



7500 Els

STRINGING MACHINE



OWNER'S MANUAL

Issue 3 - December 18, 2000

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7500 Els Owner's Manual

TABLE OF CONTENTS

INSIDE FRONT COVER	WARRANTY
PAGE 1	FEATURES
PAGE 2	CONTENTS AND UNPACKING
PAGE 3	ASSEMBLY INSTRUCTIONS
PAGE 9	POWER CONNECTIONS & CONTROL
PAGE 10	CONTROL PANEL FUNCTIONS AND FEATURES
PAGE 11	STRING LENGTH METER OPERATION
PAGE 12	CAM-LOCK CLAMP OPERATION
PAGE 13	STRING GRIPPER / TENSIONER OPERATION
PAGE 14	MOUNTING THE FRAME
PAGE 15	STRINGING THE FRAME
PAGE 16	PATHFINDER AWL OPERATION
PAGE 17	MAINTENANCE AND ADJUSTMENTS
PAGE 18	CARE AND CLEANING
PAGE 19	TROUBLE SHOOTING TIPS
PAGE 20	PART NUMBERS AND LISTING

LIMITED WARRANTY

GAMMA SPORTS ("GAMMA") warrants to the original purchaser that the GAMMA 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 electronic parts and string clamps), and for a period of one (1) year from the date of purchase for electronic 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.

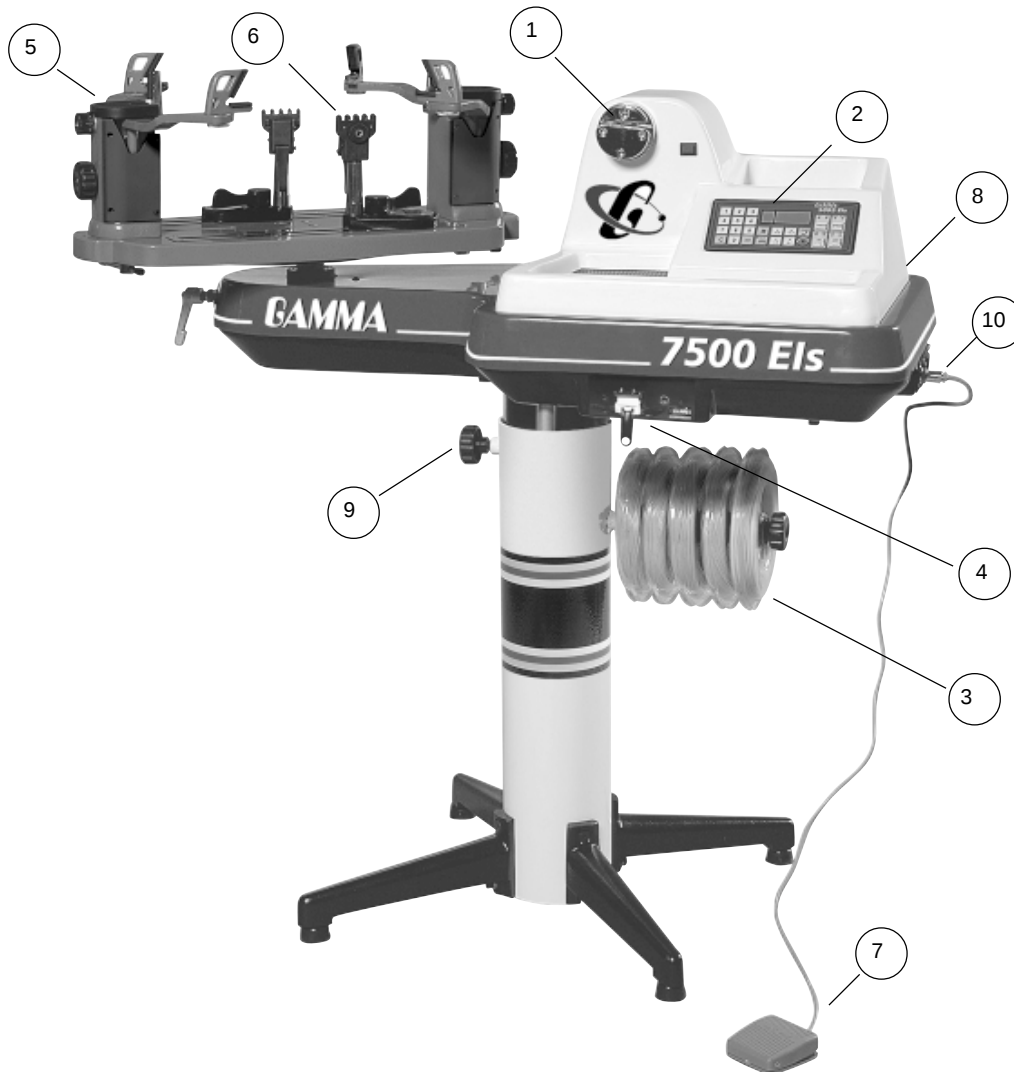
GAMMA's obligation under this warranty is limited to repair or replacement of defective EQUIPMENT, and no one is authorized to promise any other liability. GAMMA shall in no event be liable for any incidental or consequential damages.

To return defective EQUIPMENT, a return authorization (RA#) must be obtained from a GAMMA customer service representative by calling 1-800-333-0337. 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.



7500 Els

Key Product Features



1. Electric Constant Pull String Tensioner w/ Diamond Coated String Gripper (10-90 lbs tension range in 0.10 lbs increments)
2. Electronic Control Panel w/ Keypad, Knot, Prestretch, & String Length Functions
3. String Reel Holder
4. Electronic String Length Meter
5. 6 Point "Suspension" Mounting System (10 point support)
6. Dual Action, CAM-Lock, Swivel, String Clamps w/ Diamond Coating
7. Convenient Foot Actuated Tensioner Switch
8. Full Fiberglass Cover w/ Integrated Tool Trays (76 sq in of storage area)
9. Height Adjustable from 39" to 46" (can also be used on table top)
10. 110 V / 220 V Compatibility



7500 Els

Unpacking Instructions & Contents

Instructions for Unpacking and Preparing for Assembly

The 7500 Els is shipped in two cartons, a large carton for the stringing machine and accessories and a smaller carton for the post and base legs. **Please save the cartons and packing materials for possible shipments in the future.** Gamma Sports cannot be responsible for machines that are not returned, shipped in their original, undamaged packaging. The tools you will need to assemble the 7500 Els are provided with the machine. Due to the weight of the tensioner unit, you may need the assistance of someone to help lift the tensioner unit out of the carton.

Once the cartons are opened, remove all inner cartons and check to be sure that all parts are present and accounted for.

Contents of Base & Leg Carton

- (1) Lower Post
- (2) Upper Post with Flange Plate
- (4) Legs
- (1) Locking Knob Screw
- (4) M8 x 25 Flat Head Screws
- (4) M8 x 30 Cap Screws
- (1) String Reel Holder (M8 Threaded Pin), (1) Knob, (10) Spacers, & (2) M8 Washers

Contents of Large Master Carton (including accessory cartons packed inside)

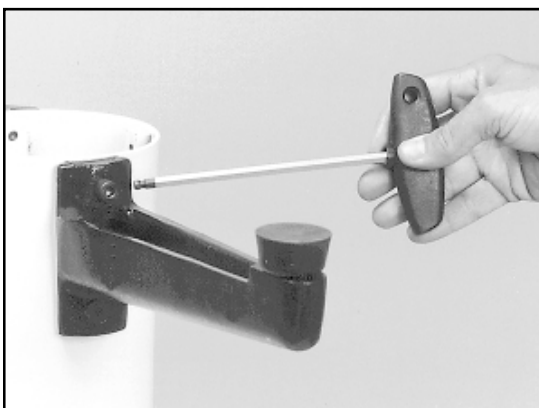
- (1) Stringer Assembly Unit w/ Tensioner Module and Turntable
- (1) Power Cord w/ Ground Pin
- (2) Suspension Mounting Stands w/ Frame Support Slide, Side Supports, and Adapters
- (2) Mounting Stand Locking Levers w/ Washers
- (2) String Clamp Heads
- (2) Badminton Frame Support Slides Fitted w/ Plastic Adapter
- (1) Package of Spare plastic adapters for mounting system supports (contains 12 pcs)
- (1) Face Plate for String Length Meter & (4) Spare String Length Meter Clamp Pads
- (4) Rubber Feet w/ Screws
- (1) Foot Pedal Tensioner Switch
- (1) Tool Kit (contains side cutter, bent nose pliers, needle nose pliers)
- (1) Straight Stringers Awl & (1) Pathfinder Specialty Awl
- (1) Starting Clamp
- (2) Composite Badminton Floating Clamps
- (1) 6 mm "T" Handle Hex Wrench
- (1) 5 mm "T" Handle Hex Wrench
- (1) 10 pc L-Hex Wrench Set
- (2) Support Post Screws (M10)
- (1) Box Wrench – 6 mm

Assembly Instructions



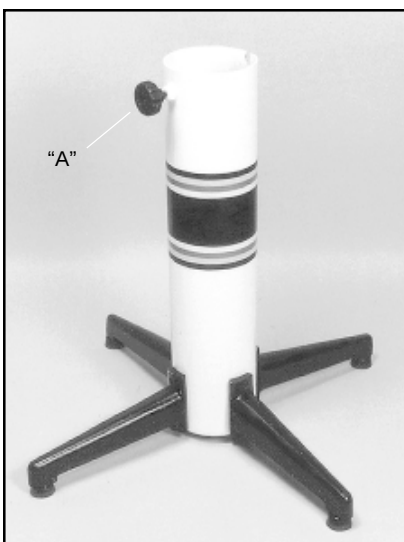
Base Leg Assembly

The stringing machine uses a four leg base design. The legs must be assembled to the support post before use. Remove the lower column support, the upper column support, four (4) legs, four (4) socket head cap screws and four (4) flat head cap screws from the small shipping carton.



Base Leg Assembly (Cont.)

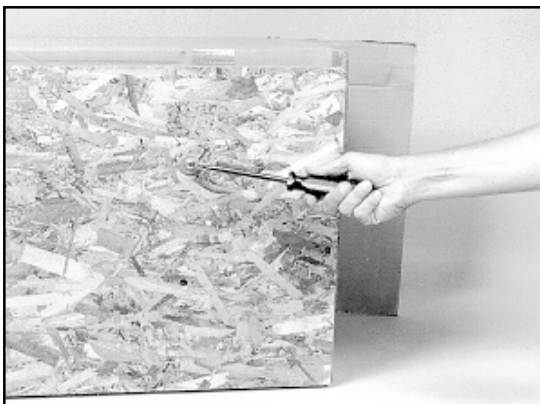
Align the holes in the leg flange with the matching holes in the lower column support post. Secure the leg with one FLAT HEAD cap screw through the upper hole, and one SOCKET HEAD cap screw through the bottom hole.



Base Leg Assembly (Cont.)

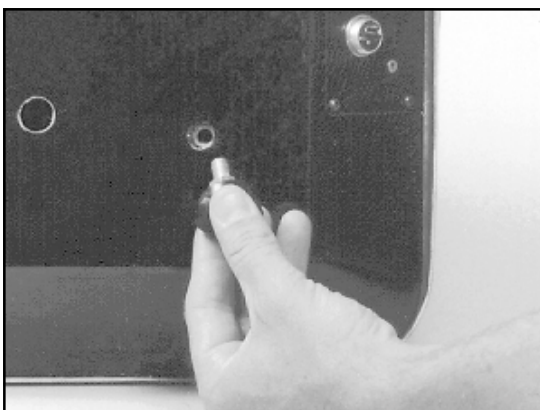
To complete the base stand, screw the height adjustment locking knob ("A") into the side of the support column. The locking knob should not protrude beyond the inside of the support column at this time.

Assembly Instructions



Unpacking the Tensioner Assembly

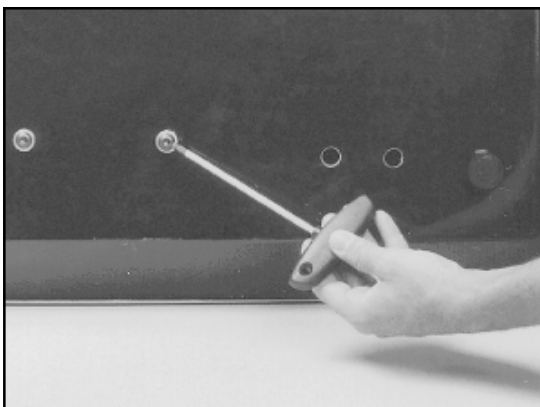
The tensioner assembly is packed inside the inner carton and is bolted to a sheet of wood with four (4) bolts to prevent damage during shipment. Another sheet of wood is bolted to the underside of the inner carton through the first piece of wood. First locate the nuts attached to the bolts that secure the outer piece of wood to the inner piece of wood. Remove the nuts and with assistance carefully lift the tensioner assembly from the inner carton and lay it floor. To remove the inner piece of wood from the base of the machine, raise each end and remove the four (4) shipping bolts from the underside of the wooden sheet. **Note: Please retain the bolts, wood and cartons for future shipment.**



Foot Installation

CAUTION ! To maintain the alignment between the fiberglass covers and the frame, it is very important that the feet be installed before removing the four center screws that attach the tensioner assembly to the upper post flange.

To install the feet, tilt the tensioner back on its side and screw the four feet into the holes at the corners of the base.



Stand Upper Post Installation

After installing the four corner feet, remove the four (4) button head cap screws from the base of the assembly.

Assembly Instructions



Stand Upper Post Installation (cont.)

With the height adjustment cap screw on the upper post facing the right side of the tensioner, align the four (4) holes in the upper post flange with the holes in the tensioner base. Secure the flange to the base with the four cap screws.



Height Adjustment

The height of the machine is adjustable from 39" to 46". To change the height, remove the socket head cap screw from its current position and place it in the appropriate hole to set the desired height of the machine.

Assembly Instructions



Installing the Racquet Mounting System

Align the threaded hole in the bottom of the frame support post with the slot in the turntable. Screw the lever lock bolt with washer into the center hole located in the bottom of the support post and loosely tighten. Position the washer with the rounded edge toward the turntable.

Repeat procedure for the support post on the opposite side of the turntable.

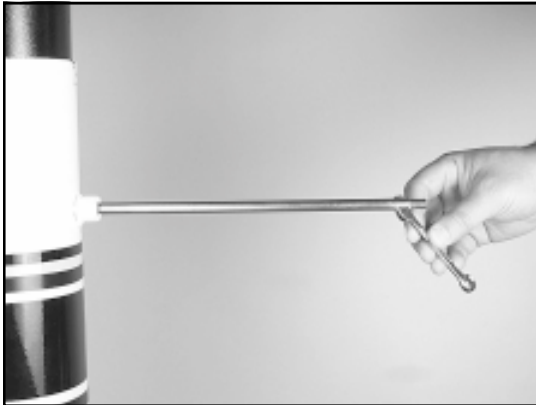
There are two guide pins located in the bottom of the support post. The outer guide pin may be removed if needed to provide additional separation space between the mounting arms for mounting super oversize racquets.



Clamp Head Installation

The post of the string clamp head and the tube of the string clamp base are treated with grease to provide protection against corrosion during shipping. Remove any excessive grease with a clean cloth prior to use. The post and tube may also be cleaned with isopropyl alcohol. After this type of thorough cleaning, the post and tube should be treated with a light coating of machine oil to protect the surfaces against corrosion and to ensure smooth operation.

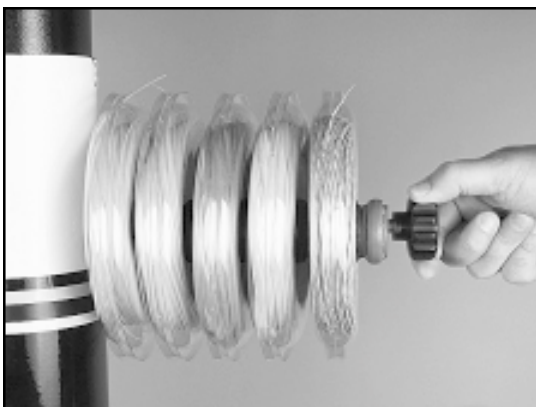
String Reel Holder Installation



The string reel holder pin is an 8 mm rod with threads on both ends, and flat surfaces machined on one end. Thread the end of the pin without the flat surfaces into the threaded boss on the right side of the lower column support. Using the M6 open end wrench positioned on the flat surfaces, securely tighten the pin to the lower column support.



The string reel holder can hold up to 5 reels of string (depending on the size of the string reel). Before placing the first reel on the pin, slide two M8 washers over the pin and slide them to the boss on the lower column support. After the first reel is placed onto the pin, place two spacers between each reel to provide enough space between reels and allow them to turn freely without rubbing against one another. (To provide a smooth feed to the String Length Meter, place the reels on the pin so the string spools off the reel from the underside of the reel.)



After the last reel is installed, place the remaining spacer(s) on the pin and attach the threaded knob to the end of the pin.

SLM Face Plate Installation



Remove the tape covering the opening on the front side of the bottom cover to expose the string length meter.



Position the face plate assembly over the opening in the bottom cover, and align the two countersunk end holes of the face plate with the threaded attachment holes in the front of the string length meter. With the two flat head machine screws, secure the face plate assembly to the string length meter.



To check for proper alignment, lift the top clamp of the face plate assembly and insert a section of racquet string at least 12 inches long into the entrance hole of the face plate. Continue feeding the string section into the string length meter, until it appears through the exit hole. If the entrance or exit holes appear to be blocked, loosen the attachment screws and adjust the position of the face plate assembly until the section of string exits the face plate. After the face plate is properly aligned, tighten the flat head screws.

Power Connection & Controls

Instructions for Power Connection (Refer to Figure 1)

CAUTION ! Before connecting to the power supply, check the voltage supply switch setting located on the side panel as shown in Figure 1. To change from 110 volts service to 220 volt service simply slide the switch fully to the top or to the bottom until “110V” or “220V” appears on the switch plate.

The acceptable range of input voltages for the “110 V” setting is between 110 V and 120 V @ 60 Hz and for the “220 V” setting, between 220 V and 240 V @ 50 to 60 Hz. If you have any question regarding the input voltage supply for your area, please ask your electric utility company.

To install the power cord, insert the female end of the power cord into the Power Cord Socket located on the side panel and plug the male end into a grounded power outlet.

When using extension cords, use grounded heavy duty extension cords rated for 15 AMP service. To connect the foot pedal switch, insert the 2 pin mail connector located at the end of the foot pedal switch cord, into the two pin receptacle located in the side panel. Tighten the connector with the sleeve nut located on the foot pedal switch connector.

After checking to be certain that the machine is set for the correct input voltage, switch on the machine by pressing the Lighted On-Off Power Switch on the side panel. At start-up, the LED will display a countdown from “9.0” to “0.0” while the machine performs a self diagnostics check at start-up. The machine should be permitted to warm-up for 10 minutes prior to stringing. After ten minutes, it is recommended that the “TEST” button be pressed to self calibrate after warm-up.

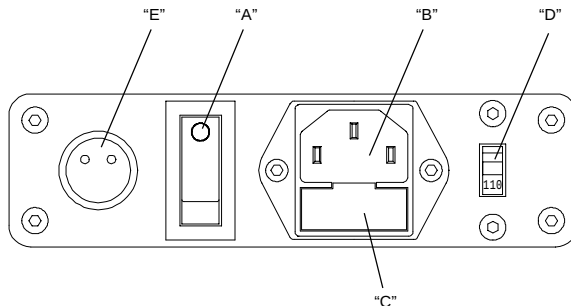


Figure 1 - Side Panel Features

- "A" - Lighted On-Off Power Switch
- "B" - Power Cord Socket
- "C" - Sliding Fuse Holder w/ Spare Fuse
- "D" - 110V / 220V Switch
- "E" - 2 Pin Foot Pedal Switch Socket

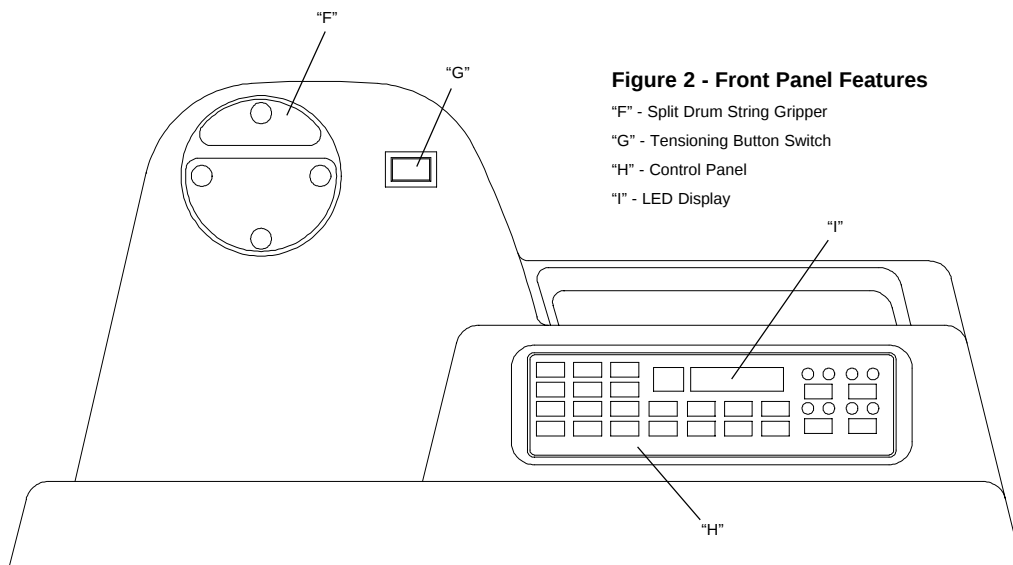
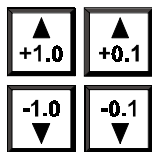
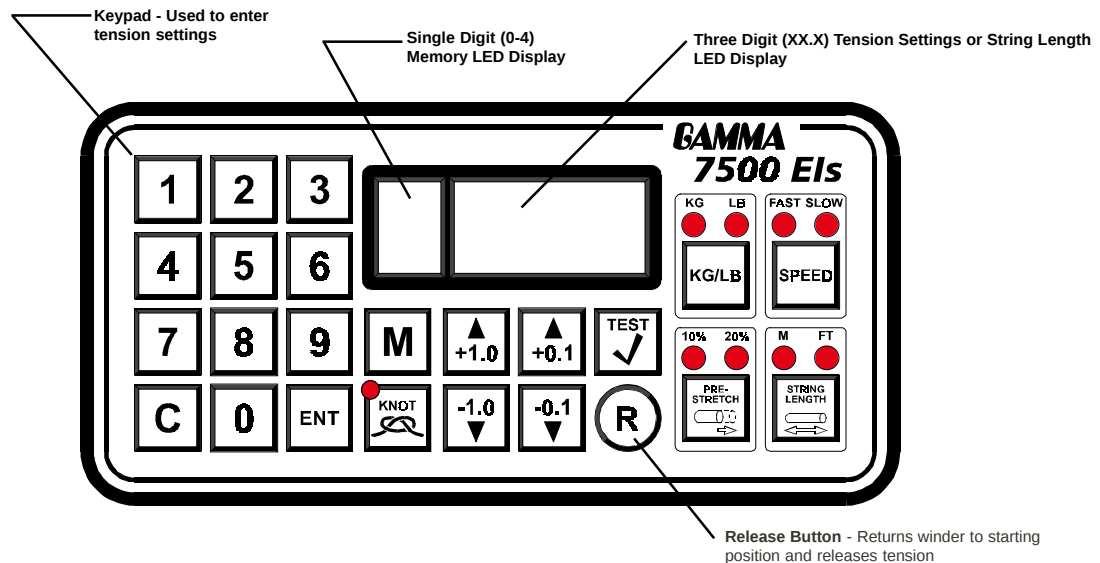


Figure 2 - Front Panel Features

- "F" - Split Drum String Gripper
- "G" - Tensioning Button Switch
- "H" - Control Panel
- "I" - LED Display

Control Panel Functions and Features



Tension Index Buttons - Changes tension setting in +/- 1.0 or 0.1 Lb or Kg increments. Holding the button down will scroll the tension setting values up or down. Tension settings entered with the tension index buttons are placed into temporary memory setting "0".



Memory Button - Indexes from 4 preset tension settings that can be stored in memory. Settings are retained even if machine is turned off. Each press of the button indexes to the next memory setting. Memory settings 1-4 must be entered using the keypad followed by pressing the "ENT" button.



Clear Button - Clears display to enter a new tension



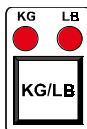
Enter Button - Confirms tension setting when entered on keypad (display flashes when tensions are keyed in with the keypad until this button is pressed)



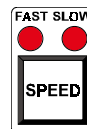
Test Function - Performs internal calibration check. Press and hold for 5 seconds until the winder reverses and performs an internal diagnostic check, such as the one performed at start-up.



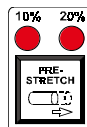
Knot Function - Increases pulling tension by 10% over the setting value (max 90 lbs / 40.8 kgs) for one pull. During pull the Memory LED flashes to indicate that the Knot function is enabled.



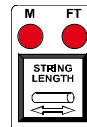
Lbs/Kgs Button - Changes tension display from Lbs to Kgs. Each press of the button toggles back and forth between Lbs and Kgs



Speed Button - Changes pulling speed of winder from Fast to Slow. Slow speed is recommended for low stretch strings, such as Kevlar. Each press of the button toggles back and forth between Fast and Slow speed.



Pre-Stretch Function - Pulls string 10% or 20% over the tension setting (up to 90 lbs / 40.8 kgs), releases the string, and repulls to the tension setting. Each press of the button toggles between 10%, 20% or no pre-stretch.



String Length Meter Button - Enables string length meter function. Each press of the button toggles back and forth between Meters and Feet measurement. To switch back to tensioning function, press the "Lbs/Kgs" button.

String Length Meter Operation



To enable the String Length Meter (SLM) function, press the String Length function key on the keypad. When the String Length button is pressed, one of the Red LED indicators below "M" or "FT" will light up to indicate that the SLM function is enabled. Pressing the String Length button will toggle between "M" and "FT" to set the measurement units for either Meters ("M") or Feet ("FT"). Measurements are displayed in 0.1 increments.



To measure out a length of string from a reel (sets can also be measured) insert one end of the string through the string guide grommet (from the backside). While lifting the clamp pad, insert the string through the entrance hole of the face plate until it appears at the exit hole and release the clamp pad. (The clamp pads will prevent debris from entering the SLM.)



When the end of the string appears out of the exit hole, press the "C" button on the keypad to "Zero" the SLM, and the length of string measured will be measured from the point on the string located at the edge of the exit hole. Pull the end of the string in a slow steady fashion and the SLM will begin measuring the length of string pulled and indicate the measurement on the LED display. When the desired length of string is measured, cut the string at the exit hole.

NOTE : When reaching the end of a length of string, pull the string through very slowly to avoid inaccurate string measurement. The string length meter was designed to measure strings between 1.10 mm (18 ga) and 1.45 mm (15 ga) at an accuracy of +/- 0.3% of the indicated value and +/- 2 inches (50 mm) absolute. When measuring strings smaller than 1.10 mm (such as badminton strings) the error will be -2.5% of the

indicated value (up to 6" short in 40 ft) and +/- 2 inches (50 mm) absolute.

Cam-Lock Clamp Operation



Clamp Head Operation

To clamp a string, lift the clamp head and place the string between the jaws and depress the clamp head lever to secure the string. The clamping pressure applied to the string should be adjusted to provide sufficient pressure to secure the string when subjected to the desired pulling tension. The diamond coated gripper plates provide for increased friction between the clamps and the string to allow for reduced clamping pressure while securing and holding the string under tension.

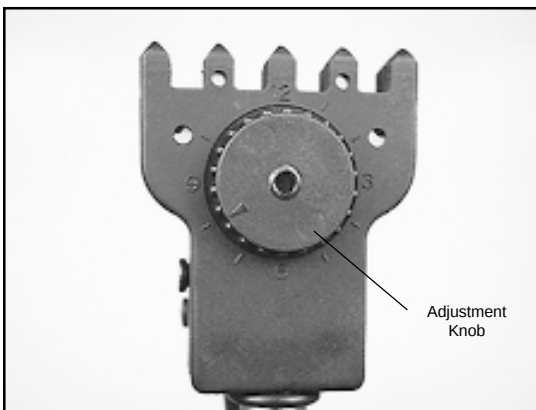


CAM-LOCK Clamp Base Operation

Rotate the Base Locking Lever clockwise to secure the clamp base to the turntable.

Reverse the clamping procedure to unlock the string clamp. The Locking Lever is spring loaded to assist the unlocking of the clamp base.

The Locking Lever should be tightened enough to prevent clamp base slippage on the turntable, when the desired tension is placed on the string. To go from the loose position to the clamped position and back, generally requires the travel permitted by the clamp base. If the travel is not sufficient to allow smooth operation of, adjust the Clamp Base as outlined in the Clamp Base Adjustment section.



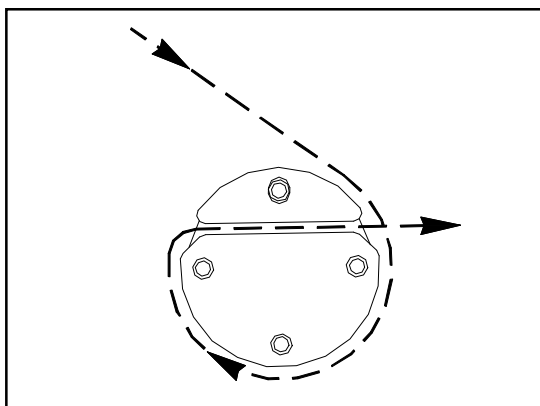
Clamp Head Adjustment

The clamp heads will need minor adjustments according to what string type, construction, and gauge you are using.

To adjust the gap (clamping pressure) between the clamp jaws, insert the string through the racquet as if you were beginning the main strings. Clamp the strings and pull tension. If the string slips through the jaws of the clamp, tighten the clamp by compressing the clamp jaws together by hand while turning the Adjustment Knob, in the clockwise direction. If the clamp leaves impressions or damages the string, it may be excessively tight and should be adjusted by turning the hex screw counter clockwise to open the gap between the jaws. The clamp jaws must be cleaned periodically to be free from dirt and any residue for them to grip properly.

Note: The string clamps supplied with your stringing machine can accommodate tight string patterns such as badminton. Depending on the string pattern, the clamp may spread the strings slightly which will not compromise the quality of the string job.

String Gripper Operation



String Gripper Operation

To insert the string in the split drum string gripper, wrap the free end of the string clockwise around the gripper drum and position the string between the gripper jaws as shown in the illustration.

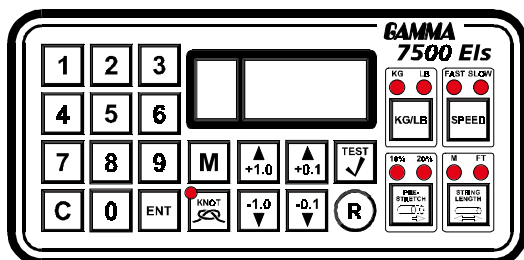
The string must pass over the top half of the gripper before being placed between the diamond coated plates of the upper and lower gripper jaws. Excessive slack in the string should be removed before applying tension. As the drum turns and applies tension to the string, the upper jaw is forced down to clamp the string between the jaws.

CAUTION ! Never tension a string with your finger between the string and upper gripper jaw as serious injury could result if your finger is caught between the string and upper jaw during tensioning. CHILDREN SHOULD NEVER BE PERMITTED TO OPERATE THIS MACHINE WITHOUT ADULT SUPERVISION.

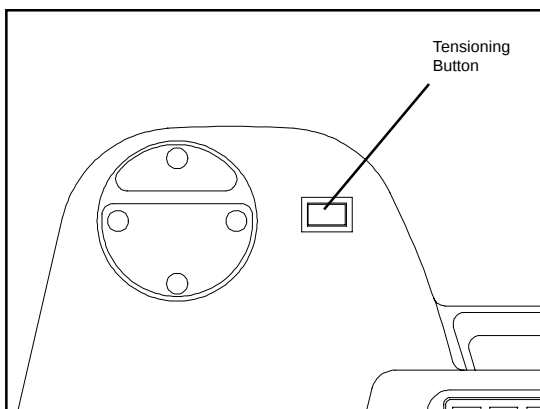
CHILDREN SHOULD NEVER BE PERMITTED TO OPERATE THIS MACHINE WITHOUT ADULT SUPERVISION.

Tensioner Operation

Setting the String Tension



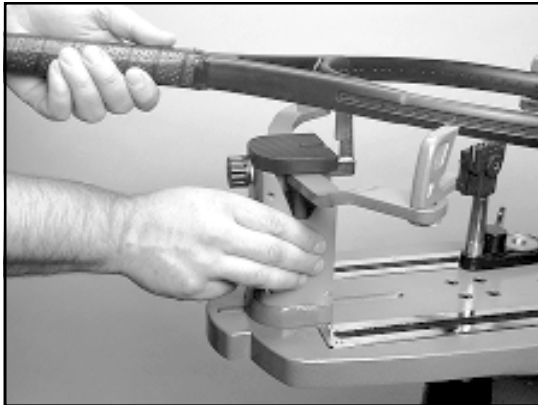
String tensions may be entered using the keypad and storing the settings into one of four memory storage settings (See section on Control panel Functions and features) or by using the tension index buttons. While tension setting is entered, the value displayed will be flashing until the “ENT” button is pressed, indicating that the tension setting is accepted.



Tensioning a String

After wrapping the string around the gripper jaws, press the tensioning button switch on the front panel of the machine, or press the foot pedal switch to activate the tensioner. The using the fast pulling speed (see section on Control Panel Functions and features) the tensioner will start pulling at full speed and then slow down as the tension in the string approaches the tension setting. When the tension in the string reaches the tension setting, the LED display will begin to flash, and the string will be ready to clamp off. In the event that one of the keys on the control panel are accidentally pressed while tensioning a string, the tensioner will automatically reverse and release the string being tensioned.

Mounting the Frame



Adjusting the Frame Support Posts

Place the racquet frame over the center support slide and onto the frame support. Loosen the lever lock bolt on one support post. Slide the post outward until the center support of the racquet support slide is positioned near the inside surface of the racquet frame. Securely tighten the lever lock bolt.

Adjust the opposite post using the same procedure.

Caution: To avoid racquet damage, the support slide should not contact the racquet prior to fixing the support posts.



Shoulder Support Adjustment

The shoulder supports are adjustable to provide support to the racquet frame. Loosen the knurled knob at the bottom of the shoulder support and swivel the support so that the pads will contact the frame squarely when the arms are closed against the racquet. Should the shoulder supports block string holes, adjust the position of the racquet between the arms until the shoulder supports contact the racquet between grommet holes.



Securing the Shoulder Supports

Secure the racquet frame with the shoulder supports by rotating the large adjustment knobs on the outside of the support post assemblies clockwise. Adjust the supports until firm contact is made between the shoulder supports and the frame.

The tear drop shaped holes towards the back of the shoulder supports are handy for holding the loose end of the string while pulling the string through the racquet. Simply insert the loose end into the tear drop shaped holes and slide the string into the point of the hole.

Mounting the Frame



Support Slide Adjustment

Once the frame support posts are secured, lightly tighten the support slides by turning the knobs on the outside of the slides clockwise. Adjust the slides in equal increments until slight resistance is felt.

Apply a final adjustment to all racquet support points until the racquet is firmly secured in the mounting system.

Should the frame supports lose contact with the frame while stringing, they should be adjusted, as needed, to maintain contact with the frame.

Stringing the Frame



Installing the Main Strings

To begin stringing the main strings, insert the two ends of the string through the two center holes at the appropriate end of the frame and continue through the center holes on the opposite end of the racquet.

Secure one of the strings using a string clamp and insert the free end into the string gripper.

When tension is applied to the string, clamp off the tensioned section of string, release string from tensioner, and proceed to thread string into next sets of holes. After the last main strings are pulled, tie-off the strings at the appropriate hole specified by the racquet manufacturer.



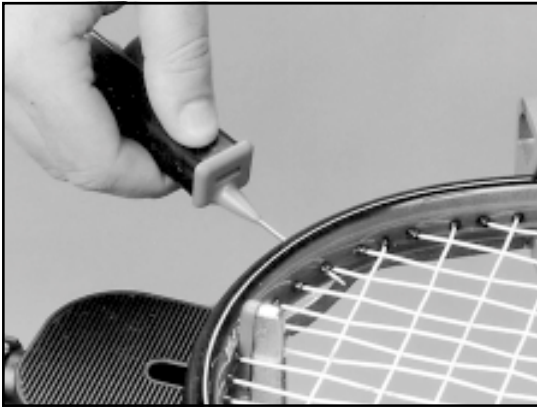
Installing the Cross Strings

Weave the cross strings over and under the main strings being careful to alternate the weave direction of each consecutive cross string so as to be opposite of the previously installed cross string.

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

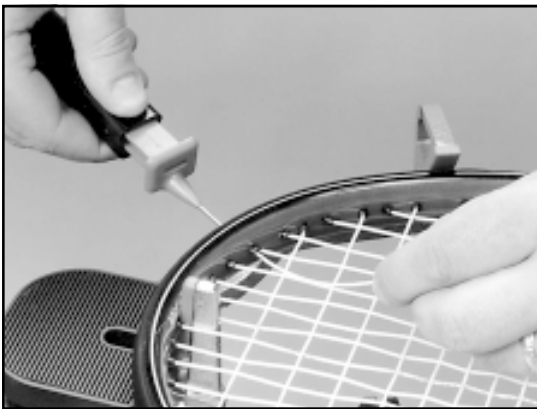
Remove the strung racquet by loosening the shoulder supports and support slides in small increments until the racquet is free from the mounting system.

Pathfinder Awl Operation



The machine includes the new Pathfinder stringing awl which creates a pathway between or around strings to make inserting a string through tight grommets easier and quicker.

Insert the awl through the grommet hole in the same manner as for traditional awls. The Pathfinder awl must be in the closed position before insertion.



Once the awl is inserted, pull the handle of the awl outward while holding the tip section in place, leaving the outer sheath in the grommet hole.

Insert the end of the string into the center of the sheath.



While holding pressure on the string, slowly pull the sheath out of the grommet hole to leave the end of the string exposed.

Tensioner Calibration

Each stringing machine has been checked and calibrated at the factory using accurate load sensing devices to ensure that the machine pulls at the correct tension. The tension is then controlled by the pre-set factory settings of the electronics. However, if you suspect that your machine is not pulling at the correct tension, or if you would like to check the pulling tension using a tension calibration device, you may do so.

Most tension calibrators (such as a Gamma Tension Calibrator) function by inserting a string from end of the calibrator into a string clamp, and pulling on the string located on the opposite end of the calibrator. The tension measured by the calibration device will then display the tension being applied to the calibrator by the machine.

With the machine set for the fast pulling speed, and the tension set at 20 lbs., place the string from one end of the calibrator (preferably equipped with synthetic string) into a string clamp. Place the opposite end into the string gripper and apply tension. If the tension indicated on the calibrator does not match the tension setting, release the string and remove it from the gripper.



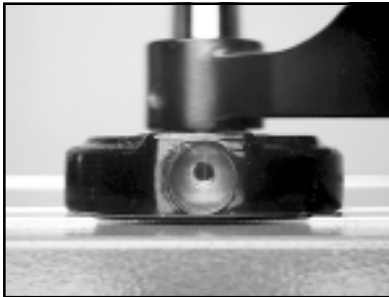
Press and hold the "Test" button on the control panel for 5 seconds and release it when the winder rotates in the reverse direction and the machine performs its own self diagnostic test. After tension display returns to the preset value, recheck the pulling tension using the tension calibrator at both 20 and 60 lbs.

In the event that the measurement from the calibrator does not match the tension setting, the machine can be externally calibrated by up to +/- 5 lbs from the factory settings. If the difference between the measurement from the calibrator and the tension setting is more than 5 lbs. call the machine service department of GAMMA Sports at 1-800-333-0337 for assistance.



To calibrate the machine externally, set the machine for a pulling tension of 40 lbs. With the calibrator attached, press and hold the "TEST" button until a flashing "9" appears on the display. Press the "+0.1" or "-0.1" buttons, to match the display value to the calibrator value. Press "ENT" to save the calibration settings.

Cam-Lock Clamp Base Adjustment



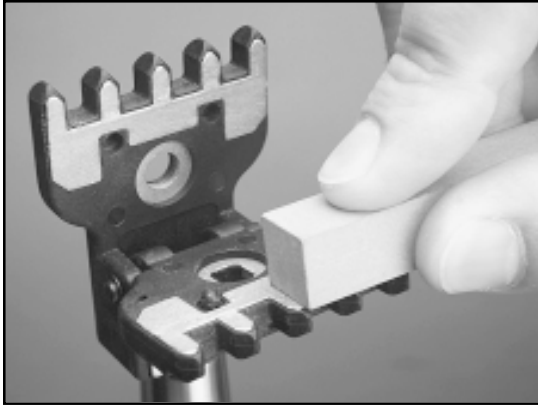
If the bases of the Cam-Lock clamps slip on the glide bars, the base locking levers may need adjustment.

Remove the plastic cap by pulling straight up on the edges of the cap. Line up the large hole in the clamp base with the smaller hole in the locking cone as shown.



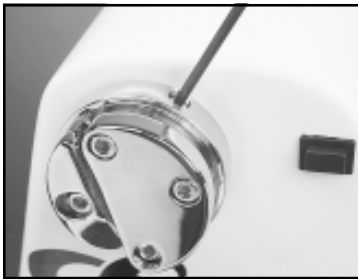
Insert the 3MM hex wrench through the holes and into the screw located in the base. Rotate the wrench clockwise to tighten the clamp and decrease the base locking lever travel. Rotate the wrench counterclockwise to loosen the clamp and increase the base locking lever travel.

Cleaning Instructions for String Clamps



To thoroughly clean the diamond coated surfaces of the clamp heads, remove the adjustment knob screw, lever plate, and compression spring to expose the inside surfaces of the clamps. Using the cleaning stone provided with your machine (you can also use a small tooth brush or a sharpening stone for knives), scrub the diamond coated plates until all debris is removed. Clean any dust or residue with a damp cloth and re-assemble the clamp head.

Cleaning Instructions for String Gripper

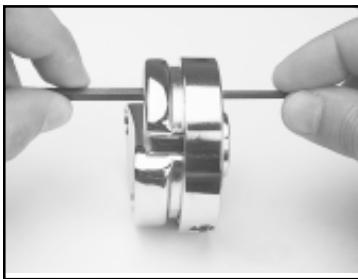


To thoroughly clean the diamond coated surfaces of the string gripper jaws, remove the gripper drum from the motor shaft by loosening the drum attachment screw located at 5 o'clock on the side surface of the gripper drum, and sliding the gripper drum off the shaft.

Note: To provide easier access to the attachment screw, press the tensioning button switch to rotate the gripper drum. When the screw is positioned at the top of the drum, switch the power off on the machine to stop the gripper drum from turning and remove the screw.



Remove the gripper jaws from the gripper drum by removing the 4 cap screws that attach the jaws to the drum. When removing the grippers, take care to not loose the compression springs inside the cavities of the lower gripper jaw. With the gripper jaws removed from the drum, using the cleaning stone provided with your machine (you can also use a small tooth brush or a sharpening stone for knives), scrub the diamond coated plates until all debris is removed. Clean any dust or residue with a damp cloth and wipe down the gripper drum surfaces to remove any residue as well.



To re-assemble the gripper jaws to the drum, fit the springs over the spring retainers of the upper jaws and fit the upper jaw to the lower jaw. While holding the jaws together position them onto the drum and align the holes in the jaws to the holes in the drum. Re-attach the jaws to the drum with the cap screws. The hole in the drum for attachment of the upper jaw has a small set screw inserted into the hole from the back side of the drum. This set screw was adjusted at the factory to provide the proper engagement of the upper jaw screw with the drum. When tightened the upper jaw should slide freely up and down. To tighten the upper jaw screw, place a hex wrench in the small set screw located on the back side to hold it in place when the attachment screw on the front side is tightened.

Troubleshooting Tips

PROBLEM	SOLUTION
String slips in clamps	• Adjust gap between jaws • Clean clamp jaws
String slips in string gripper	• Clean gripper jaws • Make sure string is wrapped over upper gripper jaw before inserting between gripper jaw plates
String clamp slips on base	• Clean base of clamp and turntable glide bars
String Length Meter measures inconsistently	• Contact Gamma Sports Machine Service Department for SLM Cleaning Procedure
Electrical system does not function	• Check power source / voltage setting • Check power cord connection • Check fuse • Call Gamma Sports customer service

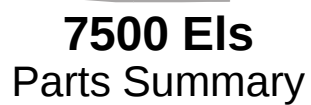
To check fuse, remove the power cord and pull the fuse holder straight out. Remove the fuse from the clips and examine it. If it is burned out, replace it with the spare fuse and replace the fuse holder in its socket. Supply power to the machine and check for proper operation. If problems persist, contact Gamma Sports Customer Service at 1-800-333-0337

Self Diagnostics

The electronics of the machine are designed to provide self diagnostic trouble shooting information, if parts of the machine do not function normally. When this occurs, error codes will appear on the display. A summary of the error codes and corrective actions that should be taken are provided below.

Code	Corrective Action
C01	• Check wiring to return microswitch on motor and PC board • Check return microswitch on motor shaft • Call GAMMA Sports for assistance
C02	• Check that string is still not engaged in gripper after gripper returns
C06	• Call GAMMA Sports for assistance
C07	• Check for loose power connection at AC socket or wall outlet • Call GAMMA Sports for assistance
C09	• Check that voltage setting for machine is correct • Call GAMMA Sports for assistance

To reset the machine after an error code appears, press the Clear ("C") button on the control panel. If the error code disappears, resume stringing as normal. If the error code re-appears, corrective action needs to be taken. For assistance, call the machine repair department of GAMMA Sports at 1-800-333-0337.





7500 Els Parts List

Part #	Description	Part #	Description
6B	Cap Screw - M8 x 30	216	7500 Top Cover
9	Washer - M8	217	7500 Lower Cover
13	Locking Lever	218	7500 Frame Assy
14	Washer - M10	219	7500 Transformer Set (117/230)
21A	Frame Support Slide SM Tennis	221	String Length Meter Cover
21B	Frame Support Slide SM Bad.	222	String Length Meter Clamp Pads
22A	Badminton Adaptor - Black	223	String Length Meter
23A	Tennis Adaptor - Black		
37	Gripper Cap Screw Set		
101	AC Power Cord		
102	Fuse Holder Cap		
103	Fuse		
106	Locking Knob Screw		
114	Short Leg		
115	Flat Head Cap Screw -M8 x 25		
121	Leveling Foot		
122A	Shoulder Support Pads - Black		
243	Gripper Drum Back Plate		
127	Flanged Upper Support Column		
128	FRP Base Foot		
131	Foot Pedal Switch		
132	Mounting Arm Adj. Knob SM		
133	Support Slide Adj. Screw SM		
134	Suspension Mounting Arms		
135	Shoulder Support Adj. Knob SM		
136	Shoulder Support SM		
139	Shoulder Support Bushing		
173	Turntable Glide Bar/12mm		
178	Glide Bar SST		
180	Comp Fixed Clamp Thin		
194	TT Brake Pad		
195	TT Brake Pad Flat Head Screw		
199	Flanged TT Pin		
203	Flanged TT Pin Cap Screw		
204	Cam Lock Base/Glide Bar Assy		
205	Cam Lock Clamp Base		
246	Die Cast Gripper Jaw Assy		
208	Lower Column (w/RH Reel Hold)		
209	TT Brake Lever		
210	Reel Holder Bolt		
211	Reel Holder Spacer		
212	Reel Holder Knob		
213	7500 Els Tensioner Module		
214	7500 Upper Tray Pad		
215	7500 Lower Tray Pad		

SPARE PARTS & TOOLS

Part #	Description
70	T-Handle Hex Wrench 5 mm
71	T-Handle Hex Wrench 6 mm
72	Pathfinder Guiding Awl
73	Stringer's Awl
109	Needle Nose Pliers
110	Bent Nose Pliers
167	Hex Wrench Set (10 pc)
168	Bad. Flying Clamp Set
170	M10x35 Cap Screw for SM
171	Cutting Pliers
194	TT Brake Pad
222	String Length Meter Clamp Pads
223	Gripper/Clamp Cleaning Stone
224	6 mm Open End Wrench