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Your pump has been carefully packaged at the factory to prevent damage during shipping. However, occasional damage may occur due to rough handling. **Carefully inspect your pump** for damages that could cause failures. Report any damage to your <u>carrier or your point of purchase</u>.

#### INITIAL START UP PROCEDURES:

- 1. Inspect the pump and the sewage tank for any obvious condition that may necessitates cleaning, correction, adjustement or repair.
- 2. Assure that the pump is secure and vertical for proper operation.
- 3. Assure 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 over the pump.
- 4. Assure that the motor is securely plugged into a proper 'GFCI' electrical outlet.
- 5.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. (Repeat this step monthly)
- 6. Lift the float to assure that the pump will start when required. (Step 7 below will test submersible pumps with enclosed floats).
- 7. Pour pails of water in the sewage tank to turn the pump on. Assure that any check valve present will permit the sewage to flow.
- 8. Observe that the plumbing can pump the sewage safely out of the residence. (Repeat this step monthly)



## INSTALLATION INSTRUCTIONS

## MODEL 400700 GRINDER PUMP

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



#### SAFETY INSTRUCTIONS:

Before installation and operation, follow these procedures:



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.

A separate circuit must be lead from the home electrical distribution panel properly protected with a fuse or a circuit breaker. We also required that a ground fault circuit be used as well as a 'GFCI' receptacle. <u>Consult a licensed electrician for all wiring.</u>



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

Never make adjustements 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.

#### **ELECTRICAL CONNECTION:**

For pumping systems using more than one pump, each pump needs to be connected to a separate dedicated circuit protected by a fuse or breaker. This way, the power supply of one pump will not stop operating if the fuse of one of the pumps burns or if the breaker of one of the pumps trips.

#### MATERIAL REQUIRED FOR SEWAGE PUMP APPLICATION:

- Desired length of ABS/DWV 2" pipe, to link up from pump discharge to waste or drain existing pipe.
- □ Required quantities of 2" ABS/DWV elbow (s) and/or other fitting (s) to run the discharge line.
- □ 1 only 1 1/4" male adaptor to 2" slip, to connect the discharge pipe to the pump.
- Desired length of ABS/DWV 3" pipe and required quantities of 3" ABS/DWV elbow (s) and/or other fitting (s) to run the vent line.
- □ 1 only 2" union check valve # 450457.
- □ 1 only 18" X 30" minimum size sewage basin like # 400420.
- □ Teflon tape and ABS cement.

### TOOLS:

Screwdrivers, hacksaw to cut pipe, knife to assist in pipe cutting, round file to smooth pipe ends, pipe wrench, adjustable wrench, 1/4" drill bit and drill.

Ensure that you have a gas tight cover for your sewage basin and 3" ABS/DWV vent piping.

#### NOTICE

This unit have been designed to pump water only. This unit is not designed for applications involving salt water, brine or any other liquids including petroleum products. Use with salt, brine or any other liquids including petroleum products will void the warranty.

#### **APPLICATIONS:**

• Designed for a permanent installation for homes and cottages application.

#### CAPACITIES:

<u>HEAD</u>	<u>US GPH</u>	<u>HEAD</u>	<u>LPH</u>
3.0m	7100	10'	1875
6.0m	6200	20'	1635
9.0m	4200	30'	1100
10.5m	1900	35'	500

FRICTION LOSS IN

PIPE NOT INCLUDED.

• 3/4 HP

- 115 V AC
- 60 Hz
- 7 A (14 A at start)

#### **IMPORTANTE NOTICE:**

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 will also void your warranty:

- Two (2) pumps have to be installed in the sewage pit. The first pump as a primary pump and the second pump as the backup unit.

- An Alarm system model 450454 has to be installed to advise you of any malfunctions.

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

#### INSTALLATION STEPS:

See typical installation diagram in page 4

STEP 1 We recommend that you install your pump and basin 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. Assuming that you have a sump pit located in your basement floor... Your sump pit should 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.

Friction losses in the discharge pipe must 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.

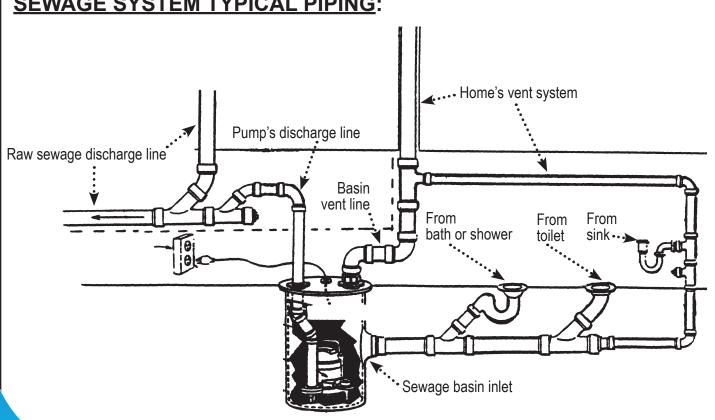
Never run the pump dry. Damage to the seal may occur.

The run of the pipe from the check valve to the existing waste or drain line must never be slooping downward except when connecting to same.

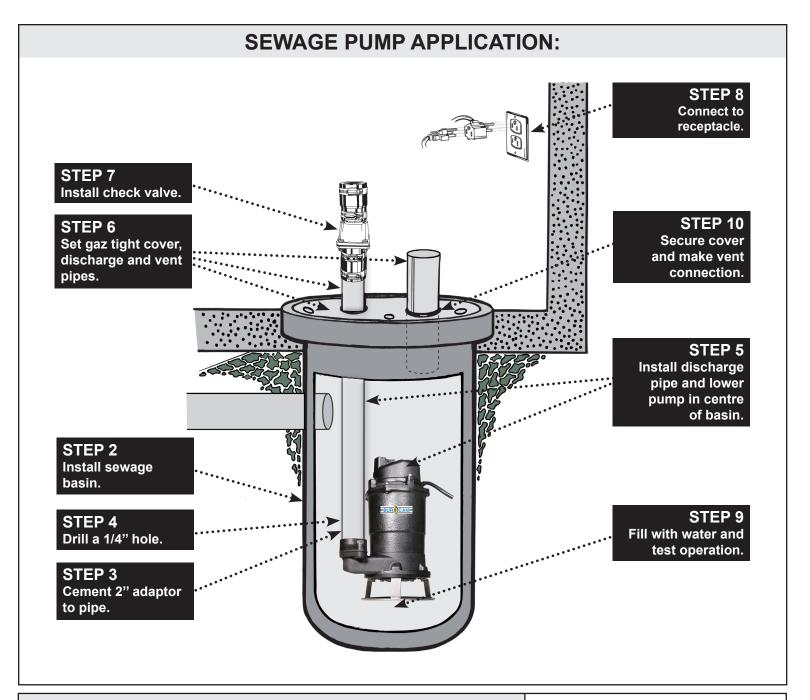
# **STEP 2** For a new installation, install your sewage basin in the excavation you have provided in the basement floor of your home. Connect the necessary piping from your shower trap, toilet, etc., to the inlet of your sewage basin, with the proper pipe and fittings. (See diagram)

STEP 3 Cut a length of 40" to 42" of 2" ABS/DWV pipe. Cement the 1 1/4" male adaptor to 2" slip to one end of this pipe.

- With your drill, make a 1/4" hole in the adaptor previously glued. This hole will prevent any air STEP 4 locking wich might occur.
- Screw the pipe with the male adaptor into the 2" discharge opening in the pump. Lower pump STEP 5 with piping attached into the sewage basin. Make sure that the pump is as close as possible to the centre of the basin. Adjusting the pump in centre of basin will keep mechanical float switch from rubbing on side of basin.
- When you are pumping raw sewage, you must have a gas tight cover on the basin and a vent STEP 6 pipe from basin, connecting to home's vent system (see diagram). Feed the 2" riser pipe from pump's discharge, through the 2" opening in the cover. Secure a 3" vent pipe to the cover and bring the switch and pump motor power cables through the opening in the cover provided.
- Install a 2" check valve (model 450457) union type to the 2" discharge riser pipe coming out STEP 7 of the cover, to a lenght of 2" ABS/DWV pipe, and run the discharge line as short as possible to the home's waste sewer line. Secured the check valve with the provided clamps. Be sure that the arrow on valve are pointing away from pump.
- Connect the 3 prong plug of the switch in a receptacle. Insert the motor 3 prong plug into STEP 8 female receptacle on exposed piggy-back of switch plug. The mechanical switch provided for automatic operation is preset to pump. No adjustments are necessary.
- Fill the sewage basin with water to test the operation of the submersible sewage pump and STEP 9 switch operation. Pump should start pumping when the water level reaches 12" to 15" above the bottom of the basin and above the pump. Allow the pump to go several "ON-OFF" cycles to assure satisfactory operation.
- Secure the gas tight cover and the plug for electrical cords with the gaskets and screws STEP 10 provided with the cover. Make vent connection to home's vent system.

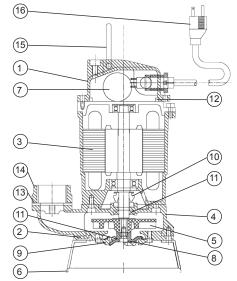


#### **SEWAGE SYSTEM TYPICAL PIPING:**



#### **REPAIR PARTS:**

REF.	DESCRIPTION	#	REF.
311130	Motor Cover	14	311142
311131	Suction Cover	15	311143
311145	Motor	16	311144
311132	Pump Body		
311133	Impeller		
311134	Base support		
311135	Capacitor		
311136	Cutter		
311137	Cutter ring		
311138	Mech. Seal		
311139	Oil Seal		
311140	O-Ring (Top Cover)		
311141	Packing (Flange)		
	311130 311131 311145 311132 311132 311133 311134 311135 311136 311137 311138 311139 311140	311130Motor Cover311131Suction Cover311145Motor311145Motor311132Pump Body311133Impeller311134Base support311135Capacitor311136Cutter311137Cutter ring311138Mech. Seal311139Oil Seal311140O-Ring (Top Cover)	311130 Motor Cover 14   311130 Suction Cover 15   311131 Suction Cover 15   311145 Motor 16   311132 Pump Body 16   311133 Impeller 16   311134 Base support 16   311135 Capacitor 11136   311136 Cutter 11137   311137 Cutter ring 11138   311139 Oil Seal 11130   311140 O-Ring (Top Cover) 11111



Repair parts may be ordered from your authorized point of sale or from BUR-CAM PUMPS

DESCRIPTION

Flange

Handle

Cable

#### **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
	Disconnected plug	Re-install
	Corroded plug	Clean
	Float stuck	Check movement
	Defective switch	Replace
	Defective motor	Replace
lotor runs but no	Improper voltage	Check voltage
water is delivered.	Pump may be airlocked	Check drilled hole in discharge pip
	Pump discharge head too high	Wrong pump selection (over 15')
	Clogged inlet/impeller	Clean
oump does not	Improper voltage	Check voltage
leliver to full	Pump may be airlocked	Check drilled hole in discharge pip
apacity.	Pump discharge head too high	Wrong pump selection (over 15')
	Clogged inlet/impeller	Clean
	Defective switch	Replace
Pump does not	Missing check valve	Install valve
shut off.	Clogged check valve in open	Clean debris
	position	
	Float obstruction	Check for movement

#### 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.