

Installation Instructions

WF2613

Classic Corner 54" Washfountain with Foot Control

Table of Contents

| | |
|-------------------------------------------------|-------|
| Pre-Installation Information | 2 |
| Semi-Circular Washfountain Dimensions | 3 |
| Rough-In Specifications | 4-5 |
| Drain Rough-In Specifications | 6 |
| Pedestal Assembly and Drain Spud Installation | 7-8 |
| Supplies w/Optional Soap Dispenser (A/O drains) | 9-10 |
| Supplies w/Optional Soap Dispenser (B/H drains) | 11-12 |
| Valve Assembly | 13 |
| Installing the Operating Rod | 14 |
| Soap Recommendations and Maintenance | 15 |
| Check Valve Troubleshooting | 15 |
| Soap Valve Repair Parts | 16 |
| Stop, Strainer and Check Valve Repair Parts | 17 |
| Sprayhead Troubleshooting/Repair Parts | 18 |
| Foot Valve Breakdown and Repair Kit | 19 |
| Manual Mixing Valve Repair Parts | 20 |
| Angle Volume Control Valve Repair Parts | 21 |
| Vernatherm™ Mixing Valve Maintenance | 22-24 |
| Cleaning and Maintenance Instructions | 25-26 |



IMPORTANT

Read this entire installation manual to ensure proper installation.

Flush all the water supply lines before making connections.

Main water supply to the unit should be ON at all times.

This installation manual and parts list should be filed by the owner's maintenance department.

UPC Certified



Bradley 

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<http://www.bradleycorp.com>

Pre-Installation Information

Operation

The system used on your Bradley Foot Controlled Washfountain actuates the valve when the foot rail is depressed. The valve then stays open until the foot rail is released.

Supplies Required:

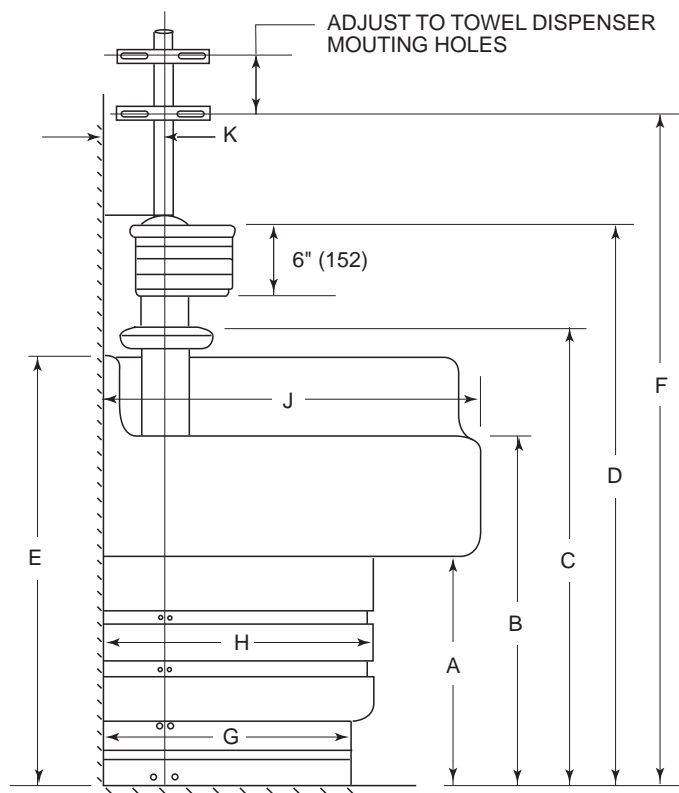
- (6) lag bolts, screws or other fasteners to anchor washfountain pedestal to floor.
- 1" hot and cold water supply lines and fittings (refer to rough-ins on pages 4-5).
- Reducing fittings and 1/2" nominal copper tubing for models with supplies from above.
- Standard P-trap (refer to rough-ins on pages 4-5). Vented trap supplied by Bradley when required.
- 2" drain lines and fittings (refer to rough-ins on pages 4-5).
- Pipe sealant and plumber's putty.
- 1-1/2" vent pipe on types vented through washfountain column (see page 3 for lengths required).

NOTE: Supply lines for one or two washfountains should be 1"; for three washfountains, 1-1/4". For more than three washfountains pipe size should increase proportionally. Vent pipe to be 1-1/2" on models vented through washfountain.

Bradley Classic Washfountain Warranty Information

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

Corner Washfountain Dimensions



| Material | A | B | C | D | E | F | G | H | J | K |
|-------------|-----|--------|--------|--------|--------|------|-----|-----|--------|--------|
| Inches | 19 | 29-1/4 | 39-1/8 | 47-5/8 | 36-1/4 | 56 | 26 | 28 | 37-1/4 | 10-1/4 |
| Millimeters | 483 | 743 | 994 | 1210 | 921 | 1422 | 660 | 711 | 946 | 260 |

For juvenile height, subtract 4" from dimensions A-E.

Length of Tie Pipe Required for Vent through Washfountain Column

| Type | Pipe Length |
|----------------------------------------------|------------------|
| 54" Less Soap Dispenser | 21-1/2" (546mm) |
| 54" With Soap Dispenser | 30" (762mm) |
| 54" Less Soap Dispenser With Towel Dispenser | 55-1/2" (1410mm) |
| 54" With Soap Dispenser With Towel Dispenser | 48" (1219mm) |
| 54" With Cube Adapter | 32" (813mm) |
| 54" With Cube Adapter With Towel Dispenser | 50" (1270mm) |
| 54" With Cube Adapter And Soap Dispenser | 40" (1016mm) |

NOTE: Drain must be connected with 2" schedule 40 welded wrought iron pipe, minimum, to provide lower support for this installation. Vent or support pipe must be of the same material in 1-1/2".

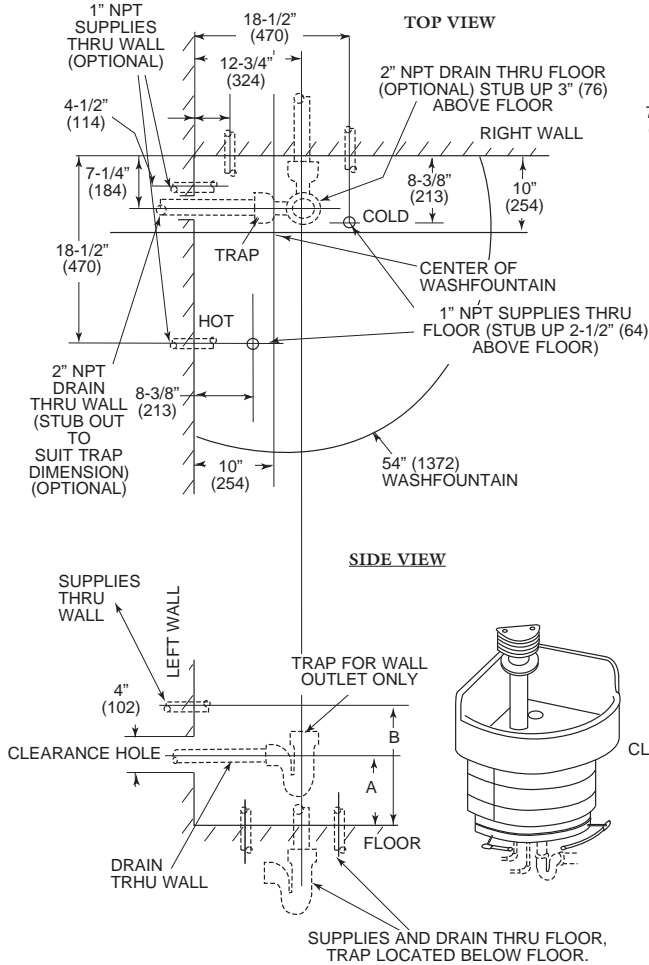
Rough-In Specifications

Rough-In Notes:

1. All pipes and fittings not furnished by Bradley are shown in broken lines.
2. Supply lines for one to two washfountains should be 1"; for three washfountains 1-1/4"; for more than three washfountains, pipe sizes should be increased proportionately.
3. Overhead supplies must be reduced to 1/2" copper tube to pass through support tube.
4. Check valve inlets are 1/2" NPT.
5. Dimensions shown in parentheses are millimeters.

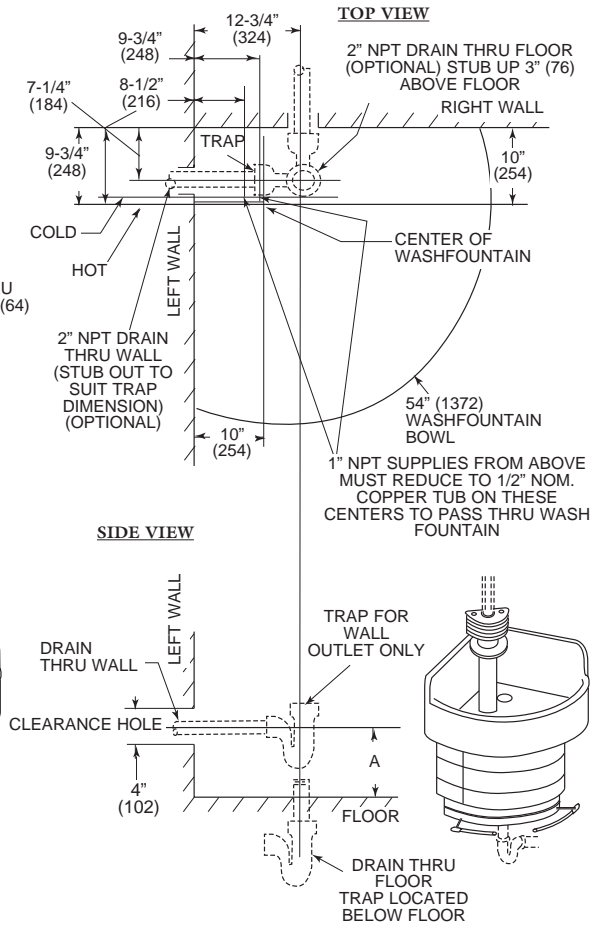
Type A

Off-line vent with supplies from below.



Type O

Off-line vent with supplies from above.



NOTE: UPC AND IPC RESTRICT THE VERTICAL DISTANCE FROM THE FIXTURE OUTLET TO THE TRAP WEIR TO NOT MORE THAN 24". CHECK STATE AND LOCAL CODES FOR VARIANCES.

Use this range of heights when hook-up is made with a coupling and nipple (2" drain through wall must not interfere with diagonal frame member on pedestal).

| DIM. | RIGHT WALL | | LEFT WALL | |
|------|--------------------------------------|-------------------------------------|-----------------------------|--------------------------------|
| | Std. Ht. | Juv. Ht. | Std. Ht. | Juv. Ht. |
| A | 11-1/4" to 13-1/4" 286mm to 337mm | 9-1/4" to 10-1/4" 235mm to 260mm | 6" to 11" 152mm to 279mm | 6" to 8-1/2" 152mm to 216mm |
| B | 12" 305mm | 8-1/4" 210mm | 12" 305mm | 8-1/4" 210mm |

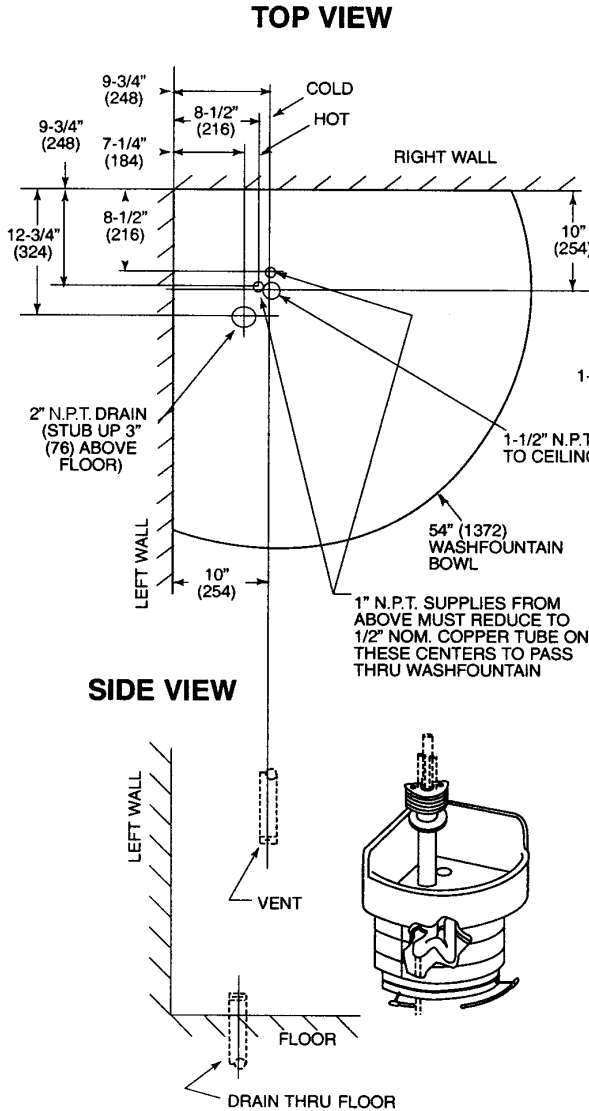
Rough-In Specifications

Rough-In Notes:

1. All pipes and fittings not furnished by Bradley are shown in broken lines.
2. Supply lines for one to two washfountains should be 1"; for three washfountains 1-1/4"; for more than three washfountains, pipe sizes should be increased proportionately.
3. Overhead supplies must be reduced to 1/2" copper tube to pass through support tube.
4. Check valve inlets are 1/2" N.P.T.
5. Dimensions shown in parentheses are millimeters.
6. For maximum rigidity of sprayhead/support tube assembly, use 1-1/2" N.P.T. galvanized pipe for vent. Use of plastic or copper for vent is not recommended.

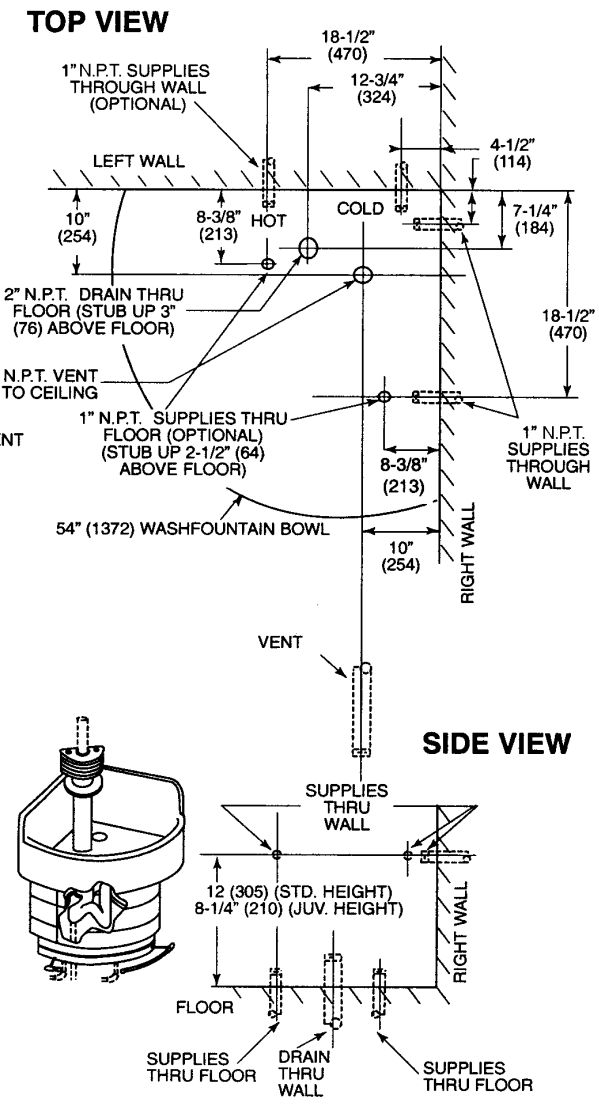
Type B

Centrally rising vent with supplies from above



Type H

Centrally rising vent with supplies from below



Use this range of heights when hook-up is made with a coupling and nipple (2" drain through wall must not interfere with diagonal frame member on pedestal).

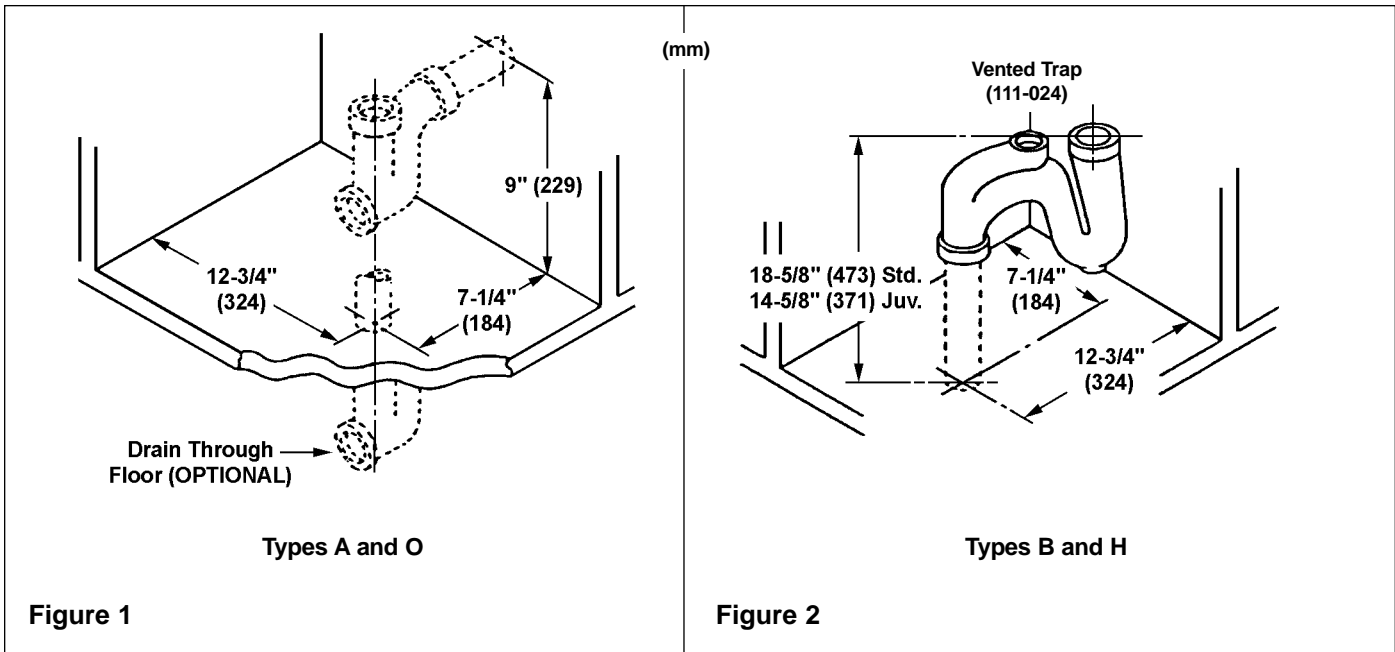
| DIM. | RIGHT WALL | | LEFT WALL | |
|------|--------------------------------------|-------------------------------------|-----------------------------|--------------------------------|
| | Std. Ht. | Juv. Ht. | Std. Ht. | Juv. Ht. |
| A | 11-1/4" to 13-1/4" 286mm to 337mm | 9-1/4" to 10-1/4" 235mm to 260mm | 6" to 11" 152mm to 279mm | 6" to 8-1/2" 152mm to 216mm |

Installation Instructions

Step 1: Installing the Drain

1. Rough-in supply and drain piping as required for your installation (see pages 4-5 for rough-ins).
2. Assemble the drain to the dimension shown in Figure 1 or Figure 2.

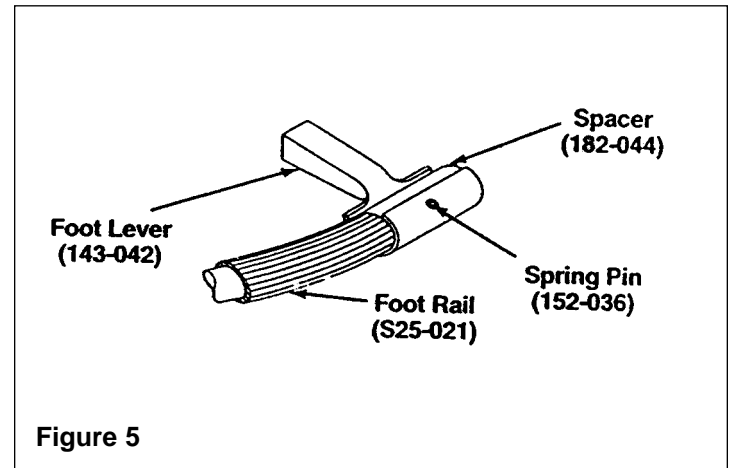
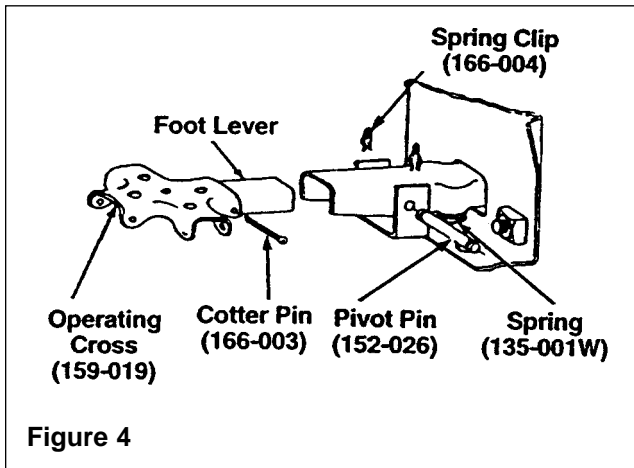
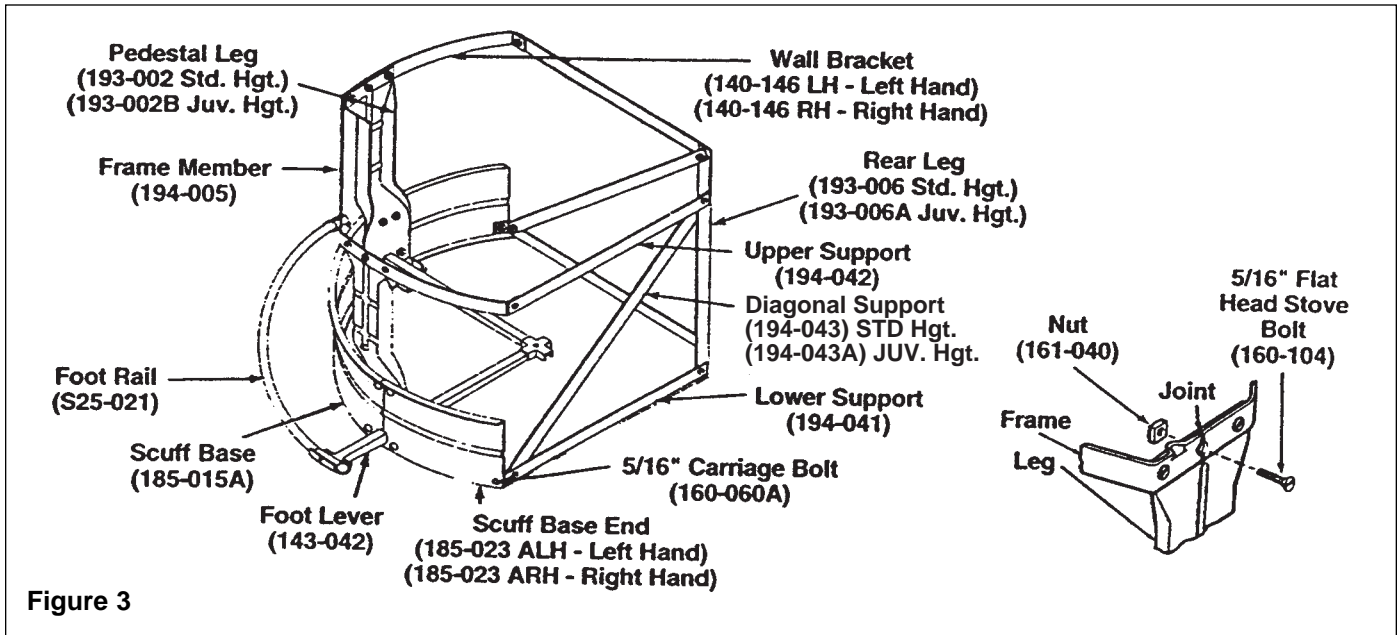
NOTE: All piping shown in dotted lines to be supplied by the installer.



Installation Instructions *continued . . .*

Step 2: Assembling the Pedestal

1. Assemble the legs and scuff base panels with the 5/16" carriage bolts and nuts provided (see Figure 3).
2. Attach the pedestal frame members, the rear support members and the rear legs with the 5/16" stove bolts and nuts provided (see Figure 3).
3. Add the foot levers and operating cross to the pedestal assembly (see Figures 3 and 4).
4. Attach the spacers, foot rail and spring pins to the foot valve levers (the bend in the center of the foot rail must be pointing up) (see Figures 3 and 5).



Installation Instructions *continued* . . .

Step 3: Anchoring the Pedestal to the Floor and Installing Drain

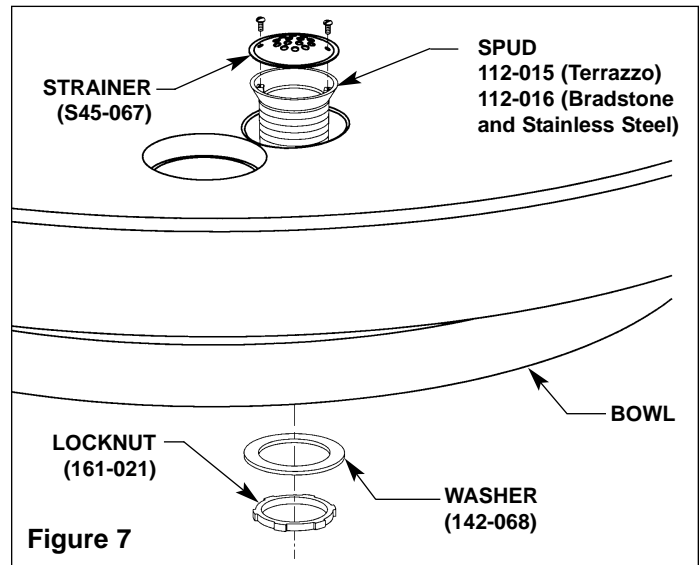
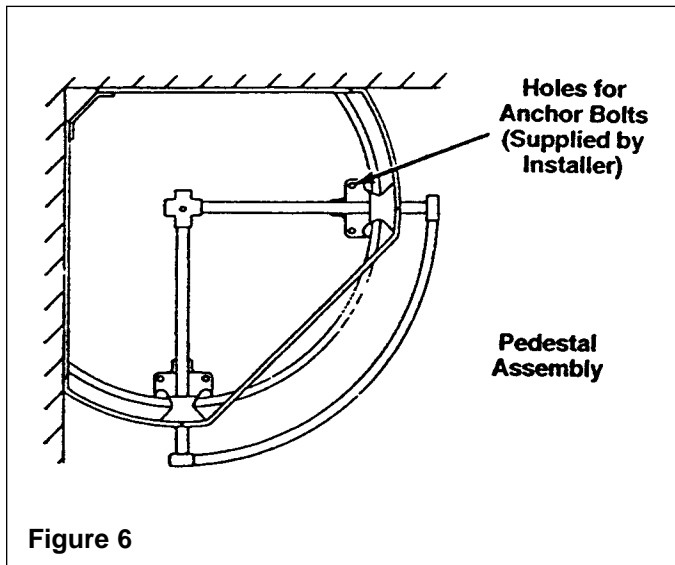
⚠ IMPORTANT: FOR PROPER DRAINAGE, THE BOWL AND PEDESTAL MUST BE LEVEL WHEN THEY ARE SECURED TO THE FLOOR .

⚠ WARNING: USE SUITABLE LIFTING EQUIPMENT TO POSITION THE BOWL AND PEDESTAL ASSEMBLY. HANDLE WITH CARE! FAILURE TO DO SO COULD RESULT IN SERIOUS PERSONAL INJURIES.

1. Position the pedestal assembly.
2. Anchor the pedestal assembly to the floor with suitable anchors (supplied by installer) (Figure 6).
3. Place the bowl on the pedestal using suitable lifting equipment.

⚠ CAUTION: Bowl Surface is smooth. Use suitable lifting equipment to position the bowl and pedestal assembly. Handle with CARE!

4. Screw the spud into the drain with the lock nut and washer between the drain and bowl (see Figure 7).
5. Tighten the spud and locknut against the bowl (see Figure 7).



Installation Instructions *continued* . . .

Step 4a: Installing Supplies with Optional Soap Dispenser for A/O drain units

NOTE: See Step 4b for units with type B/H drain.

NOTE: For models with optional paper towel dispensers, tie pipe assembly, or shroud, see separate instruction sheets and Step 4b for units with type B/H drain.

NOTE: Flush the supply lines before making connections.

1. Install the hemmed end (not sharp end) of the support tube (welded seam toward the walls) with the gasket into the bowl (see Figure 8 on page 10).
2. Using pipe sealant, connect the supply pipe to the sprayhead and place on top of the support tube. Make sure spray holes point away from the wall.

3a. For Unit with Soap Option:

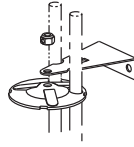
1. Place the upper tie bar on top of the sprayhead and join the upper and lower tie rod (the longer threaded rod) with the coupling nut and setscrews (Tie bar must be parallel to wall).
2. Insert the tie rod assembly through the hole in the upper tie bar and secure with the lower tie bar, tie rod nut and setscrew from below (see Figure 8).
3. Install the spacer, soap dispenser, dispenser cover and restraining bracket and secure with the acorn nut and socket setscrew.
4. Continue installation with Step 5 on Page 13.

3b. For Unit without Soap Option:

1. Place the dispenser cover on the sprayhead. Thread the acorn nut onto the lower tie rod, run the tie rod through the dispenser cover and restraining bracket and secure from below with the lower tie bar, tie rod nut and socket setscrew (see Figure 8).
2. Continue installation with Step 5 on Page 13.

Installation Instructions *continued* . . .

TYPE "O" DRAIN
(Supplies from above)



TYPE "A" DRAIN

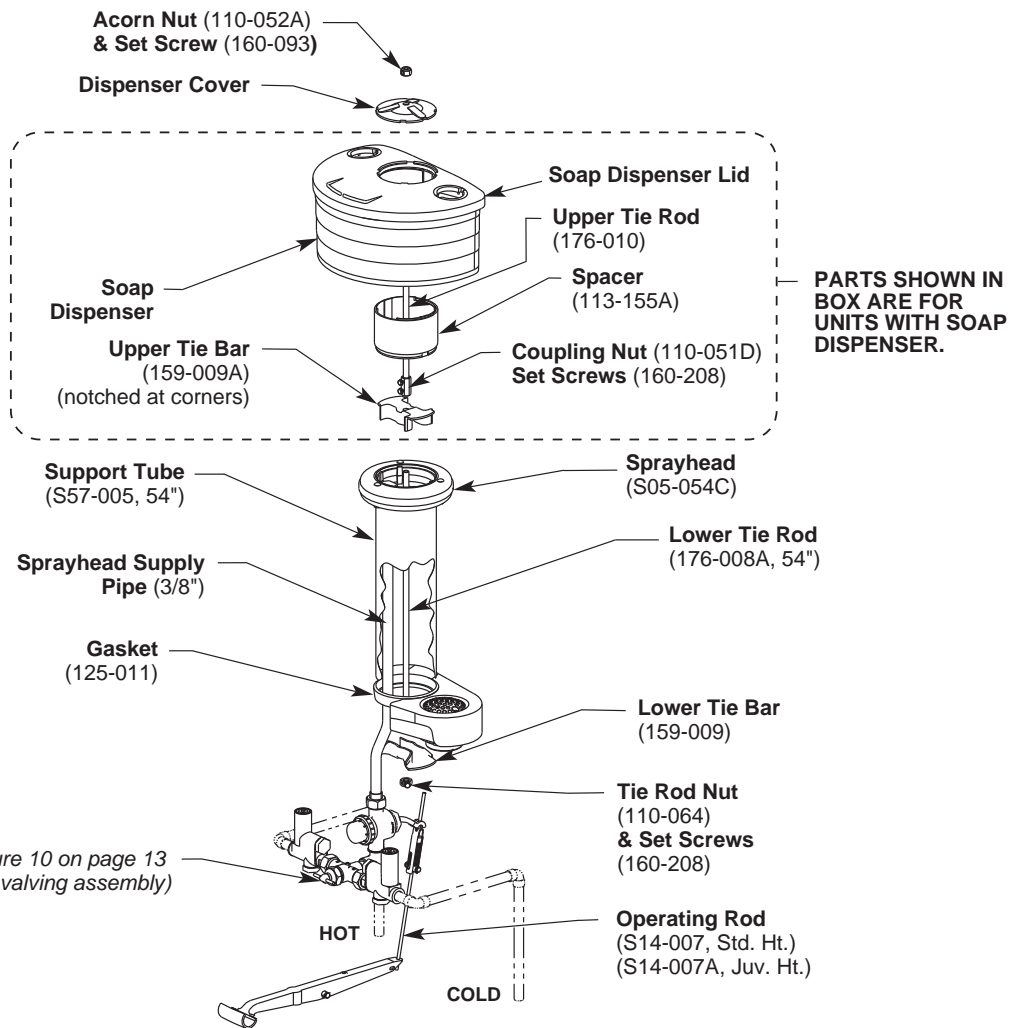
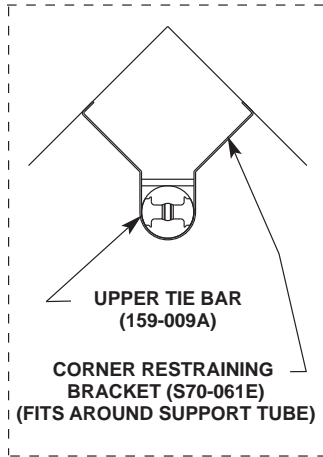


Figure 8

Installation Instructions *continued* . . .

Step 4b: Installing Supplies for B/H drain units

NOTE: Flush the supply lines before making connections.

1. Install the hemmed end (not sharp end) of the support tube (welded seam toward intersection of walls) with gasket into the bowl (see Figure 9 on page 12).
2. Using pipe sealant, connect the supply pipe to the sprayhead and place on top of the support tube. Run tubing down through the support tube. *Make sure spray holes point away from the wall.*
3. Insert the 1-1/2" vent pipe (supplied by installer, see page 3 for length) through the soap dispenser with the spacer (if provided), sprayhead, and support tube.
4. Connect to the vented trap (provided).

5a. For Unit with Soap Option:

1. Slide the tie bar over the 1-1/2" vent pipe 1/2" below the top of the soap dispenser and secure with the set screws. (Tie bar must be as shown in Figure 9).
2. Slide the dispenser cover over the 1-1/2" vent pipe and secure with the two screws (included) to the tie bar.

5b. For Unit without Soap Option:

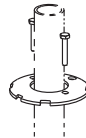
1. Slide the tie bar over the 1-1/2" vent pipe, 1/2" below the top of the sprayhead and secure with the set screws. (Tie bar must be as shown in Figure 9).
2. Secure the dispenser cover over the 1-1/2" vent pipe and secure with the two screws included with the tie bar.

6. Connect the Vent Pipe

- a. Connect the vent pipe to the vent through the ceiling with the pipe union.
- b. Continue installation with Step 5 on Page 13.

Installation Instructions *continued* . . .

TYPE "H" DRAIN
(Supplies from below)



TYPE "B" DRAIN

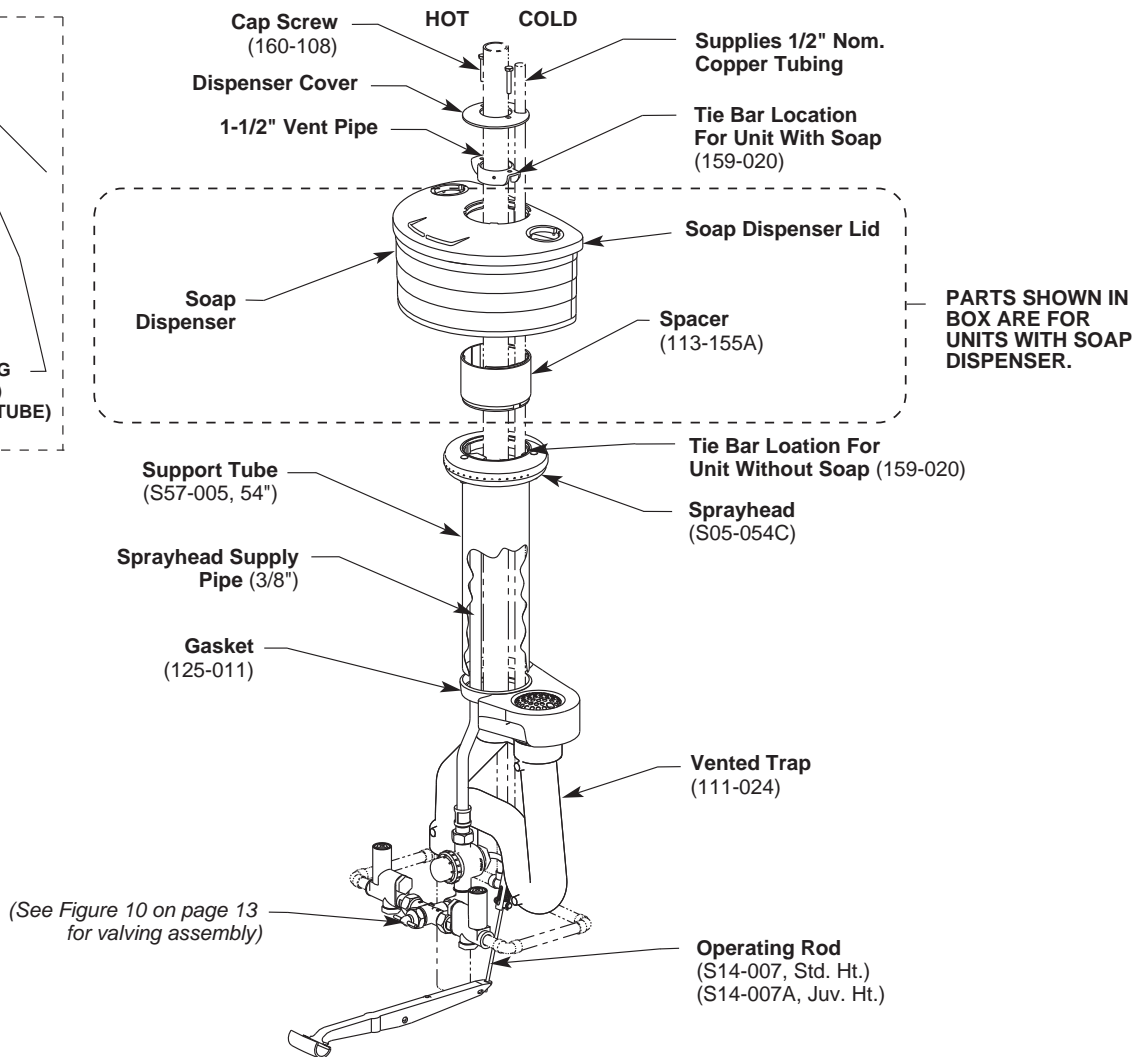
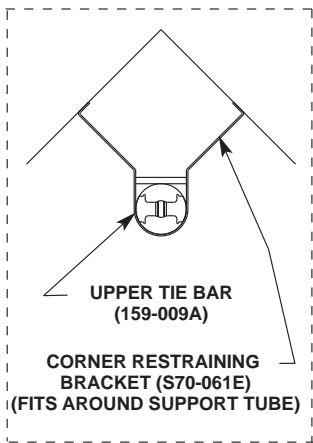


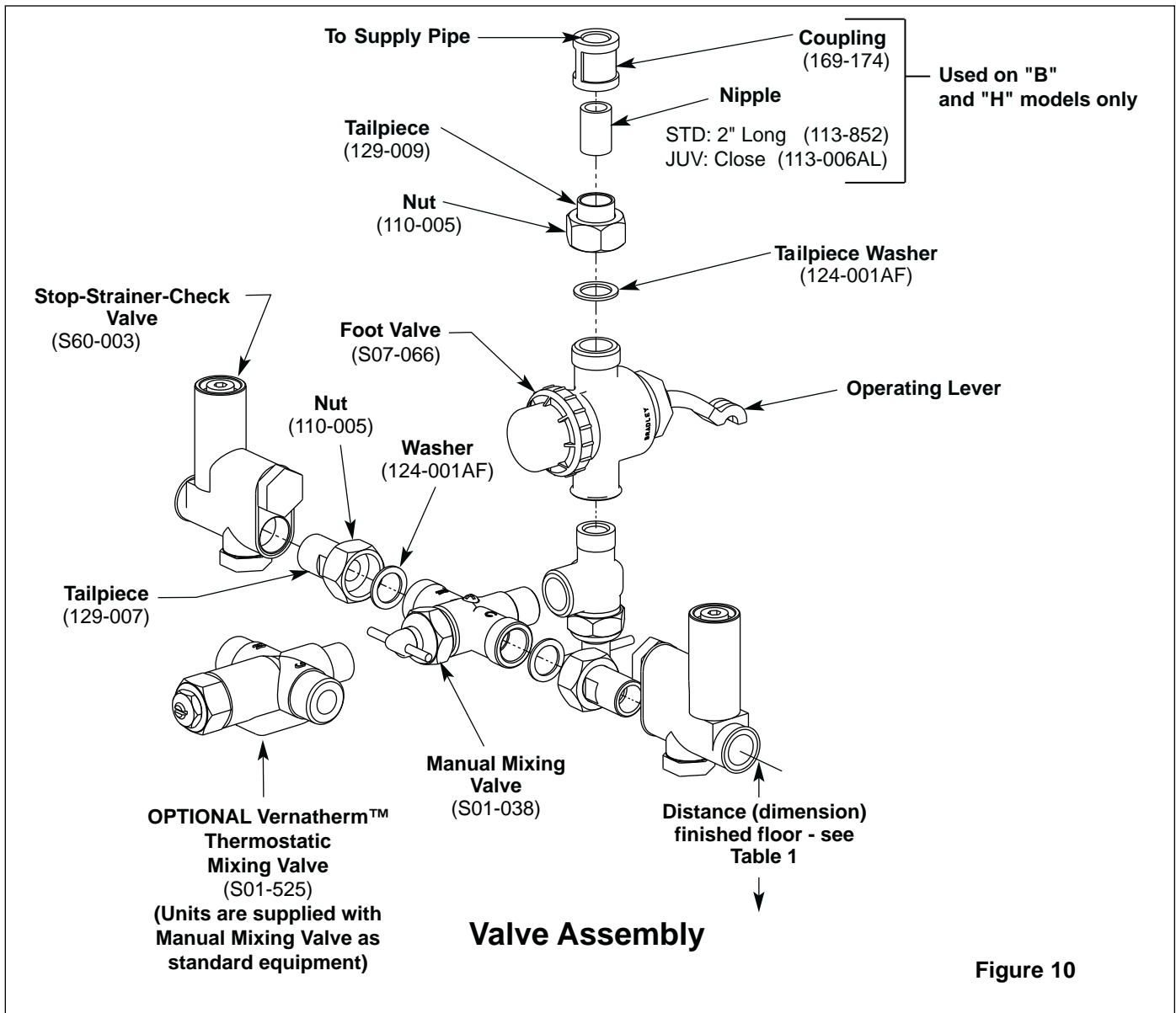
Figure 9

Installation Instructions *continued* . . .

Step 5: Installing the Drain

NOTE: Flush the supply lines before making connections.

1. Assemble the stop-strainer-check valves, mixing valve, volume control valve and foot valve to the supplies as shown in Figure 10 at the approximate height indicated in Table 1.



| DISTANCE TO FINISHED FLOOR | | | | |
|----------------------------|----------------|----------------|----------------|----------------|
| Model | Type A | Type B | Type O | Type H |
| Standard Height | 9" (229mm) | 6-3/16 (157mm) | 9" (229mm) | 6-3/16 (157mm) |
| Juvenile Height | 5-1/4" (133mm) | 3-7/16 (87mm) | 5-1/4" (133mm) | 3-7/16 (87mm) |

Table 1

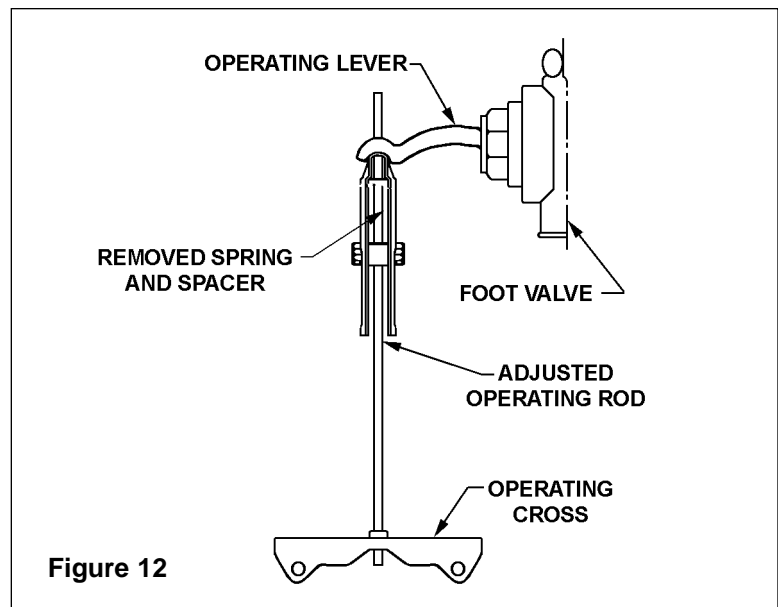
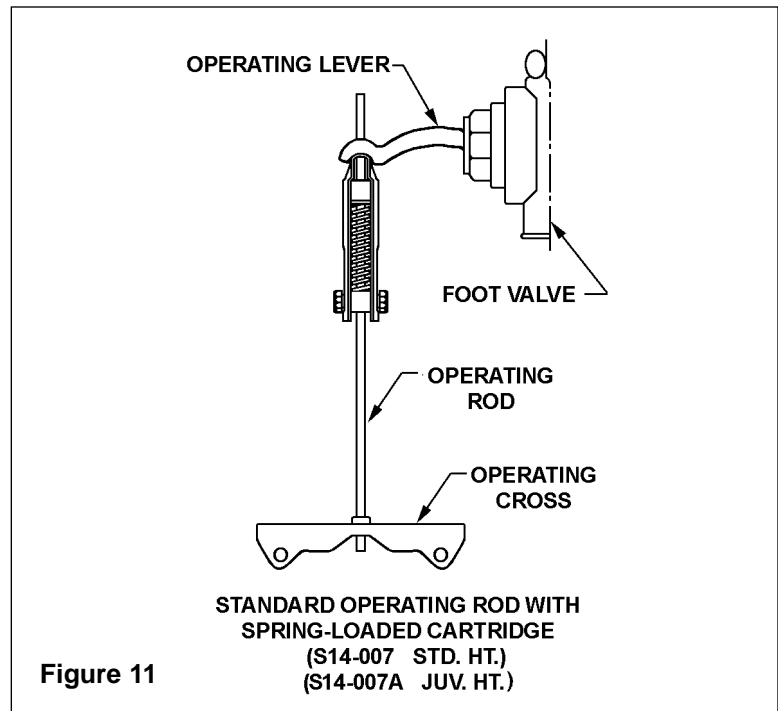
Installation Instructions *continued* . . .

Step 6: Adjusting the Operating Rod on Foot Valve

1. Insert the rod in the operating lever and then into the operating cross (see Figure 11).

NOTE: For normal operation, use the operating rod as shipped. The spring loaded cartridge should be adjusted so there is no play in the operating lever. Care must be taken to insure that a snug fit is achieved without activating the foot valve or water will leak from the sprayhead (see Figure 11).

2. When movement of the operating rod is insufficient to open the foot valve, disassemble the rod and remove the spacer and override spring. Reassemble the operating rod as shown in Figure 12. Reinstall and adjust so that the foot valve is completely open when the foot lever is fully depressed. This prevents damage to the foot valve due to the absence of the override spring.
3. Turn supplies on and activate the sprayhead. Check piping installation for leaks.
4. Clean the sprayhead if necessary. See page 18 for sprayhead troubleshooting.
5. Adjust the volume control valve for desired spray. Spray should not be set closer than 2" to the side of the bowl.
6. Install pedestal panels by fastening panels to pedestal legs with the Phillips head machine screws supplied.



Soap Recommendations and Maintenance Tips

Quality soap dispensers require good quality soap and periodic maintenance to properly operate. Bradley soap dispensers will provide dependable, consistent operation over the long term when soap with reasonable viscosity and pH levels are used and when a minimal amount of periodic maintenance is performed on the valves.

Soap thickness is determined by a measurement called viscosity. Soap viscosity should be between 100 cps (centerpoise) and 2500 cps for all Bradley soap dispensers. Thinner soaps are perceived by the users as being “watered down” so users tend to take more than they need, resulting in waste. Thick soaps flow slower and inhibit the “flushing” action of the valves, which allows the soap to congeal in the valve and cause clogs.

The pH (acid) level of the soap should be in the range of 6.5 to 8.5. More acidic soaps (pH levels lower than 6.5) will corrode metal parts (even stainless steel!!) and degrade rubber and plastic components. They will also cause skin irritation. Most inexpensive soaps (typically the pink lotion type) fall into this acidic category and will eventually cause valve failure and metal corrosion. Base soaps (pH levels higher than 8.5) will cause swelling or degradation of rubber and plastic parts and skin irritation.

Generally, any quality soap meeting the viscosity and pH guidelines above will work well with Bradley soap dispensers. PCMX or Isopropanol based antibacterial soaps (within viscosity and pH limits) will also work with Bradley dispensers. Soaps satisfying these basic guidelines will provide consistent flow and reduce clogs.

Most soap dispenser problems are caused by soap that is too thick or corrosive, or by a lack of maintenance. Many soaps come in concentrate form which must be diluted with water. Often, the soap is improperly diluted or used straight out of the bottle, which causes clogging and valve failure. If proper soap is being used, valves that have never been cleaned are usually the source of dispensing problems. Bradley has entered into an agreement with Champion Brand Products to provide additional customer service for purchasers of our dispensers regarding soap issues. They are very helpful and can get to the bottom of almost any soap dispenser-related problem. They also sell an excellent “Bradley approved” soap. Please see Bradley Instruction sheet 215-1286 for soap valve cleaning details and Champion Brand Products contact information.

Check Valve Troubleshooting

If water just dribbles or does not flow from sprayhead:

1. Turn off water supplies to fixture.
2. Inspect check valves for proper installation. See Stop, Strainer and Check Valve on page 17.
3. Open the stops and clean the strainers, if necessary.

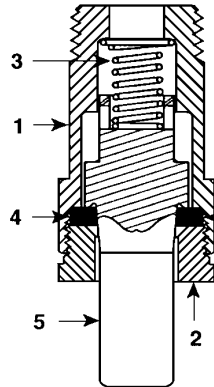
If water sprayhead delivers all hot or cold water:

1. Turn off water supplies to fixture.
2. Inspect check valves for proper installation.
3. Open the stops and clean the strainers, if necessary.
4. Inspect mixing valve for proper installation (see Vernatherm valve on page 22).

Soap Valve - Liquid - S09-007S

This valve delivers a measured amount of soap with each upward stroke. The soap dispenser has been standard on washfountains since 1983 and is not well-suited for very thick lotion soaps.

NOTE: Lotion soap will clog liquid soap valves. Use only lotion soap valves with lotion soap.

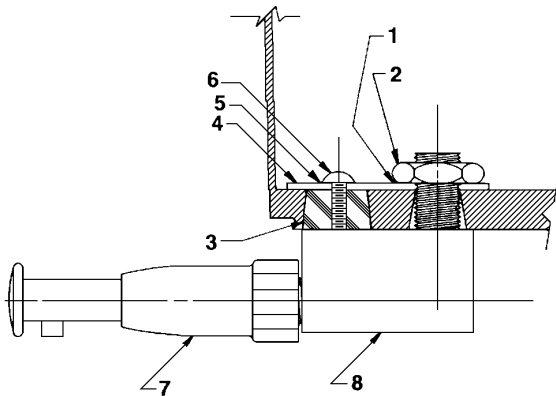


Parts List

* Not Illustrated

| Item | Part No. | Description | Attaching Parts S09-007S | |
|------|-----------|--------------------------|--------------------------|--|
| | | | Qty | |
| 1 | 118-025 | Valve Body | 1 | |
| 2 | 110-007 | Packing Nut | 1 | |
| 3 | 135-001L | Spring | 1 | |
| 4 | 125-001BU | Washer | 1 | |
| 5 | 119-028 | Plunger | 1 | |
| * | 161-014 | Nut | 1 | |
| * | 124-001D | Washer | 2 | |
| * | 142-002AH | Washer - Stainless Steel | 1 | |

Soap Valve - Lotion - S09-057S Parts List



| Item | Part No. | Description | Valve Assembly S09-057 | Attaching Parts S09-057S |
|------|-----------|-------------------|------------------------|--------------------------|
| | | | Qty | |
| 1 | 124-001D | Washer | — | 1 |
| 2 | 110-057 | Nut | — | 1 |
| 3 | 125-001AN | Stopper | — | 1 |
| 4 | 159-114 | Reinforcing Plate | — | 1 |
| 5 | 124-001AT | Washer | — | 1 |
| 6 | 160-176 | Screw | — | 1 |
| 7 | S09-040 | Valve | 1 | 1 |
| 8 | S53-045 | Adaptor | 1 | 1 |

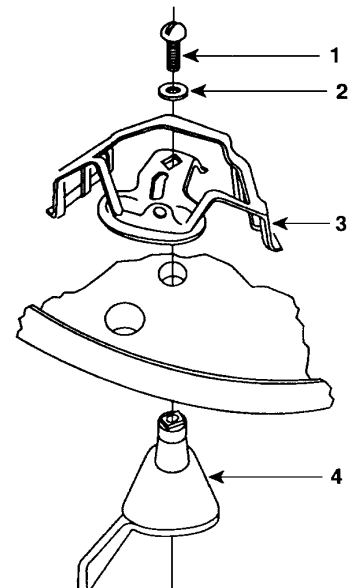
Soap Valve - Powdered - S09-010A

Parts List

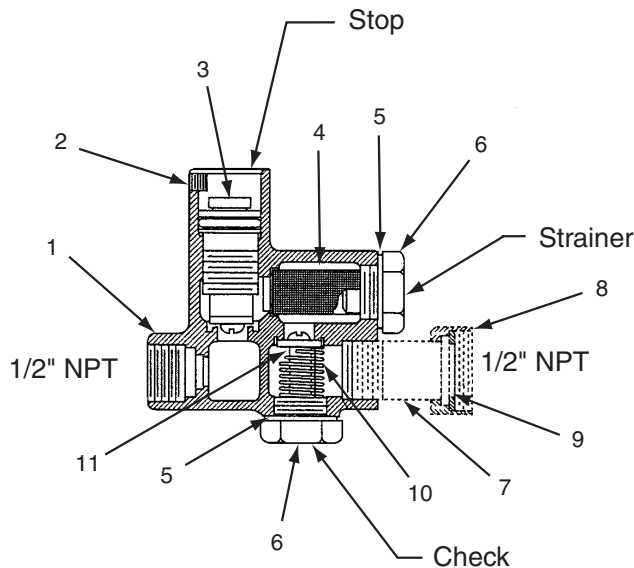
| Item | Part No. | Qty | Description |
|------|----------|-----|------------------------|
| 1 | 160-069 | 1 | Screw, 1/4-20 RD |
| 2 | 142-002X | 1 | Washer, 1/4 Split-Lock |
| 3 | S62-002 | 1 | Agitator / Slide Assy. |
| 4 | 192-004 | 1 | Lever - Powdered Soap |

NOTE: Reducer plugs are available for use with fine granulated soap to reduce the flow.

NOTE: Valves can be changed from powdered to liquid by plugging the innermost, or "bearing" hole with rubber plug, part number 125-001AK. To change from liquid to powdered, the plug must be removed. If none is present, it will be necessary to drill out the bearing hole with a 1/2" or 5/8" drill. The plastic container configuration forms a natural template for locating the bearing hole.

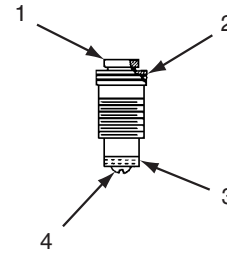


Stop, Strainer and Check Valve



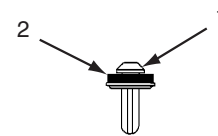
Parts List Stop Assembly S21-014 Standard Celcon Core

| Item | Part No. | Qty | Description |
|------|-----------|-----|-------------|
| 1 | 119-057 | 1 | Valve Core |
| *2 | 125-001AW | 1 | "O" Ring |
| *3 | 125-001L | 1 | Bibb Washer |
| 4 | 160-164 | 1 | Screw |



Parts List S60-003 Stop, Strainer and Check Valve

| Item | Part No. | Qty | Description |
|------|-----------|-----|-------------------------|
| 1 | 118-039 | 1 | Valve Body - Brass |
| 1 | 118-039A | 1 | Valve Body - Plated |
| 2 | 160-131 | 1 | Set Screw |
| 3 | S21-014 | 1 | Stop Assembly - Celcon |
| 3 | S21-026 | 1 | Stop Assembly - Brass |
| *4 | 156-006 | 1 | Strainer |
| *5 | 124-001BV | 2 | Fiber Washer |
| *6 | 153-068 | 2 | Plug - Brass |
| 7 | 129-007 | 1 | Tail Piece - Brass |
| 7 | 129-007A | 1 | Tail Piece - Plated |
| 8 | 110-005 | 1 | Tail Piece Nut - Brass |
| 8 | 110-005A | 1 | Tail Piece Nut - Plated |
| *9 | 124-001AF | 1 | Tail Piece Washer |
| *10 | 135-001AB | 1 | Spring |
| *11 | S21-015 | 1 | Check Assembly |



Parts List Check Assembly S21-015*

| Item | Part No. | Qty | Description |
|------|-----------|-----|-------------|
| 1 | 119-091 | 1 | Plunger |
| 2 | 125-001BB | 1 | Washer |

* S45-050 Repair Kit Includes these parts

Installation Instructions *continued* . . .

Sprayhead Troubleshooting and Repair Parts

Problem: Water splashes over the rim of the bowl.

Cause: Foreign matter has reduced the size of the sprayhead slots, causing greater pressure at the open slots.

Solution: Clean the sprayhead:

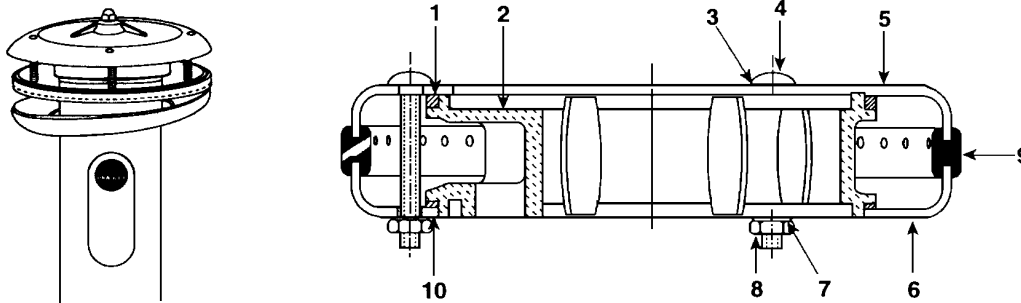
1. Disassemble the sprayhead and dislodge any dirt, lime build-up and foreign debris with a wire brush.
2. Sprayheads with rubber grommet spray rings may be cleaned by rubbing a coin over the grommet.
3. Throttle down the volume control (water spray should strike the bowl without splashing outside of the bowl).

Problem: Water flow diminishes from the sprayhead.

Cause: Strainer portion of the stop-strainer-check valve is plugged.

Solution: Remove and clean the strainer screen from the stop-strainer-check valve.

NOTE: The sprayhead shown below includes a perforated rubber spray ring grommet that is self-cleaning. The water pressure flexes the spray holes which slows accumulation of foreign matter and tends to “break loose” any such deposits that may have accumulated.



Parts List

| Item | Part No. | Description | Sprayhead Assembly S05-054C | Repair Kit S45-051 |
|------|-----------|----------------------------|--------------------------------|-----------------------|
| | | | Qty | |
| 1 | 125-001DE | Neoprene Washer-Top | 1 | 1 |
| 2 | 139-031 | Sprayhead Manifold | 1 | — |
| 3 | 124-001AL | Washer | 3 | 4 |
| 4 | 160-211 | Carriage Bolt | 3 | 4 |
| 5 | 115-061 | Sprayhead Top | 1 | — |
| 6 | 116-008 | Sprayhead Bottom | 1 | — |
| 7 | 124-001AT | Washer | 3 | 4 |
| 8 | 161-025 | Nut | 3 | 4 |
| 9 | 124-020E | Sprayhead Grommet - Corner | 1 | — |
| 10 | 125-001DF | Neoprene Washer-Bottom | 1 | 1 |

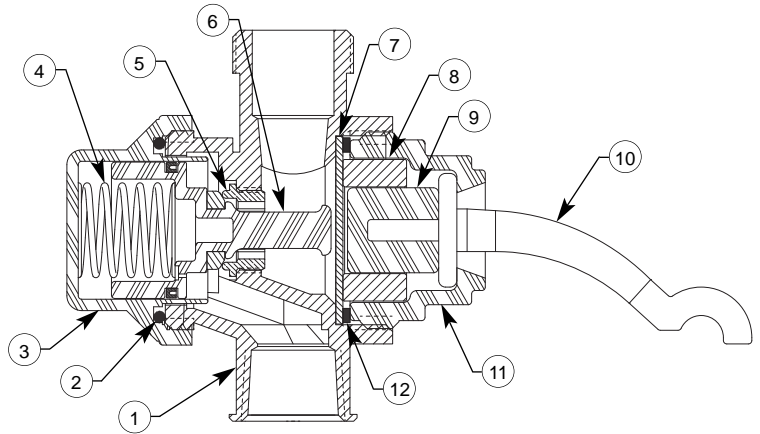
Installation Instructions *Continued* . . .

Repair Parts *Continued* . . .

S65-230 — Repair Kit for Foot Valve S07-066

S07-066 Foot Valve

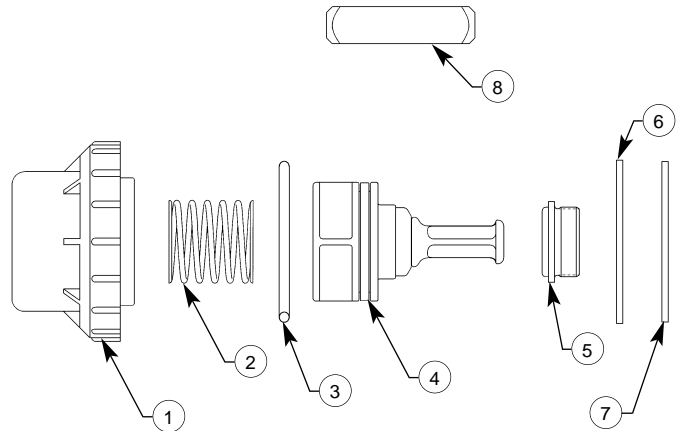
| ITEM | QTY. | PART NO. | DESCRIPTION |
|------|------|----------|-----------------------|
| 1 | 1 | 118-302 | FOOT VALVE BODY |
| 2 | 1 | 125-154 | O-RING, #2-127 |
| 3 | 1 | 118-300 | HOUSING |
| 4 | 1 | 135-088 | SPRING |
| 5 | 1 | 117-016 | VALVE SEAT |
| 6 | 1 | S64-093 | PLUNGER ASSEMBLY |
| 7 | 1 | 125-001Y | DIAPHRAGM |
| 8 | 1 | 179-002 | PLUNGER GUIDE |
| 9 | 1 | 119-024 | PLUNGER |
| 10 | 1 | 143-026 | OPERATING LEVER |
| 11 | 1 | 110-101 | BOTTOM NUT |
| 12 | 1 | 124-001V | WASHER, 1-3/8" x 5/8" |



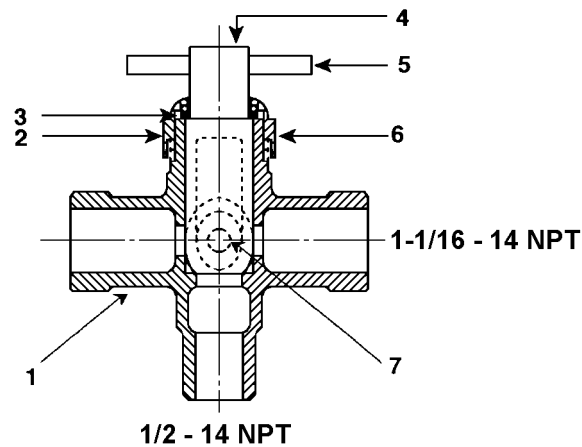
NOTE: This repair kit services only the S07-066 valve shipped AFTER January 2003.
See 215-1370 *Washfountain Parts and Service Guide* for service information before this date.

S65-230 Foot Valve Repair Kit

| ITEM | QTY. | PART NO. | DESCRIPTION |
|------|------|----------|-----------------------|
| 1 | 1 | 118-300 | HOUSING |
| 2 | 1 | 135-088 | SPRING |
| 3 | 1 | 125-154 | O-RING, #2-127 |
| 4 | 1 | S64-093 | PLUNGER ASSEMBLY |
| 5 | 1 | 117-016 | VALVE SEAT |
| 6 | 1 | 125-001Y | DIAPHRAGM |
| 7 | 1 | 124-001V | WASHER, 1-3/8" x 5/8" |
| 8 | 1 | 130-033 | KEY, VALVE SEAT |
| 9 | 1 | S45-125 | LUBRICANT (not shown) |



Manual Mixing Valve Repair Parts

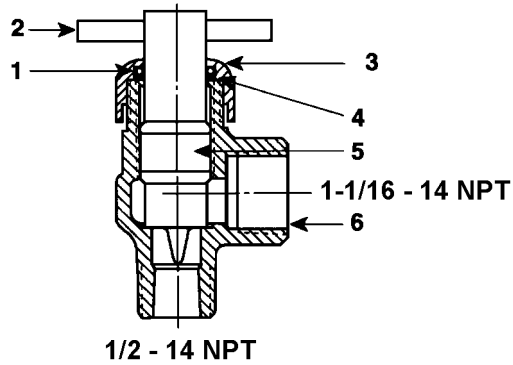


Manual Mixing Valve Parts List

| Item | Part No. | Description | Valve Assembly S01-038 | Valve and Tailpieces S01-038S | Repair Kit S45-197 |
|------|-----------|----------------------------|---------------------------|-------------------------------------|-----------------------|
| | | | Qty | | |
| 1 | 118-034 | Mixing Valve Body - Brass | 1 | 1 | — |
| 1 | 118-034A | Mixing Valve Body - Chrome | — | — | — |
| 2 | 124-001BD | Fiber Washer | 1 | 1 | 1 |
| 3 | 125-001BC | O-Ring | 1 | 1 | 1 |
| 4 | 119-059 | Mixing Valve Core | 1 | 1 | 1 |
| 5 | 152-038 | Roll Pin | 1 | 1 | 1 |
| 6 | 121-016 | Bonnet - Brass | 1 | 1 | 1 |
| 6 | 121-016A | Bonnet - Chrome | — | — | — |
| 7 | 160-197 | Screw - Brass | 1 | 1 | — |
| 7 | 160-189 | Screw - Stainless Steel | — | — | — |
| * | 129-007 | Tailpiece - Brass | — | 2 | — |
| * | 110-005 | Tailpiece Nut - Brass | — | 2 | — |
| * | 129-007A | Tailpiece - Chrome | — | — | — |
| * | 110-005A | Tailpiece Nut - Chrome | — | — | — |
| * | 124-001AF | Tailpiece Washer | — | 2 | 2 |

* Parts not shown

Volume Control Valve Repair Parts



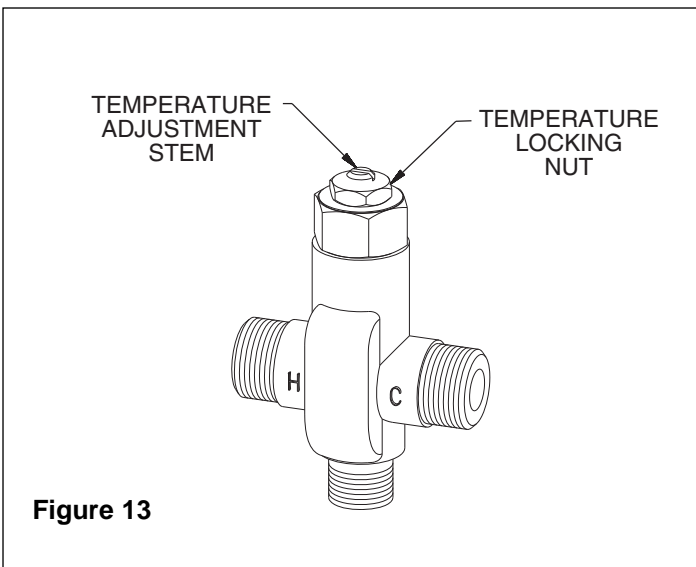
Volume Control Valve Parts List

| Item | Part No. | Description | Brass Valve | Repair Kit |
|------|-----------|--------------|-------------|------------|
| | | | S02-045 | S45-198 |
| | | | Qty | |
| 1 | 125-001BC | O-Ring | 1 | 1 |
| 2 | 152-038 | Roll Pin | 1 | 1 |
| 3 | 121-016 | Bonnet | 1 | 1 |
| 3 | 121-016A | Bonnet | — | — |
| 4 | 124-001BD | Fiber Washer | 1 | 1 |
| 5 | 119-060 | Valve Core | 1 | 1 |
| 6 | 118-033 | Valve Body | 1 | — |
| 6 | 118-033B | Valve Body | — | — |

Adjusting the Vernatherm Thermostatic Mixing Valve

⚠ *NOTE: 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–115°F (35°C–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 (Figure 13).
 - 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

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.

Problem: Limited water flow

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

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

1. Remove the valve's cap and thermostat (see Figure 14 on Page 24).
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" per steps on Page 22.

Vernatherm Thermostatic Mixing Valve (S01-525) Parts List — Repair Kit S65-259

Parts List S65-259 Valve Repair Kit

| Item | Part No. | Qty | Description |
|------|-----------|-----|-------------|
| 5 | S39-413 | 1 | Thermostat |
| 7 | 125-001BX | 1 | O-Ring |
| 8 | 125-157 | 1 | O-Ring |

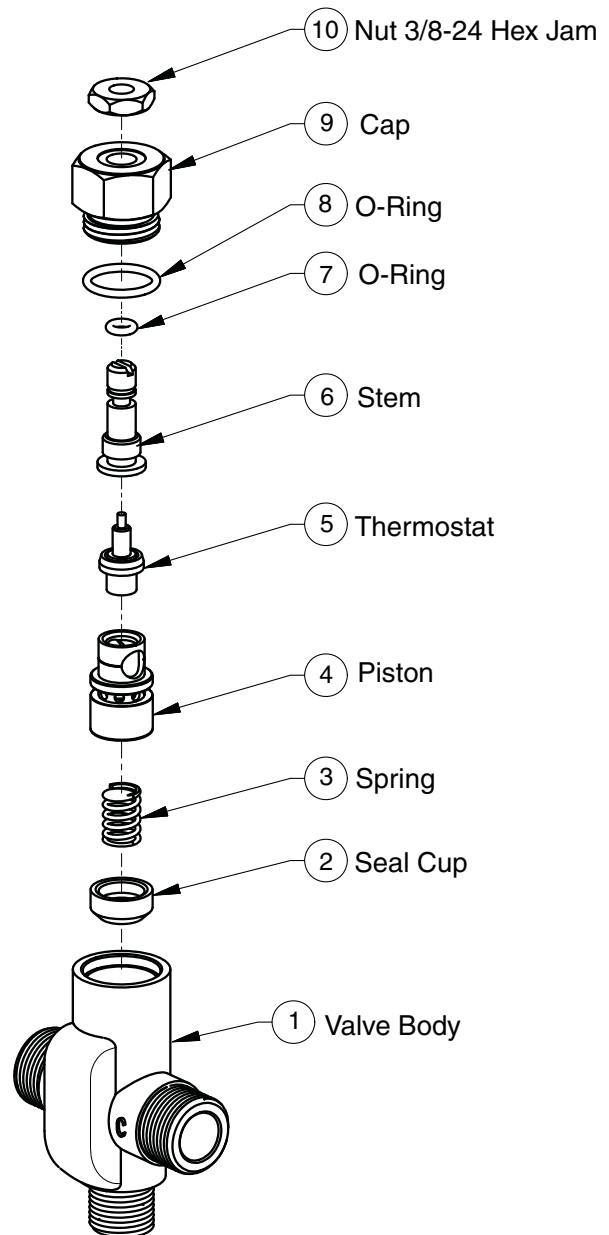


Figure 14

Cleaning of Washfountains

To Preserve Finish of Terrazzo Compositions

Clean terrazzo washfountain bowls daily or as often as conditions require with any standard household detergent, hot water and soft cloth. Bradley terrazzo bowls may be refurbished by cleaning with tri-sodium phosphate, two pounds per gallon, and a scrub brush. Stubborn spots may be removed with emery cloth. After bowl is thoroughly cleaned and dried, Epoxy resin or a good quality polyurethane finish should be applied.

Eroded terrazzo is usually the result of exposure to caustic substances. This condition can be repaired relatively easily. Repair kits are available from your Bradley Representative. Do not use drain cleaners on terrazzo.

Bradstone

Bradstone is impervious to most chemicals and stains. Soap and dirt accumulations should be washed off with detergent cleaners. Abrasives and caustic cleaners are not recommended. An occasional waxing with automotive wax will make future cleaning even easier.

Drain Cleaning

Drains can be cleaned with a plumbers snake inserted through the drain spud after removing the strainer, or through the trap clean out plug



IMPORTANT: Do not put drain cleaners in bowl. Damage to bowl will result.

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 manufactures 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 manufactures instructions and apply in the same direction as the polish lines.



IMPORTANT: 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 manufactures instructions. Many of these products leave a protective coating the 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 manufactures 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.



IMPORTANT: 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.

NOTE: 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.