THE MOST DEVE-**LOPED MARKET SET**

The Tuning-File sharpens all types of skis and snowboards on the side of the edge at an adjustable angle of 0° to 6°.

Sharpening is easy and fast even on especially hard edges thanks to four patented innovations: anti-tilt ergonomics, pre-cutting diamond, a clever ABS Tuning-File sidewall plane and a membrane that keeps the chips away from the ski-base.



GENERAL INFORMATION

TUNING IS:

- lightly grind (polish) the base edge to reduce roughness in order to increase the handling and precision of the skis and snowboards
- sharpen the side of the edge to eliminate the rounding and give a sharp edge (diagram A)

COLORS OF DIAGRAMS

- polishing of the base edge
- sharpening of the side edge
- thinning of the edge
- ABS sidewall material removal with the Tuning-File sidewall plane

DIAGRAM A: SHARPENING WITH TUNING

We begin by polishing the base edge before sharpening the side. A sharp edge is thus obtained with a minimum of thinning

DIAGRAM B: TUNING-FREE SHARPENING

If the base edge is not polished beforehand, more steel must be removed to obtain a sharp edge.

DIAGRAM C:TUNING ANGLES

The base edge bevel angle is necessary for the precision of handling and the maneuverability of skis and snowboards, while the side edge angle acts on the grip

Sports, giant slalom, ski cross	1°	3°	
Casual, touring	1°	1°	
Slalom	0,5	3° à 6°	
Freestyle, downhill, boarder cross		1.5°	1° à 3°

SAFETY

- · Wear cut-resistant gloves
- · Protect bindings from sharpener chips (use maskingtape, paper, cloth, etc.)

ORDER OF OPERATIONS

I. REMOVE ABS SIDEWALL MATERIAL WITH THE TUNING-FILE SIDEWALL PLANE. II. PRE-GRIND THE SIDE EDGE WITH THE DIAMOND FACE FILE. III. SHARP WITH THE FILE

I. REMOVE ABS SIDEWALL MATERIAL WITH THE TUNING-FILE SIDEWALL PLANE.

To prevent the diamond from getting stuck and the files slide on the plastic, before the first sharpening, then from time to time remove a little of the material that overhangs the edge (ABS edge and fiber or aluminum).

- 1. Insert the two planer legs into the Tuning-File handle (E), tilt it under the flange and tighten with the black screw (F).
- 2. Pull to remove the material. Note that the thumb presses the planer, which dampens the vibrations (G).

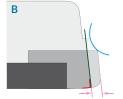
The circular blade is positioned automatically above the edge (H1). After a few passages, the blade touches the edge, it no longer removes matter and generally emits a metallic noise; the edge is then ideally cleared (H2). The blade rises in an arc of circle which does not weaken the edge or ski or snowboard.

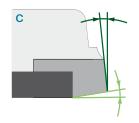
If you want to clear the edge more deeply or if the edge is especially high, place the cursor of the handle at a high value, for example 6°. Generally, the work is ideal with the cursor in position 0°, 1°, 2° or 3° (L).

Left handed users will screw the blade opposite the standard mounting (I).

On certain skis or snowboards, this operation leaves a plastic burr which must be eliminated with the abrasive pad delivered with the set.







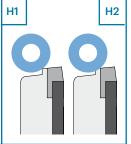












II. PRE-GRIND THE SIDE EDGE WITH THE DIAMOND FACE FILE.

Edges often have surface hardened areas (hardened by stones or too intensive machine sharpening) that cannot be accurately filed and which damage the file.

- 1. Before using the file of the sharpener, it is therefore necessary to pre-grind the edge by back & forth movements with the diamond face of the file (J). Generally, as soon as the passages are soft (no scratching), the edge is ready to be filed.
- 2. Frequently change the position of the diamond to prevent it from being worn in the same place.

The time devoted to pre-grind is more than compensated by a filing which will be easier, more precise, faster and above all that will decrease the wear of the file.

III. SHARP WITH THE FILE

Skiing or snowboarding is maintained on the side, ski binding against oneself (K). Our X-Flat folding workbench or the T-SUPP table-jigs greatly facilitates operations.

- 1. Set the desired angle by pushing the cursor (L)
- 2. To file by pulling against yourself (which is the best way) and not to eject the chips in the direction of the ski-base, the file should be mounted as follows:

If you are right-handed, all the files will be tightened according to (M).

If you are left-handed:

- the milled (half-circle tooth) file "LFG" will be tightened according to (N).
- the race file "LRACE" and the extra-fine file "LFINISH" will be tightened according to (O).
- 3 Firmly press the Tuning-File against the ski base and pull it against you (D and K). It is easier to file in several small movements of about 40 cm and to move along the edge, than in a long movement along the entire length of the edge. Warning: you have to raise the file or release the pressure during the return movements.
- 4. To avoid cuts and to keep a good firmness, check that the thumb does not exceed from the file. (D)
- 5. Stop sharpening as soon as you feel that the cutting of the edge is sharp. The evaluation of the cutting edge is done by passing the finger or the nail delicately and perpendicularly on the edge. Never touch the edge in length.

USEFUL INFORMATIONS

- As described in the general information, it is particularly advisable, before each sharpening, to slightly polish the underside of the edge with the diamond files in the GT guide.
- · Change the position of the file in the handle from time to time, in order not to always use it in the same place.
- · If you want to reduce the aggressiveness of skis and snowboards, you can slightly round the edge on the first and possibly also the last 10 to 15 cm (spatula and heel) with the abrasive pad delivered with the set.
- Clean diamonds: apply a few drops of water and dishwashing agent, brush with a brass brush, rinse and wipe the file to prevent corrosion.
- Do not work with dirty or worn polyester membrane. Dirt is removed with a brush. A video shows how to replace it (www.tooltonic.com> support> maintenance tools). We offer bags of 5 spare membranes.
- · If you take your Tuning-File into a jacket pocket, slide the file under the elastic membrane before placing it in its case.
- · For frequent re-sharpening, the use of two Roto-Finish (RF200 and RF400) according to our Twin Roto Concept is sensational (www.tooltonic.com).























