

## Optima Plus® EBF-85

## TROUBLESHOOTING GUIDE

**1. Module emits audible “BEEPs” when activated.**

- A. Battery power is nearly exhausted. To ensure proper operation, insert four (4) new C-size alkaline batteries. Check that the orientation of each battery matches the positive (+) and negative (–) symbols shown in the bottom of the battery compartment. Reattach battery compartment to control module.

**2. Sensor is activated but faucet DOES NOT deliver water.**

**INDICATOR: Module DOES NOT produce audible “BEEPs”.**

- A. Battery power is fully exhausted. To ensure proper operation, insert four (4) new C-size alkaline batteries. Check that the orientation of each battery matches the positive (+) and negative (–) symbols shown in the bottom of the battery compartment. Reattach battery compartment to control module.
- B. Batteries are not installed properly. Check that the orientation of the batteries match the positive (+) and negative (–) symbols shown in the bottom of the battery compartment. Reattach the battery compartment to the control module.
- C. Solenoid valve module is not working properly. Replace EBF-11-A solenoid valve module.

**INDICATOR: Module produces audible “BEEPs” when batteries are installed and after 30-second calibration procedure, but NOT when a target is placed in the detection zone of the Sensor.**

- D. Fiber optic cable is not connected correctly to solenoid valve module or was not connected when batteries were installed. Reconnect fiber optic cable to solenoid valve module. Open battery compartment to reset electrical system. Check that the orientation of each battery matches the positive (+) and negative (–) symbols shown in the bottom of the battery compartment. Reattach the battery compartment to the control module.
- E. Fiber optic cable is not working properly. Replace EBF-1009-A sensor cable, or EBF-10-A faucet/sensor assembly.
- F. Solenoid valve module is not working properly. Replace EBF-11-A solenoid valve module.

**INDICATOR: Module produces audible “BEEPs” when a target is placed in the detection zone of the sensor and solenoid valve produces an audible “CLICK”, but NO water flows.**

- G. Water supply to faucet is not open. Open supply stop(s).
- H. Bak-Chek® is installed backwards. Reinstall Bak-Chek(s).
- I. Solenoid filter is clogged. Remove, clean, and reinsert. Replace with EBF-1001-A or EBF-1004-A solenoid filter kit if necessary.
- J. Aerator or spray head is clogged. Remove, clean, and reinsert.

**INDICATOR: Module produces audible “BEEPs” when a target is placed in the detection zone of the sensor, but solenoid valve DOES NOT produce an audible “CLICK” and NO water flows.**

- K. Solenoid valve module is not working properly. Replace EBF-11-A solenoid valve module.

**3. Faucet delivers only a slow flow or dribble when sensor is**

**activated.**

- A. Water supply valve is partially closed. Open the supply stop(s) completely.
- B. Solenoid filter is clogged. Remove, clean, and reinsert. Replace with EBF-1001-A or EBF-1004-A solenoid filter if necessary.
- C. Aerator or spray head is clogged. Remove, clean, and reinsert.

**4. Faucet DOES NOT stop delivering water or continues to drip after user is no longer detected (automatic shut-off fails even when batteries are removed).**

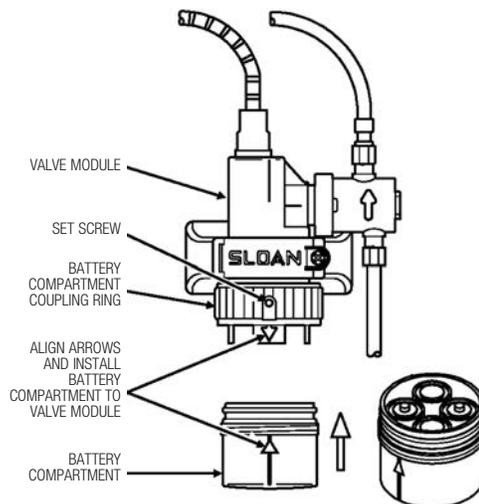
- A. Solenoid valve has been connected backwards. Disassemble solenoid valve compression fittings at the inlet and outlet positions. Water should flow from inlet through the solenoid valve to outlet according to the direction shown by the arrow on the side of the solenoid valve. Reconnect the fittings in the correct orientation.
- B. Solenoid valve seat is dirty. Remove, clean, and reinsert solenoid filter. Activate faucet several times to flush out dirt.
- C. Solenoid valve is dirty. Backflush by reversing water flow (opposite to the direction shown by the arrow on the side of the solenoid valve) through the solenoid valve. Reconnect the compression fittings in the correct orientation. Activate faucet.
- D. Solenoid valve module is not working properly. Replace EBF-11-A solenoid valve module.

**5. The water temperature is too hot or too cold on a faucet connected to hot and cold supply lines with two Bak-Chek's.**

- A. Supply stops are not adjusted properly. Adjust supply stops.
- B. One Bak-Chek is installed backwards. Reinstall Bak-Chek.

**NOTE:** For some systems, a thermostatic mixing valve may be required.

## BATTERY REPLACEMENT

**3. Faucet delivers only a slow flow or dribble when sensor is**