



**ARCHERY CLUB**

**COMPOUND BOW CLASS**

# Course Instructor

## Jerry Hoppe



- Highly Experienced and Successful Archer
- 40+ years of Competition
- National/World Line Judge
- Previous OAC Board Member
- Mentor to Many of Our Club Members!

# Tell us About Yourself

- Name
- Archery Background
- Type of Bow or Bow of Interest
- Recreational or Competition?
  - Distances can be a factor in both

# Overview

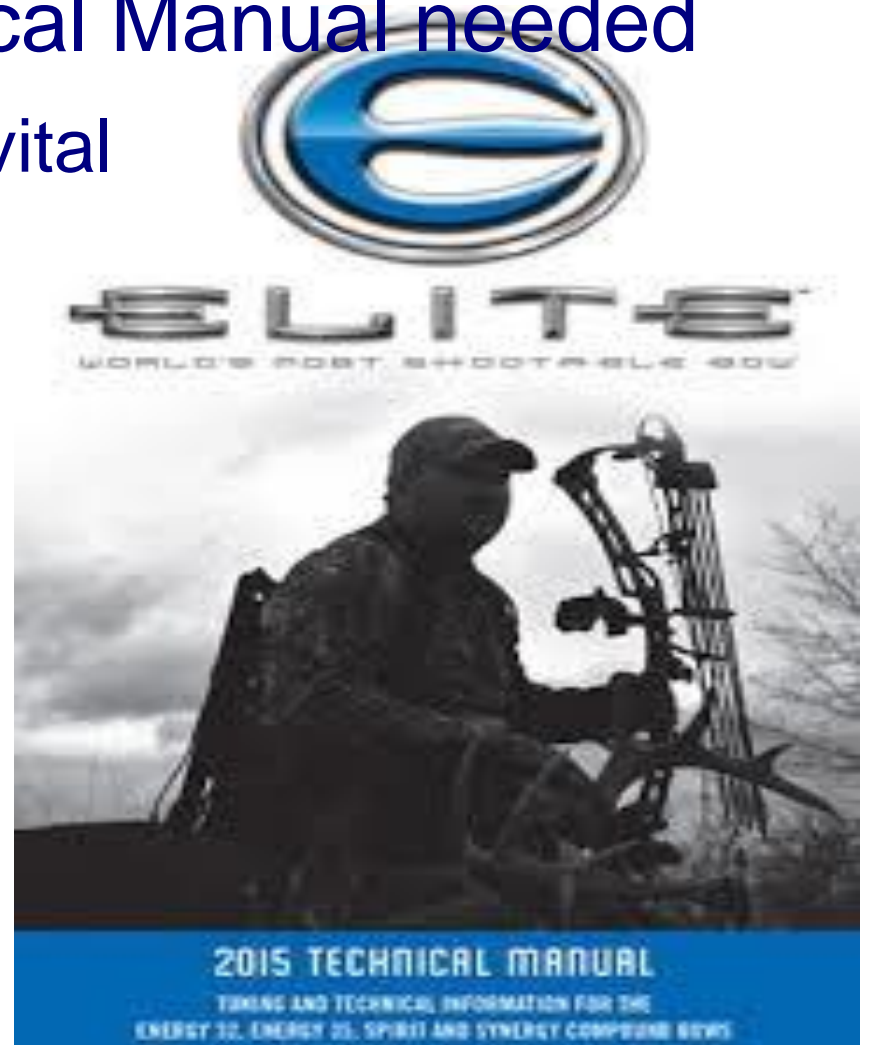
- Compound bows from the factory
- Adjustability of Compound bows
- Initial setup of a Compound bow
- Mounting equipment
- Tuning

# Out of the Box

- Target bows are not 'ready to shoot'
- At a minimum will need an arrow rest
- Compounds have high degree of adjustability
- Factory Settings / Low Level

# Factory Settings

- Manufacturer's Technical Manual needed
  - Specs and settings are vital
- Low Level Tune



# Factory Settings

- Brace Height
- Axle to Axle Distance
- Cam Timing
- Tiller Setting
- Yoke Adjustment
- Cam Lean

# Install needed equipment

- Arrow rest
- Nock point
- D-Loop
- Sight / Scope
- Peep Sight
- Stabilizer Mounts / Stabilizers



# Various Arrow Rests

- Full Capture aka biscuit type
- Blade as Shown
- Prong
- Drop Away

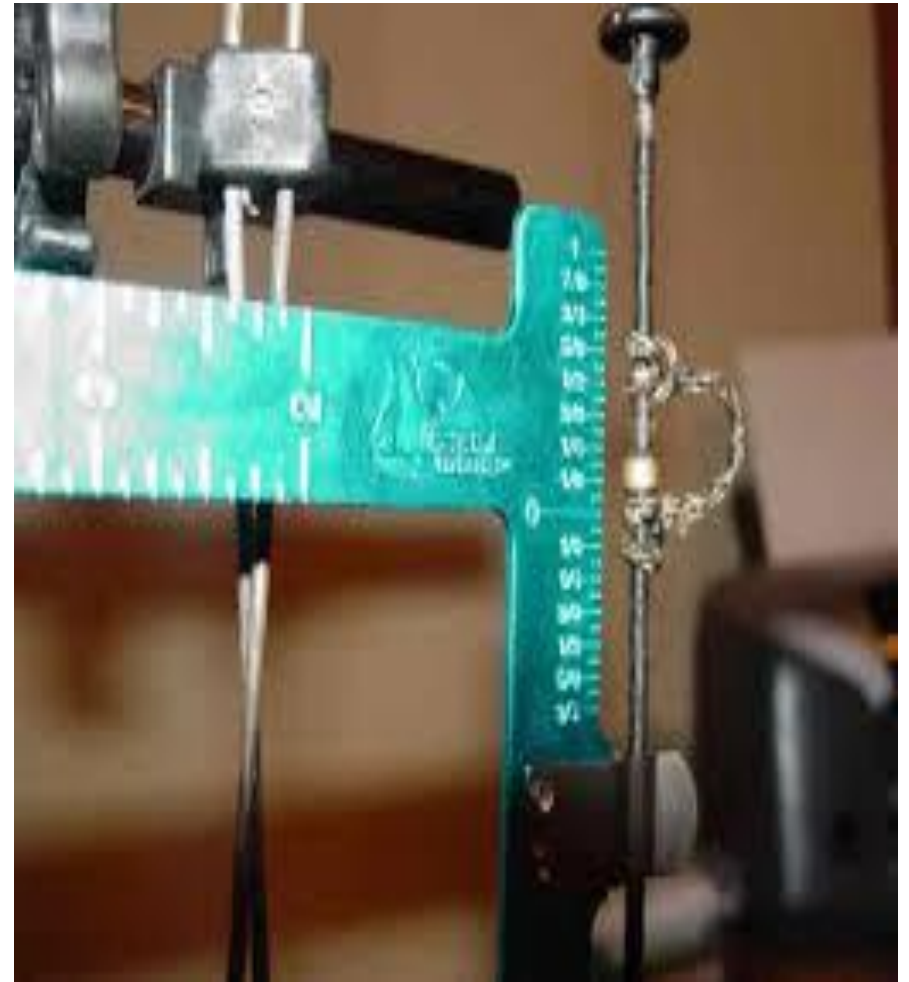
# Arrow Rest



BOGEN  
(SPORT)  
SHOP.eu  
Ihr Bogensport-Versand  
aus der Euregio!

Comes in Different Weights: .08, .10, and .12

# Nocking Point



# D-Loop



# Sight / Scope



scope not included





# Peep Sight



Consistent Anchor Point

# Threaded Peep Sight





# Aperture Sizing



**1/8"**  
**#746**



**3/32"**  
**#745**



**1/16"**  
**#744**

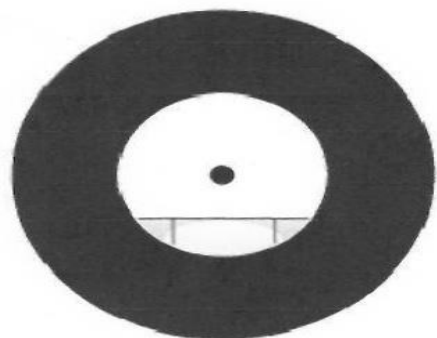


**3/64"**  
**#743**

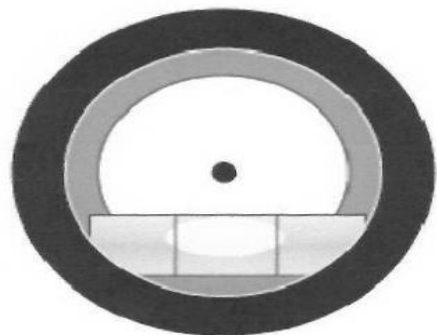


**1/32"**  
**#719**

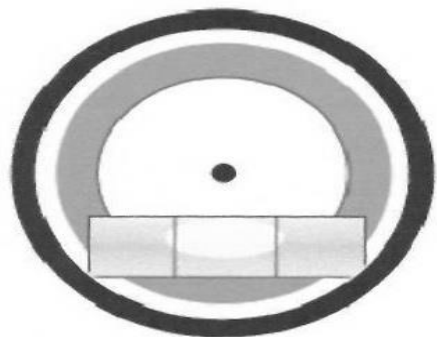
# Peep – Scope / Concentric Circles



PEEPSIGHT  
TOO SMALL



PEEPSIGHT  
CORRECT



PEEPSIGHT  
TOO BIG

# Scope Lenses

- Magnification: 2X, 4X, 6X, & 8X
- Anything Over 4X usually needs a “Clarifier”
- Why would you need a clarifier?

# Clarifiers



# Verifiers



# Stabilizers



# Release Aids

- Four Basic types of Release Aids
  - Index Finger
  - Thumb Trigger
  - Resistance Activated
  - Back Tension (hinge)

# Index Finger Release





# Thumb Trigger



# Back Tension (Hinge)



# Resistance



# Compound Set Up and Adjustment

- Shooting Targets is about ACCURACY
  - If you care where your arrows are hitting, then you really need to understand this information!
- Why do I need to know Set Up and Adjust ??
  - Nearest Dealer/Shop is Ocala
  - Nearest Dealer/Shop that KNOWS TARGET
  - UNKNOWN

# Common Adjustments

- Initial Adjustments Needed
  - Draw Weight
  - Draw Length
  - Nock point
  - Center Shot
- Some Bows have wide range of Adjustment
- Others may be very limited

# Adjusting Draw Weight

- Usually a 10 lb. Adjustment range
  - 50lb Limbs (Draw Weight) Adjusts to 40-50lbs
  - Some Bows have a wider range of adjustment
- Adjusted by limb bolts
- How much Draw Weight to reach 60 yds?



# Adjust Limb Bolts

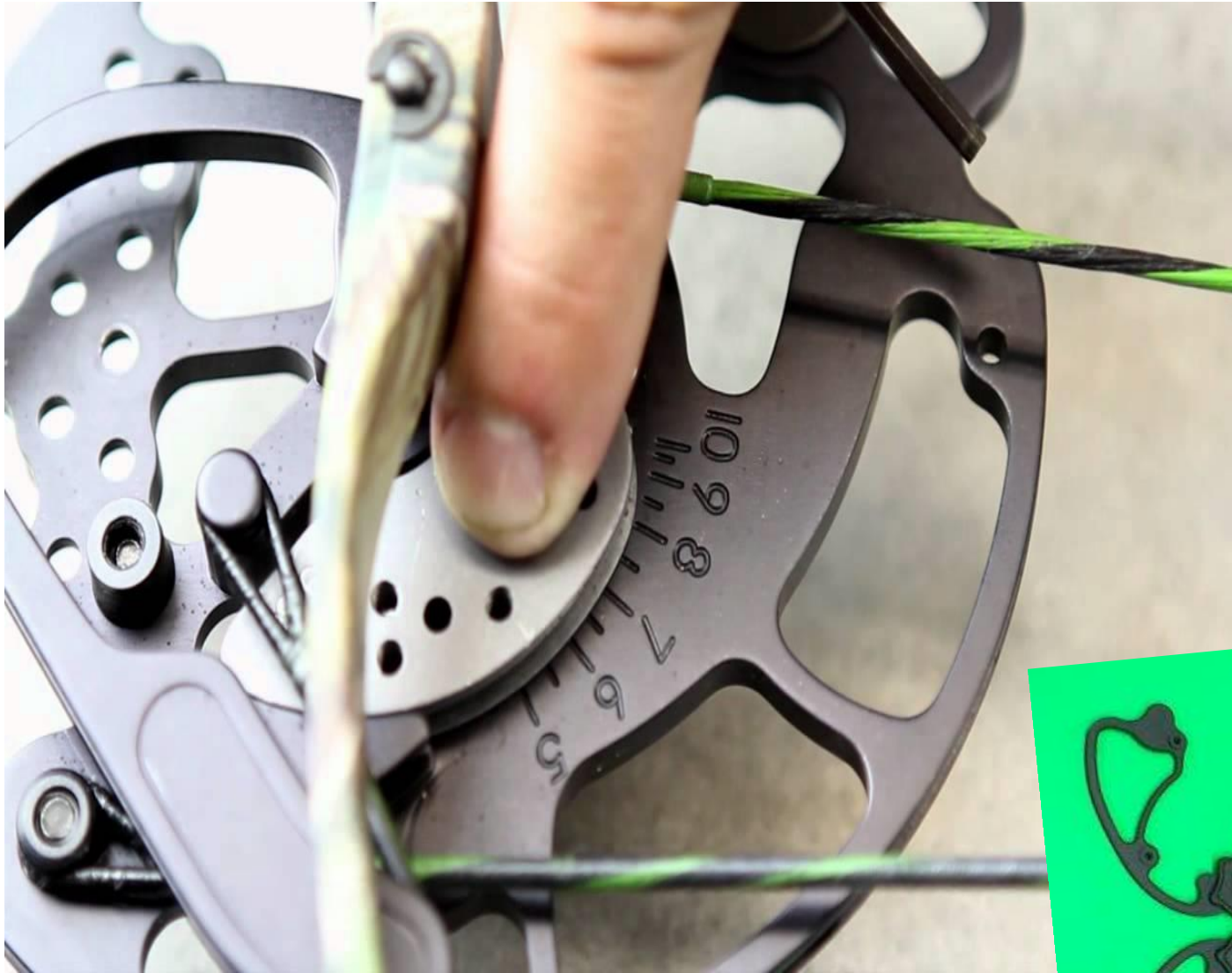


# Draw Length

- Modules and Module positions
  - Adjustment on Module
  - Different Module
  - Different Cam Set



# Draw Length Adjustment Modules



# Set Arrow Rest Height

- Arrow should center on Berger Button Hole
  - Starting Point
- Level and perpendicular to bow string or slight Downward angle

# Arrow Rest Setting



# Set Nocking Point Height

- Arrow should be perpendicular and level
- D-Loop can be used as nocking point
- Finger Shooters – no D-Loop

# Set Center Shot

- Arrow comes DEAD Straight off Arrow Rest
- Alignment of Bow String and Arrow to Center of Bow – Vertical alignment
- Adjusted at arrow rest

# Set Center Shot



# Selecting Arrows

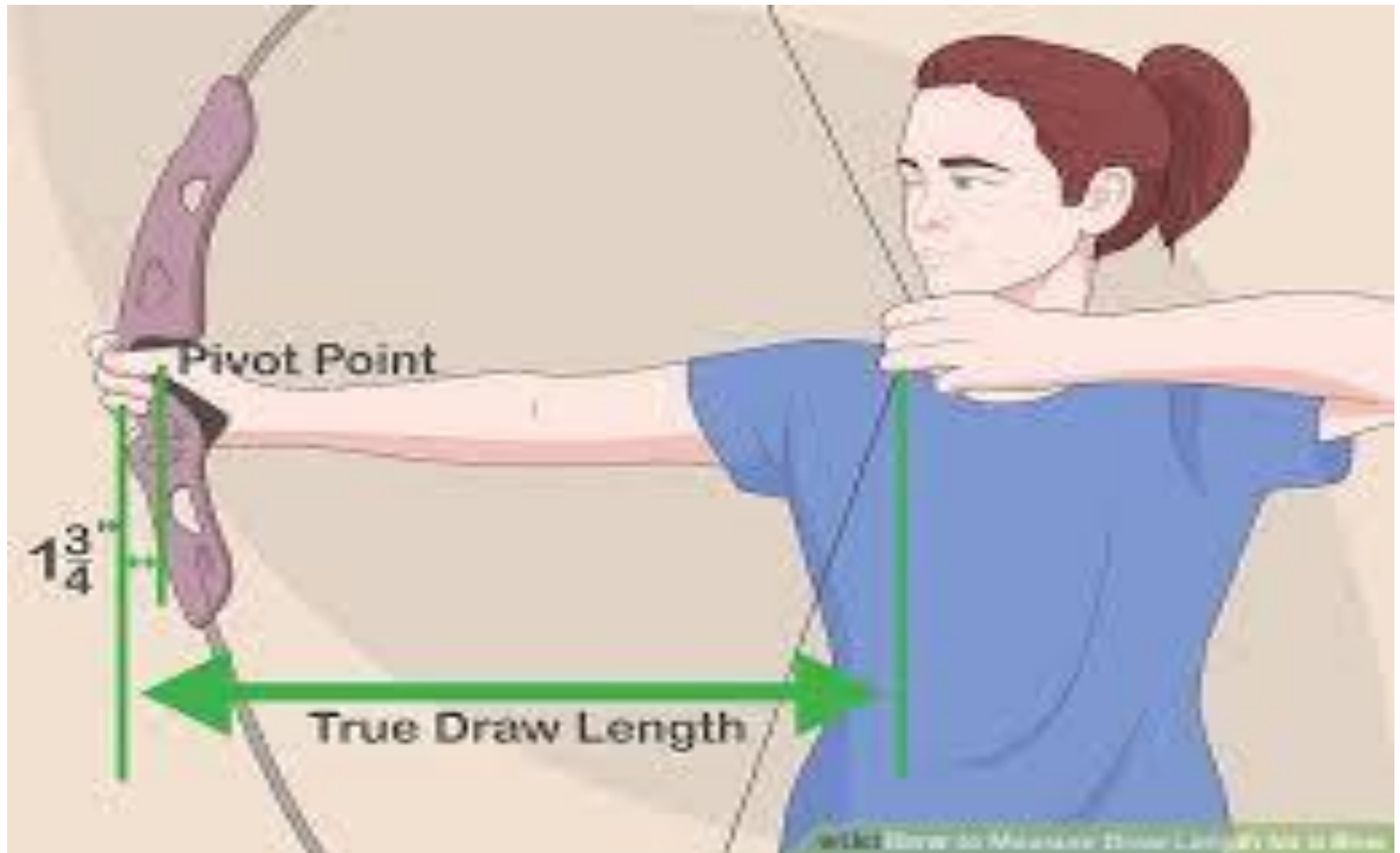
- Proper Arrows before Tuning



- Overview of selecting correct arrows
  - Correct Length
  - Correct Spine

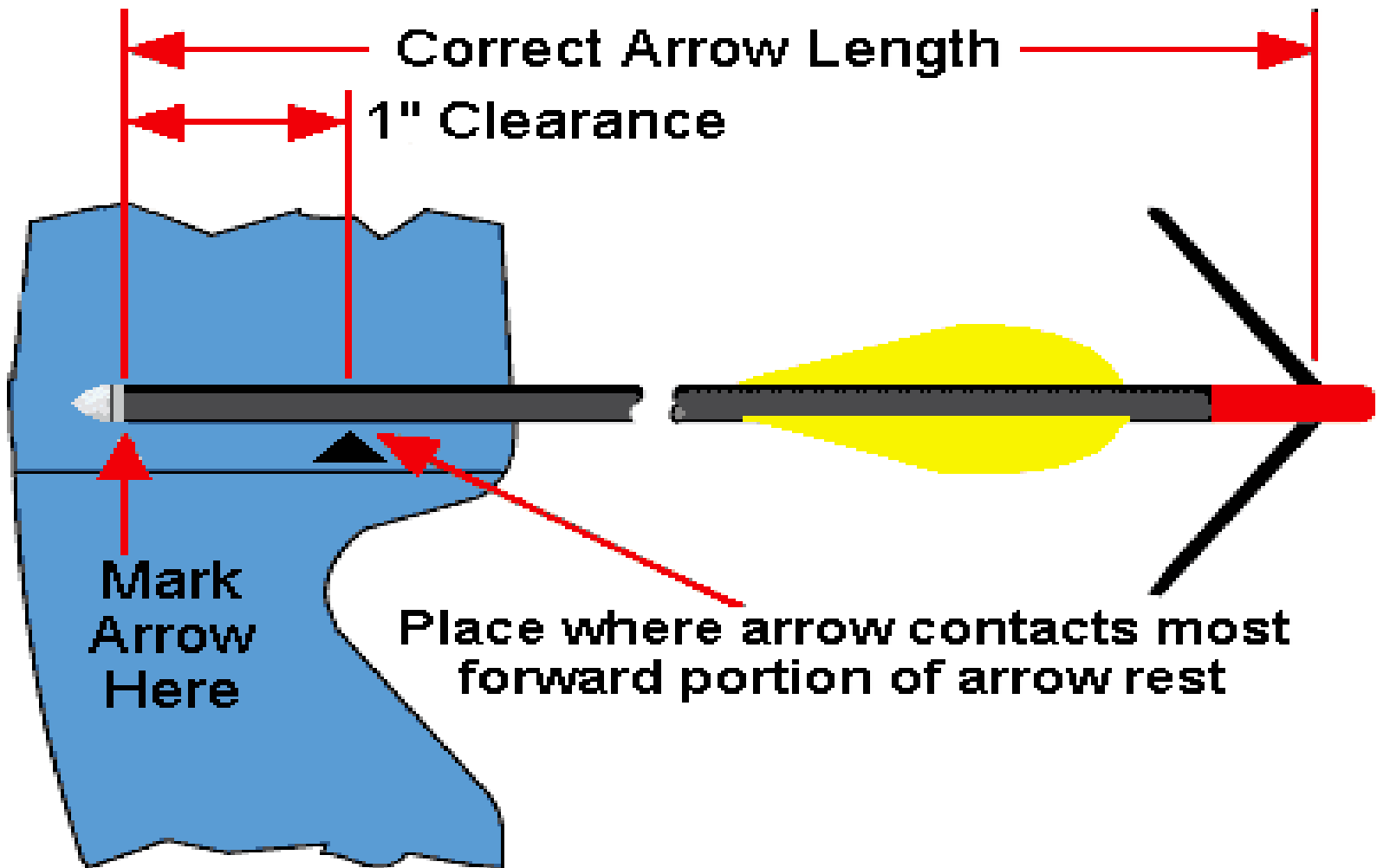


# True Draw Length





# Arrow Length



# Arrow Length & Spine

- Choose a proper length arrow
  - Draw Length + 1" (Minimum)
- Use an 'Arrow Chart' to select correct spine
  - Length of Arrow NOT draw length

# ARROW SELECTION

COMPOUND BOW – Release Aid Calculated Peak Bow Weight – lbs

YOUR ARROW

LENGTH FOR TARGET • FIELD • 3D

RECURVE BOW

Bow Rating - up to 275 FPS	Bow Rating - 276-300 FPS	Bow Rating - 301-320 FPS	Bow Rating - 321-340 FPS	23"	24"	25"	26"	27"	28"	29"	30"	31"	32"	Bow Weight - lbs. - Finger Release
29-35 lbs. (13.2-15.9 kg)				00	01	02	03	T1	T2	T3				21-27 lbs. (9.5-12.2 kg)
35-40 lbs. (15.9-18.1 kg)	29-35 lbs. (13.2-15.9 kg)			01	02	03	T1	T2	T3	T4	T5			27-32 lbs. (12.2-14.5 kg)
40-45 lbs. (18.1-20.4 kg)	35-40 lbs. (15.9-18.1 kg)	29-35 lbs. (13.2-15.9 kg)		02	03	T1	T2	T3	T4	T5	T6	T7		32-36 lbs. (14.5-16.3 kg)
45-50 lbs. (20.4-22.7 kg)	40-45 lbs. (18.1-20.4 kg)	35-40 lbs. (15.9-18.1 kg)		03	T1	T2	T3	T4	T5	T6	T7	T8	T9	36-40 lbs. (16.3-18.1 kg)
50-55 lbs. (22.7-24.9 kg)	45-50 lbs. (20.4-22.7 kg)	40-45 lbs. (18.1-20.4 kg)	35-40 lbs. (15.9-18.1 kg)	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	40-44 lbs. (18.1-20.0 kg)
55-60 lbs. (24.9-27.2 kg)	50-55 lbs. (22.7-24.9 kg)	45-50 lbs. (20.4-22.7 kg)	40-45 lbs. (18.1-20.4 kg)	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	44-48 lbs. (20.0-21.8 kg)
60-65 lbs. (27.2-29.5 kg)	55-60 lbs. (24.9-27.2 kg)	50-55 lbs. (22.7-24.9 kg)	45-50 lbs. (20.4-22.7 kg)	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	48-52 lbs. (21.8-23.6 kg)
65-70 lbs. (29.5-31.8 kg)	60-65 lbs. (27.2-29.5 kg)	55-60 lbs. (24.9-27.2 kg)	50-55 lbs. (22.7-24.9 kg)	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	53-57 lbs. (24.0-25.9 kg)
70-76 lbs. (31.8-34.5 kg)	65-70 lbs. (29.5-31.8 kg)	60-65 lbs. (27.2-29.5 kg)	55-60 lbs. (24.9-27.2 kg)	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	58-62 lbs. (26.3-28.1 kg)
76-82 lbs. (34.5-37.2 kg)	70-76 lbs. (31.8-34.5 kg)	65-70 lbs. (29.5-31.8 kg)	60-65 lbs. (27.2-29.5 kg)	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15	63-67 lbs. (28.6-30.4 kg)
82-88 lbs. (37.2-39.9 kg)	76-82 lbs. (34.5-37.2 kg)	70-76 lbs. (31.8-34.5 kg)	65-70 lbs. (29.5-31.8 kg)	T7	T8	T9	T10	T11	T12	T13	T14	T15	T16	68-73 lbs. (30.8-33.1 kg)

For ATA Speed of 341-350 FPS: Start in 321-340 FPS column, drop down one row in chart:

Examples: 58B-31in-345 FPS: drops down one row, still in Group T13  
46B-28in-345 FPS: drops down one row, shift from Group T8 to Group T9

For ATA Speed of 351+ FPS: Start in 321-340 FPS column, drop down two rows in chart:

Examples: 59B-31in-355 FPS: drops down two rows, shift from Group T13 to Group T14  
47B-28in-355 FPS: drops down two rows, shift from Group T8 to Group T10

Size	Spine	Model	Weight Gr/inch	Size	Spine	Model	Weight Gr/inch	Size	Spine	Model	Weight Gr/inch	Size	Spine	Model	Weight Gr/inch
1800	1.800	Carb1	3.6	2.90	1.500	A/C/G	4.7	1250	1.250	A/C/E	5.1	1100	1.100	A/C/E	5.1
1800	1.800	Apollo	3.6	1500	1.500	A/C/G	4.7	1300	1.300	A/C/G	5.1	1150	1.150	A/C/G	5.5
1800	1.800	Inspire	3.6	1600	1.600	Carb1	3.8	3L-00	1.300	A/C/C	5.1	3-00	1.150	A/C/C	5.5
1214	2.501	75	5.9	1600	1.600	Apollo	3.8	1400	1.400	Carb1	5.2	1150	1.150	Carb1	5.0
1413	2.036	75	5.9	1600	1.600	Inspire	3.8	1400	1.400	Apollo	4.2	1200	1.200	Inspire	7.2
				1416	1.684	75	7.1	1400	1.400	Inspire	4.2	1200	1.200	Apollo	5.5
				1516	1.403	75	7.3	1400	1.400	Vector	3.9	1000	1.000	Vector	5.0
								1514	1.379	X7	6.8	1614	1.153	X7	7.7

Size	Spine	Model	Weight Gr/inch	Size	Spine	Model	Weight Gr/inch	Size	Spine	Model	Weight Gr/inch	Size	Spine	Model	Weight Gr/inch
*920-100R	0.920-1.000	A/C/E	5.8	*780-850R	0.780-0.850	A/C/E	6.0								
*900-1000R	0.900-1.000	X10	5.8	*750-830R	0.750-0.830	X10	6.4								
*880-1000R	0.880-1.000	A/C/G	5.9	770	0.770	ProTour	6.0								
2L-04	1.020	A/C/C	6.1	*810-880R	0.810-0.880	A/C/G	6.1								
2-04	0.920	A/C/C	6.5	2-04	0.920	A/C/C	6.5								
900	0.900	Carb1	5.3	810	0.810	Carb1	5.8								
1070	1.070	Apollo	5.9	950	0.950	Apollo	6.2								
1000	1.000	Inspire	7.2	900	0.900	Inspire	7.7								
1000	1.000	Vector	5.0	1714	0.963	X7	8.1								
1713	1.044	75	7.4	1716	0.880	75	9.0								
1714	0.963	X7	8.1												
1616	1.079	75	8.4												

## KEY

- A/C/E** Aluminum/Carbon/Extreme
- X10** X10 Shafts (Aluminum/Carbon)
- ProTour** X10 ProTour Shafts (Aluminum/Carbon)
- A/C/G** A/C/G (Aluminum/Carbon)
- A/C/C** Aluminum/Carbon/Composite
- FMJMatch** FMJ Match
- Carb1** Carbon One
- Apollo** Apollo
- Inspire** Inspire
- LSpd** LightSpeed & LightSpeed 3D
- SDRIVE 25** Super Drive 25
- SDRIVE 23** Super Drive 23
- FB** FatBoy
- FBORE** Full Bore
- X7** X7 Eclipse (7178-T9 alloy)
- 75** XX75: Platinum Plus, Tribute, Jazz and Neos (7075 alloy)
- R** The size recommendations for recurve bows are indicated with a letter "R" next to the size.
- Size** Indicates suggested arrow size
- Spine** Spine of arrow size shown (static) ATA standard
- Model** Designates arrow model
- Weight** Listed in grains per inch average for barrelled or tapered shaft

Every effort has been made to ensure the accuracy of this catalog. Graphics and images are for illustration purposes only. Due to on-going efforts to improve our products, Easton reserves the right to make changes without notice. 2018 products available for sale on or after December 1, 2017.

\* When two sizes are listed together, the weight listed is for the first shaft.

# What Arrow Do You Choose?

- Use the Arrow Chart
- Compound Bow Draw Weight = 44lbs.
- Archer's Draw Length = 29"
  
- Calculate True Draw Weight / Arrow Length
- Find a suitable arrow

# Initial Set Up vs. Tuning

- Initial Set Up is not 'Fine Tuned' for Accuracy
- Tuning improves efficiency and accuracy
- Tunes to Your shooting style

# Why Should I Tune ?

- Shooting 'Yellow' @ 20, 40, 60
  - Might want to skip additional tuning
- NOT hitting 'Yellow'
  - Not necessarily the fault of Tuning
  - Form is as important
  - Tuning is a good place to start

# WHEN Should I Tune?

- Shooting 'reasonable' group sizes
  - 4" at 20yds, 6" at 40yds, 8" at 60yds
- Consistently off your mark
- Different Distances need windage Adjustments

# Why We Tune

- Achieve Straight Arrow flight
  - Proper Vertical / Horizontal Plane
- Insure Bow tolerances are in line
- All components aligned to Bow
- Match Arrows to Bow
- May be Re-establishing settings after re-string

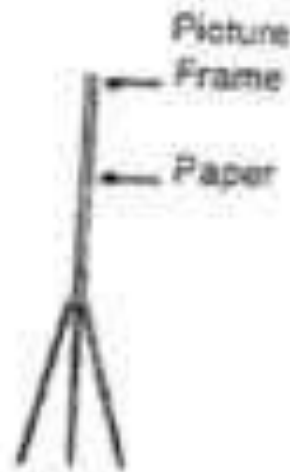


# A Tuning Process

- Paper Tuning
- Sight/Scope Tune, Adjust and Level
- Walk Back and/or French Tuning
- Stabilizer Tune, Adjust and Balance

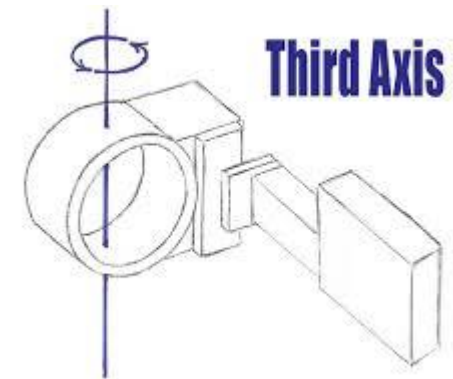
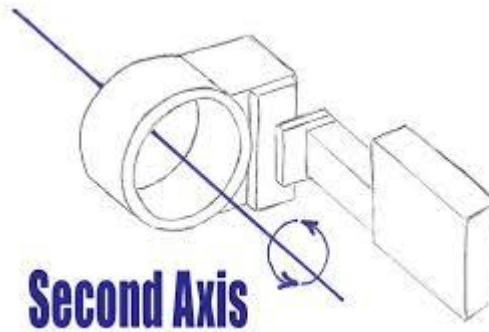
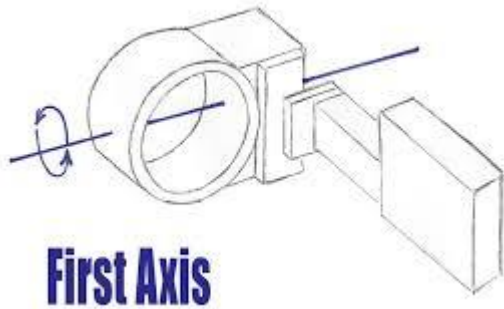
# Paper tune

## PAPER TUNING



 <p><b>NOCK HIGH TEAR</b></p> <p>How to Fix</p> <ul style="list-style-type: none"><li>• Raise arrow rest</li><li>• Lower nocking point</li><li>• Check Cam Sync</li></ul>	 <p><b>NOCK LOW TEAR</b></p> <p>How to Fix</p> <ul style="list-style-type: none"><li>• Lower arrow rest</li><li>• Raise nocking point</li><li>• Check Cam Sync</li></ul>
 <p><b>NOCK LEFT TEAR</b></p> <p>How to Fix</p> <ul style="list-style-type: none"><li>• Move rest right</li><li>• Check shooting form</li><li>• Adjust yokes or cable guard</li></ul>	 <p><b>NOCK RIGHT TEAR</b></p> <p>How to Fix</p> <ul style="list-style-type: none"><li>• Move rest left</li><li>• Check shooting form</li><li>• Adjust yokes or cable guard</li></ul>
 <p><b>MULTIPLE TEARS</b></p> <p>Tackle one issue at a time. Fix the vertical tear first before fixing the horizontal tear.</p>	 <p><b>BULLET HOLE</b></p> <p>Nothing to fix here</p>

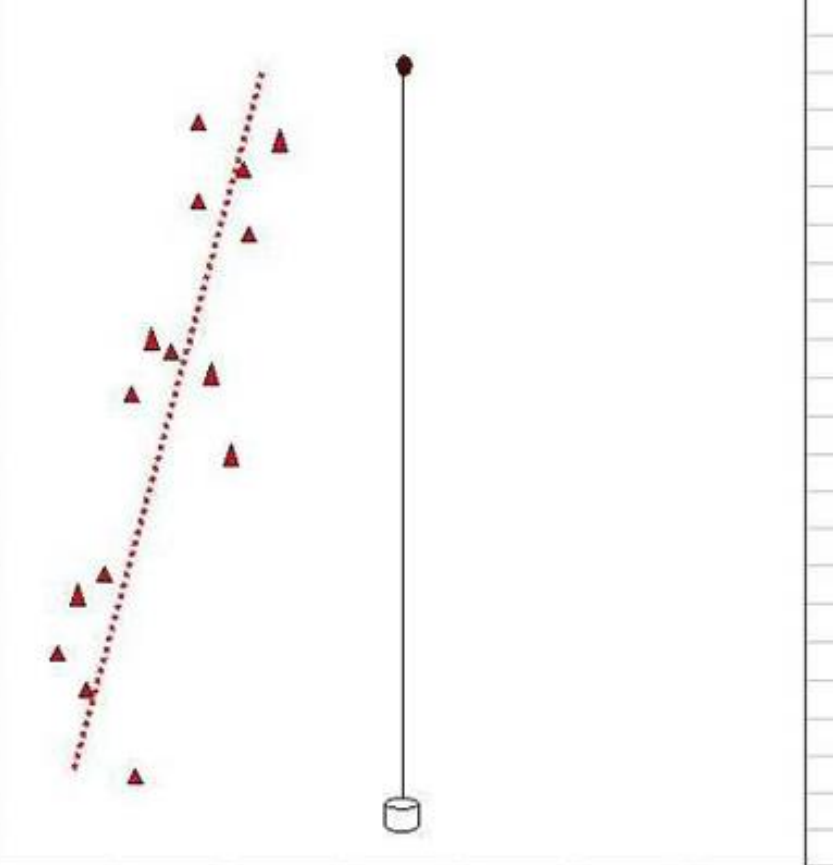
# Level Sight



Third Axis Only Needed For Uphill/Downhill Shooter

# Walk Back Tune

First attempt	
10 yd group of 5 arrows	
20 yd group of 5 arrows	
30 yd group of 5 arrows	
Pick a direction and move your arrow rest 1/16th inch	



The diagram shows a target area with a vertical line on the right side, representing a target or a point of reference. A dotted line of arrows is drawn on the left side, representing a group of arrows. The arrows are clustered around the dotted line, indicating a group of arrows. The vertical line has a small circle at the top and a small cylinder at the bottom, representing a target and a target rest respectively.



Spine Issue

# Looking For a Bow ?

- New or Used Equipment?
- New:
  - Mail Order (Lancaster)
  - Local Archery Shops – Jerry's, Alachua, etc.
- Used:
  - Local Archery Shop – Alachua, Adventures Archery
  - Club Posts in Groupworks or Bulletin Board

# Compound Bow “Base” Costs

- We Don't Recommend CHEAP Equipment
- Target Compound: \$700 - \$1700
- Compound Target Bow: ATA 37”- 40”

# Compound “Add-On” Costs

- Arrow Rest: \$50 - \$180
- Sight: \$100 - \$450
- Scope: \$50 - \$200
- Peep Sight: \$10 - \$60
- Release: \$75 - \$250
- Stabilizers: \$100 - \$500
- Arrows: \$75 - \$400 / Dozen



# Target Compound Bow Cost

- Bow: \$700 - \$1,700
- Sight: \$500
- Scope: \$200
- Release: \$200
- Rest: \$200
- Arrows: \$150
- Sling: \$10
- Misc.: \$200

# Bow Press



# Ready to Shoot

