Compound Tech 100

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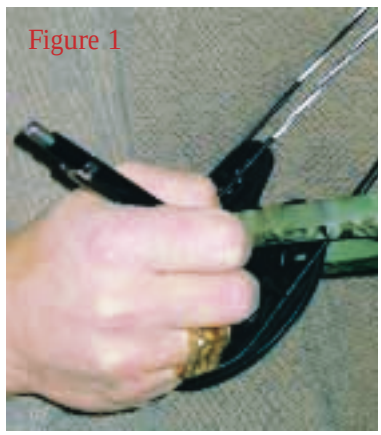
Setting Up Your Compound Bow —The *Easy* Way

Recently, an old archery friend called me with some questions. His wife had switched from Olympic style shooting to a compound bow and after many, many years of archery experience they were now back to square one. For every question my friend had I tried to give him the easiest, most straightforward answer to help them out. In our last conversation about bow setup he commented that someone should write an article on the topic. In the six years I have spent as a product developer in the industry I have learned some secrets to the basics of compound bow setup that are quick, easy to understand, and provide good results with a minimum investment in time and tools. Is this Bow Tuning 101? Heck no—this is setting up a bow quickly to get you shooting!

Step 1 **Measuring Strings and Cables**

Bow companies spend a great deal of time establishing the specifications for their bows. A safe assumption is that the string and cable measurements that they give you are the optimal setup for that product. I start setting up a bow by checking the measurement of the strings and cables. This guarantees that I start with the brace height, axle-to-axle length and, most importantly, wheel orientation that the manufacturer specifies. Any stretch or creep that may have occurred post manufacture will be eliminated. Timing issues of a two cam and, more critically, orientation settings of a single cam are returned to factory settings. From there I measure and document axle-to-axle length and brace height and mark my wheels (with a pencil at this time) where the string leaves them (*see Figure 1*). This way if I ever have a problem I have a quick reference to look back to. This process is time consuming and more complicated than any of the other steps in the process, however, it is also the most important step.

Figure 1



Step 2 **Cable Guard Offset**

Since many companies have gone to a fixed position cable guard this next step may not be necessary. However, if you need to set the cable guard position here is a quick and easy way. By placing a parallel wall (constant diameter) arrow shaft against the sight window cutout of the riser you create a gauge to adjust your cable clearance (*see Figure 2*). I set my cables just a hair outside of the arrow shaft. Any further in and I may have a problem clearing my cables. Any further out and I may clear my cables, but hit my riser with the fletchings. Once you establish what size and orientation of fletch you will shoot and start fine tuning your centershot you can reduce your cable clearance if you like.

Step 3 **Draw Weight and Draw Length**

Once you are sure that your strings and cables are set to factory specifications it is time to set the draw weight and draw length. I usually use a hand held scale for my personal bows and a calibrated scale at PSE for business related

bow setups. The hand held scales are questionable for accuracy unless you calibrate them. However, I usually only need to set the bow to my optimal draw weight. Whether that weight is 58 lb. or 57¾ lb. is less relevant than if the weight is the same as my other bows.

Adjusting the limb bolts on the bow will have some effect on draw length. Double check that the draw length of the bow is still what you need and make any necessary adjustments. Bear in mind that draw length adjustments will have an effect on draw weight so it may require several tries to get both settings where you want them.

Step 4 **Arrow Rest/Center Shot**

Next, mount your arrow rest to your bow. Follow the manufacturer's recommendations for mounting and setting the pitch or angle of the launcher, if necessary. (There are many theories about how much tension to put on your arrow rest but I will not discuss that topic in this article.) Setting preliminary centershot on the rest uses a method similar to the one we used on the cable guard. Place a parallel wall arrow shaft against the sight window area of the riser and whatever arrow you are going to shoot on the arrow rest and on the string. You may need to install a temporary nocking point locator to do this.

Now look at your bow from directly above and adjust the centershot of your rest so that the arrows run parallel. I usually set the arrows just a bit outside of center to guarantee good clearance (*see Figure 3*). If you measure with a ruler, set the points about 1/16″ further apart than the nock ends of the arrows. Let me reiterate that this is a preliminary setup position and not a tuning procedure. Once you start tuning the bow you may need to move the rest in or out depending on how you torque your bow.

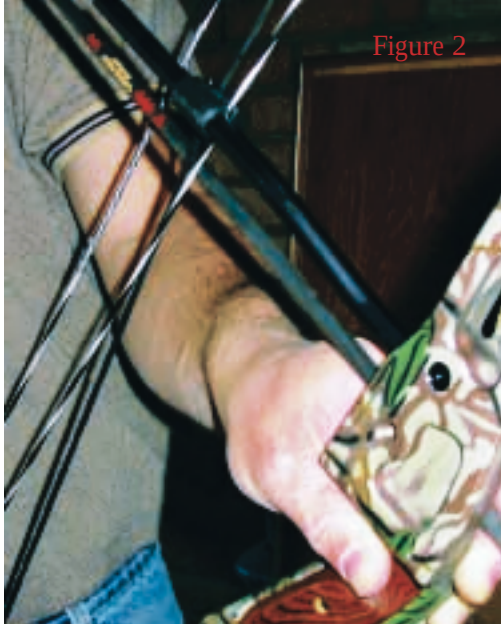


Figure 2


Figure 3


Figure 4

Step 5 **Nocking Point**

To set a preliminary nocking point location I start by placing the arrow on the rest and snapping the nock onto the string. Slide your nock up and down the string until the arrow is running parallel with the shelf of the riser. You may want to hold a parallel wall arrow shaft on the shelf of the riser to make the parallel line easier to see (*see Figure 4*). Generally, I set bows up a little nock high (2-3 serving threads) for a two cam bow and slightly higher (4-5 serving threads) for a single cam bow. Again, this is a preliminary position for your nocking point locator that establishes good clearance and is not bow tuning. When you get to tuning your bow you will probably have to move this setting to accommodate for how you torque your bow and how your bow reacts.

Step 6 **Double Check, Document, and Install Peep**

I always like to go back and double check all my measurements at this time. Any draw length or draw weight adjustment may have affected brace height and axle-to-axle length. Draw length adjustments may have affected wheel orientation as well. Mark your wheel positions with a paint pen now and write down all the information about your bow someplace where you will be able to find it again later. Next, install your peep sight and set it to the appropriate location. This is another good measurement to have written down in your notes.

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Step 7 **Mount Accessories and Shoot**

Finally, you are ready to put your sight on the bow (see any of the great *Archery Focus* articles on setting up sights for details) and set the desired balance and mass using stabilizers (*see Figure 5*). You are now ready to go shoot your bow. Good luck and may you hit what you are aiming at!


Figure 5

David Kronengold *started shooting in 1988, graduated MIT in 1996, and has been with PSE since 1996. He has been a member of the Junior USAT team, Collegiate All-American, and is an NAA Level 2 Instructor.*