

M315 NONLETHAL, TURRET-MOUNTED, 66-MILLIMETER GRENADE LAUNCHER



66-millimeter discharger



M98 nonlethal, distraction
grenade



M99 nonlethal, blunt trauma
grenade



L96A1 antiriot, irritant and L97A1
antiriot, practice grenades



M98 nonlethal, distraction and M99
nonlethal, blunt trauma grenades

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This graphic training aid (GTA) assists soldiers during the employment of the M98 nonlethal, distraction grenade; the M99 nonlethal, blunt trauma grenade; the L96A1 antiriot, irritant grenade; and the L97A1 antiriot, practice grenade from the nonlethal, turret-mounted, 66-millimeter grenade launcher.

Table 1 provides munition characteristics.

Table 1. Munition Characteristics

Ammunition	Bracket Setting	Range	Payload	Dispenser Time	Department of Defense Ammunition Code (DODAC)
L96A1 antiriot, irritant	100 meters	65 to 95 meters	23 canisters containing chlorobenzalmononitrile (CS)	10 to 12 seconds	FZ14
L97A1 antiriot, practice	100 meters	100 meters	23 canisters containing cinnamic acid (CA)	10 to 12 seconds	FZ15
M98 nonlethal, distraction	50, 75, or 100 meters	50 to 100 meters	3 canisters containing 170 decibel bang and a quick burst of light	NA	FZ16
M99 nonlethal, blunt trauma	50, 75, or 100 meters	50 to 100 meters	3 canisters containing 140 .32-caliber plastic (polyvinylchloride [PVC]) balls	NA	FZ17

WARNINGS

- 1. Handle grenades with care.**
- 2. Do not drop or throw grenades.**
- 3. Do not use damaged grenades.**
- 4. Keep grenades away from electric sparks.**
- 5. Do not place grenades near hot surfaces.**
- 6. Keep grenades sealed until use.**
- 7. Do not position your body in front of the discharger after it is loaded.**

LOADING THE GRENADES

Remove and unpack the grenade from the ammo container. Keep it free of dirt and grease, and then perform the following steps:

Step 1. Insert the grenade into the discharger tube (electrical contact first).

Step 2. Push the grenade down gently until the spring clip engages the tip at the bottom of the tube.

Step 3. Rotate the grenade one-quarter turn, and ensure electrical contact. You will feel and hear two distinct clicks as both clips seat on the firing pin.

NOTE: Check the markings on the grenade you are loading to ensure that it is the correct one for your mission. Always grasp the grenade by the sides as shown. Never load the grenade with your hand or fingers over the top of it. Ensure that your head and body are to the side or below the grenade when loading.

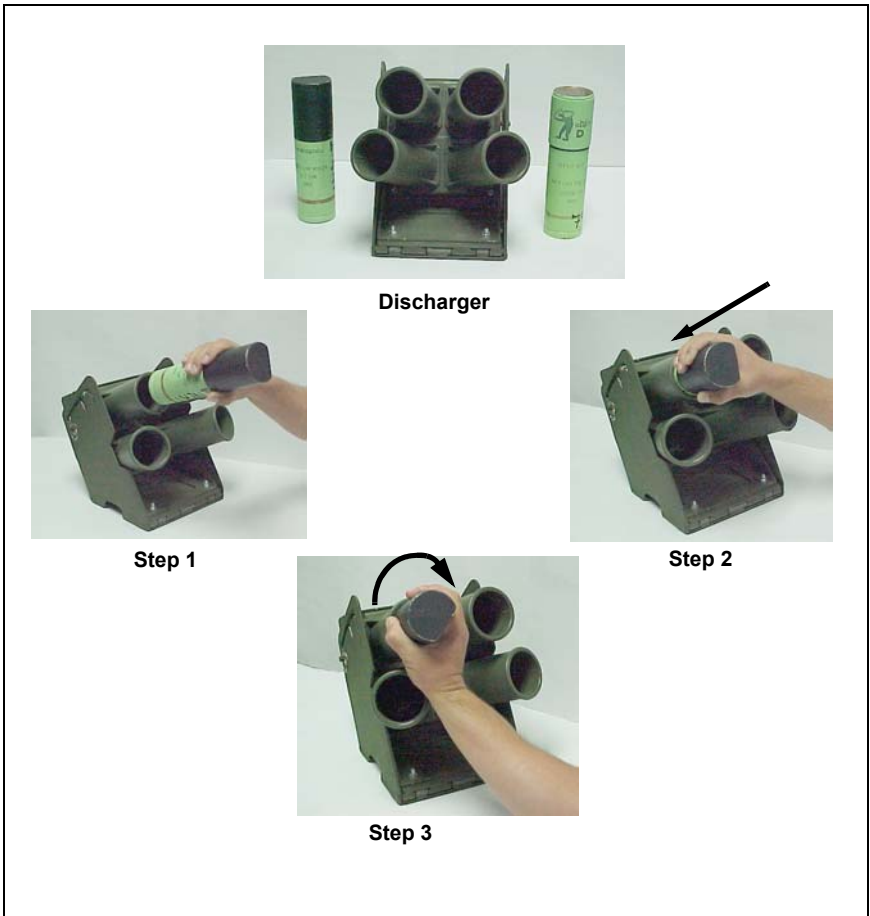


Figure 1. Loading the Grenades

LAUNCHING THE GRENADES

WARNING

Do not fire L96A1 or L97A1 grenades from the 50- or 75-meter setting. These settings are for M98 and M99 grenades only.

Perform the following steps:

Step 1. Adjust the elevation lever on the aiming bracket for the required launch distance as follows:

- M98 and M99: 50, 75, or 100 meters.
- L96A1 and L97A1: 100 meters only.

Step 2. Place the *ARM/OFF* switch to the *ARM* position by pulling out the switch, and then push up the switch (the indicator light should be on).

Step 3. Press the *FIRE* button to launch all four grenades.

Step 4. Switch the *ARM/OFF* switch to the *OFF* position (the indicator light should be off).

Step 5. Verify that all the grenades have been launched as soon as the tactical situation permits. If all grenades do not launch, refer to the hangfire/misfire procedures.

WARNING

Ensure that the line of fire is free of obstructions that could cause deflection of rounds.



Step 1



FIRE
button

Steps 2, 3, and 4

Figure 2. Launching the Grenades

HANGFIRES AND MISFIRES

A **hangfire** is the temporary failure or a delay in the action of the propellant charge. A **misfire** is the failure of a grenade to launch from the discharger tube.

WARNING

Keep the vehicle with the mounted grenade launcher pointed downrange until the misfired grenades are removed. Follow the guidelines in Technical Manual 9-1370-203-20.

In the case of a hangfire, wait 10 seconds and try to launch the grenade again. If this fails, wait another 10 seconds and try again. If the second refire attempt fails, treat the grenade as a misfire and take the following actions:

- Place the *ARM/OFF* switch to the *OFF* position.
- Wait 15 minutes.
- Ensure that the grenade is properly seated in the discharger tube.
- Place the *ARM/OFF* switch to the *ARM* position.
- Attempt to fire.

If the refire attempt fails, wait 15 minutes and try to fire the grenade from another discharger tube. When relocating the grenade, hold it away from your body and point it downrange. If the grenade fires from a different tube, notify unit maintenance of the defective tube. If the grenade fails to fire—

- Remove the grenade.
- Place it at least 200 meters from personnel and equipment.
- Notify the explosive ordnance detachment (EOD) to dispose of the grenade.

DUDS

WARNING

Keep the vehicle with the mounted grenade launcher pointed downrange until the dud grenades are removed. Follow the guidelines in TM 9-1370-203-20.

An M98 or M99 dud is one that has fired its payload from a discharger tube, but one or more canisters have failed to burn or explode. An L96A1 or L97A1 dud is one that failed to dispense its payload when it was launched from the discharger tube. In the case of a dud, wait 15 minutes, notify EOD, and discard it according to the unit standing operating procedures (SOPs). Provide the type, quantity, and precise location of the grenades to EOD.

UNLOADING THE DISCHARGERS

WARNING

Electrical trouble can cause a grenade to launch prematurely. Ensure that the *ARM/OFF* switch is in the *OFF* position before unloading a grenade. Do not place a grenade near a hot surface. Do not position your body in front of a discharger after it is loaded.

Perform the following steps:

Step 1. Place the *ARM/OFF* switch to the *OFF* position.

Step 2. Remove the grenades from the discharger tubes, and return the grenades to their original containers.

Step 3. Install the discharger cover on the tubes, and secure the grenades according to the unit SOP.