

Installation Instructions

Aerada™ 90-75 Series Metering Faucet

- S53-053** 90-75 Series Metering Faucet with 4" Centerset
- S53-082** 90-75 Series Metering Faucet with 4" Centerset & 8" Trim Plate
- S53-058** 90-75 Series Metering Faucet with Centershank
- S53-295** 90-75 Series Metering Faucet with Centershank & 8" Trim Plate

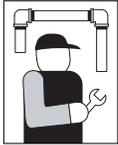
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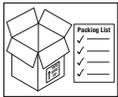
! IMPORTANT! !



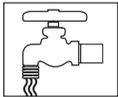
Read this entire installation manual to ensure proper installation, then file this manual with the owner or maintenance department. Compliance and conformity to local codes and ordinances is the responsibility of the installer.



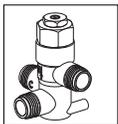
Pressurized plumbing fixtures must be installed in accordance with manufacturer's recommendations. The supply piping to these devices must be securely anchored to the building structure to prevent unnecessary movement of the installed device when operated by the user. Use extreme caution when installing the device to prevent damage to the exposed significant surface.



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.



Flush water supply lines before making connections. **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 incoming water supply can be tempered or cold. An optional Bradley Vernatherm™ thermostatic mixing valve delivers tempered water at a temperature no greater than 105°F. The 1100 series faucet operates at a flowing water pressure of 20–100 PSI. A vandal-resistant .5 GPM flow restrictor ensures a constant flow rate at all pressures.



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

Mounting Metering Faucet and Connecting Water Supply

Supplies required for installation:

- Mounting holes in countertop (see dimensions below)
- Cold or tempered water supply to 1/4" nom. copper tubing
- Piping needed to make water supply connection
- Inlet supply water strainer (available from Bradley)

Installation:

1. Insert the faucet's mounting shank(s) and copper tubing down through the hole(s) in the deck.
2. Mount the faucet to the deck by tightening the washers and nuts as shown in Figure 1 on page 3.
3. Connect the tempered or cold water supply to the copper tube using 1/4" nominal (3/8" O.D.) compression fittings as required (supplied by installer).

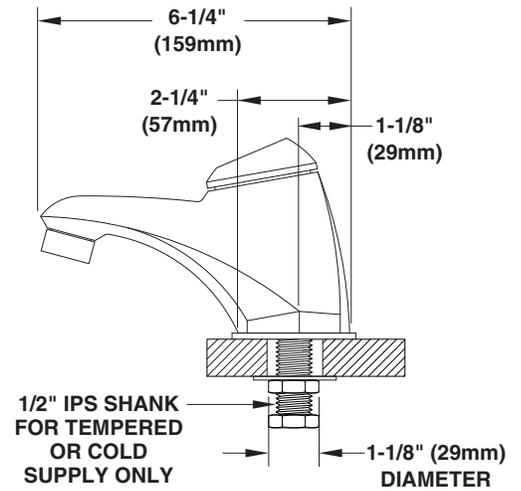
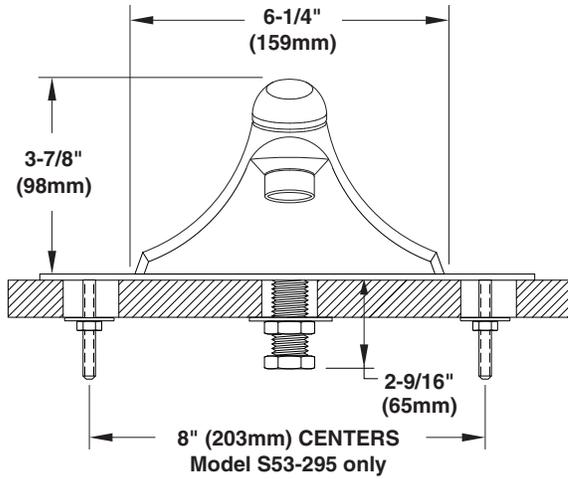


WARNING: The inlet supply water must be filtered. An in-line strainer housing (118-136), filter (269-003) and O-ring (125-001BY) is available from Bradley. The strainer will adapt to any standard 1/4" nominal compression stop. When making connection to the faucet, the supply line should be flexible enough so that the strainer can be removed for cleaning. If installation of Bradley's strainer is not practical, any suitable strainer of the same wire mesh must be used.

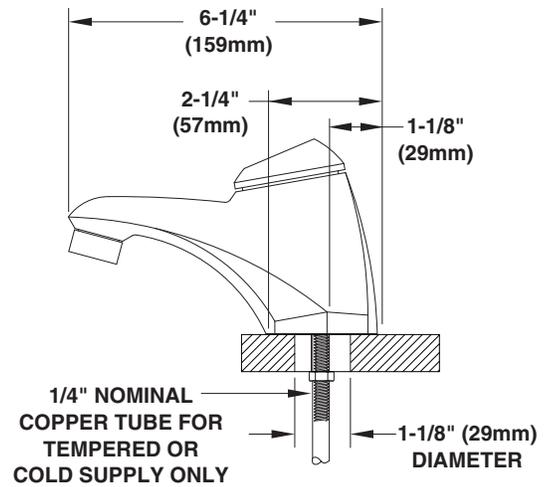
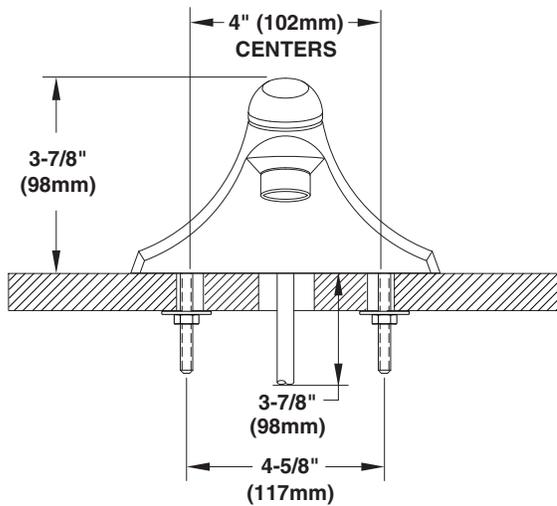
4. Turn on the water supply and test the faucet to ensure proper valve cycling. Adjust the timing, if necessary (refer to "Timing Adjustments" on page 4 for instructions).

Faucet Dimensions

S53-058 - Centershank Mounting
S53-295 - Centershank Mounting w/8" Trim Plate



S53-053 - 4\" Centerset Mounting



S53-082 - 4\" Centerset Mounting w/8\" Trim Plate

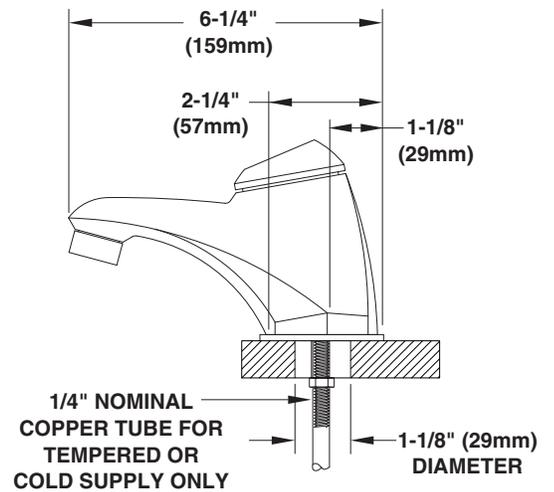
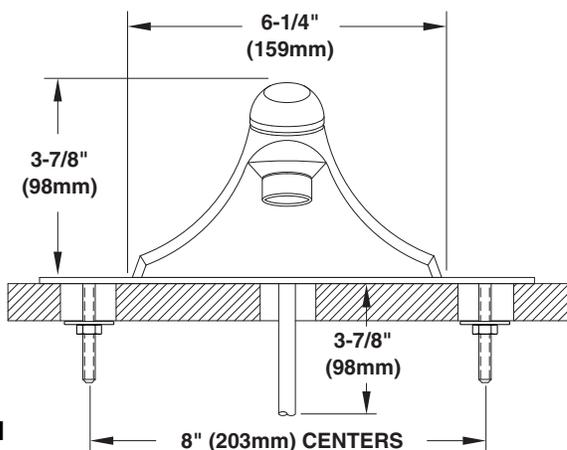


Figure 1

Timing Adjustments

This faucet has been factory tested and adjusted for a 10-12 second cycle using 75-85 PSIG pressure and ambient cold water. Varied pressures and/or temperatures will affect the timing cycle as follows:

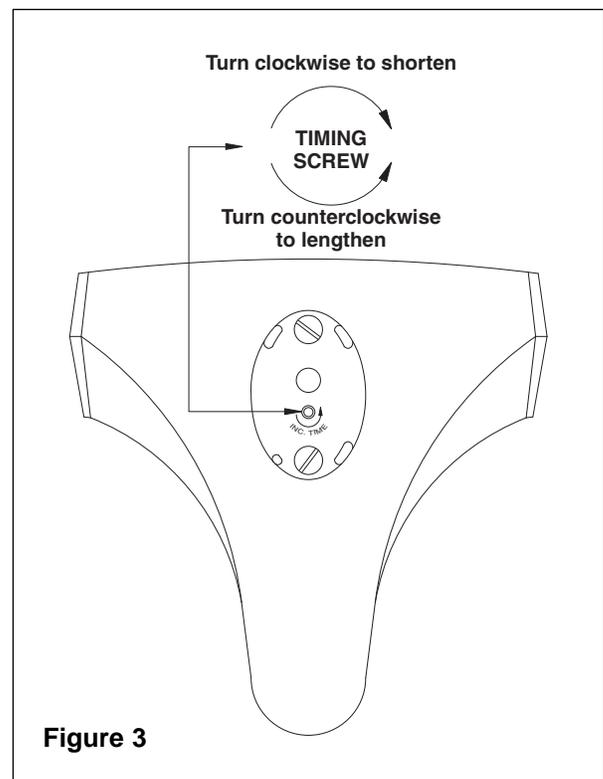
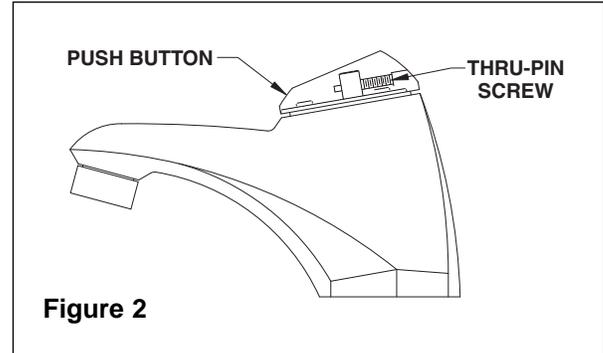
1. Lower Inlet Pressure = Slight increase in the length of the cycle
2. Higher Temperature = Slight decrease in the length of the cycle



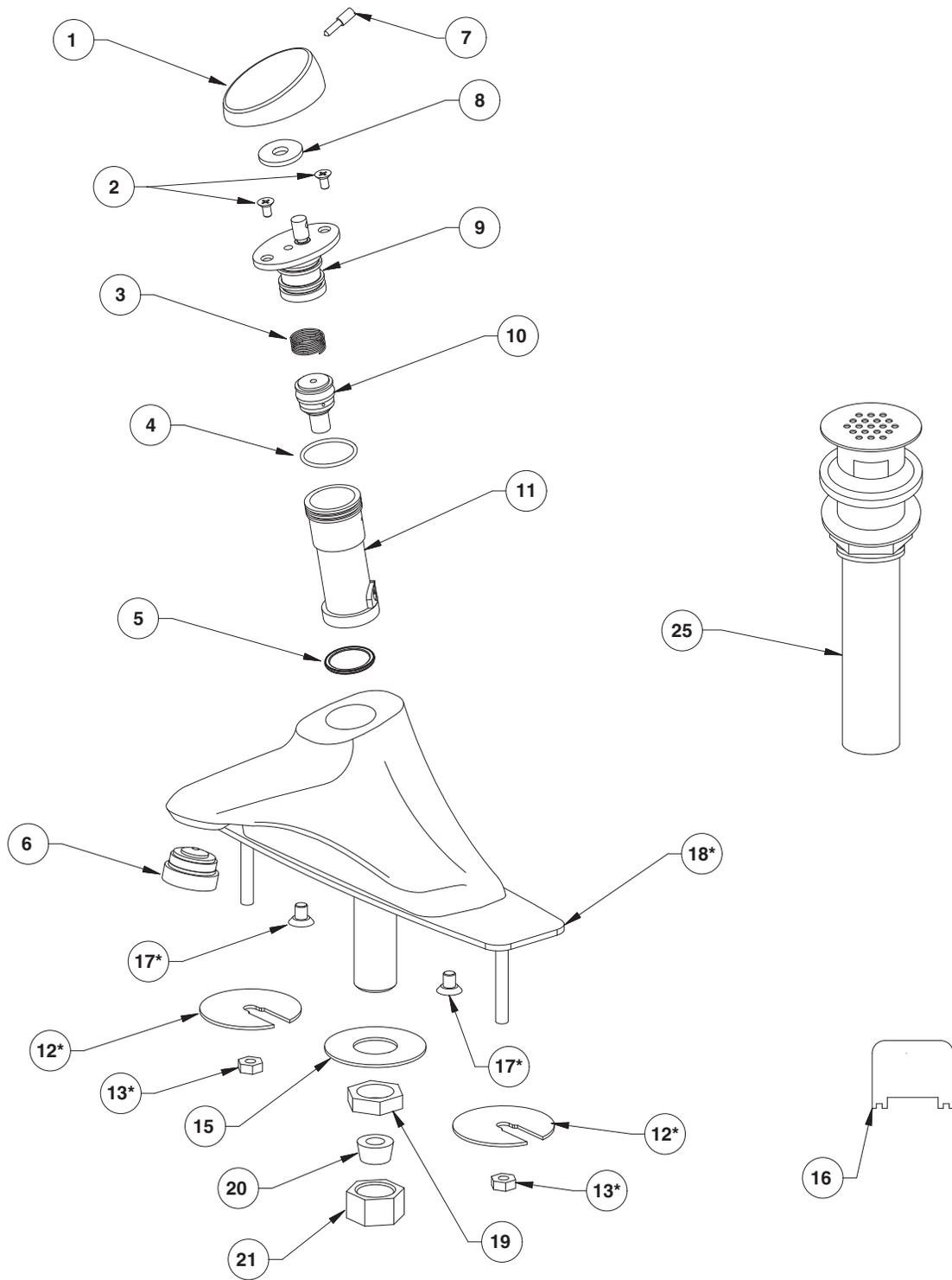
WARNING: To avoid personal injury, the inlet supply should NEVER exceed 110° F (43.3° C).

If further timing adjustment is desired, follow the steps below.

1. Using a 3/32" Allen wrench, remove the thru-pin screw in the back of the push button. Remove the push button and soap guard washer (see Figure 2).
2. Insert a 5/64" Allen wrench into the timing adjustment screw (located directly in front of the operating stem). Turn clockwise to shorten the cycle, counterclockwise to extend the cycle (see Figure 3).
3. Reinstall the soap guard washer and push button on the faucet.

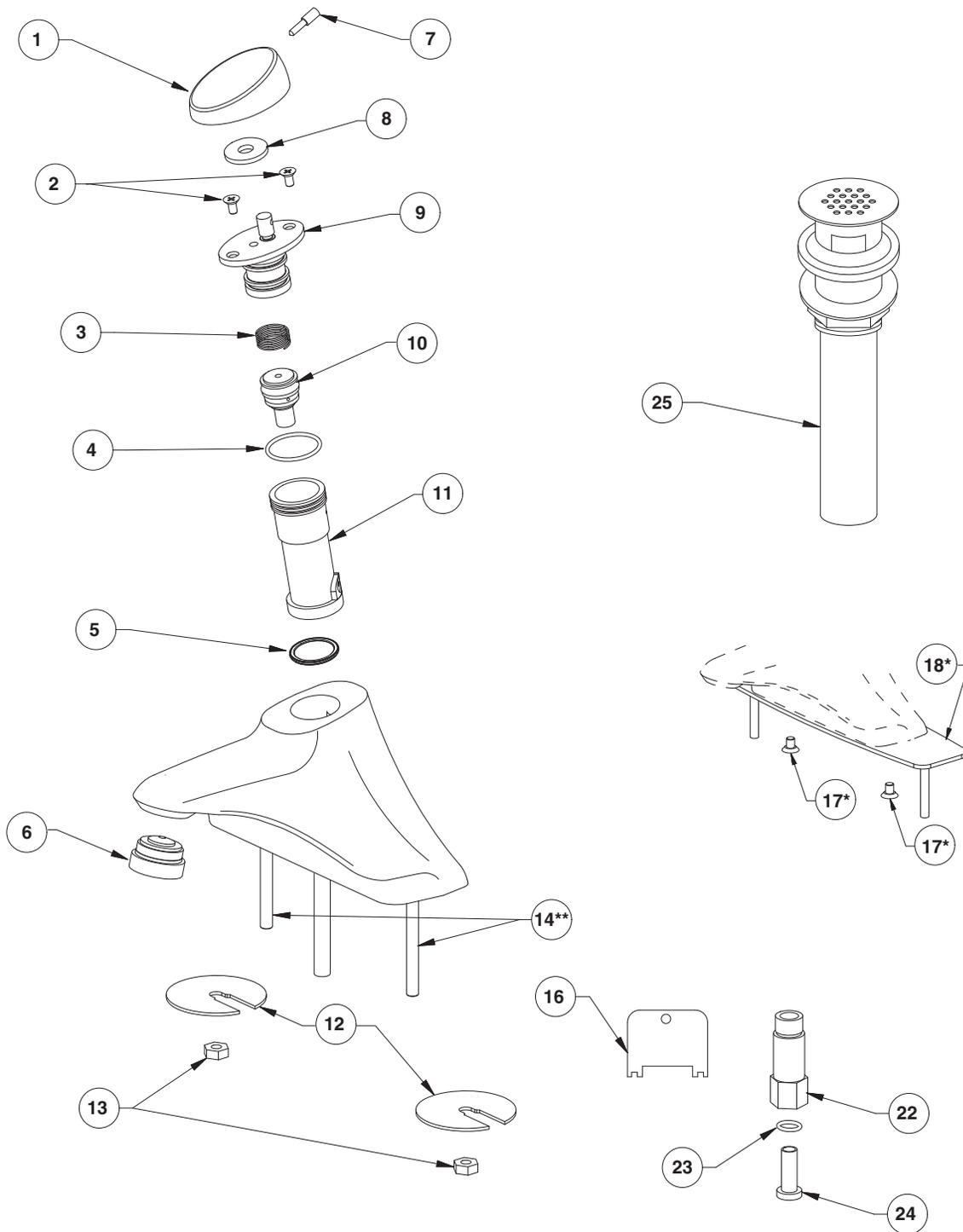


Assembly of Components - S53-295 and S53-058



* Items 12, 13, 17 and 18 are for Model S53-295 only.

Assembly of Components - S53-082 and S53-053



* Items 17 and 18 are for Model S53-082 only.
** Item 14 is for Model S53-053 only.

Parts List for 90-75 Series Metering Faucets

Item	Part No.	Qty.	Description	Item	Part No.	Qty.	Description
1	269-311	1	Push Button	14	160-294	2	Stud - 1/4"-20
2	160-277	2	Flat Head Screw	15	142-002CB	1	Washer
3	135-033	1	Spring	16	130-141	1	Spanner Wrench
4	125-001DD	1	O-Ring	17	160-121	2	Screw -1/4"-20 x 3/8"
5	156-010	1	Filter Disk	18	159-399	1	8" Trim Plate with studs
6	S05-142A	1	Aerator, .5 GPM	19	110-115	1	Nut - 1/2"-14
7	160-300	1	Thru-Pin Screw	20	169-946	1	Slip Joint Washer
8	124-047	1	Washer	21	169-945	1	Slip Joint Nut
9	S73-042	1	Upper Valve Body Assembly	22	118-136	1	Strainer Housing
10	S64-089	1	Plunger Assembly	23	125-001BY	1	O-Ring
11	118-141	1	Lower Valve Body Assembly	24	269-003	1	Filter
12	142-075	2	Washer	25	S29-069	1	Grid-Strainer-Waste (OPTIONAL)
13	161-026	2	Nut				

Repair Kits Lists for 90-75 Series Metering Faucets

Repair Kit (S65-074)

Item	Qty.	Part Number	Description
3	1	135-033	Spring
4	1	125-001DD	O-Ring
5	1	156-010	Filter Disk
7	1	160-300	Thru-Pin Screw
8	1	124-047	Washer
9	1	S73-042	Upper Valve Body Assembly
10	1	S64-089	Plunger Assembly
11	1	118-141	Lower Valve Body Assembly
	1	S45-125	Silcone Grease (Not Shown)

Repair Kit with Push Button (S65-091)

Item	Qty.	Part Number	Description
1	1	269-311	Pushbutton
2	2	160-277	Flat Head Screw
3	1	135-033	Spring
4	1	125-001DD	O-Ring
5	1	156-010	Filter Disk
7	1	160-300	Thru-Pin Screw
8	1	124-047	Washer
9	1	S73-042	Upper Valve Body Assembly
10	1	S64-089	Plunger Assembly
11	1	118-141	Lower Valve Body Assembly
	1	S45-125	Silcone Grease (Not Shown)

Nut and Washer Kit (S27-224)

Item	Qty.	Part Number	Description
12	2	142-075	Washer
13	2	161-026	Nut - 1/4"-20

Push Button Kit (S08-052A)

Item	Qty.	Part Number	Description
1	1	269-311	Push Button
7	1	160-300	Thru-Pin Screw

8" Trim Plate Mounting Kit (S45-1806)

Item	Qty.	Part Number	Description
12	2	142-075	Washer - 1/4"
13	2	161-026	Nut - 1/4"-20
17	2	160-121	Screw-1/4"-20 x 3/8"
18	1	159-399	8" Trim Plate with studs

Centershank Mounting Kit (S45-381)

Item	Qty.	Part Number	Description
15	1	142-002CB	Washer - .063 Thk
19	1	110-115	Nut - 1/2-14 NPSM Brass
20	1	169-946	Slip Joint Washer
21	1	169-945	Slip Joint Nut

Strainer Kit (S45-379)

Item	Qty.	Part Number	Description
22	1	118-136	Strainer Housing
23	1	125-001BY	O-Ring
24	1	269-003	Filter

Vernatherm™ Thermostatic Mixing Valve Troubleshooting

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

- *If stop/check 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/check valves*
- *check the hot water heater output to make sure that it is at least 20° 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.

NOTE: Refer to the Vernatherm™ parts list on page 10 when troubleshooting the valve.

Problem: Limited water flow

Cause: Dirt and debris have built up in the valve or strainer.

1. Remove and clean strainer. If strainer needs to be replaced, order Bradley part no. 173-028.
2. Check the piston for smooth movement.

To check the valve's piston for free and smooth movement, follow the procedures outlined below:

1. Remove the valve's cap and thermostat.
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. Follow the method outlined below for cleaning the piston and valve body:
 - 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 the 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).

Problem: External leaks in the system

Cause: O-rings have been damaged.

Solution: Replace O-rings where necessary. For replacement of the O-rings, contact your Bradley representative and ask for Repair Kit (part number S65-259).

Problem: Improper water temperature or temperature fluctuation

Cause: Thermostat is slowly failing or not working at all.

Solution: Check the thermostat for proper operation.

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).

Cause: Valve temperature is not properly set.

Solution: Adjust the temperature. Using a blade screwdriver, turn the adjustment stem **counterclockwise** to **increase** the temperature or **clockwise** to **decrease** the temperature.

Vernatherm™ Thermostatic Mixing Valve S59-4004XS

Repair Kit S65-259

Item	Qty	Description
4	1	Thermostat
6	1	O-Ring
7	1	O-Ring

