

Barrel and Tire Mineral Feeder Construction Instructions



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Following is a description of how you assemble one of these “barrel and tire” feeders and accompanying are plans and step by step pictures. Materials you need include;

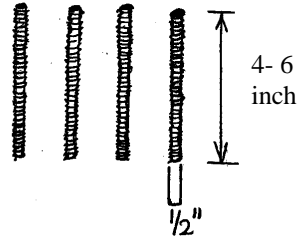
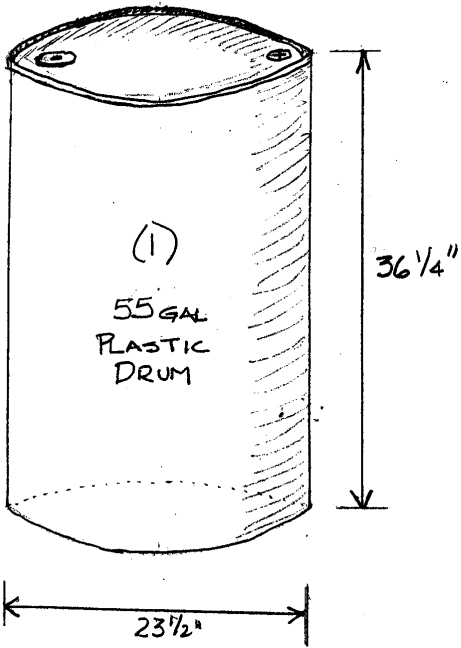
1. Large truck or tractor tire (24 or 24.5 inch wheel)
2. Plastic 55 gallon drum with a hole cut in the wall about 16-18 inches in diameter about 8 to 10 inches above the bottom. Blue or black barrels will last much longer than white.
3. Four 6 inch threaded one half inch rods, or four 4 to 6 inch x ½ inch hex bolts (fully threaded).
4. 8 half inch nuts and flat washers
5. 18 inches of chain with a connecting link or small bolt that will fit through the links to tie it together, or a 4 inch ½ inch eye bolt.

To assemble it, first drill two one inch holes about 4 inches apart through the middle of the tread of the tire and thread the short chain through them and then connect the loose ends. Another options are to put a ½ inch eye bolt through the tire tread, or to simply wrap a rope or chain around the tire. This is used to pull the feeder once it is done. Next, drill 4 equally spaced one half inch holes through the wall of the barrel, The holes should be on either side of the opening (not one directly centered under the opening). These holes should be about the same distance from the bottom of the barrel as half the width of the tire.

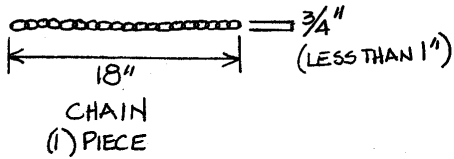
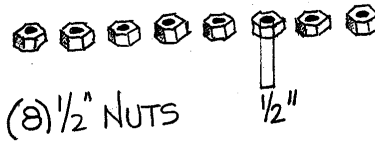
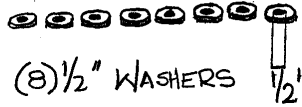
Now the tricky part. First, make sure the rod is cleaned of any label or burs and make sure a nut will easily thread all the way along the rod before you start. If you cut a 3 foot rod, make sure that you use a grinder to smooth the cut ends so they are not sharp. Start by putting rods through two of the holes with a washer on each side, extending outside the barrel, such that they will go in the opening of the tire but not touch the side of the tire on the far side. If you have 6 inch bolts or rods they will be nearly flush with the inside of the barrel. Put the barrel inside the tire, and check to make sure the rods are not too long (just clear the backside of the tire) and then tighten them down. The remaining two rods have to be threaded through the holes from the inside of the barrel (Photo 2) and then a washer and nut is put on the outside of the barrel (Photo 3). Once this is done, you shift the rod, washer and nut down inside the tire and use a wrench to hold the nut. Then thread the rod through the nut by hand until it is well inside the tire but not all the way to where it hits the inside of the tread (so it will wobble some). Then put a washer and nut on the inside of the rod and tighten them together. It helps to have four hands when you do this step. The process is repeated until all 4 rods are installed which secures the barrel inside the tire, but lets it wobble a little reducing the possible wear on it.

At that point, the feeder is done and can easily be pulled with an ATV or truck from pasture to pasture (Photo 4). The feeder holds about 100 lbs of mineral and while a little water can get in, it doesn't seem to be much of a problem when cows are eating it as long as you tend to it and break up lumps (which you need to do with any feeder anyway). So far, these have been in continuous use at several locations for 3 years. A few things we have learned is to use as heavy a tire as you can get so it can't be turned over. Also drill the holes so the pins fit in the middle of the tire allowing the barrel to be flexible. Also, in the long run it might be a good idea to use stainless steel rods and nuts so you can disassemble it at some point. Dragging the feeder over rocks or a gravel road can also wear out the bottom, so avoid that if possible. If you expect a lot of bottom wear you can cut three 2" x 8"s the shape of the bottom of the barrel and bolt them on using carriage bolts. You could also use two runners bolted to the bottom of the tire to hold the barrel off the ground. All in all, this works better than any feeder we have had and the price is certainly right! For a demonstration go to www.YouTube.com and search for “cattle mineral feeder”.

SUPPLY LIST

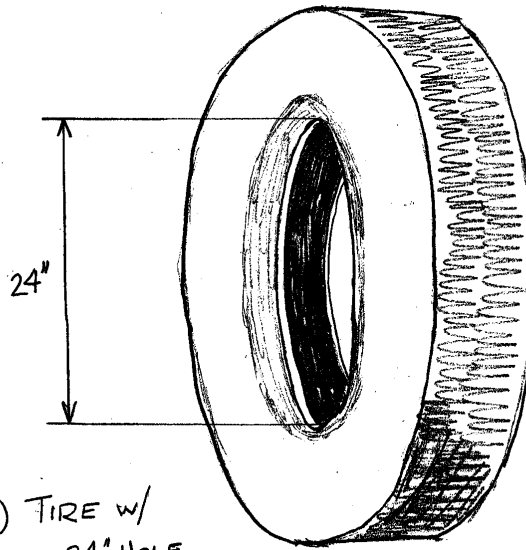


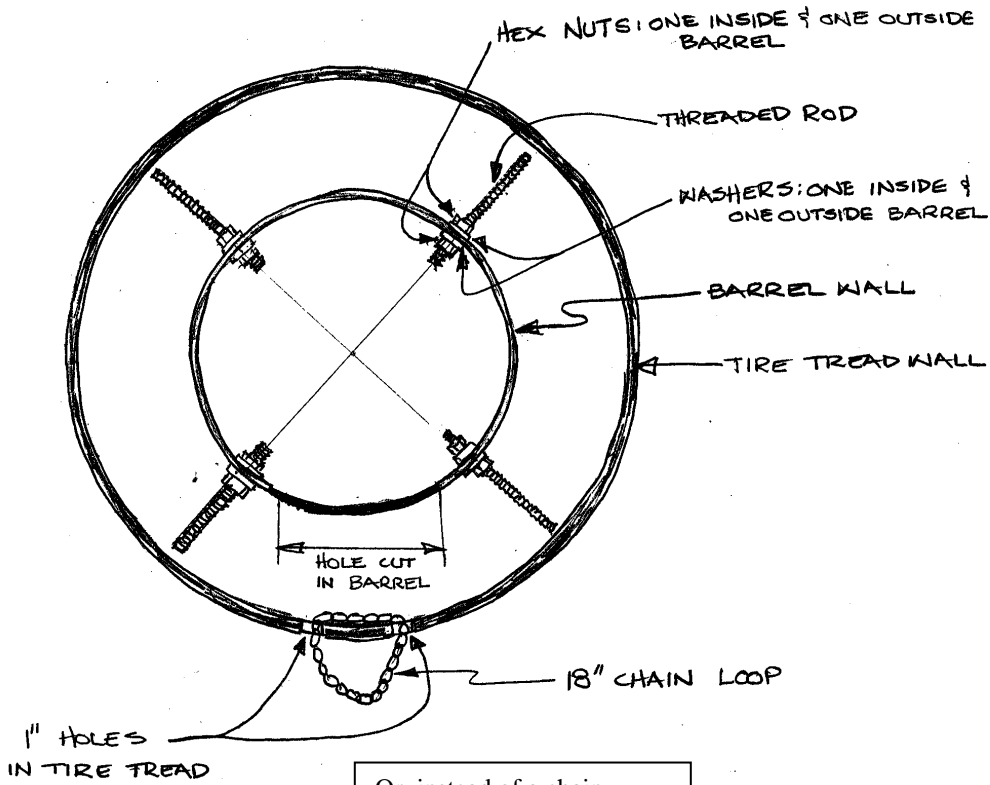
Four 4 to 6 inch
threaded rods or hex
bolts



(1) CONNECTING LINK

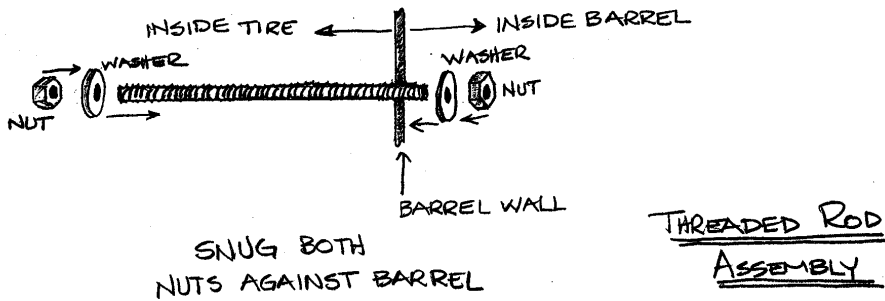
Or, instead of a chain
substitute a 1/2 inch eye bolt

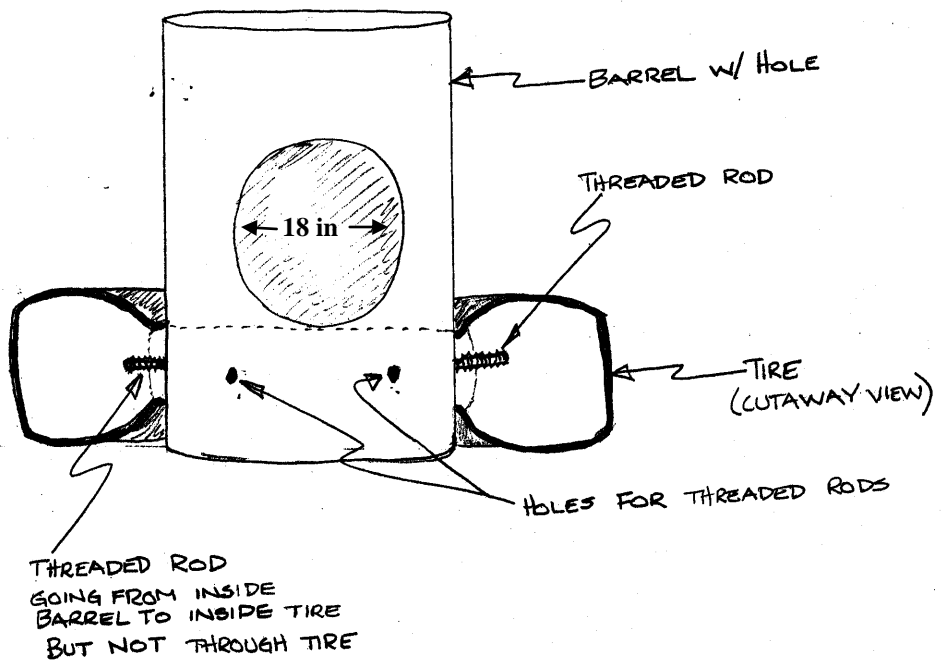




Or, instead of a chain substitute a 1/2 inch eye bolt

TOP VIEW: ALL RODS IN PLACE
 w/ 1/2 TIRE CUT AWAY &
 TOP OF BARREL CUT AWAY





SIDE VIEW
W/ 1/2 TIRE CUT AWAY



Photo 1. Materials needed for the “barrel and tire” mineral feeder



Photo 2. The threaded rod goes through the wall of the barrel into the inside of the tire



Photo 3. Start the nut on the rod outside of the tire and then slip it inside to thread the rod into the tire



Photo 4. This “barrel and tire” mineral feeder is easy to move and holds up to abuse