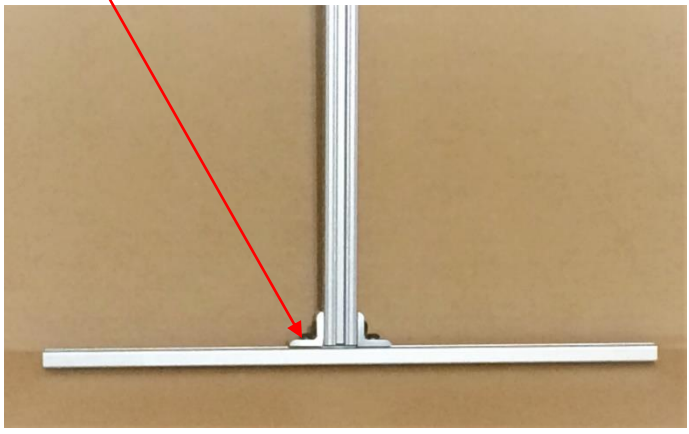
COOP'S LINEAR DRAW-BOARD

VERNON COOP

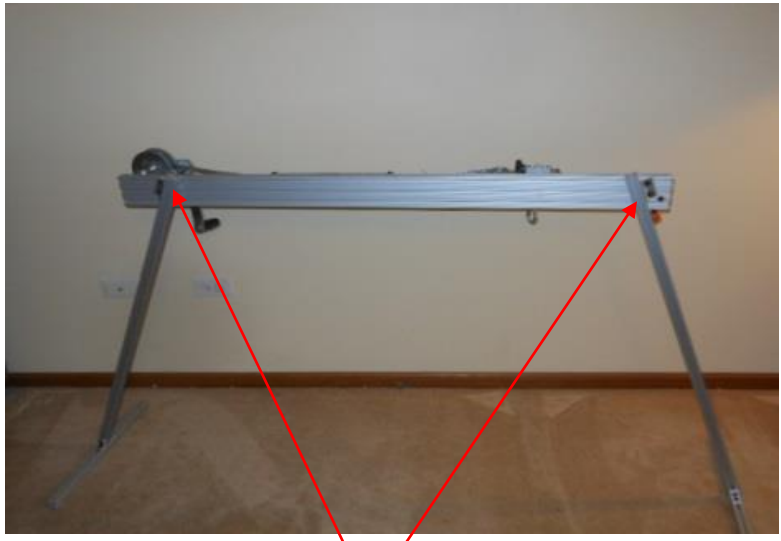
A draw-board is the most important tool every archer should own.
Our machine is unique in that it holds the bow vertically as it is drawn through its cycle. The same way a human does.
Our machine can be mounted to the wall as normally done in most clubs or on its supplied stand.
At the end of this book, we will show a few of the things that can be done using our Draw –Board Pro.

ASSEMBLY

The leg kit is in the white box. It contains 2-3 - inch brackets that mount on the back of the machine. 4 -1- inch brackets that mount the ½ feet to the legs.



slide the 2- 3 inch brackets on the back of the machine and tighten in place.



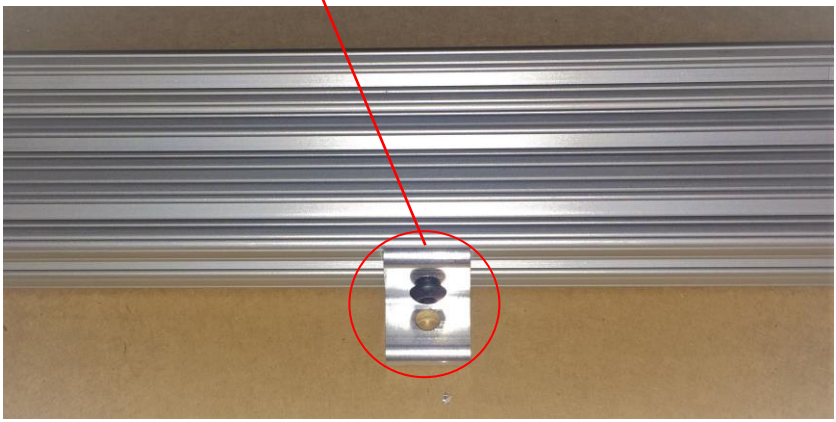
Slide the legs into the 3 inch brackes on the back of the draw –board as shown in the pics

Splay legs apart for added stability and tighten in place.

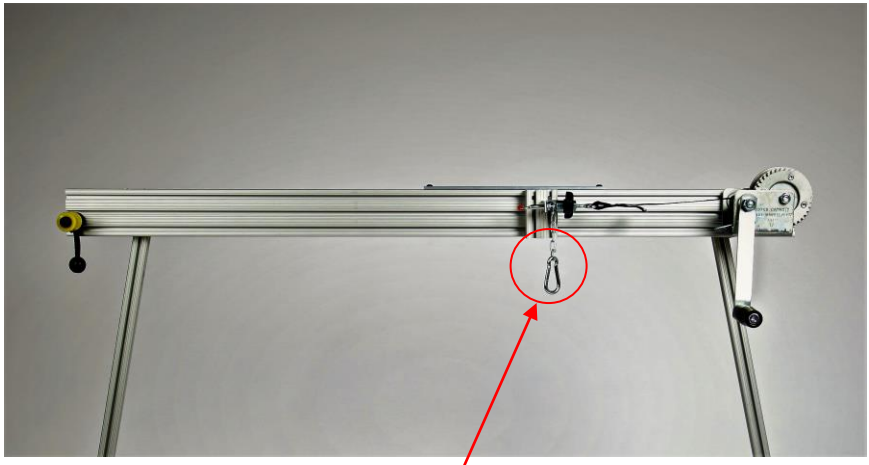
The draw- board can also be mounted to a wall.

Use the 4 – 1- inch brackets

Slide inside the top and bottom and align to your wall studs and screw in place with the appropriate drywall screws.

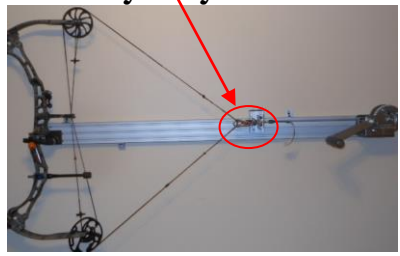


Using your Linear Draw - Board



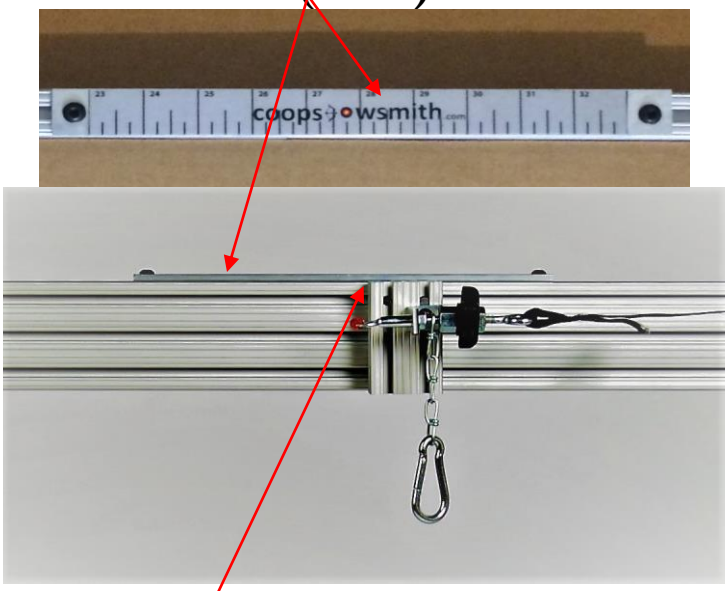
Place your bow against the rubber bumpers and loop the bungee strap around the handle.

While holding the bow with your left hand slide the hook forward and attach to your D- loop. Connect the carabiner directly to the string! This is very important for your safety and the safety of your bow



Make sure the winch is locked in place. Hold the bow as you slowly crank the bow back to its full draw position.

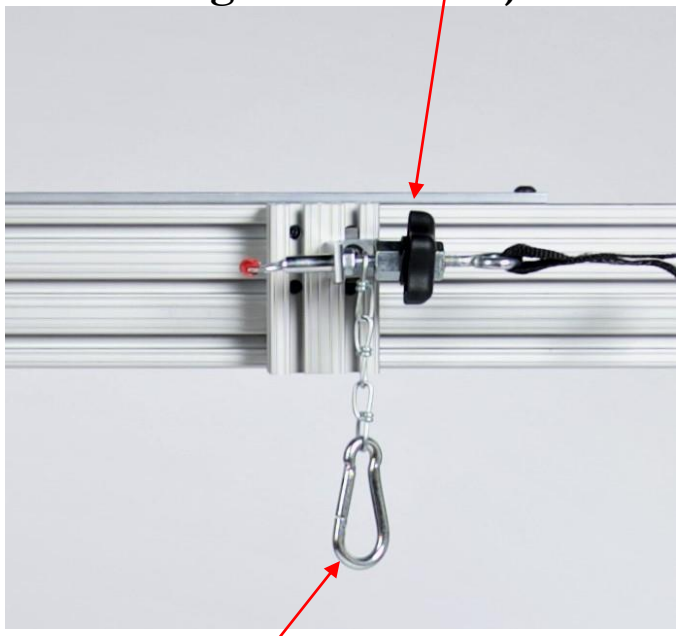
(scale)



The linear guide block will line up with the draw length. If you're hooked to the D - loop it will give you your draw length including the D-loop

NOTE: scale may need to be adjusted to proper draw length.

Minor string adjustments can be easily made using the micro adjustment



Safety catch needs to be used at all times!

Optional Equipment

We offer a modified version of the Bowmaster. (figure 22) It doesn't include the compressing device and is designed to work with a draw-board. But the original Bowmaster works just fine with all of our machines.

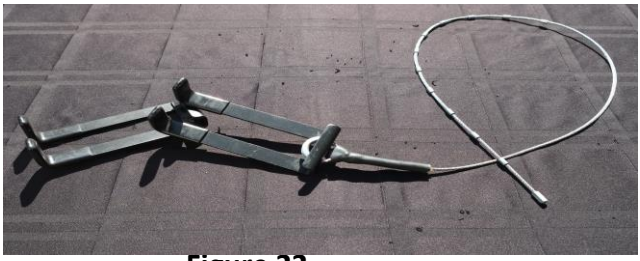


Figure 22.

Not included please order from our website

The bow L clamps are by Bow Master and can be used on past parallel bows, but only up to 6 degrees past parallel. If the past parallel limbs are more than 6 degrees past parallel to the limb tips, then, the Bow Master L clamps cannot be used. The Bow Master L clamps **do not work for all bows! Caution must be used!** Here is an easy way to tell if your bow is past parallel at rest. Below are photos of two different bows. Put a piece of paper up to the limb with one edge of the paper parallel with the string.(figure 23) The edges of the paper make it easy to see the angle of the limb. The picture on the left is of a bow that is not quite parallel as you can see by the yellow line (yellow line is the angle of the limb tip). The picture on the right is a bow that is definitely past parallel. Only use the Bow Master L clamps on bows that do not have past parallel limbs greater than 6 degrees past parallel.

NEW G2 VERSION FOR 2016

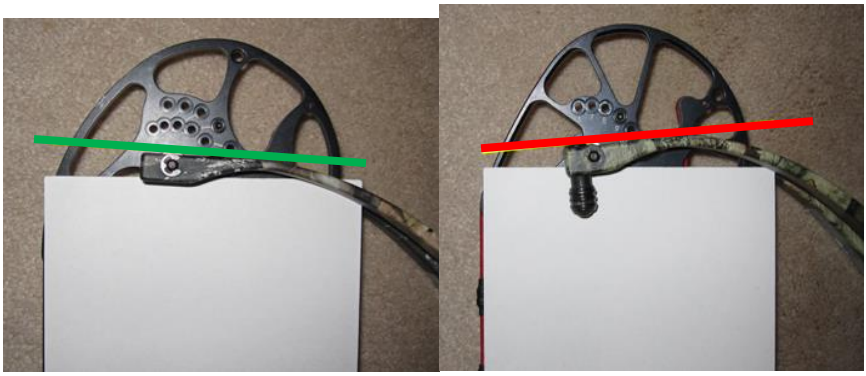
NOW WORKS WITH LARGE CAMS
AND ON BOWS UP TO 6º PAST PARALLEL
Logo stamped on the bracket indicates it is suitable for past parallel*

Split Limb L Brackets G2

This compact, lightweight bracket provides a quick and easy attachment point for the Bowmaster Bow Press. The L design presses from the limb tips and compresses the limbs in much the same way as when the bow is drawn. This new design works on a wide variety of bows, including those up to 6º past parallel. They work equally well on both solid and split limb bows and also work on bows with flared limb tips.

The NEW Bowmaster G2 Split Limb L Brackets, are longer than previous versions and are designed to fit large cams like those on the newer universal fit compound bows. Like the 2015 version of the Split Limb L Brackets the new G2 L Brackets will also work on bows up to 6 degrees past parallel.

http://www.prototechind.com/split_limb_L_brackets_info.htm



Almost parallel + 1 degree **Past-parallel - 6 degrees**

Almost Parallel versus Past Parallel

The Bow Master L clamps can slip off past parallel limb tips greater than 6 degrees. Use caution whenever using the Bow Master L clamps on any bow.

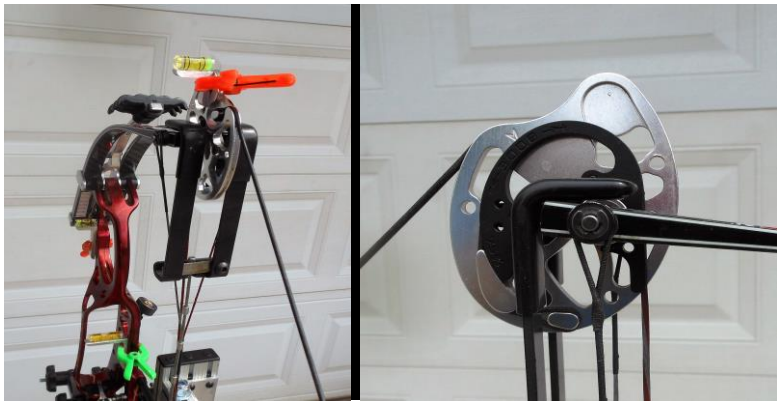
! WARNING: The limbs of a compound bow are under extreme tension. Use caution while working on the bow. Keep the face of the limbs away from you at all times. Eye protection must be worn!

Draw your bow just enough to fit the Bow Master L Brackets onto your bow. Set the L brackets in place. Adjust the length of the Bow Master L brackets making sure your cable ends are in the

proper place, and the latch on the L bracket is fully engaged. **Find the longest setting possible, with the least amount of draw!**

Now, back off the Draw - Board Pro winch and watch to make sure the hooks are centered and the cable is latched. You can now replace your string and cables, adjust twists in end loops and even remove cams if you are careful.

Remember to always keep your face and fingers out of the way!

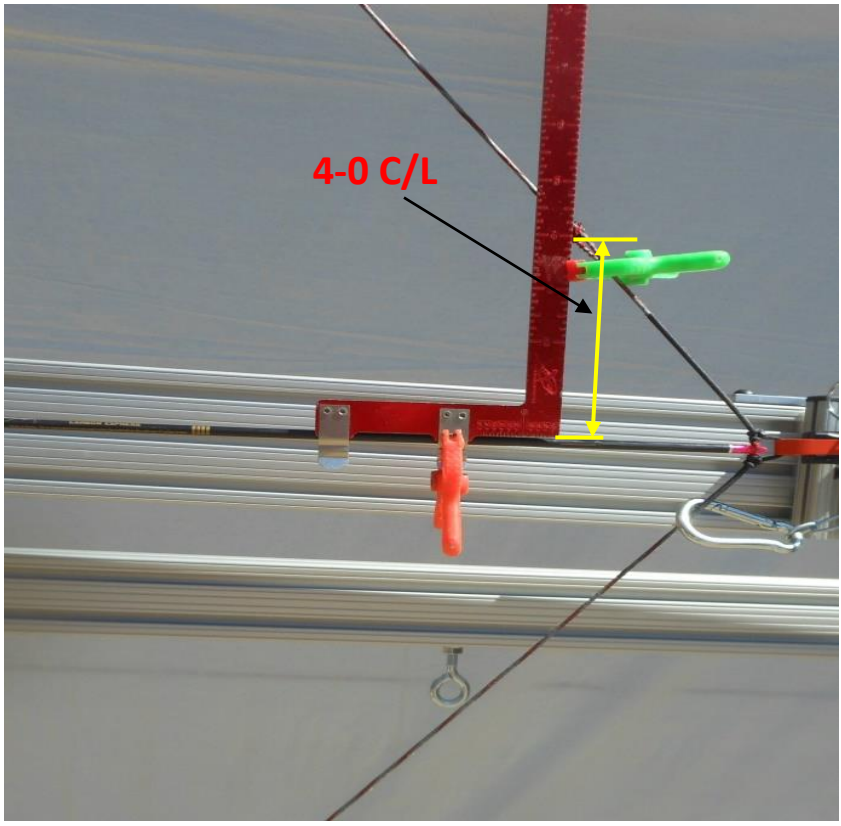


These retainers were designed to be used with the Bowsmith Pro but work well on any Draw– Board. Extreme caution must be used at all times! Never put your face near the cams or put your fingers in the cams while the clamps are on.

Installing new string

Now take the time and take some measurements before

you remove the strings and cables. Measure your peep height, this will save you from having to find it later by trial and error. Measure from the center of the shaft to center of the peep.



If you look at my bow specs and current set up, they are a little different. I want my bow back to factory specs so that's my goal. And regarding "factory Specs" very seldom do you get a bow that is at exact specs so a little + or -. (Close counts.) If you're off a 1/8 at brace or 3/16 with the ATA that's close enough for me but some people want it perfect. If this is you spend the extra hour or so. When satisfied how the bow is set up enter the actual settings and keep on file. After filling out the form you can now carefully install the limb locks and remove the old string and cables. Check your bearings for excessive play at this time. When satisfied all is correct, install the new strings. Hook the release using both safeties directly on the string and with the winch apply just enough pressure to remove the bow clamps. If the bow wants to roll forward you may have to attach a temporary d-loop. For this, I generally use the old string. Now carefully back down the winch paying close attention that the string and cables are in their respective grooves and remove limb clamps.

OWNER _____

MAKE AND MODEL _____

FACTORY SETTINGS	**ACTUAL BEFORE TUNE**
AXEL TO AXEL ____	_____
BRACE HEIGHT ____	_____
DRAW LENGTH _____	_____
DRAW WEIGHT _____	_____
LIMB BOLT SETTING _____	_____
PEEP HEIGHT _____	_____
SIGHT RADIUS _____	_____

TUNED SETTINGS

AXEL TO AXEL ____

BRACE HEIGHT ____

DRAW LENGTH _____ **D- LOOP** _____

DRAW WEIGHT _____

LIMB BOLT -TOP _____ **BOTTOM**_____

PEEP HEIGHT _____

SIGHT RADIUS _____

TILLER + - BOLT TURN **TOP**_____ **BOTTOM** _____

OWNER _Vern Coop_____

MAKE AND MODEL _2014 Hoyt pro comp, gtx-2, 75%

FACTORY SETTINGS	**ACTUAL BEFORE TUNE**
AXEL TO AXEL 36-15/16	37-1/8
BRACE HEIGHT __7-15/16__	___8___
DRAW LENGTH _-26.25__	25.75 **D-loop-** 26.25
DRAW WEIGHT 40-50_	_47_
LIMB BOLT /TILLER	**top**_ 2.25 **bottom**_ 1.75
PEEP HEIGHT	**static** 5-7/16_ **full-draw** _4_

TUNED SETTINGS

AXEL TO AXEL __37__

BRACE HEIGHT __8__

DRAW LENGTH __25.75___ **D- LOOP** _26-1/8th_____

DRAW WEIGHT __47____

LIMB BOLT -TOP __2_____ **BOTTOM** ___2_____

PEEP HEIGHT __5-7/16____

SIGHT RADIUS __32.125_____

TILLER + - BOLT TURN **TOP**__0___ **BOTTOM** ___0___

Adjusting cam lean

Tighten your limb bolts and back off 1/2 turn. You never want your limb bolts bottomed out this can cause binding and damage your limbs.

Attach string to release and be sure to use both safeties! Draw the bow back and adjust so it touches the bow stops.

Plumb bow riser, do not use the bubble on your sight at this time rather clip on a small level. See figure 33.

Figure 33

Figure 34

Clip on a level to the top cam or idler wheel at full draw; make sure it is on a flat spot. Figure 34. With riser plum,

adjust top cam to be plum. Do this in ½ twist increments

and do both sides ½ twists out on one side and ½ twists on the other this technique will not move your timing .

NOTE: At this time it's a good idea to keep notes as you go. It's easy to forget what you have done.

Using our limb retainers makes this fast and easy, no reason to move the bow back and forth to a press. **Use caution!** Make sure hooks are centered and when backing down make sure string and cables are in their proper places.

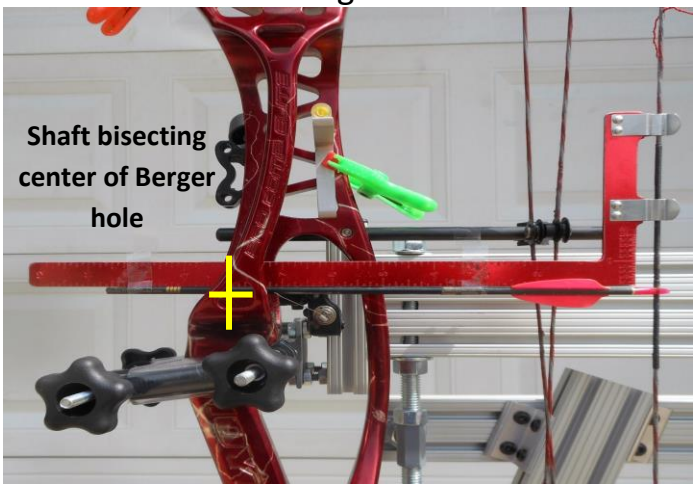
These retainers were designed to be used with the Bowsmith Pro but work well on any Draw–Board.

Extreme caution must be used at all times! Never put your face near the cams or put your fingers in the cams while the clamps are on.

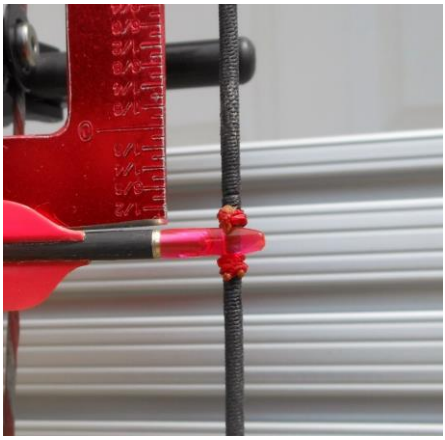
Note: these retainers are not for every bow and they should not be used at full draw! Find the shortest draw length that works for your bow.

D-loop

Square your shaft with the string bisecting the Berger hole.



Tie your nock into place. With triple over-hand knots and seal with a flame.



Tie a D-loop refer to figure 48. Getting a D-loop to stay in place requires it to be tight and the ends need to be melted forming a small mushroom head.

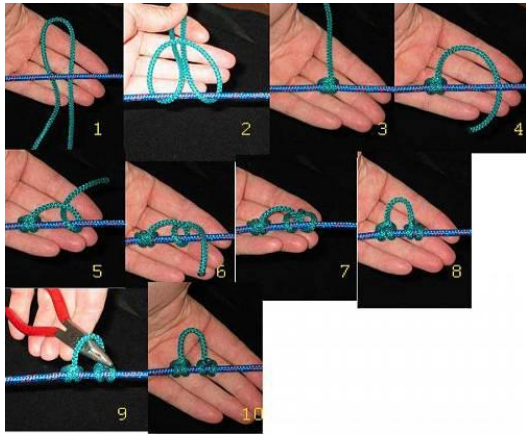
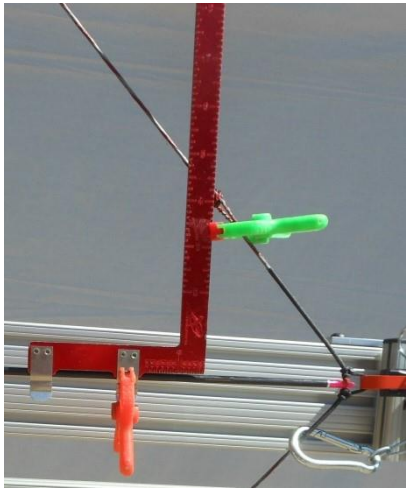


Figure 48.

Installing your peep

Now take the time to install your peep. With the bow

properly set up in the machine with both safeties installed you can crank the bow back to full draw and using the micro adjustment set the bow to where it just touches its draw stops.



Measure from the center of the shaft to the center of the peep and slide the parting string to the exact spot to where the peep will go.

Use your fingers to separate the string and slide peep into place.

Note: no tools are necessary to install the peep when done at full draw.

Re-measure to ensure the peep is in the exact place. Now back the bow down to brace and measure your peep again.

If satisfied with the position crank the bow back to full draw and tie in place. Learn to tie this type of knot, it's done with a single piece of string and it tightens when the bow is backed down to brace.

When satisfied with your knots, square your peep to your eye by rotating the string by adding or removing twists. Be careful you don't change the length of the string by more than ½ twist.

Setting Up Your Sight using our draw-board

First thing is to set up your bow riser plumb and for practical purposes, we are using a target sight, but this procedure also works for most hunting sights. **I recommend that all bow sights be set at full draw to compensate for riser twist.** Some bows have more twist than others but all can benefit from this technique.
Your sight should be set using the same sight radius that you plan on shooting.

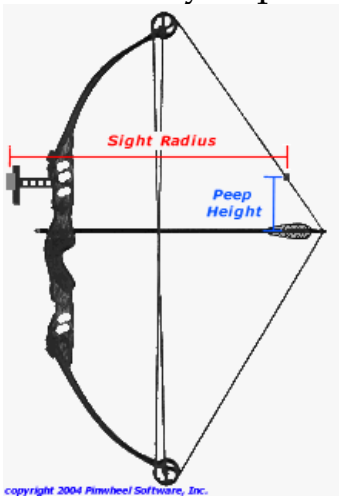


Figure 64

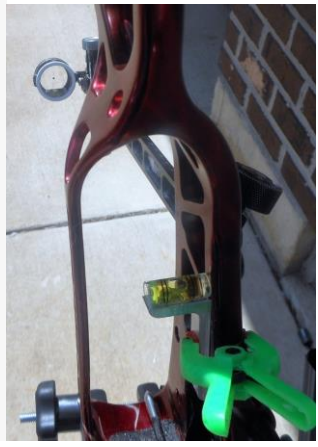


Figure 65

Use a level on your riser and set it plumb. I use small custom made levels that are great for this. See Figure 65. Clamp a level to the side of the sight if it won't clamp try using double-sided tape. Plumb the sight rail (elevation slide) to the riser **at full draw! See figure 66.**

Tweak the sight rail or elevation slide until it is perfectly plumb to the riser
Your sight rail should be plumb to the riser at full draw.
This is very important for having a straight shot at all ranges!
Try and get this perfect!

Figure 66
Now with the elevation slide plumb to the riser, it's time to set your sight bubble.

Perfect!

Now with this done, it's time to set the 3rd axis; this is where a helper comes in handy. With the bow at full draw **on level ground,** pick up the back of the machine so the bow is pointed down at about a 45-degree angle.

You need a little finesse here to keep the riser plumb as in figure 65.

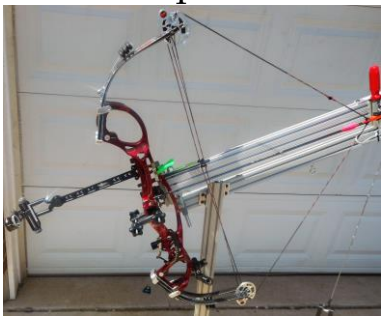


Figure 69

Figure 70

If the sight bubble stays level (centered), when the rear of the draw - board is raised up off the ground, then you are good. If the sight bubble does not stay level or if the sight bubble runs left or runs right, then repeat the adjustment process (3rd axis adjustment) until you get a level bubble throughout its range of motion. It helps to have the feet on level ground.

More on this and other techniques that can be found at

www.coopsbowsmith.com