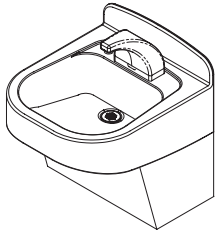
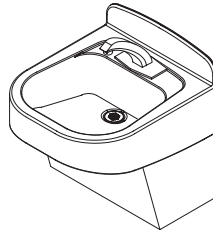




INSTALLATION INSTRUCTIONS SINGLE, DOUBLE AND TRIPLE STATION SENSOR OPERATED SOLID SURFACE LAVATORY SYSTEMS

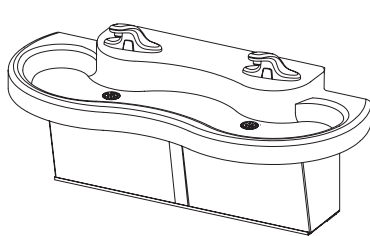


ELS-41000-A
Single Station
Solid Surface Lavatory System
With SloanStone Faucet

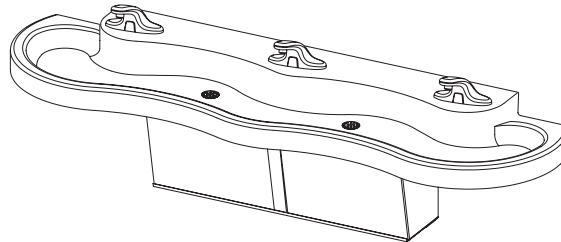


ELS-41000-B
Single Station
Solid Surface Lavatory System

ELS-41000
Single Station
Sensor Operated
Solid Surface Lavatory System



ELS-42000
Double Station
Solid Surface Lavatory System



ELS-43000
Triple Station
Solid Surface Lavatory System

ELS-42000
Double Station
Sensor Operated
Solid Surface Lavatory System

ELS-43000
Triple Station
Sensor Operated
Solid Surface Lavatory System

Made in the U.S.A.

Installation of SloanStone ELS-40000 Series Solid Surface, sensor operated lavatory systems make wash-up totally "hands-free," providing the ultimate in sanitary protection and automatic operation. The lavatory systems use infrared 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 hands are removed from the invisible beam of light, the water supply automatically turns off. SloanStone ELS-40000 Series Lavatory Systems can be hardwire or battery powered.

SloanStone ELS-40000 Series Lavatory Systems are designed for easy installation and maintenance. All system components are pre-plumbed and

assembled at the factory. SloanStone ELS-40000 Series Lavatory Systems come complete with Optima sensors (including 24 VAC solenoid valves and transformer or batteries), spray heads, and can be supplied with juvenile height cabinet, thermostatic mixing valve and soap dispenser.

The following instructions will serve as a guide when installing the SloanStone Lavatory System. As always, good safety practices and care are recommended when installing your new Lavatory System. If further assistance is required, contact your nearest Sloan Representative office or the Sloan Installation Engineering Department.

LIMITED WARRANTY

Sloan Valve Company warrants its SloanStone ELS-40000 Series Lavatory Systems 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. This warranty does not cover the life of the batteries (for battery powered lavatory systems).

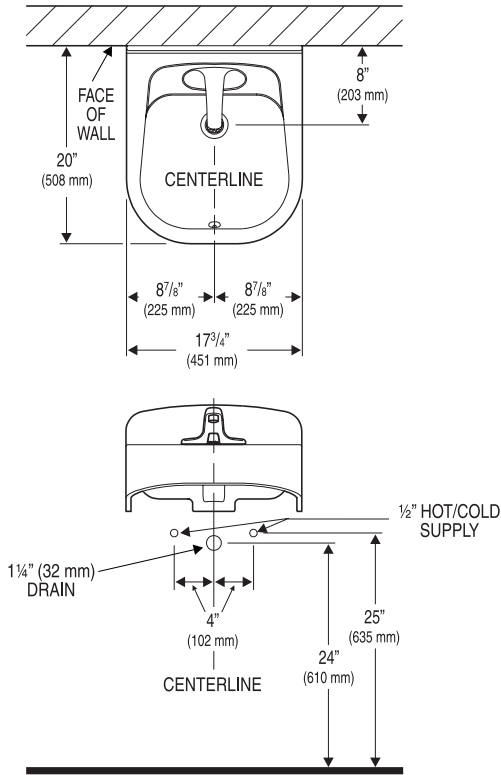
THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. IN NO EVENT IS SLOAN VALVE COMPANY RESPONSIBLE FOR ANY CONSEQUENTIAL DAMAGES OF ANY MEASURE WHATSOEVER.

LAVATORY SYSTEM ROUGH-IN

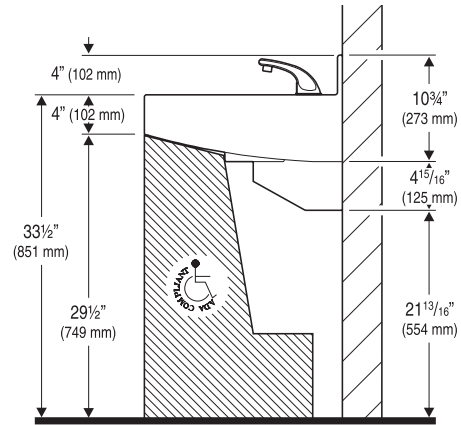
Single Station Lavatory System

MODEL ELS-41000 — 0.5 gpm (1.9 Lpm) Max. — Aerator

LAVATORY SYSTEM WEIGHT (Empty) — 60 Lbs. (27 Kg)



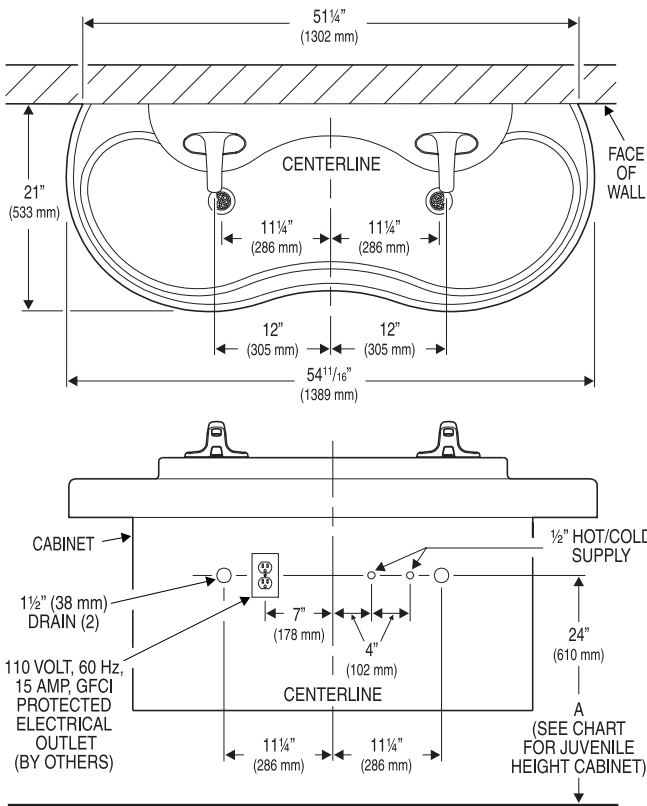
Side View
Single Basin



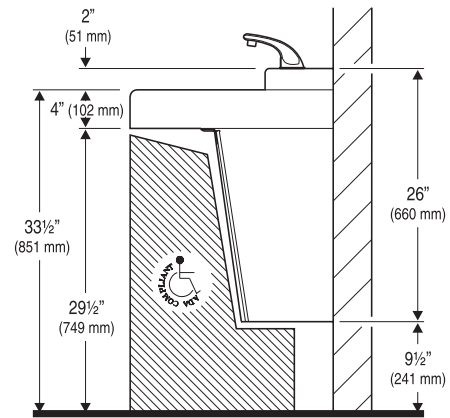
Double Station Lavatory System

MODEL ELS-42000 — 0.5 gpm (1.9 Lpm) Max. — Aerator

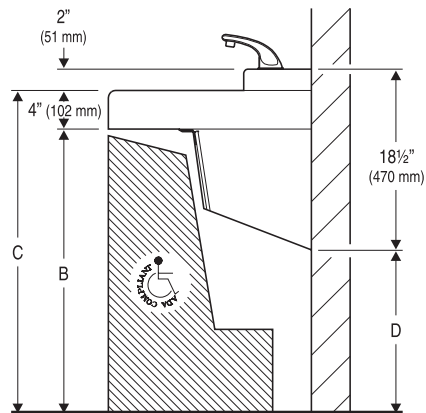
LAVATORY SYSTEM WEIGHT (Empty) — 160 Lbs. (72 Kg)



Side View
Standard Height Cabinet
Double and Triple Basin



Side View
Juvenile Height Cabinet
Double and Triple Basin

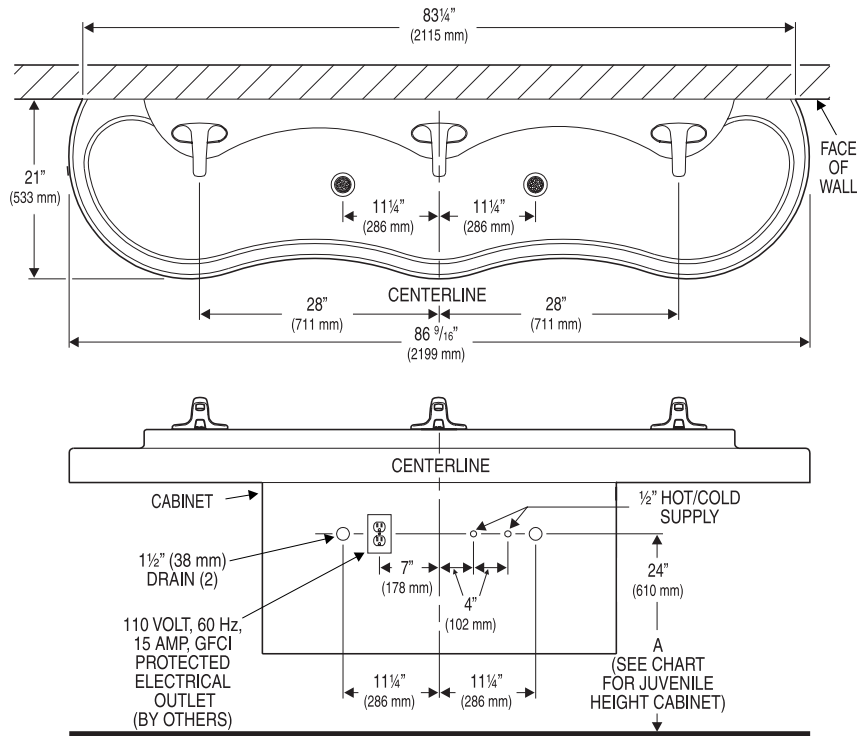


LAVATORY SYSTEM ROUGH-IN

Triple Station Lavatory System

MODEL ELS-43000 — 0.5 gpm (1.9 Lpm) Max. — Aerator

LAVATORY SYSTEM WEIGHT (Empty) — 200 Lbs. (90 Kg)



For Side View of Triple Basin
See Page 2 Rough-in

VARIABLE MOUNTING HEIGHT CHART				
	DIMENSION DESCRIPTION	Texas Accessibility Standard (T.A.S.) AGES 4-10	Texas Accessibility Standard (T.A.S.) AGES 11-15	American Disability Act (A.D.A.) STANDARD
A	ROUGH-IN	20 1/2" (521 mm)	22 1/2" (572 mm)	24" (610 mm)
B	KNEE CLEARANCE	26" (660 mm)	28" (711 mm)	29 1/2" (749 mm)
C	RIM HEIGHT	30" (762 mm)	32" (813 mm)	33 1/2" (851 mm)
D	TOE CLEARANCE	13 1/2" (343 mm)	15 1/2" (394 mm)	17" (432 mm)

PRIOR TO INSTALLATION

Prior to installing the SloanStone ELS-40000 Series Lavatory System, install the items listed below. Also, refer to the appropriate rough-in diagram on pages 2 and 3.

- **When Using Plug-In Transformer** — Install electrical receptacle(s) for plug-in transformer(s) — 120 VAC, 2 amp service for each faucet (24 VAC, 35 VA) plug-in transformer used.
- **When Using Box Mount Transformer** — Install electrical wiring to the transformer location — 120 VAC, 2 amp service for each standard faucet (24 VAC, 40 VA) or EL-154 (24 VAC, 50 VA) transformer used.
- Hot and cold water supply lines or tempered water supply line
- Drain lines

Important:

- *ADEQUATE STRUCTURAL SUPPORT IN OR BEHIND THE WALL IS REQUIRED. REFER TO THE APPROPRIATE ROUGH-IN DIAGRAM ON PAGES 2 AND 3 FOR DRY WEIGHT OF SINK. STRUCTURAL SUPPORT MUST HAVE A MINIMUM PULLOUT RATING OF 1000 POUNDS (450 Kg).*
- *ALL ELECTRICAL WIRING SHOULD BE INSTALLED IN ACCORDANCE WITH NATIONAL/LOCAL CODES AND REGULATIONS.*
- *ALL PLUMBING SHOULD BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND REGULATIONS.*
- *A 24 VAC STEP-DOWN TRANSFORMER MUST BE USED FOR HARDWIRE APPLICATIONS.*
- *USE APPROPRIATE PRECAUTIONS WHILE CONNECTING TRANSFORMER TO 120 VAC POWER SOURCE.*
- *DO NOT PLUG TRANSFORMER INTO POWER SOURCE (RECEPTACLE) UNTIL ALL WIRING IS COMPLETED. PERMANENT DAMAGE TO THE TRANSFORMER CIRCUIT*

CONTROL MODULE WILL RESULT IF 24 VAC WIRES TOUCH EACH OTHER OR SHORT WHEN POWER SUPPLY IS ACTIVE.

- *BEFORE CONNECTING FLEX HOSES TO SUPPLY STOPS, FLUSH ALL WATER LINES UNTIL WATER IS CLEAR.*

FOR BATTERY OPERATED LAVATORY SYSTEMS, DO NOT INSTALL BATTERIES UNTIL THE SYSTEM IS COMPLETELY INSTALLED.

Installing batteries before sensor cable is connected to control module may result in improper range adjustment.

TOOLS REQUIRED FOR INSTALLATION

- Electric drill for drilling anchor holes.
- Socket or open end wrench for installing anchoring fasteners.
- Open end wrench for connecting water lines.
- Pipe wrench for installing drain lines.

SINK LOCATION

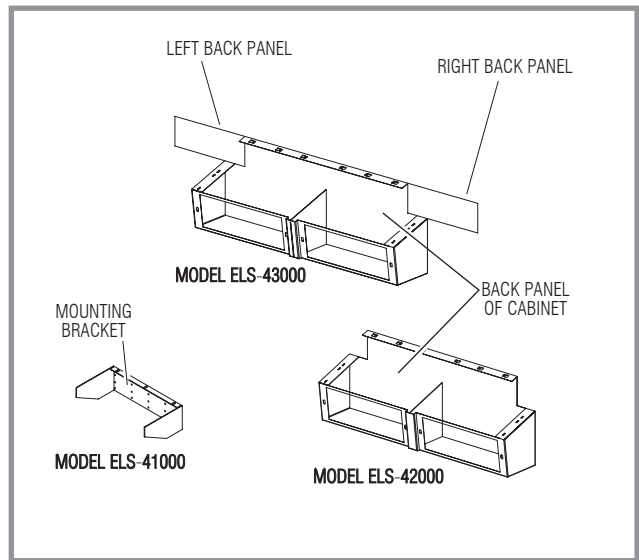
Determine the appropriate wall location for the Lavatory System. Consider that hot and cold water supply lines, a drain line, and an electrical source (receptacle or wiring depending on type of transformer used) will be required. For Cabinets with slide out panels, leave enough room on each side of the Cabinet for panel removal. Compare the physical dimensions of the Lavatory System to the space available for the installation. If wall is not load bearing, a carrier may be required behind the wall. Refer to the appropriate Rough-in diagram on Pages 2 and 3 for Lavatory System dimensions.

Prior to Lavatory System installation, electric wiring, water supply and drain must be installed.

INSTALLATION INSTRUCTIONS

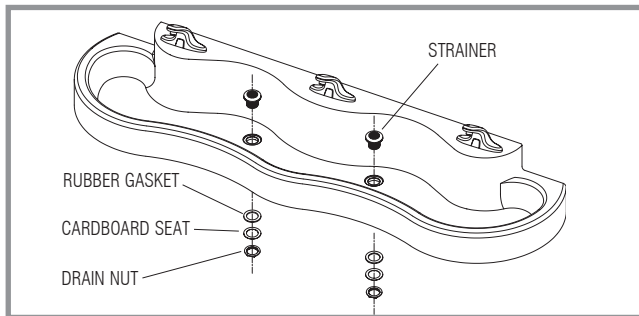
Step 1 — Cabinet or Mounting Bracket Installation

- A** Remove plastic protective coating from all stainless parts before installation.
- B** Measure and mark vertical centerline of lavatory system on wall.
- C** Determine desired Cabinet height. Using rough-in diagrams on Pages 2 and 3, identify the type of Cabinet or Mounting Bracket being installed. When installing a Juvenile Cabinet, be sure to identify the proper clearance required between bottom of Cabinet and finished floor. (Refer to Variable Mounting Height Chart on Page 3). Once the dimension between finished floor and bottom of Cabinet is determined (ELS-42000 and ELS-43000), mark the wall at that height. For ELS-41000, mark a level line at 32½" from finished floor.
- D** With help of an assistant, lift Cabinet against wall, aligning bottom of Cabinet (ELS-42000 and ELS-43000) or top of Mounting Bracket (ELS-41000) with mark made on wall. Align Center hole of Cabinet or Mounting Bracket with vertical centerline on wall. Level Cabinet or Mounting Bracket. Mark and drill holes in wall through all mounting holes located on back of Cabinet or Mounting Bracket.
- E** Secure Cabinet or Mounting Bracket to wall using wall anchors that are specific for that type of wall: drywall, concrete, metal studs, wood studs, etc. (supplied by installer).



Step 2 — Strainer Installation

- A** Insert strainer into Basin using plumbers putty (supplied by installer).
- B** From beneath basin, install the rubber gasket, cardboard seat and drain nut onto strainer. Secure drain nut against Basin.



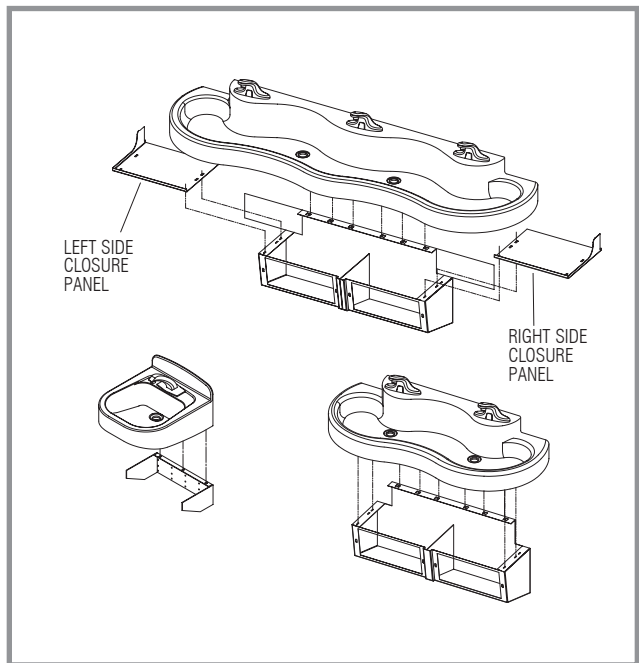
Step 3 — Faucet Installation

Install faucet as instructed in the installation instructions furnished with the Faucet.

Note: Faucets are mounted on Lavatory systems ordered with ETF-600 and EBF-650 faucets.

Step 4 — Basin Assembly

- A** ELS-42000 and 43000 — Slide two ¼"-20 Tinnerman nuts into two center slots on top flange of Cabinet.
Note: nuts should be approximately in center of slots.
- B** With help of an assistant, carefully lift Basin onto Cabinet or Mounting Bracket aligning mounting holes in Basin with holes of Cabinet or Mounting Bracket.
- C** ELS-43000 — Insert Left and Right Side Closure Panels between Cabinet and Basin as illustrated.
Caution: Do not leave basin on cabinet unsupported. It may fall and cause damage or personal injury.
- D** ELS-43000 — Align slots of Left Side Closure Panel with slots of Left Side Back Panel. Install ¼"-20 x ½" fasteners loose enough for further alignment. Follow the same procedure for the right side.
- E** ELS-42000 and 43000 — From beneath Basin, align slots of Cabinet and Closure Panels with threaded mounting holes beneath Basin. Install ¼"-20 x ½" fasteners in all Basin mounting holes and tighten securely. Tighten all remaining fasteners securely.
ELS-41000 — Tighten the 3 fasteners provided, finger tight. Ensure that top of deck is level and front bottom of lavatory apron measures 29" from the floor. Make any necessary adjustments then tighten fasteners securely.
- F** Locate Front Panel of Cabinet kit, align holes with front inserts on Basin and secure with ¼"-20 x ½" fasteners.

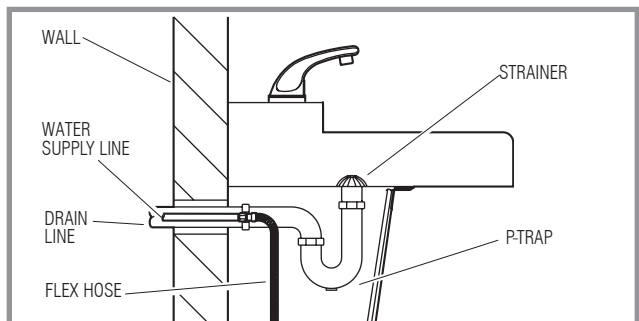


Step 5 — Sensor and Water Line Connection

Install Sensor and Water Line Connections as instructed in the installation instructions furnished with the faucet.

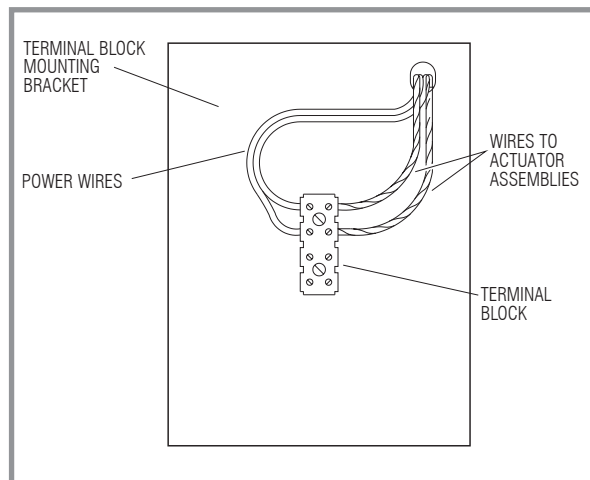
Step 6 — Drain and Water Supply Line Connection

- A** Install P-trap and drain lines making sure all connections are secure.
Note: P-trap and drain lines furnished by others.
- B** Flush supply line(s) of any debris. Install Flex Hose(s) to water supply line(s). Tighten fitting(s) securely.



Step 7 — Supply Power to Lavatory System

- A** For hardwire installations, make sure that power is off to the transformer prior to making connections. Run power wires from Transformer to Terminal Block as illustrated. Use wire ties to secure wiring. Once all wiring within the system is connected, supply power to the Transformer.
- B** For Plug-in Transformer installations, make sure that power is supplied to the receptacle. Once all wiring within the system is connected, plug the Transformer into the receptacle.
Important: Plug-in Transformer MUST be used with a Ground Fault Interrupt (GFCI) Receptacle to help prevent possible electrical shock.
- C** For battery powered installations, install batteries into the control module(s) as indicated by the "+" and "-" marks.



Step 8 — Start-Up

- A** Turn on water supply to lavatory system. Check for leaks at water supply and drain lines. Repair any leaks.
- B** With Aerator removed, activate Faucet(s) for 30 seconds by standing in front of the Faucet. The Solenoid Valve should "click," Sensor LED indicator should blink and water should flow from the Faucet(s). If this does not occur, refer to the Troubleshooting section of this instruction manual.
- C** Close Supply Stops and reinstall Aerator (using the Key provided). Reopen Supply Stops, activate Faucet(s) and check for leaks.

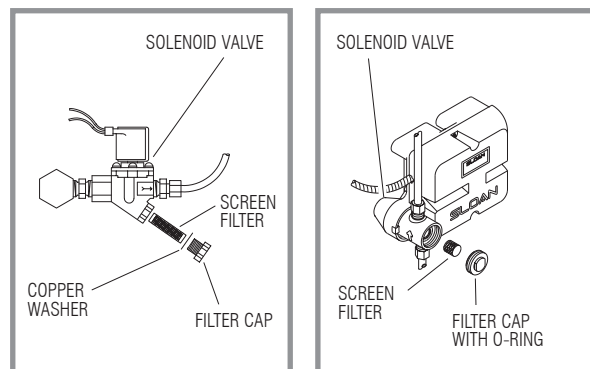


OPERATION

As the user's hands enter the beam's effective range, the beam is reflected back into the sensor receiver and activates the solenoid valve allowing water to flow from the Faucet. Water will flow until the user removes hands from the Faucet or until the automatic time out limit setting is reached.

SOLENOID SCREEN FILTER CLEANING

- A** Before cleaning the Screen Filter, turn off the water supply at supply stop(s).
- B** Activate the Faucet to relieve any pressure in the system.
- C** Unscrew the Filter Cap and remove it from the Solenoid Valve Housing.
- D** Carefully remove the Screen Filter from the Solenoid Valve Housing.
- E** 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.
- F** Examine the Copper Washer or O-ring for wear or damage; replace if necessary. Carefully replace the Screen Filter into the Filter Cap. Screw the Filter Cap with Copper Washer or O-ring into the Solenoid Valve Housing and tighten securely to prevent leaks.
- G** 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.



TROUBLESHOOTING GUIDE

I. No water flows when sensor is activated

Ensure that main power supply is turned "ON." Check receptacle, transformer, batteries (battery powered models), solenoid, leads and connections.

If Sensor LED does not blink:

- A. Control module circuit board is faulty; replace.
- B. Sensor is faulty; replace sensor module.

If Sensor LED blinks when user is sensed:

- A. Supply Stop(s) may be closed; open Supply Stop(s).
- B. Debris may be in Solenoid filter; remove, clean and reinstall.

II. Very low flow or slow dribble

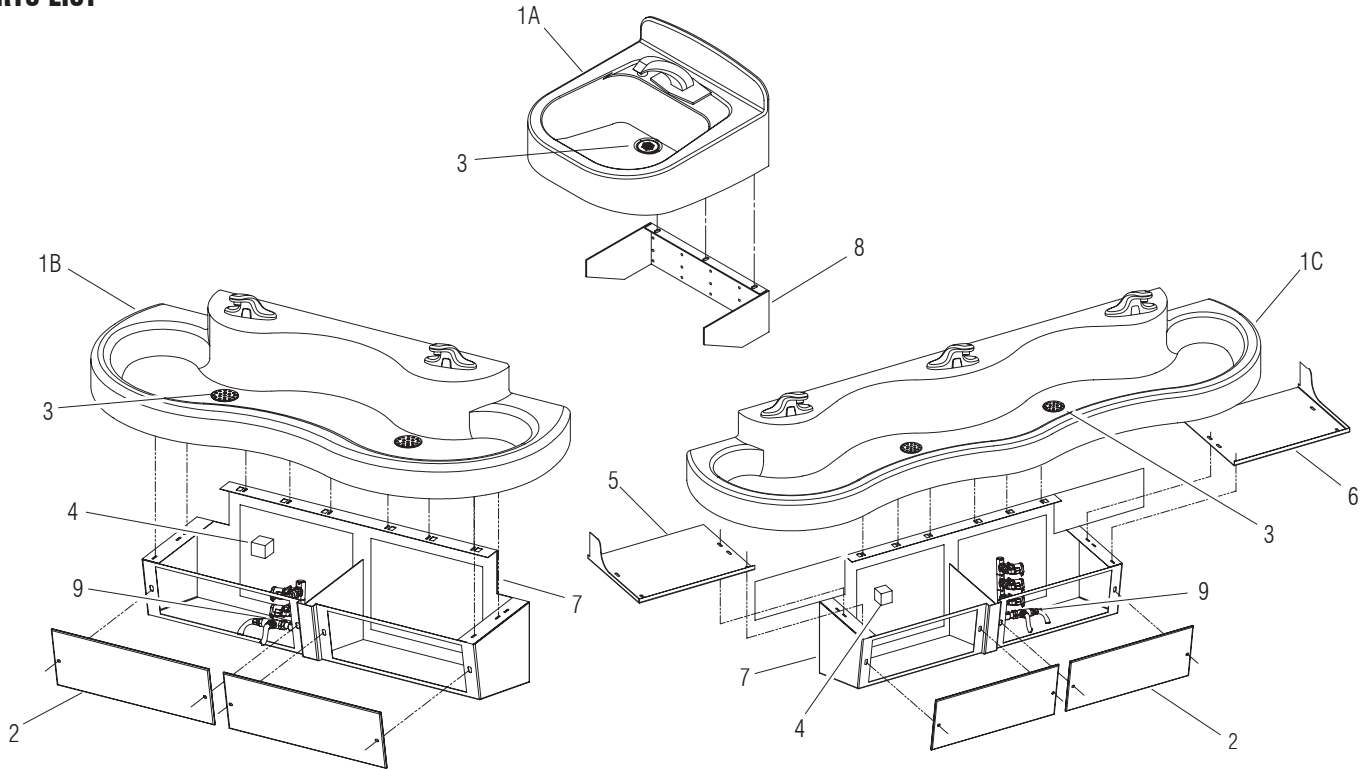
- A. Supply Stop(s) may be closed; open Supply Stop(s).
- B. Debris is in solenoid, won't close properly; remove operator and clean. Reassemble in the same manner.
- C. Debris may be in Solenoid filter; remove, clean and reinstall.
- D. Debris is in aerator; remove, clean and reinstall.

III. Continues to run (even after power to faucet has been disconnected)






- A. Solenoid valve is installed backwards; install correctly.
- B. Debris is in solenoid, won't close properly; remove operator and clean. Reassemble in the same manner.




If further assistance is required, please contact the Sloan Valve Company Installation Engineering Department at 1-888-SLOAN-14 (1-888-756-2614).






PARTS LIST



Hardware Kit

-  1/4-20 x 4" THREADED ROD
-  1/4-20 x 1 1/2" FASTENER
-  1/4-20 x 1" FASTENER
-  1/4-20 x 1" FASTENER (FLAT HEAD)
-  1/4-20 x 1/2" FASTENER

-  1/4-20 x 7/8" COUPLING NUT
-  4 WAY WIRE TIE BASE
-  AERATOR KEY

-  4" WIRE TIE WRAP
-  1/4-20 TINNEMAN NUT
-  1/4-20 WING NUT
-  TT30 PINNED TORX BIT
-  TT27 PINNED TORX BIT

Item No.	Description
1A	Solid Surface Basin (Single)
1B	Solid Surface Basin (Double)
1C	Solid Surface Basin (Triple)
2	Front Panels
3	Strainer Assembly
4	Electronic Valve Assembly
5	Left Side Closure Panel
6	Right Side Closure Panel
7	Cabinet (Standard) Cabinet (Floor Mounted — Not Shown) Cabinet (Juvenile — Not Shown)
8	Mounting Bracket (Single Basin) Mounting Bracket, for use with Shroud (Single Basin Only — Not Shown) Shroud (Single Basin Only — Not Shown)
9	Power Supply Hardware Kit

Item No.	Description
MIXING VALVE	
MIX-135-A	Below Deck Thermostatic Water Mixing Valve (BDT Variation)
SOLENOID REPLACEMENT KIT	
ETF-408	Transformer Powered Faucets
EBF-62-A	Battery Powered Faucets
SOLENOID FILTER REPLACEMENT KIT	
ETF-1009-A	Transformer Powered Faucets
EBF-1004-A	Battery Powered Faucets

NOTICE:

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