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## CAR and DRIVER

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## ROAD TEST

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# Corvair

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# Monza

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# Spyder

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*Poor Man's Porsche  
adds a "Super"  
to the top of the line*



High-powered Spyder remains flat and stable, if a bit hung-out, on bad surfaces.

Now that the Chevy II has come along to relieve the Corvair of the responsibility of being "sensible," in the sense of stodgy and mundane transportation, the Corvair has been allowed to swing. Back in the beginning of the great compact revolution, General Motors engaged in some typical thinking, and came up with a carefully implemented misunderstanding: the sales department was under the impression that it was getting a Falcon, and Engineering was under the impression that it had been ordered to build a Volkswagen. The result, in addition to the first Corvair, was a panic that caused the Chevy II to be pushed through as a hysterical reaction, to give Sales something to throw into the battle with Ford.

Interestingly enough, in the interim between panic and Chevy II introduction, the Corvair had been developed into a pretty fine automobile. And, perhaps more interesting, it was done under the aegis of Billy Mitchell and the much-maligned styling department. The top-of-the-line Monza has taken over so much of the Corvair's sales that the lower lines are dropped or ignored. The Chevy II has been a success, but

registrations of that car haven't in any gross way overshadowed those of Monza Corvairs. The success of the factory-entered rally cars in various Canadian events, and a continuing succession of improvements, have made a warm spot for the car among automotive enthusiasts throughout the country. Every option that comes along seems to add to the sporting nature of the little dear. And the latest, the exhaust-driven turbo-supercharger, is per-

haps the largest single step in a sporting direction.

This option, covered technically in C/D in June, 1962, is very simply a small compressor that uses exhaust gases for power and provides a healthy boost in intake manifold pressure for what is basically a very restrictive head design. The result is a jump in horsepower and torque on the order of 50%.

If this explanation seems a bit single-minded, then that is as it



Miserable weather conditions really brought out the charm of Corvair's neat coupe.



Handling options are chiefly responsible.

should be. The turbo-charger is just as directly straightforward in its approach to the problem, avoiding as many complications as possible and making no compromises at the expense of all-out performance. The Oldsmobile exhaust-driven supercharger, by contrast, is forced to embroil itself in sophistication to give a broad range of response with tractability. The Corvair doesn't bother. There is lag in the throttle response (because of the inertia of

the exhaust-driven turbine), there is no boost to speak of until about 2,400 rpm, and maximum boost (about 10 p.s.i.) isn't obtained until 3,400 rpm. Further, to avoid the high-compression-ratio detonation problems that forced Oldsmobile to devise a water-and-alcohol injection system, Chevrolet engineers responded with disarming directness: they simply lowered the compression ratio, from 9-to-1 down to 8-to-1, and got, in the bargain, a more manageable low-rpm engine than the 102-bhp "Hi-Performance Turbo-Air." (They also radically revised the spark-advance curve for the same reasons.)

The package comes as the "Corvair Monza Spyder," from Mitchell's "Sebring Spyder" dream car a couple of years back. The name seems to mean the turbo-charger package, plus some identifying trim and a very handsome brushed-aluminum instrument panel, with 120-mph speedometer, resettable trip odometer, an electric tachometer (which unfortunately crams its 6,000-rpm range into a quadrant, instead of keeping the styling theme of the speedometer, and being incidentally a lot easier to read), a manifold pressure gauge that reads either vacuum or pressure, a fuel gauge, and a cylinder-head thermometer.

Also standard equipment on the Spyder is the 3.55-to-1 rear axle ratio, which is a particularly good choice. Not only does it give a nice compromise for all-round use, but it provides a traditional set of figures for the enthusiast. Fourth gear gives 20 mph per 1,000 rpm, so two times the number on the tach gives the mph. Handy. The ratio does make for a bit of noisy churning, though, particularly when the heater is whistling away at high rpm.

Testing a tried-and-true, already-on-the-market sort of car with a markedly more powerful engine op-

tion, the likely thing to remark would be the performance of the combination, in particular the acceleration. As it turns out, we found ourselves more intrigued by the virtues of the basic, evolving design than by the performance option. What comes with the blown Corvair is better than the blower.

What came with it on the test car was the four-speed manual transmission, the heavy-duty suspension, the heavy-duty metallic brakes, and Positraction. (What didn't come with it, and isn't available from Chevrolet, to our great disappointment, is faster steering. Despite constant nagging from enthusiast sources, otherwise known as the market, for more than three years, and despite continual improvement in the running gear and handling of the car, Chevrolet still hasn't made faster steering available. The car has the lightest non-power steering imaginable now, so fears of heavy steering could hardly be the excuse. With the Corvair's weight bias and swing axles, it needs quickened steering perhaps more than anything else. Why it isn't available, when other options are, is beyond us.) The handling options to transform the car, changing it from a queasy every-now-and-then-you-almost-catch-up-with-it feeling to a solid and positive tautness that gives confidence. It becomes a great car to charge around back-country roads in, which is just what we spent most of our time doing, in the snow.

The surprise of the car, however, is a somewhat negative one, having to do with its complete tractability. On one hand there is the little fun car, great in the snow, manageable and with a trace of fire. On the other, there is the expected liveliness that somehow doesn't materialize, the knowledge that something ought to be going on back there that never makes itself felt (despite the fine acceleration times the car turns in). With the lowered compression ratio, around-the-town plugging below the 3,400-rpm limit of maximum blower effect is pleasanter than in the 102-bhp car with the same (3.55-to-1) rear axle ratio. In fact, given a top limit on the order of 4,000 rpm, it would be easy to come away from a trial run wondering if you hadn't been in the wrong car.

With the accepted lag in blower response, the 3,400-rpm lower limit to maximum boost, and the stumpy-pulling gearing of the indirect ratios in the transmission, by the time the turbocharger begins to take effect, on a hard acceleration run, it is almost time to upshift. The kick in the back is a mild one, only



Weather equipment worked well once the car was really warm, but warm-up was slow.

## MONZA SPYDER CONTINUED

achieved at the very top end of the rev scale, and short-lived at that (we used 5,000 rpm in our test, and the engine wasn't really sharp in the upper ranges). It has its effect, this blower, in acceleration runs. But for the kind of rip-rip quick response on the road (that the car could now handle), it needs low-end punch and reduced weight.

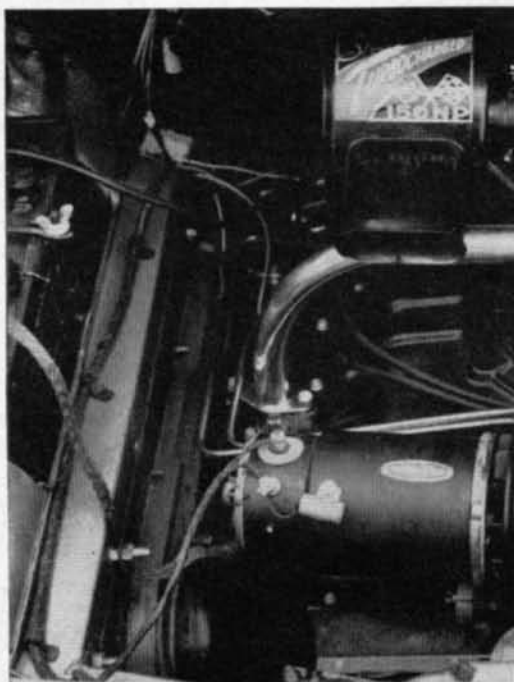
Perhaps with time in the car it would be possible to become accustomed to staying up where the boost comes in. In case this is your custom, you shouldn't have to worry about things staying together, because included in the engine when blower-fitted are heavier connecting rods, different bearing inserts, a specially hardened crankshaft, special pistons and rings, and different materials for exhaust valves and valve guides. Externally there are various modifications to the power plant, mostly for heat protection because of the use of exhaust gases in the engine compartment. The option includes a heavier clutch.

Shift linkage on the fine four-speed all-synchromesh transmission has been improved considerably, and there is no hint of previous second-gear problems that occasionally cropped up in earlier versions. The device is a continuing joy, effortless

and yet positive. The much-praised Monza interior is pleasant and plush, the individual seats doing a lot better job of holding and supporting than many of the pure-blooded buckets of the past. A bit more adjustment would be welcome in the seating, but there's room for all but the occasional anomaly (and we've got a staff full of anomalies). The car's very lowness makes entry and exit a bit cumbersome, but we seem to be continually paying that price these days for styling—and a low center of gravity—and smiling about it. All in all, the character of the car hasn't been changed very much, except for a large chunk of capability tacked onto one end.

In that light a particular comparison comes to mind. Corvair has benefited since the beginning from a "poor man's Porsche" whispering campaign. And we are reminded of the Porsche Normal vs. Porsche Super arguments that rage eternally. The "Super" designation on a Porsche is sometimes characterized as 500 rpm, at a dollar apiece, tacked onto the wrong end—for normal street use, that is, since another 500 rpm of redline is not too handy in traffic. The Spyder option on the Corvair Monza is very similar, but only if compared to a Monza that already has the handling options.

Tradition has it that the first



Tiny blower doesn't interfere with spare.



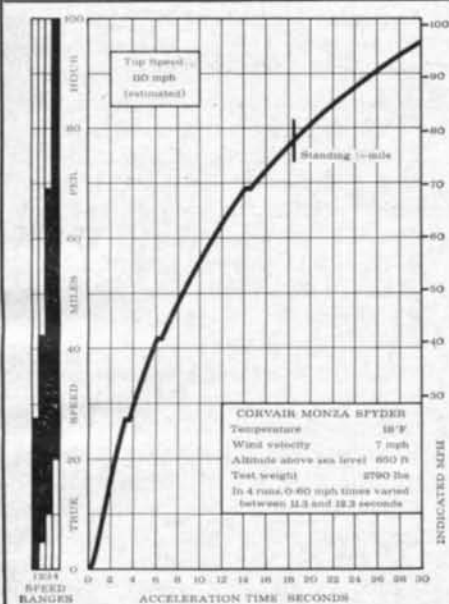
### CORVAIR MONZA SPYDER

Price as tested: \$2,739.65

Manufacturer: General Motors Corporation  
Detroit 2, Michigan

#### ACCELERATION:

Zero to	Seconds
30 mph	3.9
60 mph	11.7
90 mph	25.7
Standing start 1/4	18.5



#### ENGINE:

Displacement	145 cu in, 2,372 cc
Dimensions	6 cyl, 3.44-in bore, 2.60-in stroke
Valve gear	narrow-angle, pushrod-operated, overhead valves
Compression ratio	8 to one
Power (SAE)	150 bhp @ 4,400 rpm
Torque	210 lb-ft @ 32-3400 rpm
Usable range of engine speeds	850-5,200 rpm
Carburetion	Single-barrel sidedraft Carter and Turbo-Supercharger
Fuel recommended	Premium
Mileage	16-24 mpg
Range on 14-gallon tank	225-335 miles

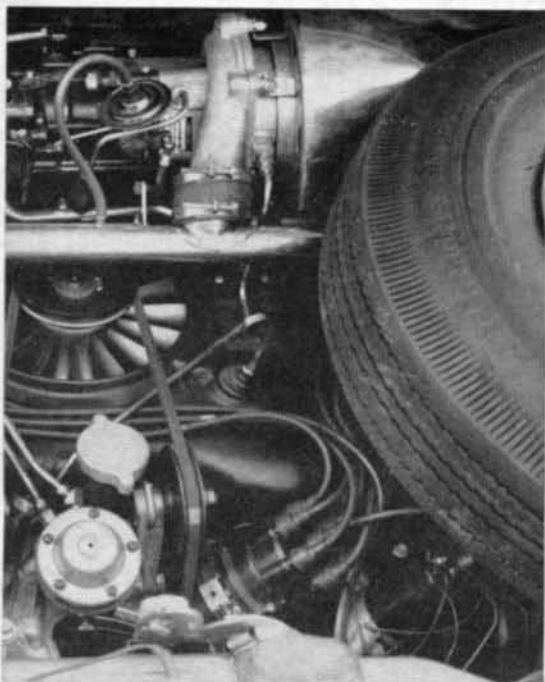
#### CHASSIS:

Wheelbase	108 in
Track	F 54.5 in, R 54.5 in
Length	180 in
Ground clearance	7.5 in
Suspension:	F: ind., wishbones and coil springs. R: ind., swing axles, trailing wishbones, and coil springs.
Steering	Recirculating ball
Turns, lock to lock	5
Turning circle diameter between curbs	42 ft
Tire size	6.50 x 13
Pressures recommended	F 15, R 26 psi
Brakes	9-in drums, 198 sq in swept area
Curb weight (full tank)	2,513 lbs
Percentage on the driving wheels	62

#### DRIVE TRAIN:

Clutch	Single disc dry plate				
					Mph per 1,000 rpm
Rev	No	3.66	Step	Over-all	13.15
1st	Yes	3.65	57%	12.98	5.4
2nd	Yes	2.35	63%	8.34	8.3
3rd	Yes	1.44	44%	5.12	13.6
4th	Yes	1.00		3.55	19.8
Final drive ratio	3.55 to one				

bunch of enthusiasts sprang full-blown and wind-whipped out of MG TCs—a little mythically, perhaps. Another batch has undoubtedly erupted from the Volkswagen, wending their economic way just as enthusiastically and with just as much dedication to the sport. We suspect that the New Wave in sports cars will flow from just the sort of machinery that staid old General Motors is supplying in the Monza. GM must certainly be surprised to see what has happened to its economy car, which is rapidly becoming "too good for the common people." But where else can you buy a four-seater that will break 100 mph, do 0-60 in less than 12 seconds, have all-independent suspension, four-speed all-synchro gearbox, American-car luxury, and reasonable handling for under \$3,000? **c/o**



Dome behind tire protects it from heat.



Front anti-roll bar, stiffer springs and shocks of the heavy-duty suspension kit (standard with Spyder engine) reduce positive camber of rear wheels, lower car.



Lush Spyder interior, with well-placed controls, makes a very desirable package.



Brushed-aluminum dash is handsome, with nearly complete set of instruments, but markings on tach are too small for quick readings; full-circle dial would help.