

SKATE SHARPENING

"When & How?"

by Shawn Killian; Founder, Planet Hockey, Inc.

How often should I sharpen my skates? What "Radius" should I use?

I hear these questions possibly more than any others.

The simple answer is, don't sharpen your skates as often as you do. Most people are infatuated with sharp skates and grind the expensive steel from their \$400 skates much too frequently. Sure, skates need to be sharp, but they never need to be razor sharp. In fact, skates that are too sharp are much more likely to cause knee and ankle injuries and will decrease your speed, agility and overall performance on the ice. As you glide, your blade cuts into the ice, melting the ice through friction. The sharper the blade, the deeper it cuts into the ice, creating more friction and slowing you down. Speed skaters, the masters of speed on the ice, have zero hollow. In other words, their blades are perfectly flat. They can not afford to have their edges slow them down by carving deeply into the ice as they glide. However, hockey players do need a bit of hollow to provide the grip needed to change directions and to explode. But not much!

The function of your blade is to furnish two distinct edges, an inside edge and an outside edge. And the function of your edges is to grip the ice. There are two ways to grip the ice. One is with very sharp skates. Extra sharp skates automatically cut deeply into the ice providing too much grip and not enough "play" or "slide" which is needed when stopping and changing direction. The other way, and the best way to create grip, is to roll your ankles which digs an edge into the ice, allowing you to control the amount and degree of grip. You are now in control, not your skate. Your edges should provide a certain degree of slide, or play (this is called the flat of your skate). A skate that is too sharp does not provide "play" and holds you to the direction of your momentum (similar to a train trying to turn or stop).

On a scale of 1-10 (10 being extra sharp), most people maintain a 9 or 10. I recommend a 7. This lets your skates have more movement, but the trick now is to learn how to control your edges through precise angles and pressure. I say that you can easily skate 20 hours, unless you "lose an edge". Get into the habit of lightly rubbing your finger along both edges at once. Most players use this test before each ice session to give them the confidence that their edges are faithfully beneath them and are ready for duty. If when you rub your finger along your blade, you feel a "bur" or a "knick", or the blade is not completely smooth, consider getting them sharpened immediately. Just remember that sharp skates are important, but not as important as blades that are smooth and "knick-free".

HELPFUL HINT

I tell players to go through their 10 point safety and performance check at the conclusion of each skate, then again before they take the ice. Finding a problem with your stick or your skates 3 minutes before practice or a game does you no good. That problem was there when you got off the ice last, but was overlooked. Find problems such as a "lost edge" early so you can take care of it. These are the little things that drive parents nuts when asked to fix them 5 minutes before the big game, that can potentially become major issues:

10 Point Safety and Performance Check

- to be conducted after each ice session and then again before you hit the ice.
- SKATE blades (sharpness and free of chips or $\frac{1}{2}$ lost edges $\frac{1}{2}$)
- SKATE laces
- STICK blade
- STICK shaft
- HELMET screws, straps and padding
- MOUTH guard
- HOCKEY tape
- GEAR - is it all in your bag
- HYDRATION - bring your own water bottle for before and after your skate
- NUTRITION - have a nutrition bar in your bag at all times

The sharpness is definitely important, but even more so is the "hollow" or deepness of the edges. Some sharpening machines grind a deep hollow (3/8 inch), which is bad news! Stay away from too deep of a hollow that will create a "death grip" to the ice. To measure the hollow on your skate blade, turn the boot upside down holding the heel of your boot towards your body, with the toe facing outward. Like looking through the sight of a gun, close one eye and look down the blade while holding it up to a light. Now place a penny on the blade and measure how much light shines under the coin. More than a slight sliver of light is too much, and therefore, too much hollow. As you run your finger along the blade, you should feel only a very slight "U-shaped groove" in the blade. A medium hollow (one we recommend) is considered an inch radius.

HI EDGES AND LOW EDGES WITH A COIN

Running your finger along the blade and flipping the boot upside down and looking at the light showing under a coin are the only tests that many top level players use to assure proper edge condition. In fact many players actually "take the edge off the edge". This means, they try to take some of the sharpness and hollow off of their edges by rubbing them several times along a piece of wood or another dulling device. If you are among those who race to the sharpening machine twice a week, you more than likely are not only throwing away money, placing yourself at risk of injury, but are actually decreasing your speed and agility on the ice. Just send me half of the money you will save and I'd be one happy fella! Witness the increase in performance and you will be even happier.

Enjoy every shift!

This article was written by Shawn Killian, Director of Planet Hockey Skills Training. Planet Hockey teaches Skills Training Camps throughout the United States and abroad, including the Planet Hockey Ranch (resident hockey/outdoor adventure camp) in Colorado and Maine, TEAM Planet Hockey European Spring & Summer Hockey Tours, as well as produces instructional training VIDEOS. For more information call 1-800-320-7545, Email info@planethockey.com, or visit Planet Hockey's Website: www.planethockey.com.