



Installation Guide

Soda Gun Dispenser System

Start-up Video (Remote Cooler): <http://youtu.be/1tcf2pVgiyg>

Start-up Video (Ice Maker): <http://youtu.be/KgDFKP3atQ8>

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Preparing for Installation

Chapter 1

1.1 Unpacking & Inspecting

Upon receiving your system remove it from the shipping carton or pallet.

Required Items & Parts






Soda Gun, Tower, or Draft Arm	
Cooling Device	
Carbonator	
Primary Regulator (high pressure)	
Secondary Regulator (low pressure) †	
Syrup Pumps † (1 for each flavor)	
High Pressure & Bag In Box Tubing	
Bag In Box Connects †	
Co2 Tank *	

* Not all systems include this item

† Not included in seltzer-only systems

Unpack all parts. Make sure all required items and parts listed (left) are present and in good condition. If any parts are missing or damaged, notify our office immediately.

Optional Items

Shutoff valve	
Inline Water Filter	
Water Filter	
Water Regulator	
Water Booster	
Back Flow Preventor	
Main Water Supply Hose	

1.2 Selecting Remote Cooler Location

(If you're using another cooling method, skip to Section 1.3)

Consider positioning cooling unit as close as possible to your electrical source or receptacle. Allow a minimum of 2" space between remote cooler and cabinet walls or top for sufficient space for ventilation. Excessive heat in a storage cabinet will prematurely melt the ice and cause the cooling unit to labor excessively. Ambient temperature for your cooling system should not exceed 100 degrees "F". **Operation of the cooling unit in temperatures exceeding 100 degrees can & will cause early cooling unit failure and produce poor drink quality.**

Enough space must be allowed to install the remaining support equipment for your system. Co2 tank, syrup boxes, carbonator, syrup pumps & regulators.



Note: *If you are planning on installing the cooling unit in a small enclosed area with poor air circulation, consider installing a vent in the cabinet wall to allow for adequate heat dissipation.*

1.3 Tools Needed

1. Pliers
2. Flathead Screwdriver
3. Crescent Wrench

A bucket and rag are also useful to have, if needed.





Water Supply

Chapter 2

2.1 Volume, Pressure, & Quality

Since a soft drink is approximately 5 parts water to 1 part syrup, having an adequate, clean water supply is absolutely *essential*. There are 3 important areas of focus with your water supply:

1. Volume

- The inside diameter of your main water supply tubing must be a **minimum 1/4"** if connected to your water source *within 10'* of the carbonator.
- If your carbonator is *more than 10'* away from the water source, a **minimum 3/8"** inside diameter is required.

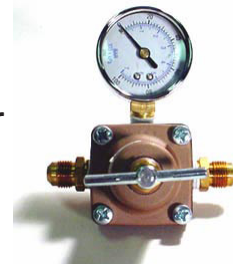
Anything less than this will starve the carbonator pump and create noise within the pump, poor carbonation, and cause premature failure of the carbonator. Do NOT use ice maker tubing!

- Food grade braided nylon, copper, or stainless tubing is acceptable for your main water supply.

2. Pressure

- High water pressure affects the carbonators ability to carbonate properly. Ideal water pressure range is 35 – 55 psi. If water pressure exceeds 55psi, the carbonator will NOT carbonate properly.

- Water pressure above 55psi. (most city water is above 55psi.) will require a water pressure regulator.



- If the water pressure is irregular or below 35psi. a water booster will be necessary.



3. Quality

- Mineral deposits & sediment (found in most city water supplies) get caught in the carbonator rotary vane pump, and in the check valves as well as other areas of the system causing leaking and or failure.
- A water filter is recommended to remove unwanted silt, sand, smells, & other undesirables. This will give the highest quality product results as well as lengthen the life of your soda system.

- When a water filter is used, it is important that it has a flow rate of 100 gallons per hour and **MUST** be flushed **BEFORE** it is connected to the soda system.



Cartridge and Inline water filters

NOTE: Water supply should be connected pre-water softener, not post. **Using softened water will adversely affect carbonation.**

2.2 Connecting the Water Supply

The main water connection on your system is clearly tagged. Your water supply line will run to the carbonator pump.

We use a **3/8" fitting** (not metric) for this connection.

NOTE: If you have a non-carbonated flavor or plain water coming from your dispenser, you will need to "tee" your main water supply.

Once you have established your water supply source, it is **important** to **thoroughly flush** this line for a few seconds of any debris, scale, mineral deposits, and any other impurities that may be in the lines. The smallest amount of debris can easily get lodged in a check valve or in your dispenser causing dripping, leaking, and failure.

NOTE: Water connections directly connected to potable water supply should be sized, installed & maintained according to federal, state, & local laws.



Installing the Components

Chapter 3

3.1 Installing the Soda Gun

The following are three common ways to install your soda gun:

- A. Hole in Countertop
- B. Soda Gun Holster
- C. Soda Gun Tower

Hole in Countertop Installation

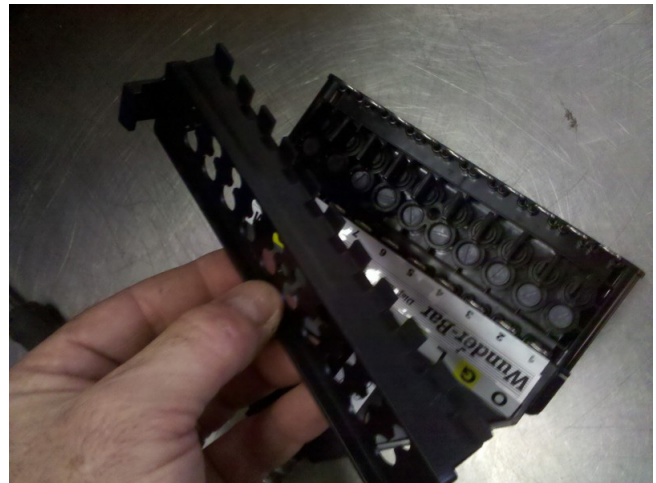
Many people install their soda gun through a hole in their counter top. This is often near a sink but does not have to be. The soda gun rests in the upright position when not in use. The flex hose is hidden beneath the counter top. Flex hose slides in & out of concealed area when in use.

Here are the steps for this installation:



Standard or Low Profile manifold (left)
Flow Control or Raised Cone manifold (right)

1. Make sure the manifold (see picture at right) of the soda gun will be mounted within *5 feet or less* of the cooling device. **The exact location cannot be determined until the soda gun has been disassembled and put through the hole in the counter and reassembled.**



Newer manifolds look like this

2. Decide where you want to drill the hole through the counter where the soda gun will rest. You must leave enough slack on the soda gun flex hose between the hole and the manifold to easily pick up the soda gun head from its resting place and dispense your beverage into your glass. This may take two people to properly place your soda gun; one to position the manifold and another to simulate the operation of the soda gun making sure it moves freely during usage.



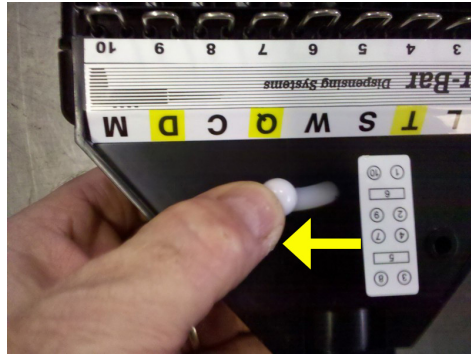
Remove these to access the line ON / OFF adjusting screws on newer manifolds

3. Remove the brixing manifold (right) by pulling up the kwik clips half way. (You will feel them click when pulling them



up halfway) **Do not fully remove them.**

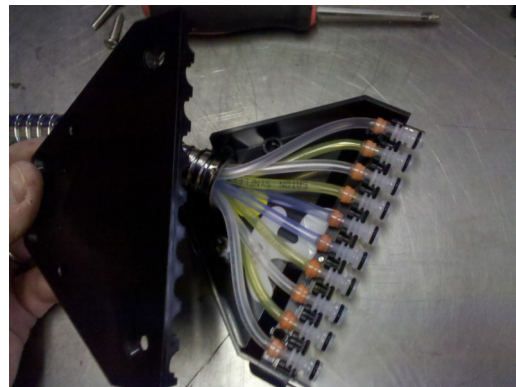
Push the white nylon slider toward the brixing manifold which will help separate the brixing manifold from the triangular part of the manifold.



CAUTION: WHEN SEPARATING THE BRIXING MANIFOLD FROM THE BLACK TRIANGULAR PART, BE SURE TO DO IT *EVENLY* AND NOT ON AN ANGLE TO PREVENT CRACKING AND DAMAGE TO THE MANIFOLD HOUSING.

4. Disassemble the manifold by unscrewing four phillips head screws.

Remove the four phillips head screws and then remove the cover. You will see small tubing that runs through the flex hose coming from the gun handle snapped in place on the bottom side of the manifold.



5. Number the lines 1-10 with a black marker before unsnapping them from the manifold. You will need to put them back in the exact space you removed them from.



6. Unsnap the lines very carefully from the manifold. These are fragile pieces that can easily break so take your time.

Label the lines (tubing) *BEFORE* unsnapping them

Once you have removed the lines from the manifold, fish the flex hose through the top of the hole that you drilled. If you are planning on using a *finishing ring* (right), you need to put this in place now.



7. Once you fish the soda gun through the hole, you will need to reassemble the manifold. Follow steps 4 and 5 in reverse.

8. Mount your manifold.

First, make sure the tubing coming from the cooling device can easily connect into the end of the manifold without kinking the lines. Make sure the end of the manifold is pointing in the

direction of the tubing coming from the cooling device before you mark where you are mounting it.

This tubing, when connected to the manifold, should not pull on the manifold otherwise it will lead to cracking and leaking. If you cannot get the tubing to lie properly and it is pulling on the manifold, get a pipe bracket to anchor the tubing to the wall or use wire ties to relieve pressure.

Second, you must leave enough slack on the soda gun flex hose between the hole and the manifold to easily pick up the soda gun head from its resting place and dispense your beverage into your glass. This may take two people to properly space your soda gun... one to position the manifold and another to operate the soda gun making sure it moves freely during usage.

Third, mark where you are going to secure the manifold.

Finally, secure manifold to the desired location.

Soda Gun Holster Installation

Using a soda gun holster is common in a bar setting. The holster mounts with four screws under the counter top ledge



allowing the soda gun to rest in the holster when it is not in use. A sanitary drip cup catches any liquid that might drip from the nozzle. This is one of the easiest installation methods.

1. Make sure the manifold of the soda gun will be mounted within 5 feet or less of the cooling device.
2. Decide where you will be mounting the soda gun holster. You must leave enough slack on the soda gun flex hose between the holster and the manifold to easily pick up the soda gun and dispense your beverage into your glass.

This may take two people to properly space your soda gun... one to position the manifold and another to operate the soda gun making sure it moves freely during usage.

3. Mount your manifold.

First, make sure the tubing coming from the cooling device can easily connect into the end of the manifold without kinking the lines. Make sure the end of the manifold is pointing in the direction of the tubing coming from the cooling device before you mark where you are mounting it.

This tubing, when connected to the manifold, should not pull on the manifold otherwise it will lead to cracking and leaking.

If you cannot get the tubing to lie properly and it is pulling on the manifold, get a pipe bracket to anchor the tubing to the wall or use wire ties to relieve pressure.



Second, attach manifold to the marked location.

4. Mount your holster using the hardware enclosed.

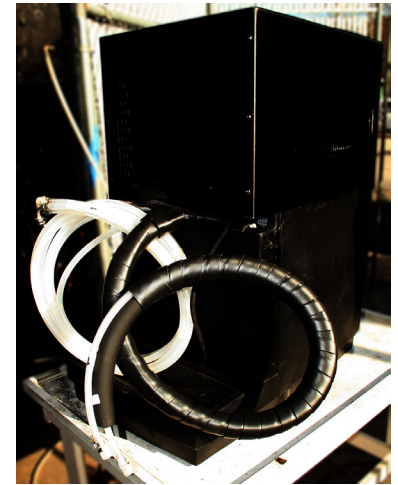
Soda Gun Tower Installation



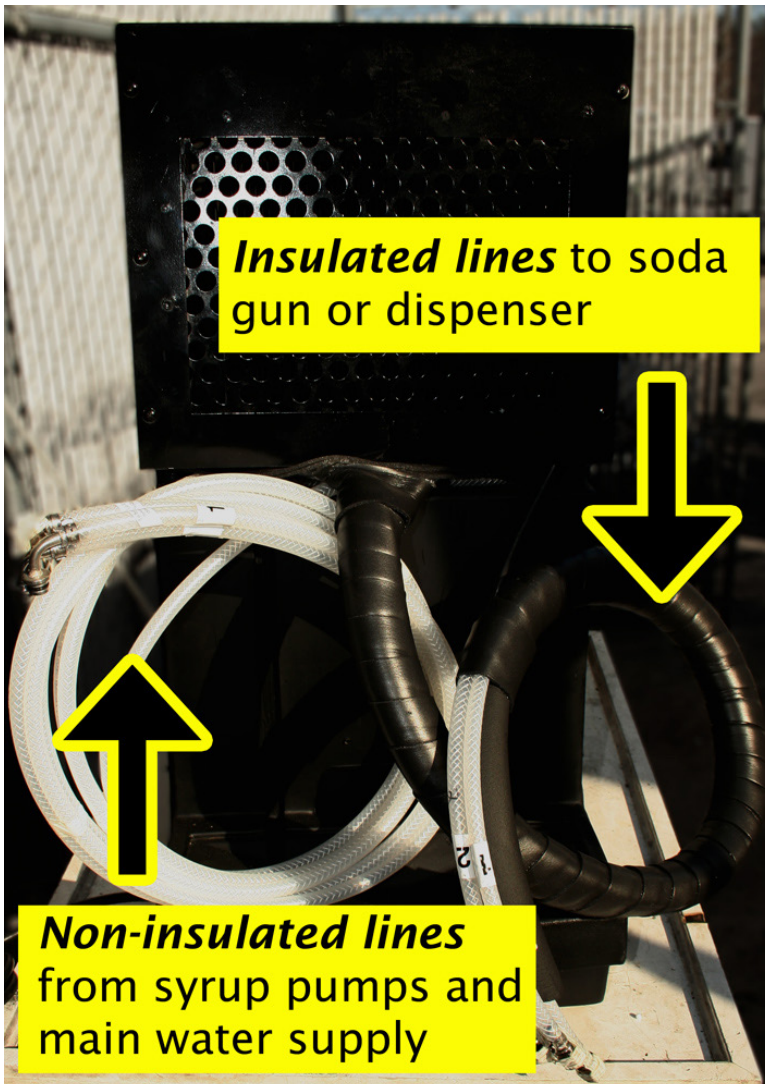
This method of installation allows the user to remove the gun head from it's resting position to dispense product or to leave gun head in its resting place and slide cup under the nozzle and select flavor to dispense from horizontal position. The tower can be anchored or remain movable. Again how and where the manifold is anchored will determine gun handle movement.

3.2 Installing the Cooling Device

If your system is cooled by a **remote cooler** (right), you will have two sets of lines coming out of the remote. The *insulated* lines will go to your dispenser or soda gun. The *non-insulated* lines that are shown below come from the syrup pumps and water supply.



These lines will be labeled and will be discussed further in the remaining installation chapters.



If your system is cooled by a ***cold plate*** or ***ice bin with built-in cold plate*** (right), you will have two sets of lines coming in and out of it. The *insulated* lines will go to your dispenser or soda gun. The *non-insulated* lines come from the syrup pumps and carbonator, so you will need to attach them to the syrup pumps and carbonator.



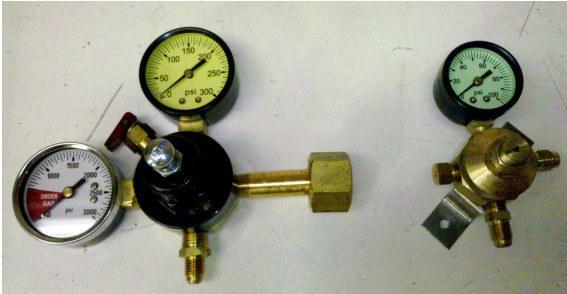
If you just have a cold plate, you will need to install the cold plate in an ice bin or igloo cooler.

3.3 Connecting the CO₂ Supply

1. Place CO₂ cylinder where it can be easily retrieved for refilling. Secure the tank with a safety chain to prevent the tank from falling over.
2. Connect primary CO₂ regulator to CO₂ cylinder. Use a fiber or plastic washer between the primary nut & stem and the tank neck (right).



3. Tighten the CO₂ nut on the regulator with an adjustable wrench.



If you have separate primary & secondary regulators (left) with your system **go to step #4**

If you have a *triple gauge regulator* (right) **skip to:**
"Triple Gauge Regulator Installation"



4. Using the 1/4" high pressure tubing, attach the 1/4" swivel nut that is marked " to primary regulator gas out" to the bottom of the regulator. *Make sure* the white nylon flare washer is between the swivel nut and the brass flare fitting located on the bottom of the primary regulator.



5. Tighten the swivel nut with an adjustable wrench.

6. Locate where you want to mount the secondary regulator and syrup pumps.

7. Attach the CO₂ tubing swivel nut end that reads “to secondary regulator gas in” to the right male flare fitting on the secondary regulator. Make sure white flare washer is installed before connecting. Tighten swivel nut with adjustable wrench.



8. Attach the remaining swivel nut end of the CO₂ line that reads “to carb tank CO₂ gas in” to the carbonator tank. Make sure white flare washer is installed before connecting. Tighten swivel nut with adjustable wrench.

WARNING: DO NOT TURN ON THE CO₂ SUPPLY AT THIS TIME

Triple Gauge Regulator Installation

Triple gauge regulators are both primary & secondary regulators attached together.



You will have two separate CO₂ gas lines for this type of regulator.



Attach the swivel nut on the CO₂ line that reads “to primary

regulator gas out” to the brass male flare fitting on the bottom of the primary regulator. White flare washer MUST be installed between these two fittings. Tighten swivel nut with wrench.

Attach swivel nut on the opposite side of the CO₂ line that reads “to carb tank CO₂ gas in” White flare washer MUST be installed between these two fittings. Tighten swivel nut with wrench.



Attach the swivel nut on the CO₂ line that reads “to secondary regulator gas out” to the brass male flare fitting on the bottom of the secondary regulator. White flare washer MUST be installed between these two fittings. Tighten swivel nut with wrench.



Attach swivel nut on the opposite side of the CO₂ line that reads “to syrup pump CO₂ gas in” White flare washer MUST be installed between these two fittings. Tighten swivel nut with wrench.



WARNING: DO NOT TURN ON THE CO₂ SUPPLY AT THIS TIME

3.4 Connecting the Syrup Supply

Bag-N-Box is a plastic bag filled with syrup encased in a box.

There is a connection receiver at one end of the bag.



A syrup pump with a clear piece of tubing with a bag in the box connector attached to it is connected to the receiver. (see picture below)



Syrup is pumped out of the bag, moves through the syrup pump and is pushed toward the dispenser. There are different style connectors for different manufacturer's products.



Coke

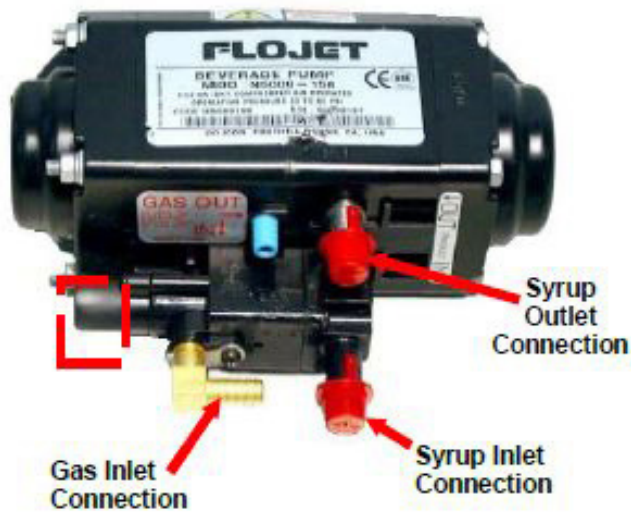


Pepsi

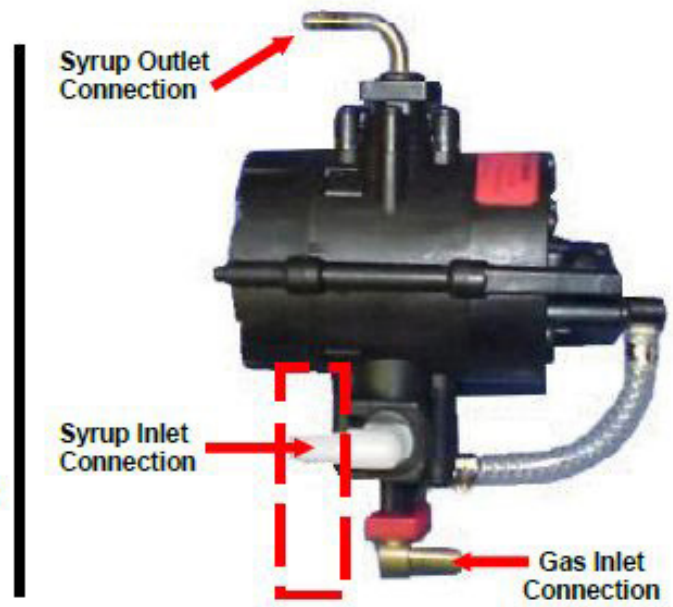


Generic

Pump Operation



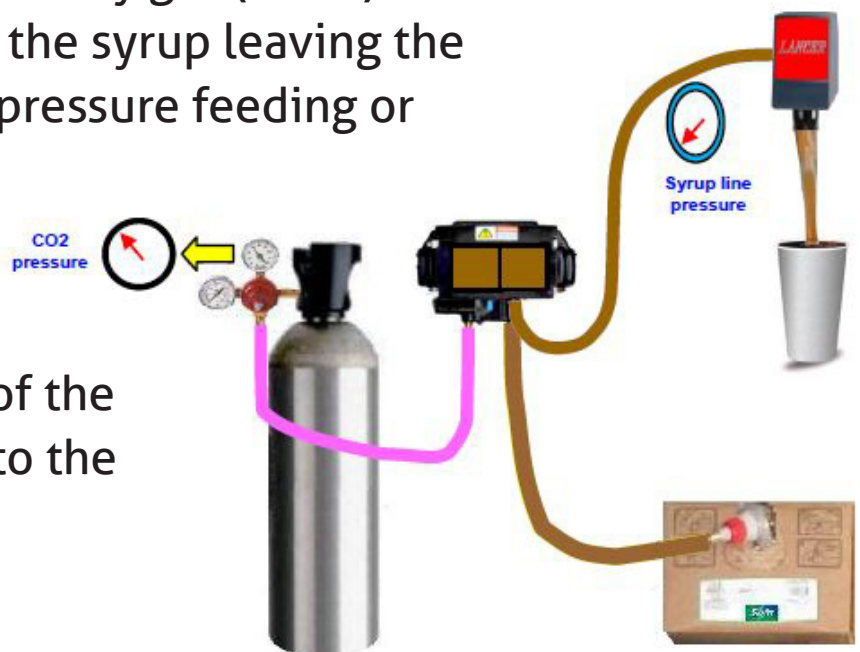
FLOJET Pump



SHURFLO Pump

The syrup pump is propelled by gas (or air) pressure. The pressure of the syrup leaving the pump is equal to the gas pressure feeding or driving the pump.

The pump will continue to run until the pressure of the outbound syrup is equal to the inbound gas pressure.

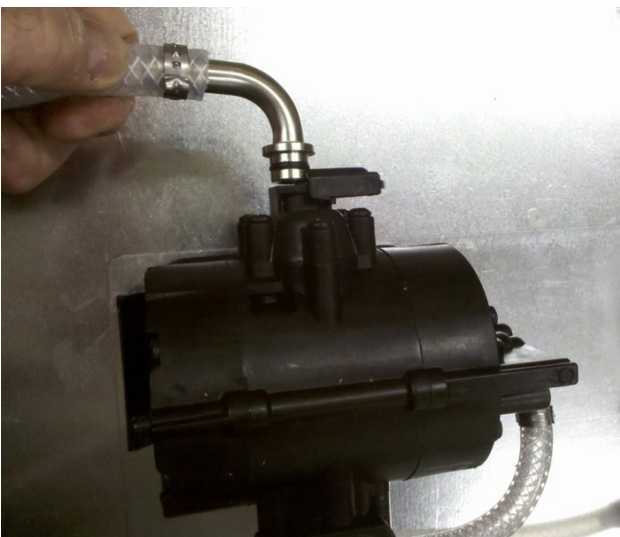


When the pressure drops in the syrup line to the dispensing valve, the pump will activate and

continue until the pressure is equalized. This will happen almost every time a drink is poured from the valve.

Installing Bag-In-Box Syrup Pumps

1. Place your syrup boxes as close as possible to the syrup pumps. Under 10 feet is ideal.
2. Mount syrup pumps to your desired location.
3. Uncoil syrup line tubing from cooling device to the syrup pumps.
4. Connect the syrup pump fitting on each line to each pump.
(See pictures of pump types below)



5. Attach each syrup pump bag in box connector to each syrup box.



6. If you DO NOT have all of syrup boxes (1 for each syrup pump) disconnect the gas CO2 fitting from the pump so it does not activate that pump when you start the system. Allow it to dangle loosely.



**WARNING: Do not walk away from your system with the water and the electric on until you have run your system through several times and know that it is operating correctly!
Check for any leaking or improper connections.**



Soda Gun Start-up Procedures

Chapter 4

Start-up Video (Remote Cooler): <http://youtu.be/1tcf2pVgiyg>

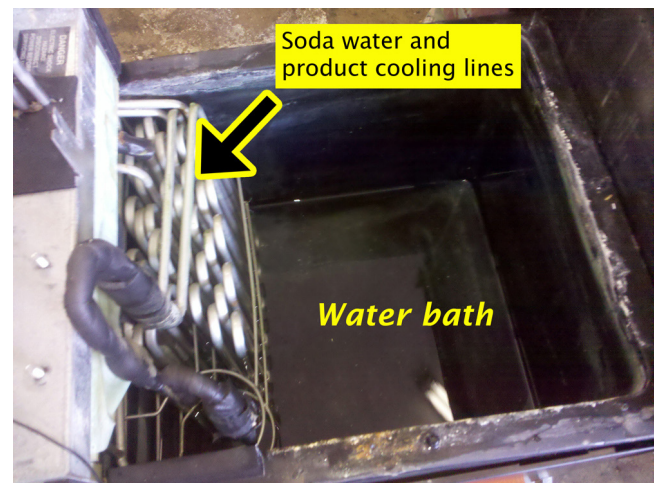
Start-up Video (Ice Maker): <http://youtu.be/KgDFKP3atQ8>

If you have a **remote cooling system**, conduct the following start-up procedures:
Otherwise, skip to step #5

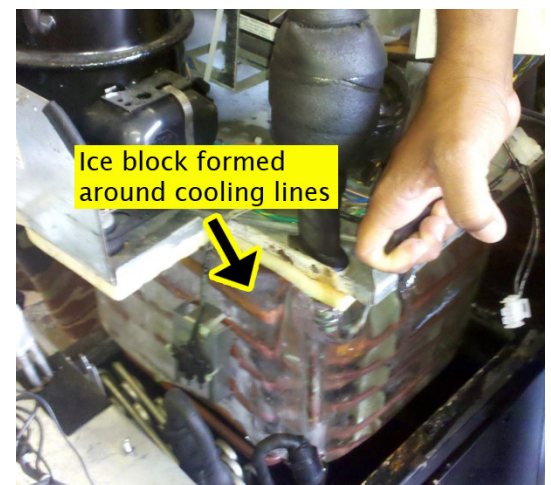
The insulated line (or *duct line*) has the tubing with the cold soda water, ice water, and chilled syrups that go to a tower or draft arm. Always cut the duct line as short as possible; this gives a colder drink, faster.



The water bath area is under the lid. You **must** fill the water bath with tap water to about 1½ to 2 inches from the top of the unit (yes, all that stuff ends up under water). You should be able to feel the water with your finger through the water bath fill hole.



Do NOT turn the remote cooler ON without water in the water bath! The water bath is where the unit makes a block of ice used to cool the drinks. It will take about 4 hours for the first ice bank to form and the unit to shut off. After that, it will cycle periodically, maintaining a full ice bank.



NOTE: This water is only used for cooling the drinks; **you will never drink this water.** From time to time, check the water level and fill if low.

The incoming water, syrup, and electric lines all come out of the unit behind the “Front Plate” in the center. It is best to bring the lines straight back, under the unit, to keep them from kinking.

Connect all lines and turn on the water supply BEFORE turning the power switch to the “ON” position.

1. Fill up the water bath two (2) inches from the top of the water fill hole.
2. Put your finger in the water bath fill hole. The water should be halfway up your finger.



3. Plug the cooler into your power supply. **If slurping noise is heard, water level is too low.**



4. Allow the machine to harvest ice for the next several hours.

Standard Cold Plate Cooling Start-up

5. You will need to set up your cold plate to be immersed in ice. There is a variety of options to set this up.



Any type of container that will allow you to cover your cold plate with ice will work.

Ice on the cold plate is necessary only when all of the support equipment is assembled and you are ready to start dispensing product.



Standard Carbonator Start-up

6. Turn water supply to the carbonator ON.

Water supply tubing and valve are not included, so your water supply connection may look different than this picture.



7. Plug carbonator in to power source. **Do NOT plug the carbonator in if you have not connected water to it.**

Do NOT expect the carbonator to start running because it is already full of water. *Only after* dispensing soda water will the float in the tank sense the water level drop and activate the motor and pump. This procedure will be performed later.



8. Start filling carbonator tank by releasing the **pressure relief valve** located on top of carbonator tank (see figure #1).

This will allow air to escape while the tank fills with water. Hold pressure relief valve open until water spurts out of valve opening.

9. Close **pressure release valve**.

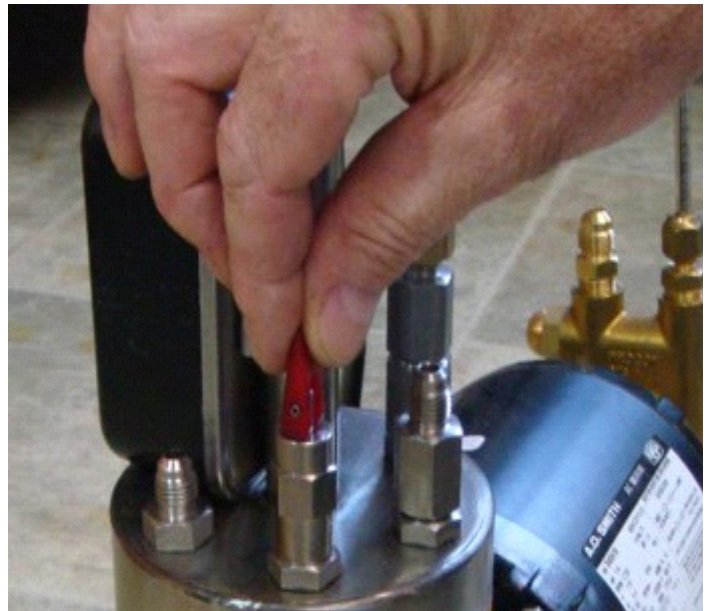


Figure #1.

10. Check for water leaks.

Inspect all connections where water is run (example: carbonator, soda fountain or gun, all tubing lines carrying water).

CO₂ Gas Introduction

11. Prepare for CO₂ gas introduction to the system. Make sure the adjusting screw (see figure #2) & screw lock nut (see figure #3) are not tightened but are unscrewed and loosened.



Figure #2.

This is performed by turning them in the counterclockwise direction. This allows you to introduce the gas in stages.

12. Turn CO₂ tank valve on. Turn in counter clock wise direction.



Figure #3.

13. Set adjustment on primary regulator by turning adjusting screw in the clock wise direction until needle on primary dial reads 100 psi.



Figure #4.

14. Check for CO₂ gas leaks by

spraying all connections where gas runs through tubing with a spray bottle filled with a mild dish detergent mixture (1/2 water & 1/2 detergent).

If leaks are found (bubbling; see figure #4), make necessary adjustments to clamps or fittings until bubbling stops (see figure #5). Tighten lock nut.

Do NOT adjust secondary regulator, yet!



Figure #5.

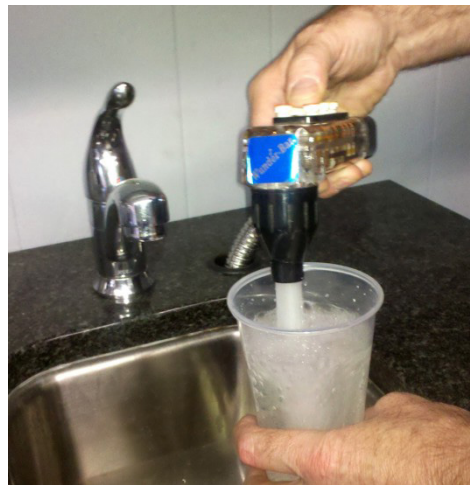


Figure #6

15. Purge air from tubing by pushing the oval "SODA" button on your soda gun.

16. Recycle carbonator allowing the proper blend of gas & water levels in the carbonator tank by pressing the oval "SODA" button on your gun (see figure #6) until



Figure #7.

carbonator motor (see figure #7) starts.

Spitting or erratic water flow is normal while air purges from the system. STOP dispensing water until carbonator finishes recycling (motor turns off).

NOTE: Normal carbonator recycling does not exceed 60 seconds. If your carbonator is taking longer than 1 minute to recycle (motor turns off), unplug it immediately!

Perform recycling process 3 times. By the 3rd time you will notice a strong effervescence (bubbling) in the water.

You are now ready to introduce syrup to the system.

NOTE: ALL syrup pumps must be attached to a bag in box syrup before allowing them to be started. If you do NOT have a syrup box attached to each syrup pump you MUST disconnect the fitting that supplies gas to the pump (see figure #9).

17. Turn screw on the secondary regulator clockwise to allow gas to pass and be sent to drive the syrup pumps (figure #8).

While turning the screw you will see the needle on the dial rise. As the pressure rises you will begin to hear popping

coming from the syrup pumps signifying their activation. You will also see syrup moving from the syrup box up the BIB tubing towards the syrup pump.

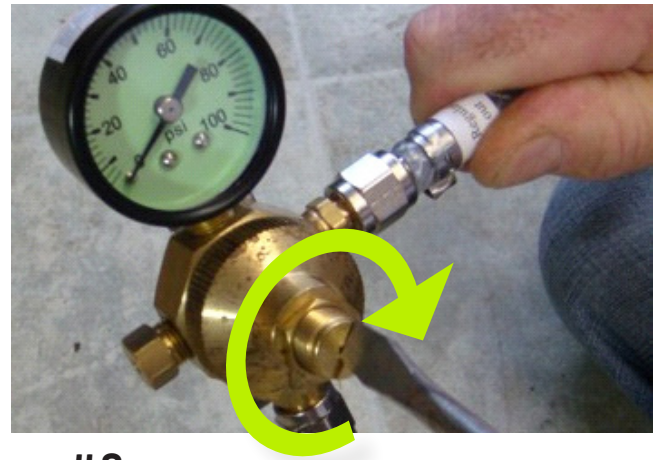


Figure #8.

Continue adjusting regulator to **55 psi**

NOTE: Syrup pumps **DO NOT** continually run endlessly, they will push syrup to your dispenser and stop when pressure you have set the secondary regulator to has been achieved.

If your syrup pump does **NOT** shut off after a minute of setting your secondary regulator, disconnect the syrup pump that is continually running by removing the gas fitting from the active pump (see figure #9).



Figure #9.

Activate each flavor by pressing the flavor buttons on the gun handle to allow syrup to flow. You will hear the syrup pumps popping during this process (see figure #10).

18. Adjust each flavor for proper syrup and water (carbonated or plain) ratio. This can be done to taste or with a **brix kit**. Adjusting screws for syrup and soda water are found on the black triangular manifold.



Before



After

Figure #10.

Adjusting Syrup to Soda Water Ratio (Brixing)

Brixing Soda Guns

Adjusting the taste or sweetness for the products dispensed from the soda gun is performed on the **manifold**.

There are two (2) different types of manifolds: *standard* and *raised flow control*.

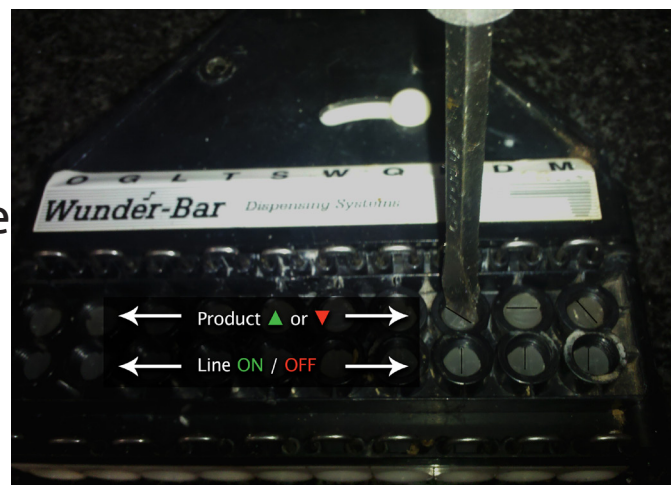


Figure #11.

The adjusting screw closest to where the fitting and tubing are attached is the ON/OFF control for each line going into the gun.



Standard and Raised Flow Control Manifolds

The second set of adjustments increases and decreases the flow of the product running to that port. See figures 11 and 12 showing both types of manifolds being adjusted for syrup flow.

Low Profile manifolds reduce flow rates by turning the nylon adjusting screws **clockwise**.
Flow Control or Raised Cone manifolds reduce flow rates by turning white nylon screws **counter-clockwise**.

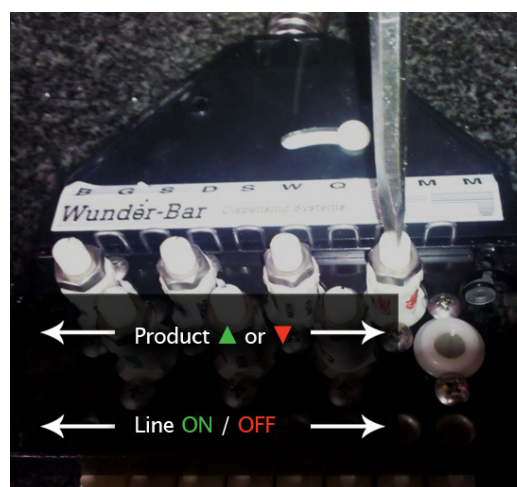
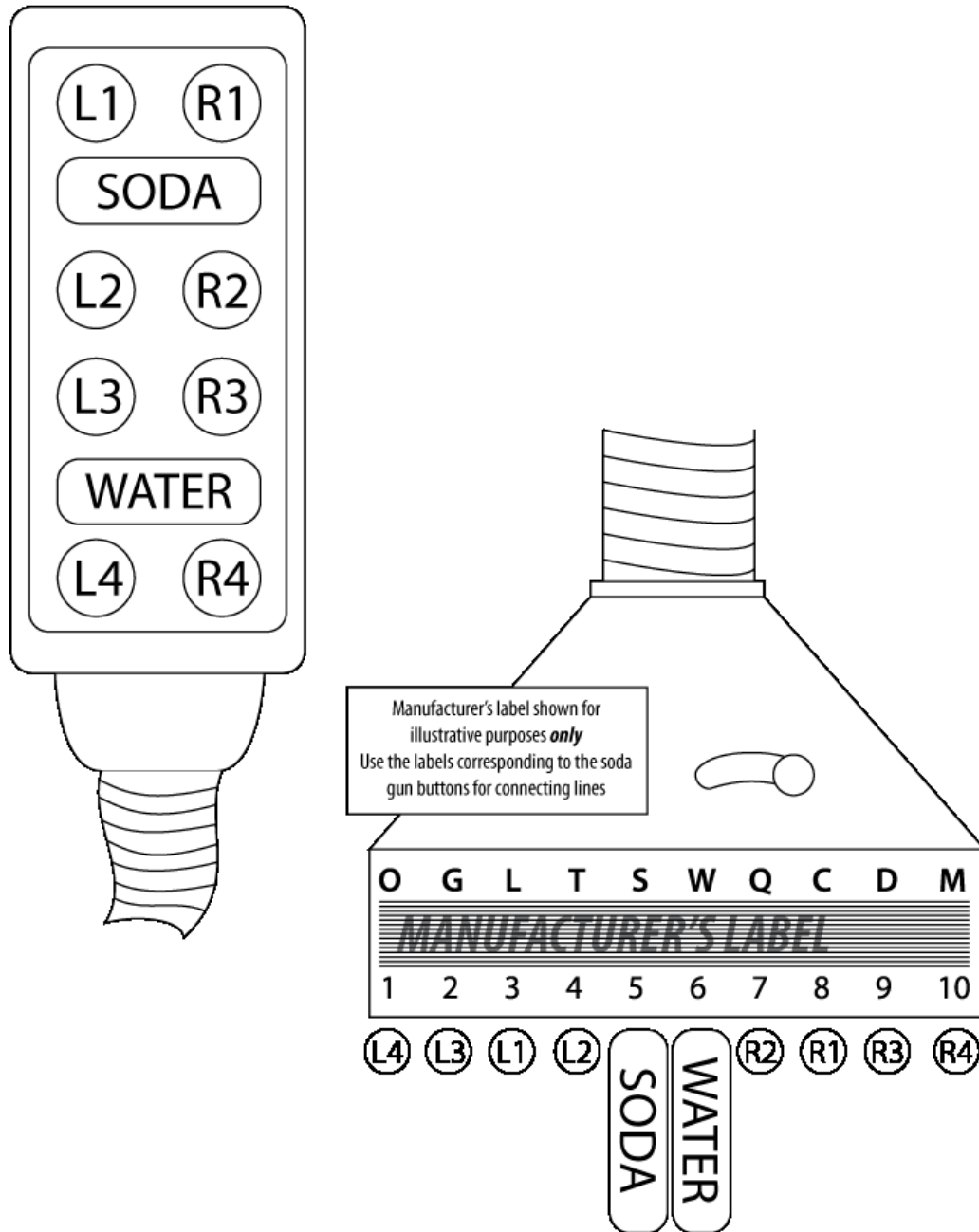


Figure #12.

Use the diagram on page 39 to figure out which line coming into the gun corresponds to what button on the gun's handle.



WARNING: Do not walk away from your system with the water and the electric on until you have run your system through several times and know that it is operating correctly! Check for any leaking or improper connections.

POST-MIX BEVERAGE DISPENSER

For 1 to 14 Button
Post-Mix
and
Juice Dispensers
Standard and Flow Regulator Manifold



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SERVICE AND FACTORY ASSISTANCE:

Please record your Installer/Service Agent's name and phone number here for future reference:

SERVICE AGENT NAME: _____ DATE OF INSTALLATION: _____

SERVICE AGENT PHONE: _____ SERIAL NUMBER: _____

Or, call the Wunder-Bar Service Hotline 1-866-WUNDERBAR (1-866-986-3372) anytime or (707) 448-5151 Monday through Friday, 7:00 AM to 5:00 PM Pacific Time.

Wunder-Bar

Food & Beverage Dispensing Systems

I N S T A L L A T I O N

When you begin to install your *Wunder-Bar*® Mechanical Flex Hose bar dispenser, you will notice that all necessary mounting hardware, a hose hanger, a drip cup, a drain tube, and the appropriate number of stainless steel input fittings are included with each dispenser (Fig.1).

The input fittings are installed in the product manifold of the dispenser. These input fittings are held in place by kwik klips. To remove input fittings, pull up on kwik klip just far enough to allow removal of the fittings (Fig.2). (It is not necessary to remove the kwik klip entirely).



1/4" straight Input Fittings are included with all new *Wunder-Bar*® Post-Mix Beverage and Juice Dispensers unless custom "Fitting Sets" are ordered. Input fittings are available in straight, 90 degree, and 45 degree configurations with either 1/4", 5/16", 3/8", or 1/2" barbed ends. 3/8" and 1/2" Input Fittings are available in two lengths: "short" and "long" (Fig.3) to allow the two lengths to be installed "staggered" to accommodate braided tubing.

When making your tubing connection; remove the input fitting, secure to tubing with crimp ferrule or Oetiker clamp, re-install fitting into correct position on product manifold, push the kwik klip securely into place, locking input fitting into position. The letters on the product label at the manifold correspond to the button positions on the dispensing handle.

Two, 2" stainless steel wood screws are provided as part of the mounting hardware package to attach the tube collector/manifold assembly to the underside of the bar. (A Kwik Mount kit is also available as an optional item). Attach the tube collector/manifold assembly to the underside of the bar. It is recommended that a screw be placed in both the tube collector and the brix manifold to prevent unwanted flexing.

Attach the hose hanger in proper position with the 3/4" stainless steel screws provided. The hose hanger is in proper position when the slight bend in the hose hanger slants down and WUNDERBAR can be read from the top. The ribbed side of the hose hanger points down. Pull the drip cup through the large opening in the hose hanger until it is securely in place.

The drip cup is in proper position when the hose hanger is in the middle groove of the drip cup. Attach the drip cup drain tube to the drip cup outlet and then route the drain tube's end to a floor drain or other appropriate sanitary drain opening. Do not install the drain tube's end into the ice bin or sink drain fitting. Most municipal, county, and state health departments require that this drain tube run directly to floor or sanitary drain opening. CHECK YOUR LOCAL HEALTH CODES!

After all connection are made, turn on water supply, carbonator, CO2, and BIB pumps. CHECK ALL DISPENSER AND SYSTEM FITTINGS CONNECTIONS FOR LEAKS IMMEDIATELY!

ATTENTION!

The POST-MIX DISPENSER'S water supply line must be connected to the potable water supply with adequate backflow prevention to comply with federal, state, and local codes.



Fig.1

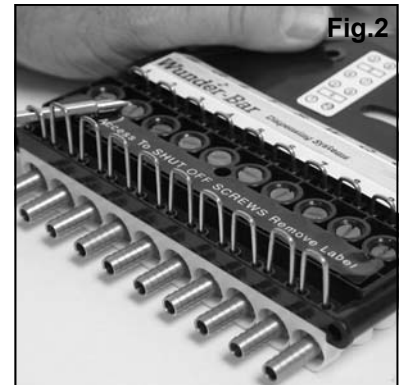


Fig.2

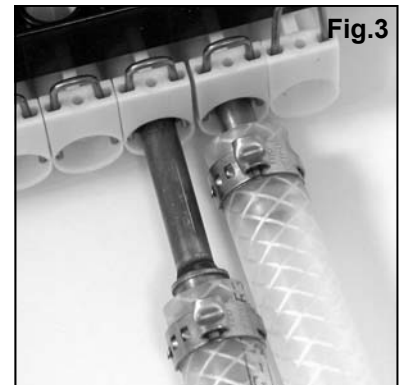


Fig.3

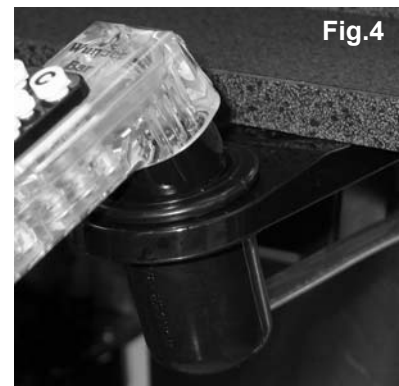


Fig.4

It will be necessary to brix your Wunder-Bar® Mechanical Flex Hose bar dispenser before use. Either a Wunder-Bar® Syrup separator and Brix Cup (Fig.5) or a refractometer may be used. Diet products do not contain sugar so a syrup separator must be used in conjunction with a Brix Cup.

Brix is the amount of sugar content in a finished product. A syrup separator (p/n PH10-83) is designed to separate the syrup/concentrate from the soda or plain water, allowing for proper measurement of products. A Brix Cup (p/n PH10-35) allows the user to visually compare and confirm the ratios of soda-to-syrup and water-to-syrup. A refractometer (Not available from Wunder-Bar) is a hand-held optical device used to measure the amount of sugar in solution in beverages containing sugar.

In order for accurate Brix measurements or readings to be made, it will be necessary to "ice down" the cold plate, by covering the cold plate located in the bottom of the ice bin with a minimum of 4" to 6" of ice. If a mechanically refrigerated beverage chilling system is to be used, instead of a cold plate, turn ON the refrigerated, re-circulating beverage unit and allow it to "chill down" to normal operating temperature before attempting to take Brix readings or measurements. Once the cold plate or refrigerated unit have reached temperature, dispense approximately 10 to 12 ounces of each beverage just before attempting to "read" each products' brix.

SETTING THE SODA AND WATER FLOW RATES

Set the flow rate to your specifications or to the nominal flow rate of 5 oz of soda in 3 seconds. Dispense Soda, through nozzle, into the large chamber of the Brix Cup or a measuring cup. Adjust the brix screw at the "S" position on the product manifold by turning the screw **counter-clockwise or "out" to increase** flow rates and **clockwise or "in" to decrease** flow rates (Fig.6). The brix screws are the exposed screws on the product manifold. Do not adjust the "Shut-Off Screws"! The shut off screws are closest to the input fittings side of the manifold and are covered with a label that reads: "FOR ACCESS TO SHUT OFF SCREWS REMOVE LABEL". (Fig.7) Do not confuse the two different screws! Repeat adjustment process for the Water.

ADJUSTING THE BRIX RATIOS

Now that soda and water flow rates are set, product brixing may begin. The "L" button corresponds to the "L" position on the product label at the manifold. "C" is for the "C" position, "T" for "T", etc. The syrup brix screws are adjusted in the same manner as Soda and Water Brix Screws; **counter-clockwise or "out" increases** flow rates, **clockwise or "in" decreases** flow rates. The most common ratio for Post-mix beverages is 5:1 (5 parts soda or water to 1 part syrup). However, some specialty beverages have 5.5:1 or higher ratios. Some juices and mixers have ratios as low as 1:1 to 2:1. Always read the BIB (Bag-In-Box) syrup container label for ratio specifications before starting. The small chamber (syrup side) of brix cup should fill to 1 oz. in the same amount of time it takes to fill the large chamber 5 oz. of soda or water—confirming a 5:1 brix ratio (Fig.5). If the product was 4:1 ratio, the small chamber would fill to the same 1 oz. mark, but the soda or water would fill to 4 oz. Repeat until all products are brixed.

SECONDARY WATER BRIX SCREW (Fig.8)

All Wunder-Bar® Post-Mix and Juice dispensers have a "Secondary Water Adjustment Screw" to enable juices and beverages with 2:1 and 1:1 ratios to be dispensed through buttons located under the lower right Butterfly Plate. The Secondary Water Brix Screw is factory set to the "open" position. Use a small bladed screwdriver to turn the screw Clockwise or "in" to decrease water flow to achieve 2.1 to 1:1 ratios for products like tomato juice and Bloody Mary Mix.

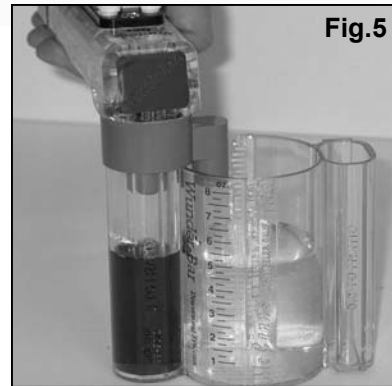


Fig.5

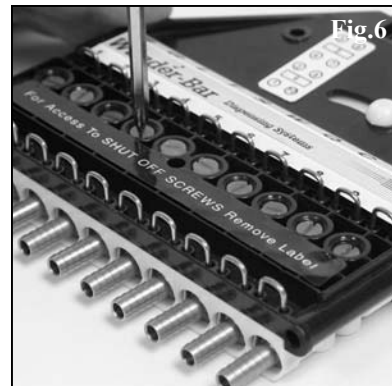


Fig.6

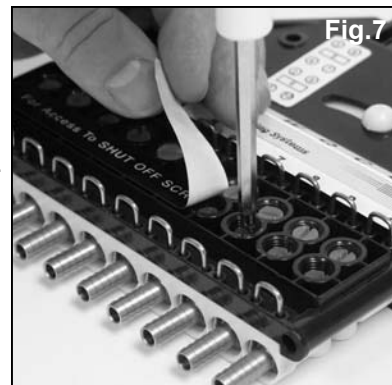


Fig.7

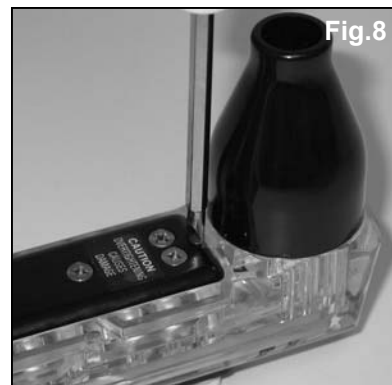


Fig.8

Wunder-Bar® Mechanical Post-Mix Dispensers can be configured for any combination of carbonated, non-carbonated, or non-carbonated premix products—up a total of 14 products total, including soda and plain water. All these combinations are field convertible without shutting off the dispenser. Wunder-Bar® Post-Mix Juice Dispensers are permanently factory-configured to dispense non-carbonated juices, mixes, and beverages, only.

BUTTONS AND BUTTERFLY PLATES

The Buttons and Button Plate can be removed while dispenser is under pressure (Fig.9). After the button plate has been removed, buttons and the configuration of the dispenser can be changed so that any combination of carbonated and non-carbonated buttons can be achieved. Simply remove the butterfly retainer screws (Fig.10) and lift out the butterfly plates (stainless steel plates with small ball bearings attached) to create various standard configurations and endless special configurations. The butterfly plate balls fit into the handle recess. The half moon cutout area of the butterfly plates are where the retainer and retainer screws are located when attaching the plates to the handle. When replacing the butterfly plates, be careful not to over-tighten the retainer screws. This may cause the plates to bind. See Butterfly Maps on pages 8 and 9.

SHUT OFF SCREWS

If it becomes necessary to work on the internal components of the dispenser, you must turn off all syrups, water, and carbonated water. Then press all buttons to de-pressurize the dispenser. If the dispenser is has a disconnect type manifold (Fig.11-13), this will be an easy task. Simply shut down the one station, while the others remain in operation. If the dispenser is equipped with a permanent manifold type, you must shut down the entire beverage system and turn off the water and CO2. The difference between a disconnect manifold and a permanent manifold is that the disconnect manifold is equipped with shut off screws (Fig.11), which allow the dispenser to be shut off at each dispenser's brix manifold without effecting the other dispensers. Permanent manifolds do not have shut off screws.

The Shut off screws work like a gate valve. There is a hole through the screw that runs in the same direction as the slot on the head of the shut off screw. The shut off screws are under the label that reads: "FOR ACCESS TO THE SHUT OFF SCREWS REMOVE THIS LABEL". The shut off screws are the Screws closest to the input fittings. (Fig.11) Turn the screws 90 degrees clockwise to shut off the flow of products to the dispenser. **Shut off screws do not shut off 100% and pressure will slowly build up in the flex hose tubes if left attached.** This will cause problems while working on the handle so be sure to disengage the flex hose from the brix block for service to the bottom of handle.

DISCONNECTING DISPENSER FROM BRIX MANIFOLD

After all shut off screws are turned off depress buttons on dispensing handle to release pressure in the flex hose tubes. Pull up on kwik clips between the tube collector and manifold (Fig.12). These are called the Interconnect kwik clips. (It is not necessary to remove the kwik clips). By lifting up all interconnect kwik clips and pushing the cam knob, the tube collector separates from the brix manifold (Fig.13). A replacement dispenser can now be placed onto the brix manifold, the interconnect kwik clips pushed back into place, shut off screws opened 90 degrees counter clockwise, and the new dispenser doesn't even have to be rebrixed! **OR** repairs can be made in a properly equipped, adequately lighted area, and out of the way of the bartender. Reinstall the dispenser back onto the brix manifold when repairs are completed. Re-brixing should not be required.

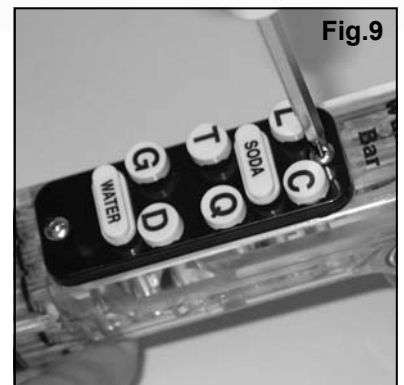


Fig.9

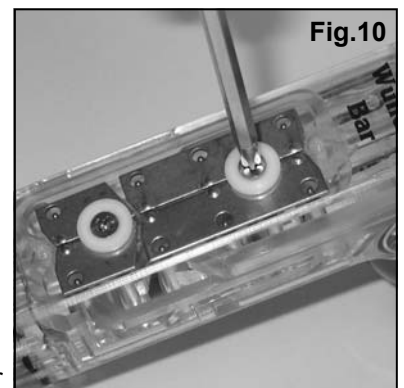


Fig.10

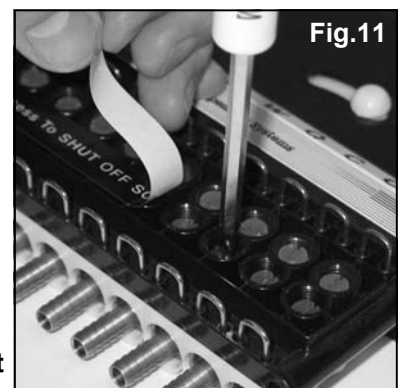


Fig.11

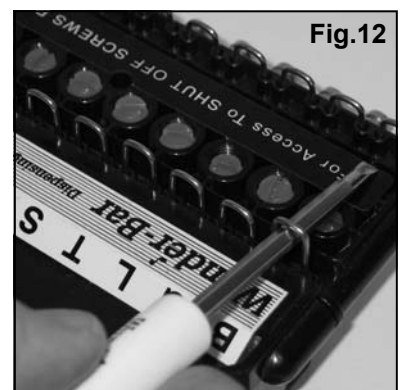


Fig.12

REPLACING O-RINGS IN THE HANDLE

DO NOT attempt to make repairs, of any kind, while the dispenser is connected to the manifold. After all shut-off screws have been turned 90 degrees to the OFF position, use a screwdriver to move all of the tube collector Kwik Klips to the "un-locked" position (Fig.12). Separate the flex-hose assembly from the manifold (Fig.13).

Remove the button plate. The butterfly plates may only need to be removed if a soda or water valve needs to be serviced. Otherwise, it will not be necessary to remove the butterfly plates.

Remove the bottom plate screws and bottom plate. Hold the dispenser in the palm of your hand with the nozzle pointing down. Push the desired plunger stem, from the top of the dispenser, downward into the palm of your hand, using a spare plunger stem, or a device the same diameter as that of the plunger stem (Fig.14, paper clip, drill bit, etc.). The hat, valve spring and valve plunger assembly drop out into your hand. Some models may have a stem spring.

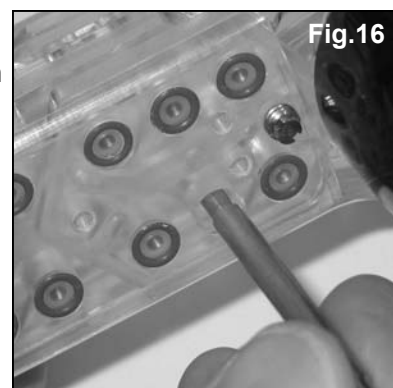
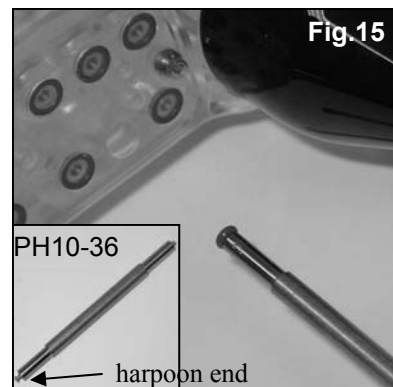
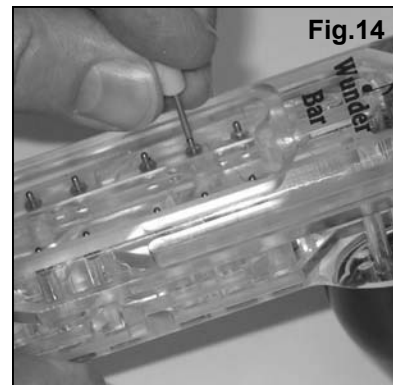
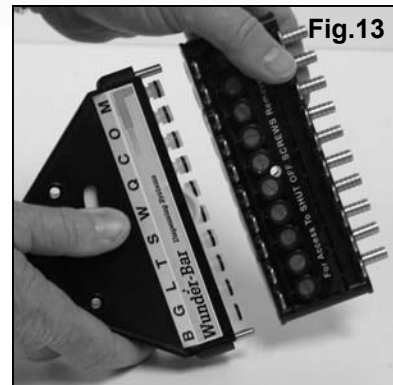
The Hat o-ring seals off bottom access hole of the valve cavity. The valve spring (also known as the hat spring) provides sufficient tension to return the plunger when button is not depressed. The stem o-ring seals around the plunger stem in the top of the handle. (See exploded Handle parts drawings for these various parts on pages 14, 17, 19, and 22).

REMOVAL OF STEM O-RING

The stem o-ring is still in the cavity of the dispensing handle. This o-ring cannot be removed from the top of the handle. It must be removed from the bottom of the handle. Turn the handle so that the nozzle is pointing up. Using the O-ring tool (p/n PH10-36) in your service kit, remove the stem o-ring with the "harpoon" end of the tool (Fig.15), (there are two ends to this tool, one is barbed or harpoon shaped and the other is blunt). Stab the o-ring with this tool, and it will slide onto the tool, making removal fast and easy. If you do not have this tool, straighten out a paper clip and put a slight bend on one end. Insert it up into the hole of the O-ring and withdraw the o-ring from the handle. Be careful, not to gouge or scratch the o-ring seat with the end of the paper clip.

REPLACING THE STEM O-RING

Using the opposite end of the o-ring tool, (the blunt end), place the replacement o-ring onto the end of the tool and push the o-ring into place. Make sure the o-ring is lubricated with Dow Corning food grade silicone lubricant supplied with your parts kit. If you do not have this material, you must use a suitable food grade silicone lubricant product. **At this point you must be careful!** Push the o-ring very gently up into its seat (Fig.16). As you push slowly and gently, you will pass an access hole. Rock the O-ring back and forth, as you go, so that the side of the O-ring does not catch on the edge of the side of the access hole. If you are not careful; you will cut the O-ring as you go by this side hole. After you have the o-ring all the way up into its seat, inspect the cavity to see if there are any o-ring shavings left behind. If so, you have damaged the O-ring and will have to repeat the removal of the stem o-ring. If you do not have the O-ring insertion tool, use the sank end of a drill bit. We recommend using a drill size of #24, 25, or 5/32". Be sure the stem O-ring is correctly and fully seated in the upper cavity. If it should become crooked or cocked and not remain in the seat, remove and insert a new O-ring.



REPLACING VALVE PLUNGER ASSEMBLY

Replace the (cream colored) molded Santoprene® rubber valve plunger assembly back into handle, being careful to align in cavity before pushing the valve's stem through the stem o-ring. Wipe the inside wall of valve cavity clean and dry with a Q-tip (Fig.17). This is a very important step! Make sure the inside wall is clean and dry! Pick up the hat and valve spring assembly. Wipe the Hat o-ring carefully, while rotating the spring on a clean, dry towel. Push into handle with the tip of the index finger. Leave finger tip positioned over the o-ring until you are sure it does not back out of the cavity. If hat and o-ring stays in place, immediately replace the bottom plate. **If the hat pops out, roll the hat o-ring assembly in baking soda (Fig.18, white powder included with parts kit) and try again.** If this fails, change the Hat o-ring. Replace bottom plate. **Do not over-tighten the bottom plate screws as permanent damage to the handle may result.**

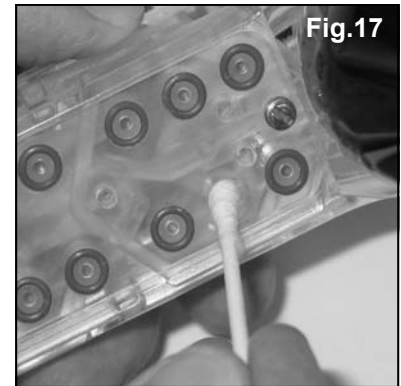


Fig.17

TUBE COLLECTOR

When the tube collector is apart from the brix manifold, the tube collector cover plate can be removed exposing the product tubing (Fig.19). The three tubes at each outer position are large ID (six total), faster flow tubes, for heavy syrup or juice products. The interconnect fittings for the large tubes have the letter "B" molded into the base of every fitting. These tubes are attached to the dispensing handle in the four lower (back of handle) product inlet positions, which have larger tracks through the handle providing greater flow rates. The two blue colored tubes are the high pressure tubes used for soda and water. The remaining tubes are standard ID tubes. Both the blue tubes and the standard syrup tubes have smaller Interconnect fittings with the letter "A" molded into the base of every fitting. Red lock Rings are used to secure the large ID syrup tubes and the blue tubes to their "B" interconnect fittings. White Lock Rings are used to secure the standard ID tubes to "A" interconnect fittings.

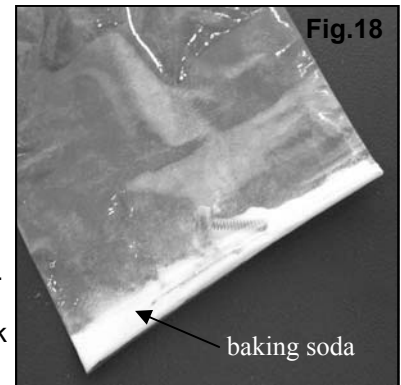


Fig.18

REPLACING A PRODUCT TUBE

Disconnect the Handle and sheathing assembly from the manifold. Remove the Tube Collector Cover screws to gain access to the tube-ends and interconnect fittings. Lift up on the desired tube's interconnect fitting and unsnap it to separate it from the tube collector. The Individual tube can now be replaced in the field. Remove the four screws from the handle heel and slide the heel and sheathing away from the handle. Loosen and remove the two retainer posts, using a hex driver, wrench, or pliers, from the rear of the handle. NOTE: The word "UP" is stamped into the retainer plate at the top to aid proper tubing to handle orientation during re-assembly. Pull the retainer plate and tubing (with ferrules and caps) away from the handle.

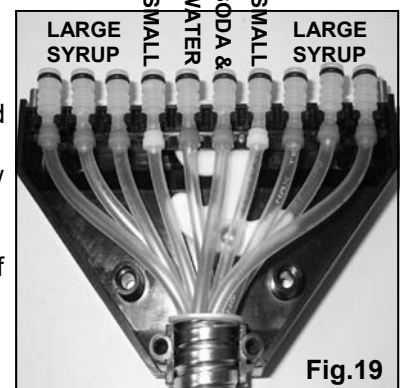


Fig.19

A new tube assembly with an, interconnect fitting and lock ring attached, would be ordered from the factory. Cut the old interconnect fitting off of the old tube. Tape the no fitting end of the new tube to the old tube-end. Locate the tube to be replaced—at the heel end of the sheathing—and slowly pull the tube through the sheathing all the way to the back of the retainer plate. Un-tape the tubes and discard the old tube. Insert the new tube's end through the open hole in the retainer plate about 1 to 1-1/2". Dip the tube end in hot water for 3 seconds and then install the ferrule into the tube end. Install the ferrule cap onto the tube end with ferrule installed. Push all of the tubes' back to the retainer plate surface. Align the mark to the top of the handle while inserting all ten tube ends with ferrules and caps back into their o-rings in the back of the handle. Once all ten are properly inserted, re-install the two retainer posts while visually confirming that all ten ferrule caps are centered in their respective tube seal o-rings. Do not over-tighten the retainer posts.

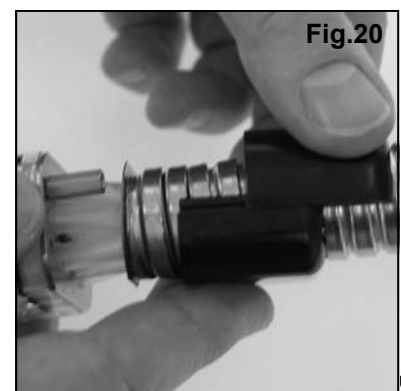


Fig.20

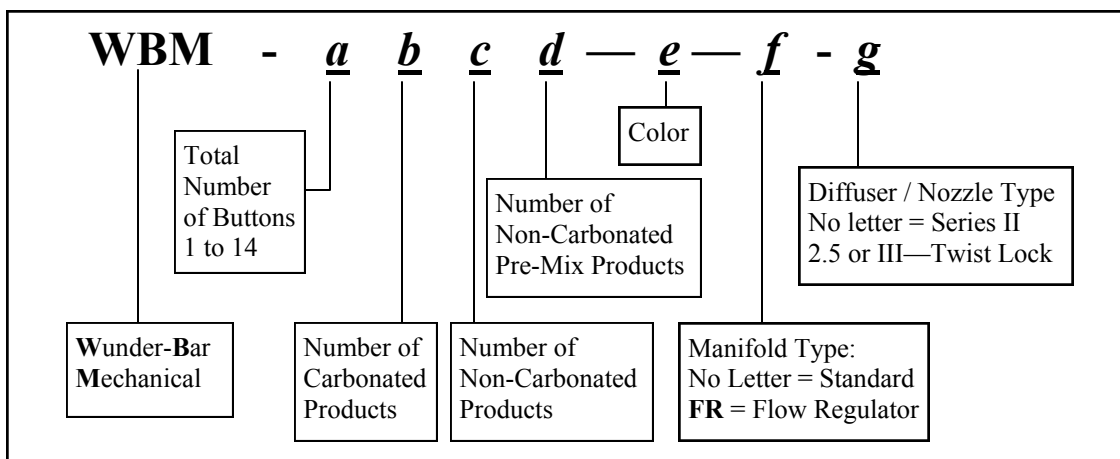
The Wunder Bar Mechanical Flex Hose bar dispenser is available in 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, and 14 button models. All models can be configured for many combinations of carbonated, non-carbonated, non-carbonated premix products at any time. All of these combinations are field-convertible and can be modified without shutting off the dispenser. All seven, eight, and nine button dispensers have all the necessary valves and product tubes already installed into the dispenser, making the upgrade to up to ten buttons as easy as adding buttons on the handle and input modules and input fittings at the manifold.

BUTTONS AND BUTTERFLY PLATES

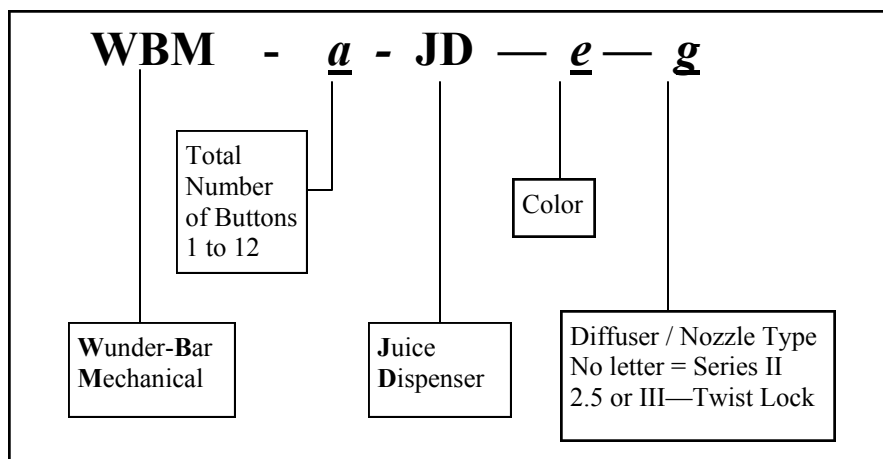
The buttons and button plate can be removed while dispenser is under pressure. After the button plate has been removed, buttons can be changed as can the configuration of the dispenser. By removing the butterfly retainer and screws, and lifting out the butterfly plates (stainless steel plates with small ball bearings welded to their underside) we can create Various standard configurations and endless special configurations. The butterfly plate balls fit into indentations in the handle recess. The half moon cut out area of the butterfly plates are where the retainer and retainer screws are located when attaching the plates to the handle. When replacing butterfly plates, be careful not to over-tighten the retainer screws. Over-tightening the retainer screws can cause the butterfly plates to bind. See the *Butterfly Plate Maps* on pages 8 and 9 of this manual.

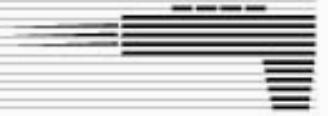
EXPLANATION OF MODEL NUMBERS

POST-MIX AND ENERGY DRINK DISPENSERS



POST-MIX JUICE DISPENSERS





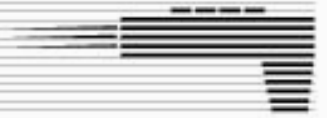
BUTTERFLY MAP

<p>WBM-10800</p>	<p>WBM-10710</p>	<p>WBM-10620 (WBM-860)</p>	<p>WBM-10530 (WBM-851)</p>
<p>WBM-10440</p>	<p>WBM-10350</p>	<p>WBM-10260</p>	<p>WBM-10170</p>
<p>WBM-10080</p>	<p>WBM-12640</p>	<p>WBM-12550</p>	<p>WBM-12460</p>

● = Carbonated positions

* = Secondary water metering screw effects these positions

○ = Non-Carbonated positions ® = Requires Soda/Water Button foot extensions into bottom of button on the side that this symbol appears.



BUTTERFLY MAP

<p>WBM-12820</p>	<p>WBM-12730</p>	<p>WBM-12640</p>	<p>WBM-12550</p>
<p>WBM-12460</p>	<p>WBM-12370</p>	<p>WBM-12280</p>	<p>WBM-14840</p>
<p>WBM-14750</p>	<p>WBM-14660</p>	<p>WBM-14570</p>	<p>WBM-14480</p>

● = Carbonated positions * = Secondary water metering screw effects these positions
 ○ = Non-Carbonated positions ® = Requires Soda/Water Button foot extensions into bottom of button on the side that this symbol appears.



FLOW REGULATORS

LIQUID FLOW REGULATORS

The purpose of the flow regulator is to provide a more precise brix ratio between soda and syrup during pressure fluctuations. The regulators compensate for pressure variances by automatically reducing the amount of product that passes through when pressure rises, and increasing amounts when pressure falls. Liquid flow regulators manufactured for post-mix beverage dispensers use a "piston" moving up or down within a "cylinder". Typically, a small opening at one end of the piston is where the liquid enters. Located within the hollow piston is an adjustable tension spring which provides resistance against the path of liquid flow.

HOW IT WORKS

Incoming liquid, under pressure, forces the piston upward against the adjusted tension spring. As the piston moves, the regulating process begins. It partially or fully closes the outlet holes located in the top of the cylinder wall. As pressure varies, the piston will move in a direction to open or close the outlet holes to maintain the preset flow rate.

FACTORY GUIDELINES

The flow control regulator is not a "fix-all" for varying pressures over a wide range. There are limitations, a minimum operating pressure and a maximum operating pressure. This range is determined by the "Finished Product" (FP) flow rate. When you lower the FP flow rate, you increase the operating range. Therefore, a slower FP rate is generally better because lower pressures can be applied to the syrups and this increases the regulator's accuracy and consistency. To maintain a proper flow and desired "Finished Product (FP)", flow rate must first be established. The following finished product flow rate chart is to assist you in flow rate setting.

CAUTION: Before you begin to set rates, make certain that all air has been removed from the soda, water and syrup lines. Air will cause varying flow. Also, be sure to chill all liquid to its normal operating temperature to assure proper settings.

GENERAL OPERATING INSTRUCTIONS FOR FLOW REGULATORS

Your Flow Regulator Manifold was factory pre-set and tested to the following pressures and flow rates:

Achieving Finished Product Flow Rate of 1.5 Ounces Per Second

1. Set High CO2 pressure to 90 PSI (flow) to Carbonator
2. Set Low CO2 pressure to 60 PSI (flow) to BIB pumps for Sugar-based syrups.
3. Set Diet CO2 pressure to 20 PSI (flow) to BIB pumps for Diet syrups.
4. Set Soda flow rate to 6.5 ounces in 5 seconds (See adjustment procedures below)
5. Set Syrup to Soda/Water ratio to 5:1 for most carbonated products. Other ratios will be noted on the BIB label.

At 1.5 ounces per second finished product flow rate, controllable pressure "throw" ranges are:

SODA: 40 to 110 PSI

SUGAR BASED SYRUPS: 20 TO 80 PSI

DIET SYRUPS: 10 TO 40 PSI

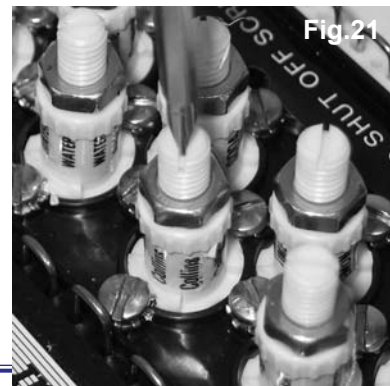
FLOW REGULATOR ADJUSTMENT

Once the Soda and Water flow rates have been set, only adjust the syrup flow regulator adjustment screws if the ratio is not correct. Loosen the desired syrup's lock nut first, before attempting adjustments

To decrease the amount of syrup: Turn the adjustment screw counter-clockwise (fig.21).

To increase the amount of syrup: Turn the adjustment screw clockwise (Fig.21).

Always make adjustments in 1/4 to 1/2 turn increments.



EQUIPMENT AND SUPPLIES NECESSARY

- Clean 5 gallon bucket (1)
- Clean cloth towel (1)
- Safety goggles and rubber gloves

CLEANING SOLUTION

Kay-5® Sanitizer/Cleaner, chlorinated alkaline product is approved for use as a manual type cleaner or for use as a chlorinating sanitizer. Kay-5® is available in 1 oz. packets. Two, 1 oz. packets of Kay 5® mixed with 5 gallons of water, will deliver the appropriate cleaner concentration.

PREPARATION:

Prepare sanitizing solution by adding two, 1 oz. packets of Kay-5® to 5 gallons of potable water (not greater than 100°F) in a clean 5 gallon bucket. This produces a 100 PPM chlorine solution. Stir to ensure Kay-5® crystals are completely dissolved.

CAUTION: Chlorinated detergents are corrosive. Wear rubber gloves and safety goggles while performing all cleaning and sanitation procedures.

Note: If a chlorinated sanitizer/cleaner other than Kay-5® is used, follow the manufacturer's instructions for proper dilution to produce 100 PPM Sanitizer/Cleaner solution.

DO NOT USE BLEACH. Bleach is abrasive and harsh on the numerous plastic components in our dispensing systems. We have confirmed that using a buffered chlorinated detergent and following the prescribed procedures ensures optimum sanitation and maintenance of dispensing equipment. This will limit sanitizer odor/off-taste carryover that could be perceived as a hazard

CLEANING THE SHEATHING

Materials Required:

Cleaning Solution (see CLEANING SOLUTION, above)
Flexible soft plastic bristle brush
Clean, dry Bar Towel

1. Immerse the Brush in Cleaning Solution as shown in **Fig.1**.
2. Wrap the brush around the sheathing at the Heel end (**Fig.2**). Move the brush up and down the entire length of the Sheathing, from Heel to Manifold (**Fig.3**), a minimum of 6 times.
3. Immerse the Brush in the Cleaning Solution. Rotate the Sheathing Brush 1/2 turn. Move the Brush up and down the entire length of the Sheathing 6 more times.
4. Immerse the Sheathing Brush in the Cleaning Solution. Rotate the Sheathing Brush an other 1/2 turn. Move the Sheathing Brush up and down the entire length of the Sheathing a minimum of 6 more times. Dry the entire length of the Sheathing with a clean bar towel.

CLEANING THE NOZZLE

Material Required:

Cup of Cleaning Solution (see *CLEANING SOLUTION* above)

- 1a. SERIES II NOZZLE REMOVAL: (Compression Fit, two O-rings) (Fig.4)
Grasp the nozzle and twist back and forth while pulling the nozzle away from the handle. If the nozzle is difficult to remove, immerse nozzle end of the handle in a cup of carbonated water for five minutes before attempting removal again.
- 1b. SERIES 2.5 and SERIES III: (Twist-Lock, one O-ring) (Fig.5)
Grasp and twist the nozzle counterclockwise to unscrew the nozzle from the Handle. If the nozzle is difficult to remove, immerse nozzle end of the handle in a cup of carbonated water for five minutes before attempting removal again.
2. Remove nozzle and place in cup of cleaning solution (see CLEANING SOLUTION above) for 2 minutes. Immerse a clean brush in the sanitizer solution. Scrub nozzle and diffuser with a clean brush until any and all buildup is removed.
3. Remove nozzle from sanitizer solution. Allow nozzle and diffuser to air dry.
4. Reinstall nozzle onto diffuser.
5. Dispense a beverage to confirm proper operation.

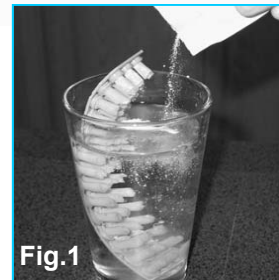


Fig.1



Fig.2



Fig.3



Fig.4



Fig.5

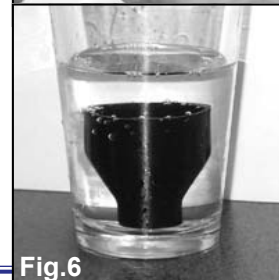


Fig.6

The Wunder Bar Mechanical Flex Hose bar dispenser is a NON -ELECTRIC dispenser. Rather than opening electrical solenoids by activating a switch in the handle, the button actually pushes down on tiny valves to allow water, soda and syrup to flow out. No electricity is generally an advantage in a wet bar environment. This means our dispenser can be soaked in lukewarm or cold water, which we recommend to be done when necessary, without being damaged. The dispenser is not intended to be used as an ice pick and should never be utilized to crack or chip ice. Under normal conditions this Wunder Bar dispenser should last for many years of trouble free service.

CLEANING A POST-MIX SYSTEM

WASH INSTRUCTIONS:

1. Fill the Sanitizer Tank (**Fig.7**) or Bucket (**Fig.8**) with Cleaning Solution (see *CLEANING SOLUTION* section on page 11). Label all BIB connectors to prevent mix-up. Disconnect all connectors from the Bag-In-Box Syrup Containers.
- 2a. **SANITIZING TANK:** Attach the BIB connector to the Sanitizing Tank outlet (**Fig.9**) to WASH one syrup circuit at a time, or to the tank manifold (if so equipped) to WASH multiple lines. Pressurize the tank to 30 to 40 PSI.
- 2b. **BUCKET:** Attach the BIB connector(s) to the appropriate cleaning adapter(s). Place the connector (s), with the adapter(s) installed, into the bucket of cleaning solution (**Fig.10**) so that they resting in the bottom, fully submerged.
3. Press and hold, one flavor button (exceptions are WATER and SODA) at a time, (**Fig.11**) until cleaning solution with no syrup present is dispensed from the nozzle. Repeat this process for all flavor buttons.
4. Allow the cleaning solution to remain in the system for a minimum of two minutes. Then proceed to step 5, RINSE INSTRUCTIONS.

RINSE INSTRUCTIONS:

5. Rinse and fill the Sanitizing Tank or Bucket with clean warm water (100° F / 38° C).
- 6a. **SANITIZING TANK:** Attach the BIB connector to the Sanitizing Tank outlet(s) (**Fig.2**) to RINSE one syrup circuit at a time, or to a tank manifold (if so equipped) to RINSE multiple lines Pressurize the tank to 30 to 40 PSI.
- 6b. **BUCKET:** Attach the BIB connector(s) to the cleaning adapter(s). Place the connector(s), with the adapter(s) installed, into the bucket of water (**Fig.10**) so that they resting in the bottom, fully submerged.
7. Press and hold, one flavor button (exceptions are WATER and SODA) at a time, (**Fig.11**) until pure water with no cleaning solution present is dispensed from the nozzle. Repeat this process for all flavor buttons
8. Proceed to step 9, SANITIZE INSTRUCTIONS.

SANITIZE INSTRUCTIONS

9. Fill the Sanitizer Tank (**Fig.7**) or Bucket (**Fig.8**) with Cleaning Solution (see *CLEANING SOLUTION* section on page 11). Disconnect all connectors from the Bag-In-Box Syrup Containers.
- 10a. **SANITIZING TANK:** Attach the BIB connector to the Sanitizing Tank outlet(s) (**Fig.2**) to RINSE one syrup circuit at a time, or to a tank manifold (if so equipped) to RINSE multiple lines Pressurize the tank to 30 to 40 PSI.
- 10b. **BUCKET:** Attach the BIB connector(s) to the appropriate cleaning adapter(s). Place the connector (s), with the adapter(s) installed, into the bucket of cleaning solution (**Fig.10**) so that they resting in the bottom, fully submerged.
11. Press and hold, one flavor button (exceptions are WATER and SODA) at a time, (**Fig.11**) until approximately 10 ounces of cleaning solution is observed being dispensed from the nozzle. Repeat this process for all flavor buttons.

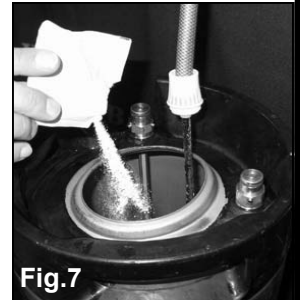


Fig.7



Fig.8

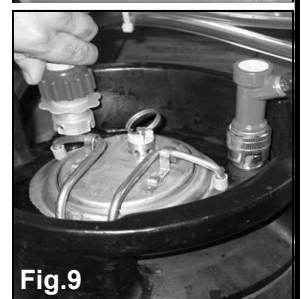


Fig.9



Fig.10

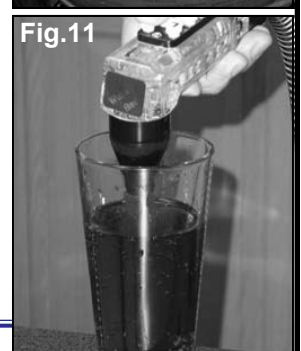


Fig.11

PROBLEM: Push product button and no syrup is dispensed.

POSSIBLE SOLUTION: *Check to make sure there is product in Syrup tank or BIB containers. *Check product connection at BIB container's outlet fitting and the pump. *Check CO2 supply to syrup tank or BIB pump. * Is product or pump inlet line kinked or crimped? *Is shut off screw in closed position? Open shut off screw. * Is brix screwed in too far? Open brix screw.

PROBLEM: Push soda button and no soda is dispensed.

POSSIBLE SOLUTION: * Is carbonator plugged in? Check power supply. * Is water supply to carbonator on? Check water supply. * Check CO2 supply to carbonator. * Is line kinked or crimped? *Is shut off screw in closed position? Open shut off screw (page 3). * Is brix screw screwed in too far? Open brix screw (page 3). * Is proper butterfly configuration being used? Check butterfly maps on pages 8 and 9.

PROBLEM: Push water button and no water is dispensed.

POSSIBLE SOLUTION: * Check water supply. * Is line kinked or crimped. *Is shut off screw in closed position? Open shut off screw. * Is brix screw screwed in too far? Open brix screw. * Is proper butterfly configuration being used? Check Butterfly map.

PROBLEM: Push product button, dispenses wrong product.

POSSIBLE SOLUTION: *Is correct BIB container connected to proper BIB pump? Check BIB product container and pump. * Is correct product tubing connected to proper position on manifold? Check connection at brix manifold.

PROBLEM: Product(s) taste "weak" or watered down.

POSSIBLE SOLUTION: Was dispenser brixed at proper operating temperature? Make sure cold plate is iced down correctly. * Is CO2 supply to containers or pumps set properly? Check CO2 supply and regulators, adjust to correct settings. Check CO2 supply to carbonator, set high pressure regulator between (95-105 PSI). Check brix screw on soda and/or water positions. Check brix screws on product. Check to be certain shut off screw slots are in proper position. (Flow runs in same direction as slot.) **Rebrix dispenser.**

PROBLEM: Product(s) taste "strong" or syrupy.

POSSIBLE SOLUTION: Was dispenser brixed at proper operating temperature? Make sure cold plate is iced down correctly. * Is CO2 supply to containers or pumps set properly? Check CO2 supply and regulators, adjust to correct settings. Check CO2 supply to carbonator, set high pressure regulator between (95-105 psi). Check brix screw on soda and/or water positions. Check brix screws on product. Check to be certain shut off screw slots are in proper position. (Flow runs in same direction as slot.) **Re-brix dispenser.**

PROBLEM: Push button and release, product keeps dispensing.

POSSIBLE SOLUTION: * Butterfly plates are too tight. Remove button plate and loosen butterfly retainers, these only need to be snug. **Do not over tighten!** * Debris caught in cork o- ring. Hold hand over nozzle, depress all buttons at once, back flushing dispenser. This may dislodge particle enough to pass through dispenser. Change cork o-ring.

PROBLEM: When button is depressed, product oozes from under button plate.

POSSIBLE SOLUTION: * Stem o-ring defective. Replace stem o-ring (p/n PH10-20).

PROBLEM: Product leaks or drips out of nozzle.

POSSIBLE SOLUTION: * Cork o-ring (older models) or molded valve defective. Replace cork o-ring or replace entire valve with new molded valve stem (p/n PH10-89).

PROBLEM: Product leaking around bottom plate.

POSSIBLE SOLUTION: * Hat o-ring has failed. Replace hat o-ring(p/n PH10-26).

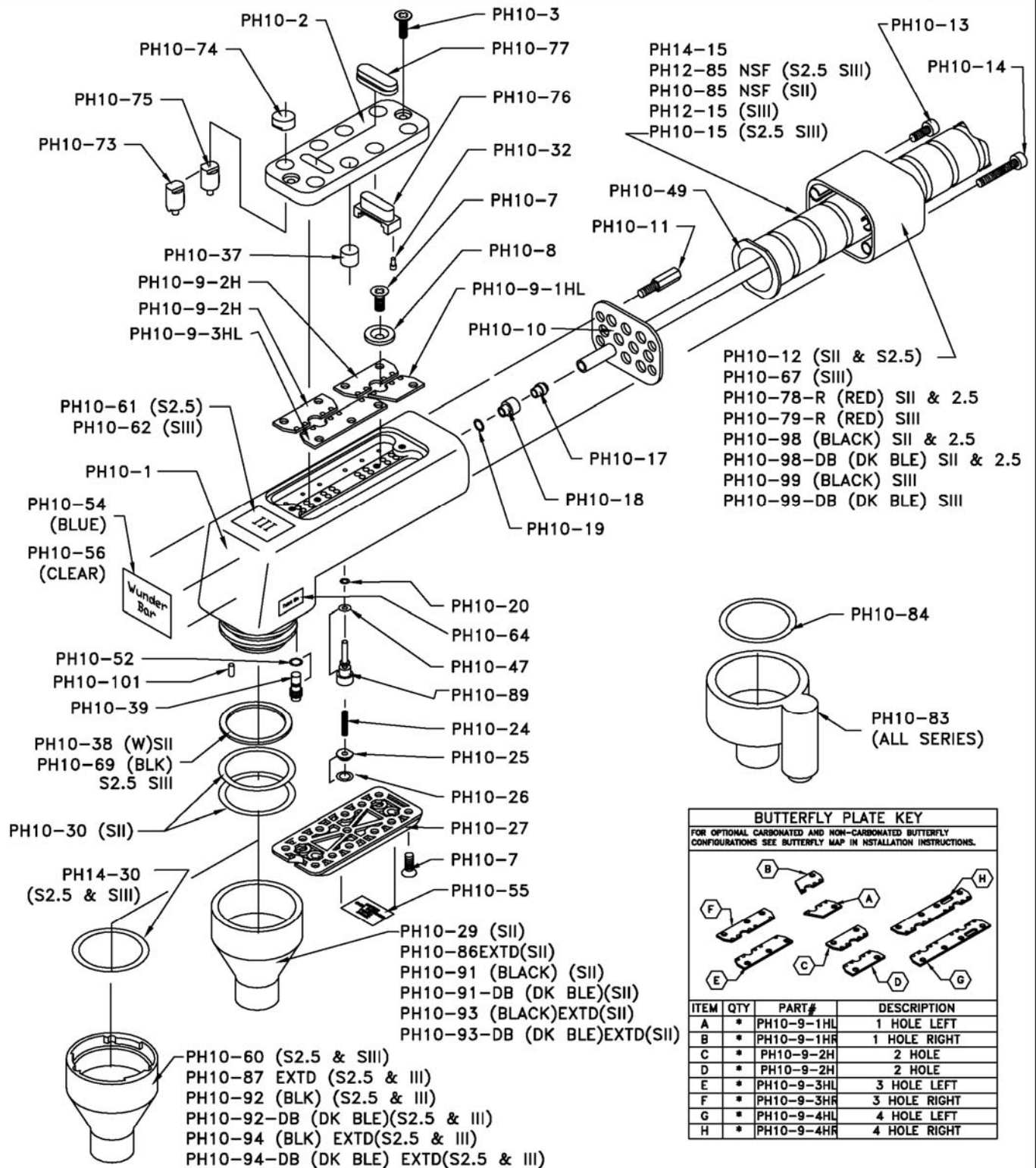
* Bottom plate screws are loose. Tighten bottom plate screws. **Do not over tighten!** Bottom plate screws have been over tightened, causing damage to handle and/or bottom plate. May be necessary to replace handle and/or bottom plate.

* Bottom plate has warped. Replace bottom plate.

10 BUTTON POST MIX HANDLE (SII, S2.5, SIII)

JOB:

ITEM#:



BUTTERFLY PLATE KEY
FOR OPTIONAL CARBONATED AND NON-CARBONATED BUTTERFLY CONFIGURATIONS SEE BUTTERFLY MAP IN INSTALLATION INSTRUCTIONS.

ITEM	QTY	PART#	DESCRIPTION
A	*	PH10-9-1HL	1 HOLE LEFT
B	*	PH10-9-1HR	1 HOLE RIGHT
C	*	PH10-9-2H	2 HOLE
D	*	PH10-9-2H	2 HOLE
E	*	PH10-9-3HL	3 HOLE LEFT
F	*	PH10-9-3HR	3 HOLE RIGHT
G	*	PH10-9-4HL	4 HOLE LEFT
H	*	PH10-9-4HR	4 HOLE RIGHT

Wunder - Bar Dispensing Systems

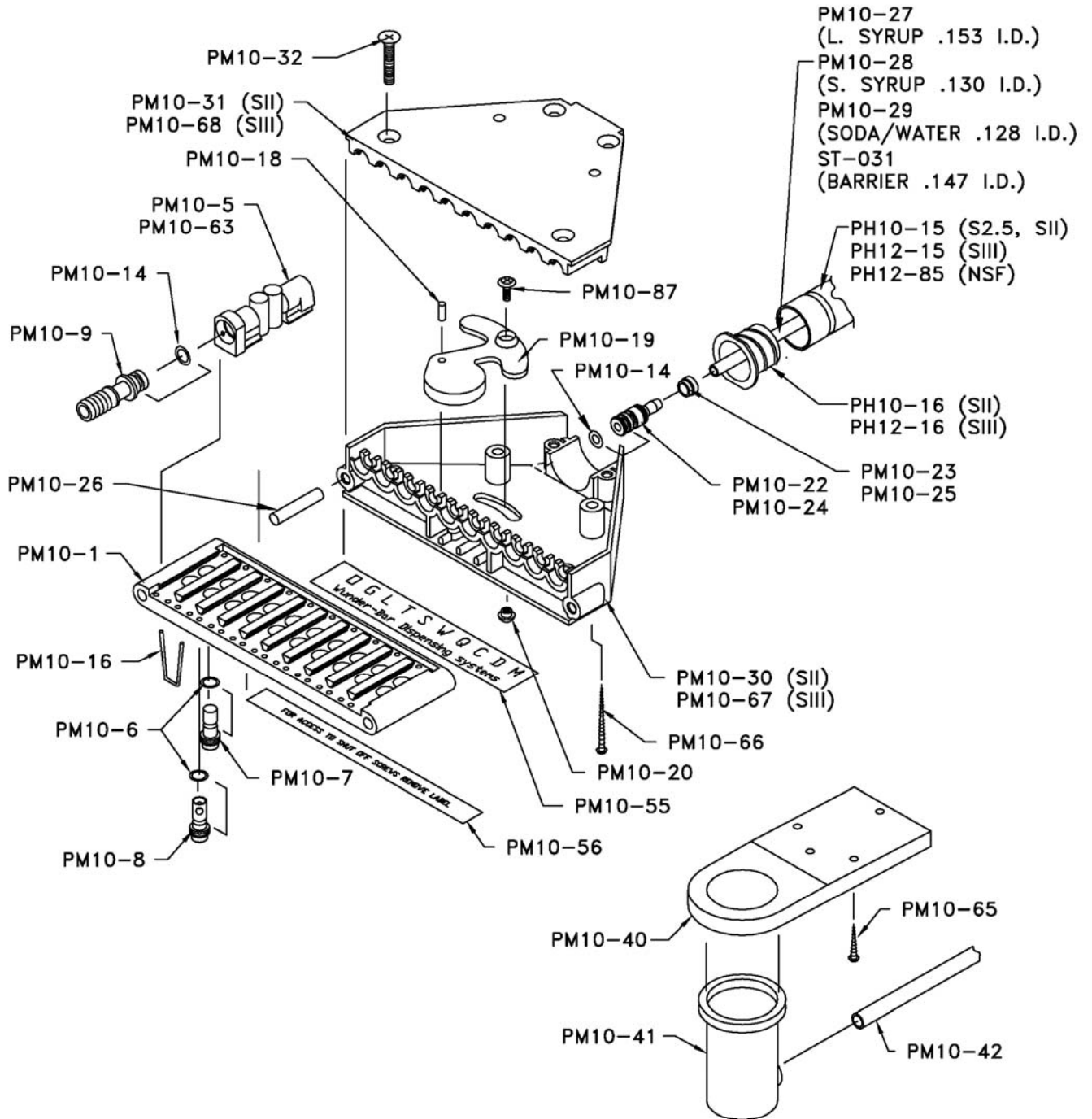
AUTOMATIC BAR CONTROLS, INC.
790 EUBANKS DRIVE
VACAVILLE, CA 95688

PHONE: (707) 448-5151
FAX : (707) 448-1521

10 BUTTON POST MIX
MANIFOLD (SII, S2.5, SIII)

JOB:

ITEM#:



Wunder - Bar

Dispensing Systems

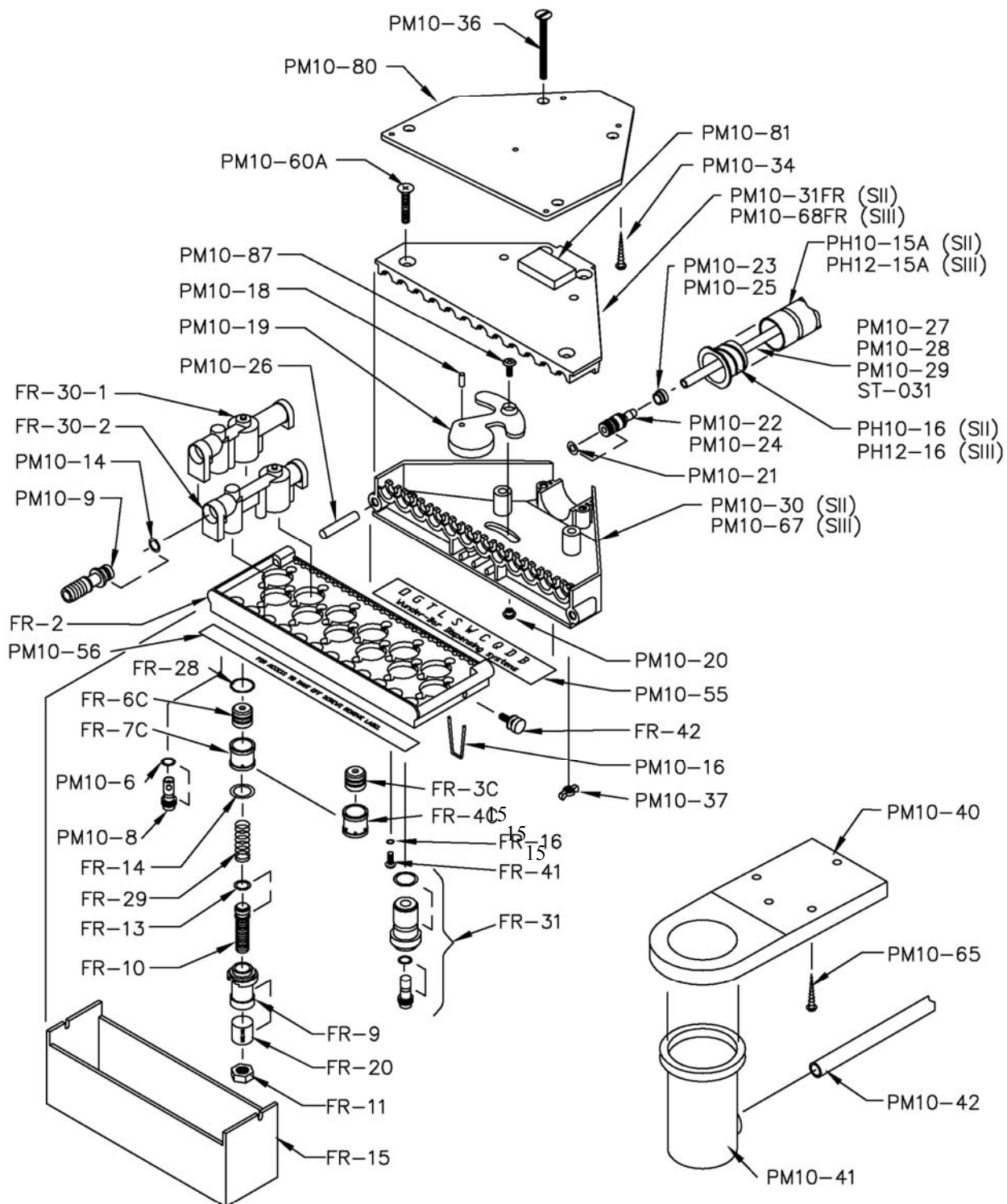
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FAX : (707) 448-1521

**10 BUTTON POST MIX
MANIFOLD W/FLOW
CONTROL (SII, S2.5, SIII)**

JOB:

ITEM#:



Wunder-Bar

Dispensing Systems

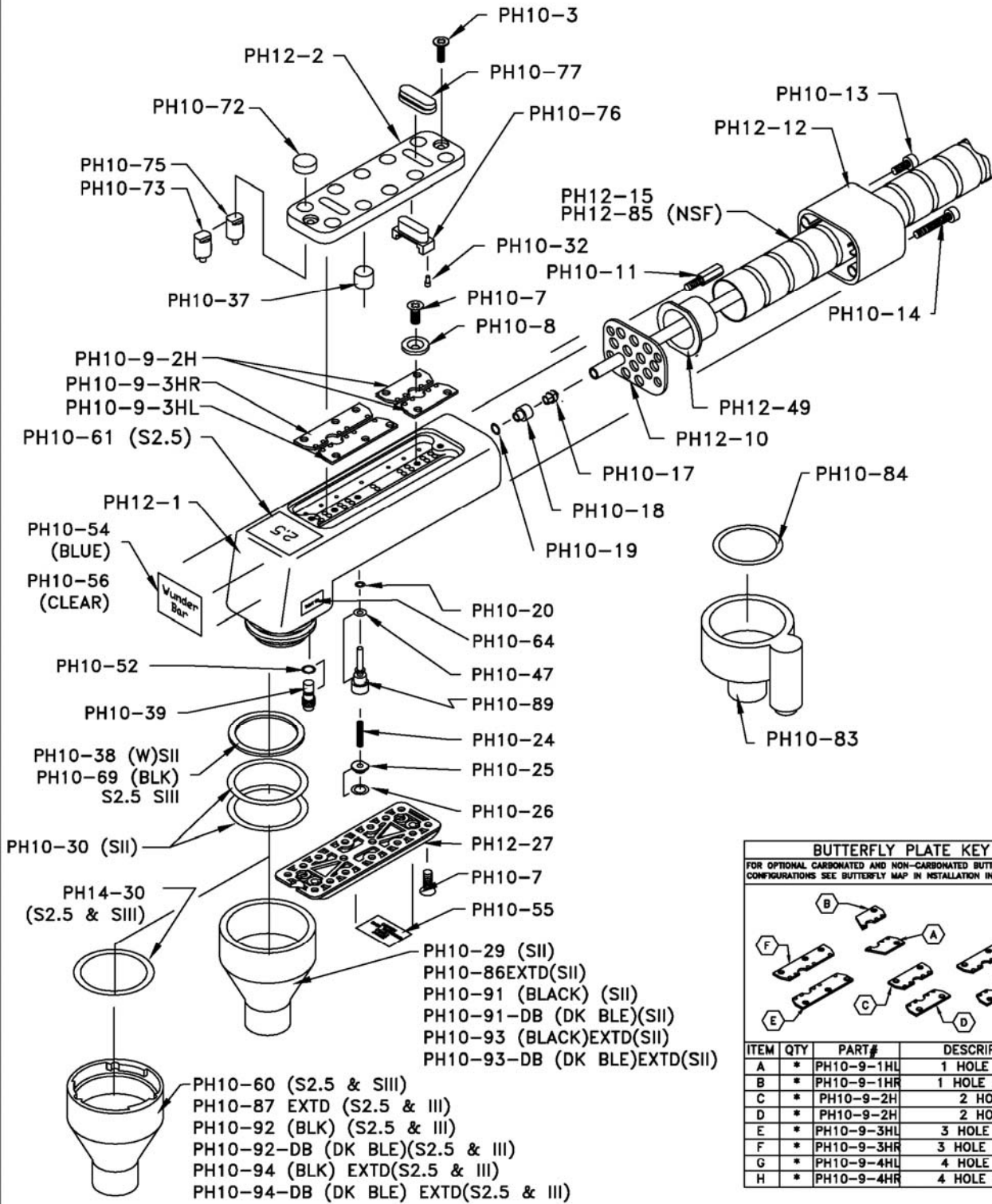
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790 EUBANKS DRIVE
VACAVILLE, CA 95688

PHONE: (707) 448-5151
FAX : (707) 448-1521

12 BUTTON POST MIX HANDLE (SII, S2.5)

JOB:

ITEM#:



BUTTERFLY PLATE KEY
FOR OPTIONAL CARBONATED AND NON-CARBONATED BUTTERFLY CONFIGURATIONS SEE BUTTERFLY MAP IN INSTALLATION INSTRUCTIONS.

ITEM	QTY	PART#	DESCRIPTION
A	*	PH10-9-1HL	1 HOLE LEFT
B	*	PH10-9-1HR	1 HOLE RIGHT
C	*	PH10-9-2H	2 HOLE
D	*	PH10-9-2H	2 HOLE
E	*	PH10-9-3HL	3 HOLE LEFT
F	*	PH10-9-3HR	3 HOLE RIGHT
G	*	PH10-9-4HL	4 HOLE LEFT
H	*	PH10-9-4HR	4 HOLE RIGHT

Wunder - Bar

Dispensing Systems

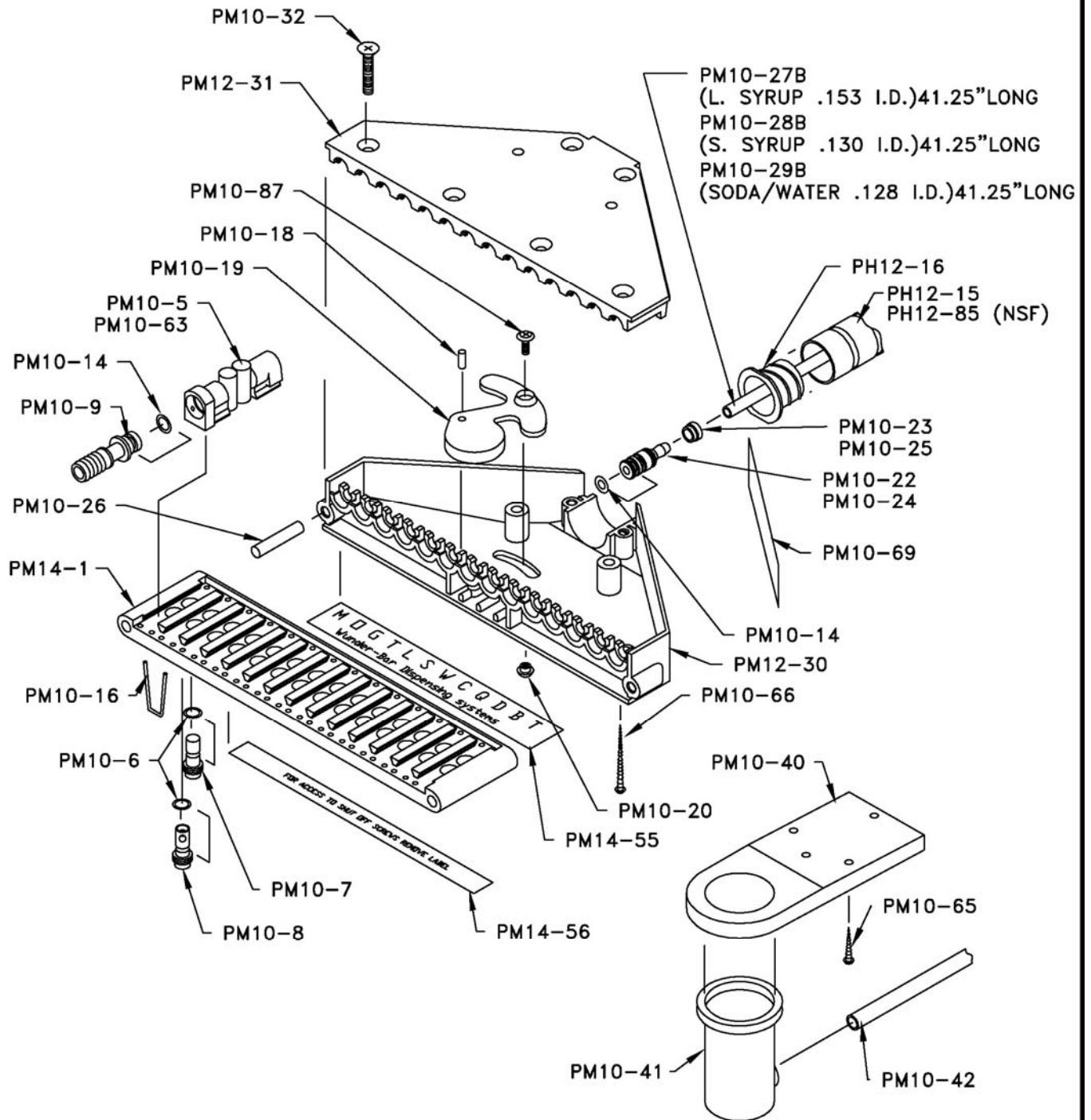
AUTOMATIC BAR CONTROLS, INC.
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12 BUTTON POST MIX MANIFOLD (SII & S2.5)

JOB:

ITEM#:



Wunder-Bar

Dispensing Systems

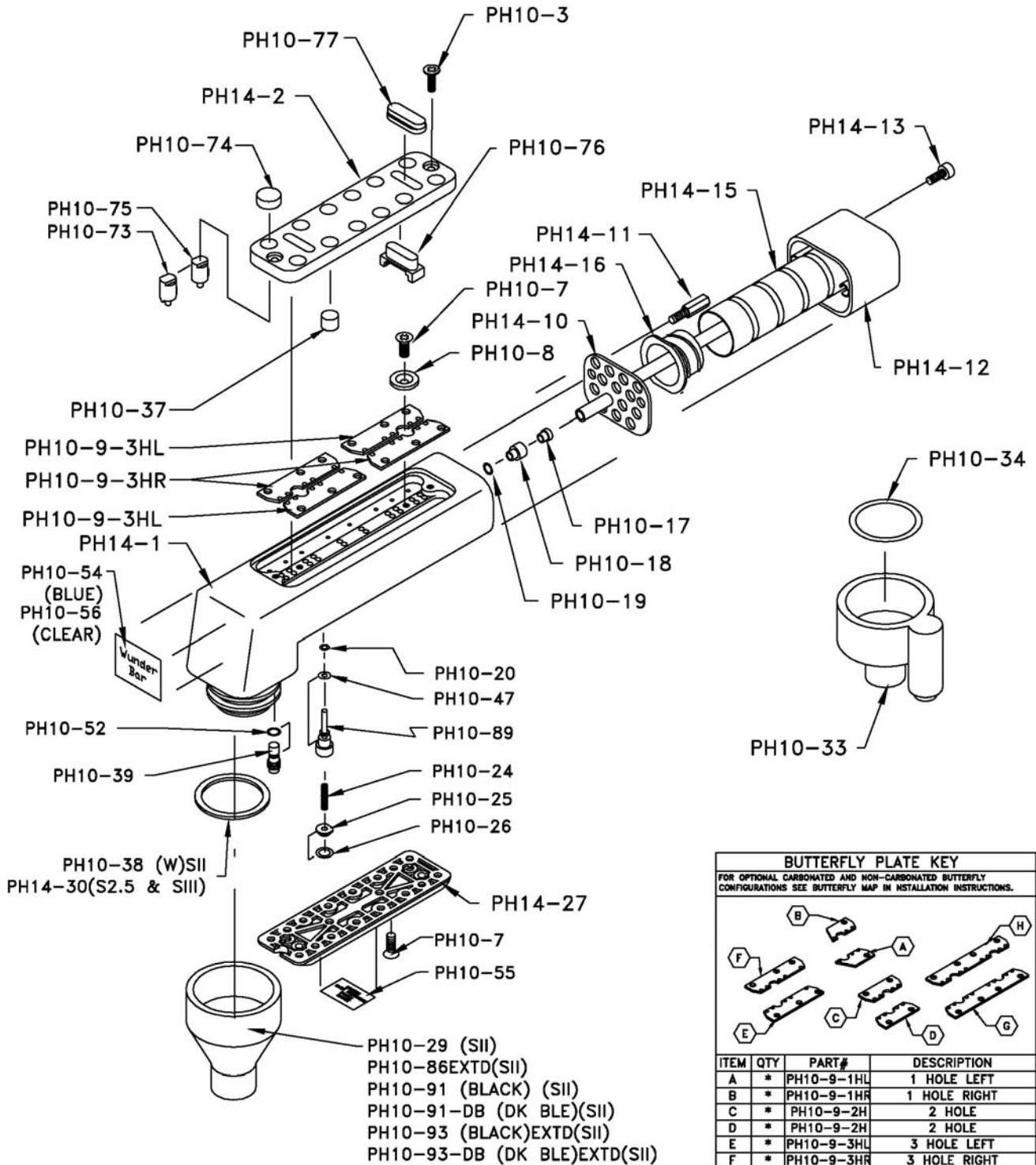
AUTOMATIC BAR CONTROLS, INC.
790 EUBANKS DRIVE
VACAVILLE, CA 95688

PHONE: (707) 448-5151
FAX : (707) 448-1521

14 BUTTON POST MIX HANDLE (SII)

JOB:

ITEM#:



BUTTERFLY PLATE KEY			
FOR OPTIONAL CARBONATED AND NON-CARBONATED BUTTERFLY CONFIGURATIONS SEE BUTTERFLY MAP IN INSTALLATION INSTRUCTIONS.			
ITEM	QTY	PART#	DESCRIPTION
A	*	PH10-9-1HL	1 HOLE LEFT
B	*	PH10-9-1HR	1 HOLE RIGHT
C	*	PH10-9-2H	2 HOLE
D	*	PH10-9-2H	2 HOLE
E	*	PH10-9-3HL	3 HOLE LEFT
F	*	PH10-9-3HR	3 HOLE RIGHT
G	*	PH10-9-4H#3	4 HOLE LEFT
H	*	PH10-9-4H#4	4 HOLE RIGHT

Wunder - Bar

Dispensing Systems

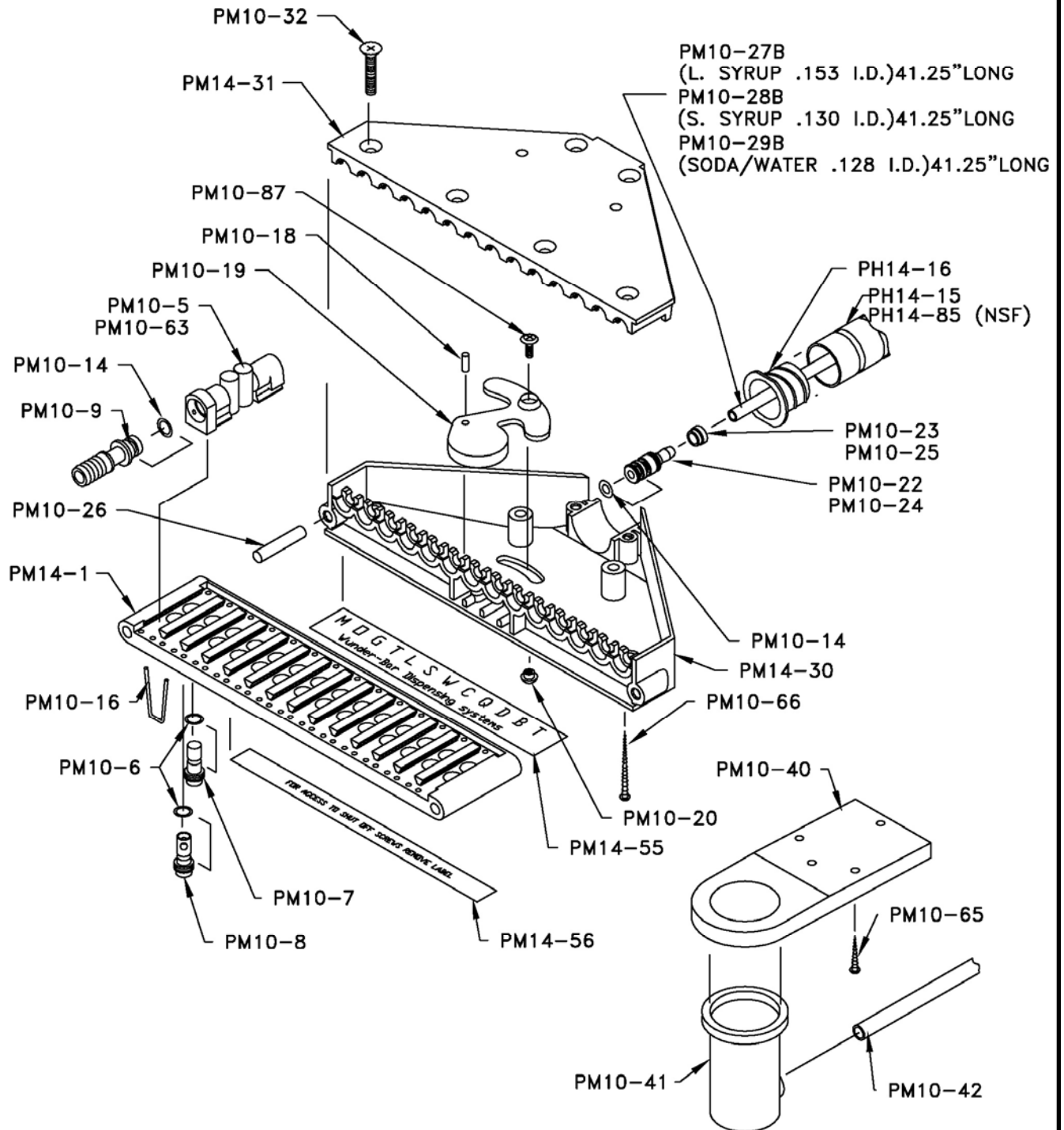
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VACAVILLE, CA 95688

PHONE: (707) 448-5151
FAX : (707) 448-1521

14 BUTTON POST MIX MANIFOLD (SII)

JOB:

ITEM#:



Wunder-Bar

Dispensing Systems

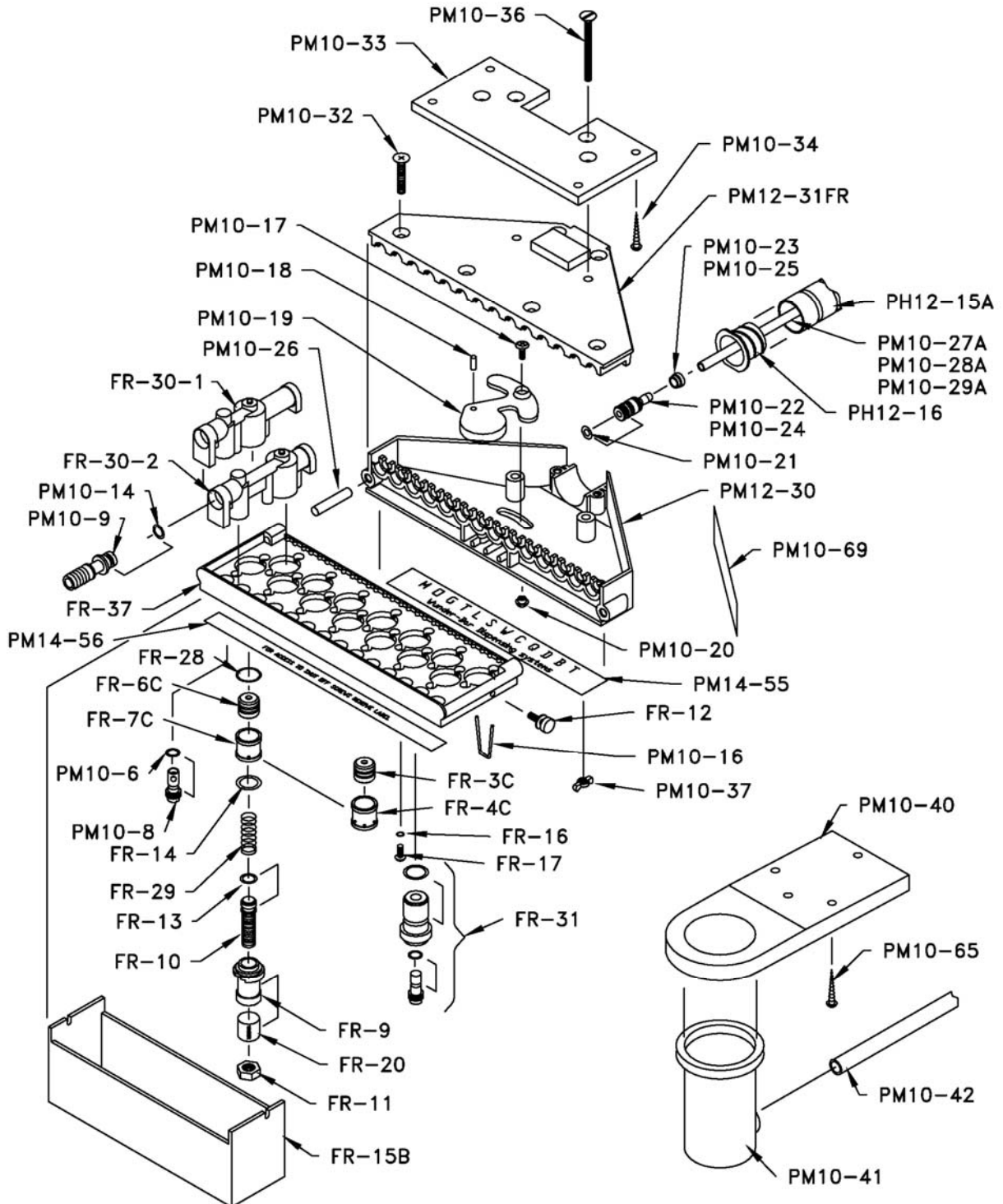
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12/14 BUTTON POST MIX
MANIFOLD W/FLOW
CONTROL (SII & S2.5)

JOB:

ITEM#:



Wunder-Bar

Dispensing Systems

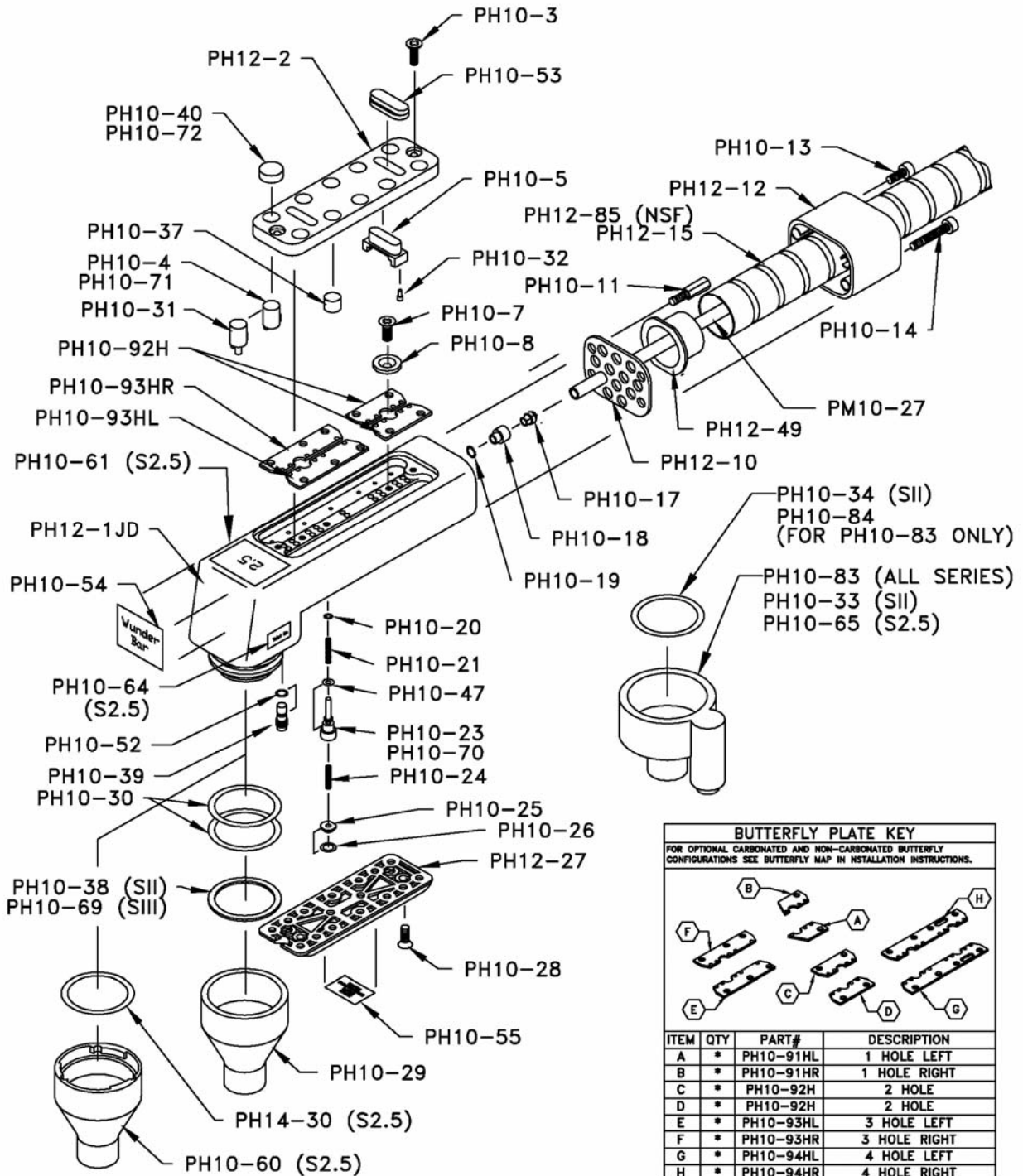
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VACAVILLE, CA 95688

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FAX : (707) 448-1521

10 BUTTON JUICE HANDLE (SII, S2.5)

JOB:

ITEM#:



BUTTERFLY PLATE KEY
FOR OPTIONAL CARBONATED AND NON-CARBONATED BUTTERFLY CONFIGURATIONS SEE BUTTERFLY MAP IN INSTALLATION INSTRUCTIONS.

ITEM	QTY	PART#	DESCRIPTION
A	*	PH10-91HL	1 HOLE LEFT
B	*	PH10-91HR	1 HOLE RIGHT
C	*	PH10-92H	2 HOLE
D	*	PH10-92H	2 HOLE
E	*	PH10-93HL	3 HOLE LEFT
F	*	PH10-93HR	3 HOLE RIGHT
G	*	PH10-94HL	4 HOLE LEFT
H	*	PH10-94HR	4 HOLE RIGHT

Wunder - Bar

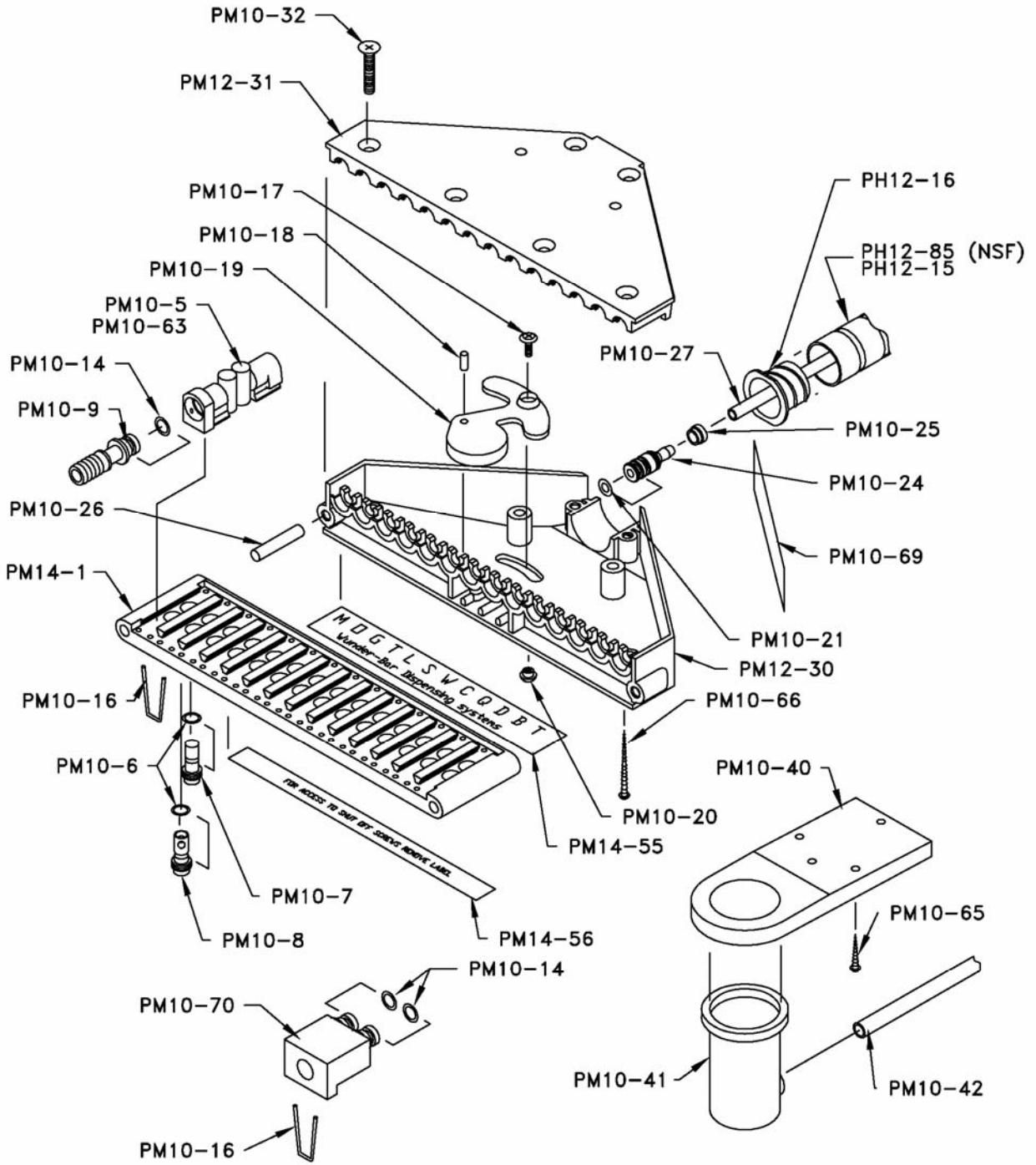
Dispensing Systems

AUTOMATIC BAR CONTROLS, INC.
790 EUBANKS DRIVE
VACAVILLE, CA 95688

PHONE: (707) 448-5151
FAX : (707) 448-1521

10 BUTTON JUICE MANIFOLD (SII & S2.5)

JOB: _____
ITEM#: _____



Wunder-Bar Dispensing Systems

AUTOMATIC BAR CONTROLS, INC.
790 EUBANKS DRIVE
VACAVILLE, CA 95688

PHONE: (707) 448-5151
FAX : (707) 448-1521



Sanitation

Chapter 6

Prepare a large bucket with warm to hot tap water.

Mix sanitizer packet (1 packet to each 2 ½ gallons of water)

You may also use liquid bleach (unscented) ¼ oz. bleach to each gallon of water.



If you have Coke or Pepsi bag in box connectors (right), you will need to open the spring loaded safety valve to allow liquid to draw through the bag in box connector.



Pepsi and Coke BIB connectors

You can also remove the syrup BIB connector from the clear suction hose on the syrup pump to allow sanitizer to pass. Reconnect BIB connector with a standard worm clamp at the completion of sanitizing.



If you have the grey generic style connectors, you can remove the tan cap (right) to allow sanitizer to pass.

If you have access to an empty syrup box, cut the bladder connect off (see pictures below). This will allow you to attach it



to your BIB connect during flushing & sanitizing.

Put each syrup pump suction hose in the sanitizing solution and activate dispenser until sanitizer flows freely from the nozzle.

DISPENSER CLEANING & SANITIZING PROCEDURES

DAILY

Cleaning the Dispensing Valves

DO NOT RUN nozzles, drip pan, etc. through a dishwasher.



STEP 1
Wash hands with soap and water.



STEP 2
Prepare 2.5 gallons of Kay-5® or chlorine-based sanitizer solution in a dedicated bucket. Stir until crystals are dissolved. See packet for instructions and necessary precautions.



STEP 3
Remove nozzles and diffusers from dispensing valves.



STEP 4
Clean in Kay-5® or chlorine-based sanitizer solution with a dedicated nozzle brush and place in sanitizer solution for at least 3 minutes.



STEP 5
Remove nozzles/diffusers from sanitizer solution and let them air dry.



STEP 6
Clean each lower valve body (underneath dispensing valves) and lever with a dedicated brush and Kay-5® or chlorine-based sanitizer solution and wipe with a clean cloth towel.



STEP 7
Wash hands with soap and water.



STEP 8
Reinstall all nozzles and diffusers once dry. Activate valves for 10 seconds and taste a drink from each valve.

Cleaning the Drip Pan



STEP 1
Pour 1/2 gallon of the Kay-5® or chlorine-based sanitizer solution over cup rest and down drip pan drain.



STEP 2
Remove rack. Wipe down inside/outside of the drip pan with a clean cloth towel and Kay-5® or chlorine-based sanitizer solution.

Cleaning the Dispenser If Drop-In:



STEP 1
Clean all exterior surfaces of the dispenser, including levers with a clean cloth towel and Kay-5® or chlorine-based sanitizer solution.



STEP 2
Empty ice bin and pour in a 1/2 gallon of Kay-5® or chlorine-based sanitizer solution.



STEP 3
Clean all interior sides with a clean cloth towel and Kay-5® or chlorine-based sanitizer solution. Wipe dry.



STEP 4
Clean the ice chute with a dedicated brush and Kay-5® or chlorine-based sanitizer solution.



Follow steps 1 & 2 of Cleaning the Dispensing Valves, then remove nozzle and clean nozzle/diffuser with a dedicated brush and sanitizer solution. Let them air dry and reinstall nozzle.

If Ice Combo:

If Bar Gun:

WEEKLY

Cleaning the Syrup Connectors



STEP 1
Wash hands with soap and water.



STEP 2
Prepare 2.5 gallons of Kay-5® or chlorine-based sanitizer solution in a dedicated bucket. Stir until crystals are dissolved. See packet for instructions and necessary precautions.



STEP 3
Disconnect syrup line from Bag-in-Box.



STEP 4
Soak connectors in a dedicated bucket of Kay-5® or chlorine-based sanitizer solution for 1 minute. It's OK to soak multiple connectors at the same time if they are marked with a flavor label.



STEP 5
Shake BIB connector a couple of times and reconnect syrup lines to correct Bag-in-Boxes.

MONTHLY

Cleaning the Inside of the Ice Bins



STEP 1
Wash hands with soap and water.



STEP 2
Prepare 2.5 gallons of Kay-5® or chlorine-based sanitizer solution in a dedicated bucket. Stir until crystals are dissolved. See packet for instructions and necessary precautions.

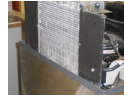


STEP 3
CAUTION! Dispenser and icemaker must be UNPLUGGED prior to cleaning.



STEP 4
Apply sanitizer solution using a dedicated soft, long handle nylon bristle brush to scrub inside of ice bin and chute. Do NOT use a metal brush.

Counter Electric



Condensers
Clean condenser fins with a dedicated hard brush.



If air filters are used, clean appropriately.



Check water filters to ensure they are current.

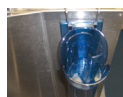


Maintain product labels for valves...



...and syrup lines.

IMPORTANT - Material Handling Info



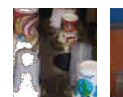
Use only dedicated ice buckets/scoops when handling beverage ice. Clean ice scoop and holder daily. Store properly.



Do NOT store items in ice bin of drop-in dispensers as this could cause contamination.



Keep the ice bin closed when not in use.



Cups, lids and straws must be properly stored and handled to prevent contamination.



Do NOT use soap, bleach, detergent, steel wool, scouring pads or abrasives when cleaning dispensers or components.



Use caution in preparation and handling of sanitizer solution; see package instructions.



Troubleshooting

Chapter 7

PROBLEM	QUESTION	SOLUTION
Only syrup is dispensing from the soda gun	<i>Is the carbonator plugged in?</i>	Carbonator must be plugged in
	<i>Is the water supply turned on?</i>	The minimum water supply must be provided — 35-50 PSI
	<i>Is the CO₂ supply on?</i>	Check the CO₂ tank to see if it is full and turned ON. If it is empty, replace or refill it.
	<i>Is the CO₂ pressure set correctly?</i>	The CO₂ pressure to the carbonator must be set between 100-105 PSI. Check and set all system pressures to the correct settings.
	<i>Is an obstruction in the water line?</i>	Remove the obstruction
	<i>Are the water lines connected properly?</i>	Reconnect the water lines correctly
Only water is dispensing from the soda gun	<i>Do you have enough CO₂ gas in the CO₂ tank?</i>	Replace or refill CO₂ tank
	<i>Do you have syrup?</i>	Check and replace any empty boxes of syrup
	<i>Are system pressures set correctly?</i>	Adjust and reset pressures to their proper settings
	<i>Are the syrup connectors properly connected?</i>	Remove the connectors and properly reinstall them
No syrup dispenses from the beverage button(s)	<i>Do you have syrup?</i>	Check and replace any empty boxes of syrup
	<i>Is the syrup system obstructed or lines installed improperly?</i>	Reconnect the lines properly or remove the obstruction to allow syrup to flow
	<i>Is CO₂ going to the syrup pumps?</i>	Replace or refill CO₂ tank
	<i>Is product or pump inlet line kinked or crimped?</i>	Straighten the line
	<i>Is shut-off screw in CLOSED position?</i>	Open shut-off screw
	<i>Is brix screwed in too far?</i>	Open brix screw

PROBLEM	QUESTION	SOLUTION
No water dispenses from the water button	<i>Is an obstruction in the water line?</i>	Remove the obstruction
	<i>Are the water lines connected properly?</i>	Reconnect the water lines correctly
	<i>Is the water line kinked or crimped?</i>	Straighten the line
	<i>Is shut-off screw in CLOSED position?</i>	Open shut-off screw
	<i>Is brix screwed in too far?</i>	Open brix screw
	<i>Is proper butterfly configuration being used?</i>	Check butterfly plate diagrams
Product button dispenses wrong beverage	<i>Is correct BIB syrup box connected to proper BIB pump?</i>	Check BIB syrup box and pump
	<i>Is correct product tubing connected to proper position on the manifold?</i>	Check connection at soda gun manifold
Poor carbonation	<i>Is CO₂ pressure to the carbonator (primary regulator) properly set?</i>	The CO ₂ pressure to the carbonator must be set between 100-105 PSI. Check and set all system pressures to the correct settings.
	<i>Is the carbonator air locked (all CO₂ and no water in the tank)?</i>	Turn OFF carbonator and CO ₂ . Open pressure relief valve on carbonator tank until water comes out. Turn carbonator and CO ₂ back ON.
	<i>Is the inlet water pressure to the carbonator above the maximum 50 PSI?</i>	Minimum inlet water pressure is 35 PSI — 50 PSI maximum. Install water regulator or booster pump to maintain proper pressures.
	<i>Is the carbonator inlet water temperature too high?</i>	Inlet temperature of the water to the carbonator should be no more than 74 degrees Fahrenheit
	<i>Do you have CO₂ gas?</i>	Replace or refill CO ₂ tank
	<i>Is the dispensed beverage temperature warm?</i>	Lower beverage temperature to 36-40 degrees Fahrenheit
	<i>Is the under-counter ice maker (if equipped) operating properly?</i>	Ensure cold plate is completely covered with ice
	<i>Is the remote cooler (if equipped) operating properly?</i>	<ul style="list-style-type: none"> - Check if ice bank has formed around remote cooling lines - Check for proper water level - Check power to refrigeration deck

PROBLEM	QUESTION	SOLUTION
Poor Carbonation (continued)	<i>Is ice in the cup?</i>	Ice to your carbonated beverage is necessary to maintain optimum beverage quality
	<i>Is there any residue of cleaning agents (dish detergent) in the cup?</i>	Any type of cleaning detergent residue will reduce product quality
Beverage tastes weak	<i>Is the CO₂ supply set properly?</i>	Check CO ₂ supply and regulators—adjust to correct settings. Check CO ₂ supply to carbonator, set primary regulator between 100-105 PSI. Check to be certain shut-off screw slots in black manifold are in proper position (flow runs in same direction as slot). Rebrix dispenser.
	<i>Do you have a sufficient supply of syrup?</i>	Replace empty syrup containers
	<i>Is the brix of the manifold set correctly?</i>	Brix all beverage flavors at proper operating temperature
Beverage tastes sweet	<i>Is the CO₂ supply set properly?</i>	Check CO ₂ supply and regulators—adjust to correct settings. Check CO ₂ supply to carbonator, set primary regulator between 100-105 PSI. Check to be certain shut-off screw slots in black manifold are in proper position (flow runs in same direction as slot). Rebrix dispenser.
	<i>Is the brix of the manifold set correctly?</i>	Brix all beverage flavors at proper operating temperature
Beverage has an off-taste	<i>Is the brix of the valve set correctly?</i>	Brix all beverage flavors at proper operating temperature
	<i>Is the syrup supply fresh?</i>	Most syrups should be used within 90 days of the manufacturer
	<i>Is the water supply filter fresh?</i>	Change the filter
	<i>Is water supply tubing from main water supply NSF and non-toxic?</i>	Use only NSF certified and non-toxic food grade nylon, copper, or stainless tubing for your main water supply

PROBLEM	QUESTION	SOLUTION
Soda gun manifold does not maintain brix	<i>Are the CO₂ system pressures correct?</i>	Check and adjust any pressures and inconsistent regulators
	<i>Are the flow controls in the manifold sticking?</i>	Clean or replace the beverage flow controls
	<i>Is the BIB syrup pump holding pressure?</i>	Repair or replace BIB syrup pump
	<i>Are incoming water pressures constant?</i>	Add water booster pump or water pressure regulator to maintain proper brix
Soda gun button(s) continue to operate after released	<i>Are the butterfly plates too tight?</i>	Butterfly plates are too tight Remove button plate and loosen butterfly retainers—these only need to be snug. DO NOT OVERTIGHTEN
	<i>Is debris caught in molded valve stem?</i>	Hold hand over nozzle and depress all buttons at once, backflushing the dispenser. This may dislodge particle enough to pass through dispenser. Replace valve stem
When button is pressed, product oozes from under button plate	—	Stem O-ring defective Replace stem O-ring Part #: PH10-20
Product leaks or drips from nozzle	—	Replace entire valve with new molded valve stem Part #: PH10-89
Product leaking around bottom plate	—	Hat O-ring has failed Replace hat O-ring Part #: PH10-26
	<i>Are bottom plate screws too loose?</i>	Tighten bottom plate screws DO NOT OVERTIGHTEN
		Continued on next page...

PROBLEM	QUESTION	SOLUTION
Product leaking around bottom plate (continued)	<i>Have bottom plate screws been overtightened?</i>	Check for damage to handle and/or bottom plate—may be necessary to replace handle and/or bottom plate
	<i>Has the bottom plate warped?</i>	Replace bottom plate
Unusual amount of foaming of finished product	<i>Is drink being drawn correctly?</i>	Make sure cup is tilted with product flowing down the inside of the cup
	<i>Is the dispensing nozzle dirty?</i>	Clean dispensing components
	<i>Is soft water being applied to the system?</i>	Do not use carbonated softened water for beverage systems
	<i>Is the CO₂ system pressure to the secondary regulator high?</i>	Reduce pressures to the recommended settings
	<i>Is the drink too warm?</i>	Make sure the ice bin is filled sufficiently and inlet temperature of the water to the carbonator does not exceed 74 degrees Fahrenheit
Dispensed beverage is warm	<i>Is there ice on the cold plate (if equipped)?</i>	Be sure ice covers the entire cold plate—give the cold plate time to cool
	<i>Has ice bridged over the cold plate (if equipped)?</i>	Push ice down to ensure ice covers and contacts the entire cold plate
	<i>Is standing water covering the cold plate (if equipped)?</i>	Clean or unstop drain to the dispenser
	<i>Is the refrigeration system (if equipped) plugged in or turned on?</i>	Plug in (or turn ON) the refrigeration system, if necessary
	<i>Does the system beverage temperature increase significantly between cooling point and dispensing point?</i>	Locate source of heat gain—repair or replace the cause of added heat
	<i>Is electric power supplied to the receptacle or refrigeration system?</i>	Restore power to the receptacle or refrigeration system
	<i>Has the water bath in the remote cooler frozen completely?</i>	Allow about 4 hours after starting the remote cooler to give it time to form an ice bank
	<i>Is the cooling system operating properly?</i>	Repair or replace the cooling system

PROBLEM	QUESTION	SOLUTION
Dispensed beverage is warm (continued)	<i>Is the cooling system operating properly?</i>	Repair or replace the cooling system
Carbonator does not operate	<i>Is the main water supply pressure too high?</i>	Water supply pressure must be between 35-50 PSI
	<i>Is the water turned on and the CO₂ pressure set between 100-105 PSI?</i>	Restore CO ₂ supply to the carbonator within proper limits
	<i>Is electric power supplied to the carbonator?</i>	Restore electricity to the outlet that supplies the carbonator with power
	<i>Is the water level control of the carbonator operating properly?</i>	Repair or replace according to instructions provided by the carbonator manufacturer
	<i>Is the inlet water pressure to the carbonator above the maximum 50 PSI?</i>	Minimum inlet water pressure is 35 PSI — 50 PSI maximum. Install water regulator or booster pump to maintain proper pressures.
BIB syrup pump will not start	<i>Do you have syrup connected to the inlet hose of the pump?</i>	Replace syrup box
	<i>Is the connector to the Bag-in-Box syrup properly connected?</i>	Remove and properly reconnect the BIB connector
	<i>Is the CO₂ supply interrupted?</i>	Check CO ₂ supply — Replace, refill, or turn on if necessary
	<i>Is the gas pressure to the pump correctly set?</i>	Adjust gas pressure to the recommended setting for the product — Make sure CO ₂ fitting is properly inserted
BIB syrup pump operates but does not pump syrup	<i>Is the BIB syrup pump air locked?</i>	Make sure BIB pumps are installed with the outlet port on top
	<i>Is the syrup BIB connector properly connected?</i>	Remove and correctly reconnect the BIB connector to the BIB container
	<i>Is the tubing from the BIB syrup box to the pump full flow and not kinked?</i>	Remove/repair kink or replace hose
BIB syrup pump does not supply enough syrup	<i>Are the gas or air pressures supplied to the pump correct?</i>	Check and correct any incorrect gas or air pressures