

MATERIALS: (MICROWAVE OVEN CART)

1 piece 2 x 4 (actual 1½" x 3½") 10' long

2 pieces 2 x 4 (actual 1½" x 3½") 8' long

1 piece 2 x 2 (actual) 4' long*

1 piece 1 x 1 (actual) 8' long*

48" x 48" sheet of ½" AC or birch plywood (cut top and bottom shelves only—see detail for cutting pieces)
Butcher block top ½" x 25" x 31"

Yellow glue, wood filler, sand paper

HARDWARE:

1 pkg. 1" brads

 $20 \cdot 1/4'' \times 2 \cdot 1/2''$ lag bolts with washers $16 \cdot 1/4'' \times 3''$ lag bolts with washers 12 No. 10 fhws 3'' long 12 No. 8 fhws $1 \cdot 1/4''$ long 4 ball casters (plate) (Stanley CD86-4667)

MATERIALS: (MOVABLE KITCHEN ISLAND)

4 pieces 2×4 (actual $1\frac{1}{2}$ " $\times 3\frac{1}{2}$ ") 8' long

2 pieces 3/4" x 7/8" 8' long pine*

1 piece ½" x ½" 12' long pine*

1 piece 1 x 2 (actual 3/4" x 11/2") 8' long pine

1 piece 1" dowel 36" long

 $^{1}/_{2}$ (48" x 48") sheet of $^{1}/_{2}$ " birch plywood (see detail for cutting pieces)

 $^{1}/_{2}$ (48" x 48") sheet of $^{1}/_{4}$ " birch plywood (see detail for cutting pieces)

1 piece 1 x 4 (actual $\frac{3}{4}$ " x $\frac{31}{2}$ ") 3' long pine

1 piece pine lath 24" long

1 piece butcher block top 1½" x 25" x 31"

Yellow glue, wood filler, sand paper

HARDWARE:

 $16^{-1/4}$ " x $2^{1/2}$ " lag screws with washers

 $12^{-1/4}$ " x 3" lag screws with washers

2 dozen No. 8 fhws $1^{1/4}$ " long

7 No. 10 flws 3" long

12 No. 8 fhws 1" long

1 pkg. 3/4" brads

1 pkg. 1" brads

6 No. 8 pan head screws 11/4" long

1 No. 8 pan head screw

 $2^{1/4}$ " long (for knife rack) $1-1^{1/16}$ " x 30" continuous hinge

(Stanley SC 311 1/4) 1 pair magnetic cabinet catch

(Stanley SP46)

4-4" cabinet pulls (Stanley 4477)

4-2" ball casters (plate) (Stanley CD86-4667)

1 multiple outlet strip

1 drawer stop

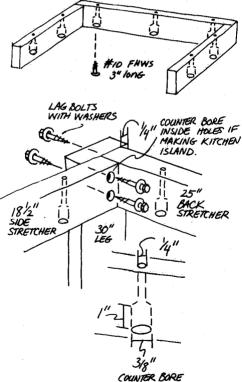
^{*}Need to be custom cut by you or your lumber store.

STEPS 1, 2, 3 TO BUILD A MICROWAVE OVEN CART

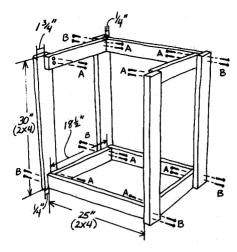
Easy-to-build cart $-34^{\prime\prime}$ tall (with casters) x 31 $^{\prime\prime}$ x 25 $^{\prime\prime}$ —has a butcher block top and rides on ball casters. Here's the perfect spot for a move-around microwave or convection air oven. The bottom and middle shelves provide good storage for cookware. Cart also works as a handy work area or serving cart.

STEP 1-MAKING THE FRAME

- Cut 4 stretchers 18½" long from 2 x 4.
- Cut 4 stretchers 25" long from 2 x 4.*
- Cut 4 legs 30" long from 2 x 4.
- Through the *height* of stretchers used for top, pre-drill and counterbore holes (see diagram) for attaching butcher block later.
- Through *width* of these same stretchers, pre-drill holes for attaching stretchers to legs. NOTE if you intend to build the Movable Kitchen Island, these holes also must be counterbored to provide clearance for the drawer.

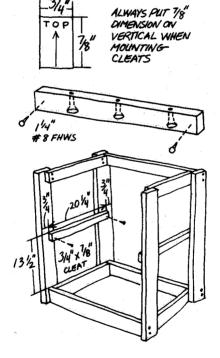


• Now assemble frame, as shown, using glue and lag bolts with washers. See detail for where to use $16 (\frac{1}{4}" \times 2^{\frac{1}{2}"})$ lag bolts with washers identified as "A" and where to use $12 (\frac{1}{4}" \times 3")$ lag bolts with washers identified as "B."



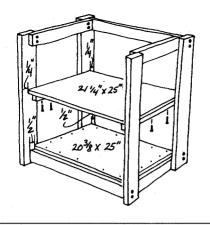
STEP 2-CLEATS

- Pre-drill, countersink upper shelf cleats for $1^{1}/4''$ No. 8 screws (underside of cleat) before attaching to legs.
- Add upper shelf cleats.



STEP 3-SHELVES

- Cut and install top and bottom shelves (top 211/4" x 25", bottom 203/8" x 25")
- Attach top shelf to cleat with 11/4" No. 8 screws through pre-drilled countersunk holes.
- Attach bottom shelf with glue and 1" brads 6" apart.

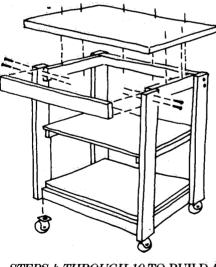


AT THIS POINT, YOU MUST DECIDE.

Do you want to build the more simple Microwave Oven Cart? Or go on to build the Movable Kitchen Island?

FINAL STEPS TO FINISH THE CART:

- Add 4th top stretcher, per Step 1.
- Attach standard butcher block through pre-drilled holes, using 3" No. 10 screws.
- Install plate casters per instruction on package.



STEPS 4 THROUGH 10 TO BUILD A MOVABLE KITCHEN ISLAND

This more elaborate "island" cart has many extra features. These include a heavy duty electric outlet strip for kitchen appliances, a drawer for utensils and lots of storage on shelf and behind cabinet doors.

You may, if you like, also add a knife rack to the unit (and we show you how-to's). But we *caution* that families with small curious children may not want to build on this feature!

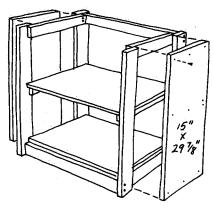
^{*}Cut only 3 stretchers this length if you plan to build the Movable Kitchen Island.

Construction of this project is similar to the microwave cart but with a few important exceptions. Heads of lag screws used to fix top side stretcher to legs must be countersunk so they will not interfere with drawer runners. Also the drawer replaces the top front stretcher.

FOLLOW STEPS 1, 2 AND 3 FOR MICROWAVE CART

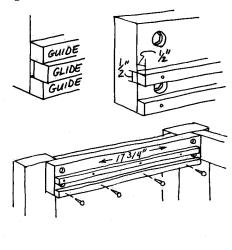
STEP 4-SIDE PANELS

- Cut side panels from 1/4" plywood and attach, using glue and 1" brads.
- Note: all exposed nails should be countersunk with a Stanley nail set (58-112), filled with wood filler and sanded.



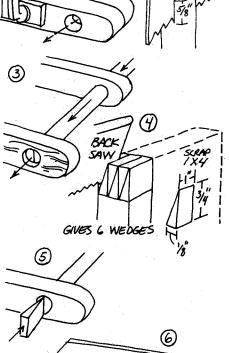
<u>STEP 5</u>-ATTACH DRAWER GUIDES TO UPPER STRETCHER

- To determine spacing between guides, use drawer "glide" from drawer assembly (Step 8) as an aid. (See detail)
- Drawer guides should be $17^3/4''$ long x 1/2'' x 1/2''. Attach to stretchers with glue and 1'' brads.



STEP 6-BUTCHER BLOCK WITH HANDLE ASSEMBLY

- Cut two 34" lengths of 11/2" x 3/4" stock for handle assembly.
- Round off each at one end, using coping saw and sandpaper.
- Clamp pieces together flush and drill 1" holes for dowel. (See details 1-6.)
- Cut dowel to length (width of butcher block plus width of two end pieces). (Example: 25'' + 3/4'' + 3/4'' = 261/2''.)
- Notch the dowel ends in the same direction (5/8" deep x thickness of saw blade).
- Insert dowel between end pieces (notch must be vertical to wood grain of side members) and glue in place.
- Cut wedges from scrap, tap in place, glue, let dry, trim off excess and sand smooth.
- Attach handle assembly to butcher block with glue and clamp until dry. You may add No. 8 round head brass screws—3 to each side—if desired.

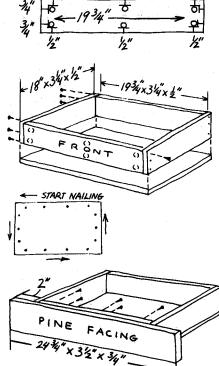


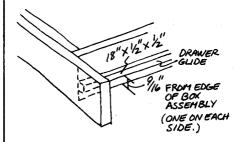
STEP 7-ATTACH TOP TO FRAME

• Attach top butcher block assembly to bottom frame, using your earlier predrilled and countersunk holes in upper three stretchers. (From Step 1.)

STEP 8 - CONSTRUCT DRAWER ASSEMBLY

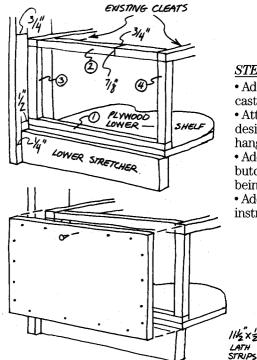
- Select one of your 193/4" pieces for the drawer front. Pre-drill and countersink six 3/16" holes, as shown below.
- Assemble the 4 pre-cut pieces, using 1" brads and glue on each corner.
- Attach pre-cut plywood bottom to drawer frame. (For best fit, see sketch: start by positioning one edge flush with frame, glue and nail, then work counterclockwise, keeping plywood flush as you go.)
- Attach front facing piece of pine to drawer frame, using 1" No. 8 screws through the pre-drilled countersunk holes. Note: make sure drawer frame is centered, side to side, on facing piece of pine.
- With glue and 1" brads attach the two 18" x $^{1}/_{2}$ " x $^{1}/_{2}$ " glides to 18" box assembly. Glides should be mounted $^{9}/_{16}$ " up from bottom edge. Mount handles to drawer front per instructions on package.





STEP 9-ATTACH BACK PANEL AND 4 CLEATS

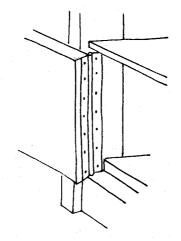
• Add 4 framing cleats as indicated to back, using glue. Cut-to-size back panel should fit tightly into space provided between upper shelf and bottom stretcher. Attach with glue and 1" brads as necessary.

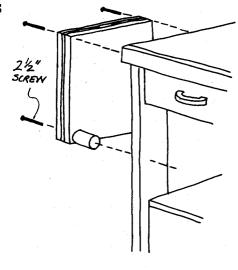


STEP 10-INSTALL PRE-CUT DOORS

• With a hacksaw, cut two strips of brass piano hinge to 137/16" lengths and attach one to each door.

• Attach doors to frame.





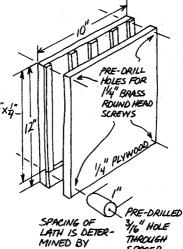
STEP 11-FINISHING TOUCHES

 Add magnetic door catches and plate casters per package instructions.

• Attach an electric outlet strip, if desired, somewhere below the overhang of the butcher block.

• Add a drawer stop to underside of butcher block to keep drawer from being pulled completely out.

• Add knife rack, if desired, per detail instructions.



WIDTH OF YOUR KNIFE BLADES.

SPACER (USE DOWEL

LEFT OVER FROM HANDLE ASSEMBLY.)