May 2019 Gary Claytor

## 10 Easy Steps to Big Circle Cutting Jig

1) Cut  $\frac{3}{4}$  inch plywood 3" wider than the band saw table (gives 1  $\frac{1}{2}$  " overhang on each side) Cut the length as long as the circle plus the distance to the throat minus an inch. 17 x 32)

2) Clamp a 2 x 4 as a temporary stop block.

3) Cut slot for band saw blade. Mark spot where blade hits , draw line down center, use square to connect. Start cut at the table saw.

4) Cut runner for miter gauge slot - thinner than the depth of the miter gauge slot, slides easily with no slop. Glue, clamp or weight, counter-sink screws.

5) Permanent stop block same thickness as table, screw wood to the bottom, attach to the sled forming an L bracket.2 additional options: T-nut & thumb-screw, carriage bolts and L- bracket on the other side.

6) Cut 4 pieces for the top- piece for the back, tilt table saw blade to 30 degrees and cut a trapezoid shape strip to act as a slide , 2  $\frac{1}{2}$  inches wide. Cut 2 more pieces at 30 degrees to act as a trap for the slide. Line the center of the trapezoid strip on the front of the blade tooth, then glue and clamp the other two pieces. Make sure strip slides freely with no slop.

7) Countersink & epoxy bolt with threads cut off with a washer to bottom of trapezoid strip to act as a pin to spin the circle. ( $\frac{3}{8}$  in). (3 inches from the end).

8)Countersink and epoxy T-nut into the end of the slot for a thumb screw which locks the slot in place. (Mark in two spots).

9) Build a box from 2 x 4's , countersink carriage bolts with washers and wing nuts to attach box to sled.

10) Bolt U-shaped wheeled carriage to the box. (wheeled legs).







