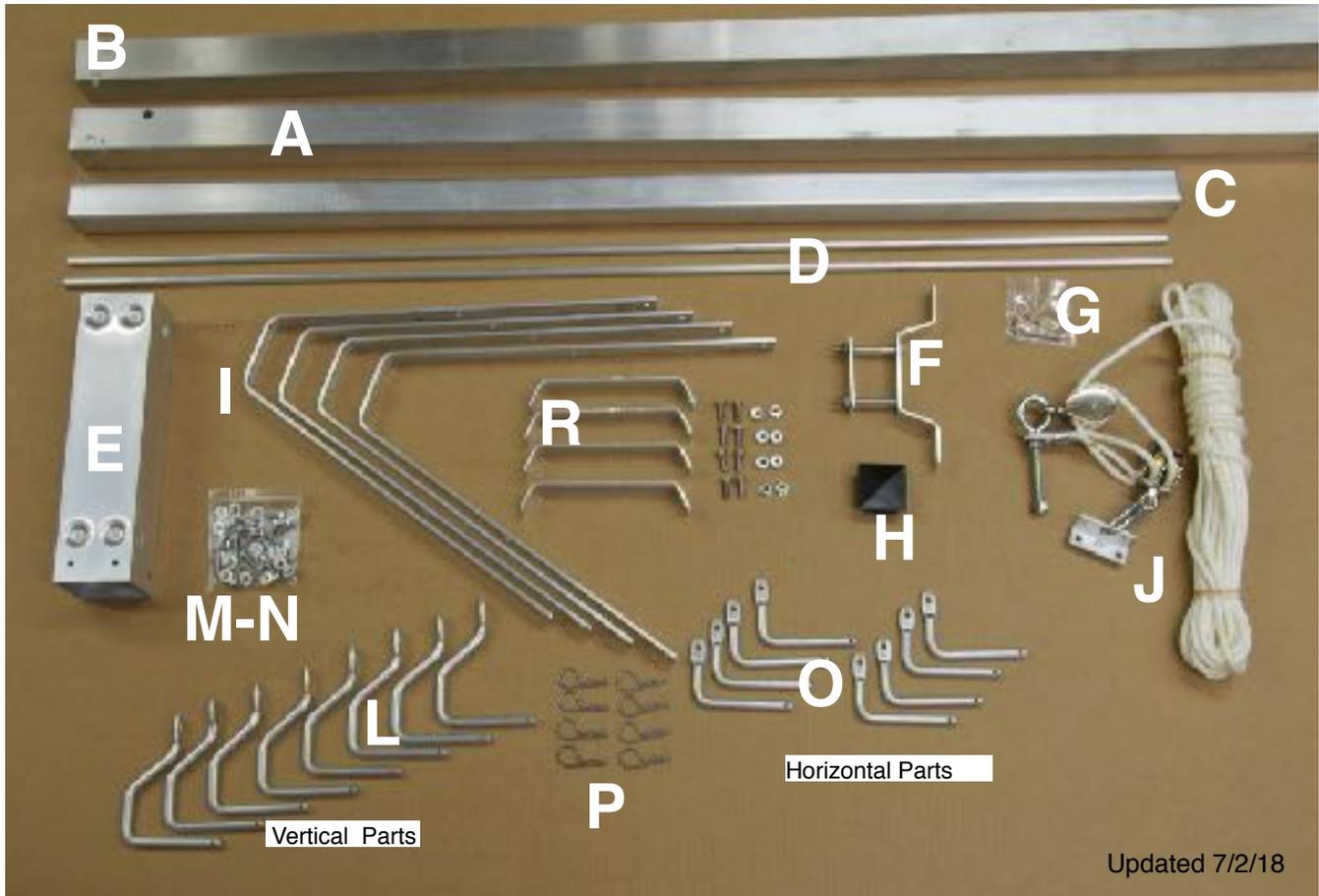


Troyer's 8 Unit Gourd Rack (#GR8)



Updated 7/2/18

Parts List

- A: Top of Pole
- B: Bottom of Pole
- C: 48" Ground Stake
- D: Top Perch rods 48" long
- E: Hub
- F: Rope Winder w/ attached stainless steel hardware
- G: (2) 10 - 24 x 1/4" set screws and allen wrench
- H: Top Cap for pole
- I: 4 U shaped gourd hanging arms
- J: small angle piece attached to the 4 part rope and pulley with eyebolt
- M,N 1/4 - 20 x 3/4 bolts 16 total of each
- R: Braces (4) for hanging arms with 8 1/4 - 20 x 3/4 bolts with nuts.
- P: 8 Stainless hitch pins

For Vertical Starter:

- L 8 Vertical GMA's
- M 8 stainless bolts
- N 8 Stainless whiz nuts

OR

For Horizontal Starter

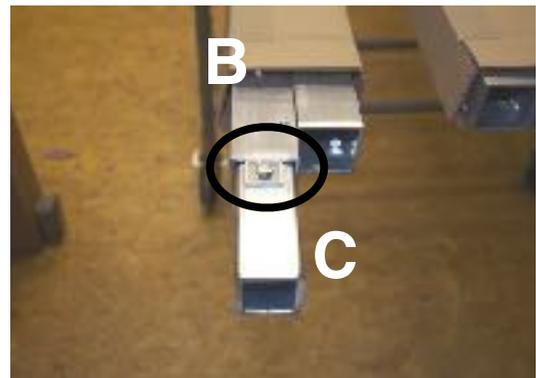
- M 8 stainless bolts
- N 8 Stainless whiz nuts
- O 8 Horizontal GMA's

Tools Needed for Assembly

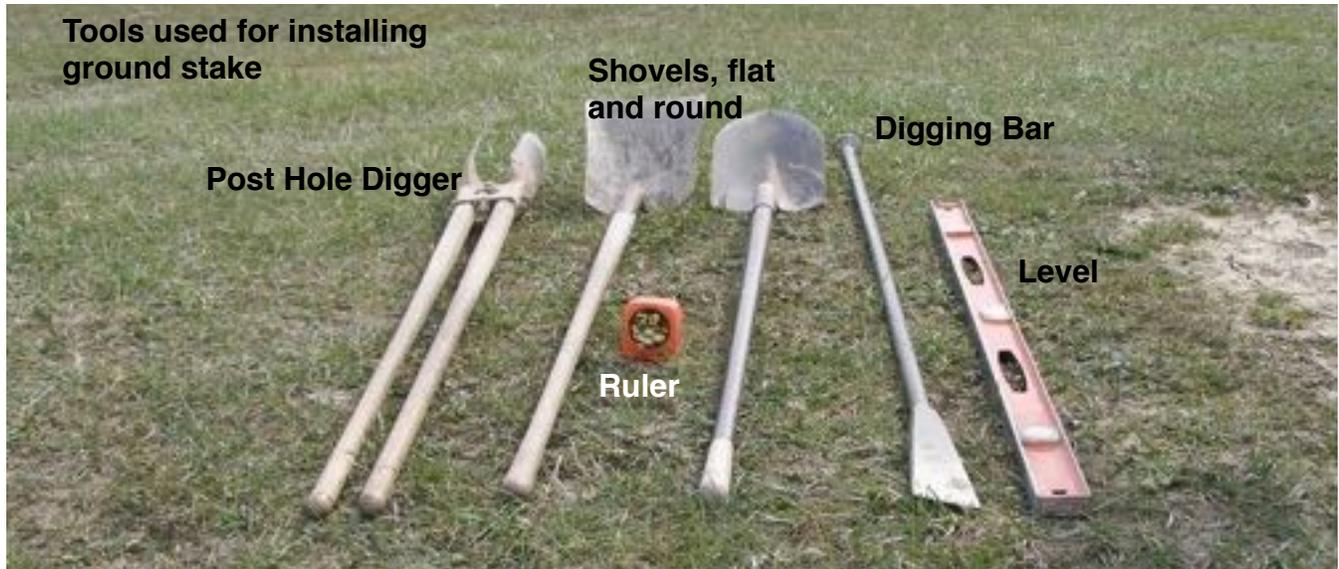
- 7/16" box wrench
- 9/16" box wrench
- Ruler, pencil
- Speed square
- 3 in 1 oil

IMPORTANT

The ground stake part C can be found inserted into the lower pole section (B). There is a stop plate (see circle) that keeps the ground stake from moving during shipping. This end should be placed into the ground. If you should accidentally install the ground stake upside down, the stop plate is removable. Simply unscrew the bolt and the plate will come off.



Troyer's 8 Unit Gourd Rack (#GR8)



The installation of a ground stake is as vital as the foundation of your home. Both need to be done correctly in order to support the housing. Please read and follow these directions. Your rack will only be as good as its foundation.

If you purchased a ground sleeve follow the sleeve instructions, skip steps 1-7.

Step 1 Installing the aluminum ground stake. Using a post hole digger, dig a hole with a minimum depth of 32"-36" deep by 10" in diameter. Poor ground conditions may warrant a larger hole and more concrete. After your hole is dug place about 4" of pea gravel into the hole.



Step 2 Measure and mark all 4 sides of your ground stake 24" from the top down (note, the aluminum ground stake is universal,

no need to worry which end you place in the ground). This will help keep your ground stake at the proper above ground height.

Step 3 You will need at least 3 bags of Ready to Use Concrete Mix, 80 pounds each.



Step 4 Empty contents of the ready mix concrete into an old wheelbarrow. Mix and handle the concrete according to the directions on the bag.

Step 5 Shovel your wet concrete into your hole to the top of your hole.



Step 6 Insert your ground stake into the cement. Hold the ground stake vertically. You firmly PUSH down several inches then pull up a bit, then push downward, slowly sinking the aluminum stake into the cement. **Stop when the cement meets the line drawn on your stake (see circle).** Next fill the hollow tube of the stake with cement. To settle the cement in the tube, gently tap the sides of the stake. Finish by sloping the cement away from the stake so no water will puddle against it.



Step 7 Wipe off any concrete from the exterior of the ground stake, check for plumb and that your ground stake is the full 24 inches above ground. Periodically check your ground stake for plumb. For best results wait at least 2 days for your concrete to cure.

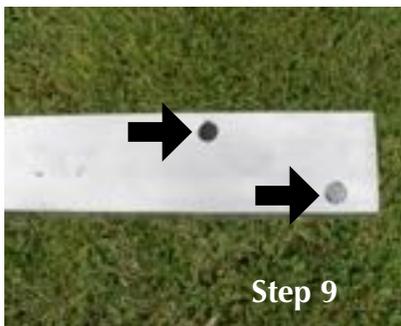


Troyer's 8 Unit Gourd Rack (#GR8)

Step 8 Assemble the pole. Notice that your pole consists of a top piece, (A) which has a splice piece installed at one end of the pole and holes on the other end, and a bottom piece (B) which has 2 square cut ends. Upturn a 5 gallon bucket and lean the bottom section so that either end rests on top of the bucket. Insert the splice piece into the bottom end piece. The splice should slide in with little force. The splice will remain in place due to gravity. (**Tip!** Spray the splice with WD 40, it will aid in insertion of splice)



Step 9 Set your pole over the bucket so that you see 1 pre-drilled large hole in the upper right and one same size hole, approximately 2" lower and to the left.

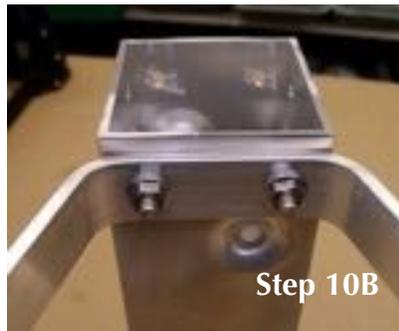


Step 10 (Please note that the instructional photos do not show the attached rope with pulleys. **DO NOT** remove your rope assembly) Assemble the hub unit. You will need your angle arms (I) the 1/4-20x 3/4 stainless bolts and whiz nuts, and the small angle piece (J) that has a hole in the center. Insert 2 of the bolts into the

side of the hub which has ONE glide button (see photo 10A), align

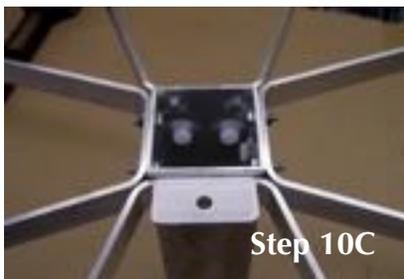


the arm so that the holes in the center of the gourd-hanging arm holes slips over the bolts on the hub. Thread the nuts on (10B)



Repeat on the opposite side of the hub.

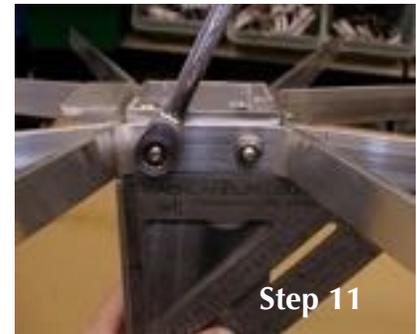
You are now going to place the arm pieces on the side of hub where you see TWO glide buttons.



One of these sides you will be attaching the small angle piece (J) with the attached rope and pulleys. For ease of assembly, place the gourd arm that will not have the extra angle piece on first.

Last add the remaining gourd arm over the bolts, then place the small angle on with the attached rope and pulleys. Thread the nuts on and tighten.

Step 11 Tighten all the nuts and make sure your arms are level by placing a speed square to the bottom of the gourd arm.



Step 12 It's now time to place the hub onto the pole. Make sure your pole is still oriented on your bucket as seen in Step 9. (Note that the top of the hub is where the arms are attached). Now align your hub so that your rope & pulley are on the same side of the pole as the two holes seen in step 9 photo. Slide the hub onto the pole and then stop when the hub clears the two pre-drilled holes.

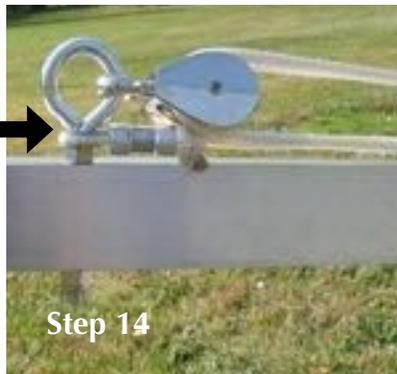
Step 13 Remove the rubber bands from the pulleys and rope. Grasp the upper and lower pulleys and pull them apart about 6". It is very important to make sure that your rope is not twisted. Your rope should look exactly like the photo step 15. If it does not your rope is twisted. You will need to turn it counter or clock wise. Once your rope appears exactly like the photo continue with step 14.

Troyer's 8 Unit Gourd Rack (#GR8)



Step 13

Step 14 Now we need to place the stem of the eyebolt into the hole in the pole. Again make sure your rope is not twisted. Remove the lock nut at the end of the eyebolt, insert it into the lowest hole, all the way thru the pole. Once the eyebolt is out the other side, thread the lock nut back on. Tighten the lock nut all the way up to the pole. This is easily accomplished by using a screwdriver or open end wrench on the eyebolt side, and using your 9/16 wrench to tighten the lock nut. Make sure that you orient the eyebolt so that open end is facing up, and that the eyebolt is parallel to the pole.



Step 14

Step 15 Oil the pulleys with any quality oil such as 3 in 1 household oil. Oil the pulley shaft, inside and outside being sure to catch all 4 pulleys. Oiling should be done every year. Failure to oil the pulleys could cause squealing.

Step 16 Install the top perch rods. You will need your 2, 10 - 24 x 1/4" set screws (G) and your 2 top perch rods (D) and the allen wrench (G). Locate the small tapped hole. Using your allen



Step 15

**VERY IMPORTANT!
OIL YOUR PULLEYS!
It will prevent
squealing**

wrench thread the set screw into the hole only deep enough to hold the set screw into place. Measure your top perch rods and find the center and mark. This will be how far you will insert each rod. Insert one rod into the lower top perch hole first. Tighten the set screw and repeat for the upper top perch rod. (**Tip!** When tightening your set screw use the shorter end of the allen wrench, it will give you more tightening power).



Step 16

Step 17 Insert the top cap. Insert the black pole cap, by gently tapping it into the top of your pole.



Step 17

Step 18 Install the rope winder (F). Measure from the bottom of the pole up, and mark the pole at 48". The rope winder came pre assembled. Undo 1 of the bolts by



Step 18



Step 18

backing off the whiz nut, and remove the bolt. Slide the open section around your pole at your mark, reinsert the bolt and thread the whiz nut back on and tighten. Make sure your rope winder is square to the pole by using your speed square.

Step 19 Unfurl your rope and walk it out the full distance. Once rope is unfurled, run your hub down to the rope winder. Notice how the rope you unfurled is becoming shorter as the hub approaches the rope winder. Wrap the remainder of the rope loosely around the rope winder.

Step 20 Stand your pole up and slide the pole over your ground stake. The pole can be installed by a single person, but please always have an extra pair of helping hands.

Step 21 Install the arm support braces (R). Each arm support brace is installed between the arms aligned to the corners of the hub. Install the braces by aligning the hole in the brace to the inner hole of the gourd arm as seen in the

Troyer's 8 Unit Gourd Rack (#GR8)



Step 20

photo step 21 and use your 1/4-20 x 3/4" stainless bolt with nut to secure into place. Once all the braces have been installed tighten all the bolts and nuts.



Step 21



Step 21

Step 22 It's time to install your gourd hanging brackets. If you choose the Vertical option you will have to enlarge the gourd hanging hole to 3/8" Each arm will hold a single GMA.

For the vertical or horizontal choice you will need your 8 gourd mounting arms (L or O), 8 bolts

and nuts and 8 hitch pins (M,N and P).

Align the large hole in the flat part of the GMA with the hole at the end of each arm. Place a 1/4 - 20 x 3/4 bolt thru the GMA, flat hanging arm and out the opposite side, and thread the whiz nut on. Make sure the GMA is level and tighten.



As seen in step 22 Horizontal. The pin of the GMA faces you. Be sure all the GMA's are level and tighten the from the bolt head.



Next place all your gourds on your GMA's. Insert the hitch pin into the pre-drilled hole as seen in the "vertical" photo above.

It's time to raise the gourds up. Wearing a pair of non slip gloves, unwrap your rope from around the winder. Stand about 3 feet from

the pole and pull on your rope. Never stand directly under gourd rack while raising or lowering. The hub should raise with very little effort. When the hub reaches the top you will feel a stopping sensation as the pulleys meet. Holding tightly to your rope you will walk to your rope winder and wrap the excess rope around your winder. Be sure no rope is falling on the ground or that it is laying over a predator guard. A climbing predator could use this rope to climb your pole and raid the nest.

That's it, you did a great job! We hope you will enjoy your new rack and that it is the beginning of a great new hobby for you and your family!

Maintenance:

Remove gourds at end of season and clean out.

If possible, remove and store your rack inside during the off season. If you remove your gourd rack and have an exposed ground stake or ground sleeve, cover the top of using duck tape (or like). This will keep water from entering (do this even if you filled your stake with concrete). Remove tape before you install the following season.

Check your rope for fraying. If your rope looks worn err on the side of caution and call us for a low cost replacement.

You can wax your pole with any quality car wax.

Oil your pulleys every year.

Thank you for purchasing the Troyer 8 Unit Gourd Rack. Should you have any questions about the installation of this product please give us a call, we are happy to help!