



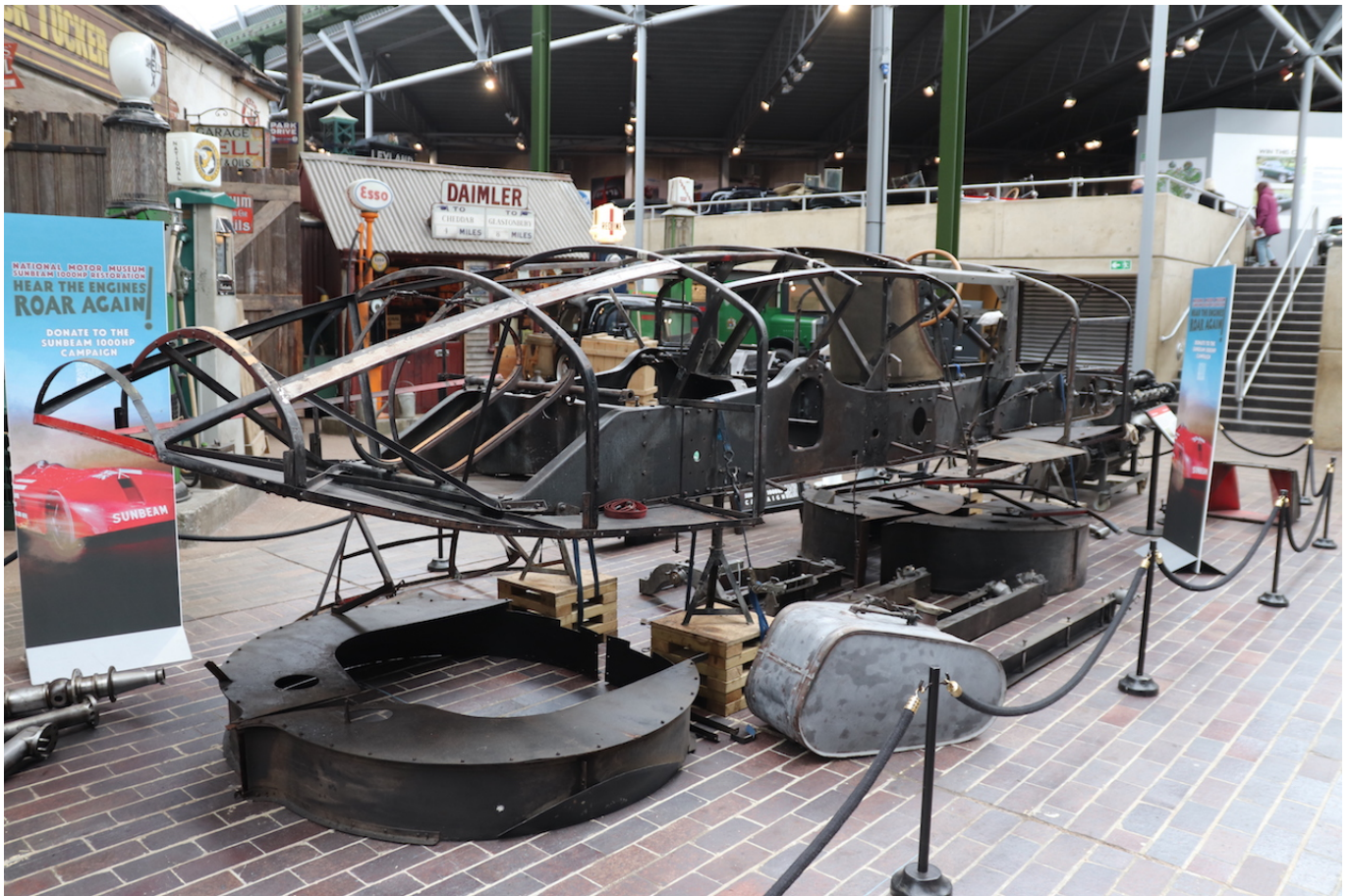
## Crack detected in engine subframe of Beaulieu's Sunbeam 1000hp record breaker

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<https://www.wheels-alive.co.uk/crack-detected-in-engine-subframe-of-beaulieus-sunbeam-1000hp-record-breaker/>



The stripped down Sunbeam 1000hp chassis in the National Motor Museum.

Crack detection discovered engine subframe crack (now repaired) in the National Motor Museum's Sunbeam 1000 hp, as their



specialist workshop team continue the restoration of this unique and very special historic vehicle...

*They tell us:*

(All words and images from the National Motor Museum, Beaulieu).

A visual inspection checked for potential problems, before a non-destructive solution with magnetic particles was sprayed over test areas to show any cracks under Ultra-Violet fluorescent light. A powerful magnifier helped to reveal whether marks were cracks or scratches on the axles, suspension units and machined metal parts.



Crack testing with Ultra-Violet fluorescent light.

One crack was found in the engine subframe, where it had been bolted to the chassis, but has been ground out and rewelded by workshop engineers - and no further issues were found.





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### Crack discovered in engine bay subframe.

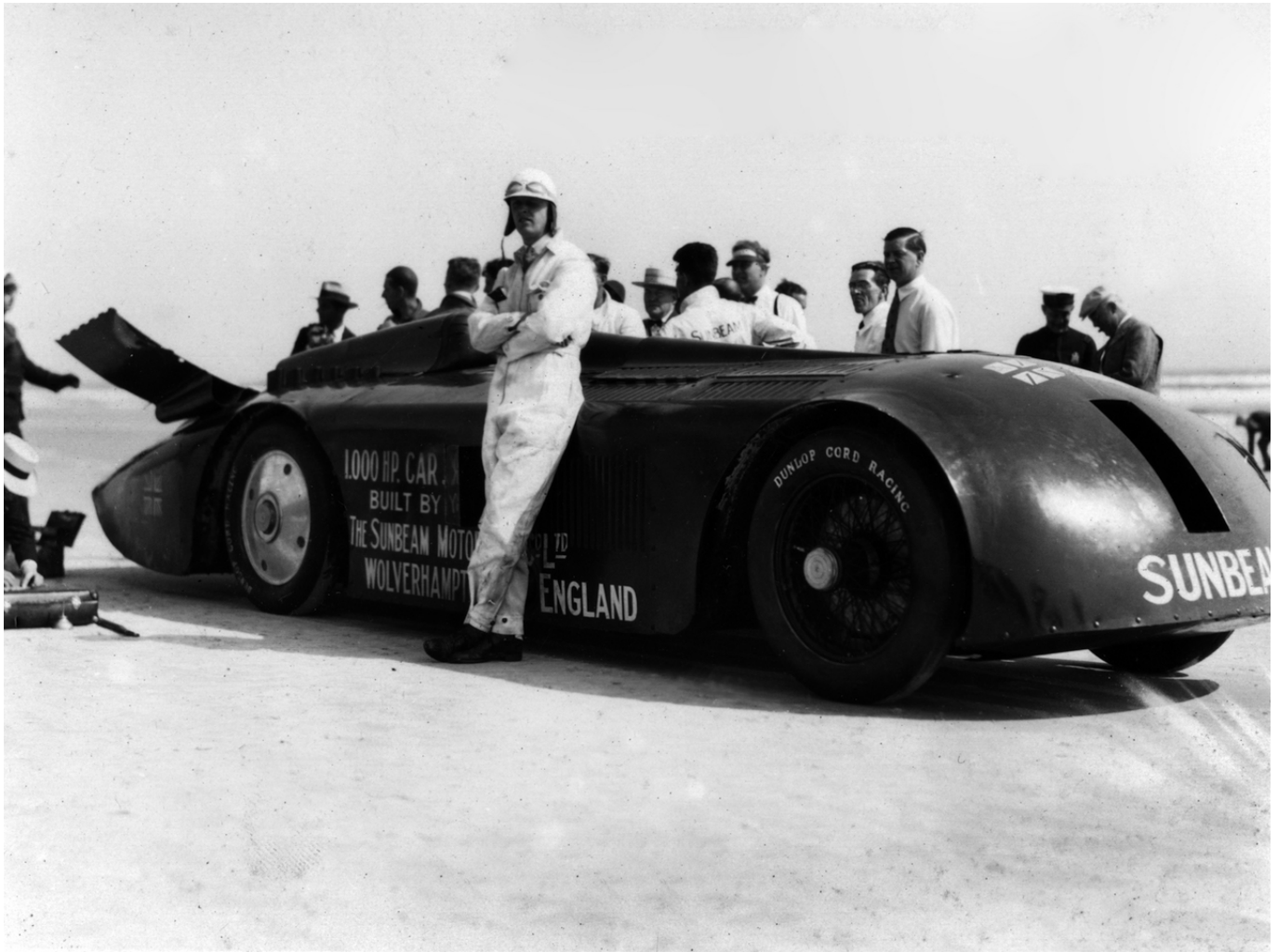
National Motor Museum Senior Engineer Ian Stanfield said: "We have not encountered anything we were not expecting to come across and considering how complex this project is, we are very pleased with what we have found."



Senior engineer Ian Stanfield with machined parts which passed crack testing.

Work is being carried out as part of the Sunbeam 1000hp Restoration Campaign, which aims to raise £300k to complete the restoration of 'The Slug' with the ambition of taking it back to Daytona Beach in Florida for the 100th anniversary of its record-breaking run in

2027.



Major Henry Segrave with the Sunbeam 1000hp at Daytona Beach in Florida, in 1927.

Visitors can see the exposed chassis in the National Motor Museum as part of a visit to Beaulieu, while work is being carried out (please also see our heading photograph).

To prepare for the latest testing, the workshop team called on their colleagues at Buckler's Hard Yacht Harbour for more powerful pressure washing boatyard equipment to remove dirt and grease, as well as wash away any harmful residue from the previous soda blasting process.





Specialist laser cleaning is also being used and four brake drums have been taken away by Laser Tec experts for cleaning. The stunning results of the technique were shown by removing Castrol R oil from an adjustable spanner, which had remained 'glued' to the chassis since Sunbeam's record-breaking run.



Original workmens' markings revealed on the Sunbeam 1000hp.

In the next stages, the chassis will be sprayed with Trimite lacquer to help preserve it for another 100 years. Using clear coat will ensure that original workmen's markings, which were revealed during the restoration, will remain on show.



To see footage of Sunbeam's laser cleaning and crack testing, go to Beaulieu's YouTube channel at <https://youtu.be/dB0Lk5YKzBc>.

The Sunbeam 1000hp Restoration Campaign was launched with Hampshire-based Brookspeed Automotive last year and reached a £50k fundraising milestone at the start of 2024.

The Sunbeam's two 22.5 litre engines, which each produced 435 bhp, have not run since before World War II more than 80 years ago – after corrosion attacked internal workings. This immensely powerful machine, which was designed and built solely to break the 200mph barrier, was once the fastest car in the world. National Motor Museum engineers aim to recapture the sounds, sights and smells of this ground-breaking machine and help to preserve it for future generations.

Funds are now needed to turn back the clock and complete the full restoration project. Donations for the Sunbeam 1000hp Restoration Campaign can be made online at [sunbeam-1000hp-restoration-campaign/](https://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 [michelle.kirwan@beaulieu.co.uk](mailto:michelle.kirwan@beaulieu.co.uk).

## The 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.

For more information please go to:



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