# Installation and Maintenance Manual

# Verge<sup>®</sup> Multi-Feed Soap Tank



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



Scan or click to view Installation Guide for Individual Automatic Top-Fill Soap Dispensers

For questions regarding the operation, installation or maintenance of this product, visit <u>bradleycorp.com</u> or call 800.BRADLEY (800.272.3539). Product warranties and parts information may also be found under "Resources" on our website at <u>bradleycorp.com/customerservice/warranty</u>.



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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.

A minimum clearance of 5-1/8" between the sensor and surface or bowl is required.

## **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



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**Dimensions** 

(mm)

5-1/8"

(130)

5-1/8" (130)

#### IMPORTANT: THE 6-3300, 6-3500 & 6-3700 SERIES SOAP DISPENSERS CANNOT BE MOUNTED DIRECTLY ON A DECK DUE TO THE REQUIRED 5-1/8" (130MM) MINIMIUM SENSOR CLEARANCE. THESE DISPENSERS MUST BE MOUNTED OVER A LAV BOWL. The 6-3100 Series soap dispenser can be mounted directly on a deck with the use of Crestt - Spout Spacer (P15-576). Contact Bradley Tech Service for additional information. Soap dispenser can accommodate a maximum deck thickness of 1-1/4". 6-3100 Crestt Series 6-3300 Metro Series - 4-7/16" (113) -- 4" (102) 4-7/16" (122) -- 3-1/8" (79) -4" (102) -\_ 3-1/16" (78) \_\_ Dispensing Area 3-11/16" (102) (94) 5-1/8" Dispensing 2-5/8 (130) Area (67) Sensor Range Sensor 100° Range . 100° 3" (76) 3-1/4" (83) 4" (102) - 3-7/8" (98) 6-3500 Linea Series 4-13/16" (122) -6-3700 Zen Series 4-3/16" (106) 3-5/16" (100) 4-3/4" (121) -4-1/8" (105) 3-1/4" (83) 4-1/8" Dispensing (105) Area 3.30" 2-13/16" (84) Dispensing 2.34' (71)Area (59)5-1/8" (130)Sensor Range Sensor 100° Range 3-3/8" (86) - 2.47" (63) -- 4-1/8" (105) - 3.31" (84) -











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## **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)	Low power
	OFF: 2 seconds	
LED flashes red	<ul><li>ON: 0.2 seconds</li><li>OFF: 2 seconds</li><li>Soap dispensing is enabled intermittently</li></ul>	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
LED solid red	Continuously solid	Maintenance required/cleaning of soap pump and system or possibly replacement of soap pump

## **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.

# **A**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.