

## PRECIOUS FLUIDS AND OTHER CONCERNS

by Bruce Bonnell (condensed by the Editor)

(reprinted from Portland Triumph Owners Assoc *Triumph Trax*, February 1998)

Come spring time (yes, I'm thinking ahead) when we are preparing our cars for the summer driving season, there are a few maintenance chores that should be performed. I've taken much of this information from an article in British Car Magazine. Some of the information was news to me. Being aware of some routine maintenance procedures will pay dividends in keeping our cars young and trouble free on the road. We should think about changing some of our car's fluids along with the engine oil which have sat all winter and had time to collect moisture and in some cases even become acidic. I personally don't like crawling around under my car, but always feel better after I've done it, knowing things are properly oiled, lubed, and fresh for another year. So here are some aspects of your car's care to think about.

**REAR AXLE/DIFFERENTIAL:** These units usually have a drain plug as well as a oil filler/level plug. Most British car differentials since the 1950's take 90 or in some cases 140 weight EP hypoid gear oil. EP stands for Extreme Pressure. The hypoid gears exert a lot of shear forces and ordinary oils won't stay on the gears. For these type of rear ends, make sure the oil container says Hypoid on it. I use a synthetic brand called AMSOIL.

Getting the oil into the differential requires some dexterity since the filler plug is usually in a rather inaccessible location. I use a gear oil pump (from an auto parts store) with a length of plastic tubing for filling until the fluid starts running out of the filler hole. Ketchup squeeze bottles with rubber tubing also work well. It is a bit of a messy job. Once done, check the level every year, and change it every two years. These units should not leak.

**STEERING SYSTEM LUBRICATION:** Some older Triumphs (TR-3 and earlier) have cam and lever steering. There is a filler plug on top of the steering box that is removed and 90 or 140 weight EP hypoid oil put in up to the bottom of the threads. It is not necessary to change this oil, just keep it topped up.

**SHOCK ABSORBERS:** Most modern shocks don't require any maintenance. But, if you have Armstrong "lever dampers" they require a oil level check. Find the small filler plug in the housing. Fill with special shock oil (Moss Motors has it) or you can use 20 or 30 weight motorcycle fork oil available at a motor cycle shop. A small pump type oil can works well for putting it in. Check shock oil level once a year.

**SUSPENSION & DRIVE LINE LUBRICATION:** Good thing we like to tinker with our cars, because British cars are not "lubricated for life." Check your shop manual for specific lube points.

The important thing is to use a grease with Molybdenum Disulfide (Moly) base. This stuff is better than the old lithium based grease. Buy a grease gun

with a flexible hose for getting to tight spots. Go at it after wiping and cleaning off the grease fitting. Pump 4 to 6 strokes of the gun until you see old grease coming out of the joints.

Wheel bearings should be re-packed and adjusted about every 30,000 miles. Wheel bearings require High Temp. wheel bearing grease which is more fibrous than chassis grease so that it will stay on a rotating bearing.

**BRAKE FLUID:** Here the correct type of fluid is very important! British brake manufacturers (Lockheed and Girling) used natural rubber in the dust and fluid seals. Most other companies use synthetic rubber. Good old American DOT 3 brake fluid will cause the natural rubber to absorb water and eventually decompose. DO NOT USE DOT 3 in your British Car.

You have choices. Use Castrol GT LMA DOT 4 fluid, which is commonly available and comes in a blue and white container. The other choice is to use DOT 5 Silicone fluid. This is my personal choice for all my cars. Silicone fluid has several advantages: 1) it is non-hygroscopic (won't absorb water-which causes rust), 2) it doesn't harm paint like regular brake fluid, 3) it is more stable over time. This means it is good for cars that sit in cold, damp garages without being used for long periods. In fact, most classic car museum curators use silicone fluid in their collection cars. You should do a complete hydraulic system rebuild with new seals and hoses before switching to silicone. NAPA parts stores carry this product.

**RADIATOR/ANTIFREEZE:** What works best is a 50/50 mix of anti-freeze to water. The anti-freeze helps prevent rust and corrosion in the cooling system. It does break down over time, which is why it should be flushed and drained every two years. Make that every year for all aluminum engines like the TR-7 and TR-8. Use distilled water instead of tap water for reduced iron content. Pre-mix the water and antifreeze in a separate container to insure a 50/50 mix. Keep a pre-mixed container handy for topping up as needed.

You should be aware of a new product that is added to the existing coolant for further temperature reduction. It is called "water wetter" made by Red Line Co. (Moss Motors sells it). It claims to reduce coolant temperature by as much as 10 degrees F by increasing heat transfer. It certainly doesn't hurt to try it. I use it in my GT-6 and have never had an overheating problem.

So whether you do your own maintenance or have someone else do it, it doesn't hurt to have an awareness and knowledge of these necessary procedures. Consult your shop manual and then go for it!