

Tyres

Tyres are one of the most important things influencing the performance of your 4x4 both on road and off road. They are also one of the most common things causing problems in the bush.

A few things to think about:

1. Tyres can be classified into 3 broad groups (apart from specialist rubber for competition work for example):
 - a. Highway terrain tyres with tread patterns suited to tarred roads where they give good handling and fuel economy. Stock standard tyres fitted to new vehicles are often road surface oriented and not suited to bush travel because they do not have the tread or strength required.
 - b. All terrain tyres designed to perform well both on-road and in the bush. They have a stronger construction and more aggressive tread pattern. Light truck construction is stronger than passenger vehicle construction.
 - c. Mud terrain tyres with very aggressive tread patterns which give excellent grip and durability in the bush but are generally noisier and do not handle as well on the road.
2. To get maximum life and performance out of tyres it is very wise to regularly rotate them front to back and have the wheel alignment checked.
3. Tyre pressure is critical to the life of the tyre, ability in the bush, fuel economy and handling on the road. As a *general* rule of thumb:
 - a. Bitumen: 35 – 40 psi
 - b. Fast smooth gravel: 32 – 36 psi
 - c. Slow rough gravel: 26 – 32 psi
 - d. Rocks and Mud: 22-28 psi
 - e. Sand: 18 – 25 psi
4. For highway work, especially carrying loads, higher pressures will give better wear rates because they will run cooler, and better fuel economy because of reduced rolling resistance.
5. For rocks and gravel, lower pressures are recommended to give better handling, better grip and to reduce the possibility of damage and punctures. Tyres with lower pressures tend to “fold” over rocks and are less prone to staking. Try it with a balloon and blunt pin. A tightly inflated balloon is easy to burst while a soft balloon is not. Lower pressures also give better grip in mud, snow and climbing hills, and is more comfortable for passengers. Keep speeds low.
6. For sand driving or very soft mud and snow, dropping tyre pressures to 18 – 25 psi will give much better flotation over the soft surface because it gives a greater (longer) contact between the rubber and the ground. Be careful that you do not turn corners too hard because you can roll the tyre off the rim.
7. Make sure you have a good tyre pressure gauge and that you reinflate the tyres when you return to highway travel. A good compressor pump is recommended.
8. Check tyre pressures regularly.

This is a general guide only. There are many factors influencing the correct pressures to use. Tyre manufacturers like Cooper publish excellent guides for 4WD drivers.