New 164 with 6-cyl, 3-liter engine has same body aft of windshield as 144 but longer front end and new frontal treatment.

VOLVOS FOR 1969

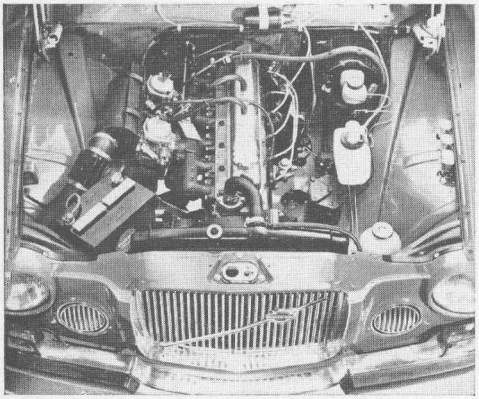
BY STIG BJÖRKLUND

VOLVO HAS GENERATED very little news the last couple years but for 1969 there are a few things to spruce up the existing lines, and the long rumored 6-cylinder car has finally made its appearance.

The 122 models will be sold at reduced prices in the home market to meet expected competition from the upcoming Saab 99, but these dated models have been dropped from the American lineup completely. All cars that had been powered by both the single- and dual-carburetor 1.8-liter engines are getting corresponding versions of an enlarged, 2-liter unit for 1969. This means that the 142, 144 and 145 models sold in the U.S.—the S version—will have the 2-carburetor version.

The new engine is a stretch of the existing 4-cyl unit: stroke remains the same at 80 mm, and the block has been partly redesigned to accommodate a bore of 89.9 mm which raises displacement from 1778 cc to 1986. Bigger intake valves (42 mm vs. 40), freely rotating valves, stronger pistons and rods, and various other minor detail changes have →

New 6-cyl engine for 164 uses same pistons, rods, etc., as 2-liter four. Additional cylinders require a longer hood.



Gearshift lever on 164 rises vertically from gearbox tunnel rather than from far ahead as on earlier Volvo sedans.

VOLVOS

Volvo 164 Specifications

Price, approx	$4000
Engine	ohv inline 6
Bore x stroke, mm	88.9 x 80.0
Displacement, cc	2980
Compression ratio	9.2:1
Horsepower @ rpm	145 @ 5500
Torque @ rpm, lb-ft	163 @ 3300
Carburetion	2 Zenith-Stromberg
Transmission: 4-speed manual or 3-speed automatic	
Final drive ratio	3.73 or 3.31:1
Brakes	discs front & rear
Tires	165S-14
Body/frame	steel unit
Front suspension: unequal A-arms, coil springs, tube shocks, anti-roll bar	
Rear suspension: live axle, trailing arms, Panhard rod, coil springs, tube shocks	
Steering type: recirculating ball, power assisted	
Curb weight, lb	2830
Distribution, front/rear, %	54/46
Wheelbase, in	106.5
Track, front/rear	53.2/53.2
Overall length	185.8
Width	68.4
Height	56.7
Fuel tank capacity, gal	15.5

also gone into the larger engine. The extra displacement has not been used so much for extra power as for a fatter torque curve in the low and middle speed ranges: power is up only from 115 bhp at 6000 to 118 at 5800. But peak torque is up from 112 lb-ft at 4000 rpm to 123 lb-ft at the more useful speed of 3500 rpm, and this should do much to correct what we felt was a certain sluggishness in the 144 as compared with older and lighter Volvos.

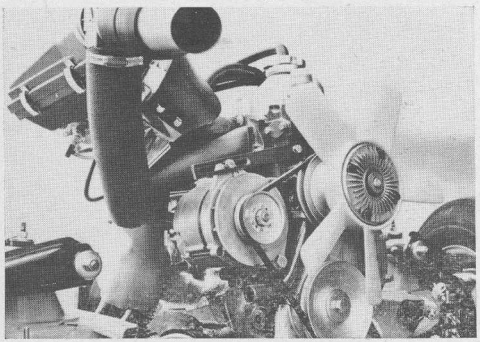
Alternators are standard on all models and all but the 1800S (which, strangely enough, will not be called 2000S!) will have a viscous-drive fan clutch that limits fan speed to 3000 rpm. Also, all except the 1800S will have a new air intake system for the engine which mixes heated and unheated air before it reaches the air cleaner by means of a thermostatically-controlled flap and duct system, much in the manner of many 1968 American cars. This is not to be confused with the excellent Volvo emission-control intake manifold, which takes fuel and air mixture through tortuous passages past exhaust heat at low speeds for better vaporization of fuel; this system is continued and is now standard on all Volvos, regardless where they are sold. Completing the engine-compartment changes is a higher-pressure radiator cap which lifts the coolant boiling point to around 250°F.

The Borg-Warner Model 35 automatic transmission, optional equipment, has been revised to give a "torque demand" downshift from 3rd to 2nd gear at low road speeds. This means that one can get that downshift at, say, 25–35 mph without kicking the accelerator pedal all the way to the floorboard—a most welcome change.

Inside the 140 series models there is new spun acrylic upholstery which feels like textile but is as washable as plastic and provides ventilation through its pores.

THE BIG NEWS is the 164, but as with most interesting new models from Europe we won't see this one in the U.S. until later—spring of 1969, we understand. The 164 is an extended 144, with a 4-in. longer wheelbase and 3.0 in. more overall length. Its 6-cyl engine uses up not only the extra inches of overall length but also a little of the air space ahead of the fan on the 144, so it's obvious that no attempt was made to maximize the "long hood look." The sheet metal is all new up front and returns to the Volvo frontal appearance of the 1930s—a big square grille with the old Volvo sign diagonally across it.

Heated air-intake system is added to dual intake manifold for further improvement of warmup, fuel economy, emission.



The engine is both new and not new. Take the newly introduced B20 engine described above, add two more cylinders, and you have it. Of course it's worked over quite a bit, but it does use exactly the same pistons, rods, bearings and so forth. Like the 144S it carries two Zenith-Stromberg carburetors, but its valve timing is a little milder so that its power peak of 145 bhp comes at 5500 rpm and its maximum torque of 163 lb-ft occurs at just 3300 rpm. Still no overhead cam—Volvo engineers think there is even less need for it in this case than in the 4-cyl engine. Like the 2-liter four, the new six uses thermostatically mixed intake air, the emission-control intake manifold and the viscous-drive fan.

A brand new gearbox has been designed for the 164, which has ratios appropriate for the more powerful engine as well as new remote shift linkage which puts the shift lever back where it ought to be instead of so far forward as it is on the 144—thus the clumsy, long lever is gone.

Since the 164 carries some 175 lb more on its front wheels than does the 144, it needed new steering gear. This it got: a new variable ratio, recirculating-ball gear instead of the straight-ratio, worm-and-roller box of the other models. Overall ratio is 18:1 at the straight-ahead position, increasing to about 26:1 out at the locks for parking ease. Volvo's first power steering will be available on the 164 (standard in the U.S.), and has a constant ratio of 15:1; it is a ZF system with careful attention paid to road feel in its design. Brakes are identical with the 144's all-disc system except for larger front pads and continue the unusual fail-safe hydraulic circuit split, which has been extended to all models.

With the standard 6.85-15 tires and 3.73:1 final drive ratio, the 164 is geared for over 19 mph per 1000 rpm; with optional Borg-Warner automatic transmission a 3.31 final drive is used, and this gives over 21 mph/1000 rpm—Americans should feel at home with this gearing, but acceleration might be a bit slow. Overdrive, optional on all Volvo models in their home market including the 164, is unavailable here.

Though its body aft of the windshield is pure 144, the 164's interior is considerably more luxurious, with carpeting, extra sound insulation, leather seat upholstery and, wouldncha know it, phony wood on the dash. There is a fold-down center armrest in the rear seat, which is primarily designed for two people.

In Sweden the basic 164 costs about $800 more than the 144S so that we can estimate its price as around $4000 in the U.S. And if this really is the price Volvo sets for the car, it should sell very well.