

## INSTALLATION & SIGHT IN INSTRUCTIONS FOR OPTIMIZER LITE KING PIN ADJUSTABLE BOW SIGHT

### CAREFULLY READ THE FOLLOWING INSTRUCTIONS COMPLETELY BEFORE MOUNTING OR SIGHTING IN YOUR BOW!

#### Mounting the sight on your bow:

1. Using the two 10-24 screws, mount the sight to your bow riser. Choose the set of holes that best fit your riser and shooting style. (For the Tournament Edition, simply attach the dovetail block to the riser).
2. The Optimizer Lite King Pin comes PRE-SET from the factory with the removable SET-UP SPOOL reading “0” when the SLIDE is moved to the UPWARD-MOST POSITION. At the conclusion of this sight in procedure, you will be removing the SET-UP SPOOL, and replacing it with your YARDAGE SPOOL. **IMPORTANT:** If, in the future, you wish to re-sight in your Optimizer King Pin, rotate the YARDAGE SPOOL to position the SLIDE in the UPWARD-MOST POSITION, then tighten the SPOOL LOCK. Remove the YARDAGE SPOOL and replace it with the SET-UP SPOOL. Before tightening the set screw, rotate the spool to align the “0” with the red line in the MAGNIFIER. Tighten set screw (Do **NOT** over-tighten!!). Loosen the SPOOL LOCK. Your sight is now restored to the original factory setting.
3. Rotate the SET-UP SPOOL counter-clockwise (for R.H.), clock-wise (for L.H.) to position the SLIDE in the UPWARD-MOST POSITION. Mount the sighting aperture (scope) to the 2nd AXIS BLOCK and mount the 2nd AXIS BLOCK to the SLIDE in the HIGHEST set of holes that still allow you to sight in at 20 yards (this will require a little trial and error, but will be accomplished in a few shots). This step is necessary to achieve the maximum range from your bow and the Optimizer Lite King Pin.
4. **Note:** The 2nd AXIS BLOCK has a hole at the top and a slot at the bottom for attachment to the SLIDE. The average archer may not use this feature and will simply position the bottom screw in the “MIDDLE” of the slot before tightening. The more technical archer will require that the level in the scope housing is positioned perfectly square with the vertical axis of the bow. This is done by either mounting or suspending the bow vertically plumb. With the TOP mounting screw slightly snug, insert the enclosed wrench into the 2nd AXIS ADJUSTMENT SCREWS to micro-tune the 2nd AXIS BLOCK until the bubble in the level is positioned between the witness marks. Tighten the BOTTOM screw, then the TOP. Slightly snug the 2nd AXIS ADJUSTMENT SCREWS. 2nd axis calibration is now complete.

#### Sighting in:

1. WINDAGE (left and right) adjustment:
  - a. Loosen the WINDAGE LOCK KNOB (rotate counter-clockwise) and rotate the CLICKER KNOB to roughly position the sight pin in vertical alignment with your arrow. Tighten the WINDAGE LOCK KNOB.
  - b. At CLOSE RANGE, shoot several arrows to determine the direction of adjustment required.
  - c. If your arrows group to the LEFT of the target:
    1. Loosen the WINDAGE LOCK KNOB (rotate counter-clockwise).
    2. Rotate the CLICKER KNOB clockwise for RIGHT HANDED bow.  
Rotate the CLICKER KNOB counter-clockwise for LEFT HANDED bow.
  - d. If your arrows group to the RIGHT of the target:
    1. Loosen the WINDAGE LOCK KNOB (rotate counter-clockwise).
    2. Rotate the CLICKER KNOB counter-clockwise for RIGHT HANDED bow.  
Rotate the CLICKER KNOB clockwise for LEFT HANDED bow.
  - e. One click = 1/8” at 20 yards.
  - f. Always tighten the WINDAGE LOCK KNOB before shooting (rotate clockwise).

2. ELEVATION (up and down adjustment) / Selecting the correct yardage tape:

Your Optimizer Lite King Pin comes complete with a SET-UP SPOOL, a BLANK SPOOL, and 52 different yardage tapes. They are numbered on the top from 26 (extremely fast bow) to 77 (moderately slow bow). The numbers on the SET-UP SPOOL are NOT yardage marks. They are merely a means of measuring and selecting the proper tape. In order to select the proper tape, you must have a SAFE range with a measured 20 yards and a measured 60 yards.

- a. **SIGHT IN AT 20 YARDS** by rotating the SET-UP SPOOL. Once you have an extremely accurate sight in at 20 yards, make note of the number on the SET-UP SPOOL nearest the red line under the MAGNIFIER, (Example: number “5”).
- b. **SIGHT IN AT 60 YARDS** by rotating the SET-UP SPOOL. **Note:** The accuracy of the entire shooting system depends on an extremely accurate sighting at both **20** and **60** yards.
- c. Once you are accurately sighted in at 60 yards, make note of the number on the SET-UP SPOOL nearest the red indicator line under the MAGNIFIER, (Example: number “53”). Lock the spool by rotating the SPOOL LOCK clockwise.
- d. Subtract the 20 yard setting (number 5) from the 60 yard setting (number 53)  
(Example:  $53 - 5 = 48$ ).
- e. The sight tapes in the enclosed kit are numbered from 26 to 77. Our example shows that we need tape **48**. Simply peel tape 48 from the kit and carefully apply it to the BLANK SPOOL as shown. **Note:** The “20” should be placed **LEFT** of the set screw for **RIGHT HAND**, and **RIGHT** of the set screw for **LEFT HAND**.

- f. After the tape is squarely applied to the BLANK/YARDAGE SPOOL, remove and apply the enclosed clear Mylar decal over the two tape ends to secure.
- g. Loosen the set screw in the SET-UP SPOOL and remove the spool from the HUB by pulling it straight off.
- h. Slide the YARDAGE SPOOL all the way onto the HUB. Rotate the spool to position the “60” in line with the red indicator line under the MAGNIFIER. Tighten the set screw (Do **NOT** over-tighten!!). Loosen the SPOOL LOCK.
- i. Rotate the YARDAGE SPOOL to position the “20” in line with the red indicator line under the MAGNIFIER. Tighten the SPOOL LOCK. Loosen the cap screw on the STOP. Slide the STOP downward until it hits the STOP PIN. **Note:** There are (2) threaded holes in the bracket which can be used to tighten the STOP in place. Select the hole that positions the lock screw closest to the middle of the slot in the STOP. Tighten cap screw (Do **NOT** over-tighten!!). Positioning the STOP in this manner will allow you to quickly acquire your 20 yard setting without looking at the magnifier.

3rd Axis Adjustment:

The 3rd axis adjustment is a feature that is generally used by competition archers and by those that hunt in mountainous terrain. Most archers ignore this feature but it is built into the Optimizer Lite King Pin for those that wish to use it. It is best to have a qualified bow technician adjust your 3rd axis. With the bow mounted plumb in a bow vise, and with the 2nd axis previously calibrated, the vise is tilted forward 45 degrees and locked. The level in the scope is then observed to assure that the bubble is still reading true. If not, loosen the 3rd AXIS LOCK SCREW. Insert the enclosed wrench into the 3rd AXIS ADJUSTMENT SCREW and rotate until the bubble is centered. Next, the bow vise is loosened, tilted backwards 45 degrees and locked. Check that the bubble reads true. Tighten the 3rd AXIS LOCK SCREW.

Replace the Kingpin magnifier with the brass needle following these steps:

- Step 1. Rotate the Set-Up Spool to “0” or the Yardage Spool to “20”. Tighten the Spool Lock.
- Step 2. Remove the set screw in the Set-Up / Yardage Sleeve. Remove the Sleeve from Hub.
- Step 3. Remove the set screw that secures the magnifier.
- Step 4. Insert a small diameter object (nail, pen...) into the access hole in the bracket to **PUSH** the magnifier out of the bracket. Do **NOT** place a pliers on the magnifier to remove.
- Step 5. Install the needle insert into the bracket and secure it with the set screw provided.
- Step 6. Replace the Set-Up Spool with the “0”, or Yardage Spool with the “20”, aligning with the needle. Replace and tighten the Spool set screw.

