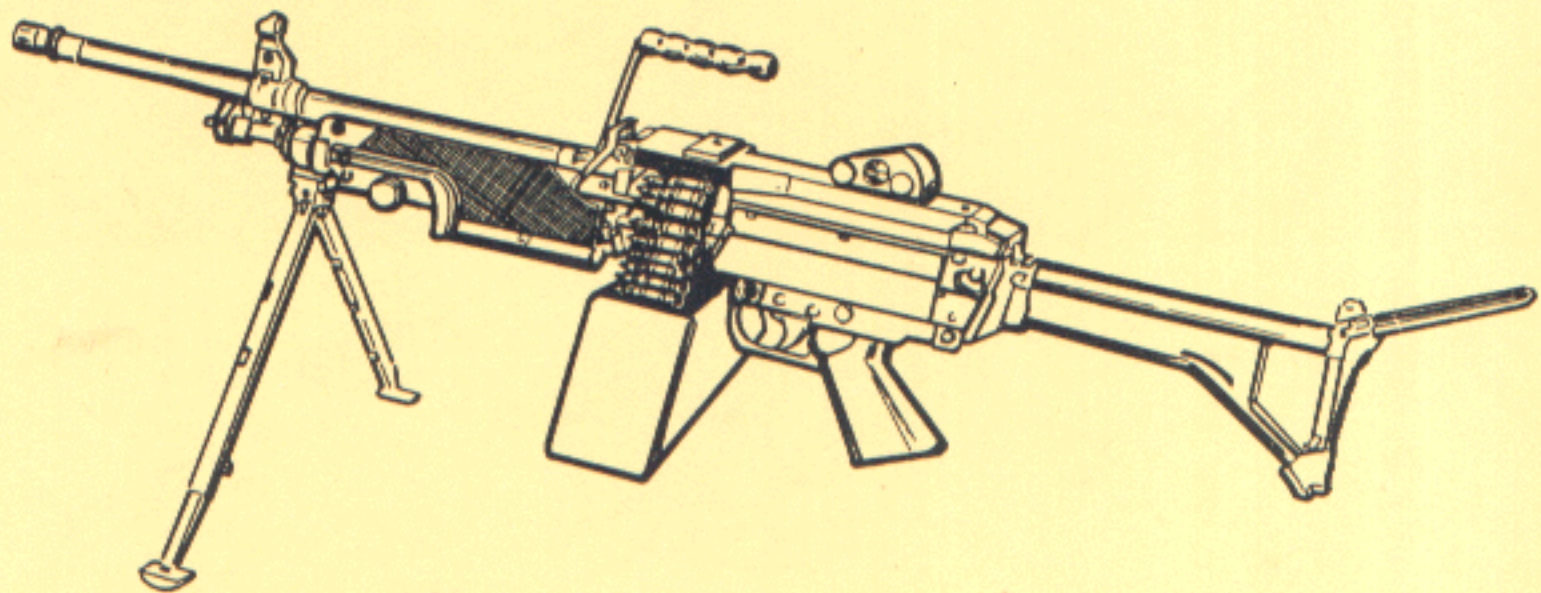


FM 23-14

SQUAD AUTOMATIC WEAPON (SAW), M249



DECEMBER 1985

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HEADQUARTERS, DEPARTMENT OF THE ARMY

FIELD MANUAL
No. 23-14

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 10 December 1985

SQUAD AUTOMATIC WEAPON (SAW), M249

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Preface

This manual is intended to provide technical information, training techniques, and guidance on the squad automatic weapon. Unit leaders and the designated gunners will find this information invaluable in their efforts to successfully integrate this automatic weapon into their combat operations.

The tactical positions shown in this manual are not tactically correct, but were drawn to enhance the reader's understanding of related subject material.

Unless otherwise stated, whenever the masculine gender is used, both men and women are included.

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CHAPTER 1

Introduction**1-1. EMPLOYMENT**

The squad automatic weapon (SAW) gunner supports the infantry squad in both offense and defense. He is capable of engaging targets with a heavier volume of fire than that of the individual rifleman. The weapon provides the infantry squad with improved suppressive fire and a high volume of close and continuous assault fire. There is no change in movement techniques used by a SAW gunner from those used by M16A1 automatic riflemen. In the defense, the SAW is sited by the squad leader. The SAW gunner's fighting position is the same as that for the automatic rifleman and is represented by the AR symbol on the squad sector sketch. The SAW gunner uses aiming stakes in defining his sector.

1-2. DESCRIPTION

The SAW is an air-cooled, belt-fed, gas-operated automatic weapon which fires from the open-bolt position. It has a regulator for selecting normal (750 rounds per minute) or maximum (1,000 rounds per minute) rate of fire. The maximum rate of fire is authorized only if the weapon's firing rate slows under adverse conditions. Ammunition is fed into the weapon from a 200-round ammunition box holding a disintegrating metallic split-link belt. The SAW also has an alternate feeding provision for use in emergencies — the 20- and 30-round M16 rifle magazines. The weapon has a quick-change barrel; however, barrels must not be interchanged with those from other SAWs unless their headspace has been set for that weapon by direct support personnel.

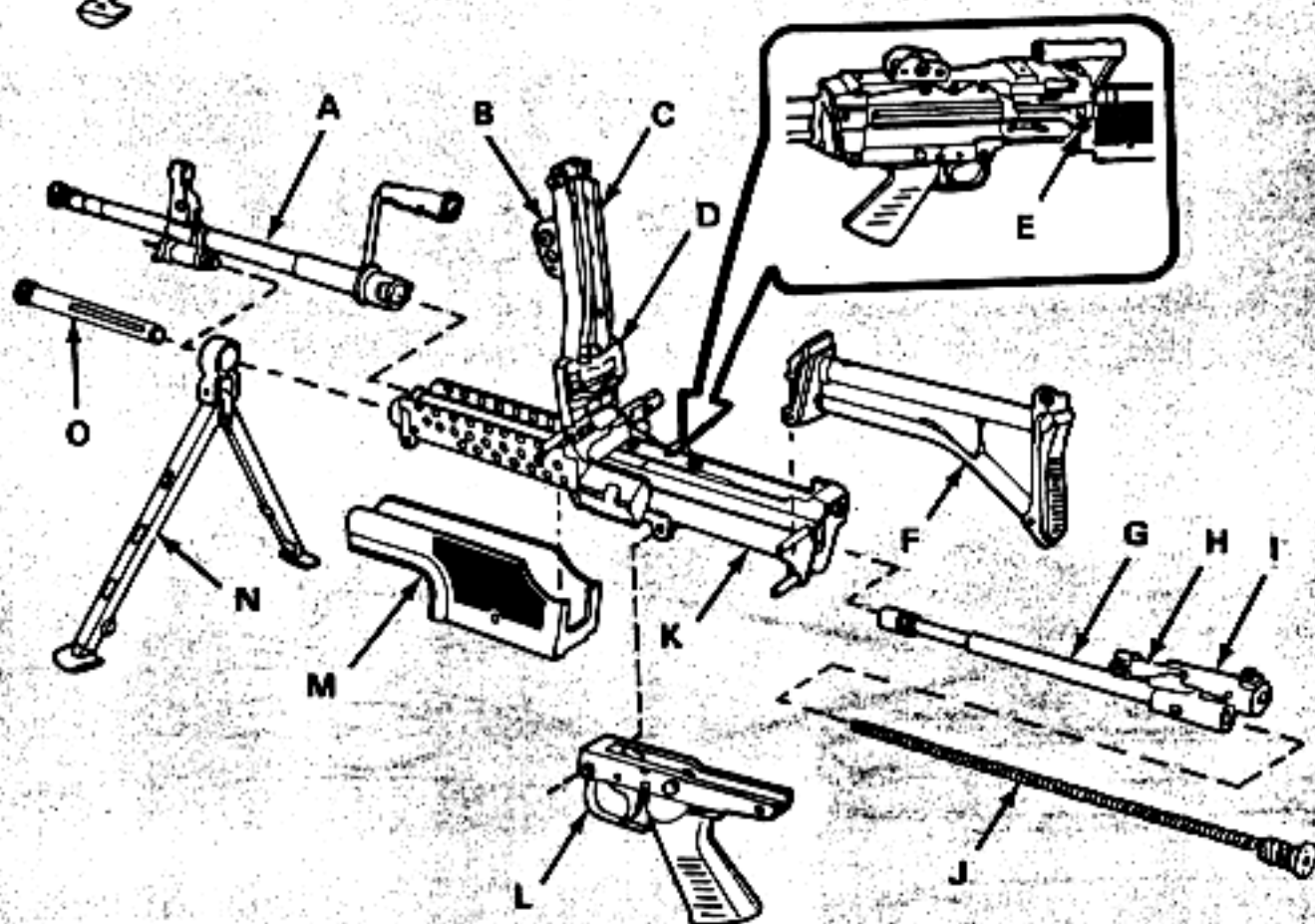
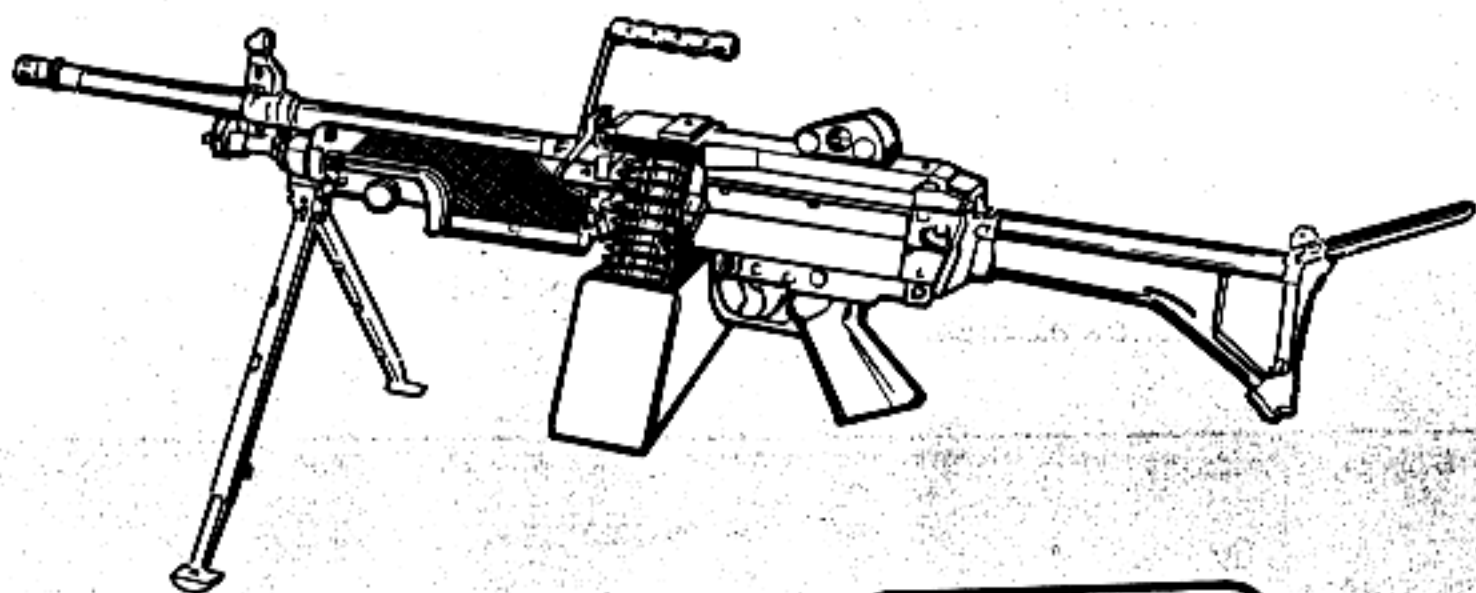
- a. **COMPONENTS.** The major components of the SAW and their purposes are shown in Table 1-1.

TABLE 1-1. COMPONENTS AND PURPOSES

COMPONENTS	PURPOSES
Barrel assembly	Houses cartridges for firing, directs projectile, and supports fixed front sight.
Butt group assembly	Serves as a shoulder support for aiming and firing SAW. Contains a folding shoulder rest.
Operating rod assembly	Absorbs recoil from bolt and operating rod assembly at the end of recoil movement.

TABLE 1-1. COMPONENTS AND PURPOSES (CONTINUED)

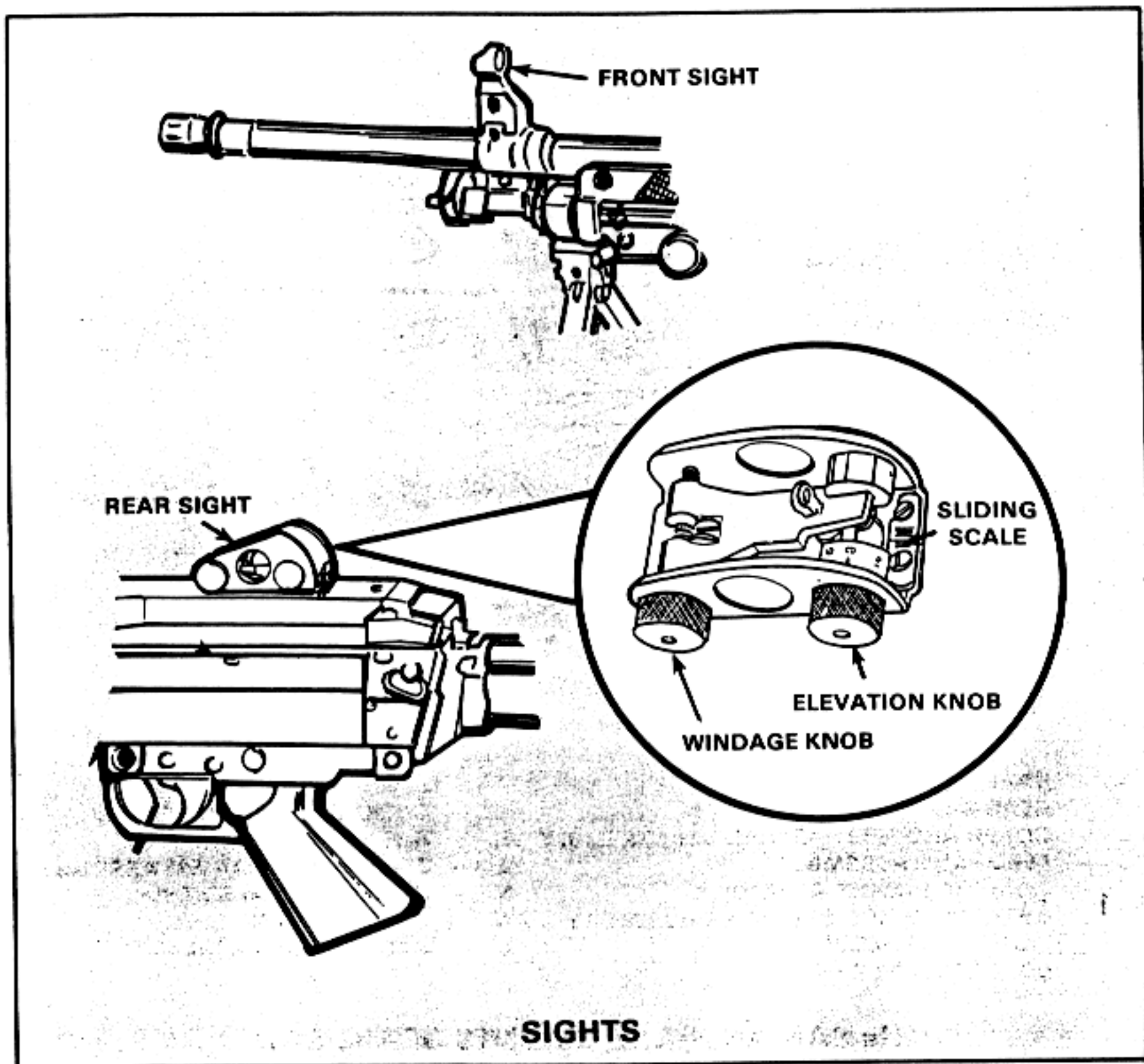
COMPONENTS	PURPOSES
Piston assembly	Transfers power from propelling gases to bolt and slide assemblies in the functioning of the SAW (moves recoiling parts rearward).
Bolt assembly	Provides feeding, stripping, chambering, firing, and extraction, using the propellant gases and recoil spring for power.
Slide assembly	Houses firing pin and roller assembly.
Trigger mechanism assembly	Controls the firing of the weapon.
Cover/feed mechanism assembly	Feeds linked belt ammunition, and positions and holds cartridges in position for stripping, feeding, and chambering.
Rear sight assembly	Rear sight is adjustable for both windage and elevation.
Handguard assembly	Provides thermal insulation to protect the operator's hands from heat, and houses the cleaning equipment.
Bipod assembly	Supports SAW in prone position. The telescopic legs can be individually adjusted to three different lengths.
Receiver assembly	Serves as a support for all major components. Houses action of weapon and, through a series of cam ways, controls functioning of weapon.
Cocking handle assembly	Pulls the moving parts rearward. Moves in a guide rail fixed to the right side of the receiver.
Gas cylinder assembly	Locks bipod in place on receiver and provides passageway for operating gases.



- | | |
|---------------------------------------|--------------------------------|
| A — BARREL ASSEMBLY | I — SLIDE ASSEMBLY |
| B — REAR SIGHT ASSEMBLY | J — OPERATING ROD ASSEMBLY |
| C — COVER AND FEED MECHANISM ASSEMBLY | K — RECEIVER ASSEMBLY |
| D — FEED PAWL ASSEMBLY | L — TRIGGER MECHANISM ASSEMBLY |
| E — COCKING HANDLE ASSEMBLY | M — HANDGUARD ASSEMBLY |
| F — BUTT STOCK AND SHOULDER ASSEMBLY | N — BIPOD MACHINE GUN |
| G — PISTON ASSEMBLY | O — GAS CYLINDER ASSEMBLY |
| H — BOLT ASSEMBLY | |

THE SAW AND COMPONENTS OF THE SAW

- b. **SIGHTS.** The SAW has a hooded and semi-fixed front sight. The rear sight is mounted on the top cover of the ammunition feed mechanism assembly. The elevation knob drum is marked for each 100 meters of range, from 300 meters to a maximum of 1,000 meters. Range changes are made on the SAW sight by rotating the elevation knob to the desired range setting. Rotation of the peep sight is used for fine elevation or range adjustments, such as during zeroing. Each click of the peep sight (180-degree turn) equals a 1/2-mil change in elevation. The sight is adjusted for windage by rotating the windage knob. Each click of windage adjustment also equals a 1/2-mil change.



- c. **SAFETY.** The safety is on the trigger housing. Pushing the safety from left to right (red ring NOT visible) renders the weapon **SAFE**, and the bolt cannot be released to go forward. Pushing the safety right to left (red ring visible) renders the weapon off **SAFE** and ready to fire. The cocking handle on the right side of the weapon is used to pull the bolt to the rear.

CAUTION

THE COCKING HANDLE MUST BE MANUALLY RETURNED TO THE FORWARD POSITION EACH TIME THE BOLT IS MANUALLY PULLED TO THE REAR.

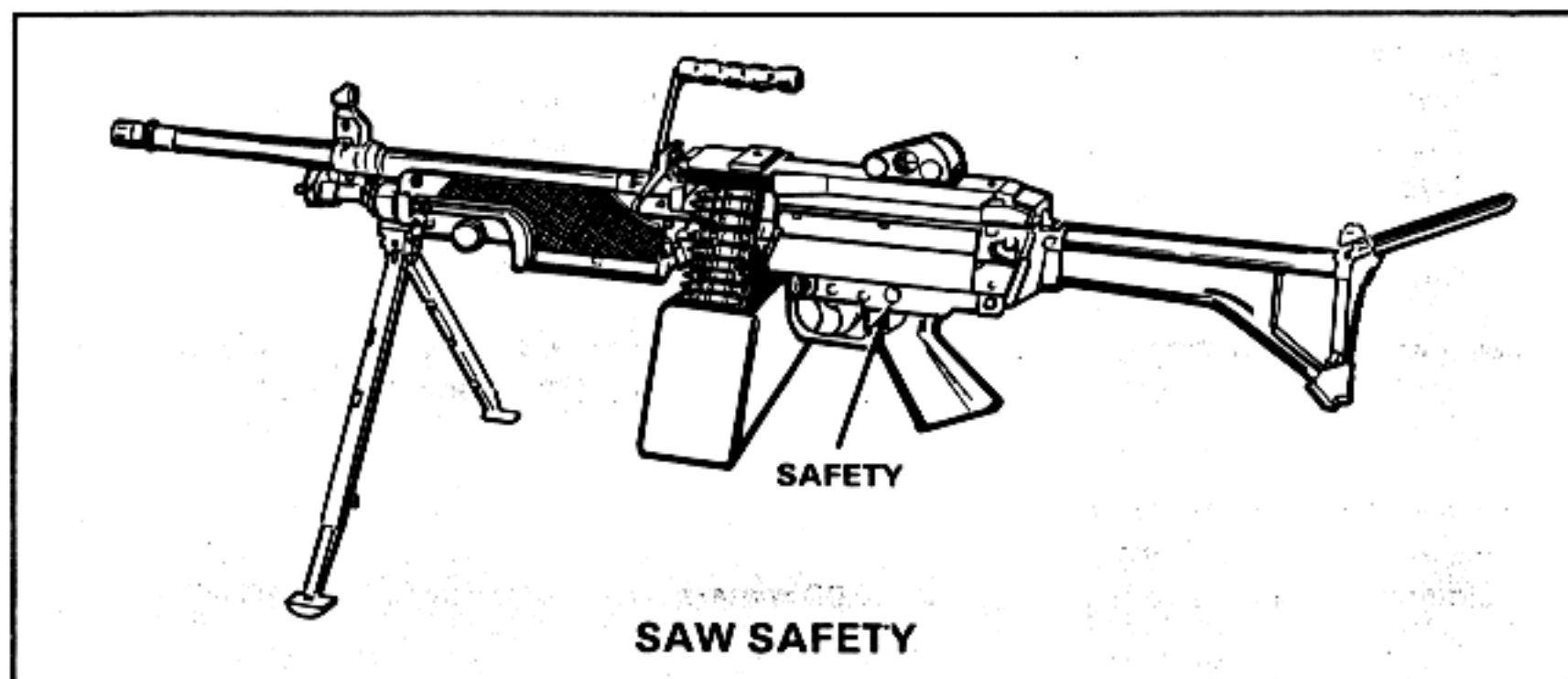


TABLE 1-2. GENERAL DATA

Ammunition	5.56-mm ball, tracer, blank, and dummy ammunition is packaged in 200-round boxes each weighing 6.92 pounds (3.140 kilograms), or 30-round magazines each weighing 1.07 pounds (0.485 kilogram).
Tracer burnout	900 meters (+)
Length of SAW	40.87 inches (1,038 millimeters)