

Tires!

By Ralph Chandos

Not generally considered the subject matter of memorable dinner party conversations, but for someone who trailers horses they represent a critical and largely neglected component of the trailering process. Understanding a few basic concepts and performing some simple maintenance procedures can help ensure a safe trailering experience for you and your animals.

While the tires on your tow vehicle are every bit as important, trailer tires can present some problematic idiosyncrasies particular to the application. Unless you are the rare exception most horse trailers do a fair bit of just "sitting around". The implication here is that trailer tires often "die" of old age long before they run out of tread. The common misconception..."it's got plenty of tread-it must be safe" is a difficult mind set to overcome but the reality is that the integrity of a tire deteriorates with age. Heat, sunlight, ozone exposure and a number of other factors inevitably contribute to the process, often manifested in sidewall cracking exposing the cord reinforcements of the tire to moisture and other elements. Over time the process can lead to sudden tire failure and provide an untimely and potentially expensive contribution to the shredded rubber commonly observed on our roadways.

So how do we know the age of a tire and what are some reasonable guidelines? Every tire sold for "on highway" use must by law display an alpha-numeric "DOT" number on one sidewall (so it might be on the inside). This number with the DOT prefix when properly interpreted provides a wealth of information including the manufacturer, the plant where the tire was produced and many other bits but for our concerns let's look at the last four digits because they will indicate the week and year that the tire was made. Ex. a DOT number ending in 2607 would indicate that the tire was manufactured in the 26th week of 2007...1308...the 13th week of 2008 etc.

So now that we know the actual age, what constitutes old? It's difficult to establish a hard number when it would be prudent to remove a tire from service because there are many factors that can influence longevity. A trailer parked inside a barn or the cheap investment of tire covers can greatly extend a tires useful life relative to one stored outside exposed to weather and direct sunlight. While I would not necessarily advocate discarding a tire that is 6 or even 7 years old, it might be a good time for added scrutiny.

Visually inspecting tires for sidewall cracking or other signs of deterioration becomes more critical as they become older and a few minute inspection might avoid an unscheduled roadside tire change or potential trailer damage. The valve stems where air is added to the tires are most likely the same age as the tires and they may also exhibit signs of age so it is a good time to look at them as well.

Maintaining proper inflation is a major factor in maximizing a tires useful life. Running a tire even 5 or 10 lbs. below the recommendation on the sidewall will dramatically increase wear and more importantly cause excessive heat build up. Tire manufactures

universally agree that the leading cause of tire failure is under inflation and while it's always important to maintain correct air pressure, running an old tire low is asking for a failure. Most tires will exhibit a certain amount of "porosity" so even with the absence of a nail or other leak source they will typically lose pressure and over time this can become significant. This loss is usually fairly consistent tire to tire so if three tires indicate a 5lb. loss and the fourth is 15lbs. low we could probably discount the first three as normal air loss but the fourth most likely has another issue.

So a few quick thoughts in closing. When you have new tires installed on your trailer you can ask your dealer to mount the tires such that the DOT numbers are on the outside so you can more easily reference it. He will know full well what this number means but might hope that you do not. Remember that knowing the significance of this number can prevent him from selling you tires that might already be several years old when you buy them. Also make sure that the tires you are being sold have the proper weight capacity for your trailer. Even if they are the same size as the ones coming off they might not have the correct weight rating. Always ask for new valve stems and request steel valve caps if they do not already have them. The plastic ones that they usually come with them will keep dirt out of the valve stem but will not always provide an air seal if the core inside the stem fails...the steel ones though slightly more expensive will provide a secondary seal. If you record the DOT numbers and pressure recommendations somewhere handy when you purchase your tires...inside tack room etc. you will have a convenient reminder of the tires age and filling guidelines without having to crawl around the tires to find them. And remember, maintaining proper inflation is key in maximizing longevity and preventing premature failure.