Club Meetings

14th April – The New Inn, Heckfield

(Meetings start at 8pm, but please arrive earlier if you intend to eat at the pub.)

Club runs

The Committee have looked at the possibility of arranging two outings around mid summer of 2025:

- West Berks brewery at Yattendon
- George & Dragon pub for lunch, near Swallowfield

If you are interested in either please contact Don (01189 733568) or email :

v.woolls@hotmail.co.uk

Christmas Lunch

Although it is a bit early to start thinking about Christmas, the committee have booked the Elvetham hotel for a traditional lunch on Sunday 7th December. The good news is that it will be the same price as last year for a 3 course meal at £39.50 pp. There is no commitment at this time but a deposit of £10 pp will be required in June. Please make a note of this date, more details will follow later.

So far I only have 20 names down for the lunch and we need at least 30 in order to go ahead with the arrangements. If you have not already replied, and would like to attend, please email

nhaegmembership@gmail.com asap.

Public Car Shows

April 27th - Drive it Day, contact Trevor Mulford, trevormulford1942@gmail.com

May 11th – Basingstoke Festival of Transport.

May 17th - Mill House, North Warnborough – contact Andy Seager, andyseager@mac.com

May 17th & 18th Beaulieu Auto Jumble

June 14th - Hartley Wintney Show

June 21st - Old Basing

June 22nd - Tweseldown

June 29th – A7 Rally, Beaulieu

July 5th - Bourne show Farnham

July 12th - Odiham fete

July 19th - Dogmersfield

Aug 3rd - Phyllis Tuckwell, Churt

Aug 8th - RAF Odiham

Aug 24th /25th - Swallowfield

Sept ?? - West Green House

Change of Club Venue

You will be aware that the meeting room at the New Inn is not always ideal when the restaurant is busy and that the background noise prevents the committee arranging guest speakers or other club activities. The committee has therefore been searching for an alternative venue which offers a large meeting room that is ideally free of charge.

The Tweseldown pub, Beacon Hill Road, Church Crookham, GU52 8DY was suggested as an alternative venue and members were invited to vote on:

1) Changing to the Tweseldown
2) Holding club meetings on a Tuesday evening (instead of Monday)

16 replies were received with the majority accepting the proposed change although the following comments were also received: it was too far to travel, not in favour of evening meetings and finally it was suggested we continued with Monday meetings because it would be less busy.

The committee has since discussed the matter further and decided that club meetings will continue to be held at the New Inn because it offers a central location for our members. Meetings will therefore continue to be held on a Monday and following the introduction of BST from the end of March, revert to the evenings.

Drive it Day- Sunday 27th April

The NHAEG Drive It Day event this year will comprise a short tour through the leafy lanes of Hampshire, commencing at 11.00 am from the car cark of the New Inn.

The route will cover approximately 20 miles, finishing back in the familiar surroundings of The New Inn, Heckfield, at mid-day – i.e. 12.00hrs.

The club rules state that any donations should be to a small local charity and not major organisations. The committee has therefore agreed that we will not purchase the Childline plaques at £12 each but instead make a donation of £50 to the Phyllis Tuckwell Hospice.

Pre-ordered lunches will be served at 12.20 pm, chosen from a menu which will be circulated to Drive It Day Run entrants in good time before the event.

24 places for lunch have been reserved and meals must be chosen in advance in order to avoid delays in serving, which occurred on last year's event.

Please contact Trevor Mulford by telephone on 01252 620435 or by e-mail at trevormulford1942@gmail.com

Speed Limits and Drivers' Licences

I was surprised when I found recently that at the time when early Austin Sevens were made, there was an overall maximum speed limit in the U.K. of just **20mph!**

Given that cars were even in those days designed and marketed to appeal to drivers with a taste for a bit more speed than horses, I was astonished to find that such a slow limit was in force.

The 1865 'Red Flag Act' reduced the speed limit from 10 to 4 mph (6 km/h) in the country and 2 mph in towns and required a man with a red flag or lantern to walk 60 yards ahead of each vehicle, and warn horse riders and horse drawn traffic of the approach of a self-propelled machine. The 1878 Act removed the need for the flag and reduced the distance of the escort to 20 yards.

The speed limit for motor cars was raised to 20 mph (32 km/h) by the Motor Car Act which stood until 1 January 1931 when all speed limits for cars and motorcycles were abolished under the Road Traffic Act 1930.

Just like the 70 mph maximum speed limit today, the 20 limit had been completely disregarded and in 1931 it was abolished because "the existing speed limit was so universally disobeyed that its maintenance brought the law into contempt".

The local Constabulary in your Scribe's stamping ground turned a blind eye when Algernon Guinness used to test his 200hp Darracq Land Speed Record car at 100mph along the A30 at Blackbushe.

Our local force's light-handed attitude towards speed-merchants was still evident in the late 1960s when after fettling sessions I would road test a Formula 3 Brabham along a dual carriageway which was then the Bracknell by-pass! This activity never induced more than a wave from the local Bobbies. If it was getting dark, I tied bicycle lamps to the car.

But, returning to the subject of speed limits, the first person to be convicted of speeding in the UK was Walter Arnold of East Peckham, Kent, who on 28 January 1896 was fined for speeding at 8 mph, thus exceeding the contemporary speed limit of 2 mph. He was fined one shilling plus costs. He must have been doubly miffed because he was the importer of Benz cars into the U.K.

An 1896 Benz

Given that virtually from the word 'go' drivers were expected to keep within prescribed speed limits, it's odd that speedometers weren't made compulsory until January 1937, when safety glass in windscreens were also made compulsory.

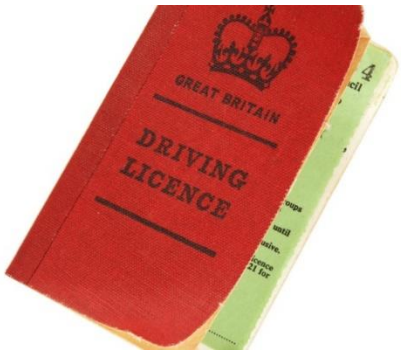
There were no big changes to speed limits until when on 25th November 1965 the government announced that a temporary 30 mph speed limit would be applied to sections of motorway (there were 350 miles of it at that time) affected by fog, ice or snow and that a general maximum speed limit of 70 mph would be applied to all otherwise unrestricted roads, including motorways, for a trial period of four months starting just before Christmas. The four-month trial 70 mph speed limit on 100,000 miles of previously unrestricted roads and motorways was introduced at noon on 22 December 1965.

Due to the 1973 Oil Crisis a temporary maximum national speed limit of 50 mph for all roads, including motorways, was introduced on 8 December 1973.The 70 mph limit was restored on motorways in March 1974 and on all other roads on 8 May 1974.

The 70 mph speed limit was made permanent in 1978.

Driver registration was introduced in 1903 with the Motor Car Act. Holders of the sulphur-yellow coloured document were entitled to "drive a motor car or motor cycle". The wording changed in 1930 after which holders were allowed to "drive or steer a motor car or to drive a motor cycle". It was not clear why a motorcycle would not need to be steered. Shortly afterward, the document cover changed to a dark red colour. Holders were for a period entitled to drive a vehicle of "any class or description"

All motor vehicles had to be registered, display registration marks and be licensed annually at a cost of 20 shillings (£1) The fee for the first driving licence, which was obtained over the counter at Post Offices, was 5 shillings (25p).



The Driving Test was first started on British roads on 1st June 1935. Because of the casualties on the roads, early Examiners were recruited from the services and Police. In 1935 there were only 1.4m cars on the road – today there are over 38 million in the UK. There were no test centres in 1935 so you had to arrange to meet the examiner somewhere like a post office, train station or town hall. The pass rate in 1935 was 63% compared to 46% in 2009. 1969 saw the first driving test set for an automatic vehicle.

Chris Keevill

Understanding two and three brush charging

Let's start with the two-brush scenario

On a two-brush dynamo using the 'Lucas style' charging system (not the Bosch system) one end of the field winding is connected to earth, the other emerges from the dynamo case and is usually denoted by 'F'. The other terminal 'D' is the output of the dynamo which comes from one of the two brushes, the other being connected to earth. The dynamo is 'excited' by connecting the output 'D' to 'F' in which case the dynamo is then charging at its full capacity all of the time - which of course we don't want. The regulator controls the dynamo by making and breaking the connection between D and F to 'limit' its output; when F is disconnected the field collapses and the dynamo is no longer 'excited' so it output effectively falls away. In practice this connection and disconnection takes place many times per second and the regulator responds to the electrical load requirements of the vehicle to adjust the frequency of that cycle.

Now to three-brush

Before regulator technology was implementable on cars the responsibility of controlling the dynamo was down to the driver who either switched the dynamo on or off depending on his/her interpretation of the need to charge based on the ammeter - and a lot of guesswork! Later the options changed to 'half' or 'summer' and 'full' or 'winter' but this was still a very course-grained approach to managing the charge rate with the result that the battery could be over charged

(and boil away its' electrolyte) and/or overheating the dynamo. The same thing occurred, when the driver used the switch he/she was simply connecting D to F for 'on' or disconnecting them for 'off' and with the slightly later system connecting D to F for 'full' or placing a resistor between D and F to get a lower rate of charge for 'half'.

There was an additional challenge with this system in that the faster the dynamo spun the higher its output - so if 'full' was selected the dynamo would simply belt out and ever-increasing voltage as the car accelerated. So a system needed to be implemented to self-limit the dynamo irrespective of the speed at which it was driven. This was accomplished by not directly earthing the internal end of the winding (as above in the two-brush system) but connecting it to a third brush and forcing it to find an earth through the windings of the armature. The nature of that arrangement causes the dynamo to self-limit because the field is inhibited from growing beyond a certain point.

Conversion

So now you can see that if we want to place our trust in a regulator to look after our charging system we need to earth the internal end of the field winding - so if we take the wire off the third brush (often identifiable by being much thinner than the other two and on a sliding track) and connect it to earth we have effectively changed the configuration to two-brush. You can in fact remove the third brush assembly too.

Now we can insert our regulator by connecting its D terminal to the D terminal (or the +ve brush) of the dynamo and connecting its F terminal to the F on the dynamo. 'A' goes to the ammeter as before and there will be a connection for earth on the regulator too.

CAUTION:

You MUST NOT simply connect the regulator across the existing control box at the D and F connections - there must be an uninterrupted connection between the dynamo and the regulator for these two terminals. If in doubt simply run a new pair of wires between them. You can however connect A on the regulator to A in the control box.

The reason why you cannot splice the regulator across the existing control box is that there is both a resistor and a switch across them and these will simply negate the action of the regulator.

Before you perform the conversion it's useful to know what the resistance of the field winding is; it needs to be within the range expected by the regulator - for example the range might be 4 to 8 ohms. You need to test the field winding 'out of circuit' so disconnected from the car and with the wire off the third brush. If you're unsure just find someone that can drive a multi-meter - it's a five minute job. If it's a Riley Rotax unit it should be fine assuming that the field winding has not been compromised - so a test is advisable.

Andy Seager April 2020 – Disclaimer: No responsibility is assumed for persons attempting to convert their charging systems – you do this at your risk. If you are in doubt seek professional help.

Stay safe
NHAEG Committee