

# Air Pump

The Hozelock Cyprio air pump is designed for use outdoors. It must not be submersed in the pond. All electrical components are safely housed inside the product.

## ATTENTION

**AUTOMATIC CUTOFF.** To help ensure your pump's long life and to prevent damage, it is fitted with automatic thermal overload protection. This switches off the pump if it overheats. If this occurs, switch off the power at the mains supply to the pump. Check for the cause. Usually it will be debris blocking the inlet/outlet of the pump or airstone. Remove the obstruction and wait 15 minutes for the pump to cool down and automatically reset. Then switch on the pump again.

**NOTE: YOU MUST SWITCH OFF THE MAINS SUPPLY BEFORE THE PUMP WILL RESET.**

## IMPORTANT

- WARNING: ALWAYS UNPLUG OR DISCONNECT ALL APPLIANCES IN THE POND FROM THE ELECTRICITY SUPPLY BEFORE PUTTING YOUR HANDS IN THE WATER WHILST EQUIPMENT IS BEING INSTALLED, REPAIRED, MAINTAINED OR HANDLED.**
- Do not use the supply cable to lift the pump as this may cause damage.
- If the supply cable is damaged, do not operate the pump.
- Do not operate or leave the pump in freezing conditions.
- Check that the voltage marked on the pump corresponds to the mains supply.
- A 10mA or 30mA Residual Current Device (RCD) MUST be fitted to the mains supply.
- Do not operate this pump without the inlet filter and cover attached. Using the pump without AN INLET FILTER may invalidate your warranty.

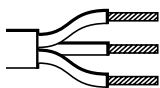
From 1st January 2005 installing this product in the garden is classed as 'notifiable' in the revised Building Regulations for England and Wales. The Regulations now require you to tell your local authority building control department that you intend to install this product before installation. Your local authority will let you know how you can get your installation approved.

## WARNING: SAFETY AND ELECTRICAL CONNECTIONS

- The pump is supplied with 10m of 3-core electric cable, which is permanently connected and sealed to the motor. The supply cable cannot be replaced. If the

cable is damaged, the pump should be discarded. This product is designed to be permanently wired to the mains supply in a dry weatherproof enclosure through a Double-Pole Switched Fused Spur - (Disconnect) to BS 3676 - Fitted with a 3 or 5 Amp fuse. The installation must conform to the national and local wiring regulations, which could include the use of a plastic or metal conduit to protect the cable.

- A 10MA OR 30MA RESIDUAL CURRENT DEVICE (RCD) MUST BE FITTED TO THE MAINS SUPPLY.
- WARNING: THIS APPLIANCE MUST BE EARTHED AND IT IS ESSENTIAL THAT THE CONNECTIONS ARE MADE USING THE FOLLOWING CODE;**



Brown - Live

Blue - Neutral

Green/Yellow - Earth

The BROWN lead should be connected to the LIVE terminal which may be marked with an 'L' or coloured brown or red. The BLUE lead should be connected to the NEUTRAL terminal which may be marked with an 'N' or coloured blue or black.

The GREEN/YELLOW lead should be connected to the EARTH terminal which may be marked with an 'E' or coloured green or green/yellow.

- If an extension cable is required, this should be connected to the end of the pump cable using a weatherproof cable connector. The joint must be positioned in a suitable weatherproof housing. The extension cable should be of 3 core 0.75mm<sup>2</sup> Polychloroprene rubber insulated cable (ref: HO5 RN-F) and permanently wired to the mains supply with a 3 or 5 Amp fuse.
- The pump cable (and extension cable) should be adequately protected against damage especially where contact with gardening equipment (lawn mowers, forks etc...) children and domestic animals may occur.
- Always disconnect the mains power supply whilst the equipment is being installed, repaired, maintained or handled. Consult a qualified electrician or local authority if in any doubt about wiring to the mains supply.

## PUMP INSTALLATION

**IMPORTANT:**  
**MAXIMUM DEPTH OF AIR STONE IN POND = 2M. BY PLACING THE AIR STONE DEEPER THAN 2M YOU WILL FOREGO THE PRODUCT WARRANTY.**

- Place the unit near the pond, on a solid level surface (See Fig 7). 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.

- Push the rubber outlet pipe over the outlet of the air pump and fasten in place using the metal clip provided to hold it firmly in place (See Fig 1).
- Insert the chrome plated iron manifold into the end of the rubber tube and fasten securely in place with a metal clip provided (See Fig 2).
- Push the 4mm air tube onto the end of one of the metal manifold outlets and ensure it is securely in place (See Fig 3). Open the manifold outlet valve (See Fig 4).
- To fit the non-return valve to the air pipe, cut the pipe and push the ends onto the inlet/outlet of the valve. This valve only works in one direction, which is indicated by the mark 'OUT' (See Fig 5). This valve ensures that water is not sucked back into the pump if the pump is installed below the pond's water level when the power supply is turned off.
- Cut the air tube to the desired length. This will be determined by:
  - The location of your pump around the pond
  - The depth at which you want to position your air stone in the pond (MAXIMUM DEPTH = 2m).
- Attach the other end of the air tube to the 100mm sintered air stone (See Fig 6).
- Place the air stone in the pond or filter. Locate the air stone(s) in a position to maximise pond aeration. If using multiple air stones ideally position these in different parts of the pond.
- Attach additional air tubes, valves and air stones if desired following the same installation process described in steps 3-6.
- Ensure all the manifold outlet valves that don't have air tube attached are closed.
- Manifold outlet valves can be adjusted until you achieve the desired air output.

### IMPORTANT:

**If necessary partially open some of the unused manifold outlet valves to relieve backpressure on the pump and to reduce pump noise levels. It should be noted that the greater the number of air stones used the less the backpressure on the pump which can increase the usable life of the pump's diaphragm (membrane).**

### Pump Location

The pump should be positioned on a solid flat surface so it doesn't vibrate when in use (See Fig 7).

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

The Hozelock Cyprio air pump has been designed to allow quick and easy maintenance. The air pump contains rubber

parts, 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 ELECTRICITY SUPPLY BEFORE STARTING MAINTENANCE.**

1. The diffusion of air from air stones will deteriorate over time. In order to maximise the efficiency of air output, air stones should be replaced every year.
2. If rubber o-rings and the diaphragm are replaced every year, the efficiency of the pump will be maintained at a consistently high level. A spares kit (1821) is available from Hozelock Cyprio.

**Tools Needed**

- Medium sized Phillips screwdriver.
- A pair of Pliers

**Replacing the Inlet Foam**

1. Remove the grommet from the air inlet cover (See Fig 8).
2. Remove screw from the air inlet cover (See Fig 9).
3. Remove the air inlet cover (See Fig 10).
4. Remove and replace the filter (See Fig 11).
5. Replace the air inlet cover, screw and grommet.

**Replacing the Outlet Foams**

1. Remove the 4 screws from the base of the air pump (See Fig 12) and remove the lid (See Fig 13).
2. Remove the six screws from the motor base and remove the two main motor brackets (See Fig 14). Do not remove the earth cable screw.
3. Carefully remove the cable grommet (See Fig 15) and lift the motor unit from the base moulding (See Fig 16).
4. Replace the foams (See Fig 17).
5. Ensure seals are in place before reassembling the motor unit to the base moulding (See Fig 16).
6. Ensure cable grommet is located correctly in the base moulding.
7. Reassemble the pump lid ensuring that the seal is in place between the lid and base (See Fig 13).

**Replacing the Flapper Valves**

1. Remove the 4 screws from the base of the air pump and remove the lid (See Fig 12/13).
2. Locate the rubber L-tube. Remove the hose clip (closest to air chamber cover) from hose band and detach the L-tube from air chamber cover (See Fig 18).
3. Remove the 4 screws from the air chamber cover; gently pull the cover away from the pump (See Fig 19/20).
4. Remove the securing screw and cover plate from the air chamber housing (See Fig 21).
5. Remove the rubber inlet and outlet covers; care should be taken not to damage these as they act as seals (See Fig 22).
6. Pull out the valves, when replacing the new valves ensure they are fitted from the same direction (See Fig 23).
7. Replace the valves by passing the spigot through the hole and then pulling the spigot from the other side until the lug passes through the hole locking the valve in place (See Fig 24). Cut the spigot back after the valve is securely in place.
8. If the diaphragms are to be replaced then

- move to step 5 in the following section.
9. Reassemble the product follow the steps in reverse order from step 7. Ensure that the rubber seal is in place between the lid and the base.

**Replacing the Diaphragm**

1. Remove the 4 screws from the base of the air pump and remove the lid.
2. Locate the rubber L-tube. Remove the hose clip (closest to the air chamber cover) from the hose band and detach the L-tube from the air chamber cover (See Fig 18).
3. Remove the 4 screws from the air chamber cover; gently pull the cover away from the pump (See Fig 19/20).
4. Remove the centre nut, washers (See Fig 25).
5. Remove and replace the diaphragm assembly (See Fig 26).
6. Replace the washers and tighten the centre nut.
7. Reassemble the product following the steps in reverse order from step 5.

charge, unless in our opinion it has been damaged or misused. Liability is not accepted for damage due to accident, improper installation or use. Liability is limited to replacement of a faulty pump. This guarantee is not transferable. It does not affect your statutory rights. To obtain the benefits of the guarantee, firstly contact Hozelock Cyprio Consumer Services who may request that the pump is sent along with proof of purchase directly to the address below. **Damage caused by running the air stone at a depth greater than 2m invalidates the Guarantee.**

SPARE	PART NO.
Air Pump Spares Kit	1821
Diaphragm (Membrane)	Z12700
Metal Manifold	Z12710
Air Stone and Air Tube Kit	Z12720

**FAULT FINDING**

**ALWAYS UNPLUG OR DISCONNECT THE PUMP FROM THE ELECTRICITY SUPPLY BEFORE STARTING MAINTENANCE.**

**Increased noise / Low 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 one air stone at a depth of 2m, the backpressure may be causing the noise. Open one of the other manifold outlets to bleed off some air to relieve the backpressure. Alternatively add an extra air stone.
3. The air stone should not be placed at a depth more than 2m.

**No air output**

1. Check power is on and the electrical installation is correct.
2. Check the metal outlet manifold valves are not all closed
3. The pump may have over-heated triggering the automatic thermal overload switch. Turn off the power at the mains supply to the pump and check for the cause including diaphragm, flapper valves and inlet/outlet foams.

If you need further advice either return the faulty product to the point of purchase or contact Hozelock Cyprio Consumer Services on 01844 292002

**SPARE PARTS**

Contact the Consumer Services Helpline on 01844 292002

**HOZELOCK CYPRIO 2-YEAR GUARANTEE**

If this pump, excluding the Diaphragm, Flapper Valves, Inlet and Outlet foams and o-rings, becomes unserviceable within 2 years of the date of purchase it will be repaired or replaced at our option free of

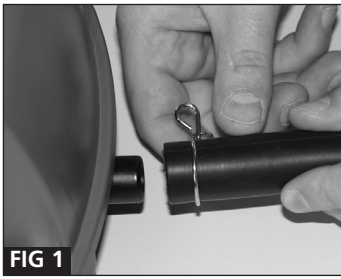


FIG 1

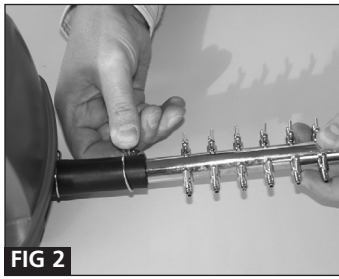


FIG 2

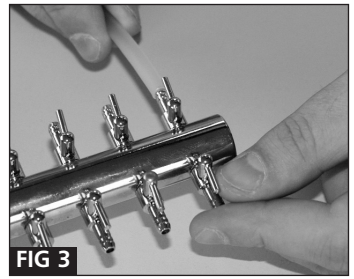


FIG 3

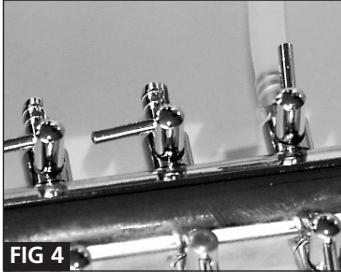


FIG 4

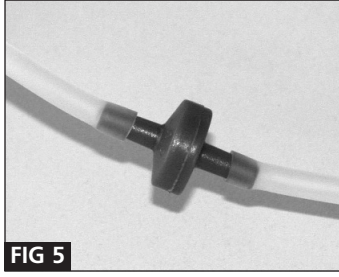


FIG 5

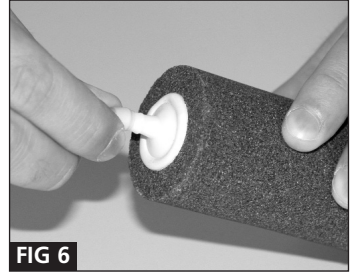


FIG 6

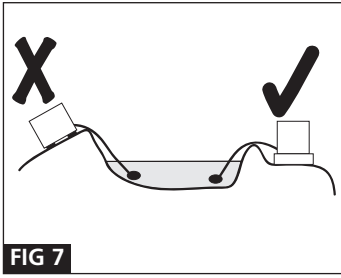


FIG 7

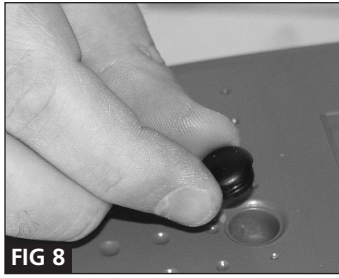


FIG 8



FIG 9



FIG 10



FIG 11



FIG 12



FIG 13

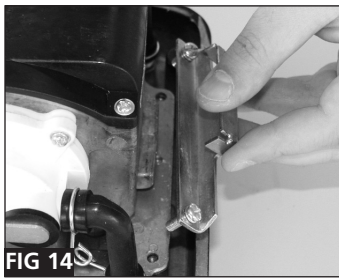


FIG 14

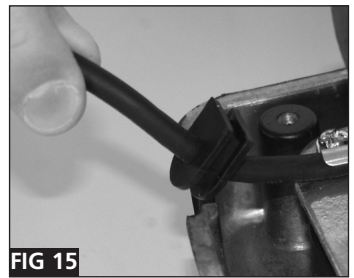
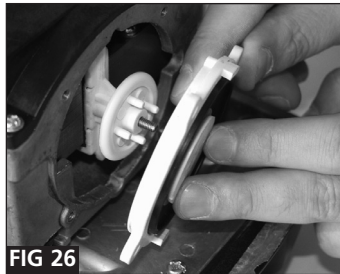
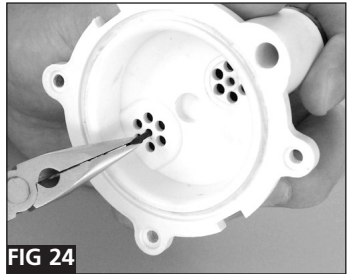
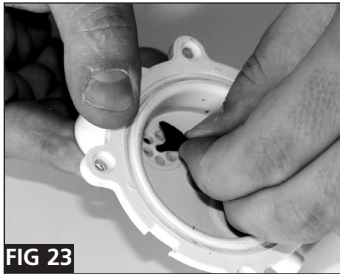
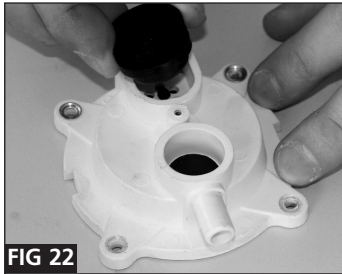
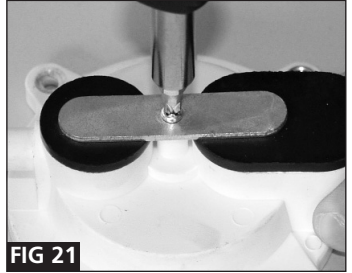
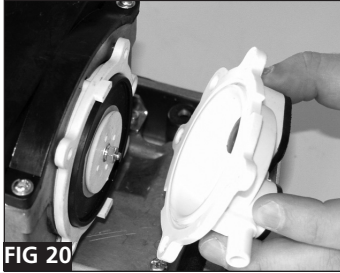
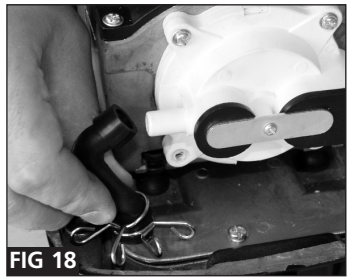
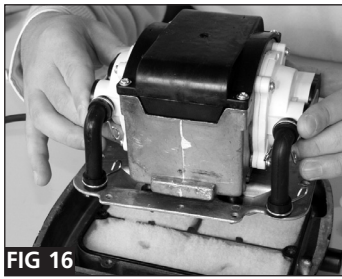


FIG 15



Hozelock Cyprio  
Haddenham, Aylesbury, Bucks. HP17 8JD.  
England.  
Tel: +44 (0)1844 292002 Fax: +44 (0)1844 291820  
[www.hozelock.com](http://www.hozelock.com)

The Aquatics Division of Hozelock Group

33553-000