Note: Project shown %" shorter than full size to fit on page. This Judy Gale Roberts wall plaque bears looking into.

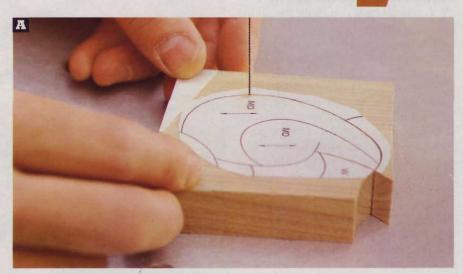
o matter if you're a novice at intarsia or a seasoned pro, here's an eye-catching project you'll enjoy building, and one that any child will adore. You'll find full-size patterns for cutting out all of Teddy's parts (including spacers for raised parts). Each pattern piece has labels that identify the wood color, grain orientation, and grouping for easier contouring of parts. Now, get ready to put your paws to work.

Note: You'll need a selection of 3/4"-thick wood scraps of dark, medium-dark, medium, and light tones. We used pine for the light-toned wood and western red cedar (which Judy prefers due to its color variety) for all of the other tones.

### First, cut out the parts

Start by making at least five copies of the full-size bear pattern in the *WOOD PATTERNS*<sup>®</sup> insert. The bear's parts are identified on the pattern with uncircled letters indicating the wood tones. Look over a pattern to find areas where you can cut out groups of adjacent parts that have the same wood tones. Cut apart the grouped and individual pattern pieces.

2 For each pattern piece, align the arrow on the pattern with the grain on your stock, and move the pattern around until you find the area with the best color and grain figure for the piece. Adhere the patterns to the stock with spray adhesive. See the **Shop Tip**, *right*. 3 Scrollsaw the parts, as shown in **Photo A**. (For tips to help you scrollsaw more accurately, see the article on *page 20*.) To form the opening in the muzzle for the nose, make a cut through the bottom of the muzzle into



For tight-fitting parts, scrollsaw right down the middle of the intarsia pattern lines.

the nose area, then remove the waste for the nose.

4 Drill a <sup>3</sup>/<sub>8</sub>" hole <sup>1</sup>/<sub>4</sub>" deep in each of the face pieces to receive Teddy's eyes, where shown on the patterns. Then, using a  $\frac{3}{8}$ " plug cutter, cut two  $\frac{3}{8}$ "-long plugs for the eyes. (We cut them from dark cedar.) Or, cut these pieces from a  $\frac{3}{8}$ " walnut dowel. Set the eyes aside for now.

### SHOP

### Working with light-tack spray adhesives

For applying patterns, use a spray adhesive, such as 3M Spray Mount Artist's Adhesive, that lets you easily remove and reposition the paper. If patterns stay attached for several days, though, or you apply too much adhesive, they can become difficult to remove. Should this happen, apply a little heat to the top of the paper with a hair dryer, as shown at *right*. This will soften the adhesive so you can cleanly peel off the paper. Keep the heat low to avoid burning. Later, remove the adhesive with a solvent.



# **Contouring guide**



Contour the inner ear piece so it slopes toward the face and angles slightly from top to bottom. Aim for a face-to-ear depth of about 1/4" at the top to 5/16" at the bottom.

### Now, for the contouring

Group together parts with the same circled letter. The parts in these groups have a continuous contour across them, so you'll save time by sanding them as groups.

2 Using double-faced tape, adhere the groups of parts to a  $9 \times 12^{"}$  piece of  $\frac{1}{4}$ " plywood, with each group's pieces arranged as shown on the complete pattern. Leave a  $\frac{1}{4}$ " clearance between the groups; then cut them out by scrollsawing the plywood to within  $\frac{1}{16}$ " of the groups' perimeters.

**3**Referring to the "Contouring guide," *above* and *right*, mark contour reference lines along the edges of the grouped and nongrouped parts.

Note: For best results, practice contouring scrap pieces first to get used to the technique. If you don't feel comfortable doing this, it's perfectly fine to just gently round the top edges of parts and leave their faces flat.

Using 100-grit sandpaper, contour the parts as shown in **Photo B**. We used a 3"-diameter pneumatic drum sander mounted in a drill press, which is ideal. (See the Buying Guide on the *opposite page* for our source.) But an oscillating spindle sander, drill-press drum sander, or disc sander also would be suitable. Be careful not to sand completely around the edges to the back surface, which will leave gaps between parts. We found it easiest to start with the bear's feet and work to its head.

**5** After contouring the bear's face pieces, glue the  $\frac{3}{8}$ "-long plugs into the  $\frac{3}{8}$ " eyeholes. Then hand-sand the eyes, gently rounding their edges and leaving them approximately  $\frac{1}{16}$ " proud of the face pieces.



Contour the top of Teddy's belly to about 1/8" below the scarf. Slope the scarf toward the face and the right paw down into the scarf.



Round the belly's bottom to about  $\frac{3}{16}$ " below the feet. Angle the raised paw toward the face and hat. Sand the bottom scarf pieces to sit about  $\frac{1}{16}$ " below the belly.

6 As your contouring progresses, frequently place adjacent parts together and check for the desired transition between them, as shown in **Photo C**.

**7** When you have finished roughsanding the parts, finish-sand their contoured surfaces by hand to 150 grit, then 220 grit.

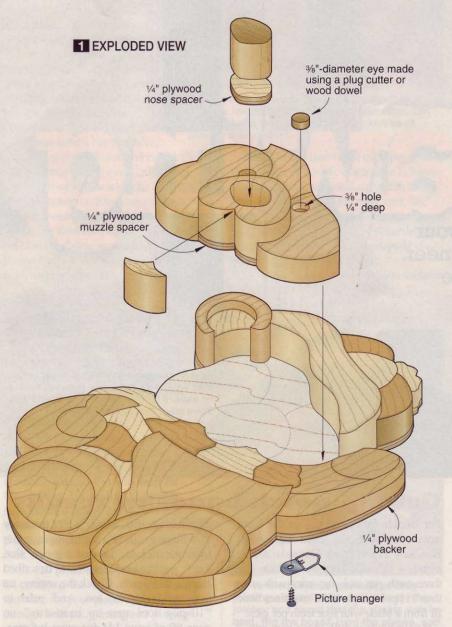
8 Cut out the full-size muzzle and nose spacer patterns from one of your photocopied patterns. Adhere the spacer patterns to a 2×3" piece of 1/4"-thick plywood; then scrollsaw the pieces to shape. 9 Remove the double-faced tape from all of the grouped parts. Now assemble the bear on a 9×12" piece of 1/4" plywood, raising the muzzle and nose parts with the spacers, where shown on **Drawing 1**, and as shown in **Photo D**. Check the fit and transition between all of the parts, and make final adjustments where necessary by sanding or trimming. **10** When you're satisfied with the fit and look, trace around the perimeter of the bear with a pencil. Carefully slide the bear off the plywood backer, keeping the pieces together. Cut the backer to shape, scrollsawing just inside the marked line. Sand the edges smooth.



When contouring the parts, use light pressure and keep them moving to prevent burning the wood.



Check the transition between adjacent parts as you contour them. Re-mark and continue sanding as necessary.



Written by Owen Duvall Project design: Judy Gale Roberts Illustrations: Roxanne LeMoine; Lorna Johnson Photographs: Marty Baldwin



Install the muzzle spacer followed by the muzzle. Then insert the nose spacer and the nose into the muzzle opening.

## Glue the bear to the backer, and add the finish

Spray-paint the back face and edge of the backer with glossy black enamel paint.

With the paint dry, carefully slide the bear onto the unpainted side of the backer. Center the bear so there's an even overlap all around the backer. Now, glue each piece onto the backer using a couple of drops of yellow woodworking glue.

Remove all of the dust. Then, apply three coats of a clear finish, sanding to 400 grit and removing the dust between coats. (We used Watco aerosol satin lacquer.) Finally, attach a hanger to the backer.

### **Buying Guide**

Drum sander and adapter. 3"-diameter pneumatic drum sander no. 09M32, \$57.99; drill-press adapter no. 14072, \$14.99. Woodcraft, call 800/225-1153, or go to www.woodcraft.com.



Want to know more about intarsia?

To receive a free newsletter chockfull of intarsia tips, books, videos, classes, and patterns (including the two bear companions shown *above*), visit Judy Gale Roberts' Web site at www.intarsia.com, or call 800/316-9010 in the U.S. or 865/428-8875 if outside the U.S.