National Motor Museum engineers complete the rebuild of the Sunbeam 1000hp record breaker’s rear engine

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Author:

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Sunbeam 1000hp milestone as National Motor Museum engineers complete the rear engine rebuild…

The Museum tells us:

(All words and photographs from The National Motor Museum).

In a landmark stage of the Sunbeam 1000hp restoration, National Motor Museum engineers have almost completed the rebuild of its rear engine after years of work to strip, clean and restore it.

Sunbeam had only run for 300 yards (274m) before being packed into a crate to be taken to Daytona for its Land Speed Record-breaking run in 1927. Though engineers have had to take apart and restore each part of the colossal 22.5 litre Matabele V12 aero engine to enable it to work again.

Parts which had been laid out on the workshop bench, and meticulously bagged and labelled, have now been reassembled. The workshop team has relied on experience and knowledge, with no manual or documentation to help with the Sunbeam engine rebuild.

The crankshaft, con-rods, pistons and cylinder blocks have all been cleaned, restored and pieced back together. The only non-original parts are the piston rings which were glued tight with Castrol R oil, so needed a new set of replacements to be made from a pattern. All four of the camshafts have also been put back in place.

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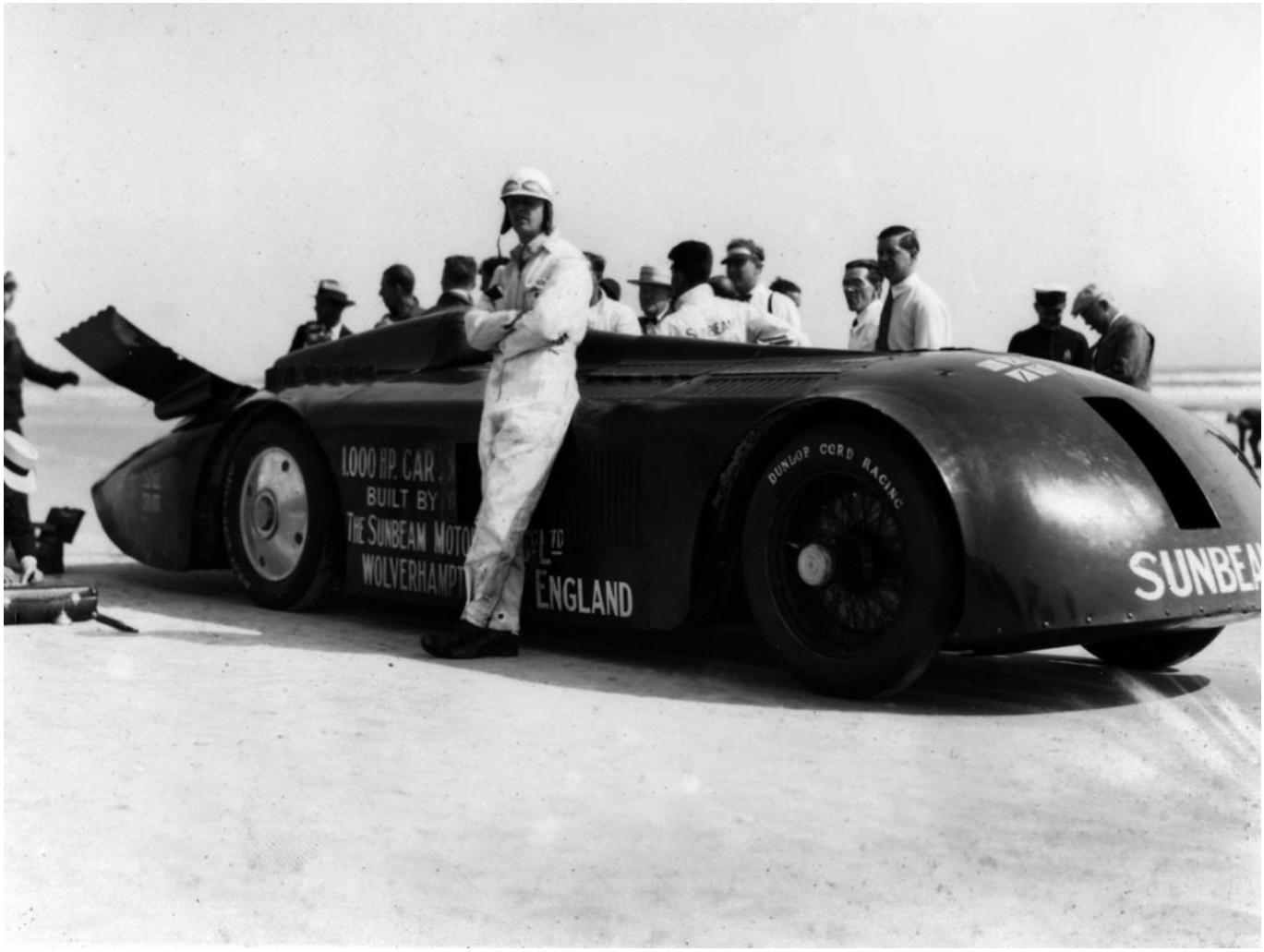
See video footage of the rebuild here: https://youtu.be/p4ohsLb1z-U

National Motor Museum Senior Engineer Ian Stanfield said: “It’s one of the exciting parts of the project to put the engine back together. We wanted to make sure that everything was turning and free before bolting it up for the last time.”

He added: “They were clever people who designed and built Sunbeam 1000hp back in 1918. When you look at the materials they used, the machining was phenomenal and the design was incredible. They were able to come up with some very good ideas.”

There are plans for a rear engine start-up out of the car, before it is lowered back into the chassis. Sunbeam can run with just one engine but the team plans to begin work on the front engine, which also once produced 435 bhp and has not run for more than 80 years.

The front engine and exposed chassis can currently be seen by visitors to Beaulieu on display in the National Motor Museum.



Major Henry Segrave with Sunbeam 1000hp at Daytona Beach in Florida.

FUNDS NEEDED TO COMPLETE THS MAMMOTH JOB…

Funds are needed to complete the full restoration project. Sunbeam 1000hp Restoration Campaign was launched with Hampshire-based Brookspeed Automotive and aims to raise £300k to complete the restoration of 'The Slug' with the ambition of taking it back to Daytona for the centenary of its record-breaking run in 2027.

Donations for the Sunbeam 1000hp Restoration Campaign can be made online at https://nationalmotormuseum.org.uk/sunbeam-1000hp-restoration-campaign

Sponsors and corporate donors who would like to be associated with the campaign are urged to get in touch by emailing nellie.rogers@beaulieu.co.uk.

National Motor Museum

The National Motor Museum is an Accredited Museum and all of its collections have been designated by Arts Council England as being of national and international importance. Its internationally-acclaimed collection of more than 1.9 million items is cared for by the National Motor Museum Trust and includes historically important vehicles, motoring artefacts, film footage, images, documents and books. After marking the museum's 50th anniversary in 2022, work has started on ambitious plans to upgrade facilities and open up even more of its collections to visitors.