

AquaVantage AV®

Foot Pedal Series

Exposed Flushometer, Manual Flushometer Installation, Operation, Maintenance and Parts Manual

Patented and Patents Pending



<u>MARNING</u>: Cancer and Reproductive Harm - www.P65Warnings.ca.gov <u>MADVERTENCIA</u>: Cáncer y daño reproductivo - www.P65Warnings.ca.gov

AVERTISSEMENT: Cancer et effets néfastes sur la reproduction - www.P65Warnings.ca.gov

LIMITED WARRANTY

All goods sold hereunder are warranted to be free from defects in material and factory workmanship for a period of three years from the date of purchase. Decorative finishes warranted for one year. We will replace at no costs goods that prove defective provided we are notified in writing of such defect and the goods are returned to us prepaid at Sanford, NC, with evidence that they have been properly maintained and used in accordance with instructions. We shall not be responsible for any labor charges or any loss, injury or damages whatsoever, including incidental or consequential damages. The sole and exclusive remedy shall be limited to the replacement of the defective goods. Before installation and use, the purchaser shall determine the suitability of the product for his intended use and the purchaser assumes all risk and liability whatever in connection therewith. Where permitted by law, the implied warranty of merchantability is expressly excluded. If the products sold hereunder are "consumer products," the implied warranty of merchantability is limited to a period of three years and shall be limited solely to the replacement of the defective goods. All weights stated in our catalogs and lists are approximate and are not guaranteed.

AquaVantage Rough-In, Product Specification, Models, and Options

ENGINEERING SPECIFICATION: ZURN AquaVantage® 'AV' Exposed Flush Valve - Exposed, quiet diaphragm type, chrome-plated flushometer valve with a polished exterior. Complete with Zurn's AquaVantage TPE, chloramine resistant, dual seal diaphragm with a clog resistant, triple filtered by-pass. The valve is ADA compliant with a non-hold-open and no leak handle feature, high back pressure vacuum breaker, ne-piece hex coupling nut, adjustable tailpiece, spud coupling, and flange for spud connection. Control stop has internal siphon-guard protection, vamdal-resistant stop cap, sweat solder kit, and a cast wall flange with setscrew. Internal seals are made of chloramine resistant materials.

MODELS

Z6300AV - 1-1/2" Urinal Valve with top spud connection

Z6310AV - 1-1/2" Water Closet Valve with back spud connection

Z6320AV - 3/4" Urinal Valve with top spud connection

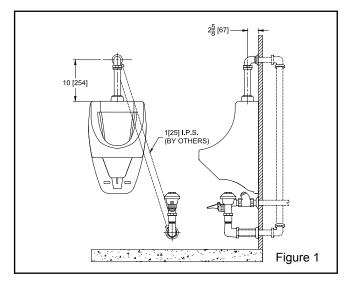
FLOWS

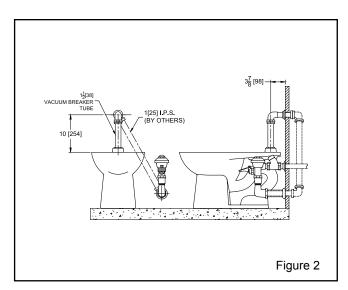
-WS1 Low Consumption 1.0 Gal. for Urinal, 1.6 Gal. for Water Closet

-FF Full Flow 3.0 Gal. for Urinal, 4.5 Gal. for Water Closet

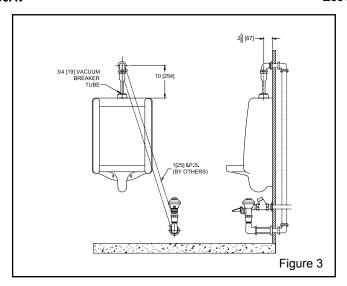
-HET High Efficiency 1.28 Gal. for Water Closet

-ULF Ultra Low Flow 0.125 Gal. for Urinal

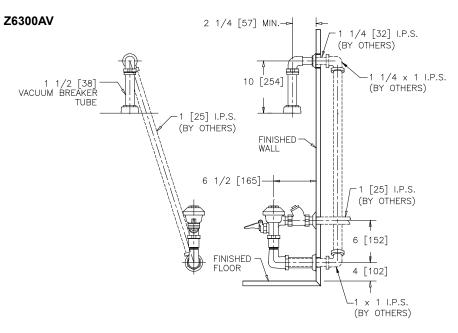


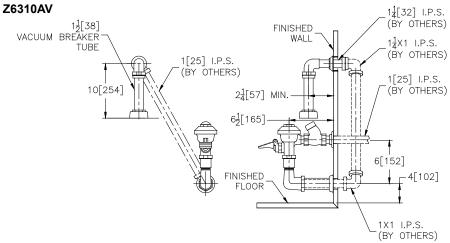


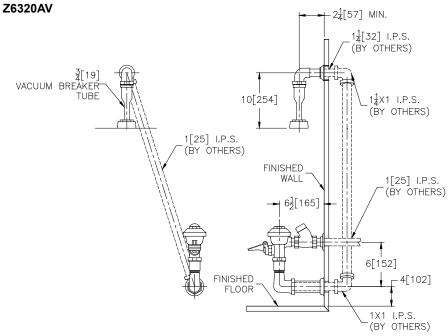
Z6300AV Z6310AV



Z6320AV







Sweat Solder Adaptor Installation Instructions

Important:

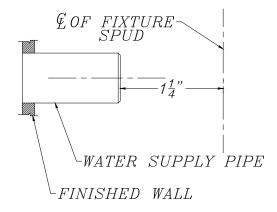
- All Plumbing is to be installed according to state and local codes and regulations.
- Water supply lines need to allow proper water flow for each fixture.
- Flush all lines of any debris before making connections.
- Do not use pipe sealant or plumbing grease on any fitting other than the control stop inlet.

The AquaVantage® valve is designed to operate under various water pressures with recommended range between 10 and 100 psi (69 to 689 kPa). Each Zurn valve is tested for proper performance at the factory before being shipped. Consult the product pages of the catalog for available flow options.

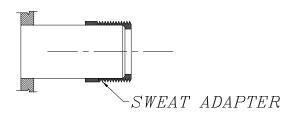
Most low consumption fixture (1.6 gallon) require a minimum of 25 psi running pressure through the valve to obtain proper evacuation. When installing your quality Zurn valve it is recommended that to protect the polished finish you do not use a toothed wrench. This will cause gouges and scratches on your valve.

Step 1

Measure distance from finished wall to centerline of fixture spud; cut water supply pipe 1-1/4" shorter than this measurement. Chamfer O.D. and I.D.

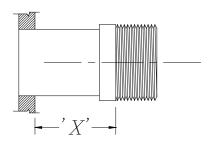


Step 2Slide threaded adapter onto supply pipe until shoulder stops on end of pipe. Then sweat-solder the adapter to water supply pipe.



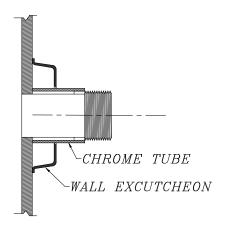
Step 3

Measure from finished wall to first thread of adapter for length of chrome tube. Cut chrome tube this length 'x'.

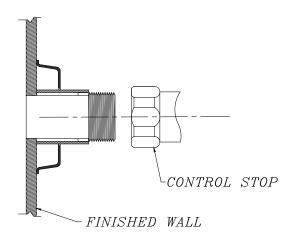


Step 4

Slide wall escutcheon over chrome tube and slide both chrome tube and wall escutcheon over supply pipe pushing the wall escutcheon all the way to the wall.

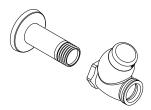


Step 5Screw control stop onto water supply water adaptor.

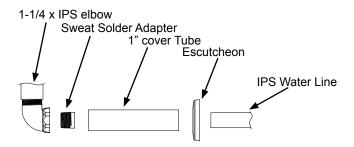


AquaVantage Installation Instructions

1. Install ground joint tailpiece onto sweat solder adapter. Connect straight stop onto ground joint tailpiece using thread compounds on male NPT threads only as needed.



2. Connect sweat solder adapter and 1" cover tube to 1 x 1 IPS water line outlet pipe using 1-1/4 x 1 IPS elbows as needed per figures 1, 2 or 3 on page 2. Connect 1 1/2 to 1 1/2-27 threaded elbow to 1 1/4-27 thread tube and slide escutcheon over tube for both water outlet from valve and water outlet to fixture for step #6.



3. Insert the flush valve tailpiece into the stop valve and hand tighten the lock nut to the stop valve. Plumb the entire unit.



4. Install 1" street elbow onto flush valve body outlet.

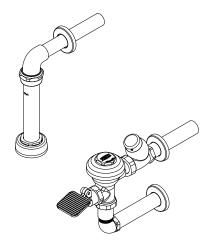


5. Determine the length of the vacuum breaker tube as necessary to fit, to the required length. Insert the vacuum breaker into the vacuum breaker tube and slide the tube nut up the body. Attach to the 1 1/2-1 1/4-27 threaded elbow. Slide on spud gasket and nut.

- **6.** Connect IPS water outlet to 1 1/4-27 threaded tube and tighten escutcheon.
- 7. Install flush tube assembly into spud fixture and thread onto IPS water line.



8. Hand tighten spud nut and vacuum breaker tube nut to fixture and flush valve. Adjust the valve assembly for plumb. Tighten fixture nut, vacuum breaker tube nut and lock nut with spanner wrench.



- **9.** Insert handle gasket onto pedal assembly and tighten to valve body.
- **10.** Open stop fully and check for leaks, adjusting for plumb as necessary.

Contents:

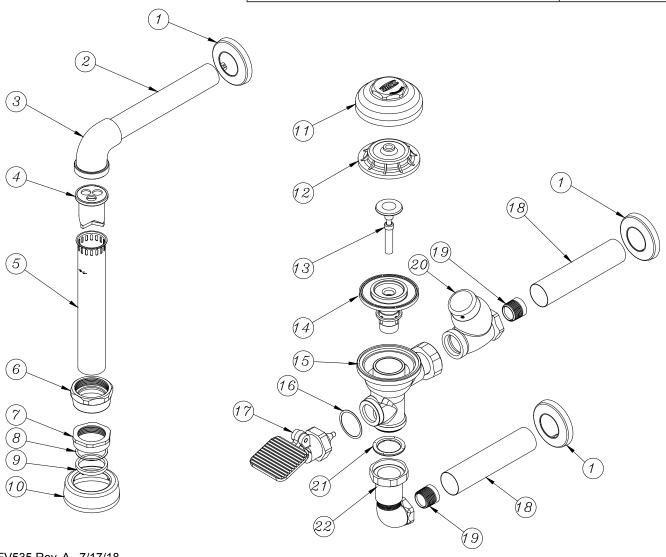
- 1.) Wall Escutcheon (3)
- 2.) 1 1/4-27 Threaded Tube (1)
- 3.) 1 1/2 to 1-1/4-27 Threaded Elbow (1)
- 4.) Vacuum Breaker (1)
- 5.) Vacuum Breaker Tube (1)
- 6.) Vacuum Breaker Tube Nut (1)
- 7.) Compression Spud Nut (1)
- 8.) Fiber Washer (1)
- 9.) Compression Nut Gasket (1)
- 10.) Fixture Escutcheon (1)
- 11.) Valve Cap (1)
- 12.) Plastic Cover (1)
- 13.) Trip Asssembly (1)
- 14.) Kit Assembly (1)
- 15.) Valve Body (1)
- 16.) Handle Gasket (1)
- 17.) Foot Pedal Actuator (1)
- 18.) 1" Cover Tube (2)
- 19.) 1" Sweat Solder Adapter (2)
- 20.) Stop Valve (1)
- 21.) Rubber Gasket (1)
- 22.) 1" NPT Street Elbow (1)

Covers and Repair Kits	Product No.
Outside Cover - CP - Item 11	P6000-LL-CP
Inside Cover - Item 12	P6000-L -CP
High Efficiency Toilet Closet Kit - 1.28 gal. flush	P6000-ECA-HET
Low Consumption Closet Kit - 1.6 gal. flush	P6000-ECA-WS1
Water Saving Closet Kit - 3.5 gal. flush	P6000-ECA-WS
Full Flow Closet Kit - 4.5 gal. flush	P6000-ECA-FF
Spud Coupling Assembly	P6000-H

Control Stop Repair Kit and Parts	Product No.
Control Stop Repair Kit for 1"	P6000-D-SD
Seal Seat for 1"	P6000-D42
Straight Stop	P6000-CG-CP
Sweat Solder Connection with Cast Wall Flange, Items 1, 18, 19	P6000-YBYC

Handle Assembly and Repair Kits	Pruduct No.
Foot Pedal Assembly, Item 17	P6000-MYW
Foot Pedal Repair Kit (Side) for 17	P6000-MYWK
Handle Seal	P6000-M9
Handle Gasket Includes Item 16	P6000-M10

Adjustable Tailpieces	Product No.
Ground Joint Tailpiece for Flush Valve	P6000-J1G-CP



Trouble Shooting Guide

Problem	Cause	Corrective Action
Valve will not operate.	Stop valve is closed. Supply valve is closed.	1.) Open stop valve. 2.) Open supply valve.
Insufficient volume of water to adequately siphon fixture.	Stop valve is not open enough. Urinal trip mechanism installed in wrong kit, urinal for closet. Insufficient volume or pressure at supply.	1.) Open stop valve for desired volume of water. 2.) Replace urinal part with proper closet valve part. 3.) If gauges are not available to measure supply pressure or volume of water at the valve, completely remove the working parts and open the stop valve to allow water to pass through the empty valve. If the supply is adequate to siphon the fixture, the guide ring may be removed from the guide assembly to provide additional flow. Should this provide unsatisfactory, steps should be taken to increase the pressure and/or supply.
Flush valve shuts off too quickly.	Damaged or punctured diaphragm.	Install new P6000-EUA or P6000-ECA replacement kit to remedy the problem.
Valve is short flushing.	Cylinder guide assembly and diaphragm assembly are not tight. Enlarged bypass orifice. Urinal trip mechanism (blue #13) in closet flush valves.	1.) Screw the two assemblies hand tight. 2.) Install the new P6000-ECA, P6000-EUA replacement kit to remedy the problem. 3.) Install closet trip mechanism.
Valve is flushing too long or not shutting off.	 Trip mechanism not seating properly due to foreign material between trip mechanism and retainer disc. By-pass orifice is plugged or partially plugged. Line pressure is not adequate to force trip mechanism to seal. Cracked cover. 	1.) Disassemble parts and rinse thoroughly. 2.) Examine by-pass orifice and clean if necessary being certain not to enlarge orifice opening. 3.) Pressure is inadequate or has dropped below minimum operating range. Steps should be taken to increase the line pressure. 4.) Replace cover with new one.
Water splashes out of fixture.	Supply volume is more than is necessary. Lime accumulation on vortex or spreader holes of fixture.	Adjust downward on control stop. Remove the lime build up.
Flush is not considered quiet.	Control stop may not be adjusted for quiet operation. Fixture may be contributing to noise. Piping system may be source of noise.	1.) Adjust the control stop for quiet operation keeping in mind the fixture evacuation requirements. 2.) Check noise created by fixture by placing a cover over the bowl opening to separate valve noise from bowl noise. If it is determined the fixture is too noisy, consult with fixture manufacturer. 3.) High pressure in the system can sometimes be controlled by the stop valve. Other sources of noise may be the absence of air chambers and shock arrestors, loose pipes, improper size pipes, etc. In these cases the building engineer should be consulted.
Handle assembly leaking.	1.) Handle assembly is not tight.	1.) Tighten handle assembly.
Water drips from chrome cap.	1.) P6000-L inside plastic cap is cracked.	1.) Replace P6000-L plastic cap.

Care of Chrome-Plated Surfaces

The suggested cleaning of chrome-plated surfaces is simply to clean them with soap and water then dry. Commercial cleaning compounds are never recommended.

Seasonal Use

Valves used in installations subject to shutdown because of cold and freezing conditions should be maintained in the following manner. After the main supply has been shut off and the water drained from the system, remove the stop cap and stop valve internals to allow the water to drain from the flush valve itself.



