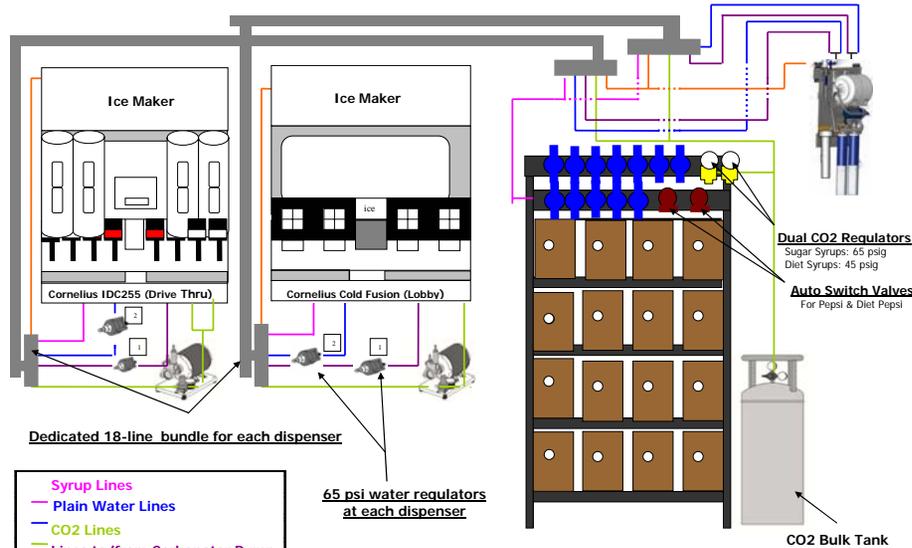


Installation Guidelines



•CO2 supply pressure set to 120 p.s.i.g.



•Diet syrups 45 p.s.i.g.
•Sugar based 65 p.s.i.g.

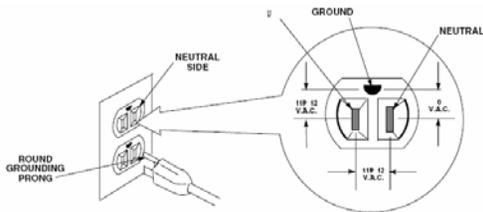
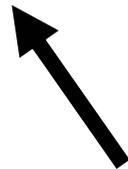
•Water booster/water filter mandatory for all Taco Bell and KFC locations

•New **18-line** bundle tubing
+14 – 3/8” poly for syrups
+3 – 3/8” braided for water
Separate lines for plain water, carb water & ice maker
+1 – 1/4” braided for CO2



Separate bundles for Lobby & Drive Thru

•65 p.s.i.g. water pressure regulators installed at each dispenser
1 for plain water line
1 for carb water line



Revision Date: May 08, 2014
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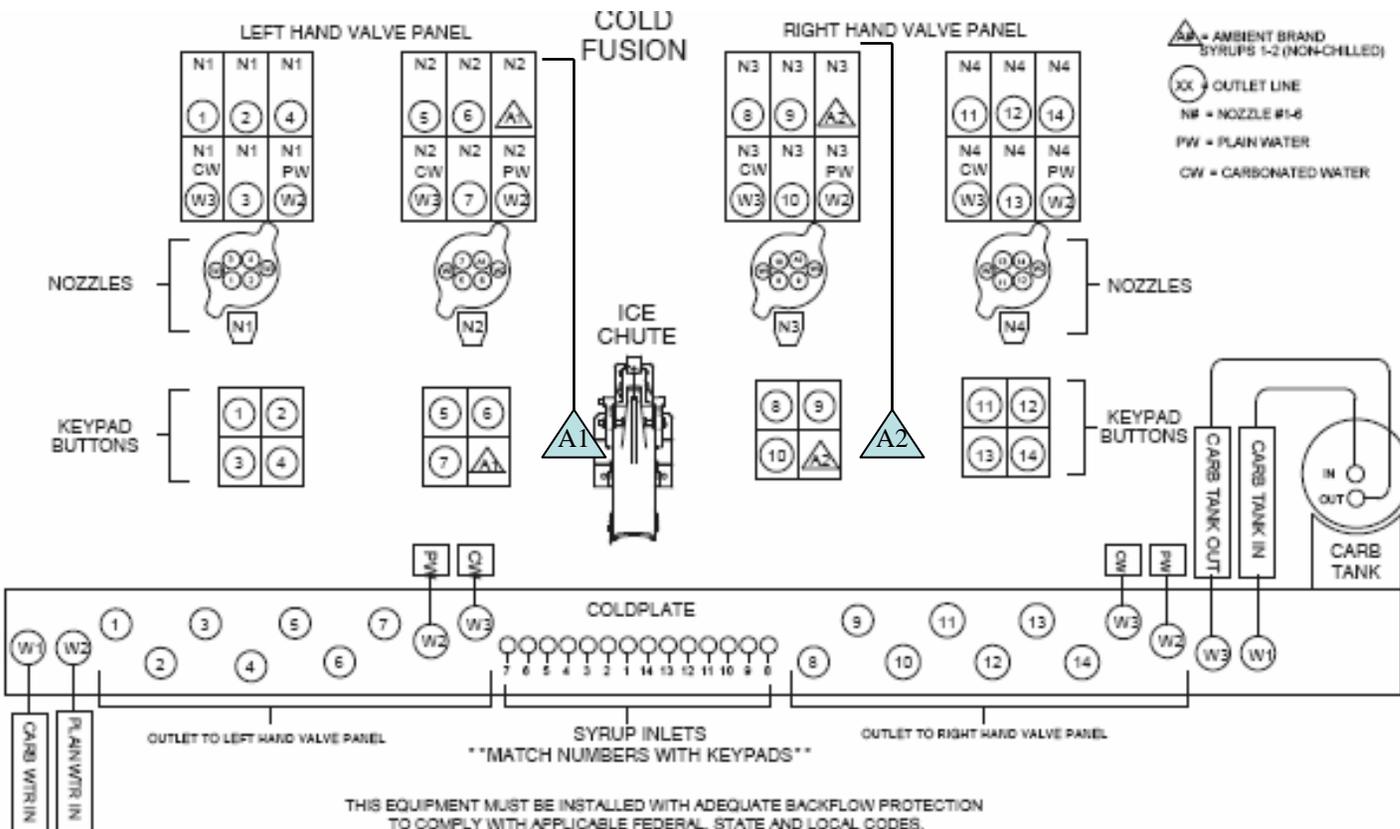
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Revision: B
Publication Number: 620045238

Plumbing Differences



- Note Carb Water & Non-carb water connections now located on the LH front corner of the Dispenser.
- Note change in syrup inlet connections, syrup 1 inlet starts from the center to syrup 7 inlet on the left and syrup 8 inlet starts on the right to syrup 14 inlet in the middle. Due to modifications in plumbing take note of which valves each INLET FITTINGS FEED.



Notes:
 16 Brands, 14 chilled syrup lines allow for 2 ambient syrups (non-carbs).
 Positions A1 & A2 are the non-chilled syrup lines.

Start Up Sequence



1. As with all Ice Cooled – Ice Drink Dispensers assure that the cold plate has been chilled for 30 minutes prior to setting Ratio – per Pepsi specs.
2. Start up Water Booster System according to Supplier’s Instructions.
3. Turn on Water Supply to Cold Fusion and pull relief on the carbonator tank (located behind the lower splash plate on the RH side) to assure system is flooded with water and all air is removed.
4. Turn off water supply.
5. Turn on CO2 Supply to Cold Fusion – supply pressure of 120 p.s.i.g. from the Bulk or High Pressure Tank supplies the 75 p.s.i.g. preset gauge on the Pump Deck.
6. Plug Cold Fusion into pump deck and make sure the ON/OFF switch is turned OFF.
7. Plug the Cold Fusion into its devoted 115VAC/1PH/15A power receptacle.
8. Depress and hold any of the Brand buttons that will dispense carbonated water until CO2 only dispenses to gas out the system, now all air is evacuated and the tank is charged with CO2.
9. Turn on Water Supply to the Cold Fusion.
10. Turn the pump deck switch ON to fill carbonator tank.
11. Start up Syrup BIB Pumps according to Supplier’s Instructions.
12. Depress each Brand button individually and hold to prime water and syrup lines, the button will stop dispense after 30 seconds of continual pour. It may take several 30 second dispenses until spitting stops and all air has been removed from the water and syrup lines.

Carbonator tank relief valve.



Plug from Cold Fusion



Pump Deck

ON/OFF switch to pump motor – only.

New “E-Board”



NOTE: Once power is applied to the Cold Fusion a timer starts filling of the carbonator tank, should the tank not fill in 5 minutes the “E-board” will shut down on error. **Should the water supply be shut off and the Cold Fusion errors after 5 minutes just simply cycle power to the Dispenser to reset the board.** This saves carb pumps.

White rubber programming buttons for selected button cluster.



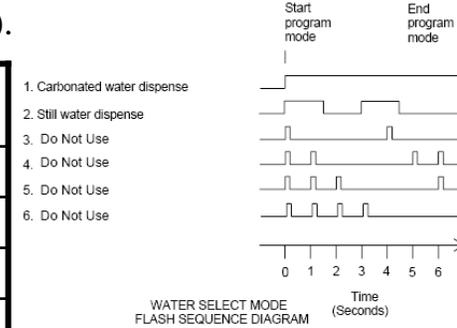
4 Brand Buttons per Button Cluster

Carb or Non-carb changeover is achieved by selecting from a carbonated water solenoid or a non-carbonated water solenoid being energized, dependent upon what is programmed. Each Brand button has this ability.

In the water selection mode, each of the Brand Buttons flashes in a sequence according to one of six dispense types, Cold Fusion only uses Dispense types 1 & 2 (see below).

1. Depress two white rubber programming buttons simultaneously until all four Brand Buttons flash OFF and ON bright – or for about 3 seconds. Factory default is for Carbonated water dispense (the Brand buttons will be lit solid).
2. To change a single Brand button from a Carbonated to a Still (non-carbonated) Water dispense depress and release that Brand Button one time (the Brand button will flash ON for 1.5 seconds and OFF for 1.5 seconds). The flashing sequence now shows that Brand is set to dispense still water. *Note that each of the 16 Brand buttons can be individually set for either carbonated water dispense or still water dispense.*
3. To change from a Still Water dispense to a Carbonated Water dispense depress the desired Brand button 5 times or until lit solid.
4. The next logical step while still in programming would be to set Ratio. *Note:* Should you choose to leave programming depress two white rubber programming buttons simultaneously until all four Brand Buttons Flash OFF and ON to a dull glow (once again about 3 seconds).

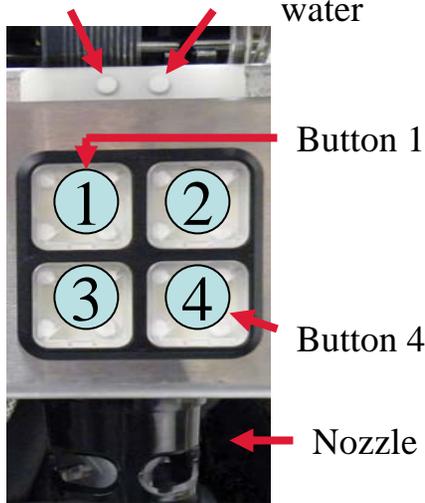
Dispense Type	Description	Button Illumination (each button is back lit by a LED)
Type 1	Carbonated Water Dispense	Solid
Type 2	Still Water Dispense	Flashing, 1.5 sec ON, 1.5 sec OFF
Type 3	Do not use	N/A (1 quick flash / long pause)
Type 4	Do not use	N/A (2 quick flashes / long pause)
Type 5	Do not use	N/A (3 quick flashes / long pause)
Type 6	Do not use	N/A (4 quick flashes / long pause)



Ratio Procedure – Second Programming Level



Carbonated water Non-carbonated water



Syrup side
Water side



Water / syrup flow is adjusted the same as the UFB valve –



CW – Increase

CCW - Decrease

Once the Carb or Non-carb setting has been achieved ratio can be set (while still in Programming mode). Ratio is set by volume, the PC Board has a non-adjustable 4 second timer used to run both the water and syrup solenoids, no S-Tube is used.

1. Prior to setting ratio stir the Ice and verify temperature is down to Pepsi specifications.
2. Depress buttons 1 & 4 simultaneously until all 4 buttons flash quickly – or for about 3 seconds . *Note: The 2 white rubber programming buttons now function to run the carb or non-carb water solenoid valves.*
3. Place “water side” of the ratio cup under the nozzle and tap the carb water button, tap the ratio cup 3 times on the counter and check dispensed amount. Increase or decrease carbonated water solenoid flow control until 10 ounces is dispensed in the 4 second portion.
4. Repeat process for Non-carb water and set to 10 ounces.
5. Place “syrup side” of the ratio cup under the nozzle and tap the Brand button (the Brand Buttons now energize the specified syrup solenoid for the 4 second portion. Increase or decrease syrup solenoid flow control until 2 ounces is dispensed. *Note: It may be helpful to keep the ratio cup filled with the 10 ounces of water for better perspective of 5:1 ratio.*
6. Repeat for other 3 Brand syrups (per button cluster).
7. To exit the programming mode depress buttons 1 & 4 simultaneously until all 4 buttons quickly flashing change back to bright (carb / non-carb mode) – or for about 3 seconds then depress the 2 white rubber programming buttons simultaneously until all 4 buttons change back to a dull glow – about 3 seconds.
8. Repeat for remaining 3 button clusters.

Note: There are two programming levels, Carb to non-carb is the first and ratio is the second. While in the programming mode should a button not be depressed within a 30 second timeframe the system will back out of programming to the Dispense mode. Should this happen simply start that task once again.

E Board Diagnostics/Troubleshooting Guide



Diagnostic Red LED

DIAGNOSTICS GUIDE FOR THE MAIN CONTROL BOARD

State	Observed State of Red LED	Sensor Input	Control Response	Service Remedy
0	Flash rate 3 seconds	Both probes read "wet"	Standby mode. Pump = OFF	No service required
1	Flash rate 1/2 second	Pump is OFF and HIGH probe reads "dry" and LOW probe reads "wet"	Waiting for level to drop below LOW probe. Pump = OFF	No service required
2	Flash rate 1/2 second	Both HIGH and LOW probes read "dry"	Normal mode. Pump = ON	No service required
3	Flash rate 1/2 second	Entered when HIGH probe does not detect liquid, and LOW probe does detect liquid, and pump is ON	Normal mode. Pump = ON	No service required
4	Flash rate 1 second	Entered when HIGH probe reads "wet" and LOW probe reads "dry"	THIS IS AN ERROR CONDITION.	<ul style="list-style-type: none"> - Check electrical connections at the carbonator tank, and at connector J4 on the main control board - Black wire should be connected to the LOW probe and also to Pin 4 of Connector J4 - Reverse the connections if incorrect - Replace harness if necessary
5	ON continuously, but "flickers" every 3 seconds	Poor signal connection to the carbonator tank. May result in short cycling of the carbonator pump.	Able to continue to function but carbonator pump short-cycles. Pump will come on each time a drink is drawn. THIS SITUATION SHOULD BE CORRECTED.	Check the harness connections of the red signal wire at both ends: <ol style="list-style-type: none"> 1) at the carbonator ring terminal and 2) at Pin 5 of the J4 connector at the main control board
6	ON continuously	Entered when pump has run continuously for 5 minutes	THIS IS AN ERROR CONDITION.	Unplug the unit and plug it back in. This will reset the unit's main control board and restart the carbonator pump.

