

POST-MIX BEVERAGE DISPENSER

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



CONTENTS

Installation.....	2
Brixing.....	3
Configuration and Maintenance.....	4
Repair.....	5-6
Buttons and Butterfly Plates.....	7
Butterfly Maps.....	8-9
Flow Regulator Manifold.....	10
Sanitizing and Cleaning.....	11-12
Troubleshooting.....	13
Exploded Parts Drawings.....	14-23

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NSF STD 18



COMPONENT

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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.

POSTMIX

REV120508

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

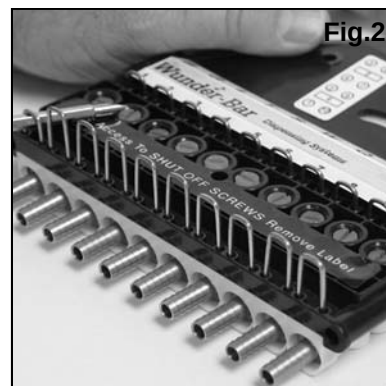


Fig.2

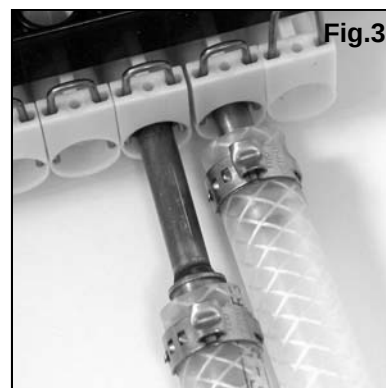


Fig.3

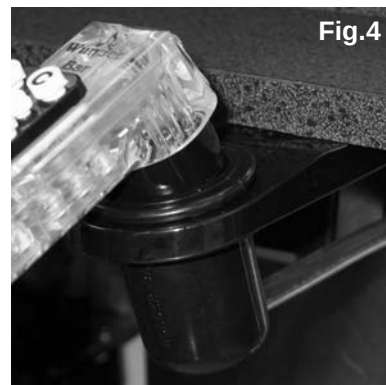


Fig.4

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.

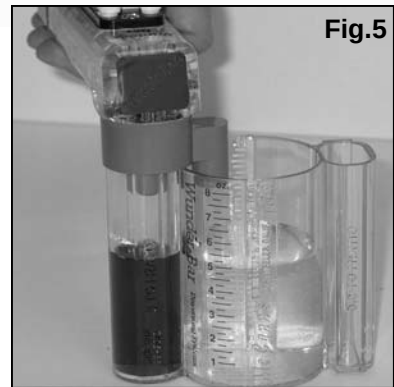


Fig.5

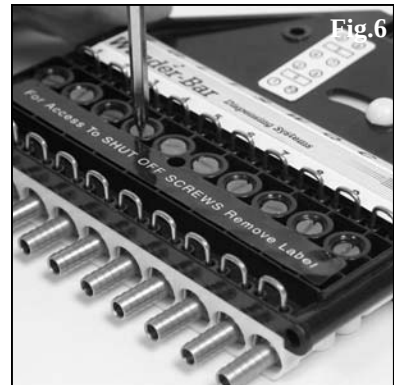


Fig.6

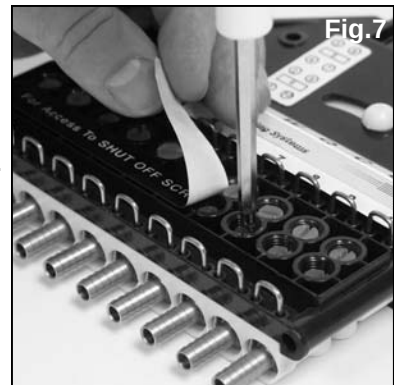


Fig.7

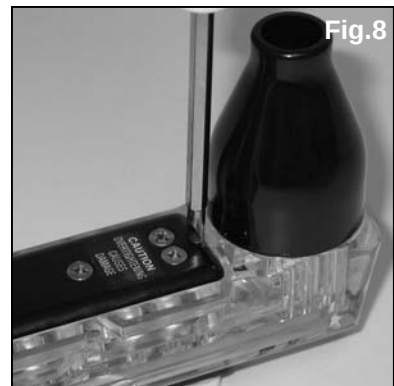


Fig.8

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 klips between the tube collector and manifold (Fig.12). These are called the Interconnect kwik klips. (It is not necessary to remove the kwik klips). By lifting up all interconnect kwik klips 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 klips 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.

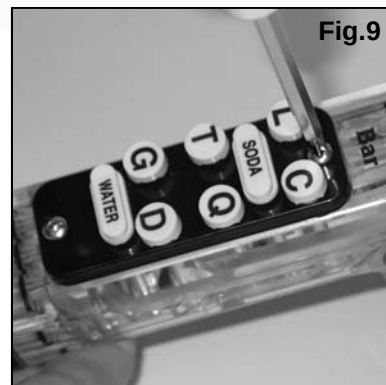


Fig.9

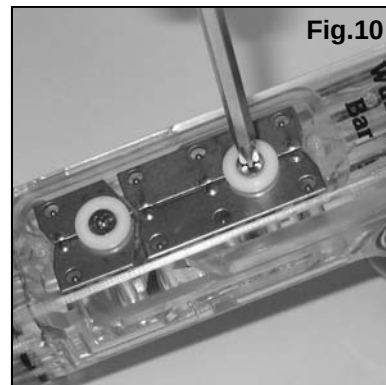


Fig.10

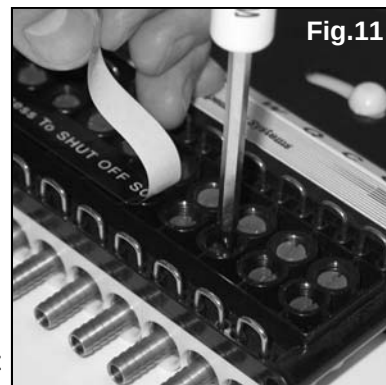


Fig.11

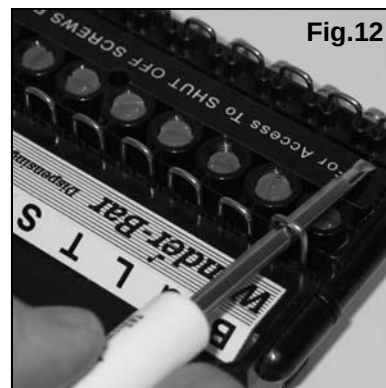


Fig.12

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.

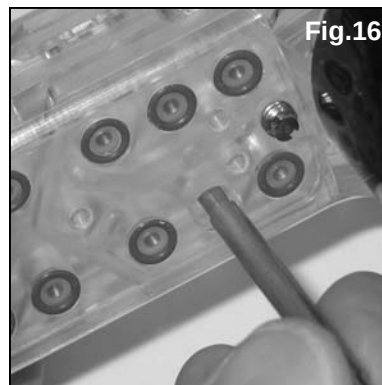
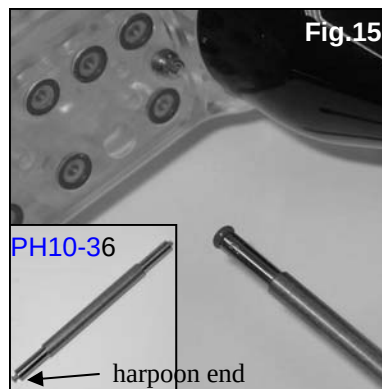
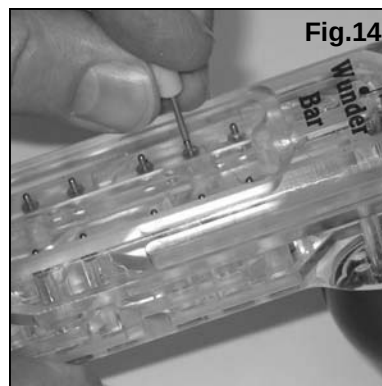
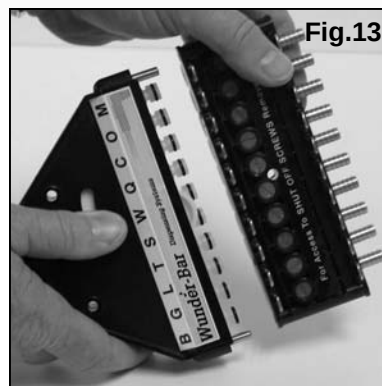
The Hat o-ring seals off bottom access hole of the valve cavity. The valve spring (also known as the hat spring) provides sufficient tension to return the plunger when button is not depressed. The stem o-ring seals around the plunger stem in the top of the handle. (See exploded Handle parts drawings 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.**

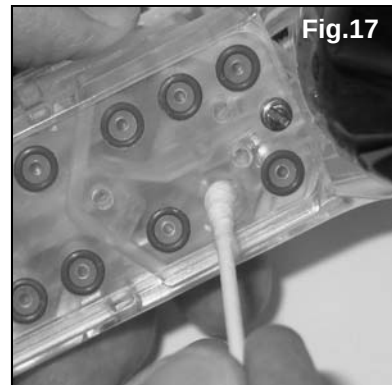


Fig.17

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.

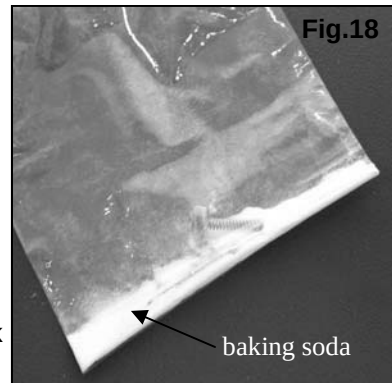


Fig.18

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.

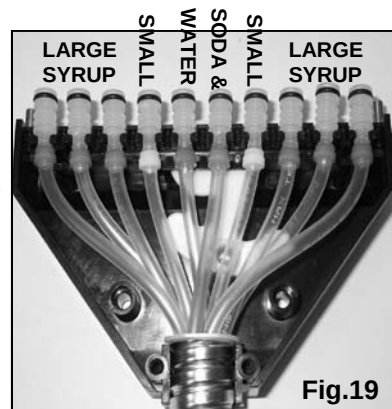


Fig.19

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.

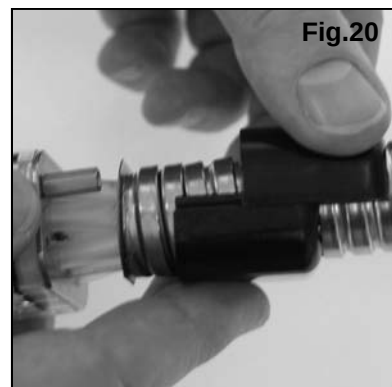


Fig.20

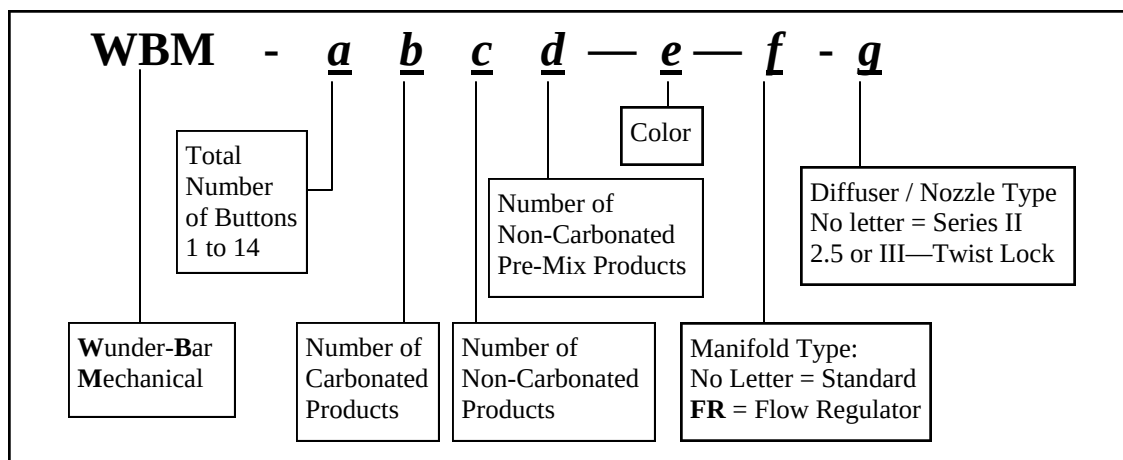
The Wunder Bar Mechanical Flex Hose bar dispenser is available in 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12, and 14 button models. All models can be configured for many combinations of carbonated, non-carbonated, non-carbonated premix products at any time. All of these combinations are field-convertible and 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

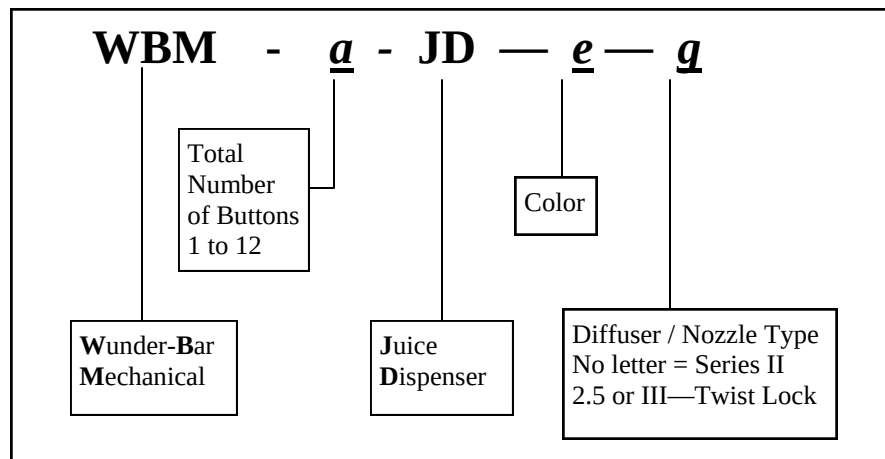
The buttons and button plate can be removed while dispenser is under pressure. After the button plate has been removed, buttons can be changed as can the configuration of the dispenser. By removing the butterfly retainer and screws, and lifting out the butterfly plates (stainless steel plates with small 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

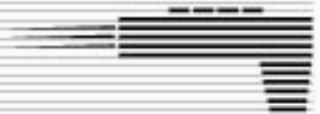
WBM-10800	WBM-10710	WBM-10620 (WBM-860)	WBM-10530 (WBM-851)
WBM-10440	WBM-10350	WBM-10260	WBM-10170
WBM-10080	WBM-12640	WBM-12550	WBM-12460

● = Carbonated positions

○ = Non-Carbonated positions

* = Secondary water metering screw effects these positions

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



BUTTERFLY MAP

WBM-12820	WBM-12730	WBM-12640	WBM-12550
WBM-12460	WBM-12370	WBM-12280	WBM-14840
WBM-14750	WBM-14660	WBM-14570	WBM-14480

● = 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.

POSTMIX

9

REV120508

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.

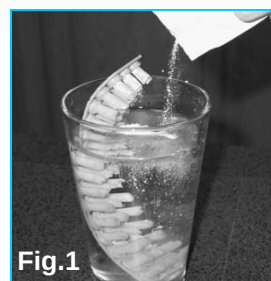


Fig.1

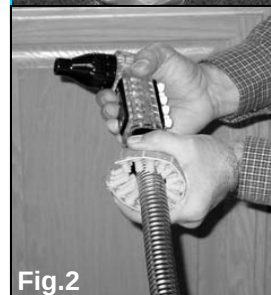


Fig.2



Fig.3



Fig.4



Fig.5

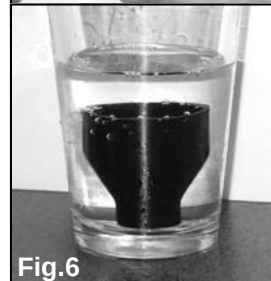


Fig.6

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.

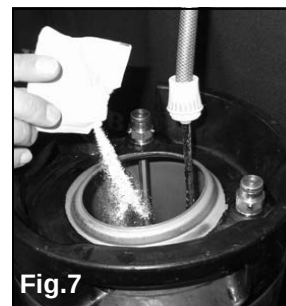


Fig.7



Fig.8

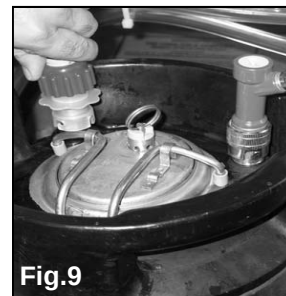


Fig.9



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.) **Rebix 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).

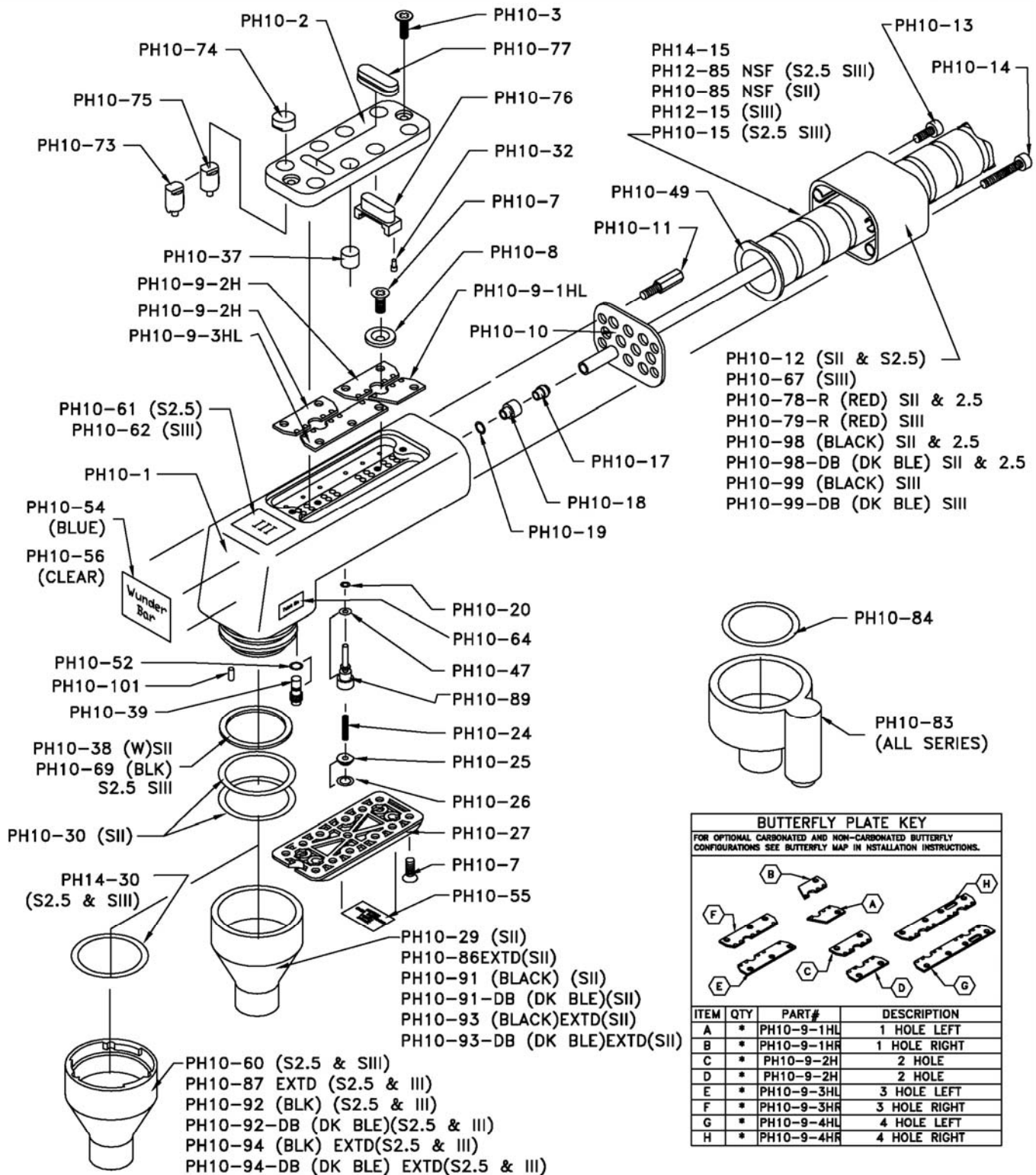
* Bottom plate screws are loose. Tighten bottom plate screws. **Do not over tighten!** Bottom plate screws have been over tightened, causing damage to handle and/or bottom plate. May be necessary to replace handle and/or bottom plate.

* Bottom plate has warped. Replace bottom plate.

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

JOB:

ITEM#:



Wunder - Bar

Dispensing Systems

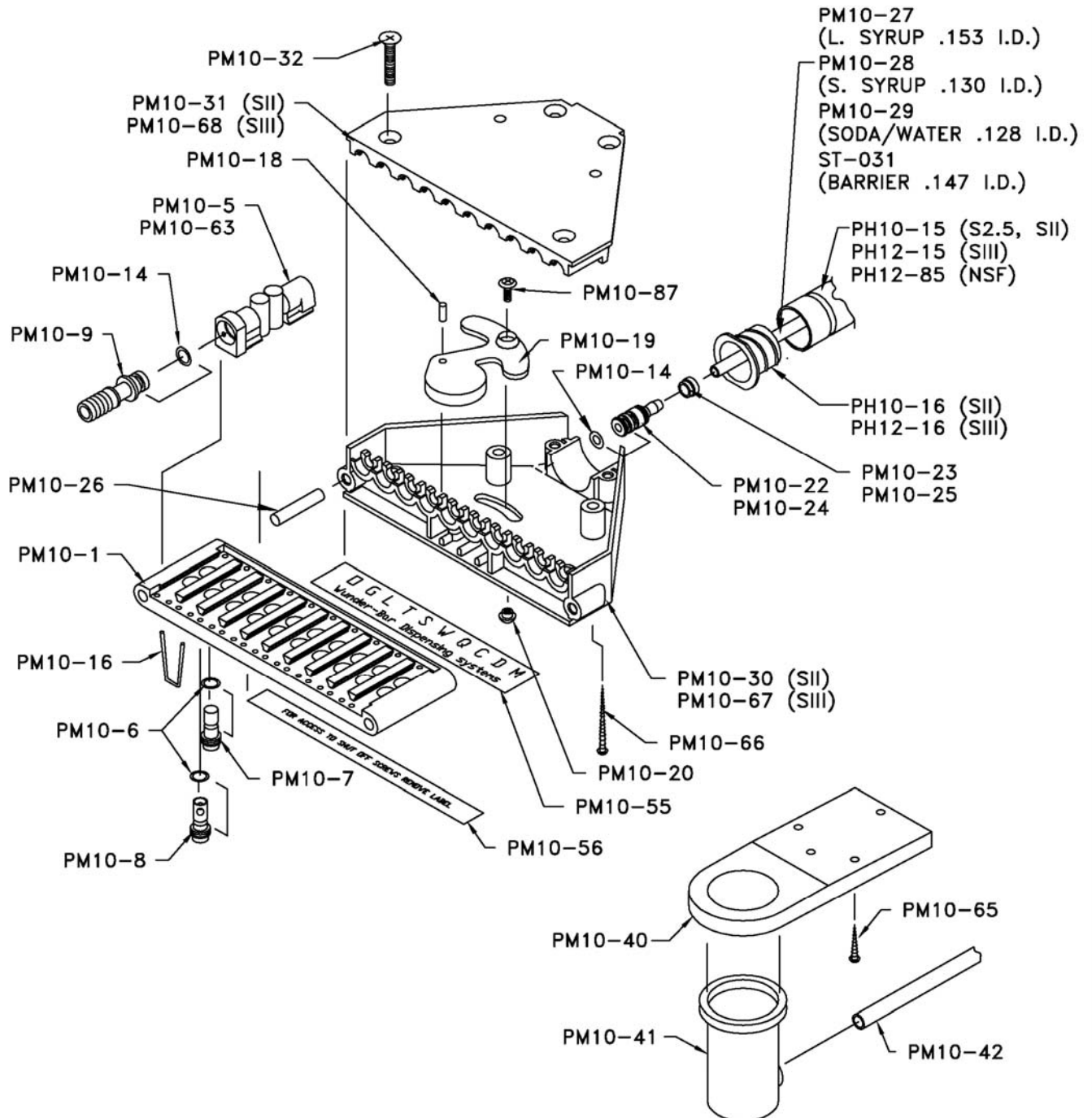
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790 EUBANKS DRIVE
VACAVILLE, CA 95688

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

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

JOB:

ITEM#:



Wunder-Bar

Dispensing Systems

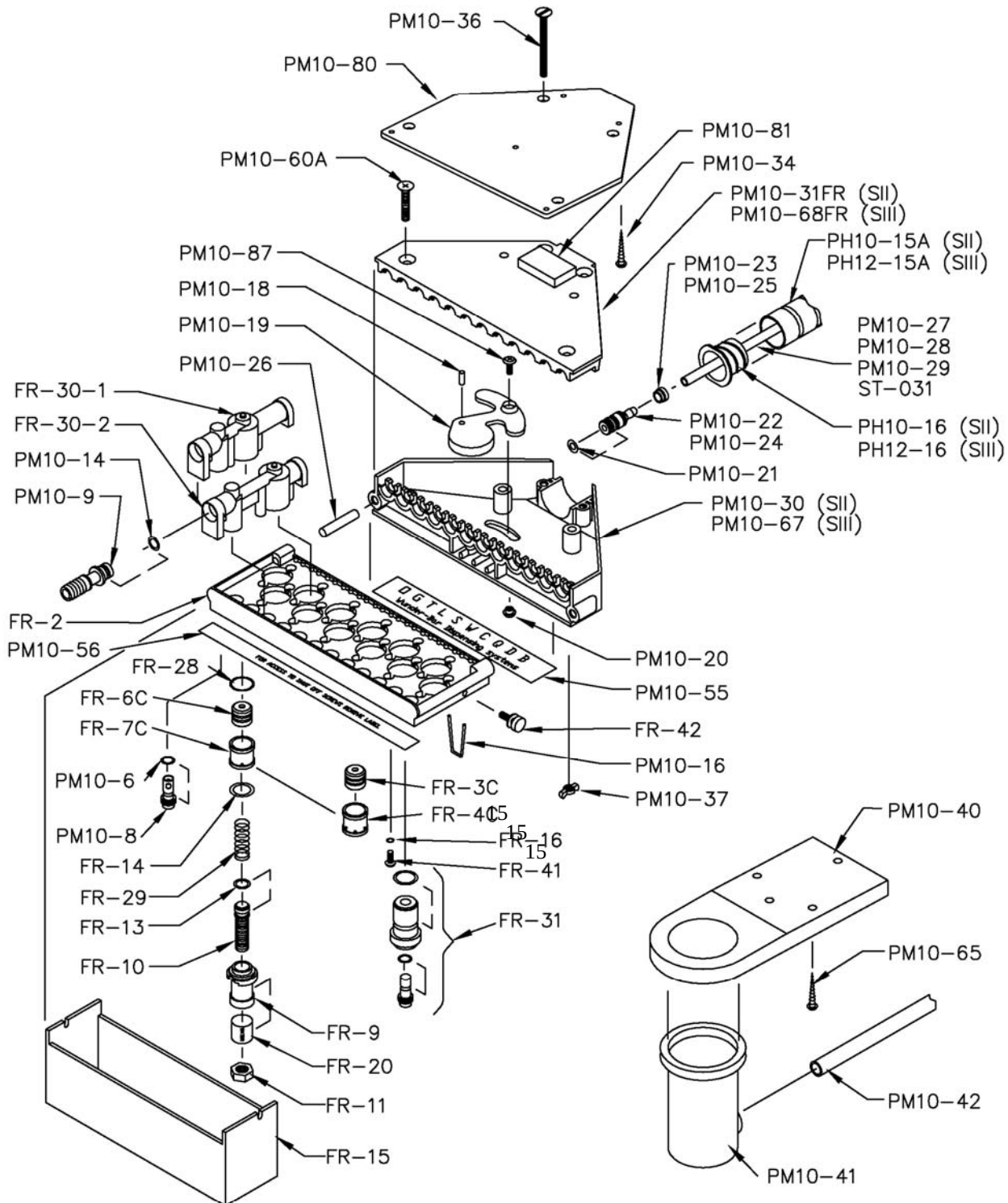
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**10 BUTTON POST MIX
MANIFOLD W/FLOW
CONTROL (SII, S2.5, SIII)**

JOB:

ITEM#:



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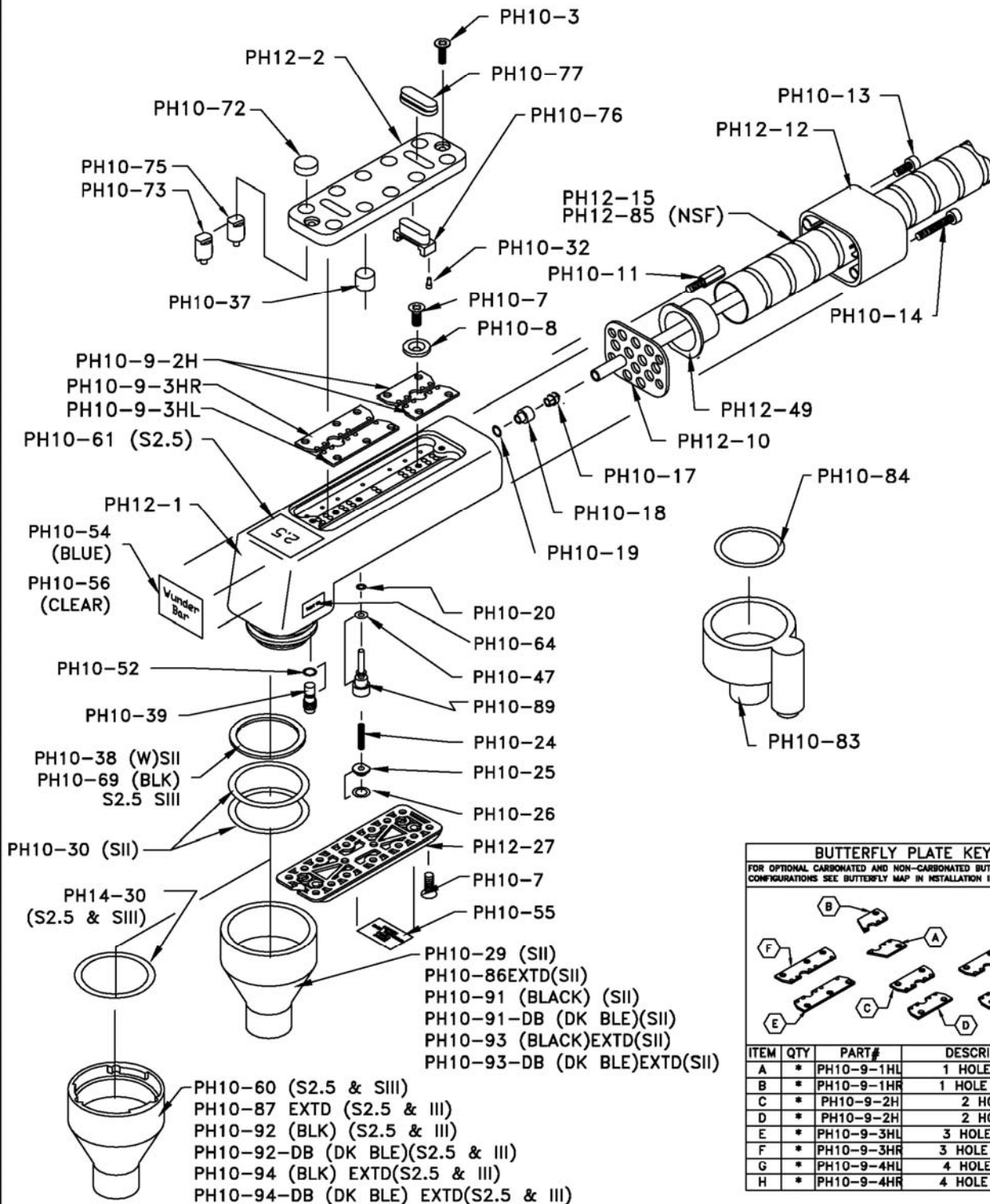
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VACAVILLE, CA 95688**

**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

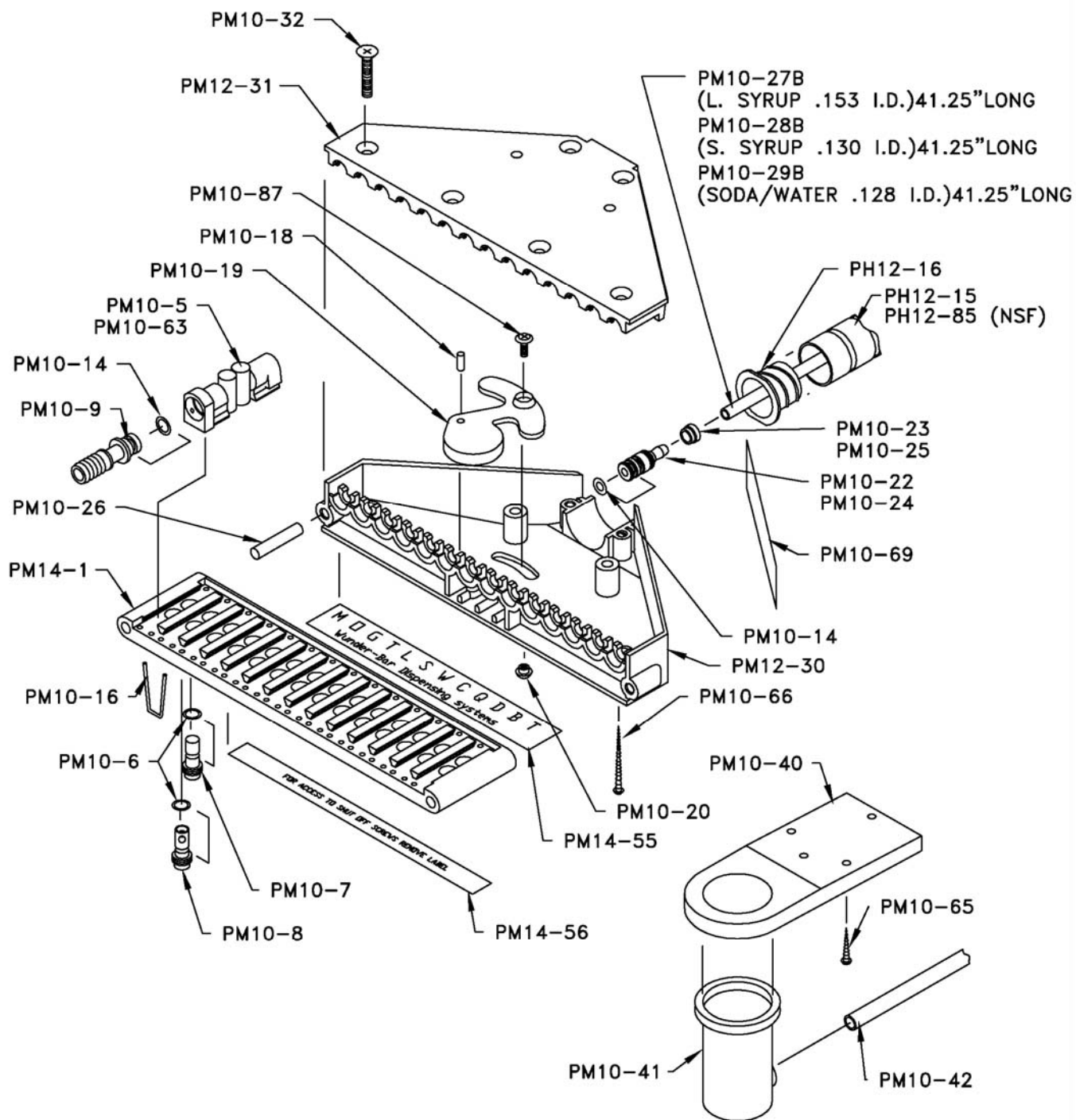
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12 BUTTON POST MIX MANIFOLD (SII & S2.5)

JOB:

ITEM#:



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Dispensing Systems

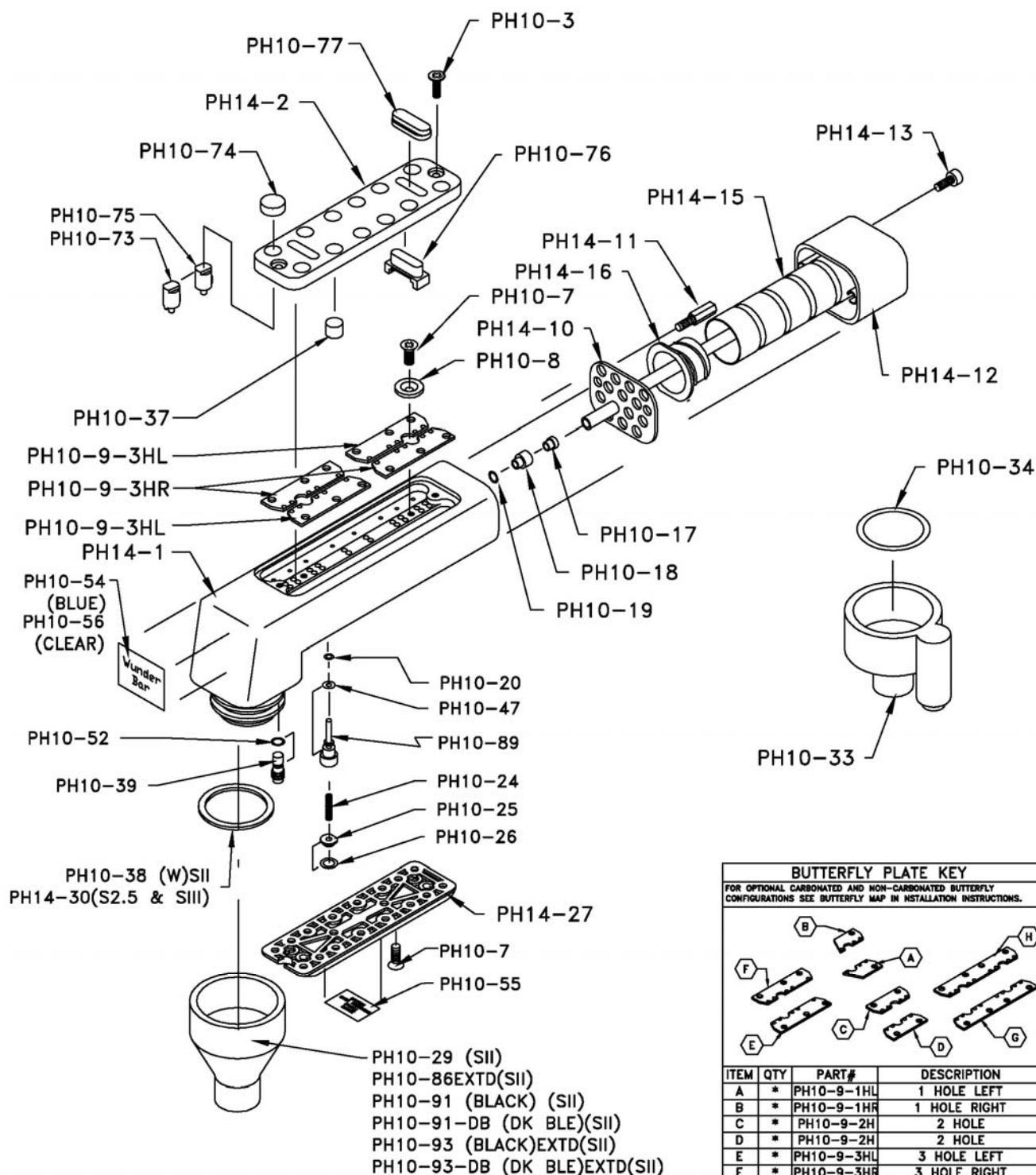
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14 BUTTON POST MIX HANDLE (SII)

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

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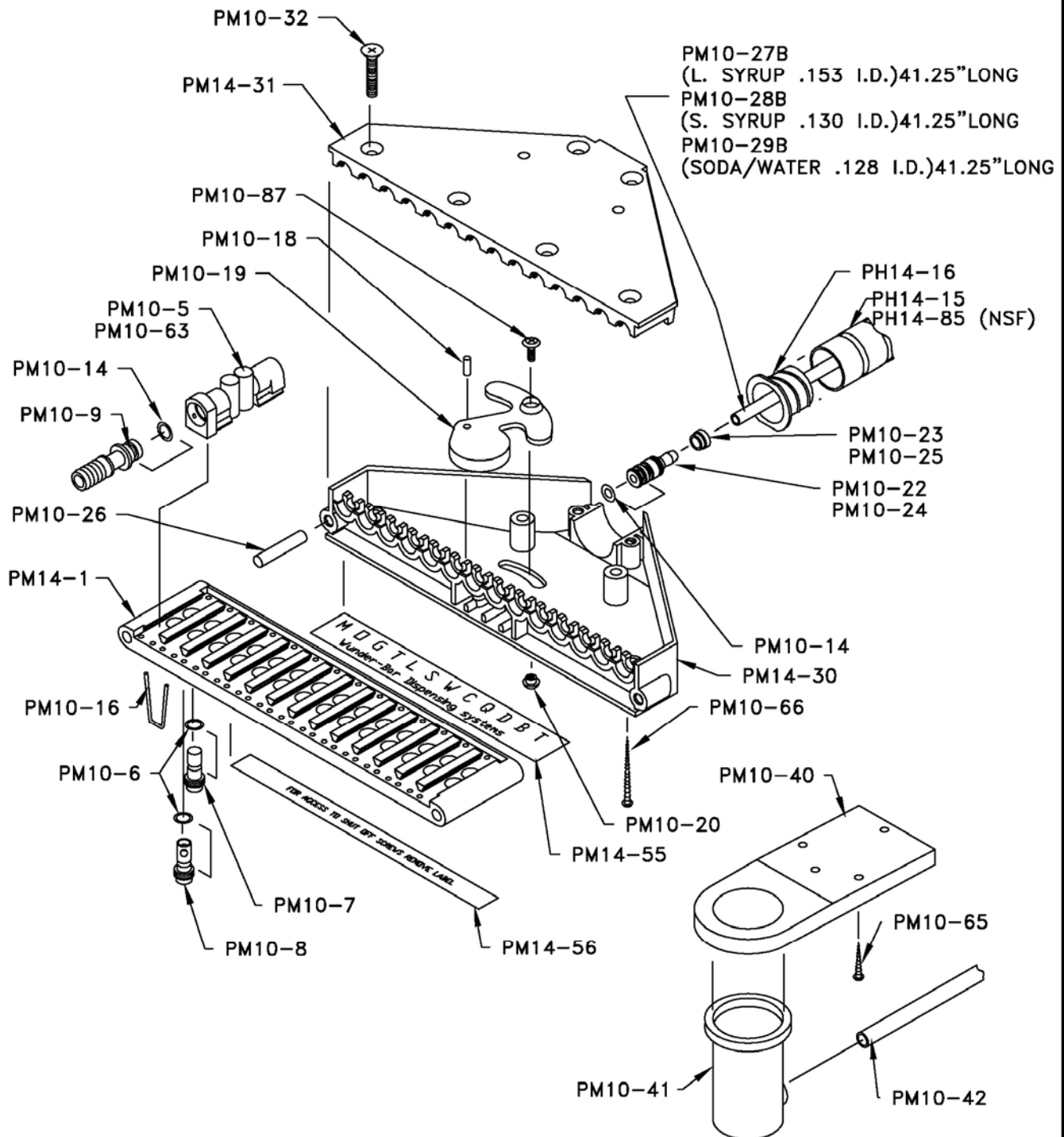
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14 BUTTON POST MIX MANIFOLD (SII)

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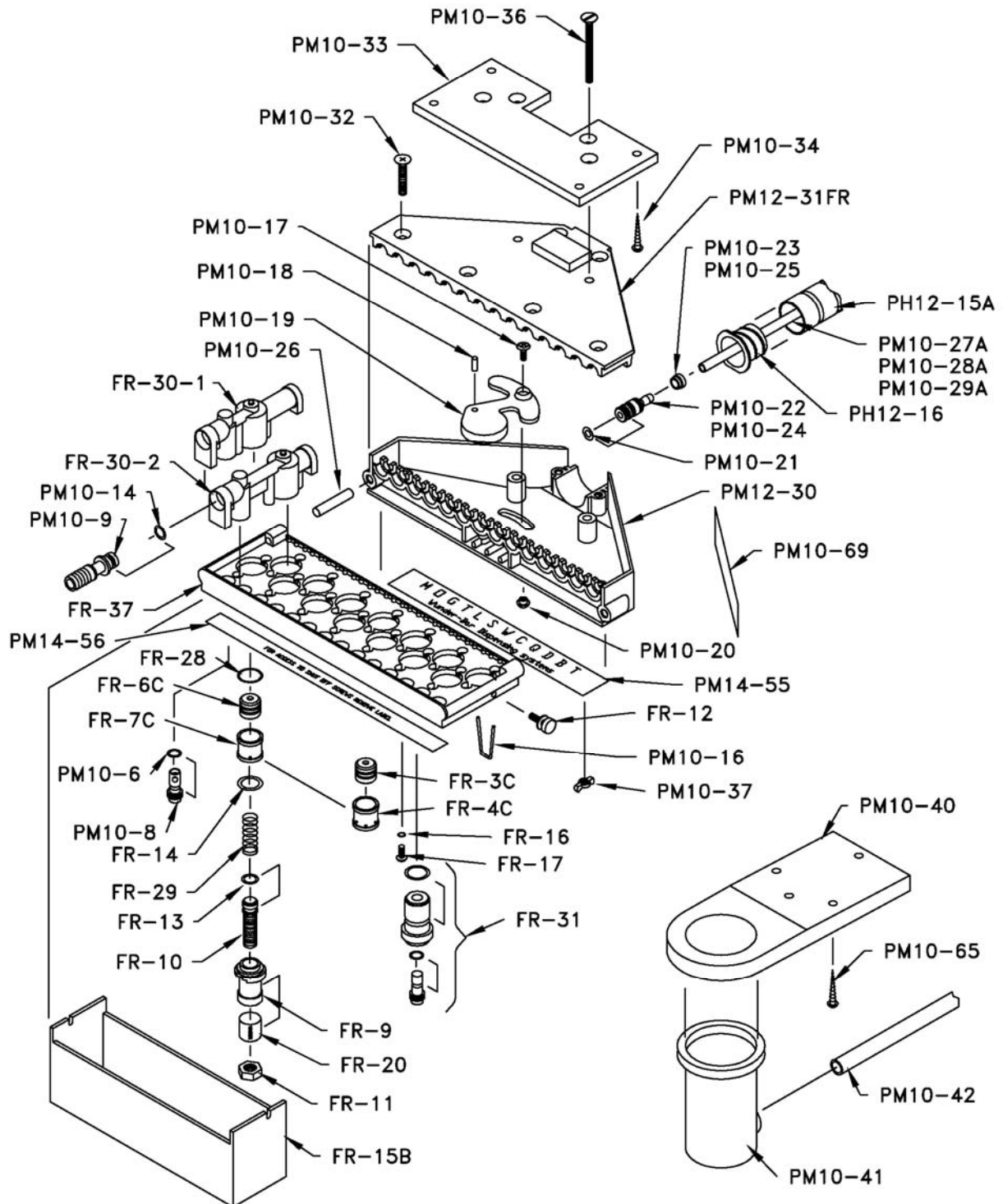
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12/14 BUTTON POST MIX
MANIFOLD W/FLOW
CONTROL (SII & S2.5)

JOB:

ITEM#:



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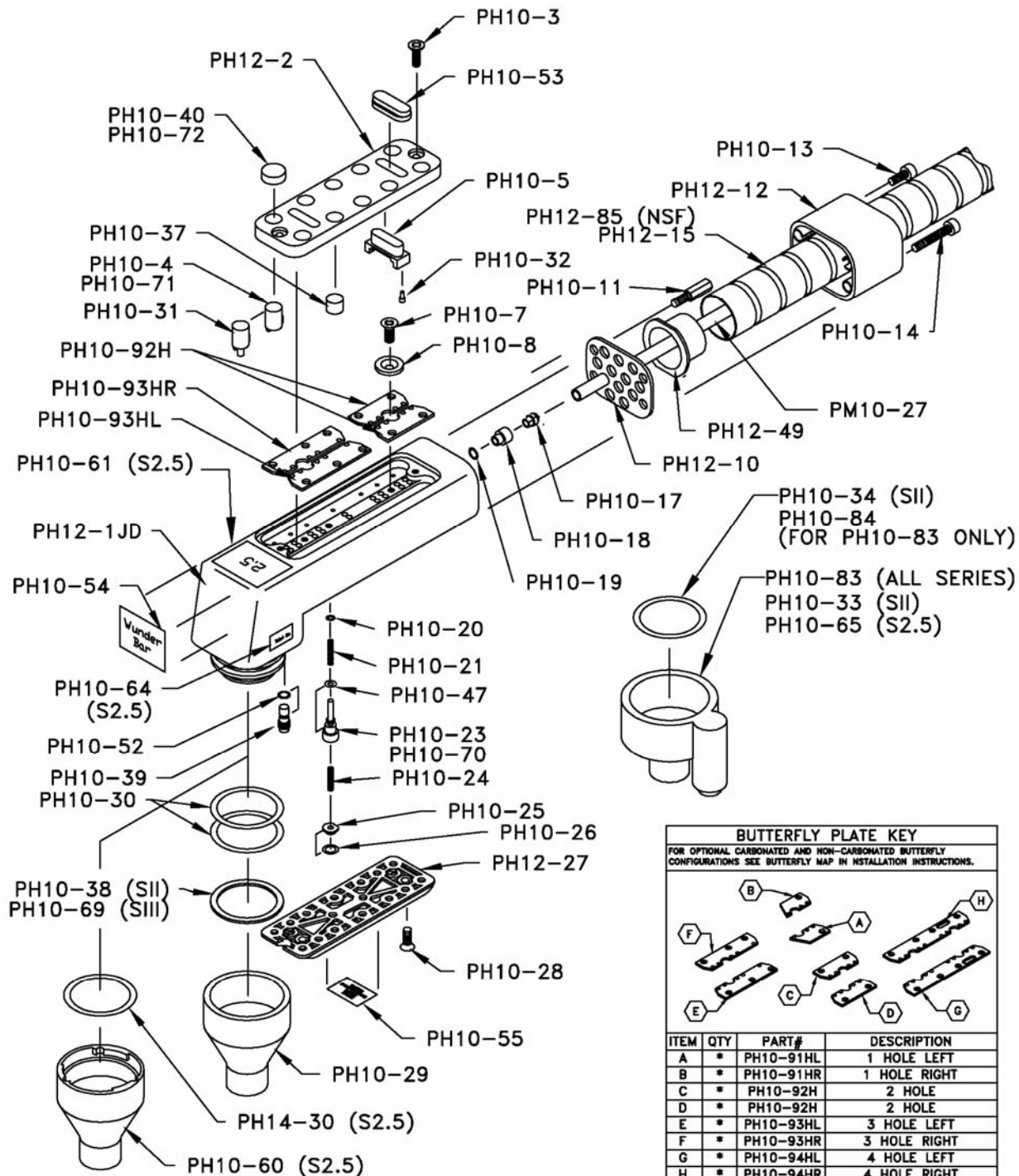
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10 BUTTON JUICE HANDLE (SII, S2.5)

JOB:

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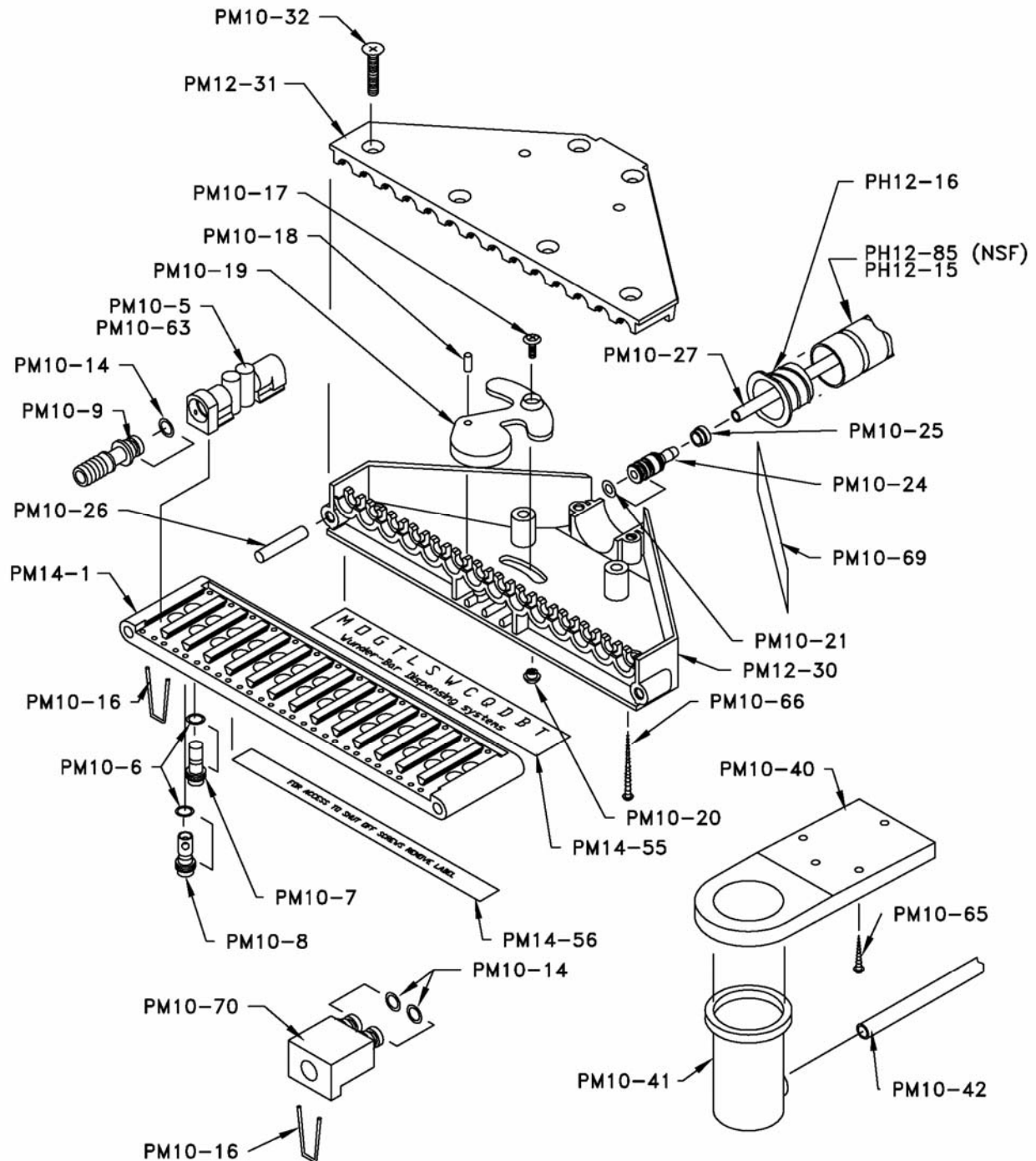
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10 BUTTON JUICE MANIFOLD (SII & S2.5)

JOB:

ITEM#:



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