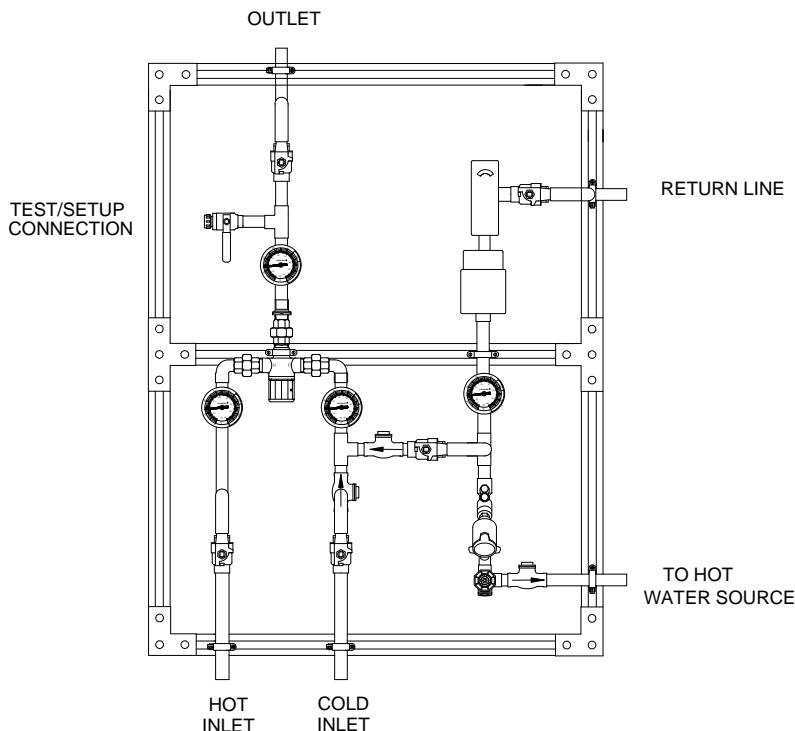


MEGATRON® MODEL 270/370 SYSTEMS

Valve is ASSE 1017 listed

Valve is ASSE 1070 listed



INSTALLATION

- | | |
|--|--|
| <ol style="list-style-type: none">1. Megatron 270/370 systems is factory pre-assembled and tested. System should be installed at a location where it can easily be cleaned, adjusted or repaired.2. System supplies must be connected as shown (Hot-left, Cold-right). Exercise caution when soldering. | <ol style="list-style-type: none">4. Flush pipes thoroughly after system has been connected.5. Refer to page 4 of this bulletin for correct Setup Instructions. |
|--|--|

**NOTE: NOT TO BE USED FOR
EYEWASH APPLICATIONS**

Maximum Operating Pressure 125PSI (860 KPA) for Hot and Cold Water.

! CAUTION !

All thermostatic water mixing valves have limitations. They will not provide the desired accuracy outside of their flow capacity range. Consult the capacity chart on page 4.

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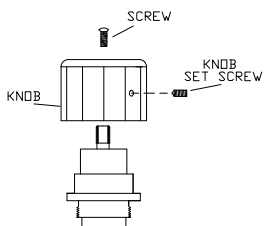
Phone: 401.461.1200 Fax: 401.941.5310

Email: info@leonardvalve.com

Web Site: <http://www.leonardvalve.com>

ADJUSTMENT AND SERVICE

TEMPERATURE ADJUSTMENT



1. Open hot and cold water supply valves to mixing valve.
2. 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. Loosen knob set screw with 5/64" allen wrench. Adjust the setting of the valve to obtain the desired temperature (counterclockwise, to increase temperature-clockwise to decrease temperature.)
4. Tighten knob set screw to lock temperature setting.



WARNING



WARNING! This thermostatic mixing valve's temperature setting **MUST** be checked. If the temperature is too high (above 110°F, 43°C), the temperature knob must be adjusted immediately. Excessively hot water is **DANGEROUS AND MAY CAUSE SCALDING!!**

PRESSURE-TEMPERATURE:

- Minimum Flow: 0.5 GPM (1.9 l/Min)
- Maximum Pressure: 125 PSI (8.6 BAR)
- Maximum Hot Water temperature: 200°F- (93°C)
- Approach Temperature 5°F (2.8°C) above set point.

TROUBLESHOOTING INSTRUCTIONS

GASKET KIT	Leaking water under knob. Leaking water between valve cover and body.	GASKET KIT Model 270 1/WX Model 370 1/WX
REBUILDING KIT	Valve will not control temperature after cleaning.	REBUILDING KIT Model 270 R/270/370 Model 370 R/270/370
CHECKSTOP KIT	Hot water by-pass into cold line. Cold water by-pass into hot line.	CHECK KIT Model 270 4/220 Model 370 4/320

SEE PAGE 3 FOR COMPLETE PARTS BREAKDOWN

SEE PAGE 4 FOR PIPING IN RECIRCULATED OR NON-RECIRCULATED WATER SYSTEMS

MODEL	IN	OUT	MINIMUM FLOW (GPM)	PRESSURE DROP										PSI
				5	10	15	20	25	30	35	40	45	50	
			L/MIN	.3	.7	1.0	1.4	1.7	2.1	2.4	2.8	3.1	3.4	BAR
270	1/2"	1/2"	0.5	3.5	5.5	6.5	7.5	8.5	9.5	10	10.5	11.5	12	GPM
			1.9	13	21	25	28	32	36	38	40	43	45	L/MIN
370	3/4"	3/4"	0.5	4	6	7	8	9	10	10.5	11.5	12.5	13	GPM
			1.9	15	23	27	30	34	38	40	43	47	49	L/MIN

IMPORTANT!! THIS IS A CONTROL SYSTEM WHICH MUST BE CLEANED AND MAINTAINED ON A REGULAR BASIS (SEE MAINTENANCE GUIDE AND RECORD MGR-1001).

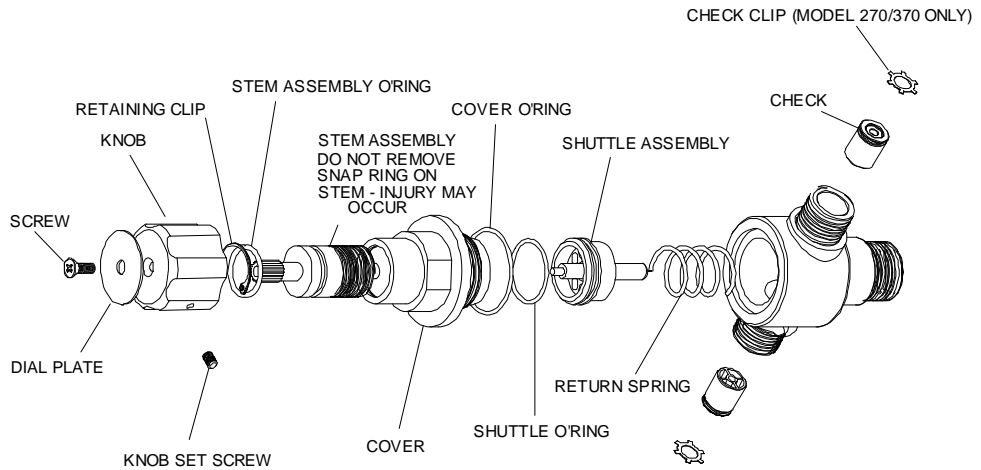
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VALVE PARTS LIST



MODEL 270, 370

MODEL 270	MODEL 370
<u>1/WX Gasket Kit</u> Shuttle o'ring Stem assembly o'ring Cover o'ring <u>R/ 270/370 Complete Rebuild Kit</u> Return spring Shuttle assembly Shuttle o'ring Stem assembly o'ring Cover o'ring <u>4/220 Check valve Kit</u> 2 Check valves 2 Check clips	<u>1/WX Gasket Kit</u> Shuttle o'ring Stem assembly o'ring Cover o'ring <u>R/ 270/370 Complete Rebuild Kit</u> Return spring Shuttle assembly Shuttle o'ring Stem assembly o'ring Cover o'ring <u>4/320 Check valve Kit</u> 2 Check valves 2 Check clips

DISMANTLING & CLEANING

1. Shut off hot and cold water to the valve as well as the valve outlet port.
2. Loosen lock screw on side of knob with 5/64" allen wrench.
3. Remove the knob screw on top of knob.
4. Remove temperature adjustment knob.
5. Remove valve cover, which includes the stem assembly.
6. The shuttle assembly can now be removed, cleaned and inspected. Be sure to check the condition of the shuttle o-ring and replace if necessary.
7. Lubricate the shuttle o-ring before installing the shuttle assembly.
8. Install the cover assembly including o-ring back onto valve and tighten.
9. Replace knob and knob screw.
10. **Valve temperature must be reset after any repairs or cleaning!! See Page 2. Temperature Adjustment**

TROUBLESHOOTING

1. Leaking water under knob, order gasket kit, replace stem assembly o-ring. Remove knob screw and knob, remove retaining clip, thread out the stem assembly and replace o-ring. Lubricate o-ring, thread stem into cover, replace retaining ring, knob and screw. **Valve temperature must be reset after any repairs or cleaning!! See page 2.**
2. Leaking water between cover and body, order gasket kit, replace cover o-ring. Remove knob screw and knob and remove valve cover and replace o-ring. Replace valve cover, knob and knob screw. **Valve temperature must be reset after any repairs or cleaning!! See page 2.**
3. Hot water bypass into cold line, order checkstop kit and replace checks within inlets of valve.
4. Valve not controlling temperature even after cleaning, order complete rebuild kit. Remove knob screw and knob and remove valve cover. Replace shuttle assembly and return spring being sure to lubricate shuttle o-ring. Replace valve cover, knob and knob screw. **Valve temperature must be reset after any repairs or cleaning!! See page 2.**

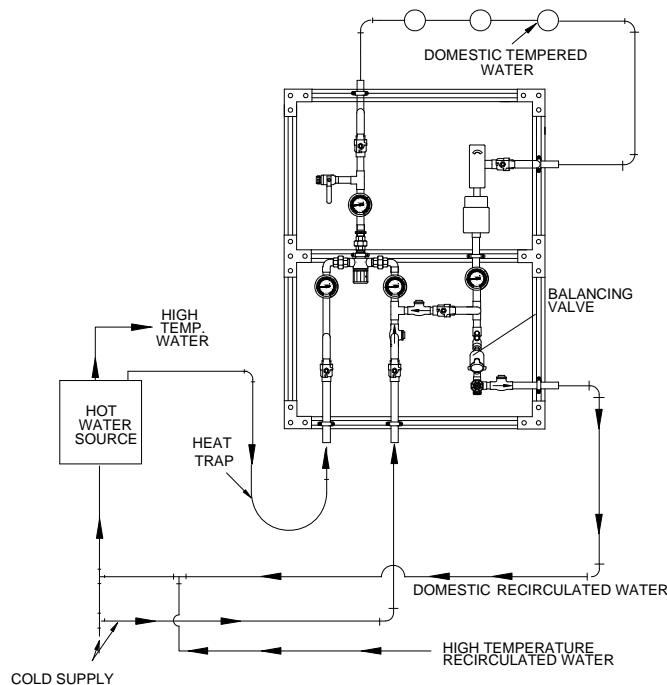
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REQUIRED METHOD OF PIPING (RECIRCULATED DOMESTIC WATER SYSTEMS)



THIS PIPING METHOD IS NOT TO BE USED FOR MORE THAN ONE BUILDING

PROCEDURE TO BALANCE RECIRCULATION SYSTEM

1. ADJUST THE BALANCING VALVE TO FULL OPEN, TURN THE RECIRCULATION PUMP OFF AND FLOW WATER BY EITHER USING FIXTURES OR BY USING THE TEST CONNECTION.
2. ADJUST THE VALVE HANDLE TO THE APPROPRIATE TEMPERATURE.
3. CLOSE THE FIXTURES AND / OR TEST CONNECTION, TURN ON THE RECIRCULATION PUMP.
4. OBSERVE THE TEMPERATURE, IF THE TEMPERATURE REMAINS AT THE SET POINT SET UP IS COMPLETE. IF THE TEMPERATURE INCREASES CLOSE DOWN THE BALANCING VALVE SLOWLY UNTIL IT RETURNS TO SET POINT.

LIMITED WARRANTY

Leonard Valve Company (hereinafter, "Leonard") warrants the original purchaser that products manufactured by Leonard will be free from defects in material or workmanship under normal conditions of use, when properly installed and maintained in accordance with Leonard's instructions, for a period of one year from the date of shipment. During this period, Leonard 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. Leonard provides no warranty, express or implied, which extends beyond the description contained herein. LEONARD SPECIFICALLY DISCLAIMS ANY AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. Nonetheless, some jurisdictions may not allow the disclaimer of certain implied warranties, in which case Leonard hereby limits such implied warranties to the duration of the limited warranty period contained herein. Some jurisdictions may not allow limitations on how long an implied warranty lasts, so the foregoing durational limitation may not apply to you. In no event will Leonard be liable for labor or incidental or consequential damages. Any alteration or improper installation or use of this product will void this limited warranty. If any provision of this limited warranty is prohibited by law in the applicable jurisdiction, such provision shall be null and void, but the remainder of this limited warranty shall continue in full force and effect.

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