

APPENDIX D

OBSOLETE HAND GRENADES

This appendix provides data for identifying and understanding the characteristics 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.

D-1. M30 PRACTICE GRENADE

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

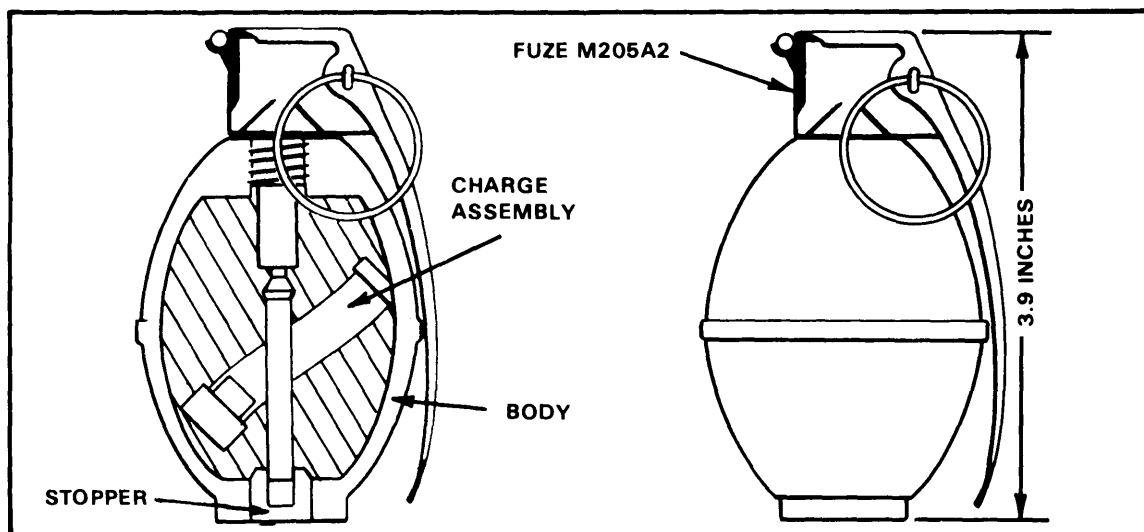


Figure D-1. M30 practice grenade.

- a. Body. Cast iron. (The grenade body is reusable.)
- b. Fuze. M205A1 or M205A2.
- c. Weight. 16 ounces.
- d. Safety Clip. Figure 1-7.
- e. Capabilities. The average soldier can throw the grenade 40 meters. The M30 grenade emits a small puff of white smoke after a delay of 4 to 5 seconds and makes a loud popping noise.
- f. Color and Markings. Light blue with white markings.

WARNING: FUZE FRAGMENTS MAY EXIT THE HOLE IN THE BASE OF THE GRENADE BODY, CAUSING INJURY

D-2. MK1 ILLUMINATING HAND GRENADE

The MK1 illuminating hand grenade is a ground signaling and illuminating item (Figure D-2). Its uses are similar to ground pyrotechnic signals, 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 because the grenade may become embedded in the 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 of its incendiary nature, caution should be exercised to prevent fires, which would be detrimental to tactical operations.

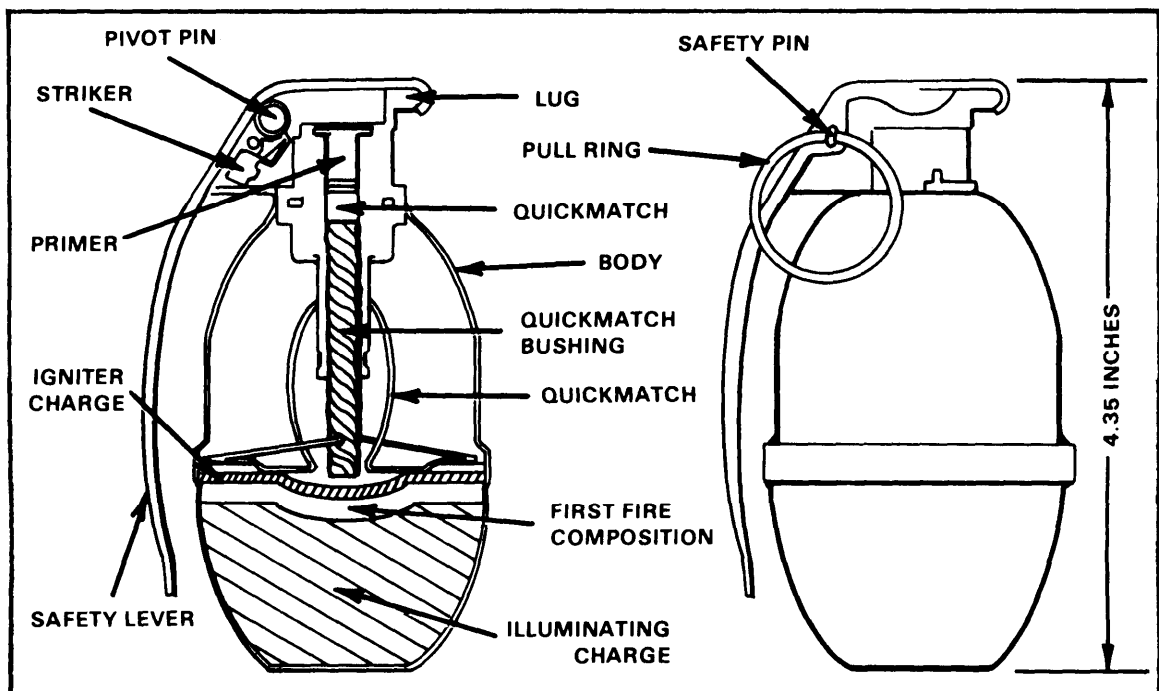


Figure D-2. MK1 illuminating grenade.

- a. Body. Sheet steel.
- b. Filler. 3.5 ounces of illuminating pyrotechnic composition.
- c. Fuze. Special igniter. The special igniter 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. 10 ounces.

e. Capabilities. The average soldier can throw the grenade 40 meters. The filler will burn for 25 seconds, producing 55,000 candlepower. The MK1 grenade will illuminate an area 200 meters in diameter.

f. Color and Markings. White with black markings (old); unpainted with black markings (new).

WARNING: AVOID LOOKING DIRECTLY AT THE ILLUMINATING GRENADE AS IT BURNS. THE INTENSITY OF THE LIGHT MAY DAMAGE THE RETINA.

D-3 . MK2 FRAGMENTATION HAND GRENADE

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

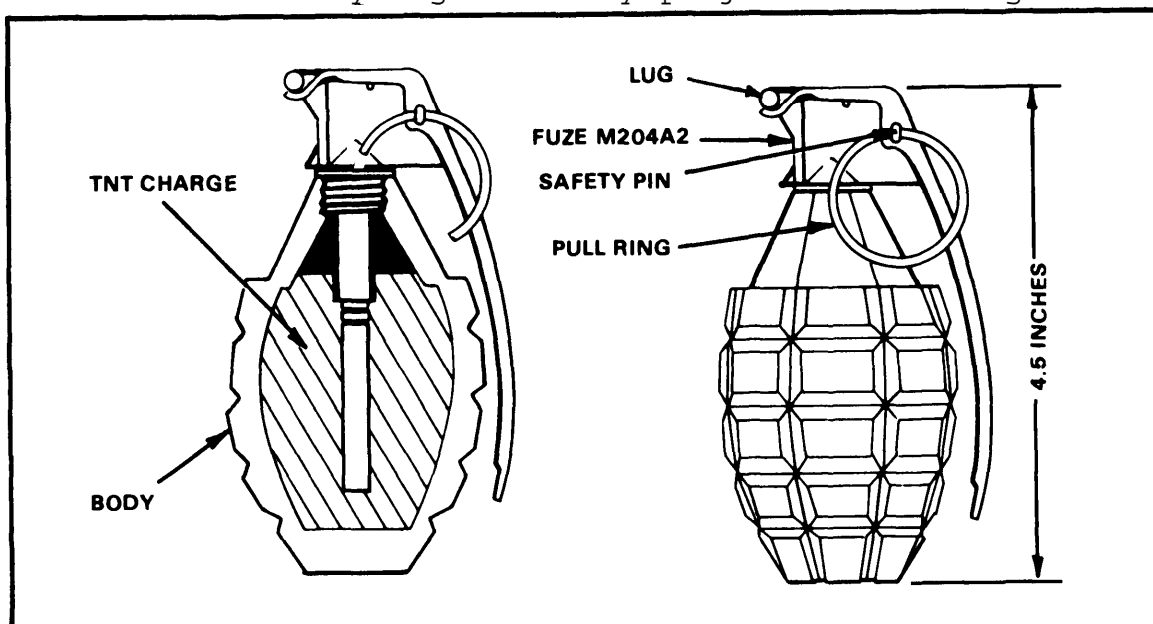


Figure D-3. MK2 fragmentation hand grenade.

- a. Body . Cast iron.
- b. Filler. TNT (flaked or granular).
- c. Fuze. M204A1, M204A2.
- d. Weight. 21 ounces.
- e. Capabilities. The average soldier can throw the grenade 30 meters. The grenade has a bursting radius of 10 meters.
- f. Color. Olive drab body with a single yellow band 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.

D-4. M26 AND M26A1 FRAGMENTATION HAND GRENADES

These grenades are used to supplement small arms fire against the enemy in close combat (Figure D-4). The grenade produces casualties by high velocity projection of fragments.

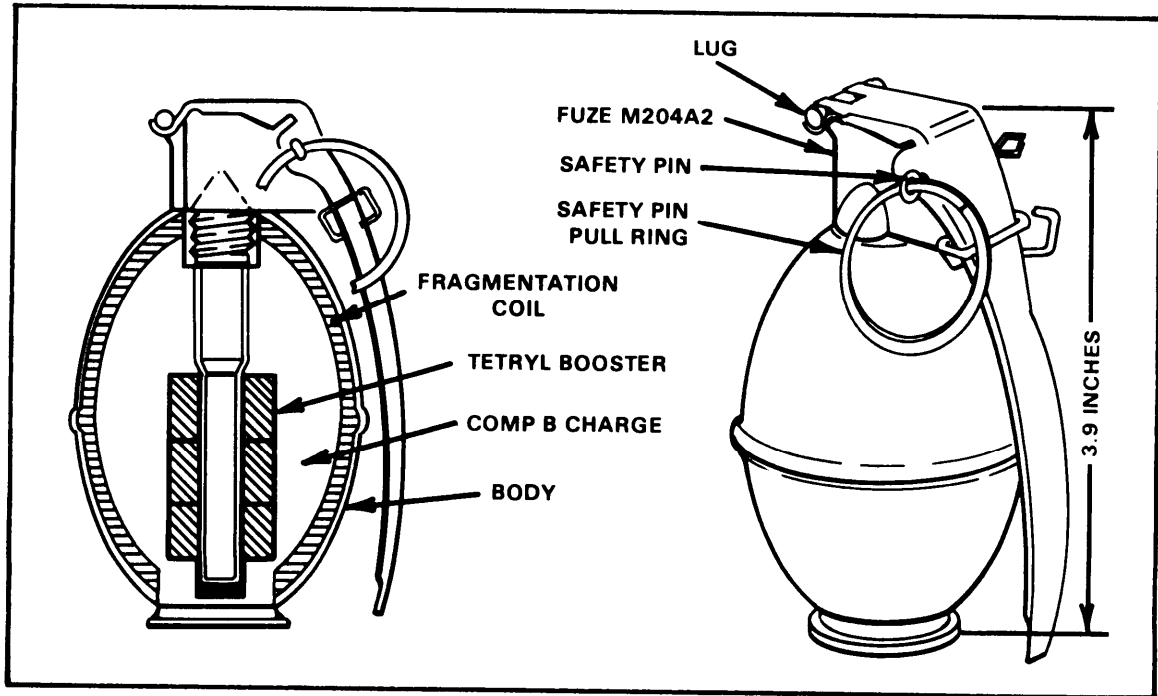


Figure D-4. M26 and M26A1 fragmentation hand grenades.

- a. Body. Cast iron.
- b. Filler. TNT (flaked or granular).
- c. Fuze. M204A1, M204A2.
- d. Weight. 21 ounces.
- e. Capabilities. The average soldier can throw the grenade 40 meters. The grenade has an effective casualty radius of 15 meters.
- f. Color and Markings. 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 THIS GRENADE IS 15 METERS, FRAGMENTS CAN DISPERSE UP TO 230 METERS

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

These grenades contain only CN (tear gas) for a filler (Figure D-5). They differ in the amount of filler they contain.

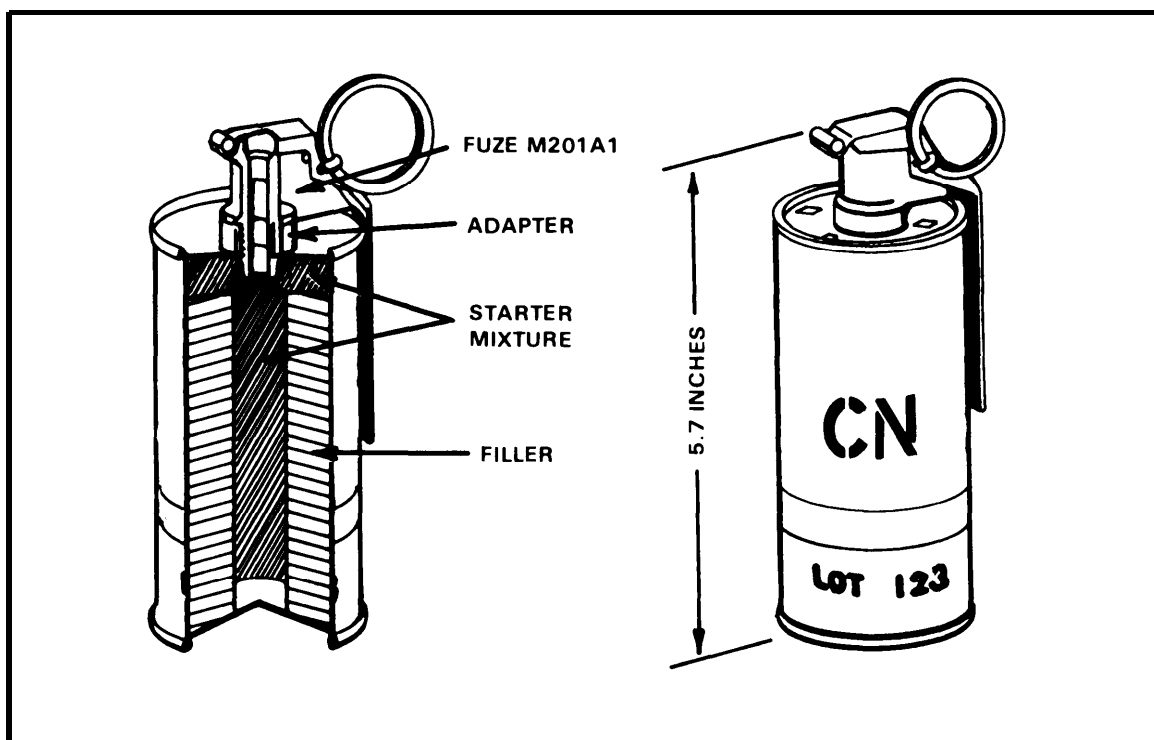


Figure D-5. M7 and M7A1 tear gas grenades.

- a. Body. M7 grenade -- same as the M6 (paragraph D-7a).
M7A1 grenade -- same as the MA1 (paragraph D-7a).
- b. Filler. M7 grenade -- 10.25 ounces of CN.
M7A1 grenade -- 12.5 ounces of CN.
- c. Fuze. M201A1.
- d. Weight. M7 grenade -- 17 ounces.
M7A1 grenade -- 18.5 ounces.
- e. Capabilities. The average soldier can throw either grenade 35 meters. Both grenades produce a dense cloud of irritant agent for 20 to 60 seconds.
- f. Color and Markings. The M7 and M7A1 grenades have a gray body with a single red band and red markings.

WARNING: FRIENDLY FORCES SHOULD DON PROTECTIVE MASKS BEFORE USING THESE GRENADES.

D-6. ABC-M7A2 HAND GRENADE

This grenade is used to control counterinsurgencies and for other tactical missions (Figure D-6). It also may be used to simulate casualty agents during training. It looks the same as the M7A1 in Figure D-5.

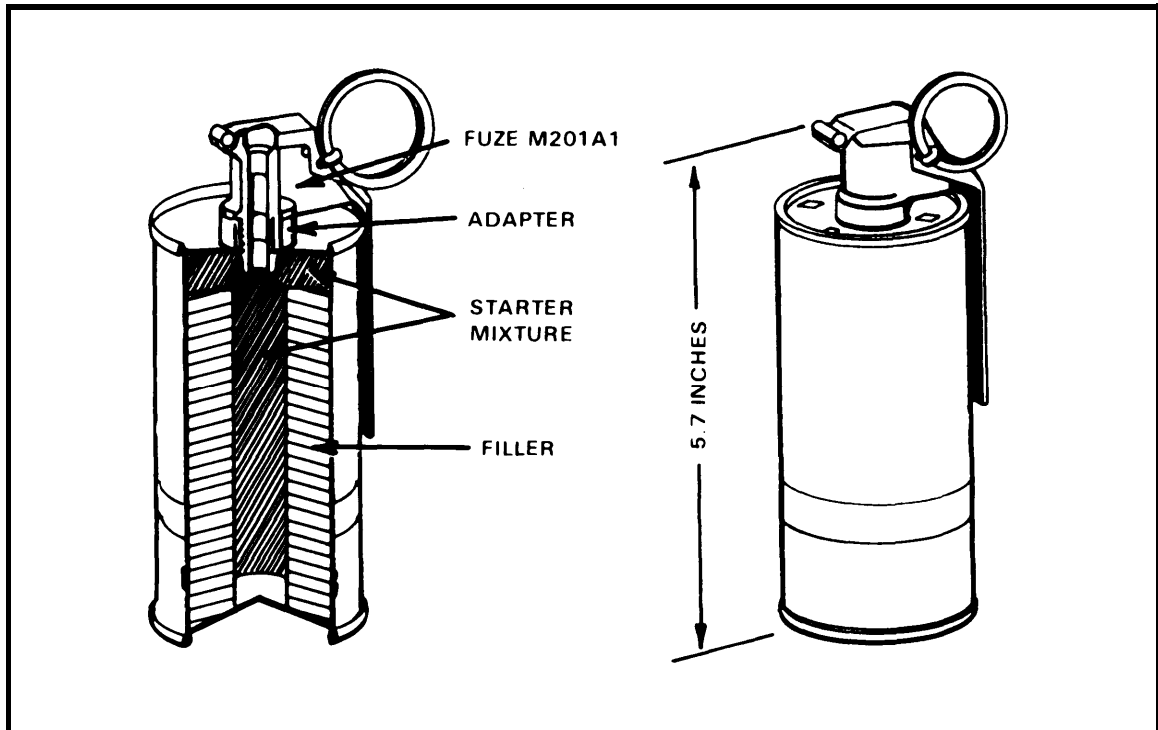


Figure D-6. ABC-M7A2 hand grenade.

- a. Body. Sheet metal.
- b. Filler. CN-pyrotechnic composition.
- c. Fuze. M201A1.
- d. Weight. 18.5 ounces.
- e. Capabilities. The average soldier can throw the grenade 35 meters. The grenade produces a dense cloud of irritant agent for 20 to 60 seconds.
- f. Color and Markings. The M7A2 grenades have a gray body with a single red band and red markings.

WARNING: FRIENDLY FORCES SHOULD DON PROTECTIVE MASKS BEFORE USING THIS GRENADE

D-7 . M6 AND M6A1 CN-DM RIOT CONTROL HAND GRENADES

The M6 and M6A1 grenades contain a combination mixture of CN and DM (Figure D-7). They differ chiefly in external appearance and the manner in which the filler is combined.

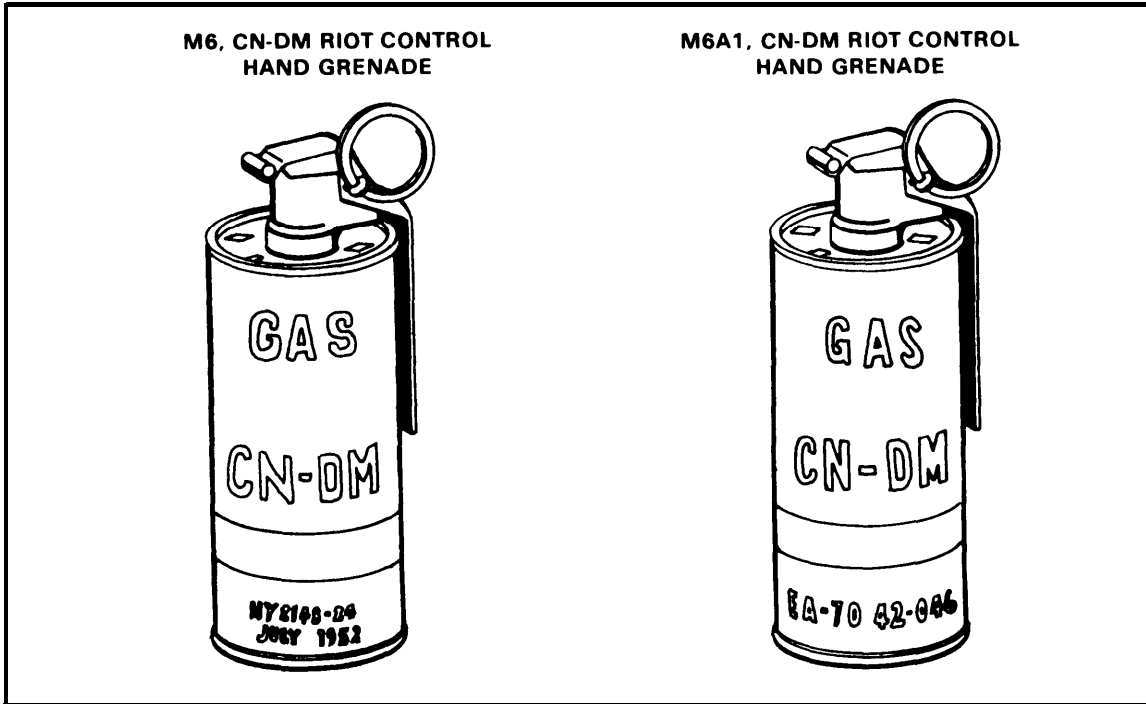


Figure D-7. M6 and M6A1 riot control hand grenades.

- a. Body. Sheet metal. The M6 has six emission holes at the top and two rows of nine emission holes each along the sides. The M6A1 grenade has four emission holes at the top and one at the bottom.
- b. Filler. M6 grenade -- 10.5 ounces of CN-DM mixture.
M6A1 grenade -- 9.5 ounces of CN-DM mixture.
- c. Fuze. M201A1.
- d. Weight. M6 grenade -- 17 ounces.
M6A1 grenade -- 20 ounces.
- e. Capabilities. The average soldier can throw either grenade 35 meters. Both grenades emit a dense cloud of irritant agent for 20 to 60 seconds.
- f. Color and Markings. The M6 and M6A1 grenades have a gray body with a single red band and red markings. (Under the standard color-coding system, the single red band and

red markings indicate a nonpersistent, riot control filler. A double red band and red markings indicate a persistent riot control filler, and any combination of green bands and green markings indicates a casualty-producing filler. Currently, there are no casualty-producing agents in grenade form.)

WARNING: FRIENDLY FORCES SHOULD DON PROTECTIVE MASKS BEFORE USING THESE GRENADES

D-8. ABC-M25A1/ABC-M25A2 RIOT CONTROL HAND GRENADES

The ABC-M25A1 riot control hand grenade is a bursting munition with an integral fuze (Figure D-8). 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.

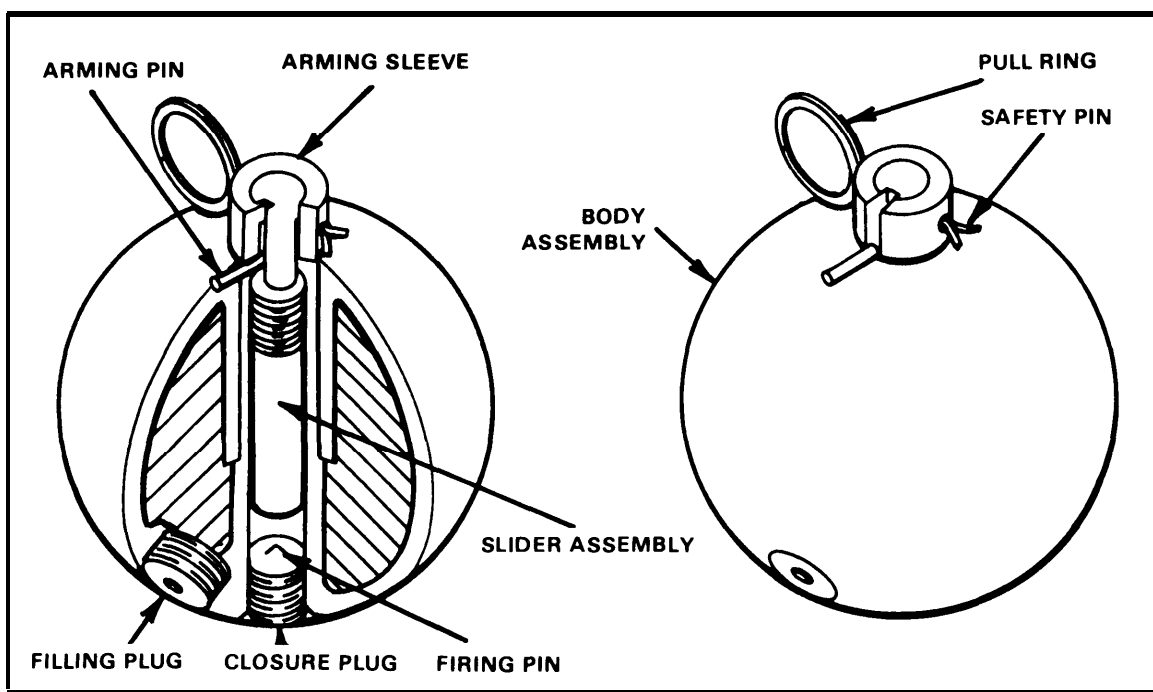


Figure D-8. The ABC-M25A1 riot control hand grenade.

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 ON THE ARMING SLEEVE AFTER THE SAFETY PIN IS PULLED.

- a. Body. 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 aerogel for increased dissemination efficiency.

c. Fuze. Integral.

d. Weight. 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 agent) of approximately 5 meters, but fragments of the grenade are occasionally projected 25 meters.

f. Color and Markings. Same as the M6 and M6A1 grenades (paragraph D-7f). (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: FRIENDLY FORCES SHOULD DON PROTECTIVE MASKS BEFORE USING THESE GRENADES

D-9. M34 WHITE PHOSPHOROUS HAND GRENADE

The M34 chemical smoke grenade is the most versatile of all hand grenades (Figure D-9). 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. Rolled steel (serrated to facilitate fragmentation).

b. Roller. 15 ounces of white phosphorous.

c. Fuze. M206A2.

d. Weight. 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 approximately 60 seconds at a temperature of 5,000 degrees Fahrenheit. This intense heat causes the smoke produced by the grenade to rise quite 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/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 prior to the standard color-coding system agreement and are painted according to the old color code.

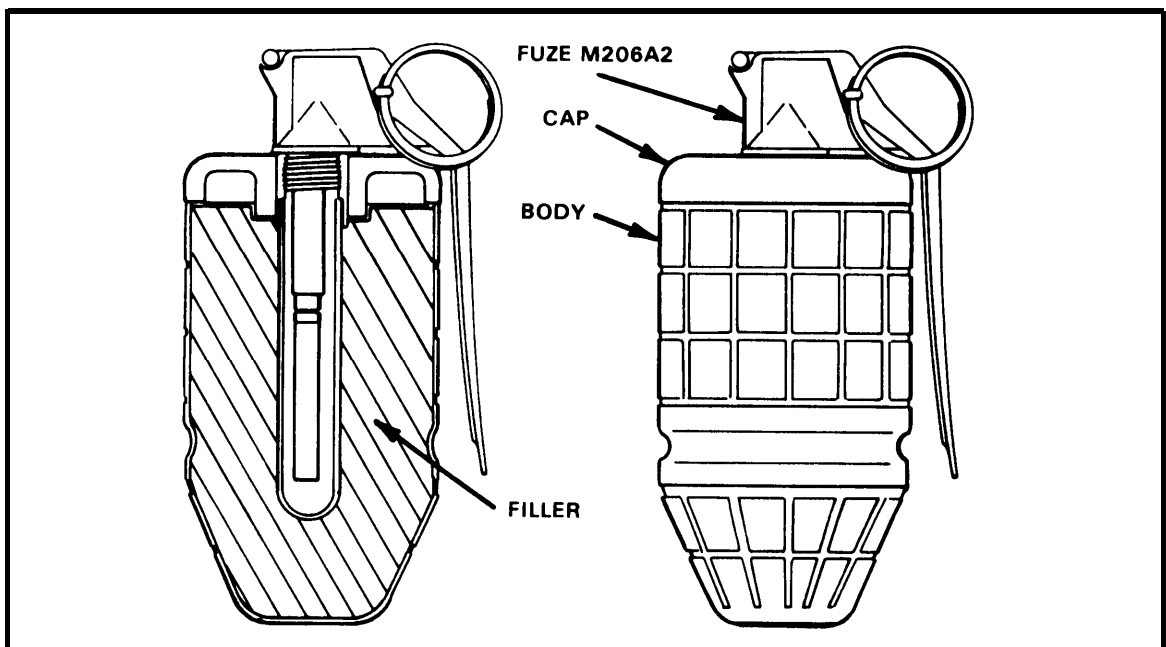
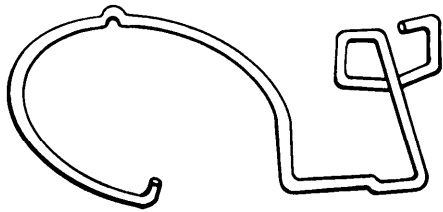


Figure D-9. M34 WP smoke hand grenade.

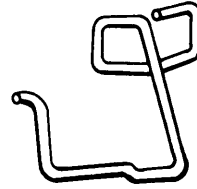
WARNING THE M34 HAS A BURSTING RADIUS OF 35 METERS WHICH IS FARTHER THAN THE AVERAGE SOLDIER CAN THROW IT THEREFORE THE THROWER MUST BE IN A COVERED OR PROTECTED POSITION

D-10. SAFETY CLIPS

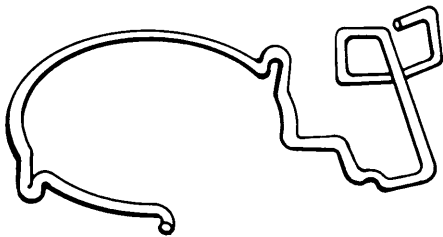
Improvements have also been made in safety clips. There are four types of safety clips that might be encountered on the obsolete grenades (Figure D-10).



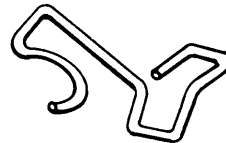
**SAFETY CLIP FOR USE ON
GRENADE M61 AND M62**



**SAFETY CLIP FOR USE ON
GRENADE M67 AND XM69**



**SAFETY CLIP FOR USE ON
GRENADE M68**



**SAFETY CLIP FOR USE ON
GRENADE M67**

Figure D-10. Safety clips on obsolete grenades.