

Car club magazine

Vol. 3 No. 3

May - June

1972



End Of The Road

PURPOSE & BENEFITS OF THE NASH HEALEY CAR CLUB

The Nash Healey Car Club is now an International Car Crub for all Nash Healey owners and enthusiasts. Other Nash and other type Healey owners are also welcome to join. The Nash Healey Car Club has over 100 members in the United States, England, and the Virgin Isles.

It is our desire to promote the preservation, restoration and maintainance of all Nash Healey cars.

To unite all Nash Healey owners and enthusiasts of the marque.

To promote the showing of Nash Healey cars on a Regional and National scale.

To provide a source for all members in finding, buying, selling and trading Nash Healey cars, parts, and literature as well as other automobilia.

To publish a bi-monthly magazine for all members. This will include pictures, articles, technical points, restoration tips, and reports on Nash Healey meets, and news of Nash Healey's and other Nash and Healey cars, and a classified section (advertising will be Free for all members in this section).

All members will be entitled to and encouraged to send in news items, articles, and stories on restorations. Letters and pictures of members cars will also be welcomed.

Membership dues for one year are \$6.00 for the United States and \$4.00 a year for England and other countries overseas. This includes a membership card, one year subscription to the Nash Healey Magazine (published bi-monthly) and a Directory which lists all members and all known Nash Healey cars.

PLEASE NOTE: All Foreign Memberships must be paid in American dollars, either with an American Express Money Order of a Bank Draft.

NASH HEALEY CAR CLUB MAGAZINE

The Nash Healey Car Club Magazine is the official publication of the Nash Healey Car Club and is published bi-monthly. It is sent free to all paid up members. Each member will receive all issues of the Nash Healey Magazine for the year he joins regardless of what month he joins. No part of this magazine shall be reproduced without the permission of the Nash Healey Car Club officials.

PRESIDENT & EDITOR
Richard M. Kauffman
R. D. 2. Boyertown, Pa. 19512

VICE PRESIDENT & ASSOCIATE EDITOR
DIRECTORY EDITOR & CLUB TECHNICIAN
Burt Horman Richard Law
1100 Terrace Ct. 318 Cordova St.
Lynden, Wash. 98264 S. F., Cal. 94112

MEMBERSHIP SECT./TREAS. Irene Schlang P.O. Box 2034 E. Liverpool, Ohio 43920

PRINTER & CO-ORDINATOR
Susan Law
318 Cordova St.
S. F., Cal. 94112

REGIONAL REPRESENTATIVES

WEST COAST MID WEST ENGLAND
Frederick Roth James Cash Richard Ellis
3148 Carlton Dr. 6251 N. Sheridan St. 1 Marie Ave.
Thousand Oaks Chicago Downton, Wilts,
Calif. 91360 Illinois 60626 England

Volume 3 - Number 3

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EDITORIAL

With Spring finally here, it's good to dust off the Nash Healey and take a spin around the countryside. And now showing your Healey at one of the club meets, this just may be your year to take home a trophy.

From the way the entries have been coming in, our Spring Meet in Boyertown should be a great event this year.

While we are on the subject of N.H. car meets, we might as well do the whole bit.

West Coast members that will be attending the Harrah Swap Meet and Show in Reno, Nevada, June 24th, will want to get together with other members, and why not bring your Healey. I understand there will be a class for cars of this type. Jim Cash, our Midwest Representative, has arranged for a Midwest Regional Meet on June 17th at Emhurst American Motor in the Chicago area. There will be dash plaques and trophies awarded. I understand some of the Nash club members will also be bringing some of the older Nash's to the meet. Sounds like a fine meet. It is very good to see some activity in the Midwest.

And don't forget the big Nash Healey 3rd Annual National Meet to be held in Kenosha, Wisconsin on August 11th and 12th. This will be held with the Nash Car Club of America. There will be a fine banquet again this year. See the enclosed flyer for complete details and please send in your registration for it as soon as possible. Reservations for banquet tickets must be in by August 1st, 1972. I understand none will be available at the door.

I urge all members to arrive on the 11th of August so you can attend our annual business meeting. This will be held at 4:30 P.M. at the Holiday Inn, 5125 6th Ave., Kenosha, Wisconsin. Some important matters of the club will be discussed. There will be a get together and program Friday evening at the Holiday Inn.

The proof sample of our club bumper badge has arrived and it is terrific. Just what we need to put the finishing touch on the Nash Healey. The colors

and quality are very good. We are ordering a very limited supply. If you would like one, members can order one right now with shipment in about a week at a reduced price. Price per badge until June 15th is \$5.50. After that date the regular price of \$6.50 will be in effect. However, even the regular price is much less than the price some clubs charge for this type of bumper badge. See the list and prices of club items in the Classified Column.

I am also glad to announce that original king pins and bushings are available. Again, see the Classified Column for details.

Members that belong to the Association of Healeys in England were delighted to see three Nash Healeys on the cover of the latest issue of the Healey Gazette, as well as a reprint of the article, "Nash Healey at Le Mans", which I had written for our Magazine about two years ago.

The same issue of the *Healey Gazette* also carried a very fine but lamentable editorial, and because our club basically has the same problem, we are reprinting a portion of that editorial. The title is "OUTLOOK", and it states, "The Association was started by a few enthusiasts because they were, for want of a better expression, dedicated. They formed themselves into a steering committee with the intention of promoting the Association, providing it with a good foundation and hoping that their efforts would promote similar responses from other Healey owners. To a very limited extent only, has this hope been realized because nearly 100 Healey owners have been attracted sufficiently to become members, but in spite of this there is still APATHY.

Many of you are too apathetic or disinterested to meet your fellow members. We have to ask you, what is it you want from an association such as ours and the result, again APATHY.

Why is it you are so reluctant to meet fellow members and owners of cars for which you profess such an interest? Many of you are still names only, in spite of all attempts to give "faces" to the "faceless ones". What more can we do?

This fourth year of our existance is, we think, the most critical and unless you can shake off your APATHY and contribute something - even if you only come

to the meetings - the future for the Association and preservation of that very fine product - the Warwick built Healey - is in jeopardy.

The future is in your hands - if you wish the Association to continue you must overcome your APATHY and give it such support as you can. If you are not prepared to do this, one can only conclude that you have no genuine regard or affection for the Healey car and the end is in sight. But there will always be hope because that very devoted group of people who started it all, in spite of your APATHY, will not let the Healey become another of "the lost causes of motoring".

It is a sobering thought that those people who were sufficiently enthusiastic and public spirited to initiate this Association nearly four years ago are still as actively involved as ever and are doing even more work than then. Do you ever spare a thought for the Association which you profess to believe in? Does it ever occur to you that if the "Few", to paraphrase Sir Winston Churchill's immortal phrase, "to whom so much is owed by so many", decide that it is time to carry "enough", there will be no Association and, in a very short time, no Healey cars either.

Do you think it is really fair for the few to carry on without encouragement and faced with your APATHY. The future rests very largely with you....."

While I do not say every point stated by the Healey Association applies to our club, by in large we do have the same situation. We need more activity on the part of more members. For we too are facing a crisis. It has been suggested that because of our limited membership, and lack of response of members to share in the responsibilities, and lack of interest in submitting material for our Nash Healey Magazine, that we change the format of our Magazine and resort to a Newsletter. After considering the situation carefully I feel after publishing a quality magazine such as we have, to resort to a run of the mill Newsletter is the fastest way to ruin the club.

But yet, due to the foregoing condition we must do something. So as of the next issue we will be going to a quarterly Magazine rather than Bi-monthly. This way we can maintain the same quality Magazine we now have and I feel a club like ours should have. In fact we will try to increase the number of pages of the Magazine and will be mailing the Magazine First Class Mail, so there will be some definite advantages with the new

arrangement. There will not be as much pressure on the Editor and Printer as to time, and members will still be receiving a quality club publication, and receive it sooner.

We will still need material for the Magazine and I hope more members will realize that it is for the benefit of all the members to send in interesting material for the Magazine.

Don't feel that we are out of material to print however, for in addition to current news of N.H. Meets, restorations, and technical articles we will be reprinting some excellent material from such sources as Road & Track. I received a fine letter from John R. Bond, publisher of Road & Track on this. Mr. Bond writes, I know of your club and we try to support owner clubs and you certainly have our permission to pick-up or reprint anything on the Nash Healey from our Magazine. Mr. Bond added, "There are 2 or 3 Nash Healey's in our area and the next time I spot them I'll try and stop them and inform them of your club. Keep up the fine work."

We appreciate Mr. Bonds comments and we will indeed be reprinting material from Road & Track. In my letter to Mr. Bond I mentioned the fact that perhaps many readers would appreciate an article on the Nash Healey and other fine sports cars of the Fifties.

I have learned that both Automobile Quarterly and the Action Area Vehicle Magazines are planning a special issue on Nash and Nash Healey sometime in the near future. So the interest in our cars is still growing. But let's help it along by showing your Healey at some of our car meets this year.

In closing, for you members that are interested in the new Jensen-Healey, complete description and photos are in the April issue of Road & Track.

Let's hope there are not too many Healeys in the condition as the one on our cover. Member George Vollmer of Rochester, Pennsylvania sent in the photo.

R. M. Kauffman

THE CARS OF DONALD HEALEY

By R. M. Kauffman

PART II - The Nash Healey and Austin Healey Era.

We have printed much material on the Nash Healey in past issues, but perhaps many members do not know just how the Nash and Healey merger came about.

Actually, it was back in December of 1949 while Donald Healey was on a sales tour to the United States. It seems, by chance, that Healey met and started talking to George Mason, then President of Nash Motors. This chance meeting on board the ocean liner Queen Elizabeth started the beginning of the unusual Anglo-American car the Nash Healey.

In some ways this was not a strange arrangement because the U.S. sports car buyers wanted good performance as to handling and endurance. Certainly the Healey cars had proven this, both on and off the track. But they also wanted more power then the small Riley engine could offer and an engine for which they could readily get replacement parts - the very dependable Nash engine was the answer.

However, production on the Nash Healey did not yet start. First the car would have to prove itself, and this it did on the internationally famous Le Mans course in France. (Complete racing history on Nash Healey at Le Mans can be found in Vol. 1, No. 5 of the N.H. Magazine). So the Nash Healey took a well deserved 4th in the 1950 Le Mans.

Now production plans for the Nash Healey went into full swing. The small Warwick factory was turning out the new N.H. model as fast as possible. The company was very interested in the dollar earning power of the new Healey model. The prototype Nash Healey made its debut at the London and Paris auto shows in October of 1950 and was shown for the first time to the U.S. public at the Chicago auto show in February of 1951.

By 1952 Nash management was looking to a change in styling, both in their production Nash cars and also in the Nash Healey sports car. Again Nash looked to a leader in the field of car styling and decided upon Pinnin Farina of Turin, Italy. Nash used the Farina designed style in its' cars of the 1953-55 era. Most

critics agreed that the styling change in the Nash Healey was for the better.

From February 1952 on, the Farina bodied cars were fitted with an improved Nash engine. The bore was increased to raise the cylinder volumn to 4,138 CC. The compression ratio was raised to 8:25 to 1, and twin Carter horizontal carburetors replaced the former S.U.'s. These modifications brought peak power performance to 140 B.P.H. at 4,000 R.P.M.

The Nash Healey proved to have the best production of any Healey car up to 1954, with a total of 506 Nash Healeys being made (B.M.C. in England says $404~\rm N$. H.'s were made, but according to American Motors Corporation, 506 is the correct figure).

In the five year racing history of Nash Healey at Le Mans, they did quite a job. While the British consider the Nash Healey an English car and we consider it an American car and some higher critics do not even consider it period, the Nash Healey established a very comendable record at Le Mans.

Even though the Nash Healey beat the two Austin Healey entries in the 1953 Le Mans race, Healey's committements and efforts were now completely toward the Austin Healey arrangement.

Donald Healey, following the same proceedure as with his early models and with the Nash Healey, took several prototype Austin Healeys to the salt flats of Utah and indeed set some excellent speed records. In all, the Austin Healey established 21 speed records and as of 1970, 12 of these record still stand.

The Austin Healey 100 was the sensation of the London Motor show and in Miami, Florida in 1953 Donald Healey won the Grand Premier Award for design and later at the New York Auto Show the same car was voted the International Show Car of the year.

So, by all the fine publicity on the Austin Healey, the public, both in England and in the U.S., were ready to buy this new Healey model. In just a short time over 3,000 Austin Healey 100 cars were ordered. With the tremendous response for the Austin Healey it was decided that the small Warwick plant could no longer handle the production on the scale necessary. So, 25 cars were built, just to give the Austin dealers some display models.

The engine that was decided upon was the already proven Austin A90. This developed 90 H.P. at 4,000. R.P.M. The body design remained virtually unchanged for over 10 years.

The Austin Healey 100 was billed as the "World's Cheapest 100 M.P.H. Sports Car". The car sold here in the states for about \$3,000. Considering the fine performance of the Austin Healey that was a pretty good buy in 1954. The A.H. 100 had a total production of 14,500 cars produced from May of 1953 to August of 1956.

While the Austin Healey was by far the most acclaimed sports car bearing the Healey marque, Healey realized if the A.H. was really going to be in serious competition on the race circuits, he needed to produce a more powerful car. This was achieved in the Austin Healey S and later the A.H. 100 M. According to the factory records, there were only 99 of the A.H. 100 S cars built. This was a racing version of the A.H. 100 with a full tuned engine, and lightened and restyled body. Austin 4 cylinder push-rod 0 H.V. engine with 132 H.P. it had twin 1-3/4" S.U. Carbs., 4 speed gearbox and was labeled for export only, with most of the cars finally winding up here in the states.

Just as the Nash Healey established a fine record at Le Mans, the Austin Healey 100 % did likewise at the famous American Sebring 12 hour race in Florida. The A.H. took a well deserved in its first outing in 1954, the next year A.H. took oth and in 1956 A.H.

Some of the more notable exponents of the A.H. 100 S' were Jackie Cooper, the movie star, who did quite a bit of racing on the West Coast as well as taking part in the record setting runs in Utah. Also Sterling Moss, the famous British race driver, drove the A.H. 100 S including the 6th place finish at Sebring in 1955. Still another notable driver was Capt. George Eyston, who himself had set many records years before for England. Even Briggs Cunningham drove this A.H. model a few times.

By the year 1956 the 4 cylinder Austin engined Healey was replaced by what some enthusiasts call the "Big" Healey, referring to the 6 cylinder Austin Healey. Then in July of 1959 the A.H. 300 Mark I was released to the public, later the Mark II and III. Production on six cylinder came to a close in 1968 with a total production run of over 37,000 cars.



RACING BAPTISM.—Driven by Hadley and Mercer, the Austin-Healey speeds through Reggato shortly after the dawn start of the 1953 Mille Miglia, its first race.

IT is but rarely that the new model of one of the small specialist manufacturers steals the show at Earls Court; this feat is usually reserved for something new from one of the Big Six, for the advent of a new popular model is of direct interest to a large number of potential owners, whilst its introduction will have been accompanied by widespread publicity.

No one would deny, however, that the sensation of the 1952 Motor Show was the Healey "Hundred" as it was then called. The lovely little pale blue car was slipped into the Show so late that no mention of it appeared in pre-show publicity, in fact it was only shown at all as the result of a last-minute decision on the part of its manufacturer, Donald Healey. It at once scored an almost overpowering success, for not only was the stand thronged with people from the moment the doors opened until closing time, but also orders poured in at such a rate that it was soon obvious that the small Healey factory in Warwick was quite unequal to the task of producing the car in sufficient quantities to reap the dollar harvest.

At this stage Mr. Leonard Lord of Austins decided that something must be done about it, and after talks with Donald Healey it was agreed that the new car should be produced not in one of the smallest car factories in Britain but in one of the largest, Longbridge, and would be distributed by the world-wide chain of Austin distributors. Outward and visible manifestation of this sudden change in the fortunes of the car was an alteration to its name, unprecedented act in the middle of a Show, and henceforward it was to be known as the Austin-Healey "Hundred."

Before the giant British Motor Corporation came to put the seal of its approval on the new model, however, much work had gone on quietly behind the scenes, for the Austin Healey had been under development for more than

The idea behind the car came to Donald Healey as a

result of visits he paid to the United States, for he returned with the conviction that what was required was a car with a high torque-to-weight ratio. A sports car of this type could be driven most of the time in top gear in typical American fashion and yet would possess sufficient acceleration to deal effectively with big American saloons. To be sold at a reasonable price, this new sports car would have to be built from units already in quantity production, and as Donald Healey considers that Austin are not only the largest but also the best builders of engines and gearboxes in Europe, he went to see their managing director, Mr. Leonard Lord, early in 1950. After considering various power units, the Austin A90 engine was finally selected as having the right characteristics, for this husky longstroke engine develops no less than 140 lb. ft. of torque at 2,500 r.p.m., and on March 10, 1950, Mr. Lord decided in favour of the project.

Work on the design started soon after this date, the overall conception of the new car being Donald Healey's, while Mr. B. Bildy was chief chassis draughtsman and Mr. G. Coker chief body designer on this project.

Rigidity for Road-holding

Few men have had more experience than Donald Healey of trying to make fast cars stay on the road, for his knowledge learned the hard and practical way has been gained with such cars as the 100 m.p.h. short-chassis 4½-litre Invicta, a variety of Rileys and Triumphs, including the supercharged straight-eight model and, since the war, a succession of Healeys. He has come to the conclusion that good road-holding is 75 per cent. frame rigidity and only 25 per cent. suspension. He therefore insisted that the frame for the new car must be the most rigid his company had yet built.

This has been achieved by designing a car which is mid-way between the old type with a simple chassis frame, which depended so largely on its massive side and cross254

Success Story - - - Contd.

LINE AHEAD.—Before the 1952Motor Show was half-way through, it was arranged that the car should be produced at Longbridge; a double assembly line is now fully engaged.

Donald Healey insisted that the body should be distinctive and yet should not be a slavish copy of Italian lines, and this aim has been achieved to a quite remarkable extent. By popular repute, the English are supposed to be a race not over-interested in motoring, but park an Austin-Healey by the kerb in any city—and, just as remarkable, inany district—and few are the passers-by who do not

stop to admire it.

The novel sliding-forward screen was designed to replace the traditional fold-flat variety owing to the fact that the slightly bowed windscreen of the Austin-Healey cannot be folded flat on the scuttle.

Anglo-American Accord

The tremendous success achieved by the new model at Earls Court was repeated when Donald Healey took one with him to the United States in the early months of this year. After travelling across the Atlantic in style on board the R.M.S. Queen Mary, it gained the Grand Premium Award at the World's Fair in Miami, Florida, was awarded the Grand Prize of the Show and the title of International



Motor Show Car of 1953 at the New York International Motor Show, where it was also awarded the Gold Medallion for the most advanced design of the year for foreign cars, and at the show held by the Sports Car Club of America in conjunction with their Pebble Beach road race it gained the Grand Prize for the best car in the show.

In other words the allure possessed by the car is equally powerful on both sides of the Atlantic. Donald Healey was not satisfied to have produced a car which won awards for its good looks, he also wanted to show that it had performance as well. He had taken the first step in this direction by running the prototype at Jabbeke the previous October where it had obtained the Belgian National Sports Car records for the flying kilometre at 111.7 m.p.h. and for the flying mile at 110.9 m.p.h. The car at this time was fitted with a very stock engine practically straight off the production line, and Healey was confident that much more was obtainable with tuning.



He now wished to demonstrate that the car was not only a good-looker, capable of truly remarkable speeds over short distances, but was also able to attain and hold high speeds for hours on end. He therefore took the very bold step of entering two cars for both the Mille Miglia, the classic Italian race, and the Le Mans 24-hour race. He knew that his cars would be outclassed by such cars as the Aston Martin DB3S and the Ferrari which had been specially built for sports-car racing, but Healey was convinced that his very stock cars would not be disgraced by comparison and would show themselves able to maintain a surprisingly high average over the distance.

The Mille Miglia was regarded in the nature of a trial run for Le Mans for both cars and drivers, who were to be Bert Hadley and Johnny Lockett on this occasion. As so often happens, cars which had behaved perfectly when driven hard on the road under normal motoring conditions revealed an unexpected weakness when raced, which is why a race-tested car is so well worth the having.

(Continued on page 255)

LE MANS.—Running completely equipped with bumpers and other items the Austin-Healey "Hundred" gave a remarkable demonstration of high-speed reliability at Le Mans (below), the two cars finishing 12th and 14th at an average speed for the 24 hours of over 89 m.p.h. The Lockett-Gatsonides car is here seen rounding Terrier Rouge. (Left) Austin's managing director, Donald Healey, on the correct cockpit drill of one of the Le Mans cars.



3RD ANNUAL NATIONAL MEET OF THE NASH HEALEY CAR CLUB INTERNATIONAL

TO BE HELD IN KENOSHA, WISCONSIN - AUGUST 11, 12, 1972

- FRIDAY, AUG. 11 Early arrivals can register in the hospitality room of the Holiday Inn. There will be a business meeting held at 4:30 P.M. All members and officers should plan to attend. Some important club matters will be discussed. There will be an informal get together at 7:30 P.M. and a program arranged.
- SATURDAY, AUG. 12 Car Show and Swap Meet will be held at Lakefront Stadium between 57th Street and 59th Street, at Lakefront in Kenosha.

The gates will open at 8:30 A.M. for cars and flea market vendors. All cars must be registered and in their place by 12 Noon for judging. Judging will start at 1 P.M. under Nash Healey rules and regulations.

Entry fee - \$3.00 per car and \$3.00 per Flea Market space.

Eight trophies will be awarded: 3 Convertible Class, 3 Hardtop Class, Best-of-Show, and Longest Distance Trophy.

Gates will open to the public at 9 A.M.

There will be a National Meet Banquet held Saturday nite after the stow at the Holiday Inn, 5125 - 6th Ave., Kenosha, Wis. This will be by ticket only. All members and guest should have their requests for tickets in no later than August 1, 1972. Tickets for the Banquet are \$5.50 per person and paid in advance.

All Nash Healey members and guests are encouraged to stay at the Holiday Inn, 5125-6th Ave., Kenosha. They have very fine facilities and moderate rates. Members are requested to contact the Holiday Inn and make your own room accomodations. However, please mention you are a Nash Healey member attending the National Meet.

	REGISTRATION	FOR 3RE	NASH	HEALEY	NATIONAL	MEET
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NOTE: Please send registration and ticket requests in no later than August 1st. Send all room requests direct to the Holiday Inn of Kenosha, 5125 - 6th Ave., Kenosha, Wisconsin 53140.

Make all checks or money orders payable to: Nash Healey Car Club And Send them to: Nash Healey Car Club Int., R.D. 2, Boyertown, Pa. 19512

The Conception, Development and Achievements of the Austin-Healey

members, for strength, and the integrally-constructed saloon. There is a chassis frame, consisting of two squared 3 in, by 3 in, steel tubes placed only 17 in, apart, with a fabricated cross-member of 3 in, by 2 in, square tubes at the front, a further rectangular cross-member at the rear and a crueiform structure in the centre.

To this comparatively simple structure are added outriggers to support the front shackles and mountings for the year springs, and the pair of cross-braced channel section hoops forming the scuttle structure. These outriggers are joined at their extremities by what amount to an additional pair of side-members of angle section running parallel to the main side-members and joined to them by the floorboards of welded steel. Further stiffness to the vital front portion of the chassis is given by two rectangular members running diagonally from the top of the scuttle to the front cross-member. As the body frame members are welded to the frame structure before receiving their light alloy panels, the body also plays its part in making the complete structure very stiff.

To this very rigid structure Donald Healey attributes the excellent road-holding of this model. A further advantage of the second pair of side-members is that they prevent any door movement when the car is travelling over rough roads at speed, while the braced scuttle structure happroved equally successful in preventing scuttle shake.

The position of the engine in the frame was varied until correct balance was achieved, a slightly more forward position than the original setting eventually being adopted, as it was found the car had too much of its weight over the rear wheels. Even so, the engine is still well behind the front wheel centres. The fact that from the very beginning it had been decided to make the car a two-seater and not attempt to produce a model to which either two or four-seater bodies could be fitted helped in many ways, for no compromise was then necessary. The car could be kept very compact, with a consequent saving in weight and a gain in stiffness, and, as a kind of free bonus, the looks of the car also benefited greatly by this decision.

Early in 1952 the first chassis was completed, and fitted with a two-seater test body. It proceeded to cover a very large mileage in the ensuing months, for a very great deal of time was spent on the road in getting the suspension as perfect as possible. Particular attention was paid to obtaining good rear wheel adhesion without the expense of either independent rear suspension or a de Dion layout, and much experimental work was carried out with a wide variety of radius arm and Panhard rod locations. Eventually, a Panhard rod located very low down in the frame was chosen as giving the best results.

The front suspension gave no trouble, but much time was devoted to getting the steering geometry accurate, as this was felt to be essential with a car that was both very fast and exceptionally light. A standard Burman steering box was retained.

Many different types of shock absorber were tried at the rear the front shock absorbers of course form part of the suspension system, and Donald Healey was confirmed in his belief that the lever arm type provide a much better ride than the direct acting, telescopic pattern for this particular car. Armstrong double-acting hydraulic shock absorbers were therefore eventually decided on

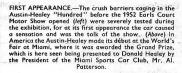
No trouble has been experienced with the brakes, which are of the Girling hydraulic type with two leading shoes at the front and 11-in, drums at front and rear, the total frictional area being 145.2 sq. in, for a car with a dry weight of only 17 cwt.

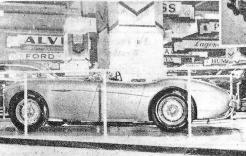
Power with Reliability

The engine is the standard Austin A90 unit, the only modification being a slight alteration to the exhaust system to give an easier passage to the gases. Mr. Healey is full of praise for this engine, which appears to be practically unburstable by hard driving and which produces a surprising amount of power in spite of its very normal specification, a fact for which no doubt Weslake and Co., Ltd. should take some of the credit as they were largely responsible for its combustion chamber design.

A standard Austin gearbox is used, but bottom gear is locked out of action, as it was found that owing to the high power-to-weight ratio the Austin-Healey was apt to spin its rear wheels violently in this gear. In any case, the normal second gear was quite low enough to serve as bottom. The gearbox is modified in two other respects, for it is controlled by a central gear lever instead of by a steering column gear change, and a Laycock-de Norman ville overdrive unit is fitted to the rear of the box. The overdrive is operated by a small toggle switch, on the facia panel and gives overdrive on second gear as well as on ton







LUBRICATION SECTION

LUBRICATION SPECIFICATIONS

	Mile Intervals	Lubrication Recommendations		
Air Cleaner	1,000	Dry Type-Clean.		
Axle Shaft Bearings (Rear Wheels)	15,000	Wheel Bearing Lubricant-Repack.		
Brake Controls	1,000	Light Engine Oil.		
Carburetor	1,000 or Once Each Month	Remove Suction Chamber Cap. Fill Reservoir With Light Machine Oil.		
Linkage	1,000	Light Engine Oil.		
Clutch and Brake Pedal Shaft	1,000	Chassis Lubricant—2 Fittings.		
Distributor	1,000	Wipe Breaker Plate Cam With Petro- latum Jelly-1000 Miles.		
	5,000	Drop of Light Engine Oil on Wick of Rotor Shaft.		
Engine Oil	2,000 Under Normal Conditions	6 Qts. SAE 20 or 20W Above 32°F. Below 32°F.—SAE 10W. Sub Zero—SAE 5W.		
Front Suspension Trailing Link Steering Linkage	1,000 1,000	Chassis Lubricant—6 Fittings. Chassis Lubricant—6 Fittings.		
Front Wheel Bearings	10,000	Bearing Lubricant-Repack.		
Fuel Pump	5,000	Clean Screen to Eliminate Sediment.		
Generator	5,000	Light Engine Oil-2 Oil Cups.		
Master Cylinder	1,000 (Check)	Lockheed 21-B Brake Fluid.		
Rear Axle Drive Gears	1,000 (Check) Change Every 10,000 Miles or Yearly	Use Only SAE 90. Rear Axle Oil Sui able for Hypoid Gear Service.		
Starting Motor	5,000	Light Engine Oil-2 Oil Cups.		
Steering Gear	3,000 (Check)	SAE 90 Steering Gear Lubricant.		
Transmission and Overdrive	1,000 (Check) 10,000 Change and Refill	3½ Pts. SAE 90 Mineral Oil in Warn Weather. SAE 80 in Cold Weather		
Water Pump	5,000	Water Pump Lubricant.		
MISCELLANEOUS				
Cooling System				
Pressurized	10 Lbs.			
Capacity	17 Qts.	Including Weather Eye		

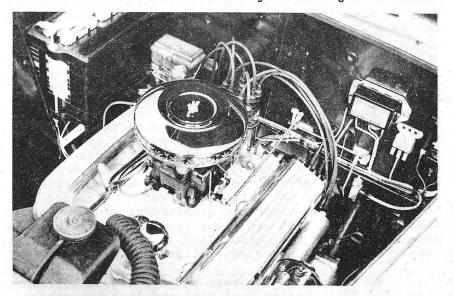
What of the future, even though Donald Healey is now 74 years old, he is certainly not ready to retire or give up. Healey is coming out with a completely new car, the Healey Lotus which will be available shortly. For publicity on this new Healey he has shipped one of the first cars he built, a Concurs Westland Roadster, to the United States for prestige publicity. If you have an opportunity to see this fine car it would be well worth your while.

Donald Healey is keenly aware of the pollution problem here in the States and he strongly feels that a practical steam powered car is the real solution to this problem. So who knows, one of these days you may be driving a steam powered Healey sports car.

In any event, I feel that both race and sports car enthusiasts alike have certainly benefited from the many cars of Donald Healey.

SO YOU WANT TO BUILD A "HOT-ROD"?

Part II - Conclusion By The California Dude



Chevrolet V-8 engine installed in the 1954 N.H. 12 Volt conversion nearly completed.

So much for the easy part. Now things start to get interesting:

A new clutch pilot shaft bushing has to be machined by your friendly machinist. I made mine out of oil-impregnated-bronze (Oil-Lite). It should have a .002" press fit into the end of the crankshaft and allow about .005" clearance on the pilot shaft. I bored mine .006" oversize so that when it was pressed into the crankshaft its bore would close down to about .005" clearance. I machined the length so that the pilot shaft would pass through it by about 1/16". Forget about soaking the bushing in oil. If any large amount of oil is left in this bushing it will end up in the clutch after the engine warms up and you may have to replace the oil soaked clutch plate.

After you install the pilot bushing in the crank-shaft and have the \$7,000,000 adaptor in your hand it's time to go to work.

I recommend temporarily installing the crankshaft in the bare engine block complete with main bearings and bell housing. This will enable you to rig and move the engine block around without having to fight all the weight. After you install the cut off Nash housing and the Chevie throwout housing, check to make sure that the adapter fits both engine bell housing and transmission by physically installing the bolts. If one or two holes are off a little use a rat-tailed file on the adapter holes to make them fit. This is cheating but it's legal. Keep in mind that the engine and transmission must be on the same crosswise plane.

Now that you have followed my "crystal clear" instructions, install complete adapter assembly and engine in the engine compartment with flywheel and throwout bearing and block up the engine at the front to see roughly what you've got. I set the center line of the crankshaft at the front about even with the top edge of the frame and installed all '55 Chevrolet motor mounts. Note that there are no mounts holding the rear of the transmission (it's sitting on the crossmember) but it's close enough to give you an idea of where the final assembly will end up, although it would be a good idea to block it up to clear the crossmember about an inch. I also switched left and right rear mounts so that the ears were spread further outward so there would be less twist on the rear motor mount frame brackets.

Now it's time to break out the liquid refreshments from your "Nash Healey Tool Kit" and look the situation

over and curse me for this article.

Next, four clearance checks have to be made and they are:

1. DISTRIBUTER: It must clear the crossbrace on the firewall. If it doesn't, break out the hacksaw and make it fit. No problem here because if you have to cut a 3" wide space out of the crossbrace the car won't fall apart. I filled in the holes with an epoxy body filler to make it look good. Afterwards I found that the distributer would have cleared by about a half of an inch but I like to give myself plenty of room.

2. LEFT CYLINDER HEAD:

a. Spark plugs must clear the steering box. The number 7 plug is a real tiger so give yourself lots of room to install the spark plug wire.

b. Exhaust manifold; I used Chevie 265 headers as the outlet is at the front but you will find that the larger engines have the outlet at the rear and there is no way that the outlet will clear the steering box. The best method is to have some custom made headers manufactured so that the exhaust system will clear and the passages are not restricted. My cars exhaust system can be compared with a tuba player trying to play through a straw.

3. THROWOUT ARM: Assuming that you checked to find out how it fits into the bell housing before you went this far, it's now time to crawl under the car and try to install it in place in the bell housing. "How 'bout that", it's too long and you will have to cut off the end to get it to fit and you will have to drill a new hole for the clutch release cable assembly. The existing cable assembly is about two or three inches too short so I made a spacer assembly and roughly it looks like this;

Nash clutch arm

Nash clutch arm

Clevis pin

Nash cable anchor.

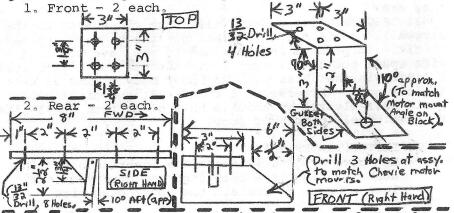
(Pc. 10, pg. 20)

Stock

Bolts

4. STARTER: You will find that the frame is too close for comfort so mark the frame where the starter will be and you won't believe this one; After you remove the engine block take a ball peen hammer and pound in the frame in this area so that the starter will clear, This is known as "Joe Magee Engineering" but it works,

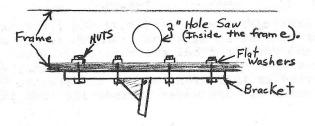
Four angle iron and steel plate motor mount brackets will have to be fabricated to hold this conglomeration together and mine are as follows:



The front motor mount brackets were fastened through the top of the frame with 3/8" sheet metal bolts. After proper bracket position was assured they were welded along the fore and aft top sides.

The rear mounts present quite another problem. The only way I could use stock 1955 Chevrolet motor mounts and have them attach to the brackets I made without causing undue downward frame twist was to switch them left for right and vice-versa. This is legal as it doesn't change the mount angle. It does position the ears under the frame for a simpler bolting hook-up. This method leaves a lot to be desired and someone may be able to come up with a better system to attach the rear mounts to the frame brackets.

To attach the rear brackets I used a 2" hole saw to cut a large hole in the inside of each side of the frame next to where they would go. Next I layed out the eight holes for each bracket on the underside of the frame and drilled ½" holes through. I installed the brackets using much dexterity with my fingers through the 2" side holes. I installed large flat washers under each nut to distribute the load on the bottom of the frame.



To this point I have covered most of the major items for this engine conversion but I have left a lot of detailed specific facts out because, quite frankly, I never thought I would have to write an article on this subject and I did not keep a record file.

There are several things that I must mention, I used the stock N.H. radiator but I had the right top inlet blocked off and moved the outlet from the left side to the right. My radiator friend installed a Chrysler outlet so that the "plumbing" would clear the fan blades. Also I moved the radiator back about 9". It sits over the old frame motor mount brackets.

I fabricated a new battery box so that it would clear the engine. This is a matter of turning the assembly 90° and making braces to secure it.

The electrical aspects are yet another matter. I understand that 6 Volt starters are available for Chevie engines. Whether they are positive or negative ground I don't know so lots of luck. The early Chevy engines use a 6 Volt ignition system so maybe you can use one of the 6 Volt/12 Volt battery systems. This is up to you. I changed over to a 12 volt system and I had to make a new dash board, plus I installed a tachometer and gages to suit. If you want to stay original as possible I would suggest that you contact an electronic genius to convert your 6 Volt positive ground electrical system to 12 Volt negative ground.

It's a simple matter to change all of the lights to 12 Volts. Just remove the 6 Volt lights and make the substitution at your local parts house.

The exhaust system requires some ingenuity. Obviously, a hole has to be cut through the left side of engine compartment. After that its' your baby. I used coat hanger wire to layout my header pipes and took them to the local muffler shop to have pipes made, complete with manifold flanges. The rest of the piping and mufflers is up to you as it is a simple matter to buy the appropriate pipe and clamps at your local parts house. I ran my tail pipes under the rear axle. I wish you could have seen me bending the straight exhaust pipe material for clearance. I marked where the bend would be and used the sewer drain in front of the house as a fixture. I shoved the pipe down to the bend marks and pulled until I had the proper curve. This is "Joe Magee" but it works.

I have noticed that some people have installed

327 Nash or American motors engines in N.H.'s and what was done or how it was done is a mystery to me. My own personal opinion of this is if you go this route you will be back into the parts availability problem. The reason I chose General Motors is they will be with us for awhile and they follow up by providing a complete line of inexpensive replacement parts for their products.

NASH HEALEY NOTES

By R. M. Kauffman

I must admit that since I have become interested in Nash Healey sports cars, I have found very few owners that are truly experts in the technical aspect of the Nash Healey (myself included).

But thank goodness there are a couple still around. Karl Baldwin of Annapolis, Md. is such a person. I had the pleasure of talking to Karl at the '71 N.H. Spring Eastern Regional meet. He later sent me some photos and other information on the old Nash Healey Association and other material. I feel some of the information Karl sent along would be of interest to other members.

First, on the point of Nash Healey engine conversion, one member asked me how I felt. Well, I am not 100% against modification but when it comes to the engine, I guess I am a purist, basically because I like to enter my Healey in show competition. If I leaned more toward the rally or racing end then perhaps I too would convert to a V-8 engine.

Well, anyhow, Karl has a manual for the installation of a 327 Rambler V-8. Parts numbers and illustrations included. He said he will be glad to send a copy to any member interested in such a conversion.

He also said if anyone is having problems getting head gaskets, a good place to contact is N.A.P.A. New England Warehouse, 325 Vassar St., Cambridge, Mass. This takes Victor #1076 for the 3½" bore. Karl adds this gasket will work successfully with as much as .125 overbore.

Depending on availability, American Motors has, or at least did have, a 3/4 race cam available from the factory warehouse - Part #3136381.

Something else the other members may be interested in. I have known only one N.H. owner that claims he never had tachometer problems. The Stewart Warner Corp. will rebuild these units at a reasonable fee by sending the tachometer head, sender & cables to them. The address is: Stewart Warner Corp., 1840 West Diversey Parkway, Chicago, Illinois 60614.

Karl added - he has had a great deal of experience in building and racing his Nash Healey and that he would be very glad to answer any technical or other questions if a member needs help. He has done much mechanical work and prides himself on the quality of the same, especially where a N.H. is concerned. Karl's father, Harold, was one of the original members and officers in the old N.H. Association. Karl's father stuck to hill climbs, Gym-kanas and rallies where Karl participated in mainly drag racing.

BALDWIN WINS BURKE MOUNTAIN CLIMB

Harold Baldwin of St. Johnsbury, who is 62 years old, and driving an eight year old classic (a Nash Healey with 62,000 miles on the odometer) won the Burke Mountain Hill Climb yesterday.

Baldwin took the event with his $N_{\circ}H_{\circ}$ against some of the leading sports car drivers in Vermont and $N_{\circ}Hamp_{\circ}$

This years climb was sponsored by Scuderia 25 of the New Hampshire Sports Car Club and was run despite inclement weather. But the usual rough weather of moderate to heavy rain and fog at the top of the mountain could not deter or turn back the hardy souls who had come to take home the trophy.

The group of capable young drivers featured such modern cars as Sunbeam Alpines, Austin Healey 300, A.C. Aces, Porsche Carrera, Sprites, and the English import Kieft, but Baldwin and his Nash Healey were not to be denied and today the 1960 trophy reposes in St. Johnsbury.

In commenting on his unexpected success, Baldwin stated that any of his younger competitors could have considerably bettered his time had they been privileged to have driven his eight year old machine.

Truly this is quite a tribute to a real N.H. enthusiast, Harold Baldwin, and to the power and stamina of the Nash Healey sports car. Our thanks to Karl Baldwin for sending this information.

NASH HEALEY CAR CLUB

CLASSIFIED SECTION

Please note that all advertising in this section is FREE for all members. Advertising for non-members is 5¢ a word. If you want to buy, sell, or trade a car, parts or literature, use the N.H. Classified. Send all Ads to: Classified, Nash Healey Car Club, R.D. 2, Boyertown, Pa. 19512. All Ads must be in one month ahead of issue.

PARTS FOR SALE

Nash Healey parts - Brand new original King Pins & bushings, Voltage regulators, horn relays, park lite lenses, tail light lenses, many other items. Send for list to: R. M. Kauffman, R.D. 2, Boyertown, Pa. 19512.

For N.H. Farina bodied Coupes & Roadsters - New neoprene weather striping. This is the strip that runs vertically on the post behind the door & horizontally in front of door scuff plate. Please indicate exact size. Price: \$1.50 per foot, sent Postpaid. Fredrick J. Roth, 3148 Carlton Drive, Thousand Oaks, Calif. 91360.

PARTS WANTED

For '51 Nash Healey - New aluminum head or used one in good condition. Also need fan. Write: Jules Kurtz, 101 Broadway, Newburg, N.Y. 12550.

For '53 N.H. Roadster - Complete set of wheel covers, N.H. Script, complete steering wheel & Horn ring assembly. I also need original head lamps for 1936 (3680) Nash Ambassador 4 door sedan. Write: D. B. Bishoff, 200 Holland Ave., Morgantown, West Va. 26505.

I need literature & photos for '53 N.H. Roadster. Also any paint chips or paint chart for same. Write: Arthur Nelson, 299 Arnold Ave., Pert Amboy, N.J. 08861

CARS WANTED

'51 Nash Healey in good condition. Prefer in the East Coast. Please send price & description to; Robert Cosgrove, 29 West St., E. Paterson, N.J. 07407.

NOTICE

Special sale on Nash Healey club items. Until June 15th, many club items are available to members at reduced prices.

Remember these prices are in effect only until June 15th and a limit of three of each item per member. All items will be sent Postpaid. Now is your chance to get the club items you want and save money. Send all orders to: Nash Healey Car Club Int., R.D. 2, Boyertown, Pa. 19512.

Don't forget to send in your registration form for the 1972 National Meet in Kenosha, Wisconsin, August 11, & 12. Send all room reservations direct to the Holiday Inn of Kenosha, 5125 - 6th Ave., Kenosha, Wis.53140.

The car on the back cover is the former Paul Shaw car. This is the car that was wrecked in Iowa last year, and later bought by member Francis Stewart of Illinois, and recently was completely burned in a garage fire. It would seem that this is one Healey that was not supposed to survive.

IN OUR SUMMER ISSUE:

REPORT AND PHOTOS ON N.H. SPRING MEET
MATERIAL FROM THE TECHNICAL SERVICE MANUAL
AND MUCH MORE.

COMING MEETS:

Huntsville, Ala. AACA Show & Swap Meet - - - June 9-11. Saginaw, Mich. Car Show & Swap Meet - - - - June 18th. Cockeysville, Md. 5th Annual CHVA Nat. Meet - July 1st. Hamilton, Ohio 18th Annual Show & Parade - - July 22nd. AND KENOSHA National Nash Healey Meet, of course.

