

Installation Instructions

Ultima™ Manual Toilet Flush Valve, Piston-Type 1-1/2" Top Spud

MODEL NUMBERS

6047 Series

7017 Series



OPERATING PRESSURE:

- 25 psi (flowing) - 80 psi (static)

FLOW REQUIREMENT:

- 25gpm (94.6 L/min).

Certified to comply with:

- ASSE 1037
- ANSI/ASME A112.19.2
- ADA Compliant

American Standard

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@lixilamericas.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)

American Standard
CRT
Certified Response Technician

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

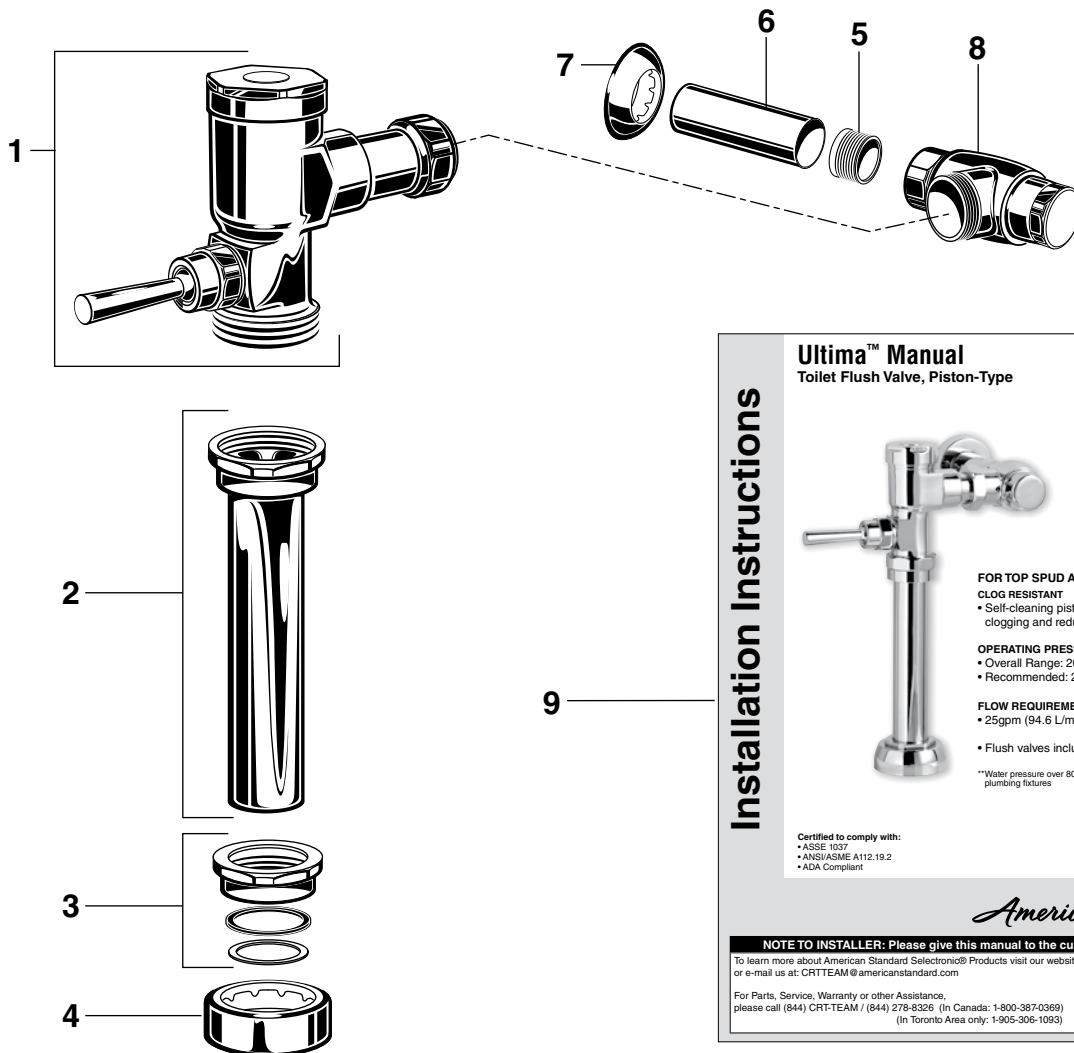
Remove the Flush Valve items from the carton. The illustration below shows all items after they have been removed from the carton. Some items may be packaged partially assembled to other items.

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

CARE INSTRUCTIONS:

DO: CLEAN 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.



Ultima™ Manual

Toilet Flush Valve, Piston-Type

MODEL NUMBERS
6047 Series
7017 Series

Installation Instructions

FOR TOP SPUD APPLICATIONS

CLOG RESISTANT

- Self-cleaning piston valve prevents clogging and reduces maintenance.

OPERATING PRESSURE:

- Overall Range: 20-125 psi **
- Recommended: 25 psi (flowing) - 80 psi (static)

FLOW REQUIREMENT:

- 25gpm (94.6 L/min).

• Flush valves include sweat solder kit.

**Water pressure over 80 psi is not recommended with most plumbing fixtures

Certified to comply with:

- ASSE 1037
- ANSI/ASME A112.19.2
- ADA Compliant

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

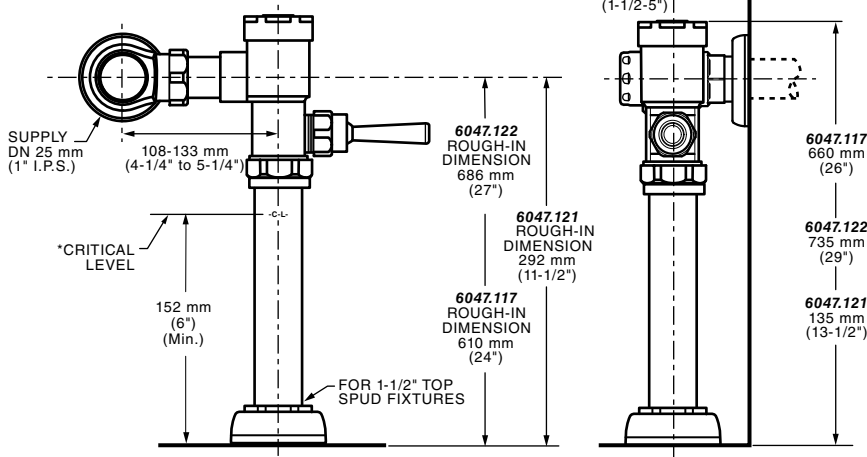
To learn more about American Standard Selectronic® Products visit our website at www.americanstandard-us.com or e-mail us at: CRTTEAM@americanstandard.com

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)

Certified Response Technicians

Roughing-in Dimensions

Fig.1



GENERAL DESCRIPTION

MANUAL FLUSH VALVE

Exposed Flushometer
for 1-1/2" Top Spud Fixtures

OPERATING PRESSURE:

- Overall Range: 20-125 psi **
- Recommended: 25 psi (flowing)
80 psi (static)

FLOW REQUIREMENT:

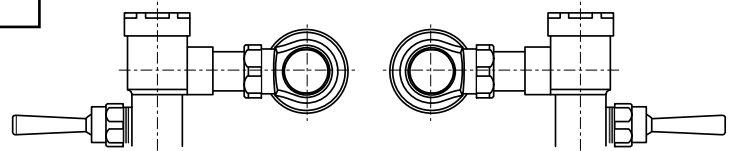
- 25gpm (94.6 L/min).

**Water pressure over 80 psi is not recommended with most plumbing fixtures

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

See **(Section 8)** for converting Flush Valve to Left Hand Installation.

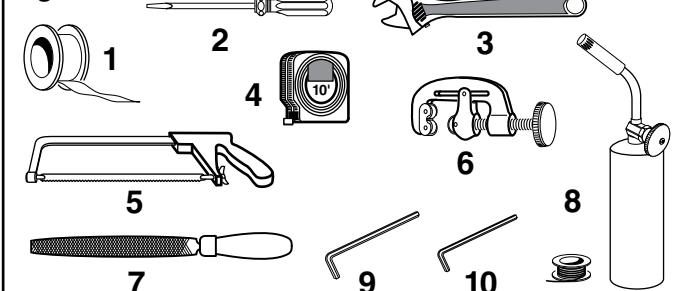
Right or Left Hand Installation



RECOMMENDED TOOLS; Fig. 2

1. Teflon Tape
2. Flat Blade Screwdriver (For adjusting Supply Stop)
3. Adjustable Wrench
4. Tape Measure
5. Hacksaw
6. Tubing Cutter
7. File
8. For Sweat Connection; Solder and Torch
9. 2.5mm Hex Wrench
10. 1.5mm Hex Wrench

Fig.2



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 must 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.

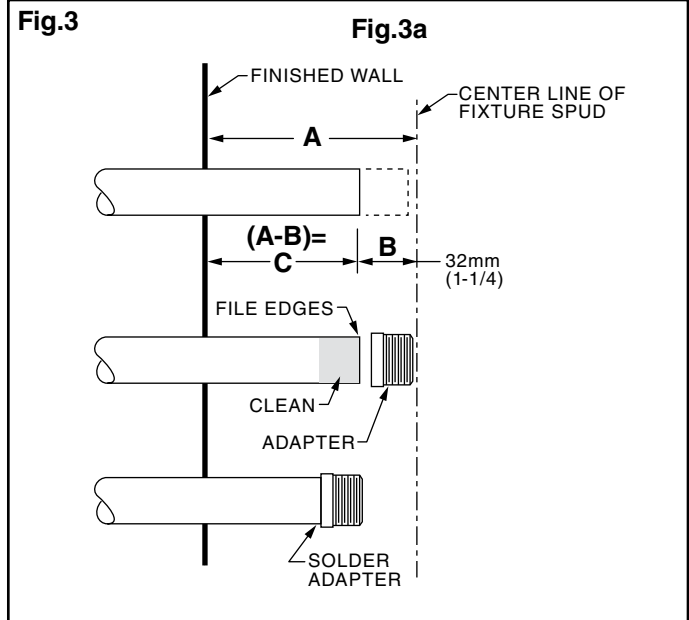
- Flush all water lines prior to operation **(See Step 5)**. Dirt and debris can cause flush valve to run continuously.
- With the exception of Supply Stop Inlet, **DO NOT** use pipe sealant or plumbing grease on any valve component or coupling!
- Protect the chrome or special finish on the Flushometer. **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.

1 INSTALL SWEAT SOLDER ADAPTER; Fig. 3

CAUTION Turn off hot and cold water supplies before beginning.

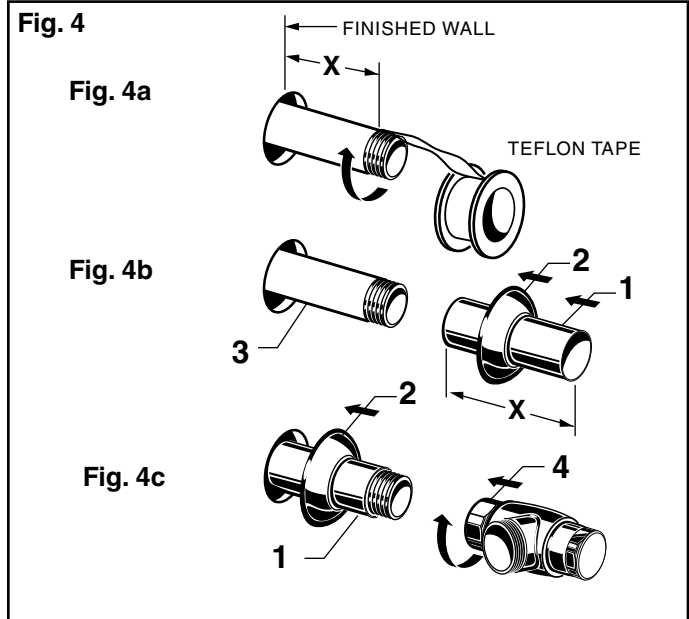
Note: Install Optional Sweat Solder Adapter (Supplied) for copper pipe supply line. Fig. 3.

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 on until it is seated against the internal stop. Sweat the Adapter to the pipe.



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

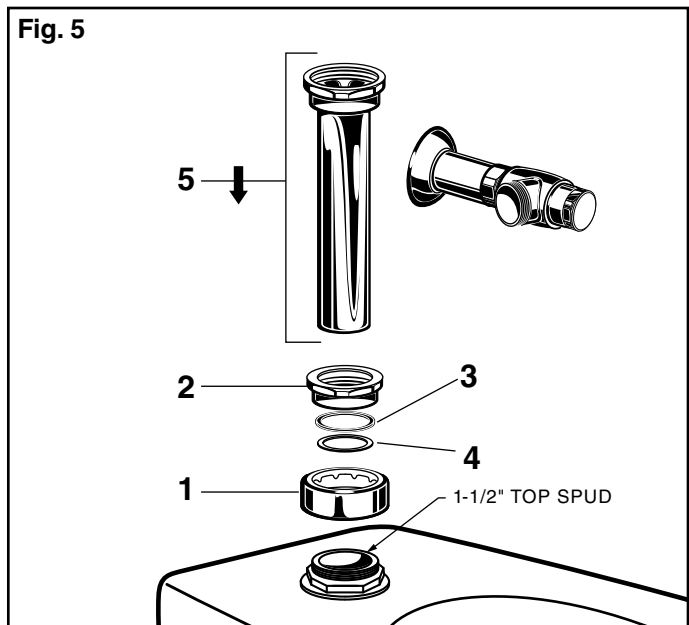
1. Measure from finished wall to first thread of Adapter or threaded supply pipe (dimension "X"). Cut COVER TUBE (1) to length (X). Apply Teflon Tape to the threaded end of the Adapter or supply pipe. Fig. 4a.
2. Push the COVER TUBE (1) into the WALL ESCUTCHEON (2). Slide both onto the SUPPLY PIPE (3).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



3 INSTALL DOWN TUBE AND VACUUM BREAKER; Fig. 5

1. Place the SPUD FLANGE (1) over the spud on the Fixture.
2. Thread SPUD COUPLING NUT (2) onto Spud. Make sure SEAL WASHER (3) and FRICTION WASHER (4) are installed. Do not tighten fully.
3. Insert the DOWN TUBE (5) into the SPUD COUPLING NUT (2) and push it down.

Note: If cutting Down Tube (5) to size, note that Critical Line (C/L) on Vacuum Breaker must typically be 6" (152mm) minimum above fixture. Consult Code for details.



4 INSTALL FLUSH VALVE; Fig. 6a & 6b

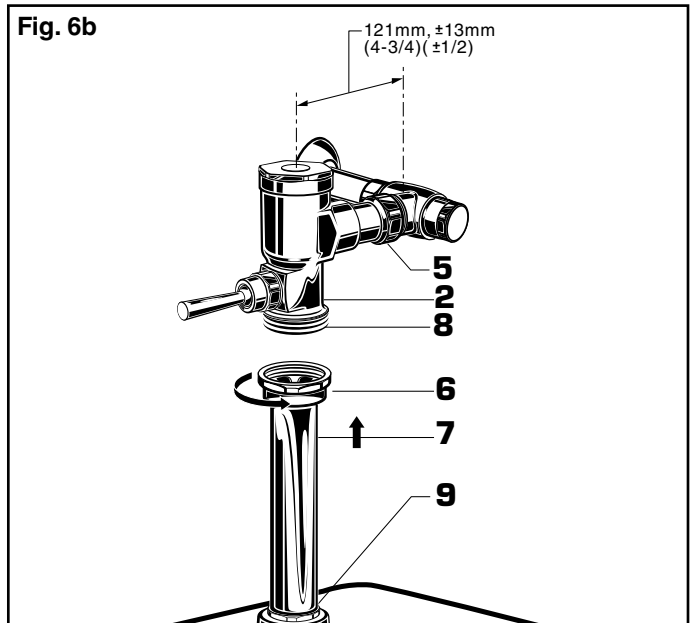
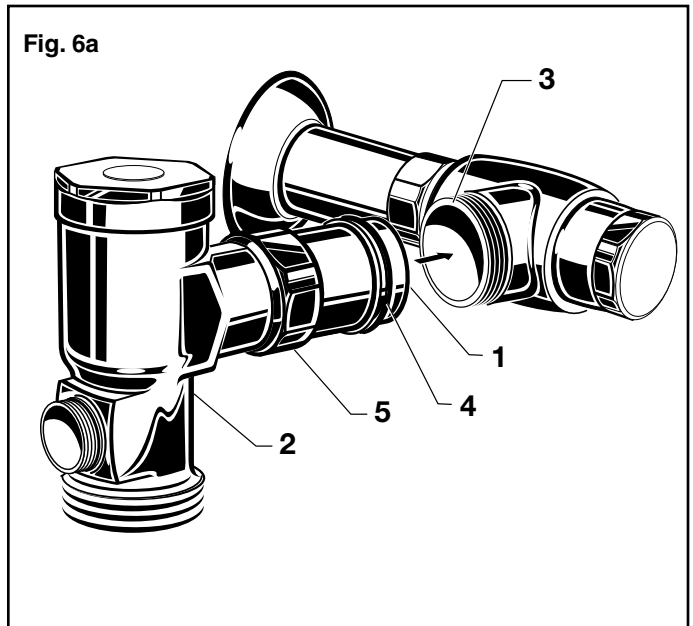
1. As shown in Fig. 6a, insert the side INLET FLANGE (1) on the FLUSH VALVE (2) into the SUPPLY STOP (3). Lubricate the INLET FLANGE O-RING (4) with water if necessary. Lightly tighten COUPLING NUT (5). Fig. 6a.

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

2. Align the FLUSH VALVE (2) (Fig. 6b) directly above the DOWN TUBE (7) and VACUUM BREAKER COUPLING NUT (6).

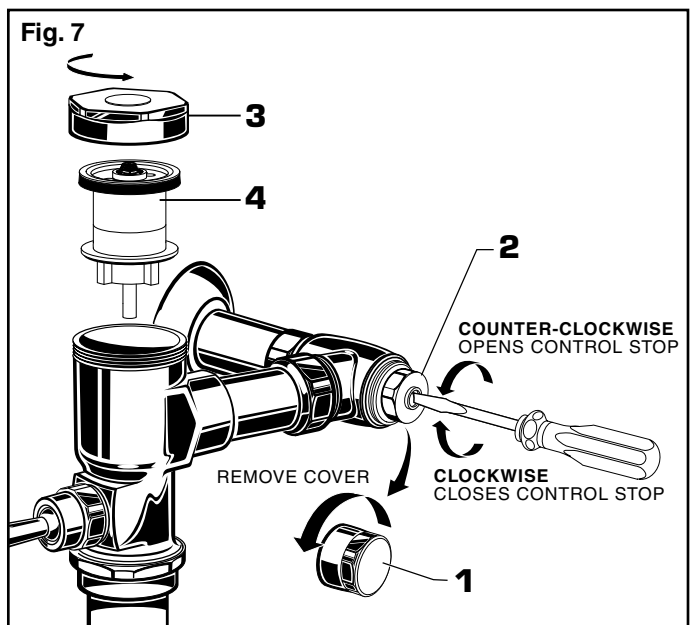
Note: There is a $\pm 13\text{mm}$, ($\pm 1/2$) tolerance for the 121mm (4-3/4) dimension. Fig. 6b.

3. Pull the DOWN TUBE (7) up to meet the threaded FLUSH VALVE CONNECTION (8) and hand tighten the VACUUM BREAKER COUPLING NUT (6). Align all components of the flush valve assembly. Fig. 6b.
4. Lightly tighten the COUPLING NUT (5) connection first, then the VACUUM BREAKER COUPLING NUT (6) and finally the SPUD COUPLING NUT (9). Once aligned correctly, use a wrench to tighten couplings to make water tight connections. Fig. 6b.



5 FLUSH OUT SUPPLY LINES; Fig. 7

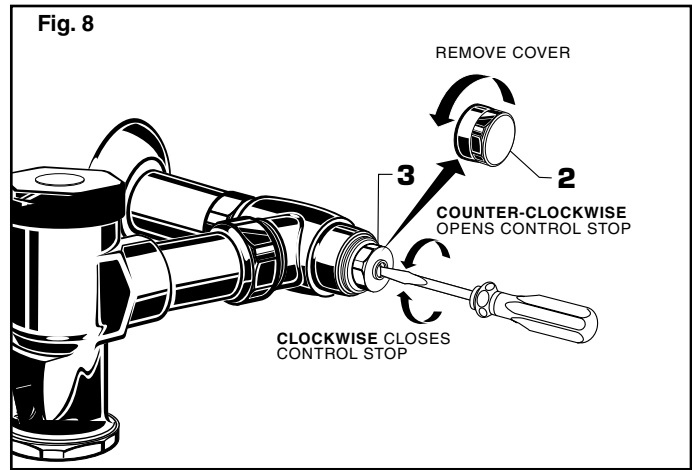
1. Remove COVER (1) from SUPPLY STOP (2). Make sure supply stop is closed.
2. Remove FLUSH VALVE CAP (3). Pull out PISTON (4). Replace FLUSH VALVE CAP (3) and tighten.
3. With a flat blade screwdriver open SUPPLY STOP (2) to flush line of any debris or sediment.
4. Close SUPPLY STOP (2). Remove FLUSH VALVE CAP (3). Replace PISTON (4). Replace FLUSH VALVE CAP (3) and tighten.



6 ADJUST SUPPLY STOP; Fig. 8

IMPORTANT: To avoid overflowing, the SUPPLY STOP (3) must never be opened to the point where the flow from the valve exceeds the flow capacity of the fixture. The fixture and drain must be able to handle a continuous flow in case of a flush valve failure. Valve is designed to provide stated flush volume with a 25 GPM flow rate.

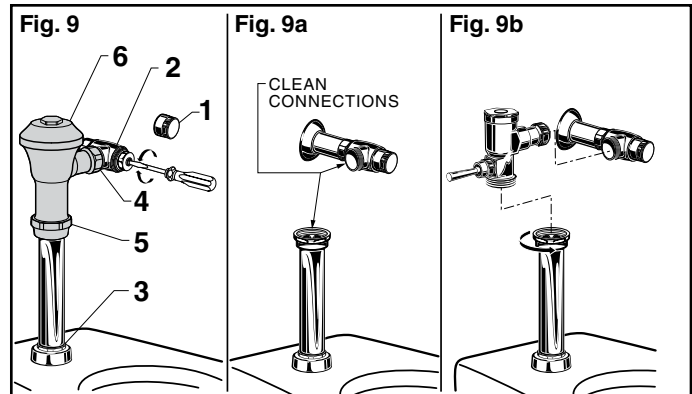
1. Remove COVER (2) from SUPPLY STOP (3). Turn on water supply 1/4 turn to 1/2 turn (CCW) and test for leaks. **Note: Unit may flush for approximately 5 to 10 sec. when water is first turned on.**
2. Actuate the FLUSH VALVE by pulling handle down.
3. Adjust SUPPLY STOP (3) after each flush until the stated flush volume is achieved, no splashing occurs and the fixture is properly cleansed.
4. When adjustment is complete, replace COVER (2) and tighten to ensure vandal-resistance.



7 HOW TO RETROFIT OUR VALVE; Fig. 9 (Replaces Industry Standard Manual and Electronic Valves)

Note: In most Retrofits the wall escutcheon, supply stop, 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 COVER (1) from SUPPLY STOP (2) if installed. Fig. 9.
2. Turn water supply off. Fig. 9.
3. Loosen SPUD COUPLING NUT (3). Unthread COUPLING NUT (4) and VACUUM BREAKER COUPLING NUT (5). Remove FLUSH VALVE (6). Fig. 9a.
4. Clean all threaded connections before installing the new flush valve. Fig. 9a.
5. Refer to Sections 4,5 and 6 to complete the retrofit installation. Fig. 9b.



8 LEFT OR RIGHT HAND INSTALLATION; Fig. 10

1. The FLUSH VALVE can be installed either as a right or left hand installation.
2. Orientate the FLUSH VALVE as shown in Fig. 10 to desired position for a left or right hand installation.

