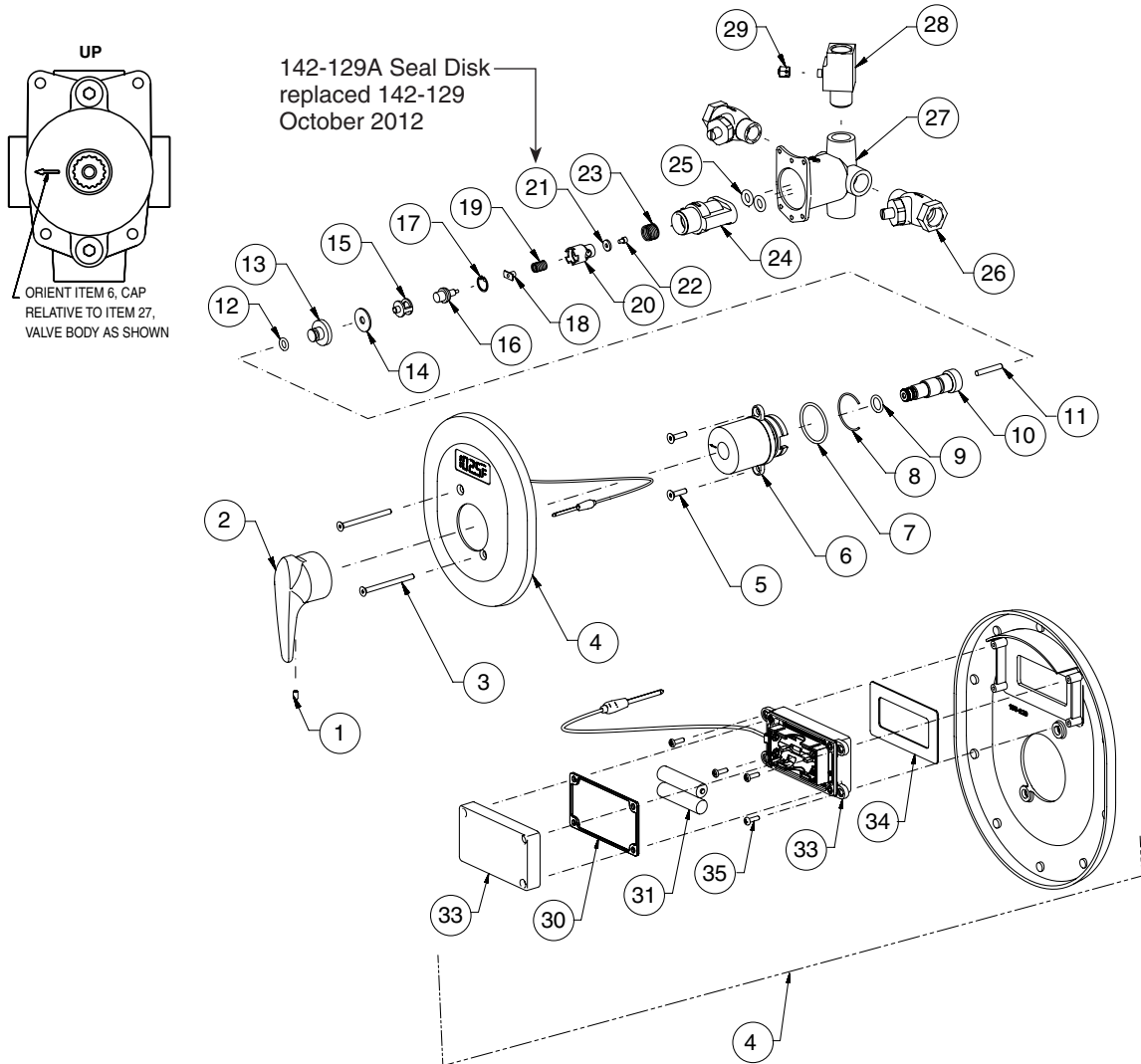


### Thermostatic Mixing Valve — Model S59-2005T1 (January, 2013 to Present) For Individual Showers



To adjust the valve's temperature to other than the factory preset, follow the procedures outlined below.

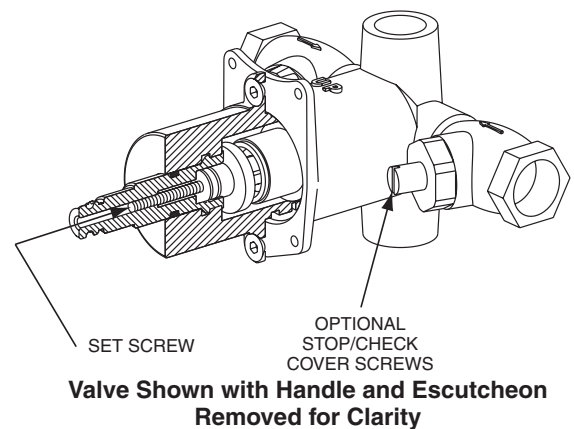
1. Turn on the water and let it run until 2.5 – 4 GPM is flowing through the valve.
2. Remove the shower valve handle and handle screw to expose the set screw inside the valve stem.
3. Using a 3/32" hex-head Allen key, turn the set screw **counterclockwise** to **increase** the temperature or **clockwise** to **decrease** the temperature.
4. When the adjustment is complete, replace the handle and turn off the water.

NOTES: When replacing the double face seals, lubricate the top face with a small amount of lubricant when reassembling.

When assembling the valve cap into valve body, use lubricant on 125-154 O-ring to prevent twisting of O-ring.

If lubricant is not available, a slight film of soap may be used.

*NOTE: The maximum temperature for this valve has been set to approximately 110° F with an incoming hot water temperature of 140° F. This maximum temperature may need to be adjusted based on the installation conditions or application. See Figure below for adjustment.*



## Thermostatic Mixing Valve — Model S59-2005T1 (January, 2013 to Present) For Individual Showers

### Parts List

Item	Part No.	Description	Assembly	Thermostat Kit	Piston/Liner Kit	O-Ring/Seat Kit	Display Repair Kit
				S65-257	S65-253	S65-252	S65-382
				Quantity			
1	160-226	Set Screw 10-24 x 5/16	1	—	—	—	—
2	128-163	Handle	1	—	—	—	—
3	160-386	Screw	2	—	—	—	—
4	S74-020	Escutcheon Assembly w/ Display	1	—	—	—	—
5	160-225	Flat Screw 10-24 x 3/4	2	—	—	—	—
6	107-519	Cap, TMV-Shower	1	—	—	—	—
7	125-154	O-Ring	1	1	—	1	—
8	153-427	Retainer, Shower TMV	1	—	—	—	—
9	125-001CD	O-Ring	1	—	—	1	—
10	120-152	Stem, Shower TMV	1	—	—	—	—
11	160-408	Set Screw 10-24 x 1-1/4	1	—	—	—	—
12	125-001CM	O-Ring	1	—	—	1	—
13	153-404	Holder-Shutoff Disk	1	—	—	1	—
14	142-112	Disk-Shutoff	1	—	—	1	—
15	153-406	Retainer-Shutoff Disk	1	—	—	1	—
16	S39-413	Thermostat	1	1	—	—	—
17	132-044	Retaining Ring	1	—	1	—	—
18	153-405	Retainer-Overheat Spring	1	—	1	—	—
19	135-085	Spring	1	—	1	—	—
20	119-245	Piston	1	—	1	—	—
21	142-129A	Seal Disk - Hot	1	—	1	—	—
22	160-407	Screw 6-32 x 3/16	1	—	1	—	—
23	135-074	Spring	1	—	1	—	—
24	144-065	Liner, TMV-Shower	1	—	1	—	—
25	125-155	O-Ring	2	—	2	2	—
26	S27-102	Stops (Optional)	2	—	—	—	—
27	118-144	Valve Body	1	—	—	—	—
28	269-2092	Tee-Probe (Includes 269-2096)	1	—	—	—	—
29	269-2096	Sleeve/Nut Assembly	1	—	—	—	1
30	269-2081	Gasket - Display	1	—	—	—	—
31	261-013	Battery (AAA) 2 Pack	1	—	—	—	—
32	124-089	Foam Rim Seal (not shown)	1	—	—	—	—
33	269-2076	Temperature Display	—	—	—	—	1
34	124-088	Gasket - Temperature Display	—	—	—	—	1
35	160-478	Screw 4-40 x 3/8	—	—	—	—	4

## Thermostatic Mixing Valve — Model S59-2005T1 (January, 2013 to Present) For Individual Showers

### Troubleshooting Thermostatic Mixing Shower Valve



Before attempting to troubleshoot the valve or disassemble the components, check for the following:

- Stop/check valves are fully open and that all inlet and outlet shut-off valves are open
- Hot and cold inlet pipes are connected properly, and that there are no cross-connections or leaking stop/check valves
- Water heater output is at least 15° F above the set temperature.

Be sure to close the appropriate shut-off valves prior to disassembly of the valve and reopen the valves after inspection and repair is complete.

Problem	Cause	Solution
External leaks in the system	Either the NPT joints or the o-rings have been damaged.	Replace the NPT joints and/or o-rings where necessary. For replacement of o-rings, order the o-ring/seat kit as specified in the included Service Guide.
Limited water flow	Dirt and debris have collected on the stop/check valve seat, limiting the movement of the stop/checks.	<b>Clean Stop and Check Valves:</b> Remove the stop and checks, clean the screen and seat and reassemble the valve. Do not remove the seat. The components may be brushed with a small wire brush to remove debris. If the stop/check valves need to be replaced, contact your Bradley representative and ask for Stop/Check Valve (S27-102).
Temperature fluctuation or improper Temperature	Thermostat is slowly failing.	<b>Inspect Thermostat:</b> 1. At room temperature (80°F or less), remove the valve assembly from the valve body as described below. 2. Place the thermostat into a small container filled with 115°F water. The thermostat's pushrod should pop out of the thermostat approximately 1/10". 3. If the pushrod does not pop out, the thermostat must be replaced (it cannot be repaired). Order a new thermostat kit as specified in the Service Guide.
	Inlet supply line to the mixing valve is being shared by other pieces of equipment that are used only periodically, such as laundry appliances or washdown stations. It may reduce the inlet pressure to the mixing valve to less than 3 PSI. The supply line size may not be large enough to supply both the valve and the other appliances.	Enlarge the supply line size, reconfigure the supply line or regulate the supply usage.
	Valve temperature is not properly set.	Adjust the temperature as described on page 3.
	Piston does not move freely and must be cleaned.	Clean the piston as described below.

### Troubleshooting: Piston Disassembly and Cleaning

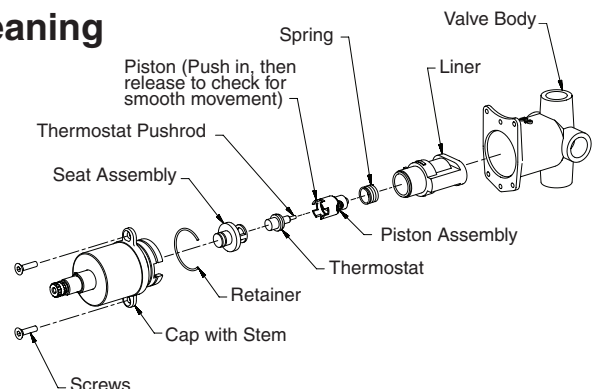
#### Check the piston for free and smooth movement

Remove the handle and escutcheon to expose the valve assembly. Loosen the two screws that hold the valve assembly in the valve body. Remove the valve assembly.

Gently pry the retainer off the valve assembly. This will separate the cap and liner exposing other components. Disassemble components.

Push in on the piston with your finger (the piston should move freely). If not, the piston and liner assembly needs to be cleaned.

Clean the piston and liner assembly with any cleaner suitable for brass and stainless steel (400-grit sandpaper may be used to polish and hone the piston and liner). If the piston does not move freely after a thorough cleaning, the piston/liner assembly must be replaced.



Arrow on cap must point to HOT side.