ERF-885 I.I. — Rev. 0 (09/05)
Code No. 0816493

SLOAN®
OPTIMA® *plus*

INSTALLATION INSTRUCTIONS
BATTERY POWERED
SENSOR ACTIVATED
WIRELESS LAVATORY FAUCET

ERF-885

Battery Powered,
Sensor Activated
Lavatory Faucet

Made in the U.S.A.
Compliant to:
ANSI/ASME A112.18.1M
CSA B125

Installation of the Sloan OPTIMA *Plus*® ERF-885 Battery Powered, Sensor Activated Wireless Lavatory Faucet makes wash-up totally "hands-free," providing the ultimate in sanitary protection and automatic operation. The OPTIMA *Plus*® Faucet uses Active and Passive Infrared sensing technology to sense the user's presence and turn on a water supply that has been pre-mixed to the desired water temperature. When the user's presence is no longer sensed, the water flow automatically stops.

The ERF-885 Faucet is powered by four C-size batteries which eliminates the need to run any electrical lines to the system. In addition, the Faucet uses an RF signal between the sensor and valve module which eliminates the need to connect any electrical or optical line between the two components. These features provide easier installation in less time!

The Sloan ERF-885 Battery Powered, Sensor Activated Wireless Lavatory Faucet comes complete with an integral faucet and sensor assembly, trim plate, control module, four Duracell alkaline batteries — Size C (for control module), two DL123A lithium batteries (for spout), Bak-Chek® compression tee and all mounting hardware. Available with 4 inch or 8 inch trim plate. Also available as optional equipment is a grid strainer and mixing valves. 3/8 inch copper supply tube or flexible hose connections to be supplied by the installer.

The following instructions will serve as a guide when installing the Sloan ERF-885 Faucet. 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)**.

LIMITED WARRANTY

Sloan Valve Company warrants its ERF-885 Faucet to be made of first class materials, free from defects of material or workmanship under normal use and to perform the service for which it is intended in a thoroughly reliable and efficient manner when properly installed and serviced, for a period of three years (1 year for special finishes) 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 batteries.

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.

FCC INFORMATION

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference and
(2) This device must accept any interference received, including interference that may cause undesired operation.

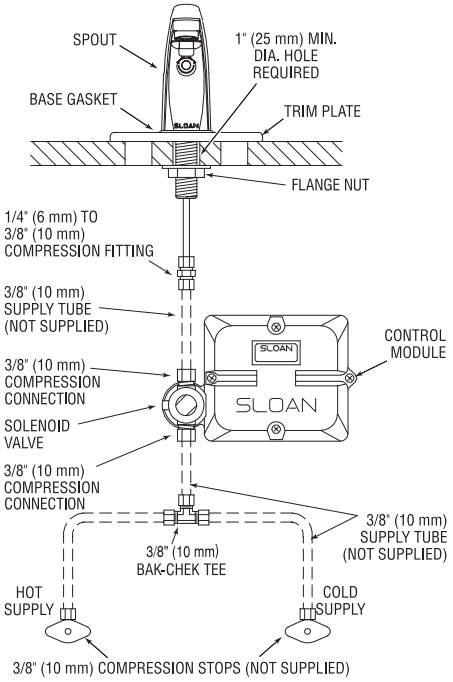
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

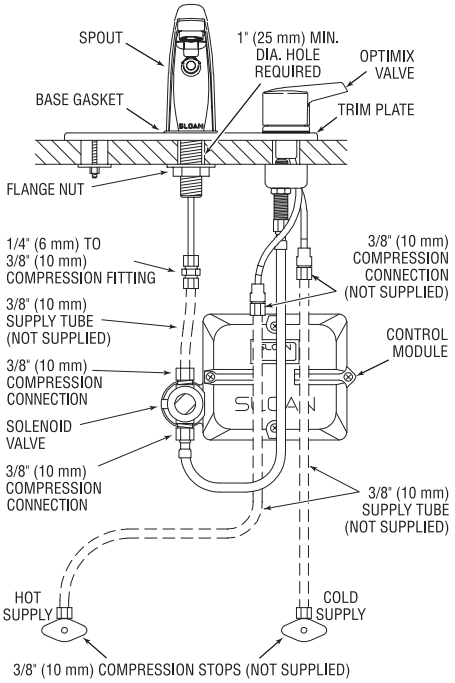
Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

ERF-885 FAUCET ROUGH-IN — *Figure 1A*

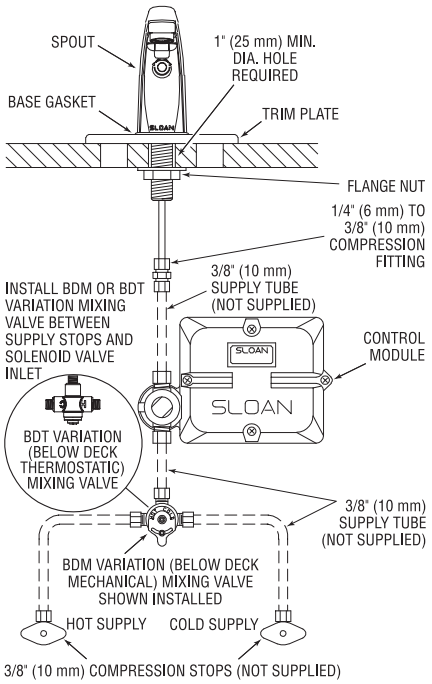
ERF-885 Faucet with Bak-Chek® Tee for Hot and Cold Water Supply (shown with 4" trim plate)



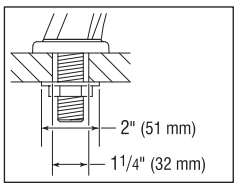
ERF-885 Faucet with ADM Variation Mixing Valve for Hot and Cold Water Supply (shown with 8" trim Plate)

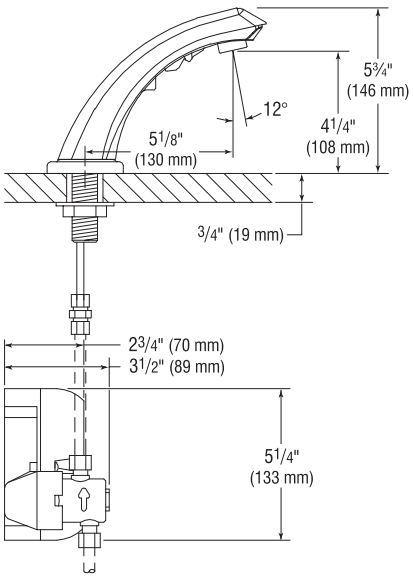


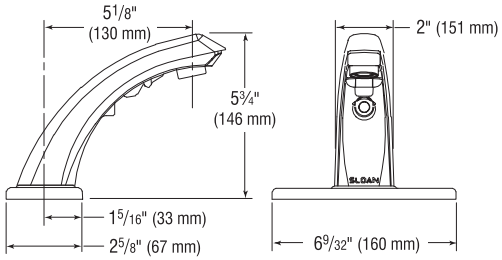
ERF-885 Faucet with BDM and BDT Variation Mixing Valves for Hot and Cold Water Supply (shown with 4" trim Plate)



FAUCET SIDE VIEW — *Figure 1B*







!!! IMPORTANT !!!

KEEP THREAD SEALANT OUT OF YOUR WATERWAY TO PREVENT COMPONENT PART DAMAGE! DO NOT USE ANY SEALANT ON COMPRESSION FITTINGS.

PRIOR TO FAUCET INSTALLATION

Prior to installing the Sloan ERF-885 faucet, install the items listed below. Also, refer to Figures 1A and 1B.

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

Mixing Valve

When installing the faucet with a Sloan Mixing Valve, these Installation Instructions AND the Installation Instructions packaged with the Mixing Valve MUST be followed.

Important:

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

Tools Required for Installation

- Open end wrenches for the following hex sizes: 1/2", 9/16", 5/8", 11/16", 1"
- Basin wrench
- Phillips head screwdriver, #2
- Hammer (if installing plastic or hollow wall anchors to mount control module)
- Pliers
- 1/4" drill bit (if installing plastic wall anchors to mount control module)
- 5/16" drill bit (if installing hollow wall anchors to mount control module)
- 3/8" drill bit (if installing toggle nut anchors to mount control module)

FAUCET INSTALLATION OVERVIEW

The following outline identifies the proper steps required for Faucet installation. Detailed instructions for each of these steps are contained in the following pages. Familiarize yourself with these steps prior to installing the ERF-885 Faucet.

Step 1 — Install Faucet Spout and Trim Plate
Step 2 — Remove Cover and Battery Compartment from Control Module
Step 3 — Mount Control Module to Wall
Step 4 — Connect Water Supply Lines
Step 5 — Install Spray Head
Step 6 — Install Battery Compartment into Control Module
Step 7 — Open Supply Stops and Remove Label from Sensor
Step 8 — Install Cover onto Control Module

SUPPLY CONNECTION NOTES

Bak-Chek® Tee — When connecting the ERF-885 faucet to both hot and cold water supplies, a Bak-Chek® Tee is provided and required as illustrated in Figure 1A. Water temperature can be controlled by adjusting the supply stops.

Pre-tempered Supply — When connecting the faucet to a single line water supply or a pre-tempered water supply, a Bak-Chek® Tee is not required.

Use of a Mixing Valve — A Bak-Chek® Tee is not required or provided when a Temperature Mixing Valve is included with the faucet.

Step 1 — Install Faucet Spout and Trim Plate

Note: When installing with a Sloan MIX-110-AA Mixing Valve, install Faucet and Trim Plate before installing Mixing Valve. For complete installation guidelines, refer to the Installation Instructions supplied with the Sloan mixing valve.

Step 1A — ETF-662-A Single Hole 4" Trim Plate *(Figure 2A)*

Slide Rubber Faucet Gasket onto Faucet Shank. Ensure that Roll Pin on base of Faucet fits into hole in Rubber Faucet Gasket.

Apply plumber's putty to underside of Trim Plate. Slide Trim Plate and Back-up Spacer onto Faucet Shank. Align Roll Pin with small slot in Trim Plate.

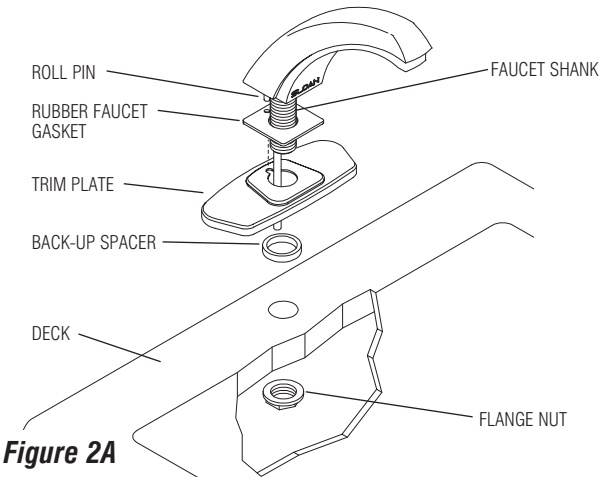


Figure 2A

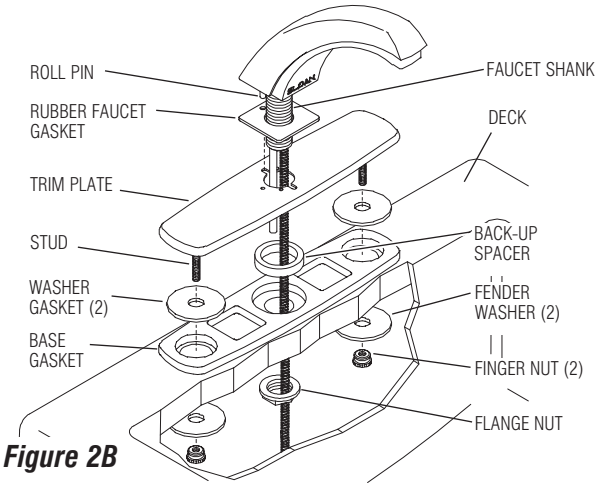


Figure 2B

Holding Faucet, Rubber Gasket, Trim Plate and Back-up Spacer in place, insert Faucet Shank through the 1" (25 mm) center hole in deck or lavatory. Secure Faucet to Deck using the Flange Nut supplied.

Step 1B — ETF-510-A Single Hole 8" Trim Plate *(Figure 2B)*

Slide Rubber Faucet Gasket onto Faucet Shank. Ensure that Roll Pin on base of Faucet fits into hole in Rubber Faucet Gasket.

Slide Trim Plate and Back-up Spacer onto Faucet Shank. Align Roll Pin with small slot in Trim Plate.

Slide Washer Gaskets over Studs. Place Studs and Faucet Shank through Base Gasket and holes in Deck.

Secure Trim Plate from below Deck using the two (2) Fender Washers and two (2) Finger Nuts supplied.

Secure Faucet from below Deck using the Flange Nut supplied.

Step 2 — Remove Cover and Battery Compartment from Control Module (Figures 3 & 4)

Remove the Control Module Cover from the Control Module Base. Remove the Battery Connector from the Battery Compartment. Remove the Battery Compartment from the Control Module by gently pulling straight out.

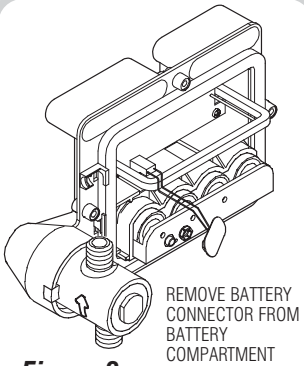


Figure 3

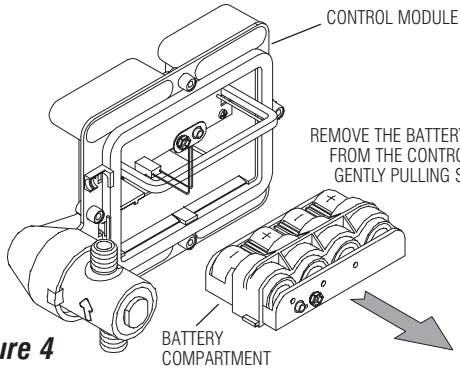


Figure 4

Step 3 — Mount Control Module to Wall (Figures 1A, 1B & 5)

Important: DO NOT install Control Module upside down. The control module may be oriented so that it faces sideways (vertically); however, optimum performance is obtained when Control Module is horizontal with the Sloan logo on the cover facing up as shown in Figures 1A and 1B.

Install the Control Module in an appropriate location no more than 24 inches (610 mm) from the Faucet Spout; refer to Figure 1A. All four (4) Cover Screws must be accessible from the chosen mounting position.

With Control Module Cover removed, use the Control Module Base as a template to mark locations on wall for Mounting Fasteners. Determine the appropriate Mounting Fastener for the particular wall type (three different fastener types are included; see parts list). Drill four (4) appropriately sized holes.

For Plastic Wall Anchor — 1/4" (6 mm) holes

For Hollow Wall Anchor — 5/16" (8 mm) holes

For Toggle Nut Anchor — 3/8" (10 mm) holes

Attach Control Module Base to wall using the appropriate fastener.

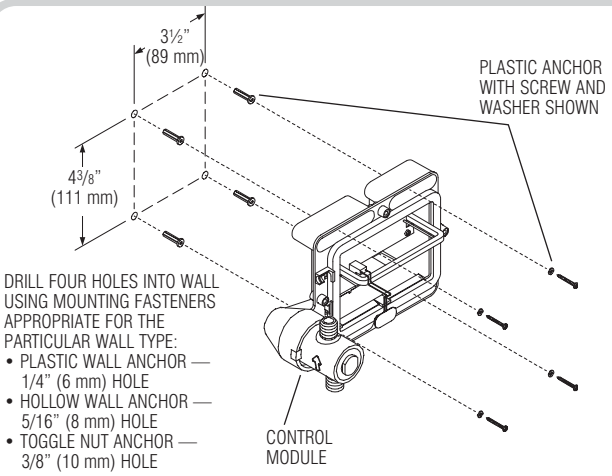


Figure 5

Step 4 — Connect Water Supply Lines (Figures 1A, 6 and 7)

IMPORTANT: Keep thread sealant out of your waterway to prevent component part damage! DO NOT use any sealant on compression fittings.

Note: *Flow direction of Solenoid Valve is indicated by an arrow on Valve Body.*

Note: *If installation includes a Sloan mixing valve, refer to the Installation Instructions supplied with the Sloan mixing valve.*

CONNECT WATER SUPPLY LINE FROM SPOUT TO SOLENOID VALVE

Install the 1/4 inch end of the 1/4 to 3/8 inch Compression Fitting onto the Spout's copper supply tube. (Refer to Figures 1A and 6.)

Connect 3/8 inch O.D. supply tube between Compression Connection on Solenoid Valve and Compression Fitting on the Spout's copper supply tube. (Supply tube furnished by installer.)

CONNECT WATER SUPPLY LINE FROM SUPPLY STOP(S) TO SOLENOID VALVE

Flush dirt, debris, and sediment from the supply line(s).

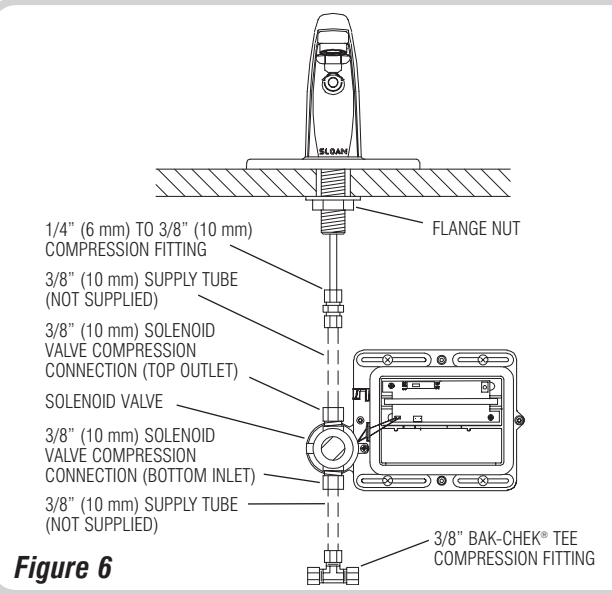


Figure 6

For Dual Line Hot and Cold Water Supply Applications

Note: *When connecting the Faucet to a hot and cold water supply, a Bak-Chek® Compression Tee is required as shown in Figures 1A and 7.*

Install a 3/8 inch (10 mm) copper supply tube between the Bak-Chek® Compression Tee and the hot and cold supply stops. (Supply tubes and supply stops furnished by installer.) Tighten Compression Fittings securely.

Install a 3/8 inch (10 mm) copper supply tube between the Bak-Chek® Compression Tee and the inlet side of the Solenoid Valve.

Note: *Failure to install the Bak-Chek® Compression Tee can result in a cross flow connection when the faucet is in the off position and the supply stops are open. If the pressures of the hot water supply and cold water supply are different, hot water can migrate into the cold water supply or cold water can migrate into the hot water supply. Most plumbing codes require that the Bak-Chek® be used to prevent this.*

For Single Line Water Supply Applications

Note: *When connecting the Faucet to a single line water supply or a pre-tempered water supply, a Bak-Chek® is not required as shown in Figures 1A and 7.*

Install a 3/8 inch (10 mm) copper supply tube between the supply stop and inlet side of Solenoid Valve. (Supply tube and supply stop furnished by installer.) Tighten Compression Fittings securely.

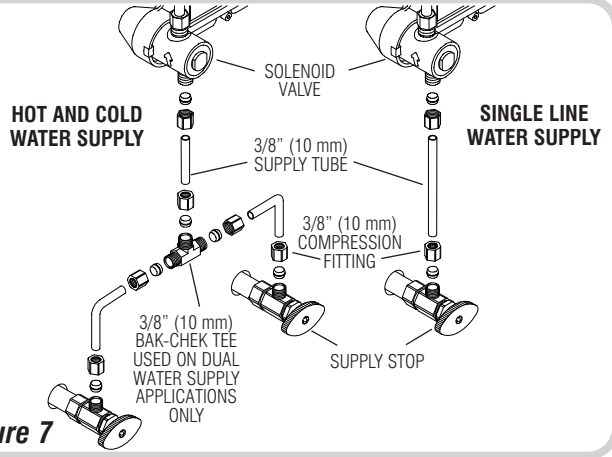


Figure 7

Step 5 — Install Spray Head (*Figure 8*)

Install Spray Head into opening of Spout. Tighten Spray Head with Key provided.

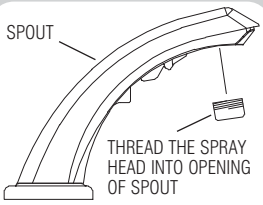


Figure 8

Step 6 — Install Battery Compartment into Control Module (*Figures 9 and 10*)

Note: *If batteries are not already installed, install them as instructed on Page 7.*

Install Battery Compartment into the Control Module as illustrated in Figure 9. Connect Battery Connector to Battery Compartment as illustrated in Figure 10. An audio "beep" will sound when power to the Control Module is detected.

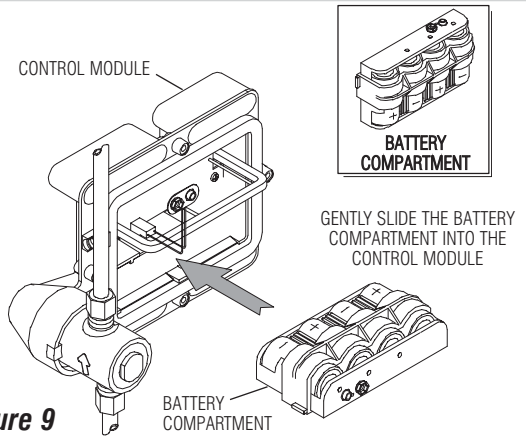


Figure 9

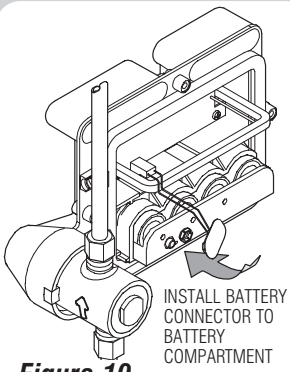
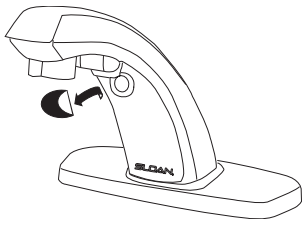


Figure 10



REMOVE LABEL FROM SENSOR

Figure 11

Step 7 — Open Supply Stops and Remove Label from Sensor (*Figure 11*)

Open supply stops. Remove label from Sensor on Spout. Two audio "beeps" will sound to acknowledge that the Control Module has recognized the Spout.

Note: *If label was removed from Sensor BEFORE connecting batteries, connect batteries as instructed in Step 6. Pass hand under Spout to initialize Faucet.*

Step 8 — Install Cover onto Control Module (*Figure 12*)

Place Cover over the Control Module and attach using the four (4) screws provided. Cover can be installed in only one orientation.

Important: *All four (4) Cover Screws must be installed.*

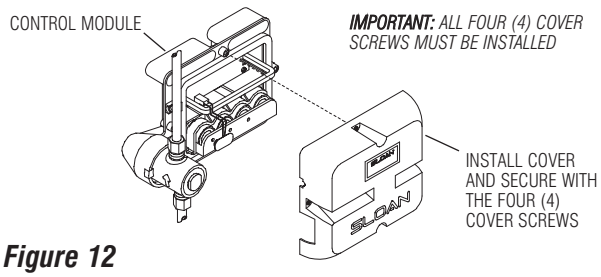
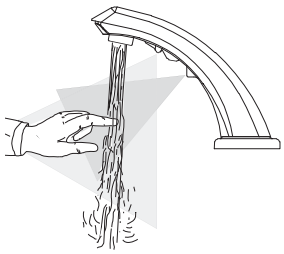


Figure 12

OPERATION

When hands are placed beneath the spray head, the **passive** OPTIMA® Sensor senses heat from the user's hands. The **active** OPTIMA® Sensor then emits invisible light beams that are reflected from the user's hands back to the sensor. When both OPTIMA® Sensors qualify the user, the Faucet transmits an RF signal to the control module to activate the solenoid and turn on a water flow. Tempered water flows for as long as hands continue to stay within the Sensor's range (30 second automatic shut off). When hands are removed, the water flow automatically stops. The faucet is then ready for the next user.



CARE AND CLEANING OF CHROME AND SPECIAL FINISHES

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

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

AUDIO ALERTS

Event	Description of Beep	Comment
At battery install or after valve reset button pressed	An audio beep will sound 6 times, once every 0.2 seconds.	A reset button is located on the PCB. This feature allows a customer to reset the valve's RF ID manually (pressing the button is the same as removing the batteries from the unit).
Valid RF ID Accepted	2 short beeps are sounded after a valid ID is accepted.	When the customer programs the valve ID, two short confirmation beeps to occur.
First 10 minutes of operation	A. Each time a valid target is detected (and for as long as it is in the target detection zone and the valve should be open) the beeper will sound once every 0.3 second. B. If there is a valid target as above, but the valve should be closed due to a time out condition then the beep rate will change to once per 0.6 seconds	
Max Flow	No beeping to occur	
Miscommunication	Water is turned off and 1 beep is sounded.	In the unlikely event that the RF signal received by the valve is incorrect, the valve will turn off and a single beep will sound. Normal operation is started automatically upon receiving a valid signal.
Low Battery Voltage	1 second after a target is removed from the detection zone, an audio beep will sound 3 times, once every 0.5 seconds	
Secondary Low Battery Voltage Detection	If a customer installs batteries that are below 4.5 ± 0.1 VDC, a one second long beep will sound and the unit will not operate.	

TROUBLESHOOTING GUIDE

1. **PROBLEM:** **Control Module troubleshooting beeper does not function (no audio "beeps" sound during faucet initialization, battery install or after reset button is pressed).**
   CAUSE: *No battery power is being supplied to Control Module.*
   SOLUTION: Ensure that the batteries are installed properly into the Control Module. Check that the orientation of each battery matches the positive (+) and negative (-) symbols shown on the bottom of the Battery Compartment. Reinsert the Battery Compartment into the Control Module. Make sure the Battery Connector is securely attached to the Battery Compartment. An audio "beep" should sound 6 times.
   CAUSE: *Insufficient battery power is being supplied to Control Module.*
   SOLUTION: One (or more) of the batteries is "dead." 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 on the bottom of the Battery Compartment. Reinsert the Battery Compartment into the Control Module. Make sure the Battery Connector is securely attached to the Battery Compartment. An audio "beep" should sound 6 times.
2. **PROBLEM:** **Faucet does not deliver any water when Sensor is activated.**
   INDICATOR: ***Solenoid valve produces audible "CLICK."***
   CAUSE: *Water supply valve is closed.*
   SOLUTION: Open supply stop(s) completely.
   INDICATOR: ***Solenoid valve DOES NOT produce an audible "CLICK."***
   CAUSE: *Solenoid lead is not properly connected to the Control Module.*
   SOLUTION: Disconnect and reconnect Solenoid lead to the Control Module.
   CAUSE: *Batteries are not installed properly.*
   SOLUTION: Check that the orientation of each battery matches the positive (+) and negative (-) symbols shown on the bottom of the Battery Compartment. Reinsert the Battery Compartment into the Control Module. Make sure the Battery Connector is securely attached to the Battery Compartment. An audio "beep" should sound 6 times.
3. **PROBLEM:** **Faucet delivers only a slow flow or dribble when Sensor is activated.**
   CAUSE: *Water supply valve is partially closed.*
   SOLUTION: Open supply stop(s) completely.
   CAUSE: *Solenoid Filter is clogged.*
   SOLUTION: Remove, clean, and reinsert. Replace EBF-1004-A Solenoid Filter Kit 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 both the inlet and outlet positions. The water should flow from inlet through the Solenoid Valve to the outlet according to the direction of the arrow shown on the side of the Solenoid Valve. Reconnect the compression fittings in the correct orientation.
   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 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 Bak-Chek® Tee.**
   CAUSE: *Supply stops are not adjusted properly.*
   SOLUTION: Adjust supply stops.
   NOTE: ***For some systems, a thermostatic mixing valve may be required.***

For additional information about Sloan Mixing Valves or Trim Plates, consult our Installation Instructions or Maintenance Guides.

If further assistance is required, please contact the Sloan Valve Company Installation Engineering Department at:

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

ADJUSTMENT PROCEDURES

The ERF-885 faucet is factory set so there should be no need for adjustments; however, if an adjustment is required, refer to the following instructions.

Reset Button and Time-out Setting Switch *(Figure 13)*

RESET BUTTON — The Reset Button is used whenever it is necessary to rematch the Control Module's RF ID to the Spout's RF ID. When the Reset Button is pressed, an audio "beep" will sound. Pass hand under Spout to initialize the Faucet. Two audio "beeps" will sound to acknowledge that the Control Module has recognized the Spout. For the first ten minutes, the unit will "beep" when a valid target is detected.

TIME-OUT SETTING SWITCH — The Faucet Time out Setting determines the maximum time faucet will run upon continuous detection. Faucet is factory set at the 30 second time out. Position switch to the right for a 20 minute time out.

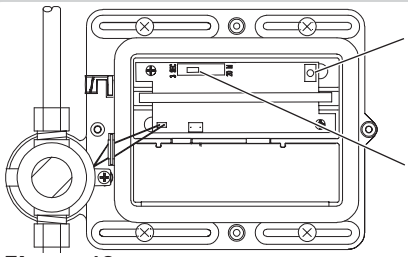


Figure 13

Range Adjustment *(Figures 14 and 15)*

The OPTIMA *Plus*® ERF-885 Faucet is factory set to operate when hands are placed 6-1/2 to 7 inches (165 to 178 mm) from Sensor. This range should be satisfactory for most installations. If range adjustment is required, refer to the following procedure.

The Range Potentiometer is located in the Throat Plate (Figure 14).

Turn off water supply. Remove Throat Plate as follows and as illustrated in Figure 14. Remove the Spray Head using the Key provided. Remove the hex screw located in the Spray Head opening of the Throat Plate. Remove the Throat Plate from the Faucet Housing.

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

Turn Range Potentiometer counterclockwise to decrease range or clockwise to increase range.

Place Throat Plate next to the Faucet Housing and cycle Faucet several times to assure that the Sensor range does not inadvertently pick up reflection off the edge of the sink. If reflection occurs, slightly adjust Range Potentiometer counterclockwise and again cycle Faucet.

Repeat adjustment procedure until desired range is achieved.

Reinstall the Throat Plate and secure using the hex screw. Install the Spray Head using the Key provided.

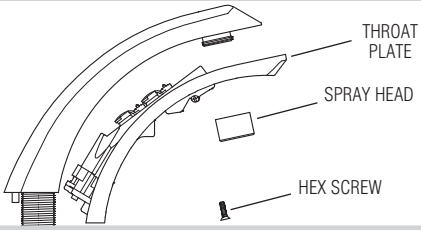


Figure 14

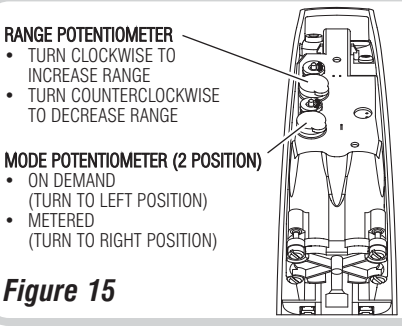


Figure 15

MAINTENANCE PROCEDURES

Control Module Battery Replacement *(Figures 3 and 16)*

(Water does not need to be turned off)

The Sloan OPTIMA *Plus*® ERF-885 Control Module is furnished with four (4) C-size alkaline batteries that provide up to four (4) years of operation (at 8000 cycles per month). When a "beep" is heard after hands are removed from the detection zone, battery power will be depleted within one (1) month. Replace batteries with four (4) new C-size alkaline batteries.

Remove the Cover from the Control Module by unscrewing the four (4) Cover Screws located at the center of each side.

Remove the Battery Connector from the Battery Compartment. Remove the Battery Compartment from the Control Module by gently pulling straight out with a firm grip. Spread the ends of the Battery Retainer and remove it from the Battery Compartment. Remove the old batteries and insert four (4) fresh C-size alkaline batteries into the Battery Compartment as indicated by the (+) and (-) symbols inside the Battery Compartment. Spread the ends of the Battery Retainer and slide it over the Battery Compartment until locked into place.

Note: *Battery Retainer must be installed as shown in Figure 16. If installed up-side-down, it will not install into the Control Module.*

Install Battery Compartment into the Control Module. Connect Battery Connector to Battery Compartment.

Place Cover over the Control Module and attach using the four (4) screws provided. Cover can be installed in only one orientation.

Important: *All four (4) Cover Screws must be installed.*

Pass hand over Sensor to begin Start-up Mode.

Note: *If batteries are installed below 4.5 ±0.1 VDC, a "BEEP" will sound and the faucet will not operate. Install fresh batteries.*

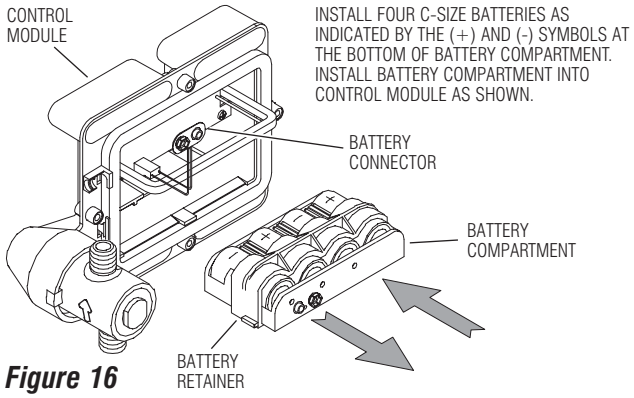


Figure 16

Spout Battery Replacement (Figures 14 and 17)

The Sloan OPTIMA *Plus*® ERF-885 Spout is furnished with (2) DL123A lithium batteries. Should these batteries ever need replacing, refer to the following procedure.

Turn off water supply. Remove Throat Plate as follows and as illustrated in Figure 14. Remove the Spray Head using the Key provided. Remove the hex screw located in the Spray Head opening of the Throat Plate. Remove the Throat Plate from the Faucet Housing.

Remove the four (4) Battery Cover Screws from the Throat Plate and remove the Battery Cover. Remove the old batteries and insert two (2) fresh DL123A lithium batteries into the Battery Compartment as indicated by the (+) and (-) symbols inside the Battery Compartment.

Reinstall the Battery Cover and Battery Cover Screws into the Throat Plate.

Reinstall the Throat Plate and secure using the hex screw. Install the Spray Head using the Key provided.

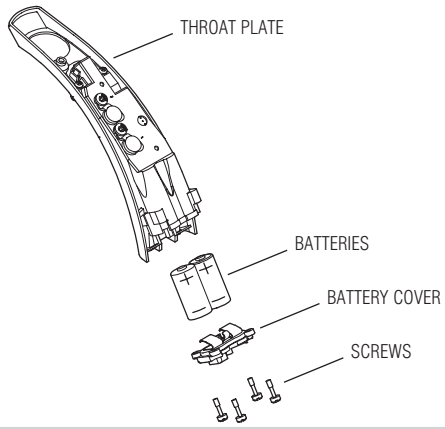


Figure 17

Solenoid Filter Screen Cleaning Procedure (Figure 18)

Before cleaning the Screen Filter, turn off the water supply at supply stop(s). Activate the Faucet to relieve any pressure in the system. Unscrew the Filter Plug and remove it from the Solenoid Valve Housing. Carefully remove the Screen Filter from the Solenoid Valve Housing.

Clean the Screen Filter using fresh tap water only. If necessary, use a small brush to clean. Use caution while cleaning to prevent damage to Screen Filter. If any Filter components are damaged, order Filter Replacement Kit ETF-1004-A.

Examine the Screen Filter Plug O-ring for wear or damage; replace if necessary. Carefully replace the Screen Filter into the Filter Plug. Screw the Filter Plug with O-ring into the Solenoid Valve Housing and tighten securely to prevent leaks.

Turn on the water supply at the supply stop(s). Activate the Faucet to purge any air from the system lines. Check for leaks and repair as necessary.

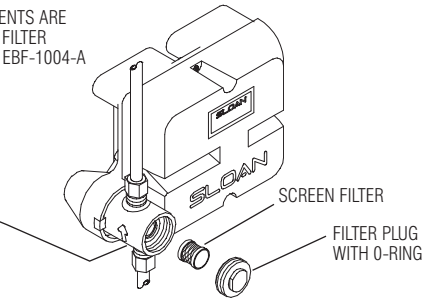
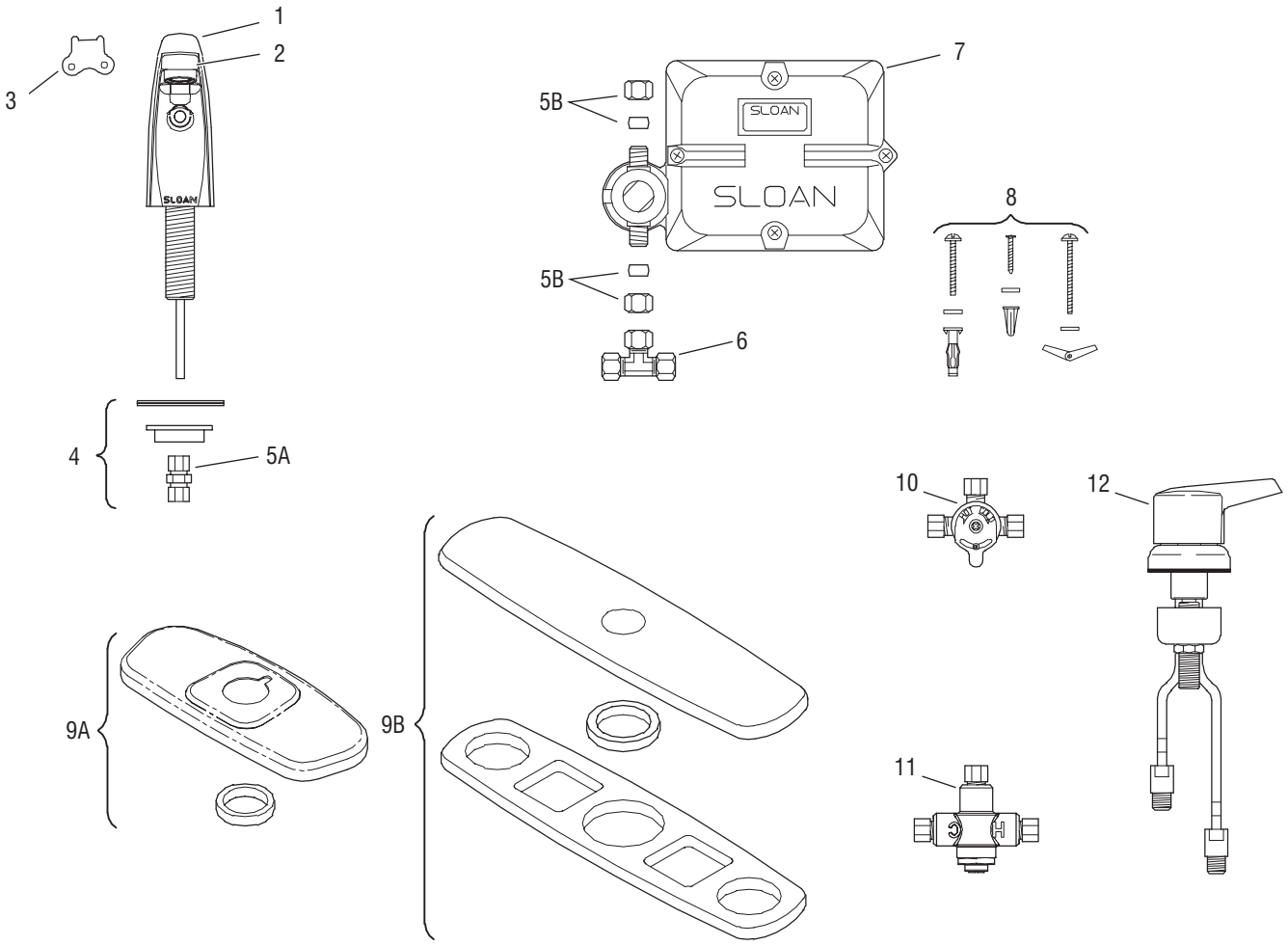


Figure 18

PARTS LIST



Item No.	Part No.	Description
1	ERF-1-A	Faucet Spout and Sensor Assembly (ERF-885)
2	ETF-234	0.5 gpm (1.9 Lpm) Spray Head with Key (male thread)
3	ETF-435	Replacement Key Only for ETF-234, 0.5 gpm (1.9 Lpm) Spray Head
4	ETF-290-A	Faucet Mounting Kit includes Base Gasket, Flange Nut and ETF-297 Compression Fitting Connector
5A	ETF-297	1/4" to 3/8" Tube Compression Fitting Connector
5B	EBF-16-A	Single Solenoid Supply Kit includes two (2) Compression Nuts and two (2) Compression Sleeves
6	ETF-617-A	3/8" Bak-Chek® Tee Compression Fitting
7	ERF-2-A	Control Module Assembly includes Base Enclosure, Cover Enclosure, two (2) Gaskets, Solenoid Body, Solenoid Enclosure and Solenoid Filter Plug
8	EBF-79-A	Mounting Hardware Kit for Control Module Assembly includes four (4) Anchor Nuts, four (4) Toggle Nuts, four (4) Mounting Screws for Base Plate, four (4) Flat Washers, four (4) Anchors, and four (4) Metal Screws
—	ERF-3-A	Sensor Replacement Kit
—	EBF-1011-A	Solenoid Replacement Kit includes Solenoid Body, Solenoid Enclosure and Solenoid Filter Plug
—	EBF-1004-A	Solenoid Filter Replacement Kit includes Filter Screen Assembly and O-ring
—	ERF-15-A	Repair Kit for ERF-2-A Control Module Assembly includes Battery Holder with Leads and Connector
—	EBF-50	Control Module Replacement Gasket (two required)

Item No.	Part No.	Description
TRIM PLATES		
9A	ETF-662-A	4" (102 mm) Centerset Single-hole Trim Plate Kit (Standard)
9B	ETF-510-A	8" (204 mm) Centerset Single-hole Trim Plate Kit (Optional)
OPTIONAL MIXING VALVES		
10	MIX-60-A	Below Deck Mechanical Water Mixing Valve (BDM Variation)
11	MIX-135-A	Below Deck Thermostatic Water Mixing Valve (BDT Variation)
12	MIX-110-AA	Optimix® Deck Mounted Water Mixing Valve
REPLACEMENT BATTERY FOR SPOUT		
—	ERF-4	DL123A Lithium Spout Replacement Battery (two required)

For additional information about Sloan Mixing Valves or Trim Plates, consult our Installation Instructions and Maintenance Guides.

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.

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SLOAN VALVE COMPANY • 10500 Seymour Avenue • Franklin Park, IL 60131
Phone: 1-800-9-VALVE-9 or 1-847-671-4300 • Fax: 1-800-447-8329 or 1-847-671-4380
www.sloanvalve.com
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