



Self-Venting Submersible & In-Line Booster Pumps

INSTALLATION & USER INSTRUCTIONS

Thank you for purchasing this Whale® product. For over 60 years, Whale® has led the way in the design and manufacture of freshwater and waste systems including: pumps, plumbing faucets, showers for low voltage applications. The company and its products have built a reputation for quality, reliability and innovation backed up by excellent customer service. Read carefully before installation and use.

TYPICAL INSTALLATION

Designed for use in low voltage applications including leisure boats or recreational vehicles such as caravans or motorhomes to pump cold clean freshwater. If it is intended for use with any other liquid, it is the user's responsibility to ensure that the materials are fully compatible with the liquids to be used and that a system of safe working practice is applied to installation, use and maintenance.

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1. SPECIFICATION

Submersible - Model Specifications

Model	Standard	Premium	Premium	High Flow
Product Code UK Specification	GP1002	GP1352	GP1354	GP1652
Product Code EU Specification	GP1010	GP1356	GP1358	GP1656
Voltage	12V d.c.	12V d.c.	24V d.c.	24V d.c.
Recommended Fuse Size	5 amp automotive		3 amp automotive	5 amp automotive
Weight	0.15 kg (0.3 lbs)			
Hose Connections	Suitable for 10 mm ($\frac{3}{8}$ ") or 13 mm ($\frac{1}{2}$ ") Flexible Hose For $\frac{1}{2}$" hose connection: Fit adaptor by pressing on firmly. Note: Once fitted adaptors cannot be removed. For 15mm Quick Connect Plumbing: Use WX1511B (Stem Adaptor 11 mm-15 mm). Connect WX1504 (15 mm Equal Straight) and then 15 mm Plumbing For 12mm Quick Connect Plumbing: Use Whale part: WU1211B, and connect WU1204 and then 12mm plumbing			
Material In Contact with Liquid	Pump Body: ABS, Seals: Nitrile®, Strainer: Polypropylene, Impeller: PBT, Cable: PVC			

Discharge Head	Flow Rate Per Minute Current Draw (Note: performance may vary depending on specific installations)			
0 m (0 ft)	10.3 ltrs	13.2 ltrs	13.2 ltrs	15.75 ltrs
	2.4 amps	3.6 amps	3.8 amps	3.8 amps
1 m (3 ft)	8.75 ltrs	11.75 ltrs	11.75 ltrs	14.75 ltrs
	2.2 amps	3.3 amps	1.6 amps	3.7 amps
3 m (9 ft)	5.75 ltrs	9.75 ltrs	9.75 ltrs	12.75 ltrs
	2.0 amps	2.9 amps	1.455 amps	3.5 amps

In Line - Model Specifications

Model	In-Line Premium	In-Line Premium	In-Line High Flow
Product Code	GP1392	GP1394	GP1692
Voltage	12V d.c.	24V d.c.	12V d.c.
Recommended Fuse Size	5 amp automotive	3 amp automotive	5 amp automotive
Weight	0.15 kg (0.3 lbs)		
Hose Connections	Suitable for 10 mm ($\frac{3}{8}$ ") or 13 mm ($\frac{1}{2}$ ") Flexible Hose For $\frac{1}{2}$" hose connection: Fit adaptor by pressing on firmly. Note: Once fitted adaptors cannot be removed. For 15mm Quick Connect Plumbing: Use WX1511B (Stem Adaptor 11 mm-15 mm). Connect WX1504 (15 mm Equal Straight) and then 15 mm Plumbing For 12mm Quick Connect Plumbing: Use Whale part: WU1211		
Material In Contact with Liquid	Pump Body: ABS, Seals: Nitrile®, Strainer: Polypropylene, Impeller: PBT, Cable: PVC		

Discharge Head	Flow Rate Per Minute Current Draw		
	0 m (0 ft)	13.2 ltrs	13.2 ltrs
3.6 amps		3.8 amps	3.8 amps
1m (3 ft)	11.75 ltrs	11.75 ltrs	14.75 ltrs
	3.3 amps	1.6 amps	3.7 amps
3m (9 ft)	9.75 ltrs	9.75 ltrs	12.75 ltrs
	2.9 amps	1.45 amps	3.5 amps

Note: Pump performance will depend on the plumbing system and restrictions on outlets in your installation. Premium and High Flow models come with 3/8" (10mm) hose connection. They can be adapted for 1/2" (13mm) hose by pushing on the 1/2" adaptors supplied with the pump. Whale's policy is one of continuous improvement and we reserve the right to change specifications without prior notice.

2. PRINCIPLES OF OPERATION

To the fitter

Check that the product is suitable for the intended application, follow these installation instructions and ensure all relevant personnel read the points listed below. Also ensure that these operating instructions are passed on to the end user.

To the user

Read the points listed below before installation and use of equipment.

3. APPLICATION

- These pumps are designed to pump clean cold freshwater in low voltage applications such as a leisure boat or recreational vehicle.
- Submersible models designed to be run fully submerged in water, another In-Line Booster pump is designed to be run in the pipe line between the water supply and the outlet.
- The pumps are rated for intermittent use only- maximum continuous operation should not exceed 15 minutes.

4. WARNINGS

- Ensure that a system of safe working practice is applied to installation, use and maintenance.
- Always disconnect power sources before installing or making connections.
- Wiring must comply with applicable electrical standards and include a 5 Amp automotive fuse for each pump. Improper wiring can cause a fire resulting in injury or death. Suggested wiring information is given as a guide only.
- Please note that incorrect installation may invalidate the warranty.
- Not suitable for petrol, low flash point liquids and aggressive chemicals. This pump **must not** be used for pumping petrol or any highly inflammable or corrosive liquids.
- Do not use the pump in water temperatures above 40°C (100°F).
- For submersible pump models it is best to stand the pump vertically in the tank.
- Contact Whale@ Support on 028 9127 0531 for additional advice on this product or installation.

5. INSTALLATION - ALL MODELS

1. **Please note** - The manufacturer cannot be held responsible for claims arising from incorrect installation, unauthorised modification or misuse of this product.
2. Before installing, ensure that the system is fully drained before starting the installation. To do this open and close all outlets to expel water and air and check that the submersible pump can reach the bottom of the water container.

SUBMERSIBLE PUMP INSTALLATION - See Fig. A

For plumbing connections see Specification table above. The pump outlet **MUST** be higher than the inlet.

- Must be installed in one of the following ways:-
1. With a floor pump - Fig. A1
 2. With a microswitchwed tap/faucet - Fig. A2 and Fig. A3
 3. With a pressure switch system - Fig. A4

Note: Where there is a long run of pipe between the pump and the faucet, it is helpful to insert a check valve (FV1227) in the pipe close to the faucet.

Step 1
Switch off the 12V d.c. supply

Step 2
Connect to an appropriate 12 or 24 Volt power supply and switch.

- Brown wire to positive
- Blue wire to negative
- Each pump protected with the appropriate fuse

Step 3

- Fit the required length of hose to the pump and then fully immerse the pump in the water container.
- To avoid entry of air or water leaks it is important that all hose connections (to pump, tank, water heater and taps / faucets) are securely fastened.
- If using with a Whale In-Line Pressure Switch, (WU7207) an isolator switch **must be** installed to protect the pump from accidental switch on when the system is not in use. The pressure switch **must be** fitted into the pipework in close proximity to the pump and before any other fittings (see Fig. A).

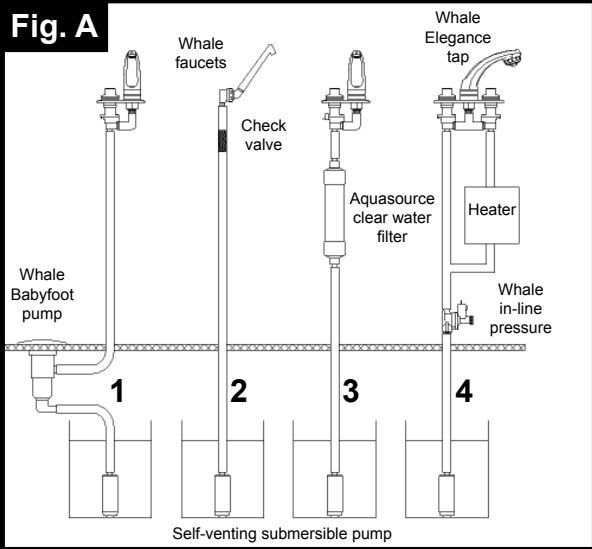
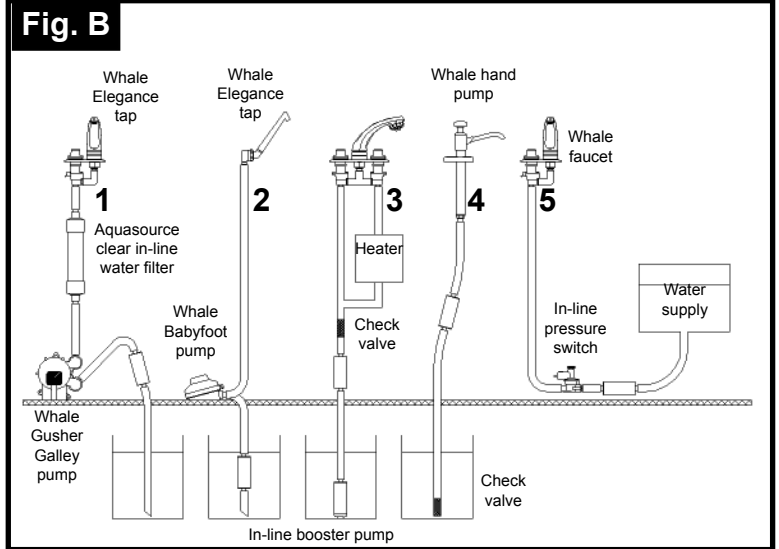
IN-LINE INSTALLATION - See Fig. B

- For plumbing connections see Specification table above
 - Must be installed in one of the following ways:-
1. With a foot operated pump (Fig. B1 and Fig. B2). Position the Pump in the suction pipe between the foot pump and the water tank, not between the foot pump and faucet.
 2. In-line to boost a submersible pump (Fig. B3).
 3. With a hand operated pump (Fig. B4).
 4. In a pressurized system (Fig. B5).
- Where there is a long run of pipe between the pump and the faucet, it is helpful to insert a check valve (FV1227) in the pipe close to the faucet.

6. OPERATION

Priming the pump.

- When fully immersed in water Submersible pumps are primed and give instant water delivery.
- In-Line Booster pumps **must be** primed using either by gravity (as in Fig. B5) or operating a hand pump (Fig. B4) or foot pump (Fig. B1 and Fig. B2) until full water flow from the outlet.
 - o Once primed the pump is ready for use and should remain primed for repeated use.
 - o As an additional safeguard, a Whale check valve (FV1227) can be inserted in the suction pipe. (Fig. A2 / Fig. B3) re-priming should only be necessary when the water supply has been completely drained and the tank is refilled.
 - o If using a Whale Tiptoe pump, leave the plunger in the "locked down" position whilst operating. Ensure the isolation switch is on. Open the tap / pump should start.

Fig. A**Fig. B****Notes:**

- * Do not run the pump dry
- * Do not use the pump in water temperature above 40°C (100°F)

7. MAINTENANCE

- * Submersible pump strainers should be inspected and cleaned at frequent intervals to ensure the water supply is free of debris especially from tanks will reduce the likelihood of pump clog. The pumps are sealed units and do not require further maintenance.
- * Winterizing: To protect against damage as a result of freezing, drain the entire water system.

8. HELPFUL HINTS

- * For Submersibles - Before switching on, place the pump in water and shake for a few seconds to release trapped air. This will ensure successful priming and should be repeated when the water tank is refilled.
- * For the Whale In-Line Booster pump - Before switching on check that there is water in the tank and that the system has been primed.
- * Check that all hose connections are secure and airtight.
- * Check that the power supply is at 12 or 24 volts depending on the model. Reduced voltage (i.e. a weak battery) or wire of a thickness of less than AWG #16 may produce a voltage drop along the cable and reduced performance.
- * Ensure that there is adequate ventilation in the water tank to prevent a vacuum building up, causing restricted water flow. Any tank or cap fitting must have a ventilation hole of at least $\frac{3}{16}$ " (5mm) diameter.
- * Check that the pump's polarity is correct i.e. brown to '+' and blue to '-'.
- * Store in a clean dry place at ambient temperature when not in use.