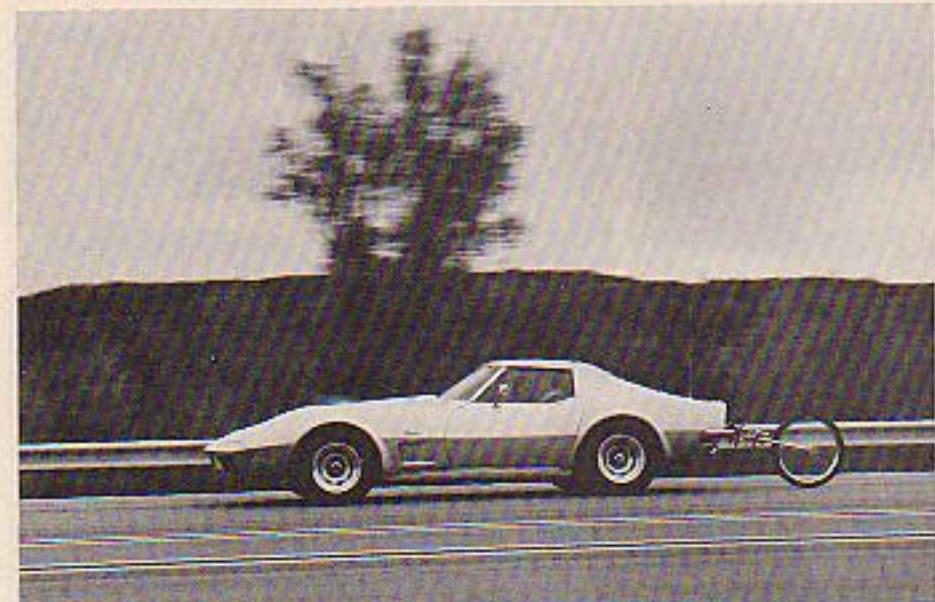
When Duntov and company adjourned to the skid pad, the effect of the radial tires was clearly evident. In 1972, the bias-belted tires (F70-15 Polyglass) generated a maximum cornering force of .83g. But now, a model-year later, the LS-4 is a .75g car.

Straight-line stopping was not a replay of the skid pad. In fact, the radial tire LS-4 stopped two feet shorter from 30 mph than the LS-5's 29 feet. Sixty-to-zero was another matter. Here it was a job to get the LS-4 hauled down in 135 feet, while last year a 122-foot average was easy with the LS-5.

We didn't have the opportunity to try out the '73 car on wet roads, but it isn't for nothing that at least one manufacturer of radial-ply tires calls its product "The Rain

0-60 mph time for the new L-82 was still 7.3 seconds! More available torque at a lower specific rpm peak has helped, of course, but remember that Chevrolet has made a conspicuous effort to pare down weight (as well as cost). The Corvette's removable rear window is gone, as well as the hidden windshield-wiper panel and complicated tender air ducts. Another 40 pounds of unsprung weight was knocked off with optional slot-type aluminum wheels. In all, comparably-equipped '73 models run about 30 pounds heavier than their 1972 counterparts.

The new L-82 Corvette may be one of the best things to happen to the American driver this year. The car is very quiet for a spirited sports machine, rides well, is more than quick enough to acquit itself well in stop-light grands prix, yet it has lost little of its nimbleness. Equipped with air-conditioning (and a new coolant-recovery system



Tire." Radials are notably less skittish on slippery roads, and their adoption on the Corvette should go a long way towards providing a truly versatile road car in the European sense.

Phase two of this test commenced when we took a 350 cubic inch, L-82 option Corvette out to Orange County Raceway. The L-82 is an emissions-inspired hydraulic-cam version of last year's fire-breathing LT-1. There are two ramifications resulting from the liters. First, horsepower in the 1973 car has dropped from 255 at 5600 rpm to 250 at 4000, but has gained five additional pounds-feet of torque over last year. Therefore, the engine has more mid-range guts, is quieter and certainly less a service problem.

Last year's LT-1 with the close-ratio, 4-speed transmission and 3.70:1 axle ratio could hit 60 mph in 6.9 seconds. In 1973, despite the new, heavier front end for the 5-mph bumper, sound deadening package, air-conditioning, a wide-ratio transmission, 3.55:1 final drive and five less horsepower,

that will never boil over—Chevrolet claims), the L-82 is the best Corvette Chevrolet has built in a long while.

That is not to say the L-82 or LS-4 were completely without fault. Driveability, no doubt due to emissions standards, was impaired by stalling during warmup, and a slight hesitation when the throttle was quickly opened. The L-82 4-speed transmission was hard to get into low gear and the gate between first and third was far too narrow. As mentioned earlier, the leg room is cramped . . . especially for a 2-seater car more than 15 feet long.

On balance, the '73 Corvettes—with either the small (350 V-8) or the large (454 V-8)—are several steps ahead of last year's models. They have lost little in the way of true performance and promise to gain substantially in something as important as driving in the rain.

There is a new Corvette in the wings for 1975, but even if it came in a year early, we wouldn't expect a single unsold '73. It's that good a car.



Above: Zora Duntov (in sunglasses), explains the intricacies of revitalized LS-4 engine for 1973. Cold-air, cowl-induction for carburetor has improved performance and lowered emissions at the same time.

Left: Striking along high-speed straightaway, America's only sports car demonstrates that at least one automaker is holding ground against the onslaught of federal regulations. Car hit 75 mph in 9.7 sec.

Below: Driving the '73 Corvette is a better deal than ever before because the car has lost little all-round performance in the process of gaining immeasurably improved ride and lowered sound levels.



# SPECIFICATIONS: CORVETTE

## '73 vs. '72 Chevrolet Corvette

	1972	1973	1972	1973
SPECIFICATIONS	454 COUPE	454 COUPE	LT-1	L82
Engine	90° V8 OHV	90° V8 OHV	90° V8 OHV	90° V8 OHV
Bore & Stroke—ins.	4.25 x 4.0	4.25 x 4.0	4.0 x 3.48	4.0 x 3.48
Displacement—cu.in.	454	454	350	350
HP @ RPM	270 @ 4000	275 @ 4400	255 @ 5600	250 @ 5200
Torque: lbs.-ft. @ rpm	390 @ 3200	395 @ 2800	280 @ 4000	285 @ 4000
Compression Ratio	8.25:1	8.5:1	9.0:1	9.0:1
Carburetion	1 4-bbl.	1 4-bbl.	1 4-bbl.	1 4-bbl.
Transmission	Turbo Hydra-matic	Turbo Hydra-matic	4-Speed close ratio	4-Speed
Final Drive Ratio	3.08:1	3.08:1	3.70:1	3.70:1
Steering Type	Recirculating ball	Recirculating ball	Recirculating ball	Recirculating ball
Steering Ratio	17.6:1	17.6:1	17.6:1	17.6:1
Turning Diameter (curb-to-curb-ft.)	37.0	37.0	37.0	37.0
Wheel Turns (lock-to-lock)	2.92	2.92	2.92	2.92
Tire Size	F70 x 15	GR70 x 15	F70 x 15	GR70 x 15
Brakes	Disc/disc	Disc/disc	Disc/disc	Disc/disc
Front Suspension	Single lower A arm, coil springs, concentric shocks	Single lower A arm, coil springs, concentric shocks	Single lower A arm, coil springs, concentric shocks	Single lower A arm, coil springs, concentric shocks
Rear Suspension	Independent, fixed differential, transverse multi-leaf spring, lateral struts, shocks	Independent, fixed differential, transverse multi-leaf spring, lateral struts, shocks	Independent, fixed differential, transverse multi-leaf spring, lateral struts, shocks	Independent, fixed differential, transverse multi-leaf spring, lateral struts, shocks
Body/Frame Construction	Unitized	Unitized	Unitized	Unitized
Wheelbase—ins.	98.0	98.0	98.0	98.0
Overall Length—ins.	182.5	184.7	182.5	184.7
Width—ins.	69.0	69.0	69.0	69.0
Height—ins.	47.8	47.8	47.8	47.8
Front Track—ins.	58.7	58.7	58.7	58.7
Rear Track—ins.	59.4	59.5	59.4	59.5
Curb Weight—lbs.	3,725	3,725	3,356	3,356
Fuel Capacity—gals.	18	18	18	18
Oil Capacity—qts.	6	6	5	5

PERFORMANCE	454 COUPE	454 COUPE	LT-1	L-82
Acceleration				
0-30 mph	3.8	2.7	2.9	2.9
0-45 mph	4.9	4.6	4.8	4.8
0-60 mph	6.8	6.8	6.9	7.3
0-75 mph	10.1	9.7	10.2	10.2
Standing Start 1/4-mile				
Mph	93	93	92	92
Elapsed time	14.1	14.1	14.3	14.3
Passing speeds				
40-60 mph	2.8	2.8	2.8	2.8
50-70 mph	3.3	3.3	3.6	3.6
Mph per 1000 rpm (in top gear)	25.0	25.0	23.5	23.5
Stopping distances				
From 30 mph	29.1 ft.	26.3 ft.	17.9 ft.	25.2 ft.
From 60 mph	122.9	135.3	116.0	122.9
Gas mileage range	13-15	13-15	9-12 mpg	9-12 mpg
MT Road Test Score	78.8	79.1	82.3	84.3