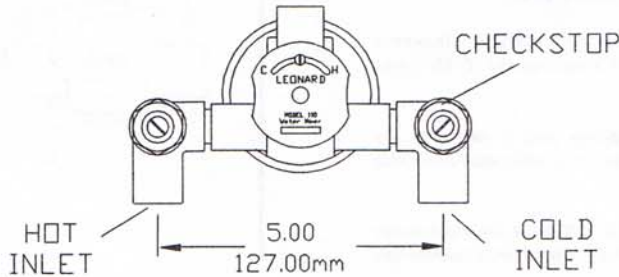


## MODEL 110 TEMPERING VALVE

### MODEL 110-AF, 110-BF, C110-AF-BR



### INSTALLATION ADJUSTMENT SERVICE INSTRUCTIONS

**WARNING! THIS IS A TEMPERING VALVE ONLY...IT IS NOT DESIGNED FOR DIRECT SHOWERING OR BATHING APPLICATIONS. IT IS NOT AN "ANTI-SCALD" DEVICE! IT IS DESIGNED FOR POINT OF USE LAVATORY LINE CONTROL (HAND WASHING), RESIDENTIAL AND SOLAR HOT WATER SYSTEMS, INDUSTRIAL PROCESSES, SPECIALIZED HEATING SYSTEM. IT IS NOT TO BE USED AS A MASTER CONTROL ON A RECIRCULATED HOT WATER SYSTEM!**

### INSTALLATION

1. Valve should be installed at a location where it can be easily adjusted or cleaned.
2. The inlets are clearly marked. Connect hot water into the inlet marked "HOT", and the cold water into the inlet marked "COLD" These markings are NOT to be confused with the C-H markings on the dial plate.
3. The checkstops furnished **MUST** be installed on the hot and cold inlets of this valve.
4. Use solder sparingly. Supply lines should be flushed before the valve is connected. Flush outlet pipe and valve as soon as it is connected.

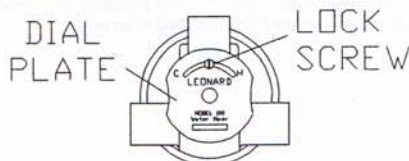
**IMPORTANT!** After installation, the adjustable temperature limit stop **MUST BE CHECKED AND RESET BY THE INSTALLER!** (See instructions below).

**REMEMBER!** This is a control device which must be cleaned and maintained on a regular basis, depending on water conditions and usage. (see MGR-1000)

### ADJUSTMENT

**WARNING! THIS MIXING VALVE IS EQUIPPED WITH AN ADJUSTABLE HIGH TEMPERATURE LIMIT STOP FACTORY SET AT APPROXIMATELY 110°F (43°C) WITH AN INCOMING HOT WATER SUPPLY OF 135°F (57°C). IF INCOMING HOT WATER ON THE JOB IS HIGHER (OR LOWER) THAN 135°F, THE VALVE WHEN TURNED TO FULL HOT MAY DELIVER WATER IN EXCESS OF (OR LOWER THAN) 110°F, AND THE HIGH TEMPERATURE LIMIT STOP **MUST BE RESET BY THE INSTALLER.** (SEE BELOW)**

1. To reset high temperature limit if the valve delivers water too hot when the dial plate is in the maximum "HOT" position, the dial may have been changed from its original position on the stem. This would also alter the high temperature limit. **TO RESET HIGH TEMPERATURE LIMIT:** Remove the dial plate and change the position of the dial plate on the stem, replacing the dial plate **TO THE LEFT** for a lower temperature.
2. If the valve does not deliver the temperature indicated by the dial plate, or if it changes erratically, a deposit of sediment may be causing the parts to stick. Loosen the lock screw on the dial plate and move the dial plate from C to H several times in succession until a clicking sound is audible.



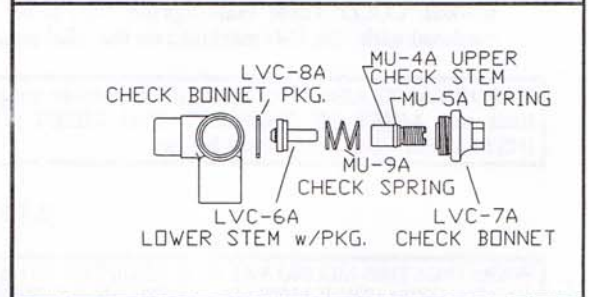
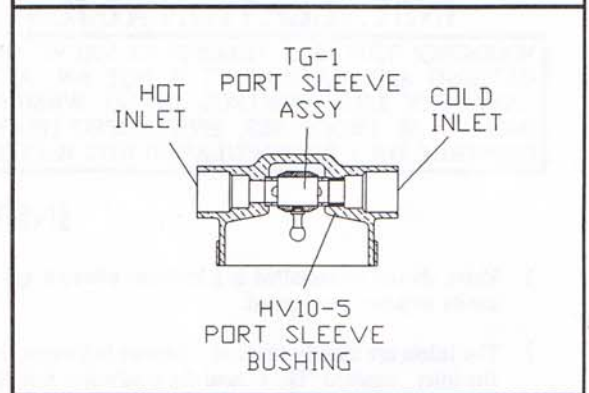
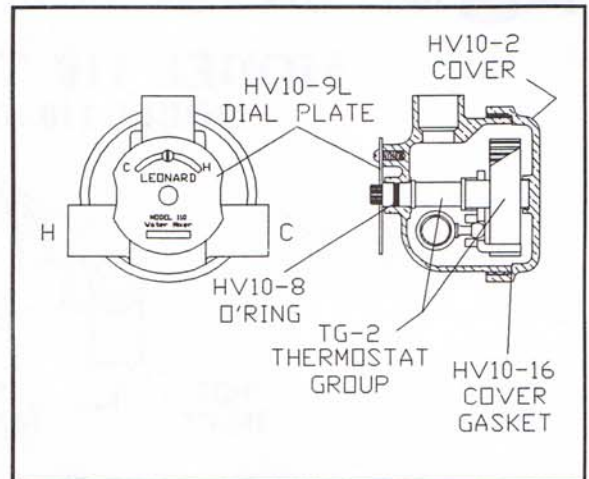
**HOT WATER IN EXCESS OF 110°F IS DANGEROUS AND MAY CAUSE SCALDING!!**

**SEE REVERSE SIDE FOR PARTS BREAKDOWN!**

## INSTRUCTIONS FOR CLEANING AND SERVICING

1. Turn off hot and cold supplies to this valve.
2. Carefully remove valve cover (HV10-2), which is threaded on rear of valve body. Do not misplace HV10-16 cover gasket.
3. Remove TG-2 Thermostatic group and if deposits are evident on the coils, submerge in a mild non-corrosive cleaning solution.
4. If the port sleeve assembly's (TG-1) thimble does not move freely, move the thimble back and forth by hand to dislodge any deposits.
5. To remove the TG-1 port sleeve assembly, break the hot and cold inlet connections. Remove valve cover (HV10-2) and TG-2 thermostat group. Force the port sleeve assembly out from the HOT through the COLD inlet using a hammer and a small screwdriver. Reinstall HV10-5 Port Sleeve Bushing on Cold inlet when reassembling.
6. When reassembling, make certain the driving ball on the thimble (TG-1) engages the hole in the bracket of the TG-2 Thermostat group.
7. Make certain the HV10-16 cover gasket is in place when reassembling the valve cover (HV10-2).
8. See instructions " To reset high maximum temperature limit" on reverse side of this Bulletin, Water temperature should not be greater than 110°F. HOT WATER IN EXCESS OF 110°F IS DANGEROUS.

**REMEMBER! THIS IS A CONTROL DEVICE WHICH MUST BE CLEANED AND MAINTAINED ON A REGULAR BASIS.(SEE MAINTENANCE GUIDE AND RECORD, MGR-1000).**



### LIMITED WARRANTY

Leonard Valve Company warrants the original purchaser that products manufactured by them (not by others) will be free from defects in material and workmanship under normal conditions of use, when properly installed and maintained in accordance with the 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.