

# PROPER TIRE PRESSURE

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**Question:** I don't know what air pressure my tires should have in them. How can I find out what it should be?

**Answer:** For vehicles produced between 1968 and 2003, the original tires sizes and inflation pressures (including the spare) are listed on a vehicle placard. Placards for those years can typically be found on: the driver-side door or doorjamb; the rear passenger doorjamb on Ford sedans; the fuel filler door; on the glove box or center console door; or, the engine compartment. Of course, it is almost always provided in the owner's manual.

Beginning in 2003, all manufacturers were required to place tire information placards in a standardized location and to follow a common format. These placards identify the Original Equipment tire sizes and inflation pressures (including the spare), along with the vehicle weight capacity. They are now located on the driver's side doorjamb for cars with a B-pillar (Post between front and rear doors), on the rear of the driver's door for those vehicles with no B-pillar, or on the inward facing surface next to the driver's seat if the B-pillar is too narrow.

In addition to providing the Original Equipment tire size and recommended inflation pressure, vehicle manufacturers must also identify vehicle load capacity with the following sentence: **"The combined weight of occupants and cargo should never exceed XXXX pounds."**

Your vehicle's manufacturer considered the vehicle's gross axle weights, the anticipated use for the tire, the tire diameter and width, and tire load rating before deciding what tire to put on the vehicle. Then, they recommend a particular tire pressure calculated to maximize ride, handling, fuel mileage and tire life.

If tires are under-inflated by as little as 6-7 pounds per square inch (psi) – which may be as much as 20% of the recommended pressure – it can lead to catastrophic tire failure. At the very least, you will see a drastic reduction in tread life – somewhere in the 20-25% range. Lower psi allows the tire to flex more when it is rolling – thus building up internal heat, increasing rolling resistance and reducing fuel mileage. You would most likely also experience a significant loss of steering precision and cornering stability.

On the other hand, if the tires are over-inflated by the same 6-7 psi, they could be subject to damage running over hazards or pot holes. The ride will be harsher but steering and cornering will almost always improve. High MPG drivers will sometimes sacrifice the harder ride of over-inflated tires for better fuel economy.

Tires will generally lose about 1 psi per month for a number of reasons. So, assuming a uniform temperature, if you only check your tire pressure once every 6 months, you may find your tires under-inflated by about 6 psi. And, of course, because of our Interior Alaska high seasonal outside temperature fluctuations, tire pressure will vary greatly from season to season. You will find that tire pressure will change about 1 psi for every 10 degrees Fahrenheit – higher for hotter and lower for colder. So, the same tire set correctly at -20F will be overinflated by 8 psi at +60F

and vice versa. This is a very important reason for tire pressure to be checked at the very minimum of once a month – or even more often if you want to maximize ride, handling, fuel mileage and tire life.

If you have any questions, feel free to stop by our Quick Lane. We'll be glad to show you what your tire pressures should be and, as always, we will be glad to adjust your tire pressure, no matter what make or model, for free.

As with all things automotive, if you have questions as to how to best equip or properly operate your vehicle in sub-arctic and arctic environments, it is in your best interest to consult with the local dealer franchised to sell your brand of vehicle.