

# Installation Instructions for Cold Carbonation Retrofit (CCR) Kits

Read all of the instructions carefully before beginning installation.

- 1) Disconnect power to the dispenser, icemaker and carbonator.  
If your CCR Kit does not contain a pre-chill coil basket, go to step 18.
- 2) Remove ice from the dispenser bin. **NOTE: Save some ice if possible to fill the bin after installation of the coil basket.**
- 3) Move the top-mounted icemaker to gain access to the dispenser bin. **NOTE: On most installations, the icemaker will not have to be removed.**
- 4) Remove strip lid(s), if present.
- 5) Remove paddlewheel pin, agitator bar, paddlewheel, bin liner and paddlewheel area (shroud) from the ice bin.
- 6) Remove any remaining ice from the bin.
- 7) Place coil basket into the ice bin.
- 8) Trim the bin top gasket to allow the tubes passing over the bin wall to lay flat against the top of the bin wall.
- 9) Clean the bin wall behind the corner cover with the supplied alcohol wipes.
- 10) Fasten the corner cover in place with the double-sided tape on the cover. The cover should be even with the top of the bin gasket.
- 11) Use the silicone provided to seal the tubes to the top of the bin wall.
- 12) Re-install the paddlewheel area and bin liner. **NOTE: The corner cover bracket must be installed under the left side of the bin liner. The bin liner screws hold the bracket and the liner in place.**
- 13) Re-install the paddlewheel, agitator bar and paddlewheel pin.
- 14) Place supplied foam gasket around the bin top to seal icemaker to dispenser.
- 15) Re-install strip lid(s), if present.
- 16) Fill ice bin.
- 17) Move icemaker to correct position on dispenser bin.
- 18) Shut off water supply to dispenser and carbonator.
- 19) Depressurize system.
- 20) Connect new cold carbonation pump deck to dispenser according to the diagram for the dispenser in the instruction packet. **NOTE: Pump deck must be located within 10 feet of the dispenser. All chilled water lines must be insulated.**
- 21) Restore water to dispenser and carbonator.
- 22) Restore CO2 to carbonator. CO2 supply to fixed regulator on pump deck should be set to 100 psi.
- 23) Restore electricity to dispenser carbonator and icemaker.
- 24) Operate carbonated beverage valve on dispenser until a steady stream of carbonated water flows out. Repeat for each carbonated beverage valve. **NOTE: Do NOT bleed more than two (2) beverage valves at a time.**

**NOTE: The incoming water pressure must not exceed 55 psi. If static water pressure is above 55 psi, it must be regulated to 50 – 55 psi. Incoming water pressure below 45 psi and available water flow of less than 2.5 gpm may require a water booster and regulator system. To test available water flow, open supply line and fill a one-gallon container. The container should be filled in less than 25 seconds.**

**NOTE: The motor cord is equipped with a 3-prong electrical plug. To ensure both the safety and proper operation of this equipment, be certain that the electrical receptacle is a proper design so as to accept this plug assuring that the carbonator is properly grounded.**

**NOTE: If the carbonator is to be installed in an area or community whose local codes require permanent wiring, the following procedure should be followed:**

- 1) Remove electrical box cover. Disconnect green ground wire from the metal shroud, black and white wires from the terminal block. Remove flexible cord restraint from hole in electrical box by compressing sides of restraint and pulling outward. Replace it with a U.L. Listed conduit connector that should be firmly screwed into the electrical box. The three wires (white, black, and green) should be fed through the conduit connector, brought into the electrical box and connected to the terminal block. **WARNING: NO. 14 AWG WIRE MUST BE USED FOR FIELD WIRING. The conduit may now be inserted into the connector and secured.**
- 2) The green wire from the conduit should be connected to the metal shroud.
- 3) The white and black wires from the conduit must connect to the corresponding white and black wires on the terminal block.

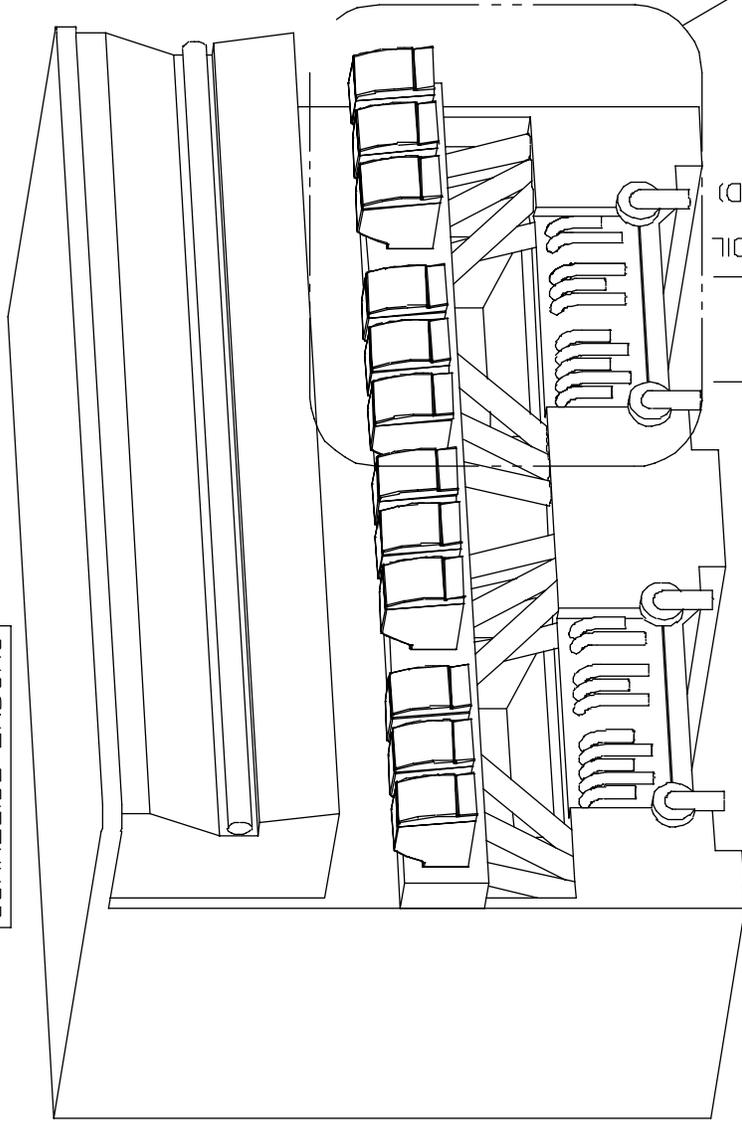
## CCR (Cold Carbonation Retrofit) Kit Cleaning and Sanitizing Instructions

1. Disconnect power to the pump deck
2. Disconnect the water supply to the pump deck.
3. Place the water inlet fitting into a 5-gallon bucket filled with a warm water and mild, non-foaming, anti-bacterial detergent solution. Use a low foaming detergent to avoid excess foam in the carbonator tank. Foam causes liquid level probes to see a false full condition in the tank.
4. Secure the water inlet fitting and hose to the bucket. The fitting must not lose contact with the water or the pump will be damaged.
5. Reconnect power to the pump deck.
6. Activate the beverage valve to pull the 5 gallons of detergent solution through the system.
7. Secure the water inlet fitting and hose to a 5-gallon bucket filled with clean tap water.
8. Activate the beverage valve to pull 5 gallons of tap water through the system.
9. Prepare a 5-gallon bucket of sanitizing solution consisting of 4 gallons tap water and 2 oz. Liquid, unscented laundry bleach (5.25% CL Na O concentration). This solution will provide 200 PPM available chlorine.
10. Secure the water inlet fitting to the 5-gallon bucket of sanitizing solution.
11. Activate the beverage valve to pull 2 gallons of sanitizing solution through the system.
12. Deactivate the beverage valve and allow the sanitizing solution to remain in the system for a minimum of 15 minutes.
13. Activate the beverage valve and draw the remaining 2 gallons of sanitizing solution through the system.
14. Fill a 5-gallon bucket with clean tap water.
15. Secure the water inlet fitting and hose to a 5-gallon bucket filled with clean tap water.
16. Activate the beverage valve and pull clean tap water through the system.
17. Repeat steps 3 through 16 on all beverage valves.

***NOTE: These instructions are intended to sanitize the CCR Kit only. Please follow manufacturer's instructions to sanitize the remainder of the beverage dispenser.***

CORNELIUS ENDURO

# ED-300 FIELD RETROFIT PLUMBING DIAGRAM



CARBONATED WATER TO INLETS OF UNIT PER CUSTOMER SPECIFICATION (INSULATION REQ'D)

FROM PUMP TO W9 INLET

TUBING FROM WATER COIL W9 TO CARBONATOR INLET (INSULATION REQ'D)

CO<sub>2</sub> SUPPLY 100 PSI MIN.

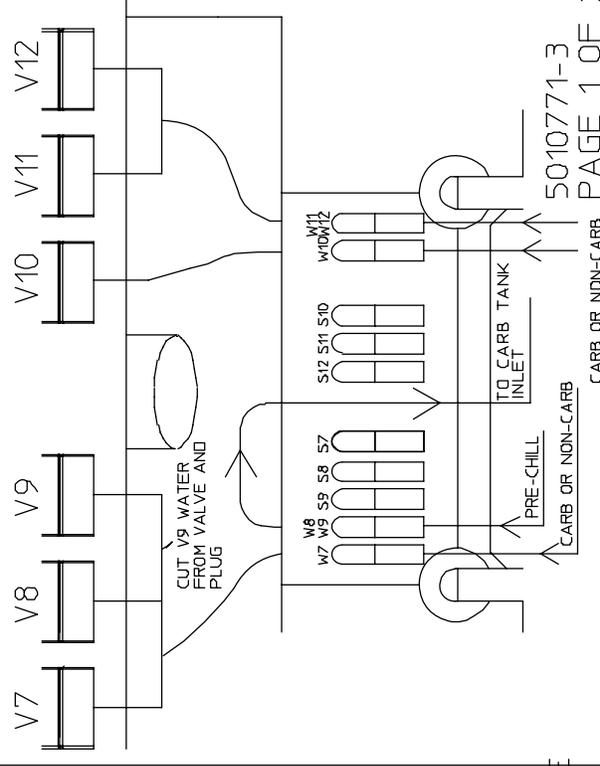
CO<sub>2</sub> REGULATOR FIXED AT 75 PSI

WATER SUPPLY

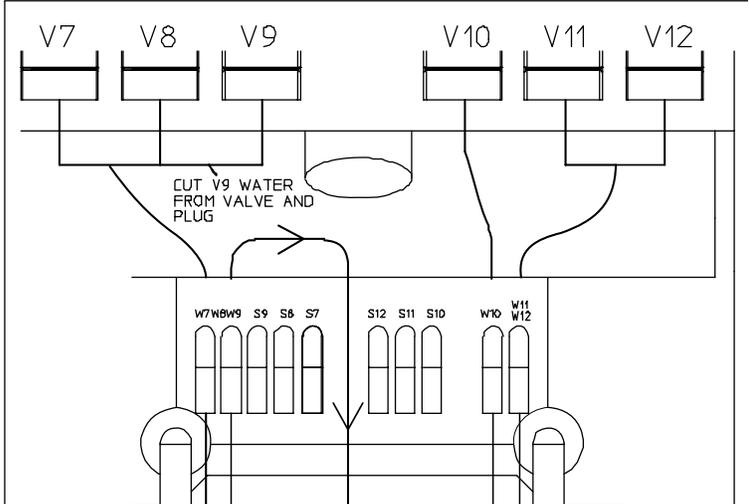
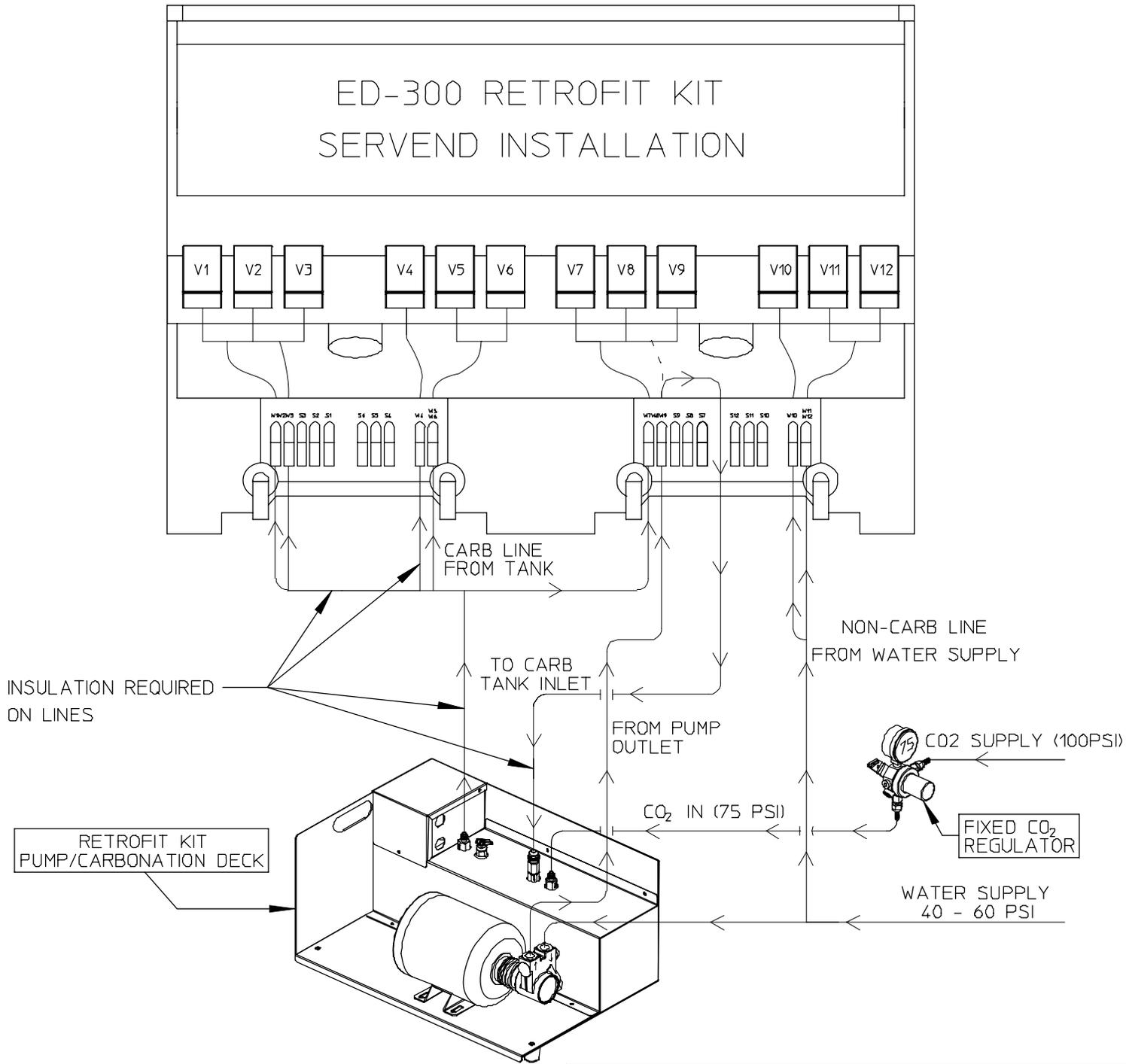
RETROFIT DECK

**IMPORTANT!**  
RETROFIT DECK MUST BE PLACED ON A LEVEL SURFACE TO FUNCTION PROPERLY

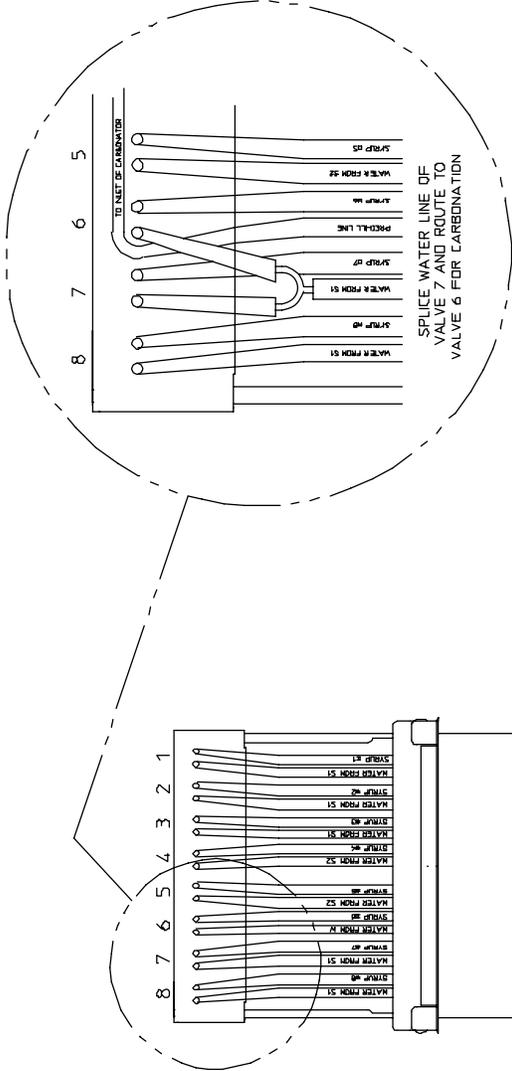
NOTE: CARBONATION DECK MUST BE WITHIN 10' (FEET) OF UNIT TO FUNCTION PROPERLY.



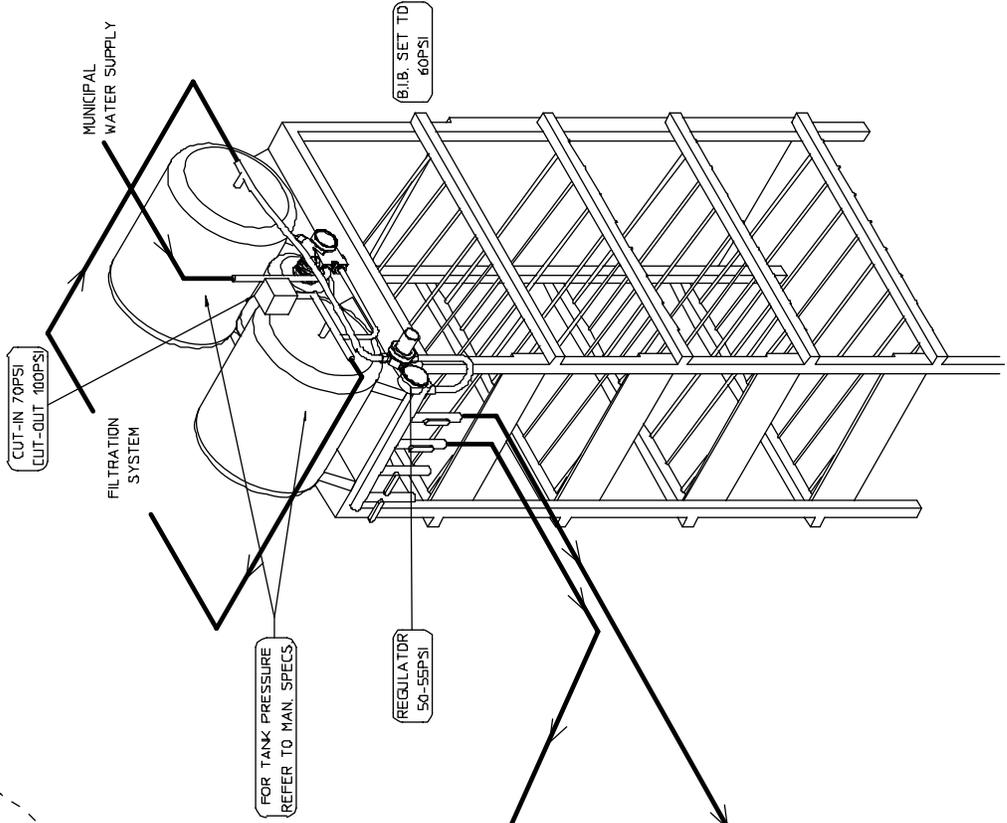
# ED-300 RETROFIT KIT SERVEND INSTALLATION



# CB-2323 FIELD RETROFIT PLUMBING DIAGRAM



NOTE: FILTRATION SYSTEM MAY BE PLACED BEFORE BOOST PUMP PER CUSTOMER SPECIFICATION.



NON-CARBONATED WATER TO INLETS OF UNIT PER CUSTOMER SPECIFICATION

FEED INSULATED LINE UP THROUGH UNIT AND OVER VALVE TUBES TO ATTACH TO PRECHILL (UNINSULATED)

CARBONATED WATER TO INLETS OF UNIT PER CUSTOMER SPECIFICATION (INSULATED)

FROM PUMP OUTLET TO UNIT INLET W USED AS PRECHILL (UNINSULATED)

WATER FROM BOOSTER TO PUMP INLET

CO<sub>2</sub> SUPPLY 100PSI MIN.

CO<sub>2</sub> REGULATOR FIXED AT 75 PSI

NOTE: CARBONATION DECK MUST BE WITHIN 10' (FEET) OF UNIT TO FUNCTION PROPERLY.

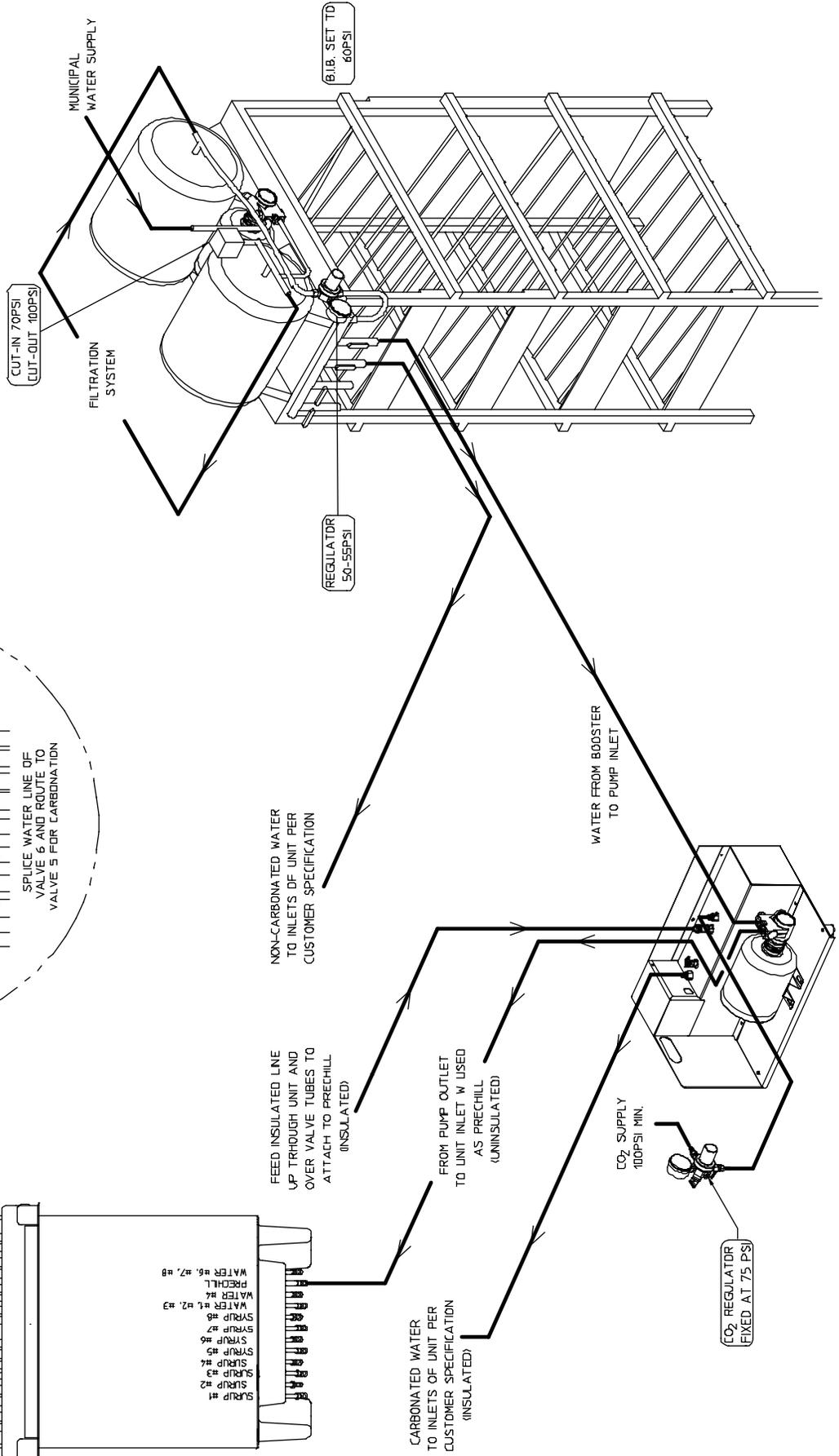
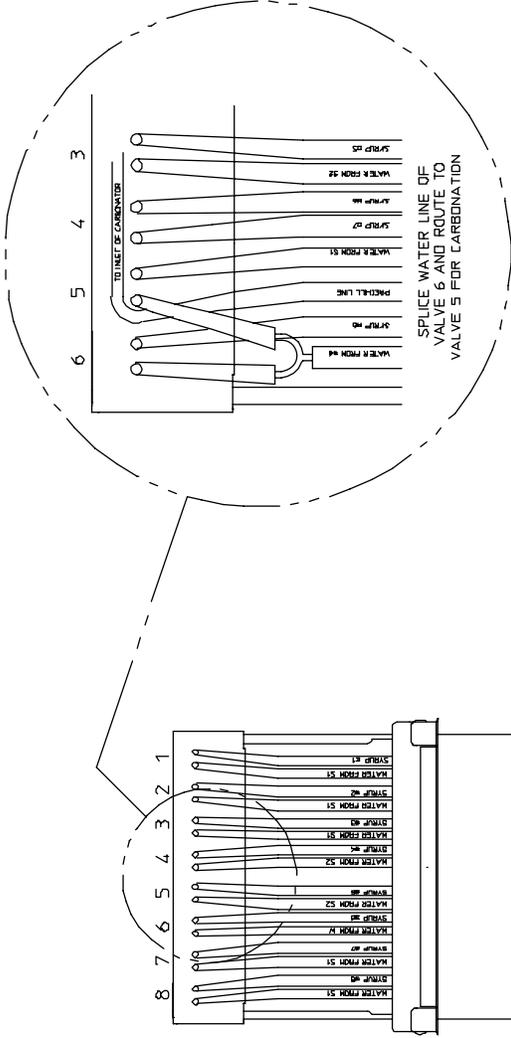
**RETROFIT DECK**

**IMPORTANT:**  
RETROFIT DECK MUST BE PLACED ON A LEVEL SURFACE TO FUNCTION PROPERLY

**BOOSTER SYSTEM**

NOTE: REQUIRES BOOSTER SYSTEM IF SUPPLY WATER PRESSURE IS BELOW 40 PSI OR IF TWO UNITS ARE INSTALLED ON THE SAME WATER LINE

# DI-2323 FIELD RETROFIT PLUMBING DIAGRAM



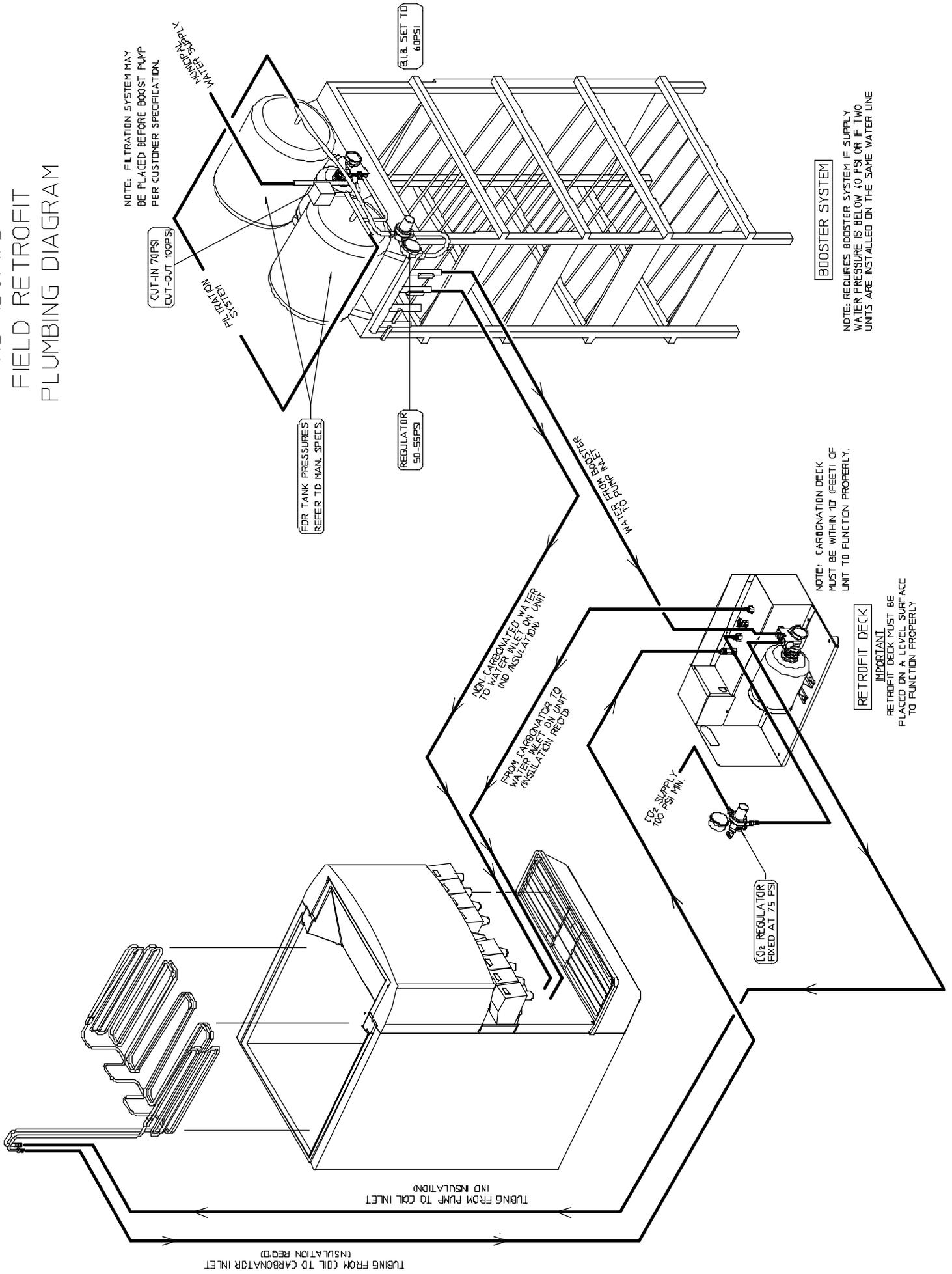
## BOOSTER SYSTEM

NOTE: REQUIRES BOOSTER SYSTEM IF SUPPLY WATER PRESSURE IS BELOW 40 PSI OR IF TWO UNITS ARE INSTALLED ON THE SAME WATER LINE

## RETROFIT DECK

IMPORTANT  
RETROFIT DECK MUST BE PLACED ON A LEVEL SURFACE TO FUNCTION PROPERLY

# MD-150/175 FIELD RETROFIT PLUMBING DIAGRAM



NOTE: FILTRATION SYSTEM MAY BE PLACED BEFORE BOOST PUMP PER CUSTOMER SPECIFICATION.

CUT-IN 70PSI  
CUT-OUT 100PSI

FILTRATION SYSTEM

WATER SUPPLY

REG. SET TO 60PSI

FOR TANK PRESSURES REFER TO MAN. SPECS.

REGULATOR 50-55PSI

WATER TO PUMP INLET

NON-CARBONATED WATER (NO INSULATION) UNIT

FROM CARBONATOR TO WATER INLET ON UNIT (INSULATION REQ'D)

CO2 SUPPLY 100 PSI MIN.

CO2 REGULATOR (FIXED AT 75 PSI)

NOTE: CARBONATION DECK MUST BE WITHIN 10' (FEET) OF UNIT TO FUNCTION PROPERLY.

RETROFIT DECK

IMPORTANT: RETROFIT DECK MUST BE PLACED ON A LEVEL SURFACE TO FUNCTION PROPERLY

BOOSTER SYSTEM

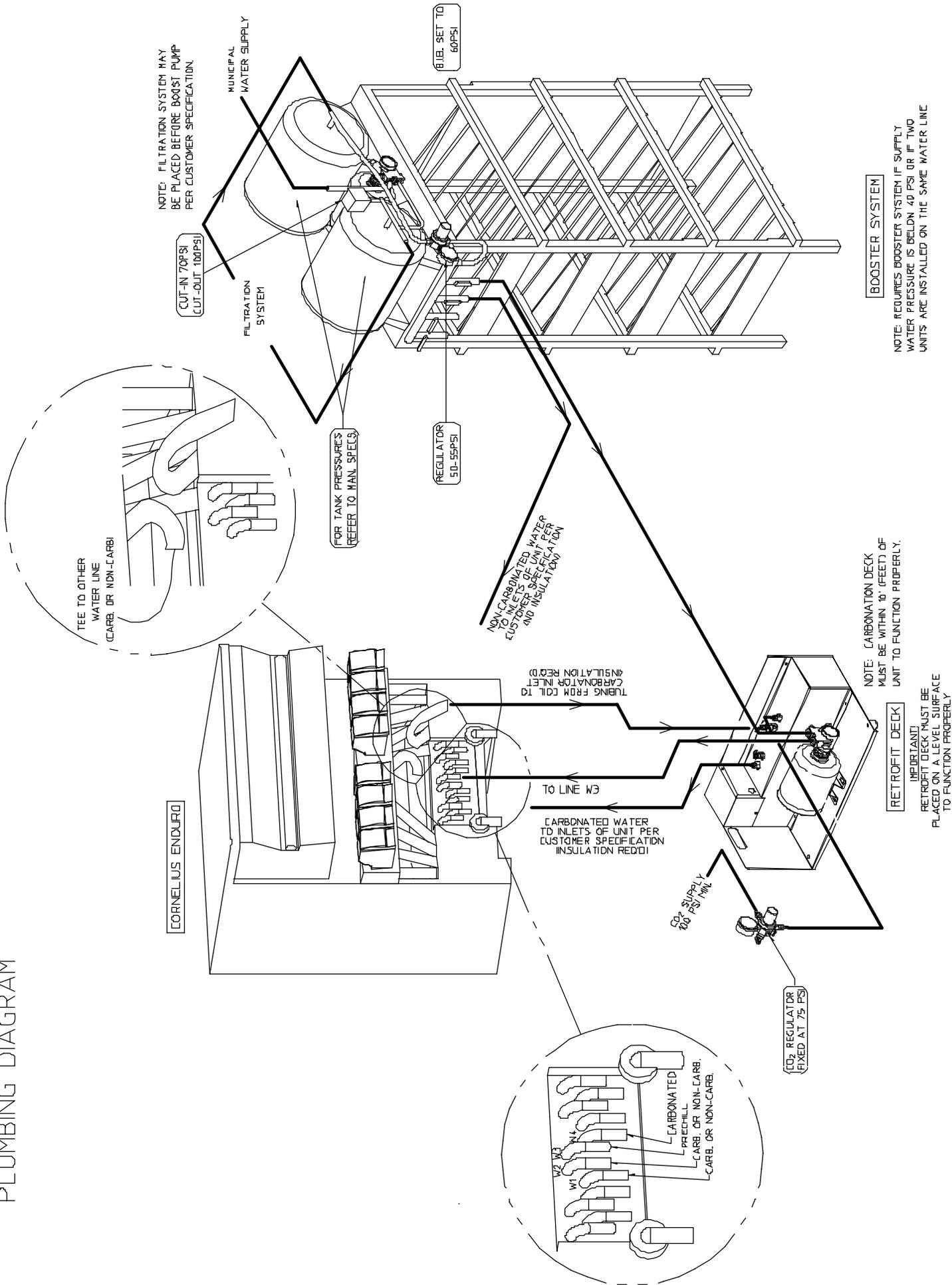
NOTE: BOOSTER SYSTEM REQUIRES BOOSTER SYSTEM IF SUPPLY WATER PRESSURE IS BELOW 40 PSI OR IF TWO UNITS ARE INSTALLED ON THE SAME WATER LINE

TUBING FROM COIL TO CARBONATOR INLET (INSULATION REQ'D)

TUBING FROM PUMP TO COIL INLET (NO INSULATION)



# ED-200 FIELD RETROFIT PLUMBING DIAGRAM



NOTE: FILTRATION SYSTEM MAY BE PLACED BEFORE BOOST PUMP PER CUSTOMER SPECIFICATION.

CUT-IN 70PSI  
CUT-OUT 100PSI

MUNICIPAL  
WATER SUPPLY

FILTRATION  
SYSTEM

REGULATOR  
50-55PSI

B.L.B. SET TO  
60PSI

FOR TANK PRESSURES  
(REFER TO MAN. SPECS.)

NON-CARBONATED WATER  
TO INLETS OF UNIT PER  
CUSTOMER SPECIFICATION  
(INSULATION REQ'D)

TUBING FROM COIL TO  
CARBONATOR INLET  
(INSULATION REQ'D)

TO LINE W3

CARBONATED WATER  
TO INLETS OF UNIT PER  
CUSTOMER SPECIFICATION  
(INSULATION REQ'D)

CO2 SUPPLY  
700 PSI/10ML

CO2 REGULATOR OR  
FIXED AT 75 PSI

TEE TO OTHER  
WATER LINE  
(CARB. OR NON-CARB.)

CORNELIUS ENDURO

RETROFIT DECK

NOTE: CARBONATION DECK  
MUST BE WITHIN 10' (FEET) OF  
UNIT TO FUNCTION PROPERLY.

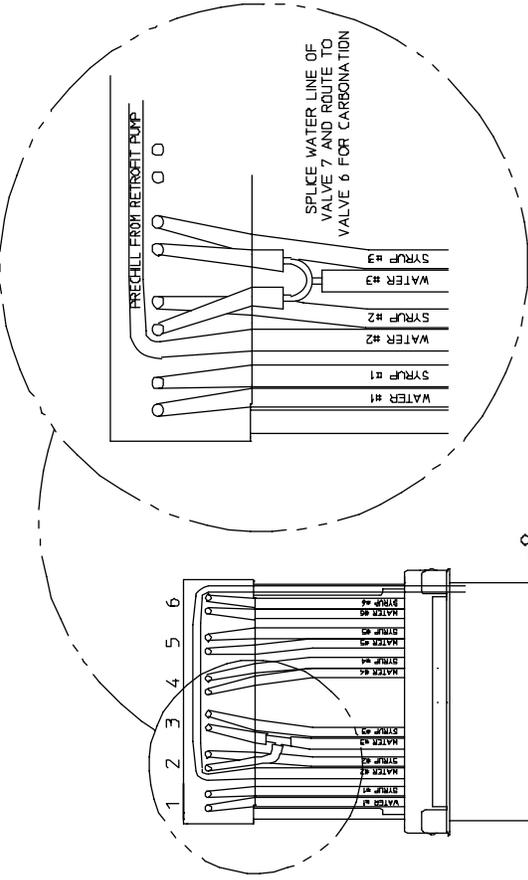
IMPORTANT!

RETROFIT DECK MUST BE  
PLACED ON A LEVEL SURFACE  
TO FUNCTION PROPERLY

BOOSTER SYSTEM

NOTE: REQUIRES BOOSTER SYSTEM IF SUPPLY  
WATER PRESSURE IS BELOW 40 PSI OR IF TWO  
UNITS ARE INSTALLED ON THE SAME WATER LINE

# DI-1522 FIELD RETROFIT PLUMBING DIAGRAM



NOTE: FILTRATION SYSTEM MAY BE PLACED BEFORE BOOST PUMP PER CUSTOMER SPECIFICATION.

CUT-IN 70PSI  
CUT-OUT 100PSI

MUNICIPAL WATER SUPPLY

FILTRATION SYSTEM

FOR TANK PRESSURES REFER TO MAN. SPECS.

B.I.B. SET TO 60PSI

REGULATOR 50-55PSI

NON-CARBONATED WATER TO INLETS OF UNIT PER CUSTOMER SPECIFICATION (NO INSULATION)

WATER FROM BOOSTER

FEED INSULATED LINE UP THRU CONDUIT AND ATTACH TO PRECHILL OVER VALVE TUBES TO ATTACH TO PRECHILL

TUBING FROM COIL TO CARBONATOR INLET (INSULATION REQ'D)

TUBING FROM PUMP TO COIL INLET (NO INSULATION)

CARBONATED WATER TO INLETS OF UNIT PER CUSTOMER SPECIFICATION (INSULATION REQ'D)

CO<sub>2</sub> SUPPLY 100 PSI MIN

CO<sub>2</sub> REGULATOR FIXED AT 75 PSI

NOTE: CARBONATION DECK MUST BE WITHIN 10' (FEET) OF UNIT TO FUNCTION PROPERLY.

RETROFIT DECK

IMPORTANT  
RETROFIT DECK MUST BE PLACED ON A LEVEL SURFACE TO FUNCTION PROPERLY

BOOSTER SYSTEM

NOTE: BOOSTER SYSTEM IF SUPPLY WATER PRESSURE IS BELOW 40 PSI OR IF TWO UNITS ARE INSTALLED ON THE SAME WATER LINE