200*200mm

Aqua Miracle

Instruction Manual

Air Pump

AP40, 60, 80, 160

TENYON

Shenzhen Tenyon Technology Co., Ltd.

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 the 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 mains supply. Ensure that 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 an 8-outlet manifold of AP40 as an example. For AP80 and AP160, 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 the manifold of AP40.

3. Push the air tubing (inner diameter 4mm or 3/16inch) onto the end of one of the air outlets and ensure it is securely 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.
7. Ensure all the manifold outlet valves that don't have air tubing attached are closed. This can be achieved by cutting a small length of tubing and attaching each end to an outlet.

Take 8 outlet manifold as an example

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

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

Trouble shooting

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

Increased noise / Low air output / No air output

1. Check for restrictions to the 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

SKU	Model	Power	Air Output	Air Pressure	Manifold Outlets
10028	AP40	25W	635GPH(40LPM)	0.028Mpa	8
10036	AP60	30W	950GPH(60LPM)	0.028Mpa	8
10029	AP80	40W	1350GPH(85LPM)	0.028Mpa	17
10030	AP160	105W	2550GPH(160LPM)	0.042Mpa	46