## Basic Instructions for Joyner Off-Center Jig Bottle Stoppers and Knobs

nilesbottlestoppers.com

	Cut waste block so there will be 1/2" of the bolt sticking up the top and make the diameter so you can see indexing holes in plate. You can turn the center to diameter of stoppers.  Drill a 5/16" hole.
3/8/x16 tpi bolt	Insert the bolt in the bottom of the index plate and thread the waste block on to the bolt as tight as you can get it. If there is any movement, put a wood screw or two in the countersunk holes in the index plate to keep the waste block from moving when you are turning.
	Be sure the numbers for the off-set holes are on the outside, not between plates. Line up the "0" on the two plates then thread in the thumb screws to hold the plates together.
	Drill a 5/16" hole 3/4" deep in your stopper blank, use a 3/8" tap to thread the hole. Then thread the blank on the bolt and, I put the mandrel in the center hole to true up the blank.
	Move the mandrel to an off-set hole, lower the speed on the lathe so nothing vibrates and take a few cuts to see if that is what you want. *leave the mandrel in the lathe and move the jig to do off set: I took it off the lathe to get a better picture.



When you first start, it will take a little practice to see the offset design you want but after 2 or 3 times, it will be easy.

Sanding can be a bit challenging if you have several off sets as in this picture so try to get clean cuts with sharp tools.



The results are worth the minor learning curves.

Create interesting bottle stoppers

**Knobs for boxes** 

**Knobs for cabinets** 

**Bottle Cap Openers** 



**Coffee Tamper handles** 

**Ornaments** 

\*One idea leads to another and another!



If you have any problems or questions, please call me: 717-486-5232 or email me: ruthniles@gmail.com

There are pictures on my Gallery > Off Center Turning page where you can see things other turners have made. Also send pictures of what you create and I'll post them on that page to inspire other woodturners.

Thank you and Have Fun!

## Basic Instructions for Joyner Off-Center Jig Pendants, Box Lids and Decorative Inserts





INDEX FACE PLATE
24 Indexing Holes with notches
on rim indicating hole location





Screw a solid waste block to the Index fact plate. I turn the waste block small enough so I can see the indexing holes. The notches on the outer rim help but it's easier at times to be able to see the hole.



Line up the "0" on both plates and put them together with the thumb screws. With the 0's lined up, if you want to do a design where you loosen the screws and index your work a hole or two either way, it helps to see which direction you indexed and how many holes. (it is easy to forget!)



Put a few cuts in what will be the back of the pendant before you part if off from your main block of wood. Sand it lightly but not real smooth and don't put any finish or polish on it or it won't stick well to the tape. Part off the disc and attach it to the waste block on the jig. The best tape I've found is the blue double-faced duct tape in the paint dept. at Home Depot

Thread the mandrel in the center hole and with nothing in the tailstock, tighten it with a little bit of pressure for 3 or 4 minutes to help the tape stick evenly. Remove the tailstock and either turn a slight dome on the disc top or clean it off flat. Doming it will have the cuts start a little in from the edge
Thread the mandrel in an off-set hole I like to start with #2 hole and turn the lathe by hand to see where you want the cut then I mark it with a pencil. Use a skew flat on its side or a small detail gauge. The detail gauge will give the sides a bit of a chamfer. With the lathe on very slow, turn it up until there is vibration then back it down a notch and cut along the pencil line.
As you continue with the cut, your tool will be "cutting air" and there will be a very slight bump as it starts cutting wood again. Take 2 light cuts rather than one heavier one, it gives a smoother, cleaner cut.
*Note: there is a spreadsheet on my website that you can download which allows you to put the number of the off-set hole and the number on the index plate and it shows you what that cut will look like.
When you like a design and there are 2 or more cuts, put a piece of masking tape on the tool rest and mark the position of the tool for each cut. Cut the tape the same length as the tool rest so if you want to use it again, the marks will be in the same place every time.

There is a Gallery page on my website with Off Center turning to give you inspiration and some great ideas. Have Fun! If you have any questions, please call me, 717-486-5232 and I will help you. Thanks *Ruth Niles*