

# SFARCHERY CO.

Neringstraat 2, 8370 Blankenberge, Belgium Fax. 32-50-42-72-45 Tel. 32-50-42-72-40 Email : contact@sf-archery.com http://www.sf-archery.com

### ■ SAFETY INFORMATION

## 1. Combine the riser and limbs completely and properly.

To improve the accuracy, each limb should be mounted into the handle correctly. When setting the Riser and Limb, please the limb deep inside pocket until you hear a clicking sound. This sound will assure proper limb placement. The failure to follow this procedure may result in a decreased accuracy and/or breakage.



# 2. Never dry fire your bow.

Dry fire means to draw and release your bow without an arrow. Shooting without an arrow absorbing a lot of the stored energy could cause severe damage to the bow and possible injury to the shooter or others close by.



# 3. Never expose your bow to extreme heat or moisture.

Excessive heat, such as could be experienced on a sunny day inside of a closed vehicle, could cause limb failure. Prolonged storage in a hot, dry, attic or damp basement could also be damaging. This voids your warranty.



## 4. Inspect your bow carefully before each shooting session.

A problematic bowstrings should be replaced. Damaged or doubtful limb should be reported to the dealer from whom you purchased.

## 5. Maintenance of bowstring and limbs.

Coat bowstring wax to your bowstring on a regular basis. With target bows, use a quality car polisher to protect the finish and luster of bow limbs.

## 6. Always play for safety.

Never shoot your bow straight upward. Always be sure of your target area and around it.

## Inspect all arrows.

Before shooting, inspect your arrows for checking any defect. Replace cracked nocks. Discard fractured or dented arrows. Repair damaged vane.





All bows are a deadly weapon.

Always abide by all safety advisements.

Children should be supervised by an adult.

# **■ CONTENTS**

## 1. BOW TERMINOLOGY

## 2. TECHNICAL INFORMATION

- 1) HOW TO SET A BOW
- (1) Stringing
- (2) Brace Height

# 2) SF BOW ADJUSTMENT

- (1) Weight Adjustment
- (2) Tiller Adjustment
- (3) Limb/Riser alignment adjustment
- (4) Limb pocket

# 3. SF RECURVE BOW WARRANTY

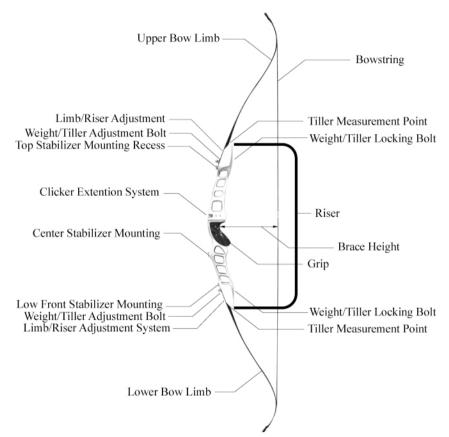
Warranty Statement

Warranty Service

Warranty Card

## ■ SF BOW TERMINOLOGY





### ■ TECHNICAL INFORMATION

**Super Forged** high quality risers are available in three models: **Carbon Limbs Bo-Tuff/Wood Limbs**, **Foam limbs**. Each style is available in three lengths: **Long Medium and Short**.

Actual bow length is determined by the combination of limb and riser type (length). The following chart shows the 25 inches riser of 'Super Forged'.

SF Recurve bow(25")	Long Limbs	Medium Limbs	Short Limbs
	70''	68''	66''

Sabastien Flute(SF) high quality limbs are available in marked weight from 22# to 46# in two pounds increments. This marked weight is measured at 28 inches draw when the limbs are used with a Super Forged(SF) riser.

## 1) HOW TO SET A BOW

SF Bows have a remarkable limb mounting and limb weight/tiller adjustment system. Bottom-end of each limb opposite to the tip has U-typed contraction hole. This hole is for adjusting weight, limb balance (tiller) and limb/riser alignment. Dovetail of limb guide bushing aligns and captures each limb to prevent it form disengaging from the riser. This engagement may cause bowstring cutting. A spring loading detent button also holds the limbs in place while stringing. To install each limb into its pocket, enter the limb guide bushing into the dovetail groove and gently push the limb into inner butt seats of the pocket. Push the limb into pocket inside when the springing button is clicking at dented hole.

#### (1) STRINGING

Special attention is needed to string recurve bow. The safest and the only method is to use bow stringer. Pre-adjust the length of the bow stringer according to the manufacturers' instructions. Hook the larger loop of the bowstring over the upper limb and slip the smaller loop in the string groove of the lower limb. Next, place the large cup of the bow stringer over the lower limb tip and the small cup over the upper limb top.

With the upper limb of the bow held the left step (some prefer to use both feet) on the middle of the stringer, pull with the right hand on the bow grip. Flex the bow sufficiently to slip the upper loop of the bowstring easily into the upper limb string groove. To unstring, reverse the procedure.

#### (2) BRACE HEIGHT

Brace height is the perpendicular distance from the bowstring to the pivot point of the handle. This height is an important part of tuning. The following chart gives you the recommendable brace height range for your bow. Contrary to popular opinion, changing the brace height does not change bow weight. But changing brace height drastically effects bow performance. For instance, each 1/2 inch change in brace height will effect velocity approximately 2 1/2 feet per second. A higher brace height will decrease velocity. A lower brace height will increase velocity. Brace height effects on both energy storing and the length of power stroke. Optimum brace height gives smoothness, good arrow flight, right grouping and a calmness. Generally speaking, slight change of string height is not critical but at extremes change, you may get erratic arrow flight and/or excessive string noise.

Sebastien Flute Limb	Long Limbs	Medium Limbs	Short Limbs
	22.5~24.5cm	21.5~23.5cm	20.5~23cm

## 2) BOW ADJUSTMENT

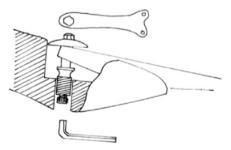
Adjust bow weight and limb tiller with a fork wrench and a Allen wrench or two Allen wrenches provided with the bow. After the adjustment, it is better to lock when bow is unstrung as it would be made more firmly. The limb Adjustment Channel is factory adjusted to minimum bow weight.

#### (1) WEIGHT ADJUSTMENT

The bow has weight adjustment system in a range of approximately 10% heavier weight than indicated on the limbs. For example, if the limbs are marked 36 pounds the bow is capable of adjustment to approximately 39 pounds. As a fine tuning aid sometimes changing bow weight to accommodate arrow spine is desirable-increasing weight for a stiff spine and decreasing of it for a weak spine. Turning the Weight /Tiller adjustment Bolt clockwise will increase bow weight. Turning the same bolt counter-clockwise will decrease bow weight. Bow tiller should be checked after all bow weight changes, some bow weight changes may necessitate tiller correction.

#### (2) TILLER ADJUSTMENT

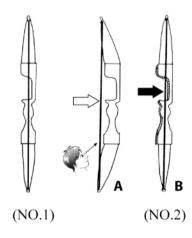
Strengthening or weakening a limb relative to the other is called tillering. Turing the Weight/Tiller Adjustment Bolt clockwise on one limb will strengthen that limb and decrease the distance between the limb and the string. Turning the Weight/tiller Adjustment Bolt counter-clockwise will produce opposite results. To adjust tiller on the riser without affecting bow weight, turn each Weight/Tiller Adjustment Bolt with equal amount but in apposite direction. When a tiller adjustment has done, shoot several ends to stabilize the change and recheck the tiller. It is best to make tiller or weight adjustment with bow braced. Normally, in course of shooting all bows will change tiller to some degrees whether limbs are adjustable or non-adjustable. Some bows have been known to reverse tiller under extreme condition. With very little exception, bow that changes tiller return to their normal tiller after resting in an unstrung condition for only a few hours. Therefore, with any recurve bow, do not jump into making premature tiller adjustments as soon as change in tiller is absorbed. After the bow has rested and is restrung, normal tiller will typically return. However, limb balance (tiller) may need to be adjusted after several times of bow use. Should this be the case, make an initial tiller adjustment then shoot several ends and recheck tiller.



#### (3) LIMB/RISER ALIGNMENT ADJUSTMENT

To ensure the proper and accurate alignment of the limb and the riser, you must first inspect the setting of the limb and the riser to make sure that the bowstring penetrates the center point of the upper and lower limb. (during this inspection you should also make sure that the bowstring goes through the center of the grip) As shown in the diagram No.1) you must mark the center of the limb on the upper and lower limb using a pen. Moreover, the string has to pass through the center of the upper/lower(the point marked with a pen) and the grip.

In order to provide an archer with a customizable control the alignment, a limb/riser alignment system. As shown in the diagram No. 2) If the upper and lower limbs are tilted toward the left side, it mighth appear to be properly aligned when you try only to place the string on the also be tilted favoring the left. This will make the sight pin to favor the right side. Thus, it makes an inaccurate arrow grouping. In order to prevent this, the riser has to be the focal point in setting and adjusting the limb/riser alignment system.



In order to prevent the improper setting and the alignment of the limb/riser you should follow these steps.

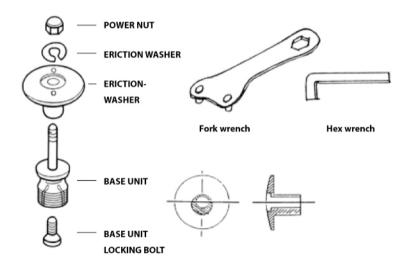
- 1) Stand where you can see the window part of a little and the opposite side should not be seen. At this time, it is the best if the stabilizer is located in the center of the bow when you find the center of your bow. Most stabilizer however, are not straight enough. So the window part is required to adjust the center of the bow.
- While standing on that side, adjust the string and the center point of the limbs that these two points are properly and accurately aligned.
- 3) By following the previous two steps listed, you will be able to adjust the alignment of the limb and riser easily.

### (4) LIMB POCKET

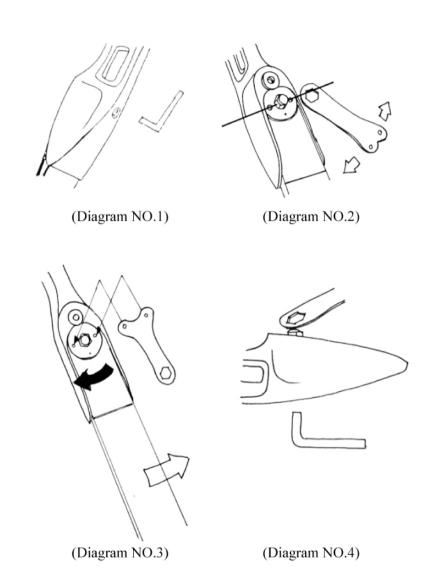
The micro tuning system developed by SF Archery allows the following adjustments to be made in fine tuning.

- -TILLER
- -BOW WEIGHT
- -LIMB/RISER ALIGNMENT

The Limb pocket mechanism consists of the following parts:



To adjust tiller and bow weight, first loosen the Base Unit Locking bolt with the hex wrench (diagram 1). Use the Fork wrench to turn the Eccentric-shank dial clockwise to increase bow weight and vice-versa for decrease in bow weight (diagram 2). When the correct poundage is set, tighten the Base Unit Locking bolt and hold the Eccentric-shank dial with the fork wrench (diagram 4). At this point, the eccentric is placed inaccurately the limb/riser alignment should be adjusted again.



To adjust limb/riser alignment, first loosen the power nut half a turn (diagram 2). Turn the eccentric-shank dial with fork wrench for the correct limb/riser alignment.

As shown in the diagram No.3), put the fork wrench into the dial holes and turn it right and left side to adjust. Turn the eccentric-shank dial clockwise to move the limb counter-clockwise for accurate limb/riser alignment and vice-versa.

Hold the dial imposition with the fork wrench while tightening the power nut with the wrench (diagram 4). At this time, it is better to lock the power nut while the bow is unstrung.

It is recommended that the limb/riser alignment should be done after finishing the tiller and bow weight.

## ■ SF RECURVE BOW WARRANTY

SF recurve bows are backed by a solid 1 year limited warranty. For the first year from date of purchase, SF recurve bows are fully warranted against factory defects in materials and workmanship. A copy of your retail sales receipt, establishing date of purchase, is required for all warranty service.

#### WARRANTY SERVICE

To obtain warranty service, you should return to the SF Distributor where you purchased your bow. The distributor can help your determine if SF Archery service is required or if the repair can be completed by the distributor. If the bow must be returned to the SF Archery, the bow owner is responsible for the return postage.

SF recurve bows requiring SF Archery warranty service should be sent to: SSA Sporting Goods N.V. - Neringstraat 2, 8370 Dlankenberge, Belgium

Before any bow is returned to the SF Archery for warranty service, the SF bow return confirmation must be made by SF Archery.

Any bow returned to the SF Archery for warranty service:

- 1. must be sent postage paid
- 2. must include a copy of the dated sales receipt
- 3. must include a short note explaining the nature of the problem

SF ARCHERY RECURVE BOW MANUAL

#### SF BOW OWNER'S PERSONAL RECORD

LIMB TYPE AND LENGTH:	WEIGHT:	#
PURCHASED FROM:		
PURCHASED DATE:		