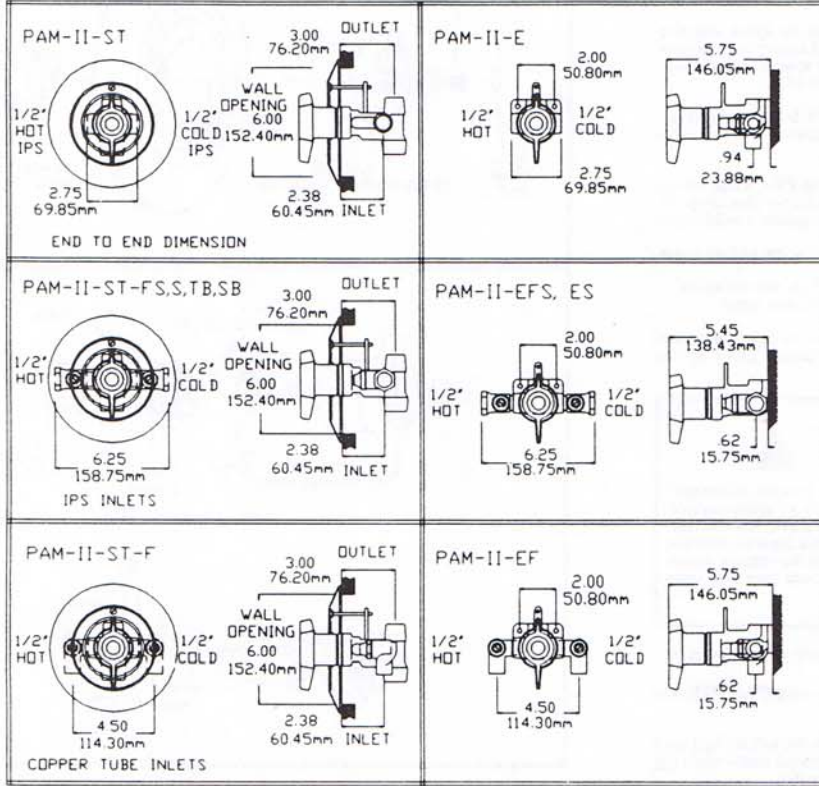


PAM® II-ST, PAM® II-E

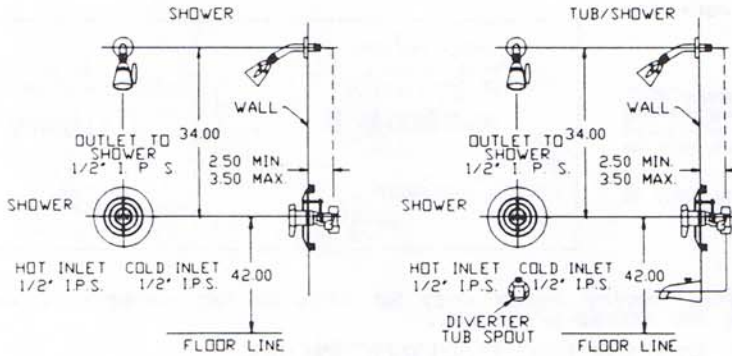
PRESSURE ACTUATED MIXER Serial No. PAST 20389 and lower
1/2" inlets, 1/2" top outlet (1/2" bottom outlet)
INSTALLATION INSTRUCTIONS



1. Valve must NOT be sealed in wall with plaster or tile. Cover screws and inlet fittings must be accessible for servicing.
2. It is recommended that the valve be furnished with inlet stops or checkstops on each supply.
3. 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 might become lodged on the working parts of the valve.
4. Attach protective cover which serves as a guide for finish wall line after piping connections have been made.
5. **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. No special elbow is required.

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 helps 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 on the dial plate, the shower is on and 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 SUPPLY TEMPERATURE OF 135°F(67°C). IF INCOMING HOT WATER ON THE JOB IS HIGHER THAN 135°F, THE VALVE WHEN TURNED TO FULL HOT MAY DELIVER WATER IN EXCESS OF 110°F. AND THE HIGH TEMPERATURE LIMIT STOP MUST BE RESET BY THE INSTALLER. (SEE REVERSE)

EXCESSIVELY HOT WATER (OVER 110°F) 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 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.

INSTRUCTIONS FOR CLEANING AND SERVICING

NOTE! WHEN ORDERING ANY PARTS, PROVIDE SERIAL NUMBER STAMPED ON DIAL PLATE (SEE DWG.1).

TO CLEAN PAM-II AFTER OPERATION

1. Remove escutcheon pointer (PAM-28) 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. Remove cover screws (PV-7) and remove complete interior assembly (See Dwg. 3). Do not misplace cover gasket (PV-37).
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 control rod group may be sticking due to foreign matter (See Dwg. 4).
 - a. Tap knurled end of control rod against a 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 in non-corrosive cleaning solution and flush with clean water.

NOTE: Before reinserting assembly in valve (with cover gasket) make sure escutcheon pointer has been turned LEFT to the maximum "HOT" position.

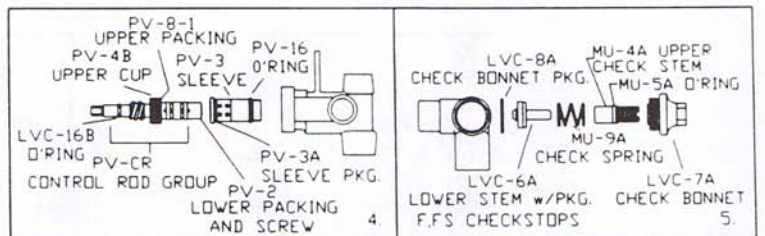
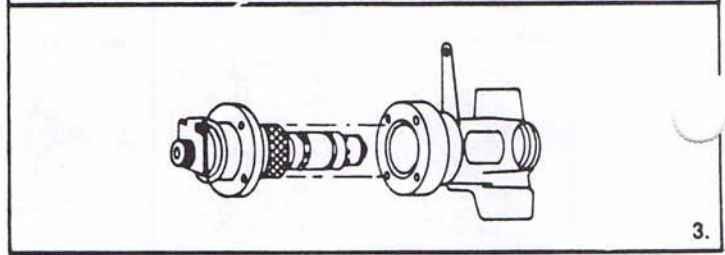
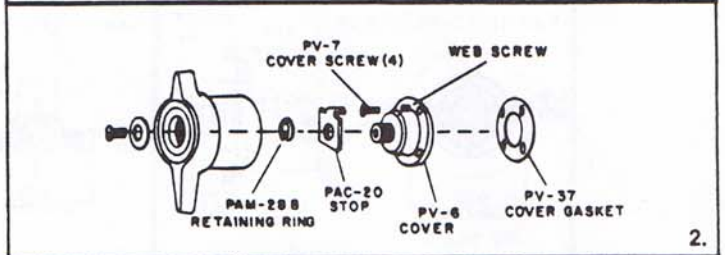
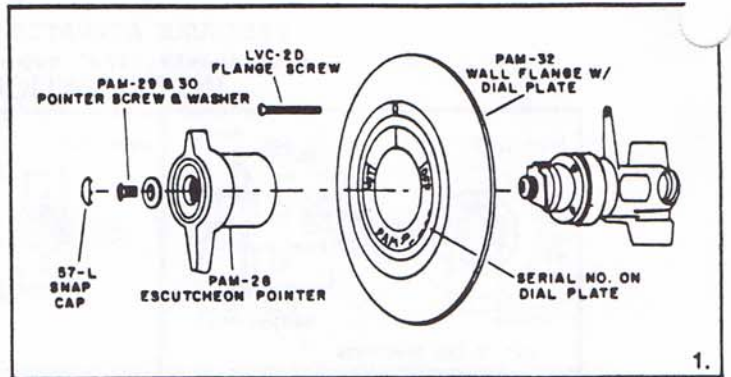
WARNING

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

TO RESET HIGH TEMPERATURE LIMIT STOP (DWG 2).

1. Remove escutcheon pointer, retaining ring (PAM-28B) and stop.
2. Replace pointer on spline and turn to the left or right until the valve is delivering the highest desired temperature OF 110°F OR LOWER, then remove pointer.
3. Replace stop on the spline so that its LEFT edge is resting against web screw on the cover (PV-6).
4. Replace retaining ring.
5. Reinstall pointer so that its pointing to the extreme "HOT" position. Test the new high temperature setting by holding a thermometer under the flow of water to be certain it is set at 110°F or lower, also check if necessary, adjust the temperature of the hot temperature source.

EXCESSIVELY HOT WATER (OVER 110°F) 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

	PACKINGS & O-RINGS	CONTROL ROD GROUP	INSERTED SEAT	CHECKSTOPS	KIT Required	Parts included;
	<ol style="list-style-type: none"> 1. Leak at handle. 2. Valve will not shut off completely. 3. Valve is difficult to pull apart. 	<ol style="list-style-type: none"> 4. Valve delivers either all hot or all cold water, or will not mix consistently. 	<ol style="list-style-type: none"> 5. After replacing packings and o-rings, valve will not shut off completely. 	<ol style="list-style-type: none"> 6. Supplies cannot be shut off completely. 7. Leak at checkstop bonnet or stem. 	Kit 1/ST(see DWGs 2&4) Kit R/ST (see Dwg.4)	PV-2, PV-4B, PV-8-1, PV-37, LVC-16B PV-37, PV-CR (clean per instructions above or replace) PV-3, PV-3A, PV-16 PV-3, PV-3A, PV-16 (also PV-45 if 5/16" seat req. tool not available). 2 each: LVC-8A, 5A, MU-5A, M10U-9A