



## FIS TUNING KIT

As ski preparation is one of the largest components to fast/ good skiing, I have built out a list of the items that athletes should have in their tuning kits. Further, good tuning equipment is critical for fast and effective ski tuning, Athletes that are concerned about time need to have good kits and knowledge. While these tools are expensive, hopefully your kits have been accruing tools over time and athletes are caring for them.

\*Please note that some items in tuning kits wear out and rarely last more than a season. Athletes that are diligent in cleaning files and stones will be able to use those items much longer.

Common items that get a lot of wear

- Files
  - In FIS- it is expected that athletes file their skis almost every night. Stoning is only done after sharpening with a file or in extremely soft conditions.
  - Files need to be replaced every year- possibly more if a lot of tuning is being performed.
  - Very few people have good quality, sharp files. But a good file saves time energy and preserves edge. Good files need to be kept clean and should be wrapped in cloth so as they are not abused in travel.
  - Do not throw out old files. Please keep in mind that older, worn files are very useful for shaping and maintaining the skis top sheets, tips and tails.
- Stones
  - Need to be replaced annually.
  - Stoning creates a fine dust that often mixes with some of the left over paraffin in wax. This combination gums up the diamond stones tremendously and essentially renders the tool useless. If not cleaned, this state greatly increases the speed in which the stone wears out (too much pressure being used, too many passes, etc. etc.)
  - Stones also need to be packaged properly and prevented from rattling around loose in a tuning bag.
- File guides
  - File guides are very precise instruments and if looked after can last a long time. Some technicians believe that dropping a guide once will change the angle of the guide. While this seems extreme, it is clear that guides that have been dropped, chipped or abused will be less effective for getting your skis consistently sharp.

**Recommended Tuning Kit** (Please let me know if I have left something off the list):

- **Fine File**- these should be chrome, high quality files otherwise they will not last very long. They only need to be 15cms long or so.
- **3 degree file guide**

- **400, 600 & finishing stone**- You may not need all 3. These need to be well cared for, cleaned and in good shape.
- **Citrus solvent**- critical for stone maintenance
- **Gummy stone**- common stone for detuning edges. Wade and I both have them on the hill on a daily basis, but if you like to detune your skis, you should have your own.
- **Side wall removal tool**- Ideally has a sharp blade- Round blade is better for our purposes. Replacement blades can be found for most high quality tools. These are best used periodically to take larger portions of side wall off. The 5/6 degree file guide and sharp panser file should be used commonly and used to take small amounts of side wall and second edge off- very smooth!
- **5 or 6 degree file guide/ an older file guide** that isn't being used any more- This is for second edge and sidewall removal. Highly recommended!
- **Body/ Panser File** (the sharper the better)- Can take longer Panser files, which are much more common, and break them into 15cm files, which are easier to work with.
- an **old/worn file**- Great for managing tips, tails and top sheets
- **Sharpie Marker**
- **Ski vices**
- **Wax Iron**
- **Training wax**- Holmenkol Beta or Six CH 6. Training wax should be quite cold and should not be fluorinated.
- Soft **brass brush** for cleaning files
- **shop towels and rags**- the blue shop "napkins" are useful. Cotton rags work great for cleaning edges and wiping skis down.
- **Scrapers**- new/sharp
- **Ski brushes**- 1 brass brush for base cleaning, 1 stiff nylon brush and one brush for polishing skis (short horsehair or softer nylon)
- **tuning box or kit**- preferably lockable
- **Wax apron** to keep clothing clean
- pair of tight **work gloves**- I use thin, rubber coated gloves similar to what you would use for light gardening. These allow for good dexterity and some protection. Stitches are not fun!!

Race Wax policy:

We will supply race wax on the road, so athletes do not have to purchase a variety of race wax. For home races, our race wax can be used, however, the skis will need to be waxed in a central place in Banff/Canmore. In the past, most athletes use their own wax due to logistics.

**\*\*A FEW NOTES\*\***

- If you have questions about anything on this list or would like help in sourcing any of these items- please reach out to either Wade or myself.
- It is not acceptable to assume that one of your teammates has a tool that you can use. Athletes need to communicate if they need to use any items.
- Please, Please Please ask for help if you have any questions at all.

Thanks everyone! let me know what questions you may have.

Talk soon

Coaches