GA-017 Notched cold-frame vent prop

Hold an already suitable lightweight cold-frame lid at three marked ventilation openings using a removable notched prop.

Controlling dimensions: US inches and feet. Metric equivalents are references. Original editorial design; no physical build, animal trial or load certification is claimed.

Before marking and cutting

Measure the stated stock sections before cutting. Use the cut-list geometry, not scale measurements from the drawing.

US inch dimensions control; millimeter values are rounded conversions. Ordinary cut target ±1/16 in (1.6 mm); fit commercial accessories before boring attachment holes.

Use limits

Original bounded garden component, not an occupied structure.

No human standing, sitting, climbing, lifting or fall protection use. No stated safe working load.

Geometry and fastener quantities are editorially checked; no prototype build, wind test or crop trial is claimed.

Materials and finished cuts

Part	Qty	Size to cut	Material and detail
P01 Prop blank	1	24 × 1 1/2 × 3/4 in 609.6 × 38.1 × 19.05 mm	1 × 2 in board sound untreated cedar or other durable untreated wood; no unknown salvage
P02 Keeper block	1	4 × 1 1/2 × 3/4 in 101.6 × 38.1 × 19.05 mm	1 × 2 in board sound untreated cedar or other durable untreated wood; no unknown salvage

Hardware and consumables

2 #8 × 1-1/4 in screws for keeper

1 light retaining cord, 30 in long

1 independently selected positive lid restraint; not replaced by the prop

Tools

Tape measure and steel rule; Pencil, square and clamps; Saw suited to the stated stock; eye and hearing protection; Drill/driver, countersink and bits matched to fasteners; Sandpaper and edge file; gloves when handling cut mesh

Primary context and design record

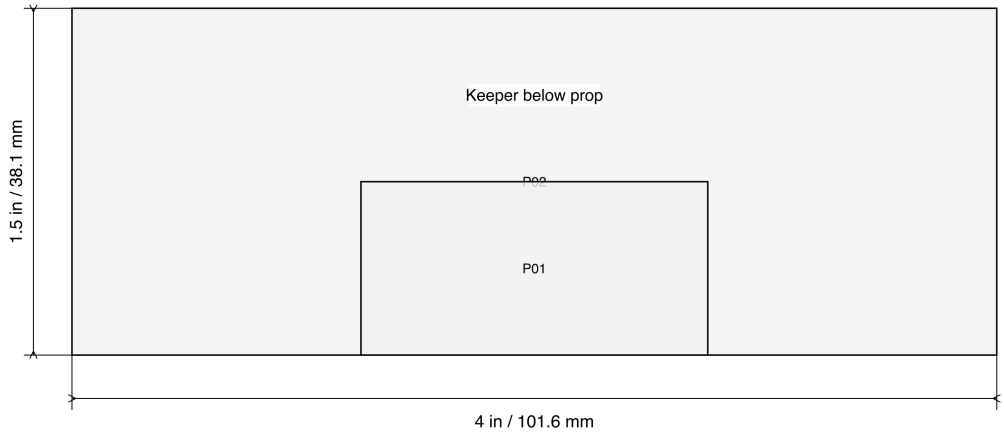
Context references; not design endorsements or certifications.

E03 · Season Extenders and Growing Fall Vegetables · Penn State Extension · https://extension.psu.edu/season-extenders-and-growing-fall-vegetables

Assembly and first checks

GA-017 Notched cold-frame vent prop

PLAN — looking down; rear at top; controlling dimensions in inches



Part IDs refer to the finished cut list. Shapes are not load-rated. Read assembly before cutting.
Notches, holes, fittings and operating angles: see numbered steps and geometric annotations.
Original editorial draft • B/W vector • not physically built or tested • no implied Extension endorsement

01 Plan the notched cold-frame vent prop for this result: Hold an already suitable lightweight cold-frame lid at three marked ventilation openings using a removable notched prop. Confirm the design reference before cutting: Notch depths 3/8 in (9.5 mm); no cracks at notch roots. In the drawings x runs left to right, y runs front to rear and z runs upward.

02 Verify the required stock before laying out these parts: 1 × 2 in board: actual 0.75 × 1.5 in (19.05 × 38.1 mm). Reject split or twisted wood and unknown salvage; thinner stock requires recalculating the joints, not simply using the listed lengths.

03 Cut and label the finished parts: 1 Prop blank 24 × 1.5 × 0.75 in (609.6 × 38.1 × 19.05 mm), mark P01; 1 Keeper block 4 × 1.5 × 0.75 in (101.6 × 38.1 × 19.05 mm), mark P02. Keep saw kerf outside each finished line. Rip only where the finished width is narrower than the actual stock; use a suitable guide and target ±1/16 in (1.6 mm) for ordinary cuts. Dowel triples mean length × diameter × diameter, not square dowel stock.

04 Mark the prop long edge for three notches with seating levels 8, 12 and 16 in above its lower end. The precise lid opening depends on hinge geometry and is measured after fitting.

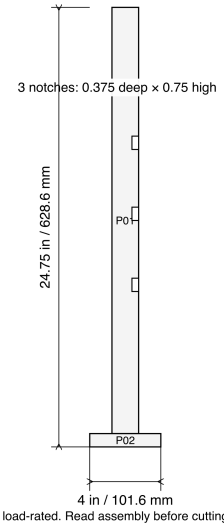
05 At each level mark a 3/8 in-deep by 3/4 in-high square notch. Keep at least 1-1/8 in of the original width uncut.

06 Cut notch shoulders with the saw and remove waste with a chisel. Round seating corners slightly, preserving a flat bottom in each notch.

Complete the assembly

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FRONT — transparent assembly projection from y = 0; controlling dimensions in inches



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07 Fit the 4 in keeper block at the base of the prop, perpendicular to the prop length. Center it so it projects 1-1/4 in each side.

08 Predrill and drive two 1-1/4 in screws upward through the keeper into the prop end. This is a positioning foot, not a lid-capacity certification.

09 Drill a 3/16 in retaining-cord hole 1 in below the upper end. Tie the cord to the cold-frame base so the prop cannot fall into plants.

10 With a helper holding the lid, seat the first notch against an existing sound lid edge. Confirm keeper and notch cannot roll or slip; measure and label the actual opening.

11 Repeat for the other settings, then fit a separate positive lid restraint and monitor temperature. Close and latch before wind or unattended conditions; never trust a friction prop in a gust.

12 Complete the acceptance checks below before putting the assembly into service. Record any changed stock thickness, fastener or equipment fit on the project sheet. The published geometry has not been physically built or load-tested.

Acceptance and intermediate checks

Notch depths 3/8 in (9.5 mm); no cracks at notch roots.

Actual lid contact and keeper seating verified with helper; independent restraint present.

Operation

Only for a pre-existing appropriate lightweight lid. No heavy glazing, universal lid rating or unattended storm use.

Cleaning and maintenance

Check notches and cord each use; replace a split prop.