



**INSTALLATION INSTRUCTIONS FOR SQUARE, ROUND  
AND RECTANGULAR FORGED BRASS TRIM PLATES ONLY  
THERMOSTATIC VALVE  
TECHNICAL GUIDE**

**PLEASE INSPECT PRODUCT PRIOR TO INSTALLING.** Carefully review all pre-assembled parts. It will be necessary for the various parts to be re-assembled exactly as shown. **NOTICE:** These instructions do not represent step-by-step directions. They are a product supplement only to be used by a qualified/licensed plumber. We recommend all plumbing fixtures be installed by a professional.

**CAUTION!**  
**THIS VALVE REQUIRES SEPARATE  
SHUT-OFFS TO CONTROL VOLUME**

FRONT VIEW



ANGLE VIEW



**AS SHOWN  
MODEL # R30.078**

Please read the complete thermostatic instructions and cautions contained in this booklet before attempting installation. It is recommended that only a licensed, professional plumber install this product. Leave booklet for homeowner's future reference.

**FEATURES:**

- Convenient, complete serviceability from front of unit.
- 3/4" NPT inlets provide for less restriction of incoming water.
- 14.5 gpm @ 45 psi. When both exits are used, the valve provides 9 gpm from top exit and 5.5 gpm from bottom exit.
- We use screw driver shut-offs with spring check valves.
- Extension kits are available through dealer at an extra charge. Request the following:  
     Part # R30.216 includes      4-1/2" Threaded Tube  
   5" Square Tube
- The parafin wax sensitivity cartridge constantly monitors temperature and re-adjusts within 2° Fahrenheit of set temperature when supply pressure and/or temperature fluctuates. Re-adjustment occurs in less than 2 seconds.
- 1/2" valve offers dual exits as a standard feature. You may decide to plug one exit.

**CARE INSTRUCTIONS:** The product you have just purchased is designed to provide long lasting beauty and dependability. When installing, we recommend you lay all finished parts on a soft cloth or towel to avoid scratching or damaging the product. To insure your product's longevity, wipe with a clean, soft, damp cloth and blot dry as often as possible. Never use abrasive cleansers, sponges, or acidic cleaning products as these may damage the finish and may VOID THE WARRANTY.

Regular cleaning each year will extend the life of the cartridge. Never use a screwdriver on any thermostatic cartridge. **Never take a thermostatic cartridge apart as you will damage this precise instrument.** Call your dealer or the factory for answers to your questions.

Bluewater Manufacturing Corporation Phone # 877-890-8006 Fax # 877-373-0649

## THERMOSTATIC VALVE TECHNICAL GUIDE

### FAILURE TO FOLLOW INSTRUCTIONS MAY CAUSE DAMAGE OR IMPROPER OPERATION AND VOID THE WARRANTY.

**Please read the complete Thermostatic instructions and cautions contained in this booklet before attempting to install the Thermostatic Valve System.**

1. Flush all rough-in piping thoroughly to remove sediment, flux and other debris. Prior to installing the thermostatic cartridge, flush all water lines to free up all solder, sand, silt, and debris that have loosened up from the installation process. The lines should be flushed long enough to remove any sediment that may come from any new additional installation such as a water heater.
2. State of the art CNC Machining and 1/4 turn ceramic disc cartridges mean precision made product. **NO HEAT, NO TORCH ...** Shall be applied to the valve assembly.
3. Install adapters at each port, seal the joint, and then run the required copper lengths to the in-coming water. Solder the copper connection a minimum of 8" away from valve body.
4. Use approved thread sealers at all joints. **DO NOT USE PLUMBERS PUTTY, USE OF ANY CAUSTIC MATERIAL MAY HARM THE FINISH AND OR INTERFERE WITH PROPER FUNCTION OF THE CARTRIDGE.**
5. Hot and cold inlets are clearly marked. **DO NOT REVERSE CONNECTIONS, THE UNIT WILL NOT WORK CORRECTLY.**
6. **DO NOT USE DIRECT HEAT, OR ANY TORCH ON ROUGH VALVES.**
7. If unit comes with a black or gray plastic outer ring -- read directions and be sure you keep above ring installed even after the trim is installed.
8. Minimum and maximum finished wall tolerances are clearly marked. (SEE EXPLODED VIEW OF VALVE)
9. It is extremely important that the rough mixing chamber be free of all debris before installation of the thermostatic cartridge. Read all instructions on boxes, valves and cartridges.
10. Under no circumstances should the thermostat cartridge be dismantled. Doing so will void any warranty and generally make the cartridge inoperable.

## THERMOSTATIC VALVE TECHNICAL GUIDE

11. For proper flow rates and multiple exit installations check with your authorized dealer for installation assistance. When installing body sprays with 1/2" systems (Custom or System 30), no more than three sprays should be plumbed out of the top outlet for maximum flow in conjunction with a pressure balancing loop.
12. Remember water pressure comes from your local water supplier and can be measured at the source on the street.
13. Pressure or water velocity is not a function of the valve.
14. The water meter that is supplied for your home should be 25% larger than the water line supply on your recirculation loop for maximum flow rates from the valve.
15. Do not attempt installation of the product if you do not understand these instructions.
16. **Qualified plumbers should be used for all installation procedures.**

### MAINTENANCE

Soaking the cartridge in a 50/50 solution of clear household vinegar and water will remove lime scale, and lime deposits caused from your water.

Regular cleaning each year will extend the life of the cartridge. Never use a screwdriver on any thermostatic cartridge. **Never take a thermostatic cartridge apart as you will damage this precise instrument.** Call your dealer or the factory for answers to your questions.

# THERMOSTATIC VALVE TECHNICAL GUIDE

## INSTALLATION INSTRUCTIONS

### STEP #1

The depth of the valve should be determined using mud guard. **(PRINT #8)** Square tube will then be 1-1/2" from finished wall. If square tube should extend beyond 1-1/2" then metric tube and square tube may be cut. NOTE: Metric all-thread tube **(PRINT#1)** has threads on inside. **DO NOT CUT THIS END.** Extensions are available for an extra charge through dealer as previously noted.

### STEP #2

Connect the hot water to the side with red mark (+) and the cold water to the side with the blue mark (-). SEE CAUTIONS 1-2-3. Inlets are 3/4" NPT **(SEE PRINT #3)**

### STEP #3

Connect the exit(s) required to 1/2" NPT copper pipe. **(SEE PRINT #3)** Both volume controls are 1/4 Turn ceramic disk cartridges. Any debris in the cartridges may allow exits to drip. If you only need (1) exit, properly plug the 2nd exit. **DO NOT USE HEAT OR TORCH.**

### STEP #4

Open both screw driver inlet ports and pressure test all connections with water. Check for flow and leaks before closing the walls.

### STEP #5

Be sure the hot water heater is connected, clean and operational. Before you calibrate/install the cartridge, set the hot water to approximately 140° Fahrenheit. **If there is no hot water, you cannot test the system for proper performance or calibration.**

### STEP #6

The center of the valve is where the thermostatic cartridge is located. The cartridge only controls the mixed water temperature and must be "calibrated" to protect the end user while bathing. Calibration is simple, but will take 5 to 7 additional minutes to set the mixed water temperatures to hot and cold limits. You control the temperature range of mixed through water calibration.

Rotate the square (or spline adapter A) tube located on the thermo cartridge **(SEE PRINT #2)** all the way to the right (clockwise) and you have the maximum cold water. Reverse (counter-clockwise) and you have the maximum incoming hot water. The set point is up to you. Feel the mixed water at the exit. Let water run for 2 or 3 minutes to confirm comfort level. Install the cover plate, dial and pointer. **(SEE PRINT #1)** The dial represents a numerical location i.e. 80 where you will place red pointer, to remind the bather of comfort temperature location. **NOTE: Some valves require separate exit shut-offs to control volume.**

### STEP #7

**HIGH TEMP LIMIT SET POINT TRIM!** The combined trim (The Dial Pointer Assembly) has a built-in stop.

Current Federal Legislation requires thermostatic valves to limit incoming Hot Water (to the bather) to a maximum of 121° F. Our unit when properly installed and manually calibrated should not exceed **116° F.**

Use an "Instant Read" Hot Water Thermometer to verify the high temperature setting! These can be purchased at supermarkets that sell cooking thermometers.

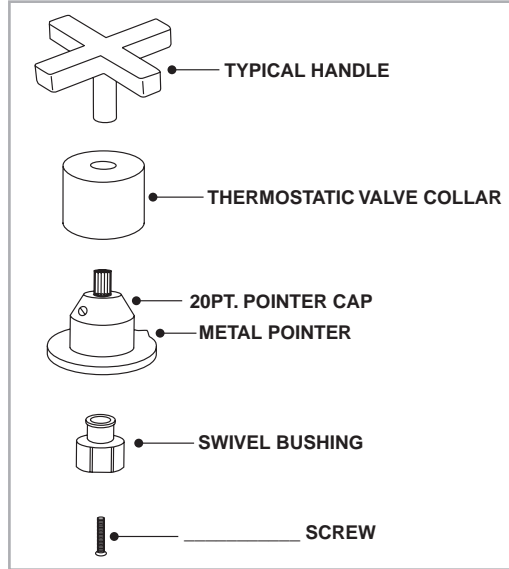
***Now enjoy the safest and most comfortable shower you have ever had!***

Bluewater Manufacturing Corporation Phone # 877-890-8006 Fax # 877-373-0649

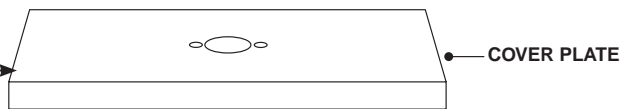
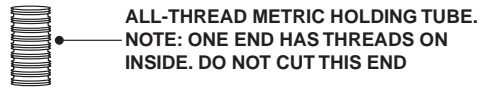
# UNIVERSAL THERMOSTATIC VALVE TECHNICAL GUIDE

## 1/2" FULL-FLOW THERMOSTATIC VALVE EXPLODED VIEW

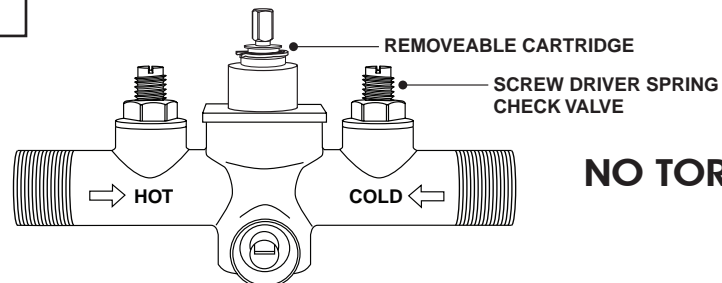
### EXPLODED VIEW PRINT 1



PLASTIC ADAPTER



CAN BE  
OTHER SHAPES



THERMO VALVE BODY

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- OPTIONAL COVER PLATES**  
SEE PAGE 8 FOR ALL PLATE OPTIONS

  - 5-7/8" x 7-1/16" RECTANGULAR COVER PLATE  
PART# 19.12.089A
  - 6-11/16" X 6-11/16" SQUARE COVER PLATE  
PART# 19.12.088A
  - 6" x 9" RECTANGULAR COVER PLATE  
PART# 19.12.151
  - 6-7/8" x 6-7/8" ROUND COVER PLATE  
PART# 19.12.087A

**NO HEAT**

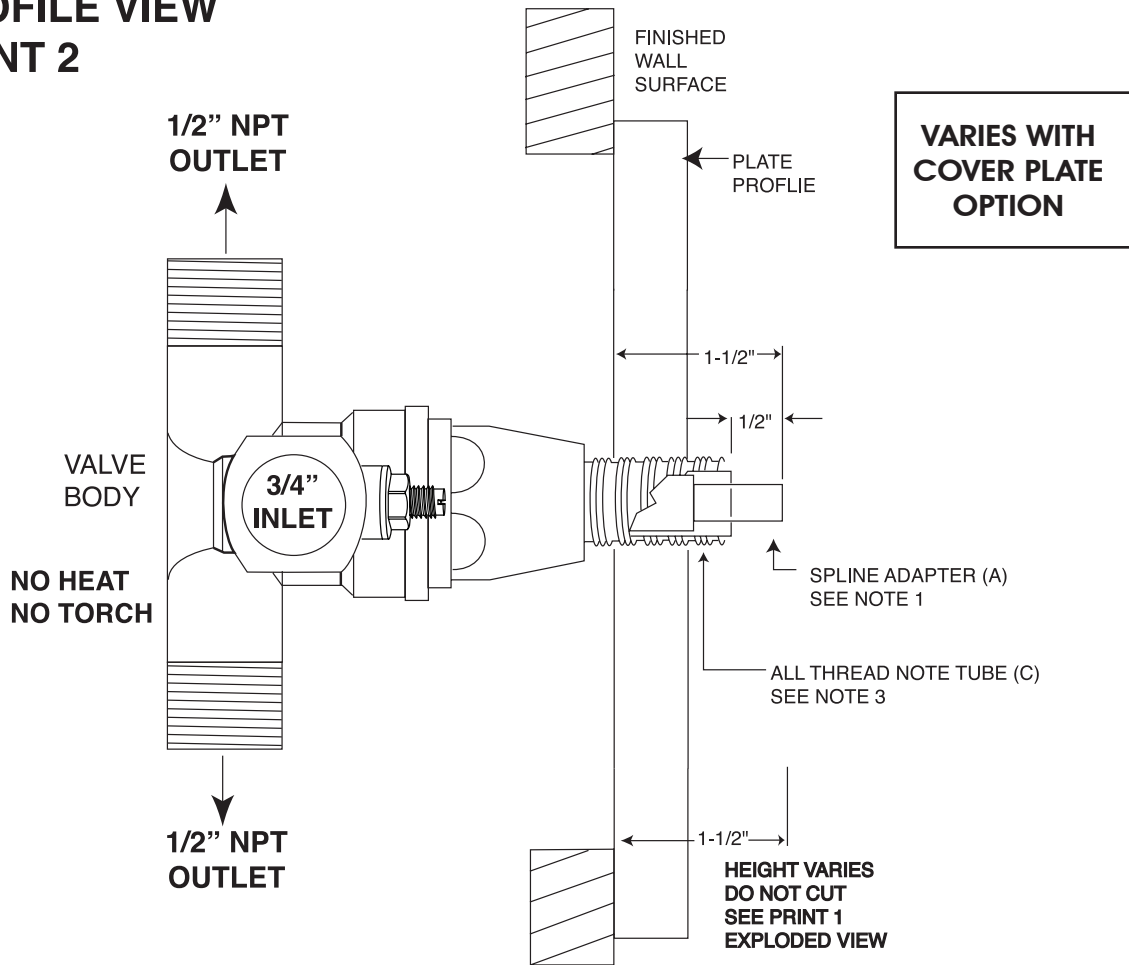
**NO TORCH**

# THERMOSTATIC VALVE

PROFILE VIEW OF INSTALLED ROUGH VALVE ONLY  
1/2" FULL FLOW VALVE AVAILABLE WITH SINGLE OR DUAL EXITS

SEE PRINT 4 ROUGH VALVE INSTALLATION PROCEDURE

## PROFILE VIEW PRINT 2



**INSTALLER NOTES:** THIS VALVE MUST BE INSTALLED AS SHOWN ABOVE

- (1) FROM THE FINISHED WALL TO THE END OF THE SPLINE ADAPTER (A) ALLOW 1-1/2" - PART SHOULD NOT BE CUT - EXTENSIONS ARE AVAILABLE. **THIS SQUARE TUBE IS SHIPPED WITH THE TRIM.**
- (2) VOLUME CONTROL STEM (B) CANNOT BE CUT - WE HAVE EXTENSIONS IF VALVE BURIED TOO DEEP.
- (3) THIS IS SPECIAL ALL-THREAD METRIC TUBE - CAUTION: ONLY ONE END CAN BE CUT - CUT BETWEEN THREADS ONLY. **THIS TUBE IS SHIPPED WITH THE ROUGH VALVE AND COVERED BY THE BLACK MUD GUARD.**

**THERMOSTATIC VALVE  
TECHNICAL GUIDE**

**SEE PAGE 8  
FOR ALL COVER PLATE OPTIONS**

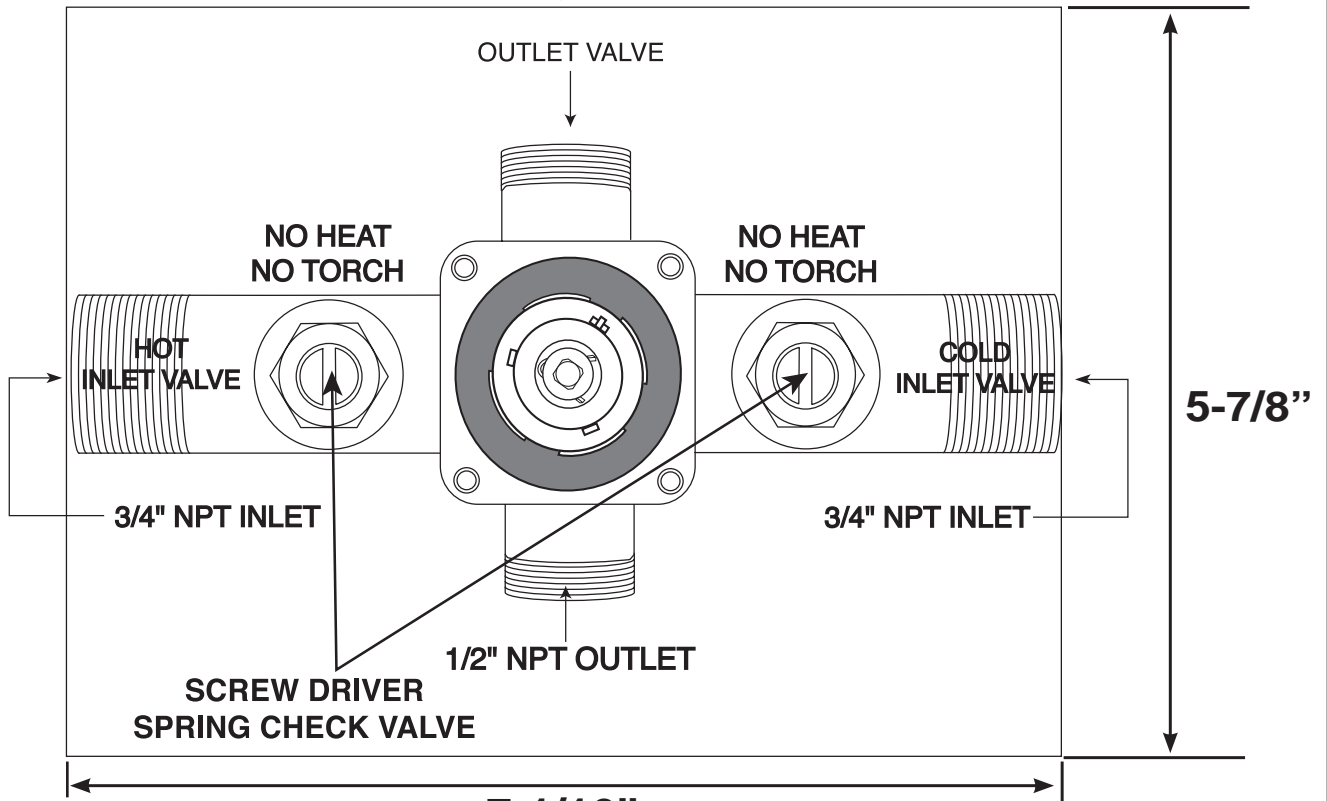
**THERMOSTATIC VALVE**

1/2" FULL FLOW WITH DUAL EXITS

**FULL FACE  
PRINT 3**

**VARIES WITH COVER  
PLATE OPTION**

**6" x 7" RECTANGULAR  
PLATE**



**NOT A TEMPLATE**

**DO NOT SCALE DRAWING**

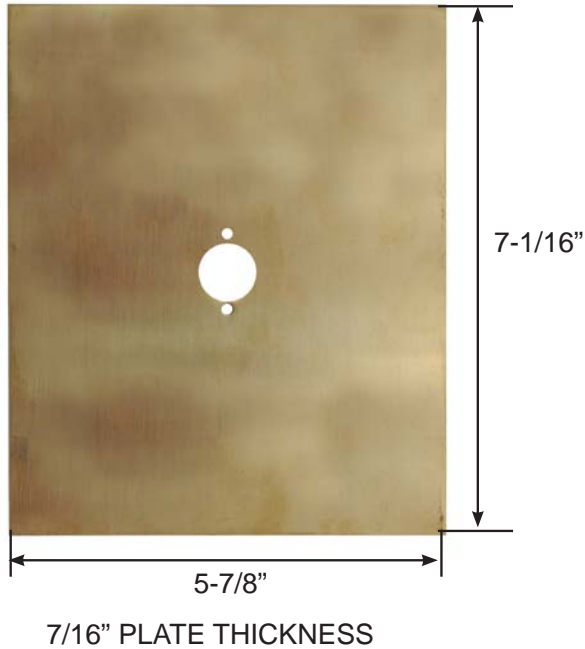
**NO HEAT  
NO TORCH**

**FACTORY  
TESTED AND  
SEALED**

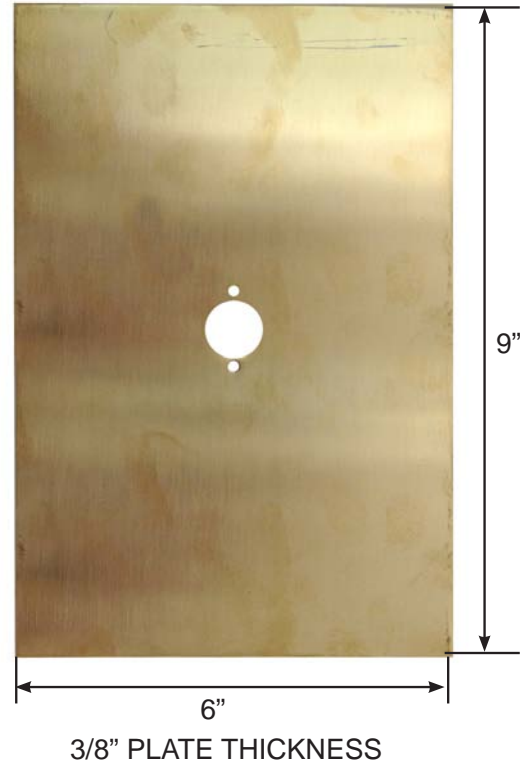
# THERMOSTATIC VALVE COVER PLATE OPTIONS

**DO NOT USE WITH MUD GUARD TEMPLATE  
(SEE PAGE 10)**

PART # 19.12.089A

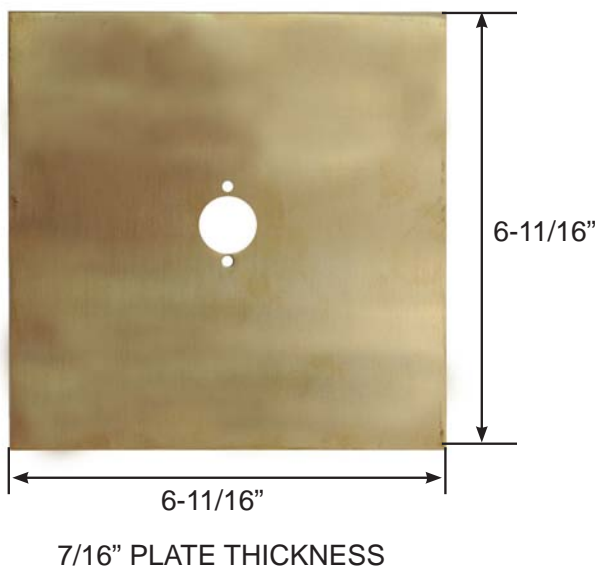


PART # 19.12.151

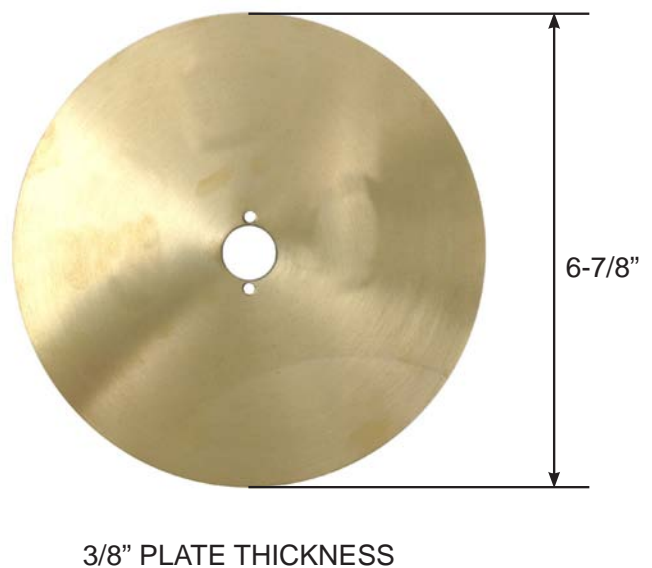


**OKAY TO USE WITH MUD GUARD TEMPLATE  
(SEE PAGE 10)**

PART # 19.12.088A



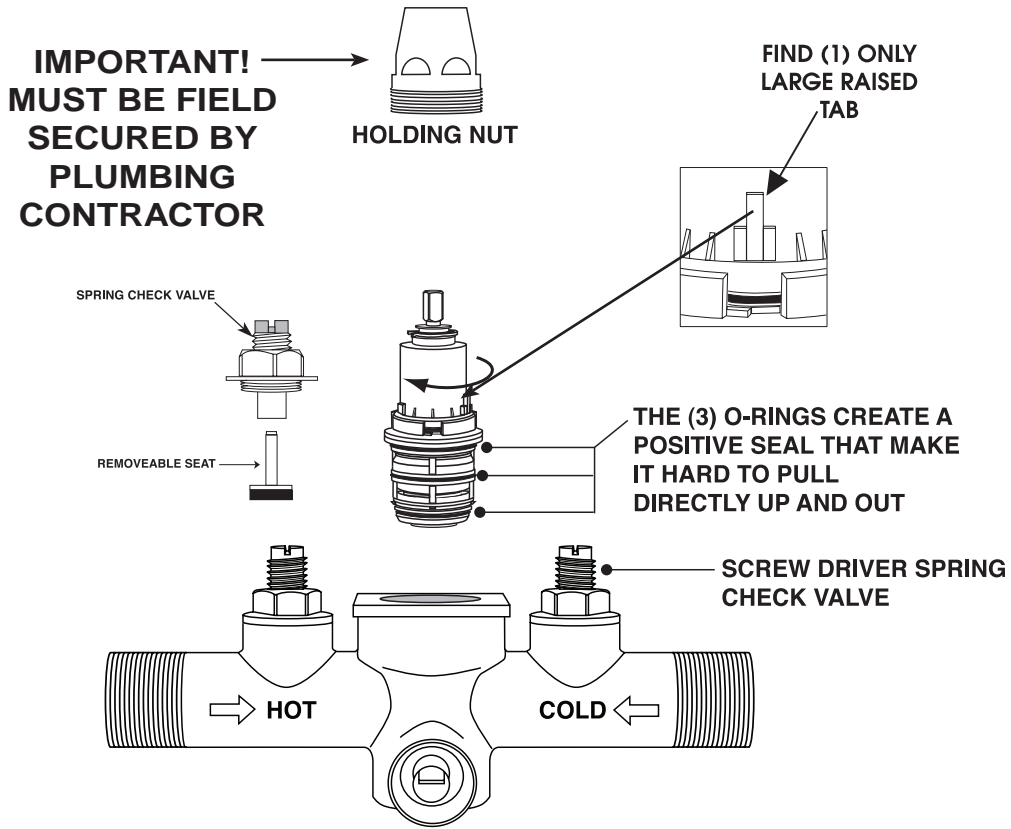
PART # 19.12.087A





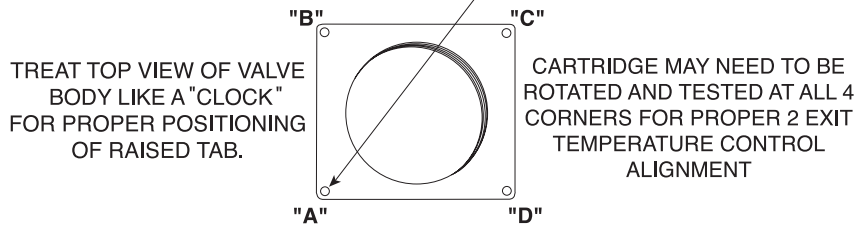
# THERMOSTATIC VALVE TECHNICAL GUIDE

## NEW THERMOSTATIC 1/2" CARTRIDGE EFFECTIVE 6-15-01 INSTALLATION AND PROPER ALIGNMENT OF CARTRIDGE FOR 2 EXIT BALANCED TEMPERATURE CONTROL



### THERMO VALVE BODY

INITIAL STARTING LOCATION  
OF RAISED TAB, FACES  
CORNER OF SCREW HOLE  
POSITION "A"



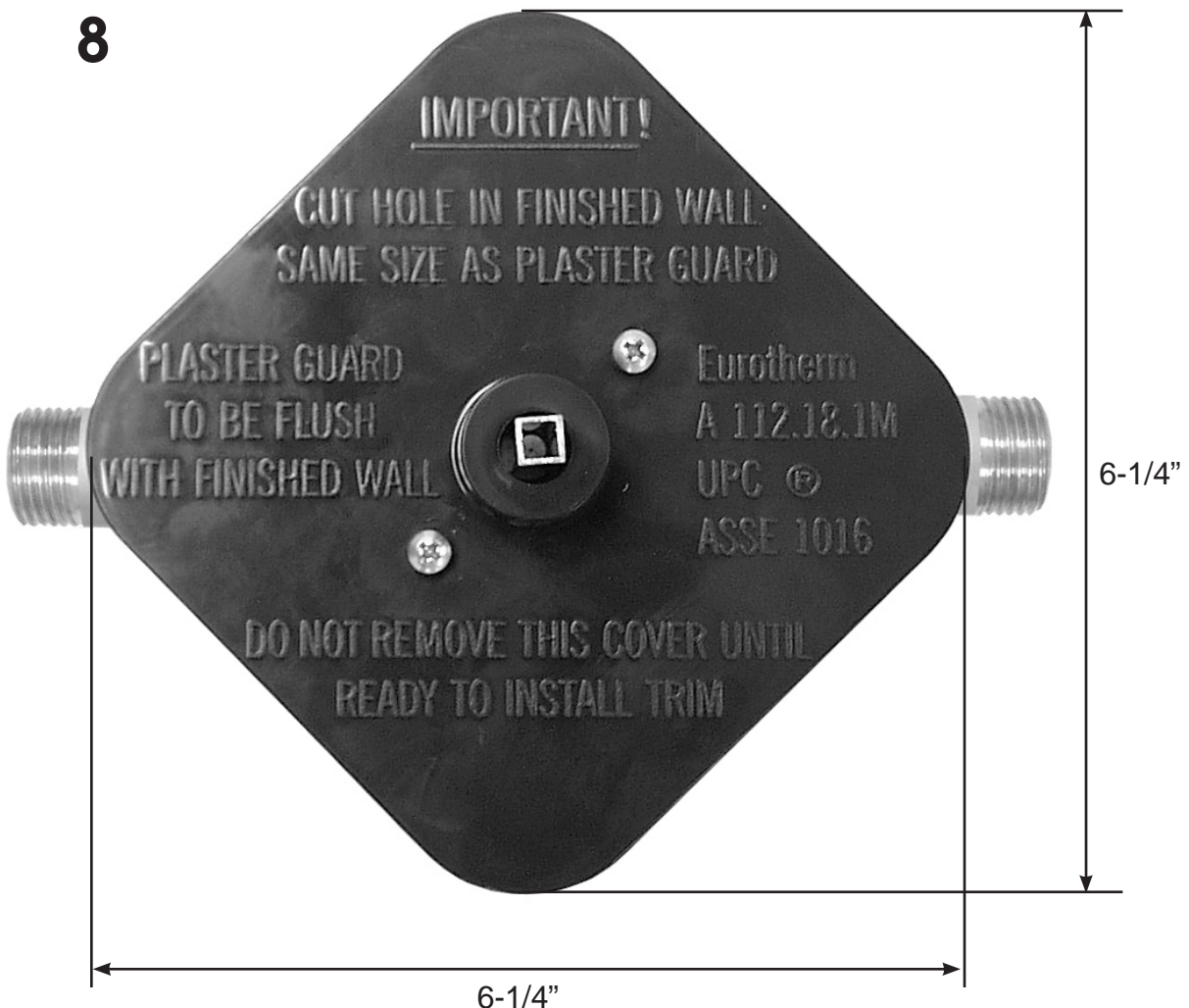
**To remove cartridge from body: Rotate cartridge counter clockwise only.**  
**To reset: Reseal - Push straight into body and secure with holding nut**

THERMOSTATIC VALVE  
TECHNICAL GUIDE

**! CAUTION !**  
**PLASTIC GUARD TEMPLATE MAY NOT BE USED FOR**  
**ALL COVER PLATES (SEE PAGE 8)**

**REVIEW ALL INSTRUCTIONS PRIOR TO CUTTING**  
**FINISHED WALL MATERIAL HOLE.**

**PRINT**  
**8**



**VALVE CARE**

Your 1/4 turn ceramic valve will provide you a lifetime of service when cared for properly. The most common valve problem is a result of debris in the water line, such as sand, silt, solder, metal shavings, lime deposits or other foreign particles. Debris can become lodged between the ceramic discs and result in improper functioning of the open and close action of the valve. Particles can even cause cracks in the ceramic discs and render the cartridge useless. For further information, please contact Bluewater Manufacturing Corporation @ 877-890-8006 or fax your request to 877-373-0649

**BLUE WATER MANUFACTURING CORPORATION  
LIMITED PRODUCT WARRANTY**

**Product/Finish Warranty:** Bluewater Manufacturing Corporation warrants that products are free from manufacturing defects in materials and workmanship for five (5) years from date of invoice. In addition, our Finish Warranty provides limited LIFETIME coverage for Chrome & PVD finishes, five (5) years for powder coated finishes & Polished Gold. Living finishes are warranted for workmanship only. If any material proves to be defective after inspection by our company, it will be repaired or replaced at our discretion at no charge. However, no claims for labor, shipping costs, or consequential damages will be accepted.

**What we will do:** We will restore any product whose finish proves to be defective back to its original finish at no charge during the appropriate warranty period stated above. Proof of purchase must be provided. After the warranty period, **Bluewater Manufacturing Corporation** will refinish any of its faucets at the prevailing appropriate charge.

**What you must do:** The faucets must be properly installed according to our instructions and specifications and are for residential use only. The faucets cannot be altered in any way. You must maintain and clean the faucets in accordance with the instructions provided with the product. You must use the faucet(s) for residential use only.

**How to obtain service:** Send your name, address, and telephone number along with a statement describing the nature of the problem and your paid sales slip or other proof of purchase to:

**BLUE WATER MANUFACTURING CORPORATION  
3280 Corporate View  
Vista, CA 92081**

We will then contact you and take appropriate action. Do not send us any part(s) of your faucet(s) or its various connecting hoses unless we have contacted you and have sent you an approved RGA form. All transportation charges for returned goods must be paid by the customer.

**What is not covered:** This warranty does not cover the crystal/glass, or porcelain products of any faucet or the drain assembly or aerator on other than the Chrome or PVD finishes. This warranty also does not cover damage caused by accident, alterations, misuse, abuse, normal wear and tear, lime deposits, direct exposure to salty air or corrosive materials, or the color change that takes place with the passage of time, or use in any manner contrary to **Bluewater Manufacturing Corporation's** printed instructions. Cartridge warranties vary. Please call factory for details. In the case of in-the-wall installations, **Bluewater Manufacturing Corporation** will assume no liability if there is no access. **In no event will we be liable for labor of any kind, incidental or consequential damages.** This warranty is extended in lieu of all other expressed or implied warranties, whether oral or written. **Many installation compounds are harmful to brass and metal finishes. The use of any lead-based or acidic curing adhesive, silicone, mastic, or plumber's putty on or near our finished products will void the finish warranty. Use only sealants which are neutral curing and are not reactive with metal and brass finishes.** **Bluewater Manufacturing Corporation** reserves the right to change, modify or alter its products as deemed necessary. This warranty supersedes any other American Faucet & Coatings Corporation warranties, whether oral or written.

*Unless otherwise contrary to state law governing the purchase, **Bluewater Manufacturing Corporation's** liability will not exceed the wholesale price for the **Bluewater Manufacturing Corporation** product considered defective. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow exclusion of incidental or consequential damages, so the above limitation may not apply to you.*

**LIFETIME WARRANTY ON 1/4 TURN CERAMIC DISC CARTRIDGE**

Should the ceramic disc cartridge in your faucet ever fail, **Bluewater Manufacturing Corporation** will replace the failed part free of charge to the original purchaser of the product. Your cost will be a \$15.95 handling and mailing charge. Labor not included. When ordering replacements, denote for widespread or centerset lavatory, Roman Tub, or other. Include age of faucet. (This does not include thermostatic, pressure balance, kitchen or diverter cartridges.)

**NOTICE**

**Bluewater Manufacturing Corporation** products are ICC-ES PMG listed and are tested to ASME A112.18.1/CSA B125.1-2011 and ASSE 1016, and comply with NSF/ANSI 61-2011a and NSF372 - 2010 for basin faucet, bar faucets, and kitchen faucets as required.