



INSTALLATION AND OPERATION MANUAL

Whale Two Way Manifold IC Grey Waste accessory



NOTE: Suitable for use with Gulper IC only

INSTALLATION & USER INSTRUCTIONS

Thank you for purchasing this Whale product. For over 60 years, Whale has led the way in the design and manufacture of freshwater and waste systems including: pumps, plumbing, faucets and showers for low voltage applications. The company and its products have built a reputation for quality, reliability and innovation backed up by excellent customer service. For information on our full range of products visit www.whalepumps.com

1. SPECIFICATION

Product Code	WM1982B	WM1984B	WM2582B	WM2584B(W)	WM3882B	WM3884B
Cable Length	2m (6ft)	4m (12ft)	2m (6ft)	4m (12ft)	2m (6ft)	4m (12ft)
Inlet Hose Connections	¾" (19mm)		1" (25mm)		1 ½" (38mm)	
Outlet Orientation (To Pump)	¾" (19mm)		1" (25mm)			
Control Voltage	5V dc via Gulper® IC					
Current Draw	Low power 0.01 Amps supply					
Connectors	Deutsch® Connectors: Quick Connect Series 7 ways (directly onto Gulper® IC)					

2. PRINCIPLES OF OPERATION

IC – Intelligent Control Technology

At the heart of every Whale IC 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 to react as required.

Two Way Manifold IC

Manifold to manage waste from multiple drains with intelligent control built in. Compact automatic system handles waste drainage from two outlets. Must be used with Gulper® IC.

The Two Way Manifold IC is connected to a Gulper® IC. When the manifold senses water it sends an electrical signal to Gulper IC which evacuates the system. As the water level decreases the electrical signal transmitted by the manifold will cease. Gulper IC will continue to operate for a further 15 seconds before turning off.

3. TO THE USER

Please read the following carefully before installation.

WARNING: Please note that incorrect installation may invalidate the warranty.

4. 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.

5. APPLICATION

Two Way Manifold IC is a unit with two waste inputs and has intelligent control built in. It must be operated by a 12 / 24V Gulper IC unit only

6. WARNINGS

1. Hoses connected to Two Way Manifold IC should be installed with an appropriate rise in order to prevent air pockets forming.
2. If using a single drain a vent should be fitted to the unused inlet in close proximity to Manifold IC. This is to prevent airlocks in the system (Fig. 3) **NOTE.** The vent should be terminated at a level above all grey waste drains.
3. Not suitable for pumping flammable liquids, diesel, chemicals etc. For use in a grey waste water system only.
4. Two Way Manifold IC is designed for installation in marine vessels only. If it is intended for use for any other purpose or with any other liquid, it is the user's responsibility to ensure that the unit is suitable for the intended use and, in particular, that the materials are fully compatible with the liquids to be used. The Whale Two Way Manifold IC is **NOT** suitable for domestic applications.
5. With all applications, it is important that a system of safe working practice is applied to installation, use and maintenance. Ensure the electric supply is turned off.
6. In order to securely fasten the unit, ensure that the mounting surface is a minimum thickness of 19mm (3/4"). Do **NOT** screw directly to the hull - must be mounted on a bulkhead or on an additional board.



7. PARTS LIST

Qty 1	Two Way Manifold IC	Qty 1	No. 8 x 25mm Panhead self screw taper
Qty 1	Cable grip		

8. INSTALLATION

This Two Way Manifold IC is designed for use with Gulper® IC to be installed in recreational marine vessels in the following application:-

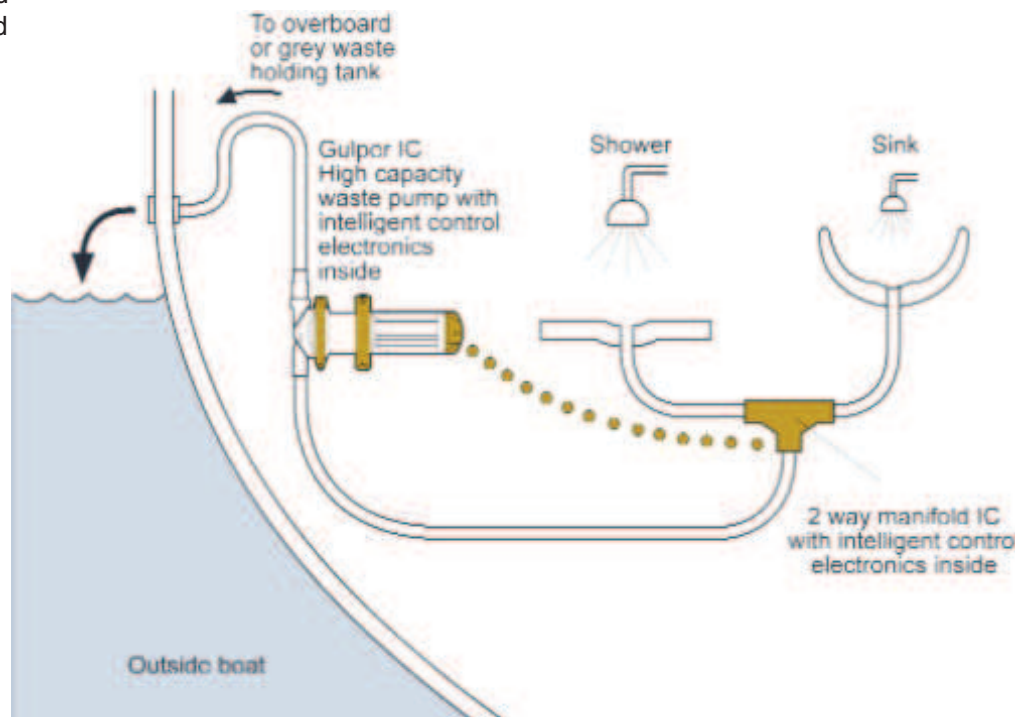
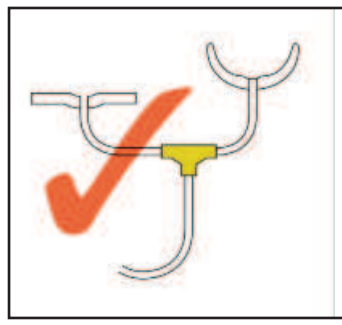
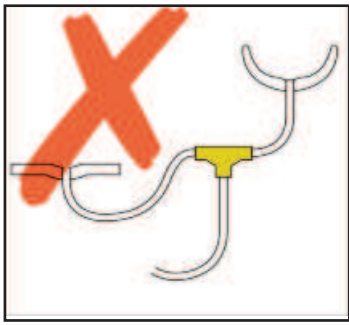


Fig 1 Typical Installation in a grey application – utilising a 12V/24V Gulper® IC

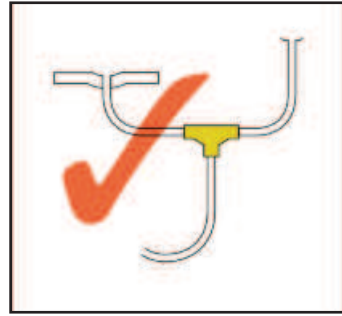
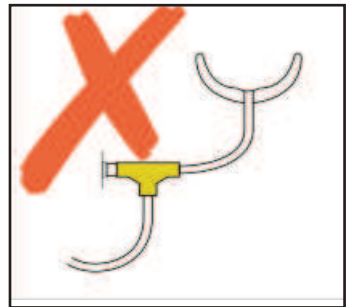
Mounting Instructions

- The Two Way Manifold IC recommended installation is in the upright position or at a 45 degree angle forwards **NOTE.** The Two Way Manifold **MUST NOT** be mounted horizontally.



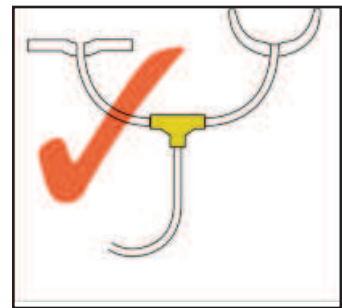
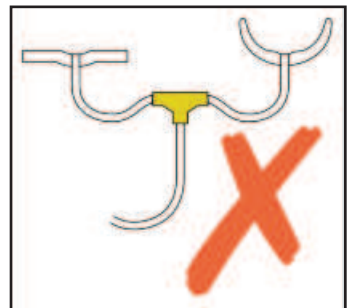
- Two Way Manifold **MUST NOT** be mounted above the level of any grey waste drain (Fig. 2).

Fig 2 Mounting location of a Two Way Manifold IC



- If connecting to a single drain, a vent should be fitted to the other inlet of the Two Way Manifold IC (Figure 3)

Fig 3 Two Way Manifold IC connected to a single unit



- Hoses from Two Way Manifold IC must be mounted with the hose rising as this prevents air pockets forming that result in poor drainage (Fig. 4).

Fig. 4 Hose installation

- Drill pilot holes for securing the Two Way Manifold IC. **NOTE** - do not drill through hull, ensure that the Two Way Manifold IC is mounted to additional board or bulkhead.
- Use 19mm (3/4") or 25mm (1") or 38mm (1 1/2") smooth bore reinforced hose to connect to the manifold securing it with hose clips.

Electrical Wiring

- For installation with Gulper® IC - use pre-wired Deutsch connectors attached
- If you are not familiar with applicable electrical standards, ensure that the unit is installed by a qualified electrician/ technician.

WARNING: Fire hazard. Wiring must comply with applicable electrical standards and include a properly sized fuse or circuit breaker (12V d.c. system - 10 Amp automotive Fuse, 24 V d.c. system - 5 Amp Automotive Fuse).

WARNING: Improper wiring can cause a fire resulting in injury or death.

NOTE: Switch off the power prior to making connections.

Suggested wiring information is given as a guide only. For full information, refer to the USCG, ABYC and ISO regulations for marine applications and wiring gauges, connectors and fuse protection.

Wiring instructions

All three wires must be connected.

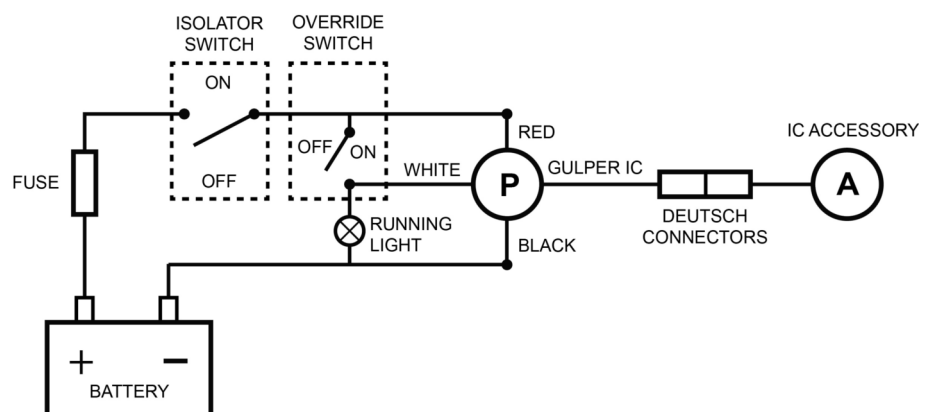


Fig. 5 Wiring Gulper IC to Whale Two Way Manifold IC



Connect the pre-wired Deutsch connectors on Gulper IC and Two Way Manifold IC.

Fig. 6 Deutsch connectors

9. INSTRUCTIONS FOR USE

Following installation of the pump system switch on shower and or sink to run grey waste through the Two Way Manifold IC and check pump is operating and the water is draining away.

The Two Way Manifold IC is an automatic application; therefore ensure that the power supply is ON.

10. MAINTENANCE

This Two Way Manifold is designed to only require minimal maintenance.

WARNING: Before servicing, drain water from system.

For Optimal Performance

Ensure this product is cleaned at regular intervals. Remove cap and wipe inside wall with damp cloth.

Annual Checks

Whale advise that the boat's plumbing system is checked annually for leaks and obstructions. Also a pump electrics check is advisable.

11. TROUBLE SHOOTING

PROBLEM	POSSIBLE CAUSES	POTENTIAL SOLUTION
Pump fails to operate	The Two Way Manifold IC may need cleaned.	Carefully remove the lid and clean the inside walls
	Two Way Manifold IC wiring Fault	Check electrical connections and visually inspect wiring
Water fails to drain away or drains slowly	Air lock around Two Way Manifold IC	Check hose has a rise from Manifold IC to drain
	Blockage of vent or within hose	Clear Blockage
Refer to Gulper IC troubleshooting guide for further instructions		

12. WINTERISING

NOTE: Winterizing - Fully drain system.

Whale® cannot guarantee warranty if the system is not fully drained for winterizing.

13. EU DECLARATION OF CONFORMITY

This product complies with all relevant European directives and standards. Please contact Whale if further details are required. Please refer to Gulper IC instructions for the Declaration of Conformity and Standards that apply to IC system installation.

14. PATENTS AND TRADEMARKS

Whale® and Gulper® are registered trade marks to Munster Simms Engineering Limited.

15. WARRANTY STATEMENT

This Whale ® product is covered by 1 year warranty. Please see enclosed document for details of our statement of limited warranty.

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