

# Optima® ETF-800



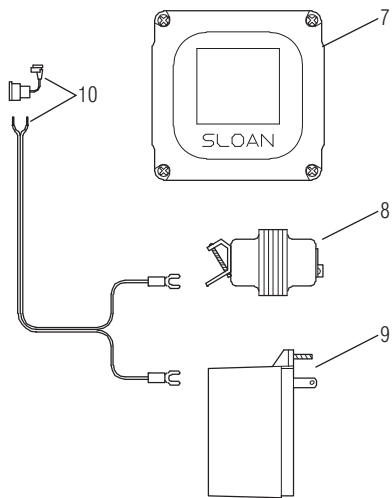
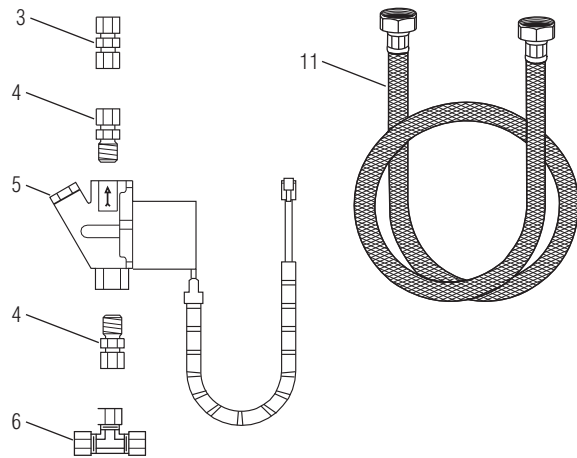
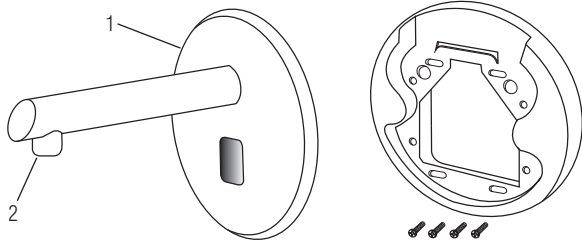
## PARTS LIST—ETF-800 FAUCET

Item No.	Code No.	Part No.	Description
1.	<b>0365797</b>	ETF-797-A	Faucet Spout and Sensor Assembly
2.	<b>0365378</b>	ETF-687	1.5 gpm/5.7 Lpm Laminar Flow Spray Head
3.†	<b>0365057</b>	ETF-530	Compression Fitting
4.†	<b>0305459</b>	ETF-61	Compression Fittings (2)
5.	<b>0305847</b>	ETF-370-A	24 VAC Solenoid Valve Assembly; Includes Wire Harness
—	<b>3305577</b>	ETF-1009-A	Solenoid Valve Repair Kit, Includes Replacement Filter
6.	<b>3365461</b>	ETF-617-A	3/8" Bak-Chek® Tee Compression Fitting
7.	<b>3306500</b>	ETF-450-A	Control Module Assembly
8.	<b>0345370</b>	EL-248-40	Box Mount Transformer
9.	<b>0365534</b>	ETF-233	Plug-In Transformer
10.	<b>0365001</b>	ETF-458-A	Power Cable with Strain Relief and Crimp Connectors (Transformer to Control Module)
11.	<b>3326091</b>	MIX-19	Flex Hose

† ETF-798-A Compression Fitting Kit, includes (1) ETF-530, (2) ETF-61 Compression Fittings and (4) Mounting Plate Screws

If further assistance is required, please contact the Sloan Valve Company Installation Engineering Department at 1-888-SLOAN-14 (1-888-756-2614).

NOTICE: The information contained in this document is subject to change without notice.



Hand Hygiene

## Optima® ETF-800

### RANGE ADJUSTMENT

The OPTIMA ETF-800 Faucet is factory set to operate when hands are placed 4 to 5 inches (102 to 127 mm) from Sensor. This range should be satisfactory for most installations.

If range adjustment is required, refer to the following range adjustment procedures.

### TO MAKE A RANGE ADJUSTMENT

The Range Potentiometer and Dip Switches are located in Control Module.

Important: Range Potentiometer adjustment screw rotates only 3/4 of a turn; DO NOT over-rotate.

Make certain that Dip Switch number 4 is in the DOWN position. Using the small screwdriver provided, adjust Range Potentiometer clockwise until green (power ON) indicator LED turns red (Faucet is now picking up sink). Adjust Range Potentiometer back counterclockwise until red LED returns to green. Range is now at maximum.

In the event the LED remains red with the adjustment at minimum (counterclockwise) setting, the sensitivity can be further reduced by switching Dip Switch number 4 to the ON (UP) position.

Cycle Faucet several times to assure that range as adjusted will not inadvertently pick up IR reflection in lavatory. If IR reflection occurs (green LED will flicker red), adjust Range Potentiometer counterclockwise very slightly and again cycle Faucet.

Repeat range adjustment counterclockwise until length of range is at bowl rim of lavatory (plus or minus 1 inch (25 mm)).

### TIME OUT ADJUSTMENT

The Faucet Time Out Setting determines the maximum time the Faucet will run upon continuous activation. This timing can be changed to meet individual application requirements.

Refer to Table 1 or label on cover of Control Module along with the following instructions to set the desired Time Out. The Dip Switches used to set the Time Out are located in the Control Module.

Set the Time Out by configuring the number 1, 2 and 3 Dip Switches as shown in Table 1.

**Table 1 — Time Out Settings**

Time Out	Dip Switch Setting		
	Switch #1	Switch #2	Switch #3
3 SECONDS	UP	UP	DOWN
6 SECONDS	DOWN	DOWN	UP
12 SECONDS	UP	DOWN	UP
30 SECONDS	UP	DOWN	DOWN
45 SECONDS	UP	UP	UP
1 MINUTE	DOWN	UP	UP
3 MINUTES	DOWN	DOWN	DOWN
20 MINUTES	DOWN	UP	DOWN

Unless otherwise specified, all ETF-800 Faucets leave the factory set with a 30 second Time Out.

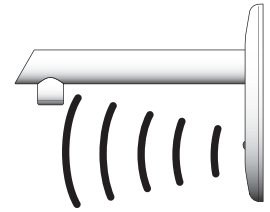
Note: The position of Dip Switch #4 (range enhancer setting) does not affect Faucet Time Outs.

Push Cables into slots at the bottom of the Control Module.

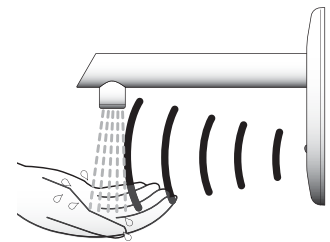
Install Control Module cover using Screws provided.

### TEST FAUCET OPERATION

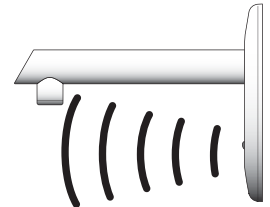
1. A continuous invisible beam of light is emitted from the OPTIMA® Sensor located below the faucet spout.



2. As the user's hands enter the beam's effective range, the beam is reflected back into the sensor receiver and activates the solenoid valve allowing tempered water to flow from the faucet. Water will flow until the hands are removed or until the faucet reaches its automatic time out limit setting.



3. When hands are moved away from the OPTIMA® Sensor, the loss of reflected light initiates an electrical signal that deactivates the Solenoid Valve shutting off the water flow. The Circuit then automatically resets and is ready for the next user.



## Optima® ETF-800

### TROUBLESHOOTING GUIDE

**Note: Remove Cover from Control Module to check diagnostic lights.**

#### 1. No water is delivered when Faucet is activated.

**INDICATOR: If no LED lights illuminate:**

- A. No electricity is being supplied to Faucet.  
Ensure that the main power is turned "ON." Check all Transformer, Sensor, Solenoid and Cable Connections. Make sure that Transformer is supplying 24 VAC (Volts AC). If no voltage is detected, replace Transformer.
- B. There is an electrical system malfunction.  
Reset electrical system. Unplug Sensor Connection. Disconnect power to circuit for ten (10) seconds. Reconnect.

**INDICATOR: If the GREEN LED illuminates when power is reconnected:**

- C. There is a short in the Sensor.  
Replace Sensor.

**Note: GREEN LED may illuminate immediately after Sensor disconnection.**

- D. There is a short in the Solenoid or Solenoid Cable.  
Replace ETF-370-A Solenoid.

**INDICATOR: If the GREEN LED does NOT illuminate when power is reconnected:**

- E. There is an electrical system malfunction.  
Reset electrical system. Unplug Sensor Connection. Disconnect power to circuit for ten (10) seconds. Reconnect.
- F. The Control Module circuit is not working properly.  
Replace ETF-450-A Control Module.

**INDICATOR: If GREEN LED illuminates AND changes to RED when hands are in the Sensor's detection zone AND the RED Solenoid LED illuminates:**

- G. Water supply stop(s) may be partially closed.  
Open supply stop(s) completely.
- H. Debris is clogging Solenoid Filter.  
Shut off water supply. Remove, clean and reinstall Solenoid Filter.

**INDICATOR: If GREEN LED illuminates AND changes to RED when hands are placed in the Sensor's detection zone AND the RED Solenoid LED flickers with a vibrating/clicking noise heard inside the module:**

- I. There is a direct short in the Solenoid or Solenoid Cable.  
Replace with ETF-370-A Solenoid.

**INDICATOR: If GREEN/RED LED illuminates AND changes to RED when hands are NOT located in the Sensor's detection zone BUT the RED Solenoid LED (in upper left corner of circuit) does NOT illuminate:**

- J. Sensor range is set too long and is detecting the sink.  
Reduce Sensor detection range.
- K. Sensor is not working properly.  
Replace Sensor.

**INDICATOR: If GREEN LED illuminates BUT does NOT change to RED when hands are placed in the Sensor's detection zone:**

- L. Sensor range is set too short.  
Increase Sensor detection range.
- M. Sensor is not working properly.  
Replace Sensor.

#### 2. Sensing Range is too short.

- A. Extended Range Sensitivity is required.  
Dip Switch number 4 should be in the "DOWN" (Extended Range Sensitivity) position. Increase range by adjusting Range Potentiometer clockwise (yellow phillips screw in blue base).

#### 3. Faucet activates by itself (false triggers).

- A. Sensor range is set too long.  
Decrease range by adjusting Range Potentiometer counterclockwise. If necessary, flip Dip Switch number 4 to the "UP" (Reduced Range Sensitivity) position. Check surroundings for factors that contribute to Sensor range detection problems (bright lights, highly reflective surfaces, sunlight, etc.).

#### 4. Faucet delivers very low flow or just a dribble.

- A. Water supply stop(s) may be partially closed.  
Open supply stop(s) completely.
- B. Debris is clogging Solenoid Filter.  
Shut off water. Remove, clean, and reinstall Solenoid Filter or replace Solenoid Filter ETF-1009-A.
- C. Solenoid is worn or not working properly.  
Rebuild with ETF-1009-A Solenoid Repair Kit or replace ETF-370-A Solenoid.
- D. Debris is clogging Faucet Aerator or Spray Head.  
Shut off water. Remove Aerator or Spray Head (use Key if required). Clean and reinstall Aerator or Spray Head.

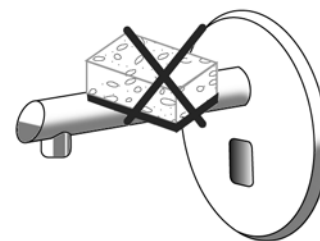
#### 5. Faucet does not stop delivering water or continues to drip after user is no longer detected (even after power to the Module has been disconnected).

- A. Solenoid Valve is installed backward.  
Disconnect Solenoid. Reconnect Solenoid with water flow toward the Faucet (see arrow on Solenoid).
- B. Debris is clogging Solenoid.  
Remove and clean Solenoid Operator. If necessary, rebuild with ETF-1009-A Repair Kit.
- C. Seat in Solenoid Valve body is damaged or pitted.  
Replace with ETF-370-A Solenoid.

#### CARE AND CLEANING OF CHROME AND SPECIAL FINISHES

DO NOT use abrasive or chemical cleaners (including chlorine bleach) to clean faucets that may dull the luster and attack the chrome or special decorative finishes. Use ONLY mild soap and water, then wipe dry with clean cloth or towel.

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



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