

AUTO TEST

VOLVO 144 DE LUXE

Good, solid engineering

AT-A-GLANCE: Mediocre performer, but relatively quiet and refined. Improved steering and much lighter clutch. Good ride and predictable handling. Plenty of legroom and very large boot. Much improved heating and ventilation. Brakes lack bite when cold. Comprehensively equipped and very well finished. Still more safety features.

DESPITE the old adage which says that one gets just as much as one pays for, it sometimes happens that a "base" model has qualities which more expensive variants lack. The Volvo 144 de luxe is such a car; powered by the mildest of Volvo's four-cylinder units (designated B20 A in this single-carburettor form), it is appreciably quieter than its more potent stablemates. Moreover, it has manners in keeping with its gentle valve timing and modest compression ratio. Whilst the model is at a disadvantage in terms of flat-out performance, it merits the careful consideration of those who are seeking a refined, comfortable car of straightforward design.

In company with other Volvos, the 144 de luxe underwent numerous changes for the 1973 model-year. External identification points include the restyled grille, larger front flashers and horizontal rear-lamp clusters. Also revised were the profile of the bumpers and the mounting of the front number plate (now bolted to the face of the bumper, between two rubber inserts).

Inside the car, more extensive changes are evident. The whole fascia is new, as are the instruments and minor controls. A restyled steering wheel of smaller diameter is employed, and the heating/ventilating system has been much improved.

Less obvious are the additional safety features which have been built into these new models. Most important are the tubular side-impact members which run along the length of the doors. Also new are child-proof catches for the rear locks.

Supplementing the shear-link arrangement at the lower end of the column (an established Volvo feature) is a new crumple-



zone at the base of the steering wheel. Its primary function is to allow the wheel, with its well-padded boss, to align itself with the driver's chest in the event of a severe head-on collision.

Of more immediate interest to prospective buyers is the availability of quartz-halogen headlamps as an extra-cost option (a standard fitment on all injection and six-cylinder models, incidentally).

Equally important were the mechanical changes introduced at this time. Revised front-end geometry has eliminated the problem of heavy steering at parking speeds, whilst changes to the clutch-actuating mechanism have resulted in an appreciable reduction in pedal effort.

Performance

Bearing in mind the modest output (82 bhp DIN at 4,700 rpm) and the car's somewhat lofty build, it is no surprise that its maximum speed is down in comparison with rival models. In decidedly gusty conditions, MIRA'S banked circuit was lapped at precisely 90 mph, with a peak of 94 mph on the down-wind leg (shown as 95 mph on the unusually accurate speedometer).

The Volvo feels happy and relaxed when cruised at 80 mph. Indeed, 85 mph (with the engine revving just beyond the peak of its power curve) may be held without sign of distress when conditions are favourable. The low level of wind noise at this pace means that the predominant note is that of the engine; however, this has a solid, healthy quality which is unlikely to offend the most sensitive of owners.

Indirect gear maxima are dependent on the sensitivity of the driver. The tachometer markings on injection models suggest that the engine should be safe for 6,000 rpm (6,500 rpm for brief periods), but the marked increase in mechanical noise level which occurs at 5,800 rpm prompted us to draw the line at this point. Equivalent road speeds are 30, 52 and 76 mph.

At 24.1 cwt, the Volvo is no lightweight. Even so, most owners will find its acceleration adequate. From standstill, 60 mph comes up in 13.9 sec and the quarter-mile mark in 19.8 sec. Equivalent times for 145 E Estate Car are 11.5 and 18.1 sec respec-

tively. (*Autocar*, 9 December 1971), whilst a somewhat ailing 144 Grand Luxe returned 11.6 and 18.3 sec (*Autocar*, 26 August 1971). As a yardstick, the Rover 2000 TC (the liveliest of the 2-litre models listed in our comparison tables) achieved times of 12.2 and 18.5 sec.

Where the single-carburettor engine of the 144 scores is in its ability to pull lustily at very low revs. For example, the test model's 20-40 mph time in top (9.2 sec) handsomely beats those returned by the 145E Estate Car (11.5 sec), the 144 Grand Luxe (11.2 sec) and the Rover 2000 TC (11.8 sec). To a lesser extent, the same holds true for the 30-50 mph figures (8.9, 10.2, 11.1 and 11.2 sec respectively). More important, the model's snatch-free transmission allows the driver to take advantage of these characteristics when trickling along in traffic or when pottering through country lanes. This, more than anything, makes the 144 de luxe such a restful car for those who have occasion to drive in this fashion.

In general, low compression-ratios are not conducive to good economy. Nevertheless, the test model returned the creditable average of 23.5 mpg. This compares favourably with the figures returned by the 154 E Estate Car (18.9 mpg), the 144 Grand Luxe (23.8 mpg) and equivalent models from rival manufacturers (see comparison table). Making due allowances for the hard driving to which the car was subjected, we are certain that owners will have little difficulty in achieving 25 mpg.

Engine and transmission

Use of full choke results in first-turn starting from cold. Driveaway flexibility is good, enabling choke to be dispensed with surprisingly quickly (within 200 yards on most mornings). There is little doubt that thermostatically-controlled air preheating helps in this connection, but rapid warm-up of the cylinder-head coolant plays an equally important part. The latter also makes for efficient heater operation within a mile or so of starting from cold.

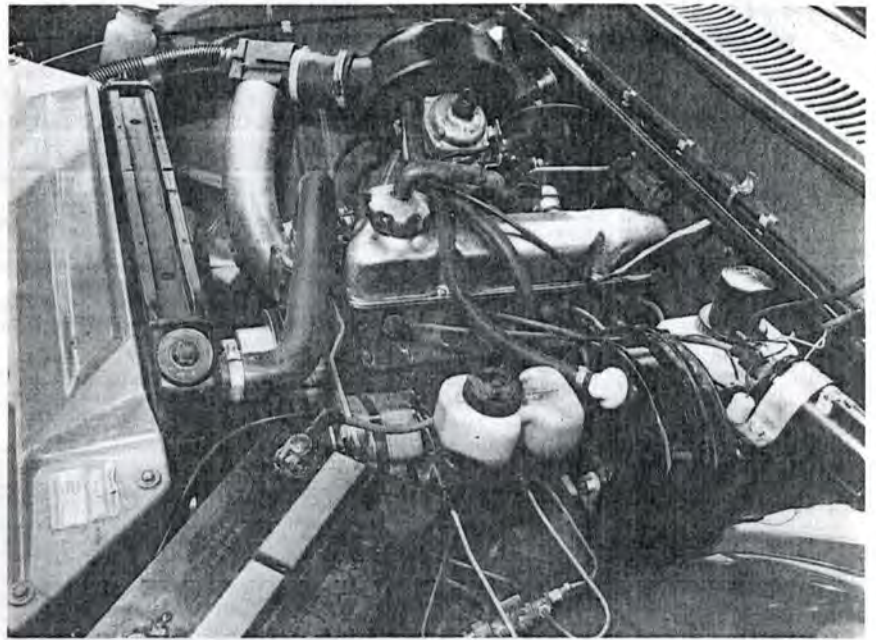
Although the engine is a trifle rattly for the first minute or two, it becomes reassuringly quiet when warm. Throttle

response is smooth and progressive, whilst carburation in general is beyond reproach. Our only complaint concerns the engine's tendency towards running-on (auto ignition).

Thanks to the aforementioned modifications, clutch disengagement now calls for a pedal effort of only 35 lb. Although travel totals 6.5 in., half this amount suffices to "clear" the unit. Basically unchanged, the actuating mechanism incorporates a lengthy cable which is routed around the engine bay (part of the right-hand-drive adaptation). The arrangement does result in slight stickiness and, in the case of the test model, an occasional clicking noise.

Moving off from rest calls for a delicate touch if one is to avoid an unpleasant thud from the rear end. This trait gives the impression of being a fundamental characteristic, rather than an isolated fault. A contributory factor is the tendency for the clutch to grab during the final stages of engagement. The unit easily coped with a restart on MIRA's 1-in-3 test hill.

A remotely-mounted gearchange lever was introduced more than a year ago. The mechanism works well and enables the most to be made of the effective synchromesh.



Surprisingly compact for a 2-litre, the engine is fairly easy to get at. A large-diameter cross-shaft connects the brake pedal to the left-hand servo. Note the tandem-type master cylinder

Ride, handling and brakes

Changes to the front-end geometry have resulted in a marked reduction in parking effort—this despite the adoption of a smaller steering wheel (now 15.8 in dia.). Some of the improvement may be attributed to an increase in overall steering ratio, 4.6 turns of the wheel now being required between nominally unchanged locks (formerly around 4.2 turns). Unquestionably, the changes have been for the better; there has been no noticeable deterioration in steering response, yet a slightly-built driver need have no qualms about manoeuvring in confined spaces.

The steering mechanism feels efficient mechanically, yet there is no trace of kick-back or fight. Indeed, we were particularly impressed with the model's ability to traverse deep puddles at speed without displaying the slightest trace of instability.

Less impressive is the 144's behaviour in gusty cross-winds. Although it gives no cause for alarm, it does yaw quite noticeably at motorway speeds.

The model's general behaviour on winding roads remains unchanged. Although somewhat cumbersome in feel to the uninitiated, it handles surprisingly well when one has learnt to accept the appreciable roll and the fact that initial understeer never gets out of hand.

The ride is good, but not especially so. Where the Volvo scores is in its ability to tackle mediocre surfaces in relative silence. Bump-thumping is effectively subdued, as is the tyre rumble generated by coarse-textured asphalt. The net result is a reassuring air of solidity and comfort.

Braking behaviour follows the pattern observed on earlier models. Between the servo's "crack-open" and "knee" points (coincident with pedal efforts of approximately 10 and 45 lb respectively), the system's response is more-or-less linear. An effort of 40 lb results in deceleration of 0.48g, a figure which is ample for all check purposes. Beyond the knee point, however, there is a disproportionate increase in the effort required: a deceleration of 0.88g (the best recorded in the wet conditions which prevailed during brake testing) calls for an

effort of no less than 120 lb. We regard this as excessive for a car of this type.

During the first three fade-test stops, there was an appreciable rise in braking efficiency. Thereafter, consistent slight fade occurred during the course of each application. Despite hard driving, no fade or instability problems were experienced on the road.

As a result of the increased efficiency observed during the early part of the fade test, further response checks were carried out at 1-minute intervals (usually 3 minutes), the first commencing some 2 minutes after the final fade check. On this occasion, a deceleration of 0.88g required an effort of only 65 lb.

Built into the naves of the rear discs are drum-type parking brakes. Despite having an unpleasantly stiff operating mechanism, they worked very well. On a wet track, a deceleration of 0.30g was recorded at 30 mph. Moreover, they proved equal to the task of holding the car on the 1-in-3 test hill (both when facing up and facing down).

Fittings and furniture

Trimmed in pvc, the seats are large and comfortable. Those at the front have adjustable head-restraints as standard fittings. Also standard are friction-lock mechanisms for adjusting backrest rake. Surprisingly, even with the head-restraints removed (the work of but a few moments), the rests cannot be lowered level with the rear-seat cushion. This means that the seats form poor makeshift beds.

In contrast, an abundance of adjustment is provided for seating purposes. Front-seat passengers may adjust the degree of lumbar support to suit their own needs simply by turning a knob on the edge of the backrest. The provision of three pairs of



Although reduced in diameter, the steering wheel remains fairly high and close to the driver. Fitted rubber mats are an optional extra

Below: Rear legroom is better than average. Note head-restraints for front-seat passengers



AUTOTEST VOLVO 144 DE LUXE...

fixing points for the rear of each seat provides a fair measure of height adjustment, although this is a task which calls for use of a spanner. Likewise, seat tilt may be adjusted by altering the length of the eye-bolts which anchor the front ends.

All those who drove the test car remarked on the improvement in driving position which has resulted from the use of a smaller wheel. Even so, the latter remains too high and too close to the driver's chest for most tastes. Other than this, the layout is good. All controls and switches are within easy reach of a belted-in driver.

Static-type seat belts are standard equipment. Designed for one-handed fastening, they are simple to adjust and comfortable to wear. A novel feature is the provision of a console-mounted lamp to remind front-seat occupants to don their belts. The system is activated by micro-switches placed beneath the seat cushions; in series with these is an additional switch which closes whenever a forward gear is engaged. Fastening the appropriate seatbelt buckle causes the light to go out.

Control and instrument layout is much improved. The ignition-cum-steering lock is now sited on the fascia, to the right of the column (formerly on the column itself). To its right are the pull-push lighting switch and the choke pull. These are the only controls mounted on the fascia proper.

As before, a stalk on the left of the steering column takes care of dipping, flashing and indicating. The double-acting switch for dipping/flashing has a beautifully smooth action, but the arrangement suffers from the slight disadvantage that the driver can never be quite sure whether switching on will result in main or dipped beams.

New is the stalk on the right of the column for the control of windscreen washing and wiping. Although very quiet in operation, the two-speed motor is a trifle lethargic on its lower setting. It is also felt that its higher speed could be increased to advantage. Another criticism concerns a tendency for the arms to settle in too high a position when parked on a drying screen (especially noticeable because of the considerable height of the scuttle).

The remainder of the minor controls are grouped on the console. Along its top edge are a rheostat for the control of panel



Above: Lumbar support is adjustable, whilst friction-lock mechanisms enable backrests to be set at precisely the desired angle. Handbrake lever is well tucked away and features effective guarding on the release button

Below: Bad point is inability to lower backrests flush with rear-seat cushion. Head-restraints are easily removed if desired



Below: The large boot has a high sill, but non-skid mat and stainless-steel scuff plate are typical of Volvo attention to detail. Note ventilation slots at base of rear window. Wheel-nut spider is not standard



Whole of fascia was redesigned for 1973 model-year. Revised heating/ventilating system features four face-level vents. Note provision for extra switches on centre console



lighting (including that for the heater controls), a rocker switch for the heated rear window (illuminated when in the "on" position), a rocker switch for the hazard-warning system (also illuminated when on) and the belt-reminder lamp. Beneath are the heater controls, more of which later. Further down the panel is an ashtray, flanked on the left by a cigarette lighter and on the right by the balance control for the two-speaker radio. Finally, across the base of the panel is the radio itself. A push-button AM/FM unit, this bears the Volvo brand name. Reception is commendably free from interference (even on the FM range), but it is felt that the tone is somewhat lacking in treble. This may well be the result of aligning the speakers towards the front and rear screens.

With the exception of the centrally-mounted clock, the instruments are grouped together ahead of the driver. On the left of the rectangular binnacle is a speedometer with a circular dial and a tenths-reading trip (resettable by means of a push-button). On the right is a matching group comprising temperature and fuel gauges, along with warning lamps for oil-pressure, charging and choke. In the centre is the space reserved for a tachometer on more sporting variants; above this are warning lamps for the braking system (one for the parking lever, the other for loss of fluid) and tell-tales for indicators and main beams. Incidentally, the latter is thought to be excessively bright. An excellent feature is the provision of a sloping one-piece lens for the whole of the binnacle; this arrangement has eliminated all reflection problems.

Head-lining material is pvc, whilst the cut-pile carpet is in a luxurious material called Volvolon. In addition, the test car was equipped with supplementary moulded-to-measure rubber mats (available from Volvo dealers).

Sun visors can be swung through 90 deg to provide protection against glare from the sides. Surprisingly, that on the passenger's side has no vanity mirror. We suspect that this is a safety precaution, rather than a petty economy. The dipping rear-view mirror is big enough to take advantage of the generous size of the rear window.

All four doors have large armrests-cum-pulls. We thought these rather hard on the elbows. In contrast, the centre armrest at the rear is delightfully soft.

Above each door (with the exception of that for the driver) is a stout grab handle. Those at the rear incorporate sliding coat hooks.

Living with the 144 de luxe

Price of the 144 de luxe, inclusive of car tax and VAT, is £1,949.56. This includes the cost of static-type seat belts. Delivery charges vary, but £20 would be a typical figure in the London area. Number plates will account for another £5 and a year's road tax will add a further £25. Excluding the cost of insurance, this means that the total bill for buying the car and putting it on the road is likely to be £1,999.56.

Since the Volvo's standard specification includes reclining front seats, adjustable head restraints, a heated rear window, a hazard-warning system and a set of mud-flaps, many owners will feel little need to gild the lily. However, automatic transmission is available as an option (£144.44), whilst dealer-installed extras include a Volvo AM/FM radio installation (£62.22,



plus fitting) and Bosch halogen headlamps (£16.42 per pair, plus fitting). No metallic paint finishes are listed for this model and there are no trim-material options. Neither can a sliding roof be specified (except when fitted by a dealer or specialist).

Having spent around £2,000, owners will be concerned with the model's ability to resist corrosion. Volvo have a good reputation in this respect, although we ourselves have little information on the subject. Certainly, examination of the car suggests that it should fare very well. Paintwork has been conscientiously applied and there is a reassuring absence of chromium plate (stainless steel and anodized aluminium being used in its place). More fundamental protection is provided by hot-dip galvanizing of underbody members, after which a sealing compound is applied to the whole of the underside.

As a family car, the Volvo is particularly easy to live with. Its relatively high build and its large doors make getting in and out an easy matter. Once inside, there is plenty of room; rear passengers are especially well catered for, there being more than average head- and leg-room.

In contrast, stowage space inside the car is barely adequate. Essentially, it consists of a lockable glovebox on the left of the fascia and a flexible pocket in each front door. The felt-covered back shelf can also be used, but care must be taken not to obstruct the ventilation slots.

In this day and age, the Volvo is unusual in featuring "six-light" construction. This, together with its high waistline, contrives to give the car an old-fashioned air. Nevertheless, visibility is not at all bad; the windscreen pillars are slim in the plane that matters and the driver can more-or-less see the model's extremities.

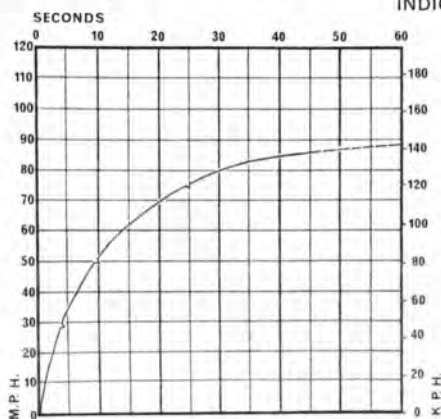
Sturdy bumpers are made from aluminium with rubber inserts and latest models have this new front grille with enlarged indicator lamps front and rear. Large diameter wheels give a generous ground clearance

The revised heating and ventilating system is a great improvement. With the exception of the four fascia-mounted eyeball vents, all controls are grouped on the centre console. Primary temperature control is effected by means of a thermostatic water valve, but an air-blending system regulates the temperature of air flowing through the inner pair of eyeball vents. In addition to ventilating the car's interior, the outer pair of vents may also be

VOLVO 144 DE LUXE (1,986 c.c.)

APPROXIMATE TOTAL AS TESTED ON THE ROAD £2,084.42

ACCELERATION



SPEED MPH TRUE INDICATED	TIME IN SECS
30	4.0
40	6.7
50	9.8
60	13.9
70	20.1
80	29.9
90	—
91	—

GEAR RATIOS AND TIME IN SEC	Top	3rd	2nd
10-30	—	7.4	4.5
20-40	9.2	7.0	4.7
30-50	8.9	7.3	6.2
40-60	10.7	8.8	—
50-70	13.9	12.4	—
60-80	19.6	—	—

Standing $\frac{1}{4}$ -mile
19.8 sec 70 mph
Standing Kilometre
37.2 sec 85 mph
Test distance
1,400 miles
Mileage recorder
4 per cent over-reading

PERFORMANCE

MAXIMUM SPEEDS			
Gear	mph	kph	rpm
Top (mean)	90	145	5,040
(best)	94	151	5,270
3rd	76	122	5,800
2nd	52	84	5,800
1st	30	48	5,800

BRAKES

FADE
(from 70 mph in neutral)
Pedal load for 0.5g stops in lb

1	40-50-40	6	30-40
2	40-50-20	7	30-40
3	35-20	8	30-40
4	30-40	9	30-40
5	30-40	10	30-40

RESPONSE (from 30 mph in neutral)
NB Please refer to text

Load	g	Distance
20 lb	0.18	167 ft
40 lb	0.48	63 ft
60 lb	0.65	46 ft
80 lb	0.72	42 ft
100 lb	0.80	38 ft
120 lb	0.88	34 ft
Handbrake	0.30	100 ft
Max. Gradient	1 in 3	—

CLUTCH

Pedal 35 lb and 6.5 in.

COMPARISONS

MAXIMUM SPEED MPH	
Ford Granada 3000	(£1,906) 114
Rover 2000 TC	(£1,954) 105
Peugeot 504	(£1,839) 99
Triumph 2000 Mk 2	(£1,749) 97
Volvo 144 de luxe	(£1,950) 90

0-60 MPH, SEC	
Ford Granada 3000	9.0
Rover 2000 TC	12.2
Peugeot 504	12.7
Volvo 144 de luxe	13.9
Triumph 2000 Mk 2	14.9

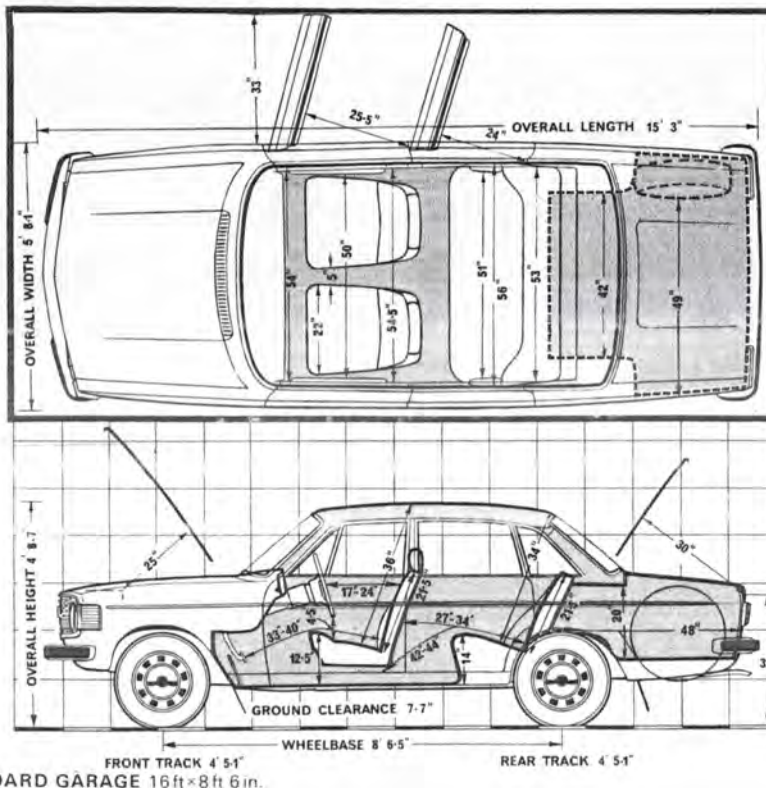
STANDING $\frac{1}{4}$ -MILE, SEC	
Ford Granada 3000	16.7
Rover 2000 TC	18.5
Peugeot 504	18.8
Triumph 2000 Mk 2	19.7
Volvo 144 de luxe	19.8

OVERALL MPG	
Peugeot 504	24.3
Volvo 144 de luxe	23.5
Rover 2000 TC	22.4
Triumph 2000 Mk 2	20.1
Ford Granada 3000	20.0

GEARING

(with 165-15 in. tyres)

Top	17.8 mph per 1,000 rpm
3rd	13.1 mph per 1,000 rpm
2nd	9.0 mph per 1,000 rpm
1st	5.2 mph per 1,000 rpm



CONSUMPTION

FUEL
(At constant speed—mpg)

30 mph	40.4
40 mph	37.4
50 mph	33.1
60 mph	28.2
70 mph	24.2
80 mph	19.3
90 mph	16.1

Typical mpg 25.0 (11.3 litres/100km)
Calculated (DIN) mpg 22.0 (12.8 litres/100km)
Overall mpg 23.5 (12.0 litres/100km)
Grade of fuel Premium, 4-star (min. 97 RM)

OIL
Consumption (SAE 20W/50) 900 miles per pint

TEST CONDITIONS:
Weather: Overcast. Wind: 15-30 mph.
Temperature: 5 deg. C. (41 deg. F).
Barometer: 29.7 in. hg.
Humidity: 80 per cent.
Surfaces: Dry concrete and asphalt (wet when testing brakes).

WEIGHT:
Kerb Weight 24.1 cwt (2,696 lb-1,224 kg).
(with oil, water and half full fuel tank).
Distribution, per cent F. 49.6; R. 50.4
Laden as tested: 27.6 cwt (3,091 lb-1,403 kg).

TURNING CIRCLES:
Between kerbs L, 31 ft 1 in.; R, 31 ft 4 in.
Between walls L, 33 ft 6 in.; R, 33 ft 9 in.
Steering wheel turns, lock to lock 4.6.
Figures taken at 4,400 miles by our own staff at the Motor Industry Research Association proving ground at Nuneaton.

SPECIFICATION FRONT ENGINE, REAR-WHEEL DRIVE

ENGINE	
Cylinders	4, in line
Main bearings	5
Cooling system	Water; semi-sealed, with pump, fan and thermostat
Bore	88.9 mm (3.50 in.)
Stroke	80 mm (3.15 in.)
Displacement	1,986 c.c. (121 cu. in.)
Valve gear	Overhead; pushrods and rockers
Compression ratio	8.7-to-1. Min. octane rating: 97 RM
Carburettor	One Zenith-Stromberg, Type 175 CD 2SE
Fuel pump	Mechanical
Oil filter	Throw-away canister
Max. power	82 bhp (DIN) at 4,700 rpm
Max. torque	116 lb ft (DIN) at 2,300 rpm
TRANSMISSION	
Clutch	Borg and Beck, diaphragm-spring, 8.5 in. dia.
Gearbox	Four-speed, all-synchromesh, remote control
Gear ratios	Top 1.0 Third 1.36 Second 1.99 First 3.13 Reverse 3.25
Final drive	Hypoid bevel, 4.1-to-1

CHASSIS and BODY

Construction Integral

SUSPENSION

Front Independent; double wishbones, coil springs, telescopic dampers, anti-roll bar
Rear Live axle; trailing arms, radius rods, Panhard rod, coil springs, telescopic dampers

STEERING

Type ZF-Gemmer, hourglass worm and roller
Wheel dia. 15.8 in.

BRAKES

Make and type Girling all-disc system with dual-line hydraulics
Servo Girling, direct-acting
Dimensions F 10.7 in. dia.
R 11.6 in. dia.
Swept area F 212 sq. in., R 198 sq. in.
Total 410 sq. in. (297 sq. in./ton laden)

WHEELS

Type Pressed-steel disc, 5-stud fixing, 5 in. wide rim

Tyres—make Pirelli
—type Cinturato radial ply tubed
—size 165-15 in.

EQUIPMENT

Battery 12 Volt 60 Ah.
Alternator SEV 35 amp
Headlamps Bosch 90/80 watt (total)
Reversing lamp Standard
Electric fuses 12
Screen wipers Two-speed
Screen washer Standard, electric
Interior heater Standard, control by air-blending and thermostatic water valve
Heated backlight Standard
Safety belts Standard
Interior trim PVC seats, PVC headlining.
Floor covering Cut-pile carpet
Jack Geared screw-pillar
Jacking points 2 each side under sills
Windscreens Laminated
Underbody protection Underbody rails galvanized before painting; sealing compound subsequently applied to whole of floor and wheel-housing area.

MAINTENANCE

Fuel tank 12.8 imp. gallons (58 litres)
Cooling system 17.6 pints (inc. expansion tank and heater)
Engine sump 6.6 pints (3.75 litres). SAE 20W/50
Change oil every 6,000 miles.
Change filter every 6,000 miles.
Gearbox 1.3 pints. SAE 80. Change every 24,000 miles.
Final drive 2.3 pints. SAE 90 EP. Change only at 1,500 miles.
Grease No points
Valve clearance Inlet 0.016-0.018 in. (hot or cold).
Exhaust 0.016-0.018 in. (hot or cold).
Contact breaker 0.014 in. gap; 59-65 deg. dwell
Ignition timing 14 deg. BTDC (stroboscopic at 600-800 rpm with vac pipe disconnected)
Spark plug Type: Bosch W175 T35. Gap 0.028-0.032 in.
Compression pressure 142-170 psi.
Tyre pressures F 26; R 27 psi (normal driving)
F 32; R 36 psi (high speed with full load)
F 27; R 31 psi (full load)
Max. payload 946 lb (429 kg)

used to defrost the sides. The quiet three-speed blower is arranged to boost the flow through all four vents. A good point is the ducting of hot air to the rear footwells.

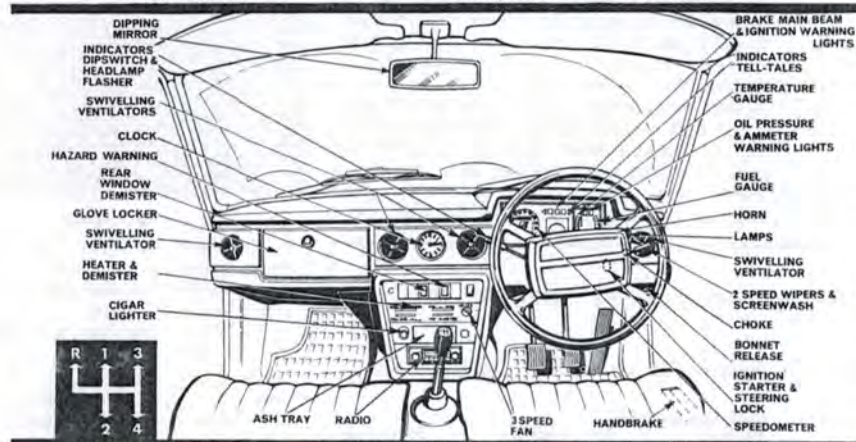
The boot is enormous, but has a very high sill. A ribbed rubber mat covers the floor, whilst the rear and left-hand body panels are protected by a one-piece fibre-board moulding. Stowed vertically on the right is the spare wheel, which is held in place by a rubber strap. The latter serves also to retain the robust screw-pillar jack (geared pattern). Also provided is a modest toolkit, consisting of a tubular spanner with tommy bar, a pair of open-ended spanners and a large Phillips-type screw-driver—all packed in a flimsy plastic bag.

Like the bootlid, the bonnet is nicely counterbalanced. Access to the oil-filler cap is good, but it cannot be withdrawn because of the attached crankcase ventilation pipe. The dipstick is buried between the sparking-plug leads and the brake servo—an arrangement which can lead to soiled cuffs.

Routine servicing should pose no special problems. Access to the carburettor and sparking plugs is very good—that to the distributor and fuel pump a little less so. Fan-belt adjustment (by moving the alternator) is easily effected, but the throw-away oil filter is behind the exhaust manifold. Battery, fluid reservoir and screen-washer bottle are easily reached.

A group of 12 fuses live in an accessible spot on the scuttle side, just ahead of the left-hand door. Battery capacity is 60 ampere-hours—a size which should provide for substantial reserve during winter use. Headlamps are Bosch 7 in. halogen units (an optional extra). They perform well and can easily be aligned should the need arise (thumbscrews in the engine bay).

During 1973, Volvo hope to export as many as 80 per cent of the 240,000 cars they plan to produce. Casual observation suggests that a good number are finding their way onto British roads. What is it that prompts a motorist to settle for a Volvo—the 144 de luxe in particular? Certainly, it can't be its performance. Neither is likely to be the pleasure of driving the car, for several rivals have it beaten on this score. We believe that the majority are bought on the strength of their rugged, straight-forward construction and excellent finish.



Service Interval	6,000	12,000	24,000
Time allowed (hours)	2.5	2.5	2.5
Cost @ £3 per hour	£7.50	£7.50	£7.50
Oil	£1.61	£1.61	£1.94
Oil filter	£1.21	£1.21	£1.21
Breather filter	—	—	£1.85
Air filter	—	—	£4.20
Contact breaker points	—	£1.05	£1.05
Sparking plugs	—	£1.20	£1.20
Total cost:	£10.32	£12.57	£18.95

Routine replacements:	Time	Cost	Spare	TOTAL:
Brake pads (front)	0.6	£1.80	£5.80	£7.60
Brake shoes (rear)	0.6	£1.80	£4.82	£6.62
Exhaust system	1.1	£3.30	£20.05	£23.35
Clutch	2.1	£6.30	£20.03	£26.33
Dampers—front	0.5	£1.50	£13.20	£14.70
Dampers—rear	0.5	£1.50	£10.08	£11.58
Replace drive shaft	1.4	£4.20	£18.50	£22.70
Alternator (exchange)	0.6	£1.80	£20.38	£22.18
Starter (Exchange)	0.7	£2.10	£23.83	£25.93

MANUFACTURER:

AB Volvo, 405 08 Goteborg, Sweden.

UK CONCESSIONAIRES:

Volvo Concessionaires Ltd., Raeburn Road, Ipswich, Suffolk.

PRICES

Basic	£1,636.00
Car Tax	136.33
VAT	177.23
Total (in GB)	£1,949.56
Seat Belts	Standard
Licence	£25.00
Approximate delivery charge (London)	£20.00
Number plates	£5.00
Total on the Road (exc. insurance)	£1,999.56
Insurance	Group 4
EXTRAS (inc. PT)	
Automatic transmission	£144.44
Halogen headlamps (pair)	£16.42
	(plus fitting)
Rubber mats—front	£3.58
Rubber mats—rear	£2.64
Volvo AM/FM radio installation	£62.22
	(plus fitting)