AT PUMP OWNERS MANUAL

IMPORTANT SAFETY INSTRUCTIONS. READ AND FOLLOW ALL INSTRUCTIONS. <u>SAVE THESE INSTRUCTIONS</u>

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.....WARNING

Before installing this product, read and follow all warning notices and instruction accompanying this product. Failure to follow all safety warnings and instructions can result in severe injury, death or property damage.

IMPORTANT NOTICE

Attention Installer: This manual contains important information about the installation, operation and safe use of this product. This information is to remain with the owner/operator of this equipment.

PPC PUMP COMPANY P.O. Box 295 Haslett, MI. 48840

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I. INSTALLATION

Notice to Installer: When the pump is mounted permanently within 5 ft. of the inside walls of a swimming pool, you must use a No.8 AWG or larger conductor to connect to the bonding conductor lug.

.....WARNING

RISK OF ELECTRIC SHOCK OR ELECTROCUTION

This pool pump must be installed by a licensed electrician or a qualified pool serviceman in accordance with the National Electrical Code and all applicable local codes and ordinances. Improper installation will create an electrical hazard which could result in death or serious injury to pool users, installers, or others due to electrical shock. Property damage may result also.

Always disconnect power to the pool pump at the circuit breaker before servicing the pump. Failure to do so could result in death or serious injury to the serviceman, pool users or others due to electric shock.

.....WARNING

Children are not to use or operate this product at any time. Children should never be allowed near this product at any time.

.....CAUTION.....

This pump is for use with permanently installed pools. It may also be used with hot tubs and spas if so marked. Do not use with storable pools. A permanently installed pool is constructed in or on the ground or in a building such that it cannot readily disassembled for storage. A storable pool is constructed so that it may be readily disassembled for storage and reassembled to its original integrity and has a maximum dimension of 18 feet (5.49m) and a maximum wall height of 42 inches (1.07m).

II. OPERATION AND MAINTENANCE

A. THE PUMP STRAINER

The pump strainer (7) is the part of the pump housing directly connected to the pump inlet. It can be distinguished from the rest of the pump by its see-thru cover (3). This cover, held in place by four fasteners (1) allows the owner to inspect the removable strainer basket (5) for debris such as leaves, twigs, hair and lint. It is very important to keep the strainer basket clean at all times. When replacing the see-thru cover, DO NOT OVER TIGHTEN the four fasteners. Excess tightening may cause damage to the cover or pump housing. *NOTE:* Numbers in parentheses () indicate ID numbers shown on page 5 of this manual.

.....CAUTION.....

To prevent damage to the pump and filter and for proper operation of the system, clean the pump strainer and skimmer baskets regularly.

CLEANING THE STRAINER BASKET:

1. Turn off the pump.

2. Remove the cover (3).

3. Remover the plastic basket (5) and empty debris.

4. Replace the basket, fill with water and replace the cover securely to prevent air from entering. Do not use tools or over tighten. 5. Open the air relief valve on top of the filter.

6. Stand clear of the filter and turn on the pump.

7. Close the air relief valve when a steady stream of water comes out of the air relief valve.

If the pump is installed below the water level of the pool, close the valves on the return and suction lines prior to opening the pump strainer on the pump. Failure to close the valves will cause the pump housing to overflow. Make sure to re-open these two valves prior to operation.

Regardless of the length of time between cleaning the pool filter, you must visually inspect the pump strainer basket at least twice a week. A dirty basket will reduce the efficiency of your pool filter and heater and will put abnormal stress on the pump motor, causing premature failure.

DO NOT run the pump dry. If the pump is run dry, the mechanical shaft seal (ll)will be damaged and the pump may develop a leak. If this occurs, the damaged seal must be replaced.

ALWAYS maintain the proper water level in your pool which is half way up the skimmer opening. If the water level falls below the skimmer opening, the pump will draw air through the skimmer, losing its' prime and causing the pump to run dry, resulting in seal damage. Continued operation in this manner could cause a loss of pressure, resulting in damage to the pump case, impeller, and seal.

B. PRIMING THE PUMP

- 1. Turn off the pump.
- 2. Remove the pump strainer cover (3).
- 3. Fill the pump strainer with water at least to the level of the suction line.
- 4. Make sure the cover gasket (4) is in place.
- 5. Tighten the 4 fasteners (1)-DO NOT OVER TIGHTEN.
- 6. Open the air relief valve on top of the filter.
- 7. Stand clear of the filter. Turn on the pump.

8. The pump will now prime. The priming time depends upon the suction lift and the horizontal distance of the suction piping. 9. Close the air relief valve when a steady stream of water comes out the air relief valve.

C. THE PUMP MOTOR

The pump motor should be protected from foreign matter, splashing pool water, deck hosing and the weather. Any enclosure should be well ventilated to prevent the motor from overheating. Whenever a motor has become wet, let it dry before starting it. Damage by elements, such as dirt, sand or water voids the motor warranty.

D. THE SHAFT SEAL

The shaft seal (11) consists primarily of two parts, a ceramic seal and a rotating spring-loaded carbon seal.

.....CAUTION.....

The highly polished and lapped faces of the seal are easily damaged. Handle the seal with care. Do not touch the contact surfaces of the seal.

This pump requires little or no service other than reasonable care. Occassionally, a shaft seal can become damaged and must be replaced.

E. PROTECT MOTOR AGAINST HEAT

- 1. Shade the motor from the sun.
- 2. Provide ample cross ventilation.

E. PROTECT MOTOR AGAINST DIRT

1. Keep the motor, motor vents and surrounding area clean.

2. Avoid sweeping or stirring up dust near the motor while it's in operation.

3. Avoid storing (or spilling) pool chemicals near the motor.

G. PROTECT MOTOR AGAINST MOISTURE

1. Provide protection from rain, snow, lawn sprinklers, etc.

2. Locate the motor on a slight elevation so water will not run or puddle nearby.

3. Avoid spilling or dripping liquid chemicals on or near the motor.

4. Avoid splashing water near the motor.

5. Do not wrap the motor with plastic or any other materials. (Exception: the motor may be temporarily covered during a storm, when hosing, winter storage, etc. Never cover the motor when it is operating or if you expect to use it.

.....CAUTION.....

Formation of ice in the pump housing or in supply and discharge water lines can cause severe damage. If temperatures fall to a level where freezing can occur, you may have to drain the pump housing and all associated plumbing to prevent such damage. Where the risk is minimal for a "hard" freeze, running your Idtering equipment may prevent ice formation. Freeze damage to the pump housing or any other components is not covered under the warranty.

III. TROUBLE SHOOTING

Before performing any maintenance, repair or troubleshooting on this pump/motor assembly, disconnect all power to the circuit. Using a voltmeter, confirm that no potential (voltage) exists from any point on the motor, connection or wiring circuit to ground. If you are unable to perform this check, consult a licensed electrician.

| SYSTEM PROBLEM | CAUSE | Remedy |
|---------------------------------|---------------------------------------|--|
| FAILURE TO PUMP | Pump will not prime-too much air. | Check the suction piping and the valve glands on all of the suction gate valves. Secure the cover (3) on the pump strainer (7) and confirm the cover gasket (4) is seated correctly. Confirm that the water level at the skimmer is at the specified level for correct operation. Failure to maintain this specified water level will result in damage to pump. |
| | Pump will not prime-too little water | Confirm the suction lines, pump strainer and pump housing (7) are filled with water. Confirm the valve on the suction line is open and functioning correctly. Confirm that the water level at the skimmer is at the specified level for correct operation. Failure to maintain this specified water level will result in damage to pump. |
| | | Clean the pump strainer basket (5). After removing the strainer basket inspect the interior (7) for any debris the basket may not have removed. |
| | Pump strainer clogged. | Replace the pump strainer cover gasket (4). |
| | Pump strainer cover gasket defective. | |
| Reduced capacity And/Or Head | Air pockets or leaks in suction line. | Check the suction piping and the valve glands on all of the suction gate valves. Secure the cover (3) on the pump strainer (7) and confirm the cover gasket (4) is seated correctly. Confirm that the water level at the skimmer is at the specified level for correct operation. Failure to maintain this specified water level will result in damage to pump. |
| | | Remove the impeller (10) and clear of debris. Inspect for any defects or excessive wear. Reattach the impeller and reassemble it to the original operating position. |
| | Clogged impeller. | Clean the pump strainer basket. After removing the strainer basket inspect the interior for any debris the basket may not have removed. |
| | Pump strainer clogged. | |



Impellers

| 75SS6142 | 3/4hp Impeller |
|----------|----------------|
| 10SS6162 | 1hp Impeller |
| 15SS6182 | 1.5hp Impeller |
| 20SS6222 | 2hp Impeller |
| 25SS6262 | 2.5hp Impeller |
| 30SS5062 | 3hp Impeller |
| | |

Flow Curve



| | Part # |
|-----|----------|
| 1 | 910002 |
| 2 | 910003 |
| 3 | 120042 |
| 4 | 910009 |
| 5 | 120008 |
| 6 | 98207700 |
| 6.5 | 57006500 |
| 7 | 120001 |
| 8 | 910008 |
| 9 | 120007 |
| 10 | |
| 11 | S201 |
| 12 | 910007 |
| 13 | 120006 |
| 14 | 120003 |
| 15 | 910004 |
| 16 | 910005 |
| 17 | 120004 |
| 18 | 120005 |
| 19 | 910010 |
| 20 | 910001 |
| 21 | 120010 |
| | |

| Description |
|--|
| Hand Knob |
| Swivel |
| Strainer Cover |
| Strainer Cover Gasket |
| Basket |
| New Drain Plug (Old Drain Plug 120009) |
| Plug o-ring |
| Pump housing/strainer |
| Diffuser Gasket |
| Diffuser |
| See Impeller chart – above |
| Shaft Seal Assembly |
| Housing Gasket |
| Seal Plate |
| Motor Mounting Plate |
| Housing cap screw w / washer |
| Motor cap screw w / washer |
| Mounting foot – left |
| Mounting foot – right |
| Mounting foot cap screw |
| Impeller w / nut |
| Motor radius adapter |
| - |