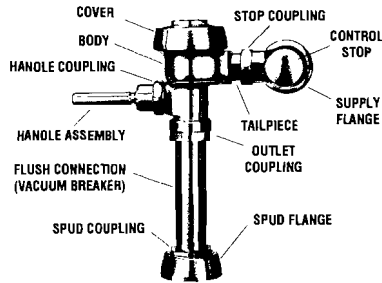
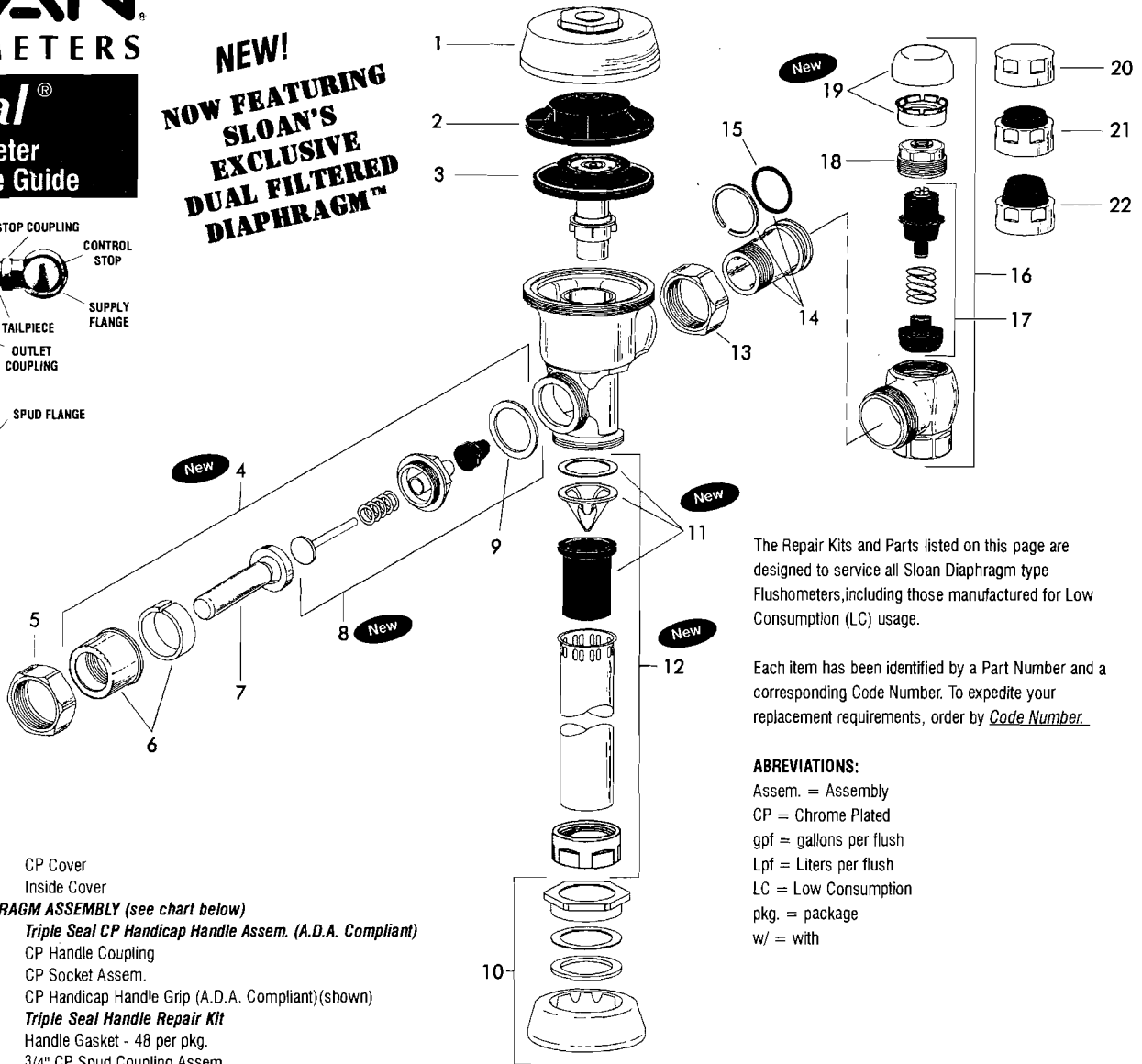


SLOAN[®] FLUSHOMETERS

Royal[®] Flushometer Maintenance Guide



NEW!
NOW FEATURING
SLOAN'S
EXCLUSIVE
DUAL FILTERED
DIAPHRAGM™



The Repair Kits 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 A-72 CP Cover
2. 0301168 A-71 Inside Cover
3. **DUAL FILTERED DIAPHRAGM ASSEMBLY (see chart below)**
4. 0302390 B-73-A Triple Seal CP Handicap Handle Assem. (A.D.A. Compliant)
5. 0301082 A-6 CP Handle Coupling
6. 0302109 B-7-A CP Socket Assem.
7. 0302389 B-74-A CP Handicap Handle Grip (A.D.A. Compliant)(shown)
8. 3302306 B-51-A Triple Seal Handle Repair Kit
9. 5301139 A-31 Handle Gasket - 48 per pkg.
10. 0306125 F-5-A 3/4" CP Spud Coupling Assem.
- 0306140 F-5-A 1 1/4" CP Spud Coupling Assem.
- 0306146 F-5-A 1 1/2" CP Spud Coupling Assem.
11. 3323182 V-651-A High Back Pressure Vacuum Breaker Repair Kit
12. 3393004 V-600-AA 3/4" x 9" CP Vacuum Breaker
- 3393006 V-600-AA 1 1/4" x 9" CP Vacuum Breaker
- 3393007 V-600-AA 1 1/2" x 9" CP Vacuum Breaker
13. 0308676 H-550 CP Stop Coupling
14. 0308801 H-551-A CP Adjustable Tailpiece 2 1/16" long
15. 5308696 H-553 "O" Ring - 24 per pkg.
16. 3308386 H-700-A 1" Screwdriver Bak-Chek® Stop CP-complete
- 3308384 H-700-A 3/4" Screwdriver Bak-Chek® Stop CP-complete
17. 3308853 H-541-A Control Stop Repair Kit*
- 3308856 H-543-A Control Stop Repair Kit**
18. 0308612 H-622 CP Bonnet*
- 0308843 H-577 CP Bonnet**
19. 3308791 H-1010-A Vandal Resistant Control Stop Cap Assem.*
- 3308790 H-1009-A Vandal Resistant Control Stop Cap Assem.**
20. 0308840 H-573 Control Stop Cap CP*
- 0308848 H-582 Control Stop Cap CP**
21. 3308866 H-574 Control Stop Cap w/Bumper*
22. 3308867 H-576 Control Stop Cap w/Extended Bumper*

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

ITEM 3 - DUAL FILTERED DIAPHRAGM™ ASSEMBLY			
Sold only in Royal Performance™ Kit			
Includes: Dual Filtered Diaphragm Assembly (item 3), Handle Repair Kit w/Triple Seal Packing (item 8), High Back Pressure Vacuum Breaker Repair Kit (item 11) and Tailpiece "O" Ring (item 15).			
Royal Performance™ Kits			
Code No.	Kit No.	Flush Volume	Use With
3301070	A-1101-A	1.6 gpf/6.0 Lpf	Low Consumption Water Closets
3301071	A-1102-A	3.5 gpf/13.2 Lpf	Water Saver Water Closets
3301072	A-1103-A	2.4 gpf/9.0 Lpf	9 Liter European Water Closets
3301073	A-1106-A	0.5 gpf/1.9 Lpf	Wash Down Urinals
3301074	A-1107-A	1.0 gpf/3.8 Lpf	Low Consumption Urinals
3301075	A-1108-A	1.5 gpf/5.7 Lpf	Water Saver Urinals

- * Use 3.5 gpf/13.2 Lpf Kit for Old Style Blow Out Urinals.
- * Some Wash Down Urinals may require a 1.0 gpf/3.8 Lpf flush.
- * For older Water Closets that require a 4.5 gpf/17.0 Lpf flush, use 3.5 gpf Kit and remove Flow Ring.

Royal Performance Kits can be used to upgrade all Royal style Diaphragm Flushometer valves.

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

SLOAN VALVE COMPANY • 10500 SEYMOUR AVENUE • FRANKLIN PARK, IL 60131
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TROUBLESHOOTING and MAINTAINING the New SLOAN ROYAL® FLUSHOMETER

The New Dual Filtered Diaphragm™ Assembly

Sloan's new Dual Filtered Diaphragm, an exclusive feature of the Royal Flushometer since January, 1998, is designed to help prevent valve run on. Dirt and debris, present in almost any water supply system, can clog the metering bypass in traditional flushometer valve designs and cause the valve to run on. A series of patented filters in the Dual Filtered Diaphragm Assembly helps prevent dirt from reaching the bypass, saving water and reducing flushometer valve maintenance.

The Dual Filtered Diaphragm Assembly is factory assembled and secured to assure an accurate flush delivery. The Dual Filtered Diaphragm Assembly is sold only in Royal Performance Kits. These Kits also include other upgraded components exclusive to the

Royal flushometer, including the new B-51-A Handle Repair Kit with factory lubricated Triple Seal and the V-651-A High Back Pressure Vacuum Breaker. These new components have been engineered to meet the performance demands of today's plumbing systems. Royal Flushometers are the standard for use with Low Consumption water closets and urinals.

Royal Performance Kits can be used to upgrade older Royal, Regal and similar design Diaphragm Flushometer Valves.

1. PROBLEM: Flushometer does not function (no flush).

- 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 new Handle Repair Kit (B-51-A) or replace with new Handle (B-73-A).
(c.) Replace Inside Parts Kit.

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

- CAUSE:** (a.) Control Stop not open enough.
(b.) Inside Parts Kit worn.
(c.) Wrong Inside Parts Kit installed on valve (i.e., Urinal Kit in Closet Valve or Low Consumption Kit being used on older fixture).

- SOLUTION:** (d.) Inadequate volume or pressure at water supply.
(a.) Adjust Control Stop for desired delivery of water.
(b.) Replace Inside Parts Kit.
(c.) Determine flush volume required and replace Relief Valve or Inside Parts Kit (check label on valve or markings on fixture).
(d.) If no gauges are available to properly measure supply pressure or volume remove Relief Valve from Inside Parts Kit and completely open Control Stop.
- If fixture siphons, more water volume is required. Install higher flushing volume Relief Valve or Inside Parts Kits or remove (cut off) Flow Ring from Guide. IMPORTANT - Laws and regulations requiring Low Consumption fixtures (1.6 gpf Water Closets and 1.0 gpf Urinals) prohibits the use of higher flushing volumes.
 - If fixture does not siphon, (or a Low Consumption flush is required) steps must be taken to increase the water pressure and/or supply. Contact fixture manufacturer for minimum supply requirements of fixture.

3. PROBLEM: Flushometer closes off immediately (short flush).

- CAUSE:** (a.) Worn or damaged diaphragm or Inside Parts Kit.
(b.) Handle Assembly is worn.
(c.) Wrong Inside Parts Kit installed on valve (i.e., Urinal Kit Inside Closet Valve or Low Consumption Kit being used on older fixture).

SOLUTION:

- (a.) Replace Inside Parts Kit.
(b.) Install new Handle Repair Kit (B-51-A) or replace with new Handle (B-73-A).
(c.) Determine flush volume required and replace Inside Parts Kit (check label on valve or markings on fixture).

4. PROBLEM: Length of flush is too long (long flush) or fails to shut off.

- CAUSE:** (a.) Bypass in Diaphragm Kit plugged or fouled.
(b.) Diaphragm Kit or Relief Valve worn.
(c.) Wrong Inside Parts Kit installed on valve (i.e., Closet Kit in Urinal Valve or Water Saver Kit being used on Low Consumption fixture).
(d.) Inside Cover worn or cracked.
(e.) Line water pressure has dropped and is not sufficient to shut off the valve.

- SOLUTION:** (a.) Replace Inside Parts Kit. New inside Parts Kits features Sloan's patented Dual Filtered Bypass to help prevent clogging.
(b.) Replace Inside Parts Kit.
(c.) Determine flush volume required and replace Inside Parts Kit (check label on valve or markings on fixture).
(d.) Install new Inside Cover (A-71).
(e.) Shut off Control Stop until pressure has been restored.

5. PROBLEM: Chattering noise during flush.

- CAUSE:** (a.) Inside Cover worn or cracked.
SOLUTION: (a.) Install new Inside Cover (A-71).

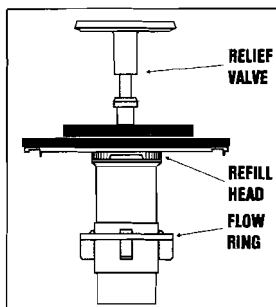
6. PROBLEM: Leaking at Handle.

- CAUSE:** (a.) Handle Seal or Assembly is worn.
SOLUTION: (a.) Install new Handle Repair Kit (B-51-A) or replace with new Handle (B-73-A).

CARE AND CLEANING INSTRUCTIONS

DO NOT USE abrasive or chemical cleaners to clean Flushometers. These solutions may dull the luster and attack the chrome finish. Use ONLY soap and water. Wipe dry with a clean towel or cloth. When 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 800 9-valve-9.



To identify the Flushing volume of the Dual Filtered Diaphragm Assembly, look at the shape and color of the following components:

APPLICATION	RELIEF VALVE	REFILL HEAD*	FLOW RING
1.6 gpf/6.0 Lpf Water Closet	Green	Gray	Smooth
3.5 gpf/13.2 Lpf Water Closet	White	Gray	Smooth
2.4 gpf/9.0 Lpf Water Closet	Blue	Gray	Smooth
0.5 gpf/1.9 Lpf Urinal	Green	Black	Smooth & Slotted
1.0 gpf/3.8 Lpf Urinal	Green	Black	Slotted
1.5 gpf/5.7 Lpf Urinal	Black	Black	Smooth

*NOTE: Water Closet (Gray) Refill Heads have larger slots than Urinal (Black) Refill Heads.

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