

Floating Power

January/February 2018



Editor's Epistle

Honorary Life Members of the Traction Owners Club

Dave Shepherd
Peter Riggs
John Gillard
Tony Hodgekiss
Chris Treagust

Published bi-monthly since 1976
Floating Power is the official magazine
of the Traction Owners Club Limited.

Registered Office:

58 St. Augustine Road, Griffithstown,
Pontypool, Gwent, NP4 5EZ
VAT Registration No. 993 2444 92

The opinions expressed by contributors are not necessarily those of *Floating Power* or the **TOC**. The **TOC** is not responsible for the results of following contributors' advice, nor does it necessarily endorse the products or services of any advertiser.

The submission of material for publication either in Floating Power or on the Club Forum is deemed to include permission for it to be presented in other formats and media such as a scanned image on the TOC website.

The editor reserves the right to subedit submitted material as deemed necessary. This publication may not be reproduced in any form or part without the written permission of the editor.

Missing Magazine?

Please contact John Oates
01629 582154
membership@traction-owners.co.uk

Be a part of Floating Power...

The closing date for input for the
September/October Floating Power is

February 14th 2018

**To submit your articles, photos and
letters to the editor, email
Bryan Pullan on:
editor@traction-owners.co.uk**

Cover Image

*Nice Spanish registered Six, belonging
to Ramon Fondevila Puyol, snapped at
a local rally in France by Bob Street.*

Well here goes for 2018, and I hope that you have all had a good Christmas and New Year.

There is relatively little to report on the social side, the big event prior to Christmas being the NEC show, which went well as you will see from the report elsewhere in the magazine, and we have already expressed interest in a stand in the next Manchester Show. Next event is Drive It Day, the start of the season for many, and not actually too far away now, so get your plans laid for what is often the first trip out of the season.

We have also had a good response on the 'What is in your garage?' front and may well carry this on in a future issue if the pictures keep coming in. The selection of cars thus far is quite diverse, and in spite of my analytical efforts, I cannot yet see a trend amongst owners. Some of you are obviously Citroën fanatics and have a selection of Citroëns of various vintages. Others of you go completely away from the Traction, as indeed do I, and obviously enjoy the diversity of driving something totally different. Keep them coming.

In this edition are the details of the National Rally, this year to take place in Llangollen, in North Wales, and the application form itself is loose in the plastic sleeve that your magazine came in, so don't throw it away if you intend to go along. Time to get under the bonnet and make sure things are fit and well for June 2018, especially your cooling systems and brakes. The Llanberis Pass beckons!

For those of you who are technically inclined, there is an item on silent blocs and the first of two articles by Martin de Little on gearboxes, this first being an analysis of what can make the box fail, sometimes catastrophically. This is based on the exploits of the gearbox gang who, as you will have seen in Bailey's Banter last year, took it upon themselves to strip down and refurbish several dud gearboxes that they had lying around. There are also further thoughts from Mike Willcock concerning the removal of engines, involving, amongst other things, the dexterous use of a wooden pallet and a wire coat hanger! I will leave you to discover this for yourselves!



*(No Charlie, he said a
WIRE coat hanger!)*

Returning to the topic of gearboxes, it strikes me that that in most cases, there seems to be very little warning given prior to the gearbox giving up the ghost. Most older cars go through a generally degenerative process that warns you when things are going wrong, rough changes, jumping out of gear, grumbling bearings, etc. However, the Traction seems to do relatively little of this. I have canvassed a few people and added my own comments to the end of the article, albeit their and my findings were far from conclusive, although hard shifting between first and second appears to be one feature that is frequently cited. It would seem to me, however, that if for any reason you are stripping the front of the car down to the degree that you can remove the top plate of the gearbox (you would need to support the box with a jack), then it would be worth trying to see if there was any lateral play in the second gear cluster, and if there was, then it is time to either get stuck in and strip and replace the various parts as per Martin's articles, or write a cheque for a reconditioned unit. Yes, I know, this is hardly a Sunday morning piece of investigative maintenance, but if your transmission is of unknown provenance, and you are working on that end of the car anyway, then it would be worth doing, if only for peace of mind!!

Anyway, welcome to 2018, and enjoy your motoring.



Editor's Epistle	2	Bailey's Banter	22
Contents / Committee	3	DVLA Saga	24
President's Ponderings / New Members	4	Silent Blocs	26
Chairman's Chat	5	NEC 2017	28
Section Details & News	6	Traction 11BL Convertible	30
Your Letters	11	National Rally 2018 and yet even more ball joints....	32 34
The Traction Avant Gearbox	14	Events Diary	35
Slough Champion	18	Classified Advertisements	36
Obituary	18	Speedi Sleeves	37
Citroen Centenary	19	Display Advertisements	38
What Else do you have in your Garage?	20		

Committee

The members of the committee of the **Traction Owners Club** are all volunteers. Please be considerate when contacting them and in the demands you make on their time. They are happy to help you but may not always be able to do so immediately.

PRESIDENT Bernie Shaw

Silvertrees, 2 Hardwick Close, Wellingborough,
Northamptonshire, NN8 5AE
01933 274382 • Email: president@traction-owners.co.uk

CHAIRMAN Chris Bailey

1 Kingfisher Way, Horsham, RH12 2LT
07768 325924 • Email: chairman@traction-owners.co.uk

SECRETARY Ian Harvey

77 Church Street, Shillington, Herts, SG5 3LJ.
01462 711248 • Email: secretary@traction-owners.co.uk

TREASURER AND COMPANY SECRETARY Tony Malyon

58 St Augustine Road, Griffithstown, Pontypool, Gwent, NP4 5EZ
01495 763239 Email: treasurer@traction-owners.co.uk

MEMBERSHIP SECRETARY John Oates

55 The Knoll, Tansley, Matlock, Derbyshire, DE4 5FP
01629 582154 • Email: membership@traction-owners.co.uk

SOCIAL SECRETARY Laurence Acher

71 Burnham Way, London, W13 9YB
07828 241877 • Email: events@traction-owners.co.uk

HELPLINE Steve Reed

1 Terwick Cottage, Rogate, near Petersfield,
Hampshire, GU31 5EG
0115 911 0960 / 0044 115 911 0960
Email: helpline@traction-owners.co.uk

CLUB SPARES Chris Treagust

98 First Avenue, Batchmere, Chichester, West Sussex, PO20 7LQ
01243 511378 • Email: spares@traction-owners.co.uk

CLUB SHOP Vanessa Plumpton

98 First Avenue, Batchmere, Chichester, PO20 7LQ
Email: shop@traction-owners.co.uk

EDITOR FLOATING POWER Bryan Pullan

4 Camwood Fold, Clayton Le Woods, Chorley, PR6 7SD
07513 362202 • Email: editor@traction-owners.co.uk

MARKETING & PUBLICITY Bev Oates

55 The Knoll, Tansley, Matlock, Derbyshire, DE4 5FP
01629 582154 • Email: enquiries@traction-owners.co.uk

REAR WHEEL DRIVE Martin de Little

CALENDAR GIRL Martin de Little
13 Grasmere Close, Mellow, Guildford, GU1 2TG
07951 417148 • Email: rwd@traction-owners.co.uk

NON-DESIGNATED

Colin Gosling

Peter Riggs

Julian Pratt

Paul de Felice

Cleve Belcher

COMMITTEE ARCHIVIST John Ogborne

4 Whitegates, Bath Road, Wells, Somerset, BA5 3LP
01749 675312
Email: committee-archive@traction-owners.co.uk

SOCIAL MEDIA Dylan Harvey

Email: social-media@traction-owners.co.uk

President's Ponderings

Happy New Year, I hope Santa managed to satisfy everybody and the turkey will soon be finished.

However, for many of us, the year ended on a less happy note and it was with great sadness that we learned of Dave Hackett's death in November. Dave was a very knowledgeable, passionate, Traction owner with a collection of interesting cars but Pearl and I shall probably always remember him best for his exuberance – especially his willingness to be a key part of the annual TOC contributions to the CTAB (Brittany) Rally “entertainment”.

The greater Citroen fraternity also lost another stalwart in November, Canadian John McCulloch. John was not a TOC member but many will know him from the excellent publication “Citroënvie” (www.citroenvie.com) which John co-edited with compatriot George Dyke. John was also a leading figure within the ACI and was President of the organisation at the time it supported the Harrogate ICCCR in 2012.

And so, to happier matters. I was unable to attend the NEC Classic Car Show (that certainly made some people very happy) but the photos showed a well laid out display and I am told our stand was not just very professional but also far outshone those around us. This was the first time we had used the new modular stand and it was clearly very successful and will be an asset for future events. Congratulations and many thanks to Julian Pratt as well as all his helpers.

With hindsight, my optimism (expressed in the last FP) concerning the new website was a little premature and, since the launch, there have been quite a few more teething problems than anticipated. Nevertheless, the webmaster and his merry men are getting on top of it and, although gremlin numbers were beyond expectation, the majority have now been tamed. The Forum proved to be a real nightmare and there is still work to do to add a lot of history and, in particular, pictures from the old

version. Nobody is complacent and a lot of effort is still going into the full transfer between the old and new websites and, as I have said before, constructive feedback and suggestions for additional content or improvement will always be welcome.

Having had 6-months usage out of my new acquisition it is now run-in and I would very much like to participate more in the 2018 social scene than has been possible these last 12 months. I do have a small (I hope) radiator leak to attend to over the winter but that is not expected to pose any major problems. So, all being well on the domestic front, I am looking forward to the TOC annual rally in Wales and, of course, one or more sorties back into the motherland – possibly to attend the TU's 50th in May, amongst other things.



Photo by courtesy of Darrin Brownhill

New Members

Welcome to our new members who have recently joined the TOC.

2608	Brian Mark	Northampton
2609	Brian Howell	Langport, Somerset
2610	Jeffrey Edgar	Redditch, W Mids
2611	John Dunlop	Rickmansworth, Herts
2612	Robert Serafinow	Potters Bar, Herts
2613	John Haddock	Florida, USA
2614	Wayne Evans	Aldridge, Staffs
2615	Daniel Lopez-Ferreiro	Crawley, W Sussex
2616	Richard Dyson-Harvey	Willunga, S Australia
2617	Andrew Cox	Hinckley, Leics.
2618	Adam Czutkowna	Bolton, Lancs.
2619	Stephen Hart	Barlaston, Stoke on Trent
2620	Michael Bell	Cosham, Hants
2621	Jonathan Rostron	Appleby, Yorks
2622	Richard Morris	Bagshot, Surrey
2623	Glyn & Sue Ruth	Damerham, Hants
2624	Richard Siggers	Coventry
2625	Huw Smallwood	Corwen, Denbighshire
2626	Pierre-Yves Martin	Mimet, France
2627	Adeline Davies	Yeovil, Somerset
2628	Mr Robbins	Touchet, France



Happy New Year.

First of all thank you to those who attended the AGM. I hope you found it worth the trip. The discussion about how the club serves the

membership was, I think, interesting and worthwhile. My thanks to Vanessa Plumpton for the excellent catering.

During the first year that I have had the honour of being TOC Chairman, I have not only realised what a lot of work goes on behind the scenes, but also the range of different ways we members indulge our enthusiasm for Traction. For some it's all about the technical stuff, for others it's the aesthetics and the romance and for others it is the history. Most of us mix of all of those things in our own specific way.

Some of us like to keep our cars original others of us like to modify a bit – or a lot. "Original" can mean keep it exactly in as-new condition as it would have left the showroom. Or it can mean never welded, painted or maybe even cleaned. And of course we have a range of modifications. Personally I am very glad we are such a broad church and inclusive of the full spectrum of interests.

In addition to having varied interests, we also have a range of skills – whether from our employment or other hobbies.

As well as a common interest in the cars, for the club to run properly we need expertise in Finance, Information Technology, Publicity, Stock Control and all the other things that the committee does. We also need to comply with all the regulations and standards that keep our assets protected and our directors out of jail.

In my day job I have to engage in something called "succession planning" – you may be familiar with such a thing. Who is going to take on key roles when the incumbent moves on? And how quickly will that person be able to pick up the reins? And does the current incumbent need some help today which would help in training the successor?

We must have all the skills we need and more amongst our members. In the recent survey some of you said you would be willing to do more. I haven't followed up on that yet (excuse alert - where does the time go etc...?) but I will - but meantime, if you wish to get involved – don't be shy. Contact me or any committee member.

To be compliant with the upcoming General Data Protection Regulation we will need you to confirm certain things on your next renewal form – and may take the opportunity to ask you what skills you have. It will be up to you whether you answer that or not, but the intention is

to get a better view of who we can ask for help if we need some technical expertise.

I'd like to thank Cleve Belcher for wading through the regulations and distilling them down to what we actually need to do to be compliant.

The Classic Car Show at the NEC was another record attendance and we put on a very good display. Thanks to Julian Pratt for arranging that. I think it was very good that we had some first timers on the stand. I was only there one day – I love talking to people about these cars and I'm glad others do too. I'm pleased we can welcome some new members who joined either at the show or shortly afterwards. We also have contact details of other people who are interested in becoming an owner and a member with whom we intend to keep in contact with some kind of newsletter for non-members.

We are looking to provide regular updates to the Facebook page.

Meanwhile we continue to develop the new website and the forum. My thanks to Cleve and to John Oates for continuing to iron out the bugs and move things forward. I refer to my previous comment that any members who feel they have the skills and the time to help will be made very welcome.

I'm looking forward to the 2018 events – in the calendar we have, in no particular order, the National Rally in Wales, the 50th Anniversary of the TU, Drive it Day and all the local events.

Looking forward to 2019 the committee has been formed to plan the UK's celebration of Citroen's Centenary.

There's a lot going on.

Finally, I would like to pay tribute to Dave Hackett who recently passed away. I didn't know him well but whenever I met him he was always happy to answer any of my dumb questions. And he always made me laugh.

Vive La Traction.

Chris.











Drive it Day

Drive it Day is on Sunday the 22nd of April, 2018. A long way off? Well maybe, but it is surprising how time flies.

Get your plans laid now and add them to your Section News pages for the next Floating Power, out in March.

Traction Owners Clubs: Section Details

Please note, we are trying something different from this edition onwards.
The chart below will contain all of the contact details of the various Sections.
Any Section Reports received will be separate, in the following pages. *Editor*

Section	Contact	Details of Regular Meetings (where available)
Eastern 	Jasmin Gagen Tel: 01284 827 039 Email: eastern@traction-owners.co.uk	Our regular meetings are every three weeks alternating between pubs below. The Angel Inn Larling, Norwich, NR16 2QU The Compasses Inn Littley Green, Chelmsford, CM3 1BU
Ireland 	Richard Sheil Tel: 00 33 87 656 9928 Email: Ireland@traction-owners.co.uk	
Kent/ East Sussex	Adrian Phillips Tel: 01892 520857 Email: kent-east-sussex@traction-owners.co.uk	
Lakes and Borders	Bob Cuppage Tel: 01539 433 391	
London 	Peter & Sue Simper Tel: 01784559867 Email: london@traction-owners.co.uk	First Thursday every month from 7.30 pm at the Hare and Hounds in Osterley, Windmill Lane, Isleworth, TW75PR
Midshires	Stephen Prigmore / Tina O'Connor Tel. 0775 937 2242 Email: midshires@traction-owners.co.uk	
North East 	Graham Handley Tel: 01661 843 493 Email: north-east@traction-owners.co.uk	
Northern 	Bryan Pullan Tel: 07513 362202 Email: northern@traction-owners.co.uk	Summer meetings at monthly Breakfast Meets at the Corner House pub, Wrightington, Lancs, first Sunday of every month, April to October, 9-30 am onwards. Members also meet on Thursday evenings throughout the year at various Lancashire pubs in collaboration with the Thursday Knights VCC. See TKVCC website for details: http://www.spanglefish.com/thursdaynightvintagecarclub/
Peak 	Bev & John Oates Tel: 01629 582154 Email: peak@traction-owners.co.uk	The Peak Section meets for lunch on the first Sunday of the even month in Inns around Derbyshire. See Sections web page for details of locations.
Northern Scotland	Ian Smith and Andy Burnett Tel: Ian Smith: 01224 715221 / Andy Burnett: 013398 86290 Email: north-scotland@traction-owners.co.uk	
Southern Scotland 	Peter Fereday Tel: 0131 449 4449 Email: south-scotland@traction-owners.co.uk	
South Midlands		<i>Please contact Bernie Shaw, President, if you are interested in filling this vital role</i>
South West 	Howard Speirs Phone: – Home: 01872 862386 – Mob: 0797 418 7267	
Surrey/Hants/ Sussex 	Sue & Philippe Allison 01256 761444 Email: surrey-hants-sussex@traction-owners.co.uk	Meetings at the Fairmile, Cobham. For dates, see contact details opposite or look out for information in Section reports.
Wales		<i>Please contact Bernie Shaw, President, if you are interested in filling this vital role</i>
West of England 	Terence McAuley Tel: 01225 466939 Email: west-england@traction-owners.co.uk	
Rest of World	Walter & Noëlla Callens Antwerp, Belgium. Email: rest-of-the-world@traction-owners.co.uk Tel: (00)32 471 860979 Please note that the time in Belgium is GMT+1.	

Note: all of the above are volunteers and will also have other commitments. Please bear this in mind when trying to contact them. Up to date details of forthcoming local events will be posted either in the Sections page of the TOC website, or within Section Reports in Floating Power.



SCOTLAND

Northern Scotland

First and foremost Smithy and I extend our warmest if perhaps belated best wishes to all for the Festive Season. Trust all had a good one!

Not a great deal to report, really, other than some work done. Peter Fereday, south Scotland contact, had his car up to have a look at poor compression etc, and once head off, broken rings had fragmented and broken through the piston crown in one of them. Think Peter is going to fill you in on the following saga!! Some work done on my own Light 15 after that. Last time I changed the gearbox, (D engine, flywheel and 4 speed gearbox) I changed the clutch plate for a new one, nothing wrong with the old one, but, well, a new one on the shelf so why not? Was not a good idea, as the gearchange was a lot stiffer and harder to get a gear, and the clutch pedal was too hard and stiff. So, whole unit out and gearbox off to have a look. As suspected, the new clutchplate had been quite a bit thicker than the one taken out, thus the clutch toggles had to be reset and adjusted to a greater height to allow the clutch to operate efficiently without "bottoming out" when fully depressed. Once the unit back, (not an easy job in the narrow cradle) and road tested, absolutely great, a nice soft resilient clutch operation and no problems with the 4-speed gearchange!

At the time of writing have bought a nice small house in the village, needs a lot of work, extensions renovations, etc, and meantime, NO GARAGE!!! So, will be very busy for the next 6 months at least to get all done and ready before selling my "old" home here. Not happy to move at all, but, no alternatives, so go for it!!

Andy and Smithy.

Ian Smith and Andy Burnett

For details of future planned activities contact:

Ian Smith Tel: 01224 715221

Email: north-scotland@traction-owners.co.uk

SOUTHERN SCOTLAND

So now we are in the close season for most Traction activities. Social events for the next two or three months will include a pre-Christmas dinner with CCC Scottish Section and 2CV Ecosse members and then the usual combined monthly meetings for a general natter at The Stables, Kirkintilloch on the last Thursday of every month.

However, on the personal Traction front my car has had more spanning in the last month than in the whole of it's previous 22 years in my possession. I had ordered one of Andy Burnett's rebuilt gearboxes sometime ago and thought that, at the same time as collecting it from Aboyne in October, he could have a quick look at the engine – compression was a bit low on one cylinder so

probably new rings would be a good idea. In the event, on inspection when dismantled, the bottom end of the engine was in good shape but once the pistons had been withdrawn the full sorry state of the top end was revealed. Every top piston ring was broken, but number 4 piston itself was breaking up. Amazing that the engine had run at all – but it hadn't missed a beat in the 150 miles up to Aboyne.



Anyway, it was immediately obvious that rather more was required than just a set of new rings and the one day job became more than a week's work - which Andy, despite his recent major heart surgery, seemed to relish. So a

new set of pistons and liners were fitted – the last ones he had in stock - together with a new timing chain and sundry other parts and gaskets. The recon gearbox was also fitted at the same time with a new thrust bearing for the clutch. The engine dismantling was hindered by the refusal of a couple of con rod bolts to shift. Apparently, they have 11.5mm heads and can be rounded if not careful – Andy reckoned that this was an early example of Citroen trying to discourage home repairs!

A further problem arose when the 123 electronic ignition – working perfectly for the last 11 years simply didn't function when refitted to the engine. Dead as a dodo and currently awaiting assessment in Holland for possible repair. It would appear parts for the earlier 123 systems may not be available. Fortunately, I had kept the old SEV Distributor which was fitted and initially



was fine. The engine fired up and sounded soooo good – quiet and smooth. However, on the trip home to Lochwinnoch some spectacular backfires on the M80 must have worried other motorists almost as much as me – lucky the bomb squad wasn't called out. A frantic phone call to Andy from the thankfully nearby services lead to the diagnosis of a rogue strand of copper on the power feed to the distributor making an intermittent short, allowing unburnt fuel through into the exhaust.....until it sparked again.

Safely back home the distributor was examined again the next day and the points were checked. Remember that you 123 owners?? Then the fun started again – the engine would just about start, not pick up and die after

Section News



about 5 seconds. The points were checked again..... and again. Finally, after a look at the static timing – which hadn't been touched – I realised that it was massively retarded now. Eventually I discovered that the

vacuum advance retaining clip had come adrift and the whole points plate was free to move more or less where it felt like in an arc of 20 degrees or more with only friction to hold it in place. It had shifted to a place where the ignition was more retarded than Donald Trump. In the end, I lost faith in this distributor and Andy has sent me a better replacement on loan while the 123 is sorted out one way or the other.

So, apart from what in hindsight were really minor problems, I now have a Traction with an engine and gearbox that should do another 20 years. Or, to use a phrase I heard recently, it has become my 'see me out' car.

Massive thanks to Andy Burnett – the guy is a legend.
Peter Fereday

For details of planned activities contact: Peter Fereday.
south-scotland@traction-owners.co.uk
Tel: 0131 4494449

WEST OF ENGLAND

You will read elsewhere of the sad loss of Dave Hackett, a central pillar of our region. We will miss him very much.

We are otherwise dormant.

Terence

For details of future planned activities contact: Terence McAuley
Tel: 01225 466939
Email: west-england@traction-owners.co.uk

NORTHERN SECTION

Not a great deal to report as 2017 ran out to Christmas. The November St Catherine's meeting passed fairly successfully, with an interesting collection of cars, even though the weather was a little unpredictable. However, several inches of snow did kill off the final one..

The last of the Houghton Tower



breakfast meets was very sparsely attended, albeit with two Tractions, mine and Ian Gardner's. The day was cold and dry with a rather biting wind and we were invited into the shelter of the inner bailey, which helped a little. However, I suspect that this gave the outward appearance that nothing was happening, since the Tilting Lawn where the shows are normally held, is visible for quite some way on the approach from Blackburn, and some may have been forgiven for getting to the bottom of the drive and deciding that everything was off. Perhaps a sign at the end of the drive when these resume in the Spring, eh? I will advise of 2018 dates for both these and the St Catherine's meets, when these are available.

Next local events on the horizon are the New Year's Day get togethers. My local one is the Corner House at Wroughtington as reported in the last FP. You need to get there early, as last year was a bumper event with around 120 cars, and for a while, even overspilled onto the road beyond the car park.

The organisers of the Manchester Show are already chasing expressions of interest for next year's event. Given the amount of space on offer, I had thought that we might try for five cars, but the run of bad luck that almost knocked us down to three cars this year, has persuaded me to stick with four.

On the home front, I am determined, with the National coming north this year, that, if I am going to do some long-ish range driving, then I need to fix my non functioning fuel gauge. So I have followed Ross Barratt's suggestion from the November/December edition and have bought a new Smith's pattern sender. I will let you know how it goes. I have a few other jobs to do on the car over the winter, so here is hoping that the weather isn't too cold!

Happy New Year and enjoy your winter

Bryan Pullan

Bryan Pullan
Email: northern@traction-owners.co.uk
Tel: (mobile) 07513 362202

SURREY, HAMPSHIRE & SUSSEX BORDERS



French picnic and table top sale was held on 15th October at the home of John and Nicki Braithwaite near Fernhurst, Sussex. While the men were getting down to the serious business of setting out stalls and buying and selling the random bits needed by every Traction owner, the women were given a guided tour of the house. We had been told that the house was interesting but nothing had prepared us for the Aladdin's cave within. John gave a witty and informative talk as he led us round, through which shone his and Nicki's love for their family home.

When the buying and selling of Traction bits was complete, we set up tables and chairs, hired from the local village hall and had a wonderful picnic (actually a full scale lunch) organised by Sue and Phil Allison. Very many thanks to John and Nicki and to Sue and Phil for an unforgettable Traction outing.

Our monthly meeting was held at the Fairmile in Cobham on the 19th of November. We had an excellent turnout of approximately 20 people and enjoyed a good Sunday lunch.

Our first meeting of 2018 is on the 21st January, again at the Fairmile, we look forward to seeing everyone then.

For more information please contact Philippe Allison on 01256 761444 or email, surrey-hants-sussex@traction-owners.co.uk



MID SHIRES

The main event to report on this edition is the NEC show, whilst there is a full report elsewhere; I thought the comments of a new pair of eyes might be of interest. Due to other commitments, Tina and I have not been able to get to the show for many years, so it was an event we looked forward to.

Our car was to appear on the stand, so I drove it up on Thursday and caught the train back, having assisted erecting the new club stand. The show itself is a great event, a whole day could easily be spent there and having explored all five halls I can say with some pride that our club stand stood out as one of the best.

Thanks to Julian for his managed, professional organisation of the event.



Drive it Day an advance reminder.

As we had such a good day out there this year, Tina and I will be going to the open day at Biscester Heritage, lots to see and do. Make a note to join us.

Buckingham Road, Biscester OX26 5HA

**For details of future planned activities contact:
Stephen Prigmore & Tina O'Connor
Mobile: 07759 372242
Email: midshires@traction-owners.co.uk**

Section News

PEAK

Thirteen of us met up on Sunday 3rd December at the Gate Inn in Tansley for a very nice Sunday lunch and a chance to exchange Christmas cards. There were no Tractions present – too much salt already on the roads in Derbyshire!!

Our next meeting will be on Sunday 4th February – in a pub on a main road as it might well be snowing...

Best wishes

Bev Oates

For details of future planned activities contact:

Bev & John Oates

Tel: 01629 582154 Email: peak@traction-owners.co.uk

LONDON



The London section die-hards braved the dark nights for a pie & pint, a gossip and the examination of worn Traction bits at a rather Christmassy Isleworth Hare & Hounds. We gather there on the first Thursday of every month. New London members, remember to come and claim your special treat.



At a recent visit to Bernie's he kindly tightened Ian Harvey's wheel bearings and



we failed to weigh his 6. However, we so admired his rear axle lifting beam that we commissioned a small batch. One is in London and is available with

the section tools, a second was presented to Martin d L in Guildford and a third to Ian in Hertfordshire, so no excuse for bent rear axles in the South East. Thanks to MdL for his skilled assistance and the use of his workshop, it was a pleasant change to be machining wood rather than wrestling with oily gearbox innards.

With the NEC behind us thoughts turn to winter overhauls, Mike's

Legere was effortlessly reassembled and safely returned to London.....

to be shortly stripped for a starter ring gear change, yes it's the car that

needed a new starter in Scotland, and it's to be fitted with the gearbox group's trial box, news of how that goes in a future FP.

Meanwhile there's been a couple of interesting jobs in our workshop;

of particular interest was Dave Butcher's Normale, the brakes were weak due to corroded slave cylinders.....

.....but in addition the brake hoses looked like this:

Traction discussions often turn to starting problems, but once started will it stop?

Over the winter have a careful look at your brake-pipes.

**For more details or information please contact:
Pete & Sue Simper on: 01784 559867 after 8pm or
london@traction-owners.co.uk**



REST OF WORLD (ROW)

Information from Citroën about the "Centenary of Citroën 2019"

Dear friends,

As you know in 2019, Citroën will celebrate its centenary.

Faced with the impossibility of gathering on the circuit Ladoux, and having considered all the places likely to host this event (old airports, circuits, factories), two sites remained in contention: the circuit of Le Mans and the site of la Ferté Vidame. In the office, unanimously the site of la Ferté Vidame was chosen. Unanimity was shared with the Clubs present at the information meeting with the clubs present at the Epoqu'Auto in Lyon.

*This unique event will take place on this place full of history of la Ferté Vidame * on 19, 20 and 21 July 2019 in partnership with the Peugeot Citroën Adventure DS and the Citroën Brand.*

Join us and experience this event together.

La Ferté-Vidame is a commune in the French department of Eure-et-Loir and has 779 inhabitants.

The place is part of the arrondissement of Dreux.... well known from the 80th anniversary of the Traction Avant !

Have a look at the movie -from the gathering in 2014- still photo below. <https://www.youtube.com/watch?v=0pifc72cvPY>

Des Tractions par centaines à la Ferté-Vidame !
www.youtube.com

Walter & Noëlla

**Section Co-ordinators - Rest of the World
Traction Owners Club**

Tel: 0032 471 860 979

email: rest-of-the-world@traction-owners.co.uk



Your Letters

DANIEL EBERLI

Dear Bryan

Thanks for publishing my piece on the Traction Maintenance courses run by Daniel Eberli. If anyone else is interested in using one of these courses, Daniel is proposing to hold his next English language course this year (2018) from Thursday April 05 until Saturday April 07 with the following main focuses:

- The basics of an internal combustion engine
- Details of the functions and the peculiarities of the different components of the Traction
- Recognise malfunctions, causes and consequences
- Carry out simple maintenance tasks and know the important points for regular care and maintenance
- Prevent excessive wear when driving, changing gears and braking

Further topics: Tools, electrics, body work, improving safety and comfort of your Traction

Ownership is not required, although I did take my own car. You'll get advice for buying a Traction

Full details and final costs are available from Daniel Eberli, E-Mail: eberlid@swissonline.ch, website: www.oldtimer-taxi.ch

Best wishes
Bob Street

ANORAK HEAVEN

Hello Bryan

I imagine I'm not the only TOC member who enjoys "Foyle's War" on television (ITV). A new series started this week, the first episode taking place in 1946. Several shots of a l.h.d. Normale appear in the hour-long episode, with the English registration number UBF 256 (is this car known to us?) To my horror this Normale was sporting a large boot. Did anyone else spot the anachronism? Not to mention the no. 19 London type RT bus whose destination blind read "West Peckham" - too far a stretch from its Highbury Barn to Streatham route.

Ah well, we anoraks must have our little moan now and then.

Kind regards
David De Saxe
member no. 1499

ENGINE OUT AGAIN

Another slant on engine removal from Mike Wilcock and some useful tips on other bits to inspect and perhaps overhaul whilst the car engine bay is opened up. I think it is also worth saying that the gearbox should be put into neutral before starting operations, otherwise you won't be able to rotate the driveshafts to undo the nuts! Ed

My experiences have been mainly with Legeres but also I've assisted with removing Normale bell housings/gearboxes rather too many times!

You will need, a part time assistant, maybe a club tool kit, several hours and a bottle of Guinness. First. DISCONNECT the battery

Removing the bonnet: Even with a Legere it's a stretch, this works easily; 2 people, only one needs long arms, remove screws, disconnect stays, short armed assistant stand at radiator, open both halves completely, a piece of cardboard between the panels will protect the paint and you can then hold them firmly together, swing the bonnet rear sideways across one wing, assistant stays put to steady the bonnet, walk it forward off the car, no drama! Of course you will have ready on the floor more cardboard to receive it. Where to store it? I usually stand it on end, covered and against a wall (more cardboard).

I know of a member who single handedly slides the bonnet onto the roof, heroic! The bonnet panels have downward flanges, the handles stick in and have split pins, if your roof blanket slips or tears you'll be fitting vinyl speed stripes to hide a deep scratches. And then, as it sticks out sideways in your narrow garage you'll walk into it! Why not put it outside on timber, it's waterproof?

If your car has modern CV shafts there's an additional operation because the shafts won't telescope into the cradle to clear the diff.

Removing top cradle plate: Block and jack under the gearbox. Remove 4 long horizontal side bolts and 4 vertical gearbox bolts from the plate, tap plate up and off. Lift the box a little and block between the box and cradle, then remove the Jack.

Disconnecting shafts: Lift and support under both lower suspension arms, do not jack under the cradle unless you have a purpose made block, remove 1 wheel and disconnect the top joint. To do this you will need special tools/instructions available with a club tool kit. (More money but you get it back), take the gearbox weight with a sling and the crane, remove the diff. flange nuts (8) spinning the shafts as you proceed, it's much easier with the top plate off. Swing the loose hub out disconnecting it's diff. flange with a large, old screwdriver. It's a fiddle but lifting and swinging the unit from the crane helps, as does an assistant. With both shafts disconnected lower the gearbox back onto the block in the cradle.

Now you're ready to lift, if you prefer to roll the car away, loosely connect the ball joint and fit the wheel.

Gear linkage: I prefer to unbolt the Eiffel Tower and swing the linkage onto the wing. Check the 3 retaining bolts, they may be different lengths and if you interchange them the rotating clutch will hit the end of one of them, making a mysterious clonk, ask MdeL.

Blocked drain plug: If no coolant comes out give it a good poke with a wire coat hanger.

CAUTION: The unit is heavy and long, it's also deep with a high centre of gravity. I would STRONGLY DISCOURAGE standing it on a tool box, especially one with wheels, or any other high narrow platform. There are good, strong trolleys available, Phil A has, I think an excellent trolley that can be raised.

Alternatively, this is what I do: Obtain a strong pallet, the blue ones are perfect. Saw off one side to reduce its width but retaining the central part of the frame. Check and reinforce if in doubt. Buy 4 large heavy-duty solid tyre castors, 2 fixed, 2 steerable and BRAKED. Good and cheap from Screwfix/Toolstation. Fix under the four corners with 6mm coach screws, you did remember them at Screwfix? A purpose made wood cradle that engages in the slats goes on top, also a thick piece of ply for your tools, coffee cup and bits. You will find that you can easily manoeuvre it 1 handed and lock it for work, you need a milk crate to sit on. The unit will have room all around it and will not stick off the end, the bell housing/gearbox can be slid off onto the ply 'bench'.

Working on the bottom end, bell housing off: You will need a wood frame to rest on the rim of the head but clear of the rocker assembly and retained to the rocker cover studs. The one shown in the manual only fits with the rocker assembly removed, I have an unused one to prove it!



With an assistant, remember the weight, roll the engine onto the timing cover and then onto the frame. You'll appreciate the length of the pallet.

If your floor is rough, use 300mm wide X 2400mm X 6mm strips of MDF under the crane wheels, it's dense and won't compress. With some engine cranes clearance under the suspension and steering is tight, a little jacking/blocking/jiggling will do it.

Engine accessories: At the cost of a few gaskets consider removing everything first; you can check and service the carb, float valve and idle screw available from Chris, flanges are commonly distorted, simple to lap flat; check and clean starter and dynamo brushes and armature/commutator, check the starter Bendix especially for end float and for loose recoil spring bolts, paint; distributor, why not put it in your spares box and invest in an electronic unit? Chris again.

Master cylinder: It's in the tight space at the side of the engine it's a swine to remove from an early Legere, so, while the bay is empty, clean and inspect it. Unless you know it's perfect remove and strip it, both very easy. Examine the bore and piston, change the seals. If there are minor surface defects they can be polished out but better to replace it, more trade for Chris! If it's full of crud you must service the wheel cylinders and change the fluid. The thing is, as most of these cars stand over the winter the brake fluid tends to degrade and corrosion starts again. I recommend taking your cylinder(s) to Past Parts at Bury St Edmunds (see website services) who refurbish them with stainless sleeves, they come back better than new.

While it's on the trolley, inspect around the diff. flanges for leaking gear box oil. If things look suspect remove a diff flange, if it's surface is pitted and grooved you need to refurbish both and replace the seals. (Chris). There's a short article about this elsewhere in this FP.

Protecting the body: I like the IKEA duvets but what about the lamps? Nice targets, cover them. I use old bath towels, afterwards they can go in the washing machine so you know they are clean and free of grit for the next time. Spend your IKEA money on new towels and meatballs.

ENGINE OUT AGAIN (continued)

It's a long steady operation, apart from where mentioned, single handed is fine but installation is much easier with two.

Now drink the Guinness.

On assembly, re-connecting the shaft flanges: Note that the shaft flanges are rectangular, not square. They will therefore engage in only 2 positions not 4. It's not obvious when you're struggling with the shaft and jiggling the unit hanging from your crane. Drove me insane the first time, it had been a long day.

More Guinness?

Mike

Mike MacDonald's car had modern CV shafts and this did not seem to actually be a problem in terms of actually detaching, once jacked up under the suspension arms. We also used an engine stand built out of solid timber to the pattern given in the workshop manual. A set of HD castors under it would have been a good idea. We still haven't put Mike's car back together again!!!!... yet! (Ed)

LIGHT 12 RESTORATION

Dear Editor

The restoration of my 1938 Slough Light 12 ECV 516 has now been completed.

The following works were carried out over the past months.

Metal repairs to floor pan, front wings, fit new rear wings. Strip to bare metal, prime and paint with 2 pack paint (Black)

Strip and Chrome Grill, Headlights and Sidelights. (Capital, Old Kent Road, London)

Oil tempered hardboard and new leather to all door cards. New leather to all seating & rear internal mudguards. Heavy hair carpet sounding proofing under new fitted carpets and under front & rear seats.

Cab heater fitted and plumbed through Radiator top and bottom hoses.

12 Volt Motorcycle fan fitted to Radiator.

This completes the project that makes a happy Traction, happy Owner and a Sad Bank Manager

Davy Selfridge.

County Antrim, Northern Ireland.



I don't know about the sad bank manager. The only time he makes any money out of you is when you are in overdraft!! (Ed)



The Traction Avant Gearbox

The Traction Avant Gearbox. Part 1. Some causes of failure.

We have had a variety of articles on gearboxes and in particular gearbox failure, however it is significant that very few, including myself until recently, seemed to have much clue as to exactly what causes what might be considered premature failure, and so, in an attempt to de-mystify this, Martin De Little has put together this following article on the technology of gearboxes generally, Traction gearboxes in particular and what may cause disaster. Part 2 in the March/April Floating Power, will explain some of the steps that should be taken when reassembling a gearbox. (Editor)

The Traction Avant's gearbox is undoubtedly a thing of beauty but, as many will testify, not necessarily a joy forever. A small group of Traction owners having suffered gearbox failures in recent times, decided that given the going rate for a restored gearbox (at least £2000.00) we might usefully explore the possibility of restoring a gearbox (or several) ourselves. This is the first of two articles (let your editor know if you want more) on the subject with the hope that it will give the more 'hands on' members a chance to diagnose a possible problem, prior to an expensive failure.

If you are of a sensitive disposition, you should look away now; in (Photos 1&2) is a Traction gearbox that has split from ars...er, I mean back to front. The long shaft on the left brings the drive from the clutch. By selecting gears on that shaft, the drive goes to the shaft at the rear and finally to the shaft pointing skywards. That shaft takes the drive to the nearside front wheel and below it (hidden) there is an identical shaft for the offside front wheel.

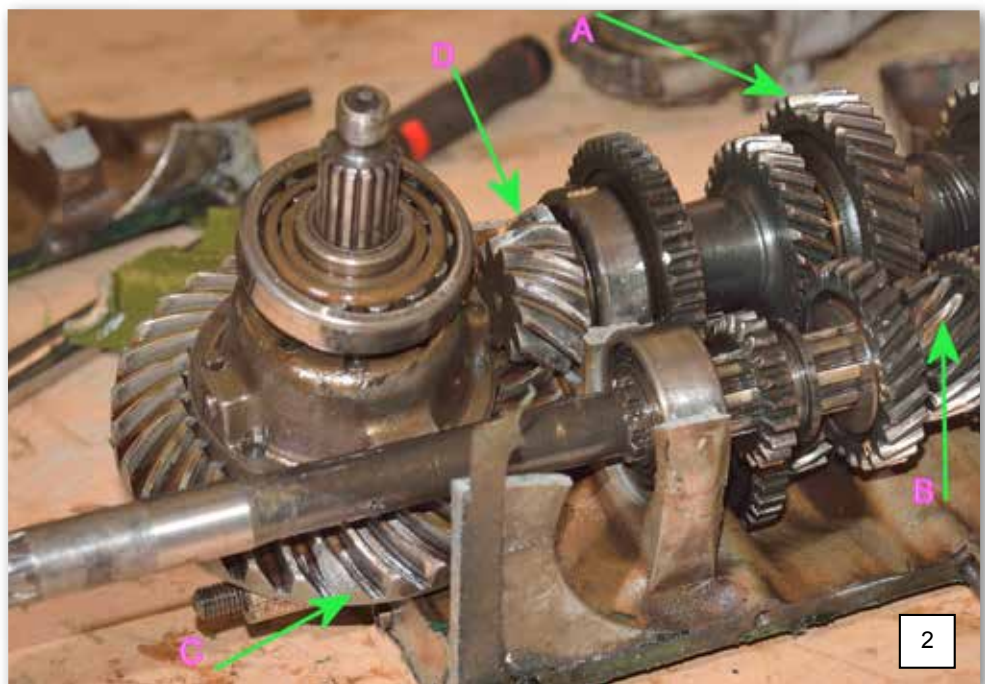
Most Traction owners will be familiar with the story that after repeated failures with an automatic gearbox, the birth of the manual gearbox back in 1934 was a particularly hurried affair. A few refinements in the early days where the casing was strengthened was about the sum total of "development work" on it.



At some point back in time, senior management at Citroën must have been a little exercised by the failure rate of Traction gearboxes? History does not tell us how serious the warranty claims were, but presumably there was a meeting one day where they sat down to discuss the matter and scratch out a simple equation along the lines of: "frequency of breakages" and "loss of faith with customers" set against "cost of warranty claims" for busted boxes and "investment costs for a reengineered box"? Patently they decided to press on, and so continued to make precisely the same gearbox until production of the car ceased. Because it was never developed in 23 years of production; finding parts for reconditioning a rebuild is quite straight forward!

There was a loud bang....

A Traction with this gear box in it (Photos 1&2) was briskly trundling



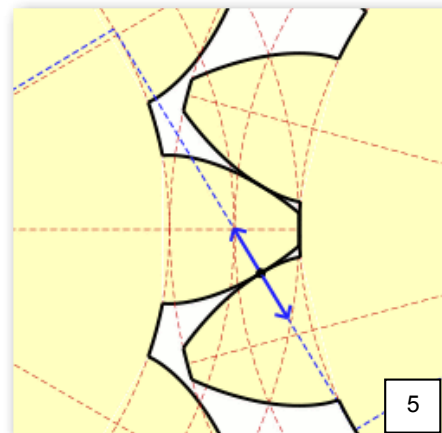
The Traction Avant Gearbox

along when there was a loud bang and an instantaneous and catastrophic “failure to proceed”. The gearbox casing had split and gravity had dumped a litre of EP90 onto the road.

The gearbox above in detail

- Part ‘B’ is 2nd gear on the mainshaft which is missing 2x teeth.
- Part ‘A’ is its opposite number running on the “layshaft” (a secondary shaft) and it too is missing 2x teeth.
- Part “D” is the pinion with bits missing from all its teeth. The pinion delivers the drive to the...
-Crownwheel “C” that is missing a tooth.
- The casing is a write off and so are 4x vital gear wheels.

We will never know precisely what happened but in all probability; 2nd gear was running slightly loose on its shaft (a notoriously weak spot in these boxes - and we come to this later) it tilted on its shaft, only very slightly yet sufficiently that, its teeth clashed with the teeth of its opposite number and between them they instantly shed 4x teeth. The 4x teeth would have gone straight to the bottom of the box, and as there is the smallest of spaces between the crown wheel and the casing, the crownwheel would have picked up a tooth or more. The steel being hard to crush, the crown wheel and pinion locked solid and the box exploded !



Gear Teeth.

In a roller bearing (Photo 4) all the moving surfaces are rolling around one another. Friction is at a minimum because nothing is sliding against anything else. In a gearwheel the same idea is being applied; every tooth on every gearwheel must perfectly ROLL around the adjacent tooth - no sliding no slipping. When you consider that all the energy being delivered by the engine to the wheels passes through just a few teeth (Photo 5) at any one moment, you will appreciate that the pressures and loads on them are tremendous.

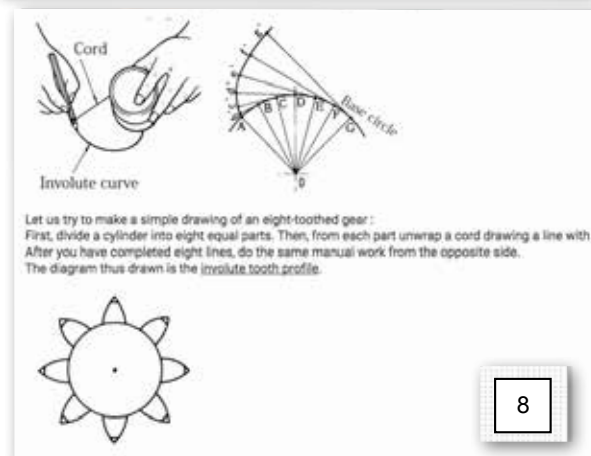
Where two smooth surfaces are rolling one over the other, there should be a negligible amount of friction and therefore negligible wear but, there will always be some wear. Unsurprisingly, the prime function of gearbox oil is to maintain a film of oil between the small area of contact between the rolling teeth such that it can never be crushed or squeezed out by these extreme pressures. In so doing, the hope is that metal will never (or at least very rarely) directly contact metal.



A chain as found on a bicycle or engine timing chain (Photo 6) neatly illustrates the idea of components rolling around one another. The small rollers between the links roll onto and roll off the sprocket teeth. As long as the chain is lubricated there will be very little wear to either the chain or the sprockets because of the rolling action.

The curve that is to be seen on gear teeth is the critical part of this “rolling around” idea ... The question for some time was; what sort of curve is required for teeth on a wheel meshing with teeth on another wheel that will permit this frictionless roll on roll off action? The answer; each tooth is made up from INVOLUTES. There is any amount of mathematics to describe an involute but simply put; if you plot the end of a piece of string as it is unwound from (or wound onto) a cylinder you have an Involute. Instructions in (Photo 8) from an old text book instruct the reader on how to make his/her own involute gear teeth ! At the junction of each radial line with the circle a tangent is drawn. Each tangent is a chord length e.g. B to b = 1x chord then as you work around, add in the preceding chord lengths e.g. C to c = 2x chords. (Not accurate I know, but it is only an illustration of principle).

Meanwhile... A ball on the end of a piece of string (Photo 7) is hit so that it winds itself around the pole, and then hit again so that it unwinds. In each direction the ball effortlessly scribes an involute in the air.



The Traction Avant Gearbox

Broken gearwheels.

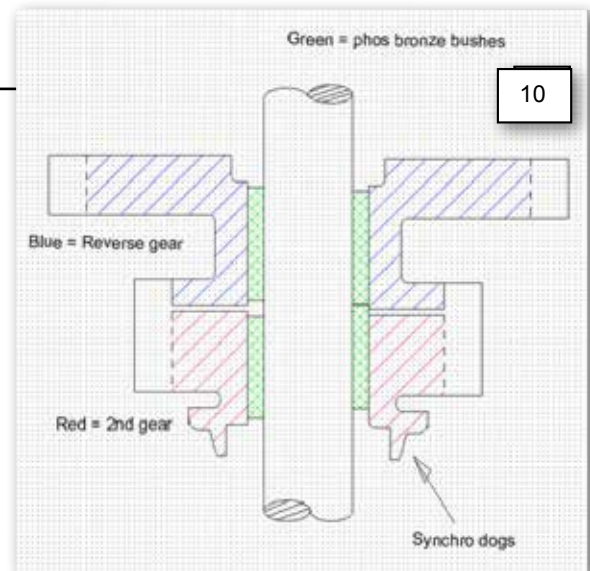
We now jump forwards to a particular issue concerning broken Traction gearboxes. In (Photo 13) is an example of a completely broken 2nd/Reverse cluster (the same part as part "B" in Photo 3 and also: 11, 12 & 14) being held in someone's hand. You can clearly see the 2x phosphor bronze bushes on which it ran.

Oriented in the same way is a sectioned drawing that I have drawn (not to scale Photo 10). It is a drawing of two halves... The left hand drawing shows a gap between the bushes for oil to reach the shaft. As the teeth mesh with one another, oil is forced down the small hole (Photo 14) into the space behind the bushes - shown in green. On the right hand side of the sectioned drawing the bush supporting 2nd gear has migrated inwards and is blocking the oil way. This has happened on quite a few gearboxes that we have seen. It is a problem also seen and discussed by Richard Sheil in his excellent article (FP Volume 31 Issue 4) on restoring a Traction gearbox.

Given the loadings that 2nd gear has to endure, the surface area of these two bushes is arguably insufficient. If the bush at the synchro end migrates inwards then support for 2nd gear is going to be reduced. If the oil supply to the inside surfaces of the bushes is cut off, some additional wear must ensue. In combination, these events will cause both bushes to wear even more quickly than they might; to a point where the cluster can easily run out of true on its shaft - with dire consequences.

If you look inside the reverse gear end (Photo 11 and blue in the drawing) you can just about make out a "dark band" which is the intended gap between the bushes.

At the 2nd gear end with the synchro cone and dogs (Photo 12 the red end) it can be seen that the bush is inset and that "the gap" has disappeared. In another image (Photo 14) you can clearly see that the bronze bush is blocking one of the 3x oil drillings.



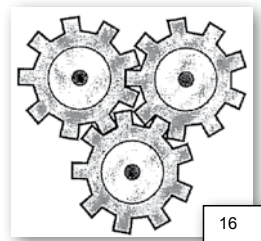
What can you do to prevent such a failure? Well it is hard to be precise but the best and safest answer is; if you hear any noises from the box at all (beyond an obvious and continuous whine) do not drive the car. In particular any kind of regular clonking or clicking sounds may well presage a disaster..

This logo (Photo 16) has been used by both Canadian and UK universities to illustrate the smooth running of their educational institutions: where students, lecturers and college are seamlessly and happily working together. Sadly in this logo, not only are the teeth completely the wrong shape but, the mechanism is locked solid, quite unable to turn at all !

Phosphor bronze for bushes.

Earlier I spoke about the wear on the bushes inside the 2nd/Rev gear cluster and indeed the 3rd gear wheel. The material inside the gear wheels that forms the "bushes" is Phosphor Bronze.

Bronze is an alloy of copper and about 11% tin. Traditionally used for (among other things) cannons and sculptures.... Phosphor Bronze (aka Phos Bronze") includes something like 0.01–0.35% phosphorous. The tin increases corrosion resistance and strength, the phosphorus increases the wear resistance and stiffness of the alloy. In brief...



The Traction Avant Gearbox

Relatively softer.

- The bearing material should usually be softer than that of the shaft but hard enough to resist adhesive and abrasive wear of its own surface.
- Bearings are more easy to replace than shafts. If a bearing is worn out only that bearing needs replacement instead of the whole shaft.
- With the lubricant there should be very little friction between shaft and bearing.
- The bearing should have high fatigue strength i.e. not break down over time crack or combine with the shaft material and suffer "galling" (tearing of the surface of one piece of metal by another piece of metal - usually under considerable load) . .
- Tiny particles of material that find their way into the bearing should be pushed out but if they are not, they should be readily absorbed into the soft bearing surface.
- Finally the material should be resistant to corrosion.

Some of the wear issues we have been looking at may (or may not) be due to the type of oil gear oil folk are using in their gearboxes. In short, there is an argument that the EP additive in modern oils has a deleterious effect on copper alloys. Some enthusiasts say it is not an issue, but there is quite a body of evidence and writing that says it is, and that it becomes more evident with high temperatures. Your choice !

Gear oils are -broadly - classified in terms of Type and Viscosity. The "Type" classifications go thus: GL1, GL2 -through to GL5. If you are minded to seek out a gear oil for your Traction that has no EP additives then you would search for Gear Oils Type GL1 SAE 90. I leave you with a few words from various expert sources

Martin de Little

From top right: www.engineersedge.com/gears/gears

From bottom right: <http://www.morrislubricantsonline.co.uk>

From Millers Oils below: <https://www.comatmotorsports.com/about3-cbfk>

Gear Oil

Gear oil is a lubricant made specifically for transmissions, transfer cases, and differentials in automobiles, trucks, and other machinery. It is of a higher viscosity to better protect the gears and usually is associated with a strong sulfur smell. The high viscosity ensures transfer of lubricant throughout the gear train. This is necessary since the devices needing this heavy oil do not have pumps for transferring the oil with only a portion of the lowermost gears bathed in an oil sump. This heavy oil can create viscous drag leading to inefficiencies in vehicle operation. Some modern automatic transaxles (integrated transmission and differential) do not use a heavy oil at all but lubricate with the lower viscosity hydraulic fluid, which is available at pressure within the automatic transmission.

Most lubricants for manual gearboxes and differentials are hypoid gear oils. These contain extreme pressure (EP) additives and antiwear additives to cope with the sliding action of hypoid bevel gears.

EP additives which contain phosphorous/sulfurous compounds are corrosive to yellow metals such as the copper and/or brass used in bushings and synchronizers; the GL1 class of gear oils does not contain any EP additives and thus finds use in applications which contain parts made of yellow metals.

Product Information:
Golden Film AG Gear Oils
Safe with phosphor-bronze

Description
Golden Film AG Gear Oils are a range of mineral oil based lubricants formulated without extreme pressure (EP) additives. These oils have good natural film strength, excellent performance and long term stability.

Applications
Golden Film AG Gear Oils are suitable for use in equipment where the manufacturer specifies a non-EP lubricant. Applications include: manual gearboxes (e.g. Renault-Fulda, Volvo), axles, worm gear drives (e.g. Q&Q), oil lubricated bearings, reflective gear/hubs, clutches, steering boxes, King Pins, etc.
Additionally, Golden Film AG Gear Oils are safe for use in transmissions that contain phosphor-bronze components. This makes them ideal for classic and vintage cars, motorcycles, tractors, trawler engines and commercial vehicles.

Performance Level
API GL1

GREEN GEAR OIL 90 & GREEN GEAR OIL 140
GL1 type monograde mineral gear oils for veteran and vintage gearboxes and transmissions. Containing anti-wear and anti-corrosion additives, but excludes the extreme pressure (EP) additives which can harm yellow metals.

Classic Green Gear Oil 90

- GL1 Specification for applications that may not contain EP additive which can harm yellow metals.
- Contains anti-wear and anti-corrosion additives.

1 L \$16.95
5 L \$75.55

[More...](#)

A further thought:

As a supplement to this article, I have also had an interesting discussion via a series of emails, with Canadian member, Larry Lewis. As you will have seen, I published a letter from him in the last FP, showing a gearbox similarly exploded to that described elsewhere by Martin in his article. Larry has undertaken gearbox repairs in the past, generally for friends and fellow enthusiasts, and in this

case, supplied a refurbished replacement for the exploded box in his pictures. I asked him if any of his contacts had described symptoms leading up to catastrophic failure, since one of the hallmarks of Traction gearbox breakage seems to be that it just happens 'out of the blue'. We concluded that:

- Many gearboxes that failed had a history of 'hard shifting' and that one of the symptoms was a deterioration of the quality of the change from first to second, assumed to be synchromesh wear, and sometimes even necessitating slipping briefly into top to synchronise the gears prior to actually engaging second. Many of Larry's contacts who subsequently suffered failure, had experienced this phenomenon.
- Several repairs carried out by Larry, involved attending to the 2nd gear cluster running loose although apart from the example quoted, none had actually burst their casings quite so dramatically. We pondered this further and also wondered if this was a lack of lubrication. The lower gear clusters run at least partially immersed in oil, whilst the upper cluster rely on oil pumped and splashed about by the action of the gears themselves.

As a further 'further thought', I wonder if the gearboxes paired with a higher ratio final drive will suffer earlier failure than the 'traditional' ones. My own car has this feature, installed in November 2016. One of the features of the change in driving characteristics is the need in hill country to resort earlier to the use of second gear, and the increased use of second gear in traffic. Arguably less wear on the engine due to lower revs, but perhaps a strain on the gearbox? It would be interesting to follow this up.

The moral of this story is probably that if you experience abnormal behaviour such as balky gearchanges, or odd crunches from your gearbox, don't just drive around it, but investigate further.

(Editor)

Slough Champion

I have continued to receive a trickle of helpful responses, possibly the most important of which was from Roger Grix who pointed out a mistake I have made, concerning the starter bendix, and has pointed out a great deal of useful information available about Lucas equipment. Many of you may know this, but Roger is the only one to have corrected me about the bendix being unique to 4 cylinder Tractions because it runs the opposite way to normal. However, if you refer to our new website (which is excellent and easy to use; go to Members Area – Technical Library) you will find a Lucas "technical service overseas correspondence course" which is very useful and interesting. There is a good explanation in the Starters section there, but basically the same pinion, which moves away from the motor as on a Traction, can be used in a starter where the pinion moves towards the motor as in many cars. So the same pinion (part no 255649 for most cars) was used on many other cars of the period such as some Jaguars, Armstrong Siddeleys, Austins, etc. There is a great deal of useful information available on the web by retailers such as www.cebrighton.co.uk, where you can find this sort of application data. So, the good news is that the bendix is not unique; the bad news is that owners of the other cars are in competition with us and it seems there are virtually no New Old Stock (NOS) parts left. I have made a start looking at suppliers to other Clubs with Jaguar, but they do indeed seem to



have the same issue. Perhaps we can cooperate with some other owners' clubs?

The main lesson to be learnt here is that our Technical Library is a very useful tool; another example is the Citroen Parts book which has good figures and lists the "unique to Slough" parts on each assembly.

Members of the committee have suggested that a Slough section be set up on our website where subject threads can be set up gradually, giving information similar to that above for the various Slough only parts. The recent letter about fuel tank senders is another good example. Members can then offer data learned from their experience and we can build up a useful reference source. I intend to start this process soon using the information I have collected so far; so please watch for this development.

John Moon

Dave Hackett

It is with great sadness that we announce the passing of Dave Hackett who died peacefully at home with his family after a long battle with cancer.



For anyone who has attended a national or international event Dave will have been a familiar figure, often viewed from the rear with his head under a bonnet! His laugh, somewhat reminiscent of Basil Brush, was unmistakable. Dave joined the TOC around 1980 and soon became a regular at TOC meetings and rallies. His mechanical expertise was quickly recognised and put to good use, both on his own cars and of those who lived near his home at Neston, near Corsham in Wiltshire.

In 1998 Dave and Jackie organised the TOC Annual Rally at Bowood House, near Lacock in Wiltshire. In addition to the usual rally activities, we were treated to a concert by the Chippenham Male Voice Choir which included Dave amongst the first basses. Dave and Jackie were married in 1999 and were paraded around Chippenham with a huge, gold-lettered, sign on top of the car saying "HACKETT". In the past, it had

been over Dave's father's butcher's shop.

Dave and Jackie rarely missed the annual Brittany Rally and had many close friends in the French club CTAB. The rally regularly featured a cabaret (the term being loosely applied!) by the British contingent and Dave was always enthusiastically involved. On one occasion, the sand dance was the chosen theme and Dave insisted on making an unscheduled appearance in his underpants causing three elderly ladies to collapse with laughter.

Those of us in the West of England Section will certainly find it hard to come to terms with Dave not being around. Dave will be missed by the TOC for many reasons – his expertise and knowledge of the cars, generosity with his time, his patience with others' technical problems and, above all, for his cheerful and fun-loving character. Our thoughts and condolences are with Jackie and the family who will perhaps be comforted by the knowledge that Dave was a much-loved member of the TOC.



It's 2018, and we are now just one year away from the centenary of our favourite marque – 2019 will mark one hundred years of Citroen manufacturing since 1919. Few manufacturers have had such an impact on the world of motoring as Citroen, and few anniversaries are more significant.

...in France

Naturally this demands the proper acknowledgement, and you should already be aware of the main French centenary event taking place over the weekend of 19-21 July. Note that the venue for this has changed, and is now the Citroen site at La Ferté-Vidame, rather than the Michelin site at Ladoux / Clermont-Ferrand.

...in Britain

In addition to the French event it is also intended to commemorate the centenary in the UK, and representatives from all three major clubs have come together to lead the creation of this event. The team comprises names that you will know: Tamsin Barrow, Phil Chidlow, Julian Pratt, Jim Rogers, Nic Shaw and Nigel Wild.

Our aim

We intend to create an opportunity for all British Citroen enthusiasts to come together and celebrate 100 years of Citroen car manufacture. This is for people above all, as well as the cars, and it will be open to every Citroen owner, whether or not a member of any club, register or forum.

We have plans...

The team is already discussing ideas as to the format, venue and content of our Centenary – and this is where we need your help! We already have in mind:

- a car from every year
- a thousand cars for a century of Citroen

But there's much more to it than this! Will this be a single-location event, or multiple events? Will it be mobile – a road-run around the country? What would you like it to be, and to do?

Ideas wanted!

This is your opportunity to help shape the Centenary, so please send us your ideas and suggestions now.. At this stage, nothing is too radical for consideration, so think big - don't wait to be left behind!

You have until the end of January 2018 to get in touch with your ideas – contact us at: citroen.centenary@gmail.com

Help wanted!

Equally, if you would like to help – because this is going to need more than six people! - please let us know, and join the number of volunteers that is already starting to grow. You can volunteer at any time, but the earlier the better. Be part of a unique event – there will only be one Centenary!

A little more detail

The Centenary will be run by a limited company, to avoid any possible liability falling on any individual club or member, and we intend to work in close co-operation with Citroen UK.

What's next?

We will respond to all offers and suggestions before developing the definitive concept of the event. Watch out for regular updates via magazines, websites and forums; this message is going out as widely as possible, and we aim to keep everyone informed.

Want to know more?

Talk to any of the team members listed above, or contact us at: citroen.centenary@gmail.com

What else do you have in your Garage?

A good selection here of 'other cars'. I can see this feature continuing into a future edition! Thank you all for your photographs and notes. Keep them coming!



Here is a photo of what I have in my garage. Besides a 1954 Belgian- built 11B, and a 1949 Paris Legere, there is my **1960 Saab 93F**. These are virtually unheard of in Canada, especially the two strokes. The fellow below is just outside my garage...usually! . Cheers-**Larry Lewis**



Bryan you asked what weird and wonderful other cars we have as well as our Traction, so how about this!!!!!! Underneath is a **Toyota Yaris** but the body was built for an exhibition in Japan, by a virtual company who make all kinds of kitchenalia. The car, one of two, was made in 2000 for the exhibition. We bought it on ebay!!! Apparently when they tried to put the two cars on the road the Japanese government would not allow it because they didn't conform, to a proper Yaris spec. The tool kit includes a rocket propelled flare for emergencies! We haven't let it off yet. It has just passed its mot needing a light bulb. It is automatic and has bench seating both front and back and inside is retro styled. We love weird!! **Barry Reece**

This is in our attic, 4 floors up and left undisturbed and unseen for 30 years It's a **1932 Velocette 250cc GTP**, 1 of a pair I bought more than 40 years ago near Prescott Hill climb for £12.50 each. With the Traction gearbox finished and removed to store, there's space in the sitting room.....**Mike Willcock**



A pale blue **1964 Volvo PV 544** sits in my garage, alongside my Light 15. Also a project in the form of a Renault 4 that is drawing towards the conclusion of a body off restoration. The Volvo, a rarity in the UK, is one of the last made with the B18 engine, was a Swedish import in the eighties and was on display in a Volvo main dealer showroom on the south coast for several years. **Editor**



What else do you have in your Garage?



Bill Dyke's 1932 Morris 10. Bill's Légère also shares a garage with a collection of Vintage motorcycles, including one dating from the First World War, and a Mercedes SL.



Something of a relative, design wise, is my **1936 Cord Westchester**, which shares the garage with my Citroen 15/6 (currently undergoing some restoration). The Cord came out of the same factory as Duesenberg and Auburn. The factory was owned by Errett. L. Cord. It was the 1st front wheel drive production car in the US and it's innovative body design caused a sensation at the 1935 New York Motor Show. The design of the front wheel drive took it's inspiration from the early Traction. **Tim Lane**



This is my **1916 Dodge** owned for 35 years, alongside my Slough built Light Fifteen. It is not obvious but they have much in common. We all know the Citroen was years ahead of its time and the same applies to the Dodge. It was designed and built by the brilliant engineering brothers John and Horace Dodge. My car was one of 70,000 made Mondeo-style and spot welded together, avoiding hundreds of hours work and the embarrassment of having the bodywork eaten by termites in certain parts of the world. Remarkably for the time, the Dodge has a 12 volt system, a starter (actually a dynostart), proper lights, and a dry multi plate clutch which would not shame a 2017 car. My friends who have cars of that period live in dread of traffic holdups as they have thermo syphon engine cooling but the Dodge has a proper pumped system. It also has a 'fatman' wheel. It can slide out of the way to allow easy access or exiting, then slips nicely back into position. However, the brakes on the rear axle only are best described as pathetic and at worst useless. **Bernard Crockford**



Hi Bryan, sorry I was not able to help at Manchester, so I am making amends with a garage photo, **1925 De Cezac, 1937 Lanchester 11hp, and "Big Has" my 56 Traction 11BN.** Regards, **Vic Lupton.**
Vic tells me that it is believed that the De Cezac is the only survivor of the marque.
(Ed)



Here's my current crop. I've just sold the C6 so will soon need something to replace it **Simon Scotland**

Bailey's Banter

The Classic Car shows in Manchester and Birmingham gave many people an opportunity to think about taking up Traction ownership. Some got to sit in them, some asked to drive. Hopefully they'll find the buyer's guide on the website helpful.

When someone drives a Traction for the first time it's not long before they remark how modern the steering feels. Most old cars now run on radials which helps to keep them from wandering around too much. But the differentiating factor is that most of our innovative Tractions have rack and pinion steering which, whilst *de rigueur* now, certainly wasn't then.

In fact those made in the first couple of years didn't have it either. They had recirculating ball steering boxes with drop links and all the bushes and pivot points that come along with that. I've never driven a Traction so equipped (in fact I still have only ever driven my own car) but I do have another car with recirculating ball steering. It is, so to speak, a bit vague. All those swivels result in quite a bit of lost motion, even when they are new. That particular car was made in 1959. Some manufacturers soldiered on with recirculating ball steering for a few more decades which I find very strange. Chrysler/Rootes were happy enough to introduce the Arrow range with recirculating ball systems in 1966 and leave it there until it was withdrawn in 1979.

Where and when did the rack and pinion design originate? The earliest application that I can find is the BMW303, launched in 1932. A search of patents from around that time reveals a one published in 1932 by Joseph Ganz for rack and pinion steering which does not refer to any previous patents.

This was two years before Citroen launched the Traction Avant. Citroen clearly had an appetite for risky innovations, so why was this not included in the original design of the Traction Avant?

Ganz was the editor of the German magazine *Klein Motor Sport* which he renamed *Motor Kritik*. The aim of this publication was to fight

corruption in the motor industry and promote technical innovation. According to his Wikipedia entry Ganz also worked for Adler and as a consultant for Mercedes, BMW and Porsche before being arrested in 1933 and then fleeing to Switzerland in 1934. Ganz was, of course, Jewish. Before he went he made an arrangement with the Standard Fahrzeugfabrik who incorporated his patents in



the Standard Superior - a lightweight rear-engined car promoted as the fastest and cheapest German peoples' car - i.e the original Volkswagen. Shortly afterwards Hitler engaged Dr Porsche on his own project and forbade anyone else from using the word "Volkswagen".

So at the time the Traction was in development the rack and pinion steering concept had been published and deployed in Germany and was protected by patent. The claims and the drawings in the patent look very similar to the rack on my car. I wonder because, having introduced the Traction Avant with recirculating ball steering it seems a bit odd to make a change to rack and pinion without an obvious need to do so.

We know there were many problems that Citroen did need to solve, resulting in design changes. The body needed strengthening, the engine mounting system needed changing, the engine needed more power and so on. However, I haven't seen any mention of problem with either the performance or the reliability of the original steering.

The 1936 road tests do mention more caster action and lighter operation than the original models. But since nobody had complained about the steering I suspect cost was the goal. Looking back through early copies of *Floating Power* recently I found an interview that that Fabien Sabates conducted with Paul Terrasson (translated by **Reg Winstone**). Terrasson was a test driver at Citroen. When asked about accidents he says there were many. He mentions repeated brake drum and stub axle failures and then talks of testing the first rack and pinion cars. "They weren't at all properly sorted. I had a car whose steering jammed as it was coming out of a bend and I ended up out of control in a ditch, being brought to a halt by a telegraph pole which only just missed my head!" Clearly they had to do a lot of work to make sure they didn't introduce a new problem to fix

one they didn't have.

I wonder if Citroen had to pay a license fee to use Ganz's design. Or did the hurried departure of Josef Ganz from the scene in 1934 give Citroen an opportunity to have the benefit for nothing?

If you want to know more about Joseph Ganz there's a book "*The Extraordinary Life of Josef Ganz - The Jewish Engineer Behind Hitler's Volkswagen*" by Paul Schilperoord. You can also go to a web site dedicated to him at www.josefganz.org.

And now a little follow-up on the New Zealander Jack Weaver.

I am grateful to **Pop Wade** who edits the magazine of the Citroen Classic Owners Club of Australia - CCOCA to you. He tells me that Mr Weaver is alive and well in Australia where he has lived most of his life. Last month we had some pictures of Mr Weaver's single seat race car. This month, courtesy of Pop, we have a couple of pictures of his more recent racer which looks a bit more familiar. But look closely - those wheels seem a bit wider than mine - and look at that instrument panel!



Fancy an antipodean adventure with your own Traction? Do you have a few weeks and some spare change? How about shipping your car to Australia and driving it between Perth and Brisbane via Ayres Rock? Interested? Read on:

Dear Sir,

I am contacting you to enquire whether some members of your club would be interested in the Tracbar Dundee Road Trip taking place in Australia with the famous Traction Avant Citroën in August 2018 (for 4 weeks) to celebrate the 20th anniversary of the French T3 events and motorcycle agency created in Australia in 1998.

There will be 20 vehicles and so far there is still room for 8 vehicles (2 or 3 adults per vehicle is possible. To be checked).

The average price of this crazy adventure is between 8000 and 14 000 € (it depends how many weeks the traveller would like to travel).

If you think this extraordinary event may be of interest to some Traction Citroën Owners of your network, I will send you the English version of the pdf document.

In case you have already heard of this event, please accept my apologies for this reminder.

I look forward to hearing from you soon.

Best regards,

Isabelle Humbert

T3 Agency France

<https://t3.fr/voyages/tracbar-dundee-2018/>

T 33 617960339

Their website <http://www.tracbar-dundee.com/> shows you the kind of thing this organization gets up to. It looks like an unforgettable adventure and a great way to find out whether you really did tighten up that ball joint nut. If I had the time and the money...

Something I wish I had done was improve my Traction's rear lighting. I think I wrote something similar last year when I mentioned before my car's less than bright tail lights and said I would do something about it. I have done nothing - well almost nothing. Back in the summer, planning the drive to Scotland for the National Rally it became clear that we were going to get some inclement weather. Not fancying our chances on the motorways with all the spray, I needed some brighter lights that I could fit quickly. And so to Halfords - not the car department for there is little there for the Tractionist, but the bike department. I selected a couple of sets of LED bike lights that are designed to strap to the frame or a seat pin. My thought was that I could strap the front lights to the radiator grille and the rear lights to the boot handles. I have never actually fitted the front lights since my headlights are pretty bright.



However the rear of my Traction is much now more noticeable on the M23 as I drive home on these dark nights.

The recent FBHVC news has a useful article on the use of LEDs on UK registered cars. I can fit LEDs as I like in the tail, stop and indicator lamps of my Traction. But my 1972 DS is not so lucky - it can have legally only have LEDs in the tail lights.

Nothing is mentioned about the use of additional bicycle lights - whether LED or not. I assume it is illegal.

Fortuitously, my Traction being of the small boot variety, has two handles - one for each light. The later big boot car has only one central handle. Now that may not be a particularly good reason for choosing to buy a small boot car - but how would you choose which size boot you want?

Visitors to the NEC asked about the Traction's different body styles - some assumed that the wider bodies (Normal, Big 15 etc) always had the big boot and the narrower cars (Legere, Light 15 etc) had the smaller boot. We know that is not true - all models have small boots (Malle Platte) until 1952 when the whole range adopted the big boot (Malle Bombe).

Early road tests report the small boot to be sufficient - "decidedly useful size" according to The Autocar in September 1938. In 1946 the still describe it as "ample". Two years later the Motor described the same boot as being of "moderate capacity" whereas The Autocar still says it is "quite useful".

In 1953 the Motor described the new big boot space as considerable but the Autocar pointed out that, due to the spare wheel, it is not as great as it first appears.

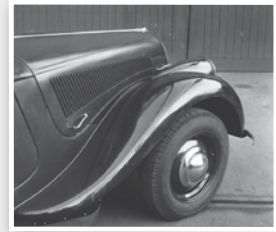
How big is the big boot? According to the October 15th 1952 issue of The Motor the Light 15's new big boot is 11.5 cubic feet. I don't have a figure for the small boot. By contrast the DS boot is 17 cubic feet.

The reason for the big boot was to achieve a more modern 3-box shape, with the spare wheel on the inside, even though the front end remained resolutely pre-war in appearance. Big boot conversions had been offered by a number of companies, some more elegant than others. I like the type offered by "Speed".



It uses the original boot lid which both maximizes the space inside and maintains the familiar look. It also features air vents on the side - this is so that any dog you are carrying in the boot will not suffocate (I kid you not).

At the front of the car, some of those same companies offered faired-in headlight conversions which Citroën ignored. The 22CV V8 prototypes already had those in 1934 and, according to the Ken Smith interview which can be read on Julian Marsh's citroenet.org website, Citroën's Slough team proposed such a design after the war. Paris firmly rejected that. Pity - it looks quite elegant actually, rather smoother than the 22CV.



I found the Speed boot conversion kit listed in an accessories catalogue on the TOC web site. It has 36 pages of gadgets - some useful, some less so. Judging from the illustrations this seems to be a pre-war publication. I thought roof boxes were a relatively recent innovation - apparently not.

I have mentioned my intention to swap my front cradle - if you're not familiar it's essentially the front subframe. That's still my plan for January or more likely February. The timing depends on two things - not travelling and having another car to rely on - so that'll be February then



- or March. I'm going to swap the whole assembly for a reconditioned exchange one from TOC spares. The cheaper alternative would be to buy all the silent bloc bits which are also available separately. This would be much cheaper but taking the old silent blocs out is apparently a complete nightmare involving a 30 tonne press, some heat and much swearing. The latter two things I can provide but a 30 tonne press I do not have. Nor do I have the time. Even so, I expect the job to take me a few weeks. The engine has to come out so I will have a look at the timing chain and take the opportunity to clean and paint a few things. I'm bound to break something too.

Why is this assembly so hard to take apart? The answer is that the splined shaft that runs through the silent bloc bushes is tapered. It's easy enough to assemble and pull up tight - rather less easy to pull apart.

If you don't like the sound of that, take a look at the article elsewhere in this issue which describes an alternative design, originally developed by Roger Williams of Steam Car Developments which uses parallel splines. Time has moved on and Roger has passed his baton to grandson Robert, whose company Yellow Box Engineering is preparing to manufacture a new batch if there is enough interest. In the article, Roger and Robert describe other advantages of his design, one being that the parallel splines will wear less and last longer than the original design. If I had the time to find the 30 tonne press and take mine apart whilst swearing like a trooper I would be tempted to rebuild mine using Roger's design.

Sadly I don't.

Chris Bailey

Dear Bryan. This is a bit lengthy but might be useful to others.

During last year I decided to try to correct the one failing with my car. When it arrived from Spain in '72 it was registered with an "L" plate appropriate to the year of importation and registration, this despite arriving with full documentation supporting it's true year of manufacture, 1955. And so, with a little planning I felt this could easily be corrected as I still had those original documents. On May 16 Steve Reed supplied further proof via an age verification certificate from the club, what could possibly go wrong? Matters rested there whilst I enjoyed the car, but on 27th December I contacted DVLA receiving an automated response on 28th, telling me a reply would follow in 3 days but as it was Xmas this may take longer.

But no, on 29th another email arrived advising me verbatim as follows *"In order to apply to re-register the vehicle you will need to send the V5C with a covering letter of explanation. Please note that your vehicle may require an inspection before allowing a change of registration number. You will need to send your documentation of proof of age. You will receive a responded within 4 weeks."*

That all seemed pretty straightforward and feeling pleased that I had the foresight to contact Steve, I duly forwarded all that was required.

On 31st Jan I received a letter stating that I needed to contact Citroen UK for further proof of age; basically the club evidence of age was deemed to be insufficient. Promptly, I wrote to the address given in the DVLA letter only to be advised by Citroen UK on 10th Feb that they did not provide this service- I would have to write to the archives department of the Conservatoire in France with a cheque for 40 Euros!

Not happy with this I rang DVLA on the 13th Feb to receive some sound advice and thus armed I wrote back with attachments :-*"Thank you for your help today and following on from our discussion I have pleasure in attaching a copy of the original Spanish registration document (in three pdf files) showing that customs duty was paid on 28 Sept 1955 under reference number 4053/55. The document also confirms all of the relevant identification numbers including chassis 420052 which is on the registration document ABP196L returned to you at the start of our correspondence. The book also shows a progression to a Mr Muggleton and I enclose also a notification of the vehicle in his name again bearing all the relevant numbers.*

I have attempted a translation of the wording of the paragraphs of the registration document and this is attached as "Spanish translation" and I have attached to this photographs of the car taken in March 2015 and the chassis plates again relay the same numbers. The vehicle MOT also carries the chassis number 420052.

It appears to me that the importation to Spain in Sept 1955 confirms the build date given by the Citroen Traction Owners Club of August 1955, evidence supplied to them by Citroen some years back when the Club took on the role of

certifying age.

I do hope that you will accept these documents and photographs as evidence that the vehicle was indeed made in 1955. If you require the original Spanish registration document I will of course be happy to forward it." Seemed a reasonable approach and I congratulated myself on the master-stroke of translating the Spanish log book, with the help of Mr Google, of course.

21st Feb sent a reminder; automated response on the same day-3 days for a reply. Then a second email arrived *"All I am able to advise that the moment is that your query continues to remain under investigation. You are in the mean time of course able to continue to use the vehicle as normal under its current registration number."* Ok, quite reasonable so I sent a thank you, receiving an automated response on the same day advising 3 days for a reply.

21st March email received, *"thank you for your recent correspondence . I confirm that for the immediate future your application for an age-related registration number will continue to remain under consideration and you will be notified of any developments with regards your request. You of course able to use the vehicle as normal under its current registration number."*

12th April reminder sent, automated reply advising 3 days for a response.

17th April I requested the V5C back for a trip to France and advising I would send it back when we returned, automated response advised 3 days for reply. But it did turn up in time with a confirmation that the age related question was still under consideration. This far down the road I wondered what could possibly still be under consideration.

10th May I returned the V5C and asked how things were progressing.

18th May DVLA email *"As confirmed in my latest email to you the matter regarding your request for an age-related registration number still remains in consideration. In the mean time I have returned the current V5C certificate you sent with your letter back to you: I suggest that you keep this document until any further advice regarding your request is offered to you."*

So five months in to the process and I have my old V5C back and I have to wait"until any further advice regarding your request is offered to you"! How gracious. No progress and no hope of any it seems; a bit frustrating but, as a retiree, I had time to continue the campaign. Thus on 18th I write back to ask what exactly is under consideration and how can I help in speeding up progress. A bit presumptuous I know but nothing to lose.

A prompt reply received on 23rd, *"Thank you for your reply . I am only able to confirm again that the matter remains under consideration and no further documents or evidence are required from you as you have already sent proof that the vehicle's manufacture date is August 1955. I will contact at*

you with any further details when I am able.” (my highlights).

This seemed like progress at last as they had now accepted that the car was of 1955 origin.

Then the unexpected arrived on 6th June. Again this is verbatim *“Further investigations into your query regarding the above vehicle have confirmed it is not possible to issue the car an age-related registration number. Please be aware that as all vehicles registered before 1983 were issued a number to correspond to the time of their first registering. In the instance of your car as its first registration date was 18-10-1972 the vehicle was issued a number corresponding to this, its first year of registering. It has been possible to amend the actual manufacture date of your car to August 1955 - as your evidence confirms - but the registration number itself will remain unchanged. As these vehicles registered before 1983 were issued numbers in line with the current policy of the time it is not possible to change these number retrospectively. An amended registration certificate has been issued to you -please retain this and dispose of any others you have for this car.”*

That was a surprise and, I thought, the statement that they were unable to issue an age related number was inaccurate so on 13th June I wrote back *“Naturally I am disappointed with the decision not to issue an age related plate for the vehicle but note that the date of first manufacture has been added to the V5C as 1955 and I assume from this that there may be an effect upon the legal requirement to have the vehicle MOT tested . Not that the vehicle will miss the annual test which, in my view is an excellent safety measure. Could you please confirm that my reading of the MOT rules is correct.*

Another question arises as well, should I find a number for sale that is of realistic age can I pay to have that number transferred.

Finally, I am a member of the Citroen Traction Owners Club and we have had many discussions about the issue of age related numbers and there is some misinformation passing around. To ensure correct info is available and to assist your department in heading off claims before they are sent in, could you please send a copy of the operating policy which has been used to make the decision and I will ensure that it is circulated in the club. Should result in less work for you all. Many thanks for your correspondence and help in sorting this out and I look forward to hearing from you in the near future with answers to my three queries.”

I admit the reference to many discussions was a bit of a blind, but I thought it may be more persuasive to appear to be saving them work.

4th July reply *“Thank you for your correspondence and with this initial response, albeit a little late for which I apologise, I will answer two of you latest queries. Firstly, your question of your car’s MOT requirement and whether there is any. In this case the MOT is no longer required as the manufacture date on the V5C has been changed to the pre-1960 date of 31-08-1955. You are probably aware that car ‘s registered before 1960 do not require an MOT. Secondly, you would*

be able to assign an age-related number to the car (which you would purchase) as long as it is a number with an issue date no newer than its manufacture date of 31-08-1955 – in other words, you are not able to make your car appear any newer than it is I will send you a further response shortly with regards your other question about the policy regarding age-related numbers.”

28th July email received *“Your query about the agency-wide approach to the issuing of age-related numbers is still being looked into. I will send more details to you regarding this when I am able.”*

Why they should now be looking into my query on sending a copy of their own policy was a mystery. If they had one and were not making it up on the hoof, surely they would just send it.

And finally on 21st Aug, 8 months after we started, I receive this final email *“Following on from earlier correspondence, there is nothing further to add to your query about age-related numbers other than to confirm again that when it’s not possible to issue an age-related number when a vehicles date of manufacture has been changed. the applicant would have the option to buy an number as long as it was for a date no later than the original date of manufacture . There is no agency operating policy as such which could be sent to you detailing this, but further information about the transferring of numbers is on the DVLA’s website and you are also able to call the agency’s contact centre on 0300 790 6802 for further advice.”*

I’ve sent responses verbatim because the quality of writing leaves much to be desired but leaving aside that I think I have learned:-

1. that my car was manufactured in 1955 is accepted
2. that there was a policy in 1972 up to 1983,
3. there is no current DVLA policy that can be sent to me,
4. I cannot have an age related number issued,
5. but I can have an age related number.

So in the eight months of our discussions were they making it up as they went along or IS IT ME?

Regards.

Ron Herivel.

ps: I’m now thinking of making an FOI request for a copy of the (non existent) agency operating policy, nothing to lose.

‘Ha.....DVLA are also making waves now about cars coming in from South Africa. Apparently a generic term CKD is now being used in RSA registration documentation to describe certain classics, which, although it doesn’t mean what the initials suggest, has given DVLA something else that allows them to question historic status on imports. I have never been sure why DVLA are so reluctant over age related registrations, especially when the car is so patently of a type that qualifies as an Historic Vehicle. Ed

Silent Blocs

In the rush to get the Traction built, certain parts had serious engineering flaws that were not addressed during its 23 year production life. The design of the silent bloc type suspension system is a prime example of this. Nowadays these sort of flaws would certainly not be tolerated, however in the forties and fifties it seemed everyone was just thankful to have a car.

In this article the cars referred to are the four cylinder Traction models i.e. the 'Legere', 'Normale', 'Familiale' and 'Commerciale'. For ease of writing from this point onwards only the 'Normale' and 'Legere' will be mentioned and the focus will be entirely on the silent bloc system.

The principle of the design for the 'Normale' and 'Legere' silent bloc system is that a splined pin connects the bottom suspension arm to the front and rear silent blocs that are bolted to the cradle. **Fig 1** shows diagrammatically the arrangement of the silent bloc system in question.

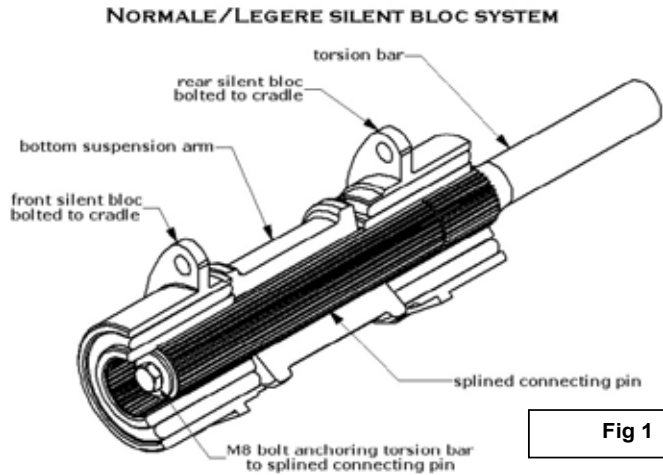


Fig 1

The original design had a tapered splined connecting pin. During installation the connecting pin was pressed in through the rear silent bloc, through the bottom suspension arm, and into the front silent bloc. The tension bar was then fed into the rear silent bloc and anchored via a long bolt. When the splined connecting pin was installed it got progressively tighter as it passed through the suspension assembly. The assembly required a significant amount of force available only through a heavy press.

During the Traction's production life the design of the splined connecting pins remained unchanged except that in the later years the central 50mm was unsplined. I am guessing that this was an economy measure. However this reduced the engagement between the bottom suspension arm

and the connecting pin by $\approx 60\%$ and caused the broaching at the outer edges of the bottom suspension arm to 'bellmouth'.

If you ever assemble a front cradle you will notice how loose the splined connecting pin is as it enters the rear silent bloc yet, how difficult it is to get it into its final 'installed' position. This is a result of the tapered splined connecting pin. The looseness seen in the rear silent bloc during assembly is what it is like in the front silent bloc

once fully assembled. This is a major design flaw with the original parts and results in the splines situated in the front silent bloc and their mating ones on the connecting pin wearing badly as shown in **Fig 2**.

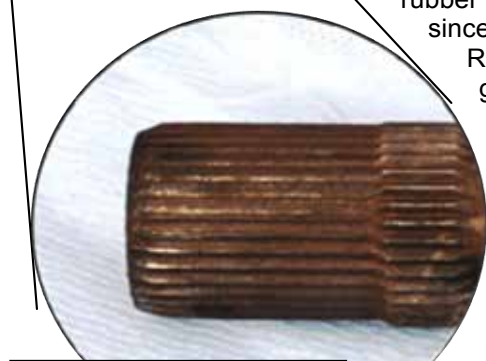


Fig 2: Splined connecting pin for Legere

As well as the splined connection having to be good the system also relies on the integrity of the rubber connecting the broached tube to the silent bloc housing. Often the rubber is badly worn as

would be expected after 50+ years of service. An example of this type of worn rubber is shown in **Fig 3**. As can be seen here the rubber has seen better days since the cars initial manufacture.

Remember that the whole suspension geometry relies on the silent bloc assembly being 'tight' and that all the forces created during braking and steering are transferred to the car body via the cradle, silent blocs, bottom suspension arm and the splined connecting pin. When MOT's were mandatory it seemed that most MOT test stations did not know how to check the integrity of the silent bloc system and so took the approach that it was an old car, not driven very far or fast and that they would be all right.

Of all the routine jobs on a Traction, I would say that the replacement of the silent blocs is one of the most awkward. The engine/gearbox has to come out and the grille and front wings removed and the body has to be safely supported to enable the front cradle to be pulled off. This makes the car totally immovable until the cradle has been replaced.

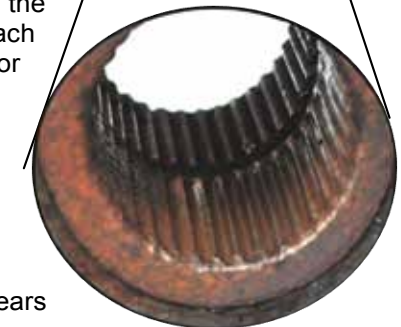
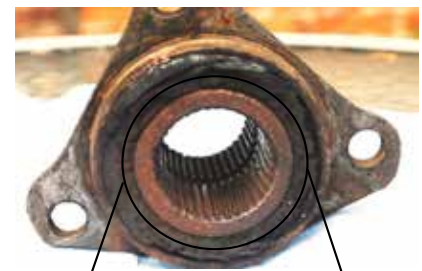


Fig 3
Splined connecting pin for Legere
Note how worn the splines are in the broached tube and the poor state of the rubber bonding.

Be under no illusion that any original silent bloc system, which will be 50+ years

old, may appear to be in good condition on the outside but closer inspection will invariably find it to have failed. Rubber, even with anti

ageing additives, has a finite life that is considerably less than 50 years.

When 'rubbering' it is impossible to bond the broached tube concentrically in the silent bloc housing and as a result extra stresses are incurred during assembly. The longitudinal position of the broached tube in the silent bloc housing can also vary and this is why the original system used packing shims to get the bottom arms in correct alignment and provide the correct 'nip' between the silent blocs and the bottom suspension arm. Because of the variation in the relative positions of the components in the silent bloc it can often happen that the cradle cannot be assembled to give the correct alignment/nip/etc by use of the available shims. The stripping or assembly of the original silent bloc system requires the careful use of a series of supporting plates/tubes and a powerful press or a lot of brute force with a sledgehammer. I think it unlikely that when the cradles were originally assembled, either in the factory or as a repair in a garage, that they were stripped down and reassembled if the shims gave the wrong alignment.



Fig 4
New silent blocs set.

There are many repair jobs on a Traction where the cost of the replacement part is a small proportion of the total repair cost. The fitting and/or adjusting of a new part can be time consuming and hence expensive if you do not do it yourself and in a lot of cases it can be technically difficult often requiring specialist tools and a high level of expertise and experience. A fully machined part that just has to be fitted is usually much easier and, in many cases, can be a more economical option. This often holds true for silent blocs on Traction.

Lancashire engineering company, 'Yellow Box Engineering Ltd' aims to supply full silent bloc sets for both 'Normale' and 'Legere' cars. These silent bloc sets eliminate the problems that plagued the original parts during their operating lives. The newly manufactured silent bloc sets are high precision parts made from new materials using specially designed tools. They are made to order in small batches and have a 100% inspection rate for superior quality. The silent bloc sets are fully compatible with the Normale/Legere cradle and bottom suspension arms. This leads to many advantages such as:

- A heavy press not being required to fit them - it can be done by a single person with a 7lb (≈3kg) copper hammer, this significantly reduced the time and effort required for installation.
- They dispense with packing shims yet give the correct alignment and 'nip' to the bottom suspension arm thus making the suspension system work as the original design intended.
- They give full and even contact between the splined connecting pin, the broached tube in the silent bloc and bottom suspension arm, resulting in a more durable and properly performing suspension system.
- The splined tube is concentric with the housing and hence no additional stresses are induced during assembly, this results in a longer life for the silent bloc.
- These silent bloc assemblies have been machined to ensure that no additional stresses are introduced on assembly and that there is no need for shims to obtain the correct alignment of the bottom suspension arms.

Each set of silent blocs supplied by Yellow Box Engineering Ltd consists of:

- High precision housings machined from a solid billet of steel.
- Broached tube.
- The above two items bonded together with age resistant rubber.
- Splined connecting pin - splined over its full length.
- A set comprises of 4 housings, 2 splined connecting pins and 2 M8 retaining bolts.

A limited production run of the above has been commissioned and manufacture is planned to start in early 2018. It is anticipated that a set will cost approximately £1000.00+VAT but a firm price can only be given when the size of the production run is known. Interest can be expressed in the form of a deposit of £500.00 per set. A reduction of 5% is available if there are bulk orders for 10 sets or more. If you are interest please get in touch as soon as possible.

If anyone is interested in the silent blocs described above please contact robert@yellowboxengineering.co.uk or ring **+44(0)7758886361**, and they will be happy to discuss your requirements, provide further information and work towards a tailored solution for your silent bloc needs.

Yellow Box Engineering are at: 2 Swan Mews, Castle Street, Clitheroe, Lancashire, BB7 2BX
Robert Williams

I have owned my 1957 11b Normale for over ten years now and have to admit to being one of those members who has done very little for the club apart from taking advantage of spares service.

My excuse is a heavy involvement with my local multi make club. However having now reduced commitment to that club I decided that it was time to get to know the TOC and its members better.

Thus it was that when the alarm sounded at 4.15am on Thursday 8th November it took me a minute to work out that I was in a spare room at Julian Pratt's house. I had volunteered to be part of the team representing the TOC at the Lancaster Insurance Classic Car Show at the NEC. For various reasons that I need not bore you with Julian had generously offered to put me up for the night before driving to Birmingham and setting up the show. At 5 o'clock we picked up Andrew, a friend and neighbour of Julian's who, although not a club member had also volunteered to help.

A rendezvous had been arranged with Eric Pennington who had volunteered to hire a van and collect the club's new exhibition stand and photographs to dress it with, from its home in Shrewsbury and take it to Birmingham by 9am. Clubs are given a designated time when they should arrive at the NEC and slot into the amazing logistics required to get the whole thing set up in about twelve hours. 9.00am saw us gathered in the appropriate car park. Julian had all the paperwork ready for a smooth entry into the hall, which was almost empty and at this point it was difficult to imagine that it would soon be full of cars, motorcycles and people. Where was our stand? Luckily, resplendent in the middle of the hall we found Lawrence Acher and his Big 15, providing a guiding beacon.

As we unloaded the storage boxes from the van and emptied them so that we could move the car out of the hall, Tim Walker arrived with his lovely convertible and Stephen Prigmore with his 11b Normale resplendent in its new paintwork. The team was now complete, and surrounded by hundreds of boards of assorted size and colour. a box of clips to put them all together plus various table tops of different shapes. There was also an A4 sized sheet of paper with a picture of the finished stand plus Julian, who had used a similar stand in a previous existence. Julian advised, "Start with the base layer, work from one end and don't try to construct the end before you have reached the middle", it would have been quicker had we taken notice! Still we only had to rebuild a couple of bits. It took three and a half hours to erect but I expect that this will be a lot less next time.

I went off for a coffee and a snack and by the time that I returned the stand had been dressed with lovely blown up photographs and copies of the Club Logo. In the meantime Mike Willcock had arrived and started to dismantle his car to enable us to show off the interesting front of a Traction. This proved to be a great hit with the punters having the same effect as that of a bonnet opening during any gathering of classic cars! Comments to the effect of, "I knew that they were front wheel drive but not any of the other innovations", were heard throughout the weekend.

Apart from Eric, who lives locally, we all



stayed at the same hotel and had dinner together each evening. On the first night together there was considerable discussion about our reason for being there. After all, the club had forked out a considerable sum of money and it was largely up to us to ensure value. This is my view: The show provides a platform from which we can promote

and share our enthusiasms for the cars and the club. It enables us to encourage owners, would be owners and even a few who had never considered a Traction before to become involved in the TOC and its activities. I was pleased to see that there were no comfortable chairs on the stand and that, apart from water to ease parched throats, no food or drink was provided. Following Julian's example, those on duty on the stand spoke to almost every person who showed interest. The majority of those approached were keen to have a bit more information and those that did not soon made it clear. Areas of interest varied: "I've always fancied one of these but..." is a common opening. Most were surprised to hear that a Traction can be brought for such a reasonable price. Ease of ownership and the service provided by the club also stimulates their interest as does the usability and comfort of the cars. The next most popular group is the one that knows a bit about the technology but is keen to know more. These were the ones mainly attracted by Mike's car. The group that I enjoy talking to most is the one containing those who are on the verge of buying their first classic and whose eye has been caught by the Tractions. One couple comes to mind, late thirties early forties with a healthy budget. They were actually undertakers by profession. After a few minutes of telling them about the Tractions he asked me to look at some pictures of cars that he was considering. The main contenders were two Rolls Royces, one large and one huge. My man has only limited mechanical knowledge but wants to learn. The Rolls, in my opinion, were not manageable and I suspect that a salesman somewhere was hoping to off load one of them. They signed the "we are interested sheet", took a free magazine and went away to research buying a Traction through the club. I really hope that they do and if you are now reading this as members, welcome.

There were quite a number of stands, both club and trade, where the people on them were sitting chatting or just ignoring the punters. I believe that our stand was as successful as it was because of the welcoming attitude of those working and of course the beauty of the cars on show.

The show itself is huge, really more than can be taken in in a day, there is something on show to suit every taste. I have to admit that I did my looking around either before the show opened or in the first hour; after that it was just too crowded for me. I also find that as my interest is primarily in pre 1970 cars there are fewer and fewer on show that interest me. Anyway it was much more fun to be our stand talking to people about Traction Avants.

Many thanks to Julian for his splendid organization and to the rest of the team, especially Lawrence Acher, Tim Walker, Eric Pennington, Mike Willcock, Raymond Albeson and Andrew for the company and stimulating debate (about all sorts of things), please can I come again next year.

Nick Shaw

Some common experience here with Manchester. We too have found that during the various shows attended in 2017, the assumption was that a Traction was an extremely expensive toy. Opening the bonnet also drew a lot of interest although we didn't go as far as taking the car to pieces!! We did, however, open up the rear doors of a Normale to encourage passers by to take a seat. That too was popular: Bryan Pullan





SUMMARY of TOC ANNUAL GENERAL MEETING, 22 OCTOBER 2017, HARWELL VILLAGE HALL, OXON

The attendance was even lower than last year – 31 including the committee. However, we were again provided with a sumptuous feast provided by Vanessa, whom we thanked profusely.

Part 1 - Formal AGM

This was chaired by Andrew York. Two directors were required to stand down and Andrew and myself stood down and were re-appointed. Tony Malyon presented the accounts as had been included in the previous FP and they were unanimously approved.

Part 2 - Informal Discussion of TOC Matters

Chris opened the meeting by welcoming all participants to the meeting after which Vanessa and Peter Riggs stood down and were re-elected, and Colin Gosling stood down.

With the aid of a Power-Point presentation, Chris reminded the meeting of the aims and purpose of the TOC, and presented the results of the survey that we had undertaken which had a 52% response rate, or 45% of the whole membership. The survey looked at both members' cars (model, year, service and maintenance arrangements, how much they are driven) and the members themselves (age profile, views on importance of TOC events, suggestions for improvement).

The results confirmed that 85% of members were aged between 55 and 74, and many were members of other car clubs. 10% of members regularly drove their cars more than 3000 miles per year, and roughly equal numbers maintained and serviced their own cars as used specialist garages. FP considered the most important feature of the Club with the Spares service a close second.

The possible improvements included more technical articles in FP and less social event reports, more technical information on the website. The survey also produced a database of the members' cars and this was presented by year and origin of car (Slough or Paris) and demonstrated that there is a large proportion of Slough-built cars and of course TOC is the only UK club that supports them.

Events

The 3 main rallies this year were the Dutch Mountain Rally, The Annual in Scotland and the Brittany Rally.

Walter and Noella Callens had prepared a Rest-of-the-World events report highlighting a summary of their involvement in 2017 and planned events for 2018 and 2019.

Website

Cleve presented the new TOC website, which is now operational and compatible with all smart phones, tablets, lap-tops and desk-top computers. The website development is still a work-in-progress and he invited feedback and observations from

members, in order to fine-tune it and is also planning to expand it to include the e-commerce opportunities.

John Moon – Slough Champion

John suggested that here are many TOC members who possess a great deal of experience of Slough-built cars and it was essential that this is recorded and saved before it is lost for good. In particular, John is concentrating on the location of parts that would prevent the cars from being used.

Spares

Chris Treagust aims to keep a very comprehensive stock of parts, but if any particular parts that were not stocked were identified, then let him know and he would see if he could find a supplier. The current economic uncertainties were affecting prices which have increased 3 times this year already. However, tyre prices were now £20 less.

NEC and other Shows

Julian Pratt announced that the arrangements for the NEC show in November had all been made and for the first time we would be utilising the modular display stand equipment recently purchased. The Manchester Show in September had used the old stand.

Other Business and Discussion

The main topics were the generation of new members and promotion of the Club to a wider population. One suggestion would be to contact new members by phone and introduce their Area / Section Rep and outlining local events as personal contact encourages involvement straightaway, or we could let the Area Reps know of any new members in their area so that they could make contact and welcome them personally. It was also felt that the first impression of the TOC should be as positive as possible as this would encourage participation and active involvement.

Chris Bailey felt that the Club now needed a Compliance Officer to ensure that all of the necessary administrative procedures are fully complied with as we needed to fully protect the data we store on our members and their financial details and an invitation for someone to take on this role would be issued.

Awards

Finally, the Barbara Longdon Cup, presented in recognition of services to the TOC, was awarded to John Oates and he was thanked by all present.

Ian Harvey

Traction 11BL Convertible



Just to bring you a taste of Spring, this article is published by courtesy of the author, George Dyke, and originally featured on the website of Citroenvie.

Many Traction Avant convertible conversions have been created since the Citroën factory ceased making them in 1941. While the UK conversions and those done on the European continent came close to mimicking factory original cabriolets by featuring the folding windshield, extended doors with the top edge swooping upward toward the front and having a “cabrio-like” rear end with a rumble seat, many from other parts of the world, particularly in places like Vietnam, took a simpler approach. In those cases the sedan’s windshield A pillar structure was left intact and the roof cut off just beyond the windshield. In these cases the front doors had the window frame cut down but they were not elongated, and the rear of the car was either modified to resemble a true cabriolet with a body section made that contained the rumble seat or swooped down to the back where the enclosed spare tire was mounted.

There has been great debate over the years as to the authenticity of many conversions that looked very close to the original cabriolets. Some people have been fooled by them and invested a great deal in what they thought was an authentic car. In Toronto in the 1980’s Mark Ketenjian wanted a Traction convertible and decided to build one himself.

Mark’s love of the Traction began in his hometown of Aleppo, Syria. In his early 20’s his father purchased one for him which he used for leisure as well as work. At the time he owned an auto parts shop and used the Traction to deliver parts around the city.



Mark Ketenjian in Aleppo Syria in his Traction 11BL – circa 1965.

In 1968 he moved to Toronto and once established, started the search for a Traction, looking for the connection to his youth and father that only that car could bring. He found what he was looking for in the classifieds section of the newspaper and bought the car in the late 70’s.

He and his brother Gary owned an auto repair and body shop in Leaside and Mark determined that he could take a Traction 11BL and work that into his dream convertible. With considerable effort and some clever engineering he created this unique Traction by strengthening the monocoque body structure in the lower sills, lengthening the doors (doing the top sweep toward the front), and having them reverse open and close by fitting Austin Mini door hinges to the area further back where the lower B pillar section had been re-located. In order to have operating rear windows that fully descended, Mark got a hold of a VW Beetle convertible and extracted the rear side windows, fitting them in the Traction. He was then able to make the front door windows that rolled down from conventional straight glass that was edge



capped in chrome trim as was the front side glass pieces that filled the area of the doors between the roll down glass and the rake of the windshield A pillars.

Possibly because he liked the greater trunk space the ‘51 BL had, preferred the extended

Traction 11BL Convertible



box section design of the modern trunk introduced in the autumn of 1952 (the boot was lengthened and its volume doubled) or he just couldn't bring himself to fabricate an entirely new back end, Mark merely cut off the roof at the C-pillars and left the rear intact. A custom fabric top was fitted and with that he had in effect a Traction convertible!

Other Tractions have had roof sections removed and the rear end left as is. A popular conversion in

Europe for doing this leaving the door and the sides of the roof in place was carried out by AEAT (Anciens Établissements Ansart and Teisseire – located in Neuilly sur Seine 41 to 43, Rue Ybry and 22, Boulevard du General Leclerc). This conversion made

a découvrable out of sedan taking off the roof from just behind the windshield to just above the trunk lid and fitting a foldable fabric top that included a rear window.



AEAT découvrable conversions.



Mark owned his Traction BL convertible along with another unmodified 11BL sedan up until his passing in 2016. He drove both very sparingly as he was always busy doing one thing or another and never really got around driving to them. In fact 6 years ago he confessed to George Dyke that he actually only drove them to the gas station once each year to put in fresh



fuel! Amazingly the Traction convertible has managed to stay in exactly the same condition as when it was converted.

Mark's love of Traction's was only matched by his love of Mini Coopers. He owned many through the years and for a short time in the 70's raced them at Mosport, a race track just outside Toronto. It was in the passenger seat of these Mini Coopers that his son has some of his fondest childhood memories. Mark's strong emotional ties to Traction's were because of their connection with his father in Syria and his son now has those same emotional ties to Mini Coopers, not Traction Avants. Although the family honours and appreciates the workmanship and engineering put into this unique car, they also acknowledge that in order for it to be loved and maintained properly it might be best to find it a new home. This is why they are considering putting it up for sale.



We're not sure how much this one-off convertible BL will command, but one thing is for sure, if you have the same desire as Mark Ketenjian did to own a topless Traction, and are impressed by what he achieved with his conversion, you surely can't get a more distinctive ride!

George Dyke, Toronto,

A very attractive car and quite an undertaking. It would be interesting to see the structure that was inserted to make the car rigid once more.

If you would like to see more about all things Citroen, with a North American perspective, then Citroenvie can be reached on the internet at <https://citroenvie.com/> (Editor)

For those of you who have never attended a TOC rally don't be put off by the word " RALLY"

- We are a gathering of like minded tractionists enjoying a fun weekend in a different part of the UK each year.
- We do not do time trials around a set course and we avoid travelling in a convoy.
- We travel at our own leisurely pace to arrive at a destination by a certain time.
- We set off from the hotel at a time of our choice and feel free to stop for a coffee or take photos en route .
- Contrary to articles in previous FP's, it is not necessary to sport a beard to take part.

One tip, don't follow the car in front of you on the run, as he may well be lost!!

THE PROGRAMME

FRIDAY 22nd June: Welcome at The Wild Pheasant Hotel from 3pm followed by briefing and BBQ at 7-30 pm, non residents welcome.

SATURDAY 23rd June: We set off at a leisurely pace to LLANBERIS where we have 2 excursions laid on. A trip on the exhilarating Snowdon Mountain Railway, where from the top we will have, weather permitting, views as far as Ireland, Scotland and Isle of Man. We will also be visiting the Electric Mountain and go deep inside the mountain to learn about this amazing feat of engineering. Time permitting we can also visit the Welsh Slate Museum and learn how slate was mined in bygone days, with free entry.

SUNDAY 24th: A relaxing morning perhaps visiting the odd castle or two and Powys Castle is certainly worth a visit and being National Trust, free to members. There is also a 'Festival of Transport in Wales' event in Welshpool and further details will be in your road book.

We then meet up in Gregynog and it's beautiful gardens for lunch and the prizegiving presentations. The prizes are decided by your fellow participants.

For pricing see booking form inserted within magazine sleeve.

North Wales being such a beautiful area it is impossible to see it all in a weekend so for those who want to arrive early or stay longer we have negotiated a rate of £72 per night B&B to be booked direct with the Wild Pheasant Hotel

Both hotels have brand new spas which are free for our use but you will be asked to pay for extras ie: massages etc.

Llanberis Pass (right)

Snowdon Mountain Railway (below)



WILD PHEASANT & WHITE WATERS HOTELS, LLANGOLLEN, LL20 8AD

Phone Wild Pheasant 01978 860629 for additional stay bookings and spa treatments only.

PLEASE

If you are intending to come please book as soon as possible and take advantage of the 'Early Bird Offer'. We ONLY have an offer of 52 rooms . More may be available if we ask well in advance.

NOTES

- The total cost does not include
- *drinks with any meals
- *Saturday lunch
- *entry to any venue other than those stated

PAYMENT

- If you wish to pay by cheque please forward to me with your application form payable to "TRACTION OWNERS CLUB"
- For ease of accounting please pay by BACS transfer to: Sort Code 20-20-62 Account No 40617679 reference TOC WELSH RALLY
- PLEASE email me at the same time as the payment is made

CONDITIONS OF ENTRY (the legal bit)

- All vehicles must be covered by a third party insurance policy
- Vehicles must not be driven or left in charge of any person who does not hold a current UK or EU driving license
- All vehicles will be at the owner's risk and the TOC cannot accept any liability whatsoever.
- The club reserves the right to change the details of the Rally, if circumstances dictate, at short notice.

RETURNING THE BOOKING FORM

Please return the booking form by the 31st January 2018 to take advantage of the 'Early Bird offer' or by 31st March 2018 at the latest

Return booking form and cheques to : **Laurence Acher**
71 Burnham Way
London, W13 9YB
Phone 07828241877

or by email to:

EVENTS@TRACTION-OWNERS.CO.UK

For any queries, clarification, or notification of your BACS transfer please contact me at the above

CONFIRMATION of receipt of Booking Form and Payment will be emailed to participants as soon as possible . Joining instructions will follow on nearer the time of the rally.

and yet even more on ball joints

In reply to Bernie Shaw's letter on page 11 of the Sept/Oct FP, yes, I must agree with him on the need to fit the spacers and key. When I wrote my response to the original Chris Ryle article [page 34] I had intended to mention this too, but somehow omitted it.

Bernie is right in the comments he makes. If the spacer and shims are not fitted, there is a risk of actually clamping the ball between the two cups if the shims between the retaining cap [426198] and bearing cup are too thick. At best, this would give very stiff steering and rigid suspension movements, but also risk the entire cup and ball assembly rotating in the lower suspension arm and wearing the housing, as Bernie describes. [See footnotes also]

Citroen Spares always supplied the ball, cups and shims as a complete factory-matched assembly and this was meant to be installed as one complete unit ["426613 paired and fitted", according to the parts catalogue]. It was not meant to be assembled with individually sourced bits, which is possible from used parts today. The bearing surfaces of the cups always had a small clearance from the bearing surfaces of the ball to ensure that there was no risk of them being clamped together and to give a channel to hold grease. This was achieved by the spacer and shim between the two cups. In the catalogue these are shown as 426611/01 [2.5 / 2.46mm thick] and 426612 [0.05mm thick "original fitting"]. Citroen refer to both these parts as 'shims', but in this correspondence, it may be clearer for readers to define the thicker one as the 'spacer' and the thinner one as the 'shim'. Since these parts are shown in addition to the complete unit 426613, I assume that they were available separately if required, but I am not sure why that should have been necessary.

So it is the spacer 426611 which Chris Ryle omits and, I assume, also the shim 426612.

In the repair manual [1938-58 edition], operation 120, paragraph 23 and drawing 41, it also says that for both upper and lower swivels, the balls and cups are matched, but "in the case of slight play, it is permissible to remove shim [38] of 0.05mm thickness, BUT ON NO ACCOUNT MUST THE ORIGINAL SHIM [39] BE REMOVED. If play is excessive the whole assembly must be changed." The 'original shim [39]' is what I have defined above as the 'spacer.'

So, it seems permissible to remove the 0.05mm shim between the cups, but this would need to be compensated by the shims between the lower bearing cup and retaining cap [paragraph 23c], or the screw-type adjuster. I have always assumed that you need to remove this shim when wear had increased the clearance between the ball and cups, but Citroen would not accept more than 0.05mm removal, as this would indicate that the hardened surfaces of the ball and cups had been worn away and any subsequent wear would be rapid. Having said that, I must admit to reducing the thickness of the spacer with a piece of flat emery cloth to make an acceptable fit to worn ball and cups. I know that Citroen would not have been happy with that, but now that roads are generally better, mileage low and the acceptance of plenty of greasing, like Chris Ryle, I was prepared to live with it.

You will have realised that these joints are not the easiest type to set up correctly and if you have dismantled one, then almost certainly you will have noticed that there is corrosion on the bearing surfaces where they turn black and slightly rough, even if you are a keen greaser. I assume this is where water can enter through the gaiter joints or be forced in round the lower cap. The black could be from salt if the car is used in winter.

In my view, the design does make the joint very vulnerable to wear and deterioration, but remember, it was Citroen's first ball joint attempt. I think one of the issues here is that there is very little grease-retaining capacity where it needs to be, i.e. between the ball and cups. The effective grease reservoir is that clearance between

the ball and cups, but it's not very big and the grease needs to be on the contact ring where the ball touches the cups. I suspect it's adequate for a few miles after greasing, but is soon pushed away from the critical area so that you are running with almost dry metal-on-metal. Once the grease has been displaced it's difficult to see how it can be regained in this area without re-greasing. This reinforces the need to use the grease gun, both with the ball joints supporting the front end [i.e. jack under the lower arms] and joints 'relaxed' [jack under the cradle], ideally with an assistant turning the steering. By contrast, traditional steering king-pins on a beam axle generally have a bigger grease reservoir, using a slot down their length which brings the grease supply around with each steering movement. The Traction's ball and cups were probably better in its heyday, when suspension movement was increased by carrying a bag of onions, a crate of wine, the mother-in-law and 2 lambs to market on the rough roads of France. On today's smooth roads with lightly loaded cars, there is probably not enough suspension travel to move the balls far enough in the cups to retrieve grease from the edge of the reservoir. The steering movement itself would only keep the ball and cup running on the same 'dry' contact ring.

Chris Ryle also ponders on whether it would have been "easier to design the bottom joint like the top one". My view is that, yes, this should have been possible, but if it was just like the top one you would have a 50-60mm threaded adjuster in an area that was very vulnerable to corrosion. Once rusted, it would be really difficult to shift and I suspect that Citroen felt that 3 small bolts holding on a grease filled cap would be easier to work on. In fact, the alternative adjustable bottom cup [TOC part H4] is just a neater version of the top joint and perhaps we should ask why Citroen didn't fit that instead?

Those are my views on the standard bottom joint, but I have wondered if there isn't an opportunity to improve it with only minor changes. For instance, by grinding some little 'scallop' in the cups to increase grease retention or cutting small grooves in the cups to aid retention and distribution. This compares with the view among vintage engine enthusiasts that hand scraped white-metal bearings are better than machine bored ones, because the scraper marks act as an extra oil reservoir directly on the bearing surface.

Better still, might be to modify the ball and cups to use modern bearing materials. There are a lot of synthetic bearing materials available now which might usefully replace the steel ball and cups. I can envisage cups being made entirely of a self-lubricating material or rust-resisting stainless steel. These could be paired with the contact area of the balls ground and fitted with a stainless steel or compatible synthetic material. There must be some combination of modern materials and sealing that will give a long maintenance-free life, as my everyday car has done 150K miles on its original ball joints. I do have some experience with older versions of these materials, but if members have any recommendations of current bearing materials, then I would be happy to get some made locally to try on my own car. Your comments on this topic would be very welcome.

Footnote A. In 1971, on my first Traction I experienced severe front brake judder. None of the usual checks revealed what was causing this and the drums had been skimmed. I had noticed that the ball joint cups seemed a bit looser in the lower arm housings than I thought they should be, so I felt that correcting this might help. At the time I was a student at a rural agricultural college, with no access to Traction spares or other owners. Remember, this was way before the TOC and the likes of Classic Restorations. Working Traction's were seen as curious and troublesome old cars and the only forum for them was the Citroen Car Club [CCC] and its Citroenian magazine. This was mainly concerned with the joys of 'D-series' ownership and the new GS range, particularly whether they should have self-cancelling indicator switches or not. There was a small section

and yet even more on ball joints

called 'Lt 15 Corner' for Tractions and maybe a few ads for Traction bits. Apart from that, you were on your own. There was a technical enquiry section, where you could write about your Citroen problem and it would be answered by a club expert in the following edition, so that could be at least 2 months to get your reply. No emails then! I needed to get my brakes fixed quicker than that.

I decided to see if the loose cup housings were the cause and felt that I could take up the slack with some fine shims and liberal use of Loctite adhesive, which had only been recently introduced to the motor trade. I remember I had to grind some metal off the edge of the cups because I could not find any shim material thin enough. It all went back together ok and I was very pleased with the result, as it almost completely cured the judder. In fact, I was so pleased that I wrote to Lt 15 Corner proclaiming my success and recommending this fix to other owners. I felt I was now a proper Light 15 owner and assumed that there were lots of others out there who would be glad of this information, but didn't know where they were.

The next issue of Citroenian published my letter, but the one after that had a letter from a member called Fred Annells strongly condemning my actions and stating that if my lower arms were that bad, then they needed changing, not shimming. At the time, I had no idea who this Fred chap was and what he was suggesting for me was just impossible anyway. So I carried on using the car as it was and it stayed that way for thousands of miles. I heard later, that Fred had also reprimanded the Citroenian editor for publishing an article with such a technical error and not consulting him first!

Footnote B. For TOC members that don't know, Fred Annells was a CCC member who lived near Guildford and had a personal collection of Tractions in various stores around the south of England and a workshop in London. He was a serious amateur enthusiast for the Traction and had lived with them throughout

their heydays. Once they became an obsolete model, motorists lost interest in them, particularly Citroen owners, who now had some advanced new cars to attract them. Fred however, remained devoted to the Traction for its technical and historical significance. He became the CCC and probably the national authority on this model. During the 50 -70's when many Tractions were scrapped and spares dumped, Fred had the foresight and understanding to buy up several rare models and spares stocks and thus saved many of today's most collectable cars from scrap. He remained a CCC member but also became a prominent and respected member of the TOC. For anything difficult, the solution was to "ask Fred", at least in the early days of the TOC. Fred died about 5 years ago, but many of today's cars are still running thanks to him and several of his special cars are now in TOC hands.

Tony Hodgekiss



EVENTS DIARY

For up to date information on events – including all overseas events - please check out the Events Page on the TOC web site. www.traction-owners.co.uk

2018		
22nd April	Drive it Day:	Contact your local section coordinator for details of any events.
10th to 12th May	50 ans La Traction Universelle	50 ans La Traction Universelle at the Circuit de Nevers, Magny Cours. More information www.la-traction-universelle.org
18th to 21st May	27th Circuit Historique de Laon	For details contact: Association de la Montée Historique de Laon 9 rue du Bourg, BP 513, 02000 LAON, FRANCE Tél : 03 23 79 83 58 / 00 33 3 23 79 83 58 E.mail : circuit-historique-laon@orange.fr website : http://www.circuit-historique-laon.com/en/
22nd to 24th Jun	42nd Welsh Mountains (Llangollen) TOC Annual Rally,	June 22nd, 23rd, and 24th 2018 Details in this issue
14-18 July	CTAB Brittany Rally	Applications for this event are currently closed, due to organisers' desire to finalise numbers by Autumn 2017. Please contact Martin Nicholson. email vicmarnic@gmail.com , who may be able to obtain more places in the event of a cancellation. There is, consequently, no guarantee of a place.
August	Tracbar Dundee	Tracbar Dundee are organising a raid in Australia. It starts in Brisbane and ends a month later in Perth. For more information www.tracbar-dundee.com

Classified Adverts – Members

Small adverts are free and are for the disposal of vehicles and parts that are their personal property.

Adverts for accommodation are charged at £7.20 including VAT

Advert submission needs to include membership number.

Adverts may be edited or refused, and the Editor cannot guarantee insertion into any specific issue although every effort will be made to publish in the next issue of Floating Power.

The Editor does not accept liability for printers' or clerical errors although care is taken to avoid mistakes.

'Members' advertisements will be inserted for two issues only. If the advertisement is still required beyond this point, then it must be resubmitted to the Editor. Please notify the Editor if you wish to delete the advertisement prior to this.

Adverts can be emailed to the Editor at the address below. For members sending adverts by post, please check current editor's address on page 3.

Classified Adverts – Non Members

£20 inc VAT per insertion.

Trade Display Adverts

From 2015 trade adverts will be available in colour or black & white at 1/4 page only.

Cost of £60 plus VAT per issue.

Please note

All Cars and Parts for Sale adverts appear on the TOC website approximately one week after Floating Power is posted to members.

Please email adverts to:
editor@traction-owners.co.uk



CARS FOR SALE



FOR SALE: Normale 11b. 1955. LHD. Big Boot. Black

During the last seven years the engine has been rebuilt and reconditioned (now runs on unleaded fuel), a reconditioned gearbox has been fitted, the electrics have been converted to twelve volts (with alternator), a stainless steel exhaust has been fitted, an electric cooling fan added and the interior has been re-trimmed. The car is garaged, reliable and used regularly throughout the year. Its agreed insurance value is £15,000. **Offers around £10,000 please. Telephone 0208 835 8161 or email vagabond7@btinternet.com.**

FOR SALE: 1955 Paris built Commercial in black with cream side panels.



This car has been upgraded to an ID engine block with DS head and four speed gearbox and has 12 volt electrics. It is fitted with an electric fan to the radiator and there is an internal heater to the cab. There is also a bespoke stainless exhaust system. This car is well known in TOC circles having done many miles on Rallies, including a 3000 mile journey to the Arctic Circle. **Offers around £14,000 please for this much loved car. Reason for sale is a current restoration project of a 1950 Light fifteen, money & space required.**

Please ring 0115 9118218 or email m.holmes1@ntlworld.com for more information.

PARTS FOR SALE

FOR SALE: Tyres - 165SR400, 185SR400 Michelin X Radial for Post War cars. 130/140X40 and 150/160X40 Michelin SCSS for early cars. Official Michelin Distributors for the UK. Mention you are a TOC member. We also balance Traction wheels for free. www.longstone.com
Tel: 01302 711123
Email: sales@longstonetyres.co.uk

FOR SALE:

Finished/ready to fit body panels *
Front R/H door,(all) £175 *
Rear R/H door (BN) £175 *
all finished in 2-pack Black. *
Big bootlid, hinge holes for Big 15 £175 *
Big boot lower closing panel £40 *
Both halves of bonnet for BN/Big 15 in primer, £300 pair
BN R/H & L/H front closing panels in primer £30 each
Front wings, fitted/repared if necessary on car,for correct fit.
L/H Light 15 £225
R/H Big 15 £225 Both in 2-pack Black.
R/H & L/H BN, in primer, exceptional. £275 each.
Tel Andy on 01339 886290 for more info (Aberdeenshire)

FOR SALE:



Newly made Flying Lady mascot. These are made of brass and are chrome plated. **Please contact Mike Plumb for info on either 01493750818 or Michael. plumb695@btinternet.com**

FOR SALE:

2 Front Wings for a Normale.
2 New hand made Front Wings Left/Right, Primed and ready to paint to your required colour match.
Total Price £900 for both, including postage to UK.



Contact Davy Selfridge Mobile

07729518992 or

Email: davidselfridge52@icloud.com

Photos can be provided after fabrication & before Primer

Davy

FOR SALE:

For traction Avant 165x400 size.
x2 Michelin tyres brand new from club spares £100 each.(never fitted.)
x2 inner tubes for the above brand new.(£15 each)(never fitted)

Bob Wall

3 Woodlands Way, Billingshurst,
West Sussex, RH14 9TB

email: Bob-wall@tesco.net

tel: 01403782174

MEMBER SERVICES

Traction bodywork and servicing/repairs Club member. Newcastle.
James Geddes 07783 259874
james.geddes62@tiscali.co.uk

Traction bodywork and paintwork. Club member. Hull area.
Steve Thompson 01964 533433
stevethompsonmotors@rocketmail.com

PARTS WANTED

WANTED: Wanted: complete rocker shaft assembly for 11D head, including pedestals etc. Condition of shaft not critical. Also pushrods to suit. **John Moon. 01256 354910 or Slough@traction-owners.co.uk**

SPEEDI SLEEVES

A little more from the gearbox club, by Mike Willcock: 'Not the end but possibly the end of the beginning...'

The club has finished it's 3rd 'box, 'boxes 1 & 2 are reserves, this one will, after the NEC, go into my Legere, it is presently safe in the sitting room.

Now, the gearbox transmits motion and power to the drive shafts via the differential flanges and they are sealed to the 'box by 2 diff seals.

Early seals were, I think, leather encased steel, my 1950 seals are rubber/mild steel but in the intervening 67 years they have hardened, the seal lips no longer exist and deep grooves have been worn in the 1950 flanges. I estimate the grooves to be 0.5mm deep, the surfaces are also pitted.

Replacement seals (available from club spares for a fiver) are synthetic rubber bonded to a plastic case, the thin sealing lip is flexible and energised by a spiral tension spring.

Modern, flexible seals will work with reduced diameters but unless the flange surface has a fine finish the thin lip may rapidly wear or tear out. Seals need to be wet to work but driving fast and hot along a Route Nationale is no time to dump your gearbox oil!

Fortunately there's a solution short of new flanges or the metal spraying and grinding of existing flanges.

Four years ago Martin de Little pressed stainless sleeves over a pair of worn flanges, a simple process and not a drop of leaked oil since.

The s/s sleeves are 0.28mm thick and have a better than ground surface, they come with a tool to ensure easy fitting. Here comes quiet, oil tight driving.

99146 SKF Speedi Sleeves are available post free from a number of suppliers through eBay. They cost around £20 each, in Martin's day £9; I blame Brexit.

This may seem a lot to save a few drops of gear oil, but as well as keeping your car clean of gear oil and trapped dirt, you do want to join those other Tractionnistes at the next restaurant don't you?

My own car has had the Speedi Sleeve treatment and the photos are from that operation. The instructions also state that 'Deep wear grooves, scratches or very rough surfaces should be treated with a suitable powdered metal epoxy-type filler. The sleeve must be positioned on the shaft before the filler has hardened.'

The sleeves actually cost me around £35 each in November 2016. and have drastically reduced the leakage from my car to an occasional very small drip, probably from elsewhere on the engine. (Ed)



TOC SHOP

Contact Vanessa Plumpton
for full details on
shop@traction-owners.co.uk
or ring 01243 511 3780

The club shop has the following items of regalia available,
including some sweat shirts and fleeces with the 40th
Anniversary logos on them. All inc. VAT
Minimum Postage £3.35 by Royal Mail



Hi-Vis Jackets	£ 4.80
Polo Shirt	£10.80
Sweatshirt	£13.20
Fleece	£15.60
Key Fobs	£ 8.00
Lapel Badge	£ 3.99
Mugs	£6.00
Grille Badges	£20.00
Binders	£ 6.00





Citroën Classics

Tel: 01784 452299

Owned and operated by Darrin and Kristina Brownhill, Darrin has been repairing Tractions and other classic Citroëns since 1987.

From our premises at Staines-upon-Thames, we offer full mechanical, electrical, bodywork / paint services, in fact anything you need to keep your Traction on the road.

Call us Today!

** We use and stock non-toxic Propylene Glycol coolant **
** EZ electric power steering systems supplied and fitted **



www.citroenclassics.co.uk

Unit 8 Tims Boatyard, Timsway, Staines-upon-Thames,
Surrey TW18 3JY

TOC SPARES HOTLINE

01243 5113780

**Chris Treagust,
98 First Avenue, Batchmere,
Chichester, W Sussex, PO20 7LQ.
Email: chris.treagust@tesco.net**

**Please note, a full spares list
is available on the
club web site at**

www.traction-owners.co.uk

What is Agreed Value?

Agreed value is where the insurer and the owner agree on a fixed value for the insured vehicle when the policy is taken out.

In the event of a total loss, your insurer will reimburse you the fixed amount that was stated at the beginning of the policy (minus the policy excess).

As a Traction Owners' Club member you can agree the value of your car yourself. No documentation, no photographs, no fuss.

www.footmanjames.co.uk



**Footman
James**



Policies from
£76**

Classic insurance redefined.

Tailor your classic car insurance policy to suit your needs.

To discover the Footman James difference, call our friendly UK team for a quote today.

0333 207 6062

or visit footmanjames.co.uk



Part of the Towergate Group



- Classic benefits included*:**
- + Salvage retention
 - + Shows and events
 - + Spare parts (up to a limit of £250)
 - + European motoring (up to 35 days per trip)
- Cover options*:**
- + Breakdown with options to include European cover and Homestart
 - + Agreed value
 - + Driving other classics
 - + Drive to work
 - + Track day cover
 - + Wedding hire cover
 - + and many more

Specialist rates for club members



Classic Car | Classic Bike | Modern Car | Modern Bike | Kit Car | Collectors | Classic Motor Trade | Household

*All cover is subject to insurers terms and conditions, which is available upon request. **Premium example based on: 1957 Morris Minor 1000. Value: £3000. Main policy only and does not include any FJ+ cover options. All premiums assume the vehicle is not the main car and includes Insurance Premium Tax. Male driver aged over 25 years old. 2000 annual limited mileage, and full clean driving licence with no claims or convictions. Member of associated club. Postcode OX10, vehicle garaged with no modifications. Includes a £10 arrangement fee. Footman James is a trading name of Towergate Underwriting Group Limited. Registered in England No.4043759. Registered Address: Towergate House, Eclipse Park, Sittingbourne Road, Maidstone, Kent ME14 3EN. Authorised and regulated by the Financial Conduct Authority. Telephone calls may be recorded. FP ADCLC205.11.14

Our 'BEST' Deal In CLASSIC CAR INSURANCE

Looking for a **NEW** policy or just a great deal on your **RENEWAL**, our classic car policies deliver exceptional cover at very affordable premiums



Single Car Policies from **£75**
Multi-Car Discounts up to **50%**
Modern & Classic Cars on One Policy*
Special Rates for Collections

FREE Agreed Value
FREE Breakdown & Recovery
TOC Member Discounts
Various Mileage Options

Terms & Conditions apply
PBIS only uses High Quality Insurers.
*Subject to Insurers terms please ask for details

Classic Car - Modern Car - Classic 4x4 - Classic Bike - Classic Military - Classic Commercial

01376 574000

www.peterbestinsurance.co.uk



30 YEARS OF QUALITY CLASSIC CAR INSURANCE

Authorised and Regulated by the Financial Conduct Authority

classiline*

INSURANCE

Discounted Insurance For Traction Owners Club Members

Cover Includes:

- UK & Euro Breakdown Cover
- Motor Legal Expenses
- Unlimited Mileage
- Salvage Retention
- Foreign Use

01455 639 000

www.classiclineinsurance.co.uk

Headline sponsors

UP TO 25% DISCOUNT FOR CITROËN TRACTION OWNERS CLUB MEMBERS

/lancasterins @lancaster_ins

LIS.CTO.A6P2017

01480 400 910

www.lancasterinsurance.co.uk

LANCASTER INSURANCE

Policy benefits, features and discounts offered may vary between insurance schemes or cover selected and are subject to underwriting criteria. Lancaster Insurance Services is a trading name of Insurance Factory Limited who are authorised and regulated by the Financial Conduct Authority (No. 306164). For mutual security, calls are recorded and may be monitored for training purposes.

