

SPORTS CAR GRAPHIC



Complete Test: VOLVO 144 S

VOLVO 144 S

Solid, safe, and an outstanding buy

ROAD TEST / by Jerry Titus

THE VOLVO 144 S is as straightforward and wholesome as homemade bread. It is unglamorous, unexciting, and devoid of frills, but it is attractive, completely functional, comfortable in almost every respect, and about as solid an automobile as we've ever sat in. This design concept has been the company's theme since it started in the car-building business, and it reaches a pinnacle in the 144. The car performs as well as the best under-two-liter sedan, stops at an excellent rate, and handles — up to a point that approaches racing velocity — without vices. Economy of operation is a very tangible bonus and it gives every indication of being tougher than a rhino when considered for longevity. From a safety standpoint, it's a car in which even Ralph Nader could relax. There are a few flaws, if you can really call them that, we'll get to in order of their appearance.

In basic description, the 144 S is a 2600-pound, four-door sedan with a 1.8-liter, pushrod engine, a four-speed transmission, live rear axle, and four-wheel disc brakes. Cost of the 144 S is just under \$3100. Styling is contemporary without nonsense, providing a large 'greenhouse' for maximum visibility, supported by strong roof-posts for maximum safety. The doors open exceptionally wide for ease-of-entry, and leg room in front and rear is equal to that in some of the biggest domestic sedans. To squeeze this package into a 102-inch wheelbase, it was necessary to keep the seats — buckets in front, molded bench in the rear — fairly upright. The steering wheel is large, a bit too close, and relatively high in pressure. The foot pedals are wide-spaced, equipped with large pads, and very efficient in both design and location. Like the engine and other driveline components, the full-synchro, four-speed gearbox is of 1800 S derivation. The shift handle is easy to reach, but its action is stiff and uncertain. Throughout our week-long test, we had trouble getting it into the right cog unless we concentrated. The throws are long, accenting the annoyance. Otherwise, the gearbox is excellent: quiet, with good ratio selection.

The instrumentation is modern and correctly placed in front of the driver on a stylized dash. The ribbon-type speedometer we could do without, but it was accurate, depending on which part of the bias-cut ribbon you read. The heating-ventilation system is *really* a system, not a design afterthought, and works exceptionally well, controlled by vertical wheels inset on the center of the dash. Heat is ducted to rear-seat passengers via the transmission tunnel and back to defrost the rear windows via ducts in the door sills. Suffice to say, it's worthy of a car costing three times what the Volvo does. The seats are great, especially the front buckets, which are not only fully adjustable for position, but can be adjusted for backrest firmness by a knob that tenses an elastic belt inside. No reason in the world why a person of almost any configuration can't make himself comfortable in this machine.

Driving around town or on the freeways is not exciting, but it *is* relaxing and pleasurable. The sedan rides firmly but well, has enough power and maneuverability to be very flexible in traffic, and its quiet performance of these duties is impressive. 'Stop-

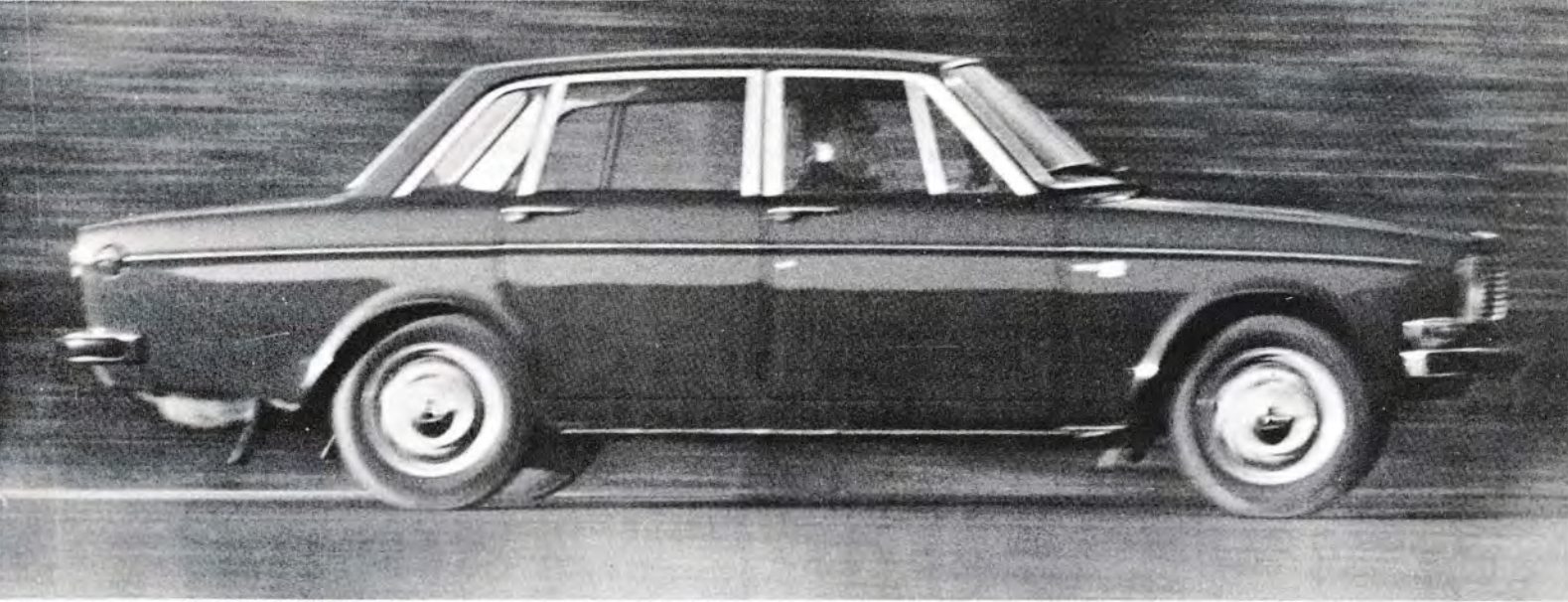
ability' is a high point, the power-assisted four-wheel discs really doing a job. Acceleration is quick and smooth, with strong mid-range torque in any gear. Eighty-five is a comfortable cruising speed for the car. Only in fast cornering is the car a disappointment, even considering it *is*, after all, a four-door sedan. Understeer it does, in a manner that Detroit would be envious of. If you see someone really smoking a Volvo through the turns, you can bet on one thing — he's *working*. But it will and can take this kind of velocity with ambitious driving. In parking or similarly tight maneuvers, the high-steering-pressure is annoying. At speed, it is one of the most stable sedans in existence, taking crosswind gusts like they didn't exist.

Quality of construction and materials is a point for which Volvo already has an established reputation, and the company is upholding it well in the 144 S — even improved on it. As we stated earlier, the solidity of the machine is really outstanding. At 2600 pounds, it is a heavy car, by import standards, and we expected it to be beefy, but the design of the unit-constructed chassis/body contributes to its strength and rattle-free condition as much as the heavy-gauge metals. A detail examination and a ride around the block is all you need to be convinced it will withstand a tremendous pounding without ill effects.

A Borg-Warner stereo-tape machine was installed in our test unit (a nice gimmick that Volvo had installed to let the car give its own sales pitch when sitting on a showroom floor) and, though we soon tired of listening to "Oklahoma," the soundbox formed by the unit shell rivaled the quality of a sand-filled speaker enclosure — further proof of the solidity.

While it always has been more conscious of safety features than the average manufacturer, at least in applying them, Volvo has not overlooked the recent public interest in them and incorporated many in the 144 S. The brakes are dual-system. If one should fail, the other still provides stopping power to two front and one rear wheel — the higher pedal pressure and more pedal travel indicate the failure. The steering column is two-piece, coupled by a yoke in the middle that's designed to separate in a front-end impact of sufficient force to distort the engine bay and force the column up or backwards. There's the three-point seat/shoulder belts that bolt to the doorpost and floor and clip-fasten to the center tunnel. The roof has strength enough to support fifteen tons (placed slowly, of course, not dropped). Crumple rate of the front and rear sections is enough to absorb a thirty-mile-per-hour impact without distortion of the passenger compartment. Then there are safety door latches, crash padding in the interior, anti-whiplash seatbacks. The nicest thing about the safety features is that they don't seem to detract in any way from the design or usability of the car.

To sum up the newest Volvo, we would call it a *sports* sedan. It is an excellent piece of transportation when compared with *any* car. Even though there's some stiff competition in its price range, the Volvo 144 S is an outstanding buy!



VOLVO 144S

ENGINE

Type...4-cylinder, in-line, iron, water-cooled
 Max. bhp @ rpm...115 @ 6000
 Max. torque...112 lb./ft. @ 4000 rpm
 Max. bhp @ rpm...115 @ 6000
 Max. torque...112 lb./ft. @ 4000 rpm
 Bore...3.313 (84.14 mm)
 Stroke...3.15 (80 mm)
 Displacement...109 cu. in. (1778 cc)
 Compression ratio...10.0 to 1
 Induction system...Two SU HS6 carburetors
 Exhaust system...Cast header to single exhaust
 Electrical system...12V generator

CLUTCH

Type...Single disc, dry
 Diameter...8.5 in.

TRANSMISSION

Type...4-speed, full-synchro
 Ratios: 1st...3.13
 2nd...1.99
 3rd...1.36
 4th...1.0

DIFFERENTIAL

Type...Live
 Ratio...4.1 to 1
 Drive axles (type)...Enclosed, semi-floating

STEERING

Type...Cam & roller
 Turns (lock-to-lock)...4
 Turn circle...30'4"

BRAKES

Type...Disc, power-assisted, dual system
 Disc diameter: Front...11.6 in.
 Rear...11.6 in.
 Swept area...N.a.

CHASSIS

Frame...Unit, steel, welded
 Body...Integral, steel
 Front suspension...Unequal-arm i.f.s., coil springs, tube shocks, anti-sway bar.
 Rear suspension...Live axle, coil springs, tube shocks, double torque arms, & Panhard rod.
 Tire size...165 x 15
 Tire type...Low profile

WEIGHTS & MEASURES

Wheelbase...102.4 in.
 Front track...53.1 in.
 Rear track...53.1 in.
 Overall height...56.7 in.
 Overall width...68.1 in.
 Overall length...182.7 in.
 Ground clearance...7.1 in.
 Curb weight...2600 lbs.
 Test weight...2910 lbs.
 Crankcase...4 qts.
 Cooling system...9 qts.
 Gas tank...15.5 gal.

PERFORMANCE RESULTS

ACCELERATION

0-30...3.6 sec.
 0-40...5.6 sec.
 0-50...7.3 sec.
 0-60...10.7 sec.
 0-70...13.8 sec.
 0-80...16.8 sec.
 0-90...21.5 sec.
 0-100...35.2 sec.
 Standing quarter-mile...19.5 sec.
 @ 87 mph
 Top speed, mph...103

SPEED RANGES IN GEARS

1st...0-33
 2nd...12-52
 3rd...27-76
 4th...38-top
 Rpm redline...6500

BRAKING TEST

Deceleration, average...72% G
 Fade...None

REFERENCE FACTORS

Bhp per cu. in...1.06
 Lbs. per bhp...22.6
 Piston speed @ peak rpm...3150 fpm
 Swept brake area per lb...N.a.

FUEL CONSUMPTION

Test...23.5 mpg
 Average...25.5 mpg

SPEEDOMETER ERROR

Indicated	30	40	50	60	70	80	90	100
Actual	30	40	50	60	69	79	89	98

