



---

# PRISM

## Owner's Manual



**Release Date:** September 25, 2018

**Publication Number:** 548000096

**Revision Date:** September 14, 2023

**Revision:** H



**Marmon Foodservice  
Technologies**

A Berkshire Hathaway Company

Visit the Cornelius web site at [www.cornelius.com](http://www.cornelius.com) for all your Literature needs.

---

## 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](http://www.marmonfoodservice.com)**

**[www.cornelius.com](http://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
  - Cleaning Instruction ..... 4
    - Daily Cleaning ..... 4
  - User Instruction ..... 4
  - How to Check Prism Ratio ..... 6
  - How to Program Optifill Top Off ..... 8
  - Disable Optifill Top-Off Delay ..... 9
  - How to Program Portion Control Sizes & Top Off ..... 10
    - Programming the Portion Sizes ..... 10
    - Programming a TopOff Pour ..... 11
    - Restoring Default Time Valves..... 13
  - Adjusting Valve Flow Rates Values ..... 15
  - Knock Out Kit ..... 16
  - Knock Out Punch Instructions ..... 18
- Installation Instructions** ..... **20**
  - Knock Out Adapter Plate ..... 20
  - Knock Out Adapter Plate and Tubing ..... 20
  - Installation Kit ..... 21
  - Back Block Installation ..... 22
  - Valve Installation ..... 24
  - Locking Valve with Back Block Using Lock Pin ..... 26
  - Connection Diagram ..... 27
  - Syrup and Water Maps ..... 28
  - Touch Module and Cover Installation ..... 29
- Schematics** ..... **30**
  - Plumbing Diagram ..... 30
  - Wiring Diagram ..... 31
- Illustrated Parts List** ..... **32**
  - Valve Assembly ..... 32
  - Prism Decal ..... 35

# 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

#### *Recognize Safety Alerts*



*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.*

## 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

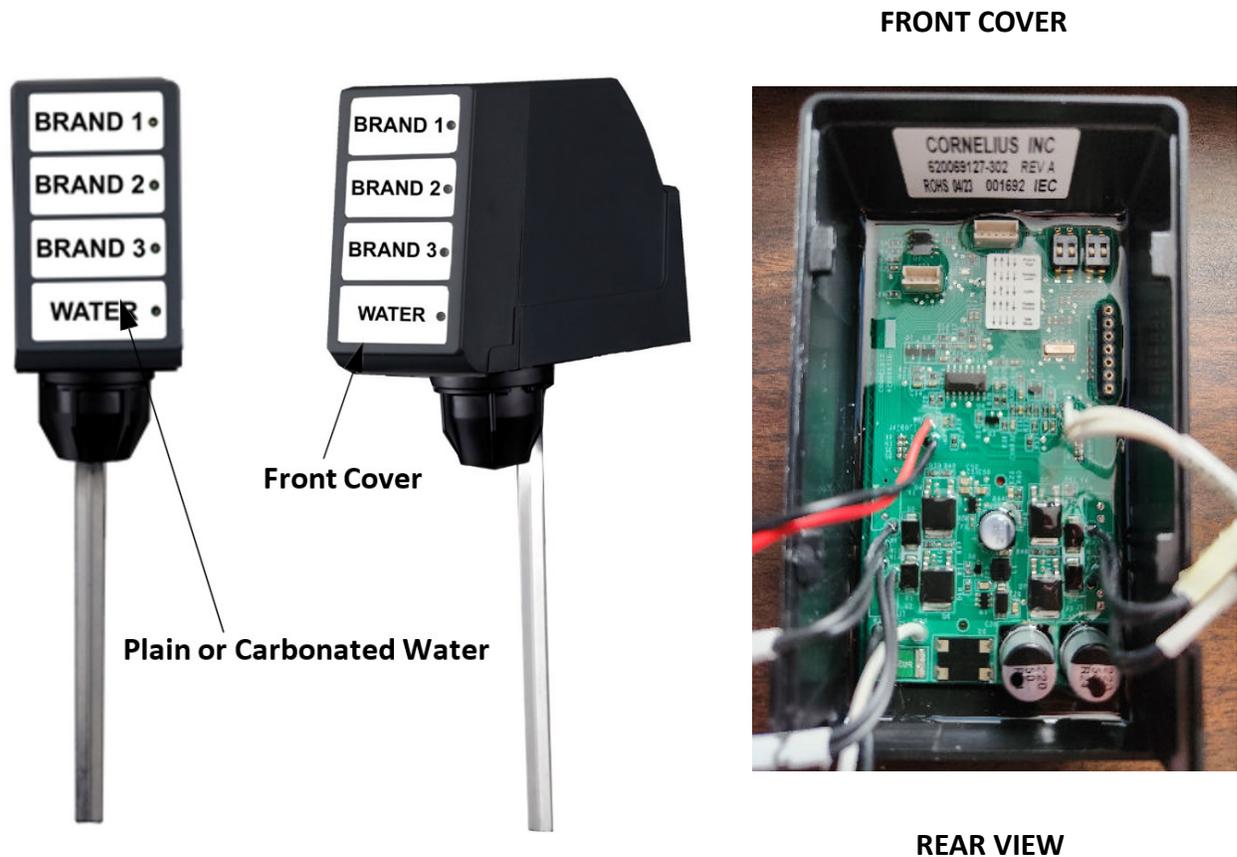


Figure 1.

The Cornelius Prism is capable of dispensing **3 CARBONATED BRANDS / SYRUP OR 3 NON CARBONATED BRANDS / SYRUP** and comes with 3 variants as below, refer Table 1 on page 4.

**NOTE: Both carbonated and non carbonated beverages CANNOT BE DISPENCED 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.

### 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 the option to add top-off.

Table 1

| Part No.                      | Description  |
|-------------------------------|--|
| <b>Sanitary Lever Valves</b>  |  |
| 620073003                     | Prism, Ceramic regulator, with mounting block and covers |
| <b>Push Button Valves</b>     |  |
| 620073005                     | Prism, Ceramic regulator, with mounting block and covers |
| <b>Optifill Lever Valves</b>  |  |
| 620073007                     | Prism, Ceramic regulator, with mounting block and covers |
| <b>Portion Control Valves</b> |  |
| 620069306                     | 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. Soak with sanitization with 2-3 minutes and Rinse with clean water, reinstall them back onto the valves and allow to air dry.

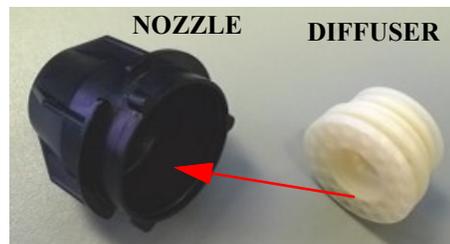


Figure 2.

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.

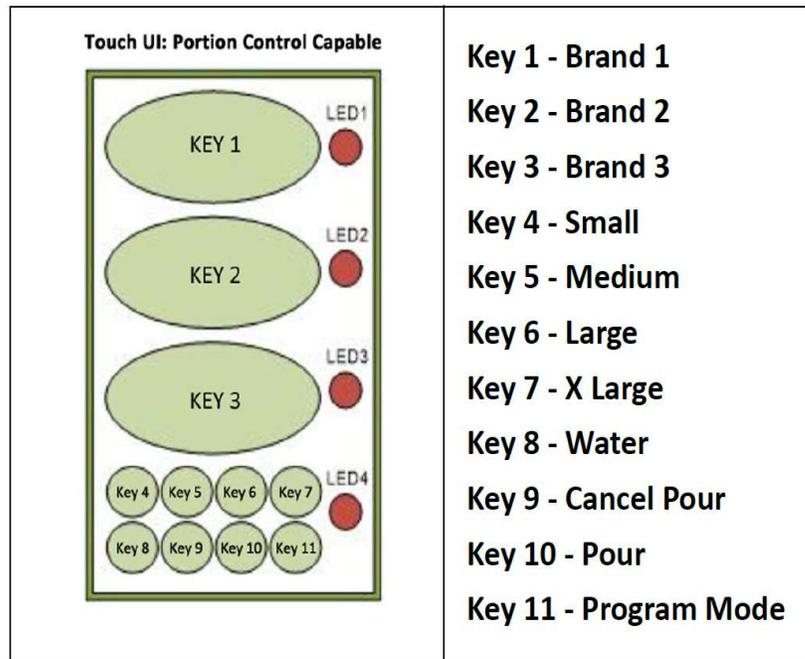


Figure 3.

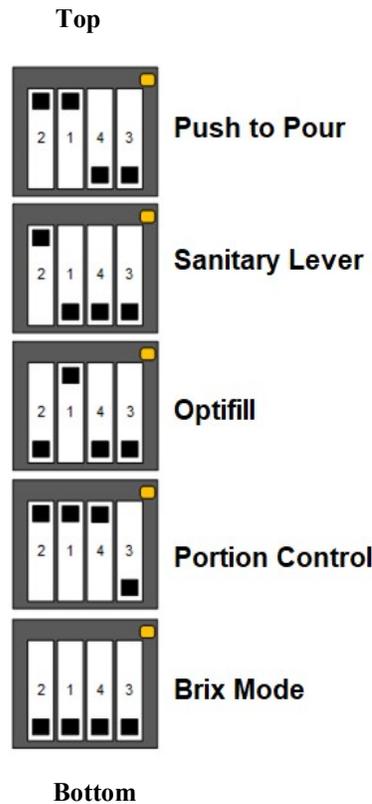


Figure 4.

**NOTE: The switch is located in the upper right hand corner of the back of the valve faceplate.**

# HOW TO CHECK PRISM RATIO



**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.   | <p>Figure 6.</p>                  |
| 4.   | <p>Press the water button to activate a time dispense of 4.0 sec. Target 10oz into the water chamber of the ratio cup.</p> <p><b>NOTE: After the water flow is adjusted, note the level of the ratio cup. Do not adjust the water again for the syrup.</b></p> | <p>Ratio Cup</p> <p>Figure 7.</p> |

|           |   |  |
|-----------|---|--|
| <p>5.</p> | <p>Press a brand to activate the time dispense into the proper syrup chamber. If the syrup level doesn't fall within one bandwidth from the noted water level, turn the adjust screw on the appropriate syrup flow control counterclockwise to decrease syrup flow or clockwise to increase syrup flow. Dispense a few drinks to check the ratio. Re-adjust as necessary. Repeat for the remaining flavors.</p> | <p style="text-align: center;">Top View</p> <p style="text-align: center;">Figure 8.</p> |
| <p>6.</p> | <p>Select the respective mode based on the type of dispense.</p> <p><b><u>After selecting the appropriate dispense mode, power cycle the valve by disconnecting and reconnecting the water connector.</u></b></p>   | <p style="text-align: center;">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

**⚠ WARNING:**  
Do not expose the capacitive touch module wire to water

### 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><b>Important:</b> If power to the valves 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 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. 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 restarted 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 step 2 &amp; 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.<br><br><b>Important:</b> If power to the valves 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="1055 1008 1161 1039">Figure 11.</p> |
| 2.   | Press and release a desired Brand button.<br><br>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

**⚠ WARNING:**  
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 released and re-pressed to resume flow.

### 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 Size |
|------------------|-------------------|
| Small “S”        | 2s                |
| Medium “M”       | 3s                |
| Large “L”        | 4s                |
| Extra Large “XL” | 6s                |

### Programming the Portion Sizes

**Note:** It is recommended that when programming portion sizes, use actual cups and ice lever.

#### Programming a Standard Pour.

Table 5.

|   |  |
|---|--|
| <p>1. Set the Dip Switch to Portion Control mode as shown in Fig. 12</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><b>Important:</b> 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>Select appropriate Portion Size Button (S,M,L,XL)</p> <p>Location of Program Button</p> <p><b>Portion Control</b></p> |
| <p>2. 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 with program mode is exited.</p>  |  |
| <p>3. Continue with other portion size buttons or reset the same portion size again.</p>  | <p>Figure 12.</p>  |

|    |   |  |
|----|---|--|
| 4. | Program additional brands by repeating step 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 cup and ice level.

**Table 6.**

|  |                          |
|--|--------------------------|
| <p>1. Enter into top-off Program mode by pressing the program button (located at 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 then the “S” Button.</p> <p><b>Important:</b> If power to the valves 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>2. 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>  | <p><b>Figure 13.</b></p> |
| <p>3. 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>  |                          |

|    |   |  |
|----|---|--|
| 4. | Program additional brands by repeating step 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 each button is now recorded<br><br>Note It is possible to have same portion size with a top-off and others without a top-off. |  |

## Restoring Default Time Values.

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

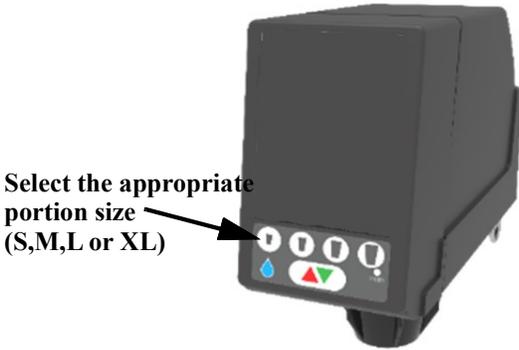
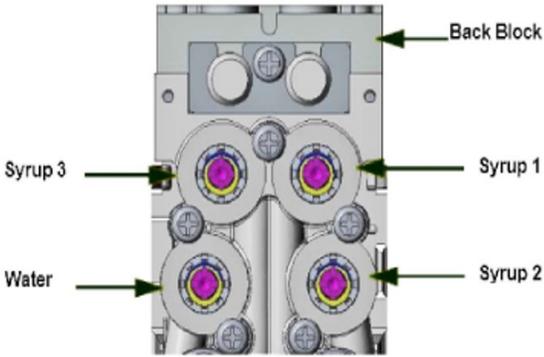
**Table 7.**

|           |   |  |
|-----------|---|--|
| <p>1.</p> | <p>Enter into “Program mode” by pressing the program button located at the bottom-right corner of the front cover for 3 seconds until the LED light turns on.</p> | <p>Select the appropriate portion size (S,M,L or XL)</p>  <p><b>Program Button Location</b></p> <p><b>Figure 14.</b></p> |
| <p>2.</p> | <p>Press and hold the Cancel/Pour Button.</p>   |  <p><b>Cancel/Pour Button</b></p> <p><b>Figure 15.</b></p>   |

|           |   |   |
|-----------|---|---|
| <p>3.</p> | <p>Press and release a desired Brand 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 Button (S,M,L or XL)</p> <p><b>Figure 16.</b></p> |
| <p>4.</p> | <p>Release the “Cancel/Pour” button. The time valve listed in “Default Time Values” was restored to that size.</p>  |   |
| <p>5.</p> | <p>The “Cancel/Pour” Button must be released and re-pressed before resetting another size.</p>  |   |
| <p>6.</p> | <p>Program addition brands by repeating steps 2 &amp; 3 ; or when complete, exit the program mode by holding the hidden program button for 2 seconds</p>  |   |

## Adjusting Valve Flow Rates Values

Table 9.

| Step | Action  | Figure   |
|------|---|--|
| 1.   | If re-adjusting a valve previously set-up, reset a module portion size button to provide its "Default Time Value ". To do this, refer to "Restoring Default Time Values" section above, then proceed to step 2.<br><br>Note: If adjusting a valve for the first time, skip to step 2 below. |  |
| 2.   | Press and release a desired Brand button.<br><br>Hold cup under valve nozzle and press the portion button..   |  <p>Select the appropriate portion size (S,M,L or XL)</p> <p>Figure 17.</p> |
| 3.   | Adjust water/syrup flow control if necessary.<br><br>Repeat as necessary.   |  <p>Top View</p> <p>Figure 18.</p>   |
| 4.   | When finished adjusting flow rate, remember to reprogram the portion size buttons at the new flow rate.   |  |

## Knock Out Kit-P/N 629097803

**NOTE:** All Enduro Cold Carbonation units since 2004 have panels that will accept the Prism Valve. Models: ED150BCH, 150BCHZ, ED175BCH, ED175BCHZ, ED200BCH, ED200BCHZ, ED250BCH, ED250BCHZ, ED300BCH and ED300BCHZ

**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

**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

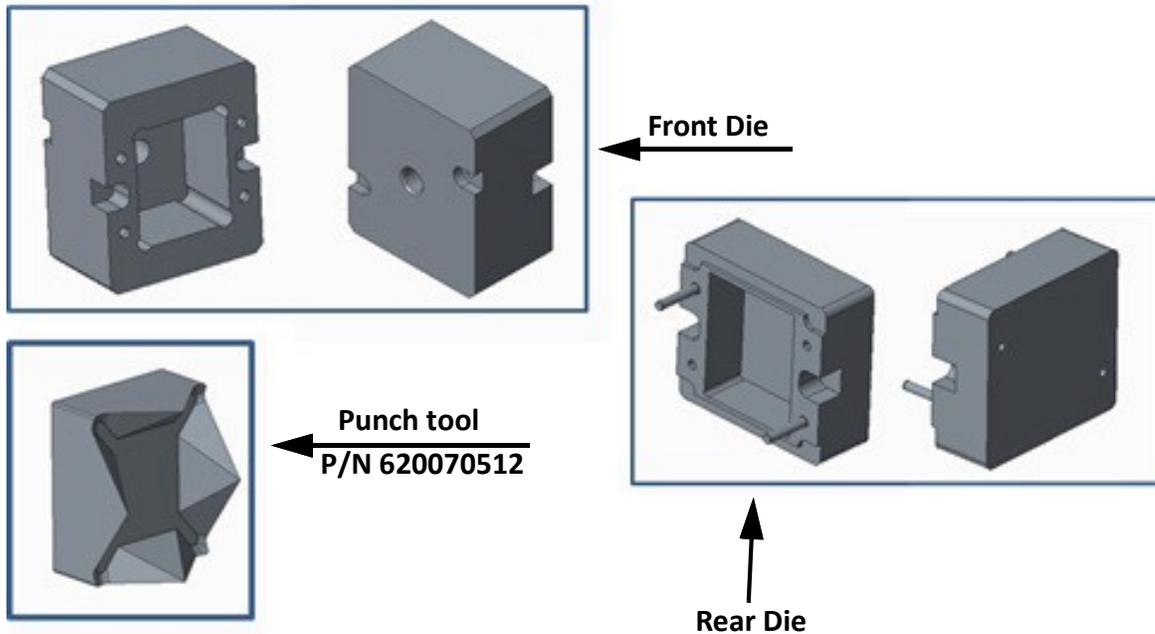
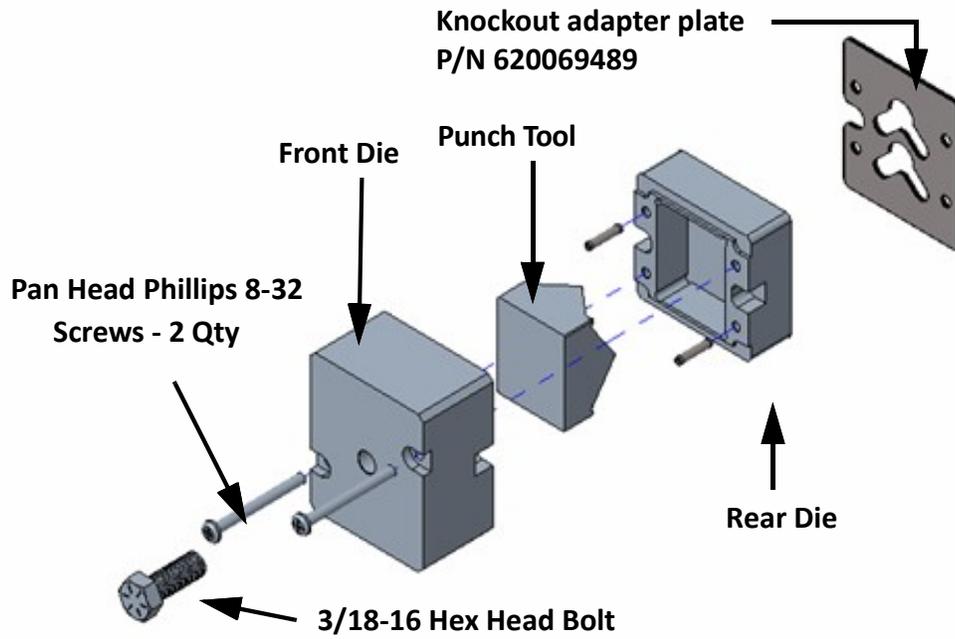


Figure 19.



**Knockout kit P/N-629097803**

Figure 20.

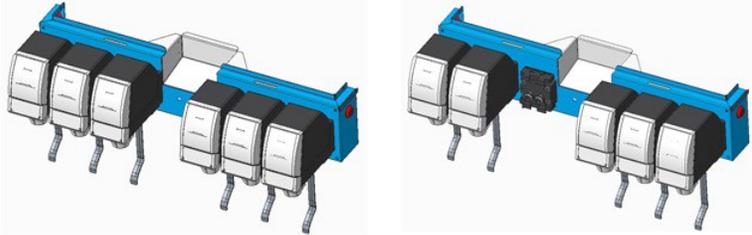
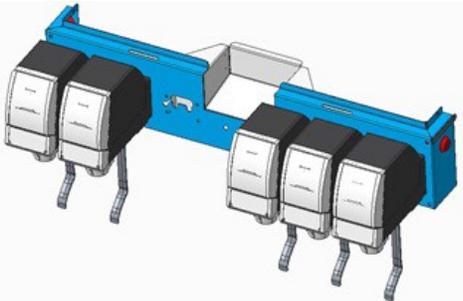
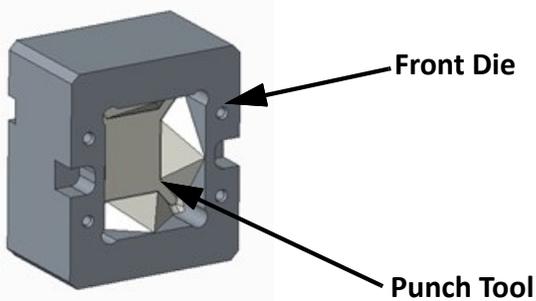
## KNOCK OUT PUNCH INSTRUCTIONS

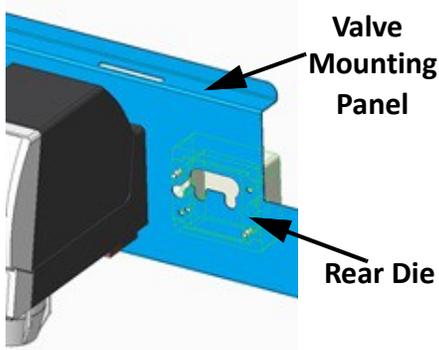
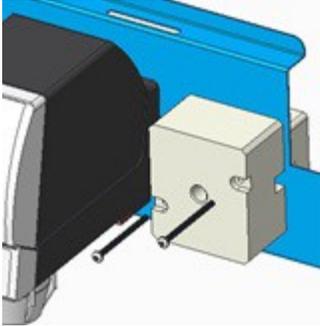
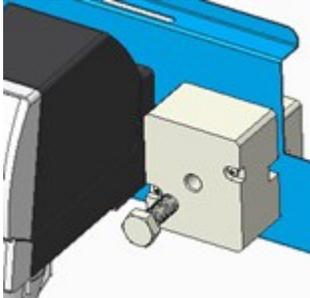
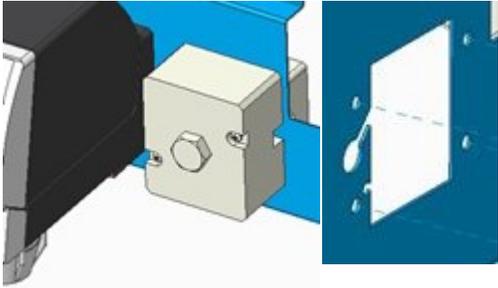
**⚠ WARNING:**  
 Must wear required PPE and right tools before using the punch out tool.

**⚠ 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 10.

| Step | Action  | Figure   |
|------|---|--|
| 1.   | Remove the valve from the back block.   |  <p style="text-align: center;">Figure 21.</p>   |
| 2.   | Remove the existing back-block from the valve panel.<br><b>NOTE: Keep the screws safe for later.</b><br><b>NOTE: Used with installation of new "Prism".</b> |  <p style="text-align: center;">Figure 22.</p> |
| 3.   | Load the "Front Die" with "Punch Tool".   |  <p style="text-align: center;">Figure 23.</p> |

|           |   |   |
|-----------|---|---|
| <p>4.</p> | <p>Align the 2 dowel pins of the “Rear Die” with Corresponding holes on the “Valve mounting panel”.</p>   |  <p style="text-align: right;"><b>Closed Condition</b></p> <p style="text-align: center;"><b>Figure 24.</b></p> |
| <p>5.</p> | <p>Assemble “Front Die” loaded with “Punch Tool” to “Rear Die”, using 2 Phillip “8-32” screws.</p>  |  <p style="text-align: right;"><b>Open Condition</b></p> <p style="text-align: center;"><b>Figure 25.</b></p>   |
| <p>6.</p> | <p>Assemble &amp; tighten the hexagon bolt using socket wrench, until the bolt head rests on the front die surface.<br/><b>NOTE: Add lubricant to 3/16” bolt before using the knockout.</b></p> |  <p style="text-align: center;"><b>Figure 26.</b></p>   |
| <p>7.</p> | <p>Remove the tool from the valve mounting panel and dispose of the punched out piece.</p>  |  <p style="text-align: center;"><b>Figure 27.</b></p>   |

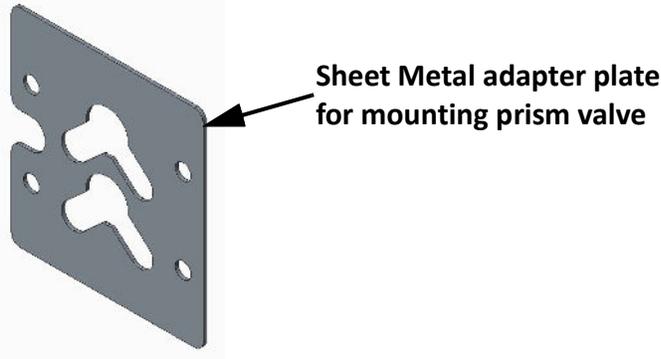
**CAUTION:**

**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



### .KNOCK OUT ADAPTER PLATE AND TUBING

TABLE 11

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

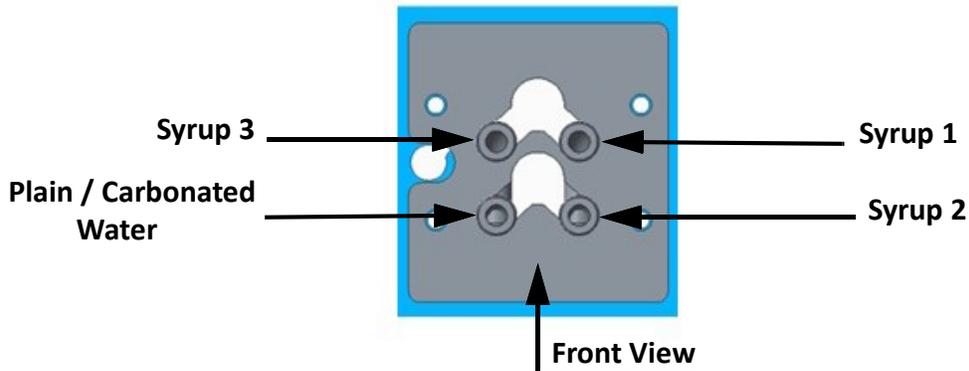
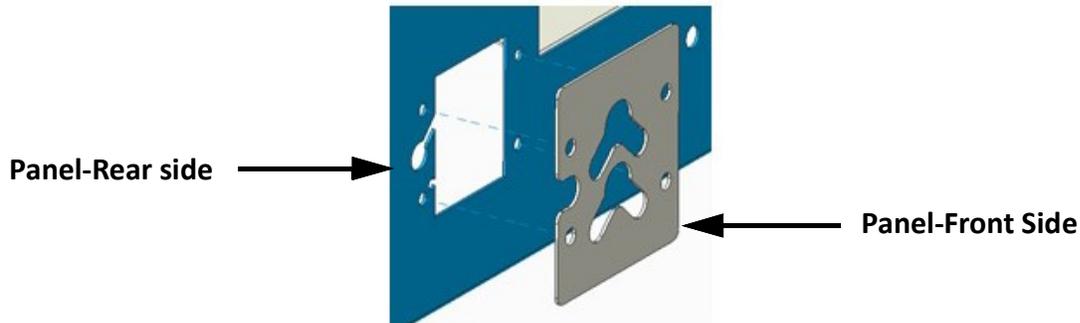


Figure 28.

## INSTALLATION KIT P/N 629097802

2. Prepare the tubing assemblies.

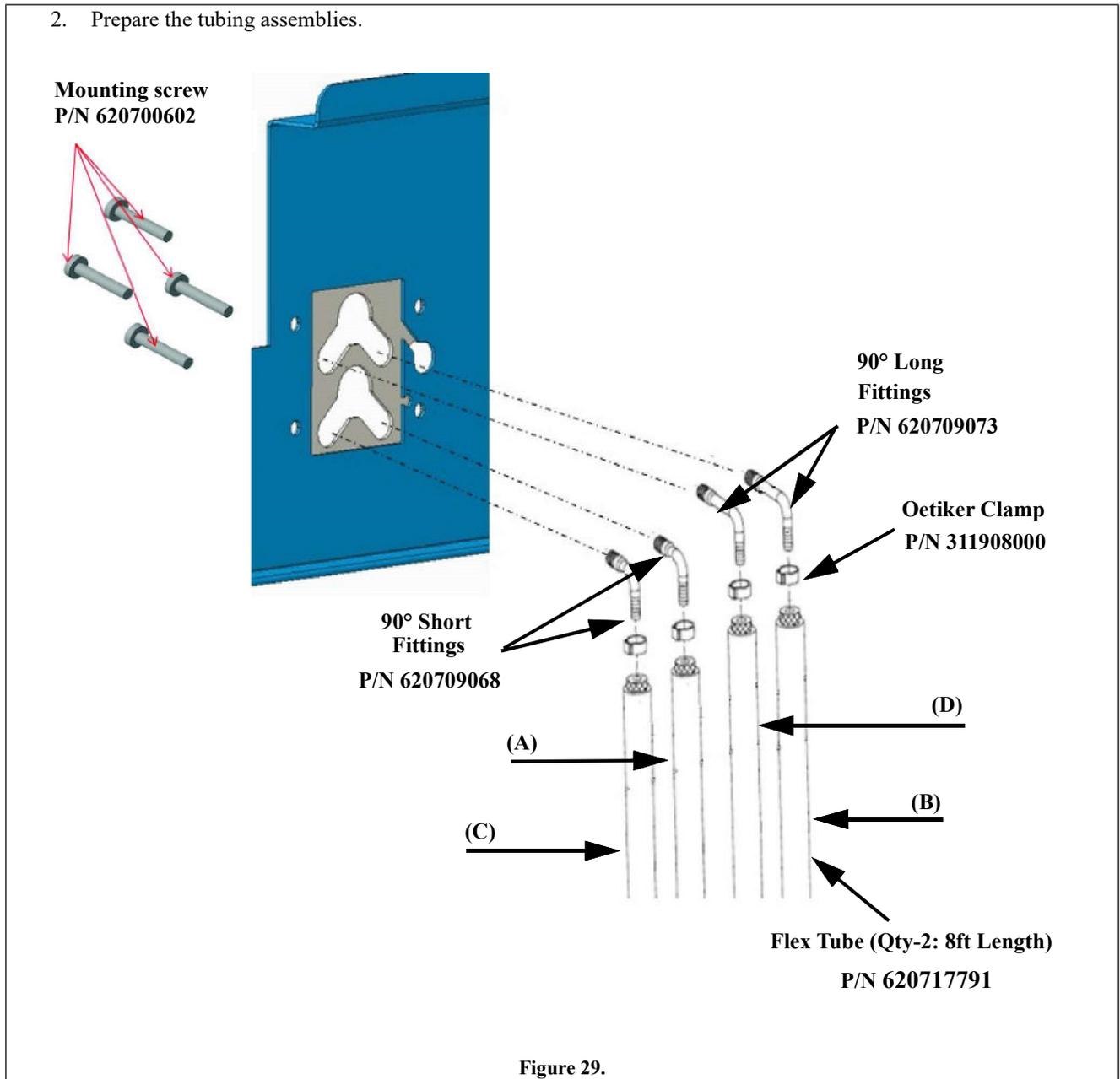


Figure 29.

**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.

**NOTE:** Use P/N 620717792 to order additional Flex tubing

**NOTE:** Use P/N 629097822 for an advance kit(100' Flex tubing, Barb Fittings & Co2 tubing, O-rings & Oetikers).

Table 5.

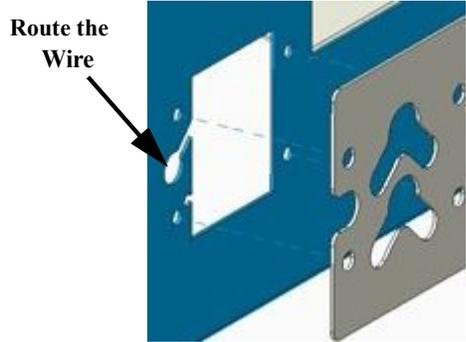
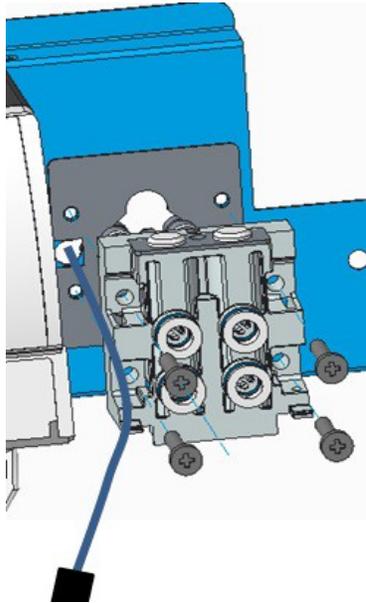
|    |                  |   |
|----|------------------|---|
| A. | Plain/Carb Water | Use 90° short fitting, 1/4" tubing & insulation from existing plain / carbonated Water line |
| B. | Syrup 1          | Existing syrup line from the cold plate   |
| C. | Syrup 2          | New syrup line using 90°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

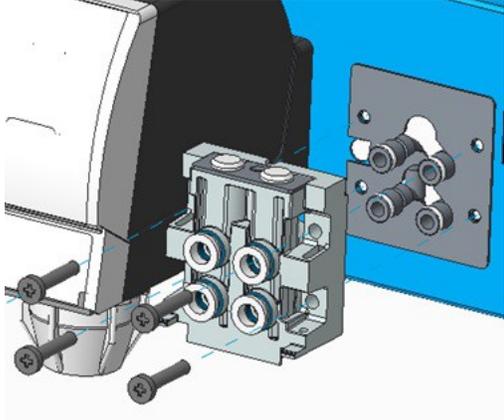
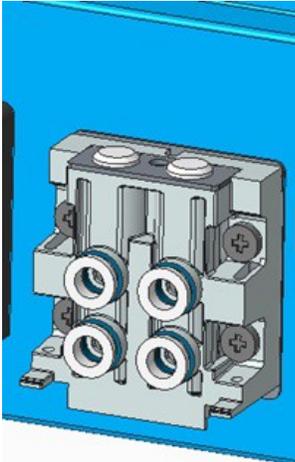
## BACK BLOCK INSTALLATION



Figure 30.

Table 12

| Step | Action   | Figure   |
|------|--|--|
| 1.   | Route the wire & connector through relief hole of rear adapter plate and back block. |  <p>Figure 31.</p>  <p>Figure 32.</p> |

|  |   |  |
|--|---|--|
|  | <p>2. Assemble all the lines with L - fittings on to the knock out adapter plate and</p>  |  <p><b>Figure 33.</b></p>  |
|  | <p>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).</p> |  <p><b>Figure 34.</b></p> |

# VALVE INSTALLATION

TABLE 13.

| Step   | Action | Figure            |
|--|--------|-------------------|
| <ol style="list-style-type: none"> <li>1. Slide, open the capacitive touch module.</li> <li>2. Disconnect the wires from the capacitive touch module.</li> <li>3. Remove the rear cover</li> </ol>     |        | <p>Figure 35.</p> |
| <ol style="list-style-type: none"> <li>4. 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.</li> </ol> |        | <p>Figure 36.</p> |

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

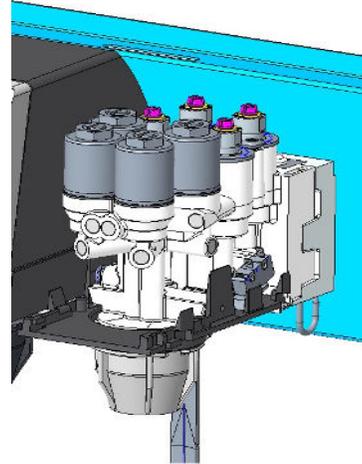


Figure 37.

6. Lock the valve body and back block together with lock pin. Refer to Table on page 26.

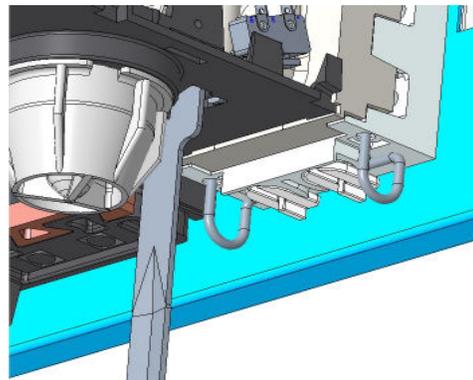
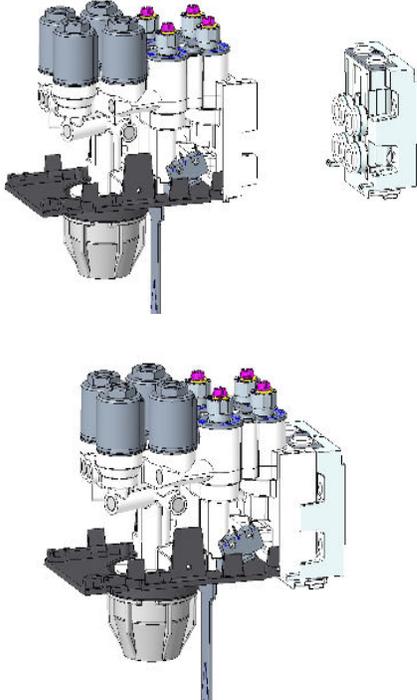
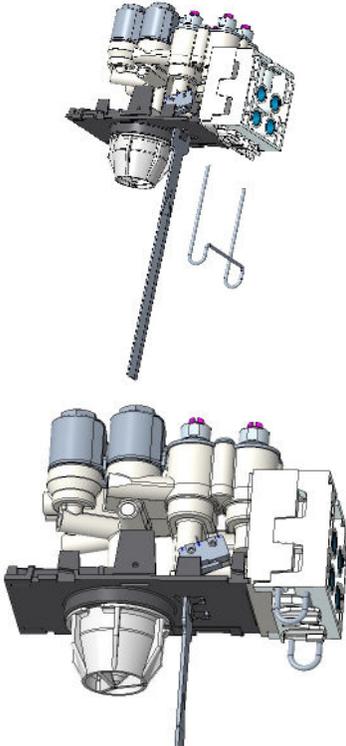


Figure 38.

# LOCKING VALVE WITH BACK BLOCK USING LOCK PIN

TABLE 14

| Step | Action   | Figure  |
|------|--|---|
| 1.   | Align the valve body with back block.                      |  <p style="text-align: center;"><b>Figure 39.</b></p>  |
| 2.   | Insert the lock pin through the back block and valve body. |  <p style="text-align: center;"><b>Figure 40.</b></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.

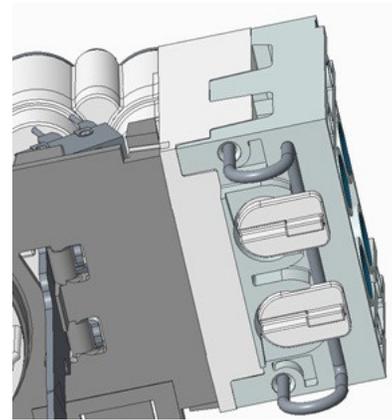
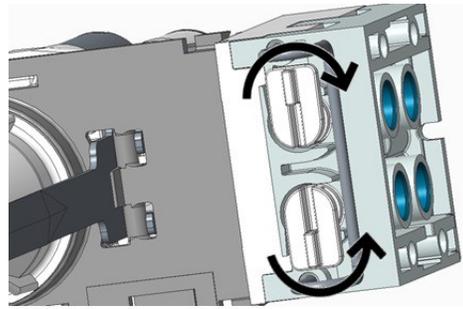


Figure 41.

## CONNECTION DIAGRAM

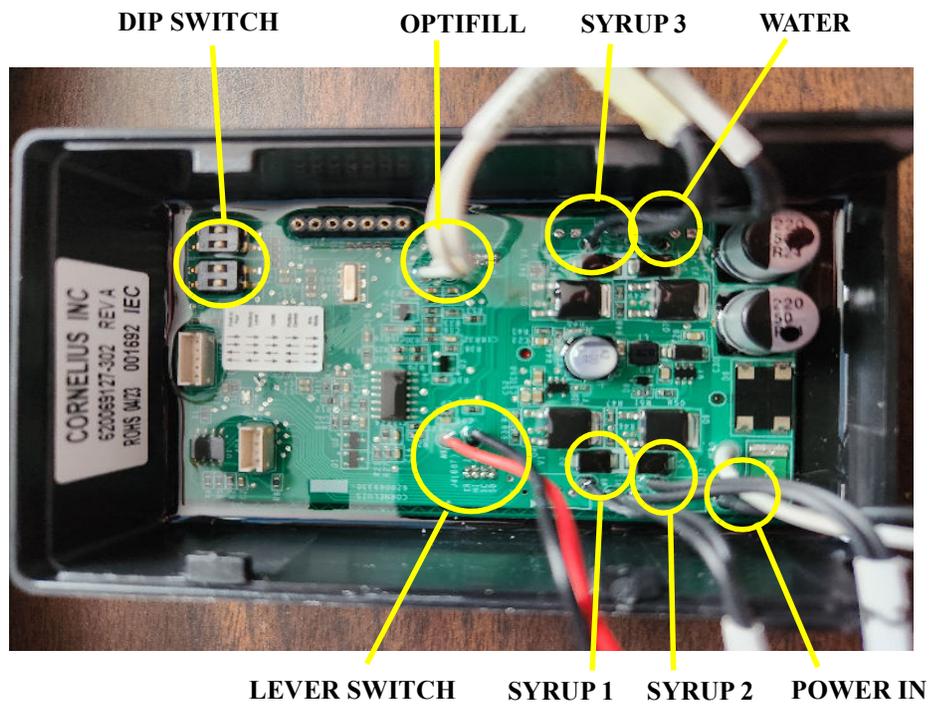
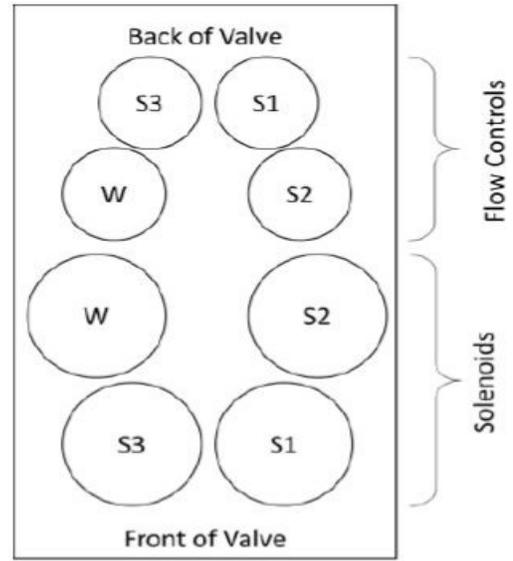
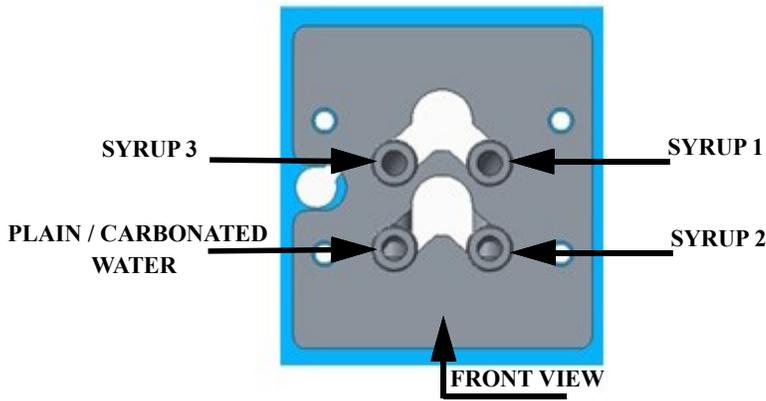


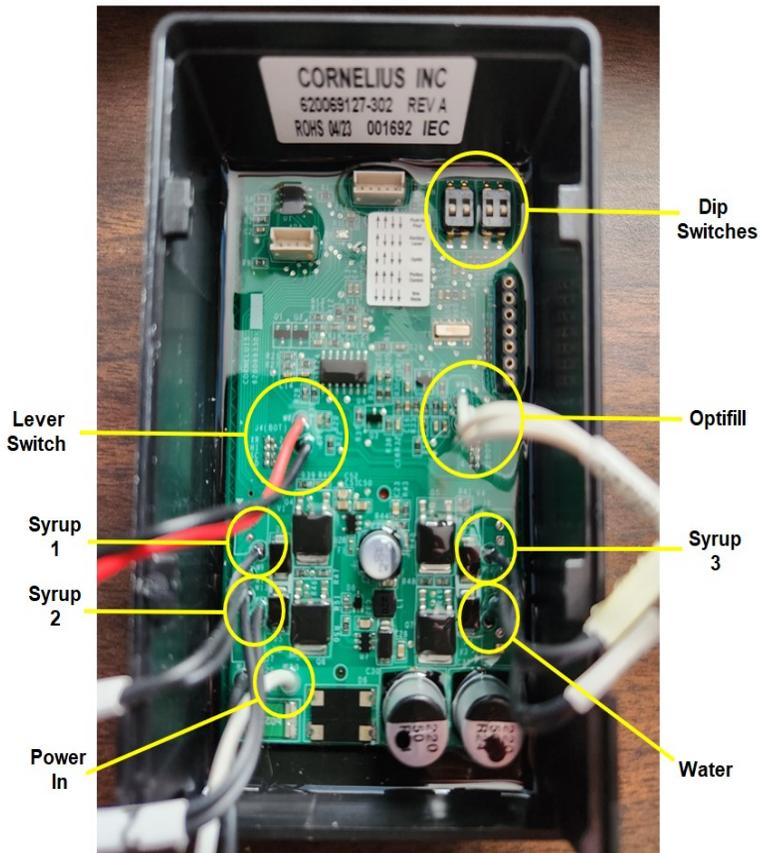
Figure 42.

# SYRUP AND WATER MAPS

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



FRONT COVER



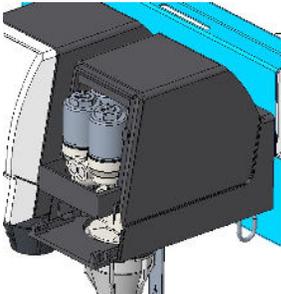
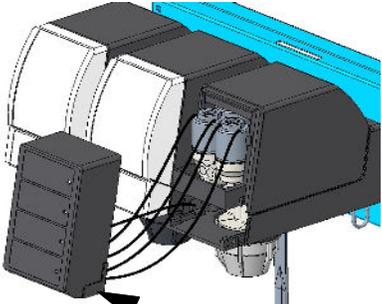
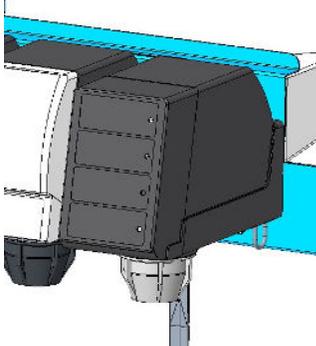
REAR VIEW



FRONT VIEW

Figure 43.

## TOUCH MODULE AND COVER INSTALLATION

| Step | Action  | Figure  |
|------|---|---|
| 1.   | Assemble rear cover.  |  <p data-bbox="1117 619 1226 646"><b>Figure 44.</b></p>  |
| 2.   | Route the wires from valve body and connect with capacitive touch module, refer Figure 45.                                      |  <p data-bbox="1112 1003 1445 1039"><b>Capacitive Touch Module</b></p> <p data-bbox="1117 1054 1226 1081"><b>Figure 45.</b></p> |
| 3.   | Slide the touch module on the rear cover from top.  |  <p data-bbox="1117 1495 1226 1522"><b>Figure 46.</b></p>  |
| 4.   | Press each button on the capacitive touch module & visually check the pour.<br><b>NOTE: Refer page 6 for ratio information.</b> |  <p data-bbox="1117 1957 1226 1984"><b>Figure 47.</b></p>  |

# SCHEMATICS

## PLUMBING DIAGRAM

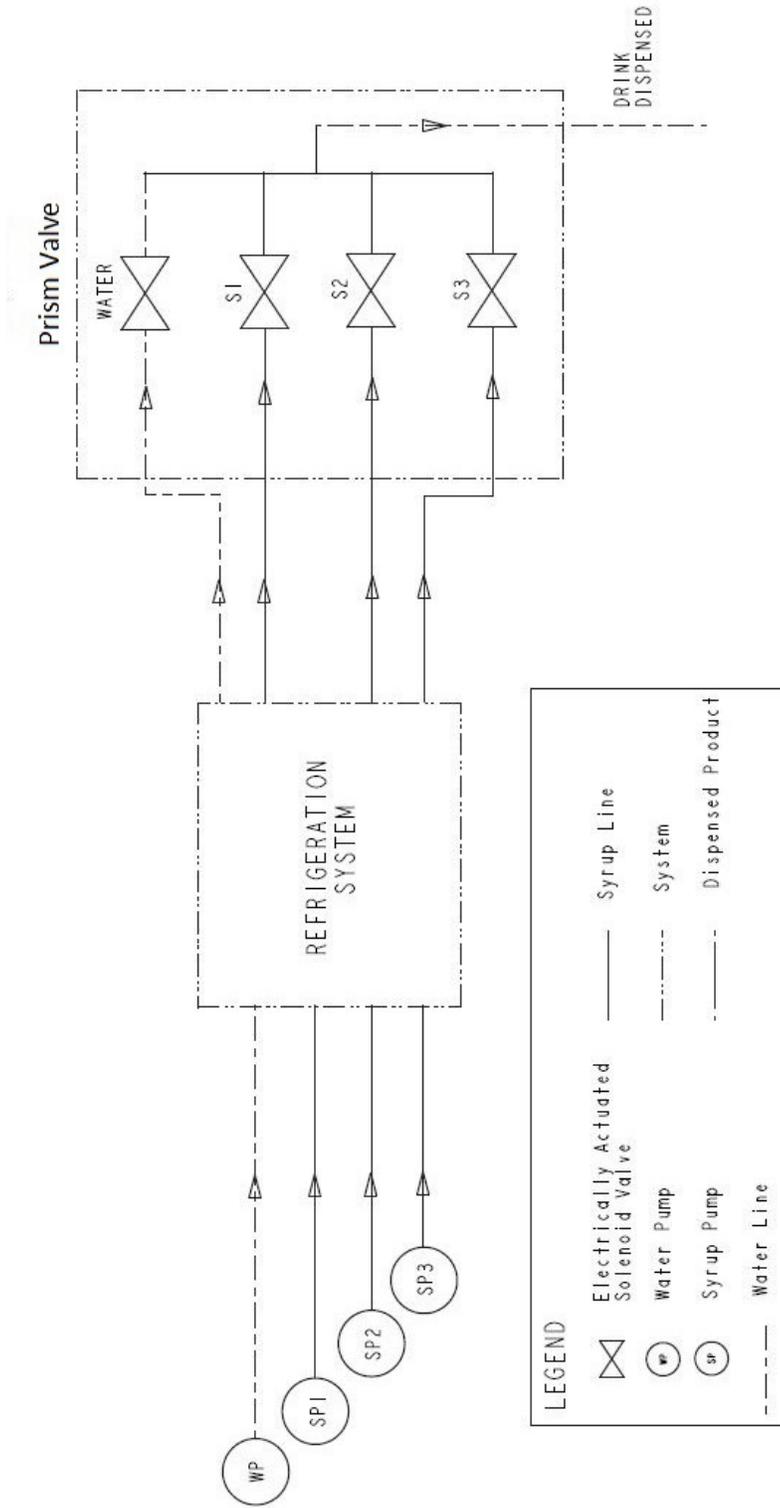


Figure 48.

# WIRING DIAGRAM

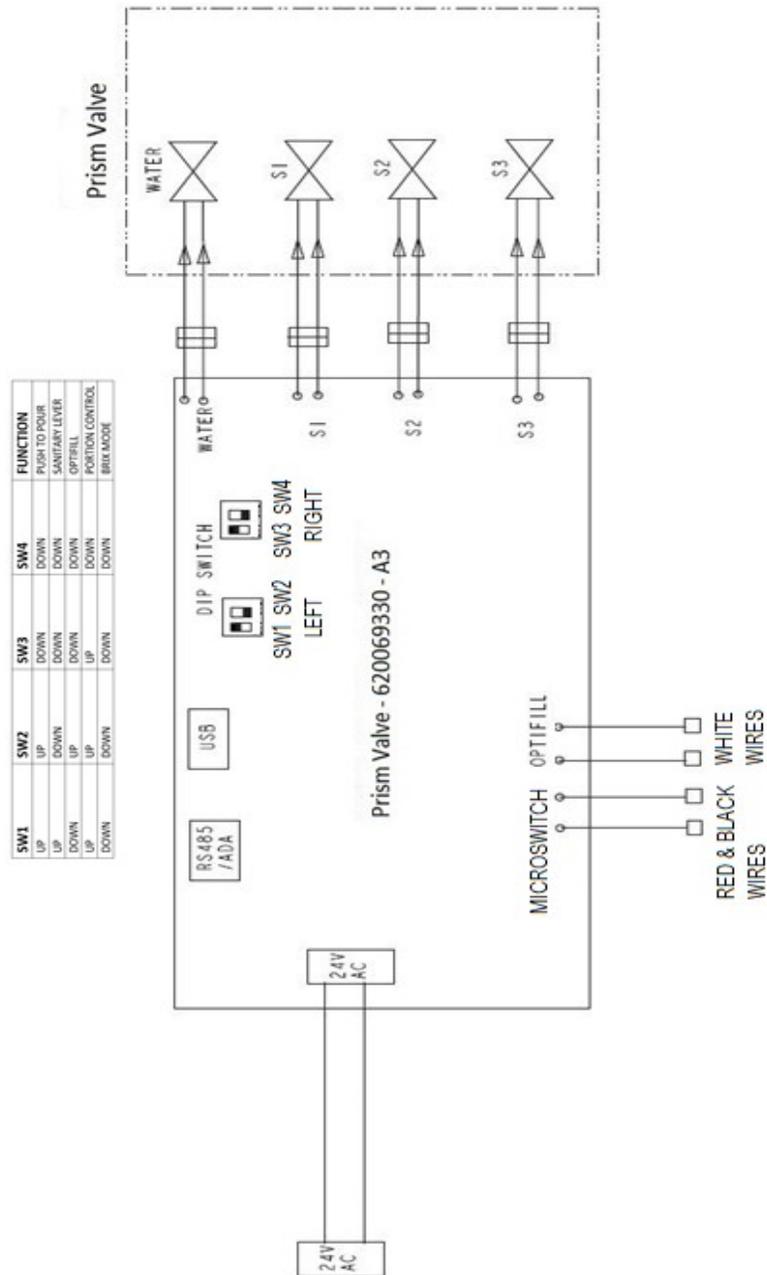


Figure 49.

# ILLUSTRATED PARTS LIST

## VALVE ASSEMBLY

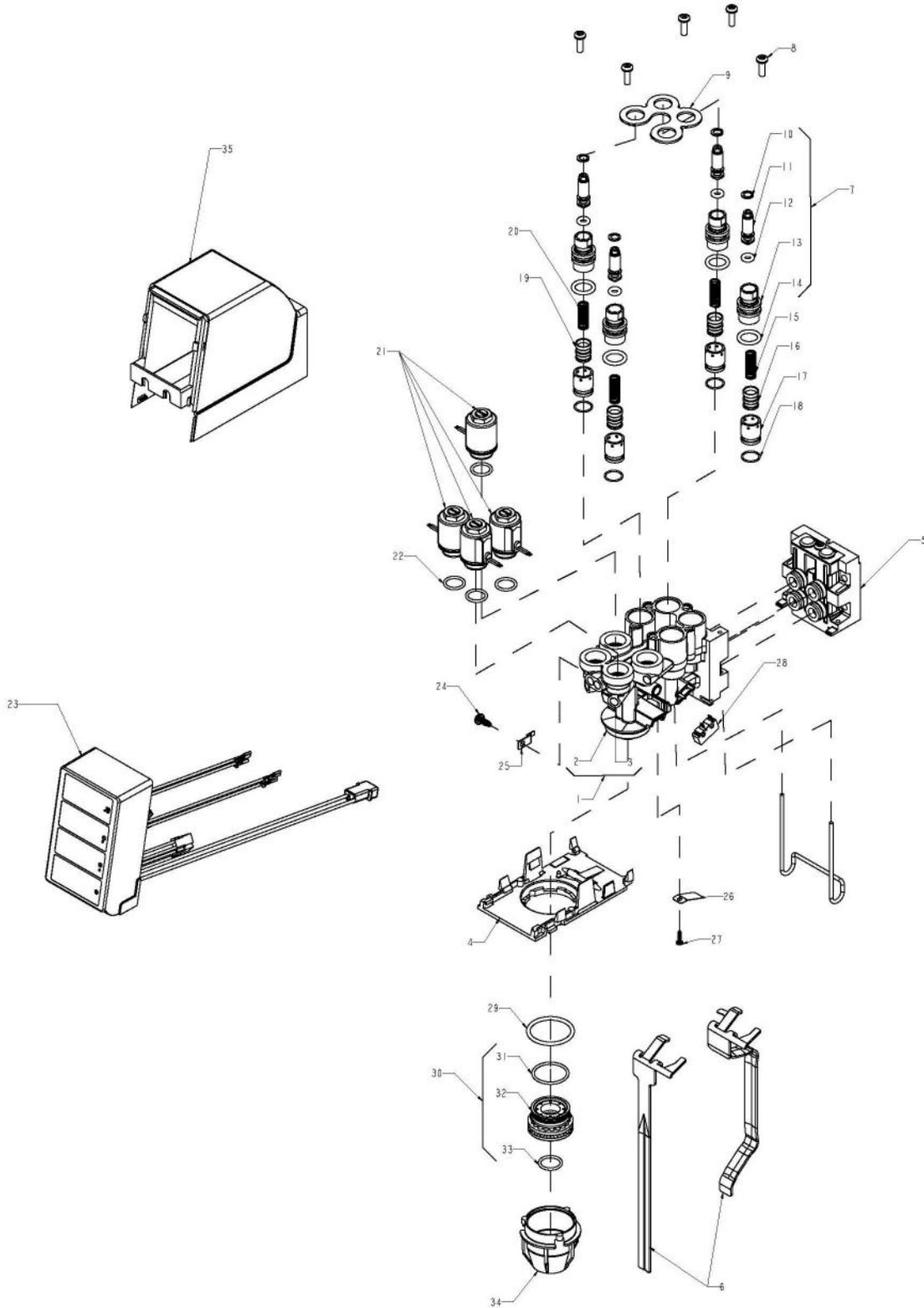


Figure 50.



| <b>Item No.</b> | <b>Part No.</b> | <b>Description</b>                         |
|-----------------|-----------------|--|
| 1               | 620069122       | Valve Body Assy.                           |
| 2               | 620069122-BODY  | Valve Body                                 |
| 3               | 620069122-PLUG  | Valve Body Plug                            |
| 4               | 620069522       | Plate Valve Base                           |
| 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              | 740002477       | Quad Ring 489ID 070CS 70DU 559PE           |
|                 | 620069127-302   | Front Cover Touch Module Black OP/SL/PB/PC |
| 24              | 620057622       | Screw #8-18 X 3/8                          |
| 25              | 620069124       | Optifill Probe                             |
| 26              | 620073724       | Lever Return Spring                        |
| 27              | 620069311       | Screw #3-24 X 3/8                          |
| 28              | 620069584       | Micro Switch                               |
| 29              | 183184000       | O-ring 1.17 ID 103 CS                      |
| 30              | 620069283       | Diffuser Assy                              |
| 31              | 311086000       | O-Ring.929 ID 070 CS                       |
| 32              | 620069559       | Diffuser                                   |
| 33              | 620069120       | O-Ring .551 ID 070 CS                      |
| 34              | 620071754       | Nozzle Black                               |
| 35              | 1950            | Cover Valve Black                          |

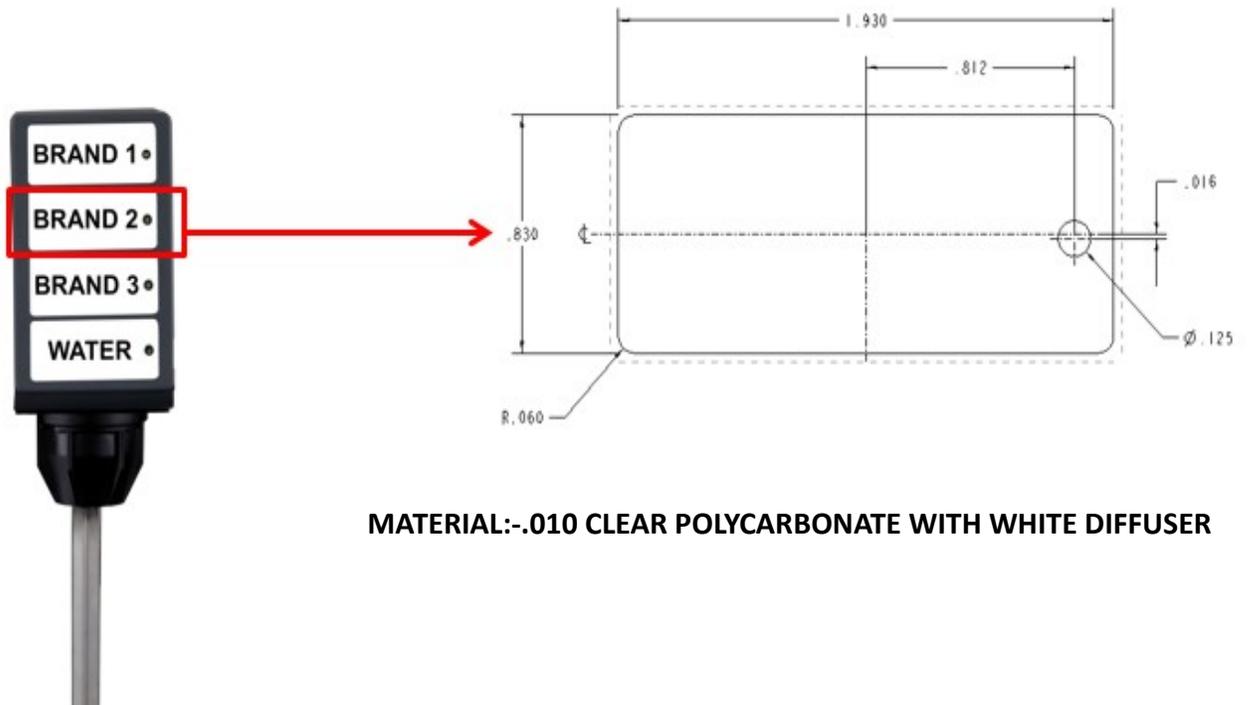
| <b>Item No.</b> | <b>Part No.</b> | <b>Description</b>                                 |
|-----------------|-----------------|--|
| 36              | 629097802       | Installation Kit<br>(Not shown in Fig.51)          |
|                 | 309852000       | Oeitker Clamp #11.3<br>(Not shown in Fig 51)       |
|                 | 620709073       | 1/4 Dole L Fitting<br>(Not shown in fig 51)        |
|                 | 620709068       | 1/4 Barb Fittings X1/4 SS<br>(Not shown in fig 51) |
|                 | 620717791       | 265 IDX420 Tube<br>(Not shown in fig 51)           |
|                 | 620700602       | Mounting Screw<br>(Not shown in fig 51)            |
| 37              | 629097803       | Knockout Kit<br>(Not shown in fig 51)              |
|                 | 620069489       | Knockout Adapter Plate<br>(Not shown in fig 51)    |
|                 | 620070512       | Knockout punch Tool<br>(Not shown in fig 51)       |
| 38              | 620070509       | Pepsi Decal<br>(Not shown in fig 51)               |
|                 | 620070510       | Generic Decal<br>(Not shown in fig 51)             |
| 39              | 620070715       | Portion Control Decal<br>(Not Shown in Fig 51.)    |

## PRISM DECAL:

Table 6

| Part number | Description           |
|-------------|-----------------------|
| 620070509   | Pepsi Decal           |
| 620070510   | Generic Decal         |
| 620070715   | Portion Control Decal |

Decal dimensions: Per brand



**MATERIAL:-.010 CLEAR POLYCARBONATE WITH WHITE DIFFUSER**

Figure 51.



**Marmon Foodservice Technologies Inc.**  
**[www.marmonfoodservice.com](http://www.marmonfoodservice.com)**  
**[www.cornelius.com](http://www.cornelius.com)**