

The Vauxhall Victor Estate Car

SMART and practical, the Victor Estate Car retains the very good handling and roadholding qualities of the saloon version. Among the optional extras fitted to the test car were twin auxiliary lamps, heater, radio, screen-washers and two-pedal control.



A 1½-litre Car with Great Carrying Power, Tested with Two-pedal Control

IT is common for estate car, or utility, versions of popular saloon models to offer increased carrying power at the cost of greater size and higher weight, with which are coupled lower maximum speed, reduced acceleration and hill climbing power, and poorer fuel consumption. It is also not unusual that the harder suspension required to cope with the additional load results in a noticeably harsher ride over rough surfaces.

Extended tests with the Vauxhall Victor Estate Car show that few of these penalties are exacted in return for a 50% increase in baggage-carrying power when the car is normally used as a four- or five-seater, and double the normal luggage-carrying capacity when the rear seat and squab are folded forward to give a maximum permissible load of 850 lb. disposed in 45 cu. ft.

As compared with the standard saloon these changes are made within an unchanged framework of space and at a cost of only 55 lb. (or 2%) in weight. In order however to cope with a considerably higher potential all-up weight the section of the tyres is increased and the gear ratio altered so that the car moves at 14.7 m.p.h. at 1,000 r.p.m. whereas the standard saloon model does 16.5 m.p.h. at the same engine speed. As one might expect, when driven in normal trim with only two up this lower top gear ratio, in conjunction with almost unchanged all-up weight, results in improved acceleration, the elapsed time between 20 and 40 m.p.h. being brought down from 12.5 to 10.7 seconds and the stiffest gradient climbable in top gear improving from 1 in 13.5 to 1 in 10.7.

What is somewhat surprising is that neither this lower top gear, nor the sloping but flat tail which ends the rectangular shape of the body sides and roof, has impaired performance at the upper end of the speed range; on the contrary, the acceleration time between 40 and 60 m.p.h. comes down from 19 seconds to 18.6 seconds and the maximum speed goes up from 74.4 to 76.8 m.p.h. In only one basic, and another ancillary, aspect does the Estate Car show to disadvantage (apart from the not unimportant extra £100 in ex-works price) which is in respect of fuel consumption which falls off from 30.6 to 25.8 m.p.g. presumably as a consequence of continuously higher engine speed. Acceleration through the gears is

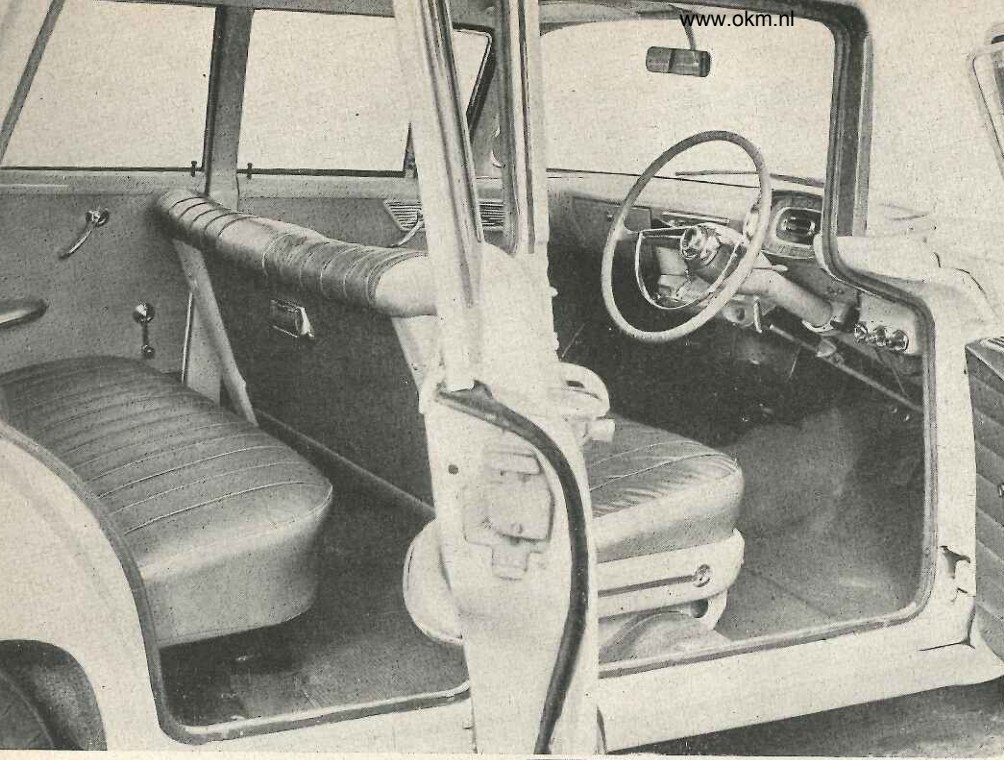
slightly impaired following the use on the car tested of a clutchless gear change which slows down the shifting process.

As is now commonly known, on the Newton two-pedal control a touch on the gear lever excites an electric circuit which opens valves exposing a servo piston to vacuum induced in the engine manifold. By this means the clutch is withdrawn during the gear-change period, the throttle being simultaneously slightly opened so as to diminish the load on the synchronizing cones which are fitted between all three ratios on the Vauxhall gearbox. This throttle bias also ensures that when the driver removes pressure from the gear lever, and thus releases the vacuum withdrawal mechanism, the clutch will positively return into action under the guidance of the centrifugal weights which bring it into engagement at over 800 r.p.m.

When the engine is idling, return springs release the friction surfaces so that when a gear is engaged the car does not move forward. The arrangement gives complete two-pedal control with genuine simplicity and a number of safeguards against failure which include a method of locking the clutch so that the engine is effective as a brake when a gear is engaged with the car stationary, a legal requirement in some countries. The price is very moderate for what many drivers will consider a real convenience, but it must be admitted that on the car tested the operation in some respects left something to be desired. Smooth take-ups from rest on the level required careful work on the accelerator and unless the handbrake was used as a damper, surge-free forward and backward movements such as are necessary with close parking were impossible to achieve.

In Brief

Price (including two-pedal control as tested) £637 plus purchase tax £319 17s. equals £956 17s.	
Price with normal clutch (including purchase tax) £931 7s.	
Capacity	1,507 c.c.
Unladen kerb weight	21 cwt.
Acceleration:	
20-40 m.p.h. in top gear	10.7 sec.
0-50 m.p.h. through gears	21.4 sec.
Maximum direct top-gear gradient	1 in 10.7
Maximum speed	76.8 m.p.h.
"Maximile" speed	75.6 m.p.h.
Touring fuel consumption	32 m.p.g.
Gearing: 14.7 m.p.h. in top gear at 1,000 r.p.m.; 29.4 m.p.h. at 1,000 ft./min. piston speed.	



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MOST modern dual-purpose cars retain the normal four-door saloon amenities in their estate-car form, and the Victor is no exception, as is evident on the left. Occupants have extremely good all-round visibility, but the projecting base of the wrapround windscreen can bruise the knees of those entering the front compartment. As can be seen on the right, even with all seats ready for use there remains a sizeable luggage platform, at a sensible level for loading and reached through a large, counter-balanced door.

Generally speaking the gear changes themselves were smoothly effected but on downward changes the driver could make a useful contribution by opening the throttle and when changing up it was desirable to take one's foot off the accelerator. It is for this specific reason that the standing start through-the-gears acceleration figures compare unfavourably with the standard model, but the loss in performance is not of a kind which would be noticed in normal motoring, and although the system is far from foolproof it gives satisfactory results with normal intelligence and co-operation and makes driving easier, particularly in traffic as a consequence of reduced physical effort.

The driver is ill advised to take advantage of the fact that the car can be started on the level in top gear, for this procedure will almost certainly reduce the life of the clutch plate; smoother starts can be made in second gear than in bottom, but for clutch longevity this practice is not advised. With excellent torque in the lower speed ranges, and a genuinely smooth engine, the car operates effectively without gear changing from 20 m.p.h. upwards; although 50 m.p.h. can be reached in second gear if necessary, 40 m.p.h. on this ratio would not normally be exceeded.

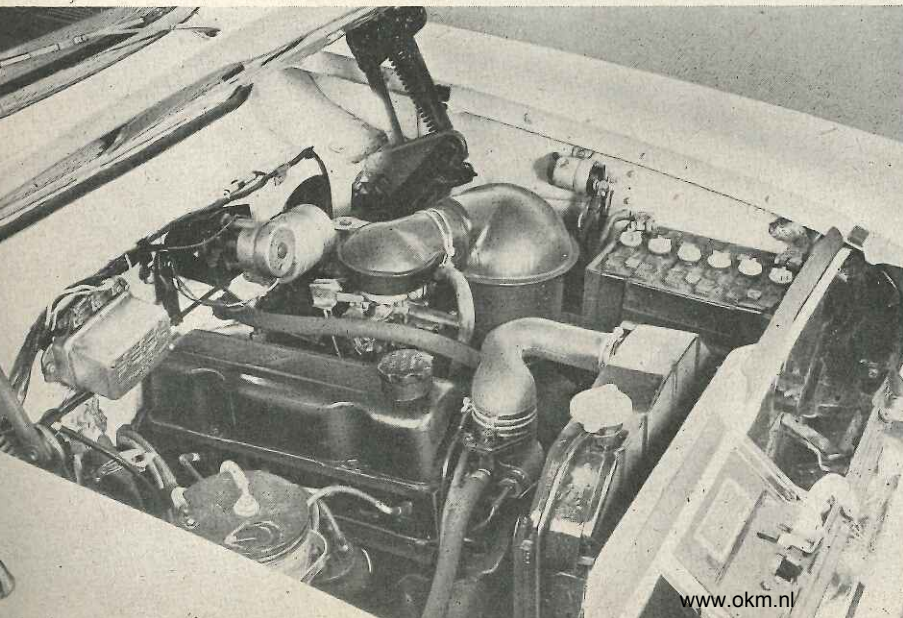


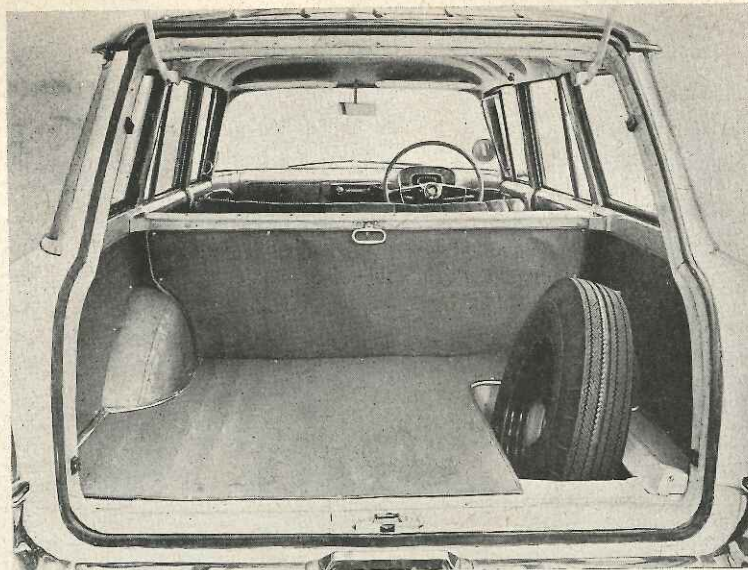
Turning now to those qualities which will be found in the car, irrespective of which transmission system the owner chooses, a 25% increase in the stiffness of the rear springs seems to have enhanced the cornering powers which were an outstandingly good feature of the saloon. Roll when cornering is reduced but slight under-steer remains, so that the car can be driven through corners in a stable condition, which is acceptable to passengers

at a speed perhaps 10 m.p.h. higher than is normal for this class of car. There is some deterioration in passenger comfort over really rough roads as a consequence of this stiffer springing and some shake can be noticed in the hull structure if in these conditions one forces the car along at between, say, 45 and 60 m.p.h. On the other hand the car rides well over rough tracks at moderate speeds and is therefore quite suitable for use over typical farm roads, or even open country.

The rear seat easily swings over, exposing the tool kit beneath it, and a simple latch then permits the squab to be moved through rather more than 90° to give a flat solid floor at the base of the vehicle to which access is easily made through the tail gate which swings up on spring counter-balances after the lock has been released. Objects slightly longer than 5 feet and up to 3 feet wide can be accom-

STRONGLY counterbalanced, the bonnet of the Victor can be lifted with little effort but could well open wider for easy access. Accessibility of battery, distributor, carburetter, plugs, dynamo and valvegear is good, but the coil and fuel pump are not easily reached.





modated on this floor and loading is eased by the fact that it is only 2 feet from the ground.

Rear seat passengers also may enter or leave with ease but those in front may be obstructed by the cranked-back pillar for the panoramic windscreen. There seems little, if any, gain in visibility through this form of screen, although both driver and passenger do enjoy an excellent view marred only by the inability of the two "clap hands" wiper blades to clear the width of the glass effectively from rain and mud.

The arcuate speedometer dial is easy to read, and the switch gear is well styled, although it is too much perhaps to ask one switch effectively to control the side, head, interior lights, and instrument lighting.

Forward of the screen the bonnet opens through a pitifully inadequate angle, making access to anything beneath it an awkward physical feat. That the makers have a somewhat contemptuous attitude to owner-driver maintenance is shown by the way in which both the coil and the fuel pump are hidden beneath the steering box

on right-hand-drive cars, and as it is recommended that the pump be dismantled every 5,000 miles this is not a point that can readily be overlooked. Nor indeed can the rear axle noise which was prominent at high speeds, partly one supposes due to the absence of the usual sealed-off luggage compartment.

The high noise level in the heating and de-misting system which has a two-speed fan, can be excused in the light of the immense air blast, which might prove invaluable in extreme conditions, and similarly the poor quality of the noise coming from the radio set can be forgiven because of the very low price of the set offered by the car manufacturers.

Attention must be drawn to the very wide range of other optional extras which are set out in our list, there being much in favour of this policy of cataloguing a car with a somewhat austere interior and leaving it to the owner to choose what items he most desires to embellish it.

The Victor however certainly contains all the elements that are needed for satis-

factory motoring, from the distinctive exterior to the well-planned interior which includes comfortable rear seats. Although the knee room is little over 7 inches when the front seat is fully back, the passengers' feet may easily be placed beneath it.

The front seat itself would be improved by a higher squab to give better support to the shoulders, and the front armrests are not ideally positioned. On the other hand the convenience of the front passenger is well looked after by a deep glove locker on the left hand side of the scuttle which may at option be fitted with both a lock and an interior light, and supplemented by an optional parcel shelf immediately below it.

The Estate Car is built to the "Super" specification which includes a chromium-plated horn ring on the two-spoke steering wheel; armrests on all the side doors; an ashtray for the rear seat passengers; twin sun visors and stainless steel surrounds for the windscreen, side windows and the rear window. A further item of Super specification is the projection of the exhaust pipe through the right-hand side of the rear bumper, but judging by the corrosion caused by the products of combustion it may be doubted whether this last feature is an advantage.

With the exception of some items of maintenance, all the practical features required in the motorcar in general, and the estate type in particular, are very well taken care of in this latest contribution of the British industry. When to this one adds maximum speed well above 75 m.p.h., exceptional handling qualities which make driving a real pleasure, reasonable fuel consumption, and a basic price which leaves some substantial change out of £1,000 (even when purchase tax has been paid) one has a most attractive proposition for anyone who must combine business with pleasure, or whose pleasure is coupled with the carriage of loads considerably beyond the capacity of the normal four-door saloon.

Specification

Engine	
Cylinders ...	4
Bore ...	79.37 mm.
Stroke ...	76.2 mm.
Cubic capacity ...	1,507 c.c.
Piston area ...	30.7 sq. in.
Valves ...	Overhead, pushrod
Compression ratio ...	7.8/1
Carburettor ...	Zenith 34VN
Fuel pump ...	AC mechanical
Ignition timing control and vacuum ...	Centrifugal
Oil filter ...	AC by-pass
Max. power (gross/net) ...	54.8/48.5 b.h.p.
at ...	4,200 r.p.m.
Piston speed at max. b.h.p. ...	2,100 ft./min.
Transmission	
Clutch ...	Borg and Beck
Top gear (s/m) ...	4.625
2nd gear (s/m) ...	7.562
1st gear (s/m) ...	14.735
Reverse ...	14.106
Propeller shaft ...	Hardy Spicer open
Final drive ...	Hypoid bevel
Top gear m.p.h. at 1,000 r.p.m. ...	14.7
Top gear m.p.h. at 1,000 ft./min. piston speed ...	29.4
Chassis	
Brakes ...	Vauxhall-Lockheed hydraulic
Brake drum internal diameter ...	8 in.
Friction lining area ...	92 sq. in.
Suspension:	
Front ...	Coil and wishbone
Rear ...	Semi-elliptic
Shock absorbers:	
Front ...	Telescopic
Rear ...	Telescopic
Steering gear ...	Burman re-circulating ball
Tyres ...	5.90-13

Coachwork and Equipment

Starting handle ...	None
Battery mounting ...	Beneath bonnet
Jack ...	Scissor type
Jacking points ...	2 in front of rear wheels
Standard tool kit: Jack, wheelnut spanner, 1 spanner $\frac{1}{2}$ s.a.e., 1 spanner $\frac{3}{4}$ s.a.e., sparking plug spanner, brake adjustment spanner, screwdriver, 7 in. adjustable spanner.	
Exterior lights: 2 head, 2 side, 2 tail, 2 brake, 1 number plate light.	
Number of electrical fuses ...	2 line fuses, 2 thermal interrupters
Direction indicators ...	Flashing type
Windscreen wipers ...	Dual two-speed electric self-cancelling
Windscreen washers ...	Optional
Sun visors ...	Two
Instruments: Speedometer with decimal trip, fuel gauge, water temperature gauge.	
Warning lights: Oil pressure, dynamo charge and main beam	

Locks:	
With ignition key ...	Front doors and boot
With other keys ...	None
Glove lockers ...	1 in facia
Map pockets ...	None
Parcel shelves ...	Optional
Ashtrays ...	1 in facia, 1 behind front seat
Cigar lighters ...	None
Interior lights ...	1
Interior heater ...	Optional
Car radio ...	Optional
Extras available: Radio, heater, parcel shelf, bonnet emblem, spare wheel cover, towing attachment, floor mats, reversing light, sun visor, screen washer, seat covers, rear compartment mat, and other fittings set out in maker's approved accessory list.	
Upholstery material ...	Elastofab
Floor covering ...	Rubber mats
Exterior colours standardized ...	5 single, 4 dual
Alternative body styles ...	4-door saloon

Maintenance

Sump ...	7½ pints, S.A.E. 20
Gearbox ...	2 pints, S.A.E. 90
Rear axle ...	2½ pints, S.A.E. 90
Steering gear lubricant ...	90 S.A.E.
Cooling system capacity (2 drain taps) ...	10½ pints
Chassis lubrication ...	By oil gun every 1,000 miles to 17 points
Ignition timing ...	9° b.t.d.e.
Contact-breaker gap ...	0.019/0.021
Sparking plug type ...	AC 45/5V
Sparking plug gap ...	0.028
Valve timing: Inlet opens 19.6° b.t.d.c., inlet closes 60.6° a.b.d.c., exhaust opens 51.6° b.b.d.c., exhaust closes 38.6° a.t.d.c.	

Tappet clearances (hot):	
Inlet ...	0.013 in.
Exhaust ...	0.013 in.
Front wheel toe-in ...	0.125
Camber angle ...	0° 38'
Castor angle ...	1° 30'
Steering swivel pin inclination ...	4°
Tyre pressures:	
Front ...	24 lb.
Rear ...	24 lb. (30 lb. fully laden)
Brake fluid ...	Lockheed No. 33
Battery type and capacity ...	Exide 12 v. 43 amp.hr.