

Road Test

CORVAIR

America's most radical compact proves that it has broken through more than one engineering barrier with its unique design

ENUINE introductory excitement and a much higher than hoped for initial sale prove that American motorists have recognized Chevrolet's Corvair as the most novel and revolutionary car that Detroit has produced in many years. Motor Life's test crew has waited anxiously since the very first reports to apply their criterions to this new compact; to see if all of its unique design innovations stood up on the highway as well as the drawing board. This first exhaustive test of one of the initial production Corvairs shows that in nearly every major area the car is an engineering success, but that it, like any truly all-new automobile, has a few rough points that coming modifications must smooth over.

The test car was a 700 series four-door sedan fitted with just about every option that a Corvair can carry, including automatic transmission. Driven extensively in town and country, it demonstrated real adaptability to both conditions particularly in the fields of performance, handling and capacity.

It accelerates well (o to 30 mph in 5.1 seconds) and it's got a potential top speed of 90 plus. It will cruise all day at legal turnpike limits and corners like the 20th Century Limited. In fact, you have a tendency to enter bends much faster than you might with a front-engined car. For some reason, the weight mass, which is largely in the rear, transmits a feeling that corners can be eaten up quicker. And, they can. Early critical rumors about the handling of rear-engined cars have been completely quieted by the Corvair's road personality.

The only fault exhibited in this area was a tendency to "drift" somewhat in high winds. This is part of the nature of any light car, of course, and can't be put down as a fault exclusive to the Corvair.

Very few modern cars can eat up the rough bumps of a dirt road like this little Chevy. Its traction is great and the vibration transmitted to the passenger compartment is at the very minimum. Squeaks and rattles are also absent, which is a virtue that can be traced to its unit body and a generally high quality of production.

Although this latter point of quality is evident, it is weakened by an unfortunate choice of materials for the car's interior. No doubt the Spartan fabrics and fixtures were selected to match the car's hoped for personality of economy but something a little handsomer would seem to be called for by both the Corvair's delivered price and the plush trimmings of some of its compact competitors.

The Corvair's capacity is one of its happiest assets. It is the lowest-American car on the outside and yet it has the most interior headroom-bar none. Foot room, front and rear is quite



RADICAL IN PLACEMENT, and radical in design, Corvair's powerplant is a six-cylinder opposed which develops 80 hp. Parts that need frequent attention are placed within easy reach.

good and the flat, nearly hump-less floor makes the packing of more than four passengers into the car possible if not too comfortable.

Surprisingly enough, the 9½ cubic feet of luggage space up front is one of the most adaptable storage areas that we have examined. Several small bags, a couple of big ones and lots of pliable jackets and the like can be dropped into this trunk with ease.

As covered at some length in this issue's cross-country test of the Corvair, the gas consumption is disappointing. Our 19.3 mpg city and highway average is a higher figure than most American drivers are used to these days, but it's lower than some had been expecting when they envisioned the Corvair as an all-out economy vehicle. It is not that since Chevrolet apparently has built in more quick performance and extra comfort.

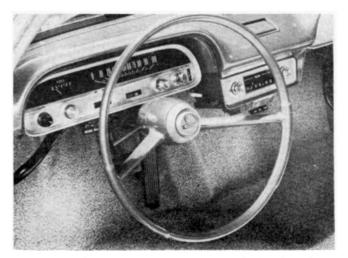
The fact that the car was equipped with an automatic transmission (an adaption of the none too economical Powerglide) has something to do with the lower than expected mileage figure. A manual three-speed version could conceivably offer up to four miles per gallon more.

That the Chevrolet engineers are ready to modify their project after receiving consumer suggestions is proven by changes that are being made currently.

The first production Corvairs had a loud noise under the dash when the heater was in operation. The factory discovered that, by boring a one-quarter inch hole in the heater baffle, this noise left at once. And, the parking brake that was on the early cars, an all-new unit that had a separate release handle above it, has been replaced with a new mechanism that has a pistol grip and built-in trigger release.

The Corvair's inline and opposed air-cooled six-cylinder engine performed throughout the test period without incident. All of its engineering importance has been discussed at length in prior issues. In practical use it stands out for good component accessibility, a seemingly high durability and an extremely low noise level.

Of all the American cars tested in the history of MOTOR LIFE, the Corvair stands out as the most original from bumper to bumper. There is hardly a feature of this automobile which was not designed by first throwing out all existing fads and conceptions. In summing up this initial test (more will follow as Chevy polishes its product), we must conclude that the designers have been successful in the great majority of points. That some modifications have been necessary only proves that it is an allnew product. If it is to be adapted to greater economy with less power is a decision that must wait on further driver reactions. •



passenger comfort. Parking brake release, center left, shown in this picture has been replaced by more conventional pistol grip.

MOTOR LIFE TEST DATA

1960 CORVAIR

TEST CAR: Chevrolet Corvair 700 BODY TYPE: Four-door Sedan BASE PRICE: \$2248

OVERALL LENGTH: 180 inches
OVERALL WIDTH: 66.9 inches
OVERALL HEIGHT: 51.3 inches
WHEELBASE: 108 inches
TREAD: 54 inches front and rear
TEST WEIGHT: 2481 lbs.
WEIGHT DISTRIBUTION: 38 per cent on front wheels

STEERING: 5 turns lock-to-lock
TURNING CIRCLE: 39 feet curb-to-curb
GROUND CLEARANCE: 6 inches

SEATING CAPACITY: four to six FRONT SEAT— HEADROOM: 38.7 inches WIDTH: 57.8 inches LEGROOM: 42.8 inches TRUNK CAPACITY: 9.5 cubic feet

Car

Fest

TYPE: ohv opposed six
DISPLACEMENT: 140 cubic inches
BORE & STROKE: 3.375 x 2.60
COMPRESSION RATIO: 8-to-1
CARBURETION: two single-barrels
HORSEPOWER: 80 @ 4400 rpm
TORQUE: 125 lb.-ft. @ 2400 rpm
TRANSMISSION: two-speed automatic
REAR AXLE RATIO: 3.55

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GAS MILEAGE: 19.3 mpg
ACCELERATION: 0-30 mph in 5.1 seconds, 0-45 mph in 9.6 seconds and 0-60 mph in 18.2 seconds
SPEEDOMETER ERROR: Indicated 30, 45 and 60 mph are actual 30, 44 and 58.1, respectively
POWER-WEIGHT RATIO: 31.01 lbs. per horsepower HORSEPOWER PER CUBIC INCH: .571

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Cross - Country

CORVAIR

Is the Corvair really a small car in the fields of handling, capacity, comfort and performance? What's the overall impression after a long trip?

By DON STEWART

Tow does Chevrolet's new Corvair really handle on the road? How much more (or less) comfortable is it than a Volkswagon? A Biscavne? A Cadillac? Is the luggage compartment too small? Can a family of four enjoy taking an average vacation trip in it? And, most importantly, does the car deliver exceptional economy?

The editors of Motor Life decided the most accurate way to answer these questions concerning GM's new rear-engined economy car was to first secure a Corvair-load a wife and two preschoolers into the vehicle-fill the forward trunk space with as much luggage as it would hold and map a course that would take it over as many different types of terrain as possible in, say, a five-day period.

I won the toss! The wife and pre-schoolers I had. The car, a Corvair 700 with automatic transmission, I acquired from Chevrolet in Detroit.

Then I placed the kids, my wife, a two-suiter, a Car-Sack, a set of golf clubs and several other small travelling bags into the car and we left the Motor City, bound for New York, N.Y., via Cleveland, Washington and Gettysburg, Pa. The latter stop was hurriedly written into the itinerary to appease the children for having to forego five days of televised mayhem, explained as a promise to "stop at the sight of a real, honest-to-goodness massacre."

The route we selected would take us over toll roads, hills, into busy cities and down a few back roads in Bucks County. Pa., or over the same type of terrain that many new Corvair owners would be traversing each year.

The car that we conducted the test with was, as I mentioned, a 700 Series. It was fitted with the automatic transmission, a manual radio, a Harrison gasoline heater, folding rear seat, white sidewall tires and chrome wheel rings. It also came with the "deluxe package" that included front armrests, a right sunvisor and a cigarette lighter and the "convenience package" that included an exterior mirror, pushbutton windshield washers and a backup and glove compartment light. In other words, it was

For such a Corvair you'd pay \$2525.00 delivered in Detroit with taxes, transportation charges and everything else paid for. Which, almost without saying, is getting quite close to the delivered price of several less-optioned bigger cars.

Next Question-"What do you get for over twenty-five hundred dollars?" Well, you get luggage space! The front cargo hold is much, much larger than I expected it to be. The contents described earlier included enough clothing, etc., for at least a week's roaming and the golf clubs, not an absolute necessity for some perhaps, fit very nicely on the floor of the rear seat. So, the initial apprehension of not having enough space for travelling gear appears to have been unwarranted.

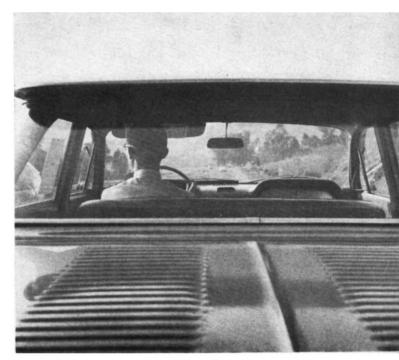
You also get a good share of passenger space for your money! Over nine hundred miles of driving produced no more uncomfortable sitting than would be experienced in a larger Chevrolet and the leg room in front was completely adequate. Without the golf clubs on the floor, two adults could have made the journey in the back seat in as much comfort but anymore than that and you'd be crowding your passengers (and your luck).

You also get a pleasant ride in the Corvair and a rather simple job of chauffeuring, too. The car responds well to all driving conditions. It does have a tendency to move around quite a bit on erratic road surfaces, an inherent fault of most swing-axle vehicles.

You are also aware of a dipping, undulating sort of motion on an even slightly bumpy surface that, while it isn't un-nerving, does transmit "rolling sea" feeling to the passengers.



LUGGAGE COMPARTMENT capacity according to the figures, 9.5 cubic feet, should have been small compared to bigger cars, but in actual practice it proved adequate for plenty of gear.



THOSE WHO HAVE spent their cross country trips riding in bigger cars might be surprised at Corvair's low fatigue level. Another very pleasant discovery is the good, all-around visibility.

But basic comfort is a part of your investment with a Corvair and you get your share. One thing that could be improved upon is the front seat cushions. Your thighs and rump get numb very easily because of the lack of padding (or the seat design). This fault might be corrected by using cushions and the individual owner will perhaps want to try it.

In the 912 miles covered, the car consumed 44.8 gallons of regular grade gasoline. This figures out to an average of 20.3 mpg.

The kind of driving that produced this gas mileage was common in a moderately long trip in the Eastern states. Highway speeds averaged 60 mph. City driving-about 20 per cent of the total distance-was at normal urban limits. There were a few hilly sections, long stretches of level road; in other words, nothing particularly unusual.

It is probable that had the test trip been made in, say, the West, over longer straights of level roads and through less congested traffic, the mpg average would have been better. A further factor, of course, was the automatic transmission. Maximum economy, if that's the goal, comes only with a manual gear box. So what a Corvair would have yielded under those more favorable conditions can only be guessed, but it unquestionably should be an increase of several miles per gallon.

Three days after I returned to Detroit, I had an opportunity to drive another Corvair, also with an automatic transmission. My driving then was in city traffic, on open highways and on the fast expressways. The mpg results were not significantly different.

The New York trip also answered the other major questions about the Corvair. Most important of these probably is that Chevrolet's new baby, although a compact, is no less adequate or comfortable for average long-distance family travel than a

It definitely is not restricted, as some had anticipated, to around-town driving only. The luggage capacity is smaller than a big car, but not as much as appears at first glance. In short, the Corvair is compact only from the outside-inside it's big enough. •

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