

**A Free Newsletter From Everyone at
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**TIRES-THE
SMALLEST
SAFETY
MARGIN**

When you think about personal driving safety, what's the first thing that comes to mind? Speed? Brakes? How about distractions - food, cell phones or other devices? While these things certainly can be detrimental, one of the least thought of concerns is tires. According to the Oregon State Police *"Tires are the single most important mechanical component of vehicle control and safe driving,"*.

Think about NBA basketball star Shaquille O'Neal - 7' 1" tall, 325 lbs with size 23 feet. On most passenger vehicles the contact patch between the road & one tire in motion is *SMALLER* than the contact patch between one of Shaquille's Reeboks & the ground!!! A sobering thought indeed. *No matter the condition of the rest of your vehicle those 4 patches of rubber are the only thing between you, your family & potential disaster.* Your family deserves to be on "solid footing" when driving.

Today's improved manufacture & design techniques provide us with safe, efficient tires far out performing our parents' tires. On their own, improved manufacturing techniques are not enough as tires are often the last thing in mind when heading out to work or play. Tires are subject to weather, heat, friction, internal pressure, age, compound deterioration, innumerable road hazards & although rare in today's tires, massive failure resulting in blow-outs. Always take into account the following:

- A tire is considered "bald" & is unsafe once it has worn to a tread depth of 2/32" or 3 mm.
- Worn tire tread can cause hydroplaning, a problem that can occur with about 5/32" tire tread remaining.
- Tire life span - *whether installed on a vehicle OR still on the retailers shelf* - is 6 years from date of manufacture. Tire compounds suffer break down & tires should be replaced after 6 years - no matter their visual condition.
- Sidewall cracks from weathering can cause tire pressure leakage, rubber ply separation or tire failure - blow outs.
- Tread patterns **MUST** match to avoid unsafe erratic handling at high speed, cornering or in panic manouvers.
- Tire/wheel sizes **MUST** match to avoid unsafe or erratic handling at high speed, cornering or in panic manouvers.
- **ONLY** install tires which meet manufacturer size, safety & utility guidelines for your vehicle.
- Buying tires in pairs not only ensures safer handling, but promotes matching wear & tread depth to help reduce stress on related drive train components like your differential.
- Having your service provider rotate tires every 10,000 Kms helps to promote even tread wear & longer tire life.
- If you hit a curb, deep pothole or other obstacle have vehicle steering components checked by a professional to avoid damage that can reduce the life of your tire tread or cause steering problems & other safety issues.
- **EVERY** time you fill up, check for proper tire inflation. Every 7 degree outdoor temperature change causes a 1 pound change in tire pressure leading to uneven or premature tread wear & reduced fuel efficiency. *Underinflation, by as little as 6 psi, can cut gas mileage by 3%.* Tires are not inexpensive - treat them with respect.

Emerging vehicle technology provides many perks to new vehicle owners including electronic tire monitors to advise when tires require pressure adjustment or other attention. Regardless of safety minded monitors on your vehicle, the tire contact patch is far too small - your safety far too important to simply rely on a monitor which could fail or potentially be faulty.

Various other vehicle component conditions adversely impact your tires along with handling, braking, fuel mileage etc. Recently Brian & I were returning from a conference - traveling the Deerfoot in Calgary. Traffic was moving along at a frantic pace when a lane change brought us up behind a late model mini-van driven by a young mom. We could easily see the rear axle bouncing in reaction to the uneven roadway - a situation caused by worn out rear shocks.

What that driver probably didn't realize is that every time the axle lifted in response to the roadway, her tires were being pulled up from the road resulting in even **LESS** tire contact with the pavement. Even a minor deficiency in the tire contact patch can have significant results when magnified by conditions like snow, rain, side winds or during emergency maneuvers.

Remember, the visual appearance of your tires can lull you into a false sense of security so you should have tire condition, shocks & steering components checked by a professional when your vehicle is in for servicing. This is the only way to ensure those little patches of rubber are doing all they can to maintain the safety of you, your passengers & other drivers/families on the road. Keep Shaquille's feet in mind when prioritizing vehicle maintenance & upkeep!!

Till next month we wish you happy safe driving.

Beverly Kaltenbruner