

2022 MENTOR e - DualSync - TECHNICAL BULLETIN, 040622r10

The MENTOR e uses a unique cable and yoke system that equalizes the torsional stress in the limbs. This results in a more forgiving bow to shoot. With yoke cables anchoring at the axle, outside of the limbs, it maximizes the balancing effect of the yoke system while reducing the load on the cam bearings. Adjusting the yokes can also assist in tuning the bow to your style of shooting. These features also make for an easier bow to service and tune.

Equalizing yoke system covered by patent 8,826,894 B1

Each MENTOR e bow has an adjustable peak weight range of up to 15 pounds. **Available with a peak weight 50 pounds.** To adjust peak weight, tighten limb bolts **Clockwise (CW)** so the limbs are evenly adjusted. Count the bolt turns while tightening the limbs for later reference if you want to readjust the limbs. A maximum of **7 Counter-Clockwise (CCW)** turns from tightened position is recommended. **More than 7 Counter-Clockwise (CCW) may cause damage to the bow.** **DualSync Cams covered by patent 6,990,970 & 8,662,062 B2**

No bow press is required to change the draw lengths of DualSync bows. The only requirement is to have a 1/8" hex wrench to loosen and tighten the adjustable module screws. Refer to the accompanying chart to determine the correct module adjustment for the required draw length. Enhanced by using of the **ACURA CABLE SLIDE**, there is no need to retune the bow after the draw length is changed. If cables and/or cable guard slide are removed for any reason, be sure to replace the cables in their original positions as this will affect the way the power cables and yoke cables track in their respective grooves.

DARTON has included their patented **Tuning Mark System** on all DualSync bows to assist the individual shooter to achieve optimum performance. By lining up the power cables between the tuning lines on each cam, you can achieve the advertised draw lengths and performance. The cable lengths are adjusted by placing the bow in a press to remove tension from the cables. The cables are then adjusted by twisting to make them shorter, 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. Be sure the axle-to-axle measurement is checked after the bow is tuned. The correct axle-to-axle measurement will assure excellent performance.

Darton's Parallel Limb Design coupled with its DualSync Cam System provides satisfying smoothness with each shot. This is enhanced by using the **DARTON's low mount Bowstring Suppression Unit**. **The bumper should be adjusted to just touch the bowstring.** If there is 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. Apply bowstring wax to the bowstring in the area that aligns with the suppressor bumper for best results.

An additional 5/16-24 threaded hole is provided below the Bowstring Suppression Unit for mounting additional accessories such as a counter-balance system.

DARTON's Progressive Torque Reduction Fiber Glass Cable Guard Rod is designed to enhance the shootability of your DS Series bow. By flexing inward as cable tensions increase during your draw cycle it allows more rod offset for better vane clearance when your vanes pass the cables. You do not have to adjust the cable guard rod in or out to compensate for any change in peak weight adjustment or draw length.

A set of Draw Stop Tabs are included with each bow for small adjustments to the module draw stops for less let-off (5-8%).

If there is any noise caused from the draw stop contacting the power cable, 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 end of each draw stop.

In addition to the draw lengths listed below there is a 1/2" adjustment between each numbered adjustment. There are also adjustable limb stop slots located on the perimeter of the cams that allows fine-tuning of the draw length and let-off. This adjustable draw stop is effective from 24" to 28". It must be removed for draw lengths of 28 1/2 to 29". It is recommended you use only one limb stop. **Mass Weight: 3.7 lbs.**

Adj. mark	#1	#2	#3	#4	#5	#6	Axle – Axle	Brace Height	w/100 pounds tension		
									Bowstring	Power Cable	Yoke OAL
w/G2 module			Draw lengths								
MENTOR e	24"	25"	26"	27"	28"	29"	32"	6 1/8"	53 7/8"	27 7/8"	17 1/4"

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". A Darton Spectra Split Yoke is used with the Power Cable lengths listed.

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.