

INSTALLATION INSTRUCTIONS FOR SENSOR ACTIVATED HAND WASHING FAUCETS



Model ETF-700-S-H
24 VAC, Sensor Activated
Hand Washing Faucet
With Surgical Bend Spout and
Shower Spray Head



Model ETF-700
24 VAC, Sensor Activated
Hand Washing Faucet
With Standard Spout and Laminar
Flow Spray Head



Model ETF-500
24 VAC, Sensor Activated
Hand Washing Faucet
With Standard Spout and Laminar
Flow Spray Head



Model ETF-500-S-H
24 VAC, Sensor Activated
Hand Washing Faucet
With Surgical Bend Spout and
Shower Spray Head

Compliant to: ASME A112.18.1 and CSA B125.1



LIMITED WARRANTY

Sloan Valve Company warrants its ETF-500 and ETF-700 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 (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.

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.

PRIOR TO INSTALLATION

Prior to installing the Sloan ETF-500 or ETF-700 Faucet, install the items listed below. Refer to Rough-in illustrations on Page 2.

- **When Using Plug-In Transformer** — Install electrical receptacle for plug-in transformer (120 VAC, 2 amp service for each ETF-233 (24 VAC, 35 VA) plug-in transformer used).
- **When Using Box Mount Transformer** — Install electrical wiring to transformer location (120 VAC, 2 amp service for each EL-248-40 (24 VAC, 40 VA) transformer used).
- Scrub or wash-up sink
- Drain line
- Hot and cold water supply lines or tempered water supply line

Multiple Faucets

Multiple faucets can be powered by a single transformer, provided that the transformer has been properly sized. Allow a minimum of 15 VA of current rating for each solenoid valve used. Refer to "Step 4 — Install Transformer" for further information.

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:

- **INSTALL ALL ELECTRICAL WIRING IN ACCORDANCE WITH NATIONAL/LOCAL CODES AND REGULATIONS.**
- **INSTALL ALL PLUMBING IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS.**
- **A 24 VAC STEP-DOWN TRANSFORMER MUST BE USED.**
- **USE APPROPRIATE PRECAUTIONS WHILE CONNECTING TRANSFORMER TO 120 VAC POWER SOURCE.**
- **DO NOT PLUG TRANSFORMER INTO POWER SOURCE (RECEPTACLE) UNTIL ALL WIRING IS COMPLETED. ALLOWING 24 VAC TRANSFORMER WIRES TO TOUCH OR SHORT WHILE POWER IS BEING SUPPLIED WILL**

CAUSE PERMANENT DAMAGE TO THE TRANSFORMER AND CIRCUIT CONTROL MODULE.

- **KEEP THREAD SEALANT OUT OF YOUR WATERWAY TO PREVENT COMPONENT PART DAMAGE! DO NOT USE ANY SEALANT ON COMPRESSION FITTINGS. FOR THREADED PIPE FITTINGS, DO NOT APPLY SEALANT TO THE FIRST TWO "STARTER" THREADS.**
- **FLUSH ALL WATER LINES UNTIL WATER IS CLEAR BEFORE CONNECTING SOLENOID TO SUPPLY STOPS.**

DO NOT INSTALL THE SPRAY HEAD UNTIL AFTER THE SUPPLY LINES HAVE BEEN FLUSHED.

FLOW RATE

The ETF-500-H and ETF-700-H Faucets with a shower spray head incorporate a 2.2 gpm (8.3 Lpm) maximum flow control. If water flow is too forceful, reduce flow to faucet by adjusting supply stops. If a pressure reducing valve has been installed, adjust valve until optimum spray is obtained. Best performance is obtained between 25 and 40 psi.

BAK-CHEK[®] TEE USAGE

When connecting the Sloan ETF-500 or ETF-700 Faucet to both hot and cold water supplies, a Bak-Chek[®] Tee is provided and required as illustrated in the Rough-in drawings on Page 2. Water temperature can be controlled by adjusting the supply stops.

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

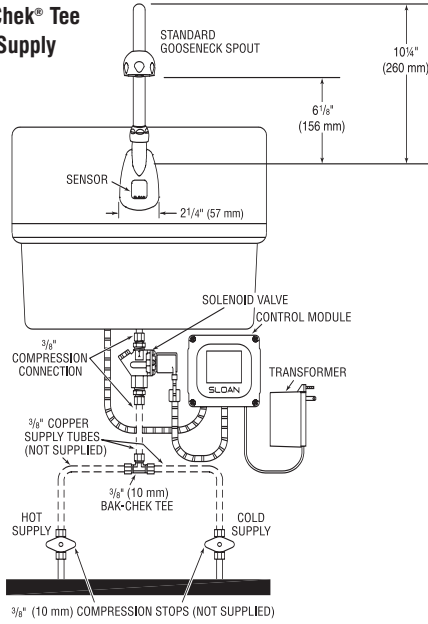
A Bak-Chek[®] Tee is not required or provided when a Temperature Mixing Valve is included with the faucet.

TOOLS REQUIRED FOR INSTALLATION

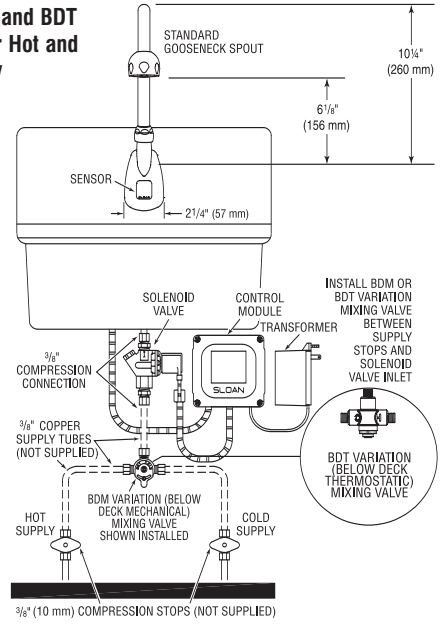
- Open end wrenches for hex sizes: 1/2", 5/8", 11/16", 15/16", 1-3/16"
- Slotted screwdriver (supplied)
- Pliers
- Pipe Wrench (ETF-500)
- Basin wrench
- Slotted screwdriver, 3/16"
- Phillips head screwdriver, #2
- Wire stripper/crimping tool

FAUCET ROUGH-IN

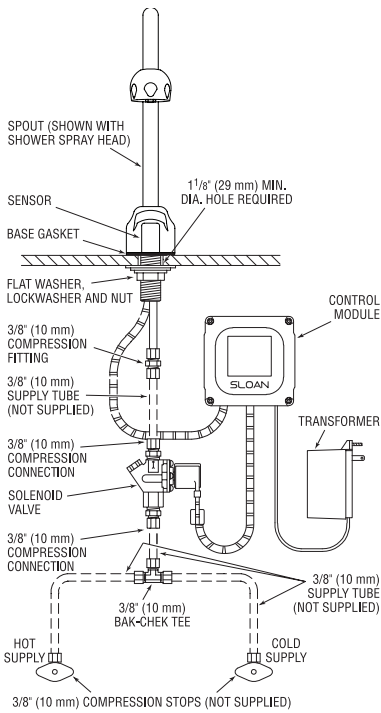
ETF-500 Faucet with Bak-Chek® Tee for Hot and Cold Water Supply



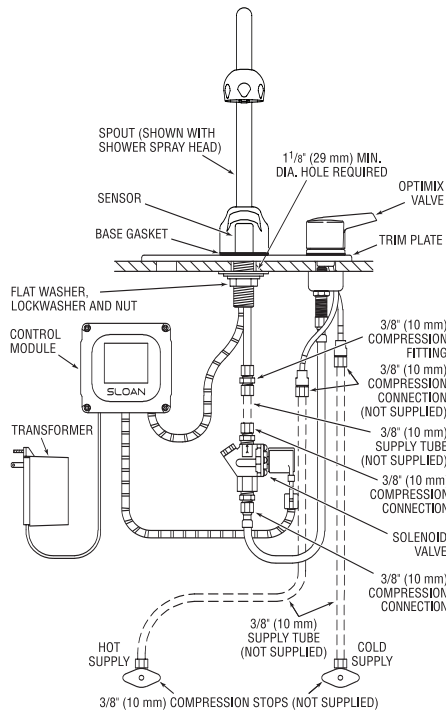
ETF-500 Faucet with BDM and BDT Variation Mixing Valves for Hot and Cold Water Supply



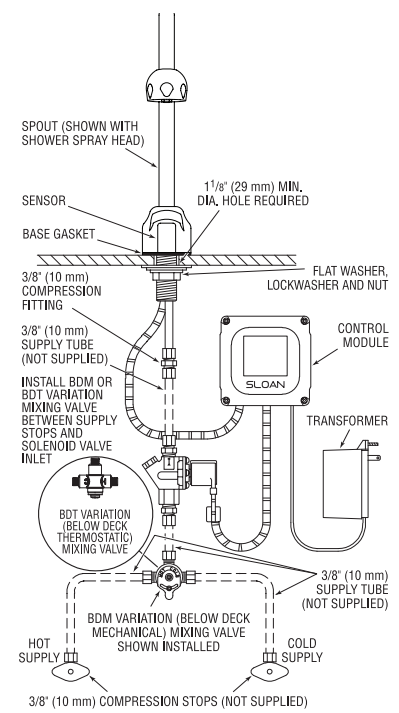
ETF-700 Faucet with Bak-Chek® Tee for Hot and Cold Water Supply



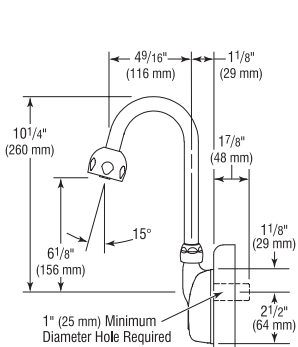
ETF-700 Faucet with ADM Variation Mixing Valve for Hot and Cold Water Supply (shown with 8 inch trim plate)



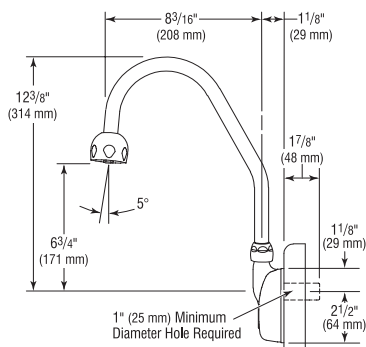
ETF-700 Faucet with BDM and BDT Variation Mixing Valves for Hot and Cold Water Supply



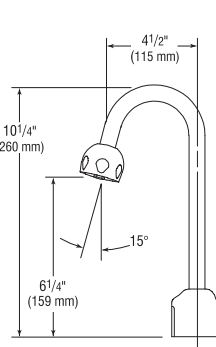
ETF-500-H with Standard Spout and Shower Spray Head



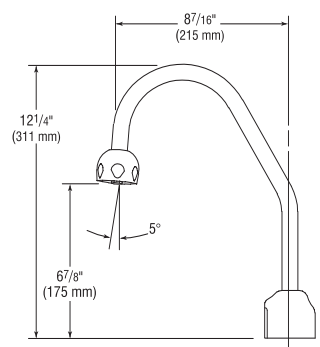
ETF-500-S-H with Surgical Bend Spout and Shower Spray Head



ETF-700-H with Standard Spout and Shower Spray Head



ETF-700-S-H with Surgical Bend Spout and Shower Spray Head

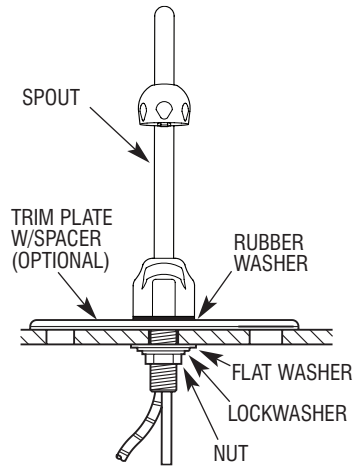


1A Install ETF-700 Faucet

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

- A** When optional Trim Plate is used, place Spacer between deck and Trim Plate making certain that Spacer is aligned with hole in Trim Plate and hole in deck.

- B** Insert Sensor Cable and Spout Shank through Rubber Washer and then through center deck hole.



- C** Secure using Flat Washer, Lockwasher and Nut supplied.

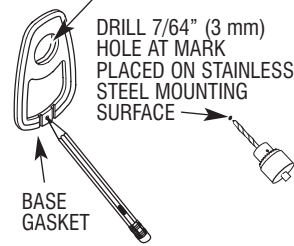
1B Install ETF-500 Faucet

OPTIONAL ANTI-ROTATION FEATURE

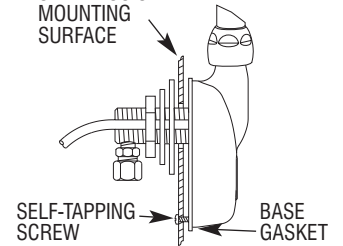
Note: The anti-rotation feature uses a screw to anchor the faucet in the vertical position and is intended for use **ONLY** on stainless steel sinks.

- A** Place the Base Gasket over the faucet mounting hole using it as a template.
- B** Mark the stainless steel mounting surface at the center of small hole at the bottom of Base Gasket.

FAUCET MOUNTING HOLE OF STAINLESS STEEL SURFACE



STAINLESS STEEL MOUNTING SURFACE



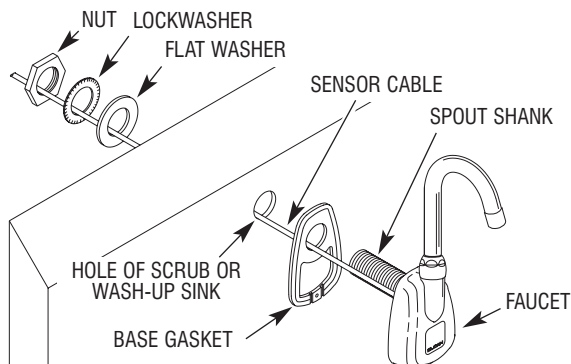
- C** Drill a 7/64" (3 mm) diameter hole through the stainless steel mounting surface at the location just marked.
- D** After Faucet body is mounted, insert the Self-Tapping Screw through the drilled hole and into the small hole in the back of the Faucet body. Tighten the Screw.

1B Install ETF-500 Faucet (Continued)

Note: When installing the faucet with a Sloan mixing valve, both these Installation Instructions AND those packaged with the mixing valve **MUST** be followed.

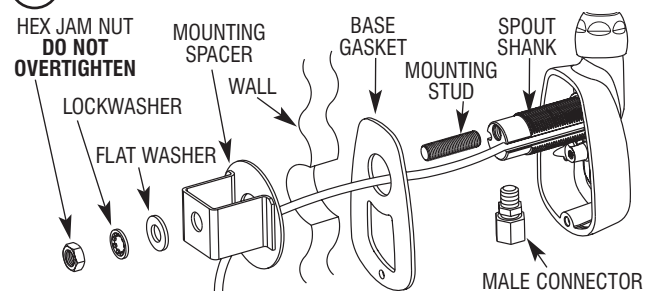
TO MOUNT ON A SURFACE LESS THEN .41 INCH (10 mm) THICK

- A** Route Sensor Cable through groove on side of Spout Shank.
- B** Insert Sensor Cable and Spout Shank through Base Gasket and Mounting Hole of sink.
- C** Secure Faucet with the Flat Washer, Lockwasher and Nut Supplied.



TO MOUNT ON A SURFACE BETWEEN .41 INCH (10 mm) AND 1 INCH (25 mm) THICK

- A** Screw Mounting Stud into end of Spout Shank.
- B** Route Sensor Cable through groove on side of Spout Shank.
- C** Insert Sensor Cable and Spout Shank through the Base Gasket and then through the mounting hole of scrub or wash-up sink.
- D** From behind wall, install Mounting Spacer onto Faucet Shank as illustrated. The Mounting Stud should protrude through the smaller hole of the Mounting Spacer.
- E** Secure using the Flat Washer, Lockwasher and Hex Jam Nut supplied. Do NOT overtighten the Hex Jam Nut.
- F** Install Male Connector into Spout Shank.

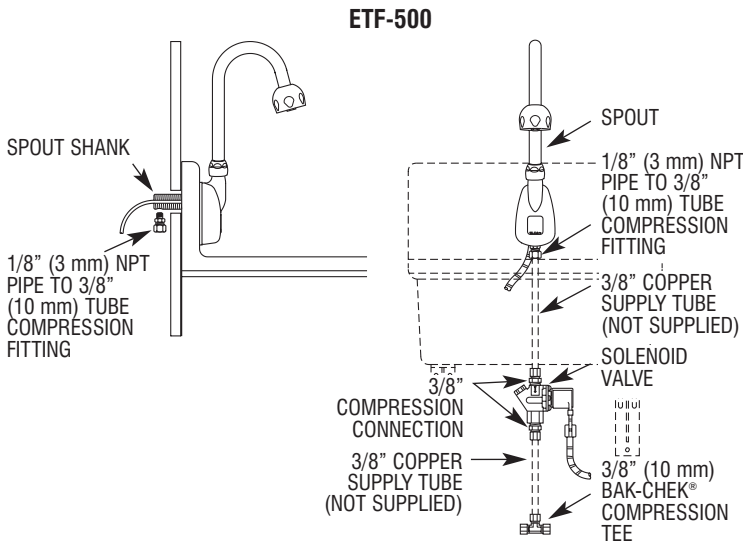


Note: Sloan Valve Company does **NOT** supply hardware necessary for mounting the faucet on surfaces thicker than 1" (25 mm) thick.

2 Install Solenoid Valve

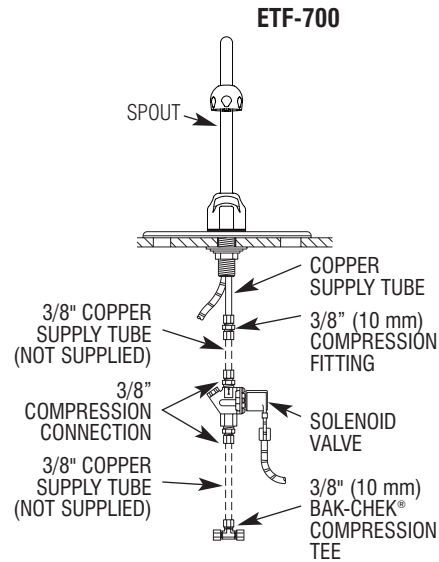
Note: Flow direction of Solenoid Valve is indicated by arrow on the Valve Body.

- A ETF-500 Faucet Only** — Thread Tube Compression Fitting into inlet hole at bottom of Spout Shank; tighten securely to prevent leaks.



IMPORTANT: Keep thread sealant out of your waterway to prevent component part damage! **DO NOT** use any sealant on compression fittings. For threaded pipe fittings, **DO NOT** apply sealant to the first two "starter" threads.

- A ETF-700 Faucet Only** — Install the 3/8 inch Straight Compression Fitting onto the Spout's copper Supply Tube.



- B All Faucet Models** — Connect 3/8 inch O.D. Supply Tube between Compression Connection on outlet side of Solenoid Valve and Compression Fitting on Spout.

3 Connect Supply Line(s) from Supply Stop to Solenoid Valve Inlet

Important: Keep thread sealant out of your waterway and prevent component part damage! Do not use sealant on compression fittings. When thread sealant is used, do not apply it to the first two "starter" threads.

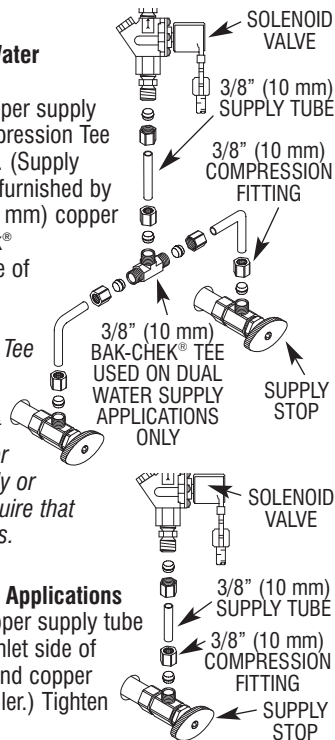
- A For Dual Line Hot and Cold Water Supply Applications**

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

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

- B For Single Line Water Supply Applications**

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



4 Install Transformer

Multiple Faucets

Multiple faucets can be powered by a single transformer that has been properly sized. Allow a minimum of 15 VA of current rating for each solenoid valve used. Refer to the following example to determine the required current rating for 3 OPTIMA faucets.

Example:

Total number of OPTIMA faucets:	3
Total number of solenoid valves:	3
Multiply by current rating:	15 VA

Minimum current rating of required transformer: 45 VA

Transformers Available with the ETF-500 and ETF-700 Faucets

Standard Plug-In †	ETF-233	120 VAC	35 VA
Standard Box Mount	EL-248-40	120 VAC	40 VA

† In Canada, use ETF-416 (120 VAC, 35 VA).

Optional Transformers Available from Sloan

Box Mount	EL-154	120 VAC	50 VA
Foot Mount	EL-208	120 VAC	100 VA
Box Mount	EL-342	240 VAC	50 VA

All Sloan transformers are 50/60 Hz.

Other transformers (not supplied by Sloan) may be used, provided they meet UL requirements for Class 2 transformers.

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

4 Install Transformer (Continued)

Plug-in Transformers

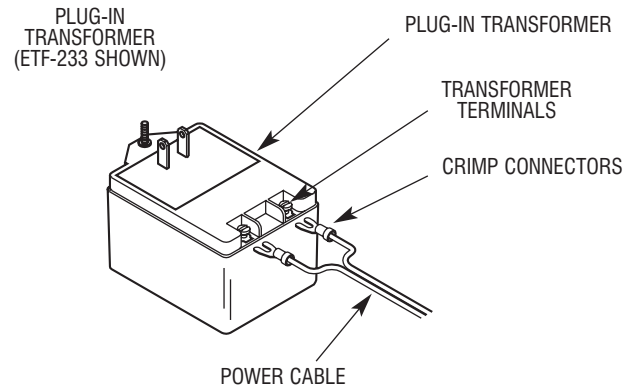
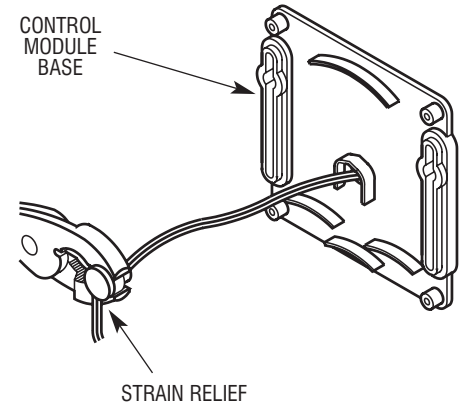
Important: DO NOT plug Transformer into receptacle until all wiring has been completed.

The Transformer is supplied with a 10 foot Cable; however, this Cable can and should be shortened to meet installation requirements.

- A** Strip ends of Transformer Power Cable approximately 3/16 to 1/4 inch (5 to 6 mm).
- B** Install Strain Relief 3 inches (76 mm) from one end of Power Cable.
- C** Insert Power Cable and Strain Relief into hole at back of Control Module. Install right angle Strain Relief so that Power Cable enters the Control Module from the bottom.

Important: Twist stranded ends of Power Cable before inserting into Terminal Block. Fraying of Stranded Power Cable Wire can cause a short and damage the Control Module and Transformer when powered.

- D** Connect Power Cable to Terminal Block on Connector Board. See Step 6.
- E** Install Crimp Connectors and connect Power Cable ends to Transformer Terminals.

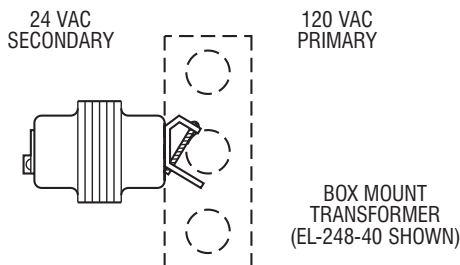


Box Mount Transformers

Important: DO NOT supply power to primary side of Transformer until all wiring has been completed.

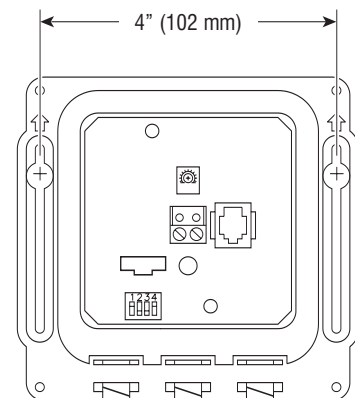
Mount Transformer on a metal electrical junction box (supplied by others). ("J" box should be mounted inside chase wall or above ceiling.) Install Transformer within 50 feet (15.24 meters) of Faucet. 18 gauge wire is recommended.

- A** Run wires from secondary side of Transformer to 3/8 inch (10 mm) hole at back of Control Module Enclosure. If necessary, wires can be run through wall and then inserted through hole in back of Control Module Enclosure.



5 Mount Control Module to Wall

- A** Install the Control Module in an appropriate location as shown in Rough-in. Control Module must be installed so that all cables enter from the bottom of the unit. When installed, Cables from the Spout and Solenoid Valve to the Control Module should have some slack.
- B** Mount Control Module to wall using Mounting Screws and Plastic Anchors.



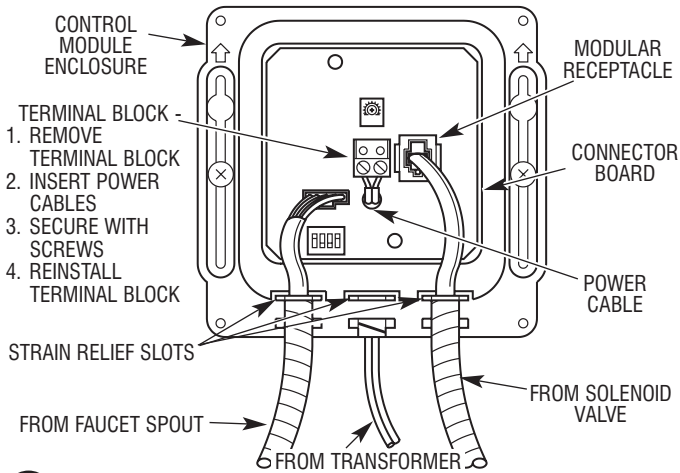
EXTENSION CABLES

Extension Cables are available as an option from Sloan to allow for installing the Control Module remote from the Faucet Spout and Solenoid Valve. Refer to the Parts List for available lengths.

6 Control Module Connection

A Route Cables from Solenoid Valve and Spout to the Control Module.

B Insert Solenoid Valve Connector into the Modular Receptacle on Connector Board.

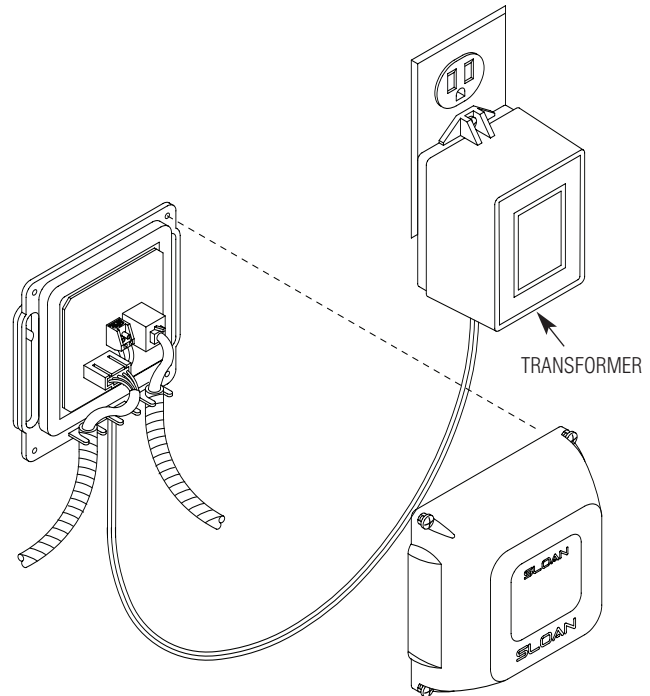


C Insert Locking Connector from Faucet Spout into mating Receptacle on Connector Board. Allow 3 to 4 inches (76 to 102 mm) of Cable to extend into the Control Module.

D Insert each Conduit Cable into a strain relief slot in the Control Module.

7 Plug In Transformer

A Plug Transformer into 120 VAC Receptacle.



8 Start-up

A Supply power to Transformer.

Note: The Control Module is equipped with two LED lights. When power is supplied by the Transformer, one LED will illuminate green. When Sensor is activated, this LED will change to red. A second red LED illuminates when Solenoid Valve is activated.

B Open Supply Stop(s). With Aerator removed, activate Faucet for 30 seconds by placing hands in front of Sensor. The Solenoid Valve should "click" and water should flow from the Spout. If this does not occur, refer to the Troubleshooting section of this installation instructions.

C Close Supply Stop(s) and install Spray Head in Spout using the Key provided. Reopen Supply Stop(s), activate Faucet and check for leaks.

9 Range Adjustment

The OPTIMA ETF-500 and ETF-700 Faucets are 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 UP 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.

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" (25 mm)).

9 Range Adjustment (continued)

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-500/ETF-700 Faucets leave the factory set with a 30 second Time Out.

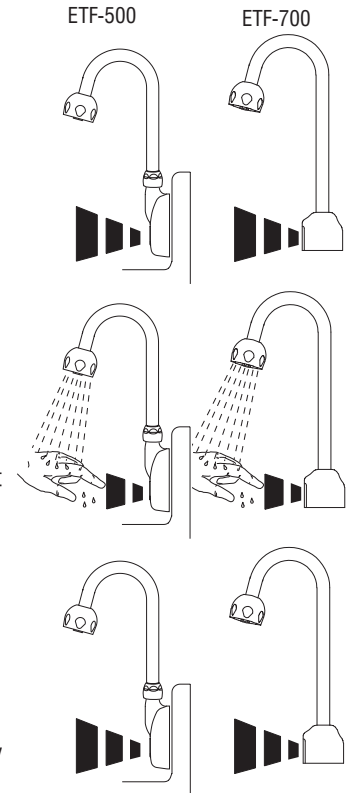
Note: The position of Dip Switch # 4 (range enhancer setting) does not affect Faucet Time Outs.

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

Install Control Module Cover using Screws provided. Refer to illustration in Step 7.

Test Faucet Operation

1. A continuous invisible beam of infrared light is emitted from the OPTIMA sensor located at the base of the lavatory faucet.
2. As the user's hands enter the beam's effective range (beneath the spray head), the beam is reflected back into the sensor receiver and activates the solenoid valve. Tempered water flows from the faucet into the sink until the hands are removed from the beam or until the faucet reaches an automatic time out limit setting.
3. When hands are moved away from the 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.



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 soap and water, then wipe dry with clean cloth or towel.

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

TROUBLESHOOTING GUIDE

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

1. PROBLEM: No water is delivered when Faucet is activated.

INDICATOR: If no LED lights illuminate:

CAUSE: No electricity is being supplied to Faucet.

SOLUTION: 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.

CAUSE: There is an electrical system malfunction.

SOLUTION: Reset electrical system. Unplug Sensor Connection. Disconnect power to circuit for ten (10) seconds. Reconnect.

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

CAUSE: There is an electrical system malfunction.

SOLUTION: Reset electrical system. Unplug Sensor Connection. Disconnect power to circuit for ten (10) seconds. Reconnect.

CAUSE: The Control Module circuit is "dead."

SOLUTION: 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:

CAUSE: Water supply stop(s) may be partially closed.

SOLUTION: Open supply stop(s) completely.

CAUSE: Debris is clogging Solenoid Filter.

SOLUTION: 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:

CAUSE: There is a direct short in the Solenoid or Solenoid Cable.

SOLUTION: 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:

CAUSE: Sensor range is set too long and is detecting the sink.

SOLUTION: Reduce Sensor detection range.

CAUSE: Sensor is faulty.

SOLUTION: Replace Sensor.

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

CAUSE: Sensor range is set too short.

SOLUTION: Increase Sensor detection range.

CAUSE: Sensor is faulty.

SOLUTION: Replace Sensor.

2. PROBLEM: Sensing Range is too short.

CAUSE: Extended Range Sensitivity is required.

SOLUTION: 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. PROBLEM: Faucet activates by itself (false triggers).

CAUSE: Sensor range is set too long.

SOLUTION: 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.).

CAUSE: Faucet has Surgical Bend Gooseneck Spout.

SOLUTION: For Long Range use (recommended for Surgical Bend Gooseneck Spout Faucet models), remove Range Jumper from upper right hand corner of Circuit Board. Adjust Range Potentiometer.

4. PROBLEM: Faucet delivers very low flow or just a dribble.

CAUSE: Water supply stop(s) may be partially closed.

SOLUTION: Open supply stop(s) completely.

CAUSE: Debris is clogging Solenoid Filter.

SOLUTION: Shut off water. Remove, clean, and reinstall Solenoid Filter or install Solenoid Valve repair kit ETF-1009-A.

CAUSE: Solenoid is worn or faulty.

SOLUTION: Rebuild with ETF-1009-A Solenoid Repair Kit or replace ETF-370-A Solenoid.

CAUSE: Debris is clogging Faucet Aerator or Spray Head.

SOLUTION: Shut off water. Remove Aerator or Spray Head (use Key if required). Clean and reinstall Aerator or Spray Head.

5. PROBLEM: 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).

CAUSE: Solenoid Valve is installed backward.

SOLUTION: Disconnect Solenoid. Reconnect Solenoid with water flow toward the Faucet (see arrow on Solenoid).

CAUSE: Debris is clogging Solenoid.

SOLUTION: Remove and clean Solenoid Operator. If necessary, rebuild with ETF-1009-A Repair Kit.

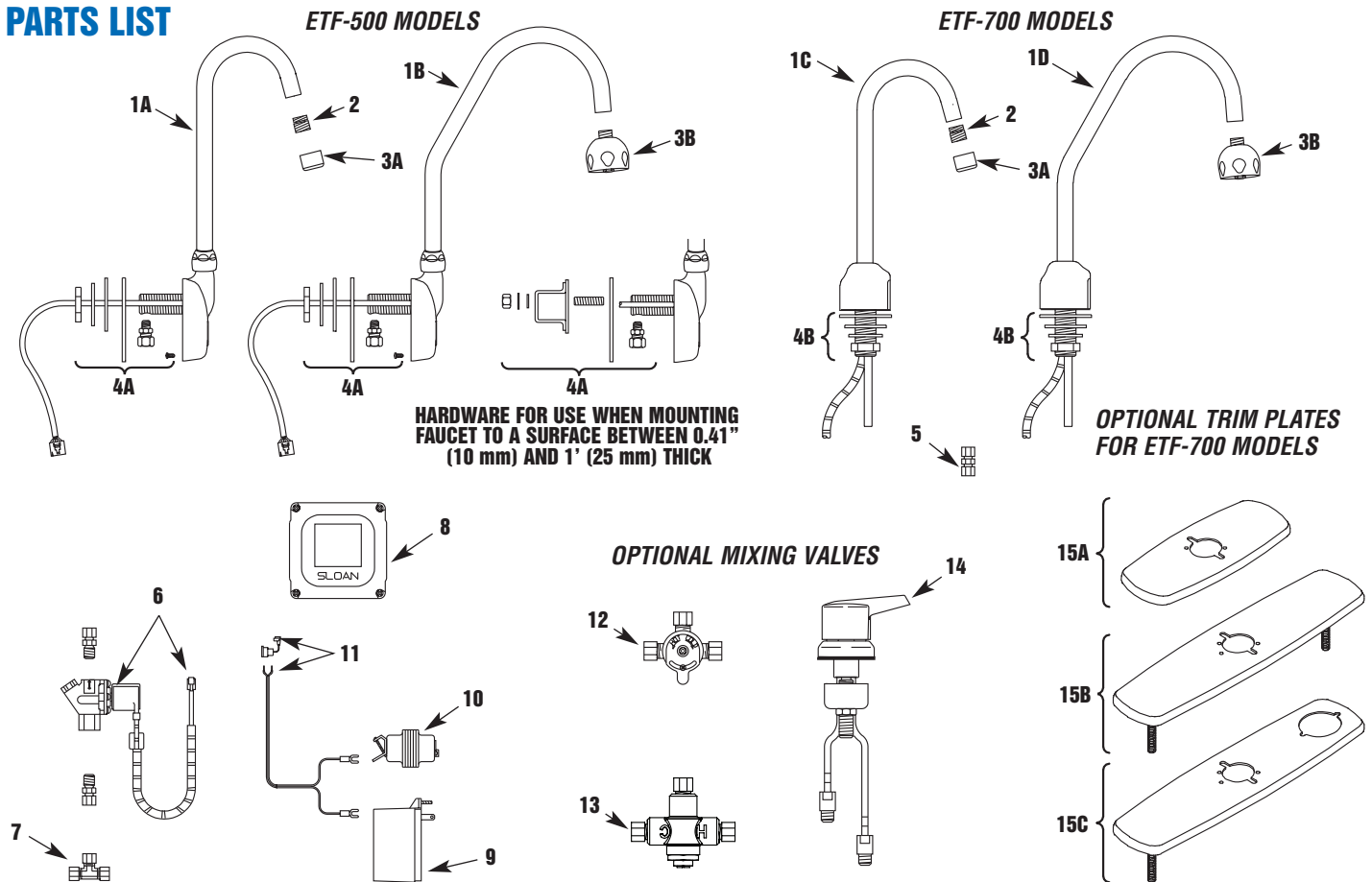
CAUSE: Seat in Solenoid Valve body is damaged or pitted.

SOLUTION: Replace with ETF-370-A Solenoid.

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 No.	Part No.	Description
COMPONENTS SUPPLIED WITH FAUCET		
1A	—	Faucet/Sensor Assembly, Standard Gooseneck Spout (ETF-500)
1B	—	Faucet/Sensor Assembly, Surgical Bend Gooseneck Spout (ETF-500-S)
1C	—	Faucet/Sensor Assembly, Standard Gooseneck Spout (ETF-700)
1D	—	Faucet/Sensor Assembly, Surgical Bend Gooseneck Spout (ETF-700-S)
2	ETF-178	Aerator Adapter (not required for Shower Spray Head)
3A	ETF-801	0.5 gpm (1.9 Lpm) Laminar Flow Spray Head
	ETF-621	2.2 gpm (8.3 Lpm) Laminar Flow Spray Head
3B	AC-55-A	2.2 gpm (8.3 Lpm) Shower Spray Head
4A	EBF-110-A	Spout Mounting Kit, includes Base Gasket, Large Flat Washer, Large Lockwasher, Large Nut, Mounting Stud, Small Flat Washer, Small Lockwasher, Small Nut, Anti-rotation Screw, Mounting Spacer, and ETF-591 Tube Compression Fitting Connector
	ETF-591	1/8" NPT Pipe to 3/8" Tube Compression Fitting Connector
4B	ETF-503-A	Spout Mounting Kit, includes Rubber Washer, Flat Washer, Lockwasher, Mounting Nut, and ETF-530 Union Compression Fitting
5	ETF-530	3/8" x 3/8" Union Compression Fitting
6	ETF-370-A	Solenoid Valve, 24 VAC, includes Wire Harness
7	ETF-617-A	3/8" Bak-Chek® Tee Compression Fitting
8	ETF-450-A	Control Module Assembly
9	ETF-233	Plug-In Transformer
10	EL-248-40	Box Mount Transformer
11	ETF-458-A	Power Cable with Strain Relief and Crimp Connectors (Transformer to Control Module)

OPTIONAL MIXING VALVES		
12	MIX-60-A	Below Deck Mechanical Water Mixing Valve (BDM Variation)
13	MIX-135-A	Below Deck Thermostatic Water Mixing Valve (BDT Variation)
14	MIX-110-AA	Optimix® Deck Mounted Water Mixing Valve (ADM Variation) (only available for ETF-700 faucet)

Item No.	Part No.	Description
OPTIONAL TRIM PLATES FOR ETF-700 MODELS		
15A	ETF-697-A	4" (102 mm) Centerset Trim Plate Kit (Faucet Only); includes Back-up Spacer, Self-tapping Screw and CP Single Hole Trim Plate Assembly
15B	ETF-608-A	8" (203 mm) Centerset Trim Plate Kit (Faucet Only); includes two (2) Finger Nuts, two (2) Washer Gaskets, two (2) Fender Washers, Base Gasket, Back-up Spacer and CP Single Hole Trim Plate Assembly
15C	ETF-106-A	8" (203 mm) Centerset Trim Plate Kit for Faucet with Optional Mixing Valve, includes Back-up Spacer, Self-tapping Screw and CP Dual Hole Trim Plate Assembly
—	MIX-101-A	4" (102 mm) Centerset Trim Plate Kit for Faucet with Optional Mixing Valve, includes Back-up Spacer, Self-tapping Screw and CP Dual Hole Trim Plate Assembly (not shown)

FAUCET CABLE EXTENSION CORDS		
Faucet to Control Module		Solenoid to Control Module
ETF-1005-26	26" (0.7 meter) Length	ETF-1003-36 36" (0.9 meter) Length
ETF-1005-36	36" (0.9 meter) Length	ETF-1003-48 48" (1.2 meter) Length
ETF-1005-72	72" (1.8 meter) Length	ETF-1003-72 72" (1.8 meter) Length
ETF-1005-108	108" (2.7 meter) Length	ETF-1003-108 108" (2.7 meter) Length

SOLENOID VALVE REPAIR KIT		
—	ETF-1009-A	Solenoid repair kit
—	ETF-437-A	Solenoid compression fitting kit

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)