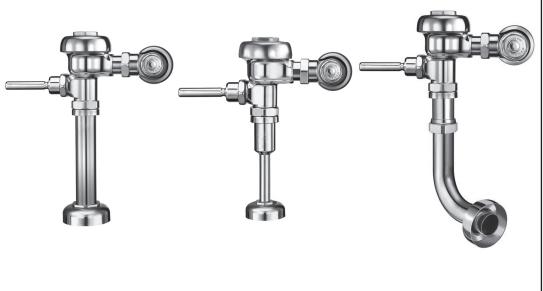
SLOAN.

INSTALLATION INSTRUCTIONS FOR EXPOSED REGAL® XL WATER CLOSET AND URINAL FLUSHOMETERS



Closet Flushometer 11/2" (38 mm) Top Spud MODELS 110/111, 113, 115 & 116

Closet Flushometer 11/2" (38 mm) Back Spud MODEL 120 & 122

Service Sink Flushometer 11/2" (38 mm) Top Spud MODEL 117

Urinal Flushometer 1¼" (32 mm) Top Spud MODEL 180

Urinal Flushometer 3⁄4" (19 mm) Top Spud MODEL 186

Squat Toilet Flushometer 11/2" (38 mm) Back Spud MODEL 137

LIMITED WARRANTY

Unless otherwise noted, Sloan Valve Company warrants this product, manufactured and sold for commercial or industrial uses, to be free from defects in material and workmanship for a period of three (3) years (one (1) year for special finishes, SF faucets, PWT electronics and 30 days for PWT software) from date of first purchase. During this period, Sloan Valve Company will, at its option, repair, replace, or refund the purchase price of any product which fails to conform with this warranty under normal use and service. This shall be the sole and exclusive remedy under this warranty. Products must be returned to Sloan Valve Company, at customer's cost. No claims will be allowed for labor, transportation or other costs. This warranty extends only to persons or organizations who purchase Sloan Valve Company for purpose of resale. This warranty does not cover the life of the batteries.

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

PRIOR TO INSTALLATION

Before you install the Regal XL flushometer, be sure the items listed below are installed. Also, refer to the rough-in diagrams on the next page.

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

IMPORTANT:

- INSTALL ALL PLUMBING 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 WATER LINES PRIOR TO MAKING CONNECTIONS.

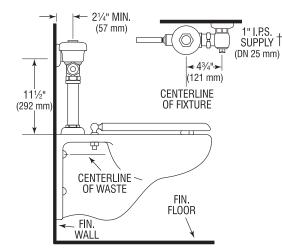
TOOLS REQUIRED FOR INSTALLATION

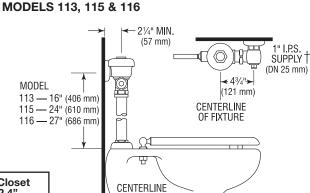
- Straight blade screwdriver
- Sloan A-50 Super-Wrench™, Sloan A-109 Plier Wrench or smooth jawed spud wrench

Sloan's flushometers are designed to operate with 10 to 100 psi (69 to 689 kPa) of water pressure. **THE MINIMUM PRESSURE REQUIRED TO THE VALVE IS DETERMINED BY THE TYPE OF FIXTURE SELECTED.** Consult fixture manufacturer for minimum pressure requirements. Most Low Consumption water closets (1.6 gpf/6.0 Lpf) require a minimum flowing pressure of 25 psi (172 kPa).

VALVE ROUGH-INS

MODELS 110/111



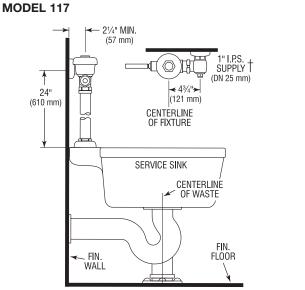


OF WASTE

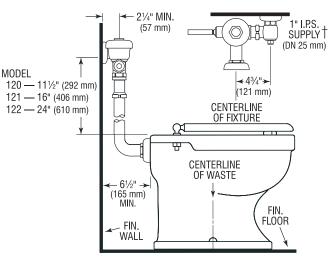
FIN. FLOOR

NOTE: Water Closet Valves with "-2.4" **Model Designation** deliver 2.4 gpf (9.0 Lpf)

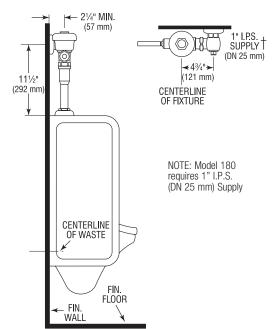




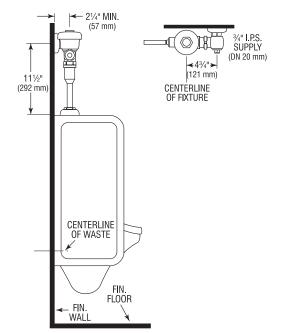
MODELS 120/122



MODEL 180



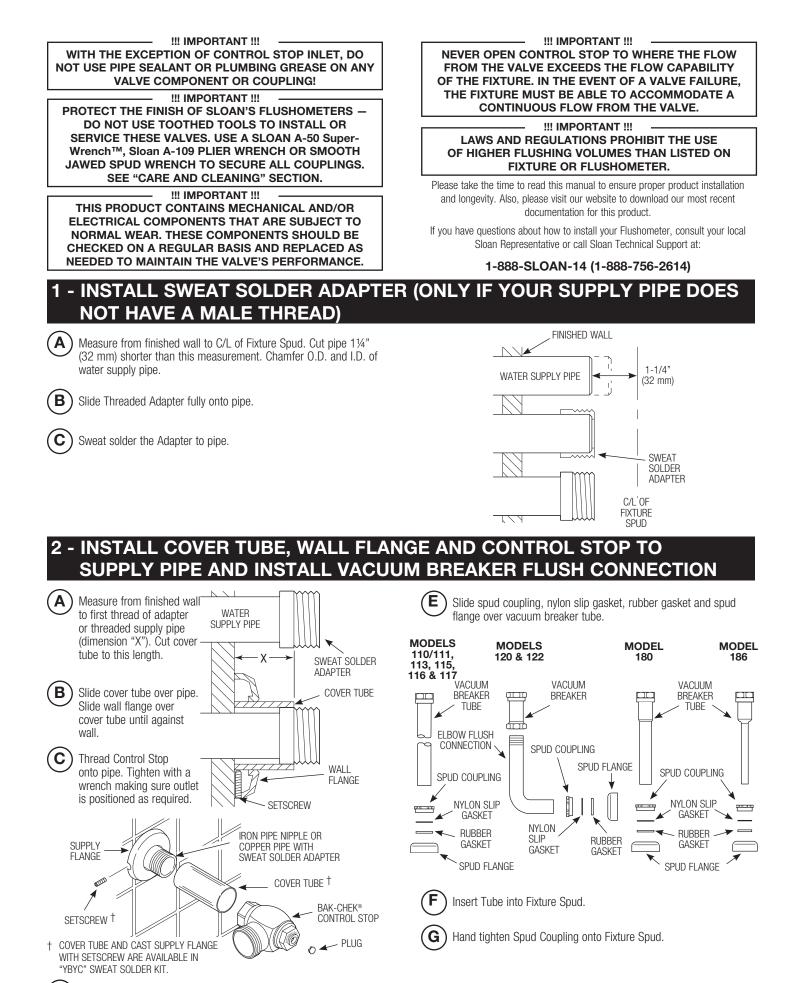




† 1" Control Stop is available with Whitworth Thread

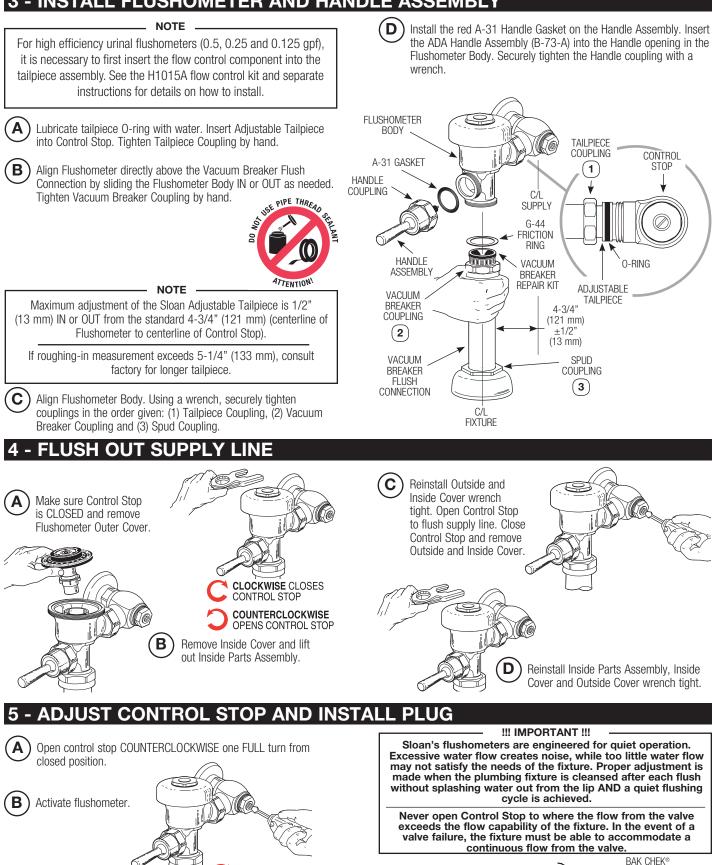
IMPORTANT NOTES:

- When mounted on an ADA accessible bowl, the rough-in to the supply inlet should be no higher than 37½" or the handle will exceed maximum height allowances under ADA guidelines.
 New ADAAG Guidelines allow for Split or Offset Grab Bars, check with local authorities or reference section 604.5.2 of ADAAG.



D Tighten setscrew with a 1/16" hex wrench. **DO NOT** install vandal resistant plug at this time.

3 - INSTALL FLUSHOMETER AND HANDLE ASSEMBLY



С

D

Install plug into the control

stop by pressing into bonnet.

CONTROL STOP

BONNET

PLUG

CLOCKWISE CLOSES

COUNTERCLOCKWISE

OPENS CONTROL STOP

CONTROL STOP

CARE AND CLEANING

DO NOT USE abrasive or chemical cleaners (including chlorine bleach) to clean Flushometers that may dull the luster and attack the chrome or special decorative finishes. Use **ONLY** mild soap and water, then wipe dry with clean cloth or towel.

While cleaning the bathroom tile, protect the Flushometer from any splattering of cleaner. Acids and cleaning fluids will discolor or remove chrome plating.



TROUBLESHOOTING GUIDE

I. Flushometer does not function (no flush).

- A. Control stop or main valve is closed. Open control stop or main valve.
- B. Handle assembly is damaged. Replace handle (B-32-A or B-73-A) or install handle repair kit (B-50-A).
- C. Relief valve is damaged. Replace inside parts kit.

2. Volume of water is not sufficient to siphon fixture.

- A. Control stop is not open wide enough. Adjust control stop for desired delivery of water volume.
- B. Urinal flushometer parts inside a closet flushometer. Replace inside urinal parts with proper closet flushometer parts.
- C. Low consumption flushometer installed on a non-low consumption fixture. Replace A-41-A inside parts kit with A-38-A water saver kit.
- D. Water saver kit installed in old, non-water saver bowl. Position refill head A-170 so that SIDE 1 is in the UP position.
- E. Inadequate volume or pressure at supply.
- If no gauges are available to properly measure supply pressure or volume of water at the flushometer, then remove the relief valve from the inside parts kit, reassemble the flushometer and open the control stop. If the fixture siphons, more water volume is required. If a 3.5 gpf inside parts kit is installed in the flushometer, then first flip the refill head (under the diaphragm) to obtain a 4.5 gpf volume. If this volume is still inadequate, remove the flow ring from the guide to obtain a 6.5 gpf kit. If additional flow is still required, try a low pressure guide kit A-175-A (#0301104). IMPORTANT LAWS AND REGULATIONS PROHIBIT THE USE OF HIGHER FLUSHING VOLUMES THAN LISTED ON FIXTURE OR FLUSHOMETER.
- If fixture does not siphon or if a low consumption fixture is installed, or if the above steps do not prove satisfactory, steps must be taken to increase the pressure and/or supply.

3. Flushometer closes off immediately.

- A. Damaged diaphragm. Replace inside parts kit to correct problem.
- B. Enlarged by-pass orifice from corrosion or damage. Install inside parts kit to correct problem and update flushometer.

4. Length of flush is too short (short flush).

- A. Diaphragm assembly and guide assembly are not hand-tight. Screw the two assemblies hand-tight.
- B. Enlarged by-pass orifice from corrosion or damage. Install NEW Inside parts kit to correct problem and update flushometer.
- C. A-19-AU (Black) urinal relief valve in closet flushometer. Replace relief valve with A-19-AC (White) closet relief valve.
- D. A-41-A low consumption kit installed in non-low consumption fixture. Replace with proper Inside Parts Kit.
- E. Handle assembly is damaged. Replace handle (B-32-A or B-73-A) or install handle repair kit (B-50-A).

5. Length of flush is too long (long flushing) or fails to close off.

A. Relief valve (A-19-A) is not seating properly or by-pass orifice is clogged because of foreign material, or by-pass orifice is closed by an invisible gelatinous film from "over-treated" water. Disassemble the working parts and wash thoroughly.

NOTE: SIZE OF THE ORIFICE IN THE BY-PASS IS OF UTMOST IMPORTANCE FOR THE PROPER METERING OF WATER INTO THE UPPER CHAMBER OF THE FLUSHOMETER. DO NOT ENLARGE OR DAMAGE THIS ORIFICE. REPLACE INSIDE KIT IF CLEANING DOES NOT CORRECT PROBLEM.

- B. Line pressure has dropped and is not sufficient to force Relief Valve to seat. Shut off all control stops until pressure has been restored, then open them again.
- C. A-19-AC (White) closet Relief Valve has been used in a 1 or 1½ gpf Urinal. Replace with A-19-AU (Black) Relief Valve.
- D. Inside cover is cracked or damaged. Replace the Inside Cover (A-71).

6. Chattering noise is heard during flush.

- A. Inside Cover is damaged. Replace Inside Cover (A-71).
- B. A-156-A Segment diaphragm has been installed upside-down. Reposition the Segment diaphragm properly (see markings on the Diaphragm).

7. Handle Leaks.

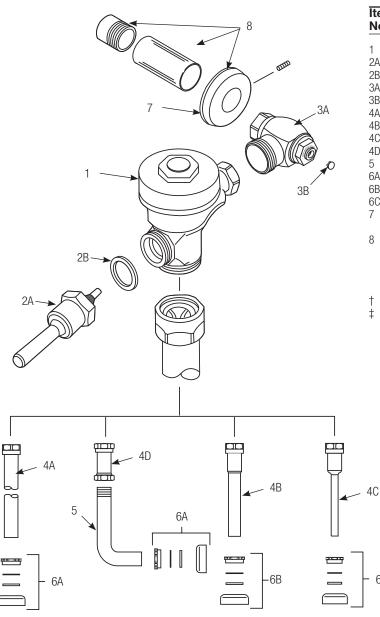
- A. B-39 Handle Seal is worn or damaged. Install new B-39 Seal. NOTE: The B-39 Seal will easily slide onto the B-40 Bushing when wet.
- B. Handle gasket has been omitted. Install Handle gasket (A-31) or Sloan handle repair kit (B-50-A).
- C. Valve handle bushing is worn. Replace handle repair kit (B-50-A).

When further assistance is required, please contact Sloan Technical Support at:

1-888-SLOAN-14 (1-888-756-2614)

or visit us online at: www.sloanvalve.com

PARTS LIST



Iter No.	n . No.	Part Description
1	†	Valve Assembly
2A	B-73-A	ADA Compliant Handle Assembly
2B	A-31	Handle Gasket
ЗA	H-790-A	Bak-Chek [®] Control Stop
3B	H-528	Control Stop Bonnet Plug
4A	V-500-AA	11/2" (38 mm) x 9" (229 mm) Vacuum Breaker Assembly :
4B	V-500-AA	1¼" (32 mm) x 9" (229 mm) Vacuum Breaker Assembly
4C	V-500-AA	3/4" (19 mm) x 9" (229 mm) Vacuum Breaker Assembly
4D	V-500-A	Vacuum Breaker Assembly
5	F-109	11/2" (38 mm) Elbow Flush Connection ‡
6A	F-56-A	11/2" (38 mm) Spud Coupling Assembly
6B	F-57-A	1¼" (32 mm) Spud Coupling Assembly
6C	F-58-A	34" (19 mm) Spud Coupling Assembly
7	F-7	Supply Flange (Supplied when Valve is Not Ordered with Sweat Solder Kit)
8	H-633-AA	1" (25 mm) Sweat Solder Kit and Cast Wall Flange with Setscrew
	H-636-AA	%" (19 mm) Sweat Solder Kit and Cast Wall Flange with Setscrew
†	Part numbe	r varies with valve model variation; consult factory

Length varies with valve model variation; consult factory

NOTE: The information contained in this document is subject to change without notice.

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