The Motor Road Test No. 35/58

Make: VW **Type:** Devon Caravette Mk. II

Makers: Caravan conversion by Lisburne Garage, Babbacombe Road, Torquay, Devon; *based upon Volkswagen Microbus imported by VW Motors Ltd., 32-34 St. John's Wood Road, London, N.W.8.*

Test Data

CONDITIONS: *Weather: Mild and dry with moderate breeze. (Temperature 46°-50° F., Barometer 22.9—30.0 in. Hg.) Surface: Damp and dry tarred macadam and concrete. Fuel: Intermediate-grade pump petrol (approx. 85-90 Research Method Octane Rating).*

INSTRUMENTS

Speedometer at 30 m.p.h.	4% fast
Speedometer at 60 m.p.h.	4% fast
Distance recorder	accurate

WEIGHT

Kerb weight (unladen, but with oil, coolant and fuel for approx. 50 miles)	22¼ cwt.
Front/rear distribution of kerb weight	44/56
Weight laden as tested	26 cwt.

MAXIMUM SPEEDS

Flying Quarter Mile

Mean of four opposite runs	58.2 m.p.h.
Best one-way time equals	61.2 m.p.h.

"Maximile" Speed (Timed quarter mile after one mile accelerating from rest.)

Mean of four opposite runs	59.2 m.p.h.
Best one-way time equals	60.6 m.p.h.

Speed in Gears

Max. speed in 3rd gear	48 m.p.h.
Max. speed in 2nd gear	31 m.p.h.
Max. speed in 1st gear	17 m.p.h.

FUEL CONSUMPTION

43.5 m.p.g. at constant 20 m.p.h. on level
39.0 m.p.g. at constant 30 m.p.h. on level
34.5 m.p.g. at constant 40 m.p.h. on level
29.5 m.p.g. at constant 50 m.p.h. on level

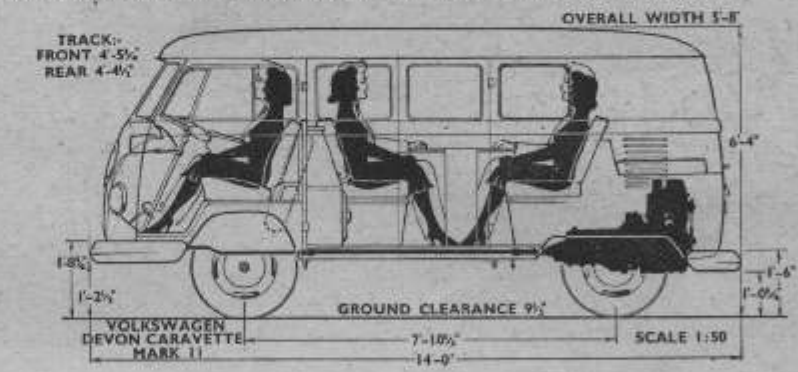
Overall Fuel Consumption for 458 miles, 16.9 gallons, equals 27.1 m.p.g. (10.4 litres/100 km.) (Overall fuel consumption test shortened by distance recorder failure.)

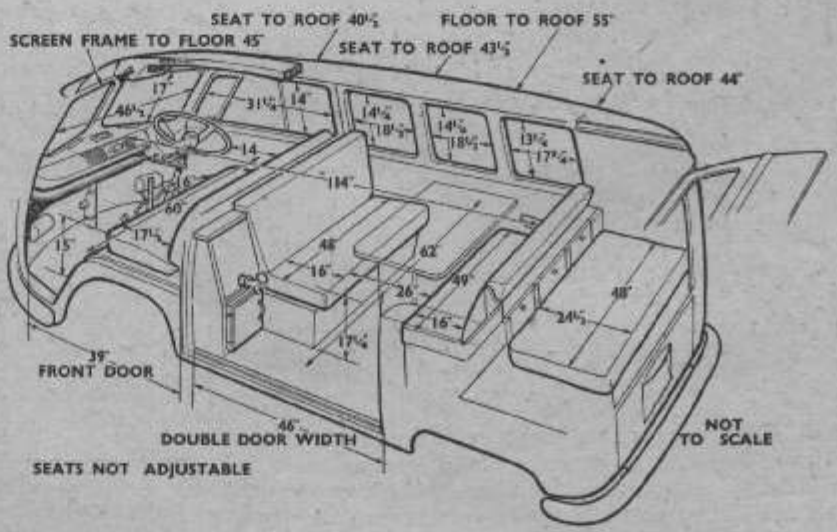
Touring Fuel Consumption (m.p.g. at steady speed midway between 30 m.p.h. and maximum, less 5% allowance for acceleration): 30.5 m.p.g.

Fuel tank capacity (maker's figure): 8.8 gallons, including 1.1 gallon reserve.

STEERING

Turning circle between kerbs:	
Left	34½ feet
Right	34½ feet
Turns of steering wheel from lock to lock	2½





ACCELERATION TIMES from standstill

0-30 m.p.h.	9.1 sec.
0-40 m.p.h.	15.5 sec.
0-50 m.p.h.	31.0 sec.
Standing quarter mile	26.5 sec.

ACCELERATION Times on Upper Ratios

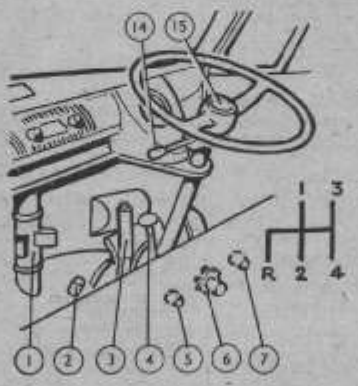
	Top gear	3rd gear
10-30 m.p.h.	15.5 sec.	9.6 sec.
20-40 m.p.h.	16.4 sec.	11.9 sec.
30-50 m.p.h.	25.0 sec.	—

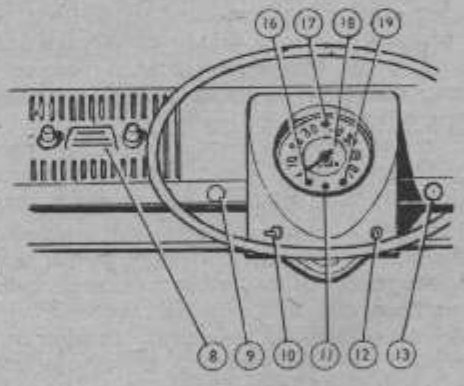
BRAKES from 30 m.p.h.

0.62g retardation (equivalent to 36½ ft. stopping distance) with 110 lb. pedal pressure
0.72g retardation (equivalent to 42 ft. stopping distance) with 75 lb. pedal pressure
0.54g retardation (equivalent to 56 ft. stopping distance) with 50 lb. pedal pressure
0.20g retardation (equivalent to 150 ft. stopping distance) with 25 lb. pedal pressure

HILL CLIMBING at sustained steady speeds

Max. gradient on top gear: 1 in 16.0 (Tapley 140 lb./ton)
Max. gradient on 3rd gear: 1 in 9.7 (Tapley 230 lb./ton)
Max. gradient on 2nd gear: 1 in 6.6 (Tapley 335 lb./ton)





1, Heater air distributor. 2, Headlamp dip switch. 3, Handbrake. 4, Gear lever. 5, Choke control. 6, Heater control. 7, Fuel on/off/reserve cock. 8, Radio controls. 9, Windscreen wipers switch. 10, Body rear light switch. 11, Headlamp high beam warning light. 12, Ignition and starter switch. 13, Lights switch and panel light rheostat. 14, Direction indicator switch. 15, Horn button. 16, Dynamo charge (and cooling system) warning light. 17, Direction indicator warning light. 18, Speedometer and distance recorder. 19, Oil pressure warning light.

The VW Devon Caravette

A Caravan Conversion Based on the Volkswagen Microbus

The space-saving boxy shape of the VW transporter body, with fully forward control and the engine at the extreme rear leaves a clear central "saloon" for caravan equipment.

MOTOR caravans as a species have merits and demerits in relation to trailer-type caravans which are quite straightforward: given that only limited accommodation is needed, the self-propelled caravan is faster, more manœuvrable, probably more economical, and can be parked on any site which will accept a car; moreover with two up the Caravette restarted on a 1-in-3 gradient. On the debit side, it is less comfortable to sit in or drive than the family car which would ordinarily be used as a tug, and the caravan part necessarily accompanies the driver like Mary's little lamb, whether it is wanted or not. A typical trailer caravanning motorist might have a maximum speed of 75 m.p.h. with the caravan left at home, or 30 m.p.h. (legal) maximum when towing, whereas the motor-caravanner has 60 m.p.h. available every day.

The Devon Caravette produced by Lisburne Garage, of Torquay, comes somewhere about the middle of the price range of these vehicles, a proportion of the cost being accounted for by the duty on the imported Volkswagen Microbus on which it is based, although vehicles of this type are not subject to purchase tax. As a caravan, it offers accommodation, cooking and washing facilities (but no lavatory) for two adults and two small children, while a tent attachment, which is available as an extra, would help to house more of the eight people who can be transported in it.

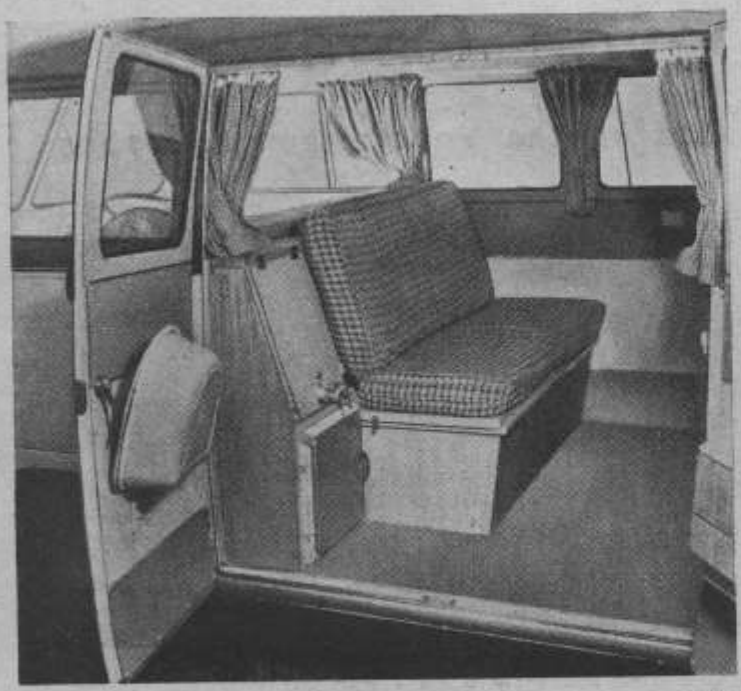
As a car, the Caravette's most surprising quality is its compactness. By the standards of private motoring, eight-seater capacity suggests a large and possibly cumbersome vehicle. Such, however, is the saving in space achieved by the rear engine, full-width interior and more particularly the forward-control driving position, that the overall length is approximately 6 in. more than that of a Hillman Minx and the width about the same as that of a Ford Consul. With a turning circle between kerbs of only 34½ ft., it is thus dimensionally quite convenient, and once the driver is accustomed to it the Caravette can even be easier to park in some circumstances than an ordinary car.

Forward control—meaning a driving position ahead of the front wheels—will be strange and possibly daunting at first to the majority of car drivers. In practice few of them will fail to adapt quickly to the "cab" of the Volkswagen. The first impression inevitably is of being very high off the ground, with little in front and a great deal behind. The bench seat is fairly upright and non-adjustable, which is inconvenient from the point of view of comfort, but less so in regard to control because all the pedals are pushed downwards rather than forwards; the steering wheel on an almost vertical column is also unfamiliar. There, however, the difference ends. The steering is light, but with its big wheel it is not so indirect as to destroy precision, and is in fact more responsive than many orthodox cars, without suffering from road reaction. The absence of a bonnet or front wings to aim by proves to be no handicap at all, partly because the vehicle is naturally straight-running and partly because the height of the driving seat gives a perspective view of the road which is of astonishing usefulness. Far from inching nervously through heavy traffic, a driver sitting above potential obstacles and surveying them over an almost uninterrupted 180°

One steps up into the fully forward driving compartment which provides unrestricted forward vision from the non-adjustable bench seat. Near-vertical steering column, slickly positive gear-change and powerful handbrake are notable features.

In Brief

Price, as tested,	£930 (No purchase tax)
Capacity	1,192 c.c.
Unladen kerb weight	22¼ cwt.
Acceleration:	
20-40 m.p.h. in top gear	16.4 sec.
0-50 m.p.h. through gears	31.0 sec.
Maximum direct top gear gradient	1 in 16
Maximum speed	58.2 m.p.h.
"Maximile" speed	58.2 m.p.h.
Touring fuel consumption	30.5 m.p.g.
Gearing: 15.1 m.p.h. in top gear at 1,000 r.p.m.; 36.0 m.p.h. at 1,000 ft./min. piston speed.	



Wide double nearside doors open on the interior, which has two wide facing bench seats (a table can be clipped between them), a water tank above a cold-store food cabinet, and a hinged washbasin on the forward door.

The engine is in a compartment below the small single bunk at the extreme rear and is illuminated at night. This picture shows dipstick access.

The VW Devon Caravette

arc of vision, should soon be able to steer through gaps of minimum width with great confidence. An incidental advantage for touring is enjoyment of a view of large parts of the countryside which are concealed from other motorists by hedges and walls.

To revert to steering control, a little practice is necessary to estimate the position of the rear wheels when backing into a kerbside parking place. Three driving mirrors are especially useful as the sliding side windows do not allow the driver to put his head out very easily, but the Caravette shares with station wagons the parking advantage that, although placed rather high up, the rear window is the rearmost part of the vehicle. As supplied for test, the front wheels were fitted with normal Michelin, and the rear with Michelin X wire-reinforced tyres, producing a consistent understeering tendency in contrast to the Volkswagen saloon with which many people are familiar. Although the understeer is not excessive under normal conditions, it can be provoked to the point of front-wheel sliding if a very sudden turn is attempted on a wet road.

Like the steering, the throttle control is smooth and responsive, and 1.2 litres propel 22¼ cwt. through a transmission with an overall ratio equivalent to 15 m.p.h. per 1,000 r.p.m. much more briskly than might have been feared. The air-cooled engine needs the choke for morning starts only after a night frost, and warms up almost instantly. Designed for maximum power at no more than 3,700 r.p.m., it withstands continuous full-throttle driving with no measurable oil consumption, and no apparent adverse effect apart from slight pinking and running-on if straight commercial-grade fuel is used. A mixture of about half commercial and half premium grades is a satisfactory compromise. The inherent balance of an opposed four-cylinder, and its remoteness from the driving compartment, make the engine reasonably unobtrusive unless it is pressed hard at low speeds in too high a gear.

The rather leisurely performance indicated by the figures recorded with this report is borne out on the road, where drivers given to hurrying must be prepared for, say, a 35 m.p.h. average when they would normally expect 40 to 45 m.p.h. over a longish run. It is, in any case, necessary to make full use of the four-speed gearbox, and every encouragement is given by an excellent central gear change with the Porsche-type, virtually unbeatable, synchromesh on the upper three gears. The seat being fixed, all drivers have to stretch rather far forward to engage first or third, while reverse gear —guarded by a push-down catch—generally presents something of a struggle.

Traction is very good, which could be a considerable advantage for caravanners parking off the road. Soft suspension and the absence of a propeller shaft as a shock-absorber combine to make the transmission rather snatchy under acceleration in the indirect gears, whereas the clutch is definitely in the private-car category for lightness and smoothness. Little need be said about the brakes, except that they appear to be perfectly adequate to the performance of the machine (no opportunity occurred to test the Caravette in mountainous country), and that a full load would probably improve on the best stopping figure, which was taken with the rear wheels just locking. The hand brake is a sensible and powerful affair with a lever on the floor.

Instruments and minor controls for the driver have been kept to a serviceable minimum. The single dial, illuminated at night by a lamp with a rheostat switch, contains a speedometer and distance recorder, with coloured warning lights for oil pressure, generator, headlamp main beam and direction indicators. The latter are of the now rare semaphore type, under the control of a finger-tip switch beneath the steering column which is frequently cancelled from its left-turn position by a long-legged driver raising his knee to operate the clutch. A key-starter is fitted, while there are knobs at the bottom of the seat bulkhead for choke, heater and fuel, the nine-gallon tank including a reserve of just over a gallon.

Caravette comfort has two aspects: mobile and stationary. For the driver and front-seat passenger, forward control magnifies the up and down motion of soft but quite firmly damped springing, and this together with comparatively restricted leg room makes about a couple of hours the longest period for which most people will want to drive without a break. In hot weather ventilation is provided by sliding windows and hinged panels on the front doors, hinged quarter lights and a cold-air intake in the roof which can be ducted to cool either the front or rear compartments, or both. In winter the outside air is efficiently kept at bay except for one or two rather piercing draughts around the pedals and control levers, and counteracted by a good volume of hot air from the engine, delivered also to front or rear at foot level, as well as onto the windscreen for demisting. Under certain wind conditions, fumes from the exhaust tailpipe appear to find their way into the engine bay sufficiently to make the heater

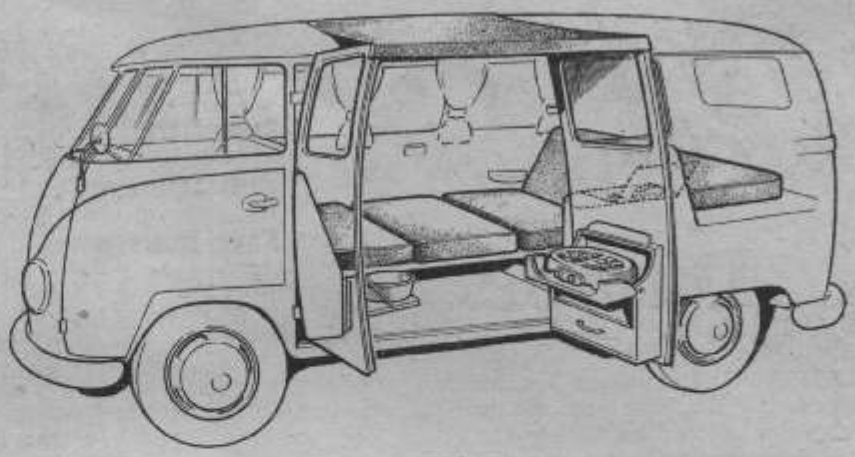
(Continued on page 623)

The VW Devon Caravette

unusable by people especially sensitive to carbon monoxide.

For travelling, the accommodation in the main part of the Caravette consists of two wooden seats covered with foam rubber mattresses which, while excellent in bed form, are too thin for heavy passenger comfort and occupy all but about 13 in. of the full width. This extra space is filled by a crockery cupboard and a Calor gas cooker on the right (i.e., rear) of the double-side doors, and on the left by a 4½-gallon water tank beneath which is an Osokool "refrigerator" of the water evaporation type. Ministry of Transport regulations insist that the Calor gas cylinder, carried alongside the engine, should be placed on the ground outside before being coupled by rubber tube to the piping system which feeds the cooker and an interior lamp above it.

The caravan equipment is pleasantly styled and excellently finished, considering its necessarily lightweight construction. A Formica-topped table is normally stowed above the child's bunk which covers the engine compartment; for meals the table fits in the centre of the floor rigidly enough to remain quite steady through all kinds of driving, while for sleeping it fits between the bench seats, when the four tailored mattresses just fill its length to make a double bed. A good deal of locker space is contrived beneath and behind the seats, and in the rear there is a "wardrobe" at the side deep enough for waist-length coats. Beside the water tank is a plastic basin which can be hinged down into position when the door is open.



As arranged for sleeping, the seats make up into a double bed supported by the table in the centre. There is a single bunk for a child at the rear and a second child could be accommodated on the driving seat.

A limitation on all current motor caravans is the height of the floor made necessary, if not by a propeller shaft, by the ground clearance of the vehicle in its basic form. In this respect it may be mentioned that the ground clearance of the VW chassis is increased by using reduction gears at each rear wheel. Because of the floor height it is not possible for most adults to stand up, although in fine weather this would be a possibility with the de-luxe version which numbers among its extra amenities a sliding roof. In any case, the limitation is not likely to be regarded as being serious. If one is to predict a market for the Caravette, it would seem to be divided between commercial travellers in need of a mobile office and an occasional bed, and holiday couples with only one or possibly two children; in either case they would probably pitch camp near to a house or hotel on most occasions, so that there would be no need to live in the vehicle for long periods. For holidaying economically there must be a considerable future for the motor caravan through hire-car companies who can use the characteristics of motor caravans such as this throughout a larger part of the year than can most private motorists.

Specification

Engine

Cylinders	4 horizontally opposed (air cooled)
Bore	77 mm.
Stroke	64 mm.
Cubic capacity	1,192 c.c.
Piston area	28.8 sq. in.
Valves	O.h.v. (pushrods)
Compression ratio	6.6/1
Carburetter	Solex 28 PCI downdraught
Fuel pump	Mechanical
Ignition timing control	Centrifugal
Oil filter	Suction strainer (and oil cooler)
Max. power (gross)	36 b.h.p. at 3,700 r.p.m.
(net)	30 b.h.p. at 3,400 r.p.m.
Piston speed at max. (gross) b.h.p.	1,555 ft./min.

Transmission

Clutch	Single dry plate
Top gear (s/m)	5.05
3rd gear (s/m)	7.58
2nd gear (s/m)	11.6
1st gear	22.2
Reverse	28.5
Propeller shaft	None (rear engine)
Final drive	4.4/1 spiral bevel
Top gear m.p.h. at 1,000 r.p.m.	15.1
Top gear m.p.h. at 1,000 ft./min. piston speed	36.0

Chassis

Brakes	Hydraulic (2 l.s. front)
Brake Drum internal diameter	9.05 in.
Friction lining area	96 sq. in.
Suspension:	
Front	Independent by trailing links and laminated torsion bars
Rear	Independent by swinging half axles, trailing radius arms and torsion bars
Shock absorbers	Telescopic double-acting hydraulic
Steering gear	Ross cam and lever, with hydraulic damper
Tyres	6.40-15 (Michelin "X" on rear of test model)

Coachwork and Equipment

Starting handle	Yes
Battery mounting	Alongside rear engine, on right
Jack	Bevel-geared screw pillar jack
Jacking points	4 external sockets under body sides
Standard tool kit:	Fan belt, starting handle, jack, square key, pliers, 2 screwdrivers, 2 box spanners and tommy bar, 1 double-ended spanner
Exterior lights:	2 headlamps with pilot bulbs, 2 tail lamps, stop lamp, number plate lamp.
Number of electrical fuses	6
Direction indicators	Semaphore type, non self-cancelling
Windscreen wipers	Electrical two-blade, non self-parking
Windscreen washers	None
Sun vizors	One
Instruments:	Speedometer with non-decimal, non-trip distance recorder
Warning lights:	Dynamo charge, oil pressure, headlamp main beam, direction indicators
Locks:	
With ignition key	Ignition/starter switch, driver's door, side and rear doors
With other keys	Square key locks engine and fuel filler covers
Glove lockers	None
Map pockets	Two in front doors
Parcel shelves:	Full-width shelf below facia panel
Ashtrays:	One on facia panel, one in rear of body
Cigar lighters	None
Interior lights:	Two in roof (also rheostat-controlled speedometer lighting)
Interior heater:	Warm air from engine cylinders ducted to windscreen and front and rear compartments. Also unheated fresh air intake above windscreen.
Car radio	Optional extra
Upholstery material:	Plastic in driving compartment, fabric in rear compartment
Floor covering	Rubber mat in front, linoleum in rear

Exterior colours standardized:
One two-tone on standard model.
Two two-tone on de Luxe model.
Alternative body styles: Alternative Mark II version of Caravette, and 8-seat VW Microbus

Maintenance

Sump	4.4 pints, S.A.E. 20/20W. Extreme heat S.A.E. 30; extreme cold, S.A.E. 10.
Gearbox and rear axle unit	4.4 pints, S.A.E. 90 gear oil (below freezing, S.A.E. 80)
Rear hub reduction gears	0.4 pints each of rear axle oil
Steering gear lubricant	S.A.E. 90 gear oil
Cooling system capacity	nil (air cooled)
Chassis lubrication	By grease gun every 1,200 miles to 15 points
Ignition timing	7½° before t.d.c. static
Contact-breaker gap	0.016 in.
Sparking plug type	Bosch W225T1, Beru 225/14u2, Lodge H14 or HN, Champion L7, AC 43L, Autolite AE6 or AER6, or KLG F70
Sparking plug gap	0.024 to 0.027 in.

Valve timing: Inlet opens 2½° before t.d.c. and closes 37½° after b.d.c.; exhaust opens 37½° before b.d.c. and closes 2½° after t.d.c.
Tappet clearances (cold): Inlet and exhaust 0.004 in.
Front wheel toe-in: 0.040 in. unladen (0.080 to 0.200 in. laden)
Camber angle: 0° 40' ± 30'
Castor angle: 0°
Steering swivel pin inclination: 4° 20'
Tyre pressures:
Front: 28 lb.
Rear: 33 lb.
Brake fluid: VW
Battery type and capacity: 6 volt, 77 amp. hr.
Miscellaneous: Fan belt tension of air-cooled engine should be adjusted to allow 0.6 in. sideways deflection under finger pressure. Every 2,400 miles clean engine oil strainer and magnetic drain plugs of transmission.

c5