

Assembly Instructions

.9, 1.5, 2.5 & 3.5 Ton Bulk Bin



Assembling .9, 1.5, 2.5 & 3.5 Ton Bulk Bin

The .9 Ton uses 4 – Leg 2 1/2” angles 92” long 8 – Leg Spacers 1 1/4” angles 43 1/2” long 8-X Bracing 1” flat straps 66” long 4 – Leg Pads 5 X 5 Plate w/tab & 20 – 5/16 x 1” hex bolts and nuts.

The 1.5, 2.5, & 3.5 use 4 - Legs 2 1/2” angle 92” Long, 8 – Leg Spacers 1 1/4” angles 51” long , 8-X Bracing 1” flat straps 75 1/2” long , 4 – Leg Pads 5 X 5 Plates w/tab & 20- 5/16 X 1” hex bolts and nuts.

Step 1:

Bolt the Leg Pads to the bottom of the legs using the 3/8 X 1” Hex bolts.

Now take 2- Legs and 2– Leg Spacers and 2– X Brace Straps and make a section like diagram 1, put the angles to the inside of the leg with the angle up, on the top one and angle down on the bottom one. Put the flat strap on the out side of the leg angle & use 5 - 5/16 X 1” hex bolts to fasten in place, (finger tighten only). Assemble 2 sections like this. Now with help stand the two sections up spaced accordingly facing each other, now add the leg spacers and X bracing between them just like Step 1 to form a square. **Now tighten all bolts.**



Diagram 1

Cone to Frame .9, 1.5, 2.5 & 3.5 Diagram-2

Step 2:

With the frame assembled drop the cone into the frame from the top. There are tabs welded to the legs to bolt the cone into place with. Drill a 5/16” hole through the top hole in each tab and bolt securely using the 5/16 X 1” carriage bolts, (bolt from the inside out). Now drill the remaining holes and bolt securely using the 5/16 X 1” carriage bolts. These tabs are long enough to reach past the sides of the cone and down the slope, you will need to bend this part into the cone and drill and bolt into place using the 5/16 X 1” Carriage bolts again from the inside out. Diagram 2

Note: If you are putting together a (2.5 Bin for Mineral Concentrate) or 3.5 Ton Bin you will need to install the extra support straps. They are 1” X 51 1/4” long. You will need to put them on the lowest bolt of the leg tabs. (2 Per Leg) They will fasten to the slide valve bolts later on in the assembly (Diagram & 2A)



Diagram 1A

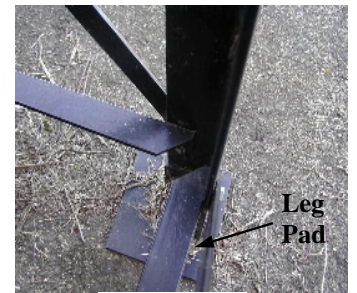


Diagram 1B

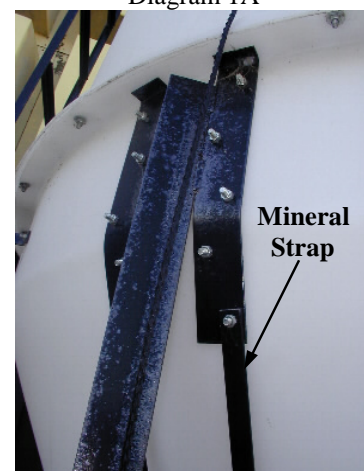


Diagram 2



Diagram 2A

.9 Ton & 1.5 Ton Top Assembly: Diagram – 3

Place the cover over the top of the cone and center it to the cone. (As shown in diagram-3) (If the Lip of the Cone is too big you will need to trim the Lip of the Cone off slightly to make it fit properly)

Now drill 24 - 5/16" holes evenly spaced around the outer edge of the top making sure to go through the lip of the cone also. Now bolt the Top in place using the 5/16 X 1 1/2" hex head bolts with a rubber seal washer on it. Place the bolt into the hole from the top down and place a 5/16" standard washer & nut on the bolt on the under side of the lip.

(Be Careful Not To Over Tighten and Crush the Washer)

2.5 & 3.5 Ton Top Section to Lower Cone

Diagram - 4

Place the Top Section on the cone that is mounted in the legs. Center the Top Section on the lower cone

(If the Lip of the Cone is too big you will need to trim the Lip of the Cone off slightly to make it fit properly)

Now drill 24 - 5/16" holes through the lip making sure to go through the lip on the lower cone. Space the holes space the holes evenly apart, Bolt the top section in place using the 5/16 X 1 1/2" hex headed bolts. You need to place the seal washers on these bolts, put the bolt with the seal washer through from the top, put a regular 5/16 washers and nuts on from the bottom.

(Be Careful Not To Over Tighten and Crush the Washer)

Cover Assembly all bins: Diagram –5

Hold the cover opener on the cover so the 2 bolts that are in the cover already are on each side of the opener. Flush the lower mounting angle with the edge of the cover. (figure AA)

Drill the 3-5/16" holes in the opener through the cover, Use 2 - 5/16 X 1" carriage bolts and 1 - 5/16 X 3/4" from the inside out to fasten the opener to the cover.

Now center the middle of the hinge to the cover opener and line the bottom of the hinge up with the bottom edge of the cover. Drill the 2-5/16" holes in the hinge through the cover. Use 2- 5/16 X 3/4" carriage bolts again from the inside out to fasten the hinge to the cover.

Next center the cover over the opening in the top of the bin. Hold the hinge down to the top of the bin and drill the 2- 5/16" holes in the hinge through the plastic and then bolt the cover in place using 2-5/16 X 3/4"



Diagram 3



Diagram 4

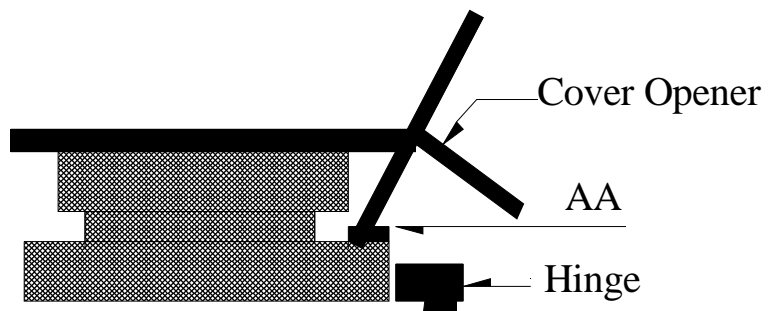


Diagram - 5

Step 4 : Lower Ladder Assembly 1.5, 2.5 & 3.5 Ton Bins
(See Diagram - 6)

The bottom ladder will mount to the leg spacer angles that goes between the legs. Find the center of this angle and measure 8 1/8" each way and drill the 5/16" holes. They should be 16 1/4" apart do the same on the other spacer angle in the same section. There are 4- 1" X 15" long angles that will mount the ladder to the bin frame, they go to the outside of the leg angle. They have a hole just back from one end, put this end towards the cross angle of the bin, on the top set and (Fig 1) bolt to the bottom side of the spacer angle using 5/16 X 1" bolts. Now mount the lower set but put the hole on the end towards the ladder on the bottom set bolt to the top side of the spacer angle using 2 - 5/16 X 1" Hex Bolts. (Fig 2) Now there are 2- flat straps 1" wide X 51 1/4" long that will go from hole that in the side of the top angle down to the hole that is in the lower angle this strap should be at a slight angle from top to bottom. Use 5/16 X 1" bolts to fasten these in place. There is one for each side. They are for helping to support the ladder. There are 2 - 1" X 6 1/2" Straps that will mount the top of the ladder to the top of the cone, bolt one to ea. side of the ladder using a 5/16 X 1" hex bolt and to the plastic cone using a 5/16 X 1" carriage bolt from the inside out.



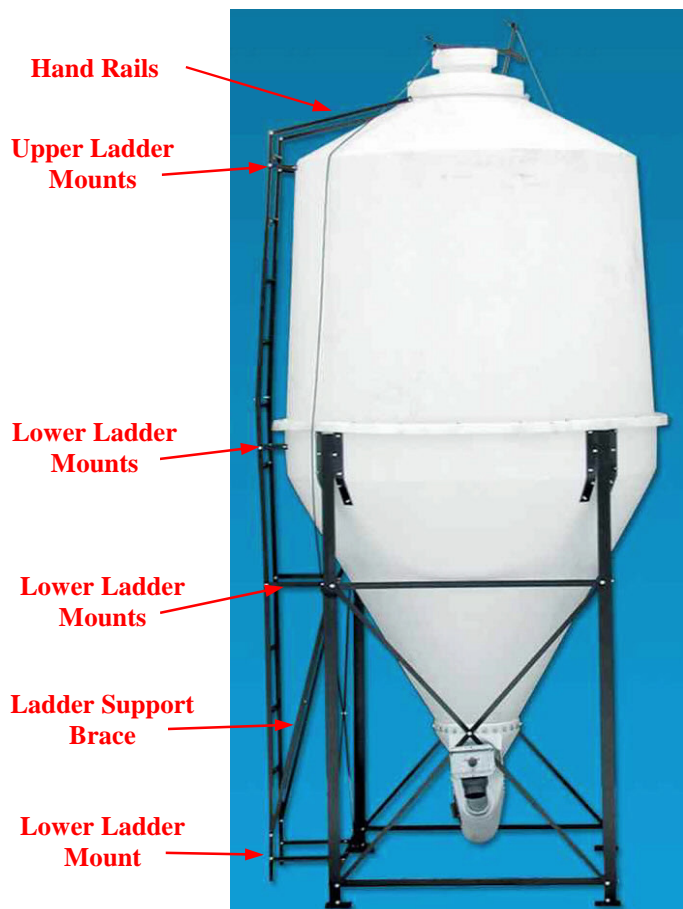
Diagram 6

Step 5: Upper Ladder Assembly 2.5 & 3.5 Ton (Diagram - 7)

There are 2 - 1 X 6 1/2" straps that mount to the top outside of the 3.5 Ton ladder, bolt these on with the bent end down and away from the ladder. (90 degrees to ladder) Finger tighten with 2 - 5/16 X 1" hex bolts. With the bulk bin laying on it's side,

Now Mount the top ladder section to the top of the lower ladder, bolt in place with 2 - 5/16 X 1" hex headed bolts, tighten completely. Now bend the top section of the ladder over to the bin. The straps you bolted to the top of the ladder earlier should be straight out from the ladder and touching the side of the bin, now drill the holes in the bin top, use 5/16 X 1" carriage bolts from the inside out to fasten them in place, **(Tighten all bolts)**

Hand Rail Assembly for 1.5 & 2.5 & 3.5 Ton Bins
There are two 1" X 28" angles that are used as hand rails that mount to the top of the ladder and the top of the bin. Bolt the angle to the out side of the ladder so the angle is up use 2-5/16 X 1" hex bolts, and you bolt the other end to the bin using 2-5/16 X 1" Carriage bolts. (Bolt from the inside out)



Boot & Slide Valve Assembly

Installing the Deluxe Slide Valve

The collars now bolt right on to the bottom of the cones there may need to be some trimming necessary . There is a straight, a 30 degree and a 45 degree collar available

Hold the collar up to the cone and Drill 1/4 " Holes about 2" apart, (the bolt pattern is marked on the collar). Use 1/4" X 1" Carriage bolts from the inside out, place a washer and nut on to fasten in place. After installing the collar run a bead of caulking around the top of the collar to help seal out the rain. Bolt the slide valve to the collar using 1/4" X 1" Carriage bolts. Use 4 down the sides and 2 on the ends. (the bolt pattern is marked on the collar of the slide valve). If you add the boot with the slide valve use the same bolt pattern to fasten the boot to the valve as you used to fasten the slide valve to the collar. (the bolt pattern is marked on the body of the slide valve). But use 5 down the sides and 3 on the ends. There is a nylon bearing you can use to help hold the auger shaft in place at the back of the boot. If the hole is to small drill it to the size you need.



Straight Slide



Straight Deluxe Slide & Boot



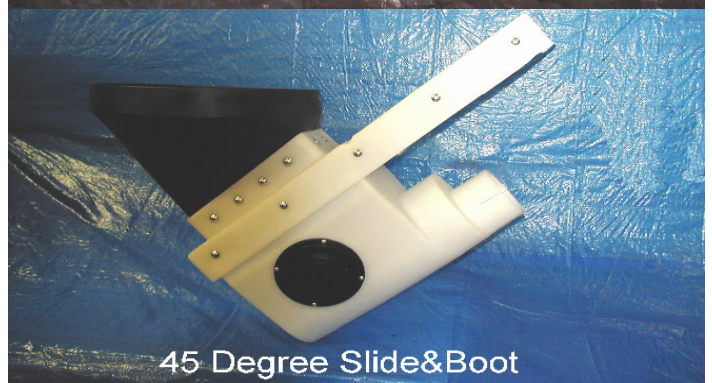
30 Degree Slide



30 Degree Deluxe Slide & Boot



45 Degree Slide



45 Degree Slide&Boot

Bulk Bin Stand Assembly

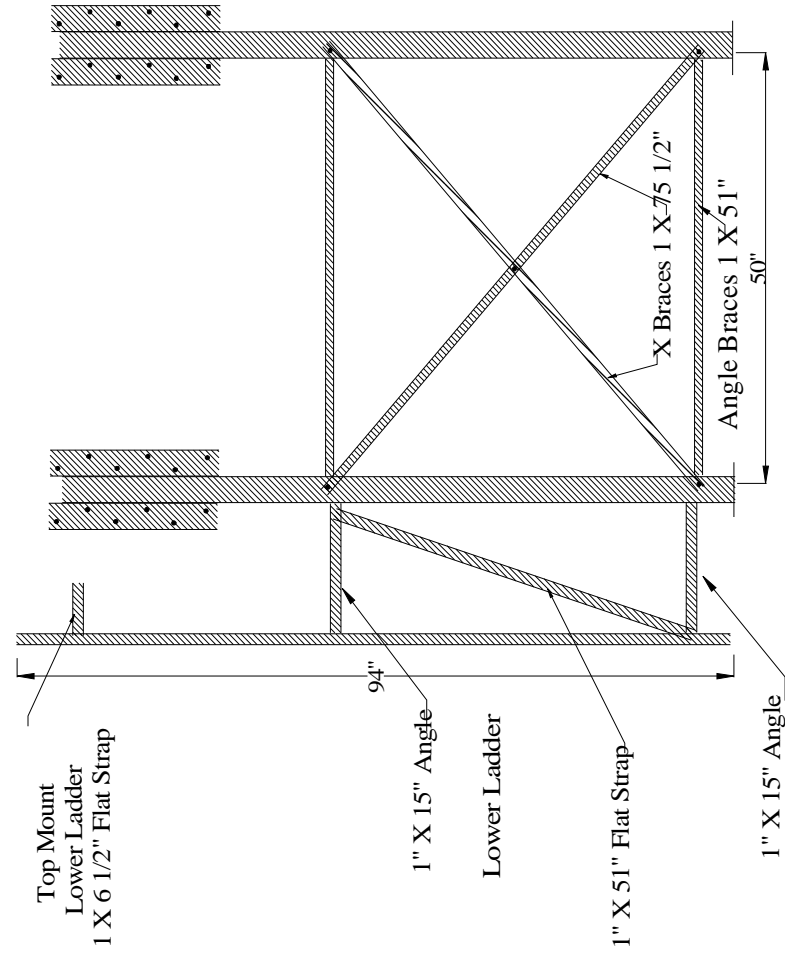
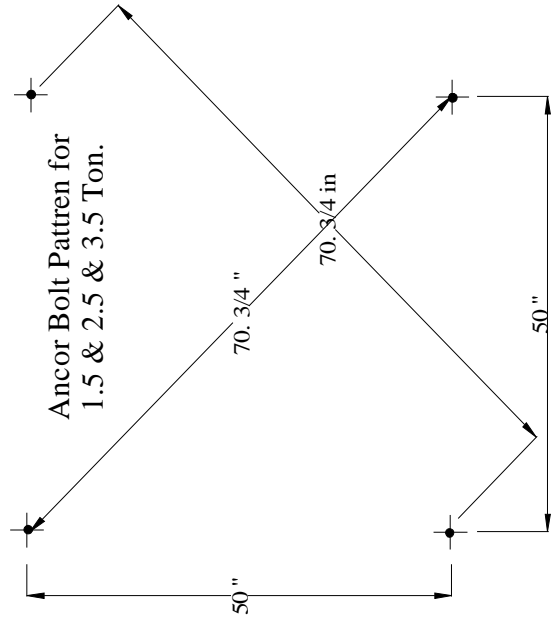
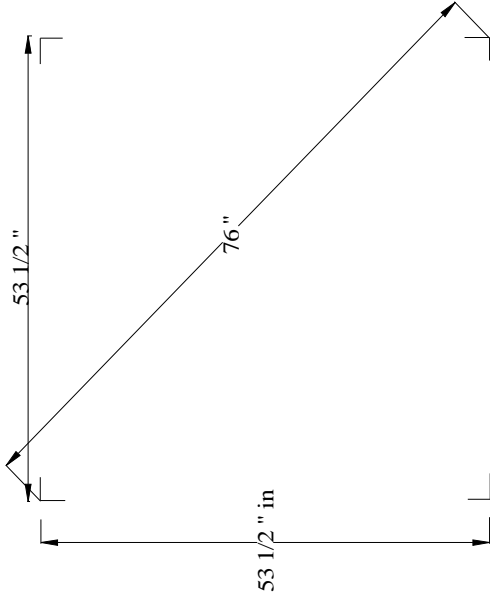


Diagram 2

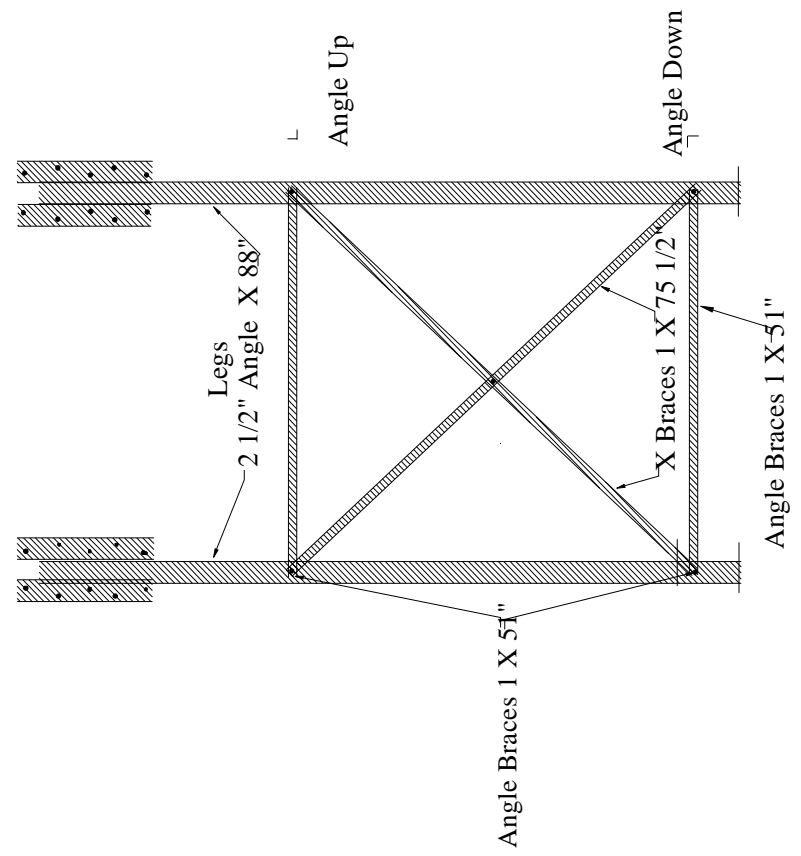


Diagram 1

Cone is 565 Gal & is 70 Cubic Ft.

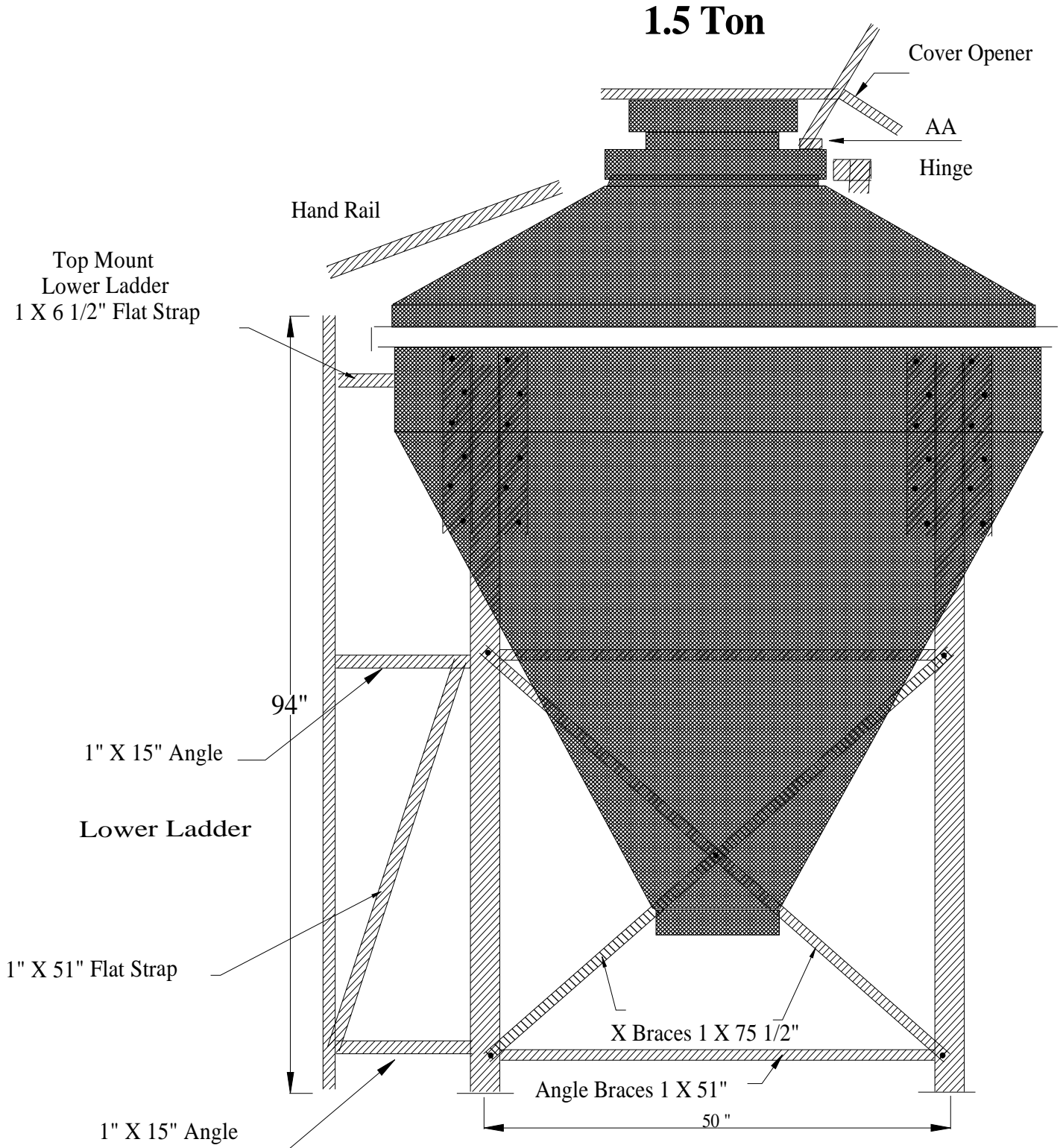


Diagram 2

Top 3.5 Ton Top is 995 Gal. & 125 Cubic Feet

2.5 Ton Top is 475 Gal & 60 Cubic Ft.

Cone is 565 Gal & is 70 Cubic Ft.

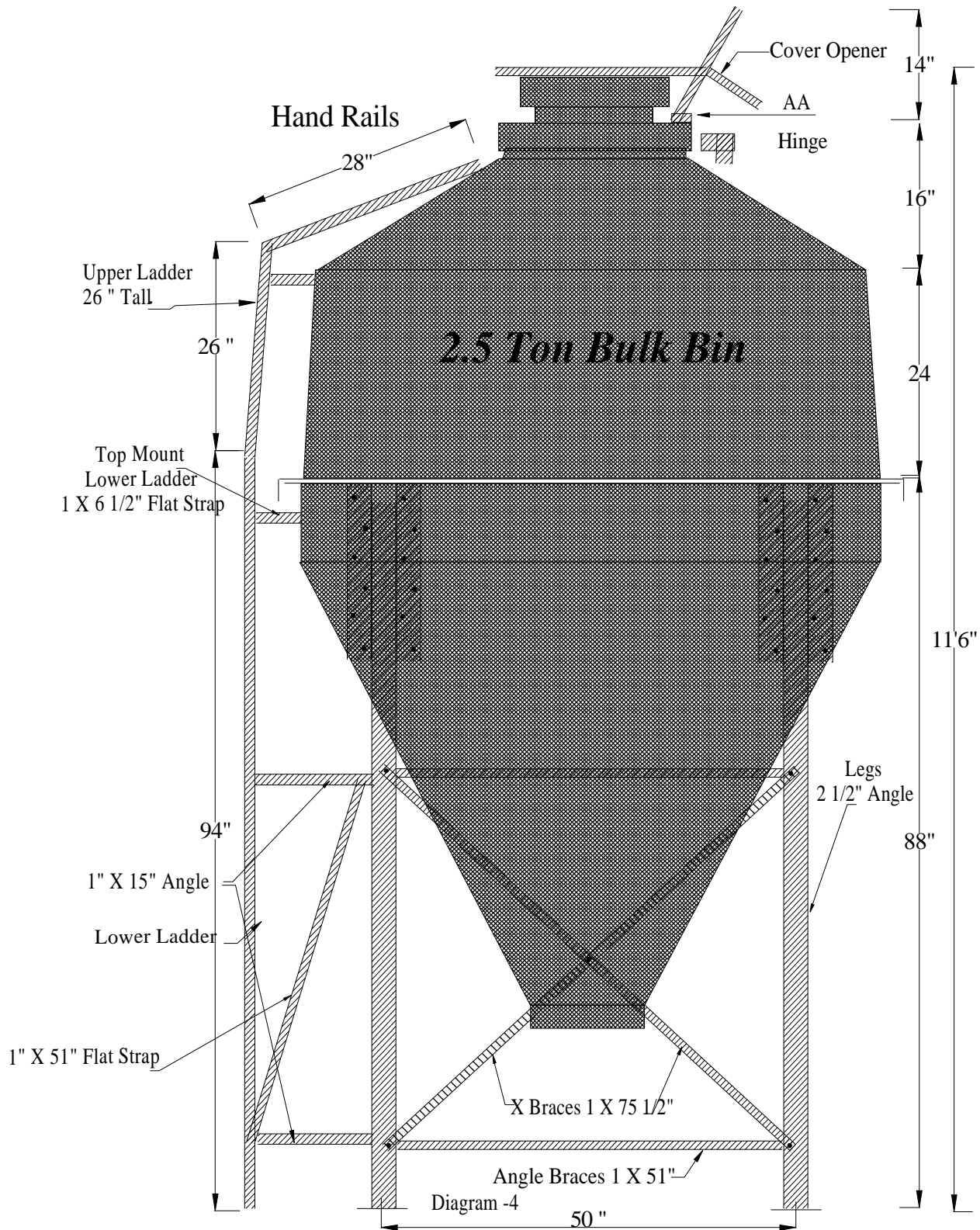


Diagram 4

Top 3.5 Ton Top is 995 Gal. & 125 Cubic Feet
Cone is 565 Gal & is 70 Cubic Ft.

