



# 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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## Be Nice to Your Tires

A spiral bound copy of Volume II of the **Commercial Fleet Tire Digest** is now available.

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February is the month when we send candy and flowers to the people who are closest to us. Tires are like your good friends, if you are nice to them, they'll be nice to you. They will run a very long time with multiple retreads and not cause you problems and headaches in the process.

Here are some of my recommendations on how to be nice to your tires:

Tires take a tremendous amount of daily abuse. In a typical 500 mile driving day, each tire will rotate about 267,500 revolutions. Every time the tire makes just one revolution, the sidewall flexes, which generates heat in addition to the heat generated by the friction of the road. High ambient air temperature and road temperature will magnify this number. And, if the tire is running underinflated, there is additional heat generated because the sidewall deflection is considerably higher. Continuing to run underinflated for a long period of time, the heat can reach such a point where the rubber compounds begin to break down and cause a tire failure. Heat is a tire's worst enemy and keeping the tire running at the proper inflation pressure will help the tire run nice and cool maximizing your mileage, fuel economy, and retreadability.

So, how to keep tires running at the proper inflation pressure when it is almost impossible to tell if a commercial truck tire is over, under, or at the specified air pressure by just looking at it. Many drivers still kick the tire sidewall or beat on the tread with a baseball bat to see if the tire is OK, but trust me, the only thing a baseball bat will tell you is if the tire is completely flat, 0 PSI. Seriously, you

wouldn't kick your good friend or beat them with a baseball bat! Air is what carries the load. If you are running underinflated, even 10 PSI, all of the key performance parameters go down. Buying and using a calibrated air pressure gauge is the best \$20 investment you can make. You should also check your gauge versus a master gauge at any truckstop for accuracy on a regular basis, because the most common stick gauges can go bad very, very quickly.

How often should you be inspecting your tires? Answer is - it depends. You could check tires on Monday morning and find that the pressures are good with no signs of punctures or road hazards. However, over the course of a day, week, month, a lot of bad things can happen to your tires. You could check tire pressures before you leave the facility and shortly thereafter roll over a piece of steel and develop a slow leaker in a matter of minutes. These are reasons why Tire Pressure Monitoring Systems (TPMS) and Automatic Tire Inflation Systems (ATIS) were developed. TPMS will alert the driver that he has a tire inflation issue but requires human intervention to find air and pump it into the tires. ATIS lets the driver know he has a tire issue while air is automatically being added as he is driving down the road. He won't be stuck on the side of the road waiting for a service call. Road "alligators" can be from new tires or from retreads - the common denominator is that they ran underinflated for an extended period of time which eventually caused the tire to blow out.

Remember, be nice to your tires and they will be nice to you. Happy Valentines Day.

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## Q & A PSI ANSWERS YOUR QUESTIONS

**Q.** When I drive in Arizona and Florida, I see a lot more rubber debris on the road versus up north. Are there more bad retreads in those two(2) states?

**A.** Heat has always been a tires nemesis. Running underinflated in hot ambient states (like Florida and Arizona) will magnify the amount of rubber on the road (alligators). Those alligators are not just retreads, if a new tire or a retread runs underinflated, eventually the tire will fail. Keeping your tires running at the specified operating pressure and rubber on the road will be dramatically reduced.