

## INSTALLATION INSTRUCTIONS AND USER MANUAL FOR SLOAN® EAF-700/750 GOOSENECK SERIES FAUCETS



## **Faucet Variations**

- Integral Spout Temperature Mixer -ISM
- -PLG Plug-in Adapter power supply (EAF-700)
- Less Transformer/Adapter -LT (EAF-700 Only) (Includes EAF-44 Power Splitter)



## **SLOAN® LIMITED WARRANTY SUMMARY**

Sloan Valve Company ("Sloan"), warrants its products against defects in materials and workmanship, excluding damage caused by matters beyond Sloan's reasonable control. Instructions for filing claims can be found in the Limited Warranty which can be obtained at www.sloan.com or by requesting a free copy by telephone at 888.756.2614. Sloan will repair or replace your defective product, or provide a refund, as your exclusive remedy. This is only a general summary of Sloan's Limited Warranty so it is important to note that the specific terms, conditions, limitations and exclusions, including the duration of warranty coverage for your particular Sloan product, are contained in the actual Sloan Limited Warranty. The Limited Warranty is subject to applicable laws in your country, state, province or other jurisdiction-and disputes arising under the Limited Warranty are to be resolved by binding arbitration unless you provide Sloan with an opt-out notice no later than 30 days after your purchase date. In case of a conflict with this summary, the terms and conditions set forth in the complete Limited Warranty will prevail.

# PRIOR TO INSTALLATION

Prior to installing the Sloan Optima EAF-700 Series Faucets, install the items listed below. Also, refer to rough-in illustrations.

- Lavatory/sink
- Drain Line
- Hot/Cold Water Supply Lines or Tempered Supply
- **IMPORTANT:**
- ALL PLUMBING SHOULD BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS.
- FLUSH ALL WATER LINES PRIOR TO MAKING CONNECTIONS.

## TOOLS REQUIRED FOR INSTALLATION

- 13 mm open end wrench or nut driver for faucet retainer nut
- 5/8" open end wrench for female end of flex hose

 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.

SFP-11 Trim Plate for 4" (102 mm) Centerset Sink SFP-22 Trim Plate for 8" (203 mm) Centerset Sink

# FAUCET ROUGH-IN



#### Model EAF-700/750 -ISM 1.5 gpm (5.7 Lpm) Max. Flow

Faucets with Hot/Cold Water Supply



When the EAF faucet is installed on a sink that has three (3) hole punchings, a trim plate should be used.

# Trim plate must be specified and ordered separately: SFP-11

Trim Plate for 4" (102 mm) Centerset Sink SFP-22 Trim Plate for 8" (204 mm) Centerset Sink

## **1 - INSTALLATION TO DECK**

#### IMPORTANT: FLUSH DIRT, DEBRIS, AND SEDIMENT FROM SUPPLY LINE(S) <u>BEFORE</u> CONNECTING FLEX HOSE(S).



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Remove nut, faucet retainer and gasket.

Install faucet into the center hole in deck or lavatory -1-1/4" (32 mm) minimum hole required.

**NOTE:** If installing the faucet on a three (3) hole sink, a trim plate should be installed at this time.



# **2 - CONNECTION TO WATER SUPPLY**



## Flush supply stops $\underline{before}$ making connections.





- C Tighten the flex hose (with strainer in place) securely to the supply.
- **D**) Open supply stop(s).



## 3A - EAF-700 MODELS - PLUG ADAPTER INTO RECEPTACLE





# **3B -** EAF-750 MODELS – CONNECT BATTERY PACK



LIMIT ONE (1) FAUCET PER BATTERY PACK

# 4 - START-UP



Remove label from faucet sensor.



Activate Faucet by holding installation instructions approximately 1-1/2" (38 mm) in front of the sensor window until red light appears, then remove instruction sheet. Faucet will run for four (4) seconds and then sensor will automatically adjust sink basin environment.

Wait ten (10) seconds after water shuts off before using faucet.



## TEST FAUCET OPERATION AND SET TEMPERATURE ADJUSTMENT (-ISM MODELS ONLY) (OPTIONAL)

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**NOTE:** Change in water temperature is directly affected by location of hot water supply.

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# STEPS TO REMOVE SPOUT CASING FROM SPOUT BASE ASSEMBLY FOR ACCESS TO SOLENOID, SENSOR, AND HOT LIMIT STOP.

## READ ALL STEPS BEFORE COMMENCING SERVICE.

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LIMIT THE MAXIMUM WATER TEMPERATURE. NOTE: THIS DOES NOT TAKE THE PLACE OF AN ASSE 1070 CERTIFIED MIXING DEVICE, BUT IS AN ADDED MEASURE TO LIMIT DELIVERY OF HOT WATER.



#### SENSOR REPLACEMENT:

Inside spout casing, remove horseshoe retention clip with needle nose pliers by gripping sides of clip and gently pull down - note bevel orientation of clip.

Push sensor to outside of spout casing, take care to orientation of sensor. Install new sensor in same orientation; feed wires through first from the outside to inside, then fit sensor into spout casing, and install horseshoe clip until firmly in place. Proceed to steps for assembling spout casing to base (steps D - F).

# 2 SENSOR

#### SOLENOID REPLACEMENT:

After following steps for removing spout casing, use 6-mm hex wrench to unscrew solenoid counter-clockwise from base. Have a towel ready to clean up what little water may spill from base.

Clean diaphragm end of solenoid of sediment or debris under running water with soft bristle brush (toothbrush) or ready the new replacement solenoid to install. Prior to installing solenoid, check inside faucet's solenoid base for debris. If debris is present use dry towel to blot out water and debris, or use a wet/dry vac to extract.

Install and thread solenoid slowly in clockwise direction to ensure against cross threading (solenoid will loosely turn approximately 3 turns before making sealing contact (a light squeeze), then use 6-mm hex wrench to finish turning solenoid to seal (a firm squeeze). DO NOT OVERTIGHTEN, there is a mechanical stop.



Use a 2 mm hex key to remove side mixer lever.



Use 2.5 mm hex key to remove spout screw (behind side mixer or cap, back-right area of spout). Firmly grip spout casing and spout tube in both hands and carefully lift spout casing from base assembly. Once casing is loose from base, disconnect solenoid cable and power extension cable from sensor.



## HOT LIMIT STOP ADJUSTMENT -ISM MODEL ONLY:

Prior to turning off water stop and removing spout casing, activate faucet and adjust side mixer lever to desired water temperature and hold mixer lever in the position and remove the mixer lever screw without moving the mixer lever. Once screw is removed, carefully pull lever straight out from spout without moving lever position, turn off water stops and follow steps to remove casing from faucet's spout base assembly (A - B).

To finish adjusting hot limit setting of mixer lever, use a 2 mm hex key to turn tall threaded stainless steel set screw clock-wise until the screw makes contact to the mixer lever, which can be viewed from the left side of the base assembly. Then follow steps to re-assemble spout casing to spout base (Steps D - F).

**NOTE:** Setting of the Hot Limit Stop Screw is only a mechanical setting; this is not a thermostatic design that self adjusts to ground water temperature changes, or pressure differential changes in a plumbing system. Most commercial plumbing codes require a master or point of use thermostatic mixing valve to limit hot water temperatures.





When service is complete (Hot Limit Stop, Solenoid, Sensor), connect solenoid plug and power extension cable to sensor. Make sure plastic water tube is vertical and secured in the base. Add a small swipe of 100% silicone grease to O-ring at top of tube.



With sensor facing to the front, align handle and retention screw hole on bottom right of spout to handle cartridge and screw hole on base of faucet, then gently slide faucet spout casing down onto faucet base making sure to align holes on bottom right of spout.



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Install spout retention screw and tighten with 2.5 mm hex key, install handle cap, or handle with 2 mm hex key.

Turn on water. Test faucet and check for leaks before and during activation of faucet.



## SENSOR RANGE ADJUSTMENT

# FACTORY SETTING IS APPROPRIATE FOR THE MAJORITY OF APPLICATIONS AND SHOULD NOT REQUIRE RESETTING UNLESS UNDER EXTREME SITUATIONS.

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First enter programming mode, place finger on IR-Click sensor (covering bottom half of sensor about 3 seconds) until ORANGE LED lights then remove finger. There is a 5-second window to select/ start a programming mode.

Then, touch finger 2 times over IR Click sensor. LED on sensor should quickly flash four (4) times (RED) every three (3) seconds to indicate Temporary Off mode.



Cover IR-Click (bottom half of sensor) after a few seconds, LED flashes RED 4 times then a pause - continue holding finger over IR-Click sensor until LED flashes RED 1 to 8 times from minimum to maximum range, see diagram in step C.



Release when desired range is reached (factory setting is #6).



After releasing finger from IR click sensor, remove hands from front of faucet area for 15 seconds, faucet will perform an auto background measurement and during this time the RED LED will flash and water will turn on and off. Range setting complete when ORANGE LED flashes one (1) time.

# 12/24 LINE PURGE FEATURE

Enter Programming Mode by placing finger on IR-Click sensor (covering bottom half of sensor for about 3 seconds) until ORANGE LED lights, then remove finger.

There is a 5-second window to select/start a Programming Mode.

Sentinel Line Purge duration is 2 minutes, and activates after last use of faucet for the selected time range.

Cover bottom half of sensor window, after 24 seconds LED flashes RED, remove finger after:

1 RED LED flash for NO sentinel rinse (disabled).

- 2 RED LED flashes for 12 Hour sentinel rinse.
- 3 RED LED flashes for 24 Hour sentinel rinse.
- 4 RED LED flashes for 48 Hour sentinel rinse.

This feature will operate the faucet every 12 or 24 hours since last use, to prevent stagnant water conditions, and to refresh drain trap. Default purge duration is two minutes.

Consult factory regarding other timing options.

	LED Flash	Hour
Deactivate	1x	
Activate	2x	12h
	Зx	24h
	4x	48h

# CONTINUOUS RUN AND CLEANING MODE FEATURES

## **CONTINUOUS RUN**



Continuous run of water for 2 minutes.

Enter Programming Mode by covering bottom half of sensor for about three (3) seconds until ORANGE LED lights, then remove finger.

Touch bottom half of sensor for three (3) seconds, then remove finger. Faucet will turn on water flow.



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Faucet will operate normally after 2 minutes or after using the touch function once again for 2 seconds.



## **CLEANING MODE**



Pause faucet for 2 minutes. Enter Programming Mode by covering bottom half of sensor for about three (3) seconds until ORANGE LED lights, then remove

finger. Touch bottom half of sensor two (2) times. There will be a short Orange LED flash with each touch, then RED LED will flash four (4) quick flashes continuously for two minutes indicating the temporary OFF or "Cleaning Mode".



Faucet will operate normally after 2 minutes or after using the touch function once again for 2 seconds.



# **OFF-DELAY (FOLLOW UP TIME)**

DURATION OF TIME THE WATER RUNS AFTER TARGET IS REMOVED.

Touch the sensor once for 2 seconds. Release. Sensor will flash orange one time to indicate programming mode activated. Touch sensor again for 5 seconds until sensor flashes red once. Release.





Touch again (water flows) and release when the desired time of water flow (0-10 seconds) is reached.



Sensor will flash orange to confirm the change has been made and the faucet is ready to operate.



# 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 of the user are removed or until the faucet reaches its automatic time out limit setting.

## **BATTERY REPLACEMENT**

NOTE: REPLACE BATTERY WHEN RED LED INDICATOR FLASHES EACH TIME FAUCET IS IN USE OR WHEN FAUCET STOPS FUNCTIONING.



# **TECHNICAL DATA**

NOMINAL VOLTAGE	6 VDC
POWER SUPPLY	120 VAC/ 6.75 VDC
WATER PRESSURE	4.3-125 PSI (0.3 - 8.6 bar)
FLOW RATE	1.5 gpm (5.7 Lpm)
WATER FLOW DURATION	0.5-4 seconds
WATER TEMPERATURE	MAX. 176°F/80°C

# TROUBLESHOOTING

#### 1. Faucet does not function.

- A. Adhesive packaging label affixed over sensor eye. Remove adhesive label from sensor eye.
- B. "Intermittent Off" is activated.
- Press button once. C. Water supply stop(s) closed.
- Open water supply stop(s) closed
- D. Battery is "dead".

Replace battery (refer to Battery Replacement section of guide).

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

- A. Reflection.
- Remove reflective surface.

B. Faucet is not working properly. Contact Sloan Valve Company Installation Engineering Department.

#### 3. Faucet does not deliver any water when Sensor is activated. Solenoid Valve produces an audible "CLICK."

A. Water supply stop(s) closed.

Open water supply stop(s).

B. Water supply stop strainer(s) clogged. Remove, clean, and reinstall water supply stop strainer(s). Replace strainer(s), if required.

## Solenoid Valve DOES NOT produce an audible "CLICK."

A. Battery low (battery operated models).

Replace battery (refer to Battery Replacement section of guide). B. Power failure.

Check power supply.

# 4. Faucet delivers only a slow flow or dribble when sensor is activated.

- A. Water supply stop(s) are partially closed. Completely open water supply stop(s).
- B. Water supply stop strainer(s) clogged. Remove, clean, and reinstall water supply stop strainer(s). Replace strainer(s), if required.
- C. Spray head is clogged. Remove, clean, and reinstall spray head. Replace spray head, if required.
- D. Debris in Solenoid. Clean and reinstall or replace.

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

A. Faucet is not working properly. Contact Sloan Valve Company Installation Engineering Department.

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

A. Battery low (battery operated models). Replace battery (refer to Battery Replacement section of guide).

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

A. Supply stops are not adjusted properly. Adjust supply stops.

When assistance is required, please contact Sloan Technical Support at: 1-888-SLOAN-14 (1-888-756-2614)

# **CARE AND CLEANING**

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 a clean cloth or towel. DO NOT spray cleaner directly onto flushometer; instead, spray into a clean cloth and then wipe down flushometer. While cleaning the bathroom sink, protect the faucet from any splattering of cleaner. Acids and cleaning fluids will discolor or remove chrome plating.



## PARTS LIST



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ltem No.	Part No.	Description
1		Spout Assembly
2		Integral Side Mixer Handle Cap
3		Integral Side Mixer Kit
4	EAF-2	Solenoid
5		Sensor Assembly*
6	EAF-1	Mounting Hardware
7	EAF-44†	Power Splitter (1 per faucet)
8	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
9	EAF-1008	15" (380 mm) Flexible Supply Hose
10	EAF-9	Hose Filter/Gasket (2 per kit)
11	EAF-48	Battery Box (Uses CR-P2 Lithium Battery (model 223))
12	EAF-11-A	6 VDC Plug-In Adapter 100-240 VAC/6.75 VDC (US)
13	EAF-37	6 VDC Box Mount Adapter 100-240 VAC/6.75 VDC
14	EAF-38	90-264 VAC/6.75 VDC Plug-In Adapter (EURO)
15	EAF-39	90-264 VAC/6.75 VDC Plug-In Adapter (UK)
	Not Shown	Bak-Cheks <sup>®</sup> inserted above hoses (ISM Models only - Interchangeable)
	EAF-8	Bak-Cheks®, 2 pack (3/8" OD)
	MIX-79	Bak-Cheks <sup>®</sup> , 2 pack (3/8" OD)

† EAF44 Power Splitter included with EAF-700 Faucet when ordered as -LT (Less Transformer) option. One (1) EAF-44 per faucet required in daisy chain application.

\* For Sensor replacement consult Repair Parts and Maintenance Guide to ensure selecting correct sensor; Sensor design changed mid-2023. Sensor changed from square with exposed mechanical button, to long vertical rectangle. Old/current style sensors are not interchangeable.





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

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