

OPTIMA PLUS® DUAL-FLUSH AND SINGLE-FLUSH SIDE MOUNT UNIT INSTALLATION INSTRUCTIONS



EBV-500-A
Single-Flush Side Mount
Battery Powered



EBV-550-A
Dual-Flush Side Mount
Battery Powered



EL-700-A
Single-Flush Side Mount
Hardwired



EL-750-A
Dual-Flush Side Mount
Hardwired

SLOAN® LIMITED WARRANTY SUMMARY

Sloan Valve Company ("Sloan"), warrants its products against defects in materials and workmanship, excluding damage caused by matters beyond Sloan's reasonable control. Instructions for filing claims can be found in the Limited Warranty which can be obtained at www.sloan.com or by requesting a free copy by telephone at 888.756.2614. Sloan will repair or replace your defective product, or provide a refund, as your exclusive remedy. This is only a general summary of Sloan's Limited Warranty so it is important to note that the specific terms, conditions, limitations and exclusions, including the duration of warranty coverage for your particular Sloan product, are contained in the actual Sloan Limited Warranty. The Limited Warranty is subject to applicable laws in your country, state, province or other jurisdiction—and disputes arising under the Limited Warranty are to be resolved by binding arbitration unless you provide Sloan with an opt-out notice no later than 30 days after your purchase date. In case of a conflict with this summary, the terms and conditions set forth in the complete Limited Warranty will prevail.

1 - INSTALLATION (FOR EITHER LEFT- OR RIGHT-HAND)

IMPORTANT: INSTALL ALL ELECTRICAL WIRING IN ACCORDANCE WITH NATIONAL AND LOCAL CODES AND REGULATIONS.

DO NOT REMOVE STICKER FROM SENSOR WINDOW UNTIL STEP 3.

Close the control stop.

Using the supplied collar wrench, remove handle and handle gasket from flushometer, if applicable.

NOTE: On some flushometers with a faulty air vent, or recently flushed valve, be prepared to collect a small amount of water with a rag or sponge placed under the handle.

Place sleeve assembly with flat notch facing upwards into collar nut and attach the Side Mount unit where the handle was removed.

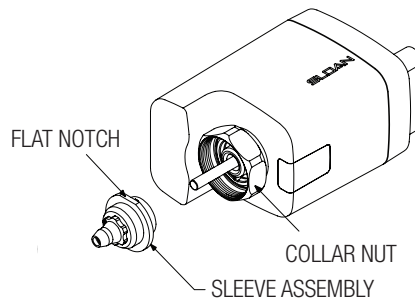
NOTE: Failure to install flat notch correctly can result in damage to the unit.

Tighten collar nut with supplied collar wrench. Open the control stop.

NOTE: Save the handle in the event you wish to return to manual flushometer.

TURN COUNTER-
CLOCKWISE TO OPEN

TURN CLOCKWISE
TO CLOSE

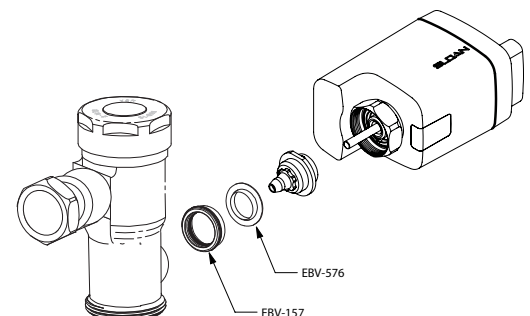


NOTE: For retrofit installation to Sloan GEM•2 flushometer (-G variation), use the SFSM to GEM Adapter Kit **EBV-575-A**.

1. Thread Chrome adapter onto valve body.
2. Place Yellow gasket on top of sleeve assembly.
3. Mount side mount to valve body and tighten collar nut.

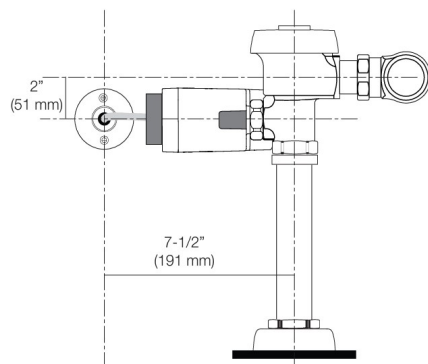
NOTE: For retrofit installation to †Zurn® flushometer make sure to re-use the Zurn® gasket and place on top of sleeve assembly before mounting to valve. Contact Sloan Technical Support if the Zurn® gasket is not present or if another is required.

† The brands and/or products names referenced herein may be subject to trademark rights of their respective owners. Use of the brands and names is for identification purposes only and does not imply affiliation with or endorsement by Sloan.



2 - ELECTRICAL CONNECTION (HARDWIRED MODELS ONLY)

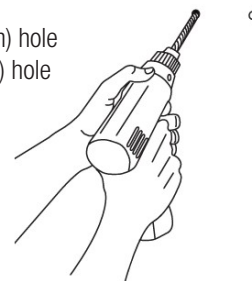
- A** Suggested mounting location of electrical supply flange.



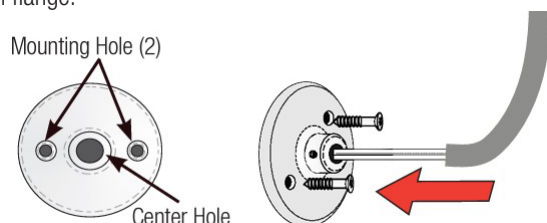
- B** Drill two (2) mounting holes into the wall and mount flange using the appropriate fasteners for the particular wall type.

Mounting Fasteners Provided:

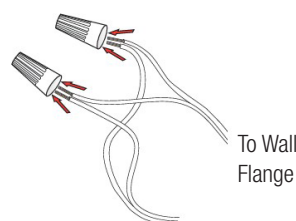
- Plastic Wall Anchor - 3/16" (5 mm) hole
- Toggle Nut Anchor - 1/2" (13 mm) hole



- C** Drill 1/2" (13 mm) center hole. Run cable through center hole in flange.

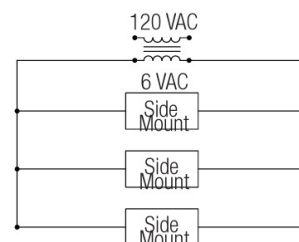


- D** Insert wires into wire connectors as shown. Twist wire connector onto wires.

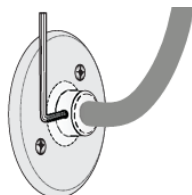


To 6 VAC Class 2 Transformer
(available from Sloan, see below).

WIRING DIAGRAM



- E** Tighten setscrew against armor sheath with 1/8" hex wrench.



Note: Hardwired units do not use batteries as backup.

VAC POWER REQUIREMENT – 6 VAC 0.5 mA per unit

Sloan Transformers:

EL-386 – 120 VAC/6 VAC Plug-in Transformer

EL-451 – 120 VAC/6 VAC 25 VA Box Style Transformer

One (1) EL-386 Transformer serves one (1) flushometer.

One (1) EL-451 Transformer serves up to six (6) flushometers.

3 - START-UP ACTIVATION

Turn on Transformer power and wait for 10 seconds (*Hardwired models only*).

Remove sticker from sensor window.

The Side Mount unit comes with batteries factory installed and will "wake up" when sticker is removed from sensor window. Please ensure this is the last step in the installation process and unless the target is a permanent fixture in the sensor's environment (*i.e. a wall or stall door*) it must be removed from the view of the sensor. There is a three (3) minute delay to calibration to allow the installer to clear from the view of the sensor.

The Side Mount unit calibrates to the surrounding environment once sticker is removed (*with three (3) minute delay to allow installer to*

clear from the view of the sensor). Remove all non-permanent articles and step away from the sensor view until the one flush activation verifies calibration is complete. The unit will exhibit an LED flash pattern as follows:

- GREEN and RED LED flash once, GREEN LED flashes 5 times
- 150 seconds of slow GREEN double flashes
- 10 seconds of fast GREEN double flashes
- 12-15 seconds of fast GREEN flashes (*calibration*)
- 3 slow GREEN LED flashes indicates calibration is done
- Normal Operation with one (1) flush activation

After power off, re-power up will need three (3) minute delay to allow installer to clear from the view of the sensor (*Hardwired models only*).

MODE CHANGE (SINGLE-FLUSH UNITS ONLY)

Battery Powered Models Only: To check unit mode within first hour of power up or "Wake up":

Present target in front of the sensor.

- **Closet mode:** GREEN LED (*if battery is OK*) or RED LED (*if battery is low*) blinks once per second.
- **Urinal mode:** GREEN LED (*if battery is OK*) or RED LED (*if battery is low*) blinks twice per second.

All Models: To change unit from water closet mode to urinal mode, complete the following within one (1) hour of power up:

Press and hold the TMO button for 20-30 seconds.

The unit will exhibit an LED flash pattern as follows:

- For approximately the first 10 seconds there will be no LED flashing.
- For approximately 10-20 seconds, both the RED and GREEN LEDs will produce short simultaneous flashes.

- For approximately 20-30 seconds, the GREEN LED will flash.

Release the TMO button during the 20-30 seconds when the GREEN LED flashes and remove non-permanent items from view of the sensor. The Side Mount unit will now be in urinal mode* and begin calibration until the one (1) flush activation verifies calibration is complete. See Start-Up Activation.

To change unit back to closet mode, press and hold the TMO button for 30-40 seconds. Release when Red and Green LEDs produce long simultaneous flashes. The Side Mount unit will now be in closet mode and begin calibration.

*Urinal mode provides a shorter sensor range and 1-2 second flush delay.

Note: Units are preset in factory to water closet mode.

SERVICE MODE - DUAL-FLUSH AND SINGLE FLUSH UNITS

Press and hold the True Mechanical Override (BLACK) button for 10-20 seconds.

The unit will exhibit an LED flash pattern as follows:

- For approximately the first 10 seconds there will be no LED flashing.
- For approximately 10-20 seconds, both the RED and GREEN LEDs will produce short simultaneous flashes.

Release the TMO button during the 10-20 seconds when both the RED and GREEN LEDs produce SHORT simultaneous flashes. The unit will now ignore targets for 10 minutes to enable the toilet or urinal to be cleaned or serviced. Unit will resume normal operation after 10 minutes or if either button is pushed. Green button will generate a reduced flush and then resume normal operation, black button will provide a full flush before resuming normal operation.

BATTERY REPLACEMENT (BATTERY MODELS ONLY)

Using supplied battery compartment hex wrench, remove battery compartment from the Side Mount unit.

Remove batteries from compartment tray.

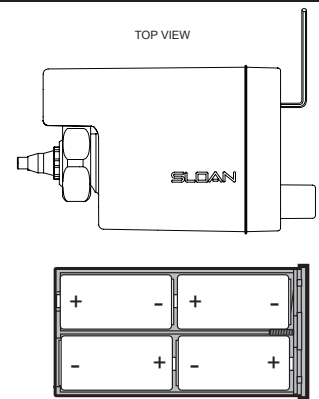
Install 4 new C-cell batteries into compartment tray (note position of batteries in tray), and reinstall compartment tray into the Side Mount unit.

The Side Mount unit comes preset from the factory. If special circumstances require adjustment of the activation distance, please contact Sloan.

The Side Mount unit calibrates upon power up with three (3) minute delay to allow installer to clear from the view of the sensor, GREEN and RED LEDs flash once. The unit will actuate a flush followed by 5 flashes of GREEN LED. The unit will then perform calibration, a 20 second sequence, where the GREEN LED flashes quickly.

Finally the unit will start normal operation.

Manual flush button on Side Mount unit allows manual activation when desired.



TROUBLESHOOTING

1. RED LED continuously flashes when target is present within first hour of power up (Battery Models).

The battery is low. Refer to battery replacement instructions.

2. RED LED flashes 4 times after a target has been present for 8 seconds. RED LED flashes once when a target is not present after one (1) hour of power up (Battery Models).

The battery is low. Refer to battery replacement instructions.

3. RED LED flashes continuously after calibration (All Models).

The unit has failed to calibrate. The optics window is obscured. Clean window and remove any objects (*barrels, toolboxes, etc.*) within close proximity of unit.

Remove battery tray, wait for at least ten (10) seconds, then reinstall battery tray and repeat power-up sequence with three (3) minute delay to allow installer to clear from the view of the sensor. If unit fails, consult Sloan Technical Support.

CARE AND CLEANING

DO NOT USE abrasive or chemical cleaners (including chlorine bleach) to clean side mount unit or flushometer that may dull the luster and attack the finish. Use **ONLY** mild soap and water, then wipe dry with clean cloth or towel.

While cleaning the bathroom tile, protect the side mount unit from any splattering of cleaner. Acids and cleaning fluids will discolor or remove chrome plating or damage the sensor window.

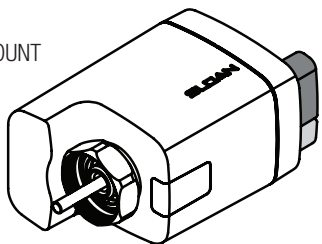
DO NOT USE abrasive or chemical cleaners (including chlorine bleach) to clean sensor window that may distort or ruin the sensor.

PARTS LIST

EBV-550-A DUAL-FLUSH SIDE MOUNT



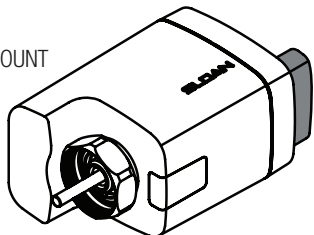
EBV-505-A SLEEVE ASSEMBLY (SUPPLIED WITH HEX WRENCH)



EBV-500-A SINGLE-FLUSH SIDE MOUNT



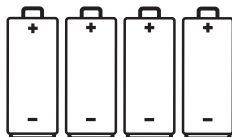
EBV-570-A SLEEVE ASSEMBLY (SUPPLIED WITH HEX WRENCH)



EBV-1014-A BATTERY TRAY ASSEMBLY



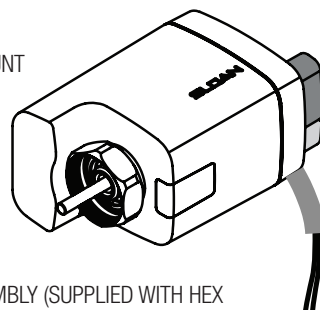
(4) C-CELL BATTERIES
(FACTORY INSTALLED)



EBV-750-A DUAL-FLUSH SIDE MOUNT



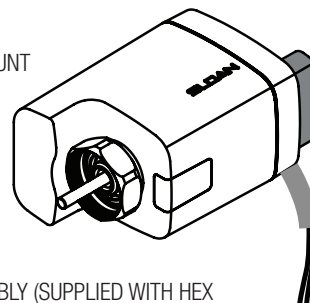
EBV-505-A SLEEVE ASSEMBLY (SUPPLIED WITH HEX WRENCH)



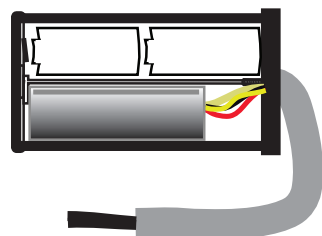
EBV-700-A SINGLE-FLUSH SIDE MOUNT



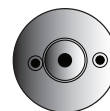
EBV-570-A SLEEVE ASSEMBLY (SUPPLIED WITH HEX WRENCH)



EL-664-A HARDWIRE TRAY ASSEMBLY

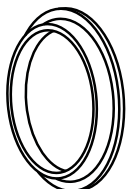


EL-612-A WALL FLANGE MOUNTING KIT



EBV-575-A GEM ADAPTER KIT FOR SFSM SINGLE-FLUSH ONLY

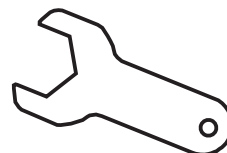
YELLOW GASKET
(FOR -G VARIATION ONLY)
EBV-576 (5325376)
(PACK OF 5)



CHROME ADAPTER
(FOR -G VARIATION ONLY)



2.5 mm HEX WRENCH
FOR BATTERY
COMPARTMENT



EBV-545 COLLAR WRENCH

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

US Patent Pending. OPTIMA PLUS®

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SLOAN • 10500 SEYMOUR AVENUE • FRANKLIN PARK, IL 60131

Phone: 1-800-9-VALVE-9 (1-800-982-5839) • Fax: 1-847-671-4380 • sloan.com