MEGATRON® MODEL TA, TA-LF

**INSTALLATION**

<table>
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<tr>
<th>1. Type TA Megatron® Systems are factory pre-assembled and tested and include small thermostatic water mixing valve for critical line control/process applications.</th>
<th>3. System supplies must be connected as shown (Hot-left, Cold-right). Exercise caution when soldering.</th>
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<td>2. System should be installed at a location where it can easily be cleaned, adjusted or repaired.</td>
<td>4. Flush pipes thoroughly after system has been connected.</td>
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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. Minimum flow must be no less than as shown.

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

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ADJUSTMENT AND SERVICE

Leonard Model TA Thermostatic Water Mixing Valves are simple in design and may be easily cleaned, adjusted and repaired. If the installation is accessible, servicing may be completed without disconnecting the valve.

NOTE: Thermostatic Water Mixing Valves are REGULATING mechanisms, which must be regularly maintained to provide best performance. Frequency of cleaning depends on quality of local water conditions and usage. (See Maintenance Guide and Record MGR-1000).

TO RESET ADJUSTABLE HIGH TEMPERATURE LIMIT STOP:

1. Loosen LTR set screw.
2. While valve is running, turn stem to maximum HOT setting of 110°F (43°C) or lower.
3. Loosen pointer screw and remove TAP-40 handle, retaining ring (MU-13D). (See Page 4)
4. Loosen LTR set screw and remove stop (TAP-29)
5. Replace stop so it rests against the web on the LEFT side of the valve cover.
6. Replace, retaining ring and tighten LTR lock screw and replace handle.

WARNING

WARNING! This Thermostatic Mixing Valve has an adjustable high temperature limit stop, which must be checked. If temperature is too high, the installer MUST RESET this stop immediately. Always check the temperature of the mixed water when the handle is turned to full HOT. Hot water in excess of 110°F is DANGEROUS AND MAY CAUSE SCALDING!

The high temperature limit stop is factory set at approximately 110°F (43°C) with an incoming hot water supply temperature of 135°F (57°C). If the incoming hot water on the job is higher than 135°F, the valve when turned to full hot will deliver water in excess of 110°F and the high temperature limit stop MUST BE RESET BY THE INSTALLER.

TROUBLESHOOTING INSTRUCTIONS

| PACKINGS & GASKETS | 1. Leak at pointer rod  
|                    | 2. Leak between valve cover and base. |
| PORT SLEEVE ASSEMBLY | 3. Valve delivers either all hot or all cold water, or will not mix consistently. |
| THERMOSTAT GROUP | 4. After cleaning or replacing port sleeve assembly, valve will not hold temperature. |
| CHECKSTOPS | 5. Hot water bypass into cold line. 
|            | 6. Supplies cannot be shut off completely. 
|            | 7. Leak at checkstop bonnet. |

PARTS REQUIRED: 
03009 Cover O'Ring 
06806 Cover Gasket 
MU-5A(2ea.) O'Ring 
TAG-1 Port Sleeve Assembly OR 
KIT #R/TA/N Rebuilding kit 
06810 Thermostat Group OR 
KIT #R/TA/N Rebuilding kit 
KIT# 4/LVC (F checkstops) 
KIT#"B" (SB,TB checkstops)

SEE PAGE 6 FOR COMPLETE PARTS BREAKDOWN & PARTS KITS

REMEMBER! THIS IS A CONTROL DEVICE WHICH MUST BE CLEANED AND MAINTAINED ON A REGULAR BASIS. (SEE MAINTENANCE GUIDE AND RECORD, MGR-1000).
REQUIRED METHOD OF PIPING
(RECIRCULATED DOMESTIC WATER SYSTEMS)

METHOD #2

PROCEDURE TO BALANCE RECIRCULATION SYSTEM

1. MAKE SURE NO WATER IS BEING DRAWN IN THE BUILDING. OPEN BALANCING VALVE, APPROXIMATELY HALF WAY AND START CIRCULATOR.

2. OBSERVE TEMPERATURE UNTIL IT STABILIZES.

3. CLOSE BALANCING VALVE SLIGHTLY IF TEMPERATURE IS TOO HOT, OR OPEN IT SLIGHTLY IF TEMPERATURE IS TOO COLD AND ALLOW TEMPERATURE TO STABILIZE. REPEAT UNTIL DESIRED RECIRCULATED TEMPERATURE IS SET.

REMEMBER! THIS IS A CONTROL DEVICE WHICH MUST BE CLEANED AND MAINTAINED ON A REGULAR BASIS. (SEE MAINTENANCE GUIDE AND RECORD, MGR- 1000).
CAUTION! All thermostatic water mixing valves have limitations. They will NOT provide the desired accuracy outside of their flow capacity range. Consult the Flow Capacity Chart and DO NOT OVERSIZEm Minimum flow must be no less than as indicated.

*NOTE: A limit stop, set for 110°F (43°C), is simply a mechanical setting to prevent excessive handle rotation. If incoming water is hotter than 135°F (57°C), the temperature of the factory test, the valve when turned to full HOT may deliver water in excess of 110°F and the limit stop MUST BE RESET BY THE INSTALLER
INSTRUCTIONS FOR
DISMANTLING VALVE

1. Turn off hot and cold supplies to this valve.
2. Loosen LTR set screw
3. Remove four cover screws MU-2C, lift off cover and
   thermostat group 06810 (DWG 1).

After installing new parts, it will be necessary to reset the
limit stop to obtain correct temperature range from Cold to
Hot. See page 2 instructions "TO RESET ADJUSTABLE
HIGH TEMPERATURE LIMIT STOP."

TO CLEAN PORT SLEEVE ASSEMBLY

To clean port sleeve assembly TAG-1 (DWG 2.): Remove base
stud TA-5. Back off jam nut 3404 as far as it will go into base.
Slide port sleeve assembly toward port sleeve nut and lift out of
valve base. Clean port sleeve assembly with a soft cloth; DO
NOT use abrasives such as emery cloth or sandpaper. After
cleaning, wash parts in clean water and reassemble in valve
base. When reassembling port sleeve assembly BE SURE TO
INSTALL WITH LONG END IN BASE AND SHORT END
AT PORT SLEEVE NUT. Locate one set of port slots facing
directly toward front of the valve. Tighten jam nut 3404 just
enough to hold port sleeve in place, (do not cramp or distort port
sleeve by exerting excessive pressure when tightening port
sleeve nut).

TO CLEAN THERMOSTAT GROUP

To clean thermostat group 06810 (DWG 1.), remove handle by
loosening lock screw and pull off. Remove thermostat group by
pushing rod through cover. BE CAREFUL NOT TO PULL
COILS OUT OF SHAPE. If deposit has collected on
thermostat coil, clean it off with a brush in cleaning solution and
rinse before re-assembly. Cleaning solution should be non-
corrosive and grit free.

To reassemble: be sure port sleeve assembly is in place and is
working freely from side to side. Reinstall base stud TA-5, then
place thermostat group 06810 on base stud and BE SURE
DRIVING BALL ON PORT SLEEVE ASSEMBLY TAG-1
IS INSERTED IN HOLE ON LOWER COIL BRACKET
(DWG 3.) Move thermostat back and forth to be sure all parts
are free. Replace cover and cover gasket on valve base, install
the four cover screws, and turn on hot and cold water supplies.
See instructions "To Reset High Temperature Limit Stop" to
properly reset limit stop.

After installation, adjustment, cleaning, always check the temperature of the valve when turned to full HOT per the
warning on the front page, using a thermometer. Also check and if necessary adjust the temperature of the hot water
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).
TA VALVE PARTS

CHECKSTOP PARTS

REPAIR KIT

KIT R/TA/N

TA VALVES ARE FURNISHED WITH LTR STOPS

NOTE: AFTER INSTALLING NEW PARTS IT WILL BE NECESSARY TO RESET THE ADJUSTABLE HIGH TEMPERATURE LIMIT STOP (SEE PAGE 2).

REMEMBER! THIS IS A CONTROL DEVICE WHICH MUST BE CLEANED AND MAINTAINED ON A REGULAR BASIS (SEE MAINTENANCE GUIDE AND RECORD, MGR-1000).
CAUTION! All thermostatic water mixing valves have limitations. They will not provide the desired accuracy outside their flow capacity range. Consult the capacity chart and **DO NOT OVERSIZE**. Flow must not be greater or less than as shown below.

### 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.