



Pioneer Mountain Homestead

Goat Milking Stand Plans

The following goat milking stand was designed by us and is used by us for milking our Nigerian Dwarf goats. The same stand can be made for larger goats by simply making a few adjustments, which we will indicate at the end of the plans.

Here is a picture of the milk stand. As you can see, it is well used.





Materials List:

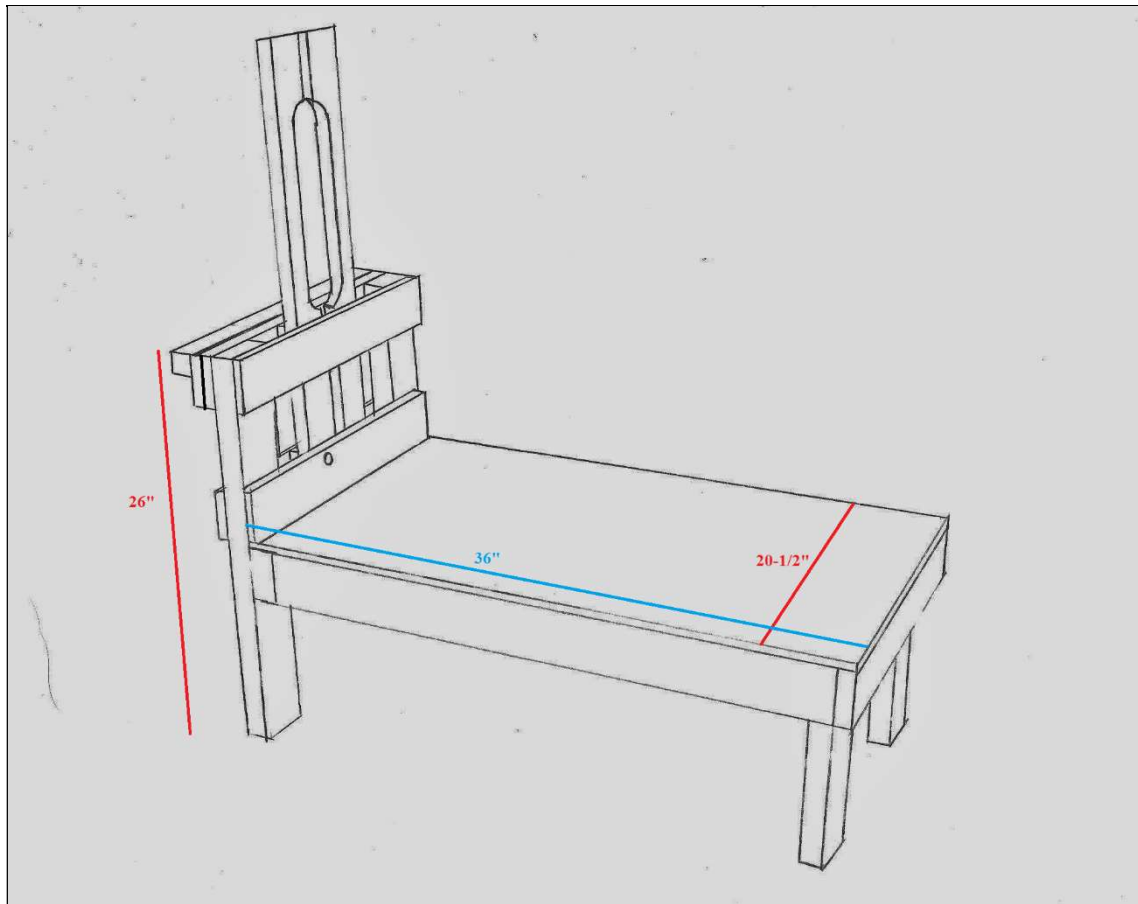
Quantity	Item
3	2"x4"x8' lumber
2	1"x4"x8' lumber
1	2'x4' sheet of 1/2" plywood
1	3/8" bolt 4" long
2	3/8" flat washer
1	3/8" lock nut*
1	Box 2-1/2" deck screws
1	Box 1-1/4" deck screws
2	3/4" screws
1	hook and eye latch
1	Feed bowl, 5 qt. fence feeder style
1	10"x 1-1/2" scrap of 1/2" plywood
*Note: You will need two 9/16" wrenches or sockets to tighten.	

Note: A 2"x4" actual dimensions are 1-1/2"x3-1/2". A 1"x4" actual dimensions are 3/4"x3-1/2".

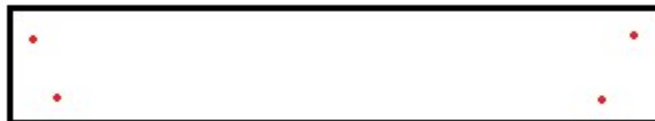
Note: PRE-DRILL holes prior to screwing to prevent splitting of the wood.

Directions:

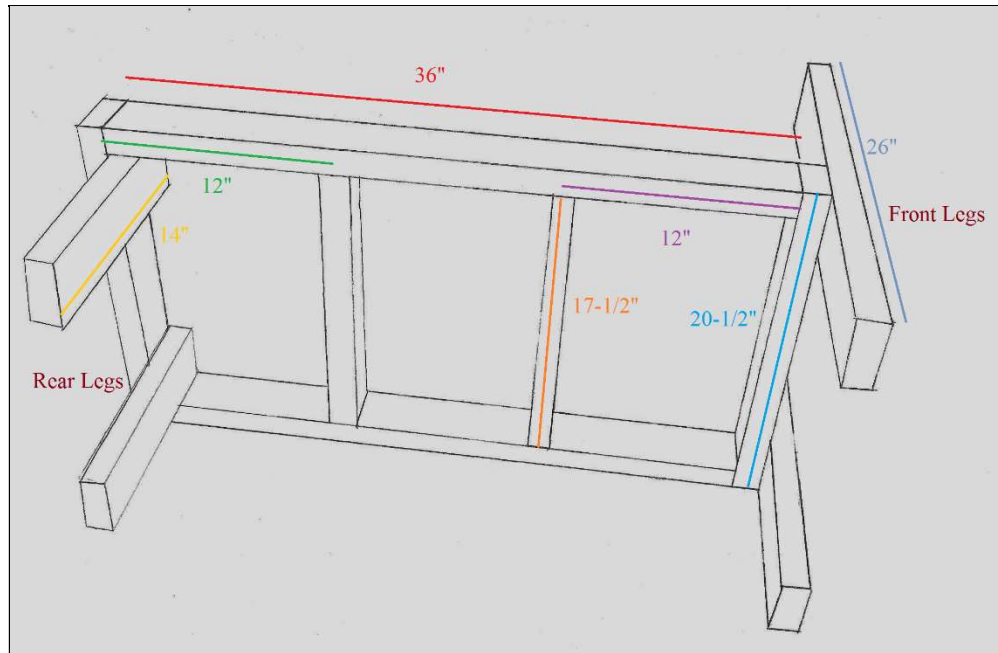
Here's the overall diagrams and dimensions of the project.



1. Cut the 2"x4" lumber into two pieces each 20-1/2" long. (These will become the front and end pieces of the platform base).
2. Cut the 2"x4" lumber into two pieces each 36" long. (These will become the side pieces of the platform base).
3. Using the four pieces just cut, assemble a rectangle with the short pieces as the ends. Use 2-1/2" deck screws to assemble. Place two screws into each of the four corners. When you screw the base frame together, put the two screws in each corner as shown in the diagram. This will keep your frame sturdier. You will use a total of 8 screws in this step.



4. Cut the 2"x4" lumber into two pieces each 17-1/2" long. These will become the platform bases. Assemble the braces 12" from each end. Use two 2-1/2" screws to attach each end of the braces. You will use a total of 8 screws in this step.

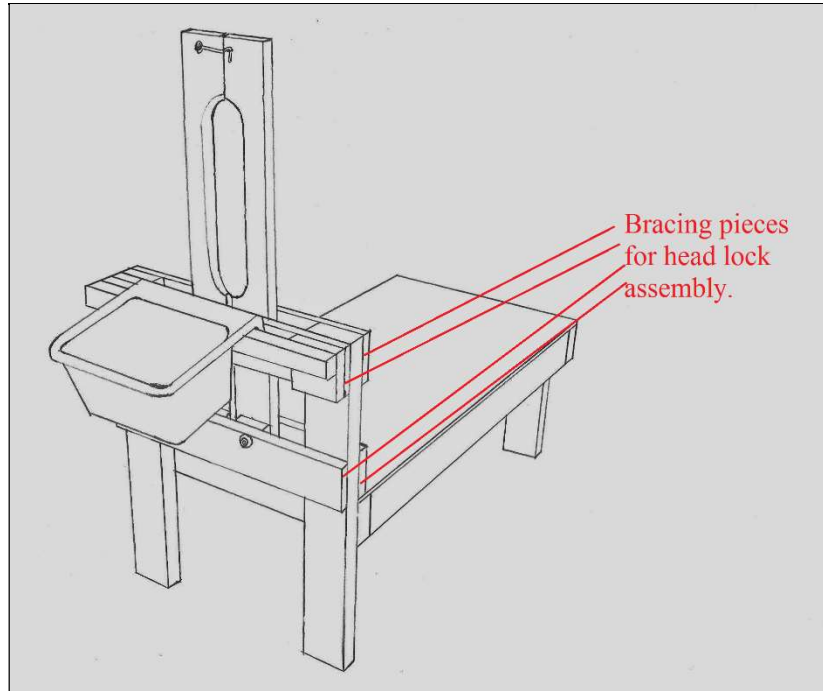


5. Cut the 2"x4" lumber into two pieces each 14" long.
6. Cut the 2"x4" lumber into two pieces each 26" long.
7. Assemble the legs using two 2-1/2" screws for each leg. You will use a total of 8 screws in this step.
8. Cut the 1/2" plywood into a piece that is 20-1/2" wide by 39" long.
9. Using 1-1/4" screws, screw the plywood onto the top of the frame. Screw around the edge and also through the two braces in the middle. Use about 22 screws evenly to do this.

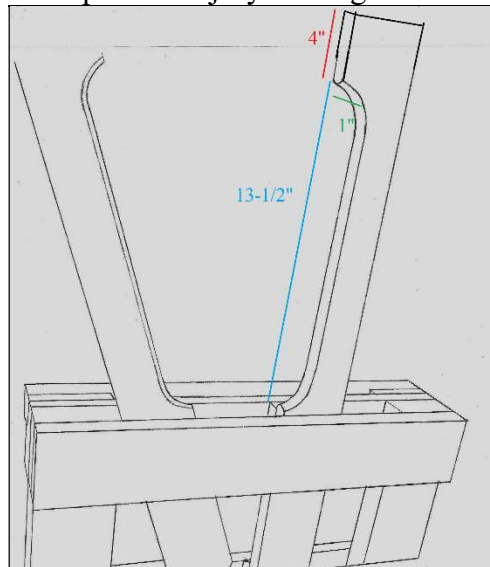


10. Cut four 1"x4" pieces of lumber each 20-1/2" long. These will brace the head lock assembly. Screw these pieces to the front legs width wise. Two pieces will be at the level of the platform on both sides of the front legs. Two pieces will be at the top of the legs

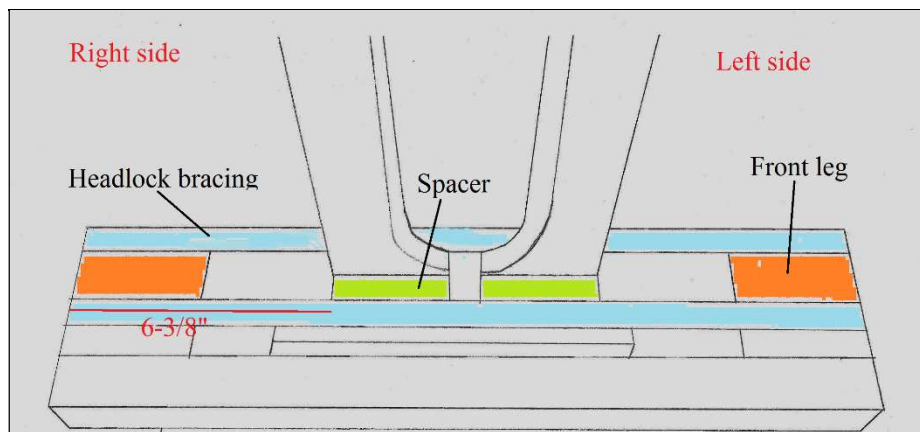
on both sides. Use 1-1/4" screws to assemble using two screws at each joint. You will use a total of 16 screws.



11. Cut two 1"x4" pieces of lumber each 30" long. These pieces will become the headlock. To make the oval cut out for the goat's neck, measure down 4" from the top and mark. Measure 13-1/2" from the 4" mark and mark this location. Measure in 1" between the two marks. Make the corners rounded. We used a standard Mason jar lid and traced it for the rounded edge. Cut out with a jigsaw. Smooth and sand the wood to remove the sharp edge and protect the goat from getting splinters. See diagram for more explanation. Do this for both pieces. If you don't have a jigsaw or a way to make the rounded corners, just make the cut out square, but be sure to sand to prevent injury to the goat.

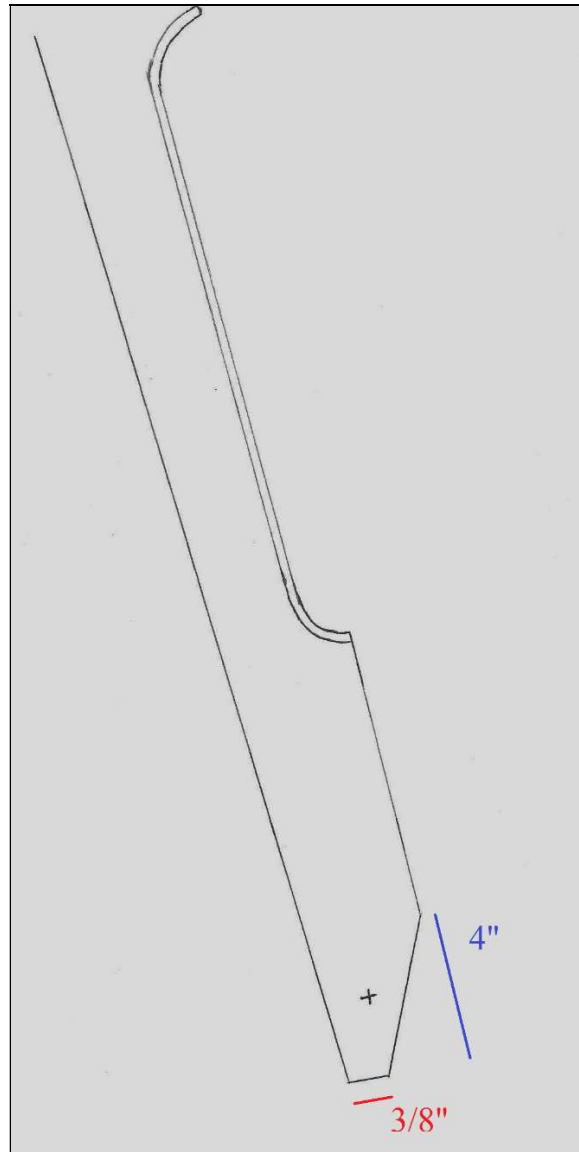


12. Cut six 1"x4" pieces of lumber each 3-1/2" long. These pieces will become spacers in the headlock. Note: We will now refer to the milking stand left and right sides. We will look at the stand as if you are standing at the end furthest from the headlock. The right side of the headlock will be the stationary side with the left side being the movable side. On the right side, or the stationary side, attach one of the spacers at the bottom of the headlock and another spacer up 8" from the bottom of the headlock so it ends 11-1/2" up from the bottom. Attach the spacers to what will be the feed bowl side of the head lock piece. Use two 1-1/4" screws in each spacer attachment.
13. The stationary head lock piece is now attached to the head lock frame. Measure in 6-3/8" from the right side. Place the stationary headlock between the head lock bracing and attach from the goat side of the head lock bracing. Use 1-1/4" screws to attach the stationary piece attach at the both the top and bottom bracing.

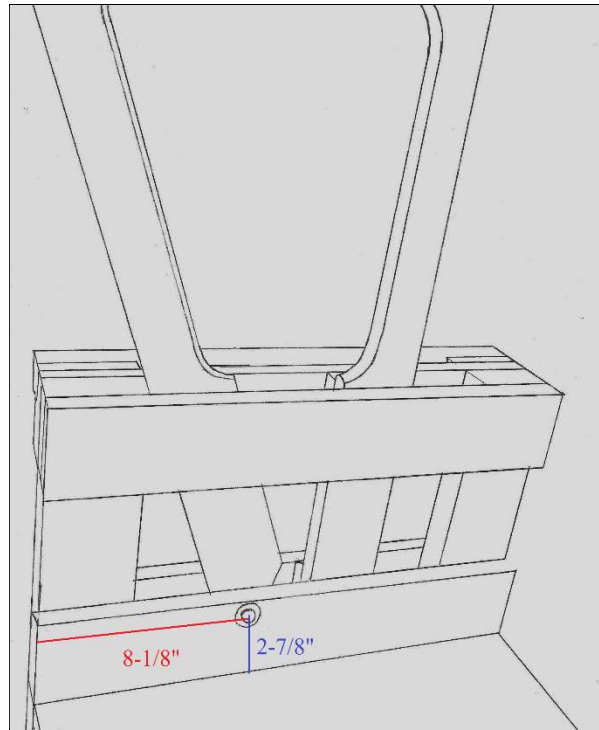


14. On the movable head lock piece (the left side), attach one of the spacers at the bottom of the headlock and another spacer up 8" from the bottom of the headlock so it ends 11-1/2" up from the bottom. The bottom spacer screws need to be attached near the top side of the spacer due to cutouts and the bolt that will be added in a later step. Use 1-1/4" screws for all the attachments.

15. At the bottom of the movable headlock piece, measure in $\frac{3}{8}$ " and mark (measure starting from the straight side). Additionally, measure up 4" from the bottom from the cut out side. Draw a line connecting these two marks and cut off this angle. Note: you will be cutting through two pieces of wood. You should also sand off the face of the spacers on the movable side at this point to allow for easier movement of the headlock.



16. Measure in 6-3/8" from the left side. Place the movable headlock between the head lock bracing. The movable headlock piece should be parallel to the stationary piece with a 3/4" gap between the two headlock pieces. Clamp the piece in place temporarily. Make a mark on the lower head lock brace closest to the platform. Measure up 2-7/8" and in from the left 8-1/8". Mark this location for the bolt. Note: This should be about centered horizontally on the movable headlock piece.

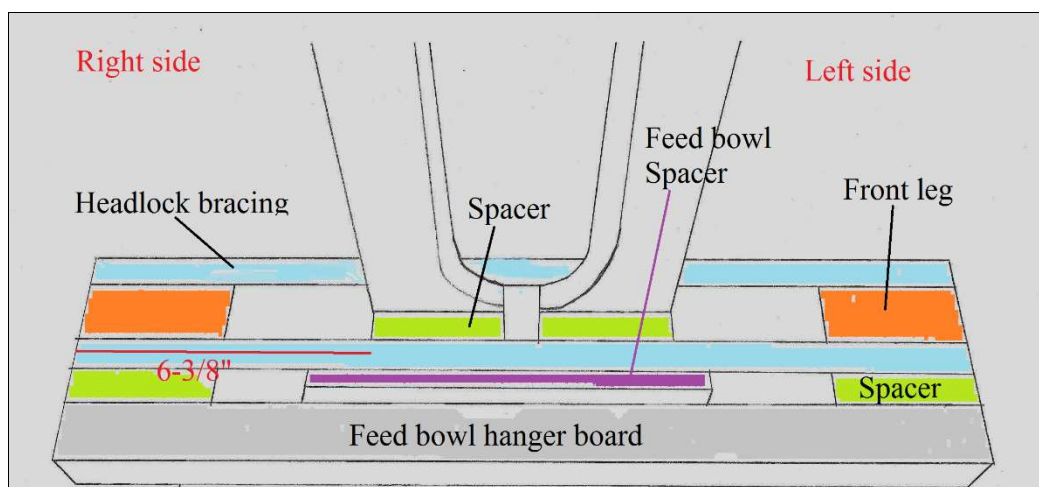


17. Drill a 3/8" hole for the bolt. Place one flat washer on the bolt and install into the hole. Place the other flat washer on the outside and attach the lock nut. Use two 9/16" sockets or wrenches to tighten the nut. Do NOT overtighten. This piece must be able to move freely.

18. While the movable headlock is still clamped, add a hook and eye assembly at the top on the side away from the platform.



19. Screw the piece of $\frac{1}{2}$ " plywood that is 10" long by 1-1/2" to the top outside brace. Center this piece. Attach with $\frac{3}{4}$ " screws.
20. Attach the final two spacer pieces (3-1/2" long) to the top of the outside brace at each end. Use 1-1/4" screws.
21. Cut one 2"x4" piece of lumber 20-1/2" long. Attach this to the outside top using 2-1/2" screws. This piece will hold the feed bucket.
22. Install the feed bowl.



As noted earlier, this milking stand is designed for a Nigerian Dwarf goat. If you would like it for a larger goat, measure how high you need the feed bowl for your goat. The plans have a feed bowl at a height of 11-1/2" from the platform. If, for example, you need your feed bowl at a height of 16 inches, then you will need to add the difference, or 4-1/2" in this example. The height difference needs to be added to four pieces. Add the difference to the front legs and the bottom portion of the headlock (but above the angled cut-off on the movable head lock section). Proceed as directed.

Good luck with your project!