Please visit ***www.acorneng.com*** for most current specifications.

36” SEMI-CIRCULAR WASH FOUNTAIN

3493-SO-SSO

IMPORTANT

Important: Some options may slightly alter installation. To ensure proper installation review the manual thoroughly and verify rough-ins before beginning any work. File this manual with the owner or maintenance personnel upon completion of installation.

Industry standard wall backing, for wall hung fixtures, is required. Installer provided wall anchors and wall anchoring hardware must be appropriate for wall construction.

ANSI, UFAS or ADA compliance is subject to the interpretation and requirements of the local code authority and is the responsibility of the installer for verification.

Single Temp Valve Assembly: Recommended working water pressure is 30 psi (2.07 bars) minimum to 100 psi (6.89 bars) maximum. Maximum temperature is 130°F (54.4°C). Maximum outlet temperature recommended is 105°F (40.6°C). Valve assembly must be drained prior to being subjected to freezing temperatures. A checkstop is provided with this valve assembly.

T/P Mixing Valve Assembly: Recommended working water pressure is 30 psi (2.07 bars) minimum to 100 psi (6.89 bars) maximum. Maximum hot water temperature is 180°F (82°C). Temperature adjustment range is 85-115°F (29-46°C). Minimum hot water supply temperature must be 5°F (3°C) above desired set temperature. Valve assembly must be drained prior to being subjected to freezing temperatures. The valve assembly has checks integral to the inlets however, angle stops are to be provided by the installer.

Prior to installation, supply lines must be flushed of all foreign material such as pipe dope, chips, or solder. Debris or foreign material in water supply may damage valve.

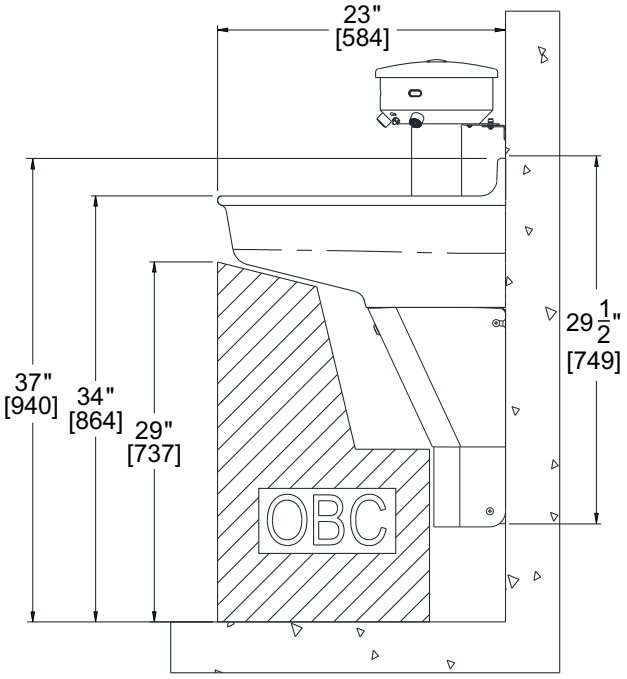
Teflon tape is recommended on all threaded waste and supply connections to reduce the possibility of leaks.

Provide 110-120VAC/60Hz/3A (MAX) electrical receptacle for factory supplied 120VAC/9VDC, 100mA plug-in transformer.

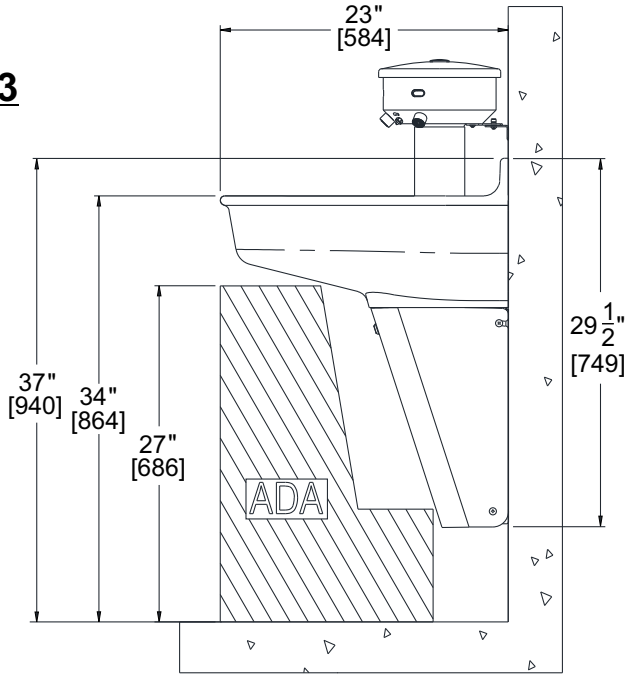
NOTE: Receptacle(s) must be wired to a GFCI protected circuit. Fixture must be earth grounded per N.E.C. (National Electrical Code).

3493 ACCESSIBILITY COMPARISONS

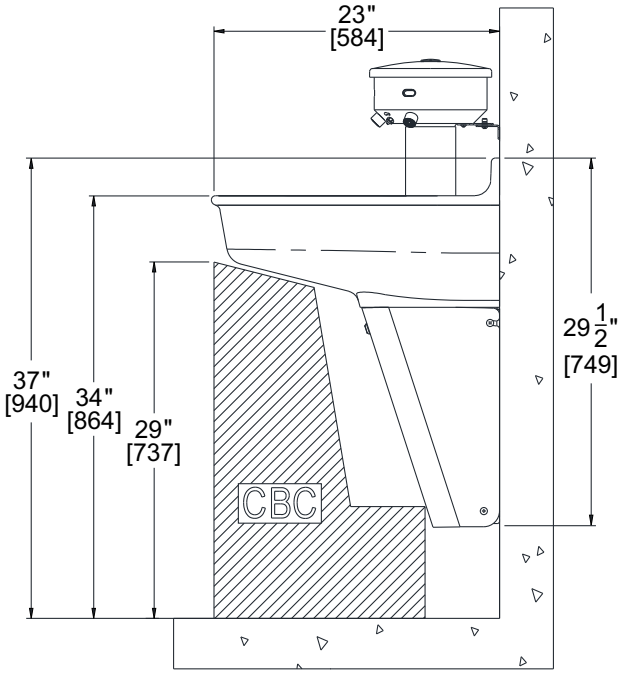
3493



OBC
(Ontario Building Code)



ADA
Adult

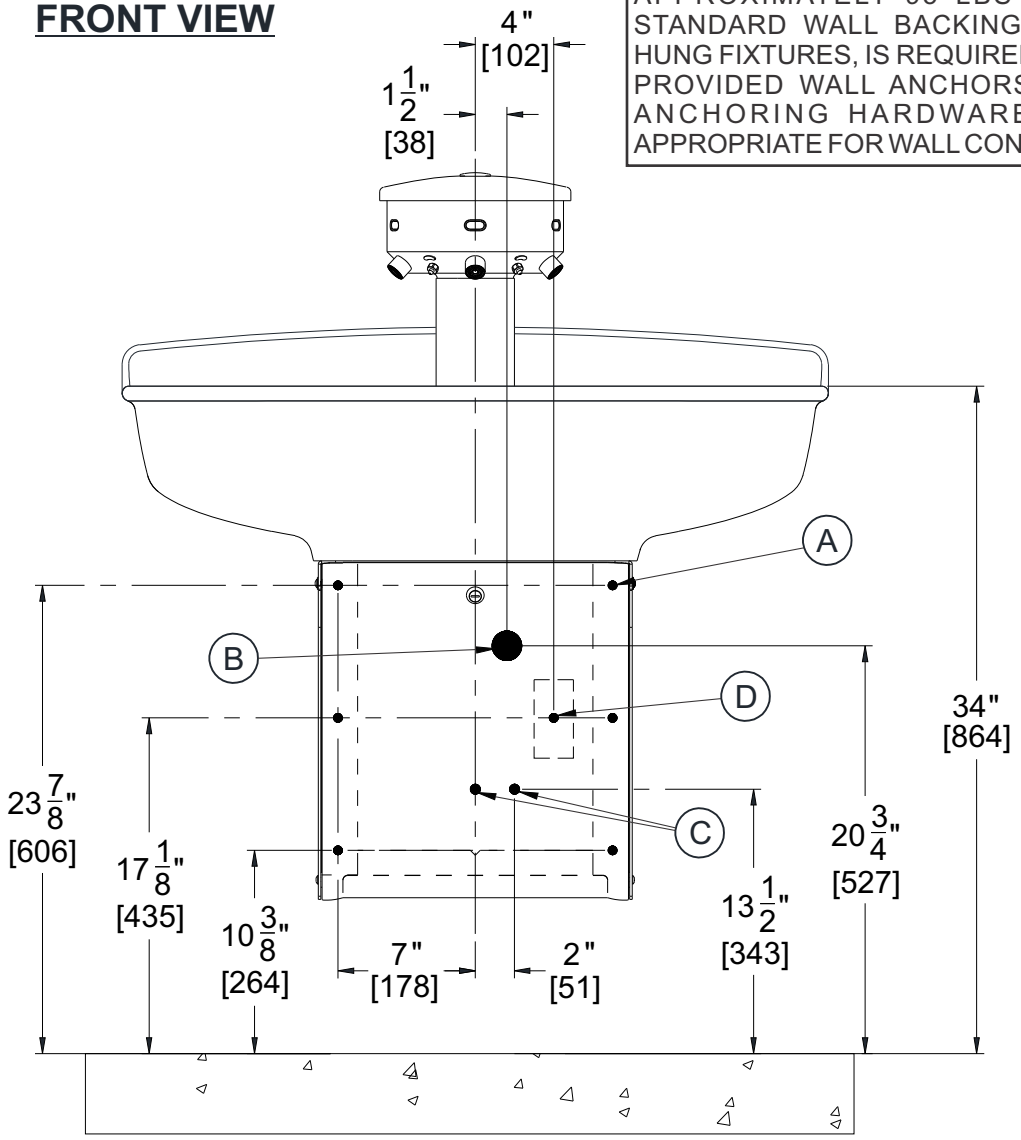


CBC
(California Building Code)

3493 ROUGH-IN DIMENSIONS -ADA

NOTE: FIXTURE WEIGHT IS APPROXIMATELY 95 LBS (INDUSTRY STANDARD WALL BACKING, FOR WALL HUNG FIXTURES, IS REQUIRED. INSTALLER PROVIDED WALL ANCHORS AND WALL ANCHORING HARDWARE MUST BE APPROPRIATE FOR WALL CONSTRUCTION)

FRONT VIEW



3493-SO-SSO SHOWN

(A) Ø7/16" Mounting Points (6) Places.

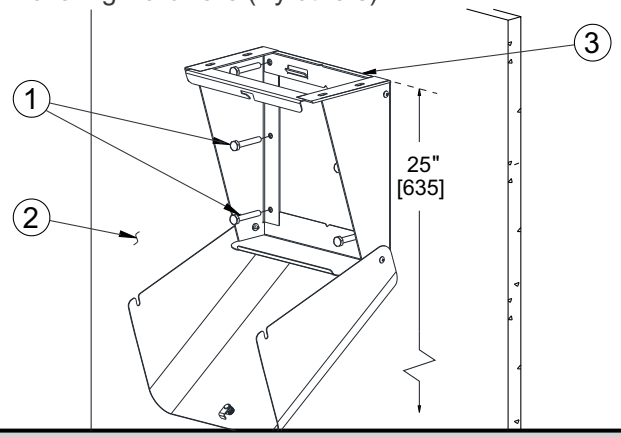
(B) 1-1/2" O.D. P-Trap Waste Outlet.

(C) 1/2" NPS Hot & Cold Supplies, Rough-In as required (Angle Stops by others).

(D) For -SO and -SSO options: Provide 120VAC, 60Hz, 3A (Max) GFCI Protected Electrical Receptacle.

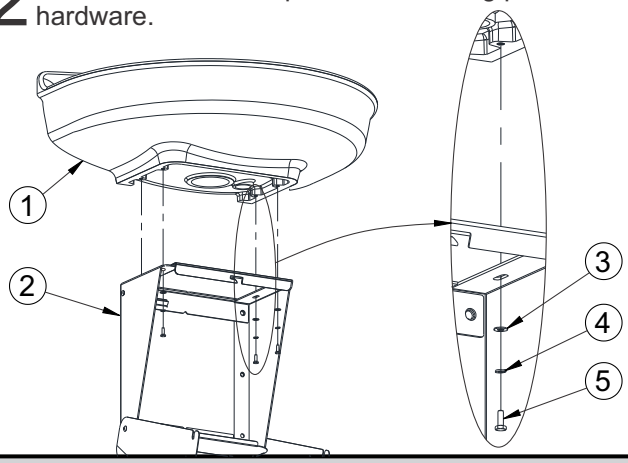
FIXTURE ANCHORING

1 Mark, level and mount Trap Enclosure using Wall Anchoring Hardware (By others).



1. Wall Anchoring Hardware by others
2. Finished Wall
3. Trap Enclosure

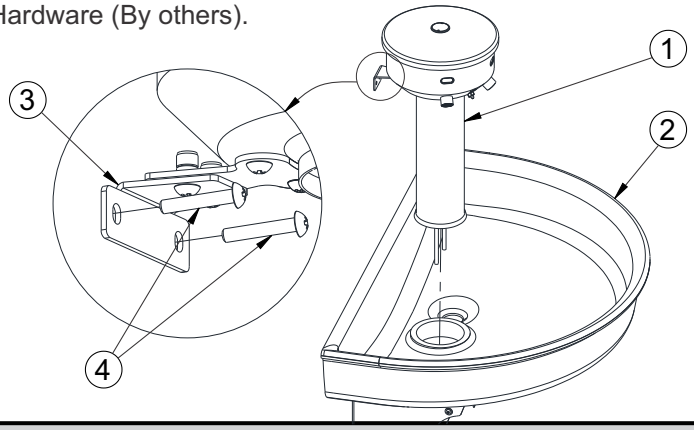
2 Install Basin onto Trap Enclosure using provided hardware.



1. Basin
2. Trap Enclosure
3. Flat Washer (Provided)
4. Lock Washer (Provided)
5. Hex Screw (Provided)

HINT: It is recommended to first install Stanchion Bracket to Stanchion, then mark/pilot wall anchoring locations before securing Stanchion Assembly to fixture and wall.

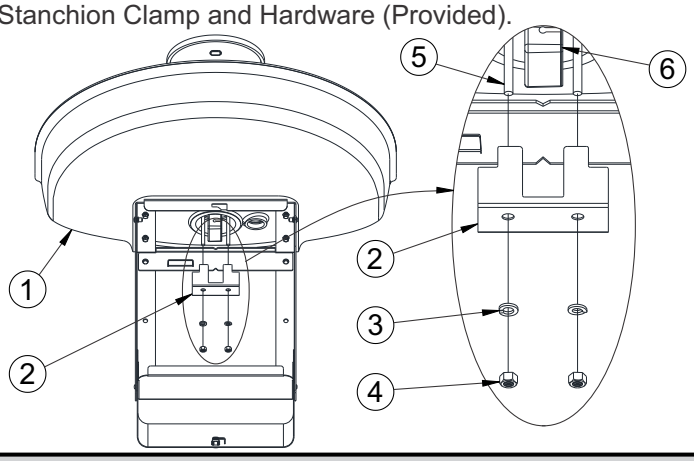
3 Assemble Stanchion Assembly onto Basin and Secure to wall using Stanchion Wall Bracket (Provided) and Anchoring Hardware (By others).



1. Stanchion Assembly
2. Basin
3. Stanchion Bracket
4. Wall Anchoring Hardware by others

FIXTURE ANCHORING

4 Secure Stanchion Assembly to Basin Assembly using Stanchion Clamp and Hardware (Provided).



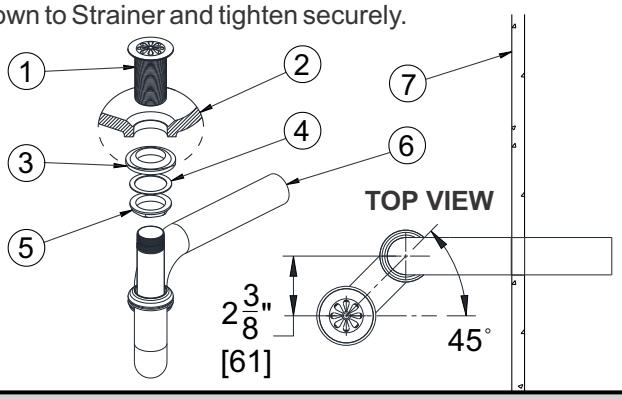
1. Basin Assembly
2. Stanchion Clamp
3. Lock Washer (Provided)
4. Hex Nut (Provided)
5. Threaded Rods
6. Junction Box

NOTE: Ensure Junction Box orientation allows for front side plug-in power supply cord.

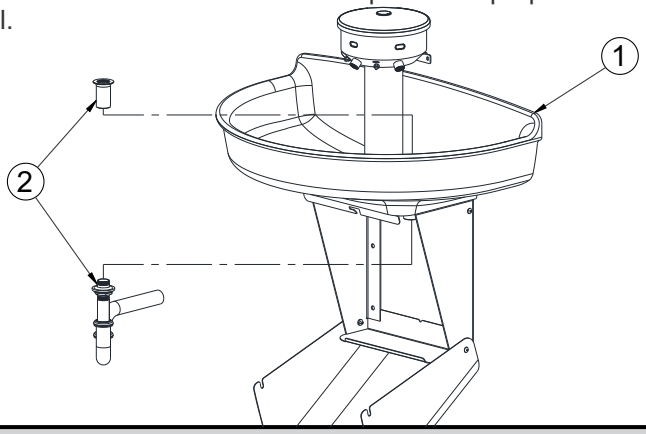
1. Drain Strainer
2. Basin
3. Rubber Gasket
4. Fiber Washer
5. Flange Nut
6. 1-1/2” x 1-1/4” P-Trap
7. Finished Wall

HINT: Teflon tape is recommended on all threaded waste and supply connections.

5 Install Drain Strainer to Basin using plumbers putty on underside of grid strainer flange. From beneath Basin, assemble Rubber Gasket, Washer and Flange Nut as shown to Strainer and tighten securely.



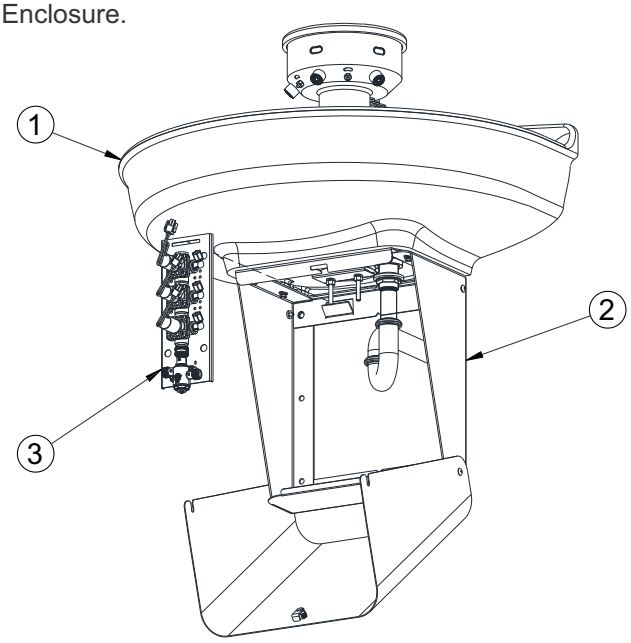
6 Install P-Trap through the Access Panel Opening on the front side of unit. Ensure P-Trap outlet is perpendicular to wall.



1. Basin Assembly
2. P-Trap Assembly (Optional)

OPTIONAL INFRA-RED VALVE CONTROLS AND SOAP

7 Secure Valve Assembly on hanger provided within Trap Enclosure.



1. Basin Assembly
2. Trap Enclosure
3. Valve Assembly

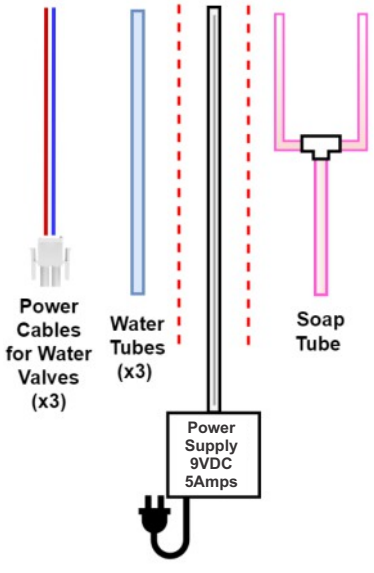
NOTE: Feed water/soap tubing and electrical cables through the bottom access of the stanchion prior to completing the connections within the trap enclosure.

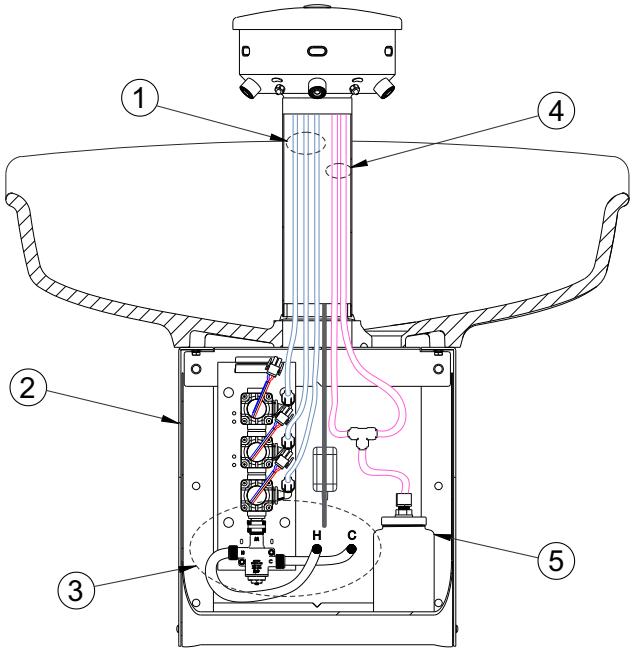
IMPORTANT

Upon completion of all plumbing connections, check for water leaks in supply lines and waste water piping.

8 Make up Hot and Cold Supplies, Water Valve Connections, and Soap Connections within Trap Enclosure.

1. Water Supply Riser Tubing
2. Trap Enclosure
3. Hot and Cold Water Supplies
4. -SSO Option Soap Tubing
5. -SSO Option Soap Bottle



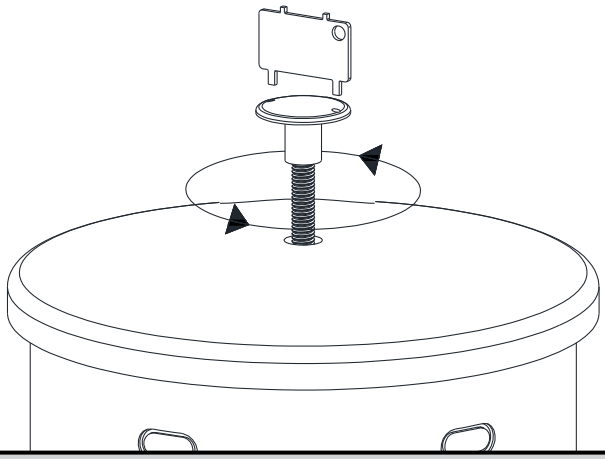


Sensor Operation Shown (3493-SO-SSO)

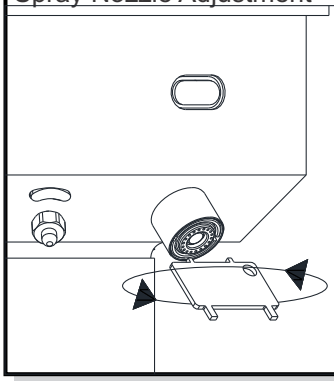
UNIVERSAL TOOL DETAIL

Provided Universal Tool

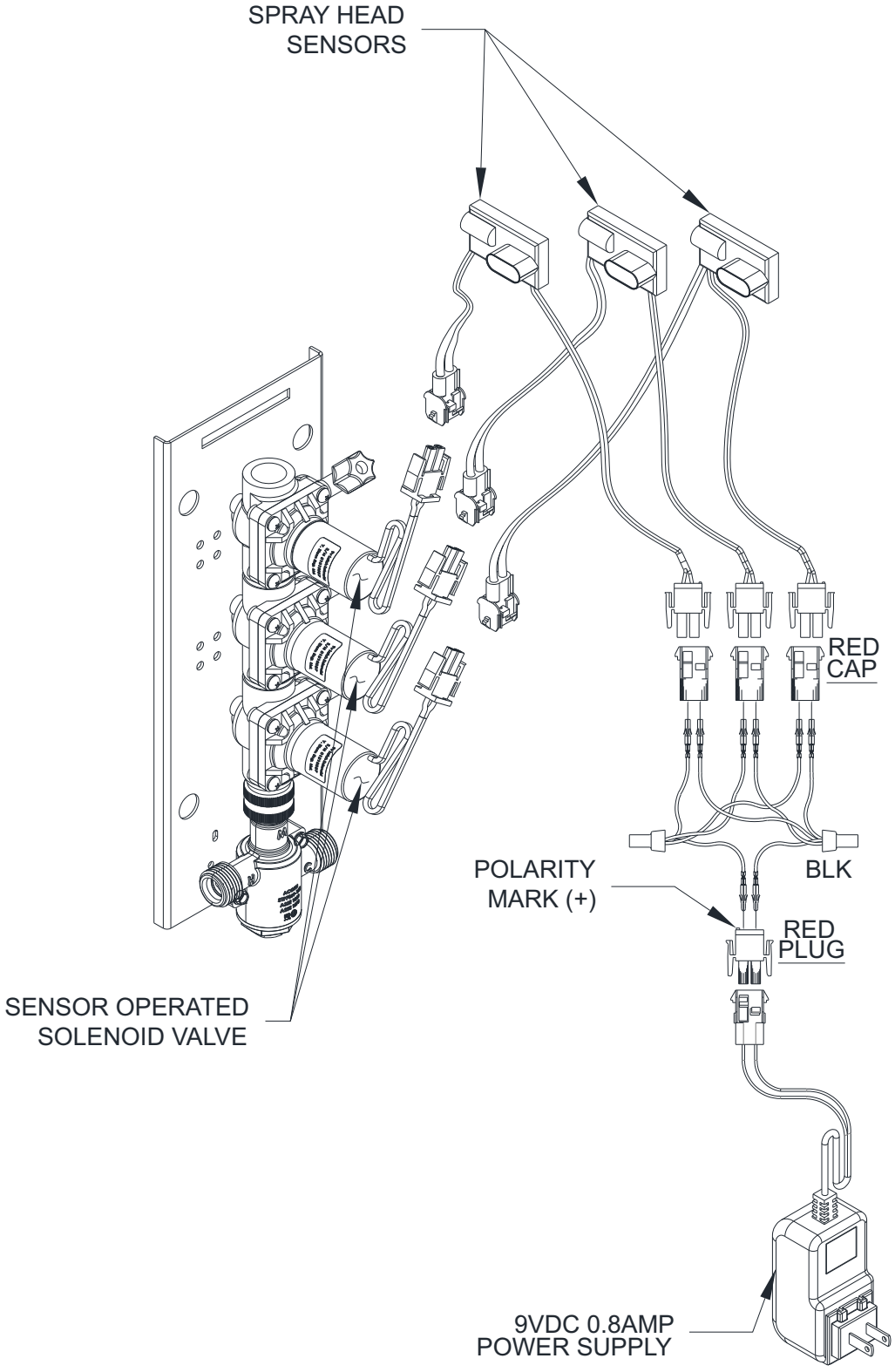
Security Nut Adjustment



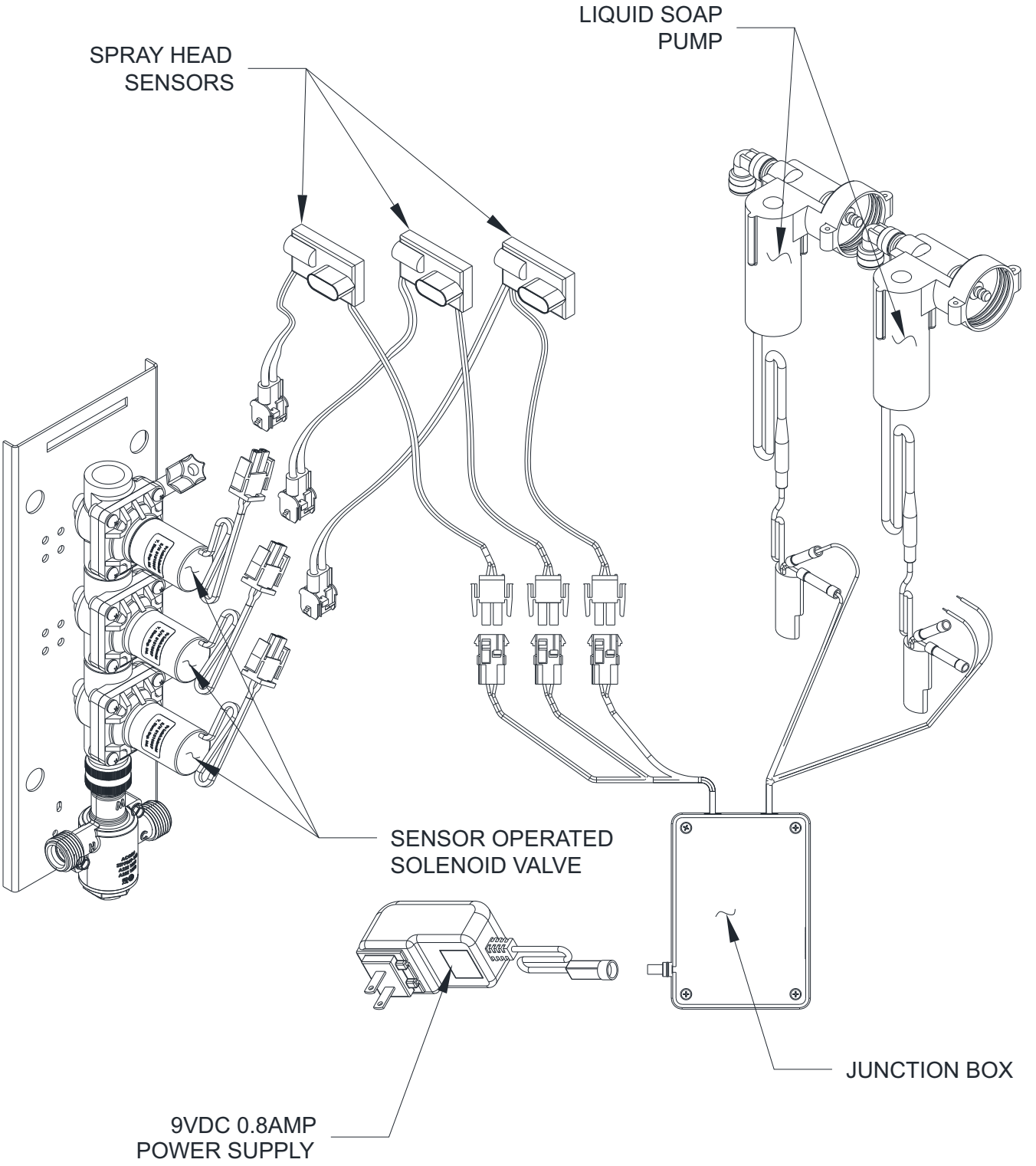
Spray Nozzle Adjustment



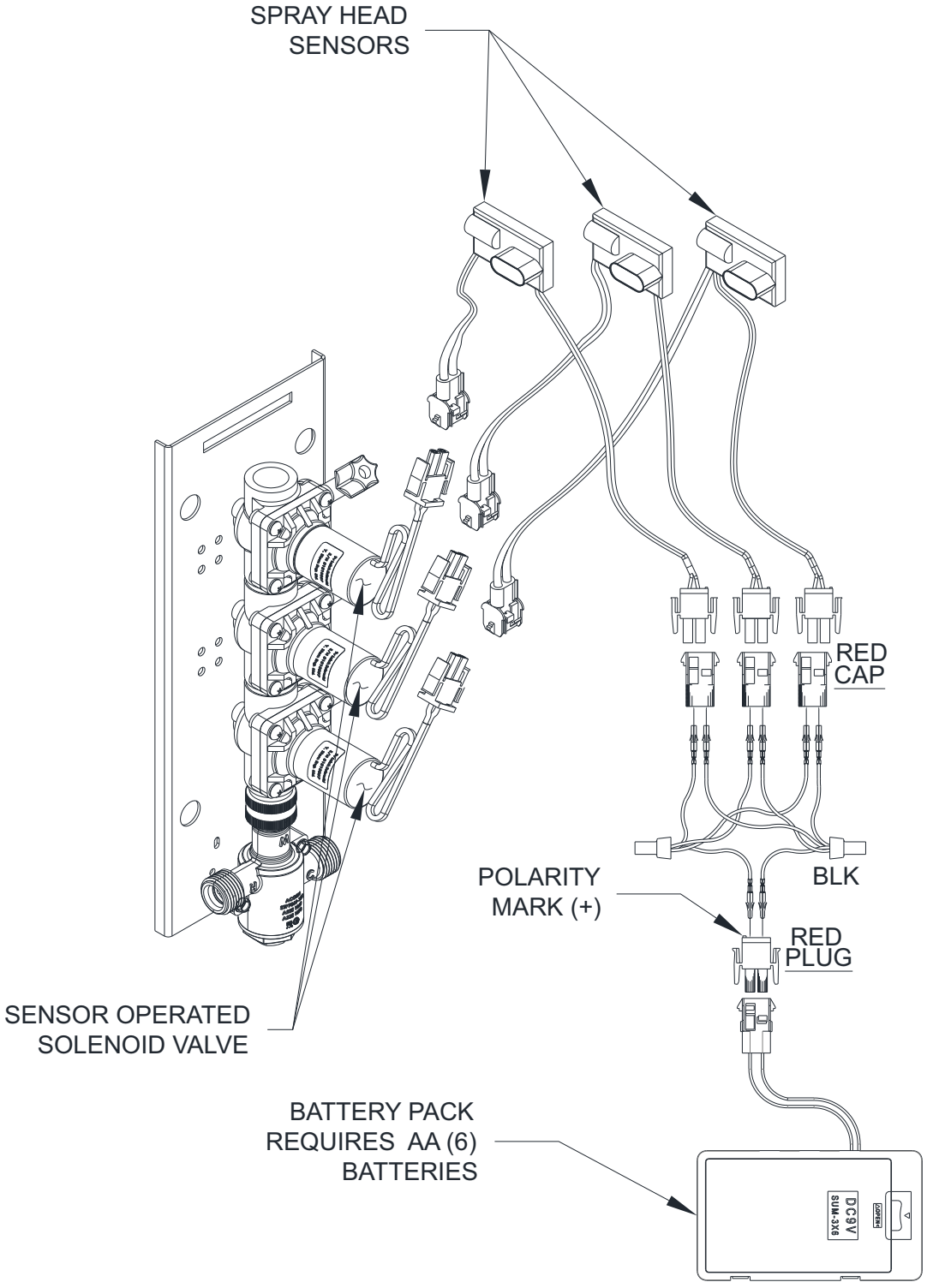
WIRING DIAGRAM PLUG IN TRANSFORMER -SO



WIRING DIAGRAM PLUG IN TRANSFORMER -SO & -SSO

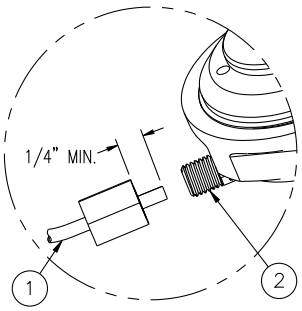


WIRING DIAGRAM BATTERY PACK -SO-BAT

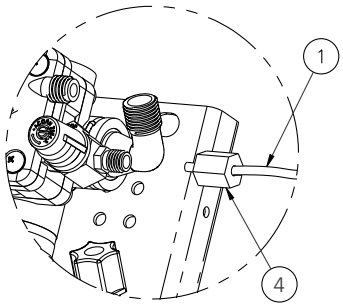


VALVE CONTROLS -H HAND OPERATION TIMING ADJUSTMENT

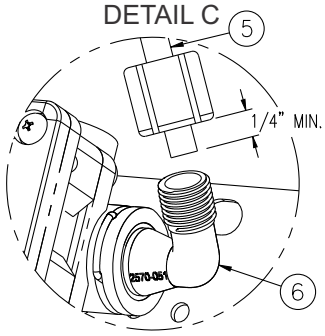
DETAIL A



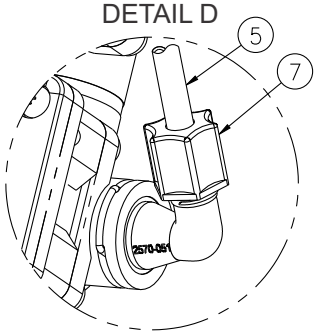
DETAIL B



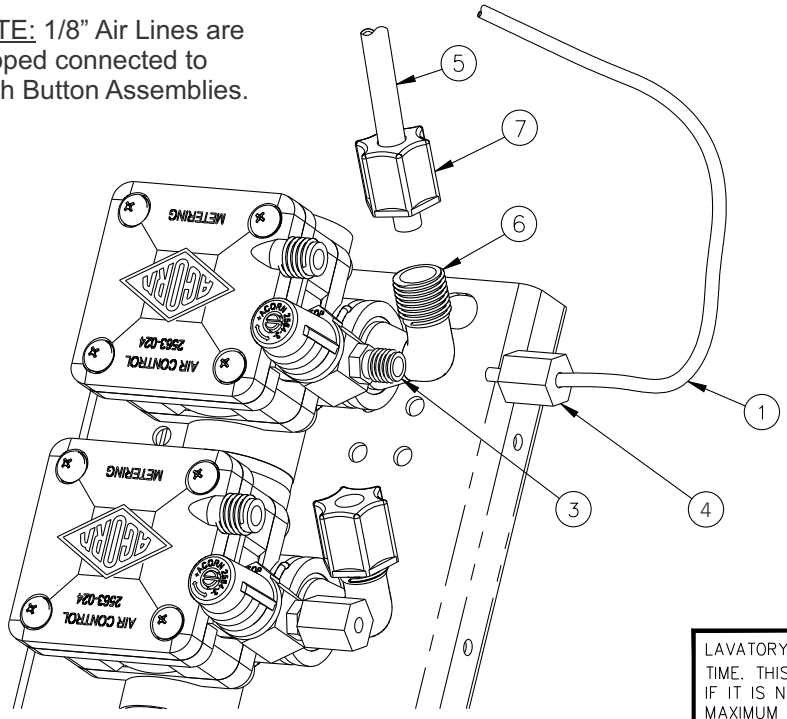
DETAIL C



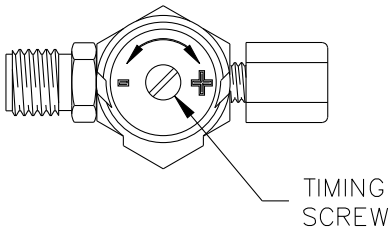
DETAIL D



NOTE: 1/8" Air Lines are shipped connected to Push Button Assemblies.



METERING



LAVATORY VALVES ARE FACTORY PRESET WITH A 5–20 SECOND RUN TIME. THIS WILL PROVIDE LESS THAN $\frac{1}{4}$ GALLON (1 LITER) PER CYCLE. IF IT IS NOTED THAT VALVES ARE RUNNING LONGER THAN THIS MAXIMUM RECOMMENDED CYCLE TIME PLEASE FOLLOW THESE INSTRUCTIONS TO CORRECT THE CYCLE TIME. WHEN SET, FAUCET SHOULD NOT PRODUCE MORE THAN $\frac{1}{4}$ GALLON (1 LITER) PER CYCLE.

TIMING IS ADJUSTABLE FROM 5 TO 60 SECONDS AND IS ACCOMPLISHED BY ROTATING TIMING SCREW. TURNING THE SCREW CLOCKWISE INSCREASES TIMING WHILE COUNTERCLOCKWISE DECREASES TIMING.

INSTALLATION INSTRUCTIONS:

A– MOUNT FIXTURE IN ACCORDANCE TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.

B– ASSEMBLE SPOUTS AND PUSHBUTTONS TO FIXTURE.

C– CONNECT 1/8" O.D. POLYETHYLENE AIR LINE ① TO PUSHBUTTON ②, AND VALVE TIMER ASSEMBLY ③ SEE DETAIL "A". HAND TIGHTEN FERRULE NUT ④ PROVIDED.

D– CONNECT 1/4" O.D. POLYETHYLENE WATER LINES ⑤ TO VALVE ASSEMBLY ELBOW ⑥ SEE DETAILS "C", AND "D". HAND TIGHTEN FERRULE NUT ⑦ PROVIDED.

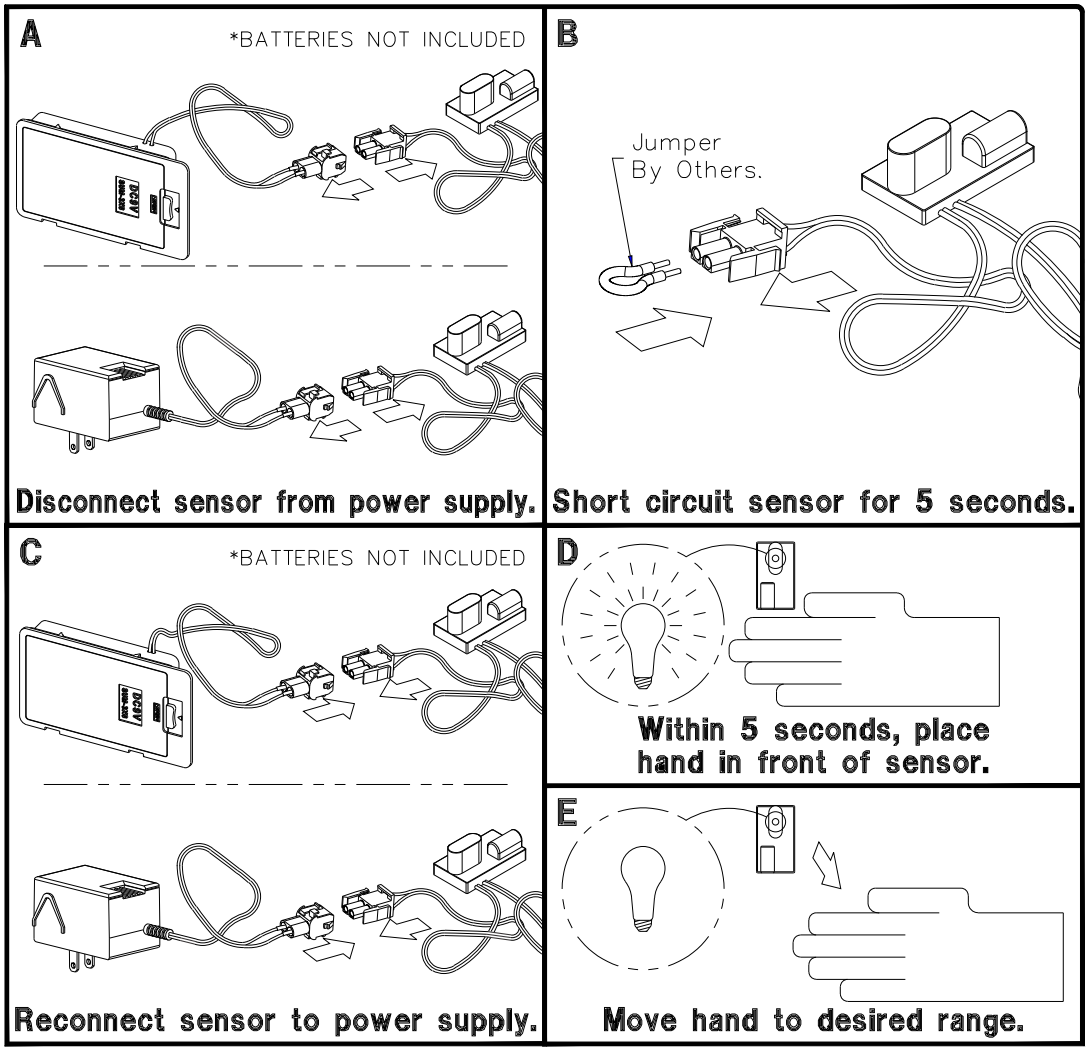
E– AFTER THOROUGHLY FLUSHING SUPPLY LINES MAKE UP CONNECTIONS TO VALVE ASSEMBLY INLET(S) 1/2" NPTE OR 1/2" NPS FLEX HOSE AS REQUIRED.

NOTE:

1) ALL TUBING SHOULD BE CUT SQUARE AND BE FREE OF BURRS OR DEFORMITIES TO ENSURE A WATER TIGHT CONNECTION.
2) EXTEND TUBING AT LEAST 1/4" BEYOND FERRULE NUT BEFORE INSERTING TUBING INTO CONNECTION OPENING BEFORE TIGHTENING.
3) TUBING SHOULD BE FREE OF KINKS FOR PROPER OPERATION
4) MAXIMUM RECOMMENDED WORKING WATER PRESSURE IS 100 PSI; TEMPERATURE IS 130° F; OUTLET TEMPERATURE IS RECOMMENDED AT A MAXIMUM OF 105° F.

WARNING:
PRIOR TO MAKING INSTALLATION, SUPPLY LINES MUST BE FLUSHED OF ALL FOREIGN MATERIAL SUCH AS PIPE DOPE, CHIPS, SOLDER, ETC. VALVE MUST BE DRAINED PRIOR TO BEING SUBJECTED TO FREEZING TEMPERATURES. MAXIMUM RECOMMENDED OUTLET WATER TEMPERATURE IS 105° F.

VALVE CONTROLS -SO SENSOR OPERATION RANGE ADJUSTMENT



NOTE: THESE INSTRUCTIONS ONLY APPLY TO 9 VOLT SENSORS THAT DO NOT HAVE A RANGE ADJUSTMENT SCREW ON THE BACK. SEE DRAWING # 9927-222-001.

INSTRUCTIONS:

A- Disconnect sensor from power supply.

B- Create a short circuit between the positive and negative connections on the sensor for five seconds. **WARNING:** Do not create a short circuit on the power supply or while the sensor is connected to the power supply.

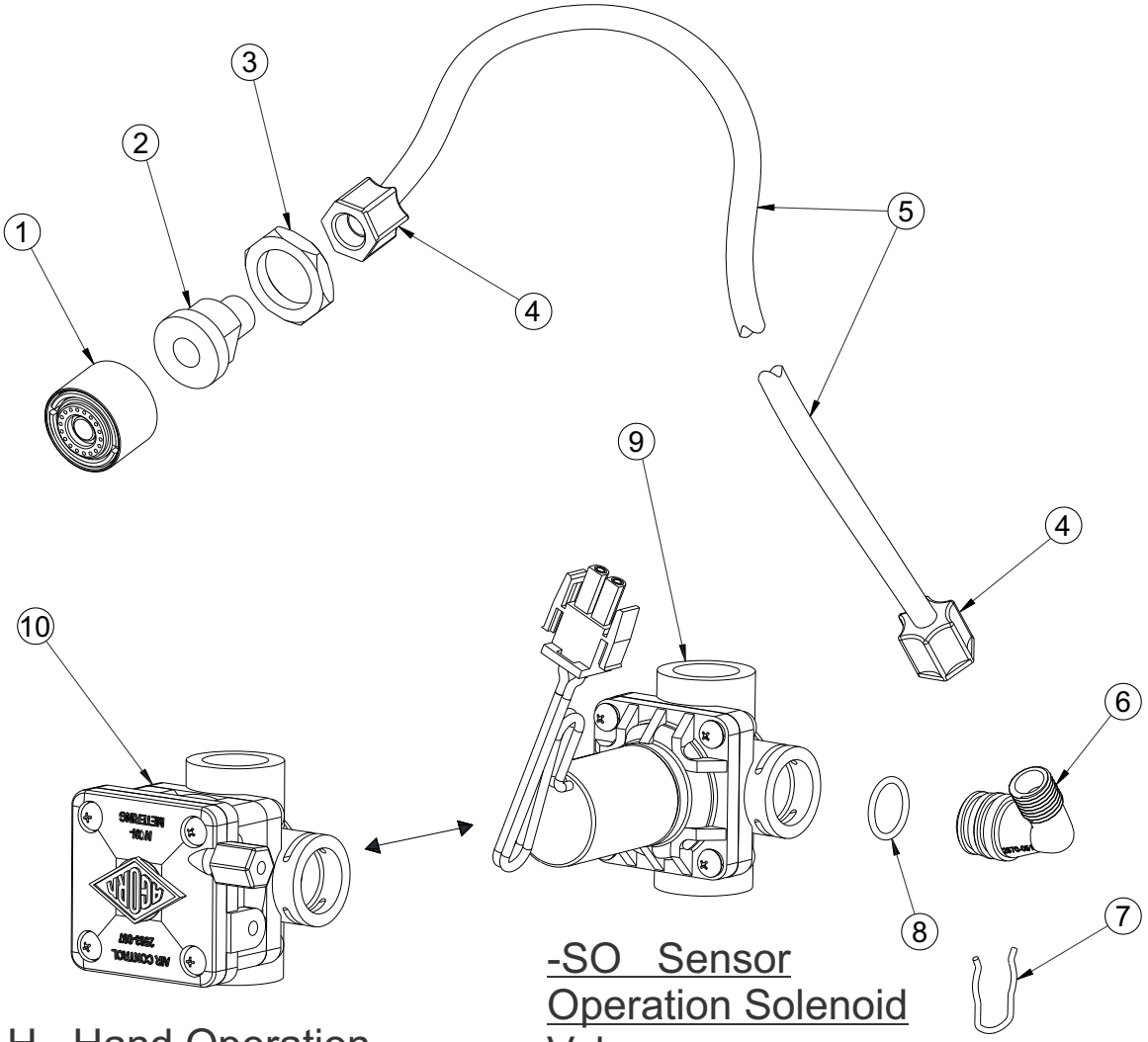
C- Reconnect the sensor to the power supply.

D- Within 5 seconds of making the connection, place hand 2 to 4 inches from the sensor.

E- Once red light begins flashing quickly, move hand to preferred distance and wait for light to stop flashing.

F- Check distance. If unsatisfactory, repeat steps A through E.

SPRAYHEAD ASSEMBLY REPAIR PARTS

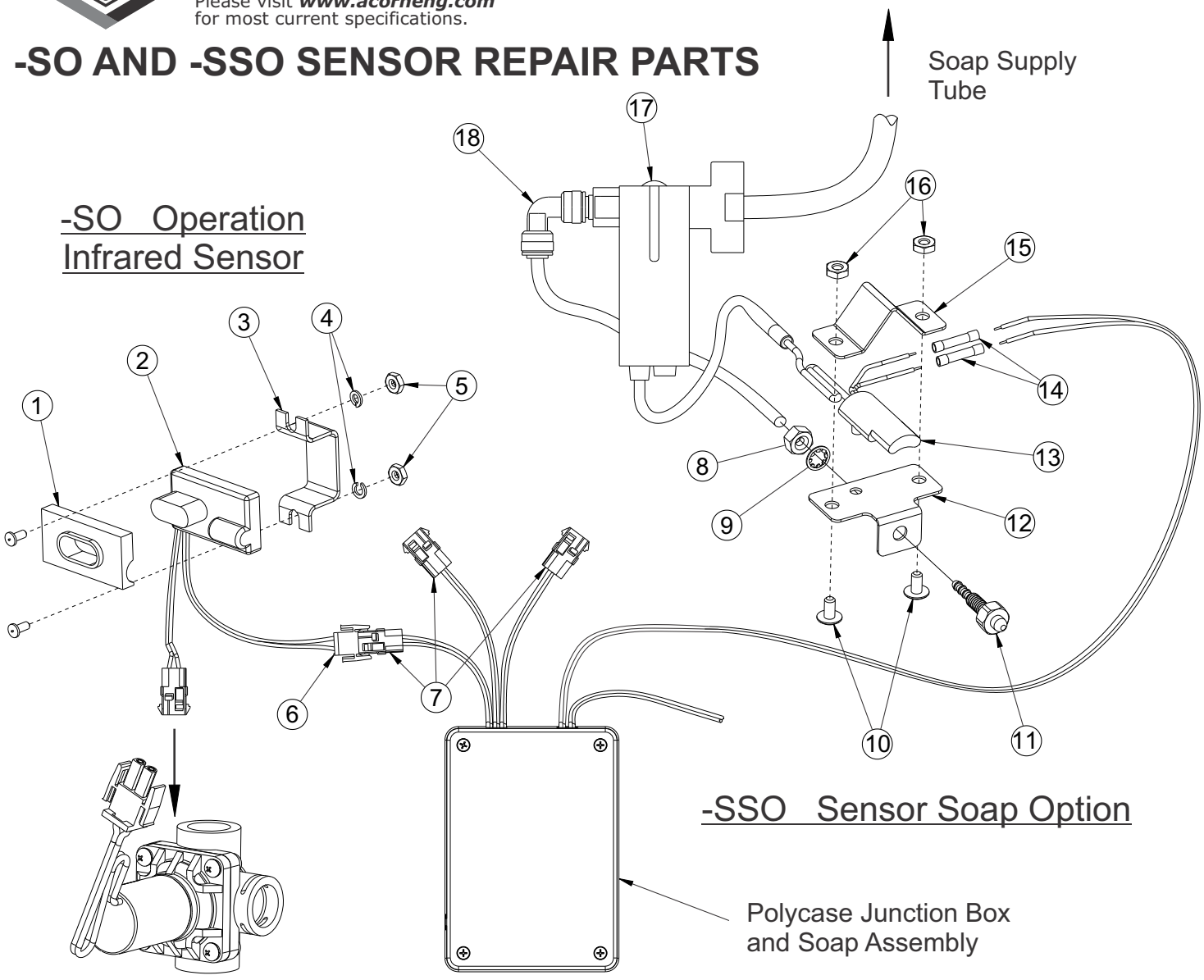


-H Hand Operation Air-Control Valve

-SO Sensor Operation Solenoid Valve

ITEM#	PART NUMBER	DESCRIPTION	ITEM#	PART NUMBER	DESCRIPTION
1	2998-018-000	NOZZLE - FEMALE, 0.35GPM	6	2570-051-000	1/4” OD TUBE RISER ELBOW
2	2998-200-198	NOZZLE ADAPTER	7	0410-015-000	RETAINING CLIP
3	0312-010-199	3/4”-28 UNI BRASS JAM NUT	8	0326-100-000	#15 O-RING
4	1895-451-000	1/4” OD NYLON GRIPPER	9	2570-130-001	9-12 VDC SOLENOID OP VALVE
5	2169-021-199	1/4” OD LLDPE TUBING	10	2570-108-001	RH AIR-CONTROL VALVE

-SO AND -SSO SENSOR REPAIR PARTS



ITEM#	PART NUMBER	DESCRIPTION	ITEM#	PART NUMBER	DESCRIPTION
1	6100-098-199	SENSOR SPACER	10	0116-016-000	#10-32 X 3/8” SCREW
2	2562-370-000	STERN SPRAYHEAD SENSOR	11	6116-313-199	SOAP NOZZLE
3	6212-102-199	SENSOR BRACKET	12	6116-312-199	SOAP NOZZLE BRACKET
4	0331-003-000	#8 HELICAL LOCK WASHER	13	6116-321-001	STERN SOAP SENSOR
5	0302-003-000	#8-32 UNF HEX NUT	14	0711-027-000	22-18 AWG BUTT SPLICE CONN
6	0711-403-000	UNIVERSAL PIN (MALE)	15	6116-311-199	SOAP SENSOR ENCLOSURE
7	0711-401-000	UNIVERSAL CAP (FEMALE)	16	0304-004-000	#10-32 UNF HEX NUT
8	0302-005-000	1/4-20 UNC HEX NUT	17	2963-400-000	LIQUID SOAP PUMP
9	0321-003-000	1/4” LOCK WASHER	18	1895-708-000	1/4” OD PUSH-IN ELBOW

CARE, CLEANING, AND REPAIR OF CORTERRA® SOLID SURFACE

CORTERRA® SOLID SURFACE

Acorn's densified solid surface material is composed of recycled solid-surface polymer resin, aluminum trihydrate and fillers. It is resistant to stains, impact and burns and complies with ANSI Z124.3. It is attractive, durable and easy to maintain.

ROUTINE CLEANING

Corterra® should be kept clean at all times. If maintained, Corterra® surfaces will retain their new, clean appearance indefinitely. Wash with a non-abrasive all purpose cleaner and water, then rinse. Wipe dry. (Never use cleaners with strong chemicals such as toilet bowl cleaners, rust removers, ceramic cook top cleaners, laquer thinners or oven cleaners). To remove persistent stains use a Scotch Brite pad and an abrasive cleaner or a solution of household bleach and water (1 part water to 1 part bleach).

REPAIRING SURFACE DAMAGE

Surface damage, such as minor chips, scratches, burn marks and graffiti can be repaired with a fine grit abrasive cleanser, such as a Scotch-Brite pad or fine grit sandpaper. For more serious physical damage caused by vandals, an Acorn Solid Surface Repair Kit is available. Contact the factory for details. Refer to drawing #9927-160-002.

SOAP SYSTEMS

Acorn soap reservoirs and dispensers provide a dependable operation over long term when proper maintenance is performed and the correct soap is being used. The most common problem with soap systems is that the wrong viscosity (thickness) of soap is being used or high acidic pH levels are in the ingredients. Soap thickness can be best explained as no thicker or thinner than normal household liquid dish soap. The pH level of the soap should be 6.5 to 8.5; more acidic soaps will corrode the metal parts and degrade rubber or plastic components.

Soap reservoirs and dispensers should be maintained periodically to clear residue. This should be done in hot water to clean the internal components. The valve should be pumped multiple times to thoroughly clean any residue inside. The reservoir and tubing should also be flushed and cleaned with hot water. In cases of extreme clogs, the dispenser should be disassembled and the parts thoroughly cleaned.

WARNING: Some soap contains corrosive additives that can cause rust on stainless steel surfaces. Acorn recommends user/ maintenance personnel review MSDS reports of soap and possible corrosive additives noted.

CARE AND CLEANING OF STAINLESS STEEL SURFACE

NORMAL CLEANING

Clean weekly or more often, as needed (especially high polishing surfaces)

RECOMMENDED CLEANING MATERIALS

- Sponge – natural or artificial
- Nylon or other soft-bristle material brush
- Soft cloth (as used on automobile finishes)

RECOMMENDED CLEANING SOLUTIONS

- Hand dishwashing liquid/soft water solution
- Mild soap/soft water solution
- 3M Stainless Steel Cleaner/Polish
- White vinegar/soft water solution (for brightening, removing oil and hard water deposits)
- CLR Brand Cleanser or baking soda/soft water solution (for brightening, removing hard water deposits)
- Club soda and sponge

FOR HIGH POLISH STAINLESS STEEL

Note: High polish stainless steel surfaces should never come into contact with any abrasive cleaning brush, cloth or cleaning agent.

To remove smudges and fingerprints:
Wipe surfaces with a quality Stainless Steel Cleaner/Polish. Apply using a soft non-abrasive cloth, wipe surfaces with stainless steel cleaner/polish.

To remove rust stains:
Wipe surfaces with CRES (available from Acorn) or equivalent cleaner. Use recommended solutions. Apply using a soft non-abrasive sponge. Rinse surfaces immediately after application. Always follow cleaner product directions provided. Afterwards, using a soft, non-abrasive cloth, wipe surfaces with stainless steel cleaner/polish.

FOR TOUGH PROBLEMS

- CRES Cleaner specifically for rust stains (available from Acorn)
- Tarn-X for general stains
- #7 chrome polish
- Silver polish

To remove stubborn spots or to treat a scratch *(Standard Satin Finish Only)*:
Use of synthetic, abrasive, general-purpose pads such as Scotch Brite is recommended. Apply the stainless steel cleaner/polish to the synthetic, abrasive pads and CAREFULLY rub out spot with cleaner/ polish. Be sure to rub in the direction of the grain! Do not allow steel wool to come in contact with the stainless steel. Steel particles can embed into the stainless steel surface and create rust!

Stainless steel should be kept clean at all times. If maintained, stainless steel surfaces will retain their new, clean, polished appearance indefinitely. To remove water spots or rust spots, stainless steel cleaner/polish on a cloth is recommended.

IF SPOTS ARE STUBBORN OR IF YOU WISH TO TREAT A SCRATCH: synthetic, abrasive, general-purpose pads such as Scotch Brite are recommended. Apply the stainless steel cleaner/polish to the synthetic, abrasive pad and CAREFULLY rub out spot with cleaner/polish. **Be sure to rub in the direction of the grain!** Do not allow steel wool to come in contact with stainless steel. Steel particles can embed into the stainless steel surface and create rust.