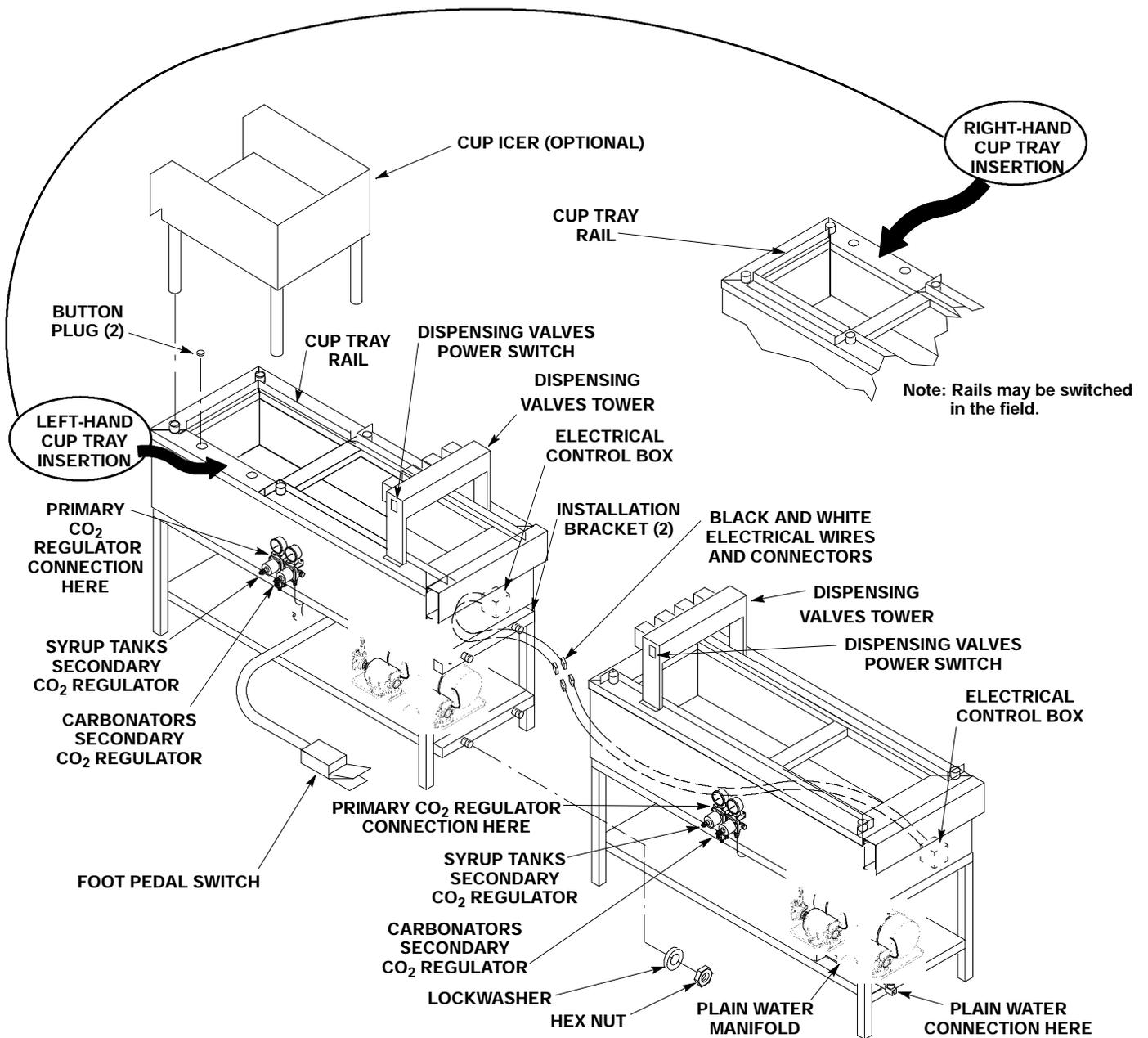




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# Installation Instructions

## 24120 POST-MIX SPEED FILLER



The 24120 Post-mix Speed Filler is designed to speed fill eight cups with ice-cooled product at one time. The speed Filler is operated by placing eight cups at a time under the eight dispensing valves, then operating the foot pedal switch to activate the valves. Syrup and carbonated water pass through coils inside aluminum coldplates covered with ice before reaching the dispensing valves which results in ice-cold carbonated drinks being dispensed. If the optional Cup Icer (see illustration) will be used, twenty cups at one time may be loaded with the desired amount of ice just prior to filling the cups with product. Install the Dual Post-Mix Speed Filler as follows:

**Note: The Post-Mix Speed Filler (unless specially ordered) is shipped from the Factory set up for Operator right-hand cup tray insertion (see illustration). During operation, cup trays are placed on the Speed Filler from the right-hand side and the dispensing valves power switch is located on the same side. The Speed Filler may be converted so that the Operator may place cup trays on the Speed Filler from the left-hand side as follows:**

1. Remove two button plugs from the Post-Mix Speed Filler as shown in the illustration. Retain the button plugs.
2. Remove four hex nuts and lock washers securing cup tray rail to top of the Post-Mix Speed Filler, then remove the rail.
3. Turn cup tray rail 90°, then reinstall the rail on the Speed Filler as shown in illustration. Secure cup tray rail to Speed Filler with four hex nuts and lock washers.
4. Reinstall two button plugs in two unused holes on the Speed Filler as shown in illustration.
5. Seal areas where cup tray rail meets top of the Speed Filler with caulking gun and tube of caulking provided with the Speed Filler.
6. On both dispensing valves towers, relocate the dispensing valves towers power switches to be on the same side the Operator will be feeding cup trays onto the Speed Filler.
7. Proceed with installation of the Post-Mix Speed Filler.

## **INSTALLING THE 24120 POST-MIX SPEED FILLER**

**Note: A caulking gun and a tube of caulking is provided with the 24120 Post-Mix Speed Filler to seal any cracks (between mating parts) on the tops, sides and the installation brackets holding the two sections of the Speed Filler together to prevent water and debris from entering the cracks.**

1. Unpack the two sections of the 24120 Post-Mix Speed Filler and all loose-shipped parts included with the Speed Filler. Make sure all packing material is removed from around the coldplates.
2. Place the two sections of the Speed Filler in operating location as shown in illustration.
3. Separate the two sections of the Speed Filler approximately 12-inches apart in preparation for fastening the two sections together.
4. Install both loose-shipped installation brackets on one of the Speed Filler sections as shown in illustration. Fasten installation brackets to Speed Filler section with loose-shipped hex nuts and lockwashers. DO NOT TIGHTEN HEX NUTS AT THIS TIME.
5. Very carefully, slide the other Speed Filler section up to and engage installation brackets threaded studs (4) into mating holes in the Speed Filler section.
6. Fasten installation brackets to Speed Filler section with loose-shipped hex nuts and lock washers.
7. Tighten all installation brackets hex nuts to securely fasten the two sections of the Speed Filler together.
8. Using caulking gun and caulking provided, seal cracks (four places) where installation brackets join sides of the two Speed Filler sections.
9. Install the two loose-shipped secondary CO<sub>2</sub> regulators on sides of the two Speed Filler sections and secure with two screws already installed in pre-drilled holes in each section.
10. Connect the two plain water tubes (coiled up and connected to the plain water manifold) to the other Speed Filler section carbonators water pumps plain water inlet fittings. Seal connections with black tapered gaskets.

11. Connect CO<sub>2</sub> tube, connected to the carbonators on one of the Speed Filler Sections, to check valve on bottom of the associated secondary CO<sub>2</sub> regulator with 160-psi gauge. Seal connection with a white tapered gasket.
12. Repeat preceding step 11 to connect CO<sub>2</sub> tube connected to carbonators on other Speed Filler section to bottom of the associated secondary CO<sub>2</sub> regulator with 160-psi gauge.
13. Connect two loose-shipped drain hoses (loose-shipped with each Speed Filler section) to threaded connectors on bottoms of the Speed Filler sections tanks. Seal connections with washers provided. Route drain hoses to a permanent floor drain.
14. Connect two loose-shipped 96-inch CO<sub>2</sub> tubes (loose-shipped with each Speed Filler section) to check valves on CO<sub>2</sub> manifold of the associated secondary CO<sub>2</sub> regulator with 100-psi gauge.
15. Repeat procedure in preceding step 14 to connect two 96-inch CO<sub>2</sub> tubes of other Speed Filler section to it's associated secondary CO<sub>2</sub> regulator with 100-psi gauge.
16. Route all four CO<sub>2</sub> tubes to vicinity of where syrup tanks will be located.
17. Install loose-shipped syrup tanks gas quick disconnects on ends of the CO<sub>2</sub> tubes.
18. Route two syrup inlet tubes out through hole in end of each Speed Filler section tank to vicinity of where syrup tanks will be located. Install loose-shipped syrup tanks liquid quick disconnects on ends of syrup inlet tubes.

**Note: The water inlet supply line to the Speed Filler must be filtered, be capable of a minimum of 400-gallons per hour.**

19. Connect plain water inlet line (meeting requirements of preceding Note) to the water manifold water shutoff valve inlet fitting.



**WARNING: CO<sub>2</sub> Displaces Oxygen.** Strict Attention *must* be observed in the prevention of CO<sub>2</sub> (carbon dioxide) gas leaks in the entire CO<sub>2</sub> and soft drink system. If a CO<sub>2</sub> gas leak is suspected, particularly in a small area, *immediately* ventilate the contaminated area before attempting to repair the leak. Personnel exposed to high concentration of CO<sub>2</sub> gas will experience tremors which are followed rapidly by loss of consciousness and suffocation.



**WARNING: To avoid personal injury and/or property damage, always secure CO<sub>2</sub> cylinder in upright position with safety chain to prevent it from falling over. Should valve become accidentally damaged or broken off, CO<sub>2</sub> cylinder can cause serious personal injury.**

20. Position two CO<sub>2</sub> cylinders close to the Speed Filler and secure with safety chains.
21. Make sure gaskets are in place inside loose-shipped primary CO<sub>2</sub> regulators coupling nuts, then install regulators on CO<sub>2</sub> cylinders.
22. Connect 96-inch CO<sub>2</sub> tube (loose-shipped with one of the Speed Filler sections) to one of the two CO<sub>2</sub> cylinders primary CO<sub>2</sub> regulator assembly outlet. Seal connection with a white tapered gasket.
23. Connect other end of CO<sub>2</sub> tube to the Speed Filler section secondary CO<sub>2</sub> Regulator assembly inlet. Seal connection with white tapered gasket.
24. Repeat preceding steps 22 and 23 to connect other Speed Filler section 96-inch CO<sub>2</sub> tube between the other CO<sub>2</sub> cylinder primary CO<sub>2</sub> regulator assembly outlet and the Speed Filler section secondary CO<sub>2</sub> regulator assembly inlet.

**Note: The power circuits connected to the Dual Post-Mix Speed Filler must be fused or circuits may be wired through an equivalent HACR circuit breaker. THE POST-MIX SPEED FILLER MUST BE PROPERLY GROUNDED. THE POWER CIRCUITS MUST BE MADE UP OF COPPER CONDUCTORS AND ALL WIRING MUST CONFORM TO NATIONAL AND LOCAL ELECTRICAL CODES.**

25. Referring to previous NOTE, connect electrical power circuits to electrical control boxes on bottoms of the Post-Mix Speed Filler tanks. REFER TO UNIT NAMEPLATE FOR REQUIRED POWER CIRCUIT OPERATING VOLTAGE, HZ, AND MINIMUM CIRCUIT AMPACITY.
26. Connect the black and white electrical wires, routed out of one of the electrical control boxes, to black and white electrical wires routed out of other electrical control box (CONNECT BLACK WIRE TO BLACK WIRE AND WHITE WIRE TO WHITE WIRE).

## **POST-MIX SPEED FILLER OPERATION**

1. Make sure the Carbonators power cords are unplugged from both electrical control boxes electrical outlets.



**CAUTION: Before opening CO<sub>2</sub> cylinders shutoff valves, turn secondary CO<sub>2</sub> regulators adjusting screws to the left (counterclockwise) until all tension is relieved from adjusting screws springs.**

2. Adjust primary CO<sub>2</sub> regulators on the CO<sub>2</sub> cylinders to a minimum nominal setting of 120-psi or 24-psi higher than highest setting required by the secondary CO<sub>2</sub> regulators. Loosen CO<sub>2</sub> regulators adjusting screws locknuts. Turn adjusting screws to the right (clockwise) until regulators gauges registers nominal 120-psi, then tighten adjusting screws locknuts.
3. Adjust carbonators secondary CO<sub>2</sub> regulators with 160-psi gauges to a nominal 90-psi. Loosen CO<sub>2</sub> regulators adjusting screws locknuts. Turn adjusting screws to the right (clockwise) until regulators gauges register nominal 90-psi, then tighten adjusting screws lock nuts. CO<sub>2</sub> PRESSURE TO CARBONATORS MUST NOT EXCEED 120-PSIG.
4. Adjust syrup tanks secondary CO<sub>2</sub> regulators with 100-psi gauges to 60-psi. Loosen CO<sub>2</sub> regulators adjusting screws lock nuts. Turn adjusting screws to the right (clockwise) until regulators gauges register 60-psi, then tighten adjusting screws lock nuts.
5. Open pressure relief valves on carbonators water tanks ( red arms should be in vertical positions).

**Note: Syrup systems should be sanitized before syrup is connected into the systems.**

6. Open plain water inlet line shutoff valve and fill carbonators water tanks until water can be seen coming out of pressure relief valves then close valves.
7. Check water and CO<sub>2</sub> systems for leaks and repair if evident.
8. Plug carbonators power cords into electrical control boxes electrical outlets..
9. Make sure dispensing valves power switches on dispensing valves towers are in "ON" positions.
10. Dispense from all dispensing valves until all air is purged from carbonated water system.
11. Fill Post-Mix Speed Filler ice tanks with ice.
12. Adjust all dispensing valves for the desired carbonated water flow rate. MAKE SURE THE CARBONATED WATER FLOW RATES FOR ALL DISPENSING VALVES ARE ADJUSTED EXACTLY THE SAME.
13. Connect full syrup tanks into the syrup systems.
14. Dispense from all dispensing valves until all air is purged from syrup systems.
15. Adjust Water-to- Syrup "Ratio" (Brix) of dispensed product on all dispensing valves.
16. Check syrup systems for leaks and repair if evident.