

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR'S MANUAL

LAUNCHER AND GRENADES, SMOKE: HC, M226

Headquarters, Department of the Army, Washington, D. C.

5 June 1974

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1. Scope. These instructions are for use by the operator. They apply to Launcher and Grenades, Smoke: HC, M226.

2. Record and Report Forms. a. Report accidents involving injury to personnel or damage to material as specified in AR 38540.

b. Report accidents or malfunctions in combat or training as specified in AR 75-1.

c. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750.

d. The reporting of errors, omissions, and recommendations for improving this manual by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to Publications and Blank Forms) and forwarded direct to Commander Edgewood Arsenal, Attn: SAREA-DE-ET, Aberdeen Proving Ground, MD 21010.

3. Description. The M226 grenade launcher (fig. 1) consists of a cylindrical plastic tube which houses one

M225 cartridge, and a two-piece sabot assembly (cover and holder) which contains two AN-M8 HC-filled smoke grenades (fig. 2). The M226 grenade launcher provides a smoke screen for concealing tactical maneuvers of a vehicle. The safety pins are removed from both grenades during assembly, therefore, the munition is armed and ready to function when it is released from the launcher tube. The aluminum-alloy cap assembly is rolled in place over a rubber gasket on the open end of the tube to hold the sabot assembly in place. The carriage containing the percussion primer is positioned in the base of the tube. A threaded plastic retainer holds the M225 cartridge in place. Two synthetic-rubber or felt pads are placed between each grenade and the sabot assembly. A plastic spacer separates the grenades inside the sabot assembly. A synthetic-rubber seal serves as an obturator ring between the sabot assembly and the cartridge.

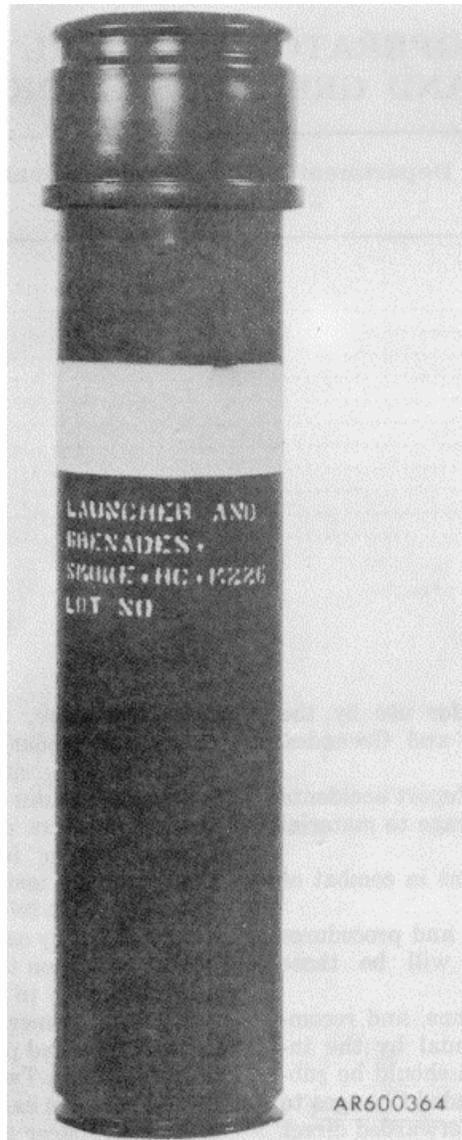


Figure 1. M226 grenade launcher.

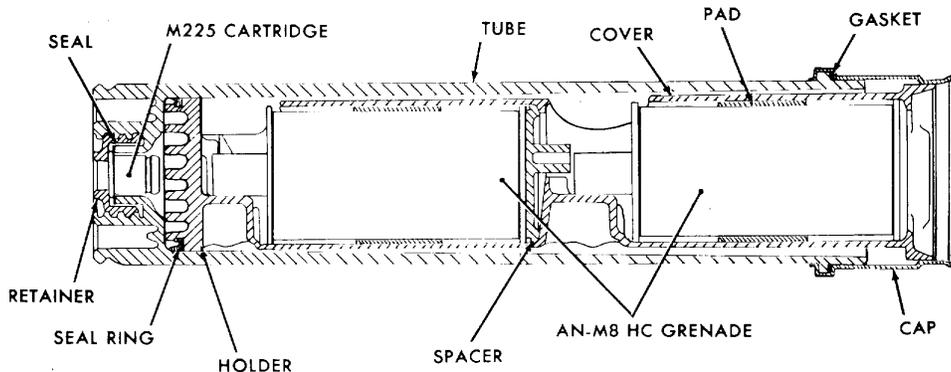


Figure 2. M226 grenade launcher, cross-section view.

4. Tabulated Data. a. M226 Grenade Launcher.

Length.....38.10 centimeters
 Diameter.....9.37 centimeters
 Weight.....2315 grams
 Range.....31 to 46 meters

b. AN-M8 HC Grenade.

Diameter.....6.35 centimeters
 Height.....11.43 centimeters
 Weight.....680 grams
 Fuze.....M201A1
 Fuze delay time.....1.2 to 2 seconds
 Burning time.....105 to 150 seconds

c. M225 Cartridge.

Diameter.....1.83 centimeters
 Length.....2.22 centimeters
 Weight.....8.50 grams
 Primer percussion.....M29A1
 Propellant (BKNO 3) weight.....1.49 grams

5. Functioning

WARNINGS

Never place any portion of the body in front of either end of an M226 grenade launcher.

Always handle an M226 grenade launcher as an armed munition.

Never attempt to disassemble an M226 grenade launcher or sabot assembly. The safety pins have been removed from the grenades during assembly of the M226 grenade launcher.

Always make sure the master switch and individual firing switches are in the OFF position BEFORE loading an M226 grenade launcher into a firing tube mount.

Do not drop the M226 grenade launcher. Striking the cartridge primer may cause the munition to function.

All personnel that are outside a vehicle that fires M226 grenade launchers must remain at least 100 meters (328 ft) from the vehicle during firing.

Always consider a delay in firing as a misfire after three attempts to fire have failed.

Do not use an M226 grenade launcher that has been hit by small arms' fire or has cracks, dents, or other deformities. Isolate these launchers and notify Explosive Ordnance Disposal (EOD) personnel immediately.

Notify Explosive Ordnance Disposal (EOD) personnel when grenades fail to function; give the quantity and location of all unfired grenades.

When a misfire occurs, all personnel must remain 100 meters (328 ft) clear of firing vehicle and firing-vehicle crew must remain "buttoned up" for at least 5 minutes. When an M226 grenade launcher is fired, the firing pin strikes the M225 cartridge percussion primer, which ignites the propellant charge in the M225 cartridge (fig. 2). Gas, which is formed in the sealed projector base cavity, ejects the sabot assembly and grenades through the end of the cap. Then the sabot assembly's cover and holder separate and allow the grenade fuzes to function (TM 9-1330-200 describes the HC grenades).

NOTE

See applicable vehicle manual for specific loading, firing, and unloading procedures.

6. Hangfires, Misfires, and Duds. a. Hangfires. A hangfire is a temporary failure or delay in the action of a percussion primer or propellant charge. When an apparent misfire occurs, wait 10 seconds and make two additional attempts to fire at 10-second intervals.

b. Misfires. A misfire is the failure of the M226 grenade launcher to fire.

c. Duds. A dud is a munition which has not armed as intended or has failed to burn after being fired. Record the number and precise location of all grenade duds and notify Explosive Ordnance Disposal (EOD) personnel.

7. Marking. a. M1226 Grenade Launcher. The tube of the M226 grenade launcher is painted olive drab and has one light-green band (fig. 1). LAUNCHER AND GRENADES, SMOKE: HC, M226 and LOT NO. are marked in light green on the tube below the band.

b. Shipping Box. The shipping box is color coded on two diagonally opposite edges. Light-green identifies smoke ammunition.

8. Packaging and Packing.

WARNINGS

Do not open or repair a damaged M226

grenade launcher shipping box, shipping container, or damaged launcher tube. Isolate the box, container, or tube and notify Explosive Ordnance Disposal (EOD) personnel immediately.

Always use caution when opening an M226 grenade launcher shipping box or shipping container.

Do not use an M226 grenade launcher that has been hit by small arms' fire or has cracks, dents, or other deformities. Isolate these launchers and notify Explosive Ordnance Disposal (EOD) personnel immediately.

Eight launchers are packed in two rows of four each in a three-piece plastic-foam box. The plastic-foam box is held together with tape and is packed in a wirebound wood box that is closed with metal strapping and wire.

9. Shipment and Storage.

Table 1 gives the M226 grenade launcher's shipment and storage requirements.

Table 1. Shipment and Storage Data

Item	Chemical munition storage group	Storage hazard class	Storage compatibility group	Hazard class	DOT* Requirement
					Markings
Launcher and Grenades, Smoke: HC, M226	B	3	A	Explosives, Class B	Special Fireworks. Handle Carefully, Keep Fire Away

*Department of Transportation

10. Destruction to Prevent Enemy Use.

WARNING

Be sure that smoke produced by the burning chemical-agent fillings do not interfere with operations of nearby tactical units.

TM 9-1300-206 contains procedures for destroying ammunition. When M226 grenade launchers are in danger of being captured, authority to destroy them must be obtained from the responsible commander. Destroy the M226 grenade launchers by burning them in a pit or trench. Pile them with flammable material such as brush or dunnage and ignite.

**APPENDIX
REFERENCES**

AR 55-56	Transportation of Dangerous or Hazardous Chemical Materials
AR 75-1	Malfunctions Involving Ammunition and Explosives Reports Control Symbol.
AR 75-14	Interservice Responsibilities for Explosive Ordnance Disposal
AR 385-40	Accident Reporting and Records
AR 385-63	Regulations for Firing Ammunition for Training, Target Practice, and Combat
TM 3-215	Military Chemistry and Chemical Agents
TM 3-220	Chemical, Biological, and Radiological (CBR) Decontamination
TM 3-250	Storage, Shipment, Handling, and Disposal of Chemical Agents and Hazardous Chemicals
TM 9-1300-206	Ammunition and Explosives Standards
TM 9-1330-200	Grenades, Hand and Rifle
TM 38-750	The Army Maintenance Management System (TAMMS)

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