CB-14 PRO STRINGING MACHINE

INTRODUCTION

TENNISPRO DISTRIBUTION congratulates you on your choice. You have just acquired a stringing machine from the CB-14 Pro range, which will allow you to string tennis racquets, but also badminton and squash racquets.

However, we advise you to read this guide carefully before you start stringing your first racquet. It will give you all the information about your machine, how it works and how to string. It will help you learn to string all types of racquets quickly.

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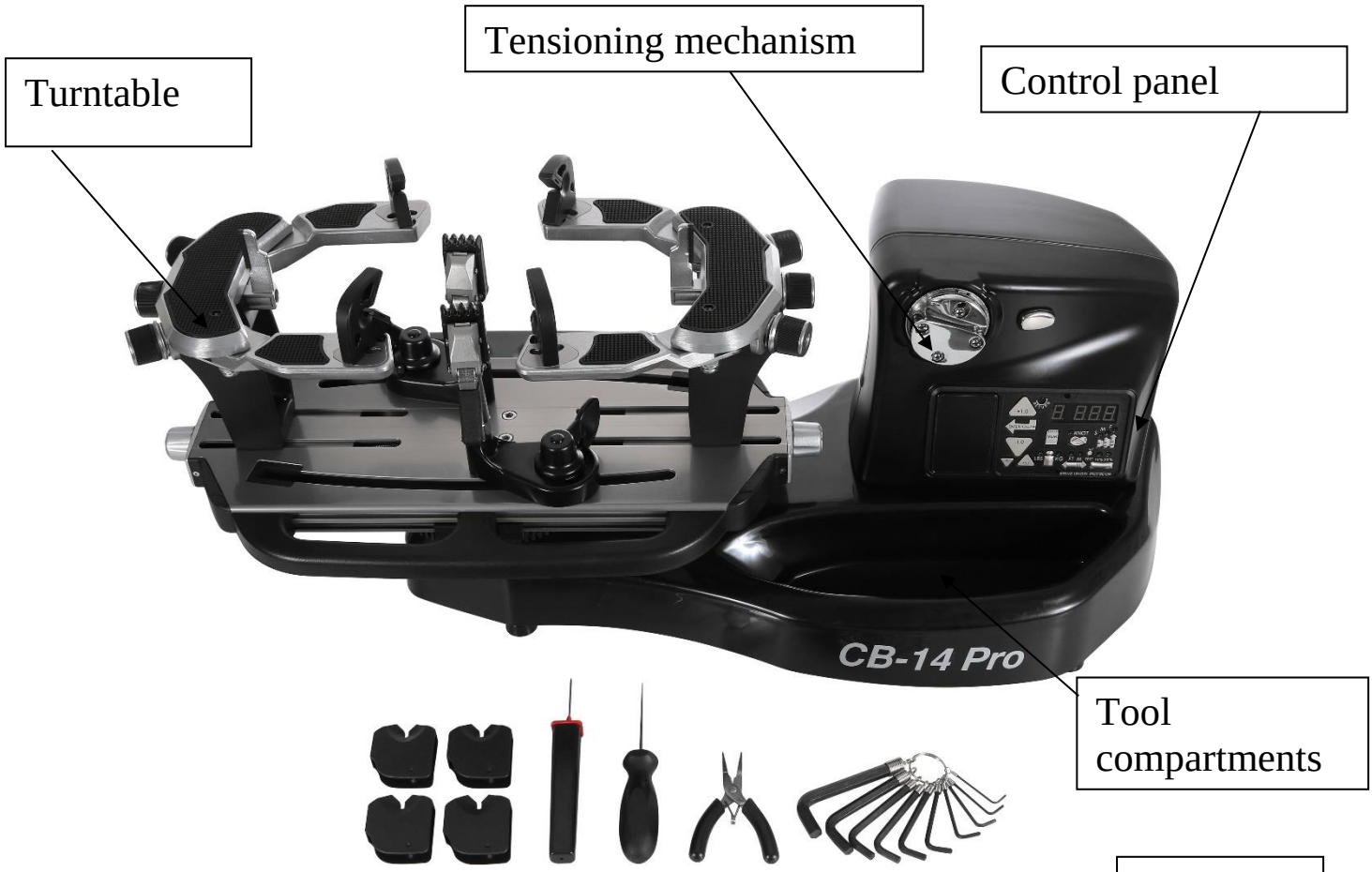
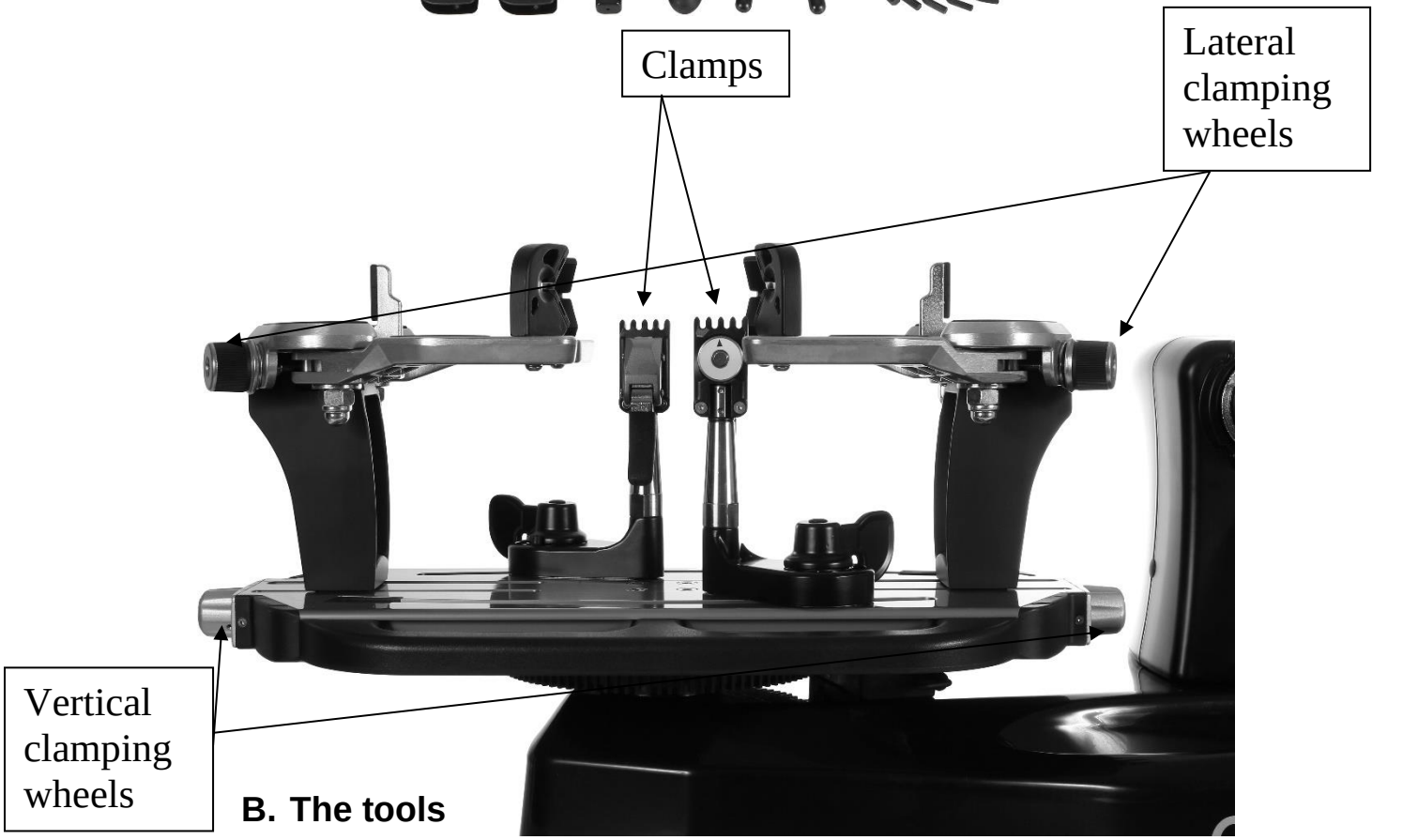
I. THE STRINGING MACHINE: COMPOSITION

A. The stringing machine





B. The tools

In addition to your stringing machine, you will receive all the necessary tools to start stringing:

- A multi-purpose pliers
- A string guide
- A punch
- Allen keys
- 4 adapters for badminton

C. The tension system

This CB-14 Pro stringing machine has an electronic tensioning mechanism controlled by the control panel.
This tensioning system has been optimized to reduce as much as possible the loss of time due to the obligation to press a button. This is why a Touch Pad has been added to the extension of the string passage and to increase the fluidity of the action.

II. PREPARATION OF THE RACQUET AND THE STRING

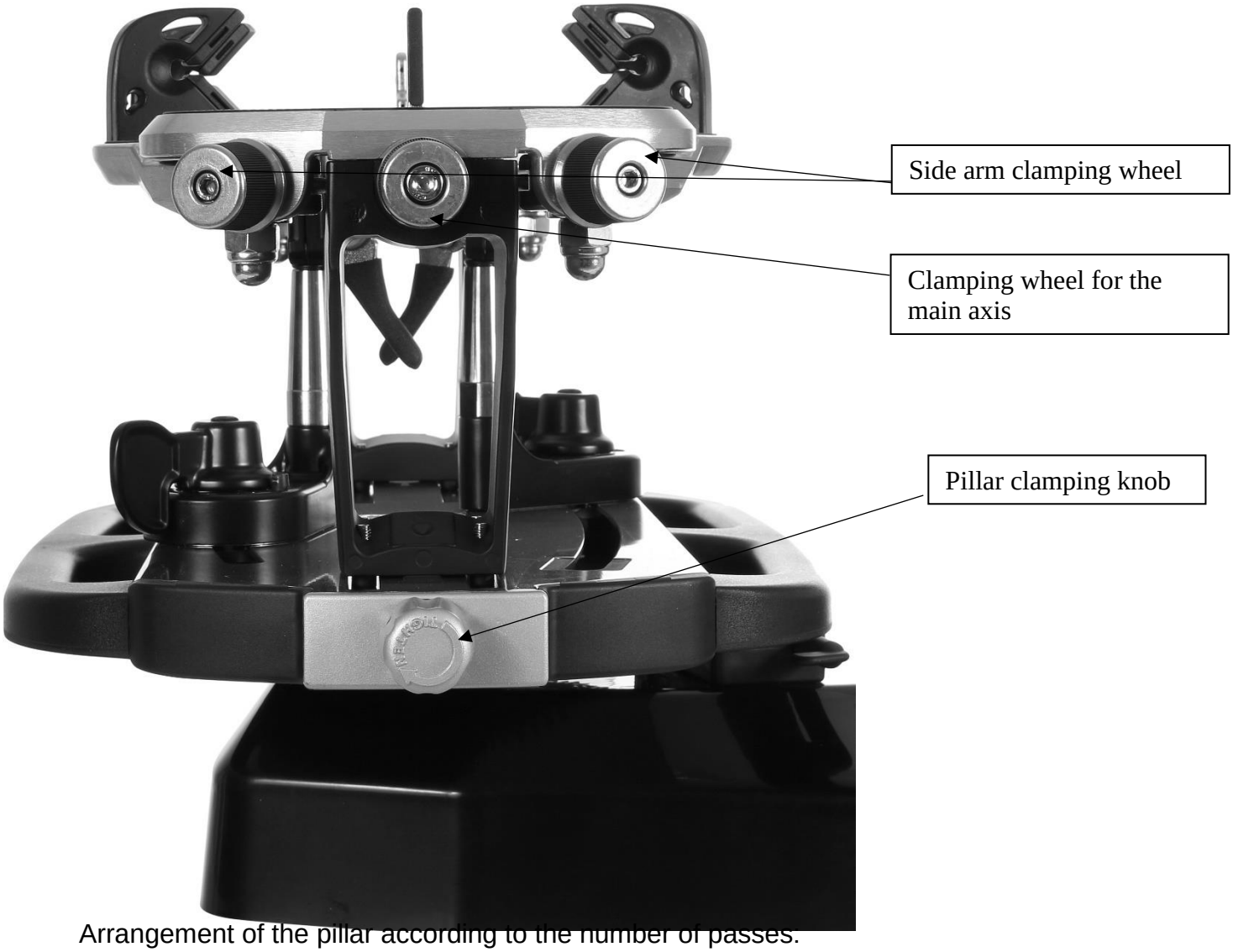
A. Racquet set up

To place your racquet correctly on the board, put it so that the two pillars are inside the frame like on the picture below:

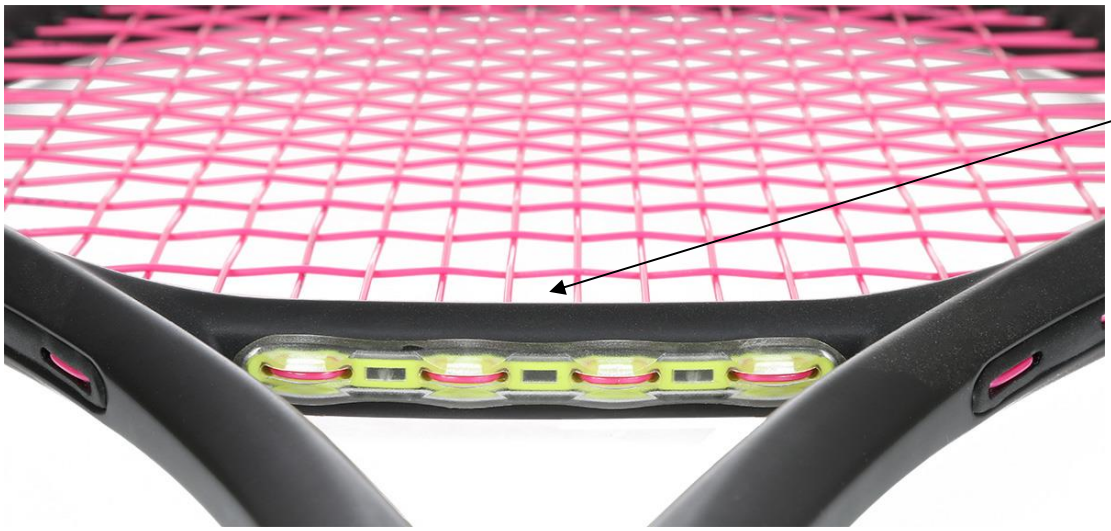
Then tighten the two central pillars with the knob so that the frame can no longer move as below:

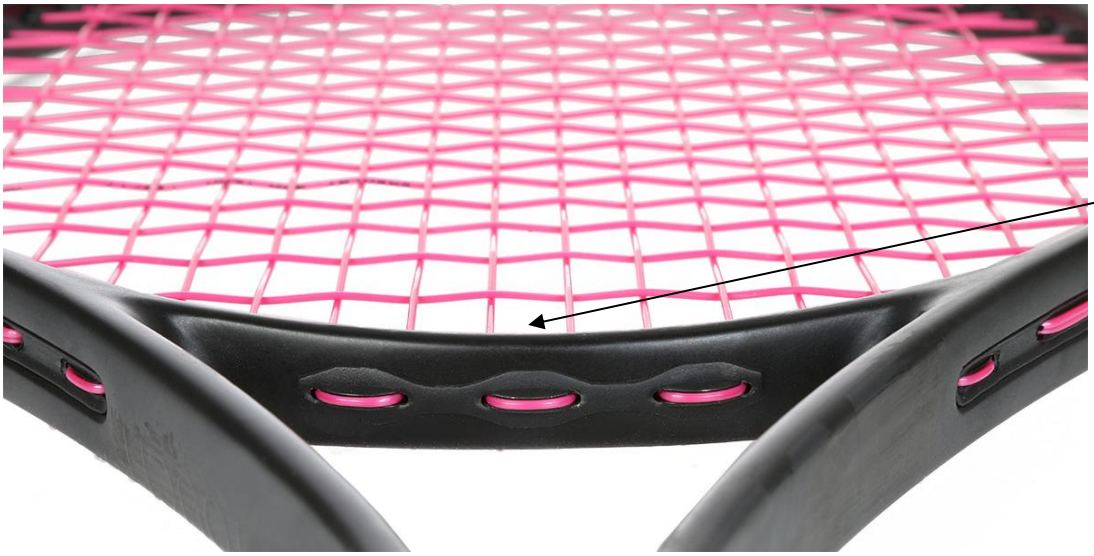
Finally, tighten the side arms to completely lock your racquet:

Below, the two clamping wheels:



Arrangement of the pillar according to the number of passes:





Caution: make sure the logo on the cap is on the right side when putting the racquet on

B. Tips before you start

First, study the document in Part B to learn the terminology of strings and holes.

Almost all racquets today do not have a right or left side. However, some models have a "short side", which is the side where you tie your upright knot when stringing with the "two knot" method and with the "four knot" method, it will be the side where you tie your top knot.

→ This is always the right side when the racquet has been properly positioned (see Racquet Set-Up)

Once you have started stringing, do not remove the frame from the clamps until you have:

- Finished stringing
- Released the tension on all the strings you have already tensioned.

Without this precaution, you could warp the frame.

C. String preparation

To find out if you should string your racquet from the top or the bottom, count the number of passes at the throat of the racquet:

- In the case where your racquet has 3 passages, you will start to string by the throat

- In case your racquet has 4 passages, you will start to string from the top of the racquet

Whether you start stringing the racquet from the throat or from the top does not affect the methodology that will be outlined below.

String can come in two forms:

- A 12 meters pack
- A string reel from which you will have to measure and cut the equivalent of 12 meters to string your racquet

III. OPERATION OF THE STRINGING MACHINE

A. The tensioning system

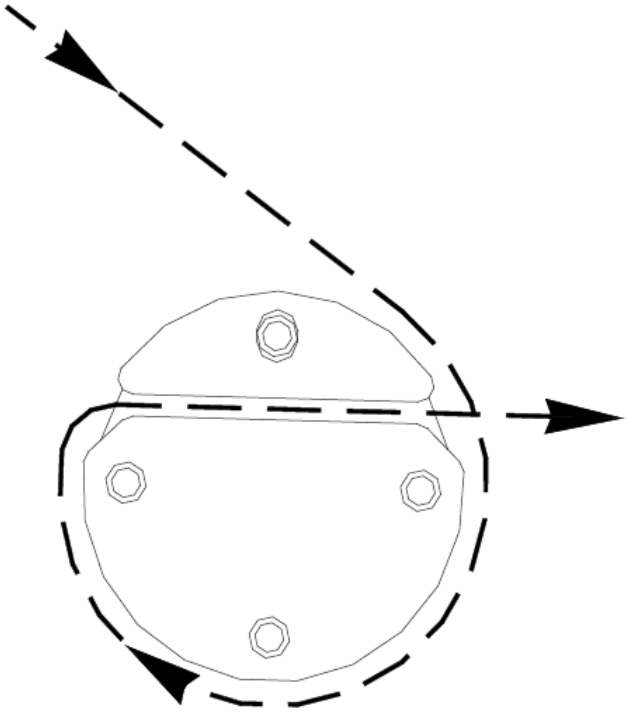
On this CB-14 Pro, a switch is present to start the powering up.

The **maximum traction time** (constant) is 60 seconds. If a string is pulled for more than 30 seconds, a beep will sound. The same happens at 40 seconds.
After 50 seconds, another beep will sound and a 10 second countdown will begin. If the countdown reaches 0, the motor will shut down and the tension applied to the string will be lost.

B. Clamps

The clamps supplied with the CB-14 Pro stringing machine are made of brushed aluminum. They can be tightened to fit the gauge of your string.

C. The traction drum



To install the string, wrap the string around the drum in a clockwise direction. The string should pass over the top of the drum and then back between the jaws of the drum. Before rotating the drum, pull the string slightly to remove excess string.

Warning: Never tension the string with your fingers near the jaws or between the string and the drum. Serious injury could occur if your finger is caught in the tensioning process. In an emergency, press the power switch to reverse the direction of rotation of the drum and release the stresses.

IV. OPERATION OF THE CONTROL PANEL

A. The screen

The control screen of the CB-14 Pro is an LCD screen. You can find two main pieces of information on it:

- The selected memory program
- The tension in XX.X format

B. Tension selection

When you are on the main screen, you can easily change the tension at which you will string your racquet thanks to the arrows on the left side of the control panel:

C. Different functions

Tension adjustment: The +1.0 and -1.0 buttons allow to increase or decrease by one unit the displayed tension (1 kg or 1 pound).
The +0.1 and -0.1 buttons allow to increase or decrease by one decimal the displayed tension (0.1 kg or 0.1 pound)

Knot : if you press this button, the light next to the knot button will come on.
This feature allows you to apply 10% more voltage the next time you power up to make your knot.

Speed : This button allows you to set the speed at which the string will be tensioned. Depending on the string, a lower speed may be recommended to avoid breakage.
Each press of this button will vary the speed between

- Slow
- Medium
- Fast

LBS-KG : You can switch from one unit to another at any time with this button. The last selection is automatically saved.

Pre-stretch : Each press of this button selects a string pre-stretch of 0% (no LED lit); 10% (white LED lit) or 20% (blue LED lit) of the selected tension.

Memory : The memory can store up to 9 different settings. Each press of the button will move to the next memory.
To store a tension in memory:

- Go to the desired memory
- Enter the tension you want
- Validate with the button « Enter/Clear » 

Test : A short press determines the number of strings made.
A long pressure (more than 5 seconds) allows to launch a self-diagnosis of the machine. This button also allows the calibration of the machine (see xxxxxxxxxxx)

 **Return** : In the event of a problem, this button will release the string stuck in the tensioner.

D. Calibrating

Please note that the calibration can only be done with a mechanical dynamometer not supplied.

Each machine is calibrated when it leaves the factory, but after a variable period of use, you may experience variations in tension. In this case, follow the procedure below:

1. Turn on the machine by pressing and holding the TEST button.
2. If the machine goes into LBS mode, press the WEIGHT button.
3. Connect a dynamometer to the machine and place a piece of string under tension on the other side.
4. If the tension of the dynamometer is different from the one displayed on the machine, make the necessary corrections with the TENSION ADJUSTMENT buttons and press the ENTER/CLEAR button.
5. Release the tension by pressing the switch.
6. The display should show 20 kg, at this point repeat steps 3 to 5.
7. Do the same for 30 kg and 40 kg.
8. After handling 40 kg, the machine should display 00. Turn off the machine and restart it normally.
9. The calibration is finished.

V. STRINGING THE RACQUET

A. Two knots method

1. The mains

Based on the pictures in part II.D. and depending on the model of your racquet you will pass a certain length of string on one side (the side chosen 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 example, for a 16-mains racquet: (16/2)+1 = 9
You will therefore pass 9 lengths of mains, this will allow you to have enough string to make the 8 mains on that side and to make the finishing knot.

Once this is done, you can start stringing your mains. Secure the string on one side so that you don't lose tension while stringing the other side.
Tension your first main as explained above and then secure the string with your second clamp.
Then pass your string through the next hole and repeat the above operation.

Once you have measured the side with your 9 lengths, you can tie the knot as explained in part C below.

Warning :

- Don't string all of one side and then the other as you may damage your racquet, instead string 3 or 4 on one side and then the other, etc.
- Some racquets have mains where you need to observe a string jump (mainly between the sixth and seventh string and between the seventh and eighth string), check this information before stringing

2. The crosses

To string the crosses of your racquet with the two-knot method, here's how to proceed:

- After tying your knot on the short strand, the second strand should be about 6 meters long to allow you to make your crosses. If this string reaches the top of the frame, you will pass it through the first free hole.
- After that, you will pass your mains by going under the first main, over the second main, under the third main... until you reach the same hole positioned on the other side of the racquet (starting over the first main doesn't change anything, it's up to you)
- Put the string under tension and position the clamp as close as possible to the grommets to maintain the tension applied
- To continue, you will pass your string through the second free hole to make your second cross.
  Warning: the crosses must be made in staggered order, i.e. if you have passed OVER a main with your cross 1, your cross 2 must pass UNDER this same main!

- Continue to make your crosses until the last one by putting under tension and moving your pince after each string made
- After your last cross, make your final knot (see part C below)

B. Stringing in four knots

To string in four knots, cut your string in half so that you have two pieces of string of 6 meters each: one will be used to make the mains and the other for the crosses.

1. The mains

The stringing of the mains for the four-knot method is the same as for the two-knot method with three exceptions:

- If your racquet has a "Short Side" it is not necessary to take this into account
- There is no need to do the math to get the lengths of the main, just do half and half with your 6 meter string
- A knot will be made on each side, once the mains are finished (see part C below)

2. The crosses

The stringing of the crosses for the four-knot method is the same as for the two-knot method with one exception:

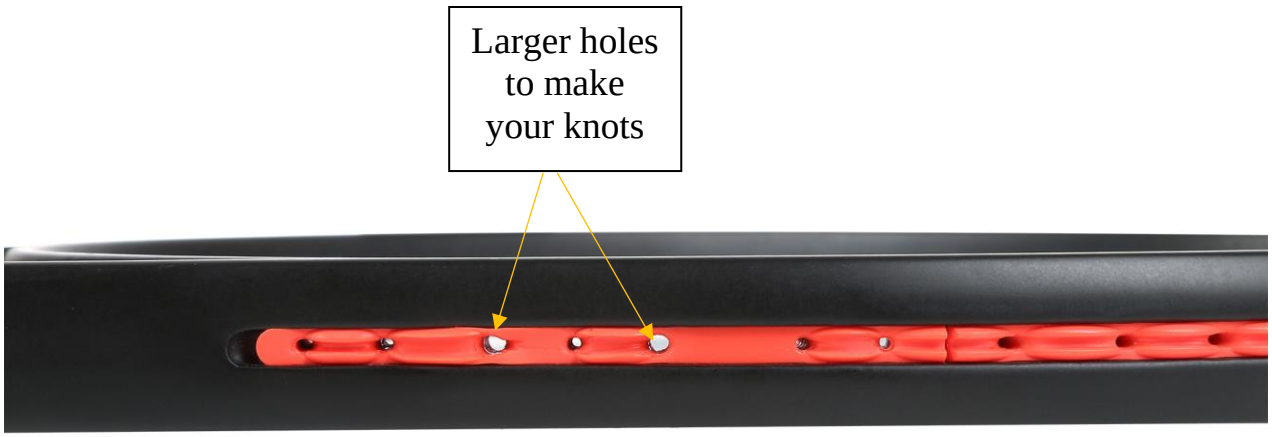
Your crosses will be made with your second piece of string of 6 meters. You are going to pass your first cross directly and make the string protrude on one side in order to put it under tension later (allow enough distance to reach the tensioning mechanism).
After that, this string will have to be blocked with a starting clamp (this one is not included in the machine, see references T014 and 800) until you have made all your crosses.
Once you have made your bottom knot, you can then put this first cross back under tension and make your last knot.
Warning: if your racquet has a "Short Side", it will be necessary to respect it and to make the piece of string protrude from the right side.

C. Making a knot

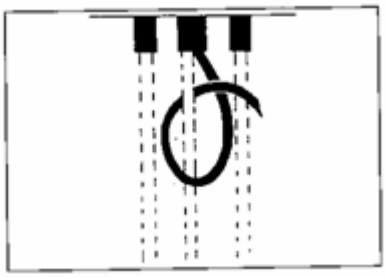
1. Making the knot

Once you have reached the end of your mains or your crosses, you need to tie a knot to keep the tension on your strings. To do this:

- If no mistakes were made on your racquet, you should find a hole (eyelet) larger than the others nearby after you have strung your last string. This hole was made in order to pass the string again to make your knot.



- Put your string through this hole (eyelet)
- Pass this string through a gap on one side or the other
- Bring up the other side of the same string and pass it through the loop
- Tighten the knot gently but firmly and repeat this process to make a second knot
- Cut off the excess string
- Remove the clamp



Please note : For most of today's racquets, the eyelets are occupied by only one string, except at the knots.
On some frames, however, two strings can fit through the same eyelet. If you have difficulty fitting a string into an eyelet that is already occupied, proceed as follows:

- Sharpen the end of the string with a box cutter or wire cutter.
- Push the sharpened string through the hole with the multi-purpose pliers.
- Use the string guide (supplied with the machine).

2. What to do if your string is too short to reach the tensioning mechanism

If the last string is too short, and if it is not possible to use the stringing machine's tensioning system, there are two possible solutions:

- Use a bump clamp (not supplied with the CB20 machine, see item reference number 808), which allows you to manually tension a string up to 35kg.
- Use a starting clamp (supplied with the CB20 machine), which serves as a connector when the string is too short to reach the tensioning system

If you have any problems or questions about your machine, contact our service department at the following address:

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