Setting jointer outfeed table

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The one question I answer over and over about proper jointer setup is How come my stock does not end up with straight parallel edges. Most believe the jointer tables are not co planer (parallel to each other) when in fact the problem is much simpler to fix.



The above image shows a properly set outfeed table in relation to the jointer knives. The edge of the stock is cutting at the desired depth and the stock is supported with about .002" max clearance under the stock to the outfeed table. The small clearance allows for the scalloping cut that a jointer produces due to the circular motion of the cutter head with the spaced knives. It should be noted that as you cut an edge or a face on a jointer the knife marks will be directly determined by the speed in which you feed the stock over the jointer. A faster feed will produce more pronounced scalloping a slower feed will produce a smoother edge. Keep this in mind as you straighten stock, it will affect the end result. I personally edge stock with several passes if the edge is seriously bowed until I near the final cut and progressively slow down to get the maximum amount of knive cuts in the final pass for the smoothest straightest edge.

Two common problems described Outfeed table too high

If as you feed stock over the jointer and you are reasonably sure you are close to a straight edge and find the trailing edge is not cutting Like this:



The outfeed table is too high. The cause of this is generally because the outfeed table was set too high to start with or the knives have worn enough that the cutter head arc is actually lower than the outfeed table. It is important to note that jointer knife wear is an ongoing issue and you should have to make adjustments to the outfeed table as wear occurs. It also helps to even the wear out across the edges (especially when just edge jointing) to move the fence to different locations across the width of the knives as you work. This is especially important if you intend to return to flattening stock at some point in the future as the knife wear will be more consistent than if you leave the fence in one position.

The fix for a too high outfeed table is as follows: Lower the outfeed table more than is necessary. You want to raise the table against the force of the lifting mechanism to take any lash out of the outfeed table. It should at a minimum look like this:



Now raise the outfeed table up until the barest of a shadow line still exists. I do this by eye and it should look like this when done $\frac{1}{2} \int_{\mathbb{R}^n} \frac{1}{2} \left(\frac{1}{2} \int_{\mathbb{R}^n} \frac{1}{2} \int_{\mathbb{R}^n} \frac{1}{2} \left(\frac{1}{2} \int_{\mathbb{R}^n} \frac{1}{$

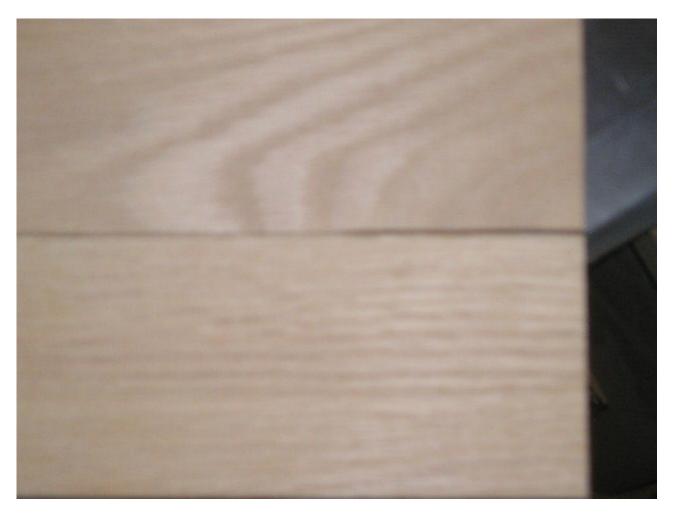


Now lock down the outfeed table and feed the entire edge over the knives. If the edge cuts the entire length and there is no snipe (see description below) you are good to go.

Outfeed table too low

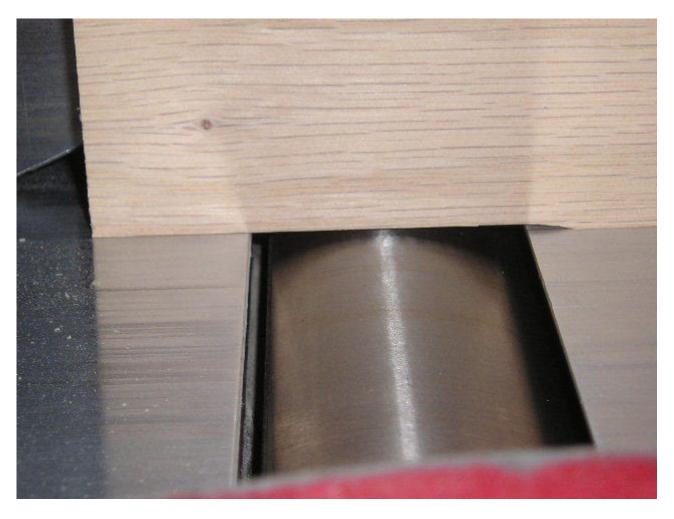
The picture here shows the leading edge of a too low outfeed table http://woodworkerszone.com/igits/picture.php?albumid=11&pictureid=53

This is pretty radical just to show the end result. Against a existing straight edge



As you can see in the blur, the end is gapped. a too low table will at the very least show this condition, on longer stock it will actually create convex edges or serious tapers with a snipe at the end

To fix: simply raise the table up until you once again have the barest shadow under the stock



Now run your edge through until it cuts the entire edge: It should look like this when set properly



Joe

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