## HINTS FROM AUSTIN'S MORRIS GARAGE

Hi, Folks, this month is another repeat of Spares and Service. This time, it's from Volume 3, Issue 1, of *Octagon Topics*, Dated 30 January, 1973.

This month, we have a guest writer (Mike Walsh) to tell us about his experience with:

## Ye Olde Front Suspension

In the course of restoring my 1954 TF, I've gone into areas of the car with which I've had no experience. One such area was the front suspension. This area is not known for its ability to withstand constant curbing by the driver. In the course of several months, I learned, sometimes the hard way, what not to do, and then the correct way. This, however, has increased the time necessary to complete the restoration project, and has produced a series of events that sounds like a comedy of errors.

The front suspension is usually trouble-free if it is lubricated and the shocks serviced on a regular basis. Trouble is usually noticed by unusual wear patterns on the front tires. This problem can sometimes be corrected by adjustment of the toe-in. Because there is no allowance for any other adjustment, short of actual bending of the components of the suspension, any other problem lies in component wear.

If such trouble is experienced, or if you are performing a complete restoration, then the time has arrived to overhaul the front end. If you have an early TD that does not have the strengthening collars or the swivel pins, or if your car has 100,000-plus miles on it, then you should have the pins, trunnions, and steering arms magnafluxed.

When undertaking disassembly of the front end, especially for those of you who have never done it, it is advisable to mark and identify all parts as they are being removed, and remember that the LH side has left-handed threads on the stub axle and swivel pin nuts. It is also recommended that jack stands be placed under the frame at both sides, behind the front crossmember, for both safety and convenience. Before attempting the disassembly operation, refer to section K of the TD-TF Workshop Manual, and make yourself familiar with the outlined procedures.

Some tips during tear-down: the long \shock absorber mounting bolts are found on the inboard side; heed that the flexible brake lines are not stretched when removing the backing plates; to remove the tie rods.

unscrew them from the steering gearbox arm (ref, section K).

To disassemble the swivel pin assembly after the shock and A-frame have been removed, push out the center pins in the upper and lower links. Failure to remove these will result in damage to the swivel pin threads. When removing the links, there should be **no** resistance on unscrewing them from the pins. If they do not turn freely, then review all procedures. On removal of the links, the pin threads may be inspected for wear. Do not drop the pins or the threads will be damaged, and they are not cheap.

Next, clean all the parts, keeping the arts for the LH side and RH side together. This includes nuts and bolts, too. After cleaning all parts, start the inspection, paying close attention to the link bushings and their pins. Any sign of grooving or pitting requires replacement of the marked piece(s). The fulcrum pins should be straight, especially where the lower Aframe is mounted. Upon inspection of the stub axle swivel pin assembly, you will notice a number stamped into the unmachined area of the stub axle, facing the frame. This number should be relatively close to the chassis number.

If it becomes necessary to separate the stub axle and the steering arm, first remove the nut on the steering arm. If the arm does not come out easily from its tapered fitment, take the entire assembly to a machine shop to be pressed out. The same applies to the king pin after having removed the tie rod. Steering arms are no longer available, and other parts are highly expensive...so, no hammering on this assembly is recommended.

Assuming you have replaced the swivel pin, let's reassemble the pieces. Clean all mating surfaces when refitting, use a thin coating of oil on both pin and axle for a smooth fit. If a heavy oil is used, more difficulty will result, with possible scoring resulting. Once in place, the steering arm may be fitted and secured. If, in addition, new link bushings and pins are fitted, carburetor dashpot. The pin, when lightly oiled, should drop through the bushing with a slight resistance. Then, to reassemble the links on the king pins, liberally grease the threads of each piece carefully, and avoid piece carefully, and avoid filling the necked-down area on the pin.

By sighting through the link pin hole, one may locate the end of the threads. Centering the link pin hole in this area and by carefully noting the position of the link, one may insert the link pin and check to make certain there is no binding.

When replacing the rubber boot on the link that fits over the swivel pin, lightly grease the inside of it so the seal will rotate about the pin without hanging up (I recommend the use of silicone spray or lube to completely cover the new rubber both inside and out—this protects all surfaces against smog and other airborne pollutants while allowing the seal to rotate.) Now that the links are on the pins, it's time to install the shock absorbers and lower A-frames to their correct links.

When fitting the rubber seals to these areas it is not advisable to grease (but still spray with silicone), because the sealing quality will be impaired. Make sure the metal retainer has a washer on the inside, and if the retainer has been bent, straighten or replace it as necessary. Then, fit the seal over the retainer and slip it on the end of the link.

It is now permissible to slip the shock arm and A-frame arms into place. Lightly grease (yes) the bolt and slip it into the hole. Adjust the assembly by hand to slip the bolt through. Under no circumstance should a hammer be used. If the bolt will not go through the shock arms freely, that means the shock arm is bent, and the shock must be replaced. Do not hurry this assembly as this adjusting to make a proper fit is extremely fine and requires much patience. However, once the job is done right, it will last a long time and give the best results.

To finish the job, bolt the fulcrum pin to the chassis and install the rubber bushings. To prevent future squeaking, it is necessary to spray the bushings with silicone lubricant (spray only the exposed rubber with silicone after installation).

Now, follow the factory shop manual to refit the assembly to the car, remembering to grease (yes) both ends of the springs before installation. I would advise you to replace all old bolts to add an extra bit of safety to this vital part of the car. Plan to replace all other rubber parts, too.

I hope this will cover some of the cloudy areas not covered in the shop manual. I will bring some old parts that illustrate what not to do to the front suspension to the next meeting.

We continue with more from the same issue.

## **MORE LOWDOWN**

from Leland

Here are some more of those little gems of information gleaned from my past experiences, together with my reactions and the solutions that I applied. They may not be according to the experts best advice, but in all cases, it seemed like a good idea at the time.

The first time I ever removed an oil pump, much time was lost in closely following the directions in the shop manual (i.e., remove bolts and pull away oil pump assembly, etc.).

- What is <u>not</u> said is the need for a heavy brass or lead hammer to knock the pump loose from the near-press fit. Don't be bashful (but don't <u>BASH</u> either). You need a good "persuader," but be sure that it is Lead or Brass.
- 2) I had a high-rpm miss in the TD that I just couldn't find. After a lot of frustration and cleaning of carbs, etc., I found a tiny hole in the gasoline line to the forward carburetor. At low rpms, the fuel supply to the forward carburetor was adequate, but at high rpms and the resulting higher demand, the air was sucked into the fuel line, and the forward carburetor simply ran dry. Believe it or not, it didn't show up as a gasoline leak either. One in a million I guess, but you never can tell.

I sure hope you all enjoy these article reprieves, and I further hope you can benefit from the information contained in them. Regards, Jerry.

We always encourage members and others to pen and submit technical articles or other material that may be of interest to owners of vintage MGs. Just e-mail me at <a href="mailto:jdaustinmg@cyberhotline.com">jdaustinmg@cyberhotline.com</a> or leave a comment at our Web site <a href="https://www.vintagemg.com">www.vintagemg.com</a>.

I might mention that this article is presented in complete form, while other technical articles at our site are available to only members. In order to view them in their entirety, it is necessary to become a member (full or associate). Please join us. Our intent is to keep our MG wonders on the road and in tip-top shape. Click on membership, and fill out the application. Or drop us a line to receive a paper copy.

As usual, these articles may be reprinted in other MG club organs, but *Octagon Topics* must be credited as being the source.

As a possibly comedic note, what follows on the next page is A club financial statement for 1974/75.

## VINTAGE MG CLUB OF SOUTHERN CALIFORNIA FINANCIAL STATEMENT 5/1/74 THRU 1/31/75

Balance brought forward from 5/1/74  Membership renewals  New Memberships  Coffee	INCOME	EXPENSES	BALANCE			
	\$172.50 562.00	\$ 23.62	\$979.48			
				Donuts		55.05
			Name Tags		28.32	
Misc.*		406.93				
			\$220.88			
Ad in Octagon Topics	\$115.00					
Printing of Octagon Topics	Ψσ.σσ	\$466.6				
g or a stanger repres		5				
Postage		96.00				
			(\$447.65)			
Raffle Chances	\$393.25					
Raffle Items	Ψοσοσ	\$243.0				
		9				
			\$150.16			
Regalia Items		\$535.6				
		4				
Car Badges and Lapel Pins		122.47				
Balance on Patches		33.40				
Avon Cars		66.07				
Balance on Key Fobs		145.94				
Glasses		145.94				
T-shirts		154.16				
Sale of Regalia Items	\$754.50					
Additional Miscellaneous Sales	146.81					
			(\$156.68)			

<sup>\*</sup>Miscellaneous items consist of door prizes and trophies for banquets, insurance for swap meet, parts catalogue, maps for events, annual picnic, dues to M.G. Car Club of England, and donated item to GoF 1974.

TOTAL BALANCE AS OF 1/31/75

\$746.19

I and the rest of the members of our club hope you enjoy the best of the holiday season and have a great 2000 MG new year.