

Owner's Manual



Release Date: September 21, 2018

Publication Number: 548000037

Revision Date: May 9, 2023

Revision: H

Visit the Cornelius web site at www.cornelius.com.



Marmon Foodservice
Technologies

A Berkshire Hathaway Company

Notice

The products, technical information, and instructions contained in this manual are subject to change without notice. These instructions are not intended to cover all details or variations of the equipment, nor to provide for every possible contingency in the installation, operation or maintenance of this equipment. This manual assumes that the person(s) working on the equipment have been trained and are skilled in working with electrical, plumbing, pneumatic, and mechanical equipment. It is assumed that appropriate safety precautions are taken and that all local safety and construction requirements are being met, in addition to the information contained in this manual.

This Product is warranted only as provided in Cornelius' Commercial Warranty applicable to this Product and is subject to all of the restrictions and limitations contained in the Commercial Warranty.

Cornelius will not be responsible for any repair, replacement or other service required by or loss or damage resulting from any of the following occurrences, including but not limited to, (1) other than normal and proper use and normal service conditions with respect to the Product, (2) improper voltage, (3) inadequate wiring, (4) abuse, (5) accident, (6) alteration, (7) misuse, (8) neglect, (9) unauthorized repair or the failure to utilize suitably qualified and trained persons to perform service and/or repair of the Product, (10) improper cleaning, (11) failure to follow installation, operating, cleaning or maintenance instructions, (12) use of "non-authorized" parts (i.e., parts that are not 100% compatible with the Product) which use voids the entire warranty, (13) Product parts in contact with water or the product dispensed which are adversely impacted by changes in liquid scale or chemical composition.

Correct Disposal of this Product



RECYCLE

This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

Trademarks and Copyrights

This document contains proprietary information and it may not be reproduced in any way without permission from Marmon FoodService Technologies Inc. This document contains the original instructions for the unit described.

MARMON FOODSERVICE TECHNOLOGIES INC
355 Kehoe Blvd
Carol Stream, IL
Tel: + 1 800-238-3600

Printed in U.S.

Contact Information

To inquire about current revisions of any documentation or assistance with any Cornelius product, contact:

www.marmonfoodservice.com

www.cornelius.com

800-238-3600

TABLE OF CONTENTS

Safety Instructions	1
Read and Follow all Safety Instructions	1
Safety Overview	1
Recognition	1
Different Types of Alerts	1
Safety Tips	1
Qualified Service Personnel	2
Safety Precautions	2
Operation	3
Prism	3
Optifill	3
Sanitary Lever	3
Push Button	3
Portion Control	3
Flavor Shots	3
Mixed Flavors	4
Cleaning Instruction	4
Daily Cleaning	4
Setup Instruction	4
How to Check Prism Ratio	5
How To Program Optifill Top-Off	8
How To Program Portion Control Sizes and Top-Off	10
Flavor Shot Setup	16
Mixed Flavors Setup	17
Knock Out Kit	19
Knock Out Punch Instructions	21
Knock Out Adapter Plate	23
Knock Out Adapter Plate And Tubing	23
Back Block Installation	25
Valve Installation	27
Locking Valve with Back Block Using Lock Pin	29
Connection Diagram	30
Syrup and Water Maps	31
Touch Module And Cover Installation	32
Schematics	33
Plumbing Diagram	33
Wiring Diagram	34
Illustrated Parts List	35
Valve Assembly	35
Prism Component Part Numbers	36
Prism Decal	37



SAFETY INSTRUCTIONS

READ AND FOLLOW ALL SAFETY INSTRUCTIONS

Safety Overview

- Read and follow **ALL SAFETY INSTRUCTIONS** in this manual and any warning/caution labels on the unit (decals, labels or laminated cards).
- Read and understand ALL applicable OSHA (Occupational Safety and Health Administration) safety regulations before operating this unit.
- Must wear required PPE before you start to service or maintain the equipment.

Recognition

<i>Recognize Safety Alerts</i>
 <p><i>This is the safety alert symbol. When you see it in this manual or on the unit, be alert to the potential of personal injury or damage to the unit.</i></p>

DIFFERENT TYPES OF ALERTS

DANGER:

Indicates an immediate hazardous situation which if not avoided **WILL** result in serious injury, death or equipment damage.

WARNING:

Indicates a potentially hazardous situation which, if not avoided, **COULD** result in serious injury, death, or equipment damage.

CAUTION:

Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury or equipment damage.

SAFETY TIPS

- Carefully read and follow all safety messages in this manual and safety signs on the unit.
- Keep safety signs in good condition and replace missing or damaged items.
- Learn how to operate the unit and how to use the controls properly.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- Keep your unit in proper working condition and do not allow unauthorized modifications to the unit.
- Any modifications to be done by Factory Authorized Service personnel only.
- Any part replacement in the system shall be conducted with like components.

QUALIFIED SERVICE PERSONNEL

WARNING:

Only authorized service personnel shall service the valve. **ALL WIRING AND PLUMBING MUST CONFORM TO NATIONAL AND LOCAL CODES. FAILURE TO COMPLY COULD RESULT IN SERIOUS INJURY, DEATH OR EQUIPMENT DAMAGE.**

SAFETY PRECAUTIONS

This unit has been specifically designed to provide protection against personal injury. To ensure continued protection observe the following:

WARNING:

Disconnect power to the unit before servicing following all lock out/tag out procedures established by the user. Verify all of the power is off to the unit before any work is performed.

Failure to disconnect the power could result in serious injury, death or equipment damage.

CAUTION:

Always be sure to keep area around the valve clean and free of clutter.

Failure to keep this area clean may result in injury or equipment damage.

OPERATION

PRISM

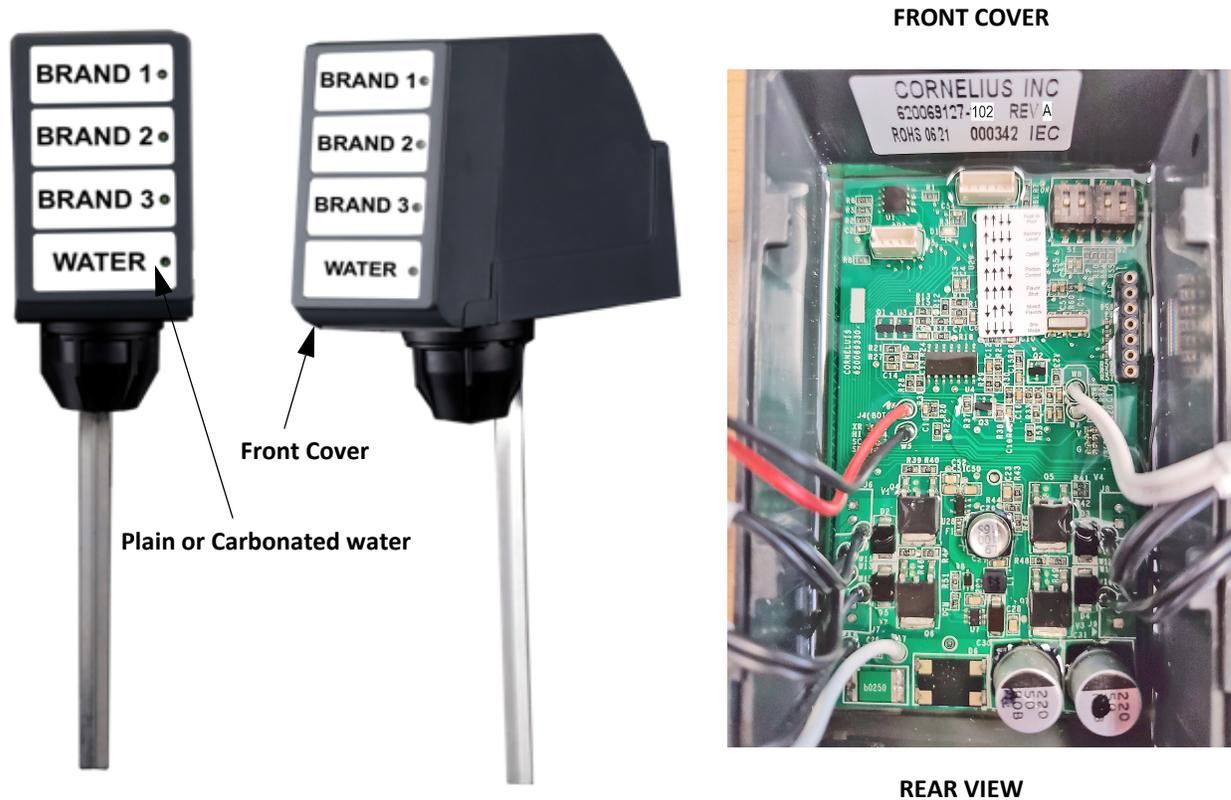


Figure 1.

The Cornelius Prism is capable of dispensing **3 CARBONATED BRANDS / or 3 NON-CARBONATED BRANDS / or 3 FLAVORS** and comes with 6 variants as below, refer to Table 1 on page 4.

NOTE: Both carbonated and non carbonated beverages CANNOT BE DISPENSED IN THE SAME VALVE

Optifill

The user places a cup against the dispensing lever, press the brand, and the valve automatically shuts off after the cup begins to overflow. Additionally, a top-off pour can be programmed in this mode.

Sanitary Lever

The user manually dispenses a beverage by selecting a brand and then pressing the cup against the dispensing lever.

Push Button

The user manually dispenses a beverage by pressing the brand until the cup is full.

Portion Control

The user dispenses a beverage by pressing the brand button, then pressing a cup size button, and then the valve automatically dispenses for a fixed time. Times are programmable, with an option to add top-off

Flavor Shots

The user dispenses a flavor only by pressing the brand button, then pressing a cup size button, and then the valve automatically dispenses for a fixed time. Line pressure must be set between 30-35 PSIG for each flavor.

Mixed Flavors

The user dispenses a flavor and beverage by pressing the brand button and a flavor button, then pressing a cup size button, and then the valve automatically dispenses for a fixed time.

Table 1.

Part No.	Description
Sanitary Lever Valves	
620069112	Prism, Ceramic regulator, with mounting block and covers
Push Button Valves	
620069114	Prism, Ceramic regulator, with mounting block and covers
Optifill Lever Valves	
620069118	Prism, Ceramic regulator, with mounting block and covers
Portion Control / Mixed Flavor Valves	
620069116	Prism, Ceramic regulator, with mounting block and covers
Flavor Shot Valves	
620073990	Prism, Ceramic regulator, with mounting block and covers

CLEANING INSTRUCTION

Daily Cleaning

1. Remove nozzle and diffuser from the valve and clean with warm, soapy water. Rinse with clean water. Soak parts in sanitizing solution for 2 minutes, then install them back onto the valve, allowing the parts to air dry.

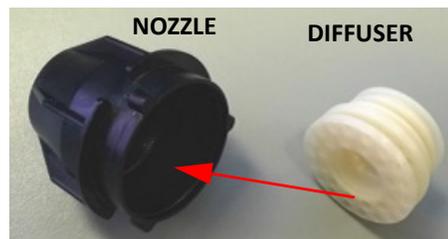


Figure 2.

2. Wash external surfaces with mild soap solution, rinse with clean water, and wipe dry.

NOTE: While cleaning the valve do not use abrasive or harsh cleaners on the unit.

NOTE: Diffuser is only compatible with Prism valve.

CAUTION:

All sanitizing solution must be drained from the system. A freezing ambient environment will cause residual sanitizing solution or water remaining inside the valve to freeze resulting in damage to internal components.

SETUP INSTRUCTION

During this step, pour directly from the valve into the ratio cup. Pour water & syrup separately.

3. Enter into "brix mode" by adjusting the valve dip switch. Set the dip switches as shown in Figure 4. Press and release the water button. The valve will dispense a preset amount of water. Adjust the flow rate using the valve flow control until the flow rate is adjusted properly. After water is adjusted properly - use the syrup buttons to dispense a preset amount of syrup. Adjust the corresponding syrup flow control until the syrup flow rate is adjusted properly

Figure 3.

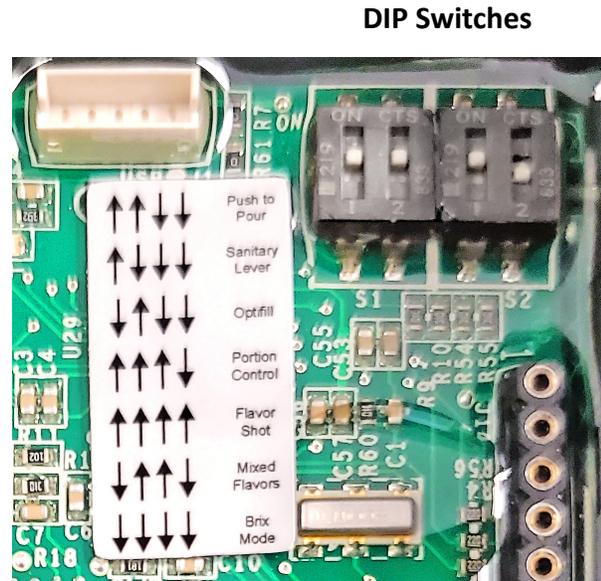
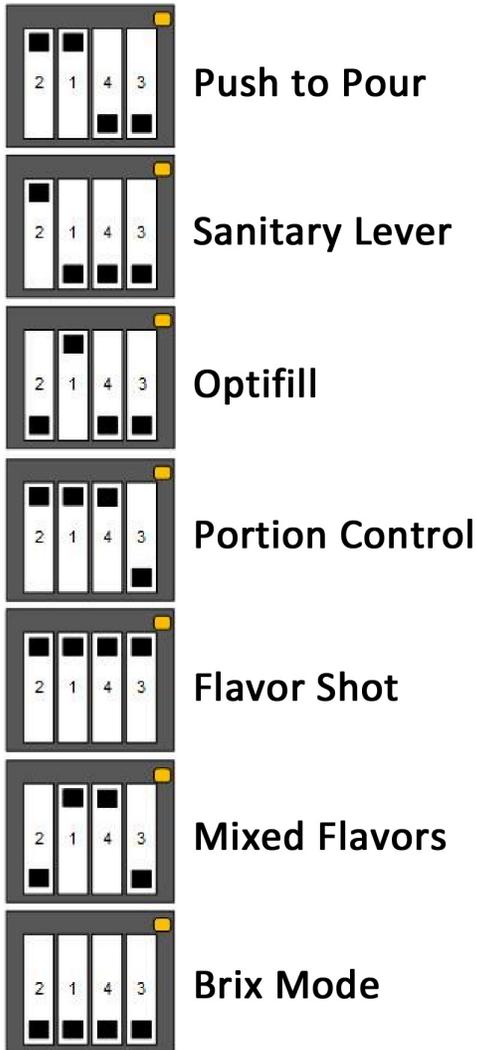
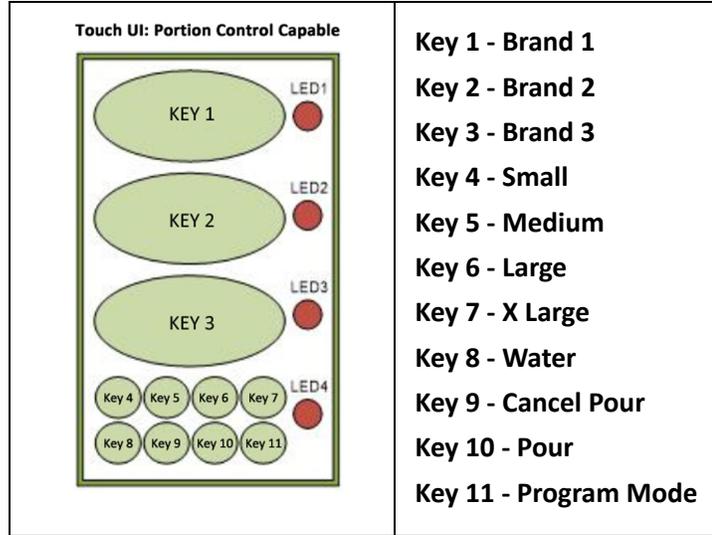


Figure 4.

NOTE: The DIP switches are located in the upper right hand corner of the back of the valve front cover.

HOW TO SET PRISM RATIO

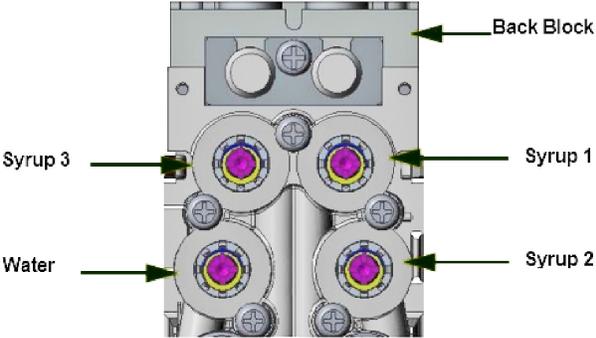
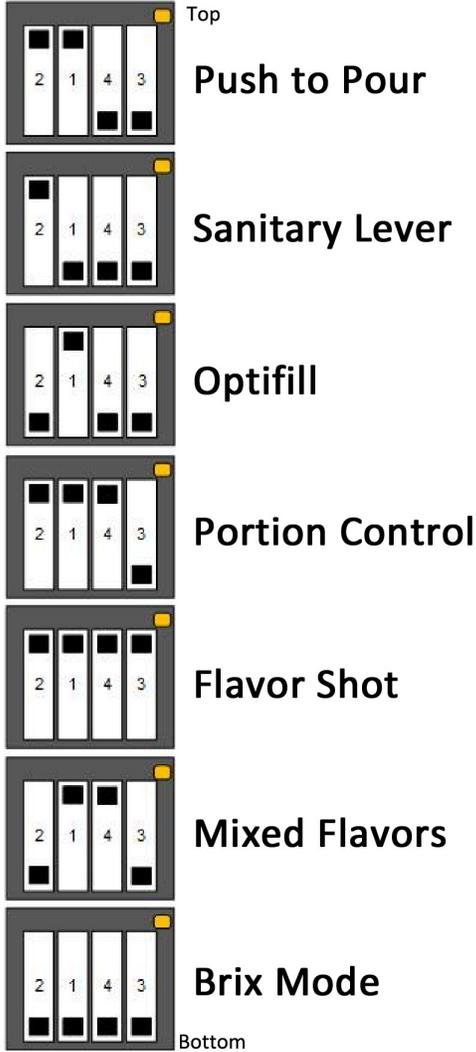
Note: For proper setup of Flavor Shots, see section on “Flavor Shot Setup.”

CAUTION:

Do not expose the capacitive touch module wire to water.

Table 2.

Step	Action	Figure
1.	Remove the capacitive touch module by lifting it upward and pulling out. Remove the rear valve cover. Leave the wire attached to the capacitive touch module.	<p>Figure 5.</p>
2.	Place the ratio cup under the valve.	
3.	Place the dip switch into “Brix mode”. Select the respective mode based on the type of dispense. <u>After selecting “Brix mode,” remember to power cycle the valve by disconnecting and reconnecting the white connector.</u>	<p>Brix Mode</p> <p>Figure 6</p>
4.	Press the water button to activate a time dispense of 4.0 sec. Target 10oz into the water chamber of the ratio cup. NOTE: After the water flow is adjusted, note the level of the ratio cup. Do not adjust the water again for the syrup.	<p>Ratio Cup</p> <p>Figure 7.</p>

<p>5.</p>	<p>Press a brand to activate the timed dispense into the proper syrup chamber. If the syrup level doesn't fall within one band of the noted water level, turn the adjustment screw on the appropriate syrup flow control counterclockwise to decrease syrup flow or clockwise to increase syrup flow. Dispense a few drinks to verify the ratio. Re-adjust as necessary. Repeat for the remaining flavors.</p>	 <p style="text-align: center;">Top View Figure 8</p>
<p>6.</p>	<p>Select the respective mode based on the type of dispense.</p> <p><u>After selecting the appropriate dispense mode, power cycle the valve by disconnecting and reconnecting the white connector.</u></p>	 <p style="text-align: center;">Bottom Figure 9.</p>
<p>7.</p>	<p>Replace the rear valve cover and replace the capacitive touch module.</p>	

HOW TO PROGRAM OPTIFILL TOP OFF

CAUTION:

Do not expose the capacitive touch module wire to water

NOTE: When program mode is enabled, the LED light in the bottom-right corner will turn on and remain on until program mode is disabled, at which point the LED light will turn off.

Programming Top-Off Delay

Table 3

Step	Action	Figure
1.	<p>Set the DIP switch to Optifill mode as shown in Fig. 10.</p> <p>Enter into “program mode” by pressing the program button, located in the bottom-right corner of the front cover, for 3 seconds until the LED light turns on.</p> <p>Important: if power to the valve is turned off while programming, perform a factory reset of the valve after power is restored (see “Restoring Default Time Values” section). After the reset, program the valve as intended.</p>	<p>Location of Program Button</p> <p>Keep cup against lever until liquid touches lever</p> <p>Optifill</p> <p>Figure 10.</p>
2.	<p>Press and release a desired Brand button.</p> <p>Place cup against the lever to allow the valve to begin dispensing.</p> <p>When the foam or liquid touches the lever the valve will automatically stop. This is the initial pour. The cup must remain in place with the lever pressed. The LED light will flash at this time.</p>	
3.	<p>When the foam in the cup has lowered, press and release the desired brand button. The valve will begin dispensing and will stop when the foam or liquid touches the lever. This is the top-off pour. The time between the end of the initial pour and when the pour is re-started is the top-off delay, which is now stored in the PC board. The LED light will be on steady (no flash) at this time.</p>	
4.	<p>When finished, program additional top-offs by repeating steps 2 & 3, or exit out of “program mode” by pressing the program button, located in the bottom-right corner of the front cover, for 3 seconds until the LED light turns off.</p>	

Disable Optifill Top-Off Delay

Table 4

Step	Action	Figure
1.	Enter into "program mode" by pressing the program button, located in the bottom-right corner of the front cover, for 3 seconds until the LED light turns on. Important: if power to the valve is turned off while programming, perform a factory reset of the valve after power is restored (see "Restoring Default Time Values" section). After the reset, program the valve as intended.	 <p data-bbox="1052 877 1149 905">Figure 11.</p>
2.	Press and release a desired Brand button. Place cup against the lever to allow the valve to begin dispensing. When the foam or liquid touches the lever the valve will automatically stop.	
3.	Remove the cup from against the lever. This will enter a zero value for the "top-off" delay time and disable a top-off pour.	
4.	When finished, exit out of "program mode" by pressing the program button, located in the bottom-right corner of the front cover, for 3 seconds until the LED light turns off.	

HOW TO PROGRAM PORTION CONTROL SIZES & TOP-OFF

CAUTION:

Do not expose the capacitive touch module wire to water.

NOTE: If the “Cancel/Pour” button is held pouring for more than 30 s, the pour times out and stops flow. The pour button must be release and re-pressed to resume flow.

NOTE: When program mode is enabled, the LED light in the bottom-right corner will turn on and remain on until program mode is disabled, at which point the LED light will turn off.

Default Time Settings

The Prism valve Portion Controls are factory programmed with time values that can be useful during initial installation and for testing the modules. The time values for each portion size are shown in the following table.

Portion Size	Initial Pour Setting
Small “S”	2 s
Medium “M”	3 s
Large “L”	4 s
Extra-Large “XL”	6 s

Programming the Portion Sizes

NOTE: It is recommended that when programming portion sizes, use actual cups and ice level.

Programming a Standard Pour

Table 5

Step	Action	Figure
1.	<p>Set the DIP switch to Portion Control mode as shown in Fig. 12.</p> <p><u>After selecting “Portion Control Mode,” remember to power cycle the valve by disconnecting and reconnecting the white connector.</u></p> <p>Enter into “program mode” by pressing the hidden program button, at the bottom-right corner of the front cover, for 3 seconds until the LED light turns on.</p> <p>Important: if power to the valve is turned off while programming, perform a factory reset of the valve after power is restored (see “Restoring Default Time Values” section). After the reset, program the valve as intended.</p>	
2.	<p>Press and release a desired Brand button.</p> <p>Press and hold the portion size button until the desired level is reached in the cup; release the button. Portion will be recorded when program mode is exited.</p>	<p>Portion Control</p> <p>Figure 12.</p>

Table 5

3.	Continue with other portion size buttons or reset the same portion size again.	
4.	Program additional brands by repeating steps 2 and 3, or when complete, exit the program mode by holding the hidden program button for 3 seconds.	
5.	The last portion set for each button is now recorded.	

Programming a Top-Off Pour

NOTE: It is recommended that when programming a top-off pour, use actual cups and ice level.

Table 6

Step	Action	Figure
1.	<p>Enter the top-off program mode by holding the program button (located in the bottom-right corner of the front cover) and "S" together for 3 seconds until the LED light turns on.</p> <p>Note: To avoid accidental pour, ensure the program button is depressed slightly earlier than the "S" Button.</p> <p>Important: if power to the valve is turned off while programming, perform a factory reset of the valve after power is restored (see "Restoring Default Time Values" section). After the reset, program the valve as intended.</p>	<p>Figure 13.</p>
2.	<p>Press and release a desired Brand button.</p> <p>Press and hold the portion size button until the desired level is reached in the cup, then release the button.</p> <p>Once the foam settles, press the same button again to add a top-off pour. The initial pour, pause, and top-off will be recorded when the program mode is exited.</p>	
3.	<p>Continue with other portion size buttons or reset the same portion size again.</p> <p>Note that the two dispenses and pause between them will be saved for each portion size when the top-off program mode is exited.</p>	

Table 6

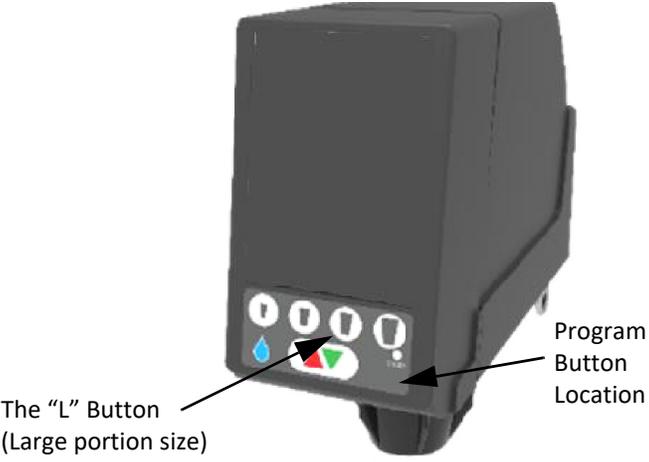
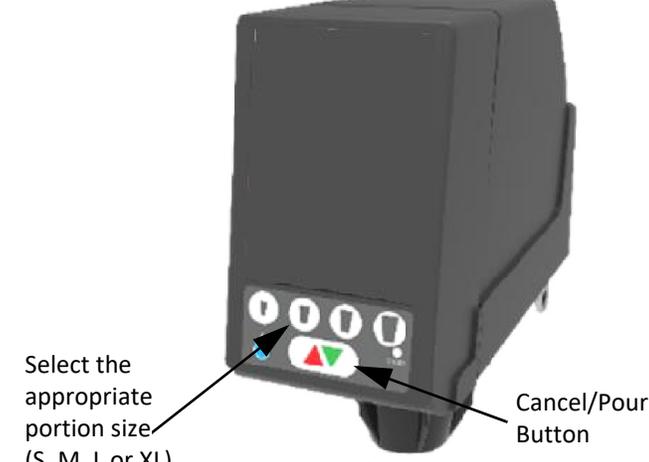
4.	Program additional brands by repeating steps 2 and 3, or when complete, exit the program mode by holding the hidden program button for 3 seconds.	
5.	The last portion, pause, and top-off for each button are now recorded. Note: It is possible to have some portion sizes with a top-off and others without a top-off.	

Programming an Incremental Pour

The module will record the sum of all consecutive pours on a single portion as one, single pour with no pauses. This is not the same as top-off mode.

NOTE: It is recommended that when programming portion sizes, use actual cups and ice level.

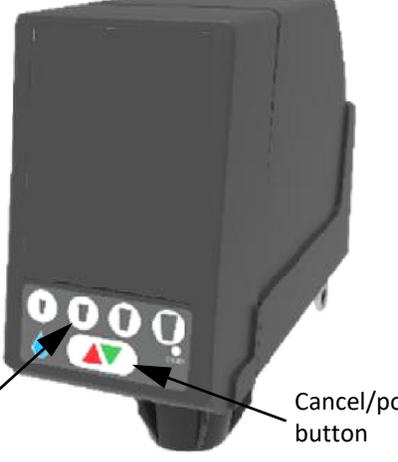
Table 7

Step	Action	Figure
1.	<p>Enter the top-off program mode by holding the program button (located in the bottom-right corner of the front cover) and "L" together for 3 seconds until the LED light turns on.</p> <p>Note: To avoid accidental pour, ensure the program button is depressed slightly earlier than the "L" Button.</p> <p>Important: If power to the valve is turned off while programming, perform a factory reset of the valve after power is restored (see "Restoring Default Time Values" section). After the reset, program the valve as intended.</p>	 <p>The "L" Button (Large portion size)</p> <p>Program Button Location</p> <p>Figure 14.</p>
2.	<p>Press and release a desired Brand button.</p> <p>Press and hold the portion size button to be programmed to desired amount, and pause if necessary for foam settling.</p>	 <p>Select the appropriate portion size (S, M, L or XL)</p> <p>Cancel/Pour Button</p> <p>Figure 15.</p>
3.	<p>Continue with other portion size buttons. The same portion size may be reprogrammed by either setting a different size and returning to the size that needs to be reprogrammed, or tapping the cancel/pour button before touching the size to be reprogrammed again.</p> <p>Note that the last set of the consecutive pours' sum will be saved for each portion size as a single pour without pause when the incremental program mode is exited.</p>	
4.	<p>Program additional brands by repeating steps 2 and 3; or when complete, exit the incremental program mode by holding the hidden program button for 3 seconds.</p> <p>Note: It is possible to have some portion sizes that were created with a single pour, others created with multiple pours.</p>	

RESTORING DEFAULT TIME VALUES

The factory default standard pour time values can be restored using the following procedure.

Table 8

Step	Action	Figure
1.	Enter into "program mode" by pressing the program button, located in the bottom-right corner of the front cover, for 3 seconds until the LED light turns on.	 <p>Program Button Location</p> <p>Figure 16.</p>
2.	<p>Press and hold the "Cancel / Pour" Button, then press and release a desired Brand button. Release the "Cancel / Pour" Button.</p> <p>Press and release the desired portion size button to be reset.</p> <p>The LED light will flash to indicate that the size will be reset.</p>	 <p>Select the appropriate portion size (S, M, L or XL)</p> <p>Cancel/pour button</p> <p>Figure 17.</p>
3.	Release the "Cancel / Pour" Button. The time value listed in "Default Time Values" was restored to that size.	
4.	The "Cancel/Pour" Button must be released and re-pressed before resetting another size.	
5.	Program additional brands by repeating steps 2 and 3; or when complete, exit the program mode by holding the hidden program button for 3 seconds.	

ADJUSTING VALVE FLOW RATES VALUES

Table 9

Step	Action	Figure
1.	If a flow rate re-adjustment is necessary for a Portion Control valve, set the mode to "Brix Mode" and follow the procedures in the "How to Set Prism Ratio" section above. <u>After selecting "Brix Mode," remember to power cycle the valve by disconnecting and reconnecting the white connector.</u>	 <p data-bbox="1089 516 1292 558">Brix Mode</p> <p data-bbox="1052 632 1149 659">Figure 18</p>
2.	When finished adjusting flow rate, remember to reprogram the portion size buttons at the new flow rate. <u>After re-selecting "Portion Control Mode," remember to power cycle the valve by disconnecting and reconnecting the white connector.</u>	

FLAVOR SHOT SETUP

CAUTION:

Do not expose the capacitive touch module wire to water.

Important:

- 1) The line pressure for flavors must be set between 30-35 PSIG
- 2) This valve must use a standard nozzle (p/n 1945) and base plate (p/n 1903) to avoid flavor/color carryover

Default Time Settings

The Prism Flavor-Shot mode is factory programmed with time values that can be useful during initial installation and for testing the modules. The time values for each portion size are shown in the following table.

Portion Size	Initial Pour Setting
Small “S”	1.8 s
Medium “M”	2.8 s
Large “L”	3.8 s
Extra-Large “XL”	4.8 s

Setup Instructions

Table 10

Step	Action	Figure
1.	<p>Set the DIP switch to Flavor Shot mode as shown in Fig. 21. <u>Power cycle the valve by disconnecting and reconnecting the white connector.</u></p> <p>Enter into Program Mode by pressing the bottom right corner for 3 seconds.</p> <p>Important: if power to the valve is turned off while programming, perform a factory reset of the valve after power is restored (see “Restoring Default Time Values” section). After the reset, program the valve as intended.</p>	<p style="text-align: center;">Figure 19.</p>
2.	<p>Tap to select a flavor and the flavor will pour for 24s.</p>	

Table 10

3.	After the 24 seconds the valve should produce 3.0 - 3.5 oz (89 - 103 mL) of flavor. Verify this with a ratio cup or graduated cylinder.	
4.	Adjust valve until desired flow rate is achieved.	
5.	Repeat for each flavor.,	
6.	When complete exit brix mode by pressing the bottom right corner for 3 seconds.	

MIXED FLAVOR SETUP



CAUTION:

Do not expose the capacitive touch module wire to water.

Important:

- 1) The line pressure for flavors must be set between 30-35 PSIG.
- 2) The flavor shots will be not be independently programmable.

Setup Instructions

Table 11

Step	Action	Figure
1.	<p>Ensure that the dip switch is set to "Flavor Shot" mode first.</p> <p>Complete Flavor Shot Setup first.</p> <p>If water and/or syrup flow rate adjustments are needed, change DIP switches to Brix Mode (Fig. 23). <u>Before proceeding to the next step, power cycle the valve by disconnecting and reconnecting the white connector.</u></p>	<p style="text-align: center;">Figure 20.</p>
2.	<p>To properly brix the water and/or syrup brands, refer to the "How to Set Prism Ratio" section of this manual.</p> <p>After completion, adjust the DIP switches to Mixed Flavor (Fig. 24). <u>Before proceeding to the next step, power cycle the valve by disconnecting and reconnecting the white connector.</u></p>	<p style="text-align: center;">Figure 21</p>

Table 11

3.	<p>If portion control size adjustments are needed, enter into "program mode" by pressing the program button, located in the bottom-right corner of the front cover, for 3 seconds until the LED light turns on.</p> <p>Follow steps 2-5 in the "Programming the Portion Sizes" section above on page 10</p>	 <p>Program Button</p> <p>Figure 22.</p>
----	---	--

KNOCK OUT KIT-P/N 620069490

NOTE: All Enduro Ambient Carbonation and Beverage Only units prior to November 2018 will require the punch tool, All Enduro Units since November 2018 have panels that will accept the PRISM valve

Beverage Only Models:

ED150B, ED150BZ, ED175B, ED175BZ, ED200B, ED200BZ, ED250B, ED250BZ, ED300B and ED300BZ

Ambient Carbonation Models:

ED150BC, ED150BCZ, ED175BC, ED175BCZ, ED200BC, ED200BCZ, ED250BC, ED250BCZ, ED300BC and ED300BCZ

NOTE: All IDC Units (Serial #: 62C0912JD002) since 2009 have panels that will accept the PRISM valve.

NOTE: All Duraflex units "DF 150/175/200/250" will not accept PRISM valve due to being "hard plumbed."

NOTE: All Drop-in Units since December 2019 have panels that will accept the PRISM valve.

1. CB1522(Six Valves) - Serial #74A1942KD256 and 74A1945KD039
2. CB1722 and CB2323(Six Valves) -Serial #74A1946KD163
3. CB2323(Eight Valves)-Serial #74A1939KD193
4. CB2323(Ten Valves)-Serial #74A1949KD212
5. CB3023(Ten Valves)-Serial #74A1942KD355

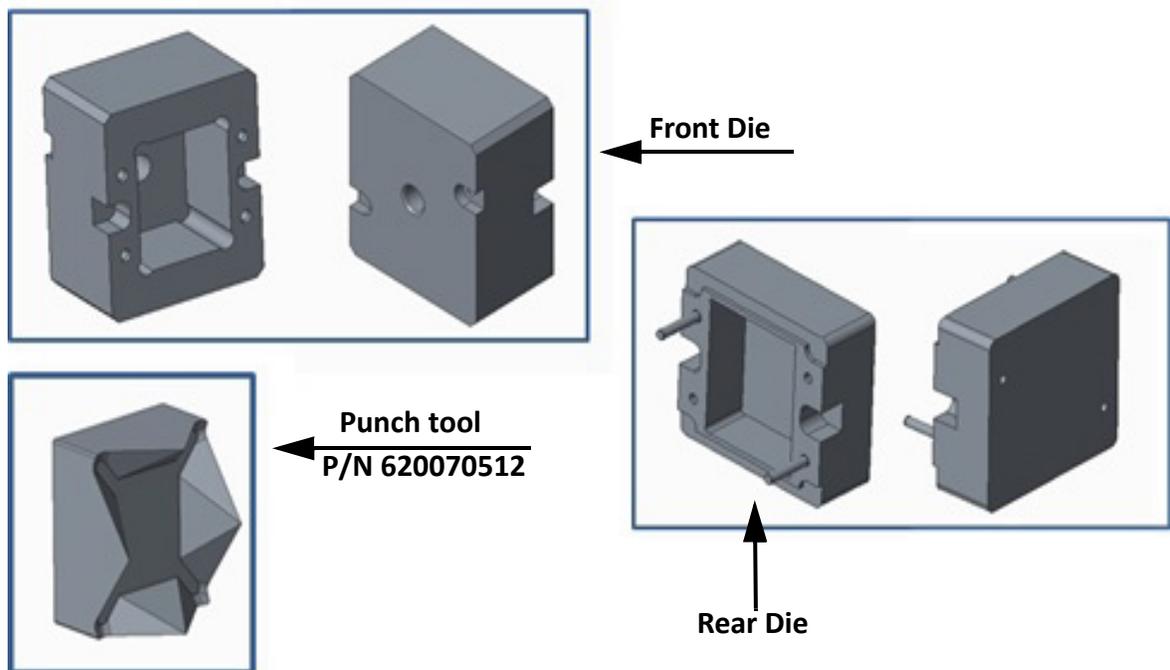
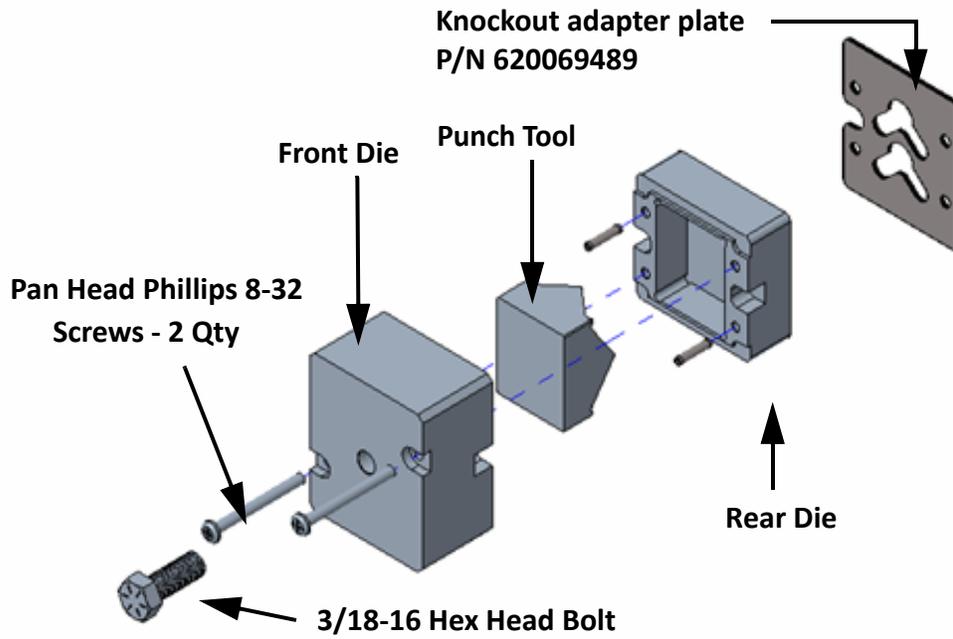


Figure 23.



Knockout kit P/N-620069490

Figure 24.

KNOCK OUT PUNCH INSTRUCTIONS



WARNING:

Must wear required PPE and right tools before using the punch out tool.



WARNING:

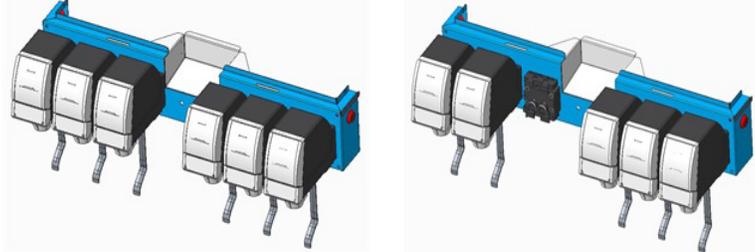
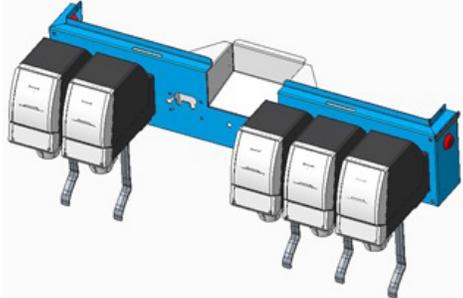
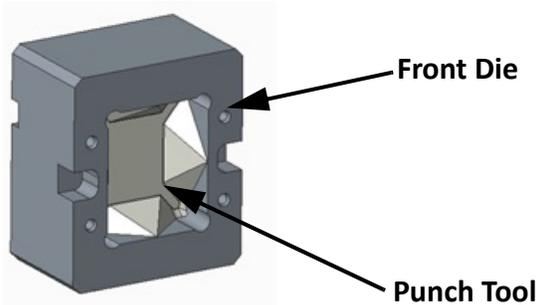
Disconnect power to the unit before servicing following all lock out/tag out procedures established by the user. Verify all of the power is off to the unit before any work is performed.

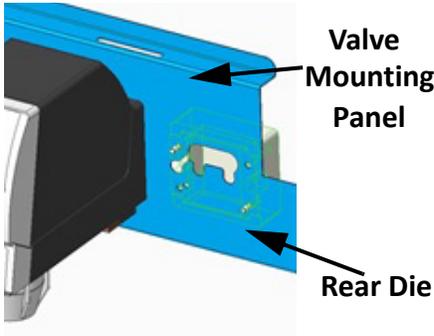
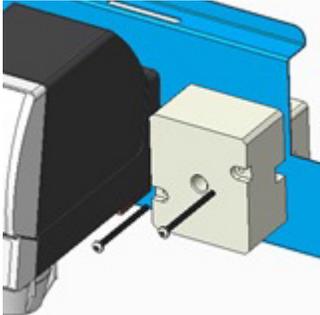
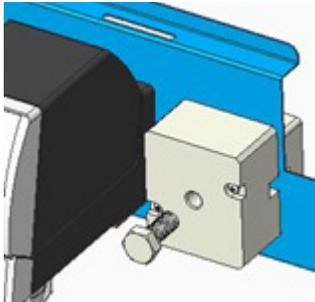
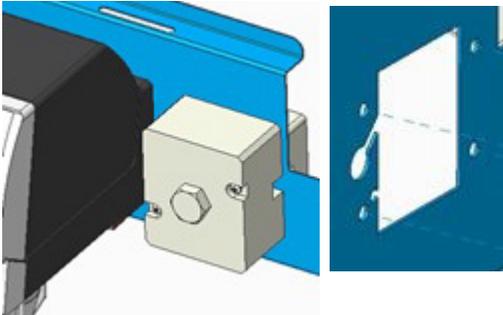


CAUTION:

Disconnect all fluid supply to the unit and release all pressures in the system.

Table 12 .

Step	Action	Figure
1.	Remove the valve from the back block.	 <p data-bbox="1068 911 1170 940">Figure 25.</p>
2.	Remove the existing back-block from the valve panel. NOTE: Keep the screws safe for later. NOTE: Used with installation of new "Prism".	 <p data-bbox="1068 1314 1170 1344">Figure 26.</p>
3.	Load the "Front Die" with "Punch Tool".	 <p data-bbox="1068 1707 1170 1736">Figure 27.</p>

<p>4.</p>	<p>Align the 2 dowel pins of the "Rear Die" with Corresponding holes on the "Valve mounting panel".</p>	 <p>Figure 28.</p>
<p>5.</p>	<p>Assemble "Front Die" loaded with "Punch Tool" to "Rear Die", using 2 Phillip "8-32" screws.</p>	 <p>Figure 29.</p>
<p>6.</p>	<p>Assemble & tighten the hexagon bolt using socket wrench, until the bolt head rests on the front die surface. NOTE: Add lubricant to 3/16" bolt before using the knockout.</p>	 <p>Figure 30.</p>
<p>7.</p>	<p>Remove the tool from the valve mounting panel and dispose of the punched out piece.</p>	 <p>Figure 31.</p>

⚠ CAUTION:

NOTE: Position of the punching may vary, depending upon requirement.

NOTE: With reference to Step - 5, all 2 screws must be tightened to avoid any tool damage or improper punching.

INSTALLATION INSTRUCTIONS

KNOCK OUT ADAPTER PLATE - P/N 620069489

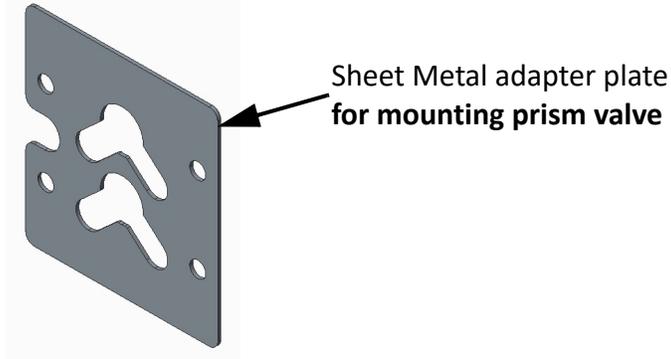


Figure 32.

KNOCK OUT ADAPTER PLATE AND TUBING

Table 13.

1. Align knock out adapter plate with 4 holes of valve mounting panel from "Front Side".

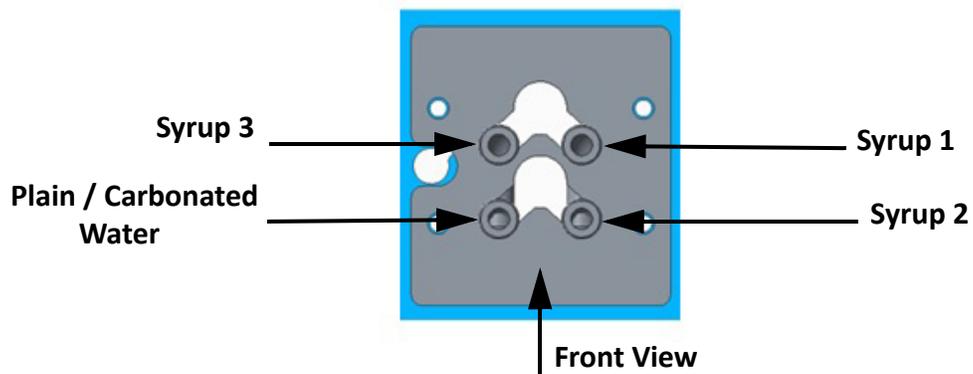
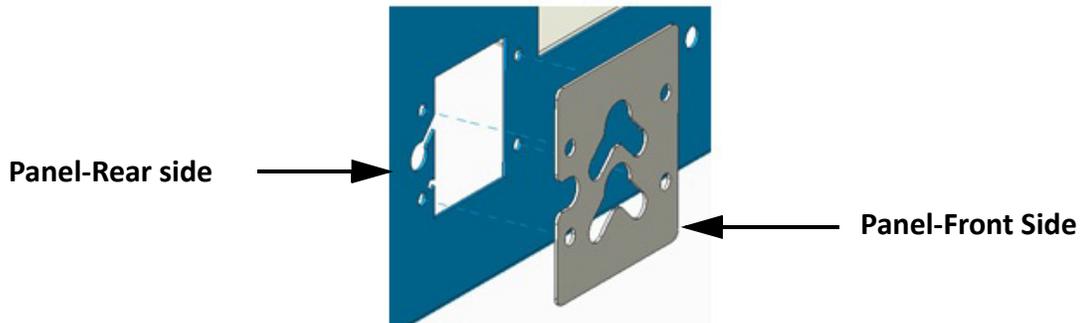


Figure 33.

2. Prepare the tubing assemblies.

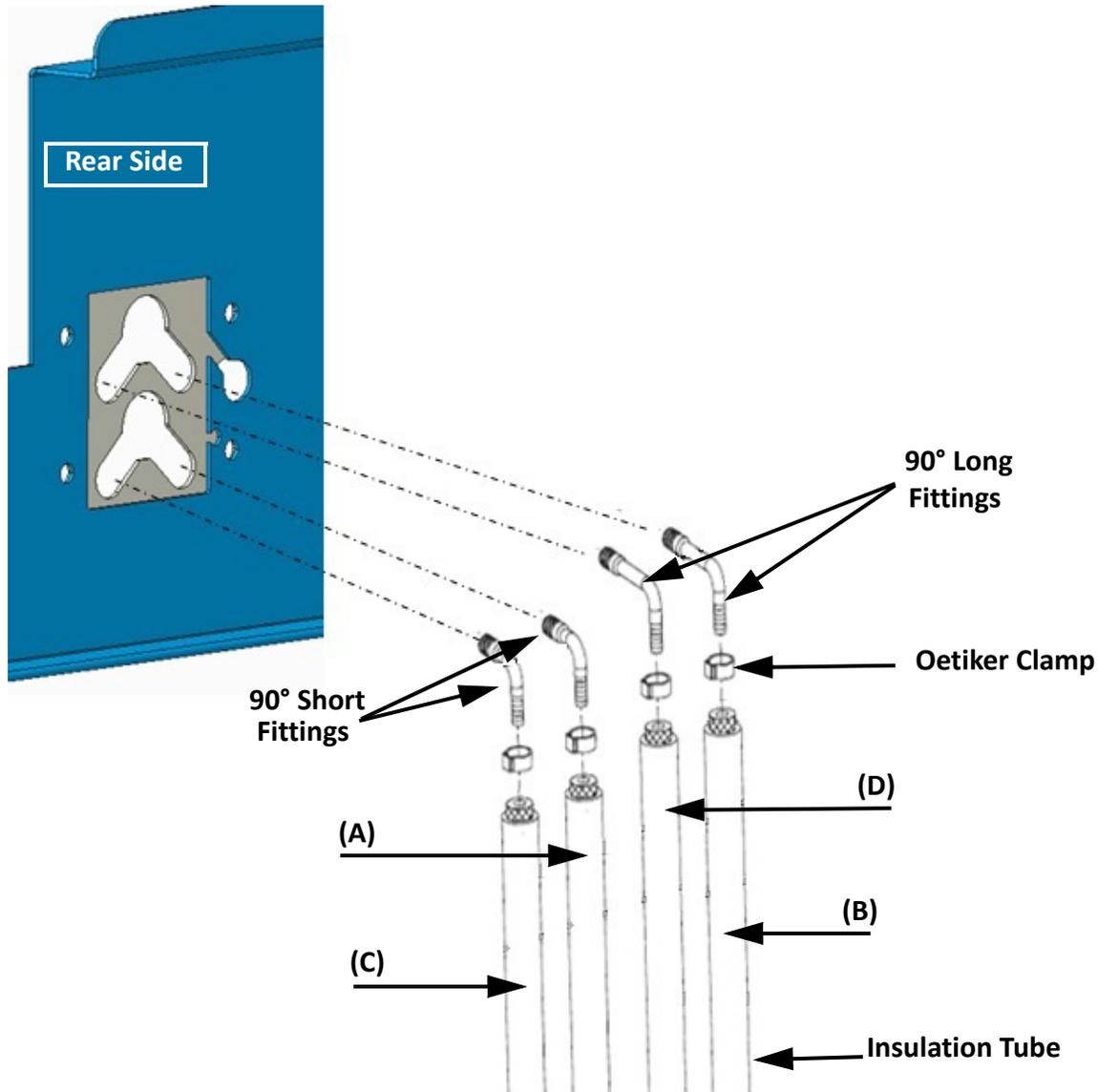


Figure 34.

NOTE: Check the O-rings on the 90° fittings for damage and replace if necessary.

NOTE: Apply Dow 111 or equal lube on the O-rings prior to install.

Table 14.

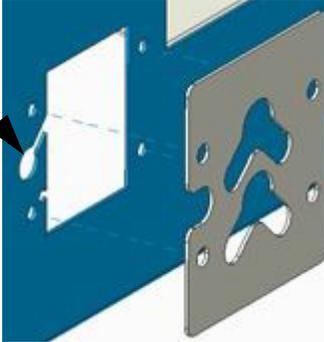
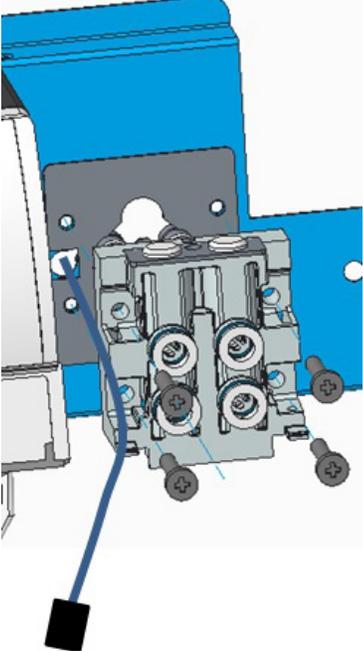
A.	Plain/Carb Water	Use 90° short fitting, 1/4" tubing & insulation from existing plain / carbonated Water line
B.	Syrup 1	Existing syrup line from the cold plate
C.	Syrup 2	New syrup line using 90° short fitting & 1/4" insulated tubing
D.	Syrup 3	New syrup line using 90° long fitting & 1/4" insulated tubing

BACK BLOCK INSTALLATION



Figure 35.

Table 15.

Step	Action	Figure
1.	Route the wire & connector through relief hole of rear adapter plate and back block.	 <p data-bbox="841 919 945 982">Route the Wire</p> <p data-bbox="1084 1262 1182 1289">Figure 36.</p>  <p data-bbox="1084 1965 1182 1992">Figure 37.</p>

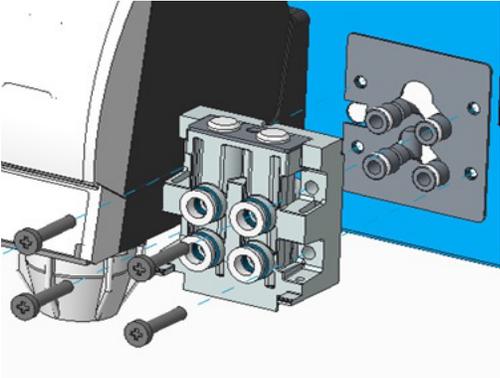
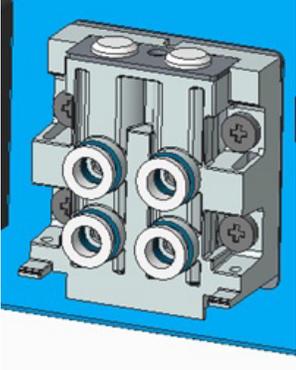
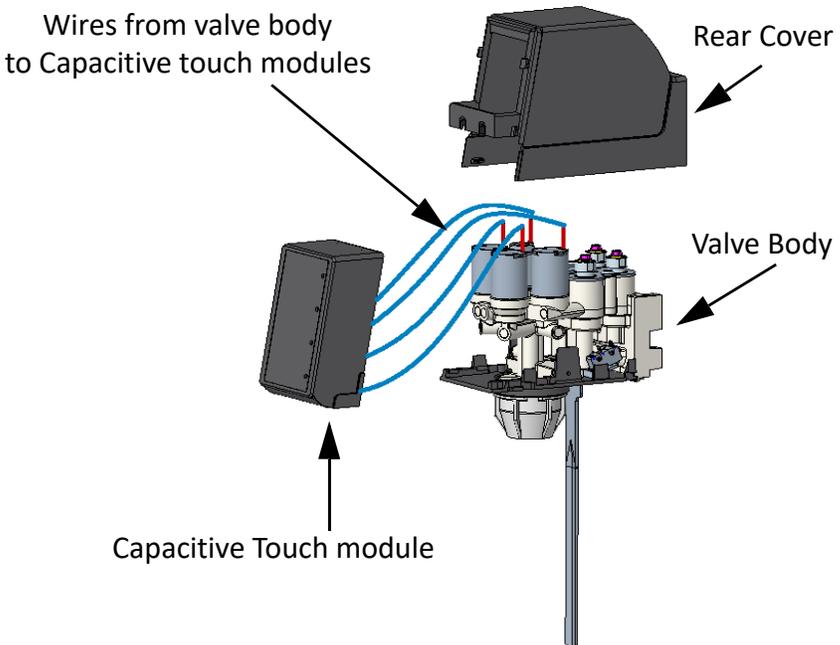
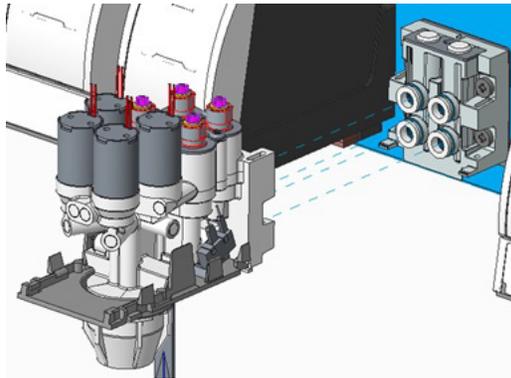
2.	Assemble all the lines with L - fittings on to the knock out adapter plate and	
3.	Align the back block inlet ports to the L-fittings and fasten back block to the valve panel using screws removed earlier (Use either existing screws or screws provided in the kit)	

Figure 38.

Figure 39.

VALVE INSTALLATION

Table 16.

Step	Action	Figure
<ol style="list-style-type: none"> 1. 2. 3. 	<ol style="list-style-type: none"> 1. Slide, open the capacitive touch module. 2. Disconnect the wires from the capacitive touch module. 3. Remove the rear cover 	 <p style="text-align: center;">Figure 40.</p>
<ol style="list-style-type: none"> 4. 	<p>Apply Dow 111 or equal lube on O - rings before assembling the valve body. Align the inlet holes of "valve body" with outlet holes of back block.</p>	 <p style="text-align: center;">Figure 41.</p>

5. Gently push the valve body against back block, until rear surface of the valve body is flush with the back block.

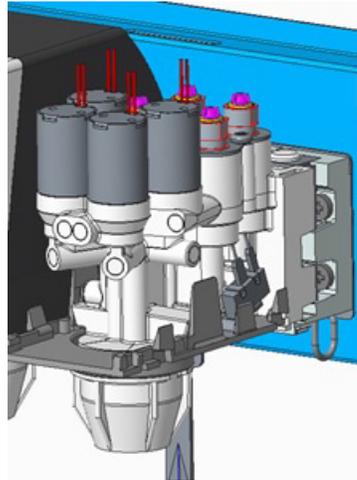


Figure 42.

6. Lock the valve body and back block together with lock pin. Refer to Table 17 on page 29.

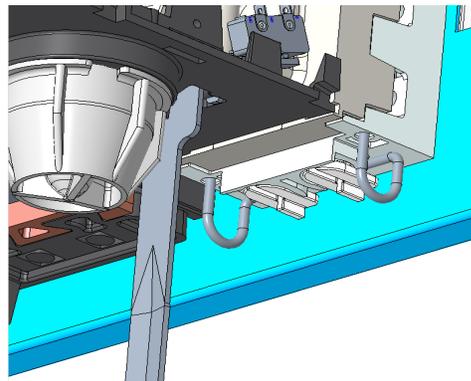
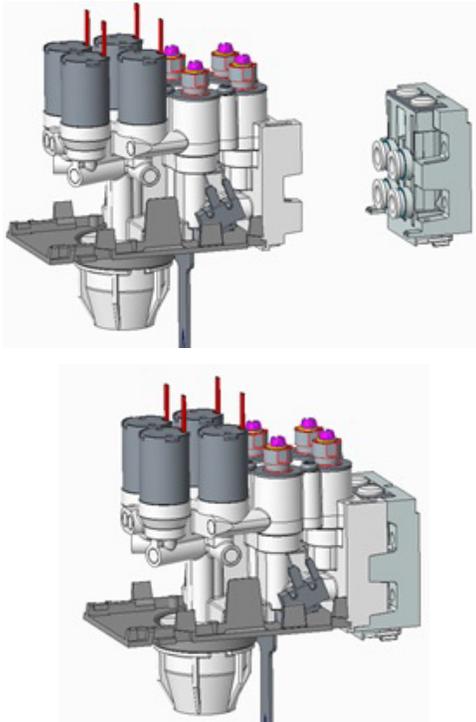
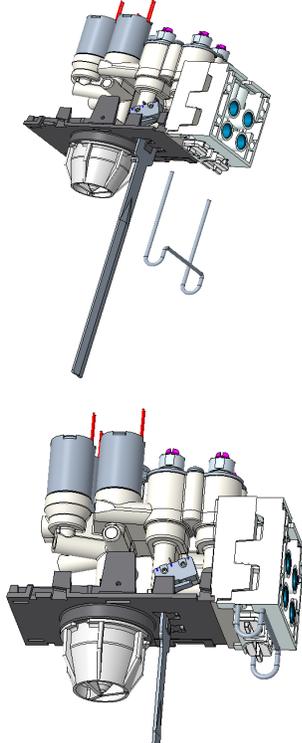


Figure 43.

LOCKING VALVE WITH BACK BLOCK USING LOCK PIN

Table 17.

Step	Action	Figure
1.	Align the valve body with back block.	 <p data-bbox="1078 1079 1175 1106">Figure 44.</p>
2.	Insert the lock pin through the back block and valve body.	 <p data-bbox="1078 1919 1175 1946">Figure 45.</p>

3. Rotate both the spindles in the direction shown to secure the lock pin in position and also to open the flow path of the drink.

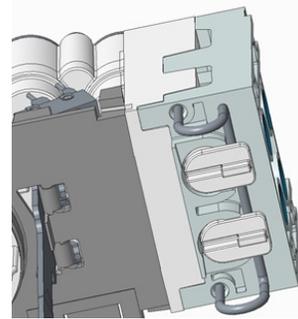
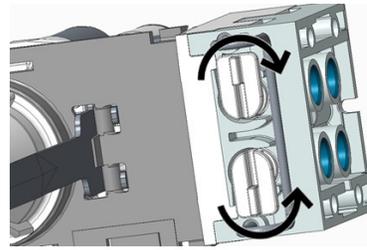


Figure 46.

CONNECTION DIAGRAM

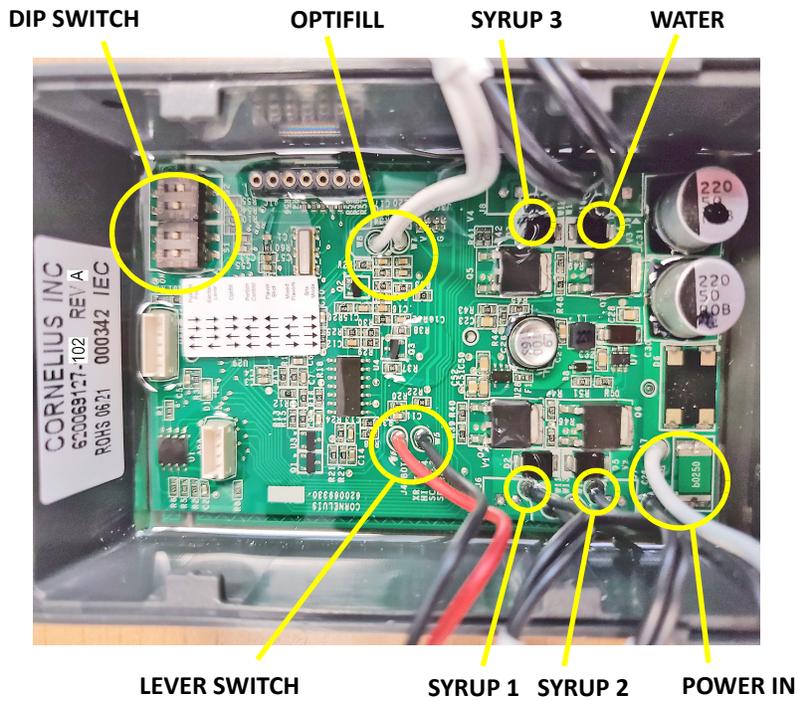
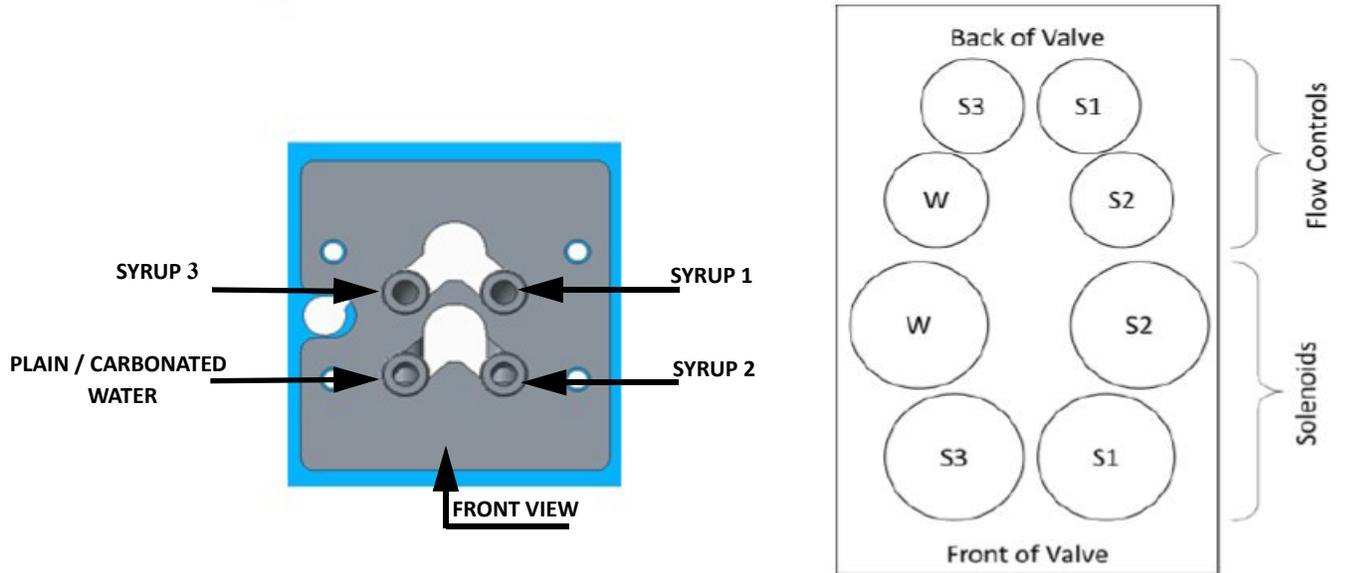


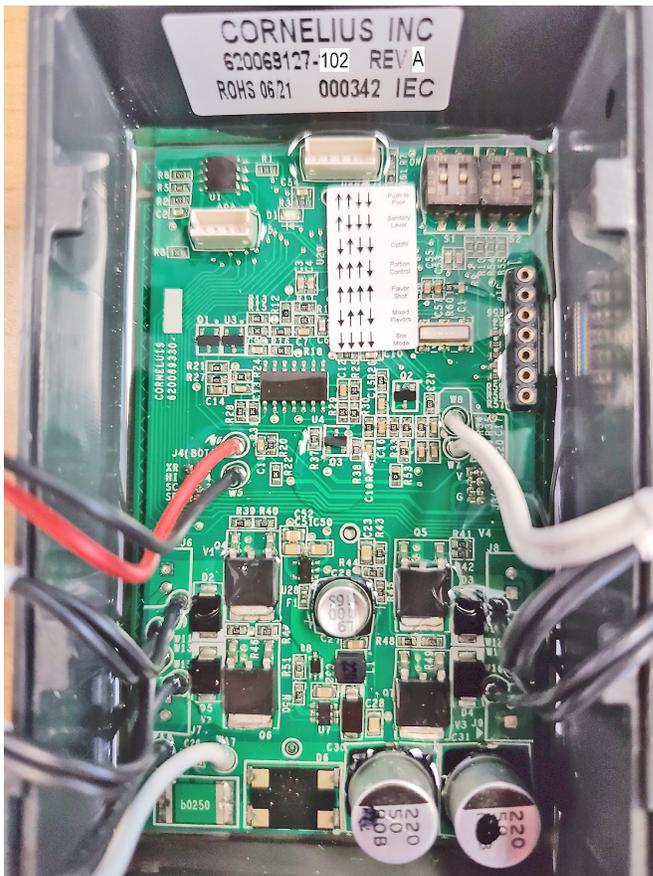
Figure 47.

SYRUP AND WATER MAPS

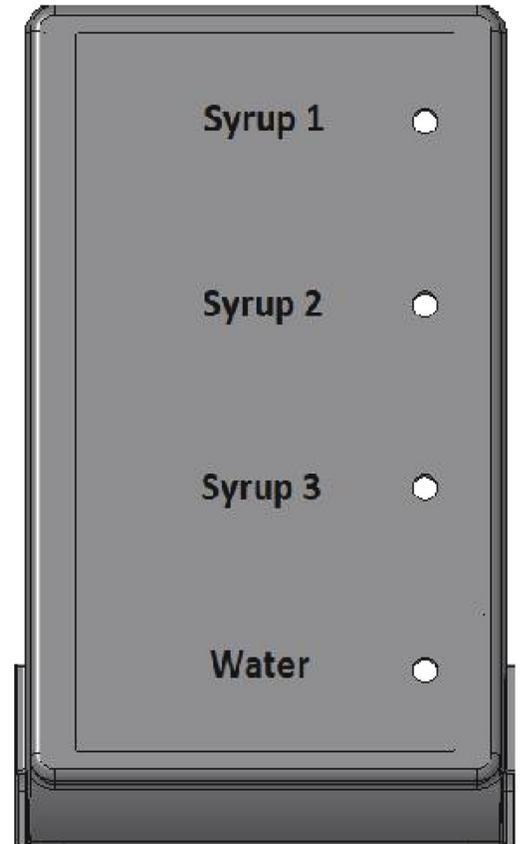
NOTE: For switch positions, refer figure 4 on page 5.



FRONT COVER



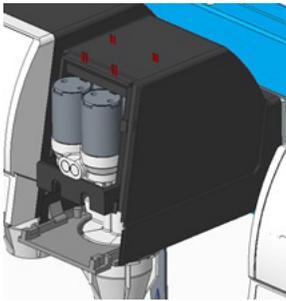
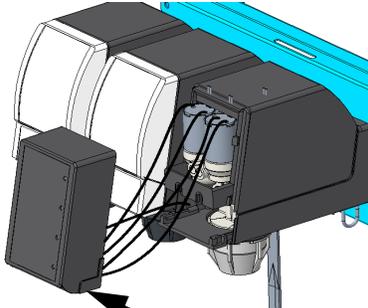
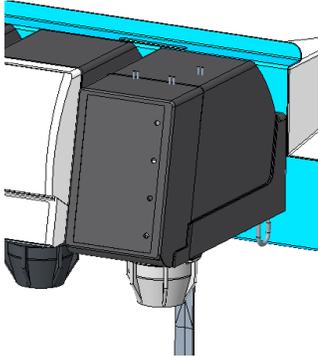
REAR VIEW



FRONT VIEW

Figure 48.

TOUCH MODULE AND COVER INSTALLATION

Step	Action	Figure
1.	Assemble rear cover.	 <p data-bbox="1029 621 1127 648">Figure 49.</p>
2.	Route the wires from valve body and connect with capacitive touch module, refer Figure 50.	 <p data-bbox="1016 1003 1341 1037">Capacitive Touch Module</p> <p data-bbox="1029 1056 1127 1083">Figure 50.</p>
3.	Slide the touch module on the rear cover from top.	 <p data-bbox="1029 1503 1127 1530">Figure 51.</p>
4.	Press each button on the capacitive touch module & visually check the pour. NOTE: Refer page 6 for ratio information.	 <p data-bbox="1029 1965 1127 1992">Figure 52.</p>

SCHEMATICS

PLUMBING DIAGRAM

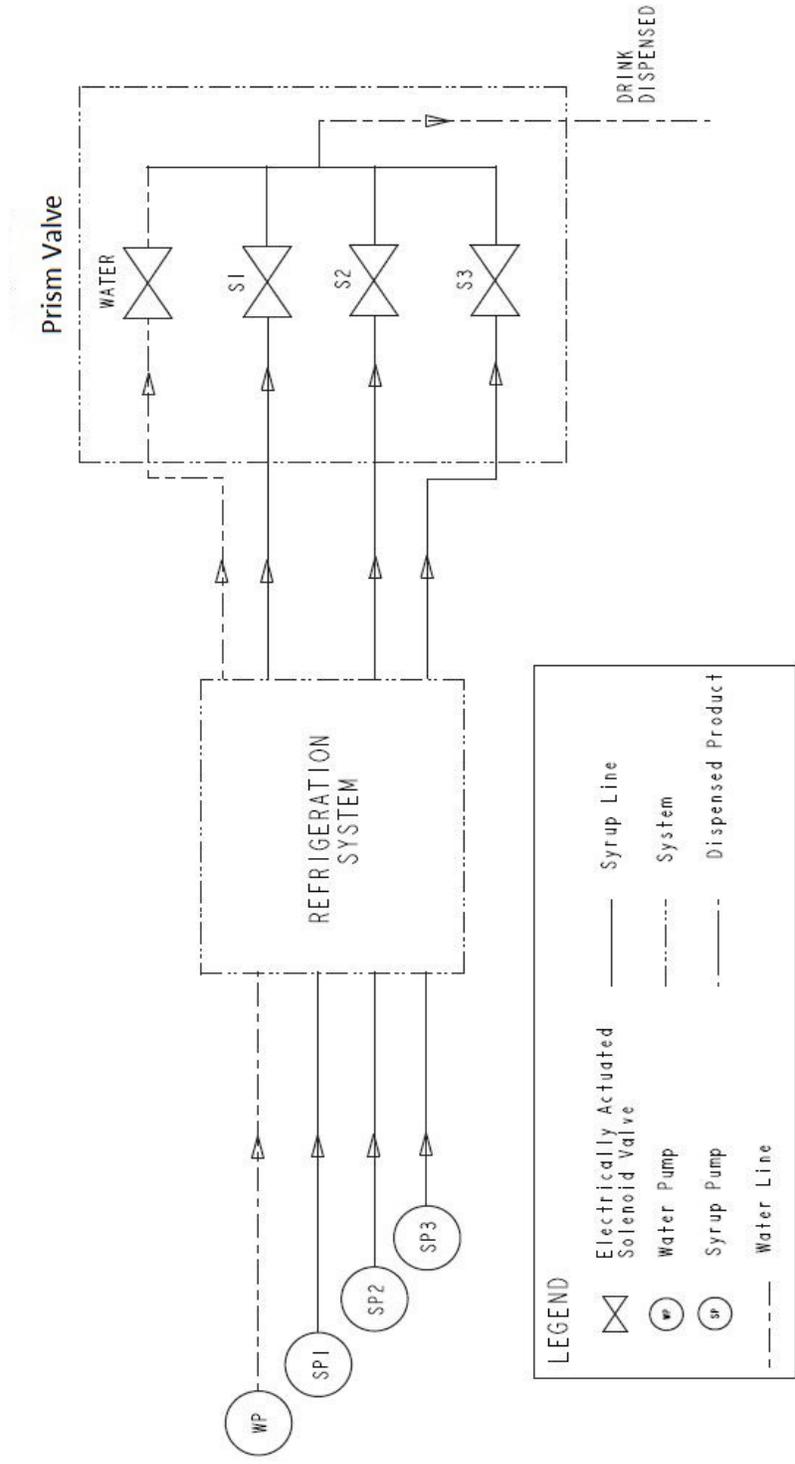


Figure 53.

WIRING DIAGRAM

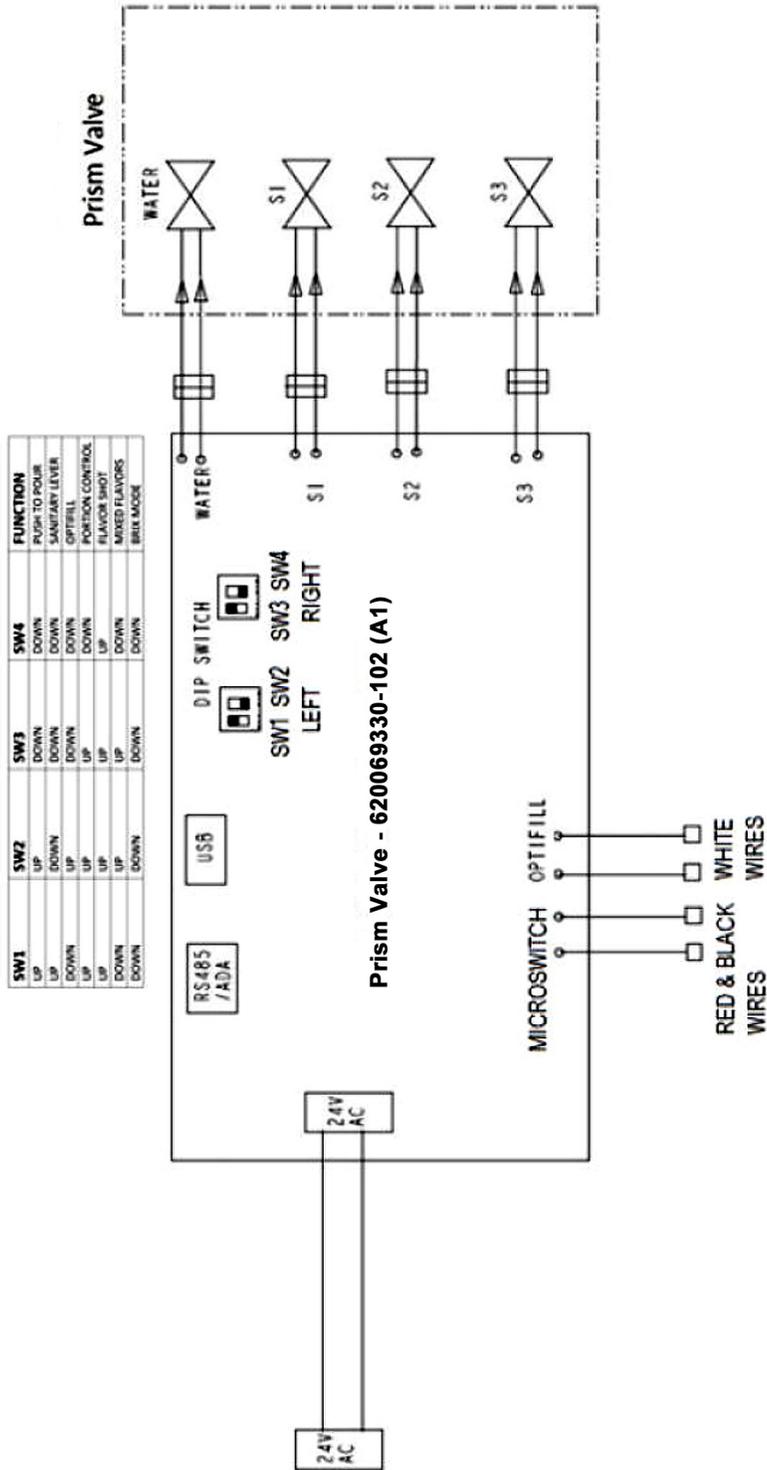


Figure 54.

ILLUSTRATED PARTS LIST

VALVE ASSEMBLY

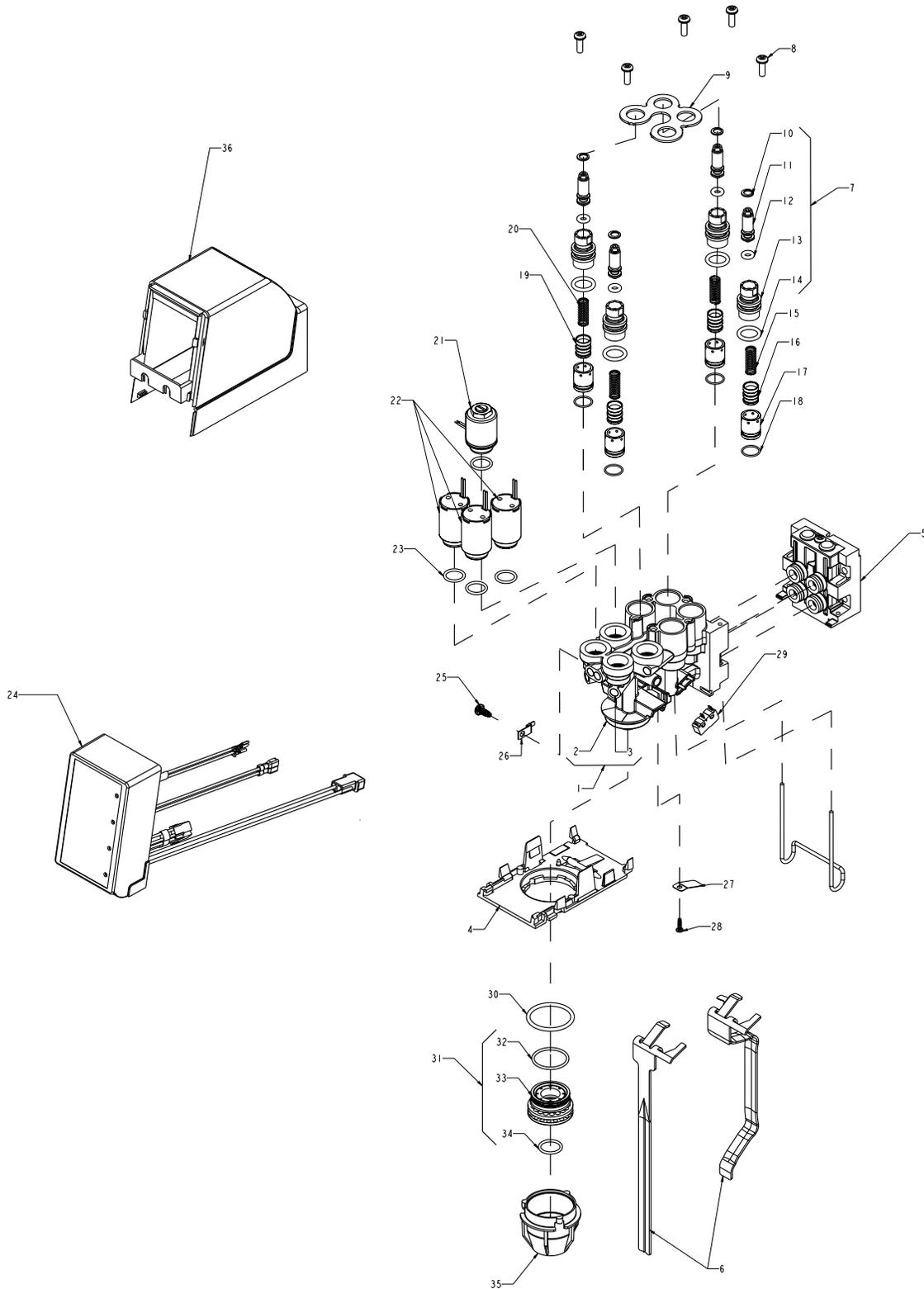


Figure 55.

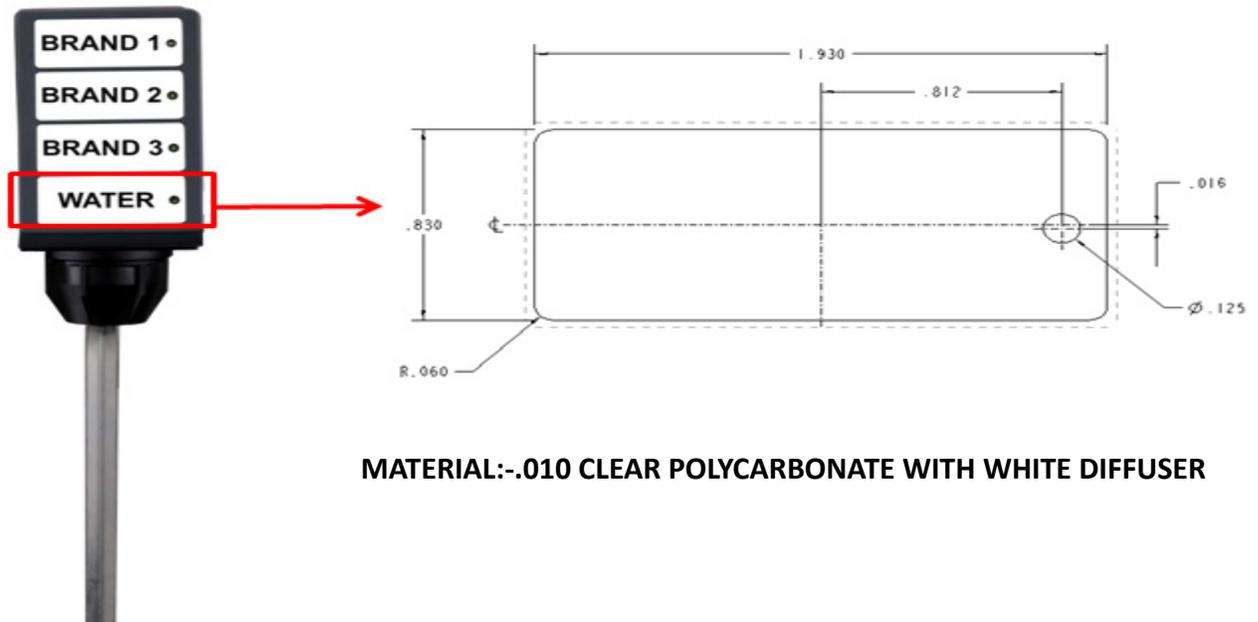
PRISM COMPONENT PART NUMBERS

Item No.	Part No.	Description
1.	620069122	Valve Body Assy.
2.	620069122-Body	Body, Valve body
3.	620069122-Plug	Plug, Valve Body
4.	620069522 1903	Plate Valve Base Plate Valve Base, Prism Plate Valve Base, Standard (for Flavor Shot valve)
5.	620056417	Back Block Assy
6.	560003252	Lever Valve Optifill
	560003193	Lever Valve Self Serve
7.	84996001	Flow Control Bonnet Assy
8.	620069310	Screw #8-18 X 1/2 Type 25 410 SS
9.	620070153	Plate Retaining Prism Valve
10.	71860292	Retainer Ring
11.	60245001	Flow Adjustment Screw FFV
12.	31525030	O-Ring.174 ID 103CS
13.	60247	Bonnet FFV Flow Control
14.	31525007	O-Ring.488 ID 103CS
15.	48258005	Spring Syrup
16.	60281002	Piston Syrup FFV
17.	60281001	Sleeve Syrup FFV
18.	740001883	O-Ring
19.	60280002	Piston Water FFV
20.	48258006	Spring Water
21.	620069126W	Water Solenoid Assy
22.	620069126S	Syrup Solenoid Assy
23.	740002477	Quad Ring 489ID 070CS 70DU 559PE
24.	620069127-102	Capacitive Touch Module OP/SL/PB/PC/FS/MF
25.	620057622	Screw #8-18 X 3/8
26.	620069124	Optifill Probe
27.	620073724	Lever Return Spring
28.	620069311	Screw #3-24 X 3/8
29.	620069584	Micro Switch
30.	183184000	O-Ring 1.17 ID 103 CS
31.	620069283	Diffuser Assy
32.	311086000	O-Ring.929 ID 070 CS
33.	620069559	Diffuser
34.	620069120	O-Ring 551 ID 070 CS
35.	620069121	Nozzle Black 3-Strut
	1945	Nozzle Black Standard (for Flavor Shot valve)
36.	620050575	Cover Valve Gray
37	629097802	Installation Kit (Not shown in Fig.42)
	309852000	Oetiker Clamp #11.3 (Not shown in Fig 42)
	620709073	1/4 Dole L Fitting (Not shown in fig 42)
	620709068	1/4 Barb Fittings X1/4 SS (Not shown in fig 42)
	620717791	265 IDX420 Tube (Not shown in fig 42)
	620700602	Mounting Screw (Not shown in fig 42)

38.	620069490	Knock Out Kit (Not Shown In Fig 42)
	620069489	Adapter Plate (Not Shown in Fig 42)
	620070512	Punch Tool (Not Shown in Fig 42)
39	620070508	Coke Decal (Not shown in fig 42)

PRISM DECAL:

Decal dimensions:



MATERIAL:-.010 CLEAR POLYCARBONATE WITH WHITE DIFFUSER

Part number	Description
620070508	Coke Decal
620070715	Portion Control Decal



Marmon Foodservice Technologies Inc.

www.marmonfoodservice.com

www.cornelius.com