

A Poor Man's Posi traction

by Tom Endy 2021

Every once in a while I disassemble a Model A rear axle assembly and find that someone has welded the three spider gears in the differential to their axle shafts so that they do not rotate. I envision some 17 year old kid with a duck-tail haircut back in 1950 doing this. In the day this was called a poor man's Posi traction. By welding the spider gears so that they do not rotate, there is essentially no differential gearing in the rear axle assembly. This allows Mr. Ducktail to take off from a signal and lay down a strip of rubber equally from both back wheels. The differential gearing in a rear axle assembly was developed by some ingenious mind. It allows a car to turn a corner with each rear wheel turning at a different rotation. The outboard wheel is turning faster than the inboard wheel. This allows the car to make a turn in either direction in a smooth continuous manner. Mr. Ducktail when making a turn would have his out board wheel skipping and making a chirping sound as the rubber tire skidded around the turn.

It is interesting to note that the rear axle assembly that the spider gear assembly came out of in the photo below also had a tooth missing from the ring gear.



The poor man's Posi traction that came out of Model A Ford that was one time owned in 1950 by a 17 year old kid with a duck tail haircut.