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The story of the mountain and the snowflake

by Craig M. Lee

Canadian symbol for winter tires spreads around the world

Once upon a time they built a highway between Vancouver, British Columbia, and the resort community of Whistler, high in the Canadian Coastal Mountains. The road was very steep with lots of curves. So lovely was it that they called it the Sea-to-Sky Highway.

It was very beautiful, but, it was also very deadly.

Often, skiers depart Vancouver with its nice green lawns, only to find the Sea-to-Ski Highway covered in heavy snow and very slippery. Many of the holidayers are in vehicles ill-equipped for the road conditions – cars shod only with all-season tires.

Along the side of the road are barriers used by the RCMP to stop and warn drivers whose cars don't have proper snow tires. Sometimes, the Mounties close the road altogether.

Despite the RCMP's measures, in 1995 there was a string of fatalities along the Sea-to-Sky Highway, also known as Hwy. 99. Investigating officers identified the problem as a lack of snow traction, coupled with lack of information for motorists to identify whether they had true snow tires or just "all-season" tires, which are a compromise.

These Mounties brought the problem to the attention of coroners. In 1995, Vince Cain, the chief coroner of British Columbia, wrote to Transport Canada asking that a method be developed to let non-experts know when they were looking at a true snow tire, that is, a tire suitable for severe conditions and not an "all season" tire.

The letter crossed the desk of John Neufeld, an automotive safety engineer at Transport Canada in Ottawa.

Now, the 14 or so major tire companies are all brutal competitors. They're headquartered all over the world. They each have their own standards and closely guarded testing secrets. Building consensus among them as to what constituted a repeatable test that would identify tires that performed to a certain acceptable standard – well, that wasn't easy.

Working with the Rubber Association of Canada and the Rubber Manufacturers Association in the U.S., Mr. Neufeld identified a particular test procedure of the American Society for Testing and Materials (ASTM). This test evaluates tires in real-world snow conditions.

After a lot of discussion, all the tiremakers agreed to adopt that recommended ASTM standard, along with the pictograph of a peaked mountain with a snowflake inside it. The new standard was announced in February 1999.

Today, if a tire bears the pictograph, even drivers who cannot read well will know it meets specific snow traction performance requirements and has been designed for severe snow, ice and winter conditions.

The actions of certain individual Canadians have led to improved winter driving safety for anyone in Canada and the U.S. willing to take advantage of it. And the mountain-snowflake symbol is spreading to Europe and beyond.