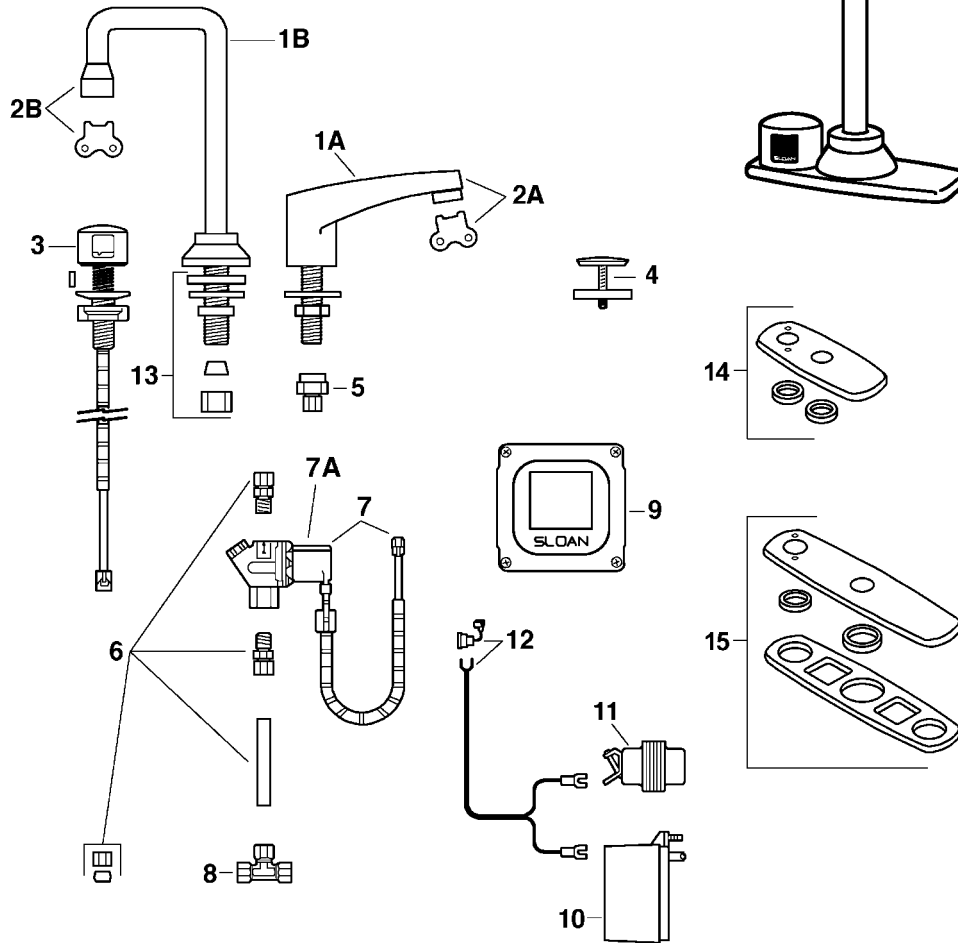


SLOAN

ETF-660, 770

For old-style faucets. ETF-66 and ETF-77 faucets manufactured before 1996 use an # 8462 control module with # 52857 sensor.



1A	# SP4385	Faucet Spout Assembly	6	# 8634	Solenoid Supply Kit
1B	# 51021	Gooseneck Faucet Assembly	7	# 8367	Solenoid Valve Assembly
2A	# 59173	Male Spray Head w/Key - 0.56 gpm		# 8633	Solenoid Valve Repair Kit Includes replacement filter
	# 54683	Male Aerator Spray Head w/Key - 2.2 gpm	8	# 54685	Tee Compression Fitting
	# 54702	Male Laminar Flow Spray Head - 2.2 gpm	9	# 8462	Control Module Assembly
	# SP4386	Male Spray Head w/Key - 2.0 gpm	10	# 8377	Plug-In Transformer
	# 54693	Key Only	11	# 54688	Box Mount Transformer
2B	# 59857	Female Spray Head w/Key	12	# 54689	Input Power Cable
	# 55670	Female Aerator Spray Head w/Key	13	# 54690	Spout Mounting Kit
	# 54677	Female Laminar Flow Spray Head	14	# 54676	4" Trim Plate Kit
	# 54693	Key Only	15	# 54704	8" Trim Plate Kit
3	# 52857	Old Style Sensor Assembly (Obsolete - Use # 8462 & # 52857)	<i>Faucet Cable Extension Cords available on request</i>		
4	# 4625	Cock Hole Cover			
5	# 54687	Tube Fitting Connector			

TROUBLESHOOTING GUIDE FOR ETF-660 AND ETF 770 SLOAN ELECTRONIC FAUCET

NOTE: Revision 2 #8462 (ETF-450-A) Control Modules (manufactured after April 1999) have built-in reset fuses to protect the circuitry if a sensor or solenoid fails or shorts. In earlier models, a sensor or solenoid short or failure could also result in an # 8462 (ETF-450-A) Control Module failure.

Note 2: Remove cover from # 5462 (ETF-450-A) 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 illuminates when the power is reconnected:

CAUSE: There is a short in the Sensor.

SOLUTION: Replace Sensor. Refer to individual faucet parts diagram for appropriate Sensor Assembly.

Note: GREEN LED may illuminate immediately after Sensor disconnection.

CAUSE: There is a short in the Solenoid or Solenoid cable.

SOLUTION: Replace # 8367 (ETF-370-A) Solenoid.

INDICATOR: If the GREEN LED does NOT illuminate when the 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 # 8462 (ETF-450-A) Control Module.

INDICATOR: If the 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) if closed.

CAUSE: Debris is clogging Solenoid Filter

SOLUTION: Shut off water supply. Remove, clean and reinstall Solenoid Filter.

INDICATOR: If the GREEN LED illuminates AND changes to RED when hands are 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.

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

SOLUTION: Replace with an #8367 (ETF-370-A) solenoid.

INDICATOR: If the GREEN/RED LED illuminates AND changes to RED when hands are NOT in the sensor's detection zone, BUT the RED solenoid LED (in upper left corner of circuit) does NOT illuminate.

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

SOLUTION: Reduce Sensor detection range.

CAUSE: Sensor is faulty

SOLUTION: Replace Sensor. Refer to individual faucet parts diagram for appropriate Sensor Assembly.

INDICATOR: If the 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. Refer to individual faucet parts diagram for appropriate Sensor Assembly.

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).

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.

Note: Applies only to REVISION 2 MODULES.

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

CAUSE: Water Supply Stop(s) may be partially closed.

SOLUTION: Open stop(s).

CAUSE: Debris is clogging Solenoid Filter.

SOLUTION: Shut off water. Remove, clean, and reinstall Solenoid Filter.

CAUSE: Solenoid is worn or faulty.

SOLUTION: Rebuild with # 8633 (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. Use key if required to remove. Then 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 towards the faucet (see arrow Solenoid).

CAUSE: Debris is clogging Solenoid

SOLUTION: Remove and clean Solenoid operator. If necessary, rebuild with # 8633 (ETF-1009-A) Repair Kit.

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

SOLUTION: Replace with # 8367 (ETF-370-A) Solenoid.

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TECHNICAL ASSISTANCE !**