Club Meetings

10th March – @ New Inn. 1pm but please arrive earlier if you wish to have lunch.

14th April – This may be at a different venue, please watch out for emails

NHAEG events in 2025

We are hoping to organise a “Pub Lunch” on Wed 26th March. This is not an organised Run. It will be ‘Just arrive at a given time for a “get together”.

This can be in your ‘real car’ or your ‘modern’, up to you! If you are interested in joining us please let us know by the 19th March, after which details will follow of venue and times. The Pub will be within the Wokingham Area

Please contact Don, Or Val if you are interested.

01189733568 Don, or 07767334040 Val

email. v.woolls@hotmail.co.uk

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)

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.

In order to gauge the level of interest please reply to nhaegmembership@gmail.com asap if you would like to attend. There is no commitment at this time but a deposit of £10 pp will be required in June / July.

Please make a note of this date, more details will follow later.

Public Car Shows

March – ?? auto jumble Midhurst

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

June 14th - Hartney Witney Show

June 21st - Old Basing

June 22nd - Tweseldown

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

AGM Summary

The AGM was held on Monday 10th Feb was attended by almost half of the club members. The current committee was re-elected. (Alan Pickett was not present but has since indicated he will continue). Chris Keevill was proposed and seconded to join the committee but not in any specific role.

1) Copies of the accounts were circulated and the following points were raised:

- Lack of detail on the line items for expenditure e.g no breakdown of charity donations / flowers / club nights
- Debate over the club giving money to Childline on Drive it Day. The club rules state local small charities, not large organisations. A vote was taken and it was agreed the club

should pay £120 for the Drive it Day plaques. Note however the plaques are now £12 each, entrants were asked to contact TM.

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2) It was proposed that the club tools and Nightjar equipment (currently with DB) should be sold off because they are seldom used. To be discussed at next committee meeting.

3) The next AGM should be held at an evening meeting (April 2026) to enable our Treasurer to attend.

4) Elvetham Heath hotel is to be contacted re the Christmas lunch for 2025.

5) The search for a new club meeting venue continues !

Basingstoke Festival of Transport

Please note that this year NHAEG will not be having a dedicated club parking area. The organisers have made a number of changes in the booking procedures and significantly increased the fees to participate. Trevor M has therefore decided the admin required is too onerous and therefore will not be taking bookings on behalf of the club. If you wish to exhibit your car as a private individual please go to the website Basingstoke Festival of Transport - Rotary District and follow the instructions.

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.

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.

Drive It Day Rally Plaques will be given to the first 12 entrants who confirm attendance by contacting Trevor Mulford by telephone on 01252 620435 or by e-mail at trevormulford1942@gmail.com

National Historic Motor Survey 2025

Please participate in the crucial National Historic Vehicle Survey and keep transport heritage on our roads

Why the survey is vital

The Federation of British Historic Vehicle Clubs will have to argue even more strongly for historic vehicles to retain their current access and freedoms on our roads in the coming years as we navigate the most challenging period in our history.

To defend our freedom to use yesterday's vehicles on tomorrow's roads, we need your help completing this crucial survey.

We conduct this major research every five years and more than 15,000 enthusiasts participated last time around. We want to make this survey the largest and most comprehensive of its kind in the world, so please take part, have your say, and help keep the historic vehicles that we love on the road for the benefit of everyone in the future.

The Federation represents more than 500 clubs, museums, and individual members passionate about historic vehicles older than 30 years, such as cars, motorcycles, buses, coaches, lorries, agricultural, military, or steam vehicles.

Due to changing political and environmental influences, the historic vehicle community, events, the freedom to use the roads, and even the fuel we use are under increasing threats and pressures.

The FBHVC aims to lobby the Government against detrimental legislation and restrictions that could impact the future of historic vehicles. However, to secure a successful outcome, the organisation needs dependable data on the significance and scope of the historic vehicle movement. The responses you provide will help shape the future of historic vehicles in Great Britain over the next five years by providing crucial data.

The survey typically takes around 10-15 minutes to complete (for one vehicle), and is best completed in 'one sitting'. You can come back to it at any time, which is helpful if you have multiple vehicles.

Survey of individuals who own historic vehicles (more than 30 years old), click here: https://survey.websurveycreator.com/s/fbhvcenthusiast

Southern Manufacturing & Electronics Exhibition

A few members from NHAEG attended the above exhibition at Farnborough which was held on the 4-6 February. This showcases manufacturing companies that specialise in everything from CNC machines to 3D printing and electronic sub-assemblies. All good stuff with some freebies. One of our members unfortunately got side tracked and had to be taken away !

Dynamo Doldrums

Notes from Andy Seager

I've been approached a few times recently by people with charging systems that don't want to come out and play when the sun has got his hat on! For the most part we can start our investigations with the dynamo – while cut-out *(or regulator box)* and wiring issues are not unheard of, the chances are that a lazy dynamo is to blame, particularly after a winter layover. But before we begin, make sure that if it's a three brush dynamo that you've tested both ½ charge and full charge *(sometimes 'summer' and 'winter')* if it works on one and not the other it's not the dynamo! See later on.

Contrary to what appears to be common practice, poking the cut-out armature with your finger is not likely to achieve anything other than drain the battery and cause excessive current to flow in the stalled dynamo – there's not much point in this tactic as a fault finding technique, it seldom produces a result and tells you nothing about what's actually wrong.

So let's turn our attention to the dynamo – it's moving component that depends on a fairly critical set of physical conditions before it will put out. Any degradation of those conditions will likely cause poor or non-existent performance. Just before we pile in with the spanners though - can you see any loose connections or frayed wires, or wires framing on the engine or body? … No?... OK then in we go.

1) Remove the dust cover – if you run with it *(its sometimes better to leave them off for cooling and to allow dust to be ejected, depends where the dynamo is mounted)* – if the dynamo is full of grease or oil, you must get rid. This might entail removing the machine from the car and taking it carefully apart. Assuming its dry inside - are there any obvious wiring issues, such as breaks, dry joints *(broken solder)* or frame-outs on the inside of

the case? If so, sort these carefully; frame-outs are common as the space inside the dynamo is very tight and things shift with vibration, old style spade connectors are not insulated so if they touch the case they cause a short. Have a smell and a good look – has it burned? If there are signs of burn outs on the windings – then it's probably best to get it checked by a specialist repairer right away. You might see scorched insulation on one of the internal lead wires if it's been framing – it's a good idea to sleeve such cases with new plastic or heat shrink tube.

2) Assuming nothing obvious has thus far been found let's move on to the commutator and brushes. Firstly, the commutator is a sequence of copper segments that communicate the separate windings of the armature via the brushes to the outside connections. Each of these segments is insulated from its neighbour with a non-conductive material which is 'undercut'. The grooves between each segment collect dust from the brushes and eventually take on a copper coloured appearance as microscopic particles of the copper from the surface of the commutator segments mix with carbon dust. Eventually electrical leakage occurs resulting in the loss or partial impairment of individual winding loops. Our first check then, is to clean the commutator with some white spirit *(not a solvent)* and carefully use a sharp *(ish)* implement to clear detritus from between each segment. Use compressed air to blow the rubbish out of the dynamo – an airline or a disposable air cylinder or a foot pump – or if you have a good pair of lungs, blow - but DON'T breath the dust!

Tip: Don't be tempted to dump a gallon of WD 40 into the machine as its more likely that it will simply mix with carbon dust to produce a conductive paste that just exacerbates the problem.

3) Next let's make sure that each of the brushes *(and you might have either two or three depending on the age of your car)* are in good shape and are free to slide in their guides, that they are actually in contact with the com' and can be effectively held in contact by the spring – if they are too short change them! Don't be afraid to carefully remove each one and make sure everything is as it should be – but put them back the same way round as they came out as the com' will have bedded the facing surface to the optimal shape. Third brushes might be fixed with a little screw on a sprung arm – make sure it's in contact with the com' and free to move with sufficient spring pressure to hold it in contact. *(the third brush is often a little thinner than the 'D' and earth brushes)*

Tip: Be careful with the internal leads, especially the third brush one as it's connected directly to one end of the field winding – move things carefully to avoid breakages.

Once you've been through these steps, put everything back as it should be and start the car, rev the engine and see if the cut-out operates and that the ammeter shows a positive charge when the revs are somewhere around that which would be the case at say 30MPH in top gear.

If the charge still fails, we need to assess the integrity of the dynamo by measuring or 'witnessing' its function. Now that we've performed a visual check we need to establish if the machine is capable of generating sufficient electricity, there are two things we can do:

1) **Option 1:** Leaving the dynamo in the car, disconnect the wiring harness completely and insulate the wire ends and get them out of the way. Next put a metal strap *(a paper clip is good)* between 'D' and 'F' on the dynamo *(connect the output to the field winding)*. Then connect one lead of a multi-meter *(polarity is determined by the car being either +ve or –ve earth)* to the wire strap and the other to a reliable earth. Set the range to 'volts' and choose a range that is well in excess of the expected dynamo output, since off load the output voltage will be much higher than its nominal rating. So on 6 volt cars set it to 20 volts or so, on a 12 volt car set it to 30 volts or above. Start the car and watch the volt meter – as you rev the engine you should see the voltage rise substantially, expect around 12-18 volts on an unloaded 6 volt machine and 25 volts or so on a 12 volt one.

If the output conforms with the above, then your charging problem resides elsewhere – more on that in a while. If the output is zero or negligible then:

a) On a two brush dynamo try Option 2 below, if no result then the machine needs specialist attention.

b) On a three brush machine, shift the third brush *(you may have to try both directions of travel, move it carefully in small increments with the engine and ignition off)* to see if you can bring the output into range – if you cannot then try Option 2, or the machine needs specialist repair.

2) **Option 2:** You're here either because you don't have a voltmeter or because the test above yielded zero output from the dynamo. Either way the dynamo is going to have to come out of the car.

   Let's just deal with the 'last ditch' in the case that you followed Option 1 above. It might just be that the machine has lost its residual magnetism – it's not likely if the car has been used within a year but it is possible. The following test will re-establish the machine's residual magnetism and after this it may then function again – it's worth a shot!

   Ok – so in either case you have the dynamo out of the car, we're now going to see if it 'motors' after all a dynamo is an electric motor! The best thing is to use jump leads and the car's own battery (assuming its charged!). You'll need that strap between 'F' and 'D' as above. Connect one of the jump leads to a good earth on the car and the case of the dynamo. Making sure you do this the right way round for your car, connect one end of the other lead to the car's battery *(the +ve battery terminal on a negative earth car and the –ve battery terminal on a positive earth car)*. Hold the dynamo still with your foot and

touch the the lead from the battery to the strap – the dynamo should spin just like a motor; you will get a spark as you connect – don't panic! However, if the machine does not turn immediately then stop.

Note: The motor action is quite gentle; the machine won't try to jump across the floor.

If the dynamo does not spin up on its own – it needs specialist attention. The process of 'flashing' the dynamo like this will establish the residual magnetism in the soft iron core of the field windings – so if it produced nothing in Option 1 above but it subsequently motored then there is a chance it will now work when you put it back in the car.

At this point you should have proved if the dynamo was:

a) Not functioning at all – so it needs specialist attention

b) Was persuaded back into life after being 'flashed' across a battery – so put it back in the car and test.

c) Is working pretty much as expected – so the charging fault is elsewhere

If the dynamo appears to be working and you still have no charge, then you may have an issue with one of the following:

a) There is a wiring issue – further investigation with a meter will be necessary, test for continuity on each wire run with BOTH ends disconnected.

b) On a three brush system if either half or full charge works but not both, then the switch might be at fault or the half charge resistor is broken or disconnected *(The switch connects 'D' directly to 'F' when shut and the half charge resistor across 'D' and 'F' when open)*

c) The cut out and/or the regulator box has a fault – assuming it's not a seized armature or dirty contact then a swap out is probably the best way to confirm that.

Back to the beginning, electrical faults can occur anywhere, this process provides some structure and method to identify where a charging fault might reside. Experience suggests dynamos are more problematic than cut-outs and regulator boxes – but don't *assume* anything. The only sure way is to diagnose by testing!

Stay safe
NHAEG Committee