

THE ASSOCIATION OF HEALEY OWNERS PRESENTS A SELECTION OF TECHNICAL NOTES

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A SELECTION OF TECHNICAL NOTES

COMPILED BY R.K.SUGG

INTRODUCTION

The articles were written by Ray Sugg (RKS) and other members of the AOHO in the 1960s and 70s and compiled by Ray.

At that time the cars were coming to the end of their lives; a small number of enthusiasts were keeping them going but this was before there was enough interest for complete restorations of the 4 seat cars, Silverstones have always had a strong following so many survived and were in use.

As it's now 50 years since they were written some information is out of date, but has been retained for historical interest.

I scanned the original and compiled to PDF in 2023 in order to make it easily available to members and allow additions based on current knowledge.

John Jaap
January 2023

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FOREWARD

In the beginning there was hope, and a group of Healey owners got together and formed the 'Association of Healey Owners'.

As one of the founding members of the steering committee, I was 'press ganged' into the post of 'Technical Secretary'. I purchased a small manual typewriter, and commenced prodding away with two fingers. I had no intention of duplicating the Riley Workshop Manual, as this would be quite pointless. My objective was to write about the problems that I had found, as a Healey owner, and the solutions I had come up with. I had no inside knowledge from the Healey Motor Co., only my experience as a ship repair fitter (which mercifully ended in 1979) and a determination to keep my car on the road by my own effort, and perhaps encourage other owners to do the same. I performed this task for about ten years, when I decided that I had suffered enough. The most discouraging thing was that many cars were being dismantled, but very few were being put back together, even historic cars like GWD 43 were wantonly destroyed. I used to visit all the owners within a radius of about one hundred miles, and see owners pulling aluminium panels off with the greatest of confidence, but very few ever saw the road again.

However, slowly, a new generation of owners are coming into the movement, with a much stronger desire to actually drive a Healey, a possibility only vaguely considered in previous years, and new rebuilds are beginning to appear. Interest is therefore being rekindled in the technical articles that were written years ago by members such as Bob Miller, Mike Chaney, Dr. Ian Picton Robinson and myself.

The Gazette was at first an 'in house' production, and our volunteer typist clearly fought a losing battle against an ancient manual typewriter and the dreaded duplicating skins, neither of which show any mercy to a misplaced typing finger. Similarly, the photocopying machines of twenty years ago do not compare favourably with those of today.

When I read in the Spring 1991 Newsletter that it was intended to collate these notes into a single volume, I realised that if I was ever going to see the last of those very untidy pages, I would have to do it myself.

I have therefore completely re-typed the text, and redrawn all the illustrations, graphs and diagrams, with the exception of those lifted from the Riley Workshop Manual. This has given me the chance to update certain thoughts, and, with the benefit of hindsight to add additional material where relevant.

The articles that we have written are, to some extent, intended to give the less technical reader a chance to think about the issues under discussion, and thereby to take some of the mystery out of the subject, rather than the purely mechanical approach of the Workshop Manual. A Workshop Manual is, however, totally desirable, and should read along with these notes.

It has been a monumental task for a two fingered typist, and I hope you like the final result.

Ray Sugg

GAZETTE NO.16
THE 'C' TYPE HEALEY TICKFORD SALOON.
CHASSIS NO. C1902

To understand the way in which this car has developed it may be as well to return to the beginning of my motoring career, when I was, as yet unaffected by the cult of ancient machinery, and blissfully unaware that we were struggling out of an era of war and austerity into an era of spurious prosperity based almost entirely on the manufacture of expendable rubbish.

From the age of fourteen I had been saving my pocket money so that one day I should be able to move from A to B without physical effort, and four years later (1948) having started work as an engineering apprentice in 1947, I was able to buy my first motor cycle, a 350 Ariel, all shiny and new.

There are few moments in life that compare with taking possession of ones first new vehicle, but in reality it was an honest but dull machine, and after three years I traded it in for a new 500 Vincent 'Comet', the half sized version of that ultimate British device, the 'Black Shadow'. With its compression raised to 'Shadow' specification, the Comet became quite competitive with other 500's and had far greater aesthetic appeal, I wish I still had it!

However, I had been running a 1937 Lanchester 14 as a hack and social transport, and it was making me soft, so that during the year 1955/56 the Comet was only used about four times. The Lanchester was a smooth and sedate old car, but thirsty with it, so I decided that what was needed was a car with the performance of the Comet, and fuel consumption no worse than the Lanchester, and an aluminium body, for about £5/600. I sold the immaculate Comet to a friend who reduced it to scrap in a year or two, and the Lanchester met a similar fate.

In the August of 1956 I commenced a nine month spell in Hospital, so that it was June 1957 when I started the search for a car.

Of the cars which might fit the above requirements (Aston Martin DB 2 Bristol, AC Aceca and the Healey Saloons) only the Healeys were likely to be in the price range.

The point I am trying to make is that I was used to new machinery, and was not looking for a sad car in need of restoration, because I did not have facilities for doing them in a reasonable time, and because I prefer driving them to working on them.

It will be that in the year 1957, Tickfords would be between three and six years old, while Elliotts would be between seven and ten years old. A Tickford was therefore decided upon, also there were lots of them for sale.

Now these were, bearing in mind the mass produced running gear, quite expensive cars in their day, being about £2490 at the time of the 66% purchase tax, so that a considerable drop in price was achieved when six year old cars were selling for £500 to £600.

What was depressing was the scruffy, untuned state of all those that were viewed. Most of the Tickfords appeared to have been sprayed Maroon, and, as was common with this colour, it faded and crazed to an alarming extent, various weird colour schemes were 'flushed over' this mess, and the crazing always showed through as the Maroon had not been removed.

By September I was getting pretty desperate, as my only transport was a power assisted bicycle which would only develop about 1 B.H.P. when it was really 'on song', and that was not very often. Then an advertisement in the Evening News took me to an address in London W.4 to meet the subject of our cover photograph. - C.1902.

The car was originally registered by 'Brooklands of Bond Street' on the 5th. April 1951 and then sold to Mr. Harold Bryan Parry, of Witherley Hall, Nr. Atherstone, Warwickshire. This is a fairly prosperous address since it is shown on my 5 mile/inch map!

In December 1953 it returned briefly to Bond Street, and was sold to Mr. John Bonham Christie, of Home Farm House, Marston, Frome, Somerset. This owner was contacted by myself a few years ago, but he said he had only had the car about three months, and most of this had been spent on repairs in the garage! He had, however owned a 'Silverstone' for about twelve years.

The next two owners names were concealed by Company headings, which is, of course, how the other half live!

In May 1956 it slipped a bit further down the social strata to a normal man living in a normal house, and registering the car in his own name - Mr. Harold Selway, London W.4.

In September 1957 it arrived at the bottom, where, under the heading 7th change in the log book, appears the name Ramon Keith Sugg.

Mr. Selway had had the car for about 1 1/2 years and had been preparing it for sprint competition. The engine had been fitted with high compression pistons, a four branch exhaust system had been devised with a completely ineffective twin bore silencer, although for road use the original system with a short tail pipe was in place. A 4.1/1 crown wheel and pinion had been fitted and the speedometer had been matched to this ratio. *(This speedo had a mileage reading of 42,000 which was probably genuine, it remained in the car until it read 49,000 when I replaced it a new one. By May 1991 I have added 176,000 miles which equals 225,000 miles!)*

As purchased, the 3 1/2 Crown Wheel had been replaced, so the speedometer and mileage readings had to be multiplied by 1.17!

The demonstration run suggested that the car was mechanically fair, although the test application of the brake projected the rear seat squab into the back of our necks, a fair indication that the car lacked attention to detail!. The exterior had been resprayed with a very hard, dark Maroon and apart from some fatigue cracks here and there, looked quite good. The following morning Mr. Selway delivered the car to my home, where the sum of £530 changed hands, and I became the slave of this wilful and arrogant piece of machinery.

Within the context of a working man earning perhaps £10 per week, this was as exciting and exotic a car as one could hope to run, yet as I became acquainted with the car I became increasingly dissatisfied with its contradictory character. I had anticipated that this sleek saloon would cruise through the countryside at 80 or 90 m.p.h. with a gentle buzz from the exhaust, while the occupants converse in muted tones, or quietly meditate on the magnificence of it all. In reality, in the case of CI902 it was certainly capable of the performance, but the cacophony of sounds and resonant vibrations were more appropriate to the rortiest of stark racing sports cars, which hit most certainly is not.

I will remind the purists among you that in the year 1957, this sort of car was not to be considered as of some future historic value, but a low mileage modern car which was not behaving in a reasonable manner.

I therefore resolved to alter everything which might yield improvement, with secondary regard to originality (a philosophy I have maintained to this day). In further justification of this attitude, I must say that although I find the Tickford bodystyle attractive, the framework design, detail specification and some of the workmanship left much to be desired. The doubtful suitability of wood framed aluminium bodywork on a lightweight 100 m.p.h. chassis together with the pillarless window styling leave little scope for careless design.

It was decided that for everyday transport a small car would be handy, so a 1933 Austin Seven was acquired - I had ended up where most people begin!

The old car bug had now got me, and the Austin was in dire need of restoration, so it was about 1962 before work commenced on the Healey which by now was in a very bad way. The chassis had cracked on both sides above the rear axle causing the windscreen pillars to bang on the quarterlight frames, and the scuttle to split on the outer panel, thus soaking the front pillars and dashboard with rain water.

The rear door pillars had rotted at the bottom so that the doors leaned outward, the paint had faded and much of the chrome plate had rusted, it was a most depressing sight.

The possibility of breaking the car for spares was seriously considered, but it did represent my life savings, and the wages in ship repair were so low that the purchase of a quality car which did not need working on would never be possible. Therefore, in spite of very poor facilities, a basic rebuild commenced.

During the following three years the chassis was strengthened, the rear door pillars replaced with fabricated 18 s.w.g. mild steel replicas, one front pillar was replaced with a laminated Ash one, the scuttle was replaced with a 20 s.w.g. steel replica. A great deal of decayed timber and corroded metal was replaced. An aluminium cowling was made for the gearbox, together with a straight remote control gear lever. A vacuum servo and remote reservoir was fitted to the brake system, indeed a complete list of all repairs and modifications carried out on this car would fill a Gazette, yet I hope that it is still recognisably a Tickford Saloon.

Once the car was back on the road, it was not long before I met John Bowers and Diana Hunter in the paddock at Silverstone (where he accompanied me on a couple of laps of honour) and I took part in the activities which led to the formation of the Association of Healey Owners.

At a later date, after an A.G.M. at Brackley, I was demonstrating the car to Peter Richardson and one or two others, they had been discussing the car as we drove toward Towcester when I heard Peter say "- and the remarkable thing is we are able to sit here talking without raising our voices while the speedometer indicates 90 m.p.h."

- Q.E.D.

1948 HEALEY WESTLAND CHASSIS NO.B.1747



Owned by John E. Humphreys of Bournemouth, since January 1988. This car was found in the U.S.A. totally derelict, partly bent, and mostly dismantled. It has since been totally rebuilt from the chassis up, to original specification.

This is the original shape of the first catalogue open Healeys. The prototype had headlamps in the position shown above, but concealed by flaps, with the spot lamps beneath.

The early production models were as shown, with the spot lamps moved to the wings. Later models had the headlamps moved to the wings, with the spot lamps back to the inboard position. The Elliotts were similarly treated.

Of the 69 Westlands built, about 19 are believed extant.



Purchased by the present owner Allan Fuller in November 1987.

It can be seen that although the chassis number had only moved on from John Humphreys model by about forty, the headlamp and spot, or foglamp arrangement had changed during that period.

B.1786 was purchased in Scotland, and was in fair overall condition. However, it had not been driven for some time, so it was trailered home to London, given a general service, and put back on the road. Generally it drove well, although the steering was somewhat vague.

The car was featured in the October 1991 "Classic and Sportscar" article, and was driven by Geoffrey Healey, who felt that the car still displayed the rugged and sporty character that was its hallmark when new.

Since then the car has been fitted with a stainless steel exhaust system, a stainless steel tube through the cylinder head and a reconditioned steering box. The steering is now much more positive.

The car is finished in dark (British racing?) green, and is an excellent example of the model.

It is to be hoped that now these two Westlands are on the road, our meetings will be graced by these more rare examples of the marque.

1950 HEALEY ELLIOTT SALLOON CHASSIS No B1812 BODY No194

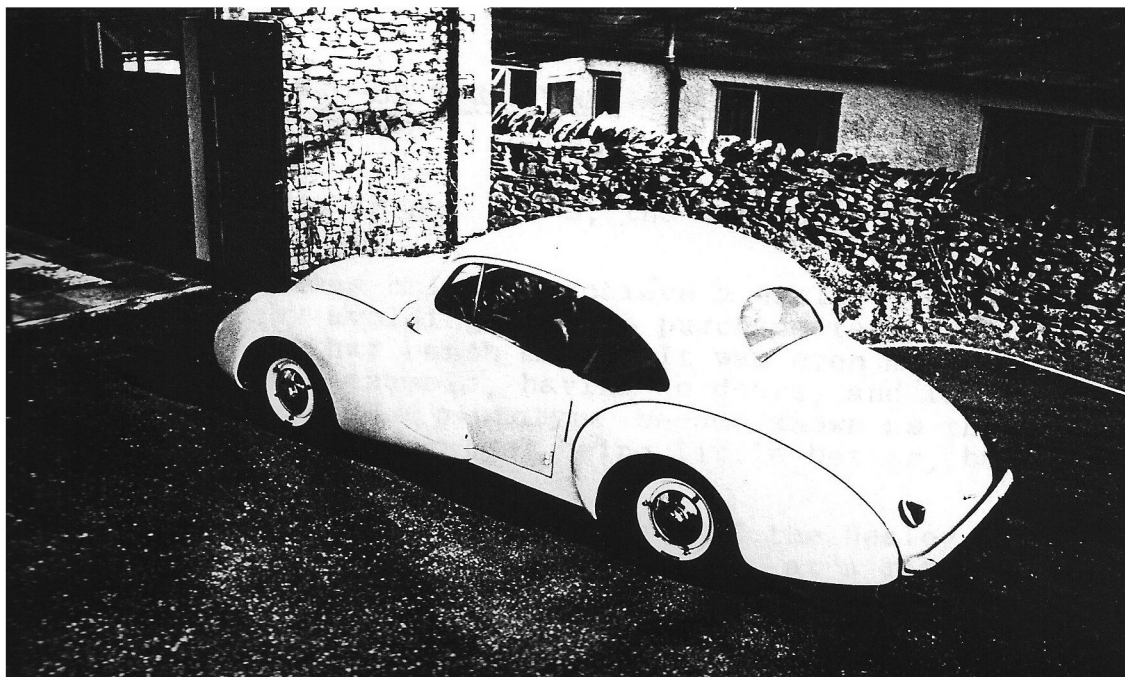


Purchased in England by Mr Gordon Vogtherr in 1989, this car was shipped back to his home in New Zealand, where work commenced on the most comprehensive and quickest restorations ever recorded in Healey history (I have seen all the photographs of each phase of proceedings- RKS) By the summer of 1991 it had completed another 4500 miles of tstin, including 100 miles of racing.

The photograph shows the car receiving final attention in May 1991 prior tp its return visit to England to take part in the 1991 Pirelli Classic Marathon.

According to Bryan Spiers, of the 101 Elliotts built, he has knowledge of approximately 30 survivors, although 5 are virtually wrecks.

Circa 1947 HEALEY DUNCAN SALOON CHASSIS No A1672

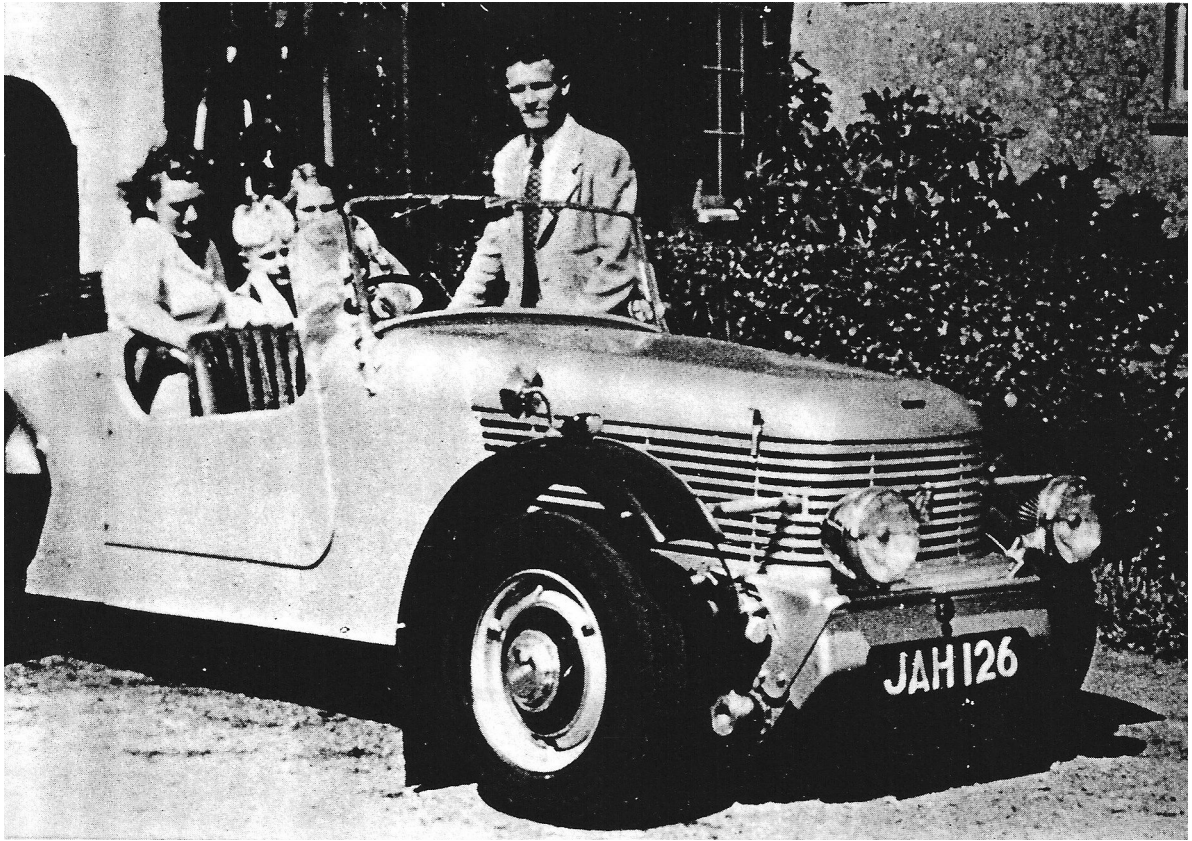


Purchased in 1970 by the present owner Robin Couplethwaite, in rough order. It has been extensively restored – Robin says, when I asked him what had been done:- “Most things, engine, new steering, suspension,brakes, king pins, 90% of the woodwork, etc”

He brought it down from the Lake District to Brands Hatch a few years ago and a fine example of the model it is.

As some members may never have seen a Duncan, I have included two views of this unusual body style, the photographs were specially taken for this publication. Built by Ian Duncan [Duncan Industries (Engineers)Ltd) at North Walsham Norfolk. There were 29 saloons, 3 coupes and approximately 50 Drones.

THE DUNCAN TWO SEATER SPORTS – commonly known as the Drone

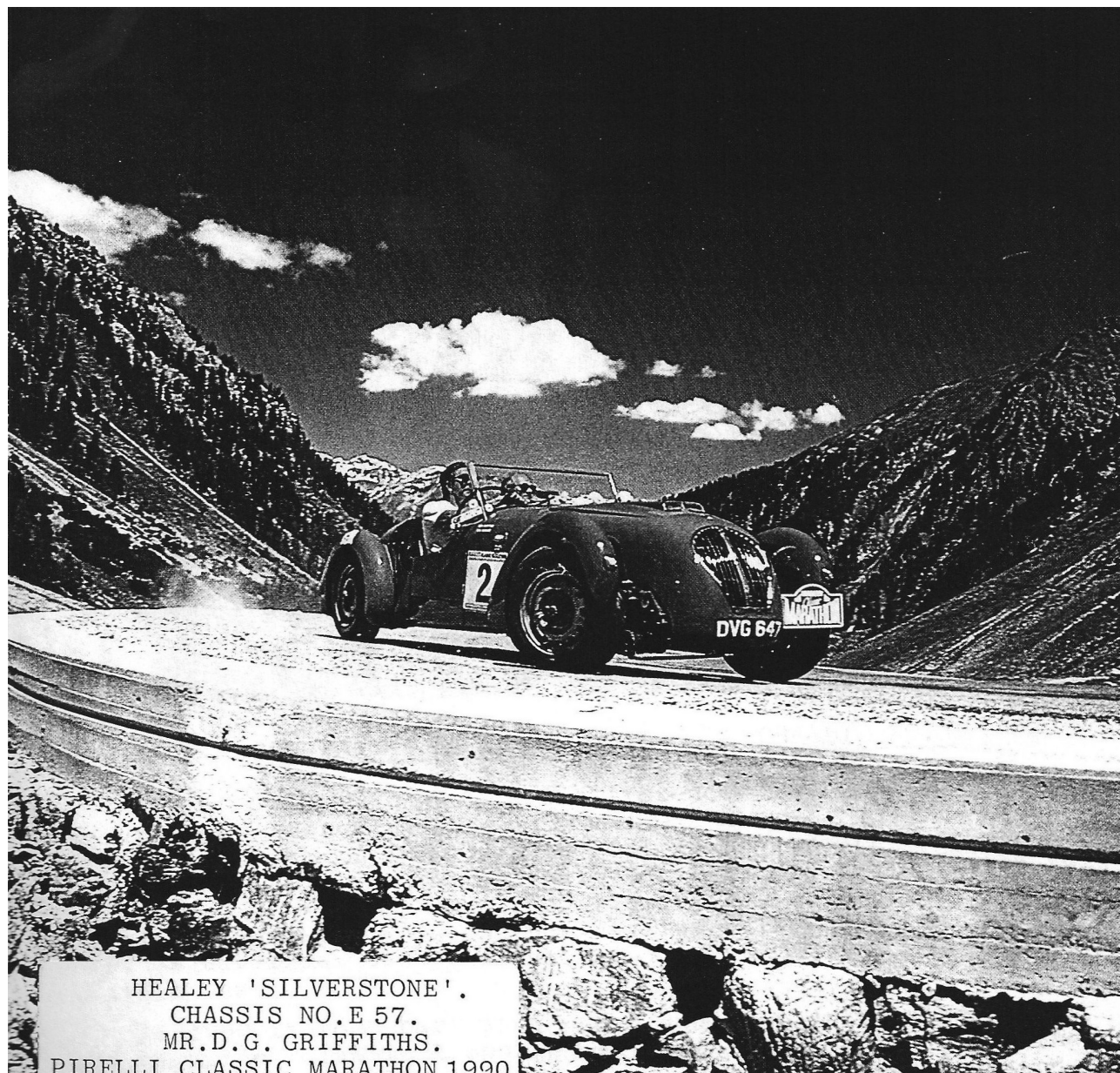


The above owner is not known, the car was probably built about 1948.

The prototype was built to achieve a basic price below £1000, thereby avoiding the 66% purchase tax levied on cars priced above that benchmark. It was even more primitive than the above example, having no doors and therefore of course, no hood. The prototype became known as The Spiv whilst the production version, being a little better, became known as the Drone.

If the owner liked the performance of the Healey part, but found the Duncan part too stark, he could, at a later date, have a more civilised body fitted.

The Pirelli Classic Marathon 1991



This is the Pirelli Classic Marathon, the longest and the most difficult challenge for classic-cars in Europe. Now in its fourth year, this event has been seen on television in more than 20 different countries. Just to get to Tower Bridge is something of a marathon ordeal... the event was so oversubscribed the entry list closed six months before the start. Some of the names overleaf have done some of this sort of thing before, when these cars belonged to what is now regarded as the Golden Era of motoring. Stirling Moss won a Gold Alpine Cup for a hat-trick of successes in the Alpine Rally, Tiimo Mäkinen helped put the Mini on the map... Roger Clark, John Sprinzel, Anne Hall, Arthur Senior, were rallying these cars more than 30 years ago and have come out of retirement for the unique challenge of the Pirelli Classic Marathon, including teams from Japan, America, Australia and New Zealand. Crews from 12 different countries have been attracted by the appeal of the Marathon. Several cars have famous rally histories, including three ex-works Healeys and two ex-works Tigers. There are more than 60 different models overleaf, and no other form of International motor-sport boasts of such glittering variety.

From famous ex-works team cars such as Healey 3000s and Sunbeam Tigers, to an Austin A40 of the type Mum drove shopping...this is 2,000 miles of pure nostalgia.

Famous marques such as the Jaguar XK120, Triumph TR3, Morgan, Sunbeam Rapier, Ford Zephyr, Healey and Mini Cooper made their reputations in Alpine Rallies.

Now they are to do it all again. There are two timed tests in Kent before catching Sealink's Fantasia (one test is at Lydden Circuit). There are four tests in Belgium, and one in Germany, before the Alps of Italy.

From Merano the survivors tackle a climb at dawn up the staircase of 48 hairpins of the Stelvio Pass - and they are only half way through the week. Arriving in the Dolomites and Cortina sees more closed road tests. Few International rallies are seven days long...and no other event is as long or as tough for classic mechanicals.

An event that from the outset has captured imaginations, the Marathon is run by a dedicated band of 65 officials, marshals and timekeepers, headed by a full-time team of professional rally organisers from an office where work for this event started 12 months ago.

The Marathon is under the auspices of the Historic Rally Car Register, and for more information contact Philip Young or Andrew Bodman at: The Rally Office, 85-87 St. Johns Rd, Tunbridge Wells, Kent. Tel: 0892 24746, Fax: 0892 511092.

Of the 105 Silverstones built, 84 are still in existence, probably more, there are some imitation Silverstones which have been created in recent years:- Caveat Emptor!

1951 HEALEY TICKFORD SALOON: CHASSIS NO. C.1902



Early Tickfords had detail differences in appearance to the later ones. Where spats were fitted to the rear wings, then both front and rear wings had squared off lower corners. Later ones had radiused corners and no spats. Earlier cars had built in twin spot lamp while later cars had twin grills. C.1902 has dispensed with its semaphore arms and now carries Volkswagen rear and 'S' type Jaguar front turn indicators. As is well known, it is a much modified car.

In 1990 it took part in a photo and test drive session for the magazine 'Classic & Sportscar' (Oct 1991 Edition), together with four other Healeys, and were driven by Jon Pressnell and Geoffrey Healey. The following comment was printed:-

"To say that Ray Sugg's Tickford is more of the same is to sell Ray's car shamefully short. Ray's car is special; it's also non-standard, so the purists will probably have an apoplexy. But Ray has owned the car since 1957, and has always regarded it as a transportation device rather than a museum curio. Thus it's been modified - no, improved... Restored at the beginning of the sixties after sixth owner Ray had watched it disintegrate around him. The Tickford thus has fabricated steel door pillars in place of the normal rot-prone ash members. a scuttle of solder-tinned steel rather than the original crack-prone aluminium. a reinforced chassis over the rear axle, specially machined halfshafts to avoid the usual Riley halfshaft fractures and Riley Pathfinder con-rods with shell bearings. And that's on top of the four-branch exhaust, electric fan, quick-release bonnet subframe, alloy gearbox cowling, special and beautifully realised remote gearchange.

You don't approve? Well, we asked Geoffrey Healey along to our test day, and he was seriously impressed by Ray's car, commenting on the Tickford's improved rigidity, excellent brakes, and - above all - on the superb steering, beautifully set up by Ray to be clearly superior to that on the other cars.

The car rides well, feeling softer, bigger and more refined than the first-generation cars, but never sloppy, and the steering is smooth and accurate - which is more than can be said for some of the other cars. The brakes have the same feel, giving progressive, well-graduated stopping. And, yes, the engine delivers its power similarly, with more refinement and notably better smoothness at low revs - although at high revolutions it can't avoid the inherent coarseness of Riley's long-stroke 'big four'. As a sympathetic honing of an evidently sound basic design, Ray's Tickford takes some beating.

241 Tickfords were built of which at least 85 have been scrapped while about 50 are known to have survived, which leaves a large number unaccounted for.

1954 HEALEY ABBOTT
CHASSIS NO. F3044



Owned by John E. Humphreys of Bournemouth. One of the 88 bodies built by Abbotts of Farnham. There are probably about 40 survivors of this model.

John purchased this car in July 1983- It was in a bad way, big ends gone, scruffy yellow and black body hood rotten, upholstery torn. The car had been left in the open for several months, and was full of water. It was therefore subjected to a chassis up rebuild, and resprayed in red.

Since then it has been a familiar sight at A.O.H.O. meetings and has featured in Classic Car (July 1984), Classic and Sports-Car (Oct. 1991), the front cover of the Austin Healey Magazine (Sept 1991), as well as trade calendars.

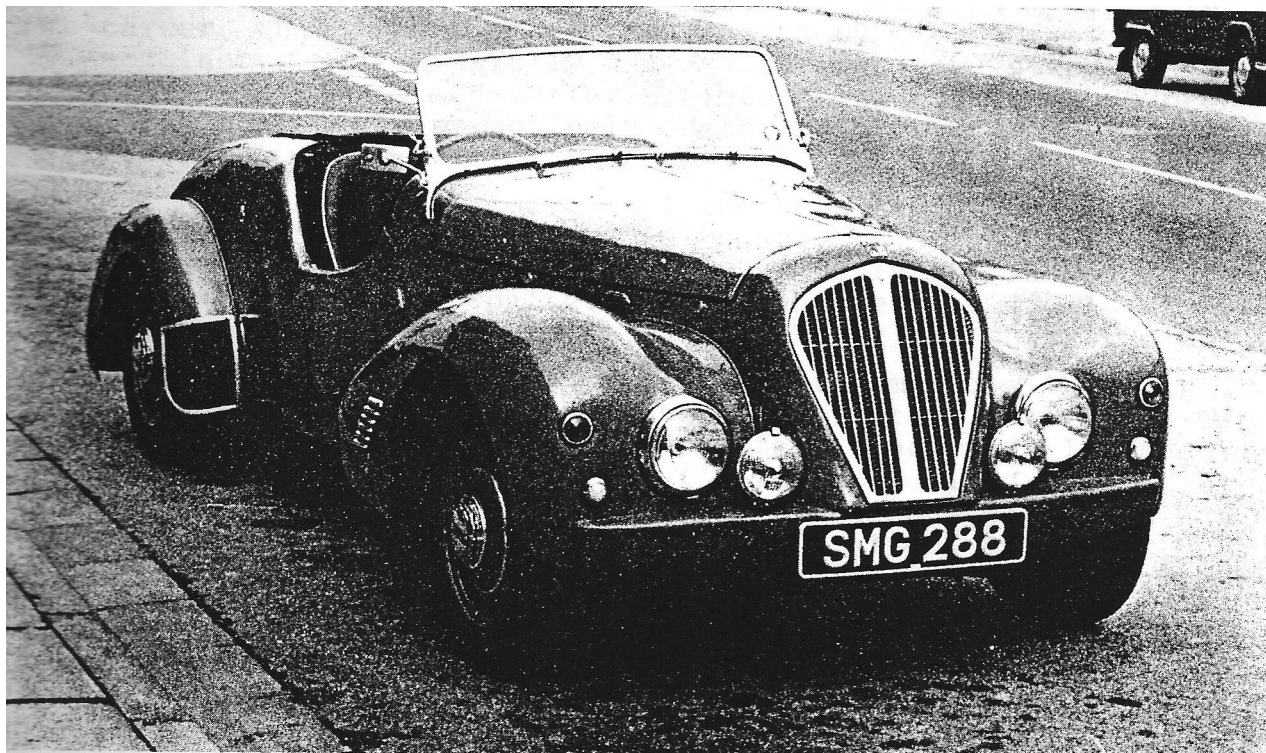
NASH HEALEYS



Originally it was decreed that all Nash Healeys would be exported, so we do not see many in the U.K., although there were a couple managed to slip the net. At one time Richard Ellis, our first editor owned the Le Mans Coupe, but I believe this is now in the U.S.A. We are indebted to the Nash Healey Car Club for permission to print the above photograph. It shows the 1952 Le Mans race car on the left, a 1953 Farina bodied Nash Healey in the centre, and a 1951 Nash Healey on the right.

I believe about 404 of all types were built, about 120 survive.

A SPECIAL BODIED HEALEY



In Gazette No.10, Bryan Speirs wrote the following introduction to his article on the Duncan :- "One of the Healey Motor Company's biggest headaches, when production started in late 1946, was in getting a supply of bodies to clothe their high performance chassis.

While Westlands at Hereford, and Elliotts at Reading did their best, there were still several chassis left each week with which they were unable to cope. About twelve firms built special bodies on these chassis, many of them being of ugly appearance and poor quality compared to the bodies designed by the Healey team.

H.G.Dobbs of Southampton produced 16 'Utilities' and H.W.M. Motors 10 two seaters. Beutler of Switzerland produced three, and many of the other 106 specials being purely one offs.

The maker of SMG 288 is, as far as I know, still unknown! It is basically a two seater, plus a 'dicky seat' in the tail. An interesting feature is the radiator grill, not a standard Healey grill, but very much like the Silverstone grill, yet the Silverstone was not introduced until about two years later!

SMG 288 was built in 1948? on chassis No.A.1560, and purchased in 1961 by present owner, Stan Thomas. The car has been stored in recent years, but we hope to see it on the road soon.