

AUTO CAR

NEW!



Morris ITAL

Full details



Italian re-style for Marina -and A-Plus economy engine

On test: **New Turbo Audi - 200T**



Motor Caravan TEST

WHEN they introduced their new van range last year, Volkswagen told us of the efforts they had made to improve weight distribution. Just how well they have achieved this was shown when we ran the new model with Devon Moonraker motor caravan conversion on to our weighbridge: it was one of those rare occasions when, to the very pound, the weight at the front proved identical with that at the rear.

Rack and pinion steering has also helped to transform this new van, and all the old wander and instability that used to characterise the former VW van have been done away with; it now holds very reasonably to a straight line course. Cross winds buffet the van about a bit, but there is no anxiety in keeping firmly "in lane" when passing a heavy truck on a motorway.

Those unfamiliar with such a vehicle tend to be rather daunted by its apparent size and bulk, but when you climb up into the driving seat, the extra height gives a good commanding view forward and makes it quite easy for the driver to judge the width. Allowance has to be made for the slight forward protrusion of the lamps and bumper, but manoeuvring in tight quarters is not difficult and the steering does not become too hard work.

On corners there is quite a lot of understeer, in spite of the even weight distribution, but the driver has no difficulty in assessing how hard he is pushing the



Left: The sliding side door is appreciated in camp, when it can be left open in suitable weather, but the catch intended to hold it open was faulty on the test vehicle and we also had trouble with loose securing catches for the elevating roof

Below: Long dipstick allows an oil check through the small inspection panel above the rear number plate



Best Devon yet

Moonraker 80 conversion of latest Volkswagen Transporter 2-litre proves comfortable and practical

By Stuart Bladon

van round a fast corner or in judging its adhesion limits. Ride comfort is very good and the suspension does not transmit much in the way of sharp wheel shock over bumps, while on undulations there is only slight tendency to front end plunge and recoil — a movement that tends to be particularly noticed as one is sitting more or less directly above the front wheels.

Quieter engine

On the test car, the automatic choke seemed to be lavishly set, causing a lot of engine commotion on starting up from cold, and the idling speed was also needlessly high. Other than this, the engine noise level is modest enough in the lower speed ranges, and the fitting of hydraulic tappets undoubtedly contributes to a much lower engine noise level than before. Maximum speeds for the indirect gears are marked on the speedometer at 19, 34 and 53 mph, but these figures seem unduly well within the limits of the engine, which can easily be taken up to 40 mph in second and 60 in third. There is an ignition cut-out which limits engine revs to 5,500 rpm, equivalent to 23, 43 and 68 mph in the gears. Top gear maximum speed in test conditions was a fairly modest 75 mph, but with favourable conditions the speed will build up to considerably more than this. With the excessive optimism in the speedometer it is not unusual to see the needle right round at 90 mph (true 81).

The gear change is sturdy and goes from one position to the next without vagueness or baulking. Smooth and light clutch action also helps to make this a very pleasantly easy van to drive, whether on narrow lanes calling for frequent gear changing, or in traffic. The engine pulls smoothly, but without much tor-

que, at low revs; but there are very definite limits as to how slowly it will run, and there was a nasty snatch to discourage us from repeating an attempt to time acceleration from 10 mph in third.

The engine is horizontally opposed and air cooled, as always on the Volkswagen light van, and is mounted beneath the floor at the back. Standard engine size is 1600 c.c., but the test vehicle had the optional 2-litre engine which costs £445 extra and is certainly to be recommended. It is false economy to have inadequate engine power in a motor caravan to be used for touring.

Two spells of quite different running, but both including free use of the VW's ability to cruise at about 70-75 mph, gave exactly 20.7 mpg after correction for a slightly under-reading distance recorder. Driving a little more gently, owners may look for up to 25 mpg on tour, but we feel it would be unduly optimistic to hope for much more. There is a generously big fuel tank holding 13.2 gal, which gives a cruising range in the region of 250 miles. Luckily we did not find out the hard way, but were surprised to learn that the fuel gauge is rather optimistic and that the tank runs dry with the needle barely entering the red section on the gauge.

Moonraker down to earth

Devon's latest conversion on the Volkswagen van is very well blended to the existing decor of the cab, and is finished in tasteful materials with pleasing design for the interior laminates and fittings. Most of the cupboard doors have rounded corners and recessed catches which harmonise very well with the vehicle itself, and the whole

of the interior is lined or covered by matt finish cloth; hardly any surfaces just covered in paint-work are exposed. In general, the finish looks very substantial and hardwearing, and we would expect it to last well except for a tendency to show too much confidence in self-tapping screws, some of which pulled out in our short test. In particular, two of these screws to secure the interior roof strap, which is the only means for pulling the roof back down after it has been elevated, are just not adequate.

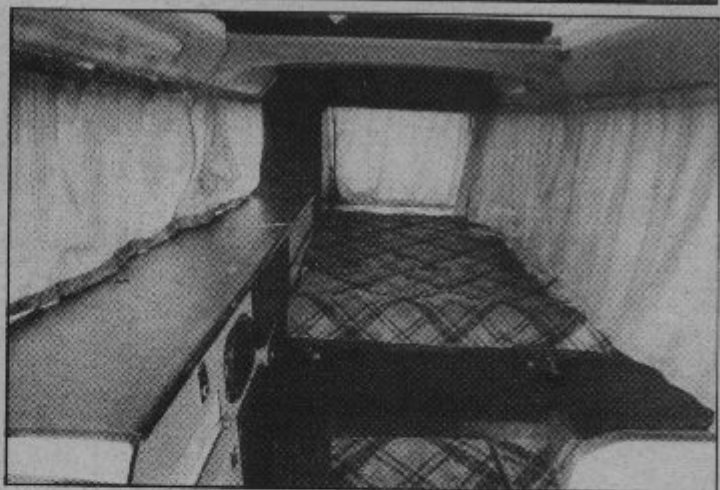
Two outside clips with safety pins secure the roof in the lowered position, but in travel they tend to work loose. On one occasion we found the clips had managed to unfasten, although previously they had been properly attached, and on a later occasion we actually had the roof go up of its own accord — fortunately only at low speed. The glass fibre panel is well shaped to form a snug fit with the top of the cab roof, and is strongly spring assisted by twin struts at each end to go up with minimum effort, unfurling a ribbed side canopy with cheerfully coloured longitudinal stripes.

In the cutaway section of the roof are two sliding false roofs, with upholstered tops. These can either be pushed together, forming a double bed, or slid apart so that there is space to get up between them and they can then serve as two separate beds for small children. Length is a little marginal in the double bed condition (6ft 2in.), but we were surprised to find how comfortable it is up there. Even with the upper bed in position, there is ample space for anyone reasonably agile to climb up, using the side locker as a step, for which it seems adequately strong. The obvious intention is that heads are to be at the forward end, and a light is positioned in the roof at that end to serve for reading, but we preferred it the other way round, with heads then at the open end and near to the roof ventilator, for which there is a flyscreen.

Neat arrangement of the main double bed down in the caravan area towards the end of the vehicle works extremely well. The seat cushions are just moved

With no proper insulation in the elevating roof, one would not wish to use the upper bed in winter, but it is a good size and ventilation is adequate





Far left: Three-burner cooker has folding heat shield and table are hinged for all the units
Left: A good double bed makes up towards the at high level does not obstruct access to the door on the

out of the way, two rubber clips released, and then with one easy movement the seat base swings upward and lines up with the back cushion. The resulting waist level bed of 6ft x 3ft 9in. is very comfortable, and it is pleasing not to have to use the table as part of its base structure.

Curtains are generously big to cover all windows, and have Velcro pads at the base to attach neatly to the side trim of the interior. There are two fluorescent lamps, one on each side, in addition to the festoon bulb lamps in the roof and on the driver's side of the cab.

Most of the "kitchen" units are arranged on the right hand side of the vehicle by necessity, since the opposite side is taken up by the big sliding side door — a very pleasing feature of the Volkswagen. On the test car, however, there was a fault in the catch intended to hold the door in the open position.

In the manner of good domestic kitchens, there is a neat, continuous worktop effect when all lids and units of the

kitchen arrangement are closed. They open to reveal the stainless steel sink and drainboard unit at the forward end, and a two burner cooker with grill beneath, in the central position. No bad thing — as there are curtains stowed nearby — the cooker has a folding heat shield.

Farther to the rear is a spacious locker with false floor which opens to reveal the gas bottle. Storage space in the Moonraker is generous, comprising a roomy box beneath the forward seat in the caravan compartment, a triangular shaped box beneath the rear seat with access from front or above, and a reasonably big wardrobe at the back. There are also a roof locker above the rear compartment and two food storage compartments below the cooker.

Four-seater

As well as sleeping four, the Moonraker is really designed to carry only four — two in the comfortable cab seats for which there are large and rather obstructive headrests — and two

on the forward facing rear seat. Two more seats are provided just behind the cab, one of which neatly folds away, but these do not have backrests and people can only sit there facing rearward; so they are strictly for use when the caravan is in camp, or for very short trips such as Mum's school run.

Between the seats can be positioned the table, which stands on a single removable tube of chrome-plated steel. It is good and sturdy, and there is neat provision for stowing the table away behind the front passenger seat. We congratulated ourselves on not losing the plug provided to fill the table support hole in the floor when the leg has been removed.

Stowage for bed bags is provided in removable flat trays at the rear of the vehicle, where they become pleasantly warmed and aired by the heat from the engine underneath. Water is carried in a removable plastic container at the extreme rear, and although its contents of only 7½ gal are very marginal for



Novel idea in motor caravan is a detachable water tank on own little wheels. Water fed from it by immersed pur

Motor caravan conversion of the Volkswagen Transporter by: Devon Conversions Limited, Sidmouth, Devon

PRICES	
Basic	£6,147.16
Car tax	£512.26
VAT	£998.91
Total (in GB)	£7,658.33
Extras (inc. CT and VAT)	
Refrigerator	£159.24
2-litre engine package	£445.49
Sliding windows	£51.69
Total as tested	£8,314.75

PERFORMANCE

MAXIMUM SPEEDS

Gear	mph	kph	rpm
Top (mean)	75	121	3,700
(best)	76	122	3,750
3rd	68	109	5,150
2nd	43	69	5,300
1st	23	37	5,250

ACCELERATION

From rest through gears

True mph	Time (sec)	Speedo mph
30	6.5	32
40	10.4	43
50	17.1	54
60	22.8	65
70	45.7	76
80	—	89

FUEL CONSUMPTION

Overall mpg: 20.7 (13.6 litres / 100km)
 Typical consumption: 20-23
 Grade of fuel: Regular 2-star, 92-octane RM

WEIGHT

Kerb, 32.8 cwt/3,690 lb/1,675 kg
 Distribution F/R, 50.0/50.0

SPECIFICATION

ENGINE	Rear; rear drive
Cylinders	4 horizontally opposed
Main bearings	3
Cooling	Air (fan on crank-shaft nose)
Bore, mm (in.)	94 (3.7)
Stroke, mm (in.)	71 (2.8)
Capacity, cc (in ³)	1,970 (120.2)
Compression ratio	7.3-to-1
Max power	70 bhp (DIN) at 4,200 rpm
Max torque	101 lb. ft. at 3,000 rpm

TRANSMISSION Four-speed, all synchromesh		
Gear	Ratio	mph / 1000 rpm
Top	0.82	20.3
3rd	1.26	13.2
2nd	2.06	8.1
1st	3.78	4.4
Final drive ratio: 4.57-to-1		

SUSPENSION

Front — location	Independent, wishbones
— springs	Coil
— dampers	Telescopic
— anti-roll bar	No
Rear — location	Independent,
trailing arms	
— springs	Coil (miniblock)
— dampers	Telescopic
— anti-roll bar	No

STEERING

Type	Rack and pinion, through split steering column and skew angle gear
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BRAKES

Front	10.9 in. dia disc
Rear	9.9 in. dia drum, 2.2 in. wide shoes
Servo	Vacuum

DIMENSIONS

Length 14ft 9 in.
 Width 5 ft 9 in.
 Height 7 ft 3½ in. (roof down)
 Interior headroom 8 ft 1½ in. (roof up)
 Main bed 6 ft ½ in. x 3 ft 7 in.
 Upper bunk: 1/2 at 6 ft 2 in. x 3 ft 10 in.

BATTERY

12 volt 45 AH

TYRES

185 SR 14

FUEL TANK

13.2 gal (60 litres)

four, we appreciated the ease with which it is refilled and trundled along on built-in wheels. The delivery pipe drops inside with an immersed electric pump on the end, and the arrangement works well.

An Electrolux 122 refrigerator is built in below the sink at extra cost of £159. It works off gas or from the vehicle's own 12-volt supply, but not from mains. In the locker adjacent to this is a pull-out cutlery drawer, but this can be fully opened only when the nearby occasional seat has been folded down.

This is certainly the most practical and thoughtfully designed motor caravan by Devon that we have yet tried, and despite the few shortcomings mentioned, it served very well both in caravan use and as transport on a trip to north Wales. It can be hustled along to cover long journeys without fuss or stress and at creditable average speeds, while not upsetting its occupants or other road users in any way. As both caravan and vehicle, it represents good progress by Devon and Volkswagen. □