



Established over 50 years ago, Blagdon are committed to producing a comprehensive range of high quality and easy to use water gardening equipment. We have an on-going programme of research and development that ensures excellent product performance and value for money for our customers. Our products are brought together with half a century of expertise and knowledge so you can be assured of a successful and creative water garden.



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Interpet.co.uk
Blagdonwatergardening.co.uk

Leaflet Code: 21/08/15



water movement
pond pump
for filters and waterfalls

force hybrid

5000 • 6000 • 8000
10000 • 14000 • 16000

www.interpet.co.uk
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pond pump for filters and waterfalls

Congratulations on buying a Blagdon Force-Hybrid solids handling water garden pump. Force-Hybrid pumps have been manufactured with the highest quality materials to deliver durable, powerful and economical pumping. The range of fittings and advanced features included, have been researched and designed to provide outstanding water garden performance. Please take the time to carefully read this pond master guide so you gain the maximum safety and benefits from this product.

IMPORTANT

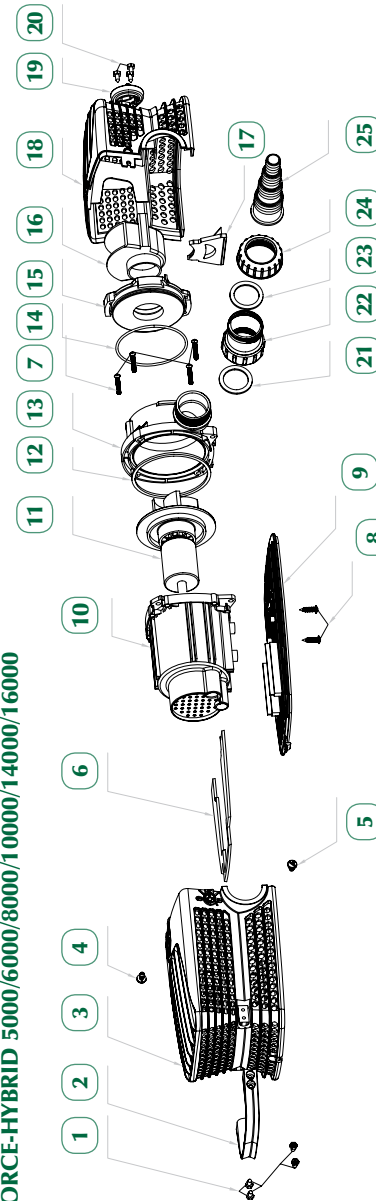
Please attach proof of purchase to this manual and file in a safe place.

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GETTING TO KNOW YOUR FORCE-HYBRID PUMP

FORCE-HYBRID 5000/6000/8000/10000/14000/16000

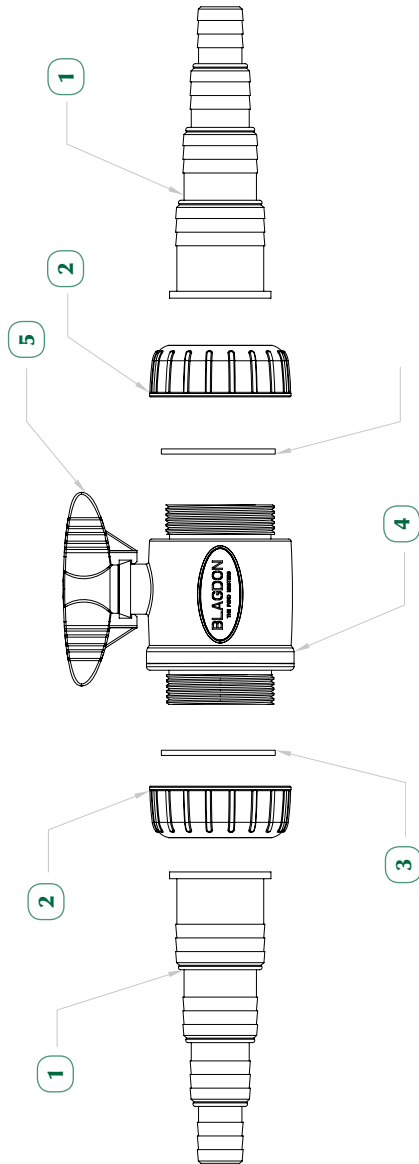


No.	Part Description	Code	No.	Part Description	Code
1	Handle screws		12	Impeller housing seal 5000-6000-8000-10000	in part 14
2	Handle			Impeller housing seal 14000-16000	in part 14
3	Back cage		13	Impeller housing 5000-6000-8000-10000	
4	Cage locks			Impeller housing 14000-16000	
5	Back cage divider 5000		14	Impeller cover seal 5000-6000-8000-10000	1050807
	Back cage divider 6000-8000-10000			Impeller cover seal 14000-16000	1050814
	Back cage divider 14000-16000		15	Impeller cover 5000-6000-8000-10000	1050838
7	Impeller housing screws	in part 11		Impeller cover 14000-16000	1050845
8	Motor location screws	in part 11	16	Inlet valve	
9	Cage base		17	Valve locator	in part 15
10	Motor Housing		18	Front cage	
11	Impeller assembly 5000	1050722	19	Intake valve switch	
	Impeller assembly 6000	1050739	20	Intake valve switch screws	
	Impeller assembly 8000	1050746	21	Outlet cage adaptor seal	
	Impeller assembly 10000	1050753	22	Outlet cage adaptor	
	Impeller assembly 14000	1050760	23	Inlet / outlet lock nut seal	1050821
	Impeller assembly 16000	1050777	24	Inlet / outlet lock nut	
			25	1 1/2" - 1 1/4" - 1" - 3/4" multi Hosetail	

Please note: Spares / replacements of all of the parts / fittings listed above are available from your retailer.

GETTING TO KNOW YOUR FORCE-HYBRID PUMP

FORCE-HYBRID - IN-LINE FLOW CONTROL VALVE EXPLODED



No.	Part Description	Spare Code
1	1 1/2" - 1 1/4" - 1" - 3/4" multi Hosetail	105616
2	Inlet / outlet lock nut	
3	Inlet / outlet lock nut seal	
4	Ball valve	
5	Flow control valve handle	

GETTING TO KNOW YOUR FORCE-HYBRID PUMP

PUMP - LIFT CHART

FORCE-HYBRID PUMP FLOW RATE IN LITRES/HOUR

RFR Realistic flow rate when installed and running through pipe work, filter and a waterfall.

5.0m						714
4.5m				976	1,601	1,871
4.0m			1,010	1,989	2,784	3,176
3.5m			2,017	3,001	3,852	4,764
3.0m		817	3,011	3,878	5,171	5,523
2.5m	790	1,382	3,900	4,410	6,799	7,089
2.0m	1,690	2,511	4,490	5,342	8,010	8,980
RFR 1.5m	2,848	3,278	5,270	6,171	9,070	10,017
1.0m	3,210	4,017	6,000	7,296	10,365	12,170
0.5m	3,650	4,926	6,390	8,001	11,834	13,076
0.0m	4,210	5,500	7,000	8,804	12,800	14,000
MODEL	5000	6000	8000	10000	14000	16000

Flow is given as optimum rate

Technical Specification and Performance

Cable Fitted	10m	10m	10m	10m	10m	10m
Voltage	230V	230V	230V	230V	230V	230V
Hertz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz
Watts	80W	106W	140W	192W	256W	296W
Safety Rating	IPX8	IPX8	IPX8	IPX8	IPX8	IPX8
Max Flow	4210 ltr/hr 927 gal/hr	5500 ltr/hr 1210 gal/hr	7000 ltr/hr 1540 gal/hr	8804 ltr/hr 1936 gal/hr	12800 ltr/hr 2815 gal/hr	14000 ltr/hr 3079 gal/hr
Maximum Lift	2.75m 9'	3.5m 11'5"	4.2m 13'9"	4.8m 15'8"	4.5m 14'9"	5.25m 17'2"
MODEL	5000	6000	8000	10000	14000	16000

INSTALLATION

Electrical installation



The power supply must meet the specifications on the product.

The pump is intended to be used with either a weather-proof cable connector or connected 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, Green/Yellow = Earth.

The electric cable is permanently connected and sealed in the motor body.

If the supply cable is damaged the pump must not be used.

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

IMPORTANT: If this product is installed using a Blagdon Powersafe armoured garden power supply fitted with a flexible lead to a three pin plug, in conjunction with a circuit breaker as recommended. It would not therefore be deemed to be a permanent part of the house wiring and would not fall within the scope of Part P of the building regulations. However if the product is wired directly into a fixed wiring spur, it will fall under part P of the building regulations and must be installed by a qualified electrician or in consultation with a building control officer.

ELECTRICAL STANDARDS STATE THAT:

- All outdoor power supplies must be protected by a circuit breaker.
- All outdoor electrical components must comply with outdoor weatherproof safety standards.



WARNING - THIS PUMP MUST BE EARTHED

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.

INSTALLATION

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 pump (i.e. local building regulations). These pumps must not be used in swimming pools, or areas where people are in contact with the water.

Always disconnect and isolate 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 main supply.



Warning - The Force-Hybrid pump is provided with a thermal cut out that temporarily switches off the pump in case of overheating and the pump may automatically restart.

Locating your Force-Hybrid Pump

The Force-Hybrid pump should be located on a firm and level base in the pond/water feature in a depth of at least 15cm, but no more than 3m.

Water Feature / Filter / Waterfall

Depending on water feature to be supplied, your pump can be used with 1 1/2" 1/4" 1" 1/2" hose fitting. Hose clips should be used to secure hose.

Tip: The larger 1 1/2" hose fitting will give maximum pump flow performance.

- Ensure pipe work is not blocked, leaking or is laid so that it gets crushed or kinked.
- Keep the height that water is to be pumped from the water surface (called Head) to a minimum. The higher the head the lower the flow rate and the more wear on the pump.
- Use the largest diameter, smoothest bore pond hose over the shortest distance and keep hose fittings to a minimum. This removes frictional loss of flow and so increases pump flow rates.

Also see the explanatory diagram on page 2.

MAINTENANCE & CLEANING

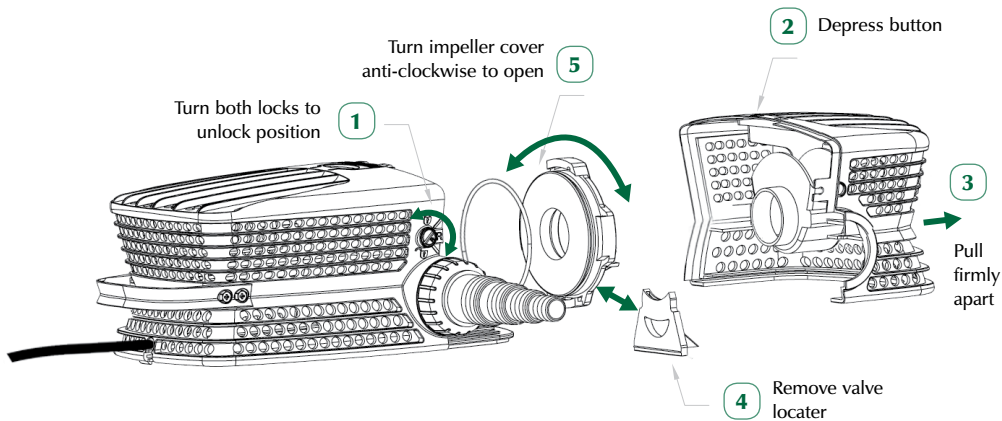


Warning - Failure to carry out routine maintenance leaving the pump under reduced or no flow conditions for long periods (i.e. blocked outlet, pipework filter cage) will result in a shorter pump life and will invalidate the guarantee.

Blagdon Force-Hybrid Pumps are centrifugal pumps with a magnetic impeller movement driven by a watertight asynchronous motor. They require minimum cleaning, only periodic cleaning of the pre-filter cage and impeller is necessary.

Monthly Maintenance/Opening the cage

Remove cage and impeller cover, wash all parts thoroughly with fresh water.

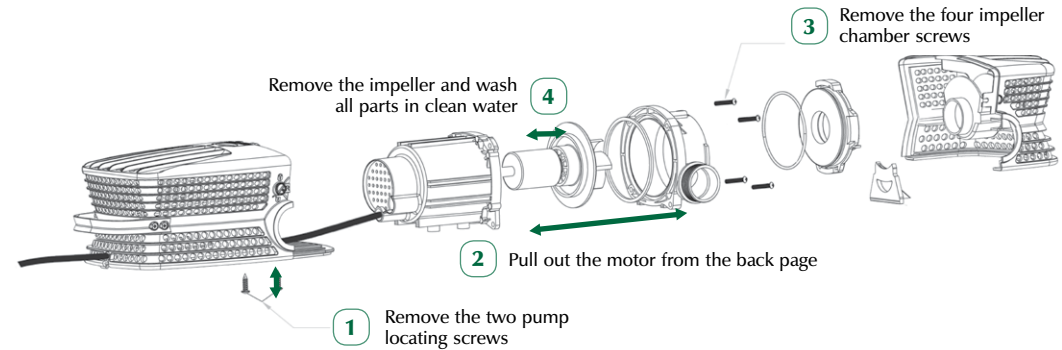


MAINTENANCE & CLEANING

Annual Maintenance/Removing the impeller

First follow the Monthly Maintenance/Opening the cage steps.

Remove the impeller and wash all parts thoroughly with fresh water.



Dismantle pump and examine all parts for wear or damage, replacing any parts that show obvious wear and/or damage. (See getting to know your pump for parts/description and replacement parts codes.) Particular care should be taken to examine the cable entry point and the cable; if there is any sign of damage the pump should be discarded.

Winter Storage

The pump can be run in the pond during the winter but care should be taken to ensure that it is fully immersed and cannot freeze solid. If the pump is not used during the winter, follow annual maintenance procedure and store frost-free in the house or garage until spring.

TROUBLESHOOTING

Problem

Low flow from pump

1. Follow monthly cleaning procedure if no improvement.
2. Follow annual cleaning procedure.
3. Ensure pipe work is not blocked, leaking or is laid so that it gets crushed or kinked.
4. Keep the height that water is to be pumped from the water surface (called Head) to a minimum. The higher the head the lower the flow rate and the more wear on the pump.
5. Use the largest diameter, smoothest bore pond hose over the shortest distance and keep hose fittings to a minimum. This removes frictional loss of flow and so increases pump flow rates.

No flow from pump

1. Check power supply is on.
2. Check fuse and wiring (SEE ELECTRICAL INSTALLATION).
3. Follow low flow procedure as above.
4. If the pump has overheated the thermal overload will temporarily switch off the pump.

If none of the above works contact Interpet (Blagdon) Consumer Advice Department (See Faults problem procedure Page 13).

FAULTS - PROBLEMS PROCEDURE

Before returning your Blagdon pump 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 procedure has been followed fully. Check fuse and any cable connectors/switch boxes. **NOTE:** If the pump has overheated the thermal overload will temporarily switch off the pump.
2. (a) Follow routine maintenance and check pump. (b) Follow monthly maintenance and check pump. (c) Follow troubleshooting guide. (d) Follow annual maintenance guide.
3. Return pump to point of purchase for inspection and advice. (You may need proof of purchase).

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:** customercare@interpet.co.uk

GUARANTEE

This product is guaranteed against defects in material and workmanship for 3 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 either to the pump or to the impeller or impeller shaft.

If the pump 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. Excludes the impeller, which may require replacing if worn. If any parts need replacing, spares are available from your retailer.

ENVIRONMENT FRIENDLY DISPOSAL



You can help protect the environment. Please remember to respect the local regulations: hand in the non-working electrical equipments to an appropriate waste disposal centre.