

# SLOAN<sup>®</sup>

## OPTIMA<sup>®</sup>

### Solis<sup>™</sup>

EAF-275 I.I. — Rev. 0a (03/05)  
Code No. 0816490

## INSTALLATION INSTRUCTIONS SOLAR/BATTERY POWERED SENSOR ACTIVATED LAVATORY FAUCETS

### **The new Optima Solis<sup>™</sup> solar powered faucet — Bringing intelligence to water**

The first solar powered electronic faucet's integrated power plant transforms light into electrical energy. Optimal performance any place, any time; in sunlight or even artificial light. The unique "Solar Energy Module" utilizes any light source efficiently.

Sloan's new Optima EAF-275 series electronic hand washing faucets operate by means of a dual infrared sensor and microprocessor based logic. The modular design incorporates all of the operating components of the faucet, including the sensor, solenoid, circuitry and solar energy module above the sink within a die-cast metal spout.

ISM models feature an integral temperature control lever which allows the user to adjust the water temperature. This adjustment can also be converted to a fixed setting. EAF faucets ordered without the ISM variation must be connected to a single, pre-tempered water supply.

Optima EAF-275 series faucets include a 6 VDC lithium battery back-up power source.

The following instructions will serve as a guide when installing the Sloan Optima EAF-275 series sensor activated faucets. As always, good safety practices and care are recommended when installing your new faucet. If further assistance is required, contact your nearest Sloan Representative office or the Sloan Installation Engineering Department at:

**1-888-SLOAN-14 (1-888-756-2614)**



### **EAF-275 Series** Solar Powered Sensor Activated Lavatory Faucets

ADA Compliant



#### **LIMITED WARRANTY**

Sloan Valve Company warrants its Optima EAF-275 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

#### **PRIOR TO INSTALLATION**

Prior to installing the Sloan Optima EAF-275 Series faucet, install the items listed below. Also, refer to Figures 1A thru 1C.

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

#### **IMPORTANT:**

- ALL PLUMBING IS TO 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.*

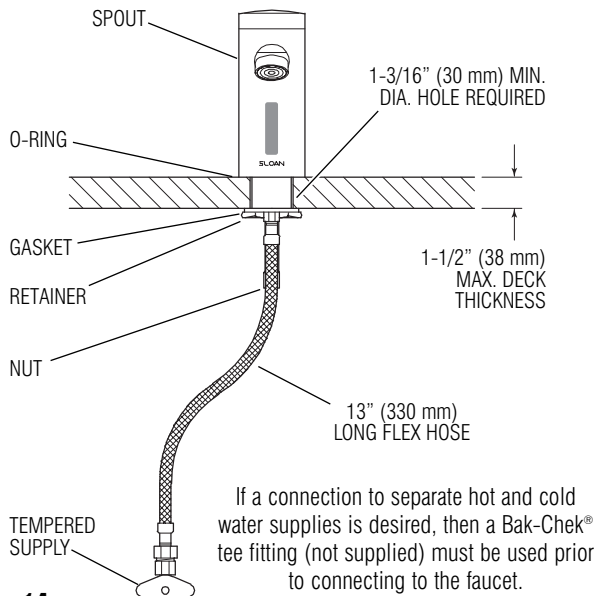
ETF-312-A Trim Plate for 4" (102 mm) Centerset Sink  
ETF-510-A Trim Plate for 8" (203 mm) Centerset Sink

#### **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

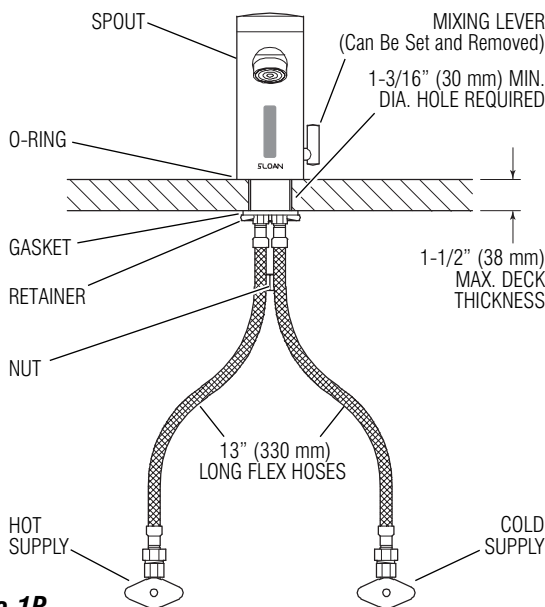
## ROUGH-IN — Figure 1

### MODEL EAF-275 — 0.5 gpm (1.9 Lpm) Max. Flow Aerator Faucets with Single Line Water Supply



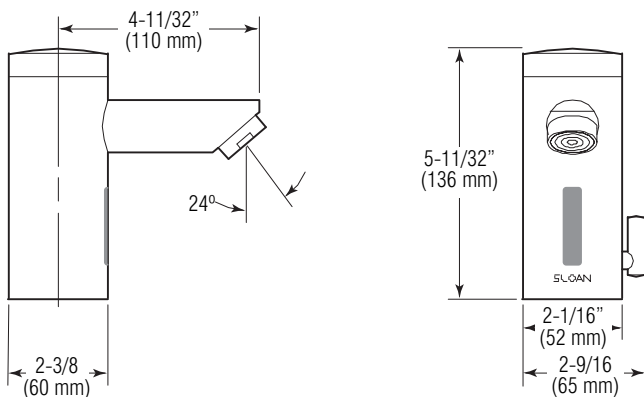
**Figure 1A**

### MODEL EAF-275-ISM — 0.5 gpm (1.9 Lpm) Max. Flow Aerator Faucets with Hot and Cold Water Supply



**Figure 1B**

### FAUCET SPOUT DIMENSIONS



**Figure 1C**

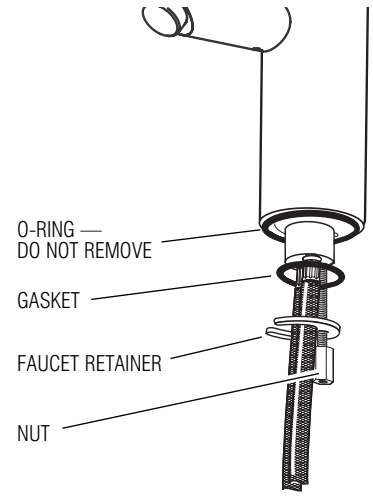
## FAUCET INSTALLATION

### Step 1

Remove all Mounting Hardware:

- Nut
- Faucet Retainer
- Gasket

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

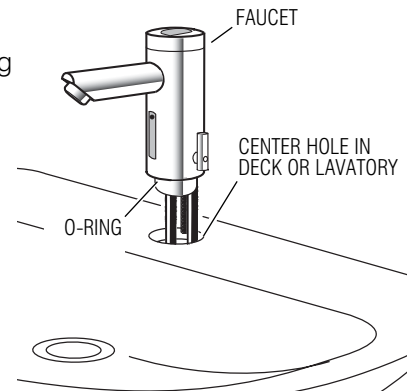


### Step 2

Install Faucet with O-ring into the center hole in deck or lavatory —

**1-3/16" (30 mm) min. hole required.**

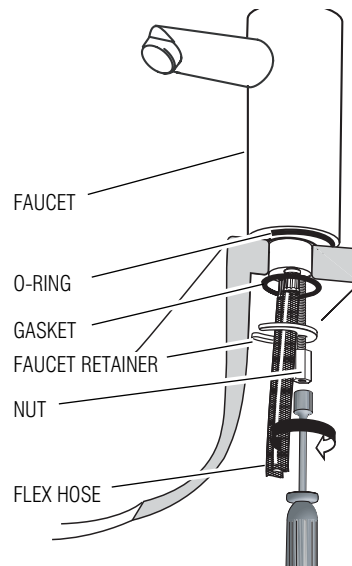
**Note:** If installing the faucet on a three (3) hole sink, a Trim Plate should be installed at this time.



### Step 3

Slide Gasket over Flex Hose(s).

Secure Faucet to deck or lavatory with Faucet Retainer and Nut.

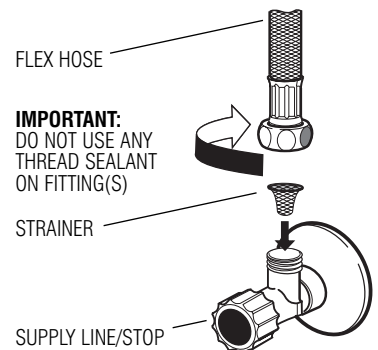


### Step 4

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

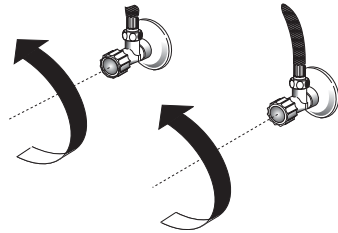
Install Strainer and Flex Hose onto Supply Stop.

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



### Step 5

Open Supply Stops.



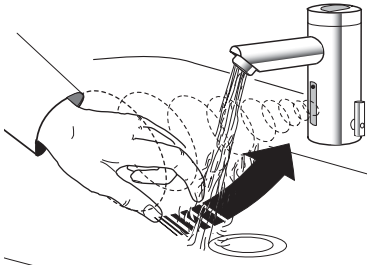
### Step 6

Remove label from sensor.



### Step 7

Activate Faucet, 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.

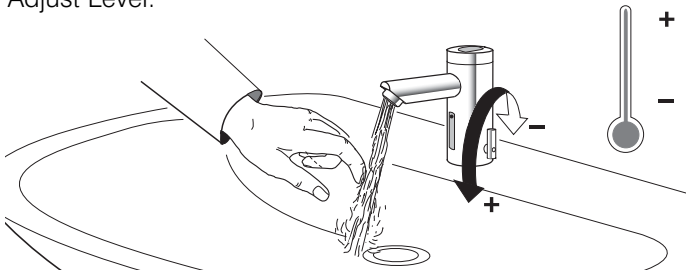


Activate Faucet and check for leaks.

### Step 8 — ISM Models Only

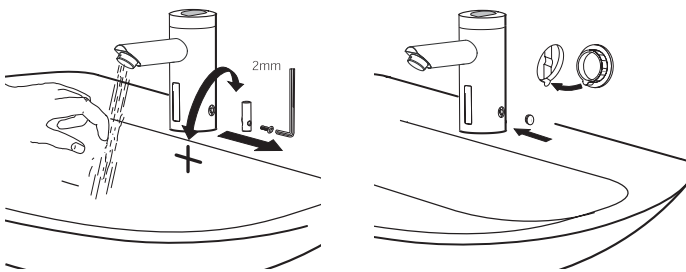
#### SET TEMPERATURE

Adjust Lever.



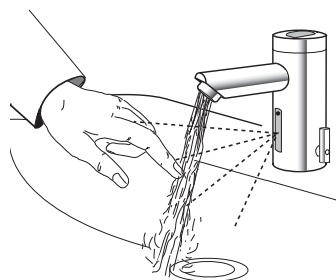
#### TO FIX TEMPERATURE

Set to desired position. Remove Handle. Plug hole with Cap.



#### 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.

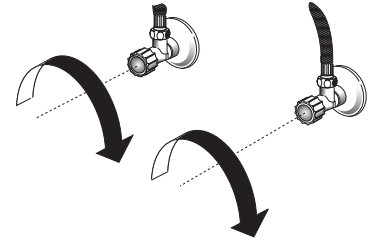


## BACK-UP BATTERY REPLACEMENT

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

### Step 1

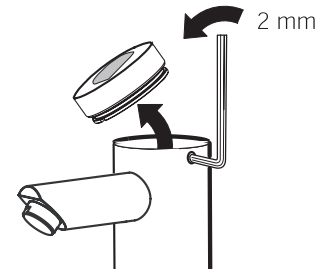
Close Supply Stop(s).



### Step 2

Loosen Screw with hex wrench.

Remove Cap.

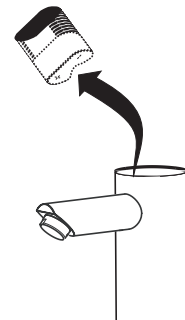


### Step 3

Move Battery Retainer tab away from Battery.

Remove old Battery.

Dispose of properly.



### Step 4

Wait three (3) minutes before inserting new battery.



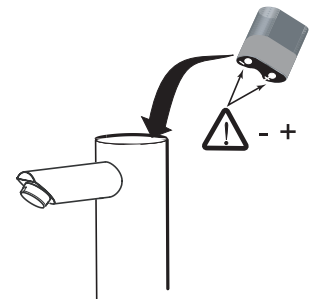
### Step 5

Insert a new 6 Volt Type 2CR5 Lithium Battery. The red LED will flash for one (1) minute.

Reinstall Battery Cover.

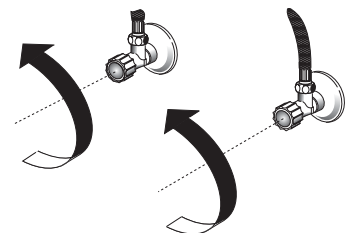
If LED doesn't flash or if it just lights up, remove the Battery. Wait three (3) minutes, then reinsert the Battery.

If water flows continuously after inserting the new Battery and opening the Supply Stops, remove the Battery. Wait three (3) minutes, then reinsert the Battery.



### Step 6

Open Supply Stops.



## TROUBLESHOOTING GUIDE

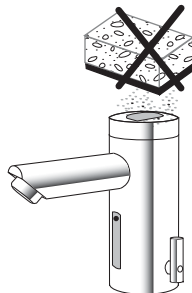
1. **Problem: Faucet does not function.**  
*Cause: Adhesive packaging label affixed over sensor eye.*  
 Solution: Remove adhesive label from sensor eye.  
*Cause: "Permanent Off" activated.*  
 Solution: Press button on faucet throat one time.
2. **Problem: Faucet delivers water in an uncontrolled manner.**  
*Cause: Faucet is defective.*  
 Solution: Contact the Sloan Valve Company Installation Engineering Department at 1-888-SLOAN-14 (1-888-756-2614).
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: Clean water supply stop strainer(s).  
**Indicator: Solenoid valve DOES NOT produce an audible "CLICK."**  
*Cause: Battery low.*  
 Solution: Replace battery (refer to Battery Replacement on Page 3).
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 at 1-888-SLOAN-14 (1-888-756-2614).
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 at 1-888-SLOAN-14 (1-888-756-2614).
6. **Problem: LED indicator blinks when faucet is in use.**  
*Cause: Battery low.*  
 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.

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

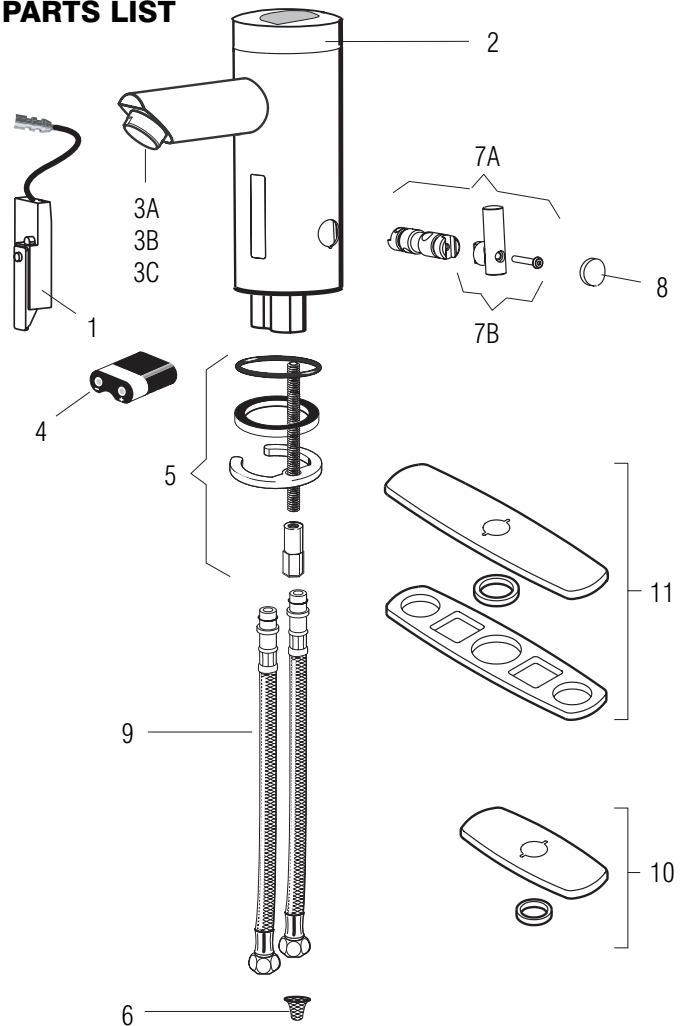
## CARE AND CLEANING OF CHROME AND SPECIAL FINISHES

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.



## PARTS LIST



Item No.	Part No.	Description
1	EAF-14-A	Faucet Sensor Assembly
2	EAF-1006	Cap and Solar Cell Assembly
3A	EAF-15	0.5 gpm (1.9 Lpm) VR Aerator Spray Head
3B	EAF-10	2.2 gpm (8.3 Lpm) Aerator Spray Head
3C	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	ETF-312-A	Trim Plate for 4" Centerset Sink
11	ETF-510-A	Trim Plate for 8" Centerset Sink

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