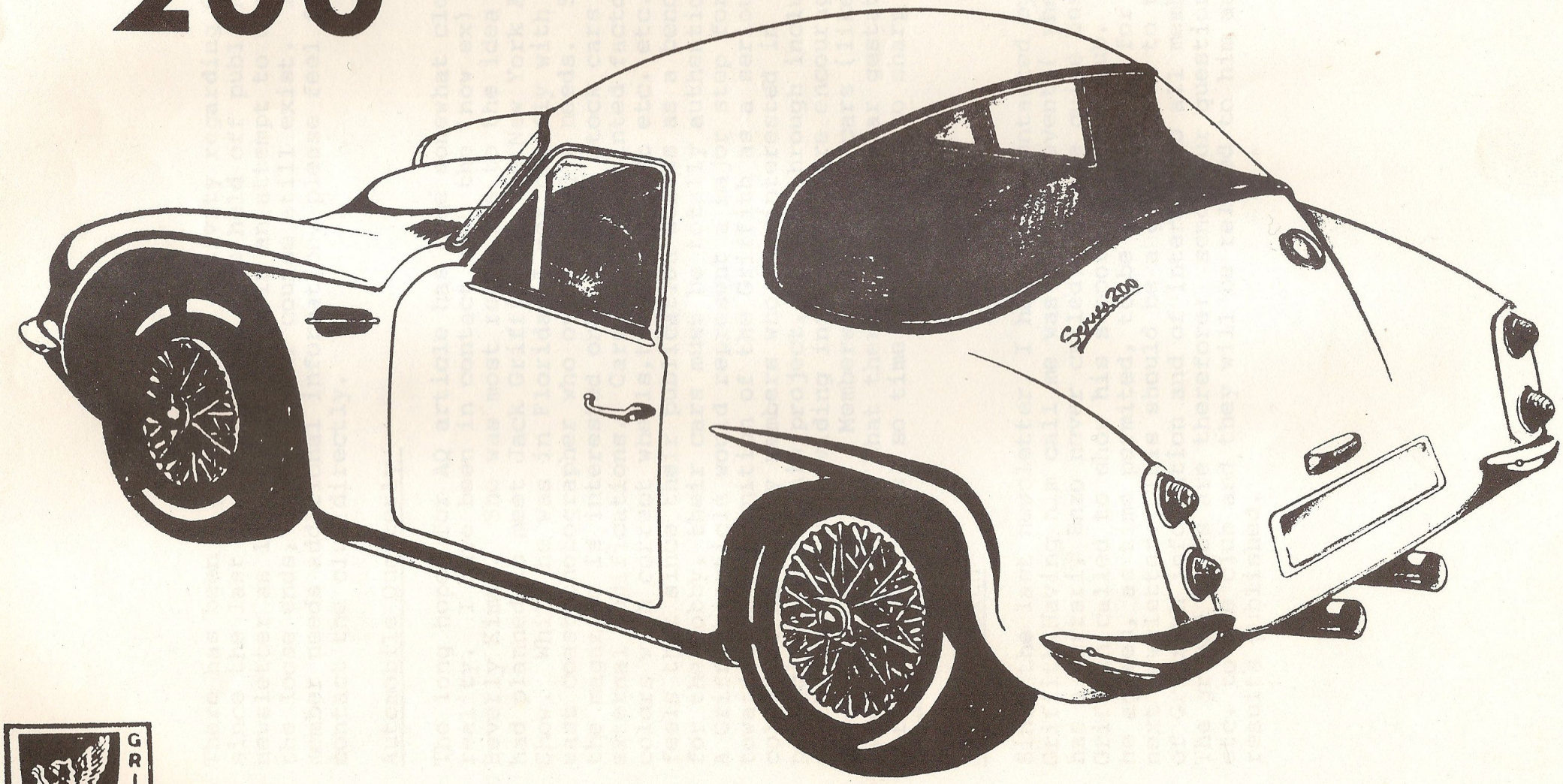
GRIFFITH

200



Griffith Club of America

June 1981

NEWS

There has been a great deal of activity regarding Griffiths since the last newsletter. I have held off publishing this newsletter as long as possible in an attempt to tie up all the loose ends, but some, of course still exist. If any member needs additional information, please feel free to contact the club directly.

Automobile Quarterly

The long hoped for AQ article has come somewhat closer to reality. I have been in contact with the (now ex) editor, Beverly Kimes. She was most receptive to the idea and had planned to meet Jack Griffith at the New York Auto Show. While he was in Florida, I met briefly with the east coast photographer who outlined AQ's needs. Specifically, the magazine is interested only in 100% stock cars with no external modifications. Cars must be painted factory colors with correct wheels,tires, exhaust etc. etc. AQ feels that since their publication serves as a benchmark for the hobby, their cars must be totally authentic. A Griffith article would represent a major step forward towards the recognition of the Griffith as a serious collector car. Any members who are interested in participating in this project, either through inclusion of their cars or providing information are encouraged to contact the club. Members with tatty cars (like myself) should note that there is a one year gestation period for articles, so time still exists to sharp up your cars.

Jack Griffith

Since the last newsletter, I have been contacted by Jack Griffith.Having him call me was quite a event (when I has a Ferrari, Enzo never called). While quite busy, Mr. Griffith called to show his support for the club. Also, he agreed, as time permited, to be interviewed for the next newsletter. This should be a great asset to the body of Griffith information and of interest to all members. The ground rules are therefore: send your questions/topics etc. to the club and they will be relayed to him and the results published.

T-Shirts

Those of you who ordered T-shirts have received them. This project turned out to be quite a success, chiefly due to the excellent quality of the photo/screen work done by the Fly by Night Studio (real name) here in Tampa. Some extra shirts were made up when the initial run was completed and are still available in limited quantities. Sizes are S, M, L, and XL; colors are yellow, blue and tan. Please note first and second color choices when ordering. Price is still $ 7.50 postpaid.The picture below is the back side of the shirt, the front side is printed "Griffith Club of America" in block letters over the left breast.

Sparto Lenses

The long awaited Sparto N.O.S. lenses are in stock. These are the red prismatic lenses. A very limited supply of the amber concentric circle lenses is also available. At present the red concentric circle lens is not available. The rubber boots, which nearly all members need are not available at this time. Rick Hall and myself have made inquiries about having these rubbers reproduced but the costs are beyond our means at this time. The cost on these lenses is $15.00 each, postpaid.

Safety News

A serious safety problem has arisen on both Series 200 and 400 cars. Lower pivot bolts (the bolt that holds the bottom of both rear shocks on each side) have been sheering with regularity. To assist club members, Daryl Stombaugh has been kind enough to develop the included technical article on this problem.

Racing News

Well known club member Gary Courtney has been tearing up parking lots throughout the Northeast. Gary has been autocrossing his Series 200 with excellent results against such competition as well set up 454 Corvettes.

Small News

* There is some talk of a reproduction Griffith !
*
* The problem with Kirk headers has been resolved, The jig used to build Griffith headers has been modified and these headers now fit properly.

* Joe Rauh is busily doing a body off job on his Series 400

* Chuck Gutke has sold his 400 to Dr. John Spragg who is planning to autocross the car.

West Coast Micro Meet

An impromptu West coast meet was held earlier this year. In the top photo standing behind Jeff Childs very low Series 200 are (1 to r) Steve Ferron, Mrs J. Childs, Jeff Childs, Ken Libutti , Lou Anderson and Paul Hill. Also present but camera shy were Joe Rauh and John Burr.

In the bottom photo are (1 to r) are the cars of Jeff Childs, Steve Ferron and Ken Libutti.

Feature Car

The feature car of this newsletter is 2005178 owned and restored by Steve Ferron of Redondo Beach, California. This car is one of the most innovatively and extensively modified in the club.In Steves words, "the car was bought off a farm in the San Fernando Valley where it had sat for six years... at the time of purchase, goats were using it as a hill to stand on".

Currently, the car has 42,000 miles and has been repainted in Diamond Silver. Modifications to the car are extensive and include power assisted rear brakes, Jaguar XJ 12 center section, roll bar, air conditioning, redesigned teak wood dash, complete leather interior and Borrani wheels.

The engine is a 289 HP with 10.5 pistons, Crane cam and kit, swirl finish valves, roller rocker arms, oil cooler, 10 quart pan, Cobra intake with 650 Holley and an Accell dual point distributor.

Many of the modifications done to this car, including the rear end kit, rear windows, rear disc brakes, door sill plates, Series 200 emblems and custom built roll bars and A frames are available through Steve and members are encouraged to contact him at 2211 Pullman Lane,Redondo Beach, CA. 90278

Griffith Air Conditioning

During the past year, I have installed AC in Griffith 2006001. Although all Griffiths differ slightly, this overview should assist members interested in such an installation.

The first hurdle in any AC installation is mounting the compressor. All extant Ford air conditioner mounts for the 289 use the popular York 2 cyl. compressor mounted on top of a bracket located in front of the right head. Such a mounting is nearly 3" too high to allow the Griffith hood to close. On 2006001, this problem was solved by using a small 1 cyl. cast iron compressor (originally made for VW aftermarket installations) mounted under a bracket designed for the York type compressor. The car now uses a 4 sheave crank and 2 sheave water pump pullys. In operation, the AC compressor is drived by a belt running from the crank to the water pump to an idler pully to the AC clutch.

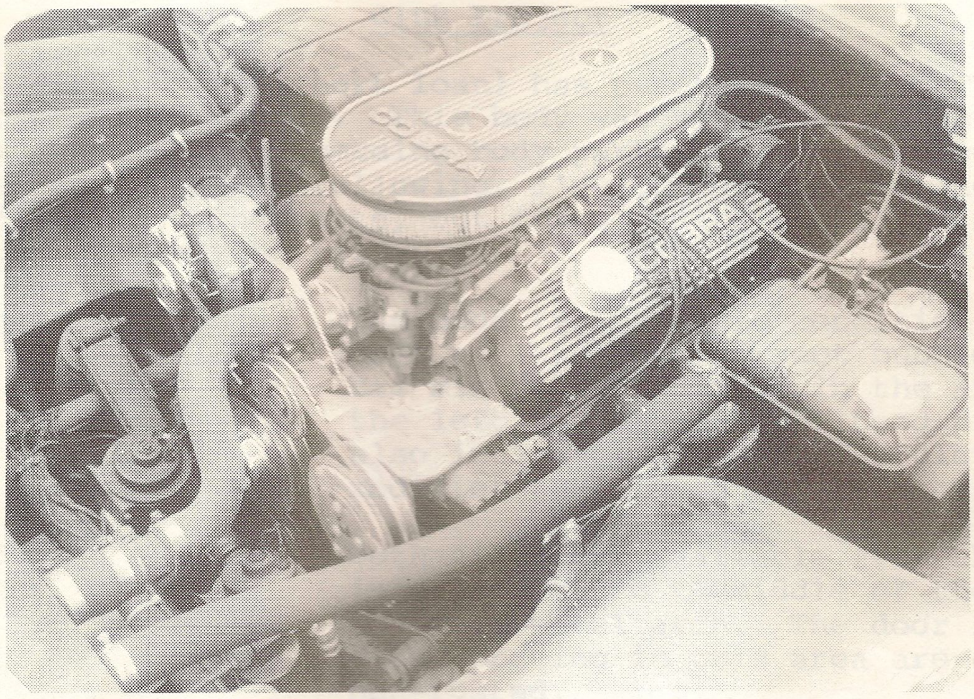
The second problem area in any AC installation is the location of the condensor. The condensor must be in the air flow, which dictates that it be under the car or in front of the radiator. On 2006001, it was mounted in front of the original Kenlow radiator. This was done by extending the fan mounting brackets 1" forward and fabricating mounts for the condensor. The drier was then located on a bracket attached to the front frame rail near the driver's side horn.

The most difficult task, however, is to mount the evaporator. Clearly, no room exists in or around the dash area on the Series 200, although such space may be available on the 400. Two mounting spaces are, therefore, possible: between the seats using a 3.8/early 4.2 XKE unit (the one best described as looking like a guitar) or custom fabricating a mount in the rear of the car. On 2006001, the assembly was mounted in the rear of the car. This consisted of a new rear wooden floor to cover the area behind the seats, with uprights between the rear window and rear wheel wells. This assembly was covered in a black vinyl similar to the original material, and holds the spare tire in the same manner as the GT 350 competition model.

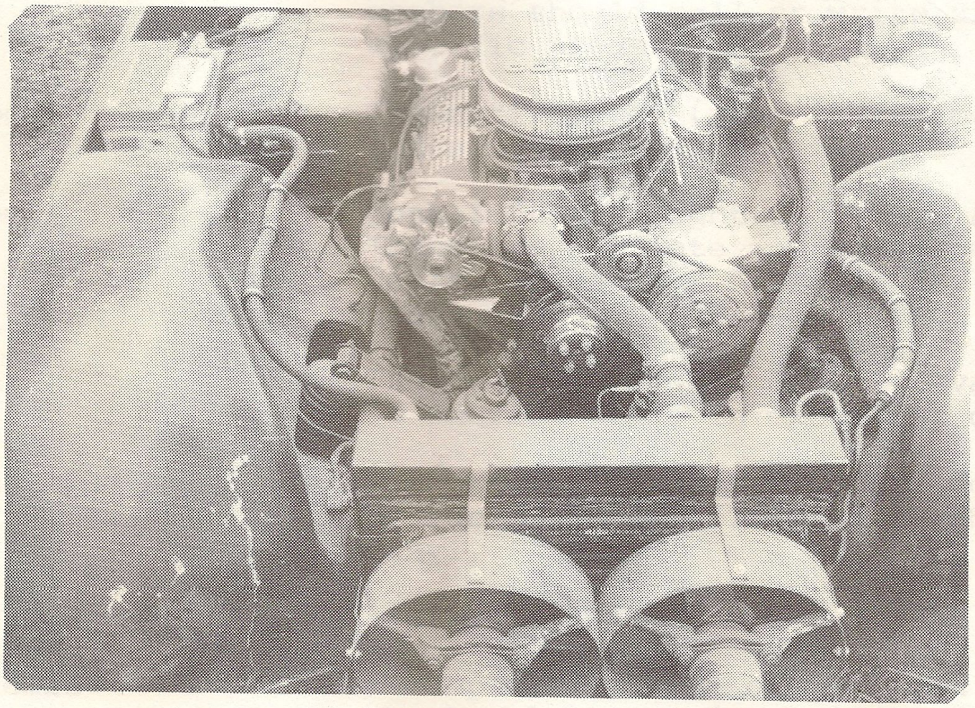
The pressure and suction lines were made of brass and run under the car. Controlling fan speed and temperature were problematic. There is no evaperator control made with a capillary tube long enough to control the evaperator. In this case, a Red Dot (brand name) de-icing switch was used and all wiring was run through the tunnel. The controls are now mounted under the stock dash.

Installing AC on many cars that were not designed for it may lead to seroius overheating problems. On the Griffith, it only exacerbates an already serious problem. On 2006001, this was remedied(to an extent) by a third fan, a water circulation tank , a water supply tank and an oil cooler.

Air Conditioning Details



This photo illustrates the compressor mounting. Also note the supply tank, drier mounting and idler pully. Please excuse the alternator bracket.



This photo illustrates the revised cooling system adaptable to all Griffiths. The stock radiator is kept full by the supply tank (in picture on rt), while the 2 gallon circulation tank (Kenworth !) is "tee'd" into the heater circuit before the heater control valve.

Club Project

The club (with a short loan) has purchased a 1967 TVR 1800 S (Griffith 400) body. This body was purchased to assist members with cars needing body parts. No running gear was included. In the following, I've tried to summerize the condition of the parts, but for details, a call or note would probably be best.

Hood	The hood is in usable condition. It does not have the correct bubble and it has minor glass damage in the area of the left headlight. The hood brace is also included. This hood could be easily modified to be used on a 200 or 400.
Left and right cuts	Both sides are available from the front inner fender to themiddle of the top of the rear wheel arch. The door frames and metal bracing in this area are good and non-rusted.
Left and right rear quarter panels	Both rear quarter panels are available. Visually, it is difficult to determine how much of them is actually there, so members should call or write with specific needs.
Roof	The entire roof (even including headliner and sunvisors) is available.
Doors	Both left and right doors are available. These are complete and undamaged. These doors include the door panels, handles, glass etc.
Dash	The complete wooden dash is available. It is uncracked and in excellent condition.
Dash Pad	The original dash pad is included. It is uncracked and upholstered in the original vinyl.
Rear Spoiler	Available and uncracked.
Wheels	A complete set (5) of American Racing 15" wheels with lugs is available. These are in excellent condition. They are very similar to the original optional mags and are the same as the wheels on Gary Courtney's 200 as pictured in the last newsletter.

Many other small parts are available, such as hood latches and heat extracter chrome strips. If anyone needs any parts, please contact the club. Parts will be sold FOB Tampa, but shipping can be worked out.

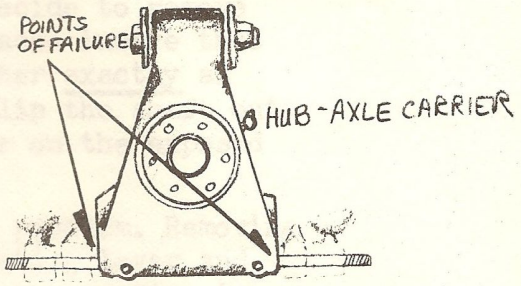
Example picture of right side cut. Pictures are available of all other parts through the club

A "fugative" (non Griffith Club)
Series 200 car located in So. Fla.

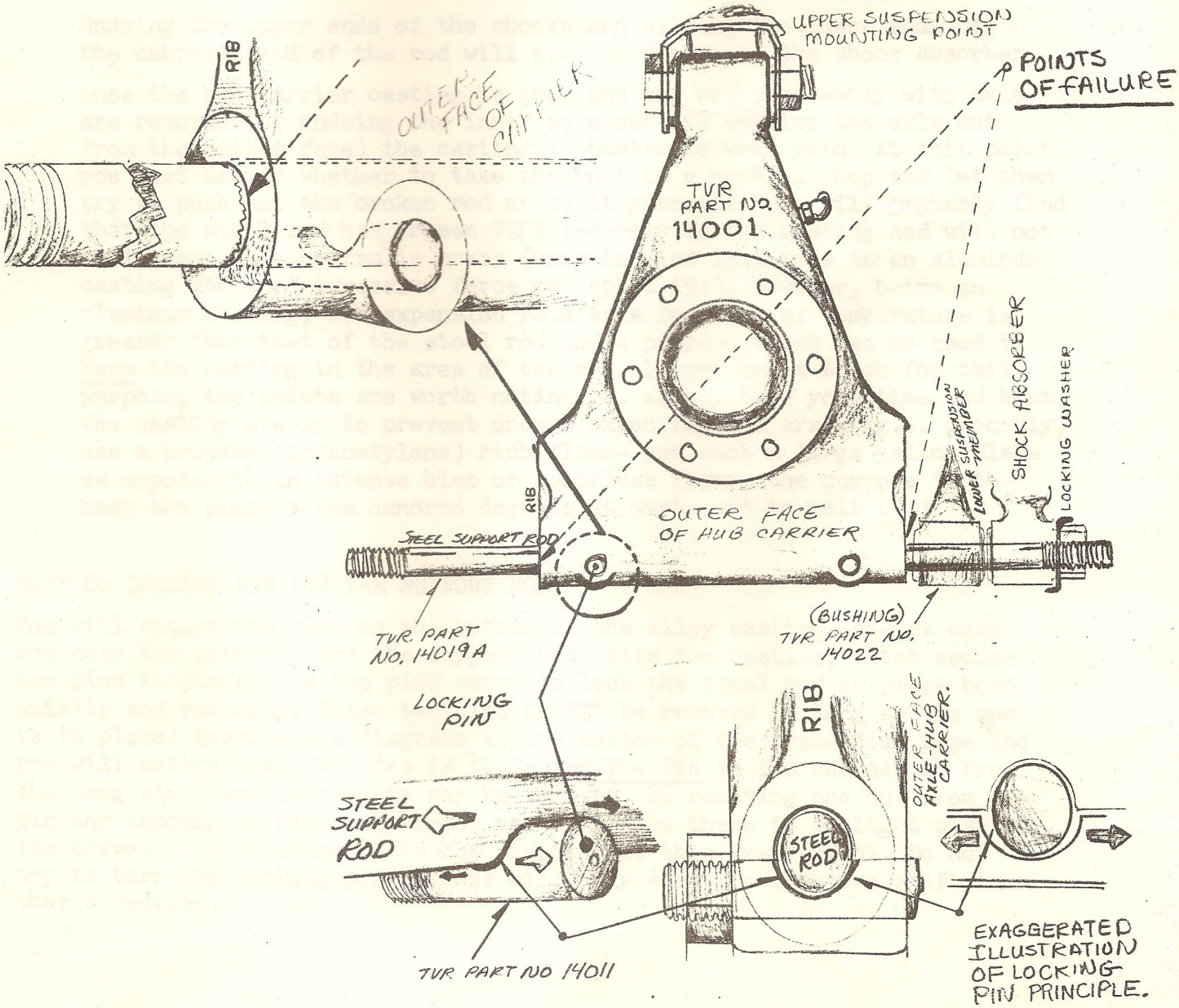
REAR SUSPENSION FAILURE

Reports of a specific type of Griffith rear suspension failure coupled with two such failures of my own have prompted this article. The failure is a shearing off of the steel shaft which serves as a tie point for the lower suspension control rods and shock absorber lower ends. The rods pass through the lower part of the rear hub carriers (the alloy casting which houses the rear wheel bearings) and the point of failure is where they are exiting the casting on either end.

The steel rod is the focus of the majority of the suspension forces in the rear suspension and these forces concentrate at the point where it exits the casting. A common factor in the reports of such failures is that "firm" shocks have been fitted recently to the cars (in my case they were Konis). Failure can occur at either end of the casting but the leading or front end failure is particularly hazardous and damaging to other drive members and suspension members. All welds and the half shaft should be closely examined during the repair of such a failure.



Once the rod has snapped, removal of the hub carrier is necessary to allow replacing the rod. Although the removal of the hub carrier from the car is not technically demanding, it does involve heavy work and requires some effort. The following information may be of assistance to those who have to repair a part which has failed in the above described manner.



Before separating the outer half shaft universal yoke flange from the flange on the hub, mark them with a file or scribe so that you can properly align them during reassembly (ditto for the inner flanges if you find it necessary to separate them as well).

Use a short piece of twine or wire to hold the half shaft in a compressed position once it is unbolted from the hub flange- do not let the shaft slide out to the stop; if you decide to remove the outer half of the shaft instead of tying it back- insure that it is marked so that it too can be put back together exactly as it originally was. Unscrew the locking ring and slip the shaft out. Do not let ANY dirt get into the open shaft end or on the exposed end!!

The removal of the emergency brake cable may be a problem. Removing the pin through the end of the cable and the actuating lever and then removing the cable mounting bracket from the hub casting is not too difficult. "Liquid wrench" and a small impact driver should loosen the bracket retaining screws from the aluminum casting.

Have a small soft plug ready when you disconnect the brake line in order to plug the end of the line unless you intend to drain the line.

It is not necessary to dissassemble the brakes from the hub.

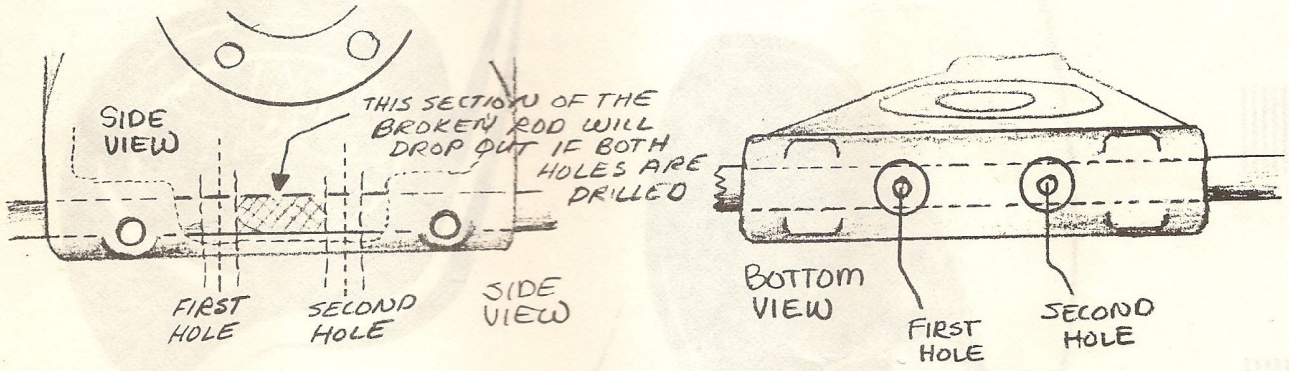
Undoing the upper ends of the shocks and sliding the lower ends off the unbroken end of the rod will prevent damage to the shock absorber.

Once the hub carrier casting is free and the brake assembly with axle are removed (by undoing the inner axle nut and pulling the axle out from the outter face) the casting is easier to work with. At this point you must decide whether to take the unit to a machine shop and let them try to push out the broken rod or do it yourself. You will probably find that the steel rod has frozen VERY securely in the casting and will not yield even on a hydraulic press (keep in mind that this is an aluminum casting and that excessive force can split it!). However, being an aluminum casting, its expansion rate as a function of temperature is greater than that of the steel rod and a propane torch can be used to Warm the casting in the area of the rod. If you use a torch for this purpose, two points are worth noting.... first, take your time and heat the casting evenly to prevent unemen expansion and cracking... secondly, use a propane (or acetylene) rich flame- you want a large yellow flame as opposed to an intense blue or colorless flame, the purpose is to heat the piece a few hundred degrees at most- not to melt it!!

NOTE ON LOCKING PIN FOR THE SUPPORT ROD!

You will notice two nuts on the bottom of the alloy casting, one at each end near the points where the support rod exits the casting, which secure two pins in place. The two pins serve to lock the steel rod in place both axially and radially. These two pins CANNOT be removed as long as the rod is in place! Examine the diagrams at the bottom of the preceeding page and you will notice that the idea is to Center The Pin in its channel to free the long steel rod so that it may be removed. By removing the nut from the pin and tapping it back and forth, you will note there is a slight play in its travel- try to place it in the midpoint of this free travel. Do not try to turn the locking pin as this will only serve to lock the shaft in that direction.

As a last resort, after the machine shop has given up, drill a small hole from the bottom of the casting through the center of the steel rod. Try to drill directly through the center of the rod as nearly as possible. Select a drill bit slightly larger than the broken rod and using the hole you just drilled, drill through the casting and rod from the bottom. You will now have two sections of rod which can be dealt with separately. Now work on the end of the rod which was not broken off: using a distance piece (or several thick washers) and a nut which fits the rod, try to PULL the broken ½ rod out by tightening the nut against the washers. A sturdy vise and wrench are required for this operation. If the broken stub moves, lubricate its inner end with "liquid wrench" or light oil and proceed until it is removed; the other broken end should then be able to be pressed out on the press at the machine shop (all the force will now be applied to ½ the rod). If you cannot pull the unbroken end free, a second hole approximately 1½ inches to either side of the first hole will have to be drilled in the rod. This will leave a gap in the middle of the broken rod which will give enough clearance to push the BROKEN ½ of the rod into the center of the casting where it can be easily removed- THEN press the other segment of the rod in while lubricating it with light machine oil. You will probably not be able to press this rod out the other end but once lose you can extract it as described above with a distance piece and nut- pulling it out.



It is not clear what the ultimate cause (or causes) of this failure might be but it is probably due to a combination of stress fatigue in the aging rods and stresses exceeding the design limit of the rod. Stiff shocks can aggravate the situation and may cause a rod to fail that otherwise might not but the point seems to be rather that another solution be found than just replacing the rod with a similar typr rod. Either a new super-rod or a relocation of the tie point for the rear shocks; I favor the latter solution and intend to find a way to add a separate rod to the lower control rods which would maintain approximately the same suspension geometry but take the load off of the exsisting rod. All suggestions are welcome!