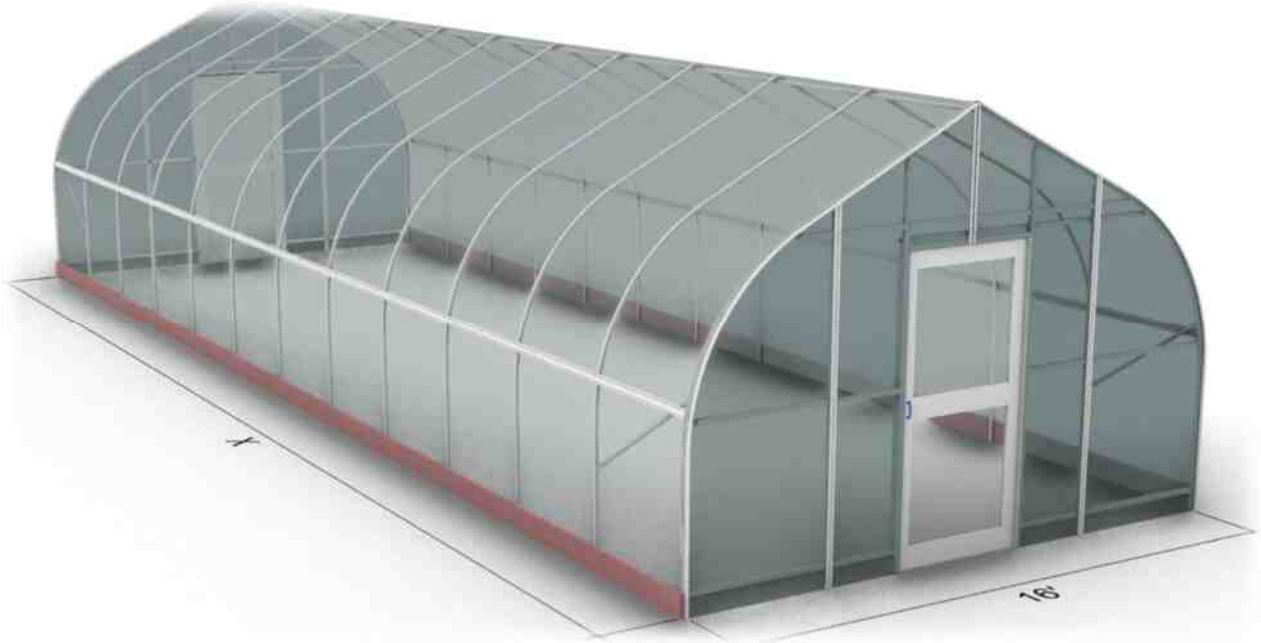


Bobcat Greenhouse Assembly Instruction Manual

40 Londonderry Tpk., Hooksett, NH 03106 • Phone: 1-877-746-6544
Email: customerservice@rimol.com • Web Site: <https://www.rimolgreenhouses.com/>



Materials Included

Refer to the separate “pick” list for details on part numbers and quantities.

Additional Tools Recommended

- Cordless drill or impact driver
- 8’ step ladders
- Utility knife
- Clamps
- 4’ level
- 100’ or longer tape measure
- Deep socket set with an adaptor for your drill
- Sledgehammer
- Sharpie markers
- Circular saw with wood blade if wood framed ends
- Jigsaw or reciprocating saw with metal blade for polycarbonate or steel framing
- Extension cords

RGS provides a care kit with a ground post driver, a 5/16” magnetic driver for TEK screws and wood-mate screws, a line level, a 3/8” drill bit and mason line.

Always refer to your pick lists for parts to be used in each step of the construction process.

READ THROUGH EACH SECTION OF THE MANUAL FIRST BEFORE YOU ENGAGE IN THE ASSEMBLY PROCESS. THIS WILL HELP YOU FULLY UNDERSTAND THE CONSTRUCTION PROCESS.

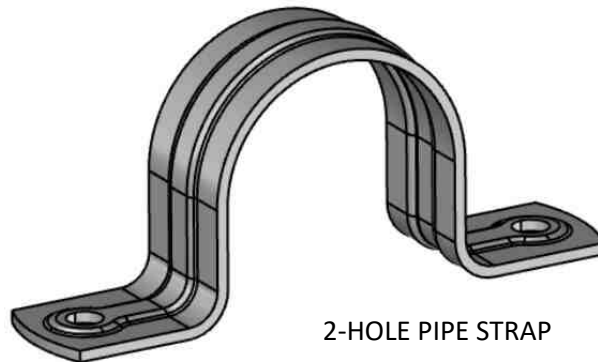
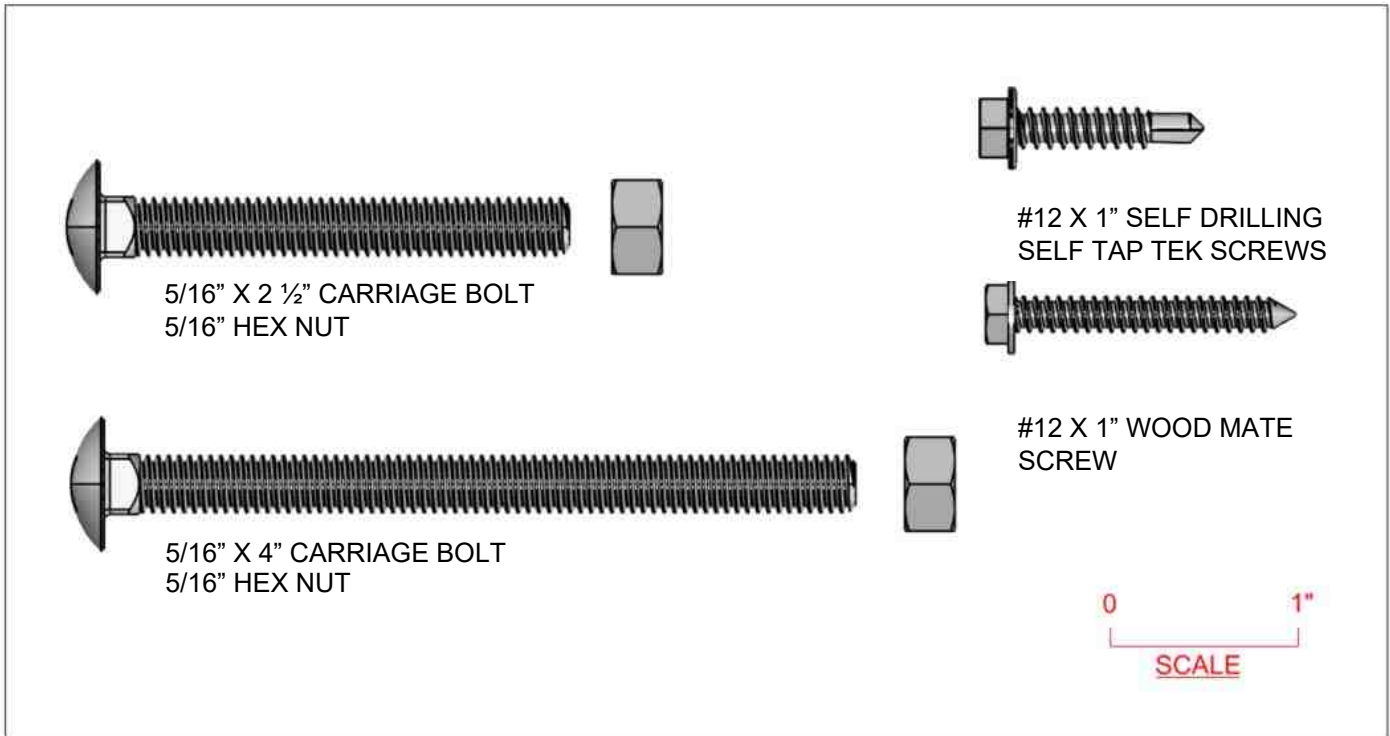
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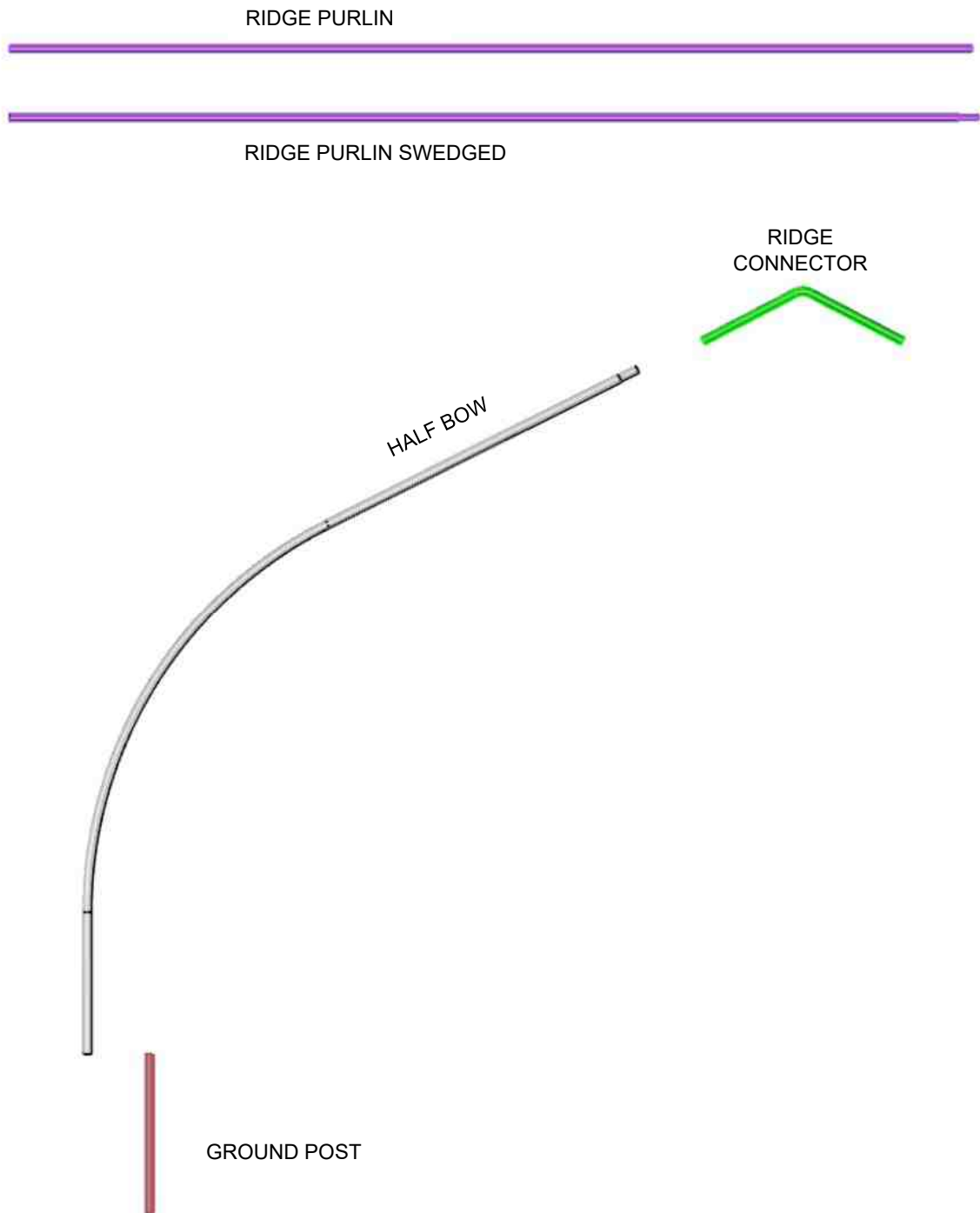
PARTS LIST

Description	Part Number
5/16" HEX NUT	FC163104+LH
5/16" X 2-1/2" CARRIAGE BOLT	FC21263+LH
5/16" X 4" CARRIAGE BOLT	FC21269+LH
#12 X 1" WOODMATE SCREW	FC31123+LH
#12 X 1" SELF DRILLING/SELF TAPPING TEK SCREW	FC31818+LH
1-5/8" 2-HOLE PIPE STRAP	FC44613+LH
1-3/8" BRACE BAND	HBB138+LH
16' BOBCAT HALF BOW	RGS16BOBBOW+LLL
4' LONG GROUND POST	RGS16GP+LP
16' BOBCAT RIDGE CONNECTOR	RGS16RC+LP
RGS CARE KIT FOR 1.66 GROUND POST	RGSCARE166+
RIDGE PURLIN 12'-2" HOLES DRILLED EVERY 4'	RGSRP12'2"@4'+LSB
RIDGE PURLIN, SWEDGED 12'-3" HOLES DRILLED EVERY 4'	RGSRPSW12'3"@4'+LSB
WIND BRACE FOR 4' BOW SPACING (54" LONG)	RGSWB34+LP

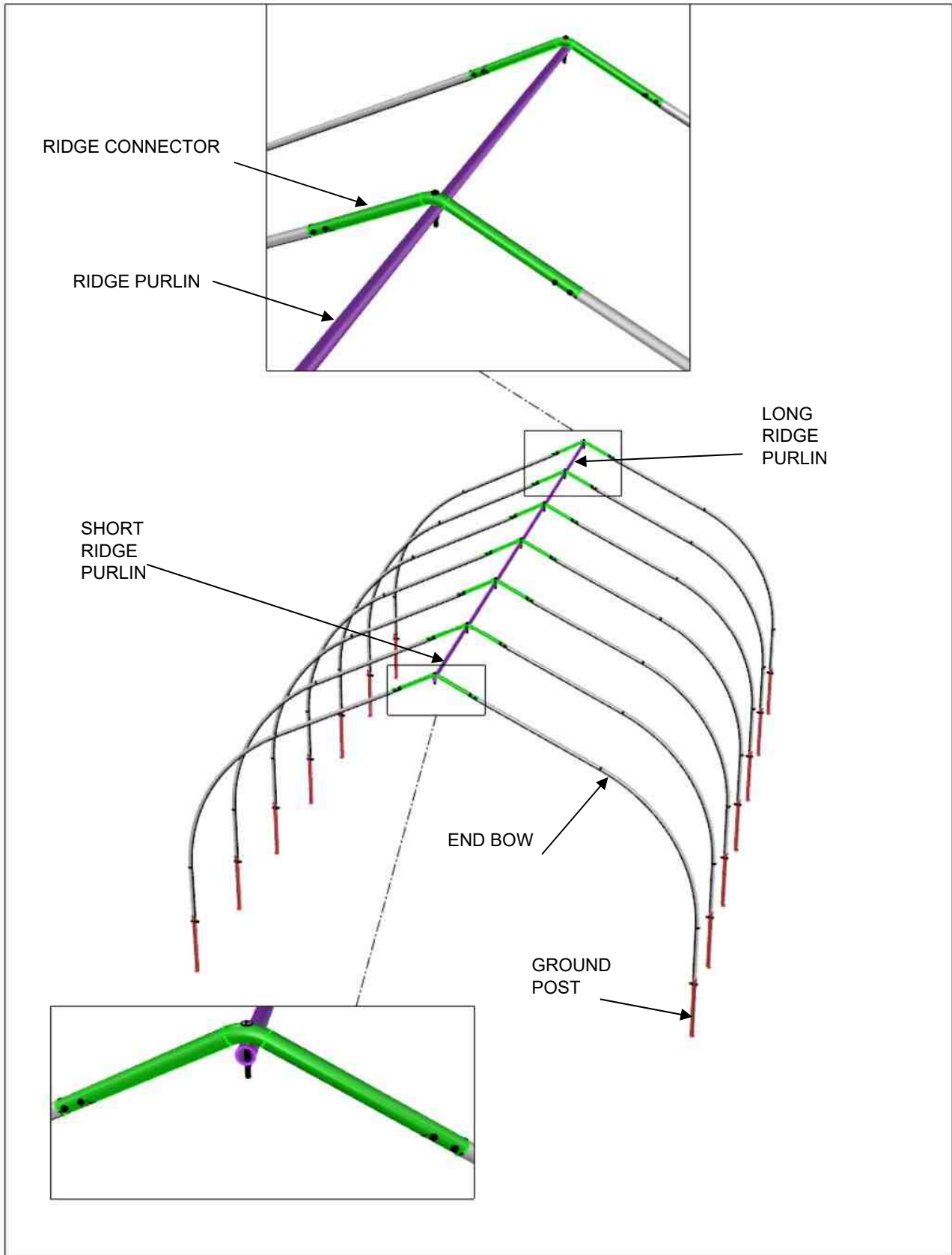
ILLUSTRATED PARTS LIST



ILLUSTRATED PARTS LIST- CONTINUED

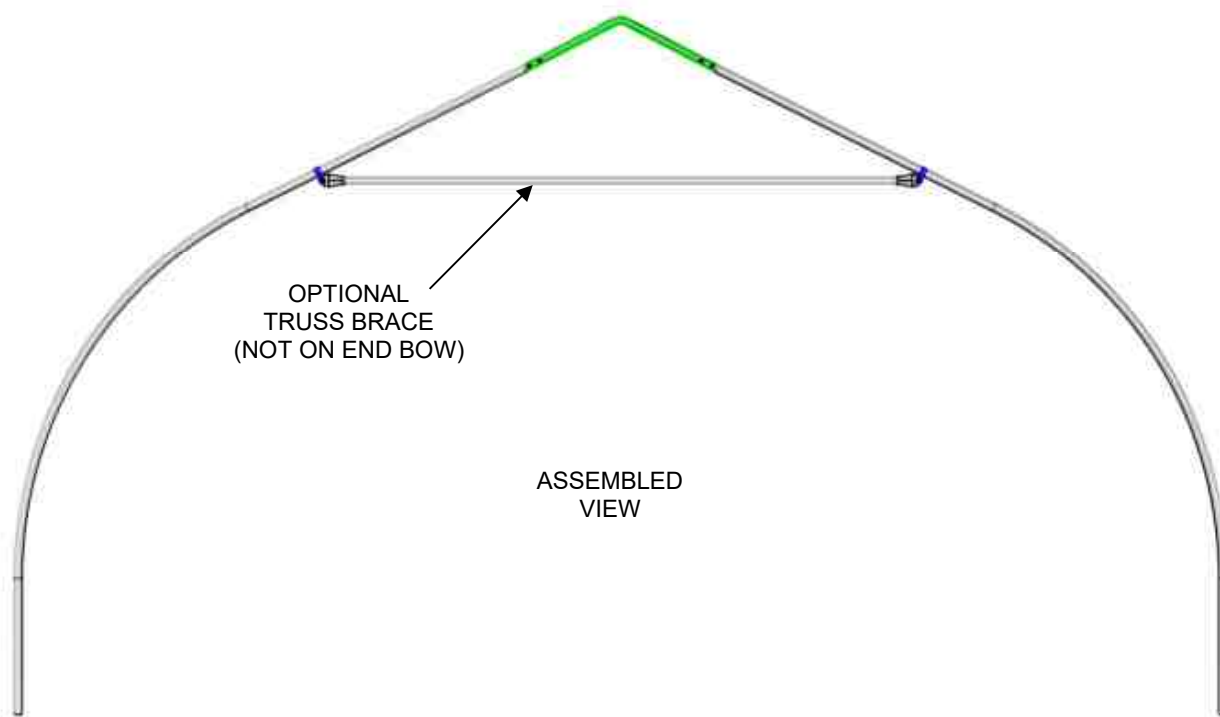
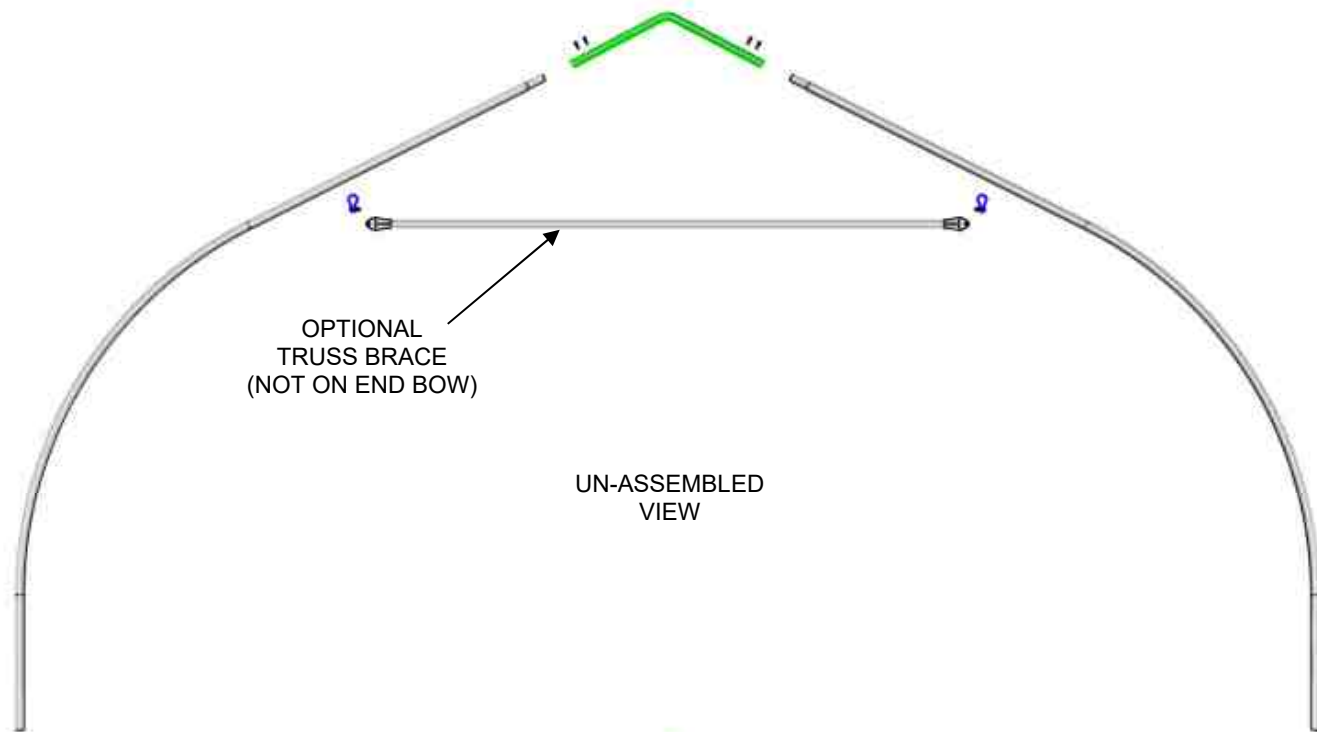


ILLUSTRATED PARTS ASSEMBLY



ILLUSTRATED PARTS ASSEMBLY CONTINUED

BOW ASSEMBLY



ASSEMBLY INSTRUCTIONS

STEP 1 LAYING OUT YOUR GREENHOUSE AND INSTALLING GROUND POSTS

Parts Needed for STEP 1

Ground Post 3' Standard or Optional Ground Post
RGS CARE KIT CONTAINS:

- *Mason Twine*
- *Line Level*
- *Ground Post Driver*
- *5/16" Magnetic Driver*
- *3/8" Drill Bit*
- *Roll 2" Poly Repair Tape*

STEP 1.0 Make sure your site location is as clean and level as possible. A level greenhouse is especially important from end to end, and the site must not have more than a few inches of height difference. If you have rocky or very hard soil, you should consider either renting a power auger or digging a continuous trench and backfilling it with clean soil.

RGS CARE KIT (*mason twine, 5/16" magnetic driver for screws, line level and the ground post driver*)



1.1 Layout your ground posts. Refer to your pick list and determine how much of your ground post will be in the ground and out of the ground (See Figure 1.2). The bolt holes are at the top of the ground post. Make sure your ground post is plumb, and the holes at the top of the ground post are facing inside and outside of the greenhouse.

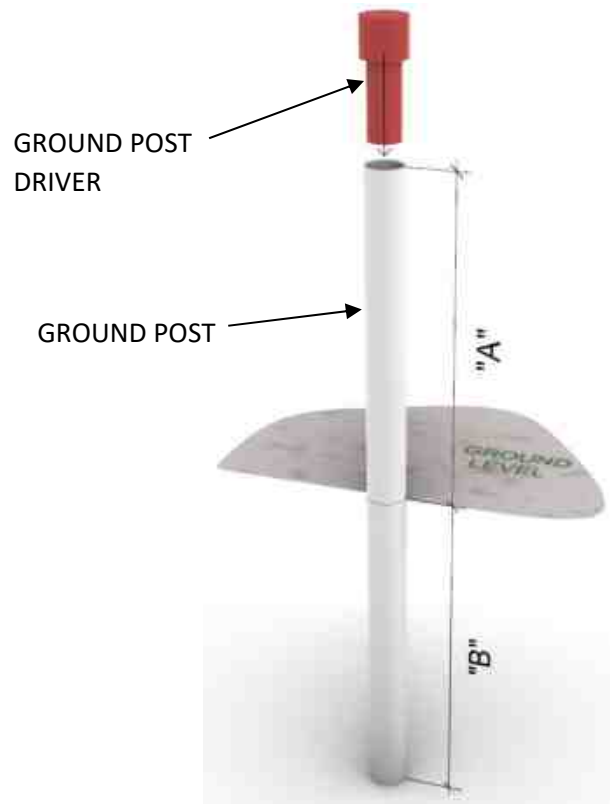


FIGURE 1.2

GROUND POST (LENGTH)	ABOVE GROUND DIM A	BELOW GROUND DIM B	RGS PART#
4'	24"	24"	RGS16GP
6'	36"	36"	RGS16GP@6

- 1.2 Determine a corner of the greenhouse, and using the ground post driver and a sledgehammer, bang the ground post into the ground.
- 1.3 Install the next corner ground post the length of your greenhouse. The most common lengths are typically 48', 72', 96', but your greenhouse may be a different length. The dimensions of the greenhouse are "on center" dimensions, so you are measuring from the center of each post to get your lengthwise measurement.
- 1.4 To get the 3rd corner ground post correct, you will need to use two tape measures to check the measurements of the opposite corner and the ground post across the width.
- 1.5 To get the last corner post correct you will also use two tape measures to figure the length and the width.
- 1.6 Check the diagonal measurements of each of the opposite corners. They should be within 1" of each other. Equal-length diagonal lengths will ensure the greenhouse is square. The diagonal measurements are as follows for each length greenhouse.

16' wide structure 48' = 50' 7"

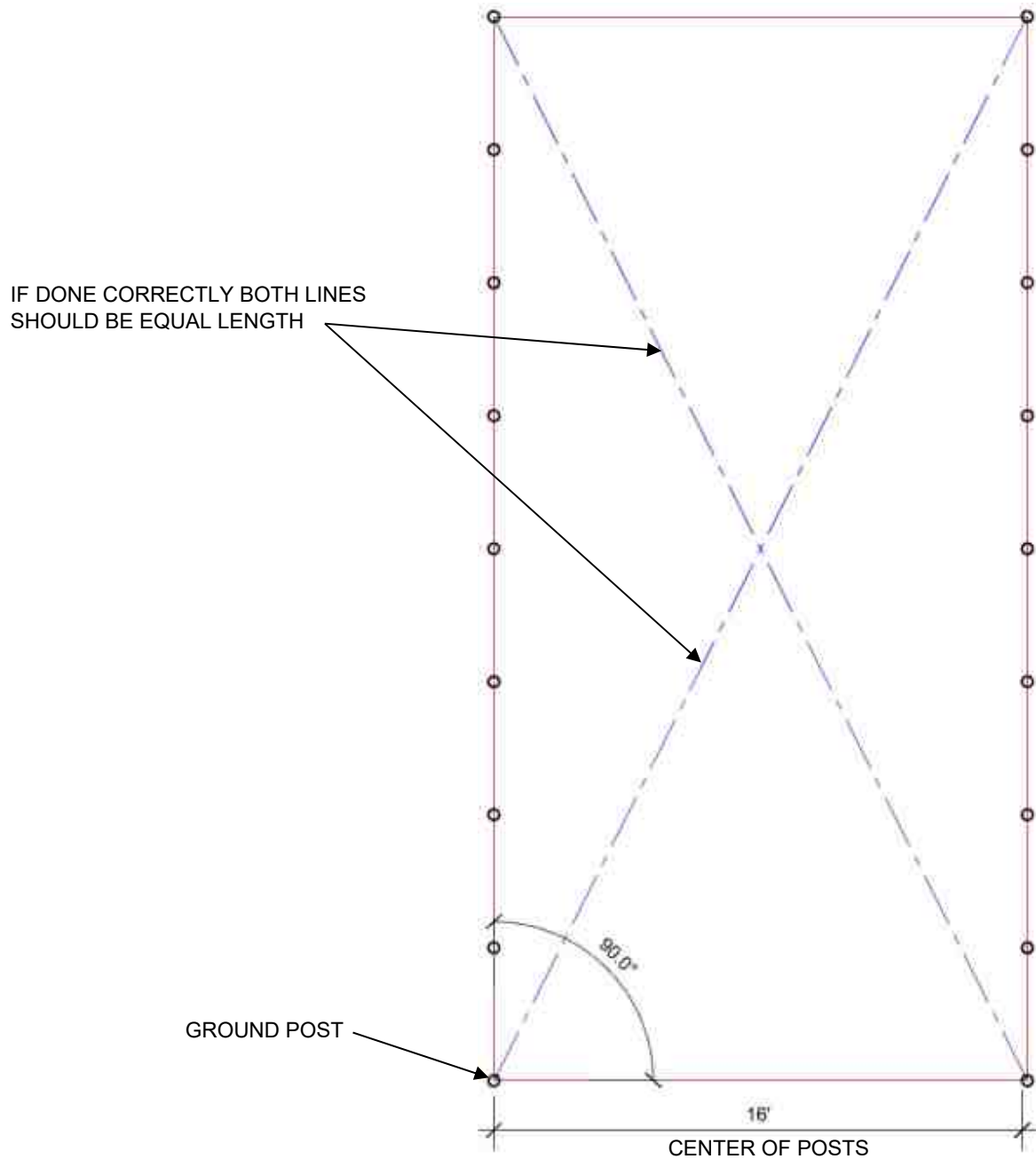
16' wide structure 72' = 73' 9"

16' wide structure 96' = 97' 4"

Tip: The way to determine the diagonal measurement is to use formula $C^2 = A^2 + B^2$

$(A \times A) + (B \times B) = (C \times C)$.

A is the width of the greenhouse, B is the length of the greenhouse and C is the diagonal of the greenhouse. For example, $(16 \times 16 = 256) + (48 \times 48 = 2,304) = (2,560$, then take the square root of this which is 50' 7")



1.7 After the four corners are set and the ground posts are level and plumb, you are now ready to install the remaining ground posts. The ground posts are located 4' on center. Using your long 100' tape, measure and mark the locations of each ground post on the string lines.

1.8 Using the twine and a line level, run a string line from one ground post to the other ground post. Run the string line around the holes at the top of the ground post. Pull the twine tight to get an accurate reading. We provide a line level for you to make sure your string lines are level, however for greenhouses 96' or longer, we recommend using a laser level or a transit.



Tip: Alternatives to using the ground post driver: You can purchase a metal fence post driver from a hardware store or fence company (these are useful when driving in taller ground posts that are 6 ft. or higher and cost around \$40) or you can rent or buy a gas-powered post driver, which is the most efficient way to install ground posts.



If you have plated ground posts, refer to Figure 1.3 and Figure 1.4 below for attaching the ground posts to concrete.

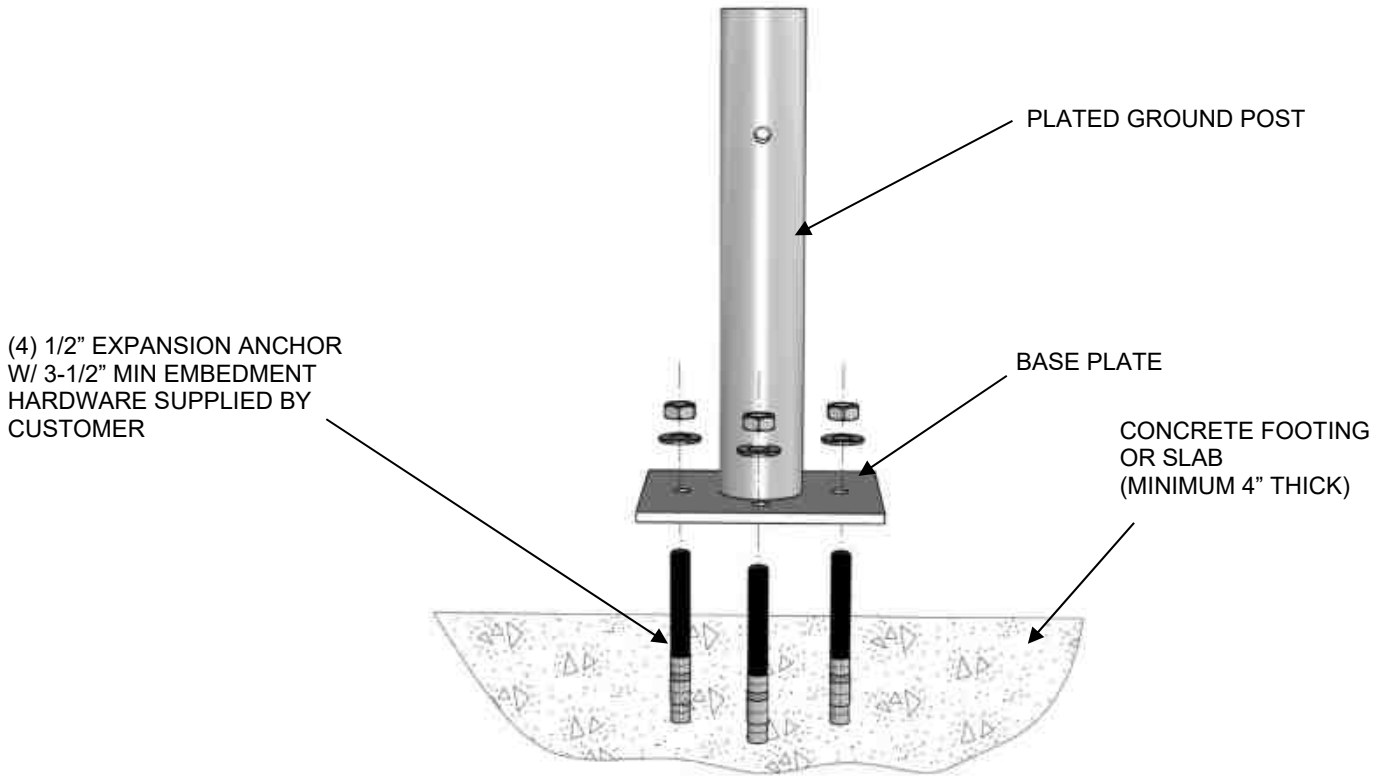


FIGURE 1.3

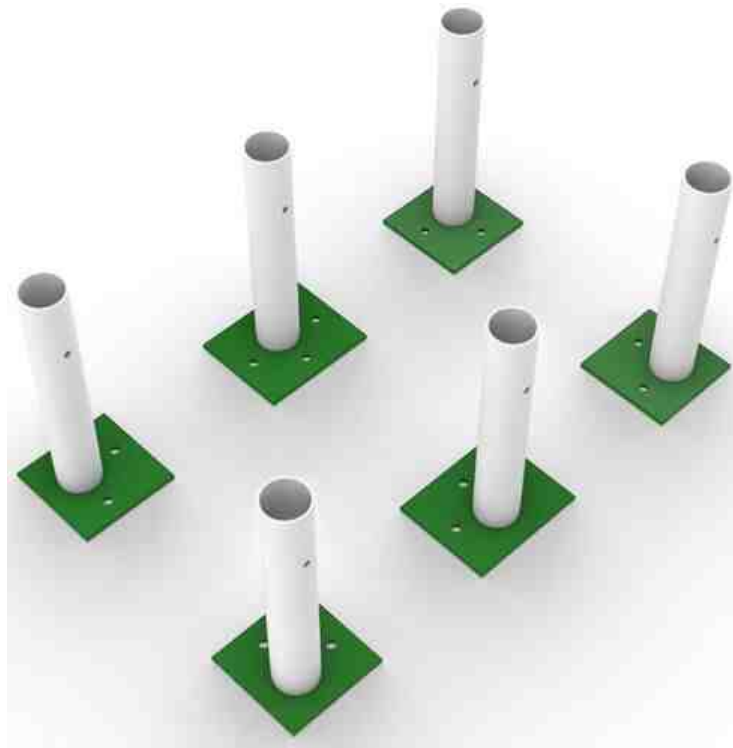


FIGURE 1.4

STEP 2 BOW ASSEMBLY

Parts Needed for STEP 2

Half Bows

Ridge Connector

1" TEK SELF DRILLING SCREWS

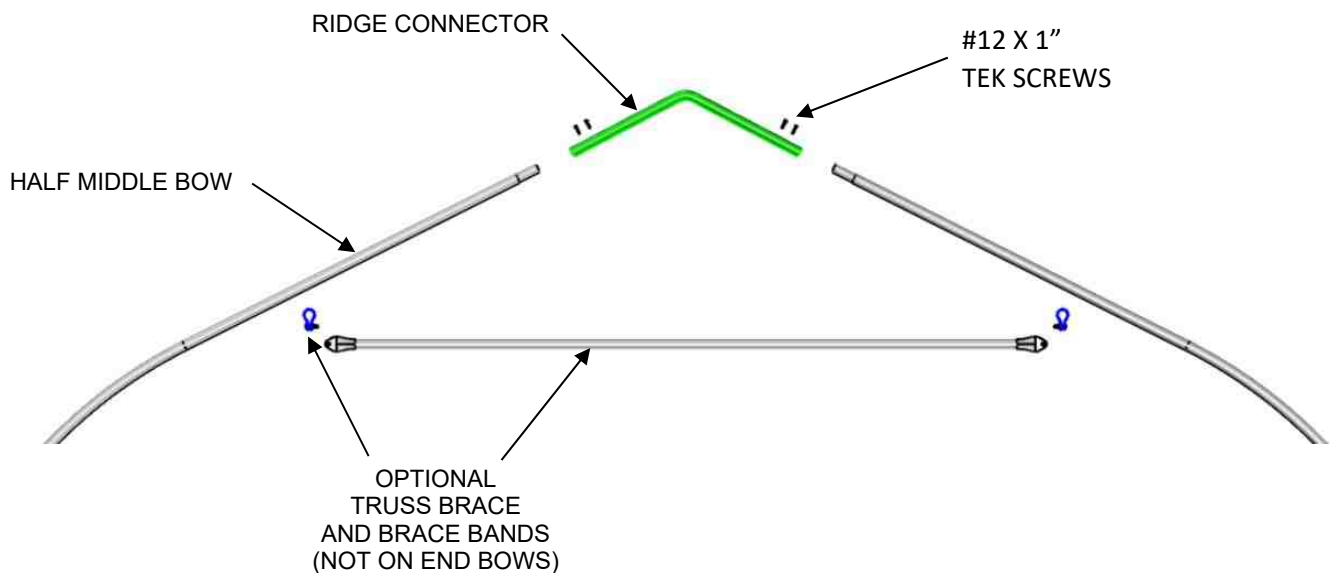
5/16" Driver (provided)

STEP 2.0 Assemble the half end bows and half middle bows to the ridge connector.

Optional: Attach the truss support bow assembly (on all bows, except end bows).

STEP 2.1 Lay out your bows and ridge connector on a flat and clean surface. The bows will insert into the ridge connector. See Figure 2.1

FIGURE 2.1



BOW ASSEMBLY

STEP 3 INSTALLING BOWS INTO GROUND POSTS

Parts Needed for STEP 3

Bow Assemblies

5/16" X 2-1/2" Carriage Bolts and Nuts

1-3/8" Brace Band

3.1 The first bow assembly that will be installed into the ground posts is the END bow assembly. END bows will have two holes on each side for attachment to ground posts.

Tip 1: Before you assemble the bows onto the ground posts, slip a brace band onto the end bow and first bow of the greenhouse. The brace bands will be used later to fasten the wind bracing in the 4 corners.

Tip 2: If you have purchased the truss support option, it is much easier to assemble the trusses to the bow assemblies on the ground before you install them into the ground posts.

NOTE: End bows do not use truss supports – framing members are used instead.

Do not tighten the brace bands on the truss supports until they are assembled into the ground posts. See Figure 2.2

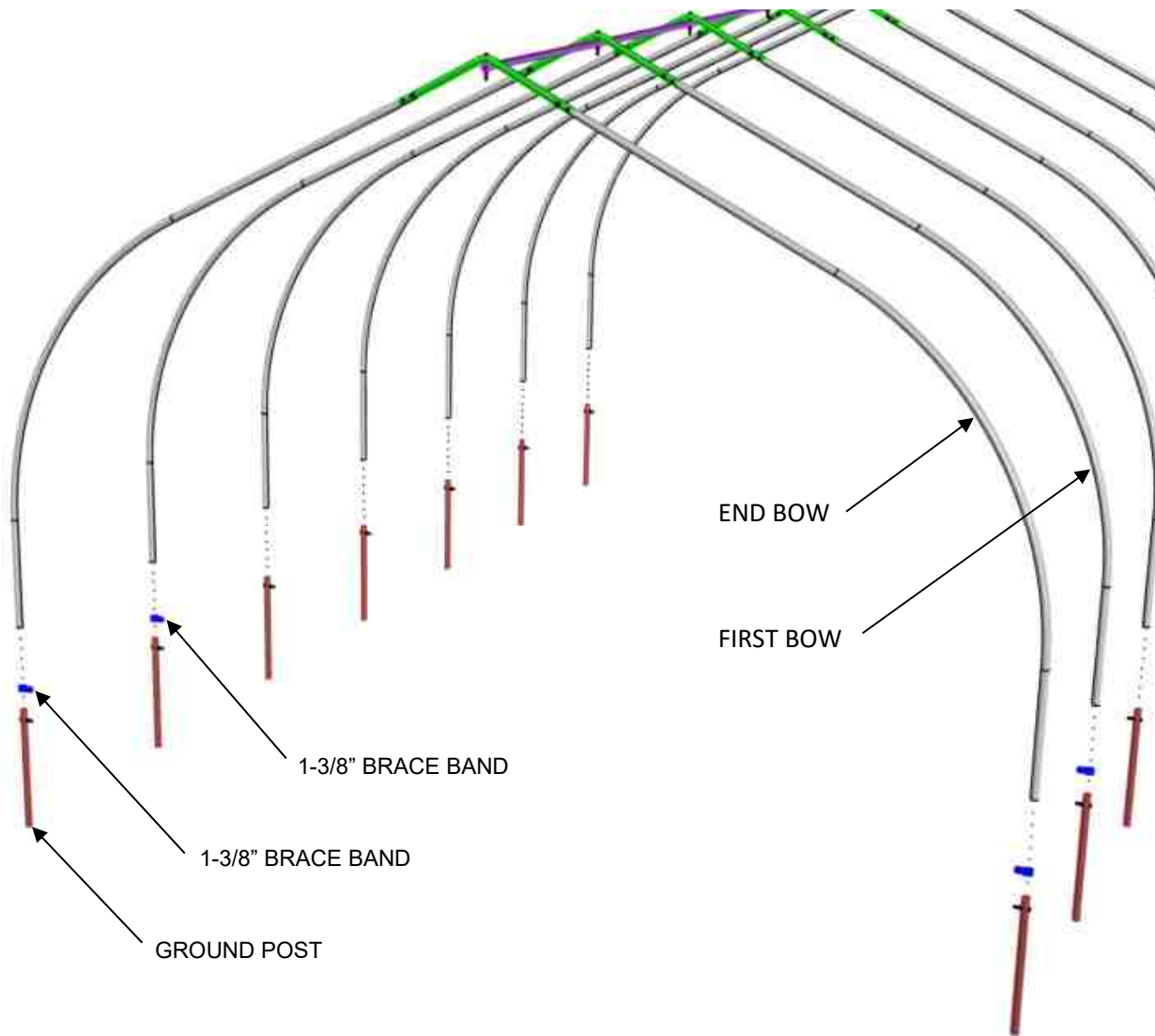


FIGURE 2.2

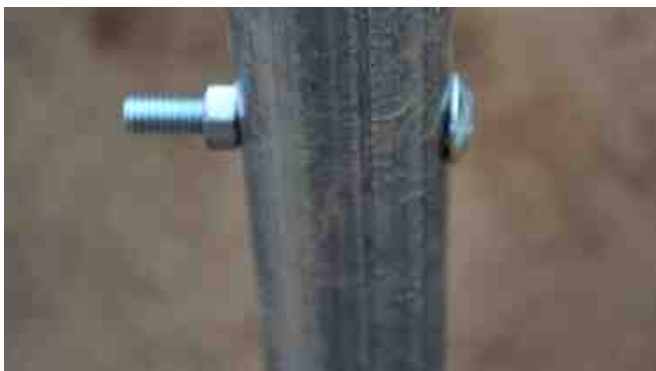
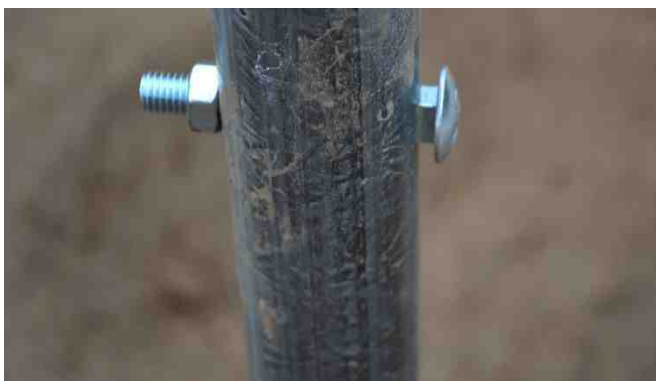
3.2 With two people, lift your bow assembly into the ground posts and attach with the 5/16" X 2-1/2" carriage bolts and nuts.

3.3 Install the remaining middle bow assemblies until you get to the other end of the greenhouse.



If the holes of the ground post and bow do not line up, use a pipe wrench to turn the ground post. If the holes are slightly off with the inserts, you can use a drift pin or a small screwdriver to move the insert to attach the bolt to the assembly.

Impact drivers work well with this process, and you want to make sure that the square part of the carriage bolt is sucked into the ridge connector and ground post.



STEP 4 PURLIN INSTALLATION

Parts Needed for STEP 4

Ridge Purlin

5/16" X 4" Carriage Bolts and Nuts

Wooden Jig

4.0 Install the ridge purlin (See Figure 4.0). The ridge purlin has holes drilled every four feet (unless you have special bow spacing for your greenhouse). All the ridge purlins are 12' 3" with a swaged end except for the last purlin. The last purlin does not have a swaged end and is either 12' 2", 8' 2", or 4' 2" depending on the overall length of the structure. Attach using 5/16" x 4" carriage bolts and nuts through each connection. The ridge purlin should be installed under the ridge connector. The square shank of the carriage bolt head must be drawn down by tightening nuts so that the head is flush with the ridge connector.

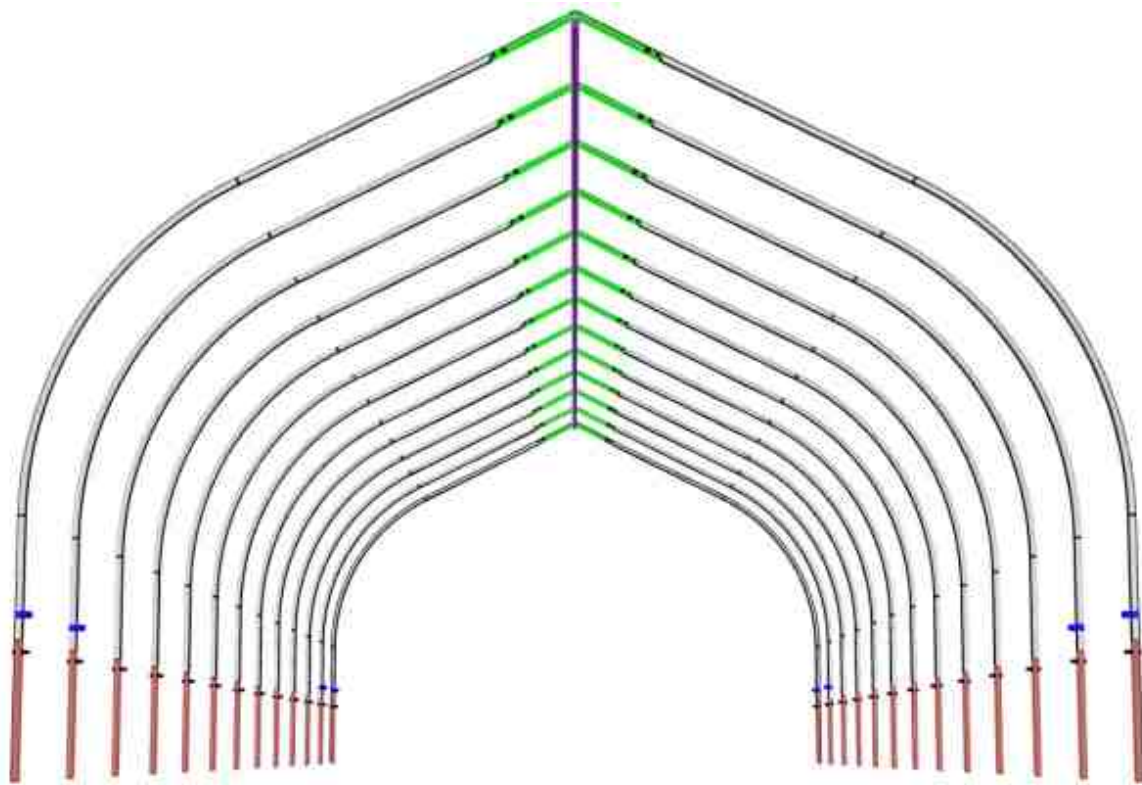


FIGURE 4.0

STEP 5 WIND BRACE INSTALLATION

Parts Needed for STEP 5

Wind Braces

Brace Bands

Bolts and Nuts as Per Previous Instructions

5.0 Wind braces are 54" long and attach from the end bow to the first bow and from the first bow to the second bow in all four corners using brace bands, bolts and nuts as per the previous instructions. See photo below.

The final item to install on the frame will be the four wind braces that go into each corner. Make sure that your frame is plumb as you install the wind braces with the brace bands, carriage bolts and nuts. The wind braces are 54" long. See installation below. Note the wind braces on the end bows should be about 60" above the ground.



Standard wind kit bracing shown.

STEP 6 BASEBOARD INSTALLATION

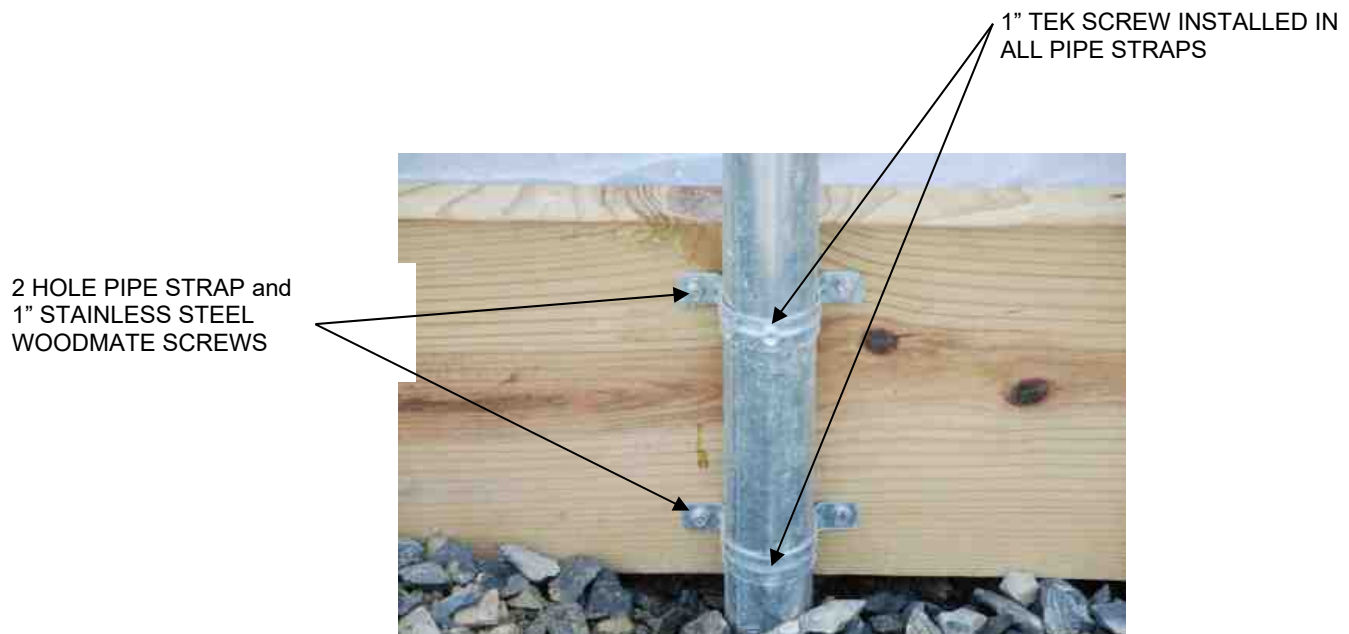
Parts Needed for STEP 6

Large Baseboard
2-Hole Pipe Strap
1" TEK Screw

Plumb Kit
3/8" Drill Bit Provided
Carriage Bolt

6.0 It is recommended to use as large a baseboard as your budget allows. Either 2 x 10 or 2 x 12 lumber is recommended. Attach your baseboards to the frame at your desired height using two 2-hole pipe straps per ground post connection. Insert 1" TEK screw through each pipe strap to secure it to the frame of the greenhouse. See Figure 6.1

FIGURE 6.0



6.2 On the ends of the greenhouse, it is recommended to drill a 3/8" hole using the bit provided through the baseboard and ground post to bolt the baseboard onto the ground post. Use Carriage bolt on ends only. See Figure 6.2

FIGURE 6.2



STEP 7 FRAMING END WALLS

Parts Needed for STEP 7

- *Mason Twine*
- *Plumb Bob*

7.0 First, make sure the greenhouse is plumb. See Figure 7.0

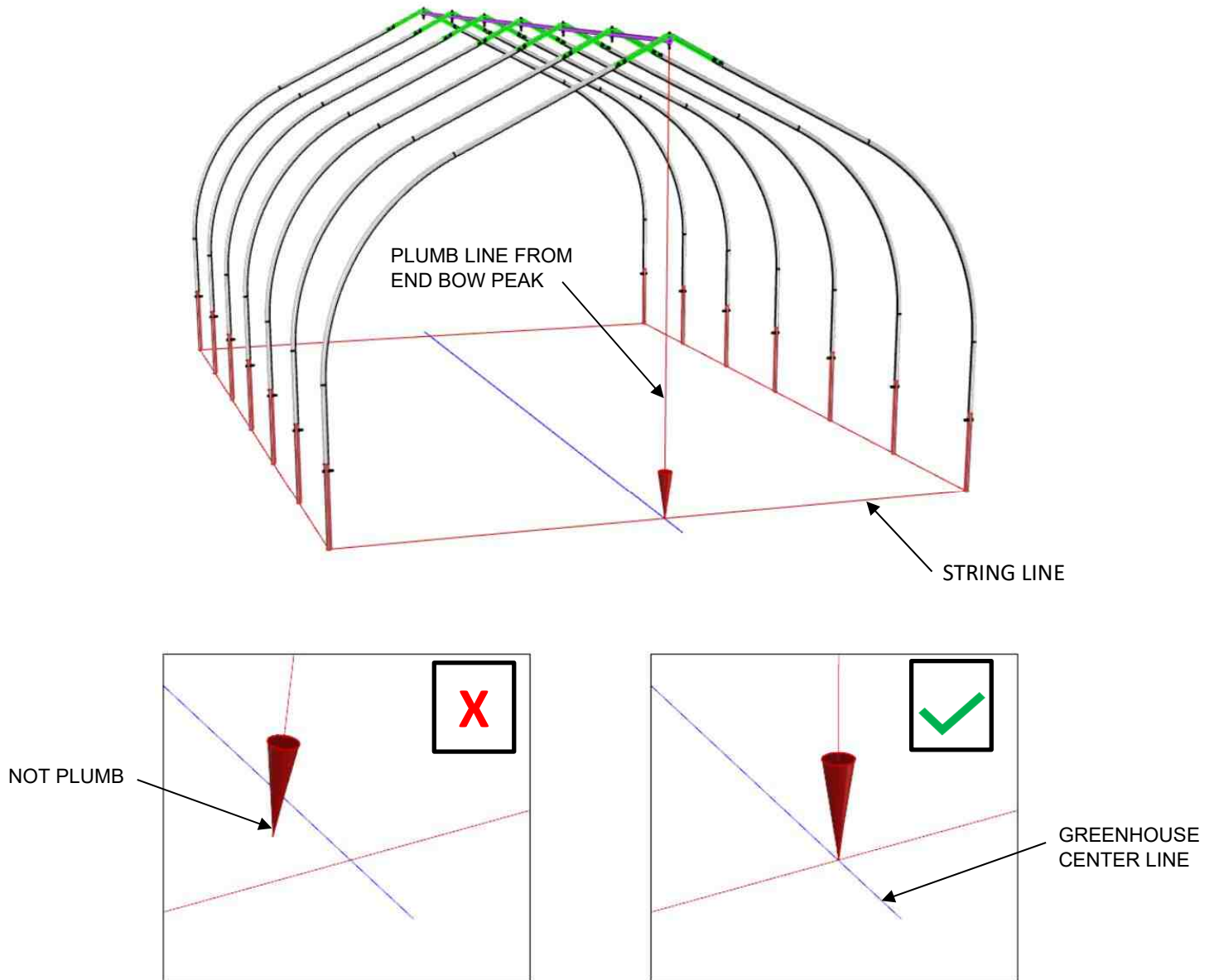


FIGURE 7.0

7.1 Pull the greenhouse forward from one end to plumb the greenhouse.

7.2 String a line from one ground post to the other ground post to square.

- 7.3 Read the instructions for your doors and equipment first to double check rough openings and assembly process.
- 7.4 Sketch out where your doors and equipment will be located. See rough openings for all doors and equipment and make note of the dimensions.
- 7.5 See examples of rough openings for doors and equipment. If you need further assistance on the layout, please contact your salesman for more specific information.
- 7.6 You will need two verticals per end wall. Verticals should be set into concrete for stability. One bag of concrete is sufficient as a footing.
- 7.7 Horizontals should have a maximum spacing distance of 4' apart.
- 7.8 See photos of how wood framing and metal framing is constructed.
- 7.9 Read through these entire directions to see illustrations and photos.

Sequence of Construction:

1. First frame out your two center verticals which will most likely be the location of a door.
2. Frame out horizontal members for completion of rough openings for doors and other equipment.
3. Frame out remaining horizontals to fill in gaps where support is necessary for covering end wall of greenhouse

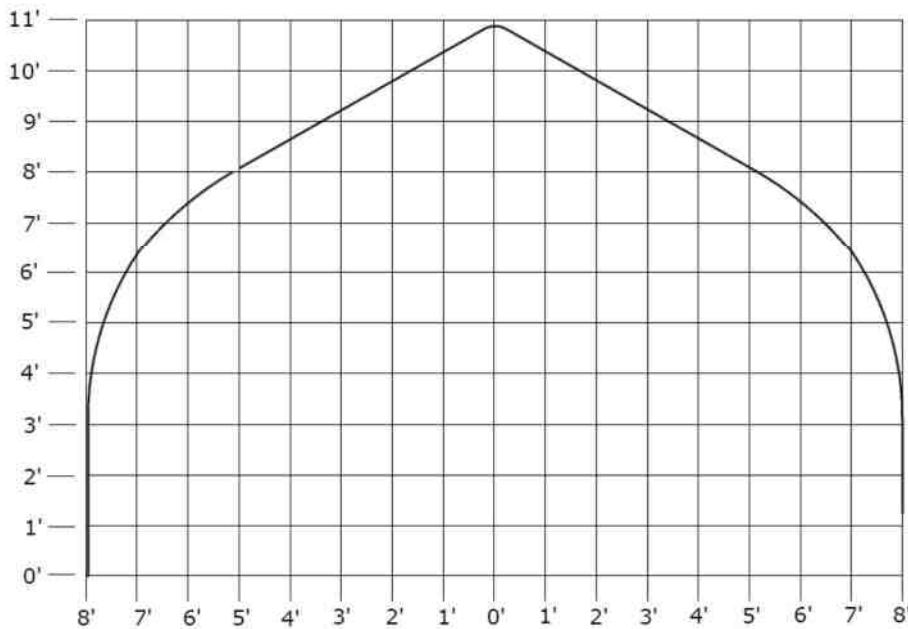
STEP 8 FRAMING YOUR END WALLS USING STEEL

The suggested lumber list per end wall is as follows with 2 x 4 lumber framing:

(2) 2 x 4 x 12

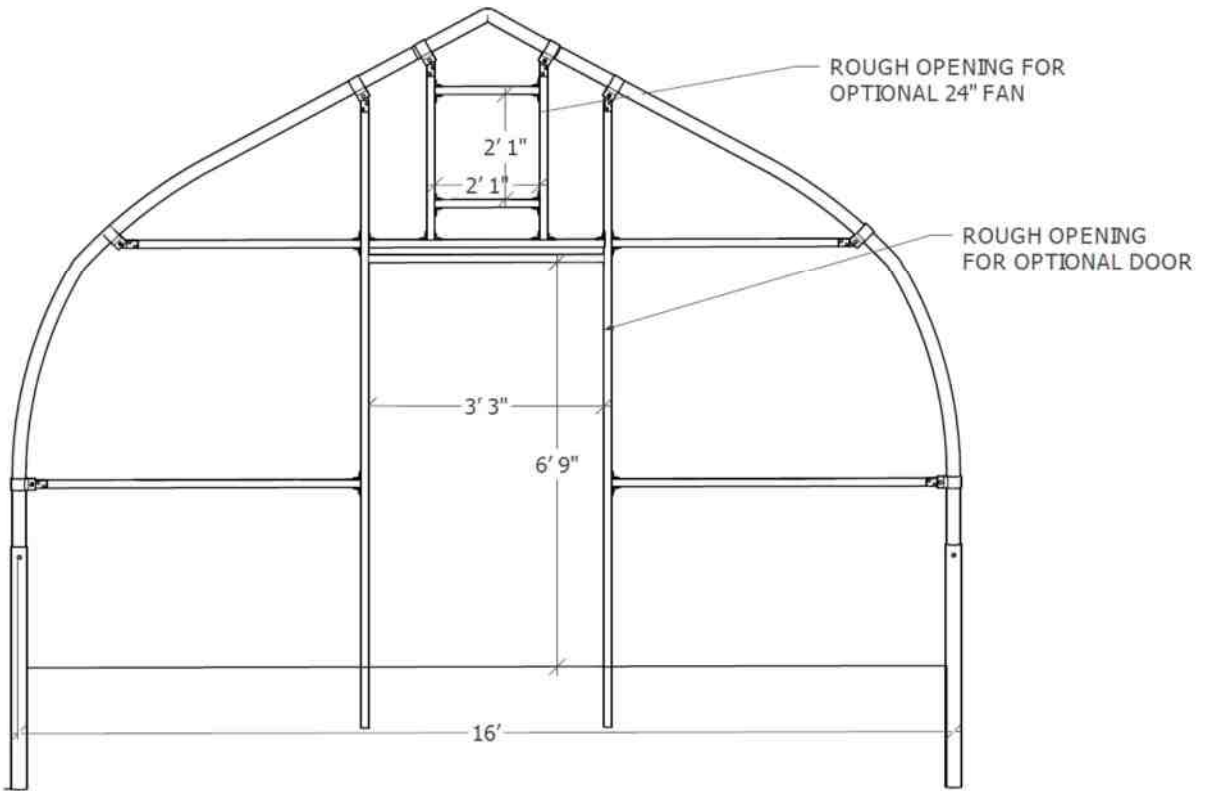
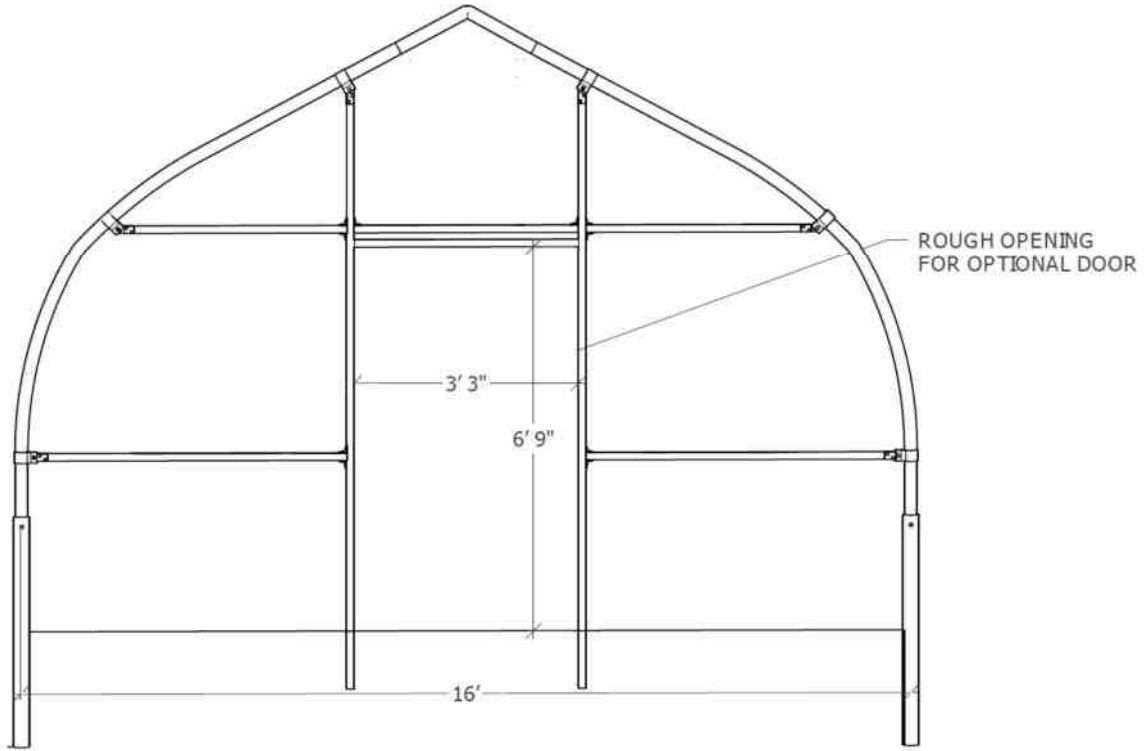
(8) 2 x 4 x 8

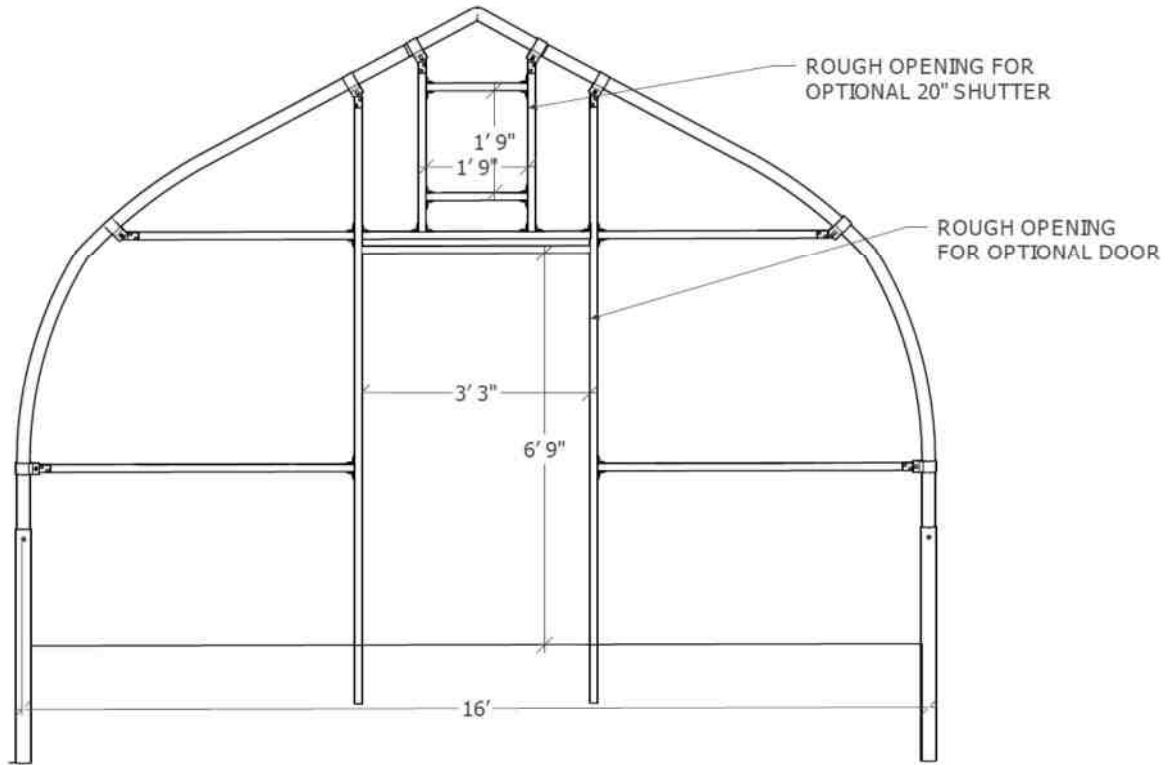
The following drawings are examples of how you can frame out your end walls. The dimensions show rough openings for optional doors, an optional gable fan and an optional gable shutter.



16' BOBCAT WITH TRUSS
1 SQUARE EQUALS 1 SQUARE FOOT







You will be using metal end wall bracket assemblies, angle brackets, TEK screws and steel tubing as shown in the photos. As per the suggested diagram, install your two verticals first, and then attach your horizontals to the framework.





The verticals must be anchored into the soil to prevent any movement of the posts.

STEP 9 INSTALLING DOUBLE WIRE LOCK FOR ROLL-UP SIDES:

Parts Needed for STEP 9

- *Sharpie*
- *T-Plate*
- *TEK Screws*
- *Double Wire Lock*
- *2 Hole Pipe Straps*
- *¼" Hex Head Bolts*
- *Splices*

9.0 Mark your end bows with a sharpie 30" above the top of the ground post. This will be the location of the bottom of your double wire lock.

9.1 Attach the T-plate with 4 TEK screws to the end bows in the four corners. See photo below.

FIGURE 9.0



This hole should line up with your mark

9.2 Use a 12' section of double wire lock, cut it into two halves, each 6' long. These will be your starter pieces on both sides.

9.3 Attach your double wire lock to the T plate and the two-hole pipe straps, you will need to slide the ¼" hex head bolts into the grooves on the back of the double wire lock.

SEE FIGURE 9.3



FIGURE 9.3

9.4 Attach your double wire lock to the T plate with a bolt and a nut. SEE FIGURE 9.4

On the first bow, and the remaining bows, you will attach the double wire lock to the two-hole pipe straps with bolts and nuts. *The double wire lock will not cover the screws on the end because later in the process, you will be attaching single wire lock to the end bows.*



FIGURE 9.4

9.5 Attach the other 12' sections of double wire lock using the splices shown with 4 TEK screws.

9.6 Measure to cut the final piece to the approximate length.

9.7 Install (2) 3/4" TEK screws through the double wire lock on every bow.



FIGURE 9.5



FIGURE 9.6



FIGURE 9.7

STEP 10 INSTALLING END WALL WIRE LOCK AND END WALL POLY

Note-that in these photos wood framing is shown, not the steel framing that is used on your greenhouse

10.0 Install the first piece of single wire lock at the peak of the greenhouse. The single wire lock will bend over the peak and bend over the curve of the greenhouse. Use TEK screws every 12" to fasten to the end bow.



10.1 Add wire lock to the end bow for the remainder of the bow. Attach single wire lock to the surfaces surrounding openings for doors. Use wood mate screws for wood framing which requires pre-drilling pilot holes. Use TEK screws for steel framing. Also, add single wire lock in other locations as shown to hold poly in place on end walls. Space screws 12" apart.



10.2 When you attach either regular poly or woven poly to your end walls, you will use the 4' long zig zag wires provided. If you have woven poly, you will have a sheet that is 17' x 32', cut the sheet into two halves, each 17' x 16' for use on each end wall. Begin by attaching your poly to the top of the bow. Keep poly relatively straight, but do not pull the poly to tighten. The wire lock will automatically tighten the poly as you install it.



10.3 Work your way from top to bottom on the installation of the poly.



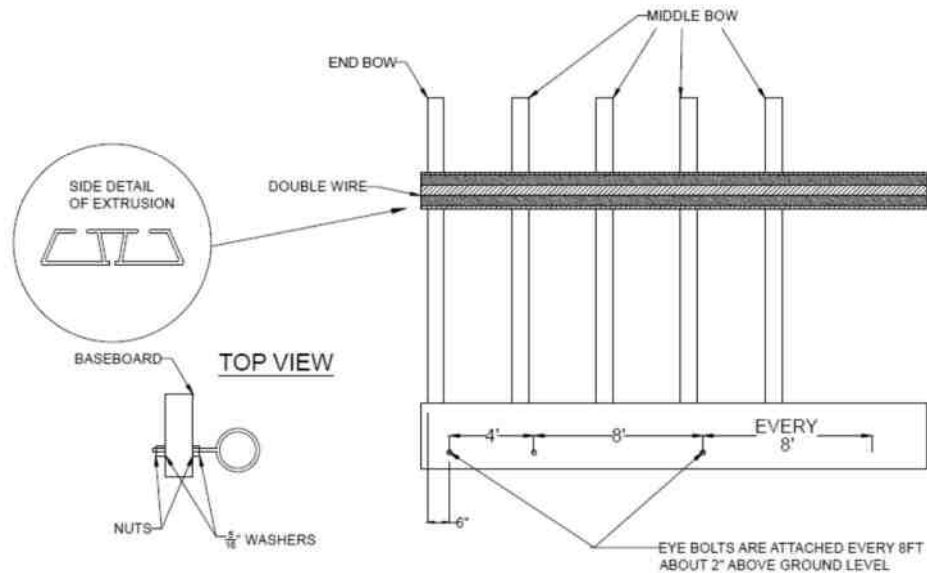
10.4 After your poly is installed, you can trim around the bow and other openings leaving about 1" of poly. At the bottom of the greenhouse, leave about 12" of poly so that you can bury it into the ground.



STEP 11 INSTALLING ROOF POLY & ROLL-UP SIDES

Prior to installing the poly on the roof, there are a few things that can be done for the installation of your roll-up sides.

11.0 First, install eyebolts in your baseboard as per the diagram below. Eyebolts are installed with a nut and washer on both sides of the baseboard the eye should be pointing up, not flat so that it can keep the roller bar in place later in the installation process.





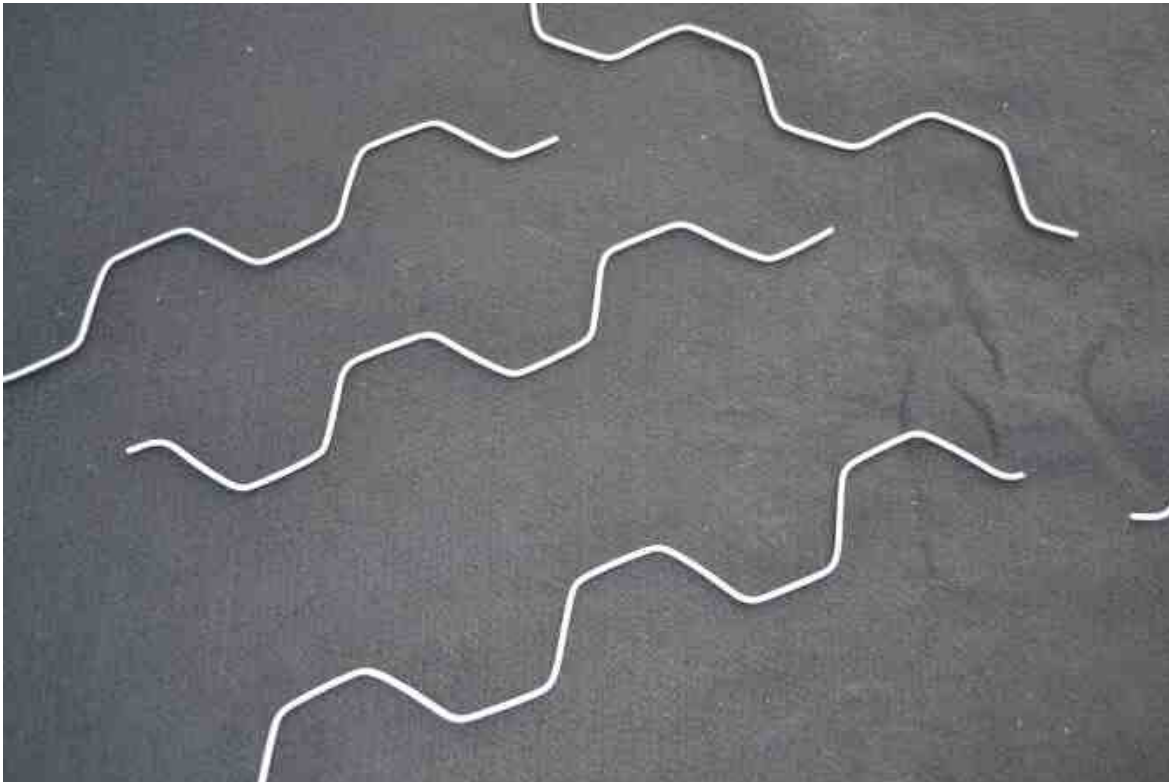
11.1 After the eyebolts are installed, lay the 12' 3" pieces of swaged tubing on the eyebolts. With the gear box option, the end of the pipe should be 1" past the end of the greenhouse. Attach all the tubes together by inserting the swaged ends into non-swaged ends, but do not TEK screw them at this time.



This is the tubing 1" past the end for the gear box

Installing the poly is best done early in the morning when there is little or no wind. You need three or more people to do this, and you should have a tall ladder at each end of the greenhouse.

Tip-Take 4 pieces of the zig zag wires and cut them into 12" pieces. These little pieces can temporarily secure your poly before your finish installation of the plastic.





Tip-Install your blower and blower bracket as per the manufacturer's directions if you will have two layers of poly. The blower should be installed about halfway up the curve of the bow.

11.2 Make sure that you have about a 10' wide space next to your greenhouse to roll out the poly which is 8' wide when it is folded. Then, attach ropes (the nylon rope used for roll-up sides can be used) to one edge of the plastic so that you can pull the poly over the greenhouse. Use two ropes for a 48' greenhouse. Tying the poly around a tennis ball works well.





11.3 Next, pull the poly over the greenhouse slowly with people on the ropes and people on the ends so that it evenly pulls over the structure. After the poly is pulled over the greenhouse, make sure the poly is straight.

11.4 With two layers of poly, use some of the short pieces on each end to hold the first layer of poly into the wire lock channels. The wire lock channels can hold two layers of wires, so the short pieces will not have to be removed later. Add your white deflector to the blower after the first layer of poly is installed.

Tip-Do not pull your poly tight if you have two layers. The inflation fan will need the space in between the poly for proper inflation.



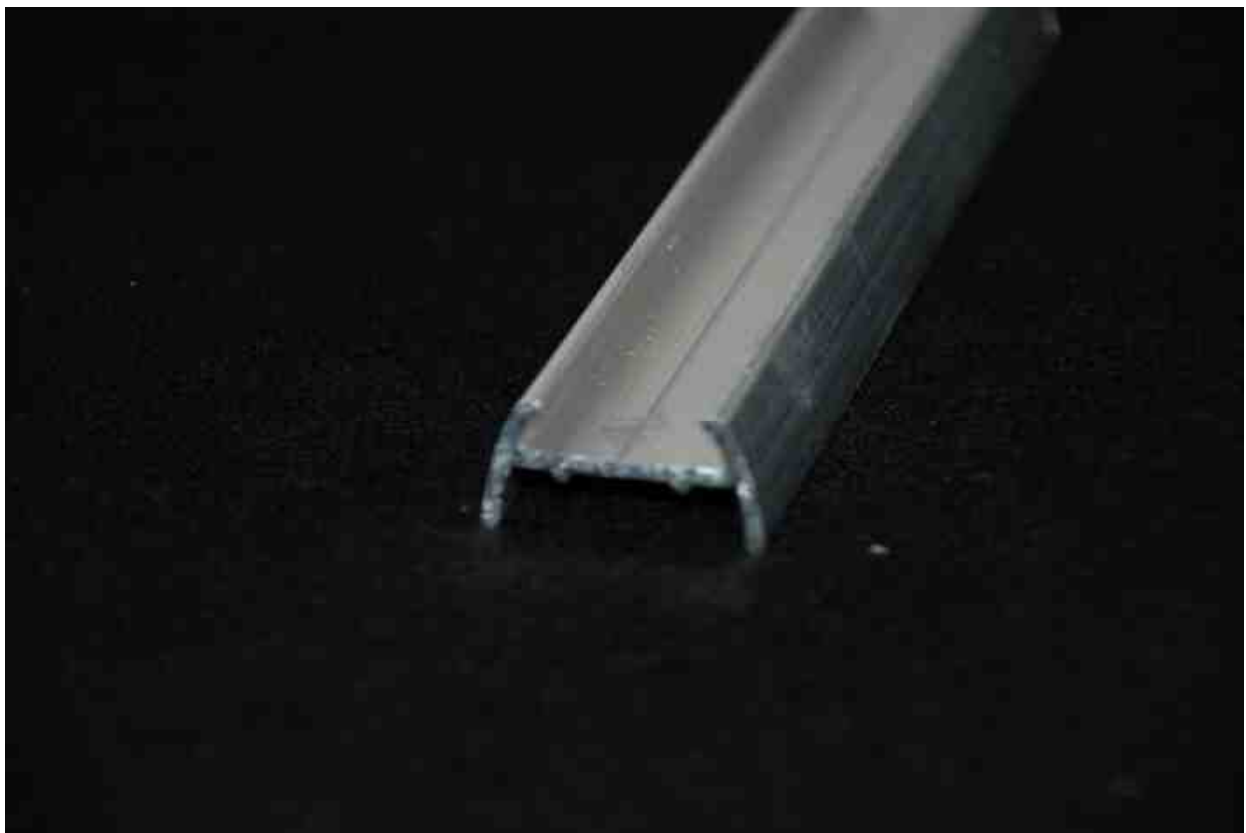


11.5 When you are done with your double layer of poly, next add wires to the double wire lock. Start in the middle and work your way out towards the ends of the greenhouse.



11.6 When you are done with putting the poly on your greenhouse, trim the excess plastic from the ends first.

11.7 Now, you will attach the plastic to the roll-up sides bar which are the swedged tubes that are resting on the eye bolts. You will use the roll-up curtain cap pictured with 1" TEK screws spaced every 12" apart. **Note**-where the swedged tubes connect, you will use two TEK screws for the proper splicing of the tubes.





The two screws are where the tubes connect with the swedged connection



After the roll-up curtain cap is installed, trim off the excess poly

11.8 Next, you will install rope hooks into the double wire lock as per the diagram shown earlier, then run rope through your eye bolts and onto the rope hooks in a “W” pattern until you get to the other end. Both ends will be tied off to hold the roll-up sides in place.



After the rope hooks are installed, secure them with a TEK screw (not shown in this photo). —





STEP 12 INSTALLING GEAR BOX KITS

Follow manufacturer's installation instructions to assemble gear box kit. Below are photos of the installed kit.





Guide pipe hardware shown





OPTIONAL DOOR INSTALLATION

For the installation of doors, gable fans and gable shutters, follow manufacturer's installation instructions. Photos are shown below for the following equipment.







OPTIONAL AUTOMATIC VENTILATION KIT INSTALLATION

1. Follow the manufacturer's directions for installation.
2. Attach exhaust fan to rough opening at one end
3. Attach shutter to rough opening to other end
4. Locate thermostat in center of greenhouse about 6 feet above ground level and have electrician wire to fan, shutter and power.
5. Photos of installation are shown below.



This is the exhaust fan



This is the shutter



You are done! Grow.



LIMITED WARRANTY

Rimol Greenhouse Systems, LLC. (RGS) warrants to only the original purchaser ("Buyer") that the greenhouse frame(s) manufactured by RGS will be free of defects in materials and workmanship for a period of five (5) years. This limited warranty shall not be effective unless the Buyer's greenhouse is installed on level ground and there are no other objects or structures within ten (10) feet of the greenhouse, and the Buyer hereby waives any claims under this warranty in the event these two conditions are not satisfied.

This warranty covers all defects in material and workmanship, EXCEPT:

1. Damage resulting from accident, misuse, abuse, neglect or from other than normal and ordinary use of the frame(s).
2. Damage resulting from failure to use the product in accordance with RGS specifications and instructions.
3. Damage resulting from repair or attempted repair by anyone other than RGS or an authorized repair contractor or facility.
4. Damage resulting from the use or installation of any other equipment or products used in the greenhouse.

This warranty applies only to the products being supplied by RGS and physically attached to the RGS products at the RGS factory. Defects in equipment installed with any RGS product, or defects in the installation of the RGS product, whether or not sold by RGS, are warranted, if at all, by the installers or manufacturers of such equipment, and are not covered by this warranty.

RGS makes no warranties other than those stated above and specifically does not warrant that any of the RGS frames, parts or products are of a merchantable equality or that they can be used for any particular purpose by the buyer.

RGS shall have the right to inspect any parts before taking corrective measures under this warranty.

RGS shall be notified of any warranty claim within 48 hours of damage. Proof of purchase must be furnished with any claim.

LIMITATION OF LIABILITY

In no event will RGS be liable for incidental, consequential, special or indirect damages, lost business profits, regardless of the form of action, whether in contract, tort (including negligence), breach of contract, breach of warranty or otherwise, even if RGS has been advised as to the possibility of same. Buyer's sole and exclusive remedy is repair or replacement, at RGS's option, of any defective parts or workmanship. In the event this exclusive remedy fails of its essential purpose, Buyer's exclusive remedy shall be refund of the defective part.

JURISDICTION

Any disputes arising between RGS and Buyer shall be governed by New Hampshire law without regard to conflicts of law principles. Buyer hereby submits, and waives any objection, to the exclusive personal and subject matter jurisdiction by New Hampshire courts and submits, and waives any objection, to New Hampshire as the proper venue for any disputes.