

# Mosquito Netting Rack Construction

## Preparing the pieces

Step 1. Cut pipe into the following sections:

- (4) 3' lengths for the legs
- (2) 2' lengths for ends
- (2) 32 ¼" lengths for part of side rail
- (2) 28 ½" lengths for part of side rail
- (4) 5 ¼" lengths for end extension

Step 2. Prime and glue one end cap to each of the 3' legs

Step 3. Prime and glue one Tee connector to the end of each 32 ¼" pipe using one of the "straight through" connections on the Tee connector

Step 4. Prime and glue one 5" pipe to the other "straight through" connection on the Tee connector

Step 5. Prime and glue one coupling connector to the end of each 28 ½" pipe

Step 6. Prime and glue one Tee connector to the other end of the pipe above

Step 7. Prime and glue one 5" pipe to the other "straight through" connection on the Tee connector

Step 8. Prime and glue 90 degree elbows to each end of the 2' pipes (2 elbows on each of the two pipes) making sure that the other end of the elbows point in the same direction.

\*Proceed to Assembly below and then return

Step 9. After the rack is assembled (steps 1-8 below), drill a hole all the way through the 90 degree connector, and the 5" section of pipe inside, from top to bottom

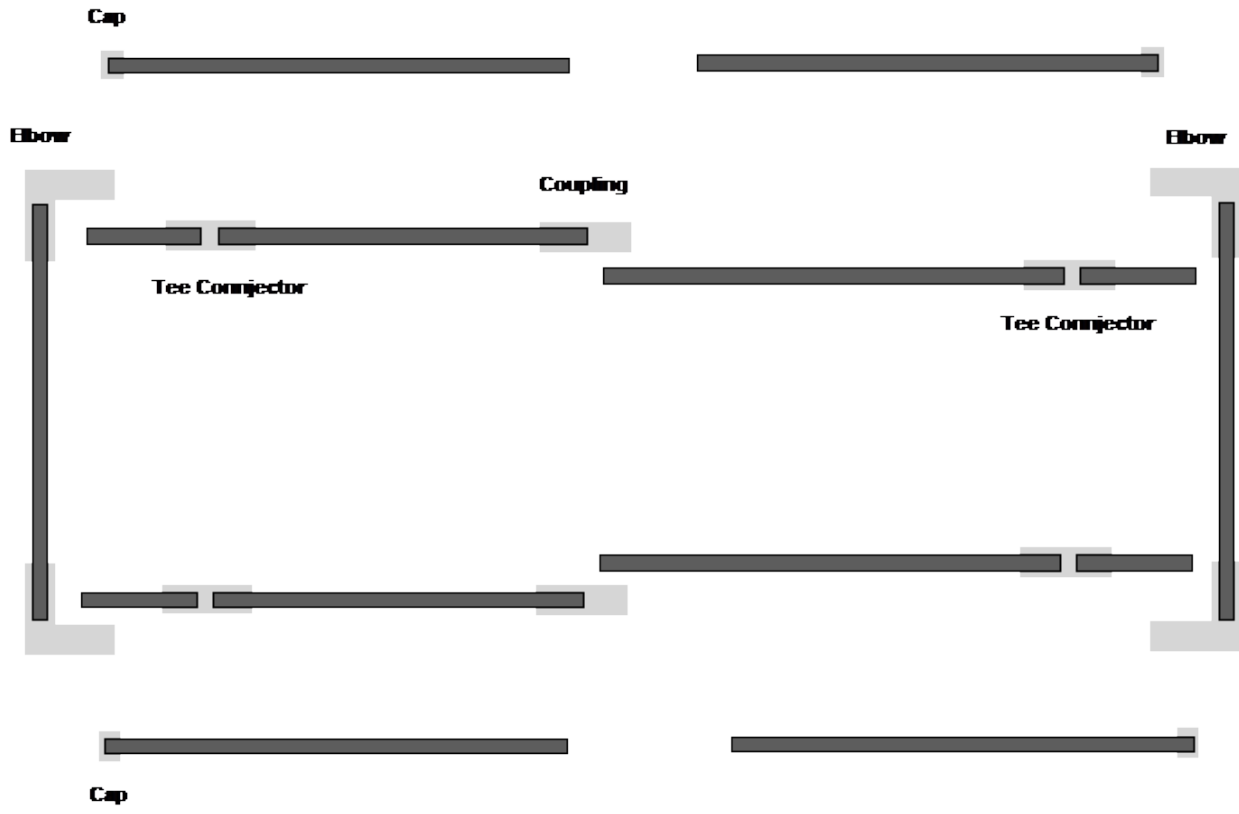
Step 10. Insert a bolt through each of the holes to prevent the legs from rotating and secure with a wing nut

Step 11. Mark both sides of all joints (for example, A & A, B & B, etc.) so the frame can be assembled the same way each time. This will assure that the bolt holes will line up after assembly. Note 1: The connections may need to be rotated to line up the holes. Note 2: Duct tape can be used to hold any loose joints together once you are at Summer Camp.

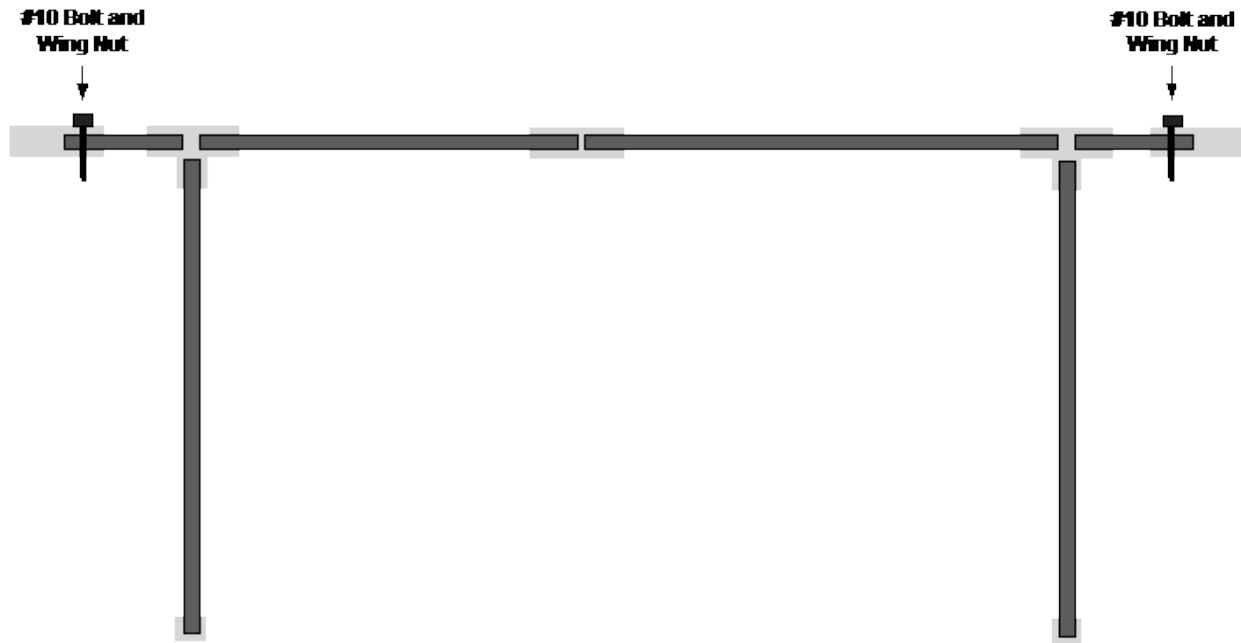
## Assembly

- 1) Insert the end of the 32 ¼" pipe (opposite the end with the Tee connector) into the coupling on the 28 ½" pipe (the 5" pipes in the Tee connectors will be on opposite ends)
- 2) Repeat step 1 for the other set of pipes
- 3) Insert one of the 5" pipes (part of one of the assemblies from above) into one of the 90 degree elbows on the "end" piece from step 8 above
- 4) Insert one of the 5" pipes (from the other long assemblies from steps 1&2 above) into the other end of the end piece used in step 3
- 5) Attach the other end piece as in steps 3&4 to the opposite ends of the long assemblies
- 6) Rotate the pipes so all of the open end of the Tee connectors are facing up
- 7) Insert the legs (3' pipes) into the Tee connectors
- 8) Turn the entire assembly over and adjust the legs so they are vertical

# Top View of Pieces



# Side View – Assembled



## Mosquito Netting Rack

Note: All PVC pieces are 3/4" schedule 40. All connectors are "slip" connect (not threaded)

Quantity	Part	Description	Cost-Each	Total
4	Cap	Solid end cap to seal tube	\$0.39	\$1.56
4	Tee	"T" Shaped connector for 3 joints	\$0.54	\$2.16
2	Coupling	Straight connector for 2 joints	\$0.12	\$0.24
4	90* Elbow	90 Degree connector for 2 joints	\$0.13	\$0.52
1	PVC Primer	Cleans parts before gluing	\$1.60	\$1.60
1	PVC Cement	Glue	\$1.46	\$1.46
3	3/4" PVC	3/4" x 10' schedule 40 PVC pipe	\$1.52	\$4.56
1 bag	#10 Bolts	4 per bag, 1 1/2" long		
1 bag	#10 Wing Nuts	4 per bag		

Total cost should be less than 15\$