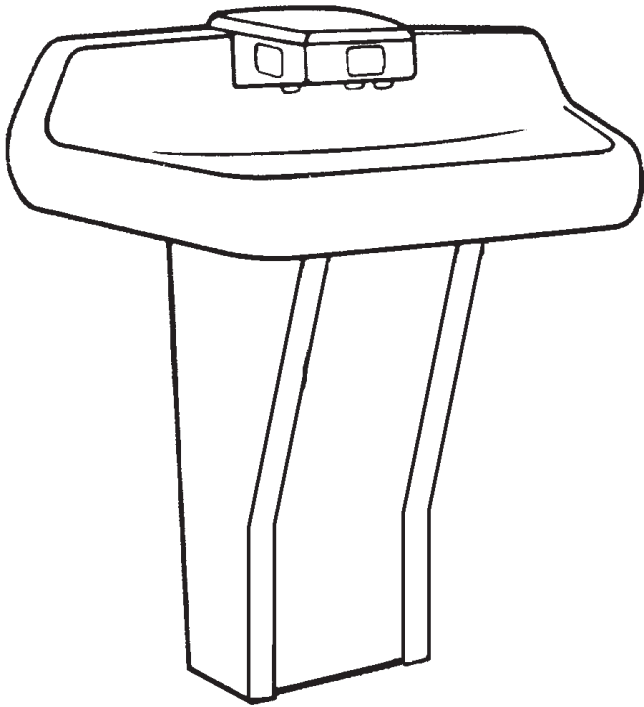


Installation



MF2903/IR

Tri-Fount™ Washfountain with Infrared Control

(Standard*, Juvenile and OBC Height)

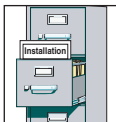
* Standard Height is ADA Compliant



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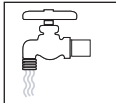
IMPORTANT!



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



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.



The Tri-Fount™ requires a water flowing pressure of between 20 psi and 80 psi. Make sure that all water supply lines have been flushed and then completely turned off before beginning installation. Debris in supply lines can cause valves to malfunction.



The Infrared control must be connected with a 24 VAC Class II transformer. Connections to 110 VAC can cause personal injury and will result in damage to the electronics.



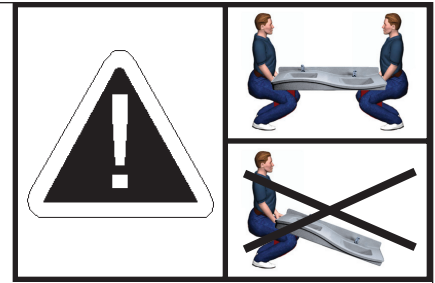
Terrazzo solid surface material care and maintenance information may be found in the "Products" section on our web site at www.bradleycorp.com. Select Technical Data document #9901.




Product warranties may be found in the "Products" section on our web site at www.bradleycorp.com.

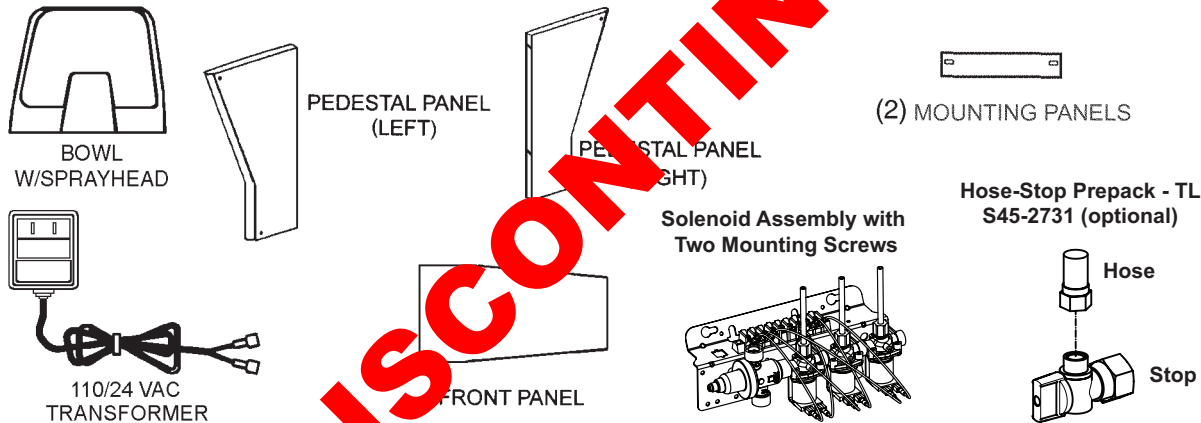
Supplies Required:

- (6) 3/8" diameter bolts with washers and (6) wall anchors appropriate for your installation
- (2) 3/8" diameter bolts with washers and (2) floor anchors appropriate for your installation
- 1/2" nominal copper tubing for hot and cold water supply lines
- 1-1/2" NPT drain trap and waste connection
- Pipe sealant and plumber's putty
- 110 VAC power source for 110/24 VAC plug-in transformer
- **OPTIONAL:** Bradley recommends installing an electrical cut-off switch to the unit. This feature allows no accidental water delivery during regular maintenance and service.



 **Barrier-free and ADA compliant**
The Tri-Fount™ with Infrared Control is designed to comply with all ADA guidelines on reaches, clearances, operations when mounted at standard height dimensions by the installer.

Washfountain Components



Pedestal Prepack - S45-197A

(8) 1/4"-20 x 1/2" PAN HEAD SCREW

(4) 5/16" I.D. WASHER

UPPER BRACKET

LOWER BRACKET

TUBING PREPACK S45-841
1/4" O.D.

RED

BLACK

BLUE

(3) TUBING UNION

Hose-Stop Prepack - TMA S45-2730

Hose

Stop

PREPACK S45-561

(2) 3/8"-16 x 3-1/4" HEX CAP SCREW

STRAINER

DRAIN SPUD

(2) 3/8"-16 HEX NUT

(2) 5/16" I.D. PLAIN WASHER

(2) 13/32" I.D. PLAIN WASHER

(2) 10-24 x 3/4" OVAL PHILLIPS HEAD SCREW

(2) 1/4"-20 x 1/2" PAN HEAD SCREW

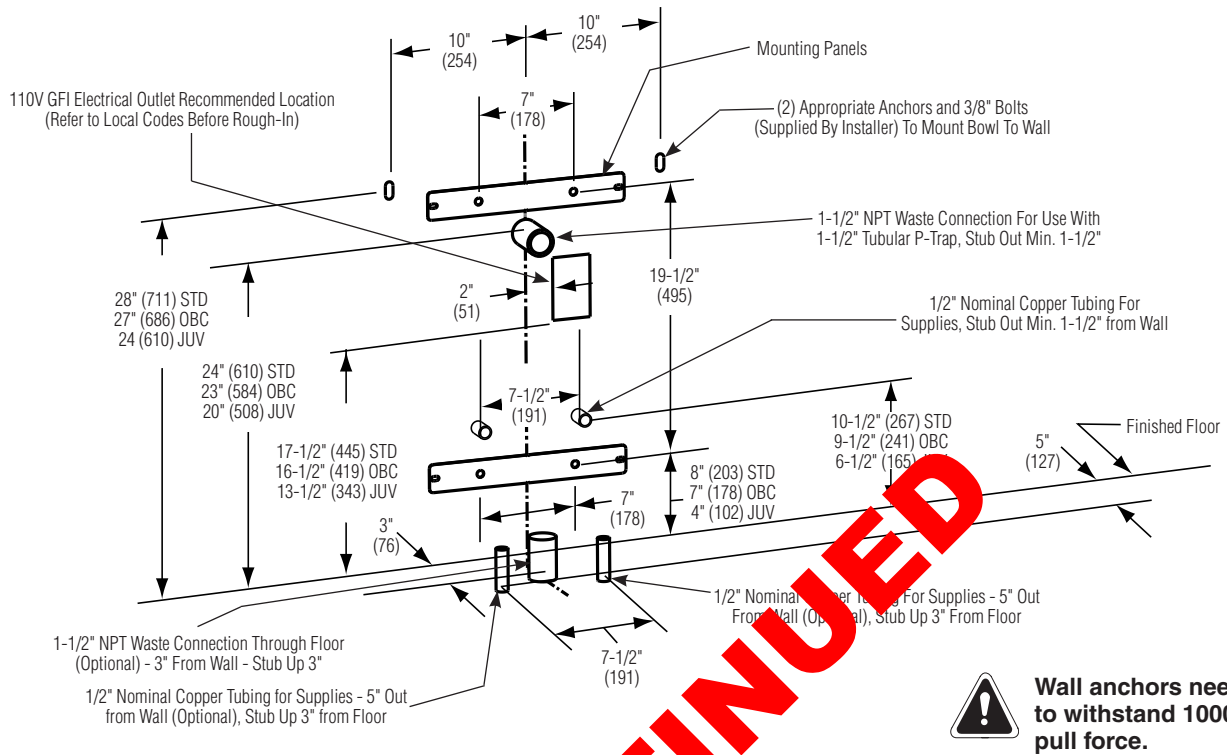
(2) WALL BRACKET

(2) ANCHOR PLATE

(2) 3/8" I.D. LOCKWASHER

DISCONTINUED

1 Rough-in Piping and Install Wall Anchors

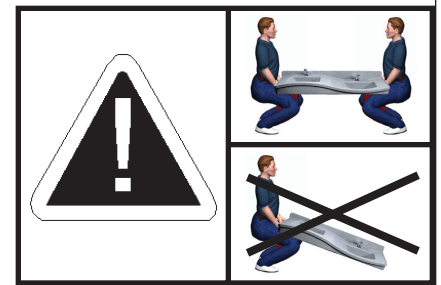
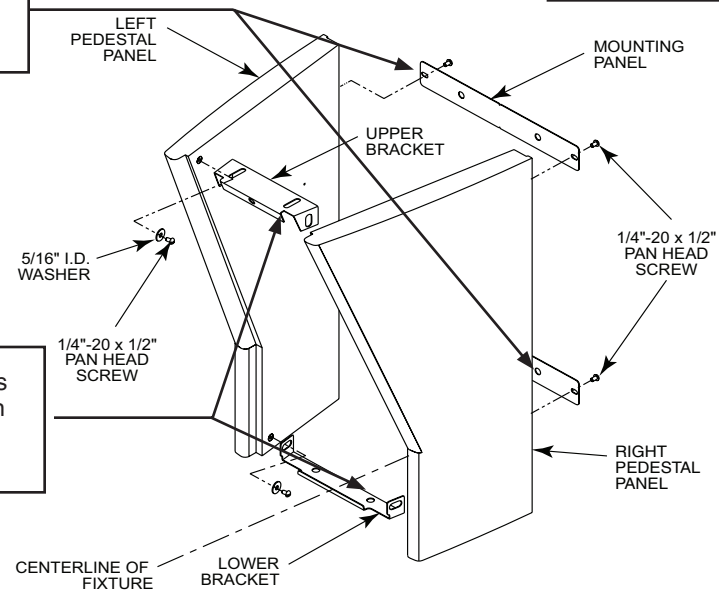


! Wall anchors need to withstand 1000 lb. pull force.

2 Assemble Pedestal

A Fasten the mounting panels to the pedestal with four pan head 1/4"-20 x 1/2" screws supplied.

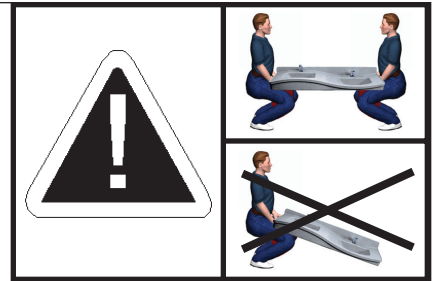
B Install the upper and lower brackets to the pedestal panels with two pan head 1/4"-20 x 1/2" screws and 5/16" I.D. washers supplied.



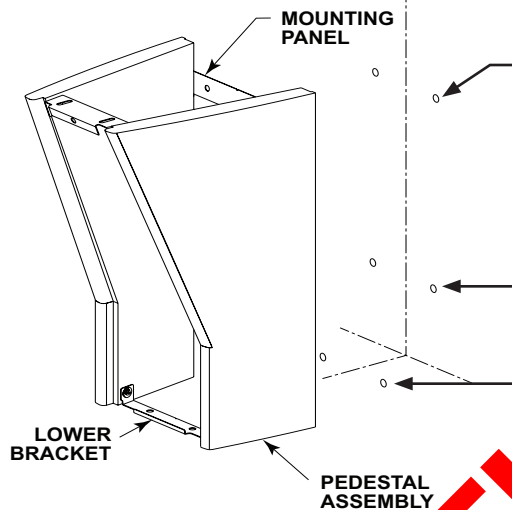
3 Install Pedestal, Wall and Floor Anchors



Before mounting the pedestal to the floor, make sure the floor is level. If necessary, install shims under the left and/or right pedestal. Remove molding strips or tiles that could prevent a flush mounting to the wall.



A Measure and mark the centerline of the washfountain on the wall and floor. Align the locating notches on the mounting panel with the centerline.



B Secure the pedestal assembly to the wall and floor anchors using 3/8" bolts and washers (supplied by installer).



Washers are not utilized on back of mounting panels.

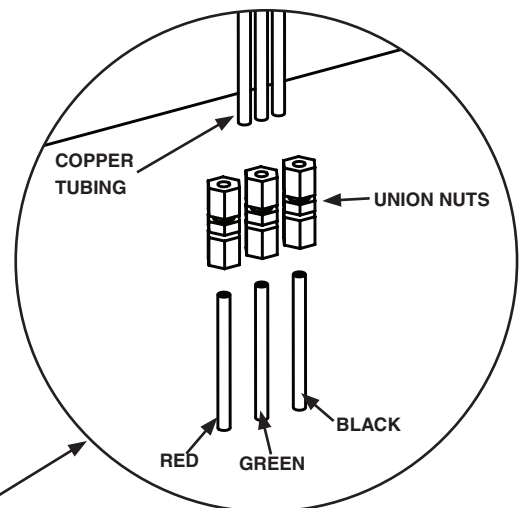
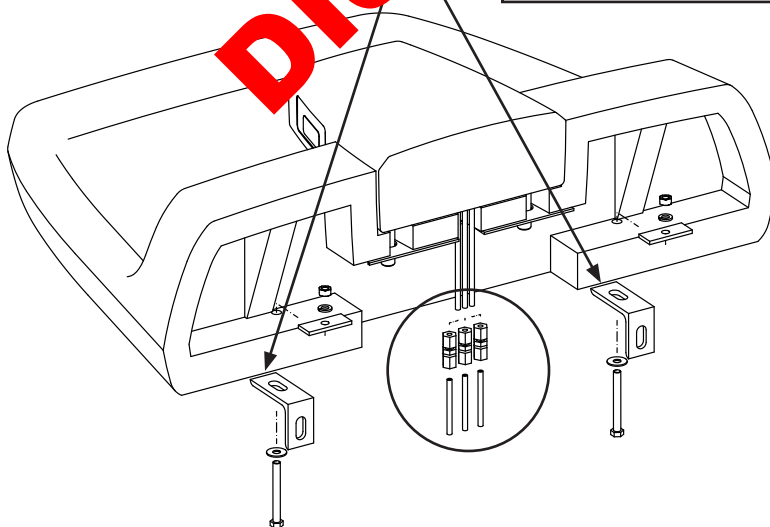
For assistance, carefully lift the bowl into the pedestal frame using appropriate lifting procedures. Ensure bowl remains 3 – 4 inches from the wall.



Do not leave the bowl on the pedestal unsupported, as it may fall and cause personal injury or damage to property.

4 Attach Bowl Brackets and Connect Sprayhead Tubing

A Install the two wall anchor brackets to the back of the bowl using the 3/8"-16 x 3-1/4" hex head bolts, 13/32" I.D. plain washers, anchor plates, 3/8" I.D. lockwashers and 3/8-16 hex nuts provided.



B Attach the three colored plastic tubing unions to the copper sprayhead inlet tubes. Tighten union nuts finger-tight plus two wrench turns. When facing the rear of the bowl, the color sequence is (L-R) red; green; black.

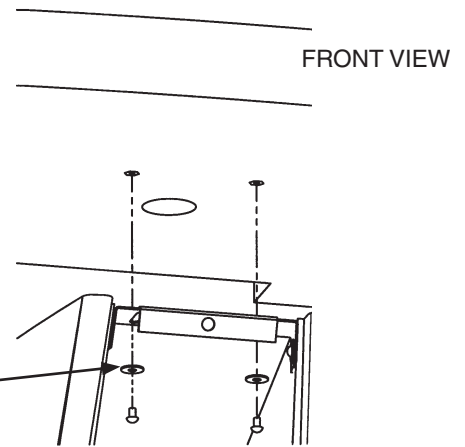
DISCONTINUED

5 Attach Bowl to Pedestal and Wall

A Uncoil the infrared sensor leads from the rear of the backplash.

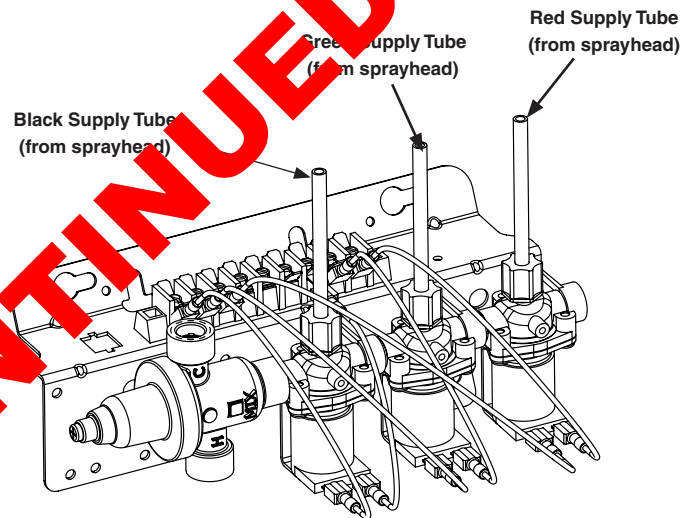
B Slide the bowl back to the wall and secure the bowl's wall brackets to the wall anchors with the two 3/8" bolts and washers (supplied by installer).

C Fasten the bowl to the upper bracket on the pedestal assembly with the two 1/4"-20 x 1/2" pan head screws and 5/16" I.D. washers supplied (see Figure 6).



6 Sprayhead Supply Connections

A Insert the colored sprayhead supply tubes into the solenoid tube connectors by loosening tube connector cap and firmly pushing tubes into connector until fully seated. Re-tighten connector cap.



7 Electrical Connections

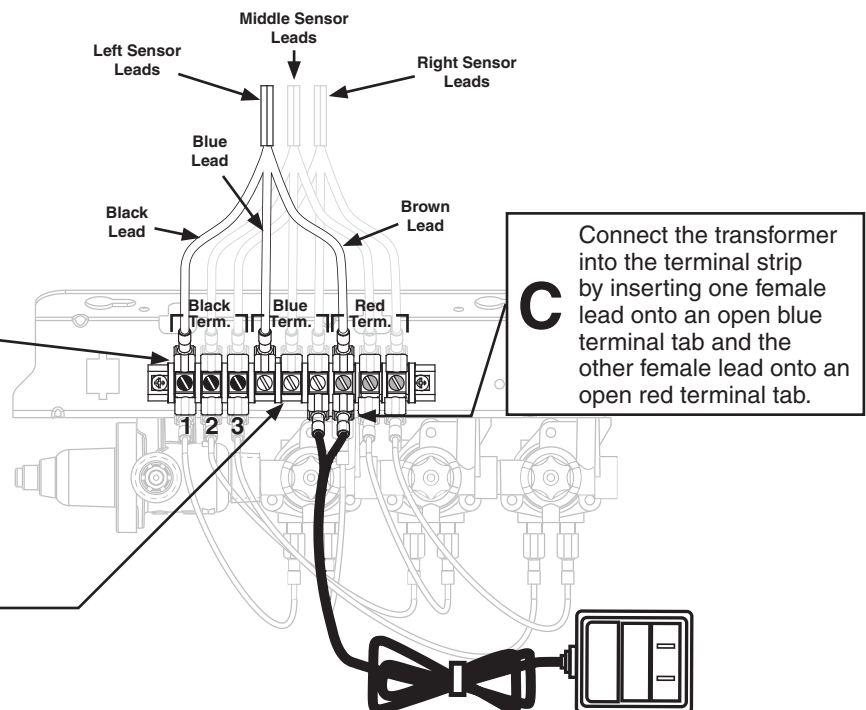


Connection of leads other than shown may cause permanent damage to the sensor or transformer.

A Plug the (3) black sprayhead sensor leads into the black terminal connectors in the following order (left sensor leads emphasized for clarity):

- Left sensor to position 1
- Center sensor to position 2
- Right sensor to position 3.

B Plug the blue sensor leads into any blue terminal connector. Plug the brown sensor leads into any red terminal connector.



C Connect the transformer into the terminal strip by inserting one female lead onto an open blue terminal tab and the other female lead onto an open red terminal tab.

7 Install Solenoid Assembly Fixture and Supply Connections



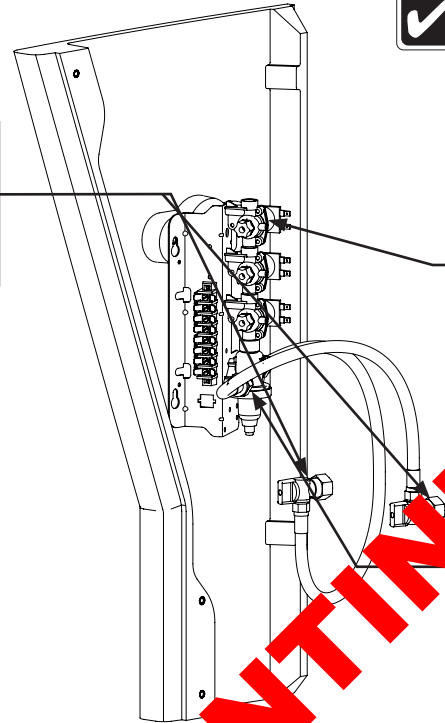
The letter "H" on the Vernatherm™ Mixing Valve indicates hot water supply inlet.



FOR OPTIONAL SINGLE TEMPERED SUPPLY: Attach the stop to the 1/2" tempered supply line. Connect the stop to the solenoid valve assembly with the flexible supply hose.

A

Attach the stops to the hot and cold water rough-ins. Connect one end of each supply hose to the stops.



C

Mount the solenoid assembly bracket as shown onto the left side of the pedestal using the two supplied 1/2-20 X 1/2" screws. Do not overtighten.

B

Connect the other end of each supply hose to the Navigator TMV valve assembly (one on the hot side, one on the cold side)



The Infrared control must be connected with a 24 VAC Class II plug-in transformer. Connection with 110 VAC can cause personal injury and will result in damage to the electronics. Consult local electrical codes and ordinances for suitable transformer mounting location.

DISCONTINUED

8 Drain Assembly



Install drain spud per common industry standard. (Discard rubber gasket included with drain spud; it cannot be used in this application.)



Install the optional soap system following the instructions outlined in manual 215-1136 provided with the soap system.

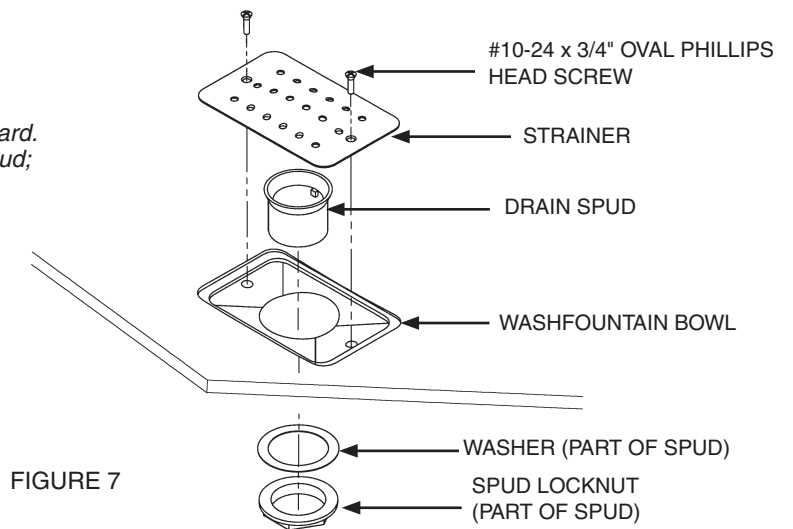


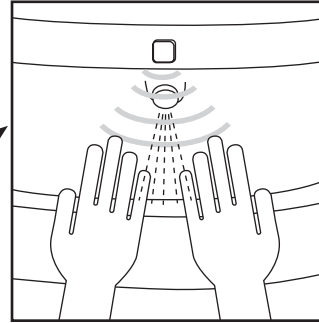
FIGURE 7

9 Check Operation

A Check to make sure both stop valves are fully open (see page 6).

B Turn on the main water supply to the Tri-Fount® and check for leaking.

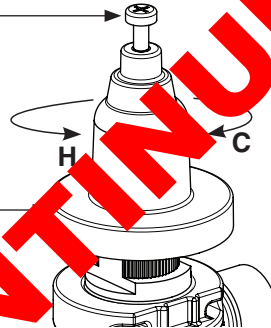
C Turn on the electrical power and pass your hand in front of each sensor until air is purged from the lines.



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.

D Loosen Cap Screw about 1/4" (4-6 turns) and lift up cover (do not remove).

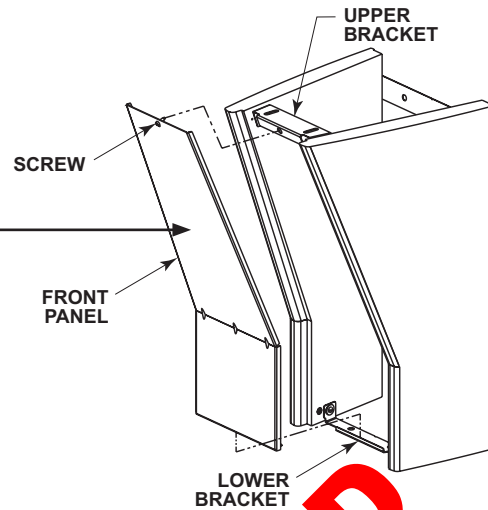
E Using cover, turn cartridge gently until desired water temperature is reached. Do not turn past stops as this may damage unit. Push cover down and tighten screw.



DISCONTINUED

10 Completing Installation

A Securely attach Front Panel to upper and lower brackets with screw provided.



Solenoid Valve Troubleshooting

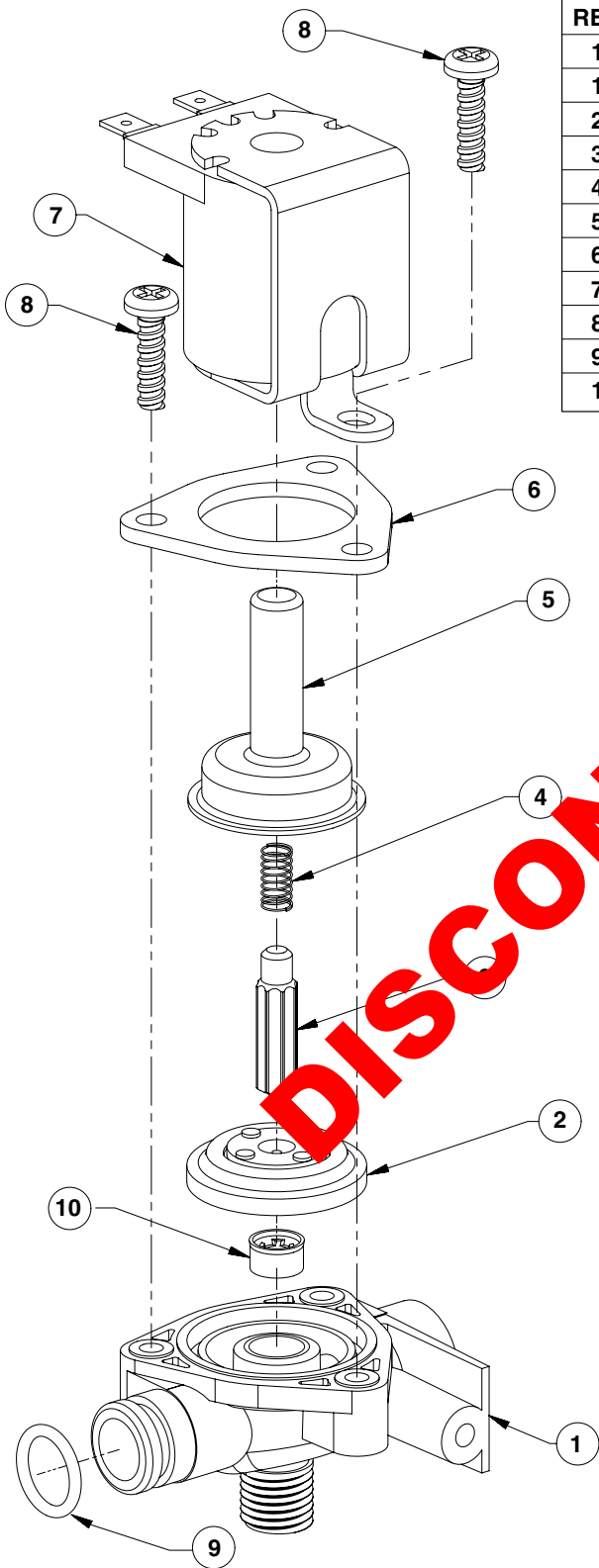


Turn off water supplies to the unit before troubleshooting.

DISCONTINUED

Problem	Cause	Solution
An individual operating station fails to shut off and drips.	Debris is trapped between the diaphragm and the valve seat.	<p>Remove debris between diaphragm and the valve seat.</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. 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 in reverse order (do not overtighten the Phillips-head screws or the plastic valve body may crack). Tighten until the armature plate makes contact with the plastic body. 4. Reconnect the wiring.
An individual operating station fails to turn on.	Failed coil for the valve or loose electrical connection to the terminal.	<p>Test the station to determine the 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 coil on 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 water and electrical supplies to the unit • pass your hand in front of the sensor. If the station still fails to turn on, replace the sensor.
	Defective Sensor.	

Solenoid valve S07-068 (closed body) and S07-068A (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	269-983	DIAPHRAGM
3	1	269-577	ARMATURE
4	1	269-578	SPRING
5	1	269-1729	ARMATURE HOUSING
6	1	269-1730	CLAMP, ARMATURE 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
10	1	125-160	FLOW RESTRICTOR, .5 GPM

DISCONTINUED

Thermostatic Mixing Valve Troubleshooting



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

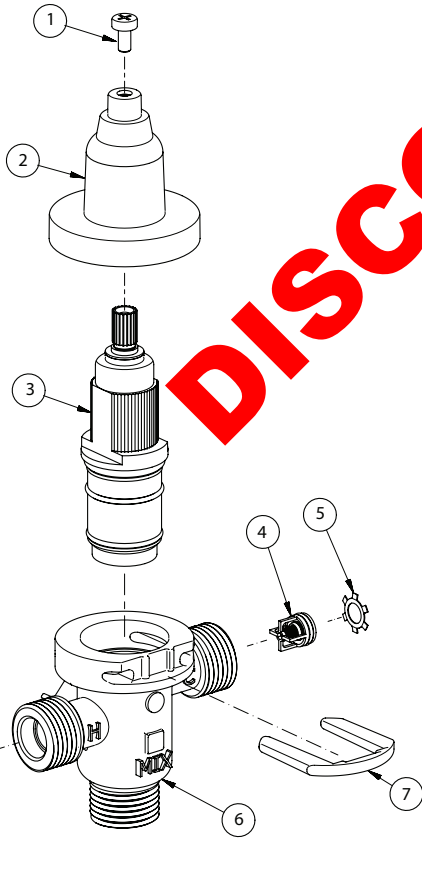
- If stop valves are used, make sure that they are fully open.
- Make sure that the hot and cold inlet pipes are connected properly, and that there are no cross-connections or leaking stop valves.
- Check the hot water heater output to make sure that it is at least 10° F above the set temperature.



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.	Damaged cartridge or O-rings.	Replace cartridge with part number 269-1927
Improper water temperature or temperature fluctuation.	Hot water supply is not 10° above desired set point.	Increase hot water supply temperature
	Valve temperature is not properly set.	Adjust the temperature as shown on page 7 step 9.
Limited water flow.	Dirt and debris have built up in the valve or strainer.	1. Check to make sure both hot and cold supplies are connected to the Nuts for mixing valve and that they have water flow. 2. Remove cover and U-clip. Remove the cartridge and clean the strainer. It is not required to grease cartridge, however if needed, use silicone grease only. Do not use grease on check valves.

DISCONTINUED



Parts List

Part No.	Part No.	Description	Quantity
	S59-4000		
1	160-463	Cap Screw	1
2	107-582	Cover	1
3	269-1927	Thermostatic Cartridge	1
4	198-014	Check Valve*	2
5	132-051	Retaining Ring*	2
6	118-319	Valve Body	1
7	146-079	U-Clip	1

* Included with Prepack S65-326

Tempered Line Adapter Option
Part no. S39-804
 (replaces S59-4000 if tempered line is used)

Strainer (173-028)