



Code No. 0816490  
Rev. 2b (05/09)

# INSTALLATION INSTRUCTIONS FOR ELECTRONIC SENSOR ACTIVATED LAVATORY FAUCETS

*Solis*®



(Models shown with ISM Integral Spout Mixer)

**EAF-275 Series**  
Solar Powered with Battery Backup Sensor Activated Lavatory Faucets



*Lino*™



**EAF-250 Series**  
Battery Powered, Sensor Activated Lavatory Faucets



**EAF-200 Series**  
Transformer Powered, Sensor Activated Lavatory Faucets



*Lumino*™



**EAF-225 Series**  
Transformer Powered, Sensor Activated Lavatory Faucets with Temperature Indicating Illumination

### LIMITED WARRANTY

Sloan Valve Company warrants its Optima EAF-275, EAF-250, EAF-225 and EAF-200 Series Electronic Hand Washing Faucets to be made of first class materials, free from defects of material or workmanship under normal use and to perform the service for which they are intended in a thoroughly reliable and efficient manner when properly installed and serviced, for a period of three years from date of purchase. During this period, Sloan Valve Company will, at its option, repair or replace any part or parts which prove to be thus defective if returned to Sloan Valve Company, at customer's cost, and this shall be the sole remedy available under this warranty. No claims will be allowed for labor, transportation or other incidental costs. This warranty extends only to persons or organizations who purchase Sloan Valve Company's products directly from Sloan Valve Company for purpose of resale. This warranty does not cover the life of the battery.

**THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. IN NO EVENT IS SLOAN VALVE COMPANY RESPONSIBLE FOR ANY CONSEQUENTIAL DAMAGES OF ANY MEASURE WHATSOEVER.**

### FAUCET VARIATIONS

- ISM Integral Spout Mixer (All Series)
- IC *Click* -Click Feature (All Series)
- DPU Drain Pop Up (EAF-200/225/250 Series)
- P Plug-in Transformer (EAF-200 Series)
- LT Less Transformer (EAF-200 Series)

### PRIOR TO INSTALLATION

Prior to installing the Sloan Optima EAF-275/EAF-250/EAF-200/EAF-225 Series Faucets, install the items listed below. Also, refer to rough-in illustrations.

- Lavatory/sink
- Drain line
- Hot and cold water supply lines or pre-tempered water supply line

#### Important:

- ALL PLUMBING SHOULD BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS.
- FLUSH ALL WATER LINES PRIOR TO MAKING CONNECTIONS.
- KEEP THREAD SEALANT OUT OF YOUR WATERWAY TO PREVENT COMPONENT PART DAMAGE! DO NOT USE ANY SEALANT ON COMPRESSION FITTINGS.

#### Trim Plates

When the EAF Faucet is installed on a sink that has three (3) hole punchings, a Trim Plate should be used.

**Trim Plates must be specified and ordered separately.**

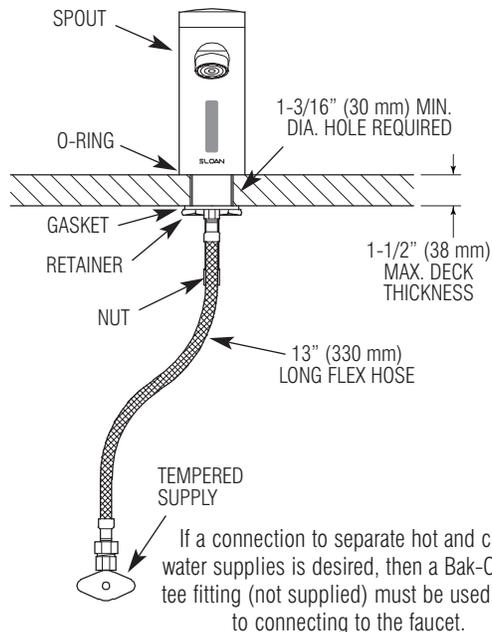
ETF-312-A Trim Plate for 4" (102 mm) Centerset Sink  
ETF-510-A Trim Plate for 8" (203 mm) Centerset Sink

### TOOLS REQUIRED FOR INSTALLATION

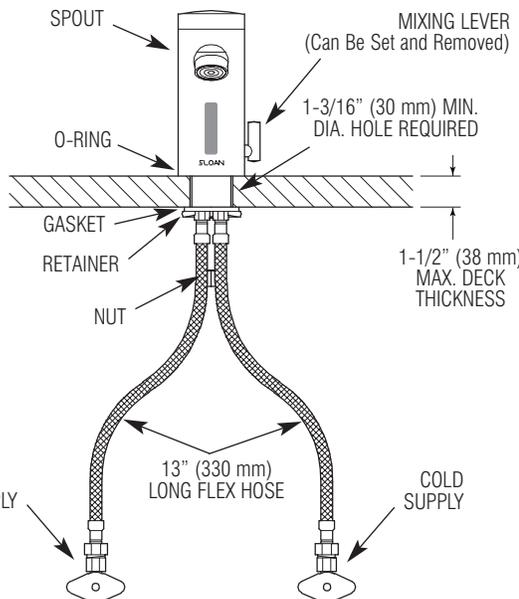
- 13 mm open end wrench or nut driver for faucet retainer nut
- 3/4" open end wrench for female end of flex hose

## FAUCET ROUGH-IN

**MODELS EAF-200/250/275 ‡**  
**2.2 gpm (8.3 Lpm) Max. Flow Aerator ‡**  
**Faucets with Single Line Water Supply**

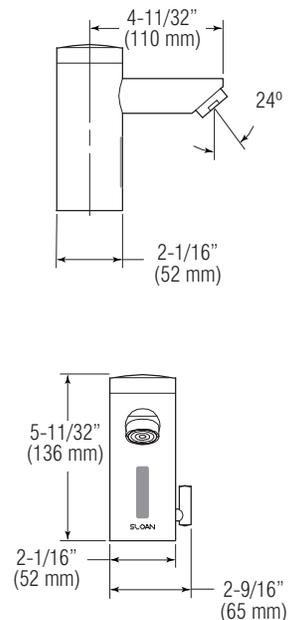


**MODELS EAF-200/225/250/275-ISM ‡**  
**MODELS EAF-200/225/250-ISM-IC**  
**MODELS EAF-200/225/250-ISM-DPU-IC**  
**2.2 gpm (8.3 Lpm) Max. Flow Aerator ‡**  
**Faucets with Hot and Cold Water Supply**



‡ EAF-275 Series Faucets are furnished with a 0.5 gpm (1.9 Lpm) Aerator Spray Head.

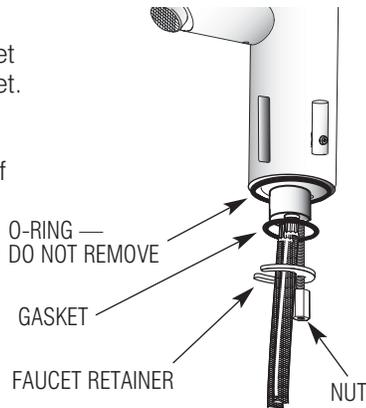
## FAUCET SPOUT DIMENSIONS



# 1 Install Faucet.

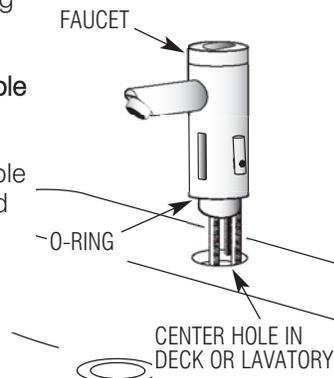
**A** Remove Nut, Faucet Retainer and Gasket.

Do Not remove the O-ring from base of Faucet.

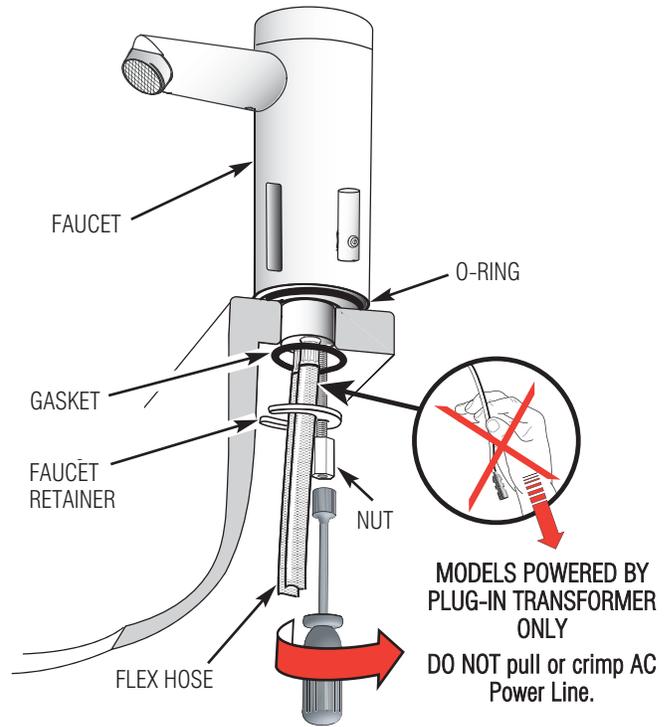


**B** Install Faucet with O-ring into the center hole in deck or lavatory — 1-3/16" (30 mm) min. hole required.

**Note:** If installing the Faucet on a three (3) hole sink, a Trim Plate should be installed at this time.



# 2 Slide Gasket over Flex Hose(s) and secure with Faucet Retainer and Nut.

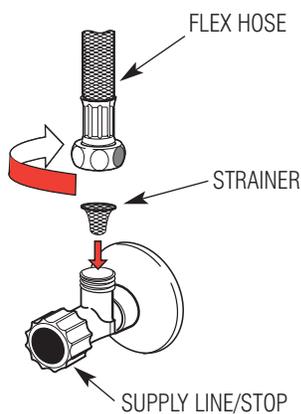


**MODELS POWERED BY PLUG-IN TRANSFORMER ONLY**  
DO NOT pull or crimp AC Power Line.

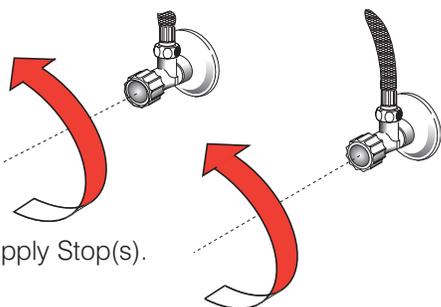
# 3 Install Strainer and Flex Hose onto Supply Stop. Open Supply Stops.

**IMPORTANT:** Flush dirt, debris, and sediment from Supply Line(s) *before* Connecting Flex Hoses.

**A** Install Strainer and Flex Hose onto Supply Stop.



**B** Tighten the Flex Hose (with Strainer in place) securely to the Supply.

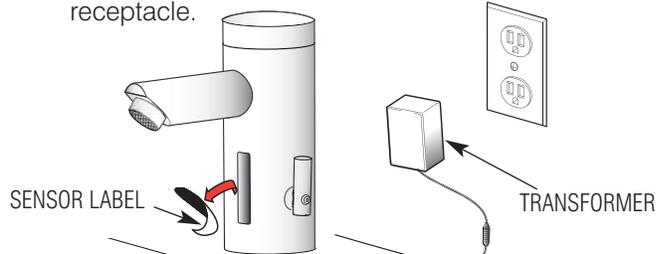


**C** Open Supply Stop(s).

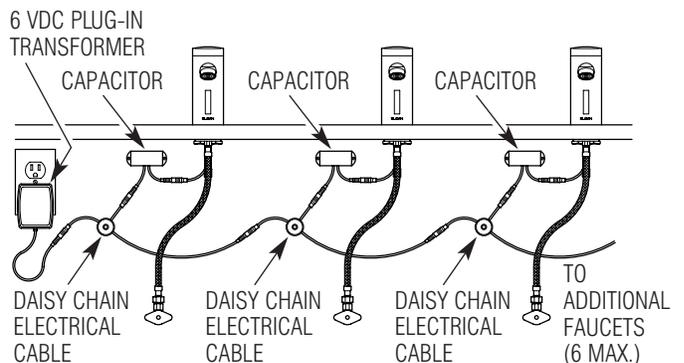
# 4 EAF-200 Models: Plug Transformer into receptacle. All Models: Remove label from Sensor.

**A** For EAF-200 Models, Plug Transformer into receptacle.

**B** Remove Label from Sensor Window.



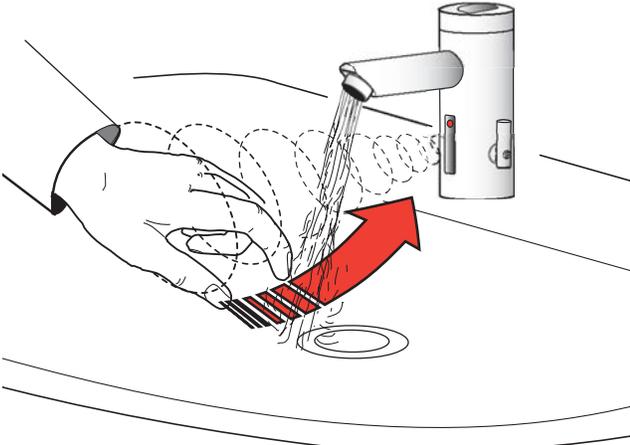
Electrical Connection for up to Six (6) Faucets Using One (1) Transformer



**NOTE:** EAF-225 can only connect one (1) faucet per one (1) transformer.

## 5 Activate Faucet.

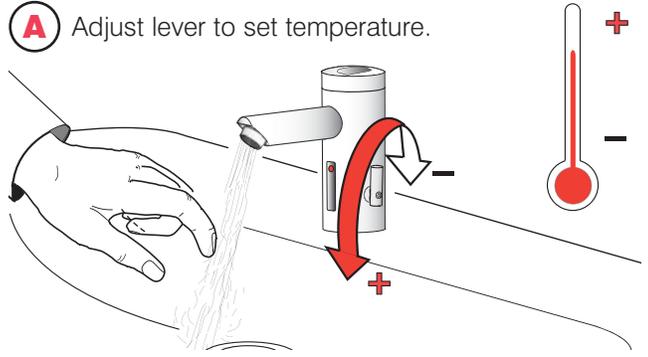
- A** Activate Faucet by pressing the button one (1) time, then immediately step away. Faucet will run for four (4) seconds and the range will automatically adjust to its environment. Wait ten (10) seconds after water shuts off before using Faucet.



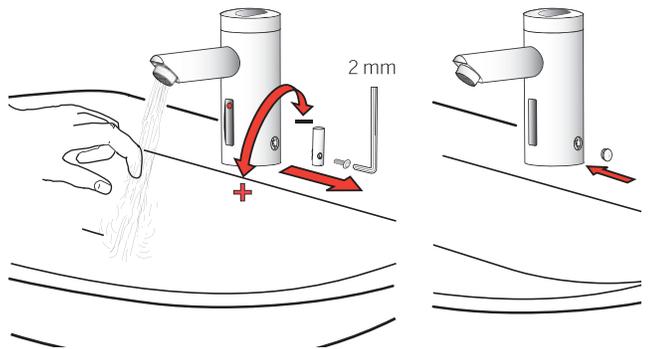
- B** Activate Faucet and check for leaks. If Faucet does not function, refer to the Troubleshooting section of this instruction manual.

## 6 Set and Fix Temperature. (Model EAF-225 see page 5)

- A** Adjust lever to set temperature.



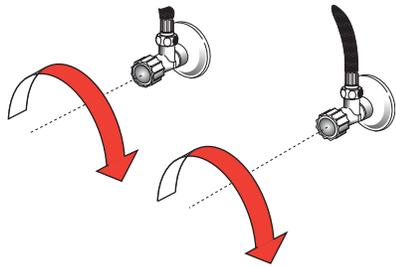
- B** **Optional** — To fix temperature, set lever to the desired position, then remove lever and plug hole with Cap.



## 7 Battery Replacement (EAF-250/275)

**NOTE:** Replace Battery when red LED indicator flashes each time faucet is in use or when faucet stops functioning.

- A** Close Supply Stop(s).



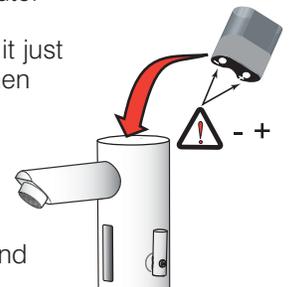
- B** Loosen Screw with hex wrench and remove Cap.



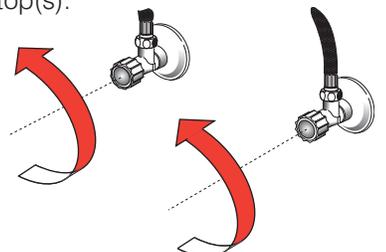
- C** Move Battery Retainer tab away from Battery. Remove old Battery. Dispose of properly.



- D** Insert a new 6 Volt Type CR-P2 Lithium Battery. The red LED will flash for one (1) minute. Reinstall Battery Cover. If LED doesn't flash or if it just lights up, remove and then reinsert the Battery. If water flows continuously after inserting the new Battery and opening the Supply Stops, remove and then reinsert the Battery.



- E** Open Supply Stop(s).



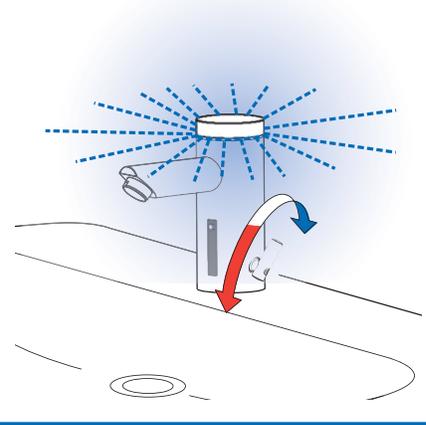
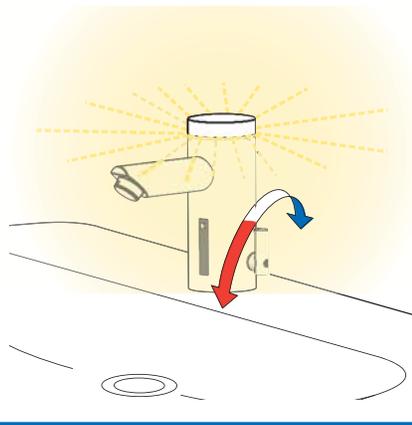
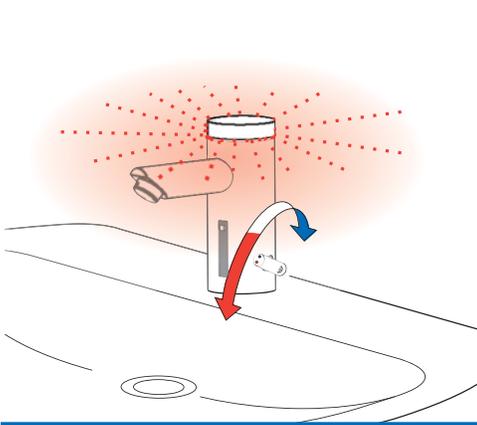
# Model EAF-225 Only

## Functions

**RED**  
HOT End Position

**WHITE**  
Tempered Position

**BLUE**  
Cold End Position

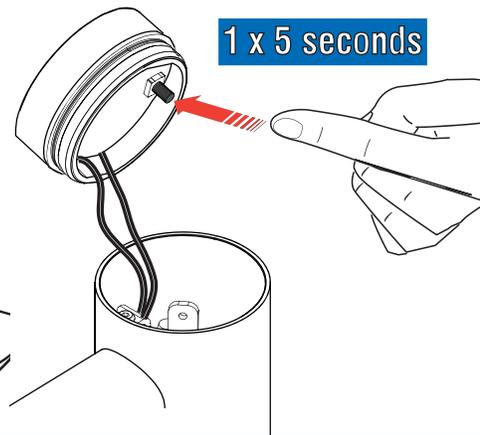


## Setting Brightness of Illumination

**A** Remove cover.

**B** Press button for approximately 5 seconds.

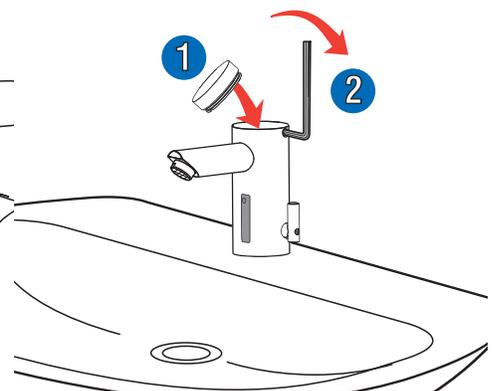
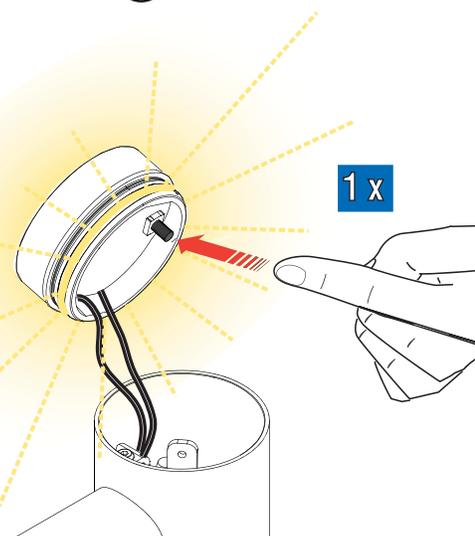
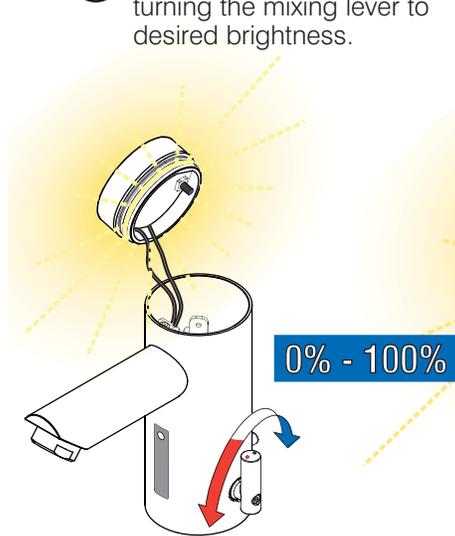
**C** When illuminant glows purple, release.



**D** Adjust the illumination by turning the mixing lever to desired brightness.

**E** Press button once.

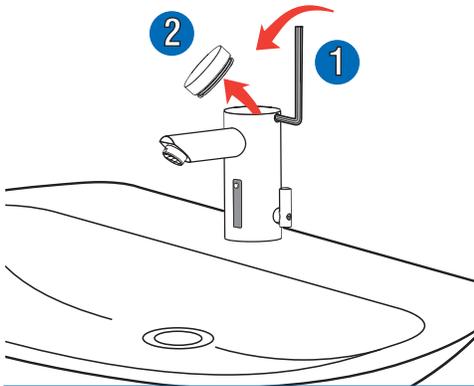
**F** Replace top cover.



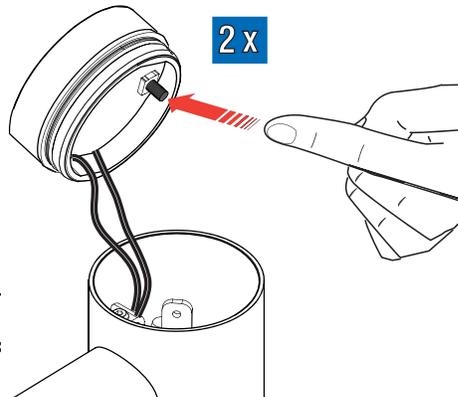
## Model EAF-225 Only

### Calibrating the illuminant colors (**RED** - White - **BLUE**) to water temperature

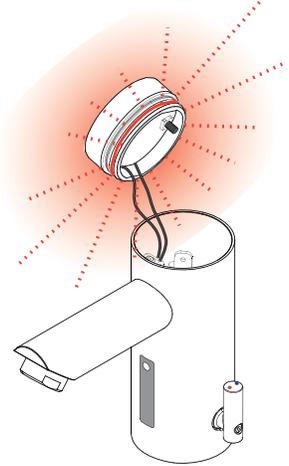
**A** Remove cover.



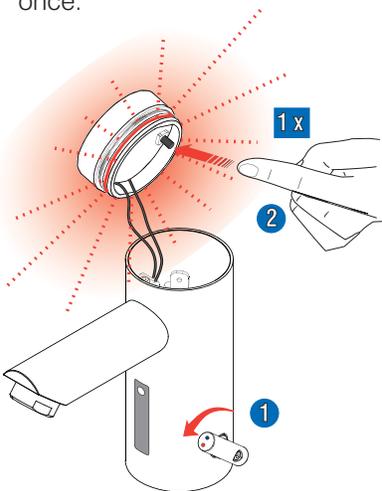
**B** Press button twice and release.



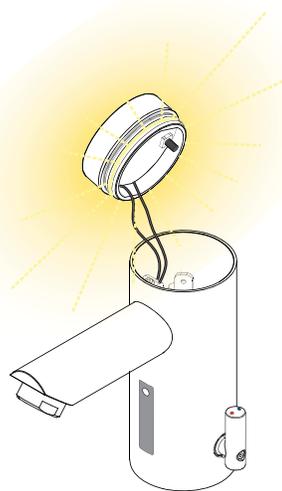
**C** Illuminant flashes red.



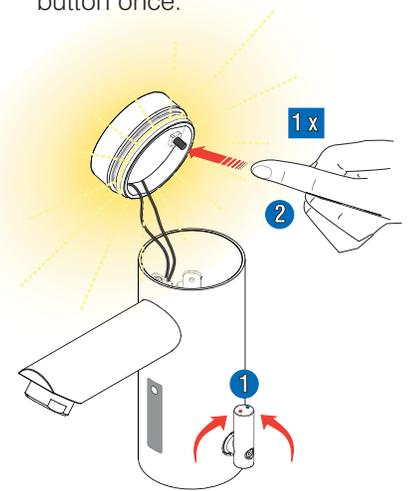
**D** Adjust mixing lever for position **RED**/hot and press button once.



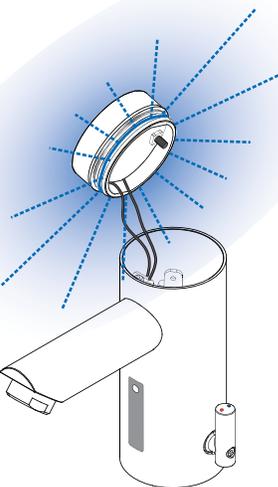
**E** Illuminant flashes **WHITE**.



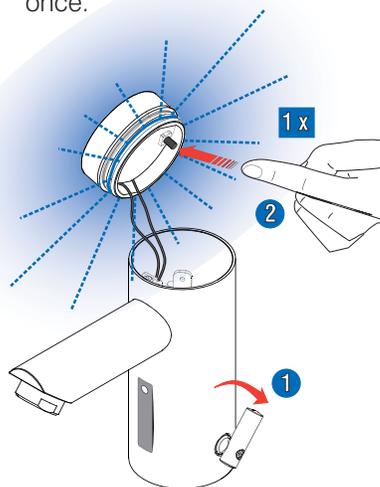
**F** Adjust mixing lever for position **WHITE**/temperate and press button once.



**G** Illuminant flashes **BLUE**.



**H** Adjust mixing lever for position **BLUE**/cold and press button once.



**I** Replace cover.



## Click SETTINGS

Function	Press Button	LED Signal
Continuous Run — 2 minute default setting (adjustable from 1 - 20 minutes)	1 time for 2 seconds	5 short flashes
reset:	1 time or will reset automatically after 2 minutes	
Temporary Off	2 times (double click)	5 short flashes followed by periodic flashing
reset:	1 time or will reset automatically after 2 minutes	
Permanent Off	Consult Factory	Periodic flashing and then 2 long flashes
reset:	1 time	
Auto Set Range Adjustment	2 times (double click) and then 1 time for 5 seconds	5 short flashes followed by 4 short flashes

## TROUBLESHOOTING GUIDE

### 1. Problem: Faucet does not function.

*Cause:* Adhesive packaging label affixed over sensor eye.

*Solution:* Remove adhesive label from sensor eye.

*Cause:* "Permanent Off" activated.

*Solution:* Press button on faucet throat one time.

### 2. Problem: Faucet delivers water in an uncontrolled manner.

*Cause:* Faucet is defective.

*Solution:* Contact the Sloan Valve Company Installation Engineering Department (see below).

### 3. Problem: Faucet does not deliver any water when Sensor is activated.

**Indicator: Solenoid valve produces an audible "CLICK."**

*Cause:* Water supply stop(s) closed.

*Solution:* Open water supply stop(s).

*Cause:* Water supply stop strainer(s) clogged.

*Solution:* Remove, clean, and reinstall water supply stop strainer(s). Replace strainer(s) if required.

**Indicator: Solenoid valve DOES NOT produce an audible "CLICK."**

*Cause:* Battery low (battery operated models).

*Solution:* Replace battery (refer to Battery Replacement on Page 3).

*Cause:* Power failure (EAF-200 Models).

*Solution:* Check power supply.

### 4. Problem: Faucet delivers only a slow flow or dribble when Sensor is activated.

*Cause:* Water supply stop(s) are partially closed.

*Solution:* Completely open water supply stop(s).

*Cause:* Water supply stop strainer(s) clogged.

*Solution:* Remove, clean, and reinstall water supply stop strainer(s). Replace strainer(s) if required.

*Cause:* Aerator is clogged.

*Solution:* Remove, clean, and reinstall Aerator. Replace Aerator if required.

*Cause:* Faucet is defective.

*Solution:* Contact the Sloan Valve Company Installation Engineering Department (see below).

### 5. Problem: Faucet does not stop delivering water or continues to drip after user is no longer detected.

*Cause:* Valve is defective.

*Solution:* Contact the Sloan Valve Company Installation Engineering Department (see below).

### 6. Problem: LED indicator blinks when faucet is in use.

*Cause:* Battery low (battery operated models).

*Solution:* Replace battery (refer to Battery Replacement on Page 3).

### 7. Problem: The water temperature is too hot or too cold on a faucet connected to hot and cold supply lines.

*Cause:* Supply Stops are not adjusted properly.

*Solution:* Adjust Supply Stops.

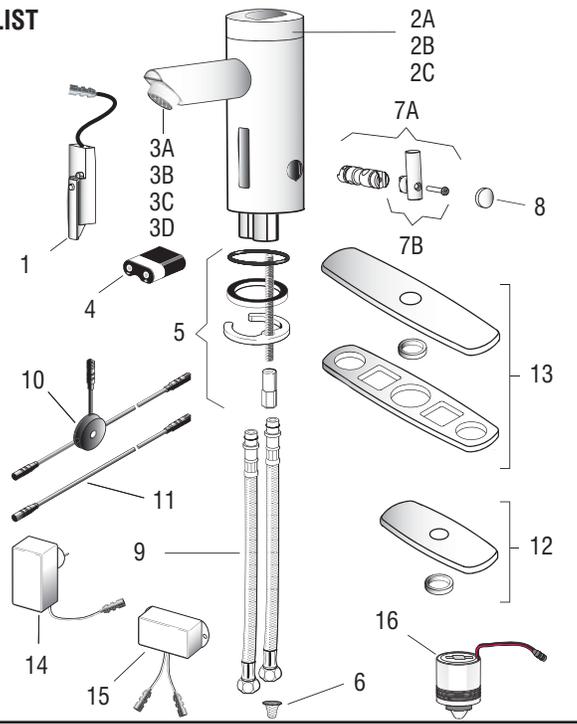
*Cause:* For models with integral mixing valve — Mixing valve is set improperly for the water temperature desired.

*Solution:* Rotate mixing valve handle clockwise to decrease water temperature or counterclockwise to increase water temperature.

When assistance is required, please contact Sloan Valve Company Installation Engineering Department at:

**1-888-SLOAN-14 (1-888-756-2614) OR 1-847-233-2016**

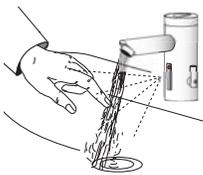
## PARTS LIST



Item #	Part #	Description
1	EAF-14-A	Faucet Sensor Assembly
2A	EAF-1006	Cap and Solar Cell Assembly (EAF-275 only)
2B	EAF-27	Cap (EAF-250 and EAF-200 only)
2C	—	Cap (EAF-225)
3A	EAF-15	0.5 gpm (1.9 Lpm) VR Aerator Spray Head
3B	EAF-22	1.5 gpm (5.6 Lpm) Pressure Compensating Aerated Stream
3C	EAF-10	2.2 gpm (8.3 Lpm) Aerator Spray Head
3D	EAF-13	2.2 gpm (8.3 Lpm) Laminar Flow Spray Head
4	EAF-1003	Battery Replacement Kit
5	EAF-1	Faucet Mounting Kit
6	EAF-9	Strainer (Filter)
7A	EAF-1004	Mixer Handle Assembly and Cartridge
7B	EAF-1005	Handle Repair Kit
8	EAF-1007	Handle Cap
9	EAF-1008	13" (330 mm) Flexible Supply Hose
10	EAF-23-A	Splitter Cable
11	EAF-24-A	11-13/16" (300 mm) Extension Cable
	EAF-25-A	47-1/4" (1200 mm) Extension Cable
	EAF-17-A	126" (3200 mm) Extension Cable
12	ETF-312-A	Trim Plate for 4" Centerset Sink
13	ETF-510-A	Trim Plate for 8" Centerset Sink
14	EAF-11	Transformer (Models EAF-200/225)
15	EAF-28	Capacitor Box (EAF-200 only)
16	EAF-2	Solenoid

## OPERATION

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 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.



## 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.



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

# SLOAN

SLOAN VALVE COMPANY • 10500 Seymour Avenue • Franklin Park, IL 60131  
Phone: 1-800-982-5839 or 1-847-671-4300 • Fax: 1-800-447-8329 or 1-847-671-4380  
www.sloanvalve.com