

200 PLANT SHELF



Smart gardeners don't wait for the ground to thaw and the air to warm before starting their spring gardening. The first seeds are always sown inside the house in a spot that gets plenty of sunshine. Unfortunately, space is usually a limiting factor in most seed starting operations. Only a few windows normally get sufficient sunshine to produce healthy seedlings, and there never seems to be enough window ledge to satisfy your aspirations. However, you can expand your pre-season gardening space with the suspended seed starter shown here.

This four-tiered shelf unit is designed to be mounted into a standard window frame. The shelves, which are removable to facilitate larger plants, are supported by two metal side frames. The bottom shelf is designed to rest on the window sill; consequently, this and all other shelf dimensions must be sized

to your particular window. The unit receives plenty of light, takes up no floor space, and can be dismounted easily when not in use. Tools, soil, and miscellaneous gardening materials are conveniently stored in the two drawers under the bottom shelf.

1. To begin building your indoor garden, start by cutting the bottom shelf back (A) to length. Cut a 1/2"-wide x 3/8"-deep groove in the back, one inch from the top edge, to hold the plywood bottom.
2. Cut the bottom shelf sides (B) to length. Cut a 1/2"-wide x 3/8"-deep groove in each side, one inch from the top edge, to hold the plywood shelf. Machine a 3/4"-wide x 3/8"-deep rabbet on the back inside end of each side piece. Make a right and left piece.
3. Cut a blind rabbet 3/4" wide x 3/8" deep x 1-1/2" long on the uncut end of each side to accept the bottom shelf front (D).

4. Cut the middle drawer support (C) and the drawer glides (E) to length. Glue and nail the drawer glides to the middle drawer support and the side pieces.

5. Cut the bottom shelf front to length. Cut a 1/2"-high x 3/8"-deep rabbet in the bottom inside edge to accept the plywood shelf.

6. Cut the bottom shelf (F) to size. Assemble the shelf unit parts using glue and 5d finishing nails.

7. Cut the drawer fronts (G) and sides (H) to length. Machine a 3/4"-wide x 3/8"-deep rabbet on each end of the drawer fronts to accept the drawer sides.

8. Machine a 1/4"-wide x 3/8"-deep groove on each drawer front to accept the drawer bottom, 1/4" from the bottom edge.

9. Machine the same 1/4" x 3/8" groove on each side piece. Cut a

LIST OF MATERIALS

(finished dimensions in inches)

A	Bottom shelf back	$3/4 \times 5-1/2 \times 35-1/4$
B	Bottom shelf sides (2)	$3/4 \times 5-1/2 \times 18$
C	Middle drawer support	$3/4 \times 4 \times 17-1/4$
D	Bottom shelf front	$3/4 \times 1-1/2 \times 35-1/4$
E	Drawer glides (4)	$3/8 \times 3/4 \times 16-7/8$
F	Bottom shelf	$1/2 \times 17-1/4 \times 35-1/4$ plywood
G	Drawer fronts (2)	$3/4 \times 4 \times 16-7/8$
H	Drawer sides (4)	$3/4 \times 4 \times 16-7/8$
J	Drawer backs (2)	$3/4 \times 3-1/2 \times 16-1/8$
K	Drawer bottoms (2)	$1/4 \times 16-1/8 \times 16-7/8$ plywood
L	Shelf fronts and backs (6)	$3/4 \times 1-1/2 \times 35-1/4$
M	Top shelf ends (2)	$3/4 \times 1-1/2 \times 7$
N	Middle shelf ends (2)	$3/4 \times 1-1/2 \times 10-1/2$
P	Lower shelf ends (2)	$3/4 \times 1-1/2 \times 14$
Q	Top shelf	$1/4 \times 6-1/4 \times 35-1/4$ plywood
R	Middle shelf	$1/4 \times 9-3/4 \times 35-1/4$ plywood
S	Lower shelf	$1/4 \times 13-1/4 \times 35-1/4$

1/4"-dia. steel rod
 Finishing nails
 Roundhead wood screws
 Clear silicone caulk
 Wood glue

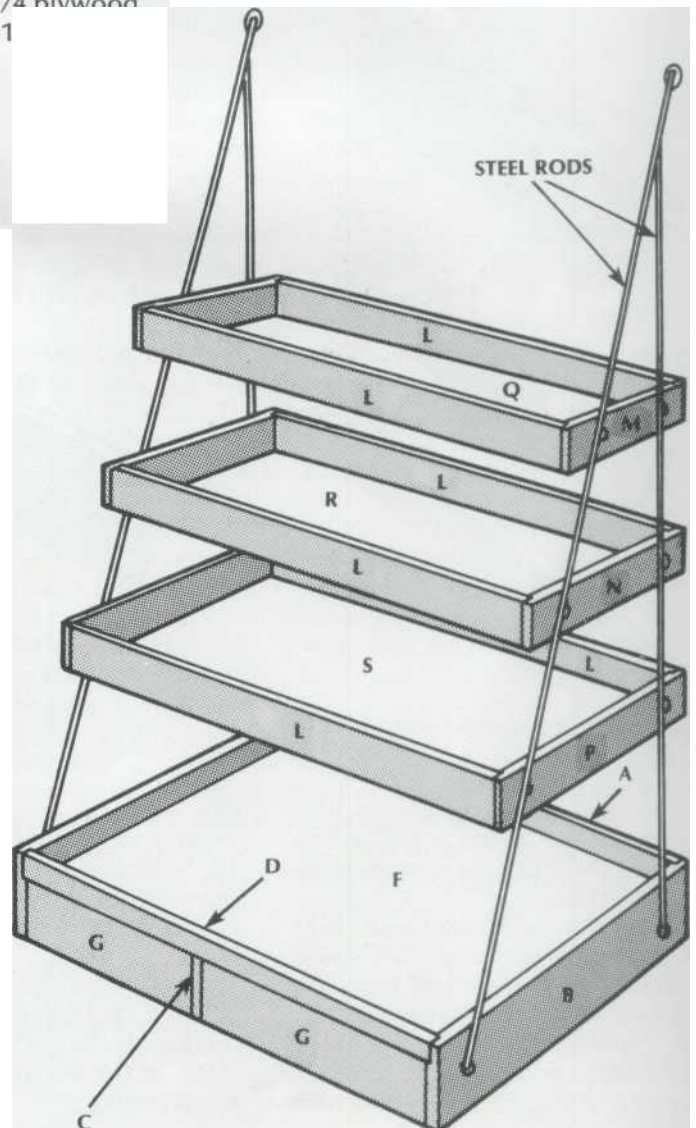
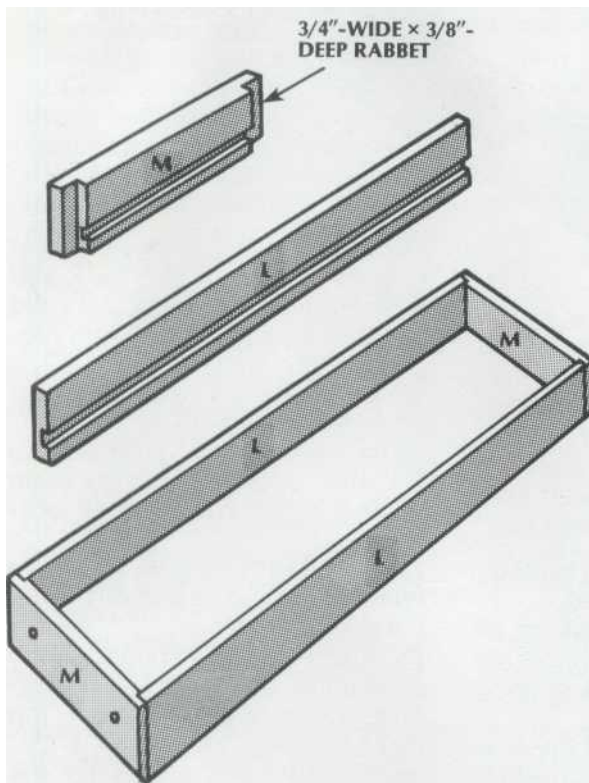
3/4"-wide x 3/8"-deep groove on the outside face of each drawer side for the drawer glides.

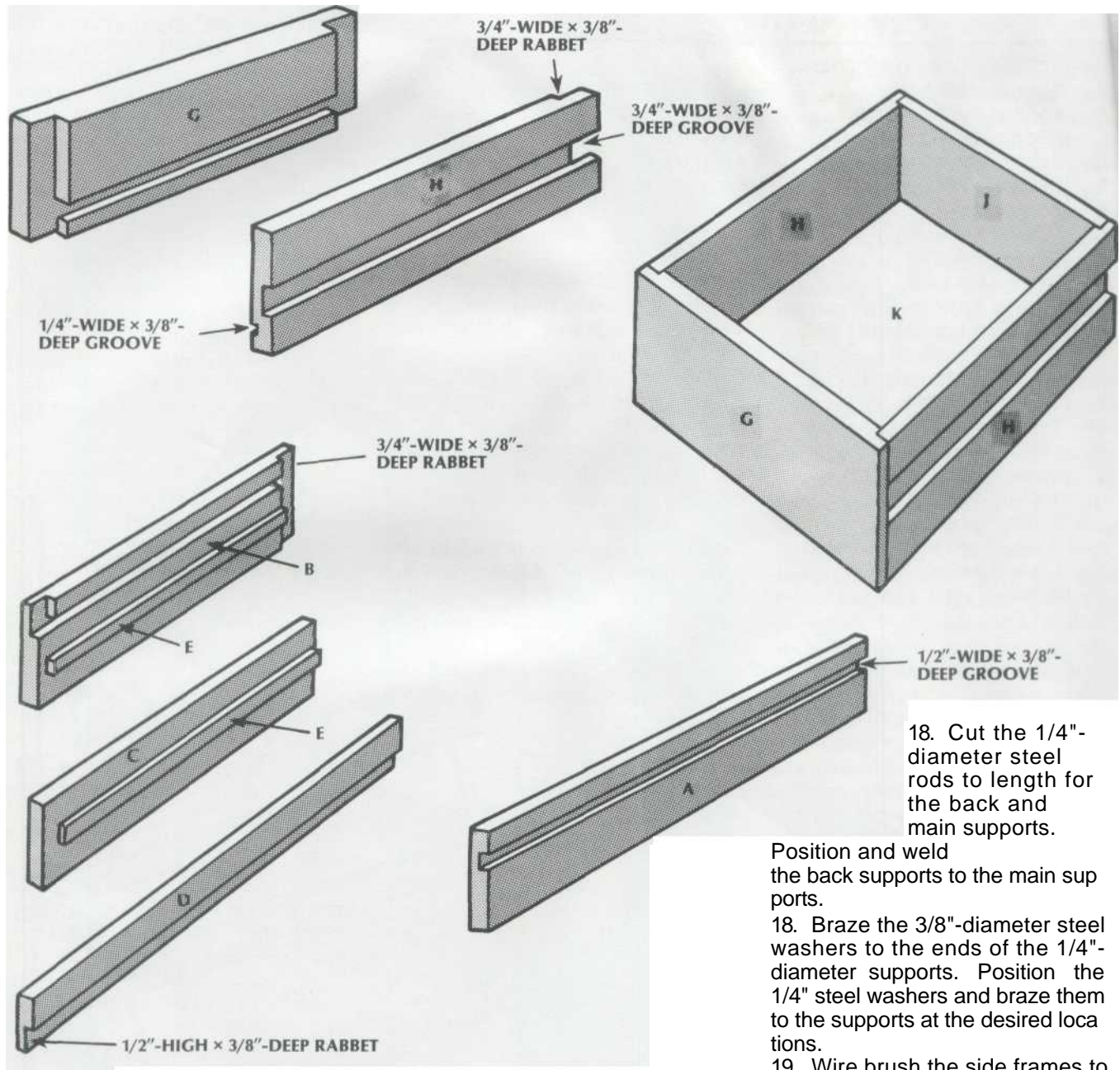
10. Machine a 3/4"-wide x 3/8"-deep rabbet on the end of each side piece to accept the back panel.

11. Cut the drawer backs (j) and drawer bottoms (K) to size.

12. Assemble the drawer sides, front, back, and bottom with glue and nails. Note that the back must be installed flush at the top; also, the bottom cannot be glued; it must always be nailed.

13. Cut the top, middle, and lower shelf ends (M, N, P) to length. Machine a 3/4"-wide x 3/8"-deep rabbet





18. Cut the 1/4"-diameter steel rods to length for the back and main supports.

Position and weld the back supports to the main supports.

18. Braze the 3/8"-diameter steel washers to the ends of the 1/4"-diameter supports. Position the 1/4" steel washers and braze them to the supports at the desired locations.

19. Wire brush the side frames to remove loose scale and dirt. Paint the side frames.

20. Attach the side frames to the shelf units. Use #12 x 3/4" round head wood screws for the top three shelves and #12x1-1/4" roundhead wood screws for the shelf with drawers.

21. Mount the unit to the window with #14 x 2-1/2" wood screws.

bet on each end of the pieces. Machine a 1/4"-wide x 3/8"-deep groove 1/4" from the bottom edge of each piece.

14. Cut the shelf fronts and backs (L) to length. Machine a 1/4"-wide x 3/8"-deep groove 1/4" from the bottom edge of each piece.

14. Cut the top, middle, and lower shelf bottoms (Q, R, S) to size. Assemble all the shelf elements with

glue and nails, except the bottom, which should not be glued.

16. Machine a 1/4" radius on all sharp edges of the shelf frames, or round them over with a sanding block.

16. Sand all surfaces and finish as desired; polyurethane varnish is recommended. Caulk the inside joints of the shelves with clear silicone caulking.