

ANNUAL HOME-IDEA ISSUE

POPULAR SCIENCE

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Compact Workshop

**Shares
Garage
with
Compact
Car**

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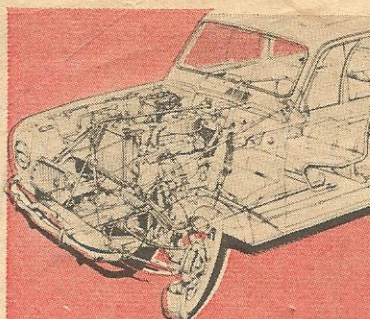
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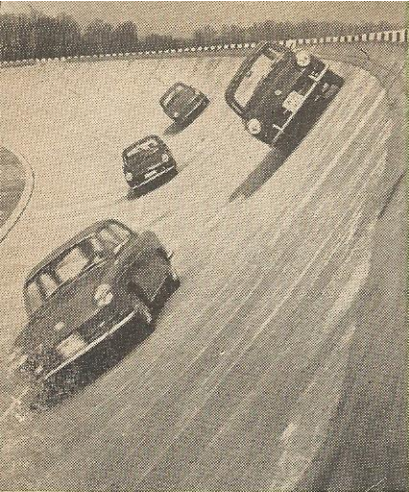
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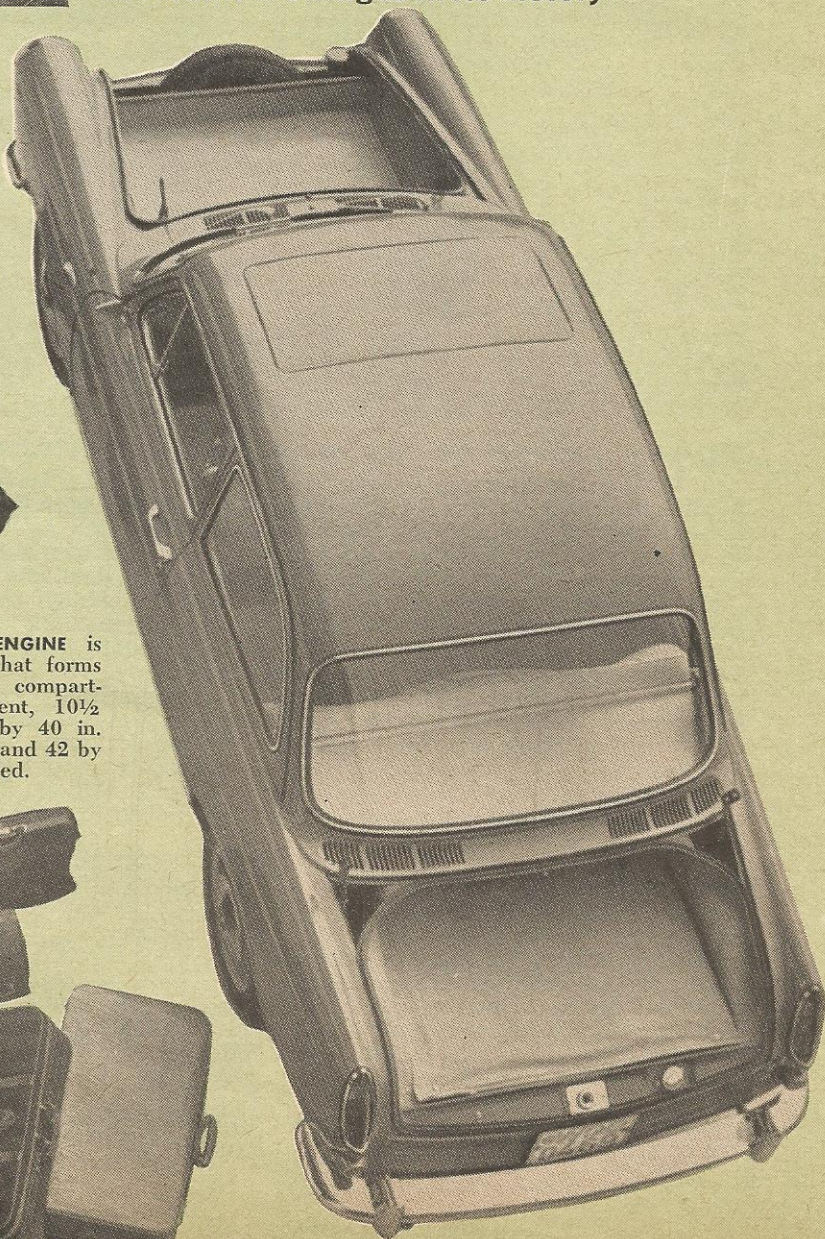
Inside the New and Bigger VW

Germany's stubby beetle goes stylish, with a huskier, sassier engine, in the first radical changes in its history

VW 1500 has top speed at least 10 miles an hour higher than that of standard Volkswagen. Cars above are tooling around VW test track.



FOUR-CYLINDER REAR ENGINE is hidden beneath panel that forms floor for extra luggage compartment. Front compartment, 10½ in. high, measures 27 by 40 in. Rear one is 9¼ in. high and 42 by 35. Leg room is increased.



By Devon Francis

THAT spanking-new Volkswagen you've been hearing about was officially unveiled last month.

It looks nothing at all like its beetle-shaped parent. Its lines, in fact, would suggest that Detroit had a hand in styling it. By the performance yardstick that Europe applies to cars in its price class, it's full of beans. A pancake engine is still there in the stern, but gone is the cooling-fan belt.

The car embodies the first radical changes in VW's history.

Designated the 1500 (a nice round figure derived from the 1,493 cubic centimeters in its engine displacement), it compares with the old one:

	Volkswagen	VW 1500
Overall length	160 in.	166.3 in.
Width	60.6 in.	63.2 in.
Height	59 in.	58.1 in.
Curb weight	1,631 lb.	1,896 lb.
Horsepower	40 @ 3,900 r.p.m.	53 @ 4,000 r.p.m.
Piston disp.	72.74 cu. in.	91.09 cu. in.
Comp. ratio	7:1	7.2:1
Bore	3.031 in.	3.3 in.
Stroke	2.52 in.	2.7 in.

The wheelbase for the two cars is the same—94.5 inches.

And now that this bagful of goodies has been dangled before your eyes, you're due for a disappointment: The VW 1500



COMPLETE BREAK WITH TRADITION is emphasized by these comparison views of standard VW and new one. Weight is distributed 60 per cent rear, 40 front. Chevy Corvair's is 63-37.

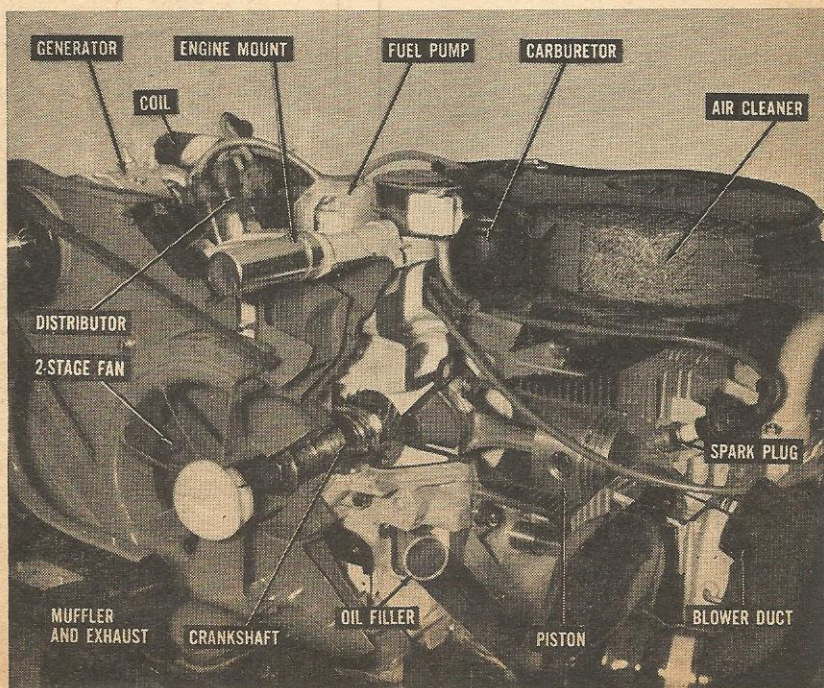
will not be sold in the U. S., at least for the present.

The company, Volkswagenwerk A. G., says it's for distribution solely in Europe and among those citizens of the other 120 countries where Volkswagens are sold. If it were sold over here now, it would cost roughly \$2,000, compared with \$1,595 for the regular VW two-door sedan at the New York port of entry.

Why a new VW? The VW people ad-

CONTINUED

BIG CHANGE in engine, as shown in this cut-away, is in the air-cooling fan. Replacing big, belt-driven, radial-type blower is two-unit fan—one radial, one axial—driven directly off crankshaft. This supplies five parts of cooling air for engine, one part fresh air for warming passengers, plus carburetor air. Axial fan's diameter is 7½ in., radial's 12 in. In standard VW, heating air is ducted to car's interior after cooling cylinders. Newly positioned dipstick is attached to underside of the oil-filler cap.



The VW 1500 looks like a leaf out of Detroit's style

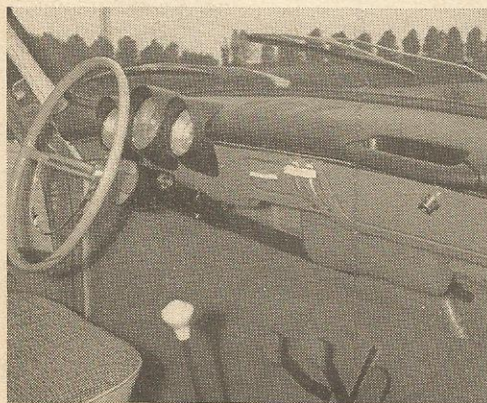
vance some plausible explanations for denying the new car to potential American customers. They say that for what it offers in performance, the 1500 could not compete in price with domestic compacts. They say they haven't the cars to send over here—production of the 1500 this year will amount to only 75,000 out of a total of a million vehicles. They say their dealers would have to stock parts for another car.

This may be a new high in tortured reasoning. As production of the 1500 rises, the price will inevitably drop. U. S. VW dealers would snap at the chance to sell it. Anyone who believes that Volkswagen's new automobile won't appear over here—particularly if the booming sales of the regular VW begin to level off—may go soak his head in a bucket.

This POPULAR SCIENCE reporter saw and drove a handmade prototype of the new VW at the factory in Wolfsburg, Germany, last May.

The car is cannily designed to look economical—as if it *had* been built by especially dollar-conscious elves in the Black Forest. Sieved through the practical German mind, it works out pretty well. The styling is tasty, and even smart, when the old and new cars are put side by side. The front end carries a faint suggestion of Renault's sparkling Caravelle. There is loads of glass area.

Germans aren't used to U. S.-style inquisitive magazine reporting.



HOODED INSTRUMENTS now include a gas gauge as well as an oil temperature and pressure gauge, a speedometer, and clock. A trick lever on left doorjamb locks lid over the rear deck.

"Who styled your car?" you ask a passel of VW dignitaries.

"Nobody. We have no stylists."

"But somebody," you protest, "had to draw a picture of it in advance."

"Well, we employ consultants."

Pursue that dead end if you want to. At the end of 10 minutes you're right where you started.

Frau Nordhoff's handrail. Instruments are hooded in the best Detroit fashion. On the right side of the dash is a handrail like that in a Chevy Corvette. This same handrail appeared some months ago on the regular VW. To carry the Detroit analogy further, even as the wives of reigning vice presidents over here suggest changes in cars in the cocoon stage, so did Frau Charlotte Nordhoff, wife of the Volkswagenwerk director-general, ask her husband why he didn't supply a grab bar for his right front-seat passengers.

There's a gas gauge, even as there is on the regular VWs now beginning to arrive in the U. S. The hardware is elegant, even by Cadillac standards.

Apart from looks, the new VW differs from its forebear in mechanical innards. The engine is Volkswagen only in principle. The manufacturer calls it a "suitcase" engine. It's nine inches lower than that in the regular VW, largely due to a new type of fan for the air-cooled cylinders.

The decapitation makes possible the addition of a station wagon to the line.

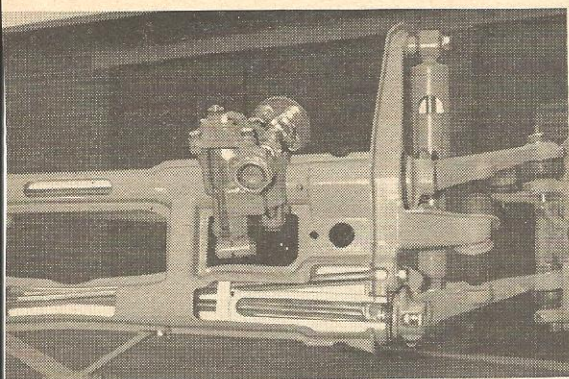
Like the standard engine, the new one has no cylinder block as such. VW simply casts four iron cylinders, shrinks them on to steel inserts, and bolts them to a crankcase. The biggest user of magnesium in auto manufacture anywhere, VW makes not only the crankcase of this metal but the transmission and fan housing, as well.

None of the parts of the old and new engines are interchangeable.

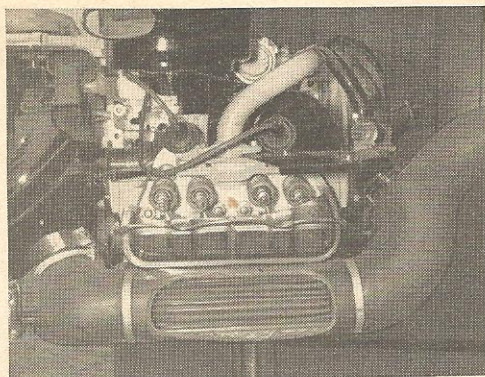
All four speeds in the transmission are synchronized—as, indeed, they are now in the standard VW. This box is even more fun to shift than that of the four-speed Corvair. The stick is crisp, the throws short. The ratios in both cars are the same: 3.8, 2.06, 1.32, and .89.

The 1500 keeps its head in the corners. This reporter found it willing to take

book—and even comes in a swank station-wagon version



FRONT SUSPENSION features two-arm ball joints in place of the standard VW's kingpins. Instead of the latter's laminated torsion-bar springs, the new car has solid bars.



HEAT-EXCHANGER SYSTEM for warming passengers is depicted by this cutaway. Fresh air in semiclosed plumbing circuit is routed from blower, around exhaust, and into the car.

hairpin turns on the test track infield at 10 m.p.h. beyond posted speeds.

The ride is splendid. On a deeply ridged washboard road where an American compact car, thoughtfully provided by the VW people, shook off one's spectacles, the 1500 went through as if on skates.

The top speed is in the area of an indicated 133 kilometers (about 83 miles an hour), with the speedometer error three miles an hour on the high side. This compares with an indicated 70-72 in the standard VW.

The 1500 accelerates from a standing start to an indicated 100 kilometers an hour—62.5 m.p.h.—in 20 seconds, compared with 26.8 seconds for the standard VW. Performance, of course, costs money. The standard VW will go 100 kilometers on 7.5 liters of gasoline. The 1500 requires 9.5 liters or, roughly, a gallon for each 25 miles.

Volkswagen officialdom can get pretty

sticky about nomenclature in a discussion of the new car. The standard Volkswagen, for instance, is not "the old car." It's "*the* Volkswagen." The new car is the "VW 1500," using only the initials, not the spelled-out name.

"They are two different cars," explains a company officer earnestly.

Yes, they are. The VW 1500 was created for the same reason that there are Buicks a cut above Chevrolets and Cadillacs a cut above Buicks. The new Volkswagen—pardon, the VW 1500—is for the man getting up in the world, ready to burnish his status symbol.

For the U. S. market, the 1500's conformance to contemporary styling may be self-defeating. Anyone can spot a Volkswagen a mile away. It has become a mark of distinction. Who wants to drive a car that can't be distinguished from an Opel, Simca, Ford Anglia, Taunus, or Hillman—or indeed, from a Falcon, Comet, Lark, Olds F-85, Tempest, or Valiant? ■ ■

REAR ENGINE in wagon, under floor like Corvair's, permits a cargo space 67 in. long and 48 wide over the wheel wells. One of car's engaging oddments is a cylinder in front compartment that, filled with compressed air, energizes windshield squirters.

