

MODELS 300620Z 300622

EFFLUENT PUMPS

Please read these instructions carefully. **Failure** to comply to instructions and **designed** operation of this system, may **void** the warranty.



SAFETY INSTRUCTIONS

This fine pump that you have just purchased is designed from the latest in material and workmanship. Before installation and operation, we recommend the following procedures :

A

Check with your local electrical and plumbing codes to ensure you comply with the regulations. These codes have been designed with your safety in mind. Be sure you comply with them.

B

We recommend that the pump be used on a separate circuit lead from the home electrical distribution panel, and which is protected with a fuse or a circuit breaker. We also recommend that a ground fault circuit be used. Consult a licensed electrician for all wiring.

C

The ground terminal on the three prong plugs should never be removed. They are supplied and designed for your protection.

D

Never make adjustments to any electrical appliance or product with the power connected. Do not only unscrew the fuse or trip the breaker, remove the power plug from the receptacle.

E

Assuming that you have a sump pit located in your basement floor. Your sump pit must be constructed from concrete, brick, tile or more recently a sump basin made from plastic and/or fiberglass. The minimum size of your sump pit **MUST** be 18" in diameter and no less than 25" deep. When pit is ready, proceed to next step.

MONTHLY MANDATORY CHECK-UP :

1. Inspect the pump for any obvious condition that necessitates cleaning, correction, adjustment or repair.
2. Clear the sump and the surroundings of any paper, leaves or other debris that might clog the input openings. Remove anything that might float into the suction area.
3. Ensure that the pump is secure and vertical for proper operation.
4. Ensure that there is adequate clearance from any combustible materials or structure. Stored materials must be kept away from the pump. Shelves or cabinet structures must not be in close proximity to the pump.
5. Ensure that the motor is securely plugged into a proper GFCI electrical outlet.
6. Test the 'GFCI' outlet by pressing its test switch. This should prove that the outlet is energized and will trip off to protect against a ground fault. Be sure to reset the 'GFCI' by pressing its reset switch.
7. Lift the float to prove that the pump will start when required. (Step 8 below will test submersible pumps with enclosed floats).
8. Put the necessary pail of water in the sump to prove that any check valve present will permit effluent to flow.
9. Observe that the plumbing can carry the effluent safely out of residence.

MATERIAL REQUIRED FOR A SUBMERSIBLE EFFLUENT PUMP APPLICATION

- ☐ Desired length of 1 1/2" or 1 1/4" of ABS/DWV pipe to link up the pump to the drain line.
- ☐ 1 only 1 1/4" check valve (350353) (Note that this 1 1/4" check valve may also be used with a 1 1/2" pipe).
- ☐ 18" x 25" sump basin.
- ☐ 1 1/4" - 1 1/2" stainless steel clamps (750886).
- ☐ ABS cement.

NOTICE

This unit is not designed for applications involving salt water or brine. Use with salt water or brine will void warranty.

Tools

- ☐ Screwdrivers, hacksaw to cut pipe, knife to assist in pipe cutting, round file to smooth pipe ends, pipe wrench, adjustable wrench to tighten fittings.

APPLICATION :

- ☐ This submersible effluent pump is designed for a permanent installation for domestic use homes, cottages and farms.
- ☐ Multi-purpose effluent pump will fill the need in most sump applications.
- ☐ To pump dirty water as a permanent installation pump.
- ☐ Can also be used as a fountain pump.
- ☐ Ideal as a utility pump to transfer water.

CAPACITY :

5' 3300 US GPH
10' 1900 US GPH
15' 360 US GPH

Friction loss
in pipe not
included.

FEATURES :

- ☐ Non-corrosive material.
- ☐ Cast iron motor body.
- ☐ Stainless steel mechanical rotary seal.
- ☐ Thermal and overload protection.
- ☐ Piggy-back grounded cables.
- ☐ 1/2 HP, 115VAC, 60Hz, 5A, (12A when start).

INSTRUCTIONS STEPS

IMPORTANT NOTICE

Please note before you proceed with the installation of this product that the manufacturer's guideline has to be respected. Failure to comply may void your warranty.

The following are minimum requirements in order to protect your residence from flooding. It is a small investment but it is your personal responsibility to protect your home, family and valuables. Failure to comply with the following requirements may also void your warranty :

- Two (2) pumps have to be installed in the sump pit. The first pump as a primary pump and the second pump as the backup unit.
- Burcam alarm system model 450455 has to be installed to advise you any malfunctions.
- As sump pumps are electrically powered and activated so to prevent flooding, a Burcam battery powered back-up pump model 300403 has to be installed to evacuate the water.

Pump selection, proper and adequate installation are a must to comply with local by-laws and need to be adhered to.

STEP 1

We recommend that you install your pump in a clean location where there is adequate room for servicing at a later date. Protection from freezing temperatures and good ventilation should be considered as well, to provide the pump an environment for long life. **Do not use to pump gas or toxic fuels. This submersible sump pump is designed to pump water only.**

Friction losses in the discharge pipe must be taken into consideration when the horizontal offset is greater than 50 feet. The discharge pipe should be increased from 1 1/2" to 2". This will reduce friction losses and allow the pump to give maximum performance.

More friction losses must also be taken into consideration when many elbows and fittings are installed in the discharge line. Each elbows and fittings must be considered as 1 feet of head.

The float switch of your pump has been pre-set at the factory and does not need any adjustment.

Never run the pump dry. Damage to the seal may occur. Fill pump pit or sump basin with water before turning on the power.

STEP 2

Assuming that you have a sump pit located in your basement floor. Your sump pit must be constructed from concrete, brick, tile or more recently a sump basin made from plastic and/or fiberglass. The minimum size of your sump pit must be 18" in diameter and no less than 25" deep. When pit is ready, proceed to next step.

EFFLUENT PUMP APPLICATION

(SEE DIAGRAM ON PAGE 5)

STEP 3

At this step, you have the opportunity to install a 1 1/2" or a 1 1/4" discharge. We recommend a 1 1/2" ABS/DWV discharge. Install a check valve (350362 in-line 1 1/2" or 350353 1 1/4" MNPT inlet and 1 1/4" or 1 1/2" outlet or 350363 1 1/2" MNPT inlet and 1 1/2" or 2" outlet) over discharge pipe of your pump and secure it with stainless steel clamps or glued nipple for ABS/DWV pipe. This check valve will allow easy access to pump, should service be required.

STEP 4

Install and position your submersible sump pump in the centre of your sump pit or basin and ensure that there is clearance to allow the mechanical or vertical float switch a free working area without obstructions (pipe, pit's wall, power cord). The float cord length is factory set and should not need adjustment. If adjustment is required, the switch cord can be shorted or lengthed.

STEP 5

Install your discharge pipe from check valve to the point of discharge or drain. For installation over 50 feet of horizontal position discharge pipe, use a 2" pipe to reduce friction loss.

STEP 6

The mechanical switch provided with your pump is supplied with a serial electrical male plug. Fix the power cord of the pump into the piggy-back receptacle of the switch and plug this one into electrical grounded outlet. We recommend that a licensed electrician be employed to do wiring. Permanently ground the motor in accordance to the electrical codes for your area. Do not use an extension cord to connect your pump to the power source. From your distribution panel to the receptacle, we recommend a wire gauge not smaller than 14 gauge. Use tape or tie wrap to fix power cords to discharge pipe.

STEP 7

Fill the sump pit or basin with water to test the operation of your submersible sump pump. The motor should start when the water level reaches approximately 3" over your pump. Allow the pump to go through several "on-off" cycle to assure satisfactory operation. If needed, see trouble shooting guide in this manual.

STEP 8

Review your installation with typical diagram. Check all connections for leaks.

MAINTENANCE

Unplug the switch and pump motor power cord. Remove the pump from pit or basin. Remove trash accumulation and dirt from the pump and float switch. Be sure the float switch operates freely after cleaning. If tar or paint has been received in the pit or basin, use kerosene to remove residue from float switch or pump. **Do not use strong paint solvents.**

Remove the screws that hold the strainer or the base to the bottom of the pump body. Pry the base off the pump body carefully. Clean the impeller and volute passage way from any debris which may have become in contact with these parts. Again, If tar or paint has entered pump, clean with kerosene. **Do not use strong paint solvents.** Be sure impeller turns freely after cleaning.

Check and clean away any debris which may be clogging the suction inlet, pump discharge, check valve and discharge line.

Replace screws and return sump pump to sump pit or basin and reconnect to piping.

EFFLUENT PUMP APPLICATION

STEP 3

Prepare your choice of discharge pipe size and check valve

STEP 2

Sump pit 18" diameter X 25" depth

STEP 7

Fill the basin and test the operation

STEP 8

Review and check connections for leaks

STEP 6

Connect float and motor power cable

STEP 5

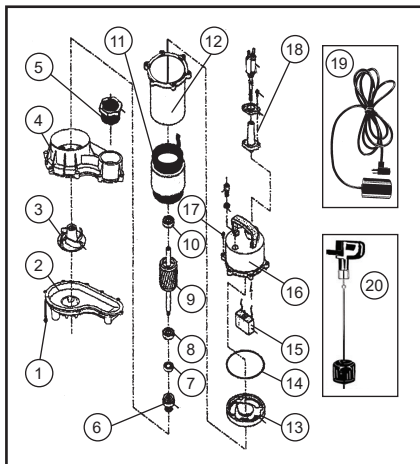
Install discharge pipe

STEP 4

Install your pump in centre of pit

REPAIR PARTS

REF.	PART	DESCRIPTION
1	350306	Base screws (9)
2	350297	Volute base
3	350528P	Noryl impeller
3	350528	Brass impeller
4	350295	Volute cover
5	350277	Discharge reducer
6	350278	Mechanical seal
7	350125	Oil seal
8	350340	Lower bearing
9	350271	Rotor
10	350340	Upper bearing
11	350272	Stator
12	450532	Stator housing
13	350286.1	Bearing housing
14	350118.1	"O" ring
15	350273	Capacitor
16	350288	Upper casing
17	350289	Screw
18	350294	Power cable
19	450453	Mechanical switch
20	450446	Vertical switch



Repair parts may be ordered your authorized point of sale of from
BURCAM PUMPS

TROUBLE SHOOTING GUIDE CHECKLIST

NEVER MAKE ADJUSTMENTS TO ANY ELECTRICAL APPLIANCE OR PRODUCT WITH THE POWER CONNECTED. DON'T JUST UNSCREW THE FUSE OR TRIP THE BREAKER, REMOVE THE POWER FROM THE RECEPTACLE.

TROUBLE	PROBABLE CAUSE	ACTION
Motor does not run.	Switch is off position	Turn switch to on position
	Blown fuse	Replace
	Tripped breaker	Reset
	Plug disconnected	Re-install
	Corroded plug	Clean prongs
	Low water level	Add water and verify
	Thermal overcharge	Cool the motor
	Defective switch/float	Replace
	Defective motor	Replace/repair
	Improper float position	Check movement
Pump does not deliver to full capacity.	Jammed impeller	Clean
	Plugged check valve	Clean/replace
	Blocked suction/inlet	Check for debris in pit and clean
	Discharge leak	Repair
	Blocked line/pipe	Check for debris or ice
	Worn impeller	Repair/replace
	Defective motor	Replace
Pump does not shut-off.	Defective switch	Replace
	Float obstruction	Adjust/check
	Blocked suction/inlet	Check for debris in pit and clean

TO THE END CONSUMER

If you have any problems with the product, before advising the store, where you've purchased the pump, please contact us at 514 337-4415, and ask for our sales department, and they will be pleased to help you with any questions you might have, concerning your installation.