

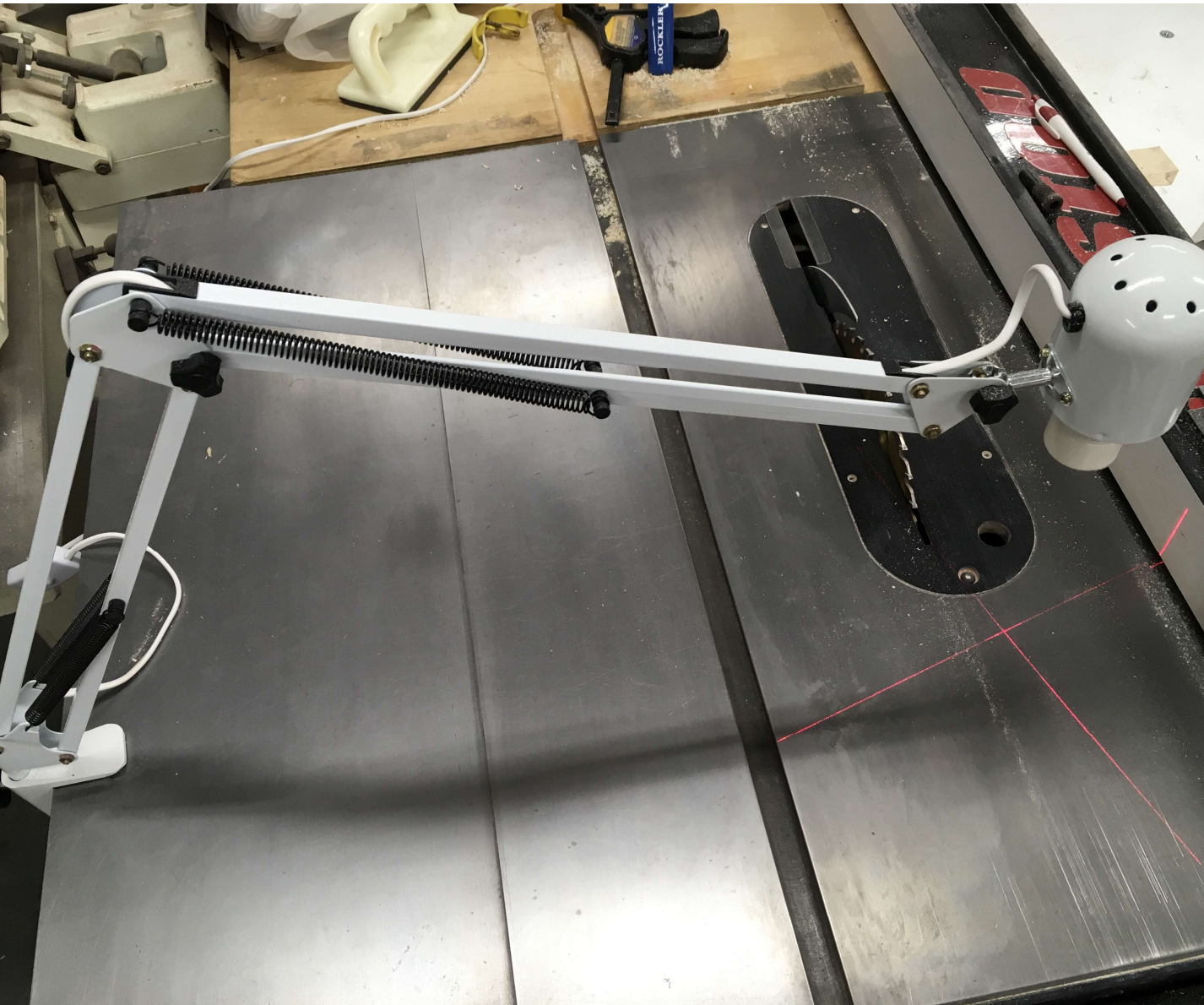
BEYOND CHEVRONS: MULTI-GENERATION LAMINATIONS

Woodturner PRO

Lloyd Johnson

Lloyd@woodturnerpro.com

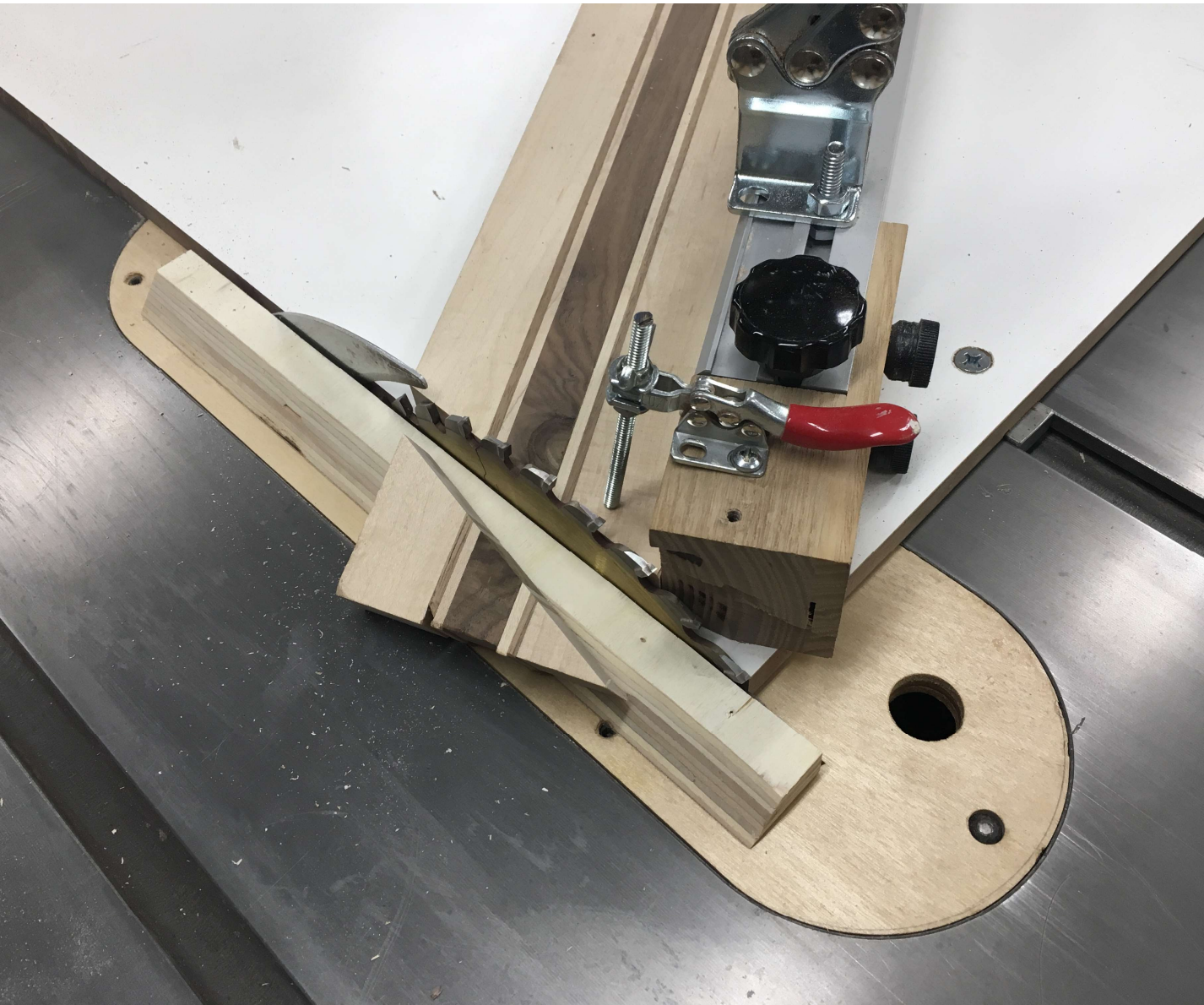




INTRODUCING PAL 2 (PERFECT ALIGNMENT LASER)

Finally, a rigid, adjustable laser that mounts easily to a table saw and has a crosshair laser. This was made for the embroidery market but since the techniques of embroidery dovetail nicely with multi-generation laminations, it works equally well for both.





ADD OFFCUT RAMP TO ZERO CLEARANCE INSERT

This simple device adds a lot of safety and a better quality saw cut. The ramp both supports the wood on the offcut side of the blade and lets the cutoff slide safely away from the blade.





LAYOUT STRIPS TO MAKE SURE OF ORDER

When used in the order in which they were cut, the design has the best chance of maintaining accuracy.





DRY FIT CHEVRONS

If the stock is $\frac{3}{4}$ ", use a $\frac{3}{4}$ " dowel at the end between the board and the clamp. This puts the clamping pressure at the center of the board instead of the top of the board.

When the clamping pressure is at the top of the board, the board is forced to be out of alignment horizontally and quality of the design will be harder to maintain.





ADD GLUE TO STRIPS

Turn all segments on edge in the same direction except the last strip which is turned in the opposite direction or not included in the gluing operation. This will make sure that glue is not put on the outside of the last strip.





GET READY TO CLAMP WITHOUT LETTING THE GLUE TOUCH

Glue immediately starts to set when in contact with mating surfaces so try to not let the glued surface come in contact with another surface until you're ready to go.

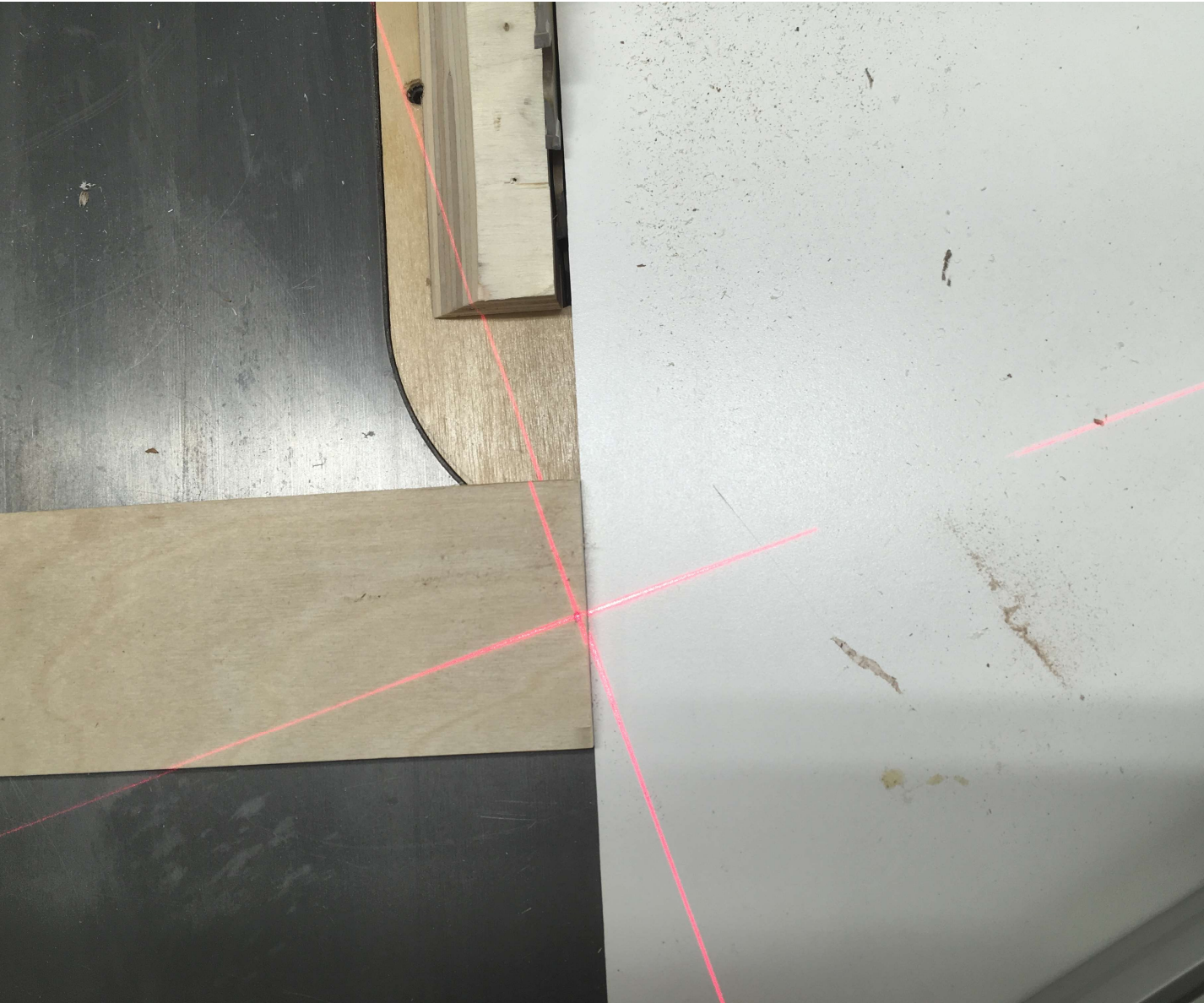




CLAMP ALL STRIPS

Quickly put clamping pressure from the ends and across the strips and let the strips slide into place.

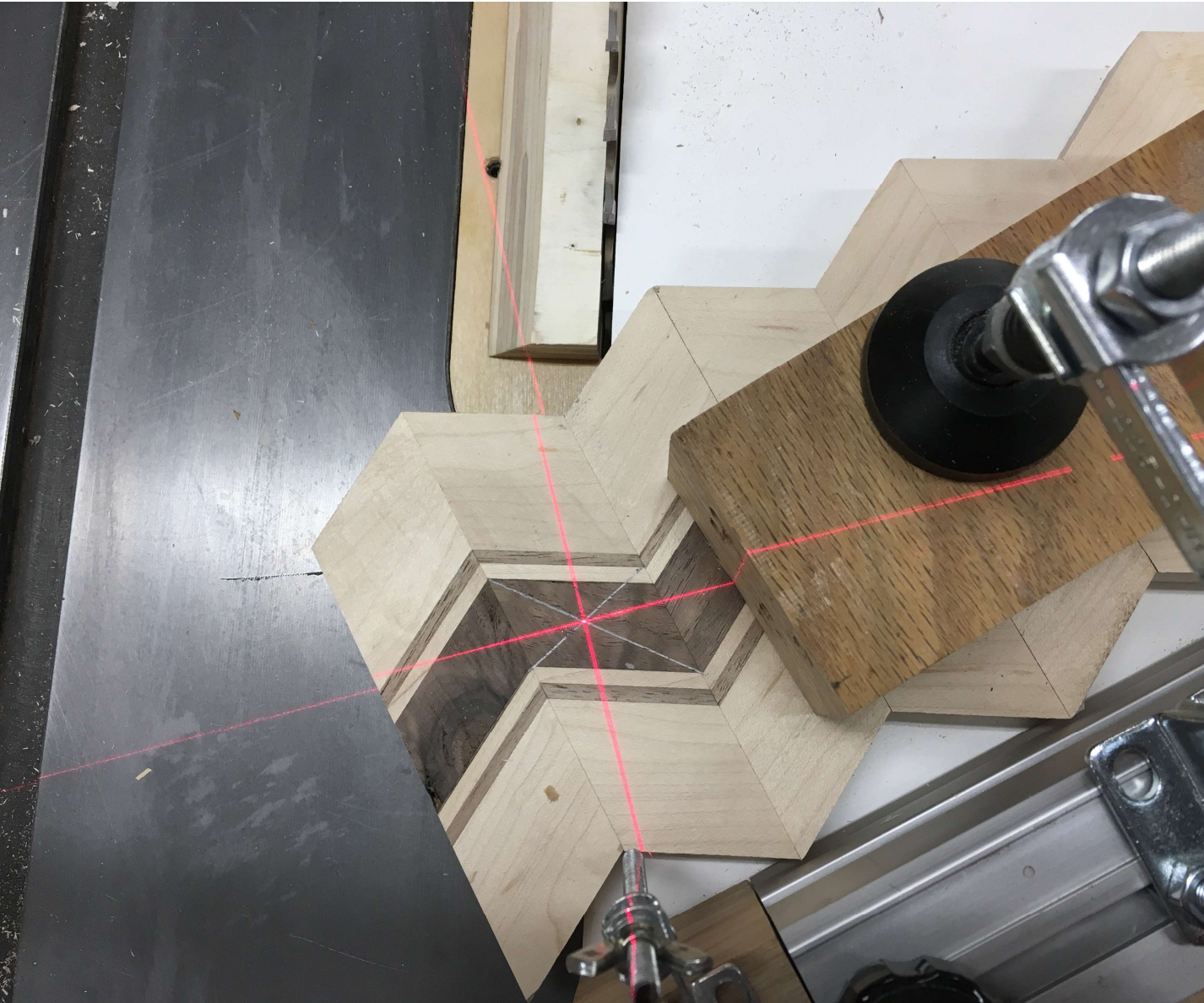




USE PAL #2 TO IDENTIFY THE PATH OF THE SAW BLADE

If using a 1/8" blade, place a mark at 1/16" on a sacrificial board. Move the adjustable arms and head of the PAL #2 so that the crosshairs of the laser points at the mark. The crosshair marks the path of the center of the saw blade.



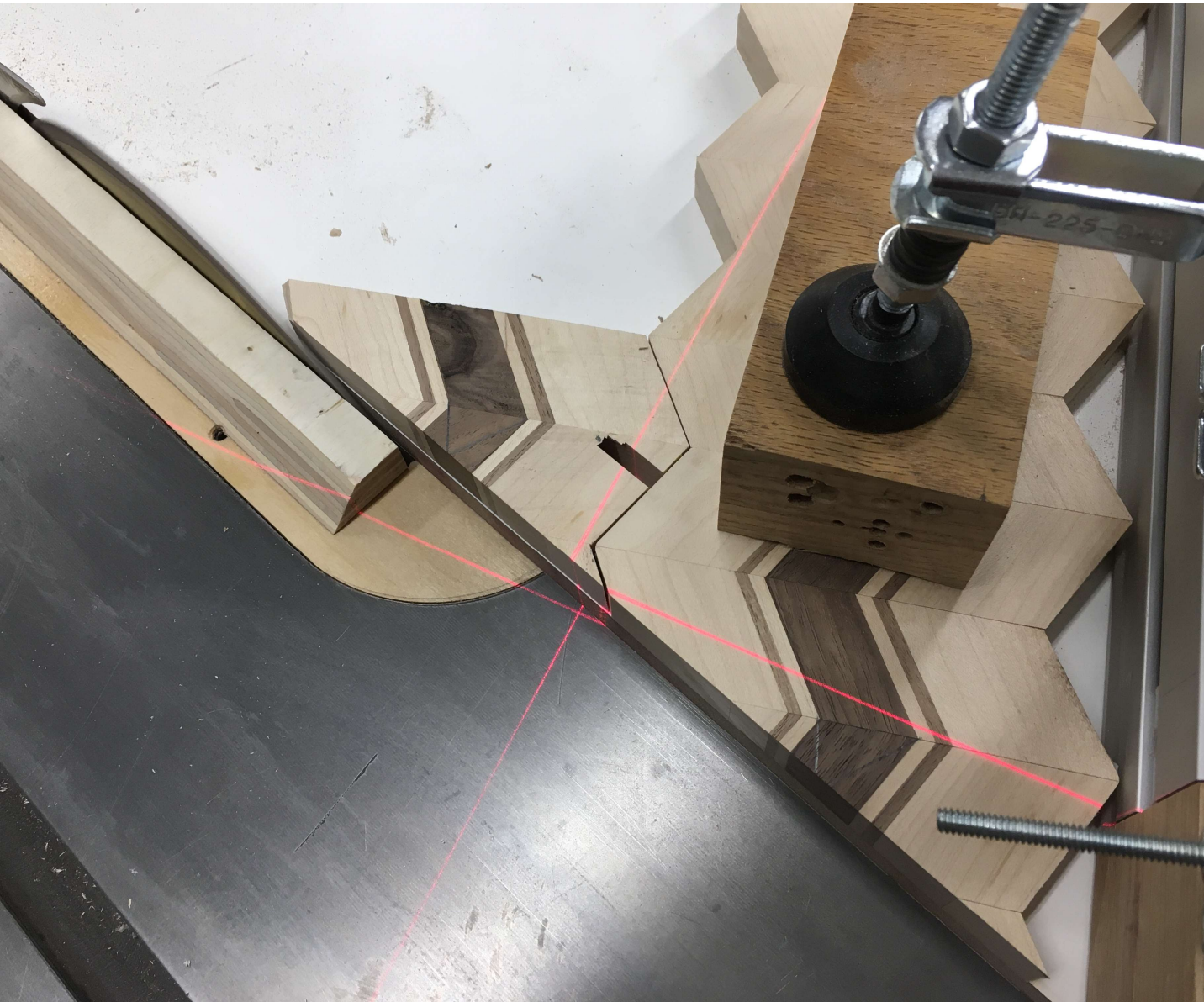


MARK ONE OR MORE DESIGN CENTERS

Select the strip that will allow a saw cut to be made through the entire width of the board in a place that will minimize board waste. It is important that this cut be made in a board that will match the design properties of 'Decline' or 'Incline'.

In this instance the property calls for using a Declining strip. This means that the kerf will be mostly perpendicular to the slope of the lamination. A cut through an Inclining strip will be more parallel to the lamination.

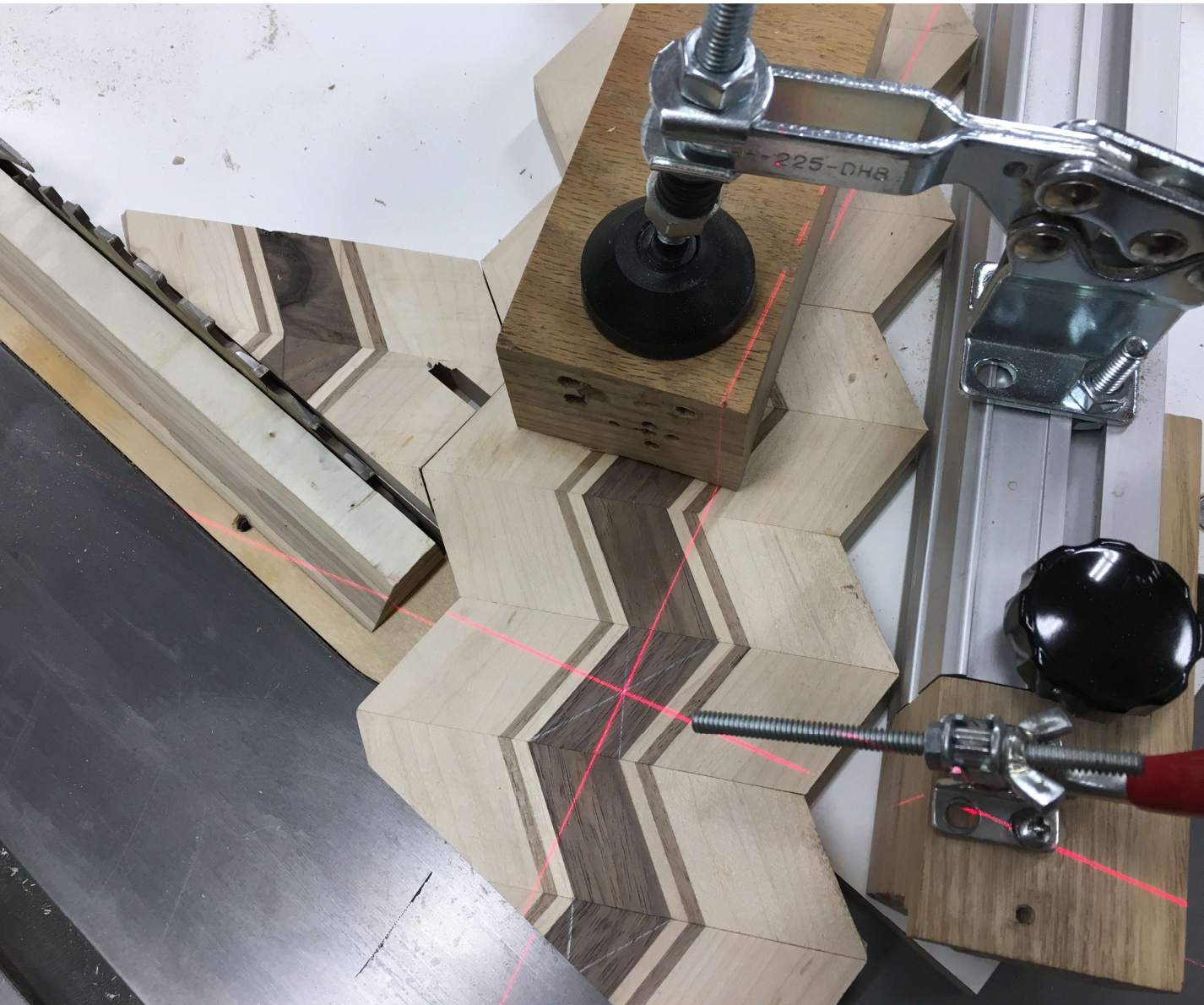




USE CUTOFF AS A POSITIONING AID

Add a strip of double-sided tape to the back of the waste piece and move it to the position shown before the board is moved. Once it is in place, the board can simply be moved to the next matching location which will position the board for the next and subsequent cuts.





CONTINUE CUTTING STRIPS FOR THE NEXT GENERATION

I call this process the 'Relative Positioning System'. By moving the board to the next and subsequent matching positions, each saw cut is made in the same position as the first cut.

It isn't possible to make these cuts by setting a stop because whatever error exists (there will always be an error) will increase cumulatively.

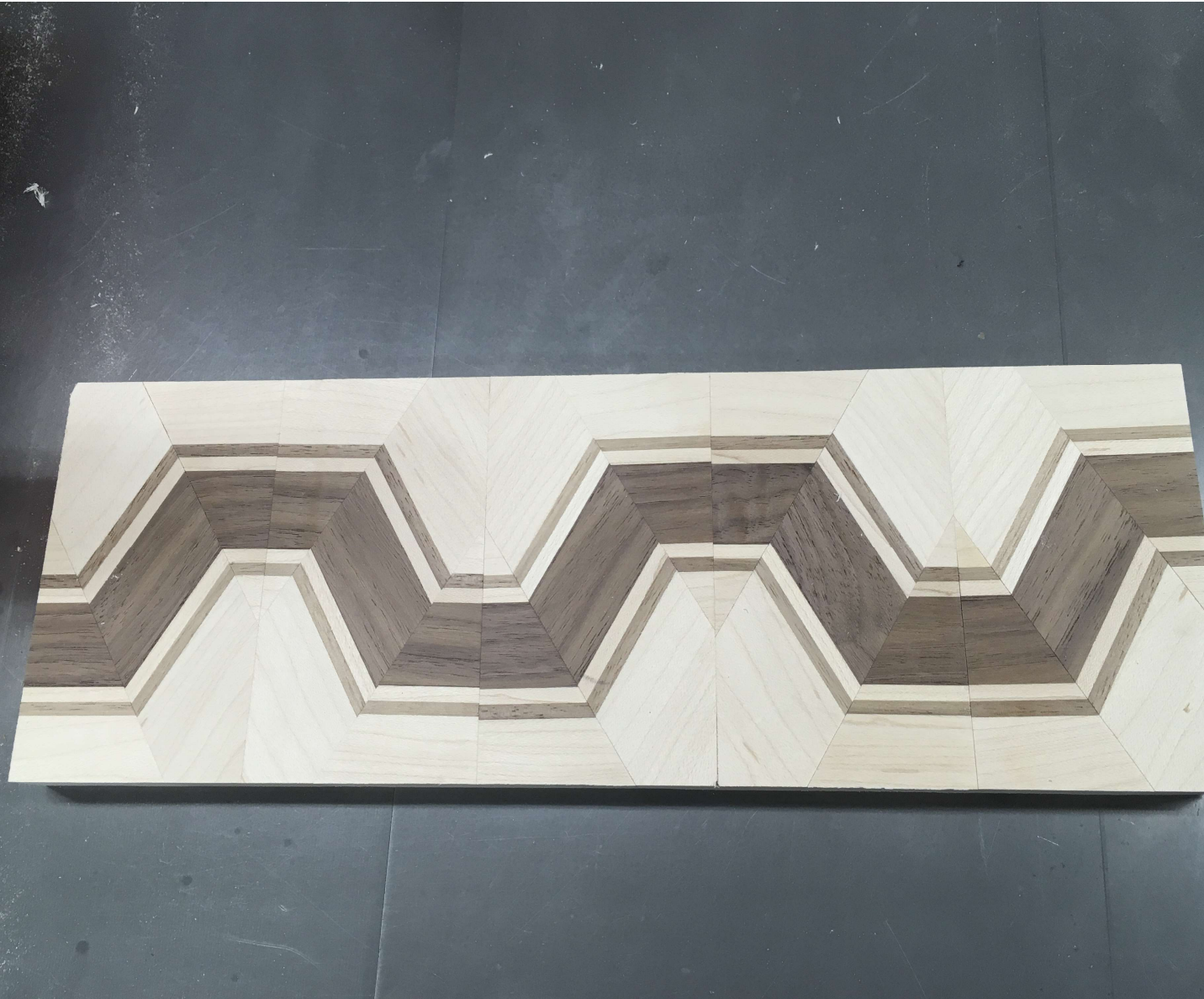




NEXT GENERATION BOARD

Glue the strips into a next generation board. Since this board is not going to be cut into a third generation board, you can trim it to size. In this case, I used a board with double-sided tap to position the board on the saw fence using the pattern to provide proper alignment.





FINISHED SECOND GENERATION BOARD

In this case, any alignment issues is the result of a laminated board that had inconsistent widths of strips of wood to make the laminated board.

