

# DISPENSING VALVES ADJUSTMENTS

**NOTE:** Adjustment instructions for other than Cornelius manufactured SF-1 and the UF-1 dispensing valves, contact the dispensing valves manufacturer.

## SF-1 AND UF-1 DISPENSING VALVES

### ADJUSTING WATER FLOW RATE

**NOTE:** Some dispensing valves are equipped with water flowwasher- type water flow regulators (see Figure 1) that dispense water at a fixed rate and are non-adjustable. Perform the following to adjust the adjustable water flow regulators for dispensed water flow rates.

#### UF-1 Dispensing Valves.

Adjusting screw stops are built into the valves to prevent leakage when the screws are adjusted clockwise too far. Stop adjusting clockwise when turning resistance increases. Turn the adjusting screw counterclockwise 1-1/2 turns after the stop is contacted.

Turn dispensing valve water flow regulator adjusting screw (see Figure 1) to the left (counterclockwise) no more than 1/4 turn at a time to decrease water flow rate or to the right (clockwise) no more than 1/4 turn at a time to increase water flow rate.

### ADJUSTING WATER-TO-SYRUP “RATIO” (BRIX) OF DISPENSED DRINK

**IMPORTANT:** On dispensing valves equipped with an adjustable water flow regulator (see Figure 1), make sure water flow rate is adjusted to your requirement before adjusting the syrup flow regulator for Water-To-Syrup “Ratio” (Brix) of the dispensed drink.

Adjust Water-to-syrup “Ratio” of dispensed drink by using Ratio Cup (P/N 311100000) and Syrup Diversion Tube Assembly (P/N 319540000).

1. Remove dispensing valve cover.
2. Install syrup diversion tube on the dispensing valve by pushing rubber end of the diversion tube up on baffle inside the nozzle.

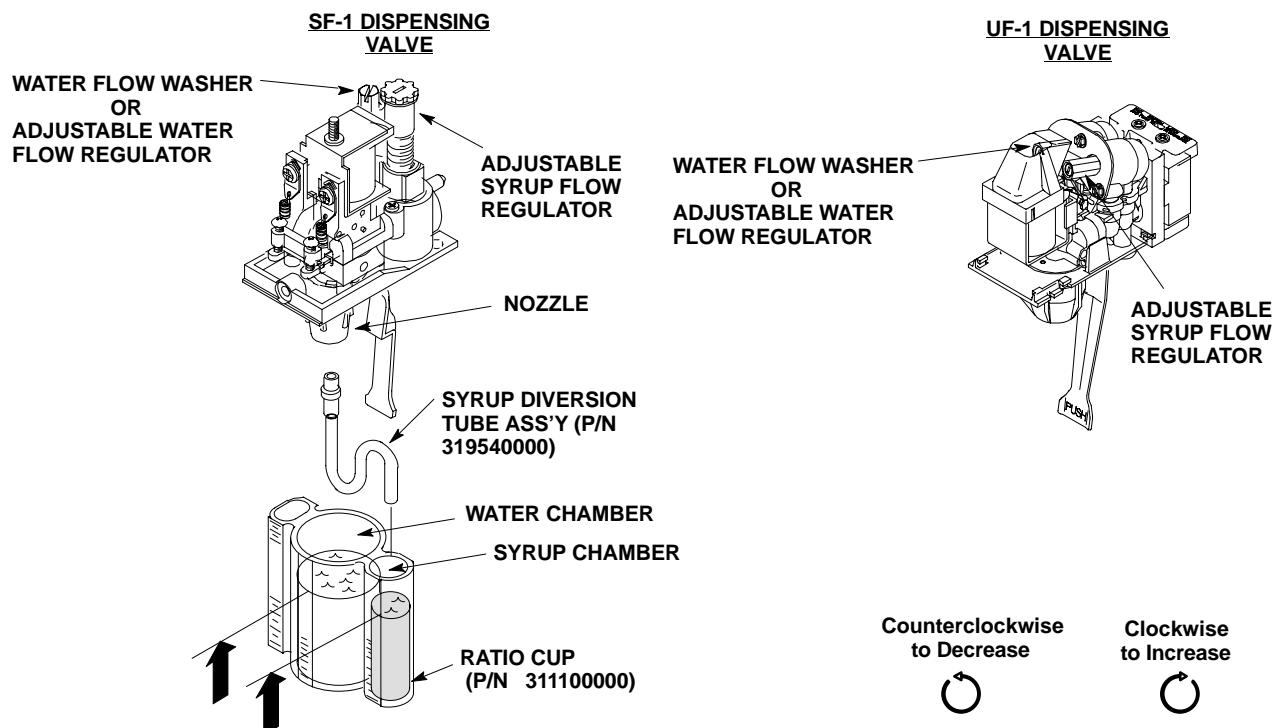


FIGURE 1. WATER-TO-SYRUP “RATIO” (BRIX) ADJUSTMENT

**NOTE: Refer to syrup Manufacturer's recommendations on the syrup package for Water-To-Syrup ("Ratio") Brix of the dispensed drink.**

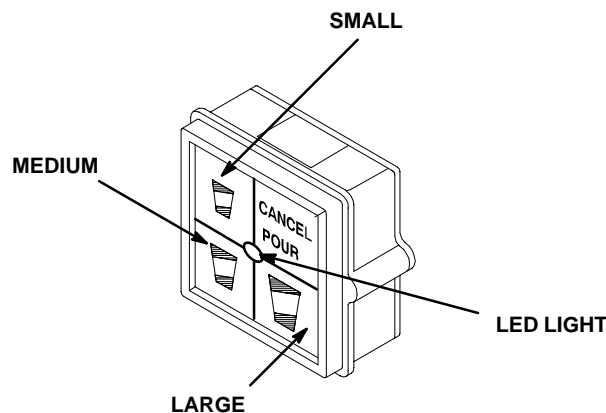
3. Hold container under the dispensing valve. Activate dispensing valve and dispense just enough to fill the syrup diversion tube with syrup.
4. Hold large chamber of the ratio cup under dispensing valve nozzle. Place free end of the syrup diversion tube into the syrup chamber marked for proper ratio. Activate the dispensing valve and dispense approximately six ounces of water into the ratio cup. Water and syrup levels should be even in the ratio cup.
5. If water and syrup levels are not even in the ratio cup, turn the dispensing valve syrup flow regulator labeled "SYRUP" adjusting screw to the left (counterclockwise) no more than 1/4-turn at a time for less syrup or to the right (clockwise) no more than 1/4-turn at a time for more syrup.
6. Repeat Water-to-Syrup "Ratio" test and adjust the syrup flow regulator as many times as necessary until proper ratio of the dispensed drink is achieved.
7. Remove syrup diversion tube from the dispensing valve.
8. Install dispensing valve cover.

## ADJUSTING SF-1 DISPENSING VALVE CODED AUTOSET PORTION CONTROL

(see Figure 2)

**NOTE: The drink size switches "S" (SMALL), "M" (MEDIUM), and "L" (LARGE) must be momentarily depressed, then released before dispensing of drink will occur. The drinks may be manually dispensed by pressing cup or glass against the dispensing valve lever should the portion control module become inoperative. The CANCEL/POUR switch may be used for three separate dispensing functions as follows:**

- A. The portion control drink may be cancelled by momentarily depressing and releasing the "CANCEL/POUR" switch. **DO NOT HOLD SWITCH IN DEPRESSED POSITION AS THE DRINK WILL NOT CANCEL AND DISPENSING OF DRINK WILL CONTINUE.**
  - B. The "CANCEL/POUR" switch may also be used to dispense a non-portion controlled drink by merely depressing and holding the "CANCEL/POUR" switch until the desired drink has been dispensed, then release the switch.
  - C. Press the "CANCEL/POUR" switch to return to the operational mode after all portion size adjustments have been completed. The blinking LED light will go out.
1. Have a sample of your small, medium, and large size cups with appropriate quantity of ice, if used, already in the cups.



**FIGURE 2. AUTOSET PORTION CONTROL ADJUSTMENT**

2. Simultaneously, press and hold the “S” (SMALL) and “L” (LARGE) buttons on the Coded Autoset Portion Control Module until the LED light in the center of the module starts blinking. Then release the buttons. The blinking LED indicates the “set mode” is active.
3. Place the small cup under the dispensing valve to be adjusted. Press and hold the “S” (SMALL) button until the cup is filled to the desired level, then release the button. This procedure programs the small size drink into the Coded Autoset Portion Control.
4. Repeat Step 3 for the Medium and Large drink size drinks. Repeat for all valves.
5. After programming the Small, Medium, and Large size drinks, press and release the “CANCEL/POUR” switch to return Coded Autoset Portion Control to the operational mode. The blinking LED light will go out.

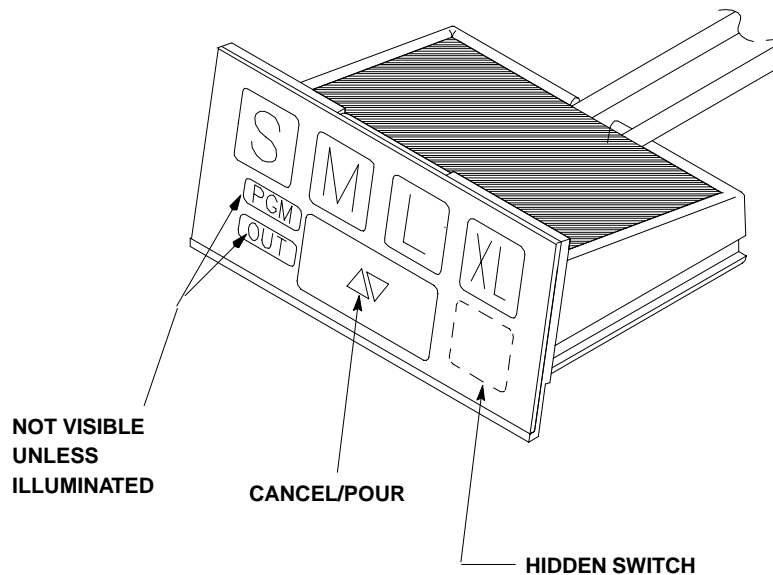
**Note: This Coded Portion Control module has a “permanent” memory and will retain the portion adjustment until readjusted, even without electrical power applied.**

## PROGRAMMING UF-1 PORTION CONTROL DISPENSING VALVE

(see Figure 3)

Use the programming mode to set the portion size of the dispensed drinks to the desired settings as follows: To enter the programming mode, the following criteria *must* be met:

1. There is no active dispensing cycle in progress.
2. The “OUT” display is inactive. The valve input voltage is within normal operational limit (20.5 VAC to 27.5 VAC).



**FIGURE 3. ADJUSTING UF-1 PORTION CONTROL**

### Accessing Programming Mode.

1. Without interruption, press and hold the “HIDDEN SWITCH” for 3-seconds

When you have entered into the program mode, the “PGM” LED will be illuminated. While in the programming cycle for any dispensing size, the “PGM” LED will flash.

**NOTE: On the portion control module, the “PGM/OUT” displays are not visible unless they are illuminated. This is similar to the dashboard warning lights on automobiles. They are shown here to identify their location.**

## PROGRAM MODE STEPS

1. Place appropriate size cup (with the desired amount of ice) under the dispensing valve nozzle.
2. Press and hold the desired portion switch until the liquid/foam level reaches the desired cup level.

**NOTE: While in the programming mode, the “PGM” LED will be illuminated. While pressing a portion switch, the “PGM” LED will flash.**

3. Release the switch storing the pour time value in memory. The “PGM” LED will stop flashing and return to a steady illumination.
4. Programming steps for this drink size are now complete. Repeat steps 1 through 3 for each drink size to be programmed.

**NOTE: Any drink size may be programmed as many times as desired before exiting the program mode. It is not necessary to adjust all cup or glass sizes while in the program mode.**

## EXITING PROGRAMMING MODE

1. Press and hold the “HIDDEN SWITCH” for 3-seconds. When you have exited the program mode, the timer values stored in temporary memory will be written to permanent storage and the “PGM” LED will go off.

## RESTORING FACTORY SETTINGS

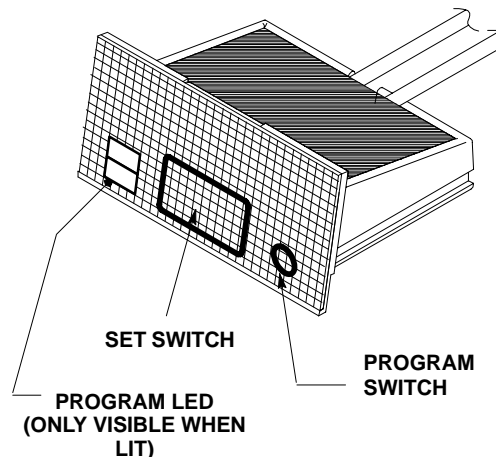
1. To restore to the factory setting while in the program mode, press and hold the “CANCEL/POUR” switch. Then, at the same time, press the desired dispensing size switch. The factory programmed setting is now restored.
2. Repeat for each drink size to be restored to the factory programmed setting.

## PROGRAMMING TOP-OFF DELAY TIME

**NOTE: The Top-Off Delay Time has been factory set at 4.0 seconds but may be field adjusted through the program mode.**

You may enter the programming mode under the following conditions:

1. The dispensing valve is not dispensing.



**FIGURE 4. PROGRAMMING TOP-OFF DELAY TIME**

## TO ENTER PROGRAMMING MODE

1. Press the "PROGRAM SWITCH" for 3-seconds until the LED (light) turns on. The valve is now ready for programming the top-off delay.

## PROGRAMMING TOP-OFF DELAY TIME

Only the top-off delay is adjustable. Use top off adjustment mainly for drinks that are foamy, such as diet drinks. To adjust the top-off delay, follow these programming steps:

1. Place an appropriate size cup (with the desired amount of ice in the cup) against the valve lever causing the valve to begin dispensing. When foam or liquid touches the lever, the valve will automatically stop dispensing. This is the initial pour. The cup must remain in place with the valve lever pressed. The LED (light) will flash at this time.
2. If you want to continue programming the top-off delay time, skip step 3 and proceed to step 4.
3. If you do not want top-off delay time, remove the cup from against the valve lever. This will enter a zero value for the top-off delay time and will inhibit a top-off pour. When finished, exit program mode by pressing the "PROGRAM SWITCH" for 3-seconds until the LED (light) turns off.
4. When foam in the cup has lowered, press and release the "SET SWITCH". 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 and it is now programmed into the valve. The LED (light) will be on steady at this time.
5. When the valve stops pouring the second time, the cup may be removed and you may exit the program mode by pressing the "PROGRAM SWITCH" for 3-seconds until the LED (light) turns off. The top-off delay is now programmed into the valve.
6. When the valve stops pouring the second time, the cup can be removed and you may exit the programming mode. The top-off delay is now set.

## EXITING PROGRAM MODE

To leave the programming mode, press and hold the "PROGRAM SWITCH" for 3-seconds.