

M-1 GARAND

TM 9-1005-222-12

PLUS SUPPLEMENTAL MATERIAL FROM

TM 9-1005-222-35 and FM 23-5

Department of the Army Technical Manual

OPERATOR AND ORGANIZATIONAL
MAINTENANCE MANUAL INCLUDING
REPAIR PARTS AND SPECIAL TOOLS LIST

RIFLE, CALIBER .30 M 1

RIFLE, CALIBER .30 M 1C (Sniper's)
and

RIFLE, CALIBER .30 M 1D (Sniper's)

M -1 GARAND

HEADQUARTERS, DEPARTMENT OF THE ARMY, 17 March, 1969

Operator and Organizational Maintenance Manual

RIFLE, CALIBER .30: M 1, M 1C (Sniper's), M 1D (Sniper's)

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This manual is current as of 2 December 1968

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*This manual supersedes TM 9-1005-222-12P/2, 11 August 1965 in its entirety.



Figure 1. U.S. Rifle, Caliber .30, M 1

TM9-1005-222-12
Chapter 1
INTRODUCTION

Section I. General

1-1. Scope

These instructions are for use by the operator and organizational maintenance personnel. They apply to Caliber .30 Rifles, M1, M1C (Sniper's) and M1D (Sniper's).

1-2. Forms and Records

a. General. Refer to TM 38-750 (Army Equipment Records Procedure) for forms and records required.

b. Recommendations for Maintenance Manual Improvements. Report of errors, omissions, and recommendations for improving this publication by the individual user is encouraged. Reports should be submitted on DA Form 2028 (Recommended Changes to DA Publications) and forwarded direct to:

Commanding General
U.S. Army Weapons Command
ATTN: AMSWE-SMM-P
Rock Island, Illinois 61201

1-3. Administrative Storage

Refer to TM 740-90-1 for administrative storage.

Section II. DESCRIPTION AND DATA

1-4. Description

a. General. The Rifles, M1, M1C (Sniper's) and M1D (Sniper's) (figs. 1, 10 and 11) are clipped, gas-operated, air-cooled, semiautomatic shoulder weapons.

b. Differences in Models.

- (1) The M1C has a telescope mounted to the receiver.
- (2) The M1D has a telescope mounted to the barrel.
- (3) The M1C and M1D also require a flash hider and a cheek pad.

1-5. Tabulated Data

a. Rifle, M1.

Weight of rifle w/o equipment	9.5 lb. approx.
Weight of rifle w/bayonet	10.5 lb. approx.
Length of rifle	43 in.
Length of barrel	24 in.
*Muzzle velocity	2,750-2,800 fps
*Maximum effective range	500 yd.
*Maximum effective rate of fire (aimed rounds per minute)	16-24
*Number of cartridges in clip	8
*Types of ammunition	Ball, armor-piercing-incendiary, tracer, blank, rifle grenade cartridge and dummy

b. Rifles, M1C (Sniper's) and M1D (Sniper's).

Weight w/equipment (telescope, flash hider, gun sling, and cheek pad)	11.75 lb. approx.
Length of rifle w/flash hider, type T-37	46-1/8 in.

*This information also applies to the M1C and M1D Rifles.



Figure 10. U.S. Rifle, Caliber .30, M 1C (Sniper's), with flash hider, M 2. From the collection of Bill Douglas.

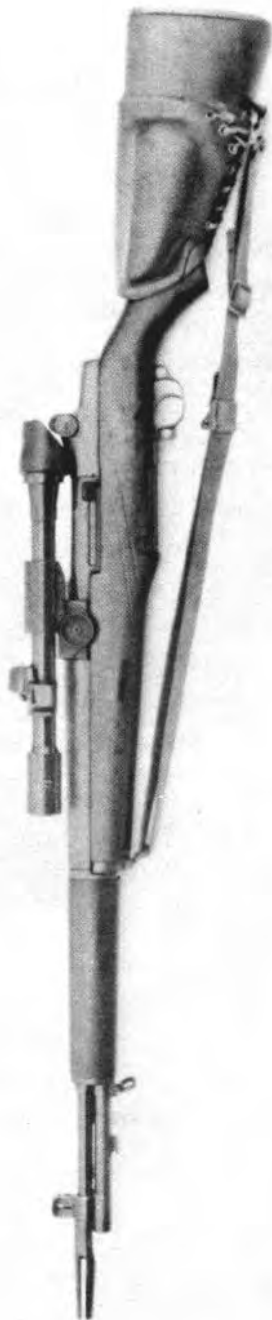


Figure 11. U.S. Rifle, Caliber .30, M 1D (Sniper's) with flash hider, T 37.

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Chapter 2
OPERATING INSTRUCTIONS

Section I. Controls

2-1. General

This section describes, locates, illustrates, and furnishes the operator with essential information pertaining to the various controls provided to properly operate the materiel.

2-2. Controls

Refer to table 2-1.



Figure 12. Controls.

Table 2-1. Controls

Item	(See fig. 12)	Purpose
Safety		To prevent accidental firing.
Trigger		To release hammer to effect firing.
Windage knob		To adjust lateral movement of rear sight.
Elevating pinion		To adjust elevation of aperture.
Clip latch		To hold clip in receiver until last round is fired.

Section II. OPERATION UNDER USUAL CONDITIONS

2-3. General

This section contains instructions for the operation of the rifles under conditions of moderate temperatures and humidity. Instructions for operation under unusual conditions are covered in section IV.

2-4. Preparation for Firing

- a. Examine bore. Make certain it is free of powder fouling or corrosion.
- b. Check gas cylinder lock screw for secure installation.
- c. Check ammunition. Make certain it is clean and that it is of the proper type and grade.
- d. Cock the rifle and place the safety in safe position (fig. 12).

2-5. Service Before Firing

Perform the before firing operations as indicated in table 3-3.

2-6. Loading

Refer to FM 23-5.

2-7. Zeroing

Refer to FM 23-5.

2-8. Misfire, Hangfire, and Cook-off

Refer to FM 23-5 and paragraph 2-9b, below.

2-9. Procedures for Removing a Round in Case of Failure to Fire

a. General After failure to fire, due to misfire, the following general precautions, as applicable, will be observed until the round has been removed from the weapon and the cause of failure determined.

- (1) Keep the weapon trained on the target and see that all personnel are clear of the muzzle.
- (2) Before retracting the bolt and removing the round, see that personnel, not required for operation, are cleared from vicinity.
- (3) Make certain the round, removed from the weapon, is kept separate from other rounds until it has been determined whether the round or weapon is at fault. If the weapon is determined to be at fault, the round may be reloaded.

b. Time Intervals. The definite time intervals for waiting, after failure of weapon to fire, are prescribed as follows: Always keep the round in the chamber for five seconds from the time a misfire occurs to insure against an explosion outside of the gun in event a hang-fire develops. If the barrel is hot and a misfire stops operation of the gun, wait five seconds with the round locked in the chamber to insure against hangfire dangers (a hangfire will occur within five seconds after the primer is struck), then extract the round immediately to prevent cook-off. If the round cannot be extracted within an additional five seconds, it must remain locked in the chamber for five minutes because of the possibility of a cook-off. Also in the event the barrel is hot and misfire occurs when attempting to resume firing after an intentional cessation of firing, the round should remain locked in the chamber for five minutes because of the possibility of a cook-off.

2-10. Service During Firing

Perform the during firing operations as described in the operators preventive-maintenance services (table 3-3).

2-11. Unloading

Refer to FM 23-5.

2-12. Service After Firing

Perform the after firing operations as described in the operator's preventive-maintenance services (table 3-3).

Section III. OPERATION OF MATERIEL USED IN CONJUNCTION WITH MAJOR ITEM

2-13. General

The following materiel is not normally used continually. Therefore, it is necessary to protect from weather and dampness in storage. Clean and lubricate materiel as required, whether in use or in storage.

2-14. Equipment

- a. **Grenade Launcher, M7A3 and Grenade Launcher Sight, M15.** Refer to FM 23-30.
- b. **Bayonet-Knife, M5 and M5A1 and Bayonet-Knife Scabbard, M8A1.** Keep bayonet in scabbard except when removed for training, inspections, cleaning, repair, or for use in combat or danger zones.
- c. **Winter Trigger Kit.** Use the winter trigger kit only in extreme cold operation and on authority of unit commander.

Section IV. OPERATION UNDER UNUSUAL CONDITIONS

2-15. General

Report any chronic failure of materiel resulting from subjection to extreme conditions (par 1-2).

2-16. Operation in Extreme Cold

- a. In climates consistently below 0°F, it is necessary to prepare the rifle for cold-weather operation. The rifle should be thoroughly cleaned with SD, dry cleaning solvent, and lubricated with LAW, weapons lubricating oil.
- b. Rifles should be free of moisture and excess oil. Moisture or too much oil on the working parts will cause them to be sluggish in operation, or perhaps to fail completely.
- c. Exercise moving parts through their entire range at required intervals. This movement helps prevent parts from freezing in place and reduces effort required to operate them.
- d. Materiel not in use and stored outside must be protected with proper cover.

Note. Transferring weapon from cold to warm air may cause moisture to collect. If the weapon is brought into a warm room, allow it to reach room temperature before cleaning and lubricating as required.

2-17. Operation in Extreme Heat

a. Hot, Dry Climates.

(1) The film of oil necessary for operation and preservation dissipates quickly in hot climates. Inspect the rifle, paying particular attention to all hidden surfaces such as bolt and lug, operating rod and recess, cam surfaces and bolt locking recess in receiver, where corrosion might occur and not be quickly noticed.

(2) Perspiration from the hands contributes to rusting because it contains acids and salts. After handling materiel, clean, wipe dry, and restore the oil film using PL special, general purpose lubricating oil.

- (3) Clean and oil the bore more frequently than usual.
- (4) Apply linseed oil to wooden parts to prevent drying.

b. Hot, Damp, and Salty Atmosphere.

- (1) See a(1) and (2) above under hot, dry climates.
- (2) Inspect materiel frequently because of increased possibility of rust.
- (3) When materiel is active, clean and lubricate the bore and exposed metal surfaces more frequently than prescribed for normal service.
- (4) Moist and salty atmosphere tend to emulsify oils and greases and destroy their rust-preventive qualities. Inspect all parts frequently for corrosion.
- (5) When materiel is inactive, cover metal surfaces with a film of PL special, general purpose lubricating oil.
- (6) Apply linseed oil to wooden parts to keep out moisture.

2-18. Operation in Dusty or Sandy Areas

a. Clean and lubricate the materiel more frequently in sandy or dusty areas. Exercise particular care to keep sand out of mechanisms when carrying out inspecting and lubricating operations. Shield parts from flying sand with tarpaulins during disassembly and assembly operations.

b. Before operating in sandy areas, remove lubricant from bolt, barrel and receiver, operating rod, and trigger housing assembly, as they will pick up sand and from an abrasive which will cause rapid wear. Dry surfaces wear less than surfaces coated with lubricants contaminated with sand. Clean and lubricate all exposed parts after action is over.

2-19. Hand-Carried Forging

- a. No special lubrication is required before forging.
- b. Protect from water splashes.
- c. If immersion does occur, proceed as directed in paragraph 2-20.

2-20. Maintenance After Immersion

a. **General.** During hand-carried forging, water seepage into bolt, trigger housing, receiver, and operating rod assembly will usually occur. It is advisable, therefore, that the service outlined below be accomplished on all weapons submerged in water as soon as practical to prevent damage to the weapon.

b. Procedures.

- (1) After submersion in salt water, wash in clear water to remove corrosive salts.
- (2) Drain all trapped moisture and wipe dry.
- (3) Assemblies which require disassembly for proper lubrication must be disassembled, dried, and lubricated as soon as possible.

Note. Items not authorized for operator disassembly/assembly must be cleaned by organizational maintenance personnel.

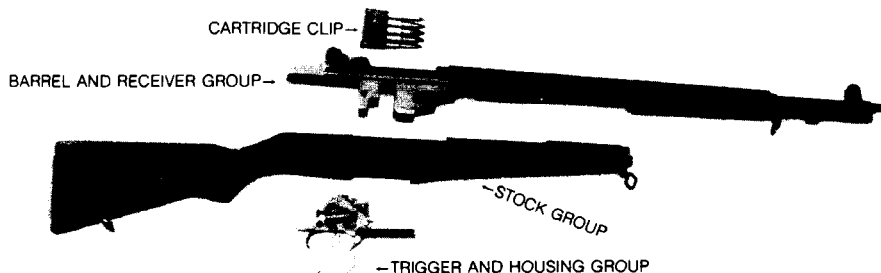


Figure 13. U.S. Rifle, Caliber .30, M 1. Major assembly group.

Chapter 3

SERVICE AND MAINTENANCE INSTRUCTIONS

Section I. Service Upon Receipt of Materiel

3-1. General

a. When a new or reconditioned Rifle, M1, M1C (Sniper's) or M1D (Sniper's) is received, it is the responsibility of the officer in charge to determine whether the materiel has been properly prepared for service by the supplying organization and to be sure it is in condition to perform its function.

b. All basic issue items will be checked with the listing in appendix B.

c. A record will be made of all missing parts, tools, and equipment, and of any malfunctions. Corrective action should be initiated as soon as possible.

3-2. Services

Refer to table 3-1 for services performed on receipt of materiel.

Table 3-1. Service upon Receipt of materiel

Step	Action	Reference
	RIFLES	
	<i>Note.</i> When new rifles are received, they are sealed in vapor proof, volatile corrosion inhibitor (VCI) bags. They are packed two in a carton and five cartons in a box.	
1	Remove carton from box and rifle from carton and bags.	
2	Check for missing items. <i>Note.</i> Items must agree with Basic issue items list.	App B, Sec II
3	Clean and lubricate bore and chamber.	Par 3-11a and 3-6
4	Field strip and inspect for missing parts and proper assembly.	FM 23-5
5	Clean and lubricate the following: Locking lugs of bolt Bolt guides Camming surfaces of operating rod	Par 3-11a and 3-6
6	Perform "before operation" preventive maintenance checks and services.	Table 3-3

Section II. REPAIR PARTS, SPECIAL TOOLS AND EQUIPMENT

3-3. Tools and Equipment

Tools and equipment issued with the Caliber .30 Rifles, M1, M1C (Sniper's) and M1D (Sniper's) are listed in the basic issue items list, appendix B.

3-4. Special Tools and Equipment

Special tools and equipment are listed and illustrated in appendix B.

3-5. Maintenance Repair Parts

Organizational maintenance repair parts are listed and illustrated in appendix B.