

**SLOAN VALVES**



**Public Restrooms**  
**Sloan Flushometers**

Restrooms subjected to higher traffic patterns are suitable for Sloan's Flushometers, the most specified Flushometers in the world. Their dependable operation and low maintenance costs make them ideal for public restrooms. Sloan Flushometers are available for manual or sensor operation.



**Clean Rooms**  
**Sloan Optima® Wash Stations**

Sloan Optima Wash Stations are stainless steel sinks that come preplumbed with Sloan's Electronic Faucets and the Option of temperature mixing and automatic soap dispensers.



**Nursing/Emergency Stations**  
**Sloan Optima® Wash Stations**

These electronic, sensor-operated, stainless steel wash stations offer water on demand to users, and are suitable for these areas.



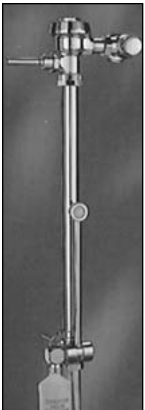
**Wash Areas**  
**Sloan Optima® Scrub Sinks and/or Wash Stations**

Laboratories require a safe, sanitary scrub area. Sloan wash stations meet this requirement. They are totally electronic, supplying water on demand.



**Locker Rooms**  
**Sloan Act-O-Matic® Showerheads**

Sloan's line of manual and electronic showerheads offer self-cleaning for easy maintenance, and a powerful spray for user satisfaction – all while meeting water conservation regulations.



**Hospital Rooms**  
**Slimline® Bedpan Washing Systems**

Sloan bedpan washers are the perfect choice for patient rooms. Where patient care is a priority, these systems help maintain superior hygiene levels, and are available with Bio-Gard, anti-microbial coating.



**Operating Rooms**  
**Sloan Optima® Scrub Sinks**

Physicians and operating room nurses prefer Sloan scrub sinks. Operation is totally electronic, supplying water on demand. Maintenance personnel prefer these sensor-operated sinks based on their easy installation and maintenance.



**Cafeterias**  
**Sloan Optima® Wash Stations and Optima® Products**

Maintaining hygiene in the food service area of a healthcare facility is one of the most important considerations. Sloan Optima Wash Stations help by making the "washing" function totally electronic: users never have to touch a faucet's handles to obtain water. Also, Optima or Optima Plus Flushometers and faucets help maintain strict hygiene levels.

**Optima Faucets**

**THE MORE YOU DEMAND, THE BETTER OPTIMA® FAUCETS PERFORM**

Sloan Optima® Faucets are specified more than any other brand of electronic faucet. Optima® Faucets are crafted in the tradition of Sloan Quality with advanced, state-of-the-art electronics. Optima® Faucets are "hands free" and are engineered and built by Sloan, the leader in electronic plumbing applications. Sloan has designed and installed more electronic plumbing installations than any other single manufacturer. The reason is that Sloan pioneered the use of electronics in the restroom. Our knowledge-base of applications has provided us with the foundation to solve the most complex hygiene and plumbing problems.

**Functional**

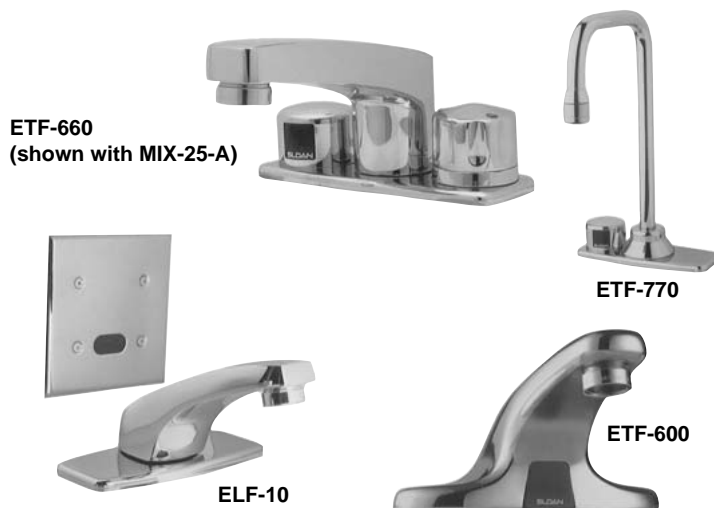
Sloan Optima® Faucets utilize advanced, infrared sensing to lessen the risk of bacteria being transferred to a user through contact with the sink's fixtures. They are easy to install and maintain, meet ADA requirements and are long lasting because they have been designed and manufactured to Sloan quality standards, the highest in the world.

**Designer Styling**

Every Optima® Faucet offers the designer a particular style to blend with their design vision. From the more traditional Optima® ETF-660 to the bolder ETF-80, you'll find an Optima® Faucet that complements your particular design.

**THE BROADEST PRODUCT OFFERING FOR A VARIETY OF APPLICATION REQUIREMENTS**

- Adjustable temperature control on specific models provides comfort and control to users
- No-hands operation promotes hygiene and helps prevent the spread of dangerous bacteria
- Designer styling enhances a building's image
- Easy maintenance, self-diagnostic electronics make Optima® Faucets one of the most "friendly" products to install and maintain
- Vandal-deterrent features such as armor cables on wire leads provide security for the product's long use



**ETF-660**  
 (shown with MIX-25-A)

**ETF-770**

**ETF-600**

**ELF-10**

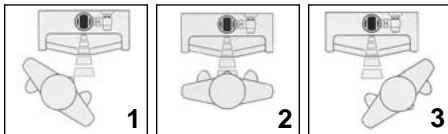
**SLOAN VALVES**

**Sloan's Optima Plus® Flushometer**

**A NO-HANDS BATTERY-OPERATED VALVE YOU CAN RETROFIT IN JUST A FEW MINUTES**

**How Optima Plus Works**

1. An invisible infrared light beam is emitted from the Optima Plus sensor.
2. As user enters the effective range of the Optima Plus sensor, the light beam is reflected back into the sensor and transformed into a low voltage electrical signal. Once activated, the circuit continues in a "hold" mode for as long as the user remains within the effective range of the sensor.
3. As the user steps out of the effective range, another electrical signal is initiated to energize the operator and activate the flushometer. The circuit then automatically resets and is ready for the next user.



**Everything you need to install Optima Plus**

It takes less than five minutes to convert an existing Royal Flushometer into an Optima Plus Flushometer. Electronic operation has never been so easy.

Impact-resistant plastic cover stands up to abuse.

New, patented valve module assures accuracy of flush volume.



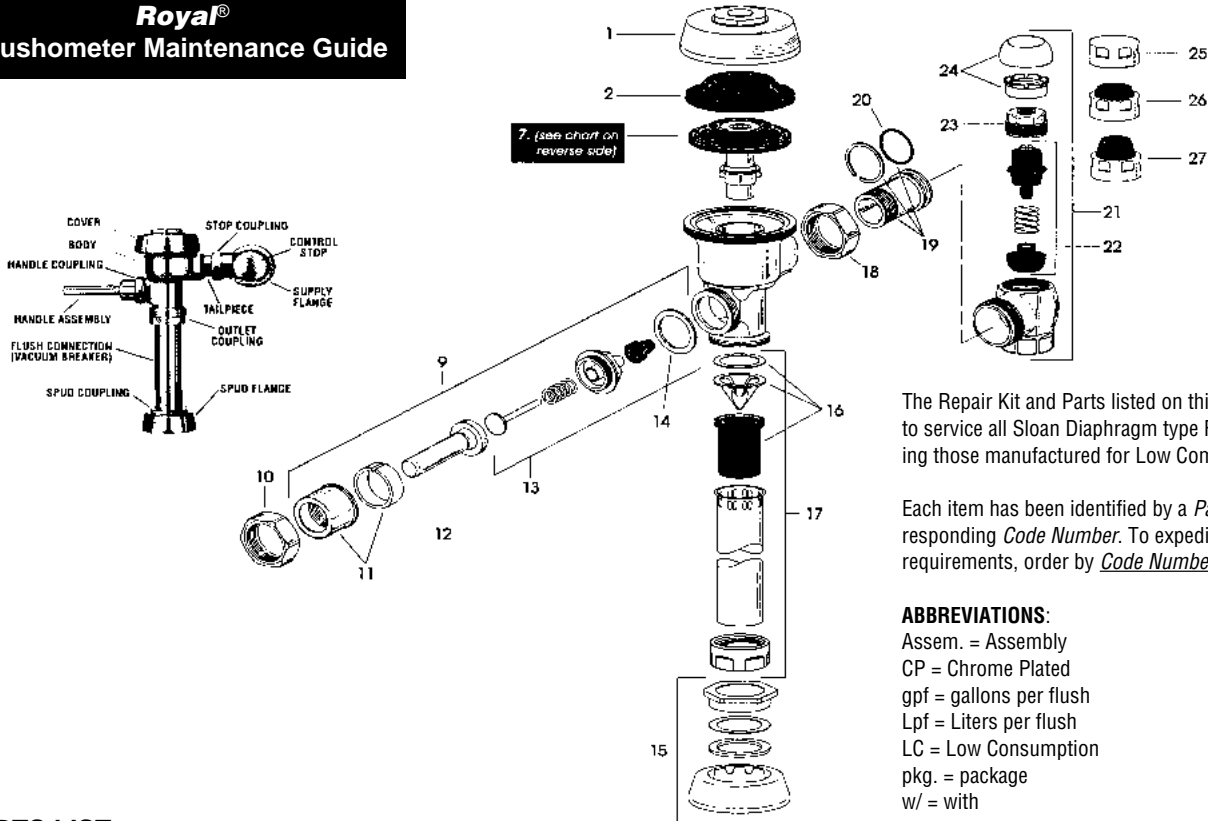
Chrome-plated brass locking ring.

Installation tools come with valve.

**Whether it's new parts or a whole new flush valve, let Lakeside Supply's broad inventory serve your needs and save you money.**

SLOAN VALVES

Royal®  
Flushometer Maintenance Guide



The Repair Kit and Parts listed on this page are designed to service all Sloan Diaphragm type Flushometers, including those manufactured for Low Consumption (LC) usage.

Each item has been identified by a *Part Number* and a corresponding *Code Number*. To expedite your replacement requirements, order by *Code Number*.

**ABBREVIATIONS:**

- Assem. = Assembly
- CP = Chrome Plated
- gpf = gallons per flush
- Lpf = Liters per flush
- LC = Low Consumption
- pkg. = package
- w/ = with

**PARTS LIST**

1.	0301172	<b>A-72</b>	CP Cover
2.	0301168	<b>A-71</b>	Inside Cover
3A.	5301058	<b>A-19-AC</b>	Relief Valve, White (Closet) – 12 per pkg.
3B.	5301059	<b>A-19-AU</b>	Relief Valve, Black (Urinal) – 12 per pkg.
3C.	5301211	<b>A-19-ALC</b>	Relief Valve, Green (Closet/Urinal-LC) – 12 per pkg.
3D.	5301143	<b>A-19-AL</b>	Relief Valve, Blue (9 Liter Closet) – 12 per pkg.
4.	5301111	<b>A-15-A</b>	Disc – for all Inside Parts Kits – 12 per kg.
5.	5301188	<b>A-156-A</b>	Diaphragm – for all Inside Parts Kits – 12 per pkg.
6A.	5301236	<b>A-163-A</b>	Guide Assem. 4.5 gpf/17.0 Lpf Closet & 1.5 gpf/5.7 Lpf Urinal – 12 per pkg.
6B.	5301032	<b>A-152-A</b>	Guide Assem. 3.5 gpf/13.2 Lpf Closet – 12 per pkg.
6C.	5301031	<b>A-151-A</b>	Guide Assem. 1.6 gpf/6.0 Lpf LC Closet – 12 per pkg.
6D.	5301155	<b>A-155-A</b>	Guide Assem. 0.5 gpf/1.9 Lpf Urinal – 12 per pkg.
6E.	5301157	<b>A-157-A</b>	Guide Assem. 0.5 gpf/1.9 Lpf Urinal – 12 per pkg.
7.	<b>SEE THE INSIDE PARTS KITS CHART</b>		
9.	0302390	<b>B-73-A</b>	CP Handicap Handle Assem. (A.D.A. Compliant) (shown)
	5302279	<b>B-32-A</b>	CP Handle Assem. (now shown) – 6 per pkg.
10.	0301082	<b>A-6</b>	CP Handle Coupling
11.	0302109	<b>B-7-A</b>	CP Socket Assem.
12.	0302389	<b>B-74-A</b>	CP Handicap Handle Grip (A.D.A. Compliant) (shown)
	5302274	<b>B-32</b>	CP Handle Grip (now shown) – 12 per pkg.
13.	3302306	<b>B-51-A</b>	Handle Repair Kit
14.	5301139	<b>A-31</b>	Handle Gasket – 48 per pkg.
15.	0306125	<b>F-5-A</b>	3/4" CP Spud Coupling Assem.
	0306140	<b>F-5-A</b>	1-1/4" CP Spud Coupling Assem.
	0306146	<b>F-5-A</b>	1-1/2" CP Spud Coupling Assem.
16.	3323182	<b>V-651-A</b>	Vacuum Breaker Repair Kit
17.	0393004	<b>V-600-AA</b>	3/4" x 9" CP Vacuum Breaker
	0393006	<b>V-600-AA</b>	1-1/4" x 9" CP Vacuum Breaker
	0393007	<b>V-600-AA</b>	1-1/2" x 9" CP Vacuum Breaker

18.	0308676	<b>H-550</b>	CP Stop Coupling
19.	0308801	<b>H-551-A</b>	CP Adjustable Tailpiece 2-1/16" long
20.	5308696	<b>H-553</b>	"O" Ring – 24 per pkg.
21.	3308386	<b>H-700-A</b>	1" Screwdriver Bak-Chek® Stop CP – complete
	3397374	<b>H-700-A</b>	3.4" Screwdriver Bak-Chek® Stop CP – complete
22.	3308853	<b>H-541-A</b>	Control Stop Repair Kit*
	3308856	<b>H-543-A</b>	Control Stop Repair Kit**
23.	0308612	<b>H-622</b>	CP Bonnet*
	0308843	<b>H-577</b>	CP Bonnet**
24.	3308791	<b>H-1010-A</b>	Vandal Resistant Control Stop Cap Assem.*
	3308790	<b>H-1009-A</b>	Vandal Resistant Control Stop Cap Assem.**
25.	0308840	<b>H-573</b>	Control Stop Cap CP*
	0308848	<b>H-582</b>	Control Stop Cap CP**
26.	3308866	<b>H-574</b>	Control Stop Cap w/Bumper*
27.	3308867	<b>H-576</b>	Control Stop Cap w/Extended Bumper*

\*for use w/H-700-A 1" & 3/4" and H-600-A 1" Screwdriver Bak-Chek® Control Stops  
\*\*for use w/H-600-A 3/4" Screwdriver Bak-Chek® Control Stops

MASTER FLUSHOMETER REBUILDING KITS		
Includes Items 7-13-16 & 20		
CODE NO.	KIT NO.	DESCRIPTION
3301048	A-1001-A	Rebuild Kit (4.5 gpf/17.0 Lpf) Closet/Service Sink
3301049	A-1002-A	Rebuild Kit (1.5 gpf/5.7 Lpf) Urinal
3301012	A-1003-A	Rebuild Kit (3.5 gpf/13.2 Lpf) Closet
3301013	A-1004-A	Rebuild Kit (1.6 gpf/6.0 Lpf) LC Closet
3301014	A-1005-A	Rebuild Kit (1.0 gpf/3.8 Lpf) LC Urinal
3301050	A-1011-A	Rebuild Kit (0.5 gpf/1.9 Lpf) Urinal
3301051	A-1012-A	Rebuild Kit (2.4 gpf/9.0 Lpf) Closet
WASHER SET		
3301089	A-156-AA	Washer Set—includes: 4, 5, 8 & 14

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

## SLOAN VALVES

**1. PROBLEM: Flushometer does not function.**

- CAUSE:** (a.) Control Stop or Main Valve is Closed.  
 (b.) Handle Assembly is worn.  
 (c.) Relief Valve is worn.

- SOLUTION:** (a.) Open Control Stop or Main Valve.  
 (b.) Install Sloan Handle Repair Kit (B-50-A) or replace handle.  
 (c.) Replace Inside Parts Kit.

**2. PROBLEM: Insufficient volume of water to adequately siphon fixture.**

- CAUSE:** (a.) Control Stop not open enough.  
 (b.) Urinal Flushometer Parts inside a Closet Flushometer.  
 (c.) Low Consumption Flushometer installed on a non-Low Consumption fixture.  
 (d.) Water Saver Kit installed in old, non-Water Saver bowl.  
 (e.) Inadequate volume or pressure at supply.

- SOLUTION:** (a.) Adjust Control Stop for desired delivery of water.  
 (b.) Replace Inside Urinal Parts with proper Closet Flushometer Parts.  
 (c.) Replace A-41-A Inside Parts Kit with A-38-A Water Saver Kit.  
 (d.) Position Refill Head A-170 so that SIDE 1 is in the UP Position.  
 (e.) 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 requiring Low Consumption Fixtures (1.6 gpf Water Closets and 1.0 gpf Urinals) prohibit the use of higher flushing volumes.  
 • 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. PROBLEM: Flushometer closes off immediately.**

- CAUSE:** (a.) Ruptured or damaged Diaphragm.  
 (b.) Enlarged By-pass orifice from corrosion or damage.

- SOLUTION:** Install Inside Parts Kit to correct above problems and update Flushometer.

**4. PROBLEM: Length of flush is too short (Short Flushing).**

- CAUSE:** (a.) Diaphragm Assembly and Guide Assembly are not hand-tight.  
 (b.) Enlarged By-pass orifice from corrosion or damage.  
 (c.) A-19-AU (Black) Urinal Relief Valve in Closet Flushometer.  
 (d.) A-41-A Low Consumption Kit installed in non-Low Consumption fixture.  
 (e.) Handle Assembly is worn.

- SOLUTION:** (a.) Screw the two assemblies hand-tight.  
 (b.) Install NEW Inside Parts Kit to correct problem and update Flushometer.

- (c.) Replace Relief Valve with A-19-AC (White) Closet Relief Valve.  
 (d.) Replace with proper Inside Parts Kit.  
 (e.) Install Handle Repair Kit B-50-A or replace the Handle.

**5. PROBLEM: Length of flush is too long (Long Flushing) or fails to close off.**

- CAUSE:** (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.  
 (b.) Line pressure has dropped and is not sufficient to force Relief Valve to seat.  
 (c.) A-19-AC (White) Closet Relief Valve has been used in a 1 or 1-1/2gpf Urinal.  
 (d.) Inside Cover is cracked or damaged.

- SOLUTION:** (a.) 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.) Shut off all control stops until pressure has been restored, then open them again.  
 (c.) Replace with A-19-AU (Black) Relief Valve.  
 (d.) Replace the Inside Cover (A-71).

**6. PROBLEM: Chattering noise in Flushometer.**

- CAUSE:** (a.) The A-156-A Segment Diaphragm has been installed upside-down.  
 (b.) The Inside Cover has become distorted from wear, freezing or abuse.

- SOLUTION:** (a.) Replace the Segment Diaphragm to the proper position as instructed by markings on the Diaphragm.  
 (b.) Replace Inside Cover.

**7. PROBLEM: Leaking at Handle Assembly.**

- CAUSE:** (a.) The B-39 Seal is worn or deteriorated.  
 (b.) Handle gasket has been omitted.  
 (c.) Valve Handle Bushing is worn.

- SOLUTION:** (a.) Install new B-39 Seal. **NOTE:** The B-39 Seal will easily slide right onto the B-40 Bushing if it is wet.  
 (b.) Install A-31 Handle Gasket or Sloan Handle Repair Kit (B-50-A).  
 (c.) Install Sloan Handle Repair Kit (B-50-A).

**CARE AND CLEANING INSTRUCTIONS**

DO NOT use abrasive or chemical cleaners to clean Flushometers, they may dull the luster and attack the chrome or special decorative finishes. Use ONLY soap and water, then wipe dry with a clean towel or cloth.

While cleaning the bathroom tile, the Flushometer should be protected from any splattering of cleaner. Acids and cleaning fluids can discolor or remove chrome plating.

If further assistance is required, please contact the Sloan Valve Company Installation Engineering Dept. at 847/671-4300.

