

# LOTUS NOTES



THE OFFICIAL MAGAZINE OF LOTUS CLUB VICTORIA and LOTUS CLUB QUEENSLAND



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- Targa 2020 for Rookies
- One of a kind? No, another twin cam Elite exists
- Birkin Clubman Upgrade

2020





## One of a kind?

No there's another, Elite Chassis No: 1559

by Doug Fraser with Peter Murray



The July 2020 *Lotus Notes* contained an article on the Lazenby car, Elite Chassis number 2001, and told the story of this well-known twin cam Elite.

Whilst reading the January 1968 *CAR* magazine article by Nick Brittan, I read two paragraphs alluding to an earlier "factory" twin cam car, speculating that Chapman initiated an experimental twin cam engine car. The article said in part,

*"Five days later the first twin cam Elite was on the road running and running fast. The trouble was it didn't handle. They'd dropped the engine too far forward and the result was that the back end kept wanting to be the front and the whole thing was slightly off balance. The car was eventually sold and was last heard of being extracted from a hedge in Northamptonshire."*

Chris Harvey's book *Lotus: The Elite, Elan, Europa* says the first twin cam Elite was built "in a matter of hours."

Fast forward almost fifty years and this car was found in the USA, parked for about 45 years with only 11,400 miles on the clock, and sporting a depressing level of corrosion under the bonnet.

The new owner, Doug Fraser, who is clearly a self-confessed masochist, was not put off. He purchased Elite chassis number 1559 in 2016 and set about bringing it to concours standard.

He discovered that Miles Wilkins had also written about the car in his book *Lotus Twin Cam Engine*. At page 30:

*"Other interesting work carried out at Cheshunt included a one-off re-design of the Elite rear suspension based on a Jaguar rubber system (this was done by Brian Luff in 1962) – apparently it felt like driving jelly and was not a success. Victor Grimwood who stayed with Lotus carried out a private 1558cc conversion to his Elite in 1963 ..."*

While he is still around, it appears that Grimwood has found God and won't talk about anything else.

The chassis number would place the bodyshell as having been produced by Bristol around 1960/1961. The Warren King list of Elites shows a delivery invoice to the first owner, R.J. Fuller, on 19 December 1963.

So could it have been a "test mule" for the factory between 1960 and 1963?

It seems this was unlikely to have been an authorised engineering endeavour and, when confirming that 1559 was the car he referred to in his book, Miles Wilkins told Doug that "Brian Luff did it purely on his own for a bit of fun to see what's what."

Doug has established that the car was imported to the USA from England in 1970.

When he took delivery of the car, Doug discovered the differential was mounted differently to any other Elite he had seen. It was in a steel sub-frame suspended in rubber.

During the strip down he found that the original mount in 16GA sheet metal had failed, but had been beaten back into shape and reinforced with 1/8" steel, with two tubular supports added at the front.

He also discovered the number "31" stamped into the side of the engine block and another number "LP 326" stamped in the back of the cylinder head. The number 31 was recorded on Warren King's list, but the correct engine number was LP 326. Doug determined that this engine block was cast on May 9 1963, and the cylinder head is stamped April 30 1963, so the engine is maybe a late replacement twin cam to allow Lotus to quit the remaining stock of unsold Elite shells.





Differential mount arrangement



Revised differential mount, 2018



The engine post rebuild



Engine mounts

During the engine rebuild, Doug discovered the internals were essentially as new, with the only damage being as a result of the car being parked for 47 years.

The gearbox is a Ford 2000e ultra close ratio alloy housing which originated in the Cortina Rally Program and was fitted to early Elans.

Interestingly, the gearbox castings were stamped with the characters "M251." "M2" being the internal factory designation for the Elan project.

The engine mounts are convoluted and were manufactured, then obviously revised with forward braces to the tops of the shocker mounts suggesting the first attempt failed.

As for the bodyshell, there was some evidence of damage to the right rear quarter, including a bent strut, but it was not extensive and easily repaired.

The car does not seem front-heavy, but there is an additional 8 kilograms of steel supporting the differential. The suspension is all standard Series 2 suspension.

There is some speculation within the Lotus 14 owner group that the car may have been a test bed for the Lotus Elan, as the differential mount is a fair representation of the Elan system.

So it seems this twin cam car was built some three and a half years before the better known Lazenby Elite.

Doug finished the restoration in time for the Lime Rock Historics in 2018, where the car took "Best of Class."

At this event, he was delighted to have the chance to meet Stephen Goss, who had written to *MotorSport* magazine in 1984, inquiring as to the whereabouts of the "prototype Elite Ford" that the factory had tried to sell him in 1963.

**Elite Ford ?**

Sir,

For historical accuracy I am trying to obtain corroboration that Lotus produced at least one old style Elite with the Ford Lotus twin-cam engine.

In 1963 I was often at the Cheshunt factory and eventually bought a Lotus Seven (reg DMP 7A). At that time almost as a joke I was offered a works Lotus 16 formula one car for the same price as the Seven (!) or for £100 more the prototype Elite Ford. I remember it as red with a large red low oil pressure light on the dash.

I have also seen an advertisement in *MOTOR SPORT* in the last five years from one of the larger sports car dealers offering a twin-cam Elite.

Perhaps one of your readers could help by adding further details to my memory.

Miami  
STEPHEN C. GOSS

*Stephen Goss letter of March 1984*



The restored Elite at Lime Rock 2018



Some months ago, when we were drafting this article, I asked Doug whether the car handles as poorly as described in the earlier reports. I was somewhat surprised when he replied that, despite finishing the restoration two years ago, he had only driven the car around his back yard and for a very short distance at the Lime Rock Historics. He explained that in the state of Vermont, there is a tax of 6% on the book value of a vehicle in order to register it, and the book value is deemed to be US\$130,000. In addition, he already has two Lotus licensed for the road, so he has been hesitant to road-register the car.

In mid-August, Doug advised:

*"However, despite the Vermont state police barracks being just a few miles North of me, I took the car out anyway in early August. I drove a couple of miles (south), down the road then drove back."*

Miles Wilkins said in his book that the car "... felt like driving jelly," and in my subsequent conversations with him, he said, "the back end will be a bit wobbly but never mind."

He didn't do it justice: It handled like s\*\*t. It was downright scary! Perhaps 'jelly' is an accurate description.

I thought that ultimately, we might have to cut out the modified diff and restore the original mounting, but later, back in my workshop, checking everything and trying to understand what was going on, I found a slightly loose rear wheel. So I re-tightened all suspension mount points and, on a second drive with

a ball indicator mounted on the diff and a camera to record any movement, I found the diff was very solidly mounted with negligible lateral movement and only a small fore and aft movement under acceleration and braking. The car felt much better, so it is now our assumption that the reinforced subframe cured the original "jelly wobble".

For those interested, see Doug's blogs.



[www.lotuar.com](http://www.lotuar.com)



<http://blog.dougfraser.com>

See this video of Doug's second test run, at up to 90 miles per hour.



<https://vimeo.com/447301551>

## POSTSCRIPT 1

In early September Doug entered the car in an Autocross at a nearby racetrack in Canaan, New Hampshire, where it performed well beyond his expectations. His video from inside the car is here:



<https://blog.dougfraser.com/wp-content/uploads/2020/09/EliteAtCanaan.mp4>

Doug has further increased his tyre pressures from the Factory Manual recommendation and is almost satisfied with the on-track performance.



Photo by Simon Kribstock



The ball indicator to record differential movement

## POSTSCRIPT 2

So, one of a kind, or even more twin cam Elites from the factory?

This has been an interesting research journey for me and has elicited responses from so many Elite enthusiasts and historians in the USA and UK. We now think that:

Chris Cadogan Rawlinson, Lotus factory manager in the period 1962–1965, built a twin cam Elite but was unhappy with it and dismantled it. Dennis Ortenburger's second Elite book says Rawlinson gave his drawings to a friend, Vic Grimwood, who assembled another in 1963(?). This was chassis number 1559, subject of the article in this issue. My UK acquaintance is attempting to find and make contact with Grimwood.

Chassis number 1789, with a Climax motor, initially invoiced to S. Moss in February 1962, was returned or purchased back by

Lotus, fitted with a Ford twin cam, sold to H. Young and then purchased by Bill Hutton and taken to the USA. It is believed the car was much later re-fitted with a Climax motor and is now in Japan in boxes. It seems this was the car that ended up in a hedge in Northamptonshire whilst being driven to the docks for export to the USA, and not chassis 1559 as reported in Nick Brittan's road test review of Chassis 2001 in January 1968 *CAR* magazine.

Chassis 2001 — subject of the initial article "One of a kind?" In July 2020 *Lotus Notes*.

It would appear that three Ford twin cam engine Elites were constructed in the factory.

However, let's not start on twin cam Climax FPF engine cars like that prepared by Lotus for the 1960 Le Mans 24 hour.