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INSTALLATION INSTRUCTIONS

ICE BANK CONTROL KIT (P/N 569000252)
ON
VENTURE POST-MIX DISPENSER (P/N 41735610245)

Read and understand these instructions thoroughly before installing this kit. Retain these instructions as part of your equipment manual.

NOTE: This Ice Bank Control Kit (P/N 569000252) is to be installed on Post-Mix Dispenser (P/N 41735610245)

Table 1. Loose-Shipped Parts

Item No.	Part No.	Name	Qty.
1	440000902	Ice Bank Control Module (see **NOTE 1**)	1
2	440000904	Probe, Ice Bank Control (see **NOTE 2**)	1
3	560003999	Mounting Bracket, Ice Bank Control Module (see **NOTE 1**)	1
4	560003596	Wiring Harness, Main	1
5	560003591	Wiring Harness, Agitator Motor	1
6	325282000	Screw, Self Drilling, Hx. Hd.; No. 8–18 Thread X 1/2-in. Long	4
7	313457000	Label, Hazard Shock	1
8	569000253INS	Installation Instructions	1
9	163506001	Wire Tie #7	4
10	560004277	Bracket, Probe (see **NOTE 2**)	1
11	163506000	Wire Tie **(see NOTE 2)**	2
12	2249	Push–In Tie Cable	1
13	313093000	Plug, Water Fill hole	1
14	186564000	Strain Relief	1

NOTE 1: Items 1 and 3 are assembled at the Factory.

NOTE 2: Items 2, 10, and 11, are assembled at the Factory to form the ice bank control probe assembly.

PREPARING DISPENSER FOR KIT INSTALLATION

WARNING: To avoid possible fatal electrical shock or serious injury to Installer, make sure Dispenser is disconnected from power source before attempting to install this kit.

Revision: A

NOTE: Only qualified personnel should install this Kit.

1. Unplug Unit power cord from electrical outlet, remove hood, then drain the water tank.
2. Unplug drop-in refrigeration assembly power cord and electric dispensing valves power cord, then lift drop-in refrigeration assembly up out of the Unit.

CAUTION: Never use an ice pick or other instrument to remove ice from the drop-in refrigeration assembly evaporator coils. Such practice can result in a punctured refrigeration circuit.

3. Allow ice bank to melt. Hot water may be used to speed up melting. ***All ice must be melted from the evaporator coils.***
4. Remove two screws securing ice bank control plastic cover, then remove and discard the cover.
5. Disconnect two electrical wires from the old ice bank control.
6. Remove two screws securing the old ice bank control to it's mounting bracket.
7. Remove o-ring securing the ice bank control bulb in the control bulb holder on the evaporator coils, then remove control bulb from the holder.
8. Remove old ice bank control bulb holder from the evaporator coils and discard.
9. Remove black loop retainer, located on underside of the refrigeration deck, that is used to secure capilary tube on the White Rodgers Control.
10. Pull old ice bank control bulb and capillary tube up through hole in drop-in refrigeration assembly platform.
11. Remove and retain two screws securing the drop-in refrigeration assembly power cord bracket to the refrigeration assembly platform.
12. Remove and retain the screw securing wiring harness ground wire to the refrigeration assembly platform.
13. Remove cover from the compressor electrical connection box.
14. Disconnect the refrigeration assembly wiring harness electrical wires from the compressor overload protector and the start relay. .
15. Disconnect 115/24 VAC, 60 Hz transformer, condenser fan motor, and agitator motor electrical wires large white connectors from mating white connectors on the refrigeration assembly wiring harness.
16. Cut off the large white electrical connectors from the refrigeration assembly wiring harness, then pull wiring harness out from under the compressor and discard.

INSTALLING ICE BANK CONTROL KIT

1. Remove and discard the plastic plug from water fill hole in drop-in refrigeration assembly platform.
2. Route electrical connector end of the ICE BANK CONTROL PROBE ASS'Y (items 2, 10, and 11) from the bottom of the drop-in refrigeration assembly platform up through water fill hole to top of the refrigeration platform.
3. Pass the ice bank control probe ass'y electrical connector up through bottom of PLUG, WATER FILL HOLE (item 13).
4. Install ice bank control holder on the evaporator coils as shown in Figure 1. Secure ice bank control holder to the evaporator coil with WIRE TIE (item 9).
5. Install PUSH–IN WIRE TIE (item 12) on underside of the refrigeration deck using hole in the deck where old black loop retainer was removed.

6. Secure new ice bank control probe assembly electrical wire in place with push–in wire tie installed in previous step.

7. Install drop-in refrigeration assembly in the Unit.

8. Hold the new ice bank control module in approximate location (see Figure 1) where the old ice bank control was removed . *MAKE SURE ICE BANK CONTROL MODULE MOUNTING HOLES ARE NOT DRILLED IN SHADED AREAS OF THE ILLUSTRATION SHOWN IN FIGURE 1.*

9. Mark location of four ice bank control module mounting bracket holes in the drop-in refrigeration assembly platform, then remove the module.

10. Drill .140 diameter holes in the refrigeration assembly platform where indicated.

11. Lay WIRING HARNESS, MAIN (item 4) in position on the refrigeration assembly platform.

12. Secure the drop-in refrigeration assembly power cord bracket to the refrigeration assembly platform with two retained screws.

13. Using retained screw, secure the main wiring harness ground wire to the refrigeration assembly platform.

NOTE: Refer to Wiring Diagram (see Figure 2) when making wiring harness electrical connections.

14. Note that the large black electrical connectors on the wiring harness are labeled “A”, “C”, and “D” and also note that the terminals on the ice bank control module are labeled “A”, “B”, “C”, and “D”.

15. Connect ice bank control probe black electrical connector labeled “D” to mating connector labeled “D” on the ice bank control module.

16. Connect wiring harness black electrical connectors labeled “A” and “C” to mating connectors labeled “A” and “C” on the ice bank control module.

17. Connect one end of WIRING HARNESS, AGITATOR MOTOR (item 5) electrical connector to mating electrical connector on the agitator motor.

18. Connect black electrical connector labeled “B”,on other end of the agitator motor wiring harness, to mating connector on the ice bank control module labeled “B”.

19. Route wiring harness electrical wires that are to be connected to the condenser fan motor, the 115/24 VAC, 60 Hz transformer primary side, and the compressor in between the compressor and the agitator motor, then on around to the compressor electrical connection box.

20. Note the difference in length of the electrical wires with large white connectors on their ends. The white electrical connector with the longest wires *must* be connected to the condenser fan motor. The white electrical connector with the shortest wires *must* be connected to the 115/24 VAC, 60 Hz transformer primary side.

21. As shown in Wiring Diagram (see Figure 2), connect wiring harness electrical wires to the compressor overload protector and the start relay, then install cover on compressor electrical connector box.

22. Using WIRE TIES (item 9), secure wiring harness to each side of the condenser fan motor supports. *MAKE SURE THE WIRING HARNESS DOES NOT INTERFERE WITH THE CONDENSER FAN MOTOR FAN BLADES.*

23. Secure WIRING HARNESS, MAIN (item 4) to ice bank control module with STRAIN RELIEF (item 14).

24. Place ice bank control module in position over the drilled mounting holes in the refrigeration platform, then secure module to platform with SCREWS (item 6).

25. Pull excess ice bank control probe electrical wire up through water fill hole in the drop-in refrigeration assembly platform and tie using WIRE TIE (item 9).

26. Plug in drop-in refrigeration assembly power cord and electric dispensing valves power cord.

27. Install LABEL, HAZARD WARNING (item 7) on top of the condenser coil assembly.

RESTORING UNIT TO OPERATION

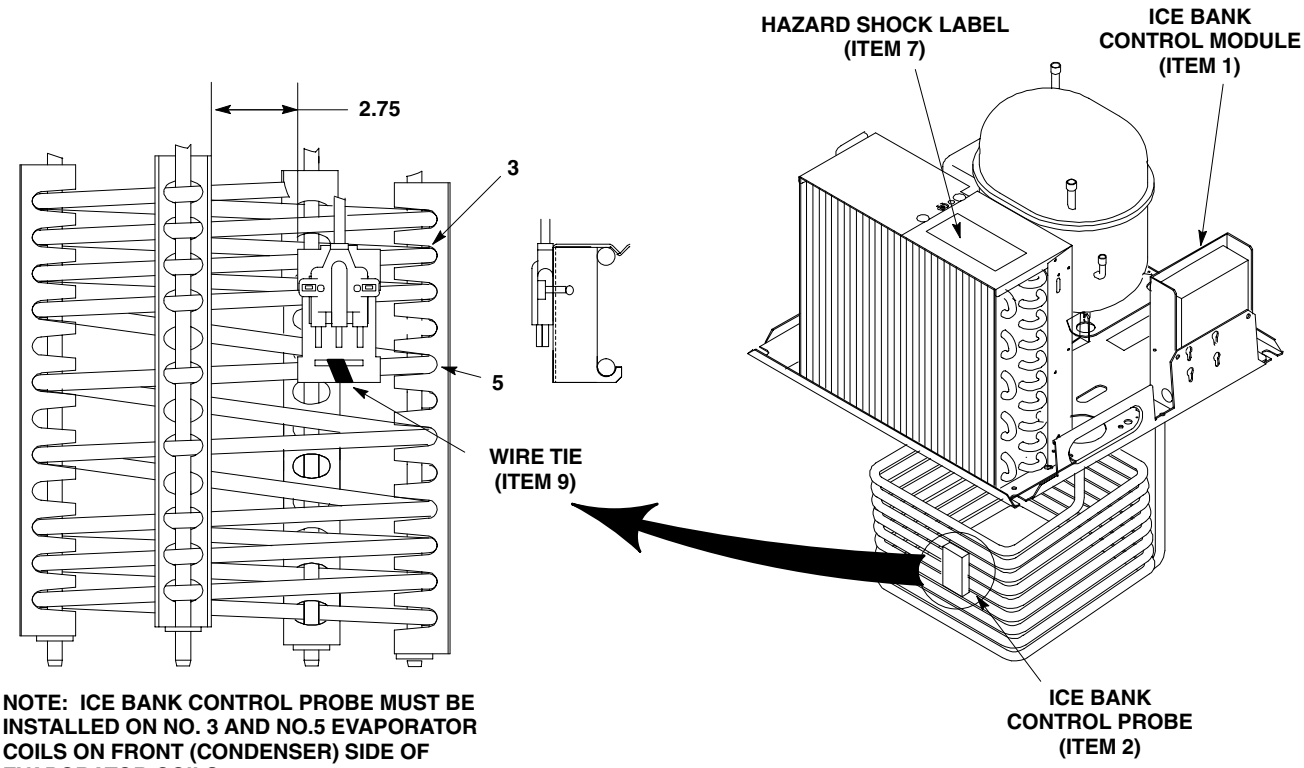
1. Fill water tank with water, then install plastic plug in water fill hole.
2. Plug Unit power cord into electrical outlet. Test Unit for proper operation.
3. Install hood on Unit and secure with screw.

GLOBAL ICE BANK CONTROL (GIBC) THEORY OF OPERATION

Once electrical power is supplied to the Unit, the agitator motor will start. There will be a three-minute time delay before the refrigeration compressor and the condenser fan motor will start. This three-minute time delay will take place each time electrical power to the Unit is interrupted.

The Unit will continue to operate until ice covers all three stainless-steel pins on the ice bank control probe. The ice bank control module senses this by measuring the difference in electrical resistance between the water and the ice. When the ice on the evaporator coil becomes thick enough, it covers the three stainless-steel pins on the ice bank control probe. The control module senses there is enough ice and turns the refrigeration compressor and the condenser fan motor off.

The Unit remains turned off until the the ice bank control three stainless-steel pins are free of ice. Once this happens, the ice bank control module starts the refrigeration compressor and the condenser fan motor.



NOTE: ICE BANK CONTROL PROBE MUST BE INSTALLED ON NO. 3 AND NO.5 EVAPORATOR COILS ON FRONT (CONDENSER) SIDE OF EVAPORATOR COILS.

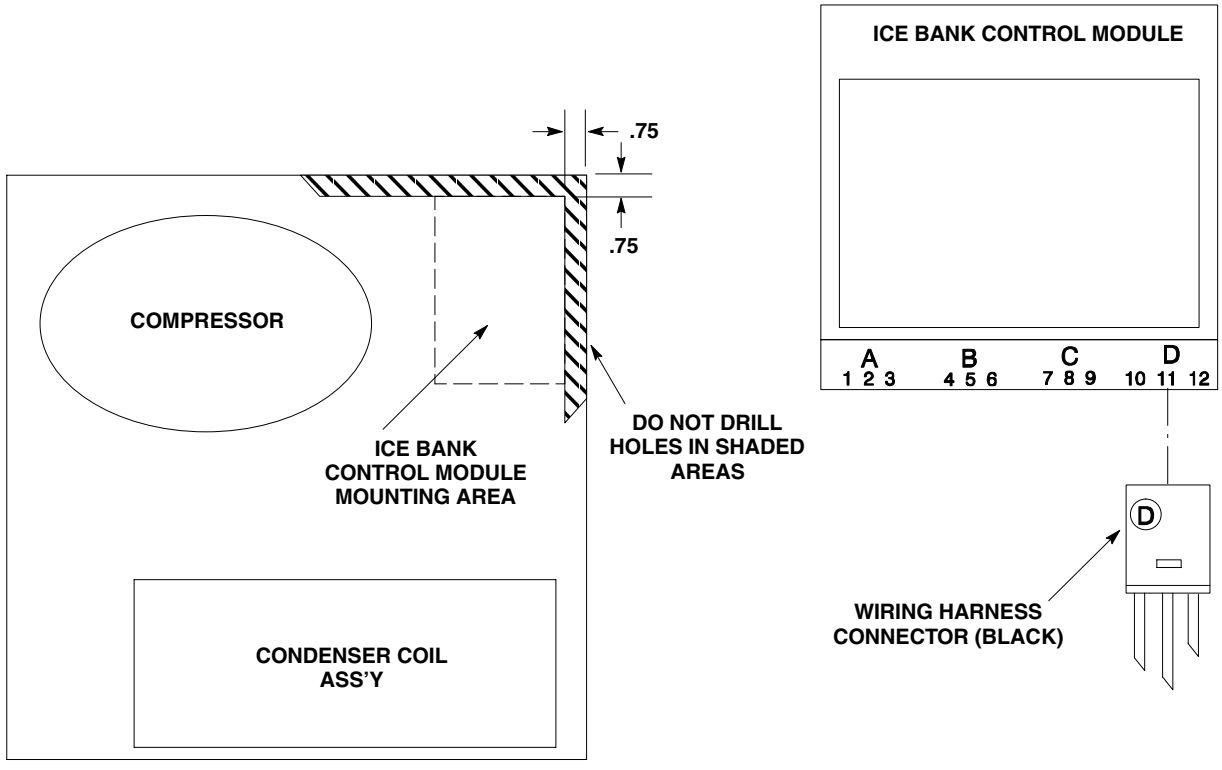
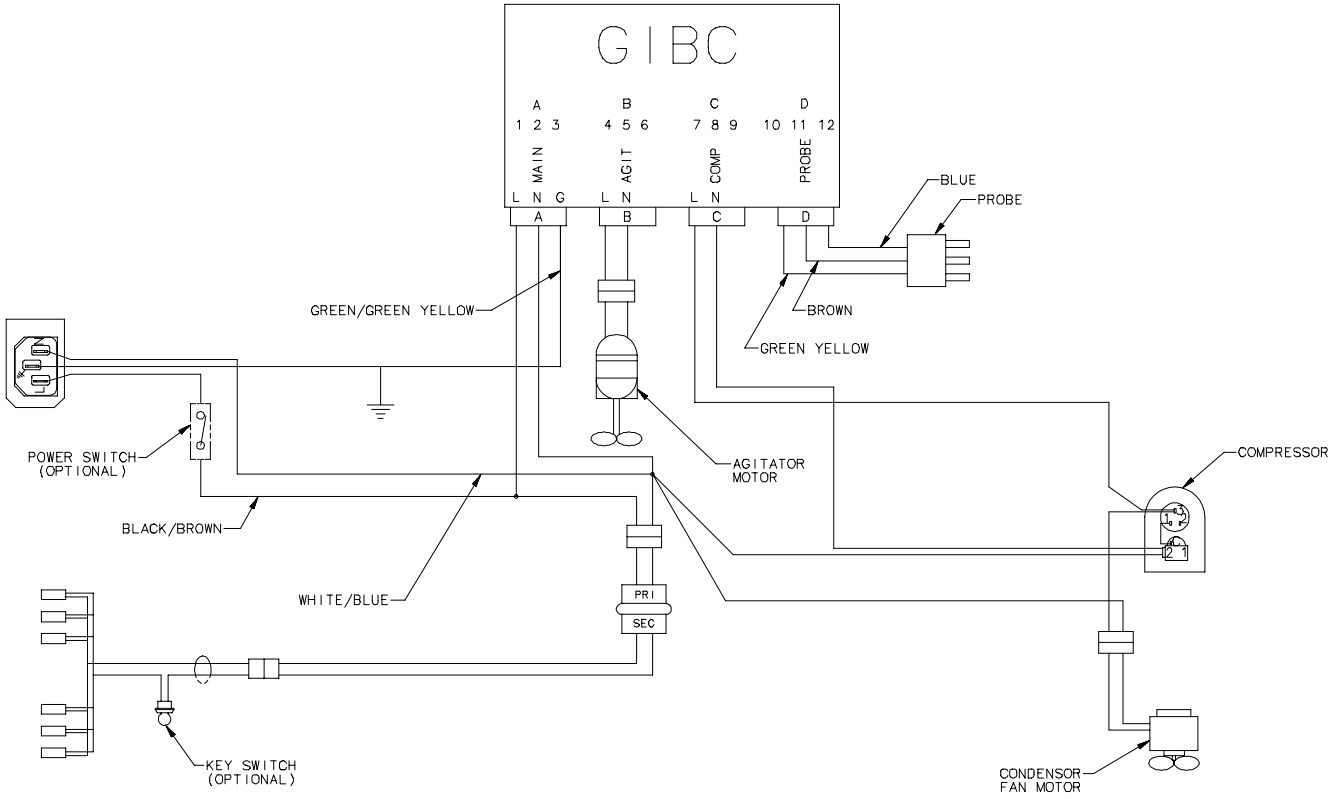


FIGURE 1.



NOTE: **INTERNATIONAL COLOR CODE**
BLACK = BROWN
WHITE = BLUE
GREEN = GREEN YELLOW

FIGURE 2. WIRE DIAGRAM