

# Take care of your vehicle so it can take care of you



Your only physical connection to the road is your tires. If a tire issue arises while driving, the window of time for **avoiding a crash** is very small.<sup>1</sup> Develop a habit of maintaining **proper tire pressure** along with regular inspection of **tire tread depth** and **rubber condition** to prevent having a tire problem to begin with.

*Gear Up For Safe Driving:* **MIND • BODY • VEHICLE**

## DID YOU KNOW?

- It is typical for tires to lose 1 pound of pressure per square inch (psi) every month.
- The average new tire starts out with a tread depth of 10/32"–11/32" (.8 to .9 cm). At a minimum, when the tread gets down to 2/32" (.2 cm), you are ready for new tires.<sup>2</sup>
- You can use an upside-down U.S. penny to check your tire tread. If you can see the top of Lincoln's head, your tire has less than 2/32" (.2 cm) of tread and you are ready for new tires.

## Tire Pressure

### MYTH

My vehicle is equipped with a tire pressure monitoring system (TPMS), so I don't need to worry about my tire pressure — my vehicle will alert me.

### FACT

The tire pressure monitoring system became mandatory equipment on vehicles sold in the U.S. beginning in 2007 and in the European Union (EU) beginning in Nov. 2012. It is valuable safety-enhancing technology, but it has limitations. First, it only alerts you when tire pressure drops below the recommended level by a certain percentage — usually around 25% (20% for the EU). Second, it does not monitor tire wear or damage that can result in a flat or blowout.



A recent survey by the Rubber Manufacturers Association<sup>3</sup> took a look at the level of tire knowledge among U.S. drivers. How would you compare?

- More than half don't know where to find the recommended inflation pressure for their vehicle — nearly half incorrectly said the optimum pressure is listed on the tire sidewall.
- Nearly 40% of drivers don't know that tires should be checked "cold" — before driving or after sitting for at least three hours vs. "hot" or after you've been driving for a while.
- 52% of drivers don't know how to tell if their tires are bald (below 2/32" of tire tread).
- Two out of three drivers do not check the tire pressure in their spare tire.



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## BRAKES ARE JUST AS IMPORTANT.

The life of your brake's key components—pads and rotors—varies depending on how and where a vehicle is driven, so have them inspected at regular intervals according to your vehicle's maintenance schedule. In between inspections, be in tune with your vehicle so you'll know if something's amiss. Fortunately, brake issues can often be detected before they become too serious, if you know some of the warning signs.

- You may hear a **squeaking or squealing noise**. This is an early sign of a problem with your brake pads and should not be ignored. By the time you hear a **grinding noise**, you may have worn through your brake pads and into the rotors, which is a more serious and costly issue.
- You may notice it takes longer to stop your vehicle.
- You may smell something **"hot" or burning** after you park your vehicle, which could be an indication of a brake pad sticking.
- You may feel that the **pedal is hard to depress** or is not returning to its normal position.
- You may feel a **vibration** when stopping or you may feel the **vehicle pulling** to the right or the left.
- You may see **fluids leaking** near your tires—this could be brake fluid.

**If you see, hear, feel or smell an issue with the brakes, be sure to get your vehicle in right away for a checkup.**

## TIPS TO GET A GRIP ON TIRE CARE

- Invest in a quality tire pressure gauge. Pressure gauges at service station air pumps are not always accurate.
- Check tire pressure monthly. Properly inflated tires not only enhance safety, they also improve fuel efficiency by roughly 3% — a significant savings at today's fuel prices.
- The recommended tire pressure for your vehicle manufacturer is located on a sticker inside the driver's door opening, not on the tire.
- Recommended tire pressure is based on "cold" tires — three or more hours since the vehicle has been driven. For the most accurate reading, check tire pressure before you drive since pressure increases as tires warm up.
- The "Max Load/Max Pressure" is not the pressure at which the tire will burst. Instead, increasing pressure beyond this point results in no additional load-carrying capacity beyond that stated.
- Unless it is nearly flat, a visual inspection will not show you if the tire is low on air. When checking tire pressure, visually inspect for bulges, cracks or objects that may have pierced the tread.
- A tire that's been in service for five or six years should be replaced regardless of tread depth or visible wear as rubber tends to break down as it ages.<sup>4</sup>
- Tires should be rotated about every 5,000–8,000 miles<sup>5</sup> (8000–13,000 km) — roughly each time you get an oil change. Rotating tires extends tread life and reduces the risk of a flat or blowout by helping ensure even wear.



## FLATS HAPPEN

Even if you do everything right to take care of your tires, you still may someday end up with a flat tire. If you are truly prepared, you've got a tire emergency plan:

- Make sure your spare tire is properly inflated and your vehicle jack is in working order.
- Decide in advance if you will change your own tire or rely on a roadside service provider.
- If you are going to change the tire yourself, make sure you are familiar with the process as outlined in your vehicle owner's manual. The first concern is safety and you should only attempt to change a tire if you know how and are in a safe location.

- If you are going to rely on a road service provider, make sure you have the right phone number and a way to call them. Many newer vehicles have built-in technology and subscription services that can summon assistance with just the touch of a button.
- Regardless of who changes the tire, remember that most vehicles have a small temporary spare tire that is only designed to travel for shorter distances and at limited speeds. Its main purpose is to get you to a service center to get your full-sized tire repaired or replaced.

1. NHTSA, Tire-Related Factors in the Pre-Crash Phase, April 2012.

2. Ibid.

3. Rubber Manufacturers Association survey, June 2013.

4. Rubber Manufacturers Association.

5. Ibid.

