10' x 20' Chicken Run Assembly
The Crazy Clucker's Farm Way!

STEP 1: Inventory Your Parts (you may be sending the entire unit back if key parts are missing)!

STEP 2: Wood Base Material List (which supports the tube frame chicken run).

- 6 — 2"x4"x10' ground contact treated dimensional lumber
- 12 — 3"x 7" Tie Plates (Gusset Plates)
- 144 — #10x ¾" Stainless Pan Head screws to attach gussets plates
- 24 — #12x1 ½" Galvanized Pan Head screws to attach bottom rail base plates

STEP 3: Assemble your wood base. Depending on the brand of chicken coop run you purchase, the length and width may be different.

Before You Cut Your Lumber:

1. Pre-layout one length and width section of your base/bottom rail and take measurements from that.
2. The back upright pole that goes vertically in the rear section and supports the roof structure is only slightly longer than the side rail poles. If you accidentally assemble it on the side, it will throw everything off.
3. Each base/bottom connecting joint which is located at all four corners and joints in between have a round plate that screws to the wood base. Your wooden 2'x 4" lumber is 3 ½" wide and the metal base plates are 3 ¾" wide and will overlap by 1/8" on each side of your board if you wish for the rail to be perfectly centered on your board.
4. Also, depending on your actual dimensions, you should place your front and back wood base 2"x 4" inside (in between) the outside the 20' long span as the width may exceed 10 feet.
5. Place two 10'x2"x4" end to end. You may use a 10'x2"x4" to insure they are straight before screwing a tie plate. I put 6 #10x3/4" stainless pan head screws in each side of the joint.

After The Sides Are Assembled:

1. Assemble the width board using the gusset plates same as the sides only screw a piece of scrap to join the end of your sideboard and your width board or your gusset plate may bend when flipping it over to plate the underside. At this point all boards are cut to fit and you will have two end and side boards assembled.
2. Loose assemble your width & length "L" assembly's together and square them by measuring from the front left corner to the right rear corner and vice versa. Both measurements should be equal. Then fasten your top gusset plates with 12 screws in each plate.
3. Carefully prop both right side or left side long ends up with something long enough to allow you under to screw the bottom plate to the joint. Also prop a board at the center joint so that it doesn't weaken the strength of the joint.

STEP 4: Assemble your base/bottom rail. Each base requires 2 #12x11/2" galvanized pan head screws. First assemble the base rail system then fasten them down. You'll need to predrill each hole through the gusset plate.

STEP 5: Assemble the support rail tubing. I did not film this part since it was self-explanatory as well as very simple and easy to do. It's the second most satisfying part of the project and comes with a sense of accomplishment. It goes very fast. Of course, the most satisfying part is when you finish it!

STEP 6: The Netting/Chicken Wire. This is no doubt the hardest part no matter how you do it. There are three basic ways, and you can use a combination of all three.

1. Zip Ties: Using zip ties is by far the easiest method to attach the chicken wire to the frame, but it comes with a cost; you'll be redoing it as the plastic zip ties will break down in the weather over the next year and begin to fail. Then you'll need to replace them with chickens in the coop. The chickens themselves aren't a bother, but their mess certainly is. Plus, it will become an annual job until something more suitable is used.
2. Rabbit Cage "J-Clips": They are almost as fast as zip ties and are very permanent. Sometimes it is a bit of a challenge to attach two wires together using J-Clips, but you'll develop the knack.
3. Utilizing the Chicken Wire loose ends: This is a much slower process but looks the best and cost you nothing to do. Simply wrap the netting (chicken wire) around the pipe and tie the loose ends back around the wire loops to hold it in place.
4. Note: With all three methods there are still occasions you'll need wire to tie the bottom to the rail in the front and rear of the unit or if you use method No. 3, you'll need wire to seam together the ends that are not cut such as where two chicken wire panels butt up together. The roll of chicken wire is wrapped with a coated wire that contains the roll from unrolling. I'm guessing, but there seems to be at least 20-30 feet if not more that you can utilize.

In the last two units that I feature in the video the chicken wire is 6 feet tall and fits perfectly in between the "rafter" poles which form your roof section. So, I ran my chicken wire from the bottom of one side then up and over the roof's ridge pole and down to the bottom of the other side. This gave me three panels as the pen is actually 18+ feet long. In this instance I cut my wire the length of the pen which worked out giving me a few inches left over to trim.

With the first two pens I built, the chicken wire was only 3 ½ feet tall so I ran the wire over the roof rafter sections lengthwise running parallel with the ridge pole. So, counting the sides with the roof, there were five panels that covered the sides and the roof. I should note it first appeared it would not be sufficient to fully cover the roof but given the direction the wire was rolled out the chicken wire is very stretchy and using the j-clips made it a snap. If you wanted to use wire instead of j-clips you could use a few zip ties to hold it in place until you had the wire wrapped around it.

Attaching the chicken wire on the front and back is much the same as the sides only smaller pieces. The rear goes pretty fast, but the front is divided into four sections counting the door itself. At least the door you can remove and assemble on a bench or table.

To attach the chicken wire to the bottom rail I used wire. This was the case around the entire perimeter.

STEP 7: Latch(es). Don't expect much in the way of latches to secure your pen. Realistically the pen is secured with chicken wire (netting) which is not the most secure anyway, but suitable to keep your birds safe from most predators as well as contain your chickens. The latches to the first two pens were better and were the flip type which are easier to deal with, especially when wearing gloves in the winter. The second two pens were much less expensive and provided a latch that would be harder to deal with, especially with gloves on. So, I made my own flip latch from a piece of scrap aluminum I had. I have a video on that and it's not nearly as hard as you think.

Step 8: Covering your roof. Both companies provided a 6'x20' "fly" to cover the roof. The fly only covers a small section of your pen, and we preferred it all to be covered. Over the years we've been through a lot of "Tarps" to utilize as roof coverings and the saying "you pay for what you get" certainly rings true! This is regarding the thickness of your tarp and the thicker the longer it will last. We use a 12'x20' 16mm tarp to get the most bang from our buck. Yes, it's much more expensive, but it's a lot of work putting a tarp on your pen not to mention you'll have a million blue strings flying around as your cheap tarp deteriorates. Luckily none of our chickens got an impacted crawl when we were using them. Yes, at some point we all start at the bottom and learn as we go.

STEP 9: Anchor the pen down! Especially if you have it fully covered with a 12'x 20' tarp, because with one good wind and its on its way back to China! This is not to protect it against tornados, just high winds. You can get a ground anchor at most any box lumber store. Personally, I had several three feet long pieces of rebar and drove it in the ground diagonally at each corner and tied it to my pens. I don't know what the wind rating is or what it will sustain, but it's better than nothing and what I had available.