

# FREQUENTLY ASKED QUESTIONS

## F.A.Q.

### GENERAL

Where can I buy Johnson Pump products, spares, and replacement parts?

- End Users can purchase Johnson Pump products from Big-Box Retailers, Authorized Online Sellers, and Local Marine Dealers.

My pump is Centrifugal, what does that mean?

- Centrifugal pumps use momentum of the spinning impeller in contact with a fluid to transfer the rotating force into the fluid outward through the discharge port. These types of pumps are used in applications where self-priming capabilities are critical, and water pressure is already supplied to the pump by gravity (gravity fed) or continuously primed via a source such as a seacock or fluid and pump below the waterline.

My pump is Self-Priming, what does that mean?

- Self-priming means the pump can draw fluid through the system without any assistance from another pump, gravity, or primer bulb.
- Most cases, this is likely a Flexible Impeller Pump (FIP) or Diaphragm pump. The trick is suction contained within the geometry of the pump design.

Why Does my centrifugal pump motor hum, vibrate, and surge, but no water is coming out of the discharge?

- It may be possible the pump is not fully submerged, or the pump is incorrectly oriented or applied in the system.
- See Air-binding/ Airlock.

All Johnson Pump Bilge/Aerator cartridge, Proline, Ultima, and Heavy-Duty bilge pumps require near vertical orientation in order properly evacuate water from the bilge.

Aerators with thru-hull connections below the water line can be oriented at slightly more aggressive angles as they receive as from a location below the water line, or about 1 inch of fluid height.

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6. The instruction manual states not to cut the wires less than 3 inches from the top of the Bilge Pump motor, why is that?

- Typically, if the wires are cut to length 12 inches or shorter from the motor cartridge, the wires are susceptible to “normal bilge water levels” which can then intrude into the wiring and then short circuit, corrode, or damage critical bilge motor electronics. It is important to make sure wires are sealed with proper waterproof/watertight connectors and neatly hung and secured.

## CARTRIDGE BILGE & AERATOR PUMPS

7. What type of grease is recommended for the motor cartridge o-ring?

- Motor Cartridge o-rings are installed with FOOD-GRADE Grease (NSF H1) as they are being used in the marine environment for aquatic life safety. The O-ring is of nitrile/NBR material. Other Food-Safe petroleum-based lubricants or oils can be used as well. Vaseline or other household petroleum jellies are not recommended as they can contain acids that degrade the o-ring material over time.

8. Are the replacement cartridge motors used in the 500|700|1000 GPH Bilge pumps the same as their sibling Aerators?

- Yes. the cartridge motors are the same for their sibling items and can be purchased from Johnson Pump retailers and dealers.

9. Will my Cartridge bilge pump housings accept the other sized replacement cartridge motors?

- Yes. The cartridge housing containing the 500, 750, and 1000 GPH motors can be interchanged, however flow may be impacted depending on the installed combination of motor and impeller.

10. I have a Mayfair Marine Bilge or Aerator Pump, is it the same as the Johnson Pump Marine Bilge and Aerator Pumps?

- Yes, more than likely the Red Johnson Pump Marine Cartridge Bilge or Aerator pump is the same design as your original Yellow Mayfair Marine Cartridge Series product.
- Example: Mayfair Aerator 2850 = Johnson Pump 28503; similar trend follows for Bilge Pumps where Mayfair Bilge Pump 3250 = Johnson Pump 32503

11. Will the Johnson Pump Replacement Motor Cartridge fit a Mayfair Marine Cartridge Bilge or Aerator Pump Housing?

- Yes, if the Mayfair Marine motor cartridge contains the same external ear-tabs like the Johnson Pump motor cartridge, the overall fitment should be the same. There may be some minor differences between pump housings such as molded discharge port on the Mayfair pump versus the nest96i-23.5 (a)6.8a10.9 (b)-12kjh5.9 (0)-13.8 96 (l)-8.8 tmllowrg pf(a)-10.9 (b)-12.9 (s l)-4.6 (0) e J6 (l yt)6.3 (96 (l)88.s)-18-5.5 (i)-12m8.9 (e)4 (21h)-8.ge o[(o)2dr ch5.9 (0)-1358.s0 e Je exomv79 -119 (e)x0ano r d-1 (sa





## HEAVY DUTY BILGE & AERATOR PUMPS

24. Do the Johnson Pump 1600|2200|4000GPH Heavy Duty Bilge pumps share the same motor, housing, or basket?

- No, the HD Bilge pumps do not share the same motors, however the 1600 and 2200 do share the same intake basket, check valve assembly, and 1-1/4" and 1-1/8" barbed hose fittings.

25. What size outlet is my 1600|2200 GPH Bilge or Aerator Pump?

- The outlet is 1" FNPT (Female National Pipe Taper), and contains separate 1-1/4" and 1-1/8" barbed hose fittings.

26. What size outlet is my 4000 GPH Bilge Pump?

- The outlet is 2" FNPT (Female National Pipe Taper), and contains separate 2" and 1-1/2" barbed hose fittings.

## SHOWER SUMP MULTIPOINTS

32. How do I use the inlet/outlet ports on Shower Sump Multiports?

- Determine which size ports you want to use with your system. Some of the ports have staggered sizes to allow for various connections. Simply cut-off the tips of the black plastic barbs only 1/8"-1/4" to reveal the holes that enter the sump. You can also use a drill, but it is important to make sure any debris is removed in order to keep the pump and internal check valve operating properly.

33. How do I access the Check valve in the shower sump multiport?

- The check valve is a popper style valve that is sealed and contained inside the inlet port manifold and cannot be accessed for replacement.

34. Since I cannot replace my popper style check valve, can I clean my check valve inside the sump?

- Yes, but it does require some disassembly of the sump unit. The pump/ float switch will need to be removed so you can access the outlet port. From here, place a dampened and light detergent cloth over a small diameter dowel that can be passed through the outlet of the multiport unit from inside to outside. Make sure no sharp edges catch or tear the popper valve. Make sure to push out the popper from inside-out. Once cleaned, to verify function of the popper style check valve you can blow from OUTSIDE to INSIDE and you should have resistance from the valve. (do not use compressed air as it can damage and deform the popper). If no resistance, it is possible the valve may be stuck or damaged and would require replacement of the sump unit.

## ENGINE COOLING & FLEXIBLE IMPELLER PUMPS

35. Where do I find the Model Number and Specific PN for my Engine Cooling pump?

- Most Engine Cooling pumps and Flexible Impeller Pumps have the 'generic' pump model/type number and product-specific part number etched into the 65.2 (u)-7-7 (u)-8.53.8 (t)6.3 ET /Spanpthe 65.2 (u)-7 (r et)6.3 R2 (h)-8.9 (e 65.2 2 (ul)-4r .1 (h).2 (h)8
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