

# ***Franck Karsenty*** *Archery Product*

[www.KarsentyArchery.com](http://www.KarsentyArchery.com)



# **Instruction Manual**

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## *Introduction by Franck KARSENTY*

*« All the adjusting methods available left me puzzled concerning the alignment of the arrow. Each test could yield a different adjustment because all the adjustments on the bow were approximate. Hence the idea to create a measuring tool which would definitely set the arrow's direction.*

*Now that the device is in your hand, I invite you to visit my web site: [www.KarsentyArchery.com](http://www.KarsentyArchery.com) in order to read testimonials by several high level archers who now use this tool to adjust their bows. And now, enjoy a good shot ... »*

## SUMMARY

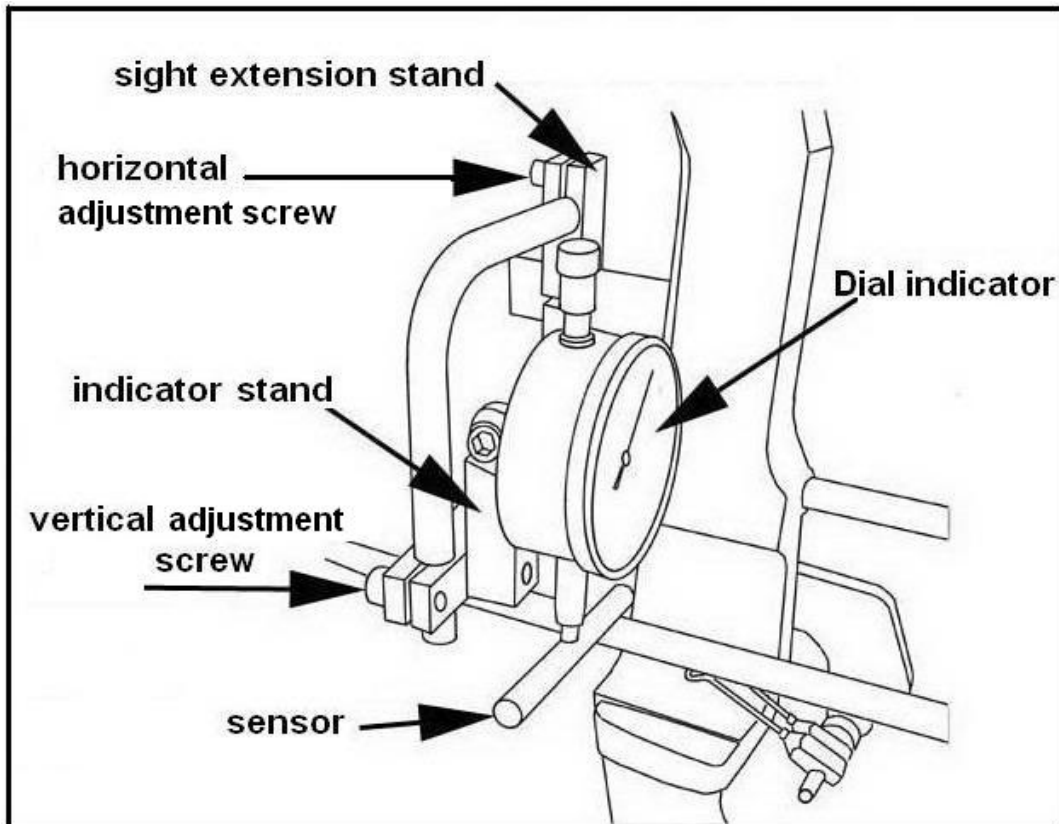
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## 1. UPON RECEPTION

The device is inside a bag and the indicator is disassembled, the following parts are included:

- § 2 Allen wrench
- § Stand to clip on to sight extension
- § Stand for the indicator
- § Clip and blade stretcher

- Assemble the indicator on its stand
- Assemble the device on the sight extension (*see picture 1 below*)

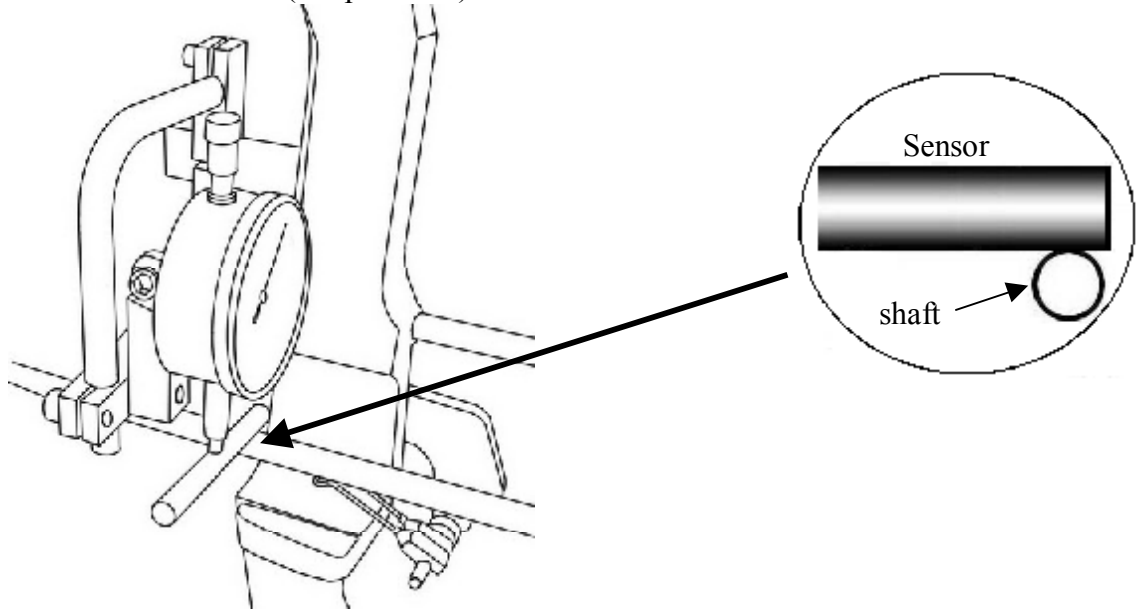


**Picture 1 : the « KF Center Shot » is correctly assembled on the bow**

**Note :** it is recommended to use a bow stand such as a bench vice to install the device on your bow.

## 1.1. Positioning the dial indicator

- Ø Position the indicator so that the hand of the small dial of the indicator reaches the middle (between marks 4 and 6 for example)
- Ø And one inch in front of the fulcrum of the arrow rest.
- Ø Position the inside end of the sensor (inner side of the riser) in a straight line with the Berger Button or with the outer end of the shaft. (see picture 2)



Picture 2 : sensor is 1" in front of the arrow rest

## 1.2. Setting the arrow rest

**Note :** it is imperative to use a rigid arrow rest during the procedure.

- Ø If you use a plastic arrow rest, you will not be able to carry out the adjustment of the nocking height.

Please follow these instructions concerning the locking of the arrow rest :

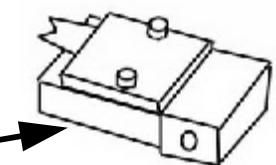
For Compound bows :

If you are using a drop away arrow rest :

- Ø Position the needle upright
- Ø Keep it in place with a clip or anything convenient

If you are using a flexible blade arrow rest :

- Ø Use the wire stretcher supplied with the **KF Center Shot**
- Ø Mind the direction of assembly (screw head on top)
- Ø Apply gentle pressure in order to flatten the stretcher on the blade stand



Picture 3 : wire stretcher

If you are using an arrow rest with spring tension

- Ø Check that the blade does not come down when you put down the shaft with the sensor under pressure. In this case, it is imperative to increase the pressure or use any accessory to block the blade.

**è Now that the device is in a correct position, you can start measuring for the nocking height**

## 2. PRIOR TO USE THE DEVICE

You must make a few adjustments to your bow:

- § adjusting the tiller
- § usual nocking height ( in case of doubt set nocking height at 0)
- § usual arrow center shot
- § string, cables and servings must be in good condition ( top, middle and bottom)
- § synchronize the cams

It is not recommended to use your stabilizer during adjustments, the bow might be too heavy. But if you find it difficult to stabilize while under pressure and that this leads to serious variations in measures, then you should try with your stabilizer.

### Notes concerning nock sets:

In order to proceed with the first adjustments with your **KF Center Shot**, in the beginning we recommend that you use metal nock sets so that you can move them easily while processing.

## 3. SELECTION OF SHAFT TO BE USED DURING ADJUSTMENT

It is imperative to use cylindrical shafts\* of the same outside diameter than the arrow you usually use with nock sets but without point.

\* for fusoidal shaft such as X10 or ACE, please check with the equivalence chart at the end of booklet.

**Tip :** choose a **NEW** shaft (*for straightness check see paragraph below*) not shorter than 2 inches extending from the arrow rest.

### Tips to check straightness :

When **KF Center Shot** is in the vertical position:

- draw the bow with the shaft
- check the indication on the dial indicator (at full drawn and then at rest)
- Turn the nock by 180°
- And start measuring again

**If the shaft is straight:** the indication will not vary more or less than 2 or 3 graduations.

**If the variation is higher than 3 graduations:** you should start again with a new shaft.

## 4. MESURING NOCKING HEIGHT

**Note:** please read « *Warning and security instructions* » at the end of booklet before proceed.

- ⊖ Take a shooting stance
- ⊖ Draw your bow normally, do not click and do not let go
- ⊖ As soon as you have stabilized, note the number indicated by the long hand of the indicator (you may also need to note the position of the small hand as well)
- ⊖ Come back to a rest position while keeping in mind the following indications:
  - ⊖ Slowly come back and keep the bow stable all the while (in a vertical position, smoothly and without swinging)
  - ⊖ leave the rope (*take off the release for Compound archer*)
- ⊖ Once at rest note the number indicated by the dial indicator and the position of the big hand (and verify also the position of the small hand)

**If the hand has not moved:** the nocking height is set

**If the hand has moved clockwise:**

- ⊖ the nocking height requires to be higher

**If the hand has moved counter clockwise:**

- ⊖ lower the nocking height

**Warning:** If the little hand has moved one division or more, this means that nocking height is way off and you will need to do a major adjustment.

- ⊖ Progressively modify the nocking height {1 millimeter at a time}
  - ⊖ Start measuring again as previously detailed until you reach the same reading between the fully drawn position and the rest position.
  - ⊖ The variation between the 2 figures depends on how precisely you take the measure and how regularly you hold the bow. The more you practice with the device and the bow, the more precise the measure will become.
- ⊖ Once the setting is correctly done, you can get on to the next step toward adjusting the center shot.

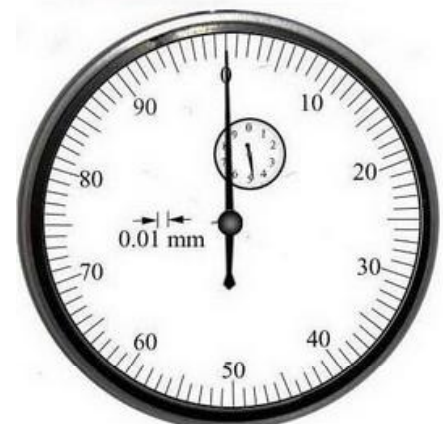
**Picture 4 : indicator analysis for Nocking Height**



**Rise up nocking point**  
or take down arrow rest



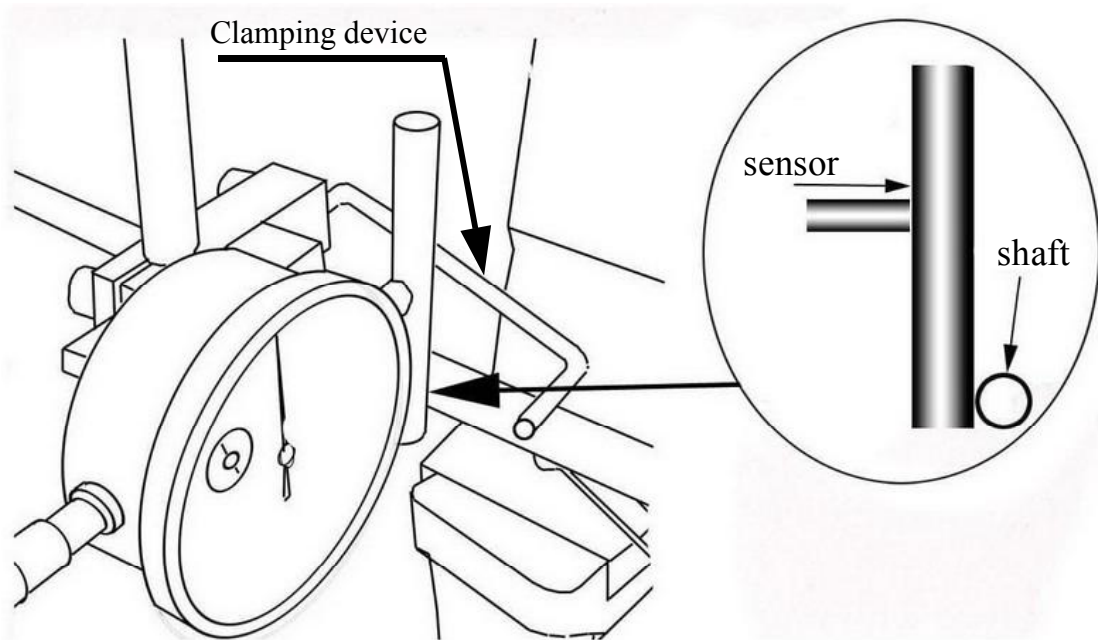
**Take down nocking point**  
or rise up arrow rest



**Nocking height correct**

## 5. MESURING THE CENTER SHOT

Using the central screw of the indicator stand, turn it round 90° as shown on the drawing beneath.



**Picture 5 : use clamping device to keep the shaft on the arrow rest blade**

**If the indicator's sensor has been correctly set in the previous step:**

- The sensor should reach a good position opposite the shaft
- And leave enough space for the coming measures

**If not:** (*too high or leaning too much*)

- Adjust the entire device by loosening the horizontal and vertical adjustment screws.

- The shaft should be placed on the arrow rest , leaning against the Berger Button (*do not click it*)
- If you are a compound archer: use the clamping device to keep the shaft in contact with the blade of the arrow rest during the process of measure
- Bring the clamping device in contact with the edge of the shaft then tighten the locking screw.
- Take a shooting stance and draw your bow as usual.
- As soon as you have stabilized, note the number indicated by the indicator's big hand (*you might also find it useful to note the position of the small hand*)
- Then come back to a rest position, heeding the following instructions:
  - Smoothly come back without releasing the rope or setting off the release
  - Release the rope (by removing the release)
  - Most important: keep the bow stable all along (in vertical position, smoothly and without swinging)
- Once at rest note the number indicated by the indicator and the position of the big hand (and verify also the position of the small hand)

**If the hand has not moved:**

- The center shot is well adjusted

**If the hand has moved clockwise:**

- push the shaft in by adjusting the arrow rest (or the Berger Button)

**If the hand has moved counter clockwise:**

- take the shaft out by adjusting the arrow rest

- Progressively modify your arrow rest {one millimeter at a time}
- Take the measure again as previously until you obtain a balance between the position at rest and at full drawn
- The variation between the 2 figures depends on how precisely you take the measure and how regularly you hold the bow. The more you practice with the device and the bow, the more precise the measure will become.

☞ Once you have correctly done the second adjustment, all you have left is one more step if you want it to be perfect:  
You must adjust the arrow's spine

**6. CHOOSING THE RIGHT ARROW**

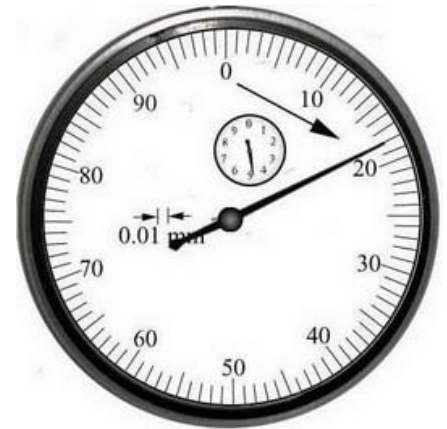
After these adjustments of the bow, it is essential to adjust your arrow to your technique as well as to your personal draw length and draw weight.

For example, you may proceed with the test known as "bare shaft". This consists in shooting 3 feathered arrows at a target located 15 meters away, then 3 bare shafts at the same target (same spine). Until you get them to hit together by using weak or stiff arrows. (see figure below)

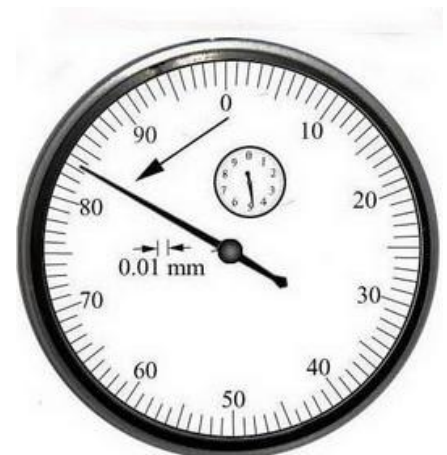
feathered arrow :		bare shaft : •	
Weak arrow	Correct	Stiff arrow	

*Example for a right archer (for lefty , reverse drawing)*

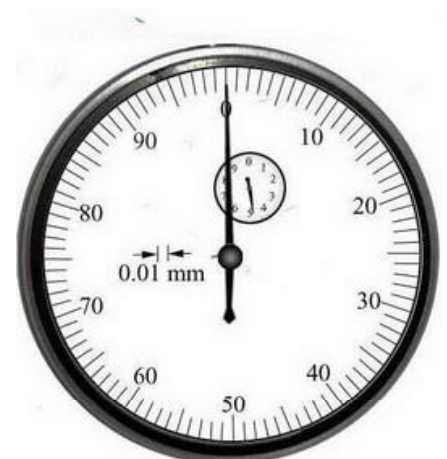
**Picture 6 : indicator analysis for center Shot**



**Rise up nocking point**  
or take down arrow rest



**Take down nocking point**  
or rise up arrow rest



**Nocking height correct**

## 7. EQUIVALENCE CHART

A/C/E "Spine"	A/C NAVIGATOR	A/C/C
1000	810	
920	810	
850	810	
780	810	
720	810	
670	810	
620	810	
570	660	
520	610	2L-04
470	540	2-04
430	540	2-04 3X-04
400	480	3L-04
370	430	3-04

X10 "Spine"	A/C NAVIGATOR	A/C/C
750		2-00
700		2-00
650		2-00
600		2-00
550		2-00
500		2-00
450	880	
410	660	
380	660	

You will find more details on our Internet site: [www.KarsentyArchery.com](http://www.KarsentyArchery.com)

## 8. WARNING AND SECURITY INSTRUCTIONS

The **KF Center Shot** is a precision measuring device and as such it is to be handled with care.

The following warnings are given not only to protect you from harming yourself but also to preserve its precision as long as possible.

- ⊘ You must not shoot an arrow when the **KF Center Shot** is placed on the bow. This could deteriorate the device as well as wound the archer or bystanders.
- ⊘ Always face a target at a short distance with nobody standing within reach of the arrow.
- ⊘ Do not open the dial indicator, you could damage it.
- ⊘ Never try to rotate the sensor on its axis, you could damage the indicator.
- ⊘ Store the device in a dry and cool place because the indicator is vulnerable to dampness.

## 9. GUARANTEE

We hope you will always be satisfied with your purchase. Therefore, we have checked the device at all the different stages of production and before delivery. **Thus, we can guarantee that our KF Center Shot has no defects.**

However, should you find a defect upon delivery or even several months later, before returning the device, you should contact us by mail or by Internet. After a thorough check up, we will tell you what to do and the cost of repairs.

