Introduction

Congratulations! You've purchased a TradTech Trident Bow equipped with ILF Limb technology for hunting, field or 3D Archery. Your TradTech Trident is designed and built for serious shooting with deadly accuracy. TradTech Bows use true ILF (International Limb Fitting) design for world class accuracy in a precision hunting weapon.

I insist that you carefully read pages 2, 3 & 4 and if you are inclined to put it together and "Just Shoot It", this bow will serve you well right out of the box, but to realize the true potential of your bow, I encourage you to take the time to read and try the techniques explained in this Shooter's Guide. I'm proud of this bow as one of our leading contributions to Traditional Archery, so we take your success seriously. Thank you so much for your confidence in us, we want you to enjoy a lifetime of shooting pleasure with your new bow!

Yours in Archery,

Robert Kaufhold / President of TradTech Archery and Lancaster Archery Supply

Table of Contents

IMPORTANT SAFETY INFORMATION

PLEASE READ BEFORE ASSEMBLING, STRINGING, or USING YOUR BOW

1. ALWAYS inspect your bow's riser and hardware components, limbs, bowstring and arrow rest before stringing your bow and prior to each end of shooting. On your bowstring, watch for frayed or broken strands, "wormed" or separated serving; Check the riser and limbs for cracks, splinters or loose hardware. If a shot "sounds" funny, stop shooting and thoroughly check your entire bow and the arrow that was just shot carefully before resuming.

2. DO NOT ADJUST YOUR BOW NOW, Shoot it and study this User's guide before you adjust it in any way…

NEVER adjust the TradTech bow's limb bolts out beyond the factory minimum weight setting. The Minimum weight is reached when the lowest edge of the limb bolt cap measures ¾" from the

surface of the riser. The maximum weight setting is reached when the lowest edge of the limb bolt cap measures 5/8" above the surface of the riser.

The limb bolts are under extreme pressure when your bow is strung or being shot. This requires a minimum of 6 threads to be fully engaged into the metal riser for maximum strength. Shooting your bow with the Limb Bolts out farther than the factory minimum setting increases the potential for threads to wear or eventually fail. The limb bolt could come out under tension resulting in serious injury to the archer. Your ILF limbs are designed to be shot within a specific range of limb pre-load angles, shooting the bow beyond the weight ranges described above may result in premature limb failure and be extremely detrimental to the shooting properties of your fine bow… Just don't do it!

3. ALWAYS Double-Check that the ILF Limbs are fully seated into the dovetail slot & under the limb bolt bezel.

3a. ALWAYS use a recurve bow stringer to string or brace and unstring your TradTech Bow every time.

3b. NEVER use or allow the use of the "Step-through" method to string/brace this or any other bow.

3c. ALWAYS keep children and others clear of the area when stringing or unstringing any bow.

3d. ALWAYS double check that both bowstring loops are properly seated in the limb's string notches.

4. NEVER DRY FIRE your bow without an arrow in it or shoot any arrow that weighs less than 5(five) grains per pound of draw weight. (40# bow = 200 grain arrow minimum) Dry firing your bow could cause a catastrophic failure of the bowstring, limbs or even riser component leading to serious injury due to the jolt of unabsorbed stored energy normally used to propel the arrow forward. Do not allow anyone inexperienced to shoot your bow.

5. NEVER expose your bow to extreme heat, humidity or moisture, especially salt water. Excessive heat as found inside a closed and un-shaded vehicle on a hot, sunny day can cause limb failures or twisting, especially when strung. Prolonged storage in a hot, dry attic or damp basement could cause corrosion, blistering and damage, voiding the warranty. After your bow gets wet, wipe it down upon return from the field and apply light, unscented oil to blackened steel parts like limb bolts, set screws, moving arrow rest parts, etc. Touch up any chips or scratches in your limbs with polyurethane clear coat finish to reseal them from moisture.

6. ALWAYS abide by all safe rules of shooting and conduct, any bow and arrow is a lethal weapon. Supervise children or inexperienced archers. Never shoot straight up or higher than needed to hit your intended target.

Only shoot in a safe direction, being sure of your target and what is behind or in the vicinity of it to avoid accidents. Inspect every arrow shaft, and its nock for cracks or defects before shooting each shot to avoid a shattered arrow upon release. Do not raise your index finger or knuckle on your bow hand above the arrow shelf to avoid being cut by the broadhead or point at the end of your arrow. Take care when pulling an arrow from any target. Never point or aim a drawn bow at another person or something you don't want to strike with an arrow.

TradTech Satisfaction Guarantee

We offer retail customers a 100% Satisfaction Guarantee: At any time within the first 15 days of new bow ownership and if the bow is maintained in like new condition with packaging, a TradTech Bow customer can trade limbs, return the riser/limbs or entire bow (minus a 10 Percent Return/Trade Fee on the Riser or Limb Cost) if he/she is not 100% pleased with the bow. The customer may apply the balance toward TradTech or Lancaster Archery Products of their choice or accept a refund or credit to their credit card. (minus the 10% Fee)

WARRANTY

The TradTech Bow riser and all TradTech limbs are warranted against defects in materials and workmanship for 1 year. A dated receipt, invoice or proof of purchase is needed for warranty coverage. Evidence of abuse or misuse, any non-factory modification or the use of attachments or accessories resulting in damage or undue stress will void all warranty claims, whether expressed or implied by this warranty. Prior to returning a bow, please e-mail info@lancasterarchery.com or call 800-829-7408 for a Return Authorization Number. The bow's owner is responsible for the shipping cost to TradTech for service. TradTech will diagnose and remedy the issue within the terms of this warranty and return the repaired/replaced bow at our cost.

Legal Disclaimer: The purchaser or user accepts by the act of purchasing this bow, that they have read this manual and acknowledges that shooting archery is an inherently dangerous activity assuming all risks and liability and holds TradTech and Samick harmless against all claims arising from the use of this equipment.

Proper Assembly and Stringing of your TradTech Bow

Installation of ILF Limbs:

Your TradTech Bow uses our genuine ILF (International Limb Fitting) System. It is quite convenient, secure and easy to use, resulting in the most accurate and quiet limb mounting system available today.

1. Align and enter the brass ILF dovetail bushings into the dovetail slot in the end of your bow riser's open limb pocket, then place the limb butt fork groove onto the limb bolt bushing underneath the stainless steel limb bolt flange.

2. Firmly push the limb into the ILF dovetail limb socket base until the spring loaded detent button engages and the ILF dovetail and limb is fully seated. You will feel or hear a light click and then the limb will stop when this occurs. Look for the limb butt plate edge to be within 1/16" of the end of the riser's limb pocket and the limb to not come back out easily.

3. It is entirely normal for the limb to still move up/down on the limb bolt bushing and slightly sideways at the ILF dovetail until the bow is braced and strung under tension.

Proper Stringing of Your TradTech Bow:

1. **ALWAYS** Double-Check that ILF Limbs are fully seated in the dovetail slot under the large limb bolt flange.

2. **ALWAYS** use a recurve bow stringer to string or unstring your TradTech Bow every time.
3. **NEVER** use or allow the use of the "Step-through" method to string/brace this or any other bow.
4. **ALWAYS** keep children and others clear of the area when stringing or unstringing any bow.
5. **ALWAYS** double check that both bowstring loops are properly seated in the limb's string notches.

Bow Length and Setting Draw Weight & Tiller

Bow Length:

Your choice of bow length is a personal one, guided primarily by your draw length in order to get your best shooting performance and smooth draw that doesn't stack increasing draw weight above 2-3# per inch.

Additionally, the limb bolt position modifies the ILF limb angle. The shorter your draw length, the more pre-load can be built into the limb angle by shooting your bow near the top of the weight adjustment range to increase performance. At longer draw lengths, shoot the bow toward the bottom half of the weight range will minimize any stacking and provide peak overall performance and shootablity.

Draw Weight:

If you've ordered your bow complete with our TradTech Limbs, then the base weight and bow length are marked on the bottom limb label. In general, purchase limbs on the lighter side as you can increase the draw weight from 2-4# over the base weight. For shorter archers with less than a 27.5" draw, shooting the bow in the top/heaviest ½ of the weight range will give you added performance by building pre-load into the limbs increasing stored energy for you. For draw lengths over 29", try to avoid the top half of the weight range, shooting your bow near the base weight for the smoothest, most comfortable and forgiving draw cycle. Add or subtract ~2# of draw weight for each inch of draw length that is over or under 28" as measured to the front of your bow. (26¼" to grip pivot or plunger hole + 1 ¾")

Arrow Weights Recommended:

For Bowhunting Deer Sized Game: 8 to 10 grains per pound of draw weight (actual at your draw)

For Bowhunting Elk and BIG Game: 10 to 12 grains per pound of draw weight

For Target, 3D and Recreational Shooting: 6 to 8 grains per pound of draw weight (depends on weight)

Limb Tiller and Draw Weight Adjustment:

Tiller: Your TradTech Bow or riser is normally shipped with the tiller set at + 1/8". For archers shooting split finger (1 over, 2 under) we recommend between 1/8" and ¼" tiller; for shooting 3 fingers under or "string walking" under the arrow, use an even 0 to 1/8" tiller for best results. Tiller refers to the difference in the pre-load in the upper and lower limbs and is measured from the limb belly (where it meets the riser) to the bowstring at a 90° angle. The upper limb should generally have a higher/greater tiller measurement for a positive tiller. (Ex: Top: 6½", Bottom 6 3/8") To reduce the tiller measurement, increase the weight on that limb by turning the limb bolt right or clockwise; to increase tiller, reduce the weight by turning the limb bolt left or counterclockwise.

To adjust tiller with no effect on draw weight, adjust each bolt the same amount in different directions as above.

Draw Weight:

Your TradTech Bow or riser comes with the draw weight set at the base minimum weight unless you've instructed us to customize it especially for you. Trident limb bolts are adjustable between a maximum and minimum draw weight position. The maximum weight setting is reached when the lowest edge of the limb bolt cap measures 5/8" above the surface of the riser. The Minimum weight is reached when the lowest edge of the limb bolt cap measures ¾" from the surface of the riser.

****NOTE: DO NOT ADJUST THE LIMB BOLTS BEYOND THIS MINIMUM SETTING TO PREVENT RISER/LIMB DAMAGE AND POSSIBLE INJURY!**

To increase your bow's draw weight; Use the 3mm Hex Wrench to loosen each In-Line Limb Bolt Locking Set Screw counter-clockwise by the number of turns you wish to increase the draw weight plus ½ turn. Then using the 6mm Hex Wrench, tighten each Limb Bolt up to three(3) turns from the factory minimum base weight and re-tighten the In-Line Limb Bolt Locking Set Screws.

LLAS- Lateral Limb Alignment System: Proper centering of the limb, riser and therefore the bowstring path greatly enhances accuracy and forgiveness, arrow spine flexibility, and tuning effectiveness. Your TradTech Riser has been factory aligned for use with all ILF Limbs.

Your TradTech Riser features an accurate, precise and dependable Lateral Limb Alignment System. This system is pre-set and precisely centered at the factory for optimum performance with TradTech and most quality ILF limbs. The LLAS will maintain its factory setting in the most severe conditions. If you ordered a TradTech Bow complete with TradTech limbs then we have assembled your bow and re-checked the alignment to insure that it is absolutely perfect with your limbs. Normally, most set-ups do not require additional lateral limb alignment adjustments, even when using another quality ILF limb from another manufacturer.

NOTICE there are TWO set screws in each lateral limb adjustment hole including one outer screw which locks both screws in place and an inner set screw used for making adjustments. The outer screws must be removed before adjustments are made.

Checking and Adjusting for Limb Center Alignment: Rest a limb tip on the floor with the bowstring up and the bow and limb tips facing down with the raised limb supported by your fingertip or a stationary rest such as a table edge. Position yourself to look directly down the bowstring line while glancing down to check the lateral location of the raised limb tip against the face of the limb directly behind it. The limb tip should be centered above the limb directly in line with the bowstring.

If your limb tip is leaning to the Right, **FIRST BY UNBRACE YOUR BOW**, then remove outer set screws to access the inner adjusting set screws, move the LLAS containing the ILF dovetail to the Left by loosening the left side LLAS set screw 1/8 to 1/4 turn counterclockwise, (making room for the LLAS to move toward that side), then tighten the right side set screw clockwise to drive the LLAS toward the left. Do not over-tighten these screws. ALWAYS draw the bow 2-3 times after making any LLAS adjustment to allow reseating of the limbs/bowstring BEFORE checking your adjustment for proper centering and lateral alignment.

If your limb tip is leaning to the Left, **FIRST UNBRACE YOUR BOW**, then remove outer set screws to access the inner adjusting set screws then move the LLAS containing the ILF dovetail

to the RIGHT by loosening the Right side LLAS set screw 1/8 to 1/4 turn counterclockwise, making room for the LLAS to move toward that side, then tighten the Left side set screw clockwise to drive the LLAS to the right side. Never make more than a ½ turn adjustment at a time to the LLAS. **Do not over-tighten these screws.** Insert the long end of the 3mm hex wrench into the first side's screw and tighten by turning the short end snug first, then tighten the other side's screw and re-tighten the original screw. ALWAYS draw the bow 2-3 times or unstring and re-string it after making any LLAS adjustment to allow reseating of the limbs/bowstring BEFORE checking your adjustment for proper centering and lateral alignment.

Brace Height: A bow's brace height is measured from the bowstring to the grip throat or pivot point of the riser. This string or brace height is critical to your bow's performance, tuning and quietness when shooting. Use this guide in setting the brace height on your bow to maintain optimum performance.

17" Trident Riser
Recurve Limbs Shrt. 58" Limbs 7" - 8"
Recurve Limbs Med. 60" Limbs 7 ¼"- 8 ¼"
Recurve Limbs Lng. 62" Limbs 7 ½"- 8 ½"

19" Trident Riser
Recurve Limbs Shrt. 60" Limbs 7 ¼"- 8 ¼"
Recurve Limbs Med 62" Limbs 7 ½"- 8 ½"
Recurve Limbs Lng. 64" Limbs 7 ¾"- 8 ¾"

21" Trident Riser
Recurve Limbs Shrt. 62" Limbs 7 ½"- 8 ½"
Recurve Limbs Med. 64" Limbs 7 ¾"- 8 ¾"
Recurve Limbs Lng. 66" Limbs 7 ¾"- 9"

You can generally make reasonable adjustments in your brace height by twisting/untwisting your string. Adding twists will increase your brace height, often quieting your bow, but resulting in your arrow reacting a bit weaker in dynamic spine and slightly lowering arrow velocity. Untwisting your bowstring will lower your brace height past our minimum recommended level may increase noise due to limb slap, increase forearm contact, stiffen the dynamic spine characteristics of your arrow while increasing arrow velocity. Do not untwist any string, especially a Flemish twist bow string to a point with less than 10 twists in it.

Your TradTech Bow riser is made of multiple hardwood laminations. The only maintenance that may be required is to wipe dry after a rain and use an automotive wax once a year. TradTech limbs also have black steel button head hex screws at the top of the limb butt that should regularly be protected with light unscented oil. Your riser and limb's clearcoat finish protects the riser and limbs from moisture and should be touched up with clear nail polish or clear wood or automotive paint if they get deeply scratched or gouged. When coming in from a wet hunt or shooting session, towel dry your limbs and riser to keep them factory fresh.