

# Gusher Titan

## Tough and Lightweight Polypropylene Models

**GUSHER TITAN** combines powerful performance and lightweight design



Thru deck/Bulkhead  
BP4410



On deck  
BP4402

Proven design  
- Tough yet lightweight

Easy to use  
ball handle



Multiple installation  
- removable clamping ring  
for head rotation

Simple plumbing  
- 38mm (1½")  
smooth hose connections

Product code: see table

## Features and Benefits

Whale's tough lightweight proven pump. A design that has been tried tested and trusted by sailors for decades.

- High flow rate: 105 ltrs (28 US gals) per minute
- Quick maintenance
  - Clamp ring easily removed for pump head rotation
- Tough, lightweight proven design
- 2 mounting options -bulkhead and thru deck models
- Suitable for use on boats over 12 m (40 ft)

## 5 Year Warranty

### Tips

It is important to ensure that a vented anti-syphon loop is incorporated in the system

## Awards and Accreditations

- Suitable as a primary bilge pump on boats equal to or greater than 12 m (40ft) accordance with ISO15083

## COMPLETE YOUR SYSTEM

Whale high quality bilge accessories including non-return valves, elbows and Y pieces see page 48 - 51



## Product Information

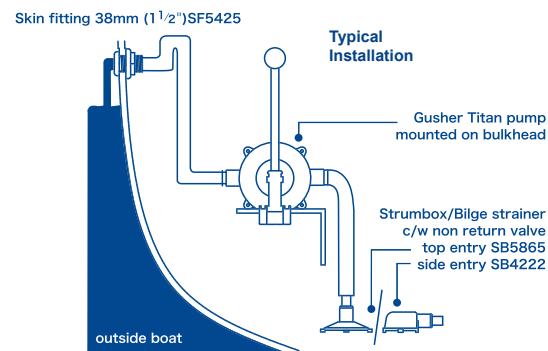
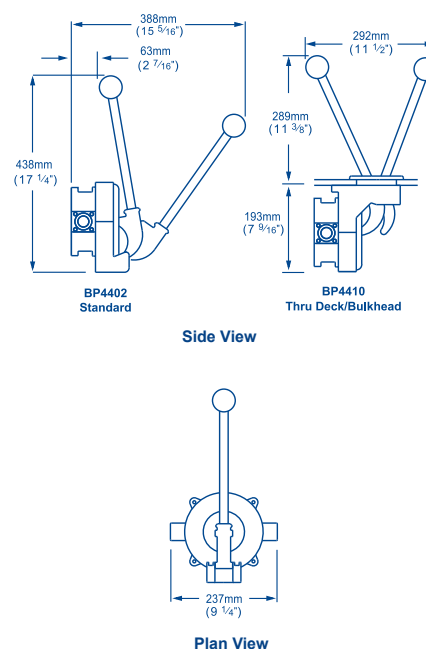
### Model Specifications

| Model                           | On Deck   | Thru Deck / Bulkhead |
|---------------------------------|---|----------------------|
| Product Code                    | BP4402  | BP4410               |
| Weight                          | 1.5 kg (3.3 lbs)  | 1.85 kg (4.1 lbs)    |
| Hose Connections                | 38 mm (1½") Smooth Hose Connections   |                      |
| Materials                       | Pump Body: Glass-filled Polypropylene, Clamp Ring: Acetal<br>Diaphragm and Valves: Neoprene, (Nitrile® option available)<br>Operating Lever: Glass-filled Nylon, Gaiter: EPDM<br>Fasteners: Stainless Steel   |                      |
| Materials In Contact With Fluid | Glass-filled Polypropylene, Acetal, Neoprene, Nitrile®  |                      |
| Service Kits                    | <b>AK4400 - Neoprene Parts</b><br><b>AK4419 - Nitrile® Parts for Oil and Diesel</b><br>Contains: Diaphragm, Valves, Seals<br><b>AK4400 - Whale Gusher Titan Neoprene</b><br>(for on deck installations) - diaphragm, valves and fixings<br><b>AK4419 - Whale Gusher Titan Nitrile®</b><br>(for below deck installations) - diaphragm, valves and fixings<br><b>AS4406 - Whale Gusher Titan - Standard Lever Kit</b><br><b>AS4407 - Whale Gusher Titan - Standard Clamping Ring Kit</b><br><b>AS4408 - Whale Gusher Titan- Operating Lever U/Deck</b><br><b>AS4409 - Whale Gusher Titan - UnderDeck Clamping Ring Kit</b><br><b>AS4412 - Whale Gusher Titan - Clamping Plate Kit</b><br><b>AS3725 - Gaiter Kit For Deckplates</b><br>(for underdeck models - Gusher 30 and 10, Titan, Urchin, MarkV) |                      |
| Accessories                     | <b>DP8904 - Deck Plate Kit for BP4410 only</b><br><b>AS4405 - Spare Handle</b>  |                      |
| Maximum Suction Lift            | 4 m (13.5 ft)   |                      |
| Maximum Discharge Head          | 4 m (13.5 ft)   |                      |

### Performance Data

|                       | BP4402 / BP4410       | BP4402 / BP4410      |
|-----------------------|-----------------------|----------------------|
| Suction Lift          | 1 m (3 ft)            | 2 m (6 ft)           |
| Discharge Head        | 0.5 m (1.5 ft)        | 0.5 m (1.5 ft)       |
| 45 Strokes per Minute | 67 ltrs (18 US gals)  | 65 ltrs (17 US gals) |
| 70 Strokes per Minute | 105 ltrs (28 US gals) | 98 ltrs (26 US gals) |

Note: These specifications are retail items only.  
For details of our bulk pack range for boat builders and wholesalers - contact Whale Support.



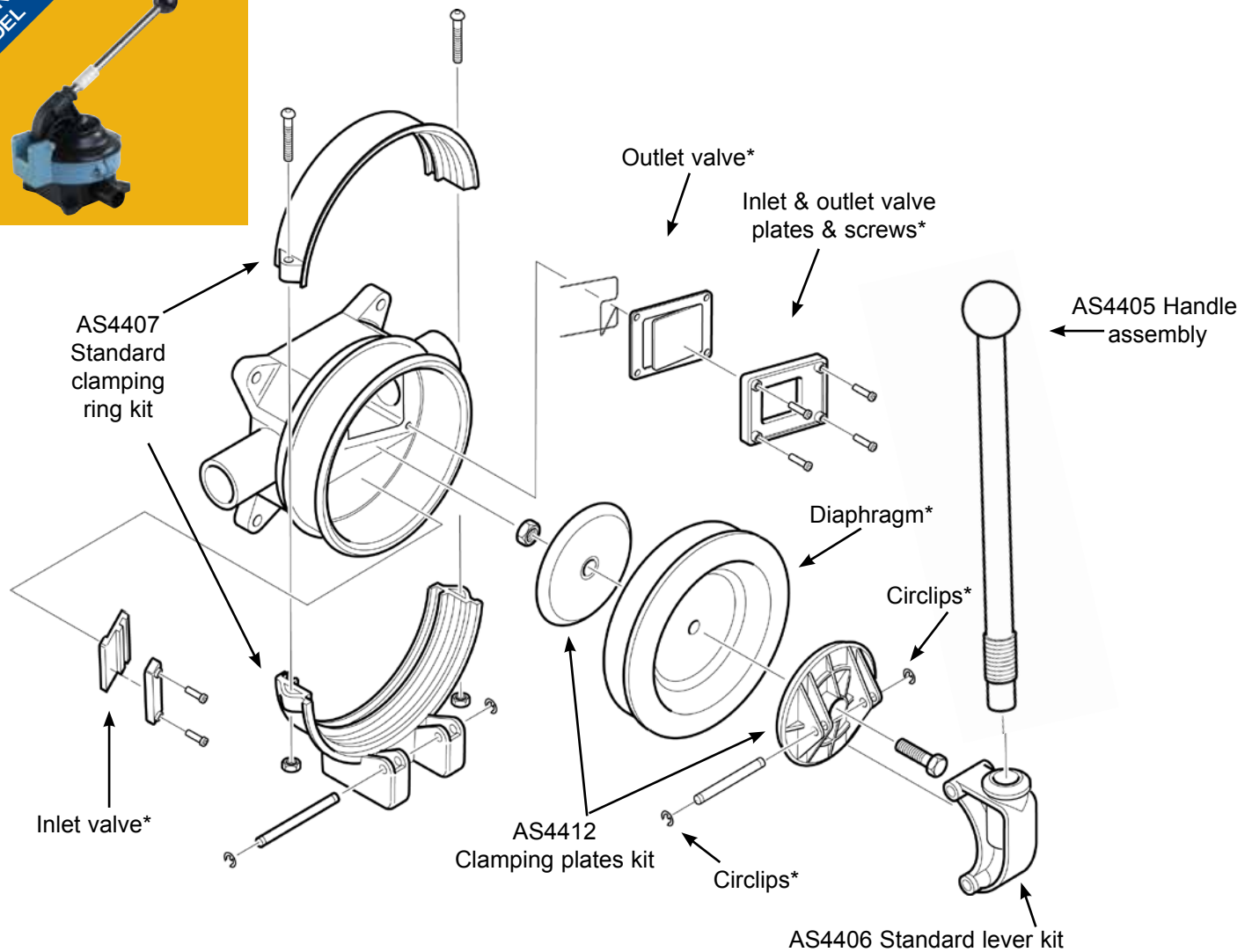


# Manual Bilge Pumps

## Gusher® Titan Standard

### On Deck/Bulkhead: BP4402 - Powerful Lightweight Bilge and Waste Pump

**Note\*** Contained in Service Kit AK4400 (Neoprene™) or AK4419 (Nitrile®)



#### Accessories

- AS4405 Spare Handle
- SB4222 Side Entry Strainer
- SB5865 Top Entry Strainer
- SF5425 1 1/2" Skin Fitting
- LV1215 1" / 1 1/2" Non-return Valve
- EB3488 1 1/2" Elbow

#### Service Kits (for On Deck/Bulkhead Model BP4402)

#### AK4400 Service Kit with Complete Set of Serviceable Parts for Gusher® Titan (Neoprene™)

| Qty | Containing          |
|-----|---------------------|
| 4   | Circlip             |
| 6   | Screw               |
| 1   | Outlet valve spring |

|   |                    |
|---|--------------------|
| 1 | Clamping nut       |
| 1 | Outlet valve plate |
| 1 | Inlet valve plate  |
| 1 | Outlet valve       |
| 1 | Inlet valve        |
| 1 | Diaphragm          |

#### AK4419 Service Kit with Complete Set of Serviceable Parts for Gusher® Titan (Nitrile®)

| Qty | Containing          |
|-----|---------------------|
| 4   | Circlip             |
| 6   | Screw               |
| 1   | Outlet valve spring |
| 1   | Clamping nut        |
| 1   | Outlet valve plate  |
| 1   | Inlet valve plate   |
| 1   | Outlet valve        |
| 1   | Inlet valve         |
| 1   | Diaphragm           |

#### AS4406 Standard Lever kit

| Qty | Containing               |
|-----|--------------------------|
| 4   | Circlip                  |
| 1   | Standard operating lever |
| 1   | Lever fulcrum pin        |
| 1   | Standard fulcrum pin     |

#### AS4407 Standard Clamping Ring Kit

| Qty | Containing           |
|-----|----------------------|
| 2   | Nut                  |
| 2   | Screw                |
| 1   | Top clamping ring    |
| 1   | Bottom clamping ring |
| 4   | Circlip              |

#### AS4412 Clamping Plates Kit

| Qty | Containing           |   |                      |
|-----|----------------------|---|----------------------|
| 1   | Clamping bolt        | 1 | Inner clamping plate |
| 1   | Clamping nut         | 4 | Circlip              |
| 1   | Outer clamping plate |   |                      |

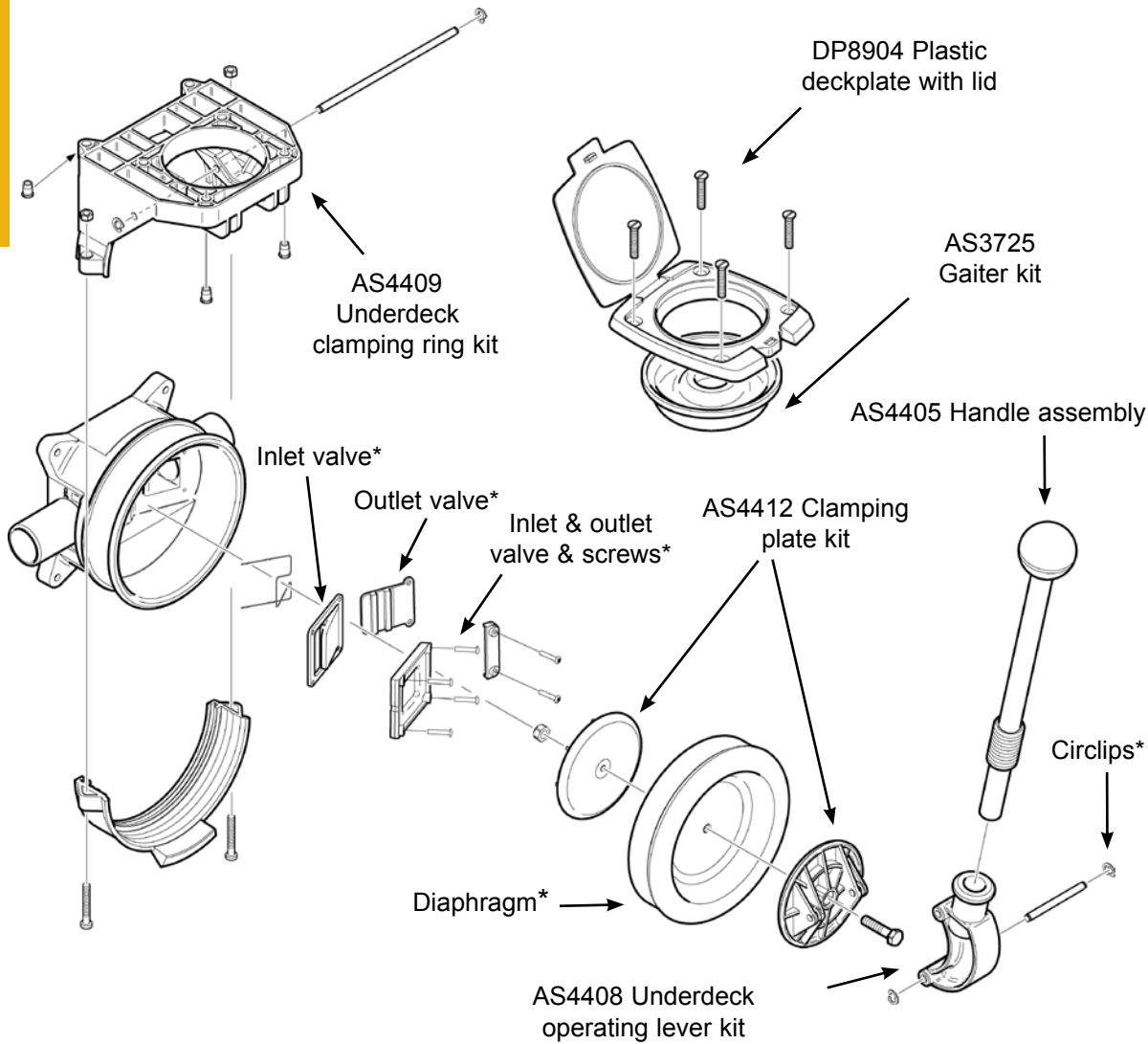


# Manual Bilge Pumps

## Gusher® Titan Underdeck

### Underdeck: BP4410 - Powerful Lightweight Bilge and Waste Pump

**Note\*** Contained in Service Kit AK4400 (Neoprene™) or AK4419 (Nitrile®)



#### Accessories

DP8904 Plastic Deckplate Kit

AS4405 Spare Handle

SB4222 Side Entry Strainer

SB5865 Top Entry Strainer

SF5425 1 1/2" Skin Fitting

LV1215 1" / 1 1/2" Non Return Valve

EB3488 1 1/2" Elbow

#### Service Kits

(for Underdeck Model BP4410)

**AK4400 Service Kit with Complete Set of Parts for Gusher® Titan (Neoprene™)**  
(See list below)

**AK4419 Service Kit with Complete Set of Parts for Gusher® Titan (Nitrile®)**

| Qty | Containing          |
|-----|---------------------|
| 4   | Circlip             |
| 6   | Screw               |
| 1   | Outlet valve spring |
| 1   | Clamping nut        |
| 1   | Outlet valve plate  |
| 1   | Inlet valve plate   |
| 1   | Outlet valve        |
| 1   | Inlet valve         |
| 1   | Diaphragm           |

**AS4408 Underdeck Operating Lever Kit**

| Qty | Containing          |
|-----|---------------------|
| 4   | Circlip             |
| 1   | U/D operating lever |
| 1   | U/D fulcrum pin     |
| 1   | Lever fulcrum pin   |

**AS3725 Gaiter Kit for Deckplates**

| Qty | Containing  |
|-----|---|
| 1   | Gaiter (for plastic or metal deckplate)                               |
| 1   | O-ring (for metal deckplate Whale Gusher® 10 & Whale Gusher® 30 only) |



# Manual Bilge Pumps

## Gusher® Titan

**On Deck/Bulkhead: BP4402**

**Underdeck: BP4410**



AK4400



AK4419



AS3725



AS4405



AS4406 for BP4402



AS4407 for BP4402



AS4408 for BP4410



AS4409 for BP4410



AS4412



DP8904



SB4222 / SB5865



SF5425

### Service Kits (Continued)

#### DP8904 Plastic Deckplate with Lid

| Qty | Containing      |
|-----|-----------------|
| 1   | Deckplate & lid |
| 1   | Gaiter          |
| 6   | Screws M6x40    |
| 6   | Nuts M6         |
| 6   | Washers M6      |

#### AS4412 Clamping Plate Kit

| Qty | Containing           |
|-----|----------------------|
| 1   | Clamping bolt        |
| 1   | Clamping nut         |
| 1   | Outer clamping plate |
| 1   | Inner clamping plate |
| 4   | Circlip              |

#### AS4409 Underdeck Clamping Ring Kit

| Qty | Containing                    |
|-----|-------------------------------|
| 2   | Nut                           |
| 4   | Circlip                       |
| 4   | Inserts for U/D clamping ring |
| 2   | Screw                         |
| 1   | U/D clamping ring             |
| 1   | Top clamping ring             |



**Whale Gusher® Titan® Bilge Pumps**  
**Models: BP4402, BP4410 and BP4429**

**READ CAREFULLY BEFORE INSTALLATION AND USE**

**To the Fitter:** Check that the product is suitable for the intended application, follow installation instructions and ensure operating instructions are passed on to the end user.

**To the User:** Read the instructions carefully. (See parts diagram)

**APPLICATION**

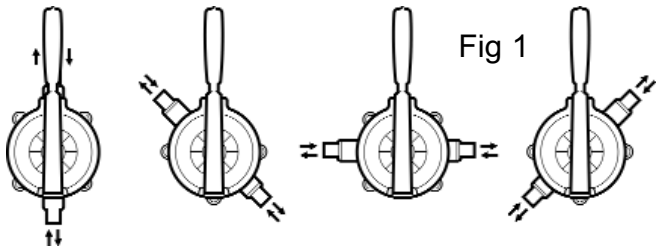
This bilge pump is designed exhaust standing water. Output capacity depends on installation conditions and pumping rate. (see fig. 3)

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 with any other liquid, it is the users 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. With all applications it is important that a system of safe working practice is applied to installation, use and maintenance.

**INSTALLATION**

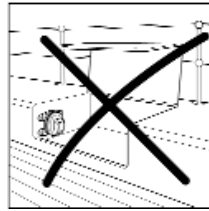
The Gusher Titan is designed for mounting on or through deck, or on or through bulkhead. The standard model (BP4402) allows considerable flexibility in the choice of handle position in relation to the direction of the flow.



**To Change Flow Direction:**

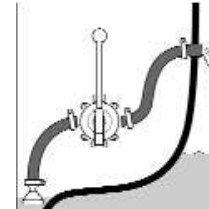
- (a) Release the screws on both sides of the clamping ring
- (b) Ease off the diaphragm and rotate body to new position relative to the fork and diaphragm
- (c) Reassemble diaphragm and clamping ring remembering to tighten the clamping screws evenly on both sides.

Select a suitable position free from obstructions where the pump can be operated efficiently and comfortably



Avoid installations 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

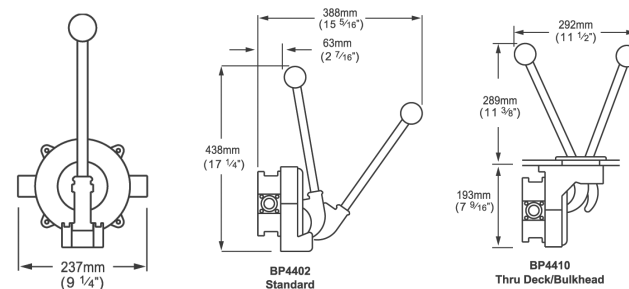


To ensure good priming and flow, avoid sharp bends in pipework and fit a Whale strumbox/strainer (incorporating a non-return valve) which prevents the end of the hose sucking against a flat surface and allows the water level to be reduced to a minimum.

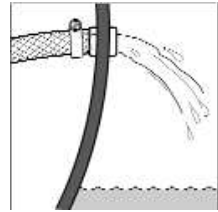
Ensure that the pump is installed to allow easy access for servicing.

**For Mounting On Bulkhead: (BP4402)**

1. Use pump as a template, mark off and drill four 1/4" (6mm) holes.
2. Check flow direction and secure the pump with 1/4" (6mm) bolts.
3. Attach 1 1/2" (38mm) smooth bore reinforced hose with stainless steel worm drive hose clips. Tighten to prevent air leaks



4. With thru-hull discharge, make sure that the discharge point is well above the water line.
5. Check the installation for air leaks, correct priming and discharge



**For Mounting On Deck (BP4429) or Thru Deck/Bulkhead (BP4410)**

1. For the on deck or thru deck/bulkhead models, the inlet and outlet directions can be reversed by following the instructions and repositioning the handle.
2. For the on deck or thru deck/bulkhead models, the deck thickness must be a minimum of 13mm (1/2") and a maximum of 25mm (1")
3. For on deck model (BP4429) follow points 1-5 of previous instructions.
4. With thru deck/bulkhead models (BP4410) a plastic deckplate (DP8904) is supplied.
5. 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 1/4" (6mm) countersunk mounting screws provided.
6. As points 3 - 5 of previous instructions

**OPERATION**

The Gusher Titan ensures 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 close to the pump.

Gusher Titan output at 1m Lift and 0.5m Head

| Ouput       | At 60 strokes/min | At 70 strokes/min |
|-------------|-------------------|-------------------|
| Gallons/min | 20                | 23.2              |
| Litres/min  | 90                | 105.6             |

Fig 3: Performance table

Performance data is based on factory tests and is typical of what may reasonably be achieved. Actual performance may vary depending on installation and operating conditions.

## MAINTENANCE

### Inspection:

Regular inspection of the pump is recommended. Rubber components should be replaced if worn or every three years regardless of condition.

Replacement components and service kits (AK4400 for Neoprene (clean bilge water) and AK4419 for Nitrile(oily bilge water)) are available from your local chandlery. It is recommended a service kit is kept on board.

### Winterising

At the end of the season, drain all water in the pipework and pump chamber.

### Changing the Diaphragm and Valves

1. Release screws on both sides of the clamping ring.
2. Remove clamping plate and diaphragm
3. Remove both circlips from the fulcrum pin and lever to expose the clamping bolt
4. Remove clamping bolt, noting position of the diaphragm plates.
5. Remove and replace inlet and outlet valves as illustrated in parts diagram
6. Fit new diaphragm, reassemble pump and test for correct priming and discharge

### ACCESSORIES

DP8904 - Plastic deckplate

AK4400 - Neoprene Spares Kit

AK4419 - Nitrile Spares Kit

\*SF5425 – Skinfitting

\*SB5865 – Top entry strainer

\*SB4222 – Side entry strainer

\*DV5606 – 2 way diverter valve

\*EB3488 – 90° elbow (male to female)

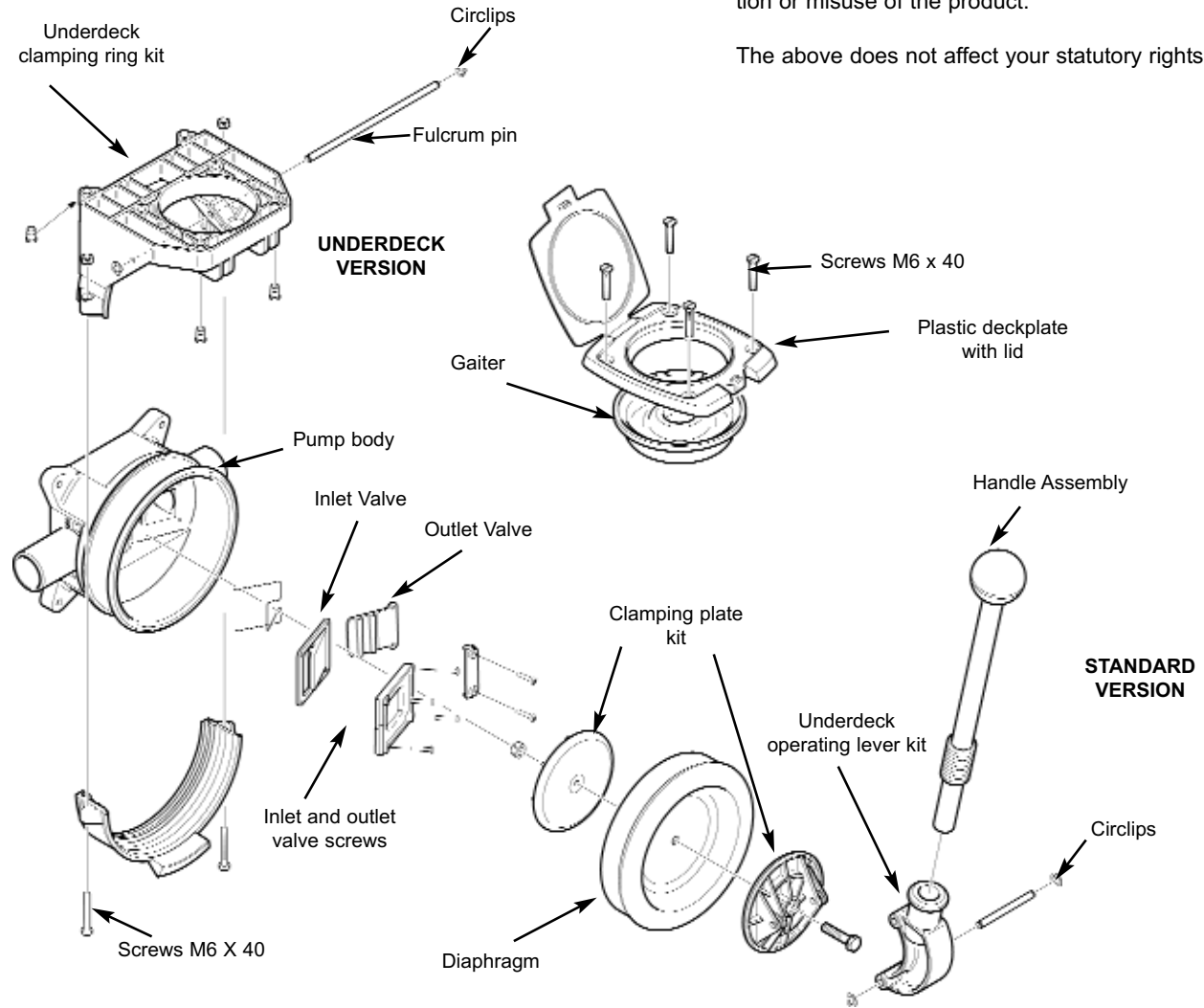
\*LV1215 – In line non return valve

### HELPFUL HINTS

Pump fails to prime or chokes:

1. Check inlet hose connection is airtight, free from blockages and does not collapse during suction stroke
2. Inspect diaphragms - replace if damaged
3. Solid objects in the body of the pump may not prevent its operation but should be removed to prevent damage
4. Inspect inlet and outlet valves for blockages. Clear with finger or screwdriver and test.

## MAINTENANCE LIST



## WARRANTY

Whale Pumps are guaranteed for 5 years (1 year on rubber parts) from date of purchase against defects in materials and workmanship. If the unit proves faulty return it to your supplier with proof of purchase and purchase date.

The manufacturer retains the right to repair or replace the unit.

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

The above does not affect your statutory rights.

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