

VACATIONING OUTDOORS

# BUILD A CAMPER

Two plywood boxes, sliding one over the other, open up to make a truck camper that sleeps four

By A. S. RYAN

If you've been figuring that the cost of a truck plus a camper is a bit steep, or you're already a pickup-truck owner but the budget won't stretch to a camper, here's a collapsible plywood unit you can build yourself. Just follow the blueprint on the following pages.

Opened up, this camper has over six feet of head room, lots of living space, and sleeping places for four. Closed, and lowered for minimum wind resistance, it's easy to drive, yet has enough head room to seat passengers while traveling. Removing the rear cab window makes easy access.

Two bumper jacks raise or lower the upper section, and hinged sides unfold to give

two full-length bunks. Plastic side curtains button around the bunks to enclose the entire camper.

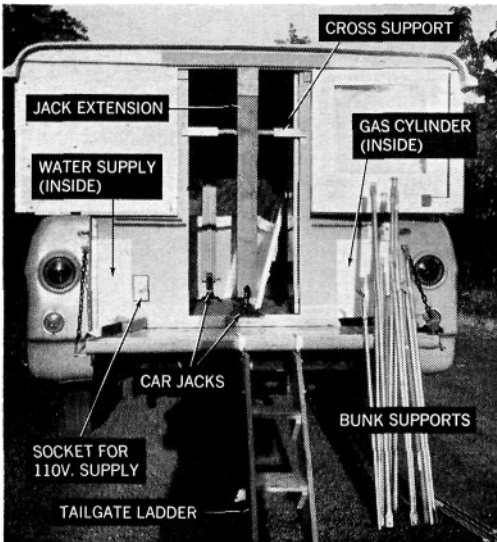
**How to plan yours.** Make careful measurements of your truck box to determine the size of the unit you'll build. Some of the dimensions given apply only to my truck (a 1965 Dodge six-passenger pickup).

Find the minimum inside height by seating the tallest in the family on a board across the wheel wells. Most truck beds have at least four feet between wheel wells. This lets you use a full sheet of plywood as the floor. Test-position all the main structural pieces after cutting. Be sure there's room to raise the tailgate.

**How to build it.** First, lay out and cut the lower ends and side pieces, using B-B, concrete-form-grade fir plywood. Use the flat-test panels you can find. Don't cut the door openings yet. To the end pieces, attach the guide strips (battens) that align the upper section for raising.

Assemble the ends and the lengthwise structural pieces of  $\frac{1}{2}$ " and  $\frac{3}{4}$ " plywood. This is easier to do with the section turned up-

*Continued*



**Raise the roof,** using bumper jacks and extension supports at each end. Top door opens out, bottom door inward, to let you exit over tailgate if necessary.

**Support raised roof** inside with flip-up braces, outside with bolted-on safety brackets. Stairs and bunk supports store inside camper when not in use.

# EXPANDABLE CAMPER



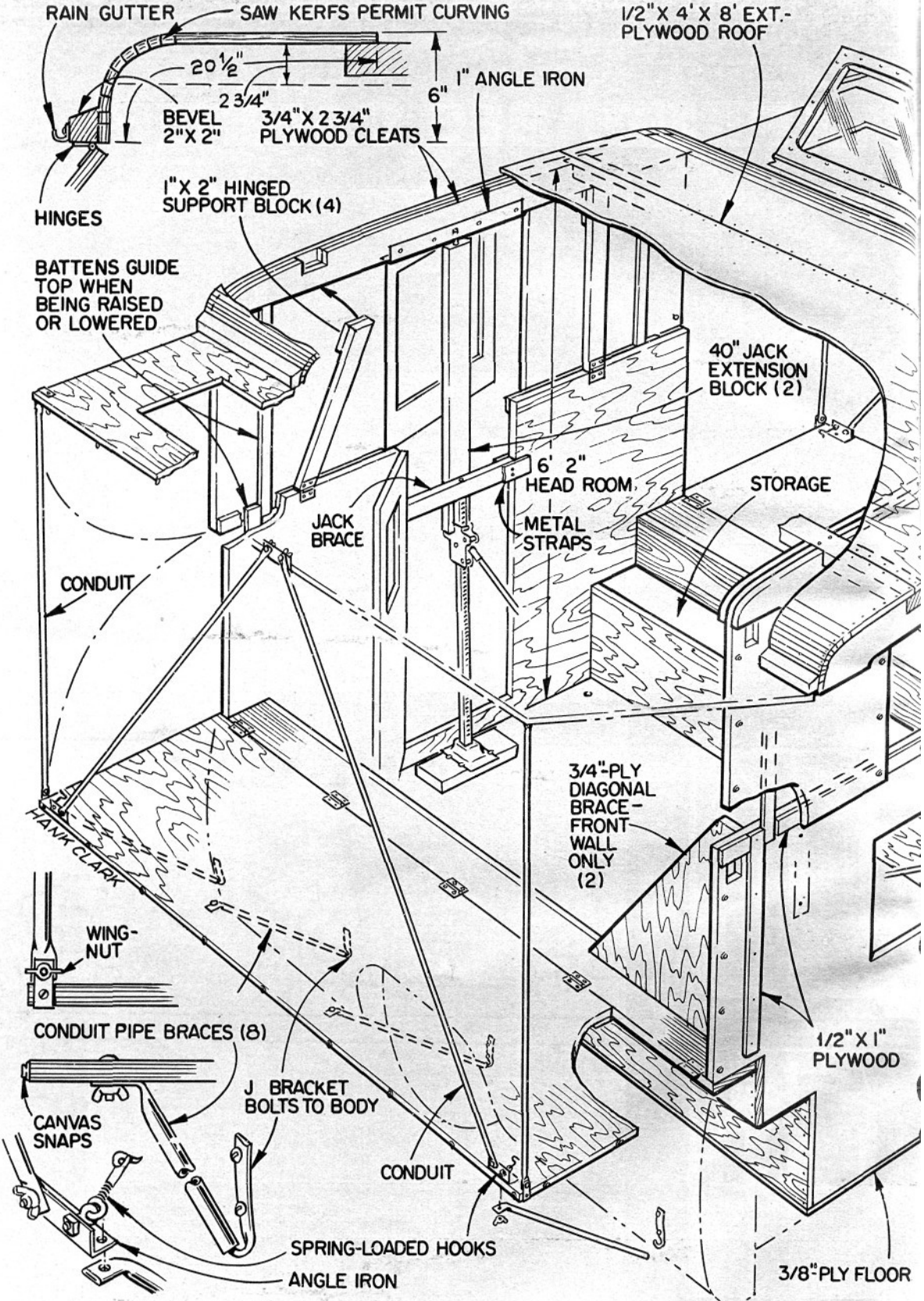
With roof raised, facilities in camper are readily available. Up front, Mom gets lunch going.



Set up for the night by opening out the side bunk and roof panels and bracing them with conduit. Lower braces rest on hooks that are bolted to truck.



Enclose the camper by attaching plastic or canvas curtains around side bunks. Snap buttons hold them securely. Windows open to provide ventilation.



HINGED WINDOWS  
(DETAILED BELOW)

2" X 4" X 8'  
ROOF BEAM (2)

RAIN SEAL

3/4" CLEATS (4)

1" X 6" -  
MOLD  
TO CAB  
ROOF

REMOVABLE  
SAFETY  
BLOCK (4)

3/4" X 6 1/2" X 76 3/4" PLYWOOD (2)

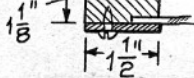
3/4" X 5 1/4" X 76 3/4" PLYWOOD (2)

1/2" X 15 3/4" X 76 3/4"  
PLYWOOD (2)

3/8"  
BOLTS  
THROUGH  
FLOOR  
(4)

GLASS

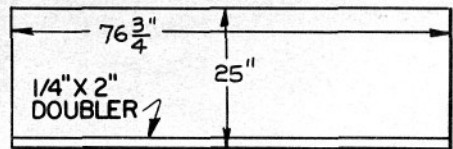
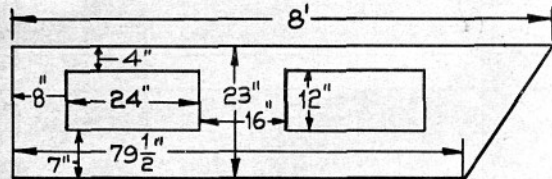
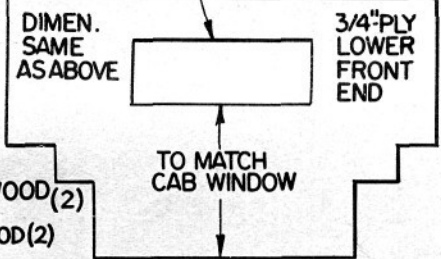
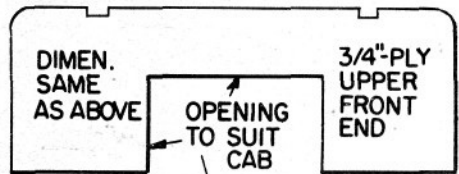
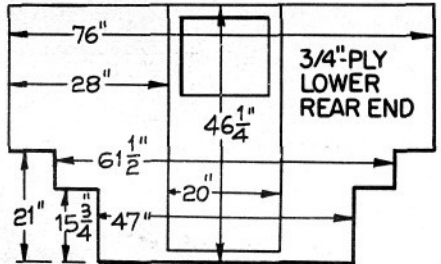
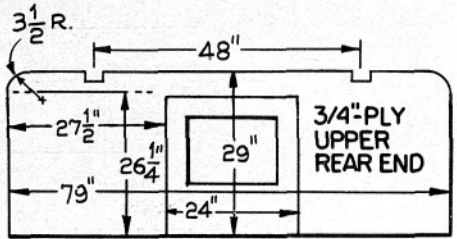
WEATHER  
STRIPPING



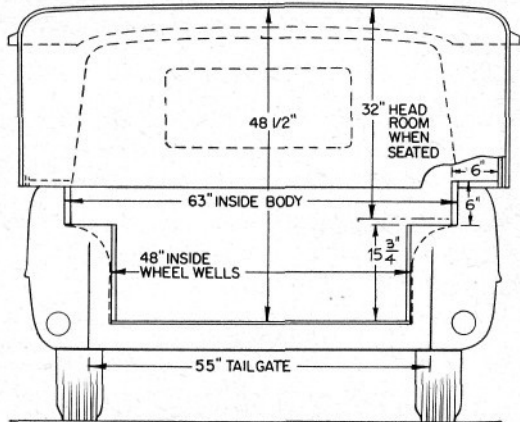
1/8" HARBORD

# PS LIE-FLAT BLUEPRINT

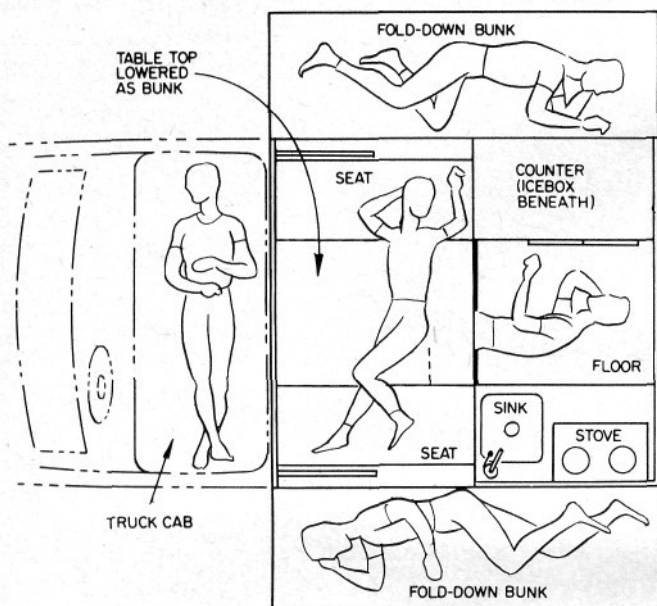
## EXPANDABLE CAMPER



1/2" PLYWOOD UPPER AND LOWER SIDES (2 EA.)



To determine the size of your camper, measure your truck's dimensions as shown above. The standard pickup can sleep four, plus one in the cab (below). Next month, plans for kitchen facilities will show how to build a table that lowers to make a cross bunk.



With top lowered for travel there's enough head room to sit inside camper. Six-passenger truck shown below sleeps two in its cab.



side down. Use 6d finish nails and a good waterproof glue, and make sure all corners are square. Glue-nail the floor in place.

Cut out a door in the lower section. Put a temporary brace across the opening (save the cutout for a door). Cut out the truck-cab access window. Attach doublers to lower sides, as shown in blue-print. Attach the fold-down sides to the lower section with five 3" hinges or a piano hinge.

Put foam gaskets between the camper body and bunk sections to limit vibration, and use spring-loaded hooks to hold the sides up.

**Raising the roof tree.** Assemble the roof by supporting the upper end pieces in vertical position (braces-nailed temporarily do it), and glue-nailing two-by-four roof beams in place. Cover with 1/2" exterior plywood, using one full panel at center and a smaller curving panel on each side. To bend these, cut lengthwise grooves every 3/8" beginning about 1" from the edge. Make test cuts and bends on scrap. Glue-nail the panels to the end pieces and the beams.

Attach the two-by-two molding at roof sides, beveled as shown in the drawing. Cut the wind-deflector cross-piece at front to fit the curve of the cab, leaving about an inch between them.

Cut out the upper rear opening (saving the cutout for the door), and screw an angle iron across the top of the doorframe to stiffen it for jacking. Drill a hole in the center of the iron to receive a stud screwed into the top of the jack extension to keep it from slipping off. (A hole in one of the cleats on the

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## Build an Expandable Camper

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front panel does the same job.) A cross brace bolted to the jack extension keeps it vertical while it's being jacked up. The jack extension is sized to provide enough height to raise the top in position to receive the roof supports.

Hinge the 1/2"-plywood upper sides to the roof molding. These open up to form a roof for each side bunk. Add weatherproofing to the inside edges of the end panels and the folding roof sections. Put two windows in each of the open-out roof sections. Be sure the windows open outward.

**Finishing it off.** Paint the upper and lower sections before you put them together. Sand all rough edges, and countersink and putty all nails and screws. Coat the camper inside and out with an oil-base, sandable primer, and finish all surfaces with high-quality enamel. Cover the top with canvas, or fiberglass and plastic resin.

**Up she goes!** Telescope together the upper and lower sections, and test-raise them several times. Adjust the batten guides until they're nonbinding. Sand them glass smooth to aid sliding action.

Hinge four one-by-two uprights (two at front, two at back) to the lower section of the camper to support the upper one in the raised position. Put catches on them to hold them in the up position. Also, fit two angle-iron and block assemblies (as shown in the blueprint) to each end of the raised top. These are placed on the outside and bolted through the end walls. They provide extra bracing and act as a safety support when the top is up.

When raising the top, unhook the folding sides so that the side curtain snaps don't catch on the lower section.

Before placing the camper in the truck, remove the truck's rear window. Then, with a neighbor's help, lift each section onto the truck. Run four bolts through the floor and truck bed to hold it in place. Make the conduit supports to lengths that keep the fold-out bunks level, and the bunk roofs sloped slightly outward (for rain runoff).

Cut and sew plastic or canvas curtains to fit around the bunks, and attach them with canvas snaps.

Fix up the interior to suit your needs, or follow the plans in next month's issue for outfitting the camper with storage cabinets, gas stove, sink, and icebox.