

One Inch Wagon Wheels Using Foam Board Construction

By Robert Maloney



All my wheels are made with just the use of a razor blade and a drill. All are made on the kitchen table. Next, I'll tell you how step by step.



These are the tools I use to make all my wheels.



Start with a piece of 3/16 foam board. Using a piece of wood with a notch cut into it, the inside and outside dimension of the rim, cut on both side of the foam board, side A and side B. NOTE on side A do not cut in the middle of the two straight lines



Cut 3 pieces just like this. Take two and glue together side B to side B.



After glue dries mark out location of spokes



Remove section A and notch where all the spoke will go.

Glue the third piece of rim in place over the notches with side 'A' facing up.



After the glue dries, remove section A of the third piece of foam board.

Cutout two 1 inch discs from 1/16 inch basswood stock. Drill a hole in the center of the disc and place over the nail in the center of the wheel as the hub. Start adding the spokes 4 at a time, adding 4 more after the glue dries until all spokes are in place. NOTE that the spokes are trimmed to fit together.

After the spokes are secure in place, glue the second hub in place. After the glue dries, lift the wheel from the nail, it over and remove the center piece of foam board (shown in photo marked 'B').



The bearing part of the wheel can be a piece of 1/2 inch dowel cut 3/4" long with a hole drilled in it. The bearings are glued over the hubs on both sides of the wheel.

Instead of a dowel, a wooden spool available at some arts and crafts stores can be used. If you use a spool, you may need to enlarged the hole and cut it to length.

The rim around the wheel is made from a strip of poster board. The sunbursts are made from color construction paper. Everyone has their own way of making rivets, however 3D paint works well.



I have had these wheels on all my wagons for years. No problems. And the cost is about fifty cents a wheel.