

Body of the 144 is its newest component, is contemporary but not radical. Structural rigidity and vision are featured.

VOLVO 144

Proven components plus new brakes in an attractive new body

BY STIG BJORKLUND

T HE LONG-RUMORED new Volvo model has been revealed in Sweden and, contrary to all the rumors, it is a 1.8liter car, not a 2.0 or 2.6-liter. Otherwise, it is pretty much what we expected—a slightly larger sedan with a contemporary, but not radical, body and refinements to the various mechanical systems.

The new model is to be called the 144. It's a 6-window, 4-door sedan on a wheelbase of 102.5 in., the same as that of the 122. Overall length is 7.5 in. longer at 182.5; it's 68.2 in. wide (vs. 63.8) and 56.2 in. high (59.2). The new body is not highly stylized and thus doesn't reflect any fads of the day, but it is neat and modern and should look good for the duration of an expected 10-year production run. It has curved side windows and a fairly low waistline, and the 6window layout makes for rearward vision appropriate to today's heavy traffic. A 4/5 seater of unit construction, it features great structural rigidity and graduated collapsibility at the ends of the car—a feature of Mercedes-Benz and soon to be a part of domestic Ford design but still the subject of some controversy.

Body

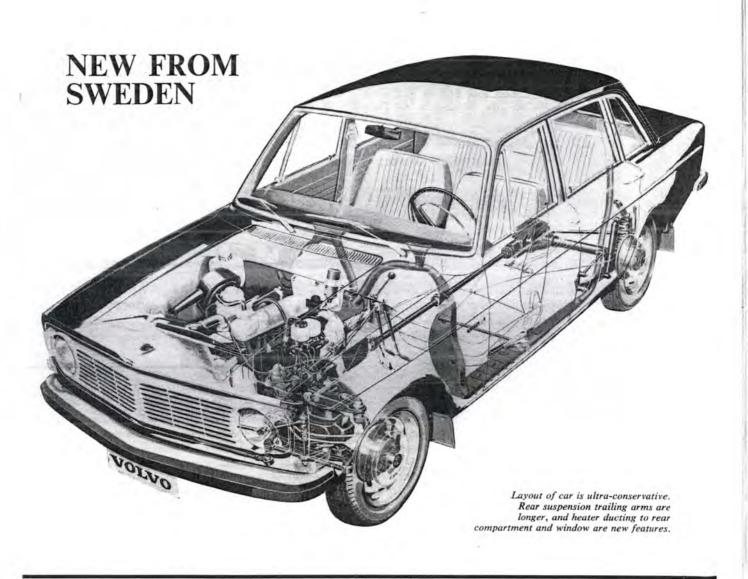
The body sides, including all door jambs and upper and lower longitudinal rails, are pressed as a single piece in the manner of the Rambler "unisides." Windshield-rear window surrounds are also one piece. A new technique of using plastic bonding allows reinforcements to be attached at certain points where welded joints would spoil the exterior surface. Luggage capacity is claimed to be 14.1 cu ft. by the "SAE Luggage" method; a rather high rear lip contributes to the body's torsional rigidity but will make loading of heavy bags a chore. Front individual seats are fully adjustable for rake and include the lumbar-support adjustment introduced on the 1800S.

Improved door catches are used to keep the doors shut in a crash. The famous Volvo 3-point seat belts are standard on the front seats; there are attachments for them on the outboard ends of the rear bench seat and attachments for a 2point belt in the center—the first time such an arrangement has been used. The steering wheel hub is recessed and has a large area for load spreading, and the steering column is collapsible by means of a coupling. The bumpers are interesting: shells are of anodized aluminum and have full-width butyl rubber contact surfaces.

In keeping with the demands of Sweden's severe climate, the 144 has a comprehensive heating-ventilation system. \implies

New 144 demonstrates its cornering characteristics at the Volvo proving ground. Rear view, like front, is simplicity itself.





There are two separate air duct systems with separate controls—one to the windshield and rear window, one to the floor. The booster fan operates on fresh air and has two speeds, and a thermostat regulates hot water flow to the system to maintain a constant temperature as set by the temperature control.

Engine & Drive Train

The 121/122S models have had 75- and 95-bhp versions of the B-18 engine, respectively. The 144/144S models have 85- and 115-bhp versions of the same engine, and it's reasonable to assume that only the 144S will be sold in the United States. The standard version is a 1-carburetor unit and the S is the same version used in the current 1800S coupe, with two SU carburetors and a low-restriction exhaust system. New are silencing air cleaners, which should eliminate the objectionable power roar of the 122S. Otherwise, this is the same sturdy, reliable and conservative 1778-cc unit we've known for years.

Clutch, gearbox and differential are unchanged from the smaller car. The Borg-Warner automatic is available on the 144 and overdrive can be had on the 144S.

Suspension & Brakes

Front and rear suspension are conventional and little changed from the 121/122S. There are refinements to rubber

isolation, and the trailing arms for the live rear axle are longer. The current 15-in. wheels are continued, with 165-15 tires. Steering takes four turns lock-to-lock and turning circle is 30.3 ft.

The brakes are the most striking mechanical change in the 144. The system is indeed impressive and should set a standard for medium-class cars to equal. There are discs at all four wheels, a double master cylinder and a direct-acting vacuum assist servo. The front discs have double-pad calipers and the rear single. Unusual is the word for the mastercylinder split: each circuit feeds one set of front pads and one rear brake. Thus failure of either circuit leaves 80% of full brake torque and the bulk of the braking at the front, which seems a good idea. Each rear line is equipped with a pressure limiting valve, continuing Volvo practice established earlier this year, and the Volvo people claim there's no chance of rear-wheel lockup with either or both circuits working, and no loss of control with one circuit operative.

The parking brake is a small drum at each rear wheel, not built into the rotor as on the Ate or Chevrolet designs.

In summary, the 144 seems to be a significant new model. It reflects the rising standard of living in Sweden but doesn't forsake the common-sense approach taken traditionally by Volvo. At 150 lb heavier than the 122S it would have been nice to have some extra displacement, but otherwise it seems a logical development of a logical car.