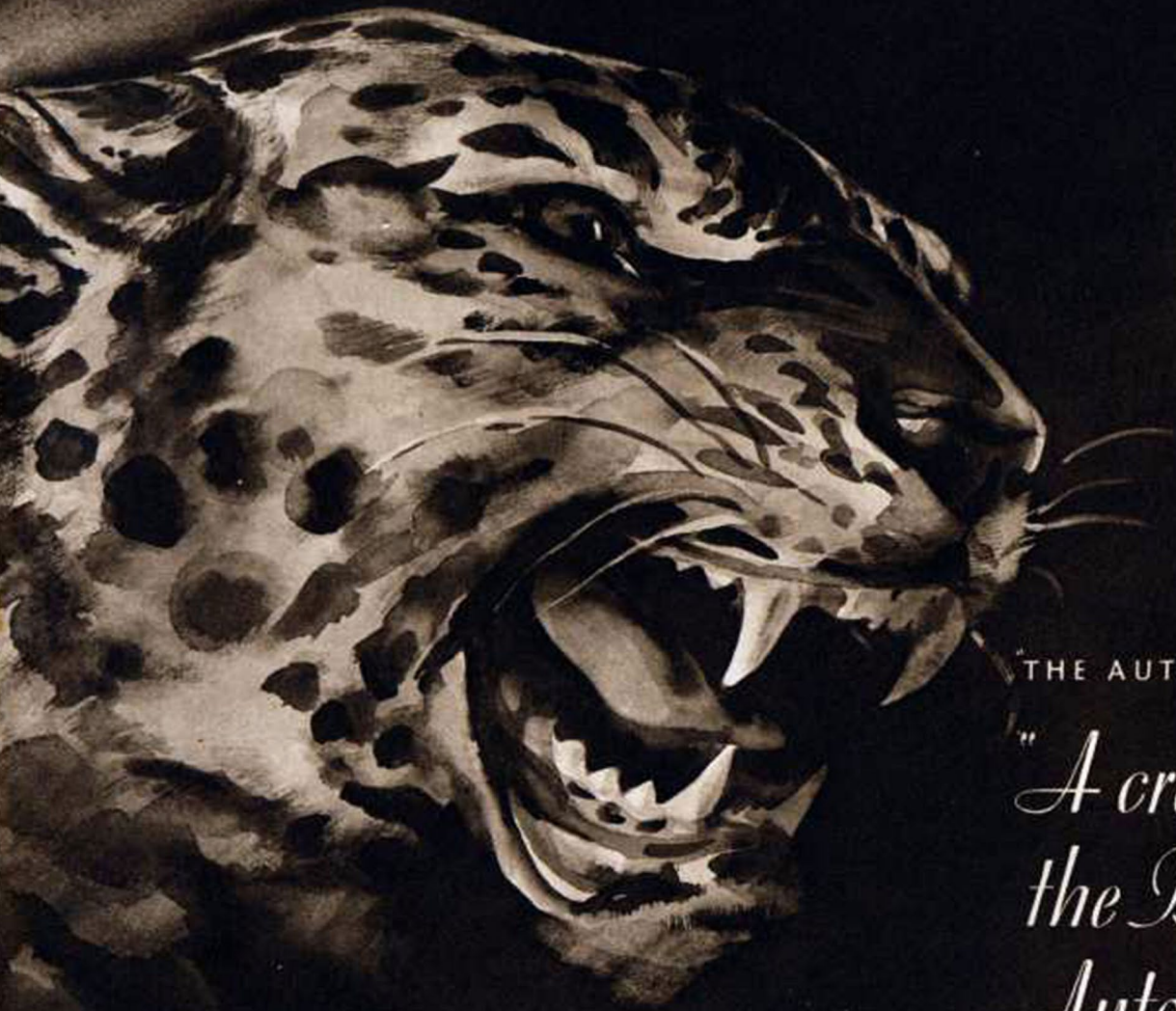


June 2, 1936.

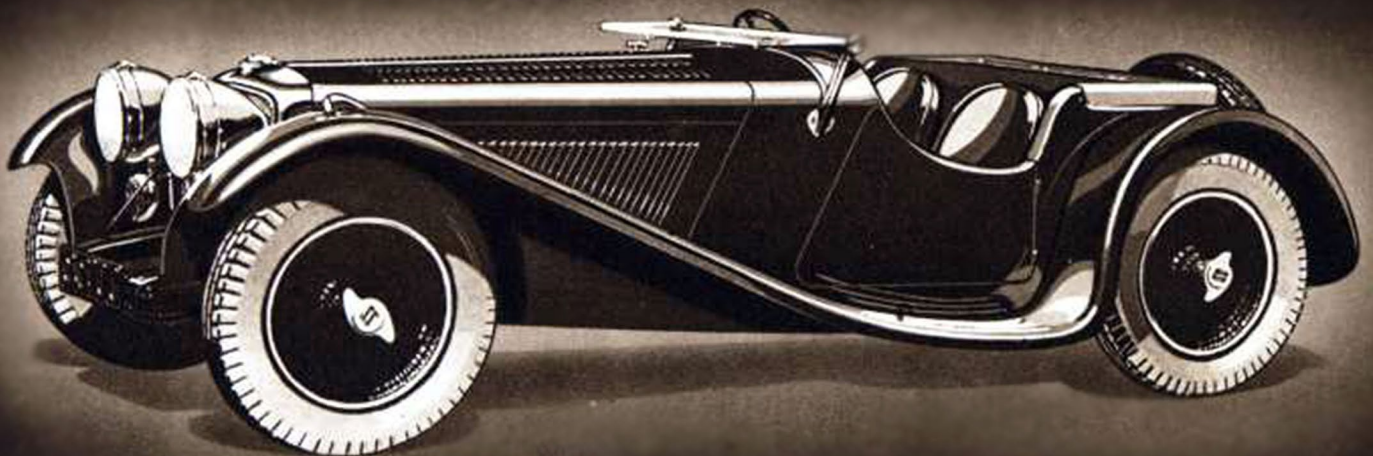
The Motor

S. S. JAGUAR



"THE AUTOCAR" SAYS

*"A credit to
the British
Automobile
Industry"*



Feature - S.S. Jaguar 100 (1936-1939)

William Lyons brought his keen eye for style and ability to build a quality sports car that sold for a remarkable price. The S.S. Jaguar 100 is highly sought after thanks to its aesthetic beauty and rarity.

Design

William Lyons created one of the most outstanding cars of all time at the age of thirty-five. He built into the S.S. Jaguar 100 all of his signature sports car features including long bonnet, smooth styling and performance that was the equal of most of his competitors. This blueprint would end up being integral to his design of the XK120 and E-Type.

Engine

The engine was a development of the old 2½-litre Standard pushrod unit converted from side valve to overhead valve with a new cylinder head designed by Consultant Engineer Harry Weslake and Chief Engineer William Heynes.

At Lyon's and Westlake's first meeting, Westlake who was renowned for his brusque, no-nonsense approach to both his work and people is reputed to have said to Lyon's "Your car reminds me of an overdressed lady with no brains – there's nothing under the bonnet!"

After a 'first class row' they adjourned to the pub and came to understand each other better. Westlake was engaged as a consultant with a brief to increase the power of the Standard 2½-litre engine from 65 bhp to at least 90 bhp. Working with William Heynes, their cross-flow head design achieved 95 bhp.

Unusual for its day, the Westlake-Heynes cylinder head was of cross-flow design with twin SU carburettors on one side of the engine and the exhaust manifold on the other. In 1938 the engine was further enlarged to 3½ litres and the power increased to 125 bhp.

(continued page 10)



Harry Weslake, Engineer and foremost expert on engine tuning. Working on the 2½ litre side-valve Standard Engine with Bill Heynes, their overhead-valve cylinder head design achieved a 50% increase in power from 65bhp to 95bhp.



Bill Heynes, founder of Jaguar's Engineering department and Chief Engineer from 1935-1989. The remarkable and talented engineer was crucial in developing the Jaguar marque, and the S.S. 100 was the first serious fruit of Bill Heynes design achievements. Bill seen here at work with his first engine test bed, although it was said that he was just at home working on chassis development. (Photo JDHT).

Feature - SS Jaguar 100 (1936-1939)

Chassis

When Chief Engineer William (Bill) Heynes joined S.S. Cars his two engineering priorities were to develop an engine with substantially more power than the side-valve Standard engine and develop a more advanced chassis.

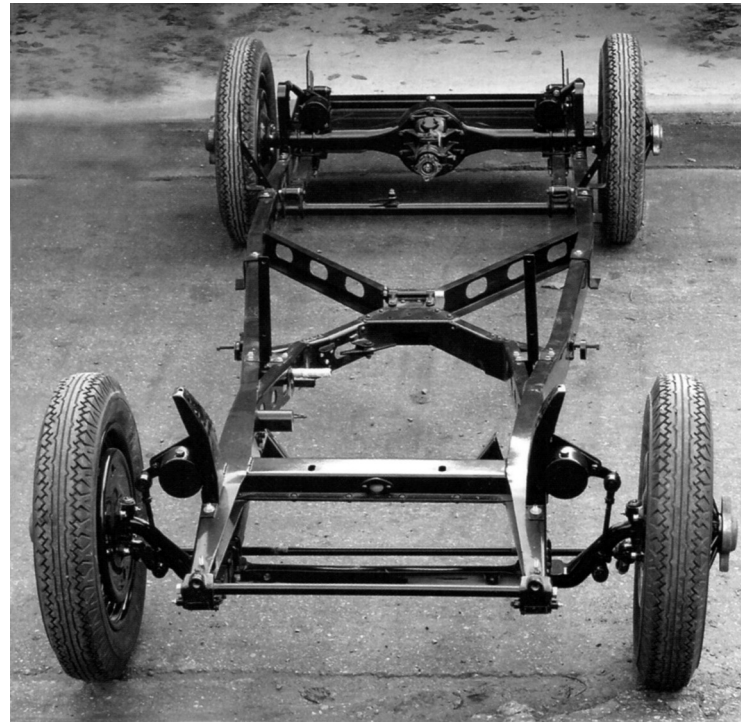
While Weslake had been performing wonders with the side valve engines, Heynes had been at work on the chassis. The Standard chassis, even in its evolved form, was scarcely advanced. The limitations of the chassis were thrown into ever sharper focus as engine power and vehicle performance increased.

Starting with the same shortened version of the S.S.1, and as used on the S.S.90, to achieve satisfactory torsional stiffness additional cruciform bracing was incorporated into the ladder-frame chassis. Heynes also adapted many of the better components adopted for the saloon onto the S.S.100.

However, a more serious problem lay with the cable operated Bendix-Perrot brakes, which had a hard time coping with the larger-diameter drums fitted to the more powerful S.S. Jaguar cars. Girling now supplied the rod-operated brake system which was still mechanical rather than hydraulic, but more satisfactory. (No Jaguar had hydraulic brakes, or independent front suspension, until after the Second World War).

The S.S. 100 used Luvax hydraulic dampers all-round with friction dampers retained at the front. The steering was the much nicer Burman Douglas worm-and-nut system. The cars were fitted with 5.50 or 5.25 x 18-inch tyres on 18-inch wire wheels and the suspension was on half-elliptical springs all round with rigid axles. The complete car weighed just over 1150 kg.

One reason why so few S.S.100's were made was that carrying out these adaptations and changed components were both expensive and disruptive in a factory which was increasingly dedicated to production of the new saloon series, the real money-makers.



Jaguar S.S. chassis showing the central cruciform brace to impart torsional stiffness. The chassis was similar to the early Saloons but more substantial. The chassis passed under the rear axle to keep the overall line of the car low.

100 MPH

The '100' was named to reflect its 100-mph maximum speed. On test by the Autocar magazine in 1937 the 2½-litre (20 RAC hp rating) car was found, with the windscreen lowered, to have a maximum speed of 95 mph (153 km/h).

With the 3½-litre (25 RAC hp rating) the top speed reached the magic 100 mph (160 km/h) with a best of 101 mph (163 km/h) over the quarter mile and the 0-60 mph (97 km/h) coming down to 10.4 seconds. *(continued page 11)*

Wooden Frame

Above the steel chassis the main structure of the S.S.100 was a wooden ash frame made from a number of timber sections glued and screwed together, onto which the alloy body panels were attached.

Windows & Aero Screens

The S.S.100 came fitted with both a conventional fold-down windscreen and behind that, separate aero screens.

No Boot

There was no boot on the S.S.100. Luggage had to be carried behind the seats. The rear of the car was taken up by the spare wheel mounted on the fuel tank.



Finned Alloy Sump

To aid engine cooling the sump was finned allowing it to shed heat more efficiently and louvres were fitted to the bonnet to allow hot air to escape from the engine compartment.

Rear Hinged Doors

The rear hinged doors gave better access to the sports car cabin. However, as they could fly completely open this design did not continue with the XK120.

Mechanical Brakes

One way of achieving suitable braking for the S.S.100 was to fit larger 13 inch diameter drums which were also finned for better heat distribution.

Feature - SS Jaguar 100 (1936-1939)

Jaguar Name

The S.S.100 was the first William Lyons car to wear the name 'Jaguar' (shared with the 1936 S.S. Jaguar Saloon).

It was on an S.S.100 that the famous Jaguar 'leaper', the marque's signature feline bonnet ornament, was first displayed replacing the 'Swallow' moniker.

In mid-1936 the first version of the Jaguar mascot was reputedly described by Sir William Lyons, founder of the company, as "looking like a cat shot off a fence".

A later publicity photograph in early 1937 of the first 3½ litre S.S.100 produced shows a revised Jaguar 'leaper' mounted on the radiator cap. It is this more stylised 'leaper' that became the trade mark on Jaguar Cars for many years. The adoption of an animal title was the brainchild of an advertising agency, who were assigned to present a selection of titles to S.S. cofounder William Lyons who, by now, had bought out his partner, William Walmsley.

This was seen as an opportunity to relaunch S.S. models as very fine cars to own, and the name 'Jaguar' kept coming to the top of their list. It caught William Lyons' imagination too, and reminded him of an old school friend who had worked on the 'Jaguar' aero engine.

Permission was sought from Armstrong-Siddeley to use the name for a car and readily granted. Thus 'Jaguar' was assigned to the new saloon and sports models in 1935, and from that point on Jaguar was there to stay. S.S. Cars was renamed Jaguar Cars in 1945.

Value of Money

When introduced to the press in London in September, 1935, those present estimated the cars would cost almost £250 more than they actually did! William Lyons instantly became a name to be recognised and respected.

In 1937 the 2½-litre car cost UK £395 and in 1938 the 3½-litre UK £445. The fixed head coupé, of which only one

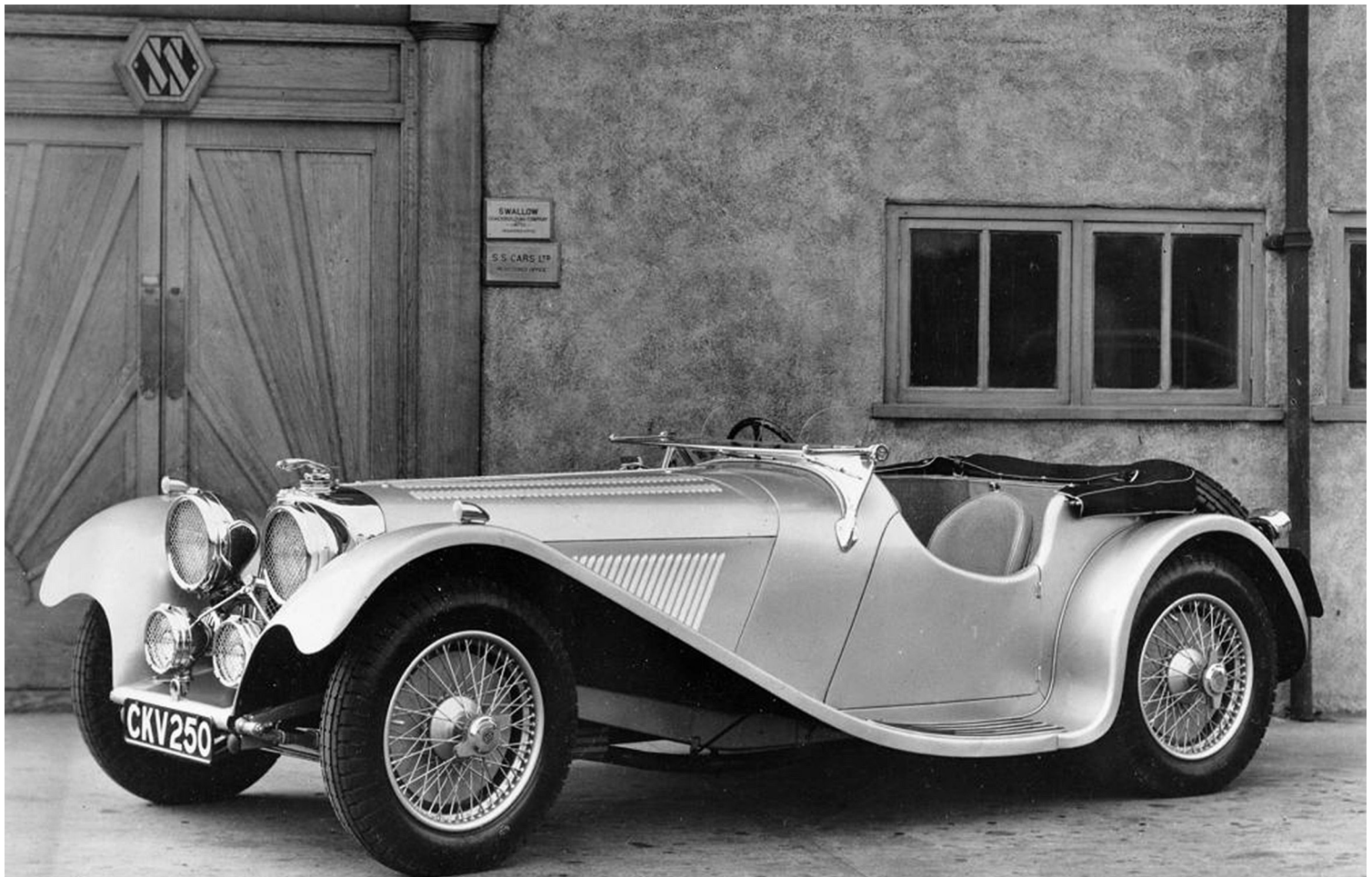
was made, was listed at UK £595. A few examples were supplied as chassis-only to external coach-builders.

Motor Racing

Although a fine road car, the S.S. Jaguar 100 was primarily marketed for competition work, and its first major success came early when Tommy Wisdom, crewed by his wife, won the arduous International Alpine Trial in 1936, beating Bugatti and bringing the fledgling marque to the attention of the Continental public. This was the first of many successful rallying forays, including class wins in the RAC events of 1937 and 1938, and the Alpine (outright) again in 1948.

Production

Only 191 2½-litre and 118 3½-litre models made. While most stayed in England, 49 were exported overseas which included three to Australia. (Although overtime another 21 have found their way in and out of Australia).



An original factory photograph of #39001, the first 3½ litre S.S.100 produced. Registered CKV 250, it is shown parked outside the doors of the Foleshill offices of S.S. Cars Ltd. in early 1937 and shows a revised Jaguar 'leaper' mounted on the radiator cap. It is this more stylised 'leaper' that became the trade mark for Jaguar Cars. (JDHT)

Fixed Head Coupe

In 1938 S.S. Cars produced a fixed head Coupe version of the S.S.100 which was shown at the Earls Court Motor Show. Reportedly inspired by the Bugatti Type 57, it had a 3½ litre engine and the interior was more like the S.S. Jaguar saloon with a high level of trim.

The doors had internal handles and wind-down windows in place of the removable side-screens. The one-off car was sold in April 1939 and still exists after spending many years in the USA and returning to the UK where it has been restored.

Replicas

There are estimated to be more than 1,000 Replica S.S.100's spread throughout the world.

One such 'replica builder' was Suffolk Sportscars in the UK that was dedicated to building exact reproductions of old Jaguar cars including S.S.100's and Jaguar C-Type's. During its 25 years of trading, Suffolk Sportscars created almost 400 new replicas before going into liquidation, in-part due to the threat of legal action by JLR.

One issue raised by S.S. devotees is that Replicas have depleted stock of original S.S. cars by using the chassis and mechanical's from perfectly restorable S.S. Sedans and S.S.1's to build the Replicas.

The second is the risk of fraud by 'rouge' individuals like UK firm JD Classics that sold a number of Replica Jaguars as original cars at a huge cost to unsuspecting buyers. With 44 original S.S.100's 'missing', there is a large scope for potential corrupt practice.

Reviews of the S.S. 100

Road tests naturally concentrated on the car's performance and handling. The visibility was considered good as both wings could easily be seen by the driver. The seats were reasonably comfortable with their coil springs and Dunlopillo overlay but the small cabin had a tendency to become hot from the engine.

It was considered that there was a reasonable amount of luggage space behind the seats for this type of car. The recessed battery box intruded somewhat into the foot well, so depressing the



In 1938 S.S. Cars produced a one-off fixed head Coupe version of the S.S.100 (chassis #39088). Its styling laid the foundation for the XK120 coupe almost 15 years later.

clutch pedal required the use of the toe rather than the ball of the foot.

The rod-operated brakes were good and the engine very tractable, needing only third or fourth gears for most normal driving. The exhaust noise was scarcely noted at low speeds though it was harsh around 60mph (97km/h), but became quieter again as the speed was increased.

The suspension was firm and there was no body roll when the car was driven hard, the combination of the front hydraulic and friction shock absorbers working well to keep the car stable. The car was very manoeuvrable, the light and positive high-g geared steering needing only 2 ½ turns from lock to lock.

Overall, the S.S. 100 was a genuinely fast, stable and exciting car to drive and it is no wonder that so many were successfully raced and rallied. It is one of the most desirable cars Jaguar has ever made.

Collectability

Of the 309 built, 86% are accounted for with devotees having spent their lives tracing the histories of each car and keeping track of them as they move to new owners.

A beautifully restored former Pebble Beach concours winning 1937 S.S.

Jaguar 100 3½ Litre Roadster was sold by Gooding & Co. at their August 2010 Pebble Beach auction. It fetched a noteworthy £666,270 (A\$1,260,000).

Nowadays even a half reasonable S.S.100 will cost at least 1 million Australian dollars (if you can find one).

Successor

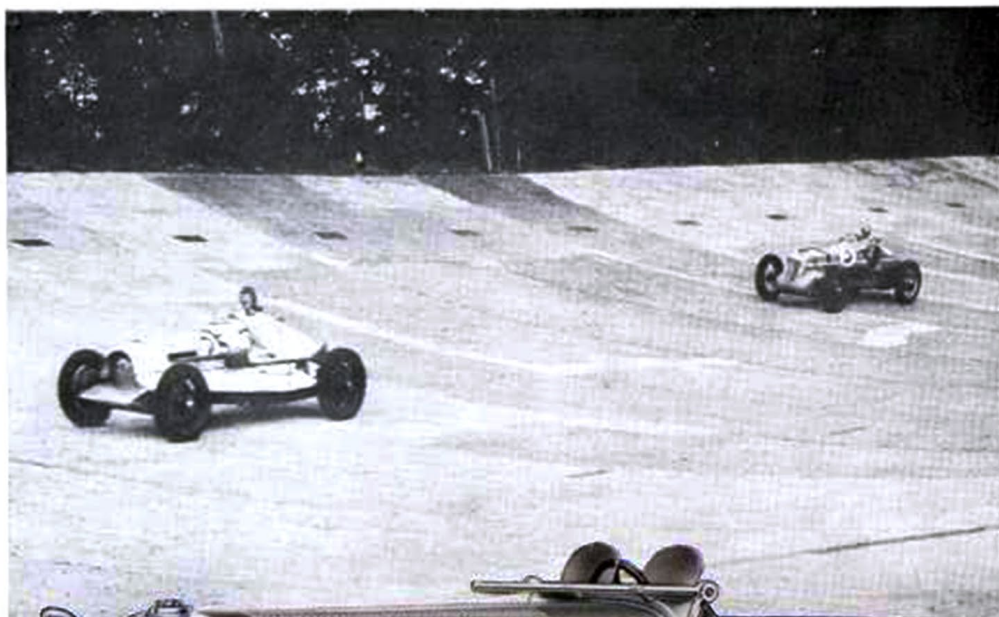
An original factory catalogue produced in 1945 included the S.S.100 as part of their model range for 1945 that included an asterisk stating *This Model Not Yet Available For Delivery.

It is unclear if Jaguar genuinely intended to produce the S.S.100 after WW2 but it didn't happen and the model was replaced by the XK120 in 1948. ■

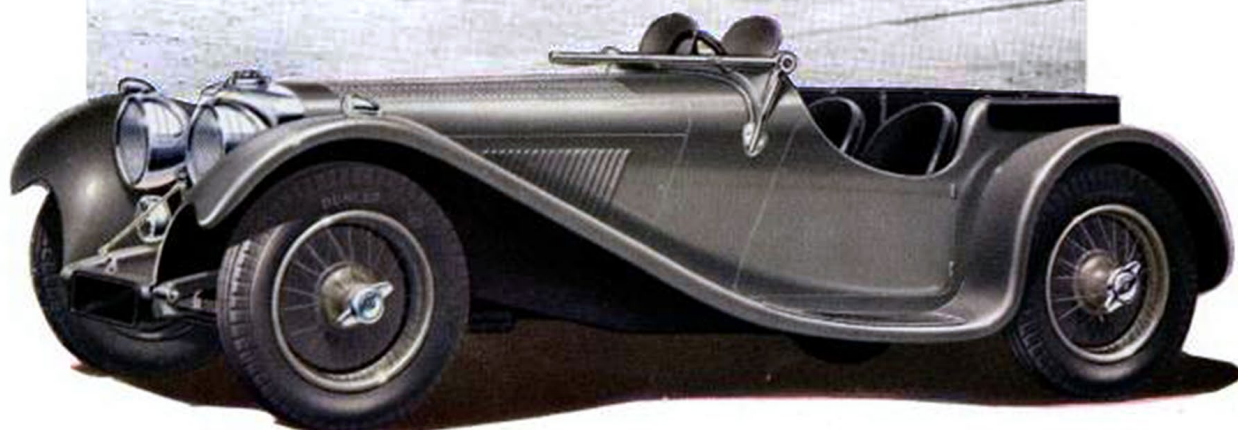
To hear what a S.S.100 sounds like see Video: [SS100 Jaguar Sights and Sounds #39067](#)

Editor: Information for this feature sourced from the 'Classic Jaguar Association of America', 'The Forerunners of Jaguar in Australasia and SE Asia' written by John Clucas and Terry McGrath and various editions of 'Jaguar Magazine' (Les Hughes).

Original 1945 Advert for the S.S.100



★ THIS MODEL
NOT YET AVAILABLE
FOR DELIVERY



THE "100" OPEN MODEL

The Jaguar "100" has for long been one of the fastest unsupercharged cars on the road and, in the hands of private owners, has registered numerous outstanding successes in competition work. Available either in 2½ Litre or 3½ Litre form it has a performance exceeding 100 m.p.h. in full touring trim. Noteworthy for its road-holding qualities, superb acceleration and ease of control, the Jaguar "100" makes special appeal to the motorist demanding the uttermost in performance. The model illustrated is the 3½ Litre.

2½ LITRE MODEL £395.

3½ LITRE MODEL £445.

