



NORTH HAMPSHIRE AUSTIN ENTHUSIASTS GROUP



DECEMBER 2015 NEWSLETTER

CHAIRMAN'S CHUNTER...

A very happy Christmas and a reliable New Year to all our members. This bumper winter edition celebrates the 40th Nightjar and features a special Technical Matters on lighting and charging (*see page 10*).

I decided to enter the Nightjar in part out of curiosity and in part to 'learn the ropes'. I didn't realise that learning the ropes was going to be as involved as it turned out to be... (*see page 5*)



Simon's Arrow gets the LED treatment

CLUB NEWS

40th Nightjar - the best yet!

What a fantastic event the 40th Nightjar was on Saturday 21st November; great organisation, so many happy people, much fun and good spirit and wonderful cars!

The considerable amount of planning and preparation begins around mid-May and a huge amount of attention to detail is required - which made this year's *special* Nightjar, as Trevor Edward remarked, "Possibly the best one yet - certainly in my personal memory at the very least. It's believed that all those taking part this year had as enjoyable time, as ever, despite the less than tropical weather!" *Read all about it on page 2.*

Maureen Breakspear

The funeral of Maureen Breakspear was held at the Easthampstead Crematorium, Bracknell, on Friday 27th November. Members came in their Historic/Classic cars and after meeting at the Finchampstead Memorial Hall, followed the Hearse to the crematorium. After the service mourners were invited to the Easthampstead Golf Club. *A full obituary follows on page 7.*

AGM – a call for new committee members

We need to maintain our committee at full working strength to deliver interesting club nights and challenging events! The current members who are standing again are very anxious to recruit support from more members. Also, George Ewart, who has been membership secretary for many years has decided to call time as well. The tasks are not that onerous if they are shared! Have a think and be prepared to step forward...

Editor: John Pratt (johnpratt@orange.net)



The 40th Nightjar Navigational Scatter Rally

Although the planning process starts in May, finding locations for the Manned and Unmanned Controls (MCs and UMCs) generally takes place around July/August time. Then Trevor, Colin, Don and Roy (Roberts) go out into the Berks/Hants/Surrey countryside to try to find either new locations (increasingly difficult!) - or to re-visit those which haven't been used for a while. This year it turned out that just Trevor and Colin did this part of the planning exercise. Having found suitable locations and agreeing some kind of basic (devious?) route to a spot deemed appropriate and/or sufficiently challenging, Trevor then put meat on the bone and devised all six task/clue sheets, attempting to make two easy, two moderate, one difficult and one extra difficult in degree of challenge.



Richard Scott (left) & Graham Rood listening to the drivers' briefing

The competitors gathered at 4.00pm at the Community Hall in Hook for scrutineering and briefing. Colin and Ann (Greig) handled scrutineering of vehicles, on arrival, essentially to check lights and also crew size since teams are penalised 10 points for each crew member in excess of two. The venue on this occasion (somehow forced upon us due to the fact that Elizabeth Hall - our usual base - was unavailable this year) proved to be a hit with just about everyone, competitors and organisers alike, drawing many favourable comments. Joan (Hancock) and Jean (Edwards) served tea, coffee, squash and biscuits prior to the rally, which, this year, raised £33.50 for Club funds. Route cards were then handed out at 5.30pm.

Two vehicles were reported to have sadly fallen by the wayside immediately prior to the event. These were John Kirkby's 1924 11.4 h.p. Humber which ran a big end on the A3 - unluckily something similar occurred last year, also preventing his taking part then - (memo to self: keep off the A3!). Also Martin Baglin's 1926 Sunbeam 25 h.p., having performed faultlessly all the way down from Norfolk on the day previously, inexplicably and obstinately refused to behave similarly on Saturday. Again a seized magneto, forced him, with a reduced crew size, to switch to Class Two (Moderns) in a Vauxhall Corsa. But at least he managed to remain an entry and came a very creditable 4th in that Class.



Some amused faces doing a whole lot of plotting

Andy Barker said, "It was my first time as a navigator (usually I drive) and as usual the clues were devious, but were different from what we have seen before. This adds to the challenge and all credit goes to the organisers for making each event unique and different from those that have preceded it."

For those who may not have been aware, there were a couple of *known* vehicle casualties, during the event, one rather more disturbing than the other. Mark Lynch, in his 1932 Sunbeam 18.2, apparently



experienced fuel pump problems which reportedly, were eventually dealt with, en-route, by having his navigator, Phil McCarthy, lift the floor board and periodically strike the offending item with a hammer whilst, of course, continuing to navigate! Geoff Pickard proved to be a 'Knight of the Road' by evidently stopping his trusty Austin 12/6 Newbury to offer assistance and spent some considerable time doing so, thereby risking sacrificing a considerable amount of his precious allotted timing allowance. In the event, because of this very charitable act, (not uncommon amongst the historic vehicle fraternity), he was not penalised and still managed to achieve 9th place with 300 points. Could there be some kind of moral here? You don't just "*Purchase an Austin; You Invest in One!*"

A more serious development resulted when the magneto on Nigel Coulter's 1925 Humber 12/25 Tourer decided to die immediately after leaving the hall. After some time was spent trying to coax it into life, with no success, a recovery vehicle was summoned, which subsequently took the Humber home in a rather undignified manner. Irritating though such a situation is ('been there, done that') it was particularly disappointing for Nigel since it was his fortieth Nightjar, having competed in every one since it began in 1975! Our commiserations are extended to him, but at least he managed to return to the hall later, in a modern, in time to collect an award for displaying such incredible stamina and loyalty to the event.

Mention *has* to be made of Dick Arman who drives *his* 1927 Humber 14/40 up from deepest Dorset every year and unsurprisingly picks up the prize for the greatest combined age of vehicle and driver; this figure amounting to 174 - you do the maths! Truly remarkable inspiration to us all!

The tasks at each control point varied in difficulty - yet Richard Kiel finished the very difficult MC4 in just 20 minutes, compared with other teams in the 33-49 minute range. The easy MC3 stage was generally completed in 10-23 minutes, as competitors used to orienteering ran round Tadley Common in the dark with torches. George (Ewart) has been Timekeeper for several years now and oversees the departure and return of competitors, checking that they are not out of time, although last Saturday was possibly the last time he will have officiated; Colin's grandson, Ben, has been 'apprenticed' to the role for the past couple of years and is likely to take it on next year - but will need an assistant!



The finish at Hook

Summing it up from the competitor's standpoint Andy commented, "Apart from it being very cold I thought it was great fun. The pressure is on the driver to make sure their car is working properly and can survive the event, whereas the navigator's job is to make sure said car doesn't end up in a ditch through bad navigation! I'd like to congratulate Simon (Jocelyn) for providing reliable transport and for being bold enough to give it a go!"

Simon Jocelyn was mighty relieved to finish, "I have to say this was my first Nightjar, and after two weeks of coaxing a somewhat reluctant 81 year old Austin Arrow to at least start, yet alone complete the run, it was very nearly the end of a relationship. The little car didn't falter once despite consuming more petrol than a Bentley Continental on a run to Waitrose."

The event relies on a great deal of support and back-up from all those people who are willing to spend several hours stuck out in the woods and commons, as marshals, sometimes in freezing, wet or foggy conditions. This year there were two completely 'new' pairs of marshals, unfamiliar with the details of the



event and commendably they, as well as everyone else out there in the boondocks, carried out their 'duties' perfectly.

Back in the Community Hall, Jeanette (Pratt) was still recovering from the shock of finding two bulls roaming loose on Tadley Common, which was why the two marshals looking like 'Minions' left their bird signs in situ!



Particular thanks must go to Andy and Do (Ranson) who drove up, once again, from their home in Weymouth to 'camp out' at Wokefield Common for the evening. Real dedication and loyalty - especially since they moved down there from their former home in Burghfield Common a number of years ago and could easily be excused showing lack of enthusiasm at the prospect of doing so.



Supper & raffle while waiting for the results

Jean Edwards had made a chilli and baked potatoes for the hall (i.e. 'static') staff, helped by Joan Hancock. They had set out tables and chairs for crews to do their initial plotting and later to cover the tables with paper table-cloths and lay out cutlery, condiments, etc. After the event there's a mad rush to try to clean the whole place up and depart before the bewitching hour of midnight arrives, although this year we didn't quite make it! Joan handled the purchase, mixing and later serving of the Mulled Wine, while John (Hancock) assisted initially in the car park and generally thereafter. Anne (Butcher) and Sarah (Pibworth) came later in the evening to serve tea and coffees to appreciative returning crews.

By 10pm the returning crews and marshals were mostly starving but entertained each other with stories of their encounters, until supper was served. This was provided by Oliver's Fish Restaurant in Old Basing, which was as good as usual. The sight of so many smiling faces sitting at the marshals' table while Trevor compiled the scores would seem to imply that, in some odd way, they also shared the enjoyment and satisfaction that the competitors clearly felt and reported - one hopes so anyway. All of the foregoing, Trevor supposes, "Arguably reflects the immense 'fun' to be had driving venerable machinery around the countryside, in the dark".

Trevor can't understand, "Why the devil do those who come back, year after year, do so, driving around in historic, often temperamental vehicles, many of them with minimal weather protection, yet get so much obvious enjoyment?"

Colin also purchased all the various prizes (wine & chocolates) and the engraved awards - and arranged these in the hall for presentation by Simon at the end of the evening. Ann also purchased all raffle items, sold raffle tickets and handled everything raffle-related; this year £233.00 was taken! From remarks and comments from competitors, it would seem that, as is generally the case, year after year, everyone thoroughly enjoyed themselves. But we're all agreed that how they're able to do so is one of life's perpetual mysteries! This year there were a number of people who had never entered before, but who have since pledged their intention of doing so in 2016, November 19th is the date to put in your diary!"

Article compiled from numerous accounts, but special thanks to Trevor.



Seeing Red - Simon's Story of Preparation for the Nightjar:

Count down: Two weeks to go, let's take the old Austin out and make sure it goes, one hour later our first call to the AA with a dead battery and a car that refused to start. Recovered home on the back of the big yellow truck, the car pushed up the driveway into the garage. Bottle of Red wine.

Next day: The club night auction.

Tuesday: Pull the starter motor out of the car as charging the battery made no difference.

Bottle of Red no. 2 and a call to Dave Holland.

Wednesday: Dave kindly delivered a spare starter motor. I fitted it to the car, no change, not a flicker, so it was removed. Both motors connected to the 12V van battery, both worked. Back to the car. No joy, it had to be the battery. A call to Trevor Edwards who kindly offered sound advice, recommending the Battery Mega store (100% spot on).

Bottle of Red no. 3.

Thursday: Battery ordered.

Bottle of red no. 4 as there was nothing more to be done today.

Friday: The battery arrived with enough acid for two, so to kill time once the battery was fitted and lightly charging, I decided to clean up the starter motor and repaint it, change the oil all with high expectations.

Bottle of red no. 5.

Saturday: Battery fitted, starter motor in, starter switch pulled – wayhey! It worked. The engine was left to run, then stopped and restarted. This was done several times to ensure hot starting was not going to be an issue. With this completed, out of the garage to undertake some further domestic tasks; cook dinner for the neighbours, and it was raining by now.

Bottle (s) of red 6 & 7

Sunday: Dry and fresh – a good day for road testing, off we go having agreed to do some circuits of the village to ensure that any necessary recovery would be as simple as a push home. First circuit completed successfully, second circuit at the traffic lights it all fell apart, taking one hour to travel one mile! Back to the garage the starter motor was removed, as was the SU Carburetor. The converter made to accept an SU Carb was homemade by a man who could not braze - this became apparent as when the paint was rubbed away, it revealed holes all around it. Too much air!!

I decided the best thing was to braze the adaptor, order new brushes for the starter motor, new fuel filter and another case of Shiraz. Brazing completed, I decided to tidy it up with a Dremel – mistake! Grit in the eye, however the adapter was completed, given a coat of paint and new gaskets made.

Time for red wine no. 8!

Monday: A very sore eye. Return home from work and a trip to A & E, three hours later an even more sore eye and with only part of the piece of metal removed. No more garage time.

Bottle of red no. 9.

Tuesday: The parts arrived and are fitted, and found to all be working, but the Carb was way out, so some adjustments are made. Next door neighbour slightly concerned, calls over the fence as a car running in a garage could mean a couple of things, one not being too nice.

Wednesday: Road trials round the village begin again. Not too great, lights flickering, engine although running it's rough. The Nightjar not looking promising right now.

Bottle of Red no. 10

Thursday: Modification time after another trip to the ophthalmic clinic to have the remaining metal removed from my eye. The irony of this event being, that I had to fix the lamp which the Doctor needed to use, to be able to remove the offending article from my eye. Back home I decided to make a heat shield, remove the filter and "twiddle" with the Carb, timing and, oh yes, rewire the lights.

Bottle of Red no. 11

Road test Friday – it worked, as did Bottle no. 12

Saturday: The acid test – off to Hook. I hadn't anticipated quite how cold it was going to be. The little car, though not running too well, made it to the hall. The little car made it, however consuming far too much petrol to be healthy, a bit like my wine consumption over the last two weeks!



THE 40TH NIGHTJAR RESULTS			
POSITION	DRIVER	NAVIGATOR	SCORE
<i>CLASS ONE</i>			
1st	James CAMPBELL	Tom CAMPBELL	453
2nd	Nick WRIGHT	Rob RHODES	445
3rd	Dick ARMAN	Ian SAYER	439
4th	James CAMPBELL	Tom CAMPBELL	432
	Geoffrey PICKARD	Dee ANDREWS	300
<i>Best Beginner</i>			
	Simon JOCELYN	Andrew BARKER	292
<i>CLASS TWO</i>			
1st	David BURTON	Helen BURTON	451
2nd	David BARTHOLOMEW	Robin APPLEBY	435
3rd	Trevor KING	Lewis MUTTER	391
<i>Best Austin Seven</i>			
	Ian NELSON	Roger BEST	353
<i>Best NHAEG Member Performance</i>			
	Simon JOCELYN	Andrew BARKER	292
<i>Youngest Driver/Navigator (Under 25 - if under 18 no wine, 2 chocs)</i>			
	Tim SPILLMAN (16)		
<i>Fastest Nominated Task (MC4)</i>			
	Richard KEIL	20 minutes	
<i>Greatest combined age of car and driver</i>			
	Dick ARMAN	174 years	
<i>ATDC Trophy Class 1 IRC Winner</i>			
	James CAMPBELL	Thomas CAMPBELL	453
<i>IRC Winning Team</i>			
	RILEY		

Monday 14th December Club Night

The December club night is all a bit of fun. Questions to answer but all with a festive theme. We shall need to split up in groups of roughly six again and we will hand out sheets and questions for people to work on.

There will be spot prizes and maybe even one for the best dressed person, so don't forget to pull out the antlers, find the Santa outfit - or even just that Christmas tie/scarf you were given last year.

We would like to start around 8.15pm if possible. Look forward to seeing you all.



Julie



Maureen Breakspear

I have been asked by John P. to write something about Maureen who as I am sure you all know sadly passed away on the 17th November. I was of course pleased to agree, in fact had already planned to do so.

I first met Maureen and Don at The Littlewick Show in 1987 soon after buying an Austin 7 Nippy, although Ann already knew Maureen as she had recently started work at the office where Ann already worked. They were in their beautiful Chummy which Don had built from a box of bits some years before.

Don, who was then Chairman suggested I join the NHAEG which I did the following month. Over the years Ann and I became very good friends with Maureen and Don and we have spent many happy hours at their house and they at ours, we have also been away with them on a number of occasions.

Maureen and Don loved going on runs in Chummy, often going abroad and in the early days even taking their two daughters Karen and Jane. Must have been quite a squeeze, not sure how much luggage they were able to take. Later as the girls passed their driving test they also started to drive Chummy.

Soon after I became Chairman, Maureen joined the committee and became editor of the newsletter for many years. She and Don also organised a number of very enjoyable holidays for the club which were greatly appreciated by everyone who went on them.

Maureen was a very warm and lovely lady, always willing to help others and never happier than when entertaining friends at home. I have had many beautiful hot curries there, washed down with Sauvignon Blanc, Maureen's favourite tippie, although it had to be properly chilled. There have been times in a pub or restaurant when Maureen returned her wine if it was not properly chilled, she was a lady who knew what she liked.

I find it very hard to accept I will never again enjoy her company and excellent food. Every time I have a glass of Sauvignon Blanc in future I will think of Mo.

The club will not be the same without Maureen, Ann and I will miss her terribly as I am sure will everyone who was privileged to know her. All our thoughts are with Don, Karen, Jane and all the grandchildren at this very sad time and I hope they can gain strength knowing that they have a great many friends around them.

Colin



Club & Events Diary 2015-16

Please let John (johnpratt@orange.net or 01252 643527) have details of any events that NHAEG members might be interested in:

NHAEG	2015/16 Dates	Club Nights	Arranged by or details from
	Mon 14th Dec	Christmas Surprise	Julie and Karen
	Mon 11th Jan	AGM	Committee
	Mon 8th Feb	Quiz night	Julie
	Mon 14th March	Speaker Night	Peter

NHAEG	2015/16 Dates	Club Lunch Meetings	Contact
	Mon 28th Dec	The New Inn	Colin
	Mon 25th Jan	The New Inn	
	Mon 22nd Feb	The New Inn	
	Tues 29th March	The New Inn	

Clubs	2015/16 Dates	Other Events & Location	Contact
White Lion Antiques	Sundays - Twice a month	Classic Car Meetings, White Lion Antiques, Hartley Wintney	See web site for dates www.whitelionantiques.co.uk
NHAEG	Mon 7th Dec	Christmas Dinner	Elaine Watkin
NHAEG	Wed 9th Dec	Salisbury Christmas Market & Cathedral Carol Concert	Jean Edwards (Coach Trip)
Watercress Line	Saturday 26th-27th Dec.	WW2 Christmas Leave event	www.watercressline.co.uk
Brooklands	Fri 1st Jan	New Year's Gathering, Brooklands	www.brooklandsmuseum.com



VSCC	Sun 31st Jan	Driving Tests, Brooklands	www.brooklandsmuseum.com
Watercress Line	Friday 12th-14th Feb.	Spring Steam Gala	www.watercressline.co.uk
Austin	Sun 13th March	Austin Morris Day, Brooklands	www.brooklandsmuseum.com
Brooklands Museum	Saturday 14th May	1940s Relived at Brooklands	www.brooklandsmuseum.com
Brooklands Museum	Sunday 22nd May	Brooklands Classic Breakfast	www.brooklandsmuseum.com
Watercress Line	Saturday 12th June 11th-	War on The Line Event	www.watercressline.co.uk
Essex Austin 7 Club	12th-17th June	The Only Tour is Essex (& Suffolk)	https://ea7c.wordpress.com/
750 MC	Sunday 3rd July	National Austin 7 Rally at Beaulieu	Ian Nelson tel: 01932 863073; email: ian.s.nelson@bteinternet.com www.beaulieu.co.uk/events/austin-seven-rally/
Watercress Line	Sunday 17th July	Alton Bus Rally	www.watercressline.co.uk
Cobham Heritage	Saturday 10th Sept	Cobham Heritage Day classic car gathering	Ian Nelson tel: 01932 863073; email: ian.s.nelson@bteinternet.com
Watercress Line	Friday 21st-23rd Oct.	Autumn Steam Gala	www.watercressline.co.uk

Club	2015/16 Dates	Inter Register Event & Location	Contact
MGCC	Sun 11th Oct	Autumn Surrey/Sussex "Naviscat"	Tim Morris twmorris@ntlworld.com

These Inter-Register events are very enjoyable, why not give one of them a try. If you would like more information see Colin, Trevor, Tony W or contact the organisers listed above.



TECHNICAL MATTERS – WINTER SPECIAL

Members' Notebook - Beat the battery blues with LED lamps

Austin Seven members know only too well that their car typically uses 2 x 5w sidelights, 2 x 5w tail lights, 1 x 5w dash panel lamp, giving the total current consumed by small filament bulbs (5 x 0.85) of 4.25 amps. A standard filament 6v 24w headlamp bulb uses 4 amps and shines an off-white light, adding another 8 amps making the car's lighting load 12.25 amps. If the dynamo output is 7 amps then a 56 amp-hour battery will go flat in 7.7 hours, or if the dynamo fails to charge 3.9 hours.

Whereas, swapping to LED lamps, the total current consumed by small LED bulbs (5 x 0.025) would be 0.125 amps and a 6v 36w rated LED headlamp bulb uses 1 amp and shines a pure white light. That's 2 amps for two head lamp bulbs. Add this 2 amps to the LED figures above and it gives a total lighting load of 2.125 amps, doubling the battery life.



Typical double pole LED headlamps

Members' experiences have varied:

John P: I purchased (BA20D fitting) LED headlamps from: www.dynamoregulatorconversions.com with an easy straight swap. The intensity and throw were improved over the halogen lamps that Trevor had fitted to PO. Andy Seager had recommended spending time adjusting the pattern, but I found that the lamp holders were fixed in the headlamp reflectors. So maybe I was lucky?



Simon J: After, once before, driving our little Austin Arrow in the dark with Denise following in the Sprite providing much needed light, I vowed that I would never again drive the Arrow at night. With a poor memory I decided to take part in the Nightjar, only then realising that meant driving at night. Therefore, time for drastic action. John Pratt and Richard Long had both recently purchased LED conversion head lamp bulbs, they both said how pleased they were with them.

A call to classic Dynamo and Regulator Conversions resulted in the purchase of two head lamp bulbs that would fit my headlamps without any conversion. Be advised they are polarity specific. I initially ordered the wrong one's (negative earth). Unusually, our car is positive earth. Another call, a small additional charge for postage and the correct lamps arrived the next day and were fitted and tested. I can now drive at night with the knowledge that I can (and do) dazzle on-coming BMW's and Audi's...



Alan P: I have LED Stop & tail lights, LED instrument light and LED side lights which all work OK but still no joy on the headlamps. I have checked polarities and checked wiring but still the blighters will not work. Upon closer inspection the LED lamps had their contacts in differing planes so would never make contact. I have contacted the firm and have sent them back for replacements.

Andy S: I've fitted LEDs to my Riley with great success, after a bit of adjustment. But maybe we should do a bit on charging too. A long time ago (2005) I wrote an article on this that we included in the club magazine. To my mind, plenty of new members have subsequently joined, and those that may have seen the original article may have lost it. (See next page – Ed)



Charging problems? – Getting the best from a three-brush dynamo

This two part guide is based on a technical leaflet produced by Andy Seager in 2005. He had found that there was no single source of information that appears to provide all the answers to the Austin Seven and other models with a three-brush charging system. He researched articles from the Internet and period books about car electrics, to help tie all the loose ends together.

Part 1: Improving Charging Rates

A bit about how it all works

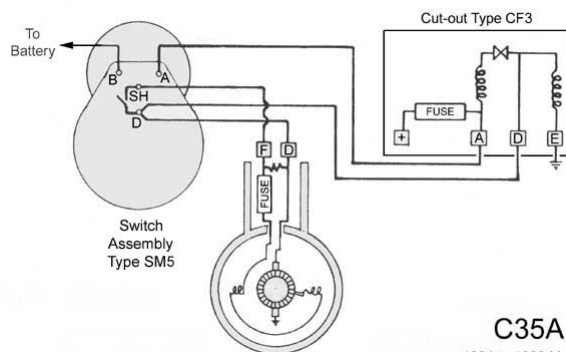
A dynamo is pretty much an electric motor, indeed if you connect both terminals together on an Austin Seven dynamo and connect them to the positive terminal of a 6 volt battery and the case to the negative terminal, it will run like a motor. As with any electric motor, if you spin the shaft it will generate electricity – so it works both ways round, albeit that it's not a very efficient motor! There is a catch though; if you want the battery to charge, the output voltage of the dynamo has to be higher than that of the battery, so it has to be spinning fast enough before you connect it to the battery – or it would simply attempt to run like a motor against the will of the engine!

In the Austin Seven (or any other car of the same era with a dynamo) the dynamo is connected across the battery via the 'cut-out' when the engine RPM is sufficient to create enough output from the dynamo to charge the battery. The cut-out is a relay that operates once the dynamo output has reached a pre-determined level – a contact closes and the dynamo is connected, if the engine RPM drops, the dynamo output falls and relay releases again, so the dynamo is disconnected. If you take the cover off the cut-out and watch while you rev the engine you can see it pull in and drop out. (Assuming everything is as it should be.)

Without plunging in to unnecessary detail, the dynamo generates electricity by quickly rotating a wire coil called the 'armature' within a fairly intense magnetic field created by the stationary wire coils in the case – or 'field windings', which are wound around fixed soft iron magnets. The electrical energy created by the armature coils as they are rotated within the field magnet is extracted via two carbon brushes that run on the 'commutator', which is a series of copper strips that are interconnected with the windings of the armature.

The terminals on the dynamo

Typically, a three-brush dynamo has two insulated terminals, with the earth being provided via the case. One of the terminals is the output, the other should be considered an input. On some the output is marked 'D' and the input 'F' on others 'positive' and 'F2' respectively. (There are many other variants) On some larger Austins there are three terminals providing three effective outputs, the greater of which only being employed while the lights are switched on.



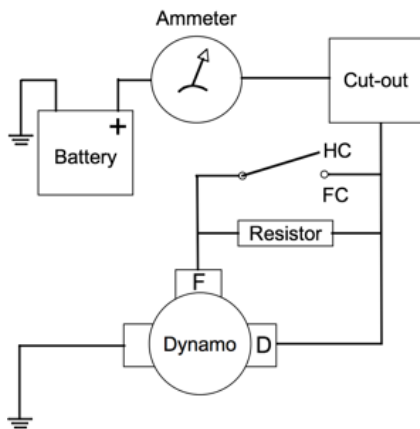


The dynamo field magnet is created by harvesting the output from 'D' and feeding it in to the field windings via the 'F' terminal, the circuit for which is completed by a third brush that also runs on the commutator. In effect the dynamo 'self-excites' – if you connect 'D' directly to 'F' the dynamo output is at a maximum. If you take a portion of the output from 'D' and connect it to 'F' you reduce the output. A wire wound resistor between F and D therefore provides a reduction in the charge for 'low' or 'summer'. The half charge switch position on the dashboard simply connects the resistor across the two terminals, the full charge position effectively shorts across the resistor, directly connecting D and F together.

Note: If the dynamo has three connections, the charging circuit is usually made with part of, or the entire resistor along with a direct connection, so 'low' or 'summer', 'high' or 'winter', and direct to cope with the demands of the headlights.

The well-used diagram on the previous page shows how all of this is connected in the Austin 7, but of course there are variations on this depending on the year the car, however the basic principle is the same. The output D is connected to the battery through the cut-out and the ammeter on the dashboard. This circuit is taken via the charging switch so that the resistor can be shorted out with the switch contacts. A simplified version of this diagram follows:

How to set up the charging rates



Assuming that everything is connected correctly, the charge rate can be adjusted by moving the third brush. This is mounted on the back plate of the dynamo on a little curved track, and is accessed by removing the dust cover band* from the dynamo. You can move the brush by simply pushing it one way or the other to change its position around the commutator. The two main brushes are located directly opposite each other (180 degrees apart), while the third brush sits between them and typically has a thinner carbon element.

**Tip: the dynamo will cool better if you leave the dust cover band off and perversely will run cleaner because it will throw out any dust generated by brush wear etc.*

The third brush can be moved by gently levering it with a small screwdriver against the aperture in the case, only lever the carrier – don't lever the carbon! It is not good practice to move this while the engine is running or while the ignition is on, you may damage the brush or inadvertently connect the brush to ground with your lever.

With the dash switch in the full charge position, shift the third brush in small increments with the engine off; once adjusted, run the engine and ensure that the cut-out operates when the engine is raised above idle speed to around 2000 rpm. Ideally you should connect a multi-meter with a 10 or 20 amp range, in the charge circuit near the battery to measure the charge current accurately, you can use the dash meter but there is no guarantee of its accuracy.



How high you set the maximum output rather depends on the car, however I suggest not setting the full charge rate to much more than 10 amps. Many pre-war Austin electrical systems force a compromise, while it may struggle at 10 amps to maintain a charge with all the lights on, if you over cook the charge rate you may cause the dynamo to overheat and throw solder. If you can get to a situation where the ammeter is at zero or in the centre with the lights on that is a good result. With smaller cars you may end up with a slight discharge of an amp or so – given the length of time you're likely to be out in the dark, this compromise is better than a damaged dynamo.

Once the full charge rate has been set, assuming that the half-charge resistor is working, you should see around 4 to 5 amps of half charge current when you put dash switch in the half charge position.

Another important consideration is the charge rate you apply to modern, low or zero maintenance car batteries. These do not like being charged for long periods at high charge rates – so set the car up with the smallest charge rate you can get away with, not the largest – you have been warned! At half charge 2 amps is plenty on a fully charged battery.

Part 2 on 'What to do in the event of a missing, broken or faulty resistor' follows in the next issue.

This month's tip from Malcolm Ryley

I can recommend the very friendly and helpful grit or vapour blast cleaning firm of R.D. Cox and Son in Reading.

They will clean and apply a high quality hard wearing twin pack paint, which is preferable to powder coating. Contact details are:

R.D. Cox and Son, The Workshop, 306 Old Whitley Wood Lane, Reading RG2 8QD Tel: 0118 975 0289



AUSTIN HISTORY

Queries of the Month

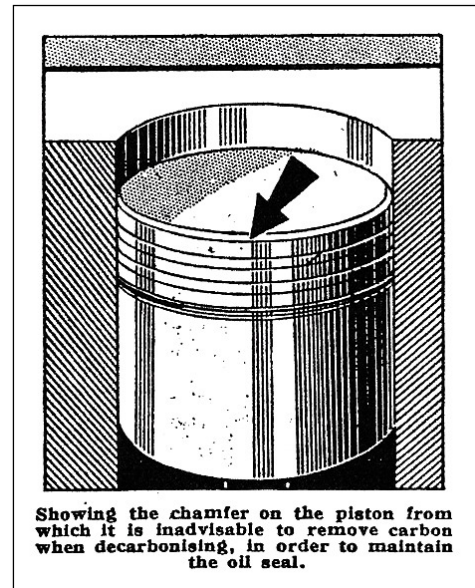
More from Andy Ranson. These originally appeared in "The Austin Magazine & Advocate" during the 1930s and 1940s. This month's selections are: No 1044 Shock Absorbers – Austin Ten and No 1180 Oil Consumption – Austin Eight. No 1044 appeared in the May 1941 edition and No 1180 appeared in the July 1944 edition.

No 1180 – Oil Consumption. Austin Eight

Q. *I recently decarbonised and ground-in the valves of my Eight, for the fourth (or perhaps the fifth) time at 39,000 miles, and since have been troubled on one or two occasions by misfiring, which I have discovered to be oil on the plugs, and I have noticed that I have to replenish the engine oil more frequently, and the exhaust smoke, especially when starting away, is noticeably bluish. Can you suggest what these are symptoms of? Presumably the cylinders are worn, but why should I notice these symptoms after decarbonising?*

A. In an engine which has been in use for a considerable mileage, which is presumably true of yours, wear of the cylinder bores, piston rings, or pistons, or perhaps all three is inevitable. The tendency to burn oil, and for the plugs to oil-up, often becomes more pronounced after decarbonising, as sometimes the carbon itself tends to act as a seal to prevent the oil reaching the combustion chambers.

Presumably, when decarbonising, you removed the carbon from round the top chamfer of the piston, as it is carbon at this point that helps to maintain the oil seal. As carbon forms again it may tend to restore this seal, but on the whole we are inclined to think that you will find it necessary to consider renewal of piston rings or cylinder reboring as advisable at some early date.



No 1044 – Shock Absorbers. Austin Ten

Q. *My car is a 1934 Ten with friction type absorbers. Lately I have experienced a creak at the back, which I am fairly certain emanates from the chassis and not the body. Can the shock absorbers be at fault, and if so, what is the remedy? Incidentally, I may as well mention that the trouble fades out after the car has been running some twenty miles or so and has warmed up. I shall appreciate your advice on this matter.*

A. From your description, and in the absence of the actual vehicle for diagnosis, it is just possible that the shock absorbers may be at fault, although there are other potential causes of the creak of which you complain, which should equally be born in mind and investigated. You will do no harm by dismantling the



two rear shock absorbers and cleaning the friction discs. They can easily be reached when the rear seat cushion and body baseboard have been removed. Note the adjustment number by the pointer before dismantling, so the same adjustment can be reverted to. Before being re-assembled you might give the slightest smear of grease to the friction surfaces. This does not adversely affect the operation of the shock absorbers, but tends to ensure quiet operation. The creak may, of course, arise from some other point, such as a perished silent-bloc spring anchorage or shackle, or from wear of the spring leaves, after prolonged usage, especially at the ends where they may be tending to dig into the leaf above. The remedy in the former instance is renewal, but this is a job requiring special tools, and so beyond the scope of the owner-driver: but in respect of the latter possibility, a thorough cleaning of the spring and the application, repeated several times, of a good thick oil, should overcome the trouble it arises from this cause.

The "Queries of the Month" are reproduced with the kind permission of the Austin Ten Drivers Club (ATDC)

Past Press

An advertisement from May 1955. Not a bad product if you had a 6 volt system, however, it was not much good relying on vacuum power for the wipers when going up hills!

Important News for Pre-War Car Owners

A Complete ^{NEW} windscreen wiper for only 39/6

less 7/6 allowance on your old wiper

Trico offers this amazing value; a completely Automatic Windscreen Wiper set comprising a powerful vacuum-operated motor, wiper blade, adjustable length wiper arm, 7 ft. of rubber tubing and manifold adaptor for under £2. Furthermore we will allow 7/6 for your old wiper irrespective of type, make or condition.



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VI
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TRICO OBTAINABLE FROM YOUR LOCAL GARAGE

OVER 60 MILLION TRICO VACUUM WIPERS ARE IN USE TODAY

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THE CHRISTMAS QUIZ

A MODE OF TRANSPORT FOR EVERY LETTER OF THE ALPHABET.

PLEASE SEND ENTRIES TO JULIE ELS EITHER BY EMAIL (julie.els@tiscali.co.uk) OR POST.

1. Mentor for a team (5)
2. A Tibetan bison hides behind a small Ford. (5)
3. A third of a yard (4)
4. Footballers wives do go on (5)
5. You could launch this salad crop (6)
6. Sound of Girls Aloud hit (11)
7. A pirate vessel with sails (5)
8. Very cold but warms up the conversation (3, 7)
9. Heavenly body under the channel (8)
10. Fast trip to the east (6, 7)
11. Rock band without Pb (8)
12. Sounds like I pursued a female (7)
13. Pole that has its ups and downs (4, 5)
14. Enables take off at sea (8, 7)
15. Don't stop this open vehicle (2, 4)
16. Propelled runner on snow (3, 3)
17. It felled Usain Bolt (6)
18. Sounds like the Hugh in Blackadder (5)
19. Having two recurring series of events (7)
20. Our monarch at sea (5, 9)
21. Could Cathy move around on this? (5)
22. An empty inflatable (3, 3, 7)
23. Sounds like something to clean the floor! (5)
24. Morrison or Halen? (3)
25. A yard of ale was shuffled around like this (4)
26. A boxer from sunset to sunrise (5, 6)

NAME: -----



MEMBERSHIP RENEWAL FOR 2016

It is now the time for you to arrange your Membership Mortgage for 2016. The 2016 Subs Form has been sent out to current members by e-mail but a copy is provided here to make completion easy. Feel free to give a copy to any potential members.

Please post your completed form and cheque made payable to NHAEG directly to George Ewart as circumstances indicate that he may not be able to attend the December club meeting.

Remember that your membership must be renewed before the January meeting, i.e. the AGM, so that you can vote on any matters arising. This request is also being made now to get things moving while the new Membership Secretary is being 'enthroned' and bear in mind that only information presented on your form can be included in the 2016 membership lists.

A few Motor Insurers – notably those covering classic vehicles etc. – now ask those seeking insurance if they are members of a Club associated with the make/type of car they are insuring. Such enquiries usually occur when premium discounts are on offer. Some companies may then seek confirmation from the club concerned so the club's response can assume a legal significance should a problem arise. An inconsistent response from the Club will not help the applicant!

It is for this reason that the Membership Secretary requires a **fully completed and signed** membership form each year so that any such query can be answered with confidence. Last year many of the forms returned in time were incomplete. To keep membership records up to date please advise the Membership Secretary **directly** of any changes or additions to details listed on your form which may arise during 2016. These updates will be published in the Newsletter and circulated by e-mail so that other members can update their lists.

Now that all our members are on e-mail, the issue of individual membership cards will be stopped. Receiving your membership list in the New Year, will replace your membership card. The provision of the cards in the past was both time consuming and expensive as many of them had to be posted.

George Ewart, Outgoing Membership Secretary

Remember that your membership must be renewed before the January meeting, i.e. the AGM, so that you can vote on any matters arising.

Members who joined after October 1st, 2015 enjoy a 15 month term and do not have to renew at this time.

Bear in mind that only information presented on your form can be included in the 2016 membership lists.

Please post your form and cheque directly to George Ewart at 12A Butler Road, Crowthorne, RG45 6QY



North Hampshire **Austin** Enthusiasts' Group

2016 Joining/Renewal Subscription Form.

Member's renewal subscription OF **£9.00** should be submitted by **December 31st, 2015** otherwise an additional **Rejoining** fee of **£5.00** will be required.
 New members are required to pay a Joining fee of **£5.00**, in addition to the annual subscription of **£9.00**

Please use BLOCK CAPITALS and highlight any changes since last year
 The Membership Secretary should be advised directly of any changes arising during 2016.

The NHAEG requests this information to maintain its records and to help provide events and activities which reflect the interests of the membership where possible. This information will not be used for any other purpose nor disclosed to any other individual, group or agency outside the **NHAEG**.
 Membership includes all family members resident at the address noted below.
 Only the Principal and Joint members will be allowed to vote at any Group Meeting or AGM.

PRINCIPAL MEMBER

Title Surname Forenames
 Address** Postcode

** For security reasons your address will only be made available to the Committee members.

E-mail address

Telephone number Mobile number

SIGNATURE DATE

(PRINCIPAL MEMBER)

JOINT MEMBER

Title Surname Forenames

E-mail address

Telephone number Mobile number

May we include your details in the circulated membership list? YES / NO

Please note overleaf the make, model, year & registration number and any other interesting facts ab your vehicle(s) and also what activities/events you would be interested in?

Do you wish to help run or organize any of these activities/events? YES / NO

Please return your fully completed form and cheque only for £14.00 or £9.00 (delete as required) payable to 'NHAEG' by post before December 31st. to:-

The Membership Secretary, George Ewart, 12A Butler Road, Crowthorne, RG45 6QY.

Forms not fully completed will be returned.