

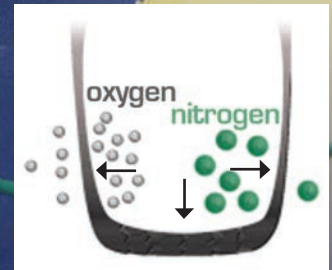
NITROGEN TYRE INFLATION

Increased safety, improved performance

N₂

Why is Nitrogen better than air for inflating tyres?

Already used in Formula One and Military Aircraft, nitrogen is the best possible tyre gas.



PRESSURE LOSS

Air is made up of 78% Nitrogen, 21% Oxygen and 1% of other gases. Oxygen is made up of very small molecules which can permeate and escape through the sidewall of a tyre over time. Pure Nitrogen molecules are larger and cannot permeate or escape through the tyre sidewall as easily. A tyre inflated with pure Nitrogen keeps the tyre pressure more consistent and stable for up to 3 to 4 times longer than normal air.

TEMPERATURE INCREASE

Oxygen is a very unstable gas which contains a high level of moisture. When the temperature of a tyre increases, the Oxygen causes the water vapour to

react and expand the tyre. Nitrogen is inert and contains no water vapour which prevents this reaction keeping the tyre pressure consistent and stable in running. This also ensures that the correct amount of rubber is in contact with the road at all times giving better handling, braking and steering.

OXIDISATION - BUILD UP

Oxygen found in normal air contains a high level of water vapour. This causes 'oxidisation' or rusting which begins to deteriorate the rubber as it begins to lose its elasticity and strength. This increases the inner rusting of alloy wheels affecting the tyre structure and ultimately the tyre's performance.



www.lodgetyre.com

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WHAT YOU SHOULD KNOW

The benefits and the cost savings



N₂

Independent testing proves that vehicle users benefit from Nitrogen by:

SAVING MONEY ON FUEL

Correct tyre pressures reduces strain on the engine which results in:

- A saving of between 4% & 10% on annual fuel bills.
- A saving of around £100 annually for the average road user.

SAVING MONEY ON REPLACEMENT TYRES

Correct tyre pressures reduces unwanted friction with the road surface which results in:

- A 20% to 30% reduction in tyre wear
- A replacement tyre saving of around £30-£50 annually for the average road user.

INCREASING SAFETY

Correct tyre pressures prevents blowouts which results in:

- A 50% reduction in tyre failures
- An increase in tread life by 25-30%.
- A significant reduction in tyre related road deaths and injuries.

IMPROVING PERFORMANCE

Correct tyre pressures prevents over contact with the road surface which results in:

- Improved steering, handling and braking.

REDUCING CO₂ EMISSIONS

By inflating with Nitrogen the vehicle user can be safe in the knowledge that they are also:

- Reducing CO₂ emissions from less fuel consumption.
- Reducing waste by extending tyre life.
- Reducing car waste from tyre related traffic incidents and replacement parts.



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