

# OWNER'S MAINTENANCE MANUAL

## INSTALLATION, OPERATING & MAINTENANCE INSTRUCTIONS



NO. 27192

HALOTRON BRX® PORTABLE EXTINGUISHERS

MODELS 337, 347, 349 AND 351

All fire extinguishers should be installed, inspected and maintained in accordance with the National Fire Protection Association standard titled "Portable Fire Extinguishers", NFPA-10 or the National Fire Code of Canada and the requirements of local authorities having jurisdiction.

When maintenance is indicated, it should be performed by trained persons having proper equipment. Fire extinguishers are pressure vessels and must be treated with respect and handled with care. They are mechanical devices and require periodic maintenance to be sure that they are ready to operate properly and safely. Amerex strongly recommends that the maintenance of portable fire extinguishers be done by a trained professional – your local authorized Amerex Distributor.

Amerex Corporation makes original factory parts available to ensure proper maintenance – USE OF SUBSTITUTE PARTS RELEASES AMEREX OF ITS WARRANTY OBLIGATIONS. Amerex parts have machined surfaces and threads which are manufactured to exacting tolerances. All parts meet precise specifications and are subjected to multiple in-house inspections and tests for acceptability. There are substitute parts available which are incorrectly labeled as U/L component parts, some are advertised as Amerex type. None of these meet U/L requirements. Use of substitute parts voids the Amerex extinguisher warranty and U/L listing. **DO NOT SUBSTITUTE.**

### REFERENCES IN THIS MANUAL:

**NFPA-10** Portable Fire Extinguishers

**CGA C-6** Standard for Visual Inspection of Compressed Gas Cylinders

**CGA C-6.3** Standard for Visual Inspection of Low Pressure Aluminum Alloy Compressed Gas Cylinders

### AVAILABLE FROM:

**National Research Council Canada**, 1200 Montreal Road, Building M-58 Ottawa, ON K1A 0R6 Canada

**National Fire Protection Association**, 1 Batterymarch Park, Quincy, MA 02169-7471

**Compressed Gas Association**, 14501 George Carter Way, Chantilly, VA 20151-2923

**REMOVE FROM SERVICE AND REPLACE FIRE EXTINGUISHERS IMMEDIATELY AFTER ANY USE.**

**AMEREX CORPORATION DOES NOT SERVICE OR MAINTAIN FIRE EXTINGUISHERS. THIS MANUAL IS PUBLISHED AS A GUIDE TO ASSIST QUALIFIED SERVICE PERSONNEL IN THE INSPECTION AND MAINTENANCE OF AMEREX FIRE EXTINGUISHERS ONLY. NO INSTRUCTION MANUAL CAN ANTICIPATE ALL POSSIBLE MALFUNCTIONS THAT MAY BE ENCOUNTERED IN THE SERVICE OF FIRE EXTINGUISHERS. DUE TO THE POSSIBILITY THAT PRIOR SERVICE PERFORMED ON THIS EQUIPMENT MAY HAVE BEEN IMPROPERLY DONE, IT IS EXTREMELY IMPORTANT THAT ALL WARNINGS, CAUTIONS AND NOTES IN THIS MANUAL BE CAREFULLY OBSERVED. FAILURE TO HEED THESE INSTRUCTIONS COULD RESULT IN SERIOUS INJURY. AMEREX ASSUMES NO LIABILITY FOR SERVICE OR MAINTENANCE OF FIRE EXTINGUISHERS BY PUBLISHING THIS MANUAL**

## INTRODUCTION

This manual covers specific instructions for Amerex Halotron BrX<sup>®</sup> hand portable extinguishers. Special maintenance instructions contained in this manual apply to these extinguishers only. Halotron BrX<sup>®</sup> “Clean Agent” extinguishers are designed for Class A, B and C hazards formerly protected with Halon 1211 extinguishers. They contain stabilized bromotrifluoropropene (BTP), which is designated for streaming fire extinguisher applications. Halotron BrX<sup>®</sup> is listed in the U.S. Environmental Protection Agency (EPA) “Significant New Alternative Policy” (SNAP) as acceptable for aerospace applications. Halotron BrX<sup>®</sup> has acceptable toxicity and cardiac sensitization levels for use in occupied spaces when used according to the instructions on the nameplate and rules of the EPA SNAP Program and EPA SNUR rules.

## PHYSICAL PROPERTIES OF HALOTRON BrX<sup>®</sup>

Primary Component	Bromotrifluoropropene (BTP)
Boiling Point	93°F [34°C]
Liquid Density	103 lb./ft <sup>3</sup> (1.65 kg / liter)
Gas Density	0.45 lb./ft <sup>3</sup> (7.21 kg / m <sup>3</sup> )
Molecular Weight	174.9
Physical State	Volatile Liquid
Vapor Pressure @ 77°F [25°C]	11.9 psi [82 kPa]

## INSTALLATION

THIS MANUAL SHOULD BE CAREFULLY STUDIED BY ALL WHO MIGHT USE OR MAINTAIN THE EXTINGUISHER. STORE IT IN A CONVENIENT PLACE FOR EASY REFERENCE.

Your layout and particular hazards dictate the placement of fire extinguishers. NFPA-10 recommends that hand portable extinguishers with a gross weight less than 40 lbs. be hung with the top of the extinguisher **not more** than 5 ft. (1.53 m) above the floor. Extinguishers having a gross weight greater than 40 lbs. (18.14 kg) should be installed so that the top of the extinguisher is **not more** than 3 ½ ft. (1.07 m) above the floor. All extinguishers should be in an accessible clean, dry location and preferably near an exit. **Never install the extinguisher in a location where a potential hazard would prevent easy access.**

The operational temperature range is -40°F to +120°F (-40°C to +60°C). The extinguisher must be protected if temperatures outside of these ranges are anticipated. Never throw an extinguisher into a fire because rapid heat buildup could cause pressure expansion and exceed the limitations of the cylinder.

## OPERATION

**WARNING: PERSONS EXPECTED TO USE THIS EXTINGUISHER SHOULD BE MADE AWARE OF THE CONFINED SPACE LIMITATIONS AND TRAINED IN INITIATING ITS OPERATION AND PROPER FIRE FIGHTING TECHNIQUE. THE CONCENTRATED AGENT CAN PRODUCE TOXIC BY-PRODUCTS. AVOID INHALATION OF THESE MATERIALS BY EVACUATING THE CONFINED SPACE. DO NOT USE IN CONFINED SPACES SMALLER THAN THE MINIMUM STATED ON THE EXTINGUISHER LABEL.**

1. Remove extinguisher from wall hanger or vehicle bracket.
2. Hold extinguisher upright, twist and pull ring pin.
3. Start back a minimum of 8 feet from the fire. Aim the nozzle at the base of the fire nearest you.
4. Keeping the extinguisher upright, squeeze the lever to discharge. Sweep the agent stream from side to side.
5. Evacuate and ventilate the area immediately after extinguishing the fire. The fumes and smoke from any fire may be hazardous and can be deadly.

**WARNING: SYMPTOMS OF OVER-EXPOSURE TO PURE Halotron BrX<sup>®</sup> MAY CAUSE CENTRAL NERVOUS SYSTEM EFFECTS SUCH AS DIZZINESS, DROWSINESS, ANESTHESIA, OR UNCONSCIOUSNESS. PERSONS SUFFERING FROM OVER-EXPOSURE SHOULD BE IMMEDIATELY REMOVED TO AN AREA WITH FRESH AIR. APPLY ARTIFICIAL RESPIRATION IF NECESSARY. CONTACT A PHYSICIAN.**

## **INSPECTING THE EXTINGUISHER**

Extinguishers should be INSPECTED when initially placed in service and at regular intervals (monthly or more often if circumstances dictate) to ensure they are ready for use..

**INSPECTION [NFPA-10]** is a "quick check" that a fire extinguisher is available and is in proper operating condition. It is intended to give reasonable assurance that the fire extinguisher is fully charged.

### **PERIODIC INSPECTION PROCEDURES (monthly or more often if circumstances dictate)**

This extinguisher should be inspected at regular intervals (monthly or more often if circumstances dictate) to ensure that it is ready for use.

A "quick check" should be made of the extinguisher for the following:

1. Located in designated place.
2. No obstruction to access or visibility.
3. Operating instructions on nameplate legible and facing outward.
4. Tamper seal not broken or missing.
5. Determine fullness by weighing or "hefting".
6. Examination for obvious physical damage, corrosion, leakage, or clogged nozzle.
7. Pressure gauge reading in the operable range.

## **MAINTENANCE**

Extinguishers should be subjected to maintenance at intervals of not more than one year or when specifically indicated by an inspection. Maintenance procedures include a thorough examination of the basic elements of a fire extinguisher:

1. Mechanical parts
2. Expelling means - inspect nozzle for clear passage.

**NOTE:** Stored pressure Halotron BrX<sup>®</sup> extinguishers do not require an internal examination of the cylinder or examination of the agent during annual maintenance, but shall receive a thorough external examination.

**Maintenance [NFPA 10]** Maintenance is a thorough examination of the fire extinguisher. It is intended to give maximum assurance that a fire extinguisher will operate effectively and safely. It includes a thorough examination for physical damage or condition to prevent its operation and any necessary repair or replacement.

## **MAINTENANCE PROCEDURE**

1. Clean extinguisher to remove dirt, grease or foreign material. Check to make sure that the instruction nameplate and UL manifest are securely fastened and legible. Inspect the cylinder for corrosion, abrasion, and dents. If any of these conditions are found and you doubt the integrity of the cylinder, replace the extinguisher.

**NOTE:** When cleaning, avoid use of solvents around the pressure gauge. Solvents can potentially damage the plastic gauge face.

2. Inspect the extinguisher for damaged, missing or substitute parts. Only factory replacement parts are approved for use on Amerex fire extinguishers.
3. Weigh extinguisher and compare with weight printed in the Maintenance section on the nameplate.

4. Check the date of manufacture on the extinguisher nameplate. Extinguisher must be replaced at 12 year intervals as determined by the date of manufacture on the UL nameplate.
5. Visually inspect the pressure gauge:
  - a) If bent, damaged or improper gauge, replace extinguisher.
  - b) If pressure is low or high and temperature/pressure relationship has been ruled out:
    1. Low pressure – check for leaks. Contact Amerex if under warranty; otherwise remove and replace extinguisher.
    2. High pressure (over pressurized or over charged) — Contact Amerex if under warranty; otherwise replace extinguisher.
6. Remove nozzle or hose and nozzle assembly and inspect for damage. Blow air through nozzle or hose and nozzle to ensure that passage is clear from foreign material. Replace component parts with proper Amerex parts as necessary.
7. Check ring pin for freedom of movement by breaking the seal and removing the pin. Replace the ring pin if bent or if removal is difficult.
8. Inspect discharge lever for dirt or corrosion that might impair freedom of movement. Inspect carrying handle for proper installation.
9. Inspect valve assembly for corrosion or damage to hose thread connection.
10. Install nozzle or hose and nozzle assembly.
11. Install new tamper seal and record service data on the extinguisher inspection tag.
12. Reinstall the extinguisher in the wall or vehicle bracket making sure that it fits the bracket properly – replace the bracket if necessary.

## **WARNING**

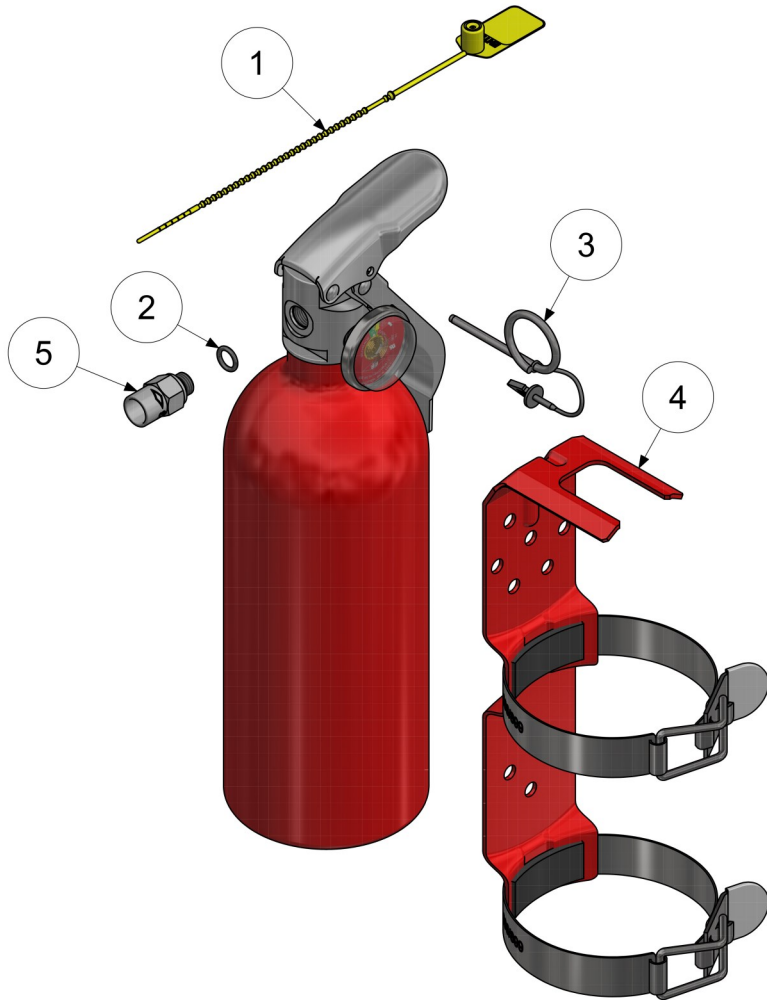
1. The Halotron BrX<sup>®</sup> clean agent is comprised of 2-bromo-3,3,3-trifluoropropene (also known as BTP, 2-BTP, or HBFO-1233xfB) with proprietary stabilizers. The stabilized agent has a 12-year shelf life after it is transferred into an extinguisher.

## **TROUBLE SHOOTING GUIDE**

	<b>PROBLEM</b>	<b>CORRECTIVE ACTION</b>
1.	Leak at collar O-ring	Contact Amerex if under warranty; otherwise remove and replace extinguisher.
2.	Leak through valve	Contact Amerex if under warranty; otherwise remove and replace extinguisher.
3.	Defective gauge	Contact Amerex if under warranty; otherwise remove and replace extinguisher.
4.	Leak in cylinder	Contact Amerex if under warranty; otherwise remove and replace extinguisher.



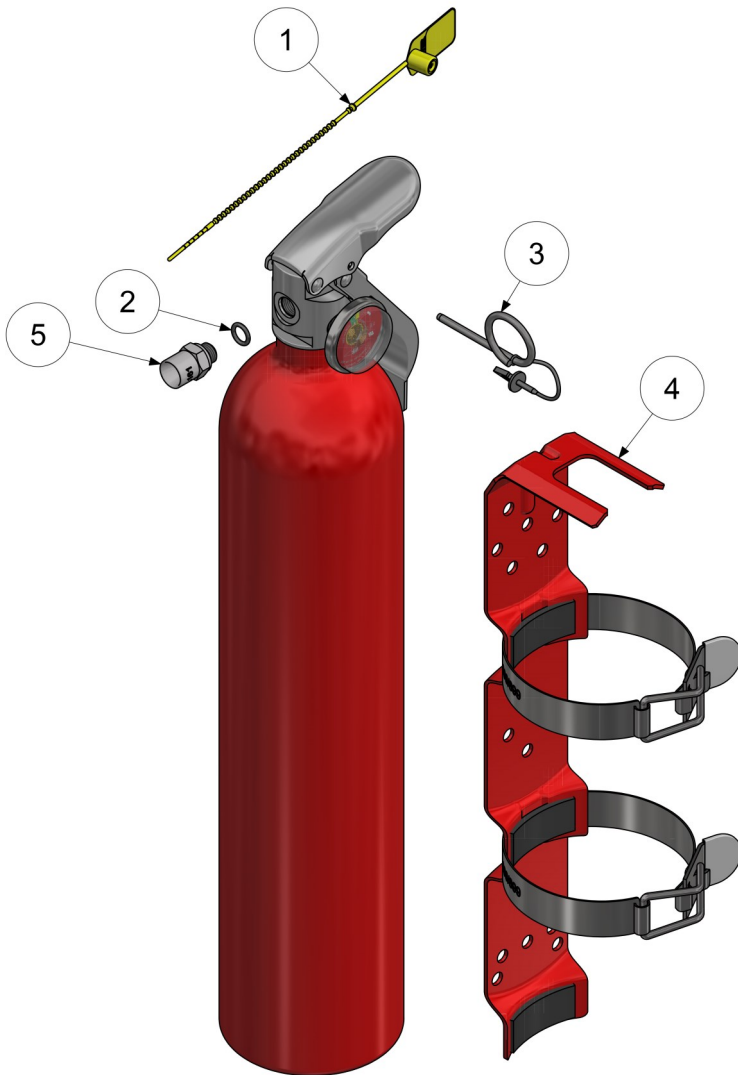
**PARTS LIST**  
**for**  
**1.92 lb. Halotron BrX<sup>®</sup>**  
**Extinguisher Model 337**



ITEM #	PART #	DESCRIPTION
1	01387-P	SEAL TAMPER (REPL YELLOW) SALES
2	01532-P	ORING NOZ HOSE END SALES
3	16354-P	PULL PIN & CHAIN ASY SM SS SALES
4	27293-P	BKT ASY 899 BTP RD SALES
5	27440	NOZ ANOD .113 BRX



**PARTS LIST**  
**for**  
**3.75 lb. Halotron BrX<sup>®</sup>**  
**Extinguisher Model 347**



ITEM #	PART #	DESCRIPTION
1	01387-P	SEAL TAMPER (REPL YELLOW) SALES
2	01532-P	ORING NOZ HOSE END SALES
3	16354-P	PULL PIN & CHAIN ASY SM SS SALES
4	25261-P	BKT ASY 898 BRX RD SALES
5	25627	NOZ .161 ANOD AL BRX



**PARTS LIST**  
**for**  
**3.75 lb. Halotron BrX<sup>®</sup>**  
**Extinguisher Model 349**



ITEM #	PART #	DESCRIPTION
1	01387-P	SEAL TAMPER (REPL YELLOW) SALES
2	01532-P	ORING NOZ HOSE END SALES
3	15747-P	STRAP ASY BK 3/8"X5" SALES
4	16354-P	PULL PIN & CHAIN ASY SM SS SALES
5	25261-P	BKT ASY 898 BRX RD SALES
6	27189-P	HOSE ASY 3/8 AL .189 BRX SALES



# PARTS LIST for 12.5 lb. Halotron BrX<sup>®</sup> Extinguisher Model 351



ITEM #	PART #	DESCRIPTION
1	01387-P	SEAL YAMPER (REPL YELLOW) SALES
2	05525-P	BKT WALL 820 RD AL 10 SALES
3	06978-P	ORING BR VLV HOSE SALES
4	12932	BKT ASY 809 BK 5" VEH
5	13888-P	PULL PIN & CHAIN ASY LG SS SALES
6	14778-P	STRAP & INSERT ASY BK 1/2 SALES
7	27289-P	HOSE ASY AL 1/2" .423 BRX SALES