

Series 900® Flushometer

TROUBLESHOOTING GUIDE

1. Push button leaks.

The actuator cartridge has an accumulation of lime or its seals are damaged or worn. Replace with a new HY-32-A cartridge.

2. The flushometer DOES NOT flush and a small amount of leakage is visible below the valve.

- Foreign material lodged in the cartridge. Remove the cartridge and inspect for foreign material. Clean under running water.
- The actuator cartridge has an accumulation of lime or its seals are damaged or worn. Replace with a new HY-32-A cartridge.
- Plastic tubing is installed incorrectly. Install plastic tubing correctly.

ACTUATOR CARTRIDGE REMOVAL

Plastic Push Button Actuator Removal:

- Loosen the setscrew in the button flange and remove the button, flange, and spring from the actuator body.
- Unscrew the cartridge from the actuator body.

NOTE: An automatic check valve in the actuator body allows removal of the cartridge without turning off the water.

Metal Push Button Actuator Removal:

- Remove the button or actuator assembly from the wall or fixture.
- Disassemble the flange or button assembly from the actuator body.
- Unscrew the cartridge from the actuator body.

NOTE: The metal push button is designed to be vandal-proof and must be removed from the wall or fixture for service.

3. The flushometer DOES NOT flush or flushes only once and will not flush a second time when the button is pushed.

- The plunger is lodged in the actuator cartridge or the plunger bypass hole is clogged. Remove actuator housing and cartridge from the flushometer. Clean under running water. If cartridge parts are worn, deteriorated or limed up and problem persists after cleaning, replace with a new HY-83-A cartridge.
- Plastic tubing is installed incorrectly. Install plastic tubing correctly.

REMOVAL OF THE ACTUATOR FROM THE FLUSHOMETER:

Turn off water at the control stop. Unscrew the actuator housing coupling nut from the flushometer. Remove the actuator housing from the flushometer. The tubing connections can be left intact. Carefully remove the actuator cartridge from the flushometer body to prevent the actuator from abrupt separation due to expansion of an internal spring. If the actuator cartridge is lodged in the flushometer body cavity, gently grip the exposed portion of the cartridge with a channel-lock pliers and rotate back and forth to loosen the o-ring seal. Carefully separate the actuator housing to reveal the spring and plunger.

4. Flushometer DOES NOT function (no flush).

- Control stop or main valve is closed. Open control stop or main valve.
- Relief valve is worn. Replace performance kit (Royal) or inside parts kit (Regal XL).

5. Volume of water is not sufficient to siphon fixture.

- Control stop is not open wide enough. Adjust control stop for desired delivery of water volume.
- Urinal flushometer parts installed in a closet flushometer. Replace inside urinal flushometer parts with proper closet flushometer parts.
- Incorrect dual-filtered diaphragm assembly (Royal) or inside parts kit (Regal XL) is installed in flushometer; for instance, urinal assembly inside a closet flushometer, or low consumption assembly inside a higher consumption fixture. Determine the flush volume required by the fixture and replace Royal performance kit or inside parts kit. Use valve label and markings on fixture for reference.
- Water supply volume or pressure is inadequate. If no gauges are available to properly measure supply pressure or volume of water at the flushometer, then remove the relief valve from the dual-filtered diaphragm assembly (Royal) or inside parts kit (Regal XL), reassemble the flushometer and completely open the control stop. If the fixture siphons, more water volume is required.

For Royal — Install a higher flushing volume Royal Performance Kit.

For Regal XL — If a 3.5 gpf Inside Parts Kit is installed in the flushometer, then first flip the refill head (under the diaphragm) to obtain a 4.5 gpf volume. If this volume is still inadequate, remove the flow ring from the guide to obtain a 6.5 gpf Kit. If additional flow is still required, try a low pressure guide kit A-175-A (0301104).

IMPORTANT — LAWS AND REGULATIONS REQUIRING PROHIBIT THE USE OF HIGHER FLUSHING VOLUMES THAN LISTED ON FIXTURE OR FLUSHOMETER.

If the fixture does not siphon or if a low consumption flush is required, steps must be taken to increase the water supply pressure and/or volume. Contact the fixture manufacturer for minimum water supply requirements of the fixture.

6. Flushometer closes off immediately.

- Ruptured or damaged diaphragm. Replace Royal performance kit (Royal) or inside parts kit (Regal XL).
- For Regal XL** — An enlarged bypass orifice from corrosion or damage. Replace inside parts kit.
- Length of flush is too short (Short Flush).
- For Regal XL** — The diaphragm assembly and guide assembly are not hand tight. Screw the two assemblies hand tight.
- For Regal XL** — An enlarged bypass orifice from corrosion or damage. Replace inside parts kit.
- Dual-filtered diaphragm assembly (Royal) or inside parts kit (Regal XL) is damaged. Replace Royal performance kit or inside parts kit.
- Incorrect dual-filtered diaphragm assembly (Royal) or inside parts kit (Regal XL) is installed in flushometer; for instance, urinal assembly inside a closet flushometer, or low consumption assembly inside a higher consumption fixture. Determine the flush volume required by the fixture and replace Royal performance kit or inside parts kit. Use valve label and markings on fixture for reference.

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TROUBLESHOOTING GUIDE (CONTINUED)

7. Length of flush is too long (long flush) or continuous.

- A. **For Royal** — Metering bypass hole in diaphragm is clogged. Remove the dual-filtered diaphragm assembly. Remove the primary and secondary filter rings from the diaphragm and wash under running water. Replace Royal performance kit if cleaning does not correct the problem.
- B. **For Regal XL** — Relief valve (A-19-A) is not seating properly or bypass orifice is clogged. Disassemble the working parts and wash thoroughly.

NOTE: SIZE OF THE ORIFICE IN THE BYPASS IS OF UTMOST IMPORTANCE FOR THE PROPER METERING OF WATER INTO THE UPPER CHAMBER OF THE FLUSHOMETER. DO NOT ENLARGE OR DAMAGE THIS ORIFICE. REPLACE INSIDE PARTS KIT IF CLEANING DOES NOT CORRECT PROBLEM.

- C. Supply line water pressure has dropped and is not sufficient to close the valve. Close control stop until pressure is restored.
- D. Dual-filtered diaphragm assembly (Royal) or inside parts kit (Regal XL) is damaged. Replace Royal performance kit or inside parts kit.
- E. Incorrect dual-filtered diaphragm assembly (Royal) or inside parts kit (Regal XL) is installed in flushometer; for instance, urinal assembly inside a closet flushometer, or low consumption assembly inside a higher consumption fixture. Determine the flush volume required by the fixture and replace Royal performance kit or inside parts kit. Use valve label and markings on fixture for reference.
- F. White closet relief valve has been used in a urinal flushometer. Replace closet relief valve (A-19-AC) with black urinal relief valve (A-19-AU).
- G. Inside cover is cracked or damaged. Replace the inside cover (A-71).
- H. Conditions in the piping system may contribute to the noise. A degree of high pressure in the piping may be relieved by adjustments to control stop. Other noises created by loose pipes, lack of air chambers, inadequate pipe sizes, etc., are problems that must be discussed with the building engineer.

8. Chattering noise is heard during flush.

- A. Inside cover is damaged. Replace inside cover (A-71).
- B. **For Regal XL** — A-156-A segment diaphragm has been installed upside-down. Reposition the segment diaphragm properly (see markings on the diaphragm).

CARE AND CLEANING INSTRUCTIONS

DO NOT USE abrasive or chemical cleaners (including chlorine bleach) 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.

While cleaning the bathroom tile, protect the flushometer from any splattering of cleaner. Acids and cleaning fluids will discolor or remove chrome plating.

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