



L A G O N D A M 4 5







F O R W A R D

This is a story concerning Lagonda, and very special M45 Lagonda, AUF 77, and the Peking Paris Motor Challenge. It is a heady mix.

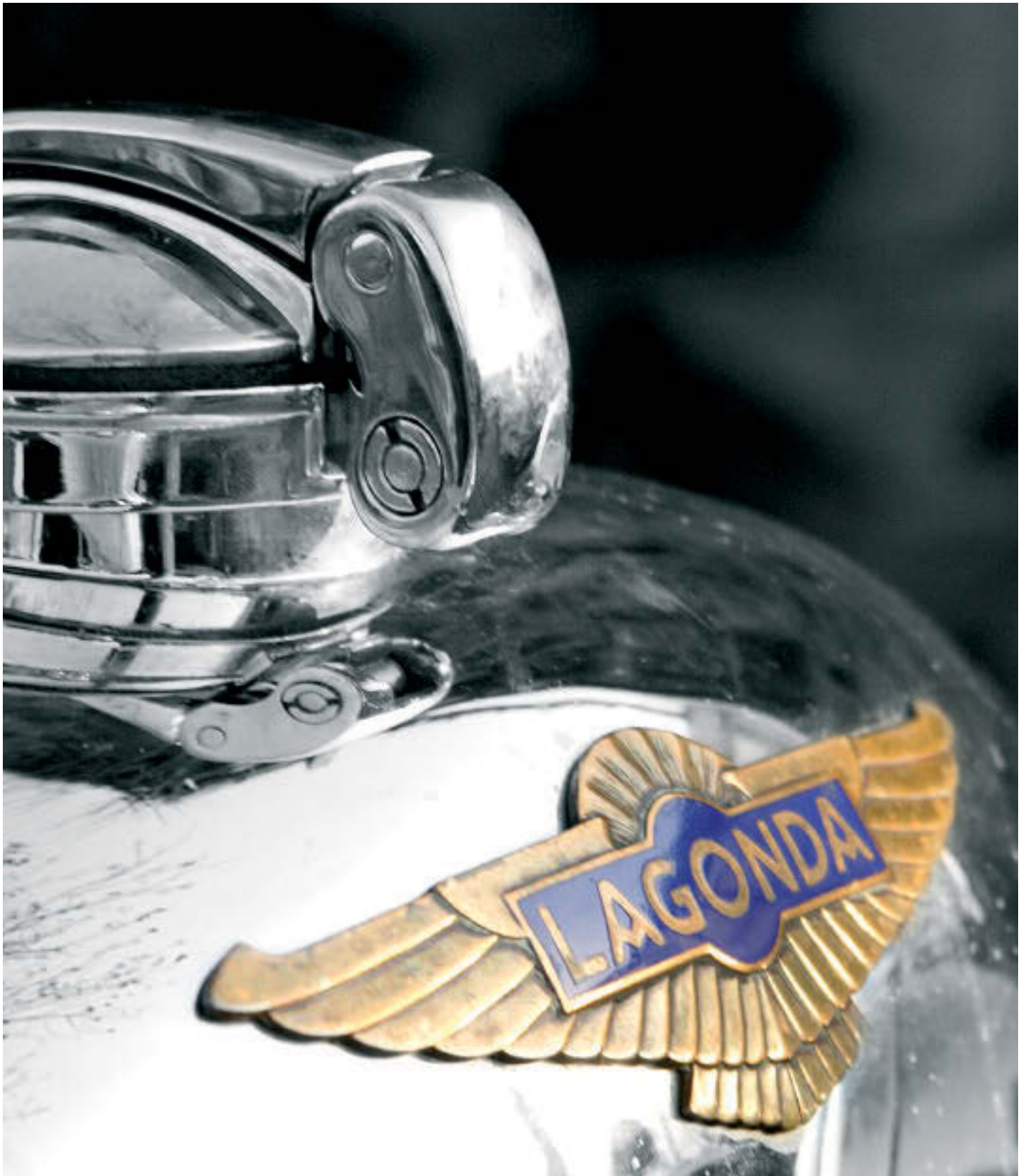
The purpose behind the commissioning and producing of this book is several fold. First to celebrate Lagonda and a wonderful old car that have given countless people a great deal of pleasure. Second it is to document her just completed meticulous restoration and finally to describe the Peking Paris Motor Challenge and her greatest adventure to come. AUF 77 is a 4.5 litre M45 Lagonda Sedan de Ville. She was built in 1934 and clothed by an elegant Sedan de Ville body, constructed by Lancefield Coachworks of London to a commission from her first owner, Major Maurice Cohn, United State Military Attaché in London.

It is important to give my hearty congratulations and warm personal thanks to many who have given freely of their time to restore this wonderful old car and to

prepare her for her greatest adventure. They include our many loyal suppliers and collaborators, without whom we could not possibly have achieved what we have. To them all I owe a deep personal gratitude. I also thank most sincerely those who have helped, some more than others but all important, to produce this wonderful book. Thank you very much. If I have omitted some names inadvertently, I hope that they will not be offended as it is quite unintentional. I am grateful to you all. I hope that you will find this an interesting and absorbing story of a wonderful company called Lagonda, and even more wonderful car AUF 77 and her restoration, and one of the finest motoring adventures, the Peking Paris Motor Challenge.

Enjoy

Bob Fountain
Beamish, Co Durham
April 2007





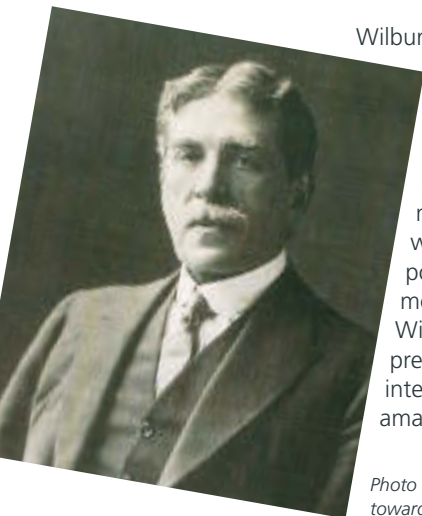
C H A P T E R O N E

THE HISTORY OF LAGONDA THE COMPANY

ORIGINS

The origins of Lagonda go back to an American family of Troy in the state of Ohio. The founder of the company was one Wilbur Adams Gunn, the son of the Rev. James Wilbur. He was born the second child in Springfield, Ohio in 1860.

Wilbur on leaving school was apprenticed to the nearby Singer sewing machine company and in 1885, was married to Bertha Myers. They moved in 1888 to New York where their daughter, Majorie was born. In 1891, Wilbur Gunn moved to England, leaving his wife and family behind. We can only speculate the reasons why, but within 7 years, they were divorced.



Wilbur initially set himself up as a freelance consulting engineer and for a time became involved in the design and operation of hydraulic plant, a preferred alternative to electrical machines then available, as they were more reliable, had a better power to weight ratio and were more powerful. In the mid 1890s, Wilbur met Constance Grey, we presume through his Opera interests, he being an enthusiastic amateur singer, and through her, he

Photo of Wilbur Gunn taken towards the end of his life.

met Constance Grey's husband, Charles. Both Charles Grey, the brother of Lord Grey and Constance had powerful connections and family wealth. In 1896, Charles Grey died. In 1898, Wilbur had divorced his wife (or had been divorced) and was free to marry Constance. He moved into the "Cottage" Thorpe Road, Egham (the Grey's residence) and with the financial resources he now had available he decided to start up in business on his own.

In 1899, Wilbur Gunn created the Lagonda Engineering Company, initially using a shed at the bottom of his garden to build small compound steam engines primarily for boat propulsion. The origins of the Lagonda name trace back to a district name of Springfield, Ohio, with its origins in a French corruption of the name of a small stream. Interestingly, the stream in question is now called Buck Creek. Wilbur Gunn was not alone in using the Lagonda name, for his brother also created a company of that name making steam boiler tube cleaning equipment. The American Company was to stay in business right up to the 1970s. There have been no connections between the UK and American companies. Nor, though often suspected, is there any Italian connection either.

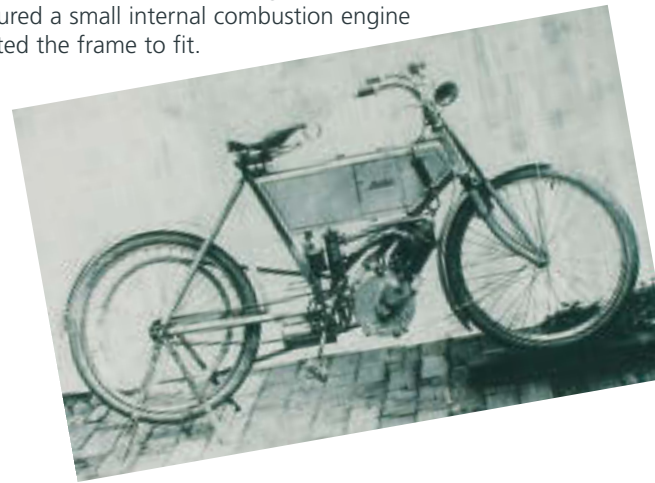
Clearly Wilbur Gunn met with some success, for it was not long before he started experimenting with different products and in 1900, Wilbur made his first motor cycle, sensing as he did, that with the state of transportation, more and more people were



AUF 77



demanding the convenience and speed available with such modes of transport. Initially, as with so many start-up businesses, the first products were built from parts bought in from other local light engineering companies, in this case Knights of Staines from whom he acquired the frames. Wilbur designed and manufactured a small internal combustion engine and adapted the frame to fit.



The first motorcycle made by Lagonda, using an in-house engine and cycle frame bought in from a local company called Knights of Staines. Power from the engine was transmitted by a simple belt, but as can be seen, still leaving the normal pedals.

Sensing also the importance of the publicity that could be had from competition, Wilbur was soon seen competing in many local trials, of which one, the 1000 Miles Trial of 1903 brought national recognition and a significant increase of demand for his Motor Cycles. In 1902, Wilbur registered the trademark Lagonda. He acquired his first employees in 1903, namely Bert Hammond who came from Knights and Alfie Cranmer. Both were to stay working for Lagonda to the outbreak of war in 1939, in the case of Alfie to 1946.

By 1904, space in the shed at the bottom of Wilbur's garden needed serious expansion. This rapidly followed by roofing over a large part of his garden and extending the property boundary along Thorpe Road, making a new entrance and creating a significant manufacturing facility.

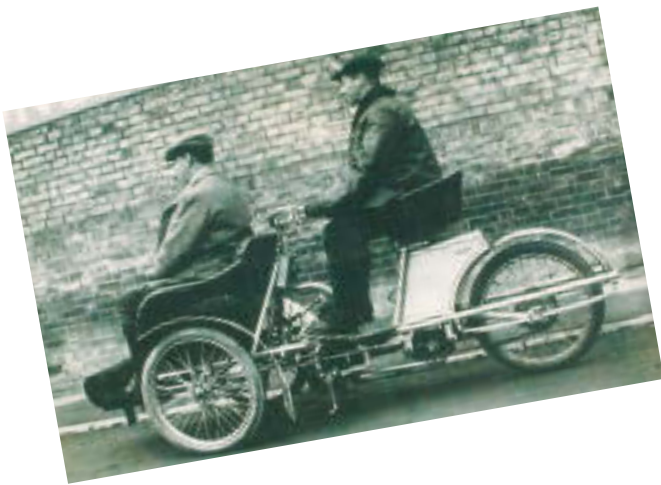


The 11.1 model introduced many revolutionary changes to simplify production and to reduce costs. The inspiration for this was the pioneering work of Henry Ford to introduce modest cars for the common man at an affordable price which were simple to maintain, yet rugged and reliable using mass production methods

TRANSITION FROM MOTORCYCLE TO CAR

In 1904, the market for tricars expanded rapidly as the demand for convenience and additional comfort grew and the wish to carry passengers became important.

Lagonda's first tricycle (or tricar as these rapidly became) was an adaptation of the bicycle frame with a bigger engine but still kept the belt drive. By 1907, however, with tricars now having expanded so rapidly, it became evident that a simpler but more effective way forward lay with 4 not 3 wheels and so the market for tricars suddenly dried, bringing many small businesses crashing down in its wake. In 1907, the Lagonda Engineering Company, or as it by then had become, the Lagonda Motor Company, went into receivership, but was able to continue trading. Sensing the importance of moving into the cycle car market, Wilbur adapted his latest tricar, making it into a 4 wheel light car. Having been in the vanguard of this new but rapidly expanding market, the company prospered and quickly grew, producing a succession of well engineered cars.



The 1905 10/12hp air cooled tricar.

Starting with the 12hp of 1908, then the 14/16 hp using a bought in 4 cylinder engine made by Coventry Simplex, followed by a 20 hp 4 cylinder model later to be adapted to a more powerful 4 cylinder engine of

Lagonda's own manufacture (the 20hp) and a new 6 cylinder model, the 30hp of Lagonda's own design and manufacture.

Bodies were made for Lagonda by a local Egham company, "Warmington's" also of Thorpe Road, whose products proved conventional but well made.

As he had done while making motor cycles, Wilbur Gunn was very quick to see the value of competition both to provide important publicity, and because it was effective in spurring development and improvements in performance and reliability.

In most cases, Gunn would personally drive his own cars, with significant success, a notable car being the 1909 18hp racer that won a summer handicap of that year at Brooklands. In 1910, Wilbur Gunn drove a 16/18hp car (a modified 14/16hp model) in the 1910 Russian Rally. This was a 2000 mile reliability trial, running variously between Moscow and St Petersburg. The culmination was the award of a Gold Medal and Certificate from the Tsar himself for the particular feat of driving non-stop between Moscow and St Petersburg in one day, the only car to do so. For this his Russian agent took virtually his entire next 2 years of production.

THE FIRST PROPER CAR

Knowing that his present premises could not be further expanded, and being an admirer of Henry Ford and his production techniques, Wilbur Gunn sensed that there was a huge market for light simple, rugged but good quality cars that could be produced cheaply using mass production methods. However, in order to be able to do so, required significant increases in the size of his premises, and investment in new design and manufacturing equipment. Clearly not a man for doing things by halves, Wilbur Gunn set about designing a completely new car (the 11.1 hp) and simultaneously heavily invested in yet further enlarging the "works". Warmington's the coach and body builder was bought out, along with an adjacent furniture store and hastily adapted for the new car's production.



The 11.1 hp model, introduced in 1913, is significant for a number of reasons. It pioneered the concept of the assembly line with the major constituent units, engine, in unit with clutch and gearbox, front suspension, rear suspension and body all coming together in a predefined sequence and simply attached. Oddly, the engine sump was in unit with the body and engine installation involved literally bringing the engine to the sump. Removal was the same done in reverse. This made these components so much easier to access, as these same assemblies could be simply detached, enhancing considerably the ease and convenience of their service and repair.

The 11.1 hp model is also very notable for the concept of the unitary body design, there being no separate chassis. The end result is a cheap, light but rugged car, simple to manufacture and assemble. Its design was quite revolutionary for the period, preceding others' use of unitary construction by 20 years or more. However, as so often happens, huge events took precedence, with the outbreak of the First World War in 1914, and with it, a need to transfer to the manufacture of munitions and other products to support the war effort. A more detailed description than can be given in this book is to be found in the official Lagonda history.

THE FIRST WORLD WAR

At the outbreak of war, Lagonda changed to support of the war effort, initially concentrating on the production of light vans, and then as the war dragged on, using the precision machine tools to produce munitions of all sorts. The "works" was considerably further expanded and the "Cottage" in Thorpe Road was demolished to make way. Wilbur and his family then rented Hythe House, facing Staines Bridge opposite the "works". At the height of war production, some 1600 people were employed, 50% of them in the Machine Shop alone, working in 3 shifts to meet the demands of the war machine. Later further expansion onto neighbouring property occurred as the need for more factory space became evident. By this stage the factory boasted a full works

canteen and a foundry to go alongside its extensive machine tools, coachworks and joinery and metal fabrication. Such expansion called for a large injection of capital mostly borrowed from the bank, so when all munitions contracts were terminated at the end of the war, as with so many factories, suddenly there was no work to do and lay offs by the hundreds of thousands became inevitable.

The demands of the war inevitably took its toll, and Wilbur Gunn suffered a rapid decline in health. He was to die in 1920 of lymphatic cancer. His wife Constance continued to live briefly in Hythe House, but later moved to a nearby hotel and finally died in 1930 in Wimborne.

THE AFTERMATH OF WAR AND THE RESTART OF CAR PRODUCTION

Car production re-started in 1919, initially with an updated version of the 11.1HP, which was rapidly further evolved and improved to widen its market. Major management changes also occurred with Alfie Cranmer taking charge of technical matters and later becoming Engineering Director in 1923. Colin Parbury assumed the role of Managing Director. The old Tollemache and Griffin taxi depot in Hammersmith, a partner company before the war, was finally acquired and became the London sales and service depot. Major Bill Oates became chief salesman and he in particular featured frequently as the principal driver as Lagonda entered cars for national and international motor sport events.

When the 11.1 hp was introduced it had demonstrated a remarkable fuel consumption of 51mpg, later to suffer as the weight of the production car increased from 9cwt to 12.7cwt and upwards as more refinement, equipment and a bigger engine were added.

There was brisk demand with Lagonda selling around 15 cars per week for £350 each in 1919. By 1920 prices had risen to £400. Shortly a more refined and powerful version of the 11.1 hp was offered, the 11.9

with an inevitable increase in price to £500. This model was introduced in October of 1920.

Lagonda featured frequently in racing events during the 1920s, with notable successes in the JCC 200 mile races. In 1921, using a heavily modified 11.9, Major Oates was responsible for Lagonda being awarded no less than 5 light car records for cars up to 1.5 litres for speed over varying distances.

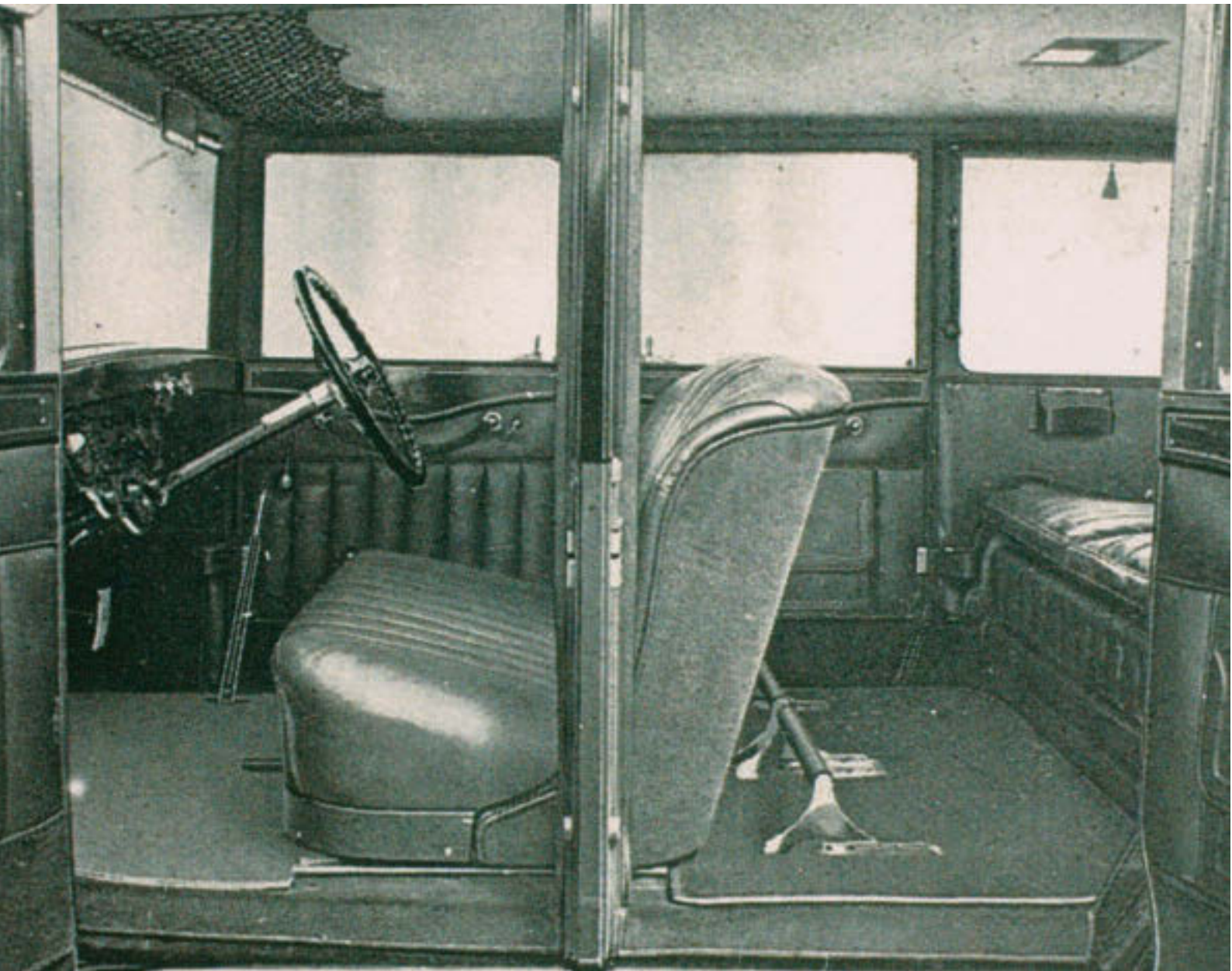
Savage deflation followed during the early 1920s with prices dropping. By 1923, the cheapest, though least well equipped model offered was priced at no more than £265, though few of these were sold. By 1923 production had recovered and Lagonda were manufacturing and selling 25 cars a week.

NEW MODELS

Model variations were introduced, all aimed at attracting an ever wider market. More refinement, more luxurious fittings and better weather equipment all added progressively to weight. To partly compensate, gearing was lowered and engine size increased, but as with any design, there comes a time when further development becomes none economic and technically not worth doing. Such was the situation in 1925. A major decision had to be made to move to an entirely new car and the big question was, should the company continue with its technically advanced unitary construction or abandon this and revert to the traditional chassis and detachable body?

A catalogue picture of the Lagonda 14/60 saloon in 1925





The 14/60 is clearly aimed at the expensive end of the market with high class furnishings and a quite remarkable amount of leg room for the rear seat passengers.

The introduction of this new model, the 14/60, answered all these questions. In an abrupt abandonment of the design concept of the 11.1 model, it ushered in a much more traditional design, using a conventional chassis frame, with front and rear semi-elliptic springs front and back. To this was added a separate coach built timber framed body. It was also given an engine which owed nothing to any earlier design. Design features included a detachable cylinder head, twin camshafts side mounted operating valves using push rods and rockers within a hemispherical combustion chamber. The 4 cylinder engine featured a capacity of 1954cc with dimensions of 72mm bore and 120mm stroke. Unusually a major effort was to design for ease of maintenance, an aim partially achieved. Gearbox and engine were separate and connected using a Carden shaft. Unusually for the period, the gearbox featured 4 speeds. Bodies themselves were typical of those manufactured in the period with high class furnishings and comfortable seating. Prices rose, the catalogue price for the 14/60 being £720 for the saloon. A tourer body was also offered at the more modest cost of £570.

From this base design emerged other tourer bodied cars, inevitably lighter and higher geared.

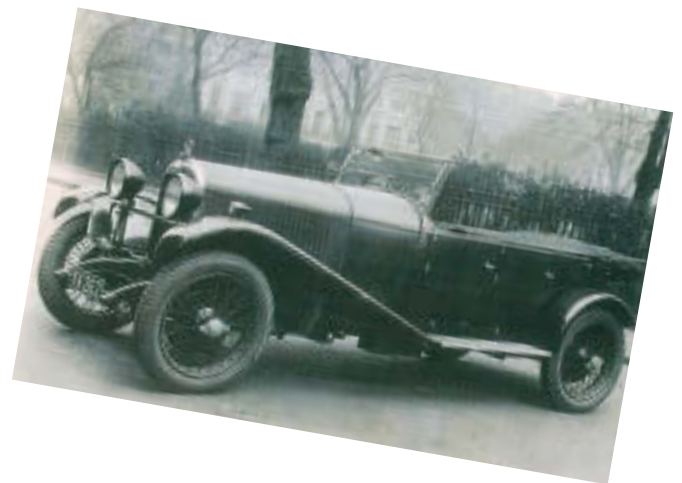
A further major development in engine design followed with the introduction of the 16/65 in 1926. A 6 cylinder engine (a first for Lagonda), of 2.4 litre capacity. Designed as a refined and very low stressed engine, it featured the same hemispherical combustion chamber, twin high mounted camshafts but with all valves in line unlike the earlier 14/60 engine. However, this engine design offered considerable development potential as we shall see, leading to the demise of the 14/60 within 2 years of its introduction. The design configuration was then adapted back into the 2 litre engine with revised cylinder block and head.

A NEW MANAGING DIRECTOR

In 1926 Brigadier General Francis Metcalfe became Managing Director in succession to Colin Parbury. His influence soon became apparent as the model policy

emphasised a greater emphasis on performance with luxury, and with factory support for motor sport. The service and distribution side was also re-organised, with the service and sales outlet at Hammersmith being leased to Major Bill Oates for him to run. The Distribution network was completely re-organised.

In 1927 the 2 litre Speed model was introduced. There was a strong emphasis on performance with a top speed of 80mph, which few of its competitors could equal and with luxury and comfort to match. Price was clearly from now on to be a secondary consideration. Here was a clear indication of the direction that the company was to take for the remainder of the interwar years. The engine was a development of the 16/65 but with 4 cylinders, improved breathing and better porting. This showed considerable development potential and useful increases in power.



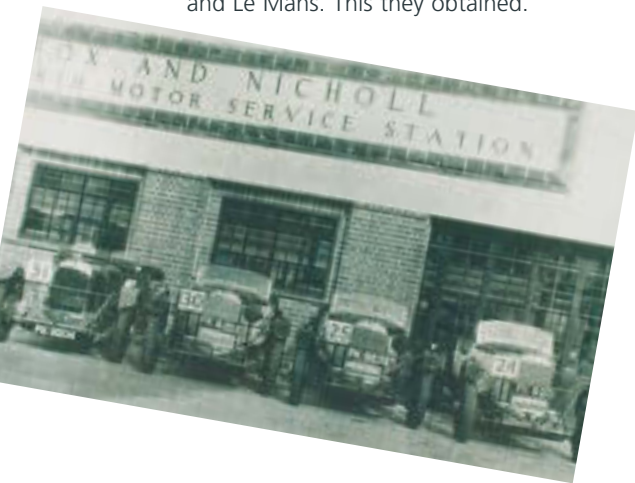
The 1928 2 litre high-chassis Speed Model. It was clear to see that this was a car designed for high speed touring. In common with many coach built cars of the period, it has a fabric covered body, it's advantage being that the natural flexing of the chassis could be absorbed. In this photo, unusually the bonnet as well as the scuttle and side are all fabric overed.

The luxury side was not overlooked with saloon bodies featuring prominently in the sales literature of the period.

To widen the appeal of the 16/65 saloon, it was clear that improved performance was needed. To that end, the 4 cylinder 2 litre engine was given 2 additional cylinders but retained the same stroke and bore. This became the 3 litre of 2931cc. It used the same 16/65 chassis, but it showed up that the 16/65 gearbox was too fragile and that a new more strong and robust gearbox design was required.

SUCCESS IN COMPETITION

Initial efforts by the factory in competition were initially very disappointing. In 1928 five races were entered but with only one finish. However it was clear to those in the know just what a potentially good car the 2 litre was. The PERRR syndicate, all amateur drivers, approached Lagonda to request the use of, and support from, Lagonda in entering at Brooklands and Le Mans. This they obtained.



The 1929 Team cars outside Fox & Nichols on the Kingston Bypass. Rebuilt from the 1928 factory cars, they all survive to this day.

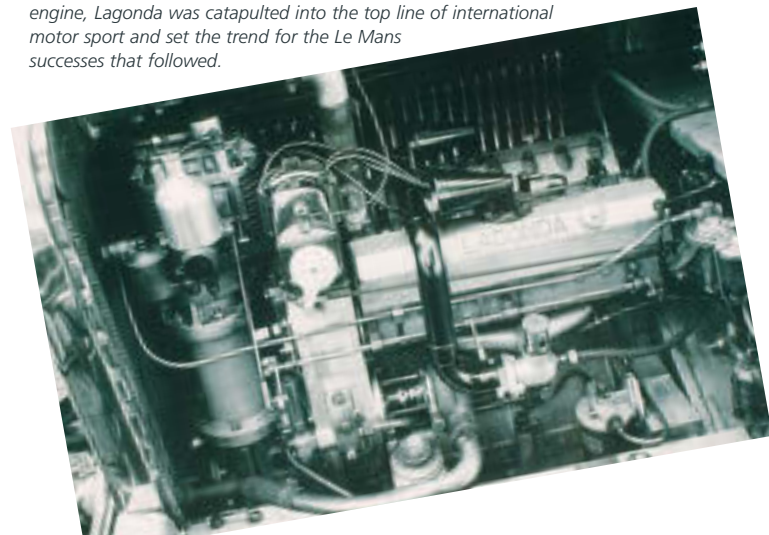
Many reliability trials also were entered with promising results, and strengths and weaknesses became more apparent. By the simple means of revising the front axle and minor changes to the mounting points of the front and rear springs, the 2 litre low chassis tourer followed with a useful lowering of the body to the benefit of the handling. A supercharger was added. A

new gearbox was designed, the earlier one being too fragile. With these changes, the 2 litre became capable of exceeding 100mph in tourer configuration and seriously competitive in the 2 litre class at Le Mans. Knowing this potential the factory itself entered a team of cars for Le Mans in 1930.

By the start of 1929, the company was prospering. Sales were typically averaging between 8 and 16 cars a week, good for the carriage trade, and the number of employees was around 500. The Factory was extended again. However by the autumn of 1929, the Depression was beginning to bite and financial stability suffered. Product development slowed and the result was a lack lustre range of models.

Competition success with the 2 litre and its derivatives followed in the early 1930's but it was becoming apparent that in order to remain a force in the carriage trade and with growing competition from Daimler, Alvis, Invicta and Bentley, an entirely new model would be required and required quickly. With an excellent manufacturing capability but with rather fewer financial resources, it became clear that there was not the finance for the design and development of another new engine of larger capacity and output, this being considered essential to remain competitive. Conversely, with most manufacture in house, it was relatively easy and hence less expensive to adapt gearbox, rear axle and steering.

The 2 litre supercharged engine. It would be fair to say that with this engine, Lagonda was catapulted into the top line of international motor sport and set the trend for the Le Mans successes that followed.





As the effects of the 1929 depression followed, it became clear that Lagonda would need to find another already designed engine with the required output and this turned out to be the Meadows engine of 4.5 litres. There simply wasn't the finance and technical capacity available to design it in house. The Meadows engine had already shown its potential with Invicta, who were using it to wide acclaim.

THE EFFECTS OF THE 1929 DEPRESSION

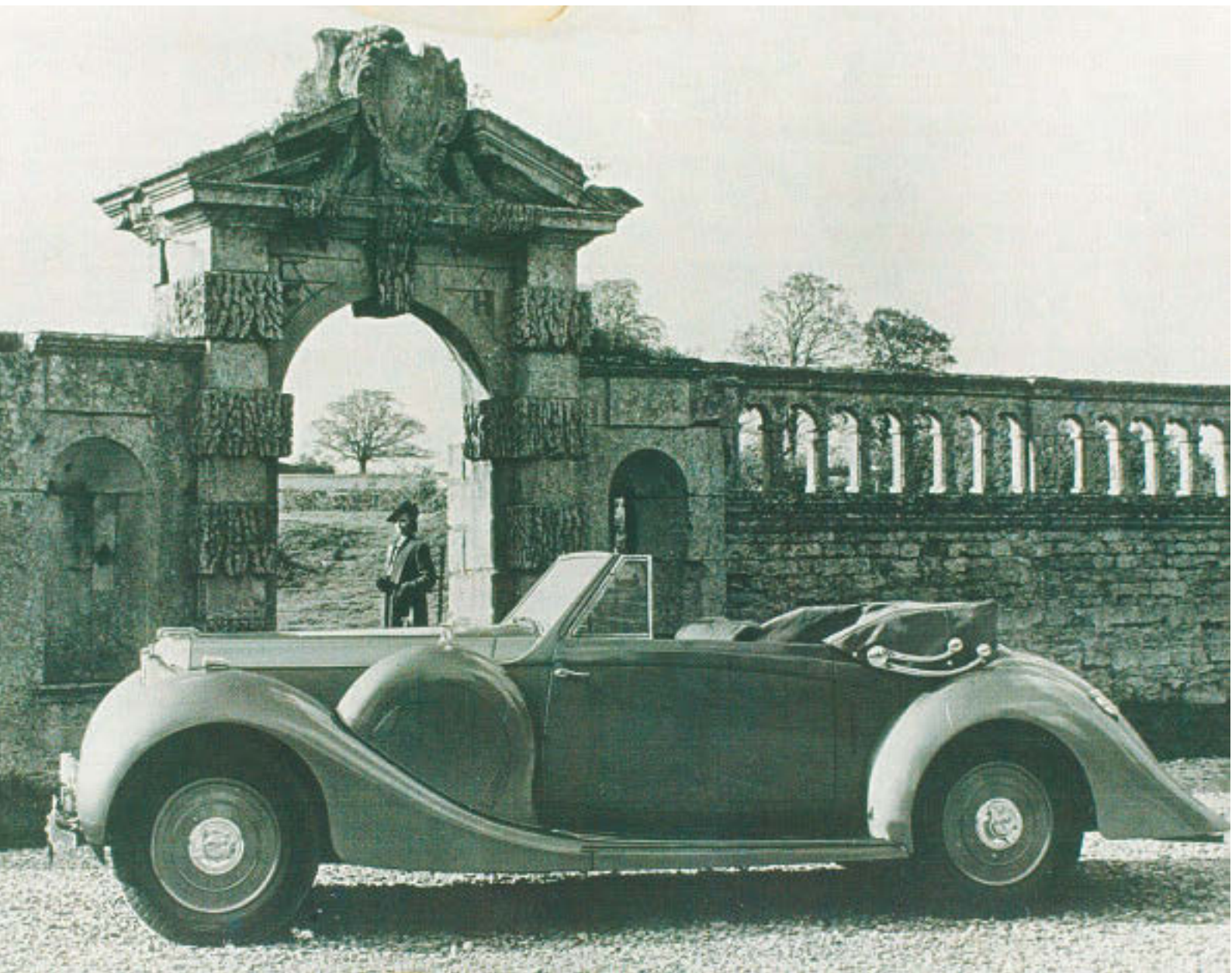
From this the M45 was created. A more detailed breakdown of the M45 and its derivatives follows in the succeeding chapter. Suffice to say that this was the single, most successful and influential model in Lagonda's pre 2nd World War history.

There was also a need for a 2 litre 6 cylinder car with which to take on the competition and as there was inadequate finance, technical and manufacturing resource and time, it was decided that such an engine should be bought in also. This was the Crossley engine, and the model to which it was fitted was the 16/80. Lacking good performance and carrying increasingly heavy bodies, the model was never a great success.

It was also clear that the economics of production demanded a lower priced but higher volume car. For this the company planned to introduce the Rapier, a small 1 litre class car.

The prototype Rapier was shown at the 1933 show but this did not get into production until the following summer, and when it was it had Lagonda's own 1104cc (62.5 x 90mm) sturdy twin overhead cam engine designed by Tim Ashcroft, as was the whole car. It had the ENV Preselector gearbox as standard, with a clutch, in an 8'4" wheelbase chassis fitted with very powerful Girling brakes. For this model Lagonda decided not to build the bodywork themselves, probably for space reasons and the standard bodies were supplied by Abbott of Farnham, although several other coachbuilders performed on this chassis. The Rapier was easily the highest revving British production





LG6 Drophead Coupe - These refined cars were on par with the best that money could buy, and appropriately priced to match. Fast, elegant and with a presence to match, they are designed for transcontinental touring in the grand manner.

car of the period and part of its long lasting qualities are no doubt due to the last-minute decision to cast the block and head in Chromium iron instead of the light alloy for which it had been designed, without changing the design.



Rapier - A small 1.1 litre car, they are not particularly fast but enjoy a strong following to this day. Reliable and with great character, they make a delightful car to own.

With such a myriad of different models, slender finances or none at all, the company desperately needed refinancing. It also needed to simplify its model structure and reduce its overheads. In this difficult situation Brigadier-General Metcalfe died, and as an interim measure was succeeded as Chairman and Managing Director by Sir Edgar Holberton.

ENTER ALAN GOOD

By then it was clear that the company could not continue to trade and was therefore put into liquidation in 1935. At this point Mr Alan Good enters the scene. A wealthy financier, he recognised that the underlying assets and production facilities gave the company significant potential and with appropriate financing, had a promising future.

The company was renamed LG Motors but retained the Lagonda trademark. The model structure was much simplified, with just the 4.5 litre and V12 cars

continuing production to the start of the 2nd World War. Rapier production was continued under separate management by a different company, Rapier Motors of Hammersmith, but production finally ceased in 1936. In addition, Alan Good brought other industrial assets into the group, including marine diesels, and these progressively were to dominate the use of the old machine shop facilities.

To bring much needed development to the M45, Alan Good recruited WO Bentley to redesign the M45 to compete with Rolls Bentley. These model developments are covered in the next Chapter.

By the start of War in 1939, it was clear that the production facilities would need to be redirected to the war effort, but some product development continued. Work started on the design and production of what became known as the LB6, a 2.6 litre twin overhead cam engine of high performance and specific power output for the new cars needed after the war.



LB6 Twin Overhead Cam - Designed by WO Bentley it features a barrel crankcase design. Initially producing around 80bhp, it was to be developed in 3 litre form eventually to produce close to 230bhp in full racing trim



POST WAR - ENTER ASTON MARTIN

On cessation of hostilities, many of the same economic conditions as prevailed in 1919 recurred with next to no production, little demand and potentially massive unemployment. To Alan Good it was quite clear that his investment lay not in the continuation of car production, but in the marine and industrial diesel market. It was therefore fortuitous that the existence of Lagonda engine and chief stylist, Frank Feeley became known to Sir David Brown who then acquired the LB6 engine and ownership of Aston Martin. This led directly to the DB2 and the start of the post war success for Aston Martin.



The first Lagonda to see production at the end of the 2nd World War. The chassis owed many of its design features to the LG6 pre-war Lagonda.

During and after the war W O Bentley was busy on a new smaller Lagonda, which had the LB6 six cylinder in-line engine with twin overhead camshafts. Two or three prototypes of this car were running by late 1945, fitted with Cotal electric gearboxes. This chassis had some superficial resemblance to an LG6 with the side members taken away but, in fact, is completely different and features independent front suspension by wishbones and coil springs, and rear by torsion bars and semi-trailing axles with the pivots at an angle, as later used by Fiat and Triumph in modified form. The rear brakes were inboard which is no doubt sound in theory but requires a great deal of dismantling to reach in practice.

The Company was unable to put the 2.6 into production for lack of a steel ration and David Brown bought the company, as he did Aston Martin, and merged them in 1948. The Bentley designed engine and chassis were the company's chief assets and they and the car works were transferred to Feltham and the Staines factory sold to Petters the diesel engine firm, who were there until 1989 when the site was cleared and a supermarket built.

W O Bentley did not go with the company to Feltham, preferring to set up as an independent consultant. More prototype 2.6s appeared using a David Brown S430 synchromesh gearbox and, in this form, the car went into production early in 1949. The factory built most of the bodies but a few went to coachbuilders, notably Tickford who slowly took over production of more and more cars. The LB6 2.6 engine was later used in the DB2 and DB24 Aston Martins, the latter eventually in the 3 litre form.

The 2.6 litre was slightly altered into MK2 form at the end of 1952 to take advantage of better petrol becoming available but the differences are fairly minor compared with the following year, when the engine was enlarged to 3 litres by staggering the cylinder bores whilst retaining the same crankshaft, necessitating offset connecting rods (83 x 90mm, 2922cc). Although the rest of the chassis wasn't altered much, a quite different body was designed for the 3 litre, again by Tickford.

Eventually there were two door and four door saloons and a convertible. In 1955 David Brown took over Tickfords and in 1958 the whole operations of Aston Martin Lagonda were moved to Newport Pagnell in Buckinghamshire, where the Tickford works had always been, and Feltham was closed. In October 1956 a MK2 3 litre appeared, featuring floor gear change and various other minor changes, and the convertible was dropped. The saloons were discontinued in February 1958. The total production of DB 2.6 litres was 511 plus 6 prototypes and of the 3 litres 256. The numbers surviving are difficult to estimate as not a not very high percentage of their owners join the Club.



*The Rapide – some say it has styling failings.
The rear suspension used a De Dion rear axle design but its installation proved troublesome.*

LAGONDA REVIVAL

There was then no Lagonda made for nearly four years until the Motor Show of 1961 when the 4 litre Rapide was introduced (96 x 92mm, 3995cc). This was virtually a four door DB4 Aston Martin and had nothing in common with earlier models. The only major difference from the DB4 apart from the styling lay in the De Dion rear suspension, different carburation and the availability of automatic transmission. 55 were made in 1962-1964.

The first hint of a new model appeared in 1971 when Sir David Brown had a personal car made which was a four door Aston Martin DBSV8 and carried Lagonda badges. However, the company was about to undergo one of its upheavals and, in 1972, Sir David stepped down and the company was sold to Company Developments Ltd, headed by William Wilson. The new owners dropped the 6 cylinder cars and, in November 1974, produced the Lagonda V8 as a production model. This was a William Towns design, very like Sir David Brown's car but with alloy wheels instead of wire ones. Only seven were made up to June 1976. They all featured 4 doors.

By then yet another set of owners had appeared in the spring of 1975 and this group, led by Peter Sprague and George Minden, set in motion the design process that led to the second V8 Lagonda which was introduced at the London Motor Show of October 1976. It was a striking looking car and was an immediate sensation with its wealth of electronics. It remained in production until 1990 and at one time formed the bulk of Aston Martin Lagonda's production, being particularly favoured by Middle-East sheiks. 645 were built and 631 sold, the rest being crash test victims, prototypes etc



Space age, quirky and futuristic, they made a huge impression when they first appeared. Not without their fair share of development problems, in particular the troublesome digital dashboard, the design remains quite unique. There has been no further Lagonda produced except a handful of design concepts.





C H A P T E R T W O

THE LAGONDA M45

THE BACKGROUND

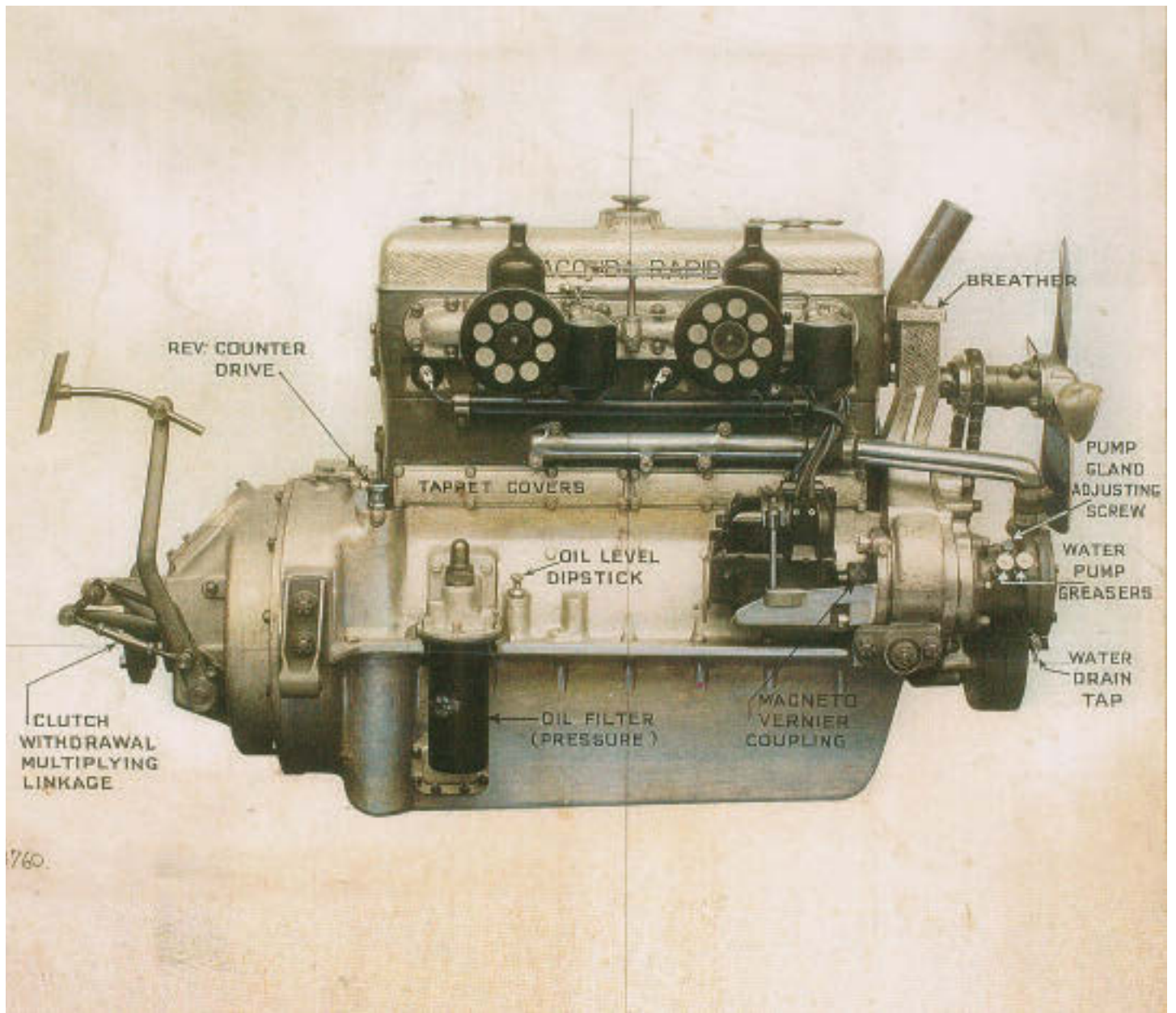
In large measure the initial impetus in developing another new model was the request from the PERR Racing Syndicate for a car that could compete in endurance racing at the highest level. Having raced MGs and having had some success with the Lagonda 2 litre low chassis cars in competition, they had a hankering for the big prize of outright winner in major races such as Le Mans and the 200 mile at Brooklands. Consequently they were keen to find a suitable car with the racing credentials, speed and reliability and Lagonda was a prime option. An approach was made to Lagonda, prompting some serious internal debate as to the options available. Clearly any solution required a new and larger engine, but finances were stretched. So after a great deal of analysis, it was concluded that there could only be one viable option, so far as the chassis was concerned, namely to extend and strengthen the 3 litre chassis. This was a comparatively easy task; but still left the problem of finding a suitable engine. It did not take long to realise that the Meadows 4.5 litre engine would be a prime candidate. It was highly improbable that Lagonda's main competitors could supply such a suitable engine. The Alvis 3.5 litre engine would not enter production until 1934, with the Speed 25, and Bentley was already in difficulties and could not be relied upon.

The proposal from the racing syndicate was conditional on the supply of 3 racing cars by the end of 1933 and the Meadows 4.5 was immediately available following the collapse of Invicta which till

then had taken the lions share of Meadows engine production. Furthermore the engine already had a racing pedigree with Invicta. The solution was staring them in the face. The idea of their development costs being paid for was an opportunity not to be wasted. Furthermore, developing the existing 3 litre engine did not appeal; as to achieve the required power outputs to be competitive, it demanded a bore and stroke that was beyond the bore and stroke limitations of the existing 3 litre block and crankcase. Neither was the design and production capacity available. So in the spring of 1933, the Syndicate put a formal offer to Lagonda that they should supply 3 racing chassis and engines that could be suitably bodied and could be made available for the 1934 racing season using the Meadows engine and a suitably modified 3 litre chassis. This was immediately accepted.

The 3 litre was the basis of the M45 chassis and required comparatively little modification to fit the longer 4.5 litre engine. Some strengthening was needed and an additional tubular cross member was added to support the back of the Meadows gearbox.





1760.
The offside of the M45 engine, this being a Rapide engine. Note the truncated design of inlet manifold. There is just sufficient space to fit shallow air filters.

Consequently the company decided that it should expend its resources, such as it had on a smaller car and from that the 1.1 litre Rapier was developed and the M45 was born. Both the 2 litre and 3 litre and their derivatives would remain in production for the time being.

THE M45 MEADOWS ENGINE

By 1933, the 6ESC 4.5 litre 6 cylinder Meadows engine had become a well tried engine. Cylinder block and head were made from chromidium cast iron and a detachable aluminium crankcase and sump, with a bore and stroke of 88.5mm and 120.6mm respectively. The head used twin plugs and was capable, it was claimed, of 118bhp at 4000 rpm.

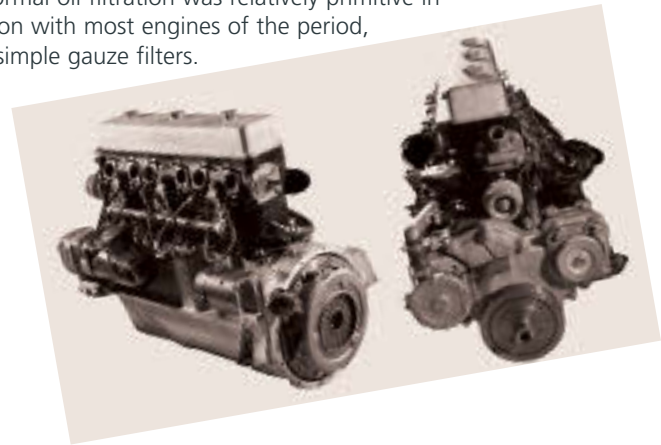
Being a long stroke engine with just 4 main bearings, the engine was rev limited by the stroke and relatively primitive design of crankshaft. Main bearings were made from cast white metal, as at the time were the big end bearings. There were two bolts for the forward and intermediate main bearings while the rear main bearing and oil seal used a 4 bolt arrangement. This arrangement was to prove in time to be a weak feature of the engine. While appropriate for industrial/agricultural use, it was not necessarily so for an automotive application. Notwithstanding this problem, it was and is an extremely robust engine with an enviable reputation for reliability, torque and general longevity. For its time it had a good specific power output and reasonable fuel consumption. The standard compression ratio was 6 to 1, desirable for the quality of fuel then available in 1933.

Ignition was a combination of coil; and magneto, which many consider the best of both worlds. Carburation was by twin SU but with a curious design of inlet manifold, in part caused by the relatively narrow width required to avoid fouling the bonnet sides. The same was true of the exhaust manifold. Both inlet and exhaust manifolds would be heavily modified in later models.

Oil capacity was a generous 2 gallons. Cooling was by a combination of thermo siphon and water pump, with engine temperature being regulated with a

Radiator grill thermostatically operated shutters; a surprisingly effective system.

The normal oil filtration was relatively primitive in common with most engines of the period, using simple gauze filters.



GEARBOX AND FINAL DRIVE

Initially at least, Meadows supplied clutch and separate gearbox in combination with the engine. The 4 speed gearbox was a Meadows T8 non synchromesh gearbox. Lagonda added one refinement, namely the main shaft brake, which made upshifts from 1 to 2 to 3 to 4 much easier to achieve silently. One of the refinements which Lagonda added was the use of Silentbloc bushes for main and layshaft bearings. The gear lever, in common with many cars, was to the right of the driver's seat. To aid heel and toe double declutching, the accelerator pedal was centrally mounted, as opposed to the right.

The rear axle used Lagonda's own spiral bevel semi-floating differential. This was connected to the gearbox using an undivided propeller shaft using Hardy-Spicer UJs.

Overall gear ratios gave a top gear speed of 24.5mph per 1000 rpm on the standard car using 19 inch wheels. In common with many large cars, flexibility was prized, so it was common to find cars being driven as low as 10mph in top gear with no problems, so obviating the need for frequent changes of gear. A few tourers were given higher gearing to reflect their lower weight.

M45 CHASSIS

The Front suspension used a robust cast iron beam with integral king pin bushes. Springs were long semi elliptic with twin Andre-Hartford friction dampers controlling each wheel. A later refinement was to replace one of the two friction dampers either side with a hydraulic controlled Luvax shock absorber, allowing drivers to modify the damper characteristics while in motion. The rear axle was suspended in an identical manner.

16 by 1.5/8 inch wheel drum brakes were fitted as standard front and back. . Having regard to the overall weight, a vacuum assisted servo was fitted in line with the brake linkage, making the M45 brakes as progressive and powerful as any cars built at the time. Brakes were operated using rod linkages actuating Perot shafts for the front wheels and a combination of rod and wire for the rear brakes.

The Chassis frame was a deep section high strength steel ladder frame with cross bracing supporting the gearbox. Other detachable cross braces were bolted front and rear adjacent to the front and rear suspension mountings. Steering used a Lagonda cam and pin steering box with an overall ratio of 14 to 1. A suspended 20 gallon fuel tank with integral fuel reserve was mounted behind the rear axle, feeding the engine through a double actuator SU electrical fuel pump.

Electrical generation was supplied by a gear driven generator behind which was bolted the distributor. This was on the near side. Twin 6 volt batteries were used in series, these being sited in under slung boxes just forward of the rear axle. On the offside of the engine was mounted the gear driven magneto.

Lighting was by Lucas P100 lamps and it was common to see a centrally mounted long range spot lamp in addition. Dipping was by a solenoid operated mechanism to deflect the reflectors, a common feature before the innovation of twin filament lamps became commonplace. The price for the bare chassis in the 1933 catalogue was £633.

Total M45 production is estimated at 345, though this cannot be a definite figure. Production started in late 1933 and went through to the beginning of 1935.

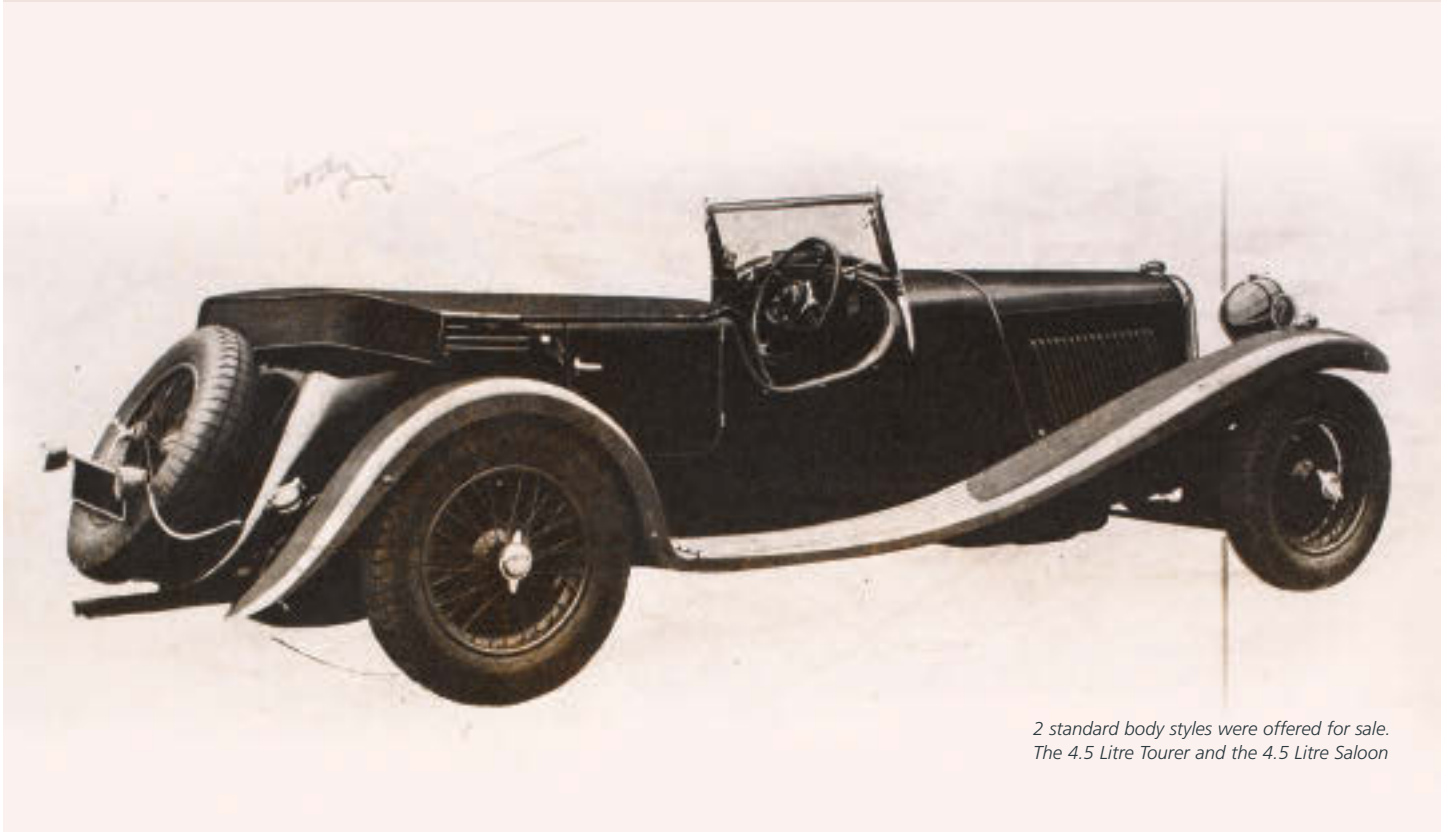
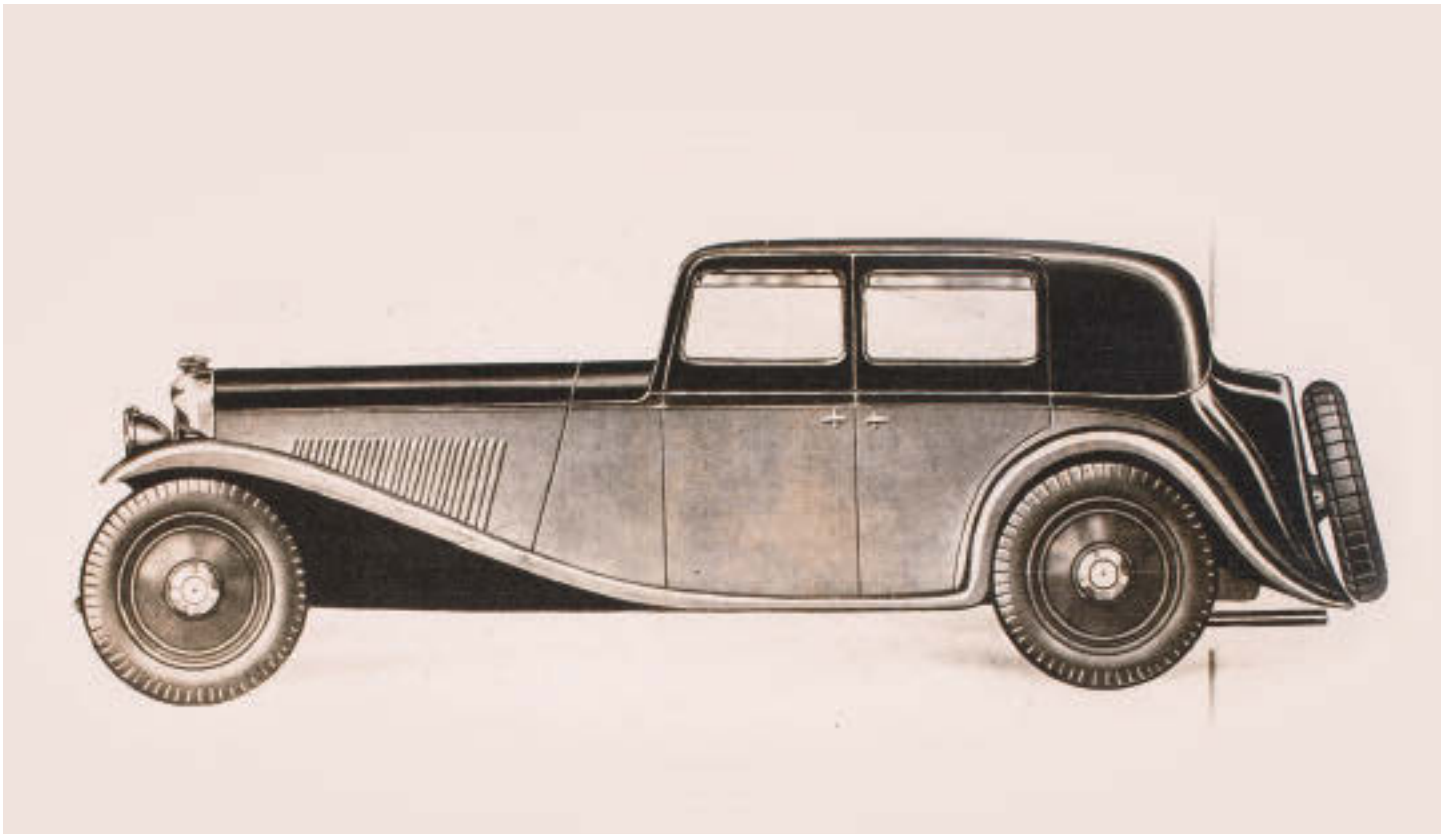
M45 BODIES

In 1929, Lagonda took a licence to use Silent Travel Patents for body mounting and door locks. These were universally adopted for the M45. The bodies were designed and built by Buckingham's, Lagonda's so called in house coachbuilder. They featured, as was common to all coach-built bodies of their period, a fully braced ash and oak frame over which an aluminium skin was stretched. A cast aluminium front scuttle provided essential body strength in torsion, as well as essential noise and fume isolation for the interior. Standard bodies featured steel full width front and rear wings, with the front wings flowing and gracefully merging with the running boards either side. Between the front wings forward of the radiator grille, there was a transverse rod, fully braced and supported by two vertical struts, to which were mounted the headlights.

A small boot was installed in the rear to which was bolted the spare wheel. Inside the lid there was a fully fitted and integral tool box.

From the outset, Lagonda offered both tourer and saloon bodies, priced in 1933 at £795 and £895 respectively. All cars came with 4 seats as standard. The dashboard featured centrally mounted speedometer and rev counter, with a clock and other auxiliary instruments to the left and right. Central between the rev counter and speedometer was a switch panel, with ignition, starter, fuel and lighting switches. It was usual for this panel to be fitted with an ammeter and ignition warning light.

In common with Bentley, Rolls Royce, Alvis and many other cars of the era, it was quite usual for owners to buy the chassis and to request a coach builder of their choice to build the body. Of these, Vanden Plas, Mulliner and Freestone and Webb were probably the most common. There were a few one offs, of which the subject of this book, the Lancefield Sedanca de Ville is one. The history of Lancefield is a separate chapter.



*2 standard body styles were offered for sale.
The 4.5 Litre Tourer and the 4.5 Litre Saloon*

M45 ROAD TESTS

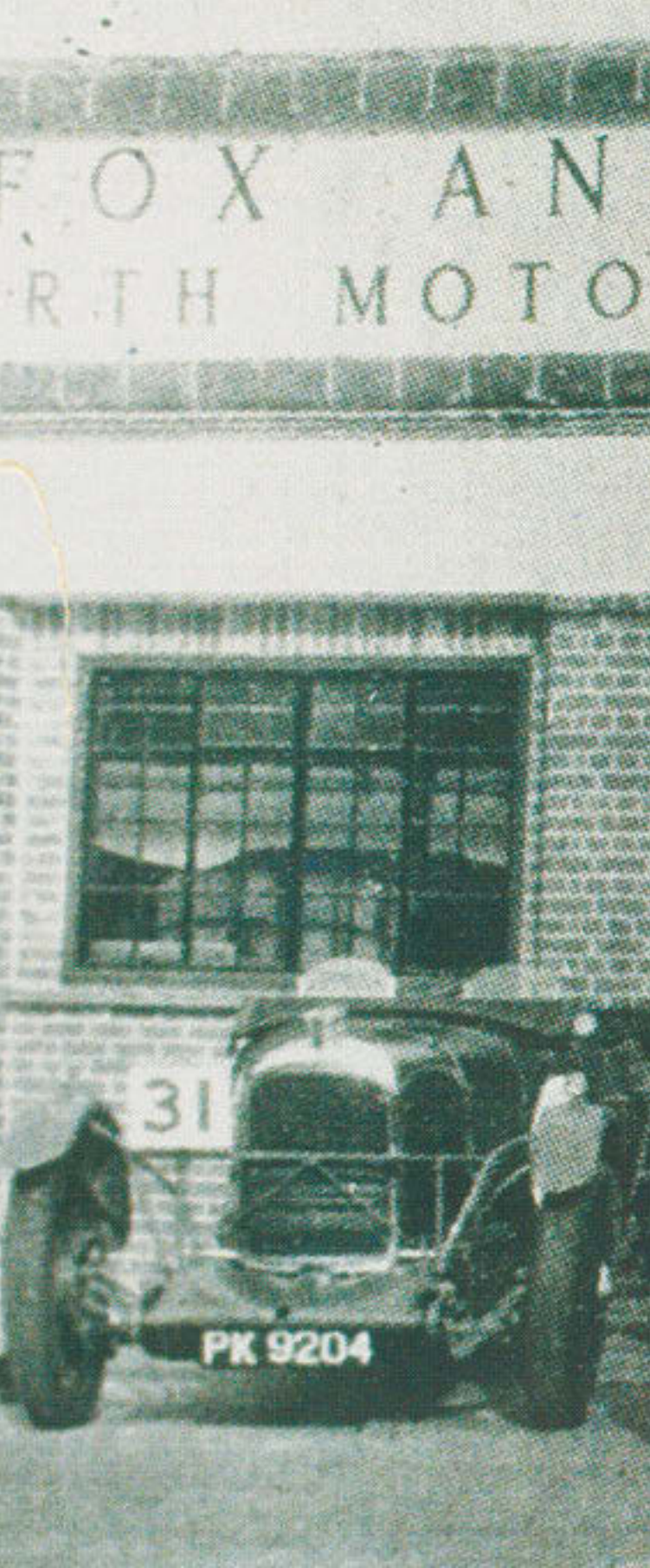
Contemporary road test reports of the era were full of praise. The combination of a large engine, relatively tall gearing for the period and a very competent chassis ensured that both in speed and handling terms, they were a match for any car in production regardless of price. Top speed was recorded as usually in excess of 80mph. Brakes drew much favourable comment, being regarded as powerful, progressive and light in comparison to many other cars. The steering was regarded as direct and with commendable accuracy.

The gearbox drew less favourable comment. The gearboxes that were initially used by Lagonda featured double helical gears in a drive to reduce gear whine, particularly in the indirect gears. These gearboxes proved fragile and difficult to use and were not a success. The company quickly reverted to the T8 gearbox, which while undeniably noisier, was much more robust and easier to use.

The quality of the bodies drew praise, being regarded as well built, elegant and very comfortable. Overall the performance of these cars was up with the best that money could buy, and all of a sudden, Lagonda had arrived as one of the most desirable cars to own. It decisively showed a clean pair of heels to the contemporary 3.5 litre Bentley that was regarded as its most formidable competition. The cars were undeniably elegant, comfortable, fast and with a considerable presence. No wonder that they proved a car of choice for planning long distance trans-continental travel.







M45'S IN COMPETITION

From the very start of production, M45s were to be found in virtually every category of motor-sport. They won numerous clubman trophies, were entered into virtually every type of rally and triumphed on the Concours de Elegance circuit.

As was mentioned at the beginning of this chapter, the PERR syndicate required 3 team cars and these were duly entered for the major motor-sport events in 1934. The first serious event was the 1934 Tourist Trophy. The syndicate was organised through Fox and Nichol and they introduced from the outset a number of quite major modifications to both engine and chassis. On the engine front, they introduced a strengthened crankcase, and to remove a major concern with regard to its torsional rigidity, using 4 bolt main bearing caps of modified and strengthened design. Modified crank rods and pistons followed. The compression ratio was raised to 7 to 1. Power went up by around 10 per cent with an equivalent increase in torque. There were numerous other modifications, all aimed at increasing reliability under racing conditions.



The 1935 Fox and Nichol Team cars – these were the winning cars, scars and all with the cups and trophies to prove it.

Brakes were changed to Girling. Suitable and additional bracing was added to the chassis to increase rigidity in key areas, though these were relatively minor.

The body bore little relation to any production car, with cycle wings and a minimalist interior in the interests of saving weight and reducing the frontal area.

To reflect the increased power and reduced weight, the gearing was raised, using a final drive of 3.18 to 1, thus giving close to 30mph per 1000 rpm and ushering an easy 100mph capability.

Results soon followed. The TT was won by a Bentley, but only after a titanic battle with the leading Lagonda.

Impressive results soon arrived in club racing, often using standard cars, albeit with some unobtrusive but important modifications.

Soon after, a new model the M45 Rapide was announced, incorporating many of the special modifications developed for the Fox and Nichol cars. Le Mans in 1934 produced disappointing results, but in 1935, Le Mans would provide a decisive victory for Lagonda with first and second. It was to be the first of 3 major successes in that decade, the last with the V12s.

By the end of the decade, Lagonda had proved in competition as well as on the road, what a superb and fast car it was and remains. The M45 became the car with which Lagonda took on the best that the world had to offer and triumphed. It was arguably the finest years of Lagonda's existence.

NEW MODELS

The LG 45 - By the beginning of 1935, Lagonda was in dire straights and soon afterwards liquidation followed. The rescue soon arrived with Mr Alan Good. Not only did he bring a decisive improvement in the competence of the management, but more crucially refinanced the company. The multiplicity of models were axed and concentrated on just the M45 and soon to follow LG45 and later cars.

New talent arrived, with Frank Feely becoming chief stylist and WO Bentley arriving, after finding that life working for Rolls Royce was intolerable. Major design changes followed. Chiefly the changes were designed



The LG 45 drophead coupe. These proved to be cars of choice for those embarking an long distance tours for they had excellent weather protection, with the advantage of a hood, and were as elegant as any car available.

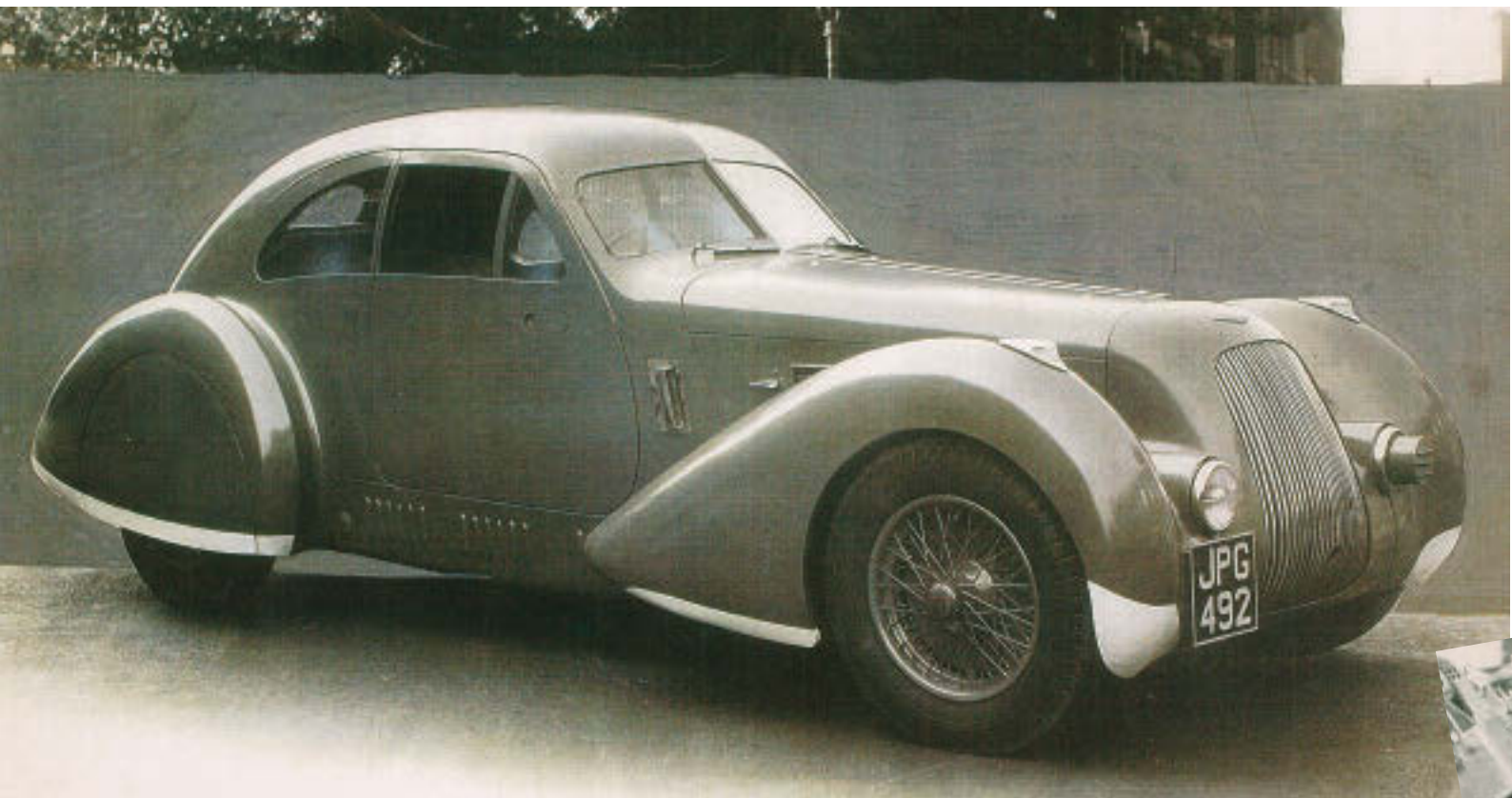
to improve the overall quality. Initially the LG 45 changes brought in all of the desirable reliability modifications already in the Lagonda Rapide, these coming with the second and third batches of the Meadows engine, referred commonly as Sanction 2 and 3.. Breathing of the engine was improved by radical improvements to the inlet and exhaust manifolds. Compression was raised.

Bodies were more fully integrated and a full drop head coupe became a standard and popular model. The spare wheel moved from the boot to the front near side wing. The beam axle front suspension remained. Weight rose inevitably and performance despite increases in power, suffered.

THE LG 6 - From 1936, even more radical changes were planned. This saw the introduction of the LG6. It came with 2 major changes, independent front suspension using torsion bars and double wishbone and a synchromesh gearbox with a central gear change. The modifications to the chassis enable a lower engine height which both lowered the C of G and the bonnet line, giving these cars a delightful and rakish line.

This is a bare V12 chassis, but the chassis configuration for the LG6 was very similar. Note the torsion bar front suspension and the demountable front cross member.





What might have been – this is a special one off V12 Bentley chaser built by Lancefield. It was completed in 1940 some 6 months after the start of war and bears a striking similarity to the Embircos Bentley completed shortly before. It was fitted with a spare V12 Le Mans racing engine.

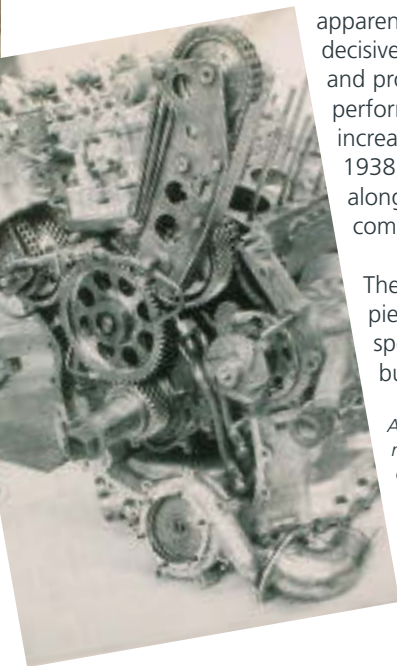
Bodies were even more luxurious and weight increased yet again. Further refinements to the now venerable Meadows engine were aimed at minimising noise and increasing the power to obviate yet more weight, these coming with the last and best Sanction 4 batch of engines. Chassis were now produced in short or long wheel base, depending on the choice of body. An integral jacking system was continued and the styling was made yet more elegant and integrated. The standard Tourer was discontinued but could be made available to special order. Special one off bodies were made by such master builders as James Young, arguably the finest of them all. French coach builders were also not ignored, for they made some of the most elegant bodies ever produced.

The LG6 was to prove curiously unsuccessful in competition and the results of 1937 were an unfortunate failure. It was perhaps a case of lighter, more nimble continental competition with all independent suspension, such as BMW and Delahaye, demonstrating that the hard sprung and heavy English cars were reaching the end of their competition era.

THE V12 – By the end of 1936, the first running V12 cars emerged and it became rapidly apparent that they offered a further decisive increase in general refinement and promised significant gains in performance to offset the inevitable increase in weight. By the beginning of 1938, V12s were in series production alongside the LG6, using an essentially common chassis frame.

The V12 engine is a very complex piece of machinery, and it requires a special expertise and knowledge to build. It also cost a small fortune to

A partially disassembled V12 engine - note the single overhead camshaft for each cylinder bank and gear and chain drive. Power output was quoted as 180bhp at 5500rpm from 4480 cc. in standard tune.



Testing at Brooklands in Aug 1939.

manufacture so prices had to increase decisively, thus making these cars available only for the extremely wealthy owner.

The costs of ownership and complexity have given the V12s a tarnished reputation, but by common consent, they set a standard few cars ever attained. They represent the epitome of the very best and elegant grand touring cars that have ever been built.

They also provided a base for the final competition triumphs that Lagonda had prior to the outbreak of war in 1939. Lagonda were 3rd and 4th, being beaten by a supercharged Bugatti, which took first place and a similar Delage, which took second. Lagonda won their class. However, they proved to be the fastest of any around the circuits of Europe and were equally strong in the Monte Carlo and similar rallies.

THE EPITAPH

The final years of peace before the outbreak of war in 1939 saw rapid development in automobile design. Lagonda at one level were in the vanguard, with a superb if complex and expensive V12. It attracted wealthy owners who were prepared to pay handsomely for a body of the finest quality, comfort and elegance. But the insistent beat of war drums continued ever more loud and menacing and by the Autumn of 1938, it was becoming clear that the days of peace were numbered. For Alan Good, this meant thinking of diversification, but also laying down plans for an eventual restart of car production; hence the need for a new car and a new engine. These developments were covered in Chapter one. Suffice to say that the M45 and its derivatives represented the finest that Lagonda has ever produced. They arrived to stun the world with cars of world beating performance, yet possessed an elegance and quality that remain a benchmark to this day.





C H A P T E R T H R E E

THE HISTORY OF AUF 77

Chassis No. Z10746 Engine No. Medows Z2505 Date of First Registration 11th April 1934

AUF 77'S EARLY HISTORY AND SPECIFICATION

AUF 77 is among the first batch of 50 M45 Lagonda cars to be manufactured. It was fitted with a 4.5 litre 6ESC Meadows engine. The chassis specification was to the standard production specification for a right hand drive M45 car.

A contemporary road test report, brochure picture and specification for an M45 are at Appendix 4.

The car was sold as a chassis by Lagonda and delivered to Lancefield Coachworks Ltd in around February 1934 for a Sedanca style body to be built and fitted. At the first owner's request some minor changes were made to the frontal appearance, namely the fitting of a badge bar and incorporation of an auxiliary light which was mounted on the off side scuttle just in front of the off side door.

It is believed that the AUF 77 was delivered to its first owner in dark maroon. The colour of the upholstery was beige.

THE FIRST OWNER

The car was first registered and delivered to Major Maurice Cohn US Army on 11th April, 1934. It is believed Major Cohn was the Assistant Military Attaché to the United States embassy. Clearly an enthusiastic motorist, AUF 77 was entered in a variety of road tests and Concours d'Elegance and there is a photograph of the car at such an event in Eastbourne in 1934.

It won the saloon car class, and in the Touring car class it was placed 2nd. Regrettably there is no other

documentation concerning ownership by Major Cohn, other than he had a country house in Sussex. It must be assumed that the Lagonda was returned to the Lagonda Service depot in Hammersmith for routine servicing. On 4th December, 1935, Major Cohn was appointed back the United States and the car was sold.



AUF 77 at Eastbourne Concours d'Elegance 1934 when the car was presented by Major Cohn.

THE SECOND

Mr John Pisani acquired AUF 77 shortly after Major Cohn returned to the USA. There is a short letter dated 23rd September, 1953, during which he confirmed that he did several extensive Continental Tours with complete reliability. He clearly remembers that car with great affection. Again there is evidence that the car would have been returned to the Lagonda Service depot in Hammersmith for normal repairs, servicing and decarbonising.

Mr Pisani sold the car to Messrs Owen & Co of Berkley Street, London during the early part of 1939 and was delivered a Rolls Royce in part exchange.

60, PRINCE'S GATE,
LONDON S. W. 7,
KNIGHTSBRIDGE 1049.

23rd Sept. 1953.

Dear Mr. Ellis,

I am very interested to receive your letter and learn that you are now the owner of my Lagonda car AUF.77.

I purchased this car late in 1935 and had great enjoyment with it. I did several Continental Tours, the two most interesting being one to Nice, Genoa, Naples, Brindisi then by steamer to Piraeus and back, up to Trieste, Vienna, Munich, Paris, and London. The other through the Italian Dolomites into the Tyrol, Switzerland and back. The car never gave me any trouble whatever and worked perfectly all the time.

I sold it early in 1939 to Messrs. Owen & Co., of Berkeley Street, in exchange for a Rolls-Royce.

Yours Sincerely,



John Pisani,



A short letter from Mr Pisani to Dr Ellis shortly after Dr Ellis purchased the car. He outlines his memories of AUF 77 during his ownership.

THE THIRD OWNER

It is believed that during the war years and for a number of years following, AUF 77 was in the ownership of Mr K. C. Sayers of Purley, Surrey. It appears that the car on being passed to Messers Own was then sold onto Davies Ltd of Staines. It appears that AUF 77 gave relatively little trouble during time in Mr Sayers ownership, but he was keen to pass on a number of observations, in particular concerning shock absorbers and the need for regular overhaul of the king pin bushes etc. Interestingly, by the time that AUF 77 was owned by Mr Sayers, it would appear to have been resprayed black. There was also a bill of £400 which was mentioned but there is no record of what the expenditure was for.

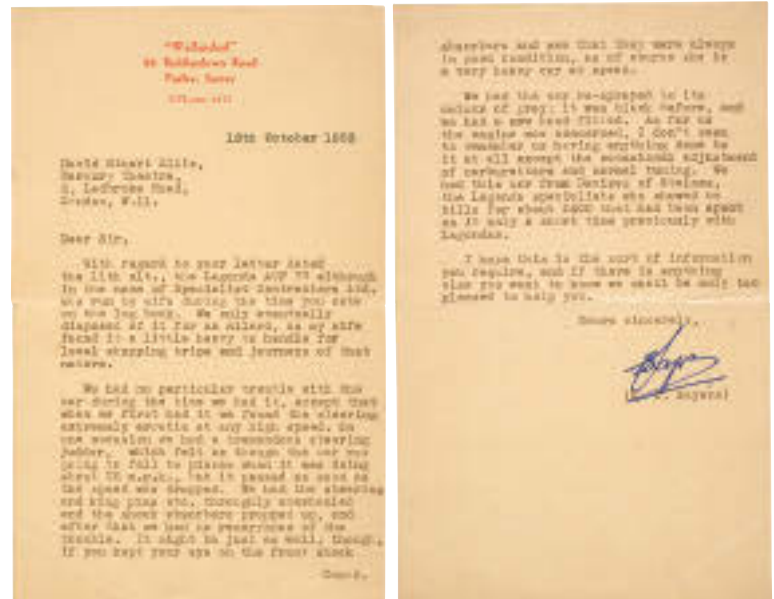
Mr Sayers put a new hood on AUF 77 in the early part of 1952.

THE FOURTH OWNER

Dr D.S.Ellis of Ladbrooke Street, Hammersmith, London acquired AUF 77 in June of 1953, shortly after having just fully qualified as a Doctor and shortly after his marriage. He was to remain the owner until 1968

Dr Ellis has many fond memories of AUF77. He recalls it was a favourite of his family and thinks often of the pleasure of family outings in her. As his letters indicate to both previous and later owners, he has been very keen to ensure there is a complete history. He has clearly found pleasure in corresponding and in exchanging views and in ensuring that subsequent owners have the benefit of his experience and knowledge.

There is a history of regular invoices for service, repairs and overhauls, needed after substantially continuous use since 1934. All of the service and repairs invoices and the associated correspondence from this period are to be found in Appendix 1. Of this expenditure a notable event was the complete overhaul and rebore of the engine which took place in 1958. Other significant repairs to the transmission, suspension, brakes were undertaken as and when needed.



A letter from Mr KC Sayers during which he passes on his recollections of his ownership of AUF 77

Dr Ellis recalls that the wood frame in the car was, by the early 1960's, showing its age and becoming rotten. However, with the mechanics in sound condition, the car remained usable until by 1967, it was clear that she would need to be completely rebuilt. By this stage, she was not his everyday car, so a key decision was needed as to whether to retain the car and face substantial expenditure on its rebuild, or whether to allow the car, perhaps a unique car of its type by Lancefield, to go to a new owner. There was much agonising as to where she should go and much reluctance to see the export of her abroad and in particular to the United States.

Dr Ellis received several offers for AUF 77, but by early 1968, it was decided that she should go to the Beaulieu Motor Museum and she was duly sold for £200 on the expectation that she would go there for restoration and for display. It was therefore with considerable irritation that he replied to Mr Timothy Brown, of Austin, Texas, USA, having discovered that she had been sold on by an intermediary for a handsome profit and that she had indeed been exported to the United States.



AUF 77 returns to the UK, sad, down at heel but complete and needing a big amount of love and care.



THE FIFTH OWNER

Mr Timothy Brown received AUF 77 in Austin Texas in early 1969, realising that in order to save her, she would need to be dismantled and rebuilt. His first intention, therefore, was to take stock and to identify what would be required to return her to as original condition. There then entered much correspondence as guidance was sought, both in the United States and in the United Kingdom. An early letter to Dr Ellis and his reply are perhaps the most interesting of these exchanges.

A compilation of the letters and other interesting documents is to be found at Appendix 2.

She was used for regular rallies and other vintage car meets and, as with her previous owners, charmed and gave much pleasure to him, his family and friends.

AUF 77 remained with Mr Timothy Brown, who retained her in regular use up until 1994 or so. But by this stage, it was clear again that a substantial rebuild was required. With some reluctance, AUF 77 was put into storage to await a good time to commence this rebuild. By 2004, it was clear that only one option remained and that she would have to be sold. Still a complete car, she was sold in July 2004 as a barn find and restoration project to Robert Fountain for \$35,000. She arrived back in the UK on the 25th October 2004 and was sent to Aston Workshop for a total rebuild.

THE SIXTH OWNER

Mr Robert Fountain, known to his friends as Bob, is a professional car restorer, specialising in Aston Martin. His interest in this Lagonda is both as a restoration project and as a long term owner, having already rebuilt a 15/98 2 litre Aston Martin tourer, which has given him considerable enjoyment. But with the Aston Martin a strict 2 seater, its use for family outings is perforce limited, so the Lagonda makes a perfect complement.

AUF 77 was duly dismantled and parts carefully stored awaiting the time to start her restoration. It was seen that a new body, using the original panels would be

required and that this would be a long term part of the rebuild. So the body was duly dispatched and AUF 77's restoration started in late in 2005.

In October 2006, the DVLA was contacted to re-register AUF 77 as a UK owned and kept car. It was a particular pleasure to be able to re-acquire her original registration number, which she now wears with pride.

A description and pictorial record of the restoration of AUF 77 is the subject of the next chapter. But it was the decision by Bob to enter the Lagonda for the Peking Paris challenge 2007 that gave the restoration a set of clear deadlines to achieve. The restoration started with a bang and was completed in March 2007, giving just sufficient time to test and rectify any faults arising before being shipped to China.

As this account is being written, AUF 77 has indeed been shipped to China, to arrive in Beijing in mid May. A history and notes on the forthcoming Peking Paris Challenge is described in Chapter Six.

Dr Ellis, the fourth owner still resides in Ladbrooke Road, Hammersmith, London. He is delighted to hear that AUF 77 has returned to the United Kingdom and has now been fully restored and looks forward to the day when he can be reunited with her and to remember the many happy family days with her.

POST SCRIPT

AUF 77 has had the good fortune to have been continuously owned by caring people, who have been prepared as and when to undertake the necessary work to keep her complete and in sound condition. She has clearly been a car with a real personality, a faithful friend and an ability to give much pleasure to countless people. She had already travelled widely. She now faces the biggest challenge of all as she returns from Beijing. Her adventures will merit another chapter.

Happy Motoring.



LANCEFIELD[®] COACHWORK
LONDON



C H A P T E R F O U R

A SHORT HISTORY OF THE LANCEFIELD COACHWORKS

LANCEFIELD COACHWORKS LTD, WRENFIELD PLACE, BEETHOVEN STREET, LONDON W10

A once long established company, Lancefield became involved with motor car body design and construction in 1921. Their location was in London W10. In 1926 they were commissioned to design and body their first Rolls Royce. The company rapidly gained a reputation for high standards of craftsmanship and design, considered at the time to be "rakish" but in impeccable good taste.

Using traditional coachwork construction techniques of ash and oak frame covered with either fabric or aluminium alloy, they became well known to a wide number of quality motor car manufacturers. These included Alvis, Bentley, Lagonda (though in small numbers), Riley, Rolls Royce and overseas for Bugatti, and interestingly Stutz in the USA. Up until the start of war, they enjoyed buoyant trading, for on Rolls Royce chassis alone they built no fewer than 150 bodies over a 13 year period. Almost certainly they would have bodied a similar number of Alvis cars.

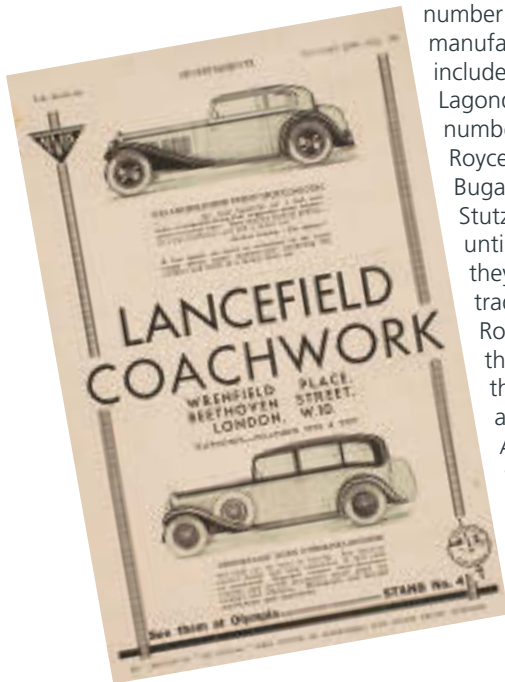
By the early 1930s, their main products were Saloon, Drop Head Coupe and Sedan de Ville bodies, aluminium panelled and trimmed to a high standard, usually in leather or Bedford Cord depending the type of body.

AUF 77 was typical of the designs that they produced.

They were commissioned specially to produce a streamlined and lightweight body for the V12 Lagonda "Bentley Chaser". Regrettably it isn't known whether this car survived but the design implementation is every bit as competent as the surviving Embiricos Bentley. One wonders whether someone with a deep pocket might like to recreate this car, for it would be a special car indeed.

Lancefield also constructed the 2 Lagonda V12 racing bodies that went to Le Mans in 1939.

With war in 1939, production inevitably turned to support the war effort. Lancefield's carpentry, metal working and panel beating skills would have been in high demand. With the proximity of aircraft factories close by, Lancefield became more and more specialised into aircraft component manufacture. By war's end, and with the coachbuilt sector in virtually moribund shape, it was clear that their survival depended on finding new business and outlets, so it came as no surprise when in 1948, Lancefield ceased coachbuilding and became specialised as an aircraft component manufacturer.





A Lancefield Sedan de Ville on AUF 77. Note the flowing lines of the front wings and their merging into the running boards, typical of their designs on Alvis as well as this Lagonda in that period.







C H A P T E R F I V E

THE RESTORATION OF AUF 77

AUF 77 ON HER ARRIVAL AT ASTON WORKSHOP

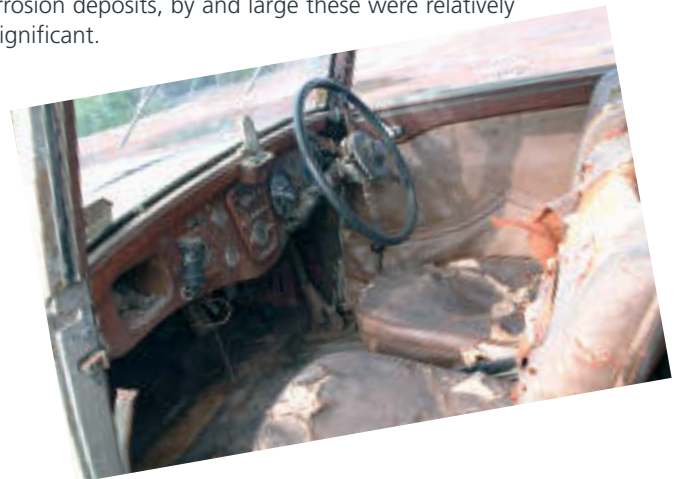
AUF 77 arrived at Aston Workshop at the beginning of November 2004. Looking very sorry for herself, she seemed remarkably complete. Though not a runner, all the engine components were present. The door pillars were starting to fail and the heavy doors showed clear signs of sagging on their hinges. The boot lid was not secure. Chrome bumper bars were missing. Most of the external chrome had been painted over. Her colour was maroon over silver and therefore highly non-original.

The interior trim was universally in a poor state. The leather seats had dried out and were badly cracked and torn though the seat frames seemed OK. The headlining and hood were also cracked and torn but together with all of the hinges, hoops, catches etc, there was no reason why a new hood to the original pattern could not be recreated. The dashboard was complete but nearly all of the veneering had delaminated and overall considerable restoration work would be needed. Indeed, it was doubtful if the dashboard as a whole was worth restoring and so it was condemned but retained as a pattern.

Her panels, being of alloy were mostly sound but the steel wings, particularly around the rear wheel arches were thin and wasted and new metal would be required. Wing supports were also badly corroded and would need to be replaced as would both running boards. There were also numerous dents which would need beating out in due course. Both front wings

were misshapen from impact damage, though not seriously.

Judged by the fact that she did not stand square, there was a high probability that the chassis frame had been bent for reasons not yet known. The distortion was thought not to be so bad as to cause a question over its integrity however. Furthermore, while some wasting of the chassis frame was evident from the corrosion deposits, by and large these were relatively insignificant.



The engine, though being complete was a definite non runner and needed freeing to be able to turn it over by hand. It was externally and internally in a filthy condition, not altogether surprising when she had stood for well over a decade in a barn. There seemed





a fair amount of wear on all of the chassis components, but all of the linkages for brakes etc were present and relatively rust free, but in a worn state.

There could be no confidence in the state of the radiator or water pump and considerable evidence of galvanic corrosion on the aluminium castings. The radiator shell was OK but dented and inevitably slightly misshapen and would need a complete rebuild. The transmission was also complete but with significant evidence of wear from an external examination. Lights, excepting the rear ones, were all present but the headlights and the glass lenses in both headlights and pass light had been broken or cracked and the reflectors consequently badly tarnished and rusted. The chromed shells were also dented. The electrical loom was in very poor condition and a number of gauges and switches were clearly broken. Though present, it was assumed that a new voltage regulator would be required and the electrical fuel pumps were probably over their useful lives.

THE STRIP

The first thing one must do before embarking on a full strip is to identify what if any parts are missing, before the evidence of what they are and how they are installed is lost. This was to prove essential with AUF 77. The next essential is to document everything that is removed and to photograph equipment installation and how, when it is not straightforward, it all came apart. This step was to prove essential when re-assembling the complicated brake linkages in particular.

The first stage of any strip is to remove all interior and exterior trim, lights, wheels and any other external bolt on component, and glass, leaving just the body shell, wings, engine, transmission, and running gear in place. This then enables a more informed assessment of the alignment of the chassis. From this it was evident that the chassis was twisted but that no significant other damage appeared to have been sustained.

The next stage was to strip the chassis to the last nut and bolt while still leaving the body shell bolted to the chassis.



On dismantling the engine, more serious problems became apparent. These included a porous and crumbling crankcase. This was condemned. It was a major blow. It would be doubtful if the crank could be reground and some doubt as to whether it was straight. A decision was taken to replace that also and a replacement was ordered.

The block would need to be rebored, but seemed OK and saveable. The cylinder head was stripped. Most exhaust valve seats were cracked and the casting around them wasted and with very little good metal to allow new ones to be inserted safely. The judgement was that this too was likely to need replacing.

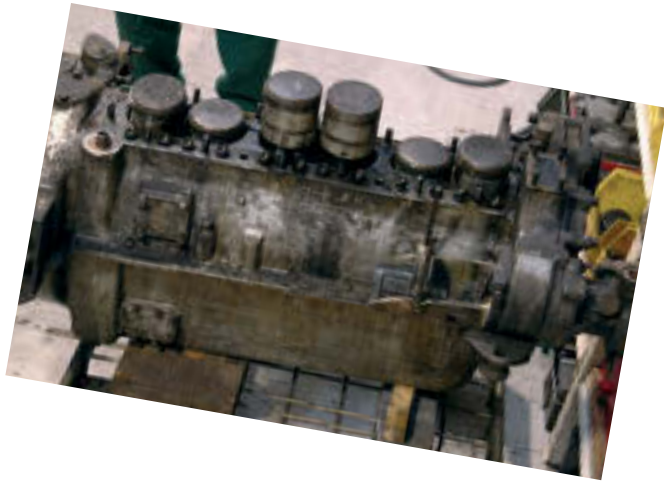
The Camshafts seemed to be serviceable but it would be sensible to replace all of the cam followers as a matter of course. Equally the rocker shaft assembly was worn but it too could be overhauled.

All of the ancillaries, such as magneto, water pump, generator and their drives could be safely overhauled, subject to the quality of electrical insulation being retained. This is always a problem, particularly with pre-war cars that used shellac as an insulating varnish. If that failed, then the armatures would need to be rewound, a skilled, specialist and expensive process.

All of the clutch assembly would need a complete overhaul and it was therefore doubtful whether it was desirable to do so. If not, then we would fit a different flywheel assembly and use a modern clutch cover plate and driven plate. The gearbox on stripping showed significant wear in all of the usual areas, not



surprising, so a key decision would need to be taken in the future as to whether to just overhaul and retain the existing gears or replace every moving part.



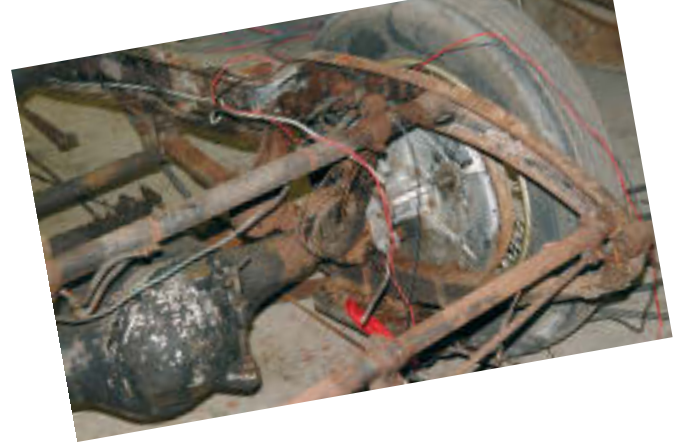
There didn't appear to be any major problems with the rear axle and final drive, but all of the usual wearing components, in particular bearings, were condemned as a matter of course.

The front axle assembly seemed fine but the usual wear in the king pin and front hubs assemblies were evident. Andre Hartford shock absorbers would need an overhaul and there was doubt whether the Luvax dampers could be rebuilt.

THE BODY SHELL

From the outset, there appeared no other choice than to reconstruct the entire body shell. There seemed very little of the original frame that remained sound. This was not altogether surprising, since it was some 70 years or so since the car was built and the wooden frame seemed otherwise completely original. The same concern applied equally to both doors frames and boot.

The decision was therefore taken to immediately dispatch the body shell for a complete reframe, this to include repairing any external alloy panel that needed it. This was dispatched for rebuild in March 2005.



THE CHASSIS FRAME

Once completely stripped and with the body shell removed, the source of the chassis twist became evident. Both the near side front dumbbell and near side rear dumbbells were distorted and both front spring hanger bush assemblies were twisted out slightly. Judicious twist and pressure on the front and rear parts of the chassis was then applied and it was successfully straightened. The use of any heat, in such circumstances is not advisable, as the application of heat itself creates distortion and the subsequent shape is not stable for some time afterwards.

Once straightened the chassis was then bead blasted, examined and pronounced sound. It was then primed and painted.

The wings were stripped and bead blasted, panel beaten into shape, new metal inserted where necessary and primed ready for final painting and re-assembly.

RESTORATION TIMESCALE

Once the body shell had been sent away for rebuild, a new crankshaft ordered and the chassis frame straightened and painted, it had been intended to recommence the restoration itself in relatively slow time, fitting work in around the many other Aston Martin restorations that are routinely in progress. However, there was a small matter of Bob Fountain's determination to take part in the Peking Paris Challenge 2007. It soon became apparent that the only viable way to do so, which would meet with the organiser's approval was, with the Lagonda.

After some deliberation the decision was taken to start the restoration proper in earnest on the 4th October 2006. By this time the body shell had been rebuilt, both doors reframed and hung and wings awaited a



trial fit. The chassis frame was straightened and painted. The Lagonda had to be MoT'd by late January 2007 which would give approximately 6 weeks in which to drive some 2000 miles to bed everything down and sort the many minor defects arising. This gave, with a break for Christmas, about 15 working weeks to complete the restoration.

THE RESTORATION PLAN

It took very little time to realise that much of the work to rebuild the engine, transmission and axle assemblies would need to be subcontracted immediately. The same applied to re-trimming seats and building a new hood. Aston Workshop's role would therefore be confined to painting, chassis assembly, outfit, test and as overall project managers. Aston Workshop would also need to scheme and fit all of the rally modifications and these would also all equally have to be designed and parts ordered not later than the 3rd week in October. Above all, Aston Workshop would need to exercise every scrap of goodwill and support from its many suppliers and collaborators to make this plan happen.

The list of all of the suppliers, supporters and collaborators is attached at Appendix 4. To them an immense debt of gratitude is owed.

The engine parts, gearbox, front and rear axle assemblies were immediately sent for overhaul and rebuild. The engine would need to be ready to fit the car by mid December so that the radiator and bonnet could be finally fitted and aligned. The axle, hub and brake assemblies would need to be back fully overhauled and assembled by the 1st week in January 2007.

A new wiring loom was ordered. It took only 2 weeks for this to be produced; which was remarkable. All instruments were sent away for rebuild and calibration with a firm date for their return of mid December to coincide with the fitting of the engine.

All parts needing chroming were dispatched by the 2nd week in October as these are a notoriously long

lead item. Headlights were dispatched for restoration, 2 new pass-lamps to the original design were ordered and the Radiator shell sent for straightening and chroming, complete with slats. All these parts would be needed back by early to mid November.

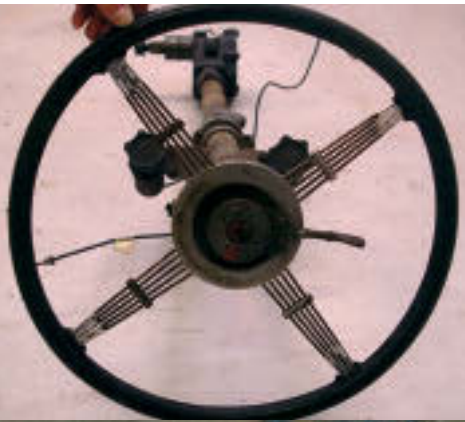
New connecting rods and pistons, flywheel assembly, clutch and camshaft were ordered new together with big end shell bearings to fit the new crankshaft. These parts would need to be with sub-contractors not later than the 2nd week in November. A new exhaust manifold and system in mild steel was ordered with the hope that would be ready by mid December in time to be mated with the engine at the same time.

New hubs, wheels, tyres and tubes, stub axles, steering linkages and fuel system components, including tanks were required and ordered with a planned date for fitting of the 2nd week in November.

The body shell and doors would need to be painted and reunited with the chassis by the 2nd week in November. This was a crucial date, as until that happened none of the parts assembly, including particularly the fuel system, reserve tank and pipe work could be installed. There was also the lead time for re-trimming to consider and for the scheming and then construction of additional stowage in the rear in place of the rear seat.

Fortunately with all of the original seats, door trims etc available as patterns; it would be possible for re-trimming to start almost immediately. Conversely, the fabrication and fitting of the hood had to await the time when the body had been painted and reunited with the chassis.

Finally but by no means least, the dashboard and other veneered items had to be ready by early December, as the Body became progressively more complete and the glass and seals fitted back. This would then enable the re-wiring to commence to coincide with the refitting of the engine. Running boards and wings had to be reassembled complete by mid November.











THE BEST LAID PLANS

There are two key lessons which often have to be learnt the hard way on very tight programmes such as this restoration. First it is essential that a viable plan is drawn up as the first thing that is done and while avoiding making commitments until the plan and programme is in place. Without a plan, no-one can know what anyone else is doing and chaos reigns. The second key lesson is to work the plan ruthlessly, but to recognise that flexibility is needed as no plan can survive without change. Any delay upfront will always result in a delay at the end and usually a much more significant one. These points were firmly briefed and understood and Aston Workshop can be very proud to have undertaken such a daunting challenge, met it and succeeded.

The first part of the plan, namely the painting of the body and its reassembly with the chassis went forward with alacrity and was throughout right on schedule. This was a crucial and very successful start to the implementation of the plan.

All of the engine parts, transmission and axle assemblies were delivered on schedule. Lighting was ordered and returned pretty well to schedule but the chroming went partly awry. Elements needed to be stripped and chromed again, but as it turned out, none of the trim, then 3 weeks late, led to delays elsewhere.

The first major problem that arose was delay in the supply of engine parts, in particular pistons and connecting rods, though the latter in the event, turned out not to be the crucial factor. Other potential disasters included the unforeseen condemnation of the cylinder block, as cylinder head studs pulled out. The new crankcase that it had been hoped to fit was not ready and therefore a spare Sanction 3 LG6 crankcase was found. This could have been a significant risk but everything went according to plan. It was also possible to find a replacement cylinder block, but this would need re-sleeving adding a week to the schedule as minimum. The replacement cylinder head was also readily found and this was given to

Aston Workshop to prepare. That went pretty well to plan. As a result of all this disruption the engine was not completed until the 3rd week in January and was not returned to Aston Workshop until the first week in February, approximately 6 weeks late, together with front and rear axle assemblies.

There was yet another alarm as the front and rear axle assemblies including brake back plates were subjected to a thorough set of crack tests, these being essential to ensure they had the necessary mechanical integrity and strength for the rally. All items except the front axle were fine, but the front axle beam around the king pin bearings showed signs of cracking. Fortunately, just as a plan to find another axle got under way, some judicious scraping and filing of the affected area confirmed that they were all they caused by minor surface discontinuities of no depth and that all was well. Phew what a relief!!!

There was another week's delay as the new flywheel and clutch assembly failed to appear on time. The result was there was not a running engine until the 3rd week in February, by which time nearly all of the suspension had been refitted.

The car was MoT'd by 2nd March and by mid March, with a very compressed timescale, had been driven over 1000 miles. As the driving schedule got underway, the first major problem encountered was the near side door opening while in motion. When it happened for the 3rd time the damage was such that the door had to be totally rebuilt, near side rear wing repaired and some minor damage to the a front wing rectified. Rectification took 3 days, a remarkable achievement.

Then on Sunday morning, 17th March, there was another major disaster. The engine seized briefly, then it managed to keep going, but it was soon apparent that the engine would need to come apart. It is at times like this that the true capability of an organisation becomes clear. Within 3 hours the engine had been removed stripped, damage assessed. A new





set of liners and pistons would be required; they were sourced and someone dispatched to collect them for the following day. By Monday morning replacement pistons had been sourced and con rods sent away for machining to fit.

By Tuesday lunch time the block was ready for reassembly, new pistons arrived that afternoon, con rods returned and the engine was refitted and running by Wednesday morning.

By the beginning of April, 2000 miles had been achieved, a fantastic achievement. There was therefore a 5 day final window to complete all the pre-rally preparations, stow all gear, fit re-tempered front and rear springs to give an enhanced ground clearance and finally fit the under-shield protection.

AUF 77 was dispatched to the shippers on Friday, 9th April, in all respects completed, serviceable and ready to start her next adventure.







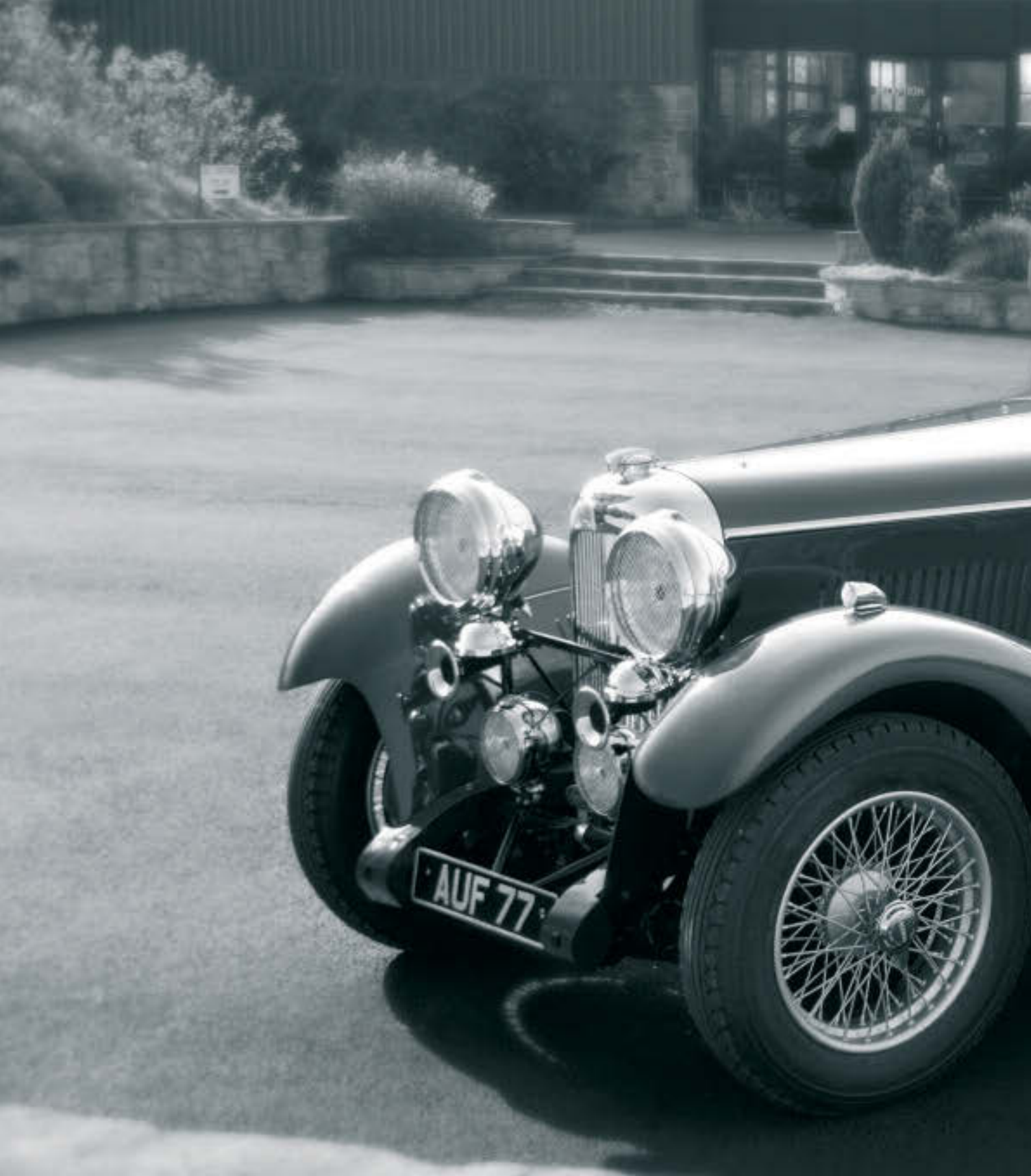












AUF 77







C H A P T E R S I X

STORY OF THE PEKING TO PARIS CHALLENGE

Starting on the 27th May, 2007 on exactly the 100th anniversary of the first transcontinental Peking to Paris Motor Challenge, there will be a faithful recreation of one of motoring's greatest adventures. The route will follow as exactly as it can the itinerary of those pioneers, to recreate some of the adventure and sense of wonder and celebrate their achievement 100 years ago. This is the story of the Challenge and of the preparations needed to undertake such an arduous journey.

THE 1ST PEKING TO PARIS MOTOR CHALLENGE

The Peking to Paris Motor Challenge was the first ever trans-continental motor-rally. It was to become an epic encounter between a Prince and a Pauper. It is a story of determination, romanticism and vision with a healthy input of danger and adventure.

The story starts with a decision by the French newspaper, Le Matin to sponsor a Challenge to demonstrate that it was possible to drive in a motor car from Peking to Paris in 60 days.

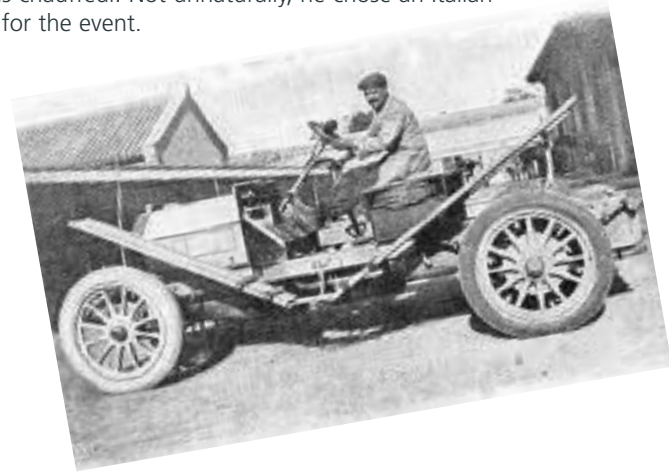
'What needs to be proved today is that as long as a man has a car, he can do anything and go anywhere. Is there anyone who will undertake to travel this summer from Peking to Paris by automobile?'

The prize was a Magnum of champagne for the first car to cross the finish line in Paris.

The Challenge was not intended as a race as such. Entrants were expected to travel together and to help

each other in the event of a misadventure. They were to travel a prescribed route and to that end, were required to report at pre determined telegraph stations to inform Le Matin of their progress. Through their Peking correspondent and embassy, they attempted to ensure that the Chinese authorities would welcome them and provide appropriate consular assistance, as also with Mongolia and Russia.

Within days Prince Scipione Borghese answered that Challenge. He enrolled Luigi Barzini, a journalist and correspondent of *Corriere della Serra* and the London *Daily Telegraph*, and Ettore Guizzardi, who was his chauffeur. Not unnaturally, he chose an Italian ITALIA for the event.



Prince Borghese and his Itala before the start. Note the rudimentary splash guards which had been created from ripped up floor boards.



The route lay through the mountainous passes of Inner Mongolia. Fit more for the pack mules than for a motor car!!

Another entrant read of the Challenge as he picked up a copy of Le Matin from the gutter. Charles Goddard, a fair-ground worker, had little money but a great vision and enormous determination, and so intent was he on entering that he borrowed and mortgaged everything to take part. He was to chose a SPYKER for the event, leant to him by the maker Jacobus Spijker. Furthermore, he had never driven any motor car before setting off on the great adventure.

In all 40 entrants indicated their intention to enter, but of those, only 5 were to actually start the Rally.

The starters were:

Prince Scipione Borghese

entering with an ITALA 35/40hp 9 litre

Charles Goddard with Jean du Taillis

entering with a Dutch 15hp Spyker

Auguste Pons

entering with a 3 wheeler Contal Cycle-car

Georges Cormier

entering with a 10hp De Dion Bouton

Victor Collignon

also entering with a 10hp De Dion Bouton

THEIR ROUTE

Of the five cars that set out from Peking, four made it to Paris to a tumultuous welcome and world-wide fame – they had set out to prove that man and machine could now go anywhere; they hoped it would make

borders between countries redundant and while the latter was not achieved, it gave a huge boost to the former.



Some of the entrants and officials with the Itala in the foreground.



They had left Peking with no passports – these had been confiscated by Chinese authorities who suspected they were spies, and had no interest in seeing the success of the motor-car having just invested in shares in the trans-Siberian railway.

The first 5000 miles were to prove challenging in the extreme. There were no recognised roads, and fuel, water and oil had to be repositioned. The latter was to prove a major problem for Charles Goddard, who lacked the resources to provide them en-route and who had to rely on the generosity of others to keep going.

It was also clear that Prince Borghese was intent on winning this event for Italy and so left the other competitors behind to largely fend for themselves.

The competitors' route lay across the Gobi desert. It was the desert crossing which was finally to be the downfall of the Contal tricar and its team. They would be lucky to escape with their lives. Other hazards confronted the entrants.

As they entered Outer Mongolia and on into Russia, they were confronted by the deep slimy mud of the thawing tundra. Some mud pools are deep enough to swallow a complete horse and cart, and anyone falling into such a mud pool would be lucky to survive. Detours would have been frequent. Metalled roads there would have been none and dust would be everywhere.

However 4 survivors reached Moscow to be greeted with a rapturous reception. From there they traversed through Estonia and into Poland, Germany and finally to Paris.

The winner, Prince Borghese reached Paris in 60 days after leaving Peking.

Second was the Spyker of Charles Goddard though he had been arrested on crossing the Dutch Border for non-payment of his debts and fraud. The car was driven to the finish by his mechanic and a driver provided by Jacobus Spijker.

Prince Borghese together with his fellow passenger and journalist, Luigi Barzini wrote and published an account of their adventure in 1908 which became an instant best seller.



THE SECOND PEKING TO PARIS CHALLENGE

The second Peking to Paris was not held until the summer of 1997, on the 90th anniversary of the original Challenge. However, in a departure from the original route, the entrants were expected to traverse Tibet, Nepal and into India, then onward to Pakistan and Iran. Organised by Enduro Classics, this was the first-ever rally for classic and vintage cars to cross China, and the first-ever rally to cross Tibet. Entrants camped at the foot of Mount Everest.

It was also the event that finally led to the opening of the crossing from Tibet into Nepal by way of the 'Friendship Bridge'.

The border at Friendship Bridge between Tibet and Nepal had been closed for 40 years since it was slammed shut by Chairman Mao. The 90th Anniversary Peking to Paris negotiated the re-opening, and remains open to this day. The route went into India and Pakistan, and was the first rally to cross Iran since the 1977 London to Sydney Marathon. Of 96 cars that set out, all but nine made it to the celebrations in Place de la Concorde, and TV film of the epic drive has been seen in more than 80 different countries

THE 2007 PEKING PARIS MOTORING CHALLENGE

On the 100th Anniversary of the original Challenge a faithful recreation of this event will take place. It will as far as possible follow precisely the same route, and in the more remote regions of Inner and Outer Mongolia and the crossing of the Gobi desert, conditions will be not dissimilar to those faced by the intrepid travellers 100 years ago.

AUF 77 has been entered for this event to be driven by Bob Fountain. His co-driver and navigator will be his good friend Joseph De Giorgi. Among the 134 competitors taking part, there are no less than 2 other Lagonda M45s. They have formed a team to assist each other and if necessary share spares if and when any may be needed.

THE CHALLENGE ROUTE

The Route in brief-Sunday, May 27th, 2007: Competitors will be flagged away from the Great Wall of China, head north to the Gobi Desert, into Outer Mongolia, to Ulaan Baatar. From there they will turn left and pound the vast grassy plains of the Asian Steppes, through territory that has hardly changed since Prince Borghese gave local villagers their first glimpse of a motor-car. They will then enter Siberia, Kazakhstan, Russia, rest at Moscow, and again at St. Petersburg, before reaching Europe - an unforgettable motoring experience, ending with a parade into Paris and a celebration on Saturday June 30th, 2007.







THE ROUTE

Day & dates			Route	Km	Local Time
Day 1	May 27	Sun	Beijing to Datong	363	GMT+8 (UK+7)
Day 2	May 28	Mon	Datong to Siziwangqi	368	GMT+8 (UK+7)
Day 3	May 29	Tue	Siziwangqi to Erenhot	248	GMT+8 (UK+7)
Day 4	May 30	Wed	Erenhot to Sainshand (+Border)	223	GMT+8 (UK+7)
Day 5	May 31	Thur	Sainshand to Ulaan Bataar	436	GMT+8 (UK+7)
Day 6	Jun 1	Fri	Rest Day Ulaan Bataar		GMT+8 (UK+7)
Day 7	Jun 2	Sat	Ulaan Bataar to Khakorin	365	GMT+8 (UK+7)
Day 8	Jun 3	Sun	Khakorin to Bayankhongor	428	GMT+8 (UK+7)
Day 9	Jun 4	Mon	Bayankhongor to Altay	388	GMT+8 (UK+7)
Day 10	Jun 5	Tue	Altay to Khovd	433	GMT+8 (UK+7)
Day 11	Jun 6	Wed	Khovd to Border Camp	295	GMT+7 (UK+6)
Day 12	Jun 7	Thur	Border to Bijsk (+Border)	635	GMT+7 (UK+6)
Day 13	Jun 8	Fri	Bijsk to Novosibirsk	437	GMT+7 (UK+6)
Day 14	Jun 9	Sat	Rest Day Novosibirsk		GMT+7 (UK+6)
Day 15	Jun 10	Sun	Novosibirsk to Omsk	668	GMT+7 (UK+6)
Day 16	Jun 11	Mon	Omsk to Tyumen	632	GMT+7 (UK+6)
Day 17	Jun 12	Tue	Tyumen to Yekaterinburg	315	GMT+6 (UK+5)
Day 18	Jun 13	Wed	Rest Day Yekaterinburg		GMT+6 (UK+5)
Day 19	Jun 14	Thur	Yekaterinburg to Perm	379	GMT+6 (UK+5)
Day 20	Jun 15	Fri	Perm to Kazan	688	GMT+6 (UK+5)
Day 21	Jun 16	Sat	Kazan to Niz. Novgorod	392	GMT+4 (UK+3)
Day 22	Jun 17	Sun	Niz. Novgorod to Moscow	439	GMT+4 (UK+3)
Day 23	Jun 18	Mon	Rest Day Moscow		GMT+4 (UK+3)
Day 24	Jun 19	Tue	Moscow to St Petersburg	730	GMT+4 (UK+3)
Day 25	Jun 20	Wed	Rest Day St Petersburg		GMT+3 (UK+2)
Day 26	Jun 21	Thur	St Petersburg to Tallinn (+Border)	450	GMT+3 (UK+2)
Day 27	Jun 22	Fri	Tallinn to Riga (+Border)	406	GMT+3 (UK+2)
Day 28	Jun 23	Sat	Riga to Vilnius (+Border)	394	GMT+3 (UK+2)
Day 29	Jun 24	Sun	Vilnius to Mikolajki (+Border)	403	GMT+3 (UK+2)
Day 30	Jun 25	Mon	Mikolajki to Gdansk	351	GMT+2 (UK+1)
Day 31	Jun 26	Tue	Rest Day Gdansk		GMT+2 (UK+1)
Day 32	Jun 27	Wed	Gdansk to Potsdam (+Border)	598	GMT+2 (UK+1)
Day 33	Jun 28	Thur	Potsdam to Koblenz	556	GMT+2 (UK+1)
Day 34	Jun 29	Fri	Koblenz to Reims (+Border)	461	GMT+2 (UK+1)
Day 35	Jun 30	Sat	Reims to Paris	161	GMT+2 (UK+1)





PREPARATION OF AUF 77 FOR THE MOTOR CHALLENGE

The Technical Regulations are attached for general information at the end of this chapter. However, these apart, there are a number of additional changes made to the original configuration of AUF 77 to enhance its chances of success in finishing the event. They may be grouped into a number of key areas, these being:

Endurance – to give AUF 77 an adequate range of at least 350 miles without a need for fuelling, an auxiliary tank of 10 gallons has been installed, this being situated in place of the rear seat. This gives a total installed capacity of 30 gallons of which around 28 are useable.

To complement the additional tank and to ensure additional redundancy in the event of a fuel pump failure, each tank has its own pump which, if required, can be cross connected to the other tank. In all other respects, there has been no other cross connection in case one of the tanks is contaminated, thus hopefully ensuring that there is always a source of good fuel.

Ground clearance and ability to deal with uneven surfaces – Ground clearance has been raised by the simple expedient of re-setting the front and rear springs. However, to assist in coping with very uneven surfaces and pot holes, the original bump and rebound stops have been replaced with a bellows type of stop installed thus helping to cushion any suspension induced shocks into the chassis.

Engine – The only modification to the standard engine specification specifically for this event is to ensure that the compression ratio is appropriate for 75 Octane fuel. The Meadows engine is well suited for use with low grade fuels.

Exhaust System - Mild steel has been used throughout so that in the event it gets hit and damaged, it can be easily welded. In addition, instead of clamping each joint, each exhaust pipe section is wired in place to its adjacent sections, thus ensuring if a solid object is hit it can separate without causing massive damage.

Under protection – Under shields have been added to protect sump, gearbox,, brake system, exhaust and main tank.

Electrical System – An alternator has been installed as the primary means to maintain battery charge. However, in the event that the alternator fails, the original generating system can be re-activated within 10 minutes of stopping the engine. As the entire electrical loom is new, waterproofing measures have been restricted to ensuring copious use is made of water repellents in all vulnerable areas, careful routing and extensive use of modern bullet connectors.

Lighting – An additional pass lamp has been mounted and halogen bulbs fitted to both main headlights. Additional internal lamps for use by the co-driver have been added.

Safety – Front seat belts are fitted, but no roll over protection has been added. Front and rear towing hooks have been installed. In all other respects, additional safety equipment as required by the organisers has been stowed on board.

Comfort – The original seats have not been used. Instead leather faced bucket seats with variable lumbar support have been fitted. Ventilation is augmented with more powerful boost fans and heater fitted for time at the higher altitudes. A modern radio with GPS navigation has also been installed but it also includes an MP3 player.

Stowage – Spare leaf springs are stowed under each front wing. A trunk has been erected over the rear seat for additional secure stowage.

2007 PEKING PARIS MOTOR CHALLENGE

Technical Regulations

The entry is divided into three categories of vehicles dependent on the dates of production of the type of vehicle being driven.

The Pioneer Category:

Cars of a model-type in production prior to 1920 with only authentic period modifications permitted.

The Vintageant Category:

Cars of a model-type in production prior to 1940 without disc brakes, regardless of age or supporting manufacturer documentation.

The Classics Category:

Cars of any model-type in production prior to 1960.

General Requirements

In line with the overall concept of the event, the organisers have devised technical and eligibility regulations which will ideally see all the cars maintain their historical integrity and original appearance. The use of any modern day technology and components is against the spirit of the event. Due to the extreme terrain and the distance of this unique event the only changes allowed to the original specifications will be those for improving safety and reliability. All cars will comply with the FIVA Event Code by respecting these specific technical regulations.

Before the start the chassis, engine block, cylinder head(s), may be marked. Replacement of any of these parts during the event will incur a penalty.

Honesty Declaration Forms

These forms will be posted to all competitors 12 months before the event and must be completed and returned to the Rally Office as soon as possible. On the forms the competitors must record any modifications made to their cars for checking by the scrutineer to ensure compliance with the following technical specifications. A copy of the form will be returned to the competitor with comments from the scrutineer as appropriate. If following this further modifications are made to the car the onus lies with

the competitor to resubmit the form to the Rally Office. No verbal approval of any modifications will be accepted. At pre-event scrutineering if the car shows any variance from the Honesty Declaration Form the competitor will be reported to the Clerk of the Course and penalties 'up to exclusion' from the event will be applied.

Chassis and Suspension

Strengthening of chassis and suspension components is permitted. Suspension must remain to the original manufactures design (for example live axles cannot be replaced by independent suspension nor leaf springs replaced by coil springs). Anti-roll bars and up-rated or additional springs and shock absorbers are permitted. Lever arms may be replaced by telescopic shock absorbers. The fitting of underbody protection is strongly recommended for the engine sump, gearbox, rear axle, fuel tank and silencing system.

Engines

The cylinder block and the cylinder head(s) must be either from the original model or from a car made by the same manufacturer, providing this was in production during the period. They must be of the same design configuration, have the same number of cylinders, camshafts and valves. Cars fitted with non-original engines will compete in the Specials Category. Engine and gearbox mountings may be modified or replaced. The location of the radiator may not be changed but its capacity may be increased. The fitting of an oil cooler is permitted. Carburettors may be changed or additional carburettors fitted providing that their size and make is of a type available in the period. The same applies to the inlet manifold. Air filters can be changed or modified but externally mounted air intakes are not permitted. The exhaust system is free, however, if the exhaust pipes are mounted outside of the bodywork they should be shielded to avoid possible injury to spectators. Cars must at all times comply with local noise regulations. Cars should be tuned to run on local fuel supplies. These may be 75 octane in Mongolia and 80 octane in Russia.

Transmission

The gearbox can be changed to a unit from a model from the same manufacturer within the period. Overdrive is permitted where the model was not originally fitted with one. A limited slip differential is not permitted unless fitted as original equipment.

Axles and axle ratio can be changed providing the type of axle and suspensions system is not changed.

Brakes

All cars must have four-wheel brakes. Post-war classics may replace drums with discs providing all the components are from a production car of the period and from the same manufacturer as the original car. Discs are not permitted on any pre-war cars.

Electrical

Magnetos or dynamos can be up-rated or replaced by an alternator. Hand-operated advance and retard mechanisms can be fitted. Uprated bulbs and additional lights may be fitted. Cars may not have more than 6 forward facing lights fitted.

Fuel Tanks

The original fuel tank can be enlarged or additional tanks fitted providing the original basic location remains unchanged and that they are manufactured to a professional safety standard.

It is forbidden to carry fuel cans within the passenger compartment. A fuel range of at least 375 miles or 600 kms is necessary.

Body (exterior)

The body should remain original in respect of shape and construction materials with the exception of small modifications, for example, additional cooling vents, bonnet and boot straps or catches, lamp guards, roof rack. Minor flaring of the wings/mudguards to accommodate larger tyres is permitted but must cover the full width of the tyre over at least two thirds of the tyre circumference. All cars must have mud flaps fitted to all four wheels.

Body (Interior)

Car interior should be original or be of authentic appearance for a car of the period. Seat belts must be fitted, the steering wheel may be replaced, the front seats may be replaced, additional instruments, switches and controls may be added providing the layout of the original components is not changed. Interior accessories may be added to improve comfort, convenience or safety provided they do not affect the performance of the car. Radio transmitters are not permitted.

Tyres and Wheels

Wheels must be of a type available in the period. Alloy wheels are not permitted. The number of tyres and wheels carried on the car is free.

Spares

There will no limit to the quantity or the range of spares that can be carried on the car, however trailers will not be permitted.

Safety

Wherever practical cars are strongly recommended to be fitted with a roll-over bar, the minimum requirement being a single hoop and two back stays. Seat belts are mandatory for all occupants. A fire and liquid proof bulkhead between engine/fuel tank and passenger compartment is strongly recommended.

All cars must be fitted with a laminated windscreen or aeroscreens, glass cannot be replaced with plastic.

Racing style driver overalls and helmets are prohibited.

All cars must carry a warning triangle, a tow rope, at least one spare wheel and have mud flaps on all four wheels. An AFFF fire extinguisher of at least 1.75 litres must be securely fitted and within easy reach within the car. A comprehensive first aid kit, as specified by the organisers, is a mandatory requirement. A tent and sleeping bags for the crew is also mandatory. The carrying of a firearm or explosive device will lead to immediate exclusion.





A P P E N D I X

APPENDIX 1 - VARIOUS BILLS FROM THE 1950's

APPENDIX 2 - LETTERS TO AND FROM DR ELLIS

APPENDIX 3 - EXTRACTS FROM 1930's LAGONDA BROCHURE

APPENDIX 4 - ROAD TESTS OF THE M45

DAVIES MOTORS LIMITED

DIRECTORS:
 J. E. DAVIES
 V. I. DAVIES
 J. H. NICHOLAIS, F.C.A.

273 LONDON ROAD
 STAINES · MIDDX

TELEPHONE:
 STAINES 3457-8
 4211 - 5 lines.

A.A.



R.A.C.

INVOICE

8818/NTP/MJB

30th March 1953.

D. Ellis Esq.,
 4, Ladbroke Road,
 LONDON W.11.

Job number 5254.
Chassis No. Z.10746.

To removing starter motor, fitting new Bendix spring and bolts etc and refitting unit.	
Labour and material inclusive.....	£1. 17. 6.
" removing, cleaning and re-gapping sparking plugs, dismantling, cleaning re-assembling and re-assembling carburettors and road testing car on completion of repairs.	
Labour and material inclusive.....	2. 7. 6.
" removing seats and floor boards, topping up front telecontrol shock absorbers and bleeding all points, adjusting clutch toggles and clutch pedal clearance, removing and refitting speedometer cable correctly.	
Labour and material inclusive.....	2. 10. 0.
" partly dismantling windscreen as necessary to inspect for possibility of making this unit open-and-shut and reassembling and rebedding.	
Labour and material inclusive.....	2. 8. 6.
" designing, making up and fitting special grid to luggage boot.	
Labour and material inclusive.....	<u>4. 15. 6.</u>
Carried forward.....	£ 13. 19. 0.



ALL CARS OFFERED SUBJECT TO BEING SOLD WHEN REQUIRED

CLIENTS' CARS STORED AND DRIVEN AT OWNERS' SOLE RISK

DAVIDS MOTOR REPAIRS LTD

TRADE ACCOUNTS
1951

Brought forward.....	£13.	19.	0.
To removing both offside road wheels, transferring covers and tubes to reconditioned rims and wheels, re- balancing and refitting.			
Labour.....	1.	1.	0.
Material.			
2 reconditioned road wheels in exchange.....	20.	0.	0.
	£35	0.	0.

DAVIES MOTORS LIMITED

DIRECTORS
 J. E. DAVIES
 V. J. DAVIES
 J. H. NICHOLSON, F.C.A.

273 LONDON ROAD
 STAINES · MIDDX

TELEPHONE
 STAINES 4211
 (8 LINES)



A.A.

R.A.C.

INVOICE.

WTF/MJB/9864.
24th October 1953.

D. Ellis Esq.,
4, Ladbroke Road,
London W.11.

Job number 5867.
Chassis Number 10746.
Reg'd Number AUP 77.

To removing cylinder head, dismantling, decarbonising refacing valve seats, refacing inlet valves, grinding in all valves, dismantling rocker assemblies, fitting new set spacing washers, re-assembling and refitting cylinder head, cleaning and regapping sparking plugs, cleaning and resetting ignition points, cleaning and resetting carburettors.		
<u>Labour and gaskets inclusive.....</u>		£17. 10. 0.
<u>Additional material. 6 exhaust valves, 32 rocker spacing washers, 1 cylinder head end plate and washer.....</u>		4. 9. 4.
" <u>removing tappet side plate, tightening down cylinder block and refitting side plate, Labour and material inclusive.....</u>		1. 7. 6.
" <u>removing radiator, repairing leak in bottom tank and refitting. Labour and Material inc...</u>		3. 10. 0.
" <u>adjusting and re-meshing steering pin and worm with column in position and refilling with oil. Labour and material inclusive.....</u>		1. 8. 2.
" <u>removing flooring as necessary, adjusting clutch toggle arms, greasing thrust and first motion shaft races, resetting clutch linkage and adjusting clutch stop. Labour & Mat ince...</u>		1. 15. 0.
" <u>removing speedometer head and fitting reconditioned replace and fitting new speedometer drive cable. Labour.....</u>		- 15. 0.
<u>Material. 1 reconditioned speedometer head in exchange, 1 speedometer cable.....</u>		5. 0. 0.
	<u>Carried forward.....</u>	£36. 15. 0.



ALL CARS OFFERED SUBJECT TO BEING UNSOLD WHEN REQUIRED

CLIENTS CARS STORED AND DRIVEN AT OWNERS RISK

DAVIES MOTORS LIMITED

GENERAL MANAGERS

10, BROADWAY, LONDON, E.C. 4

Brought forward.....	£35. 15. 0.
To inspecting road springs, and oiling greasing chassis and prop shaft, checking all oil levels, greasing water pump, top- ping up batteries, and road testing on completion. <u>Labour and material inclusive.</u>	2. 10. 0.
" supplying 2 gallons of petrol for test and 6 gallons petrol against collection.....	<u>1. 15. 8.</u>
	£40. 0. 8.

Brian Finglass
H. G. Dudley



Phone: BAYswater 3951
TULse Hill 4755

Speed Models

2 PEMBRIDGE MEWS, NOTTING HILL GATE, W.11
BUGATTI SALES & SERVICE



September. 26th.,
1953.

Mr. David Ellis,
Mercury Theatre,
Ladbroke Road,
W.11.

Dear Sir,

We thank you for your letter of the 22nd., inst. but regret that all our pre-war records have been completely destroyed by now.

If we can help you in the way of service or maintainance on your Lagonda we shall be happy to do so.

Faithfully yours,
For SPEED MODELS.

A handwritten signature in blue ink, which appears to read "Brian Finglass". The signature is written in a cursive, flowing style.
Brian Finglass.

DAVIES MOTORS LIMITED

DIRECTORS:
DAVIES
DAVIES
NICHOLSON, F.C.A.

273 LONDON ROAD
STAINES · MIDDX

TELEPHONE:
STAINES 36222
4211-5lines.

A.A.



R.A.C.

INVOICE

NTP/JPP/8853

10th April 1953.

D.S.
~~M. D.~~ Ellis Esq.,
4, Ladbroke Road,
LONDON.W.8.

13 APR 1953

re: Chassis No. 10746
re: Job No.5279.

To checking all oils and changing engine oil,
checking oil supply to valve gear, greasing
magneto, water pump fan, greasing prop
shaft, oiling engine control joints, greasing
chassis, greasing clutch, oil spraying road
springs, checking battery levels, removing
wheels, greasing hub spline and refitting
wheels, ~~checking and resetting tyre pressures.~~

LABOUR	2.	17.	-.
MATERIAL. 2½ gls XXI, 4 pts			
Spirax C. 4 pts, E.P. ...	2.	-.	3.
	£	4.	17. 3.



ALL CARS OFFERED SUBJECT TO BEING UNSOLD WHEN REQUIRED

CLIENTS' CARS STORED AND DRIVEN AT OWNERS' SOLE RISK

TELEGRAMS: LEX · PICCY · LONDON

LEX Garages Limited

INCORPORATED IN ENGLAND
2 · LEONINGTON STREET
PICCADILLY CIRCUS
LONDON · W · 1
PHONE · GERRARD 8800

DIRECTORS: H. CHINN (Chairman), R. OWEN (Secretary), D. J. ROWLAND, F. MC CARTNEY,
G. J. ALLSOP, M.B.E., F.R.S., T. W. BISHOP

YOUR REF.

OUR REF.

MR/JMS.

16th December, 1953.
(Dictated 15th).

D. S. Ellis Esq.,
Mercury Theatre Trust Limited,
2 Ladbroke Road,
London, W.11.

Dear Sir,

I am obliged to you for your letter of December 14th in connection with which I telephoned you yesterday and I wish to express my regret at any inconvenience caused you by our obvious short comings in connection with this particular repair. My Divisional Manager has been in touch with Davies Motors by telephone and, being informed that the repair is now well in hand, has arranged to forward our own order for the work so that you will not be bothered with their account.

I am pleased to have been of service to you on this occasion and trust that, notwithstanding your obvious disappointment with the initial repair, you will upon consideration give us full marks for our prompt recognition of our responsibilities.

Yours very truly,


R. CHINN,
Managing Director.

CASH SALE INVOICE
 DAVIES MOTORS LIMITED

11000000
 273 LONDON ROAD
 STAINES MIDDX

273 LONDON ROAD
 STAINES - MIDDX

TELEPHONE:
 STAINES 4211 (6 LINES)

A.A.

R.A.C.



Nº 1409

M Donald J. Ellis Esq.

Ref 4 Radbrooke Rd Date 30 12 53

				<u>London W. 11</u>
1 New Rad				
Thermometer	£	3	15	0
Pats Packing			1	10
Old Unit Returned			1	2
Unreparable.				
	£	3	18	0

Rec'd CASH M.O. P.O. CHEQUE
 £3 18 s. 0 d.
 per pro Davies Motors Limited

W. Selney

Despatched via Post

DAVIES MOTORS LIMITED

DIRECTORS:
J. E. DAVIES
V. J. DAVIES
J. H. NICHOLASS, F.C.A.

273 LONDON ROAD
STAINES - MIDDX

TELEPHONE:
STAINES 3457-8

AA



RAC

NE/LDA/10,102.
28th March, 1954.

INVOICE

D. Ellis Esq.,
4 Laibroke Road,
LONDON. W.11.

re Car No. 2,10,746.
re Job No. 5,273.

To removing windscreen wiper; removing windscreen, dismantling, fitting new Triplex glass with new glazing rubber, reassembling and refitting screen, refitting wiper unit and linkage arms, fitting new wiper blades			
<u>Labour.</u>	7	5	6.
<u>Material.</u> 1 Triplex windscreen glass, 18' glazing rubber, 2 wiper blades ...	3	17	9.
" removing water pump, dismantling, freeing off spindle assembly, reassembling and repacking, refitting; adjusting timing chains, resetting magento timing, re-setting carburettors, road testing on completion			
<u>Labour and material.</u>	4	17	-.
" removing, recharging and refitting batteries, greasing chassis chassis and spraying springs, checking all oil levels, adjusting brakes, washing down car			
<u>Labour and material.</u>	1	15	-.

£17 15 3.



ALL CARS OFFERED SUBJECT TO BEING UNSOLD WHEN REQUIRED

CLIENTS' CARS STORED AND DRIVEN AT OWNERS' SOLE RISK

DAVIES MOTORS LIMITED

DIRECTORS:
J. E. DAVIES.
V. I. DAVIES.
J. H. NICHOLSON, F.C.A.

273 LONDON ROAD
STAINES - MIDDX

TELEPHONE:
STAINES 5497-9

4211 5lines.

A.A.



R.A.C.

INVOICE

10711/WTP/MJB.
20th August 1954.

24 AUG 1954

D. Ellis Esq.,
Mercury Theatre,
4, Ledbrooke Road,
London W.11.

re job number 6745.
Chassis No. 10748.

To removing seats, and floor boards, adjusting clutch, adjusting clutch linkage, and resetting clutch stop, repacking water pump in position, checking for external oil leaks in engine, and rectifying as necessary, changing engine oil and road testing car on completion. <u>Labour</u>	£5. 10. 0.
<u>Material</u> . 2½ glns <u>XXL 2 pts cleaning fluid</u>	1. 8. 5.
" checking over telecontrol shock absorbers, dismantling N.S. rear unit, fitting new expander, refitting system and testing, removing front Hartford shock absorber, straightening shock absorber post, refitting shock absorbers, connecting and drilling hole in posts to accept split pins and adjusting shock absorbers. <u>Labour and material inclusive</u>	4. 5. 0.
" checking oil levels, greasing chassis, removing, charging and refitting battery. <u>Labour</u>	1 0. 6.
" supplying 12 gallons petrol.....	2. 13. 6.
	<u>£14. 7. 5.</u>



ALL CARS OFFERED SUBJECT TO BEING UNSOLD WHEN REQUIRED

CLIENTS' CARS STORED AND DRIVEN AT OWNERS' SOLE RISK

MAURICE LEO.
Telephone BEACONSFIELD 538

N^o 2938



GREGORIES ROAD GARAGE

Directors: M. GREGG, R. W. H. DAVENPORT

LIMITED

BEACONSFIELD

BUCKS



David Ellis Esq.,
M. The Mercury Theatre Trust Ltd., 3rd December, 1954.
Mercury Theatre,
2, Ladbroke Road, LONDON. W.11.

REFERENCE N.45 LAGONDA. Reg. AUF.77.

Tot-

Removing magneto and fitting reconditioned Simms S.R.M.6
magneto. Timing magneto.
Fitting new Scintilla 12 volt coil.
Making up and fitting new ignition leads and fitting
new ignition contacts.
Cleaning & testing plugs.
Grease & servicing car.
Draining, engine, gear box and back axle and refilling
with Castrol lubricants. Road testing car.

Supplying:- S.R.M.6. Simms exchange magneto.

2. Exide 6 volt batteries.

1. 12 volt Scintilla coil.

Reconditioning & fitting water pump.

Length of hose, ignition lead & 3 Jubilee clips.

1. Set ignition contacts.

2½ gallons Castrol X.L. (Engine).

½ gallon Castrol X.L. (Gear box).

3½ pints Castrol Hi-Press (Back axle)

12 gallons Esso Extra.

24 15 -

30 - -

12 15 6

2 9 6

10 - -

10 6

5 3

1 7 11

5 9

6 -

£52 15 5

2 15 -

£55 10 5



INVOICE

N^o 3178

TELEPHONE: BEACONSFIELD 538



MAURICE LEO
GREGORIES ROAD GARAGE
BEACONSFIELD
BUCKINGHAMSHIRE



Mr. D. Ellis,

28th May 195⁵

Mercury Theatre, Ladbroke Road, W.II.

2 6.00 x 19" Dunlop tyres.	£11. 8. 6.	£22.	17.	0.
Removing brake drum and adjusting brakes.		1.	0.	0.
13½ gallons Esso Extra and one quart Castrol XXI		3.	5.	6.
		<u>£27.</u>	<u>2.</u>	<u>6.</u>



TROY, BOSHAM, NR. CHICHESTER, SUSSEX.
TEL. BOSHAM 2258.

10th Aug

Dear Mr Ellis,

Thank you for your letter. I am sorry to say that I do not myself know the answers to some of your questions but I hope the following information will be of use.

I have not had the car de-carbonised since I bought her early this year but compression on all cylinders is good and there is no undue tendency to "pink" yet. If I were keeping her I should probably have her de-carbonised before next spring.

I have not had the car re-bored and

according to the speedometer reading she has²
done 88000 miles. In view of the performance,
oil consumption etc I think she must have been
reworked with the last 20000 miles.

I have had nothing done to the gear box but
it is quiet in all gears and on my
judgment in very good condition.

I have had neither king pins or brake linings
reworked but there is no appreciable slack in
the power & the brakes are good with plenty
of adjustment left.

Fuel consumption while I have had the
car has been about 15 m.p.g. This is
with cruising speeds of 50-60 - an occasional
run up to 70 but not as a rule dropping down
into lower gears to get max acceleration. As

You no doubt know these cars talk almost anything in top on ordinary main roads.

Dil consumption I have not kept but is quite satisfactory. In fact the reason I don't know it is that it is a case of having a book now and then and having a quart put in if it is below "Full".

Dil pressure when fully hot runs between 43 and 23 for speeds in top from 70 to 20.

I do not know if Davis Motors told you that when I bought this car from them they had a 1936 model which I would probably have had - at a considerably higher price - but

for the fact that it was about 8 inches longer and would not have gone into my "then" garage. Since then I have put up a larger garage and am now therefore getting a 1937 $4\frac{1}{2}$ from Davis Motors, to replace my present car.

Though no doubt every seller says this, I really believe this car to be in exceptionally good mechanical condition for its age, and the body work etc. is also in a pretty good state. I have had a new radiator block fitted recently as on hot days water temperature used to go a bit high in traffic and have also had new wipers even wipers fitted.

In case it may be of interest I enclose a photograph of the car taken by my brother about four months ago, but ask you to return this in the enclosed envelope
Yours sincerely J. A. Smith

6 Buckingham Vale

Clifton

Switz

6th October 1953.

Dear Mr. Ellis:

My thanks for your letter of the 22nd September, concerning the Lagonda which I owned & drove with so much pleasure in those remote days when such cars seemed a commonplace thing. Your letter has recently been sent on to me.

I am glad to hear that the car is still flourishing & in such good hands. My own connection with it was lamentably short. I bought it originally in the Spring of 1939 on my return from India, at a time when I imagined

(2)

I should be permanently posted
in England. I had it

from Pippin Rutherford Keale

(I expect you know about that
part), & I understand it

had had a distinguished
career, including the Prix
d'Elegance, etc. It

continued this meteoric
life during the summer of

'39, until the balloon went
up in September, & myself
with it. It was

stored at a garage in Bristol
for $4\frac{1}{2}$ years. It was

best cared for in a reasonable
manner, & a few bouts
all round in the interim
did not improve it. It

in the spring of '44, when home
from Egypt I saw it & sold

it as it stood to one Mr.

Thompson, an Irish acquaintance

(3)

From that moment I heard nothing more of it until your letter came to hand.

During the few months of '39 it was drawn mostly in London, but I went to Devonshire once, & the day to the Isle of Skye, on excellent roads & in conditions quite unsuitable to it (According to memory, the Scottish tour was 1700 miles, average 18 m.p.h.) There were no breakdowns or accidents. It ran smoothly the whole summer & gave no trouble.

This is about all I remember, & I hope the details may be of some interest. I should very much like to see the car again one of these days. If, when I'm in London I may give

(4)

When a call upon you would be
found enough to let me
look at it again I
should be grateful.

It has many delightful
memories of a kind
which, repeatedly enough,
can never be repeated.

Yours sincerely

Quatroyle

Very thanks for enclosing
an envelope.

"Wallandool"
86 Riddlesdown Road
Purley, Surrey

UPLANDS 4415

13th October 1953

David Stuart Ellis,
Mercury Theatre,
2, Ladbroke Road,
London, W.11.

Dear Sir,

With regard to your letter dated the 11th ult., the Lagonda AUF 77 although in the name of Specialist Contractors Ltd. was run by wife during the time you note on the log book. We only eventually disposed of it for an Allard, as my wife found it a little heavy to handle for local shopping trips and journeys of that nature.

We had no particular trouble with the car during the time we had it, except that when we first had it we found the steering extremely erratic at any high speed. On one occasion we had a tremendous steering judder, which felt as though the car was going to fall to pieces when it was doing about 75 m.p.h., but it passed as soon as the speed was dropped. We had the steering and king pins etc. thoroughly overhauled and the shock absorbers propped up, and after that we had no recurrence of the trouble. It might be just as well, though, if you kept your eye on the front shock

Contd.

absorbers and saw that they were always in good condition, as of course she is a very heavy car at speed.

We had the car re-sprayed to its colour of grey; it was black before, and we had a new hood fitted. As far as the engine was concerned, I don't seem to remember us having anything done to it at all except the occasional adjustment of carburettors and normal tuning. We had this car from Davises of Staines, the Lagonda specialists who showed us bills for about £400 that had been spent on it only a short time previously with Lagondas.

I hope this is the sort of information you require, and if there is anything else you want to know we shall be only too pleased to help you.

Yours sincerely,



(E. C. Sayers)

24.8.69.

Dear Mr Brown,

I was very startled at getting your letter as I had sold my car in good faith to an English person to add to his collection. I wanted the car to stay in England and myself turned down offers four or five times as great from Americans. My first reaction was extreme annoyance that

Some one had misled me and then made a large profit.

However all this is in no way your fault and I am sure that the car is now in excellent hands. Anyway you are a member of the Regonda Club and most of those are excellent people!

Anyway I now understand a lot more. The character I sold the car to never came to collect the spares - or paid for 6 new tyres that I had!

Unfortunately I have only just got back from holiday and have little time at the moment to cope with ~~your~~^{all} the implications of your letter - but a few points to be going on with.

1/ Ramefield no longer make car bodies - but I contacted the designer there (now retired) and have the details - your photo is one I copied from their old files. There are others.

2/ The tail lights were on the rear wings and I may still have them.

If not, I might be able to supply drawing and positions of mounting. The 'A' frame I made for a special purpose.

3/ I never had the bumpers which were removed before the war. (I had the car for 16 years in daily use). The radiator "ornament" was a personal badge of the first owner - the American military attaché (or his deputy) here in England. The badges were his. The "spot light" was a special Klaxon horn that he removed when he sold the car after a few

months. I gather he was transferred to another Embassy.

The roof I made to the original pattern. Except for the rear light the whole body is original.

As regards the engine, the only non-original modification is the water pump which was changed from graphite seal (always a nuisance) to spring rubber (a great success).

I replaced most of the water pipes to bronze - original were aluminum as these corroded every ten years or so. The magneto was changed but

months. I gather he was transferred to another Embassy.

The roof I made to the original pattern. Except for the rear light the whole body is original.

As regards the engine, the only non-original modification is the water pump which was changed from graphite seal (always a nuisance) to sprung rubber (a great success).

I replaced most of the water pipes to bronze - original were aluminum as these corroded every ten years or so. The magneto was changed but

to one that Lagonda used.

Somewhere I have spares,
photos, and long correspondences
with the previous owners. The
car has had quite a history, winning
concours and going east to Turkey!

If you are still interested
let me know and we will try
to find time etc to help you.

Yours ever.

D.W. Miles

13.9.69.

Dear Mr Brown,

I have a little time now so
here goes.

The car was made for Major
Maurice Denis Cohn, who was said
to be at your Embassy here, and
delivered on 11 April 1934. He had
a country house in Sussex.

On 4 Dec 1935 he apparently
returned to U.S.A. and sold the car
to Mr Pisani (letter enclosed) who
belonged to a marble importing business

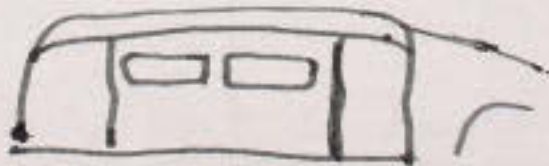
He died a few years ago. On
3 July 1939 the car went to
Mr Hoyle (letter enclosed) who
sold it to Frank Humphrey Unis
at Sneyde Park House, Bristol,
who changed the colour. It was
originally Maroon (wings etc)
and Rose (body etc).

The other owners and their letters
are listed separately. You will
see that you have a very complete
history. Further details I am sure
you can fill in by writing to
the addresses given.

(2).

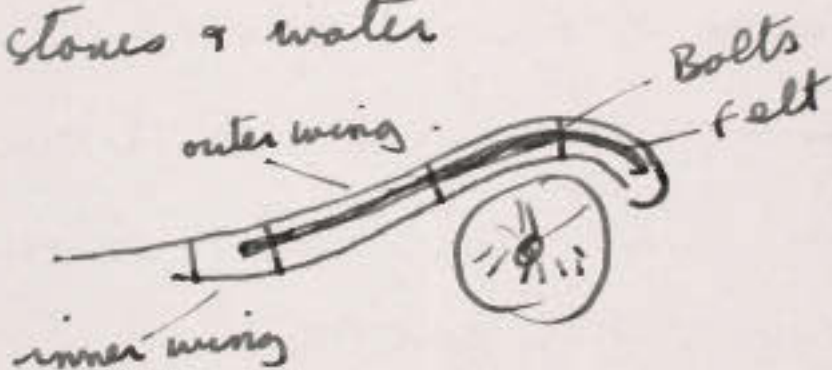
Now the bad news. Having heard nothing from the man who bought the car for so long, the spares were thrown away 6 weeks ago when I was on holiday. Such is life!

However I can let you have drawings as required. In the meantime:-
roof. This should be to the original design, shape and material except for the rear window. The original had two glass panels held in chrome frames! - size 12" x 4"



I remade the central panel as you probably have it now with plastic.

Wings These originally were all lined with felt and had another set of wings inside - Presumably to deaden the sound of stones & water



These inner shields had rusted and I removed them.

Intruments. These are as original except the central switch panel that replaced 2 multipurpose

(3)

switches .

Interior . Original and the carpet colour gives you the original maroon colour , the trimmings the Rose colour .

Engine I think I have explained already the modifications there .

The Tool kit was full and original

Lights . front original except that the passing light in the centre dumb iron had to be raised owing to a change in the law . It should be easy to remove the bracket .

Rear . If you look at your photograph you will see the rear

number plate attached to the offside rear wing. This plate was square and had letters thus: -

AUF
77

It was attached to the rear lights each of which was double.



These lights were 10" long and 3½" across and were very similar to Buick lights of the 30's

Bits of distributor condenser
mountings

A new carbon seal in its
rubber housing for water
pump - rather valuable to
you I suspect.

The two windscreen clamps
you referred to in your last
letter. These attach to the two
small hooks that should still
be fixed on the bottom of
your screen.

Incidentally the mechanism for
holding the windscreen open
I never saw, but the photo of
the car shows them very clearly.

If you would like these spares

(5)

I will arrange to send them to you. There is also a spare Photograph of the car leaving Laneville.

I spent a day with the Coach-builder and Mr Laneville (now dead) and heard the details of the ash and oak etc used. 10 different woods were ~~used~~ used! It was a special design and one off, to Major Cohn's details.

The badge on the filler cap is a Turf Club badge. Cohn's crest is on the Door.

It has just occurred to me that I am writing of the car as it left me. Maybe some one has done things

to it before you got it. If
you could send me a photo, I
could check this for you.

Anyway, all my best wishes
for all your future work and
please keep ~~be~~ me posted of
progress. I have quite got over
my irritation of the car going
ahead at great profit and will
help in any way I can.

Yours ever.

Dan Ell.

4 Ladbroke Road, London, W11 3NG
Tel. 071-727 6876

29.8.1994.

Dear Mr Brown

I have just read the new Lagonda Club Membership list and find to my delight that my old car, AUF 77 (an M45 Lancefield DHC) is now listed as having an American owner who gives his address. As a Lagonda Club member, I hope you will not mind my writing to you to find out all about this car now.

I owned this car for many years after the war - it was originally made for an American diplomat and you can see it in all its pre-war glory illustrated in the Lagonda Illustrated History, page 178.

I was never very happy about how this car got to America in the 60s. The first purchaser there wrote to me and I sent him an enormous amount of interesting material on its history etc. I am presuming that you are not that first buyer, with whom I have lost touch many years ago. If you want to know about the car's fascinating past, do please let me know. In return, I really would like to know how this rather special car is now faring.

With best wishes from one member to another !

Yours sincerely,
David Ellis

Dr. D.S. Ellis

4 Ladbroke Road, London, W11 3NG

Tel. 020-7727 6876 21.4.07

Dear Mr Dickinson,

Thank you so much for the
Wonderful photos of AVF 77.

The work on the car looks
quite superb and I do hope the
journey to Peking is a great success

With best wishes and thanks,

Yours sincerely

Daniel Ellis

P.S. Delighted to help in any way I can.

DE



LAGONDA

BRITAIN'S THOROUGHbred
CAR

LAGONDA LIMITED

STAINES, MIDDLESEX

Telephones : Staines 122 & 123

Telegrams : Lagonda, Staines



I'S
HBRED

Why Lagonda

Because every detail in the Lagonda has been carefully thought out and designed in the light of the very widest road and racing experience. The result is that the Lagonda gives you swiftness with silence, safety and luxurious comfort at the highest speeds, together with a degree of appearance that has gained for it first prizes in the leading Concours d'Elegance in Britain and on the Continent for many years.

The Lagonda well deserves its name of Britain's Thoroughbred Car, for a thoroughbred it is in every line of its beautiful streamlined body, in every nut, bolt and bar that goes to the making of a car that is as thoroughbred in its performance as it is in its appearance.

Every Lagonda car described in this catalogue is backed by a nine years' guarantee. That says more for Lagonda performance than whole pages of stereotyped eulogy. Such a guarantee could not be given without the knowledge that every separate part of every Lagonda is as perfect as

the soundest British engineering workmanship and craftsmanship can possibly make it.

The Lagonda develops ample power at very low engine speeds, with the very minimum of noise and no apparent engine vibration.

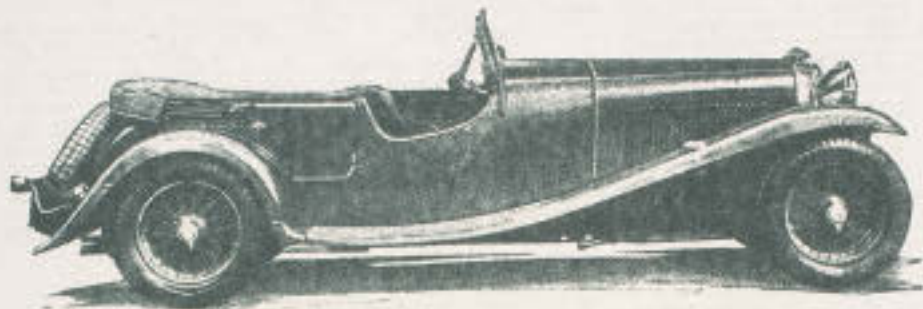
The standard range of Lagonda coachwork is built under the same roof as the chassis, and each body, too, can be finished in whatever colour scheme you require.

Though the photographs in this catalogue of Lagonda models give you a good idea of both their sturdy construction and handsome appearance, we should like you to come and see the models themselves at either a Lagonda agent's showroom or at our works at Staines, where you can personally submit the models which take your fancy to any road test you like. You will find the Lagonda a perfect joy to handle—responsive, swift and silent—a car that you will be as proud to own as we are to make.

September 12, 1922

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The Motor



THE 4½-LITRE LAGONDA

A Car Notable for
Superb Acceleration
and Road Holding

INTRODUCED at the recent Olympia Show, the 4½-litre, six-cylinder Lagonda is one of the latest sports cars now in production in this country, while at the same time it will be the most expensive of 1922 as a four-seater motor.

Like all productions from the Stanley factory, it is beautifully finished and has a wealth of equipment. The appearance, too, is most impressive, the high radiator and long bonnet giving it that air of distinction which attracts the knowledgeable and discerning motorist.

The engine is of considerable size, compact and conventional design and has an B.M.E. rating of 20.38 h.p. The four-bearing crankshaft, with a Lancaster type vibration damper at the forward end, is carried in four bearings, and the crankshaft is driven by triple roller chains at the forward end, this drive also serving to convey the motion to the combined dynamo and oil lamp unit on the rear side and the tandem mounting of the water pump and magnets on the other side.

Accessibility a Prominent Feature

The whole unit is notable for the accessibility of the components. On the off side are the plugs and two S.L. carburetors which feed the mixture through a conical manifold; on the near side is the exhaust manifold from which the gases are led away centrally. The lubrication system is by full pressure feed and incorporates a mesh filter. Water is circulated by pump and there is a large four-bladed fan and thermally operated radiator slats which are finished in chromium.

Suspension all round is by semi-elliptic springs in conjunction with Andre Telecontrol shock absorbers, which are again supplemented fore and aft by ordinary Andre shock absorbers. The knifed knox for operating the Telecontrol system passes through the floorboards just on the off side of the driver, so that

adjustment can readily be made. The brake drums are of exceptionally large diameter, heavily ribbed for cooling purposes, and the lever operates the rear shoes only, the two systems being entirely independent. A two-speed vacuum servo motor is also incorporated in the system, so providing efficient braking with a minimum of effort.

The car tested was the four-seater model, an illustration of which accompanies this article. It will be seen that it has particularly fine lines, while incorporated in the body is a luggage container. The separate front seats are mounted on L-shaped fittings and there is ample leg room. Similar remarks also apply to the accommodation for the back seat passengers, there being deep and wide wells on each side of the propeller shaft and the passengers also sit well down below the waist line. Their comfort is also supplemented by the fitting of a central folding screen.

There is a galaxy of instruments on the dash, these including a speedometer and revolution counter with large dials, clock, oil-pressure and fuel gauges, three dash lights and numerous other "gadgets." The car is provided with a wind-up windscreen which can be tilted up horizontally, so enabling the driver to get a complete view of the road in foggy weather, and the car is fitted with special long-base Lucas F.105 headlights, with a central lamp which is put into operation when necessary by a changeover switch, which at the

same time extinguishes the headlamps, thus cutting out dazzle. Other items of equipment include two electrical horns and two lamps underneath the bonnet which facilitate any adjustments which may have to be made at night.

A Fine Performer

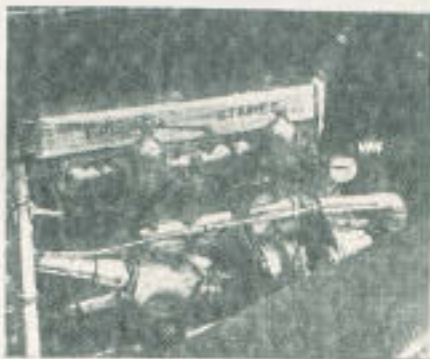
In *The Motor* of September 19 we gave a brief indication as to the top line performance of this car, and in the present more extended test these impressions were fully borne out. The maximum speed obtained at Brooklands track was 92 m.p.h., although over five different measured half-miles the maximum average speed obtained was exactly 80 m.p.h. This speed, incidentally, was obtained on five out of the six runs and the other run was only one-fifth second slower. These speeds would probably have been slightly better had it not been for the fact that owing to a record attempt proceeding at the track our actual attempt for maximum speed was delayed until it was practically dark and a thick mist enveloped the track, so making visibility very poor.

So far as acceleration is concerned, the accompanying graphs will serve to prove that the Lagonda has a particularly meritorious performance. Here are a few cases in point. From 10 m.p.h. start on top gear it attains a speed of 70 m.p.h. in 25 secs., and reaches 80 m.p.h. from a similar start in 33 secs., while 90 m.p.h. is attained in well under a minute.

The third ratio is higher than the average top, consequently the performance on this gear is somewhat electrifying. The maximum speed is 82 m.p.h. and 80 m.p.h. is reached from a 40 m.p.h. start in the very short time of 28 secs. On second gear the maximum speed is 50 m.p.h., this being attained from a 10 m.p.h. start in 37 secs.

The car was tried on the Brooklands test hill, which has an average gradient of 1 in 5.62. With a standing start on bottom gear, the hill was climbed in 20 secs., which

THE 4½-LITRE LAGONDA—Cont'd.



(Left) The off-side of the four six-cylinder engine. (Right) Showing the facts and controls. The adjustment for the telescopic shock absorbers is also seen.

is equivalent to a speed of 2100 r.p.m., and with a standing start to second gear the ascent was made in 11.2 secs., equivalent to 2935 m.p.h. As a matter of fact, the car was rather too low geared on bottom gear for this climb, the engine slightly over-revving, while on the other hand second gear was just a little bit too high to enable the car to gather its full speed until more than half the distance of the hill had been covered.

The pulling power on the various

gears as recorded by the Taylor meter also showed us particularly well; these figures will be found in the accompanying data.

The suspension and road-holding is one of the outstanding features for really acute corners can be taken incredibly fast, and with little effort on the part of the driver. It can be safely said that we have rarely tried a car at Brooklands that sat the track so well.

The braking effort is reduced to a minimum by the employment of a

Dewandre vacuum servo motor which gives progressive yet efficient stopping distances without in any way being harsh. Other excellent features are the good steering lock for such a big car, and the lightness and accuracy of the steering, which, incidentally, is of the Bishop cam type.

Altogether we formed the opinion that this new Lagonda is bound to be in big demand, for it is a thoughtless vehicle in every sense of the word.

TABULATED DATA—4½-LITRE LAGONDA

CHASSIS DETAILS

Engine: Six cylinders, 3653 cc. and 120 mm., 4420 r.p.m. Tax 4.35. Push-rod-operated overhead valves; magneto and coil ignition.

Gears: Four forward speeds; reverse third; right-hand control. Ratios, 3.4, 4.7, 7.5 and 11.4 to 1.

Brake: Assisted by Dewandre vacuum servo.

PERFORMANCE

Speed on Level: Top, 92 m.p.h.; third, 52 m.p.h.; second, 38 m.p.h. Minimum speed on top gear, 3-4 m.p.h.

Acceleration: Run through the gears to 60 m.p.h., 14.4 secs.; to 75 m.p.h., 23 secs.

Fuel Consumption: 36 m.p.g. (maker's figure).

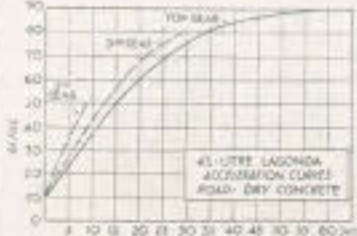
Brake Efficiency (by Taylor meter): From 20 m.p.h., 84 per cent. (equivalent to a stop in 16.5 ft.); from 40 m.p.h., 77 per cent.

Typical Performance Figures: Maximum pull (in lb. per ton on gradient): top, 276 lb.; third, 350 lb.; second, 390 lb. Corresponding gradients achievable at a steady speed are respectively 1 in 51, 1 in 64 and 1 in 54.

DIMENSIONS, ETC.

Wheelbase, 18 ft. 9 in.; track, 4 ft. 8 in. in front, 4 ft. 10 in. at the rear; overall length, 15 ft. 4 in.; width, 5 ft. 10 in.

Turning Circle: 43 ft. Weight: Curb, 3200 lbs. Price: Chassis £625; motor £795.



Note — Brake efficiency figures by Taylor meter give a direct guide to the stopping distances achievable. For example, even any car which gives a reading of 80 per cent. will stop in half the distance required by a car which gives only 40 per cent., and so on.





"THE AUTOCAR" ROAD TESTS—(continued)

No. 853 (Pac-Man Drive)
4½-LITRE
LAGONDA
SALOON



EXAGGERATION is a thing so much to be avoided in describing performance that there is a risk sometimes of giving insufficient praise to a really good car lest the opinion be regarded as falacious and, therefore, untrustworthy. However, this 4½-litre Lagonda is most definitely a machine in connection with which one can let oneself go with thorough and complete justification. It is, indeed, an astonishingly good car.

The open model attracted interest to a remarkable degree, but it was perfectly clear from the engine power that the saloon, too, would possess an outstanding performance. It is not too much to say that in this new Lagonda model we have one of the finest cars of to-day. It is a machine which vividly illustrates the point that what counts is not just the performance possible, but the way in which that performance is achieved.

It needs a car with a big engine such as that of this Lagonda, running with high gear ratios, for the tremendous charm of really easy high speed to be enjoyed to the full. Therein lies the explanation of the almost unbounded enthusiasm which the car evokes from anyone accustomed to what is but an ordinarily available car of to-day.

The engine never has to work hard; the rev counter reading seems to be pleasantly low even when its composition that is showing 70 m.p.h. or more. Run the car gently and easily at 40 to 45 m.p.h., and you scarcely realize you are moving at all; certainly not that there is an engine doing any work. Pull the throttle down a little and bring the speed up into the sixties, and you have to look at the speedometer to verify the increase; nothing else about the car tells you of it. Let the road be straight and smooth and the needle can go beyond the 70 mark, even up to 80, yet still you feel happy about the car, and even then it does not appear to be exerting itself.

In fact, at the fastest speed in the

A Car So Fascinating That to Overrate Its Virtues is Hardly Possible

table shows, there is still a good feel miles an hour in hand. The timed speed figure given is a mean of several runs with and against the wind, the test run being at an average of 92.78 m.p.h., the speedometer then showing 94.96.

Extraordinary ease of performance—and it cannot be stressed too strongly—is the great appeal of the car. It is almost revolutionary in regard to the way in which the miles can be covered. In little sheets of complete silence the big but not unyielding machine wafts itself along the road, answering instantly anywhere in the speed range to the throttle, reacting gradually except in a kind of acceleration test, yet, by contrast, throttling right down on top gear to glide through a town.

It is interesting that some of the acceleration figures for the lower speed range are better on the saloon even than the remarkable figures obtained on the open model previously; similar gear ratios are used in both. Third gear gives results surprising even to anyone who is used to high performance cars. A speedometer reading of 82 can be reached on this ratio, 70 is an amazingly short time, and still with that ease which is characteristic of

the car. Second gives a speedometer reading up to 54, and first gear 33 as a limit. An additional acceleration figure, from rest up to 70 m.p.h., was taken, and two runs averaged out at 221 sec.

Through the gears the car becomes nearly alive if the driver use is made of them; yet, on the other hand, with the dual personality machine a soft, leisurely getaway can be adopted, changing up at once into second and quickly into top, with no sign of protest from the engine. Nor is constant manipulation of the ignition control required.

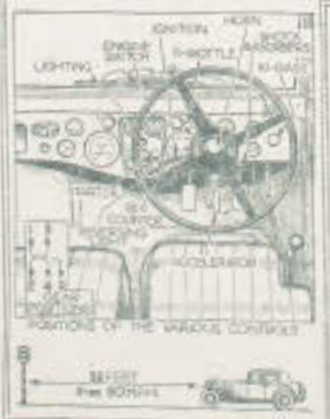
It is a big car, yet the driver can see both wing lamps—and that means a good deal, whilst it is remarkably good as regards lightness of control, showing a very considerable advance in this matter, especially concerning clutch action, steering,

4-LITRE LAGONDA SALOON
DATA FOR THE DRIVER

29.15 h.p., 44 cylinders, 33.1 - 120 mm, 14,479 c.c.l. Tax £30
Tyres 5 - 19½ on knock-off wire wheels.

Engine speed	Acceleration from standstill	Timed speed
10 to 20	20 to 40	30 to 50
20 to 30	30 to 40	40 to 50
30 to 40	40 to 50	50 to 60
40 to 50	50 to 60	60 to 70
50 to 60	60 to 70	70 to 80
60 to 70	70 to 80	80 to 90
70 to 80	80 to 90	90 to 100

Accelerations from rest through the gears in 20 m.p.h., 10% less.
Accelerations from rest through the gears in 40 m.p.h., 15% less.
Speed by Brooklands Test Hill from rest (1 in 8 and 20% gearshift), 22.64 m.p.h. (see test report).
Acceleration up 15 yards of 1 in 4 gradient from 6.04, 25 sec.
Turning circle, 436.
Tank capacity 26 gallons, fuel consumption 17 m.p.g.
14-watt lighting set cuts in at 57 m.p.h.; electrically dynamo motor control.
Weight, 38 cwt, 2 1/2 cwt.
Price, with following four-door saloon body, £550.
2 Sales Agents in The Autocar of September 1933, 1934.



Continued on Page 14.

ACKNOWLEDGEMENTS

The Aston Workshop Team who made the restoration of AUF 77 happen:

Anthony Lister, Geoff Smith, Colin Brown, Rob Kenmir, Bill Gardner, Mick Durrant, Bob Garside, Keith Slater, Mark Dempsey, Chris Redshaw, Steve Rowell, Bernard Holmes and Mathew Drummond.

Our Suppliers and Collaborators

Jeff Henderson for building a strong and beautifully constructed new body for AUF 77

Invicta Car Co for Engine, Gearbox, Front and Rear axle overhaul and as a source of numerous spares, all freely supplied at very short notice.

LMB Racing, for numerous vital parts without whom many Lagondas would not be roadworthy
Cedar Classic Cars for advice, encouragement and parts supplies

Gary Wright for a beautiful new hood, seats and trim
Geoff Hunter, Auto Electrics who most efficiently wired her

Robson Engineering for specialised fabrication and engineering supplies

Advance Radiators

Clayton Heating

Standard Chrome for a superb Radiator shell and Grille
Derby Plating for as ever, producing work of the finest quality

Vintage Headlamps for a set of fabulous Headlights and Pass Lamps and numerous other important services

Specialised Automobile Services for wheels
Longstone Tyres

Orson Engineering for Hubs and halfshafts

Bainbridge Building for superb carpentry skills

AH Fabrications for fuel tanks

Carl Lyon of Elite Panelcraft for creating a new door panel at no notice

Speedograph Richfield for instruments

Cooper Woodtrim

To those who have contributed to this book

Clive Dickinson for photographs and for production of this book

Quentin Parker for his authorship and for running all over the UK at very short notice

Lagonda Club Heritage Trust and Arnold Davey for numerous requests for information and for all of the original black and white photographs given freely

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