OPTIMA ETF-80 Faucet
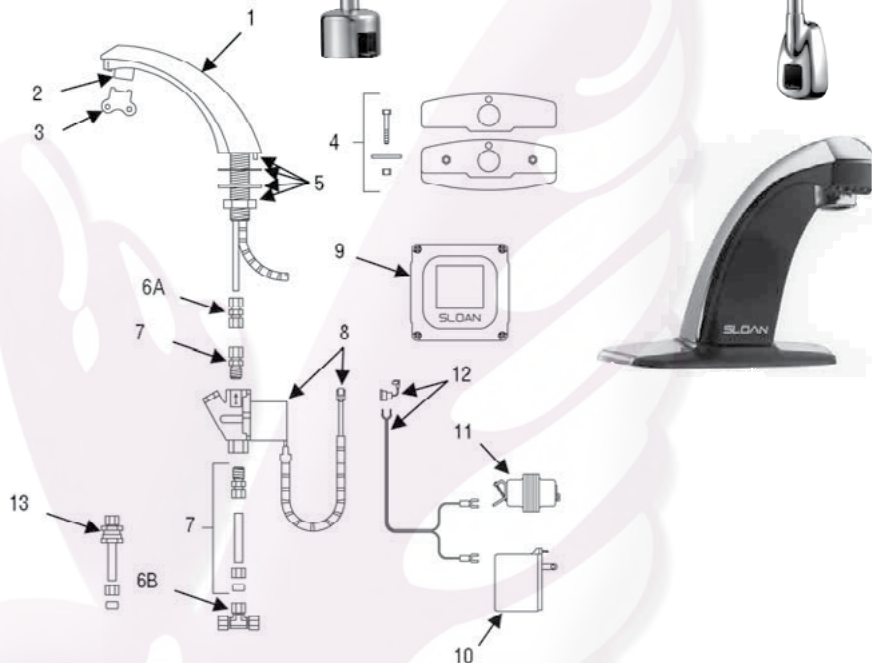

Old-Style Faucets

ETF-80 faucets manufactured before 1992 had all their electronic circuitry located within the body of the spout.

Replacement parts (including sensor components) are available in **ETF-1006-A** Repair Kits (**3305560**).

Parts List—ETF-80 Faucet

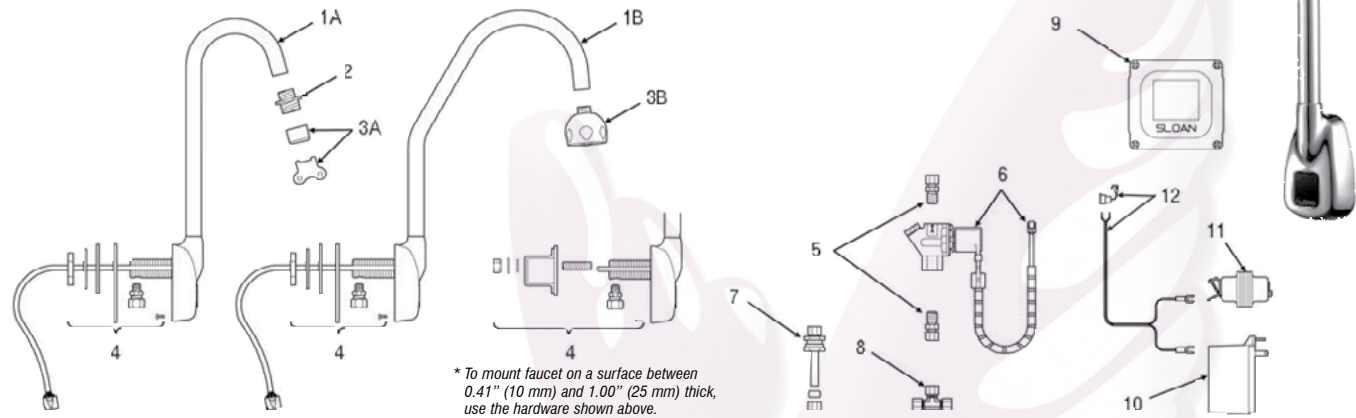| Item Number	Code Number	Part Number	Description
1	0305613	ETF-250-A	Faucet and Sensor Assembly (*ETF-80*)
	3305536	ETF-398-A	Fiber Optic Sensor Assembly Only
2	3365091	ETF-1021-A	0.5 gpm (1.9 Lpm) Spray Head with Key (female thread)
	3365090	ETF-1022-A	2.2 gpm (8.3 Lpm) Aerator Spray Head with Key (female thread)
	0305612	ETF-237	2.2 gpm (8.3 Lpm) Laminar Flow Spray Head (female thread)
3	0305927	ETF-435	Replacement Key ONLY for *ETF-1021-A* Spray Head and *ETF-1022-A* Aerator Spray Head (NOT required for *ETF-237* Laminar Flow Spray Head)
4	3365466	ETF-295-A	4" (102 mm) Centerset Trim Plate Kit for Faucet (Faucet Only) includes two (2) Nuts, two (2) Hex Screws, two (2) Flat Washers, Single Hole Cover Plate, and CP Base Plate
—	3365467	ETF-299-A	4" (102 mm) Centerset Trim Plate Kit for Faucet with Optional Mixing Valve includes two (2) Nuts, two (2) Hex Screws, two (2) Fl Washers, Dual Hole Cover Plate, and CP Base Plate (not shown)
5	0305626	ETF-290-A	Faucet Mounting Kit includes Rubber Gasket, Mounting Washer, Mounting Nut, and *ETF-297* Compression Fitting Connector
6A	0305736	ETF-297	1/4" to 3/8" Compression Fitting Connector
6B	0305728	ETF-259	3/8" Tee Compression Fitting
7	3365676	ETF-437-A	Single Solenoid Supply Kit includes Supply Tube, two (2) *ETF-61* Compression Fittings, Compression Nut, and Ferrule
8	0305849	ETF-370-A	24 VAC Solenoid Valve Assembly includes 18" (153 mm) armored Cable and two (2) Terminal Housings
9	3365000	ETF-450-A	Control Module Assembly includes splashproof Junction Box and Junction Box Mounting Kit
10	0365534	ETF-233	120V/35VA Plug-In Transformer
11	0345370	EL-248-40	24V/40 VA Box Mount Transformer
12	0365001	ETF-458-A	Input Power Cable (Transformer to Control Module) includes Strain Relief and two (2) Terminal Crimp Connectors
13	3365001	ETF-470-A	Back Check
—	3305560	ETF-1006-A	Repair Kit for old-style *ETF-80* Faucets (manufactured before 1993) includes Hex Screw, 5/64" Hex Wrench, Cable Assembly, Hos Clamp, 5-connector Housing, *ETF-435* Key for Spray Heads, Access Plate/Sensor Assembly, and *ETF-450-A* Control Module Assy
—	3305577	ETF-1009-A	Solenoid Valve Repair Kit includes Replacement Filter
FAUCET CABLE EXTENSION CORDS			
—	0365042	ETF-1005-26	Faucet to Control Module Extension Cord; 26 inch (0.7 meter) Length
—	0365861	ETF-1005-36	Faucet to Control Module Extension Cord; 36 inch (0.9 meter) Length
—	0305862	ETF-1005-72	Faucet to Control Module Extension Cord; 72 inch (1.8 meter) Length
—	0305863	ETF-1005-108	Faucet to Control Module Extension Cord; 108 inch (2.7 meter) Length
—	0365838	ETF-1003-36	Solenoid to Control Module Extension Cord; 36 inch (0.9 meter) Length
—	0365053	ETF-1003-48	Solenoid to Control Module Extension Cord; 48 inch (1.2 meter) Length
—	0365839	ETF-1003-72	Solenoid to Control Module Extension Cord; 72 inch (1.8 meter) Length

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OPTIMA ETF-500 Faucet

* To mount faucet on a surface between
0.41" (10 mm) and 1.00" (25 mm) thick,
use the hardware shown above.

Parts List—ETF-500 Faucet

| Item Number	Code Number	Part Number	Description
1A	**0365111**	*ETF-561-A*	Faucet/Sensor Assembly with Standard Gooseneck Spout (*ETF-500*)
1B	**0365112**	*ETF-564-A*	Faucet/Sensor Assembly with Surgical Bend Gooseneck Spout (*ETF-500-S*)
—	**0365097**	*ETF-568-A*	Sensor Housing and Cable Assembly for *ETF-500* and *ETF-500-S* Faucets
2	**0305784**	*ETF-178*	Aerator Adapter for Spray Heads (not required for *AC-55-A* Shower Spray Head)
3A	**3365091**	*ETF-1021-A*	0.5 gpm (1.9 Lpm) Spray Head with Key (female thread)
	3365090	*ETF-1022-A*	2.2 gpm (8.3 Lpm) Aerator Spray Head with Key (female thread)
	0305612	*ETF-237*	2.2 gpm (8.3 Lpm) Laminar Flow Spray Head (female thread)
	0305927	*ETF-435*	Replacement Key ONLY for *ETF-1021-A* Spray Head and *ETF-1022-A* Aerator Spray Head (NOT required for *ETF-237* Laminar Flow Spray Head)
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 Lockwasher, large Nut, Mounting Spacer, Mounting Stud, small Flat Washer, small Lockwasher, small Nut, Anti-Rotation Screw, and *ETF-591* 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 Supply Tube, two (2) *ETF-61* Compression Fittings, Compression Nut, and Ferrule
6	**0305849**	*ETF-370-A*	24 VAC Solenoid Valve Assembly includes 18" (153 mm) armored Cable and two (2) Terminal Housings
7	**3365001**	*ETF-470-A*	Back Check
8	**0305728**	*ETF-259*	3/8" Tee Compression Fitting
9	**3365000**	*ETF-450-A*	Control Module Assembly includes splashproof Junction Box and Junction Box Mounting Kit
10	**0365534**	*ETF-233*	120V/35VA Plug-In Transformer
11	**0345370**	*EL-248-40*	24V/40VA Box Mount Transformer
12	**0365001**	*ETF-458-A*	Input Power Cable (Transformer to Control Module) includes Strain Relief and two (2) Terminal Crimp Connectors
13	**n/a**	*EBF-110-A*	Old Faucet Mounting Kit included 3/8" Water Supply Tube, Base Gasket, large Flat Washer, large Lockwasher, large Nut, and *ETF-547* Compression Fitting Connector (order items 4 and 14 as replacement parts)
14	**0365058**	*ETF-547*	1/8" NPT Pipe to 3/8" Tube Female Compression Fitting Connector
—	**3305577**	*ETF-1009-A*	Solenoid Valve Repair Kit includes Replacement Filter

FAUCET CABLE EXTENSION CORDS

—	**0365042**	*ETF-1005-26*	Faucet to Control Module Extension Cord; 26 inch (0.7 meter) Length
—	**0365861**	*ETF-1005-36*	Faucet to Control Module Extension Cord; 36 inch (0.9 meter) Length
—	**0305862**	*ETF-1005-72*	Faucet to Control Module Extension Cord; 72 inch (1.8 meter) Length
—	**0305863**	*ETF-1005-108*	Faucet to Control Module Extension Cord; 108 inch (2.7 meter) Length
—	**0365838**	*ETF-1003-36*	Solenoid to Control Module Extension Cord; 36 inch (0.9 meter) Length
—	**0365053**	*ETF-1003-48*	Solenoid to Control Module Extension Cord; 48 inch (1.2 meter) Length
—	**0365839**	*ETF-1003-72*	Solenoid to Control Module Extension Cord; 72 inch (1.8 meter) Length
—	**0365840**	*ETF-1003-108*	Solenoid to Control Module Extension Cord; 108 inch (2.7 meter) Length

Mounting Kit and Faucet Shank

*The new mounting kit (in production since June 1999; part 4 shown on the 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 kit (part 13 shown below) 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.*
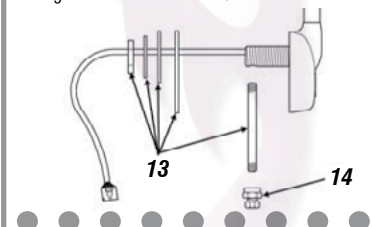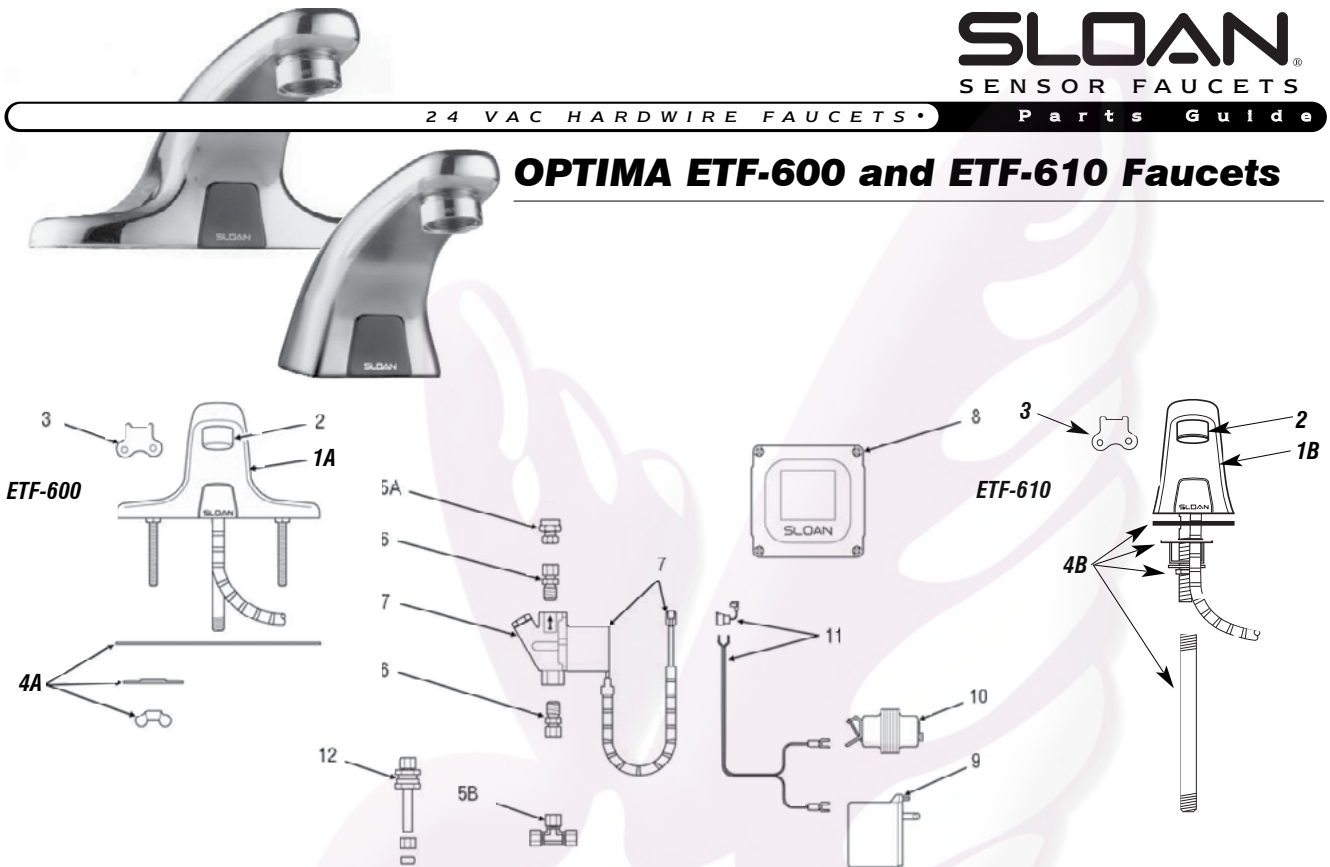

New Base Gasket

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

SLOAN
SENSOR FAUCETS
Parts Guide

OPTIMA ETF-600 and ETF-610 Faucets

ETF-600

ETF-610

Parts List—ETF-600 and ETF-610 Faucets

Item Number	Code Number	Part Number	Description
1A	0365086	ETF-543-A	Faucet and Sensor Assembly (ETF-600)
1B	0365117	ETF-570-A	Pedestal Faucet and Sensor Assembly (ETF-610)
—	0365070	ETF-542-A	Sensor Module Only (for ETF-600 and ETF-610 faucets) includes 18" (153 mm) armored Cable, Shroud, and Housing for Sensor Window
2	3365092	ETF-1023-A	0.5 gpm (1.9 Lpm) Spray Head with Key (male thread)
	3365093	ETF-1024-A	2.2 gpm (8.3 Lpm) Aerator Spray Head with Key (male thread)
	0305607	F-175-L	2.2 gpm (8.3 Lpm) Laminar Flow Spray Head (male thread)
3	0305927	ETF-435	Replacement Key Only for ETF-1023-A Spray Head and ETF-1024-A Aerator Spray Head (NOT required for F-175-L Laminar Flow Spray Head)
4A	3365088	ETF-546-A	Faucet Mounting Kit for ETF-600 includes Base Gasket, two (2) Slotted Mounting Washers, two (2) Wing Nuts, and ETF-547 Compression Fitting Connector
4B	0315085	EBF-123-A	Faucet Mounting Kit for ETF-610 includes Spacer, Base Gasket, 1/4" NPSM Hex Nut, Washer, 9/16" Lockwasher, ETF-547 Compression Fitting Connector, and 3/8" RB Water Supply Tube
5A	0365058	ETF-547	1/8" NPT Pipe to 3/8" Tube Compression Fitting Connector (female)
5B	0305728	ETF-259	3/8" Tee Compression Fitting
6	3365676	ETF-437-A	Single Solenoid Supply Kit includes Supply Tube, two (2) ETF-61 Compression Fittings, Compression Nut, and Ferrule
7	0305849	ETF-370-A	24 VAC Solenoid Valve Assembly includes 18" (153 mm) armored Cable and two (2) Terminal Housings
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	3365001	ETF-470-A	Back Check
—	3305577	ETF-1009-A	Solenoid Valve Repair Kit includes Replacement Filter

FAUCET CABLE EXTENSION CORDS

—	0365042	ETF-1005-26	Faucet to Control Module Extension Cord; 26 inch (0.7 meter) Length
—	0365861	ETF-1005-36	Faucet to Control Module Extension Cord; 36 inch (0.9 meter) Length
—	0305862	ETF-1005-72	Faucet to Control Module Extension Cord; 72 inch (1.8 meter) Length
—	0305863	ETF-1005-108	Faucet to Control Module Extension Cord; 108 inch (2.7 meter) Length
—	0365838	ETF-1003-36	Solenoid to Control Module Extension Cord; 36 inch (0.9 meter) Length
—	0365053	ETF-1003-48	Solenoid to Control Module Extension Cord; 48 inch (1.2 meter) Length
—	0365839	ETF-1003-72	Solenoid to Control Module Extension Cord; 72 inch (1.8 meter) Length
—	0365840	ETF-1003-108	Solenoid to Control Module Extension Cord; 108 inch (2.7 meter) Length

OPTIMA ETF-660 and ETF-770 Faucets

Parts List—ETF-660 and ETF-770 Faucets

Item Number	Code Number	Part Number	Description
1A	0305500	ETF-195-A	Lavatory Faucet Assembly (*ETF-660*)
1B	0305536	ETF-261-A	Deck-Mounted Gooseneck Faucet Assembly (*ETF-770*)
2A	3365092	ETF-1023-A	0.5 gpm (1.9 Lpm) Spray Head with Key (male thread)
	3365093	ETF-1024-A	2.2 gpm (8.3 Lpm) Aerator Spray Head with Key (male thread)
	0305607	F-175-L	2.2 gpm (8.3 Lpm) Laminar Flow Spray Head (male thread)
	0306930	F-179	2.0 gpm (7.6 Lpm) Spray Head with Key (male thread)
	0305927	ETF-435	Replacement Key Only for *ETF-1023-A* Spray Head and *ETF-1024-A* Aerator Spray Head (NOT required for *F-175-L* Laminar Flow Spray Head)
2B	3365091	ETF-1021-A	0.5 gpm (1.9 Lpm) Spray Head with Key (female thread)
	discontinued	~~ETF-235~~	~~Spray Head, 2.0 gpm (7.6 Lpm), with Key~~
	3365090	ETF-1022-A	2.2 gpm (8.3 Lpm) Aerator Spray Head with Key (female thread)
	0305612	ETF-237	2.2 gpm (8.3 Lpm) Laminar Flow Spray Head (female thread)
	0305927	ETF-435	Replacement Key Only for *ETF-1021-A* Spray Head and *ETF-1022-A* Aerator Spray Head (NOT required for *ETF-237* Laminar Flow Spray Head)
3	0305946	EL-3500-A	Microphone-style "On-Q" Sensor Assembly includes "O" ring, 18" armored Cable, Microphone Sensor Cap, Locking Pin, Microphone Sensor Body, and Emitter/Detector Shroud
—	0305527	EL-350-A	Old-style Microphone Sensor Assembly includes Washer, Beveled Washer, Basin Locknut, Microphone Sensor Subassembly, and flat blade Screwdriver
4	0365524	ETF-199	Cock Hole Cover
5	0365150	ETF-271	3/8" Tube Fitting Connector (female)
6	3365676	ETF-437-A	Single Solenoid Supply Kit includes Supply Tube, two (2) *ETF-61* Compression Fittings, Compression Nut, and Ferrule
7	0305849	ETF-370-A	24 VAC Solenoid Valve Assembly includes 18" (153 mm) armored Cable and two (2) Terminal Housings
8	3365001	ETF-470-A	Back Check
9	0305728	ETF-259	3/8" Tee Compression Fitting
10	3306500	ETF-450-A	Control Module Assembly includes splashproof Junction Box and Junction Box Mounting Kit
—	0305533	ETF-214-A	Old-style Control Module Assembly includes Revision 3 Control Board, two (2) Anchor Screws, two (2) small and two (2) large Phillips Screws, Junction Box Bottom, Junction Box Top, Junction Box Hole Plug, and Power Cord Hole Plug
11	0365534	ETF-233	120V/35VA Plug-In Transformer
12	0345370	EL-248-40	24V/40VA Box Mount Transformer
13	0365001	ETF-458-A	Input Power Cable (Transformer to Control Module) includes Strain Relief and two (2) Terminal Crimp Connectors
14	0305768	EL-310-A	Spout Mounting Kit (ETF-770 Only) Includes Rubber Washer, Steel Washer, Lock Nut, Rubber Cone Washer, and Coupling Nut
15	3365602	ETF-432-A	Optional 8" (203 mm) Centerset Trim Plate Kit includes Seal, Washer Fender, Gasket, Finger Nut, Trim Plate Spacer, and Dual Hole Trim Plate Assembly
16	3365468	ETF-313-A	Optional 4" (102 mm) Centerset Trim Plate Kit includes Trim Plate Spacer and Dual Hole Trim Plate Assembly
—	3305577	ETF-1009-A	Solenoid Valve Repair Kit includes Replacement Filter

FAUCET CABLE EXTENSION CORDS

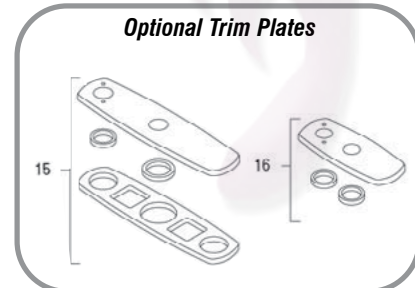|			
—	0365042	ETF-1005-26	Faucet to Control Module Extension Cord; 26 inch (0.7 meter) Length
—	0365861	ETF-1005-36	Faucet to Control Module Extension Cord; 36 inch (0.9 meter) Length
—	0305862	ETF-1005-72	Faucet to Control Module Extension Cord; 72 inch (1.8 meter) Length
—	0305863	ETF-1005-108	Faucet to Control Module Extension Cord; 108 inch (2.7 meter) Length
—	0365838	ETF-1003-36	Solenoid to Control Module Extension Cord; 36 inch (0.9 meter) Length
—	0365053	ETF-1003-48	Solenoid to Control Module Extension Cord; 48 inch (1.2 meter) Length
—	0365839	ETF-1003-72	Solenoid to Control Module Extension Cord; 72 inch (1.8 meter) Length
—	0365840	ETF-1003-108	Solenoid to Control Module Extension Cord; 108 inch (2.7 meter) Length

Old-Style Faucets

ETF-66 and *ETF-77* faucets manufactured before 1996 used an *EL-350-A* Microphone-Style Sensor with telephone jack connector (**0305527**) and an *ETF-214-A* Control Module (**0305533**).
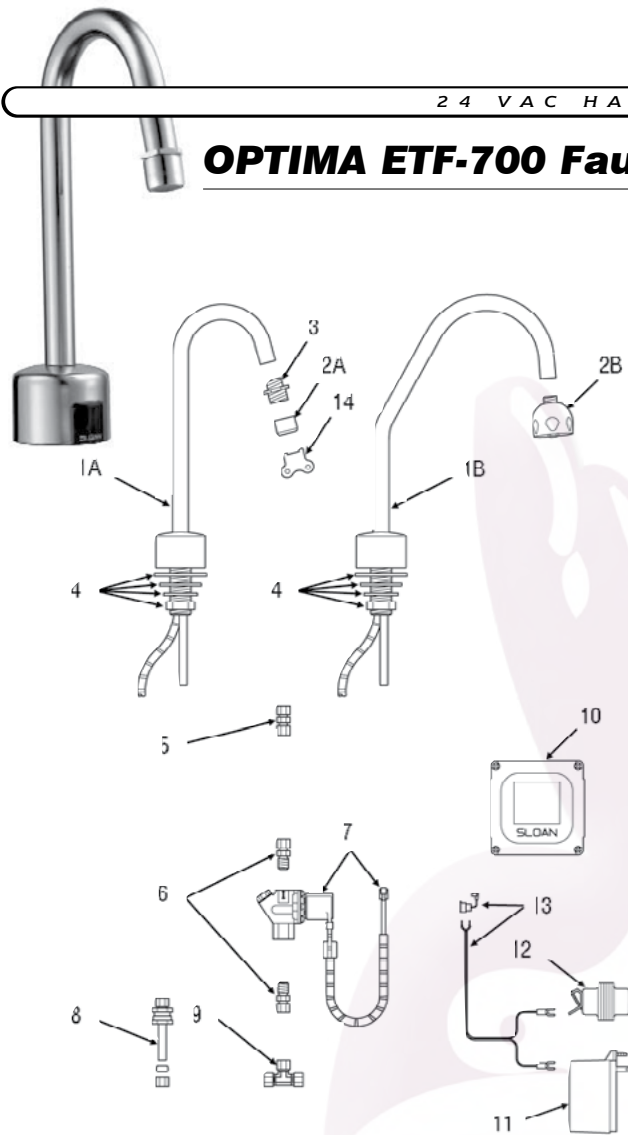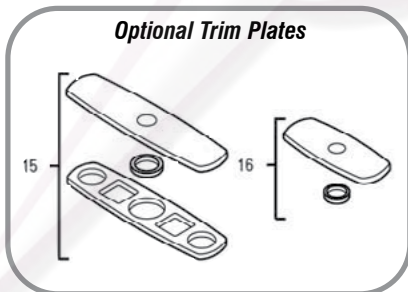
Optional Trim Plates

OPTIMA ETF-700 Faucet

Parts List—ETF-700 Faucet

Item Number	Code Number	Part Number	Description
1A	0365108	ETF-472-A	Faucet and Sensor Assembly with Standard Gooseneck Spout (ETF-700)
1B	0365109	ETF-473-A	Faucet and Sensor Assembly with Surgical Bend Gooseneck Spout (ETF-700-S)
—	0365028	ETF-476-A	Sensor Module Only includes 18" (153 mm) armored Cable, Shroud, and Housing for Sensor Window (ETF-700 and ETF-700-S Faucets)
2A	3365091	ETF-1021-A	0.5 gpm (1.9 Lpm) Spray Head with Key (female thread)
	3365090	ETF-1022-A	2.2 gpm (8.3 Lpm) Aerator Spray Head with Key (female thread)
	0305612	ETF-237	2.2 gpm (8.3 Lpm) Laminar Flow Spray Head (female thread)
2B	0328134	AC-55-A	Shower Spray Head Assembly, 2.2 gpm (8.3 Lpm)
3	0305784	ETF-178	Adapter for Spray Heads (not required for AC-55-A Shower Spray Head)
4	0365110	ETF-503-A	Spout Mounting Kit Includes Rubber Washer, Flat Washer, Lockwasher, Mounting Nut, and ETF-530 Union Compression Fitting
5	0365057	ETF-530	3/8" x 3/8" Union Compression Fitting (female)
6	3365676	ETF-437-A	Single Solenoid Supply Kit includes Supply Tube, two (2) ETF-61 Compression Fittings, Compression Nut, and Ferrule
7	0305849	ETF-370-A	24 VAC Solenoid Valve Assembly includes 18" (153 mm) armored Cable and two (2) Terminal Housings
8	3365001	ETF-470-A	Back Check
9	0305728	ETF-259	3/8" Tee Compression Fitting
10	3306500	ETF-450-A	Control Module Assembly includes splash-proof Junction Box and Junction Box Mounting Kit
11	0365534	ETF-233	120V/35VA Plug-In Transformer
12	0345370	EL-248-40	24V/40VA Box Mount Transformer
13	0365001	ETF-458-A	Input Power Cable (Transformer to Control Module) includes Strain Relief and two (2) Terminal Crimp Connectors
14	0305927	ETF-435	Replacement Key Only for ETF-1021-A Spray Head and ETF-1022-A Aerator Spray Head (NOT required for ETF-237 Laminar Flow Spray Head)
15	3365601	ETF-431-A	Optional 8" (203 mm) Centerset Trim Plate Kit includes Seal, two (2) Washer Fenders, two (2) Gaskets, two (2) Finger Nuts, Trim Plate Spacer, and Single Hole Trim Plate Assembly
16	3365468	ETF-312-A	Optional 4" (102 mm) Centerset Trim Plate Kit includes Trim Plate Spacer and Single Hole Trim Plate Assembly
—	3305577	ETF-1009-A	Solenoid Valve Repair Kit includes Replacement Filter

Optional Trim Plates

FAUCET CABLE EXTENSION CORDS

—	0365042	ETF-1005-26	Faucet to Control Module Extension Cord; 26 inch (0.7 meter) Length
—	0365861	ETF-1005-36	Faucet to Control Module Extension Cord; 36 inch (0.9 meter) Length
—	0305862	ETF-1005-72	Faucet to Control Module Extension Cord; 72 inch (1.8 meter) Length
—	0305863	ETF-1005-108	Faucet to Control Module Extension Cord; 108 inch (2.7 meter) Length
—	0365838	ETF-1003-36	Solenoid to Control Module Extension Cord; 36 inch (0.9 meter) Length
—	0365053	ETF-1003-48	Solenoid to Control Module Extension Cord; 48 inch (1.2 meter) Length
—	0365839	ETF-1003-72	Solenoid to Control Module Extension Cord; 72 inch (1.8 meter) Length
—	0365840	ETF-1003-108	Solenoid to Control Module Extension Cord; 108 inch (2.7 meter) Length

Care and Cleaning Instructions: *DO NOT USE abrasive or chemical cleaners 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 a clean towel or cloth. When cleaning the bathroom tile, protect the Faucet from any splattering of cleaner. Acids and cleaning fluids can discolor or remove chrome plating.*

Need Help? Call 1-888-SLOAN-14 *(1-888-756-2614)*

Troubleshooting Guide for ETF-80, ETF-500, ETF-600, ETF-610, ETF-660, ETF-700, and ETF-770 Faucets

NOTE: Revision 2 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 ETF-450-A Control Module failure.

NOTE: REMOVE COVER FROM 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 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 *ETF-370-A* Solenoid.

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 stop(s) if closed.

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:**
Note: Applies only to REVISION 2 MODULES.
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. Refer to individual faucet parts diagram for appropriate Sensor Assembly.

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. 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 *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 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.

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