



ONGA - AQUA PACK PLUS

DIAPHRAGM PRESSURE TANK



OWNERS MANUAL

APP8 – APP12 – APP24 – APP40 – APP80 – APP100



Warning - Read owners manual carefully before installation and when carrying out maintenance to pressure tank or associated system.

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.....



**Pentair
Water**

**Pacific
Australia**

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Disclaimer: Every endeavour has been made to publish the correct details in this owner's manual. No responsibility will be taken for errors, omissions or changes in product specifications. Pentair Water reserves the right to change specifications

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.

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Onga Aqua Pack Plus Range:

The Onga Aqua Pack Plus pressure tanks are available in 6 sizes. It is important to select the correct size for the application you intend using the product for. Selecting a tank that is too small, may result in pump cycling. Correct sizing will ensure an adequate storage of water and reduce surges in the system. See technical specifications for further details.

Pressure Rating:

The Onga Aqua Pack Plus range of pressure tanks have a maximum operating pressure of 690 kpa (100 psi). To avoid personal injury or mechanical failure the maximum pressure rating should not be exceeded under any circumstances. Should the pump or system be capable of exceeding the maximum pressure, it is recommended a pressure relief valve (set below 690 kpa) is installed in the system.



Warning: - Maximum Operating Pressure = 690 kps (100 psi)

Installation:

Onga Aqua Pack Plus pressure tanks should be mounted vertically on the tee piece provided with the pressure switch or pump. The three larger models come with a base mount with the tank designed to be installed in the discharge pipe and not directly on the pump. In all cases, the tank should be securely mounted to avoid personal injury and/or damage to the tank and equipment when in operation.

The tank should be positioned out of direct sunlight and covered to avoid damage from the elements. If the tank is installed indoors, it is recommended a spill tray and adequate drainage is installed to avoid water damage in the event of leakage or rupture.

It is recommended a gate valve is installed on the discharge line after the pressure tank. This will allow isolation of the system for maintenance and easy removal, should the need arise.

Before operation of the system, all fittings should be checked and securely tightened. Thread tape should be used where appropriate to ensure no leaks after the system is pressurised.



Warning: Installation should only be carried out by suitably qualified personnel

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 **5 years** for all parts from the date of the first consumer purchase.
- 2) 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;
 - 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. Infield service by an authorised Pentair Water 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 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.

Trouble Shooting:

Problem	Possible Cause	Suggested Solution
Pump short cycling	a. water leak in system b. faulty diaphragm c. faulty pressure switch and/or incorrect pressure switch setting d. Charge air too low	a. check system for sign of leaks b. diaphragm is not replaceable, new tank required c. check pressure switch operation, reset/replace as required d. check charge air pressure and replenish as required
Unable to maintain charge air pressure	a. leaking air valve b. faulty diaphragm	a. replace air valve b. replace tank
Pump continually runs	a. pressure switch faulty b. cut out setting of pressure switch set above maximum pressure of pump	a. check and replace pressure switch as required b. reset pressure switch below maximum pump pressure
Pump cycles periodically when no flow is required	a. leaking tap or pipe work	a. close gate valve to isolate system, check pressure gauge for signs of loss of pressure with system open check pressure gauge and system for pressure loss and/or leaking taps/pipe work

System Setup:

The Onga Aqua Pack Plus pressure tank is precharged to 69 kpa; however, for correct operation, it is recommended the air pressure is set at 10% below the cut in pressure setting of the pressure switch.

Before checking or adjusting pressure, isolate the power supply and relieve all water pressure from the system. System pressure can be relieved by opening the nearest tap or outlet on the system. Leave the tap open while carrying out this procedure.

Use a tyre pressure gauge to check air charge and top up or relieve pressure accordingly to set the correct charge pressure. Replace valve cap after setting pressure.



Warning: Isolate power and relieve all system pressure before attempting to adjust pressure switch or charge air

Maintenance:

It is recommended the air charge within the Onga Aqua Pack Plus pressure tank is checked at regular intervals not exceeding 6 months. Refer to setup for maintenance of the charge air.

The pressure tank, pump and associated pipe work should also be checked at this time for signs of leaking, corrosion or damage and replaced/repared as appropriate.

Onga Aqua Pack Plus Technical Specifications:

Pressure Switch Setting kpa	Nominal Draw Off in Litres					
	APP8	APP12	APP24	APP40	APP80	APP100
100 - 200	2.5	3.8	7.6	12.7	25.3	31.7
140 - 275	2.7	4.1	8.1	13.6	27.1	33.9
210 - 340	2.2	3.3	6.6	11.0	22.0	27.5
275 - 415	2.0	3.0	6.0	10.1	20.2	25.2
275 - 450	2.4	3.5	7.1	11.8	23.6	29.5
345 - 550	2.3	3.5	7.0	11.6	23.3	29.1
410 - 620	2.1	3.2	6.4	10.7	21.5	26.8
480 - 690	2.0	2.9	5.9	9.8	19.5	24.4

Maximum Pressure rating: 690 kpa (100 psi)
Maximum Water Temperature: 90°C
Working Temperature: 10°C - 50°C
Pre Charge Pressure: 69 kpa (10 psi)
Inlet Connection: 1" BSP male