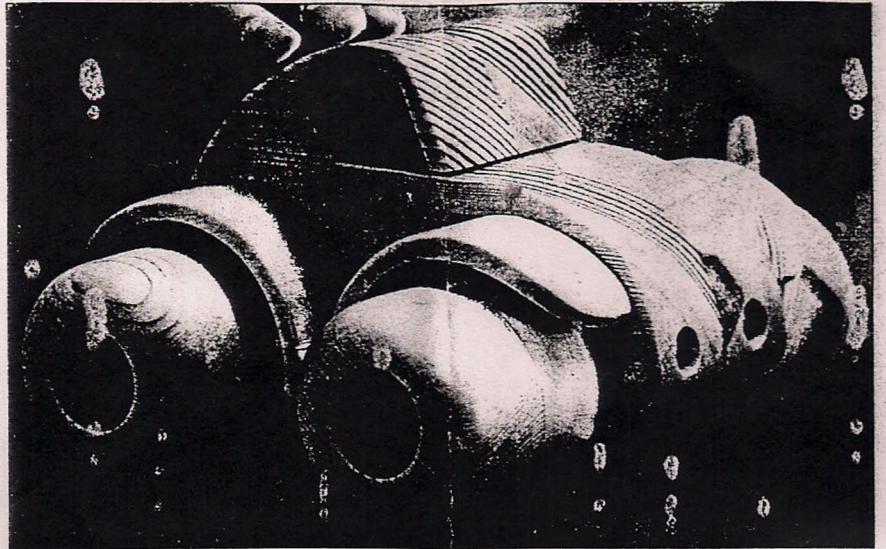


# BAJA BUGGY

**Y**oungsters will feel the wind through their hair and the summer sun upon their faces when driving this beach buggy over the dunes of make-believe. This fat-tired toy requires just a few feet of 2x4 stock and about 2½ hours to build. Can you think of an easier child pleaser?



## Shape the body and fenders

1. Plane or resaw two 12"-long pieces of pine or fir 2x4 stock to 1½" thick. You also could use five-quarter (5/4) stock and eliminate the planing. Glue and clamp the pieces together face to face for the car body (A).

2. Transfer the full-sized car outline and axle-hole locations to a piece of paper. (We photocopied the pattern; you also could use carbon paper.) Cut the pattern outline to shape. Apply spray-on adhesive to the back side of the paper pattern, and stick the pattern to the pine block.

3. Drill a pair of 7/16" axle holes through the body where marked.

4. With a 1/8" blade on your band saw, cut the car body and window opening to shape.

5. Plane or resaw another 12"-long piece of 2x4 stock to 1½" thick. Using the same transfer procedure described in Step 2, lay out and cut the two fenders (B) to shape.

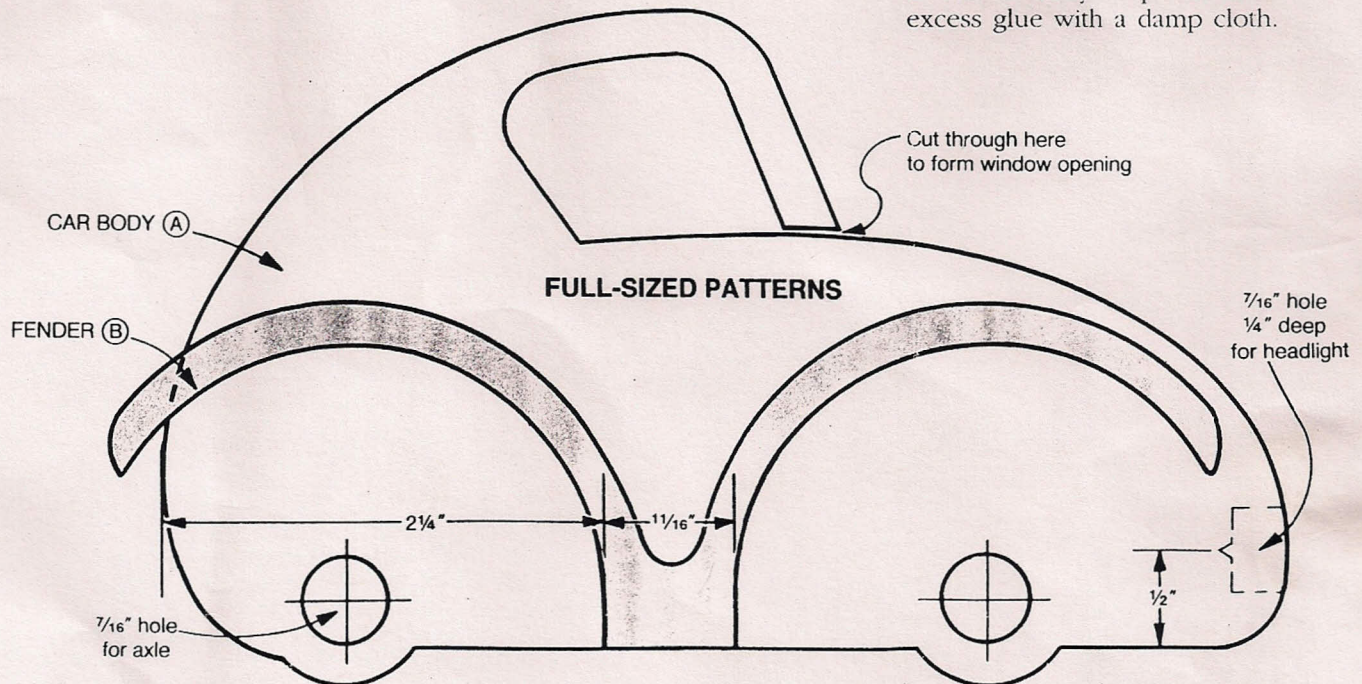
6. Sand a radius on the front and rear outside corners of the fenders as shown in the Fender detail. (We marked the radii with

a quarter, and shaped the radii with a belt sander.)

7. Remove the paper pattern, and hand-sand the car body and fenders.

8. Drill a pair of 7/16" holes ¼" deep in the front of the car body to form the headlights. (We held the car body upright in a hand-screw clamp, and drilled the holes on the drill press.)

9. Glue and clamp the fenders to the car body where located on the Full-Sized Pattern. The bottom middle section of the fenders should be flush with the bottom of the car body. Wipe off the excess glue with a damp cloth.





## Let's add the wheels

1. Plane two 12" lengths of 2X4 stock to  $1\frac{1}{16}$ ". Laminate the two pieces together face to face.

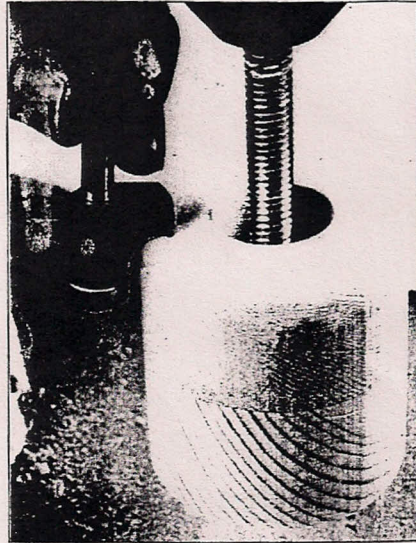
2. Using a compass, mark four  $2\frac{1}{8}$ "-diameter ( $1\frac{1}{16}$ " radius) circles on the top face of the laminated stock for the wheels (C).

3. Chuck a 1" Forstner or paddle bit into your drill press. Drill a  $1\frac{1}{16}$ "-deep hole at the center of each marked wheel. Switch to a brad-point bit, and drill a  $\frac{3}{8}$ " hole through the center of each wheel.

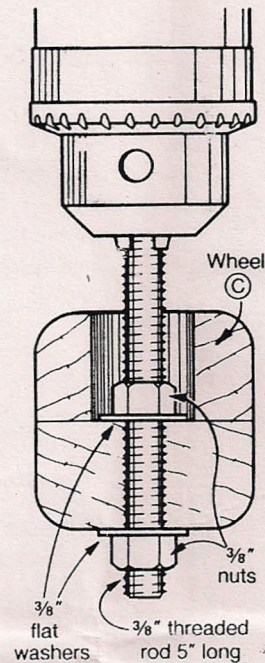
4. Using a bandsaw, cut the four wheels to shape, cutting just outside the marked outline.

5. Fasten a wheel to a 5"-long piece of  $\frac{3}{8}$ "-threaded rod where shown on the drawing *at far right*. Chuck the assembly into your drill press. With 80-grit sandpaper, sand the wheels smooth (we used a sanding block). Sand a  $\frac{3}{8}$ " round-over along the outside edges. With the drill press stopped, check the sanded round-overs for uniformity with a  $\frac{3}{8}$ " round-over bit as shown in the photo *above right*. Finish-sand with finer grits of paper. Repeat the process for the remaining wheels.

6. From  $\frac{3}{8}$ " dowel stock, cut two axles each  $4\frac{3}{8}$ " long. Glue one axle, flush with inside edge of the 1" hole, to each wheel. (See the Exploded View drawing for reference.) Insert the axles through the car body, and glue on the other two wheels so the wheel-axle assemblies rotate easily.

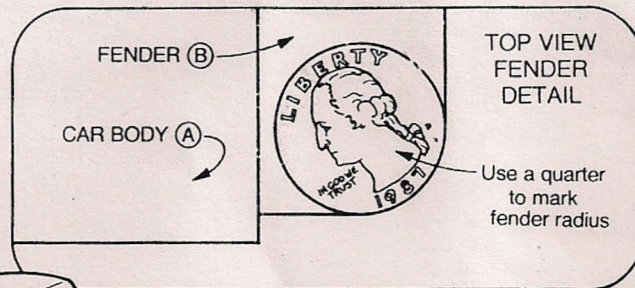


When sanding the band-sawed wheels to shape on the drill press, check round-overs with a  $\frac{3}{8}$ " round-over bit for uniformity.

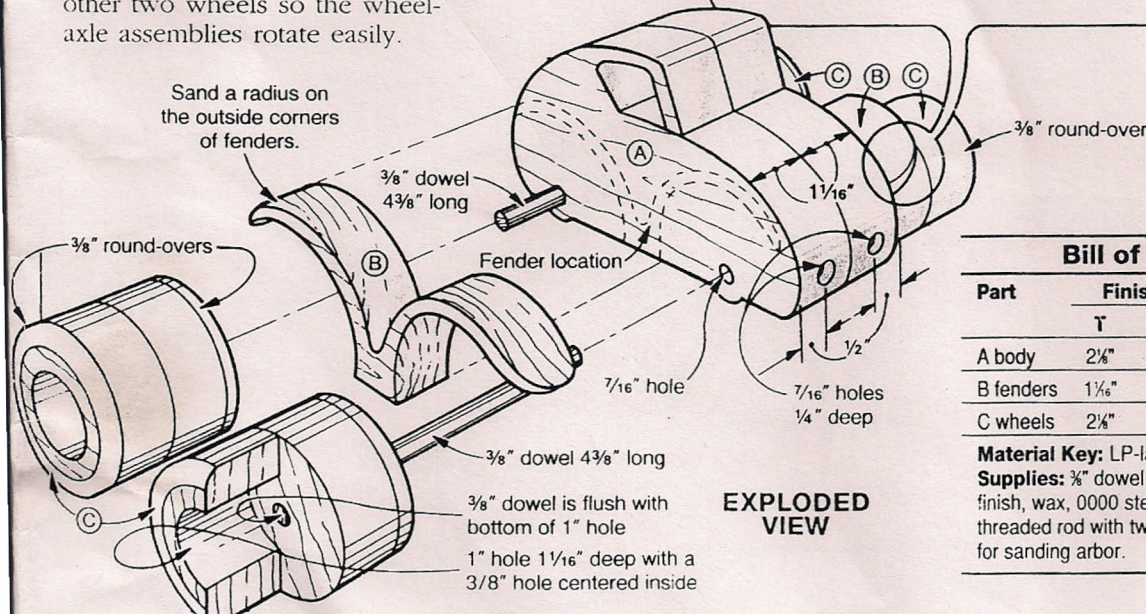


## Apply the finish and head for the dunes

1. Apply two coats of clear finish. (We found that an oil finish tends to pick up too much dirt over time, but, paint, lacquer, or polyurethane work well.) Now, watch a deserving youngster's imagination run wild.



Sand a radius on the outside corners of fenders.



## EXPLODED VIEW

## Bill of Materials

Part	Finished Size			Mat.	Qty
	T	W	L		
A body	2 $\frac{1}{8}$ "	3 $\frac{1}{2}$ "	5 $\frac{1}{2}$ "	LP	1
B fenders	1 $\frac{1}{8}$ "	1 $\frac{1}{4}$ "	5 $\frac{1}{2}$ "	P	2
C wheels	2 $\frac{1}{8}$ "	2 $\frac{1}{8}$ " diam.		LP	4

**Material Key:** LP-laminated pine; P-pine  
**Supplies:**  $\frac{3}{8}$ " dowel stock, spray adhesive, finish, wax, 0000 steel wool,  $\frac{1}{4}$ "x5"-long threaded rod with two  $\frac{3}{8}$ " nuts and flat washers for sanding arbor.