Congratulations! You have just purchased the world's finest recurve bow. Hoyt's recurve bows have been designed for the serious recurve archer. Hoyt bows have brought home more Olympic and World medals than any other bow in the world.

Since 1931 Hoyt has led the way in recurve bow technology - We are proud to continue the tradition. With nearly three-quarters of the top archers around the globe shooting Hoyt recurves, no bow is more thoroughly tested and competition proven than a Hoyt. Now more than ever, you can shoot your shot and let your Hoyt do the rest.

The following information provides helpful instruction on the various parts and components of your new bow as well as a helpful guide to getting your bow set-up and ready to shoot.

543 N. Neil Armstrong Road
Salt Lake City, UT 84116
(801) 363-2990 phone
(801) 537-1470 Fax
www.hoyt.com

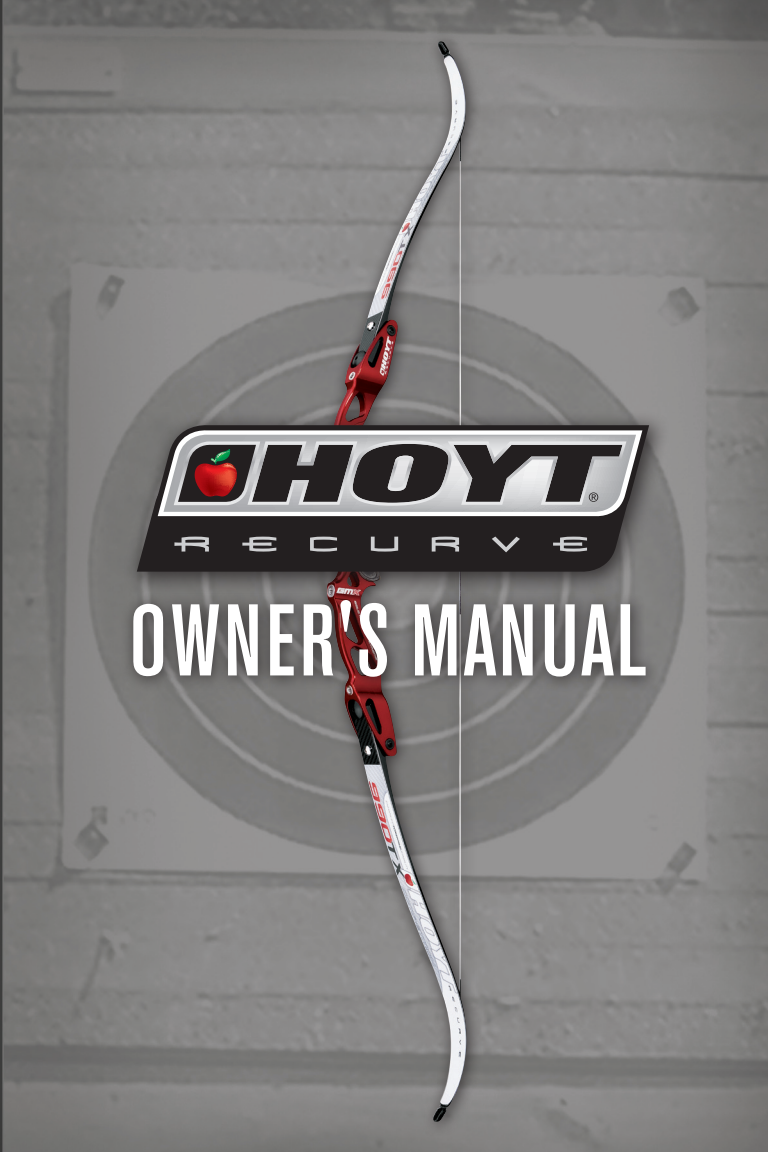

HOYT
RECURVE
OWNER'S MANUAL

TABLE OF CONTENTS

HOYT
RECURVE

IMPORTANT INFORMATION

1. **NEVER DRY FIRE YOUR BOW.** Dry fire means to draw and release your bow without an arrow. Shooting without an arrow, which absorbs most of the bow's stored energy, could cause severe damage to the bow and possible injury.
2. **NEVER EXPOSE YOUR BOW TO EXTREME HEAT OR PROLONGED MOISTURE.** Excessive heat, such as that 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 and will void your warranty.
3. **CAREFULLY INSPECT YOUR BOW BEFORE AND DURING EACH SHOOTING SESSION.** Carefully note condition of bowstring, limbs and riser before you shoot. Frayed bowstrings should be replaced. Damaged or suspect limbs should be reported to the dealer where you purchased your bow.
4. **INSPECT ALL ARROWS FOR DEFECTS BEFORE SHOOTING.** Replace cracked nocks and loose fletchings and discard fractured or dented arrows.
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. **ALWAYS BE SAFE.** Never shoot straight up.Wear safety glasses when working on or shooting your bow. Only shoot in a safe direction. Always use a bow stringer to string a recurve bow. Do not use the step-through method to string this or any recurve bow. Never point or aim a drawn bow at another person.

Warning: This bow is a deadly weapon.
Always abide by all safety advisements.
Children must be supervised by an adult.

BOW OWNER'S PERSONAL RECORD

Fill in the following personal bow record for your reference.

Riser Serial Number _____
(Located in top pocket of behind grip)

Limb Serial Number _____
(Located on limb label)

Hoyt Riser Model _____

Purchased From _____

Purchase Date _____

Length _____ Weight _____

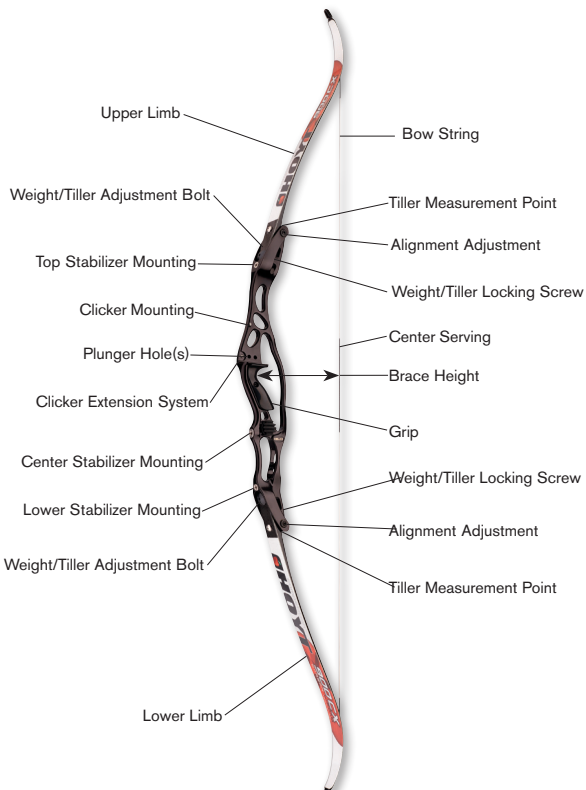
Important Notes:
Save your sales receipt and serial number for your bow. The sales receipt, as well as your serial number, is your proof of date-of-purchase. **Proof of date-of-purchase will be required should your bow ever need warranty service.** The following space has been reserved for you to staple or tape your sales receipt for safe and convenient keeping.

IMPORTANT!

Staple or tape your sales receipt
here for safekeeping.

RECURVE BOW TERMINOLOGY

Understanding recurve bow terminology and measuring techniques is very important in setting up your new bow. Please familiarize yourself with the following terms and measurements. Refer to them as needed. (Bow shown from sight window side of bow.)



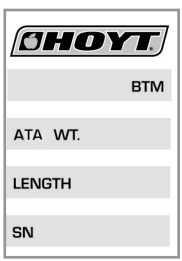
BOW LENGTH

Bow length is the distance from the tip of the top limb to the tip of the bottom limb of an unstrung bow with the tape following the limbs. Depending on which riser length and limb length you choose, you can tailor your bow to your specific needs. Refer to the following chart to determine your bow length.

Riser Length	Long Limbs	Medium Limbs	Short Limbs
21" Riser	66"	64"	62"
23" Riser	68"	66"	64"
25" Riser	70"	68"	66"
27" Riser	*72"*	*70"*	*68"*

Note: 23" riser will result in an approximate 2 lb. increase over the marked limb weight.

DRAW WEIGHT



To determine the weight on your Hoyt bow, refer to the limb specifications located on each limb.

The weight marked on the limb is measured at a 28" standard A.T.A. (Archery Trade Association) draw length. A.T.A. draw length is measured at 26 1/4" to the throat of the bow grip plus 1 3/4". This produces an industry standard by which draw weights are measured.

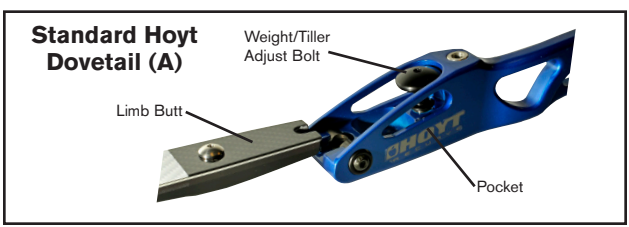
Note: Your draw weight will change due to draw length. Add or subtract approximately two pounds for each inch your draw length is over or under the 28" standard.

BOW ASSEMBLY

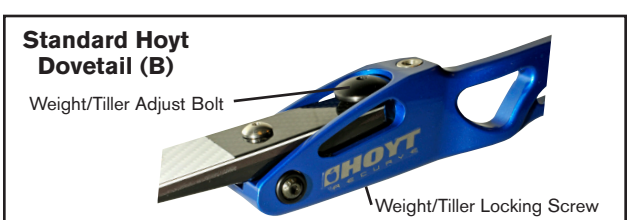
INSTALLING LIMBS

All Hoyt competition recurve bows use the patented Hoyt dovetail mounting system. This reliable and proven system is quite simple:

1. Carefully align the limb dovetail bushing with the corresponding slot in the riser pocket. Push the limb into the locket until the detent button engages. You will feel or hear a light "click" when this occurs, and the limb will stay in place under its own weight when fully seated. It is normal at this stage for there to be considerable movement possible with the limb



2. String the bow using a bow stringer.



3. Without an arrow pull the bowstring about two inches and let go to "seat" the limbs. This completes the assembly procedure.

ADJUSTING WEIGHT

Hoyt Recurve bows are adjustable over a range of approximately 10%. Factors which affect this include limb length, limb construction, and limb design and brace height.

1. Unstring the bow.
2. Using one of the two supplied Allen wrenches; loosen the tiller bolt locking screw (see Standard Hoyt Dovetail (B) image on pg. 5). If you plan to increase weight you will need to loosen this screw by more turns than you plan to add to the tiller screw.
3. Turn the weight/tiller adjustment bolt clockwise to increase bow weight. Turn it counter-clockwise to decrease bow weight.
4. Using both Allen wrenches, and holding the tiller bolt in place, re-lock the tiller bolt locking screw.
5. Restring the bow.

Note: From the bottomed out position, the tiller bolt should only be backed out to a maximum of six complete turns.

TILLER ADJUSTMENT

Tiller is a measurement which indicates the weight relationship of the top and bottom limb. This static measurement effects bow reaction and aiming. It is easily measured by noting the difference between the top limb butt to the string, and the bottom limb butt and the string. The difference (if any) is the tiller.

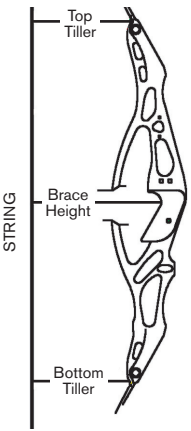
The degree of desirable tiller will vary from archer to archer, depending upon factors such as grip pressure, finger pressure, desired tuning pattern, desired aiming arc, desired bow reaction and more. As a starting point, it is usually easiest to tune a bow with 0 to 3/8" of tiller (distance from bottom limb to string is equal to that of the top limb, or less, by up to 3/8").

Typically, for most shooters with normal finger and hand pres-

sure, anywhere from 0 to 3/8" of tiller is going to yield a bow which aims easily without "pulling" high or low, and which shoots more quietly.

SETTING TILLER

Measure the tiller as shown in the diagram to the right. If you wish to increase tiller without affecting bow weight, unstring the bow and add turns to the bottom limb tiller bolt, then subtract the exact same number of turns from the top limb tiller bolt. After re-lock the bolts and set screws, restring the bow.



Do the opposite to decrease tiller. You can increase both tiller and bow weight by adjusting the bottom limb only.

HOYT'S ALIGNMENT ADJUSTMENTS

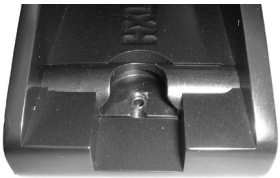
Hoyt's limb pocket design is the most precise, reliable pocket system available today. This system will maintain correct settings in the most severe conditions. Out of the package, Hoyt bows are factory pre-aligned and adjustment is optional when used with Hoyt limbs. In general, the vast majority of setups do not require alignment adjustments.

To make an adjustment, follow these directions:

1. Refer to the diagram on page 8 and note the condition.
2. Using a bow stringer, unstring the bow and dismount the limbs.
3. Before adjusting the Hardlock dowels on Hoyt bows, note the relationship of the dowel and slot to the riser. This is the factory zero point and by using it during reassembly, you will

find it quick and easy to re-set the dowel to the factory radial settings. (You may use a paint pen or pencil to mark dowel settings).

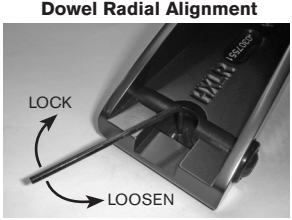
Dowel Radial Alignment



4. In order to make a riser alignment adjustment, you will need to use the two included Allen wrenches. Engage the hex head broaches on both ends of the dowel (one of which is a locking screw) and twist the lock screw counter-clockwise to loosen the system. Note that under the washer that engages this screw, there will be several brass alignment washers. A factory-shipped riser will have four (two per side) but if the riser has been adjusted the number may vary.

5. Hoyt hardware dowels have a radial locking feature which prevents dowel rotation, even under severe dry-fire conditions. The next step in adjusting the Hoyt Hardlock system is to loosen the radial locking screw by two complete turns (as shown in figure to right).

Locking/Unlocking Dowel Radial Alignment



Once the radial screw is loose, the entire dowel assembly will easily slide out of the riser. Be certain to always install the dowel from the sight window side, as the dowel is asymmetrical and designed to mate with the recessed area on the sight window side of the riser.

6. Refer to the condition chart on page 12. If your limb is showing Condition A, add washers to the sight window side of the alignment dowel. If your limb shows condition B, remove washers from the sight window side and shuffle them to the opposite side during re-assembly. Note that only washers on the sight window side control the alignment, so

you can store unused washers on the non-sight window side without affecting any settings.
7. Reassembly is accomplished by inserting the dowel into the sight window side of the riser, and aligning the dowel radially as shown in the figures on page 8. Then, snugly lock the radial set screw to pin the dowel in place. Re-install any leftover washers and the alignment cap, then using the two supplied Allen wrenches; complete the reassembly by re-installing the dowel cap washer and lock screw. Tighten snugly.
8. Re-check all locking screws for tightness and reassemble the bow.

ADJUSTING BRACE HEIGHT ("FISTMELE")

Brace height, or "fistmele," is the perpendicular distance from the bowstring to the pivot point of the handle. This height is an important aspect of tuning. The following chart gives you the recommended brace height range for your Hoyt recurve bow. (See chart on page 10)

BRACE HEIGHT RANGE CHART (STANDARD LIMBS)

Riser Length	Long Limbs	Medium Limbs	Short Limbs
21" Riser	8½–9"	8–8 3/4	8–8 ½
	21-22.8 cm	20.3-22.2 cm	20.3-21.5 cm
23" Riser	8½–9 ¼"	8¼–9"	8–8 3/4"
	21.5–23.5 cm	21–22.8 cm	20.5–22 cm
25" Riser	8 ¾ - 9 ½"	8 ½ - 9 ¼"	8 ¼–9"
	22–24 cm	21.5–23.5 cm	21–22.8 cm
27" Riser	8 ¾ - 9 ½"	8 ½ - 9 ¼"	8 ¼–9"
	22–24 cm	21.5–23.5 cm	21–22.8 cm

Adjustments can be made to the string to adjust brace height. Adding twists will increase the brace height while removing twist will decrease the brace height. Generally, Hoyt does not recommend less than 10 twists in a string. Optimum brace height is one that gives a smooth bow action, good arrow flight, tight grouping and often yields the quietest shot.

CHOOSING THE CORRECT STRING LENGTH

Depending on the length of your riser/limb combination, you can use the following string lengths as a guideline. String length is approximately three inches shorter than the bow length. When ordering strings from Hoyt, use the bow length as a reference.

STRING LENGTH RECOMMENDATIONS

Riser Length	Long Limbs	Medium Limbs	Short Limbs
21" Riser	66" bow 63" string 160cmstring	64" bow 61" string 155 cm string	62" bow 59" string 150 cm string
23" Riser	68" bow 65" string 165cmstring	66" bow 63" string 160 cm string	64" bow 61" string 155 cm string
25" Riser	70" bow 67" string 170 cm string	68" bow 65" string 165 cm string	66" bow 63" string 160 cmstring
27" Riser	72" bow 69"string 175 cm string	70" bow 67" string 170 cm string	68" bow 65" string 165 cm string

HOYT DOVETAIL SYSTEM INSTRUCTIONS

Your Hoyt recurve riser is equipped with an improved version of the Hardlock dovetail system. The redesigned dowel allows you to make weight and/or tiller changes over a larger range without the need for a radial adjustment of the dowel. In addition, the stronger dowel material allows use of a 3/16 Allen wrench (supplied), which makes locking the system faster and easier.

The only additional consideration is that the ideal radial position of the dowel is pre-set at the factory. We recommend using a pencil or other marking tool to mark the dowel before moving it to ensure a return to the optimal position.

A dowel that is not in the optimal radial position does not affect accuracy, however, rolling the dowel too far may make it difficult to remove limbs after shooting. A dowel which is not rolled far enough may fail to allow the detent on the limb dovetail to positively click into the dowel, complicating the stringing process.

Remember that dowels are asymmetrical, and need to be installed from the sight window side of the bow only.

If the pocket needs some adjusting, first string the bow (riser and limbs only). Check the limb alignment of both the top and bottom limbs by viewing down the bowstring from end to end on the face of the bow. While looking down the string line, check the location of the tip you are holding to the face of the limb in your hand. The limb tip should be reasonably close to the center of the limb.

ADJUSTING LIMB ALIGNMENT

The Hardlock limb pocket alignment system maintains its settings in all conditions**.** You can adjust your limb alignment to make it perfectly compatible to the riser simply by removing or adding the supplied washers to the alignment dowel.

To adjust your pocket follow these directions:

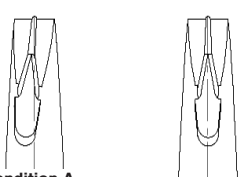
1. Refer to the diagram below and note the condition.

2. Unstring your bow and remove the limbs.

3. Unscrew the alignment locking screw and remove the alignment cap and washers. Pull the alignment dowel and washers out from the sight window side of the pocket. (Do not lose any parts!)

4. *(Refer to the limb visual)* If your limb is showing Condition A: Simply add washers to the sight window side (maxium of 4) of the alignment dowel. If your limb is showing Condition B: remove washers from the sight window side of the dowel. Limit your adjustments to one washer at a time. You can store any unused washers between the riser and alignment cap because the washers on the alignment cap (non-sight window) side of the pocket do not affect the alignment.

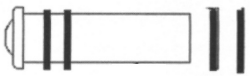
5. To reassemble the pocket, first insert the alignment dowel



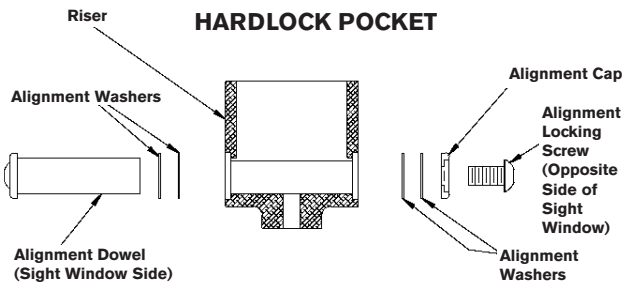
Condition A
Need to adjust limb tip to the right.

Condition B
Need to adjust limb tip to the left.

and washers in the riser (be sure to always put the alignment dowel in on the sight window side of the riser). Place the washers, alignment cap and alignment locking screw in the dowel. Be sure washers are not caught on the threads of the alignment screw, they must be flat against dowel shoulder prior to tightening. Securely tighten the dowel locking screw with the supplied Allen wrench.



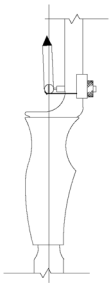
Adding washers to the dowel moves your limb tip to the right, as removing them moves the tip to the left.



APPLYING A NOCKING POINT

A nocking point marks the exact position of the arrow on the bowstring for each shot. To apply your nocking point, slip an adjustable nock set on the center serving, and slide it into position. Initially, set the nocking point at approximately 3/8" above the level point of the rest. Close the nock set with nocking pliers so it is firm, but do not over tighten the nock set as it could break your serving.

SETTING YOUR CENTER SHOT



The final step of tuning is to position your center shot. To start, position the arrow slightly outside of the center of the bowstring. To do that, begin by nocking an arrow and placing it on the arrow rest. Do not draw the bow, but position yourself behind the string side of the bow, looking down the arrow. Align the string down the center of the limbs and riser and check to see the position of the arrow tip relative to this line. Adjust the plunger or arrow rest until the inside edge of the arrow shaft aligns with this line.

FINE TUNING

For advanced methods, see your local dealer. An additional source of detailed information is the Easton Arrow Tuning and Maintenance Guide, available for a nominal fee from Easton Technical Products, 5040 W. Harold Gatty Drive, Salt Lake City, UT 84116, (801) 539-1400 or online at www.eastonarchery.com.

LIMB MAINTENANCE

Hoyt limbs are very low maintenance. However, a few simple actions can help keep them looking new and prevent minor problems. The most common limb issue is loose hardware. Over time, the stainless-steel button head screw holding the limb detent system in the limb can loosen. Use an Allen wrench to periodically re-tighten this screw. Do not over-tighten. The screw is designed to be removable to allow cleaning in the event of water immersion. However, the components are corrosion resistant and normal rainfall is not a problem. Lubricant is not required on any limb component when the limbs are used in Hoyt risers.

Hoyt foam limbs (such as 900 CX and G3) are water-resistant. Occasionally you may apply a light coat of quality car wax to the painted surfaces to keep them looking fresh, but this is not required. Wood core limbs are potentially susceptible to moisture infiltration if the protective finish is damaged (by a deep scratch, for example). The use of clear nail polish or clear automotive touch-up paint will help re-seal the wood and prevent moisture problems. After use in wet conditions, towel dry your limbs and riser to prevent water damage (do not use a heat source).

WARRANTY

Hoyt recurve handles are warranted against defects in materials and workmanship **to the original owner** for the life of the product. Hoyt recurve limbs are warranted for one (1) year. A dated proof of purchase is required for warranty coverage. Products must be purchased through a Hoyt authorized dealer for warranty coverage. Hoyt, at its discretion, voids all warranty claims either expressed or implied including but not limited to evidence of abuse, modification to original design or use of attachments or accessories that cause excessive stress.

WARRANTY SERVICE

To obtain warranty service, you should refer to the Hoyt Dealer where you purchased your Hoyt bow. The dealer can help you determine if Hoyt factory service is required or if the repair can be completed by the dealer. If the bow must be returned to the factory, the bow owner is responsible for the return postage to Hoyt. Hoyt, in turn, will match the postage for reshipping the repaired bow.

Before any bow is returned to the Hoyt factory for warranty service, 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. (warranty info continued on page 16)

Write the RA number on the outside of the shipping box and send the Hoyt bow requiring factory service to:

Hoyt
543 N. Neil Armstrong Road
Salt Lake City, UT 84116-2887

Any bow returned must have the following:

- Must be sent postage paid.
- Must include a copy of the dated sales receipt.
- Must include a short note explaining the nature of the problem.
- Must include a Hoyt Return Authorization number.
- Should not include accessories unless otherwise instructed when the Return Authorization Number is obtained.

NOTES