

CAR LIFE ROAD TEST

Chevy II V-8

A LITTLE MORE than a year and a half ago, *Car Life* sampled a specially prepared Chevy II hardtop fitted out with a 360-bhp Corvette V-8 engine. The combination of such a powerful engine in such a light, maneuverable automobile was tremendously impressive, particularly in over-the-highway performance. The road test in June 1962 gave rise to a good many questions about "When's Chevrolet going to build it?"

But Chevrolet seemingly had its doubts about the marketability of such a vigorous small package and, although some dealers and speed shops made custom installations of various Chevrolet V-8s in Chevy IIs, the combination was not offered as a factory-built unit until the 1964 models appeared. Meanwhile, Ford Motor Company had taken a similar bull by the horns and dropped 260-cu. in. versions of its own lightweight V-8 into the Falcons and Comets. The resultant public demand was gratifying and considerably bolstered some slipping sales figures for those cars. Although it would be improbable to say Ford forced Chevrolet to finally make a decision to offer a Chevy II V-8, the Falcon V-8 undoubtedly figured in the consideration. Ford says that 20% of the Falcons now sold are V-8 equipped.

The V-8 chosen for the Chevy II is the reliable, potent, workhorse of the Division, the 283-cu. in. unit developed from Chevrolet's original 265-cu. in. V-8 of 1955. With its addition to the Chevy II option list, it now is available in virtually every Chevrolet body style but the Corvair and Greenbrier.

The 283 is the result of a 0.125 in. larger bore than the 265 while the third member of the family, the 327, is another 0.125 in. larger in bore and 0.25 in. longer in stroke. Even so, the big bore, short stroke characteristics of these engines impart low-friction, low piston speed operation and long, long engine life.

There probably isn't a more versatile engine currently in production: horsepower ranges from the 195 of the "ev-



BOXY REAR of station wagon encloses a surprisingly large cargo area.

eryday" 283-cu. in. to the 375 of the exotic, fuel-injected 327-cu. in. Corvette. We suspect it has been the basis of more "hopped-up" engines than any other single design. It also has powered virtually everything motive—from fishing boats to the Disneyland Monorail.

In its more mundane form the 283 has an extremely wide and strong torque range—more than 250 lb.-ft. between 1000 and 3800 rpm (see chart)—which imparts reasonably vigorous performance to a car of the Chevy II's size. It explains why our test car had plenty of high gear "muscle" between 50-80 mph, right in the most-needed range. The curves in the accompanying chart also help reveal why our test car did not accelerate better by further rpm in 1st gear: the actual (net) horsepower curve flattens off at about 4000 rpm, at 150 bhp. Since U.S. engines are rated by their gross reading (without power-robbing accessories and corrected to a specific air temperature), the Chevrolet 283 gets a 195-bhp maximum, at 4800 rpm, which it won't reach in actual installed form as it is hampered by muffler, air cleaner, generator, water pump, fan, etc.

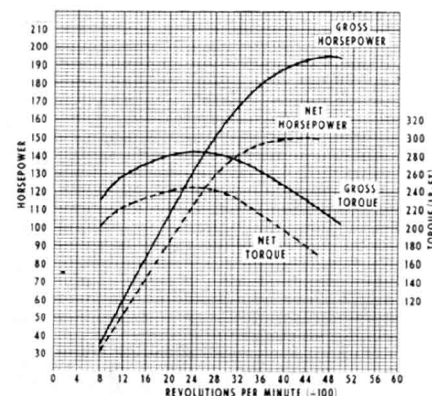
Still, at 150 bhp, the 283 makes a brisker Chevy II. The standard 194-cu. in. 6-cyl. engine has a net rating of about 90, where its listed power is 120, and this gives only adequate propulsion. Another engine option, probably less popular than the 283, is the

230-cu. in. variation of the same 6-cyl. used in the Chevelle and bigger Chevrolet lines. This has a slightly larger stroke, 3.875 vs. 3.563 in. for the 194, develops 155 bhp at 4400 rpm and has a bigger carburetor and a warmer camshaft. Yet to be adapted, however, is a third variation of this 7-main bearing engine—the 292-cu. in. developed by stroking the crankshaft to 4.125 in. This engine, used exclusively in Chevrolet trucks, is virtually interchangeable and develops 165 bhp at 3800 rpm and 280 lb.-ft. of torque at 1600 rpm!

The bigger Six might have a few advantages over the V-8, but not many as the V-8 is only 140 lb. heavier than the standard 6-cyl. and installation is not much of a problem because of the Chevy II's generous-sized engine compartment (even a 409 will go in, with a little imagination). In the case of the station wagon body styles, the extra weight of the V-8 engine just nicely balances off the extra weight of the box-shaped body.

The test weight figures (with full tank of gas, driver and one passenger) showed virtually an even amount of weight resting on each wheel. Of course, this would change to a rearward bias with any more passengers, or with a load of luggage. But, lightly loaded, the Chevy II's road manners are impeccable and a far cry, when it comes to cornering, from the nose-

POWER AND torque curves for Chevrolet 283.





TRIM, COMPACT station wagon has a new performance potential with the optional 283-cu. in. V-8 engine.

Chevy II V-8

heavy, understeering Corvette-powered II of the earlier test. The wagon scales approximately 300 lb. over the Chevy II sedan, with most of this weight over the rear wheels, so the 2- or 4-door sedans wouldn't handle quite as neutrally, but would accelerate somewhat better.

Acceleration, despite the pressure of more than half again the nominal horsepower, isn't breathtaking. Rather,

it's firm, constant and assuring, as we mentioned, particularly in the 50-80 mph range. The 2-speed automatic transmission, although providing smooth and convenient driving, robs some of the performance potential while the 3.08:1 axle ratio takes away a little more. Fitted with the optional 3:36 or 3.55:1 (all are available with the Positraction limited slip differential) ratios, the Chevy II V-8 would become progressively more quick. Available to the buyer as alternatives to the Powerglide automatic are 3-speed and 4-speed manual transmissions, the latter with the 2.56-1.91-1.48-1.00 gear spacing. The V-8 3-speed has 2.58-

1.48-1.00 gears, where the automatic has only 1.82-1.00 and a 2.1:1 maximum torque converter ratio.

Few changes were necessary to convert the 6-cyl. Chevy II to suit the V-8 installation, most of them being in the drive train itself where a stronger clutch, transmission and rear axle (from the Chevelle, standard now on all Chevy IIs) were substituted. Provision had to be made for radiator water-cooling the Powerglide torque converter, where on the 6-cyl. engines air cooling was adequate. And, also because of the larger engine, a larger radiator is required, 18.5 vs. 12.0 qt. for the Six.

CARPETED FLOORS highlight Nova series interiors.



V-8 NESTLES into engine compartment with room to spare.



There are suspension differences, both for the V-8 engine and the station wagon body, over the standard Chevy II Six. Both get a front anti-roll bar of 0.625 in. diameter and the wagon gets stronger, heavy-duty rear springs and shock absorbers, too. The basic layout remains the same, with independent action in front, live axle at the rear; no track rods are used at the rear, although the single-leaf rear springs seem to have some tendency to wind up under hard acceleration or braking loads. A set of Traction Master bars would relieve such problems.

Chevrolet has relieved another, more pressing, problem which arose with the previous Chevy II models—brakes. It had been *Car Life's* experience that the standard Chevy II brakes—hydraulic, with 9 x 2.25 in. drums in front and 9 x 1.75 in. drums in the rear—were satisfactory enough for low-speed use but tended to fade fairly fast at anything beyond that. A solu-

tion, albeit expensive, was optional sintered iron linings with vacuum booster. Now, for the '64 models, Chevrolet has enlarged the Chevy II brakes to 9.5 x 2.5 in. drums at both ends. This gives larger swept area, 228.6 sq. in., and more effective stopping power. The metallic brake option is also continued, but isn't needed quite as much as before. Under *Car Life's* usual two consecutive stops from 80 mph check, the Chevy II V-8 wagon did extremely well on the first brake application but exhibited mild fade on the second.

Little else was changed on the Chevy II to fit it for its 1964 sales role, just minor trim variations on the outside, plus a slight, general upgrading of interior trim and materials. The biggest change for '64 was in the model lineup. The Super Sport and Nova hardtops and convertibles were dropped, to avoid pricing conflicts with the Chevelle, and the middle-line 300 series

eliminated. Thus the Chevy II now is available only in 2- or 4-door sedan, or 4-door (6-passenger) station wagon form, in either 100 series or Nova trimwork.

The option list has been enlarged with the V-8 engine and 4-speed transmission (which isn't available with either 6- or 4-cyl. engines, however). New accessories include a remote-control outside mirror—a boon to the motorist in incumbent weather—and a factory-installed trailer hitch.

In all, the Chevy II wagon proved a spacious, well-appointed vehicle. The rear seat pops flat in one motion to open up a cargo area of impressive size for such a modestly proportioned vehicle. Much less bulky than the "full-sized" wagons, it looks as if it would carry nearly as much. And with the advantages of Chevy II's minimal overhang and 110-in. wheelbase maneuverability, it must rate as one of the most practical wagons available. ■

CAR LIFE ROAD TEST



1964 CHEVY II Nova V-8 Station Wagon

SPECIFICATIONS

List price.....	\$2492
Price, as tested.....	3208
Curb weight, lb.....	3065
Test weight.....	3395
distribution, %.....	50.7/49.3
Tire size.....	6.50-14
Tire capacity, lb @ 24 psi.....	3520
Brake swept area.....	228.6
Engine type.....	V-8, ohv
Bore & stroke.....	3.875 x 3.00
Displacement, cu in.....	283.0
Compression ratio.....	9.25
Carburetion.....	1 x 2
Bhp @ rpm.....	195 @ 4800
equivalent mph.....	108
Torque, lb-ft.....	285 @ 2400
equivalent mph.....	54

EXTRA-COST OPTIONS

V-8 engine, auto. trans., radio, seat belts, luggage rack, outside mirror, wsw tires.

DIMENSIONS

Wheelbase, in.....	110.0
Tread, f and r.....	56.8/56.3
Over-all length, in.....	187.6
width.....	70.8
height.....	55.0
equivalent vol, cu ft.....	422.0
Frontal area, sq ft.....	21.6
Ground clearance, in.....	5.2
Steering ratio, o/a (power).....	25.4
turns, lock to lock.....	4.5
turning circle, ft.....	38.4
Hip room, front.....	59.2
Hip room, rear.....	58.9
Pedal to seat back, max.....	42.5
Floor to ground.....	11.0
Max. cargo vol, cu ft.....	76.2
Fuel tank capacity, gal.....	16.0

GEAR RATIOS

3rd (), overall.....	
2nd (1.00).....	3.08
1st (1.82).....	5.57
1st (1.82 x 2.10).....	11.71

PERFORMANCE

Top speed (4600), mph.....	104
Shifts, @ mph (auto.).....	
3rd ().....	
2nd ().....	
1st (4200).....	52

ACCELERATION

0-30 mph, sec.....	5.0
0-40.....	7.4
0-50.....	10.6
0-60.....	14.2
0-70.....	19.2
0-80.....	26.2
0-90.....	35.0
Standing ¼ mile, sec.....	19.4
speed at end, mph.....	70.2

FUEL CONSUMPTION

Normal range, mpg.....	14-17
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SPEEDOMETER ERROR

30 mph, actual.....	30.0
60 mph.....	57.3
90 mph.....	89.2

CALCULATED DATA

Lb/hp (test wt).....	17.4
Cu ft/ton mile.....	128
Mph/1000 rpm.....	22.6
Engine revs/mile.....	2660
Piston travel, ft/mile.....	1330
Car Life wear index.....	35.4

PULLING POWER

70 mph, (2nd) max. gradient, %.....	12.0
50..... (2nd).....	19.8
30..... (1st).....	27.3
Total drag at 60 mph, lb.....	155

