

Michael Engels demonstrates how to make a rocking horse for the kids.

I decided to use shutterply for this project, although MDF will work well on the body. Unfortunately, the bow and the legs do need something a little stronger, so MDF will not do for these areas. I have found in previous projects that MDF could pull apart if the rocking horse is dropped and shelving pine tends to delaminate if not correctly checked for a good piece.

### Assembly of horse

Start off by cutting your timber to the various sizes. Draw the shape of a horse's head onto the timber, making sure that the holes for the eyes are also included. With this done you can now use the jigsaw to cut out the head.

### Tools

- Primer and paint
- Wood glue
- Countersink drill bit
- Drill press
- Hole saw
- Router and round-over bit
- Paintbrush or sponge roller
- Countersunk screws (18x)
- Jigsaw or bandsaw
- 19mm drill bit
- G-clamps
- Sanding machine



**1** Start the project by cutting all your timber to size – here the legs are being cut.



**2** Draw the head and neck of the horse onto your timber.



**3** Cut out the head using a jigsaw.

## Cutting list

- Head – 400mm x 300mm (1x)
- Centre support – 200mm x 125mm
- Legs – 223mm x 90mm (4x)
- Rocker – 900mm x 150mm (2x)
- Handle – 150mm (1x)
- Marbles (2x)
- Sides – 410mm x 125mm (2x)
- Seat – 250mm x 150mm (1x)
- Shoulder spacer – 45mm diameter (4x)
- Rocker brace – 335mm x 100mm (2x)
- Joint supports – 150mm (2x)

Now is a good time to rout a round edge onto the head making sure you do not rout too far down the neck as this will look odd once the sides are connected. The two sides now have to be marked on one side where the hole for the locating dowel is to be positioned. Place the one side flat on the work bench and position the head and centre support onto it, making sure that you have glue between the surfaces being joined. Now position the next side on top of the head and centre support and clamp together. Allow the glue to dry before continuing.

Once the workpiece is dry, use a drill press to drill the 19mm holes through the sides where the locating dowels will be positioned. We used a drill press so that the dowel would be positioned at 90° through the body, therefore, aligning the legs. Use a coffee tin or compass to mark out the ends and then cut the quarter that is marked. Rout the sides, but not on the side where the seat is going to be attached. You can now drill the holes for the eyes, handle and the locating dowels that position the legs and shoulder discs. Use the hole saw to cut four discs and once completed sand away the rough edges.

The tricky part now comes into play because these discs now have to have a 19mm hole drilled in the centre. Cut out the four legs and rout the edges before assembly. Once again, and with even more accuracy, the 19mm hole has to be drilled into the legs as indicated. The 19mm dowel can now be placed into the body and the shoulder needs to be glued into position. Do not glue the legs onto the body yet as they need to move freely to position the base onto the rockers. You may need to play around with the positioning until you are satisfied.

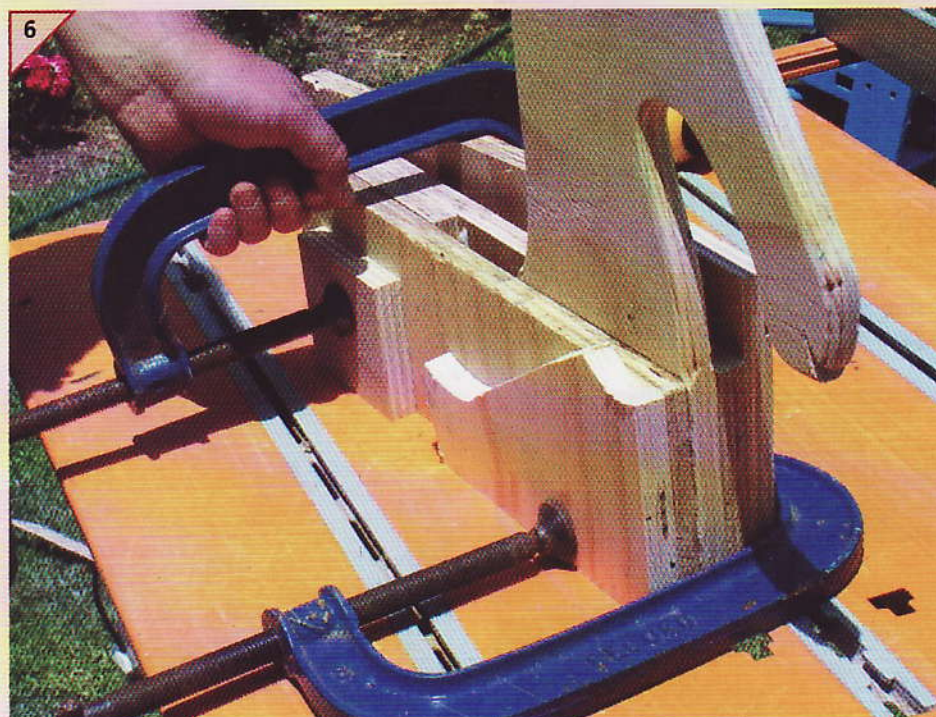
By this point the two rockers should be cut out. I advise against routing the edge



**Gluing the sides for the horse body.**



**Rout a round edge onto the head making sure you do not rout too far down the neck as this will look odd once the sides are connected.**



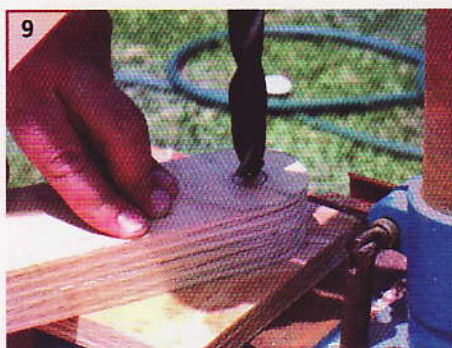
**Glue and clamp the head and sides together using off-cuts to protect the wood.**



**Drill the holes for the eyes, handle and the locating dowels that position the legs and shoulder discs using the hole saw.**



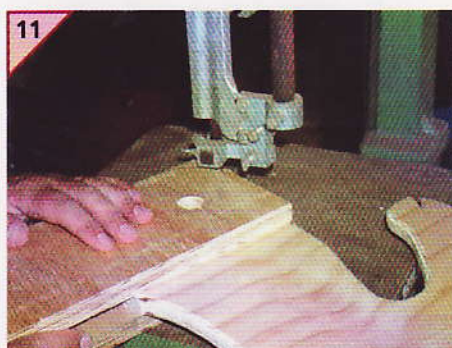
**Use the hole saw again to cut four discs and then drill a 19mm hole through the centre of each.**



**9** Drill a 19mm hole through each of the legs for the dowels.



**10** Using the drill press and the 19mm drill bit again, drill through the neck and sides for the dowel.



**11** Using a bandsaw to cut the round edges of the body of the rocking horse.



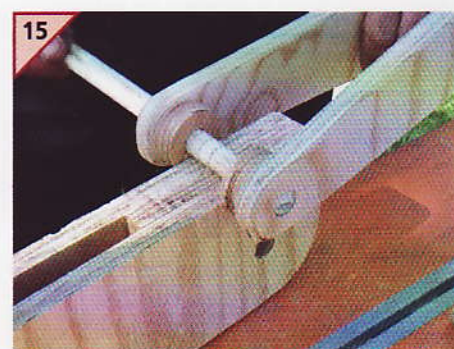
**12** A rounding-over bit is used to round the sharp edge of the horses' body.



**13** Drilling the eye hole for the horse.



**14** Sand all the pieces of the horse before the final assembly.



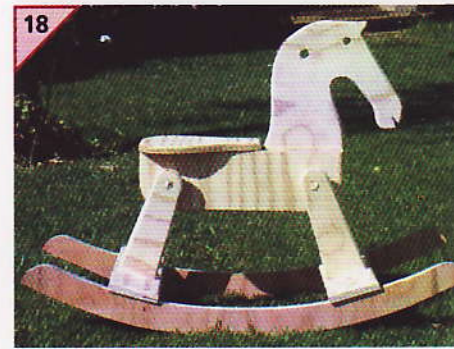
**15** Check that the dowel fits before assembling the legs.



**16** Fitting the back rocker brace to the legs.



**17** Attaching the rocker brace to the rockers.



**18** Almost there – all that needs to be done is the fitting of the marbles for the eyes, fitting the handle and painting.

of the rockers to allow more space for the glue to cover. The base needs to have the holes drilled to allow you to quickly attach the base to the rockers once you are satisfied that the legs are sitting flush onto the base. You can now put glue between the legs and the shoulder and clamp them together making sure that you check the position of the legs again on the base to ensure the legs are straight on the base.

You can now finish drilling the holes through the base to secure the legs onto the base. The last thing to do is cut out the seat, rout the edges, sand and drill two holes along a centre line remembering to countersink them on the seat and secure the seat to the body. The painting process obviously would be to prime the wood with a pink wood primer and then paint.

To be a little creative, wool can be glued onto the back of the head/neck for the horse's mane and also for a tail. Always ensure that the glue being used is child-safe as they are going to try to pull out the wool and will probably chew on the glue. For this reason I do not put a tail or mane on any of the rocking horses I make. 