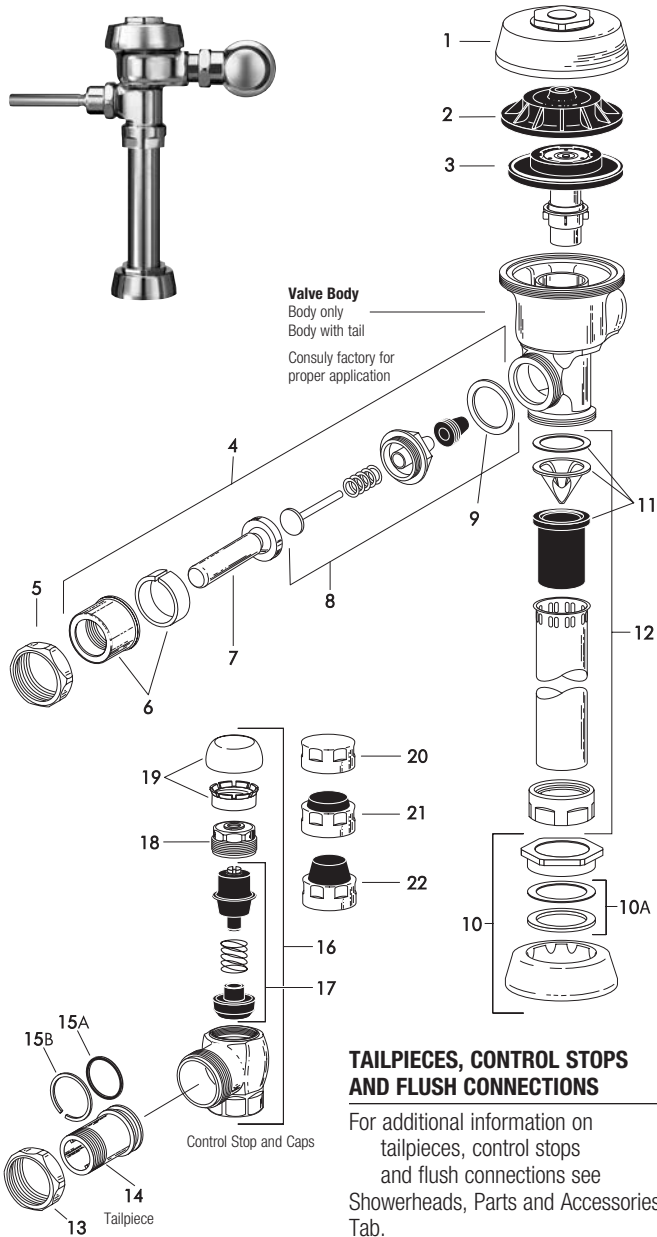


Royal® Flushometer



Valve Body
Body only
Body with tail
Consult factory for
proper application

TAILPIECES, CONTROL STOPS AND FLUSH CONNECTIONS

For additional information on
tailpieces, control stops
and flush connections see
Showerheads, Parts and Accessories
Tab.

ITEM 10A. SLIP JOINT GASKETS AND RINGS

Size	Code No.	Part No.	Description
1-1/2"	5306058	F-3	Red Friction Ring
	5322001	VBF-5	Black Slip Joint Gasket
	0319086/5319086	S-30	Flexible Seat
	0319079	S-21	Rigid Seat (rubber over brass)
1-1/2" x 1-1/4"	0396062	F-105	Slip Joint Gasket – Rigid
1-1/4"	5306057	F-3	Red Friction Ring
	5322176	VBF-5	Black Slip Joint Gasket
	0307052/5307052	G-21	Rigid Seat (rubber over brass)
1"	5306056	F-3	Red Friction Ring
	5306115	F-5	Black Slip Joint Gasket
	3/4"	5306055	F-3
5306113		F-5	Black Slip Joint Gasket

* See pages 102-103 for additional lengths

† For use with 1" and 3/4" H-700-A and 1" H-600-A Bak-Chek® screwdriver control stop

‡ For use with 3/4" H-600-A Bak-Chek® screwdriver control stop

RW for use with Reclaimed Water Flushometers

Sloan products are also available in satin, brushed nickel, chrome, gold and polished brass finishes – contact factory for part numbers.

PARTS LIST

Item No.	Code No.	Part No.	Description
1.	0301172PKA-72		CP Cover
	0301435PKA-72-HE		CP High Efficiency Cover
	0301168	A-71	Inside Cover
2.	0301336	A-71-1	Inside Cover (Purple)
	—		Dual-Filtered Bypass Diaphragm Assembly (refer to table and diagram on following page)
4.	0302390	B-73-A	CP ADA-Compliant Triple Seal Handle Assembly
	0302267	B-73-A-PH	CP ADA-Compliant Triple Seal Handle Assembly
5.	0301082	A-6	CP Handle Coupling
6.	0302109	B-7-A	CP Socket Assembly
7.	0302389	B-74-A	CP ADA-Compliant Handle
	0302264	B-74-A-PH	CP ADA-Compliant Handle (Purple Handle)
8.	3302306	B-51-A	Triple Seal Handle Repair Kit
9.	5301139	A-31	Handle Gasket – 48 per package
10.	0306125	F-5-AW	3/4" (19 mm) CP Spud Coupling Assembly
	0306140	F-5-AU	1-1/4" (32 mm) CP Spud Coupling Assembly
	0306146	F-5-AT	1-1/2" (38 mm) CP Spud Coupling Assembly
10A.	SEE SLIP JOINT GASKETS AND RINGS TABLE BELOW LEFT		
11.	3323182	V-651-A	High Back Pressure Vacuum Breaker Repair Kit
12.	3393004	V-600-AA	3/4" (19 mm) x 9" (228 mm) CP Vacuum Breaker
	3393006	V-600-AA	1-1/4" (32 mm) x 9" (228 mm) CP Vacuum Breaker
	3393007	V-600-AA	1-1/2" (38 mm) x 9" (228 mm) CP Vacuum Breaker
13.	0308676	H-550	CP Stop Coupling
14.	0308801	H-551-A	CP Adjustable Tailpiece 2-1/16" (52 mm long) Standard Length*
15A.	5308696	H-553	O-ring – 24 per package
15B.	5308381	H-552	Locking Ring – 12 per package
16.	3308386	H-700-A	1" (25 mm) CP Bak-Chek® Screwdriver Stop
	0388141	H-700-A-RW	1" (25 mm) CP Bak-Chek® Screwdriver Stop
	3308384	H-700-A	3/4" (19 mm) CP Bak-Chek® Screwdriver Stop
	0388142	H-700-A-RW	3/4" (19 mm) CP Bak-Chek® Screwdriver Stop
	3308853	H-541-ASD	Control Stop Repair Kit †
17.	3308856	H-543-ASD	Control Stop Repair Kit †
	18.	0308612	H-622
0308892		H-608-RW	CP Bonnet †
0308843		H-577	CP Bonnet † – DISCONTINUED
19.	3308772	H-1010-A	Vandal Resistant Control Stop Cap Assembly †
	3308790	H-1009-A	Vandal Resistant Control Stop Cap Assembly † H-600 3/4" Stop only
20.	0308738	H-573	Control Stop Cap CP †
	0308848	H-582	Control Stop Cap CP †
21.	3308866	H-574	Control Stop Cap with Bumper † (-YO Variation)
22.	3308867	H-576	Control Stop Cap with Extended Bumper † (-YG Variation)
23.	3388015	H-1015	Flow Control Kit (not Shown) (HEU Only)
24.	3308735	H-634-AA-RW	1" (25 mm) Sweat Solder Kit w/ Cast Set Screw Purple Flange (not shown)
	3308736	H-636-AA-RW	3/4" (19 mm) Sweat Solder Kit w/ Cast Set Screw Flange (not shown)
3308785	H-636-AA	1" (25 mm) Sweat Solder Kit w/ Cast Set Screw Purple Flange (not shown)	
	3308788	H-636-AA	3/4" (19 mm) Sweat Solder Kit w/ Cast Set Screw Flange (not shown)

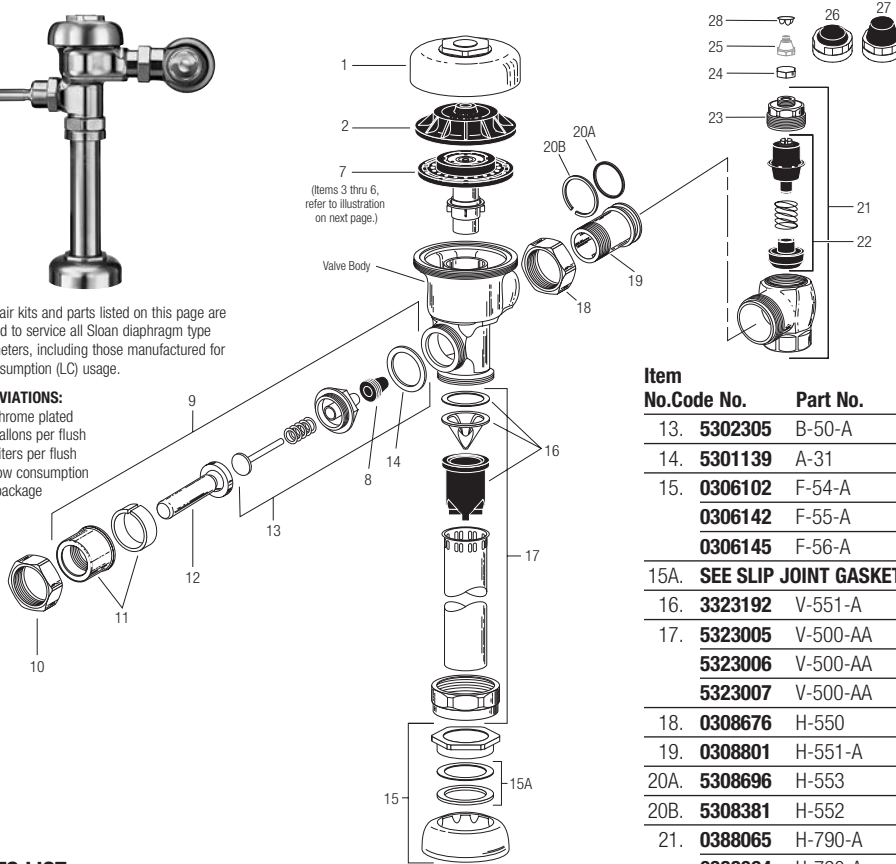
Regal® Flushometer

NOTE: Also for use with Regal® XL
(Since mid-2010)



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.

ABBREVIATIONS:
CP = Chrome plated
gpf = gallons per flush
Lpf = Liters per flush
LC = Low consumption
pkg = package



TAILPIECES, CONTROL STOPS AND FLUSH CONNECTIONS

For additional information on tailpieces, control stops and flush connections see Showerheads, Parts and Accessories Tab.

PARTS LIST

Item No.	Code No.	Part No.	Description
1.	0317004	R-10	CP Cover
	—	R-10-HE	CP High Efficiency Cover
2.	0301168	A-71	Inside Cover
SEE ITEMS 3A THROUGH 6E IN CHART ON NEXT PAGE			
3A.	5301058	A-19-AC	Relief Valve, White (Closet) – 12 per package
3B.	5301059	A-19-AU	Relief Valve, Black (Urinal) – 12 per package
3C.	5301211	A-19-ALC	Relief Valve, Green (Closet/Urinal-LC) – 12 per package
3D.	0301143	A-19-AL	Relief Valve, Blue (9 Liter Closet)
4.	5301111	A-15-A	Disc – for all Inside Parts Kits – 12 per package
5.	5301188	A-156-A	Diaphragm – for all Inside Parts Kits – 12 per package
6A.	5301236	A-163-A	Guide Assembly 4.5 gpf/17.0 Lpf Closet & 1.5 gpf/5.7 Lpf Urinal – 12 per package
6B.	5301032	A-152-A	Guide Assembly 3.5 gpf/13.2 Lpf Closet – 12 per package
6C.	5301031	A-151-A	Guide Assembly 1.6 gpf/6.0 Lpf LC Closet – 12 per package
6D.	5301155	A-155-A	Guide Assembly 1.0 gpf/3.8 Lpf LC Urinal – 12 per package
6E.	5301157	A-157-A	Guide Assembly 0.5 gpf/1.9 Lpf Urinal – 12 per package
7.	SEE INSIDE PARTS KITS CHART ON NEXT PAGE		
8.	5302297	B-39	Seal – 12 per package
9.	5302279	B-32-A	CP Handle Assembly – 6 per package
	0302390	B-73-A	CP Handicap Handle Assembly (ADA Compliant)
10.	0301082	A-6	CP Handle Coupling
11.	0302109	B-7-A	CP Socket Assembly
12.	5302274	B-32	CP Handle Grip – 12 per package
	0302389	B-74-A	CP Handicap Handle Grip (ADA Compliant)

Item No.	Code No.	Part No.	Description
13.	5302305	B-50-A	Handle Repair Kit – 6 per package
14.	5301139	A-31	Handle Gasket – 48 per package
15.	0306102	F-54-A	3/4" CP Spud Coupling Assembly
	0306142	F-55-A	1-1/4" CP Spud Coupling Assembly
	0306145	F-56-A	1-1/2" CP Spud Coupling Assembly
15A.	SEE SLIP JOINT GASKETS AND RINGS TABLE BELOW		
16.	3323192	V-551-A	Vacuum Breaker Repair Kit
17.	5323005	V-500-AA	3/4" x 9" CP Vacuum Breaker – 6 per package
	5323006	V-500-AA	1-1/4" x 9" CP Vacuum Breaker – 6 per package
	5323007	V-500-AA	1-1/2" x 9" CP Vacuum Breaker – 6 per package
18.	0308676	H-550	CP Stop Coupling †
19.	0308801	H-551-A	CP Adjustable Tailpiece 2-1/16" long †
20A.	5308696	H-553	O-ring – 24 per package
20B.	5308381	H-552	Locking ring – 12 per package
21.	0388065	H-790-A	1" Screwdriver Bak-Chek® Stop CP – complete
	0388064	H-790-A	3/4" Screwdriver Bak-Chek® Stop CP – complete
	0388029	H-740-A	1" Screwdriver Bak-Chek® Stop CP – OBSELETE
	0388031	H-740-A	3/4" Screwdriver Bak-Chek® Stop CP – OBSELETE
22.	3308853	H-541-ASD	1" Control Stop Repair Kit *
	3308856	H-543-ASD	3/4" Control Stop Repair Kit **
23.	0308612	H-622	CP Bonnet (Current Regal)
	0308991	H-639	CP Bonnet – Pre 2010 Regal Stops*
	0308601	H-538	CP Bonnet ** – OBSELETE
24.	5388001	H-1012-A	CP Cap – 6 per package VP
25.	5310034	J-2/J-7	Bumper Assembly – 6 per package – OBSELETE
26.	3308866	H-574	Stop Cap, chrome plated with Seat Bumper (-YO)
27.	3308867	H-576	Stop Cap, chrome plated with Extended Seat Bumper (-YG)
28.	5388002	H-528	Hole Plug
29.	3388015	H-1015	Flow Control Kit (HEU Only) (not Shown)

† See pages 100-101 for additional lengths
*For use with 1" and 3/4" H-740-A CP (less cap) and 1" – H-540-A CP (with H-37 cap) Bak-Chek® screwdriver control stops
**For use with 3/4" H-740-A CP Bak-Chek® screwdriver control stops

ITEM 15A. SLIP JOINT GASKETS AND RINGS

Size	Code No.	Part No.	Description
1-1/2"	5306058	F-3	Red Friction Ring
	5322001	VBF-5	Black Slip Joint Gasket
	0319086/5319086	S-30	Flexible Seat
1-1/4"	0319079	S-21	Rigid Seat (rubber over brass)
	0396062	F-105	Slip Joint Gasket – Rigid
1-1/4"	5306057	F-3	Red Friction Ring
	5322176	VBF-5	Black Slip Joint Gasket
	0307052/5307052	G-21	Rigid Seat (rubber over brass)
1"	5306056	F-3	Red Friction Ring
	5306115	F-5	Black Slip Joint Gasket
3/4"	5306055	F-3	Red Friction Ring
	5306113	F-5	Black Slip Joint Gasket

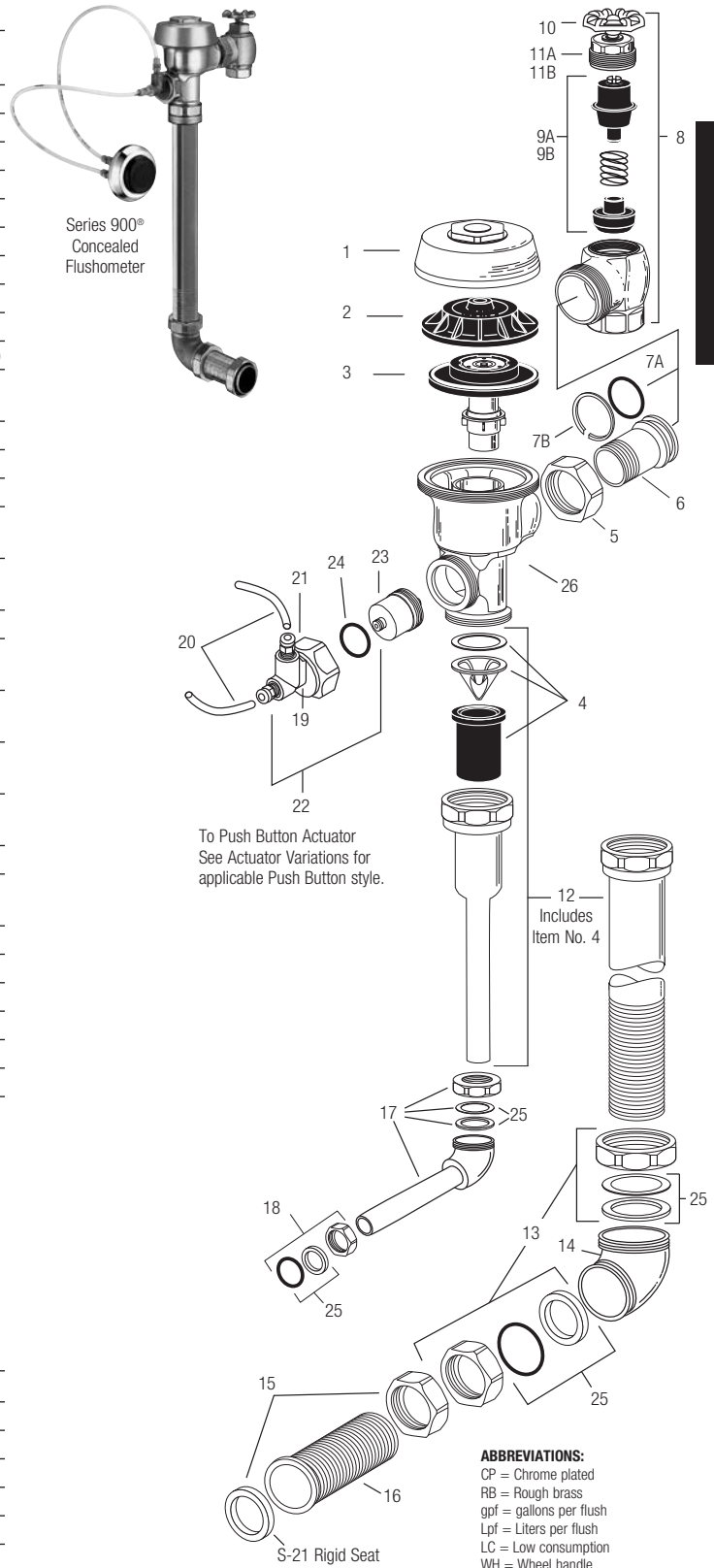
Series 900® Flushometer

PARTS LIST FOR SERIES 900® CONCEALED FLUSHOMETER

Item No.	Code No.	Part No.	Description
1.	0301173	A-72	RB Royal® Cover
2.	0301168	A-71	Inside Cover
3.	SEE THE INSIDE PARTS KIT CHART ON NEXT PAGE		
4.	3323182	V-651-A	Vacuum Breaker Repair Kit
5.	0308690	H-550	RB Tailpiece Coupling
6.	0308802	H-551-A	RB Adjustable Tailpiece, 2-1/16" (52 mm)
7A.	5308696	H-553	O-ring – 24 per package
7B.	5308381	H-552	Locking ring – 12 per package
8.	0388010	H-730-A	RB Wheel Handle Bak-Chek® Control Stop
9A.	3308855	H-541-A	1" Wheel Handle Repair Kit for H-730-A Control Stop
9B.	3308858	H-543-A	3/4" Wheel Handle Repair Kit for H-730-A Control Stop
10.	0308919	H-558-A	Wheel Handle
11A.	0208083	H-623	1" RB Bonnet
11B.	0208083	H-623	3/4" RB Bonnet
12.	See page 111	V-500-AA	Royal Vacuum Breaker Flush Connection (specify length and size)
13.	0306619	F-2-AA	1-1/2" (38 mm) RB Couplings (2 each), Friction Rings (2 each), and Rubber Gaskets (2 each)
14.	0206146	F-21	RB Elbow
15.	0306091	F-2-A	1-1/2" (38 mm) RB Coupling and S-21 Flat Rigid Gasket
16.	See pages 111-116	F-100	RB Flared End Flush Connection (specify length)
17.	See pages 111-116	F-15-A	3/4" (19 mm) RB Elbow Flush Connection with Coupling and Rubber Gasket (specify length)
18.	0306054	F-2-A	3/4" (19 mm) RB Coupling, Friction Ring, and Rubber Gasket
19.	0318024	HY-25	RB Valve Actuator Housing ONLY
20.	0318093	HY-30	1/4" (6 mm) x 48" (1219 mm) Connecting Tubes (2 required)
21.	0301082	A-6	RB Handle Coupling Nut
22.	3318005	HY-109-A	Actuator Housing Assembly (includes items 21 & 24)
23.	3318001	HY-83-A	Actuator Cartridge Assembly
24.	0337086	DO-22	O-ring for HY-109-A Adapter
25.	SEE SLIP JOINT GASKETS AND RINGS TABLE BELOW		
26.	0301050	A143-A	RB Valve Body

ITEM 27. SLIP JOINT GASKETS AND RINGS

Size	Code No.	Part No.	Description
1-1/2"	5306058	F-3	Red Friction Ring
	5322001	VBF-5	Black Slip Joint Gasket
	0319086/5319086	S-30	Flexible Seat
	0319079	S-21	Rigid Seat (rubber over brass)
1-1/2" x 1-1/4"	0396062	F-105	Slip Joint Gasket – Rigid
1-1/4"	5306057	F-3	Red Friction Ring
	5322176	VBF-5	Black Slip Joint Gasket
	0307052/5307052	G-21	Rigid Seat (rubber over brass)
1"	5306056	F-3	Red Friction Ring
	5306115	F-5	Black Slip Joint Gasket
3/4"	5306055	F-3	Red Friction Ring
	5306113	F-5	Black Slip Joint Gasket

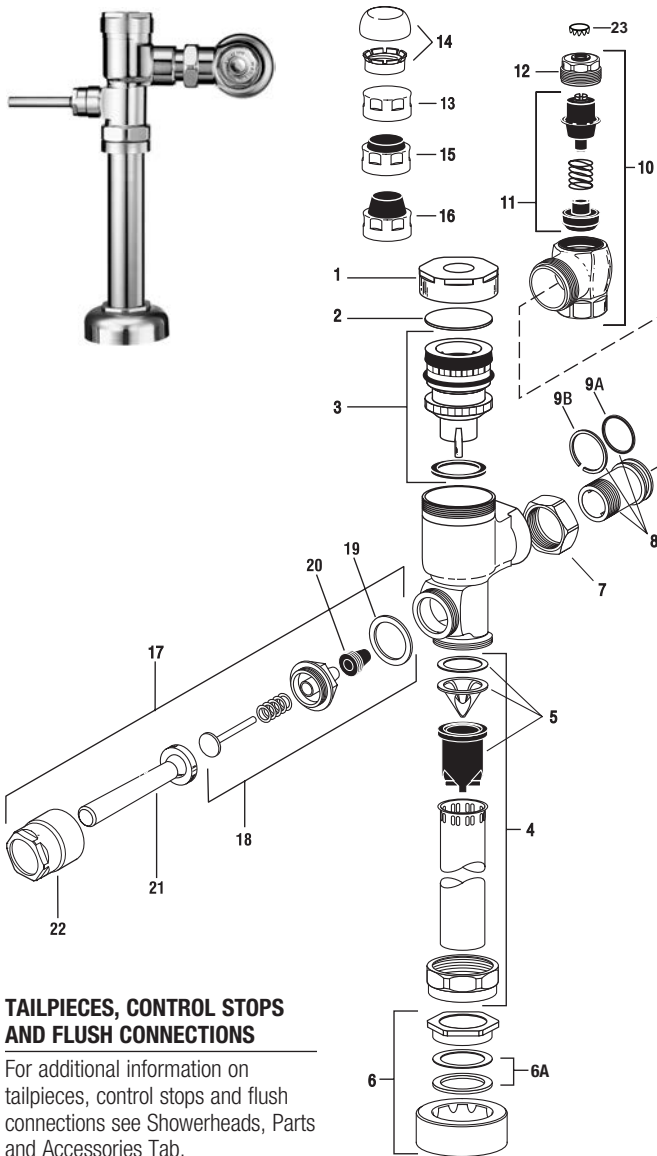


TAILPIECES, CONTROL STOPS, PUSH BUTTONS AND FLUSH CONNECTIONS

For additional information on tailpieces, control stops, push buttons and flush connections see Showerheads, Parts and Accessories Tab.

Gem•2® Flushometer

Manual Flushometers



TAILPIECES, CONTROL STOPS AND FLUSH CONNECTIONS

For additional information on tailpieces, control stops and flush connections see Showerheads, Parts and Accessories Tab.

ITEM 6A. SLIP JOINT GASKETS AND RINGS

Size	Code No.	Part No.	Description
1-1/2"	5306058	F-3	Red Friction Ring
	5322001	VBF-5	Black Slip Joint Gasket
	0319086/5319086	S-30	Flexible Seat
	0319079	S-21	Rigid Seat (rubber over brass)
1-1/2" x 1-1/4"	0396062	F-105	Slip Joint Gasket – Rigid
1-1/4"	5306057	F-3	Red Friction Ring
	5322176	VBF-5	Black Slip Joint Gasket
	0307052/5307052	G-21	Rigid Seat (rubber over brass)
1"	5306056	F-3	Red Friction Ring
	5306115	F-5	Black Slip Joint Gasket
3/4"	5306055	F-3	Red Friction Ring
	5306113	F-5	Black Slip Joint Gasket

PARTS LIST

Item No.	Code No.	Part No.	Description
1.	0307142	G-105	CP Cover
2.	0307139	G-106	Slip Disc
3.	3307135	G-1022-A	Piston Kit – 1.28 gpf/4.8 Lpf Water Closet
	0307193	G-1007-A	Piston Kit – 3.5 gpf/13.2 Lpf Water Closet
	0307195	G-1016-A	Piston Kit – 1.6 gpf/6 Lpf Water Closet
	0307192	G-1009-A	Piston Kit – 1.5 gpf/5.7 Lpf Urinal
	0307185	G-1017-A	Piston Kit – 1.0 gpf/3.8 Lpf Urinal
	3307133	G-1018-A	Piston Kit – 0.5 gpf/1.9 Lpf Urinal
	3307134	G-1019-A	Piston Kit – 2.4 gpf/9.0 Lpf Water Closet
	3307136	G-1023-A	Piston Kit – 0.125 gpf/0.5 Lpf Urinal
	3307137	G-1024-A	Piston Kit – 0.25 gpf/1.0 Lpf Urinal

PISTON KITS FOR OLD STYLE ADJUSTABLE GEM FLUSHOMETERS

	0307043	G-1003-A	Piston Kit – Water Closet
	0307044	G-1002-A	Piston Kit – Urinal

ALL PISTON KITS INCLUDE G-21 MAIN SEAT (See next page)

4.	5323005	V-500-AA	3/4" x 9" Vacuum Breaker – 6 per package
	5323006	V-500-AA	1-1/4" x 9" Vacuum Breaker – 6 per package
	5323007	V-500-AA	1-1/2" x 9" Vacuum Breaker – 6 per package
5.	3323192	V-551-A	Vacuum Breaker Repair Kit
6.	3332002	CR-1010-A	1-1/2" (38 mm) Spud Coupling
	3332001	CR-1009-A	1-1/4" (32 mm) Spud Coupling
	3332000	CR-1008-A	3/4" (19 mm) Spud Coupling

6A. SEE SLIP JOINT GASKETS AND RINGS TABLE BELOW LEFT

7.	0308676	H-550	Stop Coupling
8.	0308801	H-551-A	Adjustable Tailpiece 2-1/16" (Standard Length)
9A.	5308696	H-553	O-ring – 24 per package
9B.	5308381	H-552	Locking ring – 12 per package
10.	3308876	H-790-A	1" Screwdriver Bak-Chek® Stop CP – complete
	3308875	H-790-A	3/4" Screwdriver Bak-Chek® Stop CP – complete
11.	3308853	H-541-A	Control Stop Repair Kit*
	3308856	H-543-A	Control Stop Repair Kit**
12.	0308612	H-622	CP Bonnet*
	0308843	H-577	CP Bonnet** – OBSOLETE
13.	3308840	H-573-A	Control Stop Cap**
14.	3388017	H-1017	Flow Control (HEU Only) (Not Shown)
15.	3308866	H-574	Control Stop w/Bumper (-YO Variation)*
16.	3308867	H-576	Control Stop w/Extended Bumper (-YG Variation)*

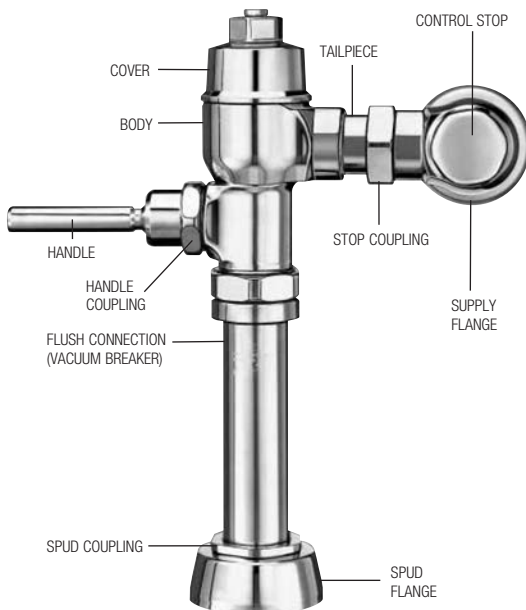
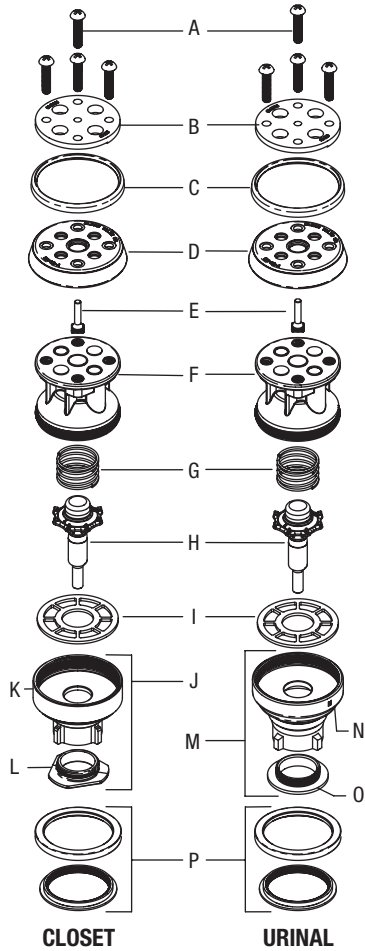
HANDLE REPAIR KIT

17.	0307100	G-143	Handle Assembly
18.	5307074	G-50-A	Handle Repair Kit – 6 per package
19.	5307065	G-35	Handle Gasket – 48 per package
20.	5302297	B-39	Handle Seal – 12 per package
21.	0307024	G-145	Handle Grip
22.	0307020	G-144	Handle Socket
23.	3308840	H-528	Control Stop Plug CP* Standard on XL

*For use with 1" and 3/4" H-700-A and 1" H-600-A Bak-Chek® screwdriver control stop
 **For use with 3/4" H-600-A Bak-Chek® screwdriver control stop

Naval® Flushometer

Also for use with Crown® (Old style), Star and Marine



NAVAL PISTON COMPONENTS (Items 14 thru 17 on previous page)

Item	Code No.	Part No.	Description
A.	0314200	CN-17	Top Plate Screws – 24 per package
B.	0314082	CN-15	Top Plate
	0314179	CN-15-A	Top Plate – Shower Valve only
C.	0314314	CN-92	Support Cup Lip Seal
D.	5314188	CN-68-A	Single Lip Cup – 12 per package
E.	0314204	CN-57	Xpelor
F.	0314228	CN-160	Piston Body
G.	5328019	SH-406	Spring – 12 per package (Replaces S/CN-58 Safety Bar)
H.	0314078	CN-18-A	Relief Valve
I.	5314226	CN-120	Relief Valve Seat – 12 per package
J.	0314240	CN-123-AC	Guide Assembly – Closet
K.	0314231	CN-23	Guide – Closet
L.	0314237	CN-144	Restriction Ring – Closet
M.	0314242	CN-123-AU	Guide Assembly – Urinal
N.	0314189	CN-43	RC Guide – Urinal
O.	—	CN-45	NK Restriction Ring – Urinal
P.	0314234	CN-21-A	Main Seat
	0314223	CN-121-A	Main Seat – Shower Valve only

NOTE: Naval® pistons can be used to replace pistons in older Crown® and Star flushometers.

REPAIR KITS

Code No.	Part No.	Description
0314016	CN-1002-A	Piston with Main Seat – Closet
0314017	CN-1003-A	Piston with Main Seat – Urinal
5314094	CN-1004-A	Piston Rebuild Kit – Closet & Urinal – 6 per package includes: 13, A, B, C, D, E, I, K, Cap Screw Gasket & Regulating Screw Packing
5314184	CN-1006-A	Piston Rebuild Kit – Shower – 6 per package includes: 13, A, B, C, D, E, I, K, Cap Screw Gasket & Regulating Screw Packing
5314184	CN-1008-A	Regulating Screw Repair Kit – includes: 2, 8, 9, CN-24 Packing Disc, CN-25 Packing Gland, CN-26 Packing Regulating Screw, CN-61 Screw Regulating Stable Piston
0314191	CN-1009-A	Piston with Main Seat – Shower
5314050	CN-1010-A	Crown®/Naval® Valve Washer Set – 6 per package includes: 13, 19, 20, C, D, I, K, Cap Screw Gasket & Regulating Screw Packing
5319049	S-14-AA	Double Cup Repair Kit (Old style Crown, Star and Marine)
5319046	S-14-A	Double Cup Lip Seal only (Old style Crown, Star and Marine)

ITEM 31A. SLIP JOINT GASKETS AND RINGS

Size	Code No.	Part No.	Description
1-1/2"	5306058	F-3	Red Friction Ring
	5322001	VBF-5	Black Slip Joint Gasket
	0319086/5319086	S-30	Flexible Seat
	0319079	S-21	Rigid Seat (rubber over brass)
1-1/2" x 1-1/4"	0396062	F-105	Slip Joint Gasket – Rigid
1-1/4"	5306057	F-3	Red Friction Ring
	5322176	VBF-5	Black Slip Joint Gasket
	0307052/5307052	G-21	Rigid Seat (rubber over brass)
1"	5306056	F-3	Red Friction Ring
	5306115	F-5	Black Slip Joint Gasket
3/4"	5306055	F-3	Red Friction Ring
	5306113	F-5	Black Slip Joint Gasket

Dolphin® Flushometer

PARTS LIST—DOLPHIN® FLUSHOMETER MODELS AND VARIATIONS

Size	Code No.	Part No.	Description
ITEM 7. Slip Joint Gaskets and Rings			
1-1/2"	5306058	F-3	Red Friction Ring
	5322001	VBF-5	Black Slip Joint Gasket
	0319086/5319086	S-30	Flexible Seat
	0319079	S-21	Rigid Seat (rubber over brass)
1-1/2" x 1-1/4"	0396062	F-105	Slip Joint Gasket – Rigid
1-1/4"	5306057	F-3	Red Friction Ring
	5322176	VBF-5	Black Slip Joint Gasket
	0307052/5307052	G-21	Rigid Seat (rubber over brass)
1"	5306056	F-3	Red Friction Ring
	5306115	F-5	Black Slip Joint Gasket
3/4"	5306055	F-3	Red Friction Ring
	5306113	F-5	Black Slip Joint Gasket

TROUBLESHOOTING GUIDE

1. Flushometer DOES NOT function.

- A. Control stop or main valve is closed. Open control stop or main valve.
- B. Handle socket assembly is damaged. Replace DO-20 handle socket assembly.

2. Volume of water is inadequate to siphon fixture.

- A. Control stop is not open enough. Adjust control stop for desired delivery of water volume.
- B. Timing of flushometer closure is set too fast. Remove DO-1 cover nut. Use a small blade screwdriver to turn DO-3 regulating screw clockwise.
- C. Water supply volume or pressure is inadequate. If no gauges are available to properly measure supply pressure or volume, completely open control stop and hold down flushometer handle without allowing it to close. If fixture siphons, increase timing of closure (see previous solution). If fixture does not siphon, steps must be taken to increase the supply pressure and/or volume. Contact fixture manufacturer for minimum water supply requirements of fixture.

3. Flushometer closes immediately.

- A. Oil chamber of upper body is empty. Remove DO-1 cover nut. Fill oil chamber with SAE 10 Oil.
- B. Piston seal is worn or damaged. Replace DO-6 piston O-ring seal.

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

- A. Volume of oil in oil chamber of upper body is low. Remove DO-1 cover nut. Fill oil chamber with SAE 10 oil.
- B. Timing of flushometer closure is not adequately adjusted. Remove DO-1 cover nut. Using small blade screwdriver, turn DO-3 regulating screw clockwise until a satisfactory flush is achieved.

5. Length of flush is too long (long flushing).

- A. Timing of flushometer closure not adequately adjusted. Remove DO-1 cover nut. Using small blade screwdriver, turn DO-3 regulating screw counterclockwise until a satisfactory flush is achieved.

6. Oil is leaking from handle.

- A. Stem seals are worn or damaged. Replace two (2) SH-75 throttle seal O-rings.

7. Valve DOES NOT close completely (water trickle).

- A. Compression spring is worn or damaged. Replace DO-16 compression spring.
- B. Flex-sac assembly is worn. Replace DO-15 flex-sac.

CARE AND CLEANING INSTRUCTIONS

DO NOT USE abrasive or chemical cleaners to clean flushometers, they may dull the luster and attack the chrome finish. Use **ONLY** mild soap and water, and then wipe dry with a clean towel or cloth.

When cleaning, protect the exposed flushometer from any splattering of cleaner. Acids and cleaning fluids can discolor or remove chrome plating.

**When assistance is required, please contact
Sloan Technical Support at: 1-888-SLOAN-14 (1-888-756-2614).**

Slimline® Bedpan Washer Flushometer

ITEM 9A. SLIP JOINT GASKETS AND RINGS

Size	Code No.	Part No.	Description
1-1/2"	5306058	F-3	Red Friction Ring
	5322001	VBF-5	Black Slip Joint Gasket
	0319086/5319086	S-30	Flexible Seat
1-1/2" x 1-1/4"	0319079	S-21	Rigid Seat (rubber over brass)
	0396062	F-105	Slip Joint Gasket – Rigid
1-1/4"	5306057	F-3	Red Friction Ring
	5322176	VBF-5	Black Slip Joint Gasket
	0307052/5307052	G-21	Rigid Seat (rubber over brass)
1"	5306056	F-3	Red Friction Ring
	5306115	F-5	Black Slip Joint Gasket
3/4"	5306055	F-3	Red Friction Ring
	5306113	F-5	Black Slip Joint Gasket

SLIMLINE® BEDPAN WASHER RETROFIT DIVERTERS

Code No.	Part No.	Description
3309022	DV-100	CP Diverter Valve Assembly
3309047	DV-105	CP Deoseptic Diverter Assembly
3309052	DV-135	CP Deoseptic Diverter Assembly 2" Offset
3309061	DV-115	CP Deoseptic Diverter Assembly ADA
3309062	DV-115-R	CP Deoseptic Diverter Assembly ADA
3309065	DV-120	CP Diverter Assembly ADA 1-1/2" Offset
3309066	DV-120-R	CP Diverter Assembly ADA 1-1/2" Offset
3309069	DV-125	CP Deoseptic Diverter Assembly ADA Offset
3309070	DV-125-R	CP Deoseptic Diverter Assembly ADA Offset
3309051	DV-130	CP Diverter Assembly 2 Offset

SLIMLINE® BEDPAN REPAIR KITS

3309035	DV-1001	Kit Bedpan Washer Wall Support
3309036	DV-1002	Repair Kit Deoseptic Pivot
3309037	DV-1003	Repair Kit Bedpan Washer Pivot
3309040	DV-1004	Repair Kit Deoseptic Diverter
3309048	DV-1005	Conversion Kit Deoseptic Diverter Assembly
3309032	DV-1007	Repair Kit Spray Arm
3309077	DV-1014	Repair Kit 10" Spray Arm
3309044	DV-32-AA	Repair Kit 12" Spray Arm
3309015	DV-1017-A	Repair Kit 15" Spray Arm

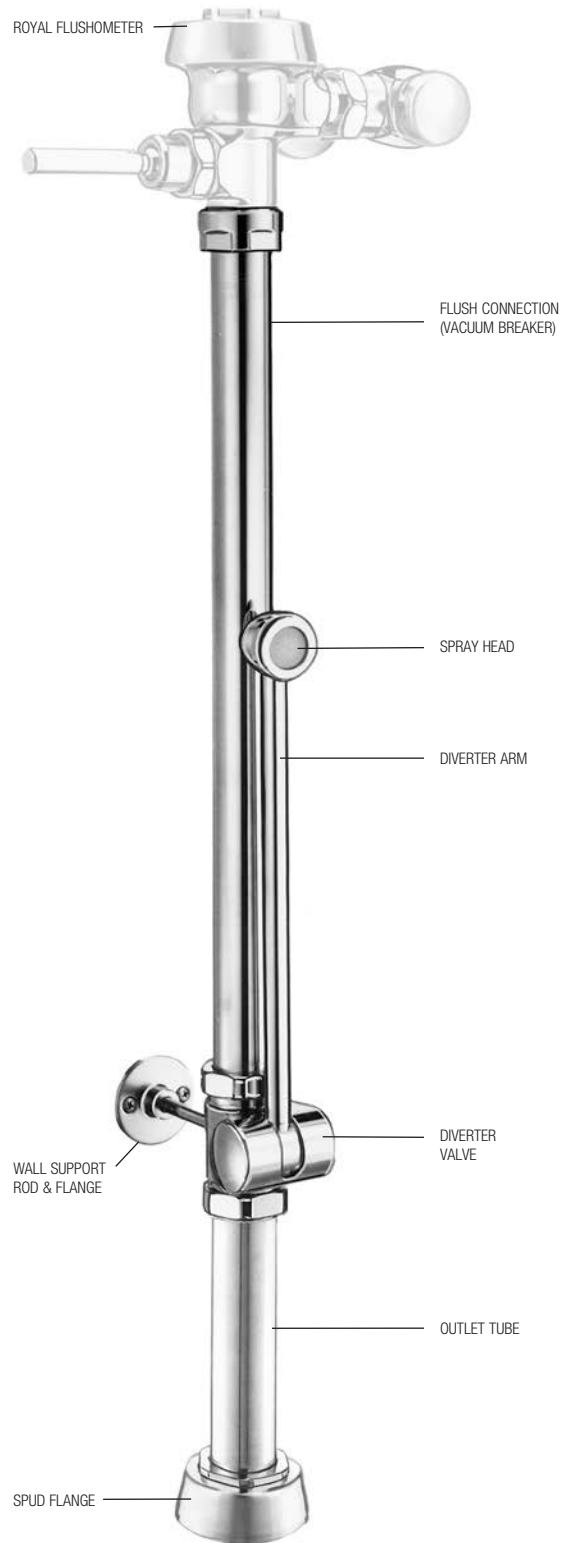
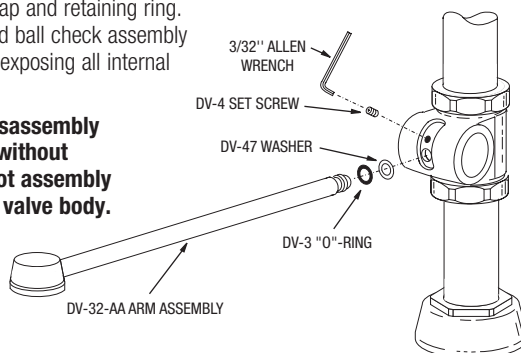
REBUILDING THE SLOAN SLIMLINE DIVERTER ASSEMBLY:

To disassemble diverter valve: Loosen set screw and remove spray arm from pivot. Slide pivot out of diverter valve body.

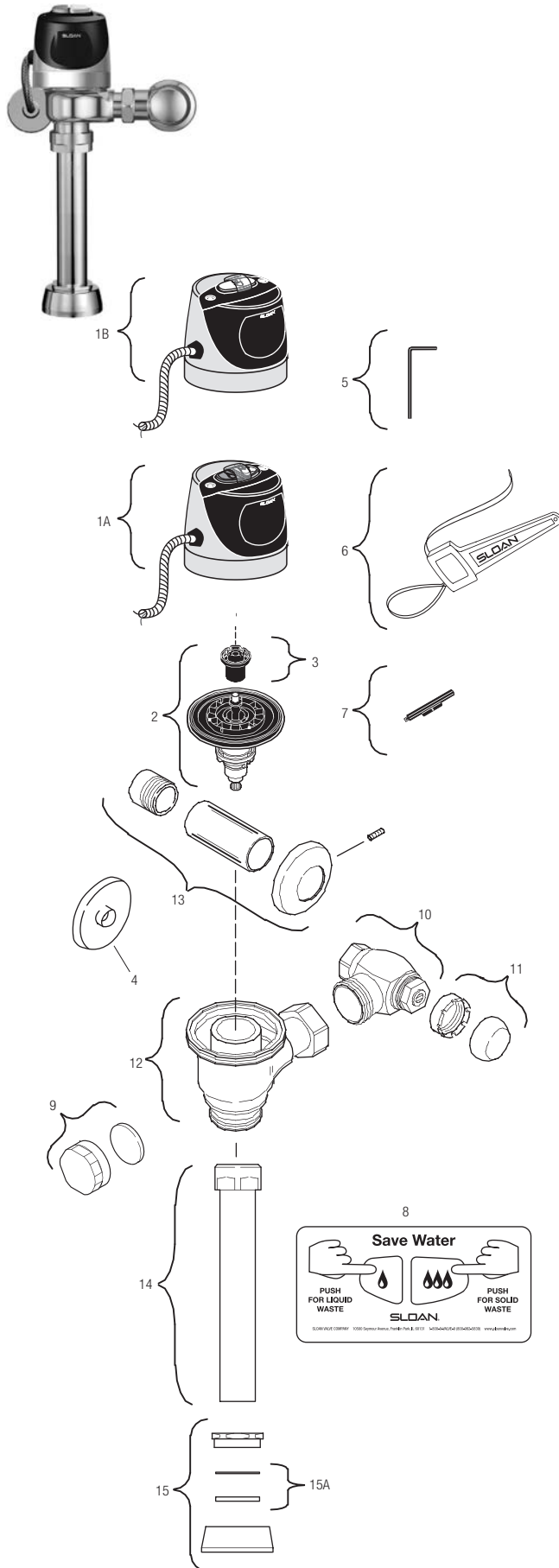
To further disassemble deoseptic diverters:

Remove plug cap and retaining ring. Slide swivel and ball check assembly off pivot shaft, exposing all internal components.

NOTE: This disassembly can be done without removing pivot assembly from diverter valve body.



SLOAN ECOS® Hardwired Flushometers



PARTS LIST

Item No.	Code No.	Part No.	Description
Items Included with the RESS Retrofit and Complete Sloan ECOS® Hardwire Valves Only			
1A.	‡	—	Sloan ECOS® Electronic Hardwire Dual Flush Assembly
1B.	‡	—	Sloan ECOS® Electronic Single-Flush Assembly
2.	3325001	EBV-1020-A	1.6 gpf/6.0 Lpf Closet Flex Tube Diaphragm Kit
3.	5325122	EBV-95	Flush Volume Regulator (Green)
4.	—	EL-612-A	Solenoid Wall Flange
5.	0325159	EBV-137	7/64" Hex Wrench
6.	0305823	EBV-22	Strap Wrench
7.	0325194	EBV-91	Range Adjustment Tool
8.	0372031	WES-19	English Operation Instruction Plate
	0372040	WES-22	Spanish Operation Instruction Plate
9.	3325814	EBV-1017-A	Handle Cap (RESS-C Retrofit Models only)
Items Included with the Complete Sloan ECOS® Hardwire Valves Only			
10.	3308386	H-700-A	1" (25 mm) Bak-Chek® Control Stop
11.	3308797	H-1010-A	Vandal Resistant Stop Cap
12.	0305381PK	EBV-36-A	Valve Body
13.	3308782	H-633-AA	1" (25 mm) Sweat Solder Kit
14.	3308782	V-600-AA	1½" (38 mm) x 10" (254 mm) Vacuum Breaker (Model 110)
	—	V-600-AA	1½" (38 mm) x 23" (584 mm) Vacuum Breaker (Model 115)
	0393049	V-600-AA	1½" (38 mm) x 26" (660 mm) Vacuum Breaker (Model 116)
15.	0306146	F-5-AT	1½" Spud Coupling Assembly (Models 111, 115, and 116)
15A.	SEE SLIP JOINT GASKETS AND RINGS TABLE BELOW		

‡ Part number varies with valve model variation; consult factory.

The EBV-1020-A Kit is supplied with multiple Flush Volume Regulators. The installer must use the correct Regulator when installing the kit.

ITEM 15A. SLIP JOINT GASKETS AND RINGS

Size	Code No.	Part No.	Description
1-1/2"	5306058	F-3	Red Friction Ring
	5322001	VPF-5	Black Slip Joint Gasket
	0319086/5319086	S-30	Flexible Seat
	0319079	S-21	Rigid Seat (rubber over brass)
1-1/2" x 1-1/4"	0396062	F-105	Slip Joint Gasket – Rigid
1-1/4"	5306057	F-3	Red Friction Ring
	5322176	VPF-5	Black Slip Joint Gasket
	0307052/5307052	G-21	Rigid Seat (rubber over brass)
1"	5306056	F-3	Red Friction Ring
	5306115	F-5	Black Slip Joint Gasket
3/4"	5306055	F-3	Red Friction Ring
	5306113	F-5	Black Slip Joint Gasket

FLEX TUBE DIAPHRAGM ASSEMBLY



Sloan ECOS® Electronic Valve Models Feature Sloan's Exclusive Flex Tube Diaphragm for the ultimate in valve performance, reliability and chloramine resistance.

Sensor Flushometers

G2 Optima® Flushometer

Sloan introduced its Optima Plus® battery powered sensor flushometer in 1992, revolutionizing the flushing of water closets and urinals. In both new construction and retrofit applications, the use of the Optima Plus has become the standard method for many facilities to improve restroom hygiene and ensure handicap accessibility compliance.

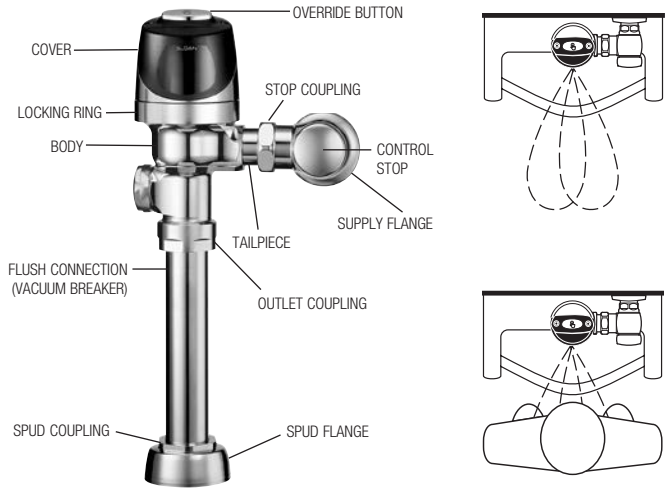
In May, 2003 Sloan introduced the G2 Optima Plus.

The G2 Optima Plus builds on the success of the original product and offers many technological advancements to further improve on performance and reliability expected of sensor activated plumbing. In addition to a new aesthetic design, the G2 Optima Plus features a new state-of-the-art electronic and optical package and a unique solenoid operator that keeps the moving components of the solenoid completely isolated from the water supply. This ensures long life and low maintenance regardless of local water condition.

The G2 Optima Plus replaces the original Optima Plus product, which was phased out of production in mid-2003.

The Sloan G2 Optima Plus automatic battery powered flushometer relies on an infrared sensor to detect a user and activate a flushing cycle. No physical contact with the flushometer surface is necessary, assuring sanitary protection. G2 Optima Plus flushometers are ADA compliant devices.

The flushometer is triggered by means of an active infrared sensor. The Optima Plus sensor emits a continuous invisible light beam. When a user enters the beam's effective range, the beam is reflected into the Optima Plus scanner window. The user is now detected. After the user moves out of the effective range of the sensor, a signal is sent to the flushometer solenoid and, after appropriate arming and/or flush delays, the flush cycle is initiated.



REGULATORS

The flush volume of the flex tube diaphragm kit is controlled by the regulator. Regulators are identified by color. Some flex tube diaphragm kits are supplied with multiple regulators. The installer must make sure the proper regulator is used when installing the flex tube diaphragm kit.

REGULATOR (SOLD 6 PER PACKAGE)

Code No.	Part No.	Description	Regulator Color
5325122	EBV-95	Urinal-0.25 gpf/1.0 Lpf	GREEN
5325122	EBV-95	Urinal-0.5 gpf/1.9 Lpf	GREEN
5325122	EBV-95	Urinal-1.0 gpf/3.8 Lpf	GREEN
5325129	EBV-102-2	Urinal-1.5 gpf/5.7 Lpf	BLACK
5325130	EBV-102-1	Urinal-3.5 gpf/13.2 Lpf	WHITE
5325122	EBV-95	Closet-1.28 gpf/4.8 Lpf	GREEN
5325122	EBV-95	Closet-1.6 gpf/6.0 Lpf	GREEN
5325130	EBV-102-1	Closet-3.5 gpf/13.2 Lpf	WHITE
5325128	EBV-101	Closet-2.4 gpf/9.0 Lpf	BLUE

EBV-1020-A and EBV-1022-A are supplied with multiple flush volume regulators. The installer must use the correct regulator when installing the kit.

ITEM 10. FLEX TUBE DIAPHRAGM KIT

Code No.	Part No.	Description	Regulator Color *
3325098	EBV-1026-A	Urinal-0.125 gpf/0.5 Lpf	GREEN
3325090	EBV-1025-A	Urinal-0.25 gpf/1.0 Lpf	GREEN
3325003	EBV-1023-A	Urinal-0.5 gpf/1.9 Lpf [†]	GREEN
3325000	EBV-1022-A	Urinal-1.0 gpf/3.8 Lpf	GREEN
3325000	EBV-1022-A	Urinal-1.5 gpf/5.7 Lpf [†]	BLACK
3325001	EBV-1020-A	Urinal-3.5 gpf/13.2 Lpf [†]	WHITE
3325031	EBV-1024-A	Closet-1.28 gpf/4.8 Lpf	GREEN
3325001	EBV-1020-A	Closet-1.6 gpf/6.0 Lpf [†]	GREEN
3325014	EBV-1021-A	Closet-2.4 gpf/9.0 Lpf	BLUE
3325001	EBV-1020-A	Closet-3.5 gpf/13.2 Lpf	WHITE
3325001	EBV-1020-A	Closet-4.5 gpf/17.0 Lpf [§]	WHITE

[†] EBV-1020-A and EBV-1022-A are supplied with multiple regulators.

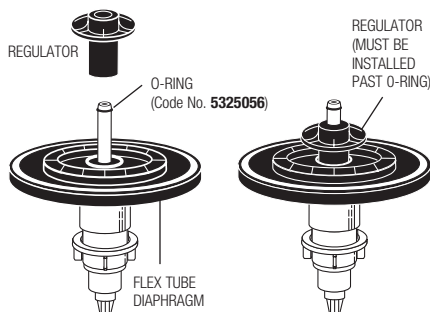
[‡] A 0.5 gpf (1.9 Lpf) urinal kit can be converted to a 1.0 gpf (3.8 Lpf) by cutting and removing the smooth A-164 flow ring from the guide.

[§] For a 4.5 gpf (17 Lpf) water closet flush use EBV-1020-A with the white regulator, and cut and remove the A-164 flow ring from the guide.

* Color of regulator to be used with flex tube diaphragm to obtain the listed flush volume.

O-RING

Code No.	Part No.	Description
5325056	EBV-83	O-ring – 6 per package



ITEM 16A. SLIP JOINT GASKETS AND RINGS

Size	Code No.	Part No.	Description
1-1/2"	5306058	F-3	Red Friction Ring
	5322001	VBF-5	Black Slip Joint Gasket
	0319086/5319086	S-30	Flexible Seat
1-1/2" x 1-1/4"	0319079	S-21	Rigid Seat (rubber over brass)
	0396062	F-105	Slip Joint Gasket – Rigid
	5306057	F-3	Red Friction Ring
1-1/4"	5322176	VBF-5	Black Slip Joint Gasket
	0307052/5307052	G-21	Rigid Seat (rubber over brass)
	5306056	F-3	Red Friction Ring
1"	5306115	F-5	Black Slip Joint Gasket
	5306055	F-3	Red Friction Ring
	5306113	F-5	Black Slip Joint Gasket

SOLIS® Single-Flush and Dual-Flush Flushometer

ITEM 8. FLEX TUBE DIAPHRAGM KIT SELECTION GUIDE

Code No.	Part No.	Description	Regulator Color
3325001	EBV-1020-A	1.6 gpf/6.0 Lpf Closet	GREEN
3325031	EBV-1024-A	1.28 gpf/4.8 Lpf Closet	GREEN
—	EBV-1028-A	1.1 gpf/4.2 Lpf Closet	GRAY
3325003	EBV-1023-A	0.5 gpf/1.9 Lpf Urinal	GREEN
3325090	EBV-1025-A	0.25 gpf/10 Lpf Urinal	GREEN

The EBV-1020-A Kit is supplied with multiple Flush Volume Regulators. The installer must use the correct Regulator when installing the kit.

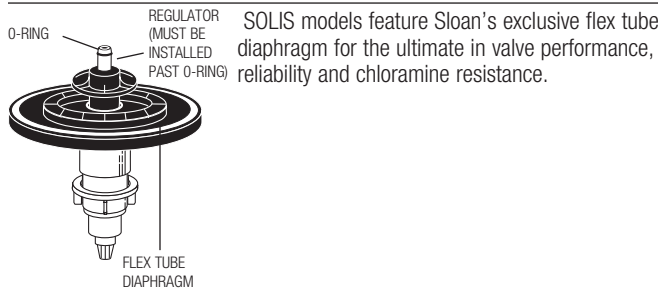
ITEM 9. REGULATORS

The flush volume of the flex tube diaphragm kit is controlled by the regulator. Regulators are identified by color. Some flex tube diaphragm kits are supplied with multiple regulators. The installer must make sure the proper regulator is used when installing the flex tube diaphragm kit.

REGULATOR (SOLD 6 PER PACKAGE)

Code No.	Part No.	Description	Regulator Color
5325122	EBV-95	Urinal-0.5 gpf/1.9 Lpf	GREEN
5325122	EBV-95	Closet-1.6 gpf/6.0 Lpf	GREEN

FLEX TUBE DIAPHRAGM ASSEMBLY



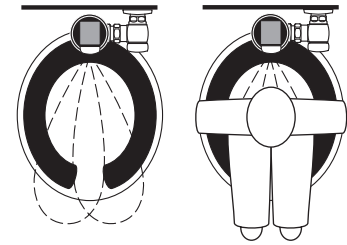
ITEM 19D. SLIP JOINT GASKETS AND RINGS

Size	Code No.	Part No.	Description
1-1/2"	5306058	F-3	Red Friction Ring
	5322001	VBF-5	Black Slip Joint Gasket
	0319086/5319086	S-30	Flexible Seat
1-1/2" x 1-1/4"	0319079	S-21	Rigid Seat (rubber over brass)
	0396062	F-105	Slip Joint Gasket – Rigid
1-1/4"	5306057	F-3	Red Friction Ring
	5322176	VBF-5	Black Slip Joint Gasket
	0307052/5307052	G-21	Rigid Seat (rubber over brass)
1"	5306056	F-3	Red Friction Ring
	5306115	F-5	Black Slip Joint Gasket
3/4"	5306055	F-3	Red Friction Ring
	5306113	F-5	Black Slip Joint Gasket

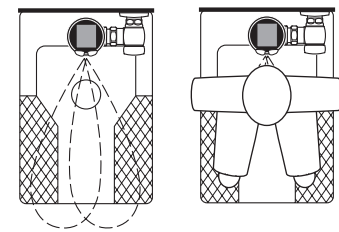
OPERATION

1. A continuous, INVISIBLE light beam is emitted from the SOLIS® sensor.
2. As the user enters the beam's effective range, 22 to 42 inches (559 mm to 1067 mm) for closet installations and 15 to 30 inches (381 mm to 762 mm) for urinal installations, the beam is reflected into the scanner window to activate the output circuit. Once activated, the output circuit continues in a "hold" mode for as long as the user remains within the effective range of the sensor. For dual-flush models, if the user stays longer than 65 seconds, a full flush will automatically initiate when the user leaves. For single-flush models, once the user steps away, a full flush will automatically initiate.

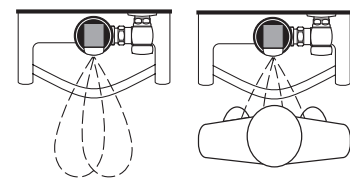
CLOSET



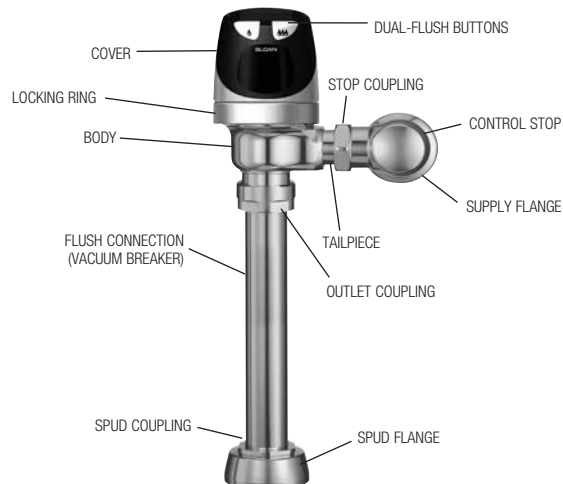
SQUAT TOILET



URINAL



3. For dual-flush models, once a user is detected, if the user leaves in 65 seconds or less, a reduced flush will automatically initiate. The circuit automatically resets and is ready for the next user. For single-flush models, when the user steps away, this initiates a full flush. The circuit automatically resets and is ready for the next user.



Sensor Flushometers