



## INSTALLATION & USER INSTRUCTIONS

Thank you for purchasing this Whale® product.

For over 60 years Whale® has led the way in the design and manufacturer of water and waste systems including:- plumbing, faucets, showers and pumps for low voltage applications. The company and its products have built a reputation for quality, reliability and innovation backed up by excellent customer service.

For information on our full product range visit: [www.whalepumps.com](http://www.whalepumps.com)

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### Read the following carefully before installation

#### 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. The manufacturer cannot be held responsible for claims arising from incorrect installation, unauthorised modification or misuse of the product.

#### To the User:

Read the following instructions carefully.

## 1. PRINCIPLES OF OPERATION

This bilge pump is designed to exhaust standing water only. The double acting pump chamber design of the Gusher® 30 ensures highly efficient throughput with an easy pumping action. Full even strokes will obtain the best results. The detachable handle is fitted with a lanyard and should be safely secured in a location near to the pump.

## 2. SPECIFICATION

Model	On Deck	On Bulkhead	Thru Deck Only
Product Code	BP3000	BP3010	BP3020
Hose Connections	38 mm (1½") Hose Connections		
Weight	5.05 kg (11.1 lbs)		5.9 kg (13lbs)
Materials	Pump Body: Marine Grade LM6 Aluminium Alloy (epoxy coated) Diaphragm: Neoprene, Buna N (Nitrile), Brushes: Acetal, Handwheels: Nylon, Fasteners: Stainless Steel		
Materials In Contact With Fluid	Marine Grade LM6 Aluminium Alloy (epoxy coated) Buna N (Nitrile), Neoprene, Stainless Steel		
Service Kit	AK3051 - Service Kit for Gusher® 30 (Neoprene) AK3050 - Service Kit for Gusher® 30 (Buna N (Nitrile)) Contains: Diaphragms, Valves, Gasket AK3020 - Thru-Deck Conversion Kit (for BP3000 includes DP3804 and bridge section) AS3725 - Gaiter Kit for use with BP3020 AS3016 - Handwheel / Stud Kit AS3015 - Lever Assembly		
Accessories	AS3095 Spare Handle DP3804 Deckplate, AS3020 Deckplate Conversion Kit		
Maximum Suction Lift	4 m (13.5ft)		
Maximum Discharge Head	4 m (13.5ft)		
45 Strokes per Minute	75 ltrs (20 US gals)	71 ltrs (19 US gals)	71 ltrs (19 US gals)
70 Strokes per Minute	117 ltrs (31 US gals)	111 ltrs (29 US gals)	111 ltrs (29 US gals)

## 3. APPLICATION

This bilge pump is suitable as a primary bilge pump on boats equal to or greater than 12m (40ft). Output capacity depends on installation, conditions during use, and pumping rate. Users should be aware that capacity may not be sufficient to cope with rapid influx of water. If it is intended for any other purpose or for use with any other liquid, it is the user's responsibility to ensure that the pump is suitable for the intended use and, in particular, that the materials are fully compatible with the liquids to be used.

This Gusher® 30 pump has been fitted with Buna N (Nitrile) diaphragms. These are for use with pumps that are used in an application where diesel is present and can be identified by a BLUE DOT painted on their surface.

The spare diaphragms enclosed with your Gusher® 30 pump are for use in installations where the pump is exposed to UV sunlight, are manufactured from Neoprene. Ideal for use when the pump is mounted on an open deck. **NOTE:** Neoprene diaphragms do not have any colour markings on them.

See page 5 CHANGING THE DIAPHRAGM for fitting them to the Gusher® 30 pump.

## 4. WARNINGS



- The pump is designed to evacuate standing bilge water only. Bilge pump capacities may not be sufficient to prevent flooding from rapid accumulation of water due to storms, rough weather and/ or rapid leaks created by hull damage and or unsafe navigational conditions.
- Fitting an inlet strainer will ensure the maximum efficiency of the pump.
- This pump **must not** be mounted below the water line when connected to an intake or outlet, unless the system has a vented loop (next page see Fig 3 - Typical Installation Diagram).
- **Not** suitable for pumping flammable liquids, diesel, chemicals etc. Suitable for bilge water only.

- With all applications, it is important that a system of safe working practice is applied to installation, use and maintenance. Ensure the waste water system is drained before installation. In order to securely fasten the unit, ensure that the mounting surface is a minimum thickness of 18mm ( $\frac{3}{4}$ " ) as shown in Fig. 4
- **NOTE: Do not** screw directly to the hull - **must be** mounted on a bulkhead or on an additional board.

## 5. PARTS LIST

### BP3000 / BP3010 / BP3020

1 x Gusher® 30 pump

1 x Stainless steel handle

AK3020 - Thru-Deck Conversion Kit for all 3 models (BP3000 / BP3010 / BP3020)

(BP3000 includes DP3804 and Underdeck Bracket)

## 6. OPTIONAL EXTRAS

SF5425 - 1½" (38mm) Plastic Skinfitting

SB5865 - Side Entry Strainer / Strumbox

SB4222 - Top Entry Strainer / Strumbox

DV5606 - 1½" (38mm) 2 Way Diverter Valve

AK3051 - Service Kit (contains Neoprene diaphragms, valves and gasket)

AK3050 - Service Kit (contains Buna N (Nitrile) diaphragms, valves and gasket)

AS3015 - Lever Assembly Service Kit

AS3725 - Gaiter Kit for BP3020

AS3016 - Handwheel/Stud Kit

YP6114 - 1½" (38mm) Y Piece

AS3020 - Deckplate Conversion Kit

AS3095 - Spare Handle

DP3804 - Metal Deckplate & Lid

## 7. INSTALLATION

Fig. 1 Thru-deck installation



Fig. 2 Incorrect installation

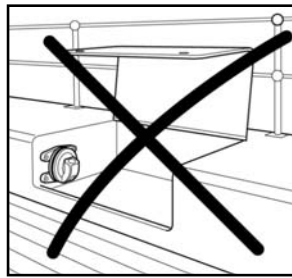
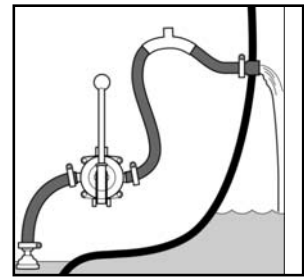


Fig 3 - Typical installation diagram



**Please note that incorrect installation may invalidate the warranty.**

The Gusher® 30 is designed for mounting on deck or thru-deck (BP3000), or on deck (BP3010) or through bulkhead (BP3020).



N.B. The pump **must be** installed above the waterline.

Choose a position to mount the pump that is dry and away from standing water and is free from obstacles, where the pump can be operated efficiently and comfortably. Ensure that the pump is installed to allow easy access for servicing.

Avoid installation locations which require a cockpit locker to be opened in order to operate the pump.

To minimise pumping effort, site the pump halfway (in height) between the strumbox / strainer and hull outlet. Mount in a position with the shortest run lengths possible.

To ensure good priming and flow, avoid sharp bends in pipework and fit a Whale strumbox / strainer (Part number SB4222 or SB5865 (incorporating a non-return valve)) in order to prevent the end of the hose sucking against a flat surface and therefore allowing the water level to be reduced to a minimum.

### 7.A. For Mounting On Deck/Bulkhead:

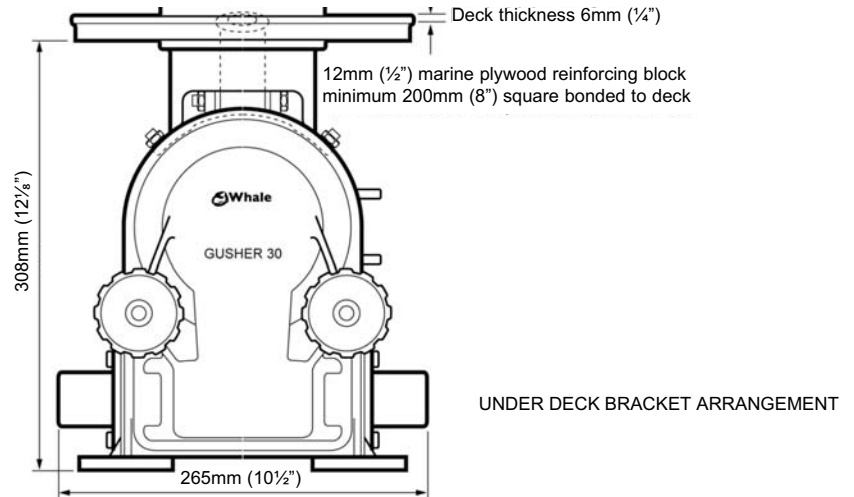
1. Use pump as a template, mark off and drill four ¼" (6mm) holes. (Note. if replacing a Gusher® 25, the mounting holes are the same).
2. Secure the pump with 5/16" (8mm) bolts.
3. Attach either 1½" (38mm) smooth bore reinforced hose with stainless steel worm drive hose clips. Ensure tight connections. **NOTE: Do not** overtighten screws or hoseclips.
4. The outlet **must be** mounted above the water line and anti-syphon loops **must be** fitted where applicable.

5. Check the installation for air leaks, correct priming and discharge.

### 7.B. For Mounting Underdeck or Thru-Bulkhead:

1. Using template, mark off the four holes for the deck-plate and cut out the hole for the pump handle.
2. The deck thickness **must be** a minimum of 18mm (¾"). For thinner decks use a backing plate 8" (200mm) square of suitable thickness so that the backing plate plus the deck is at least the minimum thickness (stated above). Bond this to the deck (see Fig. 4).
3. Position pump under deck and check flow direction. Work the rubber gaiter up through the hole until its flange rests on the deck. Secure the six ¼" (6mm) countersunk mounting screws provided.
4. As points 3 - 5 of Section 7.A.

Fig. 4 Underdeck installation



## 8. PLUMBING

Use 38mm (1½") smooth bore reinforced pipework to connect to the pump.

Secure the pipework on inlet and outlet with worm drive hose clip. This Whale Gusher® 30 is designed to only require minimal maintenance.

## 9. MAINTENANCE

**WARNING:** Before servicing pump, drain water from the system.

### Inspection:

The diaphragms and inlet valves are held in place by the groove in the pump body and cover. Following inspection, ensure that they are seated properly in the grooves before tightening the covers in place. Regular inspection of the pump is recommended. Access to the pump chamber is quick and easy, requiring no tools. Rubber components **must be** replaced if worn or every three years regardless of condition.

During periodic shipboard inspections, the bilge pump **must be** visually inspected to confirm parts are in good condition, especially rubber parts and mounting arrangements. The pump should then be operated to show that it pumps water efficiently.

### Annual Checks

- Whale advises that the boat's plumbing system is checked annually for leaks and obstructions.

### Optimal Performance

- Ensure this product is clear of debris.

Replacement components and Service Kits (AK3051 (Neoprene) and AK3050 (Buna N (Nitrile))) are available from your local marine retailer. It is recommended a Whale Service Kit is kept on-board at all times.

### Changing The Inlet Valves

1. Unscrew the two hand wheels and remove the cover to expose the diaphragm and valves.
2. Remove the inlet valve.
3. Replace with new valve and make sure it is sealed properly before replacing the cover.
4. Repeat for the other side.

### Changing The Outlet Valves

1. Remove both covers.
2. Release 4 screws on outlet and inlet ports, remove ports and gaskets.
3. The outlet valves are moulded as 1 unit. Loosen the 2 screws in the centre of the valves and remove the valves.

4. Keep valve retainers (one located in inlet valve chamber and the other located between the outlet valves).
5. Note that the 2 holes on the valves are not evenly spread. Match these with the large holes on the valve retainer.
6. Pass the 2 screws through the large holes in the valve retainer and valves, then place resulting assembly in outlet chamber - located on side of pump.
7. Position valves in the centre of the chamber and pass screws through the pump body.
8. Position second valve retainer in the inlet chamber so the screws are aligned with the smaller holes, and then tighten the screws.
9. Reassemble ports and covers.

### Changing the Diaphragm

1. Remove cover and remove clamping screw and plates to release the diaphragms.
2. Place new diaphragm in position between the two clamping plates, attach clamping screw and tighten.
3. Repeat for the other side.

### To convert a deck mounting model (BP3000) to a bulkhead model (BP3010)

1. Remove covers and diaphragms.
2. Remove the fulcrum bolt by unscrewing the nyloc nut.
3. Remove the lever assembly and re-fit through the alternative aperture in the pump body.
4. Reposition fulcrum bolt, nyloc nut and tighten.
5. Reassemble diaphragms and covers.

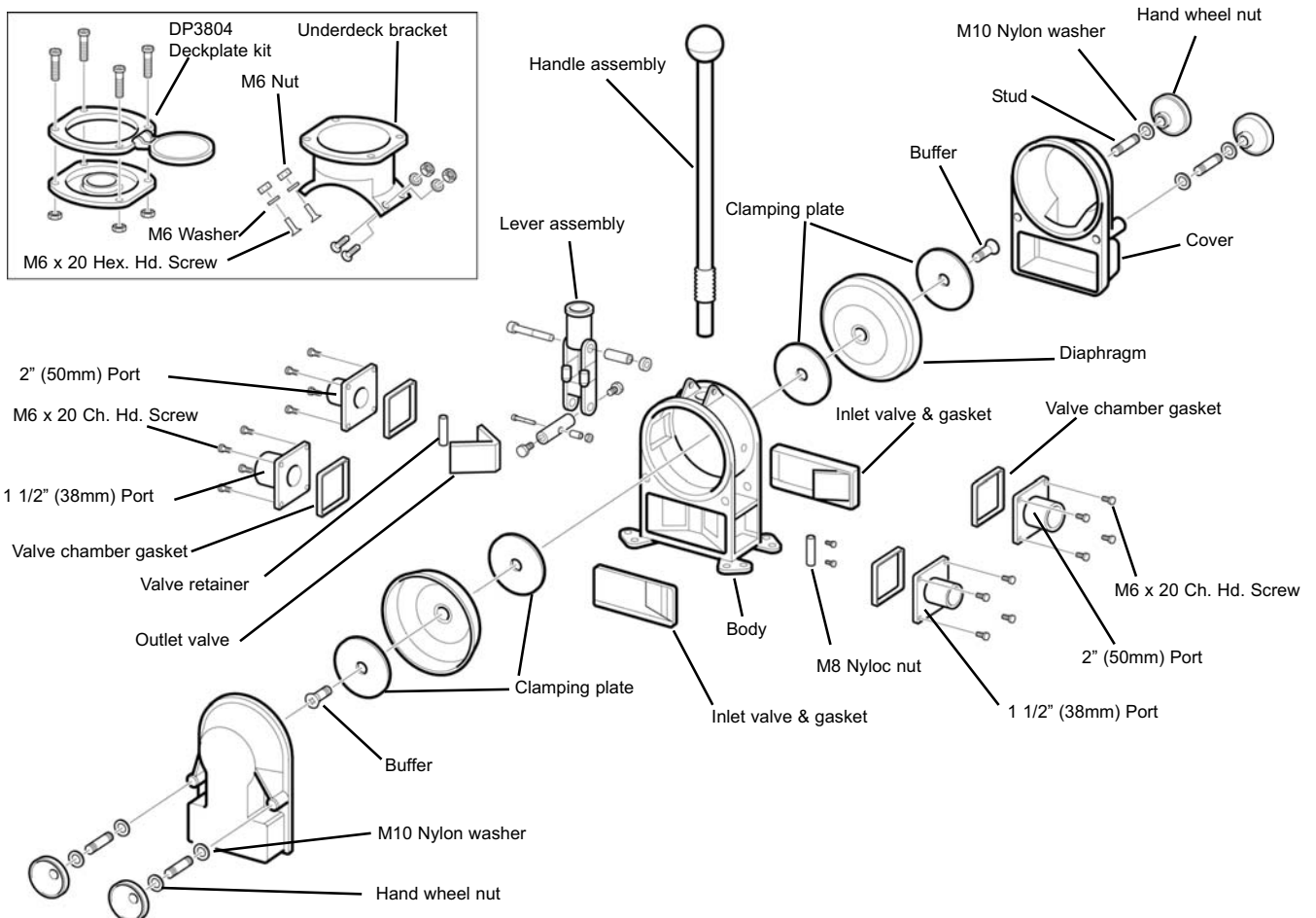


Fig. 5 Exploded Diagram

## 10. TROUBLE SHOOTING

Fails to prime	Inlet hose fault	Check inlet hose connection is airtight, free from blockages and does not collapse during suction stroke
	Diaphragm failure	If damaged replace all rubber parts (Part No. AK3051 Neoprene & AK3050 Buna N (Nitrile))
	Debris in the body of the pump	May not prevent its operation, but <b>must be</b> removed to prevent damage
	Inlet and/or outlet valve failure	Inspect and remove any debris. If damaged replace (Part No. AK3051 Neoprene & AK3050 Buna N (Nitrile))

## 11. WINTERISING

**NOTE:** Annually at the end of the season, fully drain all water in the pipework and pump chamber. Whale® cannot guarantee warranty if the system is not fully drained for winterising.

## 12. SERVICE SUPPORT DETAILS

Service kits available: AK3051 Neoprene & AK3050 Buna N (Nitrile) (Full Spare Kits) and AS3095 (Spare Handle etc). For installation or service advice please contact Whale® Customer Support:

Tel: +44 (0)28 9127 0531  
Email: [info@whalepumps.com](mailto:info@whalepumps.com)  
[www.whalepumps.com](http://www.whalepumps.com)

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[www.whalepumps.com](http://www.whalepumps.com)

## 13. DECLARATION OF CONFORMITY, STANDARDS AND APPROVALS

This product complies with all relevant European directives and standards. Please contact Whale® if further details are required

### Manufacturer's Declaration

We hereby declare, under our sole responsibility, that the enclosed equipment complies the international standard EN ISO 15083. Also approved by Lloyds (MSCA) and USCG for use in lifeboats and rescue boats or as an emergency fire pump in accordance with BS ISO 18813 Sections 4.3.2.2 and 4.3.2.3.



Richard Bovill  
Engineering Director

Lloyds Register approved.

## 14. PATENTS AND TRADEMARKS

WHALE® and GUSHER® are registered trademarks of Munster Simms Engineering Limited, Bangor, Northern Ireland trading as Whale.

## 15. WARRANTY

This Whale® product is covered by a 5 year warranty. Please see the enclosed document for details of our Statement of Limited Warranty.

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