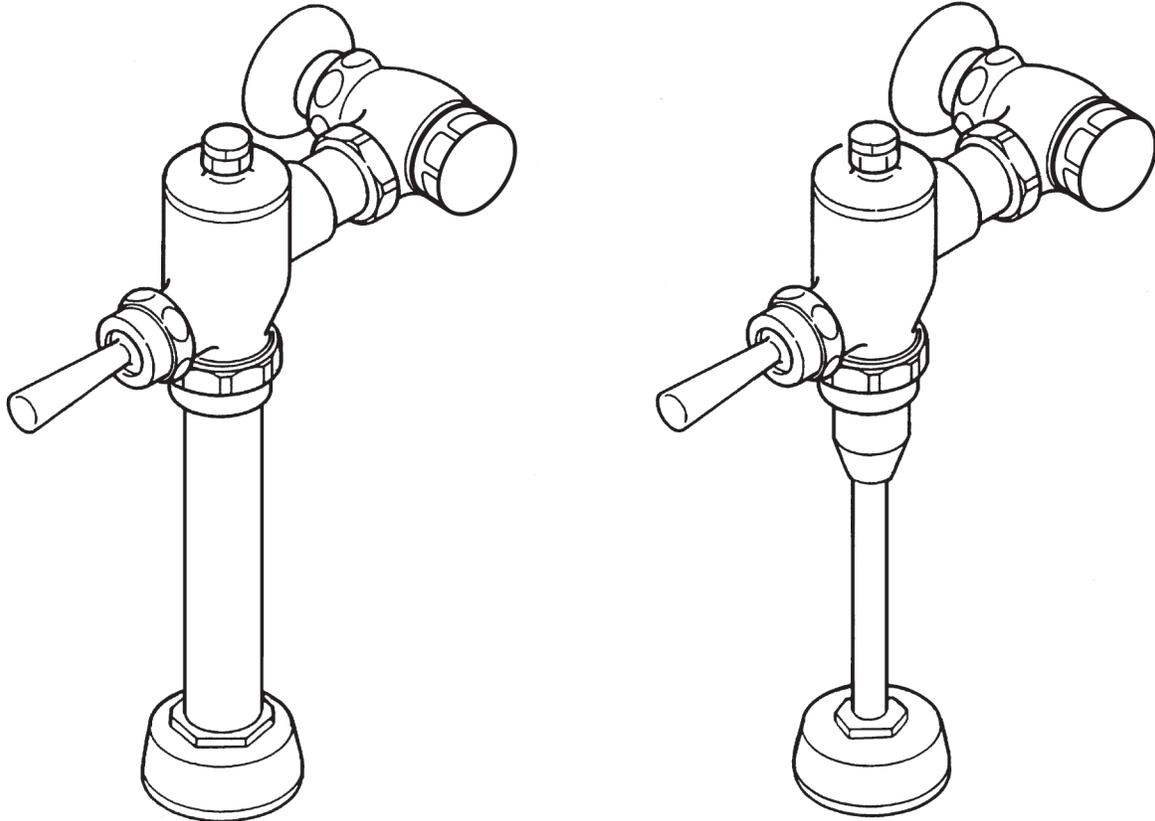


# INSTALLATION INSTRUCTIONS

Toilet Flushometer Valve TMT1HNCR

Toilet Flushometer Valve TMW1HNCR

Toilet Flushometer Valve TMU1HNCR



## LIMITED WARRANTY

TOTO warrants its products to be made of first class materials, free from defects in material or workmanship, under normal use, and to perform the service for which they are intended in a thoroughly reliable and efficient manner when properly installed and serviced, for a period of three years from the date of purchase. During this period TOTO will, at its option, repair or replace any part, or parts, which prove to be thus defective if returned to TOTO, at the customer's cost, and this shall be the sole remedy available under this warranty. No claims will be allowed for labor, transportation, or other incidental costs. This warranty extends only to persons or organizations who purchase TOTO's products directly from TOTO for the purpose of resale.

- THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. IN NO EVENT IS TOTO RESPONSIBLE FOR ANY CONSEQUENTIAL DAMAGES OF ANY MEASURE WHATSOEVER.

## PRIOR TO INSTALLATION

Prior to installing the Piston Flushometer Valve, install the items listed below:

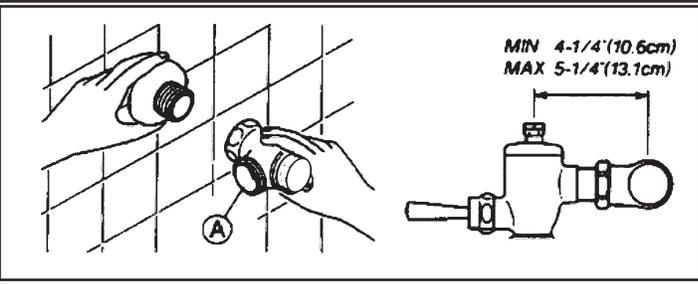
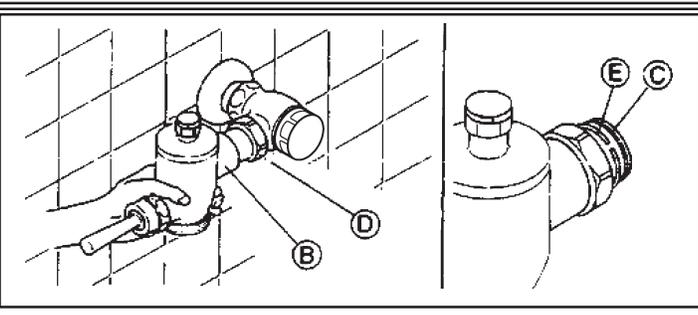
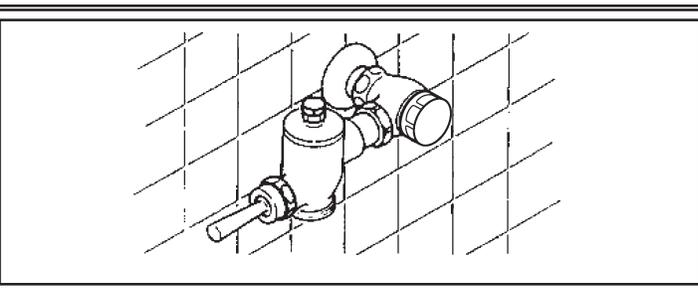
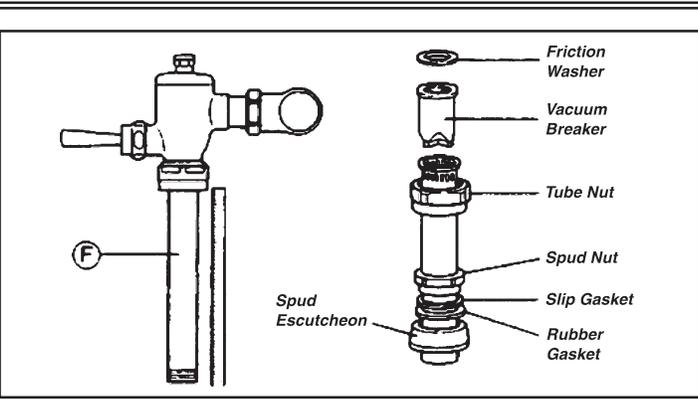
- Closet or urinal fixture
- Drain line
- Water supply line

The supply piping to these devices shall be securely anchored to the building structure to prevent the installed device from unnecessary movement when operated by the user. Care shall be exercised when installing the device to prevent marring the exposed significant surface.

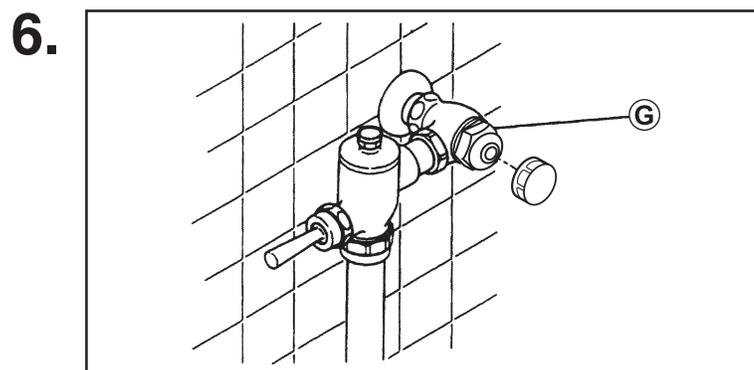
## IMPORTANT:

- ALL PLUMBING IS TO BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS.
- WATER SUPPLY LINES MUST BE SIZED TO PROVIDE AN ADEQUATE VOLUME OF WATER FOR EACH FIXTURE.
- FLUSH ALL WATERLINES PRIOR TO OPERATION.

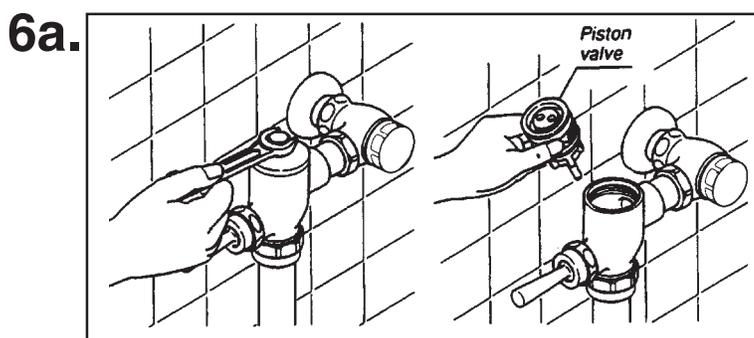
The Piston Valve is designed to operate with water pressure as low as 10psi (69kPa). HOWEVER THE MINIMUM PRESSURE REQUIRED TO OPERATE THE VALVE IS DETERMINED BY THE TYPE OF FIXTURE SELECTED. Consult the fixture manufacturer for pressure requirements. Pressure in excess of 100psi (690kPa) is not suitable for flushing any plumbing fixture. Most codes mandate a maximum of 80psi; Please check local code requirements. Protect the chrome or special finish of this flushometer. DO NOT USE TOOTHED TOOLS TO INSTALL OR SERVICE THE VALVE.

<p><b>1.</b></p> 	<p>Install stop valve assembly (A) and wall flange. Refer to shown rough in dimension. Thread sealing compounds should be used on male NPT threads only.</p> <p>For sweat solder refer to instructions in the sweat solder kit.</p>
<p><b>2.</b></p> 	<p>Prior to inserting the flushometer valve tailpiece (B) into the stop valve, be certain that the O-ring seal (C) is located in the O-ring seal groove at the end of the tailpiece, and the locking nut (D) and locking snap ring (E) are located as shown. Care should be taken not to damage the O-ring when inserting the tailpiece into the stop valve. If lubrication is needed, wetting the O-ring with water will be sufficient.</p>
<p><b>3.</b></p> 	<p>Insert the flushometer valve tailpiece (B) into the stop valve (A) and hand tighten the lock nut (D) to the stop valve. Plumb the entire unit.</p>
<p><b>4.</b></p> 	<p>Determine the length of vacuum breaker tube (F) required to join the flushometer valve and fixture spud. Cut the vacuum breaker tube, if required, to this length. Assemble the vacuum breaker tube assembly and spud nut assembly to the flushometer valve and fixture spud.</p>

- 5.** Hand tighten the spud nut and vacuum breaker tube nut to the fixture and flushometer valve. Align and plumb the valve assembly. Tighten the fixture spud nut, vacuum breaker tube nut, and lock nut with a wrench.

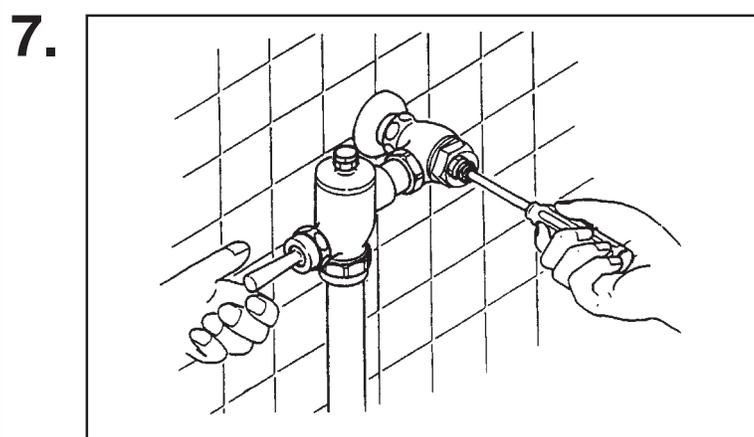


Before the water supply is turned on, be sure all stop valves to the flush valves are closed off tightly. The stop valves can be opened and closed by using the adjustment screw located at the center of the stop valve cap **G**, behind the adjustment screw cover if already installed. Stop valve adjustments can only be made by using the adjustment screw. If for any reason, it becomes necessary to remove the stop valve cap **G**, be certain that the water is shut off at the main supply valve. For new installations, we recommend the following steps:

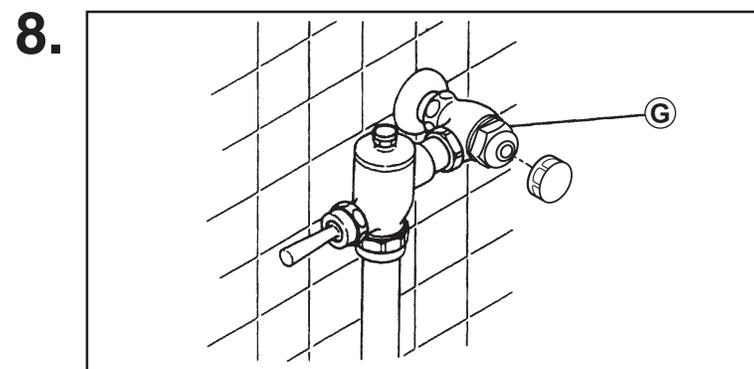


Shut off stop valve and remove flushometer cover. Lift out the piston valve. Install the flushometer cover and open the stop valve to flush the line of any debris and sediment.

After completion, shut off the stop valve, remove the flushometer cover and reinstall the piston valve. Reinstall the flushometer cover securely. Open the stop valve and activate the flushometer valve.



Flushometer valves are preset for fixture volume as marked on the valve cartons. The valve does not require adjustment for variations in water pressure within its operating range. To set the flushometer valve for proper operation, open the stop valve completely by turning the adjustment screw and flush the Flushometer valve several times. Gradually adjust the stop valve down, using the adjustment screw, so that the rate of water flow into the fixture is not excessive, yet is sufficient to adequately evacuate the waste. The final setting for urinals should be such that the fixture will not overflow when the valve is actuated several times in succession.



The stop cap screw cover should be replaced and tightly secured after final adjustments have been made.

# Specifications

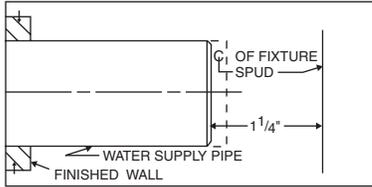
Flush volume: TMT1HNCR – 6.0LPF (1.6GPF) TMW1HNCR – 13.3LPF (3.5GPF) TMU1HNCR – 3.8LPF (1.0GPF)

Protect the Chrome or Special finish of the flushometer. DO NOT USE TOOTHED TOOLS TO INSTALL OR SERVICE THE VALVE.

## Sweat Solder Adapter Installation Instructions

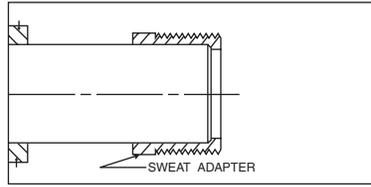
### Step No. 1

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



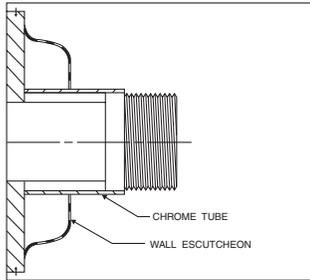
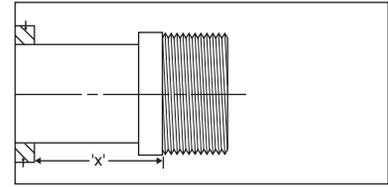
### Step No. 2

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



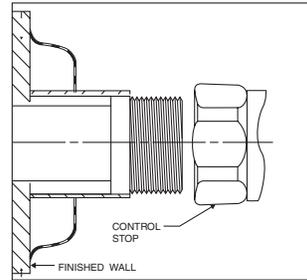
### Step No. 3

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



### Step No. 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.

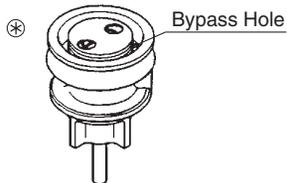


### Step No. 5

Screw control stop onto water supply pipe adapter.

## Troubleshooting Guide

PROBLEM	CAUSE	SOLUTION
Valve will not operate.	Water supply is shut off.	Turn on water supply and open control stop.
Valve doesn't shut off.	Dirt in Piston bypass hole.	Clean bypass hole <sup>⊗</sup> (unplug) by inserting a small wire.
	Dirt or debris at valve seat or sealing-area.	Clean valve seat and clean piston. replace seat seal if needed.
Not enough water to fixture.	Wrong flushometer valve unit installed.	Check fixture requirements. Install proper flushometer valve unit.
	Control stop improperly adjusted.	Adjust control stop
	Piston is damaged.	Replace Piston.
	Piston Stroke is too short.	Turn Piston Adjustment Screw counter-clockwise.
Too much water for fixture; noisy flush.	Wrong flushometer valve unit installed.	Check fixture requirements. Install proper flushometer valve unit.
	Control stop improperly adjusted.	Adjust control stop by turning the screw clockwise.
	Piston Stroke is too long.	Turn Piston Adjustment Screw clockwise.
Lever assembly leaks.	Lever nut is loose. Fiber washer is damaged. U-packing is dirty.	Tighten nut. Replace washer. Disassemble lever & clean U-packing.



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