

Water Witch

Fault troubleshooting



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When a fault is detected, you **must** refer to this guide and the light display indicators on the control box before taking any action.

Please use the following chart to identify the fault and recommended corrective action:

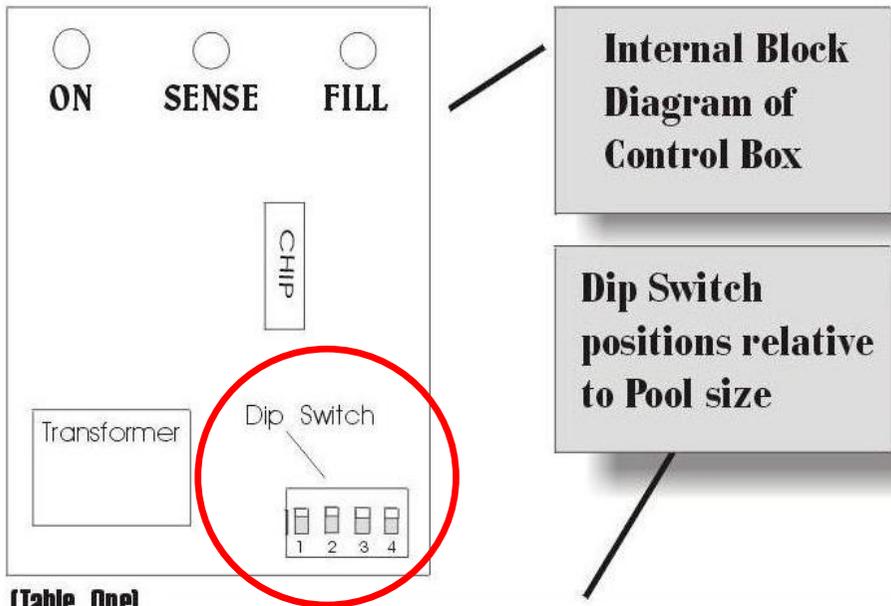
Light display	Water supply from the solenoid	Possible fault	Remedy
On & Sense	Water is flowing & doesn't turn off (pool or spa is overfilling)	Solenoid – may be debris inside the solenoid	Unscrew the four screws on the solenoid. Remove body. Remove diaphragm. Inspect for debris. Clean if necessary.
		Split diaphragm	Unscrew the four screws on the solenoid. Remove body. Remove diaphragm. Inspect diaphragm for split. Replace if detected. <i>If no debris or split diaphragm detected, supply pressure is most likely too high.</i>
<p>Be aware there is a tiny spring and rod inside the solenoid. Be careful not to lose those items when removing the top. Take notice of which position the rod & diaphragm are in, as incorrect insertion will prevent the solenoid from functioning.</p>			
On & Sense	Water will not turn on (water level in pool or spa is low)	Sensor – debris may be impeding function Sensor plug not inserted correctly into control box or individual sensor wires have been removed from sensor plug.	Remove sensor from line. Remove screws & disc plate on bottom of sensor. Remove ball inside. Clean inside sensor if necessary. Ensure sensor wires have correctly been reinserted into left-hand plug at base of control box with screws facing towards front. LHS Red Green Yellow RHS Black <i>If none of these detected, sensor may need to be replaced.</i>
On & Fill	Water will not turn on	Water supply may not be turned on Water pressure is too high Solenoid has been installed backwards.	Turn supply on Install a 3:1 brass <i>Philmac Ratio Valve</i> between supply tap & solenoid to reduce pressure. Ensure arrow on solenoid body is pointing in direction of supply flow. If backwards, reinstall correctly.

On & Fill	Water will not turn on Cont.	Solenoid wire does not have a positive connection	Ensure wire has solid connection from control box to solenoid connecting terminals. If using a multimeter, there should be 7 volts at solenoid.
		Water pressure too low	Supply pressure must be 200-800 kPa
		The solenoid will not operate on gravity tank pressure	
On & Fill	Pool or spa filling too high	Debris in supply line (If water supplied from a tank).	When water is supplied from a tank, it is recommended an in-line filter be installed between the pump & solenoid to prevent debris from entering the solenoid
		Sensor wire in plug backwards or plug inserted backwards (new installs generally)	Ensure sensor wires have been reinserted into plug correctly & plug inserted into LHS of control box with screws facing towards front. LHS Red Green Yellow RHS Black
		Sensor has debris inside	Remove sensor from line. Remove screws & disc plate on bottom of sensor. Remove ball inside. Clean inside sensor if necessary. <i>If no debris detected, follow the next step for sensor & control box fault finding.</i>
WARNING: You may expose a 240 volt current and risk death or injury if this process is not followed exactly.			
		Sensor or Control Box has ceased functioning	To test: 1. Turn power off . 2. Unplug control box from power point . 3. Unscrew lid on control box. 4. Flick all switches up (now in test mode). <i>Switches can be found on the bottom right-hand corner of the circuit board.</i> 5. Screw lid back on . 6. Connect lead to power point . 7. Turn the power on . 8. Hold sensor in upright position to simulate low water in pool. When the water starts flowing, remove sensor connection plug from control box. If water turns off & control box lights change to On & Sense , there is a fault with the sensor & it must be replaced. If lights on control box are On & Fill , & water continues to flow, the control box circuit board has been damaged and will need to be replaced.

Please note: Your *Water Witch* would have been set to a time delay when it was installed. The time delay controls the length of time the water continues to flow once the pool reaches the desired fill level. If you're not aware of the time delay, you may believe there is a problem with the unit.

To understand the time delay your unit has been set to, please reference the position of the four dip switches inside the control box to the following chart.

WARNING: Before opening the control box you must ensure the *Water Witch* unit has been removed from the power point.



[Table One]

DESCRIPTION	SWITCH 1	SWITCH 2	SWITCH 3	SWITCH 4	Time Delay Before Switching Off.
Test mode	UP	UP	UP	UP	2 Seconds
Spa	UP	DOWN	UP	UP	13 Seconds
Medium	UP	UP	DOWN	UP	75 Seconds
Large / Balance	UP	UP	UP	DOWN	330 Seconds

To locate your nearest supplier for the *Philmac Ratio Valve*, please contact their head office on 08 8300 9200 or www.philmac.com.au