

ONGA TANKBUDDY SUBMERSIBLE PUMP



Code Description

OTB450A TankBuddy-Onga sump pump 0.65 230

kw

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 ± 10%)

Maximum Flow Rate: 100 lpm Maximum Head: 32m

Water Temperature Range: $1^{\circ}C - 40^{\circ}C$

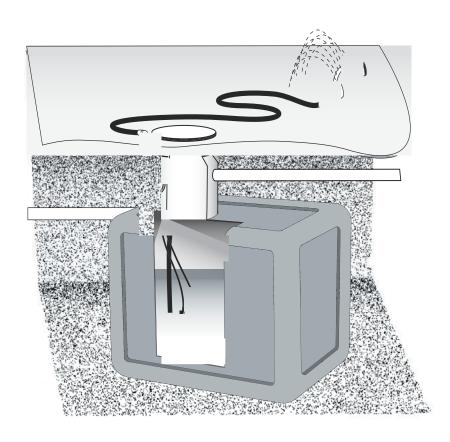
Power Consumption: 800W FLA (Full load amps): 3.7A Maximum Submergence: 7m

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 multistage 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 qualifed 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 fl ood 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.
- 3. 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.
- 4. 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.
4	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.
A	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 sympton of pump wear caused by grit or silt in the water. An increase in current draw is a sympton of abnormal mechanical friction in the pump or motor, caused by solid material being lodged within the pump.

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