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Winter Tires

No matter how many safety features your vehicle has, it's the tires that enable you to handle it in the snow and ice.

When shopping for winter tires, look for the peaked mountain with snowflake symbol. Tires marked with this symbol meet specific snow traction performance requirements and have been designed specifically for use in severe snow conditions. The [Transport Canada](#) Web site contains a list of tires that display the symbol.

To change or not to change

Tires marked "M + S" ("mud and snow" tires), also known as "all-season" tires, provide safe all-weather performance, but may not be suitable in heavy snow. Wide, high performance tires, other than those that are specifically designed as snow tires, are not suitable for snow-covered roads.

According to the [Rubber Association of Canada](#), all-season tires tend to stiffen and lose gripping power around zero Celsius. This loss of traction on icy or snow-covered roads may become critical for safety as the temperature drops.

In regions with little snow and moderate winter temperatures, all-season tires may be suitable throughout the year. However, wherever cold or snowy winters are the rule, snow tires become a necessary safety precaution. In deep snow, winter treads improve traction by allowing the tire to rid itself of snow as it rolls, giving it a clear bite on the road.

Years ago, snow tires used to be knobby and noisy. They were made for driving in the snow, but had poor traction in the dry and wet. Today, winter tires are made of new rubber compounds that can handle not only ice and snow but also cold, dry, wet or slushy driving conditions. With state-of-the-art road-clearing techniques, the roads can be clear and dry a few days after a major snow storm.

If winter tires offer such improved cold weather performance, why don't tire manufacturers make all season tires with the same compounds? There is a tradeoff: the softer, more pliant winter tread will tend to wear more quickly than an all-season tire. Consider your own driving habits and choose the best and safest alternative for your needs.

Mount on all four wheels

As a general rule, to maintain control and stability of your vehicle you should install identical tires on all wheels. Avoid mixing tires with different tread patterns, internal construction or size, unless specified by the vehicle manufacturer.

The traditional wisdom from the days when almost all vehicles were rear wheel drive (RWD), was to mount two snow tires for winter driving on the drive wheels. The rationale

was that this would provide the best forward traction. In fact, putting only two winter tires on a vehicle can change the vehicle's handling so much as to be unsafe.

However, the driving dynamics of FWD vehicles in conditions of poor traction are very different from those of RWD vehicles. Vehicles equipped with FWD need both linear (forward) traction, and lateral traction, particularly on the rear wheels, to prevent spin-out and loss of control.

To help maintain control and stability of your vehicle in icy conditions, install winter tires in sets of four. Remember that, even with quality winter tires, you must always drive according to the conditions of the roads and maintain more distance from other vehicles.

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