

Tyre Air Pressure

• General Information

1) Basic function

- Support the gross weight of the vehicle
- Affect vehicle's driving performance, maneuverability and passenger comfort.

2) Safety performance

- In case of over-inflation
 - Lose original durability of tire-casing, as the arrayed textile cord into the body ply get tense
 - Weak at the bursting, damage by shock.
 - Cause the brake-locking phenomena, slip, due to the tendency to spring up on the rough road
- In case of under-inflation
 - Raise up the excessive deflection (frequent bending and stretching movement) on the sidewall and then generate heat and fatigue rapidly. As a result, cause the run flat phenomena, which break up the tire-casing.
 - ▶ It causes by losing support durability against vehicle load due to the lack of air pressure, so it could cause the dangerous accident.
 - Get the rapid wear on the shoulder, so tire life will be shorter than expected.

3) Economy Performance

- If tire is on the condition of under/over-inflation, tread surface will be contacted partially on the ground, so it will cause uneven tire wear, rapid tread wear. Below table indicates service life depending on air pressure.
- Generally, if the air pressure is 10%(2~3 psi) less than proper, tire will be influenced harmfully.
 - ▶ 10% less of air pressure => 15% missing of tire life

4) Warning

- Measure the air pressure after 3 hours of cooling time.
 - ▶ After driving, air become a hot condition so, it could get the bigger value of measurement due to the over-activation of air molecule.
- Supply 3~4 psi more air pressure when driving on the highway.
- Check air pressure once a month
(4% air loss for 1 month on 20°C celsius / Bigger daily range makes fast air loss)

Service Life Depending On Air Pressure	
Air Pressure Deference	Loss of Tyre Life
20% More	10%
20% Less	26%
30% Less	52%
40% Less	66%