



## Smartflo Freshwater Pressure Pump

### Installation and Operation Manual

The following guidelines should be followed to achieve optimum pump performance.

#### Mounting Location

1. Locate in a dry position with adequate ventilation and no more than 3 metres from the tank. Ensure the pump cannot be submerged in water in normal use and not likely to be sprayed.
2. Pump can be mounted horizontally or vertically (we recommend the pump head is below motor level).
3. Feet positions are adjustable to allow replacement of other pump types. Use No. 8 stainless steel screws to fasten pump to solid surface, which supports the pump securely.

#### Electrical

1. Use specified fuse, as indicated on motor label, in the circuit.
2. Connect red wire to positive, black wire to negative and white wire to pump running light - recommended wire size is 2.5mm<sup>2</sup> (AWG 13).
3. Fit an isolating switch with adequate current rating on the positive side of the supply.
4. To prevent the pump running continuously, turn off at isolating switch when vehicle is left unattended or water supply has been allowed to empty.

#### Plumbing

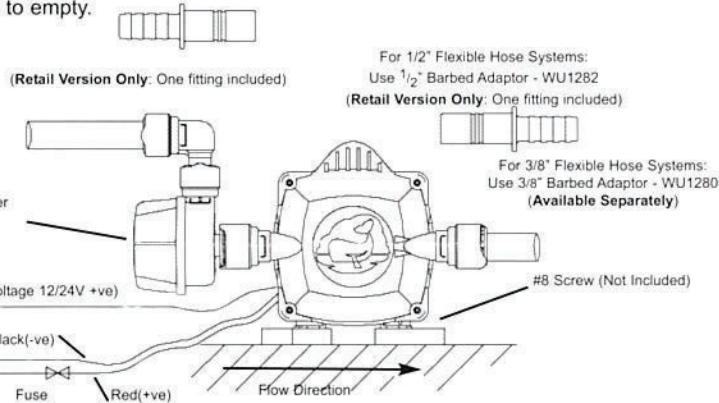
1. Ensure that the strainer provided is attached to the pump head inlet (as shown below).
2. Check pump flow direction (as indicated on pump body).
3. Never use pipe sealant or sealing tapes on threaded adaptors, as these may enter the pump and cause failure.

#### Winterizing

If water is allowed to freeze in the system, serious damage to the pipework and pump may occur. To best avoid this damage, completely drain the water system.

1. Drain the tank either using the pump or a drain valve.
2. Open all the faucets (including drain valve) and allow pump to purge the water from the system, then turn the pump off.
3. Disconnect the pump and turn on to purge into an adequate basin. Only reconnect the pump when the water system it is to be used.
4. Remember to leave all faucets including showers open to avoid any damage.

#### AK1318 - Replacement Head Service Kit



#### Service Kits

AK1317- Microswitch Service Kit

AK1320- Replacement Strainer

To ensure the correct service kit, contact our service desk - Email: [info@whalepumps.com](mailto:info@whalepumps.com).

#### Declaration of Conformity

We herewith declare that the Smartflo Pump range conforms to the requirements of the EMC directive 89/336/EEC, and to the CE Marking Directive 93/68/EEC

#### Warranty

The following does not affect your statutory rights. Whale Smartflo pumps are guaranteed for two years from date of purchase. This covers defects in materials and workmanship provided the pump case is not opened or the pump otherwise abused. If the unit proves faulty return it to your supplier with proof of purchase date. The Quick Connect pump head is designed for direct connection to Whale Quick Connect 12mm Semi-Rigid tubing only. All other systems must use adaptors.



MUNSTER SIMMS ENGINEERING LIMITED AND WHALE WATER SYSTEMS INC  
(a subsidiary of Munster Simms Engineering Limited) ("Company")

### STATEMENT OF LIMITED WARRANTY

The products manufactured and supplied by the Company ("Products"), are warranted to be free from material defects in design, workmanship and material under normal use ("Defects") for (unless otherwise extended in advance in writing by the Company) a period of 12 months from date of purchase, save that this warranty shall not apply where the Defect is attributable to defective materials supplied by third parties. In such event, the only remedy of the buyer of the Products ("Buyer") will be against that third party.

This warranty applies only to Products that are properly installed and used in accordance with all oral and written maintenance and operation instructions provided by the Company. The Company shall not be liable for a breach of any of the warranties in this Statement of Limited Warranty if the Buyer makes any further use of the Products after giving the Company notice of any Defect or the Buyer alters or repairs such Products without the written consent of the Company. Products that have been disassembled or modified (without prior written approval of the Company), are not covered by this warranty.

All Products are covered by a 1 year limited warranty (detailed below) from (unless otherwise extended in advance in writing by the Company) date of purchase ("Standard Warranty"). In addition to the Standard Warranty, some individual Products are covered by a further warranty, as detailed in Table 1 below ("Additional Warranty").

In the event that any of the warranties offered by the Company are breached, the Company shall (at its discretion) repair, replace or issue a spares kit for the defective Product subject to prior examination at Company premises. If the Company complies with this paragraph, it shall have no further liability for a breach of the warranties in respect of such Products. Adjustment or replacement of defective parts made under this warranty will not extend the warranty period applicable either under the Standard Warranty and/or the Additional Warranty.

The Company shall not bear any costs of removal, installation, transportation, or other charges that may arise in connection with a warranty claim by the Buyer. Such costs shall be the Buyer's sole responsibility.

No claim in respect of defective Products will be valid unless the alleged defective Products are returned at the Buyer's expense to the Company for inspection, together with proof of purchase. Non-stock/special order items are non-returnable by the Buyer in any circumstances, and this warranty does not apply to prototype models.

#### EXCLUSIONS:

The Company shall not be liable for any indirect loss or for any special, incidental, punitive or consequential damages suffered by the Buyer and/or any third party, whether this loss arises from breach of a duty in contract or tort or breach of a statutory duty or in any other way, including, without limitation, loss arising from the negligence, default, breach of duty, non-delivery, delay in delivery or defects or errors in the work undertaken by the Company pursuant to the terms of this Statement of Limited Warranty or in connection with any other claim arising in connection with manufacture and/or supply of the Products.

In particular, the Company shall not be liable (without limitation) for:

- Loss of profits, increased production costs or other economic injury or loss;
- Loss of contracts or opportunity; and/or
- (insofar as is permitted by applicable law) damage to property of the Buyer or any third party.

The Company shall under no circumstances be liable for any breach of its obligations hereunder and/or



## Warranty Continued

The manufacturer retains the right to decide whether to repair or replace the unit. Warranty shall be void if motor housing is abused or pump strainer not present. The manufacturer cannot be held responsible for claims arising from incorrect installation, unauthorised modification or misuse of the product.

## Trouble Shooting

Fault	Cause	Solution
Pump does not run	No power to pump	Check power supply Attach leads/clean connections Check faucet microswitch if present
	Fuse has blown	Replace fuse- Do not exceed recommended fuse size
	Blockage in pipework	Check pipework for kinks
Pump runs but no water appears	No water getting to pump	Check that water tank is not empty Check strainer is not blocked Check all connections from tank to inlet of pump are secure - any air leaks will prevent prime.
	Water leaking at outlet side of pump	Check pipework/fittings for leaks and repair check system drain plugs are closed
Pump runs but will not switch off	Water leaking at outlet side of pump	Check pipework/fittings for leaks and repair Check system drain plugs are closed
	No water	Check water supply level
Pump cycles on and off periodically when all the taps are closed. (Normal with a partially opened tap)	Water leaking at outlet side of pump	Check pipework/fittings for leaks and repair Check system drain plugs are closed
Pump cycles on and off excessively when tap/s are open	Excessive back pressure	Check pipework for kinks and filters etc. are clear Check shower rose/taps for blockage and repair
Noisy operation	Pump drawing air	see cause 'No water getting to pump' (see above)
	Noise created by vibration	Check pump is secured to solid surface Check pump body is not in contact with hard surfaces Locate away from interfering surfaces Check pipework is securely supported
Low flow	Bore of pipework connection too small	8.5mm minimum bore recommended Check for kinks in pipework Check pipework is not blocked
	Power supply to the pump	Check power supply to pump uses correct gauge wire (2.5mm <sup>2</sup> /AWG 13) to give full voltage at pump. Check battery is not discharged
	Pipework / connections crushed due to overtightened jubilee clips	Replace damaged connections
	Pump too far from water tank	Pump should be situated beside water tank
	Water leaking at outlet side of pump	Check pipework/fittings for leaks and repair Check system drain plugs are closed
	Pump strainer clogged	Remove clear lid, rinse and replace to main strainer body (retain strainer mesh to lid)

### Munster Simms Engineering Ltd.

Old Belfast Road, Bangor, N. Ireland BT19 1LT Tel: +44 (0)28 9127 0531 Fax: +44 (0)28 9146 6421

Web: www.whalepumps.com Email: info@whalepumps.com

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under any contract governing sale and purchase of the Products ("Contract") resulting from causes beyond its control including but not limited to fires, strikes, lockouts, insurrection or riots, terrorism or civil disorder, embargoes, wrecks or delays in transportation, requirements or regulations of any governmental authority, tempest, earthquake or other natural disaster, flood, bursting or overflowing of water tanks, failure or shortage of power, fuel or other utilities, or loss of data and/or communications due to causes such as those referred to in this paragraph.

This statement sets out the Company's entire liability in respect of the Products and the Company's liability under this statement shall be in lieu of all other warranties, conditions, terms and liabilities, express or implied, statutory or otherwise howsoever except any implied by law which cannot be excluded.

All warranties, conditions and other terms implied by statute or common law (save for the conditions implied by section 12 of the Sale of Goods Act 1979) are, to the fullest extent permitted by law, excluded from the Contract.

Subject to the remaining provisions of this Statement of Limited Warranty, the Company's total liability in contract, tort (including negligence or breach of statutory duty), misrepresentation, restitution or otherwise, arising in connection with the performance or contemplated performance of the Contract and supply of the Products shall be limited to the Contract price.

Nothing in this Statement of Limited Warranty shall operate so as to exclude or restrict the Company's liability for death or personal injury caused by its negligence. The Company shall **NOT** be liable for any condition, warranty or representation made by a distributor or other person acting on behalf of the Company unless expressly confirmed by the Company in writing.

This Statement of Limited Warranty shall be governed and construed in accordance with Northern Irish law and all disputes arising in connection hereto shall be submitted to the exclusive jurisdiction of the Northern Irish Courts.

Table 1:

Product type	2 years	3 years	5 years	10 years
Universal Series Pump	✓			
Chromed metal taps (TT)	✓			
Smartbail Bilge Pump		✓		
Orca Bilge Pump *		✓		
Supersub Bilge Pump		✓		
Space Heater / Water Heater		✓		
Manual Bilge Pump			✓	
Manual Freshwater Pump			✓	
Manual Toilet Pump			✓	
Quick Connect Plumbing fittings				✓
WhaleX tubing				✓

\* Applies to BE: 0500, 0950, 1450 & 1454 only. All other Orca variants have a 1 year warranty.

The period of such Additional Warranty shall commence automatically the date the Standard Warranty expires.

Note that these periods may be further enhanced through special offers, or revisions. Please see your product documentation for details.

### DISCLAIMER

All Products are rated and appropriate for use with water unless otherwise specified by the Company. Compatibility and suitability for other liquids should be verified in writing by the Company prior to such use. All specification information on Products included in Product literature is based on tests using clean cold water unless otherwise specified. Any performance / specification figures shown have been calculated using standard testing procedures. Where maximum output is stated, such maximum output refers to pumps acting at zero lift and zero head. Actual performance may vary depending on the application, installation and environmental factors. Neither the accuracy nor completeness of the information contained in any Product brochure is guaranteed by the Company and may be subject to change at its sole discretion. The Company may, at its sole discretion, change the technical performance, dimensions or appearance of any of its Products without prior notification to purchasers. The Company shall not be liable to a purchaser for any indirect or consequential loss or damage (whether for loss of profit, loss of business, depletion of goodwill or otherwise), costs, expenses or other claims for consequential compensation whatsoever (howsoever caused) which arise out of or in connection with the use of a Product. Where dimensions are stated, such dimensions are for guidance only. Inch measurements are conversions from millimetre dimensions and are shown to the nearest 1/16". US gallons volumes are conversions from litres and are also shown for guidance purposes only to the nearest 1/16. Please contact the Company directly if precise measurements are required.

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