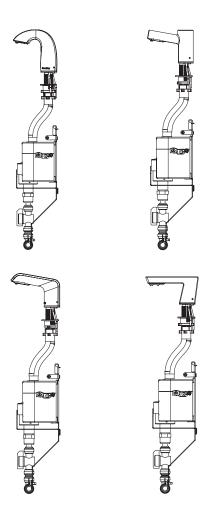
# Installation and Maintenance Manual



# Verge® Multi-Feed Soap Tank

Verge® Soap Dispenser - Crestt Series (6-3100)

**Verge® Soap Dispenser - Metro Series (6-3300)** 

**Verge® Soap Dispenser - Linea Series (6-3500)** 

Verge® Soap Dispenser - Zen Series (6-3700)

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NOTE: Refer to the <u>Installation and Maintenance Manual</u>, P20-224 for individual automatic top-fill soap dispensers.



Read the instructions in this manual before beginning installation. Save these instructions and refer to them for inspection, maintenance, and troubleshooting information.

For questions regarding the operation, installation or maintenance of this product, visit bradleycorp.com or call 800.BRADLEY (800.272.3539).

Product warranties and parts information may also be found under "Resources" on our website at bradleycorp.com.

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# **Safety Information**

#### Caution

A DC plug-in adapter (supplied by Bradley) should be used in conjunction with the Bradley soap dispenser products. The DC plug-in adapter supplied by Bradley is 6V DC regulated. Direct connection to 120V/22V 50/60Hz could result in personal injury and will damage the sensor.

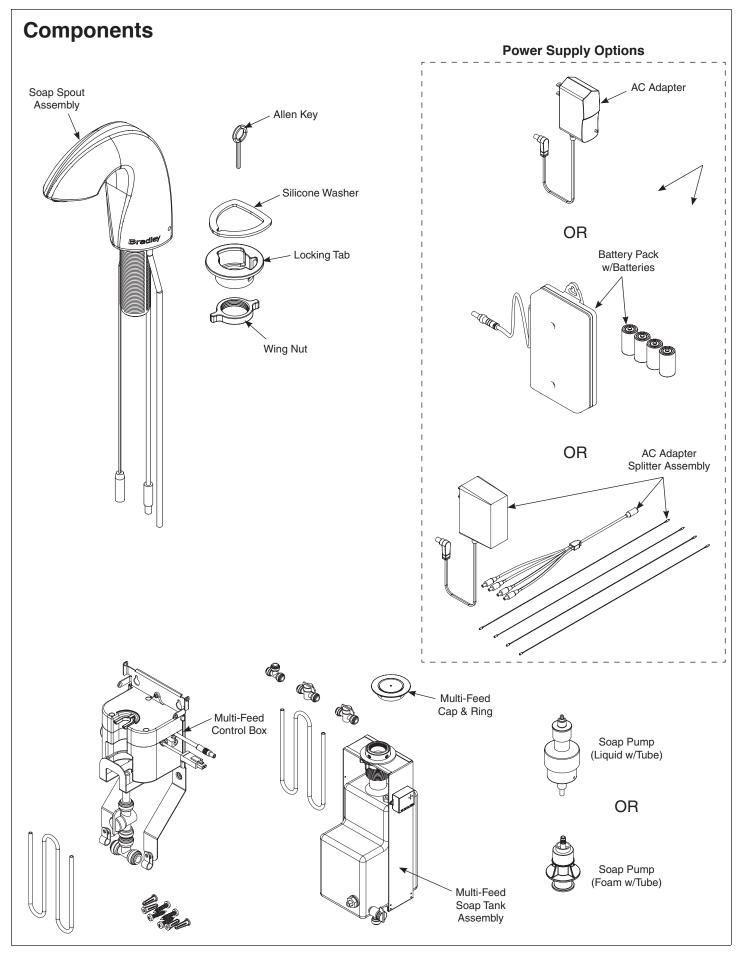
## **Important**

Separate parts from packaging and make sure all parts are accounted for before discarding packaging material. If any parts are missing, do not begin installation until you obtain the missing parts.

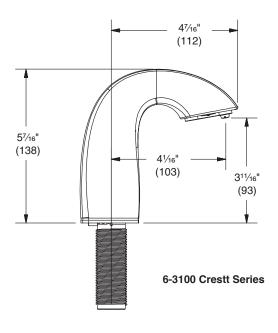
Troubleshooting and internal maintenance must be performed by qualified service personnel.

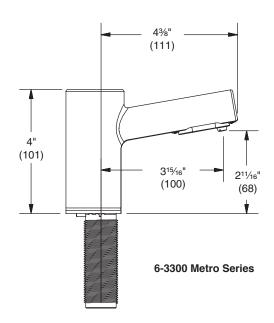
# **Supplies Required**

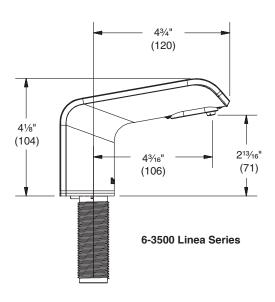
- (1) dedicated 120VAC, 20A GFCI outlet(s), if an A14-029 or A14-031 AC adapter is selected
- Drill
- 1/4" drill bit
- · Tape measure
- · Phillips screw driver
- Level
- Pencil
- Tubing cutter

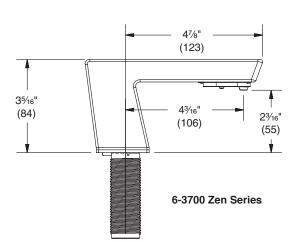


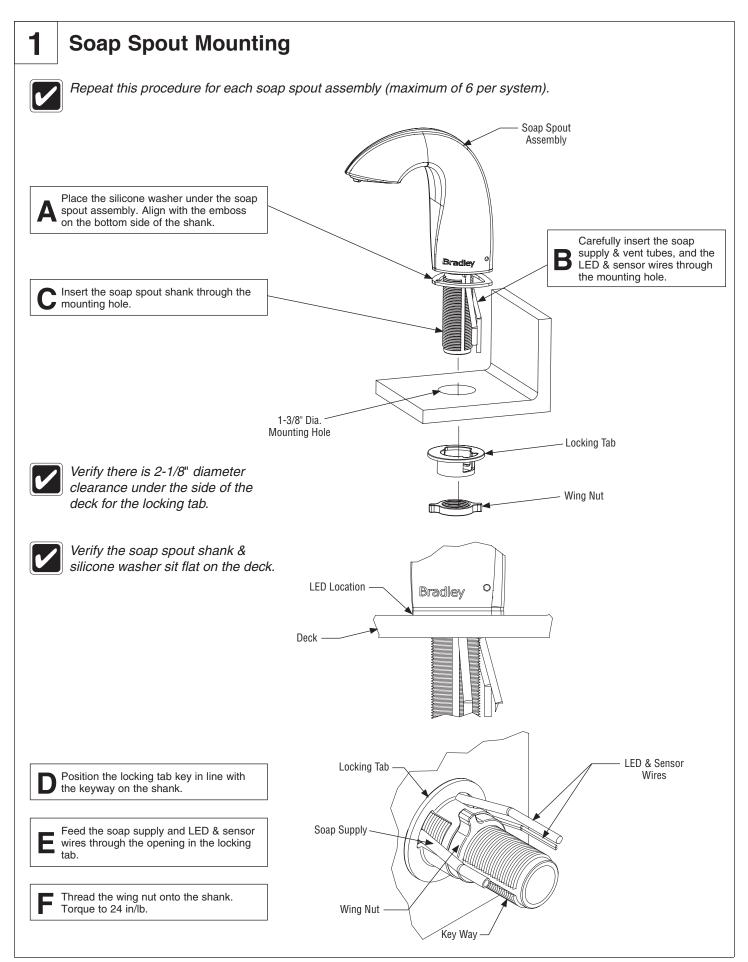
# Dimensions (mm)











# **Control Box Mounting**

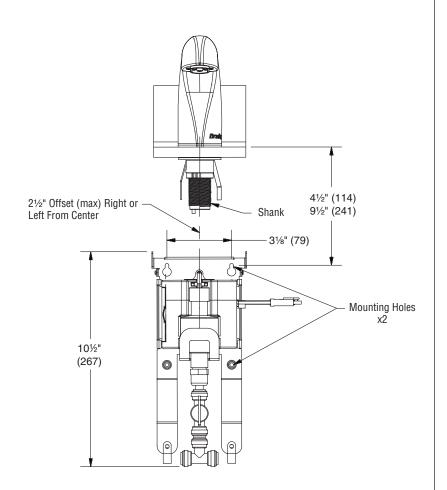


Locate the mounting position for the control box assembly.



Top mounting holes need to be mounted between 41/2" & 91/2" from the top of the deck, and 21/2" right or left of center of shank.

Use a level to ensure the control box assembly is level, and then mark four mounting hole locations on the wall using a pencil.





Drill the four 1/4" diameter mounting holes into the wall or surface, using a drill and appropriate drill bit.

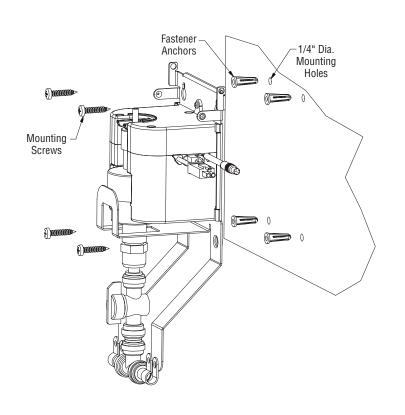


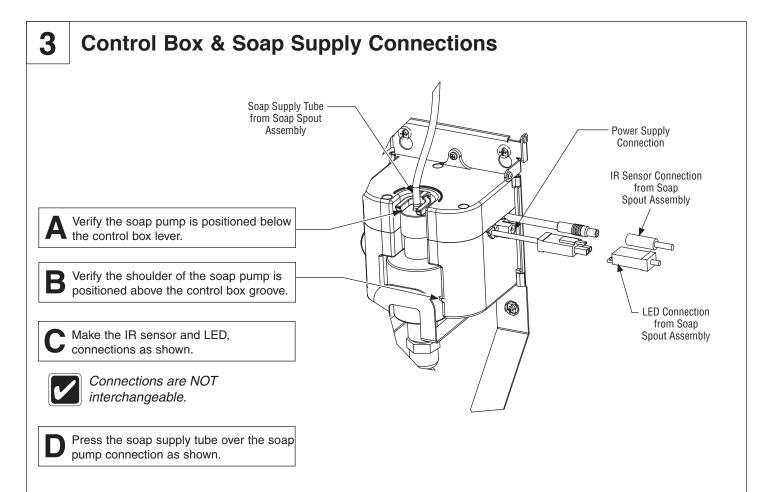
Use the supplied mounting screws (or suitable mounting hardware) to attach the control box assembly in place.



6

Appropriate fastener anchors and mounting hardware must be used when mounting the control box assembly in the desired surface.

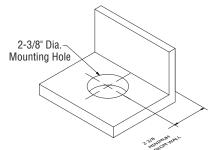




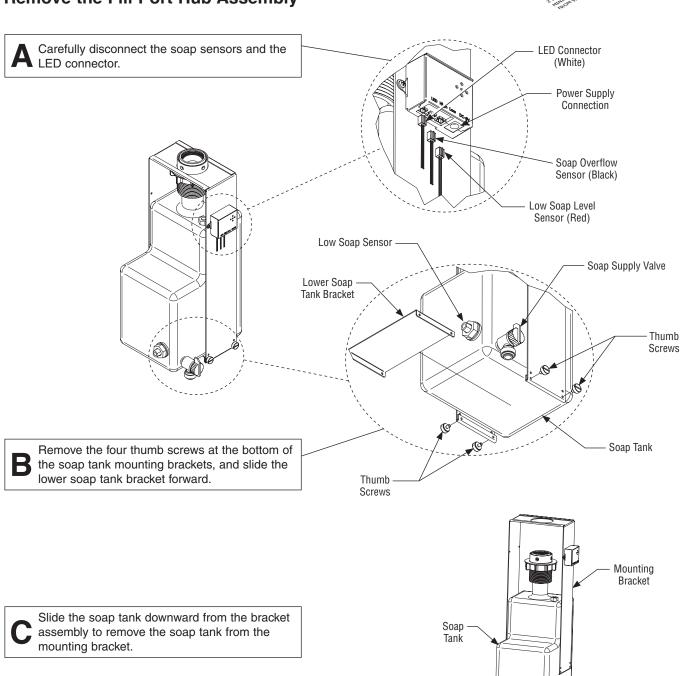
# **Multi-Feed Soap Tank Assembly Mounting**



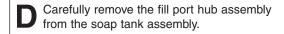
Before mounting the soap tank assembly, drill a 2-3/8" diameter hole through the deck that is positioned 2-3/8" from the adjacent back wall. This will ensure proper clearance of the soap tank.



## Remove the Fill Port Hub Assembly



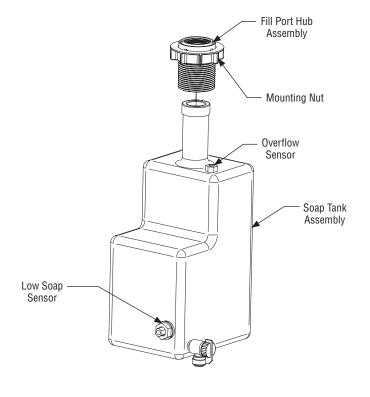
Lower Soap Tank Bracket





LED and sensor wires are not shown in this view for clarity purposes.

Remove the mounting nut from the fill port hub assembly.



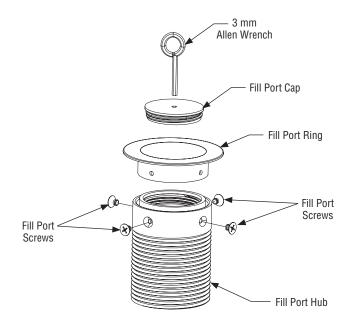
# **Install Multi-Feed Components**

Α

Insert the fill port ring into the fill port hub and align the mounting holes. Secure in place using the four fill port screws.

R

Insert the fill port cap into the fill port ring. Use the 3 mm Allen wrench (provided with spout assembly) to secure fill port cap in place.



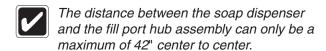
### Install Fill Port Hub Assembly on Lav Deck

A Install the fill port assembly through the 2-3/8" diameter hole in the lav deck.

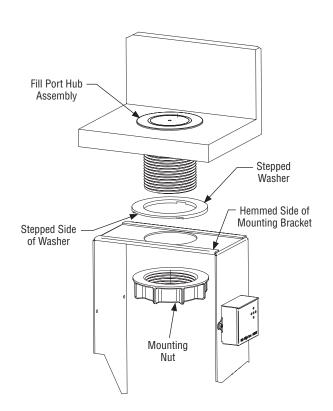
Place the stepped edge of the washer parallel with the hemmed side of the mounting bracket.

Position the mounting bracket with the stepped washer over the threaded portion of the fill port hub assembly (located below the deck).

Thread the mounting nut onto the fill port hub assembly. Hand-tighten or torque to 24 in-lb.



Lav deck can only be a maximum of 1-1/2" thick.



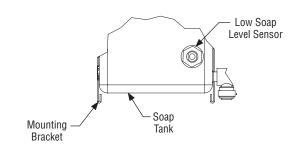
## Install Soap Tank onto Fill Port Hub Assembly

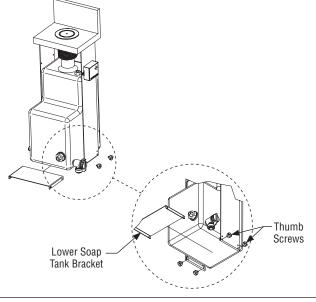
Install the soap tank onto the center of the fill port hub assembly until the bottom of the soap tank is flush with the returned edged of the mounting bracket.

CAUTION Keep the LED wire positioned to the side of the fill port hub assembly when inserting the soap tank to prevent the LED wire from getting pinched.

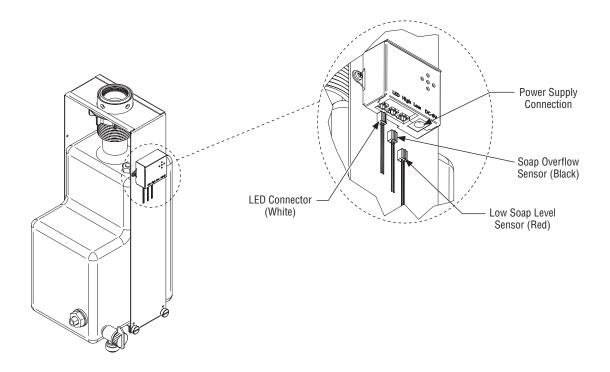
Reposition the lower soap tank bracket into the mounting bracket. Be sure to align the thumb screw holes.

Insert the four thumb screws into the mounting bracket to hold the soap tank assembly in place.





## **Reconnect Soap Sensors & LED Connector**



# **Soap Supply Connections**

## **End Tank Configuration Installation**



See page 13 for an overview of the mid tank configuration installation.



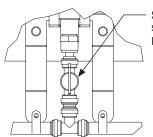
Insert 3/8" diameter tubing into the soap supply valve as shown. Connect the supply tube to the nearest control box, cutting the supply tube to the shortest length between units.



Tubing will slide 3/4" into the fittings.



Connect the soap supply tubes between the control boxes, cutting the supply tube to the shortest length between units. See illustration on page 13.



Soap supply valve is shown in the open position.

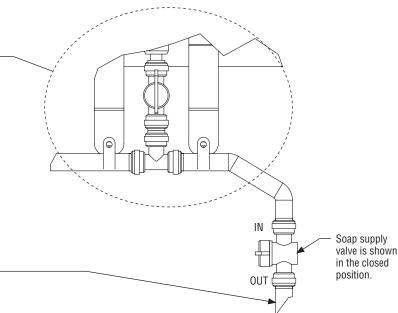
Soap supply valve is

shown in the open

position.



Cut one piece of tubing 3"-4" in length and assemble as shown.





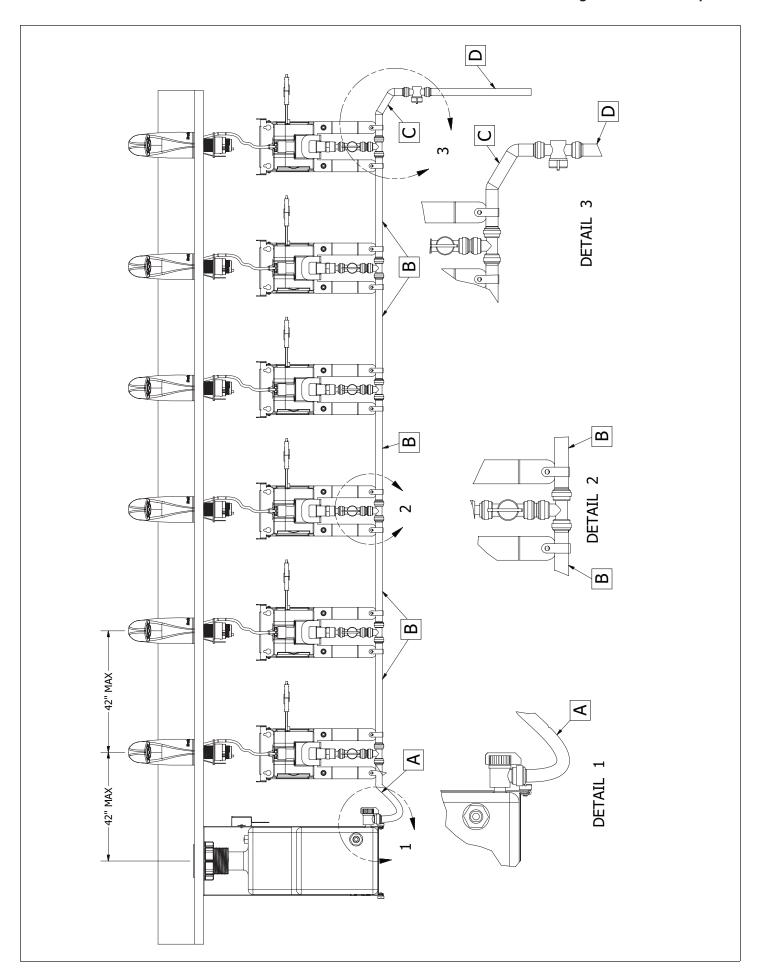
Install extra tubing after the shut off valve (located at the end of the soap supply system).



Install the soap supply valve in the proper flow direction as shown on the valve.



Use the extra tubing when cleaning and/or maintaining the soap system.



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## **Mid Tank Configuration Installation**



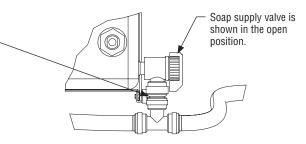
See page 15 for an overview of the mid tank configuration installation.



Cut one 1-3/4" piece of the 3/8" diameter tubing and attach as shown.

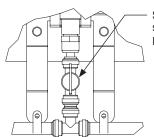


Tubing will slide 3/4" into the fittings.



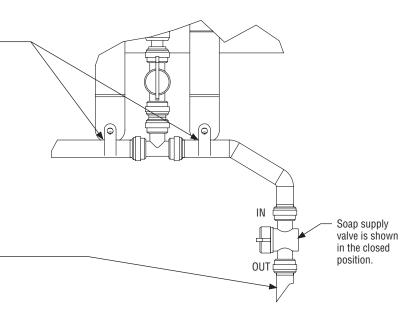
B

Connect the soap supply tubes between the control boxes, cutting the supply tube to the shortest length distance between units. See illustration on page 15.



Soap supply valve is shown in the open position.

Cut one piece of tubing 3"-4" in length and place the tubing through the straps on both sides of the control box as shown. Repeat this step for both ends of the soap supply system.



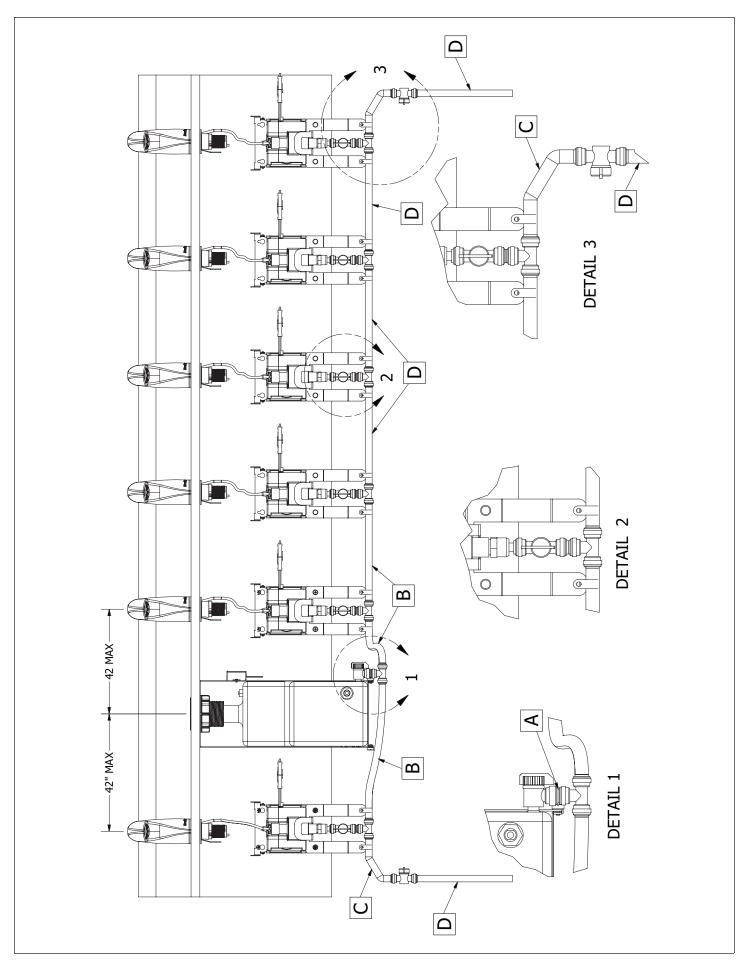
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Use the extra tubing when cleaning and/or maintaining the soap system.



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# **Power Supply Connections**



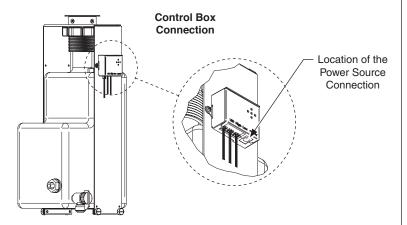
The multi-feed soap tank assembly and each of the control boxes require a power supply connection.



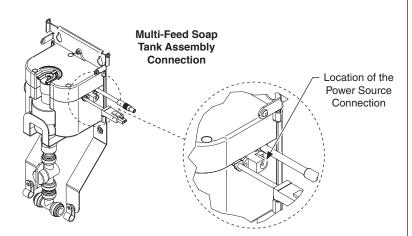
The power supply can be a Bradley supplied battery pack, a single AC adaptor, or an AC adapter splitter assembly kit (see page 3), depending on the selection made at time of purchase.



Connect the power supply to the power source for the multi-feed tank system.



Connect the power supply to the power source for the multi-feed soap tank assembly. When the connection is made, the LED at the base of the soap dispenser spout will flash green for 0.5 seconds.





# Adding Soap to Multi-Feed Soap Tank Assembly



When the soap level is at approximately 25% capacity, the LED indicator on the fill port hub assembly will flash red, indicating low soap

Soap tank capacity is 166.5 oz (5026 mL).



Remove the fill port cap from the fill port hub assembly using the supplied 3 mm Allen wrench. Set the fill port cap aside.



Slowly pour the soap into the fill port hub assembly.



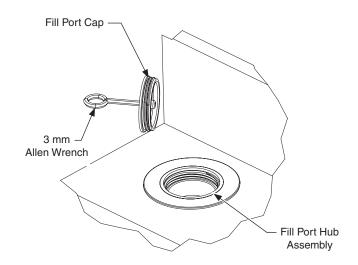
To prevent overfilling, the LED indicator on the LED indicator will turn solid red and an audible indicator will sound for 2.5 seconds. indicating that soap levels are at 90% capacity.



Replace the fill port cap into the fill port hub assembly and hand-tighten.



Initial installation requires multiple activations to prime each soap spout dispenser.



# **Operation Mode**

Operation mode is the normal dispensing mode automatically activated when the soap dispenser is in use. All of the sensors are active in this mode.

While in operating mode:

- · Soap is activated when IR sensor is triggered.
- When the voltage of the battery is lower than 4.6V ±0.2V for 7–10 seconds, the low power LED indicator flashes green/green and soap dispensing stops.
- When the soap level is below 25% capacity, the low soap LED indicator flashes red.
- When filling the soap fill port with soap, the overfill protection LED indicator becomes steady red and audible indicator sounds when the tank is at 90% capacity.

LED Indicators	Duration	Meaning
LED flashes green	1 second	Dispensing soap
LED flashes green/green	ON: 1.2 seconds (green for 0.5 seconds, pause for 0.2 seconds, green for 0.5 seconds)  OFF: 2 seconds	Low power
	ON: 0.2 seconds	
LED flashes red	OFF: 2 seconds  Soap dispensing is enabled intermittently	Low soap
LED becomes steady red with audible indicator	2.5 seconds	Overfill protection
LED flashes red/green	0.5 seconds	First time powering up the system

## **Cleaning and Maintenance for Soap Dispenser**

Wipe top and underside of soap dispenser with a mild neutral based cleaner. Dry with a soft cloth to avoid micro scratches in the soap dispenser finish and sensor plate.

## **Liquid Soap Recommendations & Dispenser Maintenance**

#### **Overview**

Quality soap dispensers require good quality soap and periodic maintenance to properly operate. Bradley soap dispensers will provide dependable, consistent operation over the long term when soap with reasonable viscosity and pH levels are used and when a minimal amount of periodic maintenance is performed on the valves. Most soap dispenser problems are caused by soap that is too thick or corrosive, or by a lack of maintenance. Many soaps come in concentrate form which must be diluted with water. Often, the soap is improperly diluted or used straight out of the bottle, which causes clogging and valve failure. If proper soap is being used, valves that have never been cleaned are usually the source of dispensing problems. With proper maintenance and soap, Bradley dispensers will provide long term, trouble free operation.

#### **Viscosity**

Soap thickness is determined by a measurement called viscosity. Soap viscosity should be between 100 cps (centipoise) and 5000 cps for all Verge liquid soap dispensers. Thick soaps flow slower and inhibit the "flushing" action of the valves, which allows the soap to congeal in the valve and cause clogs.

### pH Level

The pH (acid) level of the soap should be in the range of 6.5 to 8.5. More acidic soaps (pH levels lower than 6.5) will corrode metal parts (even stainless steel!!) and degrade rubber and plastic components. They will also cause skin irritation. Most inexpensive soaps (typically the pink lotion type) fall into this acidic category and will eventually cause valve failure and metal corrosion.

▲ CAUTION Base soaps (pH levels higher than 8.5) will cause skin irritation and swelling or degradation of rubber and plastic parts.

#### Soap Valves

Valves must also be maintained (cleaned) to function properly. At the very minimum, hot water should be pumped through valves periodically to clear out soap residue. Ideally, valves should occasionally be soaked for 30 minutes in hot water or a soap valve cleaning solution. The valve should be pumped at least 20 times while it is soaking to clear any clogs. The soap reservoir should also be flushed with hot water. Generally, any quality soap meeting the viscosity and pH guidelines above will work well with Bradley soap dispensers. PCMX or Isopropanol based antibacterial soaps (within viscosity and pH limits) will also work with Bradley dispensers. Soaps satisfying these basic guidelines will provide consistent flow and reduce clogs.