



Pool Pumps



Owner's Manual

An earth leakage or residual current protection device must be fitted to all installations.

Should you the installer or owner be unfamiliar with the correct installation or operation of this type of equipment you should contact the distributor/manufacture 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 known companies in its field, with a proud local and international reputation.

In fact, wherever people need to move water from one point to another - whether in leisure industry, horticulture, agriculture or in and around the home - Onga is a byword for reliability, value for money and technological innovation. So why does Onga lead its field? Here are a few simple reasons ...

1. Continual Product Improvement

Onga employ the best engineers both in Australia and around the world to develop new and better ways to pump and handle water.

2. Dedication to Quality

There is only one standard that we at Onga 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.

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

We believe Onga's hand picked authorised dealer network throughout Australia and worldwide are second to none. We invest a huge sum training them and supporting them. They are your link to us, and we value their expertise and trust.

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.

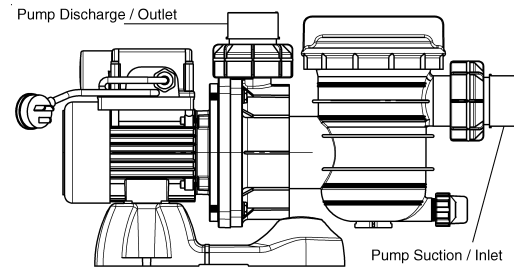
Models LTP400, LTP550, LTP750, LTP1100 **($\frac{1}{2}$ hp) ($\frac{3}{4}$ hp) (1hp) ($1\frac{1}{2}$ hp)**

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	270 kPa
Water Temperature Range	5 – 70°C
Max Ambient Temperature	55°C
IP Rating	IP55
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)

INSTALLATION



⚠ CAUTION

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.

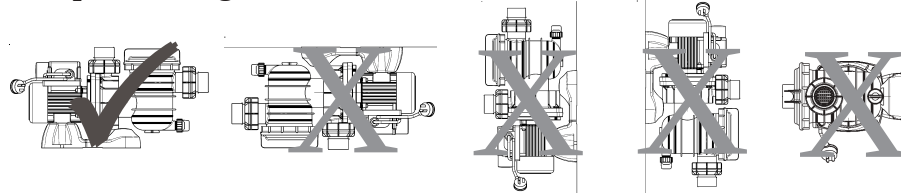
⚠ CAUTION

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.

⚠ CAUTION

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

Pump Mounting should be:



- 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.

INSTALLATION (Continued)

- 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.

OPERATION

WARNING

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

CAUTION

Electrical Operation

240 volt single phase are supplied as standard with built-in thermal overload protection and are designed to plug direct into a 10 amp domestic power supply socket to local electrical authority specifications. Onga recommends that an earth leakage/residual current protection device must be fitted to all installations.

 DANGER



Hazardous suction.
Can trap hair or body parts, causing severe 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 (Continued)

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.

SERVICE & MAINTENANCE



CAUTION 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.

REMOVAL OF PUMP FOR SERVICING

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:

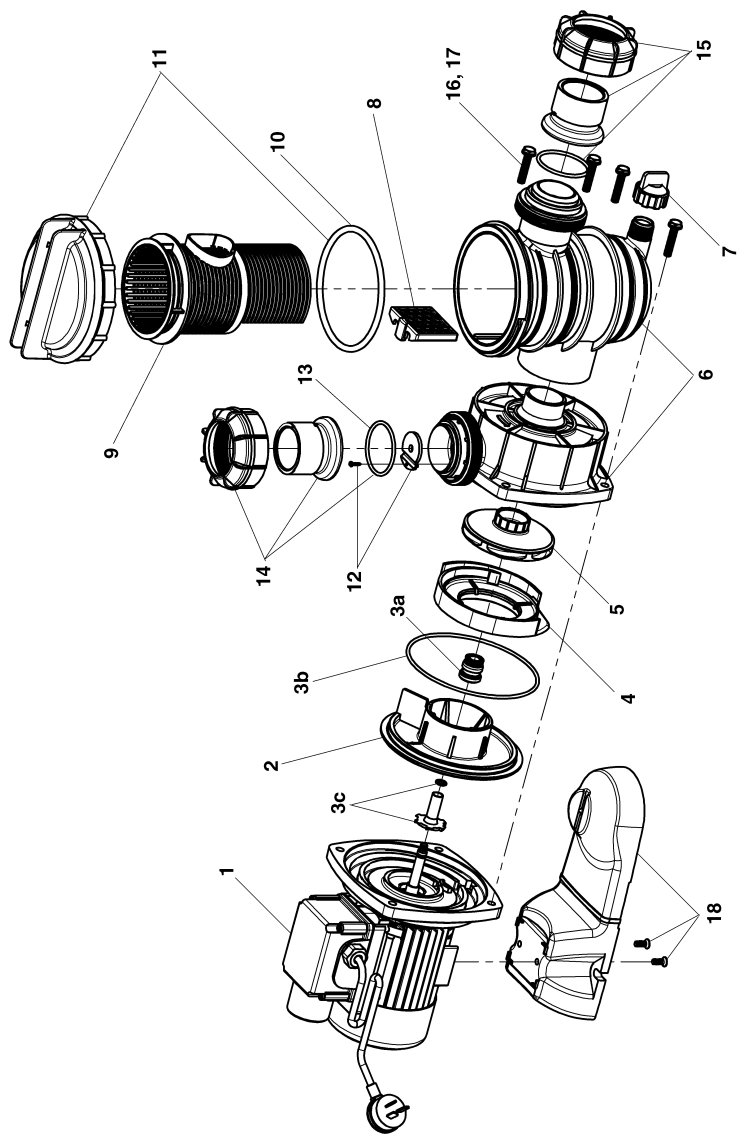
1800 664 266 (Australia)

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.

Item No.	Description	Qty.	Item No.	Description	Qty.
1	Motor	1	9	Basket - Strainer	1
2	Baffle	1	10	O'ring - Lid	1
3a	Mechanical Seal	1	11	Lid & O'ring Assy.	1
3b	O'ring – Casing	1	12	Clacker Assembly	1
3c	Shaft Sleeve & O'ring	1	13	O'ring – Barrel Union	2
4	Diffuser	1	14	Barrel Union Assy.	1
5	Impeller	1	15	Barrel Union Complete	1
6	Casing & Bowl Assy.	1	16 / 17	Bolts & Nuts	4
7	Plug – Drain	1	18	Base & Screws	1
8	Finger Guard	1			

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 operates with reduced or no flow	Pump is jammed (check if shaft is free to rotate)	Blockage in the pump or suction strainer. Motor bearings may be seized. The motor may need replacing.
	Motor burnt out due to voltage spike or flooded by water	
	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 priming 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.
	Lack of water	Ensure the water level in your pool is at least up to the halfway mark at the skimmer opening.
Pump leaking from between the casing and the motor	Debris in the pump or skimmer box	Ensure that both the hair & lint pot basket and skimmer basket are free of leaves and other debris.
	Note: Do not operate pump without hair & lint pot or skimmer basket fitted correctly	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.
	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.

Onga Product Warranty

Onga warrants that, when this product is used for the purpose it was designed, is correctly housed and vented against weather, vermin, dust etc., that it will be free of material and manufacturing defects at the time of the original purchase.

This warranty is limited to the cost of the product and does not cover third party costs including the costs of electricians, plumbers, etc. unless authorised by Onga pumps.

TERMS AND CONDITIONS APPLICABLE INTERNATIONALLY

How long the warranty is effective Internationally

- 1) This Onga product is warranted for 12 months for all parts from the date of the first consumer purchase. Should any parts fail as a result of such defects within the specified period, the part will be replaced free of charge. (This does not include travel charges, removal and reinstallation charges.)

TERMS AND CONDITIONS APPLICABLE IN AUSTRALIA AND NEW ZEALAND

- 1) YOU SHOULD CAREFULLY READ THE INSTRUCTIONS SUPPLIED PRIOR TO USING THIS ONGA PRODUCT.
This product is to be installed and operated in accordance with the instructions provided. This warranty will not apply if it is used in a manner otherwise than in accordance with the instructions.

What the warranty covers:

Onga warrants its products to be free of defects in material and workmanship during the warranty period. If a product proves to be defective in material or workmanship during the warranty period, then Onga will, at its sole option repair or replace the product with a like product. Replacement product or parts may include re-manufactured or refurbished parts or components.

How long the warranty is effective:

- 1) This Onga product is warranted for 24 months for all parts from the date of the first consumer purchase.
- 2) Where this Onga product is sold for commercial application as defined in the relevant Trade Practices and Consumer Protection legislation the warranty shall be for a period of six months from the date of purchase by the end user.
- 3) Ancillary equipment including but not limited to plastics and metal fittings, electrical controls (including touch pads), bladders, pressure switches, filter cartridges, pressure gauges, etc. shall be warranted for a period of twelve months only in relation to consumer applications and six months in relation to commercial applications.

Who the warranty protects:

This warranty is valid only for the consumer purchaser.

What the warranty does not cover:

- 1) Damage, deterioration or malfunction resulting from:
 - a) accident, misuse, negligence, fire, water, lightning, or other acts of nature, unauthorised product modification or failure to follow instructions supplied with the product;
 - b) repair or attempted repair by anyone not authorised by Onga;
 - c) any damage to the product due to shipment;
 - d) removal or installation of the product;
 - e) causes external to the product such as electric power fluctuations or failure;
 - f) use of supplies or parts not meeting Onga specifications;
 - g) normal wear and tear;
 - h) water ingress or exposure to abnormal corrosive conditions or run in dry conditions;
 - i) any other cause which does not relate to a product defect.
- 2) Damage caused to the product as a consequence of use of another manufacturer's product used in conjunction with Onga and affiliate companies.
- 3) This warranty does not cover such products as combustion engines, mechanical seals or other component parts of units not manufactured by Onga, but where possible Onga will make available to purchaser the benefit of any warranty of that manufacturer.
- 4) This guarantee does not cover underwater light bulbs, underwater lights will only be warranted if wiring is to approved standards, and an approved transformer incorporating thermistors has been used, running the light not submerged in water will void warranty.

Onga Product Warranty (Continued)

- 5) Hydrostatic relief valve supplied separately or incorporated in products are sold with the express understanding that such products offer limited hydrostatic relief and no offer is made or implied as to the suitability of such products for a specific application as their condition at the time of sale are unknown and beyond Onga's control. It is the responsibility of the installer to ensure that the performance of the valve meets the required application.
- 6) Swimming pools or spa equipment will not be warranted where the Langelier Saturation Index 'pH' range is outside 7.2 to 7.6 and they have not been regularly treated with chlorine or bromine based sanitising systems, or other recognised sanitising systems.

Spare Parts:

Spare parts are usually stocked for a reasonable period of time following last production.

Onga does not warrant that spare parts will be made available for the whole of the reasonable period and reserves its right to cease supplying spare parts or providing facilities for repair of spare parts in circumstances which are beyond its control including the requirement to remove spare parts from sale as a consequence of changes in the law or otherwise as it deems fit.

How to get service:

In Australia please contact 1800 664 266

In New Zealand please contact 0800 664 269

Claims under this warranty must give evidence of date of purchase, model and serial number of the product and the claimants name, address and telephone number.

- 1) To obtain warranted service, you will be required to provide to either Onga state office or recommended service agent:-
 - a) the product;
 - b) confirmation in writing specifying the nature of your claim;
 - c) proof providing date of original purchase;
 - d) full contact details including name and address;
 - e) the serial number of the product if any.
- 2) The product is to be forwarded by the customer freight paid to Onga. Infield service by an authorised Onga Service Agent will incur a travel, removal & reinstallation fee to adjudicate on warranty issues. Authorised warranty will be free of charge for the first 12 month period from date of the first consumer purchase.
- 3) Warranty service work will be denied or suspended, on equipment not readily accessible to service personnel, that is products that are behind barriers, tiled or bricked in, installed in roofs or second storey external walls including inaccessible power points.
- 4) Any service of any product which is found to be faulty due to abuse, misuse or improper installation will be charged to the owner at the service agents current servicing

Limitation of implied warranties:

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION CONTAINED HEREIN INCLUDING THE IMPLIED WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Exclusion of damages:

ONGA'S LIABILITY IS LIMITED TO THE COST OF REPAIR OR REPLACEMENT OF THE PRODUCT. ONGA SHALL NOT BE LIABLE FOR:

- 1) DAMAGE TO OTHER PROPERTY CAUSED BY ANY DEFECTS IN THE PRODUCT, DAMAGES BASED UPON INCONVENIENCE, LOSS OF USE OF THE PRODUCT, LOSS OF TIME, LOSS OF PROFITS, LOSS OF BUSINESS OPPORTUNITY, LOSS OF GOODWILL, INTERFERENCE OF BUSINESS RELATIONSHIPS, OR OTHER COMMERCIAL LOSS, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.
- 2) ANY OTHER DAMAGES, WHETHER INCIDENTAL, CONSEQUENTIAL OR OTHERWISE.
- 3) ANY CLAIM AGAINST THE CUSTOMER BY ANY OTHER PARTY.

Effective law:

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Nothing in this warranty limits or restricts, or is intended to derogate from, any right or remedy which the purchaser or ultimate user of the product may have pursuant to Australian state and/or Australian federal consumer protection legislation, New Zealand Sale of Goods Act, Consumer Guarantees Act, Fair Trading Act or any other relevant and applicable New Zealand legislation or authority and where necessary shall so be read and construed.

IMPORTANT

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

Please do not return Warranty - Retain for your records.

Purchased From _____

Purchase Date _____ **Serial No** _____ **Model No** _____

Ask your local Onga retail outlet about the extensive family of
Onga products

Rakes	Great White Automatic Pool Cleaners	Zelbrite
Telepoles	Hydrostatic Relief Valves	Filter Sand
Leaf Scoops	Salt Chlorinators	Solar Pumps
Vacuum Hose	Pool Brooms	Valves, Fittings
Vacuum Heads	Skimmers	Filtration Pumps
Water Testing Kits	& more	Genuine Spare Parts



Asia Pacific & Australia

Australia

Wicor
 onga.com.au
 Tel: 1800 664 266
 E-mail: mail@onga.com.au

Export Sales
 onga.com.au
 E-mail: export@onga.com.au

New Zealand

Onga (NZ) Limited
 onga.co.nz
 Tel: 0800 664 269
 E-mail: query@onga.co.nz

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 starite.com

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Germany

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Italy

STA-RITE S.p.A.
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