

SKI & BOARD TUNING MANUAL



How to get

SPEED & EDGE

GRIP

by

KUU Sport Mfg.

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WARNING: When working on your skis / board you are working with some sharp tools and edges. Hold the tools firmly, but Do Not Use Excessive Force, at any time. Excessive force tends to lead to excessive mistakes. If what you are doing leads you to want to use force, please DON'T. Instead, use a sharper / cleaner tool and more strokes. Your hands and bases will thank you for the mistakes you don't make.

HAND TUNING MANUAL

TECHNICAL INFORMATION PROVIDED BY RON KUUS, OWNER OF *KUUSPORT MFG.*

Ron Kuus is from Toronto, Canada. Ron is the President of KUUsport Mfg. Ltd., based in Toronto, Ontario. Ron's father Herbert Kuus was the inventor of the first patented electric waxing iron. KUUsport was established in 1986 and has grown to become Canada's number one manufacturer and supplier of waxes, tools and accessories for both skiing and snowboarding. KUUsport was the first company in the World to produce specific waxes and tools for the snowboarding industry, and has been manufacturing its own line of Competition Snowboards. KUUsport is continuing to grow and now exports its quality made products to over 10 countries worldwide.

Ron was a member of the Toronto Ski Club in the mid 70's, moved to Alberta where he began skiing with Norquay Ski Club. He worked his way up the ranking scale to become the number one skier on the Alberta Provincial Ski Team. Ron was also a back up on Canada's National Ski Team, raced the Europa Cup circuit and raced professionally. Ron always paid particular attention to the tuning & waxing techniques used by teammates, competitors and touted by the product manufacturers. He soon became known as the "Wax-Guru" and took particular pride in tuning his and others equipment.



Ron Kuus
Then & Now

1. TUNING INTRODUCTION

New snowboards and skis generally need to be sharpened and waxed before their first use. Hand tuning allows you to obtain maximum performance from your equipment.

A machine can make the base flat, edges square and add some structure to the base, but that is just the foundation to getting the most out of the equipment. Hand tuning is required to obtain optimum performance from your skis or snowboard, and it can be economical, convenient and enjoyable. The following is a guide to basic tuning and repair tips for maintaining the investment in your equipment, increasing performance and enjoyment on the slopes. Guaranteed!

Experienced boarders and skiers will tell you that prepared, waxed and sharpened equipment will provide fun, enjoyment and increased performance. Waxing and tuning of the base and the edges can be very technical and quite an art form. However, the basic information contained in this manual will give you the techniques needed to obtain better performance and longevity from your equipment.

For those that are striving to become better riders or skiers, it is important to continually maintain your equipment. To improve your technique the ski or board must respond at a consistent and high level of performance. In other words, it is not possible to carve or perform at a high level with inferior equipment (especially on hard snow or ice). Well maintained equipment will also allow you to experience more of the terrain, ice and well-used trails will no longer be off limits. In other words, well-tuned boards and skis allow you to improve technique and increase the variety of terrain you can enjoy.

Make every day and every run count with well tuned equipment.



2. PRE TUNING INSPECTION

When: Before you begin preparing your equipment, you should inspect the condition of the base and edges. Your goal is to achieve a waxed flat base with clean, square/beveled and sharp edges. That means no rust or nicks on the edges or scratched, dry (white) and dirty bases.

Why: The base should not be concave, or “railed”, with the edges higher than the base. A concave base or railed edges encourages the equipment to run straight and impairs the turning ability of the equipment. Although, a slight concave base may provide some riders with quicker contact for turning and some added stability.

Conversely, the bases should not be convex. A Convex bases (base is higher than the edges) will cause your equipment to wander and make it difficult to put them on edge or grip on the snow.

How: To determine if your bases are either “Concave” or “Convex”, run a straight edge at 90° down the base. If you see light between the straight edge and the center area of the base, your bases are “Concave”. If you see light on the sides of the base, than your base is “Convex”. If either of the two cases exist, you may want to take your equipment to your local shop to have the base and edges leveled. Then continue on with the following steps in this manual.

To level your base and edges by hand, you will need the KUU *Pro File* for the edges and for the base a KUU *Pro Plexi Scraper* or a KUU *Steel Scraper*. To flatten the edges, See section # 4 **Base Edge Filing**, for technique direction. Remove excess edge with the file until the base looks flat, every few strokes check the base with the scraper, so that you know when the base is level with the edges. For a convex base, See section # 11 **Base Repair**, for technique direction. Remove base material with the scraper until the base looks flat, every few strokes check the base with the scraper, so that you know when the base is level. **Note:** both of these operations may take a little bit of work and time to get the base flat, especially with sintered bases (you may need to take the board / skis to a shop).



CONCAVE



IDEAL



CONVEX

3. INTRODUCTION TO EDGE SHARPENING

Edges allow you to stop, carve a turn and hold your line on steep slopes and in icy conditions. Well-tuned (filed) edges greatly enhance equipment performance, which will allow the customer to better enjoy their time on the snow.

When regularly done, filing edges is a simple and quick procedure.

There are two edges to sharpen, flat filing for the **Base Edge** and side filing for the **Side Edge**. Also see **Notes on Edge Angles**, & terminology page 13.

Tip: To check your edges for rock damage or nicks, use a KUU **Tex Pad** and run it along the edges. The fibers on the Tex. pad will grab at any damaged sections. Inspect these damaged areas for they may need extra work when filing the edges. The tex. pad method will prevent you from cutting your fingers as opposed to inspecting the edges with your bare fingers. **Note:** Use this tex. pad method to check to see if your edges are clean of burrs after filing and polishing the edges.



4. BASE EDGE FILING or *FLAT FILING*

When: The base edge needs to be filed only once and again only when it is damaged by a rock (nicked) or rust. Do not flat file often and when you do, do it lightly, other wise you end up with a severe base bevel. Keep base edge clean with a stone.

Why: A filed base edge allows the equipment to glide and turn easier.

How: Lay the KUU *Pro File* on the base at a 45° angle to the edge (**picture # 1**). Holding the file as in the pictures below, press the file on the edge you are sharpening with your thumb. Use long smooth strokes with the *Pro File* (approximately 1/3rd the length of the board or ski per stroke), slightly overlapping each section to maintain a uniform edge from tip to tail. If you are unsure as to how much edge to remove, mark the edge length with a black magic marker and then file the edge until the marker is gone. Keep on filing, without bending the file, until the file stops removing the excess edge and glides smoothly. This will ensure a clean and sharp uniform edge. For filing the tip and tail sections or the non-running surface of your equipment, place the file at 90° to the edge (**picture # 2**). This prevents the file from rocking and enables you to flatten the edge to the base.

**Picture # 1: file at
45° to edge
and flat on the
Base running surface**



**Picture # 2: file at
90° to edge
and flat on the
base of tip or tail**



5. ADVANCED BASE EDGE BEVELING

Advanced filing does not mean for experts only. When we refer to “advance filing”, we mean that you are comfortable with the tools, i.e. you understand how a file cuts and you are comfortable using the file.

When: If you are having difficulties turning and want to make turning easier or want a faster running base.

Why: Base beveling your edges will aid in initiating your turns, reduce hooking (overturning), provide more control & produce smoother - faster riding equipment.

How: Place the file in sleeve as per diagram on the KUU **Base Bevel Sleeve** package. The Base Bevel Sleeve is angled so that the file rests on a true angle to create the bevel degree you choose. Also, see your equipment specs to choose the bevel. Repeat the same steps as **#7 Flat Filing**. Keep on filing until you have removed all the excess metal from the edges. Once the file stops removing the excess metal and runs along the edge smoothly, you have reached the chosen degree of bevel, which ensures you a uniform edge from tip to tail.

Remember: Your edges should be razor sharp from tip to tail without them grabbing or hooking in order for the board/ski to perform the way it was designed. If hooking still occurs, then next time move to the next larger degree of bevel, until the equipment carves and turns smoothly and feels good for you.

SUGGESTED BEVEL: When you first do this, choose a lower degree bevel. Large side edge bevels require a larger base bevel. . A large base bevel is also beneficial for trick skiing and half-pipe riding. The base edge should not be beveled more than 1.5° .

<u>DEGREE</u>	<u>EVENT</u>
0.5°	SL, GS, FR, BC, LESS THAN 185W & 6+EX
1°	SL, GS, SPEED, P, BC, FR, ST, B, ALL W AND 4+EX
1.5°	GS, DH, P, FR, ST, B, R, ALL W AND +210 AND 0-5 EX
2°	SPEED, P, ST

SLALOM (**SL**), GIANT SLALOM (**GS**), ½ PIPE (**P**), BOARD CROSS (**BC**), FREERIDE (**FR**), RECREATION (**R**), SPINS/TRICKS (**ST**)
BEGINNERS ADULTS & YOUTH (**B**), WEIGHT LBS. (**W**), YEARS OF EXPERIENCE (**EX**).

COMPETITORS TIP Competitors will bevel the tip section slightly more than the front/mid section to the tail. This allows you to initiate the turn easier with more control and for boarders this also aids recovery when over/under landing your jump. This will allow you to spin it around quicker without the edges catching.

6. SIDE EDGE FILING

When: If you are having difficulties turning or holding on the ice or hard packed snow, or you know your edges have not been sharpened the last few times out on the slopes.

Why: Sharpening the side edge will give you control, increase grip on snow/ice, the ability to stop and turn on the icy or hard packed conditions.

How: The KUU *Ice Buster* edge sharpener allows an amateur to achieve professional results, easily and quickly. Use long smooth strokes (approximately 1/3 the length of the edge) with the KUU *90° Ice Buster* (picture # 3), overlapping each section to maintain a uniform edge from tip to tail. If you are unsure as to how much edge to remove, mark the edge with a black magic marker and then file the edge until the marker is gone.

Also: Wipe the edge filings off the base, after every two or three strokes, to prevent grinding the edge filings into the base. Periodically (every 2 to 6 strokes) use the KUU *File Cleaner Brush* to remove the unwanted edge filings that accumulate in the file and Ice Buster (picture # 4).

Picture # 3: Ice Buster on side of base/edge



Picture #4: Cleaning the Ice Buster



7. ADVANCED SIDE EDGE BEVELING

When: If you are going to be skiing or riding on ice or hard pack snow, or are an advanced or competitive rider or skier, you will want a side edge bevel.

Why: By reducing your side edge angle you are creating a more acute angle. This angle is extremely effective for competition, steep runs; icy and hard packed conditions. The acute angle also, reduces the friction of the edges cutting into the slope/snow, which makes your equipment run quicker.

How: Perform the same technique as in # 5. With a black marker colour the whole side edge from tip to tail. With the KUU *88° Ice Buster* or *87° , 88° & 89° Bevel Guides* remove the excess edge. Begin with the rougher, cross-cut side of the file and switch to the smother mill-bastard cut as you approach the final stages of completely removing the black marker from the edges. When you have removed the black marker completely from the edge, you will have a uniform and 88° angled edge from tip to tail. (See package for more Info).

Side Edge Sharpening with 88° Ice Buster



8. EDGE POLISHING

When: Once you have sharpened the edge, use a KUU ***diamond stone, hard stone or gum stone*** to polish the edges and remove the burrs created while filing. Note: sandpaper is not recommended for this use, as it will remove the sharp edge you are trying to achieve.

Why: A clean polished edge is sharper, more effective and will last longer than a rough or burred edge.

How: Using the same technique as when filing the edges, rub a stone along the base length (**picture # 5**) and side edge length of the edge (**picture # 6**). Two or three passes over the entire edge length should be adequate. As with the file, you should feel it getting smoother with each stroke.

Picture #5 stone on base edge



Picture # 6 stone on side edge



9. ADVANCED “PROGRESSIVE EDGE BEVELING” SIDE EDGE & BASE EDGE

Progressive beveling of edges is beneficial for competitors and beginners. Although, the extra work required for these operations leans towards the Pro who understands the “whys” of tuning and has skill using a file.

PROGRESSIVE BASE EDGE BEVELING:

When: When you are looking for a faster gliding and easier to pivot board or ski. This operation will only be performed once and maintained if you hit any rocks or damage the edge.

Why: If you are having difficulties in the start of your turns and your equipment tends to run straight and not turn according to your desire and body movement.

How: We file the same as **#4 Flat Filing** and **#5 Advanced Flat Filing**. More bevel is created at the tip section (approximately 1/3 of the effective edge) than at the mid and tail sections. This will allow the equipment to turn easier without sacrificing the “Grip or Holding” ability of your equipment. For example, if you are having trouble turning, start by producing a $\frac{1}{2}^\circ$ bevel at the tip section and leaving the mid to tail section Flat. If turning remains a problem and the equipment is still running straight then create a 1° bevel at the Tip section & $\frac{1}{2}^\circ$ for the mid to tail section. The degree will change for heavier skiers/riders and beginners (see chart on beveling **DEGREE** in section **#5 Advanced Flat Filing**). This technique is very good for pipe riders as well, especially if you are not landing your 360 or 720's. With the progressive bevel you will be able to cheat on your landing and spin the board easier.

Key: In the transition section of the Tip to the Mid section, you need to *blend* the change of degree from $\frac{1}{2}^\circ$ to 0° (or 90° , base to side edge) over app. 5cm.

Competitors Tip: Beveling your base edges helps to reduce edge drag on the snow and therefore creates a faster gliding base.

PROGRESSIVE SIDE EDGE BEVELING:

When: If you are having difficulties turning or holding on the ice or hard packed snow.

Why: Sharpening the side edge will give you control, increase grip on snow/ice, and the ability to stop and turn on the icy or hard packed conditions. Progressive Side Edge sharpening allows the wider tip of the board/ski to begin the turn smoothly and an increase in edge angle (bevel) allows for more **HOLDING/GRIP** and **POWER**. Progressive edge, is a key to maintaining consistency in the turn without slowing the skier/rider down. For example, we progressively move from 90° at the tip section (app. $\frac{1}{4}$ of the effective edge from the tip) to the mid & tail sections at 88° . Remember all your main edge tuning /sharpening is done on the side edge. **Note:** different angles maybe used, (see chart on page 13 at the end of this chapter for general reference).

How: We file the same as **#5. Side Edge Filing**. **Key:** From the transition section of the Tip to the Mid section, you need to *blend* the change of degree from 90° to 88° mid to tail over app. 5cm.

Competitors tip: Some competitors leave the back ¼ section of the effective edge at 90° as well as the Tip section. This helps the competitor get off their edges slightly quicker. Generally stronger and heavier riders/skiers do this. Always carry a diamond stone on the hill to repair damaged edges and also to do a quick side edge sharpen before the competition.

NOTES ON EDGE ANGLES:

Base Edge: This is the edge that is on the base side, also known as the running surface edge in contact with the snow. Angle is referred from the base. This edge should not be beveled more than 1.5° .

Side Edge: The edge that is on the side of the equipment. Angle is referred from the base. This edge should not be beveled more than 3°.

Edges: Generally, edges should be kept at 90° or less (an acute angle). This angle refers to base edge and side edge, the actual angle of the edge. An obtuse angle, greater than 90°, will not cut into the slope well and reduce grip. See page 13 for diagrams depicting edge angles.

General: If you place an angle on the base edge, you should at least place the equivalent angle on the side edge in order to maintain a 90° or less angle on the edge. However, if you place an angle on the side edge only it is not necessary to create an angle on the base edge, for the actual angle of the edge will be less than 90°.

EXAMPLES OF ANGLES: Base is considered flat.

<u>SIDE EDGE ANGLE</u>	<u>RATING ANGLE</u>	<u>BASE EDGE ANGLE</u>
87° to 89°	A	.5° - 1°
90°	B	0° - 1°
90°	C	+1°

RATING: Depending snow conditions, your style, weight and experience, the rating will slightly change.

A - TOP PERFORMANCE

B - VERY GOOD

C - GOOD

Note: Ask your local retailer and see factory specs for guidance.

Frontal cross-section of ski/board top side up, base down.

90°
SQUARE EDGES

87° - 89°
SIDE EDGE BEVEL

1/2° - 2°
BASE EDGE BEVEL

SIDE EDGE &
BASE EDGE BEVELS

10. DE-TUNING TIP & TAIL EDGES

When: After each time you sharpen edges. Not recommended for icy conditions.

Why: De-tuning the tip and tail reduces over turning and grabbing of the tip and tail.

How: Use the *hard or gum stone* to de-tune the edges at the tip and tail (**picture # 7**). To de-tune you hold the **stone** at a 45° angle to the edge and rub it back and forth two to three times length wise to remove the sharpness of the edge at the tip and tail ends. With the stone, pressing lightly (you can always remove more edge if not effective later) round the curved section of tip and tail approximately 3 to 6cm along the running surface (where the board makes contact with the snow).

If you are unsure where those two points are, place your ski or snowboard on a flat surface and mark the points where the edges rise up from the flat surface. Then de-tune from tip and tail to 3 to 6cm past those points toward the center.

You may have to experiment to find your preference, start with 3cm and you can always do more on the slopes with your pocket stone.

Picture # 7 stone at 45° angle detuning the edge.



11. BASE REPAIR

When: If you have scratches and small gouges in your base. For large gouges down to the core, take your equipment to your local shop.

Why: Scratches in your base impede the gliding ability of the base. You will want to remove all scratches in your base to obtain optimum turning and gliding performance. Large scratches can act like rudders.

How: Scrape the base with a *plexi wax-scraper* to remove excess material. Then spray the base with *KUU Bio Citron Base Cleaner* (will not damage or leave an oily residue on your base) and wipe clean with a rag to ensure good bonding of repair material to base. You are now ready to begin filling the scratches in your base.

Use the **PRO FIX KIT, STAINLESS STEEL SCRAPER and SLICK REPAIR STICKS**. The Pro Fix Kit allows you to repair the scratches with a harder material that will last much longer and bond better to modern bases (**picture # 8**). Heat up the repair iron, press the material into the damaged scratch(s), let cool and scrape level with the steel or sharp plastic scraper. Hold the scraper with a sturdy grip as in (**picture # 9**) and push away from your body. When scraping base repair material, begin from the center of the repair and *shave* off the excess material with many light strokes to avoid removing the new base material from the scratch. For a professional finish, after scraping use KUU **base sanding paper** (220 to 320 grit) and wrap the sanding paper around a file and sand over the repaired area until smooth. The traditional KUU **Repair Candle** (drip stick) may also be used. To prevent the black carbon build up when using a candle, wipe the carbon off with a metal scraper as it forms and hold the flame of the candle close the base or scraper while it is lit, (if flame is blue, it is burning clean).

Picture # 8 using Pro-Fix base repair tool



**Picture # 9 scraper
Removing excess material**



12. BASE STRUCTURE

When: Structure before waxing with a hard brush (KUU *stainless steel* or *brass brushes*) as to create imprint/structure into base. Structure after waxing, with a softer brush (KUU *nylon* or *horsehair brushes*) to open the chosen structure created prior to waxing. (see sec. 13 **Types of Brushes**).

Why: Structuring the base reduces surface tension between the base and snow, this will allow the base and wax to perform at their maximum efficiency.

How: With a hand held structuring brush or motorized KUU *Power Rotor Brush*, (pictured below) apply the texture from tip to tail.

Generally, we have two types of structure

A) Criss-Cross Pattern - for wet snow to break up any suction under the base. Pass brush over base at an angle of 45° or more (a more vertical angle).

B) Straight Lines - used for colder (less moist) snow to reduce area of surface contact with snow, which reduces co-efficient of friction. Pass brush over base straight from tip to tail.

**A) Criss-Cross Pattern
on base**

**B) Straight on
Lines on base**



13. TYPES OF BRUSHES

ABOUT BRUSHES: In general, soft extruded bases and waxes require softer brushes and harder sintered bases and waxes require harder stiffer brushes. Wet snow conditions like those found in the spring require a harder brush also.

Stainless Steel: To imprint structure into base prior to waxing, clean heavy ground in dirt and old graphite in base.

Brass Brushes: To texture some extruded bases prior to waxing and open structures of “Colder temp. range waxes” after waxing.

Hard Nylon Brushes: For texturing Fluoro waxes and cleaning bases of ground in dirt and old graphite and fluoro particles prior to waxing. Also used after waxing to open structure of base for colder temp. range waxes.

Medium Nylon Brushes: General purpose.

Soft Nylon Brushes: Open structure of base after waxing. Use softer brushes for warmer temp. range waxes. Soft brushes are also used to get wax particles off the base, i.e. if you waxed with a -7° C wax (orange/red) and used a Med. Nylon brush after waxing to open the structure, you will see tiny pieces of wax particles on surface of base caused by the brushing. If you leave these particles on the base they get pushed back into the base structure, which causes an uneven structure. Therefore, we use a Soft Nylon Brush to lightly whisk away any wax particles on the surface from brushing and scraping.

Also, use the Soft Nylon Brush to remove residue after “Corking” Fluoro powders into base. Soft brushes will open base structure, to reduce the polished finish that causes suction, with minimal removal of Fluoro powders.

Horsehair: Used after waxing and nylon brush, neutralizes the static charge. Horsehair whisks away particles of warmer temp. range waxes and can be used for colder range waxes.

14. HOT WAXING THE BASE

When: Ideally skis & boards should be waxed before every trip onto the slopes or at least every second or third time out.

Why: The bases are made with a material that will dry out if not regularly hot waxed. If your base dries out it will not perform well and will tend to stick to the snow.

How: The first step to waxing your base is to clean your base (**picture # 10**), from dirt, oil, old wax, the edge filings and other debris created from base repair and sharpening, with the KUU **Bio Citron Base Cleaner**. Spray the base liberally with the Bio Citron Base Cleaner. Leave the base cleaner on for about 1 minute and wipe base clean before it dries, with a clean cloth. Scrape off the old wax and then use the cloth again to remove the excess base cleaner from the base, you are now ready to begin Hot Waxing

Picture #10



Picture # 11



Structuring your base is done now (see sec. **12 Base Structure**)

Once your base is clean the next step is to choose which wax to use. Once you have chosen the wax (see page 20), plug in your KUU **Hot Wax Iron** and wait for it to rise to the temperature to where the wax melts easily, without smoking. If the wax is smoking the iron is too hot. When the iron is sufficiently hot, hold the iron over the base with the tip pointing down to where you want to drip the wax. Put the bar of wax to the bottom of the iron and drip the wax on to the base (**picture # 11**). Run beads of wax all over the base so that every drip of wax can be melted to meet the next drip, in order to cover the whole base. Once done dripping the wax on the base spread the wax out with the iron flat on the base so that you cover the entire base. Always keep the iron moving. Wax from tip to tail and allow app. 3" of wet wax to trail the iron during the spreading of the wax (remember do not allow the wax to smoke).

After the wax has hardened use a sharp KUU *plexi scraper* to remove the excess wax from the base (**picture #11**) and edges (**picture #12**). The base material has absorbed all the wax you need, so scrape off all you can. The base needs to be level so that proper gliding and turning ability is achieved with your equipment. It is a combination of your base and structuring wax that will give you the optimum gliding properties.

With experience you will get a feel for how much wax to apply. Remember to wax your bases and edges at the end of the season and do not scrape the wax off the base or edges, this prevents damage, oxidization (rusting) and base drying during summer storage.

Picture # 11



Picture # 12



15. ADVANCED HOT WAXING

Wax Curing: Cooling the wax and base at room temperature is fine for general waxing, shop and rental purposes.

COLD SHOCK CURING : This is the method, developed by KUU Wax Technologies and is used for competition. If the snowboard or skis are placed out in the cold or base down in the snow, right after waxing, the surface area of the base and wax forms a tighter molecule structure that locks MORE wax and FURTHER into the base than conventional methods.

Durability: We have found that wax and bases wear more quickly along the base edges, particularly along the edges in the mid. board section. Wear near the edges is caused by the force/pressure of carving, sliding and stopping,. In order to increase the “wear” factor, we run a very small bead of the next recommended colder temp. wax along the two of the edges of the base. Colder temp. wax is more durable and will therefore last longer.

**Dripping the wax
on to the base**



**Ironing the wax
into the base**



16. KUU WAX SELECTION CHART

There are several types of waxes available and they all strive to do the same thing and that is to reduce the drag between the base and the snow to allow for easier stopping, turning and gliding (speed). The reason for different waxes is to respond to the varieties of temperature, texture and water content of the snow. Another reason for different waxes is the performance level, there are premium *compound*, *fluoro* and *graphite Competition* waxes and traditional *hydrocarbon Performance* waxes. The hydrocarbon waxes are fine products that have stood the tests of time for every day & training use and are usually less expensive. The compound, fluoro and graphite *Competition* waxes are more effective and more expensive. Everyone should have some hydrocarbon waxes in their tuning kit and racers or those looking to get the right wax in those extreme conditions should also have a selection of *Competition* premium waxes. KUU waxes have 3 effective temperature ranges, and offer each line of wax in three temperature combinations; *spring*, *universal* and *cold* weather wax bars. Rub-on and spray waxes are easily applied and can be very effective. Hot waxing the wax into the base will result in a durable wax finish. KUU waxes are uniquely formulated for all situations.

WORLD CUP CHAMPION KUU SPEED WAXES

SPEED & MAX Waxes #1

Hydrocarbon & Graphite 3 Temp.

180g & 50g (Max Wax is scented!)

Hot Waxes

Hydrocarbon 3 Temperature Speed / Max Wax -180g & 50g - #1
Graphite 3 Temperature Racing / Max Wax -180g & 50g
Hi-Fluoro Wax-3 Temp. Race / Max Wax (Cold lo- fluoro) -180g & 50g
Mach II BLUE - Premium Synthetic Compound
(Cold temp). wax -60g bar - #2
Mach II WHITE & RED - Premium Graphed Compound
(Spring & Uni.) temp. wax -60g - #2

Spray & Rub-On Waxes

A & S - Spray - Fluorinated liquid wax. -112ml #3
WHITE LIGHTNING/SPEED CREAM - Kf & Si Paste Wax - 80g - #4
KUU Kf Fluorinated 100% Powder Enhancer -1.7oz #5



"NEW" Fluoro SPEED Block - Rub On - 30g - #6

KUU Liquid wax (for sintered bases)



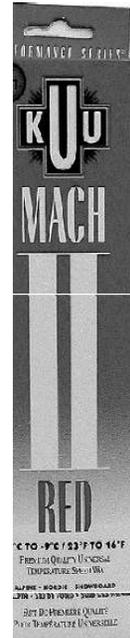
KUU COMPETITION WAXES

MACH II SERIES #2

Revolutionary compound speed waxes:

Mach II White & Red.
Top speed from;
0 to -9C (32 to 16F)

Mach II Blue *Unbeatable*
cold weather compound
wax; -9 to -30C!! (16 to -22F)



Flourinated 100% Powder Enhancer,

For extra speed rub over wax of the day.
Wax speed enhancer.



Graphite Low Fluoro Speed Block

Rub on or hot



17. CONCLUSION & TIPS

There are a couple of things you can do after each time out on the slopes that will greatly reduce the amount of time spent repairing equipment.

First is to *wipe the base and edges dry when the day is over* and store the board/ski base up against a wall or on the floor. Take a dry cloth and wipe off all excess snow and water to prevent rusting.

Second, take the dry board and quickly *sharpen them after or before each time out*. This will take only 5 to 10 minutes if you do it each time, as opposed to the 20 to 30 minutes it can take, if left for a prolonged time.

You are now ready to roll, rip, tear, fly, smoke, whatever word you use, it is all about having fun and making friends with gravity. With a bit of experience tuning and waxing, you will understand how others were able to do what they did and you will also understand why you weren't getting along with gravity as well as you are now.

Should you have any questions, ask your local shop or e-mail us at:

kuu@kuu.com

**SPEED CHANGES YOU & KUU WILL HELP YOU MAKE
THE CHANGE**