NODEN INLAY RAZOR
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CREATING CIRCULAR INLAY WITH THE NODEN INLAY RAZOR

This document assumes you are familiar with Microfence's Circle Cutting Jig, its parts, and its use.

SET UP

Items Needed:

1. Your project with a 1/16" groove cut for inlay purposes
2. One ¾" plywood 2'x2' square base with a ¼" hole drilled halfway through its thickness at its center with a ¼"x1" steel dowel pin installed (reusable for all further projects)
3. Two pieces of ¼" laun plywood cut 5 inches larger than the diameter of your project with a ¼" hole drilled through the center
4. A router installed with a straight bit slightly larger than half the width of the inlay groove and set to 1/16" depth of cut
5. A router circle cutting jig (Microfence's circle cutting jig is recommended)
6. Dial or Digital Calipers
7. Calculator
8. Pencil and Paper
9. Double-sided Kraft Paper Tape (Permacel's P-02 tape recommended)
10. Acetone
11. Knife

MAKE THE SOFTWOOD GROOVE

Items Needed: Your project, ¾" plywood base, one ¼" luan square, router and circle cutting jig, calipers, calculator, pencil and paper

1. Mount One Piece of Luan to the Plywood Base.

2. Cut Inner Diameter of Softwood Groove

A. Using the calipers, measure the inner diameter of the inlay groove of your project (Fig. 1). Divide this number by 2 to get the radius and subtract .25". Set calipers to this number.

(Project inner diameter/2) + .25 = _____

B. Make sure that one of the bit's blades is facing the circle cutting jig's center bar and set the distance of the center bar to the router's bit using the calipers (Fig. 2). Lock circle cutting jig in place.

C. Install circle cutting jig's pivot point on the steel dowel pin and rout first circle in luan plywood.

Fig. 1

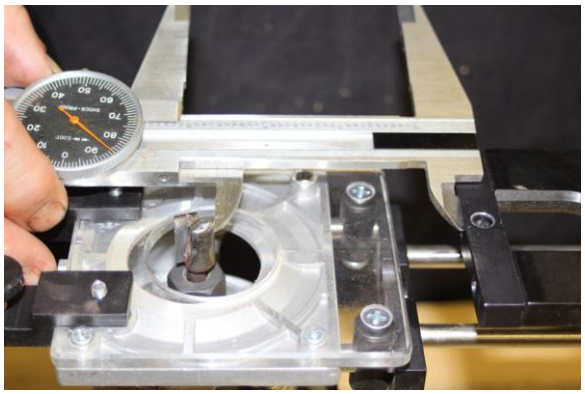

Fig. 2

2. Cut Outer Diameter of Softwood Groove

A. Using the calipers, measure the width of your project's inlay groove (Fig. 3). Record this number.

Width of Project Groove (WOG) = _____

B. Using calipers, measure the width of cut of your softwood groove (Fig. 4). Record this number. **NOTE:** Do not skip this step and assume that a ½ inch bit truly cuts a half an inch. This is rarely the case and precision is needed.

Width of First Softwood Groove Cut (WOC) = _____

C. Subtract the width of cut from the width of the inlay groove.

Width of Groove - Width of Cut = _____

D. Using the circle cutting jig's micrometer, increase the router's cut diameter by this number (Fig. 5). Each full turn of the micrometer is equal to .05 of an inch. Divide number found in 2C by .05

E. Using the micrometer, increase the cut diameter by .002 inches. This will allow your inlay wafers to slide easily in the softwood groove once complete. Lock circle cutting jig in place.

F. Rout second pass.

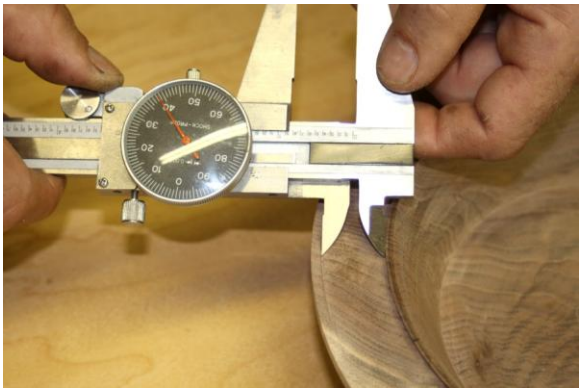

Fig. 3

Fig. 4

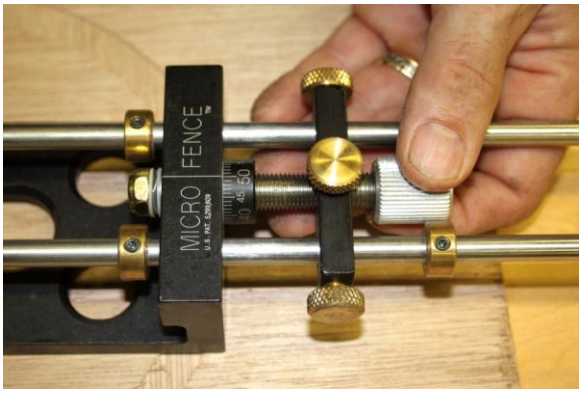

Fig. 5

3. Decrease router's cut diameter by .002 using circle cutting jig's micrometer. Lock in place to preserve setting.

4. Remove router and luan from plywood base and set aside.

MAKE JIG FOR CUTTING RADIUSED INLAY WAFERS

Items Needed: Your project, ¾" plywood base, one ¼" luan square, router and circle cutting jig, calipers, calculator, pencil and paper, double-sided tape, inlay wafers, acetone, knife, measurements recorded when making softwood groove

1. Mount Second Piece of Luan to the Plywood Base.

2. Cut Outer Groove

A. Using the saved circle jig setting from the last step, use the micrometer to increase cut diameter by width of cut.

B. Set circle cutting jig's outer stop collars to preserve setting.

C. Rout a partial groove.

3. Cut Inner Groove

A. Set calipers to width of inlay groove PLUS width of cut.

B. Using calipers, set circle jig's inner stop collars this distance from the fence body.

C. Rout second partial groove parallel to the first.

4. Make a Test Radiused Inlay Wafer

A. Apply double sided tape to an inlay wafer that is wider than the width of the inlay groove and remove paper backing.

B. Press inlay wafer firmly between two cuts on luan plywood.

C. Using the router, cut one side of radius.

D. Move router to second stop collar setting and lock in place.

E. Rout second radius of wafer.

F. Apply acetone to wafer to release tape.

G. Test fit in inlay groove. Fit should be precise.

H. Test fit in softwood groove. Wafer should fit and slide within groove.