

# DIY GARMENT RACK

## FOR A 29" OLYMPIA ROLLING DUFFEL

For this project,  $\frac{3}{4}$ " schedule 40 PVC pipe (usually sold in 5' and 10' lengths) and fittings were used.

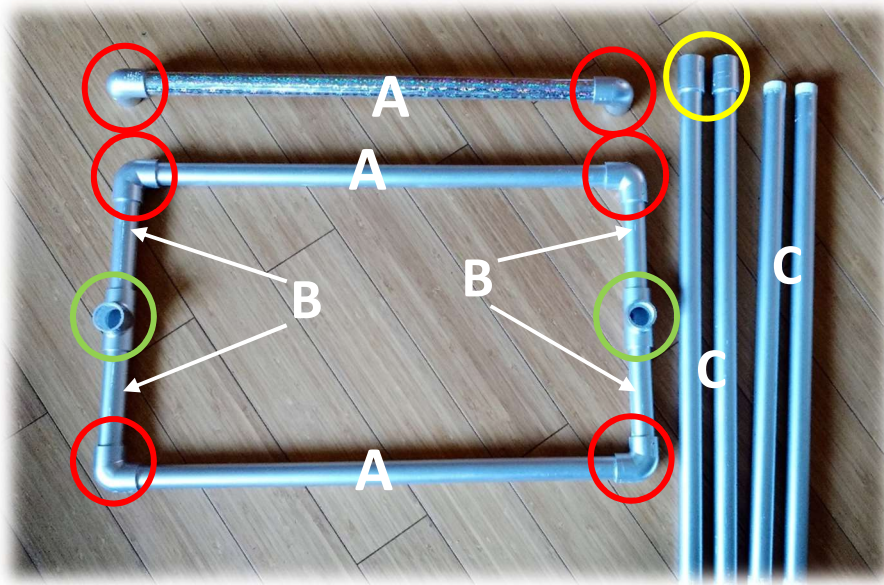


Fig. 1

### You will need:

- 4 pipe pieces 24" long (rack end posts "C" in Fig. 1)
- 3 pipe pieces 22" long (base lengths & rack hanging bar "A" in Fig. 1)
- 4 pipe pieces 5½" long (base widths "B" in Fig. 1)
- 2 "T" fittings (circled in green in Fig. 1)
- 2 couplers (circled in yellow in Fig. 1)
- 6 90° elbows (circled in red in Fig. 1)
- PVC cutting tool
- PVC primer (or rubbing alcohol to clean where pipe attaches to fittings)
- PVC glue (or E6000)
- Spray paint for plastic (optional)
- Holographic tape (for hanging bar – optional)

### How to:

First, mark, then cut the pipe in the specified lengths shown above using the PVC cutting tool. Prepare all of the fittings by cleaning the insides of each opening with the PVC primer or rubbing alcohol. *You will NOT glue all of the connections, because you will need to break down a small portion of the rack to fit it into the duffel. Also, it may be helpful to fully assemble the rack (especially the base) to make sure it properly fits into your duffel. Then you can go back and glue (The points where fittings are attached in Fig. 1 are the only points where glue should be applied. Glue should NOT be applied to one end of each coupler, nor to the elbow ends of the rack hanging bar that will attach to the end posts, nor to the center openings of the "T" fittings).* Next, take two elbows and push each one onto either side of one "A" piece. Make sure you position the elbows so the open ends are pointed down. You want to make sure the open ends of the elbows are flat against the floor at this point when

you glue so the rack isn't crooked when fully assembled. Repeat this step with the last two "A" pipe lengths and the 4 remaining elbows. Next, take two "B" pipe lengths and attach them onto either end of one "T" fitting, leaving the center opening free. Repeat with the other "T" fitting and "B" pipe lengths. After that, form the base, by connecting two of the "A" pieces with elbows attached to both "B" pieces with "T" fittings already attached. Then, create end posts, by attaching two "C" pipe lengths with one coupler. Repeat with remaining "C" pipe lengths and coupler. Insert end posts into center "T" opening on base. Finally, attach the rack hanging bar onto the end posts. Tap all joints firmly (a rubber mallet is useful) once all of the joints have been glued to ensure a good fit. Once the rack has been assembled, you can personalize it with spray paint and holographic tape or other fun, printed/colored duct tape.

The dimensions for this particular garment rack were based on the measurements of our 29" Olympia Rolling Duffel Bag. You can make this rack fit any rolling duffel, but you will need to consider the dimensions of your bag to ensure the rack fits properly. When measuring the long side of the bottom of the bag, take measurements from the INSIDE, measuring from the inside edge of the wheels (raised portion on one end of the bag, see Fig. 2) to the seam on the opposite end, and seam to seam on the short end (width).



Figure 2



Figure 3

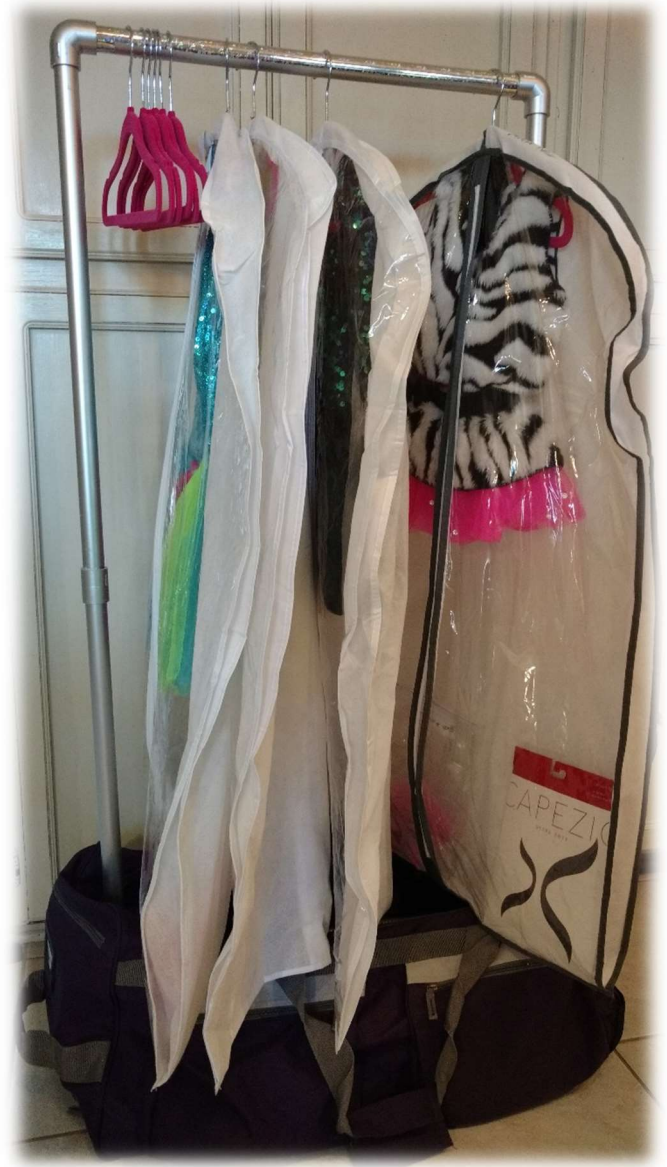


Figure 4

A few notes:

- We used garment bags purchased from Wal-Mart, one for each costume (\$2.97/ea).
- I like the flocked slim hangers because they save space and the costumes grab onto the fuzzy coating and don't fall off so easily (they come in child and adult sizes).
- Inside each garment bag, we keep a gallon-sized Ziploc bag that we keep the specific tights and shoes for each costume.
- Binder clips work well to slip over the hook of the hanger to clip costume accessories like gloves.
- Keeping everything for each costume separate in their own bags is really helpful to keep everything organized and ready to go for quick changes.