200*200mm

Aqua Miracle

Instruction Manual

Linear Air Pump
ZP-40/60/80/100/200/260

Warning:

The pump must be placed on a flat, level surface. Do not operate in a tilted position.
The pump must be installed in a well-ventilated area and protected from direct sunlight and rain.
The pump should be placed at a place higher than water level. If it is placed lower than the water level, a non-return valve should be installed at the air outlet.

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Thanks for buying this product.To ensure you use the product safely and correctly, please read thoroughly this instruction before use.

Please note that we are not responsible for any failure caused by misuse or improper maintenance. Save this instruction for future use.

Important Safety Cautions

- This air pump is designed for use outdoors.
- NEVER PLACE THE AIR PUMP IN WATER.
- Please operate the appliance under the rated voltage and frequency indicated on pump rating label or instruction manual.
- This pump is solely intended to pump air. DO NOT use for oil, solvents, or any petroleum products.
- DO NOT pull the power cord to move the pump as this will damage the cord.
- DO NOT change plug or shorten power supply cord by yourself.
- Always use a properly grounded AC outlet. DO NOT immerse the pump's plug in water or attempt to plug in a wet plug.
- Always unplug the unit from its power sources before installing or servicing. Should the unit appear to be not working, DO NOT attempt to reach, remove, or disassemble before disconnecting from the power source.
- Warning: In case the pump falls into water, cut off the power before any further action is taken.

Pump Installation (Taking for pond use as an example)

1. Place the unit near the pond, on a solid level surface. Route the cable back to the main supply. Ensure you allow for enough cable for positioning the product in the desired location near the pond.
2. Push the rubber outlet pipe over the outlet of the air pump. Make sure the fitting is tight.

Then insert the air manifold into another end of the rubber tube.

Manifold Outlet Pipe Connection

This diagram only takes a 6-outlet manifold of ZP-40 as an example. For the other models the manifolds are in different shapes. Do the same and tighten with the metal clip in the spare part bag. Note there is no clip for ZP-40 / ZP-60.

3. Push the air tubing (inner diameter 4mm or 3/16inch) onto the end of one of the air outlets and ensure it is secured in place.
4. A check valve (non-return valve) should be fitted to the air tubing to ensure that water is not sucked back into the pump when the pump is installed below the pond's water level or when the power supply is turned off. To fit the check valve to the air tubing, cut the tubing and push the ends onto the inlet/outlet of the valve.

Note: The check valve only works in one direction. Make sure the check valve is connected in the right direction.

5. Cut the air tubing to the desired length.
6. Attach the other end of the air tubing to an air stone. Place the air stone in the pond. Locate the air stone(s) in a position to maximize pond aeration. If using multiple air stones ideally position them in different parts of the pond.

Pump Location

The pump should be positioned on a solid flat, horizontal surface when in use. Make sure the pump work in a dry and dust-free environment.If you do not wish to operate the air pump for 12 months of the year, store the air pump safely in a dry environment and where temperatures will be above freezing.

Maintenance

This air pump has been designed to allow for quick and easy maintenance. The air pump contains rubber parts, for example the O-rings, diaphragm, and flapper valves, which can wear over time.

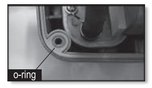
The product has been specifically designed to make the replacement of these parts as convenient as possible.

THE MAINTENANCE OF THIS PRODUCT MUST BE COMPLETED BY A TECHNICALLY COMPETENT PERSON. IF IN ANY DOUBT PLEASE CONSULT THE RETAILER WHERE THE PRODUCT WAS PURCHASED.

ALWAYS UNPLUG OR DISCONNECT THE PUMP FROM THE POWER SOURCE BEFORE STARTING MAINTENANCE.

Replacing the air stone
The diffusion of air from air stones will deteriorate over time. In order to maximize the efficiency of air output, air stones should be replaced every year.

Replacing the O-rings and diaphragm
If rubber O-rings and the diaphragm are replaced every year, the efficiency of the pump will be maintained at a consistently high level.



The diaphragm is a key component for pushing air out (left picture).

The o-ring provides sealing between the cover and the base (right picture).

Refer to the package of the replacement parts for more details about the replacement.

Clean and replacing the inlet filter foam

The inlet filter foam works as a filter to air coming into the pump.It will get dirty and block the air from coming in after some time of use. Cleaning or replacing the foam regularly will ensure you have the best performance.

Simply lift the cover up to take off the cover on the top.The inlet foam is under the cover. Tap it gently or blow it. If it gets too dirty, replace it with a new one.

Troubleshooting

ALWAYS UNPLUG OR DISCONNECT THE PUMP FROM THE POWER SOURCE BEFORE STARTING MAINTENANCE.

Increased noise/Low air out put/No air output

1. Check for restrictions to airflow:
- Check the air tube isn't kinked or trapped.
- Check there isn't an obstacle on top of the air tube.
- Check there isn't a piece of dirt obstructing the air tube.
- Check the one-way valve in the air tube is operating effectively.
- Check that the air stone is in good condition and whether it needs replacing.
- Check to see whether the inlet/outlet foams, rubber seals, flapper valves or diaphragm need replacing.

2. If only using very few air stones, the backpressure may cause the noise. Add extra air stones.

Technical Data

Model	Power	Flow Rate	Pressure	Manifold
ZP-40	18W	40LPH(635GPH)	0.03MPa	6
ZP-60	25W	60LPH(950GPH)	0.03MPa	6
ZP-80	50W	80LPH(1350GPH)	0.032MPa	16
ZP-100	60W	100LPH(1600GPH)	0.035MPa	16
ZP-200	230W	200LPH(4000GPH)	0.05MPa	46
ZP-260	280W	260LPH(4400GPH)	0.06MPa	46