# **Edgetec**



# Installation and Operating Instructions

## pulse POOL PUMP

#### **Attention 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.

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#### **Pulse Pool Pump Details**

Model Number:	
Serial Number:	
Date of Purchase:	
Invoice Number:	

#### General

The Pulse series pool pump has been specifically designed to operate todays swimming pools, its high performance and high head flow characteristics will ensure that the Pulse pool pump will operate with all your ancillary equipment including chlorinators, heaters, in floor cleaners and pool cleaners.

#### Installation of the Pulse Pool Pump

Edgetec Systems Pty Ltd has applied the latest CAD design software in designing your Pulse Pool Pump to ensure that you have many years of trouble free operation. Here are some simple installation rules that should be followed when installing the Pulse pool pump;

- Care should be taken to position the pump so that it has adequate drainage. Ensure the
  motor cannot become wet or flooded and the pump location should be well ventilated.
  The pump should be protected from direct sunlight and weather.
- 2. Ensure that the pump is secured onto a stable base. The pump mounting foot has mounting points where the pump can to be bolted to the base to prevent movement.
- 3. The pump foot has an anti-vibration pad moulded into the base to minimise noise and vibration. Failure to secure the pump to the base securely may cause damage and void the warranty.
- 4. The pump must be accessible for maintenance and be easily removed for service. Ensure that you allow enough area around the hair and lint pot basket for removal and cleaning.
- 5. The pump suction line requires a minimum of 50mm PVC pipe and should be kept as short as possible with the minimum number of elbows and bends and no air trap for optimum performance. The suction line must be installed below the water level until just in front of the pump location and the vertical riser used to reach the pump inlet. Note: Wear protective gloves when using PVC glue and solvents and always allow 24 hours to dry before starting the pool pump.
- 6. The suction and return pipe work should be self-supported so that no strain from the pipework loads up the pump barrel unions. The pump should not be suspended by the pipe work or other equipment as this will cause leaks and eventual damage to the pump. Only use the barrel unions supplied with the pump, barrel unions only require to be hand tight, do not use tools to tighten the barrel union nuts.
- 7. If the pump is installed below the water level isolation valves must be fitted to the suction and return lines.
- 8. Pump installations that are 500mm or more above the water level will require a foot valve at the pool or a check valve in the suction line.
- 9. Water temperature must not exceed 45°.

#### **Electrical Connection**

- 1. <u>IMPORTANT! The electrical installation must be performed by a licensed electrician and must conform to all national, state and local codes. Australian Wiring Rules AS3000</u>
- 2. The PULSE pump must be supplied through a residual current device (RCD) with a rated residual operating current of 30mA.
- 3. If the supply cord is damaged it must be replaced by Edgetec Systems or its service agent or a suitably qualified person.



FOR YOUR SAFTEY: This Product must be installed and serviced by a qualified service technician. Improper Electrical installation can create dangerous electrical hazards which could cause death, serious injury or property damage. Improper installation will void the warranty.

#### **Operation-Priming**

The Pulse series pool pump has been designed to prime and re prime as long as the hair and lint pot bowl is full of water and there is adequate supply from the suction points.

#### Priming/Start up

- 1. If the pump is installed above the water level and the hair and lint pot has no water in the bowl, close off the valve in the suction line (if fitted), remove the hair and lint pot lid, and fill the bowl with water and replace the hair and lint pod lid ensuring that its fitted correctly.
- 2. If the pump is installed below the water level, open the valves and you should see the water flow freely into the hair lint pot bowl.
- 3. Switch the pool pump on.
- 4. The pump should now be primed and running; however, on some installations the priming time may alter depending on the elevation and the length of pipe on the suction line.
- 5. If after around 90 seconds the pump has not primed switch the pump off and repeat step 1. If after a number of attempts you still cannot prime the pump check your connections for any leaks, it may be necessary to fit a foot or check valve to obtain prime.



Never run your pool pump without water as this can cause serious damage to the mechanical seal which may cause the pool pump to leak.

Running the pump without water will void your warranty.



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.



#### RISK OF SUCTION ENTRAPMENT HAZARD, WHICH, IF NOT AVIODED, CAN RESULT IN SERIOUS INJURY AND/OR DEATH.

Do not\_block the pump suction, as this can cause severe injury and/or death. Do not use this pump for wading pools, shallow pools, or spas containing bottom drains, unless the pump is connected to at least two (2) functioning suction outlets. Drain covers must be certified to the latest published version of AS 1926.3

#### Hair and lint Pot Basket - Maintenance

Your Pulse series pool pump has been designed to run for extended periods of time, however, the hair and lint pot basket should be inspected and cleaned on a weekly basis or more regularly if required, to do this follow the steps below;

- 1. Turn the power off to the pump and close the isolation valves.
- 2. Undo the hair and lint pot lid by turning the hair and lint pot locking ring in an anticlockwise direction (approximately 1/8 of a turn) and remove the hair and lint pot basket.
- 3. Clean the debris from the basket and clean with water if required.
- 4. Replace the hair and lint pot basket into the pump aligning the open section of the basket with the inlet of the pump. If the basket is not fitted correctly the lid will not be able to be refitted.
- **5.** Replace the hair and lint pot locking ring and tighten in a clockwise direction approximately 1/8 of a turn. *Hand tighten the lid only, do not use any tools to tighten the lid.*
- 6. Fill the hair and lint pot bowl with water (if required) and open the isolation valves and switch the pump on.

#### General Maintenance

- 1. On a monthly basis check the area around the pump motor to ensure that it is clear of debris, i.e. leaves, sand and dirt etc. Failure to keep this area clean may cause the pump fan cowl to become blocked and cause the pump to overheat.
- 2. Check the hair and lint pot basket regularly, blocked lint basket or suction line will limit the water to the pool pump and will cause serious damage and void your warranty.
- 3. On a monthly basis check the O rings on your hair and lint pot lid and pump barrel union O rings for leaks. Should any leak be detected, clean and regrease the O Rings or replace if required. Do not use petroleum based grease or Vaseline.
- 4. Check under your pump every 3 months to ensure that it is not leaking; if a leak is found call a pool service technician for repair.
- 5. Maintain your water and chemical balance.
- 6. Do not add salt, chlorine, acid or any chemicals directly into your skimmer box, this may cause damage to your pump and possibly void your warranty.
- 7. If there is large amounts of sand or grit in your pool always use a filter sock in your hair and lint pot basket, otherwise the sand and grit passing through your pump could cause serious damage.
- 8. In cold climates where the pool pump maybe subject or exposed to frost or freezing, we recommend that the pump not be used during this time and that the water be drained completely. There is a drain point located on the hair and lint pot and a ¼ BSP drain plug can be sourced from Edgetec Systems.
- 9. Should your pool pump require servicing and you cannot locate a service person, please contact Edgetec Systems for their nominated service outlet.
- 10. Use only genuine Edgetec parts when replacing or maintaining your pool pump.

## **Trouble Shooting Guide**

Symptoms	Possible Cause	Remedy			
	No water in the pump.	Ensure that the hair and lint pot is full/Ensure water level is correct in the pool			
Pump will not prime.	Air leak.	Ensure that the water level is correct at the suction points. Tighten all barrel unions and fittings on the suction side of the pump.			
	Blocked lined or closed valves.	Check that all the valves are in the open position. Check that the skimmer and/or hair and lint pot basket are free from debris.			
		Ensure that the pump impeller is not jammed or blocked.			
	Dirty Filter.	Sand Filter - Check and backwash filter. Cartridge Filter- remove and clean cartridge element.			
Low Flow.	Skimmer basket and/or hair lint pot basket.	Check and clean both baskets.			
	Valves are in closed position.	Open the valves.			
Pump will not run.	No power.	Check to ensure that the power point is switched on. Ensure that the RCD has not tripped. Check that the time clock (if fitted) on other equipment is set correctly.			
	Jammed pump impeller.	Switch the power off to the pump, see if the pump shaft spins freely by rotating the pump shaft at the back of the pump motor. If still jammed consult you pool service technician or Edgetec.			
	Ventilation.	Check that the pump is free from debris.			
Pump cuts out on over load.		Check that the pump is not in direct sunlight.			
over load.	Low or incorrect voltage.	Have an electrician check the power supply to the pump.			
		Ensure that the pump is not running off an extension lead.			
	Motor bearings.	Have the motor bearing replaced by an authorised person or Edgetec.			
Noisy Pump.	Foreign matter in the pump impeller.	Remove pump and clean foreign matter from impeller.			
	Air leak.	Check that there is no air leaks in the suction line causing the pump to cavitate. Tighten all fittings.			

#### Pulse Series Pool Pump Warranty

Edgetec Systems Pty Ltd warrants that this item sold hereunder shall be free from defects in material and workmanship for a period of two (2) years from the original purchase date and to the original purchaser and are not transferable to new owners.

This warranty is only valid when the product is installed and used in the normal manner in accordance with the installation and operating instructions provided, failure to do so will void your warranty.

The product warranty does not cover the following:

- Fair wear and tear, negligence, misuse or abuse.
- Incorrect installation.
- Running the pump dry.
- High voltage strikes, lighting strikes or acts of nature.
- Water damage from external sources.
- Inadequate ventilation.
- Repairs by unauthorised persons.
- Incorrect voltage.
- Addition of chemicals directly through the skimmer box

OR

The replacement of maintenance items used in routine general maintenance are not covered by this warranty. Maintenance items may include (but not limited to):

- · Motor Bearings.
- O-rings
- Mechanical seals.

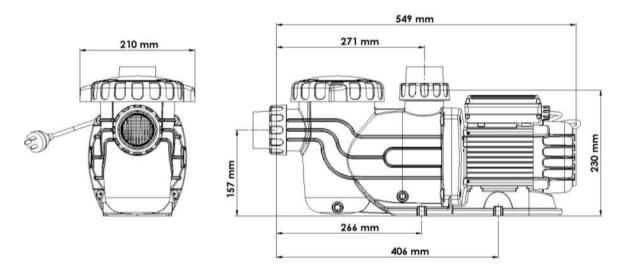
**Proof of Purchase:** All warranty claims must be accompanied with the original purchase documents, without proof of purchase the warranty will not be considered.

**Commercial Warranty:** Has a limited warranty of one (1) year from the date of purchase to these commercial installations includes (but not limited to) hotels, motels, caravan parks, health clubs, public pools and body corporate installations etc.

To obtain warranty replacement or repair, the pump should be returned to the original place of purchase or to Edgetec Systems Pty Ltd.

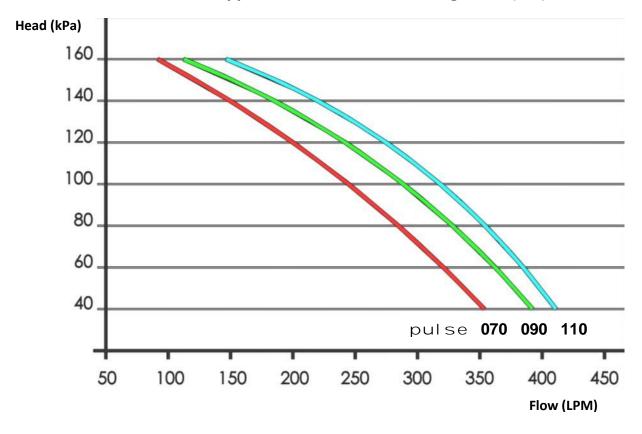
Edgetec Systems Pty Ltd goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are entitled to have the goods repaired or replaced if goods fail to be of acceptable quality and the failure does not amount to a major failure. No unauthorized personnel can make any warranty representation on the behalf of Edgetec Systems Pty Ltd unless with their written permission.

### Pulse Pool Pump Specification

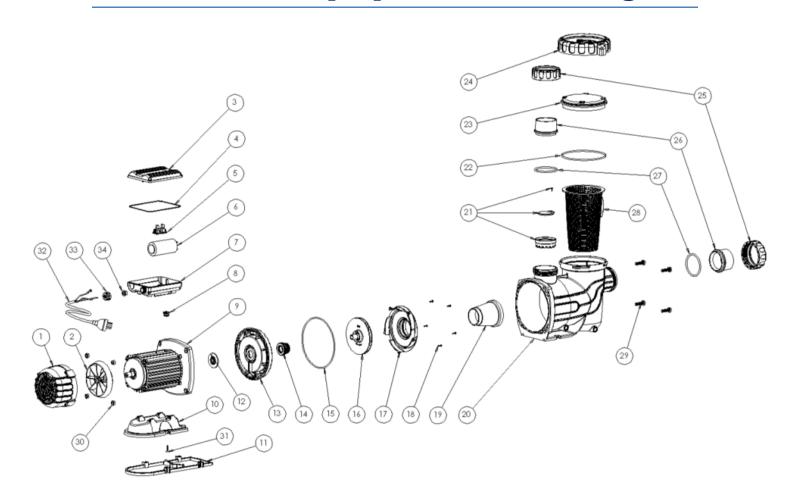


Pump Model	Нр	Supply Voltage	Power (watts)	Current (amps)	Width (mm)	Height (mm)	Length (mm)
Pulse 070	1.0	230-240	750	4.4	210	230	549
Pulse 090	1.25	230-240	925	5.6	210	230	574
Pulse 110	1.5	230-240	1100	6.2	210	230	574

Electrical Approval SGS 538 Noise Rating 65 dB (1m)



## Pulse Pool Pump Spare Parts Listing



**Parts Listing** 

Item#	Description	Part #	Item#	Description	Part #
1	Fan Cowl	10-0029	16	Impeller 1.5Hp	10-0001
2	Fan	9-2020	17	Diffuser	10-0009
3	Capacitor Cover	9-2024	18	Screws Diffuser (5)	10-0024
4	Capacitor Cover Gasket	9-2025	19	Diffuser Throat	10-0008
5	PCB Fuse Terminal	9-5128	20	Pump Casing	10-0014
6	Capacitor 20 uf 450 v 1Hp	9-2028	21	Check Valve	10-0010
6	Capacitor 30 uf 450 v 1.25Hp & 1.5Hp	9-2029	22	Hair & Lint Pot O Ring	10-0016
7	Capacitor Base	10-0025	23	Hair & Lint Pot Lid	10-0006
8	Grommet	9-2022	24	Hair & Lint Pot Lock Ring	10-0007
9	Motor 746 Watt	10-0026	25	Barrel Union Nuts (2)	10-0013
9	Motor 1100 Watt	10-0027	26	Barrel Union Pipe Socket (2)	10-0011
10	Motor Base	10-0021	27	Barrel Union O ring (2)	10-0012
11	Anti-Vibration Pad	10-0022	28	Hair & Lint Pot Basket	10-0005
12	Rubber Flinger	10-0028	29	Screws Casing (4)	10-0019
13	Back Plate	10-0018	30	Nut Casing M8 1.25 NP Brass (4)	10-0020
14	Mechanical Seal (John Crane)	10-0017	31	Screw Motor Foot M4	10-0023
15	Casing O Ring	10-0015	32	Lead 10amp 3 Pin 2 Metre	9-2030
16	Impeller 1.0Hp	10-0003	33	Nut Lead Gland M20	9-2031
16	Impeller 1.25Hp	10-0002	34	Grommet Lead Gland 6mm	9-2032

#### Notes

# pulse

by



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