

GENERAL GRABBER HTS

A street-friendly tread with an affinity for snow and ice

By Robin Stover

Photography: Robin Stover and courtesy of General Tire

Historically speaking, the Germans have always been associated with great beer, fast cars, and inarguable attention to detail. And in the case of the German-owned General Tire brand, the latter still holds true today. We recently took a trip to one of General Tire's cold-weather test

facilities near Montreal, to evaluate the marriage of high-tech sipe technology and tire compound advancements. The venue was an abandoned airfield appropriately covered in snow and ice. Our goal was to experience first-hand the difference between a standard all-season tire and General's latest light-truck and SUV offering: the Grabber HTS.

Our test vehicle was a bone-stock Ford F-150 extended cab, longbed 4x4. General had three identically equipped pickups, each sporting a different type of tire. The proving grounds consisted of a long slalom course followed by a tumbled rough section of deep, chunky snow, and finally a flat area where distance markers were set up to measure acceleration and brak-

ing distances. The idea was to simulate a variety of real-world scenarios over and over to generate data that would eventually prove that the seemingly mild-mannered Grabber HTS was superior to the more aggressive patterns so commonly referred to as "snow tires."

At first, we couldn't understand how a narrow street-friendly tread design could perform better than a wider, more aggressive all-terrain. After the demonstration, we sat down with the engineers who developed the new "wonder tire" to break it down in layman's terminology. Here is what we learned: In ice and snow, your best way to make traction is with more snow. Think about the "snowball effect." When you roll a snowball down a hill, it grows as more and more snow clings to itself. If you relate this to a tire rolling along a snow-covered road, you can visualize what makes the Grabber HTS stick. The HTS features thousands of interlocking sipes, meaning the interior wall of the sipe is actually multi-dimensional instead of straight-cut. As these sipes travel through the beginning of the contact patch, each opens up for a fraction of a second, forcing snow into a micro-thin zigzag pocket. Upon exiting the contact patch, this sliver of snow is held in place against the centrifugal

force of the tire by the interlocking sipes. When the same section of tread comes back around, the contact patch is met with snow picked up from the

SPECIFICATIONS

Tire: General Grabber HTS
Size: 265/70R17
Type: Radial
Load Range: Standard Load
Max load (lb @ psi): 2,679 @ 35 psi
Sidewall: 2-ply polyester
Tread: 2-ply polyester, 2-ply steel, 2-ply nylon
Approved rim width (in): 7.0-9.0
Tread depth (in): 12/32
Tread width (in): 10.1
Section width (in): 10.43
Overall diameter (in): 31.6
Static loaded radius (in): 15.45
Revolutions per mile: 658
Weight (lb): 19.2

previous rotation. Snow has greater interrelative friction with itself over rubber, therefore the vehicle sticks to the road better.

Many tire companies offer snow tires with sipes to achieve this; however, General recently developed a tire compound that remains super-flexible at subfreezing temperatures. This flexibility aids the function of a sipe by allowing it to open up further and react more quickly to driving conditions. Together with flexibility, the interlocking sipes can capture more snow, hold it in when others can't, and deliver outstanding stability, braking, and traction in snow and ice. We proved this theory on the track and we can support the claims: General has developed an awesome tire for snow and ice. Now if those Germans could just convince our government to build an Autobahn **FW**

