Congratulations on your purchase of a Hoyt Traditional recurve bow! This versatile high performance bow has been engineered for a great combination of smooth performance, great feel, speed and shootability. With some proper use and basic maintenance, your new bow will provide you with years of good shooting and dependable service. 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.

593 North Wright Brothers Drive Salt Lake City, UT 84116 Phone: (801) 363-2990 Fax: (801) 537-1470 www.hoyt.com



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# WARNING! YOU'RE RESPONSIBLE FOR ARCHERY SAFETY

Please read the following safety information. Disregarding these warnings may cause serious injury to you and/or others.

1. CAREFULLY INSPECT YOUR BOW BEFORE EACH USE. Carefully note the condition of the shooting string, limbs and riser before you shoot. Frayed bowstrings should be replaced. Damaged risers, limbs, etc. should be reported to your local dealer for inspection or replacement. USING A BOW WITH DAMAGED COMPONENTS MAY RESULT IN SERIOUS INJURY AND FURTHER BOW DAMAGE.

2. NEVER "DRY FIRE" YOUR BOW. Dry fire means to draw and release the bowstring without firing 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. Let down the bow slowly and carefully from any drawn position. Never try drawing a bow that does not fit your size or strength. Damage caused by a dry fire will not be covered under warranty.

**3. MINIMUM ARROW WEIGHT.** Do not shoot an arrow weighing less than five grains for every pound of peak draw weight. For example: If your bow's peak weight is 40 pounds, do not shoot an arrow weighing less than 200 grains. Shooting an arrow below five grains per pound can cause damage to your bow and possible injury to the shooter or others nearby. Damage caused by shooting an arrow that is too light will not be covered under warranty.

4. NEVER EXPOSE YOUR BOW TO EXTREME HEAT OR PROLONGED MOISTURE. Excessive heat, such as a sunny day inside a closed vehicle, could cause component failure. Prolonged storage in a hot, dry attic or damp basement can also be damaging. Store the bow properly when not in use. Damage caused by extreme exposure will not be covered under warranty.

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**5. 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 will not completely penetrate it. Make sure to position it in a safe direction away from people, animals, buildings and roads.

**6. BE SURE OF YOUR TARGET.** Make sure that there are no people, animals, buildings, roads or other objects behind or near your target. Be absolutely sure of your target in low light conditions.

7. INSPECT ALL ARROWS. Before shooting, inspect your arrows for damage. Discard cracked or dented shafts. Replace damaged or loose fletchings and nocks. Never shoot a damaged arrow. Shooting a damaged arrow can cause serious damage to your bow and or injure the shooter or others nearby.

8. ALWAYS BE SAFE. Never shoot straight up. Wear safety glasses when working on and shooting your bow. Be careful around the shooting string when using broadheads. Cutting the shooting string can cause serious damage to your bow and possible injury to you or others. Do not draw the bow beyond its maximum draw length. Never point or aim a drawn bow at another person. An adult must always supervise children.

9. READ AND HEED ALL WARNINGS. Hoyt cannot be held responsible for injuries suffered or caused by misuse, unsafe or improper arrow and bow combinations. Hoyt cannot be held responsible for injuries sustained when using an altered, modified, or damaged Hoyt bow. In addition, always read the warning labels of any other product being used in conjunction with a Hoyt bow (target, arrows, quiver...) and adhere by the safety guidelines.

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# OWNER'S PERSONAL RECORD

Fill in the following personal bow record for your reference:

Riser Serial Number	
	(Located on the riser under the grip)
Limb Serial	
Number	
	(Located on limb label)
Hoyt Riser Model	
Purchased From	
Purchase Date	
Length	Weight

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.

# IMPORTANT! A copy of your sales receipt is required for warranty purposes.

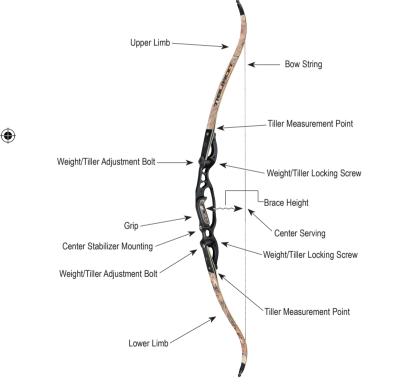
The sales receipt, as well as the serial number, is your proof of date-of-purchase. Proof of date-of-purchase will be required if your bow ever needs warranty service.

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# 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 AND STRING 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 and its appropriate measured string length.

Hoyt measures Flemish strings under 100 pounds of tension. Please refer to the chart below when selecting a new shooting string for your bow.

Model	Extra Short Limbs	Short Limbs	Medium Limbs
TIBURON	60" Bow 57.25" String	62" Bow 59.25" String	64" Bow 61.25" String
BUFFALO	58" Bow 55.25" String	60" Bow 57.25" String	62" Bow 59.25" String
DORADO	58" Bow 55.25" String	60" Bow 57.25" String	NA
GAMEMASTER II	60" Bow 57.25" String	62" Bow 59.25" String	NA

#### DRAW WEIGHT

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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"

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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:** Actual limb weight depends upon draw length, brace height, riser length and limb bolt setting.

**Note:** All limb weights are indicated for a 25" riser.

MODEL	
тор/воттом	
LBS.	
LENGTH	
SERIAL #	
MADE IN THE U	.s.a

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# **BOW ASSEMBLY**



### ASSEMBLY (Tiburon and Buffalo)

1. Before assembling your bow, verify which limbs are top and bottom. This is indicated on the limb identification label.

2. Carefully align the limb dovetail bushing with the corresponding slot in the riser pocket and align the forked limb butt with the weight/ tiller adjust bolt. Push the limb into the pocket 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 some vertical movement with the limb.

### ASSEMBLY (Dorado and Game Master II)

1. Before assembling your bow, verify which limbs are top and bottom. This is indicated on the limb identification label.

2. Back out the top and bottom limb bolts approximately one inch. Then place the forked limb butt on the limb bolt and lower the limb onto the locator pin. Using the included Allen wrench, tighten the limb bolt until

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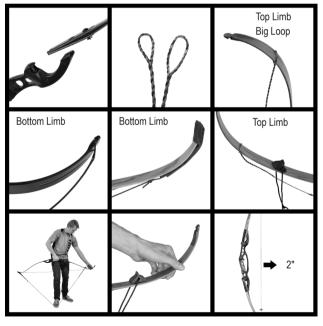
the limb bottoms out on the riser. Just snug is all that is needed – do not over tighten.

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3. Do not attempt to string or shoot the bow with the limb bolt backed off from snug. The bow is designed to be shot with the limb in full contact with the riser. The top and bottom limbs are preset at the factory for an appropriate degree of positive tiller.



Always use a bowstringer when stringing or unstringing a recurve bow. Serious injury could occur from improper installation.



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### STRINGING A RECURVE BOW

**1.** Verify that you are installing the correct size of string for the bow you are stringing. Carefully inspect the string for damage and for any knots that may have been accidentally tied from being stored.

2. Install the string by first placing the larger end loop on the top limb and slide the loop so it is approximately six inches from the limb tip. Place the smaller end loop on the bottom limb string groove. Then slide the upper end loop up the limb to take up any remaining slack in the string. The top section of the end loop should be approximately five inches from the limb tip.

**3.** With the bottom end loop securely in the bottom limb string groove, slide the fabric section of the provided recurve bow stringer over the string side of the bottom limb. Then slide the rubber component over the top limb, place it approximately six inches from the limb tip. Make sure the rubber component rests against the target side of the limb and that the cord that attaches the top and bottom pieces of the stringer is not tangled and is routed on the string side of the bow.

**4.** While standing up, with one hand hold the bow in the horizontal position with the shooting string parallel to the ground, as if the bow was pointed straight upward. The recurve bow stringer cord should be dangling at your feet.

**5.** Simply step on the cord with both feet. Simultaneously pull up on the bow with one hand so the cord is tightened, flexing the limbs as if it were being drawn. Slide the top end loop up the limb and secure it in the top limb string groove. Once the string is in place, relax the cord by letting the bow down and the shooting string will tighten, holding the bow in the strung position. Do not flex the limbs further than needed to install the string.

**6.** Carefully inspect the shooting string and verify that it is securely in the string grooves, and then remove the recurve bow stringer.

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7. Without an arrow, pull the bowstring about two inches and let go to "seat" the limbs. This completes the assembly procedure. Do not exceed two inches. Dry firing your bow could cause severe damage to the bow and possible injury.

**8.** Carefully inspect the string for excessive wear and damage. NEVER DRAW OR SHOOT A BOW WITH A DAMAGED BOW STRING.

# UNSTRINGING A RECURVE BOW

**1.** Place the bottom fabric section of the provided recurve bow stringer on the bottom limb tip, the cord must be routed on the shooting string side of the limb.

2. Place the top section of the recurve bow stringer over the top limb, the rubber component should rest on the target side of the limb, approximately six inches away from the limb tip.

**3.** While standing up, with one hand hold the bow in the horizontal position with the shooting string parallel to the ground, as if the bow was pointed straight upward. The recurve bow stringer cord should be dangling at your feet.

4. Simply step on the cord with both feet. Simultaneously pull up on the bow with one hand so the cord is tightened. Flexing the limbs as if it was being drawn, slide the top end loop down the limb. Once the shooting string is relaxed, let the bow down and the shooting string and limbs will relax, and the bow will be in the unstrung position. Do not pull the limbs further than needed to relax the string.

**5.** Carefully remove the shooting string by first sliding the top loop down the limb, with enough slack in the string, remove the bottom end loop, then slide the top end loop up the limb and remove the string.

6. To keep the shooting string from losing its twists and adjusted length, clip or weave the top and bottom end loops together so the string will

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not become untwisted. Carefully inspect the string for excessive wear and damage. **NEVER DRAW OR SHOOT A BOW WITH A DAMAGED BOW STRING.** 

# ADJUSTING WEIGHT (Tiburon and Buffalo only)

Tiburon and Buffalo are adjustable over a draw weight range of approximately 5%, +-2.5% from the preset factory position. The weight/tiller bolts are preset at three turns from the bottom position.

**1**. Unstring the bow using an appropriate recurve bow stringer method.

**2**. Using the longer of the two supplied Allen wrenches; loosen the tiller bolt locking screw. (see image on pg. 7) 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 using an appropriate recurve bow stringer method. Note: From the bottomed out position, the weight/tiller bolt should only be backed out to a maximum of six complete turns.



Backing the weight/tiller bolt further than six turns could result in damage to the bow, voiding warranty and or personal injury.

# ADJUSTING TILLER (Tiburon and Buffalo only)

Tiller is a measurement which indicates the weight relationship of the top and bottom limb. This static measurement effects bow reaction and 10

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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 pressure, 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.

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-locking 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.

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

### BRACE HEIGHT

Hoyt traditional recurves should be braced to a height that results in the lowest sound on release and least amount of arm slap. Brace height can measure between 7  $\frac{1}{2}$ " to 8  $\frac{1}{2}$ ". (see image on pg.11) Experiment with your bow by adding or subtracting twists from the shooting string to alter the brace height. Be mindful not to adjust the string too much at one time, as you may skip over the optimal brace height for your configuration.

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### ARROW REST AND CENTER SHOT

Tiburon and Buffalo feature a crowned full-radius shelf, optimal for traditional "off the shelf" shooting, with the use of the included rest pads. For Dorado and GameMaster II, since the design is cut for full clearance past center, you may also use any commonly available conventional recurve bow rest such as the Hoyt Hunter Rest or other suitable flipper or springy rest. Additional shelf pads and arrow rests are available from your Hoyt dealer.

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

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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.

#### MAINTENANCE

Hoyt traditional recurves feature robust components and simple designs and are very low-maintenance. A very light protective coat of oil on the limb bolts on an occasional basis is all that is needed. Never leave a strung bow in a vehicle or other place where temperatures may be elevated. Basically, don't store a strung bow in a place YOU wouldn't want to be. Do not leave a strung bow resting on the limb for an extended amount of time. Flexing the limbs out of alignment for an extended amount of time may cause the limb to lose its alignment.

Hoyt limbs are very low maintenance. However, a few simple actions can help keep them looking new and prevent minor problems. The 12

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most common limb issue is loose hardware (Tiburon and Buffalo Only). Over time, the stainless-steel button head screw holding the limb detent system in the limb can loosen. Use an Allen wrench to periodically retighten 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.

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).

# SHOOTING STRING MAINTENANCE

All Hoyt Traditional bow models come equipped with the Hoyt Custom Flemish string. Apply a light coat of bowstring wax to your bow's shooting string on a regular basis. Hoyt 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 shooting string in good condition. To ensure best results, replace your string when wear is evident or every two years under normal use conditions. Insist that a Hoyt Flemish shooting string be used on your bow. Beware of lesser quality strings as they may alter the performance of your bow or cause damage to it, possibly voiding the warranty. Never expose your string to extended periods of extreme heat or prolonged moisture.

A bow should not be drawn or shot without the string components properly installed and secured. (For example: kisser button, nock point, string silencers, etc.)

Improper installations of string components are a potential safety hazard. Hoyt does not recommend the use of brass or other metal clampon nocking point devices. Only a qualified archery pro shop should install string components.

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RECURVE BOW RISER AND RECURVE LIMB WARRANTY

PLEASE READ THIS DOCUMENT CAREFULLY. IT CONTAINS VERY IMPORTANT INFORMATION ABOUT YOUR RIGHTS AND OBLIGA-TIONS, AS WELL AS LIMITATIONS AND EXCLUSIONS THAT MAY APPLY TO YOU.

Hoyt warrants to the **ORIGINAL OWNER** that the **Hoyt Recurve Bow Riser**, will be free from defects in materials and workmanship for the lifetime of the product and **Hoyt Recurve Limbs**, will be free from defects in materials and workmanship for one year from date of purchase. Hoyt Recurve Bow Riser and Hoyt Recurve Limb warranty is regulated under the following terms and conditions:

1. The original owner must retain and provide an original and dated proof of purchase (sales receipt). THIS WARRANTY IS NOT TRANS-FERABLE.

 THE ORIGINAL OWNER MUST REGISTER THE RISER OR LIMBS WITH HOYT WITHIN 30 DAYS OF PURCHASE. To register your product, visit www.hoyt.com/customer\_service/ to complete the registration process electronically, or contact Hoyt at (801) 363-2990 to request a registration card.

3. All risers and limbs must have the original serial number factoryattached to the bow. The serial number must remain legible.

### EXCLUSIONS OF WARRANTY COVERAGE

This Limited Lifetime Warranty covers normal use of the product, and Hoyt does not warrant and is not responsible for:

1. The use of aftermarket products/accessories that alter Hoyt's specs or design.

2. Damage to strings, damping materials, arrow rests & pads, finish (including paint, anodize, powder coat and film-dipped finishes) resulting from normal wear-and-tear.

3. If bow shows sign of misuse, alteration, or mishandling, this warranty will be void.

**4.** Use of arrows weighing less than 5 grains per pound of draw weight will void the warranty.

5. Damage to 'other' accessories.

6. Aftermarket replacement strings.

7. Bows returned to Hoyt without a Return Authorization number obtained by a Hoyt Authorized Dealer.

### **OBTAINING WARRANTY SERVICE**

To obtain warranty service, you must return your bow to a Hovt Authorized Dealer. The dealer can help to determine if Hoyt factory service is required or if the dealer can complete the repair. Authorized Hoyt dealers may provide additional services and apply additional charges for service work performed by the dealer. If the bow must be returned to the factory, THE BOW OWNER IS RESPONSIBLE FOR THE FREIGHT CHARGES TO HOYT. Hoyt, in turn, will pay for the same return freight of the repaired product. Before any bow is returned to Hoyt, a Return Authorization (RA) number must be obtained through an Authorized Hovt Dealer. Please note that Hovt will not issue RA's to consumers. Bows returned to the factory without a Return Authorization number obtained from a Hoyt Authorized Dealer may be denied warranty service. If Hoyt determines, in its sole discretion, that a bow gualifies for warranty repair. Hoyt will make every effort to repair the bow. Repairs may be performed with original parts when available. Hoyt reserves the right to make part substitutions on warranty coverage for any reason. If original parts are not available, suitable replacement parts/components may be used. If the Hoyt bow is not repairable, but gualifies for warranty coverage. Hoyt will replace the bow with a bow of similar feature and product class in Hoyt's sole determination. THERE ARE NO OTHER WARRANTIES EXPRESSED OR IMPLIED

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THAT EXTEND BEYOND THOSE WRITTEN HERE. NO AGENT, EMPLOYEE OR REPRESENTATIVE OF HOYT OR ITS DEALERS HAVE THE AUTHORITY TO BIND HOYT TO ANY AGREEMENT NOT HEREIN STATED.

### LIMITATION OF LIABILITY

IN NO EVENT SHALL HOYT BE LIABLE UNDER ANY CIRCUM-STANCE TO YOU OR ANY OTHER PARTY FOR ANY SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PRODUCTS, EVEN IF THE COMPANY OR ANY OF THE COMPANY AFFILIATES HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN NO EVENT SHALL HOYT OR ANY HOYT AFFILIATE BE LIABLE TO YOU OR ANY OTHER PARTY FOR LOSS, DAMAGE, OR INJURY OF ANY KIND BEYOND THE BOW ITSELF.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state or country to country.

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.

# HOYT WARRANTY

593 North Wright Brothers Drive Salt Lake City, UT 84116 Phone: (801) 363-2990 Fax: (801) 537-1470

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