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The How-To-Do-Magazine

JUNE 1968

35¢

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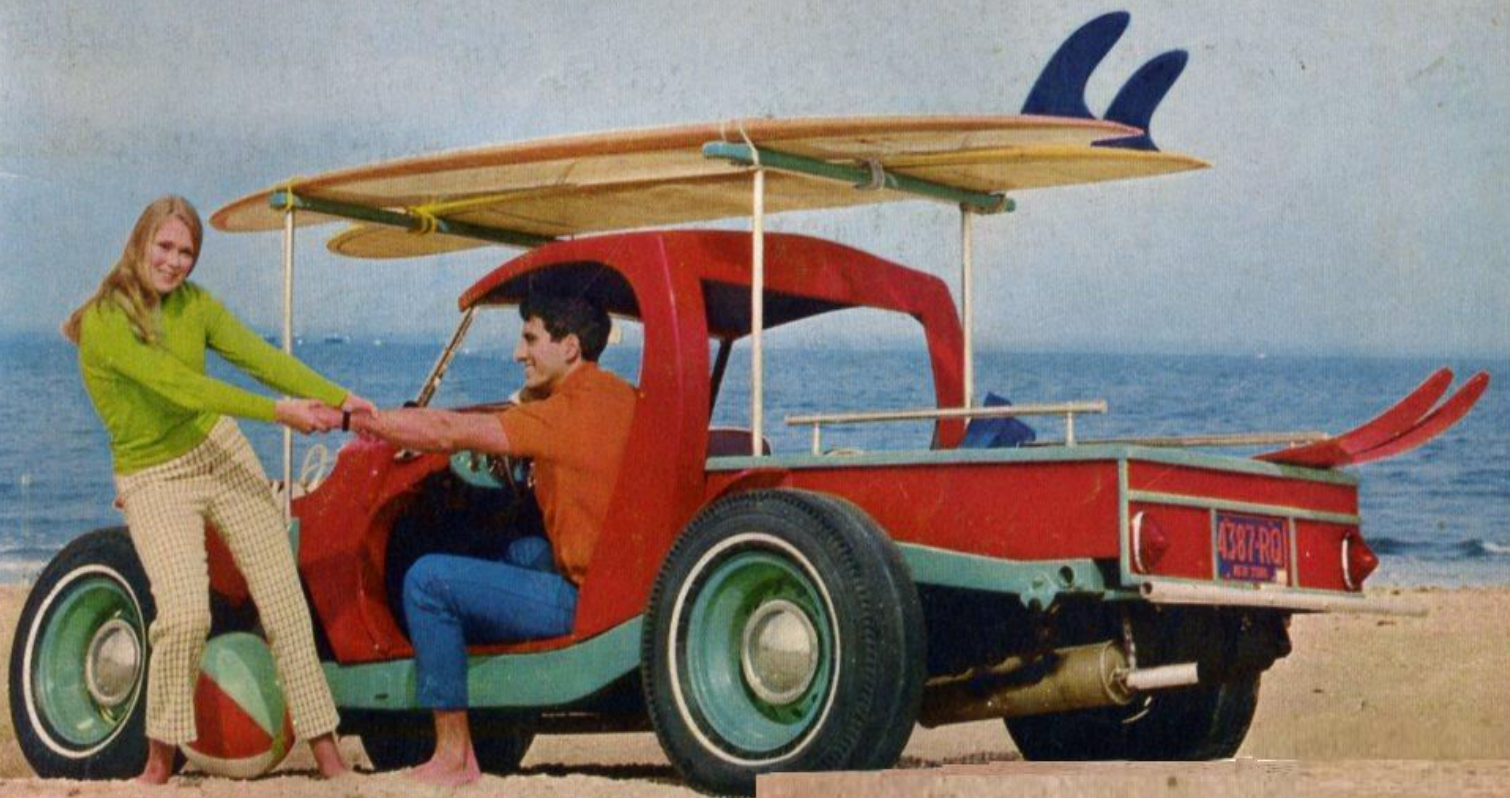
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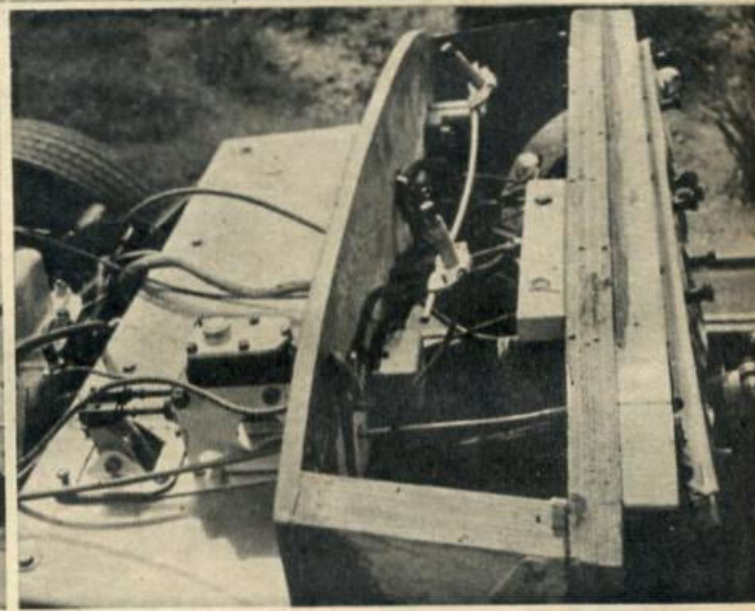
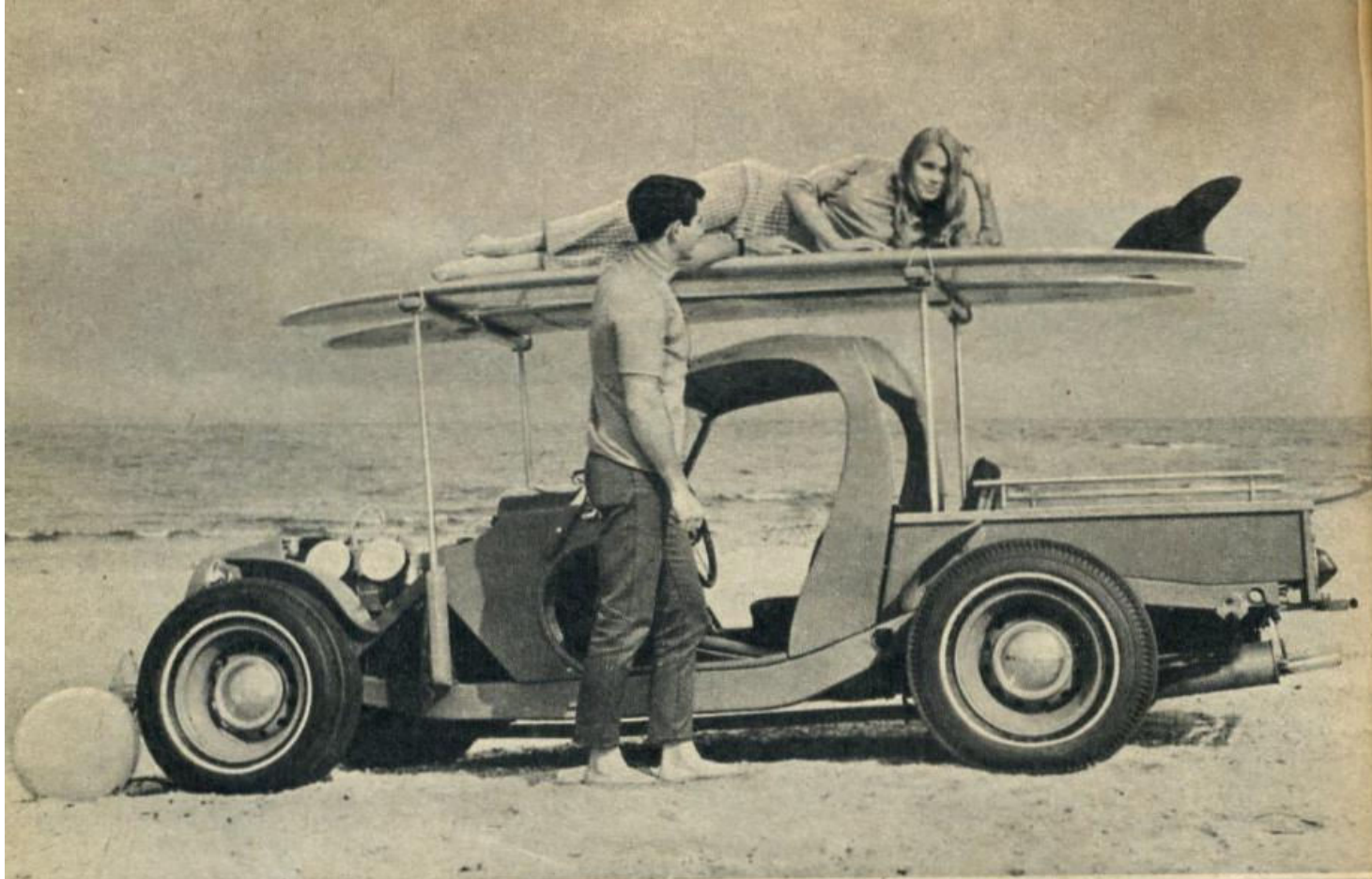
The Easy Way to Build a Boat

New!—Weekend Camp-Out on a Trail Bike!

Servicing Guide for the Distributor



Build This Fun Buggy For Under \$400



REMOVE FENDERS, bumpers, doors, hood and main body sections from the chassis.

NEW FRAME is built up of $\frac{3}{4}$ -in. plywood. Shelf above firewall holds steering box.

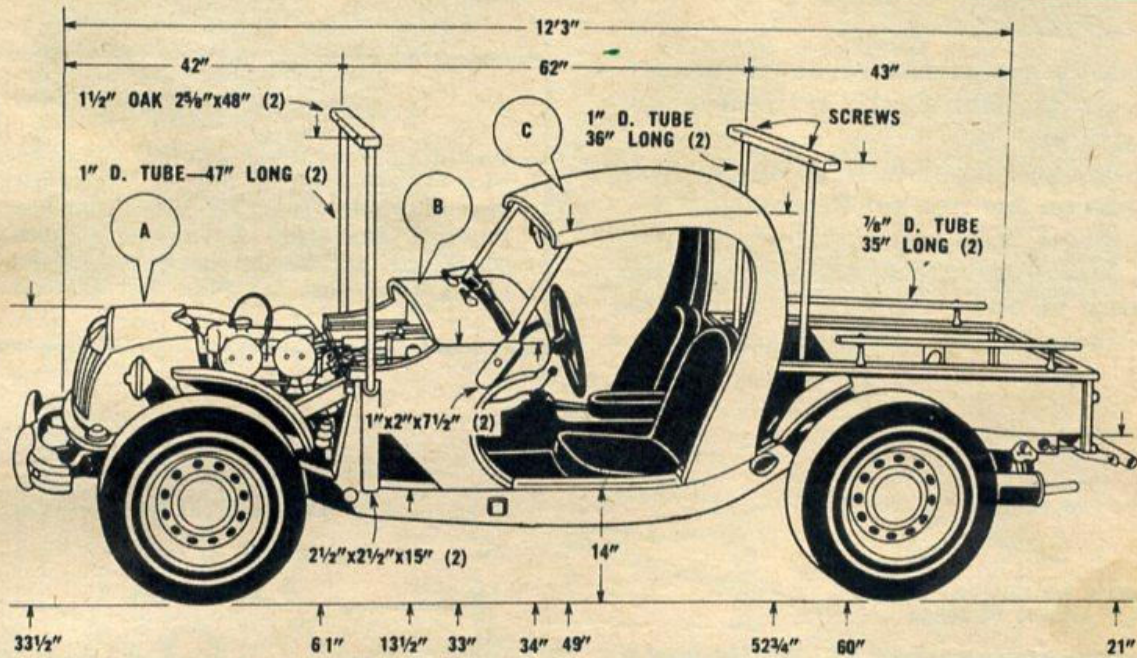
\$400

Fun Buggy!

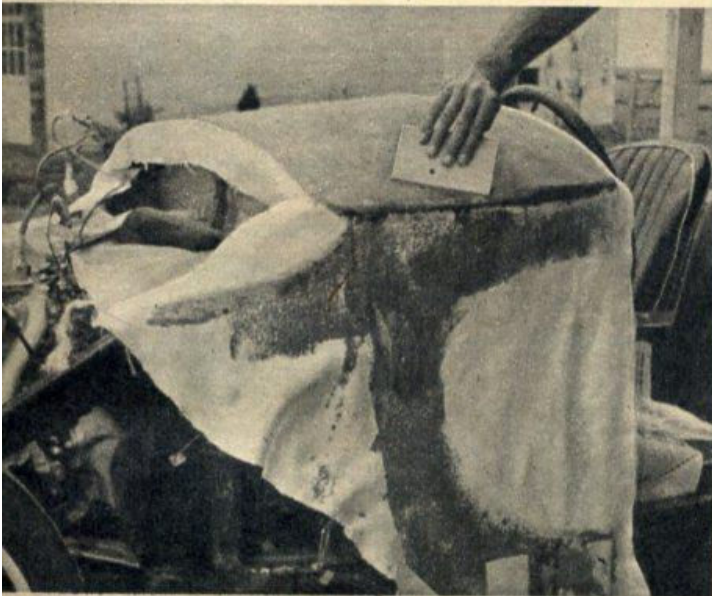
By Ro Capotosto

THE BIG thing on the scene today is fun outdoors. The return-to-nature movement has been on the up-swing for several years and continues full throttle.

The most popular activities include surfing, skin diving, dune hopping and off-the-road touring in addition to the old staples of camping and fishing. Whatever the sport, a special breed of



FUN BUGGY ASSEMBLY



FIBERGLASS cloth is bonded to Plyfoam body sections with resin. Use a squeegee.



PLYFOAM body section is attached temporarily to wooden frame before glassing.

vehicle is desirable for the off-highway travel involved. It should be lightweight yet rugged, small, able to cart plenty of sporting equipment and, in keeping with the times, it certainly should have mod styling.

MI's Fun Buggy fills the bill. It's shown in full color on the cover of this issue, along with Hannon surfboards

and Voit-AMF water skis. Just tooling along in this spunky, low-slung rig is sport in itself. We show our Fun Buggy in a beach setting but buggies are seen these days all over the country. They're as much fun for the younger set in Racine as in Daytona Beach.

The basic chassis of our buggy is an English MGA with its chunky frame

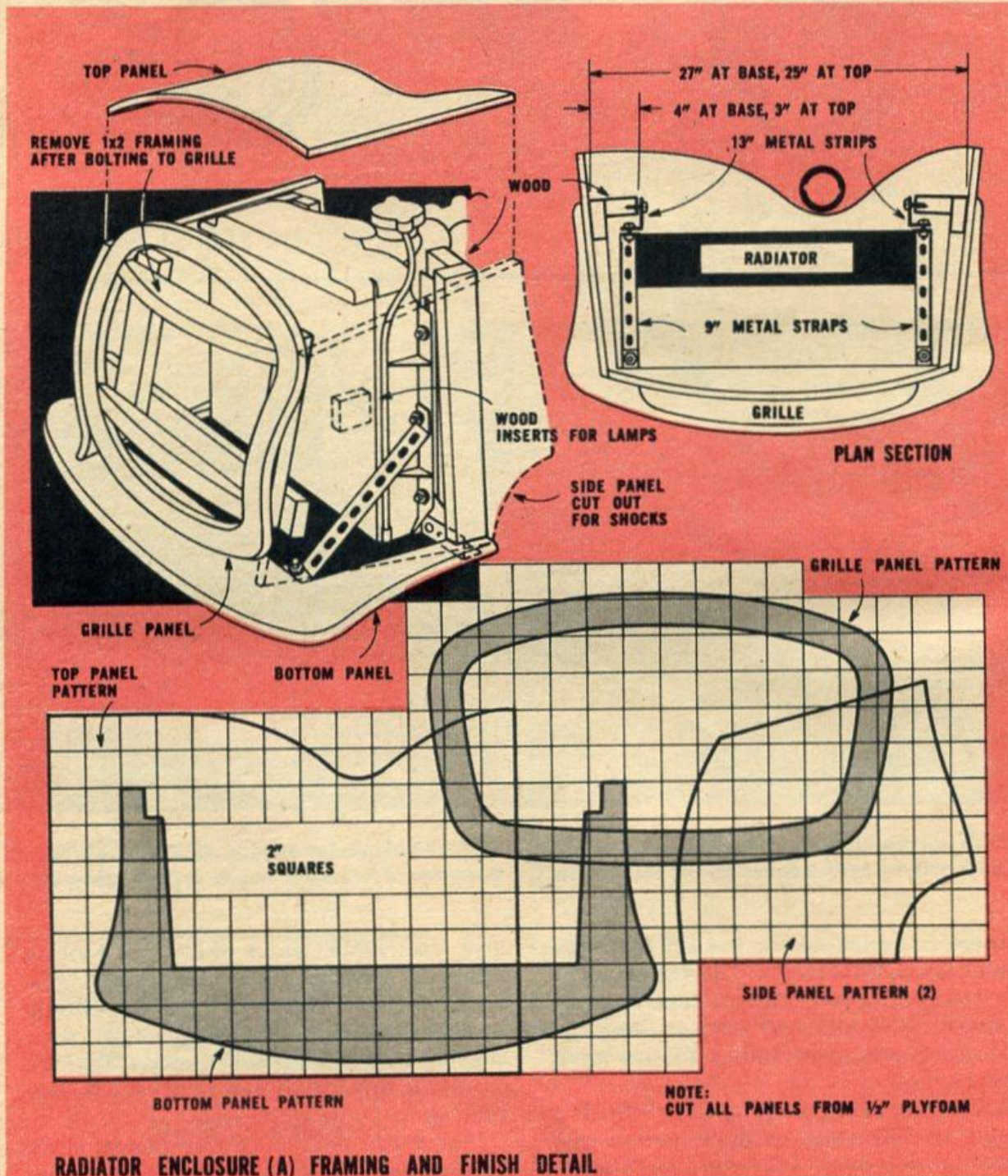
\$400 Fun Buggy!

purposely exposed to reveal the sweeping lines and add to the extremely low-slung look.

There are sophisticated factory-built buggies on the market that sell for several grand. You can buy body conversion kits that attach to stock chassis, starting at \$600. Options can jack the cost above \$2,000. Neither approach is

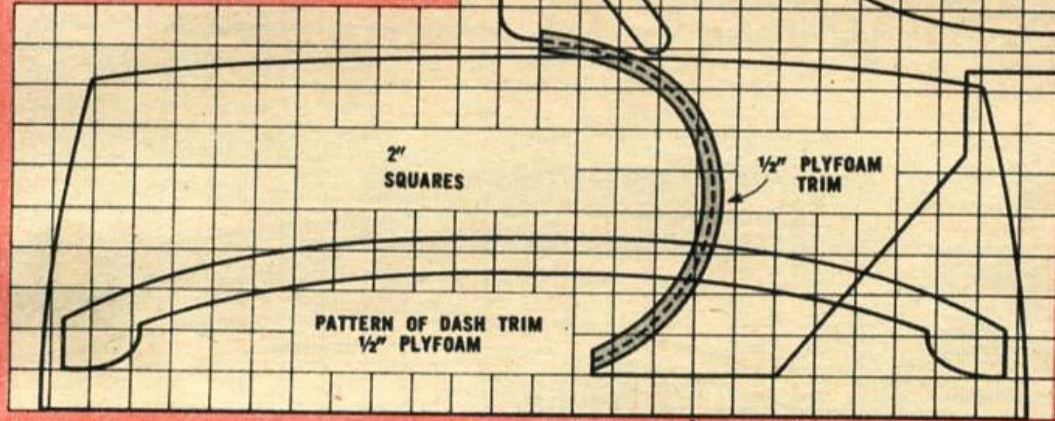
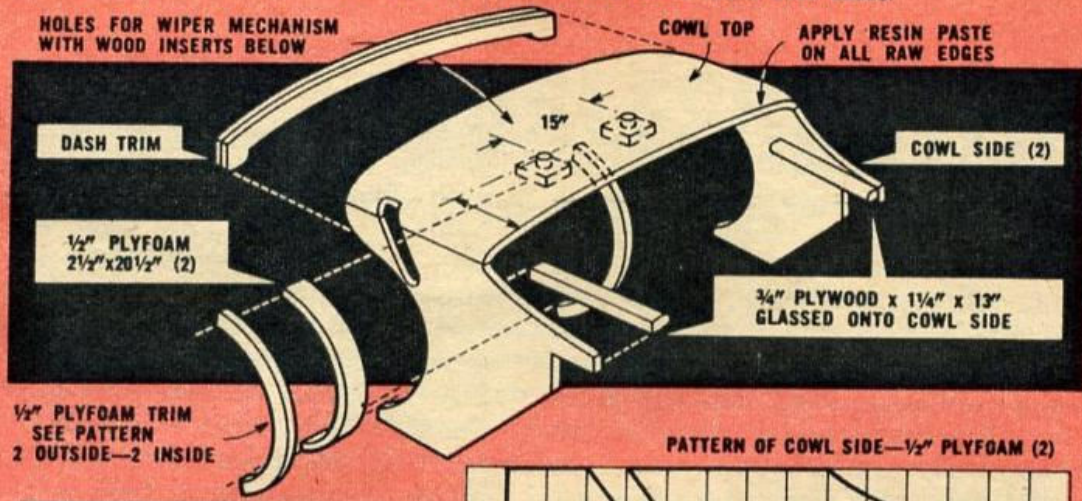
LARGE-SCALE PLANS

including additional photos, construction details and a bill of materials, are available from MI Plans Service, Fawcett Building, Greenwich, Conn. 06830 for \$3. Send check or money order only. Ask for Plan No. FB-6-68.



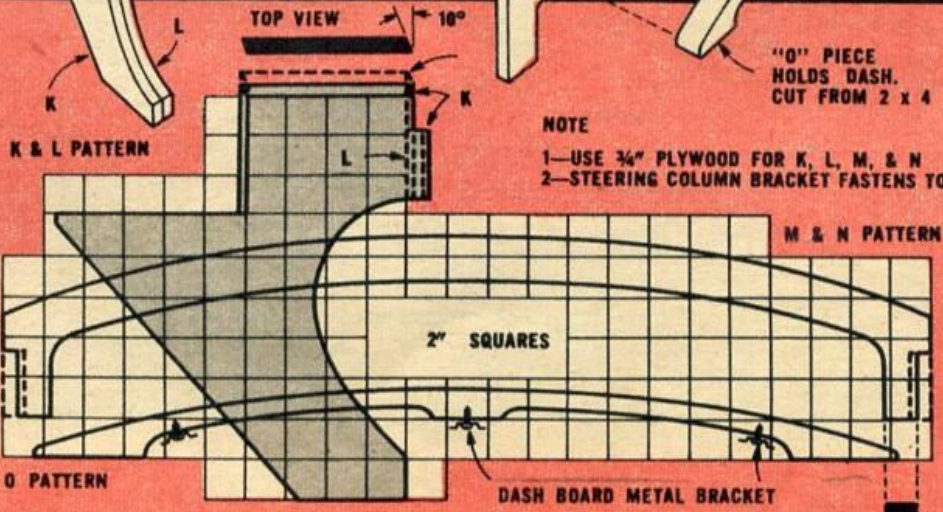
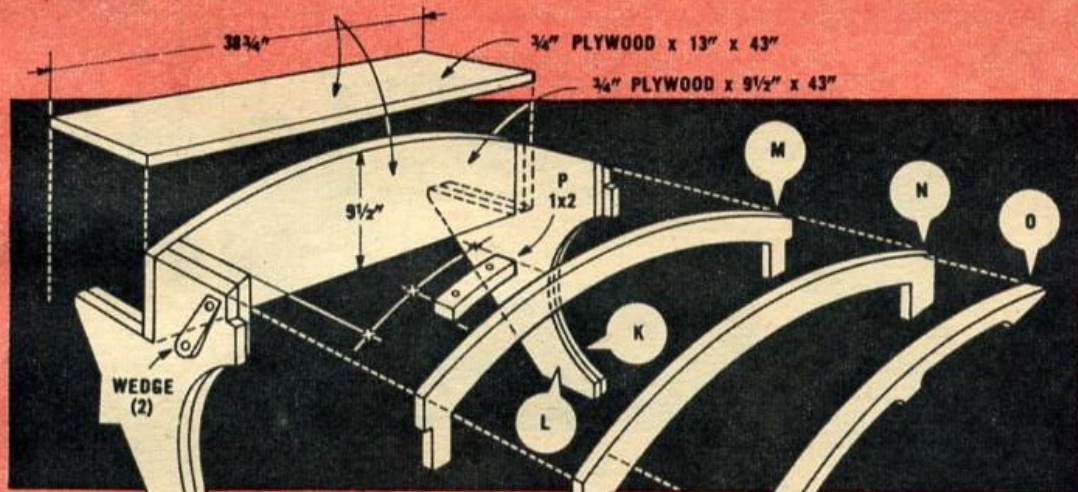
SHELF AND UPRIGHT ARE GLASSED DIRECTLY ON PLYWOOD RUN GLASS CLOTH OVER EDGES.

HOLES FOR WIPER MECHANISM WITH WOOD INSERTS BELOW



PATTERN OF COWL TOP—1/2" PLYFOAM

COWL PLYFOAM FINISH DETAILS



NOTE
 1—USE 3/4" PLYWOOD FOR K, L, M, & N
 2—STEERING COLUMN BRACKET FASTENS TO P

COWL FRAMING DETAIL (B)

\$400 Fun Buggy!

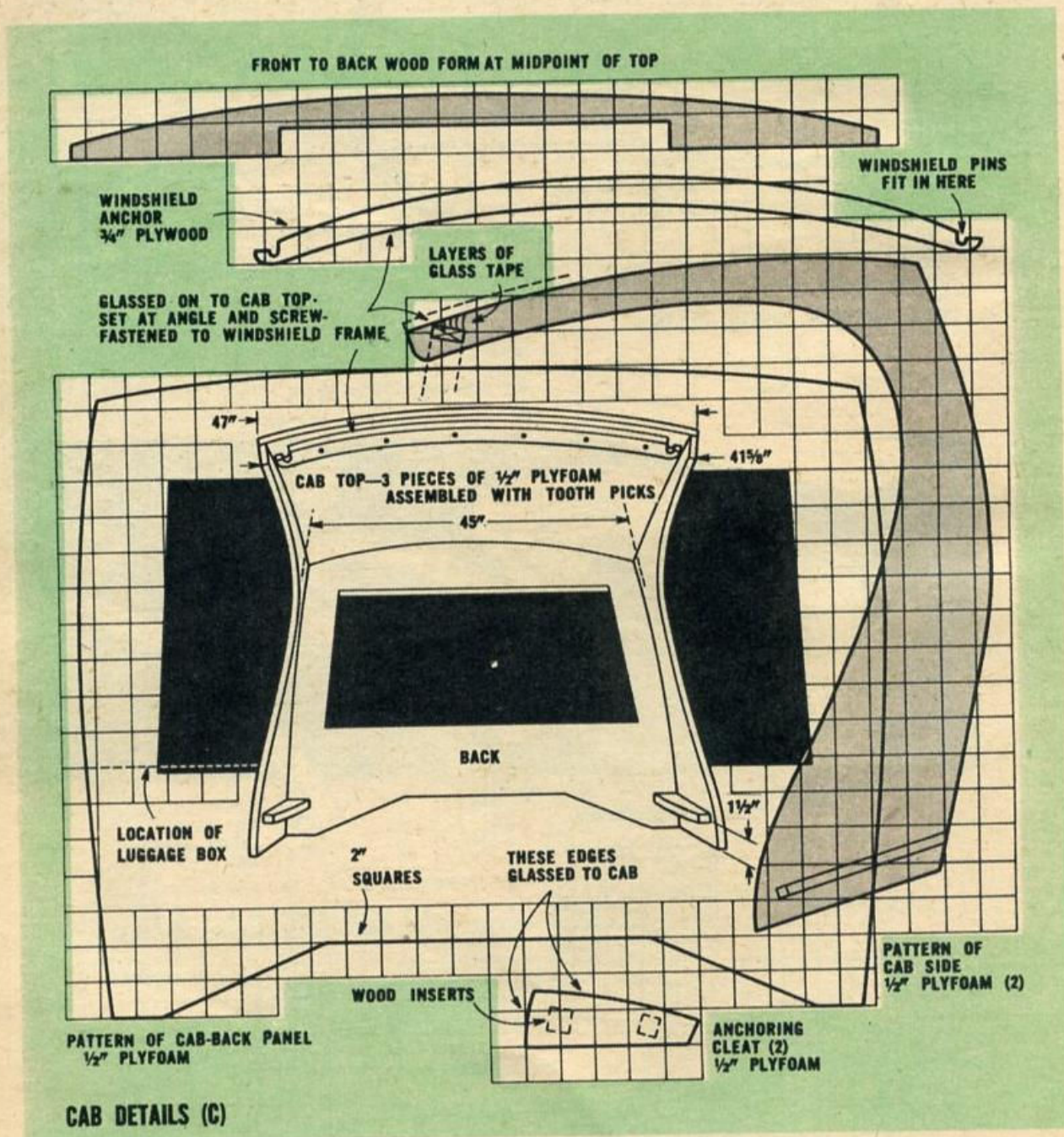
exactly bargain-basement stuff, but the Fun Buggy is. You can build it, ready to roll, for \$255. A handy option, at about \$140, are extra-wide rims and fat tires for driving on sand. (Our \$400 figure for the conversion includes the special tires and rims, of course.)

For a conversion like this you must start with a frame-and-body type car. Unitized body construction cannot be stripped down for rebuilding because there is no separate frame. We chose

the MGA chassis because of its rugged construction. For other frames, you must make minor changes in the basic design, as required. Other small cars with frame-and-body design include Triumph Herald, TR3, TR4, and Spitfire; Austin Healey; MG-T series; and, of course, the VW.

If you haven't a spare foreign car around the house, you might as well buy an MGA so you can follow our plans directly. Ours was a '58 model in pretty good shape and cost \$275. The MGA was built from 1955 to 1962 and you can get one for \$50 to \$500, depend-

[Continued on page 102]



Fun Buggy!

[Continued from page 86]

ing on condition. The ideal is a car in good mechanical condition with rusted or dented bodywork. The price will be low and tune-up costs minimal.

Begin the project by disconnecting all electrical wiring. Carefully label each wire on a strip of tape as it is removed from its connection. Dismantle the control cables, gas line, clutch and brake pedals, master cylinder and wiper mechanism, then remove the fenders, bumpers, doors and hood in that order. The main body pieces go next.

Start construction with the cowl section. The framing is made of doubled-up sections of exterior-grade $\frac{3}{4}$ -in. plywood held together with nails and waterproof glue. This unit is bolted to the chassis using the original bolts and holes on the firewall frame.

Except for the plywood luggage box, all body components are made of fiberglass cloth laminated on a core of Plyfoam. Relatively new, Plyfoam is a tough, rigid, heat-formable plastic sheet material available in $36 \times 36 \times \frac{1}{2}$ -in. sheets. It can be purchased, together with fiberglass and resins, from Link Marine Inc., Vanderbilt Industrial Park, Hauppauge, N.Y. 11787.

Plyfoam is cut with a razor or hobby knife with a thin blade. An infrared heat lamp is used to form the material. The following materials are needed for fiberglassing: glass or metal measuring cups, an eye dropper, large unwaxed paper paint tubs, wooden stirrers, several cheap paint and paper-hanging brushes with natural bristles, scissors and a rubber squeegee.

The Plyfoam sheets are joined with toothpicks on a flat surface to make up panels of required size. Temporarily place strips of masking tape on the underside of the seams to keep the resin from leaking through. Thoroughly mix the polyester resin and hardening agent according to the instructions and spread it over the Plyfoam with a wide paper-hanging brush. Quickly lay down the fiberglass cloth and work over the entire area with the squeegee to soak the fibers. Add more resin to dry spots if

needed. Laminate this skin on one side only for now. When it is cured cut the panels to the required shape with a fine tooth saber saw and assemble the component parts on the plywood frame with the glassed surface on the inside.

The exposed Plyfoam now is shaped with a rasp or coarse sandpaper. Various sections of the grille, cowl and cab assemblies can be joined to each other with annular ring nails. Press the heads just below the surface.

Apply a single sheet of fiberglass cloth to the outside of the Plyfoam assembly in the same way it was applied to the flat sheets. When the first coat of resin cures, apply a second.

The whole assembly is lifted off its wooden frame and the inside joints reinforced with narrow strips of fiberglass (called tape) and resin. The outside surface is made smooth by applying a coat of thick resin paste. Make the paste by mixing resin with a powder called Cab-O-Sil. Add hardener just before applying it. Smooth it around with the squeegee.

The final smooth surface is achieved with alternating sanding and coats of fast-drying resin mix applied with a soft brush. Further imperfections are filled with auto-body putty and sanded.

The luggage box is built of plywood and bolted through the original body mounting holes. The brackets for the overhead carrying racks also are wooden. The rear mounts are attached inside the luggage box and the front ones to mounting holes on vertical frame members near the firewall.

The front fenders, which turn with the front wheels, are supported by brackets bolted to the wheel housings.

Wind-up operations include rewiring, installing the wiper mechanism, dash and bumpers. The tail and signal lamps are original equipment but the headlights are Lucas driving lights.

Beach driving requires wide tires that won't fit the narrow stock rims. Extra-wide rims must be welded to the original wheel centers. This exacting task should only be done by an expert. Most speed shops can handle it. Ours cost \$15 a wheel. Our retread tires, \$20 each. •

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