



OWNERS SERVICE MANUAL NO. 05608

INSTALLATION, OPERATING AND SERVICING INSTRUCTIONS *for*



AMEREX STORED PRESSURE WHEELED & STATIONARY 125/150 POUND DRY CHEMICAL FIRE EXTINGUISHERS

WHEELED

Model 488
Model 489
Model 490

ABC (AMMONIUM PHOSPHATE BASE)
REGULAR (SODIUM BICARBONATE BASE)
PURPLE K (POTASSIUM BICARBONATE BASE)

STATIONARY

Model 476
Model 477
Model 478

***** RECHARGE FIRE EXTINGUISHERS IMMEDIATELY AFTER ANY USE *****

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 Corp. 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 which 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 which are incorrectly labeled as U/L component parts, some are advertised as Amerex type. None of these meet U/L requirements and all of them void the Amerex extinguisher warranty and U/L listing. **DO NOT SUBSTITUTE.**

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 OF COMPRESSED GAS CYLINDERS"

AVAILABLE FROM:

National Fire Protection Assoc., Inc. Batterymarch Park Quincy, MA 02269
Compressed Gas Association, Inc. 1235 Jefferson Davis Highway Suite 501 Arlington, VA 22202

AMEREX CORP. ♦ P. O. BOX 81 ♦ TRUSSVILLE, ALABAMA 35173-0081
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INTRODUCTION

The Amerex Models 488 (ABC), 489 (REGULAR) & 490 (PURPLE K) WHEELED and Models 476 (ABC), 477 (REGULAR) and 478 (PURPLE K) STORED PRESSURE DRY CHEMICAL fire extinguisher are designed to provide large volumes of dry chemical fire fighting agent for high hazard industrial applications. Wheeled extinguishers can be easily transported and operated by one person on smooth rolling 16" wheels. The cage type carriage configuration provides protection for the operating valve, cylinder and hose assembly.

Maximum protection from severe corrosive environment is afforded by the Amerex "Ultra" metal preparation and paint finish. The operating valve, handle, gauge guard, fill cap, hose couplings and ball type shut-off are brass, or brass, chrome plated for years of trouble free use. These Models carry an AMEREX warranty of SIX YEARS -see full wording of the warranty below.

Field recharging is possible utilizing maintenance/recharge equipment available through your Amerex Distributor. To provide optimum extinguisher reliability, recharging should be performed by persons trained in fire extinguisher maintenance and servicing. This manual should be used as a guide for installing, operating and servicing this extinguisher. THE BEST PLACE TO HAVE YOUR EXTINGUISHER SERVICED AND RECHARGED IS YOUR "AUTHORIZED AMEREX DISTRIBUTOR" WHO HAS THE PROFESSIONAL EXPERIENCE AND EQUIPMENT TO DO IT PROPERLY.

SIX YEAR LIMITED WARRANTY

Amerex warrants its fire extinguishers to be free from defects in material and workmanship for a period of SIX (6) YEARS from the date of purchase. During the warranty period, any such defects will be repaired or the defective extinguisher replaced IF THE ORIGINAL GREY LOCKWIRE SEAL IS INTACT AND/OR IF ONLY FACTORY REPLACEMENT PARTS AND RECOMMENDED SERVICE EQUIPMENT HAVE BEEN USED TO SERVICE THE EXTINGUISHER. This warranty does not cover defects resulting from modification, alteration, misuse, exposure to unusually corrosive conditions nor improper installation or maintenance. ALL IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF FITNESS FOR PURPOSE AND MERCHANTABILITY, ARE LIMITED TO THE TIME PERIODS AS STATED ABOVE. IN NO EVENT SHALL AMEREX CORP. BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so that the above limitations or exclusions may not apply to you. Amerex Corp. neither assumes nor authorizes any representative or other person to assume for it any obligation or liability other than expressly set forth herein. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. To obtain performance of the obligation of this warranty, write to Amerex Corp., P. O. Box 81, Trussville, AL 35173-0081 for instructions.

THIS MANUAL IS ATTACHED TO EVERY NEW EXTINGUISHER OF THIS TYPE, SHIPPED FROM THE FACTORY. IT CONTAINS VALUABLE INFORMATION WHICH SHOULD BE STUDIED BY EVERYONE WHO WILL OPERATE OR SERVICE THE EXTINGUISHER. IT SHOULD BE KEPT IN A CONVENIENT LOCATION FOR EASY REFERENCE.

AMEREX CORPORATION DOES NOT SERVICE, MAINTAIN OR RECHARGE FIRE EXTINGUISHERS. THIS MANUAL IS PUBLISHED AS A GUIDE TO ASSIST QUALIFIED 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. 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, MAINTENANCE OR RECHARGE OF FIRE EXTINGUISHERS BY PUBLISHING THIS MANUAL.

PREPARING YOUR NEW EXTINGUISHER FOR USE

1. Examine the extinguisher for evidence of shipping damage. Notify the delivering carrier immediately if any damage is discovered.
2. Remove all wrappings, straps and pallet retaining bolts.
3. Check to insure that the hose connection to the operating valve and shut-off nozzle to the hose are tight.
4. Check to insure that the shut-off nozzle is in the CLOSED position. The ring (safety) pin should be installed in the operating valve and the lockwire (tamper) seal intact.
5. Check to make sure that the cap is on the "bleeder valve" (located on the side of the extinguisher operating valve). The pressure seal is in the cap and it must be in place to prevent leakage.
6. This extinguisher is shipped from the factory fully charged. Visually inspect the pressure gauge - the pressure should be in the GREEN ZONE (240 psi \pm approx. 10 psi range). The most accurate method to determine if the extinguisher is filled with the proper amount of chemical is to weigh the unit. The gross weight is indicated on the nameplate (label).

Note: Slight pressure variances in the gauge reading may be found if the extinguisher has been subjected to extremes of heat or cold. High temperatures can cause high gauge readings and low temperatures, low readings. When in doubt, condition the extinguisher to 70° F (21° C) for several hours to obtain more accurate pressure gauge readings.

7. Record the date the unit is being placed into service on the inspection tag and attach it to the extinguisher.

INSTALLATION

Do not place this extinguisher close to a potential fire hazard. Amerex recommends location no less than a 50 foot distance from the hazard while leaving an unobstructed access. Avoid placing it in an extremely hot or cold place. The operational temperature range for this extinguisher is -65° to +120° F (-54° to + 49° C). The extinguisher should be adequately protected if temperatures outside of this range are anticipated. Keep the extinguisher clean and free from dirt, ice, chemicals and any contaminants which may interfere with its proper operation. **DO NOT FUNCTIONALLY TEST THIS FIRE EXTINGUISHER.** (Testing or any use may cause the extinguisher to gradually lose pressure and become ineffective.)

OPERATION

CAUTION: PERSONS EXPECTED TO USE THIS EXTINGUISHER SHOULD BE TRAINED IN INITIATING ITS OPERATION AND IN THE PROPER FIRE FIGHTING TECHNIQUE. "HANDS ON" TRAINING WILL PREPARE PERSONNEL WITH THE FEEL FOR THIS EXTINGUISHER SO THAT THE MOST EFFECTIVE APPLICATION CAN BE UTILIZED IN AN EMERGENCY SITUATION. THE BASIC OPERATING INSTRUCTIONS ARE CONTAINED IN THE PICTOGRAM PORTION OF EVERY EXTINGUISHER NAMEPLATE (LABEL). THE FOLLOWING ELABORATES ON THESE INSTRUCTIONS.

- 1. MOVE THE EXTINGUISHER TO WITHIN APPROXIMATELY 50 FEET OF THE FIRE SITE. *KEEP EXTINGUISHER UPRIGHT.***
CAUTION: THIS EXTINGUISHER MUST BE OPERATED IN AN UPRIGHT POSITION. IF EQUIPPED WITH AN OPTIONAL TOW LOOP AND VEHICLE TOWED TO THE FIRE SCENE, REMOVE FROM TOW HITCH AND OPERATE IN A VERTICAL POSITION.
- 2. TWIST AND PULL RING PIN. OPEN CYLINDER DISCHARGE VALVE BY ROTATING (PULLING) THE "T" HANDLE VALVE LEVER TOWARD THE HOSE 90°. THE HOSE IS NOW PRESSURIZED WITH CHEMICAL. WITH THE HOSE (DISCHARGE) NOZZLE IN THE CLOSED POSITION, *PULL HOSE FROM RACK. START BACK 30 FEET FROM THE FIRE.***
- 3. GRASP NOZZLE AND *AIM AT BASE OF FIRE* NEAREST YOU.**
- 4. *OPEN HOSE (DISCHARGE) NOZZLE* BY SLOWLY PULLING THE LEVER FULLY TOWARDS YOU (BRACE YOURSELF, HOLD THE NOZZLE FIRMLY AND BE PREPARED FOR A DISCHARGE RECOIL). *SWEEP SIDE TO SIDE* ACROSS THE BASE OF THE FIRE AND PAST BOTH EDGES. WORK THE FIRE AWAY FROM YOU WHILE BEING ALERT FOR FLASHBACKS. MOVE CLOSER AS THE FIRE IS EXTINGUISHED BUT NOT SO CLOSE AS TO SCATTER OR SPLASH THE BURNING MATERIAL. PROGRESSIVELY FOLLOW UP UNTIL THE FIRE IS EXTINGUISHED.**
- 5. WHEN THE FIRE IS OUT, PUSH THE HOSE (DISCHARGE) LEVER FORWARD TO THE *CLOSED* POSITION. STAND BY AND WATCH FOR POSSIBLE REIGNITION.**
- 6. EVACUATE AND VENTILATE THE AREA IMMEDIATELY AFTER EXTINGUISHING THE FIRE. THE FUMES AND SMOKE FROM ANY FIRE MAY BE HAZARDOUS AND CAN BE DEADLY.**

DISCHARGE TIME (APPROXIMATE)

488 (476) - 49 SECONDS 489 (477) - 60 SECONDS 490 (478) - 52 SECONDS

EFFECTIVE RANGE OF AGENT THROW - 25 TO 40 FEET

HOSE LENGTH - 50 FEET

***** RECHARGE EXTINGUISHERS IMMEDIATELY AFTER ANY USE *****

SHUTDOWN

BEFORE PERFORMING THE SHUTDOWN PROCEDURE AND PREPARING TO MOVE THE EXTINGUISHER TO THE RECHARGE LOCATION, MAKE SURE THAT THE FIRE IS COMPLETELY EXTINGUISHED AND THAT THERE IS NO DANGER OF A FLASHBACK.

1. Tip extinguisher to the horizontal position (resting on the carriage handle) and slowly rotate the CYLINDER DISCHARGE VALVE LEVER 90° to the OPEN position. Slowly push the HOSE (DISCHARGE) NOZZLE LEVER to the OPEN position and be prepared for some chemical discharge.

2. When all pressure has been evacuated from the extinguisher, return the HOSE (DISCHARGE) NOZZLE LEVER and CYLINDER DISCHARGE VALVE LEVER to the CLOSED POSITION.

Note: These steps will allow easy depressurization of the extinguisher and clear the hose assembly with a minimal loss of remaining chemical.

3. Return the extinguisher to the upright position. Coil the hose onto the storage rack and position the nozzle into the mount in preparation for transport to the recharge location.

INSPECTING THE EXTINGUISHER

INSPECTION [NFPA-10 4-2.1] is a “quick check” that an extinguisher is available and will operate. It is intended to give reasonable assurance that the extinguisher is fully charged and operable. This is done by seeing 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 operation.

PERIODIC INSPECTION PROCEDURES

(Monthly or more often if circumstances dictate)

[NFPA-10 4-3.2] 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 and facing outward.
4. Seals and tamper indicators not broken or missing. Bleeder valve cap on operating valve installed.
5. Determine fullness by weighing.
6. Examine for obvious physical damage, corrosion, leakage or clogged nozzle.
7. Pressure gauge reading in the operable area.

MAINTENANCE

MAINTENANCE [NFPA-10 4-4.1 & 4-4.2] 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.

MAINTENANCE PROCEDURE

Note: This procedure will be best accomplished with the extinguisher in an upright position and on a level surface.

1. Clean extinguisher to remove dirt, grease or foreign material. Check to make sure that the instruction nameplate and U/L manifest are 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

to factory test pressure - 500 psi, [3448 kPa], using the proof pressure method, in accordance with CGA Pamphlet C-6 and NFPA Pamphlet 10. See proper method of depressurizing and reclaiming chemical in RECHARGE procedures.

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 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 stamped on the extinguisher cylinder dome. Cylinder must be hydrostatically (proof pressure) tested at 12 years (first time), every 7 years thereafter, to the test pressure indicated on the nameplate - 500 psi, [3448 kPa].
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 overpressurized (overcharged), depressurize the extinguisher and follow recharge instructions
6. Remove and check ring pin for freedom of movement. Replace if bent or if removal appears difficult.
7. Visually inspect, without removing, the agent fill plug for damage or distortion. Replace as necessary ONLY AFTER PROPER DEPRESSURIZATION PROCEDURES HAVE BEEN PERFORMED (SEE COMPLETE MAINTENANCE - SIX YEAR TEARDOWN INSTRUCTIONS).
8. Check the nozzle shutoff lever for freedom of movement (open and close several times). If the operation is impeded, disassemble the nozzle, replace parts and/or properly lubricate as necessary. Make sure that the nozzle tip is clear and unobstructed.

WARNING: ALWAYS OPEN THE SHUTOFF NOZZLE HANDLE SLOWLY. ANY EVIDENCE OF AGENT IN THE NOZZLE INDICATES THAT THE UNIT MAY HAVE BEEN USED AND THE USE NOT REPORTED. BE PREPARED FOR A POSSIBLE DISCHARGE AND NOZZLE RECOIL.

9. After making sure that there is no residual pressure in the discharge hose, disconnect it from the operating valve. Blow air through the hose and nozzle assemblies to insure that the passage is clear of foreign material. Check the couplings, hose and hose gasket for damage or deterioration - replace as necessary.
10. Inspect valve assembly for signs of corrosion or damage to hose thread connection. Valve removal and/or valve part replacement should be made only after following the depressurizing procedures listed in the COMPLETE MAINTENANCE procedures.
11. Reconnect the hose to the agent cylinder. Properly coil the hose on the rack and install the nozzle (with the lever in a closed position) on the mount.

Note: When assembling the hose to the agent cylinder or nozzle to the hose, tighten the coupling ¼ turn after contacting the hose gasket.

12. Wheeled extinguishers - Inspect the wheels to insure they rotate freely. Lubricate as required. Stationary extinguishers should be checked to assure that all mounting devices are securely fastened.
13. Check carriage assembly for loose nuts, bolts, frame distortion or damage. Check welds for damage or corrosion. Replace damaged parts or make repairs as necessary.
14. Install new tamper seal and record service data on the extinguisher inspection tag.
15. If the extinguisher has been moved to perform service, it must be returned to its proper location.

COMPLETE MAINTENANCE (SIX YEAR TEARDOWN)

COMPLETE MAINTENANCE (SIX YEAR TEARDOWN) [NFPA-10 4-4.1.4] Every six years, stored pressure extinguishers that require a 12 year hydrostatic test shall be emptied and subjected to the applicable maintenance procedures. When the applicable maintenance procedures are performed during periodic recharging or hydrostatic testing, the six year requirement shall begin from that date.

Note: Some States require a Complete Teardown on an annual basis. Check with your Amerex Servicing Distributor to see if this applies to you. NFPA-10 recommendation requires that a "verification of service" external collar tag be installed on the extinguisher whenever a "Six Year Maintenance" is performed. The "verification of service" tag can only be installed if the operating valve has been removed. "Six Year Maintenance" service decal must also be attached to extinguisher cylinder.

COMPLETE MAINTENANCE (SIX YEAR TEARDOWN) PROCEDURES

1. Discharge chemical and pressure into a "closed" dry chemical recovery system (Getz Mfg. is recommended). Make sure that the extinguisher is completely empty and depressurized.

CAUTION: THESE EXTINGUISHERS OPERATE AT 240 PSI. SOME RECOVERY SYSTEMS MAY REQUIRE THAT THE PRESSURE BE REDUCED TO SAFELY DISCHARGE THE CHEMICAL AND PRESSURE INTO THE SYSTEM. USE THE PRESSURE BLEEDER VALVE ON THE EXTINGUISHER VALVE TO REDUCE THE PRESSURE TO A POINT REGISTERING JUST BELOW THE GREEN OPERABLE AREA ON THE PRESSURE GAUGE. DISCHARGE EXTINGUISHER INTO RECOVERY SYSTEM. RE-PRESSURIZE THE EXTINGUISHER (TO NO MORE THAN 200 PSI) TO EXHAUST ANY CHEMICAL REMAINING IN THE EXTINGUISHER.

Note: A "closed" recovery system is designed to prevent loss of the chemical "fines". Loss of the "fines" could result in reduced extinguisher efficiency.

2. 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 to factory test pressure - 500 psi, [3448 kPa], using the proof pressure method, in accordance with CGA Pamphlet C-6 and NFPA Pamphlet 10.

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. Check the date of manufacture on the extinguisher cylinder dome. Cylinder must be hydrostatically (proof pressure) tested at 12 years (first time), every 7 years thereafter, to the test pressure indicated on the nameplate - 500 psi, [3448 kPa].
5. Visually inspect the pressure gauge - if bent, damaged or improper type or pressure - replace with Amerex P/N: 5225 240 psi Gauge.
6. Remove and check ring pin for freedom of movement. Replace if bent or if removal appears difficult.
7. **VERIFY THAT NO PRESSURE REMAINS IN THE EXTINGUISHER** (Operating valve and nozzle shutoff in open position and there is no discharge). Remove and inspect the agent fill cap for damage or distortion.
8. Check the nozzle shutoff lever for freedom of movement (open and close several times). If the operation is impeded, disassemble the nozzle, replace parts and/or properly lubricate as necessary. Make sure that the nozzle tip is clear and unobstructed.
9. Disconnect the discharge hose from the operating valve. Blow air through the hose and nozzle assemblies to insure that the passage is clear of foreign material. Check the couplings, hose and hose gasket for damage or deterioration, replace as necessary. The discharge hose should be hydrostatically tested to 300 psi (2068 kPa) every twelve years.

10. Inspect the wheels to insure they rotate freely. Lubricate as required.
11. Check carriage assembly for loose nuts, bolts, frame distortion or damage. Check welds for damage or corrosion. Replace damaged parts or make repairs as necessary.
12. Remove operating valve assembly. Inspect for corrosion or damage to hose thread connection.

WARNING: VALVE REMOVAL AND/OR VALVE PART REPLACEMENT SHOULD BE MADE ONLY AFTER COMPLETING THE DEPRESSURIZING PROCEDURES LISTED IN STEP 1 OF THE COMPLETE MAINTENANCE PROCEDURES.

13. Complete steps 2 thru 15 of RECHARGE PROCEDURE.

RECHARGE

RECHARGING [NFPA-10 4-2.3] is the replacement of the extinguishing agent and also includes the expellant for this type of extinguisher.

WARNING:

- A. BEFORE ATTEMPTING TO RECHARGE BE SURE THE EXTINGUISHER IS COMPLETELY DEPRESSURIZED.
- B. NEVER HAVE ANY PART OF YOUR BODY OVER THE EXTINGUISHER WHILE REMOVING THE VALVE ASSEMBLY OR FILL PLUG.
- C. USE A PROTECTIVE SHIELD BETWEEN YOU AND THE PRESSURE GAUGE WHILE CHARGING AN EXTINGUISHER. DO NOT STAND IN FRONT OF THE GAUGE IF A SHIELD IS NOT AVAILABLE.
- D. USE A **REGULATED** PRESSURIZING SOURCE OF DRY NITROGEN ONLY WITH A MINIMUM DEW POINT OF MINUS 70°F (MINUS 57°C). SET THE REGULATOR TO NO MORE THAN 265 PSI (1827 kPa) .
- E. 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.
- F. 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.
- G. DO NOT MIX TYPES OF DRY CHEMICALS IN EXTINGUISHERS, RECHARGE OR RECOVERY SYSTEMS. MIXING **ABC (ACIDIC BASE)** WITH **REGULAR, PURPLE K, SUPER-K OR MONNEX (ALKALINE BASE)** DRY CHEMICALS MAY RESULT IN A CHEMICAL REACTION CAPABLE OF DEVELOPING A DANGEROUS PRESSURE BUILDUP.

RECHARGING PROCEDURE

1. Perform steps 1 thru 12 of the "COMPLETE MAINTENANCE (SIX YEAR TEARDOWN)" section.
2. Remove downtube, spring and valve stem assembly from the operating valve and thoroughly clean all parts with a soft bristle brush or soft cloth. Blow the valve, downtube and "Bleeder" valve (if used to depressurize the extinguisher) out with air or nitrogen. Inspect the collar o-ring, valve stem, spring and downtube ass'y - replace parts if worn or damaged. Lubricate the collar o-ring, and small o-ring on the valve stem with Visilox V-711 (do not lubricate the valve stem seal).
3. Reassemble the valve assembly, including downtube and set aside.
4. Remove agent fill cap and place to the side. Remove any chemical remaining in the cylinder and check the condition. Properly dispose of any chemical that is contaminated or caked.

5. Inspect the cylinder interior following CGA Visual Inspection Standard, Pamphlet C-6.
6. Clean cylinder collar o-ring seat and collar threads with a small brush and then wipe off surfaces with a clean damp cloth to remove dust. Lightly brush the collar o-ring seat with Visilox V-711. Install operating valve/downtube assembly, **HAND TIGHT**.

Note: A "verification of service" external collar tag must be installed **BEFORE** installing the operating valve/downtube assembly.

7. Stand the extinguisher upright on an accurate scale of sufficient size and capacity (400 lb. minimum). Remove agent fill cap. Remove agent fill cap o-ring. Clean cap and cylinder threads with a small brush and wipe surfaces with a clean damp cloth to remove dust. Inspect o-ring and replace if damaged or deformed. Install o-ring and lightly brush it and all threads with Visilox 711.
8. Fill cylinder through chemical agent fill hole with the correct amount and type of dry chemical specified on the label (nameplate). Use **AMEREX** chemical which has been kept free of moisture and contamination.

CAUTION: FILLING BY EYE ALONE COULD CAUSE POTENTIALLY DANGEROUS OVER-FILLING
ALWAYS USE A SCALE.

9. After the extinguisher has been filled to the proper weight, install the agent fill cap, **HAND TIGHT**.
10. Attach the nitrogen charging adapter to the male hose connector on the operating valve.
11. With the extinguisher properly secured in an upright position, connect your nitrogen pressurizing line with a quick connect to the nitrogen charging adapter. Rotate the extinguisher operating valve lever to the OPEN position and pressurize extinguisher with dry nitrogen to 240 psi. When the desired pressure has been reached, rotate the operating lever to the CLOSED position. Shut off nitrogen supply and remove the quick connect.

CAUTION: PRESSURIZING THE EXTINGUISHER IN THIS MANNER WILL ALLOW FOR PROPER AERATION OF THE CHEMICAL THROUGH THE DOWNTUBE. **DO NOT USE THE "BLEEDER" VALVE TO PRESSURIZE THE EXTINGUISHER.**

12. Remove the nitrogen charging adapter. Check extinguisher for leaks by applying leak detecting fluid or a solution of soapy water to the male hose connector orifice, around the collar o-ring sealing areas of valve and fill cap, cylinder welds, gauge and "Bleeder" valve. Remove leak detecting fluid from valve assembly by blowing out with air or nitrogen. Wipe exterior of extinguisher to remove any remaining residue.
13. Reconnect the hose to the operating valve. Properly coil the hose on the rack and install the nozzle (**with the lever in a closed position**) on the mount.

CAUTION: WHEN ASSEMBLING THE HOSE TO THE AGENT CYLINDER OR NOZZLE TO THE HOSE, TIGHTEN THE COUPLING ¼ TURN AFTER CONTACTING THE HOSE GASKET.

14. Install ring (safety) pin and lockwire (tamper) seal. Record recharge date and attach new recharge tag.
15. 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: BEFORE ATTEMPTING TO CORRECT ANY LEAKAGE PROBLEM, BE SURE THAT THE AGENT CYLINDER AND HOSE ARE COMPLETELY DEPRESSURIZED.

Note: Check to determine the source of a leak before the extinguisher is depressurized. Leakage repairs will require depressurization and removal of the valve assembly or chemical agent fill cap. Depressurize by removing bleeder valve cap ("bleeder" valve is mounted on the side of the operating valve assembly), depress valve stem to relieve the dome pressure, with the extinguisher in an upright position. After depressurizing the extinguisher and correcting the problem, it will be necessary to clean all valve and cap parts thoroughly.

PROBLEM	CORRECTIVE ACTION
1. Leak at operating valve collar o-ring	1. Remove valve assembly, clean collar thoroughly and install new collar o-ring. Lubricate o-ring with Visilox V-711.
2. Leak at agent fill cap	2. Remove cap, clean threads thoroughly and install new o-ring. Lubricate o-ring with Visilox V-711.
3. Leak through valve.	3. Install new valve stem assembly. Check valve seat for scratches or foreign matter.
4. Leak at "bleeder" valve.	4. Remove and reinstall valve using Teflon tape on threads. Note: "Bleeder" valve <u>cap</u> must be installed to prevent leakage.
5. Leak around gauge threads.	5. Remove gauge* and reinstall using Teflon tape on the gauge threads.
6. Defective gauge.	6. Remove defective gauge* and install new P/N: 5225 240 psi gauge using Teflon tape on the gauge threads.
7. Leak in the cylinder.	7. Contact Amerex if under warranty, otherwise - mark "Rejected" and remove from service or 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 7/16" open end wrench.

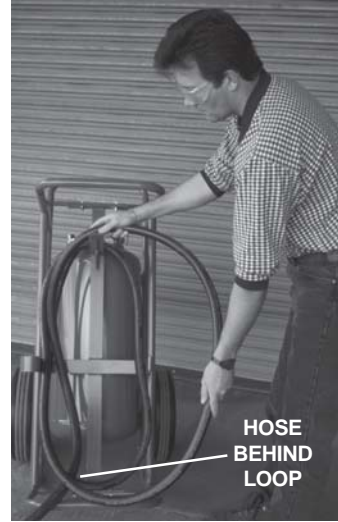
PROPER METHOD FOR COILING DISCHARGE HOSE ON 125/150 LB. WHEELED AND STATIONARY STORED PRESSURE DRY CHEMICAL EXTINGUISHERS

(If instructions are followed, the hose will uncoil without kinks.)



1

Connect hose coupling to extinguisher valve. Lay hose straight out on ground to its full 50 ft. length. Start first regular loop counter-clockwise by placing between side brackets and over top bracket.



2

The second loop is a REVERSE loop. Notice that the hose passes behind the loop on this REVERSE loop.



3

The next loop is a regular "HOSE IN FRONT" loop. Succeeding loops are alternated: REVERSE, FRONT for a total of five loops.



4

Adjust the loops so that the nozzle fits into the nozzle mount. Loops should be approximately the same size.

PARTS LIST

for

125 / 150 LB. WHEELED / STATIONARY Stored Pressure DRY CHEMICAL Extinguishers



WHEELED MODELS	488 125 LB. ABC	489 150 LB. REGULAR	490 125 LB. PURPLE K
STATIONARY MODELS	476 125 LB. ABC	477 150 LB. REGULAR	478 125 LB. PURPLE K

ITEM NO.	PART NO.	DESCRIPTION	STD. PKG.
1	5197	Valve Ass'y Complete with Downtube	1
2	4938	Downtube/Retainer Ass'y	1
3	9300	Fill Cap	1
4	8392	Gasket, Fill Cap	1
5	10431	Carriage Ass'y without Wheels - New Style	1
<input checked="" type="checkbox"/>	6624	Old Style	1
6	10430	Hose Support with Mounting Hardware - New Style	1
<input checked="" type="checkbox"/>	6129	Old Style	1
<input checked="" type="checkbox"/>	6225	Nozzle Clips with Mounting Hardware - Old Style (2 required)	2
<input checked="" type="checkbox"/>	6376	Nozzle Mount with Hardware (Old Style)	1
7	5194	Cylinder with Mounting Brackets -Old Style	1
	10467	New Style	1
8A		Nameplate (Mylar Label) Non U/L SPECIFY MODEL NO. AND YEAR OF MFG. OF THE EXTINGUISHER	1
8B	7481	Pictogram - 488, 476	1
	7483	489, 490, 477, 478	1
9	7751	Wheel Ass'y, 16" with Hub Cap, Washer and Retaining Pin (Semi-Pneumatic)	1
10	4945	Hub Cap	1
11	6059	Valve Lever with Screws	1
12	3562	Gauge Guard Ass'y	1
13	5225	Gauge - 240 PSI	1
14	6100	Ring Pin, Stainless Steel with Wire	12
15	0155	Pressure Valve and Cap Ass'y	12
16	1387	Lock Wire Seal (Yellow)	500
17	3678	Valve Body	1
18	6060	Cam Ass'y with O-Rings	1
19	5239	Collar O-Ring	12
20	5067	Valve Stem Ass'y	6
21	3556	Spring	6
22	3501	Hose Ass'y, 50 ft.	1
23	3877	Gasket, Hose/Nozzle	6
24	6279	Ball Valve Ass'y	1
25	6470	Nozzle Tip - 488, 489, 476, 477 (.344)	1
	6208	490, 478 (.328)	1
26	5191	Nozzle Ass'y (Ball Valve & Tip)	1
	7432	488, 489, 476, 477	1
		490, 478	1
27	9857	Fill Adpater	1
28	5152	Hydrotest Adapter (Cylinder)	1
<input checked="" type="checkbox"/>	NOTE: Replacement Valve Assemblies include New Valve Body, Gauge, Gauge Guard, Safety Disc Ass'y, Cam, Pressure Valve & Cap, Lever, Valve Stem Ass'y, Spring, Downtube/Retainer Ass'y		
<input checked="" type="checkbox"/>	PART NOT PICTURED		

