



# COMMERCIAL FLEET TIRE DIGEST

*The authoritative guide to reducing commercial tire expenditures from  
Pressure Systems International,  
the manufacturer of the Meritor Tire Inflation System by PSI™*

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## How Age Affects Your Tires

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[www.epa.gov/smartway](http://www.epa.gov/smartway)

The debate about how age affects tires is ongoing. For instance, some fleets say five years is their magic number while others say as much as ten years is acceptable. As rubber is bombarded by weather and the sun's UV rays year after year, the rubber compounds can develop weather/ozone related cracking. These same compounds can become "stiffer" as the tire ages. Questions about how age affects tires have been discussed for many years with fleets, new tire manufacturers and tire retreaders. Currently there are several industry task forces looking into what are acceptable age limit for tires:

- How long can a tire sit in a warehouse before it is mounted?
- Can a tire be stored outside for long periods of time?
- Trailer tires can last for many years and still have plenty of rubber...is it ok to be eight or ten years old before it is retreaded?
- How old can a casing be before it is retreaded?

To maximize your fleet's tire budget by using tires as long as they are useful, but not too long, it's important to be able to calculate the age of specific tire casings. You can do this by looking at all of the Department of Transportation (DOT) numbers branded on the tire sidewall. Understanding how to read a DOT number is very important. You certainly do not want to mount a "new" tire that has been sitting in some warehouse for the last ten years! Nor do you want to discard a tire before its useful life is done.

The Federal Government mandates that all tires be stamped with a DOT number when the tire is manufactured regardless if it was produced in the US or outside the country. If a truck tire is used domestically on equipment then it must have a DOT number. In addition, every time a casing is retreaded, a retread DOT number must be branded on the tire sidewall as well. Any tires that are manufactured and imported from outside the US should be checked to make sure that the DOT is clearly visible on the tire side-

wall (only one side of the tire is required to have the DOT number). If there is no DOT number, do NOT mount that tire on any of your equipment.

To use this information to its full potential, it's important to know what the number means - the DOT number is not just a series of digits, but rather a code that defines particulars about that tire. DOT numbers are comprised of 11 digits. From an age standpoint, the last four digits will tell you the week and year the tire was produced. So - 0209 would mean that the tire was manufactured the second week of 2009; 2604 equates to the twenty sixth week of 2004.

Retread numbers are longer - 13 digits beginning with the letter "R" followed by a 3 digit "retread manufacturer ID code". Every retread facility is assigned a three digit code by the government. It is very critical to know which retread facility capped your casing in case there are any performance issues down the road. You can find a list of retreaders' assigned numbers by going to <http://www.retread.org/Government/index.cfm/ID/180.htm>. The last four digits, as with the new tire DOT number, is the week and year the casing was retreaded. By law, the retread DOT number must be permanently applied to the tire, so you can determine the number of times a specific tire has been retreaded and also the age of the casing. Many fleets have a specification as to the number of times they will allow a tire to be retreaded.

All of the digits of the new tire DOT and retread DOT number that come before the last four digits are codes that identify the manufacturing plant, tire size, and tire type. For the most part, this is not particularly important information to find in the DOT number because the tire brand and size are clearly visible on both tire sidewalls. However, it is important to some fleets to record the entire DOT number in their record keeping systems if they want to analyze the correlation between tire performance and specific brands, tire types and sizes, and weeks of production. A good database system could take this information to identify trends that could be very useful to know. It might point out reasons to rethink your tire purchasing decisions or give you details to help you get more from your tire budget.

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