

Wet Pipe Sprinkler System Expansion Chamber



WARNING READ CAREFULLY THE FIRE-X-TROL™ INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS MANUAL TO AVOID SERIOUS PERSONAL INJURY AND PROPERTY HAZARDS AND TO ENSURE SAFE USE AND PROPER CARE OF THIS PRODUCT.

WARNING THIS PRODUCT MUST BE INSTALLED BY A QUALIFIED PROFESSIONAL.

WARNING EXPLOSION OR RUPTURE HAZARD. THE EXPANSION CHAMBER MUST BE OPERATED SO THAT THE PRESSURE DOES NOT EXCEED THE MAXIMUM WORKING PRESSURE.

! THIS IS A SAFETY ALERT SYMBOL. IT IS USED TO ALERT YOU TO POTENTIAL PERSONAL INJURY AND OTHER HAZARDS. OBEY ALL SAFETY MESSAGES THAT FOLLOW THIS SYMBOL TO REDUCE THE RISK OF POSSIBLE INJURY AS WELL AS PROPERTY DAMAGE.

WARNING RUPTURE OR EXPLOSION HAZARD. LIKE MOST PRESSURIZED TANKS, THIS TANK CAN OVERTIME CORRODE, WEAKEN, AND BURST OR EXPLODE.

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DO NOT LOCATE THIS PRODUCT WHERE LEAKING OR FLOODING COULD CAUSE DAMAGE TO THE SURROUNDING AREA.

WARNING DO NOT OPERATE IN A SETTING WHERE THE THE TEMPERATURE CAN EXCEED 200°F (93°C) AND DO NOT EXCEED THE MAXIMUM WORKING PRESSURE SPECIFIED FOR THIS PRODUCT. PROTECT AGAINST FREEZING TEMPERATURES.

State of California Residents:

WARNING: This product contains a chemical known by the State of California to cause cancer.

WARNING: This product contains a chemical known by the State of California to cause birth defects or other reproductive harm.

APPROVAL UL Listed for use with Fire Protection antifreeze systems per NFPA 13.

Proper FIRE-X-TROL™ Location

1. The FIRE-X-TROL should be installed on the water supply line to the unheated area at a point between the backflow preventer and fill cup connection (See Figure 1).
2. Once the FIRE-X-TROL is installed, check the system for any leakage. Make repairs if necessary.

THIS PRODUCT COMES WITH A LIMITED ONE (1) YEAR WARRANTY, SEE AMTROL'S LIMITED PRODUCT WARRANTY FOR DETAILS.

WARNING DANGER! EXPLOSION HAZARD. IF YOU ADJUST THE PRE-CHARGE PRESSURE OR ADD PRESSURE TO A TANK THAT IS CORRODED OR DAMAGED OR WITH DIMINISHED INTEGRITY, THE TANK CAN BURST OR EXPLODE, POSSIBLY CAUSING SERIOUS OR FATAL PERSONAL INJURY AND/OR PROPERTY DAMAGE.

! ONLY ADJUST THE PRE-CHARGE AS DESCRIBED IN THIS MANUAL WHEN THE TANK IS NEW OR WHEN THE INTEGRITY OF THE TANK AND LACK OF INTERNAL OR EXTERNAL CORROSION IS CONFIRMED.

! ONLY QUALIFIED PROFESSIONALS SHOULD CHECK, ADJUST OR PRE-CHARGE THE PRE-CHARGE OF TANKS.

NOTE: INSPECT FOR SHIPPING DAMAGE AND NOTIFY FREIGHT CARRIER OR STORE WHERE PURCHASED IMMEDIATELY IF DAMAGE PRESENT.

NOTE: PLEASE READ THE ENTIRE OWNER'S MANUAL AND INSTALLATION INSTRUCTIONS BEFORE INSTALLING YOUR NEW AMTROL PRODUCT. SAVE ALL DOCUMENTS AND MANUALS FOR FUTURE REFERENCE.

NOTE: USE PROPER SAFETY EQUIPMENT WHEN INSTALLING.

NOTE: YOU MUST COMPLY WITH ALL APPROPRIATE CODES.

FAILURE TO FOLLOW THE WARNINGS AND INSTRUCTIONS HEREIN MAY RESULT IN SERIOUS OR FATAL PERSONAL INJURY AND/OR PROPERTY DAMAGE AND WILL VOID THE WARRANTY.

Pre-Installation

1. Visually inspect FIRE-X-TROL for any damage.
2. Hydraulic system pressure must be at zero.
3. Attach nitrogen or dry air (-50°F/-46°C dew point or lower) supply to expansion chamber charging valve.

WARNING Do not use Oxygen-Explosive.

WARNING Pre-charge with nitrogen or dry air (-50°F/-46°C dew point or lower)

4. Pre-charge to 2 psig (0.14 bar) below system static pressure at tank location.

WARNING Never pre-charge below 25% of the system maximum rated pressure.

5. Remove charging hose. Carefully test charging valve for leakage.
6. Replace plastic cap.

WARNING Protect against freezing temperatures. Can cause damage and/or product failure.

WARNING Isolate expansion chamber during system hydro test.

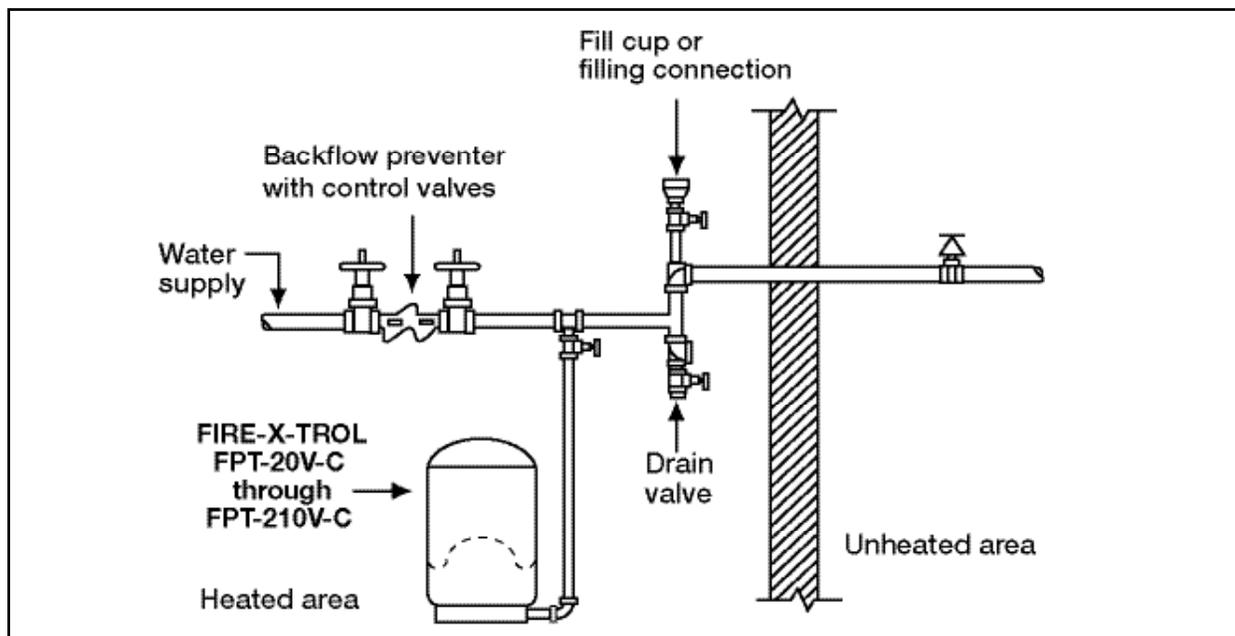
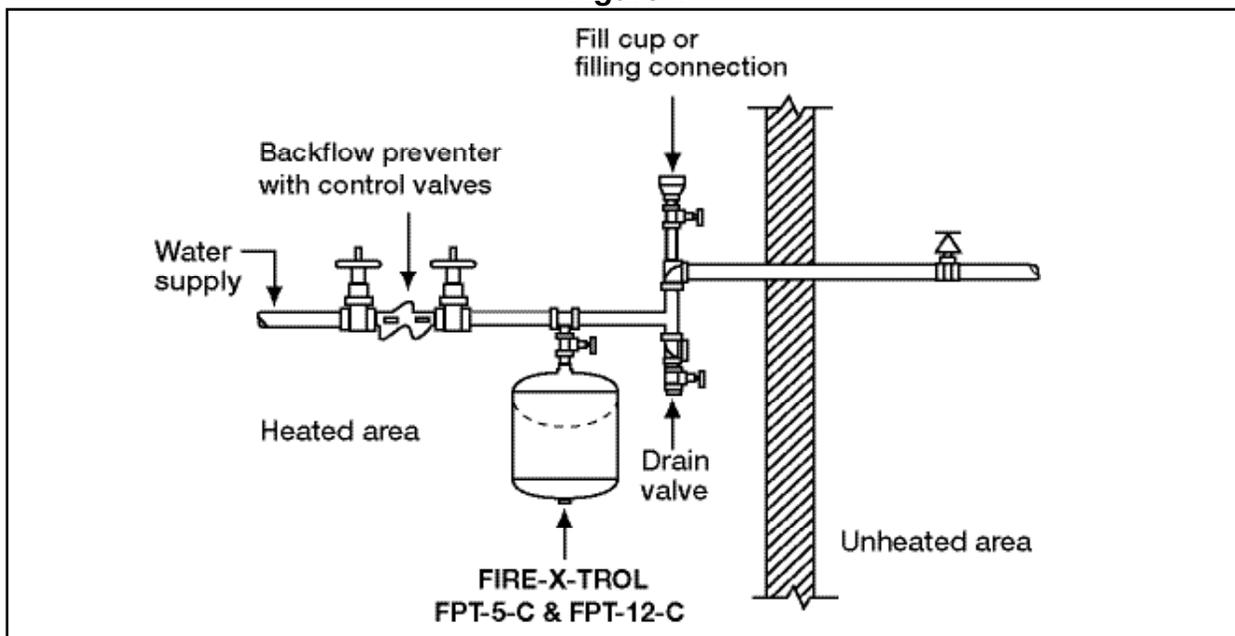
Operation

1. The FIRE-X-TROL is installed in the supply line between the backflow preventer and the fill cup connection. Its sealed-in air pre-charge chamber prevents water from entering it until the system pressure exceeds the pre-charge pressure. The FIRE-X-TROL is precharged to 25 psig (1.7 bar).
2. As the water/antifreeze solution temperature rises, expanded system fluid enters the FIRE-X-TROL's non-corrosive reservoir. The pre-charge air chamber absorbs the pressure increase, keeping system pressure below maximum system rating.
3. As the water/antifreeze temperature decreases, pressure in the air chamber forces system fluid back into the system.
4. In antifreeze systems, this sequence allows the system antifreeze percentage to stay constant. Additional supply of water/antifreeze is not needed to replace fluid that would have escaped through a relief valve.

Maintenance

1. Sprinkler system must be maintained and inspected per NFPA 25.

Figure 1



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 877-517-9673. 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.



In the interest of continuous development, AMTROL Inc. and its subsidiaries reserve the right to alter designs and specifications without prior notice. The AMTROL logo is a registered trademark of AMTROL Inc. The Fire-X-Trol logo is a trademark of AMTROL Inc.