HOW TO ADJUST THE COLLIMATION OF A KENDRICK COLLIMATOR

DISCLAIMER: If you choose to perform this procedure, you do so at your own risk. Kendrick assumes no responsibility for damage to your collimator, it’s diode or misalignment to your collimator for attempting to perform this procedure. If your collimator requires adjustment, we recommend you contact us to make arrangements to have the collimator sent to our shop for recollimation at a reasonable charge.

For those of you who insist to do this on your own, the procedure is as follows.

- You will need a 5/64” hex key to perform this operation.
- The XY axis chart included at the end of these instructions.

1. Lay the collimator over the gap between two heavy books, turn it on. Tape the XY axis chart so that the centre of this chart is the exact same height from the floor as the centre of the laser collimator. THIS IS IMPORTANT. It is not so important the centre of the chart be coincident with laser dot, just at equal height. Now, rotate the collimator. Observe the dot on the chart and if it rotates visibly at a distance of 8 to 10 feet, you have a collimation problem. We consider a collimator collimated if the dot rotates within a .250” circle at a distance of 15’.

2. Your Kendrick collimator, depending on which model you have, will typically have two sets of opposing stainless steel set-screws (4 set screws total) located as shown on the image below. These are the screws that are used for making adjustments to the laser diode in your collimator.

3. NEVER tighten a set-screw before you have loosened the one opposite it! Failure to do so will result in the crushing of the diode. Choose which set of set-screws you will to work with first, the left set or the right set. Remember, Lefty loosey, Righty tighty.
4. Now you begin the process of collimating your diode. Let us assume you have chosen to make adjustments to the Left set of set-screws. Rotate the collimator so that one of the set screws of the left set-screws (indicated by the blue lines) is facing upwards as shown in the following image. The red lines indicates the Right set.

5. Make sure the laser is turned on and pointed at the centre of the XY target chart. With a 5/64” hex wrench, slightly loosen the top facing set-screw. Remember, Lefty loosey, Righty tighty! You will observe that that the laser dot has moved as you loosen the set-screw. So far so good.

6. Rotate the laser 180° so that the opposing set screw is now facing up. Slightly tighten it until you feel it stop (finger tight). What you are attempting to do here is to get the red dot to rest on the horizontal line and to return to the horizontal line (not the central axis dot) when the collimator is rotated 180°. Do not concern yourself if it wanders off the line as you rotate. The important thing is that it return to the line after rotating 180°. Continue to make these two adjustments until you accomplish this.

7. Now move onto the Right set of set-screws. Rotate the collimator until one of the Right set-screws is facing upward. Repeat step 6 until you get the same results.

8. Now would be a good time to re-centre the XY axis chart on the laser dot on the wall.

9. Lastly, rotate the laser. If the dot does not move outside of the small central circle, you should consider your laser to be collimated.
When both sets of set-screws have been adjusted, the laser dot should not rotate outside of this circle.

Dot needs to return to this line when laser is rotated 180°. Keep adjusting one set of set-screws until it does, then move onto second set of set-screws.