



ROAD TEST/29-61

1962 CORVETTE

PHOTOS: GMC

Given: There is no substitute for cubic inches.

Given: The 1961 Corvette had 283. Therefore: The 1962 Corvette has 327.

THE GRADUAL DEVELOPMENT of the Corvette from a somewhat namby-pamby "personalized car" into a genuine sports machine has been an interesting one to observe. Detroit doesn't change its concepts overnight, nor has it been quick to embrace any competition during the past few decades. The Corvette has been the singular exception (i.e. the official factory entry at Sebring in 1957), even though sponsorship and support of Grand National stocks has been wide-spread. A Russian-born, English-imported development engineer-racing driver named Zora Arkus-Duntov has been spark-plugging Corvette progress since its inception, has managed many team entries, and has at least been consulted on every major Corvette outing since that time. Because of this closeness and enthusiasm for the sport, it seems apparent that many of the improvements made in the car are either Zora's developments or at his instigation. And very definitely, the Corvette has reached the thoroughbred category.

The biggest change over previous models incorporated in the 1962 Corvette is, of course, the 327-inch engine. This is a scaled-up version of the 283 by way of a 0.125-inch increase in bore and a half-inch increase in stroke. The hottest engine offered (see power-options chart) develops a whopping 360 horses, 45 more than last year and vehicle weight remains the same. Other internal changes include a 10-pound increase in oil pressure and the regular-production use of the optional aluminum rod and main bearings. Cam timing has been drastically altered in the stock version, but the high-performance cam has the same specs as last year's.

The cross-flow aluminum radiator, with over-flow tank and the viscous-drive fan, that was finally put into production last year is still in use. Pressure in the cooling system has been increased to 13 pounds, however, from the original seven pound figure.

Another change is in the exhaust system; a set of straight-through mufflers is standard with those engines that have

the hot-cam option. Improvements to the choke system have been made in the Rochester Fuel Injection, but it otherwise retains its 1961 form.

Changes in the driveline are relatively minor. A closer-ratio three-speed gearbox is offered, but the four-speed remains the same. A wider spread of final-drive ratios are available with each option combination. There are now five choices, ranging from 3.08 to 4.56, for the hot engined 4-speed RPO.

External changes to the body are in the nature of clean-up work and, for the little they amount to, they're very effective. We had to chuckle at the nomenclature Chevy has come up with to describe their change in ornamentation: "Pleasing exterior refinements include a windsplit around the cove replacing bright metal moldings. Grille configuration replaces three horizontal bars in the cove. The front grille is finished in black." We'd be tempted to crack, "Ah, Progress... it's wonderful," except that we ran across drawings — in Ohio of all places — that were reportedly the 1963 body design. If true, our comment is... "WOW!" If some of the rumors kicking around are well-founded, though, it may be that this will be the last year for Corvette. They claim that the car line has been non-profit and that the prestige values are being closely scrutinized by Management. These are the kind of rumors to file away someplace, because they're too undependable to act upon. As far as near-future developments for Corvette, it's nearly positive that a turbo-exhaust supercharger will be announced by mid-year, maybe sooner. It's due an Oldsmobile and Buick well before then. Yet another tip is that full-independent suspensions have been under intensive study. Should Gran Turismo racing assume its predicted importance next year, there'll be a lot of interest in Corvette and, knowing Duntov, we suspect there's preparation along these lines.

By needling Zora in the past, we've usually managed to

(continued on page 25)



Above left, the '62 Corvette bows in with some nose-dive under maximum braking effort. Directly above, Chevy's triple-threat man, Bob Clift (engineer/test driver/sports car racer) takes the helm of the hot-performing car during the acceleration runs, garnering impressive times. Below, the tasteful "clean-up" in styling on the new model is evident here.





Even though body-roll is moderate in the above photo, we discovered later that anti-sway bar up front had broken. Charts below indicate the wide range of options that enable Corvette buyers to order up anything from "streeter" to race cars.

CORVETTE CAMS			
	1961 stock	1962 stock	1961 & 1962 Spl.
INTAKE opens (°BTC) closes (°ABC) duration	12°30' 57°30' 250°	32°30' 87°30' 300°	35° 72° 287°
EXHAUST opens (°BBC) closes (°ATC) duration	54°30' 15°30' 250°	74°30' 45°30' 300°	76° 31° 287°
VALVE OVERLAP	28°	28°	66°

CORVETTE ROADABILITY OPTIONS	
RPO #687 Heavy Duty Brakes:	standard swept dimensions, but with vanes cast on the drum ribs, air scoops on the backing plates, turbo-type fans riveted to the drums and linings of segmented sintered iron.
Heavy Duty Shocks:	Stiffer rate.
Quick-ratio Steering:	16.3 to 1 (Standard is 21 to 1)
RPO #n.a. Wide-rim Wheels:	5.5K (Standard is 5.0K)

CORVETTE POWER TRAINS						
Engine Description Bore & Stroke	Gross Horsepower	Equipment	Comp. Ratio	Transmission	Std. Axle Ratio	Positraction Axle Ratios
327 Cu. In. V-8 Base Engine 4.00 x 3.25	250 hp	4-Barrel Carb. Hydraulic Lifters	10.5:1	3-Speed	3.36:1	3.36:1
				4-Speed (2.54:1 Low)	3.36:1*	3.08:1 3.36:1
				Powerglide	3.36:1	3.36:1
327 Cu. In. V-8 RPO 583 4.00 x 3.25	300 hp	Large 4-Barrel Alum. Carb. Hydraulic Lifters	10.5:1	3-Speed	3.36:1	3.36:1
				4-Speed (2.54:1 Low)	3.36:1*	3.08:1 3.36:1
				Powerglide	3.36:1	3.36:1
327 Cu. In. V-8 RPO 396 4.00 x 3.25	340 hp	Large 4-Barrel Alum. Carb. Spec. Cam. Mech. Lifters Relieved dome pistons	11.25:1	3-Speed	3.36:1	3.36:1
				4-Speed (2.20:1 Low) (Close-ratio)	3.70:1	3.08:1, 3.55:1, 3.70:1, 4.11:1 & 4.56:1
327 Cu. In. V-8 RPO 582 4.00 x 3.25	360 hp	Fuel Injection Spec. Cam. Mech. Lifters Relieved dome pistons	11.25:1	3-Speed	3.36:1	3.36:1
				4-Speed (2.20:1 Low) (Close-ratio)	3.70:1	3.08:1, 3.55:1, 3.70:1, 4.11:1 & 4.56:1

* — 3.08:1 axle ratio available optionally.

CORVETTE — 1962

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at least garner some pretty broad hints, to the consternation of Chevy's brass. This year, however, all we got for answers were tight lips and frustrated looks, an indication in itself that many hot items are in the offing.

At the Proving Grounds we encountered yet another Corvette road-racing booster, engineer Bob Clift, who campaigns an "up-dated" 1954 model in that area and in Canada with great success. Bob acted as our guide during the driving test and, needless to say, it was an invigorating and uninhibited one. At one point we decided the car handled so well in terms of front-end behavior that there'd been some "doctoring" to what was purported to be a production vehicle. The only thing we could find was that the front tires were worn to nearly a "slick" configuration. "O.K., we'll throw another set of tires on," was Clift's retort. A set of Blue Streak racing skins increased the understeer only slightly and we were forced to conclude that, for its weight and power, the Corvette is now an extremely good handling machine. The only fault we could find was that steering effort is very high, even with the normal ratio, and that it must take a powerful set of arms to race a Corvette equipped with quick-ratio steering. During our circuits the front swaybar link broke and we felt this made the car handle even better on the tight course and reduced steering effort a bit. Bob disagreed but it'd be worthwhile to those among our readership who own a 1961 or purchase a 1962 to at least experiment by disconnecting the front bar when they're practicing on a short course, for a tralom, et cetera.

From the standpoint of performance, the 1962 Corvette is fantastic. It is, without a doubt, the hottest production road machine in existence . . . in terms of acceleration. The figures we garnered were not under the most ideal conditions, with two people aboard, and after a hard kicking-around. The engine is silk-smooth and delivers its power through a phenomenally wide range. Even with the hot cam we were able to accelerate smoothly from 25 mph in 4th gear. On the other hand, a relaxed red-line of 6500 rpm for the production engine with a four-inch bore is likewise impressive. We ran out of road on the particular stretch assigned us at 135 mph, but we were sure that at least ten more were obtainable, possibly fifteen. Because of the lack of space, we were using the brakes *hard*, pulling down to 45 mph to get through a loop. It took several such applications before any deterioration showed and the regular organic lining was being used, not the Heavy Duty sintered metal!

Aside from being a high-performance sports car, the Corvette is excellent for normal road use. The ride is firm but very comfortable, even over choppy roads and occasional dips. When not forced, the steering is light and relatively effortless. The transmission is like butter to shift, even though the close-ratio box will dictate extended running in 1st and 2nd for around-town useage. Our point is that, even though it performs like a race car, it doesn't have the usual GT characteristic of being comfortable to drive in only one condition — flat-out. The fuel injection system contributes much to this docility, as well as the low-end performance, simply by proper fuel-metering.

The interior is identical to the 1961 machine. There's a choice of four upholstery colors and seven outside paint colors. Because of the many performance options, etc., available, we've chosen to list them separately in chart form. Prices, at this writing, are unavailable. With heaviness its only drawback, we feel the 1962 model moves the marque up yet another rung on the success ladder — a machine we can justifiably be proud to say is U.S. built.

— Jerry Titus

ROAD TEST/29-61 TEST DATA

VEHICLE1962 Corvette MODELSoft-top roadster
PRICE (as tested)Not Available OPTIONSFuel-injection engine

ENGINE:

Type:90° V-8
Head:Cast Chrome/alloy, removable
Valves:Ohv, pushrod/rocker actuated
Max. bhp:360 @ 6200 rpm
Max. Torque:300 lbs. ft. @ 4800 rpm
Bore:4.0 in. 101.6 mm.
Stroke:3.25 in. 72.6 mm.
Displacement:327 cu. in. 5359 cc.
Compression Ratio:11.25 to 1
Induction System:Rochester F. I. with improved choke system
Exhaust System:dual, cast manifolds to 2-inch pipe, single mufflers
Electrical System:12 V Delco distributor ignition

CLUTCH:

.....Borg & Beck single disc, dry
Diameter:10 in.
Actuation:mechanical

TRANSMISSION:

.....4-speed, full synchromesh
Ratios: 1st2.20 to 1
2nd1.66 to 1
3rd1.31 to 1
4th1.0 to 1

DIFFERENTIAL:

Ratio:3.7 to 1
Drive Axles (type):enclosed, semifloating

STEERING:

.....Saginaw worm & sector
Turns Lock to Lock:3¾
Turn Circle:36 ft.

BRAKES:

Drum or Disc Diameter11 in.
Swept Area257 sq. in.

CHASSIS:

Frame:Box-section rails with I-Beam X-member
Body:Fibreglass; reinforced
Front Suspension:Unequal arms, coil springs, tube shocks, anti-sway bar
Rear Suspension:Live, radius rods, leaf springs, anti-sway bar
Tire Size & Type:6.70 x 15 rayon

WEIGHTS AND MEASURES:

Wheelbase:102 in. Ground Clearance7.5 in.
Front Track:57 in. Curb Weight3035 lbs.
Rear Track:59 in. Test Weight3342 lbs.
Overall Height:52.2 in. Crankcase5 qts.
Overall Width:70.4 in. Cooling System15.5 qts.
Overall Length:176.7 in. Gas Tank16.4 gals.

PERFORMANCE:

0-302.9 sec. 0-809.0 sec.
0-403.8 sec. 0-9011.4 sec.
0-504.8 sec. 0-10013.5 sec.
0-605.9 sec. 0-11017.2 sec.
0-707.5 sec. 0-12021.4 sec.
0-13026.6 sec.

Standing ¼ mile 14.5 sec. @ 104 mph. Top Speed (av. two-way run) See article.
Speed Error 30 40 50 60 70 80 90
Actual 30.5 41 50 60 70 79.5 89

Recommended Shift Points

Max. 1st65 mph
Max. 2nd85 mph
Max. 3rd106 mph
RPM Red-line6500 rpm

Speed Ranges in gears:

1st0 to 68 mph
2nd18 to 87 mph
3rd25 to 110 mph
4th30 to top mph

Brake Test: 76 Average % G. over 10 stops.
Fade encountered on 6th stop.

REFERENCE FACTORS:

Bhp. per Cubic Inch1.1
Lbs. per bhp8.4
Piston Speed @ Peak rpm3250 ft./min.
Sq. in. Swept Brake area per Lb.0.084

