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› [PROFLO](#) /

› [PROFLO PFXT5I 2.1 Gallon Thermal Expansion Tank User Manual](#)

PROFLO PFXT5I

PROFLO PFXT5I 2.1 Gallon Thermal Expansion Tank User Manual

Model: PFXT5I

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of the PROFLO PFXT5I 2.1 Gallon Thermal Expansion Tank. Please read this guide thoroughly before proceeding with installation or use to ensure proper function and safety.

The PROFLO PFXT5I is designed to protect residential and commercial plumbing systems from excessive pressure caused by the thermal expansion of water, particularly in systems with a closed water supply or a backflow prevention device. It helps to extend the life of water heaters and other plumbing components by absorbing expanded water volume.

2. GENERAL SAFETY GUIDELINES

- Read all instructions carefully before installation and operation.
- Installation should be performed by a qualified professional in accordance with local plumbing codes.
- Ensure the main water supply is shut off and the water heater is drained before beginning installation.
- Wear appropriate personal protective equipment, including safety glasses and gloves.
- Do not tamper with the tank's factory-set air charge without understanding the proper procedure.
- Keep children and pets away from the installation area.

3. PRODUCT FEATURES

- Constructed of durable steel for reliability.
- Finish designed to resist rust and corrosion during everyday use.
- Capacity: 2.1 gallons.
- Compact dimensions for versatile installation.

4. SETUP AND INSTALLATION

Proper installation is crucial for the effective operation of your thermal expansion tank. It is recommended that a licensed plumber perform the installation.

Pre-Installation Steps:

- 1. Inspect the Tank:** Ensure the tank is free from any visible damage.
- 2. Check Pre-Charge Pressure:** The tank comes pre-charged from the factory. Before installation, adjust the tank's air pre-charge pressure to match your system's static cold water supply pressure. Use an air pressure gauge on the Schrader valve located at the top of the tank. Add or release air as needed using a bicycle pump or air compressor.
- 3. Shut Off Water Supply:** Turn off the main water supply to the building.
- 4. Drain Water Heater:** Drain a few gallons of water from the water heater to relieve pressure and create space for the tank.

Installation Procedure:

- 1. Locate Connection Point:** The expansion tank should be installed on the cold water inlet line of the water heater, between the main shut-off valve and the water heater itself.
- 2. Install Tee Fitting:** If not already present, install a tee fitting into the cold water inlet line to provide a connection point for the expansion tank.
- 3. Apply Thread Sealant:** Apply appropriate thread sealant (e.g., PTFE tape or pipe dope) to the male threads of the expansion tank's connection.
- 4. Connect Tank:** Screw the expansion tank onto the tee fitting. Hand-tighten, then use a wrench to tighten an additional 1/2 to 1 turn. Do not overtighten.
- 5. Restore Water Supply:** Slowly turn on the main water supply.
- 6. Check for Leaks:** Carefully inspect all connections for any signs of leaks. Tighten if necessary.



Image 1: The PROFLO PFT5I 2.1 Gallon Thermal Expansion Tank. This image shows the compact design of the tank, which is constructed from alloy steel and features a connection point at the bottom.

5. OPERATING INSTRUCTIONS

The PROFLO PFXT5I thermal expansion tank operates passively and requires no user interaction after proper installation. Its function is to absorb the increased volume of water that occurs when water is heated in a closed plumbing system. This prevents excessive pressure buildup, which can otherwise damage pipes, fixtures, and the water heater itself.

When the water in the water heater heats up and expands, the excess volume flows into the expansion tank, compressing the air cushion inside. When hot water is drawn from the system, the pressure drops, and the compressed air pushes the water back out of the tank and into the plumbing system.

6. MAINTENANCE

Regular inspection of your PROFLO PFXT5I thermal expansion tank is recommended to ensure optimal performance and longevity. Annual checks are advisable.

Maintenance Steps:

- Check Air Pressure:** Annually, check the tank's air pressure using a tire gauge on the Schrader valve. The pressure should match the system's static cold water supply pressure. If the pressure is low, add air using a pump. If the pressure is too high, release air.
- Inspect for Leaks:** Visually inspect the tank and its connections for any signs of water leaks or corrosion.
- Check for Waterlogging:** Tap the side of the tank with a coin or small wrench. A hollow sound indicates the air charge is present. A dull thud or solid sound suggests the tank is waterlogged, indicating a failed internal diaphragm.
- Replace if Necessary:** If the tank is waterlogged, leaking, or shows significant corrosion, it should be replaced. The typical lifespan of an expansion tank can vary, but regular checks help identify issues before they lead to system damage.

7. TROUBLESHOOTING

If you experience issues with your plumbing system that may be related to thermal expansion, consider the following troubleshooting steps:

- Fluctuating Water Pressure:** If water pressure in your home fluctuates significantly, especially after hot water use, the expansion tank may not be functioning correctly.
- Water Hammer:** Banging noises in pipes (water hammer) can be a symptom of uncontrolled pressure changes, which an expansion tank helps mitigate.
- Frequent Pressure Relief Valve Activation:** If your water heater's pressure relief valve frequently discharges water, it indicates excessive pressure in the system, and the expansion tank may have failed.
- Tank is Waterlogged:** As described in the maintenance section, a waterlogged tank (dull thud when tapped) means the internal diaphragm has failed.

Solution: For any of these issues, first check the tank's air pressure and inspect for waterlogging. If the tank is waterlogged or visibly damaged, it requires replacement. If issues persist after verifying the tank's function, consult a qualified plumber.

8. SPECIFICATIONS

Specification	Detail
Brand	PROFLO
Model Number	PFXT5I
Capacity	2.1 Gallons
Material	Alloy Steel
Item Weight	9.75 pounds
Product Dimensions (L x W x H)	8 x 8 x 11.6 inches
UPC	781889130995
Manufacturer	PROFLO

9. WARRANTY AND SUPPORT

For information regarding product warranty or technical support, please contact PROFLO customer service directly. Keep your purchase receipt and model number (PFXT5I) handy when contacting support.

PROFLO is committed to providing quality products and support. For the most current contact information, please refer to the official PROFLO website or your product packaging.