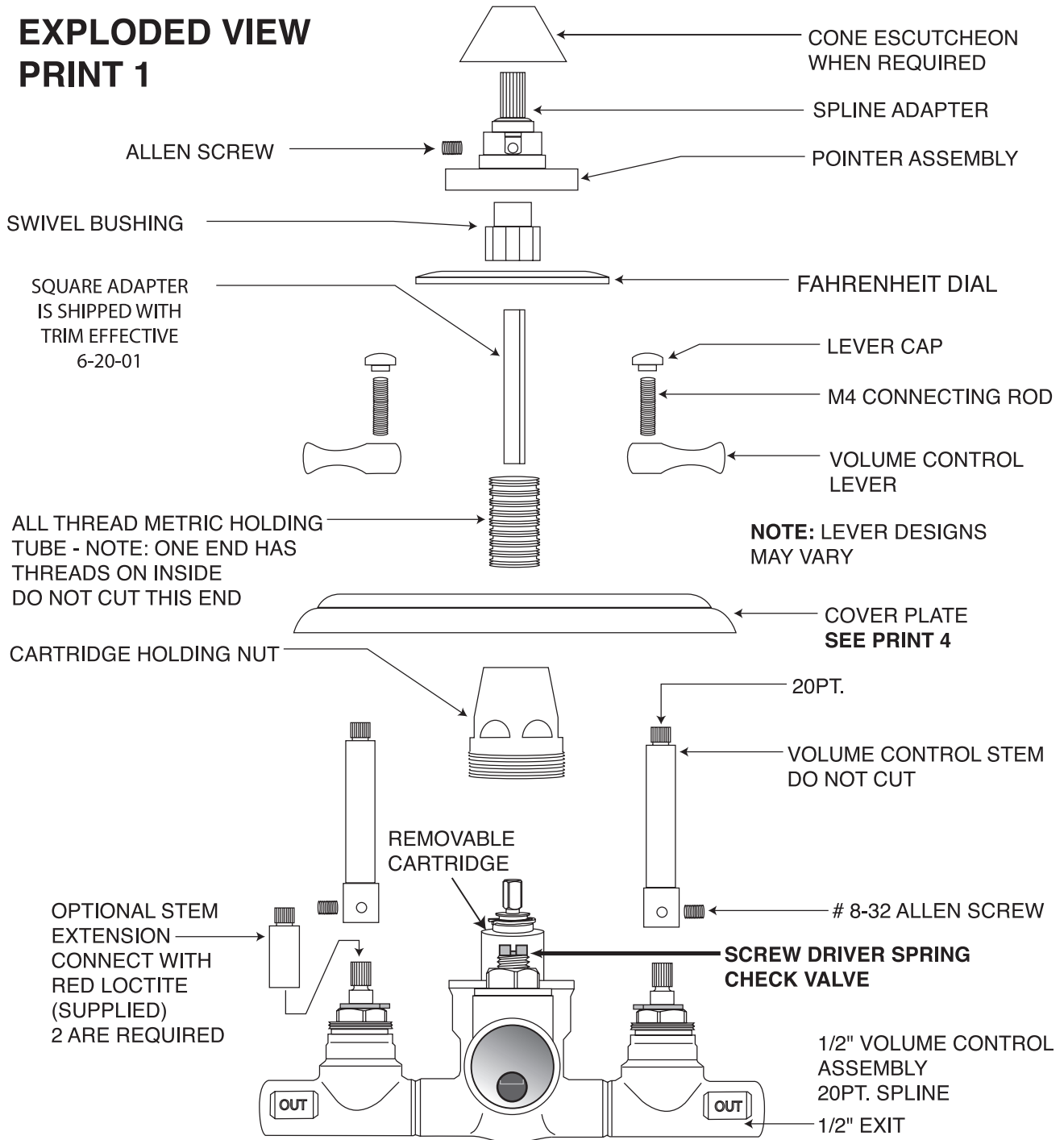


**UNIVERSAL
 1/2" FULL-FLOW WITH DUAL EXITS
 EXPLODED VIEW
 THERMOSTATIC VALVE**

**EXPLODED VIEW
 PRINT 1**



NO HEAT

THERMO VALVE BODY

NO TORCH

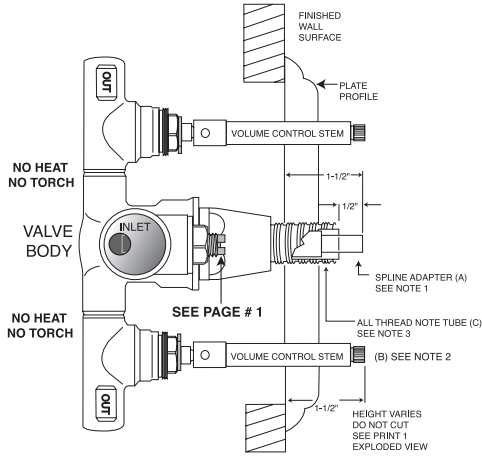
NEW 1/2" FULL FLOW THERMOSTATIC INSTALLATION INSTRUCTIONS

- STEP 1** Read the entire booklet first. Verify you have the 5 required installation prints.
- 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** The depth of the valve should be installed using print # 2. Valve is shipped with maximum extension.
- STEP 4** Connect the exit(s) required to 1/2" NPT copper pipe. **(SEE PRINT # 3)**
Inlet shut-off valves are screwdriver spring check valves. The 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 5** Open both screw driver spring check valve inlet ports and pressure test all connections with water. Check for flow and leaks before closing the walls.
- STEP 6** Be sure the hot water heater is connected, clean and operational. Before you calibrate the cartridge, set the hot water to approximately 130° - 140° Fahrenheit. **If there is no hot water, you cannot test the system for proper performance.**
- STEP 7** 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 water through 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 the red pointer to remind you the bather of comfort temperature location.
- STEP 8** **HIGH TEMP LIMIT SET POINT TRIM!** The combined trim (The Dial Pointer Assembly) has a built-in stop and a manual override which limits the distance the handle will be allowed to turn in the hot direction. If you have calibrated the valve correctly, this **CAN** prevent children, elderly, and handicapped people from the danger of excessive hot water.
- STEP 9** You are now ready to enjoy your new Eurotherm system.

**PROFILE VIEW
PRINT 2**

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



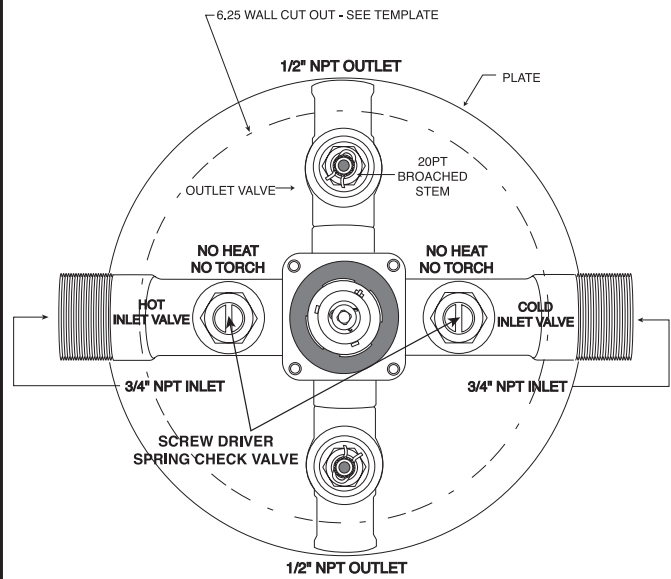
INSTALLER NOTES: THIS VALVE MUST BE INSTALLED AS SHOWN ABOVE

- (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 A SPECIAL ALL-THREAD METRIC TUBE
CAUTION: ONLY ONE END CAN BE CUT CUT BETWEEN THREADS ONLY
THIS TUBE IS SHIPPED WITH THE TRIM.

**FULL FACE
PRINT 3**

THERMOSTATIC VALVE

1/2" FULL FLOW WITH DUAL EXITS

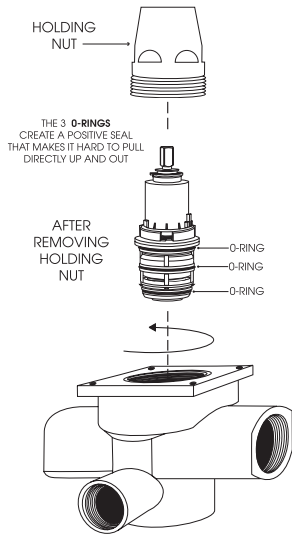


NOT A TEMPLATE DO NOT SCALE DRAWING

**NO HEAT
NO TORCH** **FACTORY
TESTED AND
SEALED**

**PRINT
5**

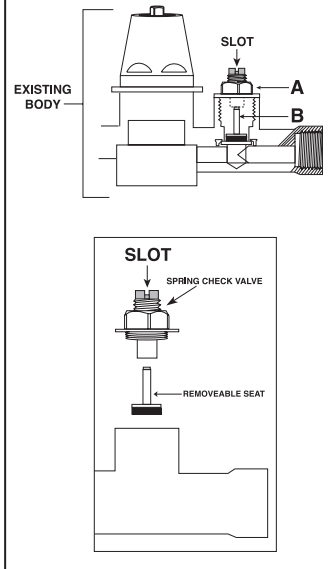
**THERMOSTATIC 1/2" CARTRIDGE
REMOVABLE FROM THE TOP**



To remove cartridge from body: Rotate cartridge counter clockwise only.
To re-set: (Re-seal - Push straight into body and secure with holding nut)

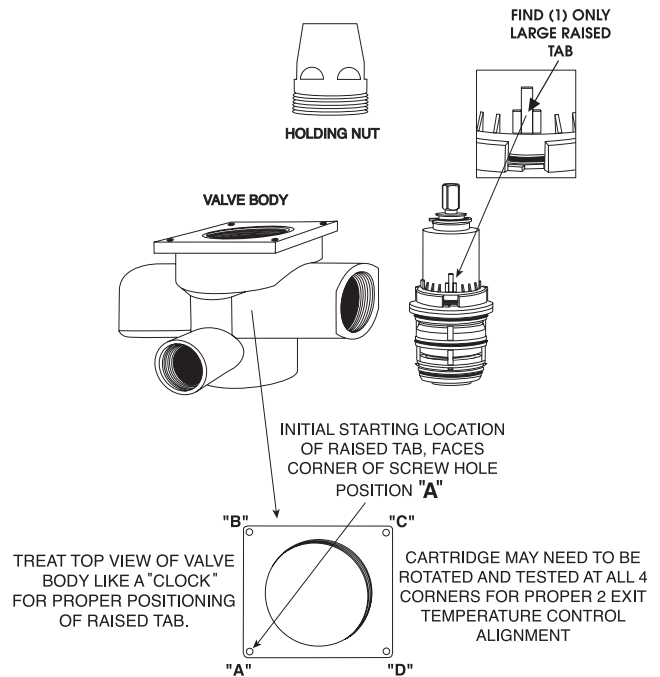
**PRINT
7**

SPRING CHECK VALVE



**PRINT
6**

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



THERMOSTATIC VALVE
-FULL SCALE (1:1) CUTOUT TEMPLATE

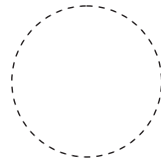
FOR 1/2" FULL FLOW SYSTEMS

COVER PLATE
PRINT 4

PLATE
(SEE NOTE 1)

ACTUAL MUD GUARD TO SCALE

**ROUGH VALVE TO BE
INSTALLED
USING BLACK
MUD GUARD INSTRUCTIONS**



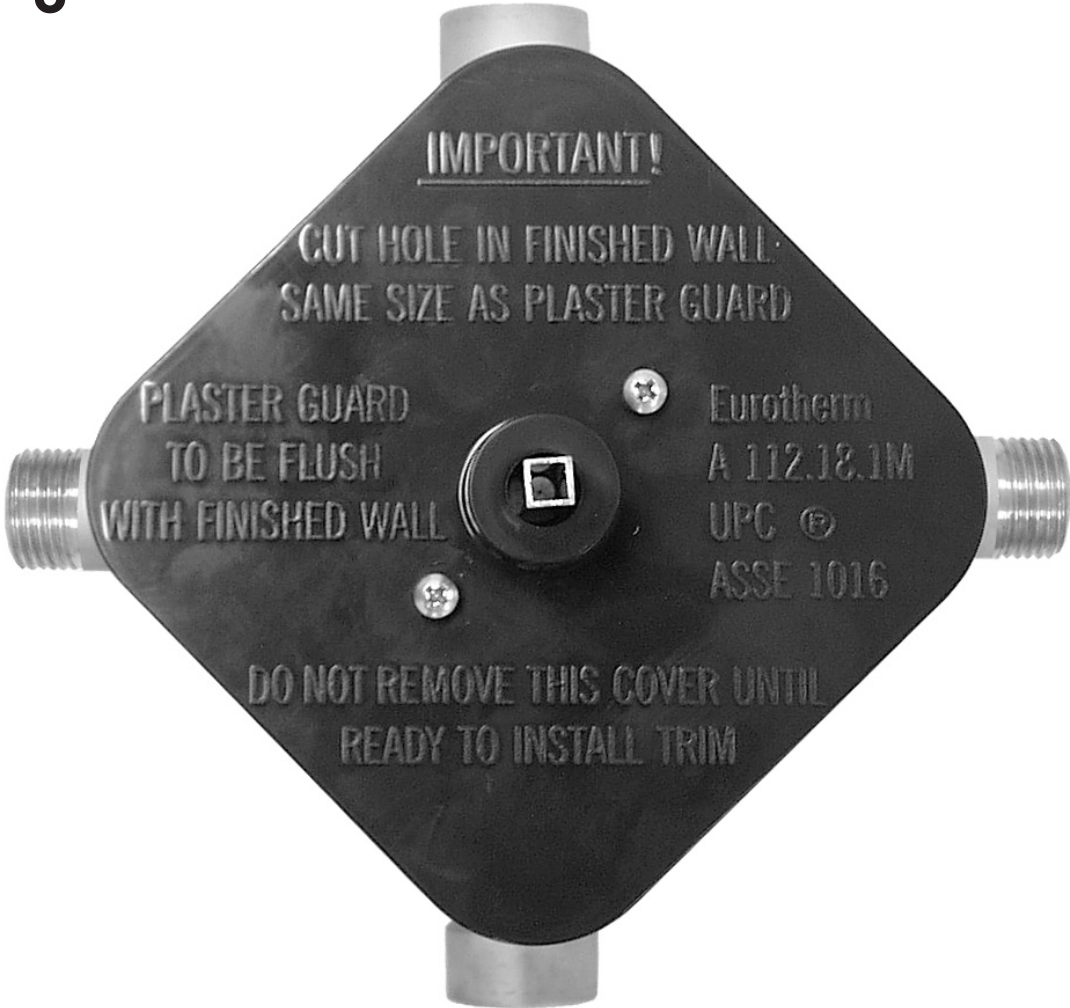
**BLACK
MUD
GUARD**

NOTES:

1. THE SOLID LINE REPRESENTS THE ACTUAL OUTLINE OF THE TRIM PLATE.
2. FOLLOW INSTRUCTIONS ON MUD GUARD FOR CUT OUTS AND INSTALLATION DEPTH.

Eurotherm Mud Guard

**PRINT
8**



GENERAL THERMOSTATIC INFORMATION FOR HOME OWNER

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

Please be sure the Homeowner is provided the booklet for future reference for regular maintenance.

FEATURES:

- 1/2" systems come with 1/4 turn ceramic disc cartridges volume controls. Service shut-off valves are screwdriver spring check valves. Other sizes may have **optional shut-offs**, ask dealer for details.
- The 1/2" full-flow Thermostatic uses a parafin wax sensitivity cartridge.
- The 1/2" cartridge constantly monitors temperature and re-adjusts within 2° Fahrenheit of set temperature when supply pressure fluctuates, re-adjustment occurs in less than 2 seconds.
- The Eurotherm brand of Thermostatic valves have been in use worldwide for over fifty years.
- Complete serviceability from front of all units.
- Sizes vary from 1/2" - 3/4" - 1", 1-1/4", 1-1/2". and 2" for residential use.
- All other units are Bi-Metal Strip with Built-in Check Valves in the cartridge.
- Extension kits are available through your dealer at an extra charge.
- The Bi-Metallic cartridge delivers the highest flow rate in the industry today.
- The Bi-Metallic cartridge has the fastest response time plus + (or) minus -1 second, and 1° Fahrenheit when fluctuation in supply pressure occurs.
- Keep in mind that the distance the shower head or other exit is from the valve will depend on how fast you feel the instantaneous correction in the temperature.
- Uniform dials and push-button over-rides are interchangeable on all sizes of valves.
- 1/2" and 3/4" size valves come with dual exits as a standard feature. You may decide to plug one exit if you don't need both.

INSTALLATION CAUTIONS!

1. 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.
2. 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.
3. 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.**
4. 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.
5. Failure to flush all water lines properly may damage internal parts. An In-Line water filter is recommended to remove harmful sediment.
6. Inlet screwdriver spring check valves are provided with the 1/2" full-flow system. All other Eurotherm Thermostatic valves that come equipped with the Bi-Metallic strip cartridge have built-in check valves to protect cross-connection.
7. All valves that are not tooled with NPT connectors come with conversion adapters. (Metric and NPT)
8. 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.
9. Remember water pressure comes from your local water supplier and can be measured at the source on the street.
10. Pressure or water velocity is not a function of the valve.
11. 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.
12. Do not attempt installation of the product if you do not understand these instructions.
13. **Qualified plumbers should be used for all installation procedures.**

**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.
2. Hot and cold inlets are clearly marked. **DO NOT REVERSE CONNECTIONS, THE UNIT WILL NOT WORK CORRECTLY.**
3. **DO NOT USE DIRECT HEAT, OR ANY TORCH ON 1/2" ROUGH VALVES.**
4. 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.
5. Minimum and maximum finished wall tolerances are clearly marked.
(SEE EXPLODED VIEW OF VALVE)
6. 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.
7. Under no circumstances should the thermostat cartridge be dismantled. Doing so will void any warranty and generally make the cartridge inoperable.

MAINTENANCE

The Bi-Metallic strip cartridge has two filter screens and a simple cleaning with a toothbrush will remove surface debris.

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.

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 or 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.