# Ski Preparation for new and newly ground skis

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# New skis off the rack

In the past several years, all ski manufactures are producing skis, which have been very well prepared at the factory. In fact, one manufacture does apply a coat of Swix LF glide wax to their racing skis directly at the factory after the grinding process. Overall, the quality of the finished product coming out of any ski manufacture's factory has risen in the past 3-4 years. Given this increase in quality, there are a number of racers and skiers in general who do not regrind their skis and use the factory grinds. If you choose not to customize your skis and get an additional grind here are the steps the SMST2 uses to get these new skis up to speed.

#### Items needed:

Swix BP99, CH10, LF6, CH6, Steel (T0179 or T0191) or Bronze (T0162) Brush, Swix Waxing iron (T73 or T72) and Glide Wax Cleaner (I84)

## **Important Points:**

Make sure to always wax in a well-lit and well-ventilated room.

Glide waxing in a room at or close to normal room temperature is advised.

Always wear a protective mask or respirator that will block organic vapors and dust particles. Throughout the entire process, allow each layer of wax to cool completely (approximately 5 min), then scrape/brush and continue with the next layer.

## Step-by-Step process:

-Scrape existing glide wax from the ski and brush

-Moisten a piece of Fiberlene with Glide Wax Cleaner (I84) and apply to the glide zone of the base

-Brush back and forth with a nylon brush, then wipe off excess and let dry 5-10 minutes

- -Saturate base with 3 layers of CH10
- -1 layer of BP99
- -1 layer of CH6
- -Alternate 5 layers of BP99 and CH10 (3 of BP99 and 2 of CH10)
- -1 layer of CH6
- -1 layer of LF6
- -Final scrape, brush and time to ski!

The theory here is to get 12 layers of volume wax into the bases. As talked about previously, when skis come off the shelf, most do not have wax on them and are often very dry. Thus, the skis are thirsty for wax and have an accumulation of dust and dirt on the base.

Glide wax cleaner is a must. It is quicker than "hot-scraping" and does a better job removing the foreign contaminates that are on the base.

Next, it is important to saturate the base with soft waxes. I like to use CH10 and BP99 because it is easy to work with and has a very low melting point. This will minimize wear of the base and potential for burning (which closes the ski base pores). We use this wax continuously through the season as a base layer for this very reason.

Alternating in a few layers of harder wax (CH6) will help bond the warmer waxes into the base. Though, if too many colder layers are used the bases will become very hard and unresponsive to future waxes and hand structuring.

Cera F, HF and LF waxes are not overly important to me until it becomes time to race but finishing with a layer of LF6 should help the skis be fast right out of the gate. Throughout the entire process, I like using the Swix fine steel brush (T0191) because it is the best/fastest for removing excess wax from the bases.

# Skis with a new grind

Athletes/racers as well as sport enthusiasts will have older skis in their ski bag. Often, these skis are good, but need to have a new grind applied to the base, either because of use from the previous season, or to perhaps apply a different structure for a certain snow condition. In these cases, the steps taken to bring these skis back up to speed is similar to preparing a new/off the rack ski.

#### Items needed:

Swix BP99, LF6, CH6, Steel (T0179 or T0191) or Bronze (T0162) Brush, Swix Waxing iron (T73 or T72) and Swix Glide Wax Cleaner (I84)

#### **Important Points:**

Make sure to always wax in a well-lit and well-ventilated room.

Glide waxing in a room at or close to normal room temperature is advised.

Always wear a protective mask or respirator that will block organic vapors and dust particles. Throughout the entire process, allow each layer of wax to cool completely (approximately 5 min), then scrape/brush and continue with the next layer.

## Step-by-Step process:

-Scrape existing glide wax from the ski and brush

-Moisten a piece of Fiberlene with Glide Wax Cleaner (184) and apply to the glide zone of the base

-Brush back and forth with a nylon brush, then wipe off excess and let dry 5-10 minutes

- -1 layer BP99
- -3 layers CH6
- -1 layer BP99
- -1 layer LF6
- -Scrape, brush and ski!

Skis with a fresh custom grind require considerably less waxing. Even though they have been reground, these skis tend to bounce back quicker than new skis after grinding, due to the wax penetration from previous years. After this, the skis will actually need some hardening. Thus, you'll see the above process has considerably more cold wax than the "Off the rack" process.

Once these steps are complete, all of the athlete's skis will be ready for training and race day waxing. Ski maintenance will include glide cleaning and glide waxing after training or racing, as well as kick wax removal and cleaning for classic skis. Stay tuned for more tips and insights on the SMST2 wax and service program.

Preparing New Skis or Freshly Stoneground Skis Article for Cross Country Skier Magazine By Ian Harvey 6/6/07

#### Preparing New Skis or Freshly Stoneground Skis

Fast skis are something special. Most skiers are emotionally attached to their fastest pair of skis because they are really worth something. Fast skis make a person more "fit" (faster) and they certainly make skiing more fun as well. New skis or freshly stoneground skis have the potential to be your "fastest skis ever". Following this advice will give new skis the best chance possible to reach their potential.

First off, check the skis for blemishes, waves on the base, top sheet cracks, rough spots on the edges, or sidewall dents. Then inspect the base more carefully. Usually new skis or freshly stoneground skis look great, but sometimes they do not. A pair of skis that has whitish and hairy bases or that has more structure on the base than what is desired will simply not run in anything except for really fast conditions or perhaps fairly wet corn snow. If the condition of the ptex is not good, a correction needs to be made or the skis will simply not run well. When it comes to base structure, it is far better to have a structure that is fine and then add more by hand as needed than to have a pair of skis that only runs when conditions are very wet.

Once we have established that the skis are in good shape overall and that the base structure and condition is good, we have three objectives: to get as much wax into the base as possible, to replace this soft wax with a hard glide wax, and to remove micro hairs. Toko, Swix, and some other companies sell "base prep" waxes. These waxes are fine for working on skis in general, but it is a simple truth that no single wax has the properties necessary to accomplish these objectives.

To get as much wax into the base as possible, a very soft glide wax (for warm conditions such as Toko System 3 Yellow) is needed. The softer a glide wax is, the better it will go into the base. The soft wax will penetrate both deeper and at a higher percentage than a harder wax. This is why we apply 5 layers of a very soft glide wax scraping and brushing between each layer. Brush out with a copper brush. The scraping and brushing cleans and "opens" the base allowing more wax to enter. Use a sharp Plexiglas scraper and allow the wax to cool completely before scraping and brushing. Scraping a ski while the wax is warm not only takes wax out of the superficial layer of the base, but it also eradicates structure (which we may have just paid to have had put in). The damage done by a small mistake such as uneven pressure on the scraper or too much pressure on the scraper or a bigger mistake such as having the scraper dig into the base will be magnified when the base is warm (and soft).

The ski bases have now been well-penetrated by a soft glide wax. This is only a half of the job though. Many of us are familiar with the experience of having glide waxed our new skis 15-20 times with a soft wax only to find that after 5 kilometers of skiing our bases already looked white and unwaxed. This happens because the bases only had very soft wax in them. For this reason, the base material itself became very soft and was not

dry friction resistant. Dry friction is especially created by skiing on sharp cold new snow which is commonly found in the first half of a ski season. Before skiing, we still need to utilize the soft wax that is in the base "holding the base open" on a micro level. If we replace this soft wax with a hard glide wax such as Toko System 3 Blue, the base will be hardened and more resistant to abrasion. We do not simply start with the hard glide wax because, by itself, it will not penetrate as well. We need the layers of the soft wax to get in there and "hold" things open.

Apply 2 layers of the hard glide wax. After each application, allow the wax to cool completely before scraping and brushing. These two layers will harden the base. Scraping and copper brushing out the blue will remove any remaining micro base hairs. Follow these 2 layers with a layer of a Molybdenum wax such as Toko LF Grey Molybdenum and then the wax of the day. Your skis are now ready to show you what they've got.