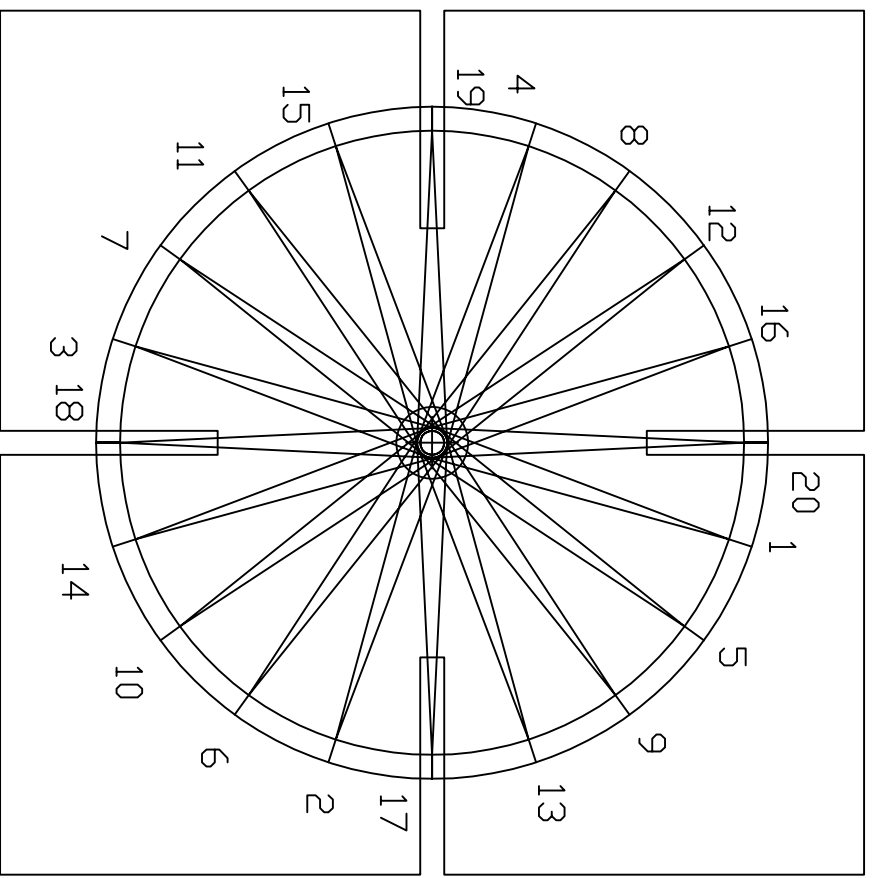
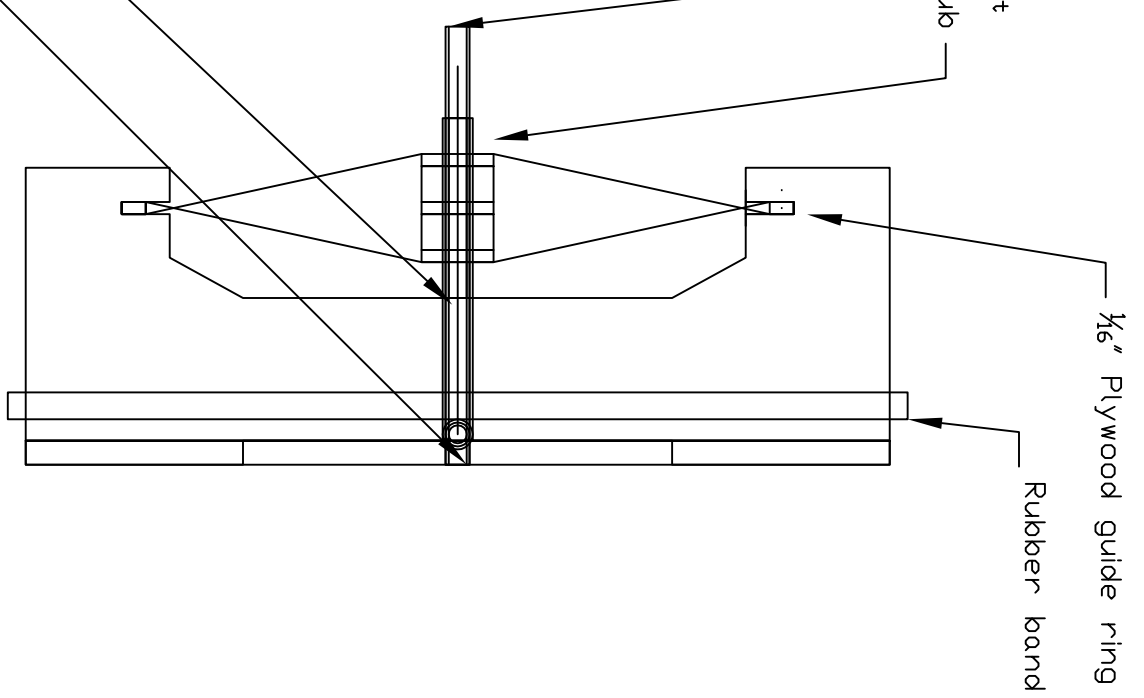


- Assembly steps:
- 1) Make central hub and assemble jigs.
 - 2) Place two UI's in place at right angles to each other in square jig.
 - 3) Place hub and ply guide ring in square jig.
 - 4) Thread the spokes using numbers and jig.
 - 5) Epoxy outer ply rings together in two half units
 - 6) Laminate the outer wheel rim halves using clamping jig
 - 6) Assemble and attach tire on wheel.

For 17 through 20, rotate the rim slightly to get access to the notches.



$\frac{5}{32}$ " brass tubing core
 $\frac{1}{8}$ " brass tubing hub

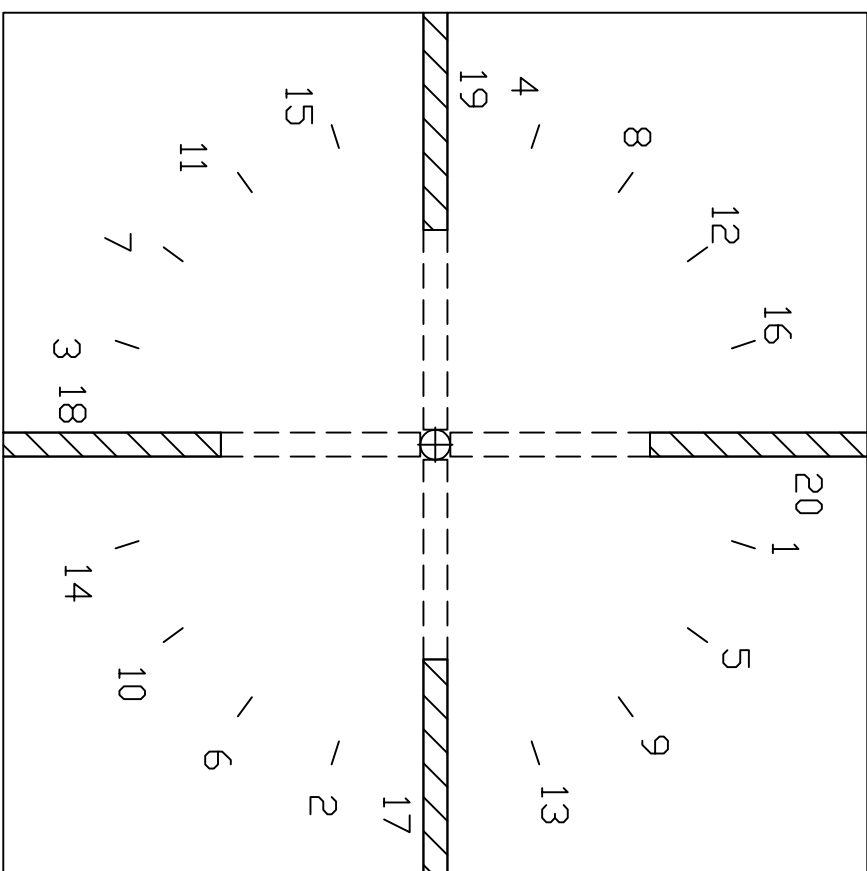
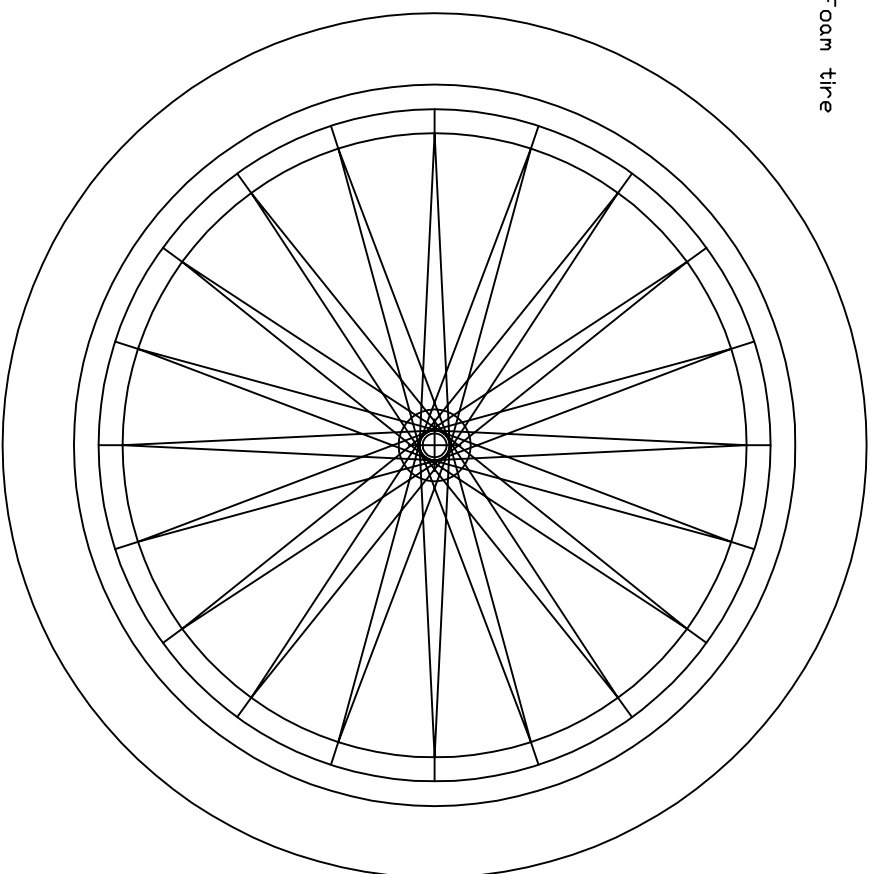
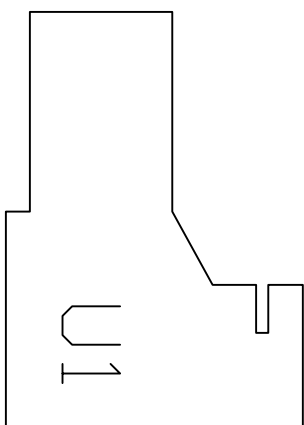
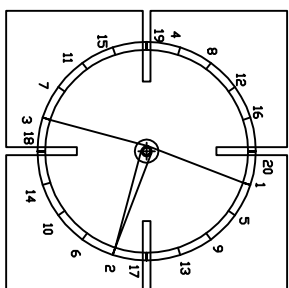


Short section of $\frac{5}{32}$ " brass tubing
 glued in place to two UI's
 Epoxy $\frac{1}{8}$ " brass tubing neatly in place

0.010" Kevlar thread or
 Whiplash super braid big game
 Fishing line from Berkley. It comes
 in a spool of 300 yards of 0.010"
 diameter in green. The material is
 a tight weave fishing line made from
 Micro Dyneema

123% of 1/2" Neoprene Foam tire material per tire

Threading Detail



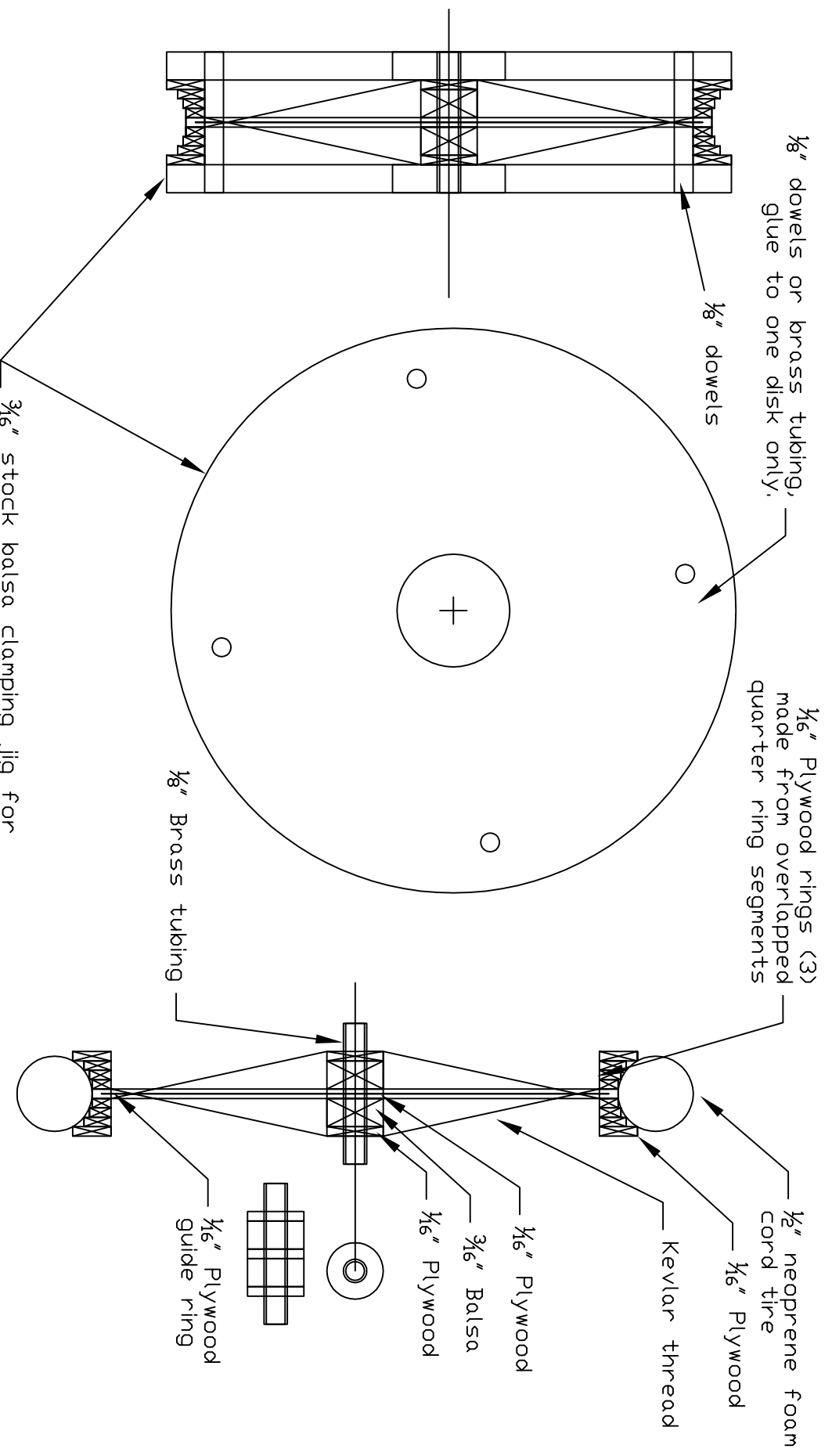
Use very thin thread, in one piece for entire wheel. Thick thread will make it harder to join the outer rim segments to the inner spoked ring.

There are laser cut notches in the almost numbered ply rim. These notches aid in alignment of the thread.

Wind thread starting from under the rim ring at 1 partially around the brass tube at the top side of the hub then back under the rim at 2. Loop over the rim then back to the brass tube at the bottom of the hub and then to the top of the rim at 3.

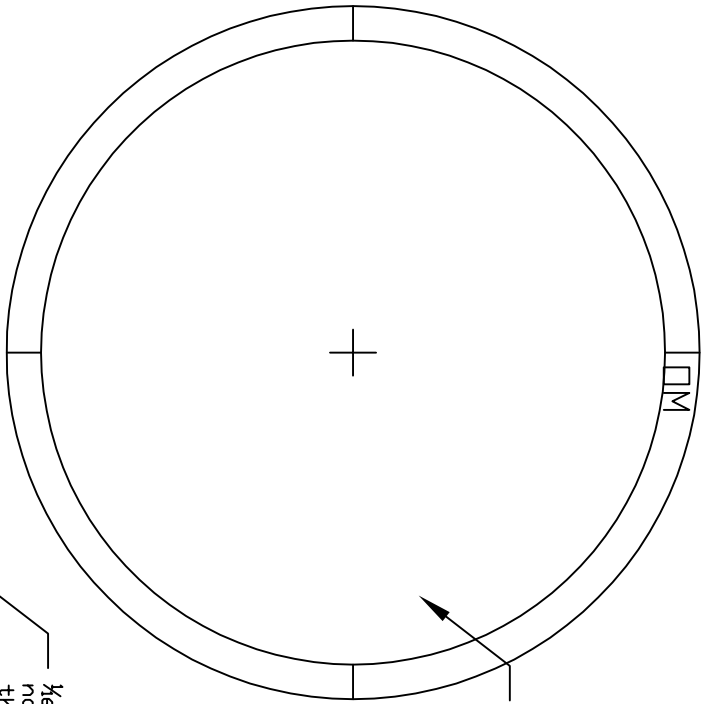
Repeat this process until the whole wheel is strung.

The tension in the threads should not be so tight as to warp the ply ring.

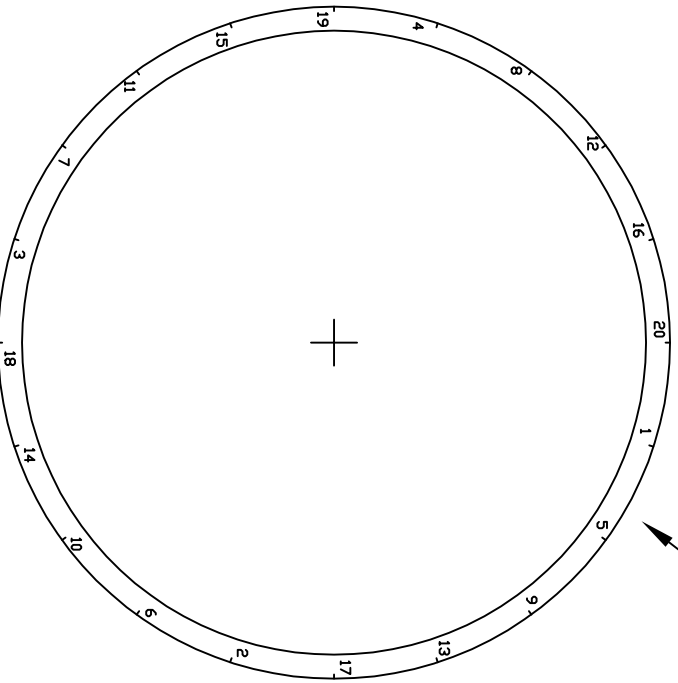


Use oil or grease on the dowels prior to use to insure that the wheel rims will not be glued to the jig!

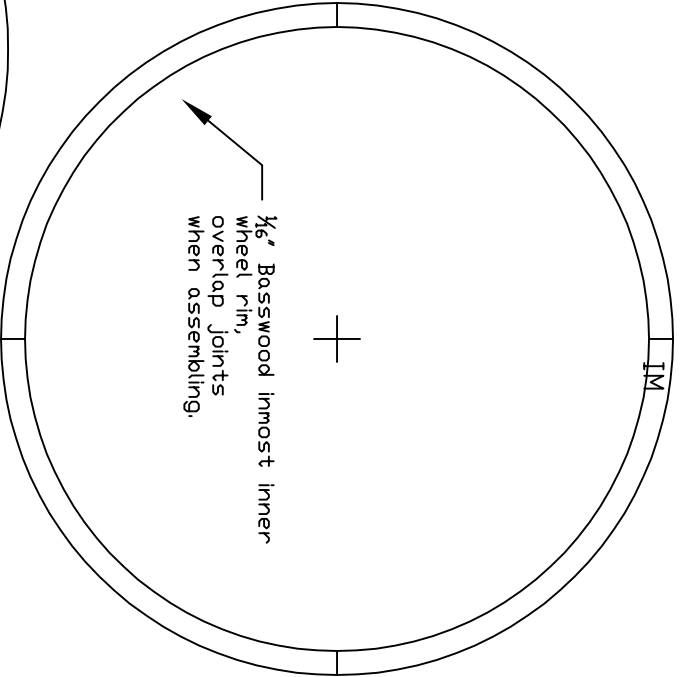
3/16" stock balsa clamping jig for adding outer rim segments. Use wax paper or polyethylene sheeting to keep jigs from sticking when epoxying the ring assemblies together.



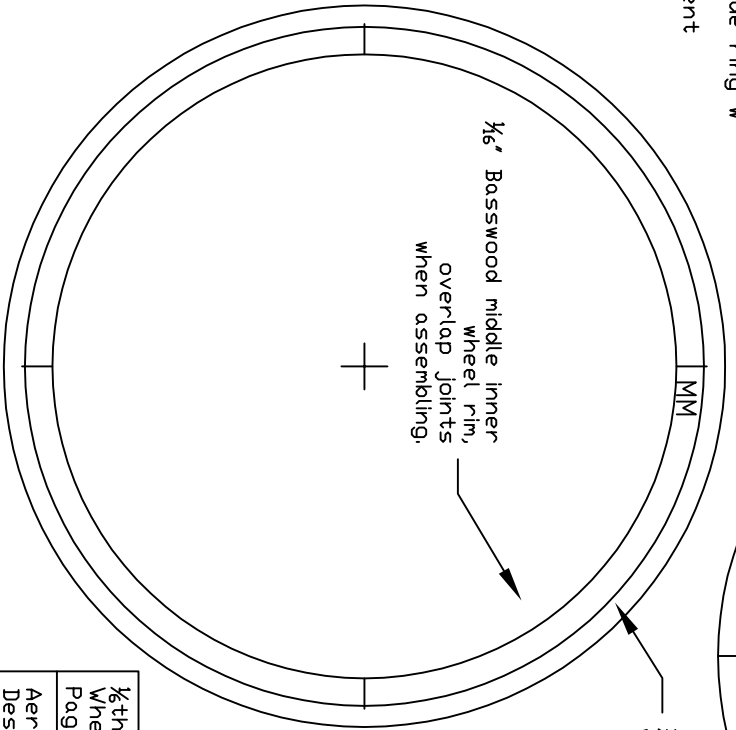
1/8" Plywood guide ring w notches for thread placement



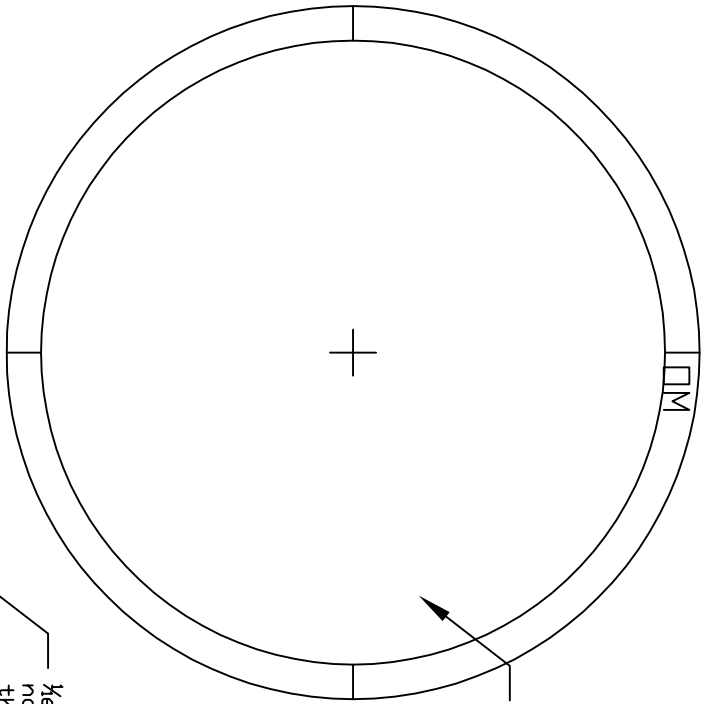
1/8" Plywood outer wheel rim (one piece)



1/8" Basswood innermost inner wheel rim, overlap joints when assembling.



1/8" Basswood middle inner wheel rim, overlap joints when assembling.



1/8" Basswood outermost inner wheel rim, overlap joints when assembling.