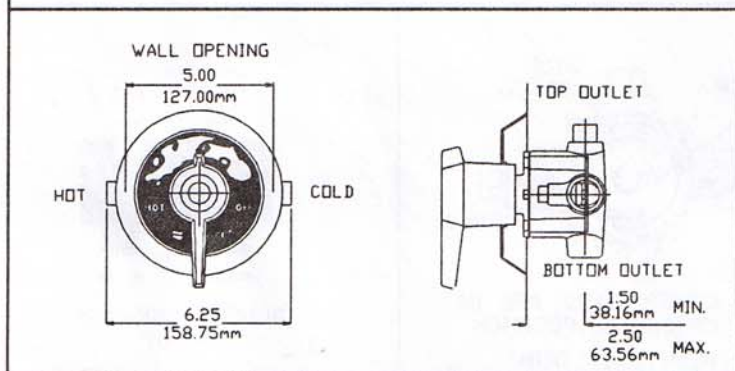
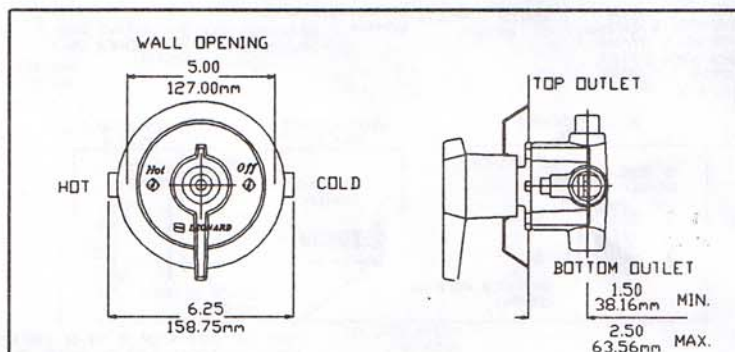


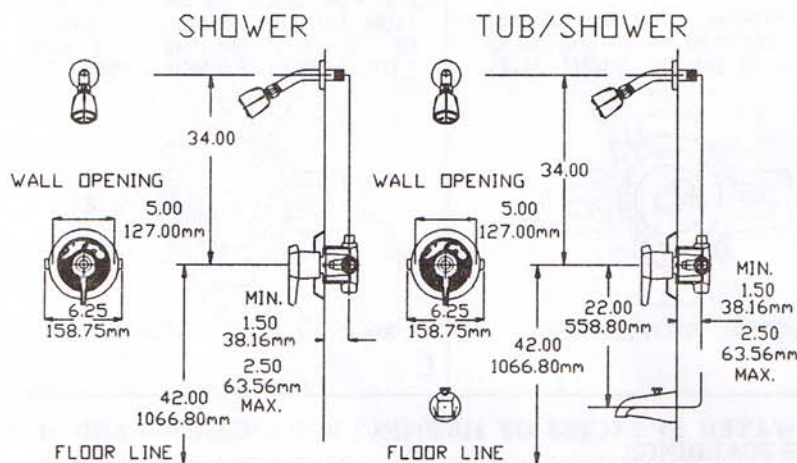
INSTALLATION INSTRUCTIONS



1. Valve must NOT be sealed in wall with plaster or tile. Cover screws and inlet checkstops MUST be accessible for servicing. Attach plaster mask which also serves as a guide for finish wall line after piping connections have been made.
 2. Before soldering, open checkstops and turn lever handle counter clockwise to the middle position.
 3. Pipe cement, solder and solder flux must be used sparingly.
 4. After connections are made (hot-left,cold-right) to the valve, remove the cover, (05447) spring (05496), stem assembly (05492) and block assembly (05491) open the checkstops to flush pipes thoroughly to remove dirt and excess materials which might become lodged on the working parts of the valve.
 5. NOTE: This valve is designed for shower or tub/shower installations. For showers, the top outlet only is used and a pipe plug remains in the bottom outlet. For tub/shower, pipe down from the bottom outlet to a diverter tub spout and pipe up from outlet to a tub shower head.
 6. Attach wall flange (05422) decorative dial* (5510 Models only) and pointer (05419).
- *Remove protective coating from dial plate and peel off back to expose adhesive.
7. Turn on hot and cold supplies to the valve (using a 3/16" blade screwdriver).

OPERATION

The Aquatrol is a pressure balanced shower/bath valve designed to compensate for changes in the pressure of hot and cold supplies to maintain comfortable bathing temperatures. Turn the lever handle counter clockwise from the "OFF" position through the BLUE (cold) area on the dial plate (5510 Models only) The shower is on and temperature is cool. As the handle enters the RED (hot) area (5510 Models only) temperature becomes progressively warmer until the high temperature is reached in the full "HOT" position. To turn OFF, move the handle back in clockwise direction to the "OFF" position.



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

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 (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 REVERSE).

REMEMBER!! THIS IS A CONTROL DEVICE WHICH MUST BE CLEANED AND MAINTAINED ON A REGULAR BASIS, DEPENDING UPON WATER CONDITIONS AND USAGE! (SEE MAINTENANCE GUIDE & 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.

Remove lever handle (pointer-05419) and wall flange (05422) See DWG A.

Turn off hot and cold supplies (using a 3/16" blade screwdriver) See DWG B.

Temporarily place pointer on spline and turn LEFT to full "HOT" position. Remove cover screws (05420) to remove cover (05447) and stem assembly (05492) and remove block assembly (05491).

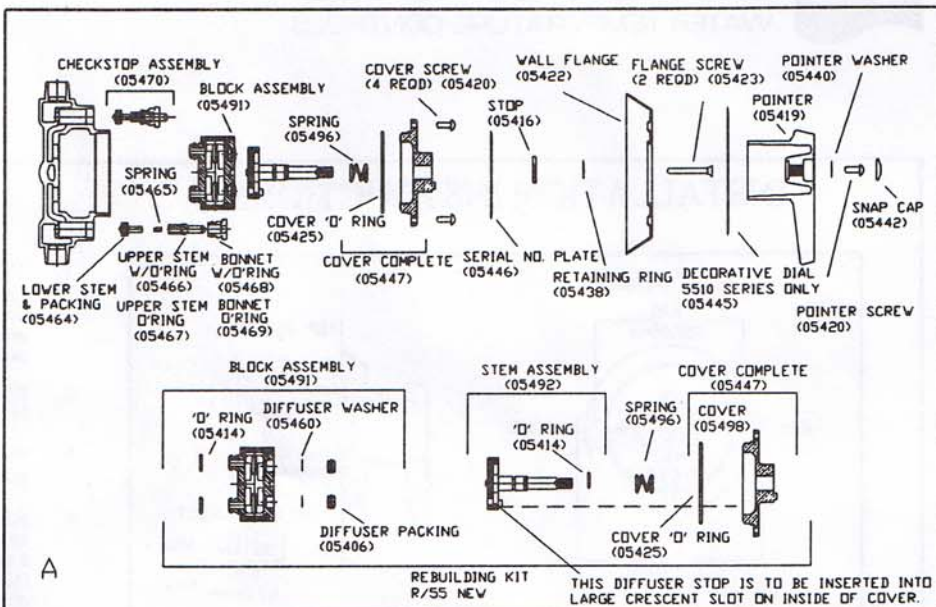
To separate the cover from the stem assembly (05492) remove the retaining ring (05438) and stop (05416).

Service generally requires only replacement of the diffuser packings (05406) and the diffuser washer (05460).

IMPORTANT! When reassembling, insert stem assembly (05492) and spring (05496) into cover (05498) with the stop on the diffuser inserted into the large crescent slot on the inside of the cover (DWG A) and placed on the body as shown in DWG D.

FOR BACK-TO-BACK INSTALLATION. The valve which will require reversed hot and cold supplies may be easily adjusted by removing the cover and reinstalling it in the body with the crescent-slot on the left side as in DWG E.

WHEN REASSEMBLING OR AFTER INSTALLATION THE TEMPERATURE LIMIT STOP MUST BE RESET BY THE INSTALLER.



A

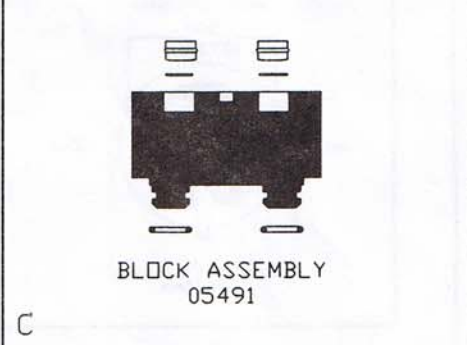
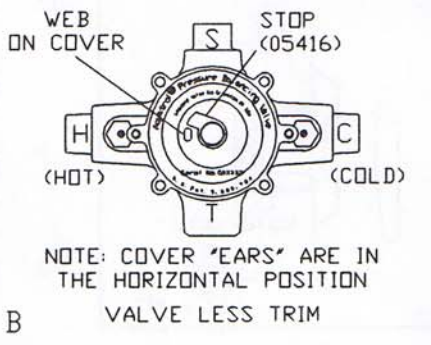
B

C

D

E

WARNING
 THIS MIXING VALVE IS EQUIPPED WITH AN ADJUSTABLE HIGH TEMPERATURE LIMIT STOP FACTORY SET AT APPROXIMATELY 110°F (43°C) WITH AN ADJUSTING HOT WATER SUPPLY TEMPERATURE OF 135°F (57°C). IF INCOMING 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).



RESET TEMPERATURE LIMIT STOP (See DWG B).

Remove pointer (05419) retaining ring (05438) and stop (05416).

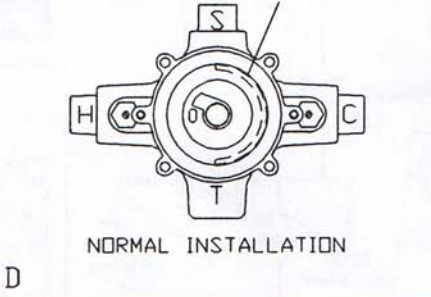
Replace pointer on spline and turn pointer to the left or right until the valve is delivering the highest desired temperature OF 110°F OR LOWER, then remove pointer.

Replace stop (05416) on spline so that its LEFT edge is resting against the web on the cover.

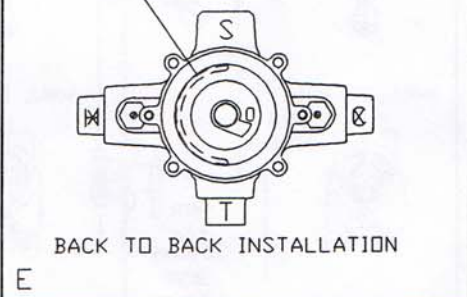
Replace retaining ring (05438).

Reinstall pointer so that its pointing to HOT position.

NOTE: NORMAL POSITION OF THE LARGE CRESCENT-SLOT INSIDE OF COVER IS ON THE RIGHT SIDE.



NOTE: FOR BACK TO BACK INSTALLATION THE CRESCENT-SLOT INSIDE OF COVER IS ON THE LEFT SIDE THE SUPPLIES ARE REVERSED.



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

TROUBLESHOOTING INSTRUCTIONS

LEAKS AND O-RINGS
 Leak at valve stem or handle
 Valve will not shut off completely
 Valve is difficult to pull apart

Kit Req'd.
 Parts included:
 Kit 1/55
 05460 (2EA)
 05406 (2EA)
 05414 (3EA)
 05425 (1EA)

CARTRIDGE

4. Valve delivers all hot or all cold water or will mix consistently (an audible clicking of the piston should be evident when the cartridge is shaken by hand).

Note: Piston may be moved by inserting a thin pin through the lower (hot and cold) openings in the block assembly (See DWG C, side view shown).

Kit Req'd.

Parts included:
 Kit R/55
 05402
 05425

CHECKSTOPS

5. Supplies cannot be shut off completely.
 6. Leak at checkstop stem or bonnet. (Note: Use 3/16" blade screwdriver to open the checkstop and needle nose pliers to remove the lower stem).

Kit Req'd.

Parts included:
 05470(2EA)
 or
 05465
 05466
 05465
 05464