

HAPPY

NASH HEALEY NEWS

NOV. 27 1981

HOLIDAYS

MOTORSPORT MAGAZINE ARTICLE - JULY 1952

The Nash-Healey Farina sports car is the latest example of the two-way street of design and engineering that stretches between America and Europe.

The man behind the body-design is 56 year old Pinin Farina, a silver-white haired ruddy complexioned and stocky Italian. The quiet, affable Farina is well-known for his work that literally covers the globe. His custom bodies are as much sought-after by royalty as by notables of stage and screen. In his years of creating car bodies, his work has been seen on the Cisitalia, Alfa-Romeo, Lancia Aurelia, Fiat, Simca, Jaguar, Bentley & Rolls.

For many months, Farina and the engineers and designers at Nash have been working together on the 1952 Nash Ambassador and Statesman. The results of that collaboration are now on the roads, fresh from dealers' showrooms, the first time an American automobile company has commissioned a foreign designer to style its car for mass production.

Farina was born in Turin in an era when the gas buggy was still a rarity on the roads. By birth he had an affinity with the art of mobile design, for his father owned and operated a coach-making business. In early youth, Pinin was more interested in how fast a car would go rather than its design. He found out--as a racing driver--and a good one. But his father's coach-building business soon exerted the greater influence.

As the automobile assumed a more important role in the customs and economics of the world, Farina followed its development with much interest. He soon diverted his father's establishment into the business of building bodies for automobiles. Farina now employs 650 people in his plant in Turin where about 100 custom bodies are produced each month.

Just as a painter with oils or a sculptor with stone understands his medium---Pinin Farina understands his medium--the automobile. The individuality without sensationalism of a Farina car distinguishes it with eye-pleasing line and form. Farina, himself, describes his cars as "functional design". He practices what he preaches.

COMMENTS FROM THE EDITOR

Christmas is just around the corner and I imagine everyone is busy shopping and getting ready for the holidays. Things get pretty hectic around our home. Ray & I would like to personally wish everyone a Happy Holiday.

Winter is definitely here in PA and things have slowed down, rather they have come to a complete halt as far as car shows go. The last show we attended was in McKeesport and that was late September. If anyone has gone to a car show lately I would appreciate hearing from you.

Our club President, Ray, went to Hershey, PA. in October and picked up quite a few parts for his 54 coupe. He said it was a beautiful three day weekend.

Last month I was busy putting the finishing touches on the club roster and I hope everyone received their copy and hope I didn't miss anyone in the roster. If you didn't get your copy please let me know.

If you would like to drop me a line to let me know what you've been doing please do so.

1981 WESTERN NATIONAL OF N.C.C.A.

Gordon McGregor was going to write an article for our newsletter about this meet but I know he has been very busy.

I was reading an article in "The Nash Times" of the N.C.C.A. and it seems there were four Nash-Healey's at this meet, which was held in mid-September. In the Nash-Healey class 1st place went to Jim & Mike Paradiso with their 1953 roadster; 2nd place to Ray Hren (previous N.H.C.C. member) with his 1954 coupe; and 3rd place to Gordon McGregor (Vice President of the N.H.C.C.) with his 1953 roadster. This meet was held in California.

By the way Gordon, if you have a few free minutes could you send me an article with complete details of the meet? It would be interesting reading material for the members.

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HEALEY KING PIN REPLACEMENT by Steve Parsons
(Printed in 1972-73 Nash-Healey Magazine)

As owners of Nash-Healeys (or any Healey prior to the Austin-Healey, we have probably all marveled at the design of the front suspension. However those of us who have worked on it have probably also sworn at it --- especially if we worked on it before there was an organized club to supply parts and advice. In all fairness, given reasonable care and maintenance, the suspension is probably as trouble free as any. But many of our cars have a large number of miles or have had many owners with little or no maintenance. My car was definitely one of the latter. This article will deal with my experience in replacing the king pins and bushings.

When I got my 51 Nash-Healey, it looked like it had been through hell and high water all at one time. Inspection showed a large amount of play in the king pins. After a year or two I gathered up the courage to disassemble them. One side, the grease fitting was missing, so no grease was getting to either bushing. On the other side, the top bushing "cap" was missing and the grease fitting was screwed into the king pin - resulting in no grease getting to the top bushing! After removing the retaining pins, I found I could not pull the king pins out. It was necessary to drill a hole in the bottom of the lower bushing and knock the king pin out with a punch. Now the gory details of the mess were revealed! It seems that someone else had previously attempted to replace the pins & bushings. Not only did they fail to properly install the grease fittings, resulting in very corroded and worn parts, but they didn't line ream the bushings after installation. As a result, one king pin had seized in its bushing and was turning in the case steel spindle bracket!

All this meant that all the bushings and king pins needed replacement plus the spindle bracket had an oblong hole in it. Woe was me! What was I to do? No parts were available (as far as I knew) and little advice was obtainable on such an "oddball" suspension. Luckily, working in the Research Dept. of Caterpillar Tractor Co. gave me access to the specifications of pins and bushings used by Cat and I found a set that looked like it would work. After much head scratching, I came up with the arrangement shown on the

HEALEY KING PIN REPLACEMENT - continued

attached sketch. This setup is now in my car and seems to be working fine, although I have only a few hundred miles on it. AT THIS TIME I DO NOT RECOMMEND THIS SETUP HOWEVER FOR TWO REASONS: (1) Caterpillar parts are expensive (about \$35 for the parts plus some machine work); and, (2) original parts are now available from either the N.H. Club or the Association of Healey Owners of England. However, when it becomes necessary for the clubs to make new bushings, this setup may have cost and greasing advantages over the original setup.

Anyway, to get back to the installation, the attached sketch should show the assembly arrangement adequately. The following are details on the individual parts plus a discussion of the problems you might encounter when installing a set of king pins and bushings.

Grease fitting: Two required per side. Use the 90° ones with 1/8" pipe thread.

3/4" to 1/8" Pipe Bushing: Two required per side. These are standard hardware store (ironmonger in England?) item. These will be screwed part way into the bushing.

Bushing, Cat #1F1234: Two required per side. Made from heavy duty bearing bronze. Must have a groove machined in it for greasing purposes. I simply used four vertical saw slots but I don't know yet if this will be satisfactory.

Before installing the king pin bushing chill them in dry ice for 15-30 minutes. After installing, line ream the bushings for proper fit with the king pin. Tap each bushing with a 3/4" pipe tap. Tap only enough to allow the pipe bushing to be screwed in 4-5 threads. When installing the pipe bushing, screw in finger tight and seal the joint with epoxy (crude yes, but it works).

Flange portion: Since the Cat bushing has no flange, the flange from the old bushing must be used. Saw the flange off as shown so that you can pilot it in the spindle.

HEALEY KING PIN REPLACEMENT - continued

Cat #7S2668 Shaft: This shaft is hardened to Rockwell C 58 to a depth of .06, so it should be hard enough. A flat will have to be machined on the shaft for the retaining pin (use your old king pin for a pattern). The king pin should be a light press fit into the spindle bracket.

Thrust Washers: These are standard Nash-Healey parts. Use your old ones unless they-or the thrust flanges on the bushings are excessively worn. If they are, new washers will have to be made at a machine shop. What the proper thrust clearance is I don't know, but I assume it should be as little as possible while still allowing free turning.

Assembly Sequence: (1 through 4 applies to original type parts also)

1. Install bushings in knuckle spindle.
2. Line ream bushings.
3. Select the proper thrust washers and slide knuckle spindle & washers over spindle bracket (the washers must both be on the bottom side of bracket).
4. Push king pin into place & retain with pin. Grease bushing ID before installing king pin.
5. Screw in pipe bushing & seal with epoxy.
6. Install grease fitting & grease after epoxy has dried.

Other Problems: The first problem encountered will be tools. If at all possible, obtain some Whitworth size wrenches - open end, box, and sockets. J. C. Witney & Co., automotibe mail order firm, has a set of open end wrenches available. Tool companies probably have sets they can order. Standard U. S. tools can be used, but it's hard on them(they have to be press fitted, or ground away, etc), and on your patience

Some people have had trouble removing the retaining pin. Evidently, the king pin has turned in the spindle bracket, wearing a groove in the retaining pin. Try removing the upper bushing cap and turning the king pin back with a hammer and center punch. Or saw off the retaining pin flush with the spindle bracket and then drill it out. If these don't work, your guess is as good as mine!

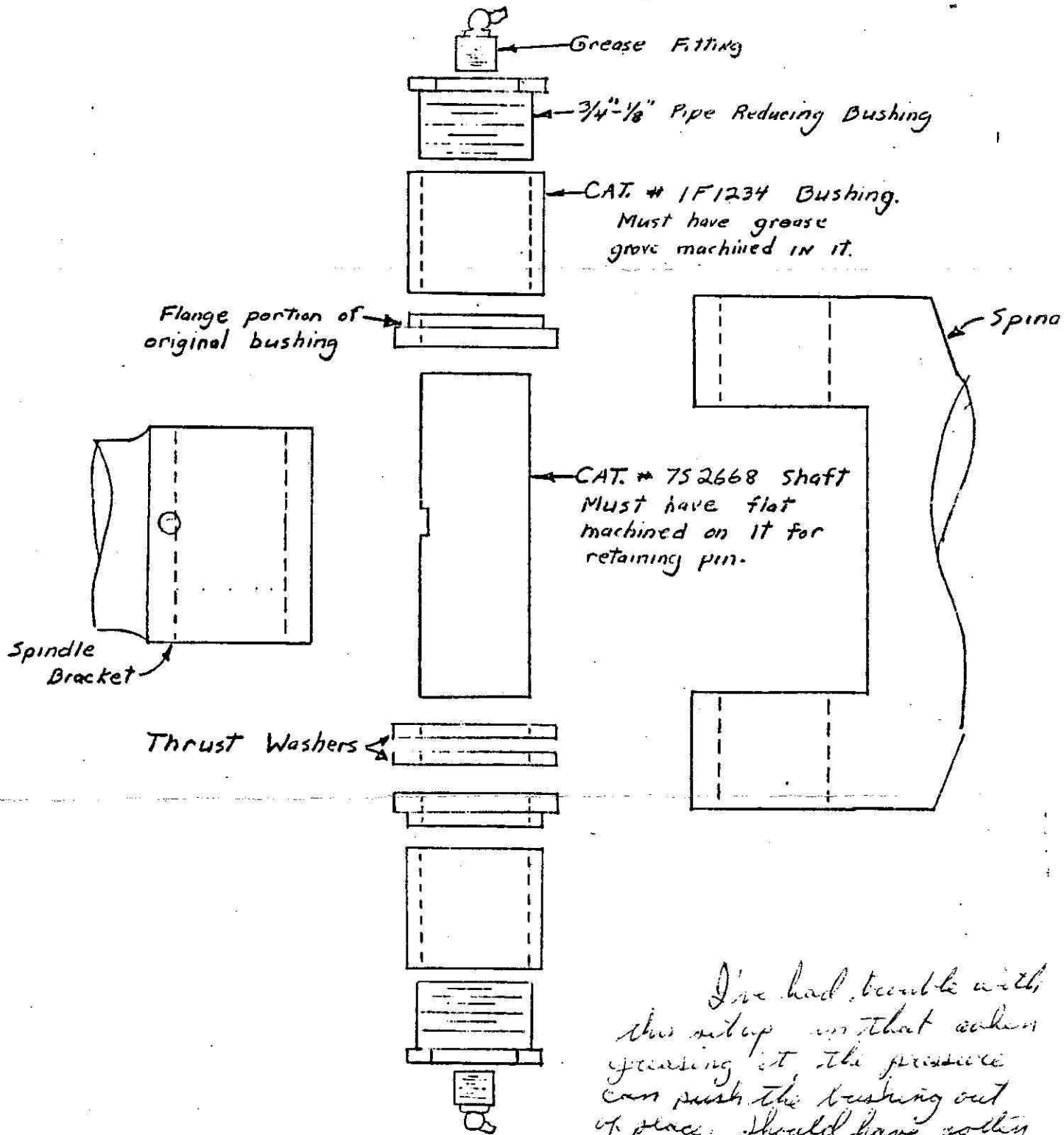
HEALEY KING PIN REPLACEMENT - continued

The king pin must not be loose in the spindle bracket. I tried to get by with a loose fit hoping the retaining pin would hold the king pin tightly against the spindle bracket. But the unit load was so high (due to the round pin and oval hole)that it cracked the spindle bracket! Getting the crack welded up was easy. Getting the spindle bracket out of the trailing arm was a bear! If your pin is a loose fit in the spindle bracket, try having the hole knurlized to reduce its size. Or, ream it oversize then either have a larger king pin made or use shim stock to take up the looseness. By all means, try to have this done "on the car". If it can't be, consider the following:

1. The spindle bracket is very tight press fit into the ball bearing of the trailing arm (or at least it was on mine).
2. As a result, it is virtually impossible to remove the spindle bracket from the trailing arm without removing the trailing arm from the car. It can be done - by using the bearing cap as a screw type press. However, the cap will be damaged, so this method is not recommended.
3. Therefore, I recommend removing the trailing arm assembly. Ray Sugg, technical editor of the Association of Healey Owners "Gazette" wrote an article on overhauling the trailing arm bearing.
4. If you go this far, check the ball and roller bearings for wear and replace those that are worn. Again see Ray Sugg's article. Part numbers of these bearings are:
 - Needle Bearings - NA 2045
 - Front Ball Bearings - DLJT 1 1/4J
 - Rear Ball Bearings - DLJT 30J
 They can be ordered through bearing supply stores here in the U.S. or can be ordered from the Association of Healey Owners Club of England.
5. When removing the bearing retaining cap, do not use a punch (or chisel) and hammer! This will stake the threads together and make removal doubly hard. Obtain or make a suitable spanner wrench or, at the very least, use a large pipe wrench.

Well, there it is. I hope this has been helpful. Overhauling the front suspension is a chore but it will result in a much better handling vehicle.

ASSEMBLY SEQUENCE OF NASH-HEALEY KING-PIN SET UP USING CATERPILLAR TRACTOR CO. PARTS



I've had trouble with this setup in that when greasing it, the pressure can push the bushing out of place. Should have gotten some heavy duty bronze bushing with flange on them or had old flanges welded/braced to bushings.

TECHNICAL TIPS by Michael Lamm

COMMENTS ON PREVIOUS TECHNICAL TIPS
by Michael Feingold

In the process of restoring my 1952 Nash-Healey roadster, I've picked up a couple of little tidbits and I thought you might like to pass along to club members.

Decorative Moldings Along the Rockers

The first involves the decorative moldings along the rockers. These were missing from my car, so I went down to my local VW dealer and bought some trim that's very similar (in appearance) to the original. It's intended for a VW 411. Ask for the fender and door spears (two each) plus 22 plastic clips. The clips fit into the Nash-Healey holes, and be sure to tell restorers not to cut off the little projections on these clips. Rather, hammer them in gently after you've set the clips into the body. Then snap on the molding after you've cut it to the proper length with tin snips. And that's all there is to it. This trim cost about \$6.25 per strip, and the clips cost 24¢ each.

Repading Dashboard, Doors, or Rear Cockpit

The other item I'd like to pass on is for the roadster restorer who needs to repad his dashboard, doors, or rear cockpit surround. The original foam rubber in my roadster had crumbled to granules, and after considerable searching, I came up with a suitable replacement. Basically, it's the insulating material that goes around hot-water pipes, but since several types are available, I finally discovered one that's not too soft or skimpy. The name of the insulation is CLIMATUBE. The type I used is for 3/4-inch copper pipe and has a 5/8-inch wall thickness. It's made by Nomaco Inc., Hershey Dr., Ansonia, CT 06401. It has a grey color (avoid the white type), and it's available in most do-it-yourself stores and lumberyards. Price is \$7 for four 3-ft. lengths. This is more than enough to finish a car. I should add that you have to cut these cylinders in half the long way, but not precisely in half because that way they are too big. I sliced off a C-section that gave me a bolster very similar to the original, and I used a table saw to assure a consistent cut.

Hope these tips do someone some good. Thanks for the roster and those fine newsletters.

(1) In some cases the template shown in the July issue for adapting the Stewart-Warner fuel level sending Unit, D-384C, for use in the Nash-Healey may require modification. The original Smiths unit in my 1951 Nash-Healey was fastened to the gas tank with 5 screws on a 2 3/8-inch center compared with the six screws on a 2 3/4-inch center illustrated in the article. Although the combination of an English gauge and American sending unit causes a reading of "empty" when the tank is filled and reads "full" when you are running on fumes, this conversion is certainly a great improvement over carrying a yardstick in your trunk.

(2) To cure erratic throttle response, Steve Parson's method of repair, presented in the September issue, was applied to my Nash-Healey with much success utilizing an AMC throttle cable part #8120144.

Important additional sources of poor throttle action were found to be elongated holes in the gas pedal arm and excessively worn throttle plates, shafts and bushings in the model H6 S.U. carburetors.

Lacking a Nash-Healey parts car or two, the two pins securing the gas pedal arm to the bracket assembly should be driven out with a punch and replaced with tapered pins which compensate for the inevitable wear from normal use. These pins come in a variety of sizes and are available at most any hardware store. It should be noted that excessively worn holes in the gas pedal arm subject it to severe stress under use. Eventually the arm fails by twisting off inside the pedal bracket assembly.

To repair the S.U. Carburetors it was necessary to drill out the old throttle shaft bushings and press new ones into the housings. New throttle plates and shafts, originally intended for use in the Triumph TR-3 were then installed. This method, in combination with the other measures described above, will restore the throttle response of your Nash-Healey to a pleasingly high degree of precision.

COMMENTS ON PREVIOUS TECHNICAL TIPS
Continued + by Michael Feingold

CLASSIFIED

(3) With regard to the September article concerned with stopping oil leaks around the engine side cover, Steve Parsons informs me of additional important point. In most cases the leak is caused by overtightening the bolts causing deformation of the sheet metal around the retaining bolt heads. With the side cover on a hard flat surface this area should be straightened using a hammer and block of wood. When attaching the side cover tighten the bolts only until they are just snug. It is very easy to strip the threads especially those in the head. Thanks Steve.

FOR SALE: Photostat of original service manual for Nash-Healey: Harvey Lipman - 9 Juniper Lane - W. Hartford, CT 06117

WANTED: Air Cleaner for dual Webber Carbs.; tachometer sending unit; clutch: Harvey Lipman - 9 Juniper Lane - W. Hartford, CT 06117

NASH-HEALEY'S FOR SALE

TECHNICAL TIP by Bruce Sheaffer

I have found that the rear shock caps from a Ford Fiesta 1978-80 fit our Nash-Healey rear shocks. Although originally the Nash-Healey had no such caps, I've found it's a nicer appearance to have the nuts at the top of the shock tube covered. Also helps to protect the things you may have in the trunk.

Dear Mr. Soles:

I have a 1953 Nash-Healey that I would like to sell. Do you know anybody that would be interested. I have \$10,000 invested, not counting the car. My name is Phil Harris and I live in Modesto. My address is 6606 Woodgate Cr. - Riverbank, CA 95367. I would like to get \$7,500 for my car. I feel this is a very good price.

Thank you,
Phil Harris
(209) 869-4489

OIL FILTER INTERCHANGE by Michael Feingold

WIX 51025	FRAM	C-199
AC P-270	HASTINGS	101
CASE A-7811	NAPA	1025
PUROLATOR P-34W and P-51S		

Dear Ray:

I learned by way of William M. Wilt, a person interested in special interest cars in Monroe, MI., that you were in charge of a new publication for Nash-Healey owners and interested persons. I belonged to the old Nash-Healey Club, then lost track of all contacts.

The reason for this letter, I have a 1953 Nash-Healey roadster, in good condition, that I would like to sell. If you run ads, or know of interested buyers, this one is for sale.

I have been offered a solid \$6,000 for it, but thought I might pursue further before letting it go at that price. I was offered \$7,300 for it five years ago, but wouldn't sell then. My time and interests have changed plus I just don't have room to store it in my garage anymore.

I would appreciate any help you might give.

Sincerely,
David S. Blackburn
408 Isaac Lane
Franklin, TN 37064

TEE SHIRTS FOR SALE

We still have several tee shirts for sale. Send in your order today. We guarantee you will like them.

There are pictures of a coupe and a roadster with the words Nash-Healey in script between them. They come in yellow and blue. The price is \$6.00 plus \$1.00 shipping for each tee shirt.

The sizes are S, M, L, & XL. Make the check payable to the Nash-Healey Car Club and mail orders to Joanne Soles, Editor - 530 Edgewood Avenue - Trafford, PA 15085

LETTERS FROM MEMBERS

Dear Joanne:

I am glad to see that you and Ray are doing such a commendable job in revitalizing both the Nash-Healey Car Club and the club publication.

It is a minor point, even a nit-picking one but the name of the car always had a hyphen between Nash and Healey (as does Austin-Healey). So the name of the club should carry that little old hyphen, as should all mentions of the car itself. I know this to be a fact because I have a complete collection of every piece of literature issued on the Nash-Healey. In fact, I was on the public relations staff of Nash Motors during the 1951-55 period when the car was being sold, and wrote most of the publicity on it.

I am now retired from the Henry Ford Museum (where I worked from 1977 until April of this year after 32 years with AMC), and am devoting a lot of time to research, writing and lecturing on automobile history.

Sincerely,
John A. Conde

John,

I don't know if it is a slip of the brain or a slip of my typewriter that I have forgotten to put the hyphen in Nash-Healey but thank you for bringing it to my attention. A small error like this is very important and it isn't nit-picking. Again, thank you-thank you-thank you!!

Joanne,

Thank you very much for the response. I am impressed. The newsletter is excellent. I've only been a Nash-Healey fan for about a year and have a pair and wouldn't part with either ever. They really grow on you, don't they?

I do believe I have the only Nash-Healey's in the northwest except for a 51 in Portland.

If there are any around I'd sure like to know. Thanks again.

Respectfully,
Charles Thomas

Charles,

Thank you for the compliment on the newsletter. I'm sure you have gotten your roster by now and as you can see you are the only member in Oregon.

We have a 54 coupe and wouldn't part with ours either and we love showing it off.

LETTERS FROM MEMBERS - continued

Dear Mrs. Soles:

Enclosed is my check for \$16.00. This covers my dues for the Nash-Healey Car Club, which I understand is \$9.00 per year. This also covers \$7.00 for a Nash-Healey T-shirt. I would like a large blue shirt. I am delighted to find out about your club and its recent re-organization and I have Mike Feingold to thank for putting me in touch with you.

As is the case with other members, I have many needs for my car. However, one I would like to suggest as a project for the car club would be to have the Nash-Healey script reproduced since I for one have none for my car and in the newsletter of July, 1981 I noticed several owners wanting script for their cars. It seems to me that this would be worthwhile project which should be self-supporting.

I intend to be as active a member as possible. However, I think my restoration project will take at least six months to a year from now before completion. By the way, I intend to race my car in vintage car racing since I have been an active road racer until this year, most recently racing in the SCCA CanAM professional series.

Dean Dietrich

Dean:

I enjoyed your letter and thank you for your membership and hope you received and liked your T-shirt. In the August issue of the newsletter, Dick Snell of Michigan said he is looking into having the script reproduced and would inform us later on when this will be done and also the cost. Good luck on the restoration of your Nash-Healey and hope you have fun racing the car later.

SOMETHING FOR THE LADIES - Banana Delight

- 2 cups graham cracker crumbs
- 3 sticks oleo (1 melted, 2 softened)
- 1 tablespoon sugar
- 2 eggs
- 1 box confectioners sugar
- 2 teaspoons vanilla
- 1 (#2) can crushed pineapple, drained
- 5-7 bananas, sliced lengthwise
- 2 packages prepared Dream Whip

Melt (1) stick oleo. Blend graham cracker crumbs, oleo & sugar and press into 9x13 pan. Cream remaining oleo, add eggs, conf. sugar & vanilla. Beat 20 minutes. Pour into crust. Cover with bananas then pineapple. Top with dream whip. Chill until firm.