

bioOrb™

ACTIVATION GUIDE

A STEP BY STEP
GUIDE TO THE
SUCCESSFUL
INSTALLATION AND
MAINTENANCE OF
YOUR BIORB



PLEASE READ THESE INSTRUCTIONS BEFORE FILLING YOUR BIORB WITH WATER

BiOrb is not a toy. Adult supervision is recommended during installation and activation by children.

Do not expose to direct sunlight when full of water as concentrated rays can cause a fire.

STEP ONE

UNPACK AND POSITION THE biOrb.



Carefully remove all packaging. Place biOrb on a strong and level surface (it weighs 32kg full). Avoid locations where the bowl could be knocked over.



Remember the biOrb needs a power socket within reach (follow instructions supplied with the air pump).



BiOrb is an aquarium, water may be splashed or spilt, therefore:

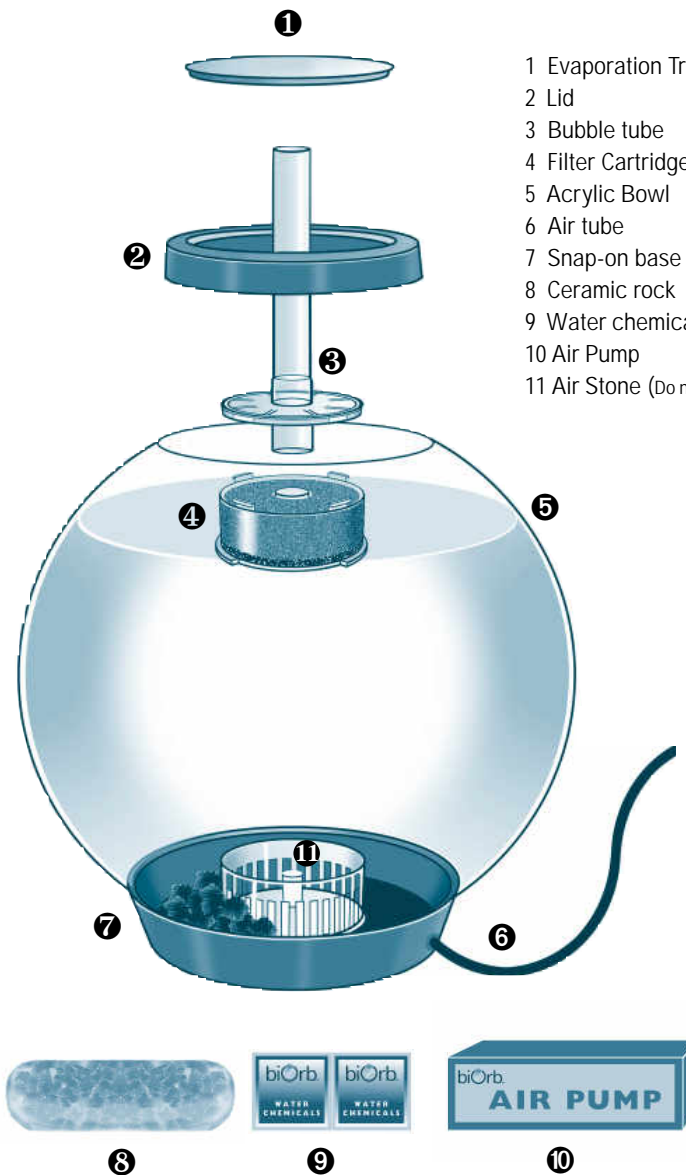
Don't position the biOrb on or above items that are electrical or could be damaged by water.



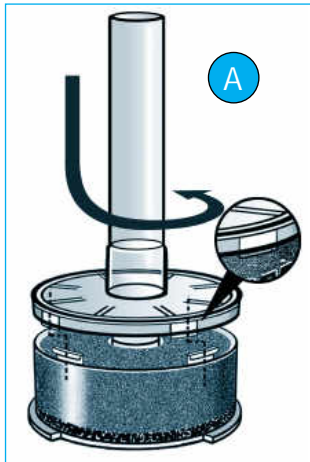
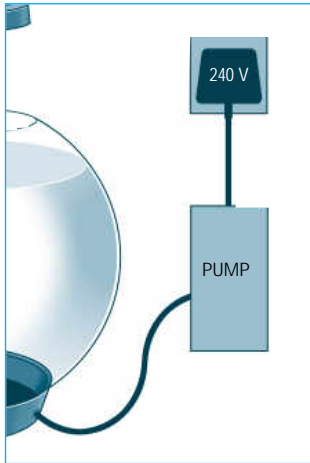
Don't place biOrb near sources of heat such as radiators, powerful lamps or in hot conservatories.

Don't place biOrb in direct sunlight such as on a window-sill. Never move biOrb full of water. (Remember it weighs 32 kg when activated).

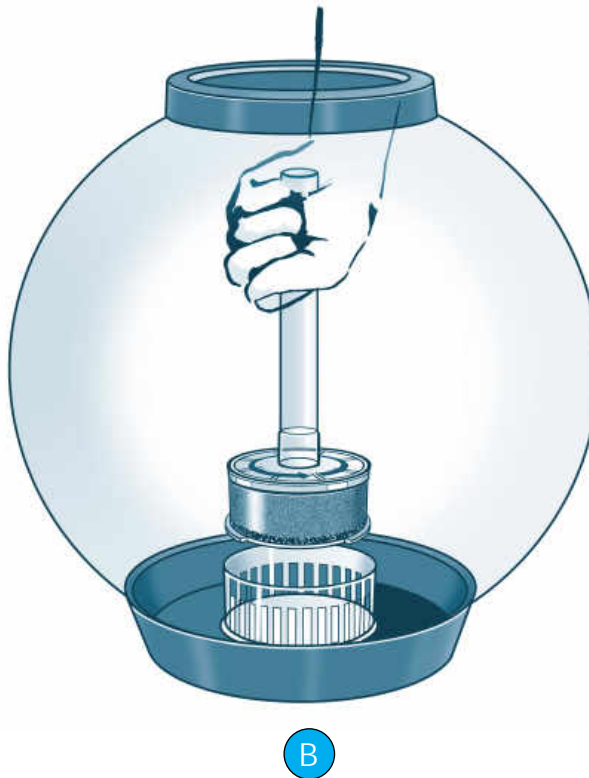
- 1 Evaporation Tray Lid
- 2 Lid
- 3 Bubble tube
- 4 Filter Cartridge
- 5 Acrylic Bowl
- 6 Air tube
- 7 Snap-on base
- 8 Ceramic rock
- 9 Water chemicals
- 10 Air Pump
- 11 Air Stone (Do not remove)



STEP TWO



AIR TUBE- PUMP AND FILTER CARTRIDGE ASSEMBLY

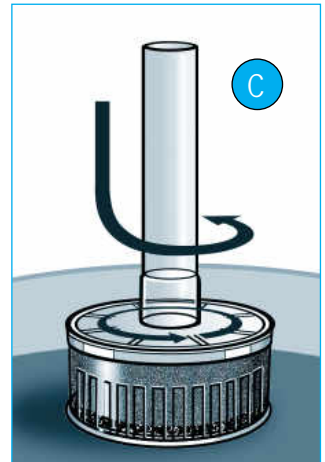


Attach the air hose from biOrb's base connection to the Air pump following Air pumps instructions. Ensure biOrb is located close to an electrical socket. Do not plug in until set up procedure completed. Remove Bubble Tube from Filter base, discarding transit sticky tape.

If Filter cartridge is not already fitted

Remove Filter Cartridge from air tight bag and clip into Bubble tube as in illustration (A). Ensure all 4 cartridge tabs are fully locked.

Insert Bubble Tube and Cartridge assembly into biOrb filter base as shown in illustration (B). Twist and lock as shown in illustration (C).



biOrb™

STEP THREE



Tip the Ceramic Media from it's plastic bag into a sieve or colendar and rinse thoroughly over a sink (D). This removes dust particles created during transit. Discard any particles smaller than a pea.

Place the Ceramic Media by hand (E) around the Filter Base being careful not to allow any to lay on top of the Filter. Don't tip the ceramic media in or out of the biOrb as it will produce scratching. Always remove by hand.

FILLING AND ACTIVATING BIORB

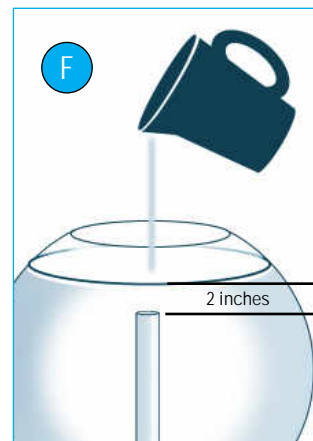


Add the water slowly(F). For best results only fill the bowl to about 2 inches above the central bubble tube. Wait 24hrs before adding your first fish. Bubbles and dust forming on the inside of the bowl during the first 24hrs in normal and can be removed by gently brushing with fingertips. Refer to cleaning your biOrb section in the detailed instructions.

Activating your biOrb.

Plug the air pump into the power point and switch on power. Always use a residual current breaker with aquarium products (not provided).

Note: The pump should be left running 24hrs a day, there is no need to turn the pump off even during filter cartridge changes and cleaning.



DETAILED INSTRUCTIONS.

MATURING THE BIORB AND ADDING YOUR FISH.

Like all aquariums your biOrb will require about two months to fully mature and stabilise. During this time the fish create pollutants that accumulate and peak. At the same time the beneficial bacteria has started to colonise in the ceramic media, and consume these pollutants. The pollutants are capable of killing or harming your fish, especially if they peak too high. By using only one small, hardy type of fish and keeping the feeding light these pollutants will not peak as high, greatly reducing any chance of harming the fish. Two fish will create twice the pollutants. Liquids are available to help speed up the maturing of the aquarium: typical samples supplied with biOrb. Once matured the aquariums biological filtration can happily consume these pollutants and your biOrb can contain many fish. There are many varieties of fish available and the biOrb is suitable mainly for coldwater fish. However, with the addition of an aquarium heater, tropical fish can also be kept. The number of fish you will be able to keep will depend upon their size, the recommended stocking levels are as follows:

Fish type	Maximum recommended No. of fish
Medium goldfish (5cm body length)	2-3
Small goldfish (3cm body length)	4-5
Small cold water or tropical fish (minnows or guppies)	20

Add fish to the biOrb at a rate of about 1 small-medium sized goldfish per month until stocked. Always remember to float a new fish on the water surface for at least 24 hours in the bag it was supplied in. This allows it to acclimatise slowly to differences in temperature. Never shock fish with sudden changes in water parameters.

MAINTAINING HEALTHY WATER IN YOUR BIORB.

There are a number of variables that will control how long the water stays clean, not green, these are:

Amount of feeding Number of fish Filter performance Water temperature

Having a high performance filter greatly reduces the maintenance, however small amounts of maintenance will be required; it is always better to be proactive about maintenance. Changing the filter cartridges every 1-2 months depending upon the factors listed above will significantly reduce the amount of water changes needed.

For best results 1/3rd water changes should occur at the 1-month, 3-month and 6-month period, after this time water changes should be done at a recommended minimum of every 4 months. The amount of water you change should never exceed 1/3rd of the total volume. If you need to change a greater volume of water, wait 24hrs between each 1/3rd volume changed.

The quality of the water you put into the biOrb will dictate how long the bowl can last between needing water changes. Tap water in its raw state can cause some problems due to the chemicals present. If possible, tap water should be filtered before being placed into the biOrb, if this is not possible a tap water conditioner should be used to stabilize raw tap water.

Tip: Occasionally you may need to remove collected solids from the filter base within biOrb. One easy way to do this is to use a siphon tube whilst the cartridge is removed during routine maintenance.

Tip: Ideally the ceramic media should never be removed from the aquarium water. If it is essential to clean the ceramic media, wait for a water change and use the old water from the biOrb. Don't use tap water this will kill the beneficial bacteria biOrb has developed during the maturing process.

FEEDING YOUR FISH.

Never over feed! Over feeding is the major cause of aquarium pollution and gold fish death. Careful feeding will reduce the biOrb maintenance, and increase the health of your fish. Gold fish require a maximum of one or two small feeds a day, smaller/ medium fish will require flake food and larger goldfish will find a floating food pellet easier.

Tip: Use good quality fish foods. Cheap foods tend to have poor nutritional content.

MAKING YOUR BIORB SPARKLE.

BiOrb is made of a good quality acrylic, which provides strength and clarity. We recommend care is taken to prevent scratching. Light external scratches can be removed by using a recommended biOrb polish.

Do not use tissue or scouring pads to clean the inside or outside the biOrb.

Do not use any cleaning products or polishes on the biOrb.

Do not use detergents to clean inside the biOrb.

Use biOrb recommended cleaning pads from service kit to clean the inside surface.

The cleaning pad provided with the service pack has two sides, smooth and coarse. The rough side should only be used to remove the most stubborn marks. To prevent scratching when using the cleaning pad apply light pressure and work down from the top of the biOrb. This ensures the ceramic media does not become trapped between the cleaning cloth and the biOrb.

ADDING PLANTS TO YOUR BIORB.

Plants in the aquarium fall into two categories real and plastic, both have their benefits. Plastic plants require little care and no light, real plants require more care but actually have beneficial side effects: they can oxygenate the water and remove pollutants. People often prefer the natural look of real plants, but to keep them green and healthy we recommend adding a biOrb light. Only buy hardy types of aquarium plants, as many fish can be boisterous.

ADDING DECORATION TO YOUR BIORB.

When adding rocks to your biOrb we would recommend that you only use items brought from aquatic outlets. Certain rocks can leach potentially hazardous materials into the aquarium. Granite and slate are good but should be scrubbed and soaked in fresh water before being added to the biOrb. Remember rocks displace water so the more rocks you have the less water you will need. There are a number of épretyl gravels available, most coloured ones are purely cosmetic and provide little biological filtration. As gravel is solid its surface area for bacterial colonisation is small when compared to the ceramic media supplied with biOrb, which is highly porous, providing significant surface area. Never remove all the ceramic media supplied with biOrb as it provides massive biological filtration. Using more biOrb ceramic media will actually increase the filtration capacity. Do not use sand or small gravel in the biOrb with out taking special precautions; otherwise this may block the filter.

DEALING WITH ALGAE PROBLEMS

Small amounts of algae may occur over long periods. Algae are naturally occurring in all water and are usually a sign of a healthy aquarium, however if you experience rapid or extreme algae growth it is due to the variables outlined in (Maintaining healthy water in your biOrb).

The growth of algae is accelerated by:

Water high in nitrate and phosphate

Lack of regular maintenance

Water temperature

Light

Water hardness

The best solution is to do a cartridge change and some water changes following the guidelines provided, this will dilute any build up of nitrate and phosphates. Nitrate and phosphates in small amounts are naturally occurring in aquariums, however they can build up over time, they are usually a result of uneaten food and fish waste being left in the aquarium.

If you use tap water in your biOrb and have persistent algae problems it may be worth finding out from your water company if the water is hard, or has high nitrate, and phosphate levels. An early indication of hard water is scale forming at the water level line.

Tip: An easy solution is to buy a recommended aquarium tap water purifying filter.

TRANSFERRING FISH FROM AN EXISTING BOWL OR TANK.

If you have an existing aquarium we would recommend transferring the stock from one to the other gradually as per instructions for adding fish to your biOrb.

ANNUAL MAINTENANCE ON AIR PUMP.

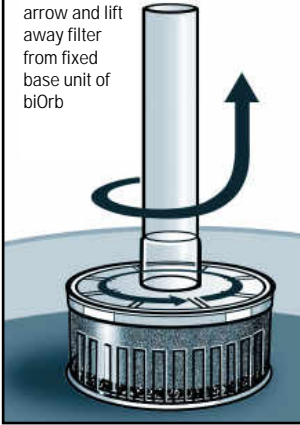
It is advisable twice a year to ensure the air pump and one-way air valves are functioning fully.

Do this by disconnecting the air tube from the pump and lower the air tube to a level below that of the biOrb water line. In the unlikely event of leakage, replace the one-way valve in the biOrb base or add an additional one-way valve 6inch from the air pump. If long-term power failure occurs it is essential to ensure that the air pump is raised well above the biOrb water level as per the air pump instructions.

Clean all around your biOrb using the soft cloth provided (The rough side is for any stubborn stains). You are now ready to change the filter. For the best results follow the instructions in our step by step guide below.

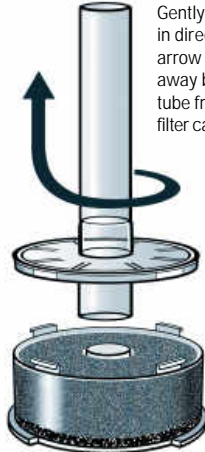
STEP 1

Gently twist in direction of arrow and lift away filter from fixed base unit of biOrb



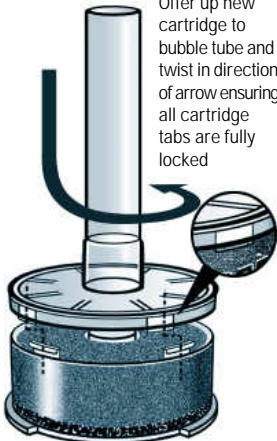
STEP 2

Gently twist in direction of arrow and lift away bubble tube from old filter cartridge



STEP 3

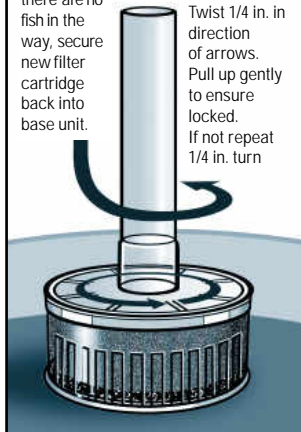
Offer up new cartridge to bubble tube and twist in direction of arrow ensuring all cartridge tabs are fully locked



STEP 4

Making sure there are no fish in the way, secure new filter cartridge back into base unit.

Twist 1/4 in. in direction of arrows. Pull up gently to ensure locked. If not repeat 1/4 in. turn

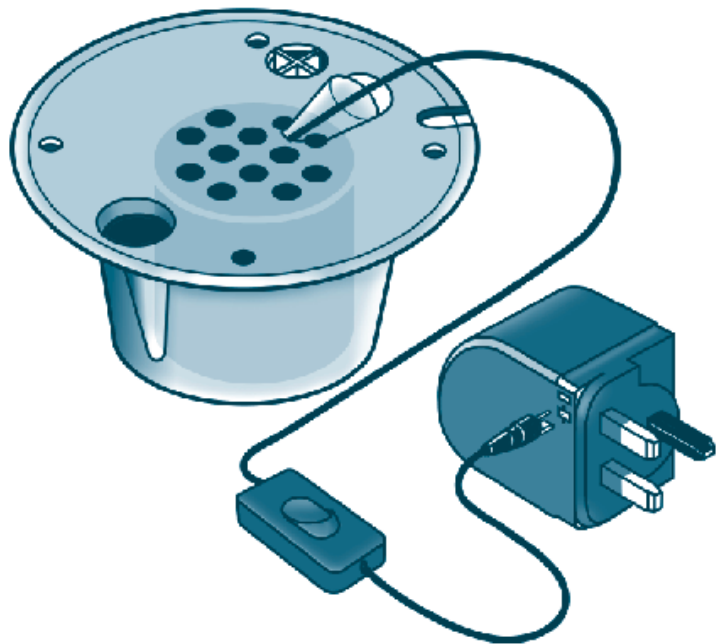


Add the Stress Coat Sachet when performing water changes
Add Stress Zyme when changing cartridge



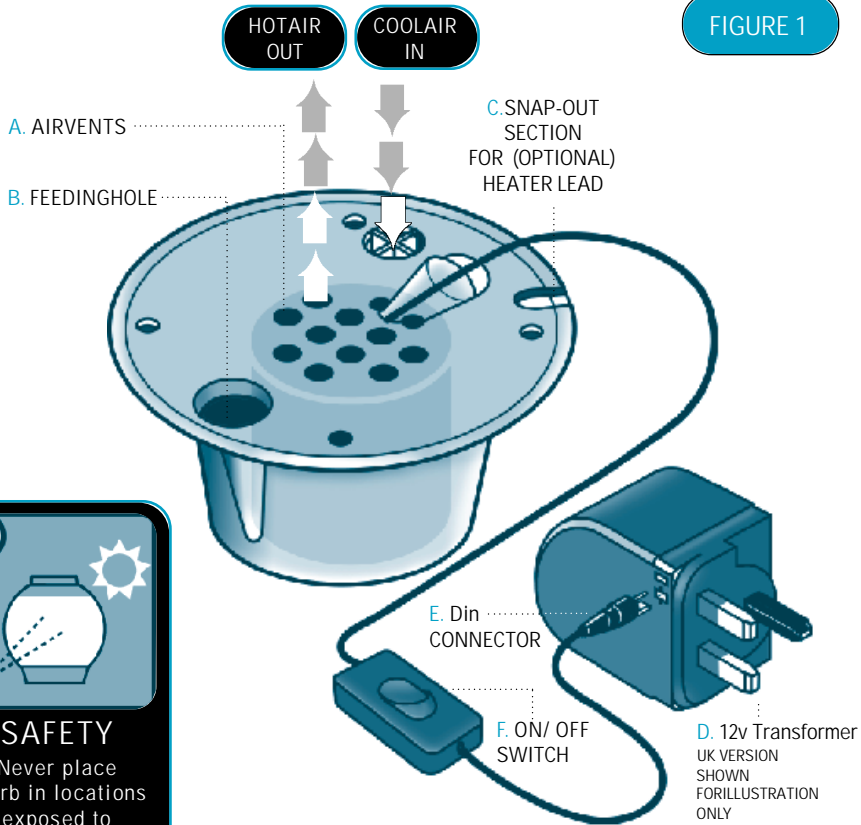
LIGHT UNIT - FITTING GUIDE

A STEP BY STEP
GUIDE TO THE
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YOUR BIORB
LIGHT UNIT



FEATURES OF THE biOrb LIGHT

FIGURE 1



SAFETY
Never place biOrb in locations exposed to sunlight

The light unit was designed as an easy-to-fit accessory for your biOrb without imposing on biOrb's attractive shape. It can be used in two modes. Firstly, to illuminate the biOrb and its inhabitants, or if you prefer a wider spread of light, remove the anti-glare shield to create a living table lamp. For the best results and greater impact place the biOrb in a dark or shady location.

THE LIGHT DESIGN HAS SEVERAL UNIQUE FEATURES

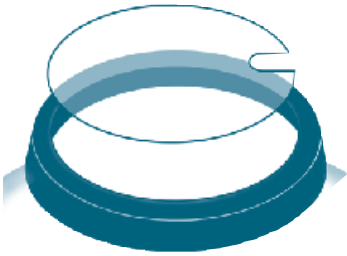
- The light is powered by low voltage electricity protecting both you and your fish from the danger of electric shock should water come into contact with the light.
- It incorporates a unique 10W light bulb and cooling chimney to reduce the heat energy entering the biOrb.
- The colour temperature of the special bulb produces white light, simulating daylight, which adds sparkle to the water, assists the growth of plants and more truly reflect the colours of the fish.

INSTALLATION

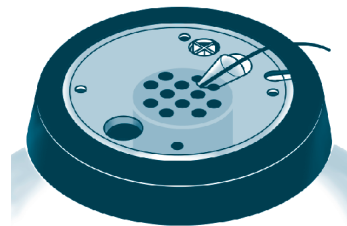
(IF NOT ALREADY FITTED)

STEP ONE

UNPACK THE biOrb LIGHT UNIT AND CHECK PARTSLIST

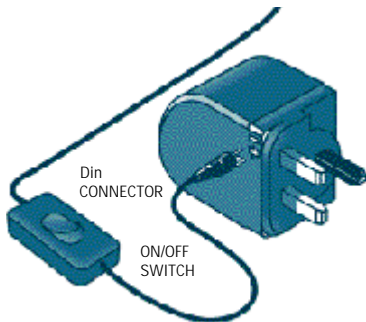


Remove the evaporation tray. It is no longer needed but it is worth keeping in a safe place in case you choose to remove the light unit at a later date.



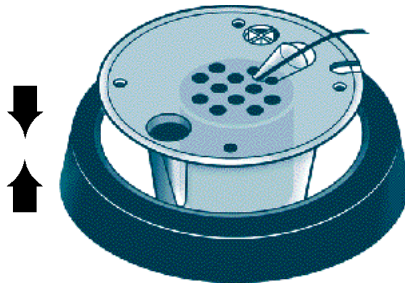
Light unit in position in biOrb

STEP THREE



Insert the din connector (E) into the plug transformer. Ensure correct orientation of the plug. Insert transformer (D) into the wall socket and using the on/off (F) switch turn on the light.

STEP TWO



Push the light unit into the hole in the lid. It is desirable that the light and lid clip together but not essential. Slight pressure will be required and the parts will naturally fit together with a click. Once clipped together-if you want to change lid cover -remove four screws as shown in "Replacing the bulb" then repeat step two. **DONOTFORCEAPART**

POINTSTONOTE

- The lamp should be left on for a maximum of 6 hours per day.
- Always feed the fish through the Feed hole (B).
- Never block the air vents (A) as shown in Figure 1.
- Never pull on the light wire.
- Never allow water to enter the light unit; always remove before filling.
- Use only Reef One bulbs-higher wattage alternatives will damage the transformer and Acrylic light unit.

MAINTENANCE

The biOrb light will need cleaning on a regular basis, especially on the 'wet side'. Water splashing on it will build up a layer of dirt on the lens. Warm water and a soft cloth is usually the best way to remove it.

Do not use abrasive sponges or detergents. The bulb has a life of at least 1200 hours but will need replacing at some point.

CAUTION: If Algae starts to develop reduce time that light is on. Consult 'Dealing with Algae problems' in the Activation Guide.

Spare bulbs are available from Reef-one.

FEATURES OF THE biOrb LIGHT

SPREAD OF LIGHT

The biOrb light unit is designed to throw light directly down. However, if you prefer a wider spread of light, the metal glare protector can be removed (see changing the bulb) and light will spread over a larger area.

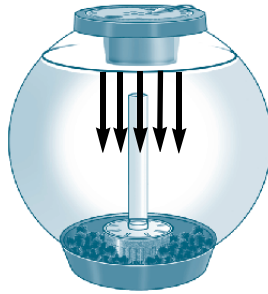
ADDING A HEATER

If you want to convert biOrb into a tropical bowl, you can achieve this by adding a heater and allowing the lead to exit through 'C' as shown in Fig. 1. With a pair of long nose pliers grasp the section ('C') shown and apply a gentle rocking motion until the part snaps out.

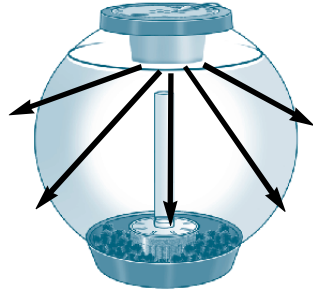
REPLACING THE BULB

Switch off at mains and remove socket from wall. Wait until the unit has had time to cool down and then carefully remove the biOrb light from the bowl. Remove the four stainless steel screws with a small Phillips screwdriver. Detach the metal anti-glare protector and put to one side. The bulb can now be unclipped. Fit new bulb and replace anti-glare protector and the four screws being careful not to overtighten.

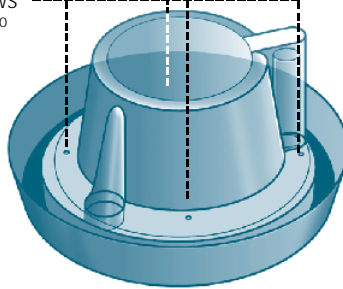
WITH ANTI-GLARE PROTECTOR



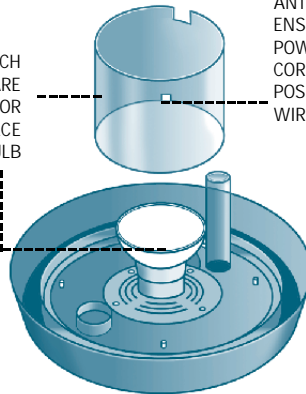
WITHOUT ANTI-GLARE PROTECTOR



REMOVE SCREWS
(WHEN REPLACING DO
NOT OVERTIGHTEN)



DETACH
ANTI-GLARE
PROTECTOR
AND REPLACE
BULB



WHEN REPLACING
ANTI-GLARE SHIELD
ENSURE RECESS FOR
POWER CABLE IS
CORRECTLY
POSITIONED OVER
WIRE



TRANSIT CLIP
MAY BE
PERMANENTLY
REMOVED AFTER
REPLACING BULB

ENSURE UNIT IS COOL BEFORE MAINTENANCE

BULB SPECIFICATION

VOLTAGE	12 VAC
WATTAGE	10W
COLOUR TEMP	4200K
BEAM ANGLE	36°
AVERAGE LIFE	1200 hours