



Big Frog Eco Drive Submersible Water Pump Operation Manual



Models:
BFED3000 ♦ BFED4200 ♦ BFED5500



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LIMITED WARRANTY

Products manufactured by ANJON are warranted to the original user only to be free of defects in material and workmanship for a period of 24 months from the date of purchase, but not more than 30 months from the date of manufacture. ANJON liability under this warranty shall be limited to repairing or replacing, at ANJON's discretion, without charge, F.O.B. ANJON will not be liable for any cost of removal, installation, transportation, or any other charges which may arise in connection with a warranty claim. Products which are sold but not manufactured by ANJON are subject to the warranty provided by the manufacturer of said product(s) and not by ANJON's warranty. ANJON will not be liable for damage or wear to products caused by abnormal operating conditions, accident, abuse, misuse, unauthorized alteration or repair, or if the product was not installed in accordance with ANJON's printed installation and operating instructions.

To obtain service under this warranty, the defective product must be returned to the distributor or dealer of ANJON's products from which it was purchased together with proof of purchase and installation date, failure date, and supporting installation data. Unless otherwise provided, the distributor or dealer will contact ANJON or an authorized service station for instructions. Any defective product to be returned to ANJON or a service station must be sent freight prepaid; documentation supporting the warranty claim and/or a Return Material Authorization (RMA) must be included if so instructed. In the absence of suitable proof of purchase date, the effective date of this warranty will be based upon the date of manufacture.

Any replacement product may be either new or like-new, provided that it has functionality at least equal to that of the product being replaced. No requests for service under this warranty will be accepted if received more than 30 days after the term of the warranty. Correction of defects, in the manner and for the duration of the warranty described in this warranty, shall constitute complete fulfillment of all liabilities and responsibilities of ANJON to the user with respect to the product, and shall constitute full satisfaction of all claims, whether based on contract, negligence, strict liability or otherwise. Except for the obligations specifically set forth in this warranty, in no event shall ANJON be liable for direct, indirect, special, incidental, or consequential damages, whether based on contract, tort, or any other legal theory and whether advised of the possibility of such damages.

ANJON reserves the right to change or improve its products or any portions thereof without being obligated to provide such a change or improvement for units sold and/or shipped prior to such a change or improvement.

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Some jurisdictions do not allow the exclusions or limitation of incidental or consequential damages and some jurisdictions do not allow limitations on how long implied warranties may last or require you to pay certain expenses as set forth above. Therefore, the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from jurisdiction to jurisdiction.



DISPOSAL: Do not dispose of this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.

Figure 1

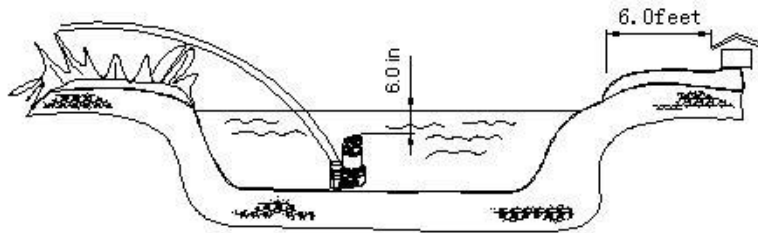


Figure 2

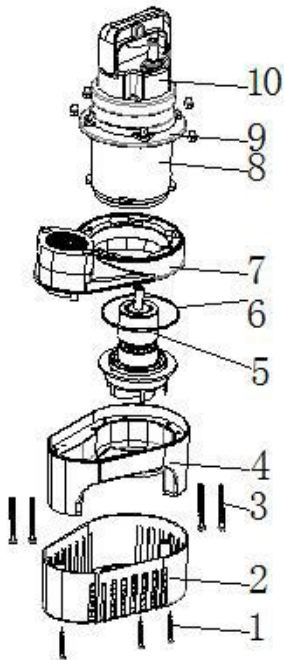


Figure 3



Model	V-Hz	Amps	Hmax (FT)	Qmax (GPH)
BFED3000	120V 60Hz	2.55A	20	3000
BFED4200	120V 60Hz	3.8A	28	4200
BFED5500	120V 60Hz	4.5A	32	5500

CAUTION: These Pumps should be installed according to your local electrical installation code. Please contact an electrician. For all technical data, please refer to the content stated on the rating label of the pump.

These pumps are not for use in swimming pools!

Safety instructions

- Read and observe all the instructions supplied with the appliance and on the appliance.
- Make sure that the outlet voltage corresponds to the stated on the rating label of the pumps.
- Make sure the appliance is securely installed before operating it.
- The electrical connection should be located in a water-proof area and should be at least 6 feet away from the edge of the pond (see fig.1).
- Keep the electrical connections dry! Ensure that the electrical cord loops below the electrical outlet to form a "Drip Loop" (see fig. 3). This will prevent water from running down the cord into the electrical outlet.
- Always unplug the appliance when not in use, before putting on or taking off parts, before cleaning the pumps and before doing any work for the fountain or pond.
- The pump must not be used when people are working in water. Please disconnect the pump first.
- Do not operate any appliance with a damaged cord or plug, or in abnormal state. The supply cord of the appliance cannot be replaced. **If the cord is damaged the appliance should be scrapped.**
- For safety reasons, any repair work should be done only by the manufacturer of the products or the authorized service facility or discard it.
- Never hang or transport the pump by means of pulling the power cord!
- Close supervision is necessary when the appliance is used by or near children.
- If you want to disconnect the pump, you can pull out the plug and the plug must be placed where you can access it.
- Never use accessories which are not recommended by the appliance manufacturer. It may result in fire, electric shock and/or personal injury.
- The pump is to be connected through a Ground Fault Circuit Interrupter (GFCI with a rated residual operating current not exceeding 30mA.
- Min. Length of power cord: 33 feet. Do not use extension cords.

These pumps are designed as submersible pumps and have been provided with overload protection for use in garden ponds, fountains, terraced fountains, indoor fountains to circulate and oxygenate clear water. You can use the suction cups or four screws to fix it. If it is fixed to any appropriate bases, make sure that the appliance is securely installed before operating it.

Facts

- High performance asynchronous motor with new design
- Energy saving up to 50% more than other pumps.
- High pump heads and larger flow.
- Can pump dirt particles of size up to ¼"
- Wear proof ceramic shaft which can be used for a longer period of time.

Used as submersible pumps (see fig.1)

IMPORTANT: Do not let the pump run dry – this could cause damage to the motor.

- Submerge the pumps completely in your skimmer so as to make the pump body fill with water.
- A water level of approx. 6 in. is required for submersible use in order to prevent the pump from taking in air. (See fig.1)
- To prevent the screen becoming prematurely clogged, place the pump above the mud in the pond!
- The pump is designed to accommodate 2" external threads through the socket (fountain jets, nozzles, water height regulators, standpipes, etc.).
- Running in conjunction with fountain jets, the pump should be stationed firmly and horizontally (on a brick).
- The pump can be switched on by simply plugging it in and switched off by plugging off.
- The water temperature should not exceed 35°C (95°F) and do not let the pump freeze in the wintertime.

Overload protection

The pump has a built-in thermal overload trip which prevents the pump from overheating. The pump must be allowed to cool down before restarting. If the pump will not start again automatically when cooling down, please check the following conditions:

- Is there a sufficient water supply? → *add water if necessary*
- Has the screen become clogged? → *clean it if necessary*
- Has dirt entered the pump housing? → *follow the cleaning instructions below*
- Have hoses or jets become clogged? → *clean them if necessary*
- Has the pump sufficiently cooled down after overheating?
- As soon as you have completed this checklist, you can start the pump again by plugging it back in.

Maintenance and cleaning (see fig2)

1. Follow these safety instructions. Make sure that the pump is unplugged.
2. Loosen the 3 screws (1) and remove the lower screen (2).
3. Loosen the 4 screws (3), and remove the pump house (4) and hoop (9).
4. Turn the pump house cover (7) in Anti-clockwise direction; remove the pump house cover (7) from the pump body (8).
5. Take the impeller assembly (5) out from the pump body (8).
6. Clean all parts using water and soft sponge.
7. For hard water deposits or rust, use a solution of CLR (or like product) with water (1:4 ratio is recommended).

Assembling the pump together:

1. Place the impeller assembly (5) pump body (8) with caution.
2. Make sure the impeller assembly (5) is assembled correctly and will turn freely and check the position of the sealing ring (6) on the pump body (8).
3. Turn the pump house cover (7) in a clockwise direction. Put the pump house cover (7) in the pump body (8)
4. Move the hoop (9) in the correct position and assemble the pump house (4). Tighten the 4 screws (3) uniformly.
5. Assemble the lower screen (2) and tighten the 3 screws (1) uniformly.