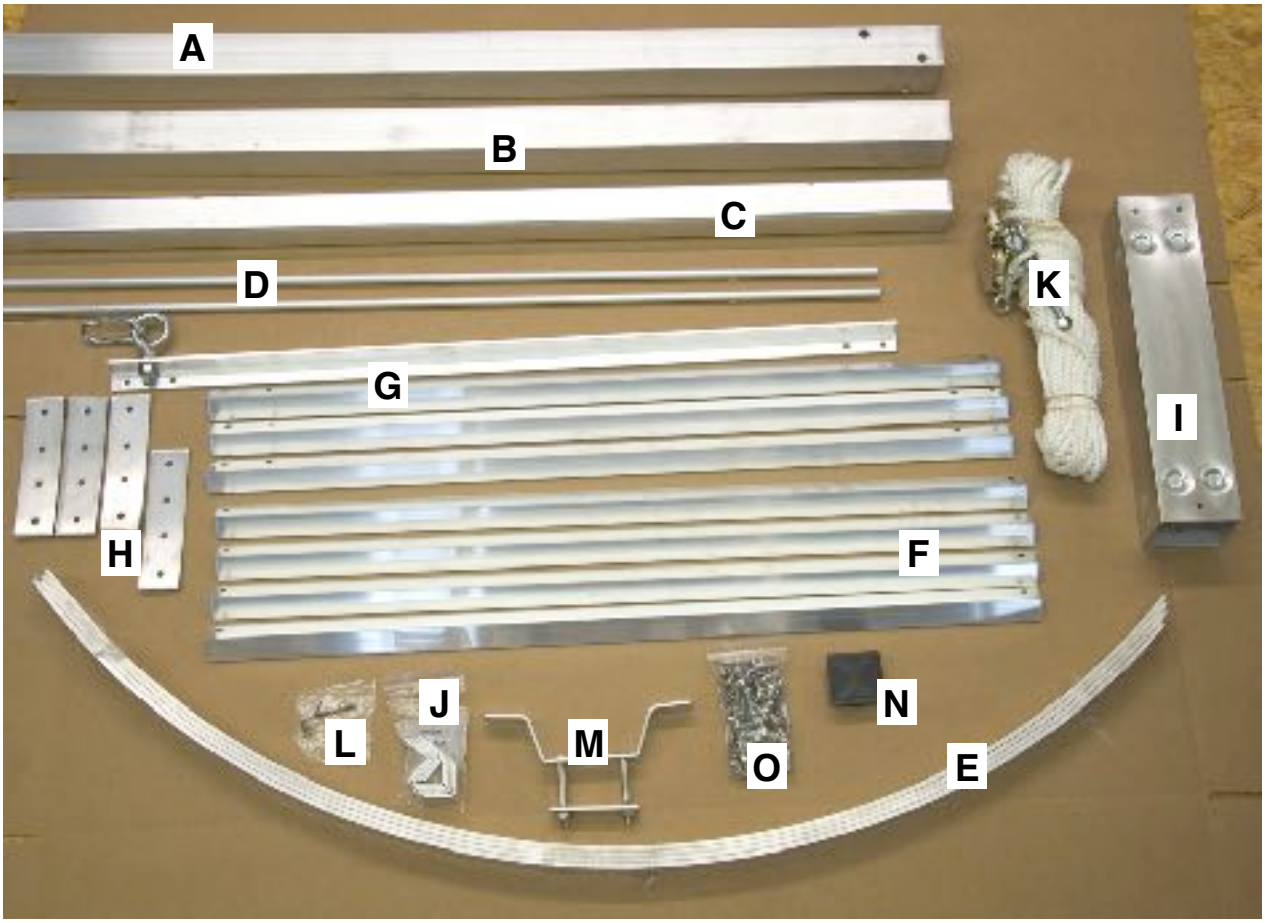
Troyer's Round Rack



Packed in the "Pole Box"

A Top of Pole (Top of pole has pre-drilled holes, opposite end has splice installed)

B Bottom of Pole (2 square cut ends)

C 48" Aluminum Ground Stake

D Top Perch Rods 48" long

Packed in the "Hub Box"

E Ring Sections 4 pieces

F Support Beams 4 pieces (have one hole on each end)

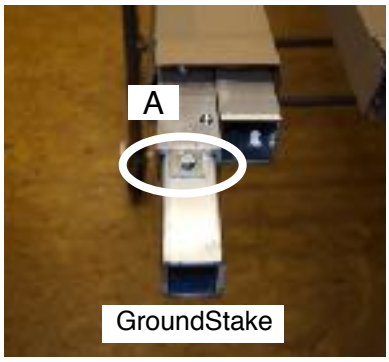
G Angle Arms 4 pieces (has 2 holes each end),
one has the eyebolt pre assembled on and a quick link attached

I Hub

K 45' of rope with attached eyebolt and pulleys

IMPORTANT

The ground stake part c can be found inserted into the upper pole section (A). 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.



Hardware Bag

H Connecting Brackets 4 pieces

J Small angle brackets 8 pieces

L 10-24 x 1/4" stainless set screws and 1 allen wrench

M Rope Winder, pre-assembled with stainless hardware

N Pole Cap

O 1/4 - 20 x 3/4" stainless nuts and 1/4-20 stainless whiz nuts; 36 pieces each

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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.

STOP

Purchased a Ground Sleeve?

Follow sleeve installation instructions and skip steps 1 – 7.

Step 1 Installing the aluminum ground stake. Using a post hole digger, dig a hole with a minimum depth 32– 36" deep by 9" in diameter. Poor ground conditions may warrant a larger hole and more concrete.

Step 2 After your hole is dug place about 4" of gravel into the hole.

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 wheel barrow. 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 Mark your ground stake using a bold marker 24" from one end. Insert your ground stake into the cement. Hold the ground stake vertically, You firmly push down several inches then pull up a fraction, then push downward, slowly sinking the aluminum stake into the cement. **Stop when the cement meets the line drawn on your stake.** 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 concrete at the base of the stake away from the ground stake so water will not puddle against it.

Step 7 Wipe off any concrete from the exterior of the ground stake, check for level on 2 sides 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.

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 the other end has holes, and a bottom piece (B) which has 2 square cut ends. Lean the bottom section so that either end rests on top of the bucket. Insert the

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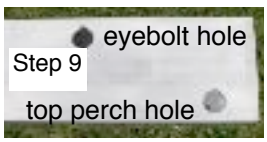
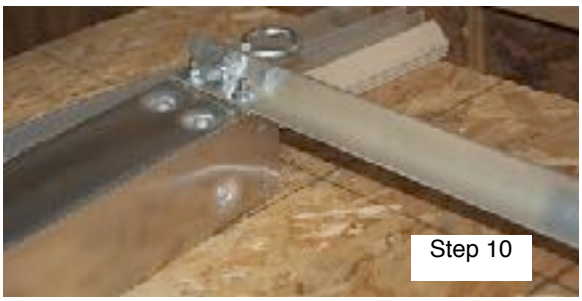
splice piece into the bottom. The splice should slide in with little force. The splice will remain in place due to gravity. TIP! Spray the splice with WD40, it will aid in inserting the splice.

Step 9 Rotate your pole till you have one large hole in the upper right and one large hole in the lower left, see photo and lay back over bucket. Place the rope winder (M) on the pole. Remove one of the nuts and bolt and slip the winder around the pole at approximately 48" above ground so that the winder sits on the top of your pole as it lays over your bucket. Replace the bolt and nut and snug the winder onto the pole.



Step 10 Set your pole aside and pull parts I, G, and F, which are used to assemble the hub. Place your hub (I) on a table (or any flat surface) and rotate your hub till you see a side that has a total of 4 dimples in it, 2 on the top 2 on the bottom.



Get the angle arm (G) that has the eyebolt pre-assembled on it and 16 of your 1/4 - 20 x 3/4 bolts and whiz nuts (O). There is only one correct way that these arms work, and the easiest way to tell is to align the holes in the angle to the hub. Insert one of the bolts from inside the hub out. Place your angle arm on to the hub so that the hole in the angle slips over the bolt. Place a whiz nut on and repeat for the other bolt.

Working from the same side you will now place one of the support beams (F) on. Begin by placing a bolt in the single hole at the bottom of the hub. Bolt is inserted from the inside of hub out. Again

this piece can only be installed one way in order to align it with the pre punched holes. The support beam connects from the single hole at the bottom

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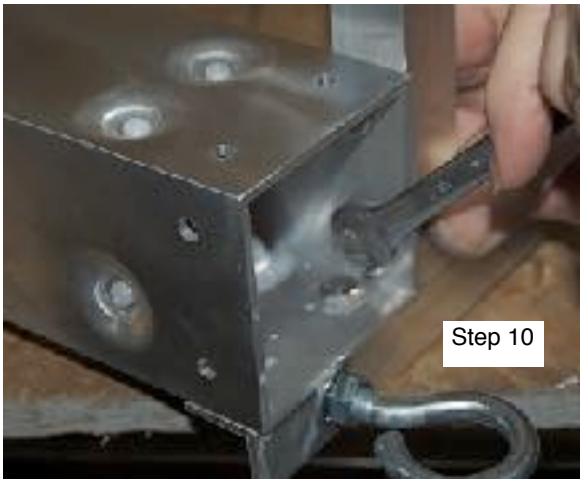
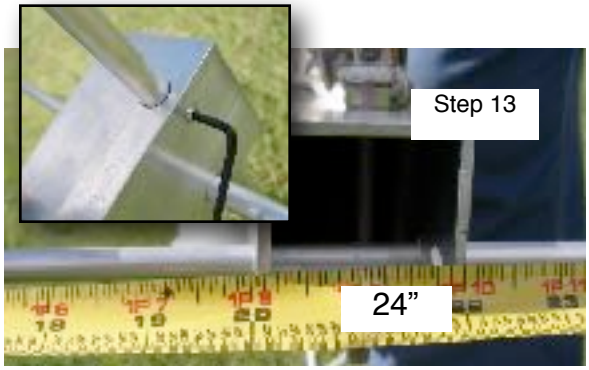
of the hub to the inner hole on the angle arm. Insert your bolt so that all the bolts are facing the same direction as those that you installed on your hub. When you have completed the section tighten all the bolts by placing your wrench on the bolt head. Continue for the other three sides. Check that all your bolts are nice and tight before continuing.



Step 11 Next place the small angle bracket pieces (J) on to the end of each of the 4 arms. You will need your brackets (J) and 4 bolts and nut (O). The small angle bracket pieces have no right or wrong way, so simply align the brackets so that one bracket goes left and one right and sandwich the bracket pieces around the end of the angle arm (where you still have an unused hole) Insert one of your bolts, being sure that you bolt is facing the same direction as the one that is used for the support arm. DO NOT TIGHTEN THE BOLTS. Repeat the process till you have all 4 arms done.

Step 12 Install the hub on to your pole. Place your pole back over your bucket, rope winder facing up. Your holes on the pole are still aligned as seen in Step 9 photo. Slide your hub onto the pole from the top of the pole downward so that the angle arm that has the connected eyebolt onto it is facing upward.

Step 13 Next you will need your 2 top perch rods (D) set screws and allen wrench (L). Measure your top perch and find the center at 24" and mark it with a pencil. Insert your top perch rod into the upper hole. Find the small drilled and tapped hole and insert one of your set screws (L) into the tapped hole using your allen wrench and tighten the set screw to the top perch rod. When tightening the set screw use the short end of the allen wrench. Repeat for the lower top perch rod. Place your black plastic cap (N) on to the top of the pole and drive onto pole using a rubber mallet (or like).



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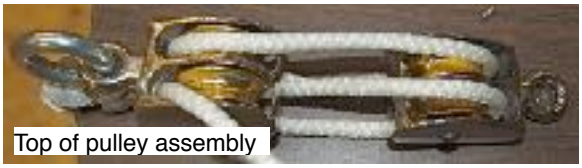
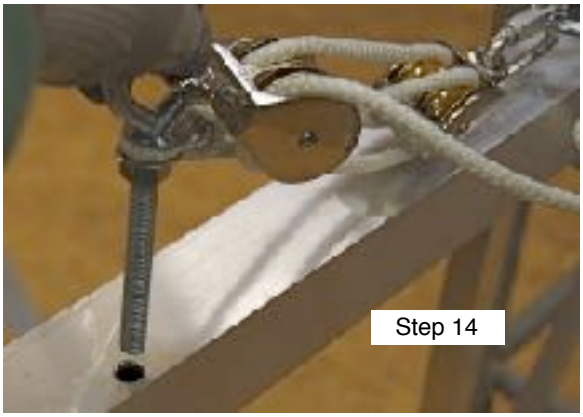
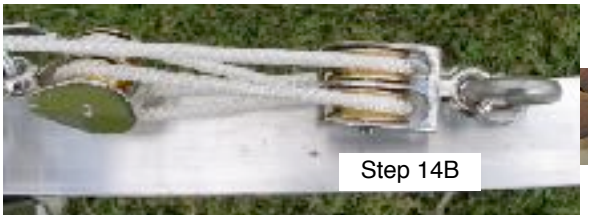
Step 14 Assemble your rope and pulleys onto the pole. Remove the rubber band around the pulleys only. Pull the upper (has eyebolt on it) and lower pulley about 6 inches apart. You will want your rope to look exactly as seen in the photo. If your quick link is not opened do so now and slip the



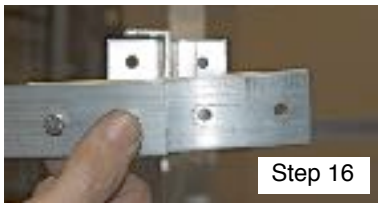
pulleys eye onto your quick link as seen in the photo. Close the quick link and tighten using a 1/2 inch open end wrench. Remove the lock nut from the end of the eyebolt and place the threaded end of the eyebolt into the eyebolt hole on the pole. Replace the lock nut back on to the end of the eyebolt, and tighten the lock nut to the pole using a 9/16" wrench. Your rope should look EXACTLY like the photo 14B.





Step 15 Remove the last rubber band from around the rope and let the rope hang freely falling towards the ground. With the aid of a helper pick up your pole with hub and slide it over your ground stake. Let your incomplete hub rest on your winder so you can complete installation.

Step 16 Adding the ring to the Angle Arms. The rings (E) have a right and wrong way (see photo). You want each of your 4 section to have the punched hanging holes face toward the ground. Begin by getting 2 of your ring sections (E) and all 4 of the connecting brackets (H) and 16 bolts and nuts (O). On 2 of the ring section you will want to bolt the connecting bracket on. Using one of your 1/4-20 x 3/4" bolt, one of the connecting brackets and one whiz nut you want to bolt the the connecting bracket on to the end of the ring section. Notice that your connecting bracket has 4 holes in it. Align the connector so that the 2 sets of holes match the end of the ring. Place the bolt into the inner hole of the ring section, with the connecting bracket to the back side of the ring, place on a whiz nut. DO NOT TIGHTEN the bolts yet. You will want to repeat this process on both ends of the ring section you are working on as well as a second ring section.



Step 17 It's time to mount the ring sections on to the support arms. Using one of your rings you just added the connecting bracket, hold the ring section up to the end of the angle arm which has the small brackets attached loosely to it. Hold up the ring section and align the holes. Insert 1 bolt into to the hole that holds the connecting bracket on the ring thru the corresponding hole of the small angle brackets. Thread on the nut. Repeat the process on the other side of the ring section you just attached. DO NOT tighten the bolts just yet.

Step 18 Go to the opposite side of the rack. Attach the other section of the ring that has the pre-assembled connecting brackets. Assemble it onto the angle arms in the exact same manner you just attached the first ring section. Did you double check to make sure your ring sections pre

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punched holes are facing toward the ground? Next attach the last two ring sections. The rings will attach to the front of the connecting brackets. Align the holes from the ring to the connecting brackets insert the bolts and thread on the nut (O) Remember not to tighten the bolts yet. Once all the ring sections have been attached its time to tighten ALL the bolts. Do this by tightening the bolts at the bolt head. Don't forget to tighten the bolts that hold the small angle pieces on too!

A completed ring section

Step 19 Double check that all 36 of your bolts are nice and tight. Unfurl your rope, letting it fall between the ring sections directly under the eyebolt at the top of the pole. Stand back out side the ring and begin pulling on your rope. Your hub will raise to the top of the pole. Once your hub has gotten as high as possible and holding tightly to your rope walk toward your rope winder and wrap the rope around the rope winder in a figure 8 configuration.

Adding gourds. This gourd rack includes Gourd Mounting Arms. To attach the GMA's Insert the bolt into the hole of the GMA, place the GMA with bolt into a hole on the Round Rack ring and thread the nut on. Evenly space them out. Do this with all 12 GMA's. Place your gourd on and slip the hitch pin into the hole of the found at the end of the GMA locking your gourd on.

Maintenance of Gourd Rack

Pole: Use any good quality car paste wax and wax your pole. Waxing can aid in the slipperiness, as well as protecting the aluminum pole from the weather elements.

Hub: Remove the arms and gourds from your rack and store inside. Place your hitch pins in the arm holes to keep from loosing them.

Rope: Check for fraying splitting or any cut marks on your rope. Note: minor fraying looks like little tufts of hair and is normal. If you are unsure of your rope replace it. Simply get in touch with us, we can supply you with a replacement rope at a reasonable cost.

Pulleys: Oil pulleys every year, it keeps the pulleys from squealing and makes raising and lowering very easy

Troyer's Birds' Paradise

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