

INSTALLATION INSTRUCTIONS for EXPOSED EMPIRE FLUSH VALVES



Empire Water Closet
Flush Valve
for 1 1/2" Top Spud



Empire Urinal
Flush Valve
3/4" Top Spud

Prior to Installation

All Plumbing is to be installed in accordance with all applicable Codes and Regulations. Water Supply Lines must be sized to provide adequate flow rate gpm (gallons per minute) to all fixtures. Drawings should be reviewed for compliance with ADA Guide lines. Particular attention should be paid to handle location and grab bar conflicts. To avoid damaging chrome during installation use flat-jawed wrench to tighten all coupling nuts.

Delany flush valves are designed to operate at water pressure between 20psi and 125psi. All plumbing fixtures require at least 20psi with most requiring higher pressure. Meeting the minimum pressure requirements of the fixture will automatically satisfy the minimum needs of the Delany valve installed. At pressures of 80psi and above, the use of pressure reducing valve in the supply line is recommended.

TOOLS REQUIRED FOR FLUSHMETER INSTALLATION:

- A) Straight Blade Screwdriver
- B) Flat-jawed Adjustable Pipe Wrench, for all nuts and the cover.
(Recommended: E110 by Rigid)

WARNING: Never use any tool with teeth

**** If your installation includes a supply line with a threaded iron pipe, skip ahead to STEP 2****

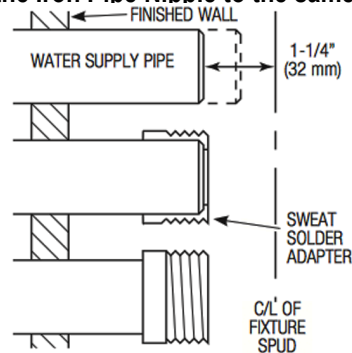
STEP 1) INSTALLATION of SWEAT ADAPTER: Fig 1

(Only Required for Supply Pipes without Male Threads)

- (A) Find Sweat Adapter Kit supplied in the box.
- (B) Measure from the finished wall to the Center Line of the fixture spud.
- (C) Cut the Pipe 1-1/4" shorter than the measured number.
- (D) File any rough edges off the end of the supply pipe.
- (E) Slide the Sweat Adapter until it hits the shoulder of the bushing. Sweat the Adaptor to the pipe.

NOTE: If an Iron Pipe Supply (IPS) is being used, stub out the Iron Pipe Nipple to the same measurement as used for the Sweat Adapter

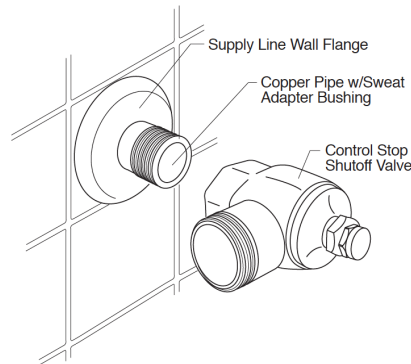
Fig 1



STEP 2) MOUNT THE CONTROL STOP: Fig 2

- (A) Measure the distance from the finished wall to the edge of first (1st) thread on Supply Pipe or Adapter.
- (B) Cut Cover Tube to this measurement.
- (C) Slide Cover Tube over Supply Pipe.
- (D) Slide the Wall Flange over the Cover Tube and up against the wall.
- (E) Screw the Control Stop onto end of the pipe until hand tight with Flat-jawed Wrench.

Fig 2



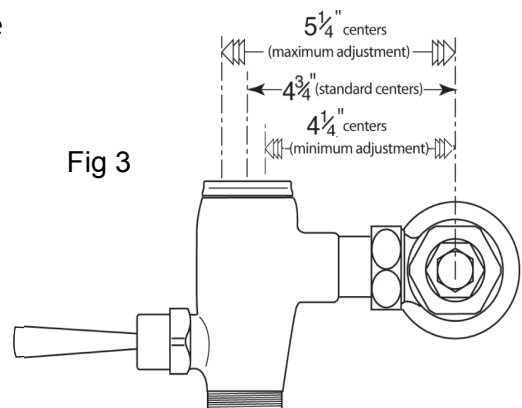
STEP 3) "SLIPFIT" ADJUSTABLE CENTERS Fig 3

All Delany Empire Valves are shipped with the Part #E135-SlipFit Union Adjustable Tailpiece. The #E135 is designed to be adjustable between 4-1/4" and 5-1/4" Centers.

- (A) Slide the #E135 SlipFit Union Tailpiece into the Control Stop. (Tip: Moistening the O-RING may make it easier to slip into the Control Stop.)
- (B) Slide the valve into the Control Stop until the valve is lined up with the center line of the fixture spud.
- (C) Loosely hand tighten the Part #133-Coupling Nut to the Control Stop.

NOTE: If centers are more than 5-1/4" apart, you must order the Part #135 in longer lengths in order to increase the centers to a maximum of 8-1/4".

Fig 3



STEP 4) INSTALLING the VACUUM BREAKER & SPUD FLANGES: Fig 4

- (A) Put the Rubber Sleeve into flanged end of Flush Connection.
- (B) Slide the Cowl Nut up the Flush Connection Tube.
- (C) Slide the Spud Nut, Spud Flange, & then Washer on to the bottom of Flush Connection Tube.
- (D) Place Flush Connection Tube into the Fixture Spud opening and tighten the Cowl Nut onto the bottom of the valve outlet.

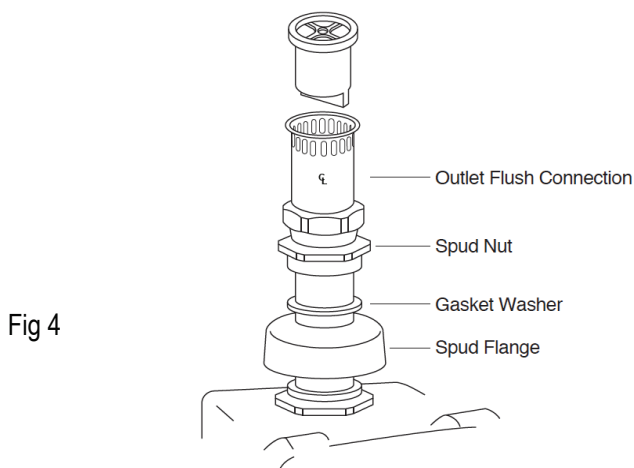
NOTE: TIGHTEN THE COWL NUT ONLY HAND TIGHT!

Cut Flush Connection 2" less than the measurement of the center line of the supply inlet to the top of the Fixture.

- (F) Making sure the Flush Connection Tube is vertical, tighten the Union Coupling Nut fully to the Control Stop with Flat-jawed Adjustable wrench.

- (G) Finally, tighten fully the Spud Nut to the Spud of the Fixture.

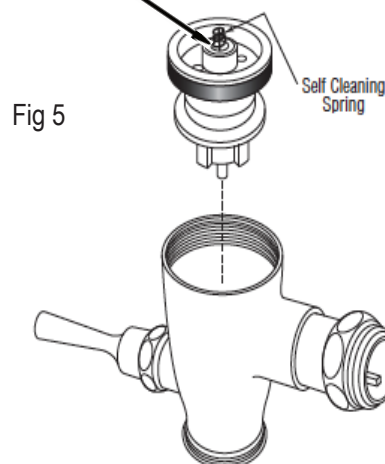
Note: The "CL" Critical Level Line marked on the Flush Connection must be a **MINIMUM of 6" (152mm)** above the top of the Fixture.



STEP 5) FLUSH DEBRIS from SUPPLY LINES: Fig 5

Once all of your separate Flush Valves have been connected to all of the fixtures and before finishing the construction project, it is highly recommended that all the supply lines be flushed of all dirt and debris that may have fallen in during the process of the construction.

- (A) Make sure the proper Water Pressure is available.
- (B) With the Control Stop shut off, open the Cover of the last valve in the branch line.
- (C) To open Empire Cover, use the Flat-jawed Adjustable Wrench to unscrew the Cover.
- (D) Remove Piston Cartridge Assembly (Fig 5) **NEVER LIFT Piston Cartridge OUT BY SELF-CLEANING SPRING**

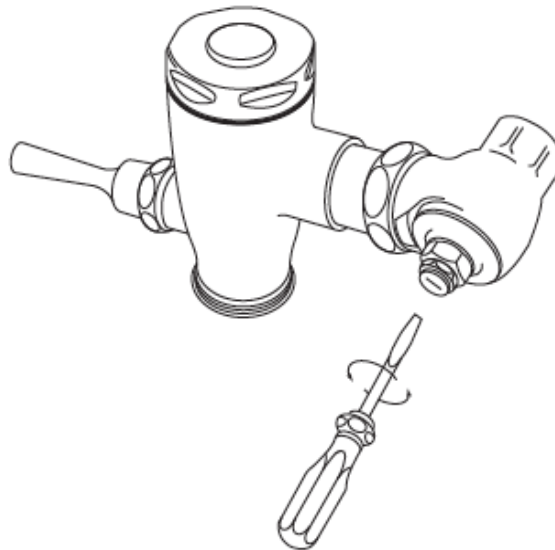


- (E) Replace the Cover.
- (F) Open Control Stop completely.
- (G) Once flushing is complete, close the Control Stop.
- (H) Open Cover and replace Piston Cartridge Assembly.
- (I) Screw the Cover back on tightly.

STEP 6) SETTING THE VALVES for MINIMUS FLUSHING NOISE: Fig 6

- (A) Open the Control Stop to MAXIMUM open position. Note: The valve may run/flush for approximately 5 to 10 seconds when the water is first turned on before shutting itself down.
- (B) Activate the flush valve by pulling the handle down.
- (B) While the water is running, slowly close the Control Stop. Depending on the inlet water pressure at any given fixture there is a setting at which the flush will be quieted. Also make sure that no splashing is occurring.
- (C) Once adjustments to the Control Stop and the flow into the valve have been made, repalce and tighten the cap for stop.

Fig 6



IMPORTANT NOTES: 1) State and Local mandated codes require that the static pressure in a given building not exceed 80 psi. It is also good plumbing practice to not exceed 80 psi in order to extend the life of all plumbing products installed. 2) In order to extend the life of the chrome finish on your flush valves never use harsh or abrasive chemicals to clean them. Use only mild soap and water applied with a soft cloth. 3) Do not use Pipe Dope or other sealants on any valve threads or couplings except for the Control Stop inlet threads. 4) Never open the Control Stop to a position where the water you are supplying is more than the Fixture can handle. A valve failure may cause the fixture to overflow.

Limited Warranty

Delany Products warrants all its products to be made of first class material, free from any defects. Each product will perform the service for which it is intended to in a thoroughly reliable and efficient manner as long as the product is properly installed and maintained for a period of one year from the date of purchase. During this said mentioned one year period Delany Products will either repair or replace any part or parts which are proven to be defective, only when the material is returned to Delany Products for inspection. This will be the only remedy available under this warranty policy. No claims will be allowed for labor, transportation or any other incidental costs. This warranty is only extended to the persons or organizations that purchased the material from a Delany Products distributor. For further assistance with any installation please call your local Delany Representative or Delany Products' Customer Service at 1-888-566-7784