

# OWNER'S SERVICE MANUAL

## INSTALLATION, OPERATING & SERVICING INSTRUCTIONS



### MANUAL PN 16303 WATER MIST PORTABLE EXTINGUISHERS MODEL B270 & B272

All fire extinguishers shall 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 shall 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 insure proper maintenance – USE OF SUBSTITUTE PARTS RELEASES AMEREX OF ITS WARRANTY OBLIGATIONS. Amerex parts have machined surfaces and threads that are manufactured to exacting tolerances. O-rings, hoses, nozzles, and all metal parts meet precise specifications and are subjected to multiple in-house inspections and tests for acceptability. There are substitute parts available that may be incorrectly labeled as UL component parts, some are advertised as Amerex type. None of these meet UL requirements, and all of them void the Amerex extinguisher warranty and UL listing. DO NOT SUBSTITUTE.

### RECHARGE FIRE EXTINGUISHERS IMMEDIATELY AFTER ANY USE.

**WARNING: DO NOT USE THIS EXTINGUISHER ON CLASS-D FIRES OR ANY FLAMMABLES THAT WILL REACT WITH WATER.**

### PROTECT FROM FREEZING.

#### REFERENCES IN THIS MAUNUAL:

**NFPA 10** Portable Fire Extinguishers

**CGA C-1** Methods for Pressure Testing Compressed Gas Cylinders

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

**National Fire Code of Canada**

#### AVAILABLE FROM:

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

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

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

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

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## INSPECTING THE EXTINGUISHER

This extinguisher must be inspected at regular intervals (monthly or more often if circumstances dictate) to insure that it is ready for use. Inspection is a "quick check" that a fire extinguisher is available and is in operating condition. It is intended to give reasonable assurance that the fire extinguisher is fully charged. This is done by verifying that it is in its designated place, that it has not been actuated or tampered with, and that there is no obvious physical damage or condition to prevent its operation.

### MAINTENANCE

**NFPA 10** At least once a year, or more frequently if circumstances require, maintenance shall be performed. Maintenance is a "thorough check" of the 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. It will normally reveal if hydrostatic testing or internal maintenance is required.

### MAINTENANCE – SERVICE PROCEDURE

1. Clean extinguisher to remove dirt, grease, or foreign material. Check to make sure that the instruction nameplate is securely attached and legible. Inspect the cylinders for corrosion, abrasion, dents, or weld damage. If any damage is found, hydrostatically test in accordance with instructions in CGA C-1 and C-6 and NFPA 10.

**Note: When cleaning, avoid use of solvents around the pressure gauge. They could seriously 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 the extinguisher, and compare with weight printed in the "Maintenance" section on the nameplate (label). Recharge extinguisher if weight is not within indicated allowable tolerances.
4. Check the date of manufacture printed on the extinguisher label (nameplate) or on the agent cylinder dome. The agent cylinder must be hydrostatically tested every 5 years to the test pressure indicated on the nameplate. REPLACE EXTINGUISHING AGENT WITH NEW AMEREX CHARGE AT TIME OF HYDROTEST.
5. Visually inspect the pressure gauge:
  - a. If bent, damaged, or improper gauge, depressurize and replace.
  - b. If pressure is low, check for leaks.
  - c. If over pressurized (overcharged), depressurize the extinguisher and follow recharge instructions.
6. Check pull pin for freedom of movement. Replace if bent or if removal appears difficult.
7. Inspect discharge lever for any dirt or corrosion which might impair freedom of movement. Inspect carrying handle for proper installation. If lever, handle, or rivets are damaged replace with proper Amerex part(s).
8. Install new tamper seal if broken, and record service data on the extinguisher inspection tag.
9. Remove hose and wand assembly, inspect for damage, replace as necessary. Blow air through nozzle or hose and horn to insure passage is clear of foreign material.
10. Inspect the valve assembly for corrosion or damage to hose thread connection. Replace valve assembly or component parts as necessary following the proper depressurization and recharge procedures. If valve removal is necessary, complete all steps in the Recharge Procedure.
11. Install hose and wand assembly. Torque swivel nut lightly with 15/16" wrench.

12. Replace the extinguisher on the wall hanger or in the vehicle bracket making sure that it fits the bracket properly and the bracket is securely attached – replace the bracket if necessary.

## RECHARGE

### WARNING:

- a. Before attempting to disassemble, be sure the extinguisher is completely depressurized.
- b. Use a regulated nitrogen pressurizing source. Set the regulator no more than 125 psi (862 kPa).
- c. Check and calibrate regulator gauge at frequent intervals. The regulator gauge shall be used to determine when the intended charging pressure has been reached. Do not use the extinguisher for this purpose.
- d. Never leave an extinguisher connected to a regulator of a high-pressure source for an extended period of time. A defective regulator could cause the cylinder to rupture due to excessive pressure.

## RECHARGING PROCEDURE

1. Perform steps 1 through 10 of the "Maintenance-Service Procedure" section.
2. Discharge all remaining pressure and contents, making sure that there is no remaining pressure. Do not top off or reuse water.
3. Remove the valve assembly and disassemble by removing downtube assembly (use a wrench on the brass retainer, not the plastic tube), spring, and valve stem assembly. Remove the collar O-ring from the valve and plastic fill tube from the cylinder.
4. Thoroughly clean all parts of the disassembled valve with a soft bristle brush or soft cloth. Blow the valve out with air or nitrogen. Inspect the spring and downtube assembly, and replace parts if worn or damaged. Replace the valve stem and collar O-ring. Lubricate the collar O-ring and small O-ring on the valve stem with V-711 (do not lubricate the valve stem seal). Inspect the downtube. If it is cracked or deformed replace with proper downtube. Inspect downtube O-ring, replace if necessary.
5. Rinse the cylinder with clean water and inspect the interior following CGA Visual Inspection Standard C-6.
6. Firmly replace the plastic fill tube and fill cylinder with DE-IONIZED WATER to the bottom of the fill tube. (Model B270 1.8 U.S. gals./6.81 liters Amerex Charge 670)(Model B272 2-1/2 U.S. gals/9½ liters Amerex Charge 671).

**NOTE: THE USE OF DE-IONIZED WATER CONFORMING TO NFPA 10 IS REQUIRED.**

7. Install a "Verification of Service" collar around neck of cylinder. Install valve assembly to the cylinder and properly align.

**CAUTION: HAND TIGHTEN THE VALVE COLLAR NUT 100-125 IN LBS. MAX (1.15-1.44 KG/M. OVER TIGHTENING WITH A WRENCH WILL DAMAGE THE VALVE.**

8. Install a PN 09492 Fill Adapter (High Performance) to the male valve outlet (where the hose assembly attached) and pressurize with nitrogen to 100 psi (690 kPa). The pressure regulator shall be set to no more than 125 psi (862 kPa). Remove Fill Adapter.

**CAUTION: DO NOT USE COMPRESSED AIR TO PRESSURIZE THIS EXTINGUISHER.**

9. Check the collar, gauge, cylinder welds, and valve orifice for leaks using a leak detection fluid or a solution of soapy water. Remove leak detection fluid from the valve assembly by blowing out with air and wipe exterior of the extinguisher to dry.
10. Install house and wand assembly into the operating valve.

**NOTE: CAREFULLY POSITION THE HOSE TO A NATURAL ANGLE BEFORE TIGHTENING THE HOSE FEMALE SWIVEL NUT. TORQUE SWIVEL NUT LIGHTLY USING 15/16" WRENCH. INSTALL IN HOSE CLIPS.**

11. Install pull pin with ring facing the front of the extinguisher.
12. Install tamper seal. Record recharge date, and attach new recharge tag.
13. Weigh assembled extinguisher, and confirm that the total weight is within the allowable tolerances indicated in the Maintenance section of the nameplate (label).

## TROUBLESHOOTING GUIDE

**WARNING: Determine the source of a leak before the extinguisher is depressurized. The extinguisher must be completely depressurized before any attempt is made to devalue it and correct a leakage problem. To depressurize – hold the extinguisher in an inverted position and slowly squeeze the discharge handle. Some water remaining in the downtube will be expelled so care shall be taken in the area being used for depressurizing. Thoroughly clean all valve parts after depressurization and valve removal.**

	PROBLEM	CORRECTIVE ACTION
1.	Leak at collar O-ring	Remove valve assembly, clean collar (knurled) nut thoroughly,
2.	Leak through valve	Check valve stem seating area for scratches or foreign matter. Clean seating area with a tooth brush and soft cloth. Install new valve stem assembly.
3.	Leak around gauge	Remove gauge*, clean threads, and reinstall using Teflon tape
4.	Defective gauge	Remove defective gauge*, and install the proper Amerex pressure gauge using Teflon tape on the gauge threads.
5.	Leak in the cylinder	Contact Amerex if under warranty, otherwise mark "REJECTED"
	* Pressure gauge threads are coated with a special epoxy at the factory. For easy removal, soak the valve assembly in hot water (180°F) for two to four minutes. Remove gauge with a thin 7/16" open-end wrench.	

**FOR REPLACEMENT PARTS SEE THE AMEREX PORTABLE AND WHEELED PARTS BOOK PN 27277 AVAILABLE AT <http://www.amerex-fire.com> UNDER MANUALS OF THE RESOURCE SELECTION.**