



FIRST, TAKE A WRECKED CORVAIR...

Two good reasons for basing a buggy on the Corvair are availability, plus the 'Vair's uncommonly strong engine.

BY DAVID BEAN, ENGINEERING EDITOR

THE DUNE BUGGY BOOM is apparently absorbing VW chassis and engines faster than VW owners are producing wrecks for salvage. Just as the buggy business is getting into top gear, the basis for the idea, the VW platform chassis, is becoming either very scarce or very expensive. Nor is the VW factory helping matters any. VW has refused to sell the assembled chassis, new, to buggy builders, and buying the parts piecemeal over the

CORVAIR BUGGIES

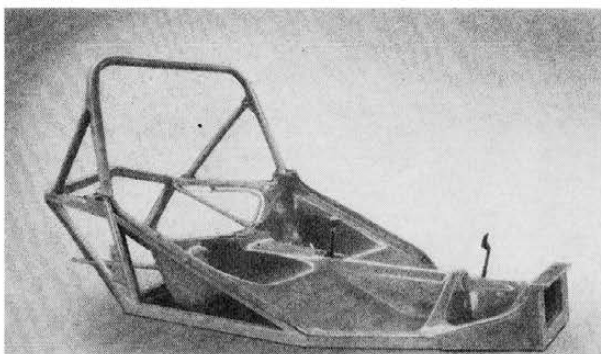
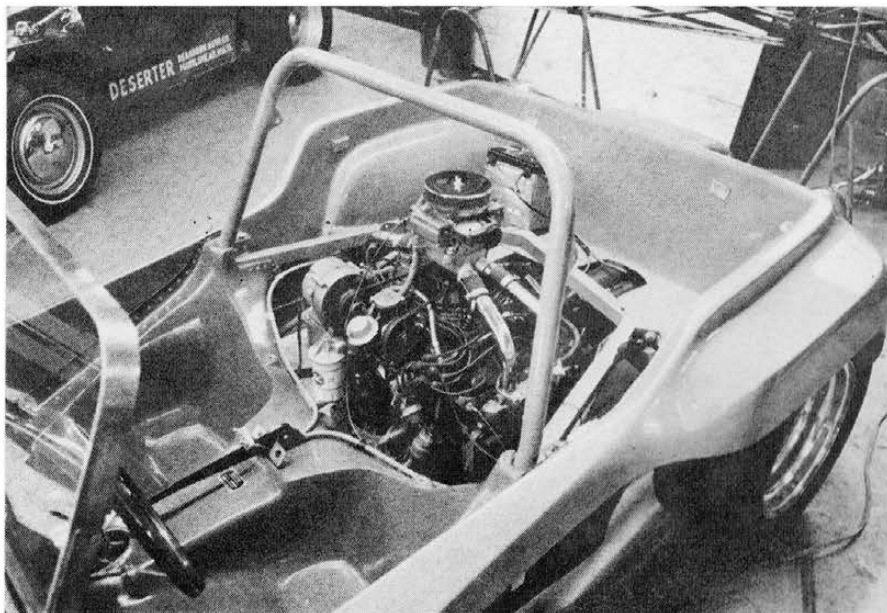
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counter is too costly. The situation doesn't show any indication of improving.

Evolving out of this dilemma is another (and maybe better) generation of buggy kit—the Corvair-based buggy, using not only the engine, but the entire drive train, at least a portion of the suspension system, and a specially constructed frame. It solves the original problems of availability and cost, and adds the attendant advantages of more power and reliability. Replacement parts and technology, too, are as near as a Chevrolet dealer. Handling, too, can be vastly better by going to Corvair components, and the finished product is beefier.

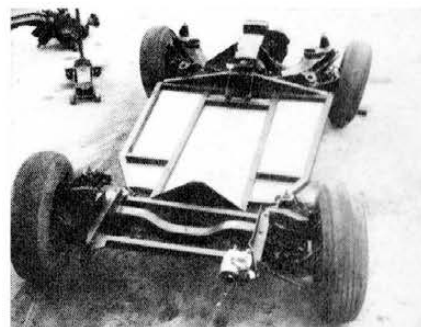
Presently on the market, or fast being tooled up, are frame kits that will accept the Corvair engine and transmission, rear suspension, and the Corvair front suspension, the VW's or some other lightweight front end from an import. The usual buggy body then bolts on over this. The special frame is needed because the Corvair is of unit construction, instead of having a platform frame. This negates simply removing the body and shortening the frame as with many VWs. The Corvair uses the module system; the front and rear suspension systems unbolt as a unit and can be transferred to the custom frame intact. Because of the special frame requirement, the second generation kit brings new sophistication to buggies. For once the builder can be assured of having a sufficiently strong and straight frame. No more questionable frames from a wreck or botched shortening jobs. Since the frame is being supplied, many of the brackets and other bits are already attached and the whole build-up can become simpler. Too often buggy kits leave the builder on his own to improvise detail items.

Granted, the custom frame is a new expense, but component cost quickly offsets this. The veteran VW scavenger will be delighted when pricing the corresponding Corvair stuff. And since the Corvair frame isn't used, components may be salvaged from heavily damaged wrecks. In the case of using a portion of VW components such as front suspension, buying these piecemeal and assembling on the special frame can still turn out cheaper in the long run. Corvair accessories, also salvaged from one or more wrecks, are plentiful—things like real fuel gauges, conventional electrics with 12-volt rating, even SAE standard bolting.

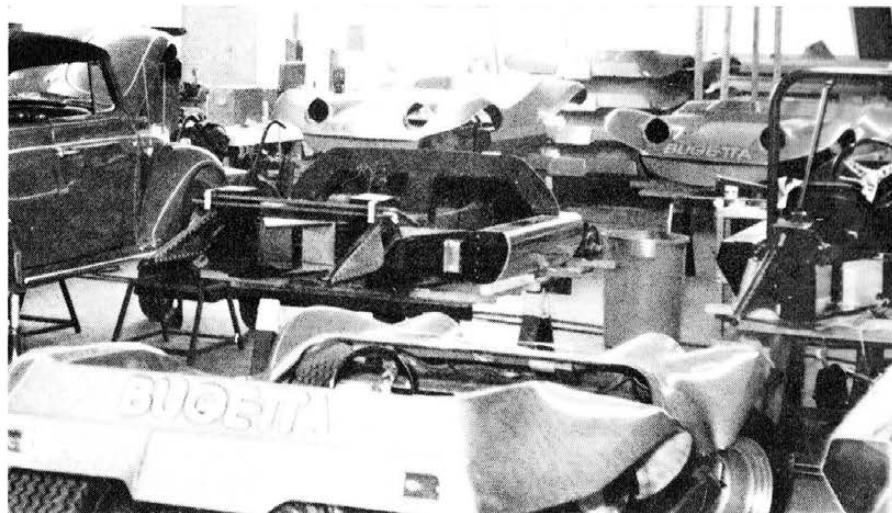


HEART of buggy is spunky Corvair, located smack in center of Dearborn's chassis (above). Engines can easily get near 200 bhp. Buggy frame, into which engine is dropped, is nicely done, has roll bar which increases chassis strength.

HEAVY-DUTY components go into the under portion of Corvair buggies such as this. It was built by Autodesign, San Diego, Calif.



EISERT'S BUGETTA factory in Costa Mesa, Calif., turns out semi-monocoque chassis, bodies, for Corvair based buggy, with sanitary race car finish (below).



Depending on what configuration is used, handling can be vastly improved over a standard Volks buggy. For exclusive street use, the '65 or later fully independent system of the Corvair is ideal. The late Corvair, by the way, is one of the few cars to come out of Detroit with near optimum suspension geometry, and makes a very good handling set-up for a sporty street or slalom buggy. It doesn't do poorly in the rough either. The buggy class of the recent Mint 400 (page 64) was won by such a set-up.

Consensus among builders is that the VW front suspension does have a slight edge for the *serious* off-road competitor because of the superior rock crawling capabilities and extra travel of the trailing arm suspension. However, if the buggy is going to be used for the street a portion of the time, the buyer may be well advised to stay with the cheaper and better pavement handling qualities of the Corvair. For the rear, it's a toss-up between the VW and the pre-'64 Corvair suspension, since they both have swing axles. For cost and convenience, it's best to stay with the

Corvair transaxle and suspension.

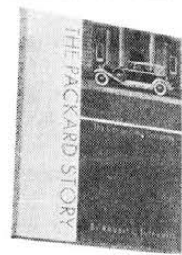
The question of power, of course, hardly needs mention. Where the stock VW starts at 36 bhp and has a potential of maybe 100 reliable horses, the Corvair starts at 80 and can be taken beyond 200 bhp. Better still, in off-road racing where brute power isn't that much a factor, a good, completely stock, 140-bhp version not only puts the hurt on the opposition, it does it dirt cheap. The Corvair buggy will be heavier, due not so much to the engine, but because of the cast iron transaxle and heavier front and rear modules. The rolling chassis will run in the neighborhood of from 100 to 200 lb. heavier than the shortened VW platform with running gear and drive train. *But* the special frame increases the strength per pound enough to make the weight penalty worthwhile, and the extra poundage is offset by extra power.

All of this is not without its drawbacks, though. The unsprung weight of the Corvair systems is high and will necessitate stiffer springs than the VW buggy would normally use, resulting in a stiffer ride. The Corvair transmission,

even the four-speed, doesn't have the most ideal ratio spacing for a light car, and the track of the Corvair front and rear is much too wide for most early buggy bodies. The Corvair engine also has earned a bad reputation for being an "oiler:" where oil can get out, sand can get in. Gaining ground clearance or trying to restore the proper geometry to the suspension is not as simple a task as it is on the VW chassis, and special springs have to be incorporated on some designs.

Kits on the market range from bare frames through complete frame/hardware/body packages to completed operational cars. Con-Ferr, one of the pioneers of this new generation buggy, markets a welded platform frame that will take '60 to '64 Corvair rear assemblies and either the Corvair or VW front suspension, and also supplies frames to Meyers Manx for its new Manx-Vair kits (which are complete with bodies and related hardware). A San Diego firm, Autodesign, makes a series of frames to take both early and late Corvair equipment with or without VW front suspension. It is one of the

Manufacturer	Kit Type	Frame Construction	Frame Material	Front Suspension	Rear Suspension & Transaxle	Miscellaneous
Autodesign 3335 Niblick Dr. La Mesa, Calif. 42041	Frame & fittings (include stabilizer bars, motor mounts and skid plate)	Backbone platform type	Welded mild steel sheet	Corvair or VW	'60-64 Corvair	Frame weight—160 lb.
Autodesign 3335 Niblick Dr. La Mesa, Calif. 42041	Lightweight frame kit	Tube frame with stressed panels	Mild steel square tubes, aluminum panels	Corvair or VW	'60-64, '65-69 Corvair	Frame weight 86 lb. has fiberglass inner floorboard with integral linkage mounts
Bugetta Eisert Racing Entr. 3037 Enterprise St. Costa Mesa, Calif. 92626	Complete car	Monocoque	Aluminum sheet	Specially designed and fabricated double A-arms, torsion bars	'60-64, '65-69 Corvair torsion bars	Sophisticated race car type construction, advanced chassis design, \$2995 for running vehicle
Con-Ferr 300 N. Victory Burbank, Calif. 91502	Frame and fittings	Backbone platform type	Welded steel sheet	Corvair or VW	'60-64 Corvair ('65-69 Corvair planned)	Frame weight—145 lb.
Dearborn Automobiles 2 Barnard St. Marblehead, Mass. 01945	Frame and fittings; frame/body kits, or complete car	Space frame	Mild steel square tubes	VW	VW transaxles, special trailing arms, adjustable coil springs, Koni shocks	Mid-engine primarily a slalom and road racing design. Frame & chassis constructed by Autodynamics, a race car builder
Fibe-Ron Mfg. 24-37th Ave., S.E. Minot, N. Dak.	Frame & fittings and frame/body kit	Backbone platform type	Welded mild steel sheet	Corvair	'60-64 Corvair '65-69 Corvair	Complete Corvair based, frame similar to Con-Ferr
Manx-Vair B. F. Meyers & Co. Box 8266 Fountain Valley, Calif. 92708	Frame/body kit	Con-Ferr's backbone platform	Welded sheet steel	VW or Corvair	'60-64 Corvair	Complete buggy kit using Con-Ferr's frame, Meyers Manx body
Vaquero Sand Chariots 505 E. Walnut Fullerton, Calif. 92632	Frame components kit (unwelded) frame/body kit	Round tube with platform	Round steel tube	Corvair, VW, Fiat, Renault	'60-64 Corvair ('65-69 Corvair planned)	Universal type chassis, will accept suspension and drive trains from Fiat, Renault, in addition to Corvair and VW
Sand Techniques Box 458 Rosemead, Calif. 91770	Frame only	Ladder-type tube frame	Square and round steel tube	Corvair, VW	'65-69 Corvair	
Aussie Enterprises 24519 Ann Arbor Trail Dearborn Heights, Mich. 48127	Frame kit	Ladder-type tube frame	Square steel tube	Corvair	'60-64 Corvair '65-69 Corvair	



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CORVAIR BUGGIES

continued

few Corvaire kits that has nearly universal body fitting capabilities.

The exciting new Vaquero dune buggy by Ocelot is built on a universal frame that not only fits the Corvaire units, but VW, Renault, and Fiat. This gives the builder a greater latitude of front suspension design (the Fiat and Renault pieces offer a beautiful opportunity to lighten the front end) as well as easing the cost problem even further.

Indy car builder Jerry Eisert builds the handsome Bugetta, an all-Corvaire design that so far is being sold only as a completed car. Building it in a racing shop has had its effect. The Bugetta has a beautifully handcrafted semi-monocoque frame, fabricated race car front suspension, and the general look of a professionally built racer. Unfortunately, like all things done well, it is expensive. Eisert is finding that the \$2995 for the completed car (it's well worth it) is not paying the wages of the racing mechanics who are building it; and production is not keeping up with the demand. When the initial run is finished, production will probably be suspended until a more efficient production technique can be figured out.

The list goes on. There are several small, almost backyard concerns, building excellent frame kits that offer nearly anything the buyer may want. There's even one company in Minot, N. Dak., making frame (and body) kits similar to the Con-Ferr. North Dakota may sound like a strange place to manufacture buggies, but at least they chose the right car. VW never seemed to make it very big in the Midwest; and those that did show up there never seemed to crash.

Down east in Marblehead, Mass., Dearborn Automobiles makes a new version of its popular "Deserter" buggy that mounts a Corvaire engine ahead of the axle, contemporary race car style. The primary reason was to create a slalom special, but with its VW suspension, it would lend itself well to off-road use as well.

We look for this mid-engine trend to be the next significant development in the buggy industry. It would detract little from the off-road capabilities and greatly enhance the pavement handling. After all, mid-engine, fully independent Corvaire suspension and Corvaire power in a lightweight two-seater is only about two steps down from a Group Seven car, and that makes a street machine worth talking about. ■

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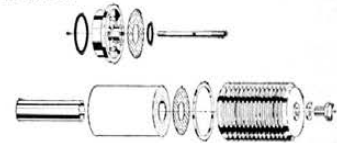
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