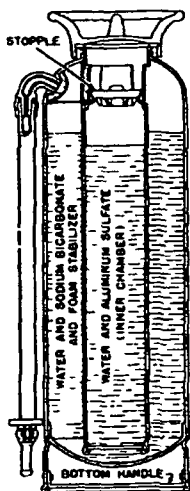


For CLASS A AND B FIRES—Wood, paper, etc., and oil, paint, and the like



Operation When the extinguisher is inverted, the lead stopple covering the water and aluminum sulfate chamber drops and permits the solution to mix with the water/sodium bicarbonate/foam stabilizer solution and produce foam. The chemical reaction releases CO_2 gas with sufficient pressure to expel the foam. For Class B fires in open containers, direct the stream against the back inside wall of the container—*never discharge the foam stream directly into the burning liquid* because it may cause the fire to spread out of the container. On spill fires, stand back and gently arc the stream. For Class A fires, aim the foam directly at the base of the flames.

Maintenance. Inspect periodically, discharge and recharge annually. Check for bent discharge elbow, corrosion, and other mechanical injury. Thoroughly clean interior, flush out hose and nozzle and clean outlet screen. Mix chemicals in clean containers and strain into their respective chambers.

Caution Store in heated cabinet because an antifreeze solution cannot be used to protect from temperatures below 40 F, do not subject to temperatures above 120 F.

FIG 43-18 —Foam fire extinguisher (No longer manufactured, but replacement parts are available)

cartridge that is recommended by the extinguisher manufacturers.

Sodium bicarbonate-base dry chemical, the most common agent, is available in ordinary form and foam compatible form. The foam compatible type can be used simultaneously with foam without causing the foam blanket to break down.

Potassium bicarbonate-base dry chemical, "purple K," is similar in extinguishing properties to sodium bicarbonate-base dry chemical, but it has twice the effective fire-fighting capacity on a pound-to-pound basis. This agent has good moisture repellency and is compatible with the simultaneous use of water or foam. Operator technique is not critical because it does not allow fuel to reflash as easily or as rapidly as sodium bicarbonate. The absence of momentary flare-up also permits the user to approach fires more closely. Also, the potassium compound extinguishes the leading edges of contained flammable liquid fires more easily than the sodium compound. This agent is also marketed as potassium

bicarbonate/urea, and offers greater range.

Ammonium phosphate-base dry chemical (multipurpose) has operating characteristics on Class B and C fires similar to sodium and potassium base dry chemical extinguishers. When discharged into a Class A fire, chemical reaction will destroy the flames and a coating, formed when the extinguishing agent softens and adheres to the burning surface thereby retarding further combustion. To obtain complete extinguishment on Class A materials, all burning areas must be thoroughly exposed to the extinguishing agent. Because any small burning ember may be a source of reignition, the importance of proper application on Class A fires is more critical than with water extinguishers. In the presence of moisture, multipurpose dry chemicals may cause corrosion when discharged on metals. It is therefore very important to clean up the multipurpose agent immediately after the fire is extinguished. It is also important never to mix the ammonium phosphate-base agent with the potassium or sodium bicarbonate-base