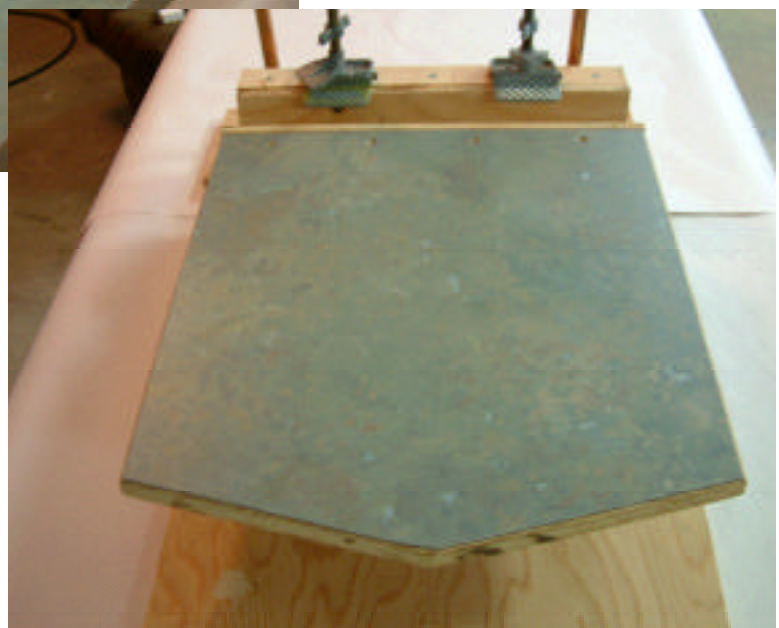


Build a VACUUM TABLE & T-SHIRT JIG



VACUUM TABLE



PARTS LIST AND TOOLS REQUIRED

●TOOLS:

Table Saw
Drill + 3/32, 3/8, 5/8, 1 3/8 Bits
Driver for Screws
Brush for Contact Cement
C-clamp

●PARTS from 5/8" G1S Plywood:

(1) Base - 24"x30"
(1) Top - 24"x24"
(2) Hinge Base - 24"x5"
(2) Spacers - 24"x3.75"
(2) Spacers - 16.25"x3.75"
(16) Spacers - 14"x5/8"x5/8"

●Other PARTS:

(1) Top - Formica 24.5"x24.5"
(3) Copper Pipe - 20"x1/2"
(2) Copper elbows - 1/2" 90°

●HARDWARE:

(2) Carriage Bolts - 5/16"x3.5"
(2) Nuts - 5/16"
(2) Blind Mounting Nuts - 5/16"
(2) Washers - 5/16"
(2) Fender Washer - 2"
(1) Box of Screws - 1"x#8

●OTHER:

(2) Clamp Hinges for Screen
Contact Cement
Wood Glue
(1) Vacuum Cleaner nozzle

STEPS FOR ASSEMBLY

STEP 1.

Assemble all the required tools and materials. Carefully cut all the components from the sheet of plywood and test fit your wood before assembly. All plywood should be flat and smooth. Always use lots of wood glue during assembly to ensure a sealed vacuum wafer.



STEP 2.

Laminate the formica to the plywood top following the instructions on the contact cement. Draw a 1" grid starting 4" from the edges of the plywood. This will make a vacuum area of 16"x16". Carefully drill the holes with a 3/32" bit ensuring that the hole spacing is equal. Buy two bits, you will probably break one.



STEP 3.

Flip the top over and use the 24"+16.25" spacers to form a perimeter. Cut a space for your vacuum cleaner nozzle(see step #4). Carefully glue and screw these spacers to the plywood of the top, using lots of glue where they join so you have an airtight seal. Now glue the 14"x5/8" sticks in between the rows of holes. Stagger the ends to allow airflow. Allow this assembly to dry over night.



STEP 4.

The vacuum nozzle as shown was found at a Salvation Army Thrift Shop, or you can steal it off your home vacuum cleaner. It slips in and out. If you are permanently mounting the vacuum top on a table, you can mount a 1.5" PVC pipe flange to the bottom over a hole that accesses the internal 5/8" spacers. Either of these connect to your vacuum source.



STEP 5.

Drill two 3/8" holes at the back of the bottom piece. Using a hammer, mount the blind mounting nuts from the bottom side. Liberally apply glue to all the spacers attached to the top, and then mount the bottom piece in position. Use screws all the way around the perimeter to seal tight. Let this assembly dry thoroughly.



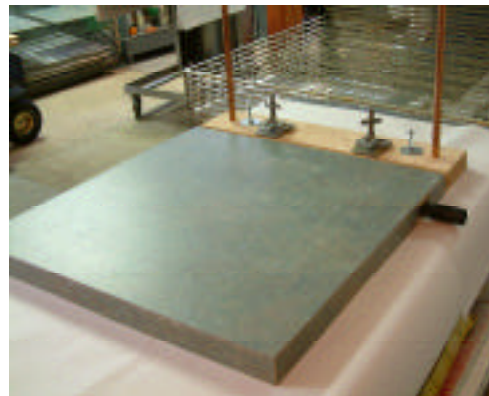
STEP 6.

The two hinge base pieces are glued and screwed together to make one unit. Drill two 1.375" holes so they are centered over the 5/16" blind mounting nuts on the base. Drill two 5/8" holes to locate the copper pipes for the counter balance. Mount the hinges to accommodate the screen.

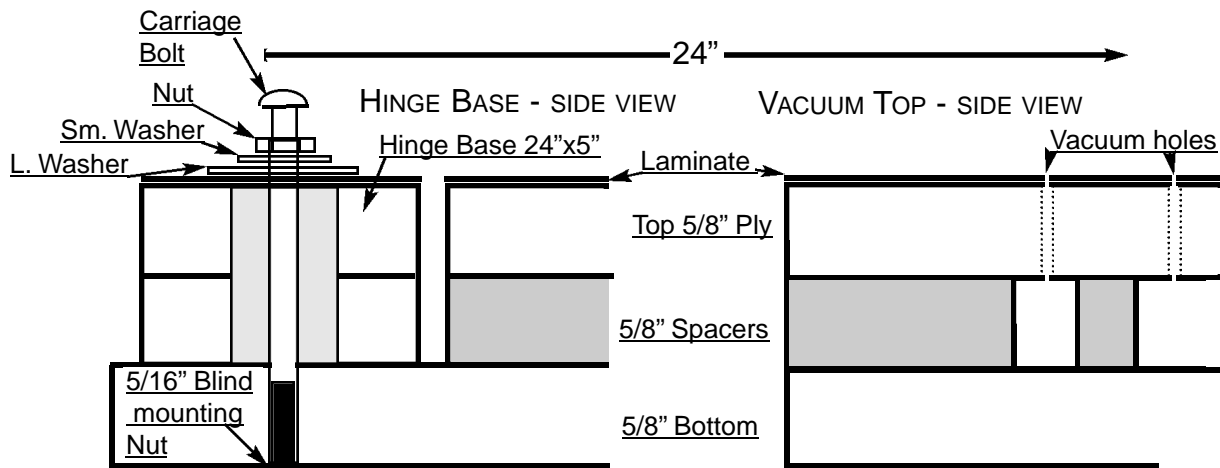
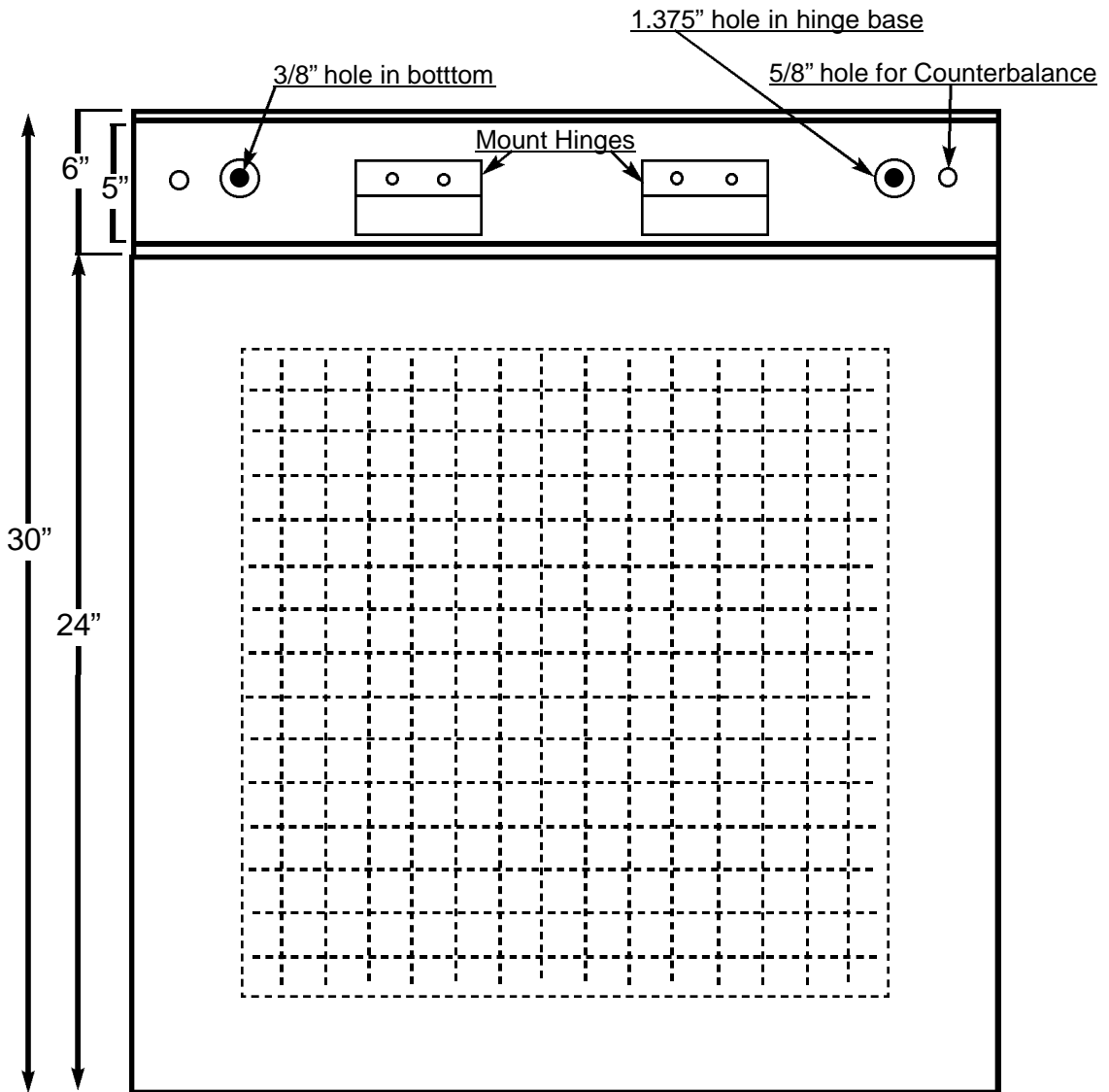


STEP 7.

Fit the nut, the small washer, and then the larger washer on the carriage bolt. The bolt threads into the blind mounting nuts, and then the top nuts can be tensioned to lock the hinge base once the screen has been registered to the material being printed. The counterbalance pipes are trimmed to fit once they are assembled. To make a counter balance attach a weighted can to one end of a cord and a C-clamp to the other. The C-clamp attaches to your printing frame. **Now you're ready to print!**



VACUUM TABLE PLANS



Hinges and Counterbalance not shown