



## **THOUGHTS FROM THE MODEL T GARAGE...**

*By Ed Melon*

Howdy fellow Model T'ers!

In our last column we talked about oil and grease leaks and how to control them. We briefly mentioned the rear end and I'd like to go into a little more detail on that area. There seems to be a lot of confusion about the right lubricant for our T differentials.

When the T was a new car, Henry recommended 600 weight gear lube. It's still available from the T parts folks but you can't just walk in your favorite local auto supply and get it. This lack of ready availability makes folks look longingly at the modern 90 and 140 weight gear lubricants. There are also some who like to add STP to the mix.

There are a couple of real "gotchas" associated with the modern lubricants! They can be downright distressful to our old T's if we don't watch out!

First... let's look at the "real" 600w stuff. To be honest, it isn't really all that good either. If you've ever heated some 600w to make it easier to pour into the rear-end, you know that warm 600w "ain't" too thick when the temperature rises! Will it stay "put"? Reid Welch (a very respected Model T mechanic) says, "No, not at least by mere virtue of its being "600w" - not if it thins a great deal at running temperatures." Staying "put", as Reid puts it, is important for several reasons. It's more likely to stay in the rear-end without leaking and it is less likely to squeeze out of the gears where it is supposed to be lubricating!

This is where the idea of adding some STP came into the mix. STP sticks to the gears and bearings and helps prevent the loss of lubrication when the temperature rises.

So.... If 600 weight isn't so good, why can't we just stroll down to Auto Zone and get some EP140?

Once again, Reid Welch... "As always. Lubing a stock rear end is an exercise in compromise. EP additives extend gear life but cannot be used safely with bronze (or babbitt) in the axle."

EP gear lubricants contain phosphorus and sulphur based additives which are corrosive to bronze, brass and babbitt!

Aaron Griffey had the following to say about the subject... "You can not use GL5



lubricants with bronze. It must be GL4! No modern differentials have bronze thrust washers. They use tapered bearings instead. 600w is about the same thickness as 140 but is specially made without the additives that eat the original babbit thrust washers."

So... The prevailing knowledge seems to suggest that if you have the original babbit thrust washers you should stick to the old 600w with maybe some STP added to it.

If you have the newer bronze thrust washers, you can use the modern 140 lube provided you use the GL4 version and not GL5.

Please note that all of the above applies to a standard T rear-end. Folks running a Ruxtel should use a lighter weight lubricant such as GL4 90.

If, after all this, you'd like an easy source for the modern lubricants, John Regan at: [www.funprojects.com](http://www.funprojects.com)

(630) 584-1471 carries the high tech lube that Reid Welch likes. It will not attack bronze thrust washers and John sells it in the small sizes we T owners need. John also sells lots of other neat T stuff so give him a look. You'll also find his site in our list of good links on the South Carolina Model T Club web site.

One last thought before leaving the rear axle... To prevent grease leaks at the rear hubs, good sealing and modest filling are necessary! If you over fill nothing is going to prevent any weight of that extra grease from making its way onto your hubs, external brakes and those nice clean wheels!

See you down the road...