

# How to Tune Your Skis for Better Performance

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Have you ever wondered why everybody else is whizzing past you on the snow while you're barely creeping along? It could be that your skis are in desperate need of a ski tune. Tuning is the process where you (or the technician you hire) flattens and repairs the bases, sharpens the edges and applies wax to the bases of your skis. All of these will make your skis move faster and help you to ski safer.

Difficulty: Moderately Challenging

## Instructions

things you'll need:

- Pair of skis
- Workbench and a vise
- Truebar or scraper
- PTex repair string
- PTex iron
- 8 inch chrome mill file
- Rubber band or ski brake retractor
- 8 or 10 inch files
- Base edge filing guide
- Diamond stone set (fine, medium and coarse)
- A variety of ski waxes for various temperatures
- A clothes iron
- Ski scraper
- Kitchen scouring pad

## Flattening and Repairing the Bases

- 1 You can tune a ski by turning it over and leaning it against a chair or other immovable object, but the ideal way to tune a ski is to secure it on a workbench with a vise that is designed for tuning skis.
- 2 Retract the ski brakes by using either a specially designed ski brake retractor or just use a thick rubber band to pull the ski brake out of the way while you're working on the edges and bases.
- 3 Check the base of the ski for "flatness." Flatness means that the ski is neither concave nor convex and is uniform from side to side and from tip to tail. You can purchase specially designed steel tools (called Truebars) for checking flatness or use any metal guide with a straight edge.
- 4 Use a base scraper to scrape or grind away any excessive base material. If your ski is severely convex or concave, you may want to send your skis to a ski shop where they can put your skis through a commercial grinder. You needn't do this every time you tune your skis.
- 5 If your bases have any deep gouges or scratches, repair them by melting PTex string into the areas needing repair with a candle or PTex melting tool. After the PTex hardens, use a base scraper to flatten the bases. If your bases are in exceptionally bad condition, consider sending them out to get professionally repaired.

- 6 Smooth out any irregularities in the bases before you proceed to edge sharpening. The bases should be completely free of burrs, scratches or other defects. These will slow the ski and effect its performance.

## Sharpening the Edges

- 1 The conditions of the edges can dramatically effect the way that your ski slides and turns on the snow. If it's been a while since you've had your edges professionally sharpened, consider sending them out for a tune that includes edge sharpening.
- 2 Sharpen the ski's edges by inserting an 8 or 10 inch file in a filing guide. Filing guides insure that the edge you put on the ski remains uniform from one end to the other. Familiarize yourself with "Bevels." Bevels are the angle that you file the ski edges and are measured in degrees. A 1 degree bevel will allow the ski to turn easier than a 3 degree bevel. There are bevels on both the base edge and the sidewall edge.
- 3 After filing the edges on both the bases and the sidewalls, run a diamond stone over the edges. Diamond stones remove small, microscopic burrs and imperfections that are difficult to see with the naked eye. Start with a coarse diamond stone and graduate to a fine stone.

## Waxing Your Skis

- 1 Determine which wax to use based on the manufacturer's recommendations and explanation of snow and weather conditions. There are different waxes for cold, sticky snow, for warmer powder snow and for slush. Each one of the waxes will make your skis perform differently.
- 2 To slide well, the porous bases on skis must be filled with wax. Pores that are not filled with wax will slow down the ski.
- 3 Using an old clothes iron, melt the wax and liberally apply it to the base of the ski from tip to tail. Don't be stingy. Use lots of wax. Iron the wax uniformly over the entire base of the ski from tip to tail. Allow it to dry.
- 4 Using a base scraper, scrape off the extra wax from the base of the ski. Apply another coat of wax following the previously described steps. If it's been a while since your skis have been waxed, you may need to repeat this step several times.
- 5 After you have scraped off all of the extra wax from the base of the ski, polish the bases using a kitchen scouring pad. Allow the wax to harden before using the skis.

## Tips & Warnings

- If it's been a while since you've had your skis professionally tuned, consider sending them out and do "touch-up" tunes yourself throughout the rest of the year.
- Skis should be professionally tuned once or more a year, depending on how often you use them.
- Keep the bases in good condition by avoiding rocks, stumps or other objects that can damage your skis.
- Consider minimizing the amount of bevel at the tips and tails of the skis. This will help them to turn easier.
- Carry a diamond stone in your parka in case you run over a rock, damaging your edges. You can perform a quick touch-up that will make your skis perform better.
- You can never apply too much wax. Apply wax liberally, repeating if necessary.
- Make sure you check a wax chart to determine which type of wax to use for the day's conditions.
- Never let anyone but a specially trained ski technician tune your skis.
- If your edges are rusty, it's a good indicator that it's time for a complete tune.

- Start out with a low degree bevel and increase it if necessary. If you "over bevel" a ski's edges, you'll have to remove significant portions of the edges, taking away years of its life.
- Do not use your mother's iron from the laundry room. Once you use an iron to apply wax, you've relegated it for that purpose forever.

## Resources

- [Where to find ski tuning tools](#)
- [Swix Wax Guide](#)