

# **Recurve Bow Tuning**

By Andy Taylor

# Why Tune a bow

Tuning harmonises the bow/arrow/archer combination

This results in good, consistent arrow flight, which is more tolerant of shot variations

This gives consistent grouping at the level the archer can shoot



# Good basic arrow flight

#### Align Arrow Nodes



# Initial set-up assumptions

Basic set-up has been done

- Tiller
- Centreshot
- Bracing height
- Basic nocking point setting

Arrows are correct spine (from Easton charts etc)

# What do we adjust?

- Nocking point
- Centreshot
- Button Pressure
- And maybe more if we find the arrows are the wrong spine for the bow/archer

#### Point to note

#### Before you start:

Record everything – if it all goes wrong you can put it back as it was

And record changes at each stage

# Bare Shaft Tuning Test

- This is a good basic test for correct arrow spine and for getting the nocking point and pressure button set up fairly well
- Shoot at around 15m to 18m (15yd to 20yd)
- Shoot 3 fletched and 2 or 3 unfletched arrows
- Note all diagrams are for a right handed archer. Reverse them horizontally for a left handed archer

## Nocking Point Adjustment



Nocking point too high

Nocking point too low

#### Pressure Button Adjustment



Button spring too stiff

Button spring too weak

#### Good Initial Tune



Before you go any further.....

#### **Record everything**

# Walkback Tuning

- Helps fine tune centreshot and spring
- Shoot from 10m to 40m or 50m, in 5m intervals
- Fletched arrows only
- Do this on a fairly calm day

Before you start:

- Have a good tune from bare shafts
- Make sure you've recorded all your settings
- Adjust sight so arrows hit about 6" from top of boss when aimed at gold at 5m. Or use tape to mark an aiming point

#### Walkback patterns - centreshot



# Walkback patterns – spring pressure



Spring is too stiff

Spring is too weak

## Summary

- We can only tune as well as we can shoot
- We tune the system, not the bow
- If anything changes (form, equipment, arrows) we should retune

#### References

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