

How to Make a Wooden Rocking Horse





Technical Information for Making a Wooden Rocking Horse

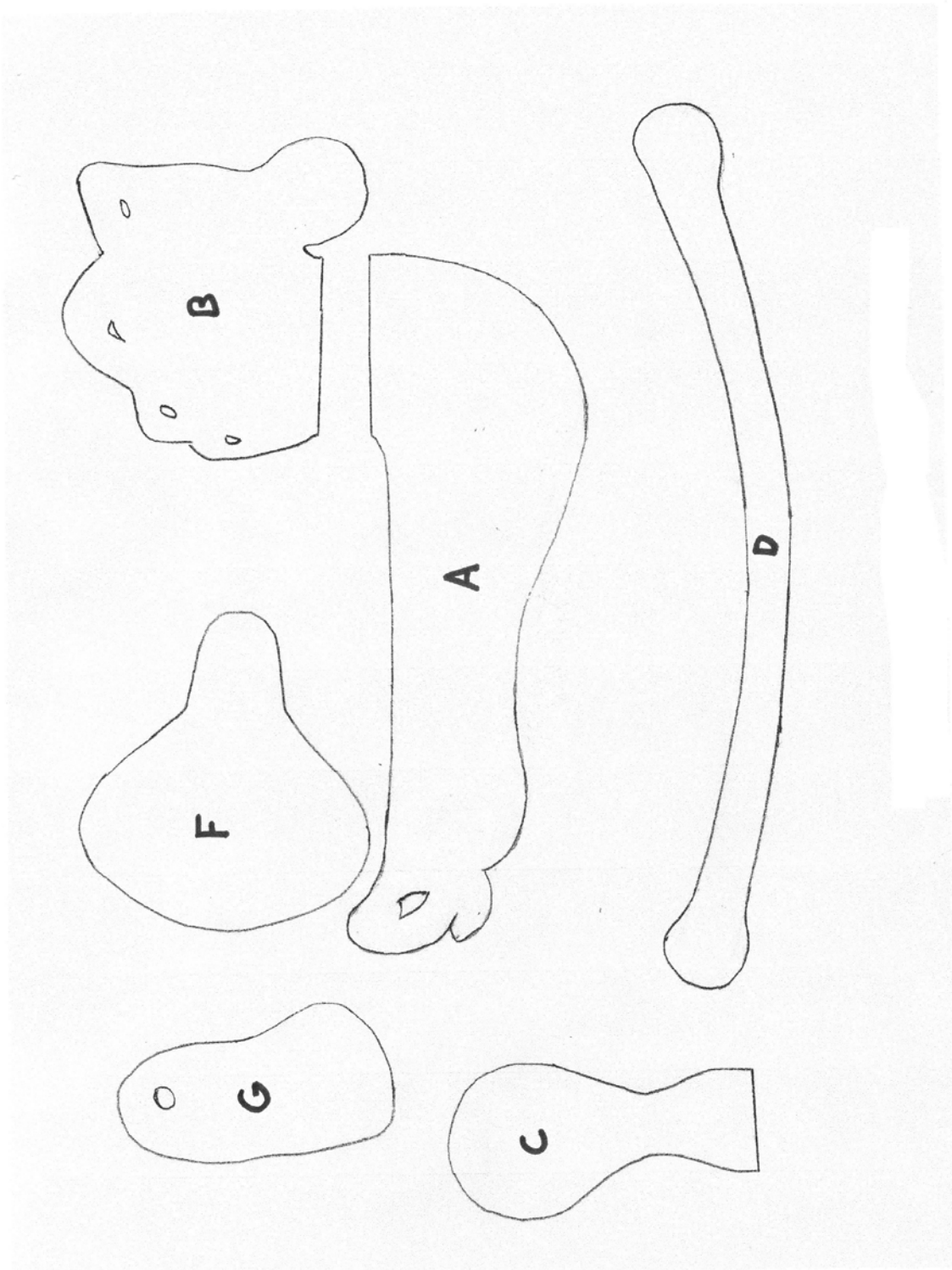
A. Materials List:

QUANTITY	LETTER	NAME	SIZE	MATERIAL
1	A	Body	2" x 7 1/4" x 24"	Poplar
1	B	Head	2" x 10" x 9 3/4"	Poplar
4	C	Legs	3/4" x 5 1/4" x 11 1/4"	Poplar
2	D	Rockers	2" x 3" x 29 3/4"	Poplar
3	E	Rocker Supports	3/4" x 3 1/2" x 11 1/4"	Poplar
1	F	Saddle	2" x 9" x 10 1/4"	Poplar

2	G	Ears	1/2" x 4 5/8" x 9"	Poplar
1	H	Dowel	3/4" Diameter x 11"	Birch
4	I	Dowels	1/2" Diameter x 2"	Birch
2	J	Dowels	3/4" Diameter x 2"	Birch
4	K	Tapered Shims	5/8" x 1/32" x 5 1/4"	Poplar

WOOD SPECIES

		
Yellow Poplar	Birch	



1. Scale body (A), head (B), legs (C), rockers (D), saddle (F) and ears (G) by 4x the pattern size.

2. Trace the pattern enlargements onto poster board or Mylar and use a pair of scissors to cut out the patterns.

C. Cutting Procedures:

1. This project can be made from one 3/4" x 12" x 48" and one 2" x 12" x 60" board of paint grade poplar.
2. Use a radial arm saw to cut off 30" of the 2" board for the rockers (D).
3. Use the rocker pattern to trace two rockers onto the board and cut out with a band saw. Use a spindle sander to smooth out the edges.
4. Trace the patterns of the body (A), head (B), and saddle (F) from the remainder of the 2" board. Cut out each shape with a band saw and smooth the edges with a spindle sander.
5. Trace the legs (C), and rocker supports (E), using their respective patterns, onto the 3/4" board. Cut out each shape with a band saw and smooth the edges with a spindle sander.
6. Plane the remainder of the of the 3/4" board to 1/2". Trace the ear pattern (G) onto the board and cut out with a band saw.

D. Sanding Procedures:

1. Rough sand all parts with an orbital sander and 80 grit sandpaper.
2. Medium sand all parts with 120 grit sandpaper.
3. Finish sand all parts with 220 grit sandpaper.
4. Hand sand all edges and round of all sharp corners.
5. Use a tack rag to clean up sanding dust.

E: Assembly Procedures:

1. Drill two holes 3/4" x 1" holes into the body (A) and the head (B). Place glue in the holes and use a wooden mallet to pound the dowels (H) into the body. Place glue on the adjoining edges of the body and head, and tap the head onto the dowels. Use a band clamp to secure the head to the body until the glue has dried overnight.
2. Glue the ears (G) onto the head (B) and the legs (C) onto the body (A). Hold the ears and legs in place with hand screw clamps. Secure the ears and legs with #8 x 1 3/4" flathead screws. Be sure that the legs are at the same angle and length before screwing them to the body. Also glue a shim (K) between

each leg and the body to spread the legs wider at the bottom. The shims should be shaped the same as the upper portions of the legs.

3. Use a drill press and a 3/4" Forstner bit to drill a hole through the head and ears for the dowel (H). Place wood glue in the hole and tap the dowel into it. The dowel should stick out 4" on each side. Clean up any excess glue on the dowel.
4. Drill a 1/2" x 1 1/4" hole into the bottom end of each leg (C). Place glue in each hole and tap one dowel (I) into each leg.
5. Align the legs (C) with the front and rear rocker supports (E). Mark the placement for the four dowels. Drill a 1/2" hole through the rocker supports. Place glue in holes and tap the rocker supports onto the bottom of each leg.
6. Attach the rocker supports (E) to the rockers (D) using glue and #8 x 1/ 3/4" flathead screws. The front and rear rocker supports should be approximately 4 3/4" from the ends of the rockers. The third rocker support should be attached onto the top-center of the rockers using glue and screws.
7. To attach the saddle (F) onto the body (A) use a Forstner bit to drill two 3/4" x 1" holes into the top of the body. The holes should be centered 2" from the rear of the body and 6" apart. Drill two corresponding holes into the bottom of the saddle. Place glue into the holes and tap the dowels (J) into the body. Place glue on the top edge of the body and the exposed dowels. Tap the saddle onto the body and secure with hand screw clamps.

F: Finish Procedures:

1. Use plastic wood dough to fill all holes, cracks and imperfections.
2. Hand sand the wood dough flush with 120 grit sandpaper.
3. If stain is desired, apply with a brush and allow to penetrate for 5-10 minutes, and then remove with a clean rag.
4. Allow stain to dry 6 hours and then repeat with a second coat.
5. Apply a clear finish coat such as Varathane, Polyurethane, lacquer, etc. using a pure-bristle brush. Allow 12 hours to dry.
6. Lightly sand finish with 220 grit sandpaper.
7. Apply second coat of clear finish.
8. If additional finish coats are desired, repeat steps #5 & 6.
9. Allow final finish coat to dry 24 hours.

Notes: 1. Be sure to match the color of the wood dough to the stain color.
2. Use a tack rag after each sanding procedure to remove the dust.

***Congratulations, your wooden rocking horse is finished and ready to use!**