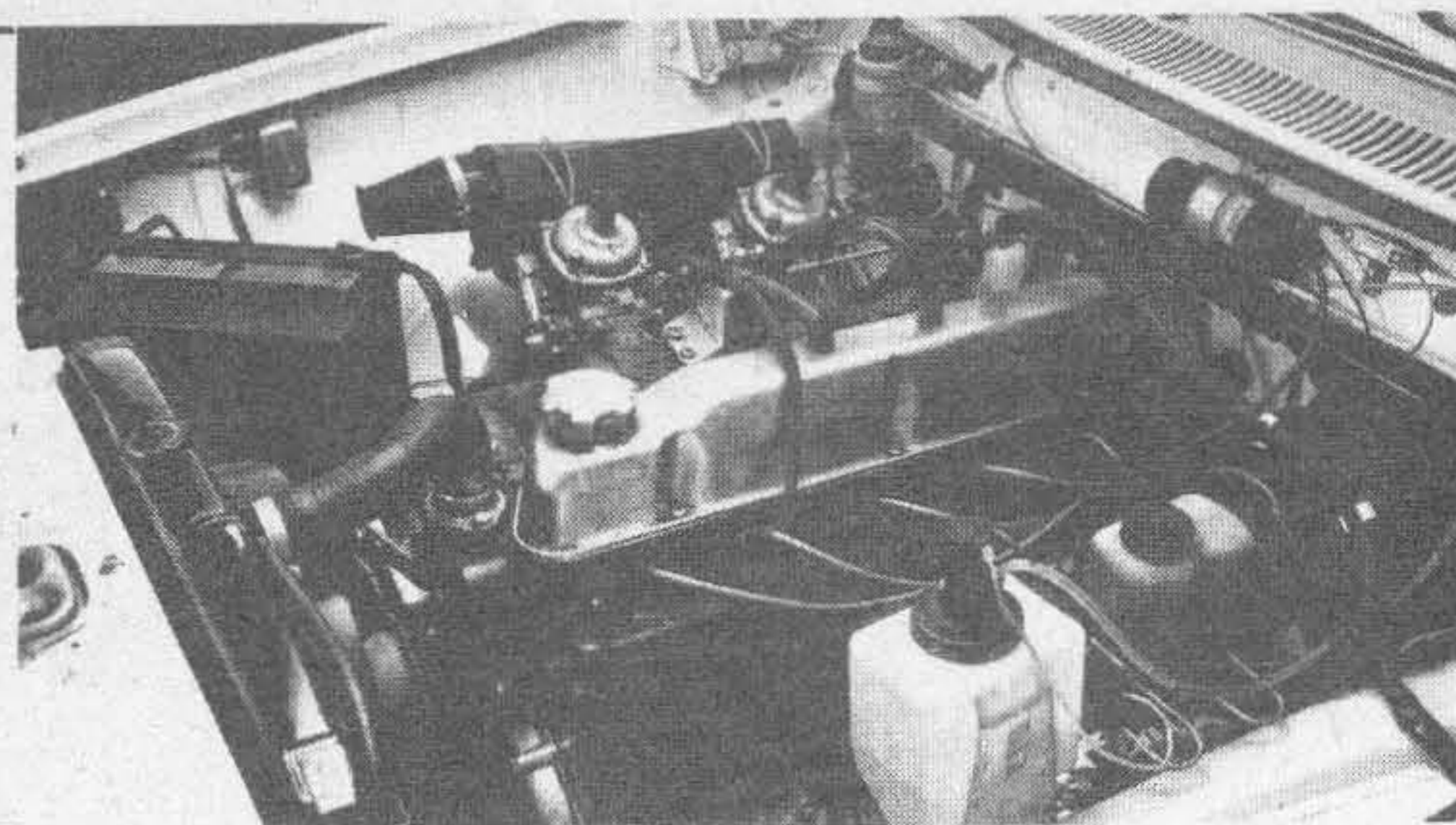


DATA SHEET: VOLVO 164



Manufacturer: A.B. Volvo Ltd.
Test car supplied by: Swedish Motors Pty.
Ltd.
Price as tested: \$5849

ENGINE

Water-cooled, six-in-line, cast iron block, seven main bearings.
Bore x stroke 88.9 x 80 mm
Capacity 2980 cc
Compression 9.2 to 1
Carburettor twin horizontal type
Fuel pump mechanical
Fuel tank 12 $\frac{3}{4}$ gallons
Fuel recommended super
Valve gear p'rod ohv
Max. power (gross) 145 bhp at 5500 rpm
Max. torque 163 lb. ft. at 3000 rpm
Specific power output 48.7 bhp/litre
Electrical system .. 12v, 60 amp hr battery, 35A alternator

TRANSMISSION

Four speed manual all synchro gearbox.
Single dry plate clutch.

Gear	Ratio	Mph/1000	Max. mph.
Reverse	3.540	—	—
1st	3.140	—	35
2nd	1.970	—	60
3rd	1.340	—	88
4th	1.000	19.4	104
Final drive ratio	3.73 to 1		

CHASSIS

Wheelbase 8 ft. 10 in.
Track front 4 ft. 5 in.
Track rear 4 ft. 5 in.
Length 15 ft. 5 $\frac{1}{4}$ in.
Width 5 ft. 8 $\frac{1}{4}$ in.
Height 4 ft. 8 $\frac{1}{2}$ in.
Clearance 6 $\frac{1}{2}$ in.
Kerb weight 1 ton 5 cwt. 40 lbs.
lb/bhp 19.5 lb.

SUSPENSION

Front: Independent by coils and wishbones, telescopic shock absorber, stabiliser bar.
Rear: Rigid axle, coil springs, longitudinal support arms and torque rods, telescopic shock absorbers.
Brakes: Disc, dual-circuit servo-assisted; sq. in. of swept area.
Steering recirculating ball
Turns lock to lock 4.8
Turning circle 31.5 ft.
Wheels: Steel disc with 165 by 15 tubed radial ply tyres.

PERFORMANCE

Top speed 103.8 mph
Average (both ways) 102.1 mph
Standing quarter mile 17.6 sec.

Acceleration

	Sec.
Zero to	
30 mph	3.8
40 mph	5.7
50 mph	7.9
60 mph	10.3
70 mph	13.6
80 mph	17.9

	3rd	top
20-40 mph	6.0	8.6
30-50 mph	5.6	8.3
40-60 mph	5.8	8.3
50-70 mph	6.3	8.9

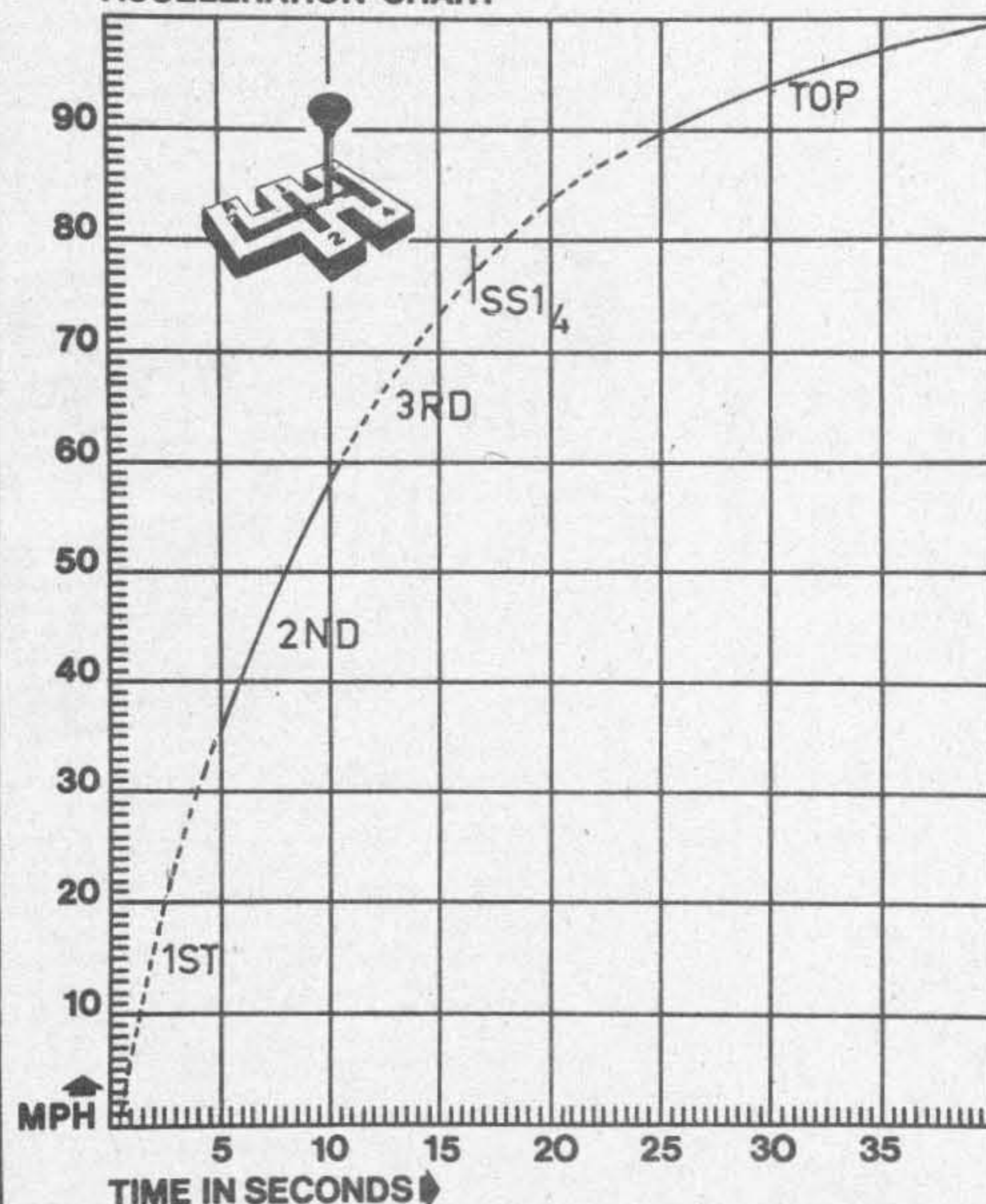
BRAKING: Five crash stops from 60 mph.

Stop	percent G	pedal pressure
1	.98	56 lb.
2	.97	55
3	.98	52
4	.98	56
5	.96	56

Consumption: 22.1 mpg over 408 miles including all tests; 24-26 mpg in normal country and suburban use.

Speedo error	30	40	50	60	70
Indicated mph	30	40	50	60	70
Actual mph	31.2	40.6	50.2	60.2	70.0

ACCELERATION CHART



HOW VOLVO COMPARES

MAXIMUM SPEED (mean) M.P.H.
70 80 90 100 110 120 130
Volvo 164 (\$5849)
Mercedes 280SE (9164)
Jaguar XJ6 (8295)
Rover 3500 (\$5970)

0-60 M.P.H. SECONDS
25 20 15 10 5
Volvo 164
Mercedes 280SE
Jaguar XJ6
Rover 3500

M.P.G. Overall
10 20 30 40
Volvo 164
Mercedes 280SE
Jaguar XJ6
Rover 3500

STANDING START $\frac{1}{4}$ MILE (secs)
20 10
Volvo 164
Mercedes 280SE
Jaguar XJ6
Rover 3500

VOLVO 164



Sweden's answer to the 3-pointed star

VOLVO, the Swedish maker of cars renowned for robustness and longevity, has moved right into Mercedes territory with their latest offering, the 164.

Although they are as different as chalk and cheese, the 164 and the Mercedes 280, which is Merc's biggest seller in Australia, have many features in common on the road.

Each has an effortless, long-legged gait that gobbles miles with ridiculous ease, each offers outstanding comfort and silence, each has superb braking and roadholding, and both have an indefinable "timelessness" in styling that will keep them young long after their cheaper contemporaries are reduced to rusty metal cubes in some junk yard.

The Mercedes has mechanical sophistication — ohc, fuel injection, four speed automatic, all-independent suspension.

The Volvo mechanicals are simpler.

Ohv, three-speed Borg-Warner automatic, live rear axle.

The Volvo is cheaper — by quite a considerable margin. The manual 164 costs \$5849 tax paid, the automatic (which has power steering as standard) is \$6349.

That's way below Mercedes territory.

The 164 is designed primarily, we imagine, to gain sales in the lucrative dollar market — where "cubes" are important.

The six cylinder motor is basically a four cylinder B20 from the 140 series Volvo, with two cylinders added.

This brings swept volume up to 2980 cc., and with an induction system that is tuned to reduce emissions to a minimum, power output is 145 bhp. with a really good inlet and exhaust system, power would jump most dramatically.

More important perhaps than sheer power, is a wide, usable torque band, and the 164 certainly has that.

Maximum torque is 163 lb. ft. at 3000, but there is plenty below that, and the car can be trickled along and accelerated away from quite low speeds without rough running, or transmission snatch.

The test car was a manual transmission job, without power steering. It is the personal car of Swedish Motors' managing director Max Winkless, who is a well-known and highly competitive rally driver.

Because of Winkless' penchant for getting off the beaten track and firing up and down narrow rally-type roads in his spare time, the 164 had been specially doctored for him.

Suspension was stiffer, and a limited slip differential was fitted — which contributed immensely to the car's gravel road performance.

We wish that the car had power steering as well. The manual steering is a variable ratio recirculating ball that unfortunately requires some effort —

VOLVO 164

not just at low, parking-type speeds, but in some rapid cornering too.

Assuming that Volvo's optional power steering is engineered with the company's usual thoroughness, it would be a worthwhile addition to any 164.

The manual steering has 4.8 turns of lock which sounds a lot — but remember it is a variable ratio, and the 164 has a very useful 32 ft. turning circle.

The power-assisted option is about one turn quicker.

Braking is absolutely brilliant. Four wheel discs are used, with a novel duplicated system that makes it impossible for there to be anything greater than a 25 percent failure.

The twin systems couple both front discs and one rear disc. The system includes a servo assistance, and relief valves that prevent rear wheel locking.

There is a considerable amount of nose dip under heavy brakes, but the feeling of sheer deceleration is something that is experienced very rarely, even by our blase road testers.

Because it is difficult to get sufficient mechanical leverage on disc brakes, a drum-type parking brake is incorporated in the system. A very hefty pull on the floor mounted handle is needed to set it.

Suspension is conventional but like all things Volvo, thoroughly proven. Wishbones and coils are fitted at the front, with a stabiliser and telescopic shock absorbers.

At the rear the rigid axle is carried on longitudinal support arms and torque rods, and located by means of a rubber mounted track rod.

Coil springs and telescopic shock absorbers complete the picture.

The system, for all its conventionality works exceedingly well, especially on the stiffened,

LSD-equipped test car. Production versions would certainly give a more supple ride.

The most impressive single feature of the 164's mechanicals is the utter smoothness of the drive train. The engine spins like a turbine, and although peak power is reached at 5500 rpm, the motor loses nothing of its silkiness at figures far above this.

The clutch pedal is reasonably light to operate, but bites like the proverbial bear-trap.

The gearbox is an absolute delight. A remote control unit, it is so far unique to the 164, but will be introduced later on the P1800E sporty coupe. It is one of the best gear changes we've ever used; and the ratios are nicely chosen too.

First runs out to 35, second will reach 60, and third goes to an indicated 90 mph. Third is an exceedingly useful city gear, allowing the car to run down to 15-or-so mph, and then pick up smoothly to quite high speeds without causing the engine to rev excessively.

It is superb, of course, for overtaking.

Straight-line performance is lively without being in the street dragster class. The 164 runs regular 17.5 sec. quarters without apparent effort and reaches 80 mph in 18 sec. Top speed is 104 mph.

The critical overtaking bracket — 30 to 50 to 70 takes 5.6 and 6.3 sec. respectively in third, and 8.3 and 8.9 in top.

The 164 comes into its own, we found, where the roads are narrow, winding, and gravelly. It is here that the car responds best to the enterprising driver, sliding and sweeping through corners, responding faithfully to minute steering corrections, and generally giving its lucky driver a ride to remember.

On winding bitumen, it is not so happy, with excessive understeer and a pronounced tendency to plough in tight corners causing the driver to work hard at the big steering wheel.

We ran the car on recommended tyre pressures, but it would obviously benefit from a few more pounds all round.

When the corners unkink a little the car's balance improves a lot. It overcomes its initial understeer quite suddenly then, and the tail slides out gracefully and controllably.

It is, we feel, very much the type of car for the well-to-do business executive who likes driving for relaxation.

One of our most outstanding memories of the 164 is its directional stability under heavy acceleration on gravel. Great twin rooster tails of dirt shoot out from behind as the LSD takes a grip, and the car spears up the road in a dead straight line. No side-slip at all, just purposeful, dead-straight-ahead motoring.

Like all Volvos, the 164 is supremely comfortable, and it will appeal even more to traditionalists because of its standard equipment leather upholstery. The seats are enormous, infinitely adjustable in many directions (including up), and provide the sort of comfort that is normally only found in living rooms, executive aircraft, Royces, and Grossers.

If the interior falls short at all, it is simply that some people may think it a little stark for a \$6000 motor car. The door trim in particular is disappointing — particularly the Phillips head screws that hold it in place.

But the car has refinements that aren't offered on the 140 series Volvos like tinted glass, and a heated rear window.

The interior is very spacious — which is in a way, a recommendation for the 140 series — as interior dimensions for the two cars are identical.

We approached the 164 with mixed feelings, half expecting it to lack either the personality of its progenitor the 140, or the sophistication of its most obvious competitor, the Mercedes.

We needn't have worried. It is a first class car in its own right.



