Optima® Flushometers

TROUBLESHOOTING GUIDE

ATTENTION INSTALLERS: With the exception of the control stop inlet, DO NOT USE pipe sealant or plumbing grease on any valve component or coupling! To protect the chrome or special finish of Sloan flushometers, DO NOT USE toothed tools to install or service these valves. Use our A-50 Super-Wrench™ or other smooth-jawed wrench to secure couplings. Regulations for low consumption fixtures (1.6 gpf/6.0 Lpf closets and 1.0 gpf/3.8 Lpf urinals) prohibit use of higher flush volumes.

Urinals (EL-1500 Sensor)

When the sensor detects a user, a slow flashing red light appears in the sensor window. After eight (8) to ten (10) seconds, the light flashes rapidly to indicate that the sensor is armed. When the sensor no longer detects a user, the sensor immediately activates the solenoid valve after a 0.5 second delay.

Water Closets (EL-1500-L Sensor)

Detection and activation are the same as for the urinal EL-1500 sensor (ABOVE) except when the sensor no longer detects an user, the sensor activates the solenoid valve after a three (3) second delay.

The EL-1500 urinal and EL-1500-L closet self-adaptive sensors are equipped with a "Sentinel Flush" feature. These units automatically activate the solenoid every twenty-four (24) hours after the last user.

1. **Valve does not function (red light does not flash when user steps in front of sensor).**
   - A. No power is being supplied to sensor. Ensure that the main power is turned "ON". Check transformer, leads and connections. Repair or replace as necessary.
   - B. EL-1500/EL-1500-L sensor is not operating. Replace sensor.
2. **Valve does not function (red light flashes when user steps in front of sensor).**

   INDICATOR: The red light stops flashing when user steps away and the valve makes a "clicking" sound but does not flush.
   - A. No water is being supplied to the valve. Make certain that water supply is turned "ON" and the control stop is open.
   - B. EL-128-A cartridge is fouled or jammed. Turn electronic power to valve "OFF" (failure to do so could result in damage to the solenoid coil). Remove the solenoid operator from the valve and remove the EL-128-A cartridge. Clean and/or repair as necessary.

   INDICATOR: The red light stops flashing when user steps away but the valve does NOT make a "clicking" sound and does NOT flush.
   - A. EL-163-A solenoid shaft assembly is fouled or jammed. Turn electronic power to valve "OFF" (failure to do so could result in damage to the solenoid coil). Remove EL-101 or EL-166 nut from the solenoid operator. Remove the coil from the solenoid operator. Use a spanner wrench or pliers to remove the EL-163-A solenoid shaft assembly from valve. Clean and/or replace as necessary. Be sure to replace plunger spring when reassembling solenoid shaft assembly.

   INDICATOR: The red light flashes three (3) fast flashes, three (3) slow flashes then three (3) fast flashes ("S-O-S") and continues to repeat this cycle even when user steps out of the sensor's detection range.
   - A. EL-1500/EL-1500-L sensor wiring connections are incorrect. Rewire sensor to valve. One solenoid lead connects to the "TO VALVE" connection on sensor. One transformer lead connects to the "24 VAC IN" connection on sensor. Second solenoid lead and second transformer lead connect together.
   - B. Wiring to sensor is ground shorted. Find short in wiring circuit and correct.
   - C. EL-165-2 solenoid coil is burnt out or coil is not connected to solenoid plunger shaft. Reinstall or replace coil as necessary.
3. **Range too short.**
   - A. Power down unit for 30 seconds. Power up. Wait six minutes for calibration.
   - B. If reset does not work, replace.
4. **Volume of water is insufficient to adequately siphon fixture.**
   - A. Control stop is not open wide enough. Adjust control stop for desired water delivery.
   - B. Low consumption unit is installed on water saver or conventional fixture. Replace diaphragm component parts of valve with kit that corresponds to appropriate flush volume of fixture.
   - C. Inadequate water volume or pressure available from supply. Increase pressure or supply (flow rate) to the valve. Consult factory for assistance.
5. **Length of flush is too long (long flushing) or valve fails to shut off.**
   - A. Water saver valve is installed on low consumption fixture. Replace diaphragm component parts of valve with kit that corresponds to appropriate flush volume of fixture.
   - B. Relief valve in diaphragm is not seated properly or by-pass hole in diaphragm is clogged. Disassemble inside diaphragm component parts and wash parts thoroughly. Replace worn parts if necessary.
6. **Water splashes from fixture.**
   - A. Supply flow rate is more than necessary. Adjust control stop to meet flow rate required for proper cleansing of the fixture.
   - B. Closet valve is installed on urinal fixture. Replace closet diaphragm component parts with proper urinal kit (inside diaphragm assembly or inside parts kit).

CARE AND CLEANING INSTRUCTIONS

DO NOT USE abrasive or chemical cleaners to clean flushometers or sensor 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).