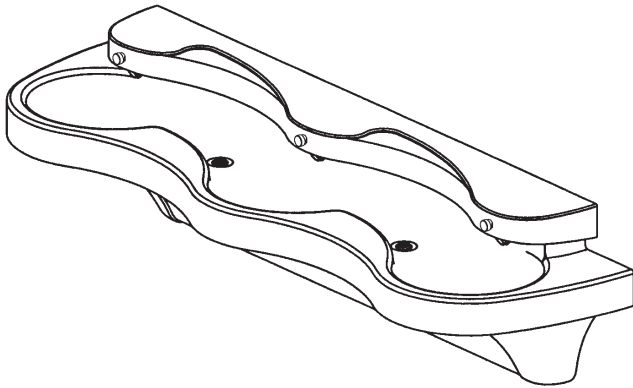


# Installation

## MG-3 TouchTime®

**Express® Lavatory System - MG Series  
with TouchTime Metering**



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## WARNING

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.

Turn OFF electrical power to the electrical outlets, then unplug all electrical units prior to installation. Electrical power **MUST** remain off until installation is complete. After installation is complete, turn on the water supply first, then turn on the electrical power.

Hardware supplied by installer must be appropriate for wall construction. Wall anchors must have a minimum pull-out rating of 1,000 lbs. Follow appropriate dimensions for standard or juvenile height based on configuration and required rim height. Overtightening fasteners can damage the Terreon® material. Use caution when tightening bowl and sprayhead fasteners.

## IMPORTANT

Read this entire installation manual to ensure proper installation. For optional soap dispenser, refer to installation instructions for Express Lavatory System MG-Series document 215-1585. When finished with the installation, file this manual with the owner or maintenance department. Compliance and conformity to local codes and ordinances is the responsibility of the installer. Product warranties may be found under "Products" on our Web site at [www.bradleycorp.com](http://www.bradleycorp.com).

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.

## Pre-Installation Information

### Barrier-free and ADA compliant - standard height mounting

The MG-3 TouchTime® Express® Lavatory System must have a rim height no higher than 34" above finished floor to be compliant with Americans with Disabilities Act (ADA). When mounted at 34" rim height, the MG-3 TouchTime Express Lavatory System meets ADA, ANSI and UFAS requirements for barrier-free clearances, reaches and controls. Always check local codes and ordinances for compliance.

### Barrier-free and ADA compliant - juvenile height mounting

The MG-3 TouchTime Express Lavatory System must have a rim height no higher than 30" above finished floor to be compliant with Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities: Building Elements Designed for Children's Use; Final Rule.

### Texas Accessibility Standards compliant

The MG-3 TouchTime Express Lavatory System meets Texas Accessibility standards (TAS) for barrier-free clearances, reaches and controls. Always check local codes and ordinances for compliance.

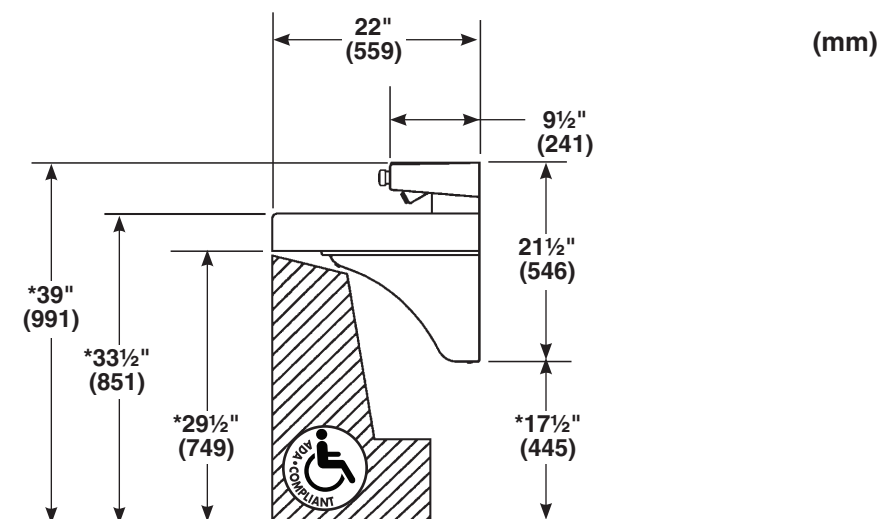
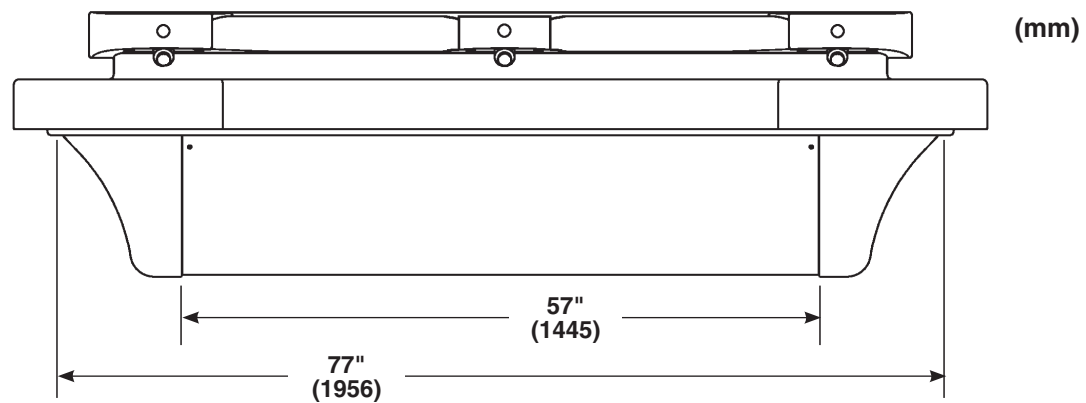
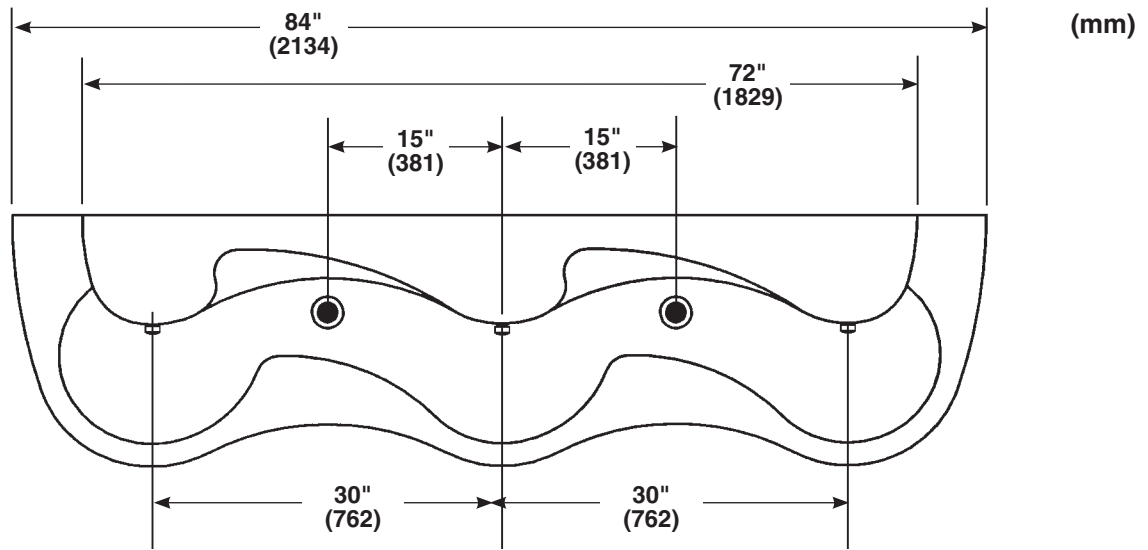
### TouchTime switch and solenoid

Each sprayhead is controlled by a TouchTime switch, enabling each user to activate a single flow of water. Each valve uses less than half the maximum of hot water allowed by the ANSI/ASHRAE/IESNA 90.1-1989 Standard.

## Supplies required for installation

- (8) 3/8" wall anchors, bolts and washers to mount frame and bowl to wall (minimum pull-out rating of 1,000 lbs.)
- 1/2" Nominal copper tubing for hot and cold supplies and 1-1/2" NPT drain piping
- 120V/220V 50/60Hz power source using Bradley supplied 120VAC/12V DC plug-in adapter

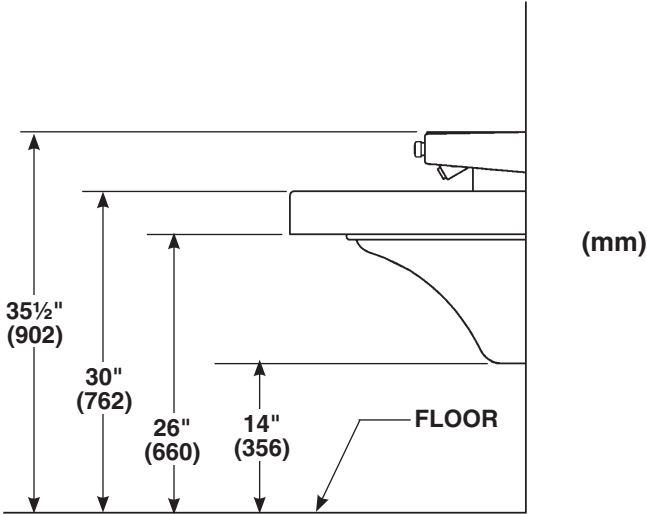
## MG-3 TouchTime Express® Lavatory System Dimensions



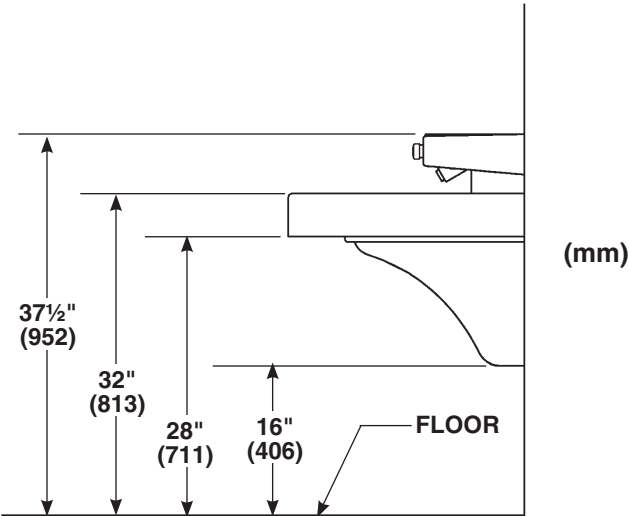
\*Subtract 4" from vertical dimensions for compliance with ADA guidelines for children's use.

Dimensions continued . . .

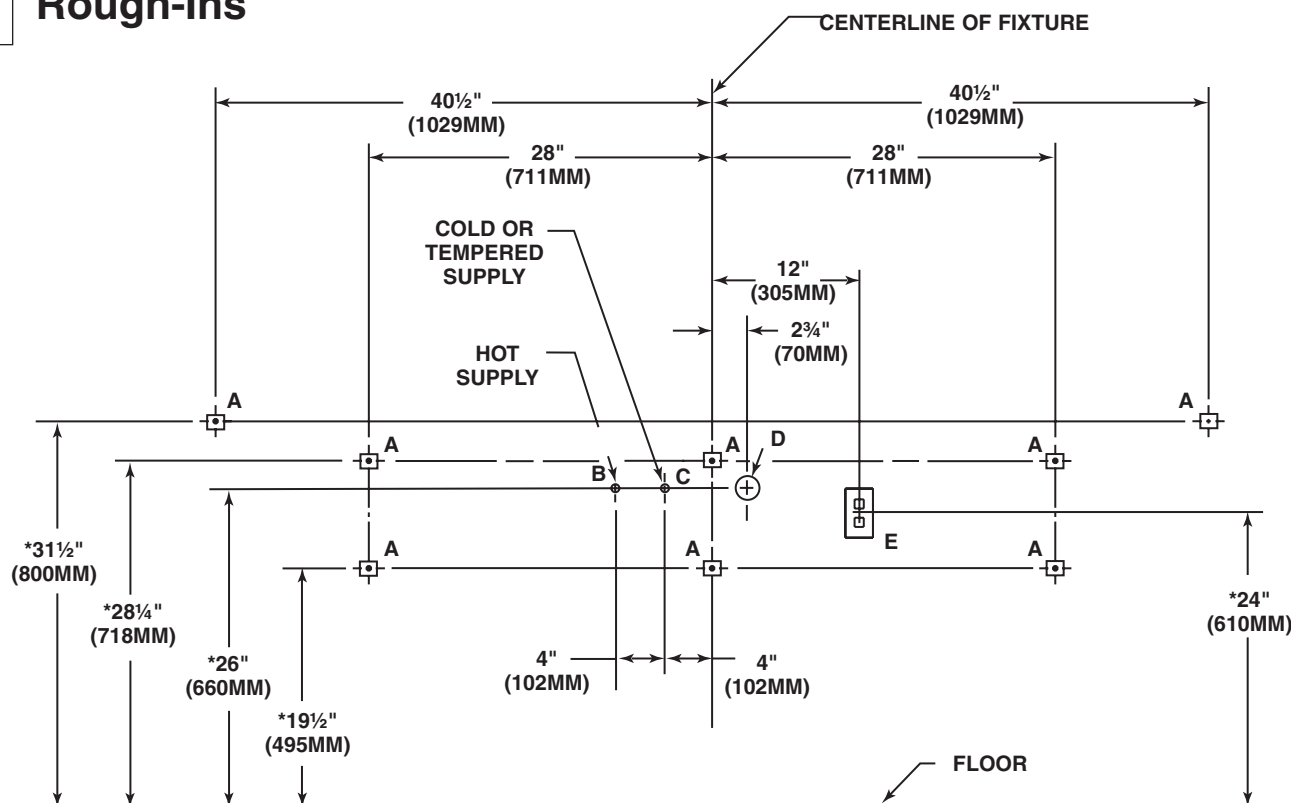
**TAS Juvenile Height**  
Grades Pre-K thru 5 or 6



**TAS Juvenile Height**  
Grades 6 thru 8 or 9



# 1 Rough-Ins



CODE	DESCRIPTION	QTY.
A	3/8" Wall Anchors with a minimum pull out force of 1,000 lbs.	8
B	1/2" Nominal Copper Tubing for Hot Supply, Stub-Out 2" from Wall	1
C	1/2" Nominal Copper Tubing for Cold or Tempered Supply, Stub-Out 2" from Wall	1
D	1 1/2" NPT Drain, Stub-Out 2" from Wall	1
E	110V GFCI Protected Electrical Outlet. I.R. and TouchTime Only	1
Rim Height	* Vertical Height Adjustments	Fixture Style
33 1/2"	None	Standard Height
32"	Subtract 1 1/2"	TAS, Grades 6 through 8 or 9
29 1/2"	Subtract 4"	Juvenile Height
30"	Subtract 3 1/2"	TAS, Pre-K through 5 or 6

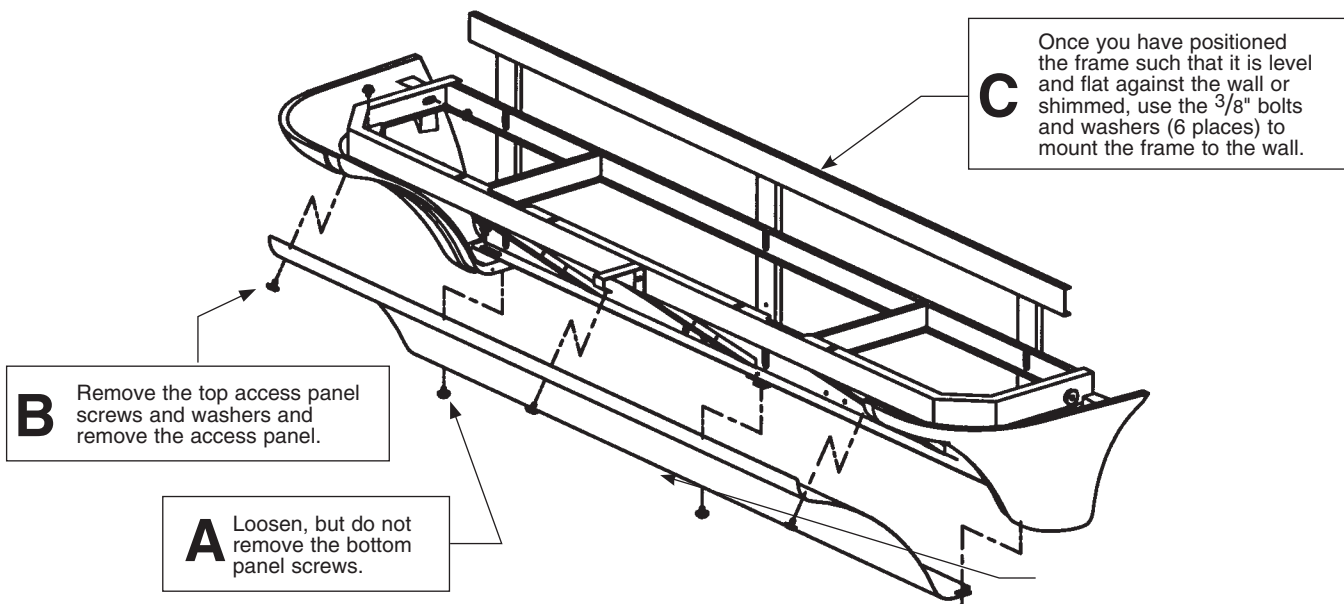


The Express® Lavatory System with TouchTime Metering (model MG-2 TouchTime) must have a rim height no higher than 34" above finished floor to be compliant with Americans with Disabilities Act (ADA). When mounted at 33 1/2" rim height, the MG-2 TouchTime Express® meets ADA, ANSI and UFAS requirements for barrier-free clearances, reaches and controls. Always check local codes and ordinances for compliance.

## 2 Mount the Frame



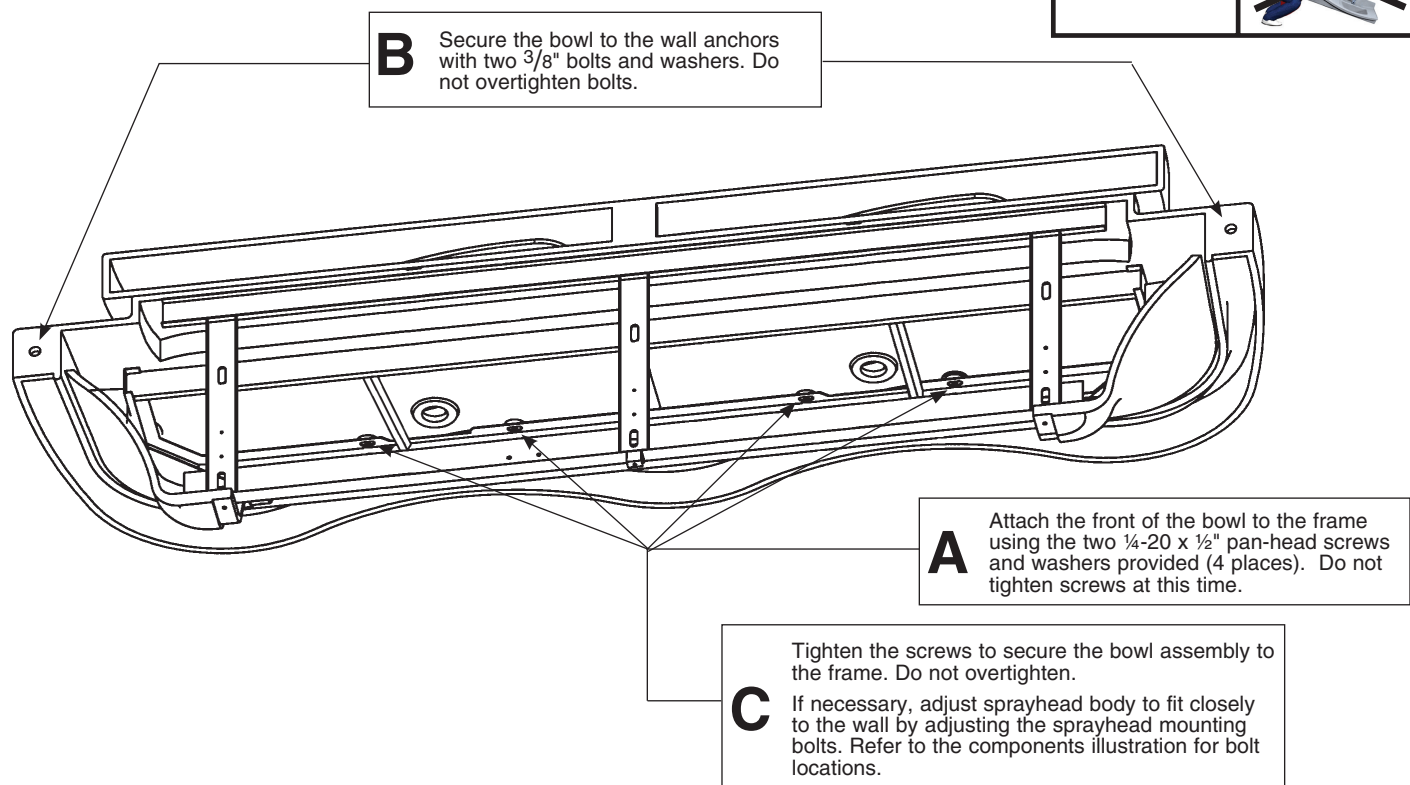
Anchoring the frame to a wall that is not flat may cause the frame to bend, making it difficult to reinstall the access panels. If necessary, use shims to compensate for wall distortion.



## 3 Install the Bowl



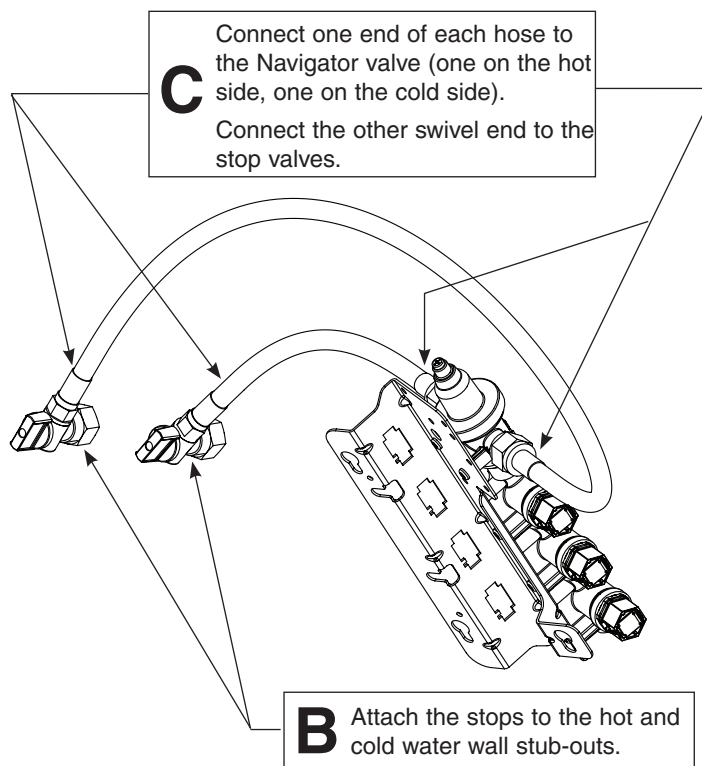
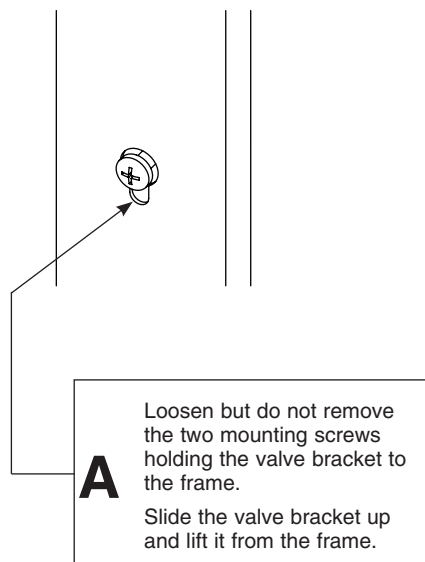
If the fixture has a soap option, refer to the soap system installation manual (215-1585) before installing the bowl assembly.



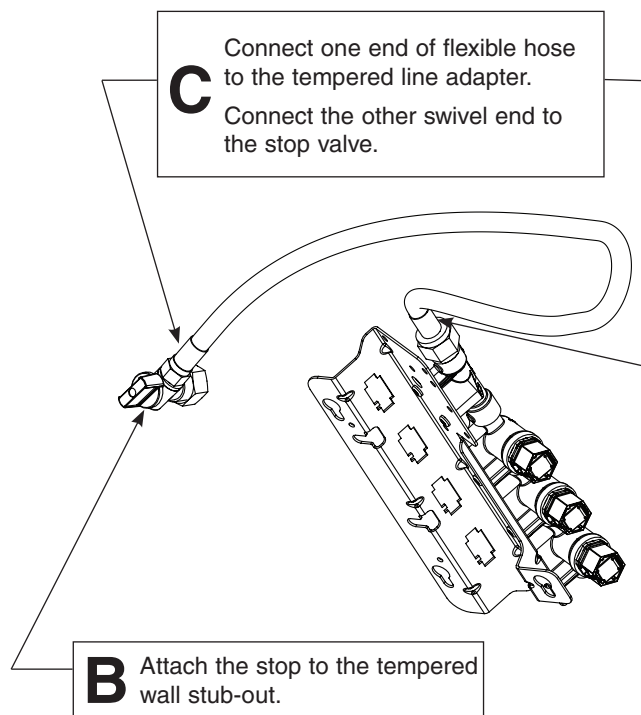
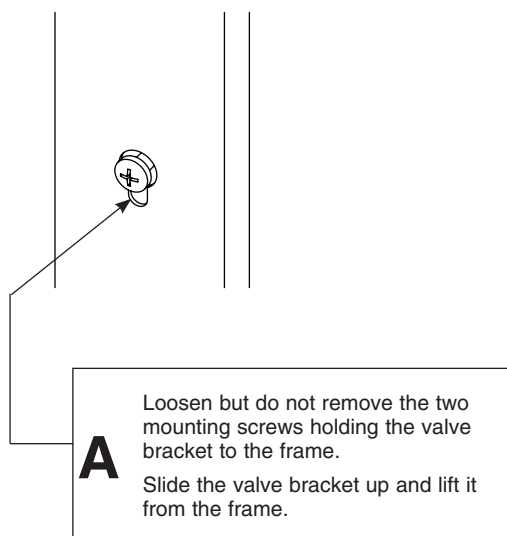
## 4a Connect the Supply - Hot and Cold Supply



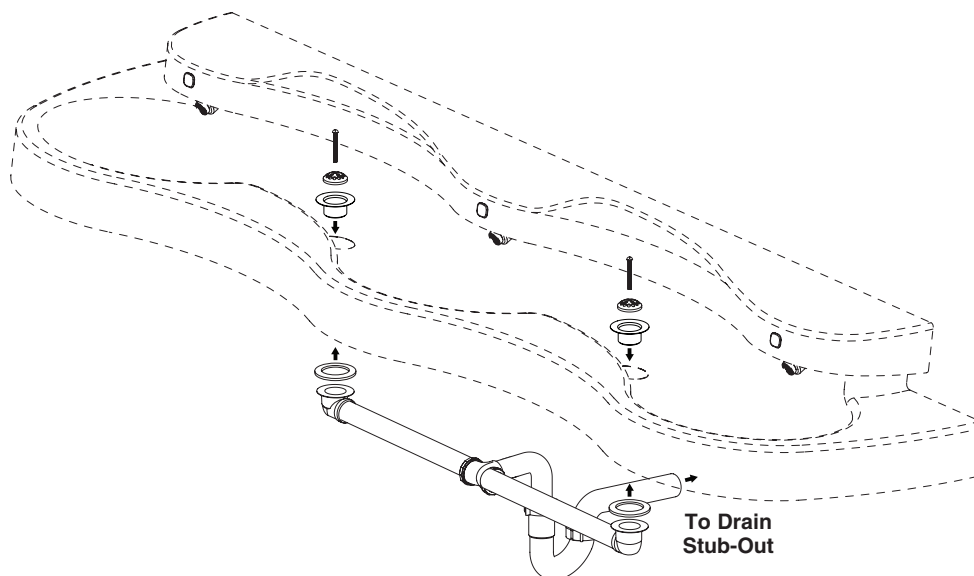
The letter "H" on the Navigator Mixing Valve indicates hot water supply inlet.



## 4b Connect the Supply - Single Tempered Supply

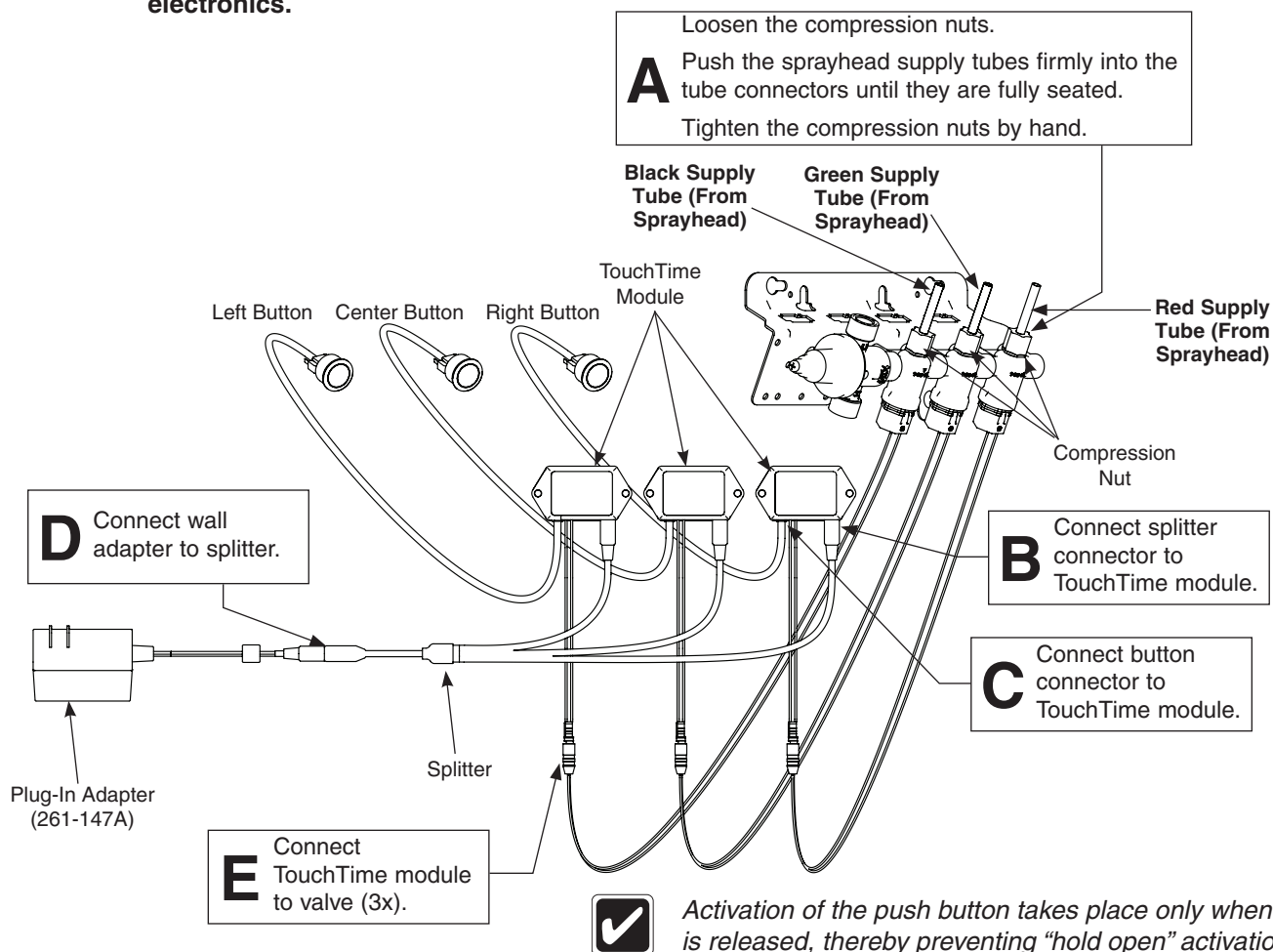


## 5 Install the Drains



## 6 Connect the Electrical and Tubing

**⚠ WARNING** The Express activation must be connected with the 120VAC/12V DC plug-in adapter provided. Not using the provided adapter can cause personal injury and will result in damage to the electronics.





## 7 Adjusting the TouchTime Module



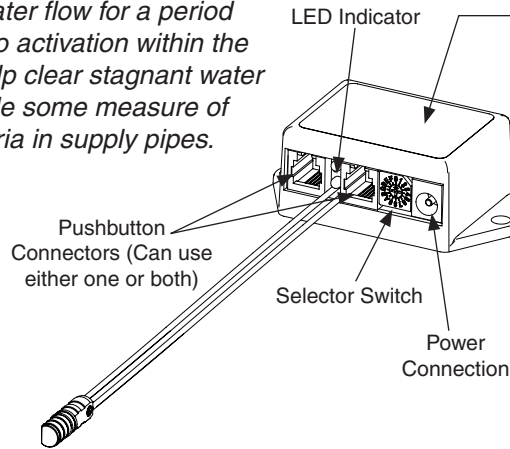
The TouchTime module is set at the factory with the selector switch in position 5. This provides a 11 second time out period.



The 24 hour flush function will activate water flow for a period of 60 seconds any time there has been no activation within the past 24 hours. This function is used to help clear stagnant water from the plumbing system and can provide some measure of prevention against the formation of bacteria in supply pipes.

**A**

To adjust the TouchTime module to a different time out period, turn the selector switch to the desired time out setting (4 through 9 for no flush, A through F for 24 hours flush) as indicated on the module label.

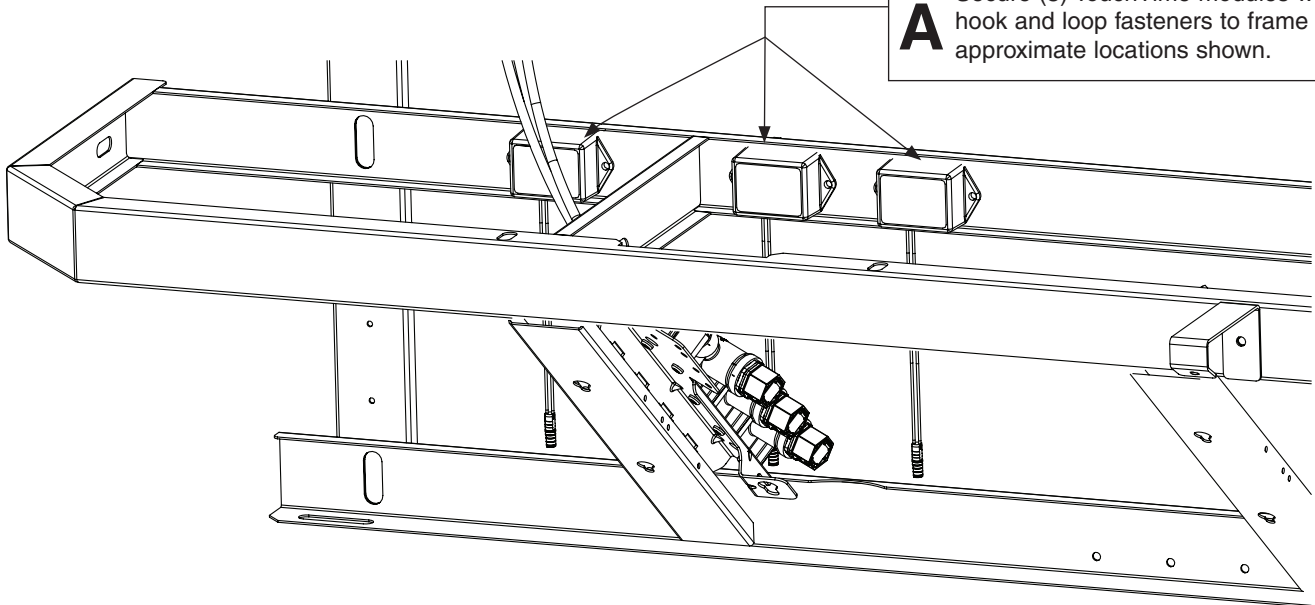


S83-360 Timer	
Indicators	
Red = Disabled	
Green = In Use/Activation Length	
Diagnostic - See Instructions	
0: Test Timer Module I/O	
1: Solenoid Open	
Custom - See Instructions	
2: Push Button Light On/Off	
3: Timeout Period	
Timeout Setting	
4: 4s, no flush	A: 4s, 24hr flush
5: 11s, no flush	B: 11s, 24hr flush
6: 15s, no flush	C: 15s, 24hr flush
7: 30s, no flush	D: 30s, 24hr flush
8: 60s, no flush	E: 60s, 24hr flush
9: 180s, no flush	F: 180s, 24hr flush
12VDC	
114-325 Rev B	

## 8 Mount TouchTime Modules

**A**

Secure (3) TouchTime modules with hook and loop fasteners to frame in approximate locations shown.



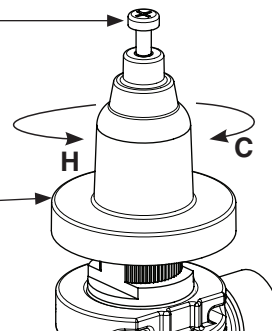
## 9 Adjust the Temperature



*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.*

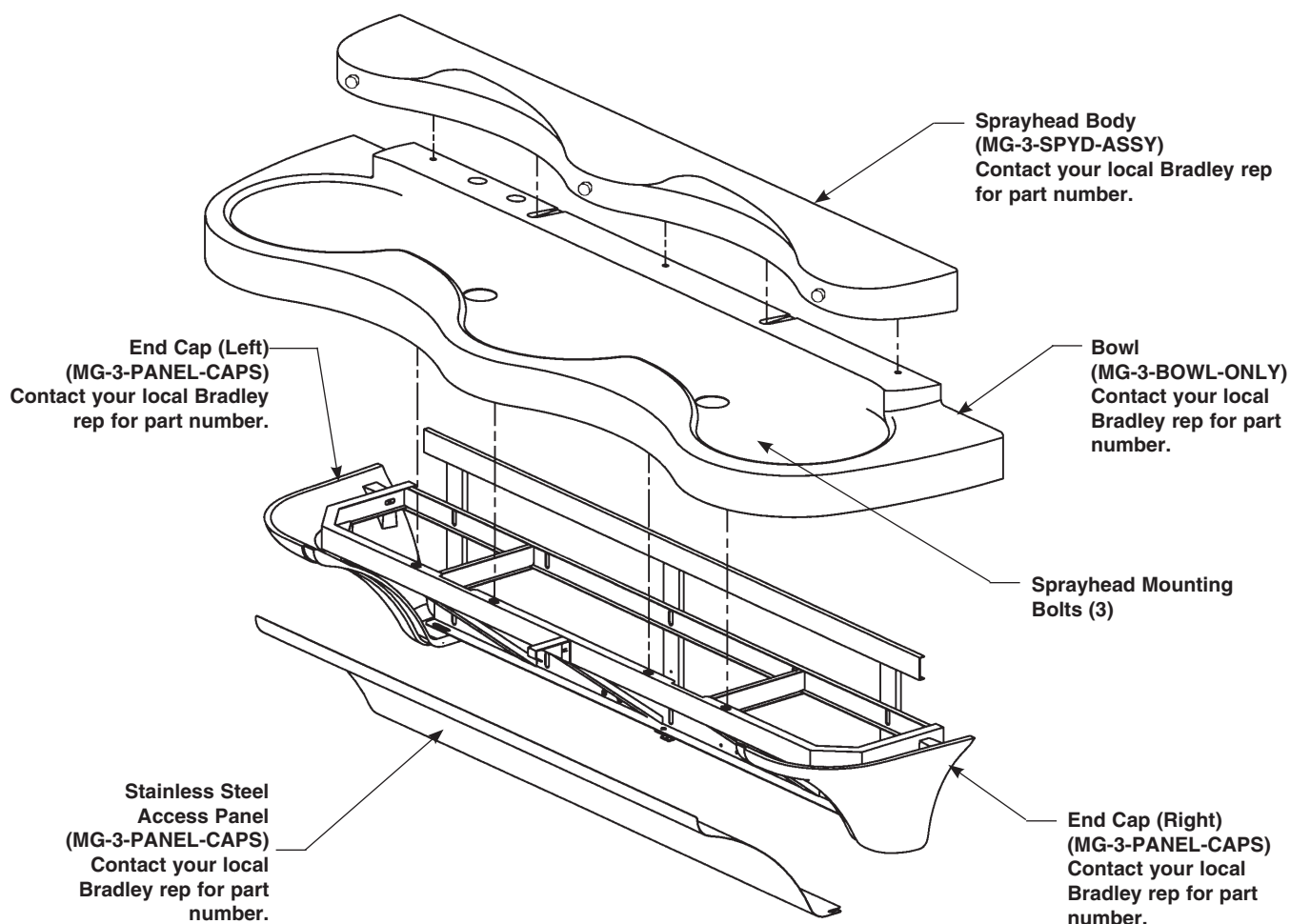
**A** Loosen Cap Screw about ¼" (4-6 turns) and lift up cover (do not remove).

**B** 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.

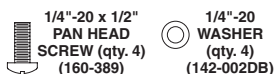


**C** Reinstall the valve bracket. Turn on the water supply and check for leaks. Turn on the electrical power, trigger the TouchTime push button of each station until all air is purged from the lines and water is flowing smoothly. Reinstall the access panel.

## Components

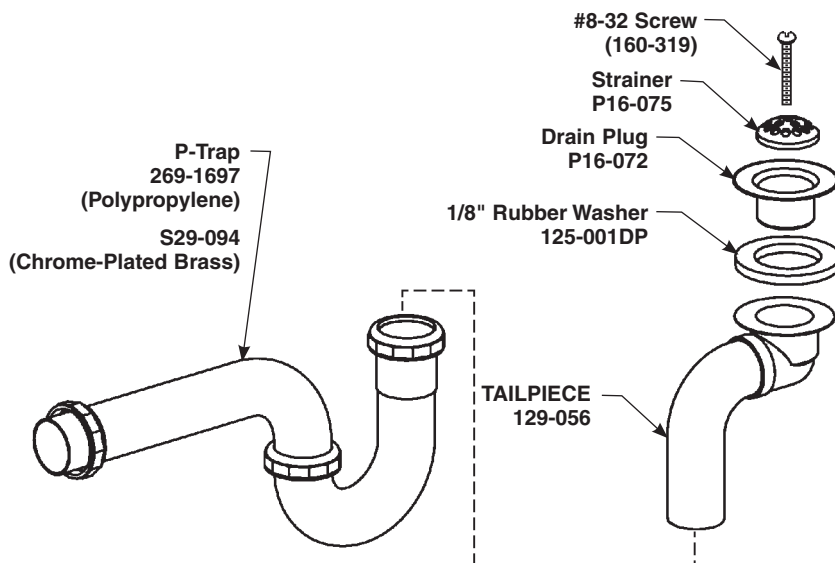


### BOWL MOUNTING HARDWARE

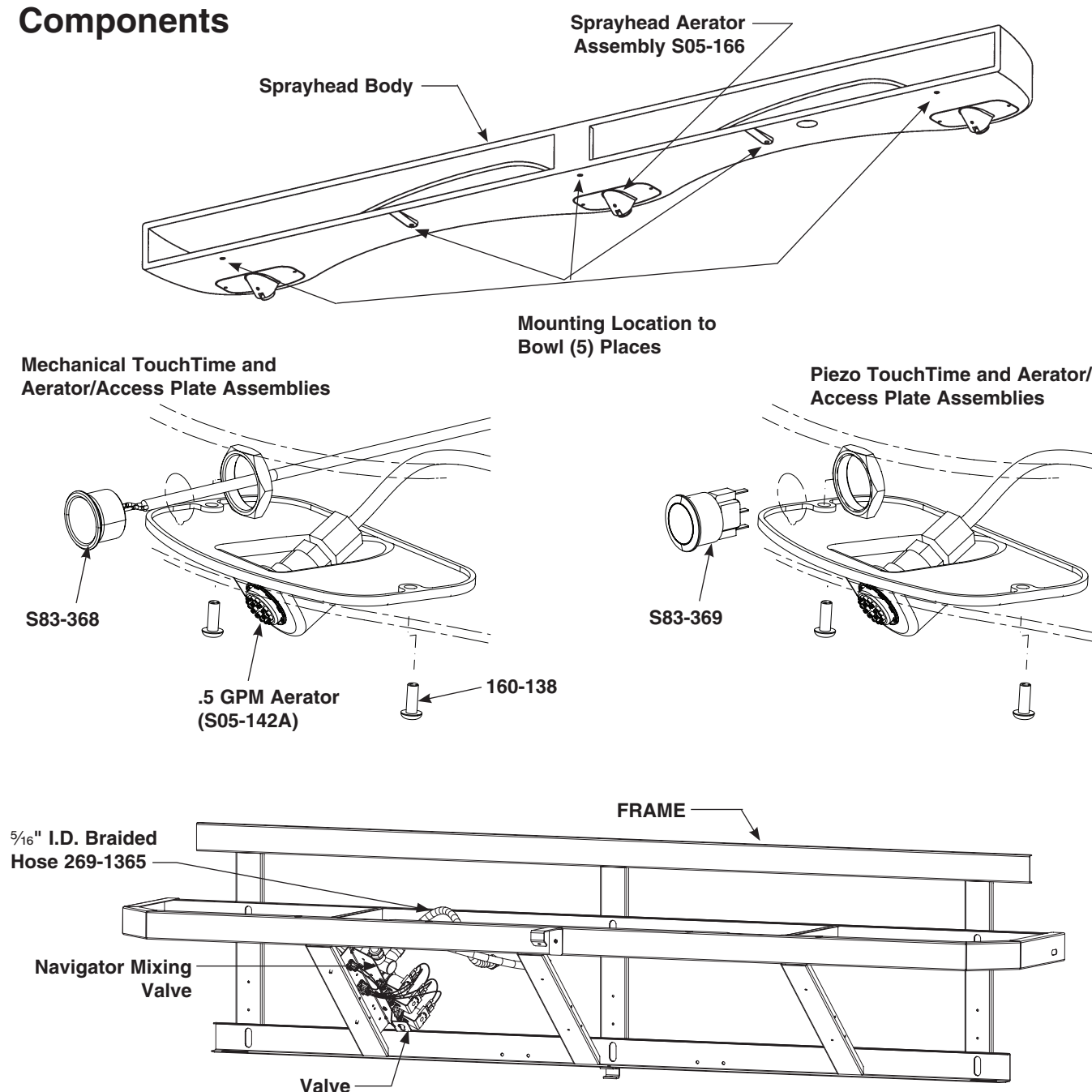


**Power Adapter (261-147A)**

### DRAIN ASSEMBLY



## Components



## TouchTime Pushbutton/Piezo Switch Assembly and Valve Access

To access valve:

1. Using a 5/32" Allen socket wrench, loosen, but do not remove the bottom access panel screws.
2. Remove the top three access panel screws and washers securing the panel to the frame.
3. Remove the access panel. Valve is located on left side of frame.

To remove sprayhead:

1. Remove (5) bolts located underside of bowl neck.
2. Carefully remove sprayhead from bowl.

To access sprayhead/aerators and pushbutton/piezo switch assembly:

1. Remove (2) screws and washers from the access plate assembly using a 1/8" Allen socket wrench. The access plate assembly is located underneath the sprayhead at two places. The assembly will drop down to access the pushbutton/piezo switch, aerator and tube connector.

## 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® and a green Scotch-Brite® 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® 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](http://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® 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.

## Troubleshooting – Stop Valve

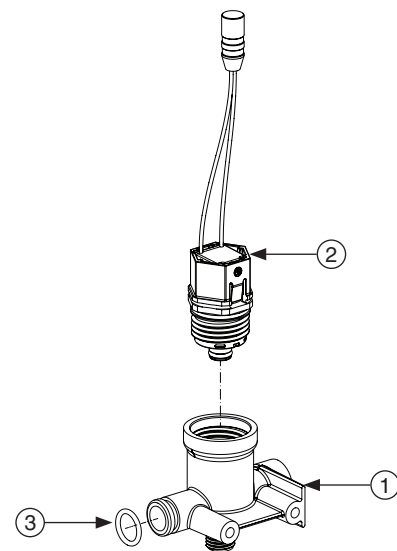
Problem	Cause	Solution
Water just dribbles or does not flow from sprayhead	Water supply malfunctioning	<ol style="list-style-type: none"> <li>1. Close the stops and check the valves that supply water to the lavatory system.</li> <li>2. Inspect the stop valves for proper installation.</li> </ol>
Water sprayhead delivers all hot or cold water	Water supply or mixing valve malfunctioning	<ol style="list-style-type: none"> <li>1. Close the stops and check the valves that supply water to the lavatory system.</li> <li>2. Inspect the stop valves for proper installation.</li> <li>3. Inspect mixing valve for proper hot and cold installation. A red marking indicates the hot inlet.</li> </ol>

## Troubleshooting – Solenoid Valve: Part nos. S07-067-DC (closed body) & S07-067A-DC (thru body)



Turn off water supplies to the unit before troubleshooting.

Item	Qty.	Part No.	Description
1	1	118-334	Valve Body, ¼" Closed
1	1	118-334A	Valve Body, ¼" Thru
2	1	S27-352	12VDC Valve Cartridge
3	1	125-165	O-Ring, #2-013



Problem	Cause	Solution
An individual operating station fails to shut off and drips.	Internal cartridge failure.	Replace S27-352 cartridge.
An individual operating station fails to turn on.	A failed cartridge 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"> <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> </ol> <p>If the adjacent station turns on and cycles normally, replace the cartridge on the problem valve.</p> <p>If the adjacent valve fails to turn on, inspect the wires from the pushbutton/piezo switch assembly and do the following:</p> <ul style="list-style-type: none"> <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> <li>• activate the pushbutton/piezo switch. If the station still fails to turn on, replace the pushbutton or piezo switch assembly.</li> </ul>

## Thermostatic Mixing Valve Troubleshooting

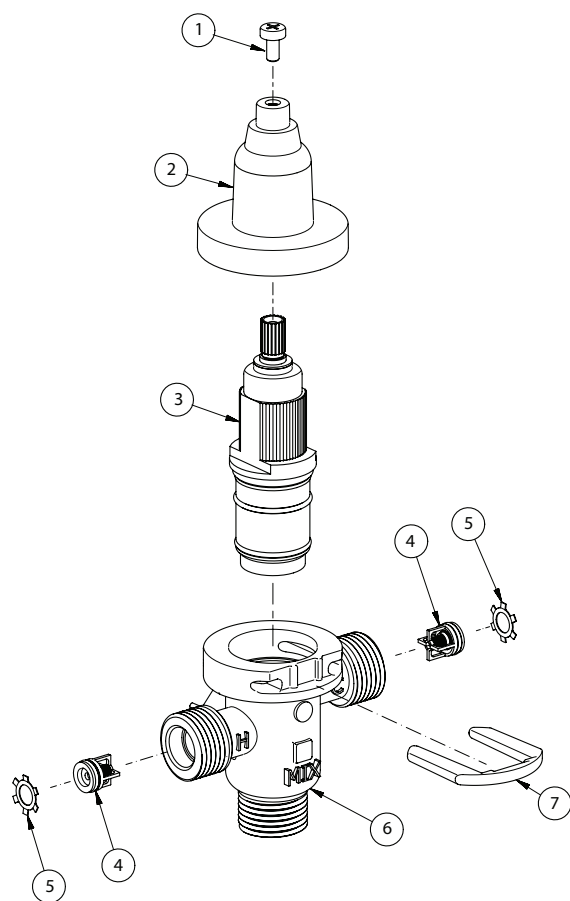
Before attempting to troubleshoot the valve or disassemble the components, check for the following conditions:

- 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 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 9, step 8.
Limited water flow.	Dirt and debris have built up in the valve or strainer.	<ol style="list-style-type: none"> <li>1. Check to make sure both hot and cold supplies are connected to the Navigator mixing valve and that they have water flow.</li> <li>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.</li> </ol>



### Parts List

Item	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)

