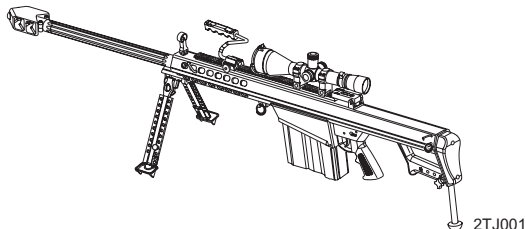


**OPERATOR'S MANUAL
LONG RANGE SNIPER RIFLE (LRSR),
CALIBER .50, M107 (NSN 1005-01-469-2133)**



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HEADQUARTERS, DEPARTMENT OF THE ARMY

MAY 2004

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 15 May 2004

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REPORTING OF ERRORS

You can help improve this publication. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Submit your DA Form 2028 (Recommended Changes to Publications and Blank Forms), through the Internet, on the Army Electronic Product Support (AEPS) website. The Internet address is <http://aeps.ria.army.mil>. If you need a password, scroll down and click on "ACCESS REQUEST FORM". The DA Form 2028 is located in the ONLINE FORMS PROCESSING section of the AEPS. Fill out the form and click on SUBMIT. Using this form on the AEPS will enable us to respond quicker to your comments and better manage the DA Form 2028 program. You may also mail, fax or E-mail your letter or DA Form 2028 direct to: AMSTA-LC-CI Tech Pubs, TACOM-RI, 1 Rock Island Arsenal, Rock Island, IL 61299-7630. The e-mail address is TACOM-TECH-PUBS@ria.army.mil. The fax number is DSN 793-0726 or Commercial (309) 782-0726.

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HOW TO USE THIS MANUAL

The safest, easiest, and best way to operate and maintain the M107 Sniper Rifle is to use this manual. Learning to use this TM is as easy as reading through the next few pages of this section. Knowing what is in this manual and how to use it will save you time and work and will help you avoid exposing yourself to unnecessary hazards while performing your job.

So Where Do You Start?

Right here, if this is the first time you are using this TM. Be sure to completely read this section on how to use this manual first. There's a lot of information here that you need to know.

Organization

This manual covers the operation and maintenance of the M107 Sniper Rifle. The manual itself is divided into six chapters, including supporting information. The six chapters and what they contain, are found in the Table of Contents in the front of this manual. For example, to learn about operating the M107 Sniper Rifle, you would look in the table of contents and discover that Chapter 2 provides all pertinent information about the operation of the M107 Sniper Rifle. Since Chapter 2 covers a great deal of information, you will have to scan the chapter to find the specific information you will need.

In Chapter 6, you will find the supporting information. Each work package provides specific information that will assist you in performing the various operational and maintenance tasks. The work packages provide such information as additional References (i.e., other TMs or FMs), as in WP 0020 00, and Expendable and Durable Items List, as in WP 0022 00. Become familiar with all supporting information work packages and what they contain before beginning any operational or maintenance task.

Am I Ready To Use The TM?

If you've taken the time necessary to read this section, and are sure of the location and arrangement of the different sections of this TM, you are ready to begin. Remember, this TM has been arranged with you, the user, in mind. Your safety and ability to perform the operational and maintenance tasks in the most efficient manner possible hinge on your ability to perform and understand the information contained in this manual. If you fully understand the arrangement and purpose of this TM, and have taken the time to read through this section, you will have no trouble operating and maintaining the rifle in the manner for which it was designed.

CHAPTER 1

INTRODUCTION

OPERATOR
LONG RANGE SNIPER RIFLE, M107
NSN 1005-01-469-2133
GENERAL INFORMATION

SCOPE

Type of Manual

Operator's Manual.

Model Numbers and Equipment Names

Rifle, Caliber .50, Sniper with Day Optical Sight and Carrying Case, M107.

Purpose of Equipment

The M107 Long Range Sniper Rifle (LRSR) is a man-portable, direct line of sight weapon system capable of providing precision fire on targets at a distance of up to 1000 meters.

MAINTENANCE FORMS, RECORDS, AND REPORTS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by (as applicable) DA PAM 738-750, Functional Users Manual for the Army Maintenance Management System (TAMMS); DA PAM 738-751, Functional Users Manual for the Army Maintenance Management System; or AR 700-138, Army Logistics Readiness and Sustainability.

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your M107 Sniper Rifle needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance. Put it on an SF 368 (Product Quality Deficiency Report). Mail it to the address specified in DA PAM 738-750, Functional Users Manual for the Army Maintenance Management System (TAMMS), or as specified by the acquiring activity. We will send you a reply.

CORROSION PREVENTION AND CONTROL (CPC)

Corrosion Prevention and Control (CPC) of army materiel is a continuing concern. It is important that any corrosion problems with this item be reported so that the problem can be corrected and improvements can be made to prevent the problem in future items.

While corrosion is typically associated with rusting of metals, it can also include deterioration of other materials, such as rubber and plastic. Unusual cracking, softening, swelling, or breaking of these materials may be a corrosion problem.

If a corrosion problem is identified, it can be reported using SF 368, Product Quality Deficiency Report. Use of Key words such as "corrosion", "rust", "deterioration", or "cracking" will ensure that the information is identified as a CPC problem.

The form should be submitted to the address specified in DA PAM 738-750, Functional Users Manual for the Army Maintenance Management System (TAMMS).

DESTRUCTION OF ARMY MATERIAL TO PREVENT ENEMY USE

Refer to TM 750-244-7.

PREPARATION FOR STORAGE OR SHIPMENT

Storage

WARNING

Do not store the weapon with live ammunition in either the chamber or magazine.

Disassemble the weapon into its three major assemblies (refer to WP 0013 00), apply a coat of CLP (item 1, WP 0022 00), and store the weapon in its carrying case.

PREPARATION FOR STORAGE AND SHIPMENT - Continued**Shipment**

Ship weapons requiring depot level maintenance in accordance with the disposition instructions and pertinent auto-retrograde message.

WARNING

Under no circumstances should the weapon be shipped while it contains live ammunition, either in the shipping box, magazine, or chamber.

- a. Ensure that the magazine and chamber are clear of ammunition (refer to WP 0005 00).
- b. Complete forms in accordance with specifications and detail the required maintenance as thoroughly as possible.
- c. Clean the weapon (refer to WP 0005 00).
- d. Place the weapon, broken down into its three major groups, in a carrying case and place it in a shipping box.
- e. Mark the box in accordance with MIL-STD-129.

NOMENCLATURE CROSS-REFERENCE LIST

Official Name	Common Name
Cartridge Magazine	Magazine Assembly
Quick Release Pin	Midlock Pin
Quick Release Pin	Rear Lock Pin

LIST OF ABBREVIATIONS/ACRONYMS

Abbreviation/Acronym	Name
API	Armor-Piercing Incendiary
APIT	Armor-Piercing Incendiary Tracer
CLP	Cleaner, Lubricant, and Preservative
LAW	Lubricant, Arctic Weather
LSA	Lubricant, Small Arms
LSAT	Lubricant, Small Arms (with Teflon)
LRSR	Long Range Sniper Rifle
MOA	Minute of Angle
RBC	Rifle Bore Cleaner

QUALITY OF MATERIAL

Material used for replacement, repair, or modification must meet the requirements of this manual. If quality of material requirements are not stated in this manual, the material must meet the requirements of the drawings, standards, specifications, or approved engineering change proposals applicable to the subject equipment.

SAFETY, CARE, AND HANDLING

Refer to WP 0019 00 for general ammunition safety, care, and handling.

END OF WORK PACKAGE