

Building A Cheese Press

The materials you use to reproduce this press are not as important as the general design. In order for the press to work it needs the parts to be correctly laid out as well as the entire press to be built with materials that are strong enough to stay true under the weight of the compressed springs. The most difficult part of building this press is calibrating the springs you use so you are aware of how many turns of the wing nuts produce which amount of weight.

Materials You'll Need

- 2 - 1/4x20 threaded rod 12in length
- 2 - 1/4x20 wing nuts
- 6 - 1/4x20 nuts
- 6 - 1/4 washers
- 2 - Compression springs (my springs 40mm x 10mm x 3mm wire)
- 3 - Steel strips/braces with holes 10in long
- 1 - Plastic cutting board Apprx. 11x14in (the thicker the better)
- 4 - Feet to lift press from surface(use plastic or rubber to avoid rusting from resting in whey)
- 1 or 2 thin plastic or metal strips for calibration guides

Most, if not all the parts should be easy to find at your local hardware or walmart/kitchen store. In addition to the parts for the actual press you will need a cheese hoop with follower and possibly a riser block. The riser is used to keep the compression bar from resting on the hoop during pressing. I made my riser from 2x4 lumber that i trimmed to fit in the hoop to follow the follower.

Tools You'll Need

- Drill with a 1/4in drill bit
- 7/16 Wrench for tightening nuts
- Screwdriver for screwing on feet
- Pencil or marker to mark drill holes and calibration marks

Assembling the Press

When i made cheddar the weight of the final pressing was enough to bow the entire press slightly. If your plastic base is too thin it will bend like mine did which is why i used the third metal strip. It helped to reinforce the press, but the thicker the base you use the stronger the press will be. The springs used also make a big difference in how much weight the press can press with. This can be difficult to determine though because there isn't much documentation from spring manufacturers about the loads of their springs. I have provided a link to a spring compression chart showing dimensions and loads. Using the chart you can find a few springs with loads you want and match the dimensions to the closest ones available. Download the excel spring chart here - [Excel Compression Spring Chart](#)



Step 1

Start by preparing all your parts and gathering the tools you'll need for assembly. In addition to the press parts you should also have the hoop you plan to use with the press. You will need it to mark the proper holes for spacing the guide rods.



Step 2

Using a ruler find the vertical and horizontal centers and draw lines from each side. The two lines should form a cross and meet in the center of the usable pressing area of the base. Using this center point, place one metal bar over the marked center point so that the bar is completely centered on the base and is parallel to the long sides. If your base is square just align the bar along either two sides. Now using your hoop mark two holes that allow for enough room for the hoop to sit between the guide rods. With the two holes marked you can now drill the holes for mounting the two guide rods.



Step 3

Screw a nut onto one of the rods far enough up to account for the bases thickness and a reinforcement brace. Place a washer on the rod and insert the it into one of the pre drilled holes. Repeat the steps for the other rod and flip the loose assembly on it sides allowing the board to rest on the upper ends of the rods.



Step 4

With the bottom of the assembly now accessible, place a metal bar for reinforcement over the ends of the two guide rods as seen in the photo. Now place one washer onto each rod and if necessary adjust the top nuts to allow more rod to come through the bottom. Finish the guide rod/reinforcement assembly by screwing and tightening one nut onto the bottom of each rod.

**Step 5**

To complete the basic press assembly, attach the four feet to the bottom of the base. Make sure your feet are tall enough to raise the press high enough so its not resting on the metal bar reinforcement nuts. The press will be more stable if the feet are attached a little more towards the center than the edges. To help aid in whey runoff you may want to use washers to space two of the feet a little taller. It doesn't really matter which two feet as long as they are both on the same side so it leans the base in one direction.

**Step 6**

Flip the base back upright and onto the feet you just attached. You can now begin to assemble the upper compression part of the press. Start this step by screwing another nut onto each rod to act as a stop for the upper parts when the hoop is not in place. Now place a second metal bar onto the guide rods and level out the screw stops. Then place a spring on each rod so they rest on the bar you just added.

**Step 7**

With the springs and lower compression bar in place you can now position the upper compression bar by placing it onto the guide rods. When this bar is in place add one more washer onto each rod. Now screw one wing nut onto each rod all the way down to the upper compression bar, but make sure the springs are not compressed. Adjust the screw stops if necessary to make sure the upper and lower compression bars are perpendicular to each other. You will not be able to properly calibrate the press if the springs are not compressed equally due to unlevel bars.

If you have decided to determine your weight during each use and not use weight marks you have now completed your press! If you would like to use weight marks and have found usable marker guides then continue on to step 8.

Calibration

**Step 8**

Remove the wing nuts and place your weight marker guides onto the upper compression bar and replace the wing nuts. Your guides should fit as snugly as possible against the upper bar so they cannot move under pressure and throw off the perceived weight. They should also fit loosely enough on the guide rods so they do not bind the floating ability of the compression assembly.

**Step 9**

The simplest way of calibrating this press is to use metal weights placed onto the top compression bar. Using 5lbs of weight, rest it on the top bar allowing the bar to stay level so each spring has an equal amount of compression. Get a second person if you need to so the wing nuts can be screwed down to the bars compressed by the weight. This will hold the press at 5lbs of compression and the guides can be marked. Repeat this process marking points for any amount of weight you may need on both calibration guides.