

# Installation

WF2500 Series Terreon Classic

WF2600 Series Terrazzo

WF2700 Series Stainless Steel

WF2800 Series Bradstone

WF3200 Series Terreon Deep Bowl

**TDB3100 Series Terreon Deep Bowl** 

### WARNING

Make sure that all water supply lines have been flushed and then completely turned off before beginning isntallation. Debris in the supply lines can cause valves to malfunction.

Turn OFF electrical supply to the unit before installation.

### NOTICE

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

## IMPORTANT

Read this installation manual completely to ensure proper installation, then file it with the owner or maintenance department. Compliance and conformity to drain requirements and other 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.

Product warranties and parts information may also be found under "Products" on our web site at bradleycorp.com.

215-1833-10 Rev. A; ECN 17-00-006B © 2017 Bradley Page 1 of 2 11/21/2017 P.O. Box 309 Menomonee Falls, WI 53052 USA 800 BRADLEY (800 272 3539) +1 262 251 6000 bradleycorp.com





#### **Cleaning and Maintenance for Terreon®**

**Material Description:** Terreon is a densified solid surface material composed of bio based resin and is resistant to chemicals, stains, burns and impact. Surface can be easily repaired with everyday cleansers or fine grit abrasives. Because Terreon is a unique cast material, its aggregate flow and distribution, and shades of color can vary from product to product creating natural characteristics.

Routine Cleaning: For regular cleaning, use mild neutral base cleaners.

**Stubborn Stains:** Remove tough stains with Soft-Scrub<sup>®</sup> and a green Scotch-Brite<sup>®</sup> pad or lightly sand in a circular motion with 240 grit wet/dry sandpaper. The finish can then be renewed with a maroon Scotch-Brite pad.

**Scratches:** Remove scratches with a green Scotch-Brite pad. The finish can then be renewed with a maroon Scotch-Brite pad.

Hard Water Deposits: Remove hard water deposits with a mild solution of vinegar and water. Always rinse the unit thoroughly after cleaning.

**Restoring the surface:** Use Hope's<sup>®</sup> Perfect Countertop to refresh and protect the Terreon Solid Surface material. Dark Terreon colors may require additional care and maintenance. For complete instructions on this additional maintenance, visit bradleycorp.com.

**Repair Kits:** Terreon repair kits are available. Contact your Bradley representative or distributor for part numbers and pricing. Repair kits are made to order and have a shelf life of 30 days.

NOTICE! Do not use strong acid or alkaline chemicals and cleaners to clean Terreon. If these chemicals come in contact with the surface, wipe them off immediately and rinse with soapy water. Avoid contact with harsh chemicals such as paint remover, bleach, acetone, etc. Avoid contact with hot pans and objects.

#### **Cleaning and Maintenance 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<sup>®</sup> 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.

**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 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.



#### **Cleaning and Maintenance for Terrazzo**

**Material Description:** Terrazzo is a mosaic-looking natural stone and concrete material polished to a high gloss and sealed with clear polyurethane resin for long lasting beauty. Terrazzo is precast and composed of 85% stone and 15% binder with steel reinforcing rods cast into the bowl.

Routine Cleaning: Clean daily or as often as conditions require with any standard detergent, warm water and a soft cloth.

**Stubborn Stains:** If stains have permeated the surface of the terrazzo, follow instructions for restoring the surface listed below.

**Restoring the surface:** Use paint stripper to remove the existing polyurethane (it is important to remove all of the old polyurethane to ensure a high quality finish). Then use light grit sand paper to remove any stubborn staines that have permeated the surface. Clean and thoroughly dry the bowl. Then apply 2 to 3 coats of polyurethane to the terrazzo in accordance with the manufacturer's instructions. Allow the polyurethane to dry completely per the manufacturer's recommendations before turning on the water.

- NOTICE! If the bowl is not completely dry before applying the polyurethane, the polyurethane will not adhere to the surface.
- NOTICE! Make sure the surface is complete covered with polyurethane to prevent water from penetrating the surface and damaging the terrazzo.

Repair Kits: Terrazzo repair kits are available. Contact your Bradley representative or distributor for part numbers and pricing.

NOTICE! Do not place acid or alkaline solutions (floor stripper or drain cleaners) into the terrazzo bowl or use them to clean the bowl. If these solutions come into contact with the terrazzo, rinse the bowl immediately with water and inspect for damage. If damage has occurred, follow the directions for restoring the surface. If bowl begins to haze, it is usually a sign that the terrazzo has come into contact with an acid or alkaline chemical or has been exposed to UV radiation. To repair this condition, follow the instructions for restoring the surface.

### **Cleaning and Maintenance for Bradstone**

**Material Description:** Bradstone is an extremely durable plastic material made of reinforced thermosetting polyester resins, finely ground inorganic fillers and fade resistant pigments. Bradstone is impervious to most chemicals and stains.

**Routine Cleaning:** Soap and dirt accumulations should be washed off with detergent cleaners. Abrasive and caustic cleaners are not recommended. An occasional waxing with automotive wax will make future cleaning even easier.







This document describes installation of washfountain bowl and pedestal only. Some optional equipment and accessories are shown for clarity. For activation, optional equipment and accessory installation, see installation documents included with those parts.



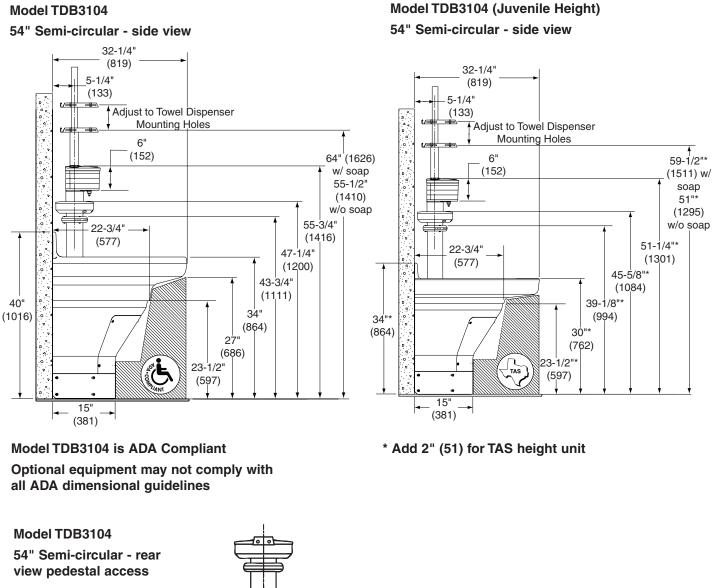
Before installation of bowl and pedestal assemblies, review all included instructions. Some options may require additional steps during the bowl and pedestal installation process.

### **Supplies Required by Installer**

- (4) 1/2" lag bolts, screws or other fasteners to anchor washfountain pedestal
- 1/2" nominal copper tubing for hot and cold water supply lines
- 1" hot and cold water or tempered supply lines and fittings (see activation instructions)
- Reducing fittings and 1/2" nominal copper tubing supply lines for types with supplies from above (see activation instructions)
- Standard P-trap (vented trap supplied by Bradley when required)
- 2" drain lines and fittings
- 1-1/2" vent or tie pipe on fixtures vented through washfountain column
- Teflon tape or pipe dope



## Semi-Circular Washfountain Dimensions (Optional Equipment Shown)



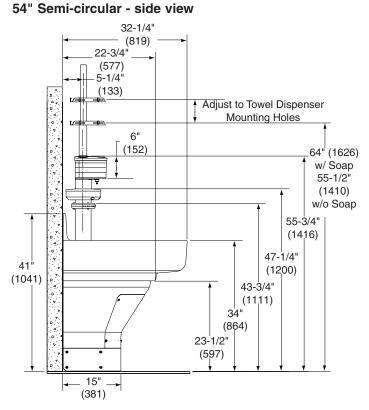
Check local codes for electrical outlet location before roughing in. Some codes require a remote location for the outlet.

Electrical outlet only necessary for certain activation options. Read all instructions included with the washfountain prior to rough in and installation of bowl and pedestal.



## **Semi-Circular Washfountain Dimensions**

#### Model WF3204



Model WF3204 is not ADA compliant

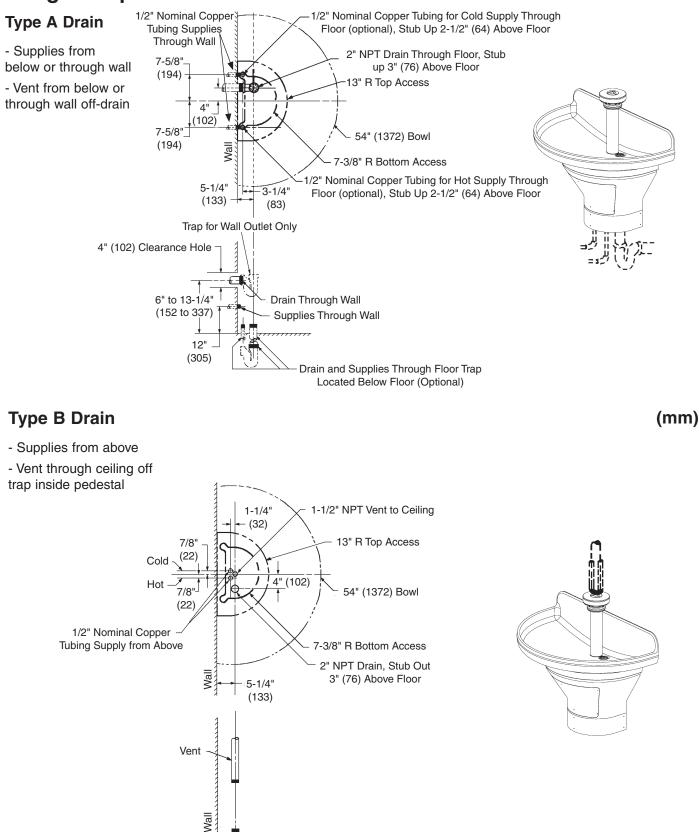


#### Bowl and Pedestal Assembly TDB3104, WF3204

(mm)

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## **Rough-In Specifications**

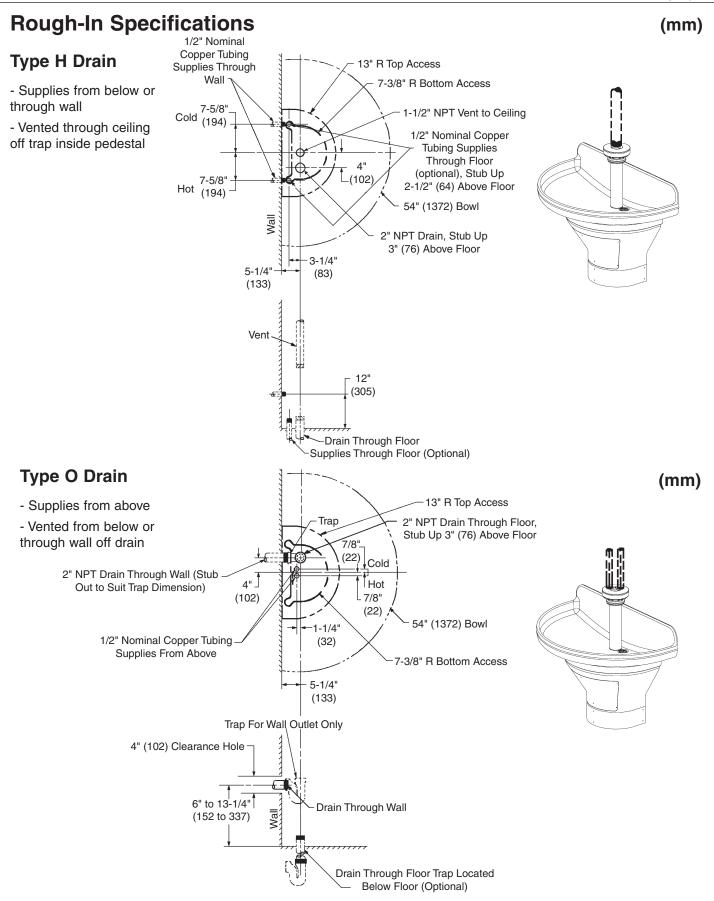


Drain Through Floor



#### Bowl and Pedestal Assembly TDB3104, WF3204

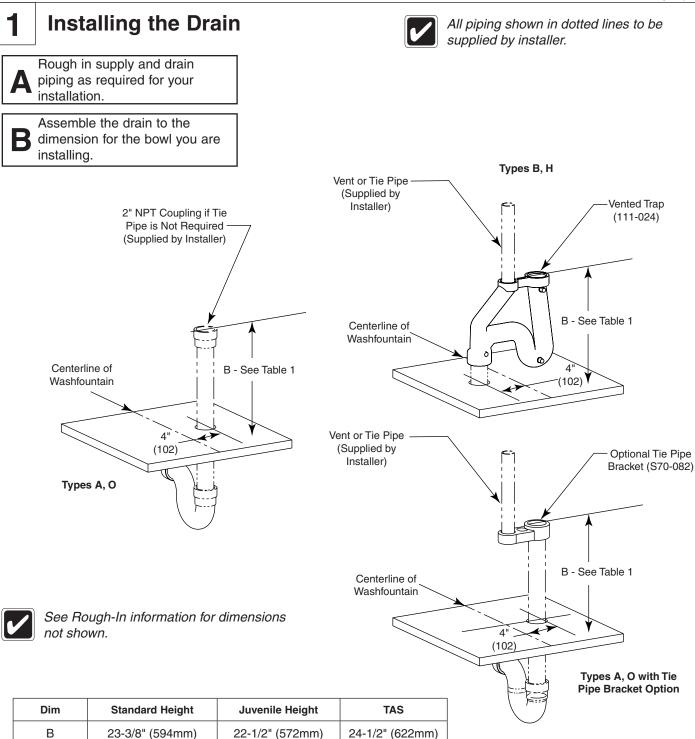
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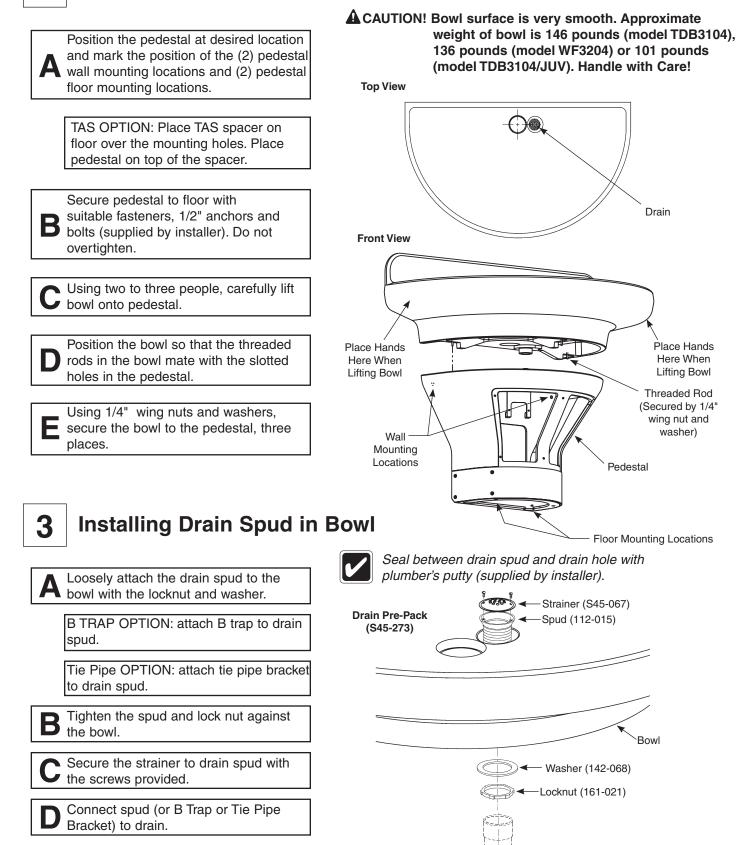
#### Bowl and Pedestal Assembly TDB3104, WF3204

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## **Bowl/Pedestal Mounting and Assembly**





## **Cleaning and Maintenance for Terreon®**

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Routine Cleaning: For regular cleaning, use mild neutral base cleaners.

**Stubborn Stains:** Remove tough stains with Soft-Scrub<sup>®</sup> and a green Scotch-Brite<sup>®</sup> pad or lightly sand in a circular motion with 240 grit wet/dry sandpaper. The finish can then be renewed with a maroon Scotch-Brite pad.

**Scratches:** Remove scratches with a green Scotch-Brite pad. The finish can then be renewed with a maroon Scotch-Brite pad.

Hard Water Deposits: Remove hard water deposits with a mild solution of vinegar and water. Always rinse the unit thoroughly after cleaning.

**Restoring the surface:** Use Hope's<sup>®</sup> Perfect Countertop to refresh and protect the Terreon Solid Surface material. Dark Terreon colors may require additional care and maintenance. For complete instructions on this additional maintenance, visit bradleycorp.com.

**Repair Kits:** Terreon repair kits are available. Contact your Bradley representative or distributor for part numbers and pricing. Repair kits are made to order and have a shelf life of 30 days.

NOTICE! Do not use strong acid or alkaline chemicals and cleaners to clean Terreon. If these chemicals come in contact with the surface, wipe them off immediately and rinse with soapy water. Avoid contact with harsh chemicals such as paint remover, bleach, acetone, etc. Avoid contact with hot pans and objects.

#### **Cleaning/Maintenance Instructions for Gel-coated Fiberglass**

**Material Description:** The Terreon Washfountains referenced in this installation manual use a gel-coated fiberglass pedestal.

**Routine Cleaning:** The gel-coated pedestal should be cleaned daily or as often as needed with a mild solution of detergent and water. Always use a soft cloth to avoid damage to the finish.

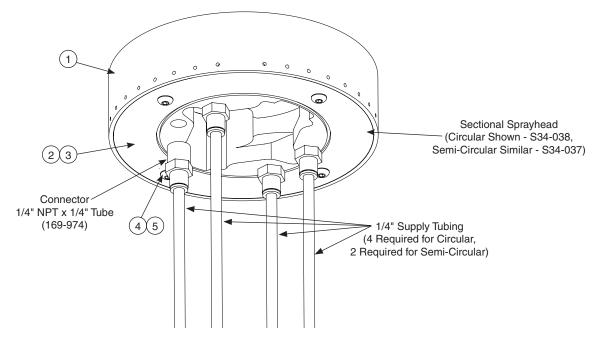
**Repair Kits:** There are no repair kits available for fiberglass materials. However, replacement parts are available, contact your Bradley representative for pricing and part numbers.

# NOTICE! Do not expose gel-coated fiberglass to solvents as they will damage the material and may create harmful fumes.

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## **Sectional Sprayhead**



#### Parts List

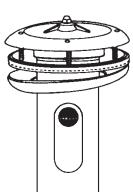
			Circular	Semi- Circular
Item	Part No.	Description	Qty	
1	115-080	Sectional Sprayhead - Plated (Circular)	1	
1	115-079	Sectional Sprayhead - Plated (Semi-Circular)		1
2	159-115	Bottom Plate	1	1
3	124-032	Gasket	1	1
4	160-138	Screw, 10-24 x 1/2" Button Head	4	4
5	142-002BT	Washer, #10, Split Lock	4	4

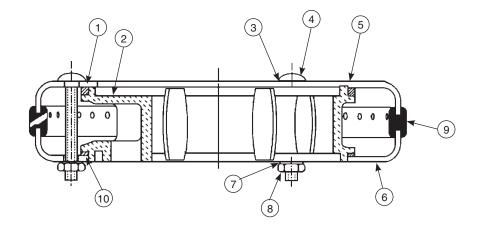


## **Non-Sectional Sprayhead**



Repair kit does not include sprayhead grommet. Order as a separate item.





#### **Parts List**

			Sprayhead Assembly	Repair Kit S45-051	
Item	Part No.	Description	Q	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	124-020C	Sprayhead Grommet - Circle	1	-	
9	120-020D	Sprayhead Grommet - Semi-Circle	1	-	
9	120-020E	Sprayhead Grommet - Corner	1	-	
10	125-001DF	Neoprene Washer - Bottom	1	1	



## Sprayhead Troubleshooting

Problem	Cause	Solution	
Water splashes over	Foreign matter has reduced the size of the sprayhead slots, causing greater pressure at the open slots.	Clean the sprayhead:	
the rim of the bowl.		<ol> <li>Disassemble the sprayhead and dislodge any dirt, lime build-up and foreign debris with a wire brush.</li> </ol>	
		<ol><li>Sprayheads with rubber grommet spray rings may be cleaned by rubbing a coin over the grommet.</li></ol>	
		Throttle down the volume control (water spray should strike the bowl without splashing outside of the bowl).	
Water flow diminishes from the sprayhead.	Strainer portion of the stop-strainer-check valve is plugged.	Remove and clean the strainer screen from the stop- strainer-check valve.	
		The non-sectional sprayhead includes a perforated neoprene 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.	

## **Sprayhead Tubing Connections**

#### A WARNING Flush supply lines before making connections.

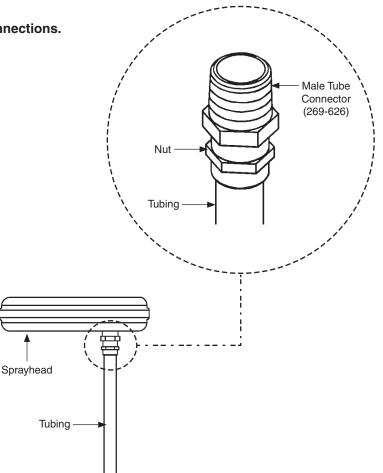


Using a sharp razor, cut tubing squarely A and remove any burrs. DO NOT pinch or crush end of tubing.

Loosen nut on fitting. Moisten end of tube and push into fitting until it is firmly B seated. Tighten nut to secure tube to fitting (make sure nut is securely tightened).



If connector leaks, reseat tubing according to above procedure. If leaking persists, replace male connector, or call a Bradley representative for assistance.





## **Supplies Required by Installer**

- (4) 1/2" lag bolts, screws or other fasteners to anchor washfountain pedestal
- 1/2" nominal copper tubing for hot and cold water supply lines
- Standard P-trap (vented trap supplied by Bradley when required)
- 2" drain lines and fittings
- 1-1/2" vent or tie pipe on fixtures vented through washfountain column
- Teflon tape or pipe dope
- 110VAC GFI power source for 120VAC/12VDC plug in adapter
- OPTIONAL: Bradley recommends installing an electrical cutoff switch to the unit. This feature allows no accidental water delivery during regular maintenance and service.

## **Pre-Installation Information**

#### TouchTime

TouchTime pushbutton/piezo switch activates a flow of water. Sprayhead is controlled by a solenoid valve, allowing user to activate a flow of tempered water from sprayhead with a pushbutton or piezo switch for 15 seconds. Activation time can be adjusted in the field. Valve uses less than half the maximum amount of hot water allowed by the ANSI/ASHRAE/ES 90A-1980 standard.

#### Solenoid Valve

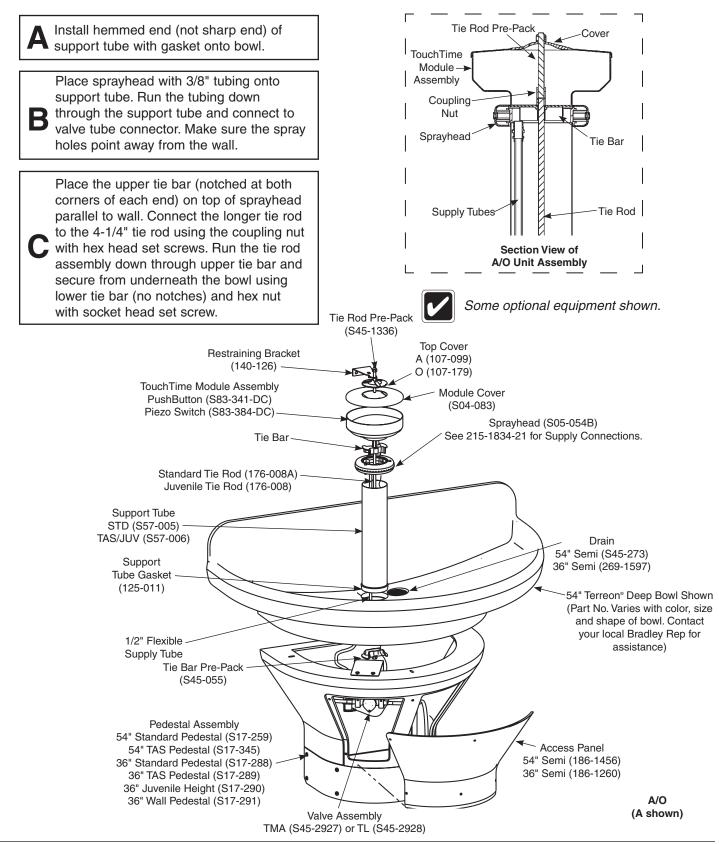
An electronically controlled solenoid valve serves as the metering mechanism. Few moving parts provide reliable metering performance and the solenoid is unaffected by chemicals and minerals often present in municipal water supplies.



Not all equipment shown in this document is available on all washfountains shown within these pages. See Tech Data for optional equipment available for your washfountain.



## **1**a Assemble TouchTime<sup>®</sup> – A and O Units without Tie Pipe Option (A Shown)



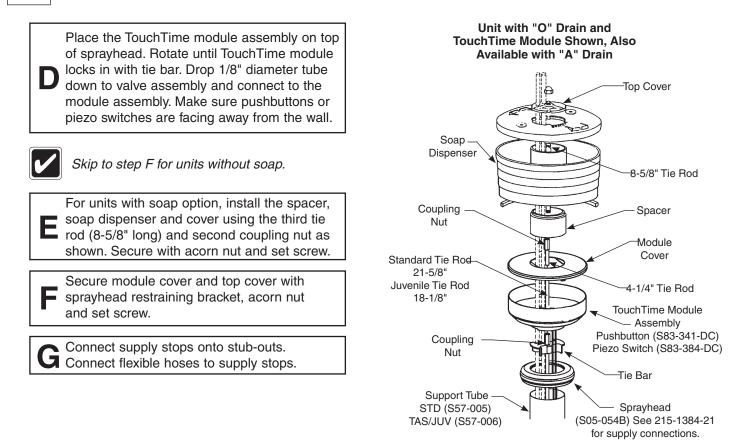
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#### **1**a Assemble TouchTime<sup>®</sup> – A and O Units without Tie Pipe Option (A Shown)

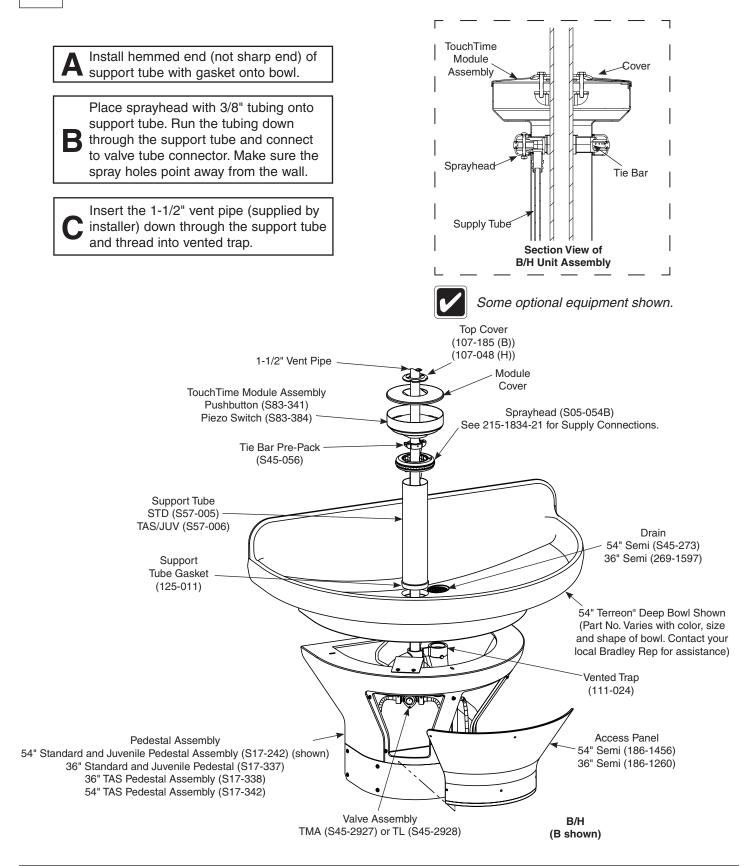




Some optional equipment shown.



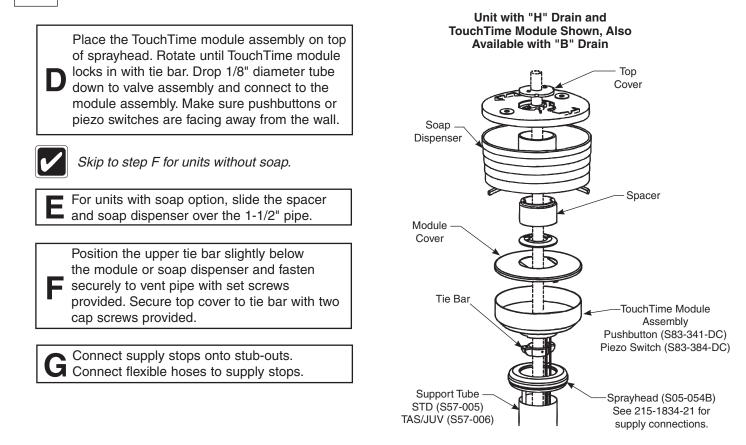
## **1b** Assemble TouchTime<sup>®</sup> – B and H Units with Tie Pipe Option (B Shown)





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#### **1b** Assemble TouchTime<sup>®</sup> – B and H Units with Tie Pipe Option (B Shown)





Some optional equipment shown.



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#### **Connect Valve and Tubing for Non-Sectional TouchTime Control**

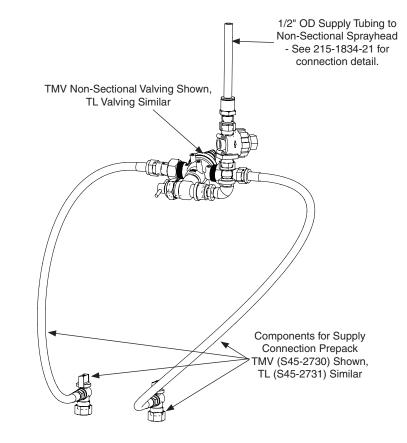


Flush supply lines before making connections.

- Connect 1/2" dia. tubing from the sprayhead to the solenoid assembly. The male connector for the valve assembly will remain tight and leakproof when tubing is cut and installed properly. Follow the procedures below when installing tubing to ensure that you achieve a leakproof seal.
- Using a sharp razor, cut tubing squarely and remove any burrs. DO NOT pinch or crush end of tubing.
- Loosen nut on fitting. Moisten end of tube and push into fitting until it is firmly seated. Tighten nut to secure tube to fitting (make sure nut is securely tightened).
- If connector leaks, reseat tubing according to above procedure. If leaking persists, replace male connector, or call your Bradley representative for assistance.



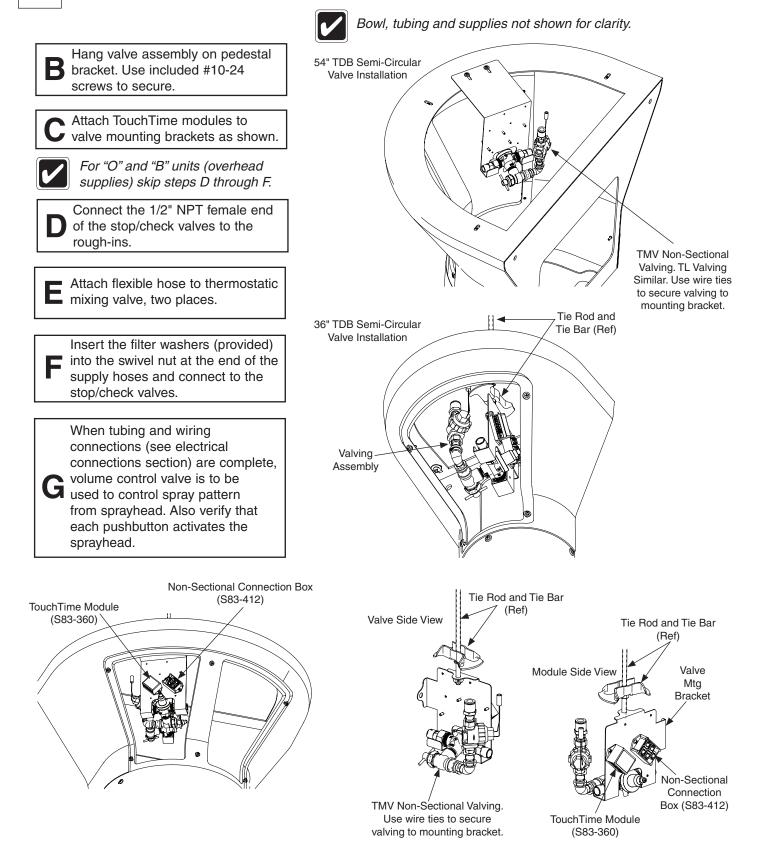
Other components not shown for clarity.







Connect Valve and Tubing for Non-Sectional TouchTime Control (Cont...)





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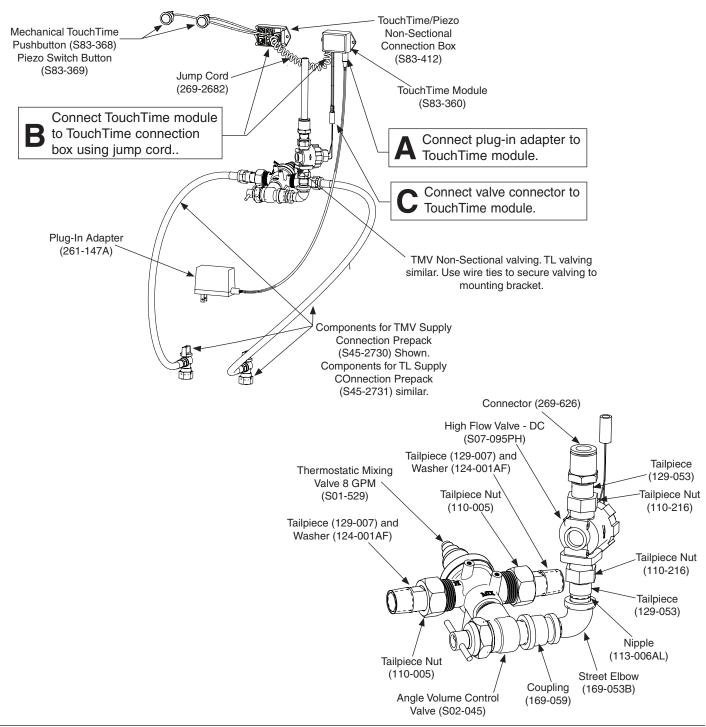
## 3 Electrical and Supply Connections

AWARNING The TouchTime activation must be connected with a 12V DC plug in adapter. Connections to 110 VAC can cause personal injury and will result in damage to the electronics.



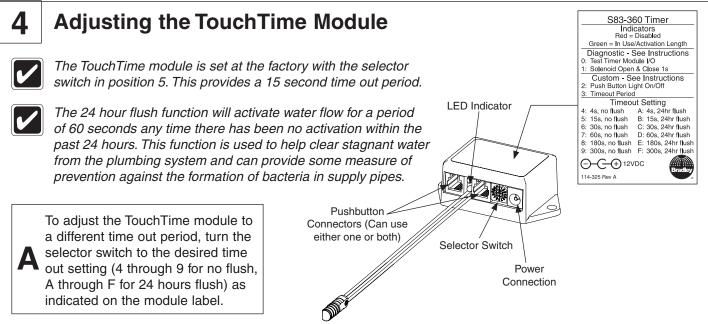
Mechanical pushbutton shown, piezo switch similar.

Activation of the push button takes place only when it is released, thereby preventing "hold open" activation.



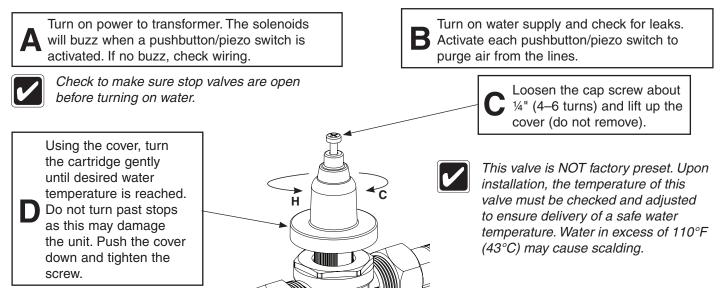


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## Turn on Water and Electricity, Test and Adjust Unit





#### TouchTime® Activation Modules - Non-Sectional Semi-Circular Washfountains TDB3103, WF3203, TDB3104, WF3204

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#### **TouchTime Module Components**

Wires not shown for clarity
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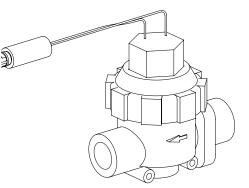
Item	Qty.	Part No.	Description
1	1	219-051	Shell Assembly - TouchTime
2**	2	S83-369	Piezo Switch
2*	2	S83-368	Mechanical Pushbutton
3	1	S04-083	Module Cover Assembly
4	1	124-067	Gasket - Cover
5	2	110-258	Nut, M22 x 1 Hex
6	1	144-066	Module Sleeve

\*Pushbutton TouchTime Module (S83-341-DC) uses pushbutton S83-368. \*\* Piezo Switch TouchTime Module (S83-384-DC) uses pushbutton S83-369.

## Troubleshooting – Solenoid Valve: Part nos. S07-095



Turn off water supplies to the unit before troubleshooting.



Problem	Cause	Solution	
An individual operating station fails to shut off and drips.	Internal cartridge failure.	Replace S27-352B cartridge.	
An individual operating station fails to turn on.	A failed cartridge for the valve or loose electrical connection to the terminal.	<ul> <li>Test the station to determine the cause.</li> <li>1. Disconnect the wires from the cartridge of an adjacent valve. Disconnect the wires from the problem valve and reconnect to the adjacent valve.</li> <li>2. Turn on electrical and water supplies to the unit. Activate the pushbutton/piezo switch on the problem station, and the adjacent station should turn on.</li> <li>If the adjacent station turns on and cycles normally, replace the cartridge on the problem valve.</li> <li>If the adjacent valve fails to turn on, inspect the wires from the pushbutton/piezo switch assembly and do the following: <ul> <li>make sure there are no breaks and that the fully insulated disconnect terminals are firmly crimped in place;</li> <li>turn off the electrical and water supplies;</li> <li>reconnect to the adjacent valve and turn on the water supplies to the unit;</li> </ul> </li> </ul>	
		<ul> <li>If the adjacent station turns on and cycles normally, replace the cartridge on the problem valve.</li> <li>If the adjacent valve fails to turn on, inspect the wires from the pushbutton/piezo switch assembly a do the following: <ul> <li>make sure there are no breaks and that the fully insulated disconnect terminals are firmly crimped in place;</li> </ul> </li> </ul>	



## **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 crossconnections 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	Hot water supply is not 10° above desired set point.	Increase hot water supply temperature
temperature fluctuation.	Valve temperature is not properly set.	Adjust the temperature as previously shown in this installation manual.
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 Navigator 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 desired, use silicone grease only. Do not use grease on check valves.

## **Parts List**

