

# 800W SWIMMING POOL PUMP

MODEL: PSP-800



**WARNING!** Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury. Save all warnings and instructions for future reference.

## INTRODUCTION

Congratulations on purchasing the Commercial Electric Swimming Pool Pump. We aim to provide quality products at an affordable price. Before using, it is most important that you read and follow the instructions in this manual, even if you feel you are quite familiar with this type of product.

This product has been designed for the circulation of water from pools & spas through filters and back into pools.

# **SPECIFICATIONS**

Input Voltage: 220-240V ~ 50Hz

Input Power: 800W

Max. Flow Rate: 19,000 litres/hr

 Max. Lift:
 5m

 Max. Head:
 11m

 Min. Head:
 1m

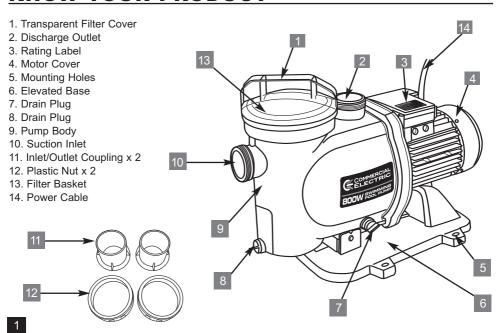
 Max. Particle Size:
 5mm

 Max. Water Temp:
 35°C

**Coupling:** Suits standard 40 & 50mm PVC pressure pipe

IP Rating: IPX5
Weight: 11.75kg

# **KNOW YOUR PRODUCT**



# TABLE OF CONTENTS

INTRODUCTION	1
SPECIFICATIONS	.1
KNOW YOUR PRODUCT	.1
ELECTRICAL SAFETY	3
GENERAL SAFETY INSTRUCTIONS	3
ADDITIONAL SAFETY INSTRUCTIONS FOR POOL PUMPS	5
PACK CONTENTS	6
SET-UP & INSTALLATION	6
OPERATION	9
HINTS WHEN USING THE PUMP	10
MAINTENANCE	10
SPARE PARTS	11
TROUBLESHOOTING	12
DESCRIPTION OF SYMBOLS	13
WARRANTY	15

## **ELECTRICAL SAFETY**

Save these instructions for future reference.



WARNING! This product is not suitable for use with drinking (potable) water.



WARNING! When using mains-powered equipment, basic safety precautions, including the following, should always be followed to reduce the risk of fire, electrical shock, personal injury and material damage.

Read the whole manual carefully and make sure you understand the operating instructions prior to use.

The electric motor has been designed for 230V and 240V only. Always check that the power supply corresponds to the voltage on the rating plate.

Note: The supply of 230V and 240V on Commercial Electric tools are interchangeable for Australia and New Zealand.

This tool is earthed in accordance with AS/NZS 60335-2-41

Note: The Power Outlet used for the water pump is recommended to be protected by a 30mA residual current device or earth leakage circuit breaker.

If the power outlet is external, ensure that it is weather proof. If the supply cord is damaged, it must be replaced by an electrician or a power tool repairer to avoid a hazard.

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.

#### Using an extension lead

Always use an approved extension lead suitable for the power input of this product. Before use, inspect the extension lead for signs of damage, wear and ageing. Replace the extension lead if damaged or defective.

When using an extension lead on a reel, always unwind the lead completely. Use of an extension lead not suitable for the power input of this product or which is damaged or defective may result in a risk of fire and electric shock.

# **GENERAL SAFETY INSTRUCTIONS**



WARNING! Read all instructions. Failure to follow all instructions listed below may result in  $\geq$  electric shock, fire and/or serious injury. The term "Power Tool" in all of the warnings listed below refers to your mains operated (corded) power tool or battery operated (cordless) power tool.

#### SAVE THESE INSTRUCTIONS

- 1) WORK AREA
- a) Keep work area clean and well lit. Cluttered and dark areas invite accidents.
- b) Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power tools create sparks which may ignite the dust or fumes.
- c) Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

# **GENERAL SAFETY INSTRUCTIONS (cont.)**

#### 2) ELECTRICAL SAFETY

- a) Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- c) Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- d) Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- e) Replacement of the supply cord. If the supply cord is damaged, it must be replaced by an electrician or a power tool repairer.
- f) When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- g) Have your tool repaired by an electrician or a power tool repairer. This power tool complies with relevant safety requirements. To avoid danger, electrical appliances must only be repaired by qualified personnel using original spare parts; otherwise this may result in considerable danger to the user

#### 3) PERSONAL SAFETY

- a) Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- b) Use safety equipment. Always wear eye protection. Safety equipment such as dust mask, nonskid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- c) Avoid accidental starting. Ensure the switch is in the off position before plugging in. Carrying power tools with your finger on the switch or plugging in power tools that have the switch on invites accidents.
- d) Remove any adjusting key or wrench before turning the power tool on. A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- e) Do not overreach. Keep proper footing and balance at all times. This enables better control of the power tool in unexpected situations.
- f) 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.
- g) If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of these devices can reduce dust related hazards.

#### 4) POWER TOOL USE AND CARE

- a) Do not force the power tool. Use the correct power tool for your application. The correct power tool will do the job better and safer at the rate for which it was designed.
- b) Do not use the power tool if the switch does not turn it on and off. Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- c) Disconnect the plug from the power source before making any adjustments, changing accessories, or storing power tools. Such preventive safety measures reduce the risk of starting the power tool accidentally.
- d) Store idle power tools, unplugged & out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool. Power tools are dangerous in the hands of untrained users.

# **GENERAL SAFETY INSTRUCTIONS (cont.)**

- e) Maintain power tools. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tools operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- f) Keep cutting tools sharp and clean. Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- q) Use the power tool, accessories and tool bits etc., in accordance with these instructions and in the manner intended for the particular type of power tool, taking into account the working conditions and the work to be performed. Use of the power tool for operations different from intended could result in a hazardous situation.

#### 5) SERVICE

a) Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

## ADDITIONAL SAFETY INSTRUCTIONS FOR PUMPS

CAUTION: Commercial Electric recommends the power outlet to be used for the water pump, be protected by a 30mA residual current device or earth leakage circuit breaker.



WARNING! This product is intended for pumping water in a Home Domestic application. 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.

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.

Young children should be supervised to ensure that they do not play with the appliance.

- 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.
- Do not mount the water pump vertically.
- Ensure the water pump is disconnected from mains power when installing.



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.

- Protect water pump and all pipes and hoses from adverse weather or freezing conditions.
- Avoid inserting hands into the inlets/outlets of the water pump while it is connected to mains power.
- Ensure that the motor is well ventilated.
- The site of the installation must be stable and dry to guarantee the stability of the water pump.
- Before using the water pump, always inspect it visually. Do not use the pump if it is damaged. If the water pump is damaged, have it checked by an electrician or a qualified plumber.
- 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.

# **PACK CONTENTS**

- 1 x Swimming pool pump PSP-800
- 2 x Couplings & nuts
- 1 x Filter basket (inside pump)
- 2 x Inlet/outlet O-ring seals (smaller seals)
- 1 x Filter cover O-ring seal (larger seal)
- 1 x Instruction manual

## **SET-UP & INSTALLATION**



**WARNING!** This product is intended for pumping water in a Home Domestic application. 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.



**WARNING!** Disconnect the plug from the mains power prior to making any adjustments or installation.

The pump is usually installed between the skimmer and the pool filter. Positioning as close as possible to the water level will minimise the suction distance and reduce head (pumping pressure) losses.

When connecting piping to the pump be mindful of the fact that the max. flow rate of 19,000 litres/hour will decrease with every metre of pipe. Ideally the pool volume should be turned over at least once a day. Refer to the table below.

It is advisable to have the pump housed in a position protected from the elements, dust, pests or anything that would adversely affect the efficiency and safety or operation of the pump.



**WARNING!** A pool filter must be used in conjunction with Commercial Electric Pool Pump. The filter is placed in line immediately after the pool pump for important filtration of the water. It stabilizes water flow and ensures the quality of the water going back into the pool.

Discharge head in metres		2	3	4	5	6	7	8	9	10	11
Flow litres per minute	18600	17400	16200	14400	13200	11400	9600	6600	3600	1500	0

# **SET-UP & INSTALLATION (cont.)**

Your pump requires no assembly before use other than the installation of the inlet/outlet couplings and connection of suitable inlet and outlet pipes (not included).

- After removing the pump from its carton, check that the pump has not been damaged.
- · Unpack the contents.

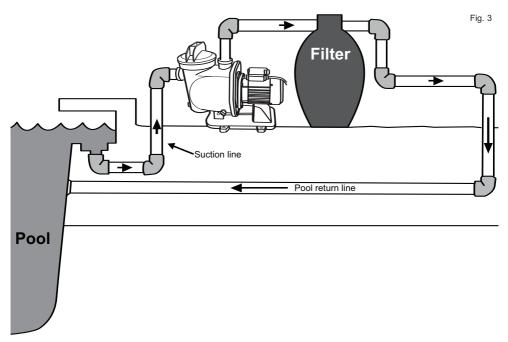
**NOTE:** The pump must be mounted on a firm base and can be bolted to the mounting surface through the mounting holes (5) in the base (Fig. 1).



**NOTE:** Make sure the transparent filter cover (1) is accessible so it can be removed (along with the filter basket (13) for cleaning (Fig. 2).



The pump is positioned between the pool and the filter, water is drawn from the pool into the pump, the water is then extracted from the pump and through the filter before returning back to the pool (Fig. 3).



# **SET-UP & INSTALLATION (cont.)**

#### Installation of the Pipes

Fit one of the inlet/outlet couplings (11) over the discharge outlet (2), place one of the plastic nuts (12) over the inlet/outlet coupling (11) and secure onto the discharge outlet (2) by turning the plastic nut (12) in a clockwise direction (Fig. 4). Repeat for the suction inlet (10) using the remaining inlet/outlet coupling (11) and plastic nut (12).



NOTE: Ensure care is taken not to damage the pump or threads when connecting pipes. Support inlet and outlet pipes to avoid damaging the pump and/or threads.

The inner side of the inlet/outlet couplings (11) allow 40mm PVC pipes to be fitted on the inside of the inlet/outlet couplings (11) (Fig. 5).



The outer side of the inlet/outlet couplings (11) allow 50mm PVC pipes to be fitted over the outside of the inlet/outlet couplings (11) (Fig. 6).



#### Sealing Pipes with PVC Glue

To ensure a water tight fit, it is recommended to use PVC glue (not included) to connect the inlet/outlet couplings (11) with the PVC pipe.

Clean both the pipe and the inlet/outlet coupling (11) with PVC pipe primer (available from Bunnings Warehouse).

When using a 40mm pipe, apply glue to the surface of the pipe that contacts the inlet/outlet coupling (11). Also apply glue to the inside of the inlet/outlet coupling (11).

When using a 50mm pipe, apply glue to the surface of the pipe that contacts the inlet/outlet coupling (11). Also apply glue to the outside of the inlet/outlet coupling (11).

Now push them together to create a firm connection.

NOTE: The delivery and suction pipes must not, under any circumstances, induce mechanical loads on the pump.



WARNING! Do not operate the pump for at least 24 hours, ensure the connections have time to set before running the pump. Please check the glue manufacturers' recommended drying times.

It is recommended to install suction and discharge valves (not included) in order to isolate the pump.

NOTE: The use of gate valves, in-line filters and non-return valves is recommended for optimal performance. These are standard accessories and available from Bunnings Warehouse or Pool Pump Retailers.

## **OPERATION**

**CAUTION!** Commercial Electric recommends the power outlet to be used for the water pump, be protected by a 30mA residual current device or earth leakage circuit breaker.

Before starting the pump, ensure that it is mounted on a firm base.

Only connect the pump power cable (14) to a 220-240V power supply.

 Open and remove the transparent filter cover (1) by turning it in an anti-clockwise direction. Fill the pump with water up to the lower level of the suction inlet (10) (Fig. 7).



2. Before closing the transparent filter cover (1), ensure the pre-filter seal is in place. Close the transparent filter cover (1) by turning it in a clockwise direction (Fig. 8).

**CAUTION!** Ensure the transparent filter cover is tightened prior to starting the pump. Failure to do so could cause a water leak and/or air leak in the system.



3. Open all suction and discharge valves connected to the pool system (not included) and turn the pump on at the mains power to self prime the pump (Fig. 9).



**NOTE:** The transparent filter cover (1) may be difficult to remove due to a vacuum effect. A strong hand tool such as a long screwdriver can be used as leverage to assist in removing the transparent filter cover (1) (Fig. 10).



## HINTS WHEN USING THE PUMP

- If the motor does not start, or if no water is extracted, refer to the troubleshooting table of possible failures and solutions.
- Never operate the pump without water. Operating without water will cause damage to the motor and void the warranty.
- Wait for self-priming to take place. The water level in the pump will rise towards the transparent filter cover (1). It is correctly primed when the water level is just below the transparent filter cover (1).

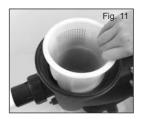
## **MAINTENANCE**

Make sure the pump is disconnected from electric power supply before performing maintenance operation.

#### Cleaning the Filter Basket

The filter basket (13) should be cleaned periodically or when foreign matter is visible through the transparent filter cover (1).

- 1. Close the suction and discharge valves connected to the pool system (not included).
- 2. Open and remove the transparent filter cover (1) by turning it in an anti-clockwise direction.
- 3. Remove the filter basket (13) from the pump (Fig. 11).



- 4. Clean the filter basket (13) thoroughly and rinse with water.
- 5. Place the filter basket (13) back in the pump.
- 6. Inspect the pre-filter seal before replacing the transparent filter cover (1). Ensure that it is not worn or damaged, if damaged, replace the pre-filter seal.
- 7. Close the transparent filter cover (1) by turning it in an anti-clockwise direction. Reconnect the pump to the mains power supply.

**NOTE:** Replacement pre-filter seals and inlet/outlet coupling seals are available through the Bunnings Warehouse special orders desk. These seals are consumable, wearing components and will wear with time. These seals are not covered under warranty.

#### Cleaning the Pump Housing

Use a moist cloth to wipe down the pump body (9). Allow to dry thoroughly before storing.

# **SPARE PARTS**

Limited spare parts are available subject to availability. Please contact your local Bunnings Special Orders Desk to order the required spare parts.

SPCESPP1600WA-55

#### Most common spare parts listed below

Spare Part No.

Connector assembly

Transparent filter cover SPCESPP1600WA-51

O-ring set SPCESPP1600WA-52

Filter basket SPCESPP1600WA-53

# **TROUBLESHOOTING**

#### Possible faults

- 1. Pump does not prime
- 2. Low flow rate
- 3. Pump makes loud noise
- 4. Pump does not start
- 5. Motor makes noise but does not start pumping water

POSSIBLE FAULTS			AUL	ΓS	CAUSES	SOLUTIONS			
1	2	3	4	5					
Х	Х				Air leak	Verify sealing of connectors and seals			
Х					Bad sealing filter cover	Clean the filter cover and verify the seals			
Х	Х				Excessive suction height	Set pump at a suitable level			
Х	Х		Х		Incorrect voltage	Verify the voltage specified on the rating label and that of the mains power			
Х					No water in prefilter	Fill prefilter with water			
	Х				Filter clogged	Clean filter			
	х				Discharge clogged	Inspect filter and discharge line			
		Х			Incorrect pump attachment	Attach pump correctly			
		Х			Debris in filter basket	Clean pump and inspect the filter			
			Х		No power	Reset the fuses			
				Х	Motor blocked	Call the Commercial Electric Customer Service			

# **DESCRIPTION OF SYMBOLS**

V	Volts	Hz	Hertz
~	Alternating current	w	Watts
/min	Revolutions or reciprocation per minute	no	No load speed
Нр	Horse power	°C	Degrees Celsius
p/hr	Per hour	kPa	Pressure rating (kilopascals)
bar	Pressure rating	L	Litres
F	Insulation class	PVC	Polyvinyl chloride
5124	Regulator compliance mark	IPX5	Ingress protection from water
$\triangle$	Warning		Read instruction manual

# CARING FOR THE ENVIRONMENT



Power tools 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.

# WARRANTY

YOUR WARRANTY FORM SHOULD BE RETAINED BY YOU AT ALL TIMES. IN ORDER TO MAKE A CLAIM UNDER THIS WARRANTY YOU MUST RETURN THE PRODUCT TO YOUR NEAREST BUNNINGS WAREHOUSE WITH YOUR BUNNINGS REGISTER RECEIPT. PRIOR TO RETURNING YOUR PRODUCT FOR WARRANTY PLEASE TELEPHONE OUR CUSTOMER SERVICE HELPLINE:

Australia 1800 069 486 New Zealand 0508 069 486

TO ENSURE A SPEEDY RESPONSE PLEASE HAVE THE MODEL NUMBER AND DATE OF PURCHASE AVAILABLE. A CUSTOMER SERVICE REPRESENTATIVE WILL TAKE YOUR CALL AND ANSWER ANY QUESTIONS YOU MAY HAVE RELATING TO THE WARRANTY POLICY OR PROCEDURE.

The benefits provided under this warranty are in addition to other rights and remedies which are available to you at law.

Our goods come with guarantees that cannot be excluded at law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Generally you will be responsible for all costs associated with a claim under this warranty, however, where you have suffered any additional direct loss as a result of a defective product you may be able to claim such expenses by contacting our customer service helpline above.

#### 2 YEAR REPLACEMENT WARRANTY

Your product is guaranteed for a period of **24 months from the original date of purchase** and is intended for DIY (Do It Yourself) use only. If a product is defective it will be replaced in accordance with the terms of this warranty. Warranty excludes consumable parts, for example: drain caps, filter cover O-ring seal (for filter cover), inlet/outlet O-ring seals, filter basket, priming plugs and all accessories.

#### WARNING

#### The following actions will result in the warranty being void.

- Professional, Industrial or high frequency use.
- If the tool has been operated on a supply voltage other than that specified on the tool.
- If the tool shows signs of damage or defects caused by or resulting from abuse, accidents
  or alterations.
- Failure to perform maintenance as set out within the instruction manual.
- If the tool is disassembled or tampered with in any way.

#### Commercial Electric

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