

**BOSS****The BSS Group PLC**

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Registered no: 60987 England  
\*BOSS is a registered trademark  
of the BSS Group PLC

**BCONDP****Condensate Removal Pump****Product Code: 53030478****GB INTRODUCTION**

Your BOSS CONDP condensate pump is designed as an automatic condensate removal pump for pumping away room temperature condensate water dripping from condensing boilers and air conditioner/refrigeration evaporative coils. The pump is controlled by a float/switch mechanism which turns the pump on to discharge the water when approximately 2-1/4" of water collects in a tank. The pump automatically switches off when the tank drains to approximately 1-1/4".

The BCONDP pump you have purchased is made with the highest quality workmanship and material. It has been engineered to give you long and reliable service.

This BCONDP pump is carefully packaged, inspected and tested to ensure safe operation and delivery. When you receive the pump, examine it carefully to determine there are no broken or damaged parts that may have occurred during shipment. If damage has occurred, please contact your supplier. They will assist you in replacement or repair, if required.

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 PETROL, FUEL OIL, KEROSENE, ETC. DO NOT USE IN EXPLOSIVE ATMOSPHERES. PUMP SHOULD BE USED WITH LIQUIDS COMPATIBLE WITH PUMP COMPONENT MATERIALS.

DO NOT HANDLE PUMP WITH WET HANDS OR WHEN STANDING ON WET OR DAMP SURFACE, OR IN WATER. THIS PUMP IS SUPPLIED WITH A GROUNDING CONDUCTOR AND/OR GROUNDING TYPE ATTACHMENT PLUG. TO REDUCE THE RISK OF ELECTRICAL SHOCK, BE CERTAIN THAT IT IS CONNECTED TO A PERMANENT EARTH.

FOR INSTALLATIONS WHERE PROPERTY DAMAGE AND/OR PERSONAL INJURY MIGHT RESULT FROM AN INOPERATIVE OR LEAKING PUMP DUE TO POWER CUTS, DISCHARGE LINE BLOCKAGE, OR ANY OTHER REASON, A BACKUP SYSTEM(S) AND/OR ALARM SHOULD BE USED.

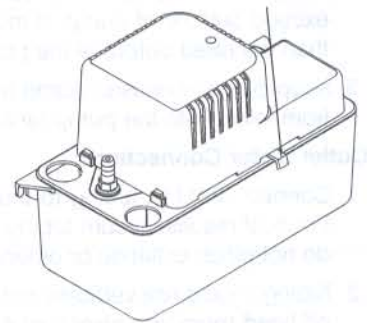
SUPPORT PUMP AND PIPING WHEN ASSEMBLING AND WHEN INSTALLED. FAILURE TO DO SO MAY CAUSE PIPING TO BREAK, PUMP TO FAIL, MOTOR BEARING FAILURES, ETC.

**INSTALLATION**

1. 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).

**Figure 1.**

Remove cardboard insert.



2. Mounting the pump: The tank has two slots provided to mount the unit on a vertical surface such as an adjacent wall. The slots are located on the ends of the tank (Figure 5).

Pump must be level and the inlet must be below the coil drain. Conduit fittings are not compatible with the plastic pump housing.

3. The pump should not be installed in a manner that will subject it to splashing or spraying.
4. This pump is not intended for use inside air plenums.

**ELECTRICAL CONNECTIONS**

1. Shut off electrical power at fuse box before making any connections. All wiring must comply with local codes.
2. Line voltage: Connect pump to voltage specified on label located on pump. Wiring is as follows:

Live (Line) — Brown

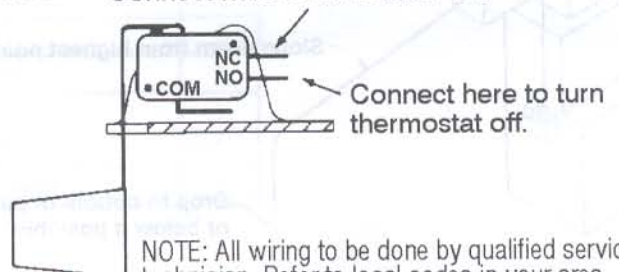
Neutral — Blue

Earth — Yellow/Green

3. 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 can not 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).
4. If fused plug is used, a 1.0 amp fuse is recommended.

**WATER DRAIN CONNECTIONS****Inlet Water Connections**

1. Position pump beneath boiler, a/c or refrigeration condensate drain so that condensate water flows into pump inlet freely (use any of the three openings provided).

**Figure 2.** Connect here to turn alarm on.

NOTE: All wiring to be done by qualified service technician. Refer to local codes in your area.

### LIMITED WARRANTY

Your Little Giant 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 (90 day warranty on Models: 1-AA-OM, GKPK-SC, PP-1, PPS-1, PP-12, PPS-12, PP-230 and Cooler King) from date of purchase by the user. No warranty on brush wear in Model 35-OM and impeller or cam in Models PP-1, PP-12, and PP-230.

Any product that should fail for either of the above two reasons and is still within the warranty period will be repaired or replaced at the option of Little Giant as the sole remedy of buyer. For our customers in the CONTINENTAL UNITED STATES: Please return the defective unit, postage paid, to the factory at 301 North MacArthur Blvd., Oklahoma City, OK 73127-6616. All defective product returned under warranty will be fully inspected to determine the cause of failure before warranty is approved.

For our customers located elsewhere; it is not economical, due to duties and freight, to return the pump to the factory for inspection. Please return the defective unit to any authorized distributor or dealer with a brief written explanation of the problem. If there are no apparent signs of customer abuse, unit will be repaired or replaced. If dispute arises over replacement of the pump, the distributor or dealer is to segregate such items and hold for inspection by a representative of Little Giant Pump Company or notify factory with details of the problem for factory disposition and settlement of warranty claim.

**DISCLAIMER:** THE FOREGOING WARRANTY IS AN EXCLUSIVE WARRANTY IN LIEU OF ANY OTHER EXPRESS WARRANTIES. 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 voltage other than indicated on nameplate.
3. Cord cut off to a length 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 customer.

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 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 which vary from state to state and country to country.

The National Electric Code (in the USA) and similar codes in other countries require a Ground Fault Circuit Interrupter (GFCI) to be installed in the branch circuit supplying fountain equipment rated above 15 volts. 115 volt GFCI's (with various cord lengths) are in stock, and we recommend each pump be used with a GFCI.

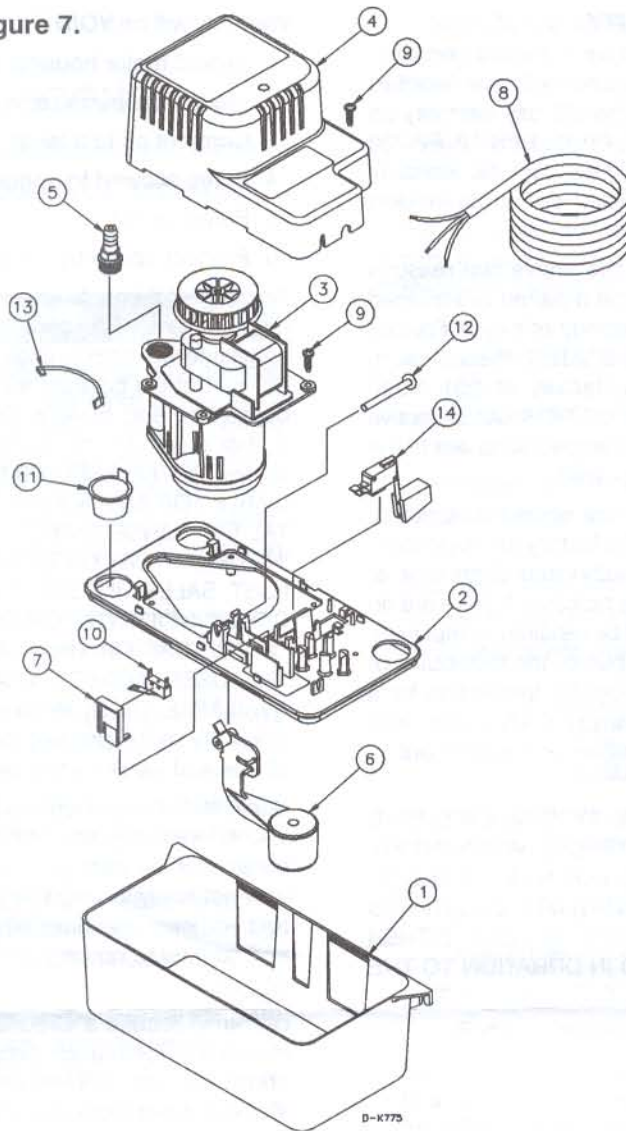
For Parts or Repair, please contact .....1.888.572.9933  
For Technical Assistance, please contact .....1.888.956.0000

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[www.LittleGiant.com](http://www.LittleGiant.com)  
[customerservice@lgpc.com](mailto:customerservice@lgpc.com)

Figure 7.



REPLACEMENT PARTS LIST			
ITEM	P/N	Description	QTY
1	14940690	Tank	1
2	154411	Cover, Tank	1
3	154493	Motor, Plate, Volute, Assy	1
4	154421	Cover, Motor	1
5	154715	Check Valve	1
6	154452	Float Arm	1
7	154471	Switch Holder	1
8	951089	Wiring Harness Assy, 230V, 6'	1
9	902414	Tapping Screw	5
10	950337	Switch	1
11	929602	Drain Hole Plug	2
12	154455	Float Pivot Pin	1
13	951941	Lead Wire Assy	1
14	154465	Safety Switch Assy	1
15*	154037	1/4" ID Tubing Adaptor	1
16*	944302	3/8" ID x 20' Vinyl Tubing	1

\*Not shown - for reference only

- The pump will accept up to three drain lines, although care should be used to make certain that total inflow does not exceed outflow of pump. If more water drains into the pump than the rated output of the pump, tank may overflow.
- Keep plugs in unused pump inlet openings to prevent debris from falling into the pump tank.

#### Outlet Water Connections

- Connect 3/8" I.D. tubing to the discharge adapter (Figure 5). For best results, secure tubing with clamps (not provided) but do not pinch collapse or otherwise restrict the tubing.
- Tubing should rise vertically but not exceed the maximum shut-off head (pumping height) of 4.3 metre above the pump.
- At highest point angle tubing horizontally and create a downward slope to drainage point. Do not sharply bend or twist the tubing in a way that might result in collapse or restriction of the tubing. Creating a downward slope will allow water to drain by gravity and keep tubing empty of water (Figure 4).
- If it is not possible to create a downward slope, try to create an inverted "U" trap directly above the pump at the highest point.

#### COMMISSIONING & MAINTENANCE

- Before servicing the pump, disconnect the electric power at the fuse box.
- Upon commissioning, check for debris in the drain pan. Remove any material that might block the drain line or drain into the pump tank.

- It is recommended that the pump be checked every six months for proper operation. It is important to check for debris blocking the pump discharge adapter/check valve. Check for proper free movement of pump float (Figure 6) and switch and check for free, unrestricted movement of motor and fan.
- Clean the holding tank and float with warm water and mild soap. Rinse completely when finished.
- Check the inlet and outlet piping. Clean as necessary. Be sure there are no kinks in the outlet line that would inhibit or restrict flow.

#### TESTING

- Turn on power.
- Lift the motor/tank cover assembly off the tank and hold level.
- Test motor switch by raising motor switch float with finger (Figure 3). Motor should turn on just before float contacts underneath side of cover.
- Replace motor/tank cover assembly on tank. This pump is designed for use with condensing boiler and furnace condensate removal applications. Caution must be taken to ensure 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 tank with fresh water.

Figure 3.

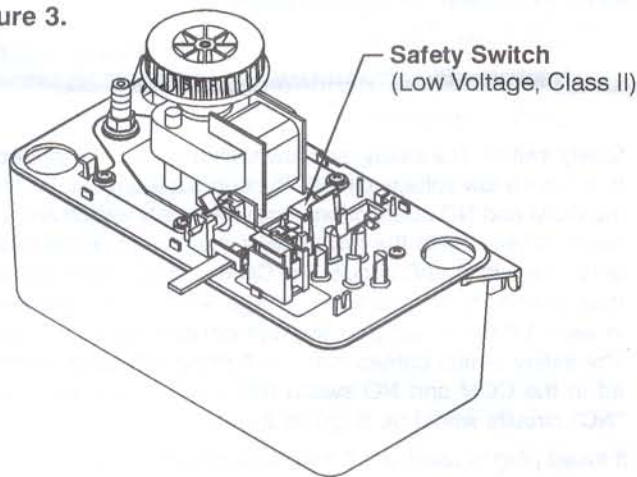


Figure 5.

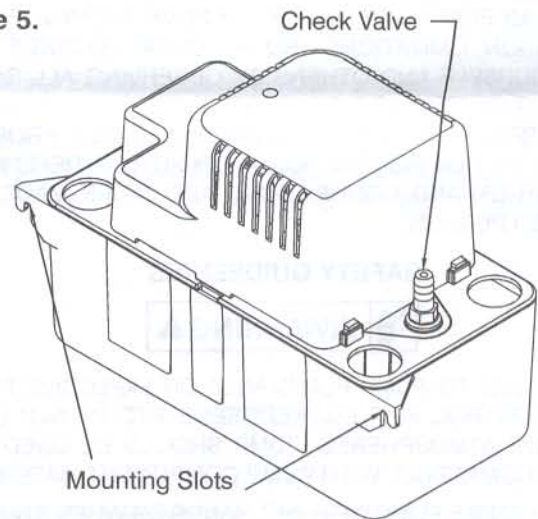


Figure 4.

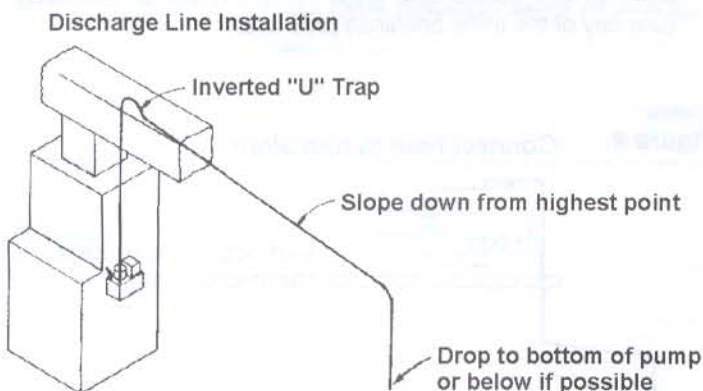


Figure 6.

