



LUXURIOUS,  
SPACIOUS,  
PRESTIGIOUS—  
YET STILL . . .

# THE SPORTY





*Orthopaedically shaped seats allow all four (five if you push the point) passengers pleasant, ache free long trips.*



# ADMIRAL



IT DOESN'T PAY to form an opinion about a car before you drive it.

For instance, sporty sedans though the Volvo 142/144 series may be, you don't really expect the same thing from the big 164, Admiral of the Volvo fleet.

A bulky, prestigious and maybe stodgy limousine, sure. But a car that offers the full limousine bit and can still be driven like a small, taut sporty car or even run in a weekend rally — no.

But such is the contradiction of the Volvo 164 manual.

It's a strange sort of car really. One — like the Audi 100LS — that has its own entirely different character and does not conform to the accepted patterns of its market or specification.

Where the 164 differs lies in its interior, its size and space, its engine and its overall aesthetic effect.

It uses a 107-inch wheelbase, so by luxury car standards it is far from big in this dimension. Yet by tall, rather square but still attractive styling and clever use of space the interior turns out to be just what five big men would ask for. With proper leg, knee, shoulder and head room, and orthopaedically shaped seats to hold them there in proper comfort they'll have room to work or discuss business in the board-room-on-wheels feeling the car imparts.

Actually, this cabin section size is identical with those of the 142/144Ss — only the wheelbase and nose have been lengthened to make the 164 longer and to take its six-cylinder three-litre engine — but it's distinguished from them by the full luxury treatment, leather upholstery, smell and all.

*(Continued on page 63)*

*Cracking through the NSW Hunter Valley's dirt roads showed the 164 to be safe, controllable and very fast in adverse conditions. It has a go anywhere feeling.*

## THE SPORTY ADMIRAL

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The carpet's pile is deeper, and there are big map or document baskets on the backs of the front buckets, which, in Volvo tradition, are infinitely adjustable right through to a full bed position and have little knobs on the sides of the squabs to let the occupant select the lumbar support he wants. The head rests slide up or down. Simply turning a knob on their support spindles locks them at the chosen height.

While these front seats appear to have strong bolstering on their edges, their lateral support isn't quite adequate when the car's hiking through bends.

Benefits for the people in the rear include proper shaping and high backs on their seats too, a fold-down armrest that tucks away comfortably and combines with an exceptionally low prop-shaft line that robs very little floor space to make carrying five a comfortable reality.

But while all this adds up to restrained opulence, you can't help getting the feeling that somehow there's an air of function and ruggedness to it all rather than delicate luxury. If, while you're trying to pin this impression down, you glance at the hefty gearstick, the strong dashboard grabhandle, the ultra functional instruments and controls and those whopping rubber pedals, it's not hard to imagine four hulking Swedish engineers buckled into the car on their way to the latest construction job.

It's not an unpleasant assessment. Indeed, we rather like it because it gives you supreme confidence in the car, a feeling that it's going to be your friend for years. And it is this impression of ruggedness and strength among the luxury that gives the car its distinctive character.

A lot of development work has obviously gone into the 164's engine since its introduction. Comparing the figures we obtained on the latest test car with those of the first 164s reveals a big

*Pushing very hard through a tight bend, the 164 squats hard on its outside wheel, lifts the inside.*

improvement in performance. The latest engines are also smoother, quieter and slightly more economical.

The 3-litre six, code-named the B30, was developed from the four-cylinder B20 Volvo engine by simply adding two more of the oversquare 88.9 by 80 mm pots. This ends up in a capacity of 2980 cc running a compression of 9.3 to one to give 145 bhp at 5500 rpm and a very strong 163 lb/ft of torque at 3000 rpm.

What it all means on the road is that you have a tremendously flexible engine that pulls smoothly and very willingly from surprisingly low revs... like 500 (10 mph) in top gear!

The driver then has the desirable choice of leaving the car in top for both round town plodding or one-gear winding up on the highway at a quite acceptable pace, or going back down through the four-speed box for squirt that lets the 164 hold its own very well indeed against the five-litre V8s of the local cars in the prestige market, and the 4.2-litre Jaguar XJ6 and BMW 2800.

The engine is smooth and quiet right through its rev range, abandoning its quietness only when the rpm passes 5000 as it winds on up to a safe 6000 rpm limit — one that we used both for acceleration runs on the test strip and on the road for overtaking.

The gear ratios are spot-on. Working through a moderate 3.73 diff that means both good acceleration and respectably long legs in top, the 164 runs 37 mph in first, 60 in second and a very nice 88 in third. With that range, there's almost always precisely the right punch for any condition. And that means very rapid touring.

Where the road is long and flat the cruising speed is between 100 and 105 mph, with a flat-out 109 on tap if you care to keep your boot hard on the throttle and wind the engine up to 5500 rpm.

Pushed hard like this the fuel consumption will drop just below 19 mpg, but ordinarily the car's cruising bills will run around 24-25 mpg.

But even at this rate the 12.75 gallon tank isn't big

### ● TECHNICAL DETAILS OVERLEAF





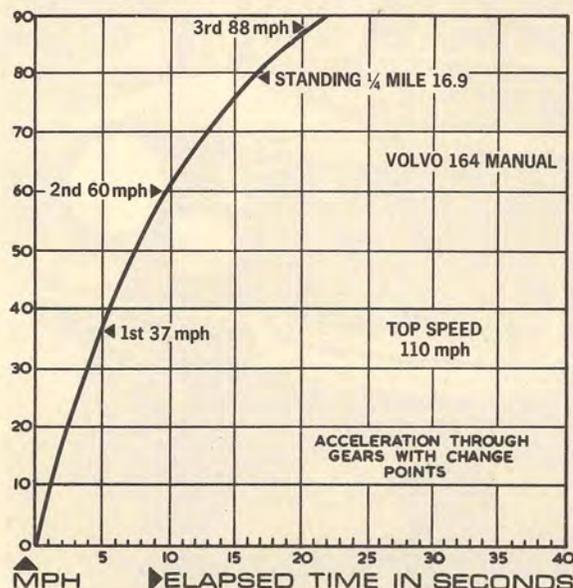
# TECHNICAL DETAILS

## VOLVO 164

MAKE	Volvo
MODEL	164 manual
BODY TYPE	4-door Sedan
PRICE	\$5999
OPTIONS	Radio
COLOR	Red
MILEAGE START	.5842
MILEAGE FINISH	.6358
WEIGHT	(1332 kg) 2937 lb
DISTRIBUTION F to R	55.5/44.5
<b>FUEL CONSUMPTION:</b>	
Overall	(7.1 kpl) 20 mpg
Cruising	(8.5-8.8 kpl) 24-25 mpg
<b>TEST CONDITIONS:</b>	
Weather	fine, warm
Surface	hot-mix
Load	2 persons
Fuel	premium
<b>SPEEDOMETER ERROR (mph):</b>	
Indicated	30 40 50 60 70 80 90
Actual	29 39 49 58 68 78 88

### PERFORMANCE

Piston speed at max bhp	(879 m/min) 2887 ft/min
Top gear mph per 1000 rpm	(32 kph) 19.6
Engine rpm at max speed	5500
Lbs (laden) per gross bhp (power-to-weight)	(9.1 kg) 20.2
<b>MAXIMUM SPEEDS:</b>	
Fastest run	(177 kph) 110 mph
Average of all runs	(175 kph) 109 mph
Speedometer indication, fastest run	(182 kph) 113 mph
<b>IN GEARS:</b>	
1st	(60 kph) 37 mph (6000 rpm)
2nd	(97 kph) 60 mph (6000 rpm)
3rd	(142 kph) 88 mph (6000 rpm)
4th	(175 kph) 109 mph (5500 rpm)
<b>ACCELERATION (through gears):</b>	
0-30 mph	3.5 sec
0-40 mph	5.4 sec
0-50 mph	7.2 sec



0-60 mph	9.3 sec
0-70 mph	13.1 sec
0-80 mph	16.2 sec
0-90 mph	21.4 sec
<b>STANDING QUARTER MILE:</b>	
Fastest run	16.9 sec
Average all runs	17.0 sec

<b>BRAKING:</b>			
From 30 mph to 0	1.7 sec		
From 60 mph to 0	3.2 sec		

20-40 mph	2nd gear	3rd gear	4th gear
30-50 mph	3.9 sec	6.1 sec	8.5 sec
40-60 mph	3.4 sec	5.6 sec	8.3 sec
50-70 mph	4.0 sec	5.5 sec	7.5 sec
	—	5.4 sec	8.0 sec

### SPECIFICATIONS

#### ENGINE:

Cylinders	.six, in-line
Bore and stroke	(3.5 in. x 3.15 in.) 88.9 mm x 80 mm
Cubic capacity	(182 cu in.) 2980 cc
Compression ratio	9.3 to 1
Valves	ohv pushrod
Carburettor	two Stromberg sidedraught
Fuel pump	mechanical
Oil filter	full flow
Power at rpm	145 bhp at 5500 rpm
Torque at rpm	(22.5 kg/m) 163 lb/ft at 3000 rpm

#### TRANSMISSION:

Type	four-speed manual, all syncro
Clutch	SDP
Gear lever location	floor

#### RATIOS:

	Direct	Overall	mph per 1000 rpm	(kph)
1st	3.14	11.732	6.2	(10)
2nd	1.97	7.348	10.0	(16)
3rd	1.34	4.998	14.5	(23)
4th	1.00	3.73	19.6	(32)
Final drive	—	3.73		

#### CHASSIS AND RUNNING GEAR:

Construction	unitary
Suspension front	upper and lower wishbones, coil springs, anti-roll bar
Suspension rear	live axle, located by trailing arms and torque rods, coil springs
Shock absorbers	Panhard rod, coil springs, telescopic
Steering type	variable ratio worm and roller
Turns l to l	4.8
Turning circle	(9.6 m) 31 ft 6 in.
Brakes type	4-wheel discs, servo assisted
Dimensions	front 10.7 in., rear 11.6 in.
Friction area	(267 sq cm) 41.4 sq in.

#### DIMENSIONS:

Wheelbase	(272 cm) 107.1 in.
Track front	(135 cm) 53.1 in.
Track rear	(135 cm) 53.1 in.
Length	(470 cm) 15 ft 5.6 in.
Width	(174 cm) 5 ft 8.3 in.
Height	(144 cm) 4 ft 8.7 in.
Fuel tank capacity	(58 litres) 12.8 gallons

#### TYRES:

Size	165 SR 15
Pressures	(F 1.6/R2.0 kg/cm <sup>2</sup> ) F 24/R 26 psi
Make on test car	Michelin ZX

#### GROUND CLEARANCE:

Registered	(18 cm) 7.1
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enough for the long range touring the car is so suited to.

The 164's suspension layout is identical with the smaller Volvos — upper and lower wishbones with an anti-roll bar at the front; live axle, coil springs, trailing arms and a Panhard rod at the rear — but it's 300 lb heavier, mostly in the front end, so it isn't quite as nimble. It also has to be pushed hard to get the tail swinging into oversteer, unlike the smaller Volvos.

This loss in sheer nippiness is compensated somewhat by the 164's wider wheels and tyres. They increase cornering power to let it hustle through bends almost as fast as the 140 series cars, if not quite as neatly.

Going briskly into the bends, its body rolls to the extent where it's kneeling hard on the outside front wheel. Then, it just squats there and goes through with remarkable lack of drama despite the high speed.

While the car is leaning hard on its front wheel like this, you might expect mid-corner bumps to throw it off line. But they don't. The tyres (Michelin ZXs on our test car) and the suspension have the ability to soak them up even at this extreme so that wonderful stability is achieved.

It takes a little while for a driver unfamiliar with this Volvo style of cornering to feel at home with it, and capitalise on it. But once he's explored a few bends he'll realise how capably the car copes with spirited driving. Then, pushed in very hard, the 164 will switch from its kneeling, very mild understeer with the inside wheel picking up, to a mild oversteer that's caught and held with a twitch of opposite lock. At the limit in tight bends, the rear offside wheel will lift and spin.

While this sort of driving might sound contrary to the image of a luxury sedan, it isn't at all out of place with the 164. The car is so pleasant to pedal along

fast anyone who likes to drive will soon be doing just that. At the same time the passengers will barely be aware how quickly they're moving. There's no impression of swaying or lurching or the car being flung about.

The ride is probably best described as relaxing. It's in perfect harmony with the seats and seems to get better with speed. Bumps don't intrude, although sometimes the car will set up a slight side-to-side wobble as it crosses uneven surfaces. While the 164 doesn't exactly glide along in the manner of an XJ6, it offers similar softness and sublime comfort for all the passengers.

Another benefit the Volvo engineers have given their car is a remarkable 31 ft 6 in. turning circle. Coupled with the brilliant vision, it makes the sedan delightfully easy to park in tight spots. Here, the variable ratio steering is not light, but still manageable with 4.8 turns lock-to-lock. Once the car is moving the steering is excellent if still a little low-g geared.

The brakes are four-wheel discs with twin circuits. Each circuit is linked triangularly to one of two pistons in each front caliper and one rear brake. If either circuit fails, you've still got braking on three wheels and 80 percent of the total effect. The handbrake works well on special supplementary drums built into the discs.

We found the pedal light and progressive pushing through an excellent servo unit for no-fade stopping every time in our tests.

The clutch has similar feel: it's fairly light with a good take-up point and it blends well with the sturdy gearstick poking up between the front seats for a smooth yet crisp transmission action.

The other controls for the driver (the driving position is first class, by the way) are so well laid out he'll be using them without having to take his eyes off the road within a few miles. The important knobs

— lights, choke, windscreen washers and two-speed wipers and variable heat electric rear window — are all grouped together on the right hand side of the dash.

Three large knurled wheels slotted vertically into the facia control the temperature and the direction of the air. While all these controls are well within reach, the radio (a very good Ferris in the test car) is on the far left of the dash and beyond the driver's range unless he stretches hard across the car — a dangerous move while the car's moving.

The speedo is well below scratch — it's one of those annoying strip affairs — and the whole instrument layout looks cheap. The door trim dashboard and head lining, too, detracts from the luxury impression.

But there are other benefits with the car. Things like twin driving lights that, like the headlights, adjust

easily from inside the engine compartment, hefty rubber inserts in the bumpers to cover all the vulnerable areas in parking lots, lights in the engine compartment, glovebox and boot, laminated windscreen, mudflaps all round, lots of odds and ends pockets, steering lock, towing hooks front and rear, and most important of all, properly planned inertia reel front seatbelts that plug into one central locking point, and a fully-crumple-rated body.

It all adds up to a highly desirable \$6050 sedan that offers its owner much more than just luxury, comfort and safety. It gives him a whole lot of performance and sheer driving pleasure as well, and these are some of the reasons why a lot of Volvo customers with a little more money to spare are bypassing the \$5395 144 Grand Luxe and buying 164s instead. \*