

# FM 23-5

DEPARTMENT OF THE ARMY FIELD MANUAL

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U.S. RIFLE  
**CALIBER .30, M1**



HEADQUARTERS, DEPARTMENT OF THE ARMY  
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## U.S. RIFLE, CALIBER .30, M1

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\*This manual supersedes FM 23-5, 26 September 1958, including C1, 22 June 1960.

# CHAPTER 1

## INTRODUCTION

### 1. Purpose and Scope

a. This manual is a guide for commanders and instructors in presenting instruction and training in the mechanical operation of the M1 rifle. It includes a detailed description of the rifle and its general characteristics; procedures for disassembly and assembly; methods of loading; an explanation of functioning; a discussion of stoppages and immediate action; a description of the ammunition; and instructions on the care and cleaning of both the weapon and ammunition. The material presented is applicable, without modification, to both nuclear and nonnuclear warfare.

b. Marksmanship training is covered in FM 23-71.

c. Users of this manual are encouraged to submit recommended changes or comments to improve the manual. Comments should be keyed to the specific page, paragraph, and line of the text in which the change is recommended. Reasons should be provided for each comment to insure understanding and complete evaluation. Comments should be forwarded direct to the Commandant, U.S. Army Infantry School, Fort Benning, Ga.

### 2. Importance of Mechanical Training

The rifle is the soldier's basic weapon. It gives him an individual and powerful capability for combat. To get the most out of his individual combat capability, the soldier must develop two skills to an equal degree: he must be able to fire his weapon well enough to get hits on battlefield targets, and he must know enough about its working parts to keep them operating smoothly so the rifle will not fail him. The soldier gets his firing skill on marksmanship training ranges and he learns how to keep his rifle in firing condition

from the mechanical training that is outlined in this manual.

### 3. Description of the Rifle

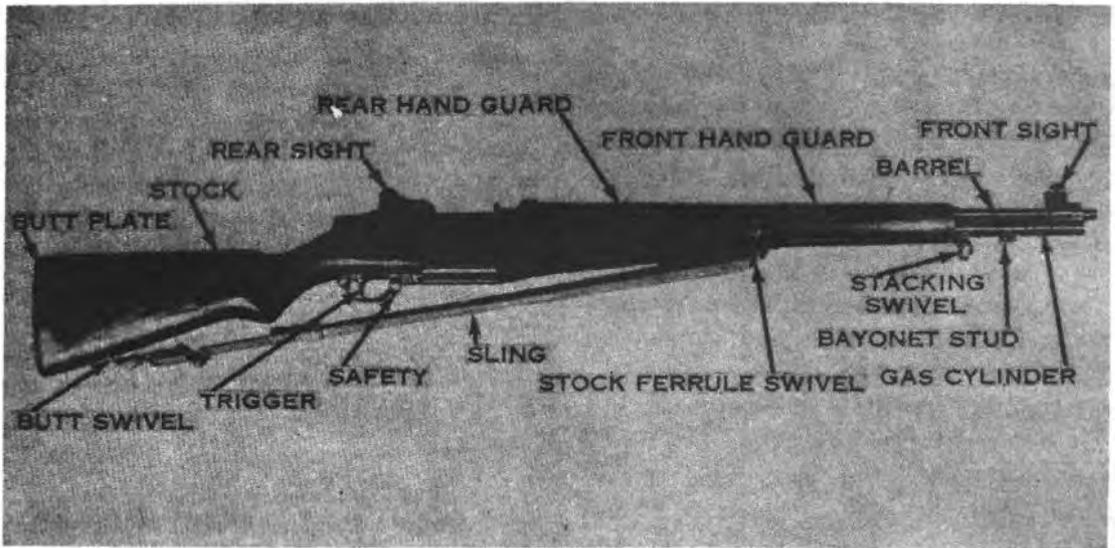
The U.S. rifle caliber .30, M1, (fig. 1) is an air-cooled, gas-operated, clip-fed, and semiautomatic shoulder weapon. This means that the air cools the barrel; that the power to cock the rifle and chamber the succeeding round comes from the expanding gas of the round fired previously; that it is loaded by inserting a metal clip (containing a maximum of eight rounds) into the receiver; and that the rifle fires one round each time the trigger is pulled.

### 4. General Data

Weight:	Complete with sling, eight-round clip and cleaning equipment (approximate) - 11¼ pounds.
Length:	Overall ----- 43 inches.
Sights:	Front ----- Fixed. Rear ----- Adjustable. One click of elevation or windage moves the strike of the bullet .7 centimeters at 25 meters.
Trigger pull:	Minimum ----- 5½ pounds. Maximum ----- 7½ pounds.
Ammunition	See chapter 6.
Muzzle velocity (approximately)	853 meters (2,800 feet) per second.
Chamber pressure	50,000 pounds per square inch.
Maximum range	3,200 meters.
Maximum effective range <sup>1</sup>	460 meters.
Maximum effective rate of fire <sup>2</sup>	16 to 24 rounds per minute.

<sup>1</sup> Maximum effective range is the greatest distance at which a weapon may be expected to fire accurately to inflict casualties or damage.

<sup>2</sup> Although there is no prescribed maximum rate of fire, a trained rifeman can fire 16 to 24 aimed rounds per minute.



*Figure 1. U.S. rifle, caliber .30, M1.*

## CHAPTER 2

### MECHANICAL TRAINING

#### 5. Disassembly and Assembly

a. The individual soldier is authorized to disassemble his rifle to the extent called *field stripping*. Table I, Disassembly Authorization (para. 7), shows the parts he is permitted to disassemble. This amount of disassembly is necessary for normal maintenance.

b. The rifle should be disassembled and assembled only when maintenance is required or for instructional purposes. Repeated disassembly and assembly causes excessive wear of parts and soon makes them unserviceable and reduces the accuracy of the weapon.

c. The rifle has been designed so that it may be taken apart and put together easily. No force is needed if it is disassembled and assembled correctly. The parts of one rifle, except the bolt, may be interchanged with those of another when necessary; for safety reasons, *bolts should* never be interchanged except by maintenance support personnel.

d. As the rifle is disassembled, the parts should be laid out on a clean surface, in the order of re-

moval, from left to right. This makes assembly easier because the parts are assembled in the reverse order of disassembly. The names of the rifle parts (nomenclature) should be taught along with disassembly and assembly to make future instruction on the rifle easier to understand.

#### 6. Clearing the Rifle

The first step in handling any weapon is to clear it. If the rifle is loaded, unload it as described in paragraph 13. The M1 rifle is clear when there is no ammunition in the chamber or receiver, the bolt is locked to the rear, and the safety is engaged. To clear the rifle, pull the operating rod handle all the way to the rear, inspect the chamber and receiver to insure that no rounds are present and push the safety to its locked position (inside the trigger guard).

#### 7. Disassembly Into the Three Main Groups

a. The three main groups are the trigger housing group, the barrel and receiver group, and the stock group (fig. 2).

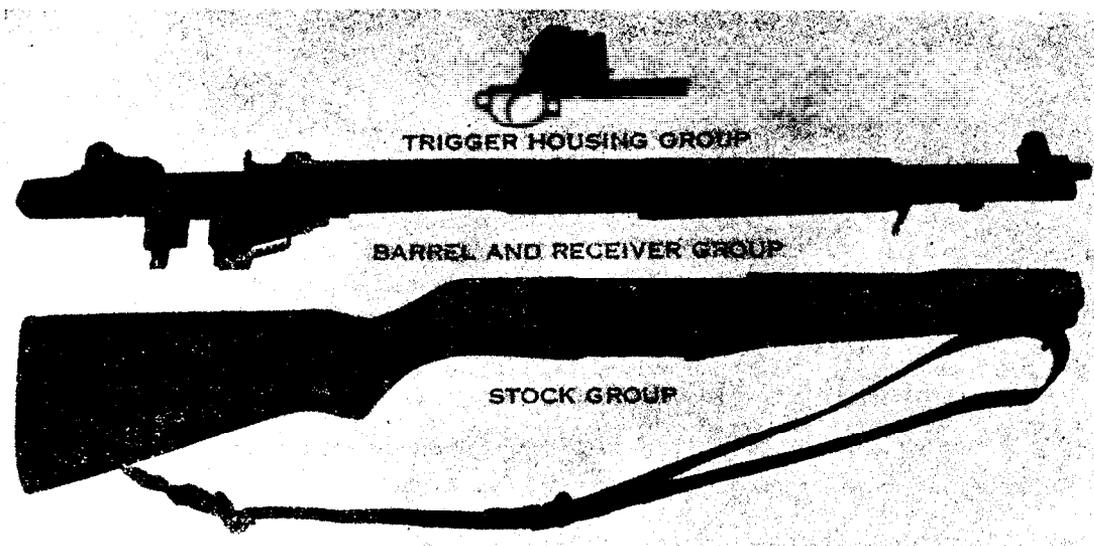


Figure 2. The three main groups.

b. To disassemble the rifle into the three main groups, first insure that the weapon is clear and then allow the bolt to go forward by depressing the follower with the right thumb and allowing the bolt to ride forward over the follower assembly.

c. Place the rifle butt against the left thigh, sights to the left. With the thumb and forefinger of the right hand, pull downward and outward on the rear of the trigger guard. Swing the trigger guard out as far as it will go and lift out the trigger housing group (fig. 3).

d. To separate the barrel and receiver from the stock lay the weapon on a flat surface with the sights up, muzzle to the left. With the left hand, grasp the rear of the receiver and raise the rifle. With the right hand, give a downward blow, grasping the small of the stock. This will separate the stock group from the barrel and receiver group.

### 8. Disassembly of the Barrel and Receiver Group

a. Place the barrel and receiver group, with the bolt closed, on a flat surface with the sights down (insuring that the aperture is at its lowest position), muzzle pointing to the left. Holding the rear of the receiver with the right hand, grasp the follower rod with the thumb and forefinger of the left hand and disengage it from the follower arm by moving it toward the muzzle (fig. 4).

Remove the follower rod and operating rod spring by withdrawing them to the right. Do not separate these parts.

b. Using the tip of a dummy cartridge, remove the follower arm pin by pushing it from the far side of the receiver toward the body (fig. 5).



Figure 3. Removing the trigger housing group.

Table I. Disassembly Authorization

Groups and parts	Individual soldier	Armorer	Maintenance personnel only
SEPARATION: INTO THREE MAIN GROUPS.....	X.....		
DISASSEMBLY: BARREL AND RECEIVER GROUP.....	X.....		
Bolt assembly.....	Remove.....	Repair.....	Repair/Replace.
Gas cylinder.....	Remove.....	Repair.....	Repair/Replace.
Gas cylinder lock.....	Remove.....	Remove.....	Repair/Replace.
Clip latch.....		Repair.....	Repair/Replace.
Rear sight.....		Repair.....	Repair/Replace.
Slide from follower.....			Repair/Replace.
Accelerator from operating rod catch assembly.....			Repair/Replace.
Front sight.....			Repair/Replace.
TRIGGER HOUSING GROUP.....	Remove.....	Repair.....	Repair/Replace.