

# Installation Instructions:

## Thermostatic Radiator Valves

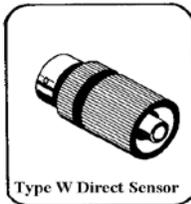
### **Applications:**



For single or two pipe steam heating systems; two pipe hot water systems; or single pipe (loop) hot water systems with bypass modifications.

### **SPECIFICATIONS:**

Max. System Operating Pressure  
Hot Water 150 p.s.i.  
Steam 15 p.s.i.

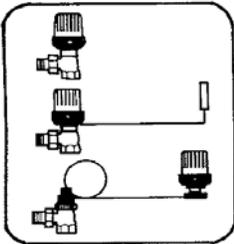


Max. System Temperature  
250 ° F

Temperature Setting Range  
45 - 86 ° F.

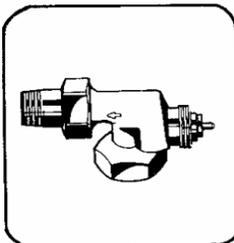
### **Installation: Two Pipe System:**

1. When modernizing old gravity heating systems, installation of a circulating pump will significantly improve system performance, and make consistent temperature control possible.
2. Flush out all radiators and piping to eliminate fouling of valve seats by weld or solder beads, rust chips and scale. For older systems, a strainer should be fitted to inlets of all radiator valves to ensure that residual scale and rust chips will not cause fouling over the service life of the valve.
3. Install the valve body in the supply side piping to each heating unit, **with the flow in the direction of the arrow** on the valve body.



**NOTE:** Reversed flow through the valve will cause chattering or malfunction of the valve.

4. Ensure that no oil or petroleum derived additives are present in the circulating medium, as the EPDM composition seat disc will be damaged. Check boiler additive ingredients for compliance with this requirement.
5. When controls with remote (external) type sensors are to be used, the valve spindle may be horizontal or vertical. When attaching the control, take care to prevent kinks or sharp bends in the connecting capillary tubing. **The sensor must be mounted where ambient room air can circulate freely, unimpeded by drapes, radiator covers or other objects.**



**NOTE:** To prevent damage, do not install controls until other construction work has been completed. A protective cap is nipped on the valve body and may be used as a temporary manual control for operation during this period.



6. Tighten metal collar on control to valve body, orienting white triangle on control base so that it is in view. Metal collar may be locked using set screw on side.
7. Adjust control cap to desired set point (see Figure 1), by aligning the selected number with white triangle on base.

**Figure 1**

0	★	1	2	3	4	5
OFF	43° F	45°	58°	68°	80°	86° F

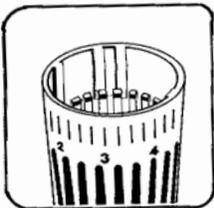
**Limiting the Temperature Set Point Range**



1. Set control to highest guide number desired
2. Remove control cap. (For Type L, insert blunt tool into hole opposite white arrow and pry control cap while pulling). (For Type W, move/tilt the control cap sideways and pull off).
3. Locate stop on inside of cap and place to right of stop located at white triangle.
4. Replace cap by pushing in until seated.

**Note:** The above procedure causes the guide numbers to represent temperature values different from those shown in Fig. 1.

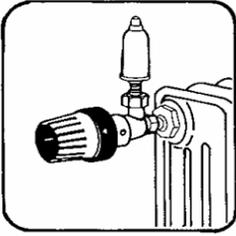
**Locking the Temperature Set Point:**



1. Set the control cap to the desired temperature.
2. Remove the cap (see "Limiting" step 2)
3. Locate the double set of stops on the inside of the cap and align them on either side of the stop located at white triangle on base.
4. Replace the cap by pushing in until seated. The control cap should not be able to turn.

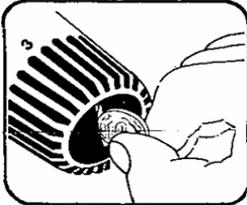
### Recalibration to the Factory Setting:

1. Remove the control cap (see "Limiting" step 2)
2. Grip the serrated ring on the internal component and screw in as far as the stop on bellows allow.
3. Unscrew serrated ring until red mark aligns with white triangle on base.
4. Replace cap, aligning guide three cap with white triangle on base. Push in until seated.



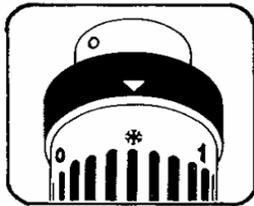
### Installation: Single Pipe Steam System:

1. Remove old steam/air vent from radiator (please note if not used in step 2).
2. Install 1/8" NPT angle pattern valve body side of radiator, near top, with valve spindle placed horizontally, and steam/air vents vertically.
3. **Install the direct type thermostatic control horizontally, ensuring that ambient air can flow freely around the control's integral sensor. If this is not possible, due to drapes, radiator cover, use a remote sensing (sensor/set point) control instead.**



### Normal Set Point Indicator:

Once the normal temperature set point for any given room is established, the indicator mark at the end of the control may be rotated with a small coin so that it aligns with the triangle point mark. This provides a visual reference for resetting the control if it has been changed.



### Frost Protection Setting (\*)

At this point, the room temperature will be controlled at approximately 43° F. to prevent frost damage during extended winter vacation, etc. The lower setting will save significant energy while providing a safety factor against frozen pipes, etc.

## **AMERICAN STEAM CONTROL'S WARRANTY**

Each American Steam Control product is warranted against defects in material and workmanship for one year from the date of shipment. This warranty extends to the original or first retail purchaser only. All defective material must be returned to the seller of the product, transportation prepaid, free from any liens or encumbrances, and if found to be defective will be repaired free of charge or replaced at American Steam Control's option. If the material is replaced, an adjustment will be made by the purchaser's use, and the purchaser will be invoiced accordingly. In no event will American Steam Control be liable for more than the purchase price of the product. American Steam Control will not be liable under any circumstances for any labor to remove or install products. Except for the following warranty, American Steam Control makes no express or implied warranty or merchantability or fitness for a particular purpose. Incidental and consequential damages are excluded, whether under this warranty or otherwise.