

Installation

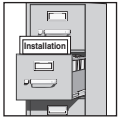
Faucet-Cabinet

Stainless Steel Cabinets with
Faucet Valve Assemblies

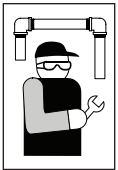
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IMPORTANT!



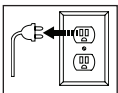
Read this entire installation manual to ensure proper installation. When finished with the installation, file this manual with the owner or maintenance department. For installation of optional components, refer to the installation manual included with the component. Compliance and conformity to local codes and ordinances is the responsibility of the installer.



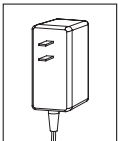
Pressurized plumbing fixtures must be installed in accordance with manufacturer's recommendations. The supply piping to these devices must be securely anchored to the building structure to prevent unnecessary movement of the installed device when operated by the user. Use extreme caution when installing the device to prevent damage to the exposed significant surface. When drilling into masonry or other hard materials to install wall and floor anchors, be sure to wear safety goggles.



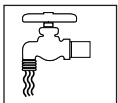
Separate parts from packaging and make sure all parts are accounted for before discarding any packaging material. If any parts are missing, do not begin installation until you obtain the missing parts.



To avoid personal injury and/or damage to the unit, turn OFF electrical power to the outlet before beginning installation.



An optional transformer may be used with the 900 Series Futura faucets. For mounting instructions, refer to the installation manual included with the remote transformer. One transformer operates up to four faucets at one time. Additional transformer(s) are required for installations with more than four faucets.



Flush water supply lines, then turn the water supply OFF before beginning installation. DO NOT use pipe dope on any faucet or supply connections. Possible solenoid contamination could occur which will void any warranty. Teflon tape is the recommended sealant. The installation requires a water flowing pressure of at least 20 PSI but not greater than 80 PSI.



Product warranties may be found under "Product" on our web site at www.bradleycorp.com.

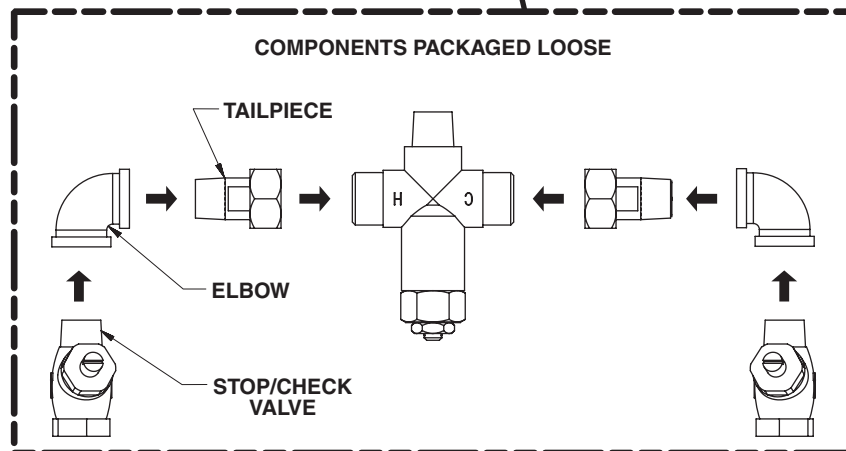
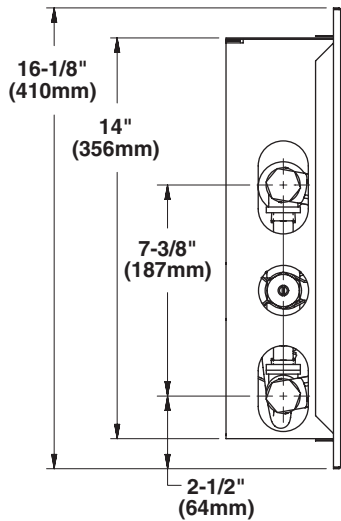
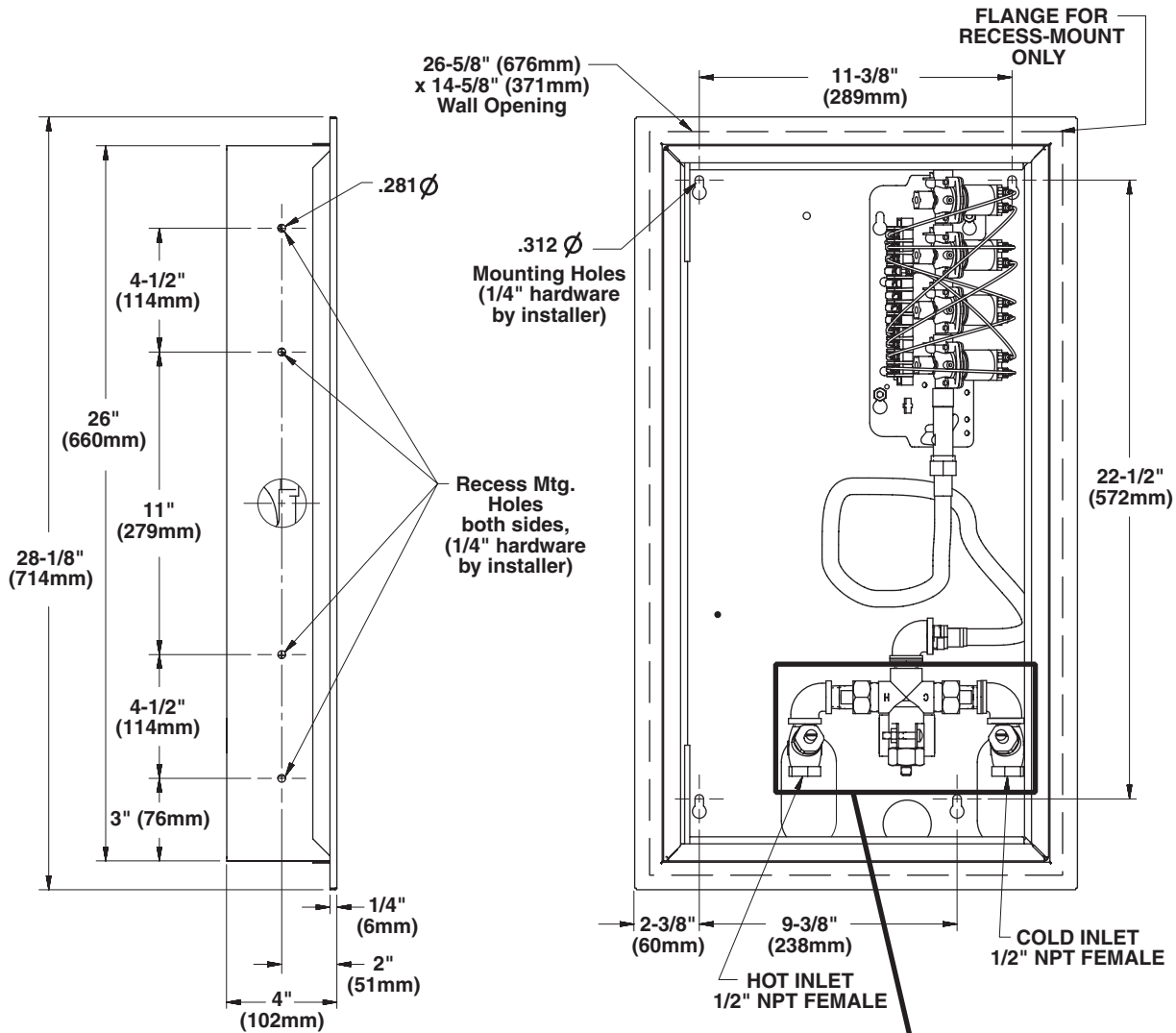
Supplies Required by Installer

- 1/2" NPT hot and cold or tempered water supply piping and fittings
- 100-120 VAC power source and electrical connectors
- 100-120 VAC/24 VAC transformer (supplied by installer or available from Bradley as an option)
- 1/4" mounting hardware (including wall anchors, if required) appropriate for your wall construction
- 18-gage two-conductor lamp cord

1a Recess-Mounted Cabinet Installation



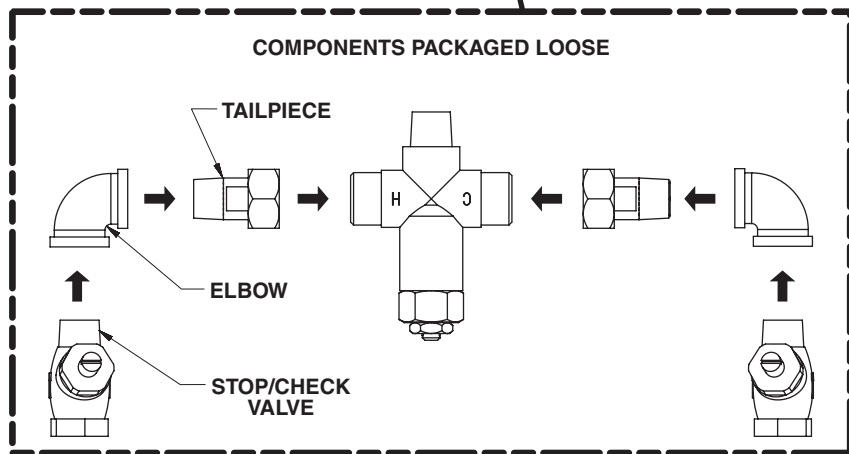
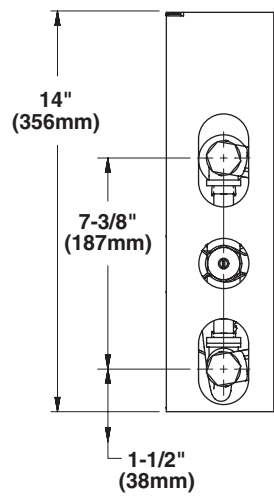
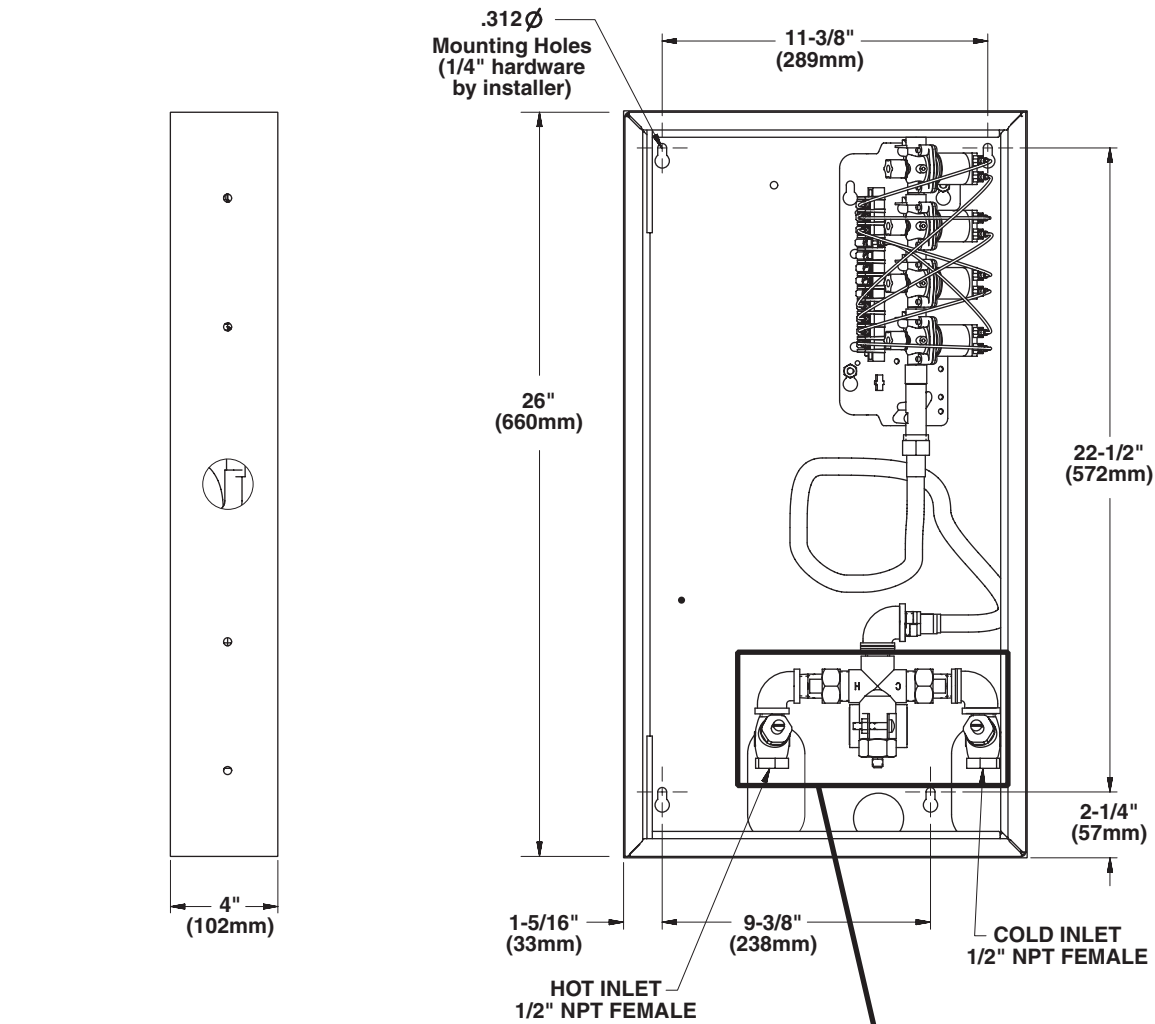
Use the cabinet as a template for locating mounting holes.



1b Surface-Mounted Cabinet Installation



Use the cabinet as a template for locating mounting holes.



Cleaning and maintenance instructions for stainless steel

Material Description: Stainless steel is extremely durable, and maintenance is simple and inexpensive. Proper care, particularly under corrosive conditions, is essential. Always start with the simplest solution and work your way toward the more complicated.

Routine cleaning: Daily or as often as needed use a solution of warm water and soap, detergent, or ammonia. Apply the cleaning solution per the manufacturer's instructions and always use a soft cloth or sponge to avoid damaging the finish.

Stubborn Stains: To remove stains from stainless steel use a stainless steel cleaner and polish such as Ball® stainless steel cleaner or a soft abrasive. Always follow the manufacturer's instructions and apply in the same direction as the polish lines.

NOTICE! Never use ordinary steel wool or steel brushes on stainless steel. Always use stainless steel wool or stainless steel brushes.

Special Situations for Material

Fingerprints and Smears: To remove fingerprints or smears use a high quality stainless steel cleaner and polish in accordance with the manufacturer's instructions. Many of these products leave a protective coating that helps prevent future smears and fingerprints.

Grease and Oil : To remove grease and oil use a quality commercial detergent or caustic cleaner. Apply in accordance to the manufacturer's instructions and in the direction of the polish lines.

Precautions: Avoid prolonged contact with chlorides (bleaches, salts), bromides (sanitizing agents), thiocyanates (pesticides, photography chemicals, and some foods), and iodides on stainless steel equipment, especially if acid conditions exist.

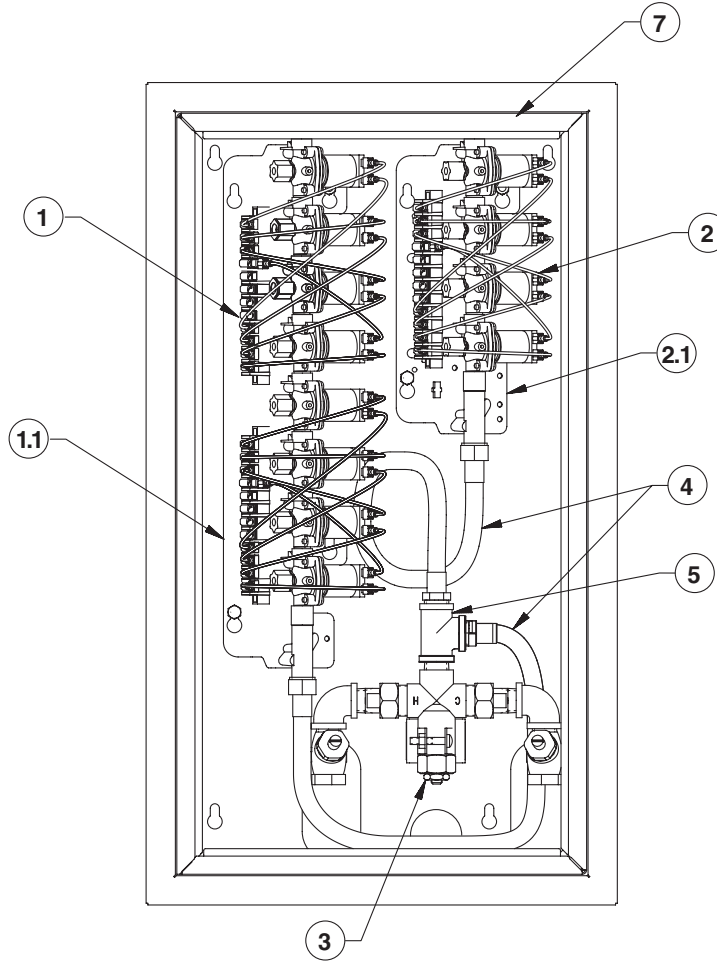
NOTICE! Do not permit salty solutions to evaporate and dry on stainless steel.

The appearance of rust streaks on stainless steel leads to the belief that the stainless steel is rusting. Look for the actual source of the rust in some iron or steel particles which may be touching, but not actually a part of the stainless steel structure.

NOTICE! Strongly acidic or caustic cleaners may attack the steel, causing a reddish film to appear. The use of these cleaners should be avoided.

Brand Names: Use of brand names is intended only to indicate a type of cleaner. This does not constitute an endorsement, nor does the omission of any brand name cleaner imply its inadequacy. Many products named are regional in distribution, and can be found in local supermarkets, department and hardware stores, or through your cleaning service. It is emphasized that all products should be used in strict accordance with package instructions.

Service Parts



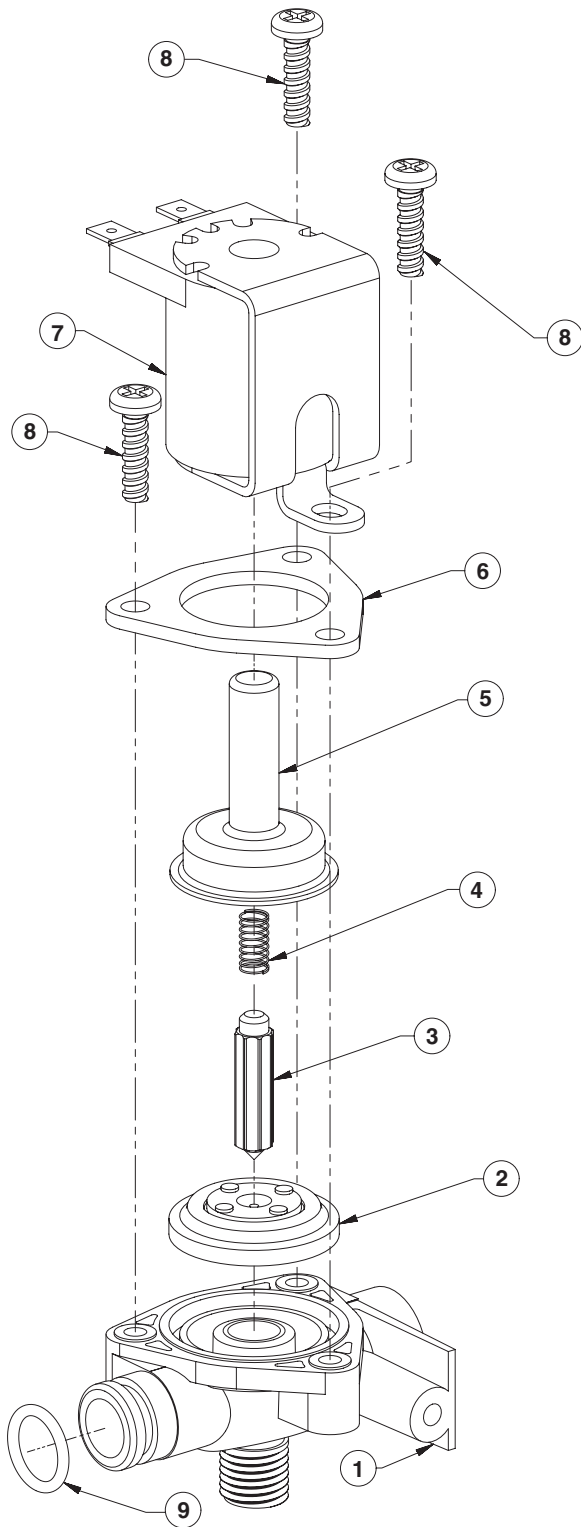
Item	Part No.	Description
1	S45-2542	Solenoid Valve Assembly - 8 Valves
	S45-2541	Solenoid Valve Assembly - 7 Valves
	S45-2540	Solenoid Valve Assembly - 6 Valves
	S45-2539	Solenoid Valve Assembly - 5 Valves
1.1	140-1019	Bracket Only (8-Valve)
2	S45-2524	Solenoid Valve Assembly - 4 Valves
	S45-2522	Solenoid Valve Assembly - 3 Valves
	S45-2568	Solenoid Valve Assembly - 2 Valves
2.1	140-928	Bracket Only (4-Valve)
3	S08-389	Mixing Valve Assembly
4	269-653	Braided Hose
5	269-1150	Tee
6	169-364	Elbow (not shown)
7	S86-160	Cabinet Assembly (Recess-Mounted)
	S86-161	Cabinet Assembly (Surface-Mounted)

Solenoid Valve Troubleshooting

CAUTION! Turn off electrical and water supplies to unit before troubleshooting.

Problem	Cause	Solution
An individual operating station drips or fails to shut off	Debris is trapped inside the valve.	<p>Remove debris in the valve.</p> <ol style="list-style-type: none"> 1. Remove the three #8 Phillips-head screws that hold the solenoid valve assembly together. Be careful not to lose the armature or spring (refer to the illustration on page 9). 2. Remove the diaphragm. Remove any particles that have been trapped between the diaphragm and the valve seat. Rinse off the diaphragm and inspect for damage. Make sure the center orifice and both small side orifices are open. 3. Reassemble the valve in reverse order, being careful not to overtighten the Phillips-head screws or you may crack the plastic valve body. Tighten until the armature plate makes contact with the plastic body. 4. Reconnect the wiring per diagram on page 5.
An individual operating station fails to turn on.	A failed valve or loose electrical connection to the terminal.	<p>Test the station to determine cause.</p> <ol style="list-style-type: none"> 1. Disconnect the wires from the coil of an adjacent valve. Disconnect the wires from the problem valve and reconnect to the adjacent valve. 2. Turn on electrical and water supplies to the unit. Pass your hand in front of the sensor of the problem station, and the adjacent station should turn on. <p>If the adjacent station turns on and cycles normally, replace the problem valve.</p> <p>If the adjacent valve fails to turn on, inspect the wires from the sensor cable and do the following:</p> <ul style="list-style-type: none"> • make sure there are no breaks and that the fully insulated disconnect terminals are firmly crimped in place. • turn off the electrical and water supplies. • reconnect to the adjacent valve and turn on the electrical and water supplies to the unit. • pass your hand in front of the sensor. If the station still fails to turn on, replace the sensor.

Solenoid Valve (S07-067 - Closed Body and S07-067A - Thru Body)



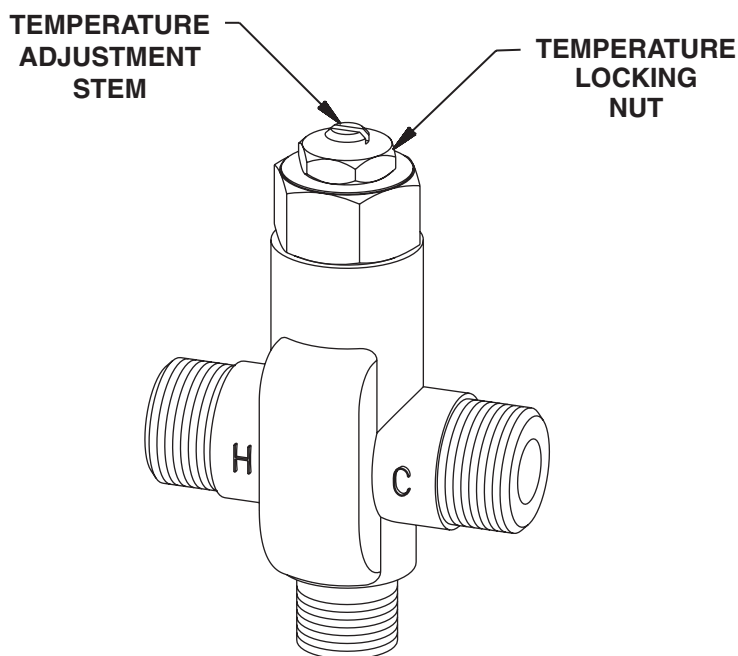
Ref	Qty	Part No.	Description
1	1	118-307	Valve Body, 1/4" Closed
1	1	118-307A	Valve Body, 1/4" Thru
2	1	269-893	Diaphragm
3	1	269-577	Armature
4	1	269-578	Spring
5	1	269-1729	Armature Housing
6	1	269-1730	Clamp, Solenoid Housing
7	1	269-579	Coil, Solenoid Valve
8	3	160-447	Screw, #8 x 5/8"
9	1	125-165	O-Ring, #2-013

Adjusting the Vernatherm Thermostatic Mixing Valve



This valve is NOT factory preset. Upon installation, the temperature of this valve must be checked and adjusted to ensure delivery of a safe water temperature. Water in excess of 110°F (43°C) may cause scalding.

1. Check the temperature when approximately 1.0 GPM water flow is reached and adjust if necessary (the range of the valve is 95°F to 115°F (35°C to 43°C). To adjust the temperature, follow the procedure below.
 - Loosen temperature locking nut with wrench.
 - Using a blade screwdriver, turn the adjustment stem **counterclockwise** to **increase** the temperature or **clockwise** to **decrease** the temperature (see illustration below).
 - Once desired temperature has been reached, tighten lock nut to prevent change in temperature.
2. Shut the hot water inlet off by closing the hot water stop-strainer-check valve. While the hot water supply is turned off, check to make sure the cold water flow is reduced. If the cold water is reduced properly, reopen the hot water supply.
3. Shut the cold water inlet off by closing the cold water stop-strainer-check valve. While the cold water supply is off, check to make sure that the hot water flow has shut down.



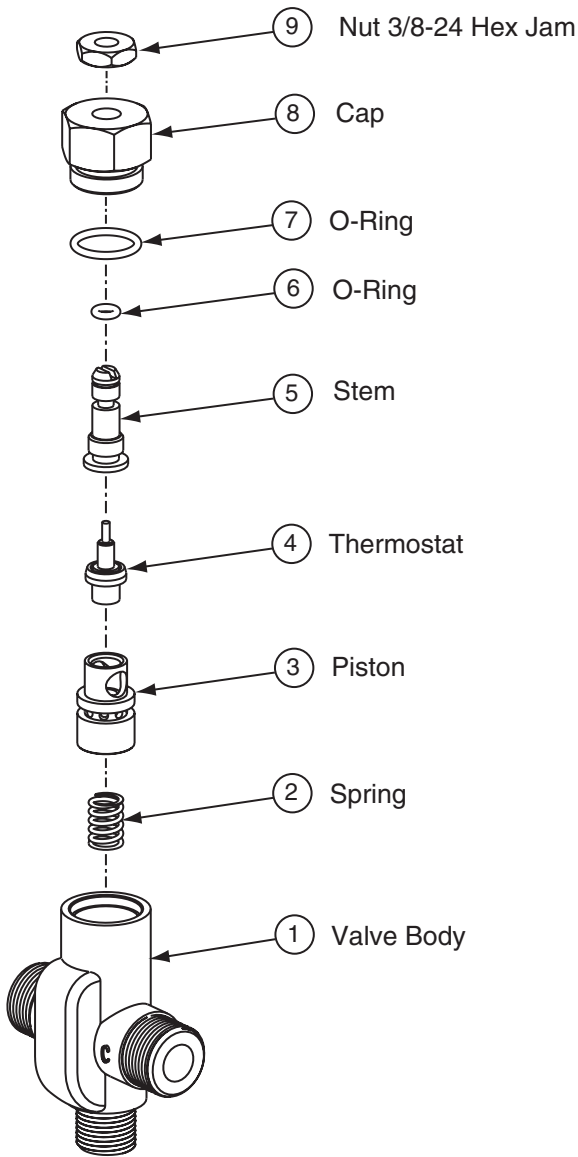
Thermostatic Mixing Valve Maintenance and Troubleshooting

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

- If stop valves are used, make sure that they are fully open.
- Make sure that the hot and cold inlet pipes are connected properly, and that there are no cross-connections or leaking stop valves.
- Check the hot water heater output to make sure that it is at least 10° F above the set temperature.

Problem	Cause	Solution
Limited water flow	Dirt and debris have built up in the valve.	Check the valve's piston for free and smooth movement. <ol style="list-style-type: none"> 1. Remove the valve's cap and thermostat (refer to illustration on page 12). 2. Push down on the piston with your finger (the piston should move freely). If the movement is not as it should be, the piston needs to be cleaned. <ul style="list-style-type: none"> • Remove the thermostat. • Lift the piston out with a needle-nose pliers and remove the spring. • Any cleaner suitable for brass and stainless steel may be used (if cleaning with suitable cleaner is not sufficient to remove debris, a 400-grit sandpaper may be used to polish and hone the piston and valve body). • Snap spring into piston (will detent) and reassemble into the valve body. • Retest piston. 3. If, after a thorough cleaning, the piston does not move freely, the piston must be replaced. Contact your Bradley representative and ask for Repair Kit (part number S65-259).
External leaks in the system.	O-rings have been damaged.	Replace o-rings where necessary. For replacement of the o-rings, contact your Bradley representative and ask for Repair Kit (part number S65-259).
Improper Water temperature or temperature fluctuation.	Thermostat is slowly failing or not working at all.	Check the thermostat for proper operation. <ol style="list-style-type: none"> 1. At room temperature (80° F or less) remove cap and thermostat. 2. Place thermostat into container with 115° F water. The pushrod should pop out of the thermostat approximately 1/10". 3. If thermostat pushrod does not pop out, the thermostat must be replaced. Contact your Bradley representative and ask for Repair Kit (part number S65-259).
	Valve temperature is not properly set.	Adjust the temperature. See page 10 for instructions.

Vernatherm Thermostatic Mixing Valve S01-522B



S65-259 Valve Repair Kit

Item	Qty	Part No.	Description
4	1	S39-413	Thermostat
6	1	125-001BX	O-Ring
7	1	125-157	O-Ring