

SNOW
EAST!

Chip Dwyer

Chip Dwyer is a PSIA Level III Ski Professional at the Killington Ski School and Master Fit certified bootfitter at Northern SkiWorks.

BOOT CAMP! Know the Terminology

Boots have many features and options and this can be confusing to the average skier. Let's define some of these features.

Liner-Used to cushion your foot and leg from the hard shell and to fit your foot, ankle and lower leg in it. Liners have come along way from the days when out of the box fit hurt and required break-in time. There are three kinds of liners available; stock liners, foam liners (using tubes to fill the liner with foam or silicon) and thermo-fit liners. Bootfitters usually recommend the stock liners for the average skier. For hard to fit feet, foam liners or thermo-fit liners usually work better. Thermo-fit liners are heated in an oven and mold to your foot, but need a close fitting shell to work well. They are a good choice for feet that are always cold. Foam liners are often used by racers and skiers with "problem fit" feet.

Zeppa - Also known as the boot board, the Zeppa is the base support in the base of the boot shell. Made of hard plastic it can affect balance in a big way. The combination of the zeppa angle called ramp angle (4-6 degrees) and forward lean (12-20 degrees) can match your ankle flexibility and help your fore-aft balance. Some boots come with a way to adjust the angle of the zeppa by raising or lowering the heel. Good bootfitters can modify the Zeppa for balance using heel lifts or by grinding. Bootfitters also grind off any arch support before installing a custom insole. Performance zeppas can be made of carbon fiber for racing and firm rubber for freestyle skiing.

Upper Cuff Adjustment - These are the shell adjusters located on the outside and inside of the ankle area. They adjust the upper cuff to match the lower leg when standing naturally at a hip width stance. Some boots have a good range of adjustment while others are limited or lack this adjustment. Some have the word "Canting" next to these adjusters but the upper cuff adjustment is only one of the four steps needed to cant a skier to ensure good lateral balance.

Buckles - On four buckle overlap boots, the middle two buckles are the most important because they hold your foot in the liner heel pocket. Most boots have a large range of adjustment on the upper buckles but you should have your bootfitter explain how to operate them. Boots with an extra adjustment range can allow for a large calf to be accommodated without modifying the buckle placement. Note: The tightness of the



photography courtesy of Technica Boots

continued on page 4

continued from page 3

upper buckle will affect the forward flex.

Forward Flex Adjustment - Usually located on the back of the boot, this adjustment changes the boots resistance to flexing forward. Many skiers change this adjustment as their skiing improves or to stiffen the boot in warm weather skiing when temperature softens the shell.

Power Strap - This is usually a velcro strap at the top of the boot that acts like a fifth buckle to improve the upper boots ability to move with the lower leg. Some come with elastic straps to give more rebound or can be changed to a "Booster Strap." One modification is to place the power strap inside the plastic tongue of the boot to help shin and tongue contact. This feature helps skiers to not get caught in an over-flexed position and can aid shin comfort.

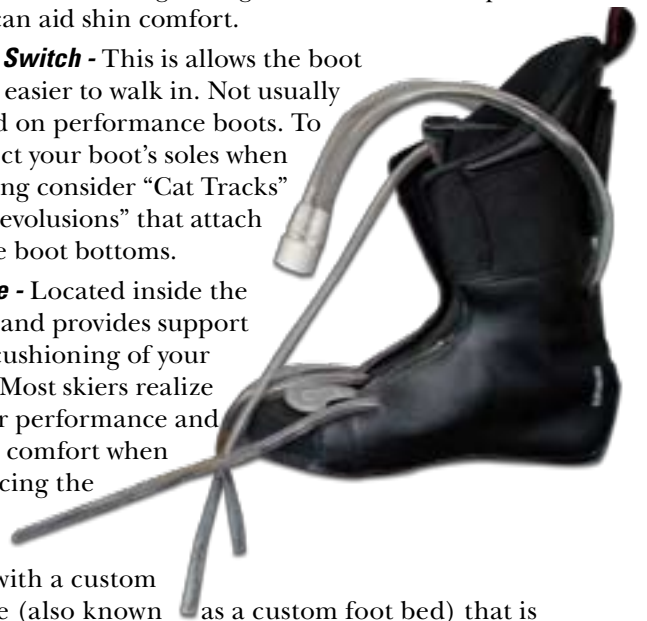
Walk Switch - This allows the boot to be easier to walk in. Not usually found on performance boots. To protect your boot's soles when walking consider "Cat Tracks" or "Revolutions" that attach to the boot bottoms.

Insole - Located inside the liner and provides support and cushioning of your foot. Most skiers realize better performance and more comfort when replacing the stock

insole with a custom insole (also known as a custom foot bed) that is molded to their foot. Insoles have a big effect on balance both laterally and front to back. Having your foot held in a balanced position is one of the four steps in the canting process.

Forward Lean Adjustment - This allows changes to the angle that your shin makes with the boot. By using this adjustment, you are able to change your stance and center of mass.

These are the basic terms of ski boot features. Our next column will be about the different types of boots, from racing to entry level, and the modifications bootfitters do to improve fit, comfort and performance. ❄️



Ask us about our Ski Packages!

Lake Placid's environmentally friendly hotel is located directly on the lake and in the heart of the Olympic Village.

A completely non-smoking resort.



Golden Arrow Lakeside Resort
LAKE PLACID, NY

800-582-5540 • www.golden-arrow.com



photography courtesy of DaleBoots