

**NEW!!**



**20°ST 25"**

**MAMBA 19"**  
**COBRA 21"**  
**NILO 23"**  
**NILO 25"**  
**LUXOR 27"**

**CONGRATULATIONS FOR PURCHASING A  
"BY BERNARDINI"  
RECURVE RISER!**

By Bernardini risers are produced and assembled in Italy using aeronautic grade materials and their grips are made from precious woods.

Risers are in aluminum "Anticorodal" 6082T alloy and are machined by very advanced milling machines with computerized control from solid bars of aluminum strictly checked to grant the uniformity of the alignment of their fibers. Pre charges bolts and limbs alignment system are made by stainless steel, while precharge large washers are made by Ergal aluminum alloy.

All aluminum parts are anodized in depth in order to grant maximum resistance to corrosion, abrasion and to grant stability of the color under sunlight. Risers in painted versions are submitted to a special priming process to grant adhesion and stability of the surface painting.

The product you have purchased has been designed and produced in away to grant you an unlimited life of its basic structure.

Please follow the easy instructions below for use and maintenance of your "By Bernardini" riser and you will be in a position to appreciate its extraordinary qualities for very long time.

**Condition of the riser at the delivery**

Risers are assembled and aligned manually one by one by using special reference limbs, in order to grant their perfect linearity. If you will use straight limbs with them, there should be no reason to change the factory set alignment.

Precharges of the limbs are set at the factory ever at the minimum possible poundage.

Loosen limbs precharges to less then the preset delivery limit is considered violation of the warranty and may generate risk of breakage of the related parts and risk of injury for the user.

**Operation of the Precharges**

By Bernardini precharge system are the most easy to operate and stable existing in the market, and have been tested over thousands of risers produced in over 15 years.

Precharges allow to increase poundage of around 8 to 10% from the starting one, depending from limbs used.

By Bernardini precharges should be operated only by the special aluminum spanner supplied with the riser. Using different kind of spanners to operate the precharges may bring to aesthetic defects not covered by the warranty.

Standard By Bernardini precharges (Nilo, Cobra and other previous models) are with continuous operation and their internal special anti vibration system grants their stability after adjustment.

Special "click" type precharges (Luxor and other previous models) divide one turn of the precharge in 12 parts with corresponding "click" positions. The adjustment of the precharge has to be effected with a continuous and slow movement.

Precharges may be used for small adjustments also with the limbs braced, but in case of need of adjustments of more than one turn, we suggest to unbrace the bow before the adjustment.

In case of exposure of the riser to particularly hard weather conditions or rain, we suggest to dry the mechanism very well and lubricate it if needed.

Never disassemble by yourself the precharges of your riser. Any improper operation or any modification of the precharge system and its "click" system (if present) is considered violation of the warranty clauses. In case of need of repair or maintenance, ask our authorized dealers.



### Operation of the alignment system

Limbs alignment system is preset at factory level with maximum possible precision and grants the assembly of the limbs perfectly on the riser axis.

Small linearity defects of limbs may request to operate the alignment system.

To this purpose, operate as follow:

- 1) Adjust precharges for poundage and tiller as desired.
- 2) Assemble the bow with the full stabilizing system or minimum with the long rod.
- 3) Insert over limbs (archer's side) minimum two pairs of Beiter limbs alignment tools or mark with a water ink pen a minimum of two references on the center of the limbs, positioned for



- each limb one close to the riser and one close to the curve of the tip.
- 4) Loosen with a 10 mm closed spanner the four blocking bolts of the upper and lower alignment systems.
- 5) Looking to the axis made by the string, the center of the limbs and the center of the long rod, tune by the hexagonal bolts the position of the precharge bolt, remembering that:
  - A) Tightening clockwise the right upper bolt (seen from archer's side) the tip of the upper limb moves to the left.
  - B) Tightening clockwise the right lower bolt (seen from archer's side) the tip of the lower limb moves to the left.
  - C) Tightening clockwise right side bolts, limbs tips will move to the right.
- 6) Operate right and left bolts until you will get the positioning of the string, center of the limbs and center of the long rod on the same axis. For Luxor 27" riser only, the long rod is by design one millimeter out from the axis of the riser, so you have to consider this displacement when aligning it
- 7) When optimal alignment is reached, tighten the bolt on the opposite side of the one operated last on that limb.

In case it will be impossible to reach an acceptable alignment, specifically in presence of limbs not straight or even worse, twisted, we suggest to you to renounce to their use and replace them.

### Replacement of the grip

For Nilo, Aladin, 20°St models, the special By Bernardini wooden grip is stuck to the riser with simple bi-adhesive tape. The grip can therefore be easily removed and replaced. Original grips for Nilo, Aladin, 20°St are the same for both RH and LH risers. Risers are usually supplied with the Medium grip. High, Super high, LK, Low and Metal grip are available as spare parts.

Original grip for Luxor 27" riser is blocked by two side M4 screws and with bi-adhesive tape, too. The grip supplied with Luxor 27" riser is the Medium model. A special "Gillo" ball grip is available as option.

### Additional weights kits

Nilo and Luxor risers can accept an additional weight kit of 4 stainless steel weight (3 only for Nilo 23"). Weights are one smaller of 50 gr, dedicated to the hole closer to the grip, and 3 (2 for Nilo 23") of 60 gr for the other holes, for a total additional maximum possible weight of 230 gr (170 gr for Nilo 23"). The weights are inserted in the holes of the riser and blocked by the dedicated grains.

Cobra riser accepts a dedicated additional stainless steel weight kit composed by two weights, one of 90 gr and one of 150 gr, for a maximum total of 240 gr. Also Cobra weighs have to be fixed by the dedicated grains.

The 150 gr weight for the Cobra riser is also compatible with the holes of the Nilo and Luxor risers, so these risers can use up to 4 of them to reach a maximum additional weight of 600 gr total. Cobra 150 gr weight is also compatible with Mamba riser.

### **WARRANTY CONDITIONS**

By Bernardini risers are warranted against manufacturing defects for 12 months from the date of the purchase.

The manufacturer reserves the right to repair defective risers or to replace them with equivalent models for features and conditions of use.

Warranty conditions are applicable to products delivered to Archery BZ Srl seat in Gallarate – VA – Italy.

Cosmetic and surface finishing defects are excluded from the warranty and can be contested only at the moment of the purchase.

By Bernardini risers are warranted at life against any failure of the structure of the riser, provided that it is not coming from improper use of the product.

By Bernardini riser are hand made and refined, thus the small layout imperfections on its surface are not defaults, but the proof of the uniqueness of each and every manufactured piece.

This Instruction manual is also the Warranty certificate of the riser and shall be presented to the dealer for any request of repair, maintenance or replacement. Warranty certificate can only be valid in presence of a fiscal proof of the purchase stating its date (invoice or purchasing receipt).

**Model:** \_\_\_\_\_

**Date of purchase:** \_\_\_\_\_

**Dealer's Stamp**