

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY

⚠ WARNING

This product must be installed by a qualified professional.

EXPLOSION HAZARD. Failure to follow the instructions in the accompanying product manual can cause a rupture or explosion; possibly causing serious or fatal injury, leaking or flooding and/or property damage.

* Use only potable water. Do not operate in a setting where the temperature can exceed 200°F and do not exceed the maximum working pressure specified for this product.

RUPTURE OR EXPLOSION HAZARD. Like most pressurized tanks, this tank can over time corrode, weaken, and burst or explode.

* Do not adjust the pressure or re-pressurize this product except for any adjustments at the time of the initial installation when the product is new.

* Do not locate this product where leaking or flooding could cause damage to the surrounding area.

⚠ WARNING Chlorine & Aggressive Water Warning

The water quality can significantly influence the life of your product. You should test for corrosive elements, acidity, total solids, and other relevant contaminants, including chlorine and treat your water appropriately to insure satisfactory performance and prevent premature failure.

Pre-Installation

1. Visually inspect THERM-X-TROL for any damage.
2. Adjust pre-charge to equal incoming pressure.
3. Replace and tighten plastic cap on air fitting.

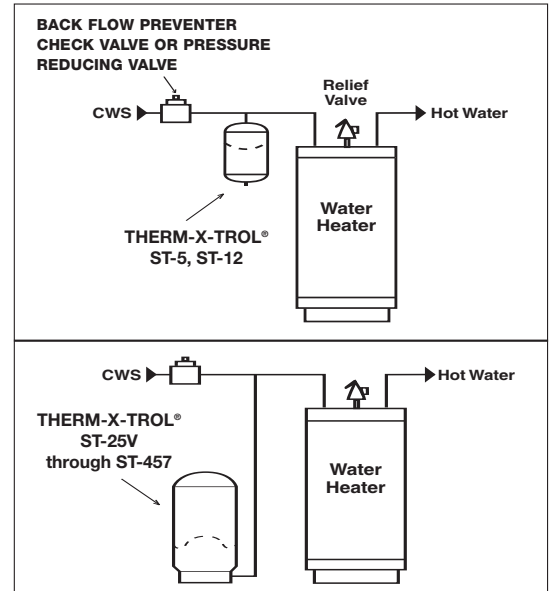
For commercial water heater installations, contact AMTROL for information.

Installation

1. Install the THERM-X-TROL on the Cold Water Supply (CWS) line to the water heater at a point between the water heater and backflow preventer, check valve or pressure reducing valve (see Figure 1).
2. Once the THERM-X-TROL is installed, check the CWS line for any leakage. Make repairs if necessary.
3. Before the initial firing of the water heater, open any hot water fixture and draw water until all air is removed from the system. Turn the water heater temperature control to desired ending temperature level, (see water heater instructions).
4. To relieve initial thermal expansion, slightly open a hot water faucet. Continue until water heater aquastat temperature is satisfied. Once heater is at its operating range, no further bleeding of expanded water is required.
5. The system water heater and THERM-X-TROL will now be operational. The THERM-X-TROL will control temperature and pressure increases caused by thermal expansion to a level well below the water heater relief valve setting.

* **The ST-5, ST-12 and ST-25 models come with a 5 year warranty. All other ST Series models come with a 1 year warranty. See reverse side for warranty information.**

Figure 1.



Maintenance

1. A professional plumber should check the complete heating system, including the THERM-X-TROL, yearly and more frequently as the system ages.

Operation

1. The THERM-X-TROL is installed in the supply line between the backflow preventer and the water heater. Its sealed-in air pre-charge prevents water from entering it until the system pressure exceeds the pre-charge pressure.
2. As the water temperature rises, expanded water enters the THERM-X-TROL's non-corrosive water reservoir. The pre-charged air chamber absorbs the pressure increase, keeping system pressures below the relief valve setting.
3. As hot water is used, the pressure in the air chamber forces water back into the system until the THERM-X-TROL is empty. At this point, the pressure in the air chamber once again equals the supply pressure.

NOTE: Models ST-5, ST-12, and ST-25V are IAPMO listed (International Association of Plumbing and Mechanical Officials). All models are listed (ST-5 thru ST-210V) under ANSI/NSF Std 61 and City of Los Angeles. Models ST-5 thru ST-25V under Southern Building Code.



MARK OF THE ORIGINATOR

AMTROL® INC. LIMITED PRODUCT WARRANTY

Products covered: all Products manufactured by AMTROL Inc. ("AMTROL").

This warranty cannot be transferred – it is extended only to the original Purchaser or First User of the Product. By accepting and keeping this Product you agree to all of the warranty terms and limitations of liability described below.

IMPORTANT WARNING – READ CAREFULLY THE INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS MANUAL ("MANUAL") to avoid serious personal injury and/or property damage and to ensure safe use and proper care of this product.

Who Receives AMTROL's Product Warranty

All purchasers or first users of the new Product. The Warranty is non-transferable.

What is covered by this Warranty

AMTROL warrants to the purchaser or first user of the new Product that at the time of manufacture, the Product is free from defects in material and workmanship. **Any warranty claim must be made within one (1) year unless another time period is set forth in the Manual, measured from the time the Product was purchased.**

What AMTROL Will Do If You Have a Covered Warranty Claim

In the event of a breach of the foregoing warranty, AMTROL will at its option either make repairs to correct any defect in material or workmanship or supply and ship either new or used replacement parts or products. AMTROL will not accept any claims for labor or other costs.

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. In addition, this Warranty shall not apply:

- if the Product is not correctly installed, operated, repaired or maintained as described in the Manual provided with the Product;
- to any failure or malfunction resulting from abuse (including freezing); improper or negligent: handling, shipping (by anyone other than AMTROL), storage, use, operation, accident; or alteration, lightning, flood or any other environmental condition;
- to any failure or problem resulting from the use of the Product for any purpose other than those specified in the accompanying Manual or alteration of any part of the product;
- if the Product is used anywhere except the United States, its territories or possessions, or Canada;
- this Warranty does not cover labor costs, shipping charges, service charges, delivery expenses, administrative fees or any costs incurred in removing or reinstalling the Product;
- this Warranty does not cover any claims submitted to AMTROL or an AMTROL-authorized distributor or retailer more than 30 days after expiration of the applicable warranty time period described in this Warranty;
- this Warranty also does not cover repair or replacement costs not authorized in advance by AMTROL.

Additional Warranty Limitations

ALL IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE SPECIFICALLY DISCLAIMED. Some states do not allow limitations on how long an implied Warranty lasts, so the above limitation may not apply to you.

Limitations of Remedies

THE REMEDIES CONTAINED IN THIS WARRANTY ARE THE PURCHASER'S OR FIRST USER'S EXCLUSIVE REMEDIES. IN NO CIRCUMSTANCES WILL AMTROL BE LIABLE FOR MORE THAN, AND PURCHASER-FIRST USER'S REMEDIES SHALL NOT EXCEED, THE PRICE PAID FOR THE PRODUCT. IN NO CASE SHALL AMTROL BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM NONDELIVERY OR FROM THE USE, MISUSE, OR INABILITY TO USE THE PRODUCT OR FROM DEFECTS IN THE PRODUCT OR FROM AMTROL'S OWN NEGLIGENCE OR OTHER TORT. This exclusion applies regardless of whether such damages are sought for breach of warranty, breach of contract, negligence, strict liability, in tort or under any other legal theory. Such damages include, but are not limited to, inconvenience, loss or damage to property, mold, loss of profits, loss of savings or revenue, loss of use of the Products or any associated equipment, facilities, buildings or services, downtime, and the claims of third parties including customers. Some states do not allow the exclusion or the limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

What To Do If You Have a Problem Covered By This Warranty

Any covered Warranty service must be authorized by AMTROL. Contact the person from whom you purchased the Product, who **must** receive authorization from an AMTROL distributor or AMTROL. If you do not receive a prompt response, call AMTROL directly at 877-517-7673. Notice of a Warranty claim should be submitted by the authorized distributor to AMTROL at the following address:

AMTROL Inc.
Warranty Claim Dept.
1400 Division Rd.
West Warwick, RI 02893

Before AMTROL determines to provide any replacement part or Product, it may as a pre-condition to making such a determination require that the warranty claimant ship the Product, postage prepaid to an authorized AMTROL distributor, or to AMTROL and provide proof of purchase evidenced by the original sales receipt or Product registration.

Replacement Product Warranty

In case of replacement of a Product or any component part, AMTROL reserves the right to make changes in the design, construction, or material of the substitute components or products, which shall be subject to all of the terms and limitations of this Warranty, except that the applicable warranty periods shall be reduced by the amount of time the warranty claimant owned the product prior to submitting notification of the warranty claim.