

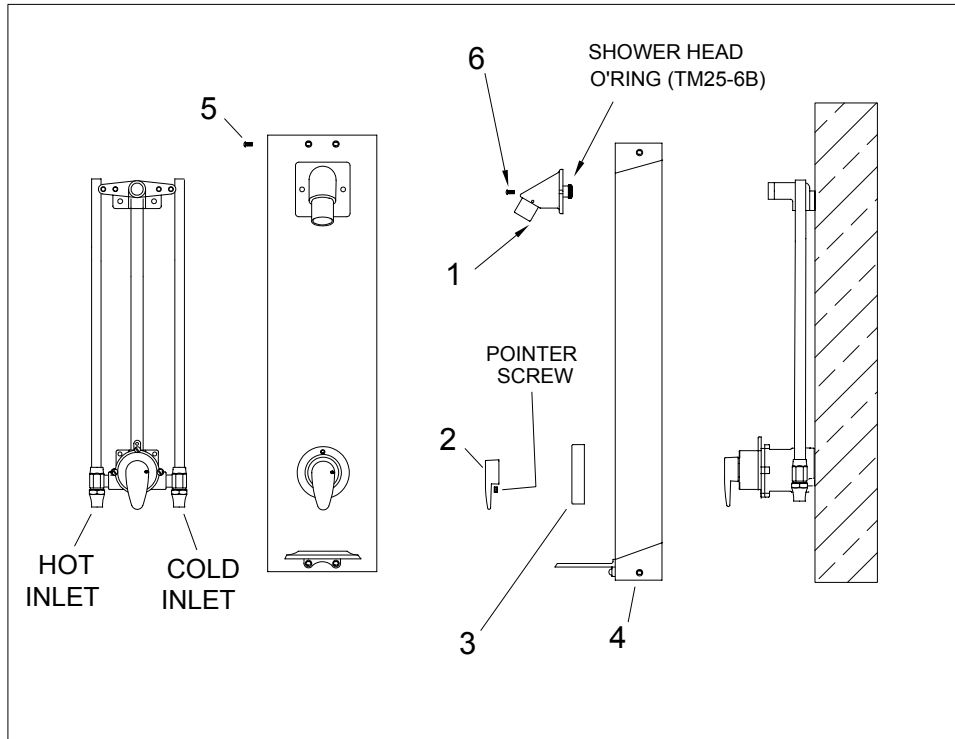
SS-LVC surfashower[®]

THERMOSTATIC MODEL

Serial No. LV 53392 and higher

½" top inlets

INSTALLATION INSTRUCTIONS



1. Remove item (6), 2- #1/4-20 X 3/4" long allen screws from showerhead, and remove.
2. Loosen pointer set screw, remove pointer (2), remove flange screws, surfashower flange (3).
3. Remove stainless steel cover (4).
4. Mount valve and piping assemble (5) directly to wall at desired height, using the integrally cast mounting fittings. See page 2 for drilling dimensions.
5. The inlets are clearly marked on mixing valve. Connect hot water to the left inlet, and the cold water to the right inlet. After connections are made, flush pipes thoroughly to remove dirt and excess materials.
6. Replace cover, and reassemble in reverse order.
 - a) Note: when re-installing be sure not to cut o'ring (10) (TM-25-6B), when installing into showerhead bracket.
7. Pop rivets (7) for end caps

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

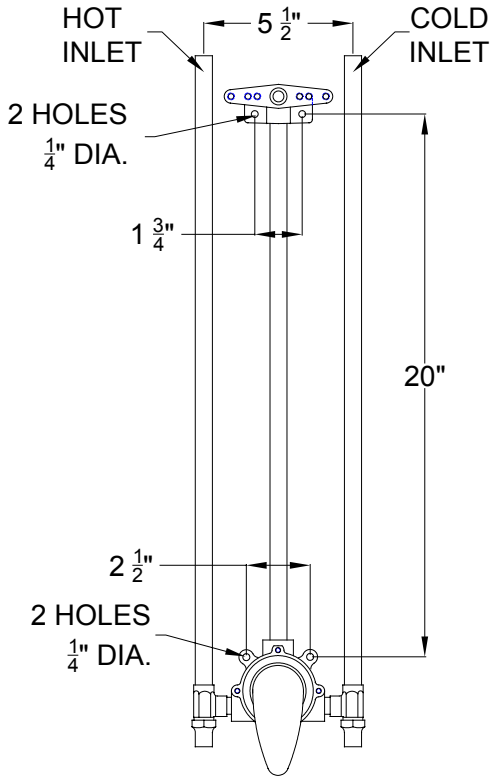
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Standard Unit Mounting Dimensions



1. It is recommended that the valve be furnished with inlet stops or checkstops on each supply.
2. 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.

OPERATION

The LVC is a thermostatic water-mixing valve, which will compensate for changes in the temperature or pressure of hot and cold supplies and maintain shower temperatures. 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 **ARROW** (COLD) area on the dial plate, the shower is on and temperature is cold. As the handle is turned toward the RED DOT (HOT) area, shower temperature becomes progressively WARMER until the high temperature limit is reached in the full "HOT" position. (the BLACK dot on the pointer lines up with the RED dot on the cover) To turn OFF move handle back in clockwise direction to the "OFF" position (the BLACK dot on the pointer lines up with the BLACK dot on the cover).

WARNING

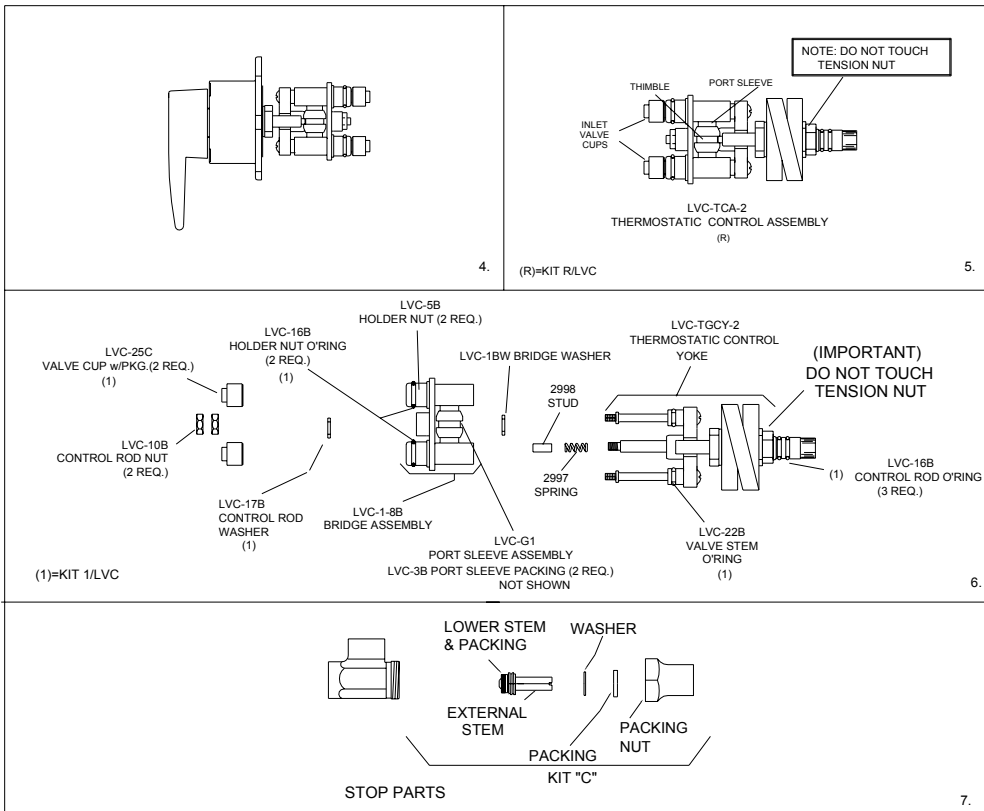
WARNING! THIS MIXING VALVE IS EQUIPPED WITH AN ADJUSTABLE HIGH TEMPERATURE LIMIT STOP FACTORY SET AT APPROXIMATELY 110°F (43°) WITH AN INCOMING WATER SUPPLY TEMPERATURE OF 135°F (57°C). IF INCOMING HOT WATER ON THE JOB IS HIGHER THAN 135°F, THE VALVE WHEN TURNED TO FULL HOT MAY DELIVER WATER IN EXCESS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

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

SERVICING INSTRUCTIONS

	SYMPTOM	KIT REQUIRED	PARTS INCLUDED
PACKINGS & O'RINGS	<ol style="list-style-type: none"> 1. Leak at handle. 2. Valve will not shut off completely 3. Valve is difficult to pull apart 	Kit 1/LVC (See Dwg. 6)	LVC-3C, 2 each LVC-22B, 27B, 25C, 3 each LVC-16B
PORT SLEEVE ASSEMBLY	<ol style="list-style-type: none"> 4. Valve delivers either all hot or all cold water, or will not mix consistently. 5. After replacing packings and o'rings, valve will not shut off completely 	Replace parts Noted (Dwg.6) or Kit R/LVC	LVC-G1, LVC-3B (2 Req) or LVC-1-8B, plus packings noted. Or Kit R/LVC (LVC-TCA2, LVC-3C)
THERMOSTAT GROUP	<ol style="list-style-type: none"> 6. After replacing port sleeve assembly, valve will not hold temperature. 7. Valve does not respond when handle is turned (tension nut has been tampered with). 	Kit R/LVC (See Dwg. 5)	LVC-TCA2, LVC-3C NOTE: DO NOT TOUCH TENSION NUT LOCATED BELOW LVC-16B O'RINGS
CHECKSTOPS	<ol style="list-style-type: none"> 8. Supplies cannot be shut off completely 9. Leak at checkstops (or stop) bonnet or stem. 	Kit "C"	SEE DWG # 7 FOR REPAIR KIT

SERVICING INSTRUCTIONS

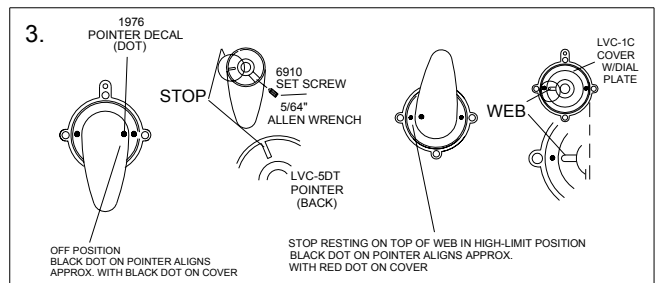


SERVICING INSTRUCTIONS

TO RESET HIGH TEMPERATURE LIMIT STOP (DWG. 3):

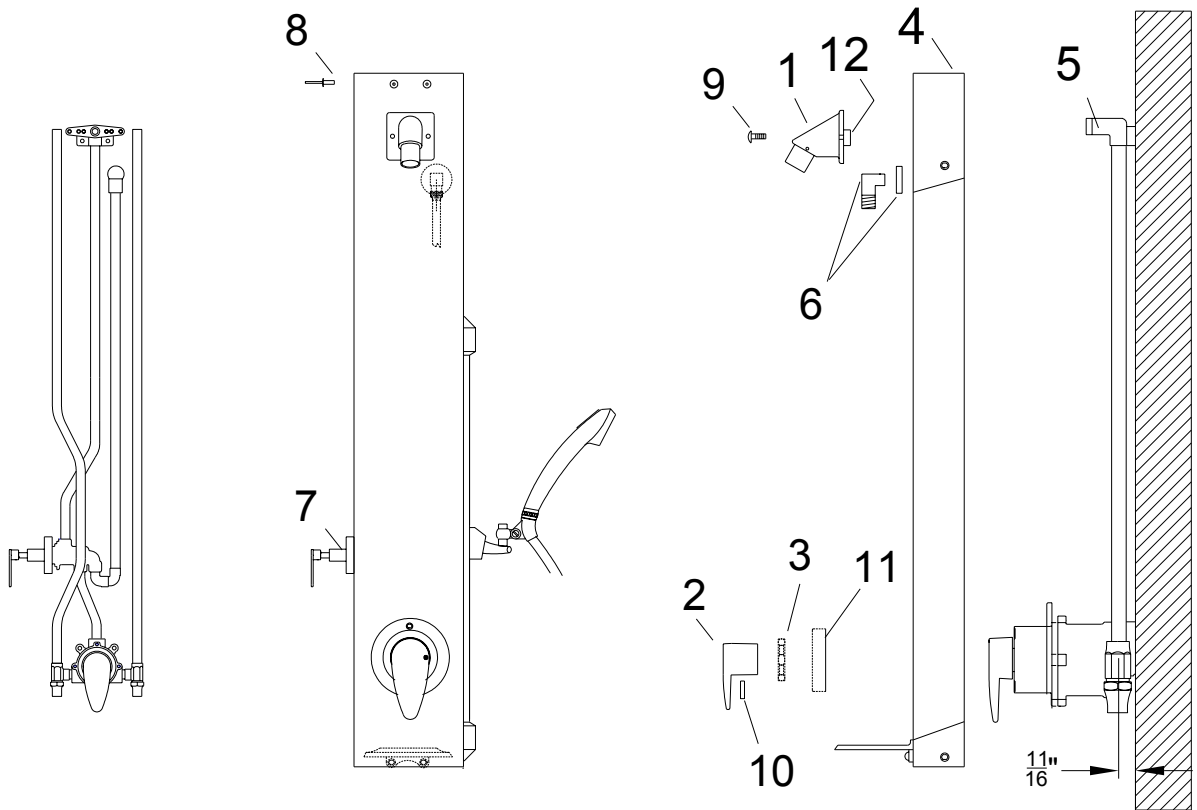
1. Remove pointer (LVC-5DT) by loosening #6910 set screw (5/64" allen wrench).
2. Turn off hot and cold supplies to valve (using the inlet stops).
3. Remove the 4 cover screws (MU-2C) and release the cover and thermostatic control assembly (DWG. 4). Do not misplace cover gasket (LVC-3C). **DO NOT LOOSEN FACTORY SET TENSION NUT. (DWG. 6)**
4. To clean, submerge the assembly in clear warm water to remove deposit or stain. Use a mild solution ammonia or non-corrosive cleaning solution to remove stubborn deposits. Replace the pointer on the valve stem and move to the left to make certain the inlet valve cups open and close vertically and that the thimble moves freely on the port sleeve (DWG. 5).
5. If the port sleeve assembly requires further cleaning, remove the control rod nuts (LVC-10B) and valve cups (LVC-25C), to release the bridge assembly (LVC-1-8B) and clean as noted above, be careful not to misplace stud (2998) and spring (2997). The bridge assembly may be further disassembled by removing the two holder nuts (LVC-5B) to clean the port sleeve (DWG. 5).
6. When cleaning the port sleeve assembly, **DO NOT USE ABRASIVES. DO NOT LUBRICATE THE PORT SLEEVE ASSEMBLY** as it will limit the performance of the valve.
7. Place cover gasket in recess, return complete assembly to valve base and tighten cover screws, **NOTE TEMPERATURE LIMIT STOP MUST BE RESET AFTER ASSEMBLY.**

1. Turn pointer to the left or right until valve is delivering the highest desired temperature of 110°F (43°C) or lower.
2. Remove the pointer from spline.
3. Replace pointer on the spline with the STOP, which is cast on the underside of the pointer, resting against the TOP side of the WEB which is cast on the cover.
4. If properly adjusted, the pointer should move fully from the HOT position, where the BLACK dot on the pointer lines up with the RED dot on the cover, clockwise to the OFF position., where the BLACK dot on the pointer lines up with the BLACK dot on the cover.



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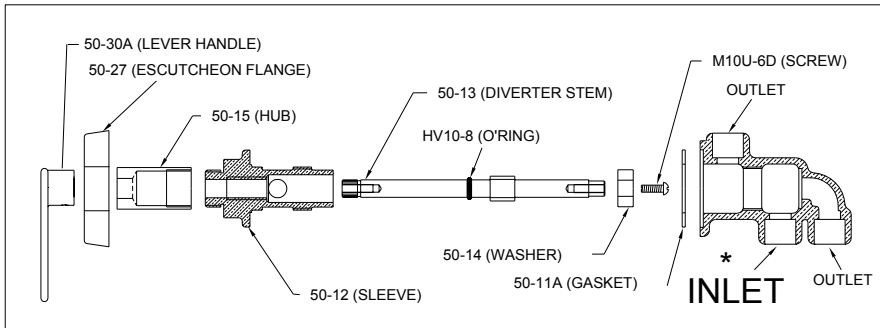
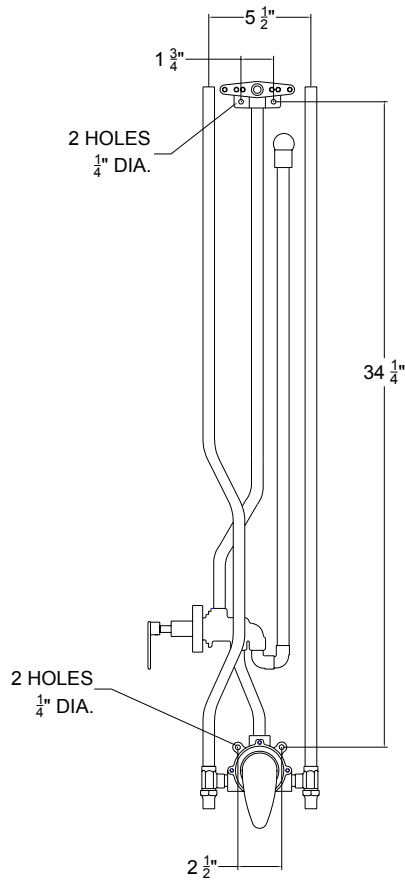
INSTRUCTIONS FOR HANDICAPPED UNITS



MOUNTING INSTRUCTIONS

1. Remove item (9), 2-#1/4-20 X 3/4" long allen screws from showerhead, and remove.
2. Loosen pointer screw (11), and remove pointer (2), surfashower flange with dial plate(3).
3. Loosen item (7) diverter, escutcheon flange and diverter hub. (See diagram on page 5)
4. Remove hand spray unit and hand shower elbow item (6).
5. Remove stainless steel cover (4).
6. Mount valve and piping assembly (5) directly to wall at desired height, (**Check Local codes**), using the integrally cast mounting fittings. See page 5 for drilling dimensions.
7. The inlets are clearly marked on mixing valve. Connect hot water to the LEFT inlet, and the cold water to the RIGHT inlet. Use solder flux sparingly. After connections are made, flush pipes thoroughly to remove dirt and excess materials.
8. Replace cover, and reassemble in reverse order.
 - a. Note: when re-installing showerhead be sure not to cut o'ring (12) TM-25-6B when re-installing, to showerhead bracket.
9. Pop Rivets for end caps, item (8)

Handicapped Unit Mounting Dimensions



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.

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