Do-It-Yourself PVC Workstand Plans

Read these directions in their entirety before starting. Check off each box as you complete each step. Take your time. The whole process should only take about 60 minutes.
Required Tools

You will need the following tools:

- Something to measure the pipe you will be cutting. A yardstick is OK, a tape measure is better.
- A felt tip (marker pen) to mark the pipe for cutting.
- Something to cut the PVC pipe with. A hacksaw or pipe cutter will work, but a PVC pipe cutter, available for about $10 at the same place as where you'll get the pipe, works perfectly.

Required Supplies

- Go to any hardware store or home improvement center for supplies. You will need to purchase the following items. They should cost around $14-28 depending on whether or not you purchase PVC Cement and/or Primer Cleaner, and the optional PVC Pipe Cutter:
  - three 10’ lengths of 3/4” schedule 40 PVC pipe.
  - four 45 degree 3/4” elbows.
  - four 90 degree 3/4” elbows.
  - eight 3/4” 3-way Tee fittings.
  - two 3/4” 3-way 90 degree fittings.
  - one small can of PVC glue, also known as PVC All Purpose Cement.
  - one small can of PVC Primer Cleaner.

Cutting Instructions

Remember the old carpenter’s rule: “Measure twice – cut once!” Take your time.

Step 1 – cut only one of the 10’ lengths of PVC pipe, and cut out just one of each of Parts A through H as follows. [Note: If you choose, you can tape two of the 10’ lengths of pipe together side-by-side, and mark them both at once for cutting. This will speed up the cutting process, and will insure that the pairs of parts A through H will be identical in length.]

- part A: 19-1/2” (quantity one)
- part B: 8”
- part C: 2-7/8”
- part D: 22-3/8”
- part E: 13”
Step 2 – repeat Step 1 on the second 10’ length of PVC pipe.

Step 3 – cut the third 10’ length of PVC pipe as follows:

- part I: 8-1/4” (quantity two)
- part K: 20-3/8” (quantity one)
- part L: 9-3/4” (quantity four)
- part M: 40-1/2” (quantity one)

Pre-Assembly Instructions Without Glue

- Now pre-assemble the entire unit without glue to make sure all of the parts fit together correctly. Do not glue anything together yet. Make sure all connections are fully seated.
- Assembly #1: The Sides. Assemble parts A through I flat on the floor. Do this twice, once for each side.
- Assembly #2: Assemble M with four L’s, using two 3-way Tees.
- Test fit both sides (Assemblies #1), together with Assembly #2, and part K. Make sure that you have the workstand assembled correctly.
- Once it is assembled correctly, then separate both Assemblies #1 from Assembly #2.

Gluing Instructions

Take your time. The entire assembly should only take you 10 to 15 minutes to glue. Important! – If you have never glued PVC together, it is very easy. First put PVC Primer Cleaner on each of the 2 parts to be glued, that is, on the outside of the male end, and the inside of the female end. Then put PVC glue on only the outside of the male end to be assembled. Now you must assemble the two parts very quickly. PVC glue dries rock-hard and immovable in about 5 seconds, so make sure you glue quickly and align the two parts together correctly, as you will only have a couple of seconds to make any adjustment. Be sure to do your gluing in an outdoor or well ventilated area, as PVC glue vapors are harmful. Wear safety glasses when gluing. PVC glue is extremely flammable. Do not use near any flame or heat source. If you get any PVC glue on your exposed skin, wash it off immediately.

- First glue Assembly #2 together. This is an excellent first assembly to glue, as it is impossible to misalign when gluing. Just make sure that these and all joints are fully seated when glued.
❑ Then glue both Assemblies #1. Glue them up flat on the floor to make sure they are plumb and square. Take great care to make sure that the 3-way-Tee connecting parts C and E together, is perfectly perpendicular to the floor when the unit is laid flat on the floor.

❑ After both Assemblies #1 are glued, then glue Assembly #2 into place between both Assemblies #1. Glue Assembly #2 into place one joint at a time.

❑ Then glue part K into place.

❑ Finally, glue the two parts I into their correct location.

That’s it! You’re done. Now go work on your bike. Good Luck!