

# PRESSURE TANK INSTALLATION AND MAINTENANCE GUIDE



## GENERAL INSTALLATION INSTRUCTIONS

### System Connection

#### In-line Type PT02, PT08, PT18, PT24

In-line Type models are designed to be installed directly in the rainwater water supply line or on top of the pump (vertically only) with a 1" connection.

#### Vertical Type With Base PT60, PT80, PT100

Vertical Type models are equipped with stand base and 1" connector. These models MUST NOT be installed on top of a pump, or warranty is immediately void. Use base provided.

#### Horizontal Type With Base PT24H, PT40H

Horizontal Type models are equipped with stand base and 1" connector. These models are designed to have the pump installed on top of the tank, securing the pump to the platform provided.

### Location

#### Proper Pressure Tank Location

The Pressure Tank must be installed under a cover that provides protection from the weather. The Pressure Tank should be installed as close as possible to the pressure controller/switch. This will reduce the adverse effects from added friction loss, difference in elevation (height), and the pressure controller/switch bouncing. DO NOT install the tank between the pump and the controller or switch, it will cause the pump and pressure device to malfunction. The tank must be protected from the weather.

### DANGER!

EXPLOSION HAZARD. WHEN THE PRESSURE TANK HAS BEEN IN SERVICE AND AN INCREASE IN PRE-CHARGE PRESSURE IS NECESSARY FOR THE PRESSURE CONTROLLER/SWITCH SETTING, FAILURE TO FOLLOW INSTRUCTIONS BELOW CAN CAUSE A RUPTURE OR EXPLOSION, POSSIBLY CAUSING SERIOUS PERSONAL INJURY OR DEATH, AND/OR PROPERTY DAMAGE.

- DO NOT ADJUST OR ADD PRESSURE IF THERE HAS BEEN A LOSS OF AIR.
- DO NOT ADJUST THE PRE-CHARGE PRESSURE IF THERE IS VISIBLE EXTERIOR CORROSION.
- DO NOT ADJUST THE PRE-CHARGE PRESSURE IF THERE HAS BEEN A REDUCTION OF THE PUMP CYCLE TIME OR THE PRE-CHARGE PRESSURE COMPARED TO ITS INITIAL SETTING. THIS IS BECAUSE REDUCTION IN PUMP CYCLE TIME CAN RESULT FROM LOSS OF TANK AIR PRESSURE WHICH IN TURN CAN MEAN THERE MAY BE INTERNAL CORROSION AND ANY RE-PRESSURIZATION OR ADDITIONAL PRESSURE COULD RESULT IN RUPTURE OR EXPLOSION.

### Adjusting Pre-charge Air Pressure. Prior to Installation

**Step 1.** Remove protective air valve cap

**Step 2.** Check pre-charge pressure:

*Suggested Pressure Settings;*

Pumps with Pressure Controller: 70% of Maximum Pump head pressure

Pumps with Pressure Switch: 10% below Cut-in pressure

Pumps with VSD (VFD) Controller: 55% of Maximum operating pressure

**Step 3.** Release or add air as necessary to correct the pressure in accordance with the above.

**Step 4.** Replace protective air valve cap.



**WARNING! Never exceed the maximum tank pressure of 145 psi / 1000 kPa (10 Bar Tanks) and 232 psi / 1600 kPa (16 Bar Tanks).**

**Explosion Hazard. Failure to follow these instructions can cause a rupture or explosion possibly causing serious injury or death, and flooding or other property damage.**

### System Connection

1. Locate the Pressure Tank in the final desired location.
2. Level as necessary.
3. To limit friction loss, install the discharge pipework with an INTERNAL DIAMETER of NO LESS than the PUMP OUTLET SIZE – long pipework will require specialist advice. Installing with any smaller pipework will void the warranty.

### Start Up - Fine Tuning Procedures

If this pressure tank is being installed with a pressure switch, the pressure switch settings or pressure tank pressure may need to be adjusted to reduce lag in start-up. If this is the case, please refer to the pressure switch instruction manual.

**Periodical Safety Inspection**

The Pump and pipework and Pressure Tank requires a safety inspection every 6 months, and must be undertaken by a competent professional.

**OPERATING RANGE**

Reefe Pressure tanks are rated for use in temperatures up to 194 °F / 90°C and pressures up to 145 psi / 1000 kPa, with rain-water, or bore-water. They are not certified for use with town water.



WARNING: Always use an accurate pressure gauge to check pre-charge as over-inflating may cause tank to explode, resulting in serious injury.

**Never exceed the maximum tank pressure of 145 psi / 1000 kPa (10 Bar Tanks) and 232 psi / 1600 kPa (16 Bar Tanks).**

Removal of the air valve from the pressure tank may result in serious injury.

**Troubleshooting**

FAULT	POSSIBLE CAUSE	SUGGESTED RESOLUTION
Pump starts and stops rapidly	Incorrect pressure switch setting.	Adjust pressure switch cut-in and cut-out settings, as per instruction manual
	Incorrect pressure tank pre-charge	Check and adjust pre-charge
	Punctured diaphragm in pressure tank	Replace tank
	Faulty footvalve or checkvalve	Service or replace footvalve or checkvalve
	Leaking pipework	Repair/fix leaks
Water emitted from tank air valve	Punctured diaphragm in the pressure tank	Replace Tank
Tank will not hold air pressure	Faulty air valve	Check and/or replace air valve
	Punctured diaphragm in pressure tank	Replace tank



WARNING Pressures tanks must be installed by a competent professional, who must follow all local and national plumbing and electrical codes.

Failure to follow these instructions may result in serious injury or death, and/or property damage and will void the product warranty. This tank is intended for use in drinking-quality rain-water or bore-water systems only and any other use may be dangerous and will void the warranty.



WARNING This product's performance and life span can be significantly and adversely impacted by aggressive water conditions. A water test should be done at regular intervals looking for corrosive substances, acids, slurry, liquids containing solids, and other contaminates which must be treated immediately if present. The system piping must be properly grounded to earth and a dielectric union is recommended in the installation.



**IMPORTANT WARNING – CAREFULLY READ THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTION MANUAL TO AVOID** serious personal injury and/or property damage and to ensure safe use and proper care of this product. This pressure tank is designed for operation on systems limited to a maximum working pressure 145psi/1000kPa (10 bar) and 232 psi / 1600 kPa (16 Bar Tanks). A 125psi/862kPa safety valve must be installed, otherwise warranty is void.

**NOTICE: These pressure tanks have been tested and certified to AS/NZS4020 “testing of products for use in contact with drinking water” however they are not WaterMarked.**

## **PRESSURE TANK LIMITED 5 YEAR PRODUCT WARRANTY**

1. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. If you are a consumer as defined by the Australian Consumer Law, you are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure. The following conditions form part of the instructions and do not over-ride your statutory rights.
2. **What This Warranty Does Not Cover - Exclusions and Limitations**  
This Warranty does not cover any failure or problem unless it was caused by a defect in material or workmanship of the pressure tank. In addition, this Warranty shall not apply:
  - If the product is not correctly installed, operated, repaired or maintained as described in this guide; nor for any failure or malfunction resulting from abuse or inclement weather (including freezing or overheating); improper or negligent handling and shipping.
  - Any failure or problem resulting from the use of the product for any purpose other than those specified in this guide or alteration of any part of the product.
  - Corrosion or deterioration of paint or plastic parts, due to the tank not being protected from the weather.
  - Fair wear and tear, which includes fading of paint and plastic parts.
3. This warranty against defects covers failure due to manufacturing defects within 5 years from the original date of purchase, for PRESSURE TANKS supplied by ASCENTO GROUP AUSTRALIA that are purchased and used in Australia. In the case of a failure caused by a defect in the product, within the specified period from the date of original purchase, you can return it to the place of purchase for a refund or you can request for us to send a replacement.
4. Faults or losses or failure caused due to but not restricted to any of the following: improper use, foreign objects inside the PRESSURE TANKS, normal wear and tear, accidents, misuse, lack of maintenance, not following these instructions, damage caused by lightning strike or livestock or any other external factor, are not covered by this warranty.
5. Warranty will be void if any tampering or removal of identification labels has occurred, or any non-genuine parts have been fitted, or repairs have been carried out by unqualified persons.
6. If an exact replacement is not available, the closest equivalent product will be supplied at our discretion.
7. This product is guaranteed as fit for the purpose of use with CLEAN DRINKABLE-QUALITY FRESH RAIN-WATER OR BORE-WATER and for NO OTHER USE. Data quoted is approximate and is generally derived from test data and does not take into account factors in the installation.
8. This PRESSURE TANK is not to be used in a system that is your sole water supply, or is part of critical infrastructure or systems that have serious consequences if they fail. For critical applications where failure could cause serious consequences, use a DUAL PUMP System (or similar) so you have a backup water supply or some other system to guarantee continuity of operation.
9. This PRESSURE TANK MUST NOT be installed in any manner that if it were to leak that it would cause damage or loss to property or persons. It MUST be installed in a well-ventilated and drained area. All warranty is void if this condition is not heeded and no liability can be accepted in the case of damage or loss caused by failing to comply with this condition.
10. In the case of a fault, refer to the Trouble Shooting Guide first. If these steps do not rectify the problem, and if the item has a manufacturing defect, return the faulty appliance to the original place of purchase with proof of purchase for replacement or refund. Alternatively you can mail us at PO BOX 650 MORNINGSIDE QLD 4170 or send an email to [csv@ascento.com.au](mailto:csv@ascento.com.au) with copy of your purchase receipt, a description of the problem, and your name and address and phone number - we will review your request and send you a replacement directly if we accept your warranty claim. Or call us on 1800807604 with the above information; however we will always require a copy of your purchase receipt. Do not send the product to us unless we ask you to do so.
11. This warranty does not exclude any non-excludable rights according to Australian Law. However any condition that is made void by Australian Law does not void the remaining conditions, which shall stand unaltered.