

VII. Specification

| Model | POND SERIES | | | |
|-------------------------|---------------|--|-----------------------------------|--|
| Motor | Model NO. | POND-100A | POND-150A | POND-S250 |
| | Rated Output | 100W | 150W | 250W |
| | Rated Voltage | 1Ø/110V,220V | | |
| | Frequency | 50Hz / 60Hz | | |
| Pump | Head @ Volume | 5m@50 ℓ / min 16.5ft@13.2 US GPM | 7m@60 ℓ / min 23ft@15.8 US GPM | 6.5m@100 ℓ / min 21.3ft@26.4 US GPM |
| Motor Protection Device | | Overheat Protector | | |
| Cable | | 3 m / 10 ft | | |
| Lubricant | | Food Grade Lubricant (White Mineral Oil) | | |
| Weight(without cable) | | 4kg / 8.8 lb | 4.4kg / 9.7 lb | 4.1kg / 9 lb |
| Outlet hose Diameter | mm | 15,20,25 | 15,20,25,32 | 32, 40 |
| | ft | ½, ¾, 1 | ½, ¾, 1, 1¼ | 1¼, 1½ |
| Accessories | | Gasket, Clips | | Gasket |

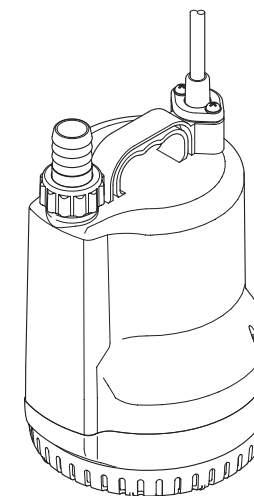
POND RESIDENT SUMP PUMPS User's Manual



- Thank you for choosing HCP POND Submersible Pumps.
- To be sure carefully read through User's Manual before installation and operation.
- Keep User's Manual in proper and easy access place for further reference at any time

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●Based on our policy of improving and developing products, therefore we reserve the right to alter specifications of our product at any time without giving prior notice.


Agent :

We make the reliable pumps.

HCP PUMP MANUFACTURER CO., LTD.

EPOEN0-1211A

I. Safety Instructions

 This is the safety alert symbol. Paying constant attention to safety is always extremely important.

WARNING Warning about hazards or unsafe practices which could result in severe personal injury or death.

- Do not attempt to repair, alter or disassemble the pump unless by a qualified technician, to avoid abnormal operation of the pump.
- To be sure install a Leakage Breaker and earth wire (Green) is properly grounded by qualified electrician. To avoid fire or personal injury that may be caused by power leakage in the event of motor failure.
- Before cleaning the pump, be sure to shut off power. Keep hands dry when making contact to the power switch.
- If the power consumption of the product is over 10 amperes, be sure to use an isolated socket. If using the product together with other electrical appliances, the socket may become overheated and cause fire hazard.
- Do not lift the pump by pulling power cable, and remove cable strain relief.
- Do not enter the pond during pump operation to avoid personal casualties in case of leakage.



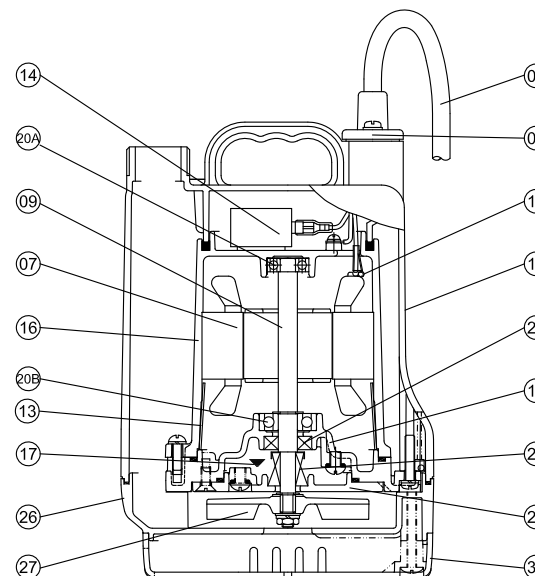
CAUTIONS Warning about hazards that will or can cause minor personal injury or product or property damage.

- This product is limited to pumping clean water, flood water and pond water only. Do not use it to pump liquid such as muddy water, oil, solvent and acid/alkaline fluids.
- Do not subject the cable to heavy pressure, processing and tearing which may damage the cable and cause short circuit and even lead to electrocution or fire.
- Do not run the pump dry. Dry running can cause motor burn out and will void the warranty.
- Do not pull the cable to remove the power plug. It can damage the cable and cause short circuit and even lead to death by electrocution or fire. When removing the power plug, hold the plug with your hands and pull it out.
- If the pump shows abnormal signs or remains inactive after starting, stop the pump and shut off power immediately; otherwise, it may cause electrocution or fire.
- The applicable pumping liquid temperature ranges should be 0~40°C, and the pump may be damaged if exceeding such range.
- If the plug or electrical wire is damaged or if the plug tends to loosen when inserting into the socket, stop using the pump and shut off power immediately; otherwise, it may cause electrocution or fire.
- When putting aside the pump for a longer period of time, be sure to disconnect power and keep it in a place beyond reach of children.

※ This Company places heavy emphasis on product quality and safety, however, this Manual does not fully cover all safety matters. For this reason, the user or the maintenance person must pay special attention to their own safety as well.

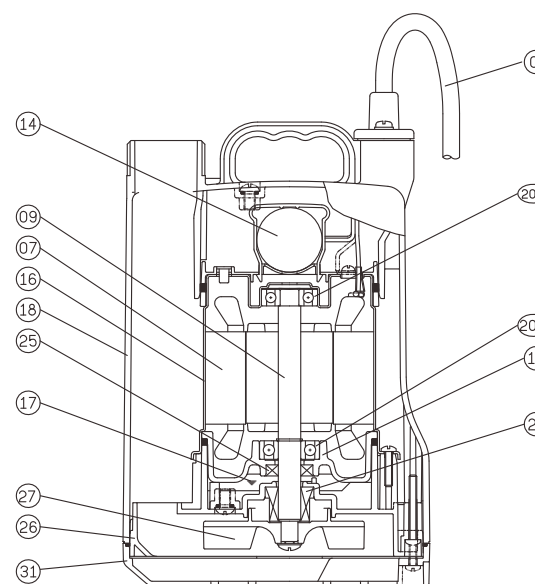
II. Sectional Drawing

■ POND-100A / 150A



| No. | Name | No. | Name |
|-----|--------------------|-----|-----------------|
| 01 | Cable | 19 | Bearing bracket |
| 04 | Cable base cover | 20A | Upper bearing |
| 07 | Stator | 20B | Lower bearing |
| 09 | Shaft (with Rotor) | 21 | M. seal |
| 10 | Overheat protector | 23 | M. seal bracket |
| 13 | Fix ring | 25 | Oil seal |
| 14 | Capacitor | 26 | Casing |
| 16 | Motor frame | 27 | Impeller |
| 17 | Lubricant | 31 | Strainer |
| 18 | Out cover | | |

■ POND-S250



| No. | Name | No. | Name |
|-----|--------------------|-----|---------------|
| 01 | Cable | 20A | Upper bearing |
| 07 | Stator | 20B | Lower bearing |
| 09 | Shaft (with Rotor) | 21 | M. seal |
| 14 | Capacitor | 25 | Oil seal |
| 16 | Motor frame | 26 | Casing |
| 17 | Lubricant | 27 | Impeller |
| 18 | Out cover | 31 | Strainer |
| 19 | Bearing bracket | | |

III. Installation

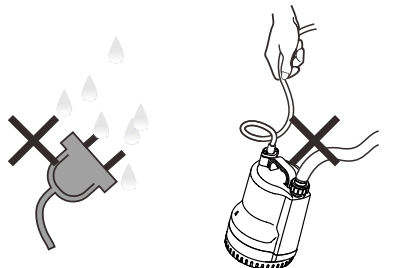
⚠ WARNING

- To be sure install a Leakage Breaker and earth wire(Green) is properly grounded. To avoid personal injury that may be caused by power leakage in the event of motor failure.
- Do not pull, bend, wrest, and splice power cable which will result in severe personal injury or death.

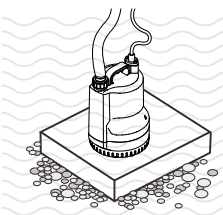
Before installation

⚠ CAUTIONS

- Check if the pump model, voltage, frequency and discharge are correct. If the specification is incorrect, then pump failure will occur.
- Multi-connector is provided, and make sure water hose is securely fasten.
- Keep the plug and the socket dry and do not pour water.
- Over length of power cable would cause voltage drop, over-current and burn .



- Pump is suitable for fresh water, flooded water and pond water application. When sand layer is occurred to raise salty water, oil, solvent and acid/alkaline fluid. Using the pump in these conditions will void warranty.
- The Air Vent is releasing the remaining air in the pump casing to minimize the air locked situation, and a tiny water flow from Air Vent is normal.
- Recommended 8 hours of daily operating to achieve best duration. 24 hours continuously would accelerate wear and shorten the pump life. Install a Timer to control the operation period or install more than two units for alternate operation.



- Motor Protection

The motor is equipped with Thermal Protector to prevent motor overheated. When Protector is reacting frequently, shut off power immediately and check the following problems:

- .Check impeller for clearness.
- .Check voltage correctness.
- .Check density of liquid.
- .Check water level.

IV. Directions of Use

| | |
|---|--|
| | |
| <p>1. Ensure that the hose is securely fastened on to the pump outlet.</p> | <p>2. Ensure the hose is unimpeded before operation.</p> |
| | |
| <p>3. Ensure the pump is operating under water.</p> | <p>4. To prevent backflow when the pump is stopped, do not place the hose outlet in the water</p> |

V. Maintenance

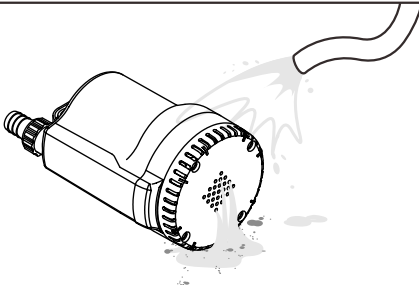
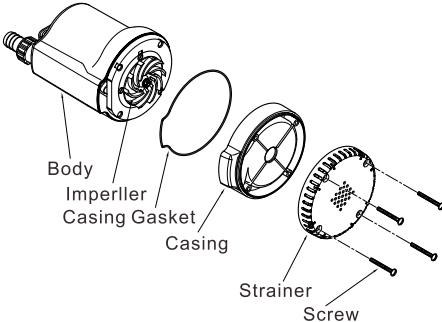
After using for a certain period, some impurities may build inside the pump. If the filter or impeller is blocked by these impurities, then it will affect water flow capacity and possibly lead to motor failure. In order to prolong pump life, carry out following procedure.

⚠ WARNING

Ensure plug is disconnected from socket before contacting with water. Failure to do so could result in death or serious injury.

⚠ CAUTIONS

Do not apply any detergent and rinse careful not to damage parts or it could void warranty.

| | |
|--|---|
| <p>Suction inlet: While holding the pump on its side, rinse the strainer with fresh water. Remove all foreign objects from the suction inlet strainer that remain.</p> |  |
| <p>Inside the pump: 1.If impeller or casing blockage has occurred, unscrew and remove all foreign objects. Then rinse with clear water. 2.Disassemble the strainer, casing and gasket, and then remove all foreign objects. Then rinse with clear water. 3.Rotate the impeller manually to confirm smooth rotation.</p> |  |

Reassembling:

Firmly place the pump upside down, and then securely place gasket, casing and four screws to pump body in sequence.

VI. Troubleshooting

⚠ WARNING

Disconnect power supply before pump handling.

Do not attempt to repair, alter or disassemble the pump unless by a qualified technician, as severe personal injury or death can result.

Symptom 1: Motor failed to operate

| Possible Cause | Solutions |
|--|--------------------------------------|
| Power failure | Ensure plug is securely in socket |
| Defective Cable | Send for repair and replace the wire |
| Impeller is jammed by foreign object | Remove foreign objects |
| Fuse blow | Replace with correct fuse |
| Leakage Breaker is active | Repair or replace motor |
| Water gets into the motor after the shaft seal is worn out | Repair or replace motor |

Symptom 2: Pump stops during running.

| Possible Cause | Solutions |
|--------------------------------------|---|
| Impeller is jammed by foreign object | Remove foreign objects |
| Voltage is abnormal | Use correct voltage |
| Motor Protector is tripped | Avoid dry running and high liquid temperature |

Symptom 3: Pump not reaching design head (pressure)

| Possible Cause | Solutions |
|--|---|
| Water hose is crushed or twisted | Remove foreign objects or solve the bending problem |
| Impeller is worn | Replace with a new impeller |
| Foreign objects occurred | Remove foreign objects |
| Inappropriate hose length and diameter | Use an appropriate hose |

Symptom 4: Leakage Breaker is activated.

| Possible Cause | Solutions |
|--|----------------------|
| Cable is frayed | Send for repair |
| The connecting part of extension wire is moist | Use after drying out |
| Seal is worn out cause water enter | Send for repair |