

# TROUBLESHOOTING AND MAINTAINING THE OPTIMA PLUS FLUSHOMETER

## 1 PROBLEM: *SENSOR FLASHES CONTINUOUSLY ONLY WHEN USER STEPS WITHIN RANGE*

CAUSE: A) Unit in start-up mode.

SOLUTION: A) No problem. This feature is active for the first ten minutes of operation.

## 2 PROBLEM: *VALVE DOESN'T FLUSH; SENSOR NOT PICKING UP USER*

CAUSE: A) Range too short.

B) Optima Plus installed on a high rough-in fixture (beam is shooting over user's head.)

SOLUTION: A) Increase the range.

B) Install EBV-46-A beam deflector.

## 3 PROBLEM: *VALVE DOESN'T FLUSH; SENSOR PICKING UP OPPOSITE WALL OR SURFACE, OR ONLY FLUSHES WHEN SOMEONE WALKS BY. RED LIGHT FLASHES CONTINUOUSLY FOR FIRST TEN MINUTES EVEN WITH NO ONE IN FRONT OF THE SENSOR*

CAUSE: A) Range too long.

B) Sensor is picking up mirror or highly reflective wall or surface in front of fixture.

SOLUTION: A) Shorten range.

B) Install Optima Plus slightly off center (2° to 5°) to eliminate direct reflection off of mirror or opposite wall surface.

## 4 PROBLEM: *VALVE DOES NOT FLUSH EVEN AFTER ADJUSTMENT*

CAUSE: A) Range adjustment potentiometer set at full "max" or full "min" setting.

B) Batteries completely used up.

C) Problem with electronic control module.

SOLUTION: A) Readjust potentiometer away from full "max" or "min" setting.

B) Replace batteries.

C) Call EQUIPARTS to replace electronic control module.

## 5 PROBLEM: *UNIT FLASHES FOUR QUICK TIMES WHEN USER STEPS WITHIN RANGE.*

CAUSE: A) Batteries low.

SOLUTION: A) Replace batteries.

## 6 PROBLEM: *VALVE DOES NOT SHUT OFF*

CAUSE: A) By-pass orifice in diaphragm is clogged with dirt or debris, or by-pass is clogged by an invisible gelatinous film due to "overtreated" water.

B) Dirt or debris fouling stem or inside parts assy.

C) Quad seal on stem or inside parts assembly damaged or worn.

D) Solenoid valve in electronic module has been overtightened.

E) Problem with electronic module.

SOLUTION: A) Remove inside parts assembly and wash under running water. **NOTE:** size of orifice in by-pass is of utmost importance for the proper metering of water by the valve. EQUIPARTS recommends that you do not enlarge or damage this orifice. Replace inside parts assembly if cleaning does not correct the problem.

B) Remove inside parts assembly and wash under running water.

C) Replace quad seal if necessary.

D) Turn solenoid counterclockwise very slightly.

E) Replace electronic module.

## 7 PROBLEM: *NOT ENOUGH WATER TO FIXTURE*

CAUSE: A) Wrong Optima Plus model installed (i.e. 1 GPF urinal installed on 3.5 gal closet fixture)

B) Enlarged by-pass in diaphragm.

C) Control stop not adjusted properly.

D) Inadequate volume or pressure at supply.

SOLUTION: A) Replace with proper Optima Plus model.

B) Replace inside parts assembly.

C) Readjust control stop.

D) Increase water pressure or supply (flow) to valve.

## 8 PROBLEM: *TOO MUCH WATER TO FIXTURE*

CAUSE: A) Control stop not adjusted properly.

B) Wrong Optima Plus model installed. (i.e., 3 GPF model installed on 1 or 1.5 gal. urinal fixture.)

C) Dirt in diaphragm by-pass.

SOLUTION: A) Readjust control stop.

B) Call EQUIPARTS and replace with proper Optima Plus model.

C) Clean under running water or replace inside parts.

## 9 PROBLEM: *MEN'S ROOM CLOSET BOWLS UN-FLUSHED*

CAUSE: A) Closet being used as urinal.

SOLUTION: A) Angle sensor slightly off fixture centerline to detect standing person in front of fixture.

## 10 PROBLEM: *HIGH VACUUM BREAKER INSTALLATION UNIT NOT FLUSHING. ELEMENTARY SCHOOL URINALS NOT FLUSHING.*

CAUSE: A) EBV-46-A beam deflector not installed.

B) Unusually short users not being detected.

SOLUTION: A&B) Install EBV-46-A beam deflector to divert sensor beams.

### TO MAKE A RANGE ADJUSTMENT

Remove and then reinstall battery compartment door to activate 10 minute flashing range indicator feature. The range potentiometer is located at the top of the electronic sensor module beneath a rubber plug. Using the small screwdriver provided, turn the potentiometer a few degrees. Turn clockwise to increase range, turn counterclockwise to decrease range. Place cover over sensor module, position body into typical user range and check range by looking for red flashing light. Red light should only flash when picking up user. Repeat adjustment procedure until desired range is obtained. Reinstall optima plus. Refer to optima plus installation manual for greater detail on range adjustment procedures.

### BATTERY REPLACEMENT

When Optima Plus has approximately 4000 flushes left, the same red light that appears at start-up will flash four times quickly whenever an object is detected. When this occurs, we recommend changing the batteries.

### CARE AND CLEANING INSTRUCTIONS

DO NOT use abrasive or chemical cleaners to clean the Optima Plus, they may dull the luster and attack the Plastic Cover and the chrome finish of the flushometer. Use only soap and water, then wipe dry with clean cloth or towel. While cleaning the bathroom tile, the Optima Plus should be protected from any spattering of cleaner. Acids and cleaning fluids can discolor or remove chrome plating.