

# OWNER'S SERVICE MANUAL

## INSTALLATION, OPERATING, & SERVICING INSTRUCTIONS



NO. 05601

### STORED PRESSURE STAINLESS STEEL WATER FIRE EXTINGUISHER MODEL 240 - 2-1/2 GALLON

All fire extinguishers should be installed, inspected and maintained in accordance with the National Fire Protection Association standard titled "Portable Fire Extinguishers", NFPA-10 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 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, horns 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 are 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.

#### WARNING

**Do not use this extinguisher on Class C fires involving energized electrical equipment, Class D fires or any flammables that will react with water. Protect from freezing unless charged with an Amerex Model 506B Loaded Stream/Anti-freeze Charge.**

#### REFERENCES IN THIS MANUAL

NFPA-10 Portable Fire Extinguishers

CGA C-1 Methods for Hydrostatic Testing  
of Compressed Gas Cylinders  
CGA C-6 Standard for Visual Inspection

#### AVAILABLE FROM

National Fire Protection Association  
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Quincy, MA 02169-7471

Compressed Gas Association  
14501 George Carter Way  
Suite 103  
Chantilly, VA 20151

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**AMEREX CORPORATION DOES NOT SERVICE, MAINTAIN OR RECHARGE FIRE EXTINGUISHERS. THE MAINTENANCE AND RECHARGE PORTION OF THIS MANUAL IS PUBLISHED AS A GUIDE TO ASSIST SERVICE PERSONNEL IN THE INSPECTION, MAINTENANCE AND RECHARGE OF AMEREX FIRE EXTINGUISHERS ONLY. NO INSTRUCTION MANUAL CAN ANTICIPATE ALL POSSIBLE MALFUNCTIONS THAT MAY BE ENCOUNTERED IN THE SERVICE OF FIRE EXTINGUISHERS. AMEREX ASSUMES NO LIABILITY FOR SERVICE, MAINTENANCE OR RECHARGE OF FIRE EXTINGUISHERS BY PUBLISHING THIS MANUAL.**

### **INSPECTING THE EXTINGUISHER**

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

INSPECTION (NFPA-10) A “quick check” should be made of the extinguisher for the following:

1. Located in designated place.
2. No obstructions to access or visibility.
3. Operating instructions on nameplate (label) and facing outward.
4. Seals and tamper indicators not broken or missing.
5. Determine fullness by weighing or "hefting".
6. Examine for obvious physical damage, corrosion, leakage or clogged nozzle.
7. Pressure gauge reading in the operable area.

### **MAINTENANCE – SERVICE PROCEDURE**

MAINTENANCE (NFPA-10) At least once a year (or more frequently if indicated by an inspection), maintenance should be performed. Maintenance is a “thorough check” of the extinguisher. It is intended to give maximum assurance that an extinguisher will operate effectively and safely. It includes a thorough examination and any necessary repair or replacement. It will normally reveal the need for hydrostatic testing.

1. Clean extinguisher to remove dirt, grease or foreign material. Check to make sure that the instruction nameplate is securely fastened and legible. Inspect the cylinder for corrosion, abrasion, dents or weld damage. If any of these conditions are found and you doubt the integrity of the cylinder, hydrostatically test, using the proof pressure method and a suitable cage, in accordance with CGA Pamphlet C-1 and NFPA Pamphlet 10.
2. **NOTE:** When cleaning avoid use of solvents around the pressure gauge. They could seriously damage the plastic gauge face.
3. Inspect the extinguisher for damaged, missing or substitute parts. Only factory replacement parts are approved for use on Amerex fire extinguishers.
4. Weigh extinguisher and compare with weight printed on the Maintenance section of the nameplate (label). Recharge extinguisher if weight is not within the indicated allowable tolerances.
5. Check the date of manufacture on the extinguisher cylinder hanger loop or on the extinguisher nameplate. Cylinder must be hydrostatically tested every 5 years to the test pressure indicated on the label.

6. Visually inspect the pressure gauge:
  - a. If bent, damaged or improper gauge, depressurize and replace
  - b. If pressure is low, check for leaks
7. Inspect the foot stand (base). If cracked or broken replace with proper foot stand.
8. 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.
9. Inspect discharge lever for dirt or corrosion that might impair freedom of movement. Inspect carrying handle for proper installation. If lever, handle or rivets are damaged or distorted, replace with proper Amerex part (s).
10. Remove hose assembly, inspect hose assembly for damage, replace as necessary. Blow air through hose assembly to insure passage is clear of foreign material.
11. Examine the air pressurizing valve (Schrader) for damage. The cap should be in place to prevent leaking.
12. Inspect the valve assembly for corrosion or damage to hose thread connections. Replace valve assembly or component parts as necessary following the proper depressurization and recharge procedures.
13. Install hose and nozzle assembly.
14. Install new tamper seal and record service data on the extinguisher inspection tag.
15. Rehang the extinguisher on the wall hanger bracket making sure that it fits the hanger bracket properly – replace the bracket if necessary. Note: When a Loaded Stream/Anti-freeze charge is used to freeze protect this extinguisher, a complete discharge and maintenance is required annually. Use only the Amerex Model 506B charge and follow the instructions printed on the carton. Reuse of the 506B charge is permitted if the charge is reclaimed in a clean pail and the freeze point is verified. To verify the freeze point, pour the loaded stream solution into a 300 ml graduated container and check the specific gravity with a hydrometer. A minimum specific gravity of 1.270 will assure freeze protection to -40°F. A lower specific gravity means that the charge should be replaced.

## **RECHARGE**

RECHARGING (NFPA-10) The replacement of the extinguishing agent and includes the expellant for this type of extinguisher.

### **WARNING:**

- a. Before attempting to recharge be sure this extinguisher is completely depressurized.
- b. Use a regulated pressurizing source (either air or nitrogen). Set the regulator no more than 25 psi (175 kPa) higher than the gauge operating pressure.
- c. Check and calibrate regulator gauge at frequent intervals. The regulator gauge should be used to determine when the intended charging pressure has been reached. Do not use the extinguisher gauge 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. Complete the “Maintenance-Service Procedure”, items 1 thru 12.
2. Discharge all remaining pressure and water (or anti-freeze solution) making sure that there is no remaining pressure.
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 from the valve assembly. Remove the collar o-ring from the valve assembly. Discard the valve stem & collar oring.
4. Thoroughly rinse all parts with clean water and wipe dry with a soft cloth. Blow the valve out with air or nitrogen. Inspect the spring – replace parts if worn or damaged. Replace valve stem and collar o-ring with new components. Lubricate the collar o-ring and small o-ring on the valve stem with Bluestar V-711 (do not lubricate the valve stem seal). Inspect the downtube. If it is cracked, deformed or does not have a threaded brass spring retainer replace the downtube. Inspect downtube o-ring, replace if necessary.
5. Rinse the cylinder with clean water and inspect the interior following CGA Visual Inspection Standard, Pamphlet C-6.
6. Firmly replace the plastic fill tube and fill cylinder with clean water until it overflows (2 ½ gallons [9 ½ liters]).

**NOTE: THE AMEREX WARRANTY DOES NOT COVER STAINLESS STEEL EXTINGUISHERS FILLED WITH WATER WHICH CONTAINS IN EXCESS OF 40 PPM OF CHLORIDES. IN MANY AREAS WATER INCLUDES HIGH LEVELS OF CHLORIDES.**

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 to 100-125 in. lbs. max (1.15 – 1.44 KG/m). Over-tightening with a wrench will damage the valve.**
8. Remove cap from the air pressurizing valve on the side of the valve body and pressurize with 100 psi (690 kPa) using air or nitrogen. **NOTE: A 02141 fill adapter may also be used by installing to the female valve outlet (where the hose assembly attaches).** The pressure regulator should be set to no more than 25 psi (175 kPa) higher than the gauge operating pressure. Replace pressure valve cap. The cap must be in place to insure that the valve will not leak.
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 hose assembly into the operating valve.
11. Install ring pin with ring facing front of the extinguisher. Install new tamper seal. Record recharge date and attach new recharge tag.
12. Weigh assembled extinguisher and confirm that the total weight is within the allowable tolerances indicated in the Maintenance section on the extinguisher nameplate.

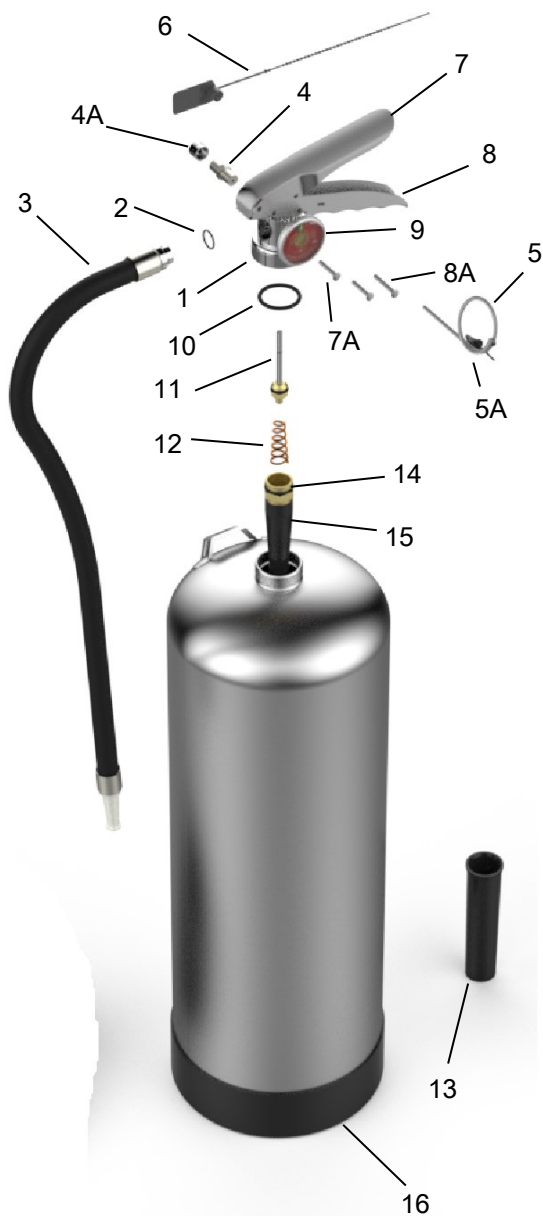
## TROUBLESHOOTING GUIDE

**WARNING:** Determine the source of a leak before the extinguisher is depressurized. **EXTINGUISHER MUST BE COMPLETELY DEPRESSURIZED BEFORE ANY ATTEMPT IS MADE TO DEVALUE IT AND CORRECT ANY LEAKAGE PROBLEM.** To depressurize – hold the extinguisher in an Inverted position and slowly squeeze the discharge handle. Some liquid remaining in the downtube will be discharged so care should be taken in the area used for depressurization. Thoroughly clean all valve parts after depressurization and valve removal.

	<b>PROBLEM</b>	<b>CORRECTIVE ACTION</b>
1.	Leak at collar o-ring	Remove valve assembly, clean collar thoroughly and install new o-ring. Lubricate the o-ring with Bluestar V-711
2.	Leak through valve	Install new valve stem assembly. Check valve seat for scratches or foreign matter.
3.	Leak around gauge threads	Remove gauge* and reinstall using Teflon tape on the gauge threads.
4.	Defective gauge	Remove defective gauge* and install a new gauge using Teflon tape on the gauge threads.
5.	Leak in the cylinder	Contact Amerex if under warranty, otherwise mark "Rejected" and return to owner.
	* 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	



**PARTS LIST**  
for  
**2 1/2 GALLON STAINLESS STEEL**  
**STORED PRESSURE WATER EXTINGUISHER**  
**(BRASS VALVE)**



ITEM NO.	PART NO.	DESCRIPTION
1	13281	Valve Ass'y - 240
2	06978	Hose Gasket (O-Ring)
3	06999	Hose & Nozzle Ass'y
4	00155	Pressure Valve & Cap Ass'y
4A	00158	Cap only for Pressure Valve
5	00160	Ring Pin, Stainless Steel
5A	00532	Chain (Nylon) for Ring Pin
6	01387	Lock Wire Seal (Yellow)
7	07762	Lever & Rivet
7A	01563	Rivet Only for Lever
8	09020	Handle & Rivets
8A	01564	Rivet Only for Handle (2 required)
9	06479	Gauge 100 psi (Stainless Steel Tube)
10	05240	Collar O-ring
11	06093	Valve Stem Ass'y
12	00383	Spring
13	02595	Fill Tube
14	05690	O-Ring-Downtube/Retainer
15	15943	Downtube/Retainer Ass'y - 240
16	03576	Foot Stand w/clip (Black)-240
*	24874	Model 506B Loaded Stream anti-freeze charge - Model 240 only
*	06247	Bluestar Lubricant (5 oz. tube)
NOTE: SEE PARTS BOOK FOR BRACKETS AND ADAPTERS		
*		PART NOT PICTURED