

# **User Manual**







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## 1 GENERAL INFORMATION

#### 1.1 INTRODUCTION

These are the original instructions for the EVOLUTION and EVOLUTION TOUR models in the Babolat Racket Station stringing machine range.

This manual has been specially developed for the EVOLUTION and EVOLUTION TOUR stringing machines.

In order to use the machines safely, **YOU MUST READ THIS MANUAL CAREFULLY** and comply with the instructions throughout the life of your equipment.

**Keep this manual handy for future reference** and ensure that it accompanies the machine in the event of rental or resale and transfer to a potential future owner.

Failure to follow these instructions exposes you to the risk of improper use of your machine, premature wear of certain components which could lead to damage and/or an accident. Babolat cannot be held responsible for the consequences of non-compliance with the instructions, particularly in terms of safety and warnings.

Keep this manual in a convenient place so you can refer to it at any time and ensure that it is kept with the machine if loaned or sold.

Technical or design modifications may be made to our machines to enable you to benefit fully from our experience and the latest technology and equipment. As a result, some of the features and information contained in this manual may be changed without prior notice or obligation to update content.

You must retain the machine's original packaging (for product return)

In this manual, paragraphs relating to safety and requiring particular attention are indicated by the following symbols:



Warning of risk of serious personal injury.

CAUTION: Warning of risk of damage to machine.



## 2 WARNINGS

In terms of safety, our machines are designed and manufactured according to applicable local regulations relating to machinery, electrical equipment, electromagnetic compatibility and the restricted use of certain hazardous substances in electrical and electronic equipment.

(Declaration of conformity in appendix 17 of this document)

Our machines comply with current safety regulations and any improper use carries risks for people and the machine.

### 2.1 USER COMPETENCY

#### Professionnel user competency:

Our machines are intended for professional use and must be installed, used and maintained by competent personnel who are qualified in this type of equipment.

Technical operations must be performed exclusively by professionals.

Incorrect repairs may have serious dangerous consequences for the user.

#### **Out of Europe:**

The appliance must not be used by persons (including children) with reduced physical, sensory or mental capacities, or a lack of experience and knowledge, unless they have received supervision or instructions".

Children under supervision must not play with the device.

#### For Europe:

This device may be used by children aged 8 years and over and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have received supervision or instructions regarding the use of device safely and understand the hazards involved.

Children should not play with the device.

Cleaning and user maintenance shall not be made by children without supervision".



## 2.2 MACHINE MODIFICATIONS / MAINTENANCE

Babolat shall not be liable if any technical alterations are made to our machines without our written authorization, or if damage occurs due to the machine not being used for its intended purpose of stringing tennis, badminton, squash or other rackets using synthetic or natural gut strings.

#### **Electrical safety:**

The main maintenance operations described in this document are preceded by warnings relating to switching off the machine prior to any operations being carried out.

In particular, we would like to emphasize that Babolat shall not be liable should any maintenance operations be undertaken without first ensuring that the machine is switched off.

Should you have any problems or questions relating to your stringing machine, please contact your nearest Babolat Customer Services departmentor visit Babolat's B2b website(http://b2b.babolat.com) or contact the aftersales team by email (aftersales-machines@babolat.com).

Make sure you have your machine's serial number to hand before you call. Also make sure that you are near to the machine and have enough time to perform actions on it if required.



## 2.3 BABOLAT'S LIABILITY

Babolat shall not be liable for any direct or indirect damage caused by incorrect installation, poor maintenance, alterations or improper use.

We shall also not be liable in the event of any failure to comply with standard requirements for the prevention of accidents and fire or for the safety of electrical installations.

In terms of electrical safety, the Babolat machine range is intended for authorized use only in industrial or commercial premises.

Under no circumstances must the machine be used without following the start-up procedure (described in section 4).

Never open the stringing machine (= never remove the housing) without Babolat's authorization.

Never apply any varnish or paint to the string above the machine as drips of these products may cause permanent damage to the housing and mechanical parts.

Failure to comply with the latter four clauses will invalidate the warranty.

#### 2.4 PRECAUTIONS FOR USE

- To switch off the stringing machine, do not use the power cable!

  First press the On/Off push button then unplug the cable from the power outlet.
- Never move or dismantle the stringing machine without switching it off first.
- Never allow children or anyone who is not familiar with the instructions to use the machine.
- Ensure that no-one enters the 1-meter (3 ft) safety area while the machine is in use (as described in the positioning section).



- Never leave your workstation without first taking the precaution of putting the stringing machine on standby or off by using the on/off push button or by locking your profile (color touch screen).
- Do not insert any objects into the turntable or traction unit openings.
- Your stringing machine is factory calibrated using precision instruments. Except in the case of an accident, Babolat does not recommend altering the calibration during the life of your machine.

If, however, you wish to calibrate your machine, see section 10.4.



#### 2.5 Preventing personal injury to users

#### Wearing and using Personal Protective Equipment (PPE):

- The use of PPE (goggles, shoes) is strongly recommended when installing and using the machine.
- Long hair must be tied back and/or covered.
- Users must be careful not to trip over the covered base.

#### Installing the machine:

The required number of installers specified in the picture instructions must be used.

The machine must be moved by two installers.

The tools recommended in the picture instructions must be used.

It is recommended that installers wear standard PPE.

Mechanical stand: the user must not insert all or part of their hand into the groove in the upper tube.

#### **Authorized actions:**

The machine has been designed to ensure the safety of the user. When using the machine as normal (not including maintenance operations), the user can and must only handle the following elements:

- Turntable and post (manual rotation)
- Turntable arm
- Billiards (tennis or badminton)
- Arm and billiard adjustment wheels
- TU start cycle button
- HMI and buttons or screen for touch screen version
- On/Off button
- Mechanical stand height adjustment screw

#### **Prohibited actions:**

injury. If the covers are removed, the machine is considered to be in maintenance status and must not be switched on.

The user must not insert any objects or body parts into the housing protected by these covers.

- The user must not insert any objects into the turntable openings or the traction unit travel slot.
- The user must not insert any part of their body (hand, fingers, other) into the turntable openings or the traction unit travel slot.

We shall also not be liable in the event of any failure to comply with the rules for use listed above.



## 2.6 ENVIRONMENTAL CONDITIONS

The following conditions are required for the workstation:

- temperature: 10-35°C/50-95°F

relative humidity: 30-70%minimum lighting: 300 lux



Protect the machine from splashes of water and do not expose it to rain.

Use the protective cover.

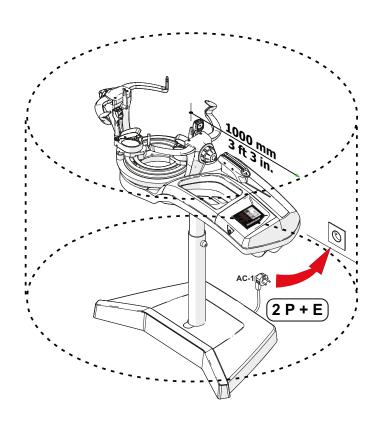
#### 2.7 Positioning

As stated in the introduction and certification, the EVOLUTION machines are designed to be used in industrial, semi-industrial or commercial premises only.

The machine must be positioned on a flat surface close to an electrical power supply and in a location allowing enough space for the operator to move freely while ensuring a minimum safety area of 1 meter around the machine.

This safety area also extends above the machine regardless of the stand height setting.

No furniture or other objects must be placed beneath the machine to prevent them from being crushed when lowering the stand.





#### 2.8 SPECIAL POWER SUPPLY

- The power supply included with your stringing machine is specially designed to ensure your safety.
- The power supply supplied is intended for use in a commercial or industrial environment only.
- If the machine is installed on a table, the special power supply must be plugged directly into the machine.

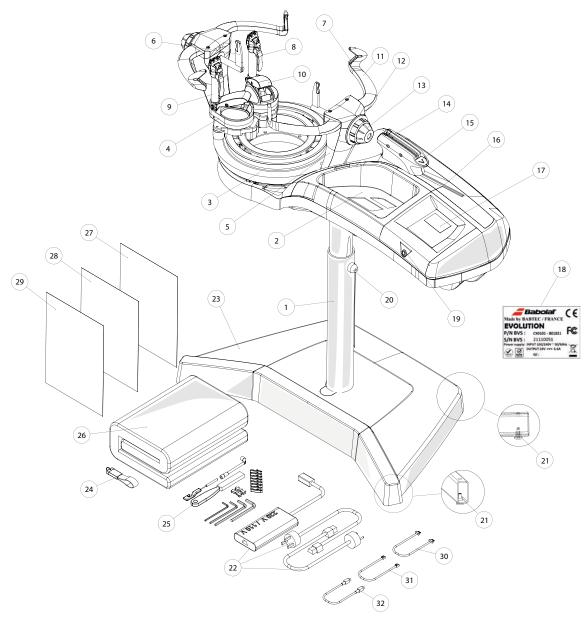


- Only use the power supply provided by Babolat.
- Extension cables must be carefully chosen, assembled and maintained.
- Insulation must be in good condition in order to ensure your safety.
- Cables must be inspected on a regular basis and replaced rather than repaired if faulty.
- Adapt extension cable lengths and sections as required.



## 3 DESCRIPTION

## 3.1 EVOLUTION



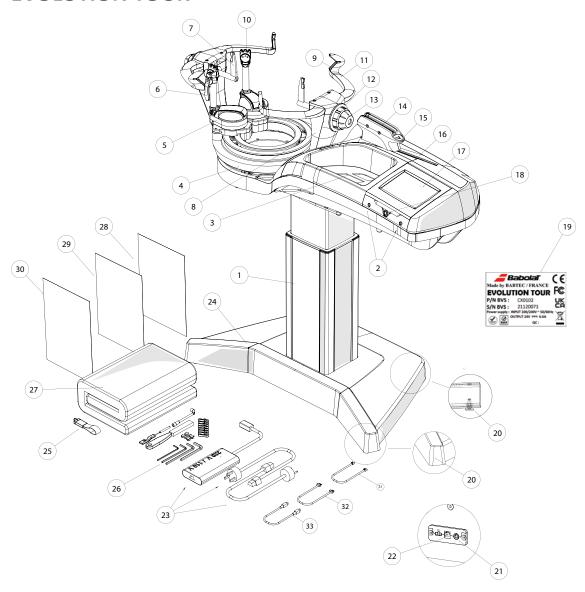
- 1 Manual stand
- 2 Tool tray
- 3 Turntable
- 4 Clamp base
- 5 Post
- 6 Billard
- 7 Arm pad
- 8 Clamp locking lever
- 9 Tooth clamps
- 10 Clamp base locking lever
- 11 Profiled arm
- 12 Profiled arm control knob

- 13 Billiard control knob
- 14 Traction head
- 15 "Start cycle" button
- 16 Traction unit
- 17 Monochrome screen
- 18 Nameplate
- 19 On/off button
- 20 Height adjustment screw
- 21 Leveling screw
- 22 Power supply
- 23 Base cover
- 24 USB drive: user manual

- 25 Maintenance tools
- 26 Cover
- 27 User manual
- 28 Quick start guide
- 29 Other documents
- 30 Ethernet cable
- 31 LIN-LIN cable
- 32 DIN-DIN cable



## 3.2 EVOLUTION TOUR



- 1 Self-adjusting electric stand
- 2 String measuring device
- 3 Tool tray
- 4 Turntable
- 5 Clamp base
- 6 Clamp locking lever
- 7 Billard
- 8 Post
- 9 Arm pad
- 10 3-tooth clamp
- 11 Profiled arm
- 12 Profiled arm control knob

- 13 Billiard control knob
- 14 Traction head
- 15 "Start cycle" button
- 16 Traction unit
- 17 Control panel with color touch screen and USB port underneath
- 18 On/Off button
- 19 Nameplate
- 20 Leveling screw
- 21 Power socket
- 22 RJ45 internet port
- 23 Power supply
- 24 Base cover

- 25 USB drive: user manual
- 26 Maintenance tools
- 27 Cover
- 28 User manual
- 29 Quick start guide
- 30 Other documents



## 3.3 CHARACTERISTICS

## **Dimensions (overall)**

Length	1140 mm / 3.7 Ft	
Width	360 mm - 650 mm / 1.2-2.2 Ft	
Machine height without stand	310 mm / 1 Ft	
Height of EVOLUTION TOUR or EVOLUTION stringing surface on stand	1000 à 1200 mm / 3.3 à 4 Ft	

## Weight

EVOLUTION machine: 31.5 kg / 69.5 lbs
EVOLUTION TOUR machine: 33.5 kg / 74 lbs

Manual stand (EVOLUTION): 15 kg/33 lbs
Self-adjusting electric stand (EVOLUTION TOUR): 22 kg/48,5 lbs

## **Electrical specifications**

Voltage	From 100 to 240 VAC
Frequency	from 47 to 63 Hz
Absorbed power	2.2 A
Control circuit voltage	24 VDC
Power circuit voltage	24 VDC

### **Noise level**

< 73 dB(A)

## **String tension**

Ranges: 5 to 40 kg in 0.1 kg, 0.5 kg or 1 kg increments

11 to 88 lbs in 0.5 lbs or 1 lbs increments.



## **3.4 TOOLS** (sold separately)

**BABOLAT** has designed a whole range of specific stringing tools to make your work easier. They are supplied in a case (purchase code P13210).



## 3.5 BADMINTON KIT (option)

The EVOLUTION and EVOLUTION TOUR stringing machines can also be used to string badminton rackets. A special kit is available for purchase and has the code MKB7301.

Section 5.8 contains information about installation and use.





## 4. FIRST INSTALLATION IN 3 STEPS

Note: You can find a summarized and illustrated version of the instructions below:

- In ANNEX 13 and 14
- Printed version in the box of the machine.
- PDF version in the USB key supplied with the machine.

## 4.1 SETTING THE TURNTABLE FREE

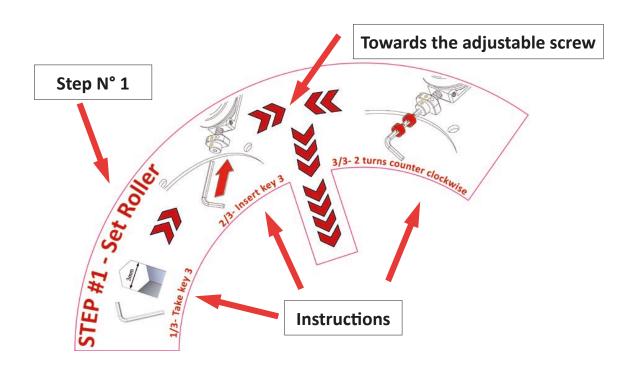
Step 00: Remove the foam spacer (A)





## **Step 01:** Set the adjustment roller

There is a removable sticker on the top of the turntable indicating the instructions shown below (in English) and showing the position of the adjustment screw.

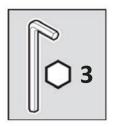


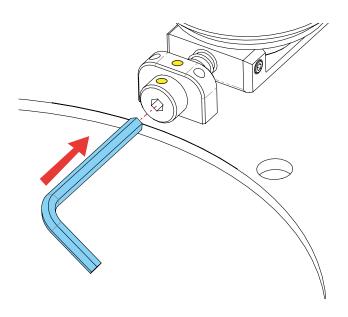




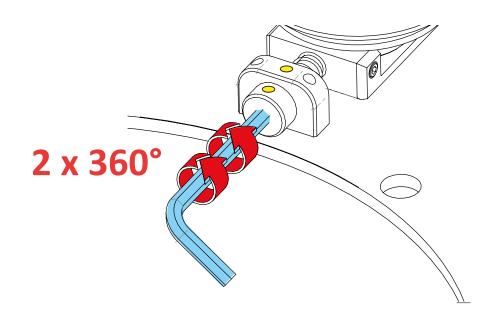
## Illustrated step-by-step procedure:

1-1: Insert the 3 mm Allen key into the adjustable screw head.





1-2: Loosen the screw (counterclockwise motion) by 2 turns (Use the yellow dots as a reference).

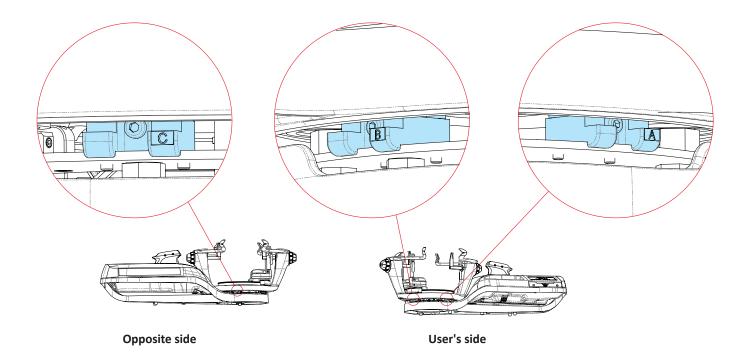




## **Step 02:** Release the 3 transit supports

The 3 transit supports are positioned on the machine as shown below.

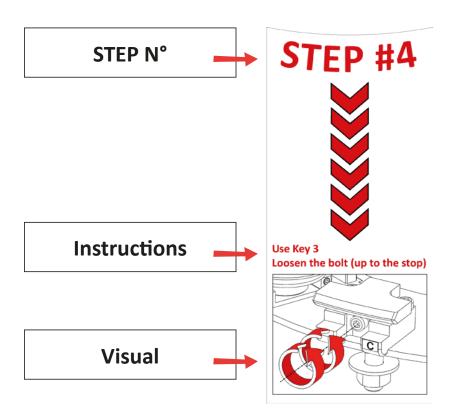
Supports A and B are positioned on the screen side while support C is on the opposite side.





A removable sticker is positioned next to each support containing instructions and an illustration of the action.



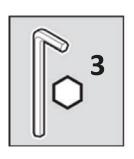




## Step 2.1: Release support A

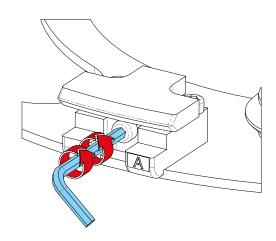
Loosen the screw (counterclockwise motion) using the 3 mm Allen key until it reaches a stop.

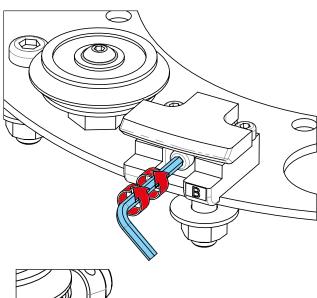
**IMPORTANT: DO NOT FORCE** beyond the stop.



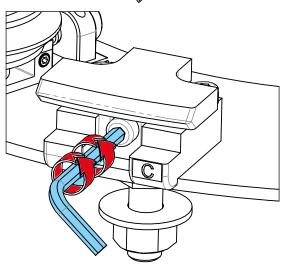


**Step 2.2:** Release support B: Same process.





**Step 2.3:** Release support C: Same process.



Step 2.4: Remove the stickers.



#### 4.2 SWITCHING ON



Always plug the machine into a grounded mains socket. Check that the voltage range indicated on the power supply corresponds to that of the power network.

When installing the machine, it must NEVER be switched on without first:

- following the installation instructions (picture instructions in the machine box)
- following the "initial installation" instructions in section 4
- Plug the power cable into a mains socket.
- Press the On/Off button for 3 seconds. The Babolat logo appears on the screen. If this does not happen, see "MAINTENANCE" section, "Troubleshooting" paragraph.
- Unplug the power cable before performing maintenance operations.



## 5. USE

#### 5.1 CONTROL PANEL

#### **EVOLUTION** monochrome screen

The 4 buttons are used to select functions or access the main screen's sub-menus. The 2 buttons and + are used to change the related options or values.

**NB**: there are step-by-step instructions on how to use the monochrome screen (see section 7).



### **EVOLUTION TOUR color touch screen**

Your EVOLUTION LINK stringing machine's color touch screen is easy and intuitive to use. You can work using a predefined user profile or without a user profile.

The screen holder can be moved to be visible to the public between uses.

**NB**: there are step-by-step instructions for the color touch screen (see section 7).





## **Audible messages**

#### **EVOLUTION** with monochrome screen

The audible signal sounds when:

- the traction head reaches the right-hand end of travel,
- the traction head reaches the required tension, provided that the sound is enabled (settings menu section 7.5).

#### **EVOLUTION TOUR** with color touch screen

An audible signal can be assigned to the following:

- at the end of each tensioning operation, when the required tension is reached,
- alerts,
- other information.

Instructions are provided for enabling and assigning a sound to each situation (section 8.4.4.2 - "Sound" sub-menu).

## **Factory settings**

Factory settings are the settings applied when you switch the machine on for the first time. They remain the same until you change them.

The factory settings are:

	Monochrome screen	Color touch screen
Preset value	25 kg / 55 lbs	/
Pre-stretch	0 %	0 %
Knot	+ 2 kg / 4 lbs	+ 2.0 kg / 4 lbs
Language	English	English
Audible signal	yes	yes
Turntable brake	/	no
Main tension	/	25 kg / 55 lbs
Cross tension	1	25 kg / 55 lbs
	· · · · · · · · · · · · · · · · · · ·	-



## **5.2 Positioning the frame**

The EVOLUTION TOUR or EVOLUTION stringing machine is designed to accommodate all types of frames, even oversized ones.

#### **CAUTION:**

Ensure the clamps are inside the stringed area before positioning the racket. Overtightening or under tightening the arms and billiards may distort or damage the frame and change the tension after stringing.

- Hold the frame in one hand and use the other to turn the billiard control knob (racket throat side) until the "V" pad of the billiard makes contact between 2 grommets and on the center, indicator marked inside the frame.
- Turn the arm control knob (racket throat side) to bring the pads into contact with the outside of the frame.
- Roughly center the frame between the arm pads then gently tighten the arms (racket head side).
- Turn the billiard control knob (racket head side) until the "V" pad of the billiard makes contact between 2 grommets in line with the first billiard. Do not tighten the billiard.

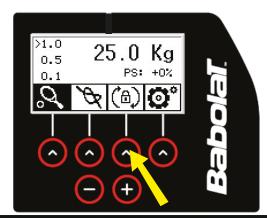


#### 5.3 TURNTABLE BRAKE

The turntable lock function allows you to immobilize the turntable during rotation. This function is useful for professional stringers.

#### **EVOLUTION** with monochrome screen

Apply and release the brake from the control panel by pressing the third button , The icon ( ) background is black when the brake is applied.



#### **EVOLUTION TOUR with color touch screen**

You can adjust the turntable lock automatically for each tensioning operation by selecting "auto" or use the manual brake by selecting "no".

You can then apply or release the brake by touching the icon(台)The box turns light gray with a yellow outline when the brake is applied.





#### 5.4 TENSIONING THE STRING

The frame must be correctly positioned. Check that the tension requested by your customer is compatible with the racket, refer to the frame manufacturer's stringing recommendations and enter the string tension value using the control panel.

• To tension the string, place it in the self-tightening jaws on the traction head and, without releasing it, press the "Start cycle" button. You will get used to performing this specific action after a few tries.

The self-tightening jaws grip the string and the traction head starts to move. Let go of the string at this point.

During the traction cycle, the screen displays the actual tension applied to the string (from 0.0 kg to the preset value).



• When the required tension is reached, close the 3-tooth clamp and lock the clamp base to immobilize the string (see section 5.7/5.8). Press the "Start cycle" button again. The traction head returns to its initial position and the self-tightening jaws open to release the string.

When the traction head reaches the end of its travel without the tension being reached, an audible signal sounds to indicate that the tension is not correct.

**String measuring device** (only on EVOLUTION TOUR, see section 8.4.1.1)

Your EVOLUTION TOUR stringing machine's string measuring device automatically adapts to the string diameter or material.

To cut a string to a particular length, simply insert the end of the string into one of the holes on either side of the On/Off button, push the string and read the measurement (5 cm accuracy) on the screen.

The measurement is taken when the end of the string emerges from the second hole. The measurement is bidirectional. The length increases or decreases depending on whether the string is being pushed or pulled.

Cut the string with pliers when the desired length is displayed. Then remove the string from the measuring device.



A: value displayed on the screen

Press "OK" to return to the stringing screen.

If you want to perform a second measurement straight away, press the "Reset" button. The counter resets to zero and you can measure the next string.



#### 5.5 Using the clamps

## 5.5.1 Description

EVOLUTION and EVOLUTION TOUR stringing machines are equipped with the latest generation of automatic precision clamps for tennis rackets.

They automatically adapt the pressure to hold and maintain the integrity of the tennis or badminton racket string whatever its diameter and material.

They also include 7 fine-adjustment notches to adjust the pressure of the automatic jaws, providing users with increased feel and feedback when closing the clamp lever.



## **Automatic precision tightening**

To adjust the clamp, you need to: - Raise the lever

- Turn the wheel if required.

Less pressure: turn the wheel counterclockwise to the minus sign (-).

More pressure: turn the wheel clockwise to the plus sign (+).







(Raise the lever then turn the wheel)

(Raise the lever then turn the wheel)



## **5.5.2** Instructions for use

**NB:** The use of an additionnal starting clamp is recommended for direct 35 kg/77 lbs traction.

**Locking the clamp:** - Place the string between the clamp jaws

- Close the locking lever

**Opening the clamp:** - Position your fingers below the handle

- Raise the locking lever





## 5.6 CLAMP BASE SYSTEM

The clamp base makes it easy to position the 3-tooth clamp at any point on the racket frame by sliding it over the turntable.

## Semi-automatic clamp base

- To hold the tensioned string, you need to:
  - position the clamp in line with the clamp base
  - move the clamp base on the turntable to position it beneath the string you want to hold
  - clamp the string using the 3-tooth clamp locking lever.
- Lock the clamp base on the turntable by pushing down the locking lever.

**NB:** This operation can be carried out at the same time as tightening the string by pushing the locking lever with the side of your hand.

 To unlock the clamp base, loosen the string by lifting the locking lever then let the clamp go down. You can also unlock the clamp base by lifting the locking lever.



The rope is placed between the clamp jaws, lower the clamp lever and exert pressure on the locking lever to lock the clamp holder.

#### 5.7 REMOVING THE RACKET

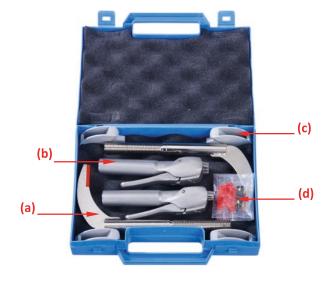
Always start by unlocking the billiards before opening the arms. After removing the racket, fully loosen the billiards to make it easier to position the next frame.



## **5.8 BADMINTON KIT (option)**

The "Badminton racket stringing kit" option (semiautomatic clamp holder: code MKB7301) is supplied in a case and includes:

- 2 badminton billiards (a)
- 2 badminton clamps (b)
- 4 interlocking V-shaped caps (c)
- 1 set of badminton billiard pads + tension distributor (d).





Do not use the "SENSOR" badminton kit with the stringing machine

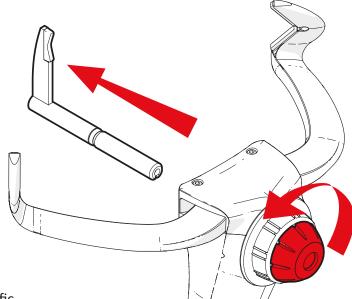
Install the badminton stringing kit on your stringing machine as follows:

• Position the 4 V-shaped caps on the profiled arm pads.

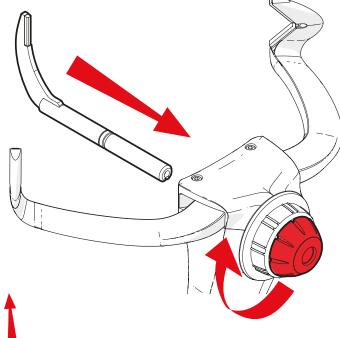




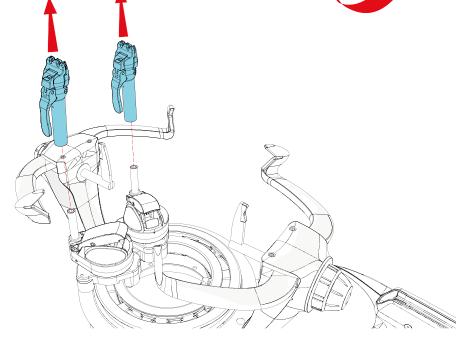
• Loosen and remove the 2 billiards.



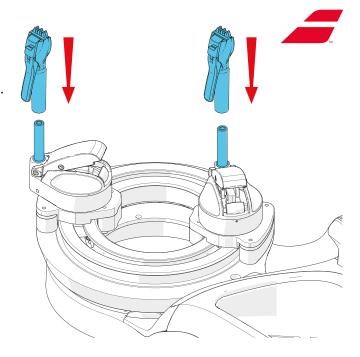
• Replace the 2 billiards with the 2 specific **EVOLUTION (TOUR)** badminton billiards.



• Remove the clamps.



• Replace the clamps with the badminton clamps.



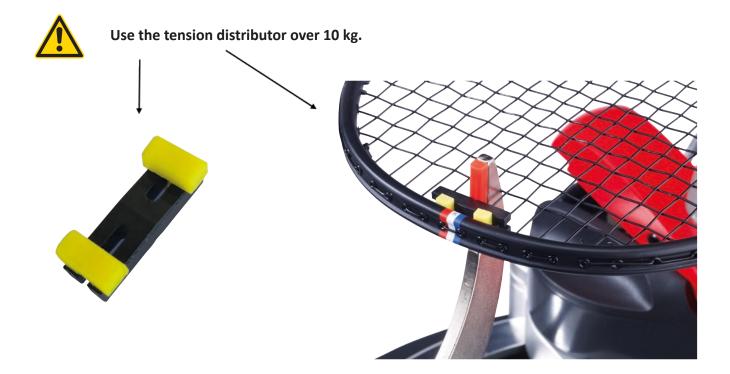
**NB**: Switch to badminton mode for strings with a gauge of less than 1 mm:







BABOLAT shall not be liable for any racket breakage if the manufacturer's recommendations are not observed.





## **6 MAINTENANCE**



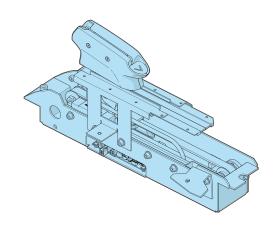
Ensure that the stringing machine is switched off before performing any maintenance operations.

Disconnect the power cable from the mains socket.

#### 6.1 REPLACING THE TRACTION UNIT

The traction unit is the key component of your stringing machine. If it becomes faulty, once you have received authorization from **Babolat** Customer Services, simply remove it and replace it with the one sent to you by **Babolat**.

The traction head must be in standby position close to the turntable. If the traction head is immobilized in the middle of its travel, contact **Babolat** Customer Services for help with returning the faulty traction head to the correct position for it to be replaced.

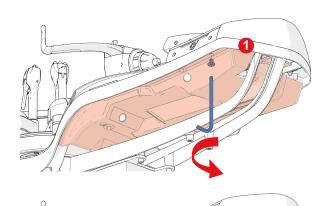


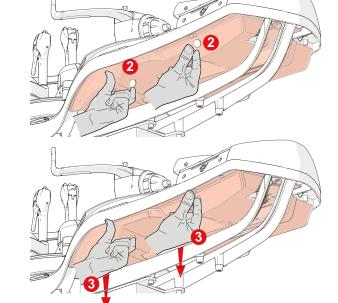
#### *Tools required:*

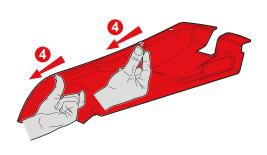
- 3 mm Allen key (supplied with the machine).
- 4 mm Allen key (supplied with the machine).

### Removing the front lower cover

- 1. Remove the security screw (and washer) using Allen Key 4 mm
- 2. Insert fingers into the lower cover holes to grip it
- 3. Pull the lower cover downwards
- 4. Slide the lower cover to the left to release it.



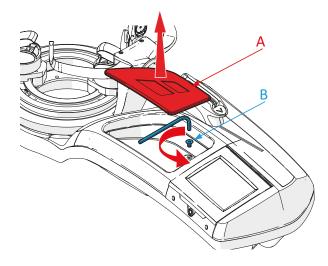




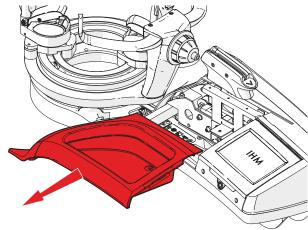


## Removing the tool tray

- Remove the foam insert (A) from the bottom of the tray.
- Loosen the mushroom HSHC screw (B) in the base of the tray with the 3 mm Allen key.

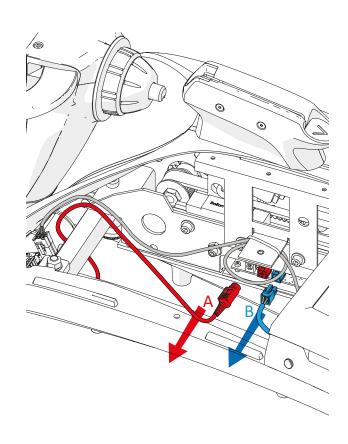


• Pull the tray towards you to remove it.



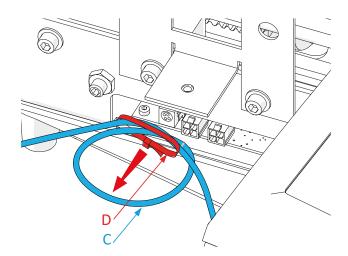
## Removing the traction unit

- Disconnect the cables from the traction unit:
  - Mains power (A).
  - Screen power (B).



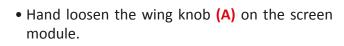


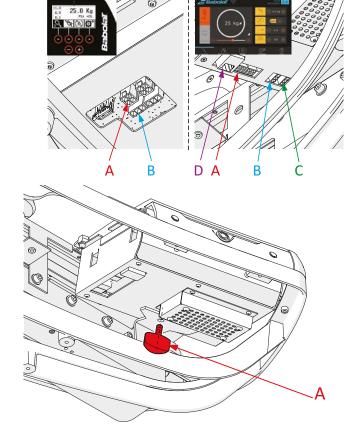
• Pull out the cable tie (D) around the turntable brake power cable (C).



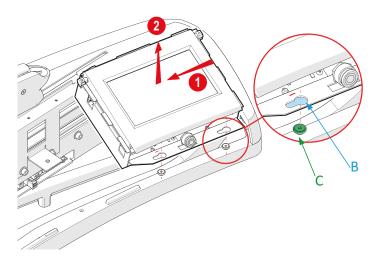
## Removing the screen module

- Disconnect the cables from the screen module (screen and turntable brake power).
  - Screen power (A).
  - Turntable brake (B).
  - Electric stand power (C).
  - RJ45 cable (D) (on EVOLUTION TOUR stand)





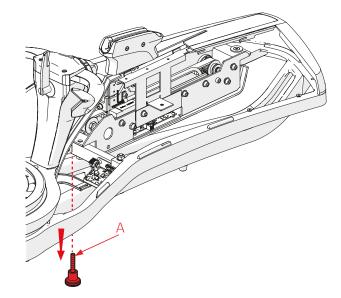
- Slide the screen module to the left (1) to release the keyhole slots (B) from the 2 "mushroom head" screws (C).
  - Lift the screen module (2)



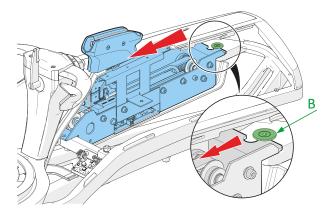
34



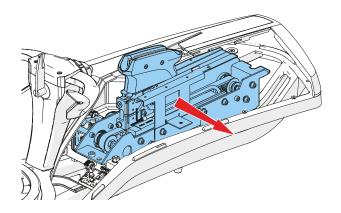
Hand loosen and remove the adjustment knob
 (A)



• Slide the traction unit forward to release the notch from the mushroom head screw (B).



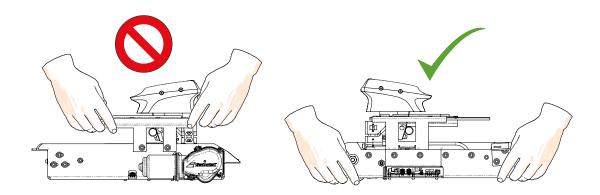
• Pull the traction unit towards you.







The traction unit (TU) must be handled by the chassis. The TU must not be lifted by the traction jaws.

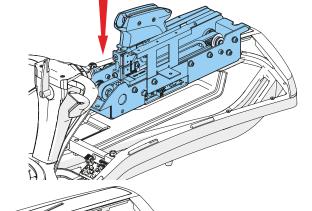




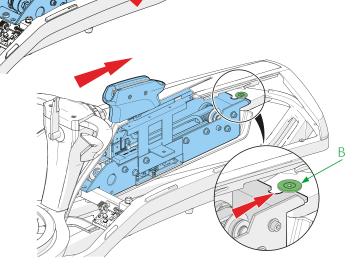
The traction unit must not be plugged in when not in its normal use position. Live and moving parts may cause serious injury.

## Reinstalling the traction unit

• Place the new traction unit on the frame.



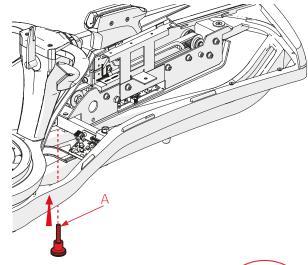
• Push the traction unit away from you.



• Slide the traction unit backwards to insert the notch around the mushroom head screw (B).

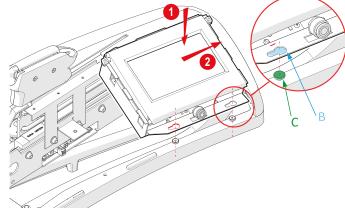


• When the notch is fully inserted around the mushroom head screw, hand tighten the adjustment knob (A).

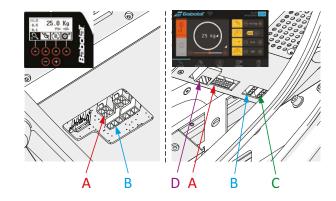


## Reinstalling the screen module

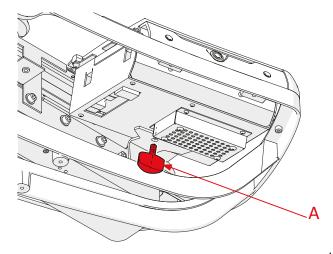
- Position (1) the screen so the keyhole slots (B) line up with the 2 "mushroom head" screws (C).
- When the 2 "mushroom head" screws (C) are in the keyhole slots (B), push the screen module to the right (2) to lock it in place.



- Reconnect the cables to the screen module (screen and turntable brake power).
  - Screen power (A).
  - Turntable brake (B).
  - Electric stand power (C).
  - RJ45 cable (D) (on EVOLUTION TOUR stand)

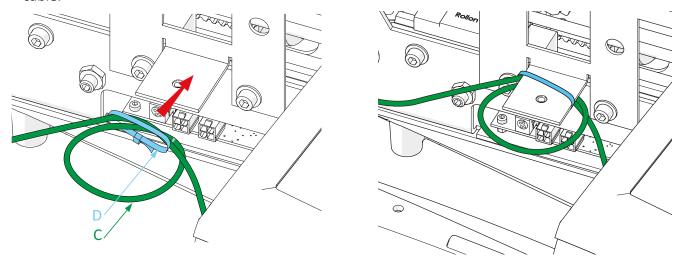


• Hand tighten the wing knob (A) under the screen module.

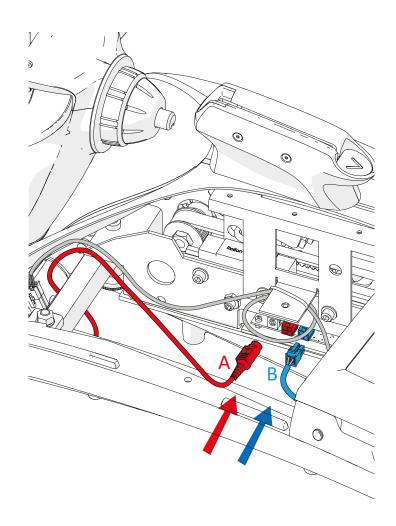




• Reposition the cable tie (D) (with the head at the bottom) around the turntable brake (C) power cable.



- Reconnect the cables to the traction unit:
  - Mains power (A).
  - Screen power (B).



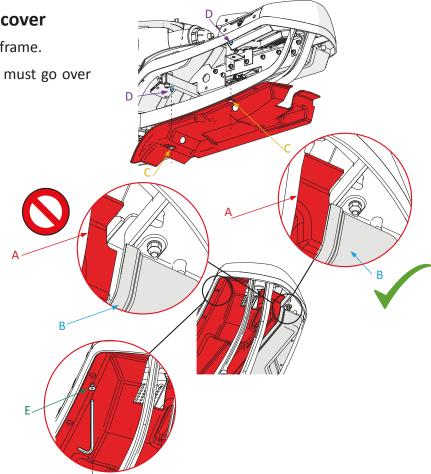


# Reinstalling the front lower cover

1. Insert the lower cover under the frame.

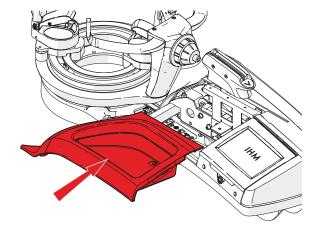
2. The holes (C) in the lower cover must go over the pins (D) on the frame.

- 3. Pay attention to the fit. The edge of the front lower cover (A) goes inside the edge of the casing (B).
- 4. Reinstall security screw (E) and washer using 4 mm Allen key.

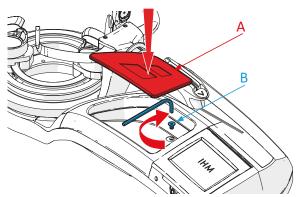


# Reinstalling the tray

Reinstall the tray.



- Tighten the mushroom HSHC screw (B) in the base of the tray using the 3 mm Allen key.
- Reposition the foam insert (A) in the bottom of the tray.





### 6.2 REPLACING THE SCREEN MODULE



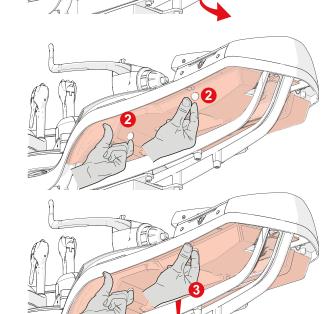
Ensure that the stringing machine is switched off before performing any maintenance operations. Disconnect the power cable from the mains socket.

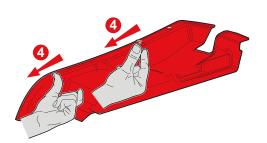
#### Tools required:

- 3 mm Allen key (supplied with the machine).
- 4 mm Allen key (supplied with the machine)

### Removing the front lower cover

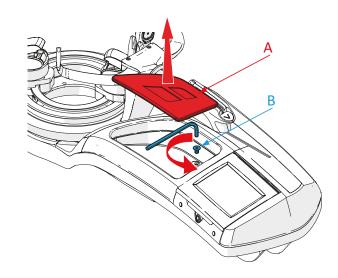
- 1. Remove the security screw (and washer) using a 4 mm Allen key.
- 2. Insert fingers into the lower cover holes to grip it.
- 3. Pull the lower cover downwards.
- 4. Slide the lower cover to the left to release it.





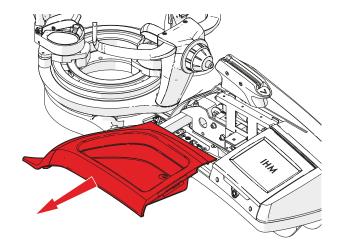
# Removing the tool tray

- Remove the foam insert (A) from the bottom of the tray.
- Loosen the mushroom HSHC screw (B) in the base of the tray with the 3 mm Allen key.





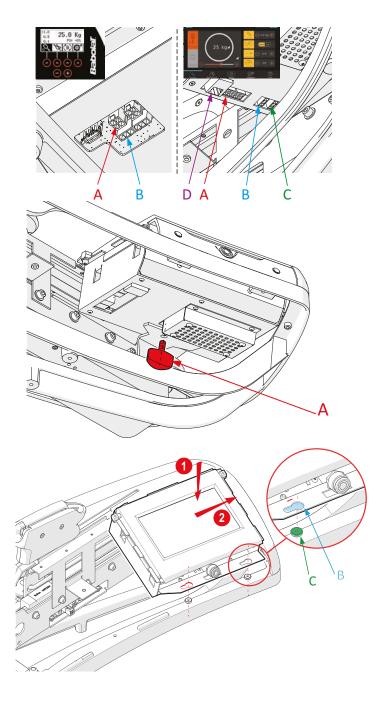
• Pull the tray towards you to remove it.



# Removing the screen module

- Disconnect the cables from the screen module (screen and turntable brake power).
  - Screen power (A).
  - Turntable brake (B).
  - Electric stand power (C).
  - RJ45 cable (D) (on EVOLUTION TOUR stand)
- Hand loosen the wing knob (A) under the screen module.

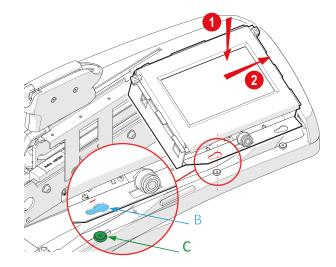
- Slide the screen module to the left (1) to release its keyhole slots (B) from the 2 "mushroom head" (C) screws.
- Lift the screen module (2).



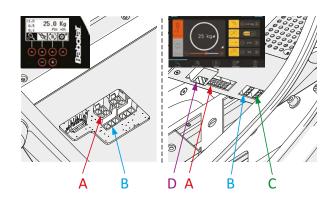


## Reinstalling the screen module

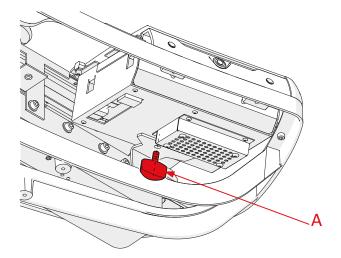
- Position (1) the screen so the keyhole slots (B) line up with the 2 "mushroom head" screws (C).
- When the 2 "mushroom head" (C) are in the keyhole slots (B), push the screen module to the right (2) to lock it in place.



- Reconnect the cables to the screen module (screen and turntable brake power).
  - Screen power (A).
  - Turntable brake (B).
  - Electric stand power (C).
  - RJ45 cable (D) (on EVOLUTION TOUR stand)



• Hand tighten the wing knob (A) under the screen module.



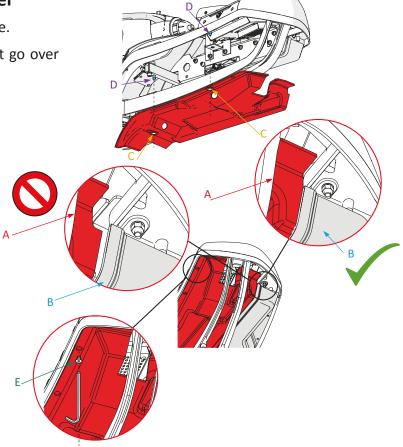


# Reinstalling the front lower cover

1. Insert the lower cover under the frame.

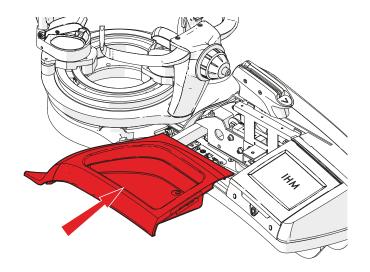
2. The holes (C) in the lower cover must go over the pins (D) on the frame.

- 3. Pay attention to the fit, steps 2 and 3. The edge of the front lower cover (A) goes inside the edge of the casing (B).
- 4. Re-install and tighten the safety screw (E) (and its washer) using the 4 mm Allen key

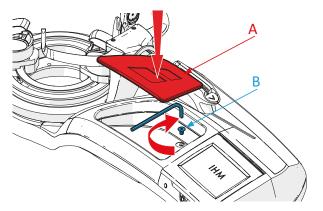


# Reinstalling the tray

• Reinstall the tray.



- Tighten the mushroom HSHC screw (B) in the base of the tray using the 3 mm Allen key.
- Reposition the foam insert (A) in the bottom of the tray





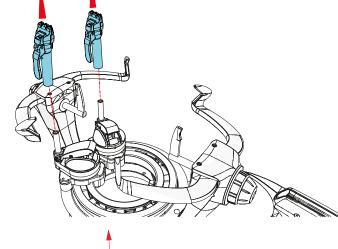
### **6.3 REPLACING THE TURNTABLE**



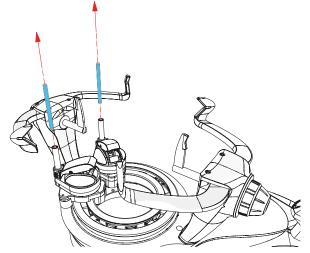
Ensure that the stringing machine is switched off before performing any maintenance operations. Disconnect the power cable from the mains socket.

### Tools required:

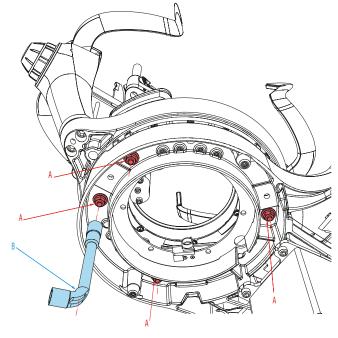
- 13 mm L-shaped socket wrench (supplied with the machine)
- Remove the 2 clamps.



• Remove the 2 pins.

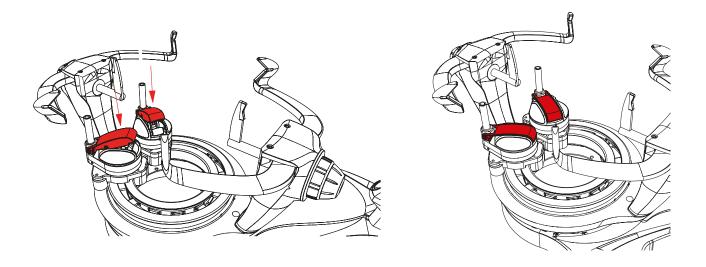


• Loosen the turntable's 4 (A) fixing nuts using a 13 mm L-shaped socket wrench (B).

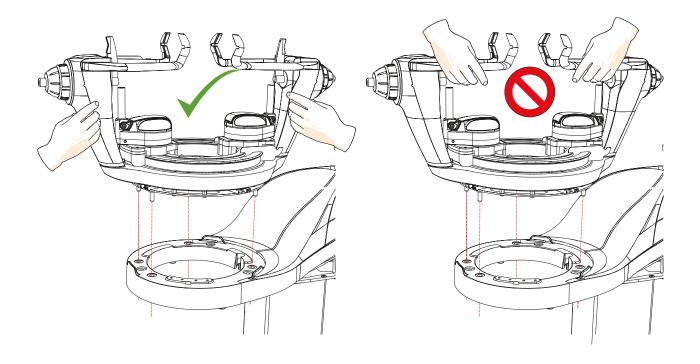




• Close the RED lever.



• Lift the turntable only by the posts, keeping it level (do not lift by the arms).



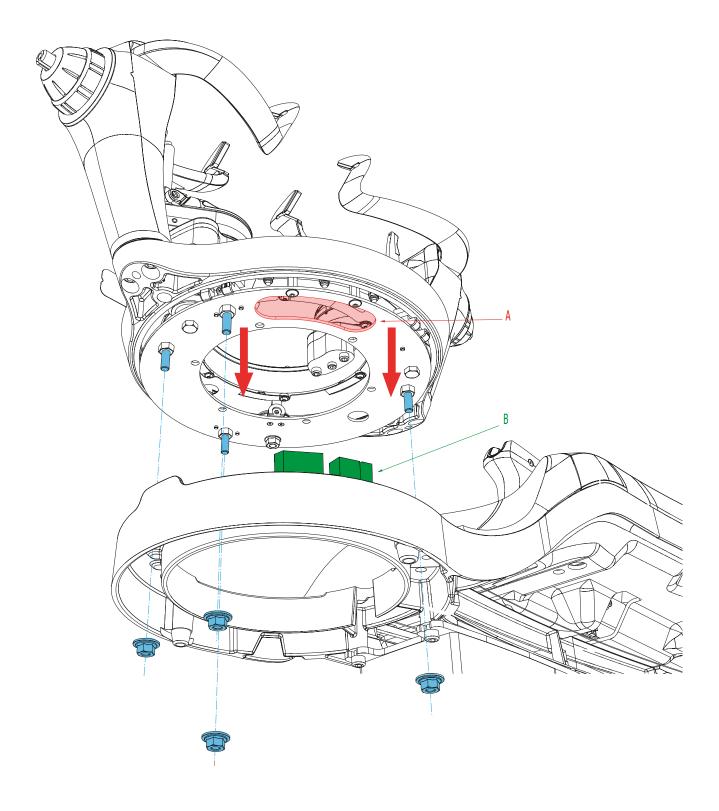
MAC – MU 2023-11-En 45 |



# Reinstalling the turntable

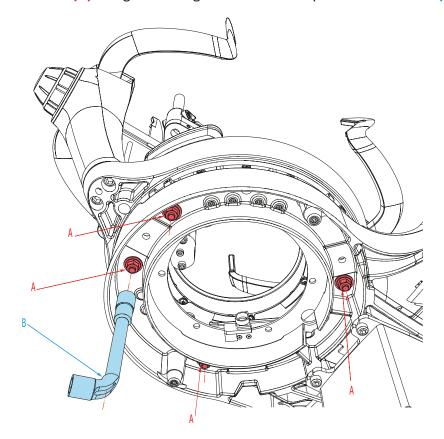
Position the new turntable by lining up the fixing pins with the 4 holes in the frame (the holes are unevenly spaced to ensure the turntable is the correct way round).

Ensure that the slot in the turntable (A) is vertically aligned with the electromagnets (B).

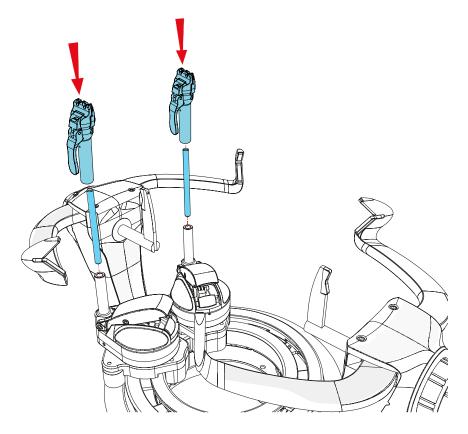




• Tighten the turntable's 4 (A) fixing nuts using the 13 mm L-shaped socket wrench (B).



• Reinstall the 2 pins, followed by the 2 clamps.





# 7 USING THE MONOCRHOME SCREEN

# 7.1 ON /OFF /STANDBY

## 7.1.1 Switching on

Press the On/Off button to switch the machine on.

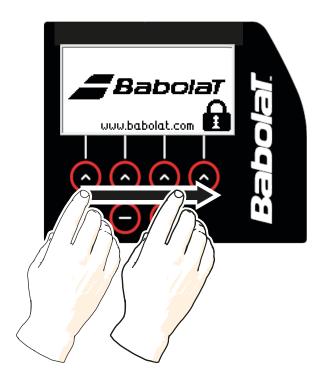
The screen displays the **BABOLAT** logo for a few seconds then displays the stringing menu:



# **7.1.2 Standby**

Short press the On/Off button to put the machine in standby.

To exit standby mode, press and slide your finger across all the arrows from left to right.

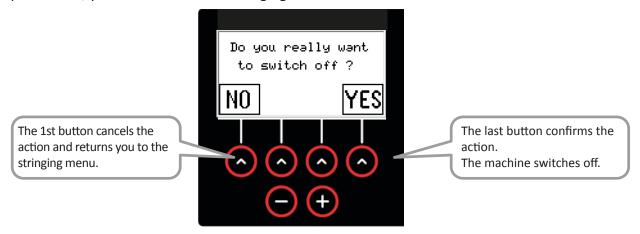




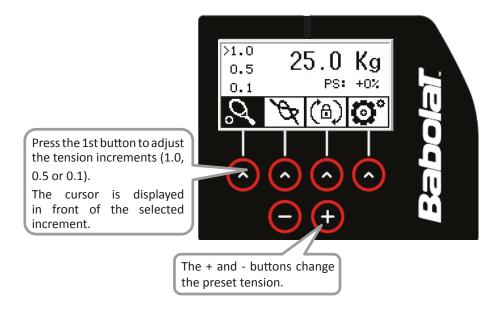
# 7.1.3 Switching the machine off

Long press the machine's On/Off button to switch the machine off. A confirmation screen appears asking you to confirm your choice.

If you press "NO", you will return to the stringing menu.

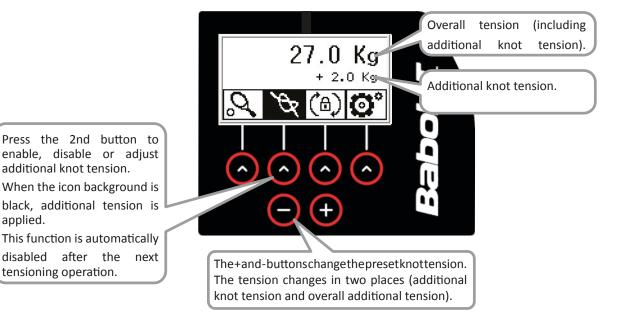


# 7.2 STRINGING MENU



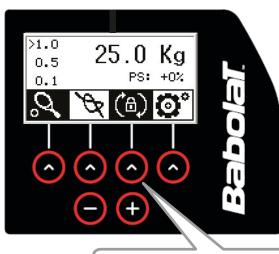


# 7.3 ADDITIONAL KNOT TENSION



### 7.4 TURNTABLE BRAKE

applied.



En appuyant sur la 3ème touche, vous pouvez activer ou désactiver le frein de berceau (l'icône passe sur fond noir quand le frein est appliqué).



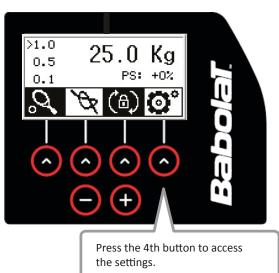
#### **SETTINGS** 7.5

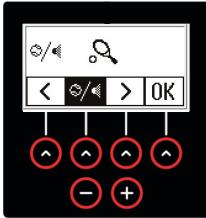
Press the 4th button to access the settings.

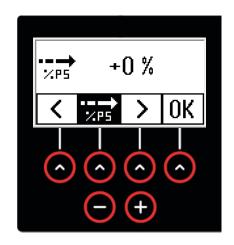
The arrows are used to scroll to the previous or next settings sub-menu.

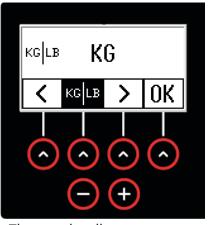
Press OK to return to the main screen (stringing menu).

+ and - change the values of the selected menus (in black), apart from the Statistics and Information sub-menus (next page).



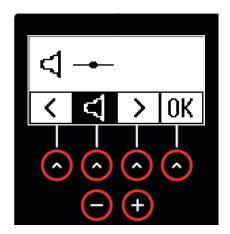




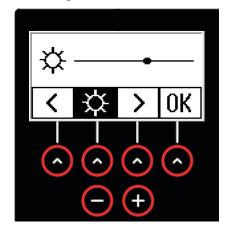


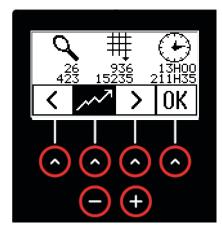
The + and – allow you to pass

0K



from kg to lbs.





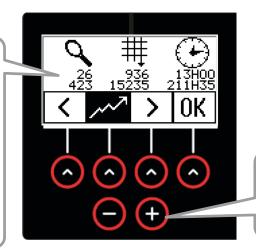




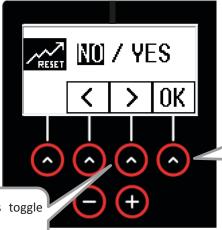
#### 7.5.1 Statistics

Statistics from left to right and from bottom to top:

- Number of rackets strung since the beginning and since the last reset.
- 2 Number of tensioning operations since the beginning and since the last reset.
- 3 Number of hours of use of the machine since the beginning and since the last reset.



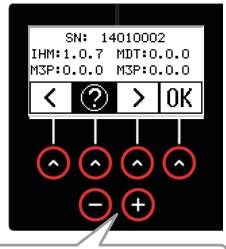
+ and - change the screen and enable you to reset the first counter. (The second counter saves the machine's history).



Next, press the 4th button to confirm your choice and go back to the previous screen.

The 2nd and 3rd buttons toggle between No and Yes.

### 7.5.2 Informations



The + and – change the screen and give access to other operating informations of the machine.

To be used only if the **BABOLAT** after-sales service demand.





# 8 USING THE COLOR TOUCH SCREEN

# 8.1 ON /OFF /STANDBY

## 8.1.1 Switching on

Press the On/Off button to switch the machine on.

The screen displays the following:

- the BABOLAT logo (for around 15 seconds) along with the store logo if this is configured (see § 8.4.4.4)
- the selection mode choice screen (see § 8.3).

When it is switched on, the screen's display will be as follows if you do not upload a logo:



There is space beneath the **BABOLAT** logo for the store logo (hatched line area below) if this is configured (cf. § 8.4.4.4).

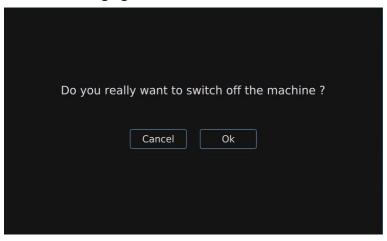




### 8.1.2 Machine stop

Long press the machine's On/Off button to switch the machine off. A confirmation screen appears asking you to confirm your choice.

Press "Cancel" to return to the "Stringing" menu.



### 8.1.3 Timeout

There are two timeout periods for putting the screen in standby:

- Short timeout: screen goes into standby with medium brightness after 2 minutes of inactivity. To exit standby, simply touch the screen or press the "Start cycle" button. (Using the measuring device does not exit standby).
- Long timeout: extended screen standby, the screen is black but the On/Off and "Start cycle" button LEDs remain on (see settings: § 8.4.4.8). Press the On/Off button to exit this long standby. The screen returns to the selection mode choice page (see § 8.3).

Short press the On/Off button to put the machine in extended standby.

#### 8.2 INITIAL START-UP MODE

The first time you switch on your machine, you are guided through several screens to configure it.

All the settings can then be modified in the "Settings" menu.

The first step involves choosing your language and confirming. You can scroll down the screen.

The default language is English but this changes according to what is selected.

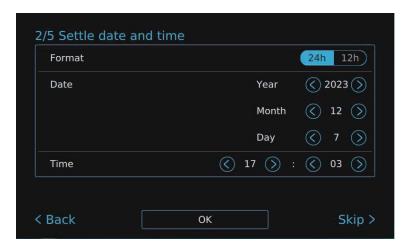
You can move to the next step at any time by pressing "Next" or to the previous step by pressing "Back".





The second step involves setting the date and time.

You can select the time display format then set the date and time.



The third step enables you to:

- create a new user profile by pressing "New profile" (see § 8.3.1);
- continue without a user profile by pressing "No profile".

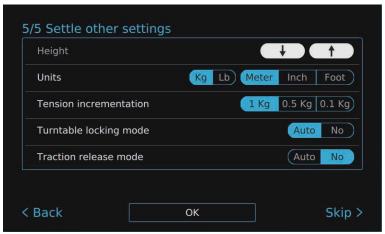


The fourth step allows you to display the logo of your choice on the machine's start screen. You will see a preview of the start screen with your chosen logo (see Configuring a logo, § 8.4.4.4).





The fifth step enables you to configure certain settings which will be saved in your profile for use each time you log in.



**NB**: Apply light pressure to the screen when raising the stand.

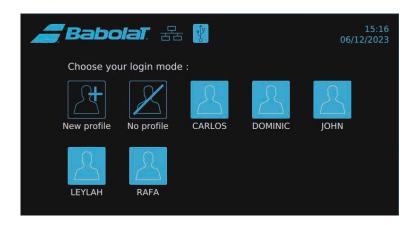
The machine is configured. You can then access the "Stringing" menu



## 8.3 CHOOSING THE SELECTION MODE

The screen gives you the following options:

- create a new user profile by pressing "New profile"
- log in with an existing profile by choosing the profile
- continue without a profile by pressing "No profile".





### 8.3.1 Creating a user profile

If you have chosen to create a new user profile, a form will be displayed.

Complete the "Name" (only required field), "E-mail", "Country" and "City" fields. Choose your language.

Do not forget to save at the end by pressing "Save".



To complete the form, tap in a field or swipe up to display the keyboard.



To upload your photo, press "Upload a photo". A window appears telling you to insert a USB drive. You can cancel your action and go back to the previous screen or insert a USB drive and move to the next screen.

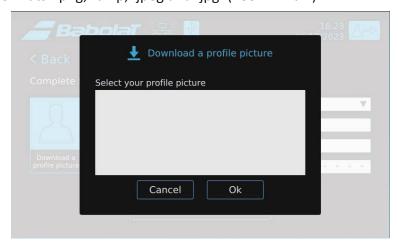




Insert your USB drive into the port accessed by lifting the screen



Choose your photo from the list (to be detected, the photo must be in the USB drive root rather than in a folder). Accepted formats: .png, .bmp, .jpeg and .jpg. (100 KB max.).



You can protect your user profile with a code.

This is done in 2 steps (choose the code then confirm).



Do not forget to save by pressing "Save". You are taken straight to the stringing screen.





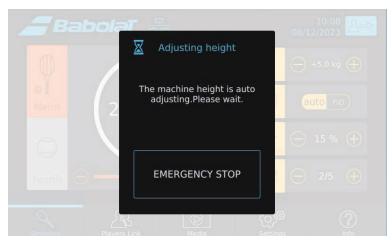
### 8.3.2 Choosing an existing profile

Press on the profile of your choice. If it is code protected, you will be asked to enter the code. The same applies if you choose "No profile".



You can save the height setting in your profile. Once you have logged in to your profile, the machine automatically adjusts its height.

You can stop it adjusting by pressing "Emergency stop".



A window will then ask you what you want to do. You can:

- continue with the automatic adjustment by pressing "Continue"
- stop the automatic adjustment by pressing "Cancel"
- adjust the machine height manually by pressing the arrows.





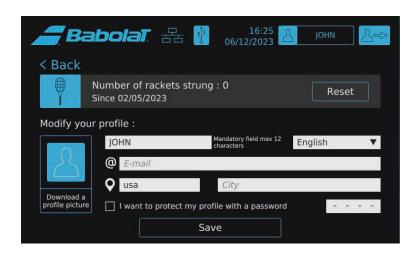
# 8.3.3 Information saved in the profile

The following settings relate to the profile (see § 8.4.4):

- Machine height
- Measuring units
- Tension increments
- Turntable locking mode
- Traction release mode
- Languages
- Sounds

Press your username in the top banner to see your statistics or edit your profile.

You can return to the previous screen by pressing the "Back" arrow.



You can reset your statistics by pressing "Reset".

A confirmation screen appears in which you can confirm your choice with "OK" or "Cancel".





# 8.3.4 Logging out of your user profile

You can log out of your user profile by pressing 2.



A window appears asking you to confirm your choice.

If you press "OK", you will return to the login mode selection page.

If you cancel, you will return to the previous screen.





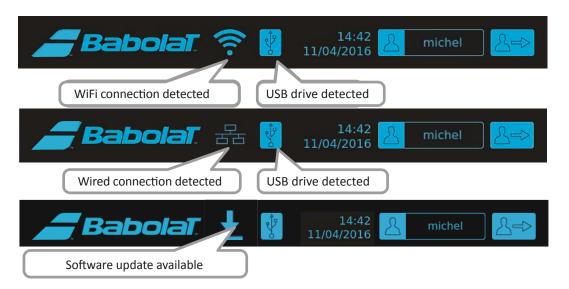
## 8.4 MENU PAGE

Whether you choose to log in with or without a user profile, the settings and values displayed are always the same as the last time that particular login mode was used.

If you choose to log in without a user profile, the top banner will be as follows throughout the application:



If you choose to log in with a user profile, the top banner will be as follows throughout the application:



The menu banner is at the bottom of the screen and the different sections can be accessed at any time.



# 8.4.1 "Stringing"" menu

Once you have chosen your login mode, you are taken to the "stringing" menu.







You can adjust the required additional knot tension by pressing + and -.

You can enable/disable this function by pressing the icon.

When the box turns light gray with a yellow outline, the additional tension is applied.

This function is automatically disabled after the next tensioning operation.

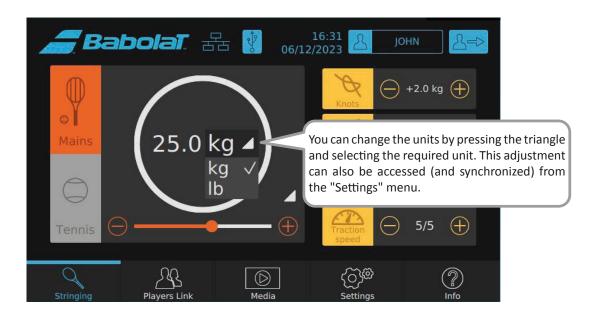


You can adjust the turntable lock automatically for each tensioning operation by selecting "auto" or use the manual brake by selecting "no".

You can apply or release the brake by pressing the brake icon. The box turns light gray with a yellow outline when the brake is applied.



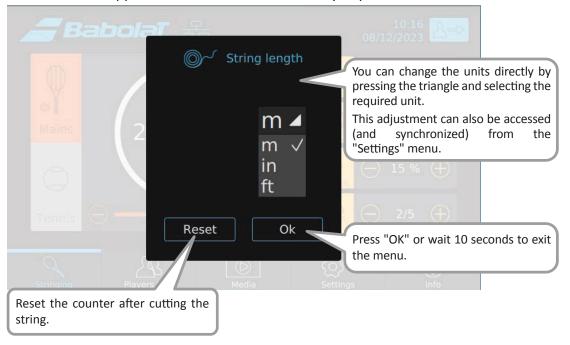




#### 8.4.1.1 String measuring device

The string length window appears when you insert the string into the measuring device in stringing mode.

The window disappears after 10 seconds or when you press OK.

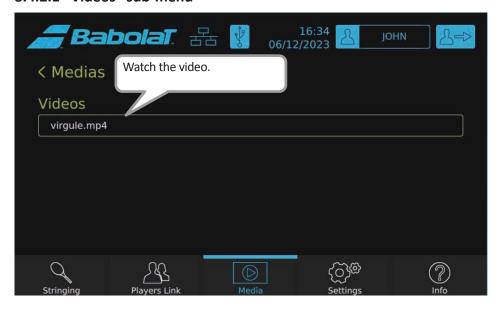




## 8.4.2 "Media" menu



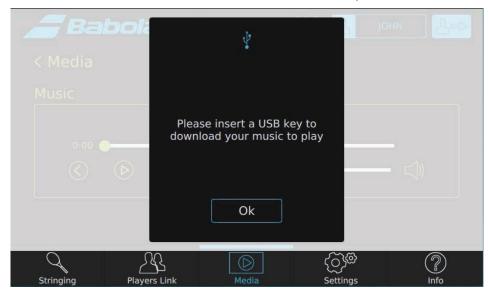
### 8.4.2.1 "Videos" sub-menu





#### 8.4.2.2 "Music" sub-menu

A window tells you to insert a USB drive to access your music. To be detected by the machine, music needs to be in the USB drive root You can listen to .mp3 and .wav files.



A list of your music appears and you can choose to move to the previous or next track, stop the track or adjust the volume.



Press "< Media" to return to the Media menu.

# 8.4.3 "Settings" menu

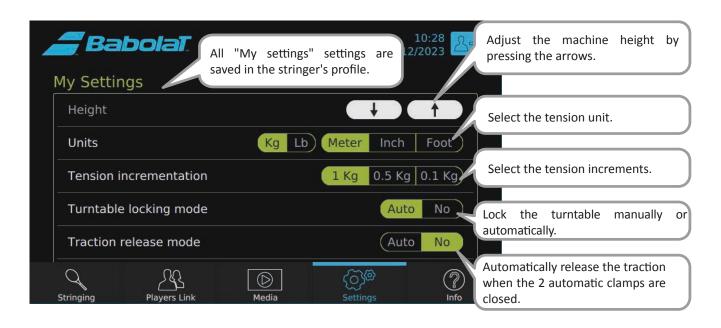
You can scroll down the "Settings" menu.

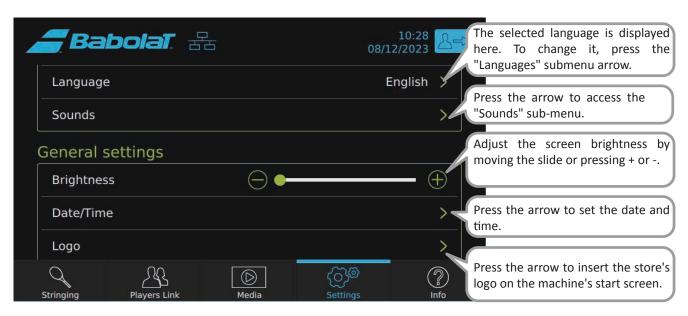
It has 2 sections:

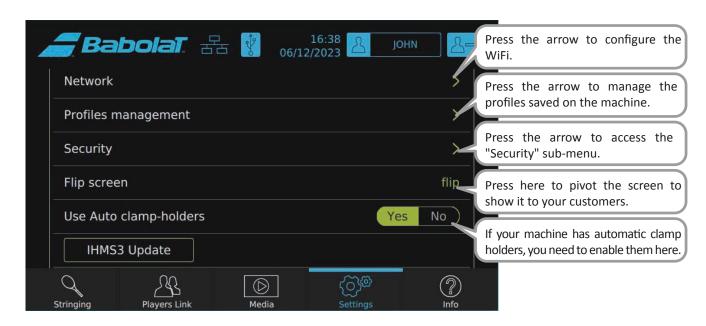
- "My settings" which contain the settings specific to your user profile,
- "General settings" which contain the settings specific to the machine.

Settings which are the same as those in the "Stringing" menu (Units, Increments, Brake) are synchronized in both menus.





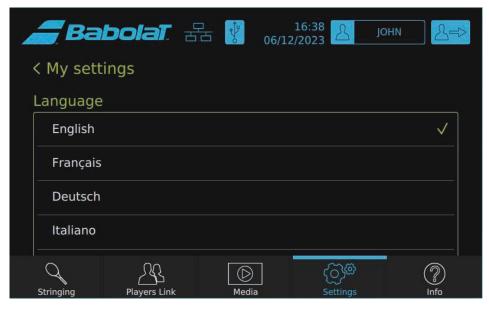






### 8.4.3.1 "Language" sub-menu

Select the interface language from the list.



Press "< My settings" to return to the My settings menu.

#### 8.4.3.2 "Sounds" sub-menu

The "Sounds" sub-menu is used to adjust the volume (by moving the slide) and type of sound.



Press "< My settings" to return to the My settings menu.



You can assign a different sound to each of the following:

- at the end of each tensioning operation, when the required tension is reached,
- alerts,
- other information.

To do this, press the corresponding arrow and select the sound you require.



Press" < Sounds" to return to the Sounds menu.

Choose a sound from the list.



Press "< Beeps" to return to the Beeps menu.

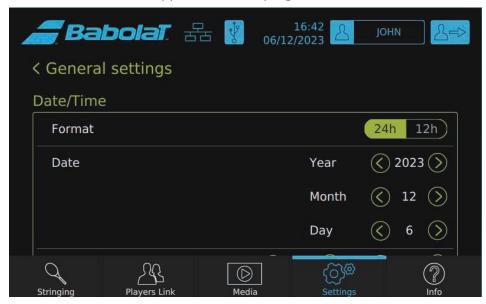


#### 8.4.3.3 "Date and Time" sub-menu

You can set the time display format then the date and time.

Scroll down the screen to display the Time menu.

This information then appears in the top right corner of each screen.



Press "< General settings" to return to the General settings menu.

### 8.4.3.4 "Logo" sub-menu

You can choose to select a logo of your choice for the machine start screen (formats .png, .bmp, .jpeg or .jpg).

You will see a preview of the start screen with your chosen logo.

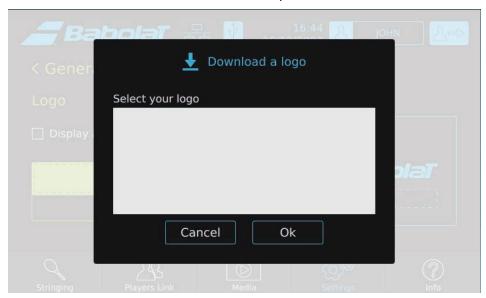




To upload a logo, insert a USB drive and put the file in the USB drive root. You will see a preview of the start screen with your chosen logo.



You can also cancel this and return to the previous screen.



Press "< General settings" to return to the General settings menu.

### 8.4.3.5 "Network" sub-menu

The stringing machine can have a wired or WiFi internet connection.



### 8.4.3.5.1 Setting up a WiFi connection for the machine

If your machine is connected via an RJ45 internet cable, WiFi will be automatically disabled.

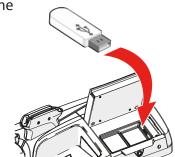
To use a WiFi connection, you must either unplug the RJ45 cable or disconnect the machine by selecting the "Ethernet" menu and pressing the "Disconnect" button (see 8.4.4.5.2).

Ensure that the WiFi dongle is properly connected to the machine.

If not, plug in the WiFi dongle under the screen (as shown below). The WiFi dongle must remain connected to the USB port

at all times for WiFi to continue to connect.

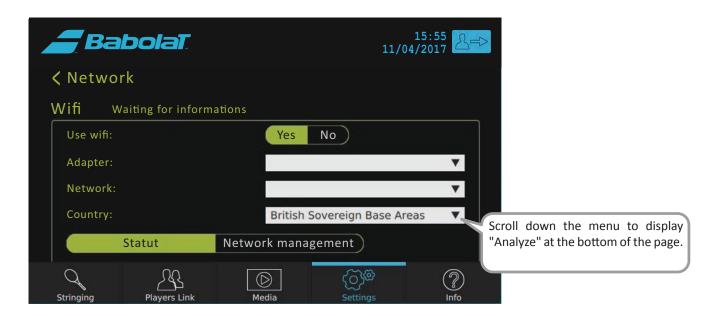
To connect via WiFi, select the WiFi menu in Network.

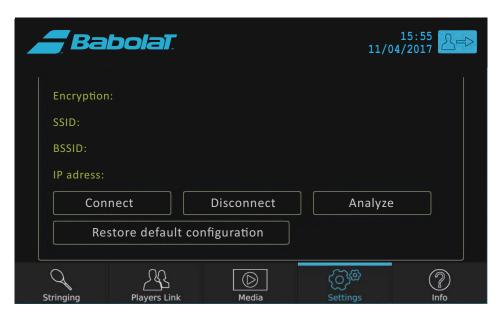










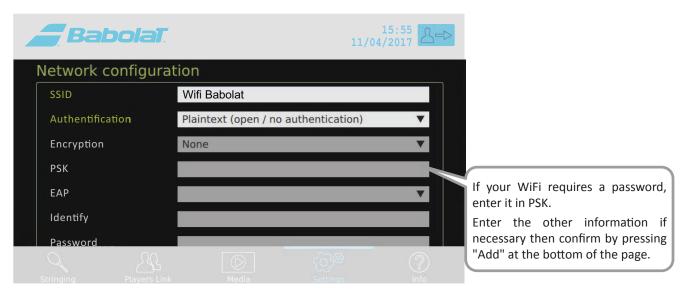


In the new window, select your WiFi network by pressing on the corresponding line then "Add".





The following is displayed at the top of the WiFi screen: "connection to network established". The network is established but not connected to the internet.



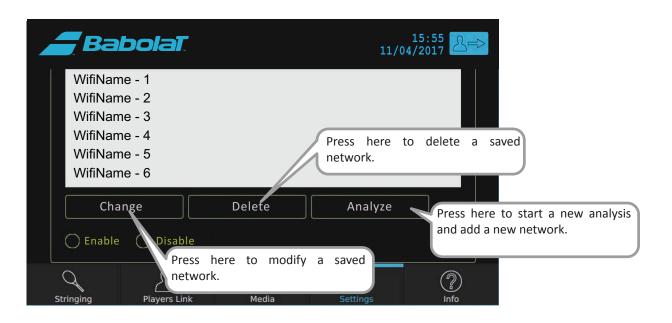
The icon below appears in the banner at the top of the touch screen. The network is established but not connected to the internet.



In the "Manage networks" tab, you can see the history of networks you were previously connected to and select, modify or delete them.









#### 8.4.3.5.2 Setting up a wired connection for the machine



2 people are required to carry out this operation.

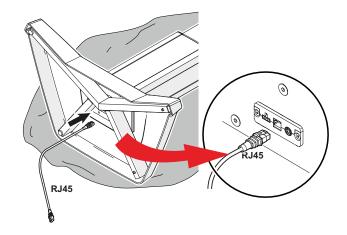
RJ45 cable - Inside the machine: supplied

RJ45 cable - Outside the machine: not supplied



# Connecting the RJ45 through the stand:

- Check if the stand is connected to the wall socket with an RJ45 cable.
- If not, connect it as follows:
   lie the machine down on a blanket to protect
   it connect the RJ45 cable (not supplied) under
   the stand
- Stand the machine back up

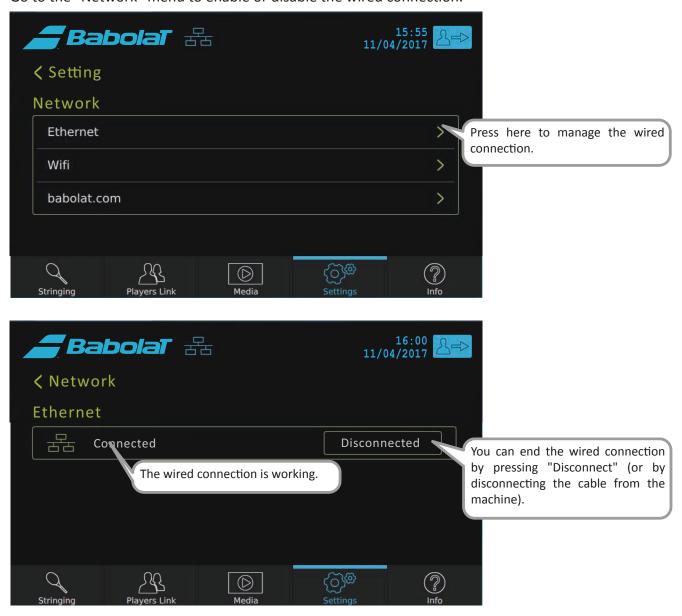


The icon below appears in the banner at the top of the touch screen.





Go to the "Network" menu to enable or disable the wired connection.



Press "< Network" to return to the Network menu.



#### 8.4.3.6 "Profiles" sub-menu

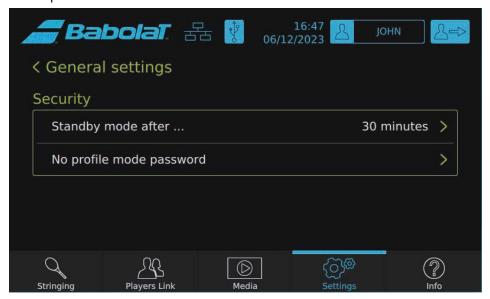
This sub-menu enables you to:

- choose the default internet connection mode (the profile selection screen will no longer appear on start-up),
- delete the password for the different created profiles (this function is protected by the following password: 1430),
- delete the existing profiles from the machine (this function is protected by the following password: 1430),



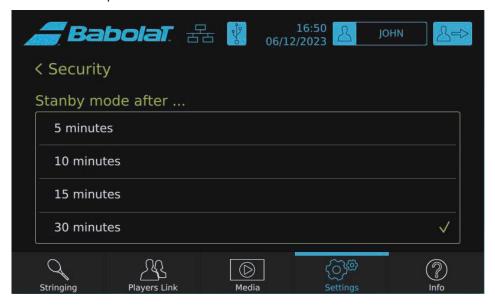
#### 8.4.3.7 "Security" sub-menu

The "Security" sub-menu is used to choose the screen standby timeout period as well as the no-profile mode password.





Choose the required time from the list.



If you want to protect no-profile mode with a password, you can set this in the sub-menu.



Press "< Security" to return to the menu.



#### 8.4.3.8 "Pivot screen" sub-menu



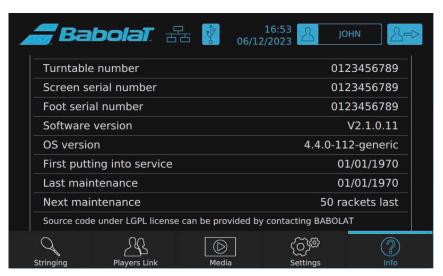


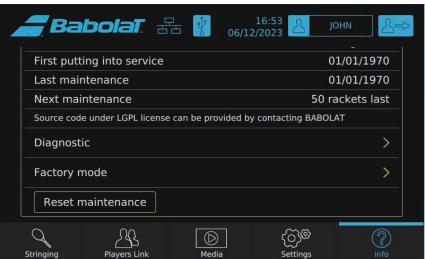
#### 8.4.4 "Info" menu

This menu enables you to access:

- the machine's statistics,
- information to tell your Customer Services department if necessary.









"Diagnostics" and "Factory mode" sub-menus are reserved for the Babolat After-Sales Department.

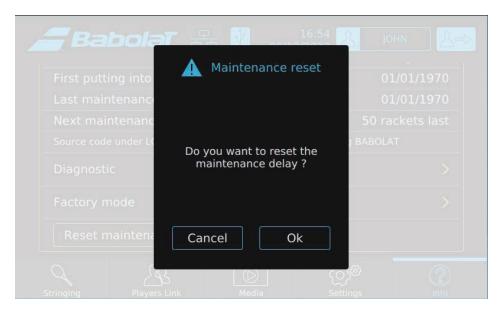


#### 8.4.4.1 "Maintenance"

A window appears to remind you to carry out maintenance operations after each 50 rackets are strung.



Once maintenance has been completed (see section 10), go to the "Info" menu and press "Maintenance reset" to reset the counter.





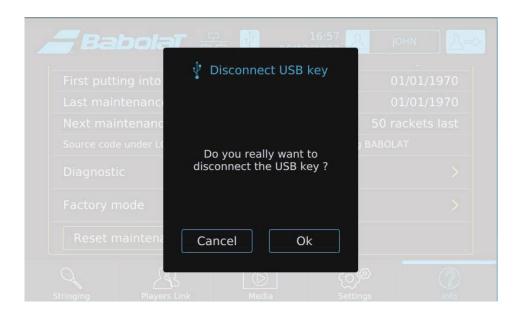
## 8.5 OTHER SCREENS

## 8.5.1 Disconnecting the USB drive

You can disconnect the USB drive at any time by pressing the icon  $\frac{1}{\sqrt{2}}$  in the top banner.



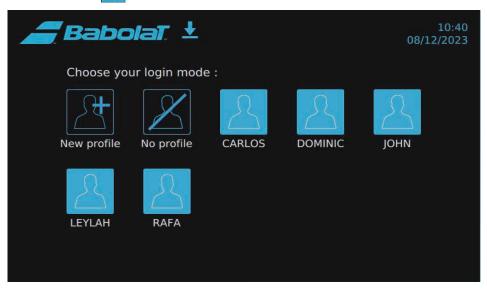
A window appears asking you to confirm your choice. You can then safely remove the drive.



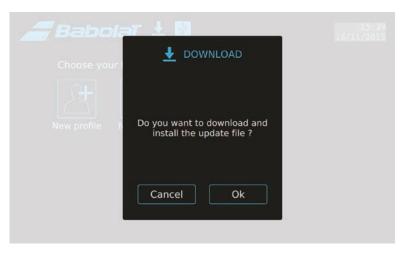
# 8.5.2 Updating the machine software

On the profile selection page, the upload icon appears automatically when the machine detects an update (internet connection required).

Press the icon to start the update (a confirmation window appears).







Press "OK" to confirm the update.

The machine will restart automatically once the update has been completed.

## 8.6 ERROR MESSAGES

Stopped at wrong height!	The stand has not stopped at the requested height. Check the connections
Communication error with m3p board driving the machine height!	Communication error between the main PCB and the PCB controlling the stand. Check the connections.
Traction unit error: Traction time exceeded. You must restart this traction to have the right tension.	The traction time is too long, the requested tension may not have been achieved. Release the traction and start again.
Traction unit error: Traction Limit switch	The traction unit is at the end of its travel, traction is impossible. Release the traction, correctly position the string and restart the tensioning operation.
Traction unit error: Other errors	Problem with the TU PCB controlling the traction unit or with the HMI S3 PCB.
ERROR HC08 CONNECTION	HC08 module error on the main circuit board. HMI S3 PCB issue.
ERROR READING FILE	Error reading the configuration files. The default values will be used.
OVERALL TENSION LIMIT MAXI AAkg/BBlbs	String tension has exceeded the authorized limit.  AA = max. tension limit in kg - BB = max. tension limit in lbs
WPA Pre-Shared Key Error	WPA-PSK requires a passphrase containing 8 to 63 characters or a 64 hex digit PSK.
Network ID Error	The Network ID character string contains characters other than letters. It must be a single string without spaces.
Add network Error	Failed to add the network to the wpa_supplicant configuration.
Enable network Error	Failed to enable the network in the wpa_supplicant configuration.

Can't find the answer you need? Contact Babolat Customer Services or visit Babolat's B2b website (http://b2b.babolat.com) or contact the aftersales team by email (aftersales-machines@babolat.com).



#### 8.7 REPLACING THE MEMORY BATTERY

The EVOLUTION TOUR product (with color touch screen) uses a lithium CR2032 3.0 V battery to power its real-time clock (RTC) and other memory functions.

In normal operating conditions, this battery should last at least several years.

A low battery may affect the operation of the clock, resetting it each time the machine is switched on. It is strongly recommended that you replace the battery in accordance with the warnings and procedure described below.

#### **REACH Regulation:**

3.0 V lithium button batteries contain 1.2-dimethoxyethane, ethylene glycol dimethyl ether (EGDME), CASE no. 110-71-4.

#### **WARNING:**

- Risk of explosion if battery is replaced incorrectly.
- The battery must be replaced with an identical battery.
- Used batteries must be disposed of in line with local regulations.

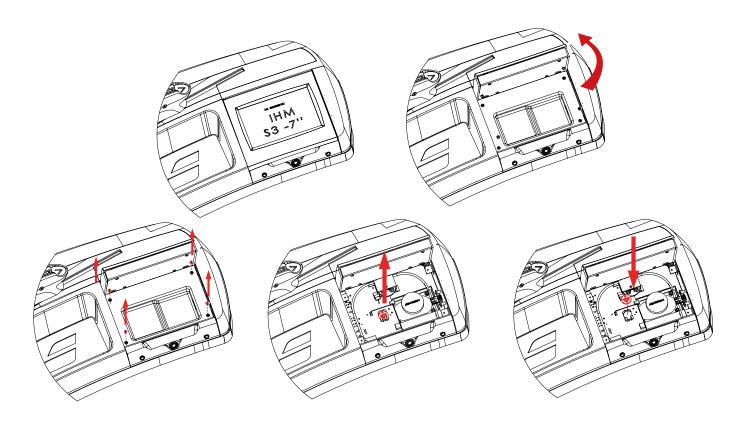


#### **Procedure:**

Follow the procedure below to change the Memory battery (CR 2032):

- Lift the screen into a vertical position.
- Select the 2 mm Allen key (not supplied).
- Loosen the four screws holding the plastic cover.
- Remove the plastic cover.
- Remove the CR 2032 battery from its housing.
- Install a new battery in its place.
- Reinstall and screw in the plastic cover.
- Lower the screen into a horizontal position.







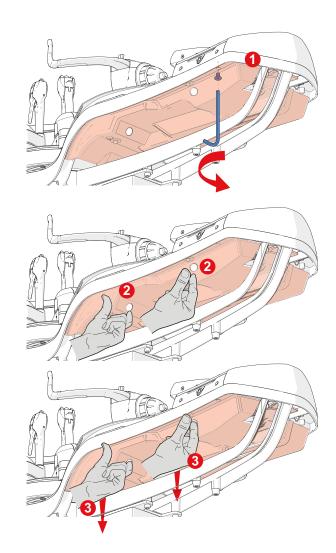
# 9 MACHINE UPDATES VIA USB DRIVE

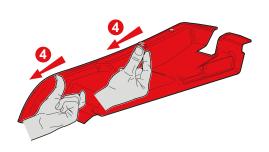
Tools required for these operations:

- 3 mm Allen key (supplied with the machine)
- 4 mm Allen key (supplied with the machine)

# 9.1 UPDATING EVOLUTION

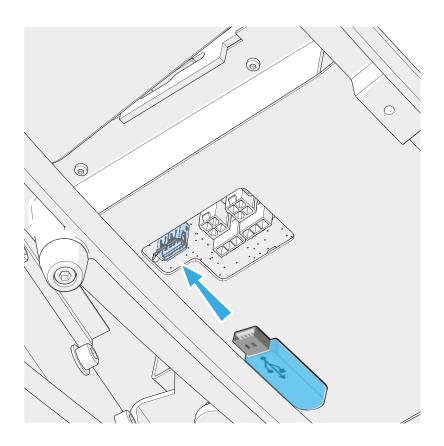
- 00. Switch off the machine.
- 0. Remove the security screw (and its washer) using a 4 mm allen key
- 1. Remove the front lower cover.
- 2. Insert fingers into the lower cover holes to grip it.
- 3. Pull the lower cover downwards.
- 4. Slide the lower cover to the left to release it.







- 7. Insert the USB drive.
- 8. Start the machine. The update is performed automatically.

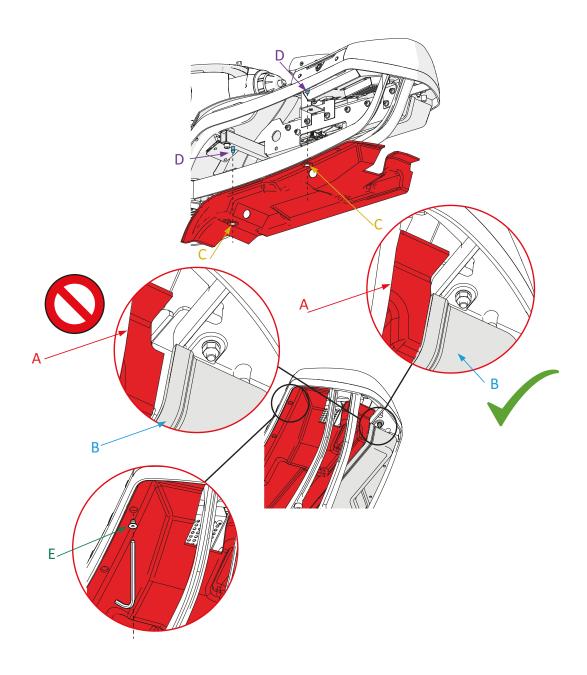


• When the screen is displayed, switch off the machine and remove the USB drive.





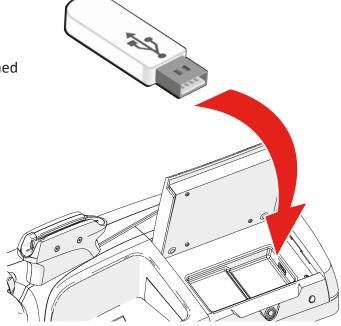
- Replace the lower cover.
- Insert the lower cover under the frame.
- The holes (C) in the lower cover must go over the pins (D) on the frame.
- Pay attention to the fit, steps 2 and 3. The edge of the front lower cover (A) goes inside the edge of the cover (B).
- Re-install and tighten the safety screw (E) (and its washer) using the 4 mm Allen key.





## 9.2 UPDATING EVOLUTION TOUR

- Switch off the machine.
- The USB port is underneath the screen.
- Insert the USB drive.
- Start the machine. The update is performed automatically.



• When the screen is displayed, switch off the machine and remove the USB drive.



#### 9.3 UPDATING SUB-MODULES

If **BABOLAT** provides you with a USB drive, insert it into the USB port underneath the screen (see § 9.6.2) then update the required functions.





# **10 MAINTENANCE**

#### 10.1 CLEANING



- Make sure the stringing machine is switched off before cleaning it or servicing one of its components. Disconnect the power cable from the mains socket.
- Never wash the machine using water, a hose or high-pressure cleaner.



• CAUTION: Never use corrosive products to clean your EVOLUTION or EVOLUTION TOUR.

Clean the machine housing regularly with denatured alcohol only. Do not use water, detergents or acetone.

The turntable surface must be cleaned with alcohol every week to preserve the optimal sliding and clamping capacities of the clamp holders.

Clamp holders: remove the clamps, clean the pins and the inside of the clamp barrel with an alcoholsoaked cloth. Replace the clamps on the clamp holders and slide them.

Clean the inside of the clamp teeth (every day or once a week depending on use) with the metal brush provided (NG 10347) to avoid clogging the metal coating.

The EVOLUTION TOUR or EVOLUTION traction head does not require any particular maintenance apart from cleaning once a year by passing an alcohol-soaked cloth between the self-tightening jaws to remove any string residue.

#### 10.2 ADJUSTING THE CLAMP HOLDERS



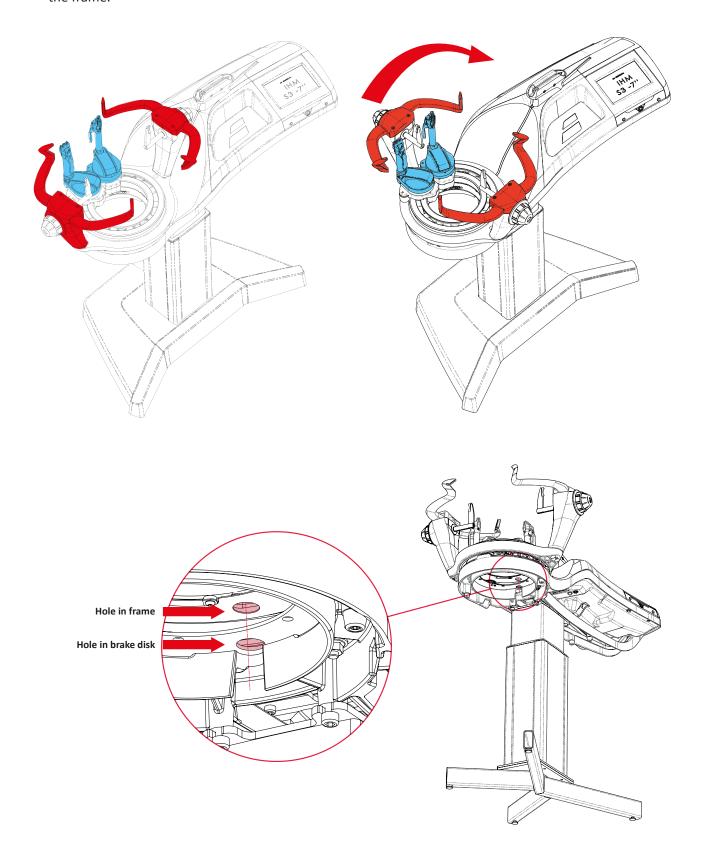
Ensure that the stringing machine is switched off before performing any maintenance operations. Disconnect the power cable from the mains socket.

Illustration of steps on the following page.



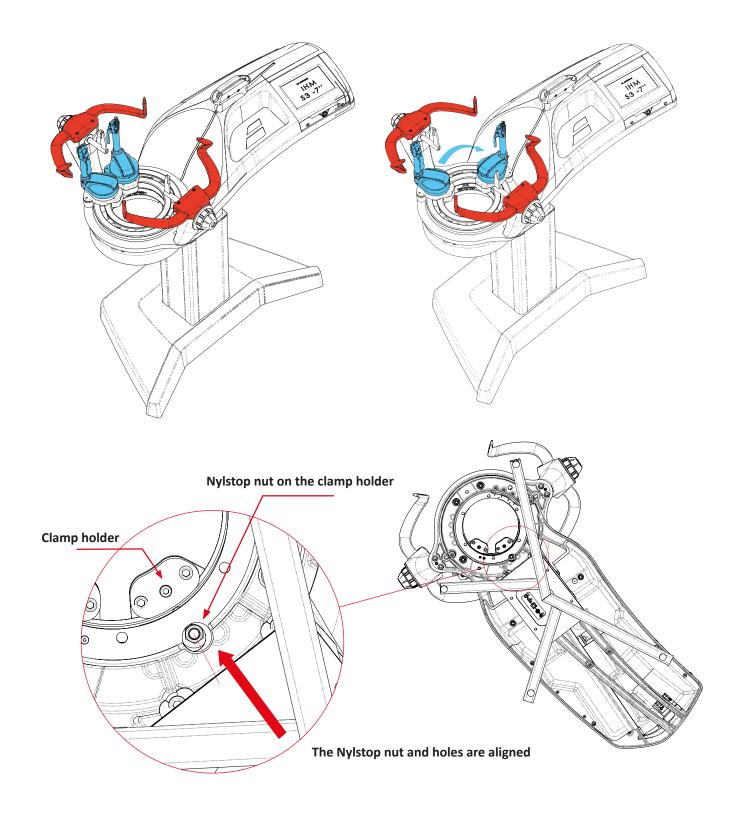
# Step 1

**01-** Turn the turntable approximately 90° to line up the hole in the brake disk with the maintenance hole under the frame.





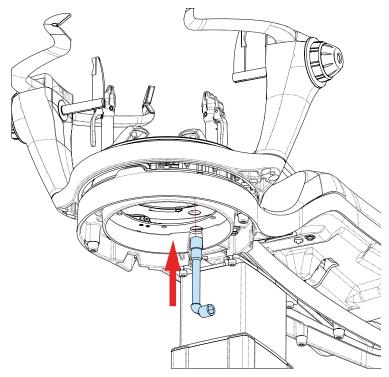
**02**- Position the clamp base in line with the tension head so that the adjustment nut is aligned with the 2 previous holes. Lock the clamp holder again. You can now access the nut.



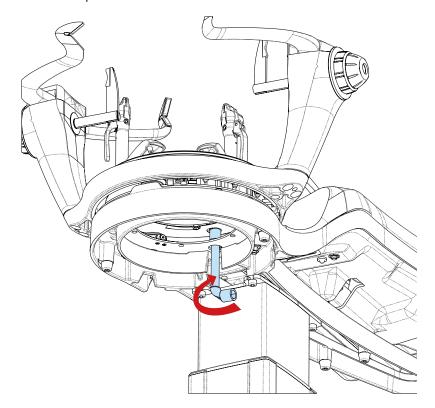


# **Step 2: Adjust the clamp bases**

**01-** Insert the 13 mm Allen key from underneath the frame into the maintenance hole until it engages with the clamp holder adjustment nut.



**02-** Tighten/loosen the nut as required.

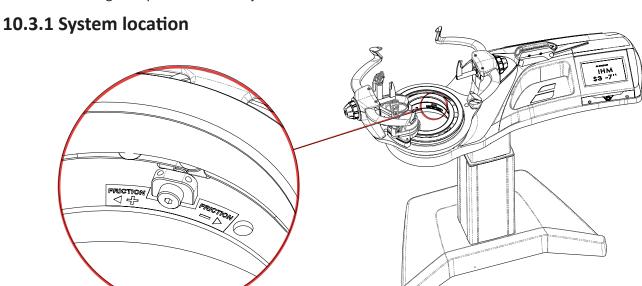


- **03-** Unlock/lock the clamp base to test the result. Repeat if necessary.
- **04-** If the problem persists, contact **BABOLAT** After-Sales Service



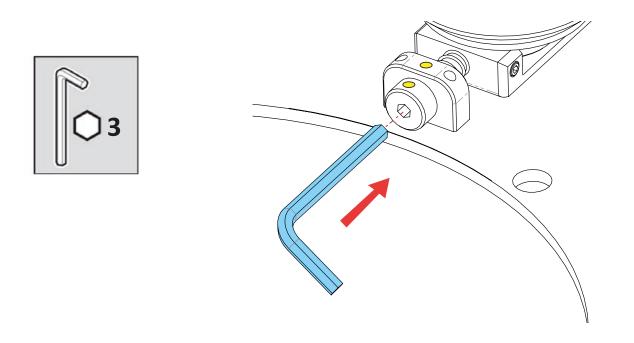
## 10.3 ADJUSTING THE TURNTABLE MOVEMENT

The EVOLUTION range allows the user to slightly adjust the turntable movement by increasing or decreasing the friction. Change the position of the adjustment roller as shown below.



# 10.3.2 Adjusting the movement

1: Insert the 3 mm Allen key into the adjustable roller screw head.





2: Adjust the movement by turning the screw slightly.

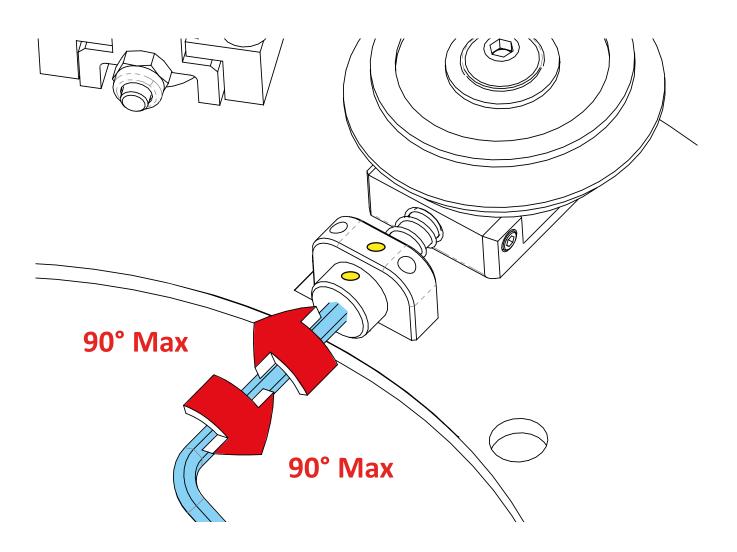
Turntable which moves more freely: Turn slightly – Clockwise - 90° max Turntable which moves less freely: Turn slightly – Counter Clockwise - 90° max

#### **WARNING:**

Do not turn the screw more than 90°.



If you do, Babolat shall not be liable for the rollers wearing prematurely or the turntable disengaging.



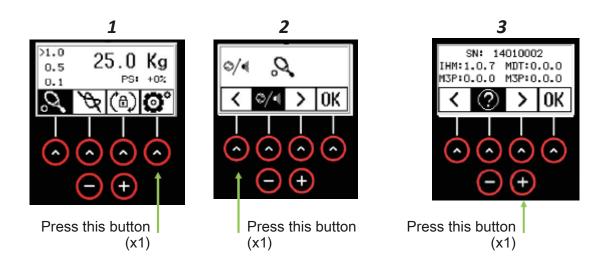


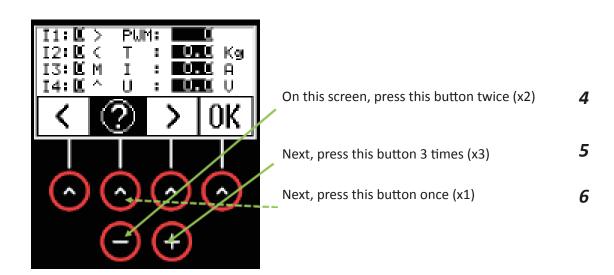
# 10.4 CALIBRATING THE MACHINE

The stringing machine is factory calibrated using precision instruments. If, however, you want to recalibrate your machine, follow the instructions below.

# 10.4.1 Accessing the calibration screen

Customer code for EVOLUTION (Monochrome):







You are on the calibration screen



# <u>Customer code for EVOLUTION TOUR (Touch screen):</u>

1



Press this button (x1)

2



Scroll down the screen

3



Press this line (x1)

4



Enter the code **0101** then **OK** 

5



You are on the calibration screen



#### 10.4.2 Calibration

#### 10.4.2.1 Principle: Both screens operate in the same way.

You need to save 2 points to create the "tension line" the computer uses to create the correct tension in the tension head.

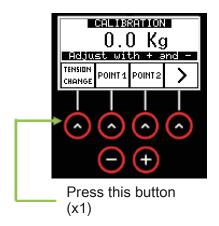
IMPORTANT: in calibration mode, the traction head DOES NOT WORK in "Constant Pull" mode. In this mode, the computer is in learning mode. You need to acquire a lot of data. To do this, apply tension to the string several times. Before confirming, check the data twice and only confirm data if you are making NO MORE adjustments (immediately after applying tension).

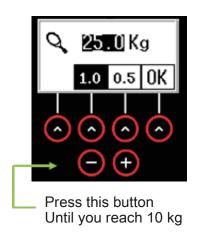
# 10.4.2.2 Calibrating the EVOLUTION screen Method:

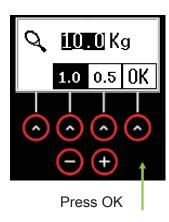
We use 2 very different tensions. The "tension line" will be calculated for the whole machine range (5 kg to 40 kg). At Babtec, we use a reference tension of 10 kg for "Point 1" and 30 kg for "Point 2".

**Step 01**: Apply 10 kg as a reference tension (below).

- Enter the reference value of 10 kg as shown below:







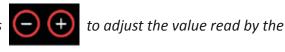
- Install your CALIBRATOR on the stringing machine and apply the tension to the string.
- If your CALIBRATOR does not show 10 kg, use this button to adjust the value read by the CALIBRATOR to 10 kg.
- <u>Before confirming</u>: Check the tension again: apply the tension to the string again. If the CALIBRATOR immediately displays 10 kg, you can confirm the value
- To confirm the value, press

**Step 02**: Follow the same procedure for 30 kg tension.

- Enter the reference value: 30 kg.



- Install the CALIBRATOR and apply the tension.
- If your CALIBRATOR does not show 30 kg, use this CALIBRATOR to 30 kg.



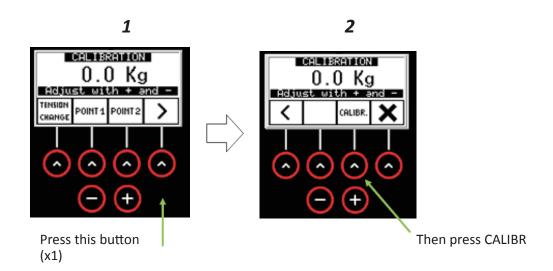
- **Before confirming**: check the tension again: apply the tension to the string again. If the CALIBRATOR immediately displays 30 kg, you can confirm the value.
- To confirm the value, press POIHT 2

#### Step 03: Calculate the tension line

The 2 points of the tension line are now confirmed.

Follow the instructions below to calculate the tension line:

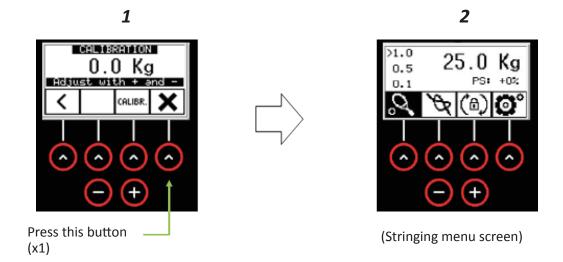
- Remove the CALIBRATOR from the stringing machine.
- Then calculate the tension line by pressing:





**Step 04**: Exit calibration mode - Return to the stringing menu.

The stringing machine is now calibrated and you can return to the stringing menu as shown below.





#### 10.4.2.3 Calibrating the EVOLUTION TOUR screen

#### Méthod:

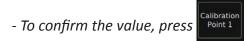
We use 2 very different tensions. The "tension line" will be calculated for the whole machine range (5 kg to 40 kg). At Babtec, we use a reference tension of 10 kg for "Point 1" and 30 kg for "Point 2".

Step 01: Apply 10 kg as a reference tension (below).

- Enter the reference value of 10 kg as shown below:



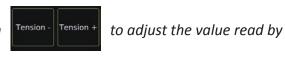
- Move the slide to reference value: 10 kg
- Install your CALIBRATOR on the stringing machine and apply the tension to the string.
- If your CALIBRATOR does not show 10 kg, use this button CALIBRATOR to 10 kg.
- **Before confirming:** Check the tension again: apply the tension to the string again. If the CALIBRATOR immediately displays 10 kg, you can confirm the value.



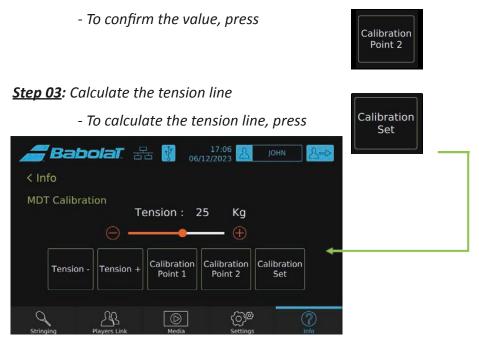


#### **Step 02**: Follow the same procedure for 30 kg tension

- Enter the reference value: 30 kg.
- Install the CALIBRATOR and apply the tension.
- If your CALIBRATOR does not show 30 kg, use this button the CALIBRATOR to 30 kg



- <u>Before confirming</u>: Check the tension again: apply the tension to the string again. If the CALIBRATOR immediately displays 30 kg, you can confirm the value.



Step 04: Exit calibration mode - Return to the stringing menu

The stringing machine is now calibrated and you can return to the stringing menu as shown below.





# 11 TROUBLESHOOTING

The button light does not come on when switching on.	<ul> <li>Check that the power supply is correctly connected to the machine and a power socket.</li> </ul>
When switching on, the screen lights up but the traction arm does not move after pressing "Start cycle".	Switch off the machine and wait 30 seconds before switching it back on.
NB: On a machine with a color touch screen, make sure you are in the stringing menu.	<ul> <li>If the problem persists, make a note of the machine's serial no. and call BABOLAT Customer Services.</li> </ul>
During stringing, the clamp holder slips or does not unlock.	• Call <b>BABOLAT</b> Customer Services who will send you the relevant instructions.

# **EVOLUTION TOUR with color touch screen**

The machine emits an audible signal and	
displays. One of the following messages:	
Traction unit error: Traction time exceeded. You must restart this traction to have the right tension.	<ul> <li>The traction time is too long, the requested tension may not have been achieved. Release the tension then restart the tensioning operation.</li> </ul>
Traction unit error : Traction Limit switch.	<ul> <li>The traction head is at the end of its travel, traction is impossible. Press the "Start cycle" button to release the tension, position the string correctly and restart the tensioning operation.</li> </ul>
OVER ALL TENSION	<ul> <li>Maximum tension limit has been reached.</li> <li>The machine limits the overall tension to a maximum of 40 kg/88 lbs.</li> </ul>
The machine emits an audible signal and displays an error code. There is an electronic problem.	<ul> <li>Make a note of this code and call BABOLAT Customer Services who will send you the relevant instructions.</li> </ul>



# 12 RECYCLING END-OF-LIFE EQUIPMENT

Babolat equipment is built to last, but when it is considered to be at the end of its life, it can be dismantled, and its components recycled.

EVOLUTION TOUR and EVOLUTION stringing machines are professional electrical electronic equipment covered by Directive 2012/19/EU, Implementing Regulation (EU) 2019/290 and Implementing Decision (EU) 2019/2193 and sold since February 02,2022.

At the end of its life, the equipment must be handled separately from domestic waste and sent to an organization specializing in handling waste electrical and electronic equipment (WEEE) or collected by the seller when new equipment is purchased.

The crossed-out wheelie bin symbol on the equipment is a reminder of this obligation.



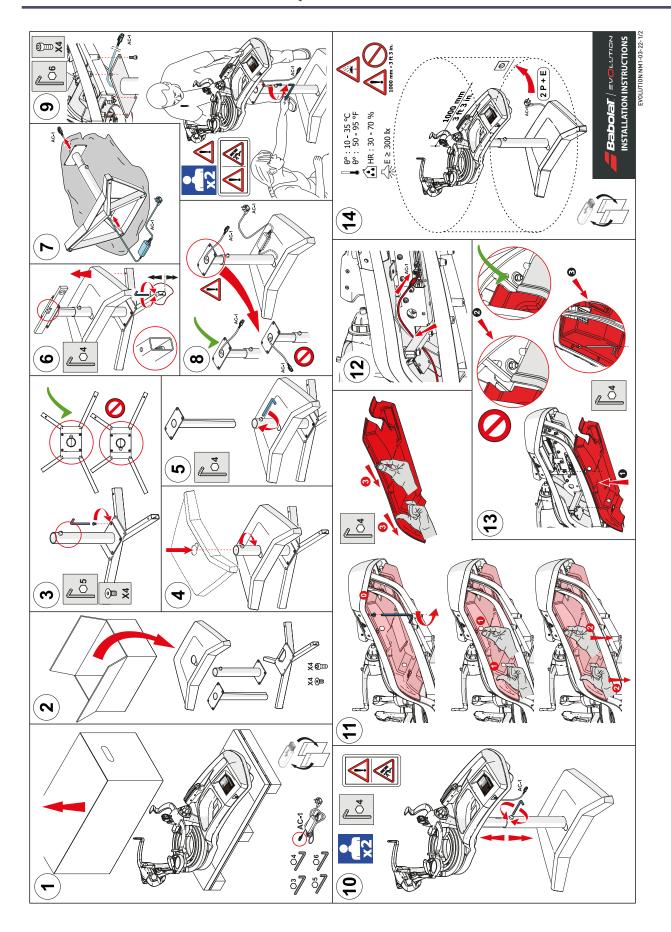
EVOLUTION TOUR or EVOLUTION components comply with the requirements of (EU) directive 2017/2102. They do not contain any dangerous substances listed in this directive.

The turntable body and frame of the EVOLUTION TOUR or EVOLUTION are made from aluminum and the housing is made from ABS.

The self-adjusting stand is aluminum and the manual stand is made from steel.

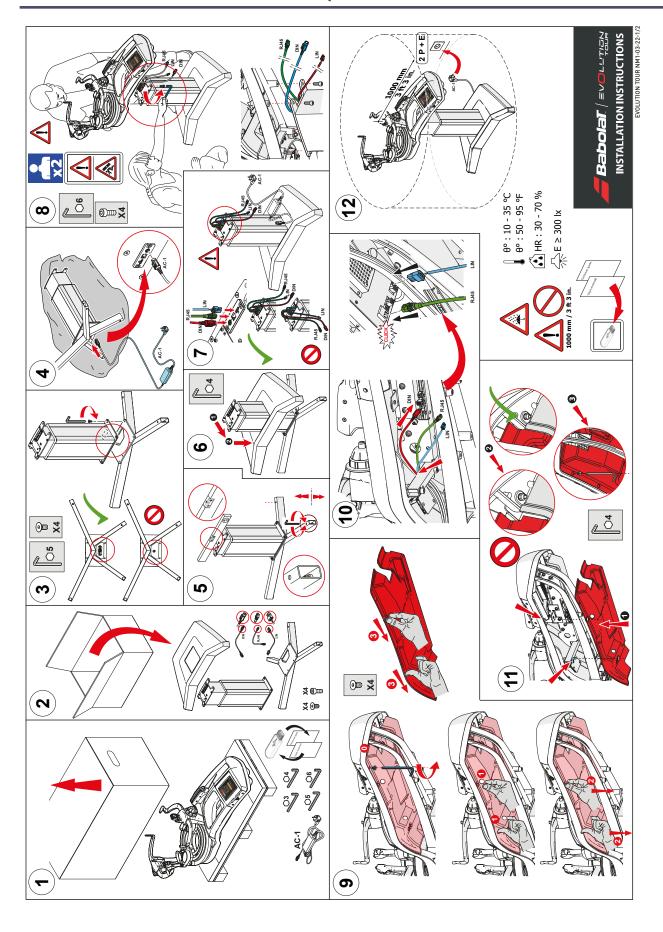


# 13 APPENDIX 1: EVOLUTION QUICKSTART INSTALLATION INSTRUCTIONS





# 14 APPENDIX 2: EVOLUTION TOUR QUICKSTART INSTALLATION INSTRUCTIONS





## 15 APPENDIX 3: TURNTABLE BLOCKING INSTRUCTIONS

To prevent premature wear of the racket station during transportation or prolonged lack of use (> 2 weeks), it is strongly recommended that you return the machine to its initial (out-of-the-box) configuration.

This involves completing the steps detailed in section 4 (Initial installation) in reverse order, i.e.

- tighten the transit bolts,
- loosen the adjustment roller.

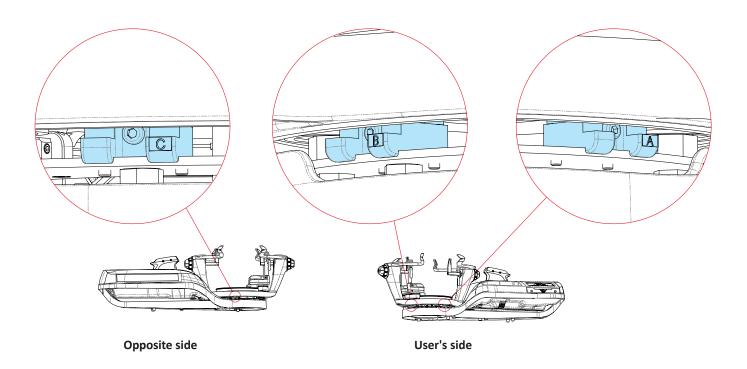
The step-by-step approach is described below.

# Step 01: Tighten the transit supports again

**REMINDER:** position of transit bolts

The 3 transit bolts are positioned on the machine as shown below.

Bolts **A** and **B** are positioned on the screen side while bolt **C** is on the opposite side.





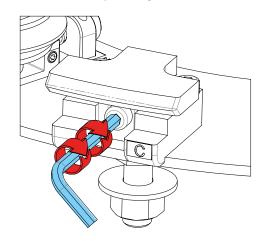
#### Step 01-1: Tighten BOLT C again

- Select the 3 mm Allen key.
- Tighten the bolt (clockwise) until it reaches a limit. The bolt is secured in the turntable.

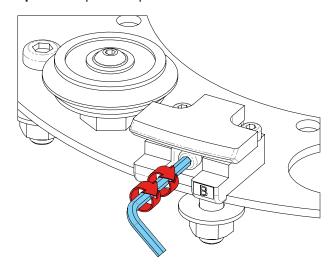




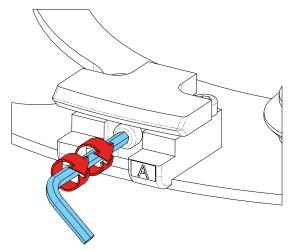
# **IMPORTANT: DO NOT TIGHTEN** beyond the limit. This may damage the turntable of the machine.



**Step 01-2:** Repeat the procedure for BOLT B.



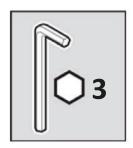
Step 01-3: Repeat the procedure for BOLT A



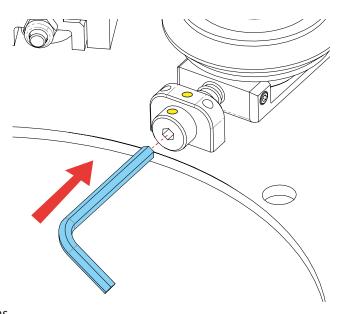


# Step 02: Relocking the adjustment screw

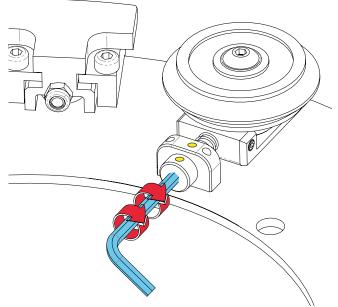
Step 02-1: Select the 3 mm Allen key.



Step 02-2: Elnsert the 3 mm Allen key into the adjustable screw head.



**Step 02-3**: Tighten the screw (clockwise) by 2 turns. Use the yellow dots as a reference.



The turntable is now secured, and you can safely transport the machine or leave it out of use for an extended period.



IMPORTANT: When you wish to use the machine again, you need to follow the initial installation procedure described in section 4.



## **16** APPENDIX 4: WARRANTY INFORMATION

#### Guarantee of the stringing machine for the benefit of the professional customer

In addition to the legal guarantees, BABOLAT VS grants the Professional Customer a commercial guarantee. BABOLAT VS stringing machines have been designed and manufactured according to the rules of the art and subjected to in-depth checks.

They are guaranteed for 3 years against any construction defect or material defect duly noted. The warranty can be extended to 5 years. Contact your Babolat representative for details.

The warranty period takes effect from the date of the invoice issued by an authorized agent of BABOLAT VS and sent to the first Professional Client user.

#### I. PURPOSE OF THE WARRANTY

During the warranty period, any part found to be defective will be repaired or exchanged for a new part or one in good working order under the conditions of section III "IMPLEMENTATION OF THE WARRANTY" of this information note.

Labor costs are also covered by this warranty.

The Professional Customer cannot demand the replacement of the complete machine.

Its immobilization cannot give rise to any compensation for any reason whatsoever.

#### **II. WARRANTY EXCLUSIONS**

This guarantee excludes damage caused by an erroneous handling, a bad treatment, an intervention of third, or a deterioration during transport, a non-respect of the rules of installation with regard to the prescriptions contained in the manual of use supplied with the machine.

#### Are also excluded from the warranty:

- (1) Protective coatings designed to wear off over time, unless failure is due to a defect in workmanship or workmanship;
- (2) Damage caused by use of another product;
- (3) Damage caused by contact with liquid, fire or any other external cause;
- (4) Defects caused by normal wear and tear or in any other way by the normal degradation of the product or by the deletion or erasure of the serial number appearing on the stringing machine;
- (5) Consumable parts and in particular the plastic parts in contact with the racket, pads, tips, etc. or
- (6) Stringing machine damaged after receipt by the Professional Customer store, except for reservations expressed at the time of delivery.

#### III. WARRANTY IMPLEMENTATION

Before any implementation of the warranty, the Professional Customer must contact the BABOLAT after-sales service via the B2B website (http://b2b.babolat.com) or by email (aftersales-machines@babolat.com).



The Professional Customer must then provide BABOLAT VS with all the elements enabling the stringing machine to be identified (in particular the BABOLAT VS customer code, the item code, date and proof of purchase, the serial number) and to assess the reality of the defect or defect, and its extent (including the description of the defect or defect and photos of the product).

If the circumstances so require, and in particular if the items supplied are insufficient, the BABOLAT VS After-Sales Department may ask the Professional Customer to return the stringing machine for an expert assessment. Each of the parties will bear the transport and packaging costs incurred by the shipment of the stringing machine to the other party and resulting from the application of this guarantee.

The BABOLAT VS After-Sales Service will carry out the necessary checks before the implementation of the guarantee and in particular will ensure that the conditions of the guarantee are respected.

BABOLAT VS undertakes to process the complaint and to inform the Professional Customer of its decision as soon as possible.

The Professional Customer must immediately return any defective part to the BABOLAT VS After-Sales Service and may not under any circumstances keep it without the written authorization of BABOLAT VS.

1. If the conditions of the guarantee are respected, BABOLAT VS will have the option of repairing the defective part, replacing it, sending a new stringing machine or issuing a credit note for the stringing machine for the benefit of the Professional Customer. The exchange or repair of a defective part carried out under the guarantee cannot have the effect of extending its duration.

In the event that the defective stringing machine is replaced, BABOLAT VS undertakes to send the replacement product within 24 to 72 hours. However, this period may be extended if the replacement product is not available in stock or if exceptional circumstances so require.

2. <u>If the conditions of the guarantee are not fulfilled</u>, BABOLAT VS will inform the Professional Client of its decision and will inform him of the reasons for the refusal to cover.



# 17 APPENDIX 5: DECLARATIONS OF CONFORMITY

#### Déclaration UE de conformité

Equipement: Machine à corder raquettes (Tennis, Badminton, Squash)

Marque : BABOLAT

Modèles: EVOLUTION & EVOLUTION TOUR

N° de Série : à partir des N° 2304XXXX

Fabricant: BABOLAT VS

Réf Rapport de test : RCE-EMIESS22K463BAB-2A v0 (édition du 24/03/2023)

Les machines à corder BABOLAT de la gamme EVOLUTION et EVOLUTION TOUR ont été conçues et réalisées, en matière de sécurité, pour répondre aux exigences de la directive générale de sécurité des produits. Les machines à corder BABOLAT EVOLUTION et EVOLUTION TOUR sont donc conformes à :

#### La Directive Machine:

- Directive 2006/42/CE relative aux machines

#### **CEM (Compatibilité Electromagnétique)**

- Directive 2014/30/UE relative à l'harmonisation des législations des États membres concernant la compatibilité électromagnétique et conformément aux normes.

#### La Directive DEEE (Déchet d'Equipements Electriques et Electroniques)

- Directive 2012/19/UE du Parlement européen et du Conseil du 4 juillet 2012 relative aux Déchets d'équipements électriques et électroniques (DEEE)
- Règlement d'exécution (UE) 2019/290 de la Commission du 19 février 2019 établissant le format pour l'enregistrement et la déclaration au registre des producteurs d'équipements électriques et électroniques
- Décision d'exécution (UE) n° 2019/2193 du 17/12/19 établissant des règles pour le calcul, la vérification et la déclaration des données ainsi que des formats de données aux fins de la directive 2012/19/UE du Parlement européen et du Conseil relative aux déchets d'équipements électriques et électroniques (DEEE)

# La directive RoHS (Limitation des substances dangereuses dans les équipements électrique et Electroniques)

- Directive 2011/65/UE et (UE) 2015/863 du Parlement européen et du Conseil du 8 juin 2011 relative à la limitation de l'utilisation de certaines substances dangereuses dans les équipements électriques et électroniques
- Directive (UE) n° 2017/2102 du Parlement Européen et du Conseil du 15/11/17 modifiant la directive 2011/65/UE relative à la limitation de l'utilisation de certaines substances dangereuses dans les équipements électriques et électroniques

# Règlement REACH pour l'enregistrement, l'évaluation, l'autorisation et la restriction des Substances chimiques

- Règlement européen 1907/2006

Certificat pour le compte de la société :

BABOLAT VS (Lyon, France)

Fait à Lyon, le 28 mars 2023

Eric BABOLAT, Président, représentant la société BABOLAT VS :











# **DECLARATION OF CONFORMITY**

Equipment: Racket stringing machine

Trademark(s) BABOLAT

Model(s): EVOLUTION / EVOLUTION TOUR

Manufacturer: BABOLAT VS

Serial N: Starting from N° 2304XXXX

This device complies with Part 15 of the FCC Rules.

(FCC CFR 47 Part 15, Subpart B of 2019 / ANSI C63.4 of 2014 / ICES-003 issue 7 of 2020)

Operation is subject to the following two conditions:

(1) this device may not cause harmful interference, and

(2) this device must accept any interference received, including interference that may cause undesired operation.

The following test reports are subject to this declaration: RCE-EMIESS22K463BAB-1A v0.

(24/03/2023 edition)

The following manufacturer/importer/entity is responsible for this declaration:

Company name: BABOLAT VS

Name/Title (legal representative): Eric BABOLAT, Président

Address: BABOLAT VS

33 Quai Paul Sédaillant

69009 LYON France

Phone: +33 4 78 69 78 69

E-mail: aftersales@babolat.com

Date: 2023/03/28

Signature:



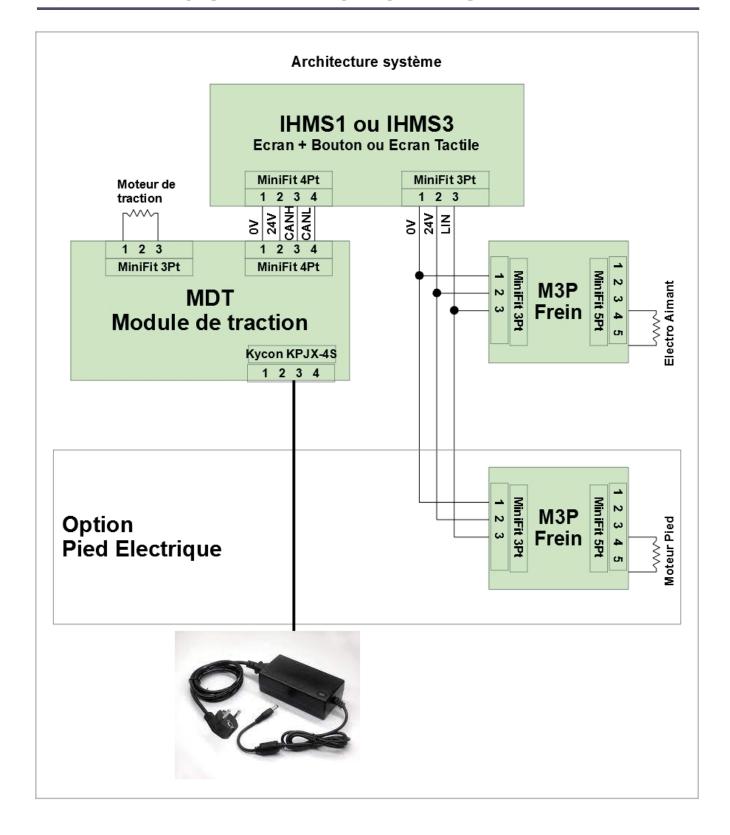








# 18 APPENDIX 6: OVERALL ELECTRICAL DIAGRAM



# Babolat VS SA - L'industrie - 33 quai Paul Sédallian, 69009 Lyon - 552 131 401 RCS LYON

# **User Manual**







