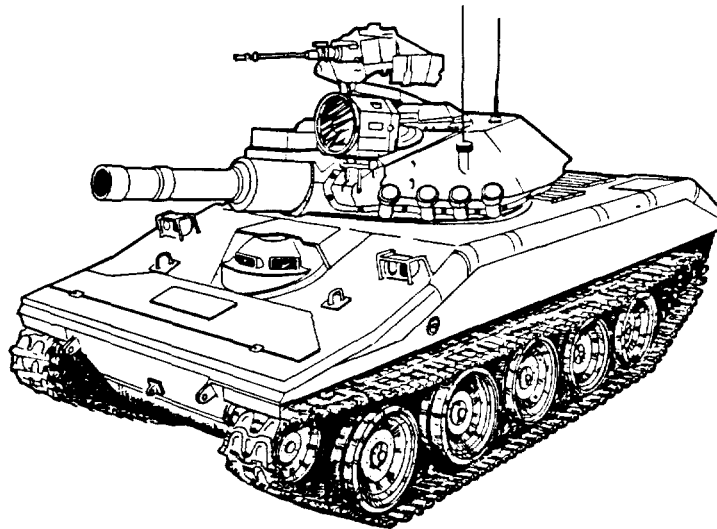


**OPERATOR'S MANUAL  
FOR  
MULTIPLE INTEGRATED LASER  
ENGAGEMENT SYSTEM  
(MILES)**

**SIMULATOR SYSTEM, FIRING LASER: M67  
(NSN 1265-01-077-6081)**

**FOR  
M551 VEHICLE**



DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

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**HEADQUARTERS, DEPARTMENT OF THE ARMY  
JULY 1988**

TECHNICAL MANUAL

TM9-1265-369-10-3

HEADQUARTERS  
 DEPARTMENT OF THE ARMY  
 WASHINGTON D.C., 15 JULY 1988

**OPERATOR'S MANUAL  
 FOR  
 MULTIPLE INTEGRATED LASER ENGAGEMENT SYSTEM (MILES)  
 SIMULATOR SYSTEM, FIRING LASER: M67  
 (NSN 1265-01.-077-6081)  
 M551 VEHICLE**

**REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS**

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in back of this manual direct to: Commander, US Army Armament, Munitions and Chemical Command, ATTN: AMSMC-MAS, Rock Island, IL 61299-6000. A reply will be furnished to you.

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\*Supersedes TM 9-1265-359-10-3 dated 22 January 1982 including all changes.

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## **Skills Needed To Use This Manual**

### Equipment Distribution:

The MILES Equipment for the M551 is shown in Outside Task 2 of this Technical Manual (TM). Use the picture with Outside Task 2 as a guide for equipment distribution. Be sure to issue a copy of this TM along with the MILES equipment.

### Equipment Return and Storage:

When receiving equipment for storage, always inspect the returned equipment using Operational Task 7 in this TM for guidance.

Return all MILES equipment and the TMs to their transit cases.

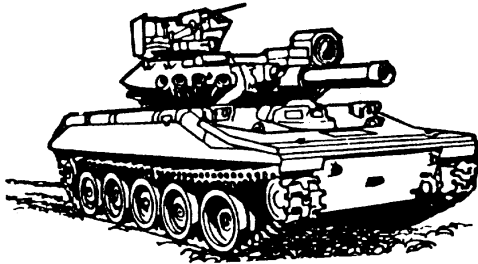
### Special Instructions for Infrequently Used Equipment:

If M551 MILES equipment is unused for 60 days, remove from transit case and perform Outside Tasks 2, 3, 5, and 7; inside Tasks 1, 3, 4, 6, and 8, MSS Machine Gun Task 1, MWLD Tasks 1 and 2; and Operational Task 7 in this TM.

## Skills Needed To Use This Manual

To use this manual you should be able to:

1. Aim and fire all M551 AARV weapons (see TM 9-2350-230-10).
2. Install M2 machine guns (see TM 9-1005-213-10).
3. Install blank-fire adapters on M2 and Coax machine guns. (See TM 9-1005-213-10 and TM 9-1005-233-10).
4. Install Hoffman MGT/WESS firing device. Know how to interface with trigger cable assembly (see TM Simulator, Tank Gun Fire Device A17-61, Hoffman Werke Jan. 79 and 1 Apr. 79).
5. Complete DA Form 2402.



If you can not do these tasks, ask your NCO or instructor to show you how. When you can do all these tasks, proceed with the instructions in this manual.

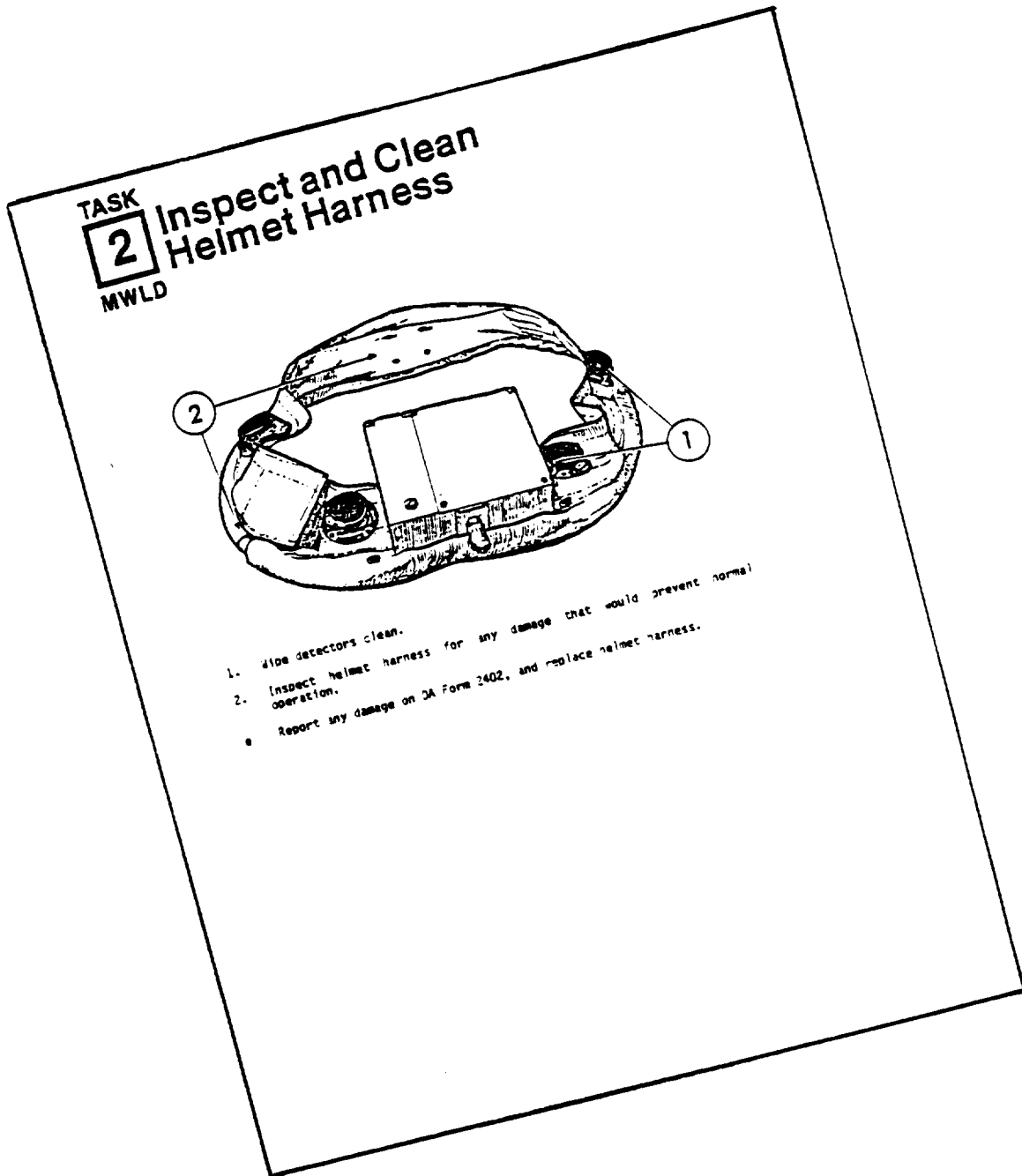
## How to Use This Manual

Before you use any M551 MILES-equipment, read this manual.

- The first part of the manual briefly explains the purpose of the equipment and how it is used.
- Then comes step-by-step guidance for every task you need to do with the M551 MILES equipment.

## How To Use This Manual, Continued

- The task pages look like this. Some tasks run more than one page. Before you begin a task, read all the steps in the task and look at each drawing carefully. To help perform the task, some steps have matching numbers in the drawings. Do each step exactly the way you are instructed.



How to Use This Manual, Continued:

- Do each task in the order it occurs in the manual.  
- DON'T JUMP AHEAD - DON'T SKIP ANY STEPS -
- If your equipment has a problem you can't fix using this manual, report it on DA Form 2402. To get a replacement, turn in the faulty equipment and the completed DA Form 2402 to your NCOIC.
- In the back of this manual is a list of abbreviations and an explanation of terms used in this manual. If you read a word you don't understand, check pages 89 through 91 for an explanation.



## General Information

This manual shows you how to operate and maintain the MILES equipment for the M551. MILES transmitters are installed in the breech of the main gun and on the cooling jacket of the M2 machine gun in the cupola. The operator tasks for the MILES equipment are listed in the Table of Contents.

### Purpose of Equipment:

The MILES equipment for the M551 consists of two battery-operated laser transmitters and a detector system, which permits realistic combat training without the hazards of using live ammunition.

### Forms and Records:

- a. Reports of Maintenance or Equipment Replacement: Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 738-750, The Army Maintenance Management System (TAMMS).
- b. Reporting Equipment Improvement Recommendations (EIRs).

EIRs can and must be submitted by anyone who is aware of an unsatisfactory condition with the equipment design or use. It is not necessary to show a new design or list a better way to perform a procedure, just simply tell why the design is unfavorable or why a procedure is difficult. EIRs may be submitted on SF 368. Mail direct to : Commander, U.S. Army Armament, Munitions and Chemical Command, ATTN: AMSMC-QAD, Rock Island, IL 61299-6000.

A reply will be furnished to you.

- c. Hand Receipt Manual Hand receipts for Components of End Item (COEI), Basic Issue Items (BII), and Additional Authorization List (AAL) items are published in a Hand Receipt manual, TM 9-1265-369-10-3-HR. This manual is published to aid in property accountability and is available through: Commander, U.S. Army Adjutant General Publication Center, 2800 Eastern Boulevard, Baltimore, MD 21220.

## Equipment Description

### Capabilities and Features:

#### Major Components:

- a. Laser transmitter in breech of main gun.
- b. Laser transmitter on cooling jacket of M2 machine gun in cupola.
- c. Detector belt segments on all sides of the turret.
- d. A combat vehicle kill indicator (CVKI) which mounts to the right front turret lifting eye. This device consists of a flashing light to indicate a vehicle kill, near miss, and hit.

Operates in temperatures from -350C (-310F) to 620C (1440F). Eye safe laser transmitter. Tactical skills practiced under realistic conditions.

The laser transmitters send harmless, invisible laser flight) beams toward targets. If the laser beam hits a vehicle target, a detector assembly on the target senses the beam and turns on a flashing light mounted on the target.

### Battery Information:

#### Battery Box:

BA-200/U, 6V carbon zinc (2)

#### M2 Machine Gun Transmitter:

BA-3090/U, 9V alkaline (1)

#### Man Worn Laser Detector - Torso Harness:

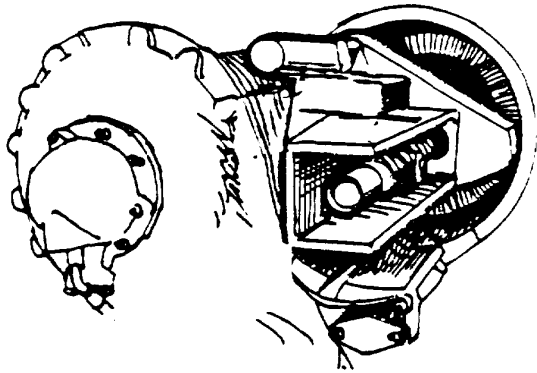
BA-3090/U, 9V alkaline (1)

#### Man Worn Laser Detector - Helmet Harness:

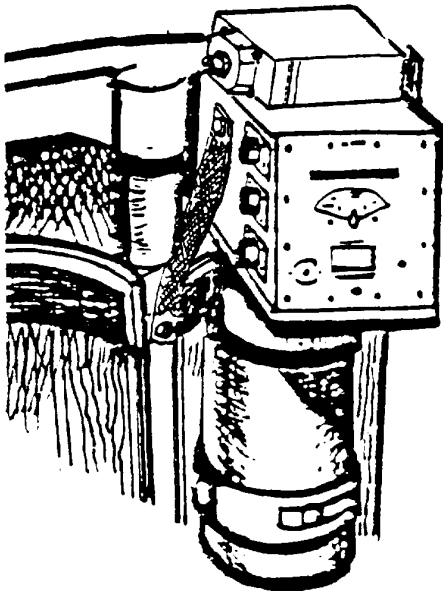
BA-3090/U, 9V alkaline (1)

Battery Life = 100 hours (approximate)

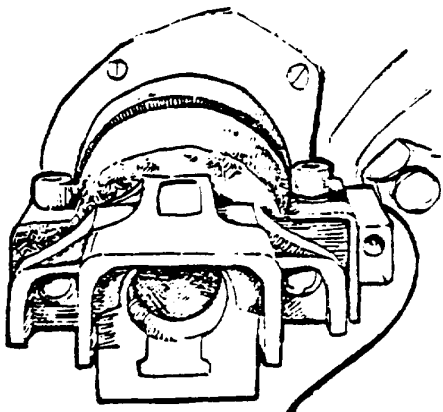
LOCATION OF COMPONENTS:



Main Transmitter. In breech of main gun.



Control Console and Battery Box. Mounted in the 3-round vertical rack in the 152 mm conventional rounds storage area.



M240 Coax Machine Gun Microphone. On barrel jacket clamp.