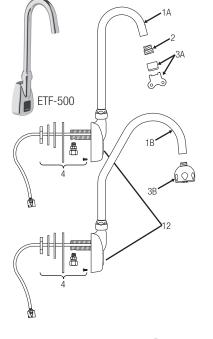
# SLOAN.

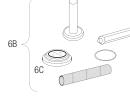
# OLD Optima® ETF-500/ETF-500-S

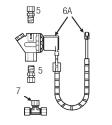


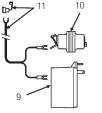


<sup>++</sup> TO MOUNT FAUCET ON A SURFACE BETWEEN 0.41" (10 MM) AND 1.00" (25 MM) THICK, USE THE HARDWARE SHOWN BELOW.

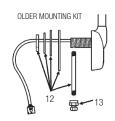












# **New Base Gasket**

The new base gasket (in production since October 1999) is shown at right. An older base gasket design did not have the u-shaped drainage hole.



PARTS L	IST-ETF-	500 FAUCET
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Item	Codo No	Dout No.	Description
No.	Code No.	Part No.	Description
1A.	0365778	ETF-772-A-ST	Faucet/Sensor Assembly with Standard Gooseneck Spout
1B.	0365783	ETF-772-A-SU	Faucet/Sensor Assembly with Surgical Bend Gooseneck Spout
2.	0305784	ETF-178	Aerator Adapter for Spray Heads (not required for AC-55-A Shower Spray Head)
3A.	0365147	ETF-621-A	2.2 gpm (8.3 Lpm) Aerator Spray Head with Key (female thread)
	0365793	ETF-839	0.35 gpm (1.3 Lpm) Multi-Lam Spray Head
	0305927	ETF-435	Replacement Key ONLY
3B.	0328134	AC-55-A	Shower Spray Head Assembly, 2.2 gpm (8.3 Lpm)
4.	0315060	EBF-110-A	Faucet Mounting Kit includes Base Gasket, large Flat Washer, large Lock Washer, large Nut, Mounting Spacer, Mounting Stud, small Flat Washer, small Lock Washer, small Nut, Anti-Rotation Screw, and Compression Fitting Connector (male)
_	0365152	ETF-591	1/8" NPT Pipe to 3/8" Tube Male Compression Fitting Connector
5.	3365676	ETF-437-A	Single Solenoid Supply Kit includes, two (2) Compression Fittings, Compression Nut, and Ferrule
6A.	0305849	ETF-370-A	24 VAC Solenoid Valve Assembly includes 18" (457 mm) armored Cable and two (2) Terminal Housings
6B	3305577	ETF-1009-A	Solenoid Valve Repair Kit includes Replacement Filter, Guide, Armature Spring, Diaphragm and Washer
6C.	3375003	MCR-1003-A	Diaphram only
7.	3365461	ETF-617-A	Bak-Chek <sup>®</sup> "T" Assembly
8.	3365000	ETF-450-A	Control Module Assembly includes splashproof Junction Box and Junction Box Mounting Kit
9.	0365534	ETF-233	120V/35VA Plug-In Transformer
10.	0345370	EL-248-40	24V/40VA Box Mount Transformer
11.	0365001	ETF-458-A	Input Power Cable (Transformer to Control Module) includes Strain Relief and two (2) Terminal Crimp Connectors
12.	0365097	ETF-568-A	Sensor Only

#### See page 157 for faucet cable extension cords.

---- = Not shown in illustration

# **OLD MOUNTING KIT AND FAUCET SHANK**

12.	<b>N/A</b> <sup>††</sup>	EBF-110-A	Old Faucet Mounting Kit included 3/8" Water Supply Tube, Base Gasket, large Flat Washer, large Lock Washer, large Nut, and Compression Fitting Connector (order Items 4 and 13 as replacement parts)
13.	0365058	ETF-547	1/8" NPT Pipe to 3/8" Tube Female Compression Fitting Connector

The new mounting kit (in production since June 1999; Item 4 shown at left) includes parts for installation on both thin and thick surfaces, an ETF-591 male compression fitting, and an anti-rotation screw for installation on sheet metal surfaces less than 0.41" (10 mm) thick. For surfaces between 0.41" (10 mm) and 1.00" (25 mm) thick, use the mounting spacer and mounting stud hardware. The faucet sensor cable is threaded through a groove on the side of the shank.

The older mounting kits (Items 12 and 13) can be identified by a copper supply tube attached to the faucet shank, requires an ETF-547 compression fitting, and threads the faucet sensor cable through the interior of the shank.



# OLD Optima® ETF-500/ETF-500-S

# TROUBLESHOOTING GUIDE

#### 1. No water is delivered when faucet is activated.

INDICATOR: If no LED lights illuminate:

- A. No electricity is being supplied to faucet. 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.
- B. There is an electrical system malfunction. Reset electrical system. Unplug sensor connection. Disconnect power to circuit for ten (10) seconds. Reconnect.

INDICATOR: If the GREEN LED illuminates when power is reconnected:

- C. There is a short in the Sensor. Replace sensor. Refer to individual faucet parts diagram for appropriate sensor assembly. **NOTE:** GREEN LED may illuminate immediately after sensor disconnection.
- D. There is a short in the solenoid or solenoid cable. Replace ETF-370-A solenoid.

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

- E. There is an electrical system malfunction. Reset electrical system. Unplug sensor connection. Disconnect power to circuit for ten (10) seconds. Reconnect.
- F. The control module circuit is not working properly. 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:

- G. Water supply stop(s) may be partially closed. Open stop(s) if closed.
- H. Debris is clogging solenoid filter. 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: NOTE: Applies only to REVISION 2 MODULES.

I. There is a direct short in the solenoid or solenoid cable. Replace with  $\ensuremath{\mathsf{ETF}}\xspace{-370-A}$  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:

- J. Sensor range is set too long and is detecting the sink. Reduce sensor detection range.
- K. Sensor is not working properly. Replace sensor. Refer to individual faucet parts diagram for appropriate sensor assembly.

NDICATOR: If GREEN LED illuminates BUT does NOT change to red when hands are placed in the sensor's detection zone:

L. Sensor range is set too short. Increase sensor detection range.

M. Sensor is not working properly. Replace sensor. Refer to individual faucet parts diagram for appropriate sensor assembly.

### 2. Sensing range is too short.

A. Extended range sensitivity is required. 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).

B. Faucet has surgical bend gooseneck spout. 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. **NOTE:** Applies only to REVISION 2 MODULES.

# 3. Faucet activates by itself (false triggers).

A. Sensor range is set too long. Decrease range by adjusting range potentiometer counterclockwise. If necessary, flip dip switch number 4 into the "UP" (reduced range sensitivity) position. Check surroundings for factors that contribute to sensor range detection problems (bright lights, highly reflective surfaces, sunlight, etc.).

#### 4. Faucet delivers very low flow or just a dribble.

- A. Water supply stop(s) may be partially closed. Open stop(s).
- B. Debris is clogging solenoid filter. Shut off water. Remove, clean, and reinstall solenoid filter.
- C. Solenoid is worn or not working properly. Rebuild with ETF-1009-A solenoid repair kit or replace ETF-370-A solenoid.
- D. Debris is clogging faucet aerator or spray head. Shut off water. Use key if required to remove. Then clean and reinstall aerator or spray head.

# 5. 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).

- A. Solenoid valve is installed backward. Disconnect solenoid. Reconnect solenoid with water flow towards the faucet (see arrow on solenoid).
- B. Debris is clogging solenoid. Remove and clean solenoid operator. If necessary, rebuild with ETF-1009-A repair kit.
- C. Seat in solenoid valve body is damaged or pitted. Replace with ETF-370-A solenoid.

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