Orion Vinyl Playset

Assembly Manual

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Thank you for your purchase of this playset.

This manual is designed to simplify the assembly process, however we recommend having an experienced carpenter involved in the project. Please read through the entire manual before starting!

Take a deep breath and get at it; the satisfaction and enjoyment of this hideout is only a few minutes away. Have fun!

You have purchased a product that consists of bulky pieces. With your purchase, you assume full responsibility to have the necessary manpower available to assemble the product. We reccomend at least two able-bodied men for this assembly. You also agree that any damage that happens to the product during the entire construction process is your responsibility, and neither the seller, nor the manufacturer, will be held liable for any such damage.

Tools Required for Job

One 4' Step Ladder

25’ Tape Measure

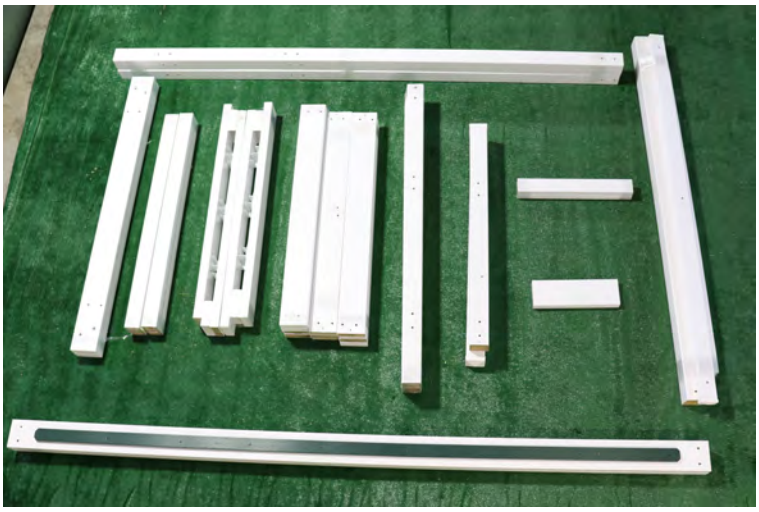
9/16th Wrench

Cordless Drill & 1/2" drill bit

#2 Square Drive Tip (included)

T30 Star Drive Tip (included)

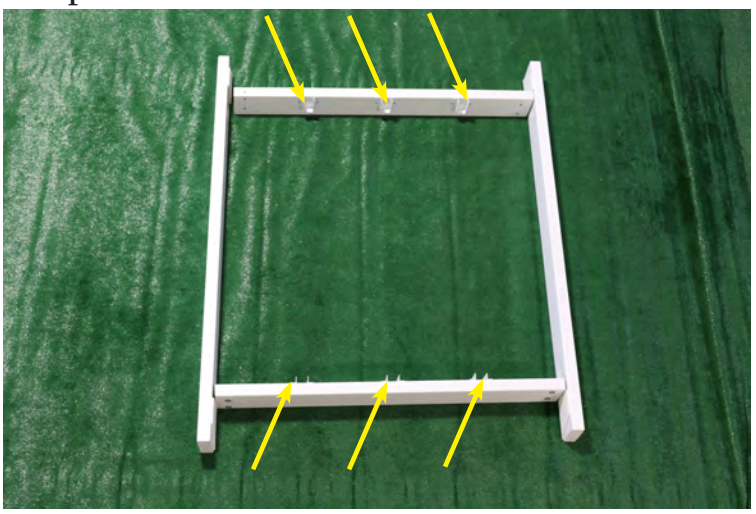
Parts List



Step 1:

Unpack and identify parts.

Step 2:

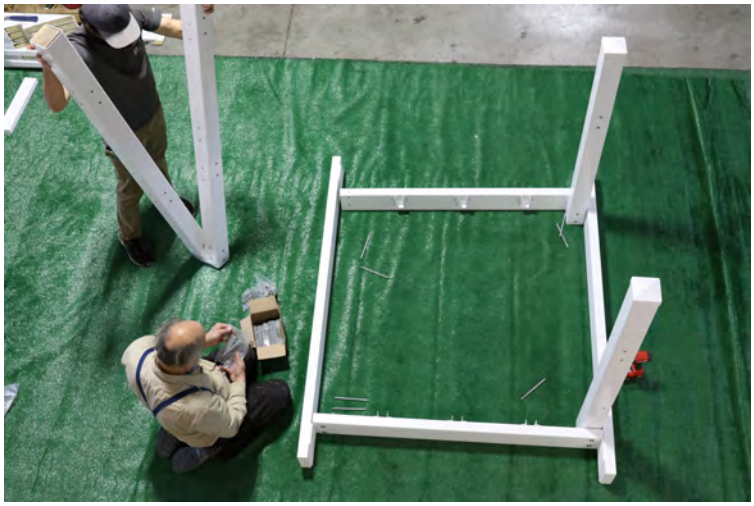


Place two 2x6x56" and two 2x6x73 1/2" on a smooth, flat surface to begin. Notice floor joist hangers.

Step 3:

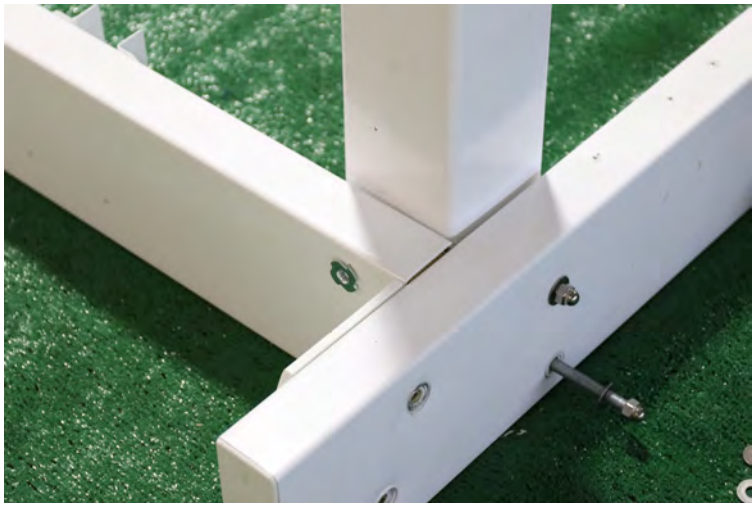
Thread 6 1/8" bolts into T-nuts on four corners.

Step 4:



Fasten two 4x4x74" (with caps up) on one side as shown. Fasten two 4x4x54" on opposite side. Pre-drilled hole configuration is very important on all 4x4's. Hand tighten acorn nuts at this point. Be sure to always place washer between vinyl and acorn nut.

Step 5:



Continue fastening 2x6's to 4x4's using 6 7/8" bolts.

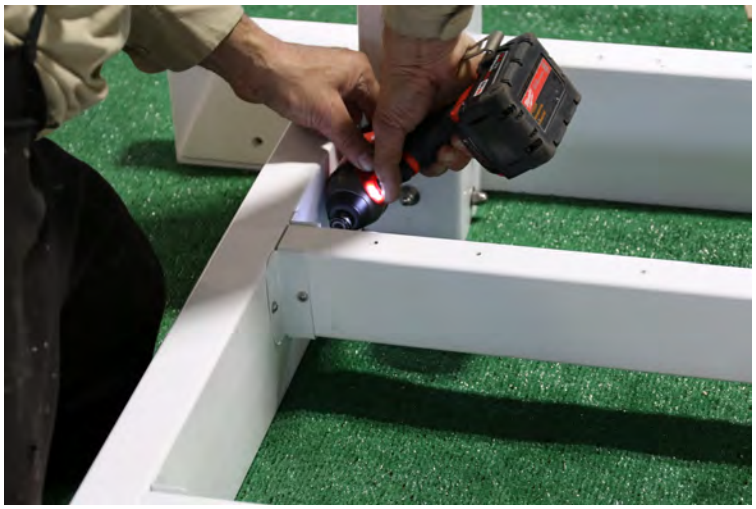
Step 6:

Tighten nuts at this point. Over-tightening acorn nuts can cause the head to pop off.

Step 7:

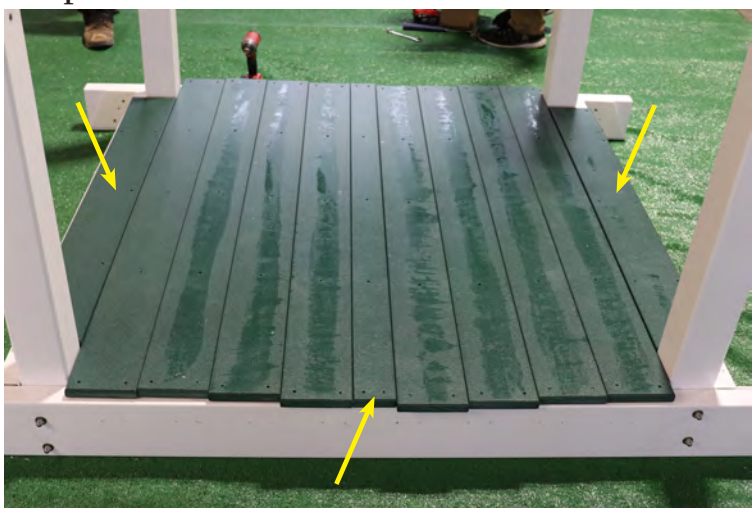
Install three floor joists.

Step 8:



Fasten joists to hangers using 1 3/4" washer head screws. Measure to ensure that tower is square at this point.

Step 9:



Lay out floor boards. Notice the two shorter ones between posts and narrow one in the center. Center floorboards.

Step 10:

Fasten using 1 1/2" screws.

Step 11:

Place three 2x6x56" in these positions. The holes on these 2x6's are offset. Notice the pattern; left-low, right-high. The side with no 2x6 is the side with the taller 4x4's. This side will receive the 7' deck.

Step 12:

Start 6 7/8" bolts in 2x6's.

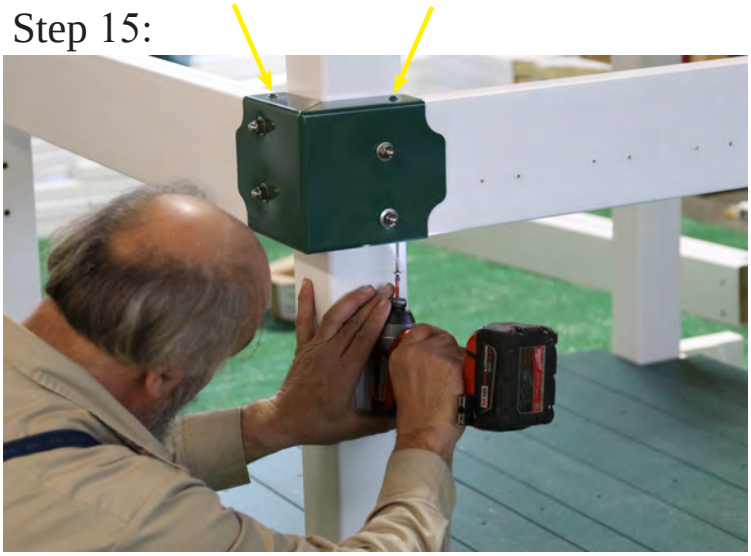
Step 13:

Place bracket on corners and fasten with acorn nuts, using washers between metal and acorn nut.

Step 14:

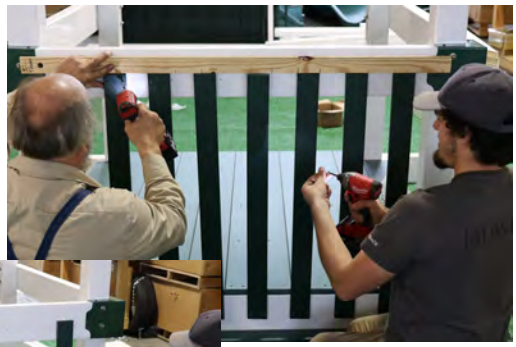
Fasten "lips" on corner brackets with 1 3/4" screws.

Step 15:



Appearance of the set at this point.

Step 16:



Use template provided to fasten poly slats to this side only of tower. Fasten using 1 3/4" washer head screws.

Step 17:

You are now ready to assemble the "legs" for the tower. Be sure T-nuts are on the inside.

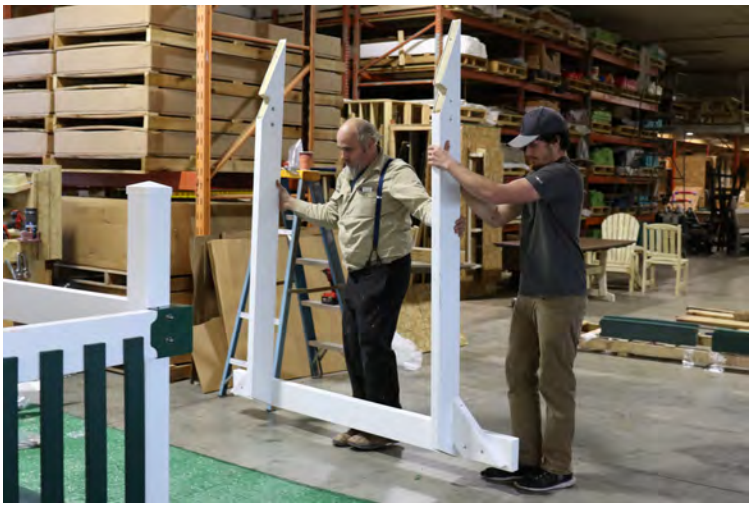
Step 18:

Fasten 2x6 using 3" lag screws.

Step 19:

Fasten brace into leg using 3" lag screws. Repeat steps 17-19 for second leg.

Step 20:

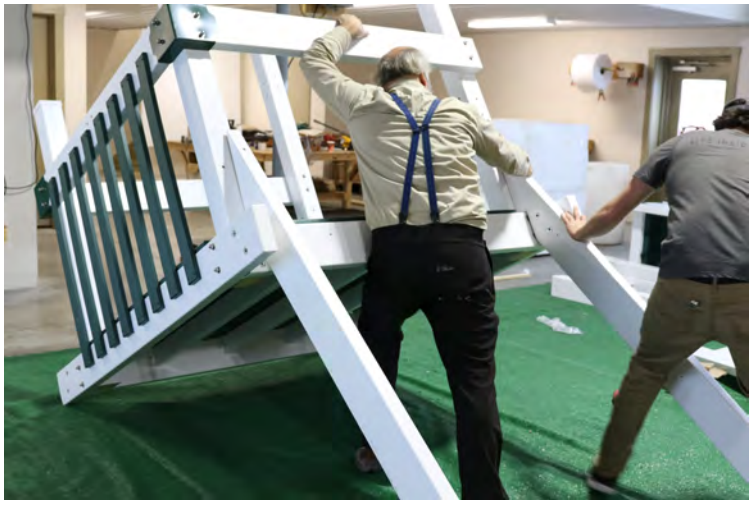


You are now ready to fasten the "leg" onto the assembled platform.

Step 21:

Step 22:

Step 23:



Step 24:

Notice T-nuts

Step 25:

Fasten using 4 3/8"bolts, washer and acorn nut.

Step 26:

Fasten on long point using 4" lag screw.

Step 27:

Repeat fastening steps on second "leg."

Step 28:

Appearance of the tower at this point.

You are now ready to install the cargo net, rock wall, and step ladder panels.
These are interchangeable at all locations on the "legs."
Decide where you want these positioned prior to fastening.

Step 29:

Fasten underneath using three 3" lag screws per leg.

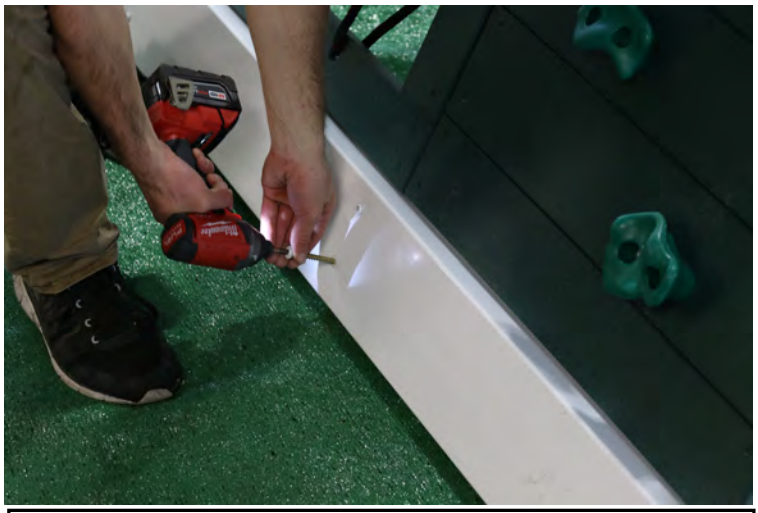
Step 30:

Fasten top plate of each panel into 2x6 floor framing using 1 1/2" screws.

Step 31:

Also fasten at this point with 3" lag screws.

Step 32:



Use four 3" lag screws at this fastening point as well.

Step 33:

Use three 3" lag screws to fasten ladder to leg.

Step 34:

You are now ready to begin framing for 7' platform. Fasten 2x6x56" using 6 7/8" bolts. Notice on this 2x6 that the hole pattern switches to "left-high, right-low."

Step 35:

Use template provided to fasten poly slats to tower.

Step 36:

Fasten 2x6x56" with joist hangers using 6 7/8" bolts. Only finger tighten.

Step 37:

Fasten 4x4x128" to 2x6 using 6 7/8" bolts.
Repeat on opposite corner.

Step 38:

You are now ready to fasten the 2x6x56" using 6 7/8" bolts.

Step 39:

Fasten 2x6x56" to bottom of 128" posts using 6 7/8" bolts. This 2x6 will have a cap on both ends.
All nuts should be tightened at this point.

Step 40:

Fasten 57 3/4" floor boards to tower using 1 1/2" screws. Use two 47 3/4" floor boards between outside posts.

Step 41:

You are now ready to finish the railing on the 7' deck. Notice in the photo the panel with the slats already fastened.

Step 42:

Fasten slats to 2x6 using template provided. This can be done after the 2x6 is fastened to the tower or before. Slat spacing is critical and is based on what component is being added to that specific panel.

Step 43:

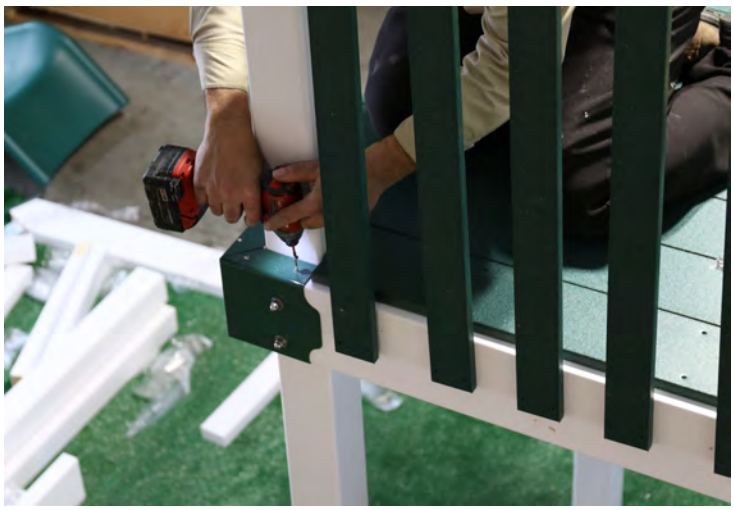
Using 6 7/8" bolts, fasten three 2x6x56" to tower. Two of these 2x6's will have caps on one end. This end should be towards the 5' deck. Finger tighten nuts.

Note: Your slat spacing and opening locations may vary based on what components you purchased with your playset. Refer to pages 25-28 for assembly instructions for your components.

Step 44:

To complete the 7' framing, fasten 2x6x56" on inside of 4x4's.

Step 45:



Be sure all lips on metal corner brackets are fastened, top and bottom, using 1 3/4" washer head screws.

Step 46:

Finish fastening slats with template provided.

Step 47:

Tower should look like this at this point. Once again, check that all the bolts and nuts are properly installed and tightened.

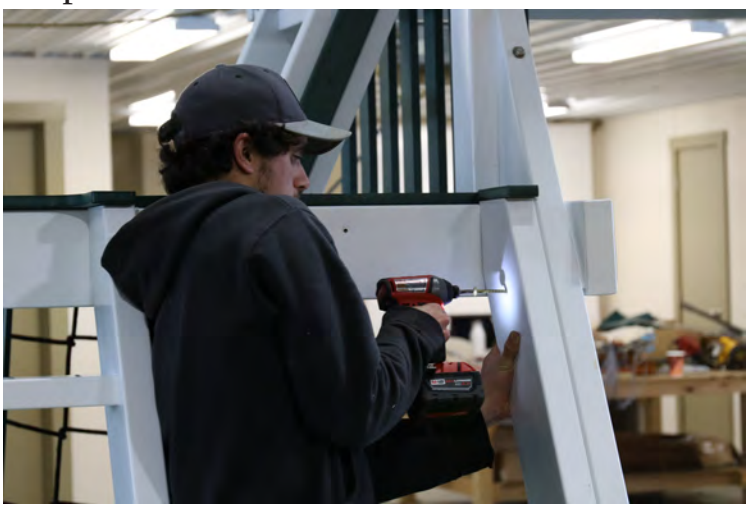
Step 48:

Fasten the small step ladder between the two decks using 1 1/2"screws.

Step 49:

You are now ready to install the slide. Before installing the slide, locate the 2x6x66 1/4" that you have not yet used. This will go beside the slide.

Step 50:

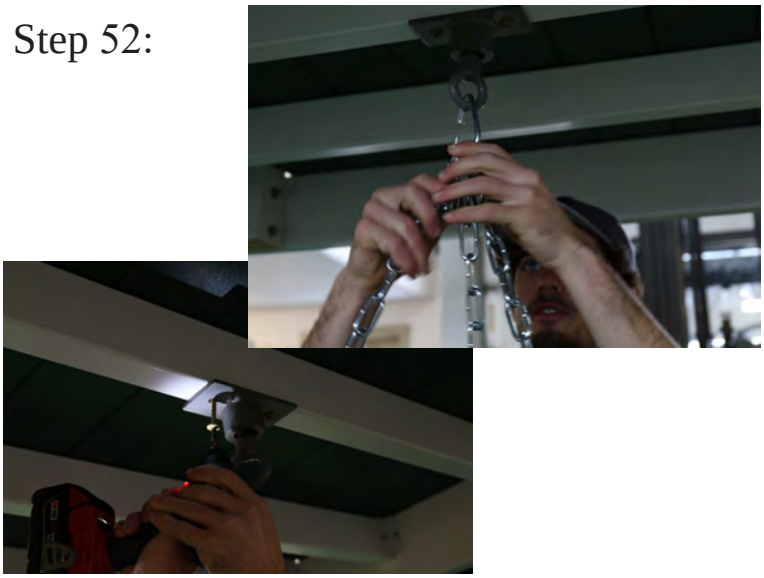


Fasten this 2x6 to inside of tower leg opposite of the step ladder, cargo net, or rock wall (which ever one will be beside the slide).
The purpose of this 2x6 is to provide support. Use three 3" lags to fasten.

Step 51:

Attach slide using 1 3/4" washer.

Step 52:



Attach tire swing swivel under the lowest deck using 3" lags.
Then attach tire swing to the swivel.

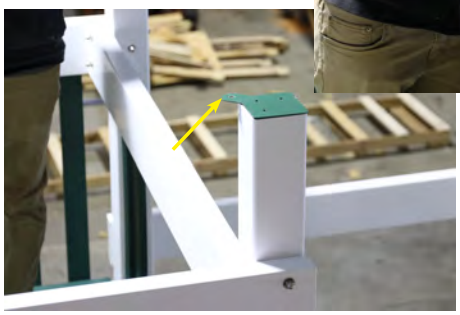
Step 53:

Attach step ladder handle to the right of step ladder using 1 1/2" lags.
Attach at the top and the bottom.

The next step is to install the roof.
Instructions for the pyramid roof assembly can be found on page 19.

Plastic Roof Assembly Instructions

Step 1:



To install a plastic roof, begin by fastening flat roof bracket to top of post using three 3" screws.
Repeat on four posts always with tab towards the center of the tower.

Step 2:

Space roof equally at all four corners.

Step 3:

Pre-drill 5/16" hole, then fasten using 3/4" bolt, two washers, and lock nut at four corners.

Step 4:

Your completed plastic roof should look like this.

The next step is to install the swing frame.
Instructions for the swing frame assembly can be found on pages 20-24.

Swing Frame Assembly

Step 1:

You are now ready to assemble the swing frame. Begin by identifying the swing beam.
The end of the beam without caps gets fastened to the tower.

Step 2:

Fasten swing bearings to swing beam using lags provided in bearing packs.

Step 3:

If you purchased a plastic glider, your next step is to install the glider bracket. This bracket needs to be fastened to the opposite side of the swing beam as the swing bearings. It can be placed at any swing position.

Step 4:

Pre-drill four 1/2" holes, then fasten using four lag screws provided.

Swing Frame Assembly

Step 5:

Finish fastening using the 1 3/4" washer head screws provided.

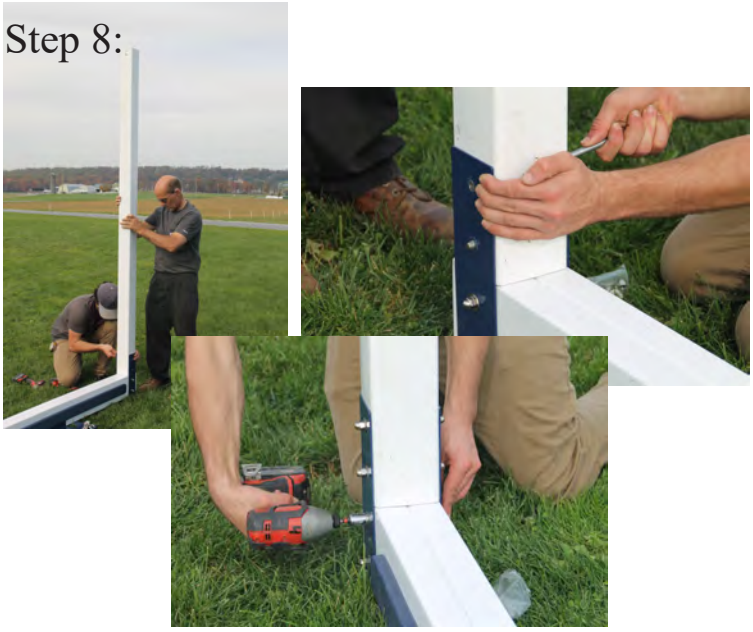
Step 6:

Rotate the swing beam 180 degrees so that the swing bearings are turned up. Fasten the swing beam receiver bracket to the swing beam using two 4 7/8" bolts provided. This bracket needs to be fastened to the end of the swing beam without the caps. Thread acorn nut onto bolt as far as you can, then back off several turns. Use washers between the acorn nut and the metal bracket. Tighten nuts.

Step 7:

With swing beam in same position, attach beam strap to swing beam using two 4 7/8" bolts provided. Only finger tighten at this point. Note that this end of the beam should have caps on it. Use pre-drilled holes.

Step 8:



Identify end post and place between beam strap. Fasten using two 4 7/8" bolts provided. You are now ready to tighten all four bolts on beam strap.
If your setup location is level, the end post will need to be shortened approximately 1' (cut off bottom end).

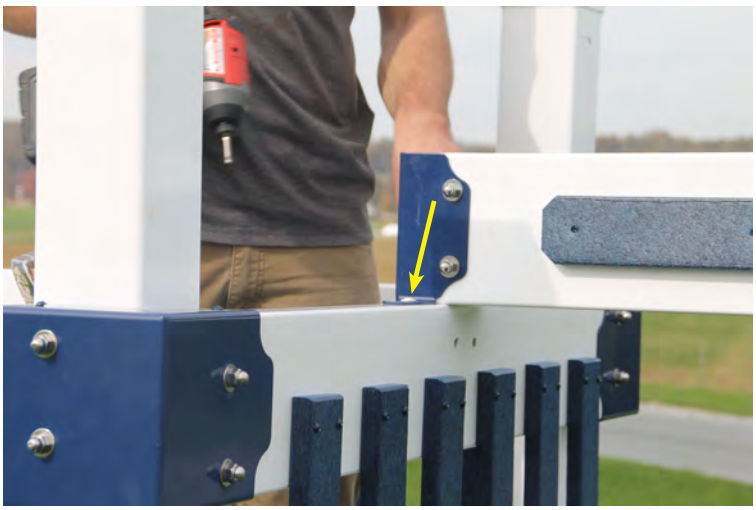
Step 9:

Fasten corner brace to swing beam and end post. Be sure end post is plumb. Attach using six 1 3/4" washer head screws.

Step 10:

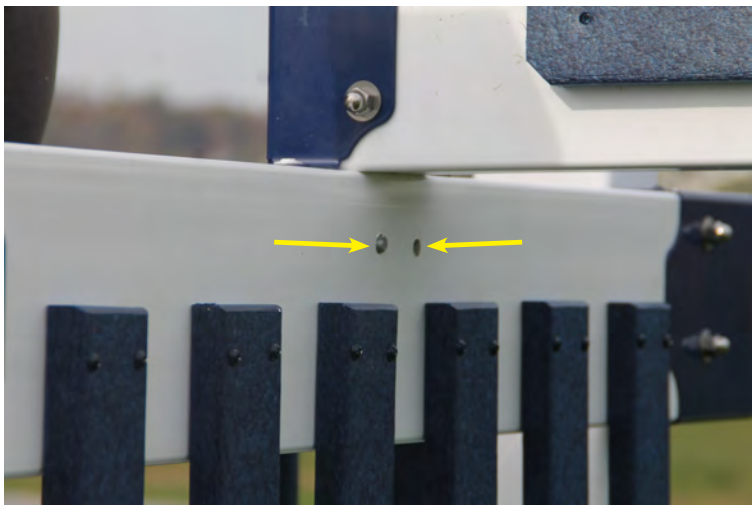
Lift swing beam into position. One person should be up in the tower. The other person should continue to hold the end post steady.
Note: your set may not appear exactly as pictured at this point.

Step 11:



Push bracket against 2x6 vinyl then fasten first with two lags provided.

Step 12:



Next predrill 7/16" holes and fasten with two 2 3/4" bolts provided, using acorn nuts and washers.

Swing Frame Assembly

Step 13:

Swing beam receiver properly fastened.

Step 14:

Identify ground runner and fasten to end post using 6 1/2" bolts. Thread acorn nut onto rod as far as you can, then back off several turns. Be sure to place washer between acorn nut and vinyl.

Step 15:

Identify end post braces. Fasten the short angle to the ground runner that was installed on previous step. Use 4 /18" bolts provided.

Step 16:

Align brace with end post then fasten long angle to end post using 3/8" x 4" lags provided. This should be pre-drilled using 1/4" drill bit.

Step 17:

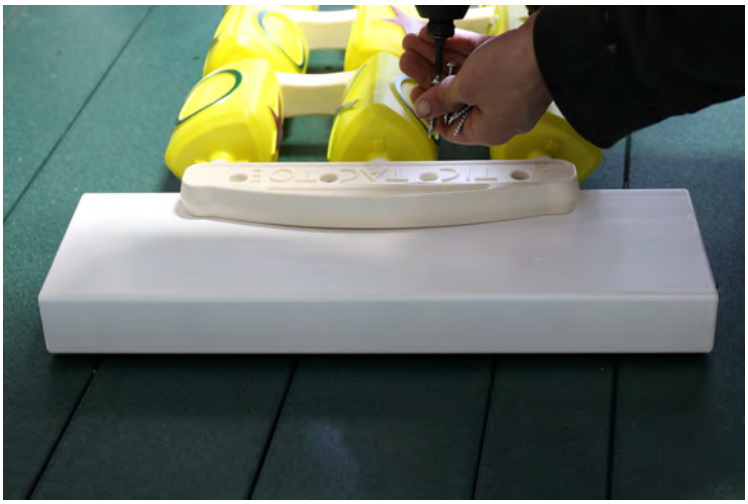
Your completed swing frame should appear like this.

Now is a good time to go over the entire set and be sure all bolts and nuts are properly installed and tightened.

The next step is to install any components you may have purchased. Assembly instructions for the components can be found on pages 25-28.

Tic-tac-toe panel:

Step 1:



With your tic-tac-toe panel, you will receive a 2x6x18 1/2". Fasten one end of the tic-tac-toe to 2x6, centered, using four 1 /3/4" washer head screws.

Step 2:

Fasten opposite end to tower at any desired location, using four 1 3/4" washer head screws.

Step 3:

Fasten 2x6x18 1/2" to poly slats on railing using four 1 3/4" washer head screws.

Step 4:

Completed install should look similar to this.

Framing for peek-a-boo panel, tornado tube, tunnel express, and sidewinder slides:

Step 1:

Fasten small angle brackets to 2x4x26" using 1 3/4" washer head screws.

Step 2:

There should be two like this one pictured when you have completed this step.

Step 3:

Fasten with 1 3/4" screws at desired location according to the components you purchased with your set. Fasten one on opposite side as well to create a frame. Spacing between 2x4's should be 29 1/2".

Step 4:

Fasten flange to frame using 1 3/4" washer screws for peek-a-boo panel.

Tornado tube, Tunnel Express, and Sidewinder slide Assembly:

Step 1:

To fasten the slide to the tower, first fasten L brackets to outside of two 2x4x26" using 1 3/4" screws provided.

Step 2:

Then place 2x4's at desired location on tower and fasten using 1 3/4" screws. Space between vertical 2x4's should be 29 1/2".

Step 3:

Assemble slide and fasten slide to tower using hardware and instructions provided with slide.

Super Spiral Slide Assembly:

Step 1:

After assembling slide according to instructions given in the box the slide came in, lift slide into place where you have already framed for the slide to be. This will take two able-bodied men.

Step 2:

One person hold slide steady while other person goes up into the tower to fasten slide.

Step 3:

Fasten the slide to the upper deck using the lags provided in the hardware pack that comes with the slide.

Step 4:

Fasten top of slide to top 2x6 of upper deck as well.