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We're looking after tires better, survey says

Under-inflation greatest thief of gasoline, money and safety

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Canadian drivers have come a long way in tire smarts since 2003, according to a survey.

That's the good news. The not-so-good news is that we all still have some smartening-up to do.

Hence this week's promotion Be Tire Smart.

In a 2003 survey, 71 per cent of cars tested had at least one tire above or below the car's tire pressure specs by 10 p.s.i. or more. That is a staggering figure.

By 2009, that number has dropped to 48.8 per cent of cars tested. More than half of us have gotten the message: check your tire pressures.

And another bit of good news is that on average in 2009, the underinflated tires were shy of the proper mark by 3 p.s.i., in 2003 it was 4 p.s.i.

Dino Tenuta, Bridgestone Canada's senior technical services manager, cites several possibilities for this improvement in the survey data provided by the Rubber Association of Canada, which represents tire makers.

He feels that consumers are getting smarter about tire maintenance and there's been a higher rate of seasonal tire changeovers. Last, technology such as tire pressure monitoring systems and the use of nitrogen as a pressure gas has contributed to the better awareness.

But why should Ms. or Mr. Commuter care about any of this? Aside from the obvious like personal safety, the association cites some scary numbers that will shorten the life or your tires and lighten your wallet:

- a tire 10 per cent underinflated wears out 5 per cent sooner and uses 2 per cent more gasoline;
- a tire 20 per cent underinflated wears out 16 per cent faster and uses 4 per cent more gasoline.
- If a tire is 40 per cent below proper pressures and that tire survives, the wear rate goes up by 57 per cent and the car uses 8 per cent more gas.

The RAC calculates that properly inflated tires will help your vehicle run more efficiently. With properly maintained tires, the average Canadian driver could save the equivalent of two weeks worth of gas every year.

Those drivers who give their tires a quick glance to check pressures are fooling themselves. Bridgestone's Tenuta says, "a consumer cannot see the difference between a properly inflated tire and one that is 10 per cent underinflated." So we are not so eagle-eyed as we thought. But the survey shows 16 per cent of those who check their tires use the eyeball method. That number is actually up from 8 per cent in 2003. That's bad.

What is worse, the survey showed 67 per cent of people waited until tires looked low to make a proper check. That is up from 53 per cent six years ago. Today 30 per cent of us wait until there is a change in steering or handling to check pressures, which is up from 24 per cent in the last survey.

And tire pressure monitors are not the answer either. They are good news/bad news electronics. Good news: they will warn you if your tire is going flat. “But, most systems don’t activate until a tire is 20 to 25 per cent low,” says Tenuta, by then some structural damage may be done.”

“Bridgestone’s stance on TPMS is that they are a good safety tool and therefore Bridgestone supports these vehicle systems, however Bridgestone does not want the consumer to become reliant on these systems and opt to not check the inflation pressure until the TPMS light is illuminated,” he worries.

When asked if there is an under-inflation number at which tires start to incur structural damage, he replied, “Underinflation can compromise the structural integrity of the tire but at what point the integrity is compromised has many variables. The percentage of under-inflation before tire damage occurs varies by vehicle, load, application, etc. . . . therefore there is no specific percentage that structural damage would occur.”

Six per cent of us never check tire pressures. How is that for a fear factor. And people wonder why some tires have a blowout. Air in the tire holds the vehicle up, air stops the sidewalls from flexing too much. Too much sidewall flex builds heat and heat can cause structural failure — a blowout to you and me.

To prevent problems Bridgestone recommends: check tire pressures monthly (tires naturally lose about 1 p.s.i. a month), top up pressures, rotate tires every 8,000 km and consider getting a wheel alignment when you buy new tires. The RAC adds that a wheel rebalance is a good idea every 20,000 km.

“It is extremely important to check your tire treads for signs of wear,” the association says. “Proper treads allow for normal handling of your vehicle and help prevent skidding and hydroplaning.

Tires are manufactured with a “wear bar” that tells you when there is less than 1.6 mm (2/32 inch) of tread depth remaining — when you see this wear bar, the tire must be replaced. You could also try the penny test: place a penny in the tire’s groove with the Queen’s crown facing down. If you can see the top of the Queen’s crown, the tire needs replacing.”

Consider your environment as well. According to the RAC, every litre of fuel consumed by a vehicle results in 2.4 kg of carbon dioxide, a greenhouse gas that contributes to climate change, being released into the environment. Proper tire inflation helps increase fuel efficiency thereby reducing greenhouse gas emissions. Every year in Canada, 1.5 million tonnes of carbon dioxide are unnecessarily released into the environment because of poor tire maintenance practices

We’re getting tire smarter, so let’s keep up the good work and make sure the numbers are even better for the next survey. After all, those tire pressures are not just numbers on a chart, those pressure numbers can save gas, save the environment, save you money and potentially save your life.

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