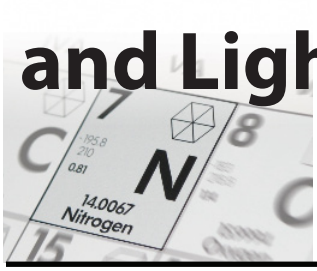
TIRE INFORMATION SERVICE BULLETIN - Issued November 29, 2006

Use of Nitrogen to Inflate Passenger and Light Truck Tires in Normal Service Applications



Purpose:

The use of nitrogen inflation systems† by tire retailers in Canada has increased in recent years. The purpose of this Tire Information Service Bulletin is to provide general information about inflating tires with nitrogen.

Tires are well engineered products designed and built to provide reliable and excellent service but they must be maintained properly. The key element of proper tire maintenance is measuring and maintaining your tires' inflation pressure every month or before long trips. The proper inflation pressure is recommended by the vehicle manufacturer; it can be found on the vehicle's tire information placard, to locate your placard refer to your vehicle's owners manual.

DID YOU KNOW?

Proper tire inflation must be maintained—whether with air or nitrogen—by regularly measuring inflation pressure. Underinflation and/or overloading creates excessive stresses and heat build up that can lead to tire failure. Tire failure due to underinflation and/or overloading—whether inflated with air or nitrogen—may result in serious injury or death.

Use of Nitrogen to Inflate Tires:

Nitrogen is an inert (non-flammable) gas – basically, dry air with oxygen removed (air around us contains about 78% nitrogen). Because of its inert properties, nitrogen is often used in highly specialized service applications and/or demanding environments. Applications such as aircraft, mining, and commercial/heavy use utilize nitrogen to help reduce the risk of internal combustion (fire) if the brake/rim/wheel components overheat. Also, dry nitrogen is used in professional racing to help reduce variation in inflation pressures (caused by moisture) where even small differences in pressure can affect vehicle handling at the extreme limits of performance.

For normal tire service applications, nitrogen inflation is not required. However, nitrogen inflation is permissible as its properties may contribute to minor reductions in inflation pressure loss. Nevertheless, several other sources of pressure leaks, such as punctures, tire/rim interface (bead), valve, valve/rim interface, and the wheel, may negate the benefit of nitrogen. Do not operate vehicle with overinflated or underinflated tires (see "DID YOU KNOW?")

The RAC cautions that depending on nitrogen alone to reduce the requirements for inflation maintenance may, in fact, give some individuals a false sense of security and lead to under inflated operation, which may result in premature tire failure.

† *For information on storing and handling nitrogen, please follow the manufacturer's and/or the supplier's safety guidelines.*

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