

# PetraFlate Nitrogen Tire Inflation



- Better Fuel Economy
- Longer Tire Life
- Improved Handling
- Enhanced Safety
- Reduced Carbon Footprint
- ...and much more!



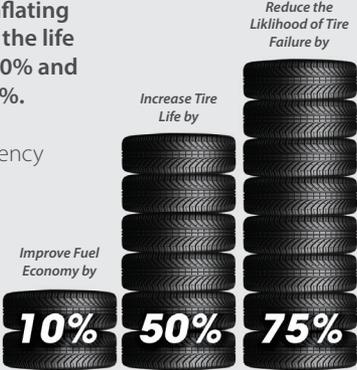
[www.petraflate.net](http://www.petraflate.net)



# Why Nitrogen Tire Inflation?

**Based on studies performed by Clemson University, inflating and maintaining your tires with nitrogen can increase the life of your tires by 50%, improve your fuel economy by 10% and reduce the likelihood of a tire failure by as much as 75%.**

With the growing focus on initiatives to improve fuel efficiency and vehicle safety, you may have heard friends or family members mention nitrogen tire inflation. It may seem strange that filling your tires with this gas can benefit your car in a range of ways, but it's true: driving with nitrogen-filled tires can help cool your tires, increase your tread life, aid in tire pressure retention, and improve fuel economy.



## Cooler Tires

Heat is the enemy of your car tires, as hot tires can suffer from excessive sidewall flexing, meaning that the side of the tire bends and stretches, weakening the rubber. Sidewall flexing wears tires out quickly and puts your vehicle at risk for serious issues like blowouts. However, filling your tires with nitrogen instead of compressed air helps ensure that your tires remain as cool as possible. When you fill your tires with normal compressed air, the air's natural humidity can be problematic for the safety of your vehicle: water vapor absorbs and holds heat, making your tires run hotter as you drive. However, filling your tires with pure nitrogen reduces the risk of these issues, as this gas will not contribute to fluctuations in pressure

## Increased Tread Life

Tire wear is caused by the oxidation of the rubber, as oxygen attacks and breaks down the bonds in this material over time. Nitrogen, however, is an inert gas, meaning that it does not react to many other substances and can be used to avoid chemical reactions like oxidation. Normal compressed air consists of 79.1% nitrogen, but using regular air means that your tires will also be filled with oxygen, which contributes to oxidation in your tires.

## Better Tire Pressure Retention

Because nitrogen has a larger molecule size than oxygen, it is less permeable, meaning that it leaks through your tires much more slowly than oxygen does. This allows the pressure in your tires to remain stable over an extended period of time — which is very helpful if don't check your tire pressure regularly! In addition, nitrogen has the added benefit of helping your tires maintain a constant pressure even in hotter weather

## Improved Fuel Economy

According to the EPA (Environmental Protection Agency), underinflated tires reduce your gas mileage by 0.3% for each 1 PSI (pounds per square inch) drop in pressure of all four tires. Because nitrogen leaks through your tires at a much slower rate in comparison to air, you're much more likely to maintain an accurate tire pressure with nitrogen-filled tires, meaning a noticeably improved fuel economy for your vehicle.

# Why PetraFlate?



The benefits of nitrogen tire inflation are well documented. In addition to the inherent benefits of nitrogen tire inflation, PetraFlate offers you even more lucrative benefits when you purchase a PetraFlate service. Enroll in the FREE PetraFlate Auto Club, and you will enjoy FREE PetraFlate top-offs, inflation service reminders and a host of other benefits that may include:\*\*

- 24 Hour Emergency Towing Service
- Tire Repair and Replacement
- 24 Hour Emergency Road Service
- 24 Hour Emergency Battery Service
- Lost Key or Lockout Service
- Travel Benefits
- Theft and Hit and Run Protection
- Trip Routing Service
- Trip Interruption Coverage



The PetraFlate AUTO CLUB - Your membership is FREE, and is your ticket to great benefits. This FREE gift from your PetraFlate dealer is a great reward for keeping your vehicle properly maintained, while conserving fuel and being environmentally friendly.

ASK YOUR PetraFlate SERVICE PROVIDER FOR DETAILS!



\*\*Complete details are provided upon customer registration as benefits may vary. See your PetraFlate dealer for more information.



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