

Provisional Press

Assembly Instructions

Parts List

All of the parts from this press can be purchased at your local hardware store except for 6 bearings. All prices are approximate to help you know you are getting the right pieces.

Hardware Store

1- 4' x 4' sheet of 1/4" birch plywood	16
1-2' section of 2" pvc pipe	4
1- 12" piece of 3/4"-10 threaded rod	4.50
2- 3/4"-10 hex nuts	.60 each
4- 5/16" x 1-1/2" hex bolts	.25 each
4- 5/16" flat washers	.10 each
4- 5/16" hex nuts	.10 each
1- 1lb box of 1" drywall screws	3
1- bottle of wood glue	3

Have the hardware cut your pieces into 8- 12" x 20" pieces.

Have the hardware cut your pvc into 1- 10 1/2" piece.

Internet Parts

4- 8 x 22 x 7 mm ball bearings	I bought a 10pk for \$6
2- 20 x 42 x 12 mm ball bearings	I bought a 2pk for \$9

Laser Cutting Instructions

Cut each of the 8 separate files on your laser cutter. I have the files set up on 12" x 20" artboards. This seems to be a common minimum size for most university laser cutters. If you have a larger laser cutter, you can experiment with combining files. Unfortunately, you will not be able to make this press if your laser cutter is smaller than 12 x 20.

Tips:

On a 50W laser, I cut the boards at 100% power and 40% speed. It takes about 1.5 hours to cut all of the files. Times and settings may vary on different cutters and systems.

I have included a file that has all of the pieces labeled titled ProvisionalPressLabelChart.pdf. It is helpful to label the pieces with a pencil as you take them off of the laser cutter to avoid confusion.

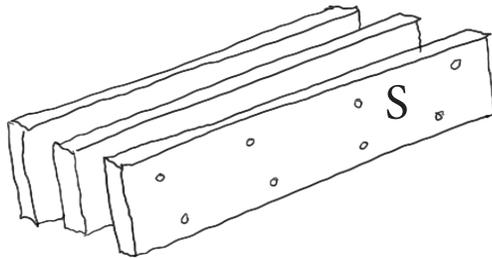
Assembly Instructions

Bed Assembly

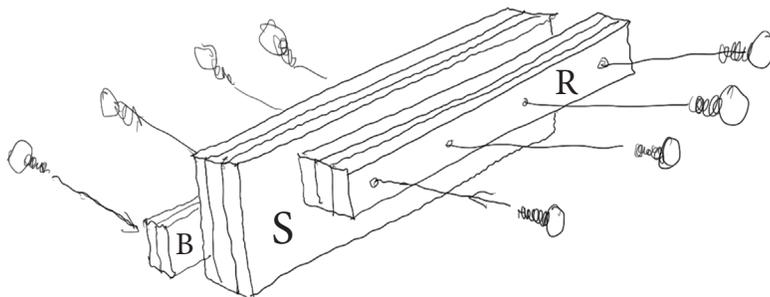
Locate all of the bed pieces. If you labeled them coming off of the laser cutter this should be simple. Laminate the pieces by taking the similar pieces described below, place a thin consistent layer of glue between each layer and put them together while making sure the precut holes align. Use screws in the precut holes to make sure everything stays tight while it dries for 15 minutes to 1 hour. Laminate similar parts with glue and screws you should have 5 sets of parts. Make sure to only use pieces with the same hole locations when laminating:

- 2 sets of 3 rails pieces. Labeled R
- 2 sets of 3 side pieces. Labeled S
- 2 sets of 2 base pieces Labeled B
- 2 sets of 2 end pieces. Labeled E
- 2 sets of end base pieces. Labeled EB
- 3 bed pieces together. Labeled BED

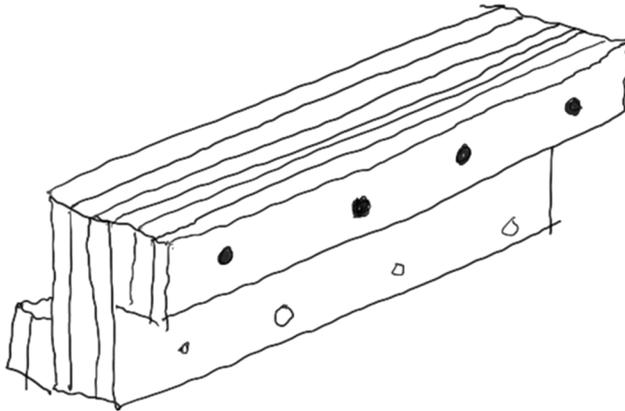
STEP 1: Align holes on 1 set (3 pieces) of Side (S) pieces. Put Glue between pieces and press together.



Step 2: While Side pieces are wet align hole on 1 set of 3 Rail (R) pieces and 1 set of 2 Base (B) pieces. Put glue between each set and line up holes to go on alternating sides of the recently glued Side (S) pieces. Glue Rail(R) and Base (B) sets to Side (S) and put screws in the precut holes. Try to drive them flush to avoid issues later



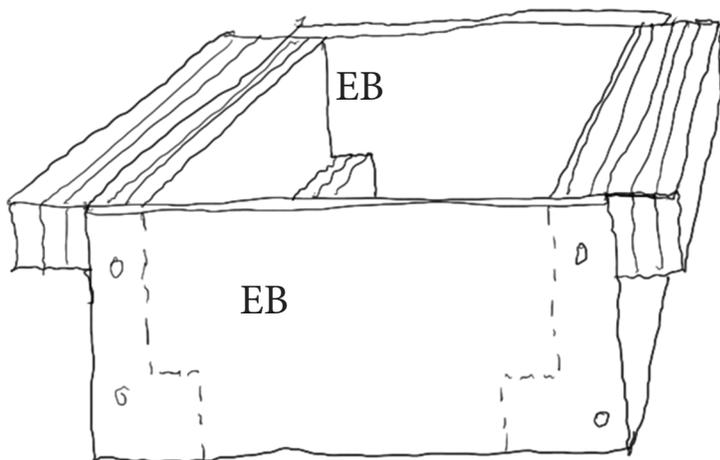
Assembled Side, Rail, and Base pieces should look like this:



Step 3: Repeat Steps 1 & 2 with remaining Side, Rail, and Base pieces.

Step 4: Glue 2 End Base (EB) pieces together. Repeat Step 4 with 2 remaining EB pieces.

Step 5: Place screws in hole of glued EB piece holes and then attach assembled side and end pieces. This is a little easier with a second set of hands, one to hold everything together, one to drive the screws.

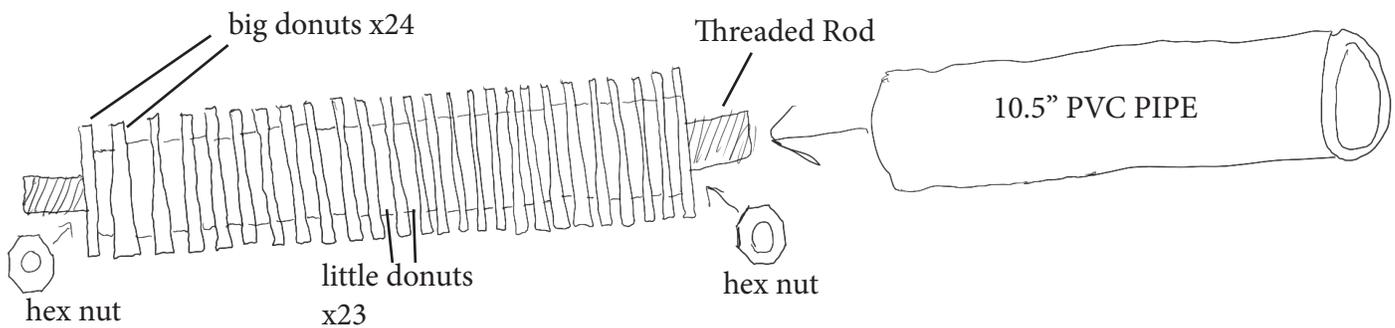


Step 6: Glue 3 BED pieces together and place under weight for 1-24 hours and then place it inside the hole you just made.

Head Assembly

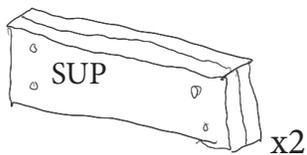
Step 1: Gather 12" x 3/4" threaded rod, 3/4" hex nuts, 24 large donut shaped laser cut pieces, 23 small donut shaped lasercut pieces, and precut 10.5" x 2" pvc pipe

Step 2: Thread the large and small lasercut pieces starting with a large piece alternating large and small until all 47 laser cut pieces are centered on the threaded rod. Put a Hex nut on either end.

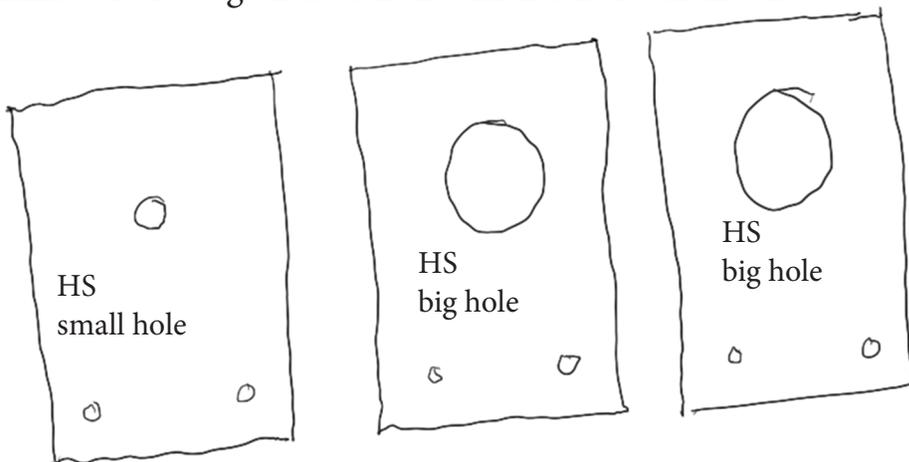


Step 3: slide pvc pipe over the previously assembled piece. Set aside.

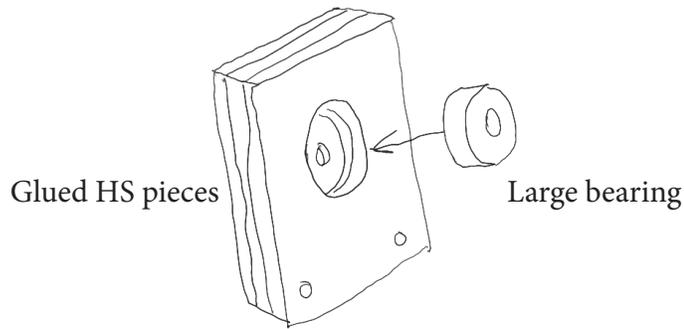
Step 4 Glue two sets of 2 head support pieces (SUP) aligning holes. Set aside.



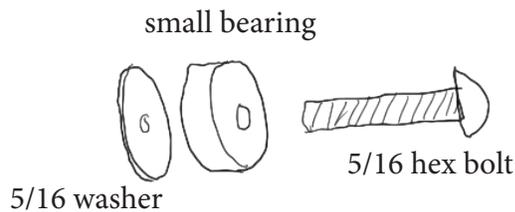
Step 5: Gather 3 Head Side (HS) pieces. Please note, two pieces should have bigger holes than the third. Laminate Parts together with the smaller hole on the end.



Step 6: While glue is drying, insert larger bearing in the round hole to ensure hole align.



Step 7: Gather one set of 5/16" bolt, small bearing, 5/16" washer and put together in that order.

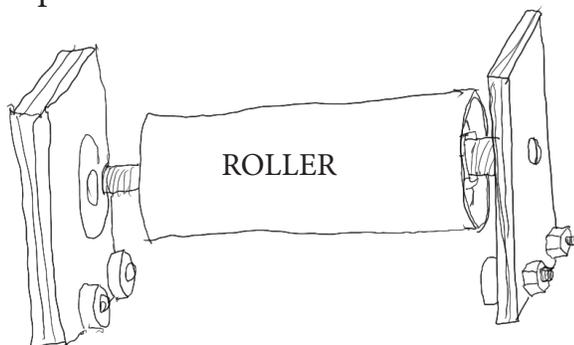


Step 8: thread set of three pieces onto assembled HS pieces. The bearing and washer should be on the same side as the visible large bearing already in place. Put 5/16" nut on other side snug. Repeat step 8 into the other small lower hole on the same HS piece.

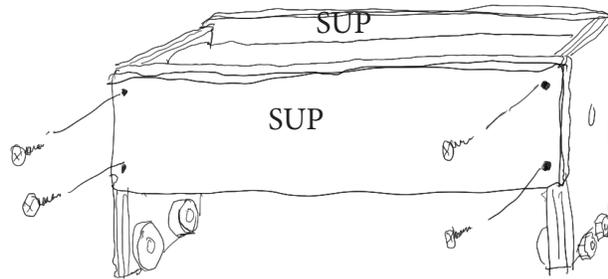


Step 9: repeat steps 5-8 to create a matching assembled HS piece.

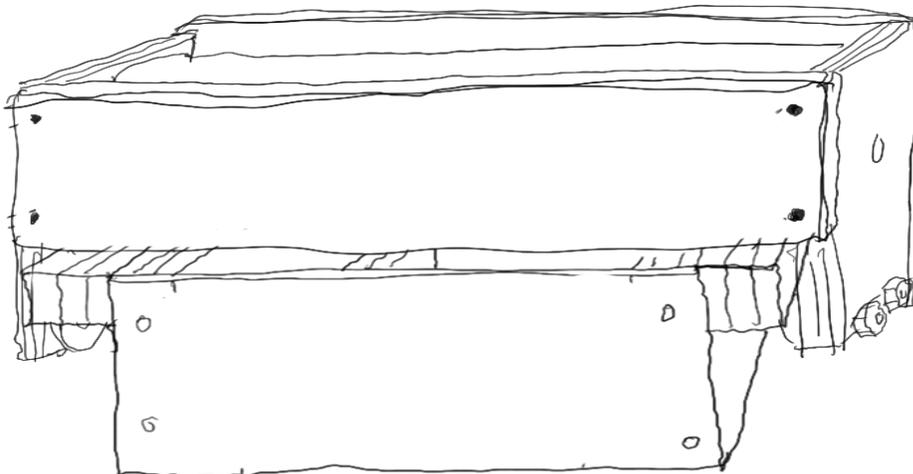
Step 10: Place ends of assembled roller (Steps 1-3) into the bearings of the two matching sets of assembled head side pieces.



Step 11: Use screws to attach glued SUP pieces (step 4) into the edges of the front and back of the matching assembled head pieces so that is flush on the top and sides.



Step 12: Slide assembled head piece onto assembled bed. Print.



Printing Instructions

This press operates just like most cylinder presses. You put your relief block on the press, ink it up, put paper on top of it and roll the roller across the block/ paper.

Tips:

Printing Height:

This distance between the press bed and cylinder is .968 inches (galley height) which is a common distance in letterpress printing. This means you are probably going to have to make your block higher in order for it to print. I generally keep about 12 sheets of regular printer paper on my press to print letterpress type (.918"). If you are using European type it will be less paper.

If you are printing linoleum blocks, I would recommend making a 3/4" block about the size of the press bed that you can double stick tape your lino down to. You will still need a few sheets of sheet of paper under the 3/4" to bump it up to printing height.