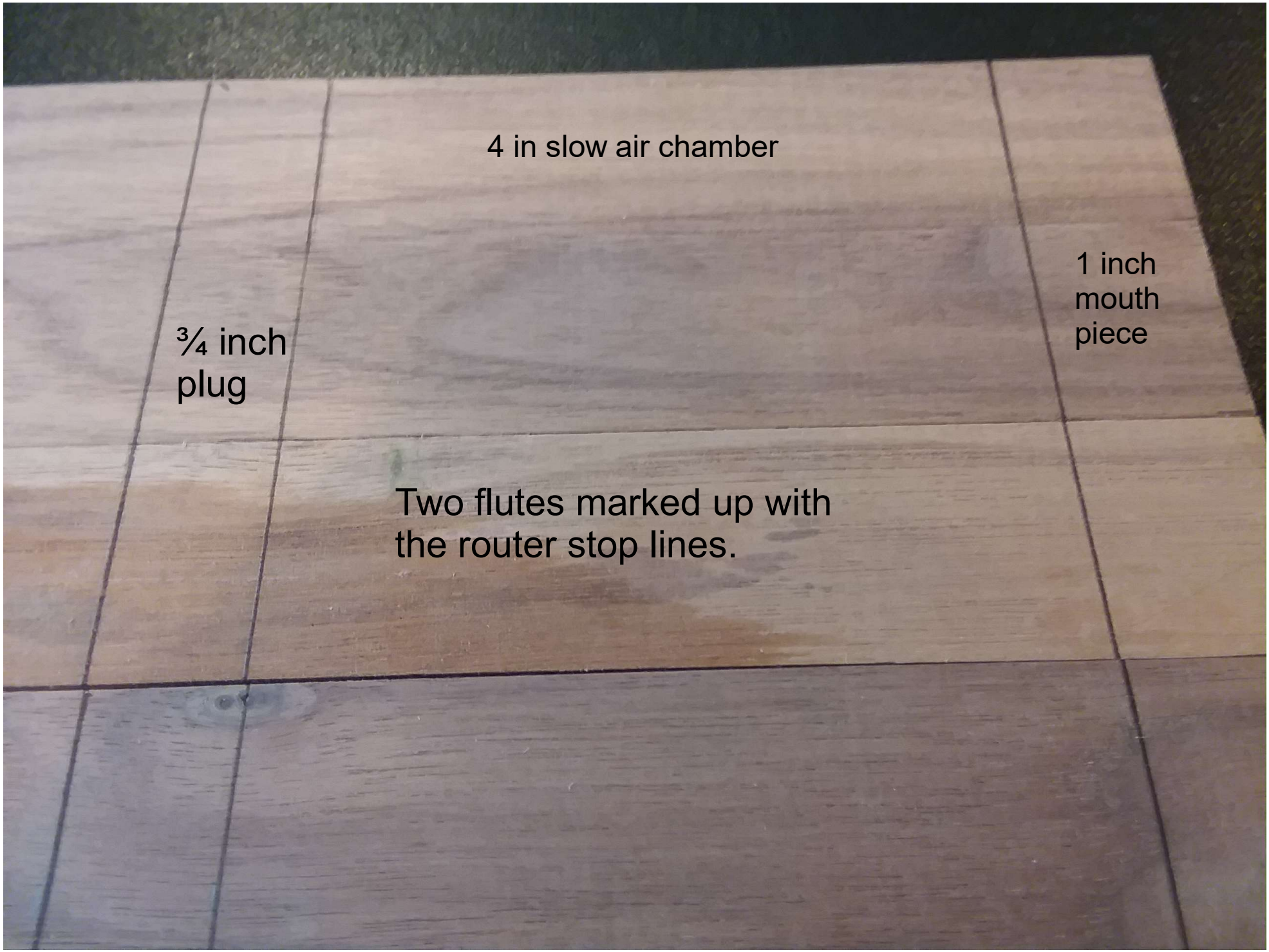
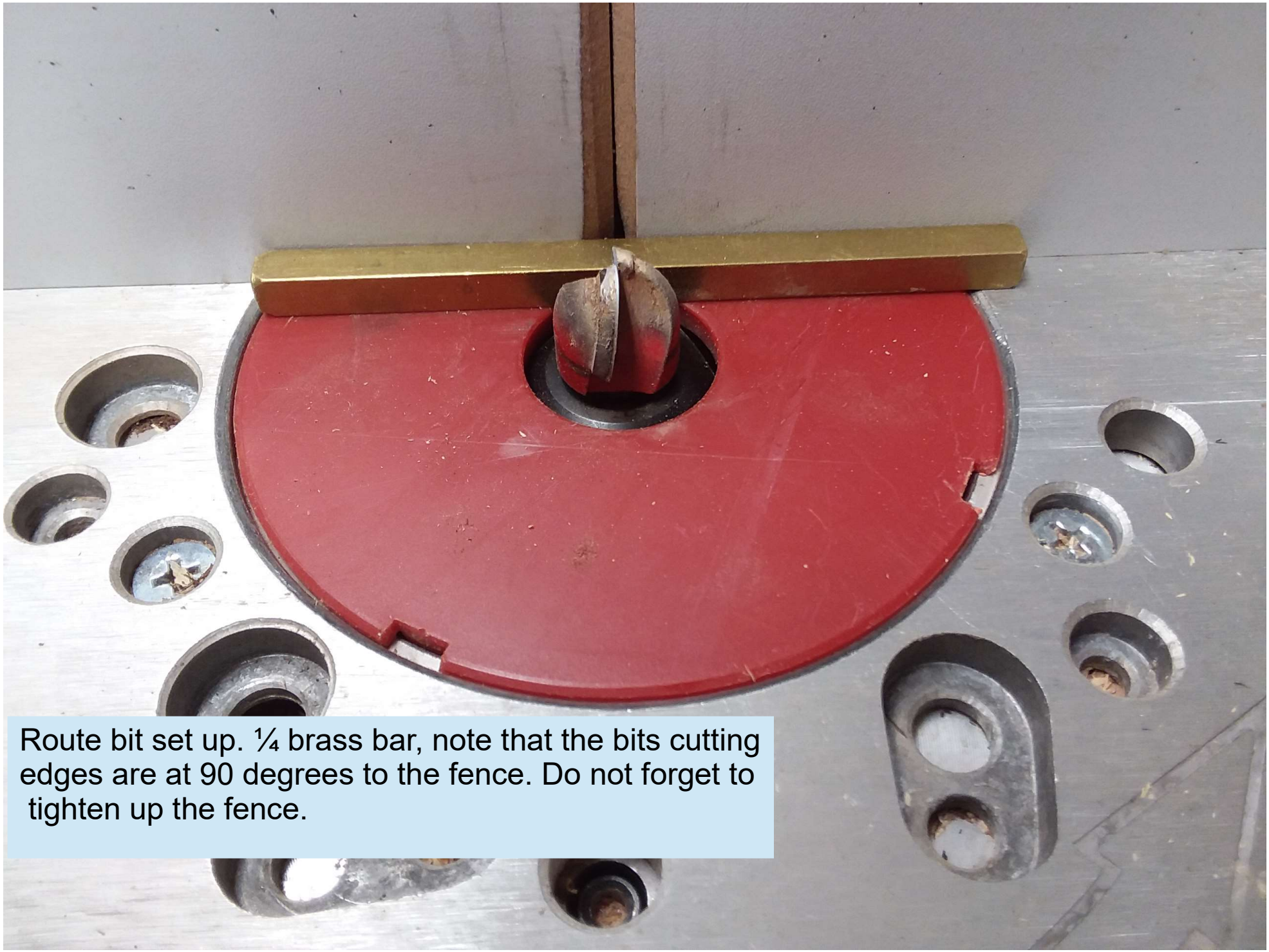
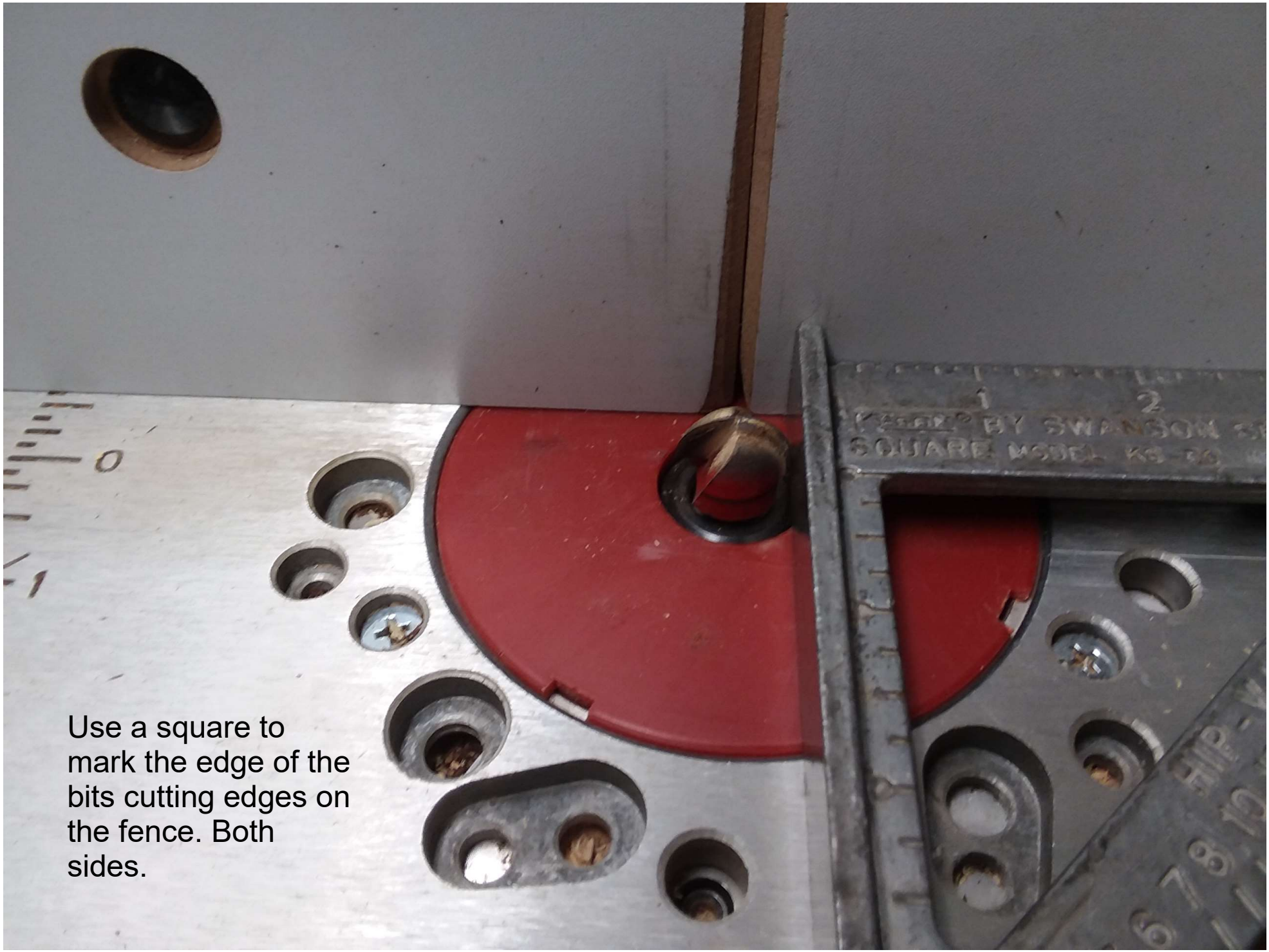
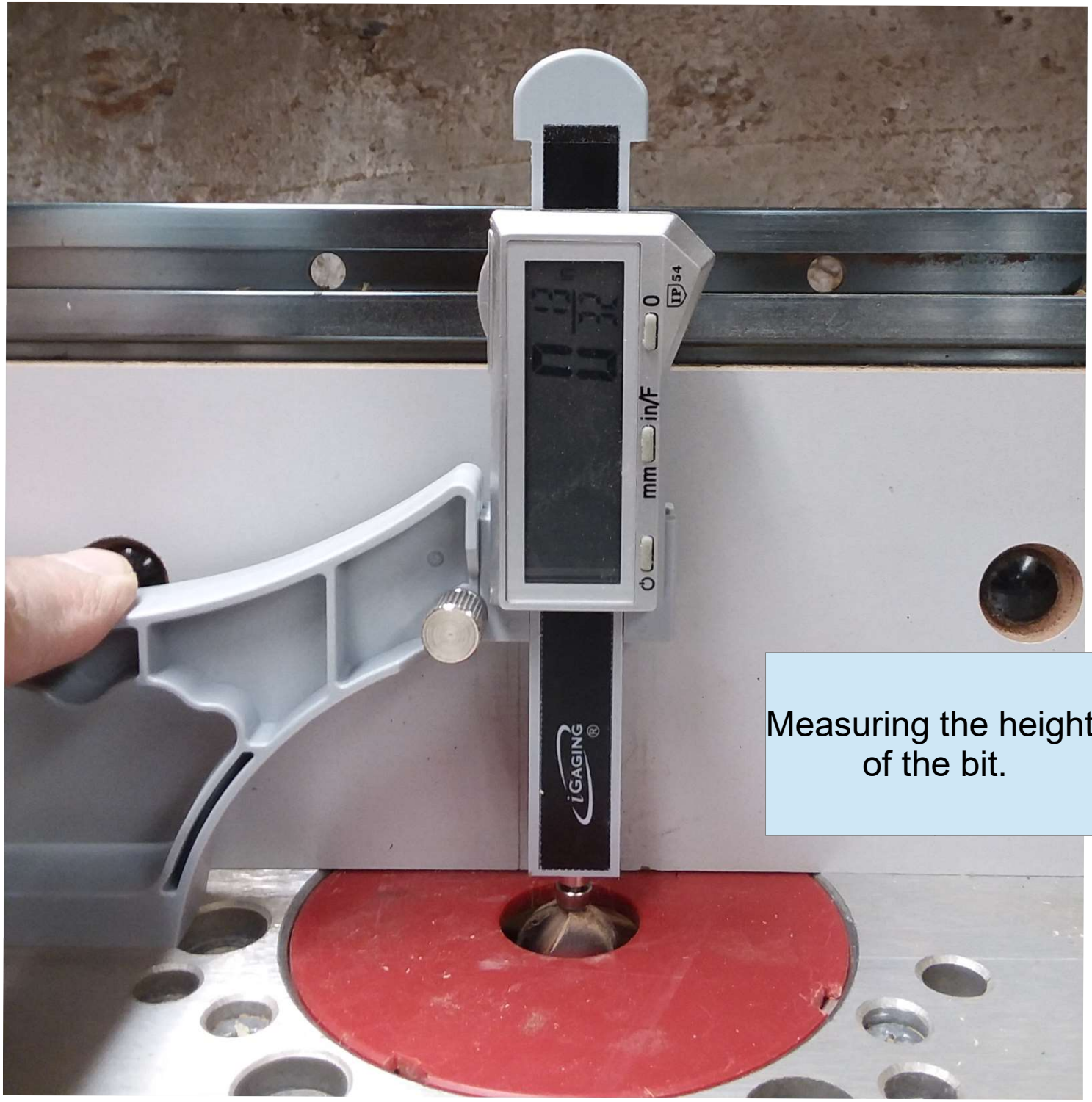

4 in slow air chamber
¾ inch plug
1 inch mouth piece
Two flutes marked up with the router stop lines.



Route bit set up. ¼ brass bar, note that the bits cutting edges are at 90 degrees to the fence. Do not forget to tighten up the fence.

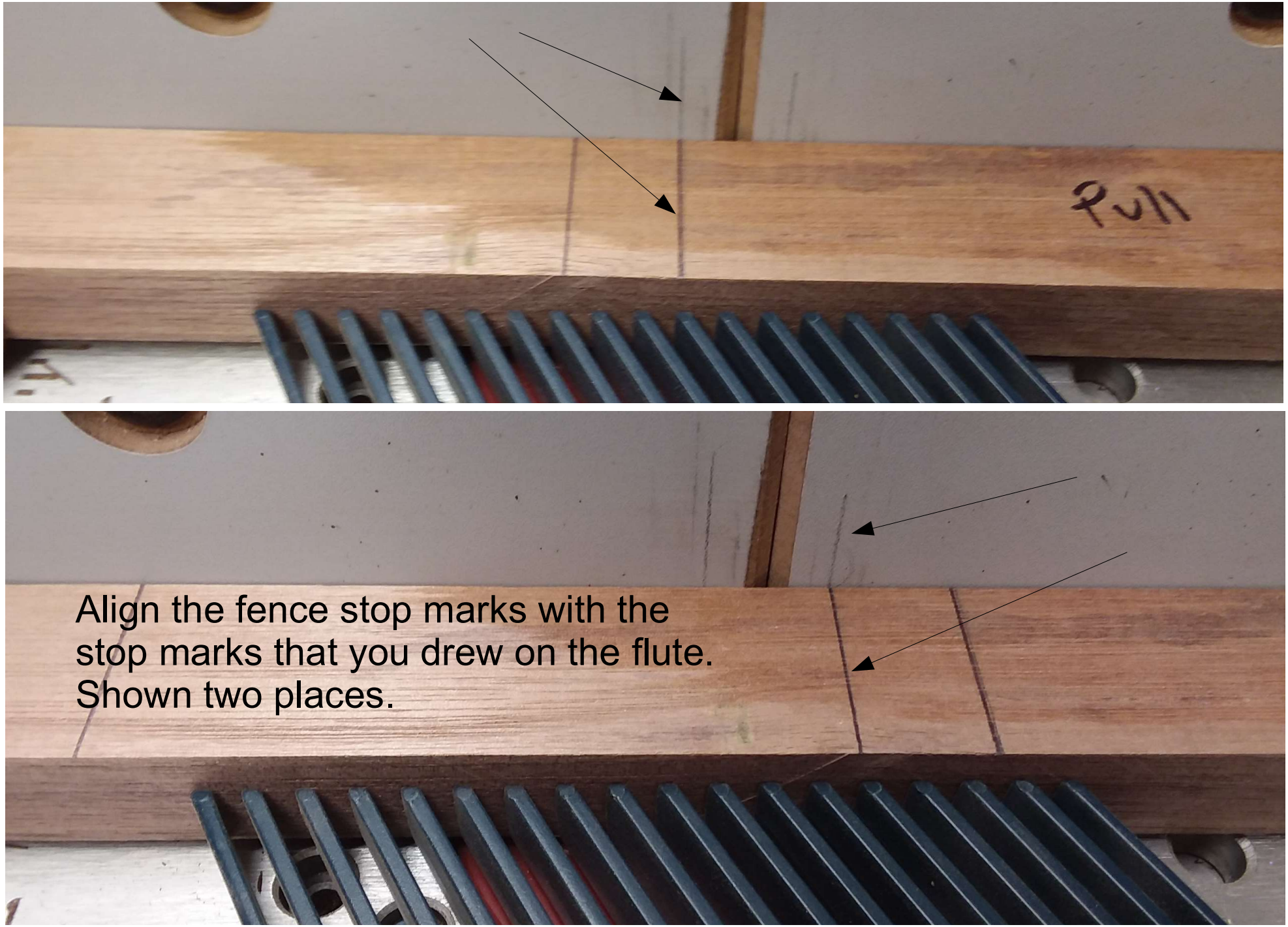

Use a square to mark the edge of the bits cutting edges on the fence. Both sides.



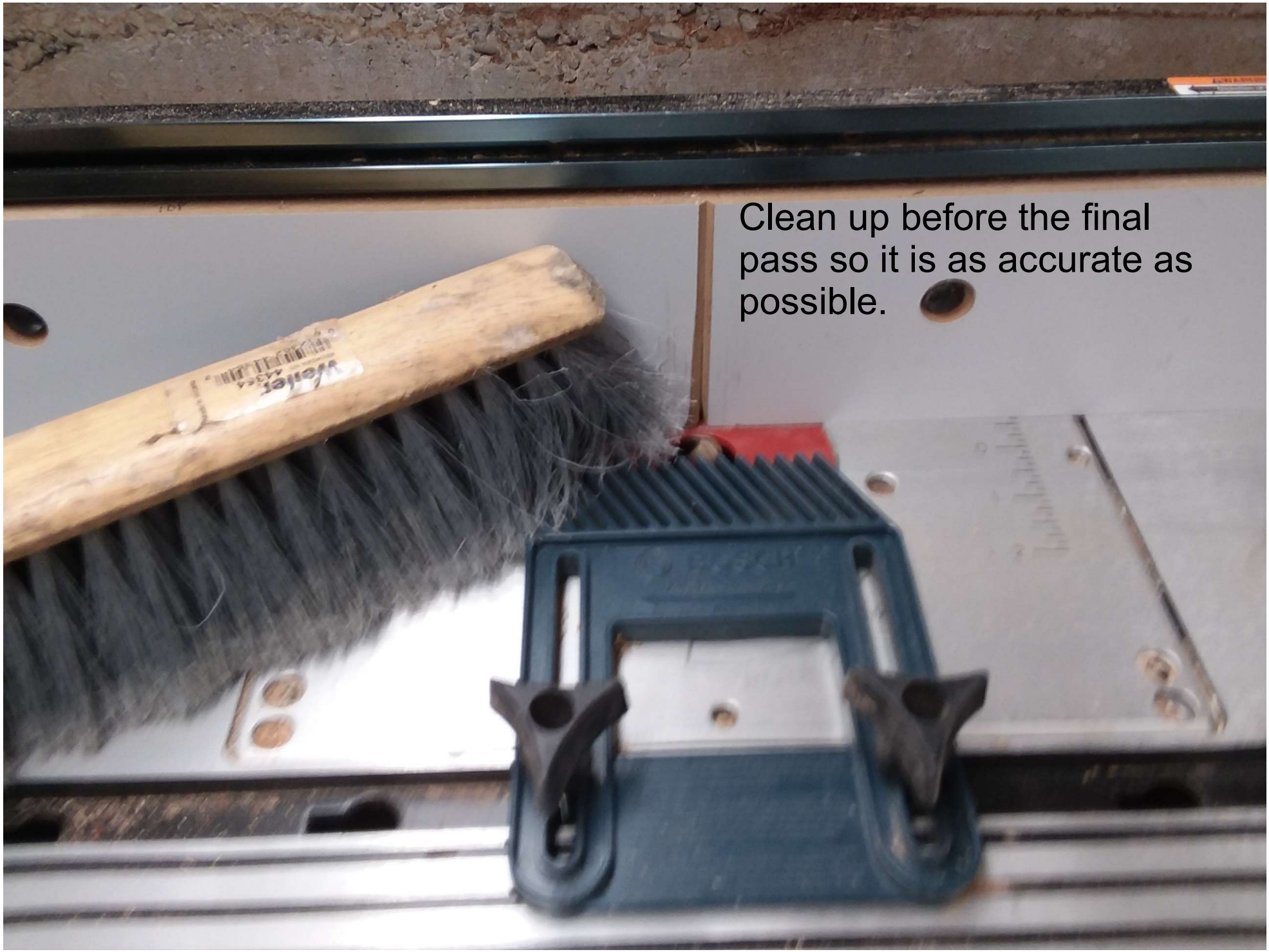
Measuring the height of the bit.

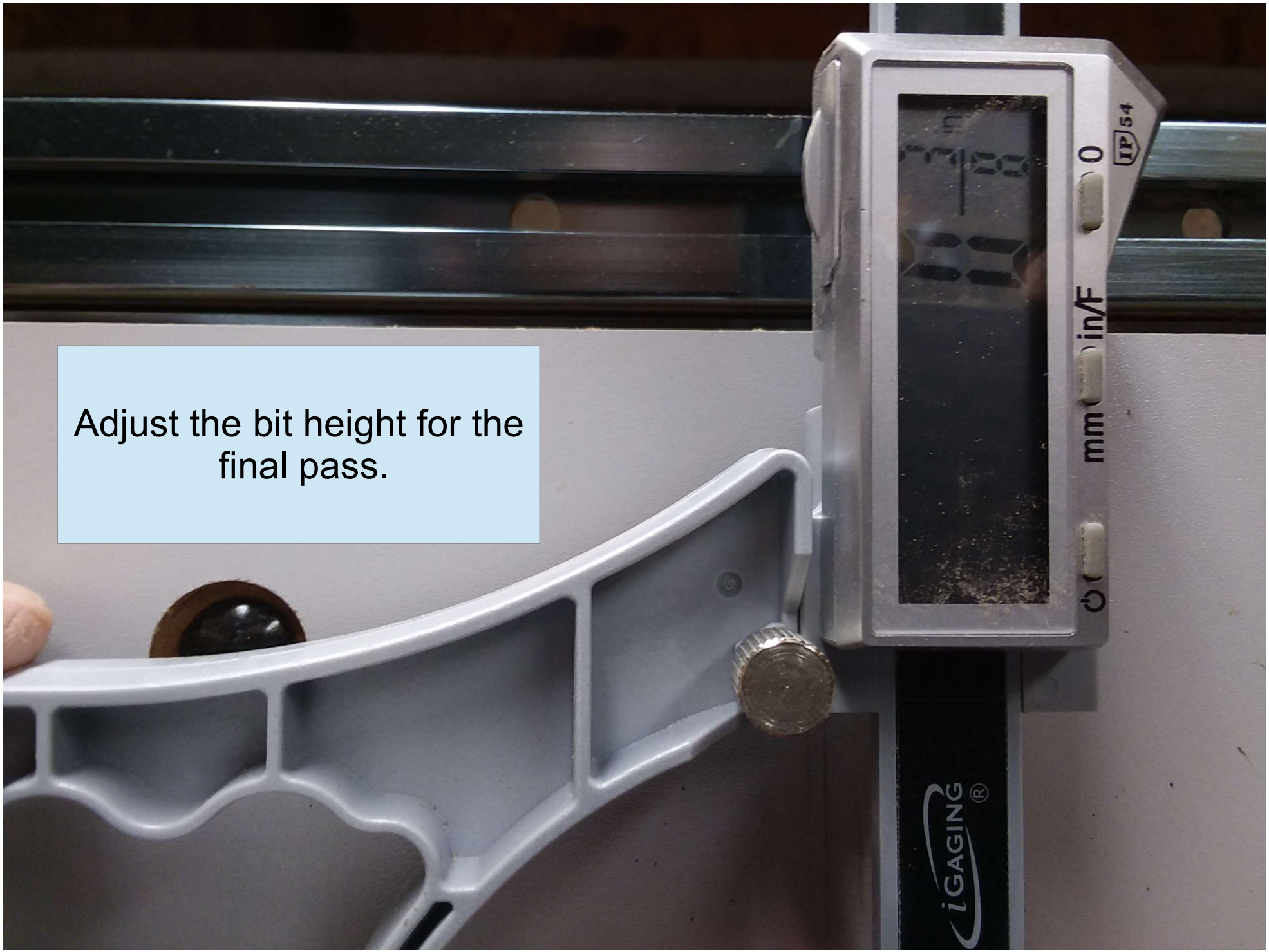

Pull
BOSCH
DIRECTION OF FEED


Pull
Push
2
BOSCH
DIRECTION OF FEED
Pull
Push


Pull
Align the fence stop marks with the
stop marks that you drew on the flute.
Shown two places.

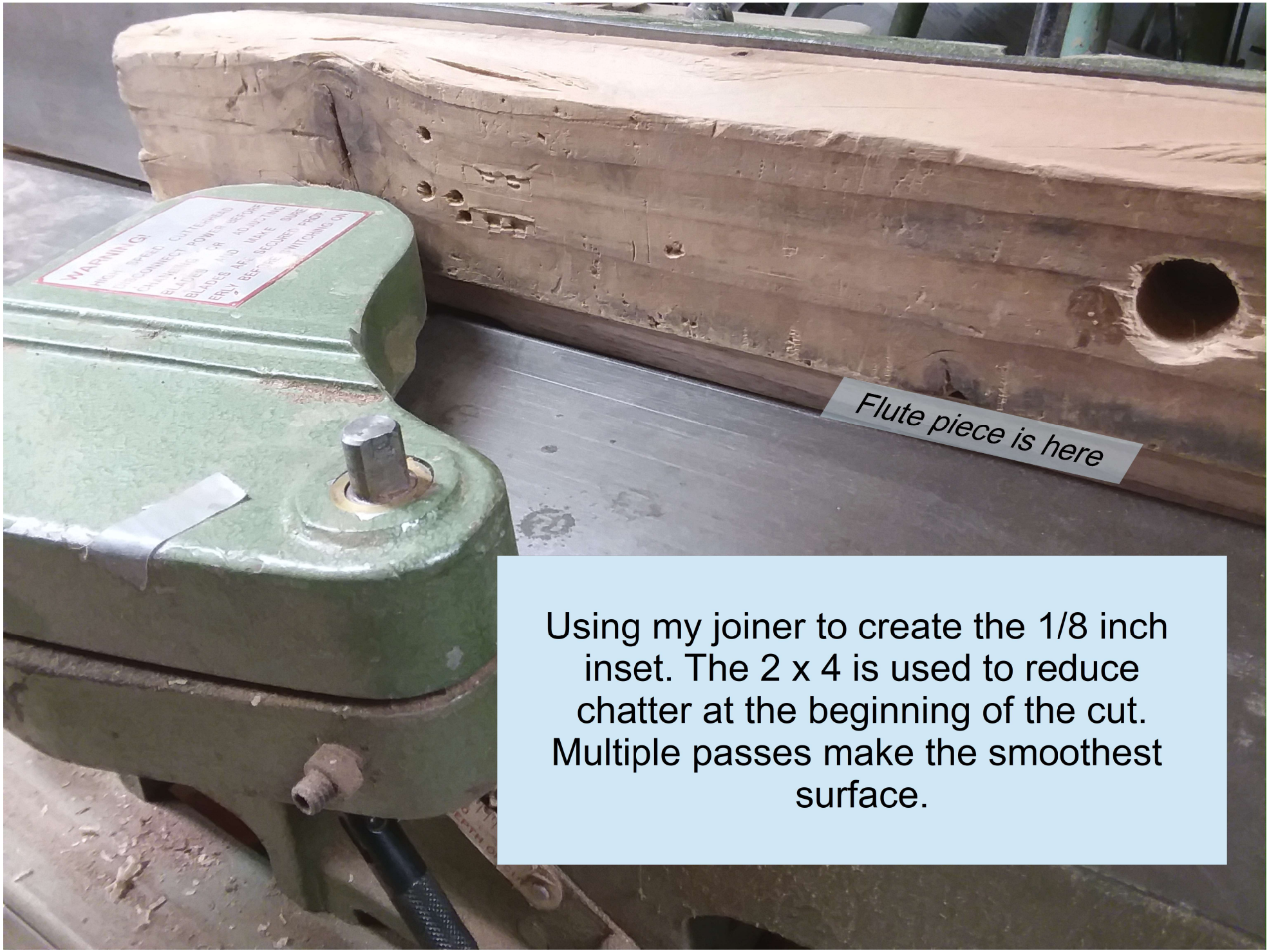
A little at a time.


Clean up before the final pass so it is as accurate as possible.

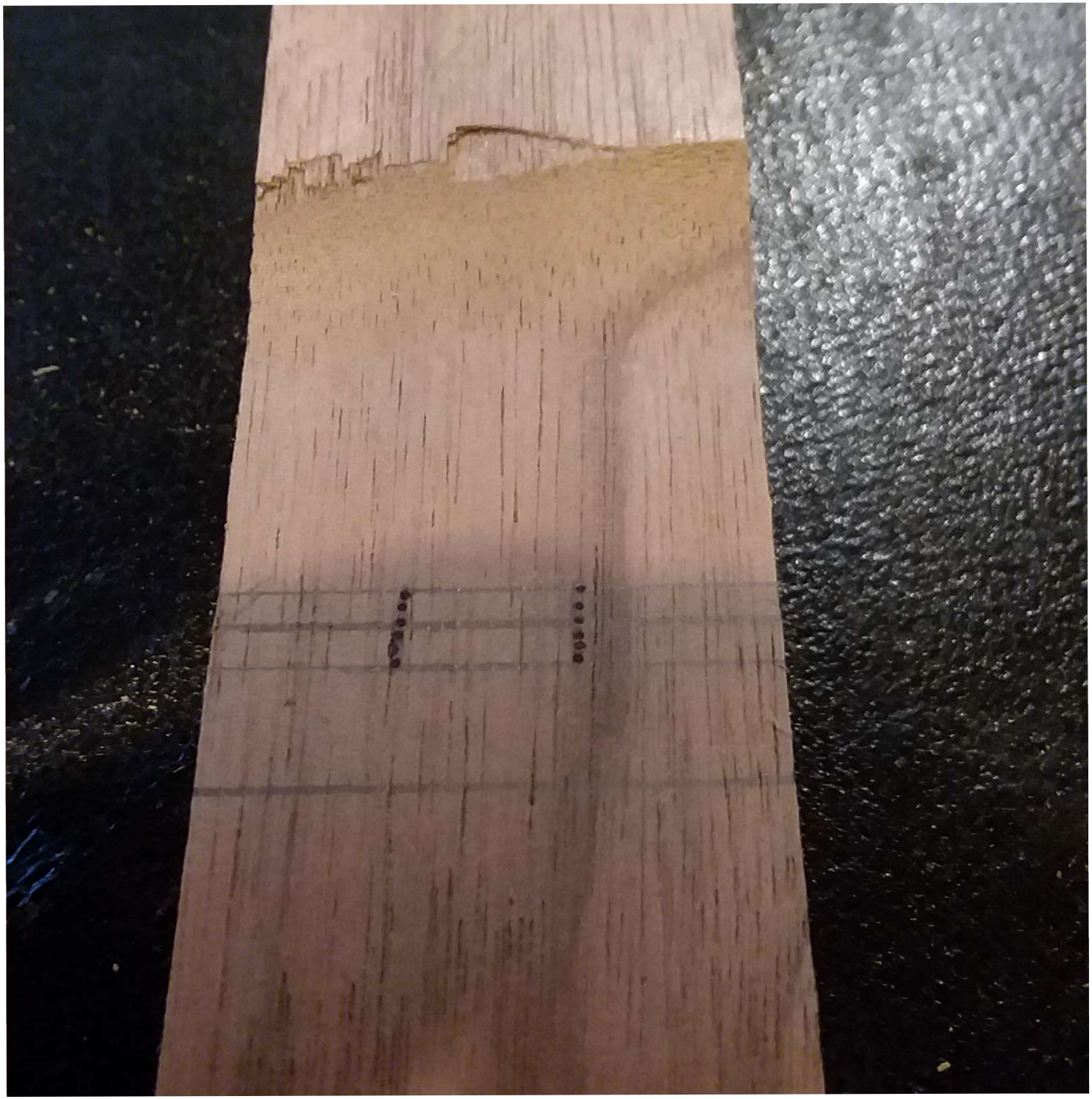

Adjust the bit height for the final pass.
0
in/F
mm
IP 54
iGAGING

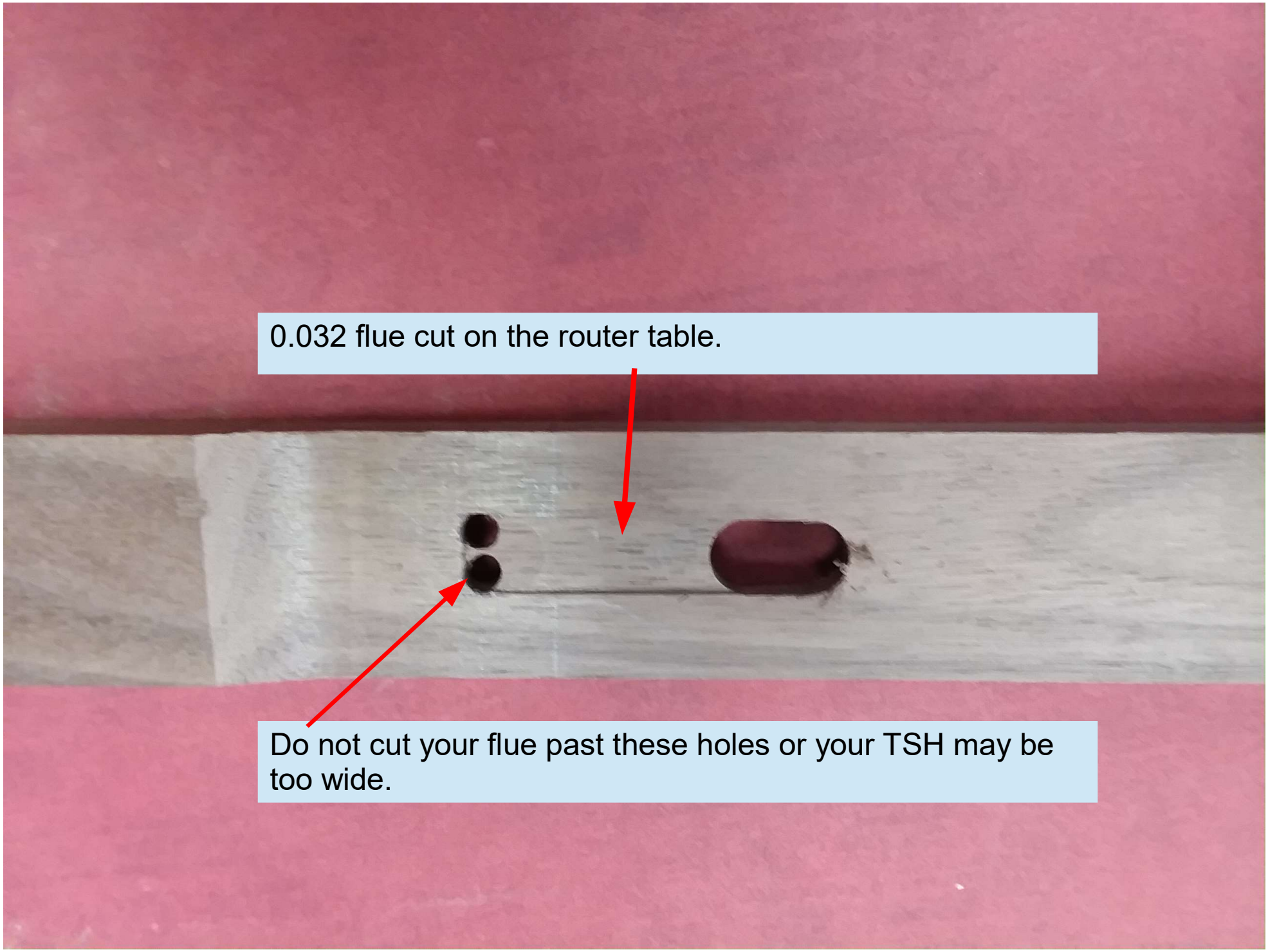

BOSCH
I still use my rule to measure the ¾ inch hole.

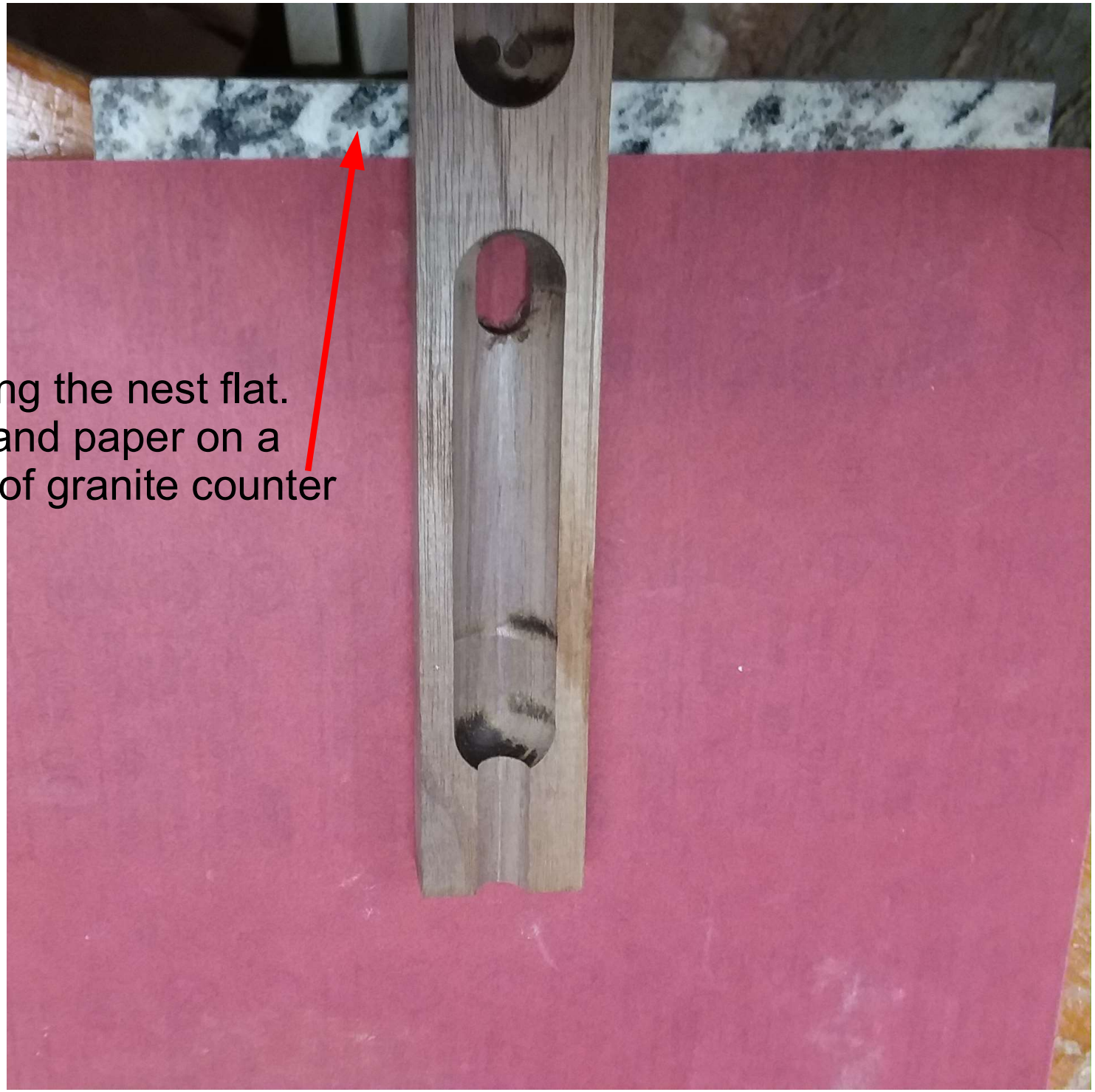
Measuring for the 3/8 inch mouthpiece hole.



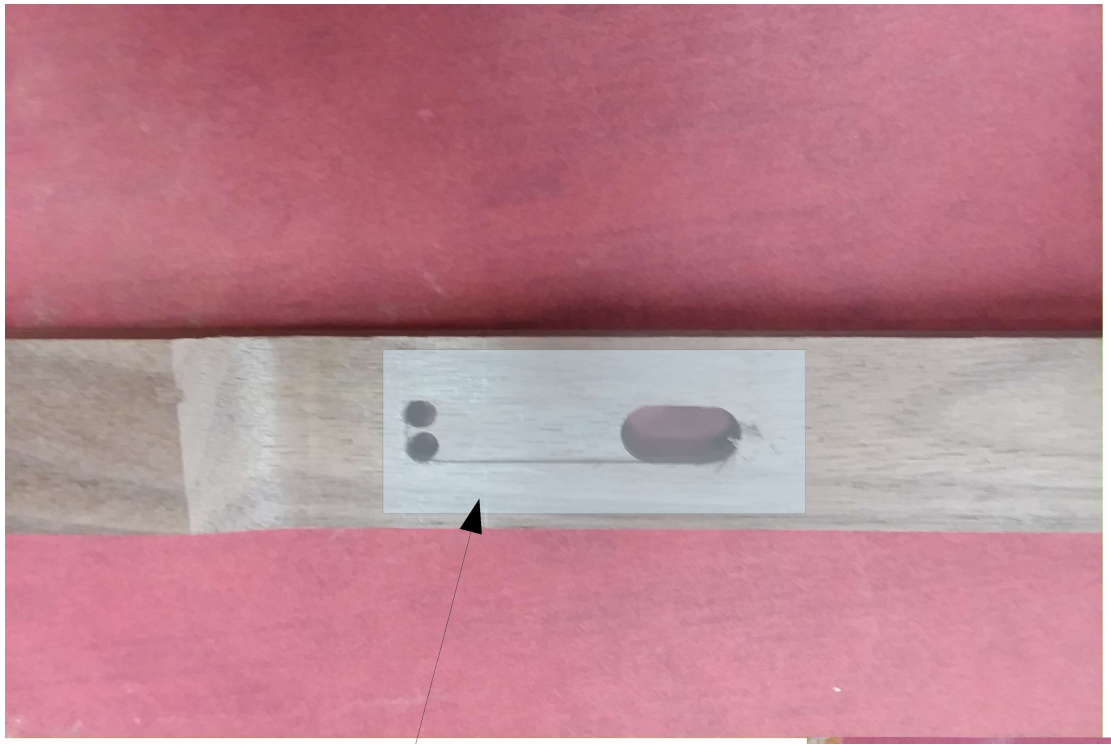
Using my joiner to create the 1/8 inch inset. The 2 x 4 is used to reduce chatter at the beginning of the cut. Multiple passes make the smoothest surface.




0.032 flue cut on the router table.
Do not cut your flue past these holes or your TSH may be too wide.

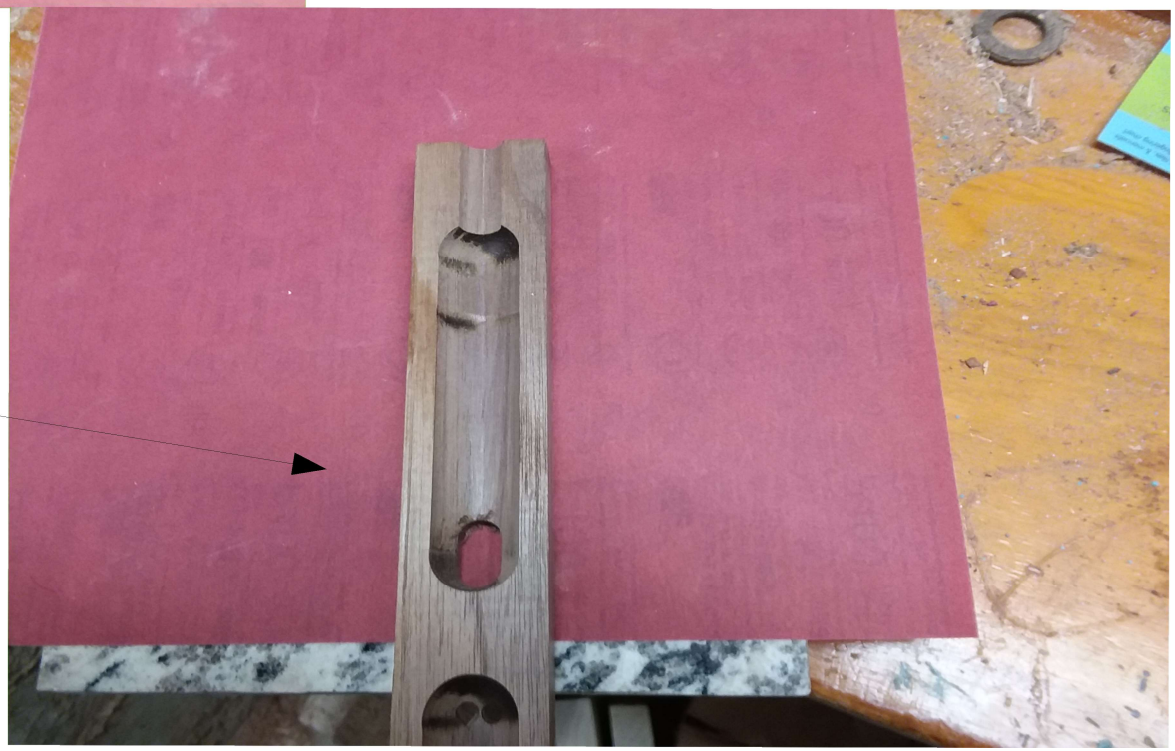


Sanding the nest flat. 220 sand paper on a piece of granite counter top.



Make sure the nest is flat. This mates with the bird, and you get less breath noise if there is a good seal.

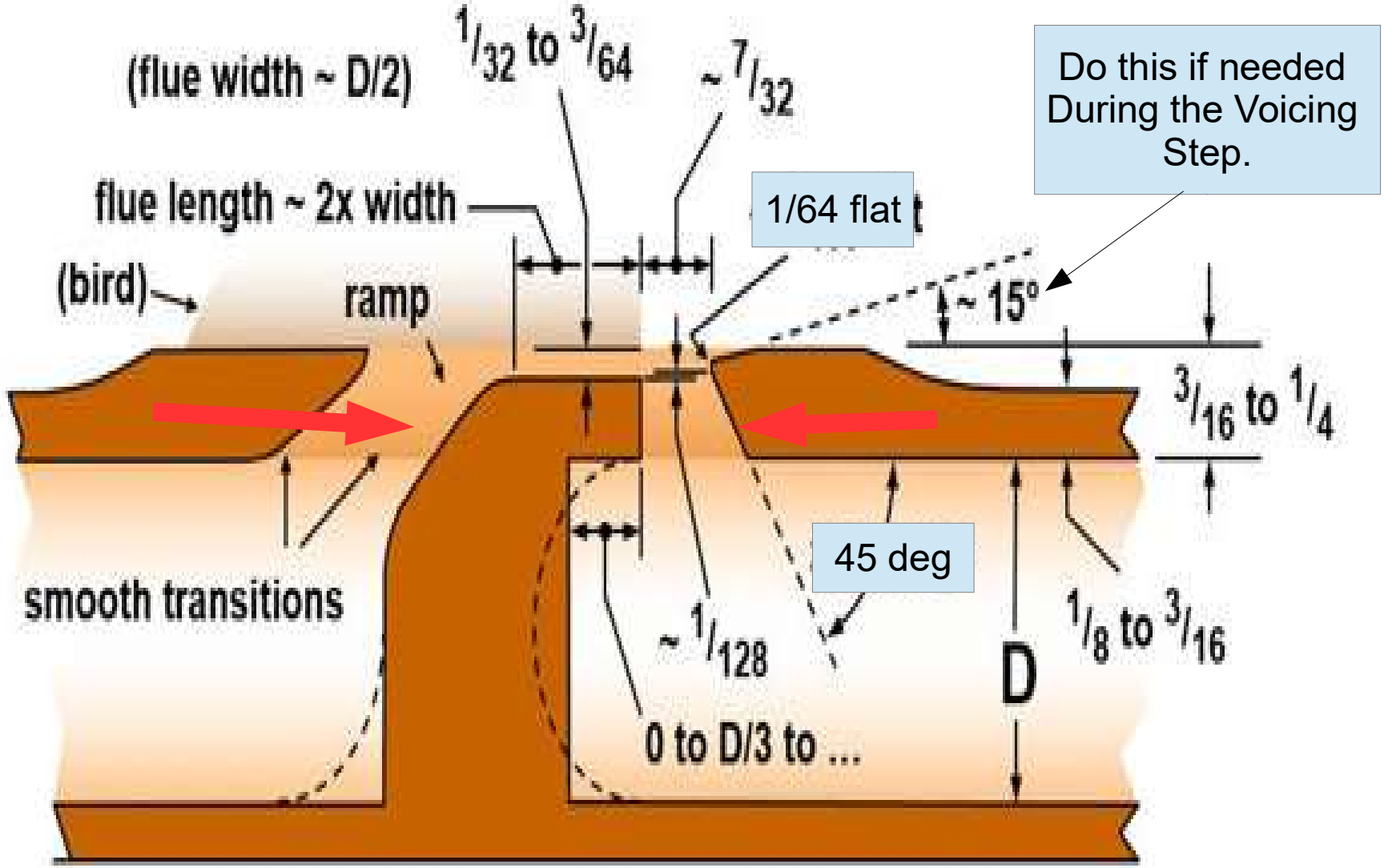
I use of 220 sandpaper and a piece of counter top to flatten this area. You can put a light finish or pencil lines to see when you have flattened the nest.



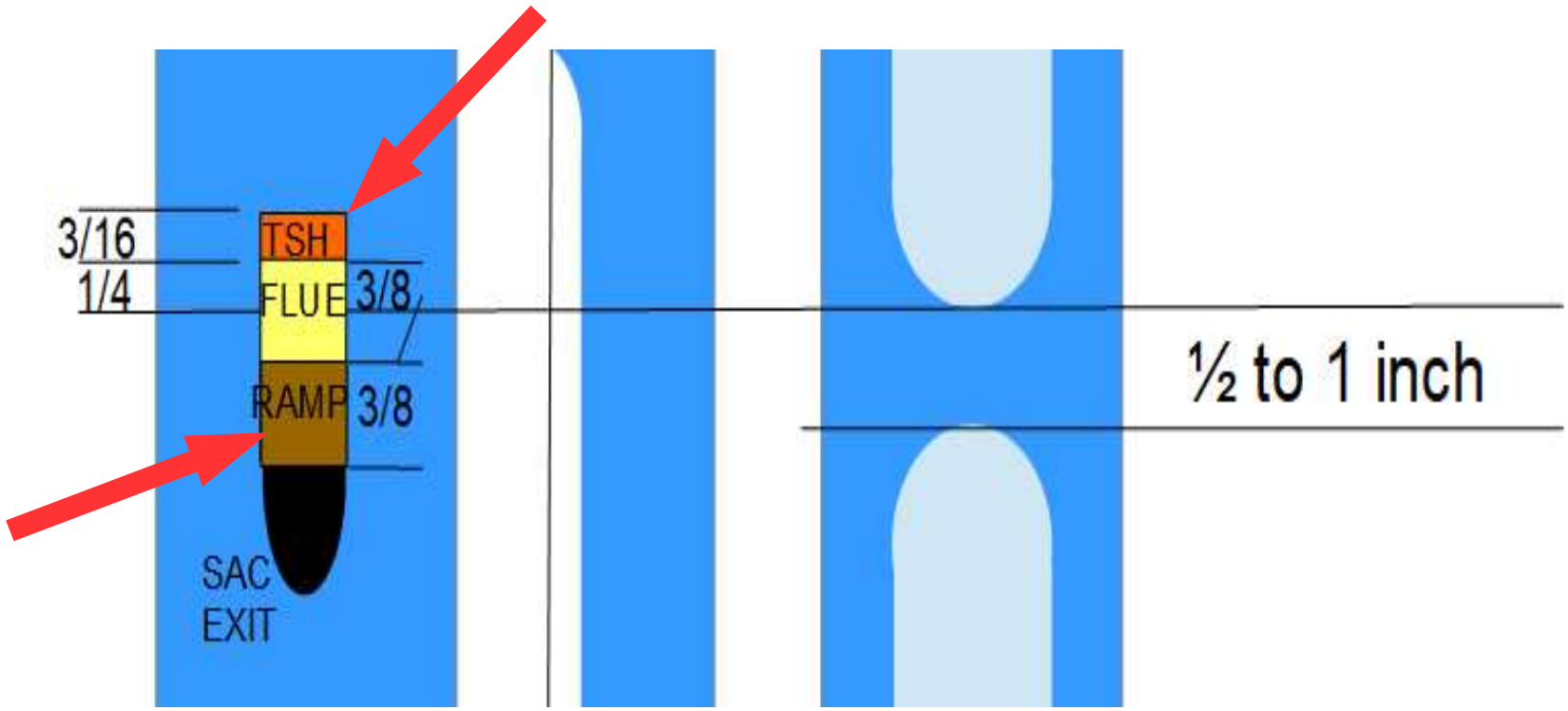
HAND TOOL TIME
Rasp, files, maybe a wood chisel.

Favorite hand tools:

Auriou 14 grain needle wood rasp
Nicholson fine file, B&C



Using your hand tools shape the ramp, square up the TSH and make the 45 degree splitting edge. Everything should be symmetrical shaped and square. The smoother this area the smoother the sound of the flute will be.



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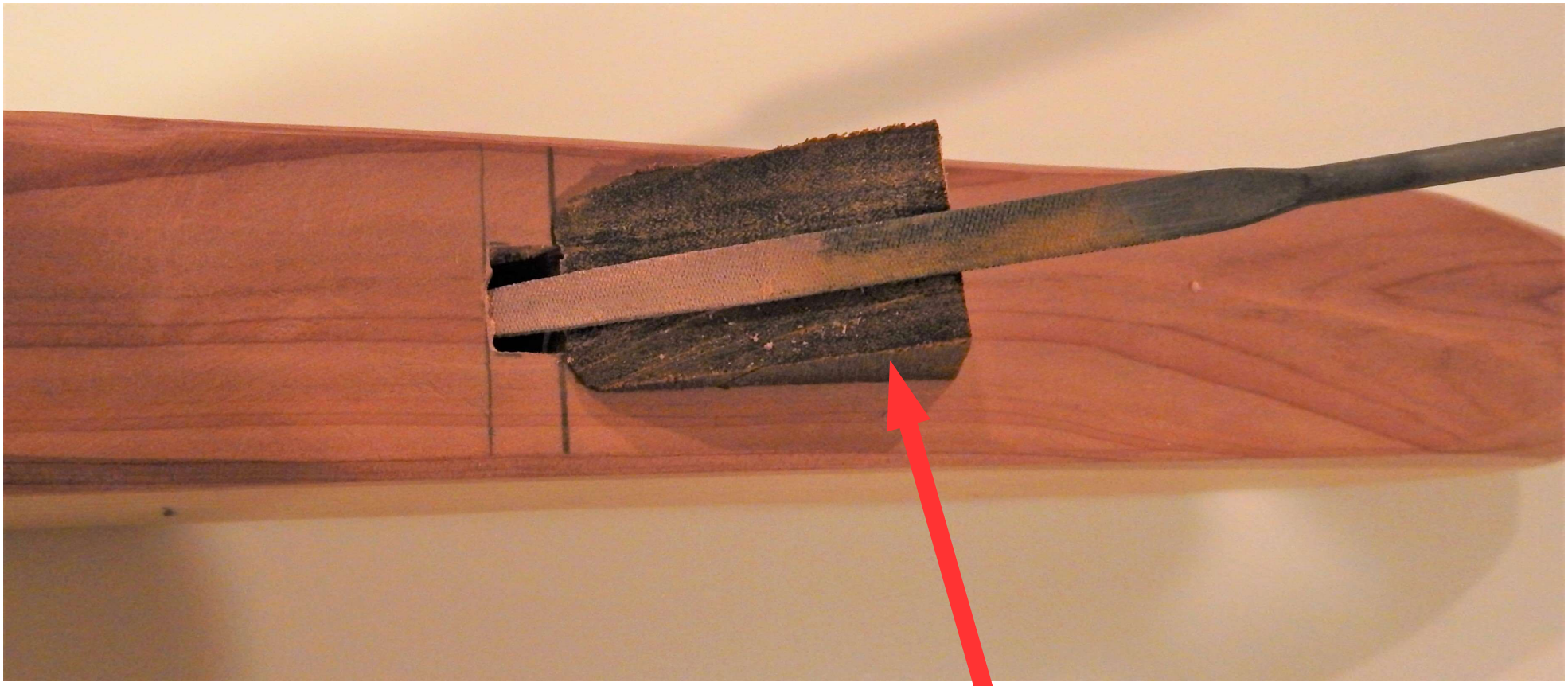
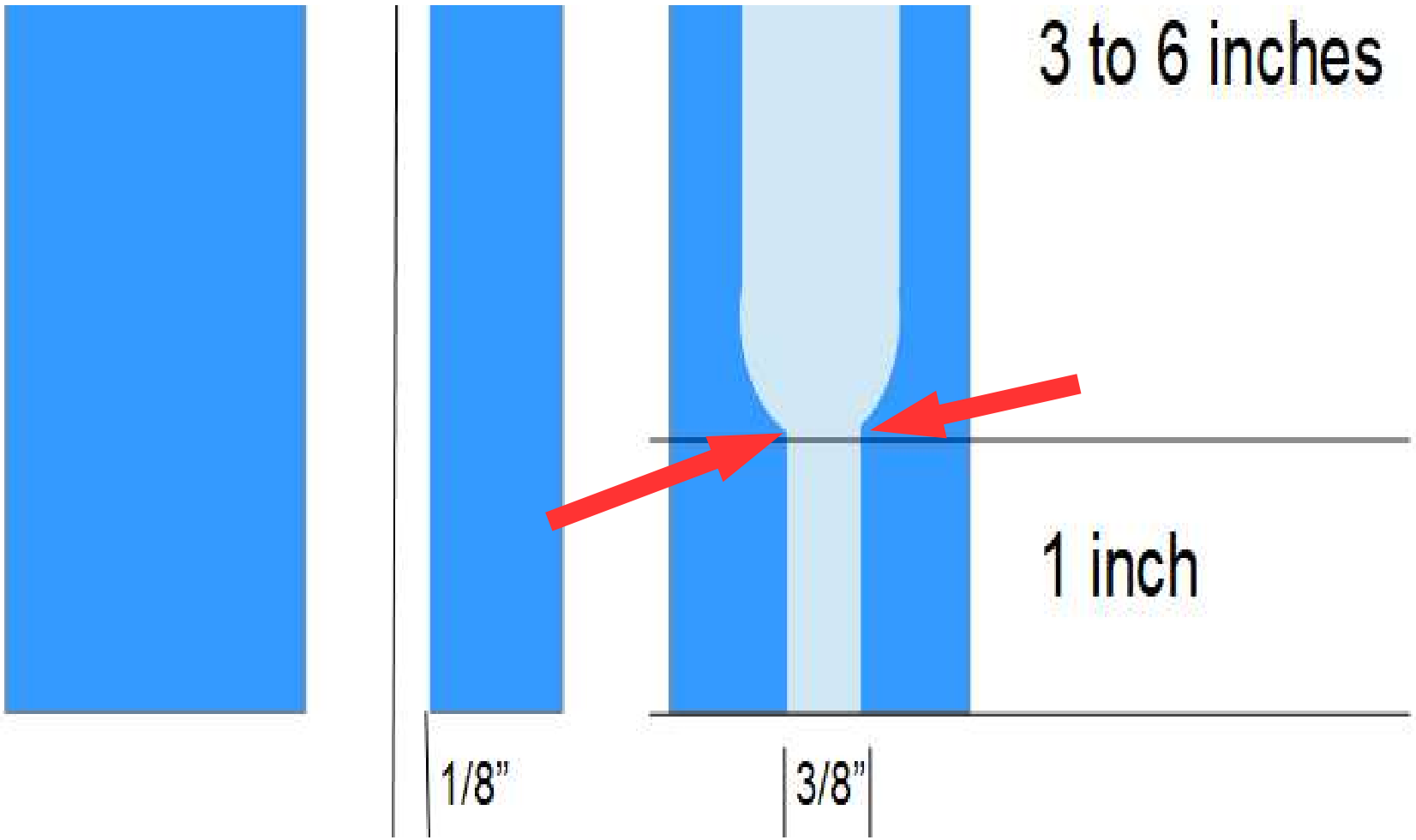


45 deg block to guide angle of splitting edge.
(old picture, I started out with a 30 degree block)



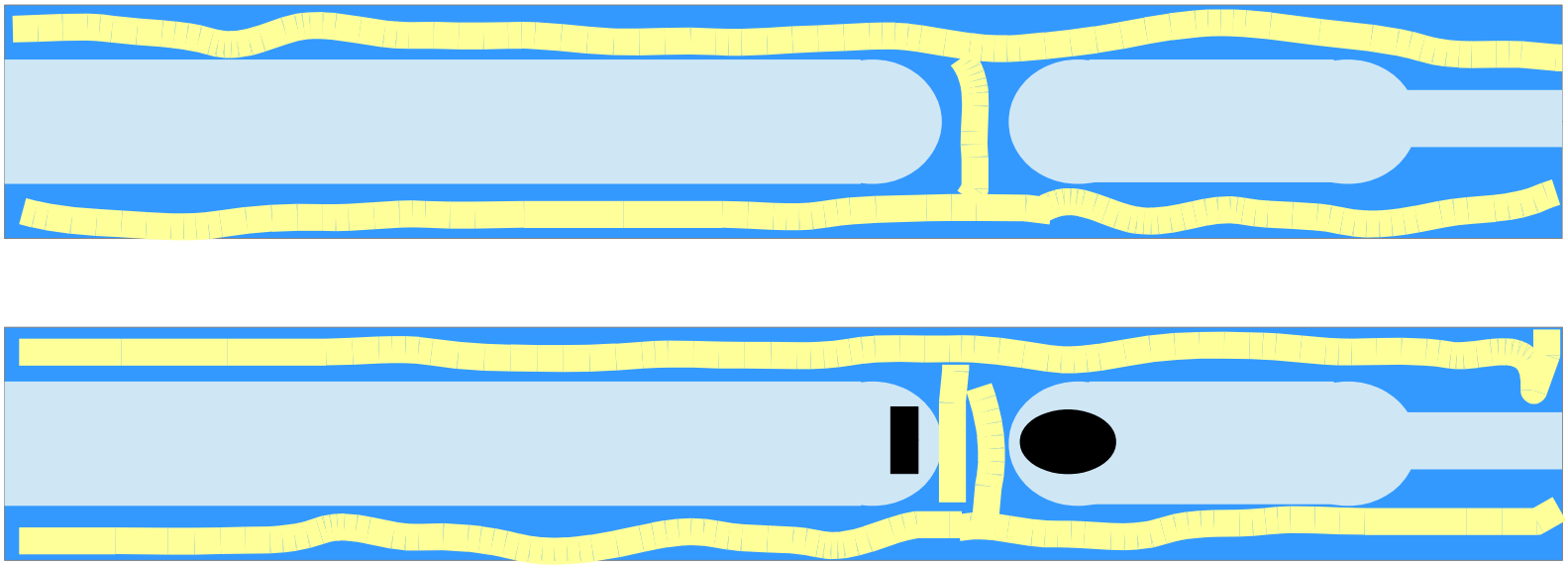
Round and smooth anything air may rush around.

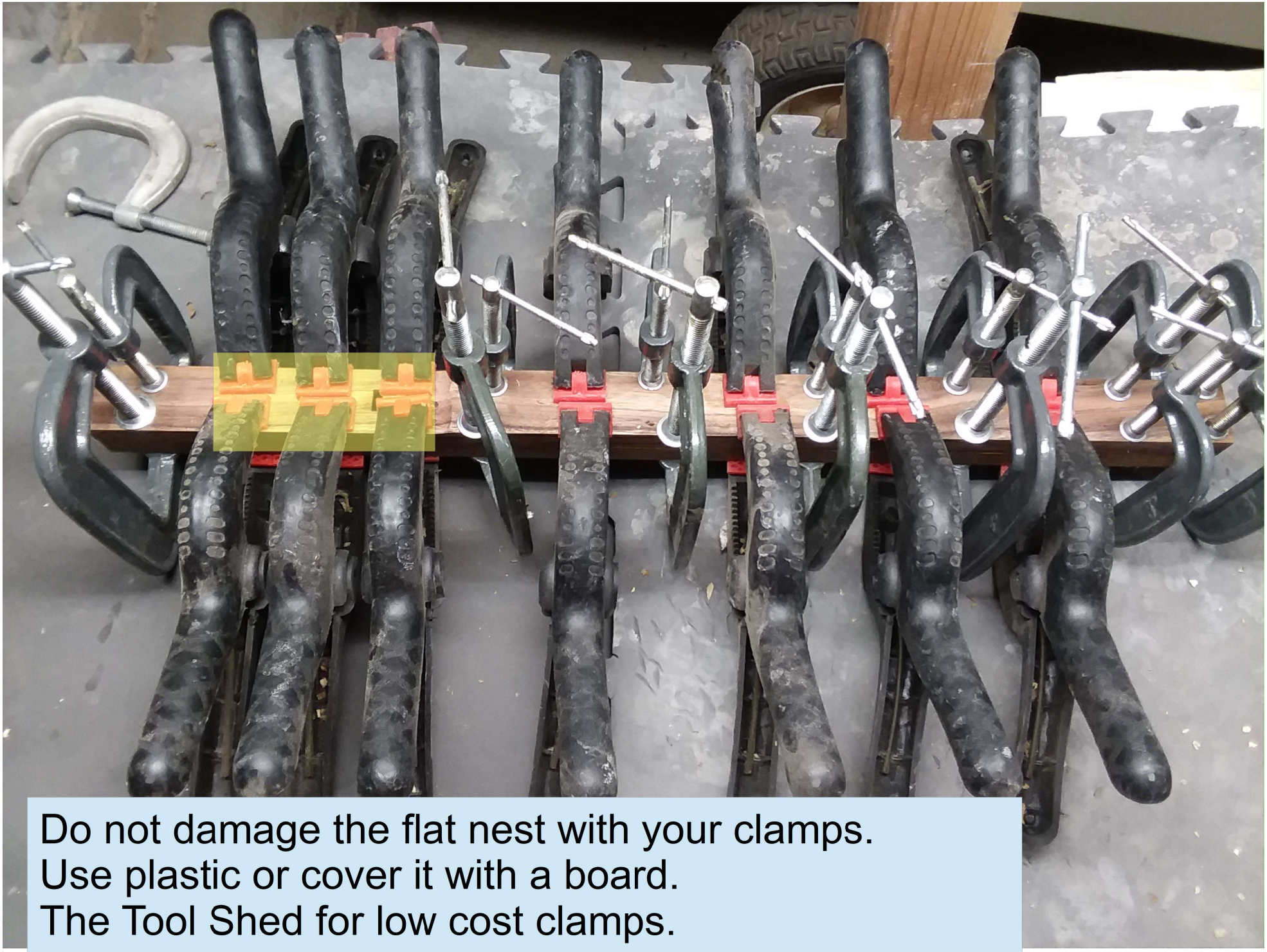
On a flat surface rough up the glue surfaces with 220 sand paper.

Coat the light blue area with poly or lacquer. I use rub on ploy. This allows for the removal of the glue.

Prepare clean up tools before gluing, see next slide.

I use Titebond III for glue. It is water proof. The SAC has to handle high moister when the flute is being played.





Do not damage the flat nest with your clamps.
Use plastic or cover it with a board.
The Tool Shed for low cost clamps.

Still want to do a flute, but don't want to build it up this far?
How about Fluteblanks.com?
There are many other sites that will
provide flute blanks or flute kits.

I use my router or table saw to create a hexagon on brittle or splintering wood and when I am trying out a new type of wood.

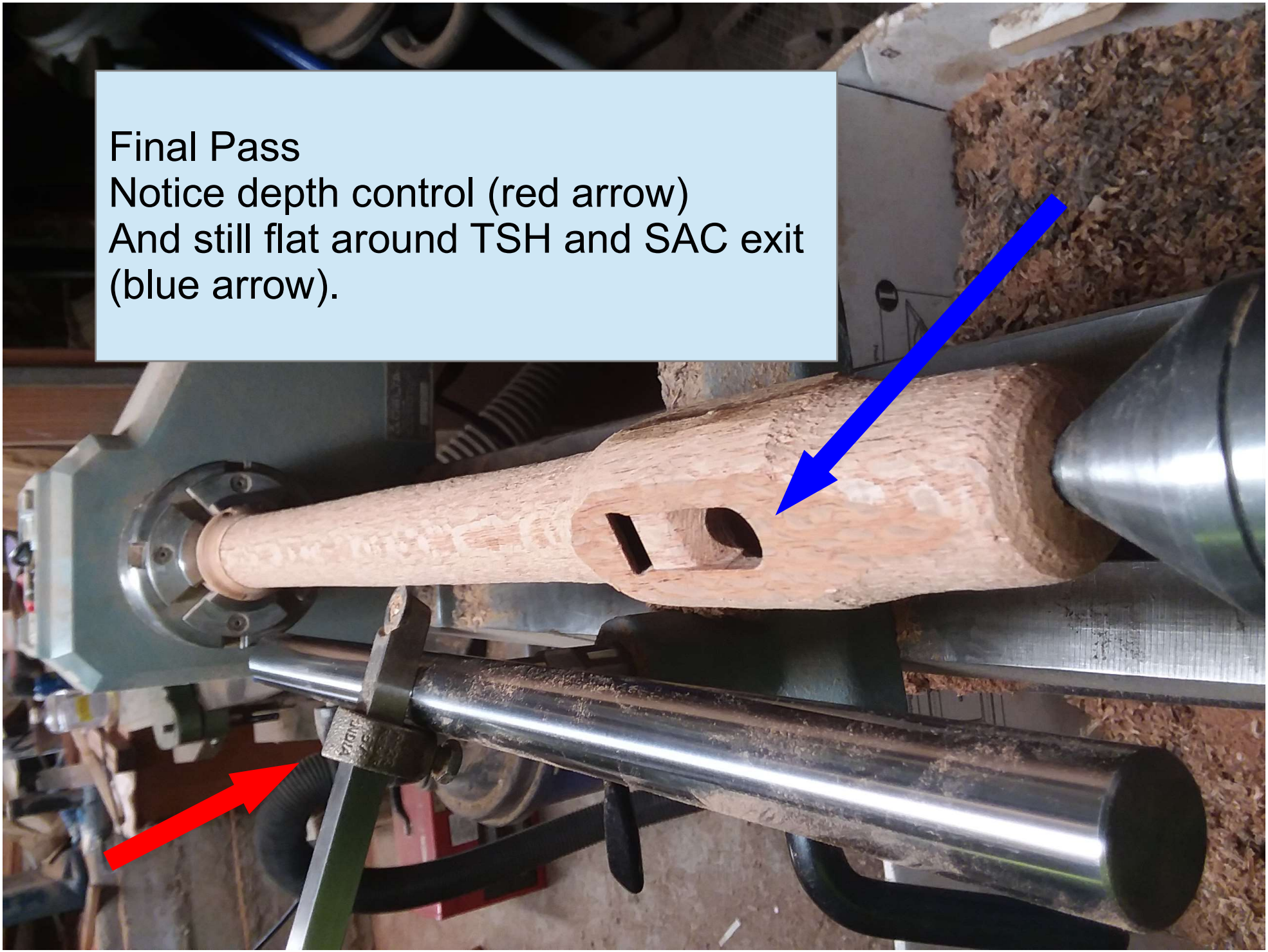

Barrel mount in the chuck.
And yes I made this on the lathe.

Barrel mounted on the head stock.


Mouth piece fixture.
Yes, made on the lathe.


Mouth piece mounted on the tail stock.


Ready for turning.
If possible we would like the barrel thickness to be between ¼ and 3/16 of an Inch.


Final Pass
Notice depth control (red arrow)
And still flat around TSH and SAC exit
(blue arrow).


Close-up of the TSH and the SAC exit.
Notice that I did not round off the nest area.


Sanded and first coat of Poly.
I use 100,220,320 and sometimes 400 grit sand paper.
I will sand with the lathe running and then sand
along the grain to remove any circular marks
using the same sand paper.

Flute is built
Ready for Voicing
Then finishing and Tuning.