

DRAIN PUMP

Installation Manual

- Under-Counter Ice Machine

NOTICE

1. DRAIN PUMP MUST BE CONNECTED TO ICE MACHINE
2. VENT TUBE MUST BE ATTACHED AND SECURED.
3. ALL HOSE CLAMPS MUST BE WATER TIGHT.
4. YOU MUST CAREFULLY READ THE INCLUDED INSTRUCTIONS FOR IMPORTANT DETAILS.

⚠ CAUTION

For safe use and installation, make sure you fully understand the method of use described in the manual and test the pump. Incorrect installation may result in damage to property. In such cases, Icetec America will not be liable for any damage or loss.

Contents

1. List of parts ----- 2

2. Tools required for installation ----- 3

3. Recommended method of grounding ----- 3

4. Method of installation (for IU-0070-OU) ----- 3 ~ 6

5. Method of installation (for IU-009*-AN) ----- 7 ~ 11

6. Maintenance ----- 12

7. Measures against malfunction ----- 13

⚠ CAUTION

For safe use and installation, make sure you fully understand the method of use described in the manual and test the pump. Incorrect installation may result in damage to property. In such cases, Ictro America will not be liable for any damage or loss.

1. List of Parts

NO	Parts Name	IU-0070-OU		IU-0090-AN		IU-0094-AN	
		R134a /513a	R600a	R134a/513a		R600a	
				Non-ADA	ADA	Non-ADA	ADA
1	Drain Pump: Beckett	1ea	←	←	←	←	←
2	Spray Hose: ID0.39"(10mm), L9.8ft(3m)	1ea	←	←	←	←	←
3	Band Spring: ø16	1ea	←	←	←	←	←
4	Cable Clamp: ø12	2ea	←	←	←	←	←
5	Cable Tie: L5.5"(140mm)	3ea	←	←	←	←	←
6	SCREW: M4 x 12, + TRUSS HEAD	5ea	←	←	←	←	←
7	Grommet Bushing	1ea	←	←	←	←	←
8	Straight Adaptor: Tube 3/8"	-	-	1ea	←	←	←
9	Locking Clip: 3/8"	-	-	1ea	←	←	←
10	U-Pipe	-	-	1ea	←	←	←
11	Pump Inlet Hose Ass'y: Y	-	-	1ea	←	←	←
12	Pump outlet Hose Ass'y: ID0.35"(9mm), L4.72"(120mm)	-	-	1ea	-	1ea	-
13	Pump outlet Hose Ass'y: ID0.35"(9mm), L11.8"(300mm)	-	-	-	1ea	-	1ea
14	Band Spring - ø12	-	-	2ea	←	←	←
15	Pump Packing(Rubber)	-	-	2ea	←	-	-
16	Drain Pump Base	-	-	1ea	←	-	-
17	Drain Pump Fixture A	1ea	←	←	←	←	←
18-1	Drain Pump Fixture B	1ea	-	-	-	-	-
18-2		-	1ea	-	-	-	-
19-1		-	-	1ea	←	-	-
19-2		-	-	-	-	1ea	←
-	Manual	1ea	←	←	←	←	←

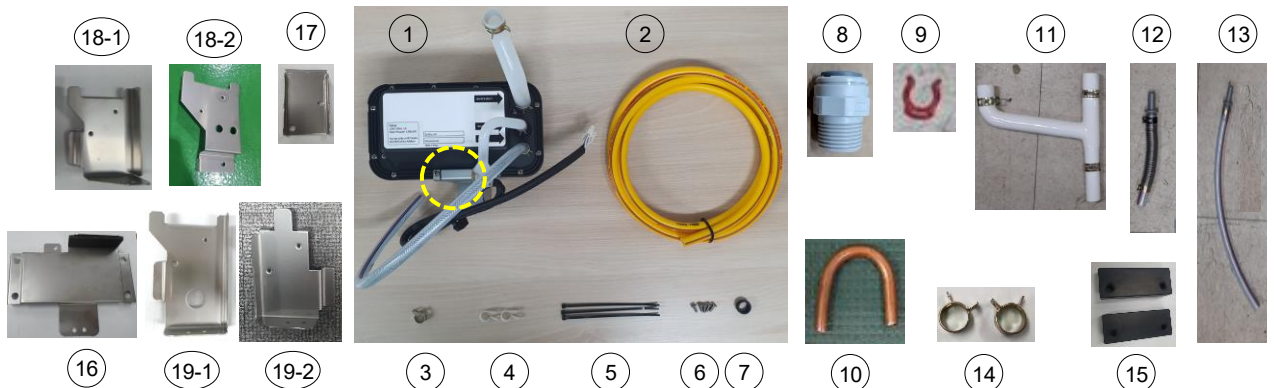


Fig. 1

CAUTION

For safe use and installation, make sure you fully understand the method of use described in the manual and test the pump. Incorrect installation may result in damage to property. In such cases, Ictro America will not be liable for any damage or loss.

2. Tools Required for Installation

- 1) Phillips-head screw-driver
- 2) Pliers
- 3) Tubing Cutter

3. Recommended Method of Grounding

The ice machine should be grounded for safety; a power plug with a ground terminal is provided. All international specifications, regulations, and codes should be observed.

The manufacturer will not be liable for any accident arising from improper grounding or failure to ground the machine.

4. Method of installation(for IU-0070-OU)

- 1) Unbox and check that all the parts are supplied (Fig. 1).
- 2) Move the operation switch to the "OFF" position, then unplug the appliance from the electrical outlet.
- 3) Position the ice maker so the back of the unit can be accessed and serviced.
- 4) Remove the screws on the upper back panel. Gently lift the rear section of the lid above the tab on the back panel, slide the panel's tab underneath the lid, and remove the panel (Fig.2).
- 5) Remove the screws on the lower back panel and remove the panel (Fig.3).



Fig. 2



Fig. 3

- 6) Remove the two screws connecting the water supply and drain bracket to the cabinet (Fig.4).
- 7) Gently pull the bracket forward and completely remove the tube between the ice bin and the back of the drain socket (Fig.5)

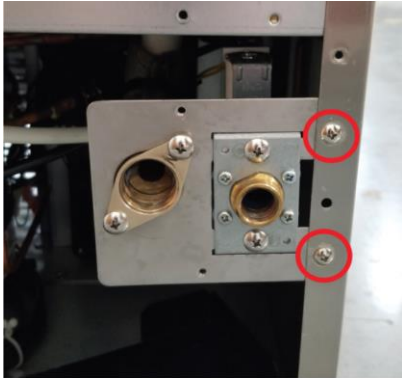


Fig. 4



Fig. 5

- 8) Place the drain pump into position inside the cabinet and attach the pump's ice bin drain tube to the bottom of the ice bin (A) and the pump's discharge tube to the drain socket (B) using the hoses and clamps provided (Fig.6). Make sure all connections are secure to prevent any water leakage. Cut drain tube(A) about 1.57"(40mm) for R600a Models and keep as not twisted and straight as possible for optimal performance.

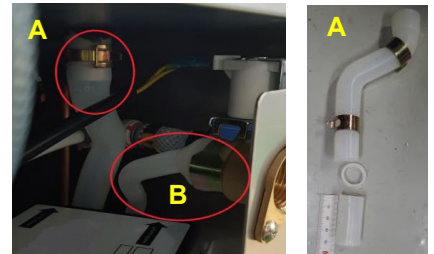


Fig. 6

- 9) Fasten and secure the pump's mounting bracket to its mounts inside the cabinet using the screws provided (Fig.7).

IU-0070-OU R134a/R513a Model Series

IU-0070-OU R600a Model Series

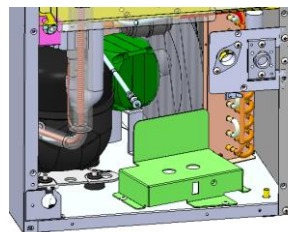
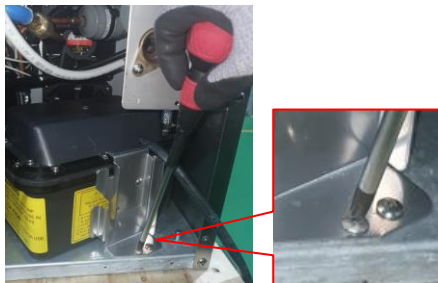


Fig. 7

- 10) Cut the drain pump air hose in line with the outlet at the bottom of the existing drain box.(Red line) (Fig.8).
- 11) Remove the existing drain hose at the bottom of the drain box (Fig.9).
- 12) After inserting the air hose of the drain pump, fix it with a clamp so that it does not come off (Fig.10).

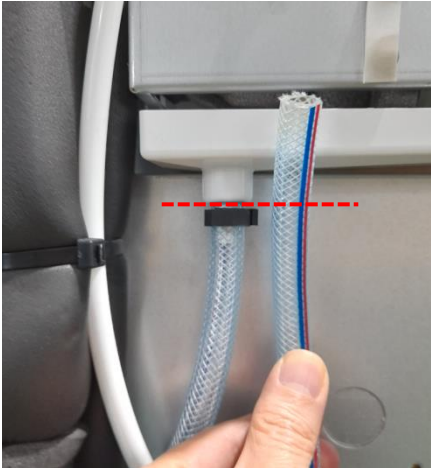


Fig. 8



Fig. 9



Fig. 10

⚠ CAUTION

The air vent hose must be installed, or the drain will not operate correctly. Do not kink or bind the air vent hose.

- 13) Reattach the water supply and drain bracket to the cabinet (Fig.11).

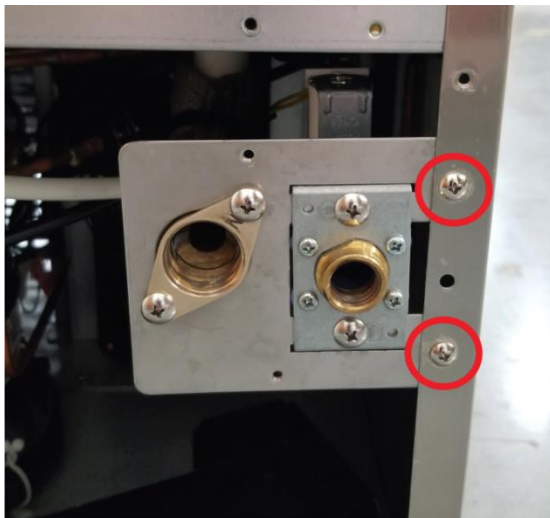


Fig. 11

- 14) Remove the plastic covering from the ice maker's connector and separate the jumper section (Fig.12).
- 15) Securely attach the pump connection to the ice maker connection making sure to match the order of the wire colors at both ends (Figure 13).
Replace the plastic covering over the connectors and secure it with a cable tie if necessary using the cable tie provided.
- 16) Reattach the lower (first) and upper back panels of the ice maker.

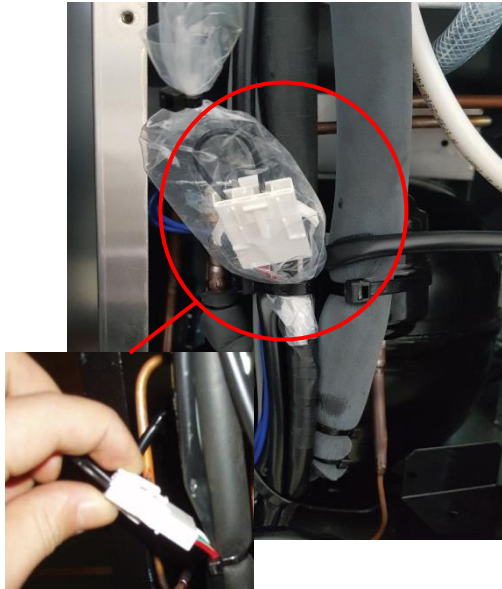


Fig. 12

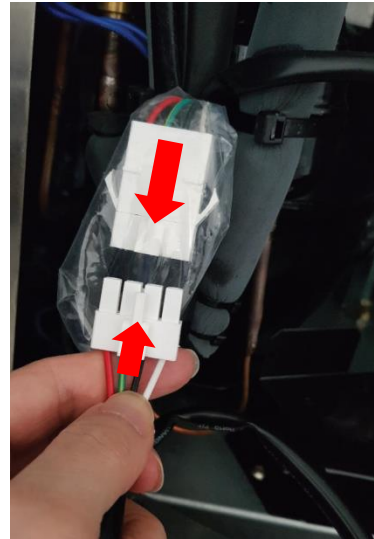


Fig. 13

⚠ CAUTION

Do not discard the jumper connector. If the pump is removed the jumper connector must be reattached to the ice maker's connector for the ice maker to operate properly.

5. Method of installation(for IU-0090-AN)

- 1) Unbox and check that all the parts are supplied. (Fig. 1)
- 2) Remove the drain pump fixture B for IU-0070-OU models only.
The drain pump fixture A will be used to IU-0090-AN. Let's keep it. (Fig. 14)
- 3) Disassemble the hoses of the drain pump water inlet and water outlet. (Fig.15)
- 4) Insert the enclosed drain hoses into the drain pump inlet and outlet.
Fix them with clamps. (Fig.16)
- 5) Please check once again that it is assembled in the same shape as the original without leaks .



Fig. 14



Fig. 16



Fig. 17

※ Drain pump preparation for only Nugget Ice maker ADA Models

Since the ADA model is lower in height than the Non-ADA model, some hose length adjustments are required.

- A) Remove the clamp on the short pump outlet hose and then remove the spring. (Fig.17)
- B) Insert the spring into the long pump outlet hose and secure it with the clamp. (Fig.17)
- C) Insert the hose into the drain pump outlet and secure it with a clamp. (Fig.19)
- D) Cut off the lower part of the enclosed pump inlet hose by 1.8”(45mm). (Fig.18)
- E) Insert the hose into the drain pump inlet and secure it with a clamp. (Fig.19)

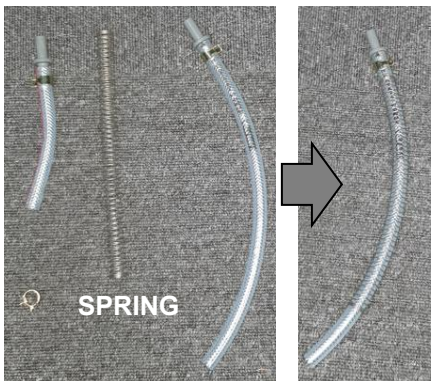


Fig. 17

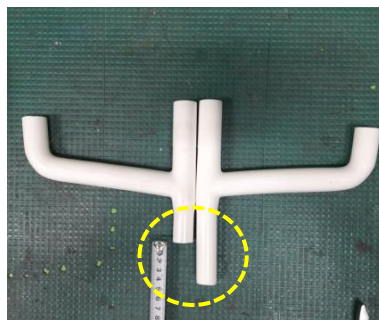


Fig. 18



Fig. 19

- 6) Move the operation switch to the "OFF" position, then unplug the appliance from the electrical outlet.
- 7) Remove the upper rear panel and lower vent-cover. (Fig. 20)
- 8) Remove the drain bracket screws using a Phillips-head screwdriver. (Fig. 21)
- 9) Loosen the hose clamps with pliers and disconnect the drain hose. (Fig. 22, 23)
- 10) Wrap Teflon tape around the straight adapter and fasten it to the drain outlet. (Fig.24)



Fig. 20



Fig. 21

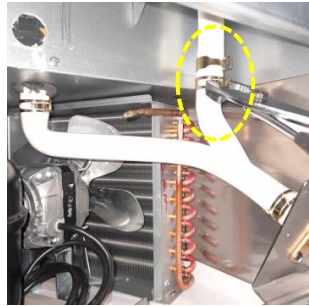


Fig. 22



Fig. 23



Fig. 24

IU-0090-AN R-134a/R-513a Model Series

- 12) Install two Pump Packing Rubbers on the 4 grooves in the bottom
- 13) Assemble the Drain Pump Base on the rubbers and fix the Drain Pump Fixture B and Base with 3 screws (Fig. 25)

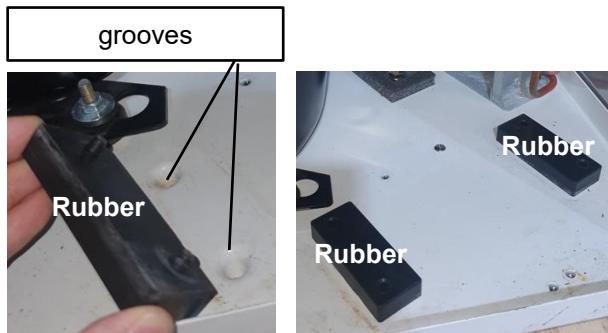


Fig. 25

IU-0090-AN R-600a Model Series

- 12) Prepare the Drain Pump Fixture B for only R-600a models
- 13) Replace the old fixture to it(Fig. 26)

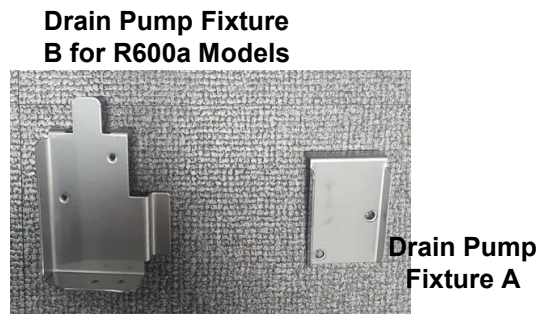


Fig. 26

IU-0090-AN R-134a/R-513a Model Series

- 14) Install the drain pump on the Base and insert the protrusion("X") of the Drain Pump Fixture B between the two protrusions("Y") of the drain pump.
- 15) Assemble the Drain Pump Fixture A and B with two screws.(Fig. 27)

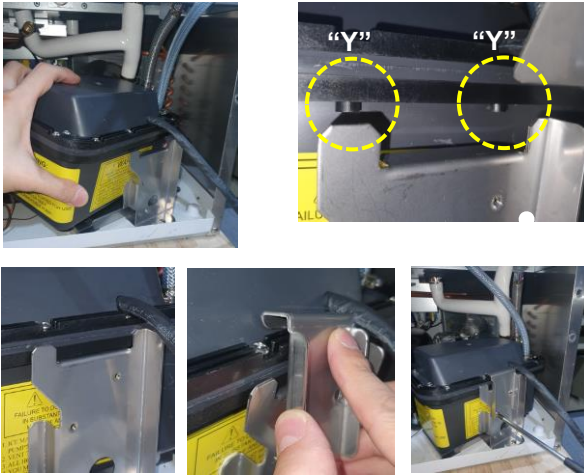


Fig. 27

IU-0094-AN R-600a Model Series

- 14) Assemble the Drain Pump Fixture A and B with two screws.
- 15) Install the Drain Pump on the base plate and fix it with two screws. (Fig. 28)

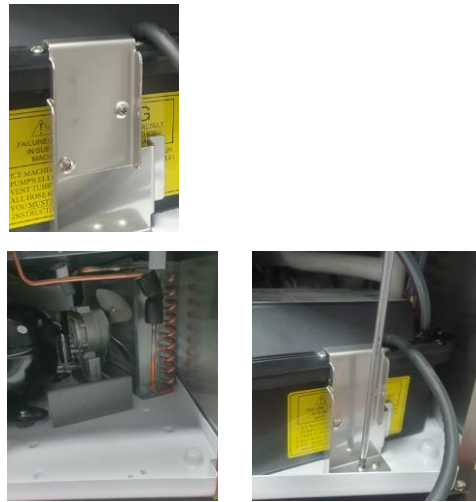


Fig. 28

- 16) Connect the drain pump's upper hose and the drain valve's lower drain hose and secure it with a clamp(Fig.29, 30).
- 17) Connect the drain pump upper hose and the ice bin drain outlet and secure it with a clamp.(Fig.31, 32)

⚠ CAUTION

Connect the hose carefully so that there is no leakage and secure it with a clamp.



Fig. 29



Fig. 30



Fig. 31

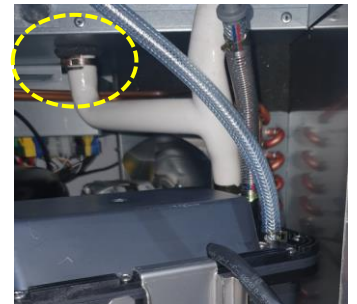


Fig. 32

18) After pulling the drain pump air hose upward, secure it with a clamp so that the hose does not shift downwards.(Fig.33)

19) Insert the u-pipe into the end of the air hose and assemble it so that the end of the u-pipe is connected to the inside of the drain pan (Fig.34).

※ **Caution :**

Fully insert the u-pipe outlet into the drain pan so that the water overflowing from the u-pipe does not flow out.

20) When installing the drain pump on the ADA model, cut off the end of the air hose by 1.8”(45mm) and assemble the u-pipe (Fig.35).



Fig. 33



Fig. 34

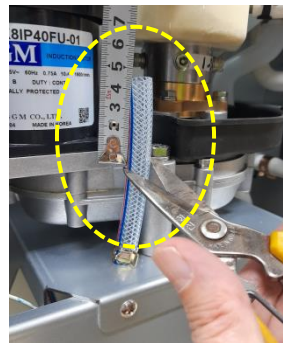


Fig. 35

21) Insert the drain hose stem of the drain pump into the drain adapter (Fig.36).

22) Insert the locking clip to prevent the hose stem from coming out (Fig.37).

23) Reassemble the drain bracket by replacing the screws (Fig.38).



Fig. 36

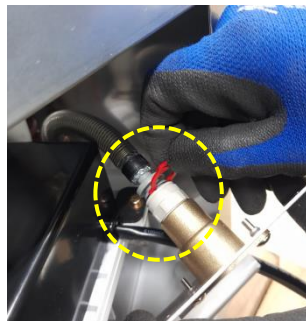


Fig. 37

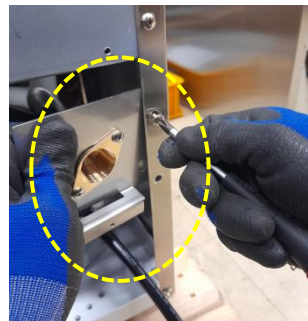


Fig. 38

- 24) Open the front door of the product and unscrew the front-cover and remove it (Fig.39).
- 25) Remove the jumper connector from the drain pump cable (Fig. 40).

⚠ CAUTION

Do not discard the jumper connector. If the pump is removed the jumper connector must be reattached to the ice maker's connector in order for the ice maker to operate properly.

- 26) Connect the drain pump connector to the bottom of the control box and organize the wiring (Fig.41).
- 27) Reassemble the front row-cover and cover-condenser and disassemble it.
- 28) Connect the drain hose to the drain outlet (Fig.42).



Fig. 39



Fig. 40



Fig. 41



Fig. 42

CAUTION

- **An air vent should be installed;** If not, overload may affect the drain pump. Ensure the air vent hose has not been folded over.
- Connect the drain tube to a suitable drain.

There should be 2-inches of space between the drain tube and the drain. The tube should not be bent or folded; otherwise, water may overflow the pump.

The drain hose should be no longer than 20ft horizontality and 8ft verticality.

- Connect the ice machine with a grounded 115V outlet.
- Test the drain pump by pouring water slowly into the ice container of the ice machine.
- About 1 **quart** of water is needed to operate the drain pump. The pump automatically works to drain the water.
- To test the safety switch of the drain pump, turn on the ice machine, put 1 **quart** of water into the container, and block the drain tube by hand while the pump is in operation. Put more water into the container until the ice machine automatically turns off. The drain pump will operate continuously. Check for any leakage. Unblock the drain tube so that pumping is carried out properly. When the drain pump functions properly, the ice machine will turn on automatically.
- Install the ice machine in the desired location. Check for any jamming of the tube or cable, or for any folding or blockage.

6. Maintenance

- 1) Check that no foreign substance has entered the hose from the drain hose to the drain pump of the ice machine. Check where the water flow to the pump is blocked using the upper hole of the water supply hose of the pump.
- 2) The air vent hose should be open for good air flow to the container of the pump; check whether there is any sharp bend or jamming.
- 3) Check the drain hose for any foreign substances and check that it is not bent or jammed. Check that the central check valve of the drain pump works properly by observing whether the water flows in one direction toward the outside of the pump.

7. Measures against malfunction

Note : Connect the hose carefully so that there is no leakage, and secure it with a clamp.

1) When the ice machine does not work:

- Check whether power is supplied to the wall consent.
- Check whether the ice machine is turned on.
- Check whether the container of the ice machine is full.
- Check whether the drain pump is properly connected to the ice machine.
- When the capacity of the drain pump is full, the ice machine will not work.
The drain pump will operate continuously. When the water level is reduced from the upper limit, the ice machine starts working again.

2) When the drain pump does not work:

- Check whether power is supplied to the wall consent and whether the cable between the ice machine and the drain pump has been properly inserted.
- Check that nothing is interfering with the flow of water between the upper hole of the water supply hose and the pump. If there is an interference or obstacle, clean this part.
- Check that the air vent hose is not folded, bent, or blocked.
- Check whether the volume of water is sufficient to operate the drain pump.
At least 1 **quart** of water is needed to operate the drain pump.

3) When the drain pump works but does not pump the water:

- Check that the air vent hose is clean and not blocked.
- Check whether anything is blocking the drain hose.
- Check that the drain hose does not exceed 8ft in height and 20ft in horizontal distance.

※ Installation Note:

This installation note should be kept near to the User's Manual and the Warranty Paperwork for this ice machine, for future reference by the user.

Model No.:

Serial No. :

Date of Installation: