SELETRONIC®
DC POWERED PROXIMITY EXPOSED
TOILET FLUSH VALVE
1.1, 1.28, 1.6, 1.6/1.1 & 1.28/1.1 GPF

Exposed Flushometer
for 1-1/2” Top Spud Bowls

CAUTION: Use only American Standard supplied transformers and cable sets. Using non-AS supplied cables, or cutting, splicing or modifying any components will void the warranty.

NOTE TO INSTALLER: Please give this manual to the customer after installation.

To learn more about American Standard Selectronic® Products visit our website at: www.americanstandard-us.com or e-mail us at: CRTTEAM@americanstandard.com

For Parts, Service, Warranty or other Assistance, please call (844) CRT-TEAM / (844) 278-8326 (In Canada: 1-800-387-0369) (In Toronto Area only: 1-905-306-1093)

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Thank you for selecting American-Standard...the benchmark of fine quality for over 100 years. To ensure that your installation proceeds smoothly--please read these instructions carefully before you begin.

UNPACKING

All American Standard Products Are Water Tested At Our Factory. Some Residual Water May Remain In The Valve During Shipping.

Remove the Flush Valve items from the carton. The illustration below shows all items after they have been removed from the carton. Some items may be packaged partially assembled to other items.

1. Installation Instructions
2. Flush Valve Body Assembly
3. Vacuum Breaker Tube
4. Spud Coupling Nut and Washers
5. Spud Flange
6. Wall Escutcheon
7. Cover Tube
8. Sweat Adapter
9. Stop Valve

CARE INSTRUCTIONS:
DO: CLEAN THE PRODUCT WITH CLEAR WATER. DRY WITH A SOFT COTTON FLANNEL CLOTH.
DO NOT: DO NOT CLEAN THE PRODUCT WITH SOAPS, ACID, POLISH, ABRASIVES, HARSH CLEANERS, OR A CLOTH WITH A COARSE SURFACE.

DO NOT REMOVE PROTECTIVE FILM FROM SENSOR EYE UNTIL INSTALLATION IS COMPLETE.
Fig. 1 (Before November 2017)

Roughing-in Dimensions
Right or Left Hand Installation
See (Section 5) for converting Flush Valve to Left Hand Installation.

GENERAL DESCRIPTION:
SELECTRONIC® PROXIMITY TOILET FLUSH VALVE
Exposed Flushometer for 1-1/2" Top Spud Fixtures

*Note: The Critical Line (-C-L-) on Vacuum Breaker must typically be 6" (152mm) above fixture. Consult Codes for details.

Fig. 1A (After November 2017)

ADA WATER CLOSET INSTALLATION:
AFWALL® TOILET SHOWN
RECOMMENDED TOOLS; Fig. 2.
1. Teflon Tape
2. Flat Blade Screwdriver
3. Adjustable Wrench
4. Tape Measure
5. Hacksaw
6. Tubing Cutter
7. File
8. For Sweat Connection; Solder and Torch
9. 2.5 mm Hex Wrench
10. 1.5 mm Hex Wrench

PRIOR TO INSTALLATION
Note: Prior to installing the Selectronic™ Flush Valve the following items must be installed.
1. Toilet
2. Drain line
3. Water supply line

IMPORTANT:
• All plumbing and electrical wiring should be installed in accordance with applicable codes and regulations.
• The use of water hammer arrestors is strongly recommended for commercial applications. All piping behind the walls should be properly secured and fastened.
• Water supply lines must be sized to provide an adequate volume of water for each fixture.

• Flush all water lines prior to operation. Dirt and debris can cause flush valve to run continuously.
• With the exception of Stop Valve Inlet, DO NOT use pipe sealant or plumbing grease on any valve component or coupling!
• Protect the chrome or special finish on the Flushometer. DO NOT USE toothed tools on finished surfaces to install or service these valves. Also see “Care and Cleaning” section of this manual.
• This product contains mechanical and/or electrical components that are subject to normal wear. These components should be checked on a regular basis and replaced as needed to maintain the valve's performance.
**FLUSH VALVE INSTALLATION**

1 **INSTALL SWEAT ADAPTER; Fig. 3**

**CAUTION** Turn water supplies off before beginning

Note: Install Optional Sweat Adapter (Supplied) for copper pipe supply line.

1. Measure the distance (A) from the finished wall to the center of the inlet spud on the fixture.
2. Cut the supply pipe 1-1/4" (A-B=C) shorter than the measurement taken in Step 1. File any rough edges off the end of the supply pipe.
3. Clean the end of the supply pipe. Push the threaded Adapter until it is seated against the internal stop. Sweat the Adapter to the pipe.

2 **INSTALL COVER TUBE, WALL ESCUTCHEON and STOP VALVE; Fig. 4**

1. Measure from finished wall to first thread of Adapter or threaded supply pipe (dimension “X”). Cut COVER TUBE (1) to length (X). Apply Teflon Tape to the threaded end of the Adapter or supply pipe.
2. Push WALL ESCUTCHEON (2) onto the COVER TUBE (1). Slide both onto the SUPPLY PIPE (3).
3. Push the COVER TUBE (1) in to expose the threads of the supply pipe. With a wrench thread the STOP VALVE (4) onto the SUPPLY PIPE (3). Align and tighten.
4. Pull COVER TUBE (1) against STOP VALVE (4) and push WALL ESCUTCHEON (2) against finished wall.

3 **INSTALL VACUUM BREAKER TUBE; Fig. 5**

1. Place the SPUD FLANGE (1) over the spud on the Fixture.
2. Place FRICTION WASHER (3) and SEAL WASHER (4) inside SPUD COUPLING NUT (2) and thread onto Spud. Do not tighten fully.
3. Insert the VACUUM BREAKER TUBE (5) into the SPUD COUPLING NUT (2) and push it down.

Note: If cutting VACUUM BREAKER TUBE (5) to size, note that Critical Line (C/L) on Vacuum Breaker must typically be 6" (152mm) above fixture. Consult Code for details.
4 **FLUSH OUT SUPPLY LINES; Fig. 6**

1. Remove STOP VALVE COVER (1) from STOP VALVE (2).
2. Open STOP VALVE (2) with a flat blade screwdriver.
3. Turn on water supply to flush line of any debris or sediment.
4. Close STOP VALVE (2) and replace STOP VALVE COVER (1).

5 **LEFT OR RIGHT HAND INSTALLATION; Fig. 7**

The unit is shipped with adjustable tailpiece on the right side. If needed, the orientation can be modified by following the steps below.

1. Loosen SET SCREW (1) with 2.5mm Hex Wrench (4) in back of FLUSH VALVE COVER (2).
2. Rotate FLUSH VALVE COVER (2) to the right and pull off.
3. Rotate FLUSH VALVE BODY (3) 180°.
4. Replace COVER (2) and rotate until key engages. Tighten SET SCREW (1).

6 **INSTALL FLUSH VALVE; Fig. 8, 8a**

1. Insert ADJUSTABLE TAILPIECE (1) into the STOP VALVE (2). Lubricate the O-RING (3) with water if necessary. Lightly tighten COUPLING NUT (4). Fig. 8.

   **Important:** Do not use lubricants (other than water) or any type of thread sealing paste or tape

2. Align the FLUSH VALVE BODY (5) directly above the VACUUM BREAKER TUBE (7) and VACUUM BREAKER COUPLING NUT (6). Fig. 8a.

   **Note:** There is a +13mm, -6mm (+1/2, -1/4) tolerance for the 121mm (4-3/4) dimension. Fig. 8a.

3. Pull the VACUUM BREAKER TUBE (7) up to meet the threaded FLUSH VALVE BODY (5), hand tighten the VACUUM BREAKER COUPLING NUT (6). Align all components of the flush valve assembly. Fig. 8a.

4. Lightly tighten the COUPLING NUT (4) connection first, then the VACUUM BREAKER COUPLING NUT (6) and finally the SPUD COUPLING NUT (8). Once aligned correctly, use a wrench to tighten couplings to make water tight connections. Fig. 8a.


MAINTENANCE

A  ADJUST STOP VALVE; Fig. 9

IMPORTANT: To avoid overflowing, the STOP VALVE (3) must never be opened to the point where the flow from the valve exceeds the flow capacity of the fixture.

1. After installation is complete, peel off the PROTECTIVE FILM (1) from the sensor. Standing to one side, block the sensor with your hand for 10 seconds. Remove your hand and listen for audible “click” from within the valve.

2. Remove STOP VALVE COVER (2) from STOP VALVE (3). Turn on water supply 1/4 turn to 1/2 turn (CCW) and test for leaks.

Note: Unit may flush for approximately 5 to 10 sec. when water is first turned on. If flow persists, turn water off and repeat step #1 above.

3. Actuate the FLUSH VALVE:
   A) Cover sensor with hand for 10 seconds.
   NOTE: Stand outside of sensor detection area.
   B) Remove hand from in front of the sensor; unit will flush in approximately 3 seconds.

4. Adjust STOP VALVE (3) after each flush until the stated flush volume is achieved, no splashing occurs and the fixture is properly cleansed.

5. When adjustment is complete, replace STOP VALVE COVER (2) and tighten to ensure vandal-resistance.

B  RETROFITING WITH SELECTRONIC VALVE; Fig. 10

(Replaces Industry Standard Manual and Electronic Valves)

Note: In most Retrosfits the wall escutcheon, stop valve, cover tube and vacuum breaker do not have to be replaced. If these items do need replacement they must be purchased separately or order the complete flush valve assembly from American Standard.

1. Remove STOP VALVE COVER (1) from STOP VALVE (2).

2. Turn water supply off.

3. Loosen SPUD COUPLING NUT (3). Unthread COUPLING NUT (4) and VACUUM BREAKER COUPLING NUT (5). Remove FLUSH VALVE (6).

4. Clean all threaded connections before installing the new flush valve.

5. Refer to Sections 4, 5 and 6 to complete the retrofit installation.
C  REPLACE BATTERY; Fig. 11, 11a

1. Loosen SET SCREW (1) with 2.5mm Hex Wrench (2) in back of FLUSH VALVE COVER (3). Fig. 11.

2. Rotate COVER (3) to the right and pull off. Fig. 11.

3. Turn COVER (3) over and disconnect the SENSOR (4) from the BATTERY HOLDER (5). Remove the BATTERY CONTAINER (6) with BATTERY HOLDER (5) and BATTERY (7) inside. Fig. 11a.

4. Remove BATTERY HOLDER (5) from BATTERY CONTAINER (6). Fig. 11a.

5. Remove old BATTERY from BATTERY HOLDER (5). Install the new BATTERY (7) making sure the shape of the BATTERY follows the shape of the BATTERY HOLDER (5). Fig. 11a.

6. Insert BATTERY HOLDER (5) with BATTERY into BATTERY CONTAINER (6). Insert BATTERY CONTAINER (6) into flush valve COVER (3). Fig. 11a.

7. Connect BATTERY HOLDER (5) to SENSOR (4) and reverse the above steps to assemble flush valve. Fig. 11a.
SET DETECTION RANGE (If Required); Fig. 13 y 14

Note: The detection distance is preset and ideal for most installations. Should an adjustment be required, follow the steps below.

1. Loosen SET SCREW (1) with 2.5mm Hex Wrench (2) in back of FLUSH VALVE COVER (3). Fig. 13a.
2. Rotate COVER (3) to the right and pull off. Fig. 13b.
3. Turn COVER (3) over and disconnect CABLE (4) from BATTERY HOLDER (5). Fig. 13.
4. Keeping hands away from the sensor detection area, reconnect the SENSOR (4) and quickly place the COVER (3) on the valve. Do not secure the COVER (3) at this time.

Note: You have 5 seconds to begin entering the program code after power connection is made.

5. While the SENSOR CONTROL LED (1) is blinking slowly, place your hand 1 to 2 in. (30-50mm.) in front of the sensor. Fig. 14.
6. When the LED (1) stops blinking and stays "ON", move your hand to the desired position and hold in place until the LED (1) begins to blink again. Fig. 14.

Note: Detection Zone is 400mm - 800mm. (Factory Setting: 400mm)

7. Once the SENSOR CONTROL LED (1) begins to blink again, remove your hand from the detection zone. When the flashing stops, the detection distance is set.
8. Replace and secure COVER (3) onto valve.
9. Actuate the FLUSH VALVE:
   A) Cover sensor with hand for 10 seconds.
   B) Remove hand from in front of the sensor; unit will flush in approximately 3 seconds.
UNIT DOES NOT FUNCTION

IS ANGLE STOP OPEN?  → NO → OPEN VALVE
↓ YES ↓

REPEATED DOUBLE FLASH ON SENSOR?  → YES → CRITICALLY LOW BATTERY. INSTALL NEW BATTERY
↓ NO ↓

RECONNECT BATTERY TO SENSOR. FLASH ON SENSOR FOR 5 SECONDS?  → 1 NO 1 DEAD BATTERY. INSTALL NEW BATTERY. REPEAT.
↓ 2 NO 2 DAMAGED SENSOR WIRE. REPLACE SENSOR. (ONLY IF ABSOLUTELY NEEDED)

↓ YES ↓

PUSH MANUAL OVERRIDE BUTTON; WILL THE UNIT FLUSH?  → YES → DAMAGED SOLENOID. REPLACE SOLENOID
↓ NO ↓

REPLACE PISTON ASSEMBLY.

UNIT WILL ONLY FLUSH MANUALLY

CLOSE ANGLE STOP AND OPEN AGAIN TO PRIME THE VALVE. DOES FLUSHING STOP?  
↓ NO ↓

PUSH MANUAL OVERRIDE BUTTON. DOES IT RETURN TO ITS ORIGINAL POSITION FREELY?  → NO → DAMAGED MANUAL OVERRIDE BUTTON. REPLACE MANUAL OVERRIDE BUTTON
↓ YES ↓

RECONNECT BATTERY TO SENSOR. FLASH ON SENSOR FOR 5 SECONDS?  → 1 NO 1 DEAD BATTERY. INSTALL NEW BATTERY. REPEAT.
↓ 2 NO 2 DAMAGED SENSOR WIRES. REPLACE SENSOR. (ONLY IF ABSOLUTELY NEEDED)

↓ YES ↓

REPLACE PISTON & SOLENOID ASSEMBLY.

UNIT IS CONTINUOUSLY FLUSHING

REPEATED DOUBLE FLASH ON SENSOR?  → YES → CRITICALLY LOW BATTERY. INSTALL NEW BATTERY
↓ NO ↓

RECONNECT BATTERY TO SENSOR. FLASH ON SENSOR FOR 5 SECONDS?  → 1 NO 1 DEAD BATTERY. INSTALL NEW BATTERY. REPEAT.
↓ 2 NO 2 DAMAGED SENSOR WIRES. REPLACE SENSOR. (ONLY IF ABSOLUTELY NEEDED)

↓ YES ↓

REPLACE SOLENOID.