

ong^a

Pentair Water



TankBuddy Submersible Pump

OTB450A/OTB450W

This pump must be supplied from a circuit protected by a residual current device – RCD (also known as an Electrical Leakage Circuit breaker – ELCB) with a maximum rated residual current of 30mA.

This manual must be read & followed during installation, operation and servicing of this product. This manual should be provided to the end user of this product; its use will reduce service calls and chance of injury, and will lengthen product life.

Relax - you've bought an **ongá** ...

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:



Residential

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



Agricultural

Innovative Stock and Crop water management solutions for Primary Industries.



Process

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 9001:2000 accreditation.

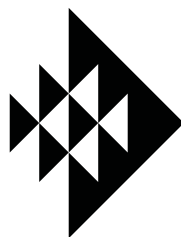


3. **A Fair Price**

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.



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Pentair Water

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Technical Information

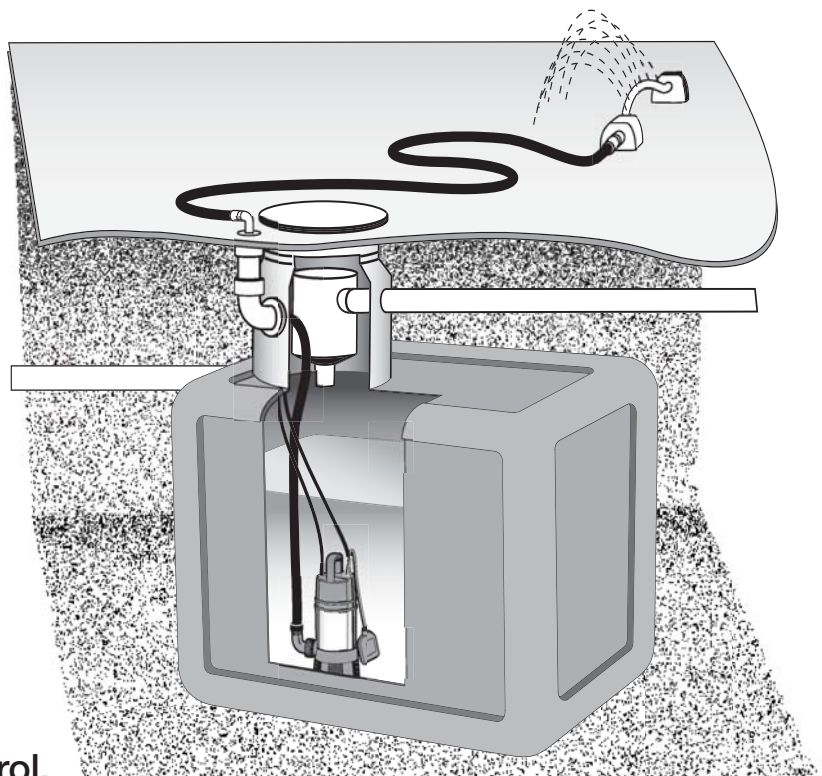
Pump Discharge Connection:	1 1/4" BSPF Thread
Supplied Fitting:	1 1/4" Hose Tail
Power Supply:	230V - 1Ph - 50Hz
Voltage Limits:	207V - 253V (230V \pm 10%)
Maximum Flow Rate:	100 lpm
Maximum Head:	32m
Water Temperature Range:	1°C – 40°C
Power Consumption	800W
FLA (Full load amps):	3.7A
Maximum Submergence:	7m

Application

TankBuddy is designed to provide water from your tank to your garden or house. Because it is submerged, TankBuddy operates silently, and takes up no space at ground level.

TankBuddy is a multi-stage pump, it provides more pressure than most submersible pumps, and adequate pressure for all but the largest homes.

TankBuddy is available in 2 versions. OTB450A is the all in one solution for automatic pump operation and OTB450W offers versatility for connection to various Onga pump controllers such as WaterSwitch and PressControl.



Installation



TankBuddy is electrically connected. Ensure that it is switched off and unplugged from the electrical supply during installation and any subsequent service work.



These instructions are a guide only. Should you the installer or owner of the product be unfamiliar with the correct installation or operation of this product you should contact suitably qualified plumbing and/or electrical personnel for advice.



Do not lift, move, or carry this pump by the electrical or float switch cables



TankBuddy is designed to be used with clean water in a residential application. Do not use it with alternative fluids, specifically abrasive, aggressive, corrosive or explosive fluids. Do not install or operate your TankBuddy in an explosive environment or near combustible matter. Do not operate or use in pools where people can be immersed in the water.



Freezing conditions will damage the unit, as water expands when it freezes. Ensure that TankBuddy is located so that it is not prone to freezing, or ensure that the product is disconnected and dried of water during cold conditions.



This pump is not intended for use by young children or infirm persons without supervision. Young children should be supervised to ensure that they do not play with the pump.

Pre-Installation

Inspect your TankBuddy for shipping damage. Report any damage to your Pentair Water dealer. Read the Owner's Manual fully that was shipped with the pump to ensure correct pump installation (this document).

For rainwater installations Pentair Water recommends that a first flush diverter and suitable strainers are installed.

Electrical

The OTB450A is supplied with a standard Australian 10 Amp plug and cord. To connect to a power supply insert the plug into the suitable socket outlet. The socket outlet shall be in a dry and flood free location. The OTB450W is supplied with a special Onga IEC connection for use in conjunction with recommended Onga controllers and power cords.

Pentair Water advises against the use of extension cords due to their lack of protection against water and due to potential voltage drop.

Supply voltage that is outside limits specified in the Technical Information section can cause motor to overheat, leading to overload tripping, reduced component life or serious pump damage and voids warranty.

The pump must be supplied from a circuit protected by a residual current device – RCD (also known as an Electrical Leakage Circuit breaker – ELCB) with a maximum rated residual current of 30mA.



Pump Installation

Securely connect a stainless steel wire cable or a rope to the handle of the pump ensuring that the wire/cable exceeds the safe working load of 10kg.

If you are using a hard discharge pipe, thread this into the outlet of the pump housing. If you are using a flexible discharge hose, use hose clamps to secure this to the fitting provided.

Lower the pump into the tank using the rope or wire cable. Lower the pump onto a hard level surface that is elevated from the base of the tank. This is to keep the pump inlet above sediments in the bottom of the tank.

OTB450A Model

Ensure that the float switch can move freely within the tank – incorrect operation and pump failure may occur if the float switch becomes trapped.

Connect the power plug to a suitable outlet. The pump will operate when

the float is higher than level, and stop operating when the pump float is in the low position.

If the pump must be removed from the tank, use the lifting rope or lifting wire cable to lift it. Do not use the power cable or the float switch to lift the pump

Do not fix the automatic float switch to the “ON” position as pump failure may occur (Refer to Trouble Shooting section). Your TankBuddy is designed to operate submerged in water.

Fittings and Accessories

Ensure that you have all required fittings and accessories prior to installing your TankBuddy:

- Threadseal tape (hard discharge pipe installations)
- Hose clamps (flexible discharge hose installations)
- Cable ties

A larger diameter hose or pipe will offer less resistance to flow, and so give better performance.

Operation



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



Do not run the TankBuddy dry, or with the motor exposed (i.e. out of the water) for long periods. This will harm the pumps seal, and overheat the motor.

Operation Check

1. Connect the pump to a suitable power outlet.
2. Ensure that the pump is completely submerged. If it is not, fill the tank with water from another source, until the pump is completely submerged.
4. The float switch will rise, and the pump will start, and empty the tank.
As the tank empties, the float switch will fall, and stop the pump.
5. Check that there is adequate pressure and flow from the discharge point.

If there are any variations to these outcomes, please see the trouble shooting section on the following page.

Service & Maintenance



To avoid dangerous or fatal electrical shock, turn OFF power to pump and remove plug from outlet before attending the pump.



There are no user serviceable electrical parts in the pump; any repairs shall be done by qualified service personnel only.



RCD tripping indicates an electrical problem. If RCD trips and will not reset have a qualified electrician inspect and repair electrical system and/or pump.



The power supply cord has a type 'Y' attachment and if service is required to the power cord, it must be replaced with the specialised power cord assembly by a Pentair Water service agent or similarly qualified personnel in order to avoid a hazard.



Always use original Pentair Water service parts. Warranty is void if unauthorised modifications are made to any component.

Under normal conditions, your TankBuddy submersible pump does not require any maintenance.

In order to avoid possible failures, it is advisable to check periodically the pressure and current draw. A decrease in pressure is a symptom of pump wear caused by grit or silt in the water. An increase in current draw is a symptom of abnormal mechanical friction in the pump or motor, caused by solid material being lodged within the pump.

Notes

Trouble shooting

Symptom	Cause	Remedy	
Pump doesn't start	Float switch isn't in the 'on' position	Wait until there is more water in the tank to start the pump	
	Not enough water in the tank to get the float above level		
	Float is caught on something, and can't rise above level	Ensure that the float can move freely	
	No power supply		Ensure that the socket outlet where the pump is connected to is switched on
			Check fuses and/or circuit breakers and RCD
Pump is blocked	Disconnect the pump from the power outlet, and check the pump housing and discharge for foreign matter		
No water from pump	Blockages in the pump or discharge	Disconnect the pump from the power outlet, and check the pump housing and discharge for foreign matter	
	Excessive lift	Ensure that the height that you are trying to lift water is within the pump's capacity. A larger pump may be required.	
	Not enough water in the tank to pump	Wait until there is more water in the tank. Ensure that float switch is operating freely	
Pump will not stop, even though there is little water in the tank.	Float switch is trapped in the "up" position	Ensure that the float switch can operate freely	
	Float switch is fused "on"	Contact and Authorised Pentair Water Service Agent to replace Float Switch	

Symptom	Cause	Remedy
Pump runs intermittently: Thermal protection inside the pump is tripping and resetting	The pump is not completely submerged	Ensure pump is covered with water
	Water temperature is too high	Ensure that water temperature limits are observed.
Pump runs intermittently	When the pump shuts off, water in the discharge line is running back into the tank, lifting the float switch.	Fit a non-return valve at the pump discharge so that water cannot return to the tank

Pentair Water Product Warranty

Pentair Water 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 Pentair Water.

TERMS AND CONDITIONS APPLICABLE INTERNATIONALLY

How long the warranty is effective Internationally

1) This Pentair Water 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 PENTAIR WATER 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 other than in accordance with the instructions.

What the warranty covers:

Pentair Water 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 Pentair Water 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 Pentair Water product is warranted for 24 months for all parts from the date of the first consumer purchase.
- 2) Authorised workshop labour will be free of charge for the first 12 month period from date of the first consumer purchase when unit is found to have failed due to defective workmanship or material supplied by Pentair Water Australia.
Infield service by an authorised Pentair Water Service Agent will incur a travel, removal & reinstallation fee payable by customer.
- 3) Where this Pentair Water 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.

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 Pentair Water;
 - 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 Pentair Water specifications;
 - g) normal wear and tear;

Pentair Water Product Warranty (Continued)

- h) water ingress or exposure to abnormal corrosive conditions or "run 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 Pentair Water and affiliate companies.
 - 3) Ingress of insects into the unit causing electrical malfunction is not warranted, care should be taken to avoid this occurrence.

Spare Parts:

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

Pentair Water 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 Pentair Water 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 an Authorised Pentair Water service agent.
- 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 story external walls including inaccessible power points.
- 4) Any service of any product which is found to be faulty due to abuse, fair wear & tear, misuse or improper installation will be charged to the owner at the service agents current servicing hourly rate.

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:

PENTAIR WATER'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.....



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Water**

**Pacific
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