



REVO Single Boot System

Binding Installation Manual

Revision Date: August 2016



REVO Sub-Z :Toe Clamp / Heel Release-Clamp



REVO MAX: Toe Block / Silvretta Release



REVO AIR: Toe Clamp/Heel Clamp



REVO ST: Toe Clamp/Silvretta Release





Note: Some bindings are shown with custom options and colors.

Introduction

Congratulations on your purchase of the FM Revo Single Boot System, a high performance and light-weight water ski binder of unmatched quality and durability. FM designed the Revo as a single boot system to satisfy the most demanding competitors. The fit, performance and durability of the Revo has propelled skiers to new levels for both the **Men's and Women's World Records.**

Please review this manual carefully and read all warnings & disclaimers contained at the end of this document.

Installation

- 1. Mark a centre line on the ski to ensure the plates are aligned correctly. Measure the desired location of the front boot heel or other reference and mark this point on the ski with a "Sharpee" or similar felt tip marker.
- 2. Mount plate so the reference point on the boot is on the desired mark. Ensure the toe center line of the boot is slightly toe out (e.g 1/8") and heel is on ski center. You may also have your own settings.
- Use at least six screws to mount the plate, preferably 8 (4 front, 4 rear). Additional screws may be used for added security.
- 4. Silvretta Unit: The Chrome bar of the Silvretta release unit should be angled slightly back (toward back of ski) as shown in the photo at right. If the bar is leaning back too far, the release unit is difficult to clamp-in and prone to prerelease. If too far forward, the forward clamping pressure on the boot will be weak.
- 5. **Toe Clamp:** The Toe Clamping Buckle is set before inserting the boot. Loosen the buckle to grab more of the





boot toe and insert the boot deeper into the toe piece. Tighten the buckle to have less of the boot in the toe piece clamp. The buckle strap should be tight to the top of the boot. If the boot is inserted too far into the toe piece, it may impede the release of the boot. Clamp the boot in a position where the Slivretta Release Unit has sufficient forward and downward pressure in securing the heel of the boot.

6. All boots - TEST the release settings before on-water use.

Sub-Z Heel Clamp / Release Setting

The Sub-Z is a hybrid binding featuring "rubber" style of release with hardshell performance. The Sub-Z utilizes FM's industry-first heel clamp system allowing the boot to exit the binding plate under a firm upward force.

The level of heel-hold is adjusted simply by moving or tightening the heel clamp buckle to the desired position in the receptor side.

Center the rubber dowel on the boot ledge when the binding is in the closed position.

If it loosens over time, adjust the Sub-Z two inch heel retention web-strap to be reasonably taught or just snug when the binding is in the closed position.

Test the Sub-Z binding while wet. Ideally you should be able to firmly pull the ski tip and release from the ski while stationary in the water and similar to a high-wrap slalom binding.



Silvretta Release Tension Settings

The release tension is set by turning the adjusting the screw located at the top of the release unit (400) or under a cover at the top of the release unit (404). Settings will vary dependent on the skier and set-up. An indicator bar (shown right) moves in the window to show the release spring tension.

Heavier skiers can run higher settings, in particular if you have a smaller boot. Large-XL boots and lighter skiers should run a bit lower settings due to the increased fulcrum point of the sole or less body weight, respectively.

Just a small amount of turning on the adjustment screw will make substantial changes to the release tension in between **4 and 6**. Always start testing with a very low setting and work upward to a firmly held but comfortable release setting. Lighter skiers or recreational skiers will want to setup between 4 and 5. Pro-calibre skiers can set the release setting higher 6-7 ish. Trick skiers may require higher settings than slalom skiers, due to aggressive movements on the ski. We suggest you wet the release unit with lake water when testing to ensure accurate function.



▲ Note that we have found settings of over 6 (six) potentially overload the capacity of the boot and liner to protect the skier. Also damage may occur to the boot or plate at elevated release settings.

Self-Testing Release Settings

Be sure to take a minute to twist and work the boots into the hook pad or wake heel pad when first placing the boots on the plate/ski (if applicable).

Wet the binding mechanisms with mix of water & drop of soap, for accurate release testing.

Land testing release settings: Remove the fin (for slalom) from the ski or support the rear of the ski with a block and buckle yourself into the boot. Block the tip and tail – I use a large sofa to hold the back of the ski or have friend hold the ski's tail down.

Using a chair or large sofa to stabilize yourself, you should be able to release comfortably in a simulated "out-the front fall" by walking out over the front of the ski in an authoritative and forceful movement. BE MINDFUL OF THE SILVRETTA RELEASE UNIT WHICH CAN SNAP BACK WITH A HARD AND RAPID MOVEMENT.

The amount of heel retention force is up to the user. Too high a force and the design limit of the boots, boot buckles, and inserts on the ski are exceeded and it hurts. Also keep in mind that standard rubber bindings have fairly low heel retention force (30-70lbs) with a toe strap being the lowest (=zero).

We have found the maximum heel retention force, before the boots and lower legs are overloaded is APPROXIMATELY ½ body weight to a MAX in the range of 65-85 lbs. If the heel retention force is any higher, the boots deform and the lower legs can be exposed to injury. We recommend you visit a ski pro-shop that specializes in binding adjustment to verify your settings if you have any doubts or questions.

Skiing Your New FM Boot

FM Boots are constructed from the highest quality materials. The advanced plastics and foams do require usage to fully break in for optimum performance and fit. To start the break-in period, ski at 2- 4 mph lower than normal and ski outside of the course (free ski). Graduate to higher speeds and the slalom/trick course after a few successful sets to "dial-in" to the new equipment. The advanced technologies introduced by Fluid Motion sometimes require adjustments in technique. Performance increases are well proven however, so some time and patience may be required.

Any questions – please write to pjager@jageng.com. No binding system can protect you from injury in every situation encountered on the water. By following certain rules you can minimize risks. Some tips are: 1. Make sure your ski and fin settings are well tuned. 2. Do not advance to the next speed or line increment unless you are skiing well within the limits afforded by your conditioning, ability and equipment tuning. 3. Always start at lower speeds and longer lines when testing new settings or equipment. 4. Ski smart and in-control, and do not impact fixed objects including gate balls, turn balls and other hazards.

Similar to conventional "rubber" boots, skiing in lower temperatures may require lower release settings. Always test the boots at lake temperature. Skiing in higher temperatures may require higher settings.

Warranty

All parts are warranted for **90 days**: Rear release unit & plate, aluminium toe clamp and toe piece, Boot shells and Liners. Fluid Motion systems are designed to be fault tolerant, but there is no substitute for safe skiing. Shutdown your run if you are late, narrow or encounter excessive slack line. Do not impact fixed objects such as turn balls, or gate balls. Consult a professional regarding ski tuning. A properly tuned ski is also a safe ski, and crashes are very infrequent.

In no event shall Jagersport.com be liable for incidental or consequential damages, shipping or remounting costs. Shipment charges are the responsibility of the customer.

PLEASE HAVE QUALIFIED PERSONNEL INSTALL THESE BINDINGS. THESE INSTRUCTIONS ARE INTENDED FOR QUALIFIED PERSONNEL who are familiar with water ski construction, marine hardware, water-ski binding systems, ski inserts, epoxies and adhesives, shop tools and supplies.

RELEASE OF LIABILITY, WAIVER OF CLAIMS, AND INDEMNITY AGREEMENT

READ CAREFULLY:

BY SIGNING THIS AGREEMENT, YOU WILL WAIVE CERTAIN LEGAL RIGHTS, INCLUDING THE RIGHT TO SUE

To: Fluid Motions Sports and Jager Engineering Inc.

In consideration of the use of the System, I hereby agree as follows:

To waive any and all claims that I have or may in the future against Fluid Motion Sports and Jager Engineering Inc. and all representatives, employees, directors or agents thereof (collectively the "*Releasees*") and to release the Releasees from any liability or loss, damages, injuries or expenses that I may suffer or that my next of kin may suffer as a result of or arising our out of any aspect of my use of the System DUE TO ANY CAUSE WHATSOEVER INCLUDING NEGLIGENCE, BREACH OF CONTRACT OR WARRANTY ON THE PART OF THE RELEASEES with respect to the design, manufacture, selection, installation, maintenance or adjustment of the System or with respect to the provision of or the failure to provide any warnings, directions, instructions, or guidance as to use of the System.

TO HOLD HARMLESS AND INDEMNIFY THE RELEASEES from any loss, damage, injury or expense to any third party resulting form the use of the System.

This Agreement shall be binding upon my heirs, next of kin, executors, administrators, assigns and representatives, in the event of my death or incapacity.

This Agreement shall be governed by and interpreted in accordance with the laws of the Province of British Columbia, Canada. All proceedings involving parts to this Agreement shall be brought within the Province of British Columbia, Canada.

I HAVE READ AND UNDERSTAND THIS AGREEMENT AND AGREE THAT BY SIGNING THIS AGREEMENT I AM WAIVING CERTAIN LEGAL RIGHTS WHICH I OR MY HEIRS, NEXT OF KIN, EXECUTORS, ADMINISTRATORS, ASSIGNS AND REPRESENTATIVES MAY HAVE AGAINST THE RELEASEES.

Signed this	day of	, 2
Name (Print)		
Signature		
Witness Name		