

INTRODUCTION

Welcome to the family of Hoyt USA!

As a member of an elite team, you will be pleased to know that you have purchased the finest crafted, most dependable bow on the market. Only the finest components go into every Hoyt USA bow along with over 50 years of experience in bow technology and manufacturing. With some basic maintenance your new bow should provide you with years of pleasure and dependable service.



**543 North Neil Armstrong Road
Salt Lake City, Utah 84116-2887
(801) 363-2990 Phone
(801) 537-1470 Fax**

BOW OWNERS PERSONAL RECORD

Fill in the following Personal Bow Record for your later reference.

Hoyt USA Bow Model _____

Purchased From _____

Purchase Date _____

Draw Length _____ " Draw Weight _____ #

Bowstring Length _____ " Cables Length _____ "

Important Note:

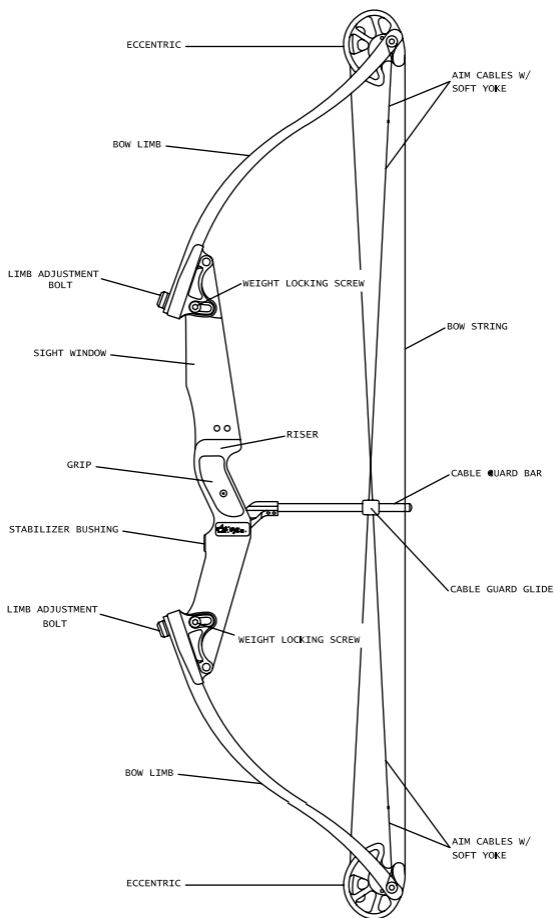
Save your sales receipt. That receipt is your proof of date-of-purchase. Proof of date-of-purchase will be required should your bow ever need warranty service.

The following space has been reserved for you to staple or tape your sales receipt for safe and convenient keeping.

IMPORTANT!

Staple or tape your sales receipt here for safekeeping.

COMPOUND BOW TERMINOLOGY



YOU ARE RESPONSIBLE FOR ARCHERY SAFETY

Please read the following safety information. Disregarding these rules may cause serious injury to yourself or property.

1. NEVER “DRY FIRE” YOUR BOW. Dry fire means to draw and release the bowstring without an arrow. Firing a bow without an arrow to absorb the energy can cause severe damage to your bow and possible injury to the shooter or others nearby.

2. NEVER EXPOSE YOUR BOW TO EXTREME HEAT OR PROLONGED EXTREME DAMP. Excessive heat, such as could be experienced on a sunny day inside a closed vehicle, could cause limb failure. Prolonged storage in a hot dry attic or damp basement could also be damaging.

3. CAREFULLY INSPECT YOUR BOW BEFORE EACH USE. Carefully note the condition of the bowstring, limbs and riser before you shoot. Frayed bowstrings should be replaced. Damaged or suspect limbs should be reported to your local dealer for inspection or replacement.

4. BE SURE OF YOUR BACKSTOP. Make sure that the backstop you use is large enough to catch a stray arrow and that it is thick enough that the arrow cannot completely penetrate it. Make sure that it is positioned in a safe direction away from dwellings and other people.

5. BE SURE OF YOUR TARGET. Make sure that there are no persons, livestock, buildings or other objects behind or near your target. Be absolutely sure of your target in low light conditions.

6. INSPECT ALL ARROWS. Before shooting, inspect your arrows for defects. Discard cracked or dented shafts. Replace damaged or loose fletching and nocks.

7. ALWAYS BE SAFE. Never shoot straight up. Be careful around strings and cables when using broadheads. Cutting strings and cables can cause serious damage to your bow and possible injury to you or others. Children must be supervised by an adult.

8. READ AND HEED ALL WARNINGS. Hoyt USA cannot be held responsible for injuries suffered or caused by misuse, unsafe or improper arrow and bow combinations. Hoyt USA can-

not be held responsible for injuries sustained when using an altered or modified Hoyt USA bow.

WARNING

This bow is a deadly weapon.

Always abide by all safety advisements. Children should be supervised by an adult.

COMPOUND BOW MAINTENANCE

Your bow is a mechanical device and as such, is subject to wear and need of periodic inspection, adjustment and service. Hoyt USA recommends that you take your bow to an authorized pro shop at least once a year for a yearly professional maintenance and inspection. Areas to be inspected are axles, spacers, lubrication of axle bushings, e-clips, strings, cables, limbs and riser.

The following information provides helpful instruction on the proper care and maintenance of your new Hoyt bow. Keep this manual as a handy guide for future reference.

STRINGS AND CABLES

Apply a light coat of bowstring wax to your bow's cables and string on a regular basis. Hoyt USA suggests once every two weeks during peak use. Use a high quality bowstring

wax available at your local Hoyt Pro Shop. This will keep your bow's string and cables in good condition.

To assure best results replace FastFlight string and cables when wear is evident or every two years under normal use conditions. Insist that Hoyt USA string and cables be used on your bow. Beware of lesser quality string and cables as they may alter the performance of your bow or cause damage to it.

ECCENTRIC LUBRICATION

A light, spot lubrication of the axles where they pass through the eccentric should be done on a regular basis (1,500- 2,000 shots). In adverse hunting conditions where dirt, dust or moisture are encountered, lubrication may be done on a daily basis. Hoyt USA recommends you use a silicone or Teflon based lubrication or any other quality grease available at your local Hoyt USA Pro Shop. It is not recommended that you use "Penetrating Oils" such as WD-40, EZ-#7, Fast Break, etc.

BOW PRESS USE

Never allow your bow to be put into a bow press unless it is operated by a knowledgeable bow technician. Always use a "Double Pull" bow press. (See fig 1) Hoyt USA recommends

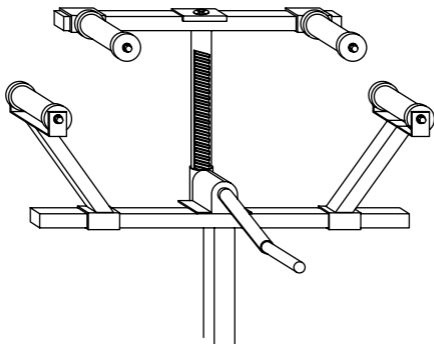


fig 1 (An Example of a Double Pull Bow Press)

that all necessary adjustments requiring the use of a bow press be done by an authorized Hoyt USA Pro Shop.

Never use a single pull bow press. (See fig 2)

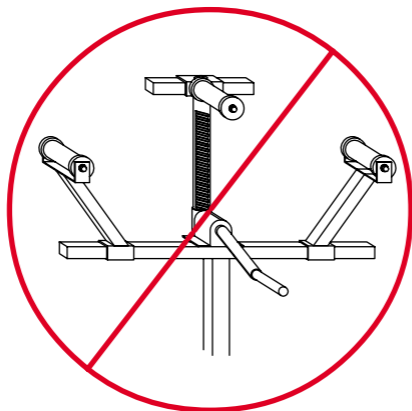


fig 2 (An Example of a Single Pull Bow Press)

COMPOUND BOW SETUP

REST SELECTION

There are two basic types of arrow rests “Shoot Through” and “Shoot Around” (See fig 3) Shoot through rests are designed for release shooters as arrows shot using a release bend vertically. Shoot around rests are designed for finger shooters as arrows shot by fingers bend horizontally. Hoyt USA recommends that you seek the advice of a qualified Pro Shop for the proper rest selection for your style of shooting.

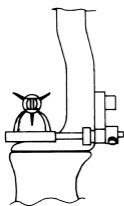
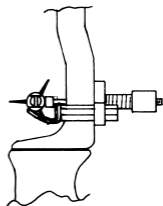


fig 3 Shoot Through



Shoot Around

NOCK SET INSTALLATION

A nock point is a reference on the string that marks the exact location for you to nock your arrow. The arrow's nock is positioned under the nock set. To install the nock set at the proper position begin by slipping the nock set on the string. Then using your rest as a reference,

position the nock set just above level. A finger shooter should initially position the nock set at approximately 3/8" above level. The release shooter should begin at approximately 1/4" above level. (See fig 4) Once the nock set is at the desired location use a special set of nocking pliers to crimp the nock set into place. **NEVER** shoot a bow without a nock set or with a nock set that has not been properly crimped. For proper installation Hoyt USA recommends that this be done by a qualified Pro Shop.

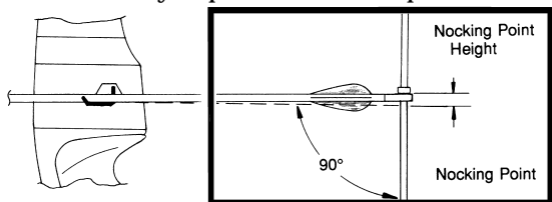


fig 4

CABLE GUARD INSTALLATION

Some Hoyt USA bows use a high or low mount style cable guard bar that is mounted directly to the side of the riser by two 10-24 screws. (See fig 5)

Some models use an adjustable cable guard bar that is inserted into a bushing in the riser. This type of cable guard bar is installed by inserting the bar into the bushing and securing it with two small set screws. (See fig 6)

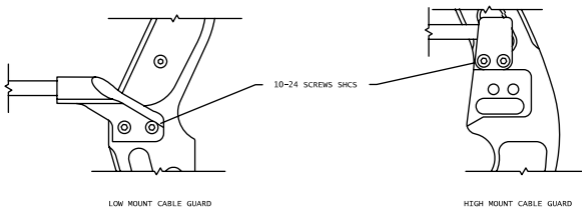


fig 5 (Examples of High and Low Direct Mounts)

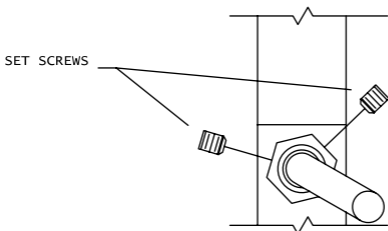


fig 6 (Example of Adjustable Cable Guard Bar)

Note: Hoyt USA recommends that the position of adjustable cable guard bars be set at the two o'clock position. (See fig 7)

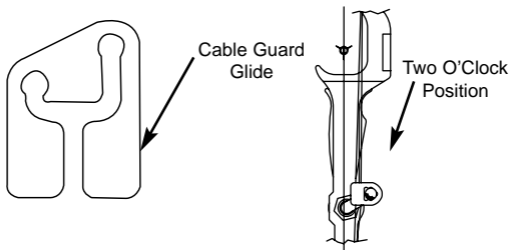


fig 7

Warning! On some shorter axle to axle models adjustable cable guard bars can be off-set too much causing the cable to track off the cam. This can cause damage to the bow or personal injury. To prevent this from happening NEVER SET THE BAR AT THE THREE O' CLOCK POSITION.

CABLE GUARD INSTALLATION (TWO CAM MODELS)

Hoyt USA uses a specially designed cable glide that has off-set cable slots. To correctly install the glide on two cam model bows make sure that when the cables are inserted into the glide the shorter slot is closer to the grip and the longer slot is closer to the end of the cable guard bar. (See fig 8)

Note: On bows with high mount bars installation may be opposite of above.

CABLE GLIDE INSTALLATION (SINGLE CAM MODELS)

On single cam models install the glide opposite from the two cam method so that the longer slot is closer to the grip and the shorter slot is closer to the end of the cable guard bar. (See fig 8)

This will ensure that contact is minimized between cables at the point where they cross.

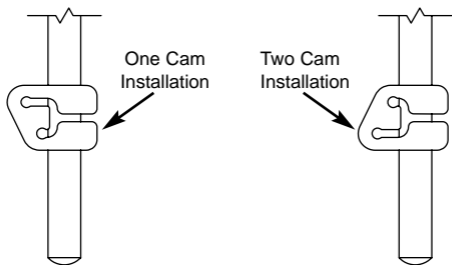


fig 8 (One Cam and Two Cam Glide Installation)

The glide is then inserted over the cable guard bar so that the cables are on the inside of the bar.

Note: If you have trouble pulling the cables back far enough to get the glide over the end of the cable guard bar you will need to use a bow press. Hoyt USA recommends that this be done by a qualified Pro Shop as a bow press may be required.

TILLER ADJUSTMENT

Tiller is the difference in actual distance between the upper limb to the string and lower limb to the string measured from the base of the limbs (where the limb and riser meet) at a 90 degree angle. (See fig 9)

Single cam models must be measured from a reference line from axle to axle. (See fig 10)

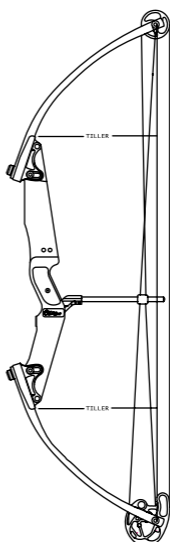
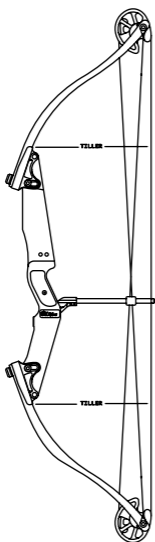


fig 9 (Two Cam Tiller)

fig 10 (One Cam Tiller)

The main function of tiller is to allow the archer to more easily and comfortably aim during the draw and release of the shot. Most bows will shoot best with an even tiller which means the distance from the string to the limb is the same on top and bottom. Tiller adjustments are made by adjusting either limb weight adjustment bolt (see next page). Example: Too much tiller on the bottom limb, decrease the weight on the top limb or increase the weight on the

bottom. Hoyt USA recommends that you initially set tiller equal top and bottom.

CENTERSHOT

Centershot is the alignment of the arrow in the power path of the string. This is accomplished by moving the arrow rest left or right.

Release shooters should line the arrow up with the power path of the string. (See fig 11) Finger shooters should position the arrow so that the tip is just to the outside of the power path of the string. (See fig 11)

Centershot is critical in how accurate a bow will perform. These are initial centershot settings, for proper alignment Hoyt USA recommends this be done by a qualified Pro Shop.

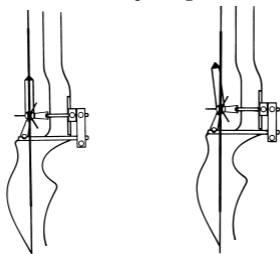


fig 11 Release Setting

Fingers Setting

FLETCH CLEARANCE

Fletch clearance is the ability of your vanes or fletches to pass cleanly by or through your

arrow rest without impacting the rest so severely that the arrows flight path is disrupted. It is necessary that you have adequate vane clearance to achieve proper arrow flight. (See fig 12)

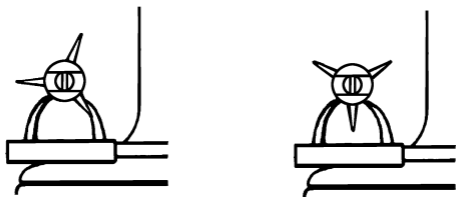


fig 12 Incorrect

Correct

DRAW WEIGHT ADJUSTMENT

Weight adjustments can easily be made by turning the weight adjustment bolt clockwise to increase weight or counter clockwise to decrease weight. Note: Always turn the top and bottom adjustment bolts in equal amounts. Some Hoyt USA model bows are equipped with a Dual Locking Pocket system. Before draw weight adjustments are made on these models you must first loosen the Locking Pocket screws located on the side of the pocket. (See fig 13)

When adjustments are completed retighten the Locking Pocket screws.

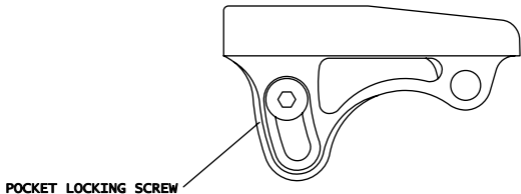


fig 13

DRAW LENGTH ADJUSTMENT

All Hoyt USA compound bows are adjustable in draw length. There are three different types of draw length adjustment

- 1. Slot Adjustments-** String is moved from one slot in the cam to another to change draw length.
- 2. Peg Adjustments-** String is moved from one peg to another to change draw length.

Hoyt USA recommends that slot and peg draw length changes be made by a qualified Pro Shop as a bow press is necessary.

3. InnerCam Adjustments- InnerCam module is moved to a different position on the cam to change draw length.

Bows equipped with InnerCams can generally be adjusted without the use of a bow press. To

adjust draw length use a standard allen key to loosen the Fastening screw. (See fig 14) Then using the same allen key remove the Draw Length screw. (See fig 14) Rotating the module in the (+) direction will lengthen the draw. Rotating the module in the (-) will shorten the draw.

Once the module is in the desired location retighten the Draw Length screw first and then the Fastening screw.

Note: You must make the same adjustments to the top and bottom InnerCam modules or the bow cannot be properly tuned.

Finer adjustments can be made by twisting the string and cables. Special care must be taken when twisting string and cables as they can be twisted in the wrong direction. Hoyt USA recommends that these adjustments be made by a qualified Pro Shop.

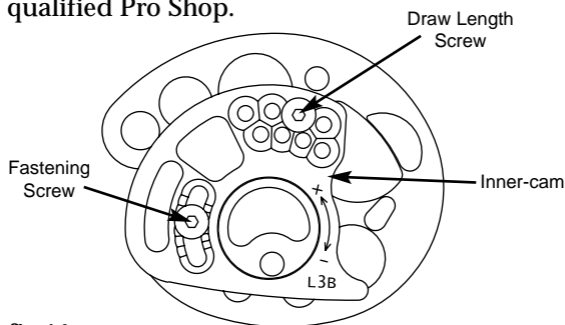


fig 14

Note: A compound bow is a complete interdependent system. Changing draw length may effect the bow's draw weight. Your bow may loose peak weight that may not be completely recoverable.

TUNING

To tune your bow have on hand three fletched arrows and three bare shafts, all identical and straight. From about 15 to 20 yards shoot your fletched arrows, making any necessary sight adjustments to hit the target at the same spot each time. Once you have sighted in, shoot the three bare shafts and note where the group of bare shafts are compared to the fletched arrows.

If the bare shafts are grouping below the fletched arrows lower the nocking point. (See fig 17) If the bare shafts are grouping above, move the nock point up. (See fig 18) Be sure to only move in small increments (never more than 1/16" at a time). Each time the nocking point is moved it will affect your sight setting, so you will have to re set your sights after each move. Continue to make adjustments until both groups are relatively close together.

If the bare shafts hit to the right of the fletched arrows decrease bow weight, check for vane

clearance or check arrow spine stiffness (weak). (See fig 15) If the bare shafts group to the left, increase bow weight, check for vane clearance or check arrow spine stiffness (stiff). (See fig 16) Some adjustments can be made by slightly moving the arrow rest to the left or right. Note: Left handed shooters need to reverse these instructions for left and right results. Hoyt USA recommends that you work closely with your local Pro Shop when tuning your bow to ensure best results.

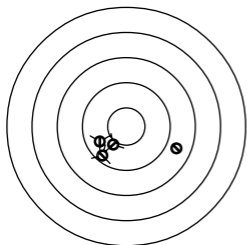


fig 15

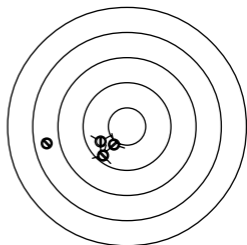


fig 16

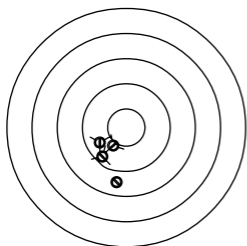


fig 17

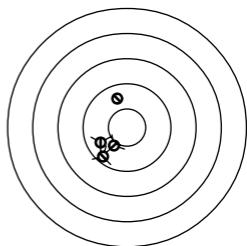


fig 18

TUNING WITH BROADHEADS

Most archers discover that they must make slight tuning adjustments when switching from practice points to broadheads. (Even at the same weight) Broadheads create a dramatic aerodynamic change in arrow flight. For this reason slight adjustments may need to be made in nocking point height, rest position or bow weight to achieve perfect broadhead flight.

HOYT USA COMPOUND BOW WARRANTY

Hoyt USA compound bows are warranted to the original retail purchaser against defects in materials and workmanship for a period of three full years from date of purchase. A copy of your retail sales receipt, establishing date of purchase, is required for all warranty service.

Hoyt USA Three Year Limited Compound Bow Warranty includes the following limitations:

1. In accordance with archery industry standards, the use of arrows which weigh less than 6 grains per pound of bow weight will void the warranty.
2. Compound bows set and shot over 95 pounds will void warranty.
3. Compound bow warranty does not cover strings, cables, grips, finishes, or cosmetic appearance (scratches, chips, dents) caused by

normal use and wear.

4. Evidence of abuse, mishandling or alterations will void the warranty.

5. Bows damaged by improper use of a bow press.

6. Mail Order Voids Warranty- The most important part of any new bow selection is the careful and correct matching of the new bow to the archer. We believe that this is so important that it can only be accomplished with the assistance of a qualified archery professional such as can be found at any Hoyt USA authorized Pro Shop. For this reason Hoyt USA does NOT PROVIDE WARRANTY SERVICE ON ANY COMPOUND BOW PURCHASED BY MAIL ORDER. See your local Hoyt USA Pro Shop for more information.

There are no other warranties, expressed or implied, that extend beyond those written here. No agent, employee or representative of Hoyt USA or its dealers has the authority to bind Hoyt USA to any agreement not herein stated. Buyer agrees that the sole and exclusive remedies for breach on any warranty concerning Hoyt USA bows shall be repair or replacement of defective parts. Hoyt USA shall not be liable for injury or property other than the bows themselves. Hoyt USA reserves the right to

replace defective parts according to availability with compatible replacement parts.

WARRANTY SERVICE

To obtain warranty service, you should return to the Pro Shop where you purchased your Hoyt USA bow. The dealer can help to determine if Hoyt USA factory service is required or if the repair can be completed by the Pro Shop. If the bow must be returned to the factory, the bow owner is responsible for the return freight to Hoyt USA. Hoyt USA, in turn, will pay for the return freight of the repaired product.

Hoyt USA bows requiring factory service should be sent to: **Hoyt USA, 543 N. Neil Armstrong Rd., Salt Lake City, Utah 84116.**

Before any bow is returned a Return Authorization number must be obtained through an authorized Hoyt USA Pro Shop. Bows returned to the factory without a Return Authorization number will be sent back.

Make sure all items have been followed before your bow is returned to the factory.

1. Must include return authorization number.
2. Must include a copy of the sales receipt.
3. Must be sent freight prepaid.

4. Must include a short note explaining the problem.
5. Do not include accessories unless otherwise instructed when the return authorization number is obtained.

PERSONAL NOTES
