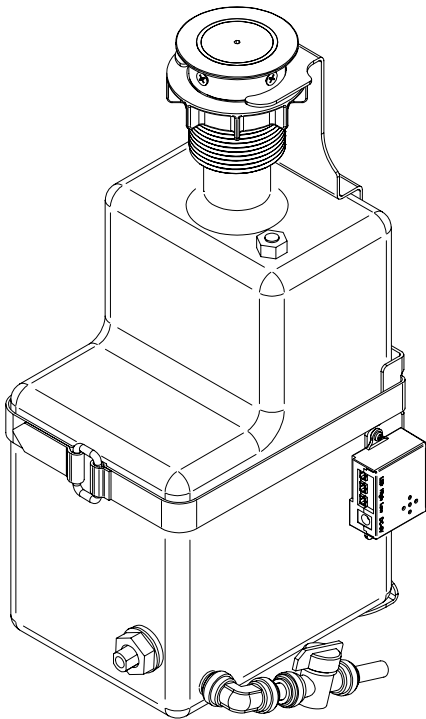


# Installation and Maintenance Manual

## Top Fill Multi-Feed Soap for WashBar®



### Table of Contents

Safety Information.....	2
Supplies Required.....	2
Components.....	3
Installation Diagrams for Compatible Lavatory Basins.....	4
Assembly Instructions.....	5
Drill Hole for Top Fill Multi-Feed Soap.....	5
Mount Multi-Feed Soap Tank Assembly and Control Box.....	6
Multi-Feed Soap Tank Assembly.....	7
Multi-Feed Power Connections.....	11
Soap Supply Connections.....	12
Add Soap to Multi-Feed Soap Tank Assembly.....	14
Update WashBar Software.....	14
Top Fill Port Operation Mode.....	15
Cleaning and Maintenance for Soap Dispenser.....	16
Liquid Soap Recommendations & Dispenser Maintenance.....	16



**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](http://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](http://bradleycorp.com).

## Safety Information

### Caution

The Multi-feed soap tank assembly is a 6V system. Do not connect the WashBar® 12V barrel plug to the multi-feed control box(es). The Multi-feed soap tank assembly can utilize the approved Top Fill Multi-Feed Power Harness (251-039). This power harness provides power to the multi-feed tank control box from the WashBar control box.

### 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.

Verify the rough-ins of the installed product match the Bradley installation rough-ins.



*Lav deck can only be a maximum of 1½" thick.*

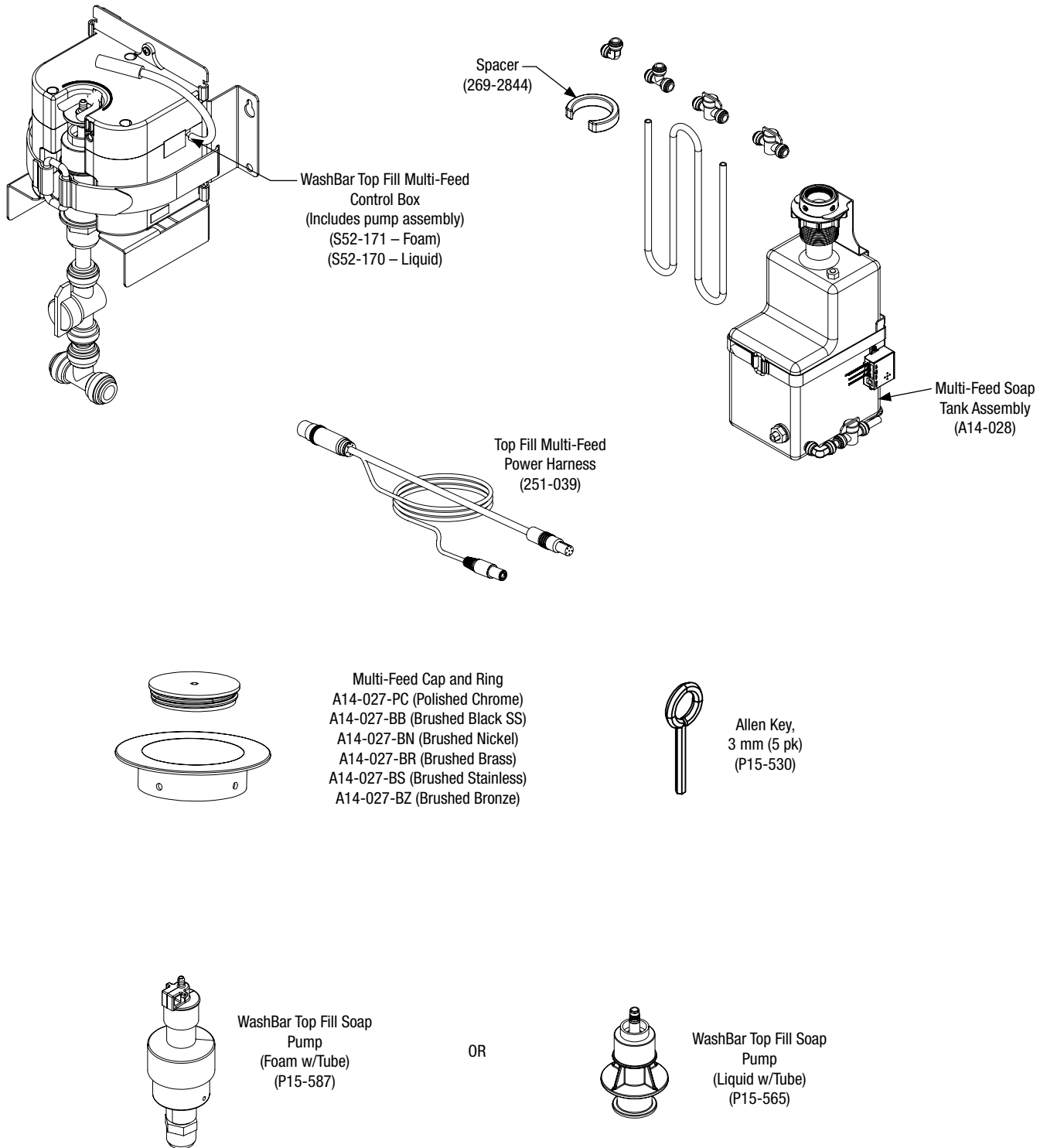
## Supplies Required (retrofit installations only)

- Drill
- 1/4" drill bit
- 2-3/8" hole drill bit (for Evero material, use diamond hole drill bit)
- Tape measure
- Phillips screw driver
- Level
- Pencil
- Tubing cutter
- Water or lubricant for drilling into Evero material



*Refer to the Supplies Required section included in your lav's installation instructions. QR codes for the installation instructions are located on page 4.*

# Components



## Installation Diagrams for Compatible Lavatory Basins



**IMPORTANT:** Prior to performing any drilling or mounting, refer to the rough-in drawings included in your lav's installation instructions.



Scan or click for LVQD1  
Installation Instructions.



Scan or click for WB1-WB-ER1  
Installation Instructions.



Scan or click for LVQD2  
Installation Instructions.



Scan or click for WB2-WB-ER1  
Installation Instructions.



Scan or click for LVQD3  
Installation Instructions.



Scan or click for WB1-WB-TR1  
Installation Instructions.



Scan or click for LD-5010  
Installation Instructions.



Scan or click for WB2-WB-TR1  
Installation Instructions.



Scan or click for TLX-4  
Installation Instructions.

## Assembly Instructions



**Follow Step 1 for retrofit installations.**  
**Skip to Step 2 for all other multi-feed installation.**

### 1 Drill Hole for Top Fill Multi-Feed Soap

**A**

Prepare the proper tools for your lav material.



*Drilling quartz requires a diamond hole drill bit and water to keep the drill bit cool and lubricated. A metal drill can be used to drill solid surface.*

*Be sure to use rags or towels to clean during the drilling process.*

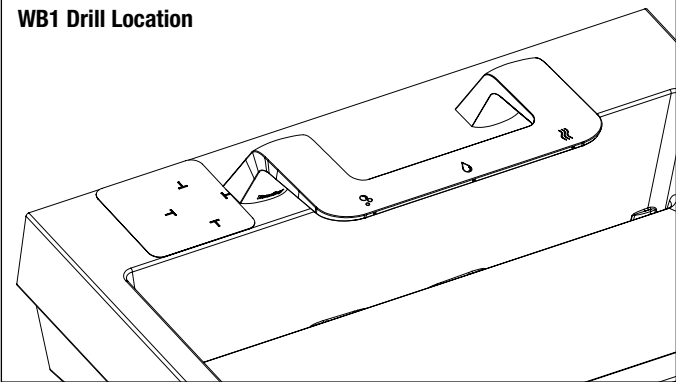
**B**

Before drilling, prepare the area to reduce cleanup. Place a bucket directly beneath the countertop where the hole will be drilled to collect any debris water used to lubricate the drill bit.

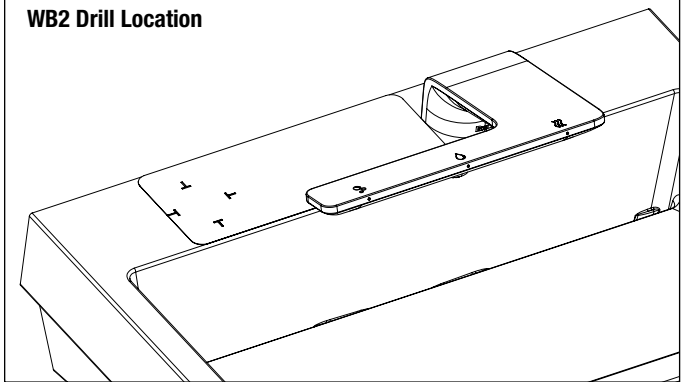
**C**

Follow instructions on supplied WashBar drilling marking template.

WB1 Drill Location



WB2 Drill Location

**D**

Slowly begin to drill.

If drilling into Evero material, be sure to occasionally lift up the drill to allow water under the bit to keep the bit cool.

**E**

Stop drilling when the cut is about 1/4" (6.25) deep. If used, remove template.

**F**

As you near the end of the hole, slowly reduce the speed on the drill to prevent any chipping and cracking.

## 2 Mount Multi-Feed Soap Tank Assembly and Control Box



**IMPORTANT:** Before mounting the soap tank assembly and the control box, refer to the rough-in drawings included in your lav's installation instructions.

**A** Locate the mounting position for the control box assembly per the rough-ins.

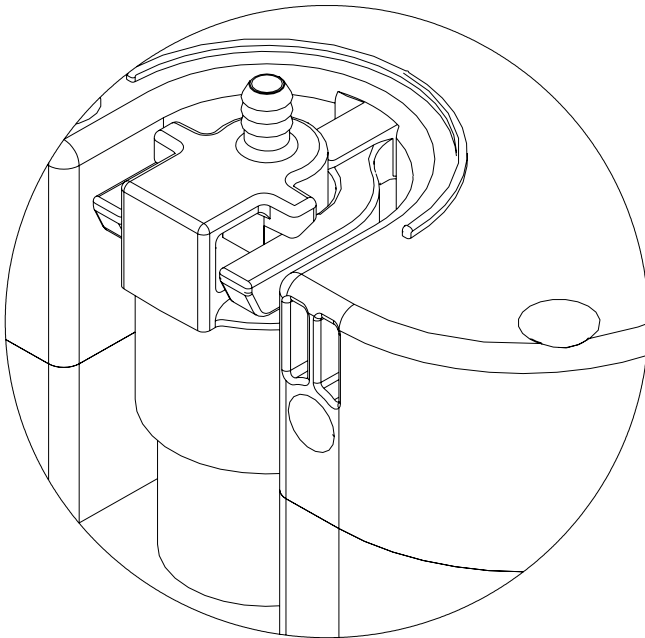
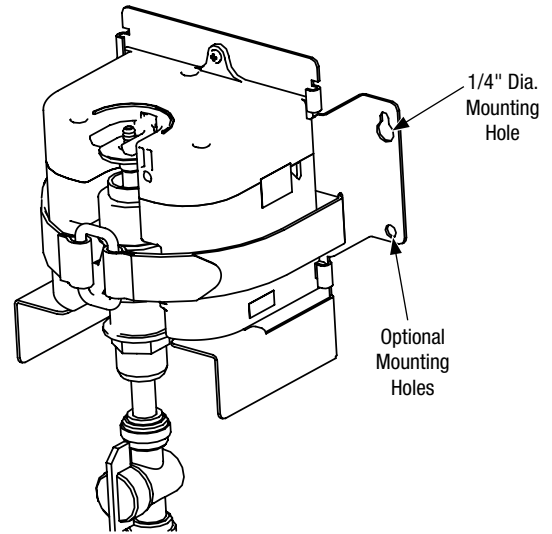
**B** Ensure the control box assembly is level, and then use a pencil to mark two top mounting hole locations (two bottom mounting holes are optional) on the wall.

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

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



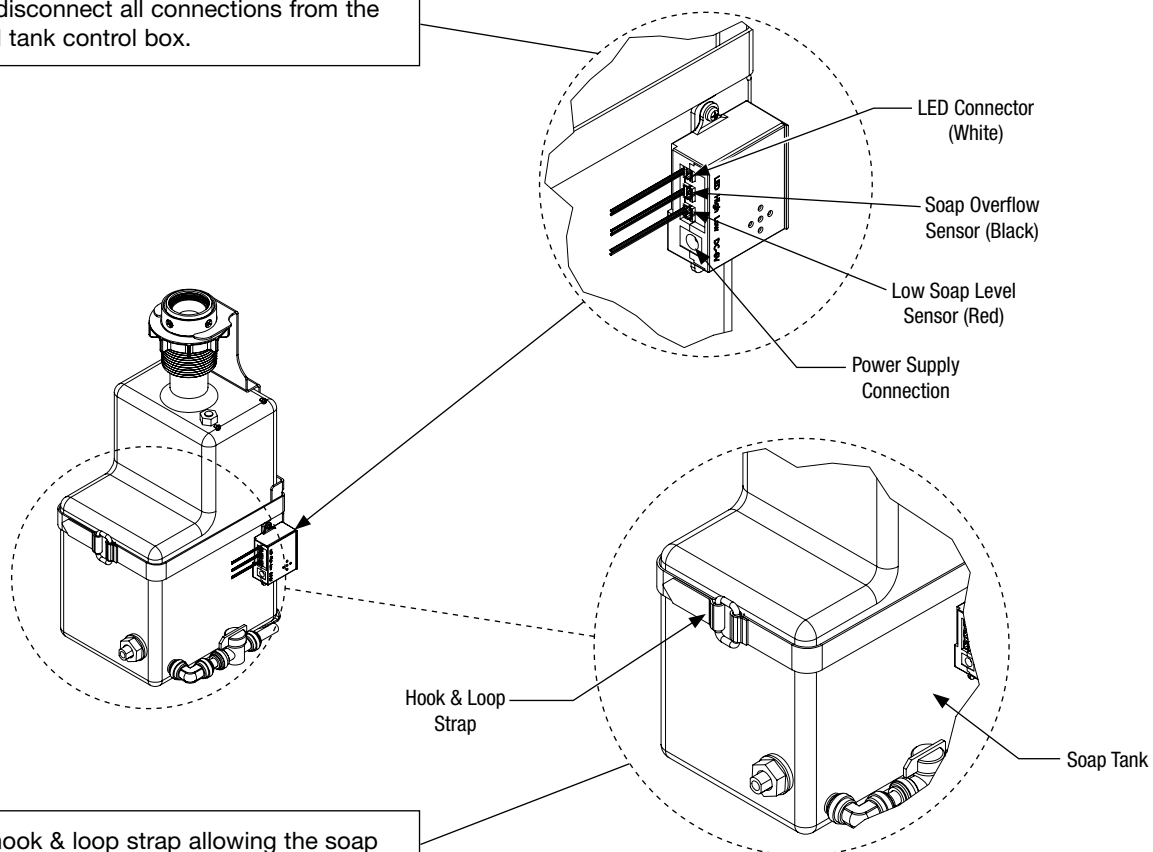
Appropriate fastener anchors and mounting hardware must be used when mounting the control box assembly in the desired surface.



**E** Position the control box lever under the wings of the soap pump.

### 3 Multi-Feed Soap Tank Assembly

**A** Carefully disconnect all connections from the multi-feed tank control box.



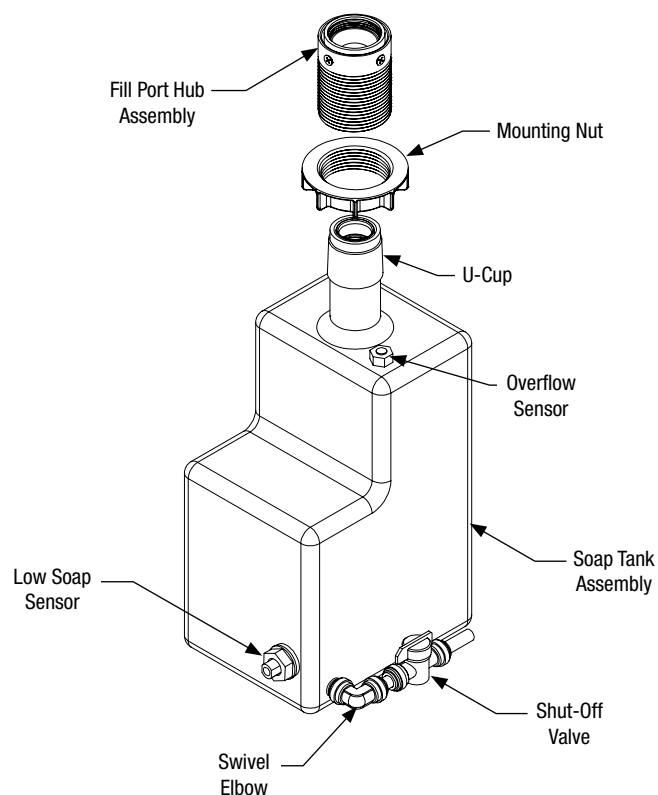
**B** Remove hook & loop strap allowing the soap tank to be removed from the mounting bracket.

**C** Carefully remove the fill port hub assembly from the soap tank assembly.



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

**D** Remove the mounting nut from the fill port hub assembly.

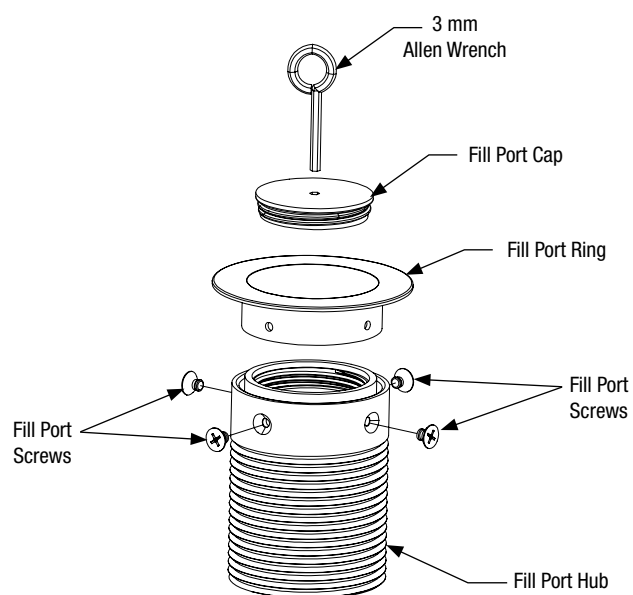


## Install Multi-Feed Components

**A** Insert the fill port ring into the fill port hub and align the mounting holes. Start the four fill port screws by hand before tightening screws for proper alignment, and then secure in place.

**B** 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.

**C** Using sealant appropriate for quartz or solid surface material when installing the fill port ring is recommended.





## 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.

**B** Position spacer and mounting bracket over fill port assembly and slide upward until spacer is in contact with under side of counter.



*The mounting bracket can be fastened to the wall when centerline of fill port assembly is 2-1/2" from wall using wall fastener slot in mounting bracket (hardware by others).*

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



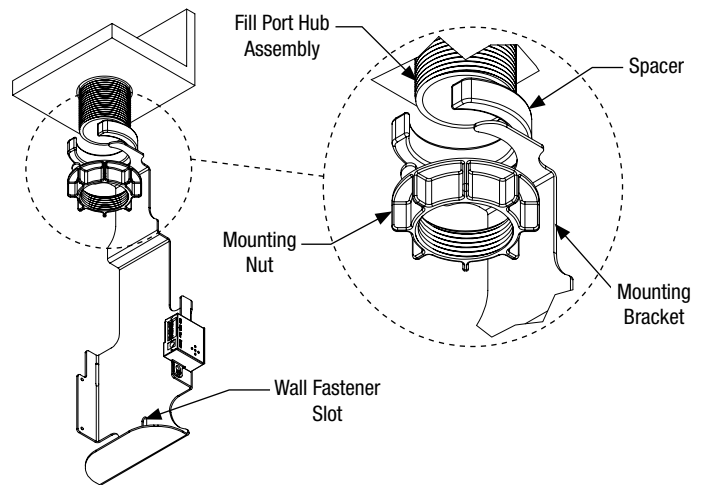
*The distance between the soap dispenser and the fill port hub assembly can only be a maximum of 42" center to center.*



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



*Discard spacer when decks are thicker than 1".*



## Install Soap Tank onto Fill Port Hub Assembly

**A** Position soap tank in center of fill port hub assembly and slide tank upward until tank is flush with return of 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.

**B** Place hook and loop strap around soap tank as shown, securing soap tank to mounting bracket.

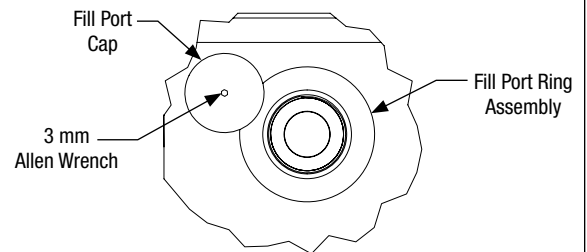
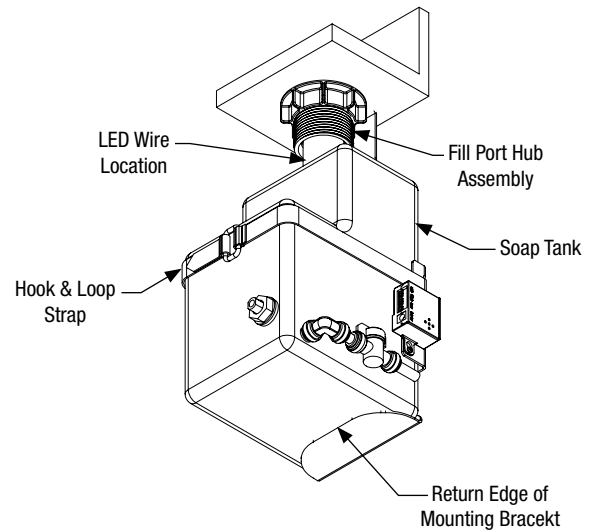


Scan or click code to view a video of how to properly set the U-cup on the tank assembly.

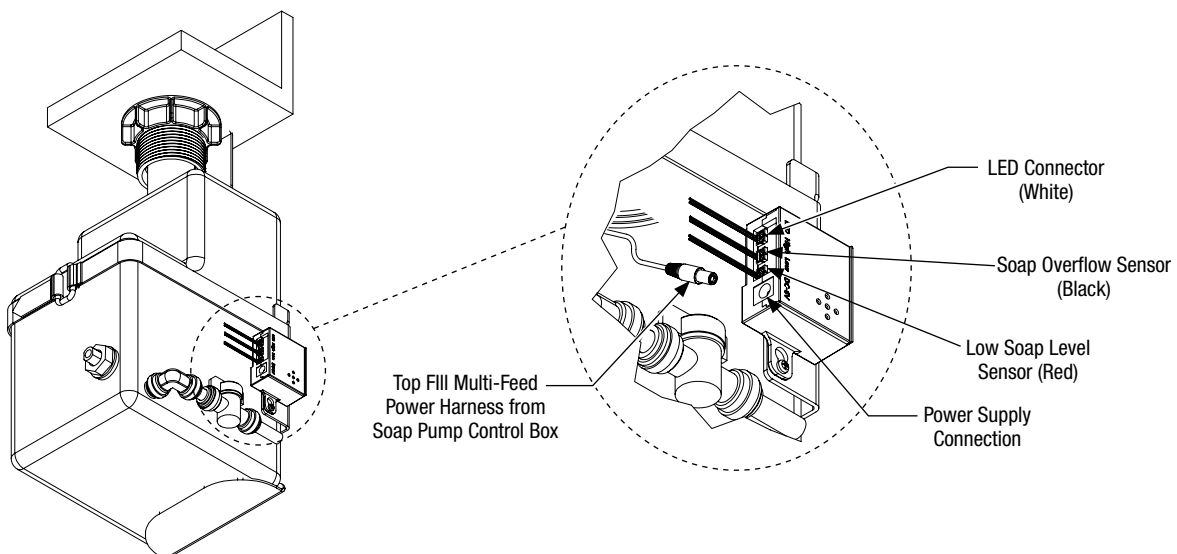
**C** Visually inspect the installation of U-cup is properly seated, ensuring U-cup does not obstruct fill port opening.



Reinstallation of tank or repositioning of U-cup from above may be needed to clear fill port opening.



## Reconnect Soap Sensors & LED Connector



## 4 Multi-Feed Power Connections

**A** Verify the soap pump is positioned below the control box lever.

**B** Verify the shoulder of the soap pump is positioned above the control box groove.

**C** Assemble the hook and loop strap as shown in the illustration below.

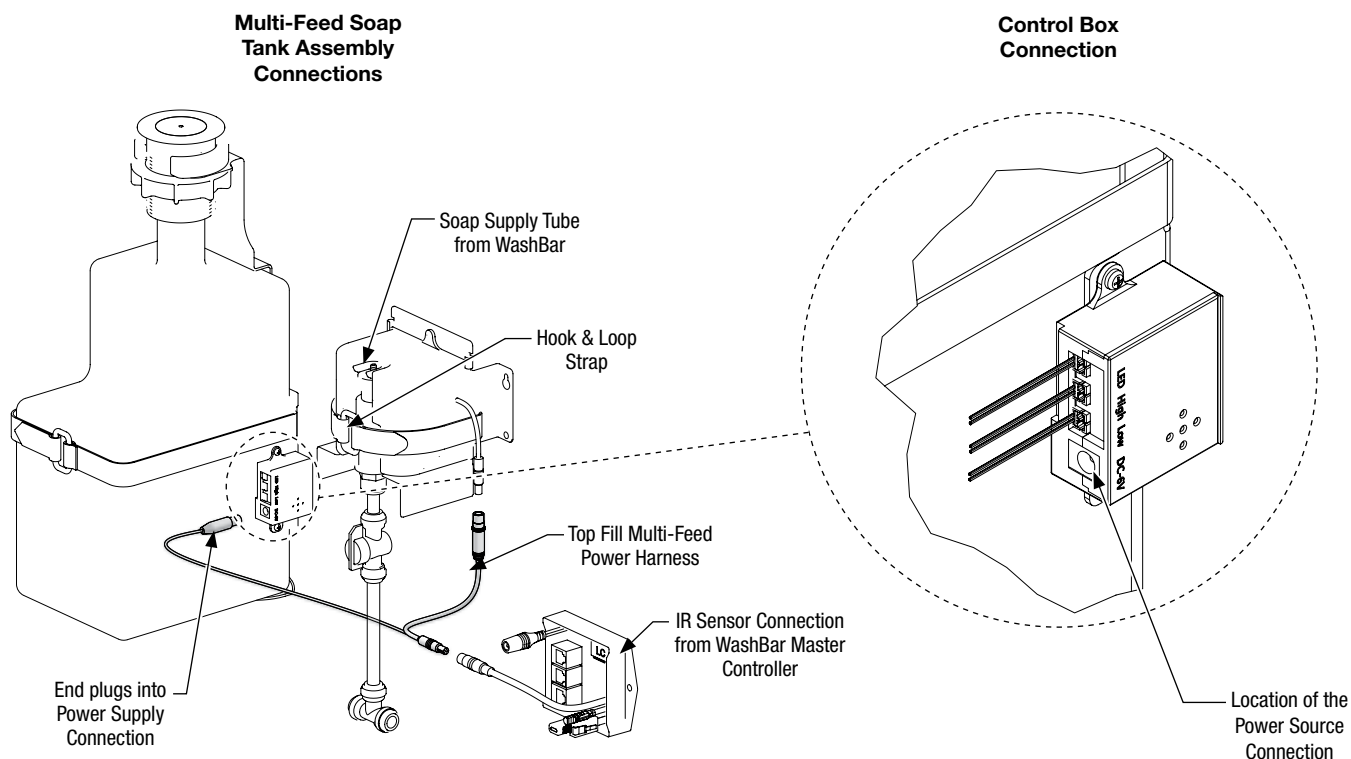
**D** Press the soap supply tube over the soap pump connection as shown below.

**⚠ CAUTION** Only use the approved Top Fill Multi-Feed Power Harness (251-039) to provide power from the WashBar master controller to the multi-feed tank control box. It converts the 12V AC (WashBar power) to 6V (multi-feed tank control box power).



The multi-feed soap tank assembly and each of the control boxes require a power supply connection from the WashBar master controller using direct connection or the power harness.

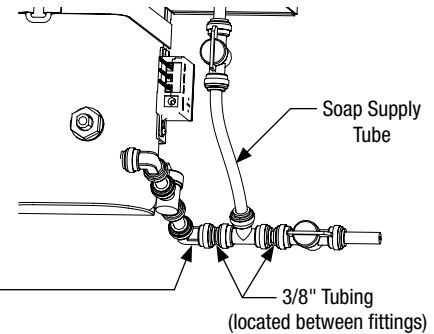
**D** Connect the power supply to the power source for the multi-feed tank system.



## 5 Soap Supply Connections

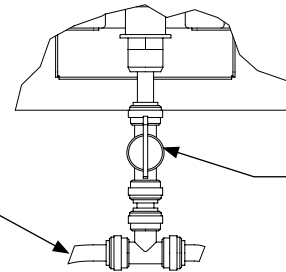
### End Tank Configuration Installation

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

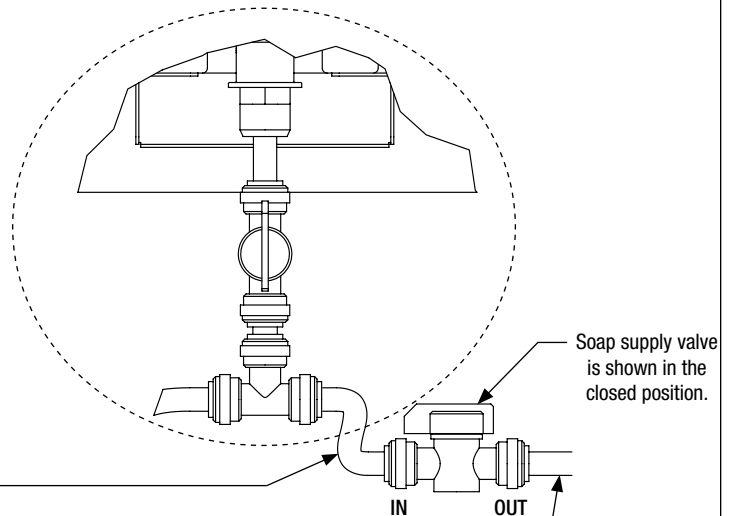


*Tubing will slide 3/4" into the fittings.*

**B** Connect the soap supply tubes between the control boxes, cutting the supply tube to the shortest length between units.



**C** Cut one piece of tubing 3–4" in length and assemble as shown.



**D** 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.*



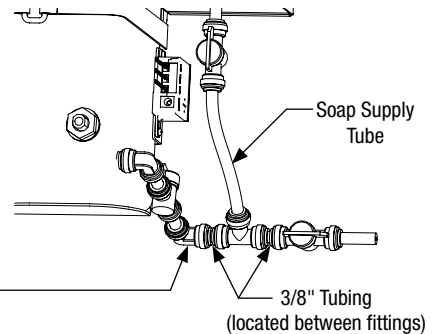
*Use the extra tubing when cleaning and/or maintaining the soap system.*

## Mid Tank Configuration Installation

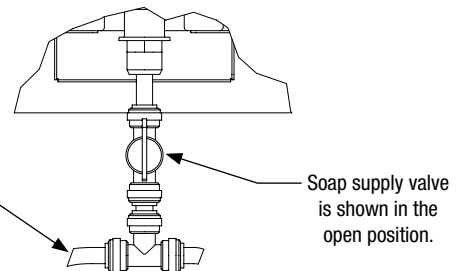
**A** Insert 3/8" diameter tubing into tee fitting as shown.



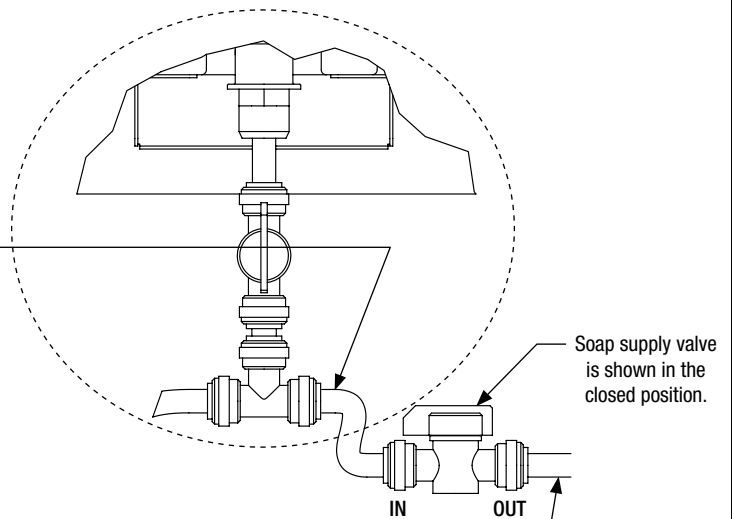
*Tubing will slide 3/4" into the fittings.*



**B** Connect the soap supply tubes between the control boxes, cutting the supply tube to the shortest length distance between units.



**C** Cut one piece of tubing 3–4" in length.



**D** Install extra tubing after the shut off valve (located at both ends 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.*


## 6 Add 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 levels.


Soap tank capacity is 166.5 oz (5026 mL).

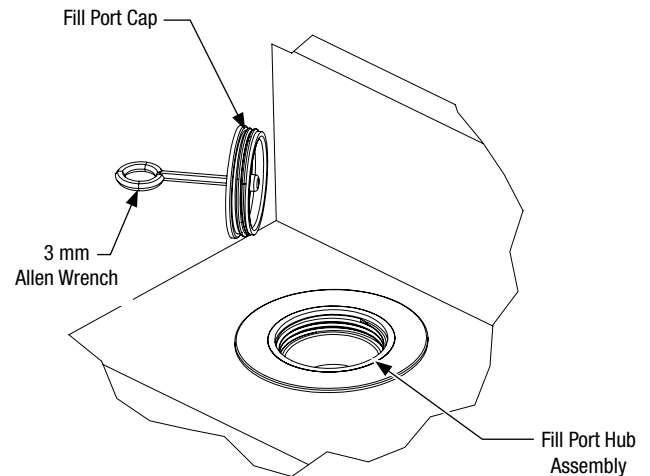
- A** Remove the fill port cap from the fill port hub assembly using the supplied 3 mm Allen wrench. Set the fill port cap aside.

- B** Slowly pour the soap into the fill port hub assembly.

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

- C** 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.



## 7 Update WashBar Software




-  Software revisions can be found at [www.bradleycorp.com/software-updates/washbar](http://www.bradleycorp.com/software-updates/washbar).


-  Update WashBar software to latest rev to disable low soap indicator on WashBar. WashBar will ignore soap counter and low soap indicator will not show LED status on WashBar.

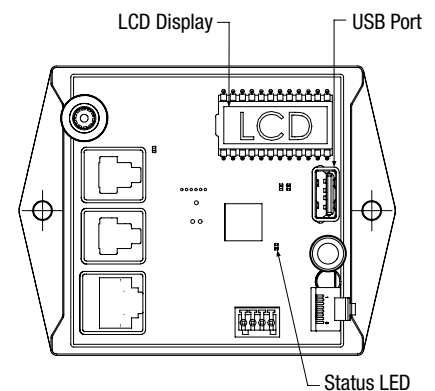
The master control board software can be updated using a USB flash drive.  
To update the software:

1. Download the desired software revision into the ROOT directory of a USB flash drive (do not copy file in any folder).
2. Place the USB flash drive containing the desired software into the master control board. Disconnect the barrel plug to power off. Then reconnect the barrel plug. Wait a few seconds for the control box to restart.
3. DO NOT REMOVE FLASH DRIVE until status LED on master control board turns off and LED lights on WashBar turn all BLUE to indicate update is complete.

-  LEDs may turn off after ALL have flashed BLUE if standby LED setting is set to "OFF". RED LEDs may be solid if board error has occurred or Flashing RED if sensor is blocked.

4. Remove USB flash drive if desired. Leaving USB flash drive in master control board will not affect WashBar performance.

-  Software version will display on the LCD screen. Software can be reversed to a previous version by having only an earlier version of the software on the USB flash drive.



## Top Fill Port Operation Mode

Top Fill Port 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  $\pm$ 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 overflow 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	<b>ON:</b> 1.2 seconds (green for 0.5 seconds, pause for 0.2 seconds, green for 0.5 seconds) <b>OFF:</b> 2 seconds	Low power
LED flashes red	<b>ON:</b> 0.2 seconds <b>OFF:</b> 2 seconds Soap dispensing is enabled intermittently	Low soap
LED becomes steady red with audible indicator	2.5 seconds	Overflow 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.

**⚠ 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.