

North Kent Lotus Group



Editorial

I hope this newsletter finds you well in these uncertain times.

There is usually little to report at this time of year at the best of times, and under current conditions that problem is somewhat compounded. I am therefore very pleased and thankful that Richard L has provided us with a new update on the Elan restoration. I am sure you will enjoy it, and my thanks to Richard for the article. I am also pleased to see that my complete inaction on my project has been of benefit to Richard, mine is still in enough of one piece for him to refer to it for his reassembly. In a round-about way I can blame Covid for the delay in my project (it's justifiably getting the blame for most things this year) in that the whole family is now back home, 'between flats', and the garage has turned into a furniture warehouse. Roll on the vaccination and 2021, I think we're all looking forward to that.

On that point, we really do appear to have reached a point where we can dare to hope for a return to some degree of normality next year. Let's hope so, and look forward to fine motoring weather and reacquainting ourselves with one another at club events and activities. We have a whole year's worth to catch up on. In the meantime, may I wish everyone a very Merry Christmas and a happy and healthy New Year.

Roger D

New Lotus Factory at Hethel

A copy of an interesting article written by Caroline Culot appeared in a local Norfolk newspaper, dated November 6th, 2020, was recently sent to me by an ex- Lotus employee friend and the newspaper article is reproduced below: -

'The 15,000 m sq production line currently being constructed at Hethel as part of an investment by Chinese owners Geely and Malaysian owners Etika, will offer technology never seen before in Norfolk. It will mean production capacity of up to 5,000 sports cars a year in 40-hour working weeks, compared to 1,500 currently made.

Sports cars will arrive in parts at one end with finished product driving out of the other – straight on to the test track. The assembly line will also include body spray painting done by robots.

There will also be a newly designed 'monsoon unit' where the cars are drenched with water to test their resilience. The new production line will feature German parts, replacing the current 30-year old equipment.

The factory, which will be used to build all models except the all-electric Evija, built in a separate unit at the Norfolk base, is part of a multi-phase development project.

David Hewitt, executive director of operations, said: "Many other car makers assemble in different places. We have it all in one place at Hethel and what this new investment, when so many other car makers are pulling back, means is that it ensures we can continue to compete with the very best in the sports car market.'

This looks promising for the future of Lotus.

Vaughn

The 6P rule

In my last newsletter update, I reported on the problems of installing the new exhaust manifold and the need to remove the engine mountings in order to accomplish this. Readers will recall that this was after an aborted first attempt when I encountered problems with the original replacement fuel pump.

I guess I was “tempting fate” when I thought that it would be the last time I would have to use the engine hoist! So what went wrong? Well on a trip to see Roger’s semi dismantled Elan, he asked me how did I remove the heater control valve as the bodywork blocks a full turn to unscrew the valve. In my case, I had removed it with the cylinder head off the car – no problem. BUT with my engine already installed (sans valve), how was I going to install the new valve? With a quick search of Lotuselan.net to confirm the problem, I concluded that the only answer was to raise the engine off the mountings one more time.



Whilst lining up engine mounting bolts presented the usual challenge, I can now report all is back in place. However, the episode has made me a bit more concerned that I will get to some future point when I am 99% complete only to find I should have installed an item much earlier! Using the 6P rule “Proper Planning Prevents P*** Poor Performance” is always a good motto but especially when rebuilding a Lotus due to all its design “querks” and access difficulties.

With the 6P rule now firmly in my own mind for this project, I have turned my attention to installing the headlight pod system and other items in the front of the nose cone BEFORE installing the radiator and other engine bay items. Also to install the wiper boxes and wiper drive rack prior to installing the refurbished heater and new dashboard. So, a few more updates:

Headlight Pods: I have mentioned before that one downside of the complete body restoration was the fact that a number of important holes were re-fibreglassed to remove star cracks properly, As many of these were not re-drilled, it has required me to accurately position and drill new ones. These include the lower fixing for the pod actuators (through the nose cone), the actuator rod to pod bolt holes and some headlamp bowl screw holes. Buckland’s book describes how to improve the design of the actuator rod fixing and where the hole should be located but only for 1 dimension.

Hence another trip to Roger’s Elan to measure and template the nose cone and to get a 2nd dimension for the actuator rod bolt hole. As most will know, the nose cone has curves in all directions as well as other “contours” internally. I used a piece of felt to make a template and triangulated this with the 2 front chassis-body bolts and the central drain hole.

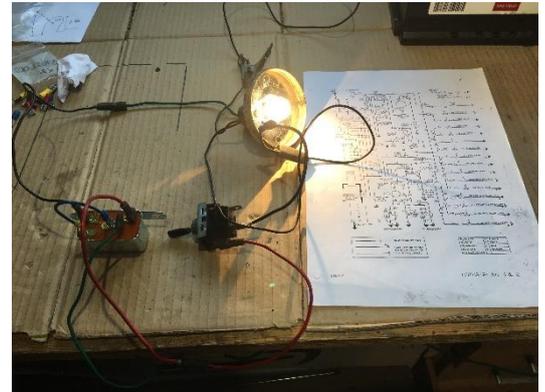
Then I was able to mark up the position of all the missing drill holes. Next, I used my old actuators (as I had to saw off the welded bottom bolts to get the correct position prior to drilling) to check that the markings were largely correct on my vehicle.





I also decided it would be much easier to install the microswitches before re-installing the pods back on the car. These switches ensure that the lights are not left on when the pods are in the closed position and on the other side they trigger the relay flasher when the pods are raised with the main light switch off.

All of this prompted me to check that the circuit would work properly, especially as I had to resort to new 4 pin relays with bridging wire (they don't make the original 3 pin versions anymore).



At the time of writing, I have yet to re-install the pods. I am waiting for new side and indicator lights so that I have easy access to fix them in place.

Wiper Boxes: It made sense to install the wiper boxes before the heater and the new dashboard.

One box installed quite easily, the other with greater difficulty as it was very tight against the plenum chamber. Apparently this is quite common after a body restoration (sometimes requiring some minor filing of the new paint and repair fibreglass). Luckily when I took some electrical components (Dynamo, Regulator and Wiper motor) to be checked over by Neil W, I had not yet installed the heater. On testing, Neil found that my wiper motor armature had burnt out. He suggested that the most likely cause was a problem with the drive rack or the wiper box bearings. On returning home, I found both problems and have thus installed new boxes and a new rack.



Neil was able to restore both the Dynamo and the Regulator – Great job Neil, Thanks!

For the wiper motor, I needed to have the armature motor rewound. Neil gave me instructions on how to re-assemble the motor as well as a wiring diagram to test that it worked when complete. On the latter it would seem, I have a “non standard” combination of wiper switch (2 speed) and motor as neither Neil’s wiring, nor the one in the manual applied. The good news is that I managed to adjust the wiring to fit my circuit and successfully test it.

Further progress has been made but that will have to be the subject of a future newsletter.

Richard L.

Group Activities and Meetings

Due to the current Coronavirus 19 restrictions some activities and the Monthly meetings have been suspended and will need to be re- arranged as and when circumstances permit.

Contacts

Web Site: www.NorthkentLotusgroup.org