

# HART™



Outdoor Wine Table

## PROJECT PLAN

**Finished Dimensions:** 16"W x 24-1/2"H x 12"D


**Skill Level:** Beginner


# Materials

Item	Qty
2" x 2" x 24" Board*	1
1" x 2" x 6' Board*	1
1" x 10" x 18" Board*	1
1/4"-20 x 12.5 mm Insert Nuts	2
1/4"-20 x 30 mm Connecting Bolts	2
Sandpaper**: 150g, 220g & 320g	
Drill Bits: 1/4" & 3/8"	
1-1/2" x 18- Gauge Collated Nails	
# 8 x 1-1/4" Square Drive Round Head Pocket-Hole Wood Screws	

\* Board Dimensions are "nominal". Actual dimensions are smaller due to lumber industry standards. Cuts are actual length.

\*\* Starting grit will depend on board surface condition, a rough surface will require starting with a coarse grit first.

 Grit is measured in the coarseness of the particles on the sandpaper. The lower the grit number, the coarser the paper. Heavy sanding would require 60 to 80 grit, medium sanding would require 120 to 220 grit, and finish sanding would require 320 to 400 grit. Super fine sanding would be 600 grit and higher.

 A select/premium board or plywood comes with a smoother surface finish. It is clear or has very few tight knots, and it will have straight and sharp edges. This grade of wood pairs well with other boards or panels better and requires less time to sand and finish.

# Tools Used



Miter Saw

or



Circular Saw



Drill/Driver



Jig Saw



Brad Nailer



Orbital Sander



20V 1.5Ah Battery



20V 4.0Ah Battery



Charger



Tape Measure



Hammer



Folding Hex Keys MM



Scissors



Safety Glasses




Drill Bits



#2 Square Dr. Bit

Also Needed:  
Clamps  
Pocket Hole Jig

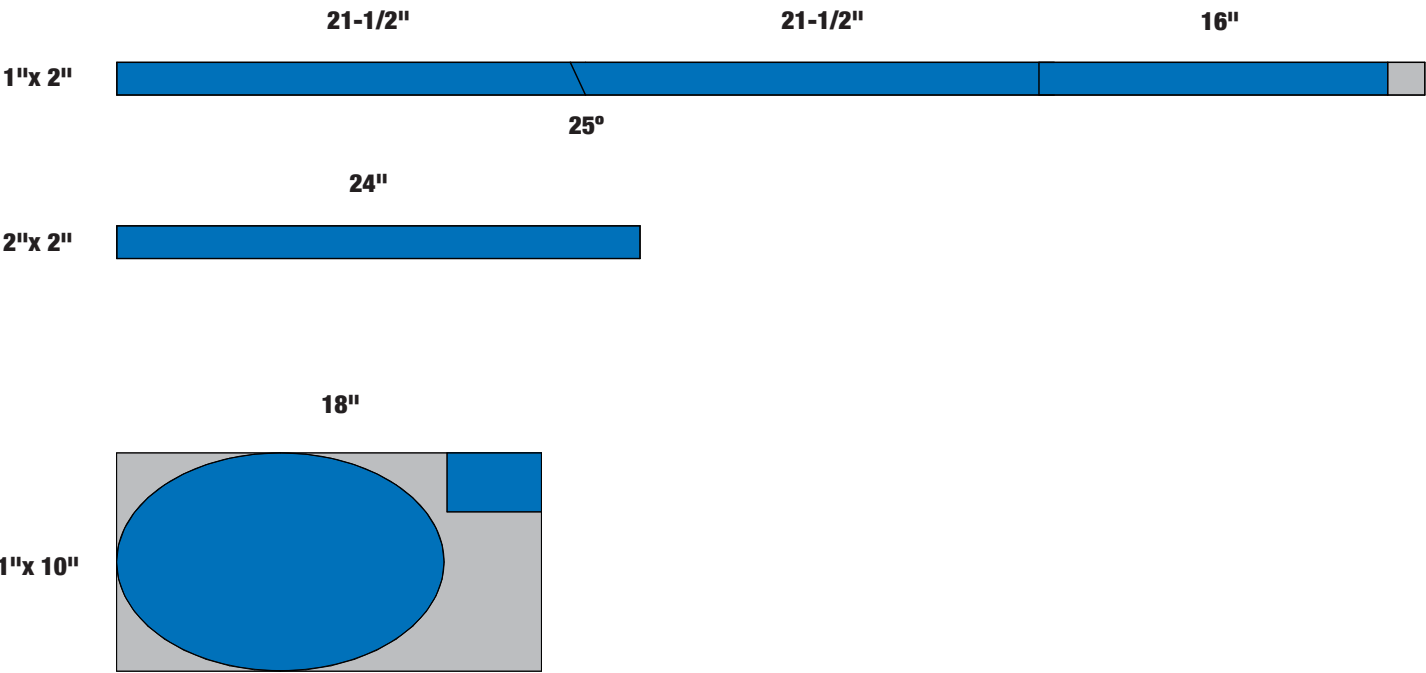
 **Battery Tip:** A 4.0 Ah battery is recommended to be paired with high amp draw tools for maximum efficiency.

# Lumber Cut List

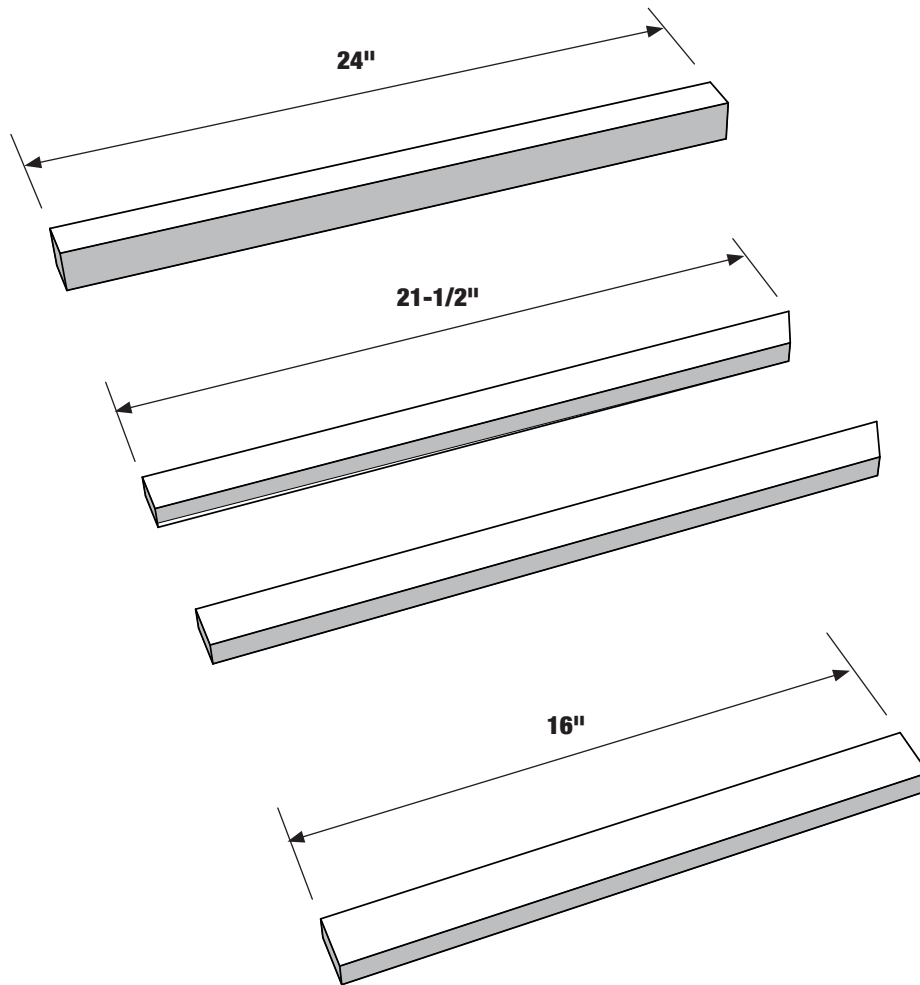
Board*	Description	Cut to	Qty
2" x 2"	Main Leg	24"	1
1" x 2"	Pivoting Legs	21-1/2" (LD)	2
1" x 2"	Foot	16"	1
1" x 3-1/2"	Bottle Support	4"	1
1" x 9-1/4"	Oval Top	13-7/8"	1

\* Board dimensions are "nominal." Actual dimensions are smaller due to lumber industry standards. Cuts are actual length.

# Lumber & Sheet Layout Guide



# Lumber & Sheet Cut Layout Guide

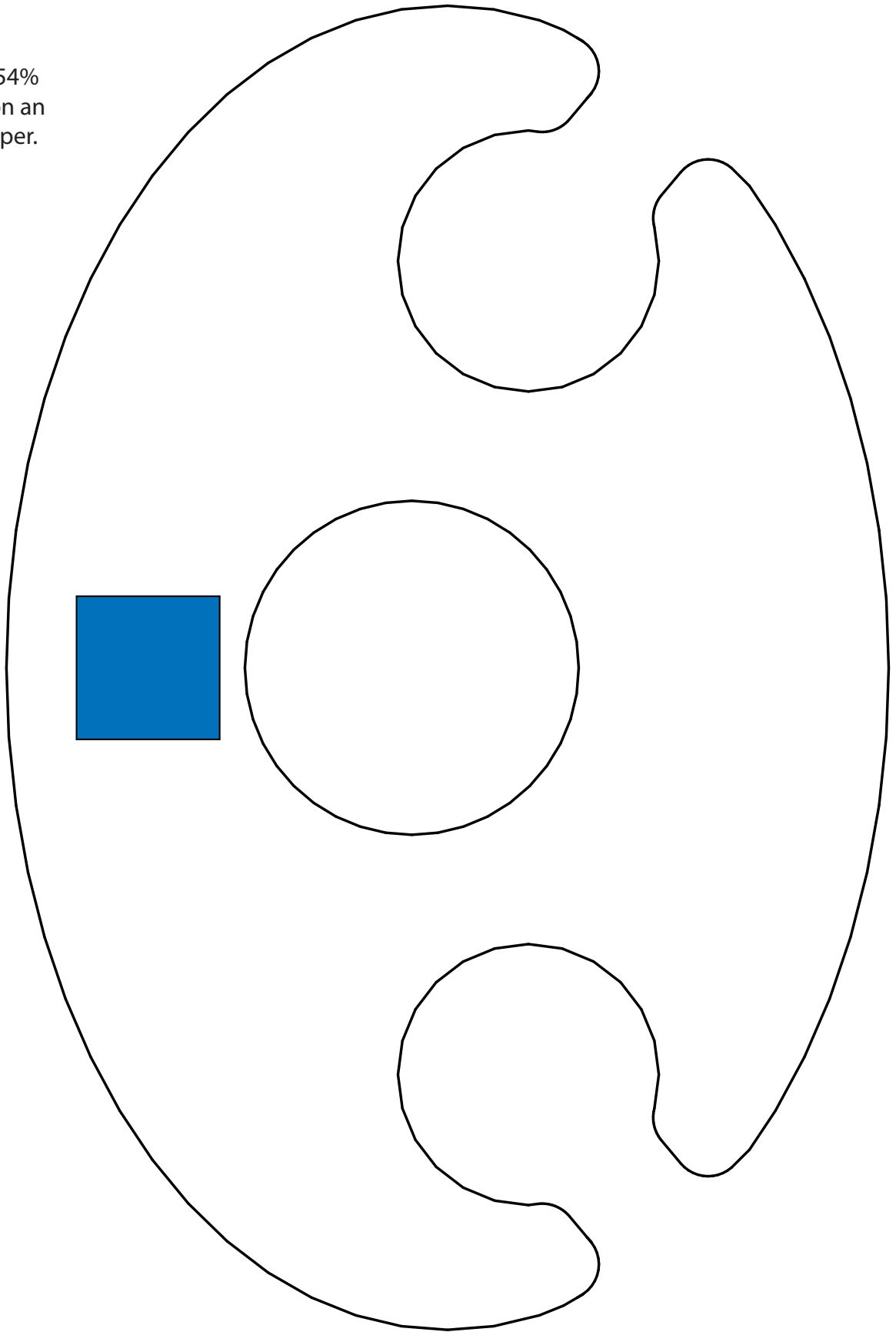


# Patterns & Templates

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## Print

Scale this page to 154% and print. It will fit on an 11" x 17" piece of paper.



# Assembly Instructions

## Step 1

Cut out all material using the Lumber & Sheet Cut Layout Guide.

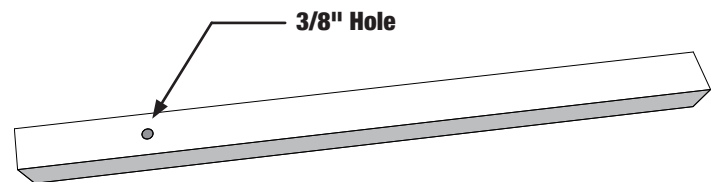


## Step 2

Use the Miter Saw to cut a 5° angle (going in the same direction) on both ends of the 2" x 2" x 24" board. Make the cut without shortening the overall length of the board.

Measure 4-1/2" from (1) long end and mark a drill point in the center.

Drill a 3/8" hole through the board.



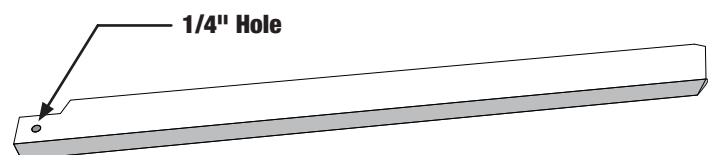
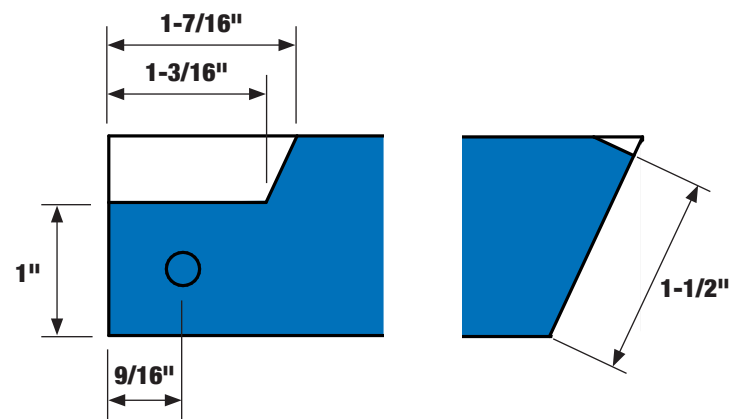
## Step 3

Take both 1" x 2" x 21-1/2" boards and follow the diagram to make marks for the cuts. Clamp the boards to a stable surface then use a Jig Saw to cut.

Then, follow the measurements in the diagrams to mark for the drill hole.

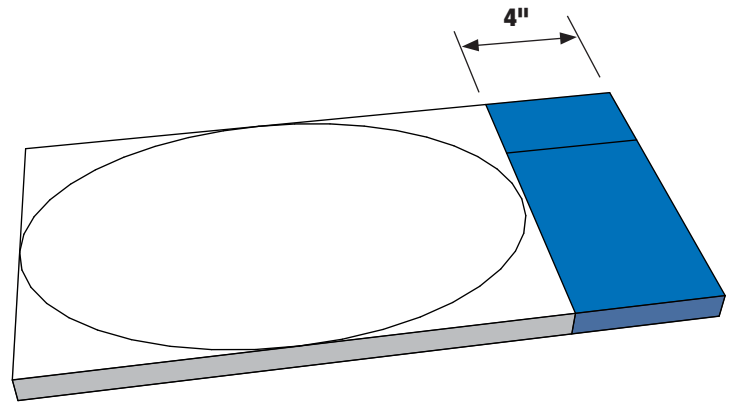
Drill a 1/4" hole through both boards.

On the opposite end, cut a small point off the bottom that is perpendicular to a 1-1/2" mark.



## Step 4

Take the 1" x 10" x 18" board and measure 4" from (1) edge. Clamp the board to a stable work surface and cut using a Circular Saw.

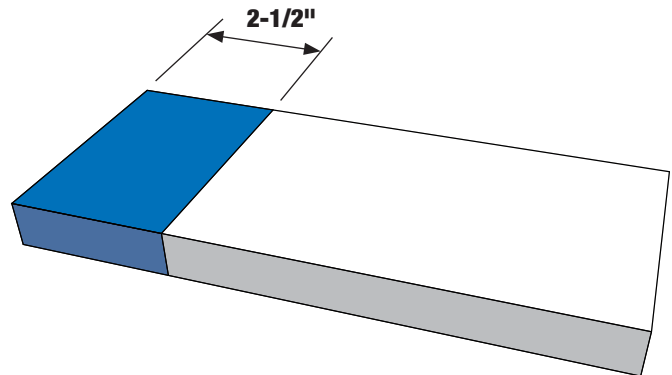


## Step 5

Now measure and mark 2-1/2" off the end of the new 4" piece cut in Step 4.

Clamp it to a stable work surface and cut.

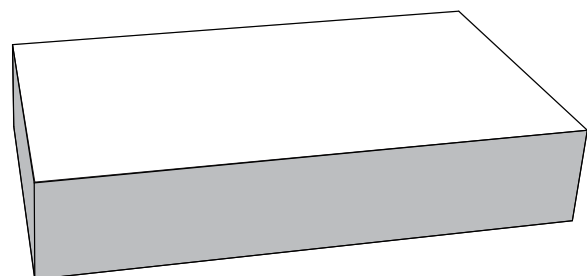
The final piece should measure 2-1/2" x 4".



## Step 6

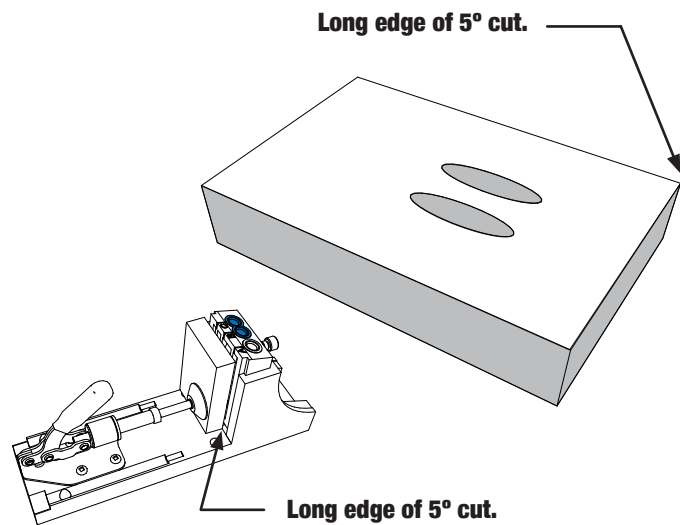
Set the board on its 4" side.

Use the Miter Saw and cut a 5° angle without shortening the overall length.



## Step 7

Place the 4" piece in the Pocket Hole Jig as shown in the diagram. Make (2) Pocket Holes using the (B&C) guides.

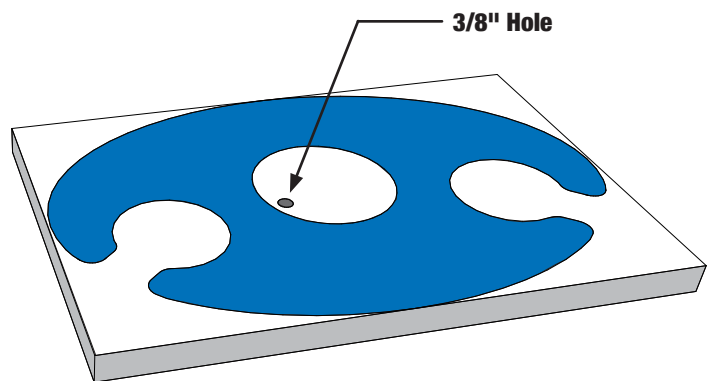


## Step 8

Use the printed template to trace the pattern for the top of the wine stand on the now 1" x 10" x 14" board.

Drill a 3/8" hole in the middle circle so the Jig Saw blade can pass through.

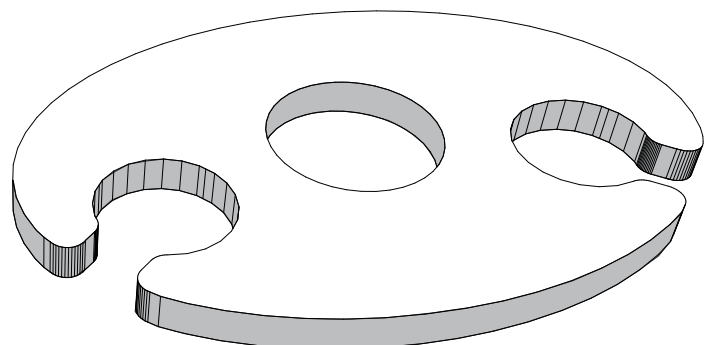
Clamp the board to work surface then use a Jig Saw to cut the top out.



## Step 9

This is a good time to sand edge before final assembly.

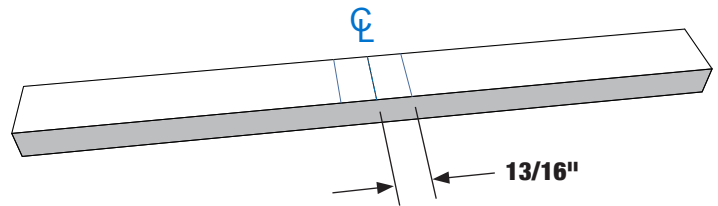
Follow sanding guideline on Page 11.





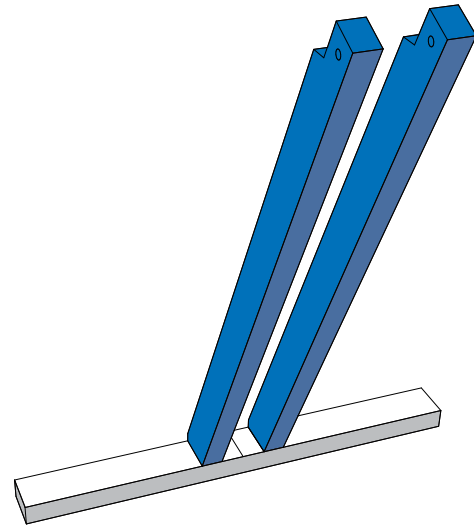
## Step 10

Take the 1" x 2" x 16" board and mark the center line at 8". Then mark a line  $\frac{3}{16}$ " on both sides of the center line. This line will be for the inside edges of the (2) pivoting legs.



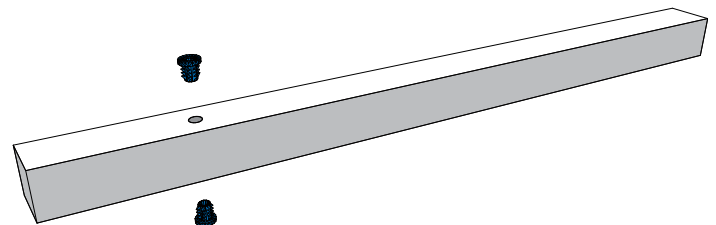
## Step 11

Attach the (2) pivoting legs to the 16" board by gluing and nailing them from the bottom.



## Step 12

Hammer the (2) insert nuts into the main support.

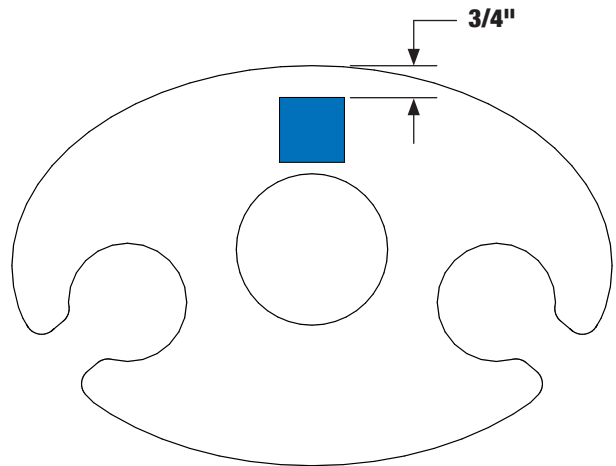


## Step 13

On the underside of the top piece, mark a line at 3/4" from the back edge.

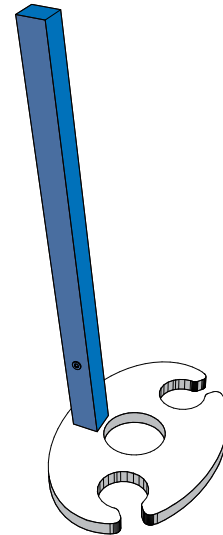
Cut out square marked in blue and trace location for main leg.

Apply a small amount of glue in the area designated in blue.



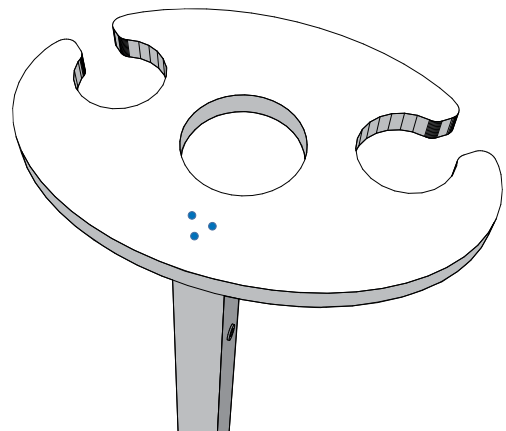
## Step 14

Place the main support leg onto the glued area, facing outward on the 5° angle. Make sure the two inserts are also down.



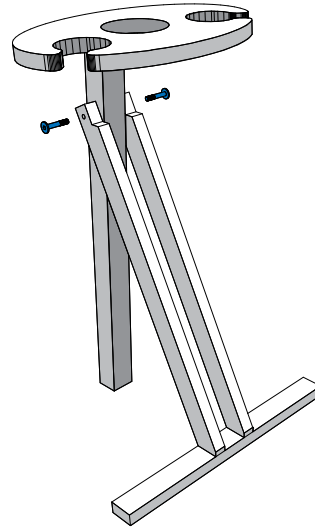
## Step 15

From the top side, use a Brad Nailer and insert a few 1-1/2" nails through the top into the main leg.



## Step 16

Place the main leg in between the pivoting legs and align the holes. Secure the legs with connecting bolts. Tighten the bolts to your liking with a #4 Hex Key.



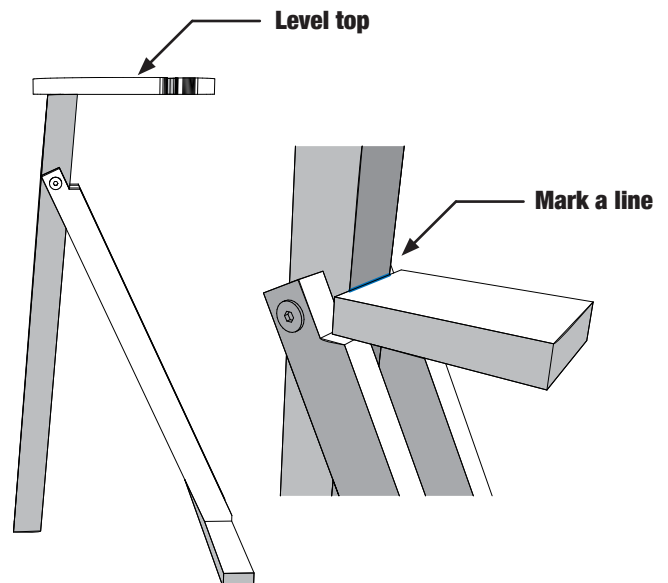
## Step 17

Tighten the connecting bolts just enough to allow the pivot legs to swing and also stand on their own.

Swing legs outward until top is level.

Place bottle support block on pivot leg notches with the long side of the 5° cut facing down.

Mark a line at this location.

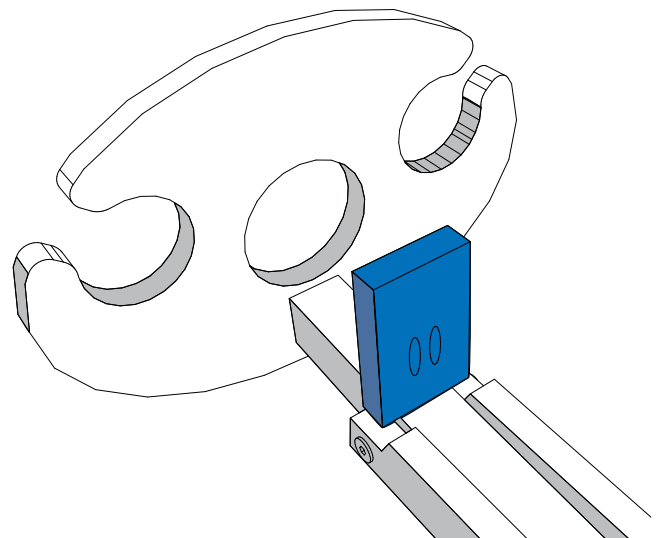


## Step 18

Lay stand down and loosen bolts to allow pivot legs to swing flat.

Put a small amount of glue on board and align to mark.

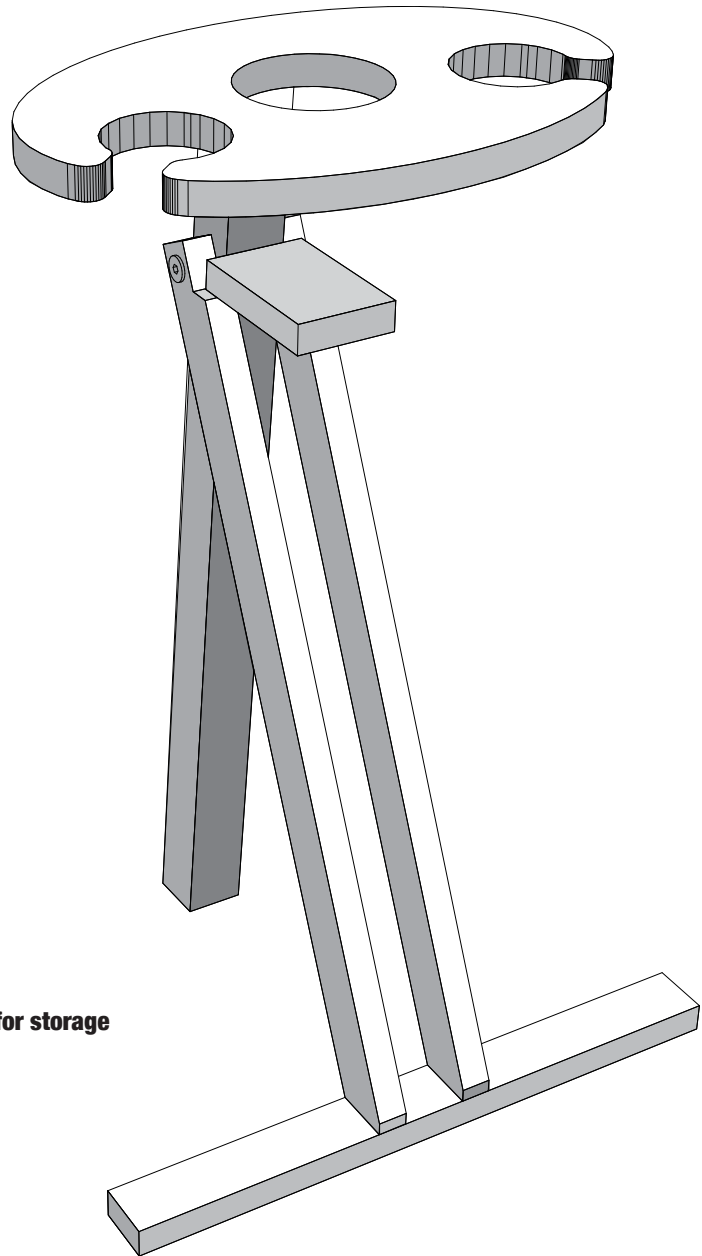
Attach the 2-1/2" x 4" bottle support board with (2) 1-1/4" pocket hole screws. The pocket holes should face downward.



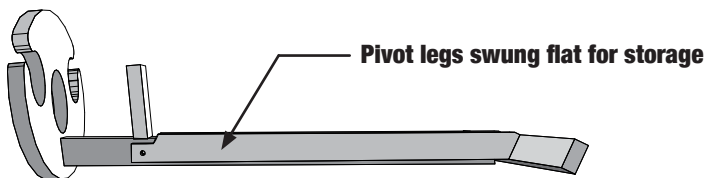
## Step 19

Sand and finish to your desire.

Project complete!



Bolt tension can be adjusted for the amount of free movement on pivot legs.



**Rougher finish** – Use 60-80 grit sandpaper to hand sand with the grain of the wood.

**Smoother finish** – Use 60-80 grit sandpaper to remove scratches & imperfections.

Followed by using 120-220 grit to smooth.

**Finish Sanding** – Use 320-400 grit sandpaper

**Super fine sanding** – Use 600+ grit sandpaper

