# Valve Installation Guide

## Some General Hints

Think your project through and be certain you have all the proper tools and accessories.
Check the alignment of all fitting and pipes to reduce stress on the fittings.
After completion, carefully inspect each joint for leaks.

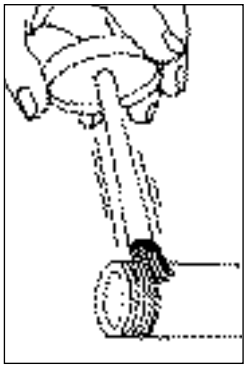
## Threaded Installations

### Accessory Checklist

- ☐ Thread seal tape or
- ☐ Pipe joint compound
- ☐ Wrenches

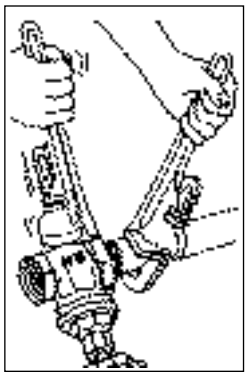
### Pipe Preparation

Use thread seal tape or pipe joint compound on all male threads only before assembling. Do not use on inside (female) threads.



### Assembly

Close the valve completely before assembly. Use one wrench to hold the pipe and one to turn the valve. Never attach a wrench to a valve anywhere except to the hex flange on the side you are screwing the pipe into.

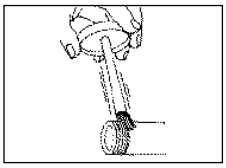


## Solder Installations

### Accessory Checklist

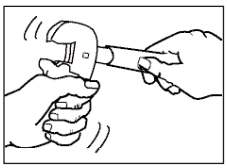
- ☐ Wire brush or sand cloth
- ☐ Solder Flux
- ☐ Solder
- ☐ Tubing Cutter

### Cutting



Cut copper tubing to size with a tubing cutter or hack saw. Be certain your cut is square.

### Reaming

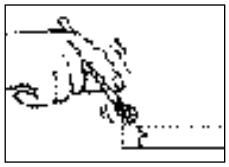


Remove all burrs on both the inside and outside edges of the tubing.

### Cleaning

Both the tubing and the valve must be cleaned of all dirt, oil, and corrosion. Use fine sand cloth or a steel wire brush. Do not use steel wool.

### Fluxing

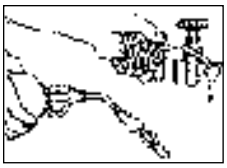


The surface to be soldered must by covered with a thin film of flux. Both the tubing and the valve must be covered. Use flux sparingly but be certain all surfaces are covered.

### Heating

Be certain the valve is fully open or remove stem and bonnet before soldering. Apply heat with a torch to the tubing first. Transfer as much heat as possible to the valve through the tubing. Avoid prolonged heating of the valve.

### Soldering



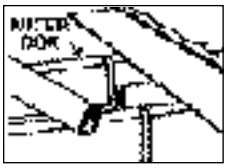
When the temperature of the parts is hot enough to melt the solder, the flame is removed. Solder is then applied to the joint and will automatically fill the joint through capillary action. Use about a 3/4" length of 1/8" diameter solder for a 3/4" valve (more or less for other sizes).

## Solvent Welding Installations

### Accessory Checklist

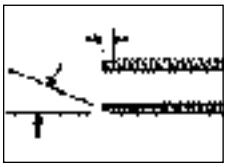
- ☐ Plastic primer
- ☐ Plastic solvent cement
- ☐ Tubing cutter
- ☐ Deburring tool

### Cutting



Cut plastic pipe to size with a fine-tooth saw or plastic pipe cutter. Be certain your cut is square.

### Deburring & Beveling

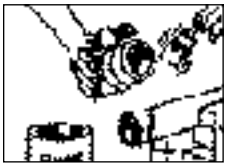


Remove all burrs on both the inside and outside edges of the pipe. Bevel the outside end of the pipe to insure easy insertion into the valve. This can be done by using a half round file or utility knife.

### Priming

For CPVC installations only. The surfaces to be glued must be coated with a CPVC primer before cement is applied. Be certain both surfaces are clean before applying CPVC primer.

### Apply Cement

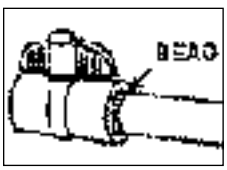


Both the end of the pipe and the inside of the valve or fitting must be coated with cement. Be sure to use the correct cement for the specific type of pipe involved. NOTE: On certain types of pipe, a second application of cement is recommended.

### Joining

Insert the pipe into the valve as far as it will go giving a quarter turn to the pipe at the same time. This guarantees an even distribution of the cement into the valve and pipe.

### Cleaning



Wipe off excess cement, leaving a small bead or “fillet.”

Drying or curing time will depend on the type of solvent cement used.
Note: It is advisable that temperatures are between 40ыF and 90ыF when solvent welding.

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