

MOMENTUM 6 USER GUIDE



TABLE OF CONTENTS:

PAGE NUMBER - PAGE DESCRIPTION

- 3. Machine Features
- 4. Assembly Instructions
 - (4) Winder Support Stand
 - (6) Drop Weight Bar Stop
 - (7) Drop Weight
 - (8) Support Posts
 - (9) Tension Bar Stop Screw
 - (10) Frame Support Posts
- 13. Mounting Racquets
 - (13) Adjusting Frame Support Posts
 - (14) Tightening Frame Supports
 - (15) Frame Shoulder Support Adjustments
 - (16) Securing the Frame
 - (18) Badminton Shoulder Support Protection Pad Installation
- 19. Stringing Your Racquet
 - (19) Setting Tension
 - (22) Clamping the First Main String
 - (23) Pulling Tension
 - (25) Clamping
 - (26) Weaving Cross Strings
 - (27) Finishing
- 28. Additional Features
 - Storage and Tool Tray
 - Wayfinding Decals
- 29. Maintenance and Adjustments
 - (29) Clamp
 - (30) Troubleshooting
 - (30) Care and Cleaning
- 31. List of Parts
 - (32) Parts List Continued
- 32. Tools and Accessories
- 33. Diagram of Parts

LIMITED WARRANTY: GAMMA Sports (GAMMA) warrants to the original purchaser that the *Momentum 6* stringing machine ("EQUIPMENT") purchased is free from defects in materials and workmanship for a period of five (5) years from the date of original purchase for mechanical parts (excluding any electrical parts and string clamps), and for a period of one (1) year from the date of purchase for any electrical parts and string clamps. Should any defects develop under normal use within the specified time periods, GAMMA will at its option, repair or replace the defective EQUIPMENT provided it is returned to GAMMA prepaid at the purchaser's expense. This warranty does not apply to any damage or defect caused by negligence, abuse, misuse, unauthorized alteration, shipping, handling, or part wear and tear as a result of normal use. Routine maintenance, adjustment, and cleaning required to ensure proper operation are the responsibility of the purchaser and are not covered under the terms of this warranty. These include, but are not limited to: String Clamp adjustment, as described on page 15, Turntable Bushing Adjustment, as described on page 15 and the Rotational String Gripper. GAMMA's obligation under this warranty is limited to repair or replacement of defective EQUIPMENT, and no one is authorized to promise any other liability. GAMMA shall in no event be liable for any incidental or consequential damages. To return defective EQUIPMENT, a return authorization (RA#) must be obtained from a GAMMA customer service representative. The RA# must be marked on the outside of the shipping carton being returned. All returns must be shipped prepaid by the customer to GAMMA. Please retain the original shipping carton and packing materials for any future shipments. GAMMA will not be responsible for machines which are not sent in the original undamaged packaging. A GAMMA Care Service Plan is also available through GAMMA customer service, call 800.333.0337 for details.



FEATURES:

- 1. Drop Weight Tensioner with 9 to 90 lbs Tension Range
- 2. Permanently Engraved Weight Scale
- 3. Patented Parallel Jaw Rotating Ratchet Gripper with Diamond Dust Coated Gripping Surfaces
- 4. Six Point "Quick Mount" Racquet Mounting System- Accommodates All Racquets
- 5. Two Advanced Composite Floating Clamps with Thumb Screw Adjustment
- 6. High Strength Die Cast Aluminum Base with Durable Painted Finish and Convenient Tool Tray
- 7. Unique Way finding sticker decal and labeling system for ease of use

100% Human Customer Support:

Toll-free at (800) 333-0337 Ext. 224 • ewan.melanfant@gammasports.com

ASSEMBLY INSTRUCTIONS

A. WINDER SUPPORT STAND INSTALLATION

STEP 1

Locate the 4 holes to attach the winder stand and align the winder stand and attachment plate with the holes.



With the machine base on it's side, hold the winder stand in place while threading the 4 screws in from the bottom. Starting with the corners will make it easy to keep the winder stand and attachment plate aligned. After each screw is threaded, fully tighten each one to secure the winder stand.



B. ENGAGING THE DROP WEIGHT BAR STOP

STEP 1

The stringing machine is shipped with the drop weight bar in the horizontal position. To limit the rotation of the drop weight bar and prevent racquet damage during stringing, the bar stop must be engaged. Hold the drop weight bar in the vertical position while turning the 5mm stop screw located on the back side of the winder stand clockwise.



C. INSTALLING THE DROP WEIGHT

STEP 1

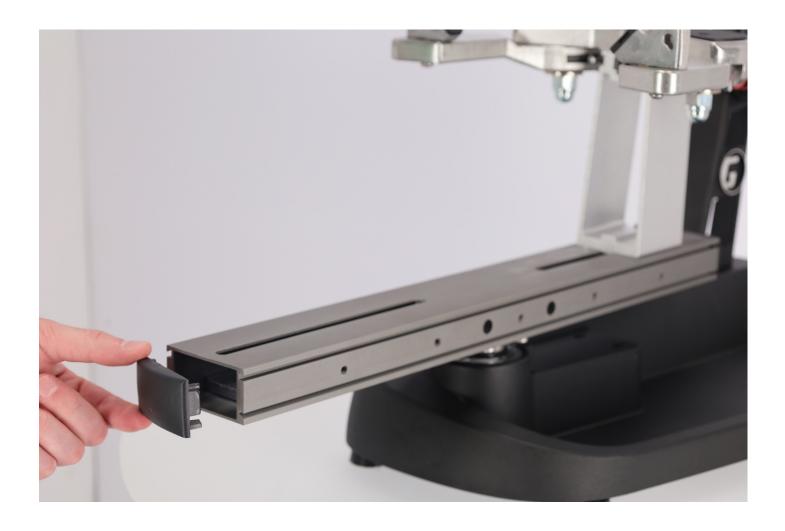
Remove the end cap from the tension bar and slide the drop weight onto the bar. The weight should be oriented with the knob end closest to the string winder. Replace the endcap.



D. SUPPORT POST INSTALLATION

STEP 1

To install the support posts you must first remove the turntable end cap by grasping the sides of the end cap and prying it free. This gives you access to the inside of the turntable. Repeat procedure on the opposite side of the turntable. If end caps are tight, a flat blade screw driver may be used to pry the end caps off



E. REMOVE MOUNTING BOLTS

STEP 1

While holding the mounting plate on the inside of the turntable remove the support post mounting bolts.

Note: There are two Nylon washers that are included for shipping purposes only. Remove and discard the nylon washers. Repeat procedure on the opposite side of the turntable.



F. INSTALLING THE FRAME SUPPORT POSTS

STEP 1

Place the support post onto the central slot of the turntable.
While holding the mounting plate against the inside top surface of the turntable with your fingers, align the hole in the support post with the hole in the mounting plate.



Install the mounting bolt through the support post and into the plate by hand and tighten with the 6 mm hex wrench.



Re-install the turntable end caps. Repeat procedure on the opposite side of the turntable.



YOUR ASSEMBLY IS NOW COMPLETE.

MOUNTING THE FRAME

A. ADJUSTING THE FRAME SUPPORT POSTS

STEP 1

Loosen the lock bolts of the frame support posts and space them apart with the frame support slides separated by the approximate length of the racquet head. Although it is not required, it is good practice to center the support posts on the turntable. Lock one of the posts in position by tightening the lock bolt and position the other post until the frame support slide is positioned near the inside surface of the racquet frame. Securely tighten the lock bolt of the second support post.



CAUTION: TO AVOID RACQUET DAMAGE, THE CENTER POSTS SHOULD NOT CONTACT THE RACQUET PRIOR TO LOCKING DOWN THE SUPPORT POSTS.

B. TIGHTENING THE FRAME SUPPORTS

STEP 1

Tighten the Frame Support Slides by turning the adjustment knob clockwise until snug against the racquet frame and slight resistance is felt.



CAUTION: OVERTIGHTENING THE CENTER SUPPORTS WILL STRETCH THE HEAD OF THE RACQUET AND COULD CAUSE RACQUET DAMAGE.

C. FRAME SHOULDER SUPPORT ADJUSTMENT

STEP 1

Being sure the shoulder supports are free to swivel in their mountings, simultaneously rotate the shoulder support adjustment knobs clockwise until both shoulder supports gently and squarely contact the frame.



D. SECURING THE FRAME

STEP 1

Adjust the position of the shoulder supports so they will contact the frame fully at approximately a right angle. Re-tighten all the frame supports in the same order as before. Do not overtighten any of the supports as racquet damage may occur. The supports should be tightened to the point where the racquet frame will not move in the mounting system when the handle is grasped, and attempts are made to move it. Should any supports lose contact with the frame while stringing they should be re-tightened.



The frame shoulder supports are equipped with a bolt and spring for adjustment. This allows the user to picot the supports without having to readjust the bolt or lose security for the frame. Users can make adjustments as desired.



E. BADMINTON SHOULDER SUPPORT PROTECTION PAD INSTALLATION

STEP 1

Slide the badminton shoulder support cover over the shoulder supports. There is no need to remove the tennis shoulder supports.



STRINGING THE FRAME

A. SETTING TENSION

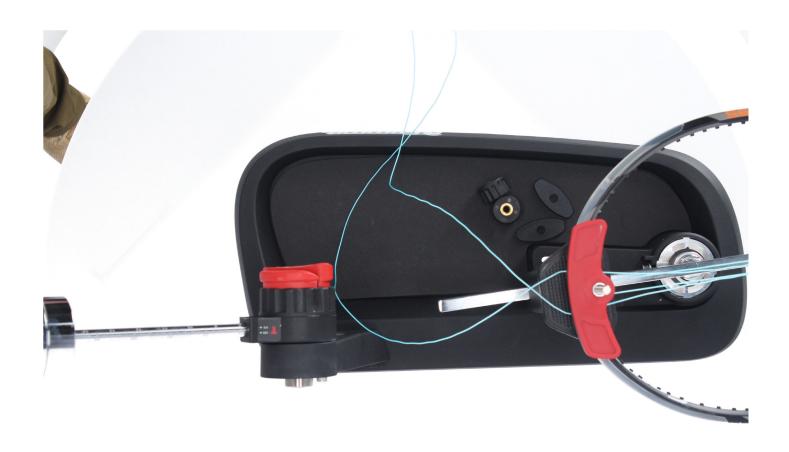
STEP 1

The drop weight is of a two-piece design. When assembled, it will accommodate tensions from 20 to 90 lbs. For tensions from 8 to 20 lbs., remove the 5mm bolt on the face of the drop weight, and use the smaller portion of the weight as described above.

Note: Tensions above 77lbs. require removal of the drop weight bar end cap.



The machine is equipped with stickers indicating the correct scales to use for stringing low and high tensions. Scales labeled for badminton should be used with the small portion of the weight.



To set the stringing tension, loosen the locking knob on the side lof the drop weight. Slide the weight in the appropriate direction until the face closest to the string gripper is indexed with the desired tension mark on the tension bar. There is a sticker on the weight indicating the correct side to use.



B. CLAMPING THE FIRST MAIN STRING

STEP 1

Thread both ends of the main string through the 2 center main grommets. Pull both ends together to maintain even length on both sides and apply the floating clamp to both strings, leaving enough space for the second clamp to fit snuggly against the frame.

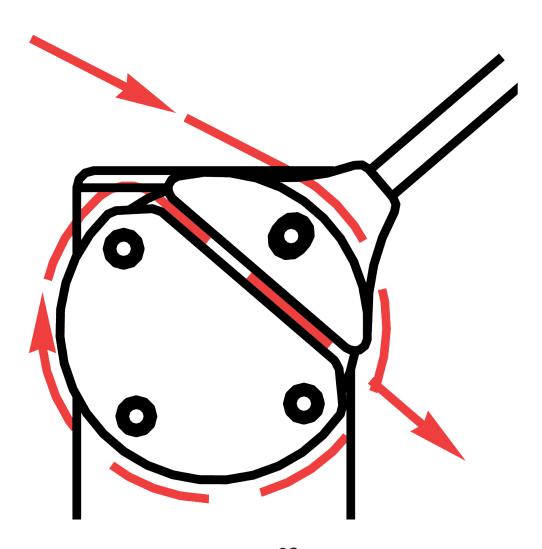


C. PULLING TENSION

STEP 1

Starting with the drop weight bar in the lowered position, wrap the free string clockwise around the gripper drum once and position between the gripper jaw. Gently turn the gripper clockwise while squeezing the jaws together until all slack in the string is removed.

Note: For proper operation, the string gripper jaw must be in the position shown. The tension in the string provides the clamping force to the jaws.



While holding the string gripper drum with your hand, lift the tension bar to approximately 45 degree angle and let fall. If the tension bar drops below horizontal, repeat the above action until the bar comes to rest parallel to the racquet. The set tension will be reached when the bar rests horizontal. If the bar comes to rest above horizontal, release the string and re-pull tension.

Manually forcing the bar into the

Manually forcing the bar into the horizontal position will greatly increase string tension and may result in racquet damage.



WARNING: TO AVOID INJURY, KEEP FINGERS AWAY FROM GRIPPER JAWS WHILE TENSIONING STRING.

D. CLAMPING THE STRING

STEP 1

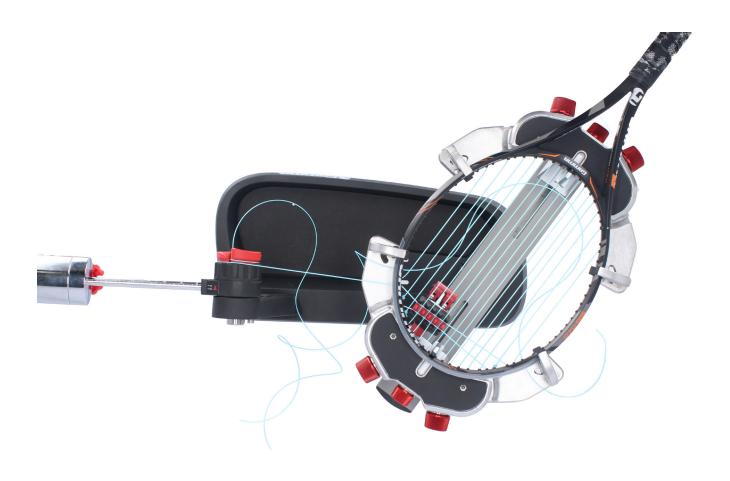
Clamp the tensioned string to the next adjacent string using the second string clamp. Release the tensioned string by raising the tension arm. Repeat the procedure for all of the remaining main strings and tie off following the racquet manufacturers recommendations.



E. WEAVING THE CROSS STRINGS

STEP 1

Follow the manufacturer's recommended stringing pattern for one or two piece stringing. This will determine the starting point for the cross strings. If applicable, tie the first cross string using an appropriate starting knot. Weave the cross strings over and under the main strings being careful to alternate the weave of each consecutive cross string so as to be opposite of the previously installed cross string.



F. FINISHING THE STRING JOB

STEP 1

Once the final cross string is tensioned and clamped, tie off at the appropriate hole specified by the racquet manufacturer and remove the frame from the mounting system.

STEP 2

First loosen the frame supports at 12 and 6 o'clock, then loosen the four shoulder supports.

ADDITIONAL FEATURES

A. STORAGE AND TOOL TRAY

The machine base incorporates ample space to store tool and accessories for easy access during stringing, and for storage when the machine is not in use. A foam pad is included with the machine but not secured.

Customers can choose to apply the pad or leave it free.





B. WAYFINDING DECALS

Decals help to guide the user through the stringing process, and weight scale labels help identify where to place the weight for different scenarios.



MAINTENANCE AND ADJUSTMENTS

A. CLAMP ADJUSTMENT

The floating clamps provided with your machine will need minor adjustments according to what string type, construction, and gauge you are using. If the strings slip through the jaws of the clamp, tighten the clamp by turning the thumb knob opposite of the handle, in the clockwise direction. If the clamps leave impressions or damage the string, they are too tight and the thumb wheel must be turned counterclockwise. The clamp jaws must be clean and free from dirt, oil, and any string coating for them to grip properly. Keep the clamp jaws clean with alcohol.



B. TROUBLE SHOOTING TIPS

PROBLEM: String slipping in clamp.

SOLUTION:

1. Adjust clamp jaw spacing.

2. Clean clamp jaws with alcohol or Gamma Cleaning Stone.

PROBLEM: String slipping in gripper.

SOLUTION:

1. Be sure to follow instructions for wrapping the string around the gripper.

2. Clean gripper jaws with alcohol or Gamma Cleaning Stone.

PROBLEM: String not releasing from gripper after pulling tension.

SOLUTION:

- 1. Remove tension bar stop screw for additional rotation freedom of the gripper.
- 2. To prevent this issue, start with the tension bar in the lowered position and use ratchet gripper for precise adjustments (this also helps achieve more consistent tension)

ADDITIONAL PROBLEMS?

100% Human Customer Support:

Toll-free at (800) 333-0337 Ext. 224 • ewan.melanfant@gammasports.com

C. CARE AND CLEANING

With time and use, the clamping surfaces of your machine may become oily or dirty and result in string or clamp slippage while stringing. Periodic cleaning of the String Clamps and String Gripper is recommended. Knife sharpening stones work well for cleaning the diamond coated string clamping surfaces. Cleaning with a solvent such as isopropyl alcohol and a mild abrasive tool such as a toothbrush also works well to remove oily or greasy build up.

PARTS LIST

PART NUMBER - PART DESCRIPTION

4A	TURNTABLE BUSHING
444	BUSHING SLEEVE
444A	BUSHING SLEEVE BOLT X2
9	WASHER
14	WASHER
21A	FRAME SUPPORT SLIDE
25	TENSION BAR
26	TENSION BAR CAP
32	DROP WEIGHT KNOB
28	FRONT WEIGHT- BADM
29	BACK WEIGHT- TENNIS
30	TENSION BAR DRUM
30A	SET SCREW
31	STRING GRIPPER DRUM
	RATCHET TEETH
35	RATCHET TEETH SPRING
	FLOATING CLAMP HANDLE
47	
48	
	RETURN SPRING
	TENSION BAR STOP SCREW
	FRAME SUPP SLIDE SCREW
140	
141	
142	
	SUPPORT ARM- RIGHT
	SHLDER SUPP LOCK Bolt and Spring
	SUPP ARM ADJUST KNOB WINDER BEARING
	GRIPPER PIVOT PIN
	PIVOT PIN RETAINER COLLAR
260	TURNTABLE
261	TURNTABLE END CAP
262	SUPP POST MT PLATE
271	SUPPORT POST
5	RUBBER FOOT
319	TT RISER RING
381	SHOULDER V-MOUNT
440	DIE CAST BASE
441	DIE CAST WINDER STAND

PARTS LIST CONTINUED

PART NUMBER - TOOL DESCRIPTION

442 WINDER STAND BRACKET

443 WINDER STAND BRACKET BOLTS

445 TOOL TRAY PAD
MPFC FLOATING CLAMP
MRSG ROTATIONAL GRIPPER

TOOLS AND ACCESSORIES LIST

PART NUMBER - TOOL DESCRIPTION

69 3MM HEX WRENCH*

71 6MM T-HANDLE HEX WRENCH*

98 10MM WRENCH*

109 NEEDLE NOSE PLIERS*
229 5MM HEX WRENCH*
MA STRINGER'S AWI *

MBMSP11 BADM SHOULDER SUPP COVER

MFSPP11 FRAME SUPPORT PADS

SHORT BADMINTON (SB)

SQUASH (SQ)TENNIS (T)

TAPERED BADMINTON (B)

MMSPP13 MMSPP13 TENNIS SHLDER SUPP PADS

MPSA MPSA PATHFINDER AWL*

OPTIONAL TOOLS AND ACCESSORIES

PART NUMBER - TOOL DESCRIPTION

MBFC BADM FLOATING CLAMP

MBFS11 BADM FRAME SUPP

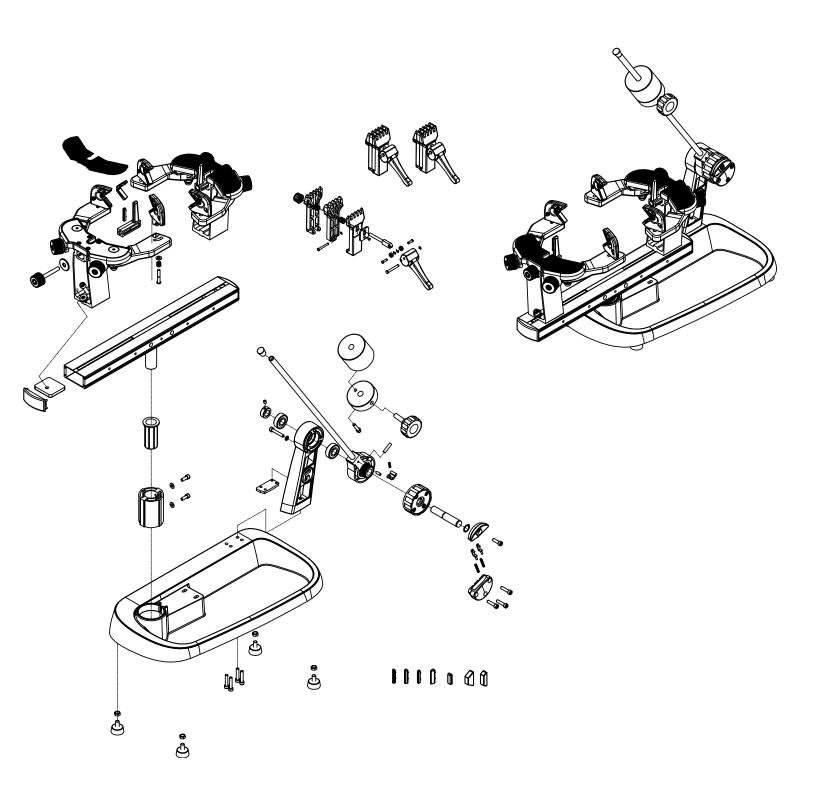
MBMSS11 BADM MOUNTING SYS UPG

MPMC MACHINE COVER
MPG STARTING CLAMP
MPS CLEANING STONE

MMFSA FLOOR STAND ADAPTER PLATE

^{*}Not Shown on following page (Parts Diagram)

PARTS DIAGRAM





MOMENTUM DROP WEIGHT 6





Momentum Drop Weight 6 Stringing Machine Made in Taiwan

MOM610