

## **1.0L ACCUMULATOR TANK**

# **INSTALLATION & OPERATION MANUAL**



Before installing or operating this product, read carefully the instructions provided in this manual. Do not use to pump gasoline, petrol or fluids with a flash point below 37°C (98°F) as this may cause explosion or death to occur.

Do not over pressurize the tank. Pressures over 125 PSI (8.6 BAR) may rupture the tank and cause personal injury.

For any questions regarding the use of this product, contact Onsen at **support@onsenproducts.ca** or **800-996-5559**.

### IMPORTANT

The accumulator tank is pre-pressurized to 10 PSI (0.7 BAR).

Before use, adjust the tank pressure to 3 PSI below the cut-in pressure of the pump.

For example, if using the Onsen 3.0 Pump (calibrated at a cut-in pressure of 55 PSI), adjust the pressure of the accumulator tank to 52 PSI.

#### IMPROVES PERFORMANCE OF MOST AUTOMATIC WATER SYSTEMS

The Onsen 1.0L Accumulator Tank is intended for installation in any pumped water system controlled by a pressure switch. The tank smooths water flow and reduces on/off switch cycling of the pump by lessening the variation in pressure and flow between the pump and the system discharge points. The even flow of water provides better control of the water delivery with systems using tankless water heaters.

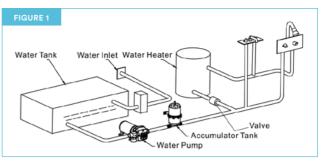
In addition, using the Onsen 1.0L Accumulator Tank helps extend the life of the pump, decreases power consumption, and reduces noise caused by the water pressure system.

#### INSTALLATION

- 1 Disconnect the power supply to the pump.
- 2 Open the faucet or any other water outlets (shower head, etc.).
- ③ Install the Onsen Accumulator Tank anywhere in-line on the discharge side of the pump (see Fig. 1). Fasten the hose to the in-let/outlet fittings of the tank securely with hose clamps.
- (4) Restore the power supply to the pump and allow water to flow through the pump and out the final discharge point in order to eliminate air from the system.

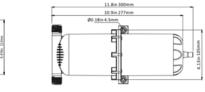
THE TANK MAY BE MOUNTED IN ANY POSITION

To remove the tank from the system, always disconnect the power source to the pump and open a faucet or water outlet to safely evacuate the pressurized water.



# SPECIFICATIONS





Model	Internal Volume	Pre-charge Pressure	Max Operating Pressure	Air Fill Valve	Inlet / Out Dia.	Weight	Dimensions	Certifications
ON-ACT-1L	1.0L (33.8 FL.OZ.)	10PSI / 0.7BAR	125PSI / 8.6BAR	Standard automotive style tire valve	1/2" MNPT	1.06 lbs (480g)	12" (300mm) x 4.6" (114mm)	CE, ROHS

## PRE-CHARGE PRESSURE ADJUSTMENT

The accumulator tank is pre-charged at 10 PSI (0.7 BAR).

#### Before use, adjust the tank pressure to 3 PSI below the cut-in pressure of the pump.

(For example, if using the Onsen 3.0 Pump (calibrated at a cut-in pressure of 55 PSI), adjust the pressure of the accumulator tank to 52 PSI.)

To increase air pressure in the tank, disconnect the power supply to the pump, open a faucet to relieve the system pressure, and adjust the pre-charged pressure using an ordinary tire gauge and tire pump at the valve located at the end of the tank.

The tank pressure should be checked regularly. To check the tank pressure, disconnect the power supply to the pump and open a faucet to relieve the system pressure. Check the tank pressure and adjust if necessary. Close the faucet and turn on power to the pump.

### HOW THE ACCUMULATOR TANK WORKS

- (A) When the water pump starts, water enters the accumulator tank until it is full. Once it is filled, the pump shuts off.
- B When water is demanded (ex: a faucet is opened), pressure in the air chamber of the tank forces water into the system up to the water outlet. The pump stays off until minimum pressure is reached, then the pump starts and runs until the cut-in pressure is reached.

#### LIMITED WARRANTY

The 2-Year Limited Warranty covers any product defects in material or workmanship under normal use and maintenance when installed and operated according to the instructions provided in this manual.

