



Leisure Time Pool Pumps

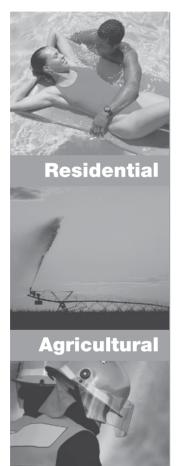
The pump must be supplied through a Residual Current Devise (RCD) having a rated residual operating current not exceeding 30mA.

Should you the installer or owner be unfamiliar with the correct installation or operation of this type of equipment you should contact the distributor/manufacturer for the correct advice before proceeding with the installation or operation of the product.

Relax - you've bought an **onga**' ...

Congratulations on your decision to purchase an Onga product. Onga is one of the best know brands in its field, with a proud local and international reputation.

Onga is a brand for reliability, value for money and technological innovation. You will find Onga product wherever people need to move water in 3 broad markets covering:



Process

Technologically advanced solutions for moving and treating water in the Home, Garden, Pool and Spa.

Innovative Stock and Crop water management solutions for Primary Industries.

Water movement products for Building services, Emergency services and Original Equipment Manufacturers.

1. Continual Product Improvement

We employ the best engineers both in Australia and around the world to develop new and better ways to take water further.

2. Operational Excellence

There is only one standard that we set ourselves for both product quality and the quality of our service. That standard is excellence... to have no-one better than us at what we do... nothing short of that is acceptable. Our commitment to quality is reinforced with our ISO 9001:2008 accreditation.

3. A Fair Price

Onga products are neither the cheapest nor the most expensive in their field. Our products do, on the other hand, always represent very good value for money; they always have and they always will.

4. Our Team of Dealers

The hand picked authorised Onga dealer network throughout Australia and worldwide are second to none. We invest considerable time and resources training and supporting them through the Onga Training Academy.



Table of Contents

Safety	4
Installation	6
Operation	7
Service & Maintenance	8
Removal of Pump for Servicing Parts Diagram	9 10
Troubleshooting	11



Rainbow Pool Products

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Page

IMPORTANT!

The operator must be provided with this owner's manual. This must be read before operation and followed during operation.

These instructions are a guide only. Users not familiar with pool equipment should seek advice from suitably qualified persons with experience in pool equipment installation.

Models: LTP400, LTP550, LTP750, LTP1100

(3/4hp) (1hp) (11/4hp) (11/2hp)

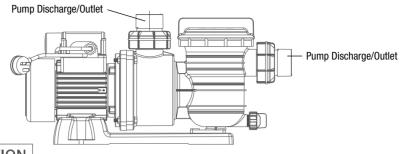
The Leisure Time range of pool pumps are ideal for domestic swimming pool and spa applications. They offer unique corrosion protection with double zinc coated cast iron endshield mounted on a non-corrosive base. The Leisure Time pool pumps have been designed to provide performance at a realistic cost.

Technical Data

Inlet	ABS Barrel union to suit 40mm PVC pipe internal ABS Barrel union to suit 50mm PVC Socket external
Outlet	ABS Barrel union to suit 40mm PVC pipe internal ABS Barrel union to suit 50mm PVC Socket external
Max. Pump Pressure	195 kPa
Max. Working Pressure	295 kPa
Water Temperature Range	5 – 45ºC
Max Ambient Temperature	55°C
IP Rating	Electrical enclosure IP55, Pump IPX5
Electrical Rating	240 Volt single phase are supplied as standard with built in thermal overload protection and are designed to plug directly into a 10 amp domestic power supply to local electrical authority specifications.
Optimal pH Range	7.2 - 7.8 (Guide Only)

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capacities, or lack of experience and knowledge, unless they have supervision or instruction concerning 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.

Installation



ACAUTION

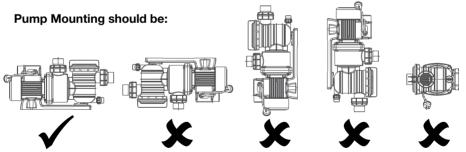
The fittings on these pool pumps are constructed of ABS. Some PVC jointing compounds are incompatible with ABS possibly causing failure to the product. Check compound suitability prior to use.

ACAUTION

All glued fittings and pipe work should be allowed to dry to atmosphere for 24 hours before closing installation. Failure to do so could cause injury or installation failure.

ACAUTION

Barrel Unions are to be hand tightened ONLY, to prevent damage occurring from over-tightening.



- 1) Pump position must be: Solid Level Rigid -Vibration Free
- 2) Allow pump suction inlet height to be as close to water level as possible.
- 3) Allow for use of a piece of short, straight suction pipe into the suction port of the pump (minimum length for 40mm diameter suction = 160mm; 50mm diameter suction = 200mm) in order to minimise water turbulence entering the pump.
- 4) Allow for control valves in suction and discharge piping. (Essential if pump is mounted below water level).
- 5) Have adequate floor drainage to prevent pump being immersed in water due to flooding.

- 6) Protect from excess moisture, vermin, dust and weather.
- 7) Allow access for servicing pump and piping.
- 8) To provide adequate ventilation keep rear of motor clear (100mm Min)
- 9) Do not use electrical extension cords/leads.

Points of Note

- a) The pump is to be supplied through a residential current device (RCD) having a rated residual operating current not exceeding 30mA
- b) 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 safely.
- c) Children should be supervised to ensure that they do not play with the appliance.
- d) If the supply cord is damaged it must be replaced by the manufacturer, its service agent or similarly qualified person in order to avoid a hazard.
- e) The appliance should be wired, in accordance with the local wiring rules, by a qualified person



A WARNING

NEVER run pump dry! Running pump dry may damage seals, causing leakage and flooding! Fill pump with water before starting motor.

ACAUTION

240 volt single phase are supplied as standard with builtin thermal overload protection and are designed to plug direct into a 10 amp domestic power supply socket to local electrical authority specifications.



injury or death. DO NOT BLOCK SUCTION. Do not block pump suction! To do so with body, may cause severe or fatal injury. Small children using pool must ALWAYS have close adult supervision!

Operation

Priming Pump:

- a) In a flooded suction system (water source higher than pump), the pump will fill itself with water when suction and discharge valves are opened. Water will be at the top of the hair and lint pot lid.
- b) If pump is not in a flooded suction system, unscrew and remove hair and lint pot lid; fill pot (casing & bowl assembly) with water.
- c) Clean, inspect and lubricate 'O'ring; reinstall 'O'ring onto bowl assembly.
- d) Replace lid onto bowl assembly; turn clockwise to tighten lid.



Tighten lid by hand only (no wrenches)!

Do not run pump dry or damage will occur and may void warranty.

Start-up Procedure:

- 1) Release all air from filter and piping system: see filter owner's manual.
- 2) Turn pump "ON" at power point or controller.
- 3) Pump should prime now. Priming time will depend on vertical length of suction lift and horizontal length of suction piping.

If pump does not prime within a few minutes, make sure that all valves are open, suction pipe end is under water and that there are no leaks in suction pipe. Ensure the skimmer basket on pool is clean and free of debris. Repeat step a) - d) under the section Priming Pump. If the pump still does not prime non return valves may be required refer to place of purchase for assistance.

ACAUTION If water is seen to be leaking from directly underneath motor and casing, have pump serviced immediately.

This indicates a leaking mechanical seal. Failure to fix this may result in premature product failure.

NOTE: Onga recommend the use of silicon based lubricant on all 'O'rings.

The only routine maintenance needed is inspection/cleaning of leaf basket. Debris or trash that collects in basket will choke off water flow through the pump. Follow instructions below to clean leaf basket:

- 1. **Stop pump**, disconnect from power, close gate valve in suction and discharge.
- 2. Unscrew lid (turn counter clockwise). If necessary, undo drain plug to reduce lid vacuum. Do not hit the lid with a hammer or similar tool. If the lid is still too tight use a lever such as a board or long screwdriver between lugs on lid.
- 3. Remove leaf basket and clean. Be sure all holes in basket are clear, flush basket with water and replace in bowl assembly with large opening at pipe connection port (between ribs provided). If basket is replaced backwards the lid will not fit into bowl assembly.
- 4. Inspect, check and lubricate lid 'O'ring; reinstall onto bowl assembly.
- 5. Clean 'O'ring groove on bowl assembly and replace lid. To help keep lid from sticking,(**tighten hand tight only no wrenches**).
- 6. Prime Pump (see priming instructions)
- NOTE : Failure to carry out routine maintenance may reduce pump performance and void warranty.
- NOTE : If the supply cord is damaged, it must be replaced by a special cord or assembly available from the manufacturer or it's service agent.

Switch off power and remove plug from power point. If the pump is hard wired into any other controls such as time clocks or automatic heads etc.,

THE WIRING SHOULD BE REMOVED BY A QUALIFIED ELECTRICIAN.

Close control valves and undo barrel unions from suction and discharge lines.

Remove pump and take to your nearest authorised Onga service agent or call:

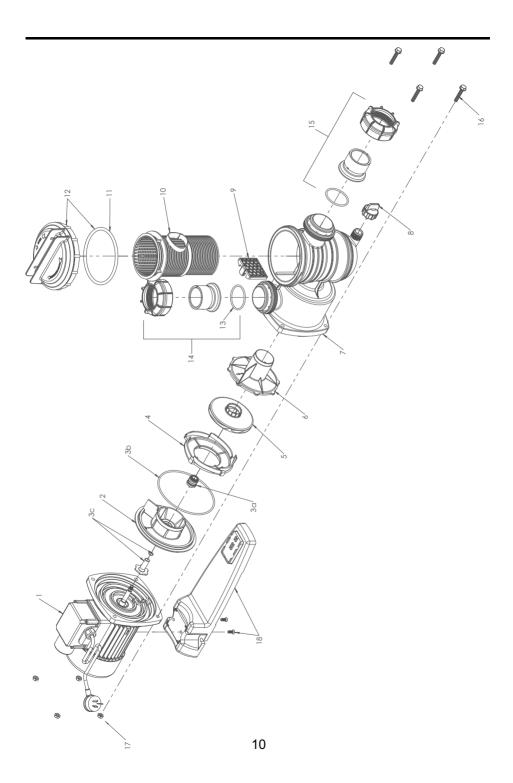
1800 664 266 (Australia)

0800 664 269 (New Zealand)

If the need arises to contact an Onga service agent please have all details available including model and serial number, date of purchase and particulars of fault.

Ref	Description
1	Motor
2	Baffle
3a	Mechanical Seal
3b	O'ring – Casing
3c	Shaft Sleeve & O'ring
4	Diffuser
5	Impeller
6	Seperator Plate
7	Casing & Bowl Assy
8	Plug - Drain
9	Finger Guard
10	Basket -Strainer
12	Lid & O'ring Assy
13	O'ring – Barrel Union
14/15	Barrel Union Assy
16/17	Bolts & Nuts
18	Base and Screws

If service parts are required please quote Model Number and Type of pump as shown on the label of the pump.



Trouble Shooting Guide

SYMPTOM	CAUSE	REMEDY
Pump does not Run	No Power at the power outlet	Use another electrical appliance that is known to work to check the power point.
	Blown Fuse.	Check Fuse and replace if necessary
	Automatic Thermal Overload has tripped to protect the motor.	Switch the power to the pump off and allow the motor to cool before switching back on. Ensure that the pump and motor have adequate ventilation in the area surrounding the pump. Ensure that the pump is not jammed with debris and that the motor shaft spins freely. The motor may be operating on a low voltage supply.
	Pump is jammed (check if shaft is free to rotate)	Blockage in the pump or suction strainer. Motor bearings may be seized.
Pump operates with reduced or no flow	Motor burnt out due to voltage spike or flooded by water	The motor may need replacing.
	Valves turned to the closed position	Check the plumbing to ensure the valves are in the correct position for filtering, including any valves on the suction or discharge of the pump.
	Dirty Filter	Clean the filter (refer to the documentation supplied with your filter).
	Air ingress to system	Re-prime the pump (refer to prim- ing procedure). Check that there are no air leaks in the suction piping or fittings. Ensure the hair & lint pot lid is closed and airtight. Check there are no leaks coming from beneath the pump and casing.

SYMPTOM	CAUSE	REMEDY
	Lack of water	Ensure the water level in your pool is at least up to the halfway mark at the skimmer opening.
	Debris in the pump or skimmer box Note: Do not operate pump with- out hair & lint pot or skimmer basket fitted correctly	Ensure that both the hair & lint pot basket and skimmer basket are free of leaves and other debris. Ensure that there is no blockage at the pumps suction or discharge. Ensure that the pump internals are free of foreign matter which may block the flow of water.
Pump leaking from between the casing and the motor	Casing bolts are not tightened Casing 'O'ring is worn Mechanical Seal needs replacing	Switch off pump and loosen the casing bolts. Check alignment and condition of casing 'O'ring before re-tightening. Replace the 'O'ring if leaking persists. Replace the mechanical seal and lip seal if fitted.

-Should problems persist please contact your nearest Onga service agent.

IMPORTANT

Please attach your sales invoice/docket here as proof of purchase should warranty service be required.

Please do not return Warranty Form to Pentair Australia - please retain for your records.

Purchased From

Purchase Date...... Serial No...... Model No.....