Dear Members

As I write these few words we're in the second day of initial lockdown-easing, the sun is shining brightly, with a forecast of 20+ degrees later on and moreover, it's my birthday – how could life possibly be any better? Well, of course, it could and with any luck will become increasingly so as the year marches steadily on.

With that pleasing prospect in mind the Committee, at its most recent Zoom meeting, felt it time to try to shake us all out of the slumbering state we've been in for the past 12 months or more. To kick off with and as recently announced a Run has been proposed for the Sunday 23rd May leading to (we all hope!) full relaxation of restrictions on June 21st.

So far 27 members (15 vehicles) have shown interest in participating in the Run, which will be a hybrid affair between the annual *'Drive It Day'* run (which this year strictly falls on St. George's Day) and our own *'Half Gallon Run'*. All details are currently being refined and will be disclosed in due course. Any gathering should be no more than 30 so if anyone else would like to be included in the Run better let me know pronto.

Secondly, but importantly, with a view to restoring some sense of normality the intention is to resume Club meetings with effect from June 14th. However, since some social distancing, (which is likely to be still in force at that time and predicted to remain so for a while yet) would be difficult, if not impossible to observe indoors, it's considered sensible to meet up *outside* at the *'New Inn'* in the daytime, rather than evening. With better weather (we hope!) and the benefit of daylight during the Summer months and into early Autumn, it's felt the best way to rekindle Club socialising.

Contact has been made with Steve, our landlord and he is very happy and prepared to welcome us back, pointing out that he has 5 tables of 6 within the picket fence outside the pub buildings which would avoid other customers having to pass too closely to our gathering. He has also given an assurance that the Tap Room, our normal meeting place, would be available should the weather take a turn for the worse, where table groups would be managed to comply with any regulations. Of course, this may or still may not be permissible at the time we meet up anyway but we must remain optimistic on this point.

Nothing is formally planned for the June meeting. It will just be an opportunity for those who wish to do so, to meet up again, as a Club, for the first time in what will be then be 15 months or so. We might even recognise a few fellow members! Depending on how many turn up we can maybe have an informal chat about how to proceed with the remaining half year, so far as events and/or activities are concerned.

Again, we have to limit our gathering to 30 in number so please do let me know if you feel like going along to the *'New Inn'*, on June 14th, around mid-day. Clearly, once **30** names have been received it will be necessary to let those members whose names are received, in excess of the legal limit, know, in order *not* to turn up. Your cooperation and understanding of this requirement is appreciated.

Looking forward very much, personally, to seeing ‘old’ (not necessarily aged, I hasten to add!) faces, (and jabbed up arms), once again before too long now.

Take care and stay safe. *Trevor E*

Filament or LED? – that is the question!

A source of great debate among groups of pre-war car enthusiasts, is the variation of opinion based on questionable facts. Having now done two seasons of driving with my Nine Kestrel, which has been converted to LEDs, I thought I’d share some insight. Firstly, what are the advantages?

- An abundance of very bright light
- Minimal current draw on the dynamo, wiring, and switches
- Cosmetically invisible even to the most critical observer

Are there any disadvantages?

- Costly when compared with the alternatives (such as using halogen filaments)
- You WILL have to do some homework
- Original bulbs might be very visible behind plain glass and owners might not like the rather obvious change – fortunately this does not apply to most(?) pre-war Riley cars
- There might be other cosmetic changes you cannot live with

So – let’s examine this ‘abundance of light’. I’m not going to start with headlamps because there’s a bit more to those and we’ll deal with that later. There are two alternatives to converting stop/tail units and front sidelights. One is ‘bulb replacement’ – the replacement LED ‘bulb’ is simply inserted in to the existing socket – various fittings are available. The second, which applies mainly to rear lights – is the use of ‘LED light boards’ in place of the existing internals of the lamp housing. The light board is a disc of plastic with a large number of discrete LEDs, some of which are red (tail), some are bright red (stop) and the remainder are yellow (indicators) – light boards also have a couple of white units for number plate illumination. Two-colour lenses are available for common lamp enclosures such as Lucas ST ‘Pork Pie’ lights. I chose to use light boards in my Pork Pies and changed the existing all-red lens to a spilt red/yellow. The result is even bright tail lights, stop lamps that cannot be missed even on the sunniest of days and bright clear yellow flashing indicators. Anyone still objecting to flashing yellow indicators should contemplate what the average 18-year old driver is taught to look for - is it worth a rear-end shunt on your pride and joy?

Conversion to light boards means removing the internals from the existing enclosure and fitting the light board with the fitting kit supplied. The existing wiring then needs re-connecting – I chose to solder and sleeve mine.

Now to the front; starting with sidelights –in my opinion one of the significant wins of LED conversion, is by using a twin filament bulb socket. One can insert a two-colour LED

replacement that shines white for ‘side’ and flashes yellow – brilliant! No need for additional lamp units on the car or coloured glass, one ‘lamp’ and two colours. Obviously the side light housing needs to be modified with a twin filament socket and appropriate wiring, but the solution is neat and effective.

Now to the tricky part, and the one that usually elicits a ‘tried LED headlights and they were useless!’ – a half-truth because this is not a ‘plug and play’ exercise. If done properly the results are outstanding, if not, an abundance of bright white light shines everywhere other than where you’re going! Why is this?

It’s all to do with focus! Simply removing the filament bulb and inserting an LED unit is highly unlikely to yield a satisfactory result. You’ll probably discover that the existing focusing arrangement in the reflector does not provide enough adjustment to achieve the correct focus. Homework time!

In my case the ‘original pattern’ reflectors had been modified with a twin-filament socket so that the existing twin filament bulbs might provide a dip/main beam arrangement – a modification that is not uncommon. The modification was not an entire success with bulbs and with the LED units a total disaster! The sockets had been soldered in pace and needed removing so that the LED unit could be moved rearwards to achieve focus. This was achieved by soldering a brass ring to the back of the reflector, through which the bulb socket passes; a small pinch screw in its periphery allows the socket to be ‘locked’ in place.

It’s likely that such a modification will be necessary on any pre-war reflector to accommodate the range of travel necessary to obtain the correct focus – try it first of course but be prepared to put some work in!

So how do you get the focus right? I did this in the garage by placing a piece of brown non-reflective card on a pair of steps (a chair would do) and holding the reflector in my hand about 3 to 4 feet from the card, having removed it from the headlamp shell but with it still connected to the wiring. I moved the socket with LED alight until I obtained the best and sharpest pattern that I could, it’s reasonably obvious when the light pattern becomes focused as the edges of the light become more defined, a little bit of experimentation will show the optimum that you can achieve. With ‘double dippers’ do this with only the top LED powered (dip). The pattern will not be round since you’re only using the top of the reflector – don’t worry about this! In my case the socket had to be moved pretty much as far back as I could get it – the locating pins of the LED ‘bulb’ were almost touching the reflector.

Once done, you should see that when you power up the lower LED (main beam) the pattern becomes more round and should still be focused. What you may notice is that the pattern looks ‘watery’ or inconsistent, particularly if you have a ‘tri-pod’ in the reflector – once patterned glass is put in front, the diffused light pattern shows much more consistency. In my case I had some

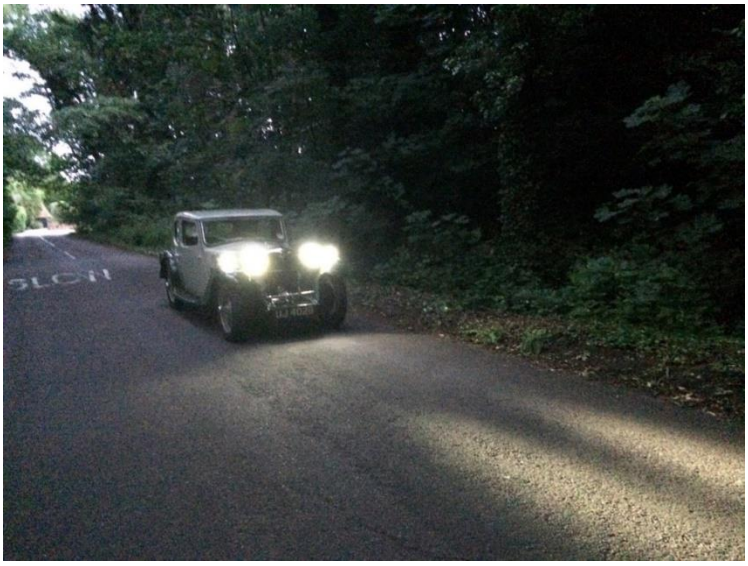
new patterned glass cut in the local glazier which had a pleasing near-original mottling albeit without the nice clear centre of the long-lost originals!

Once you've achieved the all-important focus you should experience a light output that is both directed where you need it, extremely bright and with a very reasonable dip/main beam capability. Passengers in my car have noted that 'it's like being in a modern car'. I did spend a few minutes at dusk down a deserted country lane optimising the angle and direction of the headlamps, the result of which was very rewarding.

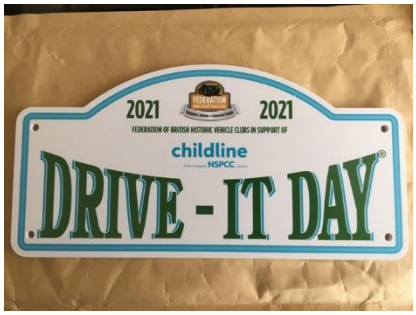
So LEDs do work, they make our cars safer, you don't need to generate huge amounts of electricity - so your dynamo is not overloaded and importantly the car becomes a realistic proposition for night time driving – in my case the conversion is cosmetically invisible. The key to success is investing time to get the system set up correctly – it's not just a case of popping the reflectors out and plugging new lamps in!

Points to note: Any wiring issues that result in a polarity cross-over between two LED units on the same circuit will cause one not to illuminate, you'll see that either will work alone but not when both are plugged in – such wiring gremlins need sorting. Grotty switch contacts and poor wiring connections might prevent LEDs working since they draw minimal current and may not overcome high-resistance joints. LED indicators need an electronic relay – existing 'hot wire' flasher relays will not function as there is insufficient current to heat the wire. Indicator tell-tale lights on the dash may need re-wiring to accommodate the electronic relay. The traditional way of wiring tell-tale lights across the left and right switch contacts will cause 'leakage' resulting in both left and right LED indicators illuminating irrespective of the switch position.

(Thanks to Andy Seager for this article)

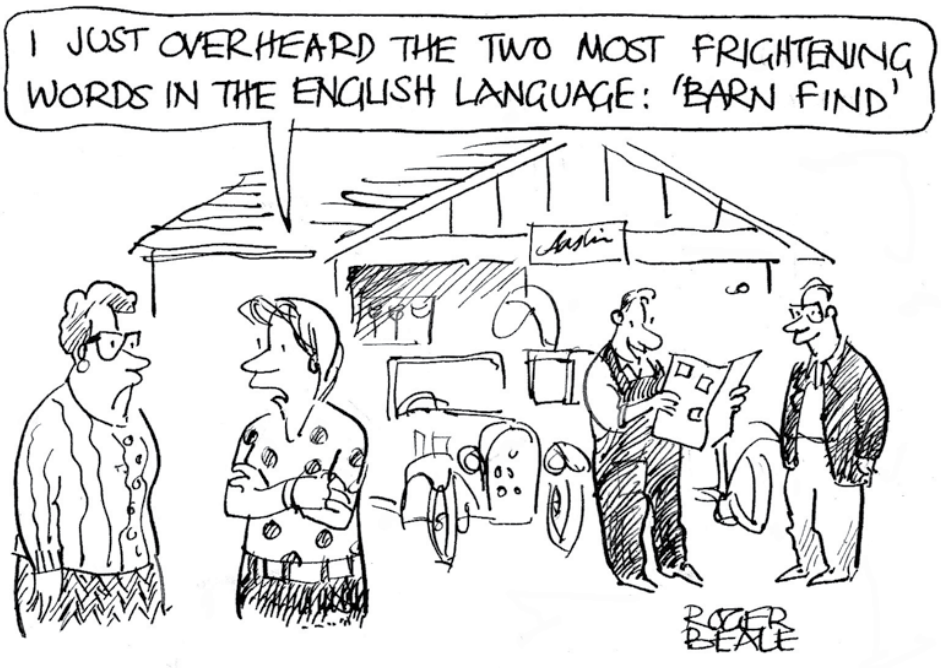


FBHVC - Drive it Day



Our attention has been drawn to the following initiative recently announced by the FBHVC (*Federation of British Historic Vehicles Clubs*), of which the NHAEG is, of course, a member. This year it is sponsoring the NSPCC Childline Appeal and is inviting the purchase of a plaque which can be displayed on vehicles being exercised out and about on *Drive It Day* which, this year, is still scheduled as Sunday 25th April on their website.

If you would like to purchase a plaque, proceeds going to such a worthy cause, then please go to http://www.driveitday.co.uk. The cost is £10.00 and the item is reported to be of very good quality.



(Copyright newsletter of the Hereford Austin seven club)

A7 Ignition Timing

The Austin Seven engine's capacity is nominally 747cc and it develops around 10.5 to 17 BHP depending on the model. Although this sounds small, it is sufficient to give acceptable performance provided the engine is correctly timed. According to the Austin Motor Company – static ignition timing is set by – Rotating the engine so that No1 cylinder is on compression stroke and position the 1/4 flywheel timing mark 1.25 to 2" before top dead centre. If the car has a manual advance/retard lever, this should be set to maximum advance (although some prefer the mid position). Slacken the distributor body clamp and rotate it so the points are just about to open. This method is of course correct but can be difficult and time consuming particularly on early engines where the starter motor assembly has to be removed to expose the flywheel timing marks. It is also difficult to visually judge the exact position of points opening – which can lead to timing inaccuracy. From experience, the following method employed by garages to set the static engine timing on any petrol engine is easier, quicker, more accurate and does not involve exposing the flywheel

o Remove No1 sparking plug (nearest the radiator) and set cylinder No1 on compression by rotating the engine and placing a finger over the plug hole and feel for compression developing (some people find this easier with the plugs from cylinders 2, 3 and 4 removed)

o Set No1 piston exactly at top-dead-centre using a thin wooden dowl (to prevent any damage to the piston crown) inserted through the plug hole

o Renew or re-face the contact points and set to 12 thou' (0.012"). If the distributor has been removed, replace it in the correct position with the flat side of the body facing mid way between cylinders 1 and 2. When entering the distributor into the dynamo to engage the skew gears – make sure the fibre heel on the contact points is mid way between cam lobes

o Connect a low wattage lamp between the low tension terminal on the side of the distributor and a convenient earth point. If the ignition is now switched-on and the fibre heel is mid way between cam lobes (i.e. the points are closed) – the test lamp will remain unlit

o With the ignition still switched-on, slacken the clamp at the base of the distributor body and very slowly turn the body anti-clockwise whilst observing the test lamp. When the cam approaches the fibre heel, the points will start to open and the test lamp will light immediately the points separate. It is useful to repeat this several times to determine the correct static timing position. Having done this – tighten the distributor retaining clamp bolt. The engine should now start-up and run reasonably well and the final fine adjustments should be done with the engine running at fast tick-over by one of the following two methods

- If you are old enough to have worked on engines before the advent of electronic tuning devices (i.e. when sweets were on ration!) you will be able to make fine timing adjustments by simply listening to the sound of the engine. This is impossible to explain in writing but can be learned by years of practice

- Alternatively make a series fine timing adjustments by trial and error. This is the easiest and most-common method but tends to be more time consuming. Make small rotational adjustments to the distributor (Note - coil ignition is much more sensitive to timing changes than a magneto) and carry-out a road test (preferably including a hill) after each adjustment. Note - to advance the timing, rotate the distributor anti-clockwise and of course clockwise to retard. Try to reach a

compromise between best performance and a smooth engine note. Over advanced engines will sound harsh, feel rough and vibrate under load. Excessively retarded engines will be noticeably down on power, can sound rough and may run rather hot. For the above guidance to be effective – all the components of the ignition system must be in good working order e.g. Plugs, gaps, distributor cap, plug leads, rotor arm, condenser and distributor spindle bearing etc. You can also obtain a good indication of whether the static timing is about right by turning the engine over slowly by hand with the ignition switched on. You should feel the lightest of kickback through the starting handle as each cylinder fires. Correct ignition timing may lead to excessive noise if the engine main bearings are worn, in which case it may be desirable to run the engine slightly retarded.

Timing cars with manual advance

The maximum ignition advance on our side valve engines should be 27° BTDC. Most manuals quote this as something like 1 7/8 inches on the flywheel but this is really difficult to measure with your head in the footwell and trying to hold a rule horizontal or wrapped around the circumference of the flywheel! The easier way, is to use the starter teeth as the guide. The gap between each tooth is 4.5° so when the 6th tooth to the left of the TDC mark points vertically upwards you've found the point (no pun intended) you need for the spark to occur.

Events – All dates subject to Change !

Club Drive it Day Sunday 23rd May 2021

Club event combining DiD and the Half Gallon Run

Club meeting 14th June

Outside at the New Inn - details to follow.

Basingstoke Festival of Transport – 22nd Aug 2021 (New date)

The Basingstoke Festival of Transport will be held at the War Memorial Park, Basingstoke, RG21 4AG. Parking is available at Old Common, London Road (use RG21 4BY and follow the parking signs) for £2.
NHAEG is organising a parking area for club members and those wishing to attend should complete the Car Club Registration Form which may be obtained from

Trevor Mulford (01252) 620435 or by email trevormulford1942@gmail.com

The Beaulieu 2021 International Autojumble.

The autojumble planned for the 15-16th May is now **CANCELLED**
The event planned for 4-5th September is still on schedule.

Hartley Witney Festival – (Postponed until Sat 4th September)

This will combine the following events:

Procession / Classic Cars / Arena Events / Stalls / Catering / Animal Farm / Morris Dancers etc
If you wish to show your car, please contact:

Trevor Mulford (01252) 620435 or by email trevormulford1942@gmail.com

Classic Motor Show

12-14 November 2021, NEC, Birmingham

The Austin 7 Centenary Celebration & Rally

This is due to take place between 19th-24th July 2022 at the Fire Service college, Moreton-in-Marsh, Gloucestershire. As provided in the magazine of the Scottish Austin Seven Club. For more information, please visit www.a7centenary.com

Stay safe
NHAEG Committee