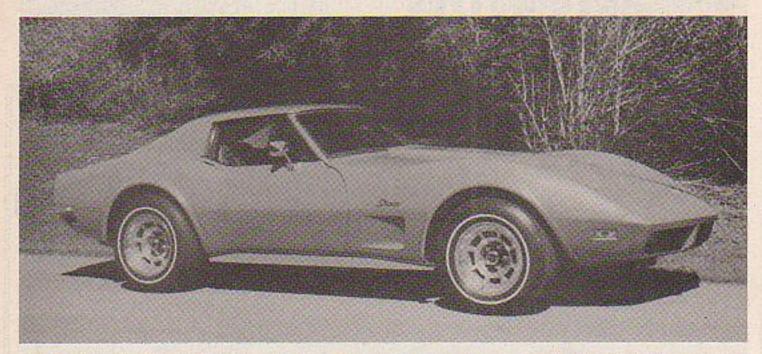
BACK TRACKIN'



The Corvette entered its third decade of production in 1973 and, while Chevrolet didn't bring out a special model to commemorate the occasion, it was a time when Corvette enthusiasts seemed more conscious than ever about the car's past and future. The reason wasn't merely a matter of chronology. Rather it was because the times were changing. What had once been acceptable in an automobile's behavior had become unacceptable and no longer was the customer having the final say about the way his or her car looked, or the way it performed. The U.S. government, acting more like Big Brother than Uncle Sam, had gotten into that act in a big way.

The Corvette had already felt the cutting edge of this new era of not-so-cozy corporate-government relationships. In 1971 the arrival of GM chief Ed Cole's mandate that all General Motors' cars would operate on ninety-one octane fuel had brought a lowering of compression ratios of key GM performance engines—including the Corvette's. In 1972 the Corvette power plant selection had been pared down to just three choices and, when word leaked out that the LT1 engine would not be available in 1973, it seemed as if the end of the road for the performance Corvette had arrived.

Things would get worse in a literal sense before they would improve since it's hard to argue with straightline performance data. But the 1973 Corvette, if somewhat less than the complete equal of earlier Corvettes on that basis, was none-theless an automobile not to be regarded as a mere caricature of a once great sports car. Many of the finest American supercars fell to that malady as the market for cars with brute horsepower dried up in the

1973

by Robert C. Ackerson

early seventies.

It wasn't just the insurance companies and government regulations that brought about their demise, however. It was, at least in part, the inability of supercar manufacturers to leave well enough alone that contributed to their downfall. Almost without exception the supercars grew larger and heavier, and this in turn meant that even more powerful engines were required to maintain the same level of performance the earlier models possessed. In the process the very market for which the supercars were intended was passed by.

The Corvette's evolution through difficult times was far different. This business of being America's only sports car wasn't something that could be easily compromised away. Either you were or you weren't. It was as simple as that. Nobody who played a role in the designing, building and selling of a Corvette could avoid coming face to face with its heritage and that's where it all came together for the Corvette. Sure, the days of the big block Corvettes were, by 1973, numbered. And no one could deny that, for a ton and a half automobile stretching out some fifteen feet. the Corvette's interior accomodations were a bit cramped. The seventies weren't easy years for any manufacturer to build a sports car, but in spite of the times every Corvette turned out by Chevrolet has been the Real McCoy.

Yet the loss of the LT1 engine for the 1973 model year was not easily accepted by many sports car fans. For example, Car & Driver (December 1972) reported that "with the passing of the LT1, it is reasonable to say that The Corvette Engine no longer exists..." Car & Driver was, to be sure, on to something here, since 1973 was the first year since 1956 that a solid lifter engine had not been available in a Corvette.

However, as Al Smith said back in the twenties, "Let's look at the record" before unfurling mourning drapes for the 1973 Corvette. The heir apparent to the LT1's performance mantle was the L82 and in a point-by-point comparison it hardly came away a loser. The LT1 held a narrow 255 to 250 edge in horsepower, but the L82's maximum output was attained at a slightly more useful 5200 rpm than the LT1's 5600 rpm. In the torque department, both engines peaked at 4000 rpm, but here the L82 was the winner-285 to 280 ft/lb. Both engines had the same 9.0:1 compression ratio, forged steel crankshaft and 2.02 inch intake and 1.60 inch exhaust valves. However the L82 sported a Rochester 4barrel Quadra-jet carburetor in place of the LT1's Holley.

Because of the many detail changes made in the Corvette for 1973 it's not really possible to make a totally objective, wheel-to-wheel comparison of a 1972 LT1 to a 1973 L82. However, contemporary road test acceleration results suggest that in that category the two cars were very closely matched. For example Motor Trend (January 1973) contains a comparative acceleration chart of these two cars which shows the LT1 just nipping the L82 from zero to 60 mph by 0.4 seconds. However, the L82's 7.3 second time was hardly

lethargic and it was achieved with a wide ratio 4-speed. The LT1 had been equipped with the close-ratio, 2.20 low gearbox. In the standing-start quarter-mile both cars turned in identical 14.3 second/92 mph marks. Car & Driver (December 1972) tested a close-ratio 4-speed L82 and it turned in a 6.7 second, zero to 60 mph run. Zero to 100 mph was an effortless 17.1 second sprint and the L82's standing-start quarter-mile time and speed was, at 15.1 seconds and 95.4 mph, equally impressive. Enough said about the supposedly "paper tiger" quality of the L82!

The 454 cid LS4 for 1973 was actually a mite stronger than its 1972 counterpart. Its horsepower and torque ratings were 275 hp at 4400 rpm and 395 lb/ft at 2800 rpm. By comparison, the older LS4 was rated at 270 hp at 4000 rpm and 390 lb/ft at 3200 rpm. Perhaps the most newsworthy feature of the 1973 LS4 was its compression ratio; it broke with the industry's trend by moving up a quarter point to 8.5:1. Either with the close ratio 4-speed or Turbo-Hydramatic the LS4 could move from zero to 60 mph in 6.4 seconds and easily exceed 95 mph in a quarter mile. Granted this wasn't the best drag strip performance ever turned in by a Corvette, but it was sufficiently quick to qualify as rapid transit.

In part, some of the credit for the Corvette's continued vitality was due to its new standard carburetor-air induction system which Chevrolet said was "designed to improve the operational efficiency at maximum acceleration of all Corvette engines." There wasn't anything startlingly unique in this setup but it worked extremely well. An inlet grille in the raised position of the hood near the windshield base ran into a ductway on the bottom side of the hood, which was directly linked to the carburetor air cleaner. The duct was equipped with a solenoid-operated door and when the call came for rapid acceleration, the door was opened to its fullest. The result, aside from a pretty dramatic change of momentum, was a sound level that might have offended quiet zone types, but brought smiles of delight to anyone who knew better.

An area that received a good deal of attention for 1973 was the Corvette's riding and normal noise level. To achieve a quieter passenger compartment, far greater use was made of sound-deadening material. Virtually all interior panel surfaces were sprayed with an asphalt sound absorber and a new dash mat was installed. In addition, thicker, 3/8 inch to 1/4 inch floor carpeting was used, along with a new hood blanket. In place of the older, solid rubber mounts used previously, the new Corvette had, at all eight of its bodyframe fasteners, two-piece rubber "biscuits" with steel inserts. As a result, reported Car and Driver (December 1972) the Corvette had "the smoothness and silence expected-but frequently not present-in a Grand Touring car."

A good deal more controversial, because of its net impact upon the Corvette's ultimate cornering ability, was the switch to radial tires and the accompanying changes made in the Corvette's suspension. The previously used F70×15B nylon wide oval tires were superseded by steelbelted GR70-15 radials. At the same time the Corvette's suspension was given slightly stiffer rebound and another 1/2 inch of front and rear ride travel. On small block Corvettes the front stabilizer bar was slightly larger while that used on the 454 engined models was a bit more flexible. The major positive results of these changes were better traction on wet surfaces, improved braking performance under adverse weather conditions and a ride with far less negative reactions to road irregularities. But there's always a

price to be paid; in this case a discernible loss in maximum cornering power from approximately 0.83 G to 0.75 G.

These changes, plus the Corvette's new engine, would give Corvette bench racers enough to argue over until the 1974 Corvette debuted, but there were many other areas where the 1973 Corvette broke with previous practice. The most obvious was its new 5 mph bumper. Actually, it was tucked quite nicely out of sight behind an attractive, resilient, bodycolored urethane pad that added another 2.2 inches of overall length to the Corvette. The resulting restyling was further emphasized by simple side front fender indents devoid of any grillework and a new front logo consisting of a bright circle surrounding the classic crossed flags and "Chevrolet Motor Division-Corvette" lettering. Few wails of displeasure were heard in response to the elimination of the Corvette's somewhat controversial die cast aluminum, vacuum-operated wiper door. The result was quicker wiper response, Improved interior ventilation and the removal of about ten pounds of unneeded weight.

After ignoring the obvious for many years, Chevrolet finally admitted that the Corvette coupe's removable rear window was a fussy little feature both difficult to install properly and prone to leaking. Thus the 1973 coupe had fixed rear glass. This removed the need for the window's storage tray behind the seats which allowed for another couple of inches of storage

The result of all these changes, refinements and innovations was a Corvette delightful to drive, exciting to look at and an object of pride for its owners. In other words, just the way it had been for the past twenty years. And come to think of it, that was the best way to celebrate the Corvette's twentieth birthday!

