

## THE MODEL A STEERING GEAR

Is your Model A hard to steer? Does your Model A have excessive play in the steering and wants to wander from one side of the road to the other? If so, it may be time to take a look at the steering gear and consider options available to us today to correct or improve the steering of our cars.

Before you consider rebuilding or replacing the steering gear, be sure to perform a complete inspection of the other components that make up the steering system including the tie rod and drag link ends, steering arms, pitman arm, front spindle bolts (King Pins) and bushings, front radius rod ball and socket, wheel bearings, spring shackles and spring mounting. Just rebuilding or replacing the steering gear will not correct poor steering if other related components are worn out. Also, incorrect front wheel alignment can contribute to poor steering. Sometimes, a good adjustment of the tie rod ends and steering gear, an alignment of the front wheels and a complete lubrication of the steering and suspension components will greatly improve the steering of your Model A. But for this discussion, we will focus on the options we have as far as the steering gear is concerned.

If you are rebuilding the original Model A steering gear there are good reproduction parts available today to completely rebuild the steering gear. With good internal components it is possible to adjust the late "Gemmer" type two tooth steering gears so they have very little play in the straight ahead position without any tight spots or binding off center, the earlier seven tooth steering gears are a little more challenging. Some owners with earlier cars have replaced the older seven tooth steering gears with later two tooth "Gemmer" steering gears. If you still find your Model A hard to steer, a shorter pitman arm is available that will make the steering easier. A lot of owners have installed the shorter pitman arm on their street and tour cars with good results.

If you want to retain the appearance of the original Model A "Gemmer" type steering gear but want to have better and easier steering, the worm and sector from a 1932-34 Ford passenger car with 15:1 ratio will fit the two tooth Model A steering gear without modification. However a '32-'34 pitman arm must also be used as the later sector shaft is splined and the square Model A pitman arm opening will not fit. The design of the later worm and sector makes steering easier and more precise.

Another option is to install a Ford F100 steering gear that has been modified to fit the Model A. This steering gear will result in even easier steering and is a definite improvement over the original Model A steering gears. Many Model A owners have converted to F100 steering. A word of caution

however is to NOT use the shortened Model A pitman arm with the F-100 steering gear. This will result in very "slow" and vague steering. The stock length pitman arm with the F-100 steering will work just fine. For more information on the F-100 conversion, contact SAA's member Randy Gross. Randy can provide you with a complete rebuilt and modified F-100 steering gear that is ready to install in your Model A.



### TECH TIP

To insure easy steering and long life of the internal components, it is very important to keep the steering gear in your Model A full of lubricant. Ford specified using (600W) Gear lubricant in the steering gear. As originally designed, the Model A steering gear did not include a seal on the sector shaft and the steering gears tended to leak and lose the lubricant. To overcome this, some owners would fill the steering gears with chassis grease which would reduce leaks but grease is not a fluid and some steering gear components would not get properly lubricated. A good solution to a leaking steering gear is to use Penrite Steering Box Lube. This is a very heavy (1200W) lubricant that will "flow" and, in most cases, will not leak. Penrite is available from Restoration Supply in Escondido, CA. (800) 306-7008 [www.RestorationStuff.com](http://www.RestorationStuff.com).

