

APPENDIX E

OBSOLETE HAND GRENADES

This appendix provides data for identifying and understanding the description and capabilities of obsolete US hand grenades. Although these grenades are no longer common to the US inventory, the majority of them are still in use by other services or nations.

E-1. M30 PRACTICE HAND GRENADE

The M30 practice grenade (Figure E-1) simulates the M26 series of fragmentation hand grenades for training purposes. The M30 adds realism to training and familiarizes the soldier with the functioning and description of the fragmentation hand grenade.

- a. **Body.** The grenade body is cast iron and is reusable.
- b. **Fuze.** The fuze is an M205A1 or M205A2.
- c. **Weight.** The grenade weighs 16 ounces.
- d. **Safety Clip.** See paragraph 1-3.
- e. **Capabilities.** The average soldier can throw the grenade 40 meters. The M30 emits a small puff of white smoke after a delay of 4 to 5 seconds and makes a loud popping sound.
- f. **Color and Markings.** The grenade is light blue with white markings.

WARNING

Fuze fragments can exit the hole in the base of the grenade body and cause injury.

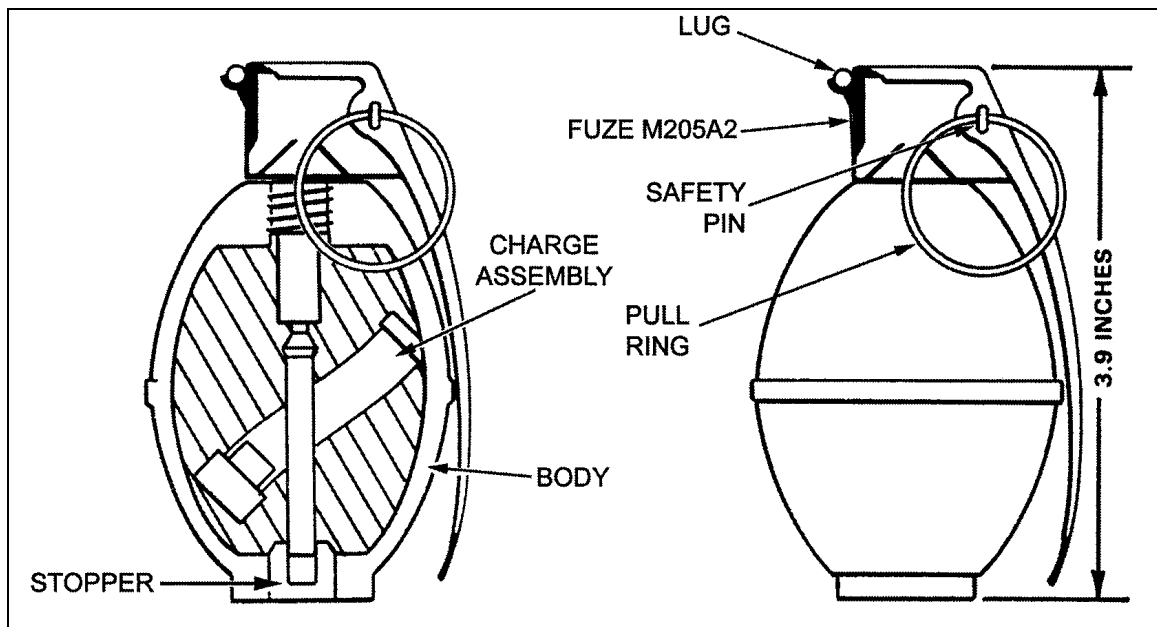


Figure E-1. M30 practice grenade.

E-2. MK1 ILLUMINATION HAND GRENADE

The MK1 illumination hand grenade (Figure E-2) is a ground signaling and ground pyrotechnic signal, except that the grenade burns only at ground level whereas pyrotechnic signals burn in flight or while suspended from a parachute. The MK1 should not be used in deep mud or swampy ground, which would result in little or no illumination. The grenade burns with a very hot flame and may be used as an incendiary agent. Because it is incendiary, soldiers should use caution to prevent fires that would be detrimental to tactical operations.

- a. **Body.** The body of the MK1 illumination grenade is sheet metal.
- b. **Filler.** The filler has 3.5 ounces of illuminating pyrotechnic composition.
- c. **Fuze.** The fuze is a special igniter, which differs from other igniting type fuzes in that it contains a quick match rather than a powder delay train. The quick match has a burning time of 7 seconds, after which it sets off an igniter charge. The igniter charge initiates the burning process of the grenade's filler.
- d. **Weight.** The grenade weighs 10 ounces.
- e. **Capabilities.** The average soldier can throw the MK1 40 meters. The filler burns for 25 seconds, producing 55,000 candlepower and illuminating an area 200 meters in diameter.
- f. **Color and Markings.** Older MK1 grenades are white with black markings; newer models are unpainted with black markings.

WARNING

Avoid looking directly at the illumination grenade as it burns, since the intensity of the light may damage the retina.

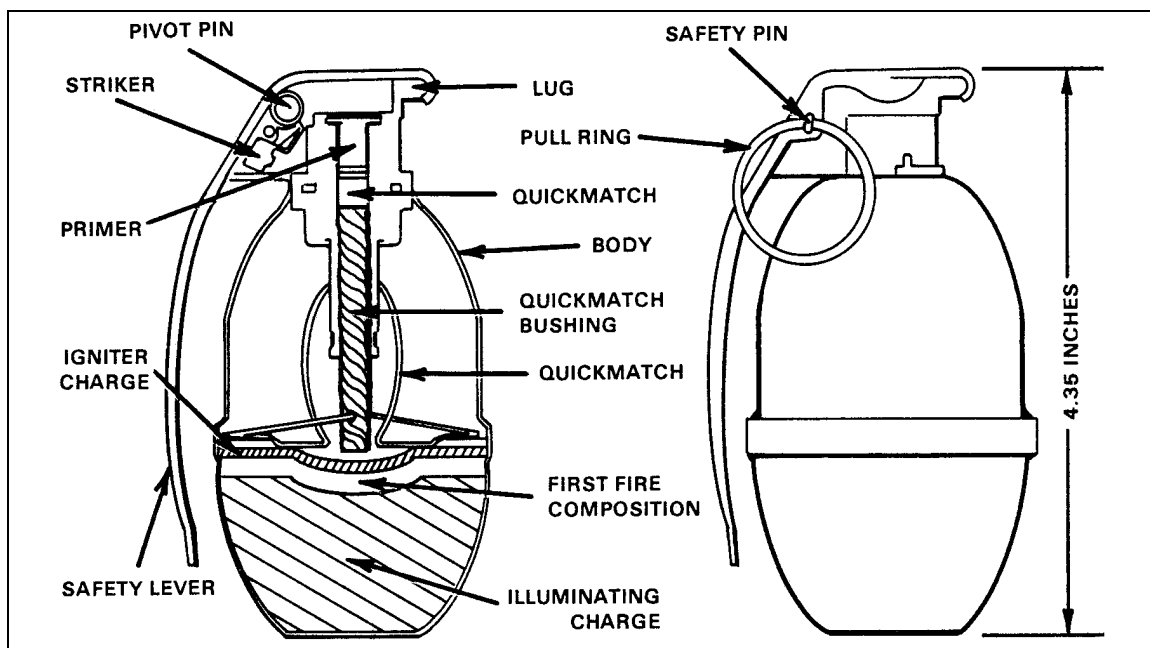


Figure E-2. MK1 illumination pyrotechnic hand grenade.

E-3. MK2 FRAGMENTATION HAND GRENADE

The MK2 (Figure E-3) is used to supplement small arms fire against the enemy in close combat. The grenade produces casualties by high-velocity projection of fragments.

- a. **Body.** The MK2 grenade body is cast iron.
- b. **Filler.** The filler has TNT, either flaked or granular.
- c. **Fuze.** The fuze is an M204A1 or M204A2.
- d. **Weight.** The grenade weighs 21 ounces.
- e. **Capabilities.** The average soldier can throw the grenade 30 meters. The MK2 grenade has a bursting radius of 10 meters.
- f. **Color and Markings.** The grenade has an olive drab body with a single yellow band, which indicates a high-explosive filler.

WARNING

If the fuze is loose, do not try to tighten it. This could set off the granular TNT in the grenade.

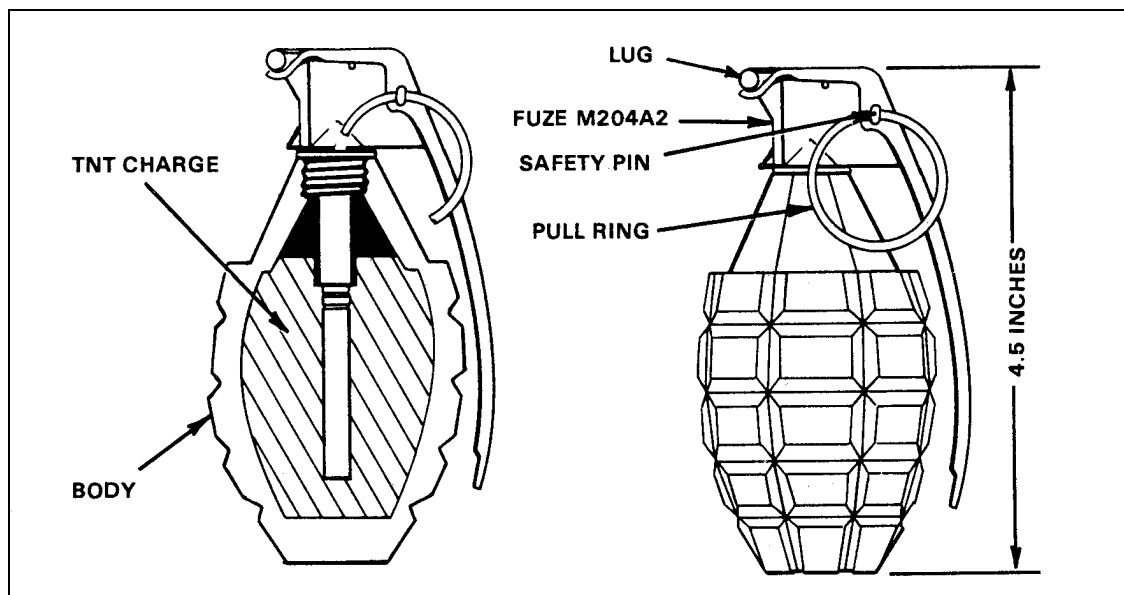


Figure E-3. MK2 fragmentation hand grenades.

E-4. M26 AND M26A1 FRAGMENTATION HAND GRENADES

These grenades (Figure E-4) are used to supplement small arms fire against an enemy in close combat. They produce casualties through the high-velocity projection of fragments.

- a. **Body.** The M26 and M26A1 grenade bodies are cast iron.
- b. **Filler.** The fillers have TNT, either flaked or granular.
- c. **Fuze.** The fuze is an M204A1 or M204A2.
- d. **Weight.** Each grenade weighs 21 ounces.
- e. **Capabilities.** The average soldier can throw these grenades 40 meters. They have an effective casualty radius of 15 meters.
- f. **Color and Markings.** These grenades have an olive drab body with a single yellow band at the top and yellow markings, which indicate a high-explosive filler.

WARNING

Although the casualty-producing radius of the M26 grenade is 15 meters, fragments can disperse out to 230 meters.

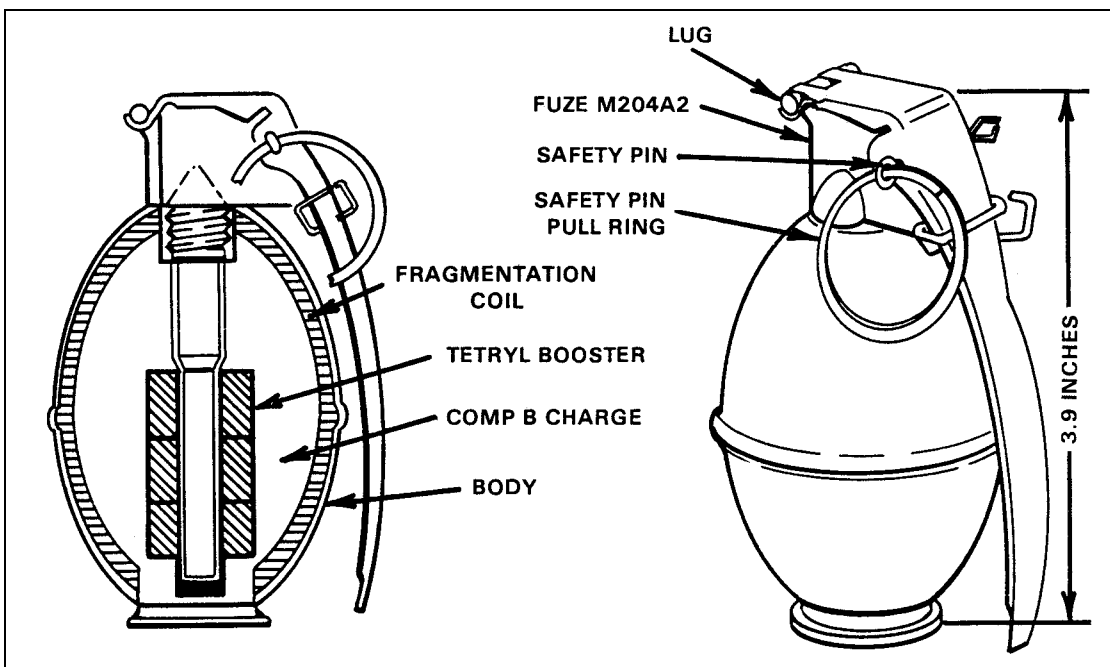


Figure E-4. M26 and M26A1 fragmentation hand grenade.

E-5. M7 AND M7A1 CN RIOT-CONTROL HAND GRENADES

The M7 and M7A1 grenades (Figure E-5) contain only CN (tear gas) filler. The two grenades differ in the amount of filler they contain.

- a. **Body.** The M7 and M7A1 grenade bodies are sheet metal. The M7 has six emission holes at the top and two rows of nine emission holes each along the sides. The M7A1 has four emission holes at the top and one at the bottom.
- b. **Filler.** The M7 grenade has 10.25 ounces of CN; the M7A1 has 12.5 ounces of CN.
- c. **Fuze.** The fuze is an M201A1.
- d. **Weight.** The M7 grenade weighs 17 ounces; the M7A1 weighs 18.5 ounces.
- e. **Capabilities.** The average soldier can throw either grenade 35 meters. The grenades produce a dense cloud of irritant agent for 20 to 60 seconds.
- f. **Color and Markings.** Each grenade has a gray body with a single red band and red markings.

WARNING

Friendly forces should don protective masks before using these grenades.

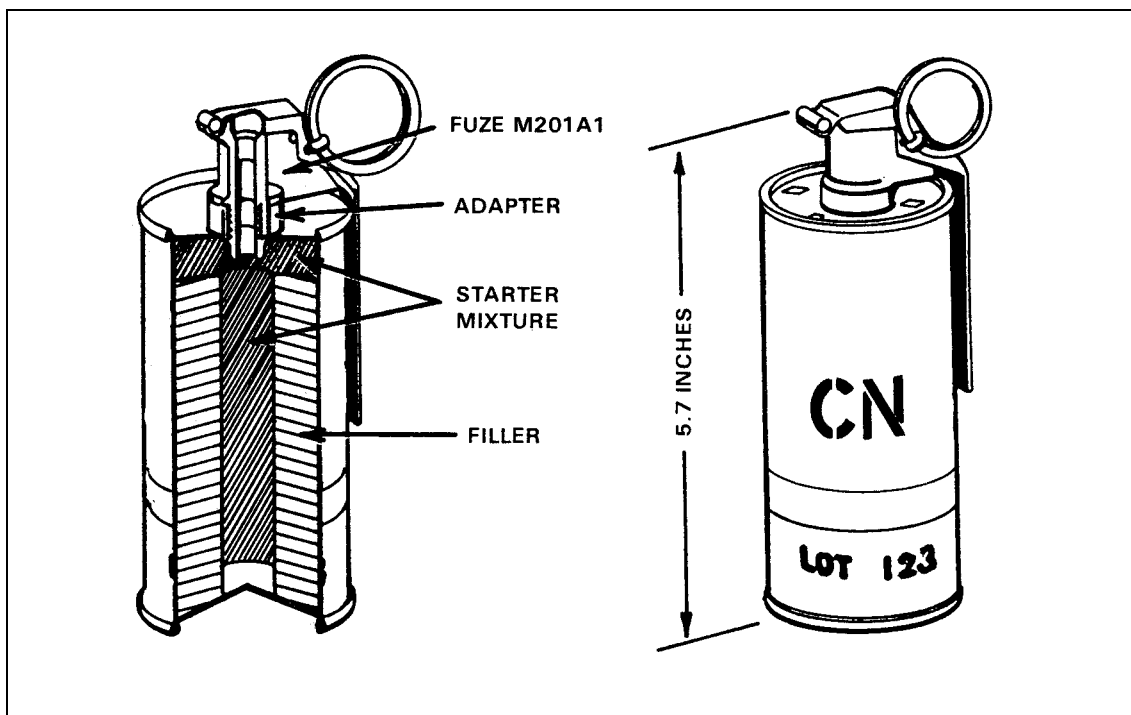


Figure E-5. M7 and M7A1 tear gas hand grenade.

E-6. M6 AND M6A1 CN-DM RIOT-CONTROL HAND GRENADES

The M6 and M6A1 grenades (Figure E-6) contain a combination mixture of CN and DM. They differ chiefly in external appearance and the manner in which the filler is combined.

a. **Body.** The M6 and M6A1 grenade bodies are sheet metal. The M6 has six emission holes at the top and two rows of nine emission holes each along the sides. The M6A1 has four emission holes at the top and one at the bottom.

b. **Filler.** The M6 grenade has 10.5 ounces of CN-DM mixture; the M6A1 has 9.5 ounces of CN-DM mixture.

c. **Fuze.** The fuze is an M201A1.

d. **Weight.** The M6 grenade weighs 17 ounces; the M6A1 weighs 20 ounces.

e. **Capabilities.** The average soldier can throw either grenade 35 meters. The grenades emit a dense cloud of irritant agent for 20 to 60 seconds

f. **Color and Markings.** These grenades have gray bodies with a single red band and red markings. (Under the standard color-coding system, the single red band and markings indicate nonpersistent riot-control filler. A double red band and markings indicate persistent riot-control filler, and any combination of green bands and markings indicates casualty-producing filler. Currently, there are no casualty-producing agents in hand grenade form.)

WARNING

Friendly forces should don protective masks before using these grenades.

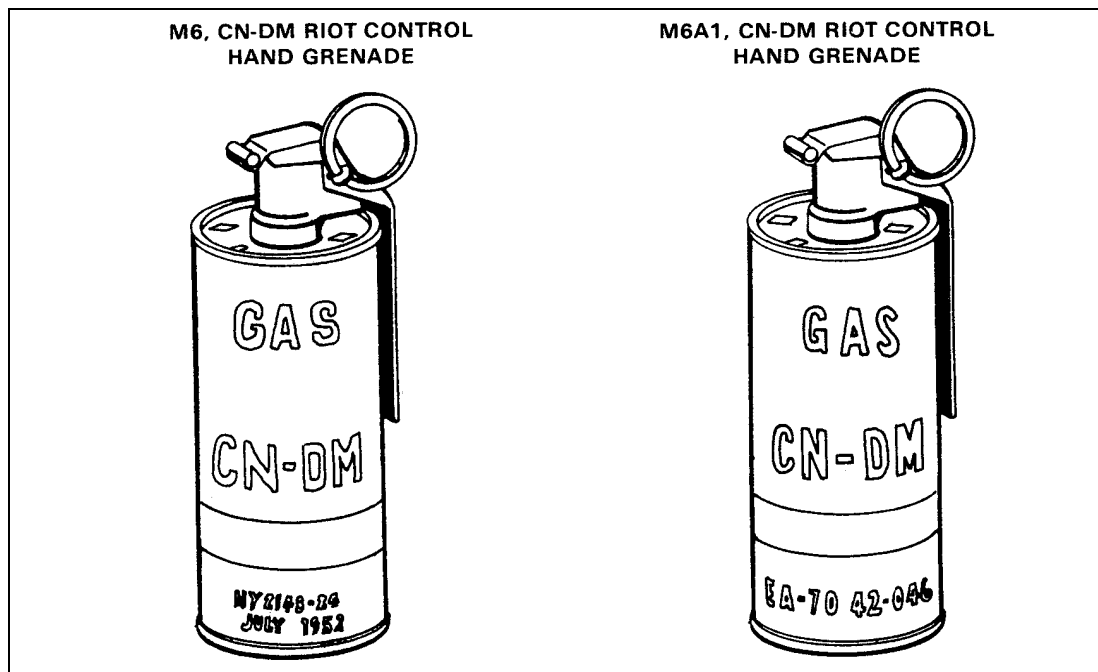


Figure E-6. M6 and M6A1 riot-control hand grenade.

E-7. ABC-M25A1 AND ABC-M25A2 RIOT-CONTROL HAND GRENADES

The ABC riot-control hand grenade is a bursting munition with an integral fuze (Figure E-7). The M25A2 grenade is an improved version of the M25A1 grenade. The two types of grenades differ primarily in body construction. They are used to deliver all three types of riot-control agents presently used in hand grenades.

- a. **Body.** The body of this grenade is compressed fiber or plastic sphere.
- b. **Filler.** The fillers of the M25 series of riot-control hand grenades vary in weight and composition according to the type of agent contained in the grenade. All fillers are mixed with silica aerosol for increased dissemination efficiency.
- c. **Fuze.** The fuze type is integral.
- d. **Weight.** Each grenade weighs 7.5 to 8 ounces, depending on the type of filler.
- e. **Capabilities.** The average soldier can throw the grenade 50 meters. The M25 series of riot-control hand grenades have a radius burst (visible cloud grenade) of about 5 meters, but fragments of the grenade are occasionally projected up to 25 meters.
- f. **Color and Markings.** The color and markings are the same as the M6 and M6A1 grenades (paragraph E-6f). Most grenades of the M25 series currently in use are not painted according to any color-coding system. They are either totally unpainted or have only a red band and red markings.

WARNING

When the ABC-M25A1 grenade is employed, do not drop it because it may go off immediately. Do not attempt to replace a pulled safety pin and do not relax thumb pressure arming sleeve after the safety pin is pulled. Friendly forces should don protective masks before using these grenades.

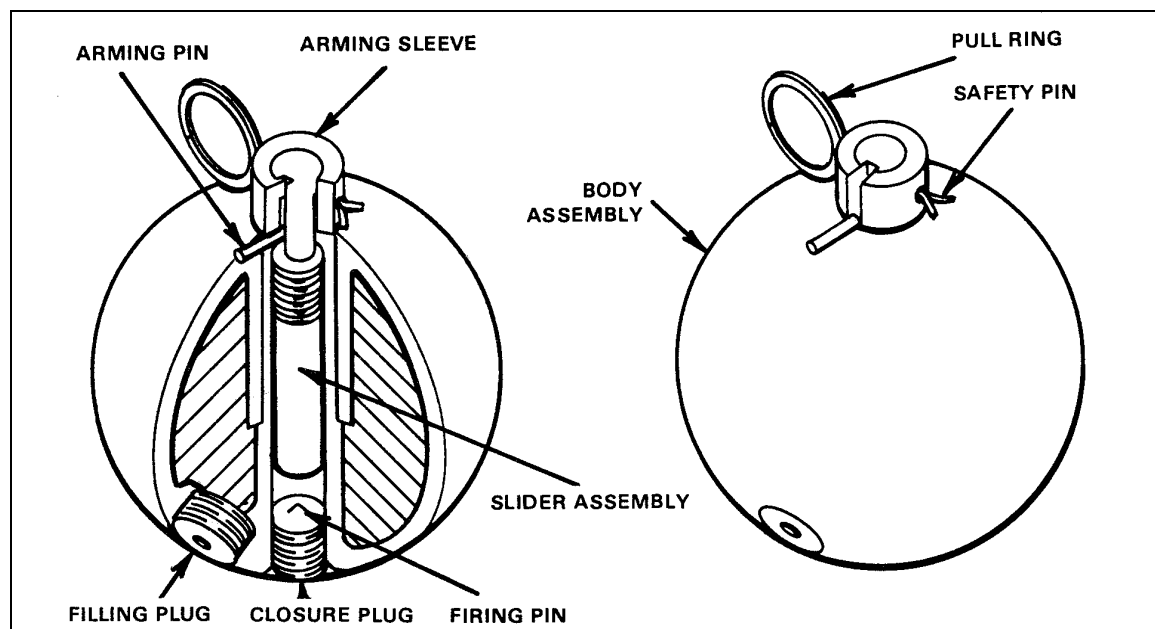


Figure E-7. The ABC-M25A1 riot-control hand grenade.

E-8. M34 WHITE PHOSPHORUS HAND GRENADE

The M34 chemical smoke grenade is the most versatile of all hand grenades (Figure E-8). The grenade can be used for signaling, screening, or incendiary missions, or for producing casualties. The use of this grenade also has a psychological impact on the enemy.

- a. **Body.** The M34 WP grenade body is compressed fiber or plastic sphere.
- b. **Filler.** The filler has 15 ounces of white phosphorous.
- c. **Fuze.** The fuze is an M206A2.
- d. **Weight.** The grenade weighs 27 ounces.
- e. **Capabilities.** The average soldier can throw the grenade 30 meters. The grenade has a bursting radius of 35 meters. All friendly personnel within this 35-meter area should be in a covered position to avoid being struck by burning particles. The WP filler burns for about 60 seconds at a temperature of 5,000 degrees Fahrenheit. This intense heat causes the smoke produced by the grenade to rise rapidly, especially in cool climates, making the M34 grenade less desirable for use as a screening agent. (The M15 WP smoke hand grenade is similar to the M34. For more information, refer to TM 9-1330-200-12.)
- f. **Color and Markings.** Under the old ammunition color-coding system, the white phosphorous grenade is light gray with a single yellow band and yellow markings. Under the new standard color-coding system, the M34 grenade is light green with a single yellow band and light red markings.

NOTE: Most M34 WP smoke hand grenades presently in use were manufactured before the standard color-coding system agreement and are painted according to the old color code.

WARNING

The M34 has a bursting radius of 35 meters, which is farther than the average soldier can throw it; therefore, the thrower must be in a covered or protected position.

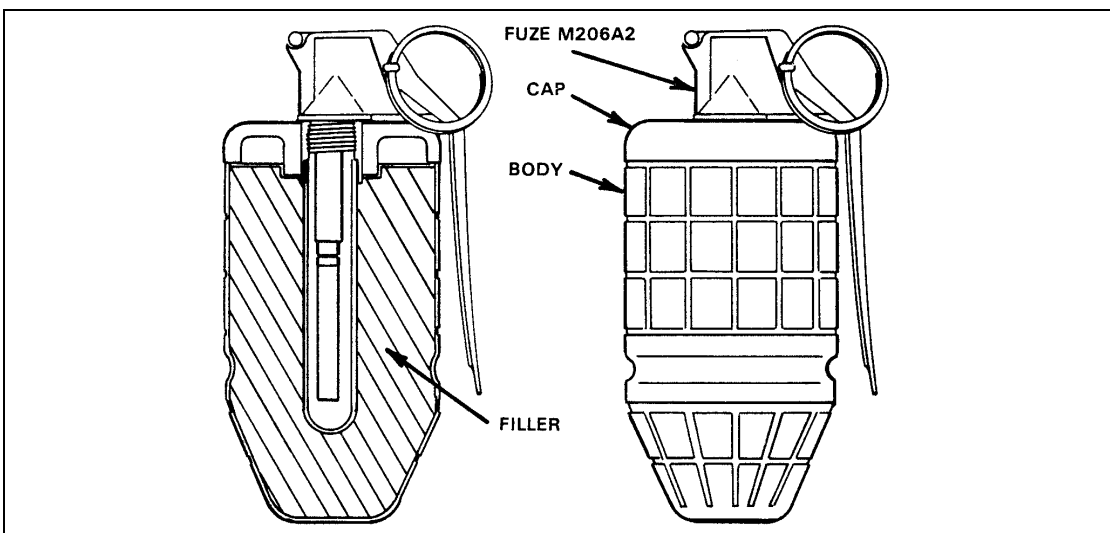


Figure E-8. M34 WP smoke hand grenade.

E-9. AN-M8 HC WHITE SMOKE

This grenade is used to produce dense clouds of white smoke for signaling and screening (Figure E-9).

- a. **Body.** The grenade body is a sheet steel cylinder.
- b. **Filler.** The filler has 19 ounces of Type C, HC smoke mixture.
- c. **Fuze.** The fuze is an M201A1.
- d. **Weight.** The grenade weighs 24 ounces.
- e. **Capabilities.** The average soldier can throw the AN-M8 30 meters. The grenade emits a dense cloud of white smoke for 105 to 150 seconds.
- f. **Color and Markings.** The grenade has a light green body with black markings and a white top.

WARNING

THE AN-M8 HAND GRENADE PRODUCES HARMFUL HYDROCHLORIC FUMES THAT IRRITATE THE EYES, THROAT, AND LUNGS. IT SHOULD NOT BE USED IN CLOSED-IN AREAS UNLESS SOLDIERS ARE WEARING PROTECTIVE MASKS.

WARNING

ANY DAMAGED AN-M8 HC GRENADES THAT EXPOSE THE FILLER ARE HAZARDOUS. EXPOSURE OF THE FILLER TO MOISTURE AND AIR COULD RESULT IN A CHEMICAL REACTION THAT WILL IGNITE THE GRENADE.

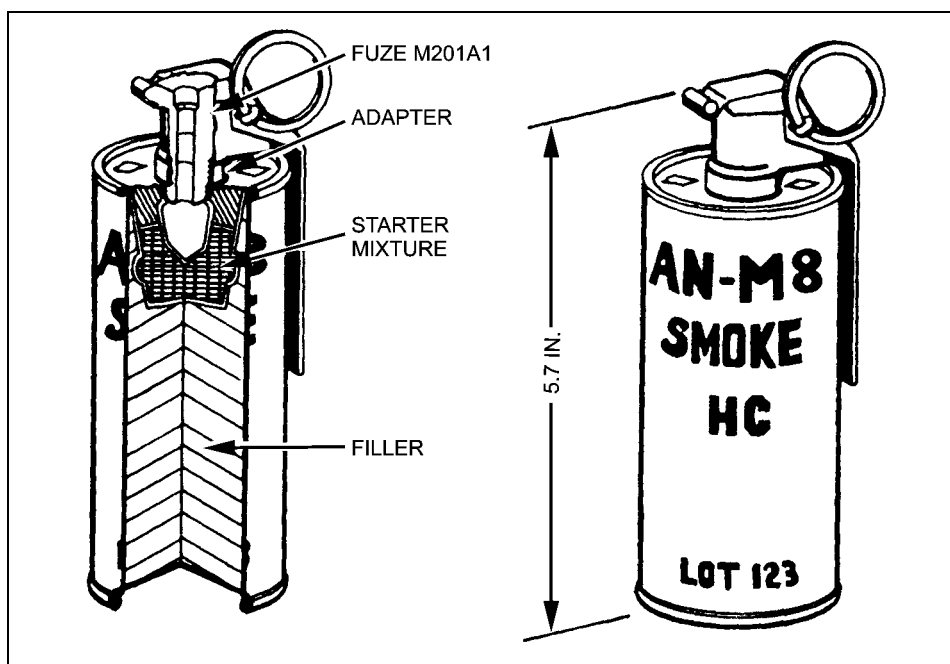


Figure E-9. AN-M8 HC white smoke grenade.

E-10. SAFETY CLIPS

Improvements have been made in safety clips. There are four types of safety clips that might be encountered on the obsolete grenades (Figure E-10).

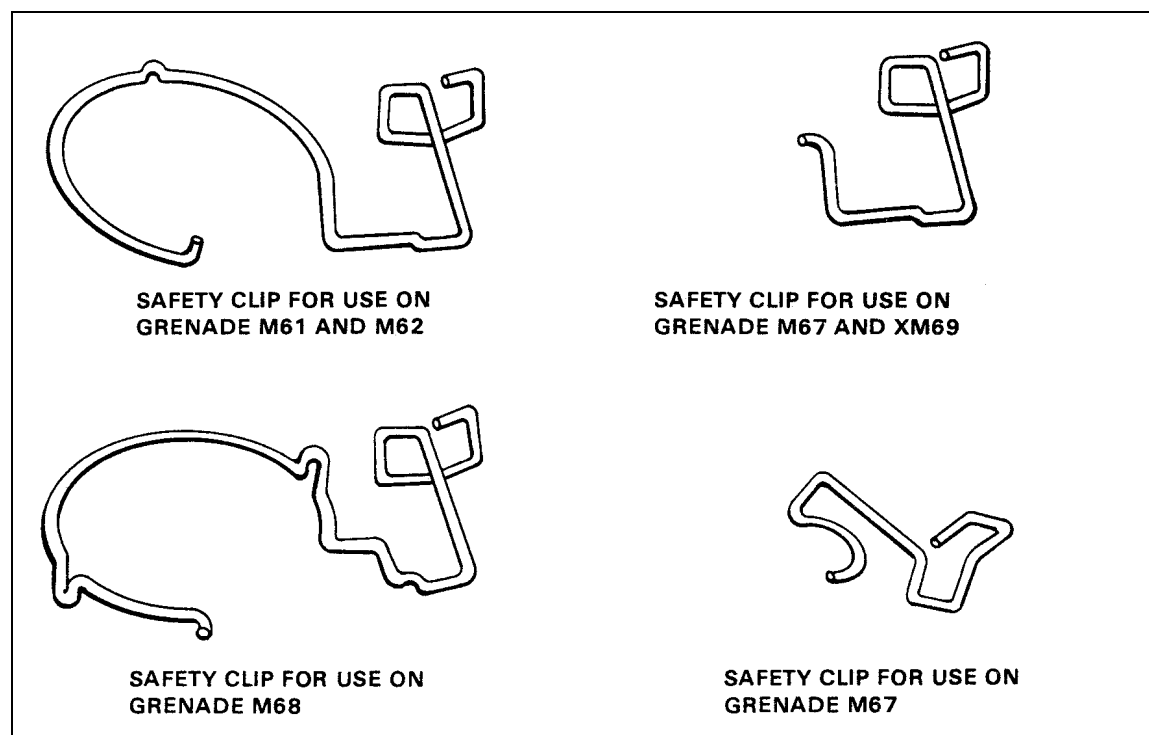


Figure E-10. Safety clips on obsolete grenades.