

Sloan ECOS® Dual-Flush Flushometer

Battery powered, sensor activated unit for exposed closet and urinal Flushometers.

PARTS LIST

Item

No. Code No. Part No. Description

Items Included with RESS Retrofit and Complete Sloan ECOS®

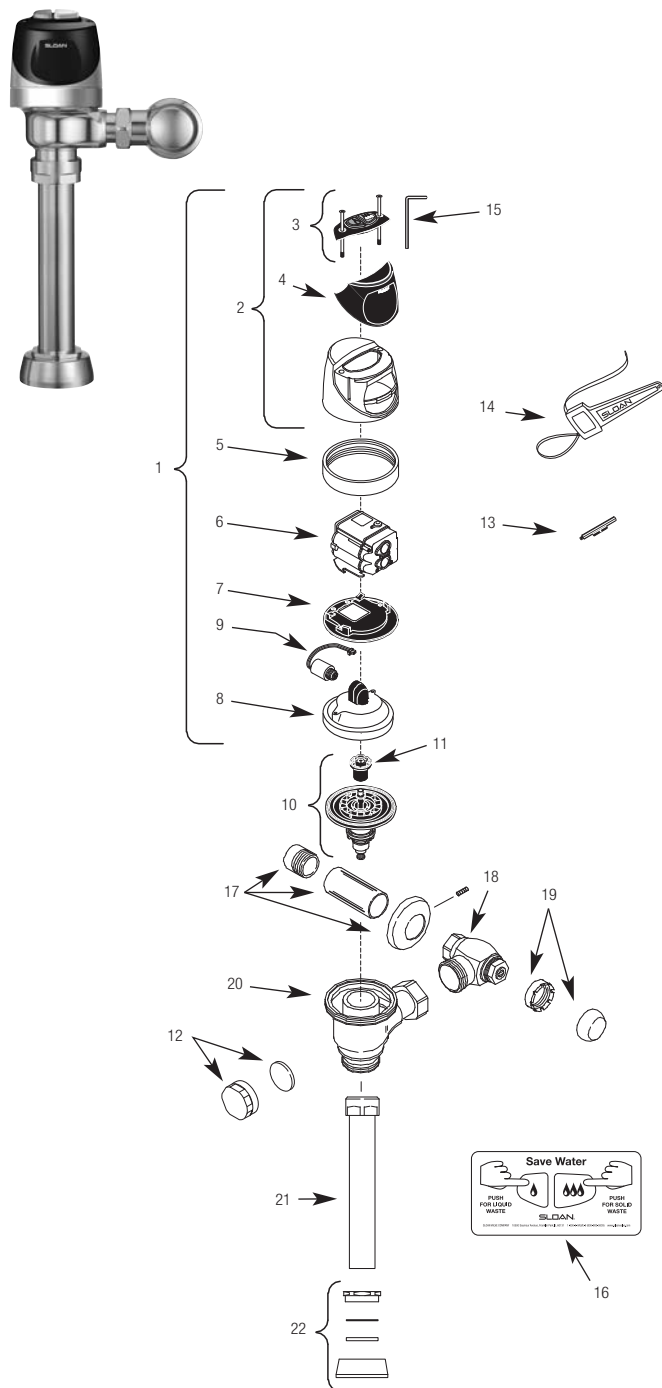
Electronic Dual-Flush Valves

1.	0372055	WES-55-A	Cover/Ring/Sensor Assembly - Sloan ECOS® Electronic Dual-Flush
	—	WES-60-A	Cover/Ring/Sensor Assembly w/ Zurn ring - Sloan ECOS® Electronic Dual-Flush
2.	0325246	EBV-191-A	Cover Assembly Sloan ECOS Electronic Dual-Flush
3.	0372003	WES-23-A	Button Cover Assembly with screws - Sloan ECOS® Electronic Dual-Flush
	0325170	EBV-132-A	Screws (2) and Hex Wrench Only
4.	0325169	EBV-131	Lens Window Cover
5.	0325210	EBV-168	Locking Ring - Plastic inner cover only
	0305843	EBV-14	Locking Ring - Metal inner cover only
	—	EBV-172	Locking Ring - for Zurn valves
6.	0325247	EBV-196-A	Module - Sloan ECOS® Electronic Dual-Flush
7.	0325171	EBV-134	Cover Rest Plate
8.	3325089	EBV-1010-A	Inside Cover Assembly (excludes solenoid)
9.	3325453	EBV-136-A	Solenoid
10.	3325001	EBV-1020-A	1.6 gpf/6.0 Lpf Closet Flex Tube Diaphragm Kit
11.	5325122	EBV-95	Flush Volume Regulator (Green)
12.	3325814	EBV-1017-A	Handle Cap (RESS Retrofit Models only)
13.	0325194	EBV-91	Range Adjustment Tool
14.	0305823	EBV-22	Strap Wrench
15.	0325159	EBV-137	7/64" Hex Wrench
16.	0372031	WES-19	English Operation Instruction Plate
	—	WES-22	Spanish Operation Instruction Plate

Items Included with Complete Sloan ECOS® Electronic Dual-Flush Valves Only

17.	3308785	H-634-AA	1" (25 mm) Sweat Solder Kit
18.	0388000	H-700-A	1" (25 mm) Bak-Chek® Control Stop
19.	3308997	H-1010-A	Vandal Resistant Stop Cap
20.	—	EBV-36-A	Valve Body
21.	—	V-600-AA	1-1/2" (38 mm) x 10" (254 mm) Vacuum Breaker
	—	V-600-AA	1-1/2" (38 mm) x 23" (584 mm) Vacuum Breaker (Model 8115)
	0393049	V-600-AA	1-1/2" (38 mm) x 26" (660 mm) Vacuum Breaker (Model 8116)
22.	0306146	F-5-AT	1-1/2" Spud Coupling Assembly (Models 8111, 8115 & 8116)

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



FLEX TUBE DIAPHRAGM ASSEMBLY



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

Sloan ECOS® Dual-Flush Flushometer

OPERATION

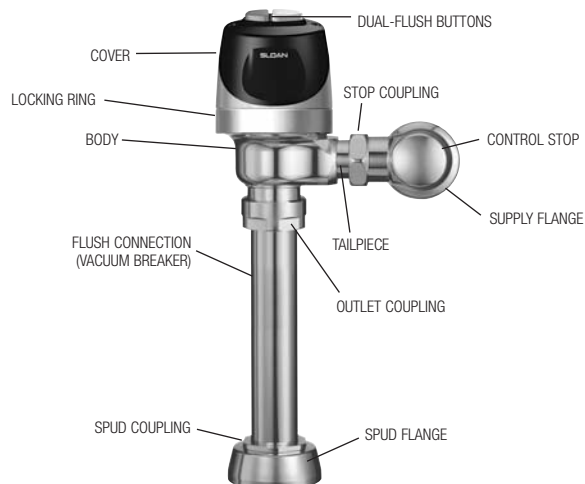
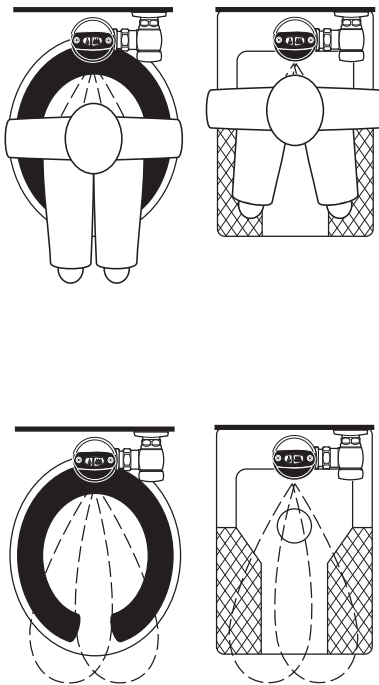
Manual Operation

Sloan ECOS® Electronic Dual-Flush Flushometers incorporate intuitive Split-button design for easy manual activation. The small button controls the reduced flush cycle (1.1 gpf/4.2 Lpf), the large button controls the full flush cycle (1.6 gpf/6.0 Lpf). Straightforward graphics alert user to proper activation. Reduced flush for liquid waste, full flush for solid waste. To further educate the user, two (2) instructional wall plates are included with each Sloan ECOS Flushometer.

Automatic Operation

Sloan ECOS Electronic Dual-Flush Flushometers can also be activated via multi-lobular infrared sensor. By detecting user presence and duration, the Sloan ECOS Smart Sense Technology™ will determine the proper flush volume for unequalled water efficiency.

1. A continuous, INVISIBLE light beam is emitted from the Optima Plus® 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.
3. When the user steps away, the loss of reflected light initiates an electrical "one-time" signal that activates the flushing cycle to flush the fixture. The Circuit automatically resets and is ready for the next user.



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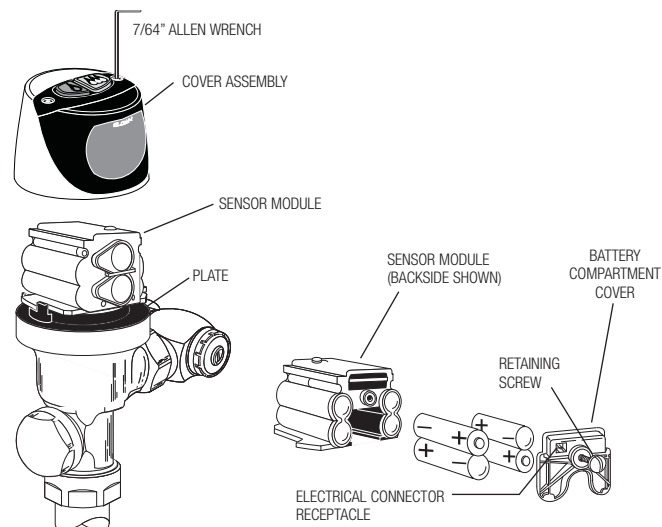
BATTERY REPLACEMENT

When required, replace batteries with four (4) Alkaline AA-Size Batteries.

Note: Water does not have to be turned off to replace batteries.

Loosen the two (2) screws on top of unit. Remove the complete Cover Assembly. Lift the Sensor Module from its Plate. Unplug the Electrical Connector from Battery Compartment Cover. Loosen the Retaining Screw on Battery Compartment Cover and remove Battery Compartment Cover. Install four (4) alkaline type AA batteries **exactly** as illustrated at right.

Install Battery Compartment Cover and secure with Retaining Screw. Make certain that Battery Compartment Cover is fully compressed against Gasket to provide a seal; **Do not** overtighten. Plug the Electrical Connector into the Battery Compartment Cover. Reinstall the Sensor Module onto the Plate. Reinstall the complete Cover Assembly onto the Plate. Tighten the two (2) Screws on top of the unit.



RANGE ADJUSTMENT (ADJUST ONLY IF NECESSARY)

The Sloan ECOS® Electronic Dual-Flush has a factory set sensing range:

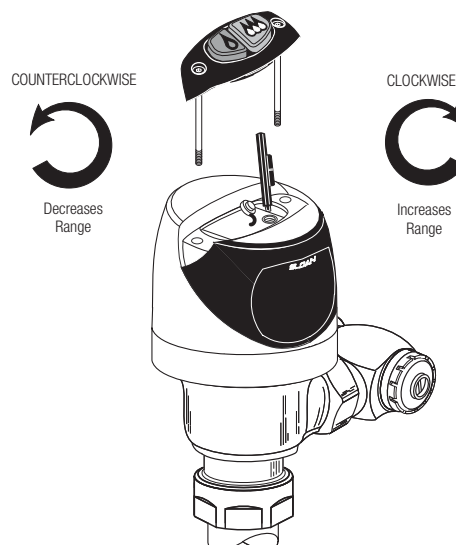
Water closet models – 22" to 42" (559 mm to 1067 mm)

The Factory setting should be satisfactory for most installations.

If the range is too short (i.e., not picking up users) 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. Remove the Rubber Plug from top of Electronic Sensor Module to uncover the Potentiometer.



RANGE ADJUSTMENT PROCEDURE

For the first ten (10) minutes of operation, a Visible Light flashes in the Sensing Window of the Sloan ECOS® Electronic Dual-Flush Flushometer when a user is detected. This Visible Light feature can be reactivated after ten (10) minutes by opening and closing the Battery Compartment Door.

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 **COUNTERCLOCKWISE** to decrease the range. Repeat this adjustment until the desired range is achieved.

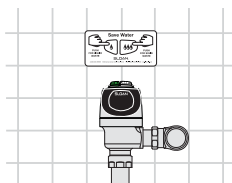
Always Determine the Sensing Range with Metal Cover and Lens Window On Top of the Unit.

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.

RECOMMENDED WALL PLATE LOCATIONS

Centered over Flushometer



On stall door



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TROUBLESHOOTING AND MAINTAINING THE SLOAN ECOS® DUAL-FLUSH FLUSHOMETER

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 Not Picking Up 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 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. Batteries completely used up; replace batteries.
- C. Problem with Electronic Sensor Module; replace Electronic Sensor Module.

5. Unit Flashes 4 Quick Times When User Steps Within Range.

- A. Batteries low; replace batteries.

6. 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. Problem with Electronic Sensor Module; replace Sensor Module.

7. Not Enough Water to Fixture.

- A. Wrong Flush Volume Regulator installed in Flex Tube Diaphragm Kit. Install the correct Regulator (see Step 7 of these instructions).
- B. Wrong Sloan ECOS® Electronic Dual-Flush model installed; i.e., 1.6 gpf model installed on 3.5 gal. closet fixture.
- C. Enlarged Bypass in Diaphragm. Replace 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.

8. Too Much Water to Fixture.

- A. Wrong Flush Volume Regulator installed in Flex Tube Diaphragm Kit. Install the correct Regulator (see Step 7 of these instructions).
- B. Control Stop not adjusted properly. Readjust Control Stop.
- C. Wrong Sloan ECOS Electronic Dual-Flush model installed; i.e., 3.5 gpf. model installed on 1.6 gal. fixture. Replace with proper Sloan ECOS Electronic Dual-Flush model.
- D. Dirt in Diaphragm Bypass. Clean under running water or replace Flex Tube Diaphragm.

Note: The EBV-46-A Beam Deflector is no longer required or available for the Sloan ECOS Electronic Dual-Flush.

CARE AND CLEANING INSTRUCTIONS

DO NOT use abrasive or chemical cleaners to clean the Sloan ECOS Dual-Flush Flushometer as they may dull the luster and attack the plastic cover and the chrome finish of the Flushometer. Use **ONLY** mild soap and water, then wipe dry with clean cloth or towel.

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.