## **Jointer Blade Alignment**

## From WoodworkersZone WoodWiki

Stick Method for Jointer Blade Alignment

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This statement first appeared in a thread on the WoodNet woodworking forum. It was compiled and reproduced here for easier public consumption.

Use a stick..... the jigs are too fussy and they depend on top dead center.

Stick is quick and easy, best of all cheap....

Get a piece of straight hardwood about  $3/4 \times 2 \times 12$ " long. Make sure it is straight as it is a reference for all the operations that follow. The stick is always used off the outfeed table, it is the reference table . Now take the stick and lay it on the outfeed table with about 3" overhanging the infeed table. (Lower the infeed table so it does not hamper the movement of the stick.) Now make a mark on the stick with a pencil right at the edge of the outfeed table. (This is the start point when setting all the knives.)

Now rotate the cutter head a knife edge will pick up the stick and move it some distance once the stick stops moving make another mark on the stick this is the end point.

Now, pull out ONE knife and mark the cutterhead as # 1. Clean out the slot and clean up the gib and the screws so that foreign material has no effect on the gib and the knife. If the head uses springs to lift the knife make sure they are all still there. They are small and get lost occasionally so it pays to look.

Now I set one fresh knife in the slot and put the gib in to and run the screws out just for enough to just touch the knife. Tighten the screws a little at a time working form the center outward. Tighten a little move to the next screw, tighten, move, tighten move etc.

After you have the screws all tightened down, put your stick back on the outfeed table. I usually start with the stick near the fence. Make a new reference mark on the stick preferably on a different side of the stick. One thing to remember here is that these marks are the ones you are going to use to set the other knives and so make sure they are accurately located. Once again, rotate the knife head and when the stick stops make another mark. Now, move the stick across the width of the jointer and align the first mark with the out feed table and using the same light pressure on the board rotate the knife again.

If the board stops at the second line then the knife is parallel ACROSS the width of the blade and probably does not need any more adjustment. You can check the knife in a couple of more places and I would on jointers wider than 8" to make sure the knife is not being forced higher or lower by the gib screws.

If the marks do not align then the distance the mark is from the second line will tell you what is wrong with the alignment ( if the board does not reach the line the knife is set too low, if it goes past it, it is set too high)loosen up the knife and reset it.

Once you get the first knife aligned go through the process again with knife #2. After you get to the knife set and tightened in then put the stick on the outfeed table again over toward the fence and rotate the head as before. If the knife pulls the board to the second line against the fence and on the outside then the #1 and #2 knives are in the same plane and you can move on to the #3 knife.

Once again the same process and if all stays put because you have tighten all the gib screws equally and paid close attention to the stick you should be able to confidently straighten and flatten boards with no or very little ripple.

I usually run two boards at this point to assure that all the work I have done is indeed right.

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