

U1234-SC & UP1234  
Water Closet Flush Valve  
for 1/2" Back Spud

U1271-SC & UP1271  
Urinal Flush Valve  
for 3/4" Back Spud

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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 the sensor location and grab bar conflicts. To avoid damaging chrome during installation, only use a flat-jawed wrench to tighten all coupling nuts.

All electrical wiring should be installed in accordance with National & Local Codes and Regulations. Delany flush valves are designed to operate at water pressure between 20psi and 100psi. All plumbing fixtures require at least 25psi 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 a pressure reducing valve should be installed in the supply line is highly recommended.

## Prior to Installation

### TOOLS REQUIRED FOR FLUSH VALVE INSTALLATION:

- A) Straight Blade Screwdriver
- B) Flat-jawed Adjustable Pipe Wrench.  
(Recommended: E110 by Rigid)

**WARNING:** Never use any tools with teeth

## What's in the Boxes

For each fixture there are two (2) boxes with the following:

Flush Valve with Red Colored Straight Fitting  
Control Stop  
Sweat Adaptor  
Vacuum Breaker Tube & Rubber Sleeve  
Elbow Flush Connection Tube  
Instruction Sheet

1/2" Push Button Assembly (#2117A-B)  
Wall Sleeve (#2103)  
Bearing Plate (#293)  
Locknut for Use w/ Bearing Plate (#243)  
(1) 6' Red Nylon Tube  
(1) 6' Black Nylon Tubes

### Step 1) Installation of Sweat Adapter: Fig. 1

If your installation includes a supply line with a threaded iron pipe, skip ahead to step 2.  
(Optional – Only Required for Supply Pipes without Male Threads)

Control Stop needs to be positioned on the Supply Pipe approximately 14-1/2" above the center line of the Spud and 4-3/4" from the center line of the flush valve.

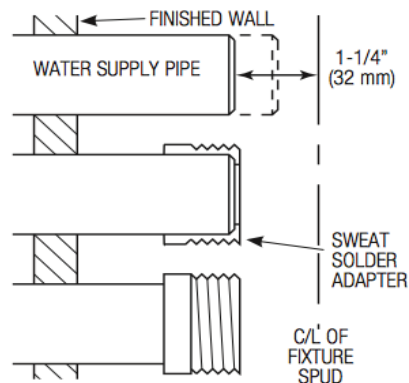
- (A) Find Sweat Adapter Kit supplied in box.
- (B) Measure from the finished wall to the Center Line of the fixture spud.
- (C) Cut the pipe 1 1/4" shorter than measured number.
- (D) Slide the Sweat Adapter until it hits the shoulder of the bushing and sweat solder to pipe.

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.

- (E) Screw the Control Stop onto end of the pipe until hand tight then tighten with Ridgid E-110 Wrench.

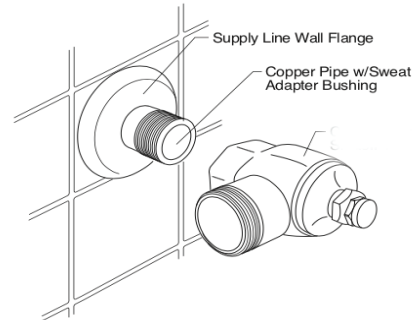
NOTE: If an Iron Pipe Supply (IPS) is being used, stub out the Iron Pipe Nipple to the same measurement as used for the Sweat Adapter

**Fig 1**



## 2) MOUNT the CONTROL STOP: Fig 2

- (A) Measure distance from finished wall to 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 Cover Tube and up against the wall.
- (E) Screw the Control Stop onto end of the pipe until hand tight then tighten with Ridgid E-110 Wrench.



## INSTALLING the VACUUM BREAKER & FLUSH ELBOW CONNECTION: Fig 4

- (1) Slide Horizontal Flush Elbow Assembly into Fixture Spud opening and attach with Nut and Washer provided. This step may be done before the fixture is even attached to the wall.
- (2) Slide Flush Connection Tube into Horizontal Flush Elbow Assembly
- (3) Secure firmly with Coupling Nut and Washer found on Elbow.
- (4) Find Rubber Sleeve pre-installed in flanged end of Flush Connection Tube.
- (5) Find Cowl Nut positioned at top of Flush Connection Tube.
- (6) Remove all packing material, screw into bottom of flush valve with Cowl Nut.

NOTE: TIGHTEN THE COWL NUT ONLY HAND TIGHT!

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

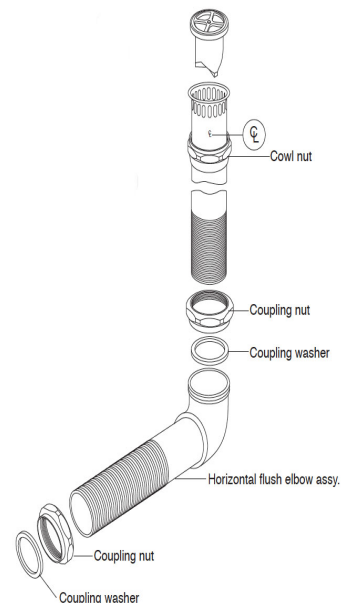
Note: The "CL" Critical Level Line marked on the Flush Connection must be a MINIMUM of 6" above the top of the Fixture.

**Fig. 4**

Urinal



Water Closet



## Installation of Push Button Assembly

- (A) Insert the Red Nylon Tube into the Red colored Kwik Connects fitting on the Push Button Assembly
- (B) Repeat with the Black Nylon Tube.

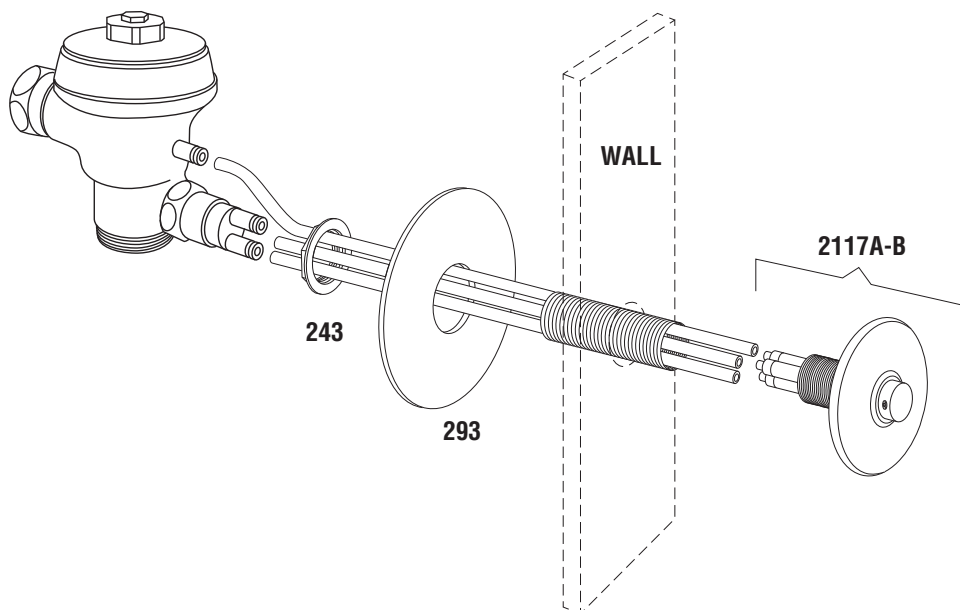
Note: It is important that the red and black nylon tubes are pushed all the way till they hit "home", and cannot be pulled out.

- (C) Run the Red & Black Nylon Tubes through Wall Sleeve (#2103).
- (D) Screw the threaded Wall Sleeve (#2103) into the Push Button Assembly.
- (E) Put this Assembly through the 1-1/2" hole in the wall.
- (F) From Chase side of wall, place the Bearing Plate (#293) onto the Wall Sleeve and push up to inside wall.
- (G) Screw the Locking Nut (#243) onto the threaded Wall Sleeve and run until the Bearing Plate is pulled up tight against the inside wall.
- (H) Push Red Nylon Tube into the Red Kwik Connect fitting on the flush valve body.
- (I) Push Black Nylon Tube into Black Kwik Connect fitting on the Piston Handle Assembly.

Note: It is important that the red and black nylon tubes are pushed all the way till they hit "home", and cannot be pulled out.

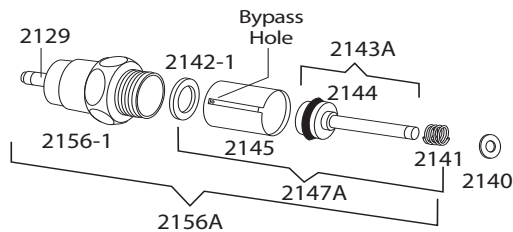
Note & Warning: If the nylon tubing provided, it may be cut shorter. When cutting the tubing, use a sharp instrument to give a clean cut (i.e. edge). Do NOT cut the tubing on an angle. Tubing that is not cut square or is out of round may leak. Any burrs left on the tubing, could damage the o-ring, which would also cause the fitting to leak.

- (J) Tighten all connections and turn on water to check for leaks.



## How to use Piston Nut Fitting

- (1) To release tube from fitting, push colored (black or red) plastic collar in and pull
  - (2) To connect tube to fitting, push tube into fitting. Note: make sure you feel it go all the way to the home position and give it a slight tug to be sure.
- Note: Make sure when cutting the tube that it is always square as a non-squared edge will leak



## Flushing Supply Lines

Remove Diaphragm Assembly (Fig 6)

**Fig 6**



Remove the Renewable Main Valve Seat using Delany #748, 12-point 1 ½" Socket Wrench. (Fig 7)

**Fig 7**



**NOTE:** This is to provide maximum cleaning of the system that no other manufacturer provides.

- (1) Replace Diaphragm alone to seal cover as you flush lines for best seal, and replace cover.
- (2) Open Control Stop completely.
- (3) Once flushing is complete, close Control Stop.
- (4) Open Cover and replace Main Valve Seat and the Diaphragm Assembly.
- (5) Screw Cover back on tightly.

## Setting a Water Closet Valve for Minimum Flushing Noise

- (1) Open the Control Stop to MAXIMUM open position.

Note: The valve may run/flush for approximately 20 to 30 seconds when the water is first turned on before shutting itself down.

- (2) 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.
- (3) Once adjustments to the Control Stop and the flow into the valve have been made, replace and tighten the cover cap. Note: Tightening the cover cap with wrench and not just by hand will provide vandal resistance.

**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.

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