

Sharpening Tips and Tricks

By Susan Ellis

Ask a group of people how to sharpen skates and they are likely to give you quite a variety different opinions on anything from what equipment to use, how often to sharpen, and the method of grinding, polishing and de-burring.

There are already a few good articles which give a very good description of sharpening and equipment. This one by Ken Hart has more details on the different types of equipment and sources:

<http://www.indyspeed.org/equipment/SharpeningYourSkates.pdf>

Here is another shorter read on sharpening:

<http://www.speedskatepei.com/sharpen.html>

The above articles give a very good run down on the basics, so I'm simply going to give you a few of my own random tips and preferences.

Jigs:

- Most jigs on the market now are pretty sturdy and reliable. Just make sure that if you take your jig apart for travel that you set it up the exact same way again every time. Some jigs are meant to be set up in a very specific way so make sure to read the instructions.
- Mark the front and back on the center stay bar as well as upside and downside (this can make a difference in set up), and mark front and back of holders so they are always facing the same way.
- Some jigs come with extra bells and whistles that are more of a pain than a help. If a jig is true, and the blades have the same amount of blade on each side, normally all you need to do is pull the blade up against the blade holder until the blade runner hits the bottom part of the blade holder and tighten it, eliminating the need to use the levelers every time.
- Some jigs come with small adjustment screws that can angle the blade one way or the other – another pain! These screws often get knocked around and unintentionally screwed in or out without you realizing it. Then when you go to sharpen your blades are now angled, causing more headaches.

Sharpening Stones:

- My personal preference for kids sharpening their own skates is the Norton combination stone – black for initial grind on one side and red for polishing on the other side. Although diamond stones, Foss, and Maple are grittier and cut faster, you run a greater risk of altering the rocker. The black side of Norton stone has a good enough grit for most sharpening jobs. You should use a coarse diamond (black dot), Foss or Maple only for tough sharpening or rockering jobs to preserve your rocker. The grittier stones also take more blade off so can wear the blade out sooner. Use them only for tough jobs or for the first few strokes of

sharpening. I also find the fine side of the Norton polishes finer than the diamond, Foss, or Maple.

- Never press down on the sharpening stone, even if it's a tough job! This can create hollows in the blades very quickly and then you will be looking at sending your blades away for a complete re-rockering job!
- If you are confident you are not putting pressure on the stone you may want to get a two sided diamond stone – blue (semi coarse) on one side and red (fine) on the other, as diamond stones don't hollow out when worn. I would still polish with the fine side of a Norton after using the fine diamond as it hones down to a finer finish.
- Diamond stones come in 8 or 10". With a 10" your stone will last longer as there is more stone to use. But they also come in a narrow width and a wide width. The wide width can put hollows in the blades if you aren't really careful so I would advise the narrow ones.
- If you are using a Norton, Foss or other normal stone check it very often for grooves or hollows in the stone as these can round the edges of your blades.
- Always go straight up and down the blade with a diamond stone to preserve it's life but move it slightly to the right or left after each up and down stroke so you are using the whole stone.
With a Norton you do go cross wise in the initial grinding to put the burr on, then straighten out the lines by going straight up and down, and then use to polishing side only going straight up and down.
- Soak your new oil stones in a quart of motor oil and leave them in the oil until it lies on top of the stone rather than absorbing in to the stone. Put them back in the oil every so often and clean them with a toothbrush. As they are already saturated with oil, they don't require any for sharpening. A light drizzle of varsol works just fine for lubricating, cleans the stone better, and doesn't put that oily coating on everything your stone and rags come in contact with making clean up easier.
Diamond stones need only be lubricated and cleaned with water.
- If you have two Norton fine polishing stones, clean only one of them and let the other get clogged up. Do your first polish with the clean one, and follow with the clogged stone for an even finer polish.
- And what about those fancy marble or granite polishing stones? Nice, but here's a trick you'll laugh at because it's so inexpensive. Wrap a sheet of newspaper a few times tightly around your Norton. Go straight up and down your skates once with it. Move the stone over slightly and do it again. Do this about 10 times and you won't get a much better polish than that! Just like a mirror!

- Speaking of polishing, throw away the 3 sided triangles before you ruin your skates!! First, the papers wear out quickly. Most people don't realize it but pretty soon you are rubbing your skates with the aluminum rather than paper. Secondly, the aluminum gets banged up with nicks and then these nicks rub on your skates and dull them. Trust me, newspaper wrapped around your Norton works better and is much less expensive!

De-burring:

- If you are having to put a big burr on because the skates were really dull you should de-burr after grinding and before polishing. If you just put a small burr on there is no need to de-burr in between.
- It's best to take the skates out of the jig to deburr and turn them on their side or turn the jig on it's side if your don't want to take them out. (Kids should take them out to prevent cuts)
- Use a small burrstone (1.5" X 1.5") rather than a long one to ensure more contact with the blade on bent blades.
- My preference for a burr stone is a small fine red Norton India. I never clean it as the clogged surface is hard enough to cut but gives a nicer finish when clogged. My beefs with the razor method are: 1) Kids shouldn't be working with razors 2) they require absolute precision and one small tilt will gouge the blade severely 3) they tend to flex and gouge. My beefs with carbide are 1) again the gouging issue if slightly tilted 2) not all carbides are alike. Some get nicks in them and or wear out but people think that since they are carbide they should always be the same.
Burr-Master – squeeze the plastic cover in the wrong place and you have a tilted stone which will put an angle on the blade rather than a nice 90 degree finish. Here is a really good example of badly tilting the stone! This guy is killing his blades! <http://www.youtube.com/watch?v=yDJOgPAcUT0> Don't ever tilt your stone whether it is a carbide, diamond, or regular stone unless it is an absolute emergency and you can't get the burr off normally.
- Ceramic and diamond deburring stones – Just don't find they cut as fast as my trusty little clogged up red Norton. Some of my li'l reds are over 10 years old and still going strong!
- Grey coloured deburring stones of most brands tend to be too rough for de-burring and wear out easily.
- Wear a Kevlar glove or put a piece of cloth between our fingers and the blade when de-burring.

How often should you sharpen?

- The sharper you keep your blades the less grinding time to get them sharp when you do sharpen again and the less risk of altering your rocker. Remember, the goal is to put a very light burr on.
- If you are having trouble getting a burr in one spot you still need to sharpen the entire length of the blade. Spot sharpening will ruin your rocker!

Tea cup method:

- When you sharpen sit on the floor with your back against a wall and the jig between your legs in front of you. Keep your back against the wall so you aren't tempted to lean over it and put pressure on. Hold the stone with just your thumbs and index fingers, with the rest sticking out, just as you would holding a fine china tea cup. Holding like this also helps to prevent pressing in to the stone.