

2019 Demon SD DualSync TECHNICAL BULLETIN, 122018r3

Each **DualSync** bow has an adjustable peak weight range of 10 pounds. To adjust peak weight, **first** tighten your limb bolts down to be sure the limbs are evenly adjusted. Count the turns when you tighten the limbs down so you know where you started. A maximum of 5 **Counter Clock Wise** turns from the tightened position is recommended, more than 5 turns and the bow will not perform as advertised. Too many turns and the bow could become un-safe. An inspection hole shows the amount of threads remaining at the end of each limb bolt. Do not shoot the bow unless at least one thread is visible.

No bow press is required to change the draw lengths of a **DualSync** bow. With the **Demon**, all you need to do is **adjust the modules**. Refer to the accompanying chart to determine the correct module location for your draw length. There is no need to retune the bow after the draw length is changed. If you need to remove your cables or cable guard slide be sure to replace them in their original positions or it will affect the way the power cables track in their respective grooves.

Demon DualSync bows include an adjustable draw stop on the upper cam. This draw stop allows you to vary the draw length and/or let-off in small increments **after the modules are adjusted**. As you decrease the draw length, the amount of let-off will also decrease. With an adjustment of approximate ¼ inch, you can vary the let-off from 65% to 75%. It is recommended that the draw stop be positioned in its slot, loose enough that it can slide, short of the desired draw length. Once you draw the bow and the draw stop has slid to its desired position let the bow down and tighten the draw stop. Having only one draw stop is not a problem with the **DualSync** cam design. When one cam stops the other cam stops, no option. If there is any noise caused from the draw stop o-ring contacting the limb, or if you choose to soften the feel of contact, position one of the felt adhesive backed pads included with each accessory package on the upper limb at the point of contact. **DualSync Cams covered by patent 6,990,970, other patents pending.**

Darton's Quad Limb design coupled with its DualSync Cam System provides a new level of smoothness not obtainable before. This has been enhanced with the use of **DARTON's low mount Bowstring Suppression Unit**. **The bumper should be adjusted to just touch the bowstring.** If there is a too large a gap between the rod end and the inside of the bumper your bowstring may be deflected and slide off the bumper. The **BNSS** is adjusted by loosening its set screw and then moving the rod in or out accordingly to position the bumper relative to the bowstring. **Anytime the limbs are adjusted, an adjustment should be made to the BNSS for correct bumper position relative to the bowstring.** Apply bowstring wax to the bowstring in the area that aligns with the suppressor bumper for best results.

DARTON has included their patented **Tuning Mark System** on all **DualSync** bows to assist the individual shooter/tuner in getting optimum performance. By lining up the power cables between the tuning lines on each cam, you will get the advertised draw lengths and performance. The cable lengths are adjusted by first putting the bow in a press to remove tension from the cables. The cables are then adjusted by twisting to make them shorter and untwisting to make them longer. If they are not lined, up or in the same relative position on each cam, you will lose some draw length and stored energy. The shoot-ability will remain the same. Be sure the axle-to-axle measurement is checked after the bow is tuned. The correct measurement will assure good performance.

Loosen the 2 bolts on each module to adjust. Position the module pin in the correct hole for your draw length. Re-tighten 2 bolts. The chart below list the draw length for each module adjustment.

location	#1	#1.5	#2	#2.5	#3	#3.5	#4	#4.5	#5	Axle – Axle	Brace Height	w/100 pound tension		
												Bowstring	Power cable	
				Draw length										
Demon SD	24"	24.5"	25"	25.5"	26"	26.5"	27"	27.5"	28"	30"	7 "	51 1/4"	34 1/2"	

Bowstrings and Power Cable measurements are with twist. Add or subtract twist in Power Cables to get correct tune. Axle – Axle tolerance is +/- 1/16".

For additional warranty or tuning information visit our web site www.dartonarchery.com or call Darton Service at 989-728-9511. To order parts, draw length modules or Darton Apparel call Darton Service at 989-728-4231.

Before pressing bow, back limbs out 4 turns from MAX setting. Darton's warranty does not cover damage to any bow caused by improper use of a bow press.