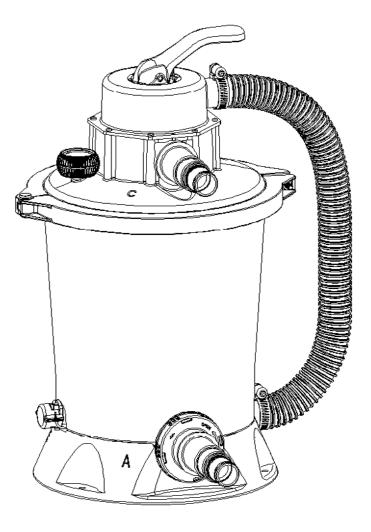
## avenli

### SAND FILTER PUMP MANUAL

### 290729XX / 290730XX



# CE

| Model                        | 290729XX   | 290730XX                                   |
|------------------------------|--|--|
| Maximum operating pressure   | <0.2bar (3psi)   | < 0.3bar(4.5psi)                           |
| Voltage                      | 220-240 V  |  |
| Effective filtrating area    | 0.058m² (0.62ft²)  | 0.058m <sup>2</sup> (0.62ft <sup>2</sup> ) |
| Maximum water flow rate      | 800 gallons/hr (3028/h)  | 1000 gallons/hr (3785/h)                   |
| Maximum water<br>temperature | <b>35</b> ℃  |  |
| Recommended filter           | 20# quartz sand or glass sand, with particle size of                   |  |
| media                        | 0.45-0.85 mm, (i.e. 0.018-0.033 inches) ,and the                       |  |
|                              | overall particle uniformity coefficient of which is smaller than 1.75. |  |
| Recommended number of media  | Quartz sand or glass sand, 10 kg                                       |  |

#### Please read carefully and save it for future reference

### **Safety instructions**

Always follow the basic safety precautions for installation and use of this electrical equipment, including

WARNING: This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

WARNING: Children being supervised not to play with the appliance

WARNING: The product should be away from the product, so as to avoid children climbing into it.

WARNING: There is risk of electric shock. This product is only connected to the outlet with grounding protection. If it can not be confirmed, please contact an experienced electrician for installation, this outlet has a maximum leakage current of up to 30mA.; please do not use the movable outlet.

WARNING: The pump is to be supplied through a residual current device (RCD) having a rated residual operating current not exceeding 30 mA.

WARNING: To remove this product, before cleaning, maintenance or adjustment, unplug the power plug from the outlet.

WARNING: Do not bury the wire in the soil, and must arrange it on safety location where it can not be damaged by the lawn mower and other equipment.

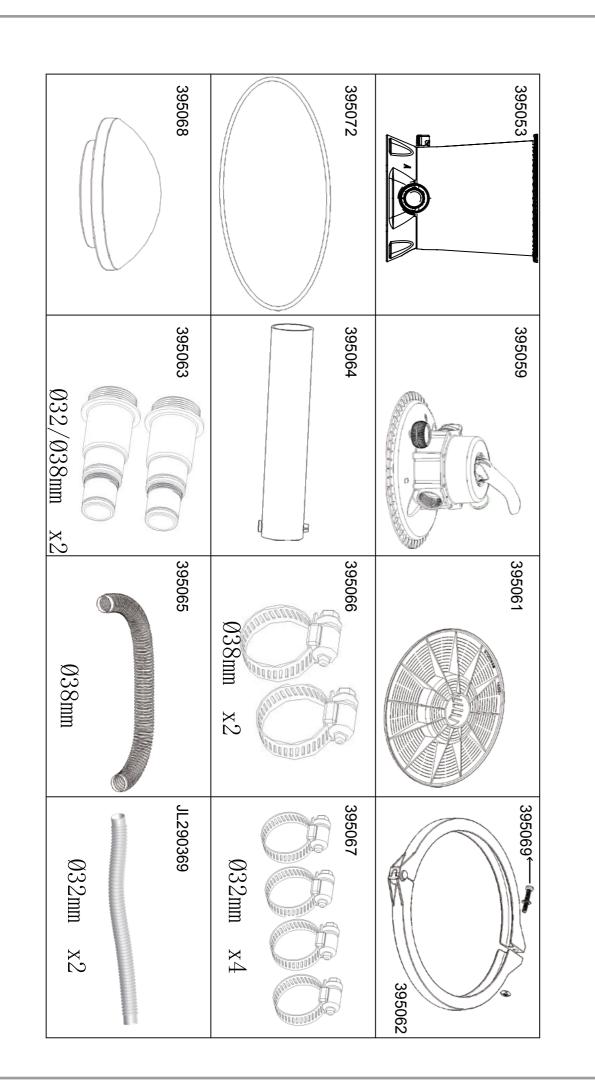
WARNING: The supply cord cannot be replaced. If the cord is damaged the appliance should be scrapped.

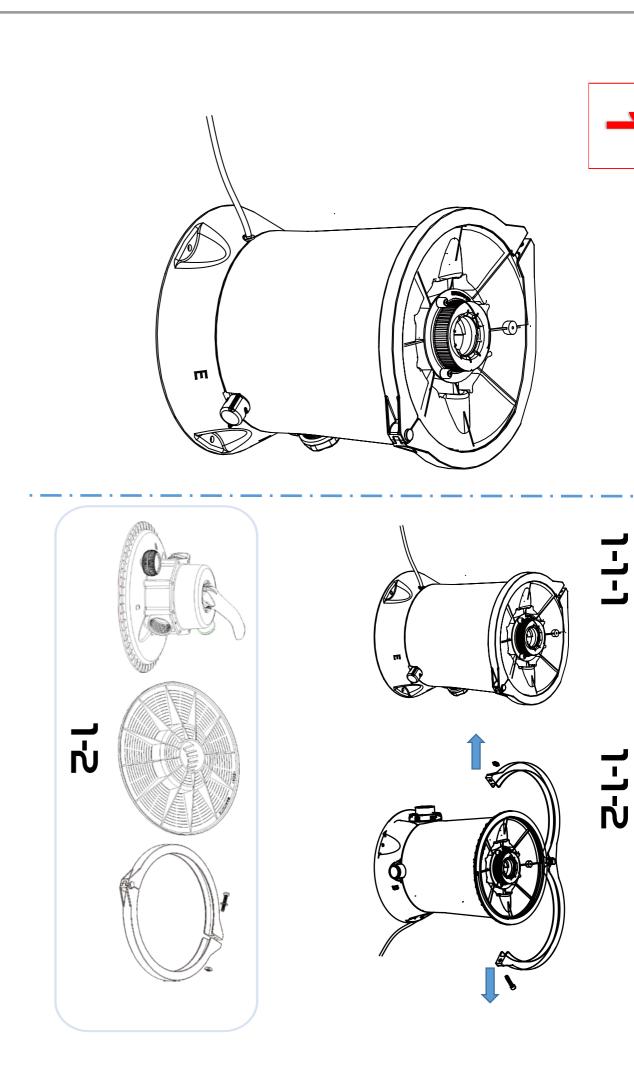
WARNING: To reduce the risk of electric shock, do not connect any extension wire, timer, plug adapter or converter to the filter body. Please provide a fixed outlet.

WARNING: If you stand in a place with water or your hands are wet, do not unplug the power wire plug.

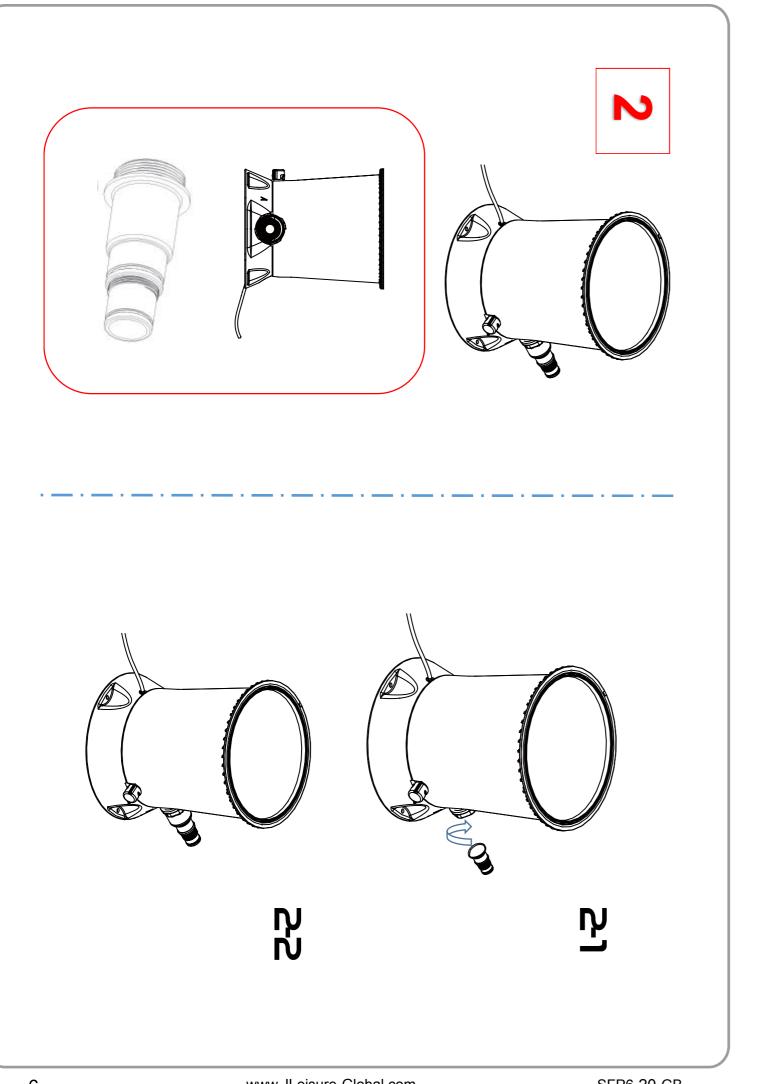
WARNING: After this product is installed, the installation position of the plug should be visible to the user and easy to access. WARNING: When the product is in use, do not start this product. WARNING: Only adult can install and remove this product. WARNING: This product can only be used with a movable product. Do not use it in conjunction with a fixed product. The movable product can be removed for water storage and re-installed on its original position. WARNING: To avoid damage to the product and the risk of injury, before the rotating the control valve position, please turn off the product. WARNING: To reduce the risk of being absorbed, if the filter cover is loosened, damaged, destroyed, or lost, do not put it into the product. In case of the above conditions, please replace the filter cover immediately. WARNING: Do not play or swim near the filter cover. Your body or hair may be inhaled to cause permanent injury to the body or drowning. WARNING: When the reading displayed on the pressure gauge of the body exceeds a predetermined maximum data, do not start this product. WARNING: There is a risk of pressure; any improper installation of the cylinder head can cause its damage, resulting in serious injury, death or damage to any property.

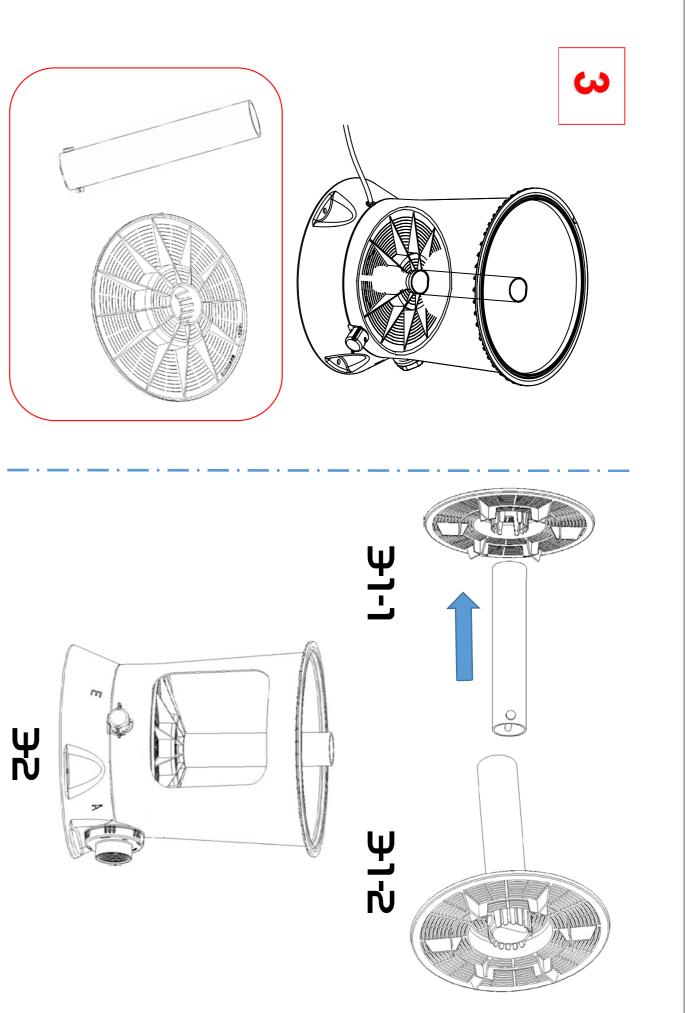
NOTE: this product is limited to those purposes described in the specification. WARNING: The maximum total head: 1.5m.

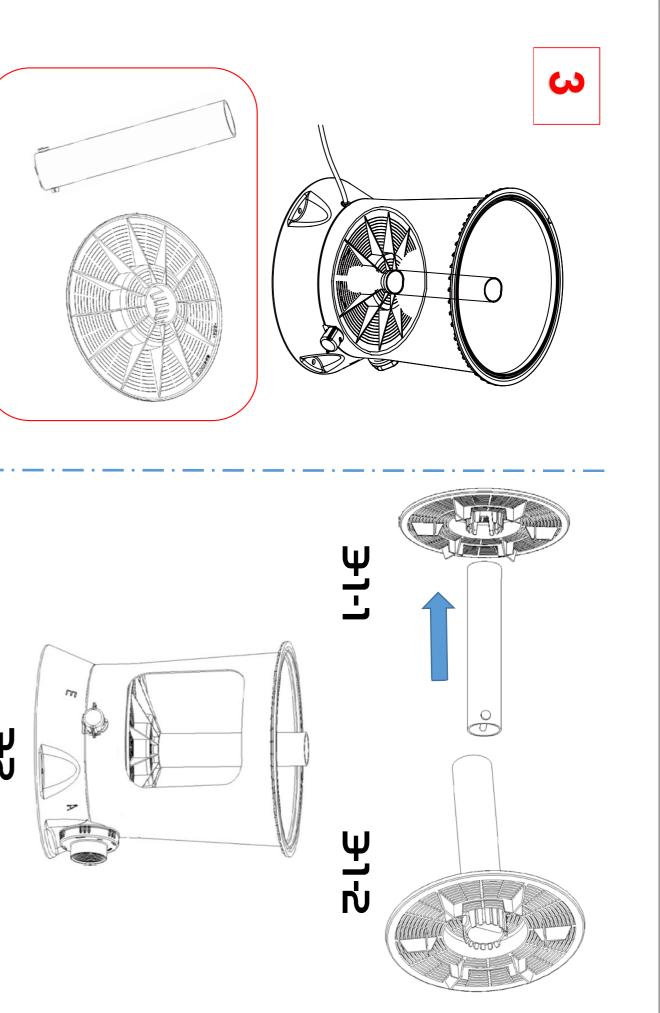




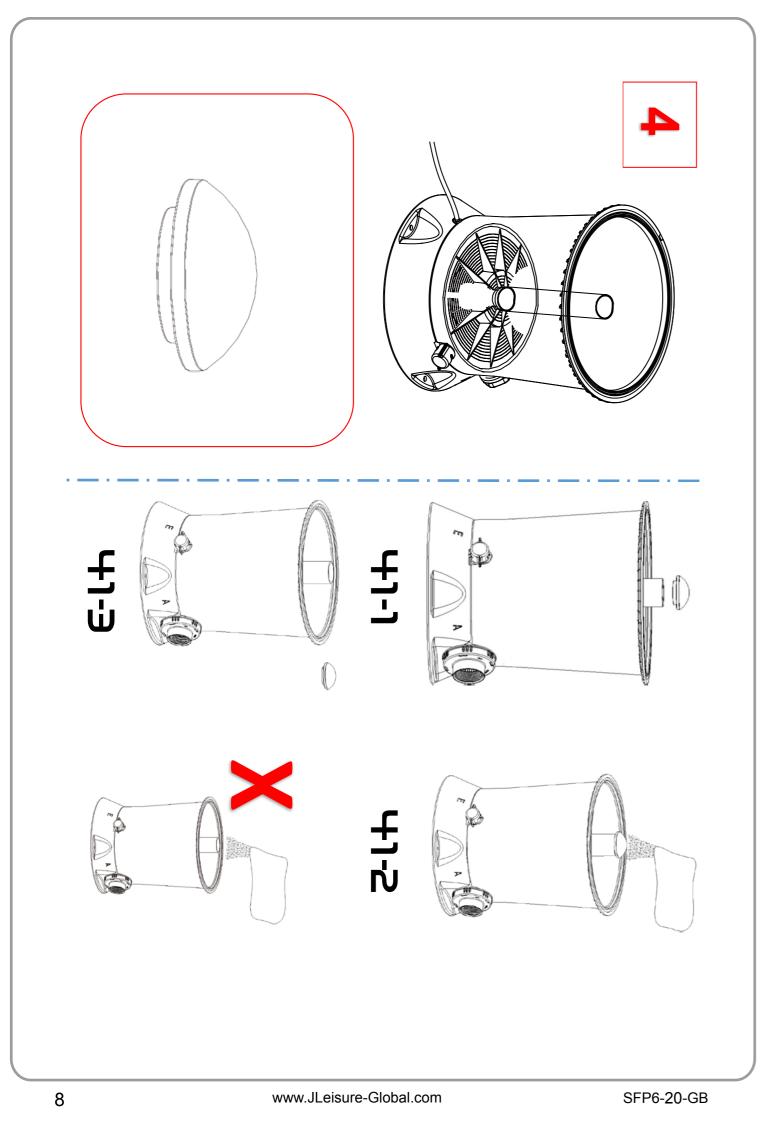


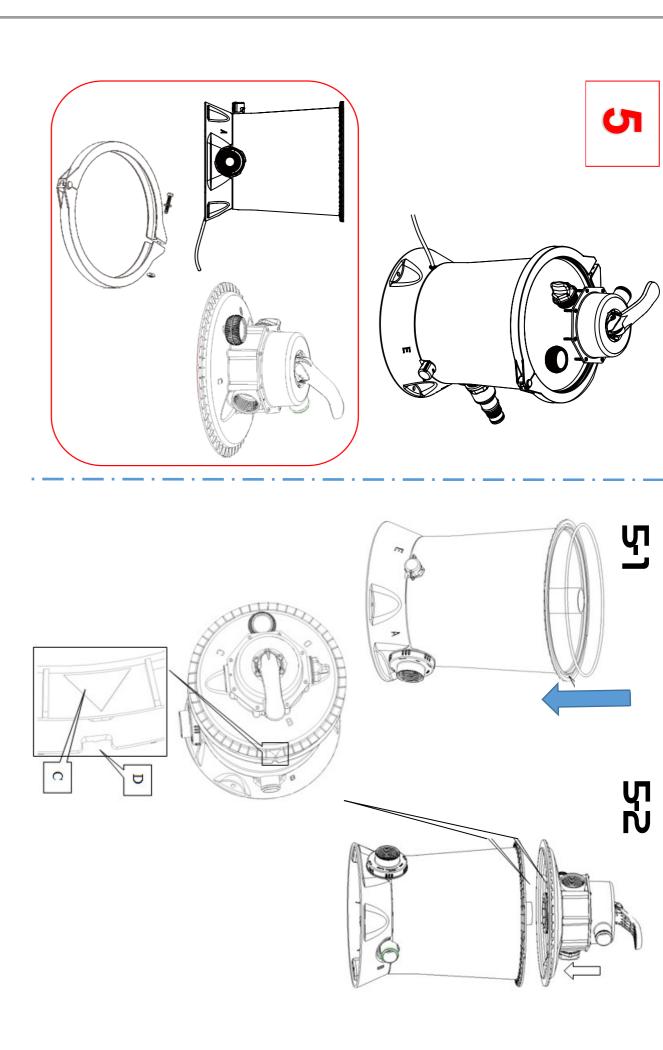




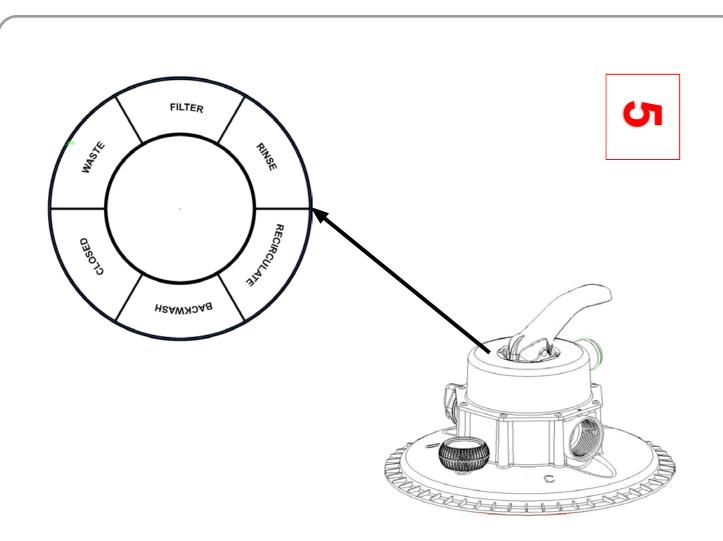


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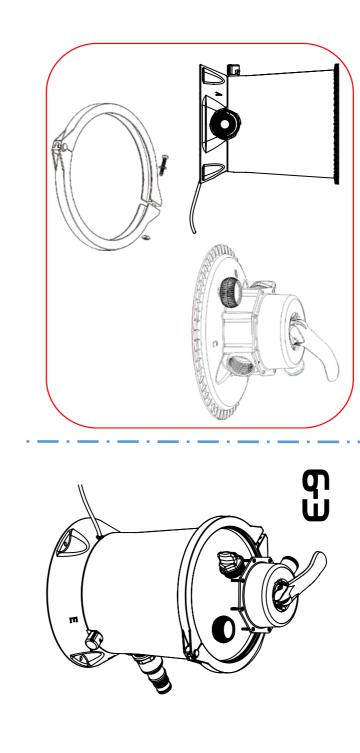




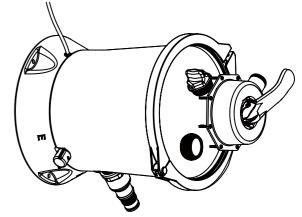


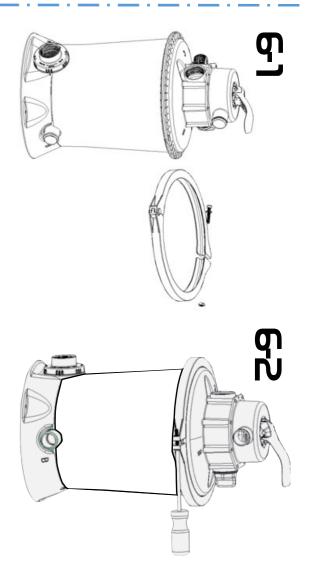


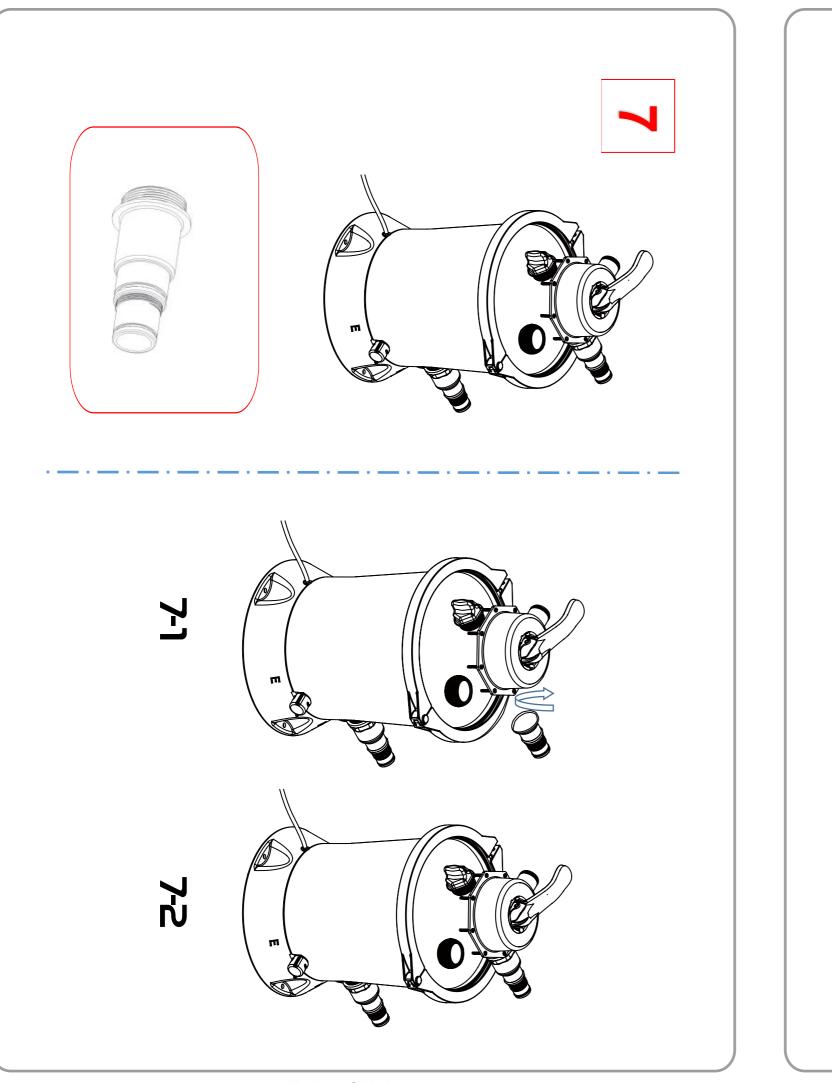
| Location of control valve | Functions  | Water flow direction   |
|---------------------------|--|--|
| Filter                    | Normal filtering to rinse the pool   | Water flows through the filter bed<br>where the sand filter pump lies<br>and then enters the pool                                    |
| Backwash                  | Reverse-direction water flow to rinse the filter bed   | Water flows through the filter bed<br>where the sand filter pump lies<br>and is then directly discharged<br>from the drain outlet.   |
| Rinse                     | This function is used for first<br>startup. Sand in the sand tank<br>is rinsed and the sand bed after<br>backwashing is leveled. | Water flows through the filter bed<br>where the sand filter pump lies<br>and is then directly discharged<br>from the drain outlet.   |
| Drain                     | Discharged directly from the drain<br>outlet, used to lower water level<br>or discharge water from the pool                      | Discharged directly from the<br>drain outlet of the sand filter<br>pump without passing through<br>the filter bed                    |
| Recirculation             | Circulates pool water without passing through the filter bed.  | Water flows directly into the pool<br>through the control valve of the<br>sand filter pump without passing<br>through the filter bed |
| Closed                    | Closed water flow between the filter and the pool  | 1  |

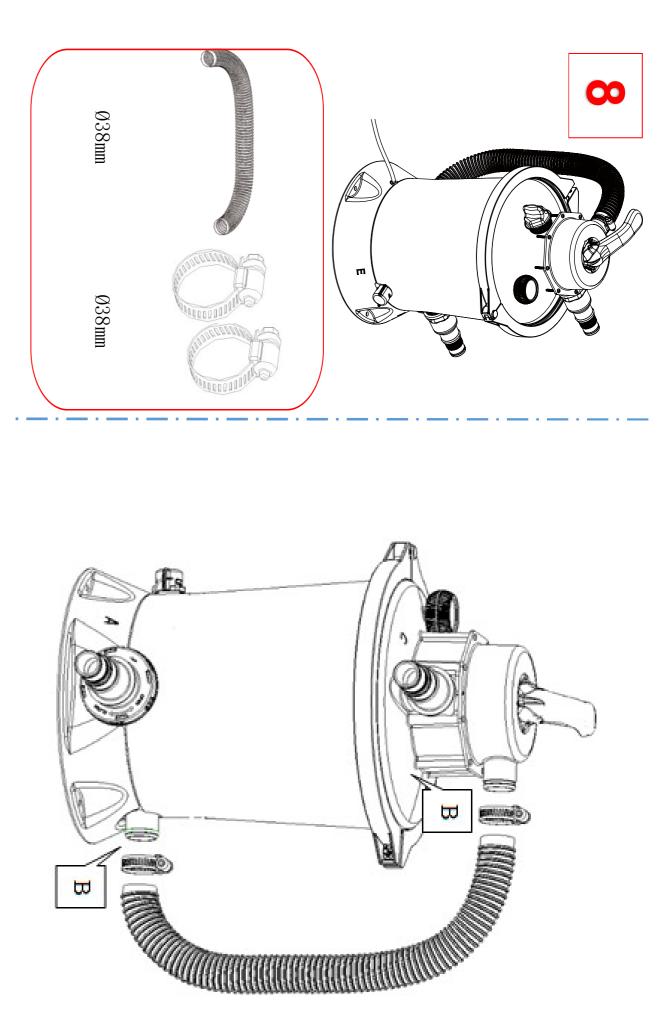


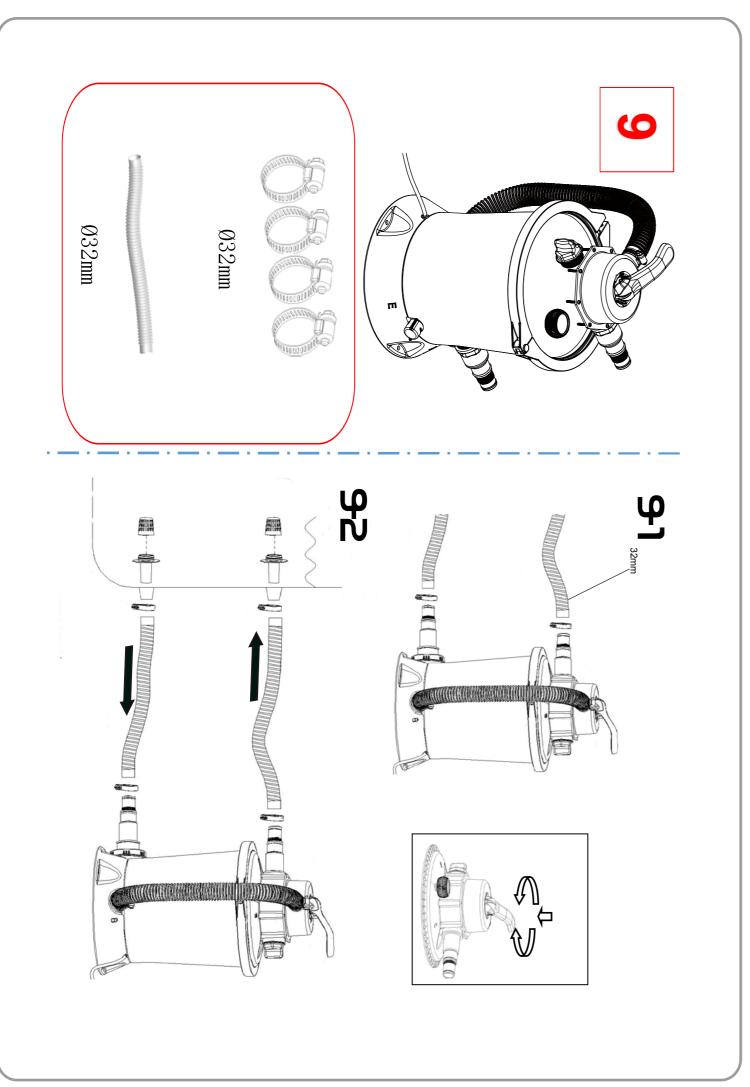












Note: During the operation of the sand filter pump, check the pressure reading of the manometer.

Generally, when the pressure of the recommended sand filter pump is less than 0.2bar (3psi) (green area), it runs normally. Note: You must make sure that maintenance begins only after the sand filter pump is unplugged. Otherwise serious risks such as personal injury and even death may occur. Note: Record the reading of the manometer during the operation of the sand filt er pump. When the manometer shows a pressure of 0.2bar (3psi) or higher, please clean up the sand bend or replace the sand. Use "backwash" and "rinse" functions. Note: regular rinsing according to use situation is recommended.

### Long-term storage and storage in winter

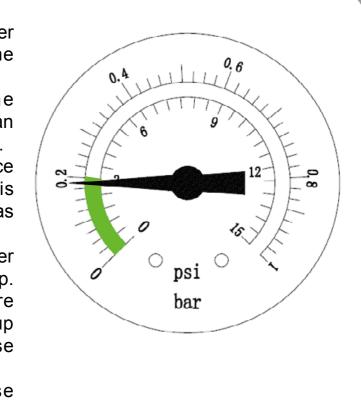
Using the product in a frozen pool may damage the product and invalidate the quality warranty. If the product has to be used with antifreeze, propylene glycol may also be used. Propylene glycol is a nontoxic chemical unharmful to any plastic parts. Other types of antifreeze are highly toxic and may be harmful to the product's plastic elements.

1.Before discharging the water or repositioning of the pool, make sure the discharge direction is towards the discharging ditch and away from the home. Review local regulations for special water treatment requirements. 2.Switch off the product and remove the power plug. 3.After emptying, remove all connected sand filter pumps, corrugated tubes and filter hoods on the pool wall.

4. Unscrew the drain valve (8) in an anticlockwise direction to completely empty water inside the body. The drain plug is at the bottom of the body.

5.Dry the parts of the sand filter pump and corrugated tubes. 6.Lubricate the seal rings and washers in the order below for long-term storage. 7. The best practice for product storage is to dry the parts and motor and replace them in the original package. To avoid shrinkage or corrosion, do not cover or wrap the motor with a plastic bag.

8.Please store the motor and parts in a dry place at 32°F (0°C) ~104°F (40°C).





| Diagnosis of Problems and Solutions  |   |   |  |  |
|--|---|---|--|--|
| Problems   | Checking  | Solutions   |  |  |
| The motor can not be<br>started normally   | inserted<br>Leakage protection<br>disconnected  | Make sure the power cord is inserted<br>into the 3-core grounded metal<br>receptacle.<br>Reset circuit breaker. If the problem<br>persists, the power system may be<br>defective. Power off immediately and<br>confer with an expert.<br>Allow the motor to cool naturally and<br>start it again. |  |  |
| Filter<br>Unable to rinse the pool   | No sand in the body<br>Location error of the control<br>valve<br>Excessive dirt in water<br>Filter barrel blocked                   | Sand filling Refer to sand filling<br>instructions<br>The control valve rotates to the filter<br>position<br>to prolong the running time<br>Clean the filter barrel   |  |  |
| The filter is unable to<br>discharge water or the water<br>flow rate is too slow | inlet<br>There is an air leakage at<br>the gap of the inlet<br>Excessive dirt in water<br>Filter medium is blocked by<br>impurities | Check and clear away the blockage in<br>the water pipes<br>Tighten the nozzle nuts and check the<br>damaged point of the nozzle and water<br>height<br>Clean the filter screen<br>Backwash<br>Disassemble the cleaning device<br>connected to the pool  |  |  |
| Filter fails to run  | Water level is too low<br>Filter screen is blocked<br>Air leakage from the inlet<br>pipe<br>Motor or blade is blocked               | Inject water to adjust water level<br>Clean the filter screen in the pool<br>Tighten the nozzle and check the<br>damaged point<br>Replace the fittings  |  |  |
| Water leakage on the control valve or upper cover                                | lost or too dirty<br>The control valve retainer   | Remove the upper cover of the control<br>valve and sleeve the seal ring of the<br>body<br>Clean the seal ring of the body with a<br>water pipe<br>Tighten the screw with a screwdriver<br>Replace the fittings  |  |  |
| The manometer fails to run   | The inner wall of the manometer is blocked The manometer is blocked   | Remove the manometer from the control valve and clear away the  |  |  |
| Sand enters the pool   | The sand particles are too<br>fine  | Use 20# quartz sand only<br>Particle size of the sand is 0.45-0.85mm<br>Or replace the sand   |  |  |