Bowsmith Pro II and Bowsmith II

Bowsmith Assembly

Your machine was assembled and test shot at the factory. It will go back togeter with no modifications. If you find you cant assemble witout changing set up please call. 815 325 9128

Remember to keep away from the front of the machine, never stand in front of the machine. Keep your hands and fingers out of the way. Keep your kids away. Check for loose bolts and always pay attention to what you are doing.

Scan with phone camera for set up and use video for the bowsmith pro

This is how your machine arrives.

Contents of the small box

Winch handel, 2 L wrenches, Hardware package, Bow hand holder / torque box and release carriage

Contents of the long inner box

Front and rear leg and 2 feet.

Upper limb brace

forward brace for the paper tuner

Paper tuner assembly

A knob on its side

Build the leg assembly first.
Identify the front and rear legs, as you can see in the pics the front leg has two knobs and the rear one.

Knob is on the front leg for paper tuner brace

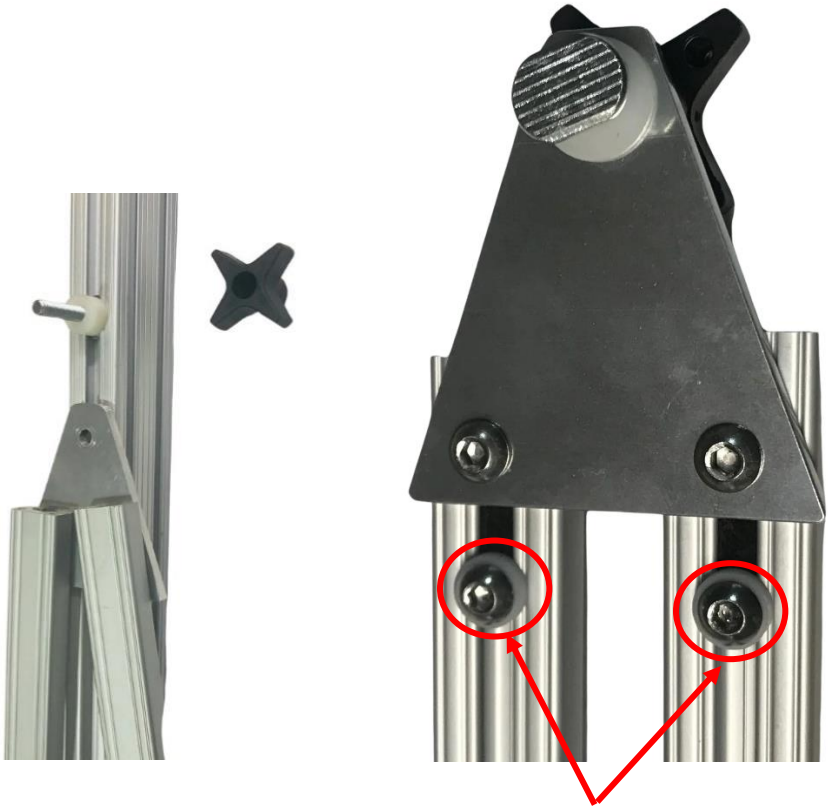
Rear leg

Install feet brackets on each side of the legs

Slide foot in place.
Try and keep it square.
Do the same thing with the front leg.

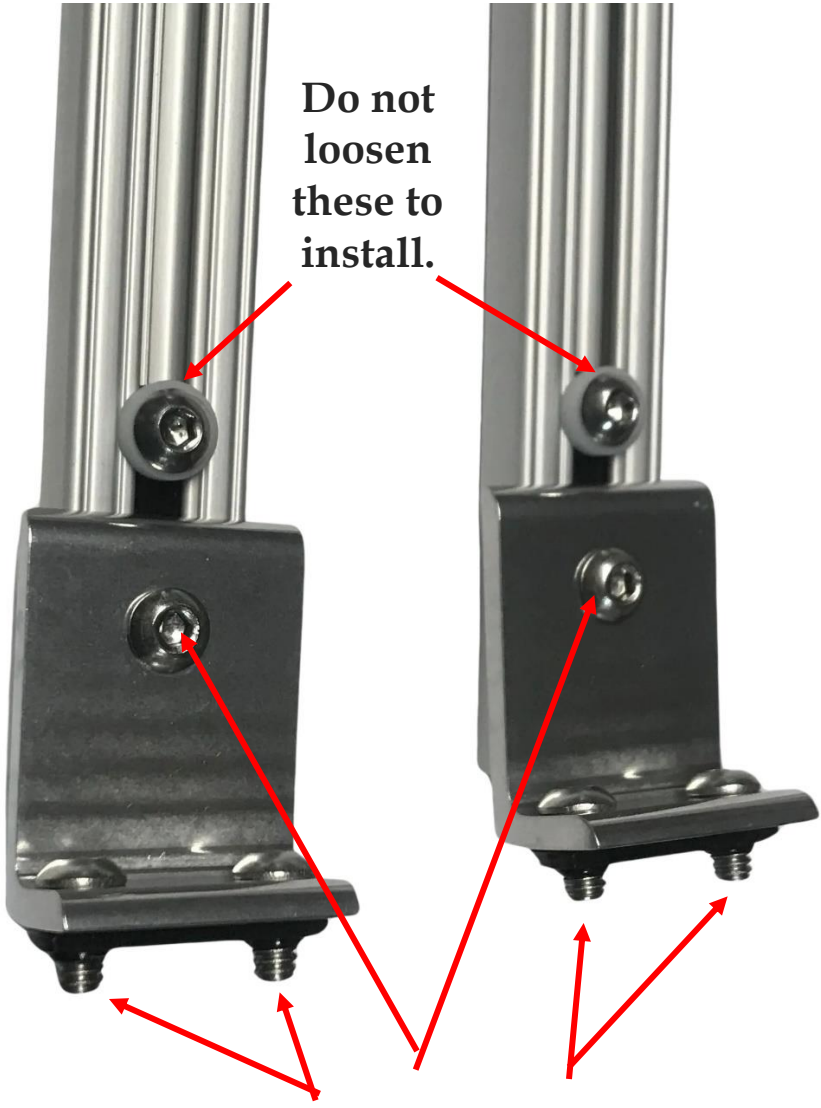
If you ordered the leg brace kit install it now.

Rear leg

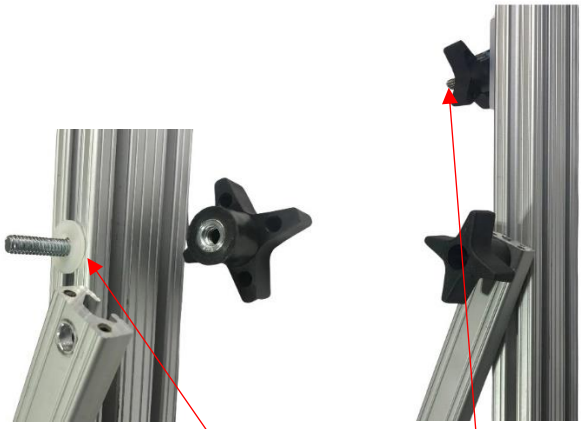


Do not loosen these to install.

Leave the washer in place and slide bracket over the bolt and loosely install the knob on the rear leg. Attach the feet brackets in place to look like the pic.


Do not loosen these to install.
Loosen to install. Slide into feet

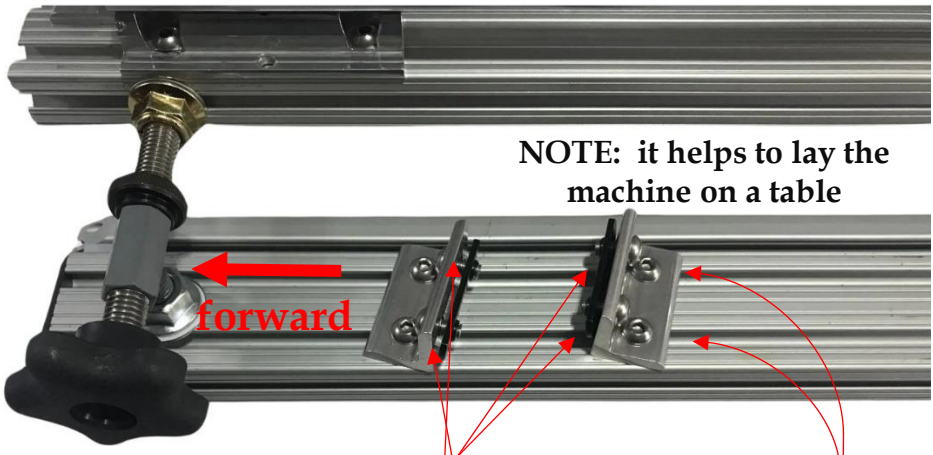
Do the same thing with the front leg.



Make sure this washer stays in place. Do not remove the other knob, it will need to stay in place as seen in pic.

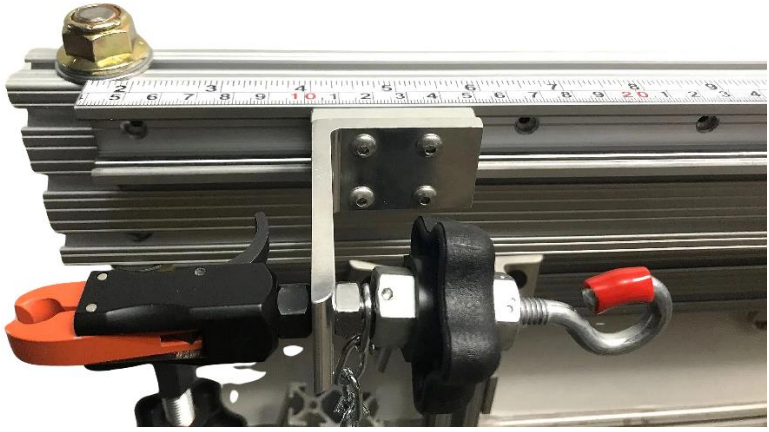
This knob is on the pro only. And is used to brace the paper tuner.

With the 2 leg assemblies complete - mount to the main frame making sure the front and rear go into their respective spots.

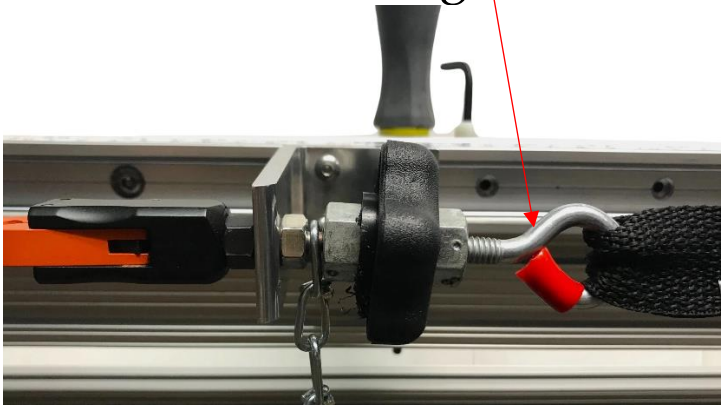


back out the four screws to leave enough play to slide in leg. Also loosen the right-side/inside bracket.
Slide the leg in place and tighten all the screws. Do the same thing with your rear leg and stand up.

Slide the release carrier block in place.

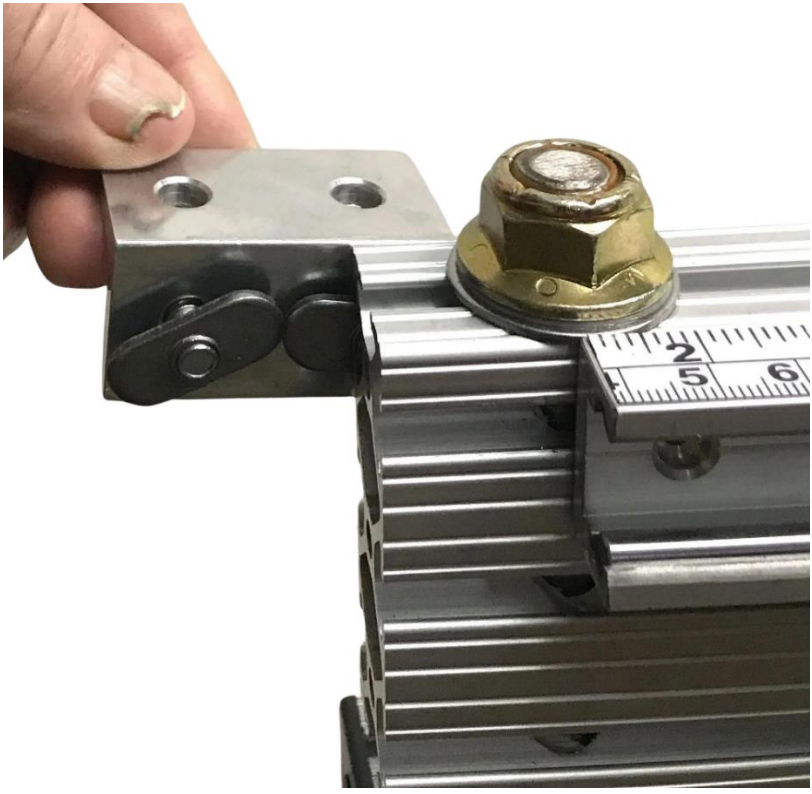


Connect the strap and slide the red grommet in place, this holds the strap from coming off.

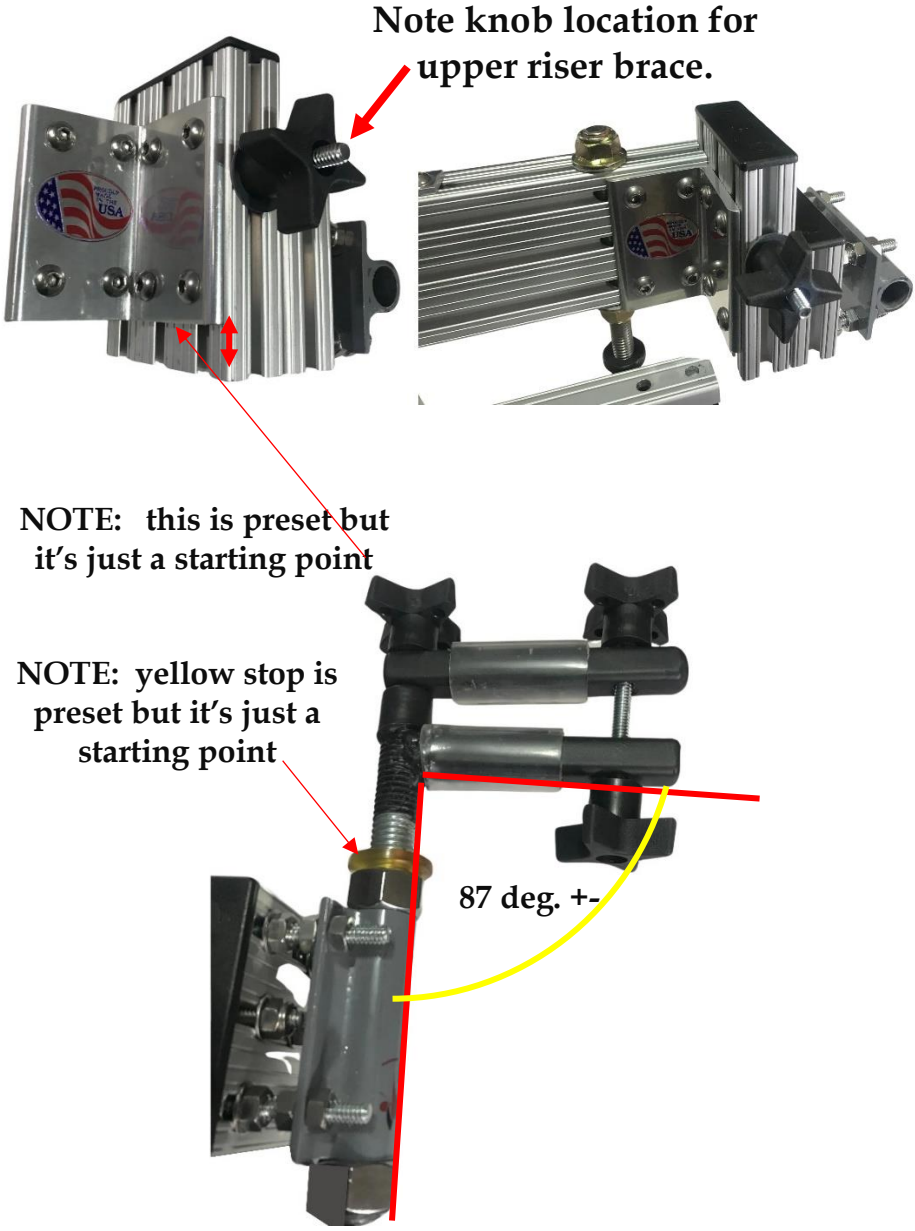


If not already installed

Slide the 1- inch by 2-inch tool carrier in place on the backside.



If not already installed-Slide the forward assembly in place and tighten.



Install bow hand as seen in pics.

Installing the paper tuner

Slide the 9 inches by ½ inch bottom part onto the 1 by 1 bar and tighten the ¼-20 nut through the bottom hole.
Locate the paper tuner brace and install.

Slid the bottom first over bolt then slide upper piece into guide.

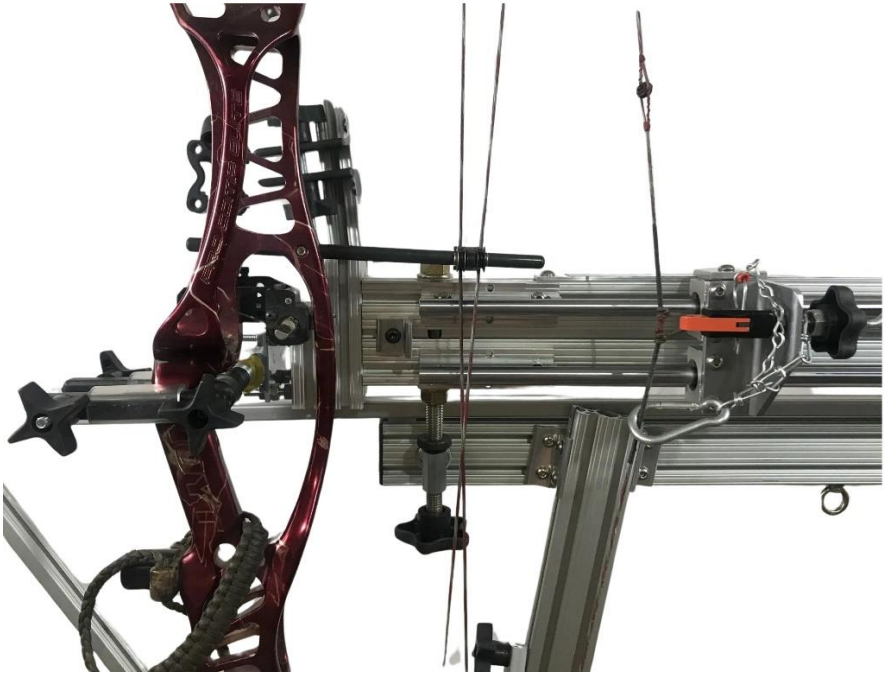
Install the 2-hole bracket into the slide. The protrusions should face up. Short bolt goes in first loosely then the long bolt. Tighten the short bolt, remove the long bolt, and use it to attach the paper holder to the slide rail.

Fold the paper holder to the side when retracting or extending to avoid binding.

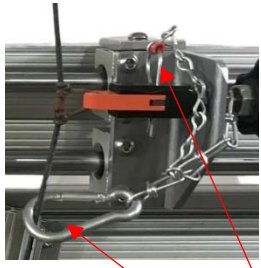
It should look like this when done.

Setting up a bow in the Bowsmith

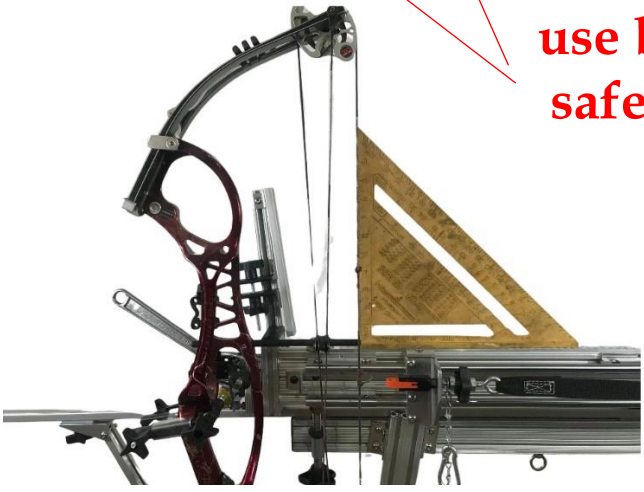
Your Bowsmith comes pre-assembled and pre-tuned for a Hoyt Pro Comp Elite. (These settings should work for most compound bows)



Set your bow in the bow hand. **Put both safeties on** and winch it a couple clicks. This sets the grip against the post. Tighten the bow hand alternating from rear first to front.



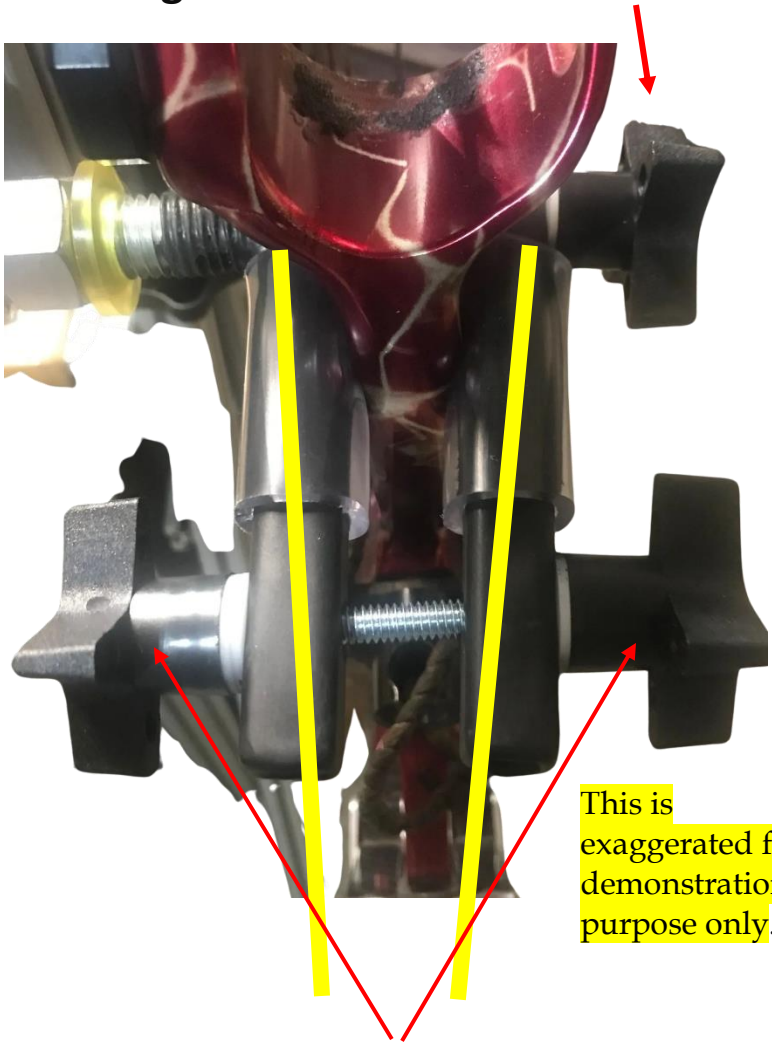
NOTE: **always use both safeties**



square the bow to the top rail. Using a cresent wrench tighten the 5/8 nut on the bow hand.

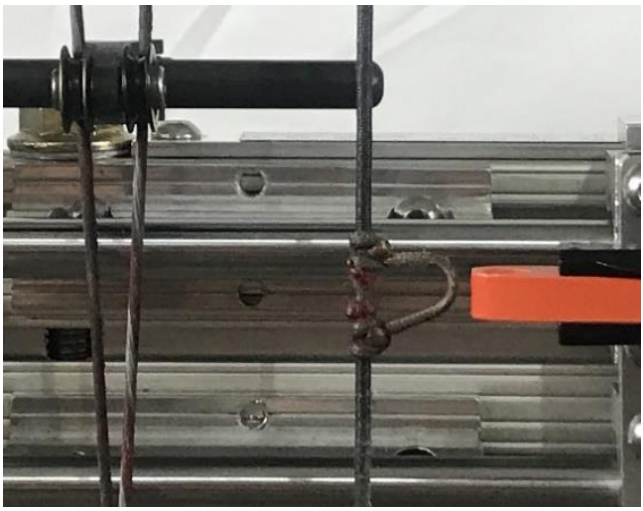
Don’t over tighten snug is fine.

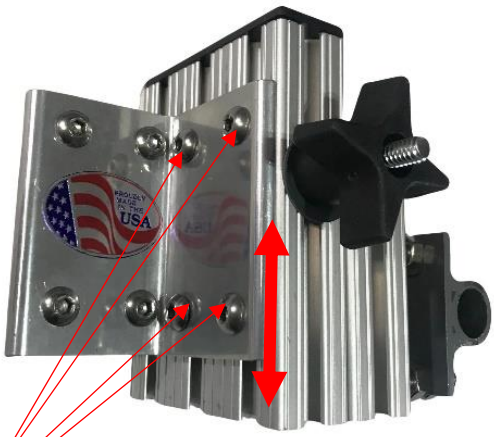
Tighten the rear knob first



Then tighten the front knobs so they pinch the front of the bowholding the bow tight to the post. The squish tubes will conform to the bow helping to keep the bow positioned

Your release should alinge like this

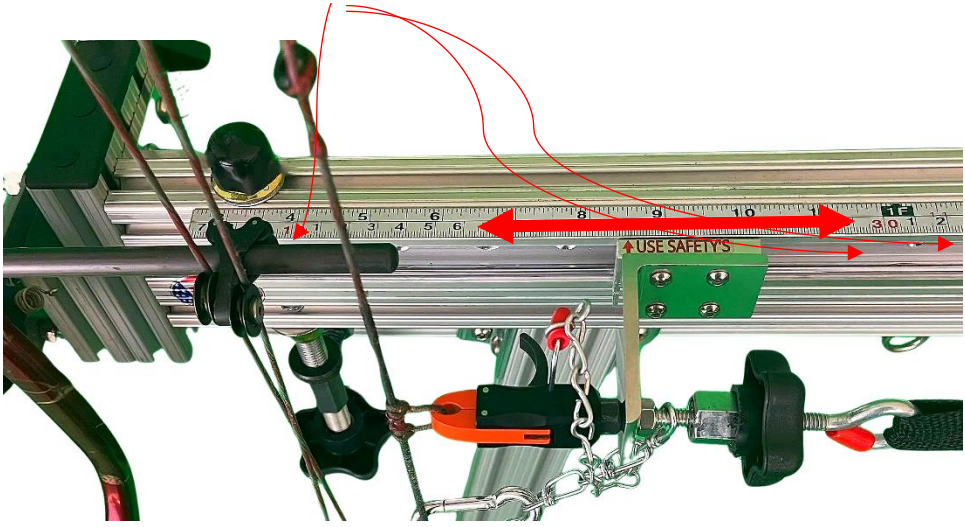


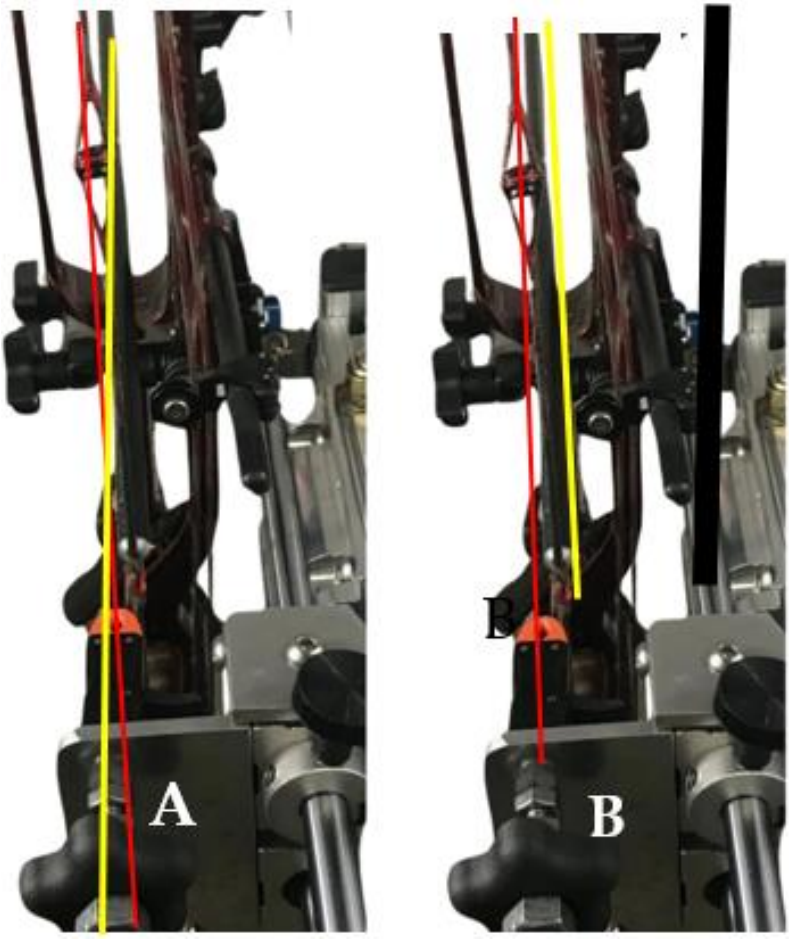


Your release should alinge like this if not, losen the 4 screws and slide the 5 inch by 3 inch block up or down.

To set the draw gauge install your bow plumb level and square. Attach the d-loop and take out all the play.

Loosen the 3 retaining screws and slide the rail until your known brace height aligns with the edge of the carrier block and re-tighten the screws. The bow in the pic has an 8.5 inch brace. Once aligned this will give you accurate readings at full draw.

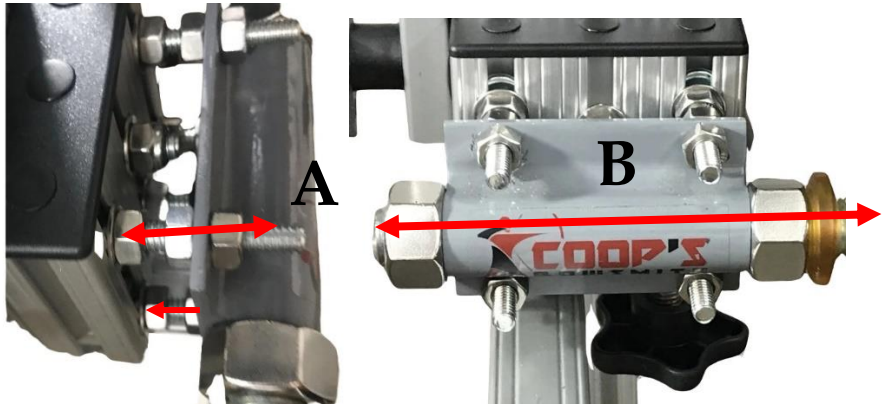




with a arrow in the bow- Sight down the back of the machine you may see one or a combination of a offset shaft or a crooked shaft . In (**A)** the shaft and bow are not square to the machine. A is corected by adjusting the torque box ¼-20 nuts. (NOTE:

a light snug is all that's needed on the ¼ -20 nuts.)

to correct (A) move the nuts in or out to change the angle of the bow. A little goes a long way. If it requires a lot try reajusting the bow in the grip.

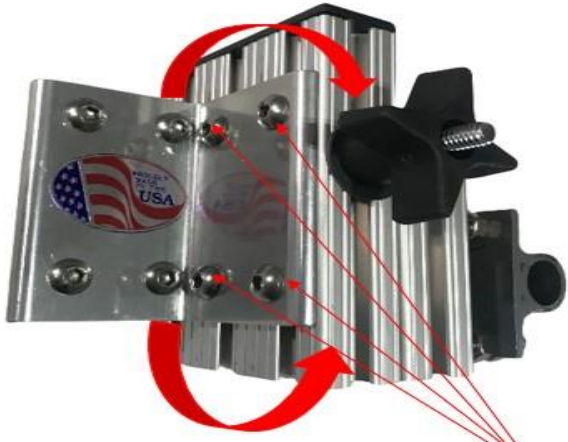


In B we adjust the bow hand in or out.

NOTE: any time you preform either procedure you must remove the upper limb brace.

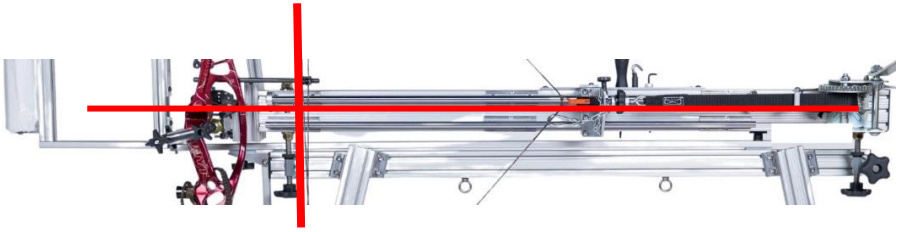
Remember to keep away from the front of the machine, never stand in front of the machine. Keep your hands and fingers out of the way. Keep your kids away. Check for loose bolts and always pay attention to what you are doing.

Plumbing the bow from left to right



To plumb the bow loosen the for screws and rotate the box left or right

When correct it will sight straight.
NOTE: this does not need to be perfefect but the closer the better



With everything close now you can install the uper limb brace

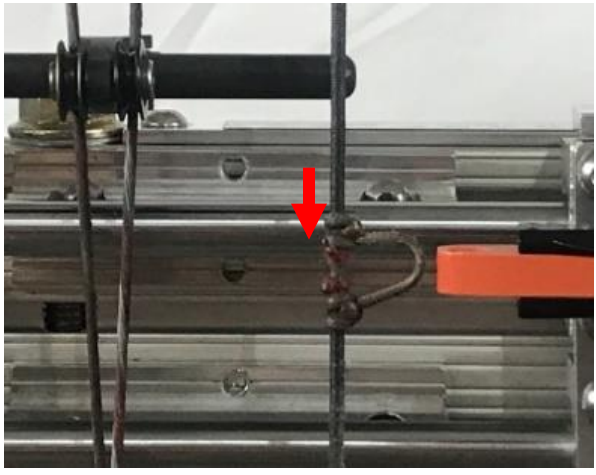
If you have not pre-installed the knob, pin, and washer you may have to loosen the bow holder assembly to install in the side slot.

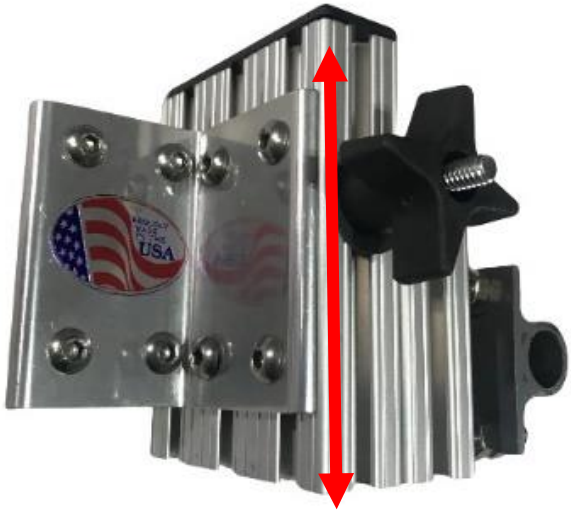
Stows folded in place until ready to use.

Find a spot on the riser. Preferably a flat spot and lock the brace in place without moving the bow.

NOTE: even with the brace installed the bow will move slightly when shot. A couple shots and it will settle in.

It may help to lower the bow a ¼ inch using the 5 inch block if it keeps moving.



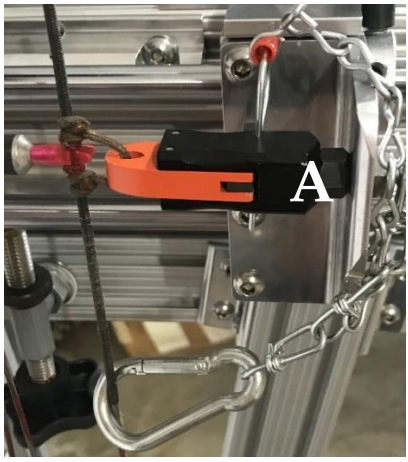


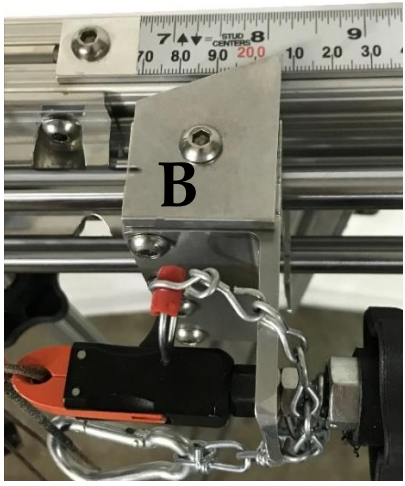
Shooting a arrow

Before shooting go back and tighten the feet and leg bolts with the L wrehch.

They must be tight or they will move

Sand bag the feet or hang water buckets from the eye hooks

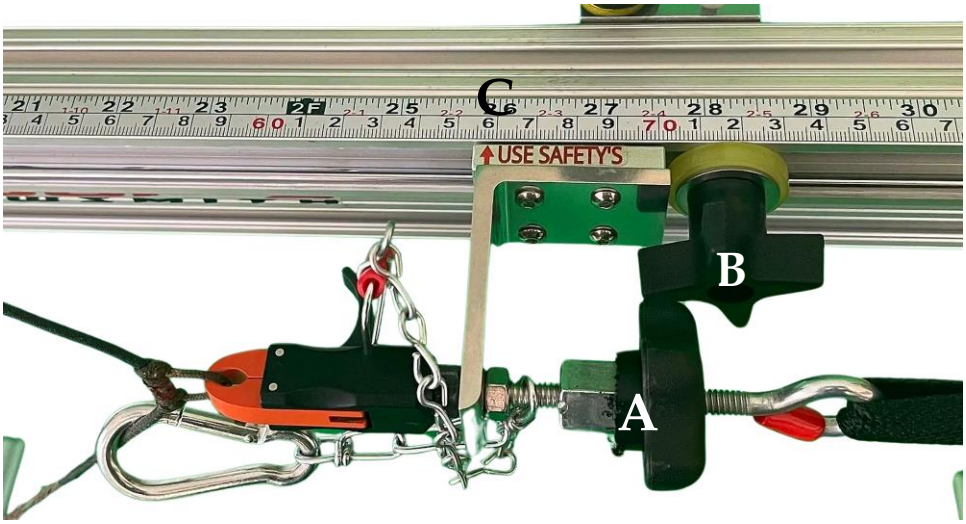




Slide your release forward close the jaws and install both safty devises. (A)

If you know your bows brace hight set the scale to match in this case its 8.25.(B)

Crank the bow back smoothly to just short of full draw. Fine ajust with the micro adjustment (A).



Set the draw stop in place (B).
Draw length is now displayed (C) Remove the string catch first, pull the pin and its ready to fire. Make sure of your target! No one in front! No body parts in or around the bow! Pull triger to fire.

. Use the draw scale On sucessive shots to relocate the exact draw point. Dont rely on the drawstop its just a saftey devise to prevend overdrawing your bow

Tuning Arrows with the Bowsmith Pro

Tuning arrows is a learning process. Fire a few arrows to settle the machine in. Don't move the bow after you shoot. You should be able to slide the release into place without touching the bow. The release should line up with the D loop every time. Your bow sight should stay level or close and your string should stay plumb or close. I tune fully fletched arrows only. Shoot 12 arrows and find the ones that hit the same hole, set these aside and tune the rest of the fletched arrows. Turn the nocks from the cock vane to the next vane and find the one that shoots closest to center. Most guys who tune this way keep all their vanes the same color and mark the cock vane with a marker. Pay attention that nothing moves. I use one good arrow to double check things as I go.

A very accurate way to shoot after you have set the machine up and test fired a shot or two is to leave the winch clicker off. Crank the bow back to full draw with your right hand, just short of the overdraw stop using the pointer to get the exact same draw length, hold the winch handle and pull the release with your left hand.

Remember to keep away from the front of the machine, never stand in front of the machine. Keep your hands and fingers out of the way. Keep your kids away. Check for loose bolts and always pay attention to what you are doing.

Paper Tuning

Paper tuning is straight forward. I will be using the Bowsmith pro with its attached paper holder.
Slide the paper holder from its stowed position and lock it into place. Then rotate the paper frame into its shooting position. Note: trying to slide this in or out without the paper frame in its stowed position **will cause binding.**
Make sure your arrow is aimed at the backstop and shoot an arrow through the paper. As you can see in figure 81, we have a perfect bullet hole. If the bow is set up correctly you should get this on almost any new set up. If you have a rip or offset hole, follow the diagram on figure 82 to correct.

Figure 80 Figure 81

Do not waste your time shooting bare shafts threw paper! Without fletching, the back of the shaft tends to follow the hole the point made.

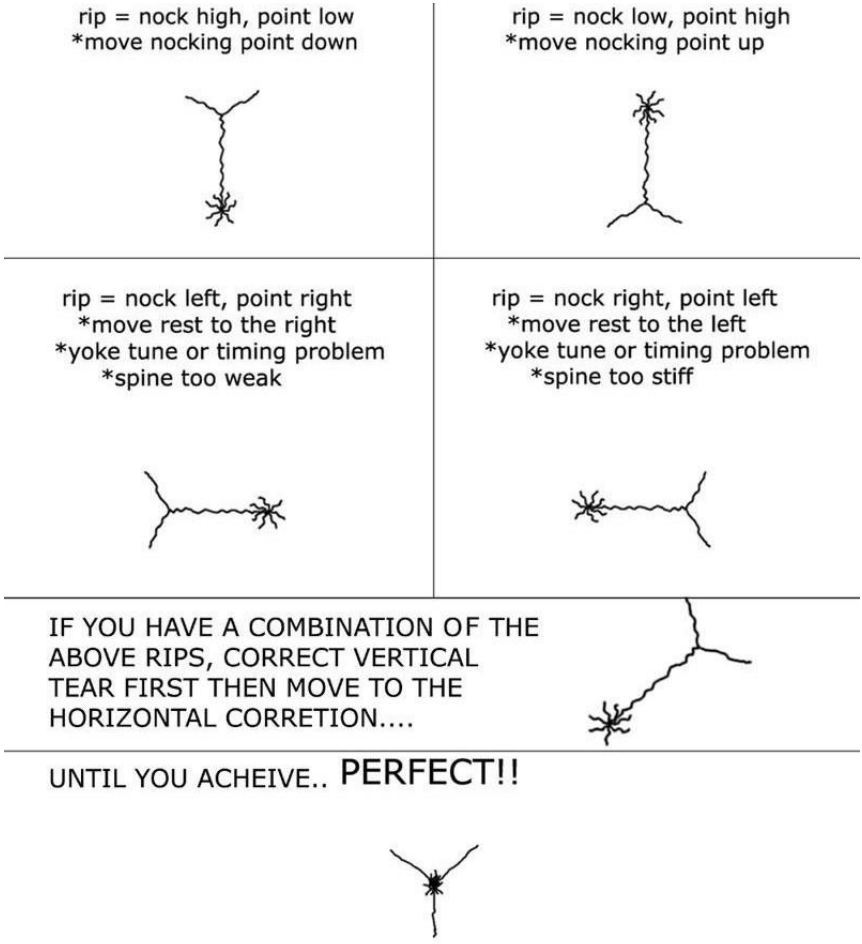

rip = nock high, point low
*move nocking point down
rip = nock low, point high
*move nocking point up
rip = nock left, point right
*move rest to the right
*yoke tune or timing problem
*spine too weak
rip = nock right, point left
*move rest to the left
*yoke tune or timing problem
*spine too stiff
IF YOU HAVE A COMBINATION OF THE ABOVE RIPS, CORRECT VERTICAL TEAR FIRST THEN MOVE TO THE HORIZONTAL CORRETION....
UNTIL YOU ACHEIVE.. PERFECT!!

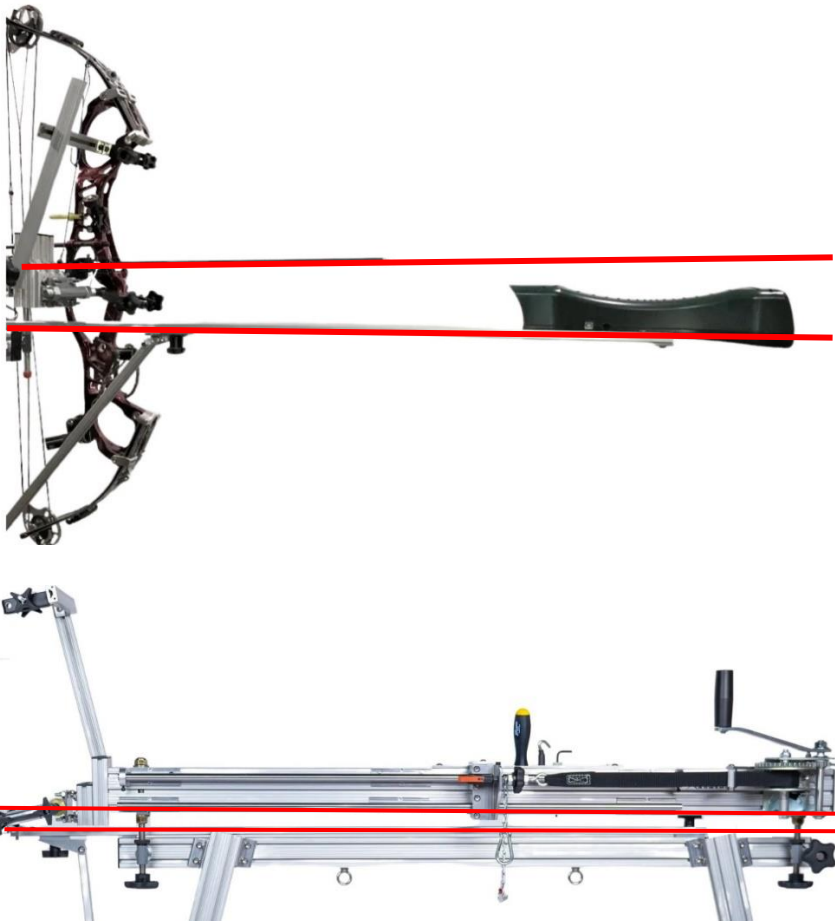
Figure 82

Chronograph

To use your chronograph, remove the paper holder and install the holder as shown in the picture. Bracket is stowed on the side of the paper holder. The flat bar should be installed from the bottom.

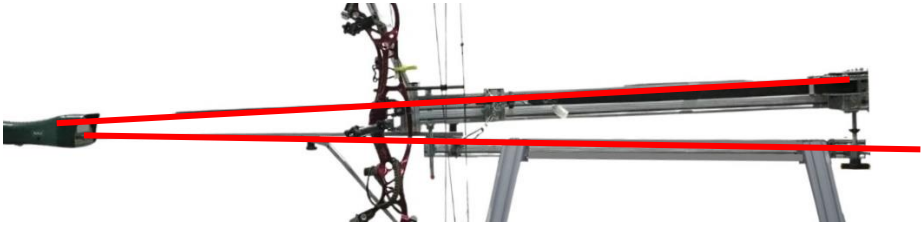
Make sure your arrow is above the chronograph.

Slide the holder all the way out and lock it in place.
DO NOT lift the chronograph as you tighten the knobs as this could raise it to a dangerous level. It should look like the picture.



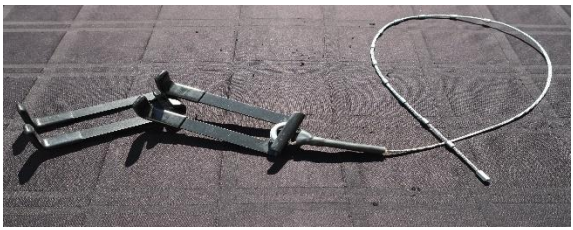
Your machine should look like this both rails parallel.

Do not do this.



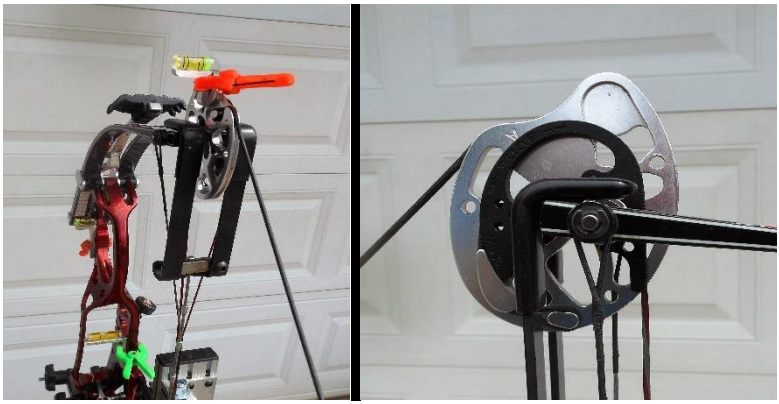
Do not adjust the back of your bow up as seen in picture above.
You will shoot your chronograph!
Follow your chronographs directions and you should get excellent results.

Another useful tool is a Bowmaster cable press or our custom-made limb retainers.



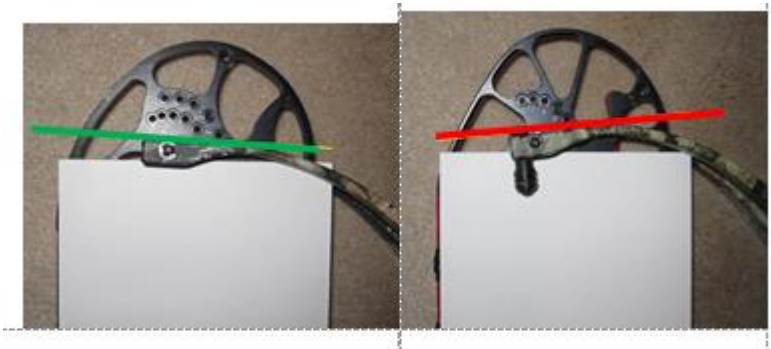
You only need a couple of inches of a draw to apply.

Do not use at full draw!



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

Do not use bows with extreme curl like the Bear Carnage.



Almost Parallel versus Past Parallel

The Bow Master L clamps can possibly slip off when used on past parallel limbs greater than 6 degrees. Use caution whenever using the Bow Master L clamps on any bow.

Draw your bow just enough to fit the Bow Master L Brackets onto your bow. Set the L brackets in place and adjust the cable for the proper fit.

Scan QR code with your phones camera to access video.

Scan for store for all options

I'm always interested in hearing from users who have found new ways to use our machine. Please drop me a line at coopsbowsmith@gmail.com
Good shooting, Coop
(815)-325 -9128

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** _____

ARROW Shaft_____ **WEIGHT** _____

SPEED/ CHRONOGRAPH _____

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__

ARROW Shaft_____ **WEIGHT** _____

SPEED/ CHRONOGRAPH _____

Now with your bow shooting good from the machine, it's time for you to shoot the bow. Concentrate on trying to use your best form. If you have good form your shots should duplicate that of the machine. And you should be shooting bullet holes. If you are getting major tears, contact a coach and have him check your form and adjust if needed.

For small imperfections, about the diameter of your shaft, no adjustment is needed as it is common for your form to move around a touch until you become as good as your favorite pro.

I am a good shot, and it is typical for me to have a slight left tear one day and a slight right a few days later. It's important that you know your bow is correct!

Remember we all have good and bad days. Don't start tweaking your bow because you're having a bad day.