



INFORMATION

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INFLATION OF PASSENGER AND LIGHT TRUCK USING NITROGEN

The use of nitrogen inflation systems by tire retailers has increased in recent years.

STRO notes that nitrogen is a gas – basically, nothing more than dry air with oxygen removed (air 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 tyre 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, tyre/rim interface (bead), valve, valve/rim interface, and the wheel, may negate the benefit of nitrogen.

If the tyre inflation pressure is below the pressure specified on the vehicle placard, the tyre must be re-inflated – whether with air or nitrogen – to the proper inflation pressure. The pressure must also be adjusted when driving with higher loads, towing a trailer, driving at high speeds etc.

STRO warns that depending on nitrogen alone to reduce the requirements for inflation maintenance may, in fact, lead to under inflated operation, which may result in premature tyre failure. With the right amount of inflation pressure, you will achieve optimum tyre performance. This means your tyres will wear longer (economy), save fuel (environment) and help prevent accidents (traffic safety) whether using air or nitrogen in the tyres. We remind you to check tyre pressure every 14:night or at least once a month and to do this when the tyres are cold.

Whether inflated by air or nitrogen, regular inflation pressure maintenance remains critical and necessary. Use of nitrogen alone is not a replacement for regular inflation pressure maintenance.