

# INSTALLATION INSTRUCTIONS

## ED 300 FLAVORBLAST™ KITS

Disconnect Electrical power and turn off primary regulator on CO<sub>2</sub> tank in Back-Room Package (or where applicable, if located in other area).

### Loose Shipped Parts

- Merchandiser with keypad housing
- Valve solenoid assemblies (2 or 4 flow controls)
- Nozzle bracket (w/PC board) and inner nozzle
- Harnesses
  - Jumper to control board
  - Power harness
  - Solenoid harness
- Push bar ice (shorter)
- Miscellaneous parts (clips, cable ties, 1/8 rivets, labels)

### Items not included in this kit:

- BIB pump for each flavor syrup
- Beverage tubing and miscellaneous fittings
- Regulator (adjustable to 30 psig)

### Tools Required

- Drill w/.128 drill bit (#30) or equivalent
- #2 Phillips screwdrivers (stubby and standard)
- Pop rivet gun or equivalent for 1/8 rivets
- Pliers – adjustable, Wire cutters
- Tape measure



### **WARNING:**

Disconnect power to the unit before servicing. Follow all lock out/tag out procedures established by the user. Verify all power is off to the unit before performing any work.

**Failure to comply could result in serious injury, death or damage to the equipment.**

### Installation

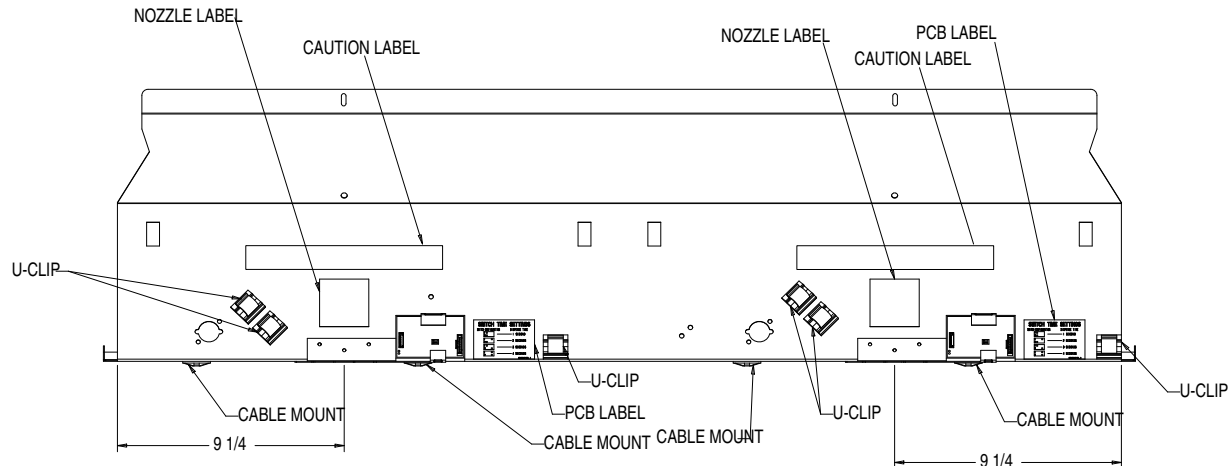
1. Remove the merchandiser and light bulb. Using white lens and graphics (old or new-if applicable) install into new merchandiser assembly.
  - For kits with graphics, only white lens will be reused;
  - For kits without graphics, white lens and graphics will be reused.
2. Remove clear 'CAUTION' labels from front of electrical box cover and discard (new labels are included in this kit and will be reinstalled in Step 9).
3. Remove lower splash panel.
4. Remove upper portion of clear ice chute cover for each side.

### For Machines with Push Bar Ice Only

5. Replace old push bar ice levers on machine with new shorter push bar ice levers.

**NOTE: Steps 7 and 8 are critical. Mounting of nozzle brackets must be correctly installed on electrical box cover for inner nozzle to properly align with cut-out in bottom of new merchandiser.**

- Locate center mounting lines on the white aluminum electrical box cover for each nozzle bracket (center mounting lines for 300 units is 9 1/4" - see Figure 1). Draw vertical line approximately 1" long, starting from bottom of electrical box cover for each nozzle bracket.

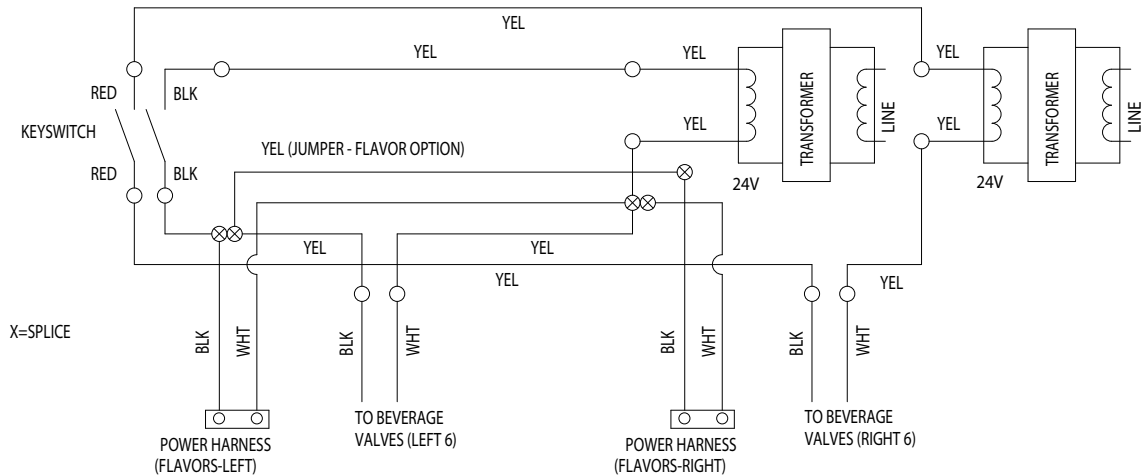


**Figure 1. ED 300 Layout**

- Using nozzle bracket (bracket with large U-slot and mounted control board) as template, line up middle hole in bracket with center line drawn in Step 7. Mark location for (3) .128 holes (use #30 drill bit) and drill into electrical box cover for each nozzle bracket. **Note: Take care to only drill about 1/2" past surface of electrical box and not to damage control board.** Open electrical box cover and remove debris from drilling operation. Close and secure electrical box cover. Install nozzle bracket with 1/8 aluminum rivets, included in this kit.
- Apply 'nozzle installation' label directly above nozzle bracket, see Figure 1. Apply new 'CAUTION' labels directly above the nozzle label on each side of electrical box. Apply 'Switch time settings' label to the right of control board at this time (see Figure 1).

### Electrical Hook-ups

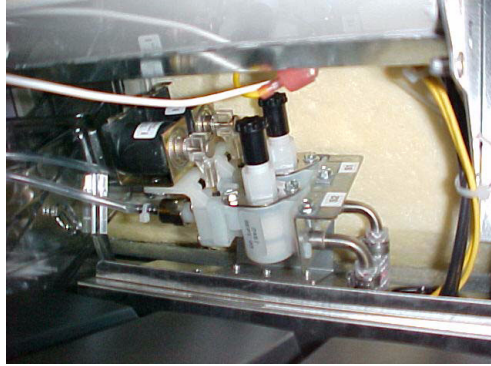
- Remove baffles, metal covers, from area above and behind valves. **Note: This is not easy due to space constraints but can be accomplished using a short stubby #2 phillips screwdriver or by rotating entire electrical box forward enabling use of standard #2 phillips screwdriver.** The plastic grommets on each baffle must be completely removed from each baffle to allow for replacement of each baffle where applicable.



**Figure 2. Wiring Schematic for Steps 10-13**

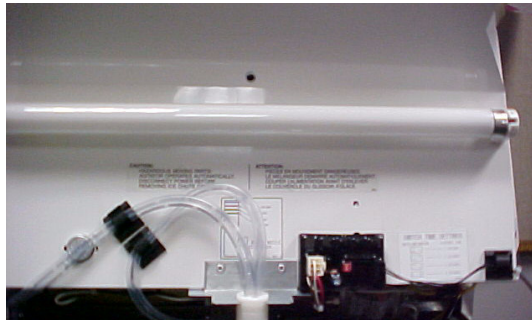
10. Locate key switch on left side of unit and find black wire connected to this key switch. **Note: The cable tie may need to be cut to allow enough slack to splice into this wire.** Feed black wire from one of the 'new' 2-pin power harness through top of plastic grommet. Splice into yellow wire from key switch using 'red' scotch splice connector.
11. Using yellow jumper (approximately 36") from kit, feed one end through top of plastic grommet from Step 10 and splice into yellow wire from 2-pin power harness (from Step 10) with the second 'red' scotch splice connector. This will connect the power source to right control board.
12. Locate 2 yellow wires from transformer coming out of center of electrical box. Disconnect one set of yellow wires and temporarily connect the end of stripped white wire to this yellow wire. **Note: Do not splice white wire into this yellow wire until it is determined that yellow wire is neutral wire from transformer- see testing in Step 18.** Connect 2-pin connector on power harness to 2-pin connector on left control board.
13. Using second 'new' 2-pin power harness, splice black wire to remaining end of yellow jumper from Step 12 with 'red' scotch splice. Splice white wire from this 2-pin harness to white wire temporarily connected to yellow wire from transformer with 'red' scotch splice (see Step 13). This second 2-pin harness is the power source for right control board. Proceed to connect 2-pin connector from right control board with this second 2-pin harness.
14. Connect solenoid harnesses to the solenoid valves prior to installing solenoid valve assemblies onto machine (see Figure 1). Proceed with installing solenoid assemblies (**Note: The plastic grommets on both sides must be re-installed into base plate of each assembly**) in area where baffles were removed. Use the screws that secured the baffles, removed in Step 10, to secure/install solenoid assemblies (see Figure 3). Connect 6-pin connectors on solenoid harness to control board. Route solenoid harnesses under electrical box and secure to bottom of electrical box with cable tie mount and cable ties.
15. Locate 30" jumper from merchandiser assembly and connect to control board. Re-install light bulbs. Temporarily connect power to unit. **Note: The bulb will come on and agitation will occur.** Test each flavor keypad for valve solenoid operation, check soda valves for normal operation as well. Switch connection of white wire from first 2-pin harness to the other yellow transformer wire if the keypads do not activate solenoids (see Step 13).

**NOTE: Disconnect power once the keypad operations have been successfully tested. Install U-clips to right side of control label to secure jumper slack. Secure any remaining harnesses under electrical box with cable mount and cable ties (see Figure 1 for recommended location of cable mounts).**



**Figure 3. ED 300 Solenoids (Right Side Shown)**

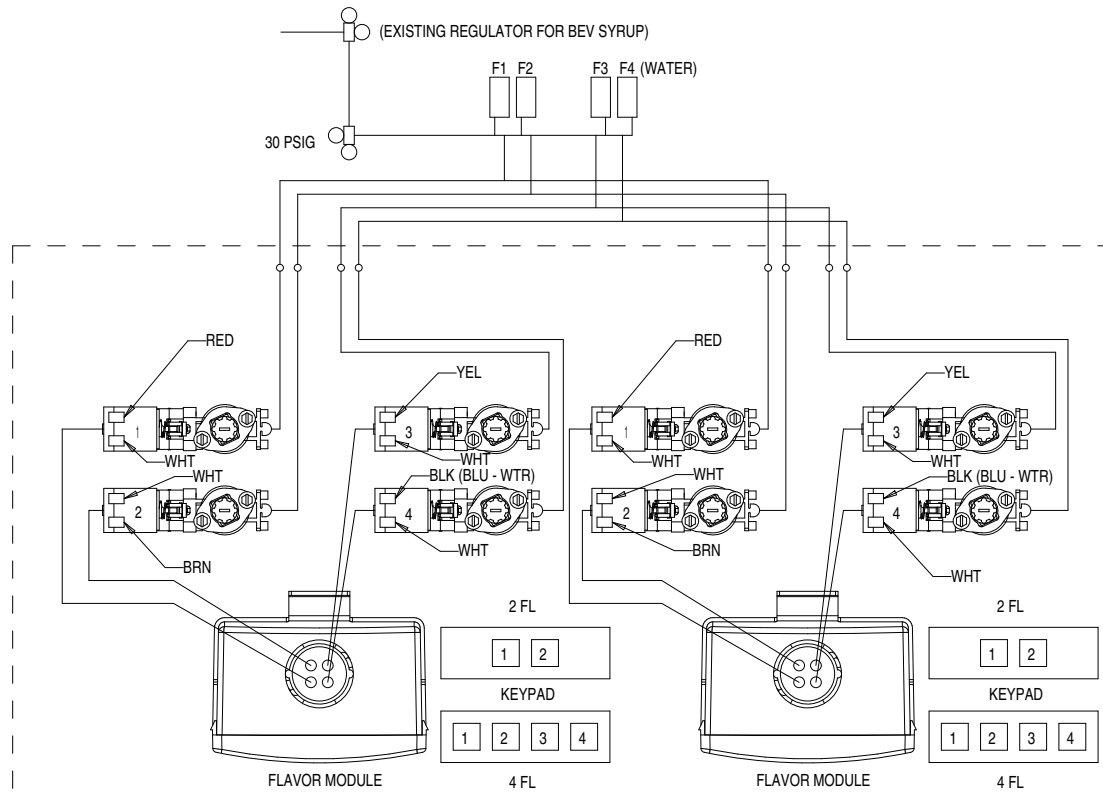
16. Beverage tubing (1/4 I.D.) should be routed from back of valve panel to center area where soda valve hook-ups from coldplate are located.
17. Replace upper portion of clear ice chute for each side.
18. Locate white inner nozzle and install onto nozzle bracket per nozzle install label (from Step 9). Tubing (1/8 I.D.) from solenoids on each side should be routed under electrical box and installed into top of each inner nozzle. Secure 1/8 I.D. tubing to electrical box front with U-clips (see Figure 4) take note to properly clean surface of electrical box prior to attaching U-clips.



**Figure 4. ED 300 with 4 Flavor Option  
(Right Side of Electrical Box Shown. Left Side Layout is Identical to Right.)**

### Electrical Testing

19. Set-up syrup flavors in Back-Room Package area as shown in BRP set-up (see Figure 5).



**Figure 5. ED 300 Plumbing/Electrical Connections**

20. Once Back-Room Package items have been installed and tubing from BRP have been run to dispenser, connections to dispenser can proceed. Make note of which flavors are 1, 2, 3, and 4.
21. Make connections from 'ambient' FlavorBlast™ syrup lines to valve solenoid lines at front of machine (see Step 16).
22. Apply appropriate flavor decals to correspond to FlavorBlast™ syrup hook-ups. **Note: The far left button corresponds to hook-up 1 and so forth.**
23. Apply plumbing label for FlavorBlast™ to the inside of the splash panel next to beverage valve plumbing label.

## Start-up

1. Reconnect power to dispenser and turn on primary regulator on CO<sub>2</sub> tank in Back-Room Package.
2. Actuate keypad to purge syrup through beverage tubing and through inner nozzle. Initial purging can also be accomplished by removing the merchandiser with the harness still connected to control board. Manually pushing the plungers on each solenoid valve will purge the syrup through the inner nozzle. Keep keypad housing and connections clear of drip tray area when purging in this manner.
3. Check connections in the following areas for possible leaks: in from of unit at syrup connections, elbow fitting at flow controls, and connections at the inner nozzle.
4. With keypad jumpers connected to control boards proceed with installation of the new merchandiser (with assembled components) onto unit. Wind up and tuck slack from jumper and keypad onto U-clips mounted to right side of each control board label. **Note: The inner white flavor nozzle should protrude through bottom of keypad housings by 1/4-1/2" (outer nozzle to be installed last).**
5. Re-install front splash panel.
6. Install UF-1 outer nozzle to bottom of each FlavorBlast™ keypad housing.

Unit should now be ready for normal soda operation with FlavorBlast™ option added.

## Troubleshooting

FLAVOR SYRUPS DO NOT DISPENSE	<ul style="list-style-type: none"> <li>• No 24 volt power to PC board.</li> <li>• No CO<sub>2</sub> pressure.</li> <li>• Empty syrup tank.</li> <li>• Kinked tubing.</li> <li>• Clogged inner nozzle.</li> <li>• Defective PC board.</li> <li>• Defective harness from keypad.</li> <li>• Defective Flow control.</li> <li>• Defective solenoid harness.</li> <li>• Defective keypad.</li> </ul>
FLAVOR DISPENSES FOR MORE THAN 1 SEC	<ul style="list-style-type: none"> <li>• Dip switch settings on control board incorrect.</li> <li>• PC board defective.</li> <li>• Defective flow control.</li> </ul>
FLAVOR DISPENSES MORE THAN .5 OZ	<ul style="list-style-type: none"> <li>• Dip switch settings on control board incorrect.</li> <li>• Flow control incorrectly set.</li> <li>• PC board defective.</li> <li>• Defective flow control.</li> </ul>

## Sanitizing Procedure

### NOTE: Disconnect Power Before Cleaning!

- Soap solution – Use a mixture of mild detergent and warm (100°F) potable water.
- Sanitizing solution – Use ½ ounce of household bleach in 1 gallon of potable water. Preparing the sanitizing solution to this ratio, the required solution of 200 PPM will be obtained.
- Cleaning tank – Fill clean, empty tank with a mixture of mild detergent and five (5) gallons of warm potable water (120°F).

### Sanitize Flavor Syrup Lines - B-I-B System

1. Remove all the quick disconnects from all the B-I-B containers.
2. Fill a suitable pail or bucket with soap solution.
3. Submerge all disconnects (gas and liquid) in the soap solution and then clean them using a nylon bristle brush. Do not use a wire brush. Rinse with clean water.
4. Using a plastic pail, prepare approximately five (5) gallons of sanitizing solution.
5. Rinse the B-I-B disconnects in the sanitizing solution.
6. Sanitizing fittings must be attached to each B-I-B disconnect. If these fittings are not available, the fittings from the empty B-I-B bags can be cut from the bags and used. These fittings open the disconnect so the sanitizing solution can be drawn through the disconnect.
7. Place all the B-I-B disconnects into the pail of sanitizing solution. 'Purge' all the flavor valves until the sanitizing solution is flowing from inner nozzle. This can easily be accomplished by holding down each keypad button for at least 15 seconds. After 15 seconds the valve will go into 'purge' mode and continuously dispense for the next 60 seconds. Allow sanitizer to remain in lines for at least thirty (30) minutes.
8. Remove nozzle cover (outer nozzle) from flavor module housing. Clean in a soap solution and rinse with clean water.
9. Remove the sanitizing fittings from the B-I-B disconnects and connect the disconnects to the appropriate B-I-B container. Operate the flavor valves until all sanitizer has been flushed from the system and flavor syrup is flowing freely.