

What could cause this excessive wear on both rear tires after only 168 miles?



This rear tire wear anomaly developed on the Tennessee T's Spring Tour on the Natchez Trace...

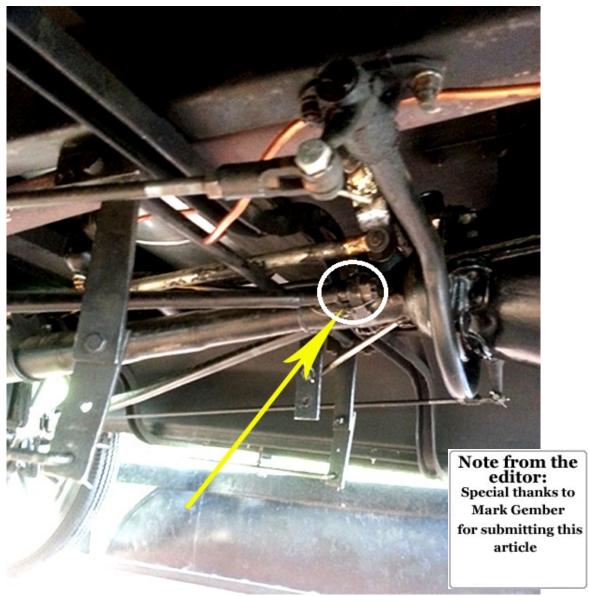
When everyone arrived at Jackson after running 168 miles on the Natchez Trace from Tupelo, a tour member told Gary Hein his rear wheels on his 1925 Fordor were making that clicking noise you hear when your wood spokes are getting loose. Gary stated, "It is worse than that! Look at the tire wear, they are both near down to the cords." Both rear tires had at least 75% of the tread gone!

Gary told us that he had just put these used tires on before this tour. On his last tour a few weeks earlier, the right rear tire did the same thing. He wondered if the older tires he was using were wearing faster. Most believed older, hard tires wear better than the new, softer tires. So being good Model T friends and also very inquisitive, we all were determined to help diagnose the problem and see if it could be corrected.

We removed both rear wheels, and found the wheels were loose on the axle shaft and wobbled in and out when pulling on the top of the wheel. We installed shims thinking that was the problem causing the wear. After further visual inspection, it was noted the rear wheels appeared to be towed in at the front. We sent someone off in search of a measuring tape so we could check the tow in, and that's when it was noted that the small drum rear end on his 1925 had large drum 1926/27 rear radius rods installed.

When the measuring tape arrived, a reading was taken between the two rear wheels. After comparing the readings, we found the rear wheels were towed in 2". We all agreed that was why both rear tires were wearing. We measured the rear radius rod length and compared it to a small drum rear end on another car that was on the tour. Their small drum radius rods were 1" longer and had a double nut arrangement to allow alignment of the rear wheels. This is a different arrangement than what is set up on the 1926/27 rear radius rod. The 1926/27 has a single nut and an expanded area that secures the radius rod to the drive shaft tube, thus preventing gross wheel alignment adjustment.

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We loosened the radius rod to drive shaft tube nuts and found they were pulling the axle shafts forward under tension. The nuts finally loosened up when they were around one to two threads of engagement. A new measurement was taken and the wheels returned to the NO tow-in position.

Gary's rear radius rods needed to be replaced with rods that are the right length for his year car in order to correct the problem. No one on the tour had immediate access to a set and Gary's rear tires were already worn out. All his rear wheel spokes were still tight and we concluded that the rear wheel spokes should stop clicking when the wheel is no longer being pulled a little sideways across the road. And best of all, his tire wear issue should go away. Although the long term effects of having the rear axle heavily bowed during continued operation is unknown, we all were in agreement that nothing good could come from it. He decided to trailer his car, and completed the tour in a modern car.

In all of his 35 years working with numerous Model T's, Gary told us he had never known there were different sized radius rods for different year cars. This was quite the learning experience for him.

Our final take-away from this incident...while all parts of a Model T perform the same function on every car, not all parts are interchangeable!