



Dangerous Tires

by John D. Whitaker

Today I want to tell you about one of my cases where old new automobile tires failed resulting in the completely preventable deaths of 4 extraordinary and unique human beings. The purpose of this article is to plead with anyone who reads this to go out and make sure that the tires on your car are not over 6 years old. If they are, get rid of them today.

I always thought that you judged the quality of a tire by looking at the tread depth. If it had a lot of tread then it should be good for lots of miles. This is not true. Tires degrade over time just like anything else, but the sinister thing about tires is that they degrade just as fast whether they are being used or sitting on the shelf. A new tire sitting on the shelf at a tire store or in the trunk of your car as a spare for several years is just as dangerous and likely to fail as a tire that has been in use for the same period of time. The defects that will cause a tread separation are usually not visible to the naked eye and only a tire expert with specialized equipment can identify an aging defect before the tires fail. If you think you can just look at a tire to make sure it is safe you are mistaken.

To understand why this is true, you need to know a little bit about how tires are made. A steel belted radial tire consists of an inner liner, two polyester body plies, two steel belts, two bead reinforcing strips, the sidewall rubber and a tread. The manufacturers combine these ingredients and then put the green tire into an oven press where it is pressed and heated which causes the components to fuse into a completed tire. The process is called vulcanization. Fusing metal with rubber is a tricky process.

As tires age, they dry out and the adhesion between the steel belts and the rubber begins to break down. Oxidation, or air getting inside the inner liner of the tire, will accelerate this process and it will happen whether the tire is in use or not. The danger here is that as an old tire, even if it has traveled few or no miles and looks new, it is subject to this kind of failure due to age. When the top steel belt and the tire tread separate and become detached from the rest



of the tire the driver usually loses control of the vehicle. If this happens at 65 miles an hour, your car may become impossible to control and you may not have much time to correct. Crash testing with trained drivers who are expecting tread separations have demonstrated that the loss of control can be nearly impossible to avoid.

In the US, there is no requirement that consumers be warned about the danger of old tires, but Audi, Volkswagen, BMW and Mercedes all began warning about the danger of older tires in their owner's manuals in the

early 1990s. They warned that tires older than 6 years old presented an increased risk. Most people would think the tires would last at least as long as the tread, or at least as long as the warranty but they don't. A German study concluded that there was an increase in tire failures after two years and a continuous increase from the 5th through the 8th years with a dramatic increase in failure after the 6th year.

You can tell a lot about tires by looking at the DOT number on the tire. The numbers consist of 11 or 12 letters and numbers which will allow you to identify where and when the tire was manufactured. Since the Year 2000, the last four digits of the DOT number will tell you the week and year the tire was created. A tire marked DOT U2LMLR5107 would indicate that the tire was manufactured in the 51st week of 2007. Tires made before the Year 2000 have a different kind of code, but they are too old anyway so if any of your tires are older than 2000 they are dangerous junk.

In my case, my client was driving down a two-lane highway at 65 miles an hour in a pickup truck with 7-year-old tires with less than a thousand miles on them. They looked like brand new tires. The left front tire suffered a catastrophic tread separation and our expert calculated that my client had 1.77 seconds from the time the tread first began to separate to when his truck hit the car coming the other way at 65 miles an hour head on. Please go check your tires.