



Established over 40 years ago, Blagdon are committed to producing a comprehensive range of high quality, easy to use, pond equipment. An ongoing programme of research and development ensures excellent performance and value for all their customers. This product excellence is demonstrated by Blagdon's award winning range of water gardening equipment. As a result Blagdon's reputation for quality is unrivalled amongst experienced pond gardeners and retailers alike.

**Blagdon - The Pond Masters**  
The name you can rely on

Interpet  
Dorking, Surrey, RH4 3YX

Leaflet Code: POS TE17



THE POND MASTERS GUIDE TO  
**MINIPOND  
WATER GARDEN  
FILTRATION  
SYSTEM**  
**4500/6000**





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**WATER GARDEN  
FILTRATION SYSTEM  
4500/6000**

Congratulations on buying a Blagdon  
Minipond Water Garden Filtration System.  
Manufactured with advanced  
technology to create a clean and  
healthy pond for your fish.

**IMPORTANT**

Please attach proof of purchase to this manual and file in a safe place.

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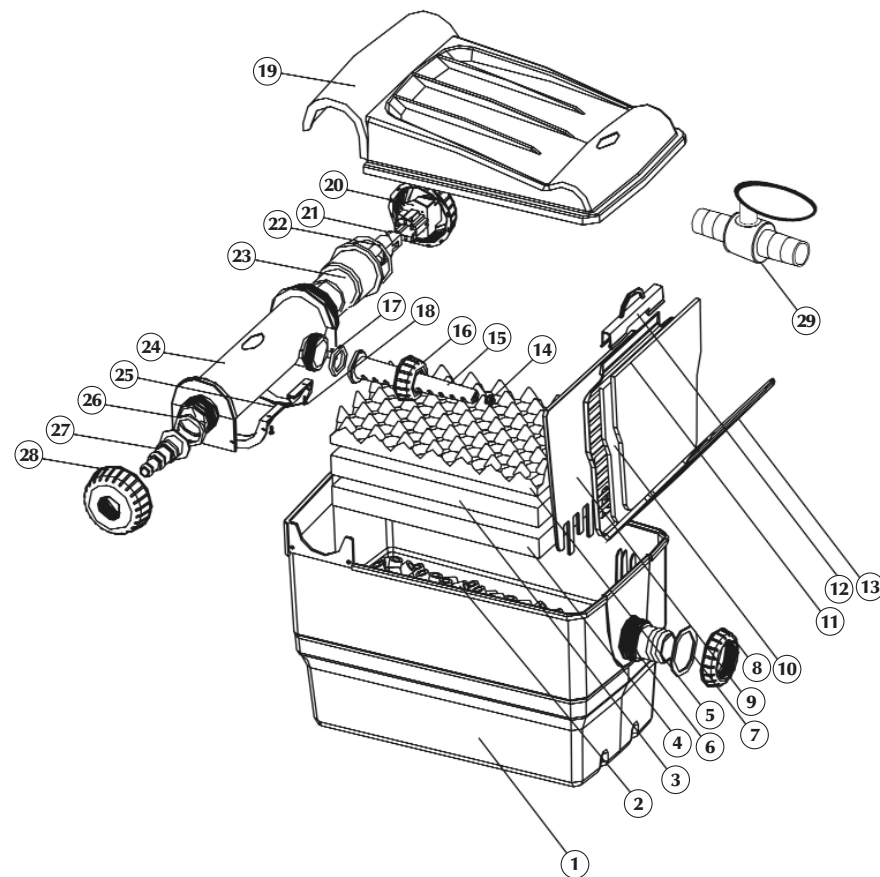
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## GETTING TO KNOW YOUR MINIPOND FILTER



Part Description	Spare Code
1 Filter body	1040570
2 Ceramic biomedia	1040587
3 Medium grade foam pad	1040594
4 Fine grade foam pad	
5 Coarse grade foam pad	
6 1 1/2" outlet hose tail	1040600
7 Outlet O ring gasket	
8 Outlet nut	
9 Filter partition divider	N/A
10 Polymer wool pad	
11 Carbon foam pad (2 wool & 2 carbon)	1010887
(6 wool & 6 carbon)	1010894

Part Description	Spare Code
12 Cartridge clip	1040617
13 Filter pad cartridge	
14 Spray bar cap	1040624
15 Spray bar	
16 spray bar nut	
17 Spray bar O ring gasket	
18 UVC feet/hinge locating screws	1040679
19 Filter lid	1040648
20 UVC electronics & cap	
21 9w & 5w bulb (9W)	1040655
(5W)	1041041
22 UVC O ring gasket	1041065

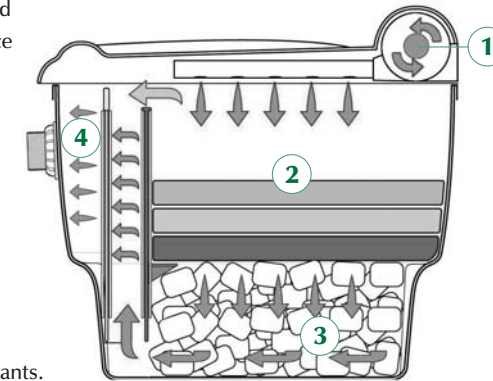
Part Description	Spare Code
23 Quartz sleeve 9w/5w	1041058
24 UVC contact chamber	1040662
25 UVC feet/hinge	1040679
26 Inlet hose tail O ring gasket	1040686
27 Inlet 1" 3/4" 1/2" hosetial	1040693
28 Inlet cap	
29 Optional 1" 25mm flow control valve (not included)	1040563

## GETTING TO KNOW YOUR MINIPOND FILTER

### HOW IT WORKS

Minipond filters create a clean, clear and healthy pond environment for your fish. A minimum of maintenance is needed due to the unique five stage filter design.

1. High performance UVC clears green water algae.
2. Graded foam filter pads remove dirt and waste.
3. Ceramic biological filter media prevent the build up of harmful toxins in the pond.
4. Replaceable polymer wool pad removes fine waste particles and polishes the water.
5. Carbon impregnated pad removes chemical pollutants.



### TECHNICAL SPECIFICATION CHART

Filter Model	Max pond size filtered over 75cm / 2'6" average depth shaded	Pond in full sunlight	Shallow pond - under 75cm/2'6" average depth	Pond in full sunlight and shallow	Pond with Koi full sunlight and shallow
10,000	10,000ltr/2,200gal	7,500ltr/1,650gal	7,500ltr/1,650gal	5,625ltr/1,237gal	2,812ltr/618gal
14,000	14,000ltr/3,080gal	10,500ltr/2,310gal	10,500ltr/2,310gal	7,875ltr/1,732gal	3,937ltr/866gal

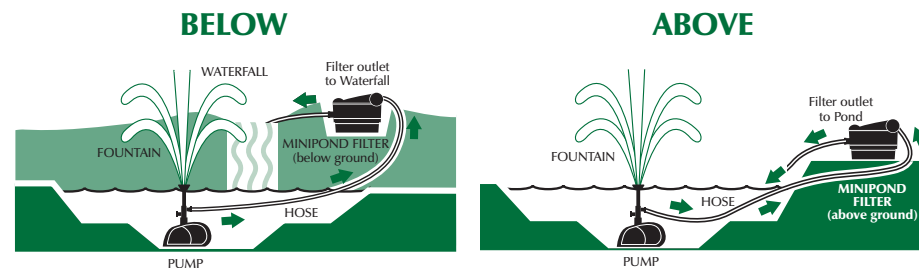
Filter Model	UVC Model Watts	Recommended Max Flow	Recommended Hose Size	
			Inlet	Outlet
10,000	18W	5,000ltr/1,100gal	32mm/1 1/4"	3x 40mm/1 1/2"
14,000	24W	7,000ltr/1,540gal	40mm/1 1/2"	4x 40mm/1 1/2"

MINIPOND FILTER	4500	6000
Watts	5W	9W
Voltage	230V	230V
Hertz	50Hz	50Hz
Safety rating	IP56 CE	IP56 CE
Cable	5 metres	5 metres

## INSTALLATION

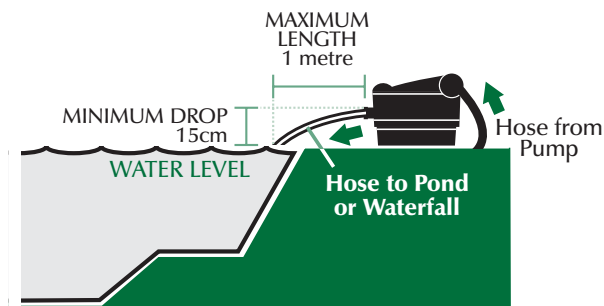
### CONVENIENT INSTALLATION

Can be installed below or above ground with water returned direct to the pond or via a waterfall. e.g:

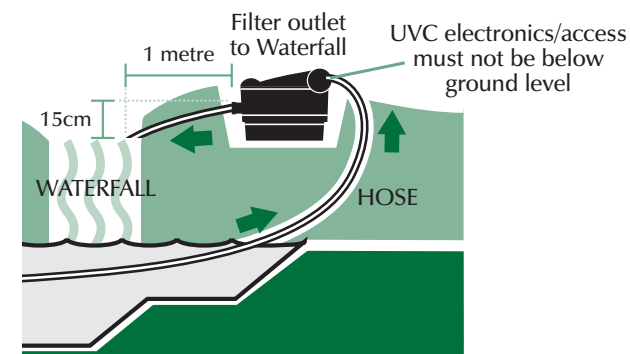


### FILTER OUTLET HOSE INSTALLATION

#### ABOVE GROUND



#### BELOW GROUND



## INSTALLATION

### IMPORTANT

The outlet hose should be smooth bore (**not corrugated**) pipe installed over as short a distance as possible with no kinks or bends.

We recommend that Blagdon smooth bore clear hose or Blagdon heavy duty smooth bore black hose are used.

The water level in the filter outlet chamber after the carbon wool cartridge should not be higher than the outlet fitting when in use.

See Flow detail diagram maximum outlet chamber level. (page 9)

**WARNING: If there is insufficient drop in height from the outlet pipe or excessive bends or kinks this will cause the filter to drain poorly allowing the outlet chamber to fill above the maximum recommended level.**

**This will increase filter maintenance and may cause the filter to overflow.**

### CONNECTING INLET HOSES

The recommended hose size for your Minipond filter is stated in the filter performance and specification chart.

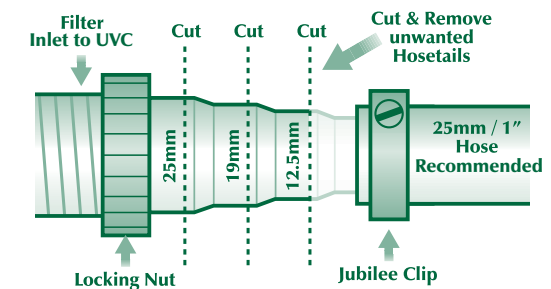
Always secure hose with a jubilee clip.

Warming the hose in a bucket of boiling water can aid fitting.

Always ensure that the smaller diameter hosetail is cut off and removed to prevent reduced filter performance.

Use the shortest possible hose lengths to minimise flow restrictions.

Avoid folds and kinks in the hose, which will reduce flow and filter performance.



## INSTALLATION

### CONNECTING TO YOUR PUMP

The pump supplying the Minipond filter must not have a pumping head exceeding 4m - 0.4 Bar.

The maximum flow rate recommended is stated in the filter performance and specification chart.

This flow should not be exceeded.

The ideal flow rate for your pond is to pump the volume of the pond water through the filter every 2-4 hours. To calculate your pond volume: average length (m) x average width (m) x average depth (m) x 1000 = Litres Pond Volume.

To calculate your pump's flow rate, fill a container from the outlet hose of the filter at the pond side.

Time how long this takes in seconds e.g. a 10 ltr bucket takes 12 seconds to fill. Divide 3600 (the number of seconds in an hour) by the time it takes to fill the bucket e.g. 12 seconds. Then multiply by the volume of the container. e.g. 10 ltr. Therefore -  $3600 \div 12 = 300$  seconds  $300 \times 10 \text{ ltr} = 3000$  ltrs per hour flow rate.

To increase flow you may need to get a larger pump. If flow is too high use an inline valve to reduce it.

The purpose of the pump is to transfer dirty water from the pond to the Minipond filter.

Placing the pump at the opposite end of the pond to the filter will give the best results.

Foam-free pump designs will give optimum Minipond filtration.

We recommend Blagdon Amphibious A Pond Pumps with pump cage, Minipond 2000, Hydratech Multi or Hydratech Torrent Pond Pumps.

### UVC BULBS & QUARTZ SLEEVE MAINTENANCE

The UVC bulb must be replaced yearly. It is recommended that the bulb is replaced and reconnected in the spring.

The Quartz sleeve can become coated in lime scale build up in hard water areas. This should be carefully removed from the quartz sleeve with a soft cloth.

Blagdon Pond Pump Cleaner should be used in stubborn cases.

Remove the quartz sleeve from the unit and soak for 3 hours in Pump Cleaner, ensuring that all O-rings are checked and replaced, if necessary.

A wet test must be carried out after maintenance to ensure there are no leaks before the UVC is reconnected.

### WET TESTING THE FILTER

**IMPORTANT:** A wet test of the filter under operating conditions must be carried out before the UVC or electrical supply is installed.

Connect the filter to the pump following all installation instructions.

After running for 24 hours check for leaks.

## INSTALLATION

### TESTING/REPLACING THE UVC LAMP

**IMPORTANT:** Ensure that the mains supply is switched off and the power isolated before removing the UVC cover.

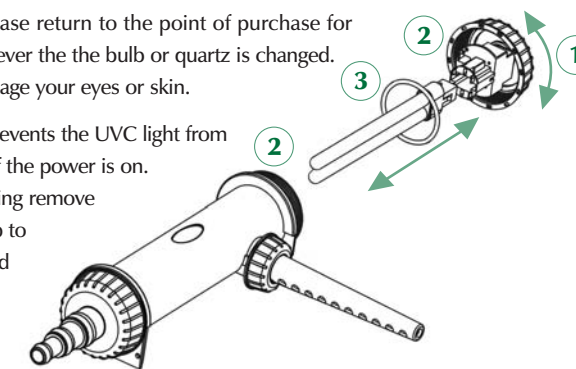
1. Unscrew the UVC electronics cover cap.
2. Inspect the UVC cap and Quartz sleeve for water leaks.
3. If there are no signs of leakage reverse the procedure ensuring that the Cover o ring is in place.

If there has been any damage to the unit please return to the point of purchase for inspection. This test should be repeated whenever the the bulb or quartz is changed.

Warning direct exposure to UVC light can damage your eyes or skin.

This unit is protected by a micro switch that prevents the UVC light from illuminating when the cover is removed even if the power is on.

In order to check that the UVC lamp is operating remove the spay bar and hold a piece of plain paper up to the the UVC outlet a faint blue reflection should be seen. This operation may be needed to be carried out at dusk as UVC lamps emit a dim blue light under normal operation.



## ELECTRICAL INSTALLATION

### Electrical installation - UVC Models



The power supply must meet the specifications on the product.

The UVC is intended to be used with either a weatherproof cable connector or permanently connected to the fixed wiring in the main system other than by means of a plug and socket.

The cores in the supply cable are coloured in accordance with the following code:

**Brown = Live, Blue = Neutral.**

Do not use the supply cable to lift the UVC as this may cause damage.



**WARNING -** A Residual Current Device (RCD), also known as the Residual Current Circuit Breaker (RCCB), with a tripping current not exceeding 30mA must be installed in the supply circuit. A means of disconnection from the supply having a contact separation of at least 3mm in all poles must be incorporated in the fixed wiring.

## ELECTRICAL INSTALLATION

**IMPORTANT:** Please note all electrical work on garden lighting and power installations must comply with part P of the building regulations. Failure to comply is a criminal offence. If the installation of this product is not carried out by a competent electrician who is registered under the Part P self-certification scheme then you must notify the local building control department before work begins. For further information and guidance on this matter and other electrical installations in your home that might be covered by the relevant legislation, contact your local authorities building control department.

For permanent installations to the mains supply, it is necessary to conform to the regulations of the local electricity authority and this would include the use of a metal or plastic conduit to protect the cable.

Attention has been drawn to the fact that special rules may exist concerning the installation of your pond UVC (i.e. local building regulations).

This UVC must not be used in swimming pools, or areas where people are in contact with the water.

Always disconnect the mains electricity supply whilst the equipment is being installed, repaired, maintained or handled. Consult a qualified electrician if in any doubt about wiring this product to the mains supply.



### Electrical/Safety

UVC Warning: Caution: Dangerous Ultra Violet Radiation. The rays from the UVC lamp are harmful to eyes and skin.

Always turn off UVC electrical supply before any maintenance.

To protect unit from flooding, leave a minimum 5cm showing above ground level to protect UVC electrics.

Never immerse unit in water.

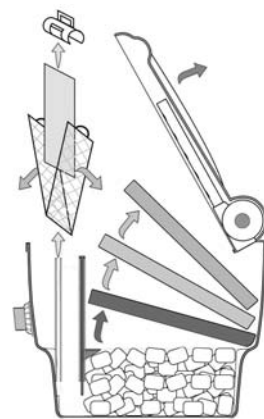
Locate unit 1m minimum from pond edge to ensure the filter cannot fall in.

## MAINTENANCE & CLEANING

Your Minipond filter has been designed to need a minimum of maintenance.

When the filter system is first installed filter cleaning may be increased for a period until the back log of accumulated pond waste is removed.

### FILTER CLEANING



## MAINTENANCE & CLEANING

### Routine maintenance

#### Graded foams

The filter foams only need cleaning when the foam chamber is full with water and the water layer above the foams starts to significantly overflow the partition into the cartridge chamber.

25% of the pumps input from the spray bar may be allowed to overflow the partition into the cartridge chamber, prior to cleaning.

Cleaning the foams before the foam chamber overflows will result in decreased filter efficiency as the foams work most effectively when partially blocked.

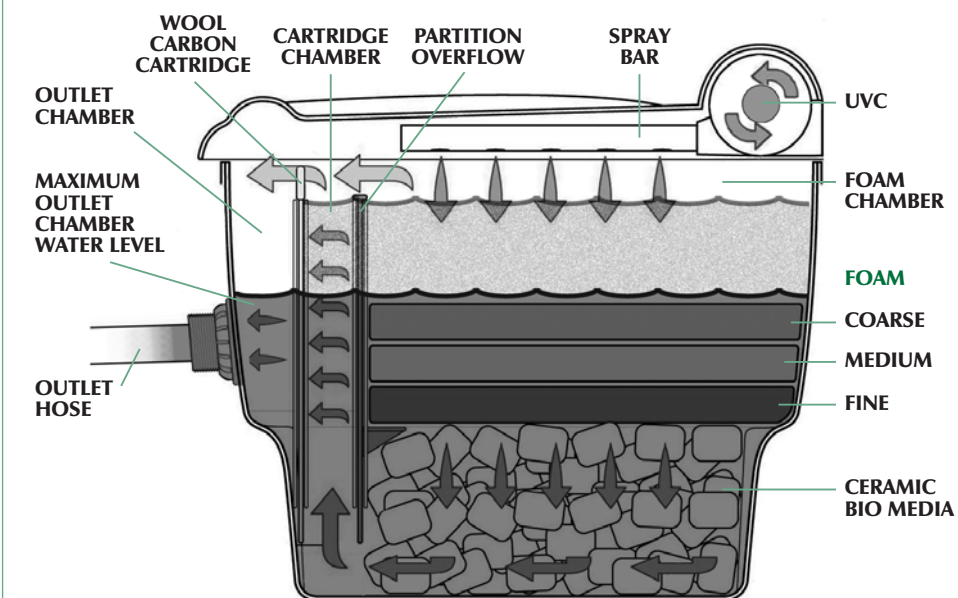
Foams may be cleaned vigorously under a running tap or hose.

Adding Interpet Bio Start after filter maintenance will help replenish these beneficial bacterial populations, and is highly recommended during the first two months of operation when the filter is slowly being colonised.

#### Ceramic bio media

These will only need very occasional cleaning (once per year), but must be rinsed in pond water to prevent damaging the beneficial bacteria which help maintain a healthy pond.

### HOW IT WORKS - FLOW DETAIL



## MAINTENANCE & CLEANING

### Polymer wool and carbon cartridge

When the cartridge chamber fills with water and starts to overflow into the outlet chamber the cartridge should be cleaned or replaced.

The Polymer wool pad may be washed a limited number of times before it starts to lose efficiency and blocks rapidly.

The Carbon Foam pad contains activated carbon particles that remove colorants and chemical pollutants from your pond water. After six weeks the activated carbon pad must be replaced as the carbon becomes full with pollutants and will be unable to absorb more from the pond water.

Replacement packs of polymer wool and carbon foam pads will be available from your retailer and are quick and easy to replace. (see diagram on page 8 and codes/descriptions on page 2)

### Annual maintenance

#### Check for wear

Once a year you should dismantle your Minipond filter. Dismantle the filter examining all the parts for wear or damage, replacing any parts show obvious signs of wear or damage. (see getting to know your Minipond filter for replacement codes and parts descriptions on page 2).

#### Replacing foams

After prolonged use and cleaning the filter foams will become damaged. This can be identified by their inability to return quickly into shape after cleaning.

Replacement of the foams is recommended.

### Winter storage

The filter can be run year round if the pump flow is maintained, this is the best option. Alternatively in winter the filter may be switched off. Follow annual maintenance procedure and store frost-free in the house or garage until spring.

## TROUBLESHOOTING

**In order to correctly identify if you have green water or cloudy/brown water, a settlement test should be carried out.**

**Take a glass of pond water and allow to settle for a few hours. When the glass is stirred a small layer of settled waste can be seen at the base of the glass. This indicates that you have brown or cloudy water and that if you have a UVC model it is working correctly. If there is no settlement it indicates that you have green water and the UVC is not working correctly.**

### Filter leaks

- Check that the filter outlet nut and O ring have been correctly assembled and that they are hand tight.
- Check the hoesetail connector O ring seal is fitted and aligned correctly on the end of the hoesetail fitting and that the inlet cover is hand tight.
- PTFE tape may be needed to give a water tight seal and should be applied to the inlet or outlet hoesetails.
- Always secure the filter inlet hose and outlet hose with a jubilee clip.
- Insure that the filter is installed on a flat and level base.

### Cloudy/brown water

- The flow rate / pond turnover is to high or to low. Check that you have correctly calculated the pond volume and that pump flow rate is within limits. (see connecting your pump page 6)
- The filter is not being supplied with water 24 hours a day. Do not turn off your pump or UVC. Continuous running is needed to maintain a clean and healthy pond.
- The filter foam pads are insufficiently blocked to trap the fine waste. Treat with Interpet Clear Pond treatment.
- Do not clean the foams until the filter foam chamber starts to overflow into the carbon wool chamber.
- The water is extremely dirty, remove pond waste and leaves - carry out a partial water change.
- Filter is incorrectly sized - refer to filter performance and specification chart. Calculate the pond volume - see connecting to your pump page 6.
- The filter foams have not been positioned or replaced correctly,ensure that the foams fit tightly within the filter chamber.

## TROUBLESHOOTING

### Green water

- Settlement test the water to ensure that there is no sediment suspended in the water. If there is follow the brown cloudy water trouble shooting guide.
- At dusk check that the UVC light is illuminated by removing the spray bar and holding a piece of paper up to the UVC and looking for the reflected pale blue UVC light. Turning the lamp on and off may aid visual identification. (Ensure the UVC lamp is not more than 6 months old).
- The UVC may be working effectively but the foams are too clean and are unable to remove the fine coagulated waste. Treat the pond with Interpet Clear Pond and do not clean the foams until the foam chamber starts to overflow into the carbon wool chamber.
- The flow rate of the pump exceeds the maximum flow rate that the UVC is able to handle. Check the filter specification chart and reduce the pump flow rate if needed. It is possible to purchase an optional Blagdon 1" flow control valve that may be fitted inline between the pump and the filter to control the flow rate. See getting to know your filter diagram and parts codes.
- The filter is too small for the pond, check the filter selection chart.
- The UVC quartz sleeve is dirty or coated in lime scale. Gently remove the quartz sleeve and clean in Blagdon pond pump cleaner.
- Follow all cloudy water trouble shooting points.

### UVC light not illuminated

- Check all fuses / RCD and electrical connections follow electrical installation (pages 7-8).

### Poor flow into the filter or out of the filter

- Inspect and clean your pond pump, check that it is in good working order.
- Check foams and filter pads ,clean as per routine maintenance if blocked.
- Always use the minimum length of inlet or outlet hose needed as this will reduce back pressure due to friction.
- Ensure that the inlet hose connector has been cut correctly to size, if not this will restrict the flow from the pump into the filter see diagram page 5.
- Ensure that the inlet hose is not kinked or crushed.
- Ensure that the outlet hose is under 1m in length at that there is a drop of 15cm over this distance, ensure that it is not kinked crushed or has a sharp bend as this will stop the filter draining correctly.

## IMPORTANT

### FAULTS - PROBLEMS PROCEDURE

Before returning your Minipond Filter to your dealer or contacting our Consumer Advice Department, please carry out the following steps. This will solve most problems quickly and easily.

1. Ensure electrical procedures have been followed fully. Check fuses and any cable connectors/switch boxes.
2. (a) Follow routine maintenance procedure fully. (b) Check location and connecting your pump details including flow rates. (c) Ensure that your pond volume and pump flow rate meet the maximum pond size recommended for the filter model on the filter performance and specification chart. (d) Follow troubleshooting guide.
3. If there is a mechanical breakdown of the filter or UVC, return to the point of purchase for inspection and advice (You will need proof of purchase).

### CLEARWATER GUARANTEE

The Clearwater guarantee will be honoured for 1 year after proof of purchase. Clearwater is guaranteed to a depth of 1m, so that fish are clearly visible.

#### Clearwater is guaranteed provided:

- You follow all instructions as above.
- Your filter is within the performance guidelines stated.
- You consult the Consumer Advice Line and follow any advice to correct the situation (01306 743747) See details.

Refunds can only be authorised by Interpet Blagdon.

### CONSUMER ADVICE CONTACT DETAILS

#### Interpet (Blagdon) Consumer Advice Department

Vincent Lane, Dorking, Surrey RH4 3YX

Telephone: 0845 226 7437

(Monday to Friday 10am to 4pm except Bank Holidays - Times may vary)

Fax: 01306 876712 E-mail: [customer-care@interpet.co.uk](mailto:customer-care@interpet.co.uk)

## GUARANTEE

This product is guaranteed against defects in material and workmanship for 2 years from the date of purchase, under normal usage. The guarantee DOES NOT APPLY in case of improper use, negligence, lack of maintenance or accidental damage to either the filter or UVC. If the filter or UVC fails due to a manufacturing fault within this period it will be either repaired or replaced free of charge. Liability is limited to replacement of the faulty product only; no other costs will be reimbursed.

This guarantee is not transferable and does not affect your statutory rights. This guarantee does not confer any rights other than those expressly set out above. This guarantee does not cover the filter foams or UVC bulb, which will need replacing when worn or every 6 months. If any parts are needed, spares are available from your retailer.