

## TIP 67 — A Quick Alignment Tool for the 3- or 4-Jaw Scrolling Chuck/ Eddie LaBane

I found a cruder, much larger version of this alignment tool online, but modified it for miniature lathe users. I do cue stick repair and restoration, so this is extremely useful in my business. I thought it may be useful for someone with similar needs. The shank is 3/8" square T6 aluminum and the bearing is from a skateboard.

This procedure is designed to bridge the gap between the somewhat slow, but highly accurate independent 4-jaw chuck and the more convenient, but less accurate self-centering 3-jaw. With practice and patience you will become faster and get better results from the self-centering units. I use my tool for aligning joint pins on damaged custom cue sticks, but regardless of your interests, anything to increase accuracy and save time is worth trying.

### To Use the Centering Device

To align a reasonably round object, slightly loosen the 3- or 4-jaw self-centering chuck so there is minimal movement of the object to be centered. Then, slowly approach the object (midway) with the Alignment Tool while the lathe is turning at a very slow speed (25 rpm) or turn it by hand. Immediately after the Alignment Tool Bearing makes contact with object and turns without hesitation, the object should be centered and no further adjustment should be made. Tighten the jaws slowly. There should be no contact gaps on any of the jaws where they meet the object. If so, turn the object slightly and repeat the process.



*The holder uses a simple 3/8" shank in the P/N 7600 tool post. A skateboard bearing is attached to one end.*