

Revo 4000

Stringing Machine

- 360° Racquet Rotation
- Diamond-dusted swivel clamps with dial adjustments
- Spring-Action Locking Levers
- 6-Point “Wide-Stretch” Mounting Arms
- Linear String Gripper
- Crank Tension Mechanism
- Reversible Crank Handle
- Convenient Tool Storage Area

GENERAL INFORMATION

WARRANTY

The Revo 4000 has a 5-year limited warranty. The string clamps have a 2-year limited warranty. The limited warranty pertains to any parts deemed defective by the manufacturer.

MAINTENANCE

- The string clamps will have to be cleaned on a regular basis. Take rubbing alcohol and clean inside the jaws of the stringing clamp. This procedure will remove oil and grit buildup.
- Use silicon spray to lubricate the rails that the swivel bases run on. This will allow the swivel bases to slide smoothly.
- Always keep the machine covered and in a dry area when not in use.

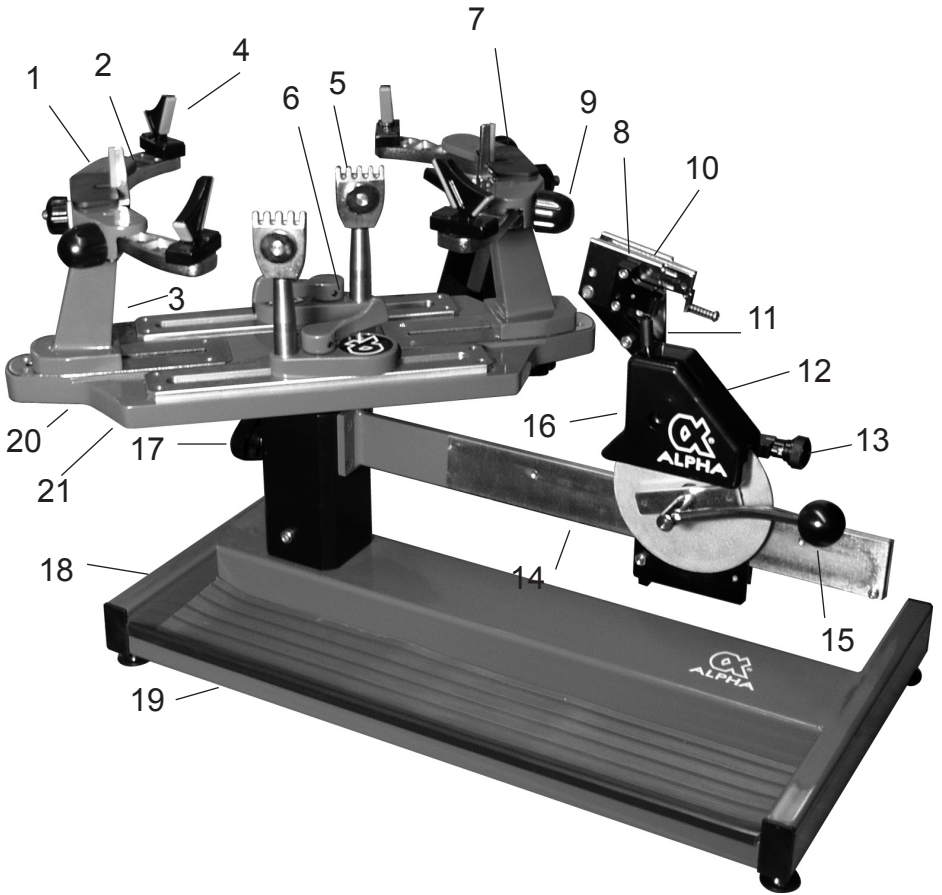
TECH SUPPORT

For any questions regarding the use of your stringing machine, please call Alpha Racquet Sports. Alpha Racquet Sports does not provide stringing patterns. To obtain patterns, contact the racquet's manufacturer or join the United States Racquets Stringers Association at (858) 481-3545.

TABLE OF CONTENTS

I. DIAGRAM.....	4
II. COMPONENT PARTS LIST.....	5
III. MOUNTING THE FRAME.....	6
IV. PREPARATION OF STRINGING.....	8
V. STRINGING THE FRAME.....	9
VI. CALIBRATION OF THE MACHINE....	14
VII. CLAMP BASE ADJUSTMENT.....	16

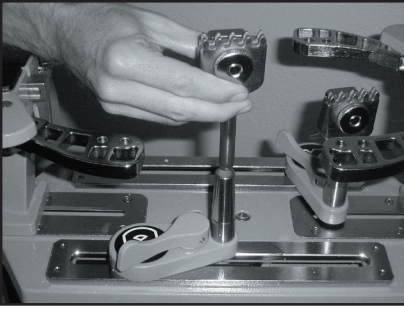
DIAGRAM



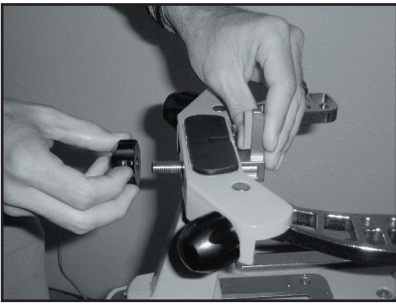
COMPONENT LIST

1. MOUNTING ARM-MAIN
2. MOUNTING ARM
3. VISE POST
4. FRAME SUPPORT
5. DIAL ADJUSTMENT STRING CLAMP
6. CLAMP BASE LOCKING LEVER
7. HEAD/THROAT FRAME SUPPORT
8. LOCKING LEVER CATCHER
9. MOUNTING ARM ADJUSTMENT KNOB
10. STRING GRIPPER
11. LOCKING LEVER
12. TENSION HEAD
13. TENSION ADJUSTMENT KNOB
14. TENSION ARM
15. REVERSIBLE TENSION CRANK
16. TENSION HEAD COVER
17. BRAKE KNOB
18. TABLE TOP BASE
19. TOOL TRAY
20. VISE POST LOCKING KNOB
21. MOUNTING SYSTEM BASE

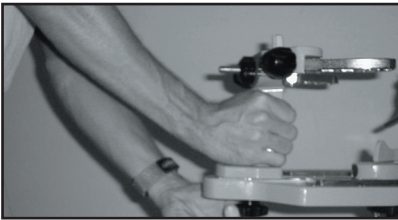
MOUNTING THE FRAME



Place clamp on the swivel bases.



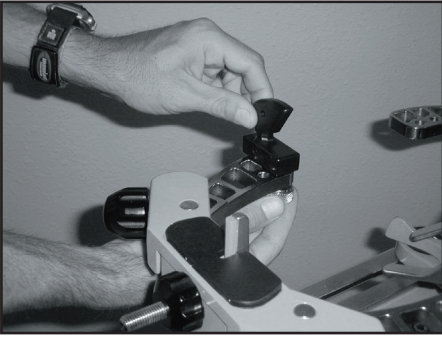
Loosen and remove the fine adjustment knobs, flip the head/throat frame supports so that they (supports) are each in an upward position. Replace the fine adjustment knobs.



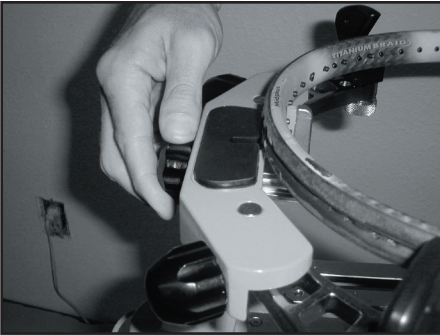
To accommodate the length of each racquet, adjust the mounting arm post by loosening the mounting post

adjustment knob. Once the correct adjustment is reached, tighten the mounting post adjustment knob. **CAUTION:** Make sure that both the mounting post and the adjustment knobs are tightened and secured. Not doing this will allow the mounting arms to creep forward during the stringing process and cause damage to the racquet. **NOTE:** Both mounting arms are identical, the racquet can be mounted either way.

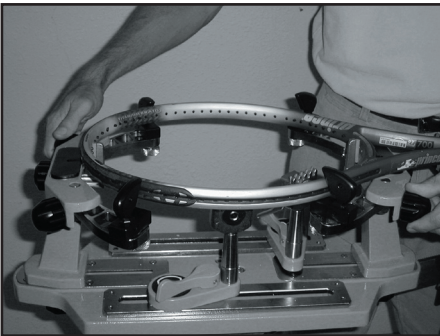
MOUNTING THE FRAME CONT'D.



Insert the frame supports into the appropriate slots located on the end of the mounting arms. The two slots are designed to accommodate most racquets.

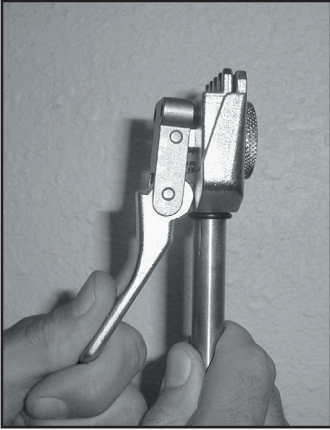


Make adjustments by turning the fine adjustment knobs. The fit should be snug.



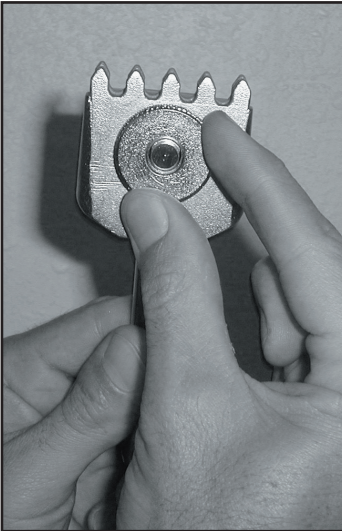
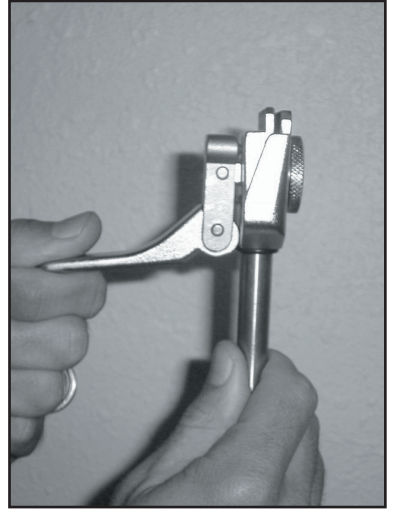
Turn the mounting arm adjustment knobs so that the angled frame support the fit up against the frame. The fit should be snug, but use caution. **NOTE:** Over-tightening can cause premature stress on the frame.

PREPARATION OF STRINGING



To clamp the string, squeeze the toggle to close.

To release the string, pull the toggle to open.



To tighten, turn the dial clockwise. To loosen, turn the dial counter-clockwise. **NOTE:** Before stringing a racquet, the tension on the string clamp has to be adjusted with the type of string gauge being used. If the string is of a thin gauge (16L, 17, or 18) then the string clamp may need to be tightened. If the string gauge is thick (15, 15L, or 16) then the string clamp may need to be loosened.

STRINGING THE FRAME

To set the tension, there are two adjustments. The first is to move the marker to the nearest hash mark of the desired tension. The hash marks on the scale are in three-



pound increments. The second adjustment is to fine tune the tension with the hash marks located on the knob's collar. The hash marks on the collar are in one-pound increments. For example, to set the tension at 62 pounds, turn the knob so that the marker matches to 60 pound hash mark on the scale. The 0 hash mark should be lined up with the platform's hash mark. Next, turn the collar two one-pound increments. The 2 pound hash mark should now be aligned with the platform's hash mark. Your tension setting is now 62 pounds. NOTE: When the machine is not in use, release the tension on the spring by setting back down to 9 pounds.

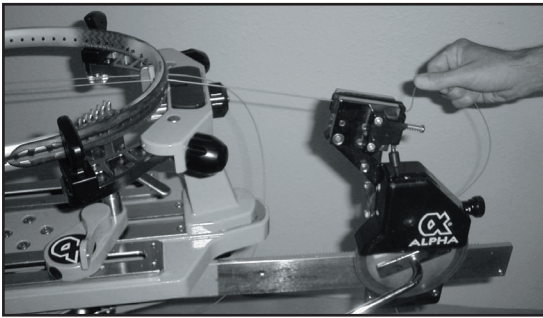
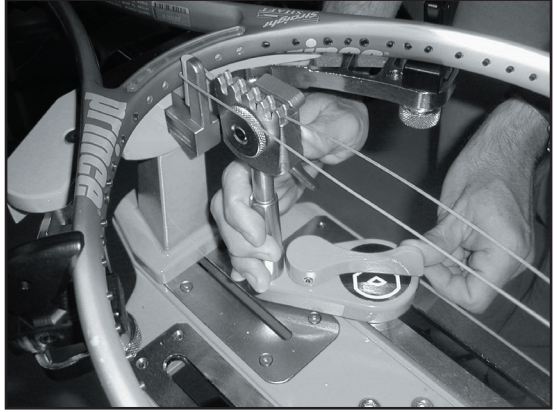
STRINGING THE FRAME CONT'D.

To determine whether the mains are at the top or the boom of the frame, count the number of holes in the open throat area. For 4 to 8 holes, start at the top of the frame. For 2, 6, or 10 holes start at the throat. You must also determine whether the racquet requires a one-piece stringing or two piece string pattern. One-piece stringing means that you will use one continuous piece of string for the whole racquet. This is where 25% of the string length will be used to string the short side (one half of the main strings). The other 75% of the string will cover the other half of the mains and all the crosses. DO NOT cut the string for a one piece string job. Two-piece stringing means that you will use two pieces, usually the same string set (unless it is a hybrid). The string must be cut to accommodate the appropriate length for the mains (usually 20'). The rest of the string set will be used the crosses.

The center of the frame supports (6 and 12 o'clock positions) divide the racquet in half. Looking at the racquet from the butt end, the first hole on the left would be considered the 1st left main and the first hole on the right would be the 1st right main. Thread the two ends of the main strings through the 1st left main and the 1st right main. Do this at the throat of the racquet.

STRINGING THE FRAME CONT'D.

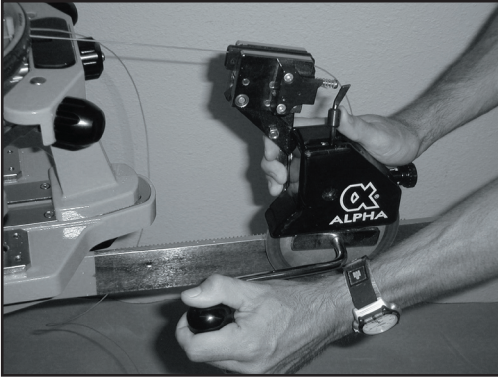
Clamp the 1st left main down at the throat and lock the blue swivel base.



Take the 1st right main and load the string in the jaws of the gripper. After loading the string, pull it at an angle to create resistance and to

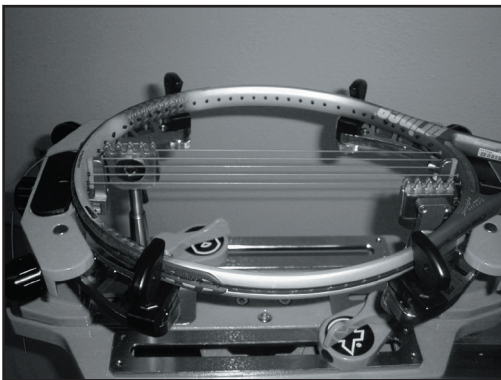
prevent the string from slipping. Grab the handle and rotate the tension head away from the racquet. Keep rotating until the latch “pops” out and activates the brake. This will keep the tension head in place and allow you to release the string clamp so that it can be repositioned.

STRINGING THE FRAME CONT'D.



Once the string has been clamped, release the string from the tension head by holding the handle with the left hand and pushing the locking lever back

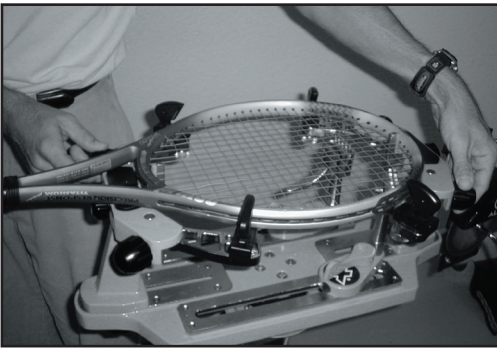
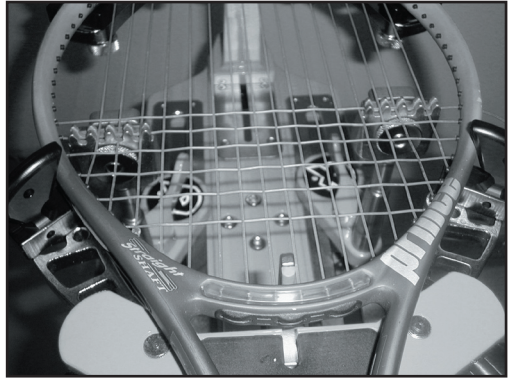
into position with the right hand. **CAUTION:** Use caution when pushing the lever back, placing the thumb high on the lever can cause the lever to “pinch” it. Rotate the tension head forward towards the racquet.



When stringing the mains, alternate by pulling one main on each side. Never pull two mains at one time.

STRINGING THE FRAME CONT'D.

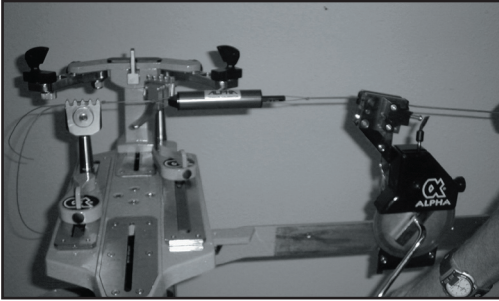
To start the crosses, make a starting knot if you are using a two-piece method. Weave the cross string by running the string over-and-under each main string. Be careful not to misweave. If you are using a one-piece string job you do not need to use a starting knot. When pulling the crosses across the mains make sure to slide the crosses up and down the mains to disburse the friction in order to prevent “notching”.



When the crosses are completed, tie off and trim the excess string. To release the racquet, release the pressure on the mounting knobs by loosening the adjustment knobs counter clockwise.

CALIBRATING THE MACHINE

Turn the mounting table so that both mounting posts are perpendicular to the tension head. Lock the mounting table in place by pulling the locking lever out.

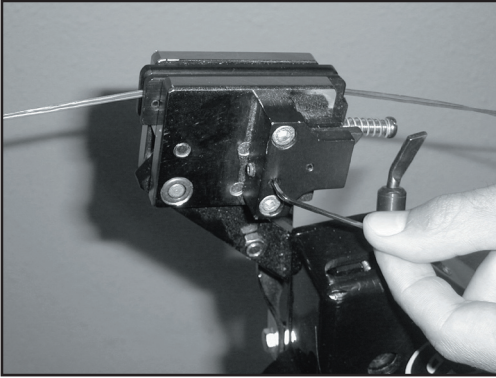


Clamp the fixed end of the tension calibrator. Load the string on the other end of the calibrator and pull tension. TIP: Make sure the clamp is positioned far enough from the tension head to allow a proper pull.

Read the tension on the calibrator to determine if the tension is correct.

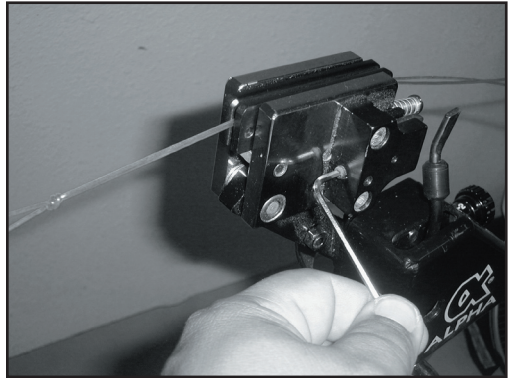


CALIBRATING THE MACHINE CONT'D.



Loosen the locking screw that is located on the side of the black housing block.

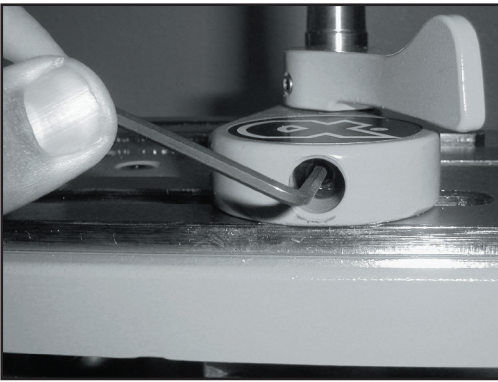
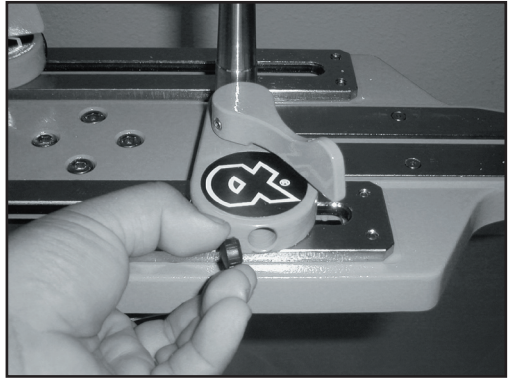
Locate the tension adjustment screw in front of the black housing block. Turn the screw counter-clockwise to make it string tighter, or clockwise to make it string looser.



IMPORTANT: Release the tension on the calibrator before making the adjustments. Repeat the process until the correct tension is pulled. Lock the locking screw so that the adjustment screw is secure.

CLAMP BASE ADJUSTMENT

Locate the black cap on the backside of the blue base. Carefully pull it off.



Turn the swivel base so that the outer port is aligned with the inner port. Take the 3mm allen key and insert into the internal adjustment screw. Turn clockwise to

increase tension. The ideal locking position for the lever should be down the center of the swivel base.