

THE MAGAZINE OF THE LAGONDA CLUB

Number 132

Spring 1987



ASTON SERVICE-DORSET

RICHARD FORSHAW · IVAN FORSHAW · ROGER FORSHAW, F.C.A.
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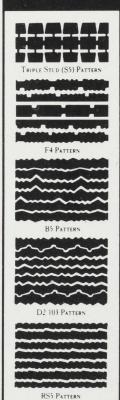
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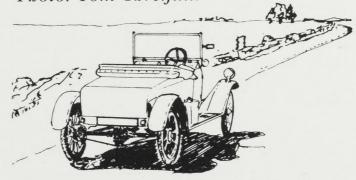
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FRONT COVER:

President, James Crocker, tuning a piano on the 'Wessex' to the approval of Hon. Treasurer, Alan Elliott.

Photo: Tom Threlfall.



Contributions do not necessarily represent the views of the Committee nor of the Editor, and expressed opinions are personal to contributors. No responsibility is accepted for the efficacy of the technical advice offered.

COPY FOR SUMMER "LAGONDA" URGENTLY REQUIRED. Submit to Editor 30 June please.

Out and About.

THE JOYS OF SPRING are with us again. Leading to the dusting down of Lagondas of all shapes and sizes. The same could be said of the owners. The models of both sorts that Jill and I met at the Northern Dinner all seemed to be in a very fine state.

To see Lagondas standing in front of the Monk Fryston Hall bathing in the lights on a clear April evening, then to be so well entertained by owners and friends before, dining and after an excellent meal must be one of lifes greatest pleasures.

The speeches (debates?) are always of a high standard and make the effort worth while. Thankyou to all concerned.

The Vintage racing season is now well under way with the April Silverstone happening on the 25th. It was a wonderful day for it and I am sure that Lagondas were well represented.

Let's hope it is the start of an enjoyable summer.

PUB MEETS

Midlands: Third Thursday in each month at the "Green Dragon", Willington (just off the A38 between Derby and Birmingham).

Southern: Second Wednesday each month at 8.30 p.m. at the Windlemere Golf Course Club House, West End, near Lightwater, Surrey. (Near the junction of the A319 Chobham Road and A322. Exit at Junction 3 if approaching on the M3). Alec Downie is the organiser.

Northern: Joint Lagonda/VSCC meet. Third Thursday in each month at the "Floating Light" nr Marsden, on the Lancashire/Yorkshire border.

London: Jointly with the B.D.C. on the third Tuesday each month at the 'Bishop's Finger' in Smithfield. Easy parking.

North East: First Wednesday in each month at "Pipe & Glass" South Dalton, between Beverley and Malton. Map reference: 965 454, Sheet 106.

Glamorgan: First Thursday with the VSCC, Court Colerman, Glamorgan.

Dorset: First Thursday each month at the Frampton Arms, adjacent to Moreton Rly. Stn. on B3390, Bere Regis. Map reference 780 891, Sheet 194.

Advertising rates in the Magazine are: £25.00 per whole page. Smaller spaces pro rata.

"LAGONDA—A HISTORY OF THE MARQUE"

by Davey & May

Now available from the Secretary at £17.50. Overseas add £2.50 post and packing.

Copy instruction books: 16/80, 2 lt. H/C, 2 lt. L/C, 3/3 ½ lt., M.45, LG.45, LG.6, V.12 £5.00 Copy Meadows Engine Catalogue £2.50 Car Badge £8.00 Lapel Badge—oval, brooch fitting £1.25 Lapel Badge—winged, pin fitting £2.00 Tie-blue or maroon Tervlene £4.00 Key Fob £1.50 Overall badge £1.75 Magazine Binder (holds 12 issues) £3.25 Short history of the Lagonda £0.75 V.12 "Trader" sheets £0.75 Books £17.50 (+ postage & packing £2.50 overseas) = £17.50 UK. Overseas £20.00 Available from the Secretary, Mrs V. E. May 68 Savill Road, Lindfield, Nr. Haywards Heath, Sussex.

Umbrella with Lagonda badge £12.50 Available from Phil Erhardt, c/o W.P. Notcutt Ltd., 44 Church Road, Teddington, Middx TW11 8PB.

Lagonda Club. Fixture List 1987

14/15	Feb	Measham Scatter Rally
7	March	Pomeroy Trophy. Silverstone
	March	Midland AGM/Dinner
3	April	Northern Dinner & Dance. Club Annual Prizegiving Monk Fryston
3	при	Hall
25	April	VSCC Silverstone
2	May	VSCC Northern Rally
t.b.a.	May	Midland Social
t.b.a.	May	Eastern Social. Norfolk
t.b.a.	May	Southern Picnic
31	May	Lagonda Fete. Brooklands Museum
6	June	Colerne Sprint
7	June	Brooklands, the next 80 years
20	June	Dorset Social—Wool
21	June	Rally Tour. Hants/Dorset
21	June	Stanley Cup. Classic Trial
27	June	VSCC Silverstone. Followed by Evening Social. Green Man
28	June	Brookland Society Reunion
4	July	Northern Gymkhana. Sandtoft Shelsley Walsh Hill Climb.
		VSCC/MAC
t.b.a.	July	Annual AML Factory Visit
t.b.a.	July	Hartley Wintney-Phoenix Rally
25/26	July	VSCC Oulton Park Race Meeting and Concours
t.b.a.	August	Midland Area.
1	August	Club Evening Pub Meet. Gloucester Area. Venue t.b.a.
1/2	August	Prescott Hill Climb
7	August	Cambridge Area Meeting. Barrington Evening
9	August	Shuttleworth Joint Meeting
16	August	Michelham Priory
29	August	BDC Silverstone. Lagonda Race
30	August	Cadwell Park Race Meeting
t.b.a.	September	Club AGM
19		VSCC Donnington Park
25	October	VSCC Eastern Rally
8		Lakeland Weekend. t.b.a.
29		London Film Show
t.b.a.	December	Hull and East Riding Area Annual Dinner

1986 Awards.

Michael	Alistair Barker	Raine	Richard Gabriel
Fox	John Harris	Committee	Arnold Davey
Northern	D Price	Fox Le Mans	Ian Ross
Densham	Dick Sage	Expensive Noises	Dennis Keen
Bentley (WO)	Colin Bugler	Gostling	Roger Cooke
Car Club	H Jetzer	Night Trial	Alan Elliott
Allison	David Ayres	Gaber	Alistair Barker

Miss Squire Northern Gymkhana 2nd D Hill 3rd **BDC** Lagonda Race 2nd Alistair Barker Colin Bugler 3rd John Harris 4th Brian Ricketts 2nd New Forest Rally Phil Erhardt 3rd AGM Concours 2/3-Litre Class 1st Roger Firth 2nd Peter Evans 1st Alec Downie 4-Litre Class 2nd Roger Cooke

3-Litre Exhaust Manifolds.

JUST ABOUT EVERYONE to whom I've spoken on the subject of the 3-litre engine, is full of praise for the unit except on the matter of the exhaust manifold design; particularly the threaded section upon which engages the phospher-bronze pipe retaining ring.

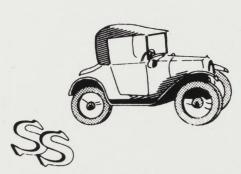
When I re-built mine, I received the usual problem of obtaining a really satisfactory gas-tight seal between the pipeend and the spherical seating-ring and was particularly apprehensive about the torque one had to apply in order to achieve anything like the required mechanical 'stiffness' of the whole assembly.

The number of manifolds—and these are of course all around 50 years old now—which have have been welded at same time or another, bears witness to the problem.

In addition, both of mine had succumbed to the averages of useage and temperature to the point where "thread-chasing" and turning new, under-sized locking-rings seemed a bit of a waste of effort particularly, as one still had manifolds which didn't look very good due to the amount of 'pitting' on the branches because of prolonged exposure prior to my rescuing the car.

Fortunately, a good friend of mine has one of those splendid family, foundry-companies which have survived, indeed, prospered due to their sheer expertise and because they had the sound business sense not to try and compete with automated units making tens of thousands off.

By utilising an old, spare manifold as a pattern and modifying the outlet to a triangular flange instead of the threaded end, new core-boxes etc were produced and the company have now cast six pairs of 3-litre exhaust manifolds in Grade 17 iron, to BS 1452; this being infinitely superior material to the original and as specified of the top-class prototype



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enginge manifold work for which the company is internationally honoured.

One outlet flange is sized to accept a st'd BMC triangular copper-asbestos gasket, in addition to which, the flange is recessed, in order to take a 2" nominal bore compression being (as used by Ford and Triumph)—so that either type of sealing arrangement can be used.

Three tapped holes for A.T. Studs (or clearance holes for 5/16" H.T. bolts), can be utilised and on my own car, I am using stub-ended exhaust pipes with 'loose' mild steel, galvanised backing flanges.

Actually, if you use a face-gasket in conjunction with a centre compression

ring, the stub-end face on the exhaust pipe, will compress the ring and as it does so, the face of the making flange will make a further seal via the gasket.

All in, all, a very satisfactory joint. I hadn't originally intended to produce these other than for my own use, but as we now have full pattern-sets (and four spare pairs of manifolds,) they are available at a reasonable figure, (unmachined), to anyone who is interested.

Telephone; Home: 07466-382.

Works: 021-558-5814.

John Downes, Ryder, 'Rock Cottage', Hopstone, Claverley, Shropshire.

JOHN DOWNES-RYDER

Old Lags Meet at Famous London Brewery.



The assembled company at the Young's Brewery. Photo: Robin Wodehouse.

ROBIN WODEHOUSE arranged the gathering at Young's Brewery, beside the Thames at Wandsworth, where Andrew McClure a Master Brewer, likes old motor cars and organised a Saturday visit for us. We all met in the Sample Room.

Employees total hundreds but this is very much a family business. The modern plant is all highly polished stainless steel making good beer from traditional ingredients only. However, the old covered copper vats have been preserved, together with two steam beam engines which pumped licquor (water is unmentionable in a brewery) around the plant until 1970. One of these engines started life before Queen Victoria was crowned.

Lagonda drivers were naturally interested and, being addicted to early forms of transport, had to see the horses which deliver supplies locally. All twenty

are black Shires with white feather, real giants—the tallest stands 19.2 hands. A few peppermints will make you a friend for life. Not long ago, in a Christmas Road Test, "Motor" plotted miles per hour against buckets of oats and a very steep acceleration curve flattening off at three miles an hour. The drivers normally wear safety belts!

In this walled oasis amid London traffic there live also the Company Mascot, a large ram, two donkeys, one goat, about thirty ducks, geese and pheasants. Children see a realistic Nativity scene set out at Christmas. Steve Lawrence showed us that he understands four-legged affairs as well by riding bareback on the ram (Steve's not a big, heavy man) and by explaining the finer points of managing a team of horses.

At lunch in their adjoining pub, we were able to thank the two Masters Brewers and former Transport Manager. Those present included:-11.1 HP Lawrence; 14/60 Smith; 2 L Benson, Lewis, Wakeley, Wodehouse; 3 L Ody; 4½ L Bush, Hare, Wills.

LEPUS

Lagonda Moves Into the 1990's.

SIGNIFICANT STYLING CHANGES to take the Lagonda into the 1990's have been announced by Aston Martin.

The Lagonda was unveiled in 1976, and was immediately acclaimed for its eyecatching looks.

"Since then the appearance has changed little, and even now it still turns heads," said Victor Gauntlett, Aston Martin's Executive Chairman. "Biased I may be, but few would argue that the Lagonda is as distinctive and admired today as it was more than a decade ago".

The changes, said Gauntlett, are a "natural evolution" of the original concept.

"I think one could say that as the lady has matured, the curves have become fuller". So the sharp edges which so characterised William Towns' 1976 concept, and which, says Gauntlett, "have stood the test of time", have been softened throughout.

Other changes include moving the fuelfilter caps from the C-posts to the base of the rear screen, deleting the pop-up headlamps and re-locating them in a new nose panel, and the fitment of fog-lights in the front spoiler.

The alloy wheels are up from 15 in. to 16 in. and are fitted with lower-profile Avon tyres, while subtle aerodynamic additions include sill skirts and front and rear undertrays.

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"William Towns and our engineers were briefed to update the Lagonda styling without ruining its outstandingly good looks," said Gauntlett. "The fact that every body panel is different, yet the 1976

concept has been retained, indicates they have accomplished that".

The 1987 Lagonda made its world debut at the Geneva Show, on Thursday March 5.

ASTON MARTIN LAGONDA



The refined lines of the new car. Photo: Aston Martin Lagonda.

Book Review.

INTERNATIONAL CAR COLLECTOR'S YEARBOOK 1 Published by Editors Des Frois Continents, S.A. Lausanne. 228 pp and indices. Price: £29.95.

THIS IS A LARGE AND COMPREHENSIVE book which deals with the events and activities of the world of period and classic car collections during the past year. It comes from the same publishing house as the well-known and highly respected 'Automobile Year' and has the same stamp of authority as its sister journal.

The book divides into six sections each dealing with a particular aspect of car collecting with reports from the car museums and private collections; Auctions and Sales, Historic Car Races and Events, etc. Reviews of new books on the subject are a prominent feature—this issue has details of some forty-five titles from world-

index sources

Naturally there is an abundance of photographs in colour which adds to the appeal of this book especially those in a feature article on the fabulous collection of cars owned by a Gtrislaine Maky of Belgium—some 800 vehicles in total—who with a team of dedicated craftsmen restores some eight cars a year before putting them on permanent display.

For anyone whose business lies in the world of car collections as well as motoring journalists and authors together with the everyday car buff, this book will provide a wealth of information. The fact that it is to be an annual publication means that the long term purchase should also invest in specially strengthened bookselves.

A. W. MAY



Midland Notes.

MY ORGANISED VISIT TO AML this year is set for Wednesday 22nd July—another fine sunny day is forecast.

Members wishing to spend a most interesting afternoon, please contact me on 0602 325356 evenings or at work—0602 608151 ext. 228. Friends are welcome provided they arrive in a Lagonda. This year I am limited to a maximum of 16, so I would appreciate that anyone booking a place and subsequently finding they can't get, to inform me a.s.a.p.

We meet at the Factory in Newport Pagnell around noon, partake of refreshment ready for the grand tour at 14.00.

I intend to organise a Sunday at Crich Tram Museum (Derbyshire) if I can muster enough support. Anyone arriving in a real car will be admitted free & be assured of secure parking facilities within the museum grounds.

Contact me if you are interested. N.B. Not restricted to Lagondas.

The attendance at the 'Green Dragon' has improved slightly—there were 7 of us at the November meet. If this continues I will have to consider moving to a larger pub. Should anyone decide to swell the numbers, join us on the 3rd Thursday of each month at Willington. It is, after all, your Club, and is only as good as you make it. If you are not interested in the social side but still use your Lagonda, the help, tips etc., can be most helpful in keeping the car on the road.

H. TAYLOR, Midlands Secretary.

Michelham Meanderings.



Raymond Wickham, 1934 M45 Tourer. Photo: Courtesy Eastbourne Gazette & Herald.

THE HISTORIC SITE of Michelham Priory near Hailsham in East Sussex, paid host one Sunday afternoon last August to a historic "collection" of a different kind—that of

a selection of vintage and classic cars joining together for the annual picnic of the Lagonda Club organised by Valerie May. The popularity of this attractive venue does not seem to lessen and a number of familiar faces were to be seen as the cars arrived late morning to assemble on the lawns near the Augustinian priory. Invitations to attend are extended to likeminded clubs in the Southern region and so active support was received from Alvis, Bentley, Aston Martin and M.G. amongst others.

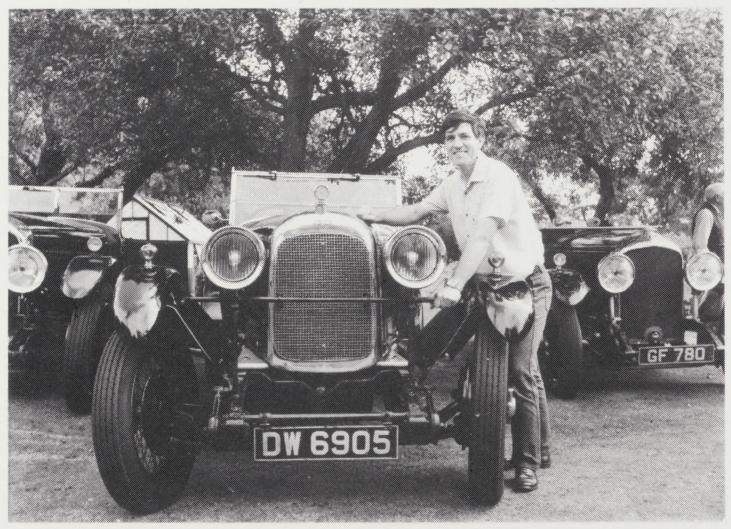
Of Lagondas, amongst those who attended were Raymond Wickham from near Tunbridge Wells in his 1934 M.45 open tourer (still enjoying driving in his 86th year), Richard Hare in his very fine LG.45 drophead coupe, Peter and Ann Sowle from Rye driving a 2-litre low chassis 1930 tourer, and Stephen Benson with his 1928 high chassis 2-litre Speed

model. Six assorted Alvis and five Bentleys featured strongly in the line-up of cars, and Paul Foulkes-Halbard's 1931 Alfa Romeo with an 8 cylinder 2.6-litre engine created a lot of interest.

Owned by the Sussex Archaeological Society, the Priory offers much for the visitor to see—apart from the historic building itself with its interesting rooms and exhibits, there are the extensive grounds bounded by a moat, a Tudor barn, 14th century Gatehouse, a working Watermill, and a restaurant and cafeteria.

If you have not sampled this event before, why not try to come this year. Details will appear in the appropriate Newsletter but the date is Sunday, 16th August.

TONY MAY



Stephen Benson, 1928 2-litre H.C. Tourer. Photo: Courtesy Eastbourne Gazette & Herald.

MAGAZINE CONTRIBUTIONS BY:

SUMMER: AUTUMN:

30th June 30th September WINTER: SPRING:

31st December 30th March

In Register.

MORE FROM A DESIGNER'S NOTEBOOK

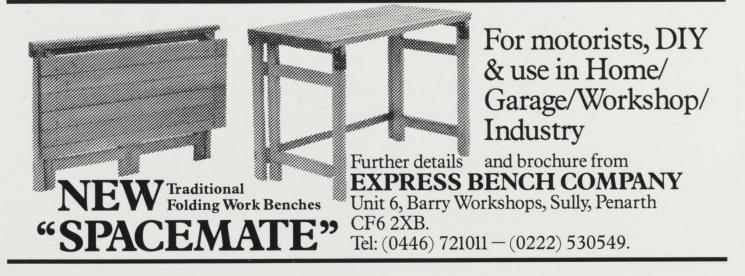
some issues ago I related, and commented upon, some of the fascinating pages from Charles Sewell's 1936-1939 notebooks. The article was well received and I am encouraged to carry on with the story.

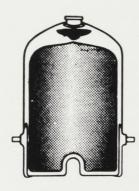
One whole book is devoted to the valve gear on V12s and although not dated, internal evidence shows it to be late 1939. The first few pages set out the six different sorts of V12 valve spring in considerable detail; these being the Sanction 1, inner and outer, Sanction 2 inner and outer, and the special racing springs for Le Mans, inner and outer. I hadn't realised just how different the S1 and S2 springs were, and for the sake of posterity I will set out some of the key figures:-

So the S2 valves, although made of the same thickness wire, are softer than the S1 variety, despite having more coils in each case. Presumably the steel specification or the heat treatment must have been changed to achieve this. I also presume these are alloys steels, as the maximum stresses are on the high side for a plain carbon steel in 1939.

The special valve springs for the Le Mans cars, as designed by Lagonda, were stiffer than standard, as you might expect, and had more coils of thicker wire. However, for some reason never explained, perhaps delivery dates, W.O. went to Eaton in the United States for the springs actually used in the race and Eaton supplied springs to

	S	1	\$2	
	Inner	Outer	Inner	Outer
Wire size Mean dia. Total coils Free coils Rate	LH Helix 0.104 (12swg) 0.869 7 5½ 52.7 lb/in.	RH Helix 0.160 (8swg) 1.140 5½ 4 145.7 lb/in.	LH Helix 0.104 0.869 8½ 7 36.7 lb/in.	RH Helix 0.160 1.140 6½ 5 127.2 lb/in.
Combined rate	198.4 lb/in.		163.9 lb/in.	
Total load (valve closed) (valve open) Corrected Max. stress	42.7 lb 130.5 lb 86300 lb/in ²	79600 lb/in²	61.6 lb 130.5 lb 89500 lb/in ²	95.1 lb 81500 lb/in²







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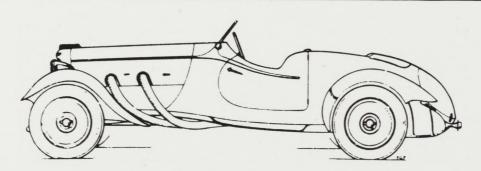
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their own design and not to Lagondas. Charles Sewell set about analysing these springs and there is a prominent note at the top of the relevant page "These springs broke at Le Mans 1939". He didn't have any design dimensions to go on, so he measured several samples.

very complex and needs a computer to solve properly. For example, the torsion loads are independent of engine speed up to the valve float speed and only fatigue loads are influenced by the rate of opening and closing.

At the end of this exercise, no obvious

	Lagonda		Eaton	
	Inner	Outer	Inner	Outer
Wire size Mean dia. Total coils Free coils Rate	LH Helix 0.116 (11swg) 0.860 10½ 9 45.6 lb/in.	RH Helix 0.176 (7swg) 1.163 8 6½ 135 lb/in.	LH Helix 0.113 (11½ US swg) 0.861 75% 66 lb/in.	RH Helix 0.170 (7½ US swg) 1.155 6¼ 184 lb/in.
Combined rate	180.6	lb/in.	250 lb/in.	
Total load (valve closed) (valve open) Corrected Max. stress	76000 lb/in²	76.8 lb 156 lb 74200 lb/in ²	47 lb 179 lb 78600 lb/in ²	53 lb 158 lb 75200 lb/in ²

I must say the samples were not very consistent, a bad omen, with the number of coils varying from 7% to 7%, for example. The Eaton design produced springs notably stiffer than the Lagonda one and also permitted slightly higher stresses, but it is notable that both sets are less highly stressed than the production model. This must be in the interests of longevity, since a racing engine spends so much of its time at, or approaching, full revs.

He then set about calculating the natural frequency of vibration of the outer springs, which turned out to be 25400 vibrations/minute, which corresponds to an engine speed of 50800 rpm; not likely to be a problem. In fact designers at that time sought a natural frequency of close to 25000 v/m. It did mean that the tenth harmonic coincided with 5080 rpm and it may be that the drivers had been told to not exceed 5000 rpm in the interests of reliability and that prolonged running at that speed had destroyed the valve springs. On the other hand, most designers would ignore all harmonics beyond about the sixth as the degree of excitation is so small. The pattern of loading on valve springs is design fault had emerged, so Charles set about exploring the limits of the production valve gear, to see if that would be suitable for racing. Incidentally, the Le Mans engines were stressed for 6200 rpm, whatever it said on the rev. counter, but during his calculations Charles found that the valve springs wouldn't quite permit this and valve float would have set in. Well, he thought he had and said so, but re-examining his calculations afresh there are two mistakes, one algebraic and the other arithmetic, and in fact the Eaton springs were good for 6200 rpm, plus a tiny margin.

The Le Mans engines had some unexpected modifications. For example, the tappet face radius was increased to $2\frac{1}{2}$ in. from the $1\frac{3}{4}$ in. of the S2 engine. (S1 engines had $1\frac{1}{4}$ in.). The inlet valve throat diameter was reduced to one and five-sixteenths of an inch from the production one and seven-sixteenths. (They were different castings anyway). You would expect the camshafts to be different and they were, with a lift of 0.465 in. compared with 0.437 on the standard article.

The upshot of the work was that a

production exhaust camshaft with production S2 valve springs, but with the 2½ in. tappet radius was good for 6000 rpm, much the same as the special springs had given, and that totally standard S2 valve gear was good for 5750 rpm. Of course, power output and longevity didn't enter these sums, they were just to establish the safe limits of the existing hardware.

And there, tantalisingly, Charles Sewell's entries stop and the following pages are in another hand, dated September 1939. The new man sets about detailed but mundane analyses of inertia loads on connecting rods and pistons, centrifugal forces on crankpins, and the like.

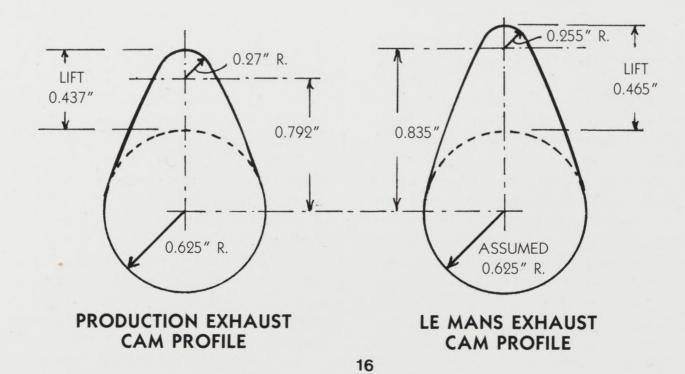
What have we learned from all this? Well, not what I hoped to find; the reason for the valve spring failures at Le Mans. Perhaps they were just badly made. Certainly the inconsistencies between samples must have been a bit alarming. I don't think the tenth harmonic coincidence means anything and I suspect that the drivers changed up at 5500 rpm in the race as this was the known peak power point. On the other hand, if the cars sustained 120 mph down the long Mulsanne straight, this represents as near as dammit 5000 rpm with the gearing in use.

If anyone wants to make Le Mans V12

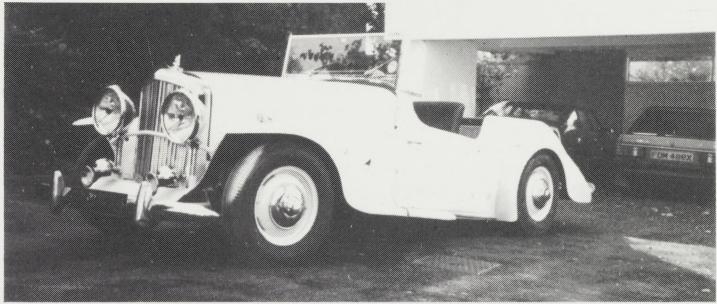
camshafts, there are enough dimensions in Sewell's papers to have a go, assuming that they made new ones from scratch and didn't reduce the base circle diameter. This is often done to develop more lift from a standard cam, but if you are having special camshafts anyway, there is little point, as it tends to use up the tappet adjustment unnecessarily. The diagram shows the principal dimensions in inches. To develop the profile accurately you need Donald Bastow's book "W.O. Bentley-Engineer" where in Fig. 8-10 the detailed properties of the S1 camshaft are given, although it will be necessary to replot lift against angular rotation to establish the changed shape due to the increased lift. The inlet cam has less lift, by the way, at 0.4 in. compared with 0.437. Nothing was ever said about Le Mans inlet cams, and I imagine that exhaust and inlet were the same. A strange anomaly with the S1 camshaft is that the exhaust cam profile produces constant acceleration of the valve but the inlet doesn't. You have to generate quite a complicated curve to get constant acceleration and I suspect that for racing cams they wouldn't bother.

One last point. The Le Mans compression ratio was 8.8 to one, compared with 7 to 1 standard. W.O. said 8.5 to mislead his rivals at the time.

ARNOLD DAVEY



1956 Lagonda (cont'd).



I WAS ASTONISHED to realise that my last report on the conversion of my Lagonda Tickford bodied saloon to an open tourer appeared in the 1984 winter edition of the Lagonda magazine. The explanation of this rapid passage of time was found when I read my progress report.

The panel beater attended once a week for three hours and considerable difficulty was encountered with the aluminium welding which resulted in very slow progress. When this was completed front and rear wings had to be provided.

Assurance was given that it would take six weeks for their completion but, in point of fact, took six months. Much to my regret the shape of the wings was not in accordance with my requests but were acceptable. Acceptable, that is, with the exception of the wing supports which were made out of flat bars. These had to be reinforced to prevent them emulating a bird in flight. In addition the running boards were too low and had to be adapted.

In between times the rewiring was completed, headlamps obtained, louvres for the bonnet sides made, a dashboard constructed and a template made for the windscreen. The latter was made for a very reasonable price by the Star Engineering of Caerleon South Wales.

Eventually all the various parts were assembled and painting completed although the completion of the hood

frame, hood and side screens is awaited.

After many years of standing idle the engine fired without difficulty much to my relief. I was able to take the car on the road for the first time. I was so pleased that, as a reward for her uncomplaining neglect, I offered to take my wife for a run. (The upholstery had been completed by then).

Much to my regret and embarrassment, we had not gone more than four miles when there was a sudden loss of power. Fortunately there was sufficient power to allow me to ignominiously crawl home. The cause of the failure was found to be due to a bent valve which I am not able to explain as the engine had had a very expensive complete overhaul before I acquired the car and had not been taxed since.

After removal of the head and inserting a new valve, the engine was reassembled and all is well after 300 miles of motoring.

Problems are not altogether over, however. The petrol gauge keeps on blowing a fuse, the N/S traffic light only works intermittently, and after a run the ammeter discharges madly when the brake pedal is depressed! These things are sent to try us and they certainly add interest to the work and in any event I look forward to the sunny days ahead when the 3-litres come into their own.

E. PARRY-JONES

For non-lag radiator see previous article.

Photo: Edward Parry-Jones.

How To Succeed In Reliability Trials.

Major W. H. Oates, O.B.E., the writer of this article, has been intimately connected with the light car movement since its inception. He has been a prominent competitor at Brooklands and in innumerable open competitions. At the wheel of Lagonda cars, he has gained a very large number of awards.

who scores the largest number of successes in reliability trials, for next in importance to handling a reliable make of car is exercising care and discretion in the manner in which the car is driven. But, no matter how good a car may be, its driver will never win gold medals unless he first studies the regulations of the event very carefully indeed; I would go so far as to say, in fact, that he should almost learn them off by heart.

Having taken this first and all-important step, the next thing to remember is that accurate timekeeping is vital; in consequence, it is essential not to depend upon only one time-piece. My own method is to use a good dashboard clock as a rough guide to the time and a very accurate stop-watch with which to check it. A good speedometer is almost essential, one of the trip variety being preferred to the cheaper type, which cannot be set to zero at the start of an event.

There are some regular competitors in competitions who set their watches to standard time—that is, the first man's time—at the start of the event, but, personally, I prefer to work out my own time for the various places along the route and keep my watches set at Greenwich or Summer Time as the case may be.

Personally, I find it less tiring and more satisfactory to run at an average speed of almost exactly 20 m.p.h. and thus avoid long waits to lose time before running in to checks. In some events, such as the Motor Cycling Club's Trials, where 10 minutes' tolerance either way of schedule time is permitted, I usually run about three minutes early, but where smaller tolerances than 10 minutes are allowed I



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When Tyres are Troublesome

Punctures, of course, can be guarded against only by using really good tyres, but even so the need for changing a wheel arises fairly often. This operation, with the aid of the passenger who always accompanies me in reliability trials, takes about three minutes, although we have done it in two when time has been short.

Balloon tyres impress me as being far superior to the high-pressure variety for trials work, and if chains are used in addition the likelihood of being stopped even on the most absurdly freak hills is very remote. Parsons chains I have found entirely satisfactory, but they take a long time to fit and, althouth I always carry them, I sometimes use short lengths of chain secured around the tyre and rim with a strap; three of these on each wheel is quite sufficient for the average Colonial section.

I am asked sometimes whether the job of getting the car ready for a reliability trial is not very tedious. Up to a point it is.

The most important thing is to make sure that the petrol system is absolutely clean and that the filter is of a reliable type. Personally. I have found the standard Lagonda filter, taking the form of a tubular gauze extending upwards from the petrol outlet of the tank, entirely satisfactory. Before a big event I always drain the petrol tank, wash it out with a gallon or so of clean petrol poured in through a chamoisleather filter; make sure that the petrol pipe is absolutely clear and strip down the carburetter and clean every part—a choked jet has robbed many a good performance of the award of a gold medal.

A new set of plugs is fitted by many drivers before the start of every event, but, for my own part, I do not find it necessary to replace plugs until they have covered about 10,000 miles.

It is always a good plan when preparing for an event to drain the old oil from the engine sump and replace it with new, as competition work means very hard driving and frequent spells of full throttle on bottom gear. It is most important for a car which is to be used in competitions to have plenty of steering lock, and in this respect Lagondas are by no means deficient; but for those who run cars which are unable to turn in a circle of 35 ft. I advise seeking some means, such as judicious filing around the stub axle, for increasing their lock, as a greater turning circle than that which I have named puts the driver at a big disadvantage.

Low Gears Helpful

I find even with a 1,500 c.c. saloon, with its full equipment and one passenger beside the driver, that the standard Lagonda gear ratios of 5, 9.3 and 17.5 to 1 are quite suitable and have never myself had recourse to freak gearing. At the same time it cannot be denied that the newcomer to competition work would be well advised to have a bottom gear ratio in the neighbourhood of 20 to 1 if he wishes to be successful during the early stages of his competition career.

During my lengthy experience in competition work I have noticed on numerous occasions that certain competitors delight in making much noise and getting off as quickly as possible from the starting line, also in passing as many competitors as they can at ridiculous speeds, and then having a long wait before entering a check, much to the annoyance of serious competitors and the general public. This, I can assure you, is a very foolish practice.

In conclusion, I cannot over-emphasize the need for keeping all the mechanical parts of the car in proper adjustment and every nut and bolt tight. A successful competition car need not be a freak, but it must essentially be maintained in firstclass running order.

Aspirants for competition successes must not assume from this that a car with a big mileage cannot be a gold-medal winner, for the saloon which I drove last year was still gaining premier awards when its total mileage was in excess of twenty thousand.

W. H. OATS

Reprinted from The Light Car and Cycle Car, May 29, 1925.

2-Litre YW 9207, Part of a Story.



YW 9207.

ON RECEIVING NUMBER 131 of the Lagonda Magazine my eye fell immediately on the number plate YW 9207 on the two-litre depicted on the front cover. This has prompted me to write and provide a bit of the past history of this car probably known only to me.

I came to own YW 9207 in 1954 by rather unexpected circumstances. A work

Photos: Alan Audsley.

colleague of mine was impressed with the two litre after being a passenger in my 1929 High Chassis Tourer, PG 402. (No 33 in the old 2-Litre Register).

Desiring then to own one of these cars he watched the advertisements and soon learnt of one for sale in Banbury. I went with him to help him check its condition and he bought it. Within a couple of weeks

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Pool Road, Pool in Wharfedale, Otley, West Yorkshire LS21 1EG Tel: Arthington (0532) 843434 he admitted his mistake in buying it as he saw that there was little chance of his ever mastering the gearbox. I liked the car, bought it from him and sold PG 402.

I believe YW 9207 started life in 1928 as a saloon but in 1936 a Walker drop head

wheels. (The original layshaft spacers would then, of course have to be replaced).

At one of the Club pub meets I was talking "Gearboxes" to another member and he offered me a ZE S2 box if I cared



coupe body was fitted. I liked this car on account of the quality of this body and in particular the degree of weather protection it provided. It was exceedingly comfortable and luxuriously fitted out.

Opening the boot revealed the spare wheel and the petrol tank and room for practically nothing else. Although still a very awkward shape I improved the boot capacity by mounting the spare wheel on the outside of the boot.

The contact faces of the intermediate gear wheels had receeded through years of gear changing and the box was far from quiet. I did what I had done previously to one of these boxes and that was to strip the box and fit different length spacers between the layshaft wheels to reposition the wheels nearer to their counterparts. Not done to the extent of prejudicing neutral this increased the effective tooth contact area and gave renewed life to these wheels. This put back the day that I would have to suffer the cost of new pairs of

to collect it from behind his front garden hedge at Kew. This I did with enthusiastic haste. The ZE was of course the close ratio "Round" box and S3 was for Silent Third, the 3rd gear wheels being helical constant mesh, engaged by dogs as was, of course top gear. I fitted this box and thoroughly enjoyed its quietness as well as its ease of engagement.

The engine started to show signs of needing fairly costly overhaul. I acquired a sound low chassis engine ex GO 1907 but realised that there were certain problems in fitting it into a high chassis frame. I cut a saddle shape out of the front cross member and slightly arched the underside of the radiator, thus making space for the front mounted dynamo of the low chassis engine. I seem to remember that there was slight adjustment to be made in the region of the exhaust manifold but otherwise the engine fitted.

Some corrosion on the front wings caught my attention and I decided on some

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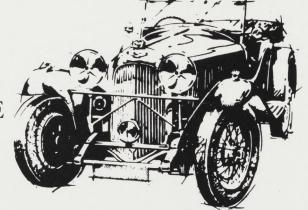
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rather drastic action. Modelled to a degree on the form of the Citroen Light Fifteen front wings I removed a mass of heavy sheet metal, removing all the corrosion and lightening the car at the same time. This considerably changed the appearance of the car and in my own opinion was more attractive.

Lack of adequate covered space and the arrival in my life of a company car brought about the eventual parting with this car. It went to Ben Walker at Sunninghill and thereafter I lost touch with it. What happened to PG 402 or to the 11.9 "Titus"

XN 4927 we do not know. The other 11.9 we owned, BC 6389 is in Freda Roberts good hands.

It is good to see that YW 9207 has reappeared restored to authentic form. From the photograph on the cover of the magazine it appears that it has a high chassis engine again but I suspect that I can see the cut out that I made in the base of the radiator to accommodate the low chassis dynamo. Beyond this I can only recognise the number plate!

ALAN AUDSLEY.



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Letters to the Editor.

Strathearn House, London W2 2NQ

Dear Sir

2-litre Supercharged Cars

Further to Dick Raynes' letter in the winter 1986 "Lag Mag" I report that I too am preparing a 2-litre Supercharged car.

It was running in a normally aspirated state when "retired" from the road owned, at that time, by Arthur Brend. The car was still recorded in the membership register in 1962 but was certainly dismantled in 1963 or 1964. When I acquired it from Trevor Peerless the Camshafts were wrapped in a newspaper dated 17th March 1963 which gives some clues as to what happened and when.

The car had suffered severe damage to the front near side including a bent chassis—presumably the cause of its dismemberment.

I acquired the car last year and was fortunate enough to persuade "the Captain" to part with a blower and its drive train and the car is well on the restoration trail at Peter Whenman's.

For the record, the chassis is OH 9996 and it was registered KY 2218.

Arthur Brend must have been something of a collector: he had two 2-litres and a Rapier. GT 910 (2-Ltr Supercharged) is now owned by P. Ridout (R15) but BWB 145 (Rapier) is no longer in the club. Exhaustive reading of those early "Lag Mags" has elicited no trace of Arthur Brend

but I do know that by 1968 he was living in Nottingham with BWB 145.

I wonder if any other (Nottinghamshire) Member knows what become of Arthur Granville Brend or his Rapier?

SIMON CARREL

10 Hill Rise, Nottingham

Dear Sir

I was in contact with Alan Audsley, several weeks ago, and I asked him if he could put together something about the car on the cover of the winter Mag. Please find enclosed contribution.

Apparently he was the Club Secretary many years ago and receives the Magazine in tribute of services rendered, although it is still mailed to an address he left in 1965. He enquired as to the possibility of being entered on the posting list for the Newsletter and I said I would inform the Committee accordingly.

The photographs enclosed, he thought, might be of interest.

HARRY TAYLOR See article '2-litre YW 9207, Part of a Story' in this issue. ED.

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Richard Hare & Sheila Burke, 1937 LG45 Tourer. Photo: Courtesy Eastbourne Gazette & Herald.



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