

# "HOW TO SERVICE SKI"

## ECOS ski workshop in the Student Kreativity and Innovation Lab (SKIL)

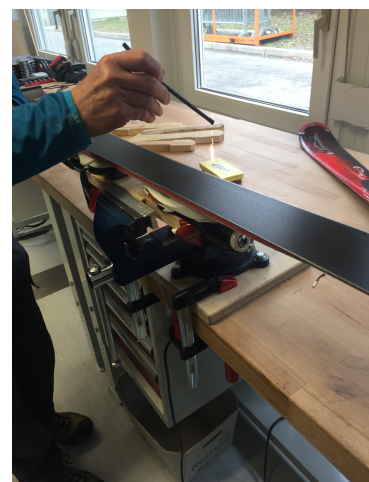
Teacher: Alexandre Buttler, January 28, 2019

- If the edges of your skis are rounded, if they are rusted, or if the sole is dry-greyish, possibly with holes, then it is time to refurbish them. Remember that there is no fun on the slopes with ruined skis. You can do this by yourself with some adapted tools. This will save you money (ca. 60.- for a full repair in the shop). Not only is it cheaper to do it by yourself, but you can do it more frequently (worth to do it after 1-2 days on icy snow) and it prolongs the life-time of your skis. Indeed, on the contrary of the machine-made refurbishment, the hand-made refurbishment does not remove material of the sole and does not (less) reduce the thickness of the edges. But if your skis are very badly damaged, you cannot avoid a machine refurbishment. A good approach is to do it once a year, and doing frequently the hand-made refurbishment during the ski season.

- First, you need to fix the ski firmly upside-down, with the stopper folded as in skiing position. You can use a wood board to replace the shoe, and tighten it in a vice.
- Then remove the old wax with a copper brush. Push the brush heavily, always from the top to the end of the ski.



- If there are holes on the ski sole, fill them with a heated repair stick (example: holmenkol folit strips).

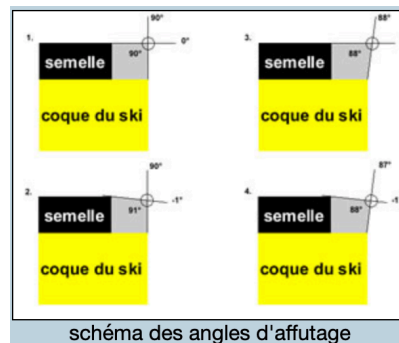


- Then, remove the melted holmenkol folit which exceeds the sole with a rigid metal plate, scrape and smooth the sole (this equalizes the ski sole). Always scrape from top to the end of the ski.



- Then comes the sharpening of the edges:

→ first, edges of the « tombée de la carre » 0.5 degrees (recommended) with a first tool, do both sides. Pass several times (2-4), press firmly but keep the correct position of the metal file, always from the top to the end of the ski.



→ Then, edges of the side of the “chant de la carre” 88 degrees (or 87 degrees or less, if you are a competitor, but then the edge will become unsharpened more rapidly) with a second tool. Do both sides, always from the top to the end of the ski (verify the little arrow on the metal file which shows the direction in which the tool should be used). Push it down flat and a little bit on the side, pass two to three times, without too much force. Each time, clean the ski sole and the tool with a towel (mind the metal splinters on your fingers), so that it moves flat on the ski sole. At the beginning, you will feel some resistance, and possibly produce some metal chips, but rapidly it should run smoothly. Do not hesitate to repeat the sharpening (which is in fact a deburring) after some days of use, especially if the snow is icy.





- If your ski edges are very much damaged, you can use another tool beforehand to smoothen locally the edges. If your ski is strongly damaged, you might need to bring it to the shop so that the refurbishing is done with a machine.



- Pass the abrasive rubber on the edges (carre) for the finishing. Strongly, flat on the top and on the sides two times. The edges should then be clean and smooth when you pass your fingers (if, at this stage, you get some metal splinters on your fingers, this would mean that you did not do a proper job!). Sometimes, especially after the machine-made refurbishment, it is recommended to “round” slightly the ski edge at both ends (at the top on a length of about 15-20cm, at the end on a length of about 10 cm) with the abrasive rubber.
- Then comes the waxing: put the wax on the clean ski sole by heating it on the iron, make the wax drops do a zigzag pattern on your ski. Do not put too much, you will anyway scrape away most of it since the aim is that the wax enters the pores of the ski sole.



- Then pass the iron a first time to extend the wax and homogenize it on the ski sole, and a second time to have a nice film of liquid and shiny wax on the ski sole. Never stay too long on the spot and keep a constant speed.
- Finally, wait until the wax is solidified and the ski sole gets cold. In the meantime, start the process with another ski.

- Then, remove the superfluous wax with a rigid Plexiglas spatula. Scrape from the top to the end of the ski. Do this vigorously so that there is no wax surface layer left on the ski sole (the wax enters in the pores of the sole). Check with your nail, there should be only a slight trace on the ski sole, not a thick layer of wax. Finally, clean also the edges of the ski with the spatula, check again with your nails.



- Do the finish with a brush (not with the copper brush, another one with plastic bristles). At the end, the ski sole should be very shiny (almost greasy like).



Last advice, dry your skis after you used them, this keeps the edges free from rust.

The entire process, sharpening the edges, repairing the sole and waxing takes about 1 hour for a pair of skis (only a few minutes for the sharpening).

Enjoy your brand-new skis!



Amarante Vitra, January 28, 2019