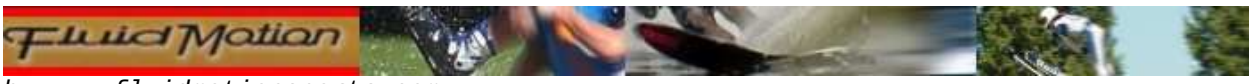


by www.fluidmotionsports.com

Heat Moldable Water Ski Boot Fitment Manual

Revision Date: 07 February 2017

BOOT MOLDING Instructions

Welcome to a new era in water-skiing. The fit, comfort and durability of the Fluid Motion Universal boots are unmatched. Their lightweight materials, heat moldable fit and design translate into top performances.

Liner & Shell Height Adjustment

The height of the boot shell and liner is based on personal preference and use factors. Advanced short line slalom users will look to lower the boot shell cuff and trim the boot shell lower at the back to allow the ski to be moved ahead at the second wake. If you are experiencing ankle difficulties, a higher boot cuff is desirable until the ankle is fully healed.

Trick users often want a higher boot than for slalom, for stabilizing manoeuvres and generating power into the wake. The stock height is recommended for trick skiing.

If modifying, be sure to leave at least 1-1.5" of liner above the boot shell's final height. The liner should be trimmed with scissors or a knife BEFORE molding. The boot shell can be trimmed with very sharp & heavy duty scissors or tin snips. In both cases make a line first then cut to the line.

The top edge of the Universal liner should be loop sewn by machine or by hand. A fabric border may also be sewn on. A trimmed edge may be left as is without detriment to performance.

Liner Heat Molding

The liners may be heat molded more than once. The liner can expand 6-8 sizes or "soak-up" about 1-2 sizes. If the boot feels too large, an insert kit can be ordered to take up space in the boot bottom with the same Ultralon EVA foam. If a boot shell is very tight, order a liner several sizes too small and heat mold upward to stretch the foam thin.

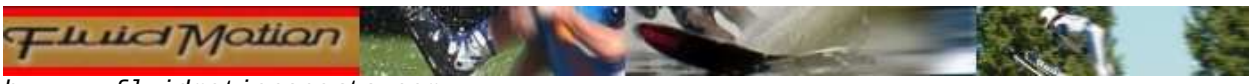
For **Slalom** boots and the **Double Six Slalom** system we are using Denali style liners in actual or slightly smaller than shoe size.

Both the Denali and Universal liners in smaller sizing can be stretched under heat. This technique provides a performance fit that is thinner in the forefoot and has a lower cuff. The more they are stretched the thinner the forefoot, but more force is required to mold.

Before using an oven at home for molding, you may want to contact ski boot shops as they have ovens and equipment dedicated for boot fitment. Some shops have heaters with pipes that can mold the liner and the shell together. Heating the liner and boot shell by injecting air at no more than **250 DegF,** then inserting the foot is an effective method to achieve the custom fit.

If this is not an option, the entire liner (removed from shell of course) can be molded at home in a suitable convection oven. Because of variables in the process we offer no warranty or guarantees as to the outcome of this method. Do so **AT YOUR OWN RISK. Beware of a fire hazard - Use caution, the liner must NOT TOUCH or come close to the oven heating elements.** Mold in a well-ventilated area, since the glue used may emit some vapour.

The oven MUST BE PRE-HEATED to **250 DegF**. A FAN driven convection oven is strongly suggested, or carefully heat turning over repeatedly in a PRE-HEATED regular oven, on a double formed cookie sheet at no more than **250 DegF**. Use a thermometer for confirmation of temperature if possible. A temporary plastic tongue is an option – see step #4.



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Steps for Oven Molding

1. Pre-heat oven to 250DegF. Use a DRY Sock, then cover your foot in a plastic bag (like a kitchen or shopping bag).

2. Put the liner in the oven, on a double cookie sheet for 7-10 min, it will go real rubbery and lose its molded shape to look sort of like an oven mitt. You can also use a tin foil covering to protect the liner from oven hot-spots. A laser-aimed thermometer (Ebay about $65) is a great tool to determine oven and liner temperatures, and for other things as well.

3. Wear some cloth gloves. Immediately after removal from the oven, insert the foot into the liner and stretch out the liner in the toe area, carefully pulling the liner up and higher but not too hard. We also use our hand to form some extra room in the heel pocket, which makes for toe room later.

Then insert the foot and liner into the shell. You may also try putting the liner into the boot first, followed by the foot. Which method to use depends on the boot and liner used. Now shape and overlap the liner tightly, and buckle the boot, as quickly as possible. **If your foot feels uncomfortably hot, then remove, change your sock/check the temperature and try again.**

4. For extra toe room, use several cut-off socks, or a small cloth in your toe area (to create a toe cap). Slide your foot into the boot/liner.

5. OPTIONALLY - like most in-line boots, insert a make-shift plastic "tongue" to compress the liner under the buckles. We use a plastic tongue cut from a Rubber Maid bin top. The tongue is 5” long by about 2” wide.

6. Do up the buckles reasonably snug and flex forward to set the heel. Sit down, or for a more compressed foot bed, stand up and wait until formed and cooled (5-10 minutes). Unbuckle and you are done.

The liner may be molded multiple times. If the liner has an outer layer of nylon, be careful that hot spots do not occur as this breaks down the glue and materials. If after molding the fit is tight in areas such as the toe, a heat gun may be used to soften and expand the plastic of the boot shell, to relieve pressure.

Foot Bed or Heel Lift Heat Molding

A foot bed is required when volume needs to be subtracted from the boot shell to produce a tighter fit for smaller or thinner feet. The heat molded foot bed may be used on its own with other types of liners.

1. Cut the EVA foam soles to suit to the boot shell floor or for internal sole of the liner. For a heel lift use ½ the sole up to the start of the foot’s arch (about 3-4 inches). Heat the soles at 250DegF for 10 minutes. This is the same procedure as for the liners.
2. Insert the heated foam into the boot or liner and follow with the foot. Stand on the sole to mold.
3. When cooled (about 10 minutes) use the adhesive tape provided to fix the sole in place if desired.

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