

## INTRODUCTION

The Condensate Pump you've acquired functions as an automated system for removing condensation generated by an air conditioner's evaporative coil. Controlled by a float/switch mechanism, it activates when the tank accumulates approximately 2-1/4" of water and deactivates when it drains to around 1-1/4".

Crafted with top-tier workmanship and materials, this pump is engineered to deliver prolonged and dependable service. Each unit undergoes meticulous packaging, inspection, and testing to ensure safe operation and delivery. Upon receiving your pump, conduct a thorough examination to detect any potential damage incurred during transit. Should you identify any issues, promptly document them, and inform our local distributor. They will facilitate replacement or repair as necessary.

**READ INSTRUCTIONS CAREFULLY BEFORE ATTEMPTING TO INSTALL, OPERATE OR SERVICE THE PUMP. KNOW THE PUMP APPLICATION, LIMITATIONS AND POTENTIAL HAZARDS. PROTECT YOURSELF AND OTHERS BY OBSERVING ALL SAFETY INFORMATION. FAILURE TO COMPLY WITH INSTRUCTIONS COULD RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE! RETAIN INSTRUCTIONS FOR FUTURE REFERENCE. INSTALLATION AND CONNECTIONS ARE TO BE MADE BY A QUALIFIED PERSON.**

## SAFETY GUIDELINES



DO NOT USE TO PUMP FLAMMABLE OR EXPLOSIVE FLUIDS SUCH AS GASOLINE, FUEL OIL, KEROSENE, ETC. DO NOT USE IN EXPLOSIVE ATMOSPHERES. THE PUMP SHOULD BE USED WITH LIQUIDS ARE COMPATIBLE WITH PUMP COMPONENT MATERIALS. DO NOT HANDLE THE PUMP WITH WET HANDS OR WHEN STANDING ON A WET OR DAMP SURFACE, OR IN WATER. THIS PUMP IS SUPPLIED WITH A GROUNDING CONDUCTOR OR GROUNDING-TYPE ATTACHMENT PLUG, TO REDUCE THE RISK OF ELECTRICAL SHOCK, BE CERTAIN THAT IT IS CONNECTED TO A PROPERLY GROUNDED GROUNDING-TYPE RECEPTACLE. IN ANY INSTALLATIONS WHERE PROPERTY DAMAGE AND/OR PERSONAL INJURY MIGHT RESULT FROM AN INOPERATIVE OR LEAKING PUMP DUE TO POWER OUTAGES, DISCHARGE LINE BLOCKAGE, OR ANY OTHER REASON, A BACKUP SYSTEM(S) OR ALARM SHOULD BE USED.

SUPPORT PUMP AND PIPING WHEN ASSEMBLING AND WHEN INSTALLED. FAILURE TO DO SO MAY CAUSE PIPING TO BREAK PUMP TO FAIL, MOTOR BEARING FAILURES, ETC.

## INSTALLATION

- Before installing the pump, allow the air conditioner to cycle several times, collecting condensate in a separate container to help flush any residual oils that may remain in the system.
- Carefully unpack the pump. Remove the cardboard packing from the motor cover air slots. Carefully slide the packing away from the pump. This packing is used to prevent switch movement during shipment (Figure 1).
- Mounting the pump: the tank has two slots provided to mount the unit. The slots are located on the ends of the tank (Figure 5). The unit should be mounted either on the side of the air conditioner unit or nearby wall. The pump must be level and the inlet must be below the coil drain.

- Conduit fittings are not compatible with the plastic pump housing.
- The pump should not be installed in a manner that will subject it to splashing or spraying.
  - This pump is not intended for use inside air plenums.

## ELECTRICAL CONNECTIONS



- Shut off electrical power at the fuse box before connecting. All wiring must comply with local codes.
- Line voltage: Connect the power cord to the line voltage specified on the motor and nameplate. The power cord must be connected to a constant source of power (not a fan or other device that runs intermittently). If the power cord does not have a plug, wiring is as follows: green (or green/yellow)—ground. Black (or brown)—line. White (or blue)—neutral.
- Safety switch: The safety overflow switch should be connected to a class II low-voltage circuit. To control a thermostatic circuit the COM and NO connections from the safety switch are to be wired in series with the low-voltage thermostat circuit to shut down the heating/AC circuit. The COM and NC switch contacts may be used to actuate a low-voltage alarm circuit (connected in series) if the heating/cooling system cannot be disrupted. The safety switch comes from the factory with leads connected to the COM and NO switch terminals. Typical hook-up of "NC" circuits would be (Figures 2 & 3),
- If the fused plug is used on 230V units, a 1.0-amp fuse is recommended.

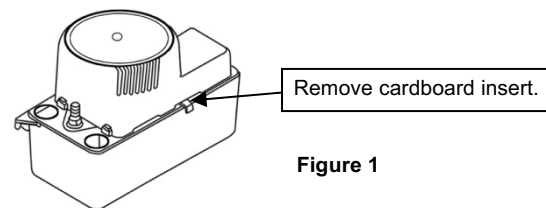


Figure 1

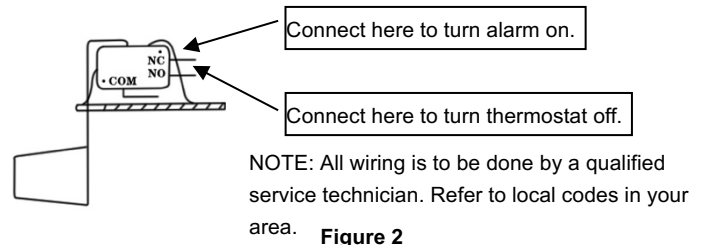


Figure 2

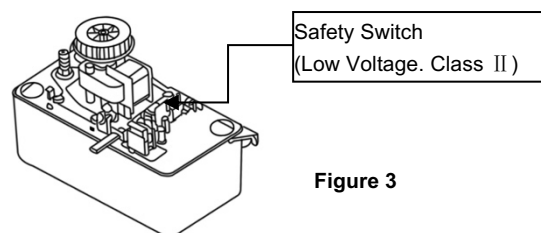


Figure 3

## Discharge Line Installation

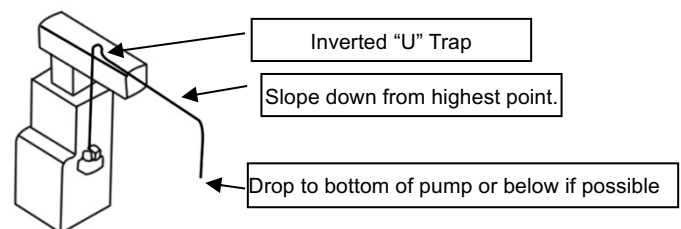


Figure 4

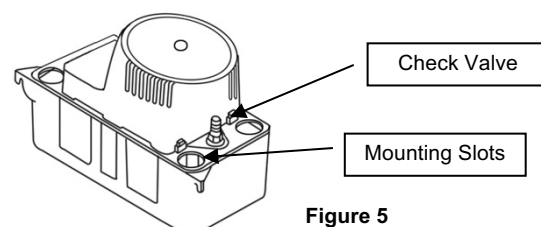


Figure 5

## TESTING

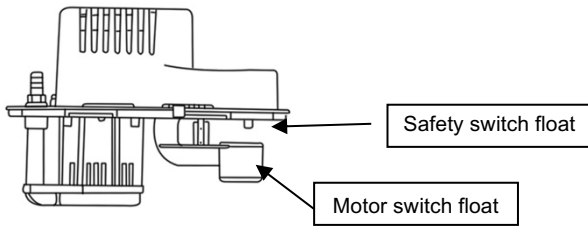


Figure 6

## PIPING

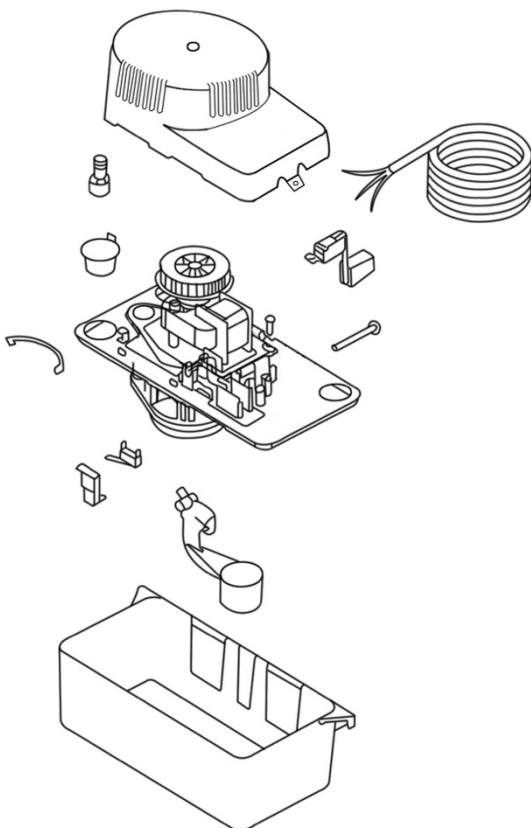
1. Run flexible tubing or pipe from the evaporator drain into one of the three pump inlets. Be sure inlet piping is sloped downward to allow gravity flow (Figure 4). Extend the inlet piping into the tank from 1 to 3 inches to ensure that it will not interfere with proper float operation. Be sure that the inlet piping is cut at an angle where it enters the tank.
2. The outlet piping should be flexible tubing secured with a hose Clamp (not provided) or pipe (3/8-inch ID. maximum to prevent excessive flow back to the unit). From the condensate unit, extend the discharge piping straight up as high as necessary. Do not extend this line above the head/GPH of the particular model being installed. From this high point, slope the discharge line down slightly to a point above the drain area; then turn down and extend to a point below or approximately level with the bottom of the condensate unit. This will give a siphoning effect which will improve the efficiency of the condensate unit and will, in most cases, eliminate the need for a check valve (Figure 5). If it is not possible to slope the discharge line down, make an inverted "U" trap directly above the pump at the highest point.

## SERVICE INSTRUCTIONS



### WARNING

1. Make certain that the unit is disconnected from the power source before attempting to service or remove any component!
2. Be sure the floats move freely. Clean as necessary (Figure 6).
3. Clean the tank with warm water and mild soap.
4. Check the inlet and outlet piping. Clean as necessary. Be sure there are no kinks in the line that would inhibit flow.



1. Turn on the power.
2. Remove the motor/tank cover assembly and hold level.
3. Test the motor switch by raising the motor switch float with a finger (Figure 6). The motor should turn on just before the float contact cover.
4. Test the safety switch by raising the safety switch float with a finger. The safety switch should be activated before the float contact cover.
5. Replace the motor/tank cover assembly on the tank.

This pump is suitable for gas furnace condensate applications. Caution must be taken to ensure the acidity of condensate does not increase below the average pH of 3.4 (to prevent localized pocket of acid that acts like a battery causing pitting) by routinely cleaning or flushing the tank with fresh water.

## LIMITED WARRANTY

Your product is guaranteed to be in perfect condition when it leaves our factory. It is warranted against defective materials and workmanship for a period of 12 months from the date of purchase by the user. Any product that should fail for either of the above two reasons and is still within the warranty period will be repaired or replaced with the option of the pump. All defective products returned under warranty will be fully inspected to determine the cause of failure before the warranty is approved.

DISCLAIMER: THE FOREGOING WARRANTY IS AN EXCLUSIVE WARRANTY INSTEAD OF ANY OTHER EXPRESS WARRANTY. ANY IMPLIED WARRANTIES (INCLUDING, BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE) TO THE EXTENT EITHER APPLIES TO A PUMP SHALL BE LIMITED IN DURATION TO THE PERIODS OF THE EXPRESS WARRANTIES GIVEN ABOVE.

Warranty will be **VOID** if any of the following conditions are found:

1. Sealed motor housing opened.
2. Product connected to a voltage other than indicated on the nameplate.
3. Cord cut off to a length of less than three feet.
4. Pump allowed to operate dry (fluid supply cut off).
5. Pump used to circulate anything other than water.
6. Product abuse by Customers.

Any oral statements about the product made by the seller, the manufacturer, the representatives, or any other parties, do not constitute warranties, shall not be relied upon by the user, and are not part of the Contract for sale. Seller's and manufacturer's only obligation, and buyer's only remedy, shall be the replacement and/or repair by the manufacturer of the product as described above, NEITHER SELLER NOR THE MANUFACTURER SHALL BE LIABLE FOR ANY INJURY, LOSS, OR DAMAGE, DIRECT, INCIDENTAL OR CONSEQUENTIAL (INCLUDING, BUT NOT LIMITED TO INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR LOST PROFITS, LOST SALES, INJURY TO PERSON OR PROPERTY, OR ANY OTHER INCIDENTAL OR CONSEQUENTIAL LOSS), ARISING OUT OF THE USE OR THE INABILITY TO USE THE PRODUCT AND THE USER AGREES THAT NO OTHER REMEDY SHALL BE AVAILABLE TO IT. Before using, the user shall determine the suitability of the product for the intended use, and the user assumes all risk and liability whatsoever in connection therewith.

Some states and Countries do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that vary from state to state and country to country.