

## INSTALLATION INSTRUCTIONS SINGLE, DOUBLE, TRIPLE AND QUADRUPLE STATION SENSOR OPERATED SOLID SURFACE AND BIO-DECK LAVATORY SYSTEMS



**ELC-41000**  
Single Station Solid Surface Lavatory System



**ELC-42000**  
Double Station Solid Surface Lavatory System



**ELC-43000**  
Triple Station Solid Surface Lavatory System



**ELC-44000**  
Quadruple Station Solid Surface Lavatory System



**ELB-51000**  
Single Station Bio-Deck Lavatory System



**ELB-52000**  
Double Station Bio-Deck Lavatory System

### **ELC-41000**

Single Station Sensor Operated Solid Surface Lavatory System

### **ELC-42000**

Double Station Sensor Operated Solid Surface Lavatory System

### **ELC-43000**

Triple Station Sensor Operated Solid Surface Lavatory System

### **ELC-44000**

Quadruple Station Sensor Operated Solid Surface Lavatory System

### **ELB-51000**

Single Station Sensor Operated Bio-Deck Lavatory System

### **ELB-52000**

Double Station Sensor Operated Bio-Deck Lavatory System

### **LIMITED WARRANTY**

Sloan Valve Company warrants its Optima ELC-40000 Series and ELB-50000 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.**

### **PRIOR TO INSTALLATION**

Prior to installing the Sloan Optima ELC-40000 Series and ELB-50000 Lavatory System, install the items listed below. Also, refer to the appropriate rough-in diagram on pages 2 – 4.

- **Plug-In Transformer** — Install electrical receptacle(s) for plug-in transformer(s) — 120 VAC, 2 amp service for each ETF-233 (24 VAC, 35 VA) plug-in 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 – 4 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.**
- **DO NOT PLUG TRANSFORMER INTO POWER SOURCE (RECEPTACLE) UNTIL ALL WIRING IS COMPLETED. PERMANENT DAMAGE TO THE TRANSFORMER AND 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.

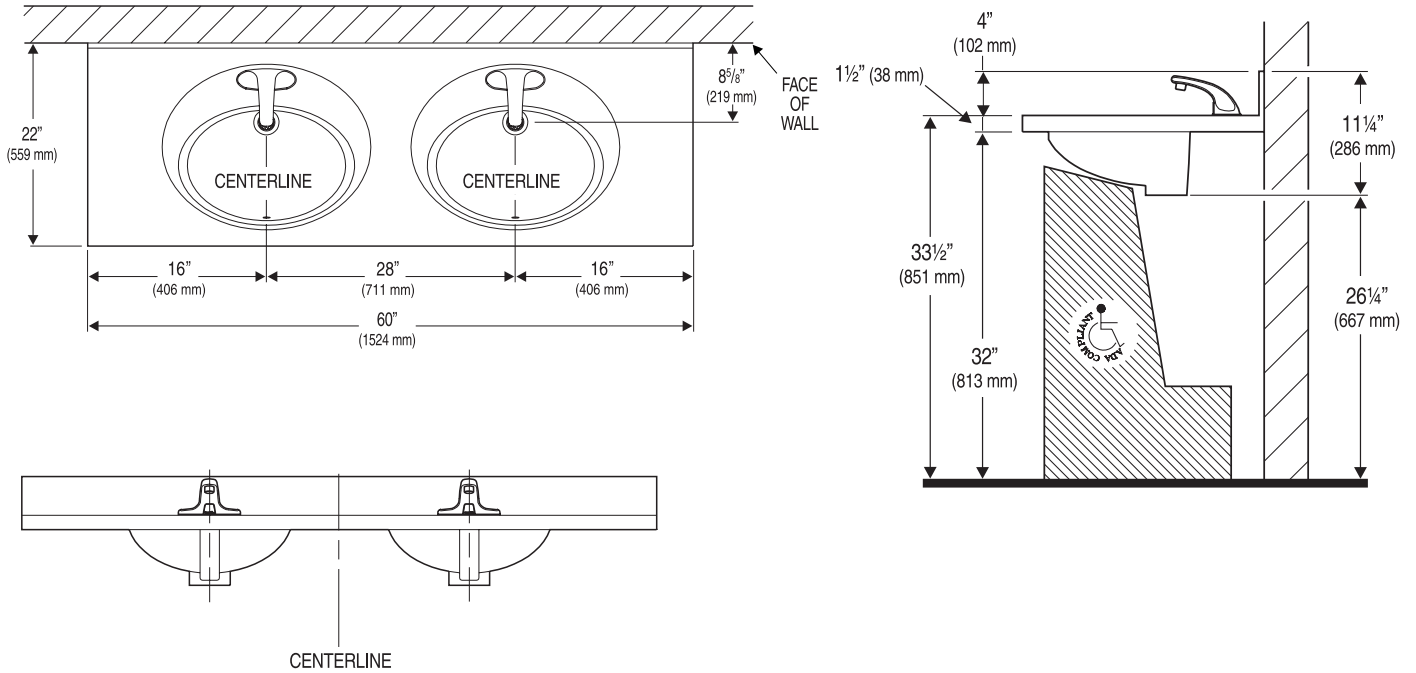


## LAVATORY SYSTEM ROUGH-IN

### Double Station Lavatory System

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

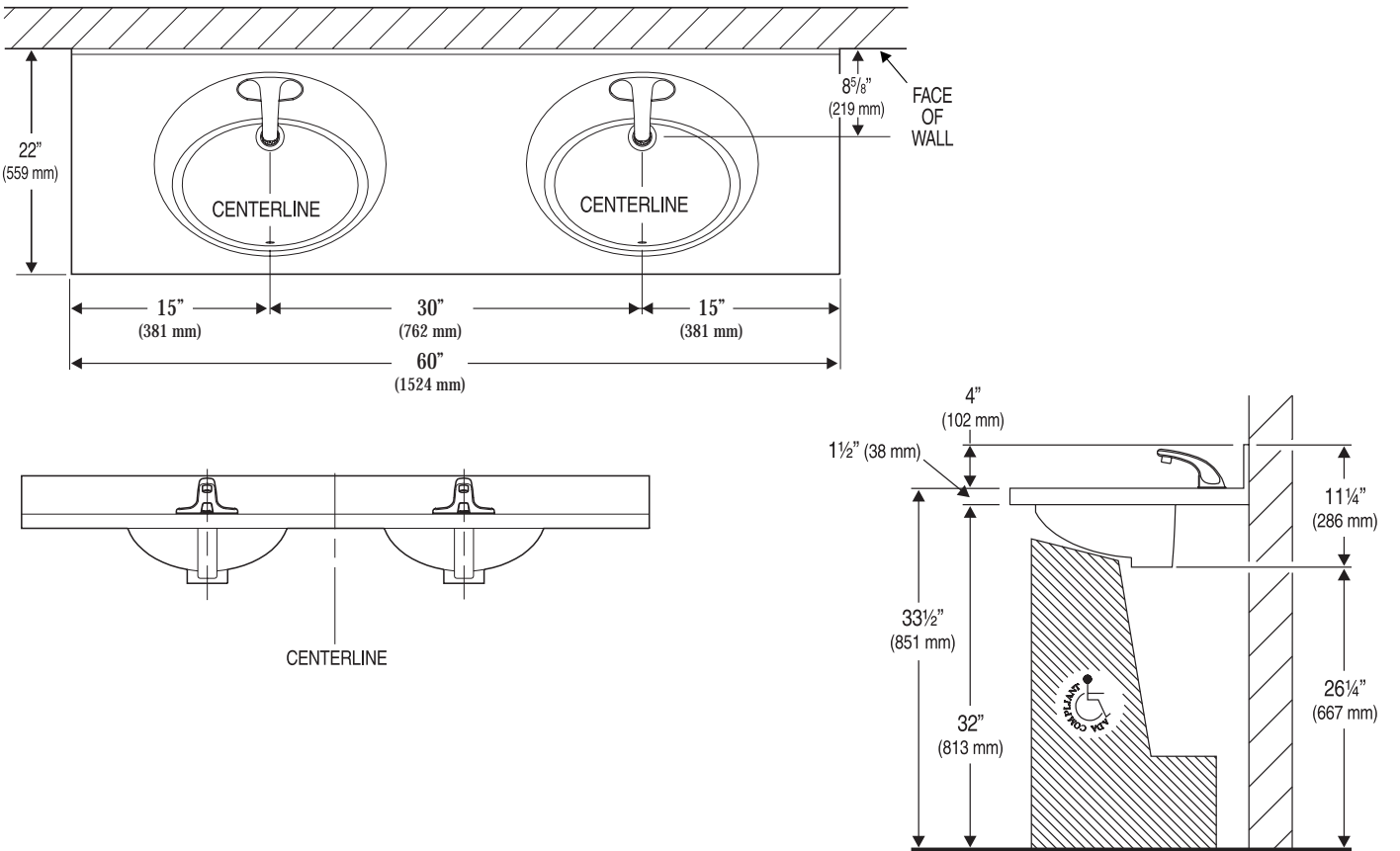
LAVATORY SYSTEM WEIGHT (Empty) — 120 Lbs. (54 kg)



### Double Station Lavatory System

MODEL ELB-52000 SERIES

LAVATORY SYSTEM WEIGHT (Less Faucet and Empty) — 131 Lbs. (59 kg)

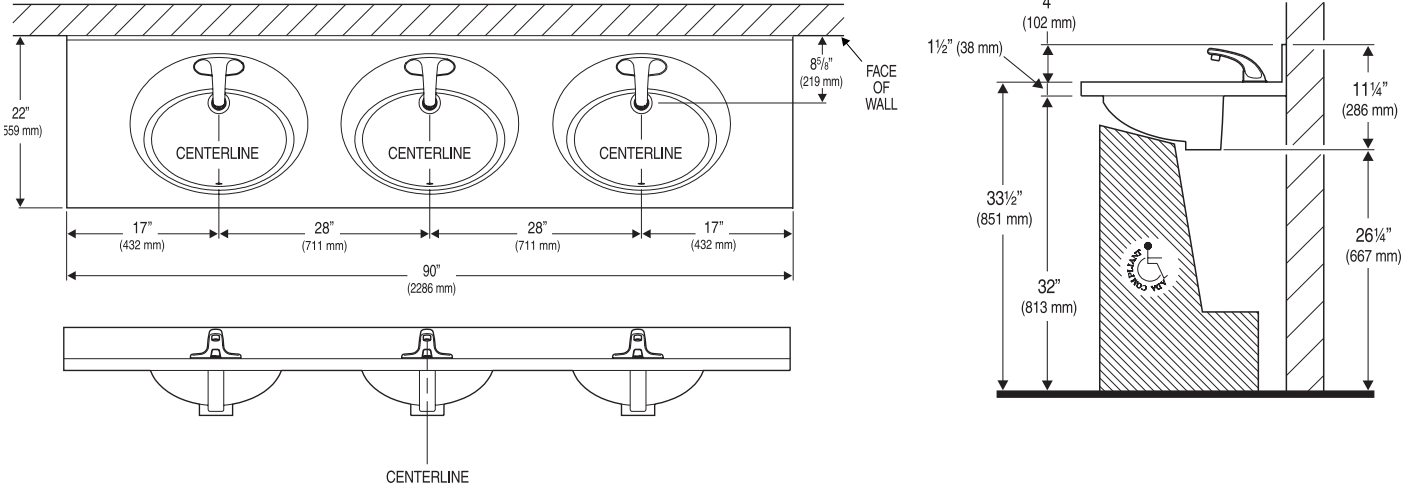


## LAVATORY SYSTEM ROUGH-IN

### Triple Station Lavatory System

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

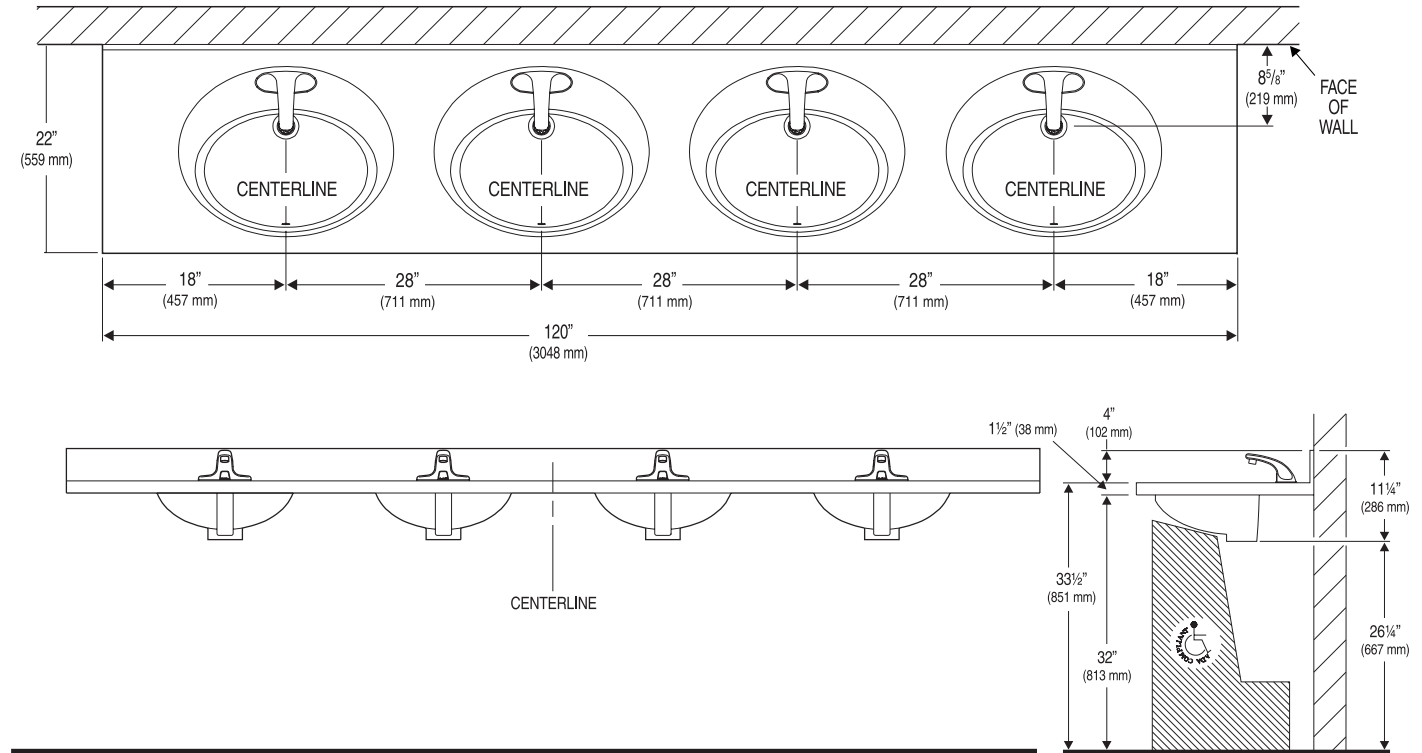
LAVATORY SYSTEM WEIGHT (Empty) — 180 Lbs. (81 kg)



### Quadruple Station Lavatory System

MODEL ELC-44000 SERIES — 0.5 gpm (1.9 Lpm) Max. — Aerator

LAVATORY SYSTEM WEIGHT (Empty) — 240 Lbs. (108 kg)



## 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.

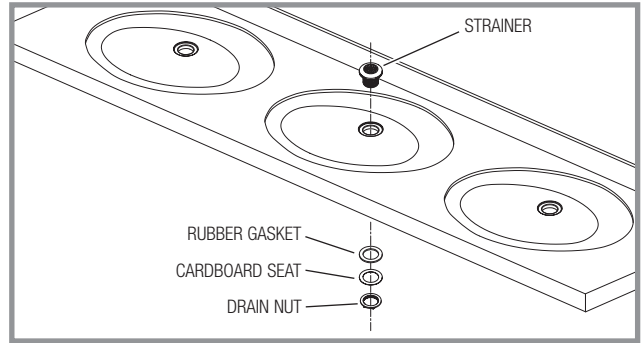
## SINK LOCATION

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) will be required. 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 – 4 for Lavatory System dimensions.

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

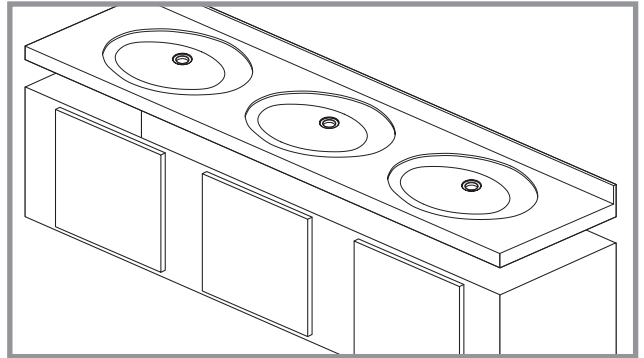
## 1- STRAINER INSTALLATION

- 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.



## 2A - VANITY MOUNTING

- A** Apply adhesive caulk to perimeter of vanity casework and corners of deck.
- B** With the help of another person, place the lavatory deck on vanity.



## 2B - WALL MOUNTING (OPTIONAL)

**Note:** Wall mounting fasteners supplied by others.

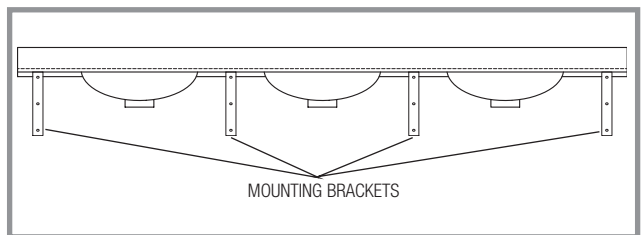
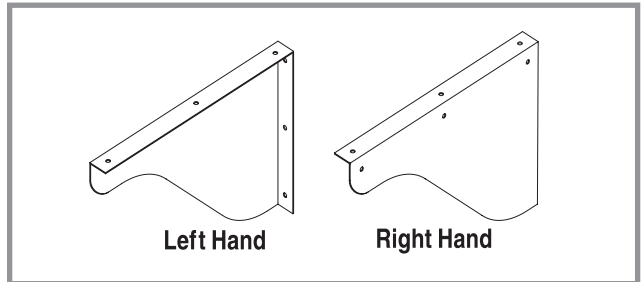
- A** Measure and mark a level line on the wall at 5/8" below the desired Basin height (this line is a guide for the top of all the brackets).
- B** Measure and mark the Bracket locations as shown. Drill holes in the wall using the Mounting Bracket as a template.
- C** Install wall anchors that are specific for that type of wall: drywall, concrete, metal studs, wood studs, etc. (supplied by installer). Some wall materials will require additional reinforcement.
- D** Secure Mounting Brackets to the wall. Use left and right Brackets as required.

**Note:** Be sure Mounting Bracket is level and plumb against wall so that Lavatory will drain correctly once assembly is completed.

- E** FOR ELC SERIES – Apply adhesive to brackets and corners of lavatory deck. With the help of another person, place the Lavatory on the Mounting Brackets. **Optional Step for ELB Series.**

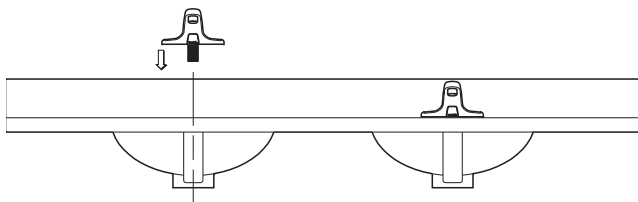
**Caution:** Do not leave lavatory on mounting brackets unsupported. It may fall and cause damage or personal injury.

- F** FOR ELB SERIES – secure Lavatory with the hardware provided through the holes provided in the brackets.



## 3 - INSTALL FAUCET, SENSOR, AND WATER LINE CONNECTIONS

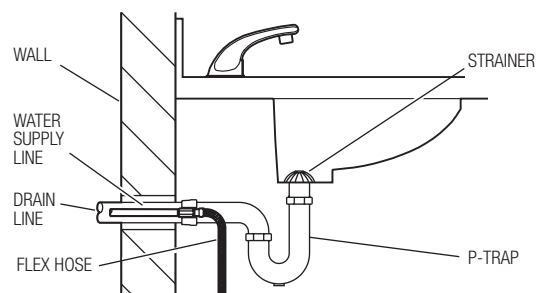
- A** Install faucet, sensor, and water line connections as instructed in the installation instructions furnished with the Faucet.



- B** Install P-trap and drain lines making sure that all connections are secure.

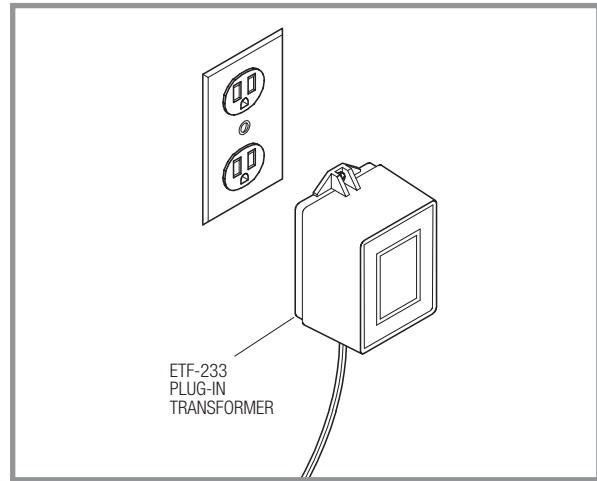
**Note:** P-trap and drain lines furnished by others.

- C** Flush supply line(s) of any debris. Install Flex Hose(s) to water supply line(s). Tighten fitting(s) securely.



## 4 – SUPPLY POWER TO LAVATORY SYSTEM

- A** For Plug-in Transformer and Adapter installations, make sure that power is supplied to the receptacle. Once all wiring within the system is connected, plug the Transformer or Adapter into the receptacle.  
*Important: Plug-in Transformer MUST be used with a Ground Fault Interrupt (GFCI) Receptacle to help prevent possible electrical shock.*
- B** For battery powered installations, once all wiring within the system is connected, install batteries into the control module as indicated by the "+" and "-" marks. Refer to the faucet installation instructions furnished with the Faucet.

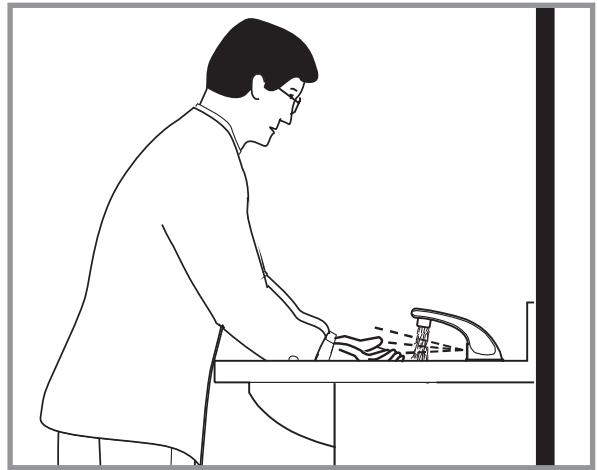


## 5 – START-UP

- 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 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. 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 and check for leaks.

## OPERATION

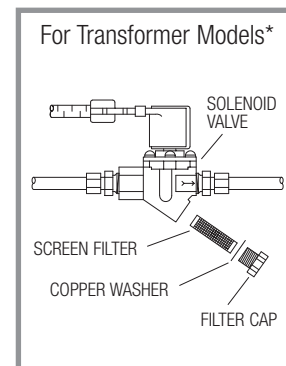
As the user's hands enter the beam's effective range, the beam is reflected back into the sensor receiver and activates the solenoid valve allowing water to flow from the Faucet. Water will flow until the user removes hands from the Faucet or until the automatic time out limit setting is reached.



## 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 Filter Cap. Screw the Filter Cap with Copper Washer or O-ring into 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.

For Example:



\* Please contact a Sloan Representative or Sloan Valve Company Installation Engineering Department for further information on the model installed with lavatory for screen filter cleaning at 1-888-SLOAN-14 (1-888-756-2614).

## 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).*

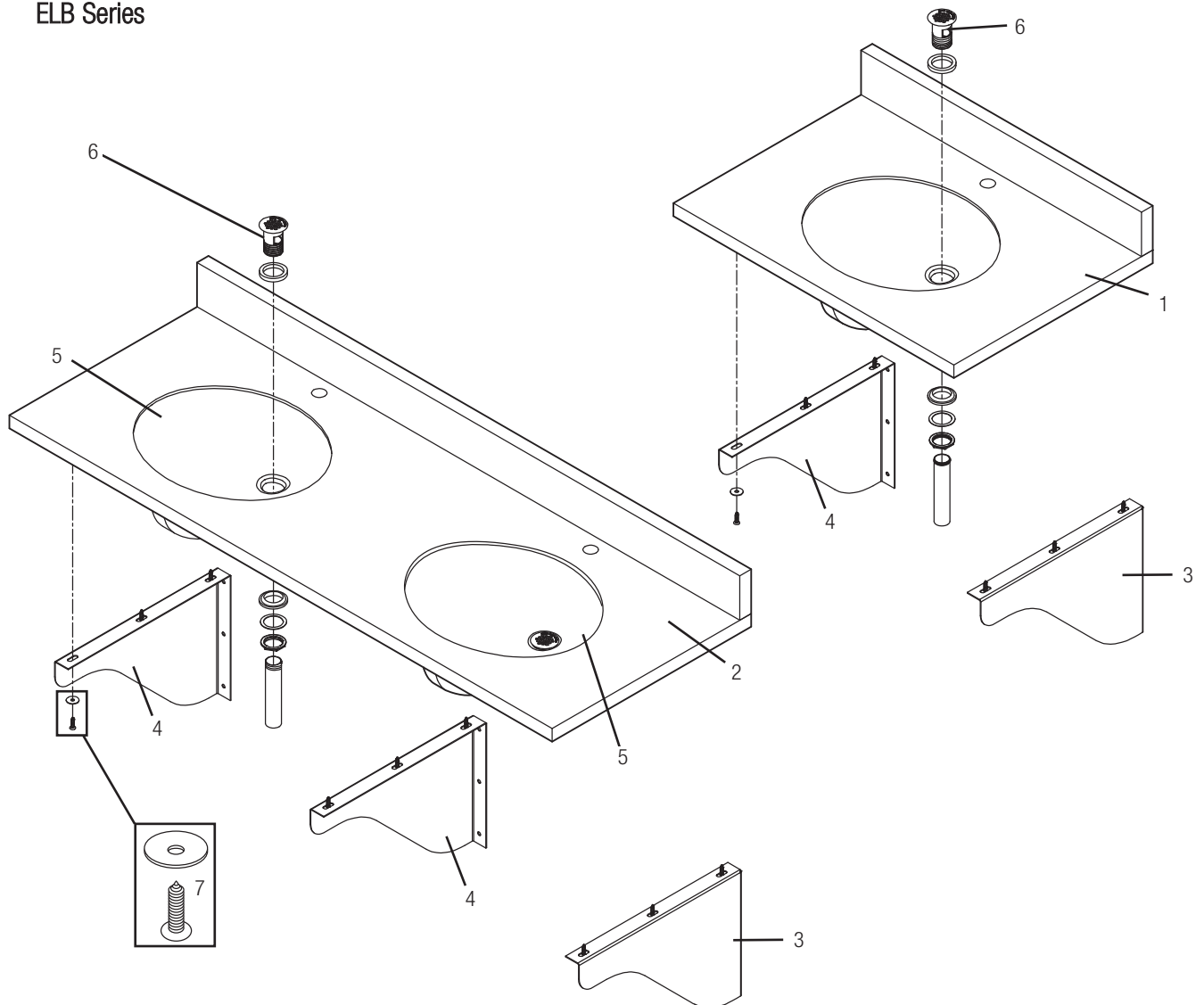
## CARE AND CLEANING

**DO NOT USE** abrasive or chemical cleaners (including chlorine bleach) to clean lavatory deck or faucets that may dull the luster and attack the finish. Use **ONLY** soap and water, then wipe dry with clean cloth or towel.

While cleaning the sink area, protect the faucet from any splattering of cleaner. Acids and cleaning fluids will discolor or remove chrome plating.

## PARTS LIST

### ELB Series



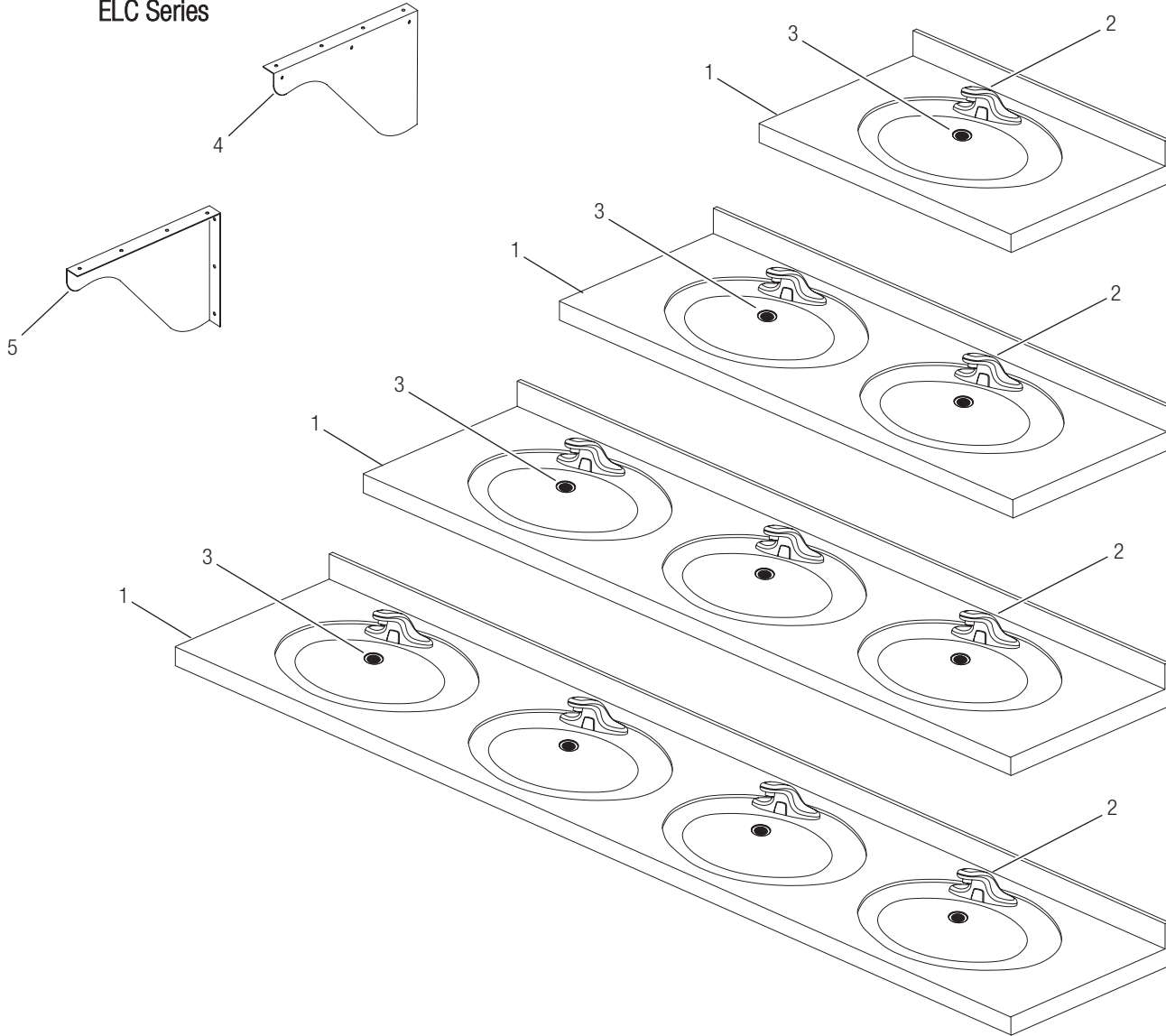
Item No.	Part No.	Description
1	ELB-51000	Bio-Deck Surface – Single Station
2	ELB-52000	Bio-Deck Surface – Double Station
3	ELB-3	Right Mounting Bracket (Optional)
4	ELB-4	Left Mounting Bracket (Optional)

Item No.	Part No.	Description
5	SS-7	Vitreous China Undermount Sink
6	ETF-460-A	Grid Strainer Assembly
7	ELB-7-A	Mounting Hardware includes 1/4" Fender Washer and 1/4" x 1" Sheet Metal Screw
7	—	Sloan Faucet (model varies)



# PARTS LIST

## ELC Series



Item No.	Description
1	Solid Surface Basin (single) Solid Surface Basin (double) Solid Surface Basin (triple) Solid Surface Basin (quadruple)
2	Faucet (Model Varies)
3	Strainer Assembly
4	Right Mounting Bracket (Optional)
5	Left Mounting Bracket (Optional)

### NOTICE:

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

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