MODEL "A" TOP SPEED

How fast will your Model "A" go? It's not really a question of how fast will it go as much as "how fast can I drive without damaging the engine"? To answer the first question "how fast will a Model "A" go, now **don't try this** but if you have a stock engine & a stock transmission, my best guess would be somewhere between 65 & 70 miles an hour for about 30 mins. and then it would start knocking and if you didn't stop, the engine would "blow up".

Of course this is only my "best guess" and I'm not about to try it! Lets talk about how fast can we drive our Model "A" without worrying about damaging the engine. First I am talking about a completely stock Model "A" engine with a stock transmission. 50 miles per hour is about the top speed you should drive unless you have a 3.54 rear axle ratio [and these are very rare] then you can drive 55 mph. Now on the other hand if you have a 4.10 rear axle you can only drive 45 mph. How did I come up with these speeds?

A stock Model "A" engine should not be held at an RPM of over 2200 to 2300. This is because of the engine oiling system and lack of counter balance built in the engine. Above 2300 RPM the oil dippers on the connecting rods don't pick up as much oil and the rod bearings start to "starve" for oil. This is partly because of foaming in the oil and partly because the dipper comes around again before the oil has a chance to "fill in", and both of these are caused by high rotational speed of the engine. Another factor to consider is the lack of counter balance in a stock engine and that also gets worse the faster the engine turns and puts extra load on the bearings. Basically the engine as Henry designed it, should not turn faster than 2200 to 2300 RPM. How did I come up with the speed for the car? A standard tire on a Model "A" moves about 7.34 feet with every turn. This is very close for a 19" or 21" tire, you might want to measure yours. So if we divide 1 mile [5,280] by 7.34 we come up with 719.35 turns for our tire in a mile. Now we multiply that by the rear axle ratio 3.78 [most common] we find the engine would be turning 2,719

Rpm @ 60 mph. **Way to fast!** We now divide this rpm by 60 to find the RPM for 1 mile an hour and that comes out to be 45.3. Now if we take our original maximum RPM. for our engine of 2300 and divide it by 45.3 we come up with 50.3 MPH. There are a few points I would like to make 1st your speedometer is probably not very accurate, it is best to calibrate your speedometer by using a G.P.S. as they are very accurate. Next remember this is maximum speed and you and your engine will be happier at 45 MPH, this is only 2,038 RPM. Now for those of you that have an overdrive just figure your speed and multiply that by the over drive ratio. Most are 17% to 25% so if you have a 17% over drive your max speed would be 58.5 MPH. Instead of 50 MPH. And with a 25% overdrive it would be 62.5 MPH. Now again this is with 3.78 gears in the rear end. Also remember you may have to make an "emergency stop" and this could be challenging with stock brakes! If you need to get there in a hurry I would suggest either, leave earlier or take your "modern iron" If you don't "over rev" your engine it will give you better service and last a lot longer, and you and your Model "A" will be happy.

Your tech

Claude Sipe