

## Jib Transfer System - PVC Arm Cementing Instructions

**Before you begin you will need the following:**

*Please ensure adequate ventilation while cementing! Outside assembly is recommended!*

✓ Materials (from previous instructions):

- Upper Base with flanges: Qty = 1 (completed in "Assy\_UpperBase" instructions)
- PVC Pipe (cut to lengths in "Mfg\_PVCArm\_Cutting")  
*\*\* Make sure after cutting the lengths you have labeled them with the appropriate letter – you will use these letters in the assembly step \*\**

✓ BOM Items:

BOM Line Item	Description	Qty
41	PVC 45-degree elbow	2
39	PVC 90-degree elbow	4
40	PVC 90-degree Tee	4
30	PVC 45-degree Wye	4
46	PVC Primer/Cement	1

✓ Tools:

- Tarp/protective sheet for use while using PVC cement
- Tape Measure
- Permanent Marker (to label PVC pipe lengths)
- Gloves – please note the PVC cement will eat through latex gloves!

*Note: **BEFORE** cementing pieces wipe all PVC pieces down with a wet rag. Any dirt or dust on the PVC lengths will impact the assembly process.*

**Instructions:**

Step	Description	Picture
1	<p>Apply primer to one outside end of the F piece                      Apply primer to one inside of the 90deg elbow                      Apply cement to one outside end of the F piece                      Apply cement to one inside of the 90deg elbow                      Push the F piece into the end of the 90 deg elbow                      Rotate the F piece ¼ turn and hold for 30 seconds                      Repeat for the 2<sup>nd</sup> F piece in the other end of the elbow</p>	
2	<p>Apply primer to one outside end of the E piece                      Apply primer to one inside of the Wye                      Apply cement to one outside end of the E piece                      Apply cement to one inside of the Wye                      Push the E piece into the end of the Wye                      Rotate the E piece ¼ turn and hold for 30 seconds</p>	
3	<p>Apply primer to the other outside end of the E piece                      Apply primer to the outside ends of the two F pieces                      Apply primer to the inside of the mating ends of the Wyes</p> <p>Apply cement to the other outside end of the E piece                      Apply cement to the outside ends of the two F pieces                      Apply cement to the inside of the mating ends of the Wyes</p> <p>lay the pieces (that you created in steps 1 &amp; 2 above) into a triangle shape</p> <p>At the same time, push all pieces together for a snug fit</p> <p><b>NOTE THE PVC CEMENT WILL SET IN ~30 SEC;                      AFTER THIS IT WILL BE DIFFICULT TO                      REPOSITION COMPONENTS</b></p>	

<p>4</p>	<p>Apply primer to one outside end of an H piece          Apply primer to one inside of the Wye fitting          Apply cement to the outside of an H piece          Apply cement to the inside of the Wye fitting          Push the H piece into the end of the Wye          Rotate the H piece ¼ turn and hold for 30 seconds          Repeat for the 2<sup>nd</sup> H piece in the other Wye</p>	
<p>5</p>	<p>Repeat Steps 1-4 to assembly 2<sup>nd</sup> triangle</p>	
<p>6</p>	<p>Apply primer to one outside end of the C piece          Apply primer to the middle PVC Tee fitting outlet          Apply cement to the outside end of the C piece          Apply cement to the inside of the PVC Tee fitting outlet          Push the C piece into the PVC Tee fitting outlet          Rotate the C piece ¼ turn and hold for 30 seconds</p> <p>Repeat to get two assemblies</p>	
<p>7</p>	<p>Apply primer to the outside ends of the D piece          Apply primer to the inside of the PVC Tee fitting outlet          Apply cement to the outside ends of the D piece          Apply cement to the inside of PVC Tee fitting outlet          Push the D piece into the end of the PVC Tee fitting outlet          Rotate the D piece ¼ turn and flatten on a surface          Hold for 30 seconds, until the cement sets</p> <p>NOTE: If the assembly is not flat, the PVC arm will not assemble properly!!</p>	
<p>8</p>	<p>Apply primer to one outside end of the B piece          Apply primer to one inside of the 45 deg elbow          Apply cement to one outside end of the B piece          Apply cement to one inside of the 45 deg elbow          Push the B piece into the end of the 45 deg elbow          Rotate the B piece ¼ turn and hold for 30 seconds</p> <p>Repeat to get two assemblies</p>	

<p>9</p>	<p>Apply primer to one outside end of the G piece          Apply primer to one inside of the middle PVC Tee outlet          Apply cement to one outside end of the G piece          Apply cement to one inside of middle PVC Tee outlet          Push the G piece into the middle PVC Tee outlet          Rotate the G piece ¼ turn and hold for 30 seconds</p> <p>Repeat to get two assemblies</p>	
<p>10</p>	<p>Apply primer to one outside end of the A piece          Apply primer to one inside of the 90deg elbow          Apply cement to one outside end of the A piece          Apply cement to one inside of the 90deg elbow          Push the A piece into the end of the 90deg elbow          Rotate the A piece ¼ turn and hold for 30 seconds          Repeat for the other end of the A piece with another elbow</p> <p>NOTE: If the assembly is not flat, the PVC arm will not assemble properly!!</p>	
<p>11</p>	<p><b>THIS STEP DOES NOT REQUIRE PVC CEMENT!</b></p> <p>Insert the two triangle assemblies (from step 5) into two PVC flanges</p> <p>Insert the two B PVC pieces (from step 8) into the other PVC flanges; in the next step you are going to prime and cement the 45 deg elbows highlighted to the right</p>	
<p>12</p>	<p>Take the assembly from step 7 and apply primer to the outside of both C- length PVC pieces</p> <p>Apply primer to the inside of the two 45 deg elbows, as highlighted in step 11</p> <p>Apply cement to the outside of both C-length PVC pipes and to the inside of the 45 deg elbows</p> <p>Insert the C pieces into the 45 degree elbows (pictured right) and hold for 30 seconds</p>	

***Please note the next sequence of tasks needs to happen rapidly to ensure the PVC cement does not set before the pieces are in place; It is strongly suggested to use two people for the following assembly tasks!***

13a) Take the assembly from step 9 and apply primer to the inside of one PVC tee outlet and the outside of the PVC G piece

13b) Apply primer to the outside of the H piece of the triangle assembly

13c) insert the PVC tee onto the H piece and rotate ¼ turn

Insert Tee onto H piece (do for both triangle assemblies):



Insert G piece in open end of PVC tee:



Both sides should look like this:



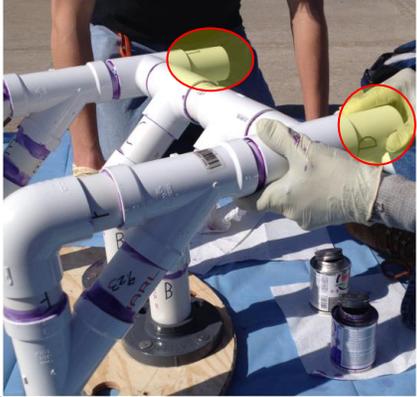
Compress the Tees until cement sets:



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Have the second person complete steps 13a – 13c at the same time with the other triangle assembly

13d) Compress the two PVC tees for 30 seconds so the cement can set

14	<p>Apply primer to one outside end of the D piece Apply primer to one inside of the PVC Tee outlet Apply cement to one outside end of the D piece Apply cement to one inside of the PVC Tee outlet Push the D piece into the PVC Tee outlet Rotate the D piece ¼ turn and hold for 30 seconds Repeat for the 2<sup>nd</sup> D piece on the other side of the PVC chair assembly</p>	
15	<p>Apply primer to the outside of both exposed ends of the D PVC pieces that you added in step 14</p> <p>Take the assembly from step 10 and apply primer to the inside of both 90deg elbows</p> <p>Apply cement to the outside of both exposed ends of the D PVC pieces</p> <p>Apply cement to the inside of the 90 deg elbows</p> <p>Place the 90deg elbows onto the two D pieces Hold for 30 seconds to set the PVC cement</p>	<p>Prime/Cement outside of D Pieces:</p>  <p>Prime/Cement inside of elbows:</p>  <p>Place elbows onto D pieces:</p> 



**You have completed the PVC Chair assembly process!**

**The PVC Cement requires 20 minutes to set and then up to 5 hours before the device is load-bearing.**

**Please put the device in a safe place, so it can dry without damage.**