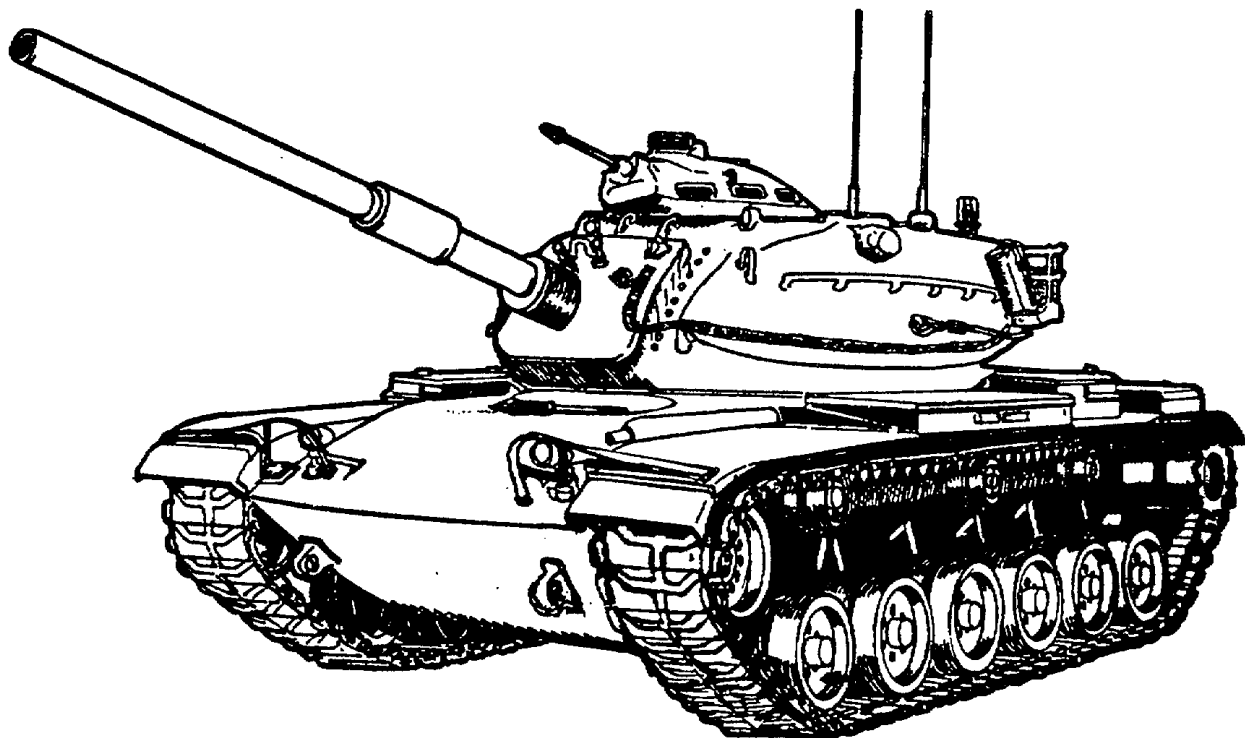


OPERATOR'S MANUAL
FOR
MULTIPLE INTEGRATED LASER
ENGAGEMENT SYSTEM
(MILES)
SIMULATOR SYSTEM, FIRING, LASER: M65
(NSN 1265-01-077-6080)
FOR
M60A1/A3 TANK



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

HEADQUARTERS, DEPARTMENT OF THE ARMY

JULY 1988

TECHNICAL MANUAL

TM9-1265-369-10-1

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

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FOR
MULTIPLE INTEGRATED LASER ENGAGEMENT SYSTEM (MILES)
SIMULATOR SYSTEM, FIRING LASER: M65
(NSN 1265-01-077-6080)
M60A1/A3 TANK**

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 9-1265-369-10-1 dated 22 January 1982

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Storage Instructions

Equipment Distribution:

The MILES Equipment for the M6OA1/A3 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:

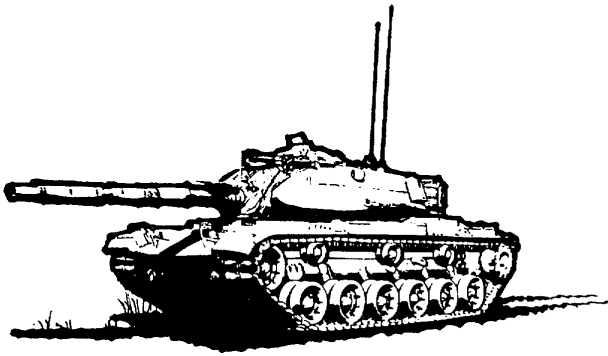
If M6OA1/A3 MILES equipment is unused for 60 days, remove from transit case and perform Outside Tasks 2, 3, 5, and 7; inside Tasks 1, 3, 4, 6, and 8, MSS Machine Gun Task 1, MWLD Tasks 1 and 2; and Operational Task 7 in this TM.

Skills Needed To Use This Manual

To Use This Manual, You Should Be Able To:

1. Aim and fire all M60A1/A3 weapons. See TM 9-2350-215-10.
2. Install M85 and coax machine guns. See TM 9-1005-231-10 and TM 9-1005-233-10.
3. Install blank-fire attachments on the M85 and coax machine guns.
4. Install Hoffman MG T/WESS firing device. Know how to interface with W1 trigger case assembly. See TM Simulator, Tank Gun Fire Device 17-61, and Hoffman Werke Jan. 79 and revised 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.



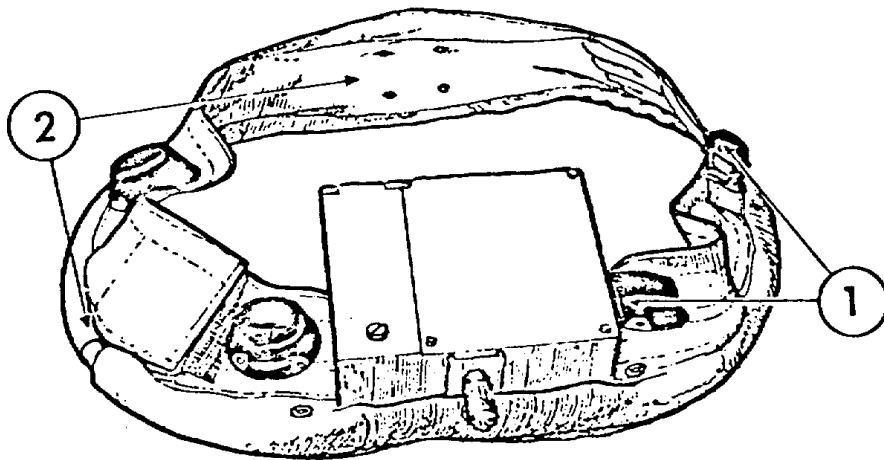
How to Use This Manual

Before You Use Any M60A1/A3/MILES Equipment, Read This Manual.

- The first part of the manual briefly explains the purpose of the equipment and how it is used.
- Then follows step-by-step guidance for every task you need to do with the M60A1/A3/MILES equipment.

TASK
2
MWLD

Inspect and Clean Helmet Harness



1. Wipe detectors clean. (Clean all 5.)
 2. Inspect helmet harness for any damage that would prevent normal operation.
- Report any damage on DA Form 2404. Replace helmet harness only if not operable.

- The task pages look like this. Some longer 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 just the way you are instructed.

General Information

This manual shows you how to operate and maintain the MILES equipment for the M60A1/A3 Tank. MILES transmitters are installed in the breech of the main gun and on the cooling jacket of the M85 machine gun in the cupola. The operator tasks for the MILES equipment are listed in the Table of Contents on Pages 1 and 2.

Purpose of Equipment:

The MILES EQUIPMENT FOR THE M60A1/A3 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 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 9-1265-369-10-1-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 barrel support of M85 machine gun in cupola.
- c. Detector belt segments on each side of the turret and on the rear.
- d. A combat vehicle kill indicator (CVKI) which mounts to rear turret lifting eye. This device consists of a flashing light to indicate a vehicle kill, near miss, and hit.

Operates in temperatures from -35°C (-31°F) to 62°C (144°F).

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)

M85 Machine Gun Transmitter:

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

Man Worn Laser Detector - Torso Harness:

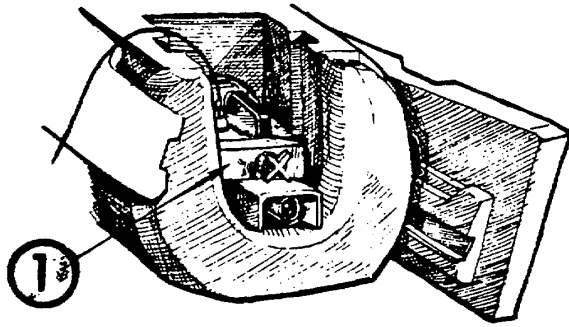
BA-3090/U, 9V alkaline (1)

Man Worn Laser Detector - Helmet Harness:

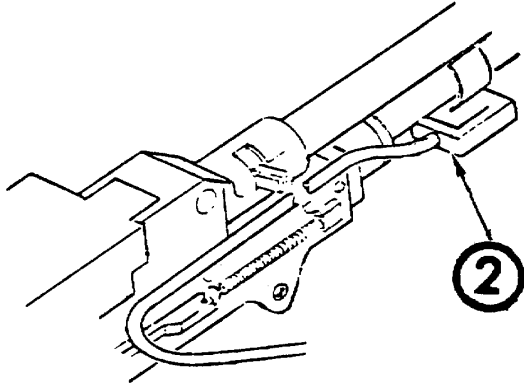
BA-3090/U, 9V alkaline (1)

Battery Life = 100 hours (approximate)

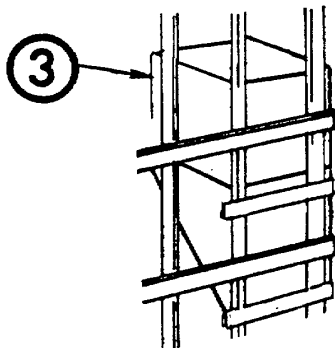
Location of Components:



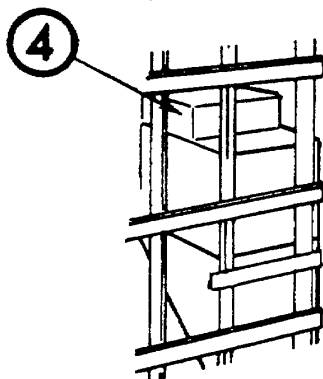
1. Main gun/coax machine gun transmitter. Fits into main gun breech.



2. Coax machine gun microphone attaches to machine gun barrel jacket mount.

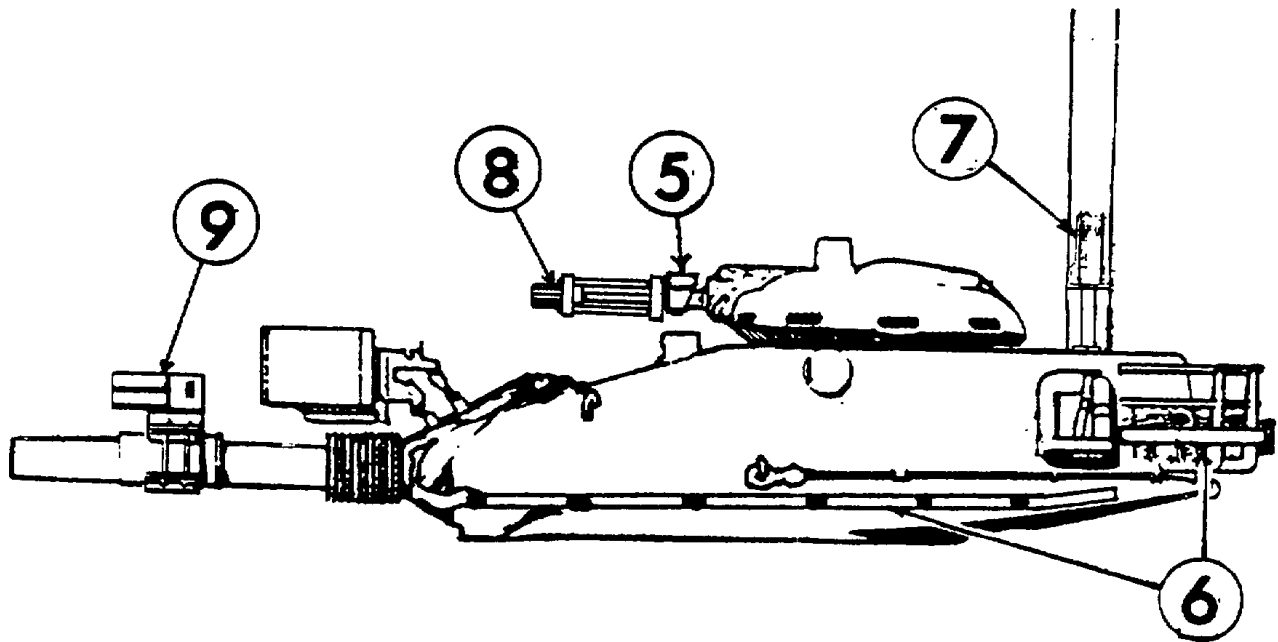


3. Control console. Mounted low on backside of radio guard rack, inside storage area, behind 105 mm gun ready rack on the turret floor.



4. Battery box. Mounted on top of control console.

Location of Components, Continued:



- 5. M85 machine gun transmitter mounted on barrel support of M85 machine gun.
- 6. Detector belt segment on front, rear (inside the bustle), and both sides of turret.
- 7. Combat vehicle kill indicator (CVKI) mounted on rear turret lifting eye.
- 8. Blank firing attachment (BFA) M20 for M85 machine gun.
- 9. Hoffman device simulator mounted on cannon tube.