2017

Version 1

Technical Manual for the Mybo Edge Compound Bow

Table of Contents

Introduction

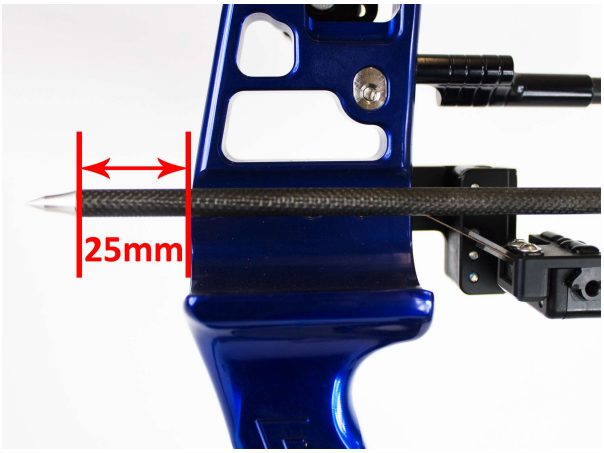
Thank you for choosing the Mybo Edge! We are all very proud of this bow and I hope you enjoy using it. Please feel free to email in some photos! I would love to start a gallery of everyone using these bows. If you have any questions, or need help, you can email us on info@ilovemybo.com.

Also, keep an eye out on youtube for tuning tips and advice from our pro-team. Have fun, and be safe!

WARNINGS

Important!

This bow is a high energy, advanced piece of archery equipment. This technical manual is to assist with the operation of you bow and is not a training manual. Do not attempt to shoot or adjust your bow without adequate training from an archery professional. We recommend you utilise the services of an authorised dealer for adjustment and set up, and a qualified coach for instruction. If you have any doubts on any aspect, please contact your dealer for advice.



Arrow Length

Use arrows that are cut approximately 25mm (1”) in front of the far side of the bow.

If desired you may use arrows of a shorter length, but please be aware that this increases the risk of injury should the point of the arrow be inside the archers hand/fingers.

(See image left)

Arrow Weight

Do not shoot arrows that weigh less than 5 grains per pound of draw weight, or are under spine (too weak). E.g. If your draw weight is 60lbs, do not shoot arrows less than 300 grains.

Inspect each arrow for gouges, scratches and impact fractures. If there are any visible signs of damage, discard the arrow. Do not use wooden or fibreglass arrows.

Visit the website www.safearrow.co.uk for more information on arrow safety.

Dry-Firing and Derailment

Do not 'Dry-Fire' your bow. (Shoot without an arrow). This may damage your bow and possibly cause injury to yourself.

Derailment is a term used to describe the string slipping out of the string track either on let-down or on shot. This is caused by a twisting force applied by the archer to either the string, or the riser, resulting in a significant misalignment between the string groove of the cam and the string. As the string travels forward, the cam is unable to pull the string back into the track and a derailment occurs.

To minimise the risk of derailment, relax the bow grip hand and draw in a smooth, controlled action keeping everything square and straight. Execute a smooth shot. Do not shoot a draw weight that is too difficult to draw smoothly. Take extra care when drawing with fingers, ESPECIALLY on let down. Letting down is the most common cause of a derailment.

Damage caused by dry-firing or derailment is not covered under warranty, but we are sympathetic to these situations. A 50% reduction on parts accidentally damaged by dry-fire or derailment is available.

Cable Guard

Do not draw the bow without a properly installed cable guard! The cams have been designed to be shot with a cable guard.

Nocking points, D-loops and Arrow Rests

The bow must be fully set up with a nocking point, d-loop and arrow rest. Do not try to shoot an arrow without these items correctly installed. If you do not know how to fit these items, or need advice on the best types, please contact your dealer for assistance.

Additional Safety Guidelines

Archery is a safe and enjoyable sport. However, bows and arrows are not toys. Used carelessly they can cause serious harm. A straightforward, common sense approach to safety should be adopted by all. The following points are not the only safety considerations to be aware of.

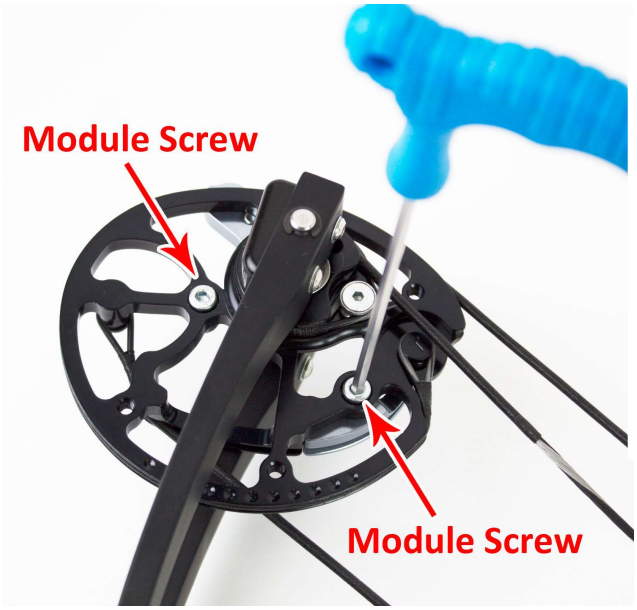
- Never point or shoot your bow at any person or object other than an archery target
- Make sure the area you are using the bow in is completely clear, and that no one could accidentally walk within range of your bow. Be aware of arrow deflection should you miss, as it may travel at extreme angles to the target.
- Spectators must always stand behind the archer.
- Be aware of arrow length. Draw the bow slowly and carefully, making sure the arrow is not drawn too far causing it to fall inside the bow.
- When drawing the bow, keep it level with the target in case of accidental release.
- Children must be supervised by an adult at all times.
- Use armguards and safety glasses when adjusting and shooting your bow. Failure to do so increases the risk of injury.
- Do not shoot your bow with damaged or frayed bowstrings.
- Use only professionally built archery targets that will not damage your arrows.

Draw Weight Adjustment

Limbs can be backed out a maximum of 7 full turns from the fully wound up position.

The amount of poundage change varies depending on the original peak weight. Typically this equates to approximately 17%.

(The limb bolt is M8 and requires a 6mm allen key). Back out both limb bolts by equal amounts top and bottom.



Draw Length Adjustment

Draw length is easily adjusted without the need for a bow press. Remove the module locking screws and remove the module completely. Replace with the desired module and re-tighten. (Modules are available separately.)

(The module screws are M4 and require a 3mm allen key). DO NOT ATTEMPT TO DRAW THE BOW WITHOUT MODULES AND DRAW STOPS FITTED!

Draw Length Chart for 38.5" Edge

Cam 1 (E1)	29" - 32"		Cam 2 (E2)	25" - 30"
Module E1-A	32"		Module E2-A	30"
Module E1-B	31.5"		Module E2-B	29.5"
Module E1-C	31"		Module E2-C	29"
Module E1-D	30.5"		Module E2-D	28.5"
Module E1-E	30"		Module E2-E	28"
Module E1-F	29.5"		Module E2-F	27.5"
Module E1-G	29"		Module E2-G	27"
			Module E2-H	26.5"
			Module E2-I	26"
			Module E2-J	25.5"
			Module E2-K	25"

Draw Stop Adjustment

The adjustable draw stop allows for a highly customizable feel at full draw. To make the most out of the adjustability it is useful to understand some fundamentals.

The purpose of a draw stop is to control the point at which the cam stops rotating. As you approach full draw, the cables come into contact with the stop. (See image). If the draw stop was moved slightly further back, the cam will rotate further, and 3 things happen.

1) Let off increases
2) The 'Valley' increases
3) Draw length increases

It is worth noting that the primary reason for adjusting the stop is to control the let-off and valley. It should not be used to control draw length. (Draw length is controlled via the modules as described earlier). The draw length change by moving the stop is very small and should be viewed as a side effect of changing the let off.

Micro draw length adjustments can be achieved by twisting of the string or cables. E.g. A few twists on the string will shorten the draw. A few twists on the cables will lengthen the draw. Please visit your dealer for micro adjustments as a bow press will be required.

The ability to adjust the let-off and valley has a direct effect on how comfortable you feel at full draw, how you aim and how you execute the shot.

In addition to the adjustments described above, you can also move the draw stop vertically.

This will change in the feel of the 'hardness' of the stop at full draw. The further away from the centre of the cam, the harder the stop feels. The nearer in to the centre, the softer the stop feels.

The difference in feel is very subtle, and may not be immediately noticeable for the newer archer. But for the experienced archer who may have a very particular preference it is a very useful addition.

(See Image below)

Experiment to find your optimal position.

<u>Warning!</u> Do not attempt to draw the bow without the draw stop fitted! This will cause the bow to 'lock-up' at full draw leaving the bow in an un-safe position.

Cam Timing / Synchronisation

Ensure that the top and bottom cams are synchronised by viewing the contact points where the cables hit the stops.

The cables should hit the stops at the same time. If one cable hits before the other, then they are not fully synchronised.

Ask a friend to watch the contact as you draw back. Be careful to only draw gently against the stops, to properly view the contact. If you pull hard on the stops when there is only a small difference, then one cable may flex, hiding the error.

Adjustment to synchronisation is performed by twisting one of the cables.

Please visit your dealer for micro adjustments as a bow press will be required.

Custom Draw Stops

If you prefer a shorter valley with a lower let-off, beyond what you can achieve with the standard draw stops we have something just for you!

Our 'XL Draw Stops' are available separately.

Cam Rotation

On all cam sizes there are a series of dots around the perimeter of the cam. This is a guideline for the start position of the cam.

The factory default position is 2 dots visible above the limb face.

It is ok to shorten the draw length by twisting the string, or even using a slightly shorter string to fine tune draw length.

The maximum (longest) cam rotation allowed is when the first dot is just hidden under the limb. The minimum (Shortest) cam rotation is 4 dots visible above the limb.

(Please note that maximum poundage will change slightly if shortening or lengthen the string)

Maintenance

A bow is a mechanical device subject to stress, vibration and wear and tear. Periodic inspection and maintenance will ensure trouble free use.

Use a string wax, such as 'Bohning Seal-Tite' regularly to prolong the life of your strings and cables.

Do not shoot strings and cables that show signs of damage or have broken strands. We recommend changing your strings and cables once per year, or sooner if the need arises.

Before shooting, check all screws are tight and inspect the bow for damage.

Do not store your bow wet, and be careful not to leave your bow in or near heat sources. The most common heat related damage is when bows are stored in cars on hot sunny days. Think of your bow as a finely tuned musical instrument and treat it as such.

The cam bearings are sealed and fully stainless steel. Lubrication is not required.

Be careful of bumping your limbs against hard objects and particular caution should be paid to using any bow stands that clamp on the limbs, and items that may move around your bow case when stored.

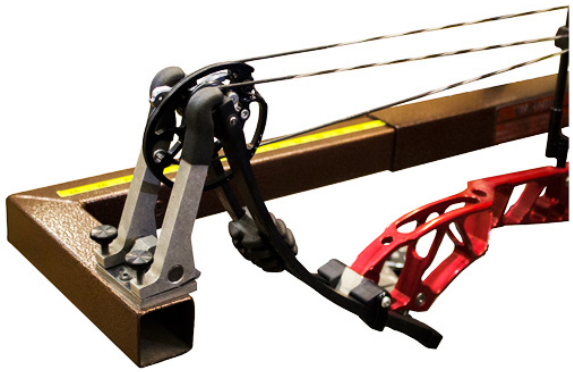
Clean your bow with a soft, slightly damp cloth. Do not use solvents.

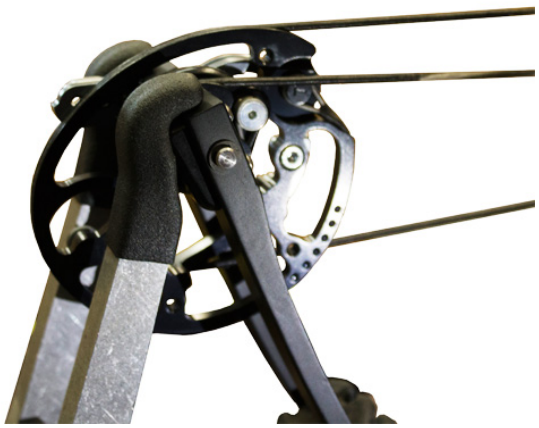
Bow Presses

Your bow can only be serviced in a bow press and should be done only by an authorised dealer.

Only bow presses that compress the bow by the limb tips are permitted. Other types of presses, such as those that use rollers resting on the limb faces, are not permitted and WILL damage your bow.

Bow press damage is not covered under warranty.





Cable Guard Adjustment

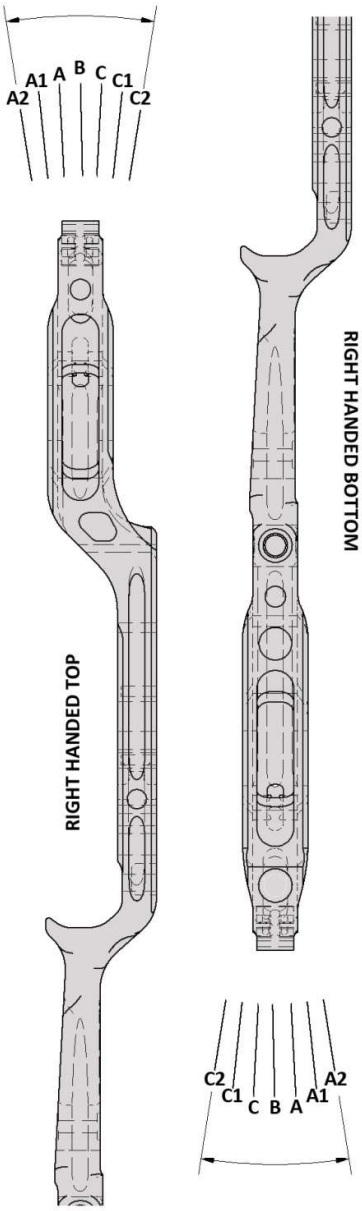
The angle of the cable guard can be adjusted to maintain correct fletching clearance.

To rotate the cable guard, undo the locking clamp, rotate to desired position, and re-tighten.

Cable Cross Over

Ensure cables are crossed below the cable slider and arranged to minimise pressure.

Do not draw the bow without the cable guard installed and properly configured!



Lateral Limb Block Adjustment

The Edge features a unique Limb Block system. This feature has been added to provide an additional tuning aid and alignment mechanism. 99% of the time the factory shipped settings will be correct. But in some circumstances an archers technique can influence the tuning of a bow in the horizontal plane beyond the point of normal tuning adjustments.

This adjustment block is a separate component fitted between the limb pockets. It is mounted directly on to the riser. Switching this block out to a different block will move the limb tips horizontally, changing the horizontal string alignment through the bow. The will affect how the bow tunes in the horizontal plane. E.g. Left/Right paper tears

This is not an adjustment that we recommend experimenting with until all other tuning avenues have been exhausted. Normal factors that can influence a horizontal paper tear can be:

- arrow spine
- arrow rest centre shot adjustment
- bowstring to face contact
- bow hand placement
- side rod configuration

Changing the blocks requires an experienced bow technician and disassembly of your bow. Contact your dealer for help, or contact us directly for additional information.

Please note that it is quite normal to have different lettered blocks top and bottom. The adjusters are used during assembly at our work shop to obtain the desired alignment to aid tuning.

Available blocks are lettered: A2 / A1 / A / B / C / C1 / C2. The diagram to the left shows the direction the limb tips will move with the corresponding block installed.

String and Cable Charts

DIMENSIONS						
Cam E1 – 29”-32”				Cam E2 – 25”-30”		
String	End Serving 1	End Serving 2		String	End Serving 1	End Serving 2
60.5”	16"	16"		57.125"	14"	14"
Cable	End Serving 1	End Serving 2		Cable	End Serving 1	End Serving 2
43"	6"	10"		43"	6"	10"
Axel to Axel Length				Axel to Axel Length		
38.5” (+ - 0.25”)				38.5” (+ - 0.25”)		
Brace Height				Brace Height		
7.625” (+ - 0.25”)				7.5" (+ - 0.25”)		

It is recommended that the cables are served through the cable slider to reduce wear.

Warranty

Your Edge is guaranteed to be free of defects in materials and workmanship for a period of 3 years.

After 3 years, and subject to available compatible components, a 50% discount will be offered on replacements parts.

If your item should develop a fault, first contact the dealer where the item was purchased. We will then work with the dealer to resolve the problem as quickly as possible.

The part will either be repaired or replaced. If we replace the part, we reserve the right to change it to a different or newer designed alternative.

Issues not covered under warranty are:

- Fair wear and tear
- Paint finish, anodising, chips, scratches or dents
- Stripped threads, rounded or broken screw heads
- Wearable items such as bearings, axels, cable slides, cable guards, strings and cables
- Accidental damage, including issues caused by Dry-Fire, derailment, modification or misuse.

This warranty is to the original owner and is not transferable.

Mybo is a division of Merlin Archery Ltd.

Unit 1, Great Central Trading Park, Great Central Road, Loughborough, Leicestershire. LE11 1RW. UK

www.ilovemybo.com