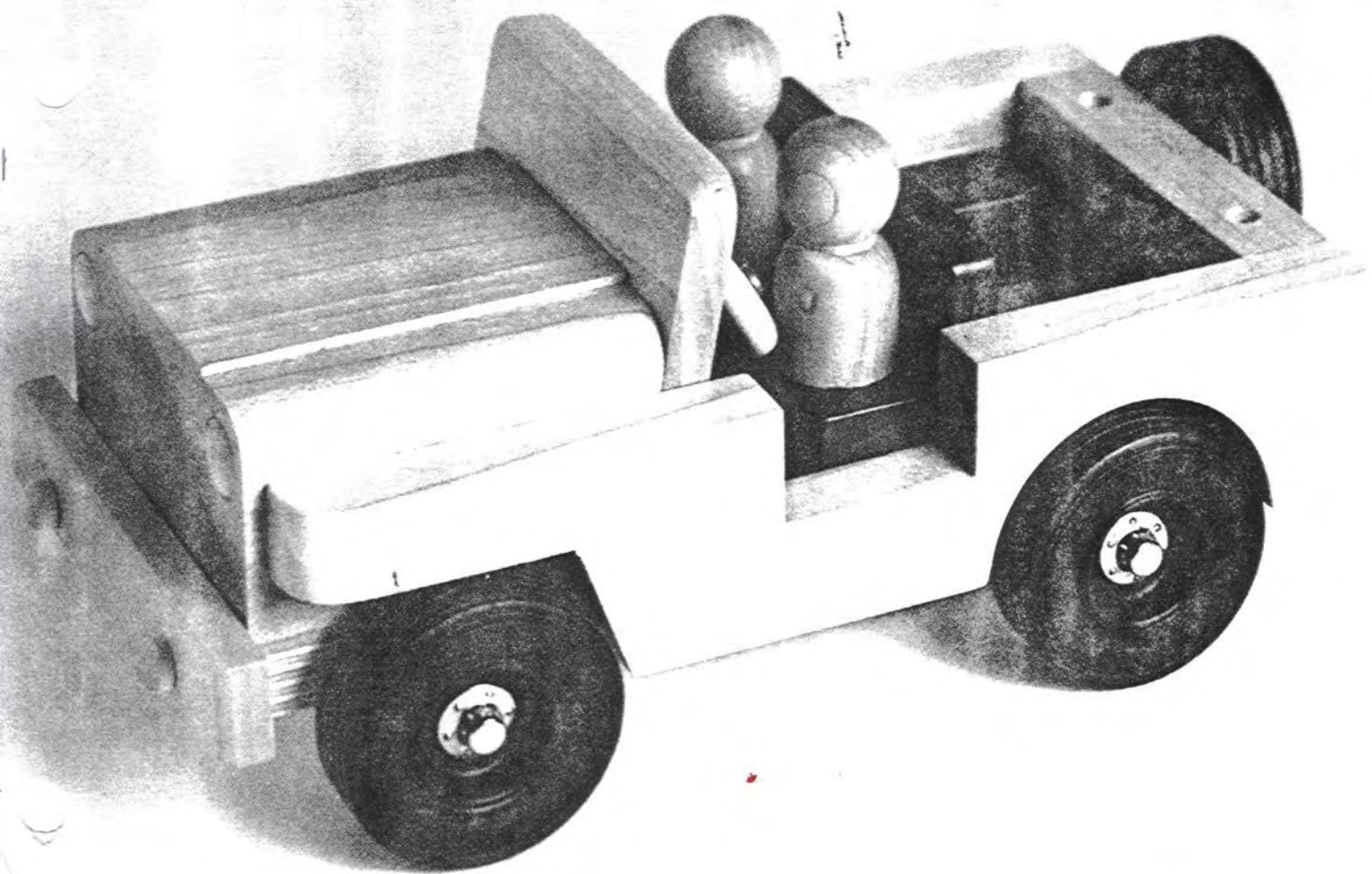
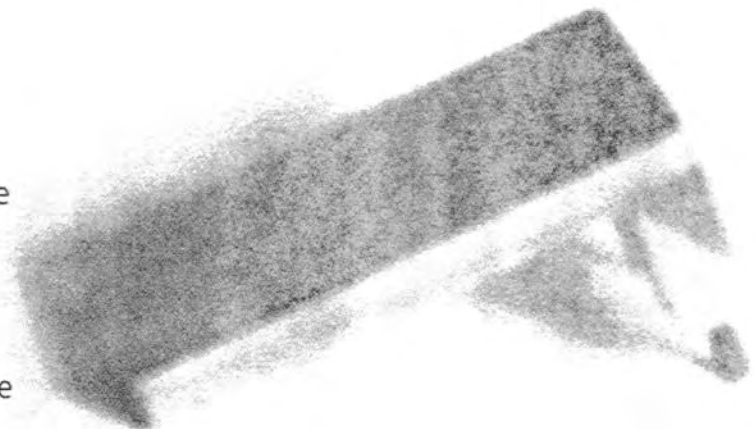


# Jeep with Canopy

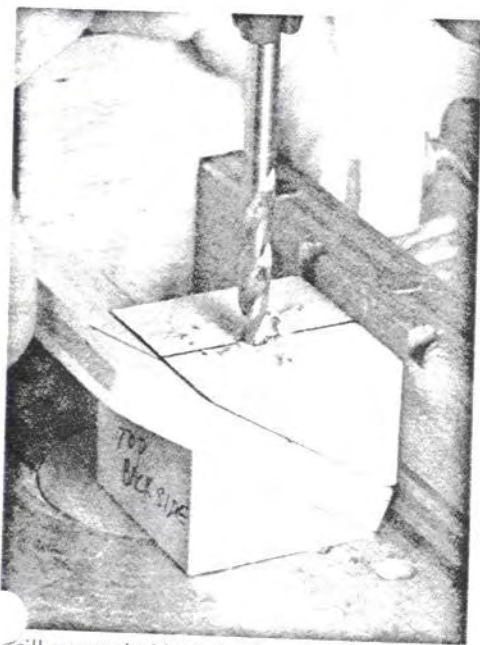
Solid-block construction, steel axles and commercial wheels held on with push nuts make this model of a military-style jeep as durable as the real thing, even under the most demanding of play conditions. And the removable top gives you two toys in one. The steering wheel and spare tire add a touch of realism, but for greater authenticity you could paint the jeep in camouflage and add some decals. Or, better yet, let the kids paint it for a vehicle that will be truly their own.



## Parts Preparation

### BODY

1. Cut the plywood floor panel to size, and then cut dadoes for the axles on the bottom. From the centerlines of the dadoes, measure out  $\frac{3}{4}$ -in. on either side and score lines to prevent the finish from flowing into the area where the axle housing will be glued (see p. 18).
2. Cut the front bumper to size and drill holes for the bumper pegs.
3. Cut the hood to size. Cut a rabbet ( $\frac{1}{16}$  in. deep by  $\frac{3}{4}$  in. wide) along each side on top of the hood, and then round the edges of the hood over with a  $\frac{3}{8}$ -in. roundover bit (see the drawing on p. 40). Drill headlight holes  $\frac{1}{16}$  in. deep before cutting the  $10^\circ$  angle at the back of the hood.
4. Cut the windshield to size with a  $10^\circ$  bevel on the top and bottom edge, and then drill an angled hole for the steering column (see the photo below and p. 10).
5. The side walls are mirror images of each other and can be spot-glued together for cutting and shaping. Cut the blanks oversized ( $10\frac{1}{4}$  in. long by  $2\frac{3}{4}$  in. wide). The extra length provides a 1-in. waste area on each end for gluing. Be sure not to glue beyond this waste section. The extra width allows you to mill the back wheelwells without having to worry about tearout on the bottom edge. (If you decide to cut the wheelwells with a bandsaw, the extra width is not necessary.)



Drill an angled hole in the windshield for the steering column, using a jig to hold the workpiece at the correct angle.

## Parts List

Quantity	Description	Finished Dimensions	Material
1	Floor panel	$\frac{1}{2} \times 3\frac{1}{2} \times 8$	Plywood
1	Hood	$1\frac{3}{16} \times 3\frac{1}{2} \times 3\frac{1}{8}$	Poplar
1	Windshield	$\frac{3}{8} \times 2\frac{3}{4} \times 3\frac{1}{2}$	Poplar
1	Front bumper	$\frac{3}{8} \times \frac{3}{4} \times 4\frac{3}{8}$	Poplar
2	Bumper pegs	$\frac{1}{4}$ -in.-dia. peg, $\frac{3}{4}$ in. long with $\frac{1}{8}$ -in.-dia. head	Birch
1	Back wall	$1\frac{3}{16} \times 1\frac{3}{4} \times 3\frac{1}{2}$	Poplar
2	Side walls	$\frac{3}{8} \times 1\frac{3}{4} \times 8\frac{1}{4}$	Poplar
2	Headlights	$\frac{3}{16}$ -in.-dia. by $\frac{1}{8}$ -in.-thick buttons	Plastic
2	Front-seat bottoms	$\frac{3}{4} \times 1\frac{1}{2} \times 1$	Poplar
2	Front-seat backs	$\frac{3}{8} \times 1\frac{1}{2} \times 1\frac{1}{8}$	Poplar
2	Back seats	$\frac{3}{4} \times 1\frac{3}{16} \times 2$	Poplar
1	Steering wheel	1 in. dia. by $\frac{1}{4}$ in. thick	Birch
1	Steering column	$\frac{1}{4}$ -in.-dia. dowel by 1 in. long	Plastic
1	Steering wheel screw	$\frac{3}{4}$ -in. pan-head screw	Steel
2	Figures	$\frac{7}{8}$ in. dia. by $2\frac{3}{8}$ in. high	Birch
1	Canopy top	$\frac{1}{2} \times 3\frac{1}{2} \times 5\frac{3}{8}$	Poplar
1	Canopy back	$1\frac{3}{16} \times 1\frac{3}{8} \times 3\frac{1}{2}$	Poplar
2	Canopy posts	$\frac{1}{4}$ -in.-dia. dowel by $1\frac{1}{8}$ in. long	Plastic
2	Axle housings	$\frac{5}{8} \times 1\frac{1}{2} \times 3\frac{5}{8}$	Poplar
2	Axles	$\frac{1}{4}$ in. dia. by 5 in. long	Steel
4	Spacer washers	$\frac{1}{4}$ in.	Steel
5	Wheels	2 in. dia. by $\frac{1}{2}$ in. thick	Birch
5	Push nuts (hub caps)	$\frac{1}{4}$ in.	Steel
1	Spare tire post	$\frac{1}{4}$ in. dia. by $\frac{3}{4}$ in. long	Steel

Cut the wheelwells with a hole saw, as explained on p. 13, and then make the perimeter cuts. Trim off the glued-together waste at each end to separate the pieces.

6. Cut the back wall to size and rabbet the inside bottom edge. Drill two  $\frac{1}{4}$ -in.-dia. holes on the top edge for the canopy posts, and one hole in the back for the spare-tire post.

### INTERIOR

1. Cut the front-seat bottoms and backs and the back seats to size.
2. Clamp the front-seat bottoms to the drill-press fence and drill  $\frac{3}{4}$ -in.-dia. holes for the two figures. If you use the  $\frac{7}{8}$ -in.-dia. by  $2\frac{3}{8}$ -in.-high commercial figures that I recommend (available from Casey's Wood Products; see Sources of Supply on p. 151), cut a  $\frac{1}{16}$ -in. deep by  $\frac{9}{16}$ -in. high shoulder at the base of the figures to fit the front seats; alternatively, drill the seat holes to fit the figures (if you do this, you'll need to make the seats a little wider).

3. Adjust the length of the  $\frac{1}{4}$ -in.-dia. plastic-dowel steering column as necessary.

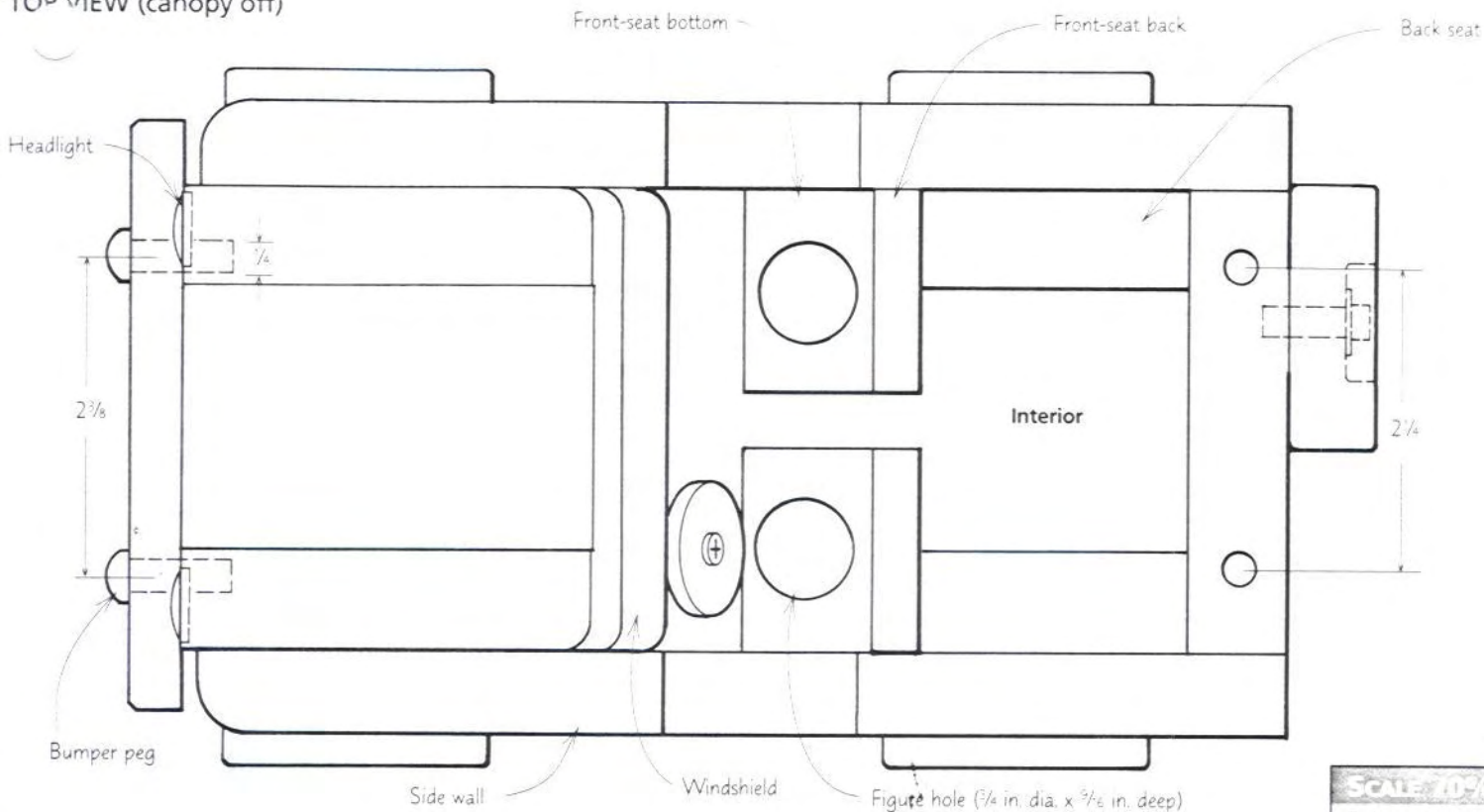
### CANOPY

1. Cut the canopy top to size, and then cut the back rabbet.
2. Cut the canopy back to size, and then drill it to receive the canopy posts.
3. Dry-assemble the canopy and check the alignment with the windshield before cutting the dado. Adjust the width and depth of the dado to fit.

### WHEELS AND AXLES

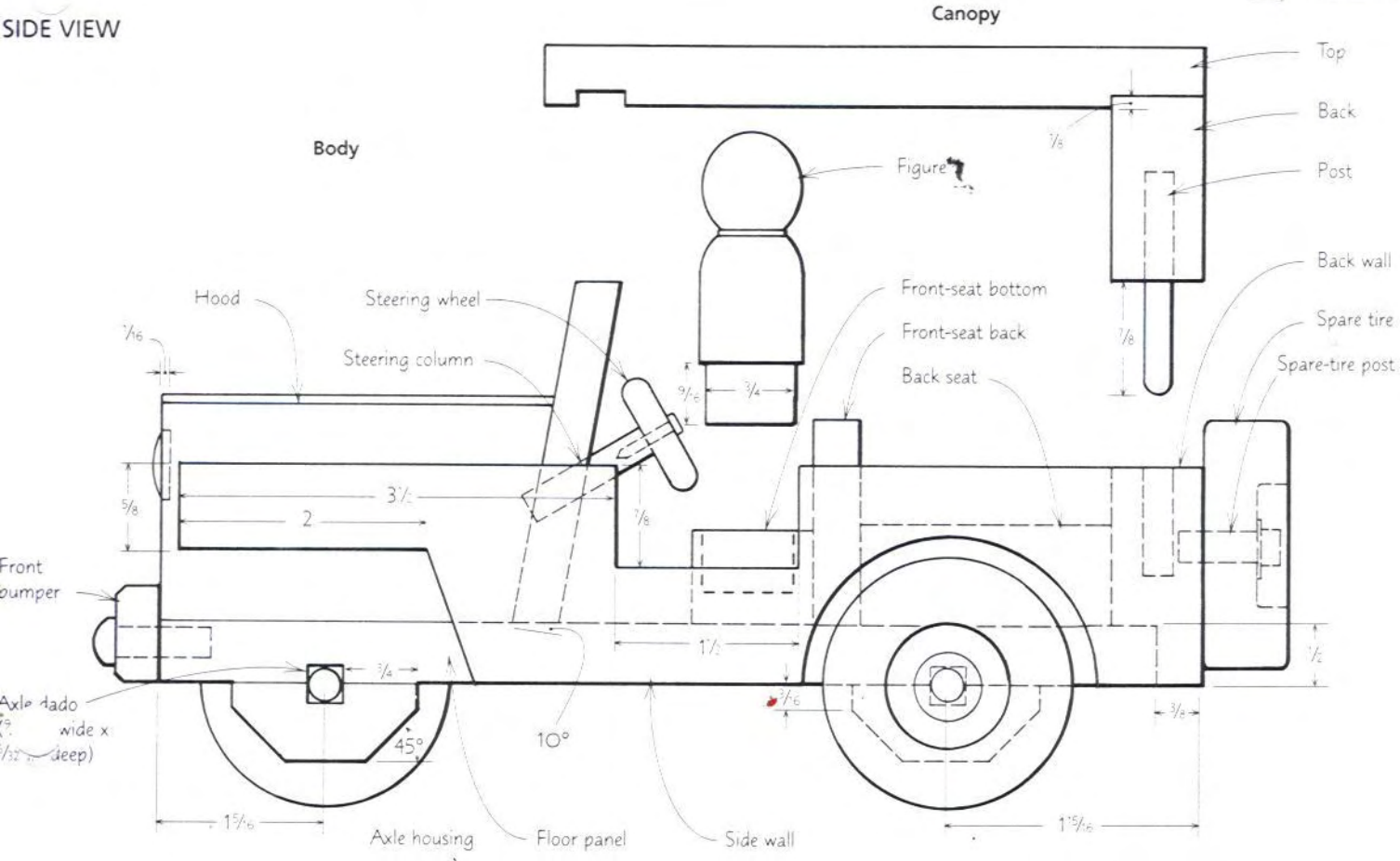
1. Dimension the axle-housing stock to thickness and width and at least 1 ft. long (depending on how many jeeps you're making). Cut the dado for the axle and the  $45^\circ$  shoulders before cutting the housings to length.

## TOP VIEW (canopy off)



SCALE 100%  
Enlarge 143%

## SIDE VIEW



# Assembly

Finish all parts as described on pp. 16-18.

## BODY AND INTERIOR

1. Glue all the body parts to the floor panel in the order that they appear in the parts list.
2. Add the interior parts in the following order: steering column, steering wheel, steering-wheel screw, back seats.
3. Glue the front-seat bottoms to their backs, and then butt the front-seat units against the back seats. Leave the figures loose in the seats.

## CANOPY

1. Glue the canopy top to the back, and the posts into the bottom edge of the canopy back.

## WHEELS AND AXLES

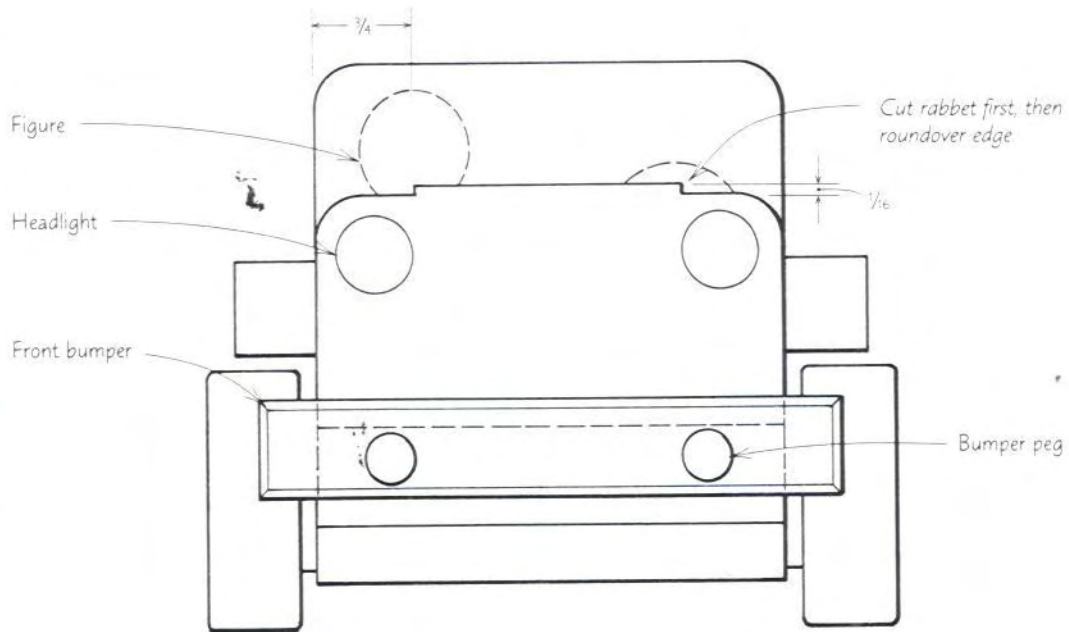
1. Glue the axle housings to the bottom of the floor panel.
2. Insert the steel axes through the axle housings, install the spacer washers and wheels and tap on the push nuts. (Note that

commercial wheels are available in smooth and treaded styles. If you use the treaded wheels you'll have to plug the  $\frac{3}{8}$ -in.-dia. axle holes and re-drill for the  $\frac{1}{4}$ -in.-dia. axles.)

3. Install the spare-tire post (either a  $\frac{1}{4}$ -in. steel rod or  $\frac{1}{4}$ -in. dowel) and spare tire on top of the back wall.

# Jeep

FRONT VIEW



REAR VIEW

