In-Line Pressure Switch
WU7207 / WU7207B

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, pumps and heating 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**

Typical Installation

The Whale In-Line Pressure Switch is designed for use in freshwater pressure systems without micro-switches. It is suitable for use with 12V d.c. or 24V d.c. Whale Submersible or Whale In-Line Pumps.

This product is designed for use with freshwater only. If it is intended for use with any other liquid, it is the user's responsibility to ensure that the materials are fully compatible with the liquids to be used and that a system of safe working practice is applied to installation, use and maintenance.

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1. PRINCIPLES OF OPERATION

The Whale In-Line Pressure Switch is designed to operate in freshwater pressurised systems connected to a 12V d.c.or 24V d.c. power supply in recreational vehicles or vessels. The pressure switch detects the opening or closing of any tap in the system and switches the pump on or off as required.

2. APPLICATION

The Whale In-Line Pressure Switch is designed for use in freshwater pressurised systems, supplied by either a Whale Submersible or Whale In-Line Pump.

3. WARNINGS

Use for any other purpose or with any other liquid is not recommended and is entirely at the user's risk.

4. INSTRUCTIONS FOR INSTALLATION

Observe all warnings.

WARNING

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.

To the User: Please read the following carefully before installation and use.

WARNING Before you begin, always disconnect power sources before installing or making connections with all applications. It is important that a system of safe working practice is applied to the installation, use and maintenance. Always ensure the water system is drained before commencing work.

Step 1 Choose a location to install the In-Line Pressure Switch. When choosing an installation location, you **must** consider the following:-

i) The location **must** allow access to the pressure switch for adjustment and mainentance when required.

ii) The pressure switch **must be** installed in the pipework, on the outlet side of the pump **before** any T pieces. This means that the opening of any tap in the system will activate the pressure switch.

iii) The pressure switch **must be** screwed to a surface or suspended in the pipework.

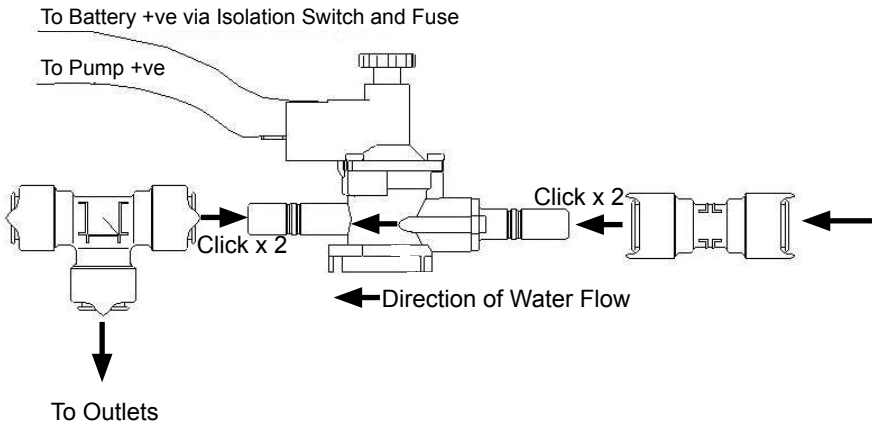

Figure 1: Pressure Switch Location

Step 2 Use Whale 12mm Quick Connect plumbing fittings (Whale Part Number: WU1202) to connect the pressure switch to the pipework.

Step 3 Connect microswitch terminals as shown below.

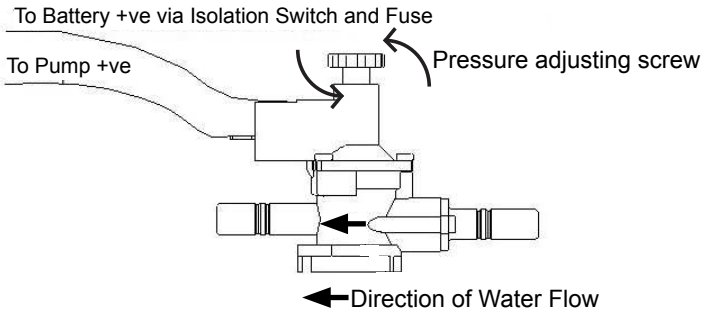

Figure 2: Connecting Microswitch Terminals

Step 4 You must fit an isolator switch and a fuse (not provided) in the postive line, as shown below.

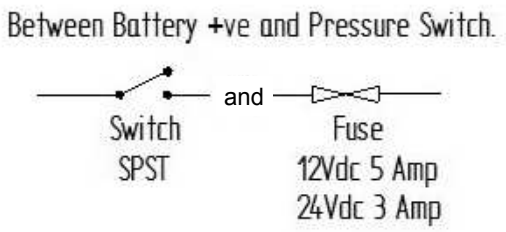

Figure 3: Installing Isolator Switch

5. INSTRUCTIONS FOR OPERATION

Priming the System

Option 1: In-Line Pressure Switch Fitted With In-Line Pump
Option 2: In-Line Pressure Switch Fitted With Internal Submersible Pump
Option 3: In-Line Pressure Switch Fitted With External Submersible Pump

Option 1: In-Line Pressure Switch Fitted With In-Line Electric Pump

Step 1 Disconnect power supply at the isolator switch.

Step 2 Open one cold tap fully.

Step 3 Ensure that the storage tank is filled to a level higher than the pump.

Step 4 Turn the power back on at the isolator switch and close the tap once water is running.

Option 2: In-Line Pressure Switch Fitted With Internal Submersible Pump

Step 1 Ensure that there is no air trapped in the pump. Air is released by gently shaking the pump under water while the pump is in the water tank is switched off. Trapped air in the submersible will not allow the pump to prime.

Option 3: In-Line Pressure Switch Fitted With External Submersible Pump

Step 1 The pump **must be** placed in the water before connecting to the side of the vehicle.

Please note: At normal flow rates the pump should operate continuously - but at low rates the pressure switch will cycle on and off to maintain back pressure in the pipework.

Please note: When battery voltage is stable, the pump will produce steady water flow. If battery voltage decreases or increases water flow will be intermittent and the pressure switch will turn on and off to maintain pressure in pipework.

Setting the Pressure Switch

Your pressure switch is factory set and should not normally require adjustment. However, adjustment may be required if the power supply voltage has varied from the previous setting, either due to battery drainage or higher voltage being supplied when the battery charger is operating. In the event that your pump doesn't switch off when you close the taps, or it pulses on and off rapidly when the taps are fully open, follow these guidelines to re-adjust the pressure switch setting.

Step 1 Ensure the system, (including the Water Heater, if installed) is full of water and all taps are closed.

Step 2 Tighten the adjusting screw clockwise until the pump comes on (see Fig. 2).

Step 3 Open any tap until you have a smooth flow of water, then close the tap.

Step 4 Return to the pressure switch and turn the pressure switch adjustment screw slowly anti-clockwise until the pump has stopped. Turn the adjustment screw a further half turn (180 degrees) anti-clockwise.

Step 5 Check for correct operation by opening and closing all taps individually. The pump should turn on when the cold tap is opened and switch off immediately when the cold tap is closed. There will normally be some pulsations at low flows. Please note: The hot side (if applicable) may take up to 10 seciond to react.

Three Golden Rules:

1. **Never** allow the pump to run dry.
2. **Never** allow the pump to run continuously for more than 15 minutes.

6. MAINTENANCE

Whale recommends regular inspection with maintenance and replacement of components as necessary. Replacement components are available (Whale Part Number: AK7209).

7. SERVICE SUPPORT DETAILS

For installation or serviceable parts advice please contact Whale Customer Support:

Tel: 00 44 (0)28 91 27 0531

Email: info@whalepumps.com

8. EU DECLARATION OF CONFORMITY

Declaration Number: EU-COMP1001-00

We the undersigned:
Name of Manufacturer: Munster Simms Engineering Ltd
Address: 2 Enterprise Road, Bangor, Co. Down, BT19 7TA
Country: Northern Ireland

Hereby we declare that the products listed below, which are in contact with drinking water from delivery date January 1st 2016, fulfil the requirements of the state of the art. In particular the mentioned plastic parts, which are in contact with drinking water, are tested according to the Guidelines of the Ministry of Health and Environment (Guideline KTW) and the technical rules of the DVGW (W270) and fulfil the microbiologic and chemical requirements for the use in mobile drinking water installations. The metal parts used in these products, which are in contact with drinking water, fulfil the requirements according to DIN 50930-6.

WU7207 (8) In-Line Pressure Switch

(B) suffix refers to items available only in bulked pack quantities for high volume production OEM use.
Reports for all the individual components, in contact with drinking water, are held in the above file number, at the address shown.

Name and Position of Person binding the manufacturer or authorised representative:

Name: Richard Bovill
Function: Engineering Director
Location: Munster Simms Engineering Ltd
Date of Issue: 16th February 2016

10. WARRANTY

This product is protected by a 1 year warranty, for full details of our warranty statement please see enclosed leaflet.

Munster Simms Engineering Ltd.
2 Enterprise Road, Bangor, N. Ireland BT19 7TA

Tel: +44 (0)28 9127 0531
Email: info@whalepumps.com
www.whalepumps.com