

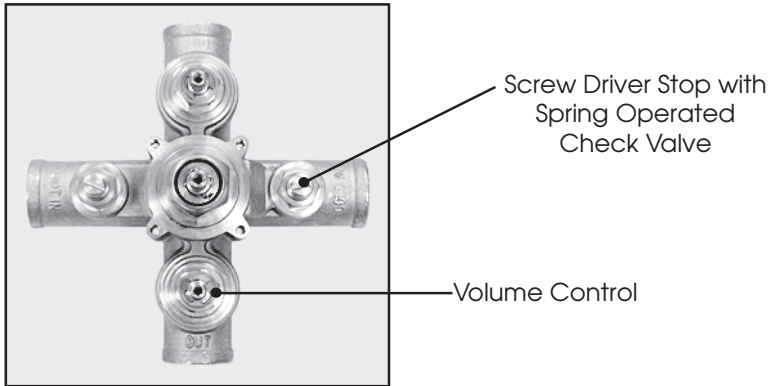
# SIGMA

PRECISION CRAFTED FAUCETRY

*Simply Safe*™

## Thermostatic Installation Instructions

*The valve with a higher purpose!*™



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:**

- Kerox 1/2" Full-flow Paraffin wax cartridge
- Complete serviceability from front of all units.
- 3/4" NPT inlets and outlets, can be reduced to 1/2" with a plumber supplied reducing bushing
- 9.7 gpm @ 50 psi
- Systems come with 1/4 turn ceramic disc cartridges for volume controls.
- Extension kits are available through dealer at an extra charge.
- The wax sensitivity cartridge constantly monitors temperature and re-adjusts within 3° Fahrenheit of set temperature when supply pressure fluctuates. Re-adjustment occurs in less than 2 seconds.
- A dual exit valve can be adapted to single exit. Please contact dealer for Part #88.30.157.

### **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.

# INSTALLATION INSTRUCTIONS

*Simply Safe*™ THERMOSTATIC SYSTEMS

## CAUTIONS!



**NO HEAT, NO TORCH ...** Shall be applied to the valve assembly. Cartridge and ceramic seats cannot withstand heat from soldering torch.



Use teflon tape thread sealer 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.**



Prior to installing the thermostatic valve, **flush all water lines** to free up all solder, sand, silt and debris that have accumulated in plumbing lines. The lines should be flushed long enough to remove any sediment that may come from any new additional installation such as a water heater.

### Reminders Prior to Starting:

- Water pressure comes from your local water supplier and can be measured at the source on the street.
- Pressure or water velocity is not a function of the valve.
- Water heater must be operational.
- Failure to flush all water lines properly as stated above may damage internal parts. Serviceable spring check valves are provided with the valve and may be blocked by initial failure to flush lines or by heavy sediment. An in-line water filter may be recommended in certain situations such as well water.
- Do not attempt installation of the product if you do not understand these instructions. **Qualified plumbers should be used for all installation procedures.**

### Begin Installation:

**STEP 1** Read complete instructions and prints from start to finish before beginning.

**STEP 2** Install male adapters at each port with the required length of copper pipe (minimum 8") already soldered to the adapter. Then connect the hot water to the side stamped HOT and the cold water to the side stamped COLD. **DO NOT REVERSE CONNECTIONS:** the valve will not work properly! **(PRINT #2)**



**REMEMBER NO HEAT NO TORCH APPLIED DIRECTLY TO VALVE!!**

**STEP 3** The depth of the valve should be determined using mud guard **(PRINT #3 & 4)**. Stem Adapter with Square Tube will then be 1-1/2" from finished wall. Do not cut part. Extensions are available for an extra charge through dealer. Volume Control Stem cannot be cut. Extensions are available for volume controls also.

**STEP 4** Connect the exit(s) required to copper pipe using same precautions mentioned in Step #2. The volume controls are 1/4 turn ceramic disc cartridges. Any debris in the cartridges may cause exits to drip. It is possible to plug one of two exits in the field with use of special part #18.30.157 ordered through dealer.

**STEP 5** Remove cartridge by rotating counter-clockwise before removing **(PRINT #5)** and flush lines one last time. Replace cartridge, pushing straight into body and rotating clockwise until tight. Replace the locknut, stem adapter, threaded tube, and square tube **(PRINT #1)**. Open both screw driver inlet ports and pressure test all connections with water. Check for flow and leaks before closing wall. Wall cut-out should be 5-1/4" diameter. **(Print #6)**

**STEP 6** Be sure hot water heater is connected, clean and operational and set to approximately 130 degrees - 140 degrees Fahrenheit. **If there is no hot water, valve cannot be calibrated or system tested for proper performance.** Install all trim pieces except brass pointer (#9) and handle or lever.

**STEP 7** The center cartridge affects only the mixed water temperature and must be "calibrated" to protect the end user while bathing. Calibration is simple and takes only a few additional minutes. The temperature range of mixed water is controlled through calibration setting the hot and cold limits.



**CALIBRATION OF VALVE PROVIDES SAFETY TO END USER.  
PLEASE READ CAREFULLY**

**CALIBRATION BY FEEL:** Rotate the Stem Adapter with Square Tube located on the thermo cartridge **(Print #4)** all the way to the right (clockwise) to obtain the maximum cold water using either a flat screwdriver inserted into the square tube or wrench on swivel bushing. Reverse (counter-clockwise) to obtain the maximum incoming hot water. Return right again (clockwise) until the mixed water at the exit point feels correct to the end user. Let water run for 2 or 3 minutes to confirm comfort level. Set the pointer dial at the 115 mark on the dial and carefully fix the set screw. That is the location of the hard stop that cannot be overridden. It will be possible to move the temperature below this point but not above this point, thus protecting children or elders from damaging temperatures.

**BY THERMOMETER:** Rotate the Stem Adapter with Square Tube located on the thermo cartridge **(Print #4)** all the way to the right (clockwise) to obtain the maximum cold water using either a flat screwdriver inserted into the square tube or a wrench on the swivel bushing. Reverse (counter-clockwise) to obtain the maximum incoming hot water. Return again to the right (clockwise) until the mixed water at the exit point registers 105° degrees on an instant read thermometer. Let water run for 2 or 3 minutes to confirm comfort level. Set the pointer dial at the 115 mark on the dial and carefully fix the set screw. That is the location of the hard stop that cannot be overridden.

**NOTE:** An end user who wishes the mixed water to actually reach 115° degrees (the real temperature) may do so by placing the pointer dial at the 115 mark on the dial, but it is not recommended for children or elders.

After installing other system trim parts, valve is ready to enjoy.

**STEP 8 Maintenance:**

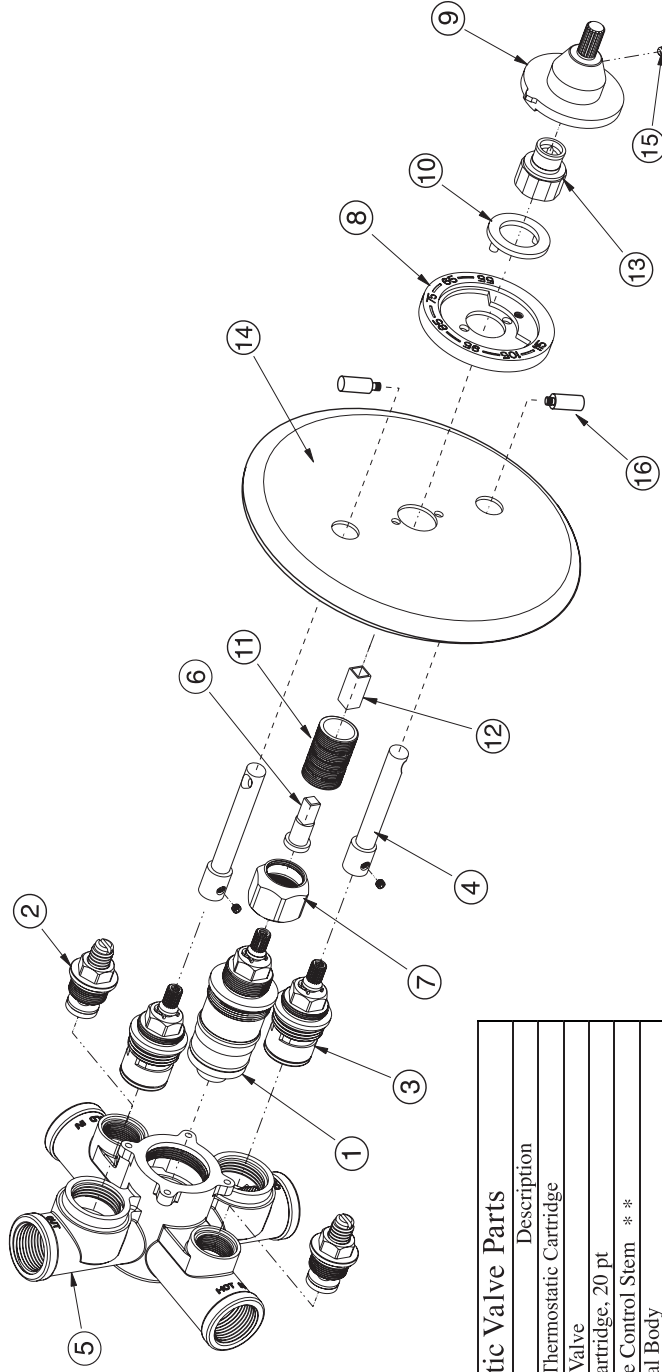
Occasionally, rinse debris and hard water build-up on cartridge filter screen with a toothbrush. **Never take the thermostatic cartridge itself apart.** Doing so will damage this precise instrument, generally make the cartridge inoperable, and void any warranty. (See Print #5 to remove cartridge and Print #5-A to service the check valve.)

Frequency of maintenance varies with many factors, such as mineral content (hardness) of water supply, new construction/changes affecting any home water lines, age of property, use of well water, etc.

# PRINT 1

## Simply Safe™ Thermostatic Valve Exploded View

The valve with a higher purpose!™

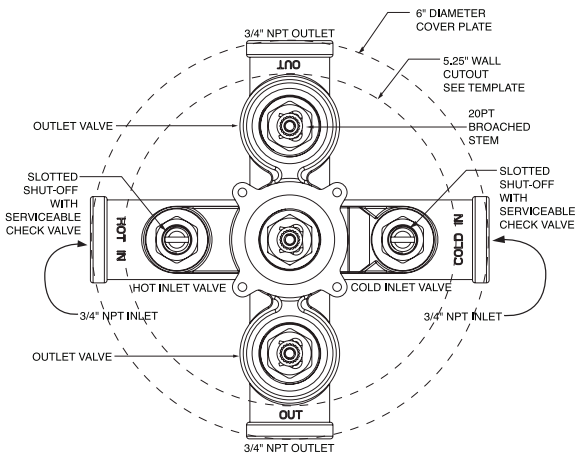


### Simply Safe Thermostatic Valve Parts

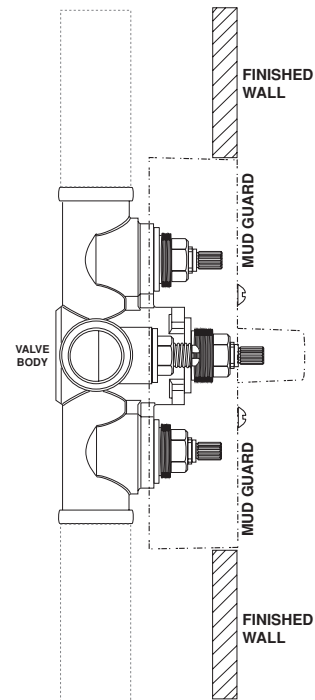
Item	Part Number	Description
1	88.30.155	Kerox Thermostatic Cartridge
2	88.30.156	Cheek Valve
3	88.30.011	3/4" Cartridge, 20 pt
4	88.12.037	Volume Control Stem **
5		Thermal Body
6	88.30.153	Stem Adapter
7	88.30.154	Cartridge Lock Nut
8	88.12.022	Mini ETL Dial **
9	88.12.004	Small Thermo Brass Pointer - 20pt **
10	88.12.406	Anchor for Mini ETL Dial
11	88.30.152	Threaded Tube
12	88.30.151	Square Tube
13	88.12.016	Sigmatherm Bushing
14	88.12.008	Thermo Trim Plate - One Volume - 6" **
15	88.12.009	Thermo Trim Plate - Two Volume - 6" **
16	88.01.001	Set Screw
	88.12.038	Volume Control Lever **
	88.30.145	Simply Safe Complete Valve - One Exit
*	88.30.150	Simply Safe Thermostatic Valve - Two Exits
*	88.30.157	Exit/Shut Off Plug
*	88.30.158	Valve Mud Guard
* Not Shown		** Finished Parts

# Simply Safe™ Thermostatic Valve

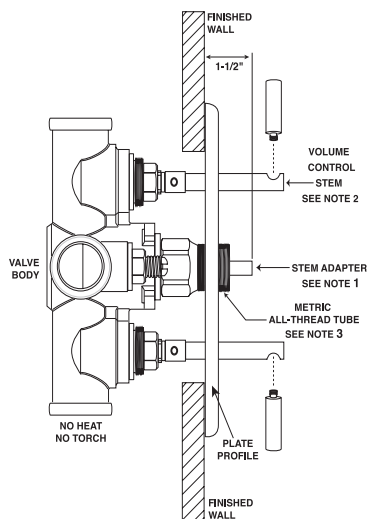
## PRINT 2 FULL FACE



## PRINT 3 INSTALLED ROUGH VALVE ONLY



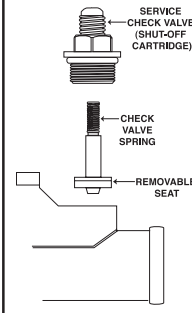
## PRINT 4 INSTALLED ROUGH WITH PARTIAL TRIM



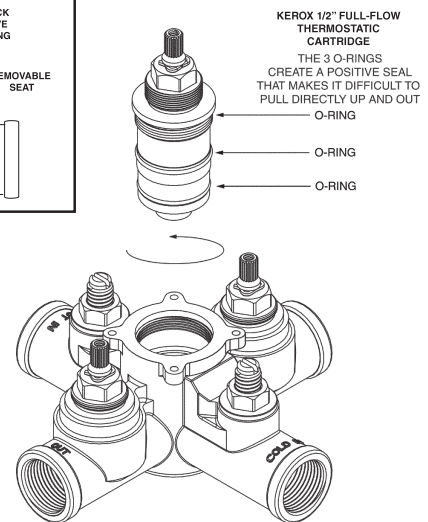
INSTALLER NOTES: THIS VALVE MUST BE INSTALLED AS SHOWN ABOVE

- (1) INSTALL VALVE SO MUD GUARD IS EVEN WITH FINISHED WALL. STEM ADAPTER AND SQUARE TUBE WILL THEN BE 1-1/2" FROM FINISHED WALL. DO NOT CUT PART -- EXTENSIONS ARE AVAILABLE.
- (2) VOLUME CONTROL STEM CANNOT BE CUT -- EXTENSIONS ARE AVAILABLE.
- (3) SPECIAL ALL-THREAD METRIC TUBE -- CAUTION ONLY ONE END CAN BE CUT -- DO NOT CUT INTERIOR THREADS AND CUT BETWEEN THREADS ONLY.

## PRINT 5-A



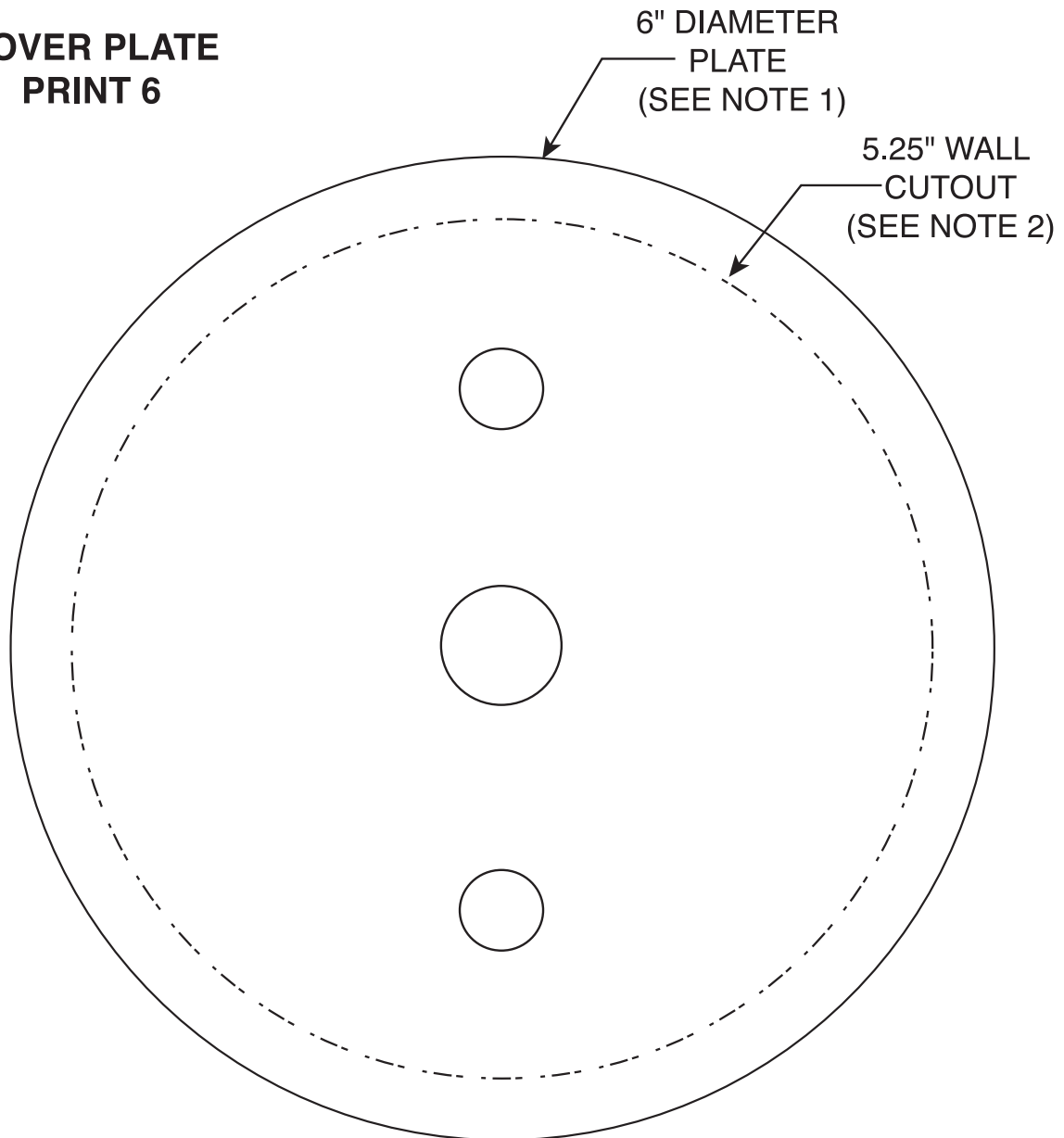
## PRINT 5 MAINTENANCE



To remove cartridge from body: Rotate cartridge counter clockwise only.  
To re-set: (re-seal -- Push straight into body and rotate clockwise until tight.

*Simply Safe*™ THERMOSTATIC VALVE  
- FULL SCALE (1:1) CUTOUT TEMPLATE

**COVER PLATE  
PRINT 6**



**NOTES:**

1. THE SOLID LINE REPRESENTS THE ACTUAL OUTLINE OF THE TRIM PLATE
2. THE DASHED LINE REPRESENTS THE WALL CUTOUT.