Road Test: Two Corvettes

0-60 in 7.3 seconds
0-100 in 20.7 seconds

VERY FEW NEW sports cars have aroused as much interest or created as much controversy as has the 1956 Corvette. The first real test of the new Corvette came at Pebble Beach (see page 22) and its performance there in a race restricted to over 1500 cc production cars, was the surprise of the day (it finished '2nd). On paper, and according to the data in this road test, the new Corvette is the best performing production car in class C today; at least until the S.C.C.A. rules that the D-type Jaguar is a "production" car by virtue of just over 100 having been built.

In June of 1954, we published a road test on the Corvette 6, and the 195 bhp V-8 version was tested in July, 1955. This report covers two 1956 models, one with the new stick-shift, the other with Powerglide. The car with the automatic transmission was tested primarily for comparison purposes against the two earlier tests, since they had a similar transmission. All four cars, fortunately, had the same axle ratio of 3.55-to-1. A comparison tabulation is very interesting and is as follows:

Corvette Comparison

Year	1954	1955	1956	1956
Trans.	P.G.	P.G.	P.G.	Stick
Bhp	150	195	225	225
Curb wt.	2890	2880	3080	2980
Test wt.	3210	3200	3410	3330
Top speed	104.4	116.9	121.3	129.1
0-60	11.0	8.7	8.9	7.3
0-80	19.5	14.4	14.4	12.4
0-100	41.0	24.7	24.0	20.7
SS1/4	18.0	16.5	16.5	15.8

photography: Poole

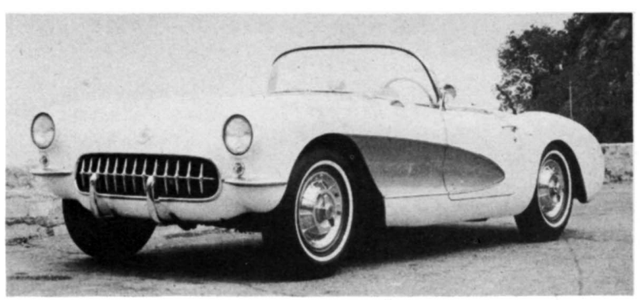
This table shows the tremendous improvement in performance that three years of development has accomplished. It shows very well the advantage of the new stick-shift transmission, but it must be mentioned that the 1956 Powerglide car had only 600 miles on the odometer which may have reduced the top speed somewhat. It also shows that the new Powerglide model is approximately 200 lbs. heavier than the '55 V-8, and 100 lbs. heavier than the '56 with stick-shift. (Both cars had R & H, power top, etc.)

The first two high speed runs with the stick-shift car recorded an average speed of exactly 125.0 mph. The speedometer held steady at 124 mph, but the tachometer seemed to lag at about 5200 rpm. Four more runs, starting with a much longer "wind-up" produced a very wavering speedometer reading, which varied all the way from 130 to 140 mph. The tachometer also behaved somewhat erratically, but read about 5700 rpm on the two best runs, which averaged 129.1 mph. This car had nearly 3000 miles on the odometer and the speedometer was almost perfect in its accuracy up to 125.

During the acceleration tests, both cars displayed fairly pronounced "flatness" of carburetion on the take-off.This appears to be a characteristic of the two four-barrel carburetors and possibly accounts for the change to a single four-barrel carburetor as standard equipment (210 bhp). The Powerglide car gets away from a standstill better than the stick-shift, on the initial "jump." Its time to 60 mph was .2 seconds slower than last year's car, because of the added weight and carburetion fault. However, from 60 mph upwards, the extra 30 bhp begins to tell and it was .7 seconds better to 100 mph and 4.4 mph higher in top speed than the 1955 test. Despite the slightly slower start, the '56 Powerglide car recorded the standing start 1/4 mile in 16.5 seconds (average), identical to last year.

The stick-shift model takes off unimpressively too, primarily because of the very "high" first gear (7.81 overall), as compared to the 11.9 starting ratio on the Powerglide. However, at 25 mph in first gear, the power really comes on like a blast and 60 mph can be touched in very close to 7 seconds dead by over-revving somewhat. The new floor shift works well though just a little heavy when trying hard. Second gear gives tremendous acceleration all the way to 100 mph if desired. Even third, or high gear, pulls well as witness the Tapley reading of 350/ton —better than most sport cars in their next-

The fiberglass body is continued with new front fenders and indented side panels.



Instrument panel is unchanged but the speedometer error on both cars was practically nil.

to-high gear. An optional axle ratio of 3.27 is available and while it might add 4 or 5 miles to the top speed, we feel that the 3.55 ratio in our test car is a good choice because of the "high" low gear.

The new close-ratio transmission has some unusual features. In the first place, it is somewhat noisy and we are told that the gears are all "straight-cut" (not helical), which seems plausible. Secondly, although first gear is not synchronized, it can be engaged at 50 or 60 mph without double-clutching. The technique requires only that the engine speed be brought up during the down-shift, *while the clutch is depressed.* Such shifts are almost fool-proof and require very little finesse, but the same procedure at 25 or 30 mph doesn't work so reliably and in this case the usual double-clutching process is safer. The advantage of being able to use first gear, while slowing down for a corner, (in a race) is of course considerable and is a feature of the new Corvette which was certainly not expected by us.

The general handling qualities and cornering ability of the Corvette remain "good to excellent" as compared to other dual-purpose sports cars. We did notice, for the first time, a certain amount of body and cowl shake at over 100 mph, which may be due to the very high speeds the new car attains so readily. The more powerful engine is smooth all the way to nearly 6000 rpm, but it did seem a trifle noisier, under full throttle, than last year's car, which had a much

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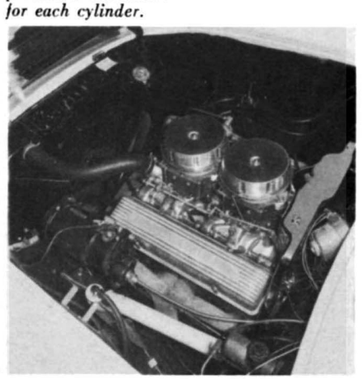
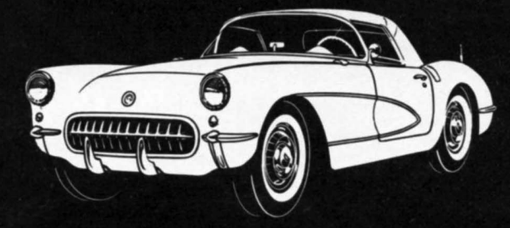
Two 4-barrel carburetors provide a carburetor for each cylinder.



ROAD & TRACK ROAD TEST NO. A-3-56

TWO CHEVROLET CORVETTES



SPECIFICATIONS

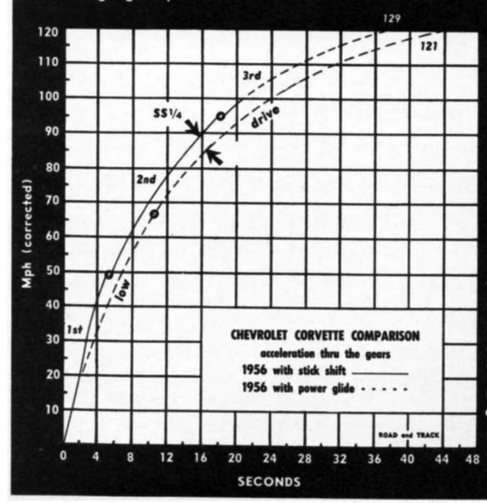
List price (stick-shift)	$3120
Wheelbase	102 in.
Tread, front	56.7 in.
rear	58.8 in.
Tire size	6.70-15
Curb weight	2980 lbs.
distribution	51/49
Test weight	3330 lbs.
Engine	V-8
Valves	pushrod ohv
Bore & stroke	3.75 x 3.0 in.
Displacement	265 cu. in. (4344cc)
Compression ratio	9.25
Horsepower	225
peaking speed	5200
equivalent mph	117
Torque, ft/lbs	270
peaking speed	3600
equivalent mph	81
Mph per 1000 rpm	22.5
Mph at 2500 fpm	112.5
Gear ratios (overall)	
3rd	3.55
2nd	4.65
1st	7.81
R & T high gear performance factor	73.0

PERFORMANCE

Top speed (avg.)	129.1
best run	130.2
powerglide	121.3
Max. speed in gears—	
2nd (5800)	100
1st (5900)	60
Shift points from—	
2nd (5500)	95
1st (4900)	50
Mileage	13/16 mpg

ACCELERATION

0-30 mph	2.7 secs.
0-40 mph	3.9 secs.
0-50 mph	5.3 secs.
0-60 mph	7.3 secs.
0-70 mph	9.8 secs.
0-80 mph	12.4 secs.
0-90 mph	16.0 secs.
0-100 mph	20.7 secs.
Standing ¼ mile—	
average	15.8 secs.
best	15.7 secs.



TAPLEY READINGS

Gear	Lbs/ton	Mph	Mph/sec
1st	off scale		
2nd	460	62	4.6
3rd	350	70	3.5

Total drag at 60 mph, 132 lbs.

SPEEDO ERROR

Indicated	Actual
30	30.2
40	40.1
50	50.0
60	60.0
70	69.5
80	79.6
90	90.0
100	100.0
125	126.2

Corvette

The Corvette corners as a sports car should, fast and flat.

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larger air cleaner-silencer. The interior treatment is impressive but the new winding windows and the power operated top have forced some curtailment in elbow and leg room. The top, incidentally, is only semi-automatic for it must be released and partially collapsed before pressing the fold button.

Since there is considerable confusion over the price of the Corvette, the essential data is tabulated herewith. The list or base price is f.o.b., St. Louis and includes a 210 bhp engine with one four-barrel carburetor, the 3-speed transmission and a manually operated soft top.

Specifications

List price, f.o.b.	$3120.00
Dual carburetors	172.20
Powerglide	188.50
Power windows	64.60
Radio & heater	322.55
Power top	107.60
Hard top	215.20
in place of soft top	N.C.
3.27 axle ratio	N.C.

Other options, such as white wall tires, windshield washer, power steering, etc., are available. An interesting item for the enthusiast is a special high lift camshaft, "recommended for racing purposes only." The extra charge is $188.30 and it gives the dual carburetor engine an output of 240 bhp. Also optional at unstated prices are segmented-metallic brake linings, magnesium wheels and Firestone SS-170 tires.

Again we are indebted to the Harry Mann Chevrolet Company of Los Angeles, this being the third Corvette they have supplied us for testing purposes. The stick-shift car is the property of Ralph Petersen whose enthusiasm has no limit. This is his third Corvette and when the new high lift camshaft and 4.1 gears are installed, he will enter the car in competition. ●

The car can be ordered with either a soft or a hard top at no difference in price.