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C & C 30 MK II

Building the bulkhead Liquor Cabinet

- 1. This package contains pages of instructions and sketches.
- 2. Woodworking skills and equipment are essential to make the 33 pieces and assemble the cabinet. This project is not for the novice.
- 1. Check the size of the shutter opening. The finished size of the Cabinet will be 15 7/8" wide and 33 3/16" high. In my opinion the shutter frame is different in each of the 174 made. My opening was not square so I shaved a table saw thickness off the front of the side frames next to the opening (1" in).
- 2. I strongly recommend that you build a plywood mockup before you start working with teak. There is not much plywood involved. You'll need 3/8" and 1/2" thickness's. Use the material listings to calculate how much to buy of each.
- 3. Your biggest challenge will be to construct the brandy and liqueur assemblies. The shutter side frames might be a mite less of a challenge.
- 4. Use # 6 SS 1"screws for the assembly. Get the flat heads with the #2 Robertson driver if possible otherwise the Philips head.
- 5. Good luck, and take your time making the real thing. You can e-mail me if you have a problem or need advice.

Have Fun!

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Bill of Material -- Sizes & Descriptions (Quantity x Length x Width

```
1. (3/4" thick) (1.1) 2 x 15 7/8" x 1 5/8" -- Top & Btm pieces (template)
               (1.2) 1 x 2" x 2" -- Door button mount (template & page 3 **)
2. (1/2" thick) (2.1) 5 x 15 1/8" x 4 1/4" -- (2.1.1) -- Btm frame
                                             (2.1.2) -- Bottle support (4 holes)
                                             (2.1.3) -- Btm, liqueur glass holder
                                             (2.1.4) -- Glass (mixed drinks) shelf
                                             (2.1.5) -- Glass support (4 holes)
                (2.2) 1 x 15 1/8" x 3 1/2" -- Btm, brandy glass holder
                (2.3) 4 x 7 5/16" x 1 3/4" -- Bottle fwd & aft support
                (2.4) 2 x 3 1/2" x 1 3/4" -- Bottle intercostal support
                (2.5) 1 x 4 x 4 1/4" -- Bottle mid support
3. (3/8" thick) (3.1) 2 x 29 13/16" x 4 1/4" -- Side frames
                (3.2) 1 x 15 1/8" x 4 1/4" -- Top frame
                (3.3) 1 x 15 1/8" x 4 1/4" -- Top, liqueur glass holder
                       (3.4) 1 \times 15 \frac{1}{8}" x 3 \frac{1}{2}" -- Top, brandy glass holder
                (3.5) 2 x 15 7/8" x 1 11/16" -- Top/Btm (1 of 2 pieces) shutter frame
                (3.6) 2 x 15 7/8" x 1 1/4" -- Top/Btm (2 of 2 pieces ) shutter frame
                (3.7) 2 x 34" x 1 5/8" -- Sides, shutter frame
                (3.8) 4 x 2 11/16" x 2 9/16" -- Shutter frame side pieces
                (3.9) 2 x 4" x 1 5/8" -- Shutter hinge supports
4. Hardware
                (4.1) -- SS #6 flat head screws x 1"
                (4.2) -- SS # 6 flat head screws x 3/4"
                (4.3) -- Door button -- Perko 1217 DP CHR
                (4.4) -- Epoxy Glue
                (4.5) -- Teak Plugs
Note: Wood grain along longest length.
      Mixed Drink Glass -- 3 1/4" Dia x 3 1/2" H Max.
      Brandy Glass -- Base 2 1/2" x 4 1/2" H Max.
```

Liqueur Glass -- Base 1 5/8" x 3 1/2"

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Consolidation of Teak Requirements (Quantity x Length x Width)

1. 3/4" Material 1 x 32" x 1 5/8" (1.1)

2. 1/2" Material 1 x 48" x 4 1/4" (2.1.1, 2.1.2, 2.1.3)

1 x 36" x 4 1/4" (2.1.4, 2.1.5, 2.5)

1 x 16" x 3 1/2" (2.2) 1 x 40" x 1 3/4" (2.3, 2.4)

3. 3/8" Material 2 x 30" x 4 1/4" (3.1)

1 x 36" x 4 1/4" (3.2, 3.3, 3.8)

1 x 48" x 3 1/2" (3.4, 3.5, 3.6)

1 x 40" x 3 1/2" (3.7, 3.9)

Note: These groupings of items include sufficient material to build the Cabinet. See Page 3 for cutting instructions.

Equipment

- 1. Table saw with carbide blade (as many teeth you can buy)
- 2. Drill press with drill bits for pilot holes and # 6 screws.
- 3. Combination drill bit and countersink for # 6 screws.
- 4. Plug cutter for #6 screws, Countersink (no drill).
- 5. Router and 45 degree and curved cutter bits.
- 6. Palm Sander, Drill Press sanding disks.
- 7. Wheel and Circle Cutter (for larger holes)
- 8. 7/8" and 1 1/4" paddle drills or equivalent.
- 9 Assortment of clamps or equivalent.
- 10. 3/8" Power Drill & bits (to drive screws).
- 11. Hammer, screwdrivers, squaring tools, tape Measure
- 12. Jig Saw/blades, etc., etc..
- 13. Flat workbench with vise

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Cutting Instructions

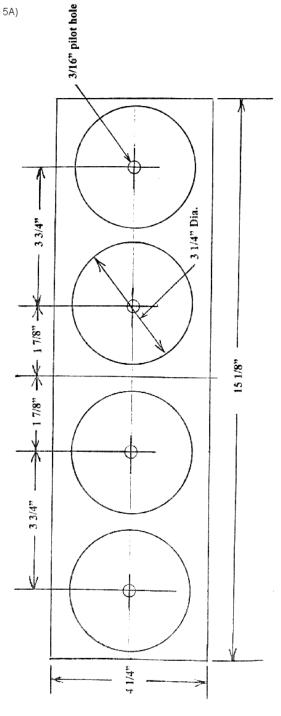
(Note 1 The boards are cut in half along the length)

(2.1.2) - Bottle support (4 holes) (2.1.5) -- Glass support (4 holes)

The identical two have different instructions for routing the edges:-

(2.1.2) -- Choose a side to be the top. Router the 4 holes, $\underline{Lop\ Only!}$

(2.1.5) – Router the 4 holes, $\underline{Top\ Only!}$ – Router the long edges (15 1/8"), both top and bottom.



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Brandy Glass Assembly

- 1. Layout pilot holes on (3.4) per Page 6. Center punch 4 locations.
- 2. Clamp (3.4) on top of (2.2) and drill 4 pilot holes using 3/16 " drill bit.
- 3. Use a "wheel & circle cutter" and pilot holes to make four 2 9/16" holes in (3.4).
- 4. Use a 1 1/4" paddle drill (or equivalent) and pilot holes to make 4 holes in (2.2).
- 5. Use a 45 degree router bit to expand the 1 1/4"" holes in (2.2) to a diameter of 2".
- 6. Clamp (3.4) on (2.2) and screw together. Drill and countersink the 10 locations shown on the Sketch. Use SS #6 screws 3/4" long.
- 7. Use table saw to carefully cut the four 1/2" wide entrance slots.
- 8. Use the 45 degree cutter in the <u>four</u> 1/2" slots to create a 45 degree angle on both sides of the slot. <u>Note</u>: This now looks like a V groove cut into (3.4). The stem of the brandy glass will slide easily into position on (2.2).
- 9. Use a curved router bit to establish a rounded appearance to the fwd and aft edges, (top and bottom of the assembly).
- 10. Lightly sand the assembly to remove any sharp edges..
- 11. Apply several coats of Teak Oil before installation.

Note: All drilling MUST be made in a Drill Press!

(2.2)

2 9/16" Dia

3 1/2"

(3.4)

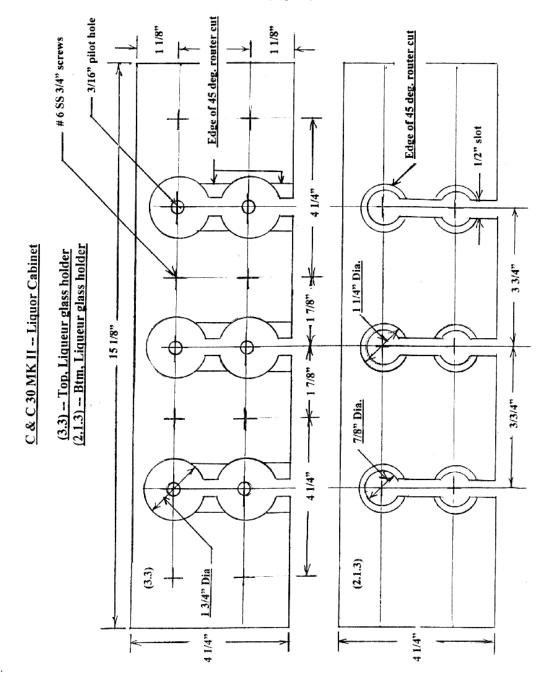
3 1/2"

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Liqueur Glass Assembly

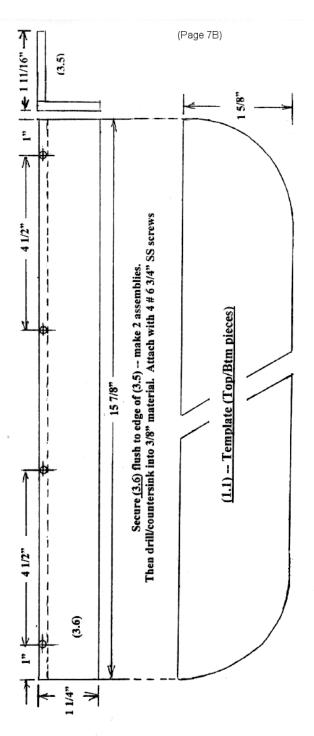
- 1. Layout pilot holes on (3.3) as per page 8. Center punch 6 locations.
- 2. Clamp (3.3) on top of (2.1.3) and drill 6 pilot holes using a 3/16" drill bit.
- 3. Use a "wheel & circle cutter" and pilot holes to make $\underline{\text{six}} 1 3/4$ " holes in (3.3).
- 4. Use a 7/8" paddle drill (or equivalent) and pilot holes to make 6 holes in (2.1.3).
- 5. Use a 45 degree router bit to cut the 7/8" holes in (2.1.3) to a dia. of $1 \frac{1}{4}$ ".
- 6. Clamp (3.3) on (2.1.3) and screw together. Drill and countersink 8 locations shown on (3.3). Use SS #6 screws 3/4" long.
- 7. Use table saw to carefully cut the $\underline{\text{three}}$ 1/2" wide entrance slots.
- 8. Use a 45 degree cutter in the <u>three</u> 1/2" slots to create a 45 degree angle on both sides of the slot. <u>Note</u>: This now looks like a V groove cut into (3.3). The stem of the liqueur glass will slide easily between the 2 positions on (2.1.3) and in and out.
- 9. Use a curved router bit to establish a rounded appearance to the fwd and aft edges, (top and bottom of the assembly).
- 10. Lightly sand the assembly to remove any sharp edges.
- 11. Apply several coats of Teak Oil before installation.

Note: All drilling MUST be made in a Drill Press



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(3.5) -- Top/Btm, shutter frame (3.6) -- Top/Btm, shutter frame



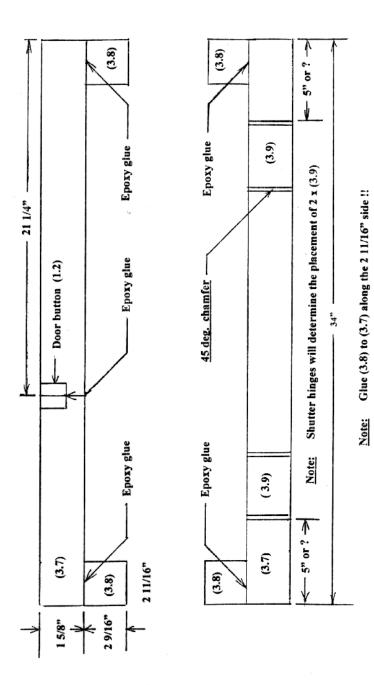
(1.2) -- Door button mount



Use surplus teak & epoxy glue to build up to 1" thickness.

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(3.8) --Shutter frame edge pieces (4) (3.9) --Shutter frame edge pieces (4) (3.9) --Shutter hinge supports (2)



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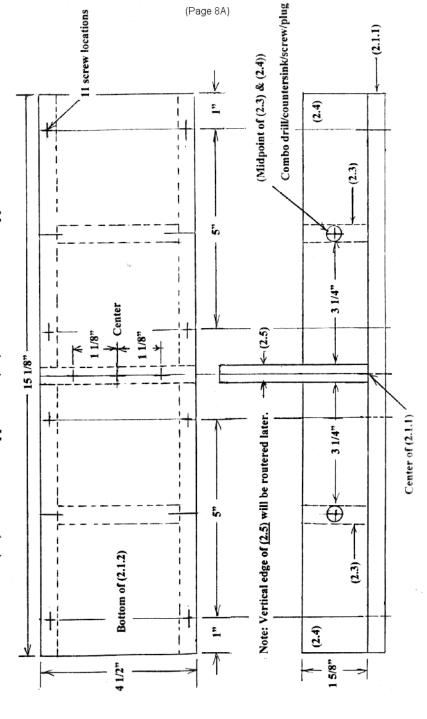
Bottle Holder Assembly

(2.1.1) -- Btm frame. $4 \times (2.4)$ -- Fwd & aft support. (2.5) -- Bottle mid support. $2 \times (2.3)$ -- Bottle intercostal support.

- 1. Study the assembly on page (12). <u>Use #6 SS screws x 1" for the assembly.</u>
- 2. Choose a bottom side of (2.1.1). Layout 11 screw locations per top sketch on page12. Center punch.
- 3. On top side of (2.1.1) locate (2.5) in the middle of (2.1.1) and clamp securely.
- 4. Butt $2 \times (2,3)$ on either side of (2.5). Ensure that they are flush with the outside edges of (2.1.1). Clamp the 4 pieces securely to (2.1.1).
- 5. Now the challenge! Drill and countersink the 11 locations using the Drill Press.
- 6. Remove (2,5) (mark to re-install correctly). Fasten the 4 pieces(2.3) to (2.1.1) with screws.
- 7. Measure 3 1/4" from either side of (2.5) and insert (2.4) between the (2.3)'s. Make sure they are secure.
- 8. Use the <u>Drill Press</u> and combo drill/countersink to drill a holes through (2.3) and into (2.4). Center the hole at the midpoint of (2.3) and (2.4). Four holes are required to secure the (2.4)'s. Insert 4 plugs and sand smooth.
- 9. Router the inside edges of (2.3) and 2.4) ONLY.
- 10. Re-install (2.5). Fasten to (2.1.1) with 3 screws.
- 11. The outside edges of (2.5) will be routered later.

Bottle Holder Assembly

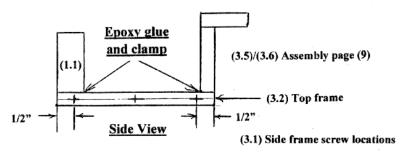
(2.1.1) – Btm frame. $4 \times (2.4)$ – Fwd & aft support (2.5) – Bottle mid support. $2 \times (2.3)$ – Bottle intercostal support.



Add (1.1) and (3.5)/(3.6) Assembly to (3.1) -- Top Frame

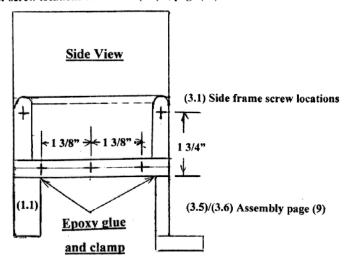
Tip: Clamp a shim of 3/8" material to both ends of (3.2), flush with the top edge. Repeat for the bottom edges of (2.1.1) of the bottle holder assembly.

Transfer screw locations to stacked (3.1)'s, page (14)



Add (1.1) and (3.5)/(3.6) Assembly to Bottle Holder Assembly

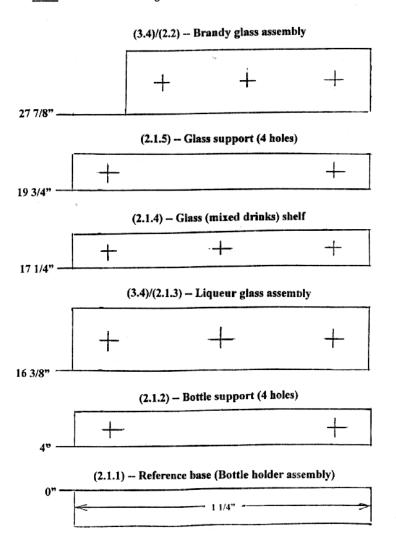
Transfer screw locations to stacked (3.1)'s, page (14)



Cabinet Assembly (Position and screw location)

Table

Lay the 2 (3.1)'s side by side along their length and mark the <u>bottom position</u> for each piece per the <u>Table</u>. Stack one frame on top of the other. Use the <u>Table</u> to locate the screw positions on top frame. Center punch each location; use the <u>Drill Press</u> to drill holes through both frames.



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Cabinet Assembly -- Part 1

Install (2.1.2), (3.4)/(2.1.3), (2.1.4), (2.1.5) and (3.4)/(2.2)

- What you need: 1. Flat work bench.
 - 2. 2 x 2" clamps.
 - 3. Large square.
 - 4. Ideally 3 power drills:-

#1 with a drill bit to extend the holes past the side frames.

#2 with a countersink, and

#3 with a #2 Philips head (+) to drive the #6 SS screws x 1"

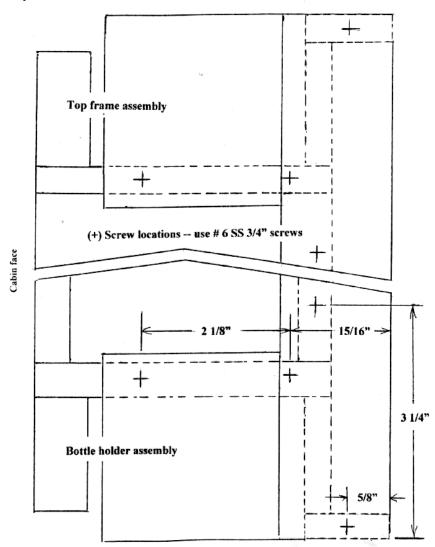
- 1. Mate the side frames to the Bottle holder assembly (Bottom) and the (3.2) Top frame assembly (Top). Tip: Place the Top & Bottom assemblies with the cabin face resting on the workbench. When fastening, make sure the whole assembly is square!
- 2. Position (2.1.2) in place with the routered side up. Fasten to side frames. Drill through (2.1.2) into (2.5) with combo drill/counter sink 1/2" from edge. Fasten (2.1.2) to (2.5). Insert plugs and sand smooth. Carefully router (front & back) along the bottom edge of (2.1.2) and down (2.5) to the edges of (2.4).
- 3. Position (3.4)/(2.1.3) in place and fasten.
- 4. Router the edges of (2.1.4), (front & back). Position in place and fasten.
- 5. Position (2.1.5) in place and fasten.
- 6. Position (3.4)/(2.2) in place (aft edge flush with rear edge of sides) and fasten.

Part 2 assembly on page 16

<u>Cabinet Assembly Part 2</u> (Attach shutter side frames to cabinet)

(Door Button side shown. Reverse for Hinge side)

Option: Hide screws on door button side by using combo drill/countersink/plug



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Completion

- 1. Add an addition screw to the shutter side frames at location (2.1.4)
- 2. Install the door button -- Perko 1217 DP CHR
- 3. Apply several coats of teak oil to the completed assembly.
- 4. Locate the bulkhead installation holes(4) as follows:-
 - 4.1 -- 1/2" from forward edge side frames, and
 - 4.2 -- 4 3/8" from the top of (3.2)
 - 4.3 -- 6 3/4" from the bottom of (2.1.1)
- 5. Install the shutters in the Cabinet (use original screws).
- 6. Install the Cabinet in the bulkhead. Use # 8 SS screws x 3/4" with caps
- 7. Stand back and admire your handiwork, and -----

Congratulations

Fill the cabinet with bottles and glasses

&

Enjoy!

ENJOY