Appendix B3 - - - Laminated Lumbar Spindles:



New Flat Spindles Feel Good on Your Back

In a rocking chair it is normal for people to lean back and relax. With round straight spindles things soon become uncomfortable, especially if you have a boney back. The flat spindles shown here spread the pressure and the lumbar curve feels good on the lower back. Even with wide spindles, Grandma, a professional rocker, always folded an afghan over the back of her chair. It's better to feel good than to look good.

These spindles are made with 3 laminations, each a little over 1/8th inch thick. There are no sharp bends, so the wood should be dry and flat. The stock is 2.5" wide, and when assembled, makes two spindles. The longest spindles need 26" stock. The outer ones can be can be 3" shorter to help dodge some defect. The 4 side spindles need 12" stock. Four long assemblies (12 laminations) make the 7 long spindles plus a spare. The short side spindles require 2 assembles (6 lamination).



Surface sand the laminations to a thickness between 0.125 and 0.150 inches. A 36 grit surface is okay for gluing, but the outer faces should be sanded to 100 grit. Sort the laminations into Fronts, mids, and backs. Only the best side of the fronts and backs need the finer sanding.

2. Shape front and back glue blocks to fit the base of the spindles. The glue blocks provide material to make a little thicker "ankle" just above the entrance into the seat



 A firehose press is used to provide gluing pressure. Lately I have been using UnibondOne adhesive. Be generous, a quart will make the laminations for four chairs. Be careful taking these out when the glue is dry. The sharp edges of dried glue can cut fingers – trust me.



4. Rasp or rough sand the glue drips off one side to make a straight reference edge for ripping. 5. Rip two
spindle
blanks.
They should
clean up
around 1"
wide.



6. Rough sand any glue drips off the base end. That end will be the reference point for spindle measurements.



7. Arrange the spindles in their final order with the best one in the center (#7) and any short ones on the outside. Mark the location of the spindle shoulders:

2 & 12 @ 8.5" 3 & 11 @ 8.0" 4 & 10 @ 17 ¼" 5 & 9 @ 19 ¾" 6 & 8 @ 20 ¾" 7 @ 21 ¼" 8. Transfer the spindle template outline onto the spindle blank.



9. Bandsaw the outline. Rotate 90 degrees and remove waste stock from the glue blocks.



10. Make sure all the base ends are flat for a reference stop and a safe place to write the spindle number.



11. Size the
upper end of the
spindle with the
¹/₂" dowel maker
to fit in the ¹/₂"
drill chuck.



12. Chuck the spindle in a drill motor and run the base end of the spindle into the dowel makers. First the ½ inch, then the 7/16 and the 3/8 inch. The stops should be about ½ inch beyond the exit of the dowel cutter.



- 13. A 3/16 round-over router bit is used to round all the sharp corners that are reachable.
- 14. It is all hand work from here rasp, sand, sand, scrape, and sand. Make sure the upper end of the spindle will go into a 3/8" test hole to 2" from the shoulder for long spindles and 1.5" for the short side spindles.



15. The upper end is given a small chamfer to help insertion in the chair bow and for protection from hammering.

That's All Folks! Spindles are ready for glue up.