



## USE AND CARE GUIDE

# AUTOMATIC CONDENSATE PUMP

CP-120



### SPECIFICATIONS

Power supply:  
115V, 60 HZ., 10 Amp Circuit

Liquid Temp. Range:  
32°F to 95°F(0°-35°C)

Discharge:  
3/8 in. Hose barb

HP	GPH OF WATER @ TOTAL FEET OF LIFT				MAX LIFT
	0 ft	5 ft	10 ft	15 ft	
1/20	0 ft	5 ft	10 ft	15 ft	18 Feet
	132	108	72	24	

### IMPORTANT!

READ ALL INSTRUCTIONS CONTAINED IN THIS MANUAL  
BEFORE USING THIS PRODUCT.

Save these instructions for future reference Failure to read and follow the warnings and instructions within this instruction manual could result in property damage, serious injury or death.

## Safety Information

**DANGER:** Do not pump flammable or explosive liquids such as oil, gasoline, kerosene, ethanol, etc. Do not use in the presence of flammable or explosive vapors. Using this pump with or near flammable liquids can cause an explosion or fire, resulting in property damage, serious personal injury, and/or death.

**DANGER:** ALWAYS disconnect the power to the pump before servicing.

**WARNING:** Secure the discharge line before starting pump. An unsecured discharge line will whip, possibly causing personal injury, and/or property damage.

**WARNING:** Extension cords may not deliver sufficient voltage to the pump motor. Extension cords present a life threatening safety hazard if the insulation becomes damaged or the connection ends fall into water. The use of an extension cord to power this pump is not permitted.

**WARNING:** This unit is designed only for use on 115 volts (single phase), 60 Hz, and is equipped with an approved 3-conductor cord and 3-prong grounded plug. Do not remove the ground pin under any circumstances. The 3-prong plug must be directly inserted into a properly installed and grounded 3-prong, grounding-type receptacle. Do not use this pump with a 2-prong wall outlet. Replace the 2-prong outlet with a properly grounded 3-prong receptacle (a GFCI outlet) installed in accordance with the National Electrical Code and local codes and ordinances. All wiring should be performed by a qualified electrician.

**WARNING:** Protect the electrical cord from sharp objects, hot surfaces, oil, and chemicals. Avoid kinking the cord. Do not use damaged or worn cords.

**WARNING:** Failure to comply with the instruction and designed operation of this unit may void the warranty. ATTEMPTING TO USE A DAMAGED PUMP can result in property damage, serious personal injury, and/or death.

**WARNING:** Ensure that the electrical circuit to the pump is protected by a 10 Amp fuse or circuit breaker.

**CAUTION:** Do not lift the pump by the power cord.

## Safety Information (Continued)

**CAUTION:** Know the pump and its applications, limitations, and potential hazards.

**CAUTION:** Follow all local electrical and safety codes, along with the National Electrical Code (NEC). In addition, all Occupational Safety and Health Administration (OSHA) guidelines must be followed.

**IMPORTANT:** The motor of this pump has a thermal protector that will trip if the motor becomes too hot. The protector will reset itself once the motor cools down and an acceptable temperature has been reached. The pump may start unexpectedly if it is plugged in.

**IMPORTANT:** Ensure the electrical power source is adequate for the requirements of the pump.

**IMPORTANT:** Before using the pump, check the tubing for holes or excess wear, which could cause leaks, and ensure the tubing is not kinked or making sharp angles. Straight tubing allows the pump to move the greatest amount of water quickly, and also check that all tubing connections are tight to minimize leaks.

**IMPORTANT:** This pump is made of high-strength, corrosion-resistant materials. It will provide trouble-free service for a long time when properly installed, maintained, and used. Please carefully read the manual and follow the instructions regarding common pump problems and remedies.

**IMPORTANT:** This pump is fully automatic in operation. The float switch controls the pump's "ON" and "OFF".

## APPLICATION

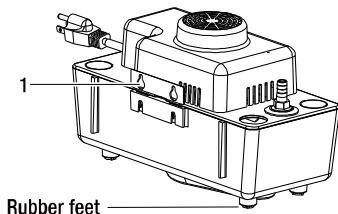
- This non-submersible utility pump is designed for condensate removal applications. Pump water only with this pump.
- This pump has not been tested or approved for use in swimming pools or in salt-water marine areas.
- This pump is not designed to function as a permanently installed sump pump. It is also not engineered to run continuously as a “fountain” or “waterfall” pump.
- Do not use where water recirculates.
- Not designed for the drains of swimming pools.

## INSTALLATION

**NOTE:** This unit is non-submersible. The pump should not be installed in a manner that will subject it to flooding, splashing or spraying.

### ***Mounting the pump:***

- The tank has two slots (1) provided to mount the unit. The slots are located on the back of the tank. Mount the unit 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.

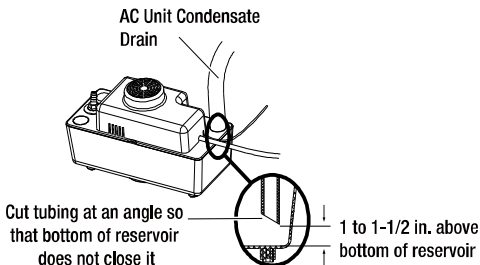


## INSTALLATION (Continued)

### *Connecting the air conditioning condensate drain tubing:*

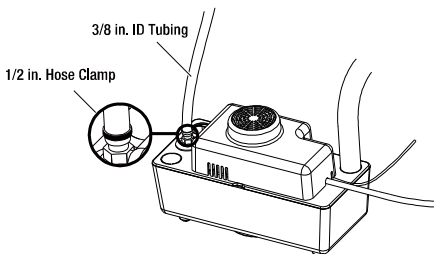
Ensure the tubing to the pump intake is fastened securely so that it cannot come out of the pump intake port.

Cut the tubing at an angle so that the bottom of the reservoir does not close the tubing outlet. Be sure the tubing does not interfere with the float.



### *Connect the Tubing*

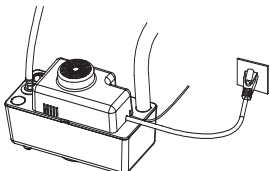
Connect the tubing from the pump discharge hose barb to the floor drain, laundry tub, or sink. Leave an air gap above the tub drain.



## INSTALLATION (Continued)

### Plug in the Pump

Plug the pump power cord into a 115 volt properly grounded power outlet.



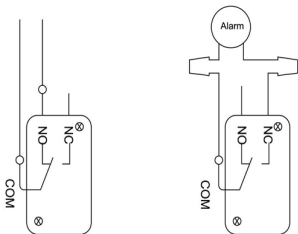
### SAFETY SWITCH

The safety switch is designed to activate an alarm (sold separately) or to cut off power in the event of high water in the condensate reservoir.

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.

Both AC and DC circuits are supported by the safety switch.

Circuit Voltage	Amp Limit
125VDC / 250VDC	0.5A
125VAC / 250VAC	6A



## TESTING

1. Unplug the condensate pump so that it cannot pump out water. Fill water into the pump reservoir until it is almost full. The safety switch should activate before the float contacts the cover.
2. Plug in the condensate pump. The float should activate the pump and pump the water out.
3. As the water level goes down in the reservoir, the safety switch should reset, allowing the appliance to start or shut off the alarm.

## TROUBLESHOOTING

<b>Problem</b>	<b>Cause</b>	<b>Corrective Action</b>
The pump does not start	<ol style="list-style-type: none"><li>1. The house fuse is blown.</li><li>2. The breaker is tripped.</li><li>3. The plug is disconnected.</li><li>4. The plug is corroded.</li><li>5. The float is stuck.</li><li>6. Open circuit</li></ol>	<ol style="list-style-type: none"><li>1. If blown, replace with a fuse of proper size.</li><li>2. Reset the breaker.</li><li>3. Secure the plug.</li><li>4. Clean the plug prongs.</li><li>5. Clean the reservoir and ensure the float moves freely.</li><li>6. Have certified electrician check fuse circuit.</li></ol>
The pump is unable to pump out water	<ol style="list-style-type: none"><li>1. The tubing is kinked, bent sharply, or coiled.</li><li>2. The tubing length is too long.</li><li>3. The float is sticking.</li><li>4. The discharge height is greater than 18 feet.</li><li>5. Obstruction in discharge tubing.</li><li>6. Blocked check valve.</li></ol>	<ol style="list-style-type: none"><li>1. Straighten the tubing.</li><li>2. Shorten the discharge tubing.</li><li>3. Clean any debris from reservoir.</li><li>4. Measure the height from the pump to the highest point. Rework discharge if greater than 18'.</li><li>5. Check line for blockage and remove any debris.</li><li>6. Remove any debris around check valve.</li></ol>
Liquid is draining back into reservoir from discharge line.	<ol style="list-style-type: none"><li>1. Damaged check valve</li><li>2. Blockage in check valve</li></ol>	<ol style="list-style-type: none"><li>1. Replace Check Valve.</li><li>2. Clear any debris away from check valve.</li></ol>
Liquid is leaking around check valve.	<ol style="list-style-type: none"><li>1. Check valve is too loose or fastened too tight.</li><li>2. Damaged O-ring.</li></ol>	<ol style="list-style-type: none"><li>1. Check valve should be hand-tightened.</li><li>2. Replace O-ring.</li></ol>
My air conditioner is not blowing cool air	<ol style="list-style-type: none"><li>1. Check safety switch on condensate pump to see if activated.</li></ol>	<ol style="list-style-type: none"><li>1. Check blockage in drainage tube, or replace condensate pump.</li></ol>

# Limited One-Year Warranty

## WHAT THIS WARRANTY COVERS

When used and maintained in normal use and in accordance with the Installation and Operating Instructions, your PumpSpy® product is warranted against original defects in material and workmanship for a full one year from date of purchase (the “Warranty Period”). During the warranty period, PumpSpy will repair or replace at no cost to you, to correct such defects in products found upon examination by PumpSpy to be defective in materials or workmanship.

## WHAT THIS WARRANTY DOES NOT COVER

This warranty does not cover use of the product in a non-residential application, improper installation and/or improper maintenance of the product, damage due to misuse, acts of God, nature, vandalism or other acts beyond the control of PumpSpy, owner’s acts or omissions, use outside the country in which the product was initially purchased and resales of the product by the original owner. This warranty does not cover pick up, delivery, transportation or house calls. However, if you mail your product to PumpSpy for warranty service, cost of shipping will be paid one way. This warranty does not cover products purchased from a party that is not an authorized retailer, dealer, or distributor of PumpSpy products.

## OTHER IMPORTANT TERMS

This warranty is not transferable and may not be assigned. This warranty shall be governed and construed under the laws of the state of Michigan. The warranty period will not be extended by any replacement or repair performed under this warranty. THIS WARRANTY IS THE EXCLUSIVE WARRANTY AND REMEDY PROVIDED BY PumpSpy. ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OR MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT WILL PumpSpy BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY KIND OR NATURE TO OWNER OR ANY PARTY CLAIMING THROUGH OWNER WHETHER BASED IN CONTRACT, NEGLIGENCE, TORT OR STRICT PRODUCTS LIABILITY OR ARISING FROM ANY CAUSE WHATSOEVER. Some states do not allow for the exclusion of consequential damages, so the above exclusion may not apply to you. This warranty gives you specific rights. You may also have others that vary state to state.



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