



# Mayflower Introduction to Compound Bows

The *Mayflower Shooting & Range Safety Rules* outlines the guide to safe shooting. These rules if contravened could result in the dismissal of the archer or worst yet the closure of the club.

Therefore, this small brief will give archers an introduction to compound archery covering required maintenance and safety.

Whether you're an experienced compound archer, or one who has recently changed over to compound, these are the things we wish to cover.

- Bow draw/mass weight.
- Peep sight install.
- String inspection
- Cam rotation & cam valley
- Release aids – Thumb trigger, back tension & wrist release
- D-loop
- High draw
- Letting down

Compound bow equipment can be far more complicated than recurve bows, and it would be advisable to seek advice from either Mayflower head coach, local archery shop or an experienced archer before venturing into this discipline.

## **Bow weight draw/mass**

For those who have recently moved over to compound you may have noticed the mass weight has increased significantly. We recommend going in light and building up over time so that you have full control over the bow. The maximum competitive draw weight allowed under AGB rules is 60lb. We strongly recommend that you keep to this ruling since these bows can cause huge amount of damage. Also, with this high velocity, arrows can gain exceptional distances over any recurve or longbow. Therefore, Mayflower Archers reserve the right to check compound draw weights to make sure they are kept under the 60lb ruling.

## **Peep sight**

The peep sight is your back sight, just like the string on a recurve bow. With many different manufactured peep sights, the one common thing you need to do is making sure it is secured to the string. It is recommended that they are tied in top and bottom of the string rather than relying on the force of the strands to hold it in place. Seek advice from Mayflower head coach or your local archery shop on how to do this. Additionally, we hold a string making course once a year where we can demonstrate these techniques.

## **String inspection**

We recommend you periodically check your string and serving for any breaks. Compound Cams and the shear forces they generate through the bow could cause the serving to move over time. Wear of this nature, whether it be serving movement or furring of the string, could cause the bow to fail if left unchecked. Periodically wax your string to stop the strands from furring up. If the serving has separated and the repair can be done, please seek advice from Mayflower head coach or local archery shop. Broken strands on compound bows are extremely dangerous and require attention immediately as the strings internal strength has been weakened.

### **Cam rotation and function**

There are four different types of Cam used on a Compound Bow: single, twin, hybrid and binary. Whilst each cam offers a different feel and way of shooting, it is how it operates which is more important. The strain the strings are under can have certain effects on the Cam. Things like Cam lean and rotation can be affected by the strings or cables stretching. Visual checks of the Cam making sure it is not leaning to one side will save on string wear and bow failure. When it comes to Cam timing you might feel slight bounce when at full draw where the Cams are not meeting up correctly, but this easily corrected with a bow press. Lastly Cams have a *valley* which, can vary dependent on the bow model, with 60-70% let off or even higher. When shooting 60lb with a 60% let off you would only have 32lb on the fingers. It is the valley that allows for this drop in poundage when pulling the string over the cam. Once you are comfortable shooting the bow, be aware that a simply flinch could cause a miss fire. Our recommendation if caught in this situation is to use the 3m safety line and fire the arrow into the ground. Under most competition conditions, you can then reshoot your arrow.

### **Release aids**

There are many manufacturers who make release aids whether it be back tensions or thumb release. Which you shoot would be a personal choice, just be aware that these can fail causing a miss fire. Most aids have a safety trigger. We recommended that you purchase one that does. Regular maintenance on your release aid is advised. Since it is a spring or catch which controls the trigger recognise that these can wear or rust over time. Read the instructions or seek your local shop or Mayflower head coach advice.

### **D-loop**

A D-loop is a piece of cord wrapped around the centre serving nocking point. We recommend you inspect this every time before you start shooting. It is prone to wear and tear and only held on to the string by looping round and burning the ends. We can offer instruction on how to tie these at the next string making course. Otherwise speak to your local archery shop or Mayflower head coach for advice.

### **High draw & letting down**

## **High draws are dangerous.**

Our boundary lines are set by Archery GB rules to protect the club as well as the public. If this protective area were to be breached this could result in the dismissal of the archer or removal of the club from the site. As mentioned throughout this brief, bow maintenance is key to stopping any miss fires occurring. When drawing a compound bow you are required to raise the bow no higher than eye line as these bows have the capability to exceed the boundary lines. The 3m safety line is there to help if you ever have the need to come down from full draw.

*Mayflower Archers*  
*July 2023*