

Marine Service Catalogue





Whale Support





tel: +44 (0)28 9127 0531 info@whalepumps.com whalepumps.com



tel: +1 802 367 1091 fax: +1 802 367 1095 usasales@whalepumps.com whalepumps.com

Contents

SECTION 1 NEW PRODUCTS	4
Grey IC	5
Gulley IC	5
Bilge IC	5
SECTION 2 ELECTRIC AND MANUAL BILGE PUMPS	6
Electric Bilge	
Gulper 320 (12V d.c. pump: BP2052(B), 24V d.c. pump BP2054(B))	7
Manual Bilge	
Gusher 25 (discontinued 1989)	8
Gusher 30 (on deck: BP3000, on bulkhead: BP3010, thru-deck: BP3020)	9
Gusher 10 Mk 3 (standard: BP3708, thru-deck/bulkhead: BP3740)	11
Gusher Titan (standard: BP4402)	13
Gusher Titan (underdeck: BP4410)	14
Gusher Urchin (standard: BP9005, and removable handle: BP9021)	16
Gusher Urchin (underdeck: BP9013)	18
Whale/Henderson Compac 50 (BP0350)	20
Mk5 Universal Pump (BP0510/MH0510)	21
Mk 5 - Double Action Pump	23
(bulkhead: MH5550, underdeck: MH5560, on deck: MH5570)	
Smartbail Compact Integrated Cover Pump	25
SECTION 3 ELECTRIC AND MANUAL FRESHWATER PUMPS	26
Electric Galley Pumps	
Automatic Pressure Pump Range (FW0814, FW1214, FW1215, FW1225	27
UF1815, UF2014, UF2015, UF8015, UF8025)	
Manual Galley Pumps	
V Pump Mk 6 (GP0650 introduced in 1993)	28
Flipper Pump Mk 3 and 4 (GP0418)	29
Gusher Galley Mk 2 Pump (discontinued 1984)	30
Gusher Galley Mk 3 Pump (GP0550 right lever, GP0551 left lever- introduced in 1984)	31
Tiptoe Mk 4 Pump (GP1309)	32
Babyfoot Pump (GP4618)	33

Faucets and Showers

Elegance Single and Mixer (11mm and 12mm smooth connections)	34
Single: RT1010, RT6010	
Mixer: RT2010, RT2007, RT2035, RT7010, RT7007	26
Elegance Single and Mixer Faucets Mk 2 (1/2" threaded connections) Single: RT1210, Mixer: RT2210	36
Elegance Combo (Faucet/ Shower)	37
(12mm version: Cold Only-RT1500, Mmixer-RT2500, RT2498)	
Elegance Combo & Faucet/Shower	39
(Cold only: RT1470 - Combined Model with Faucet and Shower Functions, Mixer: RT2498)	
Elite Faucets and Showers	41
(MT0111, MT0151, MT0161)	
SECTION 4 GREY / SHOWER WASTE PUMPS	43
Electric Grey Waste	
Gulper 220 Shower Waste Pump BP1552 (12V d.c.), BP1554 (24V d.c.)	44
Gulper 320 Shower Waste Pump BP2052 (12V d.c.), BP2054 (24V d.c.)	45
Grey Waste Tank Range GW0810, GW0831, GW1610, GW1631	46
SECTION 5 BLACK / TOILET WASTE PUMPS	47
Electric	
Gulper Toilet Waste Pump BP2552(B) (12V d.c.), BP2554(B) (24V d.c.)	48
Manual	
Mk 5 - Sanitation BP5027, BP5035	49
SECTION 6 FISHBOX / BAITWELL	51
Electric	
Gulper Groupe r BP4572 (12V d.c.), BP4574 (24V d.c.), BP4672 (12 V d.c.), BP4674 (24 V d.c.)	52
Gulper 320 BP2052(B) (12V d.c.), BP2054 (24V d.c.)	53
SECTION 7 WASHDOWN	54
Electric Washdown Pump	55
SECTION 8 ACCESSORIES	56
TCL 2 Locker Door (LD2000)	57
TCL 3 Locker Door (LD3000)	57
TCL 4 Locker Door (LD4000, clear lid version: LD4002)	57



Section 1

New Products



At the heart of every Whale IC (Intelligent Control) product lies innovative electronic control circuitry built in. This enables IC sensor accessories to communicate directly with IC pumps to control their performance. These accessories send signals to built-in intelligent software which then control the pumps that react as required.



Service kits available for the Whale IC range



Grey IC - WM8284, WM8484

Complete pre-wired grey waste system - Handles waste from multiple drains using the high capacity Gulper® IC pump.

Service Kits:

AK2050 Replacement Pump Head

Accessories:

AK2086B Deutsch® Connector Extension Cable 6m (18ft)

AK2081B Traditional Deutsch® to 2 Spade Connector

BP2082B Gulper IC, 12V (valid until June 2013)

BP2084B Gulper IC, 24V (valid until June 2013)

WM1982B (2m/6ft) & **WM1984B** (4m/12ft) Two Way Manifold – 3/4" (19mm)

WM2582B (2m/6ft) & **WM2584B** (4m/12ft) Two Way Manifold – 1" (25mm)

WM3882B (2m/6ft) & **WM3884B** (4m/12ft) Two Way Manifold – 1¹/2" (38mm)



Gulley IC - SG8284, SG8484

Complete pre-wired grey waste management system - Includes a single outlet shower drain gulley linked to the high capacity Gulper® IC.

Service Kits:

AK2050 Replacement Pump Head

Accessories:

AK2086B Deutsch® Connector Extension Cable 6m (18ft)

AK2081B Traditional Deutsch® to 2 Spade Connector

BP2082B Gulper IC, 12V (valid until June 2013)

BP2084B Gulper IC, 24V (valid until June 2013)

 $\textbf{SG1982B} \; (2\text{m/6ft}) \; \& \; \textbf{SG1984B} \; (4\text{m/12ft}) \; \text{Large Gulley IC} - \sqrt[3]{4"} \; (19\text{mm})$

SG3482B (2m/6ft) & **SG3484B** (4m/12ft) Small Gulley IC $- \frac{3}{4}$ " (19mm)



Bilge IC - S18284, S18484

Complete pre-wired bilge system including high capacity Gulper® IC pump and Strainer IC to fit in low confined bilge spaces.

Service Kits:

AK2050 Replacement Pump Head

Accessories:

AK2086B Deutsch® Connector Extension Cable 6m (18ft)

BP2083B Gulper IC, 12V

BP2085B Gulper IC, 24V

SI3422B (2m/6ft) & SI3424 (4m/12ft) Strum Box - 3/4" (19mm)



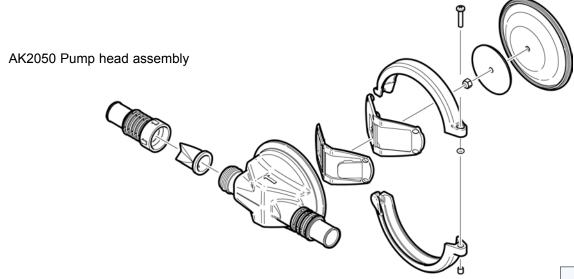
Electric and Manual Bilge Pumps



Gulper® 320 Remote Mount Bilge Pump

BP2052(B) (12V d.c. version), BP2054(B) (24V d.c. version)





AK2050

Accessories

SB3422 19mm Strainer/Strumbox (Top/Side entry - retail packed)

EB3364 1" Elbow

LV1215 1" / 11/2" Non Return Valve

SF5131 3/4" Skin Fitting

SF5204 1" Skin Fitting

Service Kits

AK2050 Replacement Pump Head for Gulper® 320, Gulper® 220 and Gulper® IC

Containing
Diaphragm
Nyloc Nut M5
Screw Hex M5 x 16mm
Outlet Valve Tricuspid

Outlet Valve Tricuspid
 Marine Head ³/₄" and 1"
 Valve Inlet and Outlet

1 Valve Plate

AS1562 Gulper Clamping Ring Kit

Outlet Valve Housing

Qty Containing 1 Clamping Ring



AS1562



SB3422

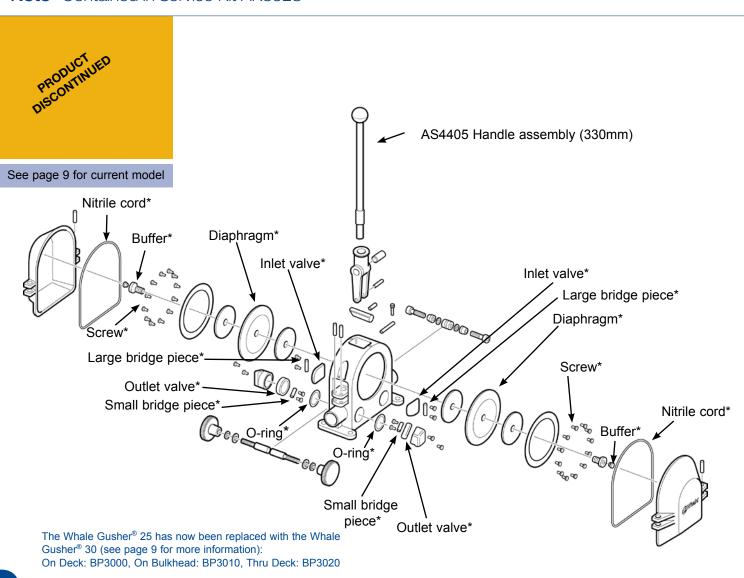
,



Gusher® 25 Pump

Whale Gusher 25 Pump (discontinued in 1989)

Note* Contained in Service Kit AK3528



Service Kits

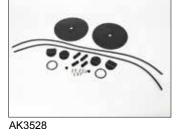
8

AK3528 Service Kit with Complete Set of Serviceable Parts for Whale Gusher® 25 (Nitrile®)

Qty	Containing
0	D

- Outlet valve
- O-ring
- Nitrile cord

2 2 2 2 Inlet valve Screw 2BA 2 Small bridge piece Diaphragm (Nitrile) Large bridge piece



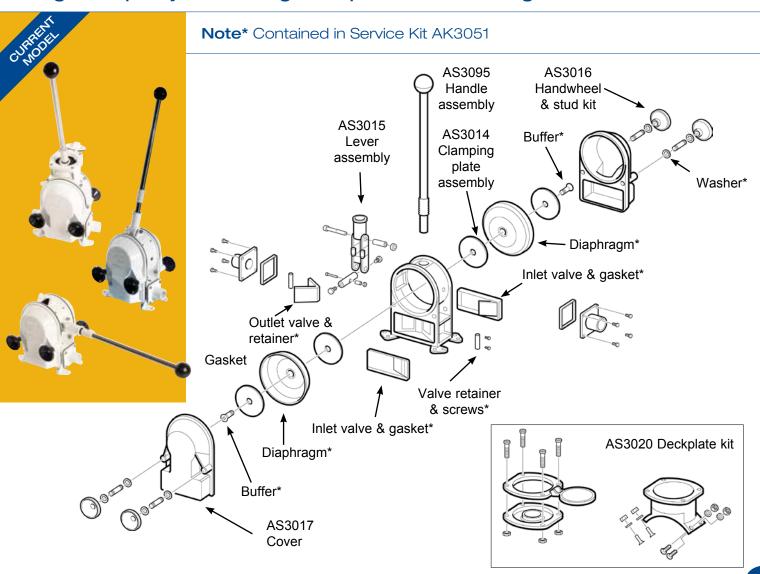


AS4405

AS4405 Handle Assembly s/s with Lanyard (330mm)

On Deck: BP3000, On Bulkhead: BP3010, Thru Deck: BP3020

Largest Capacity Manual Bilge Pump in the Whale Range



Accessories

AS3020 Deckplate Kit Assembly AS3095 Spare Handle DP3804 Deckplate

Service Kits

AK3051 Service Kit of Serviceable Parts for Whale Gusher® 30

Qty	Containing
2	Scrow No 6v1

- 2 Diaphragm
- 2 Inlet valve & gasket
- 1 Outlet valve
- 2 Valve retainer
- Valve chamber gasket
- 4 Washer nylon M10
- 2 Buffer

AS3015 Lever Assembly

QtyContaining1Fork insert1Lever1Lever bush2Buffer1Nylon nut M6

- Nylon nut M8
 Clamping screw
- 1 Connecting rod 1 Connecting rod bush
- 1 Lever bush
- 1 Lever fulcrum bolt
- 1 Body fulcrum bolt

AS3016 Handwheel & Stud Kit

Qty Containing 2 Nylon nut M8 2 Stud

Washer nylon M10Hand wheel nut

AS3017 Cover Gusher® 30

Qty Containing
1 Cover

9





Gusher® 30 Pump

On Deck: BP3000, On Bulkhead: BP3010, Thru Deck: BP3020

Largest Capacity Manual Bilge Pump in the Whale Range



AK3051



AS3014







AS3017



AS3020



AS3095





DP3804

10

Service Kits (Continued)

AS3725 Gaiter Kit for Deckplates

Qty Containing

Gaiter (for metal or plastic deckplate) O-ring (for metal deckplate)

AS3020 Deckplate Kit Assembly

Containing Qty Nut M6

Lid

Deckplate

O-ring (deckplate lid)

Nyloc nut M6

Underdeck bracket

Screw HEX HD M6x20

Screw M6x50

AS3014 Clamping Plate Kit

Qty Containing

Clamping plates 2 Clamping screws

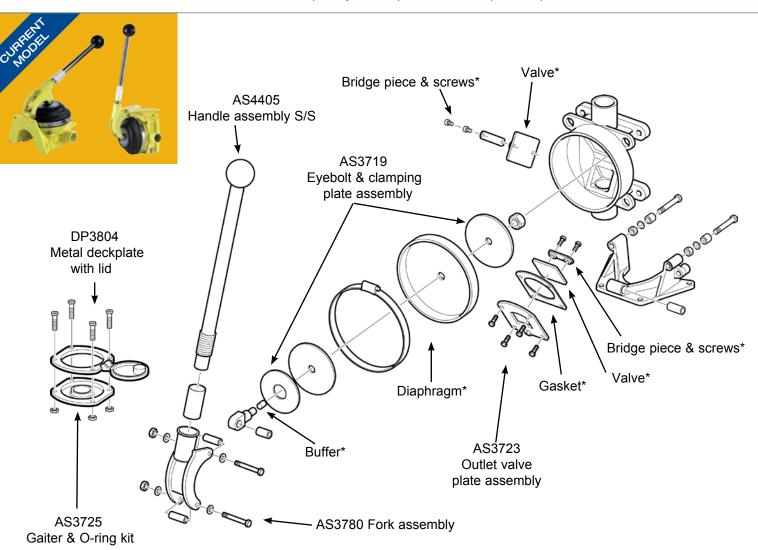
Buffers

AS3095 Handle Assembly (Standard) s/s 450mm

Gusher® 10 Mk 3

On Deck/Bulkhead: BP3708, Thru Deck/Bulkhead: BP3740 - Diecast Alloy Bilge Pump

Note* Contained in Service Kit AK3706 (Neoprene™) or AK3714 (Nitrile®)



Accessories

DP3804 Alloy Deckplate

DP8904 Plastic Deckplate with Lid

AS4405 Spare Handle

SB4222 Side Entry Strainer

SB5865 Top Entry Strainer

SF5425 11/2" Skin Fitting

LV1215 1" / 1¹/₂" Non Return Valve

EB3488 11/2" Elbow

Service Kits

AK3706 Service Kit with Complete Set of Serviceable Parts for Whale Gusher® 10 Mk 2 & Mk 3 Pumps (Neoprene™) (See list below)

AK3714 Service Kit with Complete Set of Serviceable Parts for Whale Gusher® 10 Mk 2 & Mk 3 Pumps (Nitrile®)

Qty Containing

- 2 Valve (Mk 2 pump only)
- 4 Screw 3/8"
- 4 Screw 1/2"
- 2 Bridge piece
- 1 Diaphragm
- 1 Buffer
- Valve (Mk 3 pump only)Gasket (Mk 3 pump only)

AS3719 Bushed Eyebolt & Clamping Plate Assembly

QtyContaining2Clamping plate1Nut1Fulcrum bush1Eyebolt1Buffer1Label

AS3780 Fork Assembly

Qty	Containing
1	Fork
1	Insert fork
2	Bolt
2	Fulcrum sleeve
2	Nut
4	Washer
2	Fulcrum bush

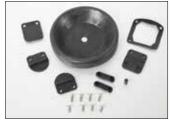
11



Gusher® 10 Mk 3

On Deck/Bulkhead: BP3708, Thru Deck/Bulkhead: BP3740 -

Diecast Alloy Bilge Pump



AK3706



AK3714



AS3719



AS3723



AS3725



AS3780



AS4405



DP3804



DP8904



SB4222



SB5865



SF5425

Note: Cast body and mounting bracket are not available as service parts.

Service Kits (Continued)

AS3723 Outlet Valve Plate Assembly (Mk 3 only)

Qty Containing

2 Screw

Screw

Bridge piece

Valve (Mk 3 Pump)

Valve plate

Gasket

AS3725 Gaiter Kit for Deckplates

Qty

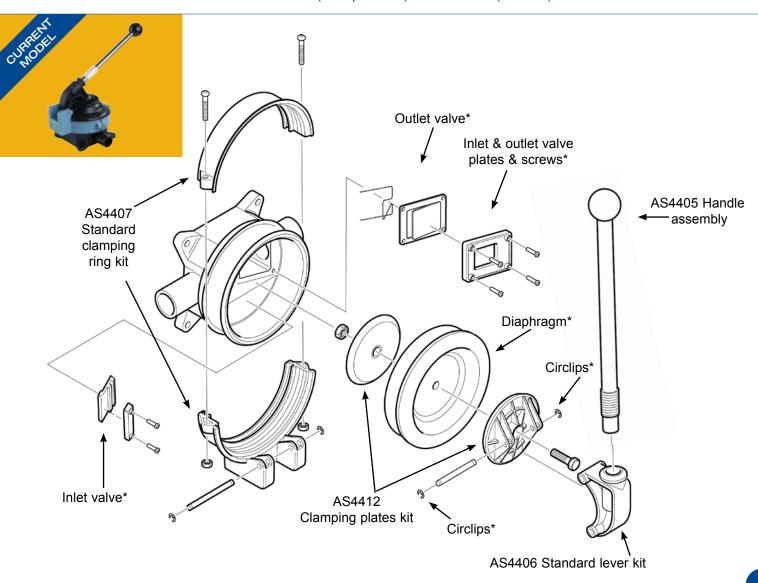
Gaiter (for metal or plastic deckplate)

O-ring (for metal deckplate)

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 11/2" Skin Fitting

LV1215 1" / 11/2" Non-return Valve

EB3488 11/2" 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 Screw1 Outlet valve spring

Clamping nut

Outlet valve plate

1 Inlet valve plate

Outlet valve

1 Inlet valve

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

Inlet valve plate

Outlet valve Inlet valve

1 Diaphragm

See page 60 for further contact information

AS4406 Standard Lever kit

Qty Containing

4 Circlip

1 Standard operating lever

1 Lever fulcrum pin

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

04.	Containing
Qtv	Containing

Clamping bolt

1 Inner clamping plate

Clamping nut 4 Circlip

Outer clamping plate

Service kits and images continue on page 14

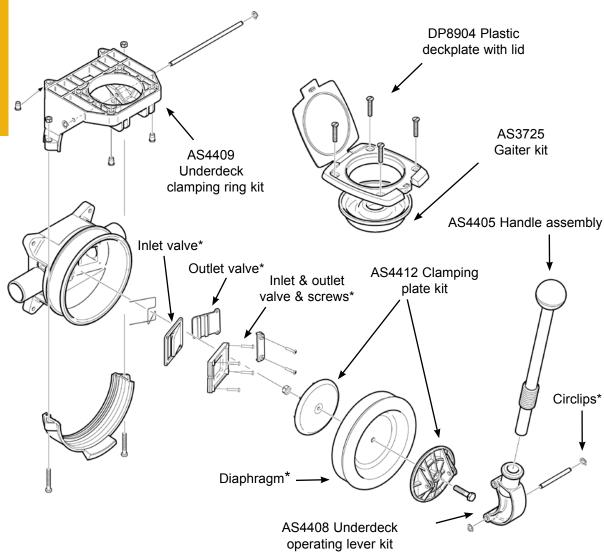


Gusher® Titan Underdeck

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 11/2" Skin Fitting

LV1215 1" / 11/2" Non Return Valve

EB3488 11/2" 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
- Outlet valve spring
- 1 Clamping nut
- 1 Outlet valve plate
- 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)
- O-ring (for metal deckplate Whale Gusher® 10 & Whale Gusher® 30 only)

14



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	Circlin

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



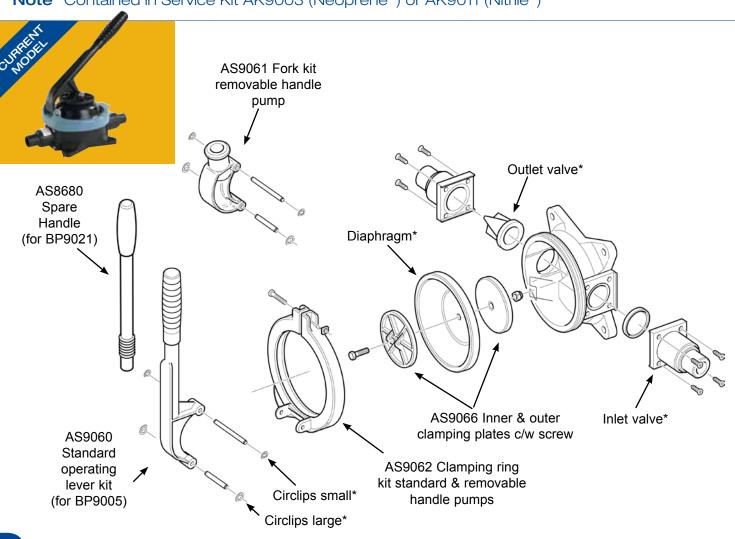


Gusher® Urchin Compact Bilge and Waste Pump

On Deck/Bulkhead: BP9005 - Fixed Handle Compact Bilge & Waste Pump

On Deck/Bulkhead: BP9021 - Removable Handle Compact Bilge & Waste Pump

Note* Contained in Service Kit AK9003 (Neoprene™) or AK9011 (Nitrile®)



Accessories

16

AS8680 Spare Handle (for BP9021 only)

SB4222 Side Entry Strainer

SB5865 Top Entry Strainer

SF5204 1" Skin Fitting

SF5425 11/2" Skin Fitting

YP6114 11/2" Y Piece

YP6130 1/2" Y Piece

LV1215 1" / 11/2" Non Return Valve

LV1219 3/4" / 1" Non Return Valve

EB3364 1" Elbow

EB3488 11/2" Elbow

Service Kits

AK9003 Service Kit with Complete Set of Serviceable Parts for Urchin (Neoprene™) AK9011 Service Kit with Complete Set of Serviceable Parts for Urchin (Nitrile®)

Qty	Containing
1	Diaphragm
1	Inlet valve
1	Outlet valve
2	Circlip small
2	Circlip large

AS9060 Standard Operating Lever Kit

Qty	Containing
1	Lever sleeve (black)
1	Lever
1	Short fulcrum pin
0	Obsella Lenna

See page 60 for further contact information

2 Circlip small1 Fulcrum pin

Qtv

AS9061 Fork Assembly for Underdeck & Removable Handle Pumps

Containing

1	Short fulcrum pin
1	Fork
2	Circlip small
2	Circlip large
1	Long fulcrum pin (underdeck)
1	Fulcrum pin (removable handle)

AS9062 Clamping Ring Kit for Standard & Removable Handle Pumps

Qty	Containing
1	Clamping ring
1	Pinching screw
1	Nut
2	Circlip small
2	Circlip large

Service kits and images continue on next page



Gusher® Urchin Compact Bilge and Waste Pump

On Deck/Bulkhead: BP9005 - Fixed Handle Compact Bilge & Waste Pump

On Deck/Bulkhead: BP9021 - Removable Handle Compact Bilge & Waste Pump



AK9003



AK9011



AS9060 - BP9005



AS9061 - BP9021



AS9062



AS8680 for BP9021 only



AS9066



SB4222 / SB5865



SF5204/SF5425



EB3363/EB3488



YP6114



LV1215

Service Kits (Continued)

AS9066 Inner & Outer Clamping Plate Kit

Qty Containing

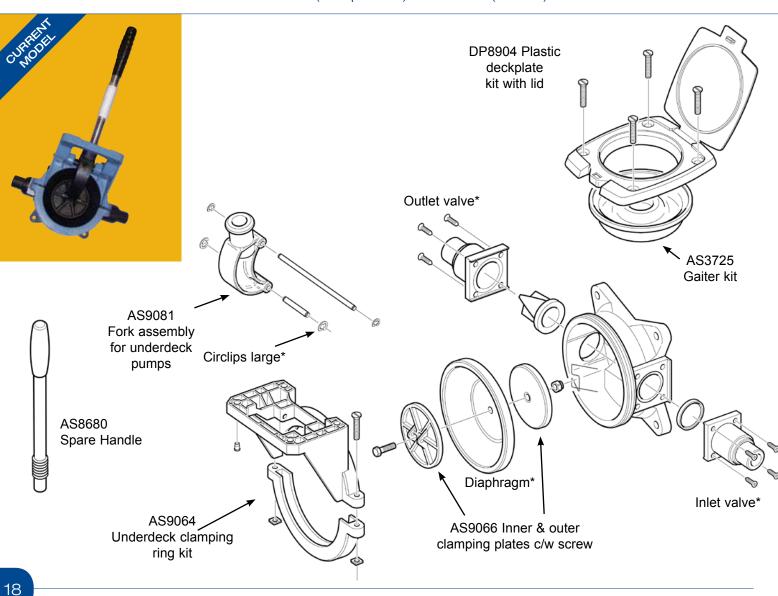
- Clamping nut nylon
- 1 Inner clamping plate
- Outer clamping plate
- 1 Clamping screw
- 2 Circlip small
- 2 Circlip large



Gusher® Urchin Underdeck

Underdeck: BP9013 - Compact Bilge & Waste Water Transfer Pump

Note* Contained in Service Kit AK9003 (Neoprene™) or AK9011 (Nitrile®)



Accessories

AS8680 Spare Handle

SB4222 Side Entry Strainer

SB5865 Top Entry Strainer

SF5204 1" Skin Fitting

SF5425 11/2" Skin Fitting

YP6114 11/2" Y Piece

LV1215 1" / 11/2" Non Return Valve

EB3364 1" Elbow

EB3488 11/2" Elbow

Service Kits

AK9003 Service Kit with Complete Set of Parts for Gusher[®] Urchin (Neoprene™) (See list below)

AK9011 Service Kit with Complete Set of Parts for Gusher® Urchin (Nitrile®)

Qty Containing

- 1 Diaphragm
- 1 Inlet valve
- Outlet valve
- 2 Circlip small
- 2 Circlip large

AS9064 Underdeck Clamping Ring Kit

Qty Containing

- U/D clamping ring
- 1 Pinching screw
- 4 Insert
- 1 Nut
- 4 Circlip

AS3725 Gaiter Kit for Deckplates

Qty Containing

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



Gusher® Urchin Underdeck

Underdeck: BP9013 - Compact Bilge & Waste Water Transfer Pump



AK9003



AK9011



AS3725



AS8680



AS9061



AS9064



AS9066



DP8904



SB4222



SB5865



SF5204



SF5425



YP6114



LV1215



EB3364/EB3488

Service Kits (Continued)

AS9066 Inner & Outer Clamping Plate Kit

Qty Containing

- Clamping nut nyloc
- Inner claping plate
- Outer clamping plate
- Clamping screw 2 Circlip (small)
- Circlip (large)

DP8904 Plastic Deckplate with Lid

Containing Qty

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

AS9061 Fork Assembly

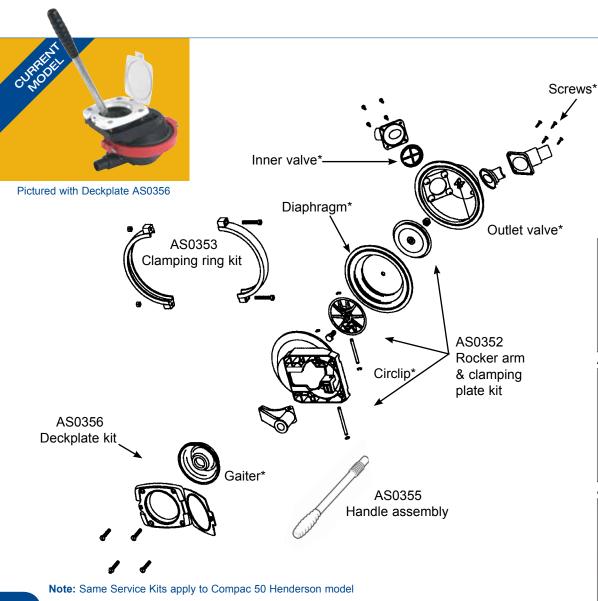
Qty Containing

- Short fulcrum pin
- Circlip large
- 2 Circlip small
- Long fulcrum pin (underdeck)
- Fulcrum pin (removable handle)



Whale Compac 50

Thru Deck Bulkhead Pump: BP0350 - Low Profile Underdeck Bilge Pump



AK8035



AS0352



AS0353

Accessories

20

AS0355 Spare Handle

Qty Containing
1 Handle
1 Grip

AS0353 Clamping Ring Kit

Qty Containing 2 Clamping ring 2 Nut M6 2 Screw M6x40

AS0356 Deckplate kit

Qty

1 Gaiter
1 Deckplate
1 Cover for deckplate
4 Screw M6x30

Nut insert M6

Containing

EB3364 1" Elbow

LV1215 1" / 11/2" Non Return Valve

Service Kits

AK8035 Service Kit with Complete Set of Serviceable Parts for Compac 50

Qty Containing
1 Inlet valve

1 Outlet valve1 Gaiter (deckplate)

4 Screw No 6 x ¹/₂" (port)

4 Circlip

1 Diaphragm (Nitrile®)

AS0352 Rocker Arm & Clamping Plate Kit

QtyContaining1Rocker arm1Inner clamping plate1Outer clamping plate1Fulcrum pin (short)1Fulcrum pin (long)4Circlip1Nut nyloc M81Screw M8x20



AS0355



AS0356

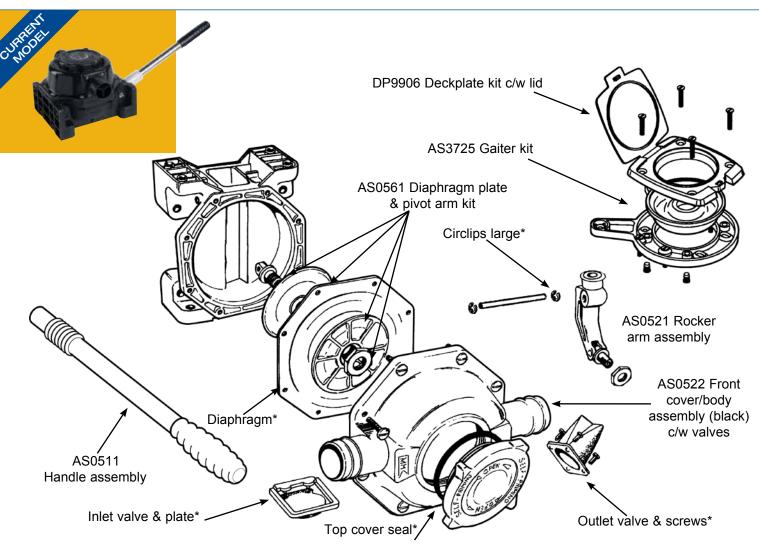
See page 60 for further contact information



Mk 5 Universal Pump

BP0510/MH0510 - Bilge and Waste Water Transfer Pump**

Note* Contained in Service Kit AK8050. Note** MH0510 is now discontinued



Note: Same Service Kits apply to Mk 5 Universal Henderson model

Accessories

DP9906 Deckplate Kit (includes cover)

AS0511 Spare Handle

AS3725 Gaiter Kit for Deckplates

Qty Containing

- Gaiter (for plastic or metal deckplates)
- O-ring (for metal deckplate G10 & G30 only)

YP6114 11/2" Y Piece

EB33488 11/2" Elbow

LV1215 1" / 11/2" Non Return Valve

SF5425 11/2" Skin Fitting

Service Kits

AK8050 Service Kit with **Complete Set of Serviceable** Parts for Mk 5 Universal Pump

Qty	Containing		
1	Inlet valve plat		
1	Inlet valve		

- Valve screw long Top cover seal
- Diaphragm Outlet valve
- Valve screw long Circlip large
- 2 Circlip small 8 Screw M5x25
- Nut M5



DP9906

AK8050





AS0521

See page 60 for further contact information

Service kits and images continue on the next page



Mk 5 Universal Pump

BP0510/MH0510** - Bilge and Waste Water Transfer Pump

Note** MH0510 is now discontinued







AS0522



AS3725



EB3488



LV1215



SF5425



YP6114

Service Kits (Continued)

AS0521 Rocker Arm Assembly

Qty Containing Rocker arm Pivot arm Rocker arm nut Pivot pin Hinge pin Circlip large Circlip small 2

AS0561 Diaphragm Plate & **Pivot Arm Kit**

Qty Containing Pivot arm 2 Diaphragm plate Rocker arm nut Circlip small

AS0522 Front Cover/ Body Assembly (black) c/w Valves

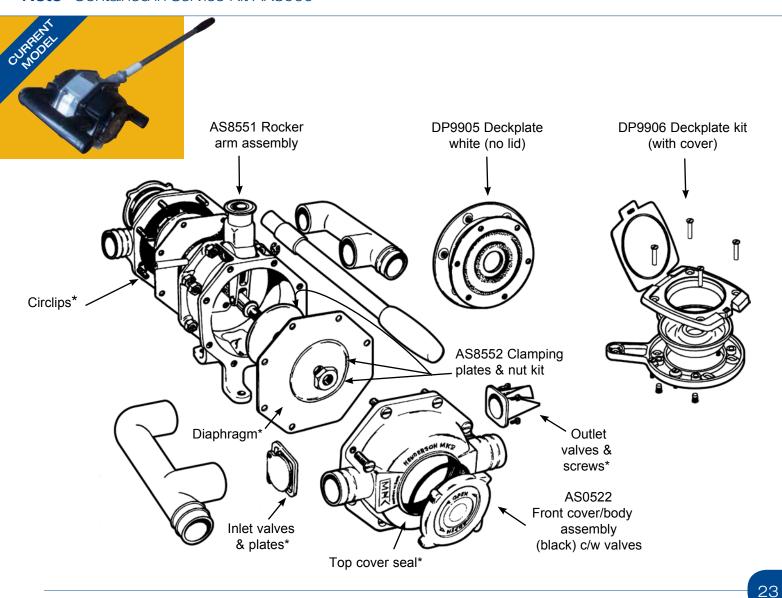
Qty	Containing
1	Top cover
1	Front cover/body (black)
1	Inlet valve plate
1	Inlet valve
2	Valve screw short
1	Top cover seal
8	Assembly screw
1	Outlet valve
2	Valve screw long



Mk 5 Double Action Pump

Bulkhead: MH5550, Underdeck: MH5560, On Deck: MH5570

Note* Contained in Service Kit AK8060



Accessories

DP9905 Deckplate White (no lid)

Qty	Containing
1	Deckring white
1	Deckseal (with 6 holes)

Screws

Screws M6x40 Screws M6x40 CH

DP9906 Deckplate Kit (includes cover)

YP6114 11/2" Y Piece EB3488 11/2" Elbow

LV1215 1" / 11/2" Non Return Valve

SF5425 11/2" Skin Fitting

Service Kits

AK8060 Service Kit with **Complete Set of Serviceable** Parts for Mk V Double Acting

Qty Containing Inlet valve plate 2 Inlet valve

Valve screw short 2

Top cover seal Diaphragm Outlet valve

Valve screw long Circlip large

Circlip small



AK8060



AS0522



Mk 5 Double Action Pump

Bulkhead: MH5550, Underdeck: MH5560, On Deck: MH5570



AS8552



AS8551



DP9905



DP9906



EB3488



LV1215



SF5425



YP6114

Service Kits (Continued)

AS0522 Front Cover/ Body Assembly (black) c/w Valves

Containing
Top cover
Front cover/body (black)
Inlet valve plate
Inlet valve
Valve screw short
Top cover seal
Assembly screw
Outlet valve
Valve screw long

AS8551 Rocket Arm Assembly

Qty	Containing		
2	Pivot bush		
1	Pivot arm		
1	Rocker arm		
1	Fulcrum sleeve		
1	Fulcrum bush		
2	Nut diapragm		
1	Hinge pin		
1	Bolt M6x50		
1	Nut nyloc M6		
1	Fork insert		
2	Circlip (large)		
2	Circlip (small)		

AS8552 Clamping Plates & Nut Kit

Qty 4 2	Containing Clamping plates (alloy) Rocker arm nuts

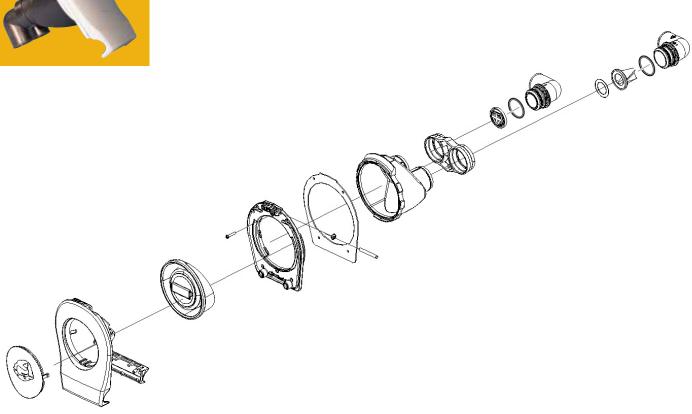


Smartbail

BP5012, BP5010B, BP5021B - Compact Manual Bilge Pump Fast Installation

Note* Contained in Service Kit AK5010





Service Kits

AK5010 Serviceable Parts Kit for Smartbail

Qty	C	0	nt	aını	ng
4					

- Inlet valve (Nitrile®) Outlet valve (Nitrile®)
- Overmould diaphragm (Santoprene®)
- Pivot pin
- Flat seal
- Screw 4 mm x 20 mm
- Washer starlock M5 S/Steel
- O-ring



AK5010

25





Electric and Manual Freshwater Pumps







Electric Galley Pump Range

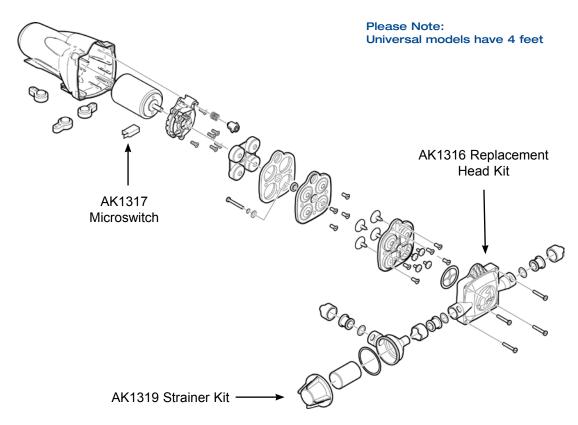
Watermaster and Universal

Watermaster - Automatic Pressure Pump Range

Universal - Washdown Pressure Pump

FW0814, FW1214, FW1215, FW1225 UF1815, UF2014, UF2015, UF8015, UF8025 Introduced 2005.





Note: UF models replaced UP codes. UF models come with Quick Connect 15mm heads. This head can be retrofitted to UP models using Service Kit AK1316.

The 8ltr and 12ltr Universal Pressure Pump models (UF0812, UF0814, UF1212, UF1214, UF1215, UF1225) have been directly replaced with the Watermaster Pressure Pump Range (FW0814, FW1214, FW1215, FW1225).

Service Kits

AK1316 Service Kit for Pump Head

Qty Containing

Replacement head (includes front cover).

Also retrofits to obsolete UP or UF style Universals, or WD Washdown kits

AK1317 Universal Microswitch Kit

Qty Containing
1 Microswitch

AK1319 Replacement Strainer

Qty Containing 1 Strainer



AK1316



AK1317

AK1319



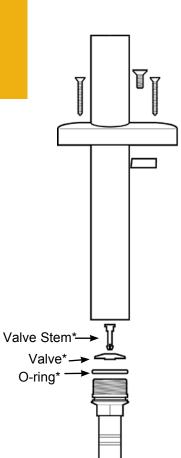


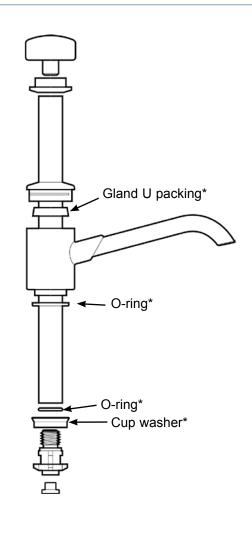
V-Pump Mk 6

V-Pump Mk 6 GP0650 - Vertical Self-Priming Hand Pump

Note* Contained in Service Kit AK0618







28

Service Kits

AK0618 Serviceable Parts Kit for V-Pump

Qty Containing 1 Cup packing

1 Buffer

1 Valve

1 Valve stem

1 O-ring (plunger cup seat)

1 Grand Ü packing

O-ring (base)
O-ring (head)

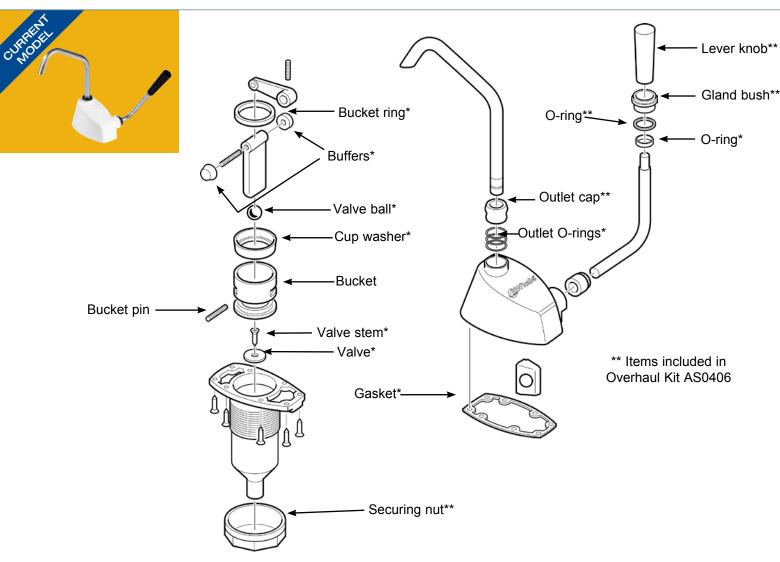


AK0618

Flipper Mk 3 & 4

Flipper Pump GP0418 - Self-Priming Lever Operated Hand Pump

Note* Contained in Service Kit AK0405



Flipper Mk 3 discontinued and replaced by Mk 4. Mk 1 and 2 service kits are not available

Service Kits

AK0405 With Complete Set of Serviceable Parts for Flipper Mk 3 & Mk 4

Qty	Containing
3	O-ring (3 per outlet)
1	Gasket
1	Bucket ring
1	Cup washer
1	Valve ball
2	Buffer
1	O-ring
1	O-ring (gland bush)
1	Valve stem
1	Valve

AS0406 Flipper Overhaul Kit

Qty	Containing
1	Outlet cap
1	Gland bush
1	Securing nut
1	Cover knob
1	O-ring





AS0406

See page 60 for further contact information

29

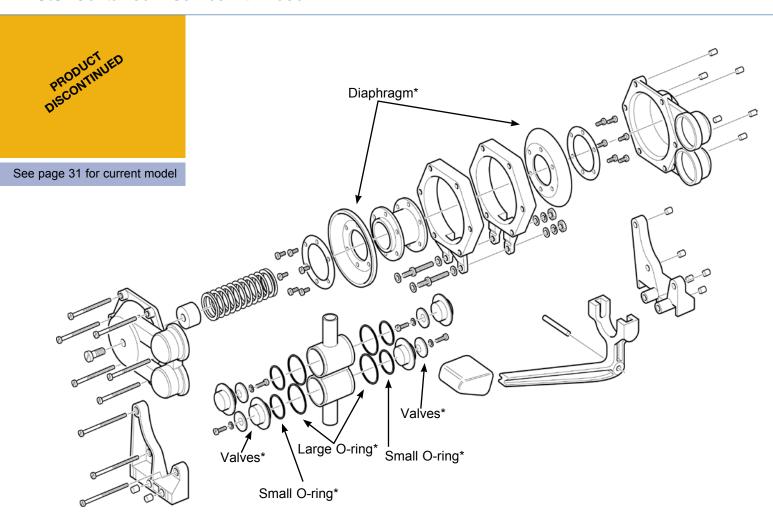


Manual Galley Pump - Foot Operated

Gusher® Galley Mk 2 Pump

Gusher® Galley Mk 2 - discontinued in 1984

Note* Contained in Service Kit AK0502



Pump replaced in 1984 by Gusher® Galley Mk 3 (see page 32). Mk 1 stock is not available

Service Kits

30

AK0502 Service Kit with Complete Set of Serviceable Parts for Whale Gusher® Galley Mk 2

Qty Containing

- Small O-ring
- 4 Valve
- Large O-ring
- Diaphragm

Note: This product is now out of production and has been replaced by Whale Gusher® Galley Mk 3 Pump. (See Page 32). No other service kits are available for this pump.

For further details of our current product range, please visit our web site www.whalepumps.com



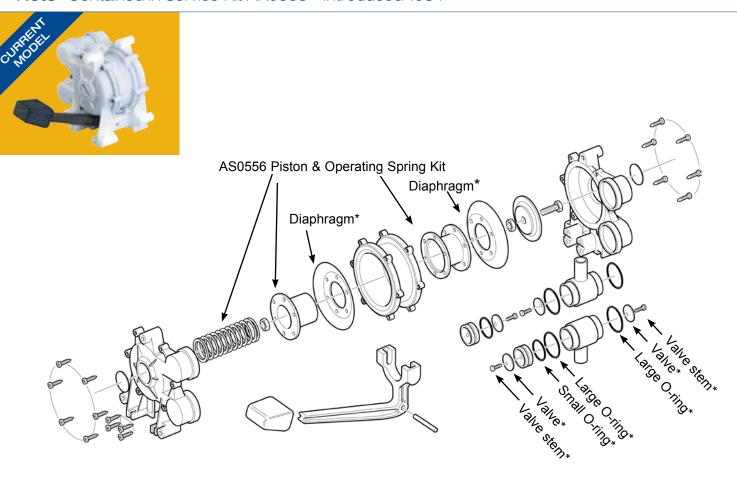
AK0502



Gusher® Galley Mk 3 Pump (Introduced 1984)

Gusher[®] Galley Mk 3 Pump GP0550 (Right Hand Version) GP0551 (Left Hand Version) - Foot Operated Fresh Water Pump.

Note* Contained in Service Kit AK0553 - Introduced 1984



Accessories

WF1530 Silverised Carbon Water Filter (inline)

Service Kits

AK0553 Service Kit with Complete Set of Serviceable Parts for Whale Gusher® Galley Mk 3

Qty Containing

- 2 Small O-ring
- 4 Valve
- 4 Valve stem4 Large O-ring
- 4 Self tapping screw
- Sealing washer
 Diaphragm

AS0556 Piston & Operating Spring Kit

Qty Containing

- Nut M6
- Operating spring
 Clamping cup
 - Piston
- 1 Clamping plate
- Sealing washer
- Screw M6



WF1530



AK0553



AS0556

See page 60 for further contact information

31



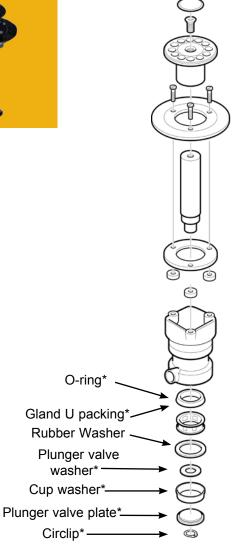
Manual Galley Pump - Foot Operated

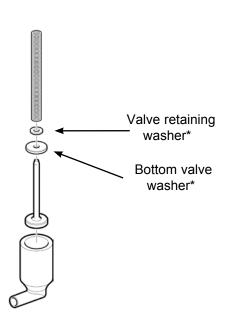
Tiptoe Pump Mk 4

Tiptoe Pump Mk 4 GP1309 - Self-Priming Fresh Water Pump. Introduced 1999.

Note* Contained in Service Kit AK1304







32

Accessories

WF1530 Silverised Carbon Water Filter (inline)

Service Kits

AK1304 Service Kit with Complete Set of Serviceable Parts for Tiptoe Mk 3 or Mk 4

Qty Containing

- 1 Cup washer
- 1 Gland U packing
- 1 Bottom valve washer
- 1 Plunger valve washer
- Plunger valve plate
- 1 Circlip
- 1 Valve retaining washer
- 1 O-ring
- 1 Rubber Washer



AK1304



WF1530



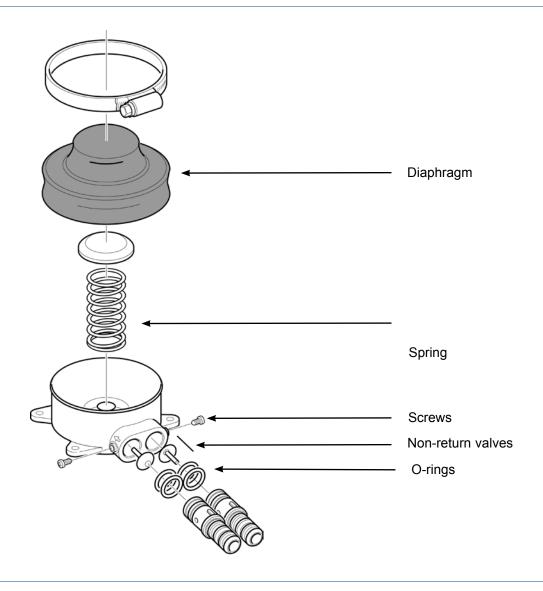


Babyfoot

Babyfoot Pump GP4618 - Self-Priming Compact Foot Pump

Note* For product manufactured after July 2003





Accessories

WF1530 Silverised Carbon Water Filter (inline)

Service Kits

AK4615 Serviceable Parts Kit

Qty Containing

1 Diaphragm neoprene

1 Spring

2 Screw

4 O-ring

2 Non return valve



33

AK4615



WF1530

See page 60 for further contact information





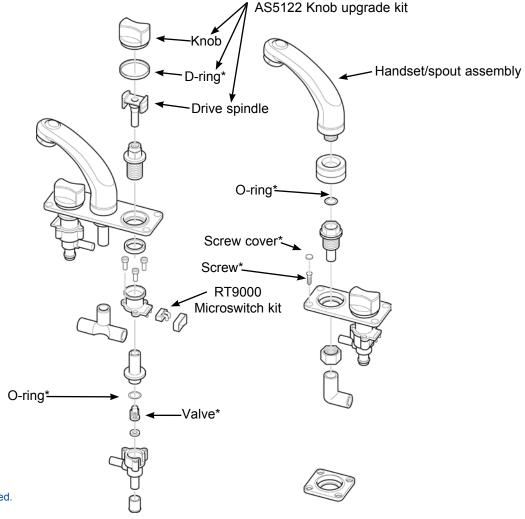
Elegance Single & Mixer Faucets(11mm & 12mm Smooth Connections)

Cold Only: RT1010, RT6010; Mixer: RT2010, RT2007, RT2035, RT7010, RT7007

Swivel Faucet Models



Note* Contained in Service Kit AK5030



Note: Long spout now discontinued. Replaced by AS5123.

Accessories

34

Also available separately

WF1230 Silverised Carbon Water Filter (inline)

RT9000 Microswitch Kit (2 switches)

Qty	Containing
2	Microswitches
2	Switch clips
4	Terminal connectors

Service Kits

AK5030 Service Kit with Complete Set of Serviceable parts for Elegance Faucets, Showers & Swim 'N' Rinse

Qty	Containing
5	O-ring (Combo showerhead & Tee pieces)
4	Screw No.6 csk
4	Screw No.6 pan head
2	O-ring (control unit)
2	Valve washer

Screw cover whiteLarge screw covers (Swim 'N' Rinse only)

4 Screw cover beige

O-ring (tap outlet)



AK5030



RT9000

1



Faucets - Tough, Lightweight ABS Range

Elegance Single & Mixer Faucets (11mm & 12mm Smooth Connections)

Single: RT1010, RT6010 - Swivel Faucet Models

Mixer: RT2010, RT2007, RT2035, RT7010, RT7007









AS5020

AS5122

AS5626

WF1230

Service Kits (Continued)

AS5020 Replacement short spout c/w 12mm male stem

AS5122 Control Knob Upgrade Kit White (Mk 2)

Qty Containing
2 Knobs
1 D-ring (blue)
1 D-ring (red)
2 Drive spindles

AS5626 Control Knob Upgrade Kit Beige

Qty Containing 2 Knobs 1 D-ring (blue) 1 D-ring (red) 2 Drive spindles

For information on 1/2" threaded models see pages 36-40



Faucets - Tough, Lightweight ABS Range

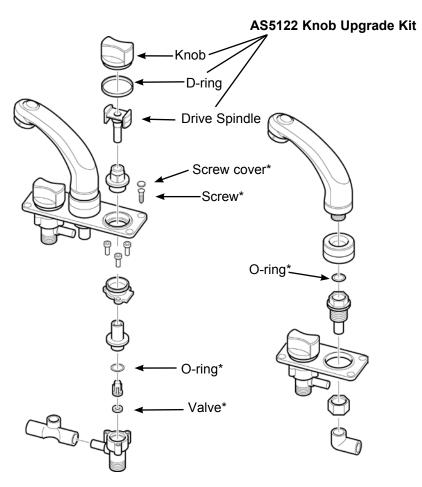
Elegance Single & Mixer Faucets Mk 2 (1/2" Threaded Connections)

Single: RT1210; Mixer: RT2210

Swivel Faucet Models

Note* Contained in Service Kit AK5030





Note: These parts are now available with a rose adjustable outlet.

36

Accessories

Also available separately

WF1530 Silverised Carbon Water Filter (inline)

Service Kits

AK5030 Service Kit with Complete Set of Serviceable parts for Elegance Faucets, Showers & Swim 'N' Rinse

Qty Containing

- 5 O-ring (Combo showerhead & Tee-piece)
- 4 Screw No.6 csk
- 2 O-rings (control unit)
- 2 Valve washers
- O-ring (tap outlet)Screw covers white
- 4 Screw covers beige
- 6 Large screw covers white (Swim 'N' Rinse only)

RT9000 Microswitch Kit (2 switches)

Qty Containing

2 Microswitches

2 Switch clips

4 Terminal connectors

AS5122 Knob Upgrade Kit White

AS5125 Long spout Assembly White

Service kits and images continue on the next two pages See page 60 for further contact information



Faucets - Tough, Lightweight ABS Range

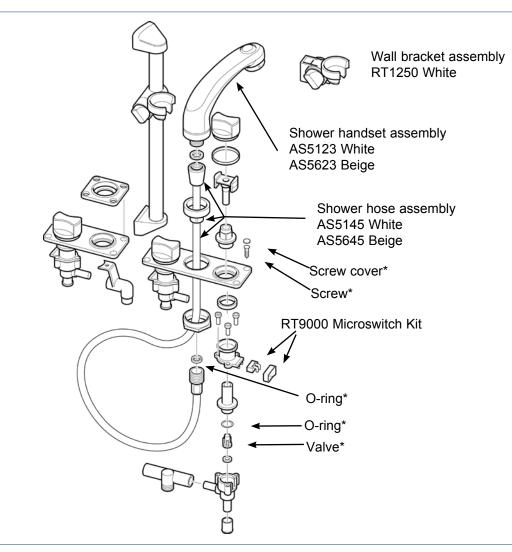
Elegance Combo Faucet/Shower Mk 3 and Swim 'N' Rinse Models

Cold Only: RT1500; Mixer: RT2498, RT2500

Combined Model with Faucet and Shower Functions

Note* Contained in Service Kit AK5030.





Accessories

RT1250 Shower Wall Bracket (for use with RT2500)

RT9000 Replacement Microswitch Kit

WF1530 Silverised Carbon Water Filter (inline)

Service Kits

AK5030 Service Kit with Complete Set of Serviceable Parts for Elegance Faucets, Showers & Swim 'N' Rinse

Qty Containing

- 5 O-ring (Combo showerhead* Tee-piece)
- 4 Screw No.6 csk
- 2 O-rings (control unit)
- 2 Valve washers
- 1 O-ring (tap outlet)
- 4 Screw covers white
- 6 Screw covers beige
- 6 Large screw covers white (Swim 'N' Rinse only)

AS5123 Shower Handset/Spout Assembly White

AS5133 Replacement Handset/Spout 1/2" Threaded (White)

AS5145 Shower Hose Assembly White (1.5 m)

AS5623 Shower Handset/Spout Assembly Beige

AS5645 Shower Hose Assembly Beige (1.5 m)

RT9000 Microswitch Kit (2 switches)

Qty Containing
2 Microswitches
2 Switch clips

2 Switch clips4 Terminal connectors



Faucets - Tough, Lightweight ABS Range

Elegance Combo Faucet/Shower Mk 3 and Swim 'N' Rinse Models

Cold Only: RT1500; Mixer: RT2498, RT2500

Combined Model with Faucet and Shower Functions



AK5030



AS5122



AS5123



AS5133



AS5145



AS5147



AS5148



AS5149



AS5623



AS5626



AS5645



RT1750



RT9000

38



WF1530

Service Kits (Continued)

Swim 'N' Rinse Transom Showers

AS5122 Control Knob Upgrade Kit White (Mk 2)

Qty	Containing
2	Knobs
1	O-ring (blue)
1	O-ring (red)
2	Drive spindles

AS5133 Shower Handset/Spout (1/2" BSP)

AS5147 Hose Assembly for Swim 'N' Rinse (7 ft/2.1 m) - includes hose and hose connectors for 12mm shower models

AS5149 Hose Connectors White Swim 'N' Rinse Showers

AS5148 Hose for Swim 'N' Rinse (7 ft/2.1 m) for $^{1/}2$ " shower models

AS5626 Control Knob Upgrade Kit Beige (Mk 2)

Qty	Containing
2	Knobs
1	O-ring (blue)
1	O-ring (red)
2	Drive spindles

RT1750 Riser Bar



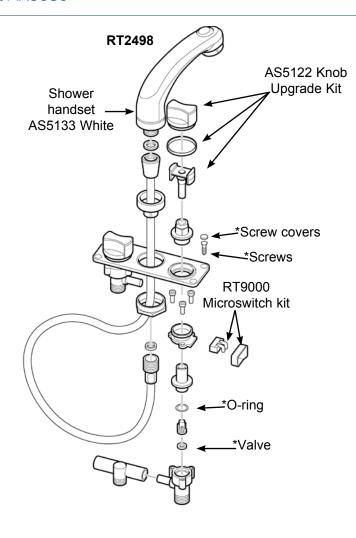
Elegance Combo Faucet/Shower Mk 3 (1/2" Threaded Connections)

Cold Only: RT1470; Mixer: RT2498

Combined Model with Faucet and Shower Functions

Note* Contained in Service Kit AK5030





Service Kits

AK5030 Service Kit with Complete Set of Serviceable Parts for Elegance Faucets & Showers

Containing Qty

- 5 O-ring (combo showerhead * Tee-piece)
- 4 Screw no.6 csk
- Screw no.6 pan head
- 2 O-rings (control unit)
- 2 Valve washers
- O-ring (tap outlet)
- Screw covers white 4
- Screw covers beige
- Large screw covers white

(Swim 'N' Rinse only)

RT9000 Microswitch Kit (2 switches)

Qty Containing

- 2 Microswitches
- 2 Switch clips
- Terminal connectors

RT1750 Riser Bar

AS5020 Replacement short spout c/w 12mm male stem

AS5122 Knob Upgrade Kit White

AS5133 Shower Handset (1/2" BSP) White

Swim 'N' Rinse Showers

AS5148 Hose for Swim 'N' Rinse (7 ft/2.1 m)

Accessories

Available separately

WF1530 Silverised Carbon Water Filter (inline)



Faucets - Tough, Lightweight ABS Range

Elegance Combo Faucet/Shower Mk 3 (1/2" Threaded Connections)

Cold Only: RT1470; Mixer: RT2498

Combined Model with Faucet and Shower Functions



AS5020



AK5030



AS5133



AS5148



AS5122



RT1750



RT9000



WF1530

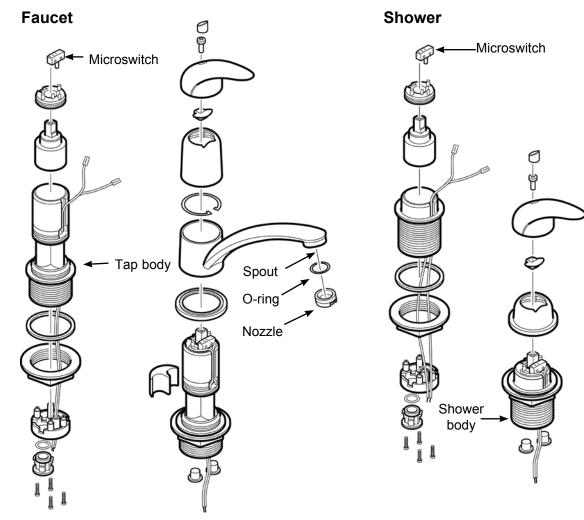


Elite Faucet Range

MT0111, MT0140B, MT0161

Single Lever Faucets





Service Kits for Faucets

General

MT8000 Microswitch Kit (2 switches)

Spouts

AK6310 Chrome

Service Kits for Showers

RT1780B Riser Bar Chrome

Adaptors

Connection to Whale Quick Connect 15 mm	WS1286B (Red) or WS1288B (Blue) and WU1222 (for angled arrangement)
Connection to 1/2" ID hose	WU1282B Stem adaptor 1/2" Hose - 12 mm Quick Connect
Connection to 3/8" ID hose	WS1280B Stem hose connector ³ / ₈ " Hose 12 mm Quick Connect



Faucets - Single Lever Lightweight Range

Elite Faucet Range

MT0111, MT0140B, MT0161

Single Lever Faucets









50





Electric Grey Shower / Waste Pumps and Tanks





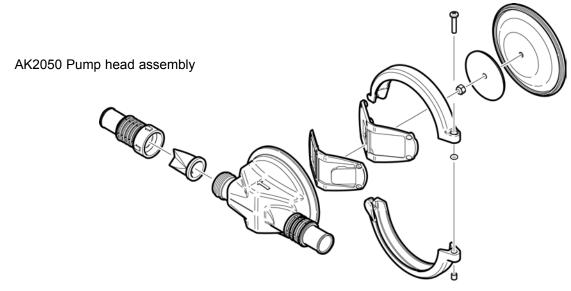
Electric Waste Pumps

Gulper® 220 Shower Drain/Grey Waste Pump

BP1552 (12V d.c.), BP1554 (24V d.c.)

Shower Drain Waste Pump





Note: Pump head ONLY available as spare

44

Accessories

GW0810 8 Ltr (2.2 US Gals) Grey Waste Tank GW1610 16 Ltr (4.4 US Gals) Grey Waste Tank

Service Kits

Qty

AK2050 Replacement Pump Head for Gulper 320 and Gulper 220

1	Diaphragm
1	Nyloc Nut M5
1	Screw Hex M5 x 16mm
1	Outlet Valve Tricuspid
1	Marine Head 3/4" and 1"
1	Valve Inlet and Outlet
1	Valve Plate
1	Outlet Valve Housing

Containing









GW1610

AS1562

GW0810

AS1562 Clamping Ring Kit



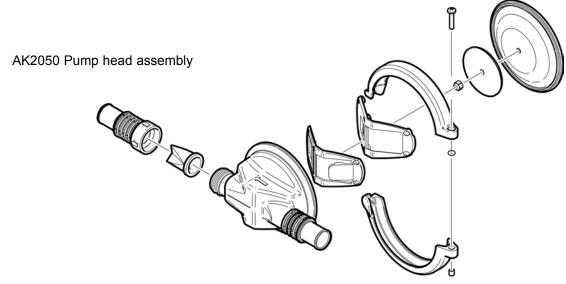
Electric Waste Pumps

Gulper® 320 Shower Drain/Grey Waste Pump

BP2052 (12V d.c.), BP2054 (24V d.c.)

Note* Contained in Service Kit AK2050





Note: Pump head ONLY available as spare

Accessories

GW0810 8 Ltr (2.2 US Gals) Grey Waste Tank GW1610 16 Ltr (4.4 US Gals) Grey Waste Tank

Service Kits

AK2050 Replacement Pump Head for Gulper 320 and Gulper 220

Qty	Containing
4	Diophroam

- Diaphragm
- Nyloc Nut M5
- Screw Hex M5 x 16mm
- Outlet Valve Tricuspid
- Marine Head 3/4" and 1"
- Valve Inlet and Outlet Valve Plate
- **Outlet Valve Housing**



AK2050



GW0810



45

AS1562



GW1610

AS1562 Clamping Ring Kit



Electric Waste Pumps

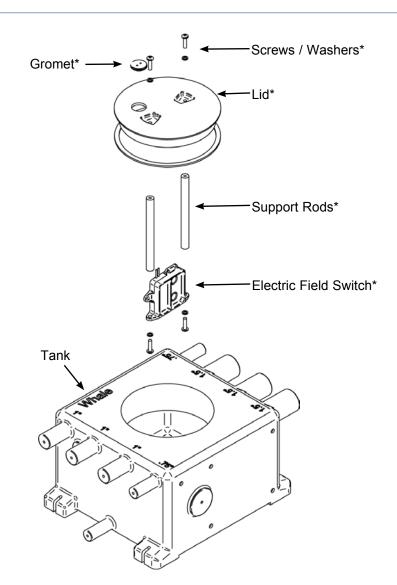
Grey Waste Tank

Grey Waste Tank GW0810, GW0831, GW1610, GW1631

8 Ltr and 16 Ltr Grey Waste Tank







* Contained in Service Kit AK1001(B)

Service Kits

46

BE9003 Electric Field Sensor Switch

Qty Containing

Electric field sensor switch

AK1001B Tank Lid with Switch built in

Qty Containing

1 Lid

1 Electric field sensor switch

I Gromet

2 Support rods

4 Screws

4 Washers



BE9003



AK1001B





Electric and Manual Black / Toilet Waste Pumps



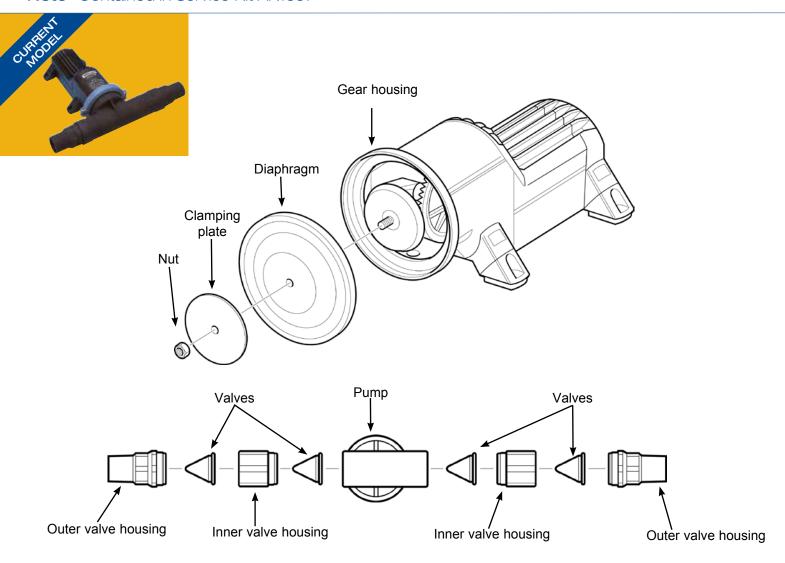


Electric Toilet Waste Pumps

Gulper® Toilet Waste Pump

BP2552B (12V d.c.), BP2554B (24V d.c.) - Pump Designed to Manage Unmacerated Toilet Waste

Note* Contained in Service Kit AK1557



Accessories

DV5606 11/2" Diverter Valve EB3488 11/2" Elbow YP6114 11/2" Y Piece

Service Kits

AK1557 with Set of Serviceable Parts for Gulper® **Toilet Pump**

Qty Containing Diaphragm Inlet/outlet valves

AS1562 Clamping Ring Kit



AK1557



AS1562





EB3488



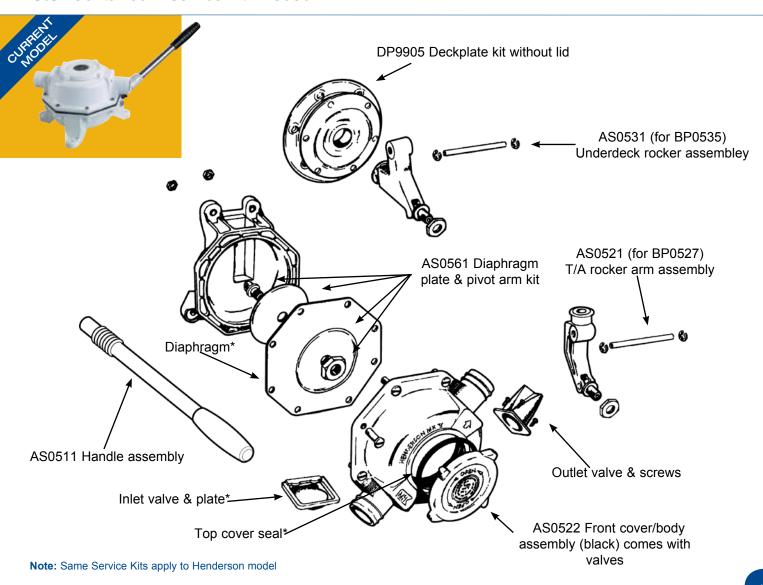
YP6114

See page 60 for further contact information

Mk 5 Sanitation

Bulkhead: BP0527, Thru Deck: BP0535

Note* Contained in Service Kit AK8050



Accessories

DP9905 Deck Ring (for BP0535 only) DV5606 1¹/₂" Diverter Valve EB3488 1¹/₂" Elbow

Service Kits

YP6114 11/2" Y Piece

AK8050 Service Kit with Complete Set of Serviceable Parts

Qty	Containing
1	Inlet valve plate
2	Inlet valve
2	Valve screw short
1	Top cover seal
1	Diaphragm
1	Outlet valve
2	Valve screw long

2	Circlip large	
2	Circlip small	
8	Screw M5x25	
8	Nut M5	

Containing

Qty

AS0522 Front Cover/ Body Assembly (black) comes with Valves

1	Top cover
1	Front cover/ body (white)
1	Inlet valve plate
1	Inlet valve
2	Valve screw short
1	Top cover seal
8	Assembly screws
1	Outlet valve
2	Valve screw long

DP9905 Deckplate White without Lid

Qty	Containing
1	Deckring white
1	Deckseal (with 6 holes)
4	Screws
4	Nuts
4	Screws M6x40
2	M6x40 CH

AS0521 Rocker Arm Assembly (white) comes with Valves

Qty	Containing
1	T/A Rocker arm
1	Pivot arm
1	Rocker arm nut
1	Pivot pin
1	Hinge pin
2	Circlip large
2	Circlip small





Mk 5 Sanitation

Bulkhead: BP0527, Thru Deck: BP0535



AK8050



AS0511



AS0521



AS0522



AS0531



AS0561



DP9905



DV5606



EB3488



YP6114

Service Kits (Continued)

AS0531 U/D Rocker Arm Assembly

Oty Containing
1 Pivot bush
1 U/D Rocker arm
1 Fork insert
1 Pivot arm
1 Rocker arm nut
1 Hinge pin
2 Circlip large
2 Circlip small
1 Pivot pin

AS0511 Handle Assembly s/s c/w Lanyard

AS0561 Diaphragm Plate & Pivot Arm

Qty	Containing
2	Pivot arm
1	Diaphragm plate
1	Diaphragm nut
2	Circlip small





Fishbox / Baitwell



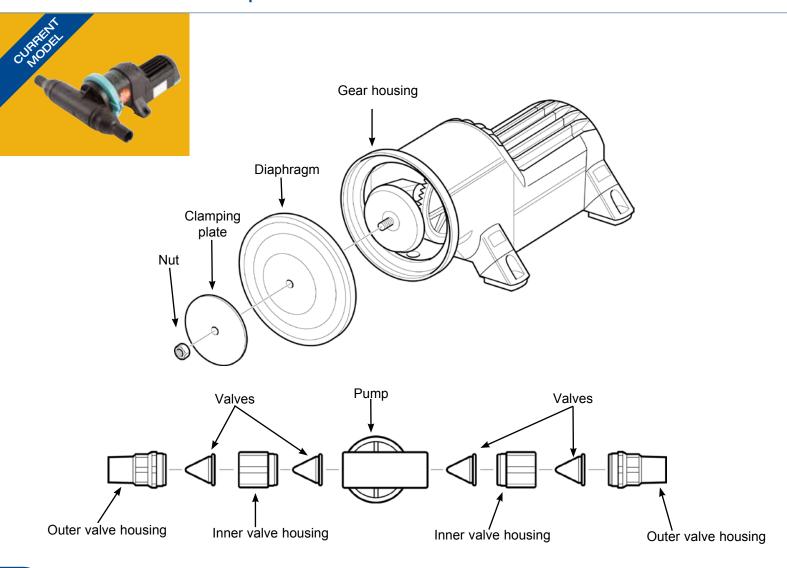




Gulper® Grouper Fishbox Discharge Pump

BP4572 (12V d.c.), BP4574 (24V d.c.), BP4672 (12 V d.c.), BP4674 (24 V d.c.)

Fishbox Evacuation Pump



Service Kits

52

AK1557 with Set of Serviceable Parts for Gulper® Toilet Pump

Qty Containing

Diaphragm (Santoprene®)Inlet/outlet valves

AS1562 Clamping Ring Kit



AK1557



AS1562



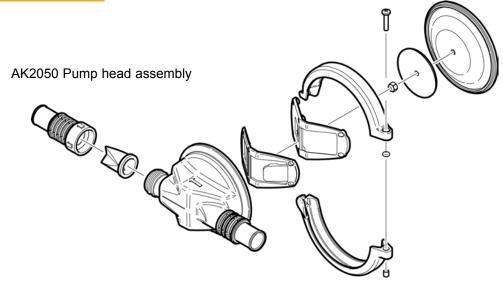


Gulper® 320 Fishbox Discharge Pump

BP2052 (12V d.c.), BP2054 (24V d.c.)

Note* Contained in Service Kit AK2050





Service Kits

AK2050 Replacement Pump Head for Gulper 320 and Gulper 220

Qtv	Containing

Diaphragm (Santoprene®) Nyloc Nut M5

Screw Hex M5 x 16mm

Outlet Valve Tricuspid

Marine Head 3/4" and 1"

Valve Inlet and Outlet

Valve Plate

Outlet Valve Housing

AS1562 Clamping Ring Kit



AK2050



AS1562



Section 7

Washdown



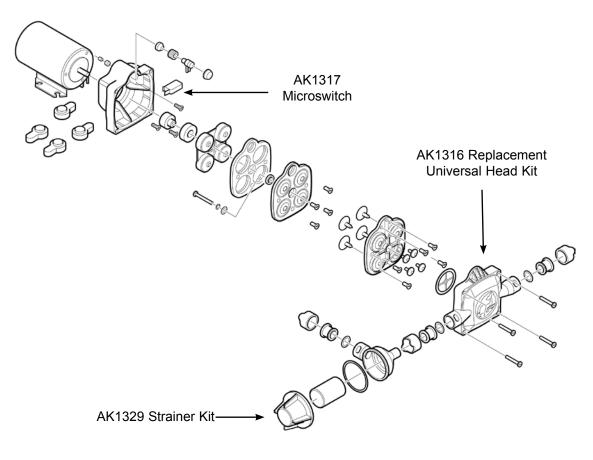


Electric Washdown Pump

WD 1815 (12V d.c.), WD1825 (24V d.c.)

Washdown Kit with Pump and Trigger





Service Kits

AK1316 Service Kit for Universal Pump Head

Qty Containing

Replacement head (includes front cover retrofit to obsolete UP style universals)

AK1317 Universal Microswitch Kit

Qty Containing 1 Microswitch

AK1319 Replacement Strainer

Qty Containing 1 Strainer



AK1316



AK1317



AK1319





Accessories







Watertight Locker Doors

Locker Door LD2000, LD3000, LD4000, Clear Lid Version LD4002

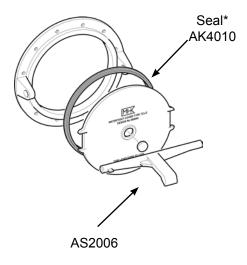
Note* Contained in Service Kit AK4010

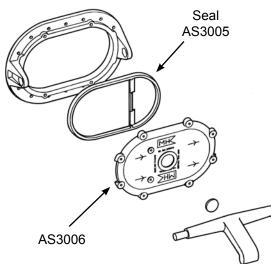


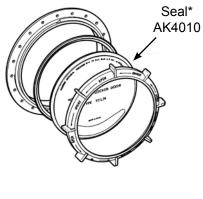












Service Kits

AK3005 Service Kit of Serviceable Parts for TCL 3

Qty Containing Seal Buffer pad

AK4010 Service Kit of Serviceable Parts for TCL 2 & TCL 4

Qty

Seal (moulded white) TCL 2 or 4 O-ring seal (black) TCL 4 only



AK4010



AK3005



AS3006













Customer Support Services

Whale employees are committed to providing excellent customer service and product installation and maintenance advice.

Contact our customer service team for technical advice:



Whale Support





tel: +44 (0)28 9127 0531 info@whalepumps.com whalepumps.com

tel: +1 802 367 1091 fax: +1 802 367 1095 usasales@whalepumps.com whalepumps.com

Call us directly for product and installation advice

"It is refreshing to find a manufacturer that not only supplies first rate products but also gives excellent back up service..."

Ken Bell, letter to Inland Waterways News

Boat Builder Technical Partnership

Our technical support team of highly skilled marine engineers work in partnership with power and sailboat builders around the world. This collaboration delivers bespoke systems that are ideal for each builder, saving both time and money.

Please note: Illustrations are for guidance only. For installation advice please contact Whale directly.

Neither the accuracy nor completeness of the information contained in this brochure is guaranteed by Munster Simms Engineering Limited and Whale Seaward Inc.

(a wholly owned subsidiary of Munster Simms Engineering Limited) and may be subject to change at its sole discretion.

Munster Simms Engineering Limited and Whale Seaward Inc. (a wholly owned subsidiary of Munster Simms Engineering Limited) may, at its sole discretion, change the technical performance, dimensions or appearance of any of its Whale products without prior notification to a purchaser.

Copyright Whale 2015 - All rights reserved. WHALE®, GUSHER®, GULPER®, SMARTBAIL®, WHALE IC®, WHALE IC DEVICE and BABYF00T® are trademarks of Munster Simms Engineering Limited, Bangor, Northern Ireland trading as Whale and Whale Seaward Inc.

Whale's policy is one of continuous improvement and we reserve the right to change specifications without prior notice. Illustrations are for guidance purposes only.

Please note that by contacting Whale Support you will be indicating your consent to receiving product updates, recall information, help guides and appropriate marketing messages from us via post, email or telephone unless you indicated an objection to receiving such messages.

Santoprene® is a registered trade name of Advanced Elastomer Systems, LP, an Exxonmobil Chemical Affiliate.

Delrin®, Teflon® and Neoprene are registered trade names of Dupont Neumeurs and Co.

Monprene® is a registered trade name of Technore Apex.