ROV Frame Build Steps

1. Gather your Materials

- 2x 7 in long ½ in PVC Pipe
- 4x 6 in long ½ in PVC Pipe
- 2x 5 in long ½ in PVC Pipe
- 2x 3 in long ½ in PVC Pipe
- 4x 2 in long ½ PVC Pipe
- 6x 1 in long ½ in PVC Pipe
- 10 ½ in PVC Corner piece SxS
- 6 ½ in PVC T pieces SxSxS
- Zip ties
- Netting

2. Build the Frame

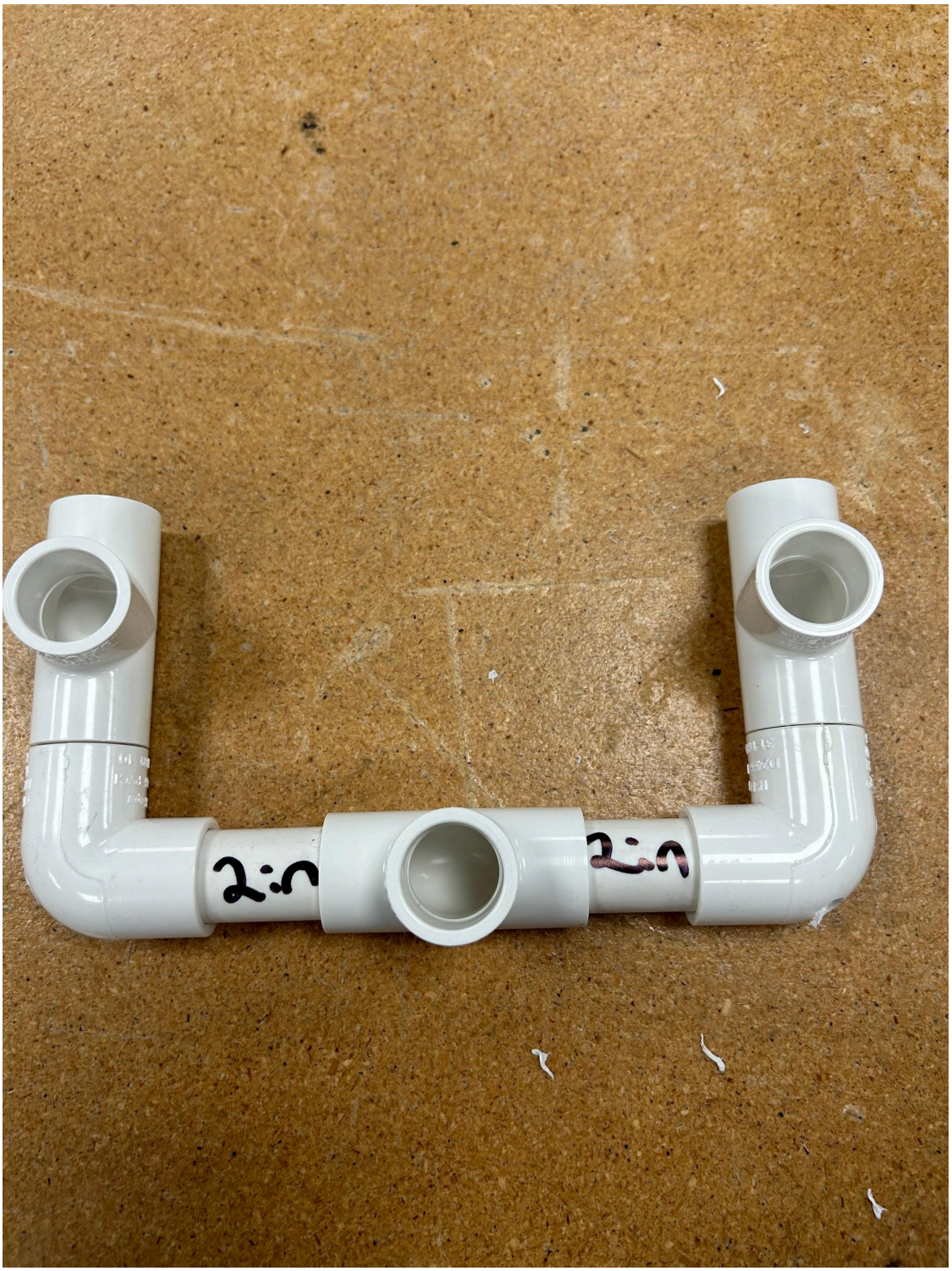
The Base

1. Start with the 2 in long PVCs and use a T piece with the exit hole facing the ceiling

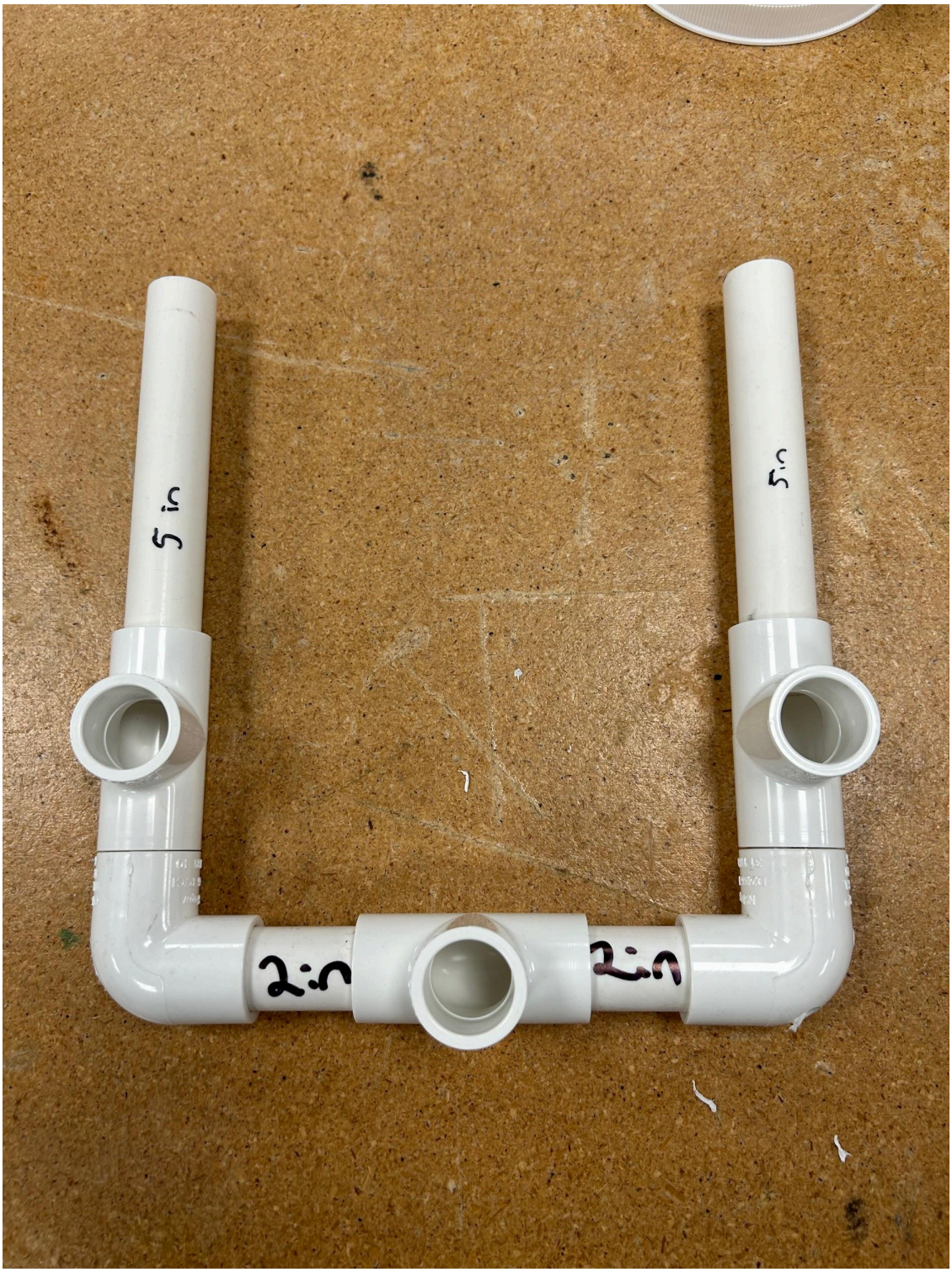
2. Now attach 2 corner pieces on the other end of the 2 inch long pieces

3. Put the 1 in pieces on the other end of each corner piece. It should look like a U shape

4. Then attach a T piece with the middle whole facing upwards to the ends of the 1 in pieces.

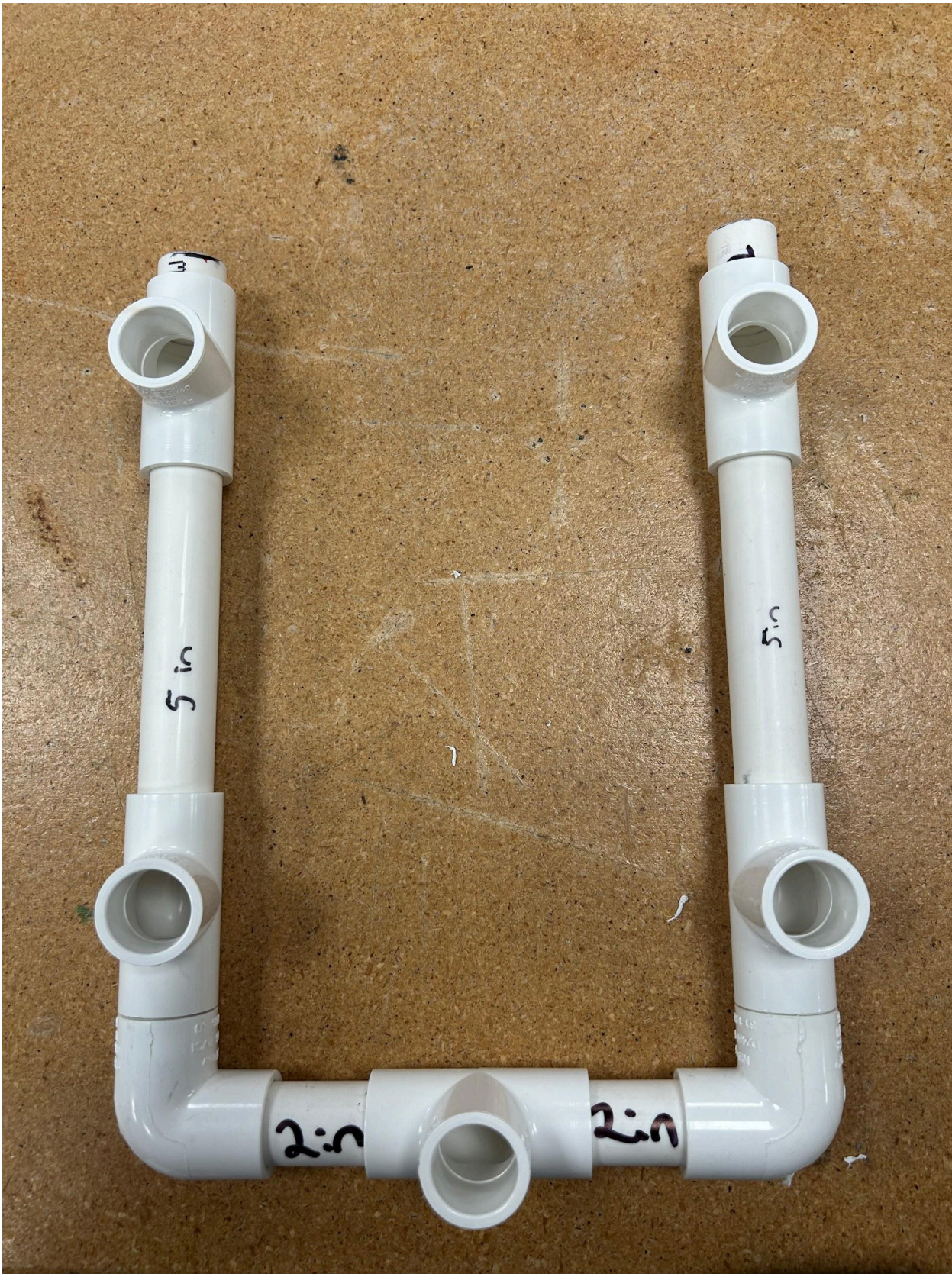


5. Continuing the build the base, attach a 5 inch PVC piece to the other end of the T piece opposite of the 1 inch pieces

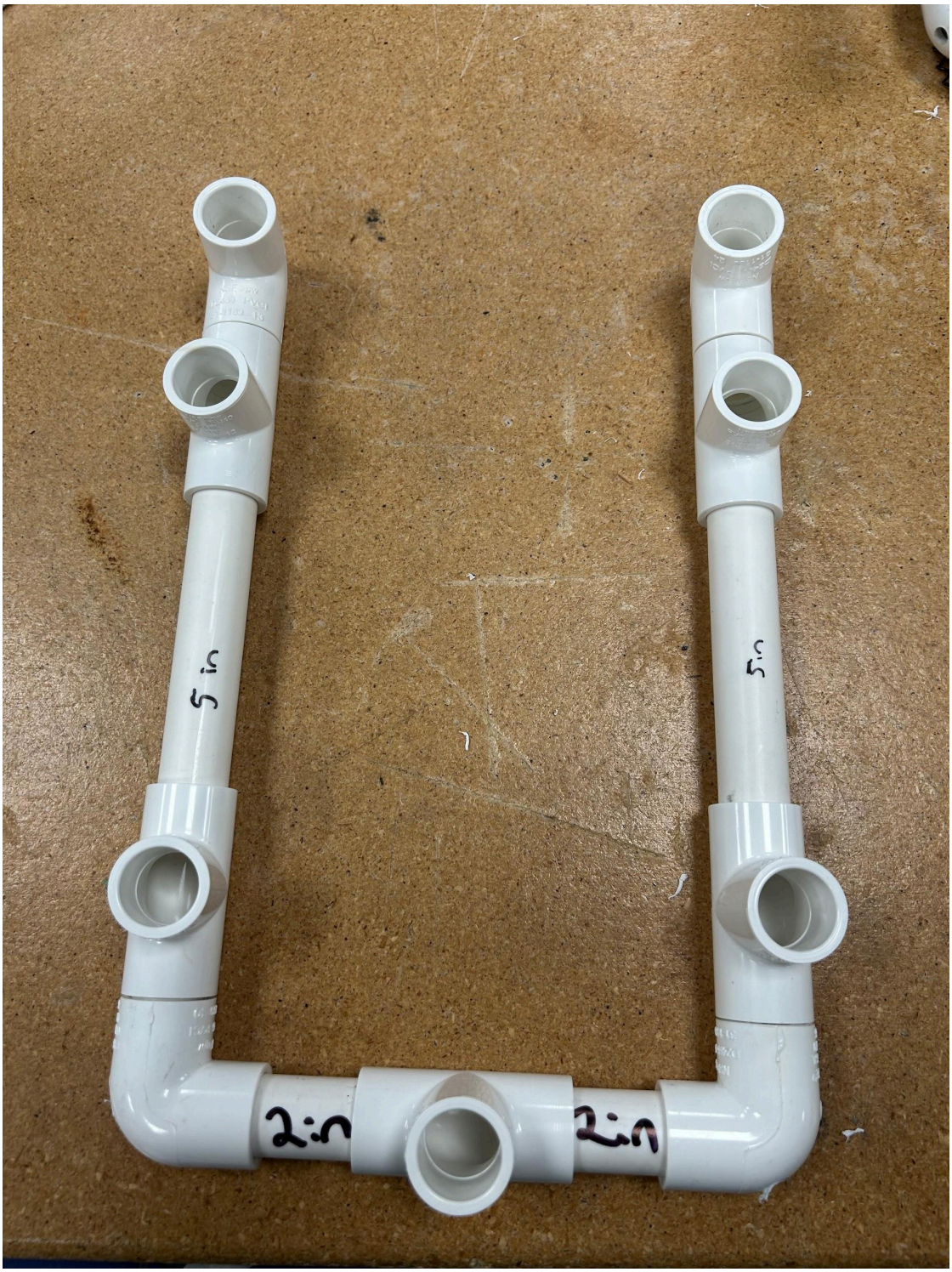


6. Then attach 2 more T piece to the other ends of the 5 inch PVC pieces

7. On the side opposite of the 5 inch pieces, put 1 inch pieces



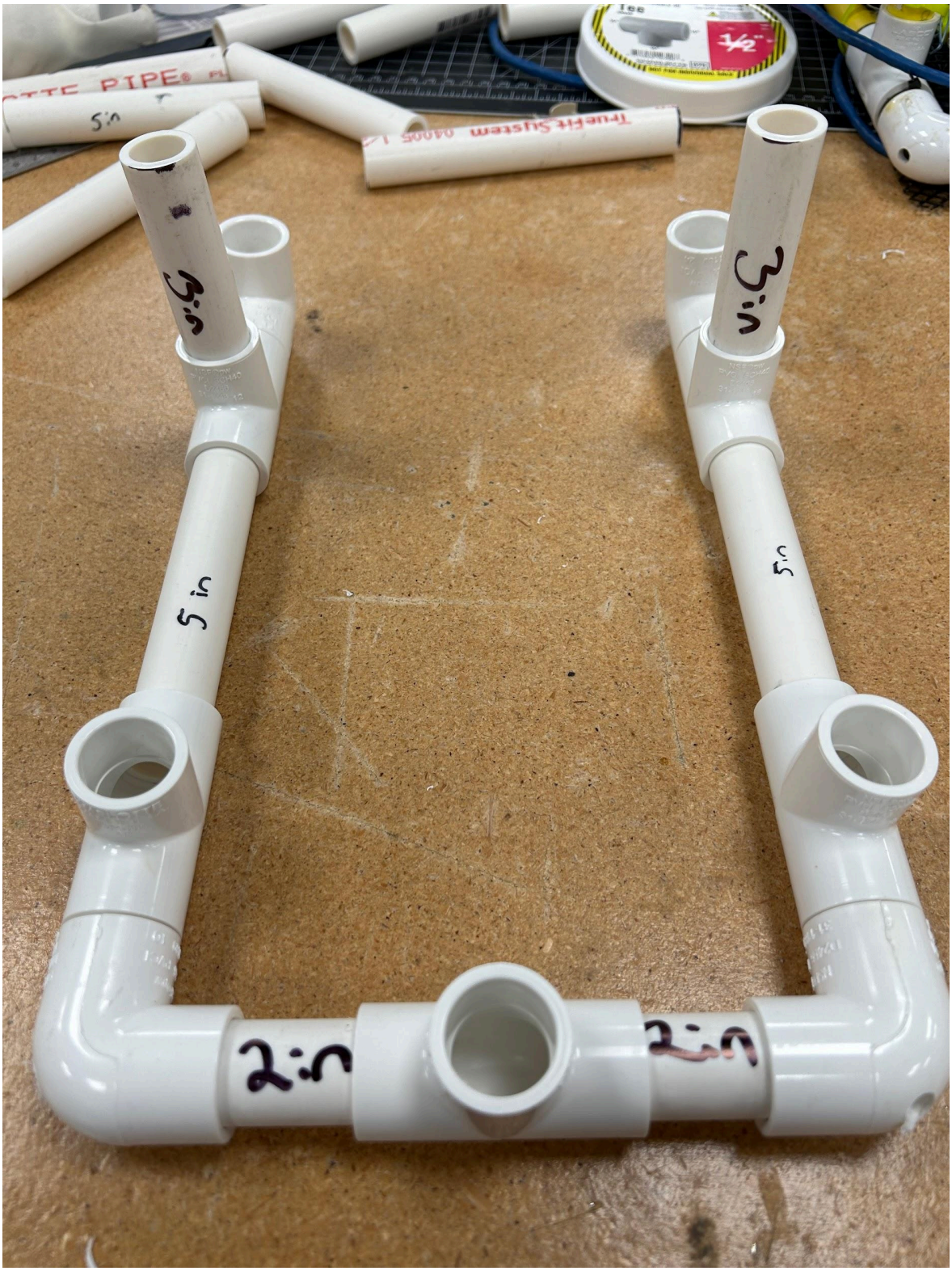
8. Put 2 corner pieces on the ends of the 1 inch pieces you just places and point the end of the corner facing the ceiling.



9. After the base is complete you should have a U shape with 3 holes on the left and right sides facing upwards.

Vertical Motor Holder

1. Place the 3-inch long PVC in each of the middle holes



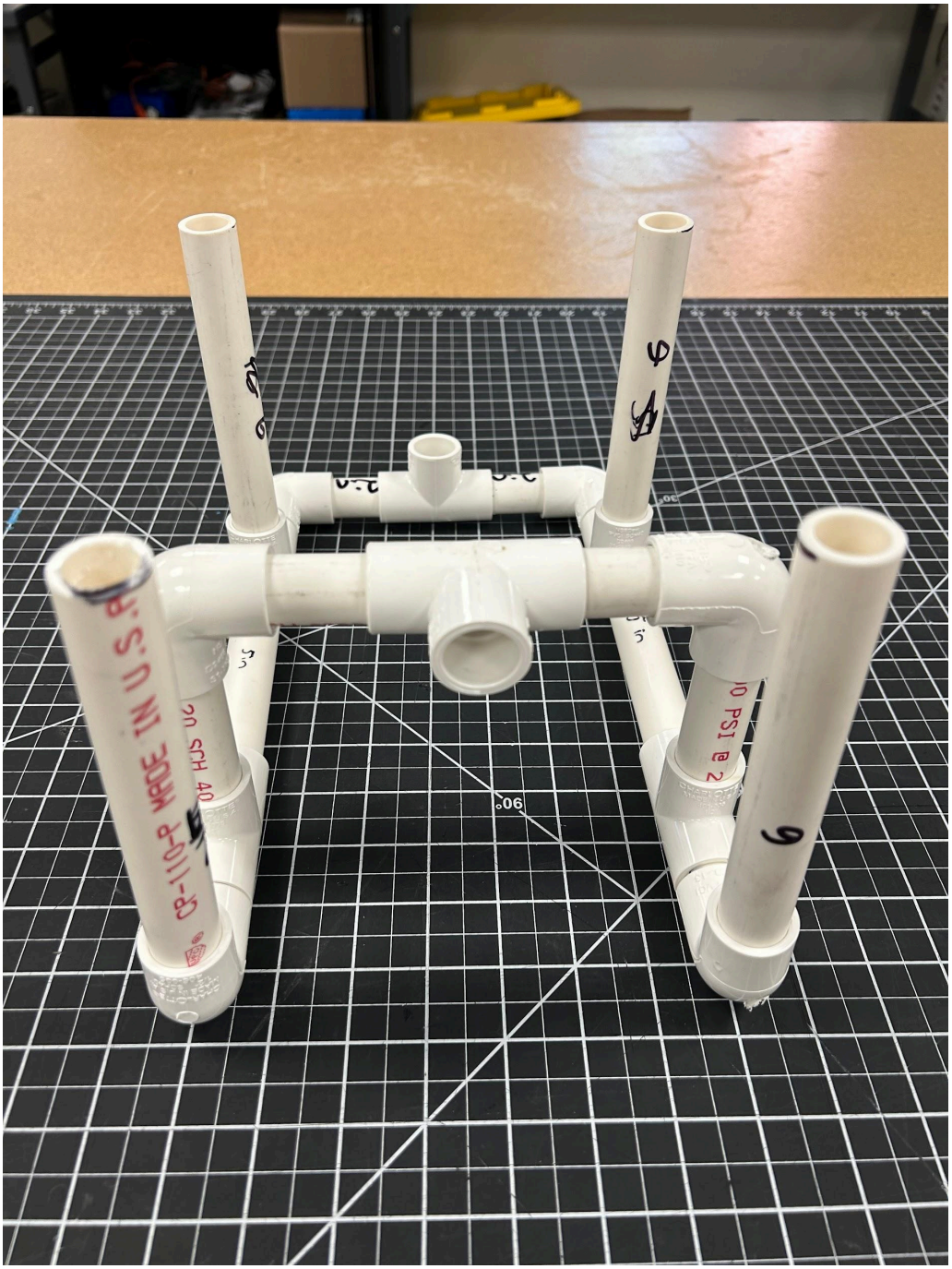
2. Then put a corner piece on the other ends of the 3 inch long pieces where each hole is facing towards the center

3. Connect the two corners with two 2 inch pieces on each side.

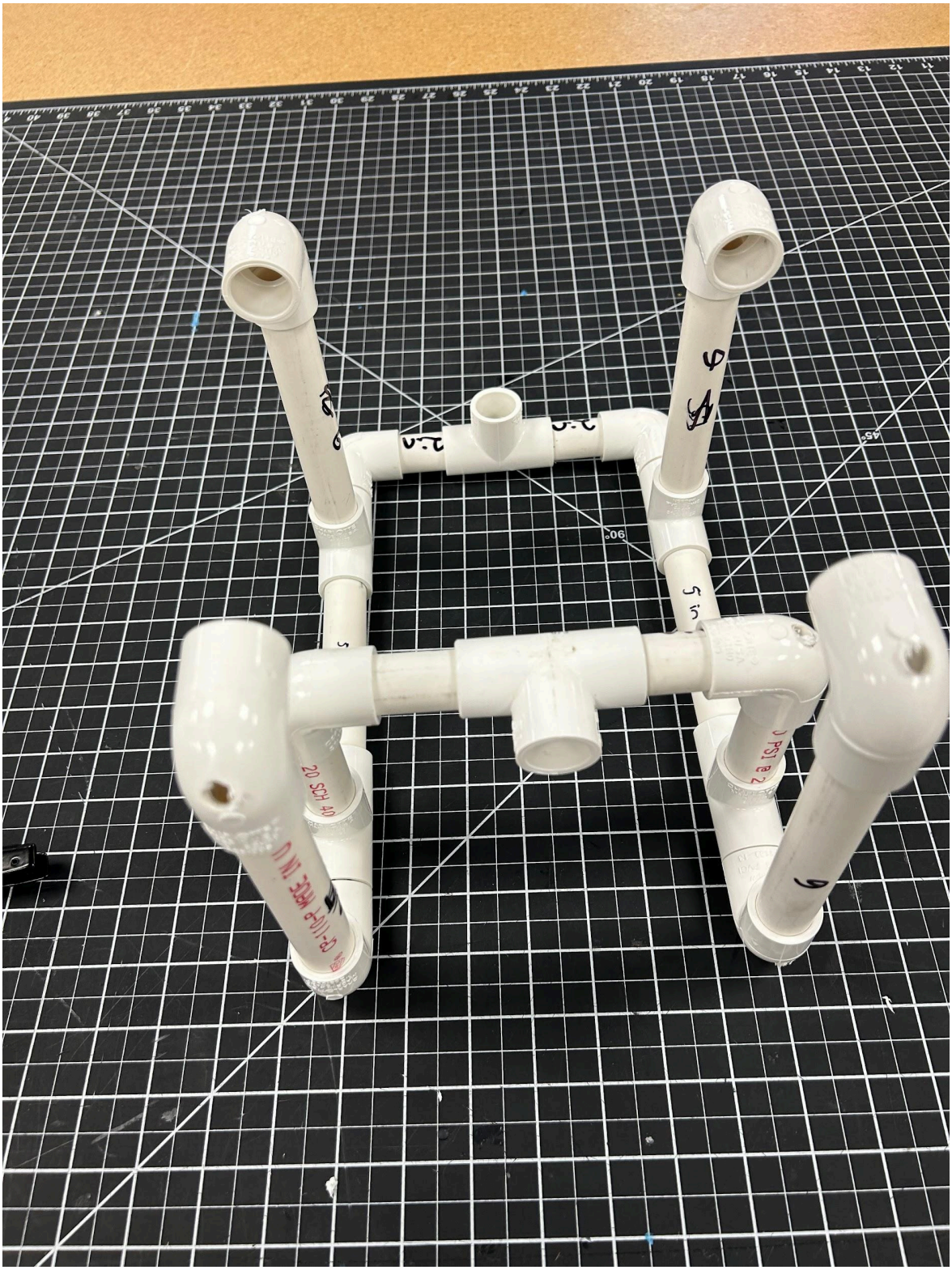
4. Put a T piece in the center with the exit hole facing towards the front of the ROV

Top of the Frame

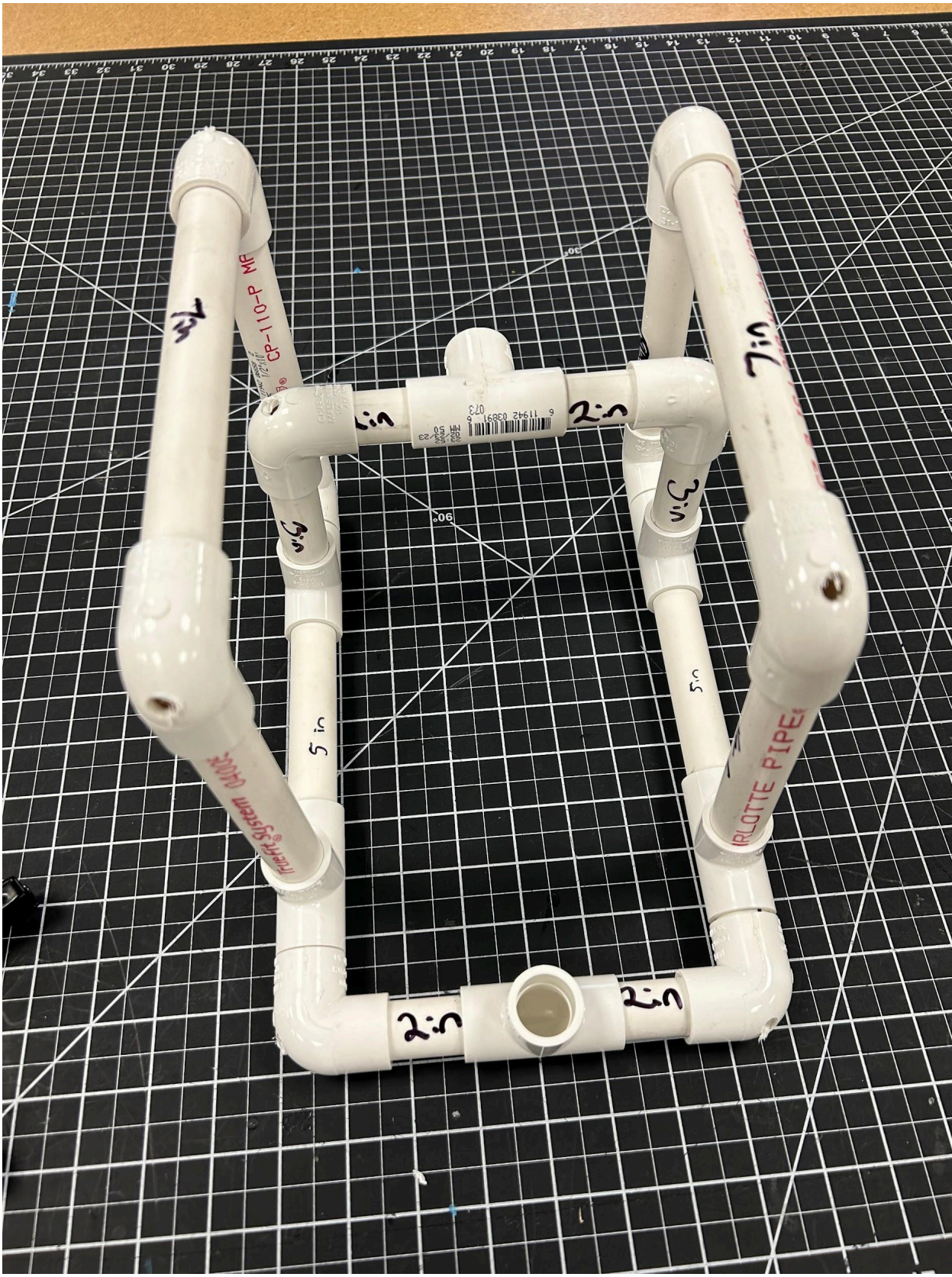
1. Place two 6 inch pieces in the front holes and two 6 inch pieces in the holes towards the back



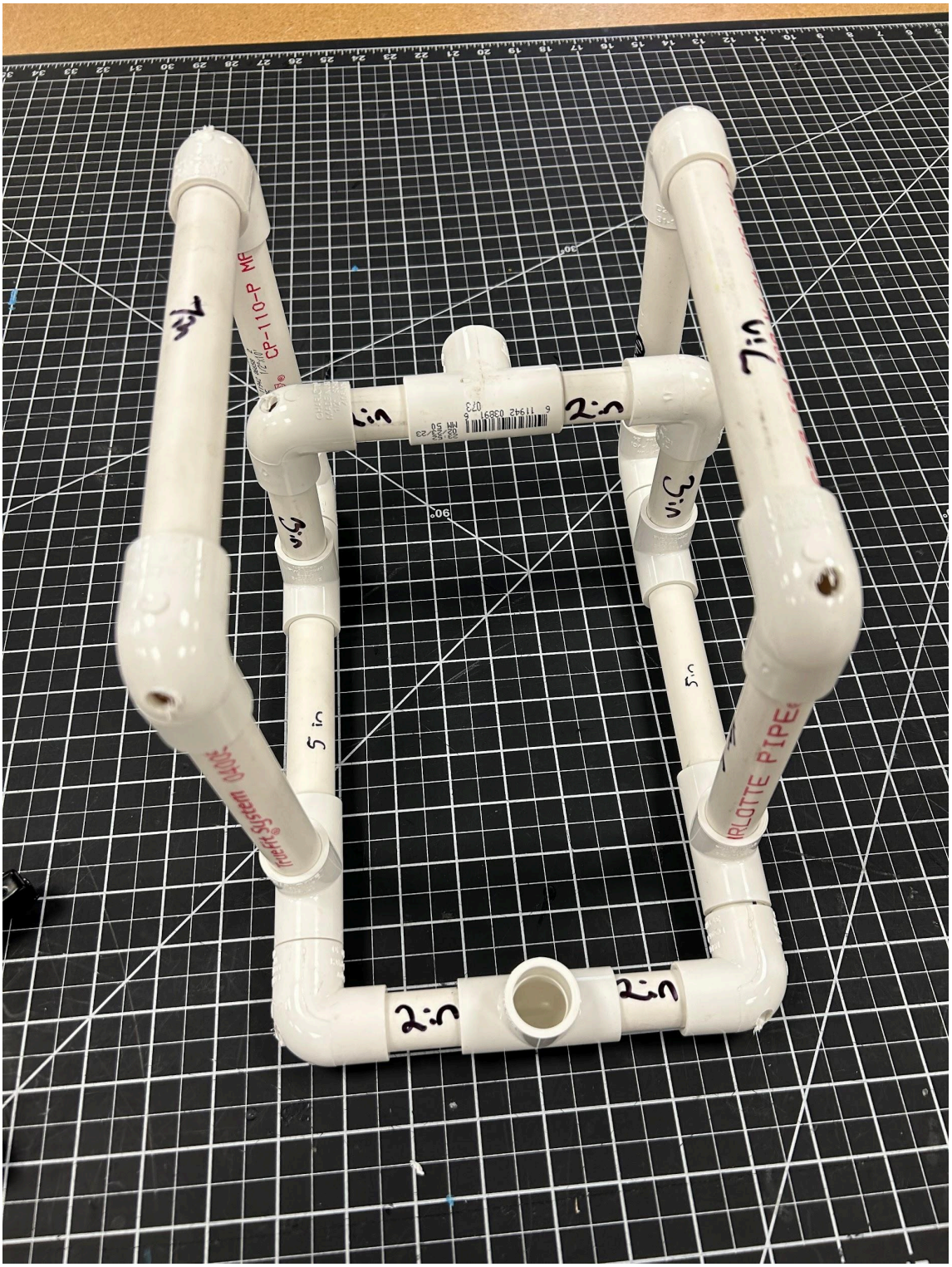
2. Put a corner piece on the other end of each of the 6 inch pieces with the exit hole facing towards the piece in the same line



3. Connect the corners together with two 7 inch pieces



4. Add 2 more 1 inch pieces to the left over T holes. We will be using them to attach our motors later !



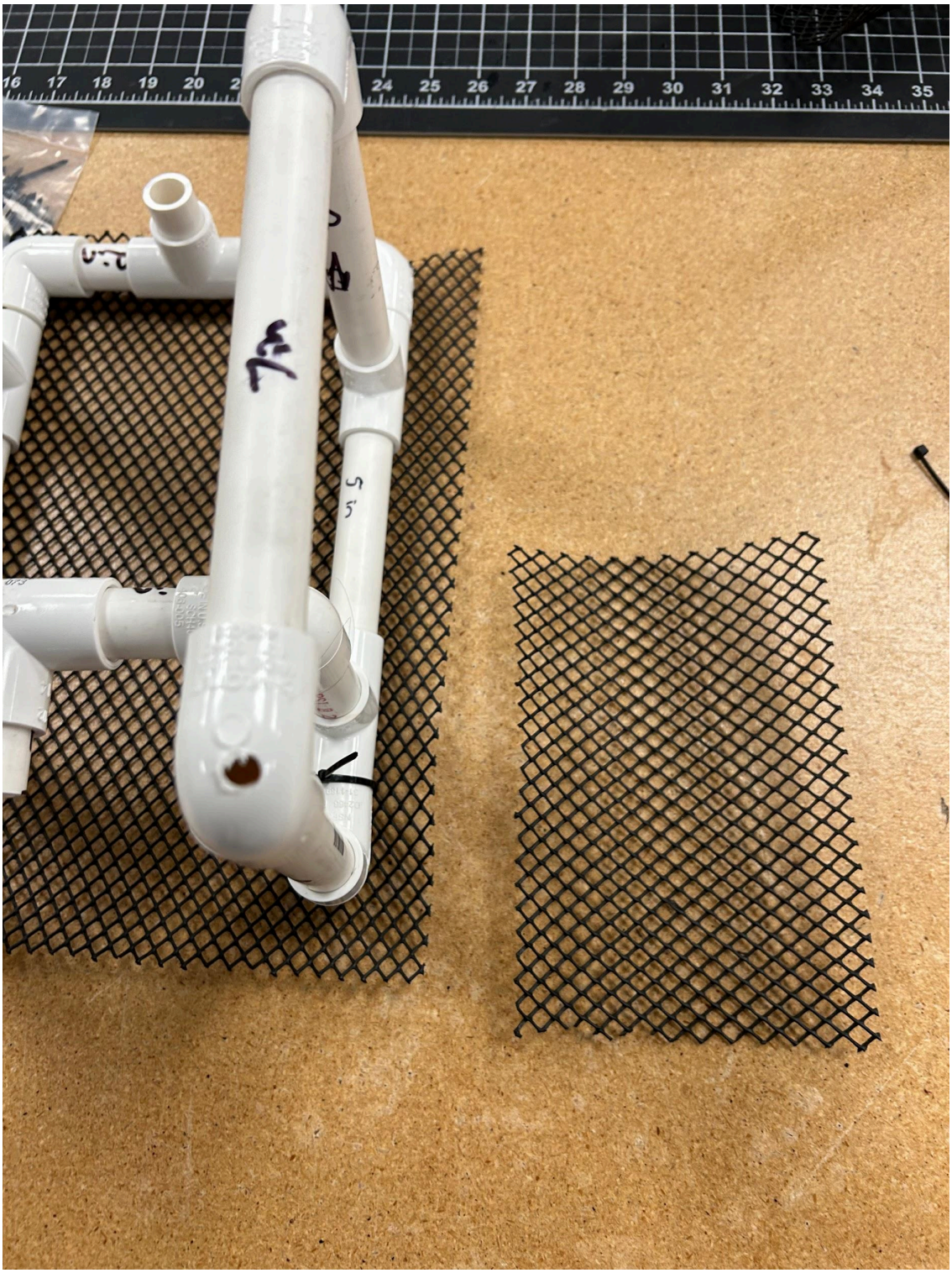
5. Carefully use a rubber mallet to make sure the pieces are all tightly in place
6. Now the frame is complete!

3. Add Netting

Cut the Netting

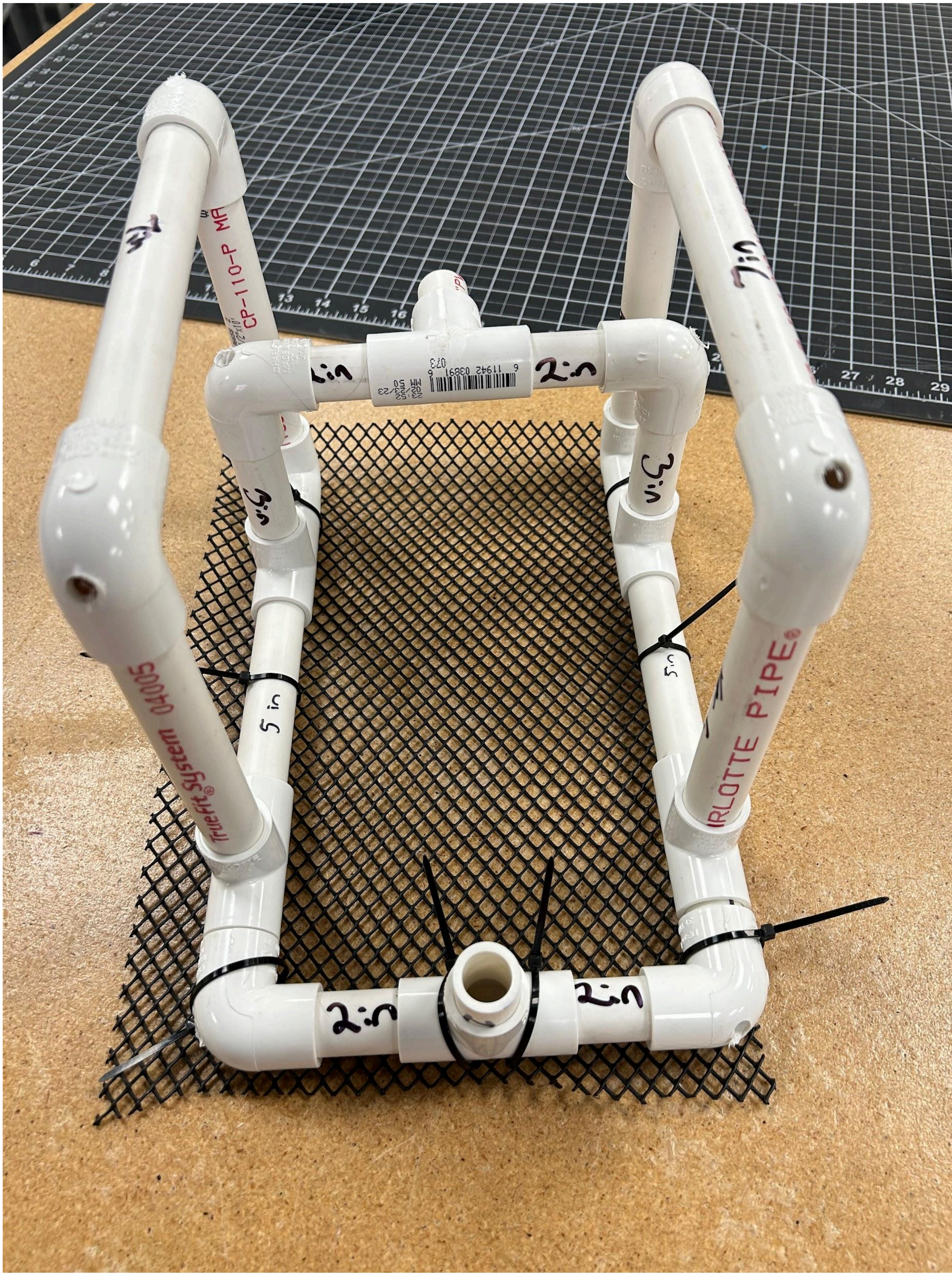
1. The goal is to create a net pocket for weights later on. First cut a large piece of net the same width and length as your frame base but add an extra inch to the outside perimeter.

2. Cut a smaller piece for the pocket that is smaller than the width of the inside of the base



Zip-tie the Netting

1. Use Zip-ties to secure the larger piece to the base PVC pieces. Make sure it is secure on all sides. Note that the open end will be for the closed part of our pocket



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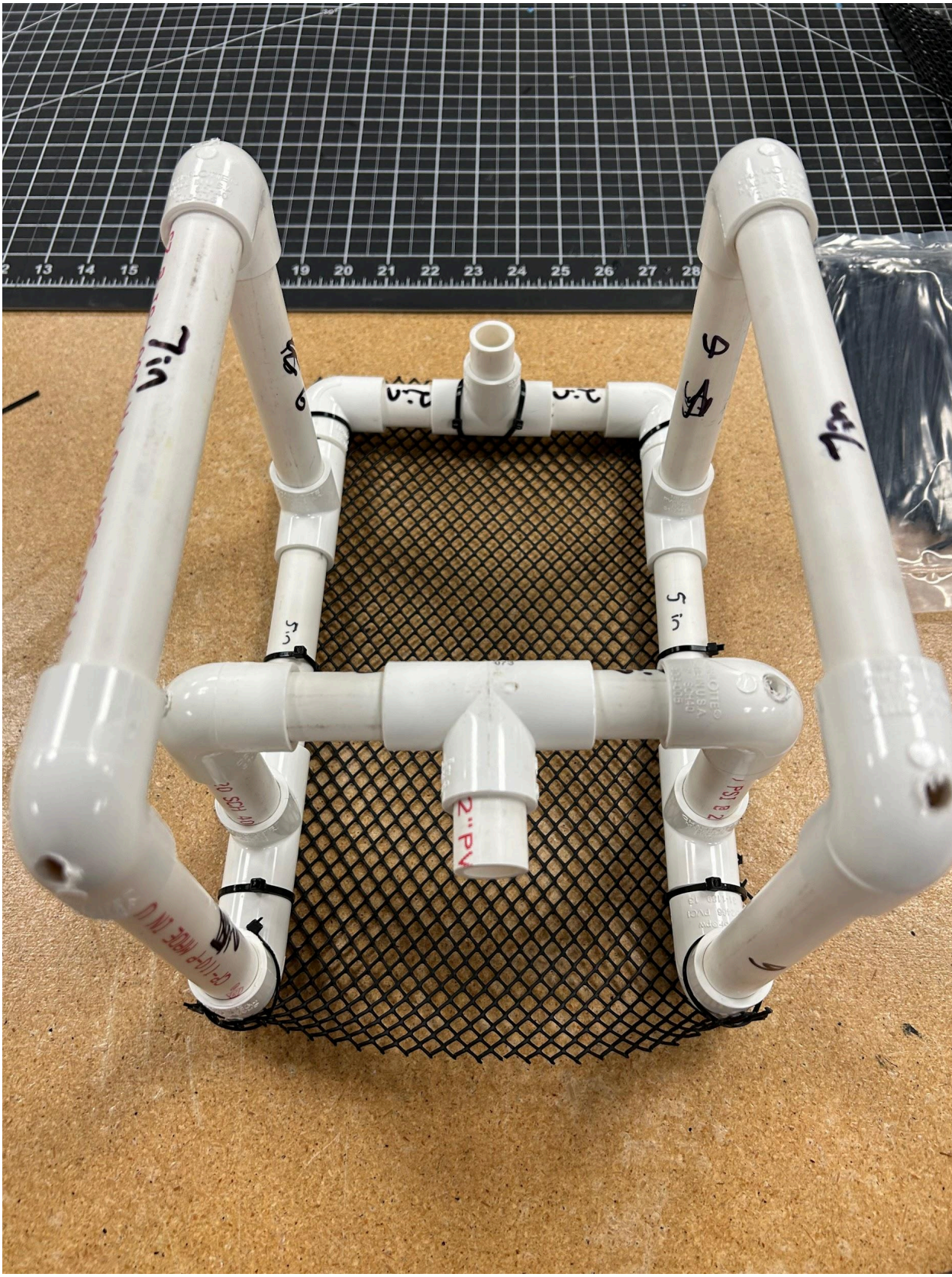
TrueFit System 04005



2. Trim excess net off the edge and cut the excess zip-tie ends

3. Now secure the pocket net piece to the the top of the base net piece. Leave one edge open enough to slip small rocks or weights into it is recommended to use the edge that will be closest to the forward/backward motor as the opening and the edge that has no PVC as a closed part with zipped ties

4. 


120 SCH 40
CP-110

5. Cut off extra zip tie

4. Add Floats

Attaching the Floats

1. Cut 2 pieces of pool noodle to fit on the top horizontal piece of the ROV. They have to be less than the length of the PVC piece it is on or it will not fit.
2. Carefully pull out the piece you would like to attach the floats onto and slide in onto the PVC pipe.
3. Reattach the piece you moved

4. Do this again for the other side