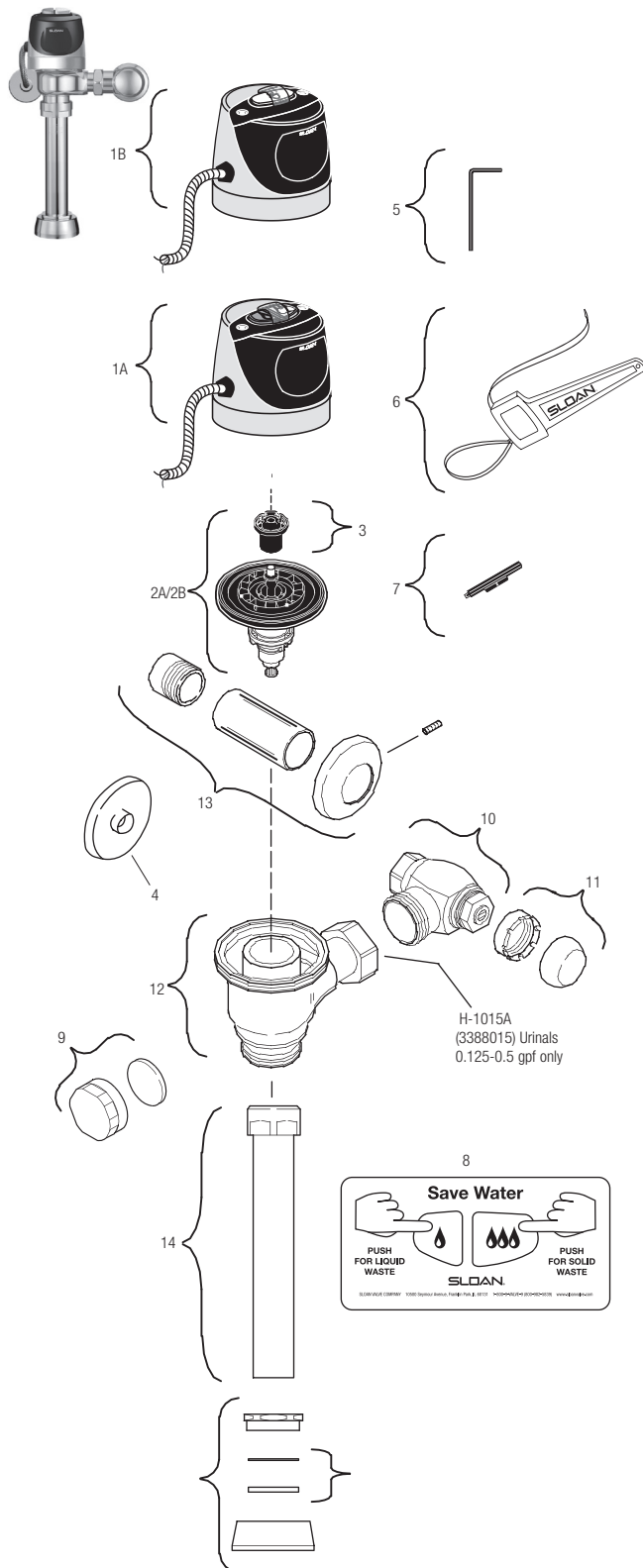


SLOAN ECOS® Hardwired Flushometer



URINAL FLEX TUBE DIAPHRAGM ASSEMBLY



- 3325090** EBV-1024-A 0.125/0.25 gpf
- 3325003** EBV-1023-A 0.5 gpf

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

PARTS LIST

Item No.	Code No.	Part No.	Description
Items Included with the RESS Retrofit and Complete Sloan ECOS® Hardwire Valves Only			
1A.	0325304	WES-56A	Sloan ECOS® Electronic Hardwire Dual Flush Assembly CP
	0325332	EBV-332A	Sloan ECOS® Electronic Hardwire 1.28 gpf (4.8 Lpf) Single Flush Assembly
1B.	0325344	EBV-344A	Sloan ECOS® Electronic Single-Flush Assembly Urinal
1C.	0325402	EBV-393-A	Sloan ECOS® Electronic Single-Flush Assembly Urinal 0.125 gpf
2A.	3325001	EBV-1020-A	1.6 gpf/6.0 Lpf Closet Flex Tube Diaphragm Kit
2B.			See Chart Below
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 ½" (254 mm) Vacuum Breaker (Model 110) (10" Outlet Tube)
	—	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. 18" Steel Cable included w/HW units. The EBV-1020-A Kit is supplied with multiple Flush Volume Regulators. The installer must use the correct Regulator when installing the kit. VAC Power Requirement: Transformer 6 VAC 0.5 mA per unit Sloan Transformers: EL-386 – 120 VAC/ 6 VAC Plug-in Transformers (not shown) EL-451 – 120 VAC/6 VAC 25 VA Box Style Transformers (not shown) Note: One (1) Sloan ECOS® Hardwire per each EL-386 Transformer and six (6) Sloan ECOS® Hardwire per each EL-451 Transformer. 18 gauge wire required.			
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
	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

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RANGE ADJUSTMENT (ADJUST ONLY IF NECESSARY)

The Sloan ECOS® Hardwire flushometer has a factory set sensing range:

Water Closet Models – 22" (559 mm) to 42" (1067 mm)

Urinals Models – 15" (381 mm) to 30" (762 mm)

The factory setting should be satisfactory for most installations.

If the range is too short (i.e., not picking up the user) or too long (i.e., picking up opposite wall or stall door) the range can be adjusted.

NOTE: Water does not have to be turned off to adjust range.

Loosen the two screws on top of the unit. Remove the override button assembly. Remove the rubber plug from top of electronic sensor module to uncover the potentiometer to adjust.

Range Adjustment Procedure

For the first ten (10) minutes of operation, a visible light flashes in the sensing window of the Sloan ECOS® Hardwire flushometer when a user is detected. The visible light feature can be reactivated after ten (10) minutes by turning the power off and on. Check the range by stepping toward the unit until the light flashes, indicating the sensor's maximum detection limit. Adjust the range potentiometer screw located on top of the sensor module a few degrees **CLOCKWISE** to increase the range or a few degrees **COUNTER-CLOCKWISE** to decrease the range. Repeat this adjustment until the desired range is achieved.

Always determine the sensing range with metal cover and lens window installed on top of the unit.

IMPORTANT: Adjust in small increments only! Range potentiometer adjustment screw rotates only 3/4 of a turn; DO NOT over-rotate.

When range adjustment is satisfactory, replace the rubber plug. Reinstall override button and tighten the two screws on top of the unit.

TROUBLESHOOTING GUIDE

1. Sensor flashes continuously only when user steps within range.

- A. Unit in start-up mode; no problem. This feature is active for the first ten (10) minutes of operation.

2. Valve DOES NOT flush; sensor does not picking up the user.

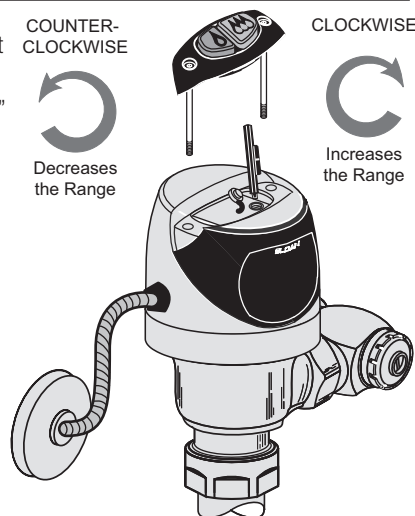
- A. Range too short; increase the range.

3. Valve DOES NOT flush; sensor picking up opposite wall or surface, or only flushes when someone walks by. Light flashes continuously for first 10 minutes even with no one in front of the sensor.

- A. Range too long; shorten the range.

4. Valve DOES NOT flush even after adjustment.

- A. Range adjustment potentiometer set at full "max" or full "min" setting. Readjust potentiometer away from full "max" or "min" setting.
B. Electronic sensor module issue; replace the electronic sensor module.



TROUBLESHOOTING GUIDE (CONTINUED)

5. Valve DOES NOT Shut Off.

- A. Bypass orifice in diaphragm is clogged with dirt or debris, or bypass is clogged by an invisible gelatinous film due to "over-treated" water. Remove Flex Tube diaphragm and wash under running water. **NOTE:** Size of orifice in the bypass is of utmost importance for the proper metering of water by the valve. **DO NOT ENLARGE OR DAMAGE THIS ORIFICE.** Replace Flex Tube diaphragm if cleaning does not correct the problem.
B. Dirt or debris fouling stem or Flex Tube diaphragm. Remove Flex Tube diaphragm and wash under running water.
C. O-ring on stem of Flex Tube diaphragm is damaged or worn. Replace O-ring if necessary.
D. Electronic sensor module issue; replace sensor module.

6. Not enough water to the fixture to flush properly.

- A. The wrong flush volume regulator was installed in flex tube diaphragm kit. Install the correct regulator.
B. Wrong Sloan ECOS Hardwire model installed; i.e., 1.6 gpf model installed on 3.5 gallon closet fixture.
C. Enlarged bypass in diaphragm. Replace the Flex Tube diaphragm.
D. Control stop not adjusted properly. Readjust control stop.
E. Inadequate volume or pressure at supply. Increase water pressure or supply (flow) to valve. Consult factory for assistance.

7. Too much water to fixture.

- A. The wrong flush volume regulator was installed in Flex Tube diaphragm kit. Install the correct regulator.
B. Control stop not adjusted properly. Readjust the control stop.
C. Wrong Sloan ECOS Hardwire model installed; i.e., 3.5 gpf. model installed on 1.6 gallon fixture. Replace with proper Sloan ECOS Hardwire model.
D. Dirt in diaphragm bypass. Clean under running water or replace Flex Tube diaphragm.

CARE AND CLEANING INSTRUCTIONS

DO NOT USE abrasive or chemical cleaners 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 a clean towel or cloth.

When cleaning the bathroom tile, protect the 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).