

SAAB 99



THE CAR OF THE 70's



The new, large Saab car — the 99 — was unveiled in Stockholm November 22, 1967. This folder gives a short presentation of the car including its development and some important technical data.

SAAB 99 — the car of the 70's — ready in '68

The new, large Saab, SAAB 99, has now reached so far in its development that the first prototype models have been unveiled at an advance preview. Very extensive tests and research have already been completed, but much remains to be done before the manufacturer, Saab Aktiebolag of Sweden, is ready to release its new model to the buying public. Before that time the car has to fulfill the very high quality demands set by the factory.

Thus a whole new series of tests is ready to begin on Swedish roads — by many considered the world's toughest test tracks.

The prototypes that have now been unveiled are part of small early series of pre-production models. In the spring of 1968 another pre-production series of cars will be completed, for yet another series of tests. Results of these tests will determine when series production can start. Present plans call for production to start during the later part of 1968.

The marketing emphasis of Saab will continue to be placed on the present very successful SAAB 96 and SAAB 95 models. With steadily growing demand for these models from markets the world over, pro-

duction of the present cars will be gradually increased. By 1970 total production of the entire line of models will exceed 70,000 units annually. To make this increase possible, Saab's Trollhättan factories are now being expanded at a cost of over 100 million Swedish kronor (U.S. \$ 20 million).

Plans for a new, large Saab model were brought up as early as in the middle 50's. By 1958 a number of sketches had been submitted by the well known automotive designer Sixten Sason. These designs are the basis for the final shape of SAAB 99.

By 1960 studies of the current Saab products, and automobiles of the competition, as well as thorough analysis of reports from both experts and the public, had brought planning to the stage where the basic design philosophy behind the new model could be determined. In this thinking projections of what could be foreseen in the automobiles and the traffic of the 1970's were of course also taken into consideration.

SAAB 99 had to be a car that must incorporate those special characteristics that have made the present Saab models outstanding in their fields: front-wheel-drive, a true aerodynamic shape and safety construction. Of course the new car had to be designed and constructed to provide optimum comfort for driver and passengers. The car also had to be made to fit into the "upper middle class" in price and size, when it was ready for market.

In the fall of 1962 the basic exterior design of the car was determined. Then came the question of the power plant.

Saab studied many possibilities in this field, including among others the new Wankel type rotary piston engine. The detailed job of evaluating the many engine

alternatives was given to the British engineering firm of Ricardo & Co Engineers Ltd. The final choice was a straight four-cylinder engine with overhead camshaft.

The British firm built some 20 test engines of this type which were delivered to Saab in the fall of 1963. Tests at Trollhättan determined that this was the ideal type of a power plant. Through contacts between Saab and the large British Leyland corporation it was discovered that both companies had plans for similar engine types for the future, and it was decided that the two corporations would seek to coordinate their engine production. A major advantage of this cooperation was, from Saab's point of view, the economies that could be attained through high volume production. Research and development could also be more effective as Saab placed its experiences and test standards at Leyland's disposal. The green light for further development of the SAAB 99 engine was given on April 2, 1964. A time schedule was worked out and negotiations between Saab and Leyland on specifications for the product were intensified. A contract was signed in Stockholm on February 18, 1965, which among other points determined that

Saab would decide exactly what standards the engine had to attain, both as to durability and reliability and in performance and economy.

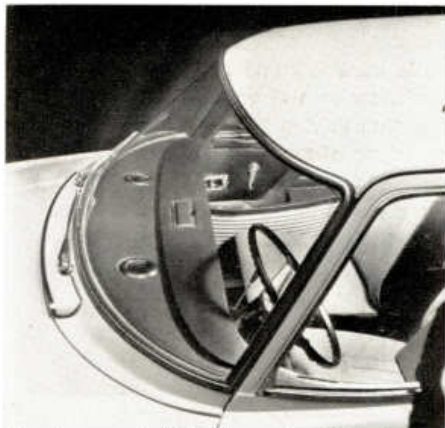
The first driving test of a hand made prototype of the new car took place in June of 1965. Secretly and well disguised, the car was tested during the summer of 1965 both in Sweden and on the Continent. Tests continued through September and October.

In January of 1966 the car was sent out on a two month test run on Swedish winter roads, in temperatures as cold as -45 degrees Centigrade (-50 F). Further tests were conducted during the summer of 1966 and yet another series of cold weather runs was made during the following winter.

Many minor details were altered and corrected during and following the tests, until the final prototype engine was installed and run during the summer of 1967. Many tests — and possibly some corrections and alterations — still remain before Saab is ready to begin production in earnest. One has to be satisfied that the product will meet the stringent demands that Saab has established for safety, economy and comfort.

SAAB 99 gives the passengers very good comfort. Three fully grown people are comfortable in the roomy back seat.

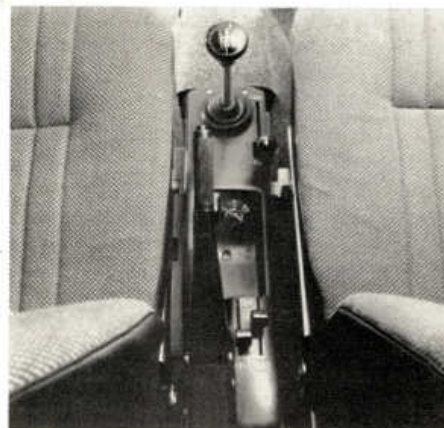




The large windshield made of laminated glass contributes to the good vision and the low air resistance.



The modern four-cylinder engine has an overhead camshaft and is mounted together with the transmission into one compact unit.



SAAB 99 has a floor mounted gear shift. On the panel between the seats are the hand brake, the ignition lock and controls for the free wheel and the backseat heating.



SAAB 99 is very suitable. By a simple relocation of the rear seat the luggage space can easily be increased to get a 170 cm (67 in.) long flat floor.



The steering wheel- and column are of safety type. The instruments are easy to read and non-glare.

Important technical specifications for SAAB 99

Engine Four-cylinder, four-cycle combustion engine. Five main bearings.

Cylinder arrangement In-line cylinders, set at a 45 degree angle to the right.

Cylinder volume 1.7 liter — 1,709 cc (104.27 cu. in.)

Compression 9.0:1

Power 87 bhp SAE at 5,500 rpm

Maximum torque 13.5 kpm (97.65 ft lb) at 3,000 rpm.

Valve mechanism One overhead camshaft, chain driven

Carburetor One Zenith-Stromberg 175 CD, constant vacuum carburetor

Fuel octane range At least 96 octane (according to Research method).

Fuel tank Well protected behind rear axle. 47 liter (12.4 US gals. — 10.3 Imp. gals.) capacity.

Electrical system 12 volt, alternator

Cooling system Liquid cooling with expansion tank. Thermostat controlled fan, driven by an electrical motor.

Drive train Clutch, transmission and differential combined with the engine into one unit. Front-wheel drive.

Transmission Placed in its own housing in the engine oil pan. Self contained circulation lubrication. Four speeds, synchromesh. Floor mounted gear shift.

Brakes Power assisted disc brakes on all four wheels. Dual diagonal hydraulic system. Hand brake works on drum brakes inside the front wheel disc brakes.

Steering Rack-and-pinion type. $3\frac{1}{3}$ turns from lock to lock.

Suspension Front: Separate wheel suspension with swinging arms. Coil springs and telescopic hydraulic shock absorbers. Rear: Light rear axle suspended in four rubber mounted longitudinal arms and one cross beam. Coil springs and telescopic hydraulic shock absorbers.

Tires Radial ply, 115×SR 15

Body Self supporting two-door sedan of steel. Aluminium treated for corrosion resistance.

Passengers Driver plus four passengers

Inside dimensions Distance from gas pedal to rear seat back 171 cm (67.3 in.)
Width at shoulder height, front 134 cm (52.8 in.), rear 140 cm (55.1 in.)
Ceiling height front 98 cm (38.6 in.), rear 97 cm (38.2 in.)

Trunk 347 liter (12.25 cu.ft.) capacity SAE.

Outside dimensions:

Overall length 435 cm (171.25 in.)

Overall width 168 cm (66.1 in.)

Overall height 145 cm (57.1 in.)

Wheel base 247 cm (97.36 in.)

Track Front 139 cm (54.7 in.), rear 140 cm (55.1 in.)

Ground clearance 17 cm (6.7 in.)

Turning diameter 10.4 m (34.1 ft.)

Curb weight (incl. driver + fuel) 1,035 kg (2,435 lbs.)

Maximum load 355 kg (785 lbs.)

Maximum weight (fully loaded) 1,460 kg (3,220 lbs.)

Weight distribution 61% front — 39% rear, at curb weight

Air drag coefficient 0.37

Performance:

Acceleration 0–100 km/h (0–62 mph) 14.5 sec.; 0–400 m ($\frac{1}{4}$ mile) 19 sec.; 0–1,000 m (standing kilometer) 35 sec.

Fuel consumption 0.9 liter/10 km DIN (26 mpg US — 31.5 mpg Imp.)

Service Permanently lubricated. 3.5 liter (7.5 U.S. pints) engine oil are changed each 10,000 km (6,000 miles)