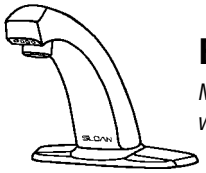
SLOAN

EBF-85, EBF-85-R

Models EBF-85 and EBF-85-R are furnished with a black plastic throat plate.



EBF-187, EBF-187-R,

Models EBF-187 and EBF-187-R are furnished with a chrome plated metal throat plate.

1	# 53814	Faucet & Sensor Assembly **EBF-85 with Black Plastic Throat**
	# 54695	Faucet & Sensor Assembly **EBF-187 with CP Metal Throat Plate**
	# 54696	Fiber Optic Sensor Cable Assembly Only. (Replaces EBF-12-A, includes lens holder)
2	# 59857	0.5 gpm Spray Head w/Key (female thread)
	# 55670	2.2 gpm Aerator Spray Head w/Key (female thread)
	# 54677	2.2 gpm Laminar Flow Spray Head (female thread)
	# 54693	Replacement Key only for ETF-1021-A 0.5 gpm Spray Head, and ETF 1022-A 2.2 gpm Aerator Spray Head (NOT required for ETF-237 2.2 gpm Laminar Flow Spray Head)
3A	# 55154	4" Centerset Trim Plate Kit for EBF-85 or EBF-187 Faucet (Faucet only.) Includes 2 nuts, 2 hex screws, 2 flat plate washers, single hole CP cover plate, and black plastic base plate.
3B	# 54676	4" Centerset Trim Plate Kit for EBF-85 or EBF-187 Faucet (Faucet only.) Includes back-up spacer, self-tapping screw, and CP single hole trim plate assembly
3C	# 54678	4" Centerset Trim Plate Kit for EBF-85 or EBF-187 Faucet with optional mixing valve includes back-up spacer, self-tapping screw, and CP dual hole trim plate assembly.
3D	# 52154	8" Centerset Trim Plate Kit for EBF-85 or EBF-187 Faucet (Faucet only.) Includes 2 finger nuts, 2 washer gaskets, 2 fender washers, base gasket, back-up spacer and CP single hole trim plate assembly.
3E	# 54679	8" Centerset Trim Plate Kit for EBF-85 or EBF-187 Faucet with optional mixing valve. Includes back-up spacer, self-tapping screw, and CP dual hole trim plate assembly.

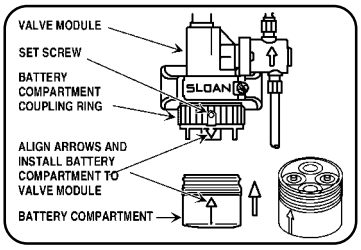
4	# 59095	Faucet Mounting Kit includes rubber gasket, mounting washer, mounting nut, and ETF-297 compression fitting connector.
5	# 54680	1/4" to 3/8" compression fitting connector
6	# 54681	20" Flex Hose
7A	# 54003	Solenoid Valve Module Assembly for Battery Powered model. Includes solenoid enclosure, solenoid body, and filter cap. Less batteries.
	# 32739	"C" size Alkaline Batteries (four required)
7B	# 54697	Solenoid Valve Module Assembly for Transformer Powered model (-R variation.) Includes solenoid enclosure, solenoid body, and filter cap.
	# 8578	Solenoid Filter Replacement Kit. Includes filter screen assembly and O-Ring.
8A	# 27585	3/8" Ferrule
8B	# 27595	3/8" Compression Nut
9	# 8238	Mounting Bracket Kit. Includes base plate, wall bracket base, wall bracket, mounting screw, self-tapping screw, 2 wood screws plus washers and plastic anchors, 2 screws plus washers and toggle nuts, 2 screws plus washers and hollow wall anchors
10	# 54682	3/8" Backcheck Tee

TROUBLESHOOTING GUIDE FOR EBF-85 SLOAN ELECTRONIC FAUCET

NOTE: BEEP sounds are emitted from the Solenoid Valve Module (not from the spout of the faucet). For the first ten minutes of operation (or after battery replacement) the unit beeps every time the faucet is activated to indicate that range limits are set. To conserve battery power, the unit will not beep again until it indicates low battery power.

CALIBRATION PROCEDURE: When the battery compartment is assembled to the valve module with active batteries, the faucet initiates a self-calibration mode and uses beeps to indicate the status of this mode. To prevent improper calibration, ensure that the spout is centered properly and that no targets are in the detection range of the sensor when the batteries are connected. An initial series of beeps indicates that power is being supplied from the batteries to the faucet. For the next thirty seconds, the sensor determines the most suitable range setting for its environment. Water will not flow from the faucet during this automatic range calibration. After the range is calibrated, a second series of beeps indicates that the faucet is ready for use. Under normal operation, this faucet adapts its range to changes in the environment.

BATTERY REPLACEMENT PROCEDURE: Loosen security set screw on the Coupling Ring with a 0.05" hex or allen wrench. Unscrew Battery Compartment Coupling Ring. Remove battery compartment. To ensure proper operation, remove old batteries and insert four 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 the Battery Compartment to the Control Module by aligning the arrow on the Battery Compartment with the arrow on the solid tab of the Solenoid Valve Module. Secure by tightening Battery Compartment Coupling Ring. To deter unauthorized removal of batteries, use a 0.05" hex or allen wrench to tighten the security set screw on the Coupling Ring



1. PROBLEM: **Module emits audible "beeps" when activated**

CAUSE: *Battery power is nearly exhausted.*

SOLUTION: 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. PROBLEM: **Sensor is activated but faucet does not deliver water**

INDICATOR: Module does not produce audible "beeps".

CAUSE: *Battery power is fully exhausted.*

SOLUTION: 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.

CAUSE: *Batteries are not installed properly.*

SOLUTION: 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.

CAUSE: *Solenoid Valve Module is defective.*

SOLUTION: Replace # **54003** (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.

CAUSE: *Fiber Optic Cable is not connected correctly to Solenoid Valve Module, or was not connected when batteries were installed.*

SOLUTION: 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 Battery Compartment to Control Module.

CAUSE: *Fiber Optic Cable is defective.*

SOLUTION: Replace # **54696** (EBF-1009-A) Sensor Cable, or **#53814** (EBF-10-A) Faucet Sensor Assembly.

CAUSE: *Solenoid Valve Module is defective*

SOLUTION: Replace # **54003** (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.

CAUSE: *Water supply to faucet is not open.*

SOLUTION: Open supply stop(s).

CAUSE: *Back Check is installed backwards.*

SOLUTION: Reinstall Back Check(s).

CAUSE: *Solenoid filter is clogged.*

SOLUTION: Remove, clean, and reinsert. Replace with **#8580** (EBF-1001-A) or **#8578** (EBF-1004).

CAUSE: *Aerator or Spray head is clogged.*

SOLUTION: 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.

CAUSE: *Solenoid Valve Module is defective.*

SOLUTION: Replace **#54003** (EBF-11-A) Solenoid Valve Module

3. PROBLEM: **Faucet delivers only a slow flow or dribble when Sensor is activated.**

CAUSE: *Water supply valve is partially closed.*

SOLUTION: Open the Supply Stop(s) completely.

CAUSE: *Solenoid filter is clogged.*

SOLUTION: Remove, clean, and reinsert. Replace with **# 8580** (EBF-1001-A) or **# 8578** (EBF-1004-A) Solenoid Filter if necessary.

CAUSE: *Aerator or Spray Head is clogged*

SOLUTION: Remove, clean, and reinsert.

4. PROBLEM: **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).**

CAUSE: *Solenoid Valve has been connected backwards.*

SOLUTION: 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. Activate faucet.

CAUSE: *Solenoid Valve seat is dirty.*

SOLUTION: Remove, clean, and reinsert Solenoid Filter. Activate faucet several times to flush out dirt.

CAUSE: *Solenoid Valve is dirty.*

SOLUTION: 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.

CAUSE: *Solenoid Valve Module is defective.*

SOLUTION: Replace # **54003** (EBF-11-A) Solenoid Valve Module.

5. PROBLEM: **The water temperature is too hot or too cold on a faucet connected to hot and cold supply lines with two Back Checks.**

CAUSE: *Supply Stops are not adjusted properly.*

SOLUTION: Adjust Supply Stops.

CAUSE: *One Back Check is installed backwards.*

SOLUTION: Reinstall Back Check.

CALL FOR TECHNICAL ASSISTANCE !

 PGH (412) 781-9100 *TOLL FREE 800-442-6622*