## **Plumbing Project Tester**

Pressure testing plumbing projects is a practical way to score projects. The real test of the plumbing skill is to create leak proof plumbing. Building plumbing is required to pass a pressure test as part of the inspection process. Building inspection requires that plumbing hold at least 30 psi of air pressure with no leaks. The tester will limit the pressure on the project making the testing safer. This is particularly important for PVC pipe which can be dangerous if it fails under pressure.

## Materials:

- Air fitting to match shop air system (male)
- ¼" x 2" nipples
- ¼" tee
- Air pressure regulator
- 0-60 PSI gauge
- ¼" ball valve
- Fittings to adapt from ¼" to project (1/4" x 1/2" bell reducer & ½" MPT x ¾" MHT)

Assemble as shown in the photo below.



Basic tester with hose thread adapter.

## Use:

Projects can be tested in water which is easier to see which joints leak and quicker. They can also be tested to see if they hold air pressure.

- 1. Attach the tester to the shop air system.
- 2. Set the pressure regulator to 30 psi.
- 3. Glue joints of the project should be allowed to set before testing. Inspect copper soldered joint to see at least some solder in the joint.

- 4. Attach the tester to the project. If water testing this connection need not be air tight.
- 5. Water Testing: Slowly open the ball valve. Submerge the project and check for bubbles. An advantage of water testing is that you can see which joints leak.
- 6. Air Testing: Slowly open the ball valve. Close the ball valve and check the gauge. If the gauge pressure drops the project has a leak.



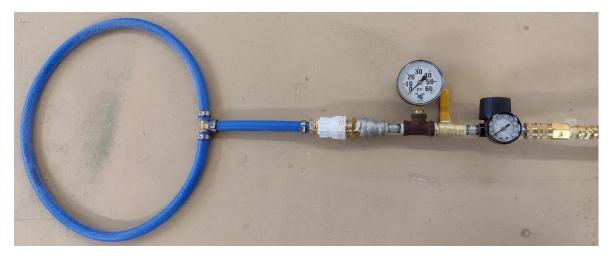
Tester connected to a project with a ½" IPT.



Tester connected to a project with regulated pressure on the project.



Valve is closed and note the pressure dropping (from above) indicating a leak



Connected to a project with a hose fitting.

## **Parts:**

Air fitting (needs to match your system)	Air Pressure Regulator
Pine Ningle	
Pipe Nipple	¼" Ball Valve
Tee	Bell Reducer
Hose Adapter (1/2" Male NPT x ¾" MHT)	