

## Installation Notice for Sweat Solder End Two-Piece Brass Valves

This valve must be soft soldered into lines without disassembly using a low-temperature solder such as 95/5 tin-antimony solder which melts at 452-464° F.

Please do not use acetylene to solder these valves. For all lead-free solder which melts in this temperature range, extreme care must be used to prevent seat damage, since temperatures over 500° F will damage the seat material.

## **Installation procedure:**

1) Clean and flux as you would any solder joint.

2) Close the valve. This does two things. It gets the handle out of the way and protects the TFE seat with the ball.

3) Wrap a wet rag around the body. With the flame directed away from the valve, apply heat to the end opposite the threaded end piece.

4) Apply solder and move off.

5) Repeat step 4 on threaded insert end.

6) Upon completion of step 1 to 5 leave the valve in the closed position until cool.

7) Heat from the soldering if excessive may affect stem seal, the adhesive material, the seat and more. It may also be necessary to tighten packing gland. ALWAYS CHECK FOR LEAKAGE AFTER INSTALLATION.

## WARNING:

THIS VALVE WAS NOT DESIGNED OR INTENDED FOR INSTALLATION WITH BRAZING ALLOYS. INSTALLATION BY THIS METHOD WILL DAMAGE THE VALVE AND DISSIPATE THE ADHESIVE USED WITHIN THE VALVE.

PLEASE USE ANY RUST PREVENTIVE SOLUTION OR INHIBITOR PRIOR TO INSTALLATION OF SEALS OR CARTRIDGES OR TEFLON RELATED MATERIAL. THE CALCIFICATION CAUSED BY THESE MATERIALS WILL EAT INTO SEALS, TEFLON AND WILL PLUG THE AUTOMATIC CARTRIDGES

DO NOT UNDER ANY CIRCUMSTANCES SOLDER THE DOWNSTREAM SIDE OF THIS VALVE WHILE THERE IS UPSTREAM STATIC PRESSURE OR WITH FLUID AROUND THE BALL. THERMAL EXPANSION OF THE FLUID COULD PRODUCE EXCESSIVE INTERNAL PRESSURE WHICH COULD DAMAGE SEAT, BODY FORGING. OR THE ADHESIVE MATERIAL. ALWAYS DRAIN DOWN THE SYSTEM AND CYCLE THE VALVE TWO OR THREE TIMES AFTER DRAIN DOWN IS COMPLETE BEFORE APPLYING HEAT. THE STEAM CREATED FROM TRAPPED FLUID IN THE CAVITY AROUND THE BALL VALVE COULD CAUSE THE VALVE TO BURST IF THE VALVE IS HEATED EXCESSIVELY.

DO NOT KEEP THREADING THE PT PLUGS. THEY WILL BOTTOM OUT AND CAUSE THE VALVE TO CRACK. THEY ARE TORQUED TO A SPECIFIC FORCE ADEQUATE TO PREVENT LEAKS. IF YOU NOTICE CALCIFICATION OR DEBRIS AROUND PT PORTS, SIMPLY DISASSEMBLE AND RE-THREAD USING NON TEFLON-BASED ADHESIVE, SINCE THE RUST PREVENTOR AND THE INHIBITORS EAT AWAY THE TEFLON, CAUSING LEAKING.

Tri Flo valves are tested twice (gas test, dipped in liquid) at our sourcing center. Then they are tested at Tri Flo Tech with hydraulic dipped liquid test. In most cases, the O.E.Ms have their own testing facility and then they are tested by the welder as soldered and pretested by the site prior to coil usage. Tri Flo valves are tested a minimum of 5-6 times.





