

**Steady rest for 20" powermatic lathe.  
By Ian Manley**



**Materials:**

A - (2) pieces 3/4 ply 24" x 24" or (3) pieces 1/2" ply 24" x 24"

B - (2) pieces hardwood 1" x 2-1/2" x 11"

C - (1) piece hardwood 1/2" x width of lathe ways x 11" long

D - (2) pieces hardwood 3/4" x 1-1/2" x 4"

E - (3) 1/4" x 6" carriage bolts, nuts and washers

(1) Rockler 4' tee track kit.

**Procedure:**

1. Cut 2 plywood discs from part A following diagram A, the inside diameter is 18" and the outside diameter is 23".

Note that the center is 10" from one edge creating a flat on the outside of the discs.

2. Laminate the plywood together to form a 1-1/2" thick disc. Sand the inside and outside edges smooth

3. Cut (3) 3/4" wide by 1/2" deep dado's at 120 degree intervals. As shown in diagram B

4. Attach part B to the front and back of the discs along the flat on the disc. Drill and counter sink 3 5/16 holes thru both part B's and the plywood discs. One inch from each end and center of part B. Secure the parts together with the 3 carriage bolts part E. Make sure the parts are aligned to give a smooth flat bottom and the discs are perpendicular to part B.

5. Cut and fit part C to a sliding fit between the ways of the lathe. Drill a 5/16 hole one inches from each end. Attach this piece to the assembly at 90 degrees to the previously attached pieces. Check the assembly for square on the lathe before gluing and screwing this piece in place.

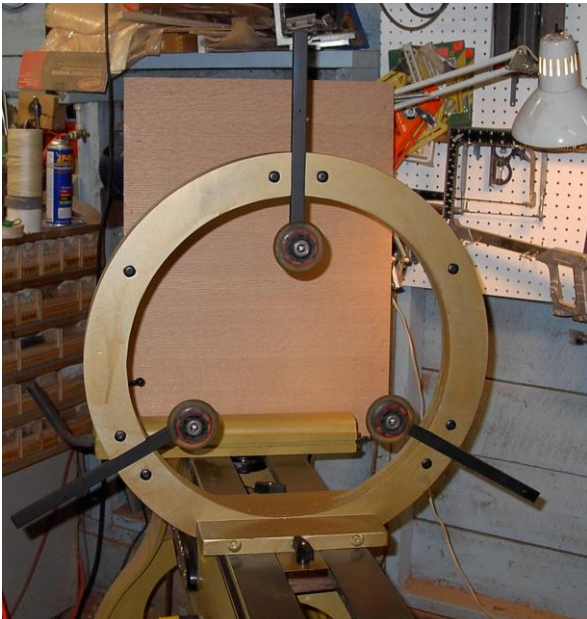
6. Cut 3 one foot pieces of tee track from the kit, drill a 1/4 inch hole 1/2 inch from one end. I used 1/4 -20 x 2 bolts with lock nuts to attach. Drill a 5/16" hole thru the center of each dado and use tee bolts and knobs from the kit to attach the track to the discs.

7. Drill a 5/16 hole in the center of both parts E, using 2 more tee bolts from the kit glue them into the blocks with epoxy. Thread these thru the holes in part C and use two knobs from the kit to hold the steady rest in place on the ways.

Notes:

Check the alignment of the pieces as you are building to make sure rest is plumb perpendicular and parallel to the bed of the lathe.

In the attached photos I added thru bolts on each side of the dados they were over kill and I don't think they are necessary for strength.



STEADY REST  
FOR 20" LATHE.

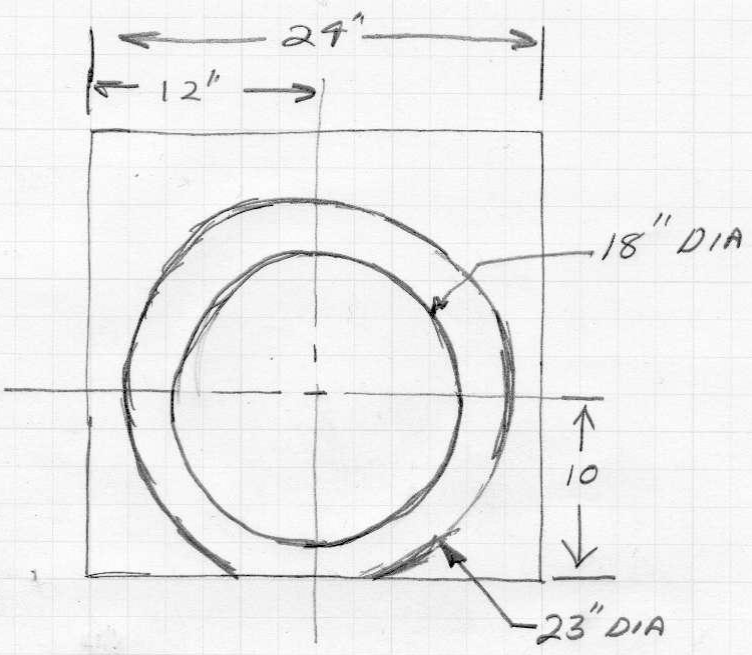


DIAGRAM A

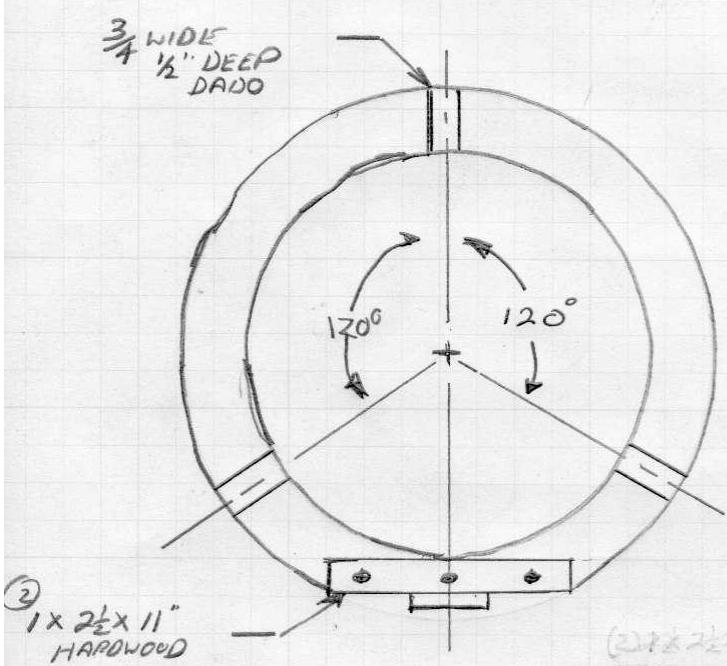


DIAGRAM B

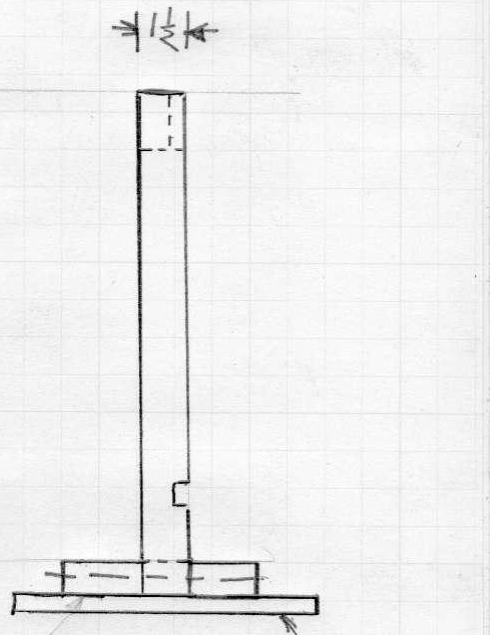


DIAGRAM C

