

# PAM<sup>®</sup>II-ST, PAM<sup>®</sup>II-E



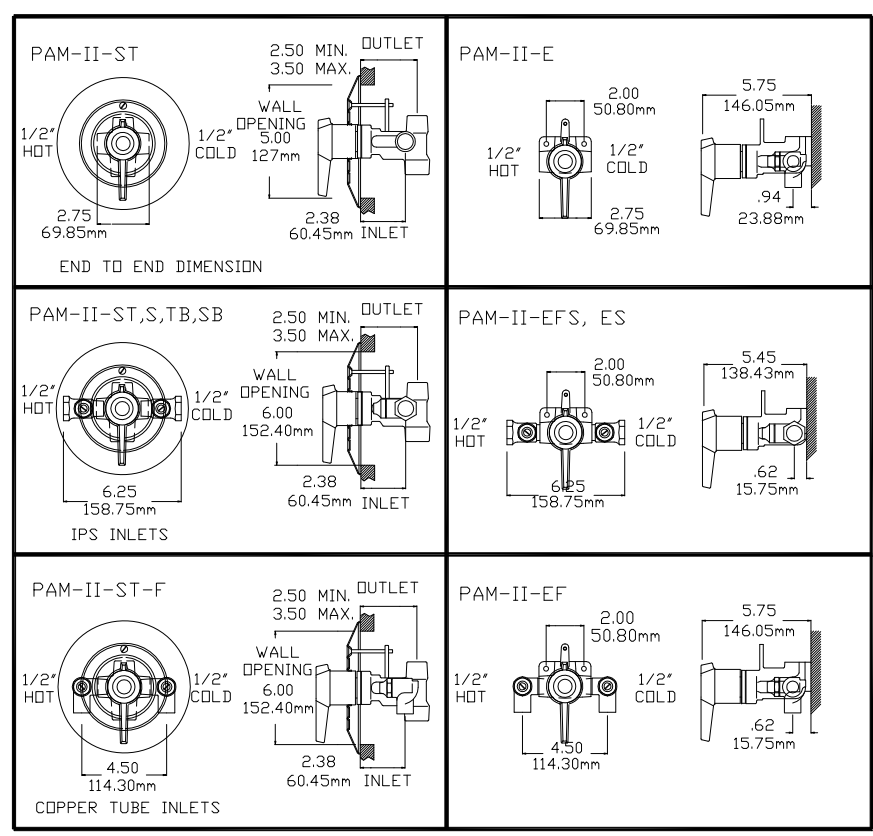
PRESSURE ACTUATED MIXER Serial No. PAST 19344 thru PAST 27799

1/2" inlets, 1/2" top outlet, 1/2" bottom outlet

## INSTALLATION INSTRUCTIONS

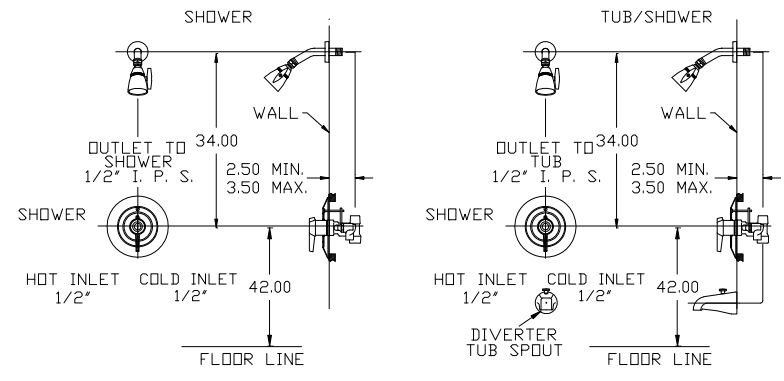


1. Valve must **NOT** be sealed in wall with plaster or tile. Cover screws and inlet fittings must be accessible for servicing.
2. Secure valve or piping to eliminate vibration.
3. It is recommended that the valve be furnished with inlet stops or checkstops on each supply.
4. Pipe cement or solder flux, must be used sparingly. After connections are made to the valve, flush pipes thoroughly to remove dirt and excess materials, which may become lodged on the working parts of the valve.
5. Attach protective cover, which serves as a guide for finish wall line after piping connections have been made.
6. **IMPORTANT:** This valve is designed for top and bottom outlet. When used for showers, the top outlet only is used and the pipe plug is left in the bottom outlet. When used for shower **AND** tub, remove the pipe plug from the bottom outlet and pipe down to a diverter tub spout.



**OPERATION**

The PAM-II-ST is a pressure-actuated water mixing valve which will compensate for changes in the pressure of hot and cold supplies. The easy to read dial with directional indicators help to eliminate confusion, as to where the handle should be located for a particular temperature. Turn the handle counter-clockwise from the "OFF" position through the BLUE (or cold) area of the dial plate, the shower is on and the temperature is cold. As the handle enters the RED (or HOT) area, shower temperature becomes progressively WARMER until the high temperature limit is reached in the full "HOT" position. To turn OFF, move handle back in clockwise direction to the "OFF" position.



**WARNING**

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 TEMPERATURE OF 135°F (57°C). IF INCOMING HOT WATER IS HIGHER THAN 135°F (57°C), THE VALVE WHEN TURNED TO FULL HOT MAY DELIVER WATER IN EXCESS OF 110°F (43°C), AND THE HIGH TEMPERATURE LIMIT STOP MUST BE RESET BY THE INSTALLER, (SEE REVERSE).

HOT WATER IN EXCESS OF 110°F (43°C) IS DANGEROUS AND MAY CAUSE SCALDING.

**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

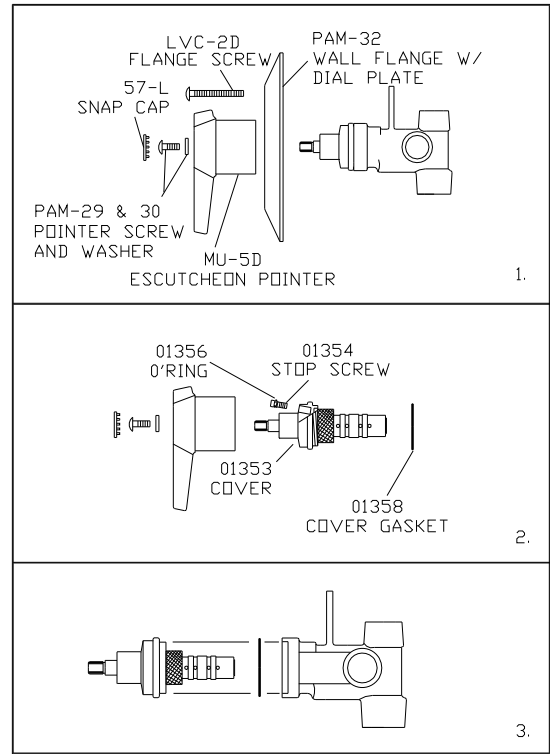
Leonard Valve Company warrants the original purchaser that products manufactured by them (not by others) will be free from defects in materials and Workmanship under normal conditions of use, when properly installed and maintained in accordance with Leonard Valve Company's instructions, for a period of one year of shipment. During this period the Leonard Valve Company will be 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 material or workmanship. There are no warranties, express or implied, which extend beyond the description contained herein. There are no consequential damages. Any alteration or improper installation or use of the product will void this limited warranty.

# INSTRUCTIONS FOR CLEANING AND SERVICING

## TO CLEAN PAM-II AFTER OPERATION

- 1) Remove escutcheon pointer (MU-5D) and wall flange (PAM-32)(See DWG 1).
- 2) Turn off hot and cold supplies.
- 3) Temporarily place escutcheon pointer on spline and turn LEFT to maximum "HOT" position. Unscrew cover and remove complete interior assembly (See DWG 3).
- 4) If valve will not shut off, replace PV-8-1 upper packing, PV-2 lower packing and inspect upper and lower valve seats in PV-3 sleeve (See DWG. 4).
- 5) If valve will not mix properly, piston in PV-CR-2 control rod group may be sticking due to foreign matter (See DWG. 4).
  - a) Tap knurled end of control rod against solid object to free piston or...
  - b) Remove PV-2 lower packing and screw and tap piston loose with a small drift pin.
  - c) Submerge lower end of PV-CR-2 in non-corrosive cleaning solution and flush with clean water.

**NOTE! WHEN ORDERING PARTS, PROVIDE SERIAL NUMBER STAMPED ON DIAL PLATE (see dwg. 1).**



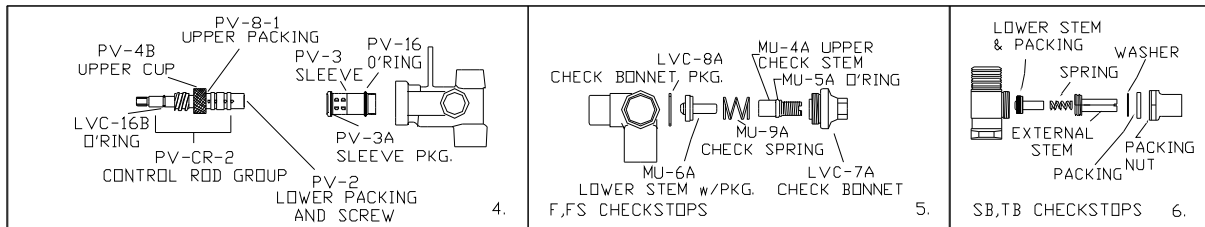
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### TO RESET HIGH TEMPERATURE LIMIT STOP (DWG2):

- 1) Remove pointer (MU-5D). Loosen 01354 Stop Screw but do NOT remove.
- 2) Replace pointer on spline and turn to the left or right until the valve is delivering the highest desired temperature OF 110°F (43°C) or lower, then remove pointer.
- 3) Tighten 01354 Stop Screw on the cover.
- 4) Reinstall pointer so that its pointing to the extreme HOT position.

**IMPORTANT! TEST THE NEW LOWER TEMPERATURE SETTING BY HOLDING A THERMOMETER UNDER THE FLOW OF WATER TO BE CERTAIN IT IS AS DESIRED. HOT WATER IN EXCESS OF 110°F (43°C) IS DANGEROUS AND MAY CAUSE SCALDING!!**



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

### SERVICING INSTRUCTIONS

	SYSTEM:	KIT Required	Parts included
PACKINGS & O-RING	<ol style="list-style-type: none"> <li>1. Leak at handle.</li> <li>2. Valve will not shut off completely</li> <li>3. Valve is difficult to pull apart</li> </ol>	Kit 1/ST/N (See DWG'S 2 & 4)	PV-2, PV-4B, PV-8-1, LVC-16B, 01356, 01358, PV-16, PV-3A
CONTROL ROD GROUP	<ol style="list-style-type: none"> <li>4. Valve delivers either all hot or all cold water, or will not mix consistently.</li> </ol>	Kit R/67 (See DWG.4)	01358, PV-CR-2 (clean per instructions above or replace) PV-3, PV-3A, PV-16
INSERTED SEAT	<ol style="list-style-type: none"> <li>5. After replacing packings and o-rings, valve will Not shut off completely.</li> </ol>		PV-3, PV-3A, PV-16 (also PV-45 if 1/4" hex tool not available.
CHECKSTOPS	<ol style="list-style-type: none"> <li>6. Supplies cannot be shutoff completely</li> <li>7. Leak at bonnet or stem</li> </ol>		DWG #5 or #6 ABOVE