CB-10 STRINGING MACHINE

INTRODUCTION

TENNISPRO DISTRIBUTION makes your life easier. You just obtained the CB-10 stringing machine in order to string both tennis and badminton racquets.

However, we advise you to carefully read this guide before stringing your first racquet. This guide will provide you with all of the necessary information regarding your machine, how it functions and the correct way to string. This information will help you learn how to quickly string all types of racquets.



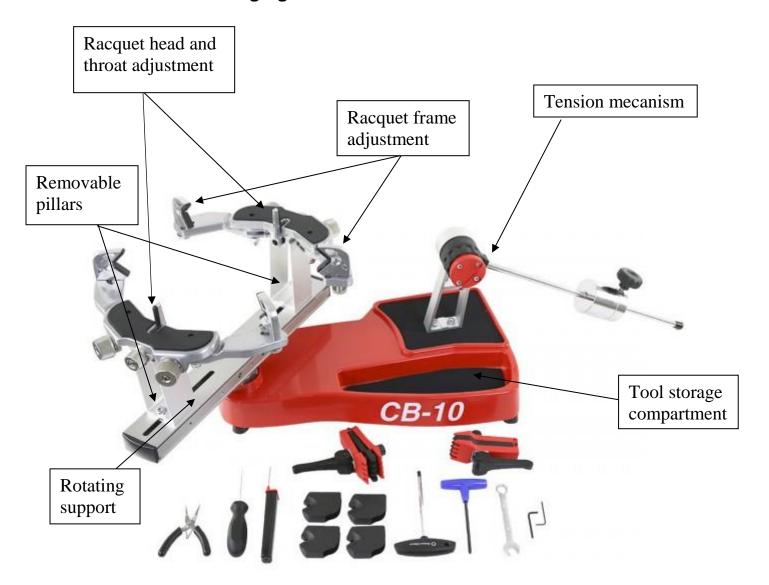
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I. THE STRINGING MACHINE : COMPOSITION

A. The Stringing Machine



B. The tools

On top of your stringing machine, you will receive all the necessary tools to begin stringing :

- Two lightening clamps
- One multi use clamp
- A string guider
- An awl
- An Allen key
- Covers for stringing badminton racquets
- A torque wrench



C. The weight

The weight of the manual CB10 stringing machine will enable you to string tennis racquets just as well as badminton racquets.

Be careful not to lose the screw that links the badminton weight to the rest of the weight if you alternate between stringing badminton and tennis racquets.

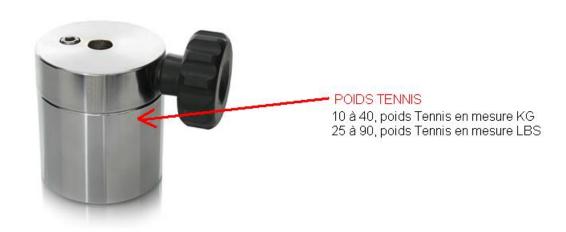




Image 1	Tennis Weight
	10 to 40, Tennis weight measuring in KG
	25 to 90, Tennis weight measuring in LBS
Image 2	Badminton Weight
	9 to 26, Badminton weight measuring in LBS
	4 to 12, Badminton weight measuring in KG

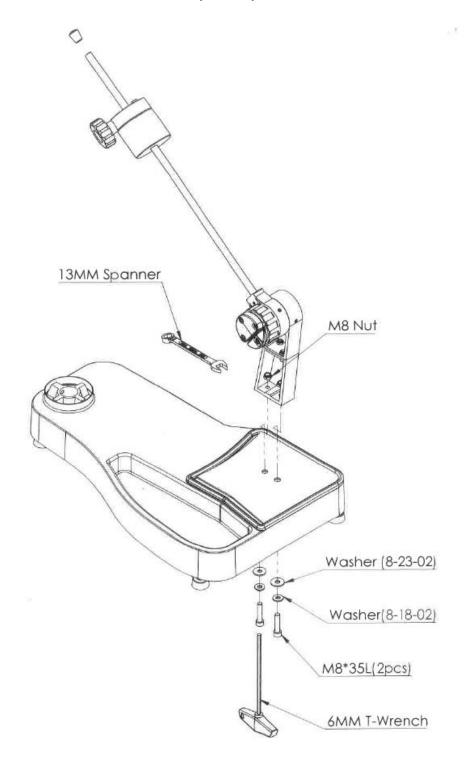


D. Putting the Machine Together

When you open the original case, you will receive 2 pieces:

- The body of the machine with the revolving plate
- The tension mecanism to assemble

In order to assemble the CB10's tension system, you need:





 To remove the end piece of the tension lever and insert the weight with the spanner adjuster on the same side as the end piece



Once you have completed these steps, your CB10 machine is ready to string your first racquet.

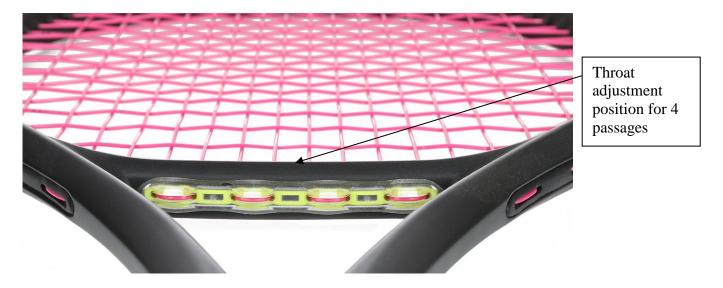


II. RACQUET AND STRING PREPARATION

A. Putting the racquet on the machine

In order to put the racquet on the machine to string it, you need to (see the following image :

- Adjust the pillars with the tightening tool and adapt the length to your racquet's length. Then, tighten with the Allen key.
 - → Position your racquet with the body of each screw in the interior of the frame. For this, position the upper screw in the middle of the mains and the lower screw in the middle of the 4 passages of the throat (see Photo 1) or in the middle of the central passage if there are 3 (see photo 2).
 - → Attention: make sure the butt cap of the racquet is right side up.







B. Advice before beginning

First of all, you need to study the present document in the B section to learn the terminology for the strings and holes. Almost all modern racquets do not have a left and right side. However, certain models offer a « Short Side ». This is the side where you must do your knot for the mains when you are stringing with the « two knot » method. For the « four knot » method, you need to tie off your superior knot on the Short Side.

→ This is the right side when the racquet is correctly placed on the stringing machine (see putting the racquet on the machine).

Once you have started stringing, do not remove the frame from the vice, unless you have :

- Finished stringing
- Released the tension for all of the strings that are already tightened.

Failing to take this precaution into consideration could lead to racquet deformation.

C. Preparing the string

To know whether you need to start stringing the racquet from the top or bottom, count the number of string passages there are at the throat of the racquet:

• If your racquet has 3 passages, start stringing at the throat area.





• If your racquet contains 4 string passages, you can start at the top of the racquet.



Starting to string at the throat or the top of the racquet does not have any impact on the following displayed methodology.

String can come in two forms (packages):

- A string pack of 12 metres
- A string reel. In this case, you need to measure and cut 12 metres in order to string your racquet.



III. HOW THE STRINGING MACHINE WORKS

A. Selecting tension

In order to determine which tension will be applied to your string, you need to place the weight on the tension lever. This is calibrated in both kilograms and pounds.

Attention: the applied tension corresponds to the numbers found closest to the tension mecanism and not to the numbers found on the other side of the lever.



B. The tension setting system

Here is how to proceed in order to put tension on the string:

- Put the string in the traction tambour. (follow the diagram below)
- Block the string by turning the tension system to the right (only a quarter turn).
- Firmly hold the two jaws, preventing them from turning, take the weight with the right hand and raise the bar to a vertical position.
- Slowly lower the weight by supporting it with the right hand. The weight lowers and the jaws exercise the string by applying tension.

For the first strings, the weight might go down a little further than the horizotal position. In this case, you need to :

- Repeat this process until the tension prevents the weight from dropping any further.
- Make sure the bar is in a horizontal position (10/15° more or less).
- The bar position must be identical in order to have similar tension on each string (see photo on page 11).





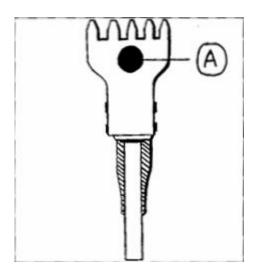
C. The clamps

The clamps are provided to help you maintain the applied string tension before releasing the tension from the tension mecanism.

Once you have tightened a string, you need to:

- Open the clamp
- Place the clamp as close to the grommet (hole) as possible on the tightened string
- Close the clamp to maintain string tension

The spanner adjuster (part A on the below diagram) will allow you to adjust the tightening space based on the string's gauge.



Remark : Generally, the clamps must be tightened enough to prevent the string from sliding. However, tightening too much can lead to damaging the string. Find a middle ground.



IV. STRINGING THE RACQUET

A. Two knot method

1. The mains

Based on the present photos in part II.D and based on the model of your racquet, you will begin stringing one side (the chosen side is not important EXCEPT for racquets with a « Short Side »). This string length is determined by the following calculation :

(Number of mains/2)+1

For instance, for a racquet with 16 mains (16/2)+1=9

You will then measure 9 lengths of a main string, permitting you to have enough string for the 8 mains on one side of the racquet and +1 extra main length to tie off the racquet with a knot.

Once this has been done, you can begin stringing the mains. Block the string on one side in order to not lose tension while you are stringing the other side. String your first main as previously explained, then block the string with your second clamp.

Put your string in the next grommet (hole) and repeat the above procedure.

Once you have finished the side with your 9 lengths measured, you can tie them off with a knot (<u>explained in part C below</u>).

Attention:

- Do not string one entire side at once as you will risk damaging your racquet. Do 3 or 4 on each side until you finish the mains.
- Certain racquets have mains where you will need to skip a string (primarly between the sixth and the seventh holes and the seventh and eigth holes). Verify before you begin stringing.

2. The crosses

To string the crosses of your racquet with two knots, here is how to proceed:

- After doing your knot with the shorter amount of string, the second amount must be another 6 metres (roughly) to enable you to string the crosses. If the last string finishes on the top, you will put the string through the first available cross hole.
- After this, you will put the string under the first main string, then over the second main string, then under... until you arrive at the same hole positioned on the other side of the racquet (starting by putting the string over or under the first main does not change anything; it is your choice).
- Put the string under tension, then clamp the string as close to the grommet as possible to maintain the applied tension.
- Continue by putting the string through the next available hole in order to do your second cross.



- Attention: the crosses must be done in staggered rows. This means if you put the string OVER the main for the cross 1, your cross 2 must go UNDER the same main!
- Continue stringing the crosses of your racquet until the last cross string by putting each string under tension and clamping each tightened string.
- After your last cross, you can do your final knot (<u>see part C below</u>).

B. Stringing with 4 knots

In order to string with four knots, cut your string into two pieces of string that are 6 meters long: one will be used for the mains and the other for the crosses.

1. The mains

Stringing the mains in four knots is the same as two knots except for three exceptions:

- If your racquet possesses a « Short Side », it is not necessary to take this
 information into account for the mains.
- It is not necessary to calculate the length of the mains. You can simply split the 12 metre string in half, obtaining two 6 metre pieces.
- A knot is to be completed on each side once the mains are completed (<u>see part C below</u>).

2. The crosses

To complete your crosses with 4 knots, the same procedure for the 2 knots method is to be followed, except there is one exception:

Your crosses will be completed with a second piece of 6 metres. You can directly string your cross and leave extra string on one side in order to tighten it later (prepare enough string to be able to tighten it with the tension mecanism). Next, this string should be blocked thanks to the departing clamp (not included with the CB3 stringing machine) until you finish all of your crosses. Here are the references on the Tennispro.eu website: T014 and 800.

Once your knot is tied on the bottom, you can tighten the first cross and tie off your last knot.

Attention: if your racquet possesses a « Short Side », you need to respect this information and put the extra piece of string on the right side.

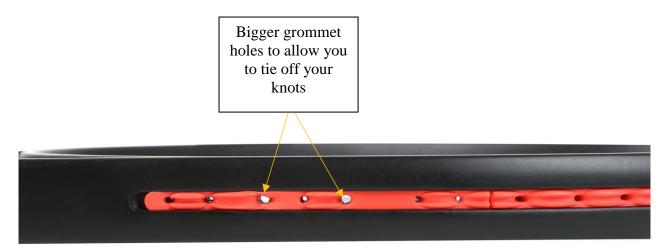
C. Doing a knot

1. Tying off knots

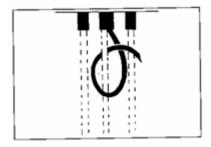
Once you have completed your mains and crosses, you need to tie off a knot in order to maintain the tension on your strings. For this :



• If no error has been made on your racquet, you need to find a hole that is wider than the other closer holes after tightening your last string. Indeed, this needs to be done in order to be able to tie the last string off with a knot.



- Put your string through the wider hole
- Put the string in an interstice on one side or the other
- Raise the string on the other side of the same string and put it in the formed loop.
- Delicately, but firmly tighten the knot and repeat this same procedure in order to do a second knot.
- Cut the excess string
- Release the clamp



<u>Remark</u>: For the majority of modern racquets, the holes do not contain another string, except for the ones in which you use to do knots.

However, on certain racquet heads, two strings can be put in the same hole. If it is difficult to put a string in a hole that already has a string in it, here is how you can proceed:

- Make the end of the string sharper or like a needle by using cutting pliers.
- Put the sharper string in the hole with the help of the multi-use pliers.
- Use the string guider (provided with the machine).
 - 1. What to do if the string is too short to reach the mecanism to tighten the string?



If the last string is too short and it is not possible to use the tension system on the stringing machine, there are two possible solutions:

- Use the bossage clamp (not provided with the CB3 machine. See the reference 808 as it will allow you to manually tighten the string up to 35kg/77lbs.
- Use the departing clamp (not provided with the CB3 machine. See the reference: 800), which connects and can be used to « lengthen » the string when it is too short to reach the tension mecanism.

If you have any problem or question regarding your stringing machine, contact our Return of Goods Service at the following address:

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