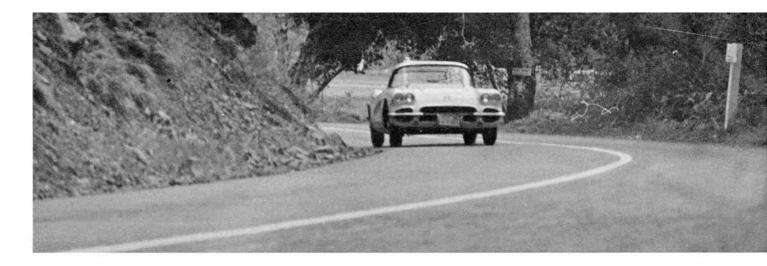


THE MOST POWERFUL CORVETTE yet to roll from the assembly line—that's the fuel-injected Chevrolet sportster for 1962. After six years at 283 cu. in., the engine has been opened to a husky 327. The bore has been stretched from 3.88 to 4.0 in. and the stroke from 3.0 to 3.25. With f.i., the result is a jump from 315 to 360 bhp!

There isn't a startling difference against the clocks, however. Testing a new f.i. Corvette with 4-speed close ratio transmission and 4.11:1 rear axle, we ran the ½-mile in 14 sec. flat, one of the fastest times we've ever recorded for a truly stock automobile. Yet, last year, we ran a 315-bhp f.i. job with identical gearing through the traps in 14.2 sec!

That's right—the addition of 45 bhp has cut a mere 0.2 sec. from the 1/4-mile time. Once a car is hitting in the 13-15 sec. bracket, further improvements in its performance are extremely difficult. Each tenth of a second becomes a bigger hurdle than the one before it.

The biggest single problem is wheelspin at breakaway. No matter how great the engine's horsepower, tires can transmit



just so much of it before they lose traction. The rest literally disappears in a cloud of smoke. It isn't until the tires are biting firmly that the extra power becomes useful. And, by that time, a Corvette is well on its way down the strip.

Of course, a specially prepared car in the hands of a skilled drag race competitor will cut under our figure. Careful tuning, special rubber and a driver's week-after-week experience balancing engine rpm and wheelspin will produce times between 12 and 13 sec. But we'll stick with 14 sec. as a reasonable limit for a new f.i. Corvette in showroom condition.

When we put away our stopwatches and relied on the seat of our pants, we *did* notice the added output. It was clearly evident on the highway, providing solid bursts for passing and climbing. Wheelspin isn't a difficulty at road speeds and the bigger engine really has a chance to show its stuff.

Here, the reason isn't so much the greater horsepower as a sharp boost in torque. Previous Corvettes have had short supplies of the latter commodity. Their fierce power ratings were obtained at very high rpm, with a consequent loss in force at moderate crankshaft speeds. Last year's f.i. unit, for example, hit a maximum torque of 295 lb.-ft. between 4700 and 5100 rpm. In the new version, the figure is 352 lb.-ft. at only 4000 rpm.

Our Tapley meter reacted violently to the added thrust. The instrument reads to 600 lb./ton, yet it spun right off

scale in 1st, 2nd and 3rd gears! And in 4th, it showed a whopping 480 lb./ton @ 55 mph! That's 110 lb./ton more than the 1961 f.i. Corvette and 55 lb./ton above the best high gear reading we obtained in the hot stocks we tested for the March issue.

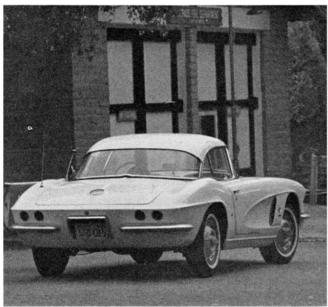
For all its punch, the new f.i. engine is remarkably flexible. Our car was no trouble at all in traffic. We used it for more than 1500 miles of city and freeway driving without suffering any of the usual "hot car" problems. The torque curve is flat enough that engine speed doesn't have to be kept very high for smooth, quick response. In fact, we found it hardly mattered what gear was used for puttering around town. The car started smoothly in 2nd and dropped as low as 1000 rpm in any ratio, even 4th, without protest.

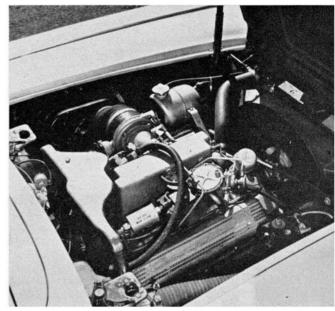
The f.i. Corvette has a reputation for poor starting, especially when the engine is already warm, but we had no difficulty with the test vehicle. Whether hot or cold, the engine fired every time with the first twist of the key. A slight change in the f.i. automatic choking system—a conventional butterfly valve has been substituted for the complex fuel enrichment device used in previous models—may account for our trouble-free experience.

Three other powerplants are available, as shown in an accompanying chart. All are based on the new 327-cu.in. block and have higher horsepower and torque ratings than those









CORVETTE continued

achieved by their 1961 counterparts.

Several minor changes accompany the increased displacement. In the standard unit, the carburetor remains a normal 4-barrel but the camshaft has been redesigned and the compression ratio raised a point.

Since 1956, the next step up has always been a basically standard engine with two 4-barrel carburetors. These have been scrapped, however, in favor of a single Carter aluminum 4-barrel. Similar to the AFBs popular for Super Stock racing, it has primary venturis 1.25 in. in diameter, compared with the normal unit's 1.06.

Third on the list is a power plant complementing the AFB carburetor with a hotter camshaft and higher compression ratio. With this combination, mechanical valve lifters replace the hydraulic type used in the two lesser engines.

The f.i. unit tops the line and, of course, shares the hot cam, high compression and mechanical lifters. The total of four is one short of last year's range because the f.i. option with regular cam is no longer offered.

A 3-speed manual transmission is standard with any engine while Powerglide automatic can be ordered only with either of the two lower-powered units. By far the most popular gearing choice, though, is the classic Warner 4-speed. The Corvette was the first car to use this superb box, setting off one of the most amazing trends in U.S. automotive history.

Traditionally, the car has been available with only the closeratio 4-speed. Because of the greater flexibility of the enlarged 1962 engine, the wider "big car" gearset is now an alternative.

The wider ratios make a lot of sense for non-competitive driving. With the closer gears, 1st is only 2.20:1 and should be teamed with a strong rear axle ratio, such as a 3.70 or 4.11:1, for proper over-all gearing. Otherwise, the car will be sluggish at breakaway. But this sort of combination can be hard to live with at 4th gear cruising speeds. With the closeratio box and 4.11:1 axle, our test car turned approximately 3000 rpm at 60 mph. Besides gulping fuel rather eagerly, it throbbed along so noisily that we kept thinking we'd forgotten to upshift!

In the wide-ratio 4-speed, however, 1st is 2.54:1. This allows an axle as light as 3.08:1 without sacrificing much initial jump. And, on the highway, the car becomes a relatively smooth, quiet cruiser.

Since the buyer of a milder Corvette is usually interested in a smooth—if sporty—road car, Chevrolet specifies the wide ratios with the two lower-powered engines. The closer gears, though, are still provided with the hotter units. Those not satisfied with this arrangement can make a switch easily enough; the two gearsets are interchangeable.

In most other important respects, the car is a repeat of the 1961 model. The body has been redecorated slightly, while the chassis continues without modification.

For those with road racing ambitions, the chassis options include a host of valuable items. These range from sintered-

CORVETTE POWER TRAIN

| | ENGINE | | | | TRANSMI | SSION | | REAR AXLE | | | |
|-----------------------|-------------------------|--------------------|----------------------|------------------------|---------------------------------|--|----------------------------|---|--|--|--|
| MAXIMUM HORSEPOWER | MAXIMUM TORQUE | INDUCTION SYSTEM | COMPRESSION RATIO | CAMSHAFT LIFTERS | DISTRIBUTOR POINTS, ADVANCE | TYPE AVAILABLE | CONVENTIONAL | POSITRACTION* | | | |
| 250 @ 4400 rpm | 350 lbft. @ 2800 rpm | Normal 4-barrel | 10.5:1 | Regular, Hydraulic | Single, Vacuum & Centrifugal | 3-speed 4-speed wide ratio *# Automatic* | 3.36:1 3.36:1 3.36:1 | 3.36:1 3.08:1, 3.36:1 3.36:1 | | | |
| 300* @ 5000 rpm | 360 lbft. @ 3200 rpm | Large 4-barrel | 10.5:1 | Regular, Hydraulic | Single, Vacuum & Centrifugal | 3-speed 4-speed wide ratio *# Automatic* | 3.36:1 3.36:1 3.36:1 | 3.36:1 3.08:1, 3.36:1 3.36:1 | | | |
| 340* @ 6000 rpm | 344 lbft. @ 4000 rpm | Large 4-barrel | 11.25:1 | Special, Mechanical | Dual, Full Centrifugal | 3-speed 4-speed close ratio * | # 3.36:1 # 3.70:1 | 3.36:1 3.08:1, 3.36:1, 3.55:1, 3.70:1, 4.11:1, 4.56:1, 4.88:1, 5.14:1, 5.43:1 | | | |
| 360* @ 6000 rpm | 352 lbft. @ 4000 rpm | Fuel Injection | 11.25:1 | Special, Mechanical | Dual, Full Centrifugal | 3-speed 4-speed close ratio *; | 3.36:1 # 3.70:1 | 3.36:1 3.08:1, 3.36:1, 3.55:1, 3.70:1, 4.11:1, 4.56:1, 4.88:1, 5.14:1, 5.43:1 | | | |

[#] Wide ratios are 2.54:1 in 1st, 1.92:1 in 2nd, 1.51:1 in 3rd and 1:1 in 4th; close ratios are 2:20:1 in 1st, 1.66:1 in 2nd, 1.31 in 3rd and 1:1 in 4th. * Optional at extra cost

Top speed (6500), mph... best timed run..... 3rd (6500)...... 2nd (6500).....

0-30 mph, sec.....

0-100. Standing ¼ mile....

speed at end..... **FUEL CONSUMPTION**

ACCELERATION

metallic brake linings in standard drums to a full competition package with similar linings in special finned drums, a steering adapter to quicken the ratio from 21.0 to 16.3:1 (reducing the lock-to-lock from 3.7 to 3.2 turns) and heavy-duty front and rear shock absorbers.

For highway use, though, this equipment is completely unnecessary. The standard Corvette is a thoroughly roadable car. Our only criticism of the chassis is that the rear axle shudders badly under hard throttle. It incorporates Hotchkiss drive, transmitting thrust via the leaf springs, and just can't handle all the power the f.i. engine delivers. Still, this isn't a problem that occurs under any but the most severe conditions.

Bigger engines and broader gearing are the really significant changes for the year. When we reported on the 1961 Corvette in last September's issue, we said, "We will readily admit that we would like very much to own a fuel-injected Corvette with all the options." Our experience with the 1962 model with its bigger bundle of torque made our desire stronger than ever.

CAR LIFE ROAD TEST



CORVETTE, 360-BHP

SPECIFICATIONS List price.....Price, as tested..... Curb weight, lb. Test weight. distribution, % Engine type......V-8, c Bore & stroke......4.00 x 3 Displacement, cu in..... Compression ratio..... equivalent mph......76.8

EXTRA-COST OPTIONS

Fuel-injected engine, 4-speed transmission, radio, Positraction, metallic brakes, wsw tires, crankcase ventilator, safety belts.

DIMENSIONS

| Wheelbase, in |
|-----------------------------|
| Tread, f and r |
| width |
| equivalent vol, cu ft375 |
| Frontal area, sq ft20.4 |
| Ground clearance, in6.7 |
| Steering ratio, o/a21.0 |
| turns, lock to lock3.7 |
| turning circle, ft37.0 |
| Hip room, front2 x 26 |
| Pedal to seat back, max40.5 |
| Floor to ground14.0 |
| Luggage vol, cu ft12.1 |
| Fuel tank capacity, gal16.4 |
| GEAR RATIOS |

| 4th | (1.00 |), 0 | ve | ral | I | | | .4.11 |
|------------|--------|------|----|-----|---|------|--|--------|
| 3rd 2nd | (1.31) |) | | | | | | . 5.38 |
| 1st | (2.20 |) | | | | | | .9.04 |

SPEEDOMETER ERROR PERFORMANCE

14.0

| 125 | 30 mph, actual29.0 |
|-----|--------------------|
| | 60 mph56.6 |
| 95 | 90 mph83.1 |
| 75 | |

CALCULATED DATA

| Lb/hp (test wt)9.4 |
|----------------------------|
| Cu ft/ton mile |
| Mph/1000 rpm19.2 |
| Engine revs/mile3120 |
| Piston travel, ft/mile1690 |
| Car Life wear index52.7 |
| |

PULLING POWER

| 4th, lb/ton @ mph480 | @ 55 |
|-------------------------|-------|
| 3rdoff | scale |
| 2ndof | |
| Total drag at 60 mnh lh | 130 |

SSV 90 3rd 80 70 2nd 60 50 40 30 20 **ACCELERATION** COASTING 10 10 15 20 25 30 35 40 45 MPH