YAMAHA TAKE DOWN BOW

CO. LTD. HAMAMATGU, JAPRAN

OWNER'S MANUAL

NIPPON GAKKI CO., LTD P.O.Box 1, Hamamatsu, Japan The Yamaha α (alpha)- \mathbb{E} take down bow exhibits the qualities of a tournament bow of the very highest level. It not only incorporates the on-target performance and the unique tackless insertion hub construction, features of the Olympic gold-medal winner — the EX — it also features its own unique double adjusting system, developed through our pursuit of an even easier-to-use bow.

How well the bow continues to give satisfactory performance depends on the way it's used. Please read this manual carefully so you can enjoy high-precision archery performance to the fullest.

HANDLING PRECAUTIONS

- 1. Be sure to remove the string from the bow when storing it.
- 2. When storing or carrying the bow, in order not to damage the handle and limbs, wrap them with a cloth and put them in the archery case.
- 3. Properly place the bow so as not to put improper pressure on it during in use or storage.
- 4. Do not shoot without an arrow or with the nock disconnected from the bowstring.
- If the bow gets wet, carefully wipe it off with a dry cloth including the handle/limb joint unit.
- 6. When storing the bow for a long period of time, lay it horizontally and keep it out of direct sunlight or dampness.
- 7. If there's any defect in or damage to the handle or limbs, there's a danger of breakage. Be sure to check the bow from time to time for defect or damage. Never modify the handle. Improper modification may cause trouble.
- The above precautions should be strictly observed. The manufacturer will not bear the responsibility for any problems caused by misuse.



The \bigotimes employs a unique double adjusting system in which draw weight adjustment and limb balance (tiller) adjustment are successfully and independently incorporated. The adjustment should be made as described below for correct use.

DRAW WEIGHT (DW) ADJUSTMENT

The **X-EX** handle includes 3 types of draw weight (DW) adjusters different in thickness (No. 1, 2, 3). Adjuster No. 1 is standard. Draw weight can be about 4.5% lower with No. 2 and about 10% lower with No. 3.

Adjuster No. 1 is provided before shipment. You can select the desired one based on conditions at the time. The number can be seen in the concave part.

How to replace draw weight adjusters

- Loosen the setscrew holding the DW adjuster by using a cross-tip (+) Philips type screwdriver, and dismount the DW adjuster.
- 2. Install the desired DW adjuster by using the screwdriver.
- If the final choice is DW adjuster No. 1, remove the backing paper from its back side and install it.

Note: Limb balance (tiller) and string height will vary slightly due to replacement of the DW adjusters.

tiller e l'alters

le prestrine

di corda variano

cambiando

dC

TUNE-UP OF LIMB BALANCE (LB) ADJUSTERS

The limb balance (tiller) can be changed by about some 15mm by tuning up the LB adjusters incorporated in each stabilizer insert provided on the handle back side. A special stopper is not used due to the screw-fastening principle. Because it is retained by powerful spring pressure, completion of adjustment is secured ... a very simple and sure method.

How to tune-up LB adjusters

- Insert the hexagonal wrench (attached to the package) into the stabilizer insert and turn the built-in adjuster.
- To increase the limb balance Turn the lower adjuster clockwise.
- To decrease the limb balance Turn the upper adjuster clockwise.

Approximately 10mm is adjustable by a single turn, though the amount of adjuster rotation and the amount of balance change differs depending upon such factors as draw weights, etc.

Precautions: LB adjusters are tuned up in a standard location before shipment. Never turn the LB adjuster counterclockwise. When using the DW adjuster No. 1, <u>do not turn the LB adjuster more</u> <u>than 1 1/2 turn</u> (even clockwise). It may happen that the limb cannot be pulled out. (Do not turn the LB adjuster more than 2 turns when using the DW adjusters Nos. 2 and 3.)



Use the values below as a guide to creating a bow that's just right for you.



* Draw weight : measured at 26" from pivot point

Table 2: Limb balance change by LB adjuster rotation



Precautions: LB adjusters are tuned up at a standard position before shipment. Never turn the LB adjuster counterclockwise.



DOUBLE ADJUSTING SYSTEM CONSTRUCTION DIAGRAM

Insert on the back side LB spring	adjuster, but, provides const	w is not used at the LB because the LB spring tant pressure, the screw or come out of its own
LB adjustment screw	ſ	Adjusting plate
Stator	n / -	Limb
		Reinforcement plate
		Locator
	- KHK	DW adjuster
	Slide pin	DW adjuster setscrew
Limb insert	I spring	Cap

Note 1: When stringing, make sure the locator is positioned correctly in the concave part of the DW adjuster.

Note 2: When dismounting the limb, pull it upward diagonally.

Note 3: If there is dirt or dust on the DW/LB adjusters, it may cause a problem. Always be sure to clean them after practice.



SPECIAL ATTENTION IS CALLED

A magnesium alloy is used in the handle of Yamaha bows. Cracks or breakage to the handle, weakened due to fatigue in the material caused by repeated shooting or corrosion during a long period of use, may occur. If so, immediately discontinue using it and contact the dealer from whom you purchased the bow.

In addition, never modify the handle by shaving it or drilling a hole in it. Any remolding of the handle unit will advance fatigue or corrosion in the metal, reducing its durability.

Yamaha designs and builds its high-quality handles by fully utilizing its long-time expertise and know-how including rational distribution of rigidity, intensive research in handle design and materials and uniformity of casting.

To assure the superb quality of the **X**-**EX** handle, for instance, Yamaha conducted many stringent tests and trials including durability tests for metal fatigue by sampling every casting lot. In addition, a minimum of 50,000 shots were made in actual shooting with the substantial draw weight of 50 lbs., after which the durability of the handles was checked by X-rays.

Specifications are subject to change without notice.