

# BROMIC WATERBOY™ 12V PUMP RANGE

# INSTRUCTION AND SERVICE MANUAL



Dear Customer,

We thank you for the trust you've placed in our products!

Your new Bromic product was designed and manufactured with state of the art pumping technology.

Read these instructions for use carefully before using the product for the first time.

These instructions contain all information necessary to safely use this product in a manner that will maximise its lifespan. Please make sure to observe all safety information included in these instructions.



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### CONTENTS

| Electrical Safety                        | 4  |
|--|----|
| General Safety                           | 4  |
| Additional Safety Instructions for Pumps | 5  |
| Your Product At A Glance                 | 6  |
| Installation - Setup & Preparation       | 7  |
| Installation - Wiring                    | 8  |
| Operation                                | 8  |
| Maintenance & Storage                    | 9  |
| Troubleshooting                          | 9  |
| Technical Data                           | 10 |

### What Do the Symbols Used Mean?

Danger notices and safety information has been clearly marked throughout these instructions. The following symbols are used to draw your attention to these important warnings:



Type and Source of Danger! Failure to observe this danger notice may cause physical injury or death.

## **ELECTRICAL SAFETY**



**WARNING!** When using electric powered products, basic safety precautions, including the following, should always be followed to reduce risk of fire, electric short circuit, personal injury and material damage. Read and understand the manual prior to operating this pump.

Save these instructions and other documents supplied with this pump for future reference.

When using 12V equipment, basic safety precautions, including the following, should always be followed to reduce risk of fire, electric short circuit, personal injury and material damage. The electric motor has been designed for 12V only. Always check that the power supply corresponds to the voltage on the rating plate.

NOTE:

- The pump should be wired on its own dedicated circuit. Connect the positive lead (red) to the positive terminal ٠ of your battery and the negative wire (black) to the negative terminal of the battery.
- The electrical circuit must be protected with an over-current protection device (fuse) in the positive lead. This pump requires a 15 amp fuse.
- In an easily accessible location, install a switch to control voltage to the pump. Turn the pump off when not used for extended periods or when the tank is empty.
- The water pump has a built-in thermal protection overload switch. The water pump stops if an overload occurs. The motor restarts automatically after it has cooled down.

## **GENERAL SAFETY**



WARNING! Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in failure.

#### 1. Work area safety

a. Keep work area clean and well lit. Cluttered or dark areas invite accidents.

b. Do not operate pumps in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Pumps create sparks which may ignite the dust or fumes.

c. Keep children and bystanders away while operating a pump. Distractions can cause you to lose control.

#### 2. Electrical safety

a. When using 12V equipment, basic safety precautions, including the following, should always be followed to reduce risk of fire, electric short circuit, personal injury and material damage.

b. The electric motor has been designed for 12V only. Always check that the power supply corresponds to the voltage on the rating plate.

c. Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the pump. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric short circuit.

d. When operating a pump, use an extension cord suitable for wet conditions. Use of a cord suitable for wet use reduces the risk of electric short circuit.

e. The electrical circuit must be protected with an over-current protection device (fuse) in the positive lead. This pump requires a 15 amp fuse.

#### 3. Personal safety

a. Stay alert, watch what you are doing and use common sense when operating a pump. Do not use a pump while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating a pump may result in serious personal injury.

b. Avoid accidental starting. Ensure the switch is in the off position before plugging in. Carrying pump with your finger on the switch or plugging in pumps that have the switch on invites accidents.

c. Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric short circuit if your body is earthed or grounded.

d. Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewellery or long hair can be caught in moving parts.

#### 4. Pump use and care

a. Disconnect the plug from the power source before making any adjustments, changing accessories, or storing pumps. Such preventive safety measures reduce the risk of starting the pump accidentally.

b. Maintain pumps. Check for contaminants, check misalignment or binding of moving parts, breakage of parts and any other condition that may affect the pumps operation. If damaged, have the pump repaired before use. Many accidents are caused by poorly maintained pumps.

c. Use the pump, and accessories etc., in accordance with these instructions and in the manner intended for the particular type of pump, taking into account the working conditions and the work to be performed. Use of the pump for operations different from intended could result in a hazardous situation.

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### **GENERAL SAFETY**

### Additional Safety Instructions for Pumps



### WARNING!

Not intended for cleaning and other maintenance of swimming pools. This product is intended for pumping water in domestic and commercial applications. Do not use it for corrosive, abrasive, explosive or dangerous liquids. Fluids other than water will damage the water pump and/or create a fire hazard. Failure to follow all instructions listed below may result in electric short circuit, fire and/or serious injury.

This product is not intended for use by person (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the product by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the product.

- Ensure the water pump is disconnected from its power source when installing.
- Do not install or operate the water pump in an explosive environment or near flammable material.
- Do not operate the water pump without liquid.
- Do not run the water pump dry.



#### WARNING!

The water pump together with associated pipework operate under pressure. Do not disconnect water pump or pipework until internal pressure has been released. Failure to do this could result in personal injury and damage to property.

- Do not disassemble the pump main housing or motor housing.
- Avoid inserting hands into the inlets/outlets of the water pump while it is connected to power.
- Before using the water pump, always inspect it visually. Do not use the pump if it is cracked and/or damaged. If the water pump is damaged, contact Bromic customer service.
- The water pump has a built-in thermal protection overload switch. The water pump stops if an overload
  occurs. The motor restarts automatically after it has cooled down.
- Never work or perform maintenance on the pump without first making sure it has been disconnected from its power source.
- Pollution of the liquid could occur due to leakage of lubricants
- The electrical connection must always be made in a dry area. Make sure that electrical connections are
  protected from inundations.
- Protect the power cables from heat, oil or sharp edges. If damaged, The power cable must be replaced by a technician.

### Caring for the environment

Pumps that are no longer usable should not be disposed of with household waste but in an environmentally friendly way. Please recycle where facilities exist. Check with your local council authority for recycling advice.

Recycling packaging reduces the need for landfill and raw materials. Reuse of recycled material decreases pollution in the environment. Please recycle packaging where facilities exist. Check with your local council authority for recycling advice.

# PART LISTS

### Your Product At A Glance

- 1. Motor
- 2. Pump Head
- 3. Pump Inlet Port
- 4. Pump Outlet Port
- 5. Pressure Switch
- 6. By-Pass Valve



### Accessories

- 7. Strainer
- 8. 1/2" Barb Hose Fittings



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## INSTALLATION

### 1. Setup & Preparation



#### WARNING!

Ensure the pump is switched off and disconnected from the power supply before performing any of the following steps

- 1. Remove the shipping plugs from pump ports. Some water from factory testing may spill out.
- 2. Install the included strainer onto the inlet port. This strainer is required for pump warranty to be valid.
- 3. Install the included barb hose fittings to both the strainer's inlet port and pump outlet port.
- 4. Mount the pump on a solid surface, vertically or horizontally in an accessible location. If mounting vertically, position the pump head downwards to avoid leakage into the motor casing in the event of a malfunction.

#### NOTE:

- Mount the pump within 1.8m (6ft) of the water storage tank.
- The pump should be mounted in a dry and adequately ventilated area. If mounted in an enclosure ensure that it is at least 0.03m<sup>3</sup> (1ft<sup>3</sup>).
- Overtightening or compressing the rubber mounts will reduce its ability to isolate vibration and noise.
- 5. Use suitable hoses, preferably 1/2" (13mm) I.D. reinforced flexible hoses to connect the pump to plumbing. Use hose clamps and tighten around the barb hose connectors
- 6. Install no less than 3/8" (10mm) I.D. hose for feed lines to fixtures. Use high pressure hoses on all water lines that can be connected to mains water.

#### NOTE:

- Do not use pump with accumulator tank.
- To reduce vibration, use at least 0.5m (18") of flexible high pressure hosing for both the pump inlet and outlet ports.
- It is recommended to anchor the points where the flexible hose meet rigid plumbing to reduce vibrations.

## INSTALLATION

# 2. Wiring



**IMPORTANT!** This pump must be installed by a technician.

- 1. This pump should be wired to a suitable 12V power supply on its own dedicated circuit, where it should not include any other electrical loads.
- 2. Please reference the wire chart below to ensure the correct wire sizing for length is used.
- 3. Install a 15 amp rated on-off switch on the (+) positive (red) motor lead.
- 4. The electrical circuit should be protected with an over-current protection device (fuse) in the positive lead. This pump requires a 15 amp fuse.

### NOTE:

Shut off power to the pump when it is not in use for extended periods •

| Metres (Feet) | AWG (mm²) |
|---------------|-----------|
| 0-6 (0-20)    | 16 (1.3)  |
| 6-9 (20-30)   | 14 (2.1)  |
| 9-15 (30-50)  | 12 (3.3)  |
| 15-19 (50-65) | 10 (5.3)  |

### **OPERATION**

This Bromic 12V pump is designed for intermittent duty only. The pump is controlled by the pressure switch, which can automatically detect when a faucet is opened to turn on the pump. The pump is also fitted with a by-pass valve, which will assist in providing a good steady flow in low usage scenarios.

The pump is equipped with a thermal overload protection device. In the unlikely event the motor overheats, the pump will shut off. Turn off power to the pump until the motor cools down.



#### WARNING!

Not intended for cleaning and other maintenance of swimming pools. This product is intended for pumping water in domestic and commercial applications. Do not use it for corrosive, abrasive, explosive or dangerous liquids. Fluids other than water will damage the water pump and/or create a fire hazard.

Failure to follow all instructions may result in electric short circuit, fire and/or serious injury.

# MAINTENANCE AND STORAGE



#### WARNING!

Ensure the pump is switched off and disconnected from the power supply before performing any of the following steps

For maintenance, conduct the following:

- Regularly check and clean the strainer of any debris
- Occasionally check the tightness of all plumbing hardware and fittings
- Occasionally sanitise plumbing hardware to prevent and remove any scale build-up

If the pump is not to be used over an extended period of time, drain the pump of liquid, turn off and disconnect power to the pump for storage.

### TROUBLESHOOTING

| Symptom                         | Possible Cause                                 | Remedy   |
|---------------------------------|--|--|
| Pump does not run               | No power or loose/improper wiring              | Check cables, switch, fuse, power supply.                                  |
|                                 | Tripped thermal protection                     | Eliminate the cause of the<br>overheating<br>(max. temperature of liquid). |
|                                 | Blown fuse                                     | Replace fuse   |
| Pump runs but does<br>not pump. | Pump intake blocked                            | Rectify blockage.  |
|                                 | Air leak at pump intake                        | Check connections and fittings for tightness.                              |
| Delivery rate too low.          | Pump is too far away from water source         | Comply with maximum self-priming distance.                                 |
|                                 | Air leak at pump intake                        | Check connections and fittings for tightness                               |
|                                 | Accumulation of debris inside pump or plumbing | Rectify blockage.  |
|                                 | Low power source voltage                       | Check power supply condition and charge if necessary.                      |
|                                 | Kinked water lines                             | Straighten pressure line.  |
| Pump does not shut off          | Discharge line leak                            | Check connections and fittings for leaks and tightness.                    |
| Pump runs very loudly.          | Mounting surface is flexible                   | Mount on solid surface.  |
|                                 | Pump is plumbed with rigid piping              | Plumb pump using flexible hosing.  |

## **SPECIFICATIONS**

If you are unable to correct a fault yourself, please contact our technical support directly. Please note that improperly conducted repairs will void your warranty and may result in additional expenses.

### **BROMIC WATERBOY 12V PUMP 11L/Min**

| Item number                | 7575160           |
|----------------------------|-------------------|
| Voltage                    | 12V DC            |
| Open flow                  | 11.0 L/min        |
| Control type               | Switch & By-Pass  |
| Max. Amps                  | 7.5 A             |
| Press. setting             | 380 kPa (3.8 Bar) |
| Self-priming<br>height     | 1.8 m             |
| Max. liquid<br>temperature | 60°C              |
| Ports                      | 1/2" - 14MNPT     |
| Warranty                   | 2 Years           |



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## Notes

