



Snow Biters

For some of us the thoughts of equipping our vehicle with winter tires only enters our minds when we feel ourselves skidding into a curb or ditch on a set of badly worn treads or on all seasons that are not capable of handling our harsh Canadian winter conditions.

Years ago "snow" tires were knobby and noisy but were made for driving in the snow. However, they had poor traction in dry and wet conditions. With the advent of better roads and better snow removal, the all-season tire was born which claimed to provide good traction for all weather conditions. While new all-season tires with their keen edges do provide better traction than those that have been in service for a climate cycle, they still don't compare to winter tires. Winter treads may be narrower with larger tread spacing, which improves traction by allowing the tire to rid itself of snow as it rolls. The wider tread spaces increase the pounds per square inch contact with the road giving it a clearer traction bite. A low-pro performance tire provides good traction on bare pavement but on cold slippery surfaces, the pounds per square inch are lower, due to their wider tread contact surface, giving extremely poor traction.

Winter tires are made of specially formulated rubber compounds that grip well not only on ice and snow but also cold, dry, wet or slushy driving conditions. With this improved cold weather performance, why don't tire manufacturers make all-season tires with the same compounds? There is a trade-off. The softer, more flexible winter treads tend to wear more quickly than an all-season tire. Basically, all-season rubbers are designed to operate in temperatures slightly above freezing and higher. At zero they tend to stiffen and lose gripping power causing the potential loss of traction on icy or snowy roads. Winter tires are designed to operate at slightly above freezing and lower.

The traditional wisdom when almost all vehicles were rear wheel drive (RWD) was to mount two snow tires on the rear drive wheels. The rationale was that this would provide the best forward traction. However, the driving dynamics of front wheel drive (FWD) vehicles, in conditions of poor traction are very different. Vehicles equipped with FWD need both linear (forward) traction, and lateral (side to side) traction, particularly on the rear wheels, to prevent rear end spin out (the largest reason for winter accidents results from loss of lateral control of a car on ice and snow). To help maintain control and stability of your vehicle in icy conditions, it is now recommended to install winter tires on both front and rear. Avoid mixing tires with different tread patterns, internal construction or size, unless specified by the vehicle manufacturer.

Making the change from summer treads to winter treads can be simplified by purchasing a "Winter Tire & Wheel Package". By keeping a dedicated set of winter tires mounted on dedicated rims, you're ready to bolt them on when they're needed saving the cost of mounting and balancing them every spring and fall. When shopping for winter tires, look for the peaked mountain with snowflake symbol signifying they meet specific snow traction performance requirements and have been designed specifically for use in severe snow conditions.

Remember that even with quality winter tires, one must always drive according to road conditions, driving defensively, slowing down and allowing more distance between vehicles.

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