

# NORTH HAMPSHIRE AUSTIN ENTHUSIASTS GROUP



## JULY 2016 NEWSLETTER

### CHAIRMAN'S CHUNTER...

We are now well into the summer seasons of fetes, runs and other events - even if the weather hasn't played ball! On *page 3* we feature members' reports of events that they have attended and the Club Diary (*page 4*) shows that there are plenty of events left to go to.

We have seen some new members enquiring about the club and attending meetings, but it is always sad when we lose a member. There is a fitting tribute to Sandra Ryley (*on page 2*).

This issue is packed with Club News, the 'NHAEG Member Interview' (*page 6*) featuring Tony & Pat Westhall, a variety of technical matters including tyre condition (*page 11*) and the sorry conclusion to the story of the British Brake Industry (*page 9*). There are other historical items and finally Aunt Brassica (*page 17*) continues to dish up advice in answer to readers' questions.

I look forward to seeing you on Monday 11th July, dressed up for our coveted-car club night (*see page 5 for details*).

*Simon*

Editor: John Pratt ([edmundjohnpratt@hotmail.com](mailto:edmundjohnpratt@hotmail.com))

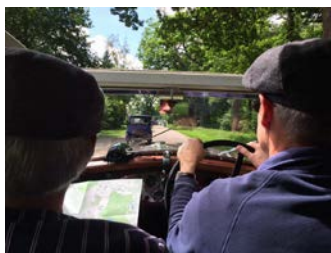
### CLUB NEWS – BRILLIANT BEN AGAIN

The big attraction of this run was the unique opportunity to travel on roads in the Crown Estate in Windsor Great Park, which are normally closed off to traffic. BEN is the automotive industry charity and this run is organised in support of their retirement village in Sunningdale. The event has been running for 20 years and has raised in the region of £4,000 pa, this year attracting 160 classic vehicles for the 21-mile drive through Windsor Great Park. The oldest vehicle was a 1904 Renault owned by the AA; there were many vehicles from the 1920s-30s, classic sports cars from the 1960s and some more modern vehicles up to a 2004 Bentley.



Ten NHAEG members participated and we gathered as instructed in Car Park 10 of Ascot Racecourse, between 9 and 10am on Saturday 25<sup>th</sup> June, prior to receiving our route

instructions and a drivers' briefing. At 11.15 we set off in groups of 5 with the oldest cars leaving first. After 5 miles we entered the Park through Blacknest Gate, passing Virginia Water and the Guards Polo field, through



Cumberland Gate and then onwards to the Windsor Great Park Village. We chugged along happily in convoy at about 20mph getting lots of waves from wardens and walkers. The views were spectacular and we caught glimpses of buildings on the estate that you don't normally see.

The route then looped back through the Deer Park to exit at Blacknest Gate and lead us round Wentworth to Sunningdale Recreation Ground for the BEN



Lynwood Fete. The cars were a major attraction and there was a concours d'elegance competition.



For anyone needing relaxation after the drive, there were several sideshows and attractions, including a café, bar, cake stalls, animal petting and massage therapy. These were all welcome, but I avoided the snake-holding! Finally, the heavens opened, as they had threatened all day, and we all drifted off home through the rain, with PO having clocked 61 miles. A cracking day out!

Footnote: The event organiser Eamonn Galligan has announced his intention to retire but we all hope that the event will continue next year. We have passed on our collective thanks to him.

*Reported by John Pratt*

## **Sandra Ryley**

**We are sad to record the passing of Sandra after a long illness. Within the Club, Sandra was really not the type of person to project herself into the limelight and maybe because of this and her generally quiet demeanor, she may not have become close and well-known to *all* Club members**

**Nevertheless, she and of course Malcolm had been members for many years and were constant and stalwart supporters of the Club's activities, including, always, the annual Group Trip which has become something of a traditional event. (Their absence, this year, will be sadly noted and doubtless observed during our time at Cricket St. Thomas).**

**It's easy to conjure up a vision of Sandra, warmly wrapped up and ensconced in the passenger seat of their Riley – hood down naturally – venturing forth on a wintry day, sometimes not overtly enthusiastically, it has to be said. She faithfully supported Malcolm on such occasions, even when as one suspects, in all honesty, she would probably rather have been at home sitting in domestic comfort.**

**She was a person with considerable intellect and with a very wide range of knowledge; both Malcolm and she were scientists working at the (now virtually defunct) Transport and Road Research Laboratory (TRRL) in Crowthorne. They both very regularly entered the Newsletter Quiz and, possibly to the good-humoured irritation of some, generally with monotonous success!**

**Another passion she had was for the game of *Scrabble*, one she shared with my better-half, Jean and they could sometimes be found spending an afternoon intensely engaged in that celebrated battle of words. Sandra's competitive nature, however, could never quite bring herself to play a tile which might allow Jean the chance to score heavily by making a Triple Word or something similar – oh no, definitely not!**

**At a time when the Club Newsletter needed an Editor, she stepped forward and valiantly kept the publication going for a considerable time before that role was taken up by our present Editor. Had she not done so it is likely that publication would have ceased.**

**Sandra's passing, though undoubtedly a blessed release for her after all the pain and discomfort she had had to endure, especially towards the end, will leave yet another big hole in the fabric of the Club and she will be sorely missed, not least by Malcolm himself and their family, to whom our sincere sympathy is extended at this very sad time.**

*Words provided by Trevor Edwards*

## Half Gallon Run Monday 13<sup>th</sup> June

This year's run took us to Odiham, where we parked by the school and then walked down past the two chapels into the village centre.

Andy Seager had set us some challenging questions which helped to reveal the village's history. The walk then took us back up past the church - but we still don't know why two French Napoleonic soldiers were buried in the cemetery!



## Pinewood Centre Sunday Car Meet

The Pinewood Centre (Old Wokingham Rd, Wokingham, West Berkshire RG40 3AQ) holds a monthly car meet for classic cars. There was a meeting on Sunday 26<sup>th</sup> June and the café web-site ([www.pinewoodbarandcafe.co.uk](http://www.pinewoodbarandcafe.co.uk)) carries announcements of these, as and when they are planned. As you may see on their web-site, pre-booking is required and a charge of £1.00 per entry is now made.

## Finchampstead Village Fete 12<sup>th</sup> June

Colin and Anne won the best in show and best pre-war car!

*Reported by Andy Barker*



## Hartley Wintney Village Festival 11<sup>th</sup> June

Ken Couzens organised an NHAEG contingent. It was incredibly busy in spite of dubious weather and Trevor M was in full party mode!

*Reported by John Bennett*



## War on the Watercress Line 11<sup>th</sup> June

Participants included a Winston Churchill look-alike!

*Reported by Colin Greig*



## Vintage Nostalgia show. Stockton park Wylie Wiltshire

Alan & Myfanwy Pickett went for the weekend. Due to an earlier serious traffic incident, the A360 was closed and all routes out of Salisbury gridlocked, making it a 4 1/2-hour journey down on Friday, yet a 2-hour journey home on Sunday! Little Gwen behaved perfectly despite being stuck in a VERY slow moving traffic queue. Lots of Classic cars, good bands, definitely worth a visit next year.



## CLUB & EVENTS DIARY 2016

Please let John ([edmundjohnpratt@hotmail.com](mailto:edmundjohnpratt@hotmail.com)) or 01252 643527) have details of any events that NHAEG members might be interested in, to add to this compilation:

NHAEG	2016 Dates	Club Nights	Arranged by or details from
	Mon 11th July	Dress Up & Coveted Car evening	John P
	Mon 8th Aug	Speaker – Rollo Malcolm Green	Peter K
	Mon 12th Sept	Speaker – The Brooklands Trust	John P
	Mon 10th Oct	Shoobox Rally	Don (tbc)
	Mon 14th Nov	Auction Night	Colin, Don & Trevor
	Mon 12th Dec	Festive Fun	tba

NHAEG	2016 Dates	Club Lunch Meetings	Contact
	Mon 27 <sup>th</sup> June	The New Inn	Colin
	Mon 25 <sup>th</sup> July	The New Inn	Colin
	Mon 22 <sup>nd</sup> Aug	The New Inn	Colin
	Mon 26 <sup>th</sup> Sept	The New Inn	Colin

Organiser	2016 Dates	Other Events & Location	Contact
750 MC	Sunday 3rd July	National Austin 7 Rally at Beaulieu	Ian Nelson tel: 01932 863073; email: <a href="mailto:ian.s.nelson@bteinternet.com">ian.s.nelson@bteinternet.com</a> <a href="http://www.beaulieu.co.uk/events/austin-seven-rally/">www.beaulieu.co.uk/events/austin-seven-rally/</a>
Watercress Line	Sunday 17th July	Alton Bus Rally	<a href="http://www.watercressline.co.uk">www.watercressline.co.uk</a>
<b>NHAEG</b>	<b>Sunday 31<sup>st</sup> July</b>	<b>Picnic</b>	<b>Peter K</b>
West Berks Classic Vehicle Club	Sunday 14 <sup>th</sup> August	Newbury Classic Vehicle Show, Newbury College, Monks Lane, Newbury RG14 7TD. £6 entry pp	<a href="http://www.classicvehicles.org">www.classicvehicles.org</a> or email <a href="mailto:show@classicvehicles.org">show@classicvehicles.org</a>
Swallowfield Horticultural Society	Sunday 28 <sup>th</sup> – Monday 29 <sup>th</sup> August	Swallowfield Show, Showground at Whitehouse Farm, RG7 1HS	email <a href="mailto:organisers@swallowfieldshow.co.uk">organisers@swallowfieldshow.co.uk</a> or Trevor E
A7OC	Monday 29 <sup>th</sup> August	Littlewick Show, Knowl Hill, A4 between Maidenhead/Reading	See <a href="http://www.austinseven.org">www.austinseven.org</a> for entry booking
Beaulieu Museum	Saturday 3 <sup>rd</sup> -4 <sup>th</sup> September	International Autojumble	<a href="http://www.beaulieu.co.uk/events/international-autojumble">www.beaulieu.co.uk/events/international-autojumble</a>
Shooting Star Chase	Sunday 4 <sup>th</sup> September	'Family Fun Day' display at the Children's Hospice, Christopher's, between Guildford and Godalming	By invitation only - contact Phil Dunford <a href="mailto:phildunford@dunfords.co.uk">phildunford@dunfords.co.uk</a>
Cobham Heritage	Saturday 10th Sept	Cobham Heritage Day classic car gathering	Ian Nelson tel: 01932 863073; email: <a href="mailto:ian.s.nelson@btinternet.com">ian.s.nelson@btinternet.com</a>
Camberley Car Show	Saturday 3 <sup>rd</sup> September	Vintage, Classics, Customs, Hot Rods, Motorbikes, Entertainment	By invitation only: contact Ken Bonner <a href="mailto:kenbonner@btinternet.com">kenbonner@btinternet.com</a>
Watercress Line	Friday 21st-23rd Oct.	Autumn Steam Gala	<a href="http://www.watercressline.co.uk">www.watercressline.co.uk</a>

<b>NHAEG</b>	<b>Mon 5<sup>th</sup> December</b>	<b>Christmas Dinner, The Mill House, Nth Warnborough, Odiham</b>	<b>Elaine</b>
<b>Club</b>	<b>2016 Dates</b>	<b>Inter Register Event &amp; Location</b>	<b>Contacts as below, or talk to Trevor, Colin or Tony W for information</b>
Humber	Sun 10th July	Navigation Rally Dorset	Dick Arman thearmans@googlemail.com
STD	Sun 31st July	Gymkhana	tba
Riley	Sun 21 <sup>st</sup> August	Rally Thames Valley	Richard Scott rscottok@btinternet.com
Crossley	Sun 18th Sept	Treasure Hunt North Yorks	Stephen Weld Tel. 01765 658569
MGCC	Sun 9th Oct	Autumn "Naviscat" Surrey/Sussex	Roger Thomas mmmfixit@hotmail.com
<b>ATDC/ NHAEG</b>	<b>Sat 19th Nov</b>	<b>"Nightjar" Scatter/Orienteering Surrey/Hants/Berks</b>	<b>Trevor Edwards trevor_c.edwards@btinternet.com</b>

## DRESS UP FOR THE COVETED CAR CLUB NIGHT – MONDAY 11<sup>TH</sup> JULY



Polish the car and shake the moths out of your old clothes for Monday 11th July. A guest judge from 'the car world' will be on hand to judge the best period clothing as well as the most coveted car.

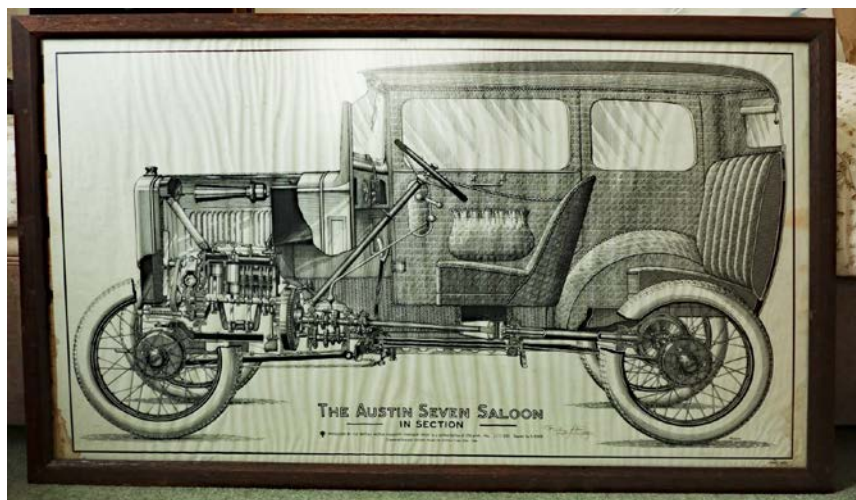
A prize will be given for the best Austin and a new award will be given for the best story behind your car's ownership (a 'Pride of Ownership' prize). As usual we shall ask Tim, the Landlord of the New Inn, for his choice too!

Please submit your Pride of Ownership story to Denise or John ahead of the meeting - or if you forget, scribble it down on the night! So, remember to get your ensemble together for us all to see...

## SEEN ON EBAY

A limited edition print, number 106/250 of a 1931 Austin 7 saloon by Stanley Edge.

The asking price was £25 but on 28<sup>th</sup> June, there were no bids with 2 days left to go...



## THE NHAEG MEMBER INTERVIEW – TONY AND PAT WESTHALL

Editor: When did you first realise that you had an interest in cars (and how)?

Tony: In the late 1950s, my dad's friend had a 1936 Austin 12/6 Ascot, which he helped to get going and eventually acquired. I used to help my dad with it and then learned to drive on it.

Pat: I was brought up in a car orientated household but I didn't really catch the bug until I met Tony at teacher training college.

Editor: What was the first car that you owned?

Tony: When my dad got a company car, he gave me the Austin 12/6 – already nicknamed 'the Duchess' by my mother, because she felt like one riding in the



back. I took it to university and while my mates had old Morris Minors and A35s, 'The Duchess', with only 24,000 miles or so, was both more reliable and capacious. In fact, it was ideal for my scouting activities, holding nearly a troupe of scouts and their camping kit. We got married with 'The Duchess' and, until 1976, it was our only car. But as impecunious teachers, with family pressure and only 25mpg, we bought a Fiat 126 which did nearly 50mpg - and we then put the savings towards restoring 'The Duchess'.



Editor: What were the cars that you most wanted to own?

Tony: I had seen a 1933 Austin Newbury Tourer at ATDC rallies and I really liked its shape – it's most unusual in having four doors in a sports body and is based on an Austin 12, for which I had many spares. But only 250 were made so it was hard to find one. My first effort was a really desperate case with just the body tub & chassis and no engine or gearbox. Pat had something to say about that! But then I saw 'Nellie' in 1987 at an ATDC rally on a trailer, allegedly with a Hillman engine. I doggedly pursued the owner to sell it to me and when I went to Manchester with a trailer to collect it – what a sorry sight – it looked like all our life savings had gone into yet another wreck. But with the dust blown off, things looked up and there at the back of the garage was a rebuilt 12/6 engine – all I had to do then was to find a gearbox! By 1992, the restoration was complete and I used it regularly for a couple of years.



We bought 'Evie', the 1931 Austin 16/6 Iver in early 2000, after a couple of false starts with two Alvis cars. My mum had died in 1996 and an inheritance meant that I could realise my plan of retiring early from teaching and starting a wedding car business – for which the white painted Iver had been used by the previous owner.

My other most-wanted was the 1934 Austin Gordon DHC, known of course as 'Gordon'. It has a 2.2 litre straight six (8-bearing) fitted with an overdrive, meaning that cruising at 50mph is smooth and relaxed.

Pat: Tony had been marshalling, then navigating, with ATDC members with much older cars, like a 1911 Napier and after a Scottish trip, we really started to get the itch to buy one. Tony had decided that any new car must fit the criteria of: Does it fit with the others?; What is spares availability?; How

reliable will it be?; How much do you have to spend? Initially we looked Model T Fords but I didn't like them - and then I saw a 1914 Austin 10 Tourer in an advert. With my inheritance, we bought 'Belinda' off the page. She has four cylinders cast individually, cooled by a pumped water system and magneto ignition. The driving experience is enhanced by a centre throttle pedal, a brake pedal operating on the transmission which gets oil soaked - and a more effective brake lever on the running board operating rear drum brakes. (Ed: Hill starts must be a juggling act!)



Editor: But what about the other cars and the caravan?

Tony: Well, it's hard to explain - we just felt sorry for them - we were offered 'Shirley' the 1936 Austin 10 Sherborne and the 1935 Austin 18 Van, which I used to get to school and has proved a blessing moving goods around - I even have a brown coat and flat cap! And along the way, in parallel, we have had a succession of classics, mainly Triumph Heralds, Ford Capris and even an Austin Healey 100/6.



We have always camped but I've always fancied an old caravan, but they are mainly too heavy. Then we found this authentic rebuild of a Car-Cruiser caravan. It had been rebuilt to the original plans in 2003 and uses original parts (wheels, axle, springs and hitch) from a 1926 unit. It has a wooden chassis(!) and a canvas & ply structure. We have been given lots of period accessories and shall camp in it for the ATDC National.

Editor: What have been the low points of car ownership?

Tony: When I started the wedding car business I bought a blue Alvis saloon, which wasn't a success. It suffered with fuel vapourisation in the downdraught SU carburettor when hot and would refuse to start, leaving us stranded. So I bought another Alvis, a drop-head, but the brides thought that its green colour was unlucky (as Arsenic was traditionally used as an ingredient in green dye). This episode ended with a hole blown in the crankcase. With the Austins, we have enjoyed good reliability, apart from running a big end, a propshaft joint failure and a few electrical niggles.

Editor: What was your best purchase, apart from the cars?

Tony: The 4-post lift in the garage has been a blessing, even if the limited headroom means that I can't stand under a car.

Editor: Do you have enough garage space?

Tony: We've squeezed three into the main garage and rented another. But the Iver is too tall to fit in the lockup, so the rotation is limited.



Editor: What have been the highlights of your automotive career?

Tony: Two things come to mind. Firstly, touring with the Newbury Tourer and the Gordon DHC which have taken us to Holland, Spain, Portugal, France and all over the UK during school holidays. Secondly, winning the ATDC 'Pride of Ownership' award in 'The Duchess' in 1982 and later at Southwell in the 1990s and then coming second at Wroxhall in 2015 - not bad for a car restored in 1970!

Editor: What have been the high points of Austin ownership?

Pat: The people that we have met through ATDC and NHAEG.

Editor: And what is next?



## A TECHNICAL 'STORY'

### *Electrical Theory by Joseph Lucas (Or Maybe Not! – Ed)*

Positive ground depends upon proper circuit functioning, the transmission of negative ions by retention of the visible manifestation known as “smoke”. Smoke is the thing that makes electrical circuits work; we know this to be true because every time one lets the smoke out of the electrical system, it stops working. This can be verified repeatedly through empirical testing.

When, for example, the smoke escapes from an electrical component (i.e. a Lucas voltage regulator), it will be observed that the component stops working. The function of the wire harness is to carry the smoke from one device to another. When the wire harness ‘springs a leak’, and lets all the smoke out of the system, nothing works afterwards. Starter motors were frowned upon in British automobiles for some time, largely because they consume large quantities of smoke, requiring very large wires. It has been noted that Lucas components are possibly more prone to electrical leakage than Bosch or generic Japanese electrics. Experts point out that this is because Lucas is British and all things British leak ... so, naturally, British electrics smoke.

The battery stores the smoke. In fact, it can store so much smoke that if you open the top and light a match, the resulting explosion can do serious damage. I'm sure you are aware that usually where there's smoke there's fire.

If you connect the battery to a charger, the smoke is then returned to the battery; therefore, we can think of a battery as a reusable storage device for smoke. The smoke circulates through the system, due to the pressure differential in the battery (smoke pressure reservoir). When the system is at rest, all the switches and relays are closed, keeping the pressure areas separated. When the reservoir becomes depleted, the pressure simply equalizes everywhere in the system and stuff just won't work.

The smoke can only escape from the wires when a path is created between pressure differential areas that have too little restriction. When this happens, the smoke travels through the wires so fast that the friction between the smoke and the outer walls of the wiring heats the wires until they rupture. The smoke continues to escape until its pressure is equalized with the atmosphere.

The light/smoke converters (headlights and other darkness absorbing devices) consume the smoke to suck up darkness and convert it to light. The smoke pump impellor (stator) converts magnetic flux into smoke, which is then returned to the smoke reservoir (battery).

So now you know!

*Thanks to Andy Seager who found this oddity!*

## COMING TO A HALT – PART 2: THE DEMISE OF THE UK BRAKE MANUFACTURERS

The Dunlop Pneumatic Tyre Company opened its first factory in the Hillfields area of Coventry in 1890. The company relocated to the Holbrook Lane site in Coventry in 1919, where over the years it developed its engineering contribution to both the automotive and aviation industries. Its first hydraulic brake was produced in 1934.



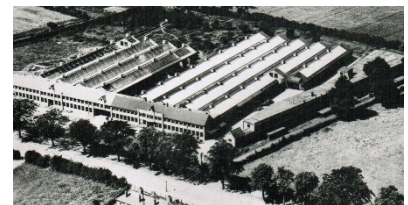
Girling of Tyseley, Birmingham, started up in 1925 as a car brake manufacturer after Capt. Albert H. Girling patented a wedge-actuated braking system. In 1926 Girling gained an exclusive contract with Austin. In 1929 he sold the patent rights to the New Hudson company. But by 1938 the manufacture of Girling brakes was taken over by Joseph Lucas Ltd. However, the patent



remained in the possession of New Hudson until 1943, when the rights were re-purchased by Lucas as they moved their Bendix brake and Luvax shock absorber interests into a new division, which became Girling Ltd. The 1938 Daimler Scout Car had Girling disc brakes, which had been adapted from military tank steering brakes, and looked more like clutches than today's familiar caliper-type disc brakes, but the principle was already there.

Now for the Lockheed story- since 1920, three London businessmen had been importing engines and gearboxes for ex-WWI US army trucks, which had been abandoned in Europe. But as the new McKenna import duties came into effect, this was less economic and vehicle development had moved on. So, by 1931, they had negotiated a licence with Malcolm Loughhead for Lockheed hydraulic brakes and they also bought the rights to the Borg & Beck dry-plate clutch. By 1948 they had licenced the novel plastic impregnated paper Purolator oil filtration system and thus the Automotive Products Group was formed.

The uptake of Lockheed brake products was immediate and a new factory was built in 1931 on a 200-acre site in Leamington Spa to meet the demand. The space was doubled in 1932 to make clutches. The Nuffield Group was a major customer and by 1939, they had supplied a million braking sets and the post war demand for popular cars propelled the company even further forward.



Girling had also been supplying the volume car makers, like Austin, but their later development work with the 1947-52 Austin A40 Devon is less well known. Girling made 110 sets of disc front brakes to fit onto their test A40s, which were driven hard round Wales. Early brake pads had simple circular button-shaped pads, and Girling were dismayed to find that these wore out in 3,000 miles. Then someone thought to put a standard drum-braked Devon through the same grueling tests, and found that the front linings were shot in only 2,000 miles! Girling then came up with the idea of segment-shaped pads, which they first tested on a Rover P4 converted to front discs. The test was halted at 10,000 miles because the pads were hardly worn at that mileage!



Actually, the P4 Rover had already made disc brake history before then, because the famous P4-based 'Jet 1', the world's first gas turbine car, had to be fitted with Dunlop disc brakes before carrying out its 152 mph record breaking runs of 1952. Not only was it fast and fairly heavy, but also devoid of engine braking! Early trials around the MIRA test track on the standard P4 drum brakes were hairy to say the least – and even with the early disc brakes, work still had to be done to counter brake fluid boiling.



By 1956, Lockheed was the UK's leading manufacturer and supplier of clutches and braking equipment, supplying 50% of the brakes made in the UK and 85% of the clutches. The company was still dominant in the market at the end of the 1970s with Girling and Dunlop trailing behind.



The number of vehicles manufactured in the UK had shot up from 14,000 in 1910 to 70,000 in 1920 and 237,000 in 1930. The war interrupted the advance and although post-war home sales were rationed to 80,000 cars, 784,000 were made in 1950, 1,811,000 in 1960 and 2,098,000 in 1970.

Having used their expertise from the aircraft industry to develop the automotive disc brake in 1946 Dunlop went on in 1950 to be the first to use composite materials and in 1973 it invented the Carbon brake disc for racing applications.

Lockheed celebrated 50 years in business in 1970 with considerable style and, with hindsight, some considerable complacency. It had failed to keep control of its intellectual property as it had licensed its designs widely to other manufacturers in Europe. But it, along with Girling and Dunlop, faced a double whammy, as vehicle numbers declined and British car makers failed to remain competitive.

The demise through the 1970s & 80s of British Leyland, later renamed Rover Group, sounded the death-knell for Lockheed, whose AP Group parent was bought by BBA in 1986, and then sold on to a management consortium in 1995, which was sold again in 2000 to Delphi Automotive Systems. The braking division, The Lockheed Hydraulic Braking Company, was then spun out to an Indian multi-national brake company now trading as Caparo AP Braking. Meanwhile, Lucas, which owned Girling merged with Varity and is still an OEM supplying a claimed 95% of the European car and light vehicle market – as well as Formula 1.

Dunlop Holdings was acquired in **1985** by BTR, following Dunlop's disastrous tie up with Pirelli. Then in **1999**, BTR and Siebe merged to create Invensys. After facing bankruptcy many disposals were made, including Dunlop Braking, while the remaining Invensys business was acquired by Schneider Electric in early 2014. Dunlop Aerospace Braking Systems is now part of Meggitt Aircraft Braking Systems.

The UK market had changed forever. Only 1.5m cars were produced in the UK in 2015 (up 7% on 2014 and the highest figure since 2007) with the automotive manufacturing industry only employing 169,000 people. Today, the only British owned manufacturers are Morgan, Caterham and McLaren. Foreign owned brands assembled in Britain are Mini, Honda, Toyota, Nissan, Lotus, Aston Martin, Bentley, Rolls Royce, Jaguar/Land Rover, MG and Vauxhall.

*Contributed by the Editor*

## TECHNICAL MATTERS

### Tyre Ageing and the DOT Code

*The original article, written by Doug Castle, appeared in CA7C Seven Focus in Feb 2007 pp18-19 and was revised for CA7C Seven Focus January 2010 pp 20-22. It is reproduced here with the kind permission of the Cornwall Austin Seven Club.*

Those of us who started driving on cross-ply tyres were taught about driving habits, as well as care and maintenance, and wheel rotation to even out and prolong tyre wear. The walls of cross-ply tyres were easily damaged by nudges against kerbs with the blister, or cut, usually meaning the replacement of the tyre. Although everyday 1950s/ 60s cars did not have performance acceleration and braking we had to avoid suspension bounce, and to be careful when cornering fast to prevent rear end axle tramp and the risk of rolling the front tyres off the rim. We had to look for uneven wear due to under inflation or incorrect tracking and toe-in, to check wheel alignment especially after a nudge against a kerb, and remove stones from the tread. Even then tyres seldom lasted 10,000 miles and punctures were fairly common.

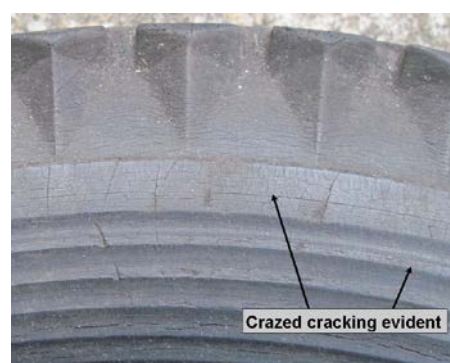
Since the coming of radials carcass structure and compound technology has continually developed to provide drivers with stronger tyres, improved grip and better wear so that tyre life increased to 18,000 miles, then up to 30,000 and now 40,000 even on modern performance cars, is not unusual. Nowadays we don't seem to bother about wheel rotation, give scant regard to tracking and toe-in and looking for tyre wear, perhaps not until the MoT test and the need for replacement tyres is pointed out, and we may check the pressure once a month or not until it looks a bit flat!

I doubt if we have ever considered tyre ageing because tyres never lasted more than a year or two, we sold the car or wrote it off. So when I read the FIVA 'Guide for Users of Historic Vehicles' and the paragraph "Because tyres do not last indefinitely, even in storage, pneumatic tyres should be replaced.... whether they are worn or not, after a number of years in accordance with the manufacture's recommendations or other guidelines." I thought yes, the tyres did deteriorate when my 'Seven' was stored for 20 years, mainly, I thought, because I seldom moved it and did not jack it up.

But then the words 'number of years - manufacturers recommendations' triggered the question, how many years and what recommendations? As I am only doing 1200 miles a year in my 'Seven' is there something that I need to know? An internet search soon found masses of information on American websites where tyre ageing is a major topic due to an ongoing Ford vs Firestone saga over a series of accidents.

The Federation of British Historic Vehicle Clubs cited a fatal accident [1] involving an MG B at speed on the M56 motorway. The subsequent Police investigation found indications that the tread had separated from the carcass when the rear tyre burst and that the tyres were 25 years old. Tyre ageing may have been a contributory factor to the incident.

The Royal Society for the Prevention of Accidents (RoSPA) offers good advice on their website in a useful section 'Tyres Information Sheet' [2], so I quote in part: "Rubber compounds used in tyres contain anti-oxidising chemicals that help to slow down the natural ageing process of untreated rubber. However, tyres do deteriorate with age, which increases the risk of tyre failure, and there may be many ways in which this can be spotted: cracking or crazing on the side wall, distortion of tyre tread, deformation of the tyre carcass. There will also be



deterioration in the ride quality caused by vibrations through the tyre. This may signify the tyre's performance has been affected by age."



*Modern tyre 6 yrs 9 mths old with 6mm usable tread remaining had cracking in the tread after 37800 miles on rear (non-driven) wheels, regularly checked for correct tyre pressure.*

Several websites make the point that deterioration occurs in storage without the tyre ever being used. Also damage through ageing may not be seen externally, it can be within the carcass and we all know that vibrations in 'Sevens' can be caused by anything, so is there some more specific information? Remember that tyres have two sides so check the inside wall as well. Now that our pre-1960 cars are not subject to a compulsory MoT (UK) we have a greater responsibility to check our tyres for ageing.

RoSPA's advice continues with "Tyres that have been in storage should not be used if they are over 6 years old, from their date of manufacture. When a tyre has been in use, the effects of ageing are lessened to a degree, but such tyres should be replaced after 10 years, irrespective of the mileage covered." We are always warned to bring our spare into use and not to leave it unused until a puncture occurs.

Now the problem might be, what was the date of manufacture from which time the tyre started to age? The chronological age of a tyre is found in the DOT Code, issued by the US Government Department of Transportation, normally visible on the outside tyre wall.



*The DOT Code on the outer wall of a new tyre fitted to a modern car. The last 4 digits show that the tyre was manufactured in the 50th week of 2009.*

It is an alpha-numeric sequence of 11 or 12 digits in the form DOT XXXX XXXX 000 providing details of the manufacturer and the factory with the third set of digits being figures indicating the week/year of manufacture, so 178 indicated the 17th week 1988. At the beginning of the 1990s the last 3 figures were followed by a ◀, so that 328◀ indicates that the tyre was made during the 32nd week of 1998. Since 2000 the last set of digits has been 4 figures, i.e. 1403, which means that the tyre was made in the 14th week of 2003.



*The DOT code on the Firestone cross-ply tyres, made in the USA, fitted to Doug Castle's 'Austin Big Seven' is on the inside tyre wall. It omits the letters DOT but there are 12 digits, the last set being 0302. This indicates that the tyres were manufactured in the 3rd week of 2002, and, therefore, when I purchased them in July 2003 they were already over a year old.*

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*There is a warning on a few websites [3] that if the tyre has a 3-digit date code then do not buy it, or use it, as it is too old.*

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There is no technical data to show the age, or usage, after which a tyre should no longer be used; it is solely due to regular inspection for signs of cracking in the walls and within the tread. The tyres on the majority of modern cars will be replaced due to normal wear and tear after high mileage and so tyre ageing is unlikely to be a problem. However, tyres on historic cars often cover less than a 1000 miles per year and so tyre ageing should be monitored as it may well appear before there is any evidence of loss of tread depth.

Many 'Seven' owners will have tyres that are in storage, or were stored for some time before being put into use, so perhaps it is time to give them a thorough examination and to look closely at the side walls and tread when the tyre is partially, or fully, deflated. But do be extra careful if you buy used tyres from an autojumble, an internet auction site or a well-meaning friend.

If you have just put your 'Seven' back on the road after many years you should examine the tyres carefully, not just the tread, seek expert advice and replace them if necessary. Even at 45mph an incident, not involving anyone else, may result in costly damage and inconvenience. Also we have a legal obligation to maintain our car in an efficient and roadworthy condition for insurance purposes; that is not just the lighting, bodywork, steering and brakes etc. but all aspects of the tyres as well.

This information has been drawn from many websites providing information on tyre ageing and DOT codes. See references below:

[1] FBHVC Newsletter No. 4, 2007 'Tyres Warning' at pp 6 & 8; also Newsletter No. 5, 2007 'More on Tyres' at pp 9 & 10. Website at [www.fbhvc.co.uk](http://www.fbhvc.co.uk)

[2] The Royal Society for the Prevention of Accidents [www.rosipa.com](http://www.rosipa.com)

[3] See, for example [www.carbibles.com/tyre\\_bible.html](http://www.carbibles.com/tyre_bible.html)

Also see:

Bridgestone article <http://www.bridgestone.com.au/tyres/passenger/care/age.aspx>

Continental article [http://www.tyresforlife.co.uk/www/tyres\\_for\\_life\\_uk\\_en/themes/tyre-information/how-old-are-your-tyres-en.html](http://www.tyresforlife.co.uk/www/tyres_for_life_uk_en/themes/tyre-information/how-old-are-your-tyres-en.html)

VOSA Dec 2013 Recommendation <https://www.gov.uk/government/publications/public-service-vehicles-tyre-age-recommendation>

## Editor's Footnote

I have just replaced the front tyres on my Seven with new Avon Sidecar Triple Duty MkII. The tyre fitter pointed out how much more flexible the sidewalls of these were compared with the secondhand tyres that he was fitting to the rear wheels (with no DOT code on these, it is hard to judge their age). However, the new tyres have transformed car's handling from a minor wrestling match after any undulation or manhole cover, to running 'straight as a die'. As Ray Adnam sagely noted, "A car is only as good as its tyres".

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## Storage: This month's 'Tip for Spannermen' from Andy Ranson

I have found the ideal solution for keeping safe all the nuts, bolts and small components when working on your Austin and it is available from any local supermarket. It is the plastic tray that good quality sausages are sold in. The added bonus is that you will have to eat several succulent sausage sandwiches before the tray becomes available. This is re-cycling at its best!



## AUSTIN HISTORY

### Queries of The Month from Andy Ranson

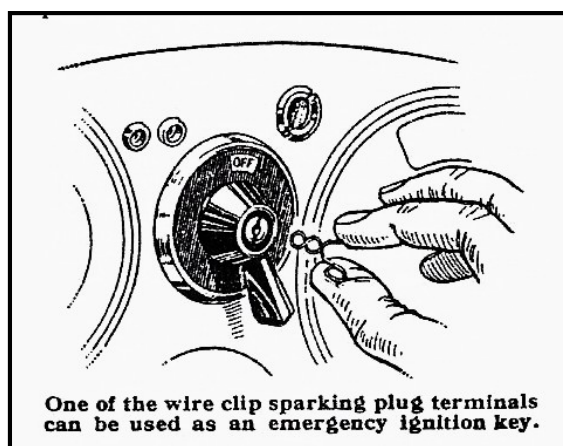
*These are reproduced with the kind permission of the Austin Ten Drivers Club (ATDC)*

These question and answer articles originally appeared in "The Austin Magazine & Advocate" during the 1930s and 1940s. This month's selections are: No 888 Ignition Key – Austin Twelve No 1113 Contact Breaker – Austin Twelve. No 888 appeared in the August 1938 edition and No 1113 appeared in the December 1942 edition.

#### No 888 Ignition Key - Austin Twelve

**Q.** *I removed the ignition key from my car, an Austin Twelve Ascot saloon, when leaving it one evening, and on returning to the car I found that I had mislaid the key, but managed to obtain one from a fellow motorist after considerable delay. I have been wondering if there is any other method of turning on the ignition if I should be similarly placed on other occasions.*

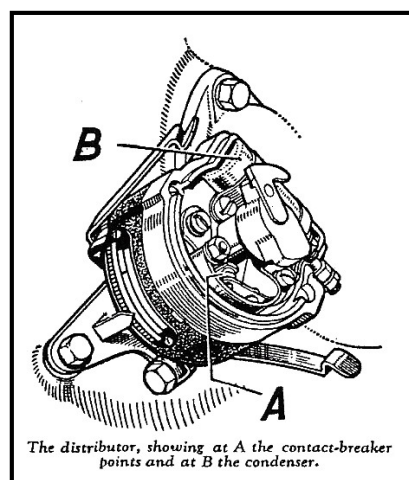
**A.** The removal of the ignition key when leaving the car for a short time is not always a necessary procedure as often the car doors can be left locked, but if it is taken out, it is a good plan to leave it in some inconspicuous place in the car, as it is easily lost if carried about. There is, however, another method of turning on the ignition. It will be found that one of the wire clips securing the ignition leads on the sparking plugs will serve as an emergency key, in the event of the real key being mislaid.



#### No 1113 – Contact Breaker - Austin Twelve

**Q.** *I have recently experienced difficulty in starting and slightly erratic running which, according to a friend, may be due to pitted contact breaker- points. On his advice new plugs have been fitted, without much change for the better, and on examining the contact breaker points in the distributor head, I find they are rather "pitted" as anticipated. Can you suggest a cause?*

**A.** As you suggest, the erratic running and difficult starting may be due to the condition of the contact-breaker points, although two other possibilities are perished high tension leads, or the moving arm of the contact-breaker sticking on its pivot. As regards the pitting of the contact-breaker points, this will be due to sparking, which results when the condenser, which bridges the points, and acts as a "damper" on the fluxing of current, has broken down. The condenser is the small cylindrical component on one side of the central high-tension rotor which distributes the current to the electrodes and can be readily renewed.



## Past Press

A selection of advertisements from past motor magazines:

# SAVE £150

# BUILD yourself a

FIBRE GLASS

**unicar**

4 WHEEL SALOON



**ON THE EASIEST OF EASY TERMS**

- ★ **SIMPLE.** No special tools or knowledge required.
- ★ **EASY.** Only 2 weeks work.
- ★ **TESTED.** Free test given on completion.

This is surely the most modern, the most satisfying, the most economical way of owning a motor car. Expect to save Yourself £150.

The cost of the UNICAR complete, assembled by us, is £429.10.0.


Start building your UNICAR today by purchasing any of the parts, in any order you wish, to suit your pocket.

**75 m.p.g.**  
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**SEND NOW** (enclosing 6d. stamps) for FREE illustrated UNICAR guide to:

**S. E. OPPERMAN LTD.**  
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Unicar from May 1959



## CRACKED CYLINDERS

Seal that crack in cylinder, valve port, water jacket, etc., in half an hour—

**PERMANENTLY** — with **Wondar Weld**, the liquid metallic preparation, tested and O.K'd by the entire motoring and technical press! No need to lay the car or lorry up. Dismantling unnecessary. Used and approved by Railway and Transport Concerns throughout the country. **GUARANTEED** absolutely.

**COMMERCIAL MOTOR:**  
—regarding a 7" crack—  
"... crack is now completely sealed, and permanently so. Applied nearly a month ago."

**MOTOR COMMERCE:**  
"... the crack (in water pipe casting) was about 8" long ... We used some Wondar Weld ... It acted almost immediately."

**MOTOR TRANSPORT:**  
"... aperture in outer wall 3/4" at widest point and 7" long ... gap first closed with iron cement ... no further sign of water leakage ... radiator has not needed topping up in a 1,000 miles of running."

## VALVE PORTS WATER JACKETS

**PERMANENTLY  
REPAIRED IN 30  
MINUTES**

**NO DISMANTLING**

**READ THESE  
TESTS**

**HOLT'S GUARANTEED.**

8 h.p.	12 h.p.	over 12 h.p.
<b>8/6</b>	<b>15/-</b>	<b>25/-</b>

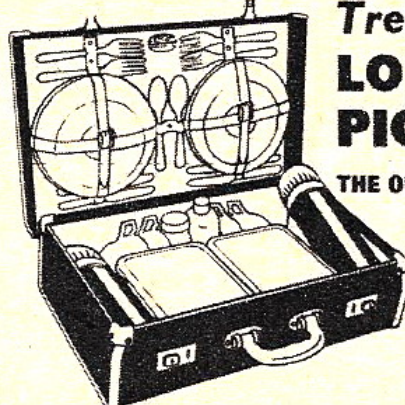
## WONDAR WELD

From Halford's, Gamages, James Grose, Marble Arch Supplies, Garages, etc. In case of difficulty IMMEDIATE attention to URGENT orders from sole distributors:

**DOUGLAS HOLT (Est. 1919) LTD.,**  
9, Little Turnstile, Holborn, W.C.1  
HOL. 4891

**NOTE:** Ask also for details of Wondar Weld Domestic. Permanently repairs cracks, leaks, etc., in domestic and industrial hot water boilers, radiators, tanks, pipes, etc. Complete treatment 20/- retail. From Halford's Gamages, Plumbers or Ironmongers. (Trade enquiries invited.)

Wonder Weld from February 1948



Available from stores, garages and HALFORDS branches.

## Treat yourself to this LOW-COST COMPLETE PICNIC SET

**THE OUTSTANDING VALUE OF THE MOTORISTS' YEAR**

- Each case contains 31 pieces.
- Cups, saucers, non-spill plates, knives, forks, spoons.
- Separate colours for each of four people.
- Colourful case also contains two vacuum flasks, food containers, etc.

**Stadium**

## COUNTRY LIFE

STADIUM LTD. 30-36 QUEENSWAY · ENFIELD · MIDDX

PRICE

# 69'6

COMPLETE

The Stadium Country Life Picnic Set from August 1961

## **“TREVOR’S TEASER”: Another A-Z quiz, - minus 2!**

All except two (guess which two!) letters of the alphabet are used once as the initial letters of the answer. The subjects are random. As always correct spellings must be observed!

1. Its stripes can be found on a crossing \_ \_ \_ \_ \_ 5
2. A Tibetan who likes to talk a lot \_ \_ \_ 3
3. Centre of a Scottish candle \_ \_ \_ \_ 4
4. Lack of the C type can cause scurvy \_ \_ \_ \_ \_ 7
5. Remove a priest from office \_ \_ \_ \_ \_ 7
6. Short term office worker isn't prompt \_ \_ \_ \_ \_ 8
7. A torch shining on a pimple \_ \_ \_ \_ \_ 9
8. Could be an instruction to an Italian in a sail-less boat \_ \_ \_ \_ 5
9. Absolutely certain! \_ \_ \_ \_ \_ 8
10. Instrument sounds like a trans-Atlantic tramp \_ \_ \_ \_ 4
11. Biblical book for mathematicians \_ \_ \_ \_ \_ 7
12. Oxford's detective's means of communication \_ \_ \_ \_ \_ 5,4
13. Instrument that persistently fails to tell the truth \_ \_ \_ \_ 4
14. A sleeping fish! \_ \_ \_ \_ \_ 6
15. A worthless oriental boat \_ \_ \_ \_ 4
16. Footwear for Torville and Dean \_ \_ \_ \_ \_ 3,6
17. Inebriated matelot assumes control of a vehicle \_ \_ \_ \_ \_ 6
18. Reverse whip for this game \_ \_ \_ \_ 4
19. Drinks gratis in this type of pub? \_ \_ \_ \_ \_ 4,5
20. Type of plant which never stops traffic \_ \_ \_ \_ \_ 9
21. A calendar fruit \_ \_ \_ \_ 4
22. Bonfire in the middle of the room ? \_ \_ \_ \_ \_ 7,7
23. Sleeping place for absconders! \_ \_ \_ \_ \_ 4,3
24. Your reply is the last one \_ \_ \_ \_ \_ 6

Name(s): .....

Please submit your entry to Trevor Edwards, 55 The Brambles, Crowthorne, Berks RG45 6EF,  
by Friday, 8th July 2016 enclosing £1.00 towards prize(s).

## READERS WRITE TO AUNT BRASSICA...



Dear Aunt Brassica,

I have seen this really nice Austin car at a show and the very nice man says it is a 'Nippy'. Well, I'm a bit nippy myself and I should like to meet him again.

He gave me his contact details - should I send a picture of myself?

Yours hopefully,  
'Attracted of Aldershot'

Dear 'Attracted of Aldershot',

*I'm slightly alarmed when you describe yourself as a bit nippy – I imagine you mean that you are quite athletic. But if you are going to woo this Austin owner, you will need to start slowly (just like an Austin – which he will appreciate) by offering him tea and cakes – it works every time!*

*I have already featured some enticing recipes, in previous newsletters that you could bake for him. But this is jumping ahead.*

*Firstly, I think you should attend to your appearance - as first impressions really count. My advice is to get into the spirit of the period and dress accordingly for your tête-à-tête.*

*This picture of me as a young girl when I worked in a J Lyons & Co teashop, as a 'Nippy', should give you some ideas – it worked for me, as I met my dearly departed there. A Nippy was someone who could be seen and interacted with every day, and perhaps this was part of the appeal of the concept. J. Lyons was very careful to maintain the 'Nippy' image as wholesome and proper – strict cleanliness standards applied for Nippy uniforms.*

*So, my dear, make sure that you look the part as this will convey to your beau who you are.*

*Good luck!*

*Aunt Brassica*

