

INSTALLATION INSTRUCTIONS SINGLE, DOUBLE AND TRIPLE STATION SENSOR OPERATED SCRUB SINK SYSTEMS

ESS-2000 SERIES



ESS-2100

Single Station Scrub Sink
with One Sensor Operated Gooseneck Spout
Faucet



ESS-2200

Double Station Scrub Sink
with Two Sensor Operated Gooseneck Spout
Faucets



ESS-2300

Triple Station Scrub Sink
with Three Sensor Operated Gooseneck Spout
Faucets

ESS-3000 SERIES



ESS-3100

Deluxe Single Station Scrub Sink
with One Sensor Operated Gooseneck Spout
Faucet and Knee Operated Soap Dispenser



ESS-3200

Deluxe Double Station Scrub Sink
with Two Sensor Operated Gooseneck Spout
Faucets and Knee Operated Soap Dispensers



ESS-3300

Deluxe Triple Station Scrub Sink
with Three Sensor Operated Gooseneck Spout
Faucets and Knee Operated Soap Dispensers

Made in the U.S.A.

Installation of the Sloan ESS-2000 and ESS-3000 Series Scrub Sinks with OPTIMA™ Sensor Operated Gooseneck Faucet(s) makes wash-up totally "hands free." The OPTIMA Series faucet uses infrared technology to sense the user's presence and activate a water supply that has been pre-mixed to the desired water temperature. When the user is no longer within the sensing range, the water supply automatically stops.

Sloan ESS-3000 Series Deluxe Scrub Sinks are designed with Knee Operated Soap Dispenser(s) to make soap dispensing totally "hands-free" providing the ultimate in sanitary protection. Pressing on the knee panel activates the soap pump to dispense an application of hand washing soap.

The ESS-2000 and ESS-3000 Series Scrub Sinks are designed for easy installation and maintenance. All system components are pre-plumbed and assembled at the factory. The ESS-2000 and ESS-3000 Series Scrub Sinks come complete with an OPTIMA™ Sensor Operated Faucet, 24 VAC solenoid valve and transformer for each scrub station and can be specified with three different water temperature control options.

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

LIMITED WARRANTY

Sloan Valve Company warrants its Optima ESS-2000 and ESS-3000 Series Scrub Sinks 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.

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.

SCRUB SINK ROUGH-IN

Figure 1A

Single Station Scrub Sink

MODEL ESS-2100-C — 2.2 gpm (8.3 Lpm) Max. — Laminar Flow Spray Head

MODEL ESS-2100-H — 2.2 gpm (8.3 Lpm) Max. — Shower Spray Head (Shown)

SINK WEIGHT (Empty) — 200 Lbs. (90 Kg)

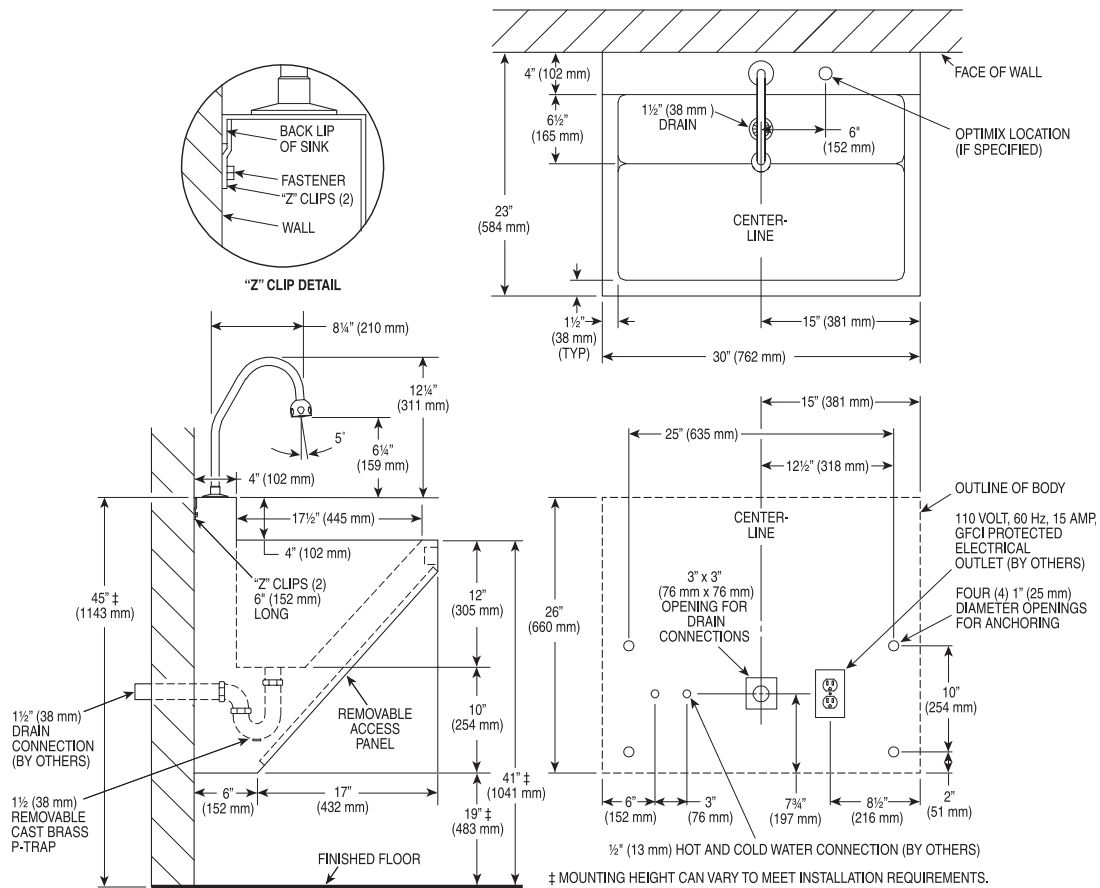


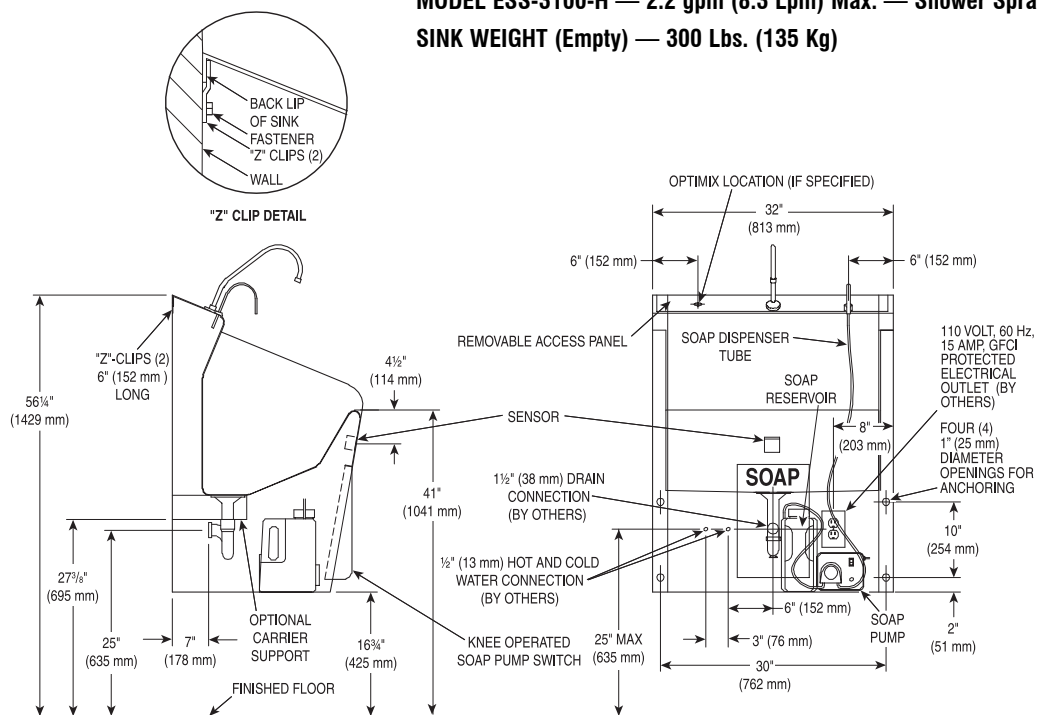
Figure 1B

Deluxe Single Station Scrub Sink

MODEL ESS-3100-C — 2.2 gpm (8.3 Lpm) Max. — Laminar Flow Spray Head (Shown)

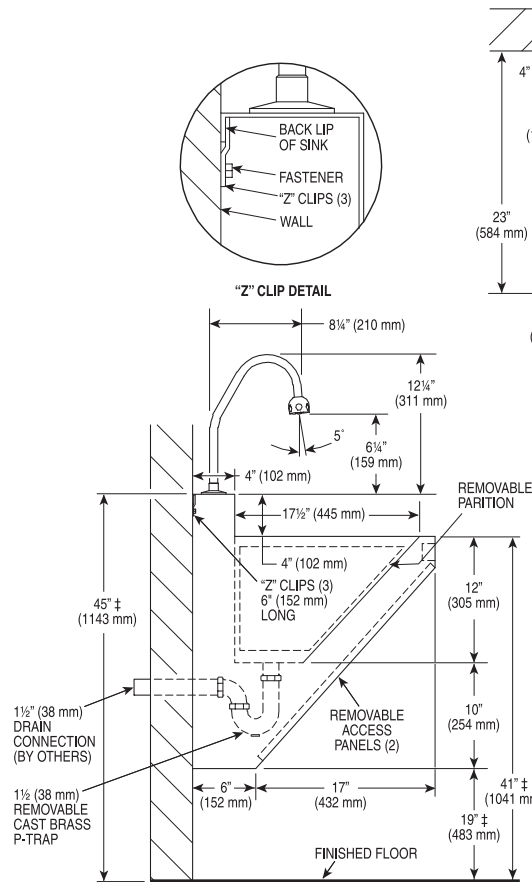
MODEL ESS-3100-H — 2.2 gpm (8.3 Lpm) Max. — Shower Spray Head

SINK WEIGHT (Empty) — 300 Lbs. (135 Kg)



SCRUB SINK ROUGH-IN (Continued)

Figure 1C



Double Station Scrub Sink

MODEL ESS-2200-C — 2.2 gpm (8.3 Lpm) Max. — Laminar Flow Spray Head
MODEL ESS-2200-H — 2.2 gpm (8.3 Lpm) Max. — Shower Spray Head (Shown)

SINK WEIGHT (Empty) — 300 Lbs. (135 Kg)

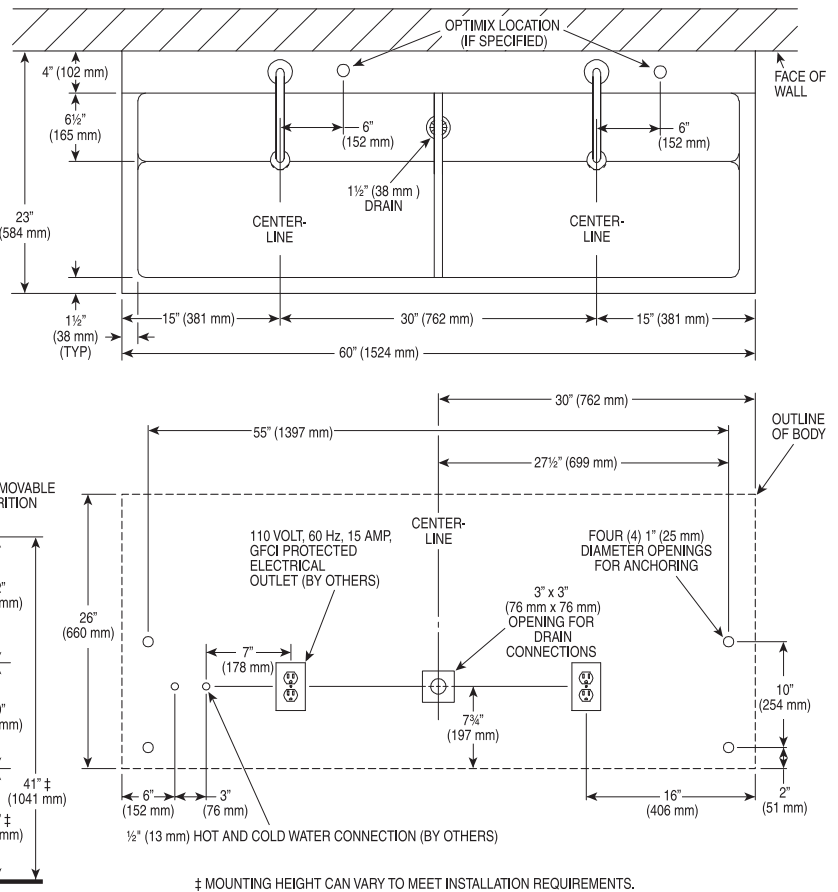


Figure 1D

Deluxe Double Station Scrub Sink

MODEL ESS-3200-C — 2.2 gpm (8.3 Lpm) Max. — Laminar Flow Spray Head (Shown)
MODEL ESS-3200-H — 2.2 gpm (8.3 Lpm) Max. — Shower Spray Head

SINK WEIGHT (Empty) — 340 Lbs. (153 Kg)

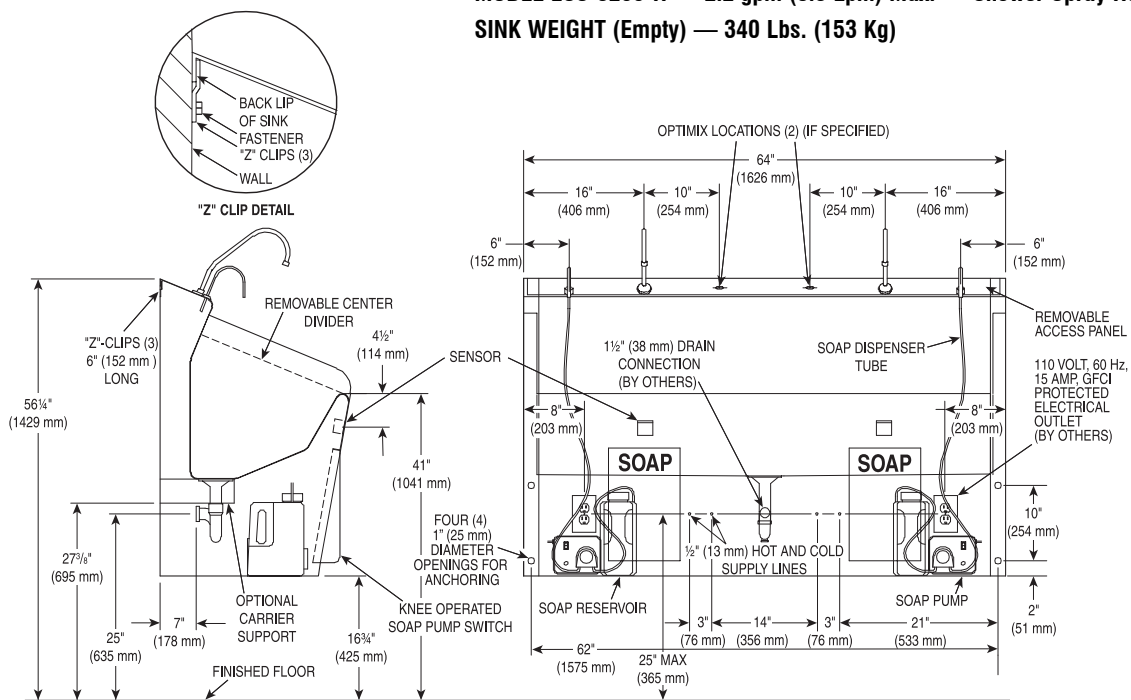


Figure 1E

MODEL ESS-2300-C — 2.2 gpm (8.3 Lpm) Max. — Laminar Flow Spray Head
MODEL ESS-2300-H — 2.2 gpm (8.3 Lpm) Max. — Shower Spray Head (Shown)

[illegible]

‡ MOUNTING HEIGHT CAN VARY TO MEET INSTALLATION REQUIREMENTS.

MODEL ESS-3300-C — 2.2 gpm (8.3 Lpm) Max. — Laminar Flow Spray Head (Shown)
MODEL ESS-3300-H — 2.2 gpm (8.3 Lpm) Max. — Shower Spray Head

[illegible]

PRIOR TO INSTALLATION

Prior to installing the Sloan ESS-2000 or ESS-3000 Series Scrub Sink, install the items listed below. Also, refer to Figures 1A through 1F.

- Electrical Receptacles for Plug-In Transformers (1 for each scrub station) — Install Ground Fault Interrupt (GFCI) electrical receptacles for plug-in transformers — 120 VAC, 2 amp service for each ETF-233 (24 VAC, 35 VA) plug-in transformer used.
- Hot and cold water supply lines with supply stops or tempered water supply line with supply stop
- Drain line

Important:

- **ADEQUATE STRUCTURAL SUPPORT IN OR BEHIND THE WALL IS REQUIRED. REFER TO THE APPROPRIATE ROUGH-IN DIAGRAM ON PAGES 2 THROUGH 4 FOR DRY WEIGHT OF SINK. STRUCTURAL SUPPORT MUST WITHSTAND WEIGHT OF SINK WHEN FILLED WITH WATER.**
- **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.**
- **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.**

TOOLS REQUIRED FOR INSTALLATION

- Electric drill for drilling anchor holes.
- Screwdriver for installing “Z” clip fasteners.
- Socket or open end wrench for installing anchoring fasteners.
- Open end wrench for connecting water lines.
- Pipe wrench for installing drain line.

SCRUB SINK LOCATION

Determine the appropriate wall location for the Scrub Sink. 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 Scrub Sink 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 through 4, Figures 1A through 1F, for Scrub Sink dimensions.

Prior to Scrub Sink installation, electric wiring, plumbing supply and drain must be installed as illustrated in the Rough-in diagrams on Pages 2 through 4, Figures 1A through 1F.

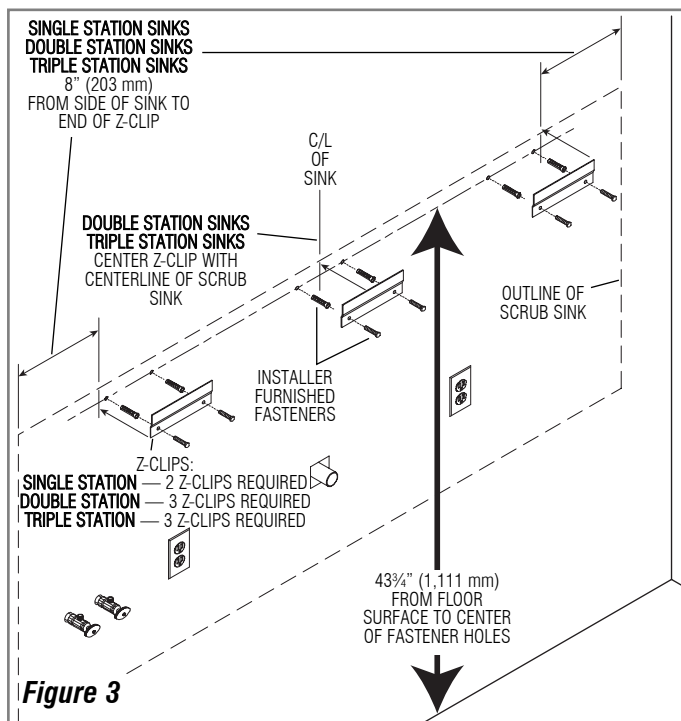
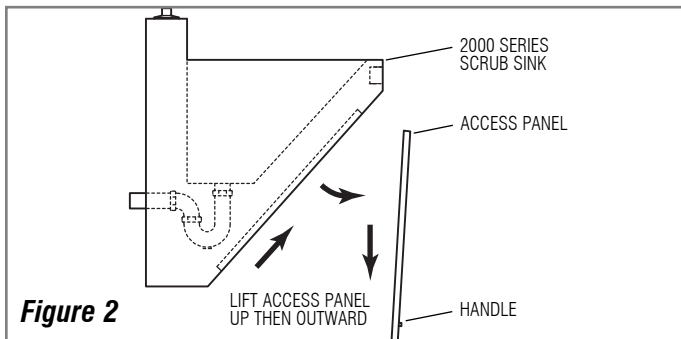
INSTALLATION INSTRUCTIONS

Step 1 — Unpack Scrub Sink

Carefully remove Sink from its protective carton. Examine the carton for additional parts before discarding packaging material.

Step 2 — Remove Access Panel (2000 Series Sinks Only)

Remove Access Panel from Sink by lifting up and pulling outward on the handle located at the bottom of the Access Panel. Refer to Figure 2. Do not use excessive force. The Access Panel is not attached to the Sink with any fasteners. For double and triple station sinks, remove all remaining Access Panels.



Step 3 — Install “Z” Clips to Wall (Figure 3)

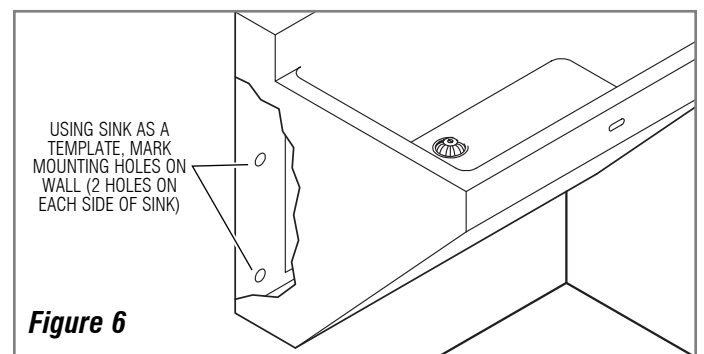
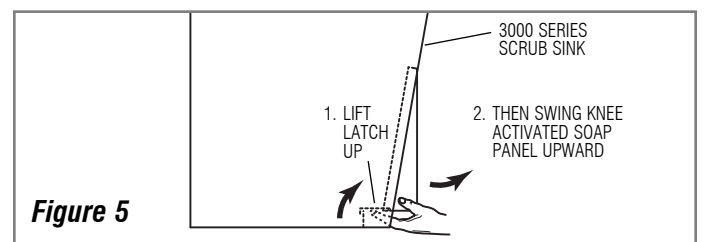
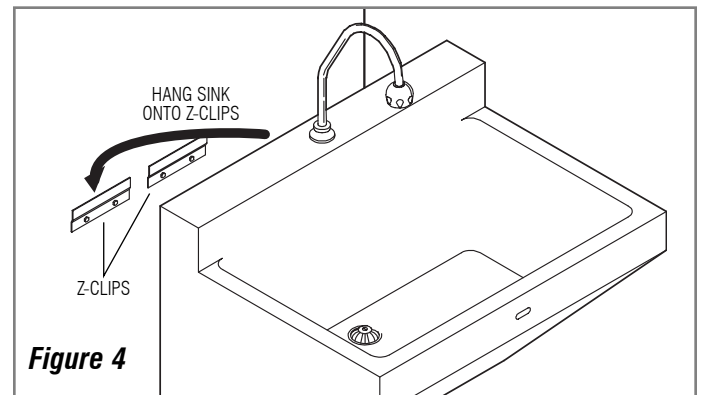
Install “Z” Clips (using installer furnished fasteners) so that mounting holes measure 43 3/4 inches (1,111 mm) from floor surface for a standard 41 inch (1,041 mm) sink height. Refer to Figure 3 for complete dimensioning details.

NOTE: Mounting height can vary to meet individual installation requirements. Adjust all rough-in and mounting dimensions accordingly.

Step 4 — Mark Mounting Hole Locations on Wall

With the help of an assistant, carefully lift and hang the Scrub Sink onto the Z-clips. Position Sink as required. Refer to Figure 4.

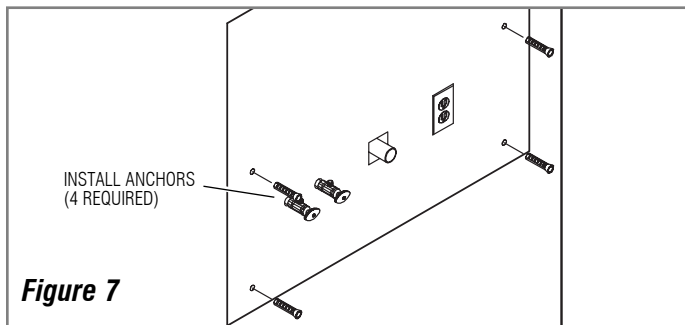
For 3000 Series Scrub Sinks, lift the Latch under the Knee Activated Soap Panel, then lift Knee Activated Soap Panel to gain access to mounting holes. Refer to Figure 5. Mark all four (4) Anchoring Hole locations using Sink as a template. Refer to Figure 6.



Step 5 — Install Anchoring Hardware (Figure 7)

Carefully remove the Sink from the wall and place in a safe location.

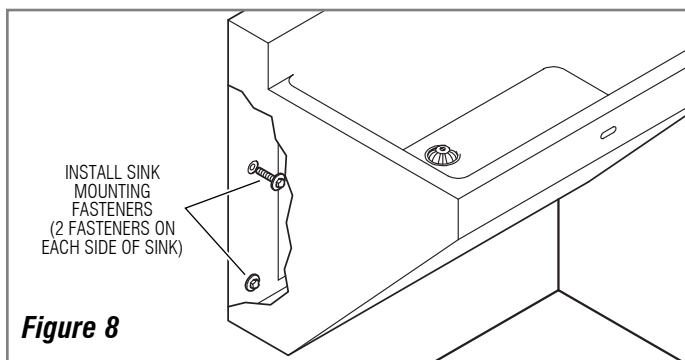
Drill a 1" (25 mm) diameter hole into the wall at each of the four (4) locations marked in Step 4. Refer to Figure 1 Rough-in Diagrams for further details on mounting hole positioning. (Mounting height can vary to meet individual installation requirements.) Install the four (4) Anchors for Sink as instructed in the Anchor Manufacturer's Installation Instructions.



Step 6 — Mount Scrub Sink to Wall (Figure 8)

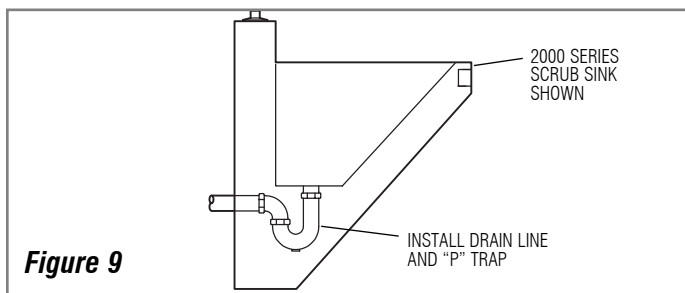
With the help of an assistant, carefully lift and hang the Scrub Sink onto the Z-clips. Position Sink so that the four (4) Sink mounting holes are aligned with the wall anchors located in the wall.

Install and tighten the four (4) Anchoring Fasteners securely.



Step 7 — Install Drain (Figure 9)

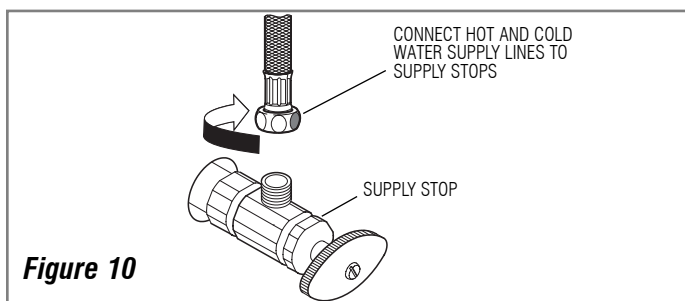
Install Drain Line and "P" Trap (furnished by installer) as instructed in the Manufacturer's Installation Instructions.



Step 8 — Connect Water Supply Lines (Figure 10)

Note: If installation includes a MIX-110-A or MIX-70-A Mixing Valve, install mixing valve before connecting the water supply lines. Refer to the Installation Instructions supplied with the Sloan mixing valve.

Important: Before connecting water supply lines to Supply Stops, flush all water lines until water is clear.



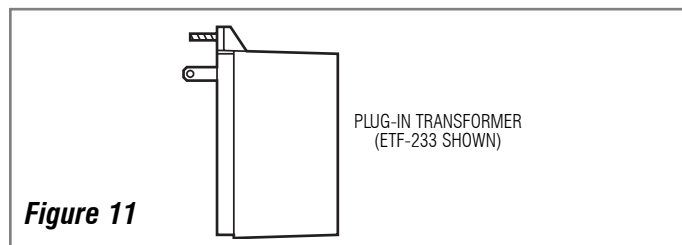
Connect hot and cold water supply lines to Supply Stops. (Supply Stops have a 1/2" male pipe thread inlet.) Open Supply Stops completely.

Note: If sink is ordered without a mixing valve, a single pretempered water supply line must be installed.

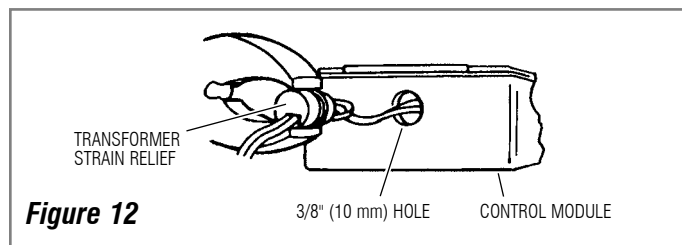
Step 9 — Connect Transformer (Figures 11 and 12)

Important: DO NOT plug Transformer into receptacle until all wiring has been completed.

The Transformer is designed to be plugged into a 120 VAC Ground Fault Interrupt (GFCI) wall receptacle. It is supplied with a 10 foot Cable; however, this Cable can and should be shortened to meet installation requirements.

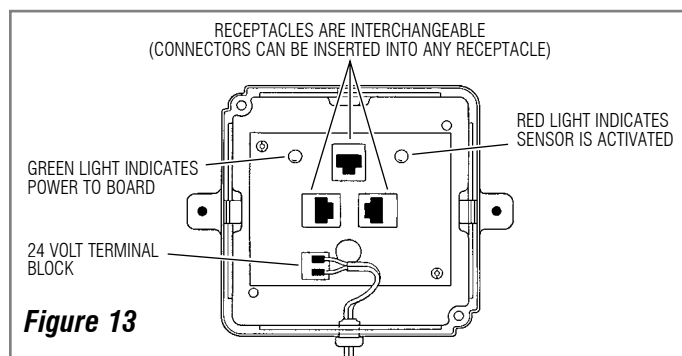


Separate and strip one end of Transformer Power Cable approximately 3/16 to 1/4 inch (5 to 6 mm). Install Transformer Strain Relief 3 inches (76 mm) from stripped end of Power Cable. Squeeze Strain Relief with a pliers and insert stripped end of Power Cable and Strain Relief into 3/8 inch (10 mm) hole in Control Module as shown in Figure 12.

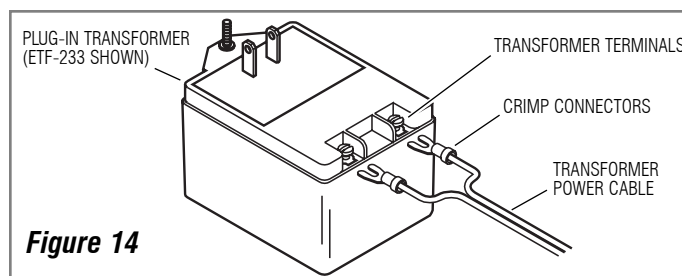


Important: Twist stranded ends of Power Cable before inserting into Terminal Block. Fraying of Stranded Power Cable Wire can cause a short and damage the Control Module and Transformer when power is supplied.

Connect Power Cable to Terminal Block on Connector Board. Refer to Figure 13 for location of 24 Volt Terminal Block on Connector Board.



Install Crimp Connectors to opposite end of Transformer Power Cable and connect Power Cable ends to Transformer Terminals as shown in Figure 14.



Step 10 — Plug Transformer into Receptacle (Figure 15)

Make sure that power is supplied to the receptacle(s). Plug the Transformer into the lower receptacle. For double and triple station sinks, plug the remaining Transformers into the remaining receptacles.

Important: Plug-in Transformer MUST be used with a Ground Fault Interrupt (GFCI) Receptacle to help prevent possible electrical shock.

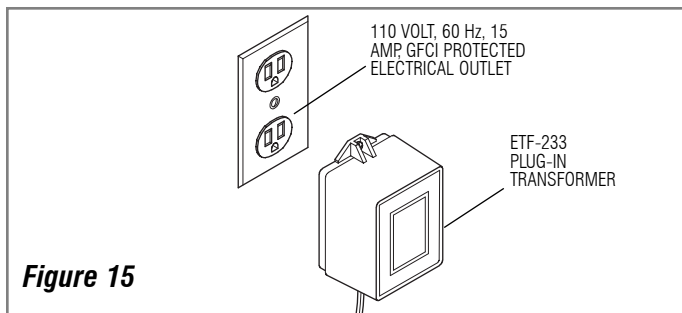


Figure 15

Step 11 — Fill Soap Dispenser Reservoir with Soap (3000 Series Sinks Only)

Lift the Knee Activated Soap Panel to gain access to the Soap Dispenser Reservoir. Remove the Reservoir Cover, fill the Reservoir with soap, and replace the Reservoir Cover.

Step 12 — Plug Soap Dispenser into Receptacle (3000 Series Sinks Only)

Plug the Soap Dispenser power cord into the upper receptacle. For double and triple station sinks, plug the remaining Soap Dispenser power cords into the remaining receptacles.

Step 13 — Start-Up

Note: The Control Module is equipped with two (2) LED indicators. When the Board is supplied with power from the Transformer, the green LED will illuminate. When the Sensor is activated, the red LED will illuminate. Refer to Figure 13 for location of LED indicators.

Open Supply Stops. With Aerator or Spray Head removed, activate Faucet for thirty (30) seconds by moving in front of Sensor. The Solenoid Valve should "click" and water should flow from the Spout. If this does not occur, refer to the Troubleshooting section of this Installation Instructions.

Close Supply Stops and install Aerator or Spray Head in Spout and tighten securely. Reopen Supply Stops, activate Faucet and check for leaks.

Install the Control Module Cover using the Screws supplied.

Step 14 — Install Access Panel (2000 Series Sinks Only)

Slide top of Access Panel up into Sink opening, then swing Panel inward until flush with Sink Frame, and then lower Panel into slot of Sink Frame. Do not use excessive force. For double and triple station sinks, install all remaining Access Panels.

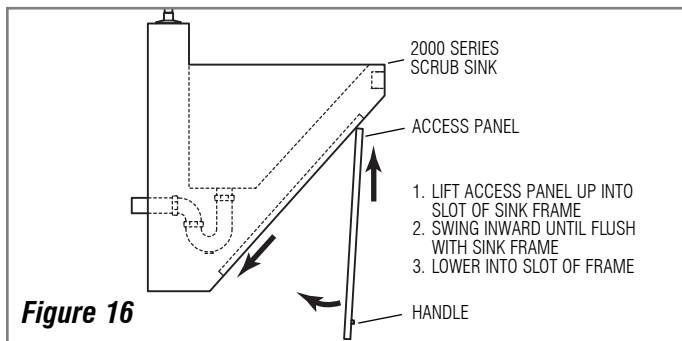


Figure 16

Step 15 — Secure Knee Activated Soap Panel (3000 Series Sinks Only) (Figure 17)

Lower the Knee Activated Soap Panel, then lift the Latch under the Knee Activated Soap Panel over and behind the Lock. Lower the Latch to secure the Knee Activated Soap Panel. Refer to Figure 17. For double and triple station sinks, secure all remaining Panels as instructed above.

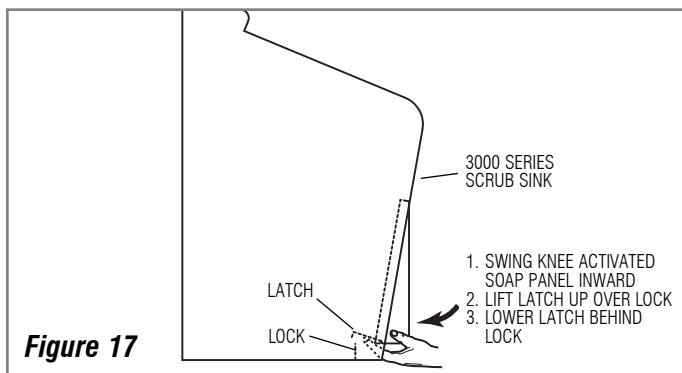


Figure 17

OPERATION

1. A continuous invisible beam of infrared light is emitted from the sensor located at the top front edge of the sink.
2. As the user enters the beam's effective range, the beam is reflected back into the sensor receiver and activates the solenoid valve. Tempered water flows from the faucet into the sink until the user is no longer detected.
3. When the user moves away from the sensor, light is no longer reflected to the sensor. An electrical signal then deactivates the solenoid valve, stopping the water flow. The circuit then automatically resets and is ready for the next user.



CARE AND CLEANING OF CHROME AND SPECIAL FINISHES

DO NOT use abrasive or chemical cleaners (including chlorine bleach) 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 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.

TROUBLESHOOTING GUIDE

Troubleshooting the Faucet

No water flows when sensor is activated

Ensure that main power supply is turned "ON." Open control module and check diagnostic lights. Check receptacle, transformer, solenoid, leads and connections.

If no lights are illuminated:

1. Control module circuit board is faulty; replace.

If green LED is illuminated and red LED illuminates when user is sensed:

1. Supply Stop(s) may be closed; open Supply Stop(s).
2. Debris may be in Solenoid Filter; remove, clean and reinstall.

If green LED is illuminated and red LED DOES NOT illuminate when user is sensed:

1. Sensor range is too long (picking up sink); reduce range.
2. Sensor is faulty; replace Sensor Module.

Very low flow or slow dribble

1. Supply Stop(s) may be closed; open Supply Stop(s).
2. Debris in Solenoid; disassemble Solenoid; clean and flush.
3. Debris may be in Solenoid Filter; remove, clean and reinstall.
4. Debris is in Aerator or Spray Head; remove, clean and reinstall.

False triggering (unit activates by itself)

1. Sensor range is too long; reduce range. Check surroundings for factors that can contribute to sensor detection problems; for example, bright lights, highly reflective surfaces, sunlight, etc.

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

1. Solenoid valve is installed backwards.
2. Debris is in Solenoid, won't close properly; remove operator and clean. Reassemble in the same manner.

Troubleshooting the Soap Dispenser

Soap does not dispense from the spout.

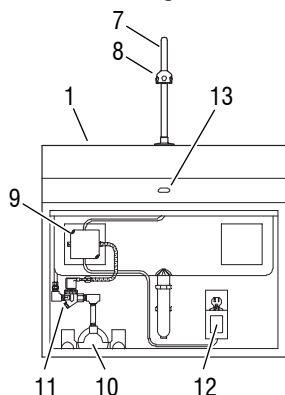
1. Soap reservoir is empty. Check the soap reservoir and fill if necessary.
2. Soap dispenser is not plugged in. Plug the soap dispenser power cord into the wall receptacle.
3. Power is not supplied to the wall receptacle. Check to make sure that power is being supplied to the wall receptacle.

How does one keep soap from dispensing while cleaning.

1. Unplug the soap dispenser power cord from the wall receptacle.

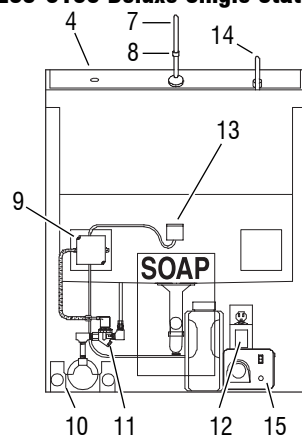
If further assistance is required, please contact the Sloan Valve Company Installation Engineering Department at 1-888-SLOAN-14 (1-888-756-2614).

ESS-2100 Single Station Scrub Sink

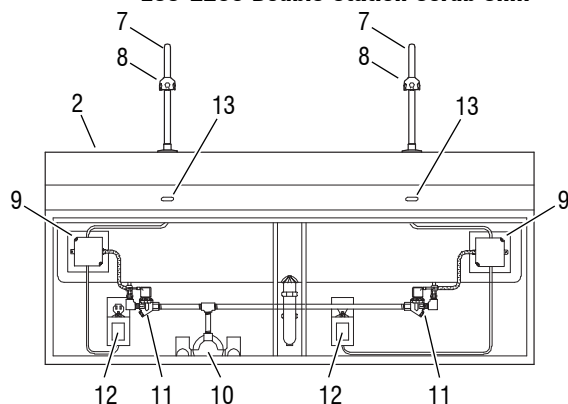


PARTS LIST

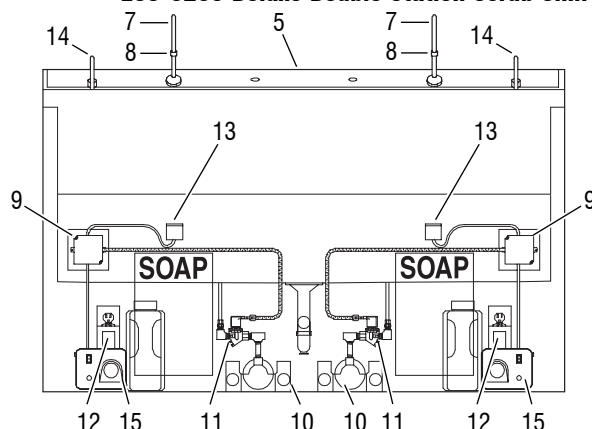
ESS-3100 Deluxe Single Station Scrub Sink



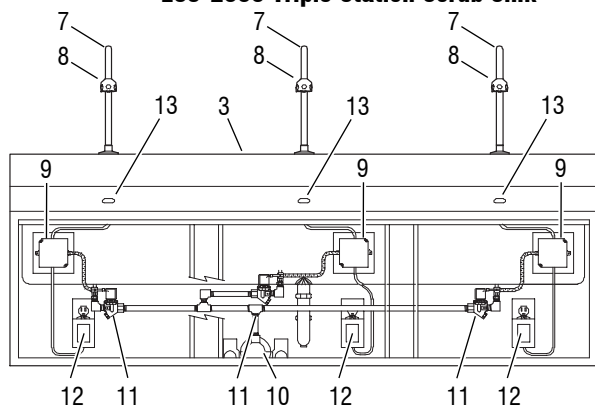
ESS-2200 Double Station Scrub Sink



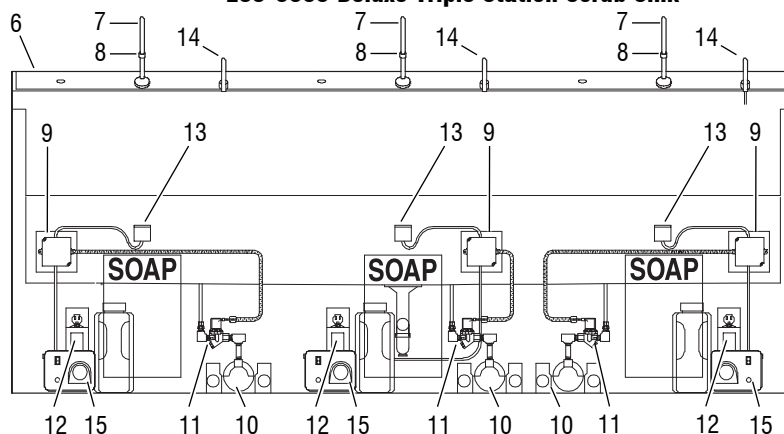
ESS-3200 Deluxe Double Station Scrub Sink



ESS-2300 Triple Station Scrub Sink



ESS-3300 Deluxe Triple Station Scrub Sink



Item No.	Part No.	Description
1	ESS-2100	Single Station Scrub Sink
2	ESS-2200	Double Station Scrub Sink
3	ESS-2200	Triple Station Scrub Sink
4	ESS-3100	Deluxe Single Station Scrub Sink
5	ESS-3200	Deluxe Double Station Scrub Sink
6	ESS-3200	Deluxe Triple Station Scrub Sink
7	AC-93-A	Sloan OPTIMA® Gooseneck Faucet — Surgical Bend
8	ETF-237	Laminar Flow Spray Head, 2.2 gpm (8.3 Lpm) Max.
	AC-55-A	Shower Spray Head, 2.2 gpm (8.3 Lpm) Max.
9	ETF-492-A	Control Module

Item No.	Part No.	Description
10	MIX-70-A	Below Deck Thermostatic Mixing Valve
	MIX-110-A	Above Deck Mechanical Mixing Valve
	MIX-139-A	Above Deck Thermostatic Mixing Valve
11	ETF-370-A	Solenoid Valve
12	ETF-233	Plug-in Transformer
13	EL-1500-LL-S	Sensor
14		Soap Dispenser Spout
15		Soap Dispenser Pump and Reservoir

NOTICE:

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