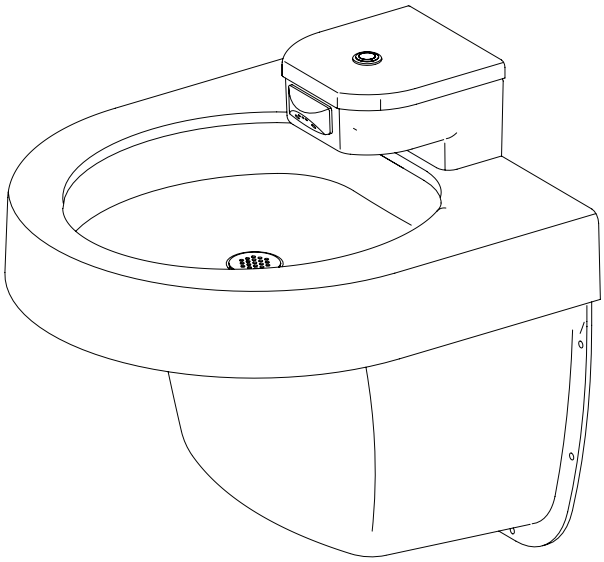
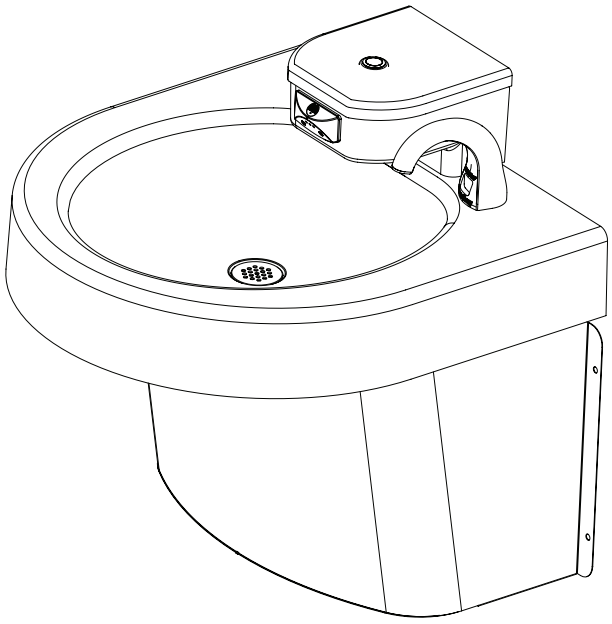
# Installation



SS-1N with TouchTime® activation,
shown with optional polymer access panel



SS-1N with TouchTime activation,
shown with optional stainless steel access
panel and soap dispenser model 6315

## SS-1N (bowl only)
## SS-1N Infrared
## SS-1N Battery Infrared
## SS-1N TouchTime®

**Express® Lavatory System SS-Series**

Express Lavatory Systems are ADA and TAS compliant

U.S. Pat. Nos. 5,611,093, 5,369,818, D398,969

Other Patents Pending

### Table of Contents




*215-1600 Rev. P: ECO 20-08-018*





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bradleycorp.com

## 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 lb. 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

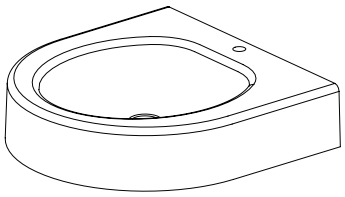
**Read this entire installation manual to ensure proper installation. When finished with the installation, file this manual with the owner or maintenance department. Compliance and conformity to local codes and ordinances is the responsibility of the installer. Product warranties may be found under "Products" on our Web site at www.bradleycorp.com.**

**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.**

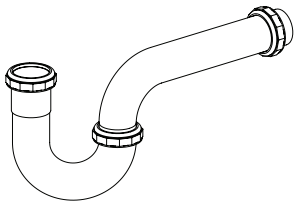
## Supplies Required

- 1/2" nominal copper tubing for hot and cold supplies
- 1-1/2" NPT drain piping
- 120V/220V 50/60 Hz power source using Bradley supplied 120VAC/12V DC plug-in adapter
- Six-volt lithium battery (for SS-1N Battery Infrared only)
- Six 1/4" wall anchors (used with optional surface-mounted bracket only) or in-wall carrier by others such as Josam model 17100-202 or equivalent
- Two #10 x 1-1/2" long screws and anchors (for SS-1N Battery Infrared with surface-mounted bracket only)
- OPTIONAL FOR STAINLESS STEEL OR HIGH IMPACT POLYMER ACCESS PANEL: #10 wall anchors, pan head fasteners and washers suitable for wall construction. (4) required for stainless steel access panel. (6) required for polymer access panel.

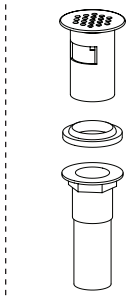
# SS-1N – Components



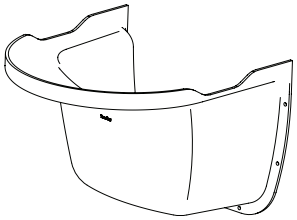
SS-1N Bowl (call your Bradley Representative for part number)



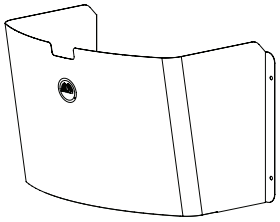
Standard PVC P-Trap (269-1697)
Optional Chrome-Plated Brass P-trap (S29-094)



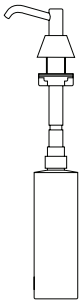

Strainer Assembly (269-1839-PC)



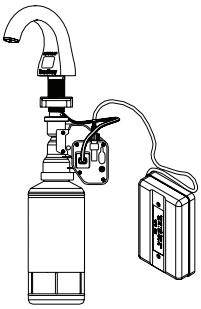
Polymer Access Panel
Coal (186-1874B)



Stainless Steel Access Panel (186-1864)



Soap Dispenser
(Model 6322)

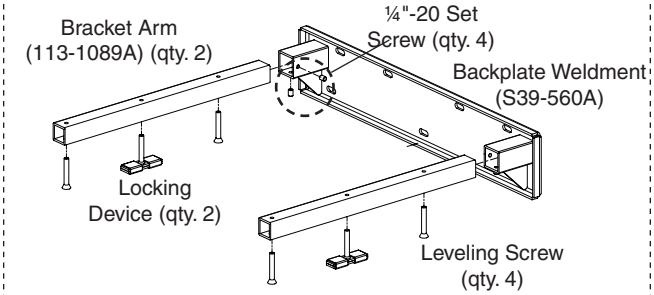


Battery Infrared Soap Dispenser (Model 6315)

27-oz. 1000-shot Refills
Case of 4 (P19-232B)

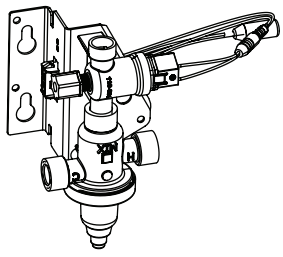
54-oz. 2000-shot Refills
Case of 4 (P19-232A)

Plug-In Adapter
(P19-231F)

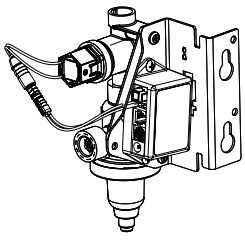



Surface-Mounted Bracket
(S45-1976)

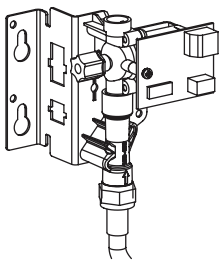
Prepack 269-1712
includes:
Leveling Screws (qty. 4)
Locking Device (qty. 2)



Navigator Mixing Valve for Infrared Activation
(S45-3693)



Navigator Mixing Valve for TouchTime Activation
(S08-2411TMA)

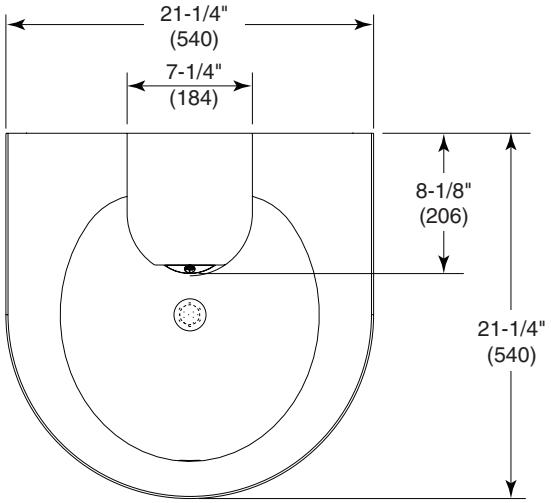


Tempered Line for BIR3 Activation
(S08-1431TL)

# SS-1N – Dimensions

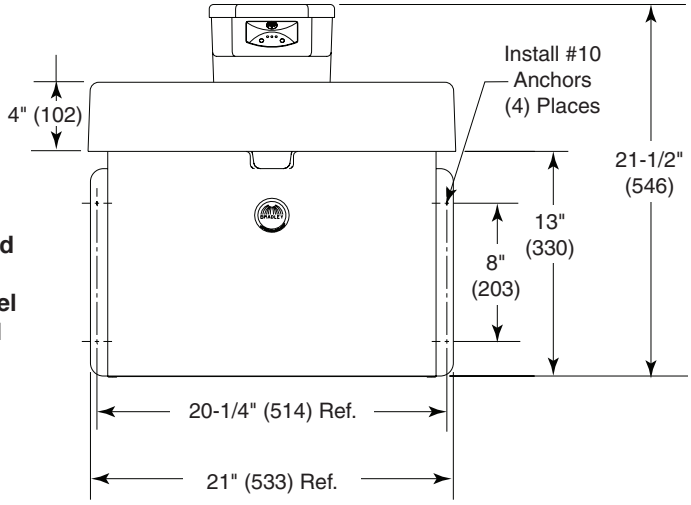
**(mm)**

**Top View**



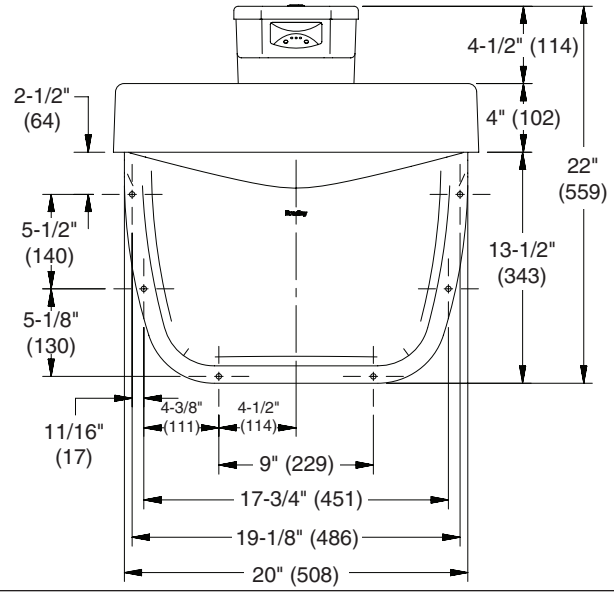

**Front View**

**SS-1N Infrared with Optional Stainless Steel Access Panel**




**Front View**

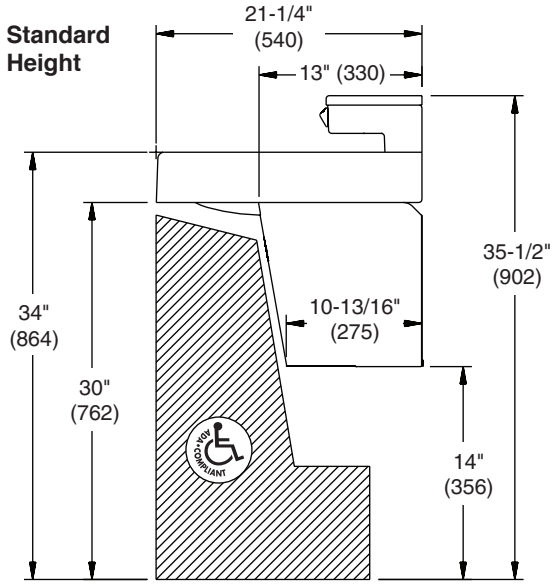
**SS-1N TouchTime with Optional Polymer Access Panel**

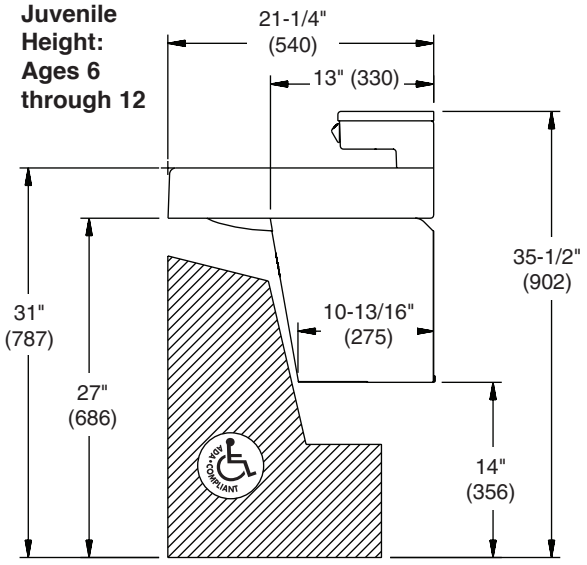


# SS-1N – Dimensions

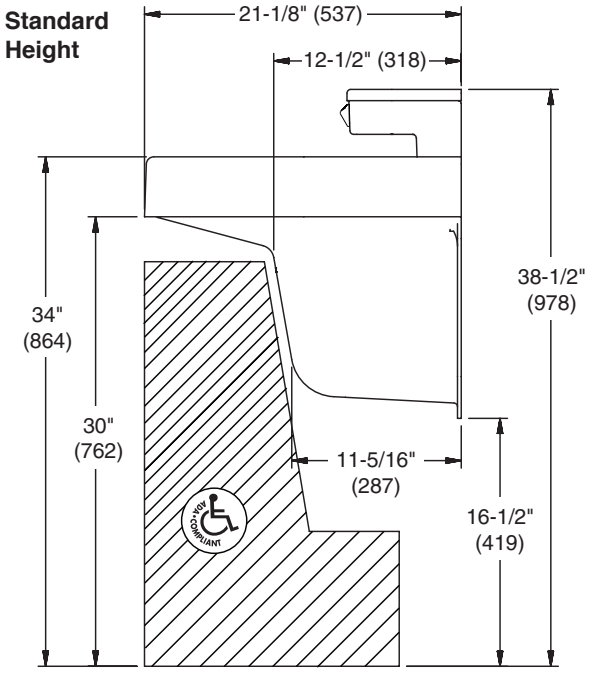
**(mm)**

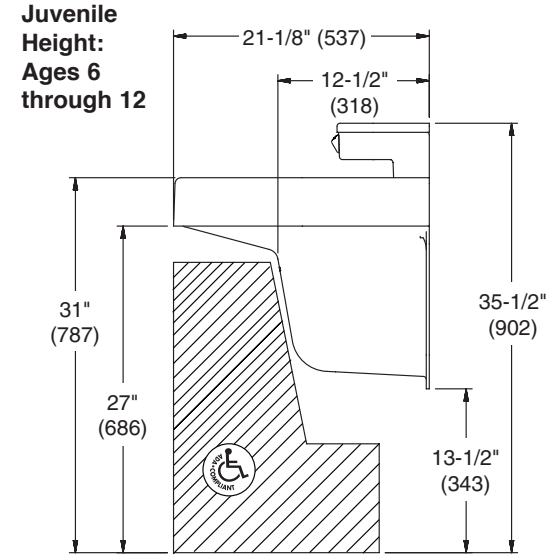
**Stainless Steel Access Panel**



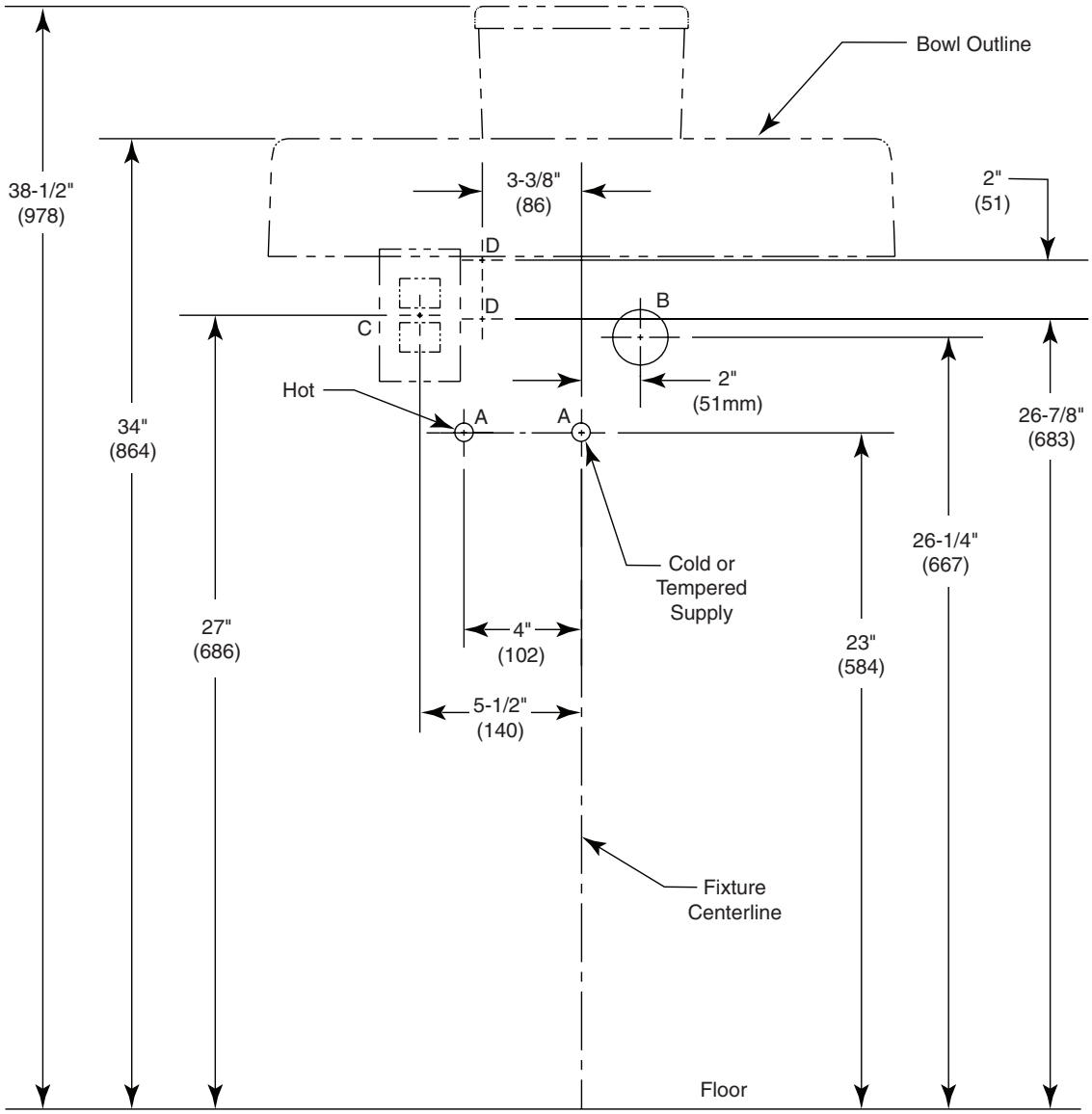

**High Impact Polymer Access Panel**



# 1 Rough-Ins

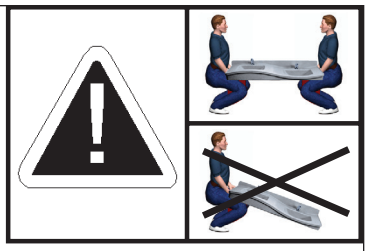
**(mm)**




| CODE | DESCRIPTION | QTY. |
|---|---|---|
| A | 3/8" Wall Anchors with a minimum pull-out force of 1,000 lb for Bowl | 2 |
| B | 3/8" Wall Anchors with a minimum pull-out force of 1,000 lb for Mainframe | 1 |
| C | 3/8" Wall Anchors for Base Frame, Standard Frame option only, minimum pull-out force not required | 1 |
| D | #10 Fasteners/Wall Anchors, Optional | 2 |

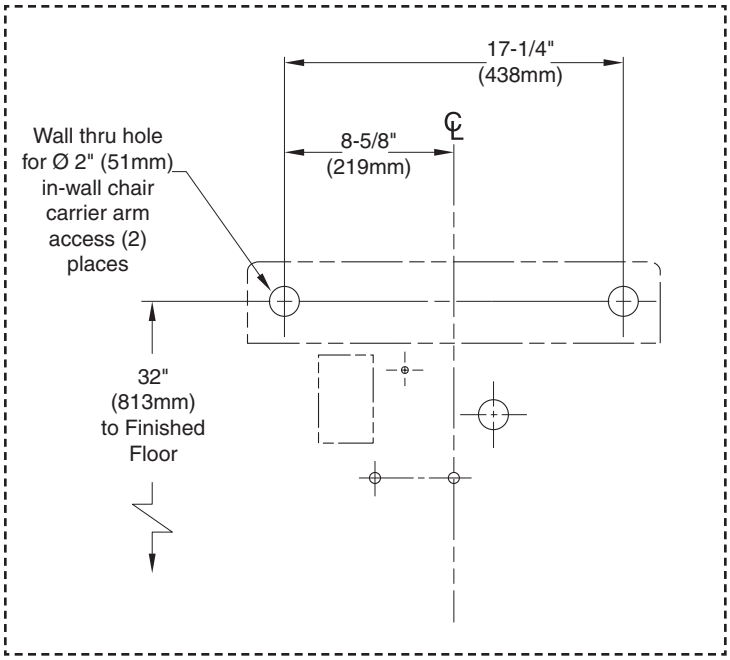
| RIM HEIGHT | VERTICAL HEIGHT ADJUSTMENTS FOR CODES A–E, H, C and W | FIXTURE STYLE |
|---|---|---|
| 34" | None | Standard Height |
| 34" | None | Wall-Hung |
| 32" | Subtract 2" | TAS, Grades 6 through 8 or 9 |
| 31" | Subtract 3" | Juvenile Height |
| 30" | Subtract 4" | TAS, Pre-K through Grades 5 or 6 |

# 2a Bowl Mounting with In-Wall Carrier

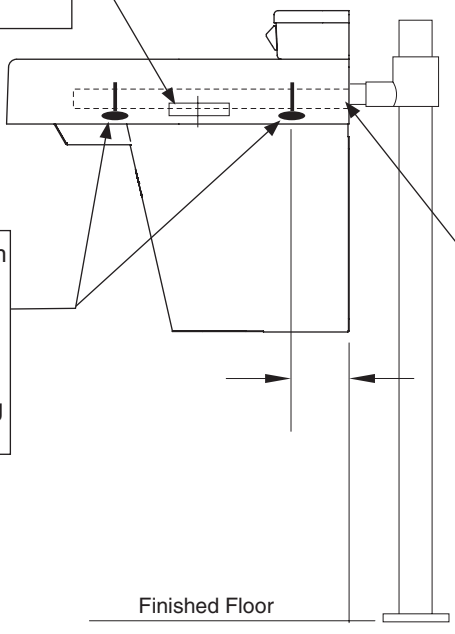


*Before beginning bowl mounting, install an in-wall carrier (supplied by installer) to the wall following the manufacturer's instructions (ex. Josam 17100-202 or equivalent).*

*For standard height carrier mounting, do not exceed the recommended 32" distance from the floor.*




**B** Secure the bowl to the in-wall carrier from beneath the bowl by tightening down the locking device on each in-wall carrier arm.



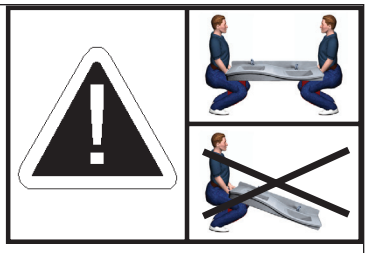

**C** Adjust the two leveling screws from beneath the bowl on each in-wall carrier arm to level the bowl, if necessary.

Refer to the in-wall carrier instructions for additional mounting information.

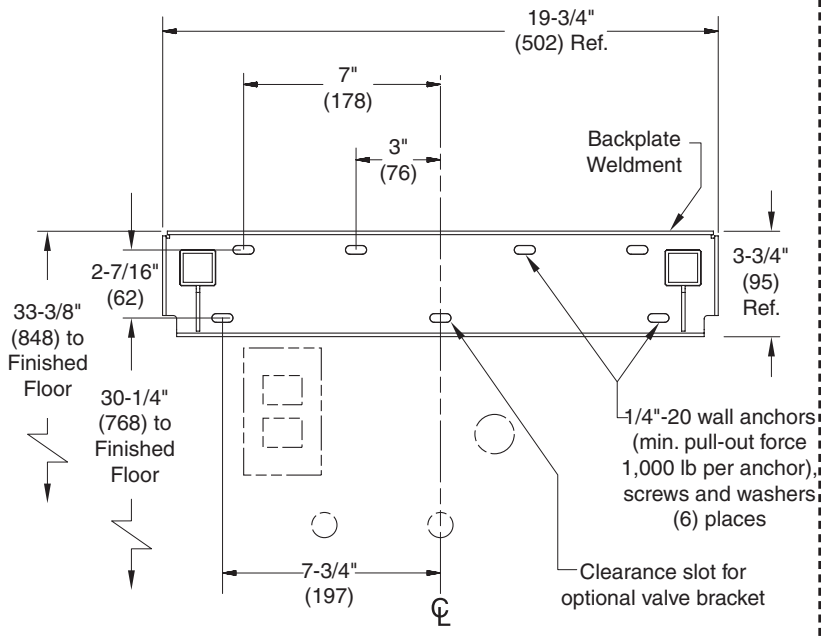
**A** Slide the bowl onto the in-wall carrier.

The bowl should be in far enough so that the holes in the underside of the bowl pads are aligned with the screws on the in-wall carrier arm (ref. 3¼" dim. from wall to leveling screw).

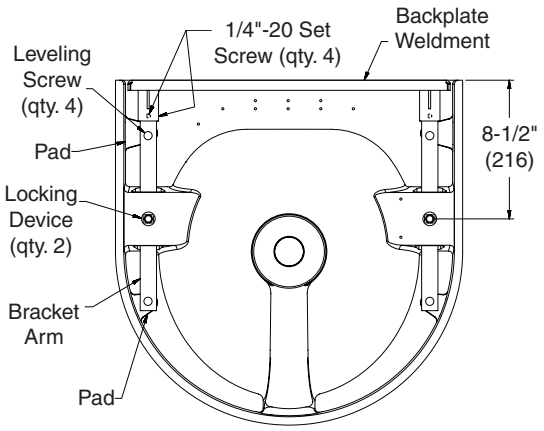
# 2b Bowl Mounting with Backplate Weldment



*Dimensions are symmetrical about centerline.* **(mm)**

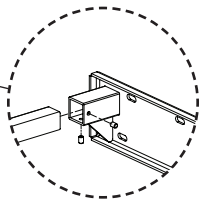


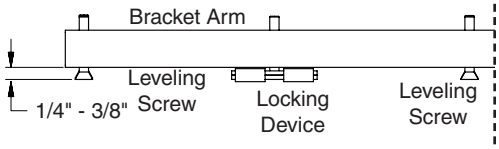

**View of Underside of Bowl** **(mm)**



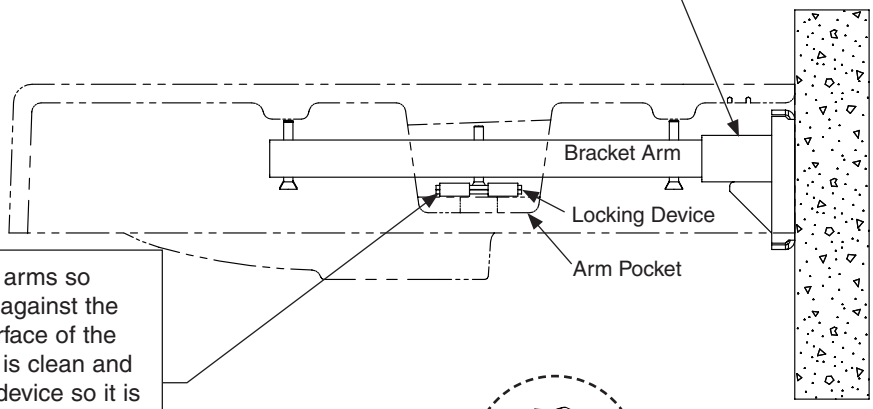

**A** Slide the bracket arms into the collars on the backplate weldment. The locking device on the bracket arm should be located 8-1/2" from the base of the backplate weldment.

Install four 1/4"-20 set screws into the backplate collar (two set screws per collar) and tighten the set screws.

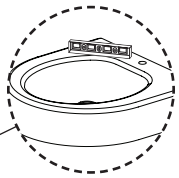





**B** Screw the locking device onto the bracket arm. The locking device should fit snug against the bracket arm. Attach the four leveling screws to the underside of the bracket arms (two per bracket arm) leaving approximately 1/4"– 3/8" unscrewed.



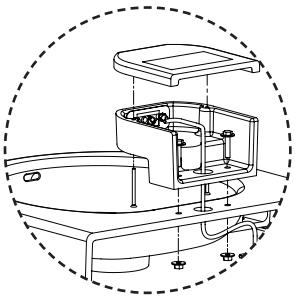

**C** Slide the bowl onto the bracket arms so the back of the bowl is tight up against the finished wall. Make sure the surface of the arm pocket in the Terreon bowl is clean and dust free. Unscrew the locking device so it is snug up against the arm pocket in the bowl. The locking device should be accessible from the access hole in the underside of the bowl.

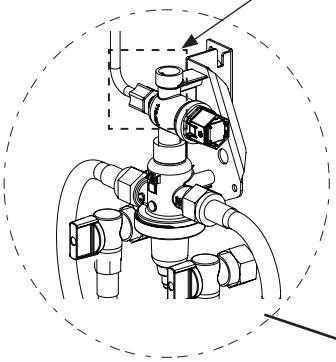


**D** Place a level onto the top side of the bowl and adjust the leveling screws until the bowl is level. Tighten the four leveling screws but do not overtighten. The leveling screws should come in contact with the pads underneath the bowl. Retighten the locking device.

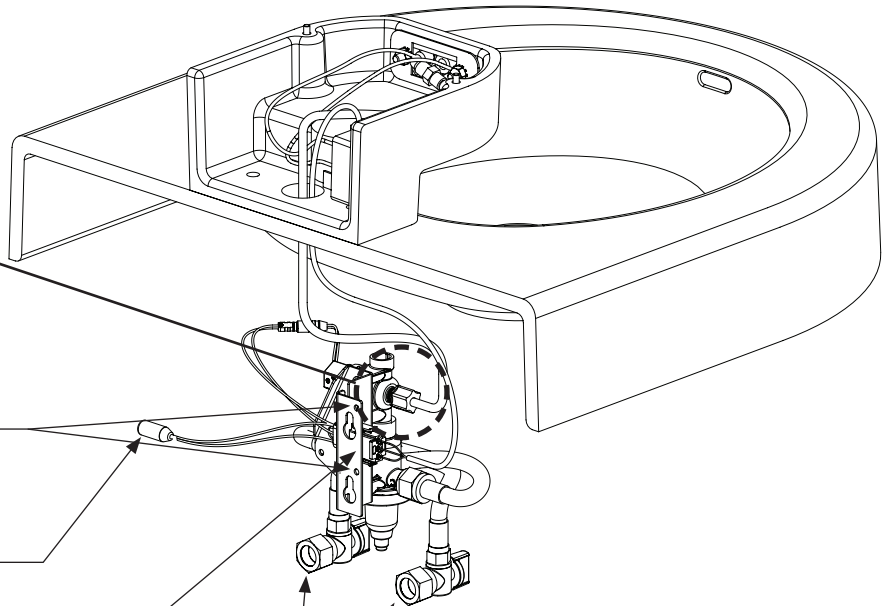
# 3a Electronic Valve Installation - Adaptive Infrared Activation

**⚠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.**





**C** Loosen the compression nut. Push the sprayhead supply tube firmly into the tube connector until it is fully seated. Retighten the compression nut (hand-tight and then two full turns with a wrench).

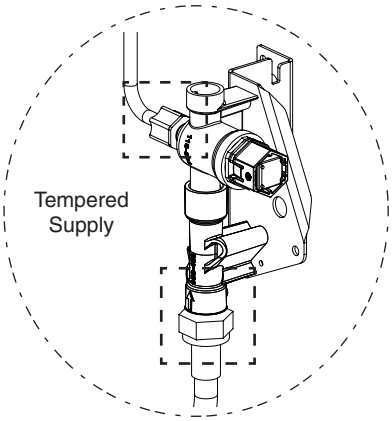


**F** Mount the valve bracket to the wall (using the two mounting holes on the bracket with two #10 screws and anchors provided by the installer.

**E** Connect power adapter to valve connector.

**D** Attach the connector from the sprayhead sensor to the valve connector.

**A** Attach the stops to the hot and cold water wall stub-outs.

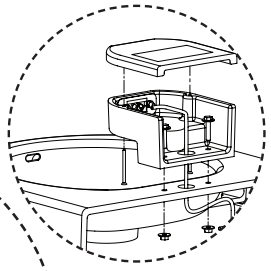


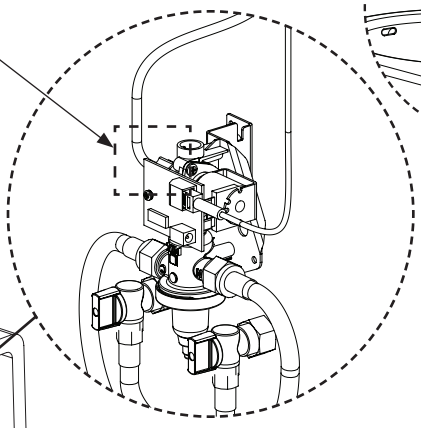

**B** Attach the swivel end of the flexible hoses to the stop valves. Attach the other end of the hoses to the mixing valve, one on the hot side and one on the cold side.

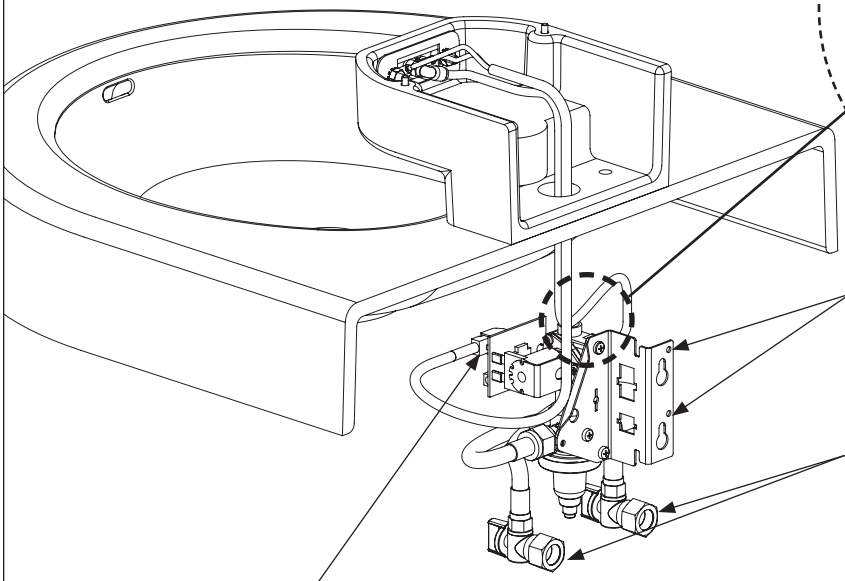
Tempered supply is similar but has only one stop valve and hose.

# 3b Electronic Valve Installation - Battery Infrared Activation

**E** Loosen the compression nut. Push the sprayhead supply tube firmly into the tube connector until it is fully seated. Retighten the compression nut (hand-tight and then two full turns with a wrench).





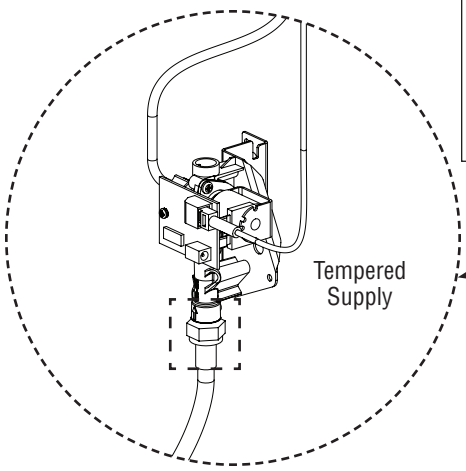


**F** Mount the valve bracket to the wall (using the two mounting holes on the bracket with two #10 screws and anchors provided by the installer.

**A** Attach the stops to the hot and cold water wall stub-outs.

**B** Attach the swivel end of the flexible hoses to the stop valves. Attach the other end of the hoses to the mixing valve, one on the hot side and one on the cold side.

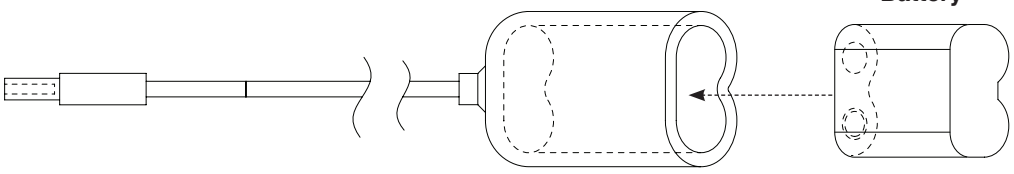
Tempered supply is similar but has only one stop valve and hose.




**C** Snap the sensor plug from the sprayhead into the valve's circuit board.

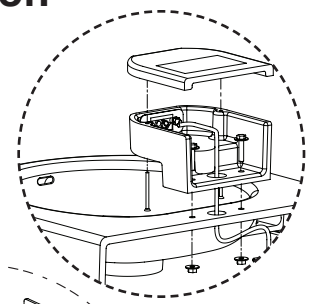
**D** Snap the battery cable plug into the female circuit board plug. Mount the battery holder in a convenient location using the hook-and-loop fastener provided.

**6-volt Lithium Battery**

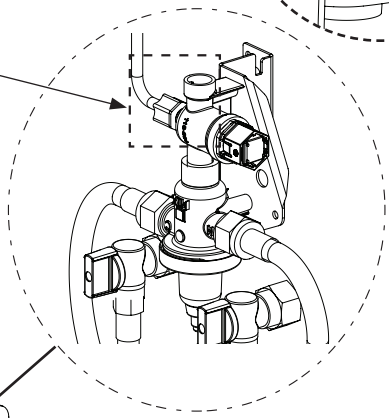


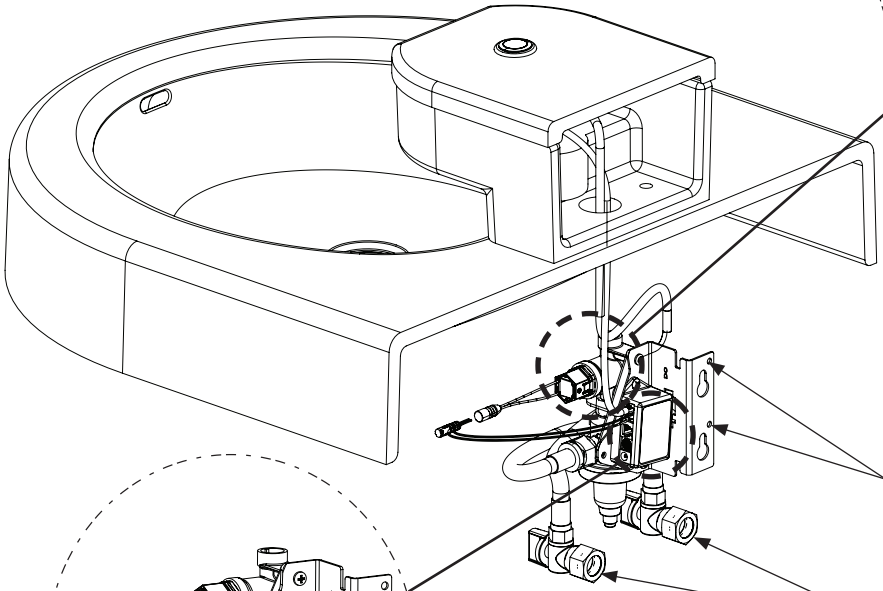
# 3c Electronic Valve Installation - TouchTime Activation

**⚠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.**

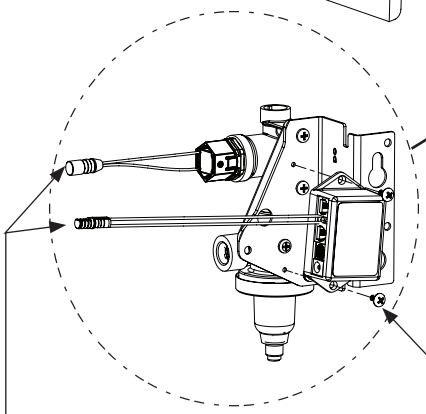


**E** Loosen the compression nut. Push the sprayhead supply tube firmly into the tube connector until it is fully seated. Retighten the compression nut (hand-tight and then two full turns with a wrench).





**F** Mount the valve bracket to the wall (using the two mounting holes on the bracket with two #10 screws and anchors provided by the installer.

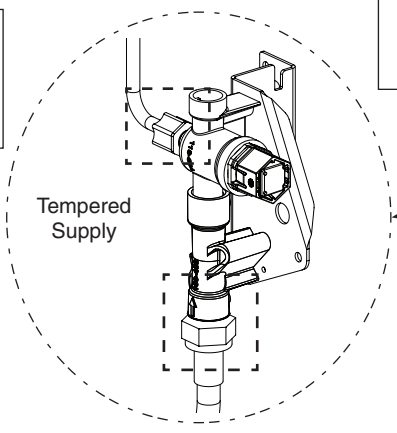


**C** Attach the stops to the hot and cold water wall stub-outs.

**D** Attach the swivel end of the flexible hoses to the stop valves. Attach the other end of the hoses to the mixing valve, one on the hot side and one on the cold side.

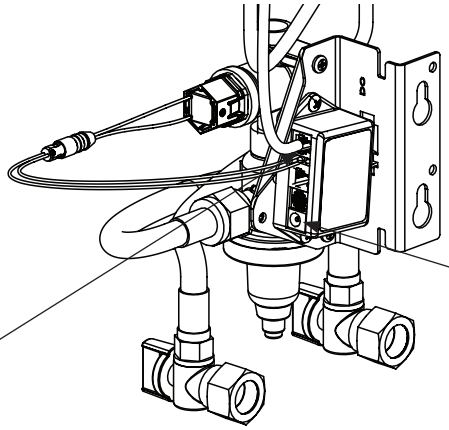
Tempered supply is similar but has only one stop valve and hose.

**A** Install TouchTime module (S83-360) to valve bracket using the 6-32 screws (160-496) supplied.



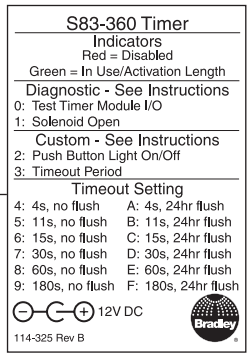

**B** Connect TouchTime module to solenoid connector.

# 3c Electronic Valve Installation - TouchTime Activation Continued...



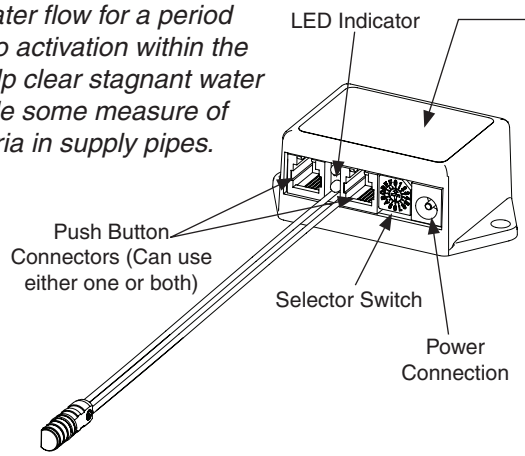
**B** Connect TouchTime push button connector to TouchTime module.

**A** Connect power adapter to TouchTime module.



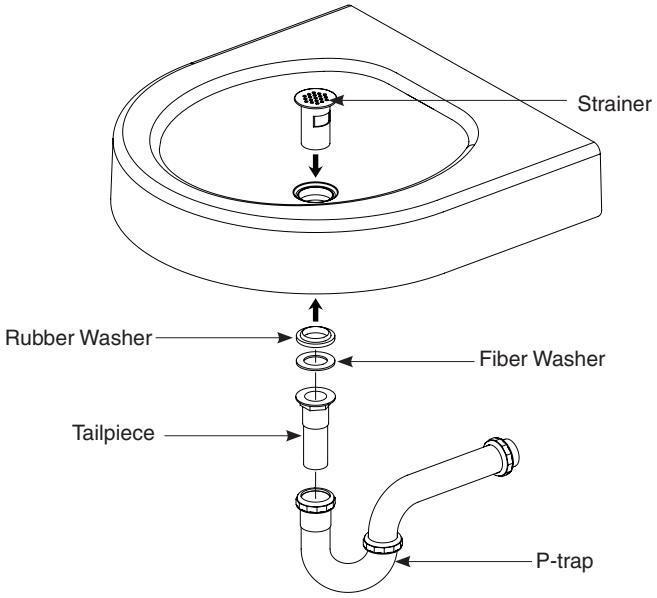

☑ *The TouchTime module is set at the factory with the selector switch in position 5. This provides a 11 second time out period.*

☑ *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.*




**C** 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 though F for 24 hours flush) as indicated on the module label.

# 4 Drain Assembly

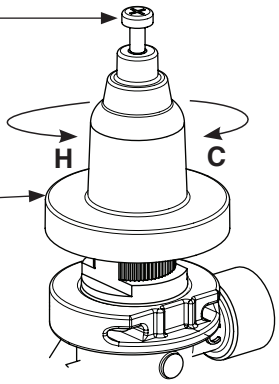


# 5 Adjust the Temperature

**⚠WARNING 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 1/4" (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**

Turn on the water supply and check for leaks.

SS-1N Adaptive Infrared: Turn on the electrical power and pass your hand in front of each station's sensor until all the air is purged from the lines and water is flowing smoothly.

SS-1N Battery Infrared: Pass your hand in front of each station's sensor until all the air is purged from the lines and water is flowing smoothly.

SS-1N TouchTime: Turn on the electrical power and trigger the TouchTime push button of each station until all air is purged from the lines and water is flowing smoothly.

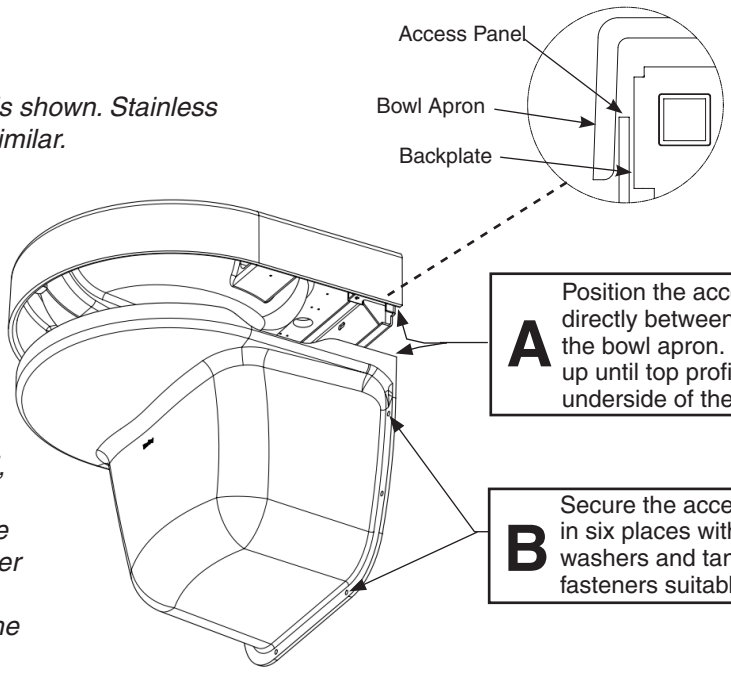
Reinstall the access panel.

☑ *For infrared activation, wait two full minutes after making the power connection before using the lav. The sensors will take up to eight full minutes (while not in use) to adapt to the bowl if another object is detected during the two-minute start-up period.*

☑ *For TouchTime, activation of the push button takes place only when it is released thereby preventing "hold open" activation. The timing is electronically controlled and set at 11 seconds.*

# 6 Access Panel

☑ *Polymer access panel is shown. Stainless Steel access panel is similar.*




**A** Position the access panel so it fits directly between the backplate and the bowl apron. Push access panel up until top profile bottoms out on the underside of the bowl.

**B** Secure the access panel to the wall in six places with #10 wall anchors, washers and tamper proof pan head fasteners suitable for wall construction.

☑ *If in-wall carrier is used, ensure access panel slides in-between inside of bowl apron and carrier arm. Access panel should bottom out on the underside of the bowl.*

# 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.

**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.

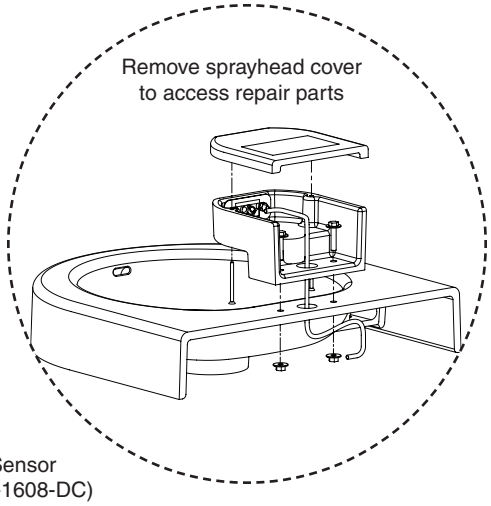
***NOTICE! Strongly acidic or caustic cleaners may attack the steel causing a reddish film to appear. The use of these cleaners should be avoided.***

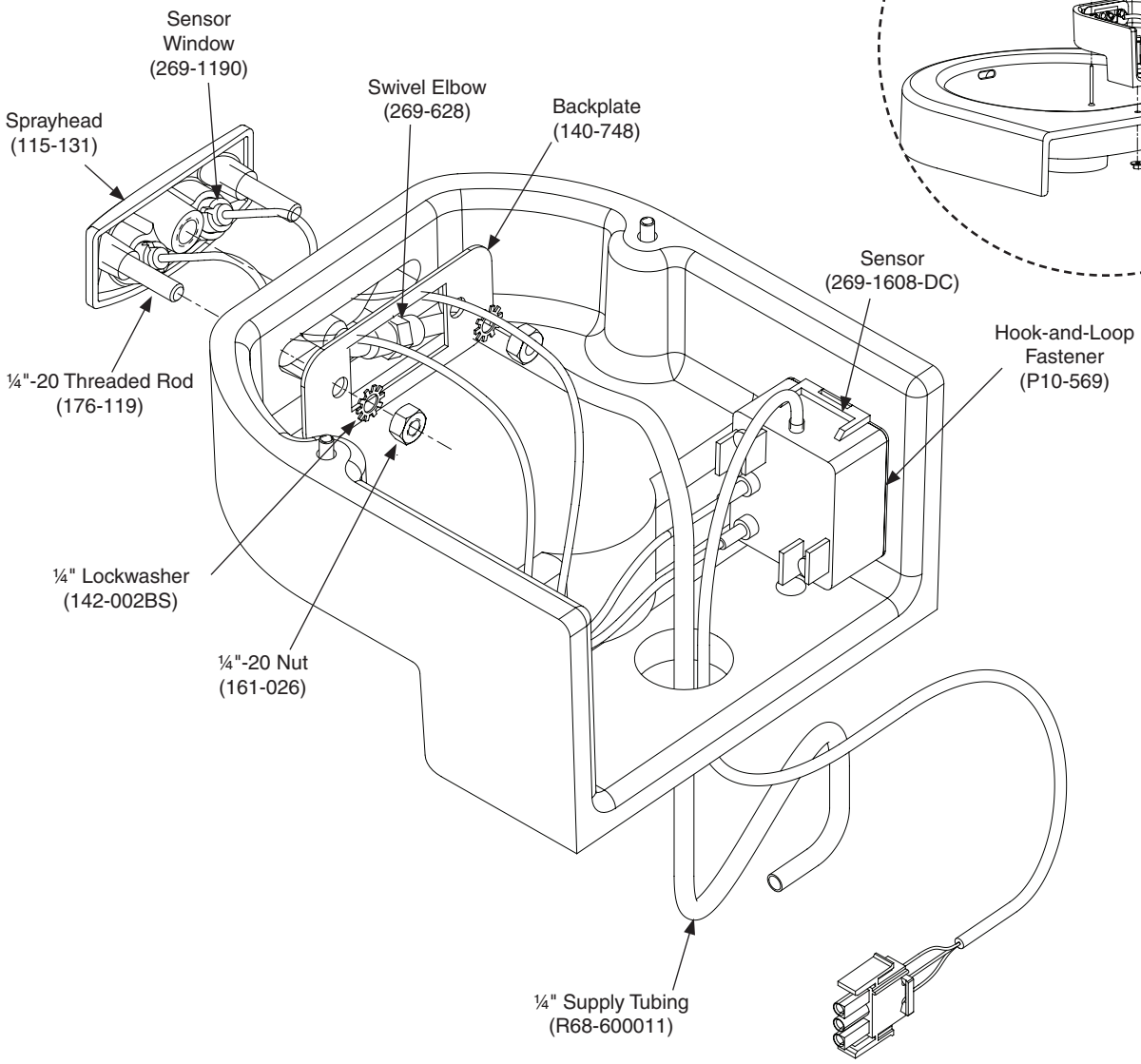
# Brand Names

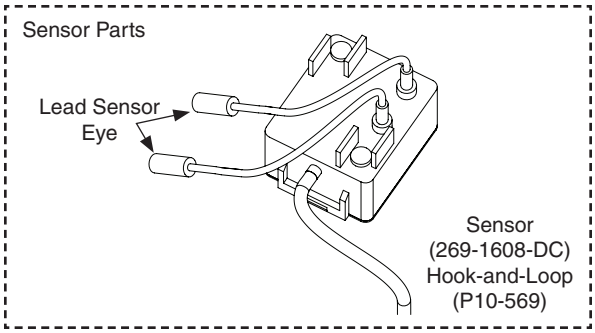
Use of brand names is intended only to indicate a type of cleaner. This does not constitute an endorsement, nor does the omission of any brand name cleaner imply inadequacy. Many products named are regional in distribution, and can be found in local supermarkets, department and hardware stores, or through your cleaning service. It is emphasized that all products should be used in strict accordance with package instructions.

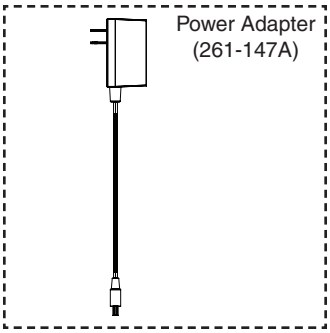
# Adaptive Infrared Repair Parts

DO NOT APPLY POWER UNLESS ALL CONNECTIONS ARE MADE



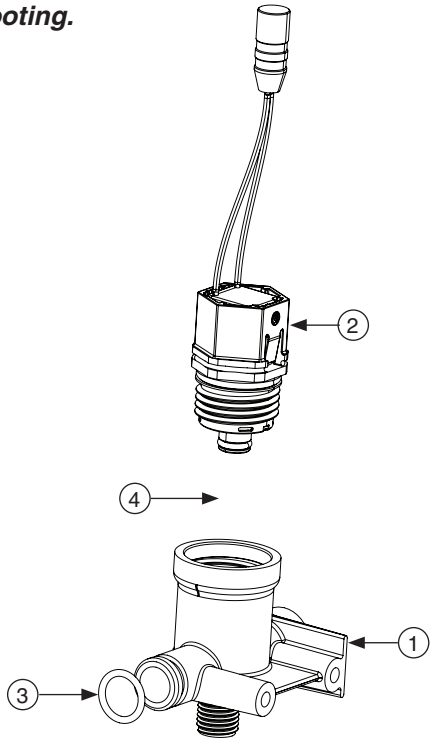



# Troubleshooting – Solenoid Valve S07-068-DC (closed body DC)

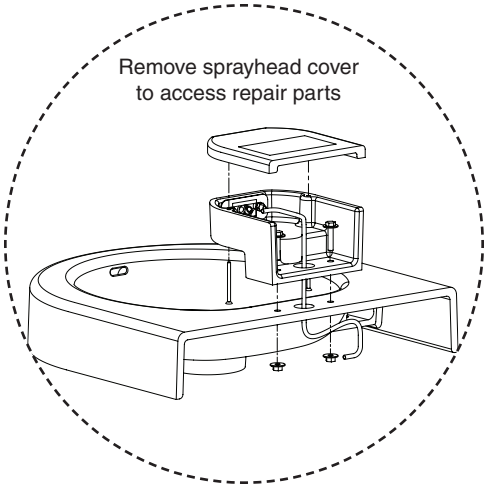
***NOTICE! Turn off water supplies to the unit before troubleshooting.***

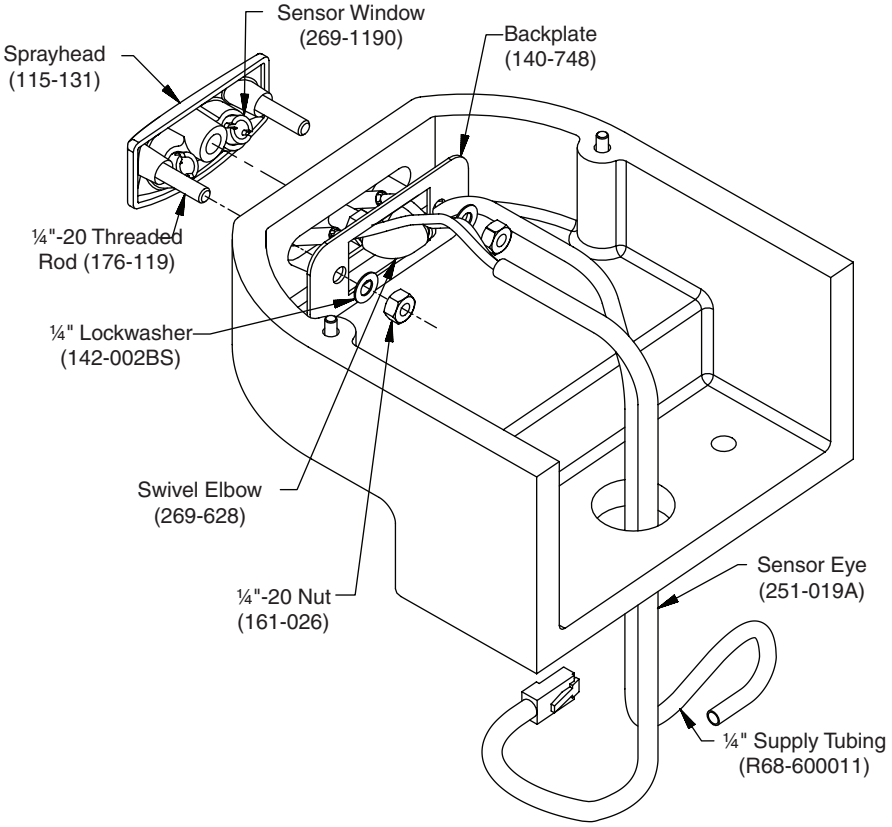
| Ref. | Part No. | Description |
|---|---|---|
| 1 | 118-334 | Valve Body |
| 2 | S27-352 | Cartridge |
| 3 | 125-165 | O-Ring, #2-013 |
| 4* | 125-160 | Flow Restrictor, .5 GPM |

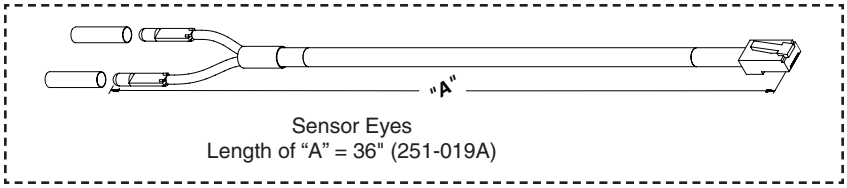


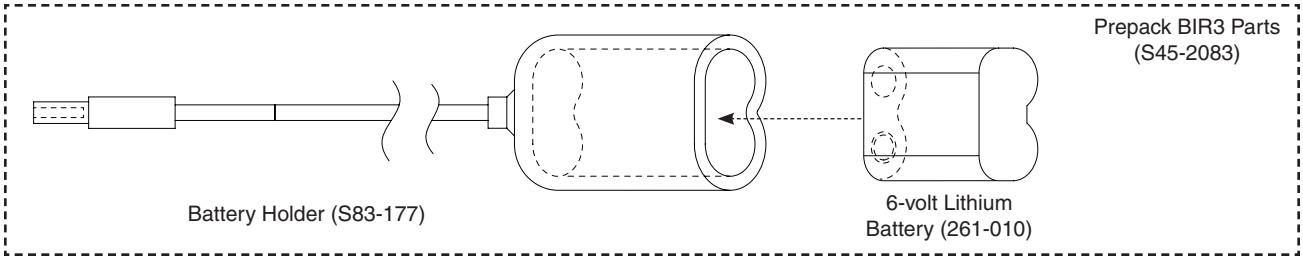

| Problem | Cause | Solution |
|---|---|---|
| An individual operating station fails to shut off and drips. | Internal cartridge failure. | Replace S27-352 cartridge. |
| An individual operating station fails to turn on. | A failed cartridge for the valve or loose electrical connection to the terminal. | Test the station to determine the cause.<br>1. Disconnect the wires from the cartridge of an adjacent valve. Disconnect the wires from the problem valve and reconnect to the adjacent valve.<br>2. Turn on electrical and water supplies to the unit. Pass your hand in front of the sensor of the problem station (IR) or press push button/activate piezo switch (TT), and the adjacent station should turn on.<br><br>If the adjacent station turns on and cycles normally, replace the cartridge on the problem valve.<br><br>If the adjacent valve fails to turn on, inspect the wires from the sensor cable and do the following:<br>• make sure there are no breaks and that the fully insulated disconnect terminals are firmly crimped in place;<br>• turn off the electrical and water supplies;<br>• reconnect to the adjacent valve and turn on the water supplies to the unit;<br>• pass your hand in front of the sensor (IR) and/or activate the push button/piezo switch (TT). If the station still fails to turn on, replace the sensor (IR) or the push button/piezo switch (TT). |

# Battery Infrared Repair Parts



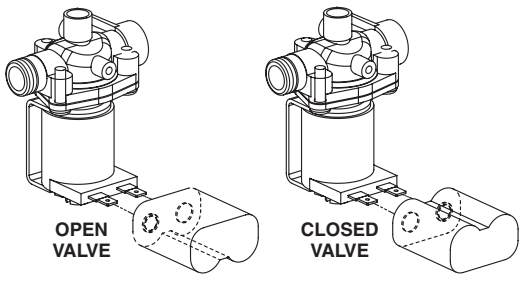



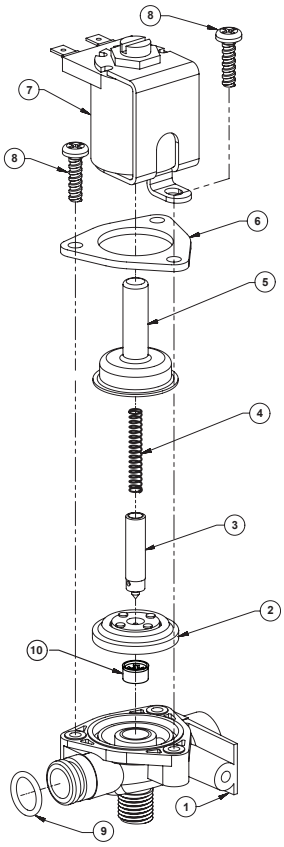
# Troubleshooting – Battery Infrared Components

***NOTICE! Turn off water supplies to the unit before troubleshooting.***

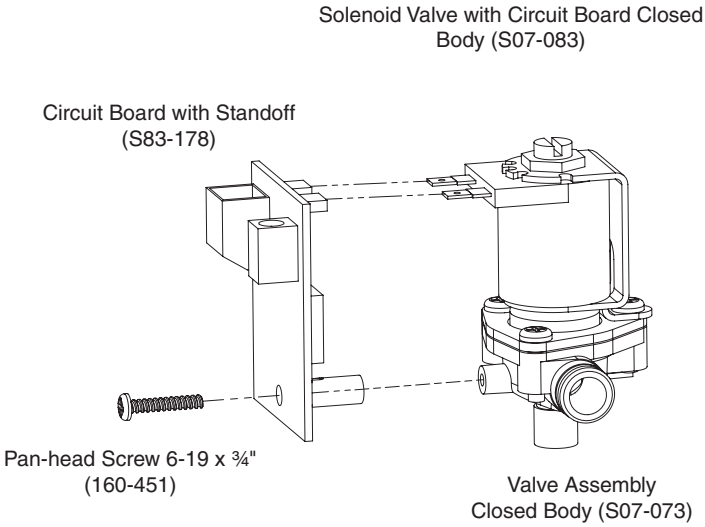
| Problem | Cause | Solution |
|---|---|---|
| An individual operating station fails to shut off and drips. | Debris is trapped between the diaphragm and the valve seat. | Remove debris between diaphragm and the valve seat.<br>1. Disconnect the plug from the battery to the circuit board of the problem valve.<br>2. Remove the three #8 Phillips-head screws that hold the solenoid valve assembly together. Be careful not to lose the armature or spring.<br>3. 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.<br>4. 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.<br>5. Reconnect the battery plug. Turn on water supplies to the unit. |
| An individual operating station fails to turn on or off. | A dead or faulty battery. | Test the station to determine the cause and replace battery if required.<br>1. Disconnect the sensor cable from the circuit board of the problem valve. Disconnect the sensor cable from the circuit board of an adjacent working valve.<br>2. Connect the battery plug from the adjacent working valve to the problem valve. Wait for ten seconds. Activate the problem station's sensor ten times. The station should turn on.<br>If the adjacent station turns on, and cycles normally, replace the battery. |
| | Faulty sensor eyes. | Test the station to determine the cause and replace sensor eyes if required.<br>1. Disconnect the plug from the battery to the circuit board of the problem valve. Disconnect the plug from the battery to the circuit board of an adjacent valve.<br>2. Connect the sensor cable from the adjacent working valve to the problem valve. Activate the problem station's sensor. The station should turn on.<br>If the adjacent station turns on, and cycles normally, replace the sensor eyes. |
| | Faulty solenoid valve.<br>  <br>OPEN VALVE CLOSED VALVE | Test the station to determine the cause and replace solenoid valve if required.<br>1. Remove the screw, circuit board and standoff from the problem valve. Remove the battery holder.<br>2. With a good working battery, briefly contact the solenoid valve directly with the battery. The contact should cause the valve to open. With the battery holder removed, briefly contact the solenoid valve with the battery in the position shown. This should cause the valve to close. If the valve does not operate when directly contacted with a good battery, and the solenoid valve has already been cleaned as outlined at the beginning of this troubleshooting section, replace the solenoid valve.<br>If problems persist:<br>Pass your hand in front of the problem station, while at the same time looking to see if the indicator light on the circuit board flashes (the indicator light is located near the hole in the circuit board where the standoff is mounted). If it does not flash, and the battery and sensor eyes have already been tested as outlined above, the problem may be with the circuit board. Make a note of the numbers printed on the circuit board, then contact your Bradley representative for assistance. |

# Solenoid Valve S07-073 (closed body BIR3)

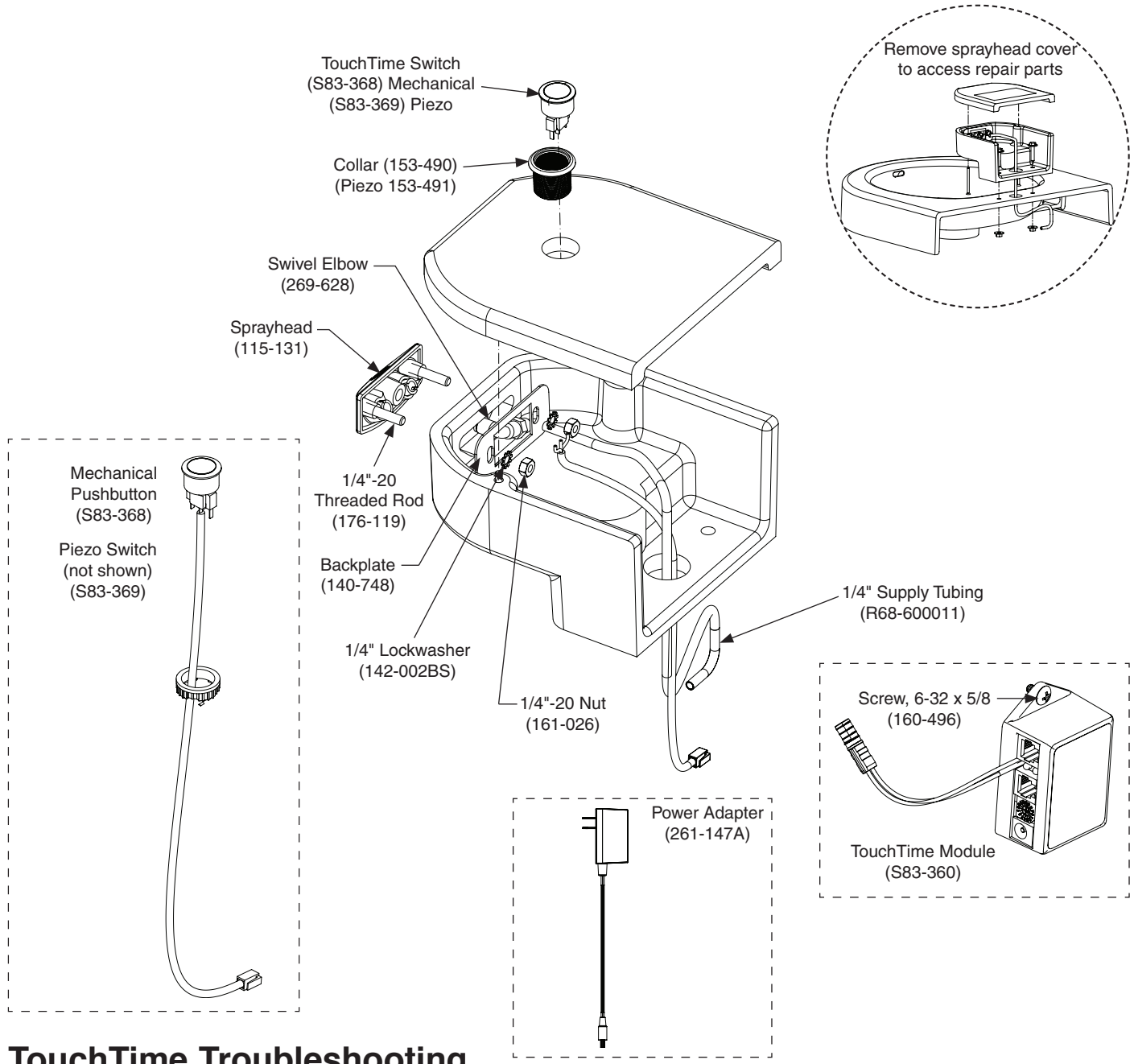
***NOTICE! Turn off water supplies to the unit before troubleshooting.***




| Item | Qty. | Part No. | Description |
|---|---|---|---|
| 1 | 1 | 118-307 | Valve Body, ¼" Closed |
| 2 | 1 | 269-983 | Diaphragm |
| 3 | 1 | 192-017 | Armature |
| 4 | 1 | 135-093 | Spring |
| 5 | 1 | 269-1729 | Armature Housing |
| 6 | 1 | 269-1730 | Clamp, Armature Housing |
| 7 | 1 | 269-1731 | 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 |



# TouchTime Repair Parts




# TouchTime Troubleshooting

| Problem | Cause | Solution |
|---|---|---|
| Water fails to flow when pushbutton is pressed or piezo switch is activated. | Plug in adapter is bad. | Plug the adapter into an adjacent TouchTime module. If water does not flow when that pushbutton is pressed, replace the adapter.<br><br>Measure output voltage of adapter using a multimeter. Voltage should be 12V ±10%. If adapter output is not 12V, replace the plug in adapter. |
| | TouchTime module is bad. | On the TouchTime module, switch the selector switch to position 1. The green light should cycle on for 1 second and off for 1 second continuously. If this does not happen, replace the TouchTime module. |
| | Solenoid is bad. | The solenoid valve should open and close at the same rate. If not, see Troubleshoot the Solenoid section and/or replace the solenoid cartridge. |
| | Pushbutton is bad. | Plug the pushbutton into either connector on the TouchTime module and set the selector switch to position 4. The green LED should illuminate for 4 seconds when the pushbutton is pressed and released. If this does not happen, replace the pushbutton. |

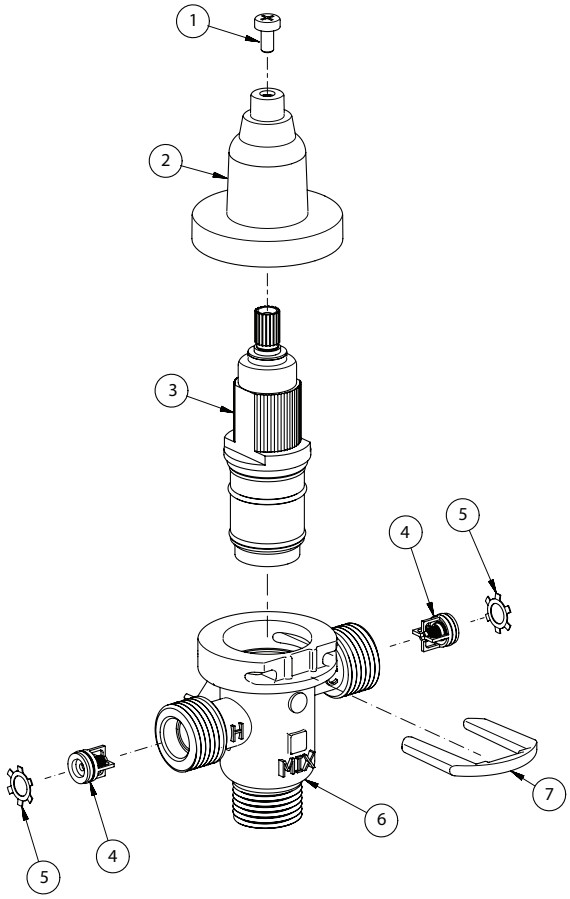
# Thermostatic Mixing Valve Troubleshooting

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 5. |
| 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.<br>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

| 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)**