



The Benefits of Winter Tires

All-season tires reflect a compromise between long tread life, ride quality, fuel economy and traction. But tires that grip the road in summer heat don't offer the same traction when the weather turns cold. In fact, the tread compound used in all-season tires offers little cold weather traction and becomes hard, losing pliability and traction in freezing temperatures. Winter (snow) tires, however, are designed to help deliver safety and control in snow, slush, rain, ice and cold weather. A good analogy of the difference between all-season and winter tires is to compare athletic shoes to snow boots. While it's possible to walk down a slick, snow-covered sidewalk wearing athletic shoes, it's generally easier and safer to do so with snow boots.

Winter Tire Technology

Winter tires have a soft rubber compound that remains flexible as temperatures drop to better conform to the road for more controlled handling. They also have unique tread patterns with wider grooves to enhance traction on snow and ice by providing channels to drain water and expel snow. Typically, they have deep sipes, which are small slits in the tread that help cut through water and slush, avoiding hydroplaning and improving grip. Grip is critical, not just to avoid getting stuck, but to help ensure that the car can stop and steer. The superior traction that winter tires deliver, as much as a 25 to 50 percent more than all-season tires, can very well be the safety margin needed to stop in time or turn to avoid trouble.

Four is Better Than Two

Always install winter tires in a matching set of four to help maintain balanced and controlled handling in winter driving conditions. Using just two winter tires on a vehicle creates a traction mismatch that can have serious handling consequences. With front-wheel-drive, putting snow tires on the front only will result in the back wheels not having as much grip as the front wheels. This will make the car much more likely to spin out (oversteer) while braking or cornering. With snow tires on the just back wheels of a rear-wheel-drive car, the front wheels won't grip as well as those that provide the power, so the car may not respond when the steering wheel is turned -- it will simply plow straight ahead (understeer).

Winter Air Pressure

Maintaining correct air pressure is a requirement for good handling, traction and durability. The fall and early winter months are the most critical times to check inflation pressures since air contracts as temperatures get colder. For every 10 degrees (°F) change in outside temperature, tire inflation pressure will change by about one psi (up with higher and down with lower temperatures). And don't forget to keep the valve caps on – if left off, moisture can freeze in the valve allowing air to escape.

Identifying Winter Tires

Tires that meet severe snow standards display a snowflake symbol on the tire's sidewall. This symbol helps set winter tires apart from standard mud-and-snow rated and all-season tires.

You Hold the Key to Safe Winter Driving

Finally, slow, careful driving is always a good idea in wintry conditions. One of the best actions a driver can take to maximize traction, grip and braking performance in winter conditions is to install tires specifically designed for winter driving. They can enhance control, provide the traction needed to navigate snowy roads and handle unexpected stops.

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