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**NIBCO**

THE FUTURE OF FLOW CONTROL — FOR NEARLY 100 YEARS

## **INSTALLATION AND MAINTENANCE GUIDE FOR 2-PIECE BALL VALVES (Figure 580)**

### **I. INSTALLATION**

1. Operate valve before installing. This verifies functionality.
2. Threaded Valves: Check connecting pipe threads for accuracy. Make sure the pipe threads are free of foreign materials such as scale or metal shavings.  
Soldered end valves: see Installation Bulletin (page 2).
3. To ensure proper installation, standard piping practices should be followed.
4. The NIBCO 2-piece ball valve is a bi-directional valve.

### **II. MAINTENANCE**

1. General maintenance should consist of operating the valve periodically to ensure that it is functioning properly.
2. Routine maintenance consists of tightening the packing to compensate for wear. The handle nut also provides the packing preload on the 580 ball valve. When leakage occurs, the packing/handle nut should be tightened in 1/8 to 1/4 turn increments just enough to stop leakage.

**NIBCO DOES NOT RECOMMEND DISASSEMBLY OF THIS VALVE TO ATTEMPT  
INTERNAL REPAIRS.**

## INSTALLATION BULLETIN FOR SOLDER END, TWO-PIECE BRONZE BALL VALVES

This valve can 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. For all lead-free solders which melt in this temperature range, extreme care must be used to prevent seat damage since temperatures above 500°F will affect the seat materials.

### 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 seats with the ball.
3. Wrap a wet rag around valve body.
4. With the flame directed away from the valve, apply heat to the end opposite the threaded end piece. Apply solder and move off.
5. Repeat Step 4 on threaded insert end.
6. Upon completion of Steps 1 to 5, leave the valve in the closed position until cool.
7. Heat from soldering, if excessive, may affect stem seal. After completion of soldering it may be necessary to tighten packing gland. Always check for leakage after installation.

### WARNING

DO NOT under any circumstances, solder the downstream end of this valve while there is upstream pressure/or with fluid trapped in the cavity around the ball. Thermal expansion of this fluid could produce excessive internal pressure which could damage seat or body materials. Always drain down the system and cycle the valve two to three times after drain down is complete before applying heat. Steam created from trapped fluid in cavity around the ball could cause the valve to burst if valve is heated excessively.