New Ski Preparation
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New skis bring with them the prospect of having a "fastest pair ever". This excitement motivates us to give them the best chance possible to reach this potential. Following this advice will accomplish do just that.

First analyze the skis and make sure that there is no damage or defects such as sidewall dents or cracks, top sheet cracks, or base damage. Then inspect the base carefully. Sometimes skis look great; the stonegrind that that they come with looks appropriate for the average condition that will be skied in and they can be simply waxed as follows and skied on. However, often times, the ski bases are white and hairy and/or the structure is too aggressive. Aggressive structure means that the skis will only run in wet snow, and probably will run best in wet corn snow. Most of us do not want to wait until spring for our skis to start gliding fast! Another common occurrence is that the bases are wavy. This can be spotted by looking down the ski base. In any of these cases, get the bases stoneground more appropriately or look for another pair of skis.

From this point on, we have three goals: to get as much wax in the base as deep as possible, replace this soft wax with a hard glide wax, and remove hair. There is no one product that can accomplish this all despite the presence of "base prep" products out there by Toko and Swix. The base prep products are better for working on skis in general, but not for new skis as no one wax has the properties needed in order to accomplish the goals listed above. For the first part, a very soft wax is needed. For the second part, a very hard wax is needed. If you mix the two, then none of the goals will be properly accomplished.

The softer a glide wax is, the better it will go into the base, both in terms of depth and in amount. For this reason, we start with a wax for the warmest conditions. There is no reason for this wax to be fluorinated (HF or LF) as this is just throwing money away. That said, the Norwegian National Team in the past only used HF waxes when they worked on their skis. I guess this is a byproduct of having a waxing budget in excess of that of the entire budget of normal teams. Iron in the wax using heat enough to make the base of the ski warm, but not too hot to touch. The wax will liquefy with very little heat, but this will not accomplish our goal which is to get wax into the base. For this, we need the base to heat up and expand such that the wax is let in. After letting the wax cool completely, scrape the wax with a sharp plexiglass scraper and brush it out with a copper brush. More aggressive brushes are not recommended due to the hair that they create on the base. If in doubt, take a steel brush and brush one ski out well with it. Use a copper on the other ski. Go outside into the sun light and see which ski has a silvery glint to it. It will be the ski that was brushed out with the steel brush. This silvery glint is micro hairs that are being picked up by the sun. These same hairs will not only slow your skis

down in powder snow especially, but will also contribute to the sealing of your base when a hot iron touches these fine and easily-melted hairs. If the plexiglass scraper is properly sharp, very little pressure should be needed to scrape the wax and hairs off. Downward pressure should not be used. Repeat this process 5 times. If the ski does not appear to be taking in wax still, on the 5th time, the wax can be heated, let cool, reheated, let cool, and reheated to ensure better wax penetration without throwing any more money away. The scraping and brushing process does open the base though, and is necessary.

OK, we've accomplished the wax penetration part, but the job is far from done. We are all familiar with the experience of having glide waxed our skis 15 times with a soft wax only to find that after 5 kilometers of skiing on new snow our bases are white and look like they were never waxed. This happens because we change the properties of the base when we wax it with such soft wax. The base becomes very soft and especially susceptible to friction from sharp new snow crystals dragging over it. The key is to take advantage of the soft wax that is "holding the base open" and fill the base with a harder more resistant wax such as blue. We don't simply start with the blue wax because by itself, it will not penetrate the base very well; we need the yellow wax to get in there and hold things open.

The blue wax will not only make the base more friction resistant, but it will also enable the hairs to be removed. This is because it is so hard that it will hold the hair in place and even pull the hair out of the ski when the ski is scraped. This is not possible with a softer wax, nor is the friction resistance.

Iron in a layer of blue (make sure to use enough heat so the blue actually gets in there), let it cool completely, and then scrape and brush it as before. Already after one layer, the skis should look dramatically better. Then iron in yellow and scrape and brush, then the blue again, and then iron in a layer of Molybdenum wax, then the wax of the day. Your skis are ready to race – they are optimally prepared.