

THE GLOBAL LEADER IN ATIS SINCE 1993

1. What is tire pressure?

Tire pressure is a measure of the amount of air in a vehicle's tires, in pounds per square inch. It's what carries the load!! Just sitting, tires can lose 1-4 pounds per month - because air molecules diffuse - or "leak" - through the tire itself. Checking tire pressure on a regular basis is critical.

2. How many tires are on a typical truck or tractor/trailer combo and how much to replace?

Depending on Single or Duals, anywhere from 10 to 18, even up to to 26 or more.

Answer: Approximately \$8,000-\$20,000. Trucking fleets calculate their tire costs on a per mile basis to a tenth of a penny. In 2017, the average tire cost per mile for a truck & trailer was 3.8 cents (Source: American Transportation Research Institute 2018 report).

3. "Road Gators" are pieces of tire that are found on road and highways. The primary cause of gators is a bad retread? True or False?

Answer: False. Under inflation is the primary cause. Studies have shown that 'gators' are just as likely to come from a new tire, as a retread. The real cause is excessive heat, typically from running under-inflated. (BTW, never pick up a gator with your bare hands! It is full of steel cords that are very sharp!!)

4. It takes approximately (21) gallons of oil to create a truck tire. It only takes (7) gallons to make a retread. Tire casings can be retreaded 2-3 times, if properly cared for!

5. Did you know the average 18-wheeler goes through approximately 20,500 gallons of fuel per year?

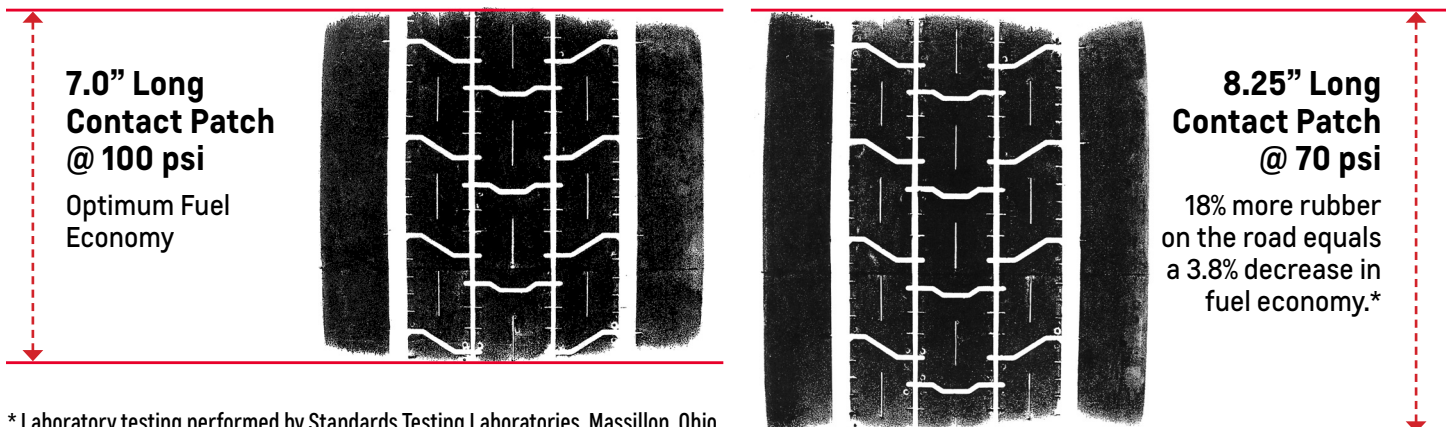
With fuel costing approximately \$4.10/gallon (US avg as of 04/2022), that is \$85,050, which is almost the cost of the truck itself!!

6. When putting air in your car's tires, you look on the side of the tire for the proper inflation. True or False?

Answer: False. The sidewall tells you its maximum allowable pressure of the tire. The vehicle manufacturer tells you what pressure you should be running based on vehicle design/weight. It is found on the inside of the driver's door.

TIRE CONTACT PATCH @ 100 psi vs. 70 psi

Tire and rolling resistance increase as inflation pressure decreases. Fuel economy drops up to 3.8% if a tire is under-inflated by 30 psi.*



* Laboratory testing performed by Standards Testing Laboratories, Massillon, Ohio.

THE FOLLOWING IS A TRUE STORY!

Pressure Systems International (P.S.I.®) is the global leader in on-board tire management systems for commercial vehicles. P.S.I.'s portfolio includes automatic tire inflation systems (ATIS) for commercial trailers, tire pressure monitoring systems (TPMS), and related TPMS telematics products.

The Background:

To get proactive with tire maintenance, a Fleet has been conducting trials of P.S.I.'s TireView LIVE system for nearly 2 years. The system consists of TPMS sensors mounted on all tractor and trailer tires, along with a TireView LIVE telematics sending unit mounted on the vehicle. This unit reports real-time tire health directly to the fleet manager, via TireView LIVE's online portal (or the preferred/existing telematics supplier).

The Incident:

The Fleet has recently installed 10 units on different types of trailers. About an hour or so after installing a unit on a belt trailer, they got an alert that a tire was a 61 psi. They looked up the trailer location using the GPS that comes with the system and were able to call the 3rd party hauler driver that was hooked to it. They asked the driver to get out and check the tire. Driver said it was fine after kicking it. They had the driver deliver the load and then head back to their trailer shop to have it inspected. When the trailer got to the shop one of technicians took the sensor off and checked it with a gauge. The gauge showed 61 psi just like the sensor said. Tech then changed the tire and was able to send it out for repair. In this instance the Fleet saved a cap and casing.

The Lesson Learned:

1. A boot kicking a tire is NOT an accurate gauge.
2. A TireView TPMS sensor is a VERY accurate gauge.

TireView LIVE makes it easy to:

- > See tire pressure, temperature, and status for all system-equipped truck and trailers
- > Identify a problem tire and get ahead of repairs before a failure
- > Create real-time alerts to notify your team of issues



Combining P.S.I.'s ATIS with TireView® TPMS and TireView LIVE™ telematics gives you data analytics for proactive tire management!

Visit P.S.I. at booth 3763 or on their website: www.psitireinflation.com

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