

## INSTRUCTIONS FOR

# SURFACE MOUNTING BOOSTER PUMP

# STAINLESS STEEL 3300LTR/HR 230V

# MODEL NO: WPB050

# Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.





Refer to instruction manual

# 1. SAFETY

#### 1.1. ELECTRICAL SAFETY

**WARNING!** It is the user's responsibility to check the following:

Check all electrical equipment and appliances to ensure that they are safe before using. Inspect power supply leads, plugs and all electrical connections for wear and damage. Sealey recommend that an RCD (Residual Current Device) is used with all electrical products. You may obtain an RCD by contacting your local Sealey dealer.

If the pump is used in the course of business duties, it must be maintained in a safe condition and routinely PAT (Portable Appliance Test) tested.

Electrical safety information, it is important that the following information is read and understood.

- 1.1.1. Ensure that the insulation on all cables and on the appliance is safe before connecting it to the power supply.
- 1.1.2. Regularly inspect power supply cables and plugs for wear or damage and check all connections to ensure that they are secure.
- 1.1.3. **Important**: Ensure that the voltage rating on the appliance suits the power supply to be used and that the plug is fitted with the correct fuse see fuse rating in these instructions.
- **× DO NOT** pull or carry the appliance by the power cable.
- **x DO NOT** pull the plug from the socket by the cable.
- **DO NOT** use worn or damaged cables, plugs or connectors. Ensure that any faulty item is repaired or replaced immediately by a qualified electrician.
- 1.1.4. This product is fitted with a BS1363/A 13 Amp 3 pin plug.

If the cable or plug is damaged during use, switch the electricity supply and remove from use.

Ensure that repairs are carried out by a qualified electrician.

Replace a damaged plug with a BS1363/A 13 Amp 3 pin plug. If in doubt contact a qualified electrician.

a) Connect the GREEN/YELLOW earth wire to the earth terminal 'E'.

- b) Connect the BROWN live wire to the live terminal 'L'.
- c) Connect the BLUE neutral wire to the neutral terminal 'N'.

Ensure that the cable outer sheath extends inside the cable restraint and that the restraint is tight.

Sealey recommend that repairs are carried out by a qualified electrician.

#### 1.2. GENERAL SAFETY

- □ WARNING! Pump must be used in accordance with Health & Safety, government, local authority and water authority rules and regulations.
- ✓ Familiarise yourself with the application, limitations and potential hazards peculiar to the pump.
- **WARNING!** Disconnect the pump from the mains power before servicing or performing any maintenance.
- ✓ Maintain the pump in good condition (use an authorised service agent). Keep the pump clean.
- Replace or repair damaged parts. Use genuine parts only. Unauthorised parts may be dangerous and will invalidate the warranty.
- ✓ Only use for pumping cold or warm water (NOT exceeding 35°C).
- If used in situations of possible flooding, user is responsible for installing appropriate back up procedures, alarms etc. in case of pump failure.
- If used with swimming pools, fish ponds, etc., ensure areas are clear of people and animals (including removal of fish from ponds). Note that this pump is not designed for continuous use in a fish pond or similar water feature or display.
- \* DO NOT operate the pump if any parts are damaged or missing as this may cause failure and/or possible personal injury.
- × DO NOT use the pump for any purpose other than for which it is designed and DO NOT modify it in any way.
- **DO NOT** use to pump chemicals, fuels, fatty liquids or salt water.
- DO NOT pump sludge, sand, gravel, mud, or fibrous materials. Ensure the inlet hose will NOT pick up any solid materials. Sand and such substances will reduce working life of pump, and invalidate your warranty.
- **× DO NOT** use to pump septic tanks or settling pits.
- \* DO NOT submerge the pump or the electrical cable in water. Protect the pump from external wet conditions.
- **× DO NOT** operate pump during freezing temperatures. **DO NOT** allow any part of the pump or pipes to freeze.
- **× DO NOT** carry pump by the cable, or piping. Only use the handle.
- \* DO NOT use the device in a location where there is a danger of explosion or in the vicinity of flammable liquids or gases.
- ✓ Make sure the work area is tidy and well lit.
- ✓ Keep children and bystanders away from the work area.
- **× DO NOT** operate pump whilst tired or under the influence of alcohol, drugs or medication.

- ✓ Maintain correct balance and footing, wear non slip shoes whilst positioning the pump.
- DO NOT point the water discharge towards another person, electrical wiring or equipment.
- Make sure that the pump is correctly positioned to prevent movement during use. Ensure the area around the pump is kept clear.
- ✓ When not in use switch off pump and remove plug from power supply. Rinse pump, drain out any water and store in a frost free, safe location.
- **WARNING! DO NOT** allow uncontrolled discharge of contaminated water, thus polluting the environment.

**NOTE:** This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

#### 2. INTRODUCTION

Manufactured from high impact thermoplastic material for added durability. Ideal for boosting or maintaining water pressure within the home or garden water supplies. Fitted with automatic pressure cut-off valve. Suitable for lifting water up to 8 metres.

#### 3. SPECIFICATION

Model no: Cut out:	
Outlet:	1" BSP
Maximum output:	3000ltr/hr
Maximum head:	35mtr
Maximum suction height:	8mtr
Maximum particle size:	1mm
Motor power:	800W
Supply:	230V
Tank size:	24ltr

#### 4. INSTALLATION

#### 4.1. GENERAL CARE INSTRUCTIONS

- 4.1.1. Keep the pump clean and well maintained.
- DO NOT use the pump if any part of it is damaged. Have it inspected by your local Sealey dealer.
- **DO NOT** run the pump dry. Make sure that the pump is already filled or ready to be filled with water, before use.
- DO NOT overtighten the filler plugs as this will damage its threads.
- 4.1.2. Make sure the pump securely anchored, through the holes in its feet, in a horizontal position.
- 4.1.3. The pump is designed to pump water only, **DO NOT** use it to pump flammable or corrosive liquids.
- 4.1.4. Make sure that a strainer is always connected to the inlet hose to prevent debris from being drawn up and into the pump causing damage.

#### 4.2. PREPARATION FOR USE

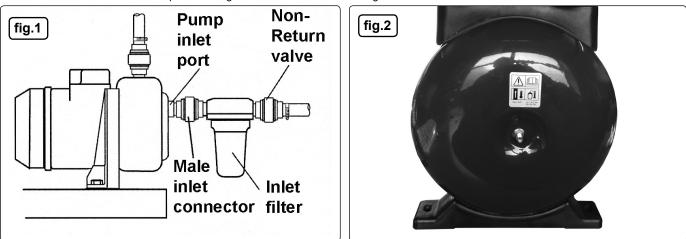
WARNING! DO NOT connect the pump to the mains electrical supply until all hose installation is completed.

Connect a male inlet connector into the pump and hand tighten (fig.1). Ensure that the direction of flow arrow is pointing to the pump. Screw a non return valve (not supplied) to an inlet filter (not supplied), make sure it is correctly orientated, with the spring loaded valve able to pass water into the filter. (Sealey recommend Water Pump Filter part no. WPF1 for use with these pumps). Make sure the bowl of the filter is hanging down.

**× DO NOT** over tighten any of the connections.

#### 4.2.1. Positioning the pump (Refer to fig.1)

- Check hoses for damage, they must be protected and supported as they are considerably heavier when filled with water.
- The pump must always be operated in a horizontal position with the outlet port pointing vertically upwards.
- Use the fixing holes in the feet to anchor the pump in its operating position.
- Make sure there is good air circulation around the pump motor.
- The pump must not become soaked with water, neither the motor or the terminal box are waterproof.
- Place the pump as close to the water source as possible.
- · Make sure there is adequate drainage for the water that is discharged.



#### 4.2.2. Pipe connections:

- use as large a diameter inlet pipe as practical, otherwise the performance of the pump will be affected.
- a gate valve may be positioned on the outlet side of the pump. This can be used to regulate the flow of water, and be useful in priming the pump.

- WARNING! DO NOT place any restriction on the inlet side of the pump, unless it is an isolator value in a gravity fed system. The pump should not be used with the delivery value closed.
  - if the pump is to be permanently fixed the fittings to the pump must be flexible. Short pieces of hose should be fitted to form the join to any rigid pipes.
  - ensure there are no air leaks as this will prevent effective priming and affect the pump's capacity.
  - make sure all pipes are kept as short and straight as possible.
  - hoses laid across roadways need to be protected by planks to reduce "hydraulic shock" caused by vehicles running over them.

#### 4.2.3. Foot Valve/Filter

If the pump is used to draw raw water from a well or excavation a foot valve/coarse filter should be fitted to the lower end of the suction hose. This will retain water in the suction system and prevent large objects entering the pump body. It may be necessary to keep the foot valve clean by:

- constructing a bed of stones to rest the foot valve on.
- position the valve to clear of the bottom of the pit, pond etc.
- securing the foot valve inside a basket or bucket.

#### 4.2.4. Preparing the Booster Pressure Tank

An air pressure tank and regulator provide a constant water pressure at the outlet. The pump automatically cuts in when the water pressure reaches a preset value. The regulator is pre-set at the factory and must not be altered. The following procedure must be completed before connecting to the water supply.

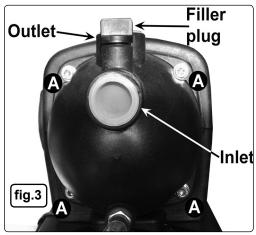
- For the system to work correctly the tank must be pressurised to its rated operating pressure of between 1.8 bar (26psi) and 2.0 bar (29psi).
- Unscrew the cap on the end of the tank to reveal the air valve (see fig.2).
- Use an air line or foot pump to pressurise the tank.
- check the pressure using a standard pressure gauge, replace the cap when finished.

#### 4.2.5. Priming the Pump

It is essential that all connections and hoses are completely tight for the system to work. This is a self priming pump but the inlet side of the pump still needs to be completely filled with water before initial starting or if the system has been drained for any other reason. • Remove filler plug (fig.3) and slowly fill with water until all the air is expelled.

NOTE: Refilling is necessary if the pump has been drained or if the water has been lost. DO NOT allow the pump to run dry.

- Open all valves on the outlet side of the pump to achieve as great a flow as possible.
- If the inlet filter is being used remove the brass plug on the top of it and fill with water.
- Turn the pump on and check for leaks. Water should begin to flow, if it fails to, check that the inlet pipe is secure and that the pump body has been properly primed.
- If the inlet filter is being used remove the brass plug on the top of it and fill with water.
- Turn the pump on and check for leaks. Water should begin to flow, if it fails to, check that the inlet pipe is secure and that the pump body has been properly primed.



## 5. OPERATION

- 5.1. Open all valves in the pipes.
- 5.2. Connect the power and switch pump on.
- 5.3. Wait for the pump to prime.
- 5.4. If the motor does not start or deliver water refer to Section 7. Troubleshooting.
- **NOTE:** to speed up the priming fill the suction pipe with water, it is recommended that a non-return valve is fitted to the end of the inlet pipe.
- 5.5. If debris has entered and blocked the pump the end housing can be removed for access, by unscrewing the four hex headed screws marked 'A' on fig.3.
- 5.6. Stop the pump by switching it off.
- 5.7. If there is a danger of freezing drain water from the pump. If it has been used with dirty, contaminated or salty water, flush it through with clean water.

NOTE: Contaminated water is water containing small solids in suspension NOT slurry, sludge, sand or mud.

#### 6. MAINTENANCE

5.1. Filter Cleaning.

The inlet filter will need regular cleaning after use. The filter bowl will need to be unscrewed and the element washed out with soap and water.

5.2. Cleaning.

Regularly inspect the pump to make sure that it is not blocked. If it is suspected that it is blocked disconnect it from the mains and back flush it.

Keep the pump clean and visually inspect it for damage to fixings and cables etc. If the pump has been used in conditions that have led to internal contamination or damage remove the end housing (refer to 4.5) and inspect the impeller for damage.

5.3. Storage.

Store in a dry, frost free, childproof environment.

# 7. TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Pump does not run	No mains supply	Check fused power supply and replace fuse if necessary (check fuse rating)
	Impellor seized/blocked	Disconnect pump from mains supply Investigate cause and clear blockage.
Pump fails to prime.	Priming chamber not filled correctly.	Fill priming chamber leaving no air gap (refer to 4.2.3.).
	Air leaks through suction hose joints damaged hose, broken clamp damaged/ill-fitting gasket.)	Repair connections/replace hose as necessary.
	Blocked inlet hose	Clean foot valve and ensure it is not submerged in mud, sediment etc. Ensure there are no kinks in the inlet hose.
Pump runs but gives poor output.	Inlet pipeline leakage.	Check inlet pipe and connector for leaks. Tighten as required.
	Inlet filter is blocked.	Check and clean the foot valve.
	Impeller/mechanical seal is badly worn.	Return to your Sealey dealer for repair.
	Congested material inside pump.	Dismantle pump and clean out.
	Impeller damaged and making a poor seal.	Return to your Sealey dealer for repair.
Pump runs but gives poor output.	Suction lift too high.	Set pump as close as possible to the level of the liquid to be pumped.
	Suction or delivery pipeline obstructed.	Remove obstruction and ensure there are no kinks in the pipeline.
	Congestion in the suction line.	Avoid unnecessary curves, restrictions or valves.
	Air leaks through damaged seal.	Renew seal.
Sudden loss of flow.	Loose or leaking connection to the inlet pipe.	Check pipeline and correct.
Undue vibration or noise.	Suction head is too high and causing cavitation.	Check suction head and lower the position of the pump.
	Excessive flow of water.	Decrease flow of water.
	Resistance in inlet pipeline.	Check pipe and clean out as necessary
	Loose rotating component.	Return to your dealer for repairs.
	Installation of pump is not stable.	Stop pump and reposition.
	Air pocket in pump or pipeline.	Release drain plug in impeller housing to release air.
	Damaged impeller.	Return to your Sealey dealer for repair.
Pump switches on and off rapidly.	Low air pressure.	Check pressure.
	Membrane damaged.	Return to your Sealey dealer for repair.
Pump switches on and off when no water is being drawn.	Leak in output side. Leak in output side.	Investigate and rectify.
	Non-return valve faulty.	Check and rectify.
Pump does not switch off.	Pressure switch faulty.	Return to your Sealey dealer for repair.
	No water at pump inlet.	Check for blockage.
	Faulty impeller.	Dismantle and investigate.



#### ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

Important: No Liability is accepted for incorrect use of this product.

Warranty: Guarantee is 12 months from purchase date, proof of which is required for any claim.

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