# **PRESSURE BOOSTER 150**

## **Owners Manual**



**AWARNING** 

This equipment must be installed and serviced by a qualified technician. Improper installation can create electrical hazards which could result in property damage, serious injury or death. Improper installation will void the warranty.



#### Notice to Installer

This manual contains important information about the installation, operation and safe use of this product. Once the product has been installed **this manual must be given to the owner/ operator of this equipment.** 



## **APPLICATION**

This pump has been specifically designed for use as a Pool Sweep Pump. When installed the suction line of the pump must branch into and draw water from the return to pool line of the pool pump filtration system.

The pool pump filtration system must be run simultaneously with the pool sweep pump and be capable of supplying enough water to meet its requirements.

## PRE INSTALLATION CHECKS

- 1. Check that the area where the pump is to be located is as close as possible to the water supply, is flat and water will drain away easily from the area.
- 2. Check that the power supply to the pump meets the specification listed on the pump name plate.
- Check that adequate housing and protection from the weather is available and will also provide proper ventilation to the unit (The pump motor cooling fan must have a minimum clearance of 150mm).

## **INSTALLATION**

Waterco Limited use the latest technology when designing and manufacturing our pumps, a few simple precautions during installation will ensure years of trouble free operation.

- 1. The pump suction line should be not smaller than 1 1/2" (40mm imperial) or 50mm true metric.
- 2. The suction line is to have as few bends or elbows as possible. There must not be an air trap on the suction line.
- 3. Use only the pump barrel unions supplied with the pump.
- 4. Bolt the pump to the required position (prevent movement).
- 5. The pump electrical cable must be wired for the proper voltage and rotation in accordance with the wiring instructions.
- 6. All wiring (electrical) work must be carried out by licensed electricians and must be installed in accordance to the local codes.
- 7. The motor must be grounded.
- 8. The weight of the plumbing and fittings is to be independently supported and not carried by the pump.

## ~ IMPORTANT ELECTRICAL NOTICE ~

#### The electrical installation is to be done by a licensed electrician.

Each pump requires a circuit breaker to separate the pump from the electrical supply.

The contact separation has to provide full disconnection in all poles under overvoltage category III conditions.

If the pump is to be installed on a swimming pool or pond situation it is **MANDATORY** that an earth leakage circuit breaker with a rated tripping current not exceeding **30mA** be installed.

Check the pumps name plate for the following: Voltage, Amp draw and Cycle.

The power cord, including the ground wire shall have a quality of **245 IEC66 (HO7RN-F)** for models **greater** than **1Kw** power input.

For models less than 1Kw input the quality shall be of 245 IEC57 (H05RN-F).

All installations must comply with local codes, based on IEC 364-7-702 requirements.

## PIPE SUPPORTS

All pipes must be supported separately from the pump otherwise distortion of the pump components could cause problems.

Short lengths of rubber hose can assist in alignment and also assist in reducing vibration through the system, long lengths of P.V.C. or poly pipe should be buried to minimise sun exposure. This is essential as expansion of these pipes can put stress on the pump.

## **CAUTION**

Do not start the pump dry! Running the pump dry for any length of time will cause severe damage and will void the warranty.

## PRIMING THE PUMP

Priming can take place by partially unscrewing the priming cap. Keep the Booster pump off, and switch the filter pump on. Allow all excess air to escape via the priming cap and reseal when water starts flowing out. Start Booster pump.

## **GENERAL SAFETY RULES**

- 1. The machines mentioned in the manual are specially designed for the pre-filtering and re-circulation of water in swimming pools.
- They are designed to work with clean water at a temperature not exceeding 35 degrees Celsius (95 degrees Fahrenheit).
- The installation should be carried out in accordance to the safety instructions of swimming pools, especially Standard HD 384.7.702, and the specific instructions for each facility.
- 4. The rules enforce on accident prevention should be carefully followed.
- 5. Any modification of the pump requires the **prior consent of the manufacturer.**Original replacement parts and accessories authorized by the manufacturer ensure a high level of safety. The manufacturer of the pump assumes no liability for the damage and injuries **caused by un-authorized replacement parts and accessories.**
- 6. During operation, some parts of the pump are subject to dangerous electric voltage. Work may only be performed on each pump or on the equipment connected to it after disconnecting them from the mains power, and after disconnecting the starting device.
- 7. The user should make sure that assembly and maintenance tasks are carried out by qualified authorized persons and that these persons have first carefully read the instructions for service and installation.
- 8. The operating safety of the pump is only guaranteed if the installation and service instructions are correctly followed.
- The limit values stated in the. Technical table should not be exceeded under any condition.
- 10. In the event of defective operation or fault, contact the technical support department of the manufacturer or its nearest authorized agents.
- 11. If the supply cord is damaged, it must be replaced by an authorized service agent.
- 12. 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 use of the appliance by a person responsible for their safety.
- 13. The appliance is not intended for use by young children. Young children should be supervised to ensure that they do not play with the appliance.

## **TROUBLESHOOTING**

#### 1. IF THE MOTOR WILL NOT START

Possible causes:

#### a. Circuit breaker has blown or tripped.

Replace/Reset circuit breaker and ensure proper size is used (The pump motor cooling fan must have a minimum clearance of 150mm).

### b. Defective Wiring

This can cause fuses to blow or motor to run erratically. Repair or replace wiring.

#### c. Impeller or Seal Stuck

Remove wet end of pump and rotate impeller by hand and clean out any debris.

#### d. Low Voltage

If motor runs slowly and will not get up to speed contact a licensed electrician to inspect power supply, and ensure that correct voltage is delivered to the unit.

#### e. Incorrect Size Wiring

Consult a licensed electrician and ensure that wiring is of the correct size for the power requirements and length of cable.

#### f. If any other problems are encountered,

please contact Waterco branch for service options.

#### 2 MOTOR RUNS HOT AND OVERLOAD TRIPS OUT

#### a. Low Voltage

If motor runs slowly and will not get up to speed, contact a licensed electrician to inspect power supply, and ensure that correct voltage is delivered to the unit.

#### b. High Voltage

Contact a licensed electrician to inspect power supply, and ensure that correct voltage is delivered to the unit.

#### c. Poor Ventilation

Provide adequate ventilation to the pump (The pump motor cooling fan must have a minimum clearance of 150mm).

#### 3. PUMP WON'T DELIVER WATER

#### a. Leaky Suction Pipe

Make sure all pipe connections and tube connections are pressure tight. Use pipe joining compound and pull up tight.

#### b. Won't Prime

Add water slowly so as to exclude air from pump and pipe system. Repeat if necessary. Check suction pipe and foot valves for leaks.

#### c. Injector Nozzle Clogged

Remove injector and clean nozzle of any obstructions. Ensure that piping is clean before replacing.

#### d. Foot Valve Stuck or Strainer Clogged.

Remove, repair and clean.

#### e. Horizontal Suction Piping Does Not Slope Up From Well To Pump

Ensure that there is no air trap in the horizontal piping between supply and pumps (no hoops).

#### f. Water Level Below Foot Valve

Lower foot valve deeper into well.

#### g. Pump Rotating Wrong Way

Contact Waterco service personnel to check the electric connections on the motor.

#### 4. PUMP LOSES PRIME

#### a. Air Leaks In Suction Line

Look for possible air leaks in suction line and if found, seal all leaks. On high suction lift it is very important to have no leaks in the suction line.

OFFICES - AUSTRALIA

NSW - SYDNEY (HEAD OFFICE) Tel: +61 2 9898 8600

QLD - BRISBANE Tel: +61 7 3299 9900

VIC/TAS - MELBOURNE Tel: +61 3 9764 1211

WA - PERTH Tel: +61 8 9273 1900

SA/NT - ADELAIDE Tel: +61 8 8244 6000

ACT DISTRIBUTION Tel: +61 2 6280 6476 OFFICES - OVERSEAS

WATERCO (EUROPE) LIMITED Sittingbourne, Kent, UK Tel: +44 (0) 1795 521 733

WATERCO FRANCE Saint Priest, France Tel: +33 4 72 79 33 30

WATERCO (USA) INC Augusta, Georgia, USA Tel: +1 706 793 7291

WATERCO CANADA Longueuil, Quebec, Canada Tel: +1 450 748 1421

WATERCO (NZ) LIMITED Auckland, New Zealand Tel: +64 9 525 7570 WATERCO © LIMITED Guangzhou, China Tel: +86 20 3222 2180

WATERCO (FAR EAST) SDN BHD Selangor, Malaysia Tel: +60 3 6145 6000

PT WATERCO INDONESIA Jakarta, Indonesia Tel: +62 21 4585 1481

WATERCO SINGAPORE INTL PTE LTD Nehsons Building, Singapore Tel: +65 6344 2378









