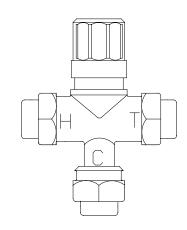
## INSTALLATION INSTRUCTIONS **LEONARD MODEL 220** THERMOSTATIC POINT OF USE MIXING VALVE

## INSTALLATION

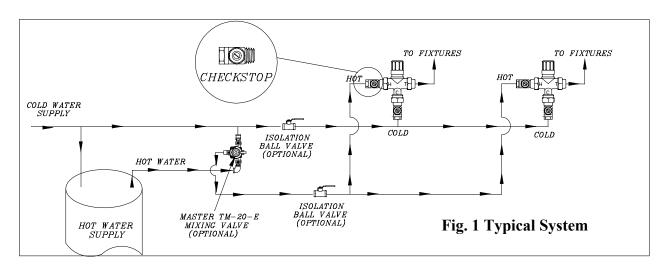
Valve should be installed by a licensed contractor in accordance with local codes and ordinances. Further, this valve should be installed in a location where it is accessible for cleaning, service, or adjustment.

### A. PIPING

- 1. Close both hot and cold water supply valves upstream on the intended
- Bleed the remaining water from the system.
- 3. Connect the water supply to the Model 220 valve as shown in Fig. 1. Supply piping must be cleaned before making connections to the valve.
- 4. Install checkstop valves or separate check valve, and shutoff valves upstream of the 220 to facilitate servicing and temperature adjustment
- 5. Start Up Open cold water supply and then hot water supply, inspect for leaks.



220 (1/2")



\*ASSE-1016 Listing is for individual showers, baths, or a combination of both.

**IMPORTANT:** This valve must be maintained on a regular basis. Please see reverse side for instructions.

CAUTION: Do not use this valve on systems using a recirculation device, Systems that use recirculation to maintain selected water temperature in supply piping must incorporate master mixing valves such as the Leonard Model 210, TA or TM

**NOTE:** When not equipped with an integral shutoff or when there is a shutoff valve installed after the control valve, there shall be stop and check valves on the inlet(s).

# WATER TEMPERATURE CONTROLS

## WARNING!

Water Temperature in excess of 110°F (43°C) Are Dangerous and May Cause Scalding, severe injury or Death!

Death!
This valve is <u>not</u> factory preset To deliver the desired mixed water temperature at the outlet the installer must adjust and verify the temperature at the outlet

Important!!
This valve can be adjusted to deliver water at temperatures exceeding 110°F (43°C). Consequently, after installing the Model 220 Thermostatic Mixing Valve you should always check the outlet water temperatures and adjust the valve to ensure delivery of water at a safe temperature not exceeding 110°F (43°C). Further, check valves and strainers must be installed in the hot and cold water supply lines to this valve. Mechanical valves are-not fail safe. Due to the effects of various water conditions, periodic verification of water temperature is required.

## INSTALLATION CONTINUED (see figure)

### **B. TEMPERATURE ADJUSTMENT**

1. Open hot and cold water supply valves to mixing valve.

Open mixed water outlet.

3. With the fixture in the full open position, calibrate the mixed water outlet temperature by placing a thermometer in the mixed water stream. (Note: loosen locking cap screw with hex wrench provided. Cap must be partially lifted to adjust temperature.) Adjust the setting of the 220 valve to obtain the desired temperature (counterclockwise, increase temperature-clockwise to temperature.)

#### C. PERIODIC INSPECTION/MAINTENANCE

This valve requires periodic inspection and verification of the outlet temperature by a licensed contractor. Corrosive water conditions, hot feed water temperatures over 200°F (93°C), unauthorized adjustments or repair could render the valve ineffective for its intended service. Regular cleaning and checking of thermostat assembly helps to maximize valve life and mixing function. Frequency of cleaning depends on local water conditions.

## CALIFORNIA PROPOSITION 65 WARNING

This product contains; lead, a chemical known to the State of California to cause birth defects or other reproductive harm

(Plumber: California law requires that this warning be given to the consumer).

CONSUMER INFORMATION ABOUT CALIFORNIA PROPOSITION 65 WARNING

All faucets and products made of leaded brass alloys, even those that comply with U.S. Enviormental Protective Agency regulations, contribute small amounts of lead to water that is allowed to stand in contact with the brass. This product complies with all E.P.A. regulations regarding the amount of lead used in plumbing brass and solder. The amount of lead contributed by any faucet/product is highest when the faucet/product is new. The following steps will reduce potential exposure to lead from faucets and any other part of the plumbing system.

\$ Always run the water for a few seconds prior to use for drinking or cooking. \$ Use only cold water for cooking or drinking.

\$ If you wish to flush the entire plumbing system of water that has been standing in the pipes or other fittings, run the

temperature of the cold water drops, indicating water coming from the outside main.

\$ If you are concerned about lead in your water, have your water tested by an EPA-certified laboratory in your area.

## LIMITED WARRANTY

Leonard Valve Company warrants the original purchaser that products manufactured by them (not by others) will be free from defects in materials and workmanship under normal conditions of use, when properly installed and maintained in accordance with Leonard Valve Company's instructions, for a period of one year from date of shipment. During this period the Leonard Valve Company will at its option repair or replace any product, or part thereof, which shall be returned, freight prepaid, to the Leonard factory and determined by Leonard to be defective in materials or workmanship. There are no warranties, express or implied, which extend beyond the description contained herein. There are no implied warranties of merchantability or of fitness for a particular purpose. In no event will Leonard be liable for labor or incidental or consequential damages. Any alteration or improper installation or use of the product will void this limited warranty.

