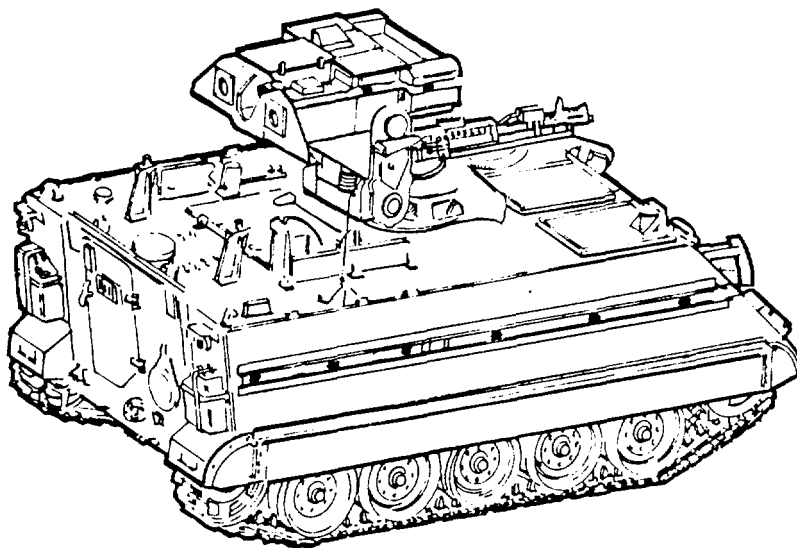


OPERATOR'S MANUAL
MULTIPLE INTEGRATED LASER
ENGAGEMENT SYSTEM
(MILES)
SIMULATOR SYSTEM, FIRING LASER: M73
FOR
M901 IMPROVED TOW VEHICLE



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HEADQUARTERS, DEPARTMENT OF THE ARMY

JULY 1988

TECHNICAL MANUAL

TM 9-1265-202-10

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: M73
FOR
M901 IMPROVED TOW 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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*This manual supersedes manufacturers TM 9-1265-202-10, 1 June 1982, incl all changes.

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Storage Instructions

Equipment Distribution:

The MILES equipment for the M901 ITV is shown in Task 2 of this Technical Manual (TM). Use the pictures with 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:

CAUTION

MAKE CERTAIN THAT THE MWLD TORSO AND HELMET HARNESS ARE COMPLETELY DRY BEFORE STORAGE IN TRANSIT CASE.

When receiving equipment for storage, always inspect the returned equipment using Operational Task 5 in this TM for guidance.

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

Special Instructions for Infrequently Used Equipment:

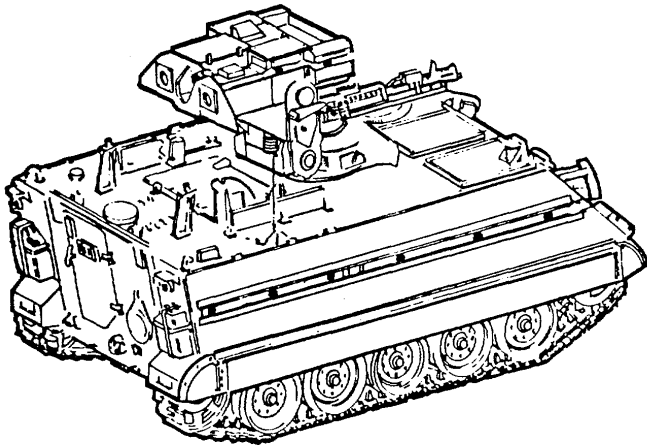
If M901 ITV/MILES equipment is unused for 60 days, remove from transit case and perform Outside Tasks 2, 3, 6, and 8; Inside Tasks 1 and 3; Machine Gun Task 1; MWLD Tasks 1 and 2; and Operational Task 5.



Skills Needed To Use This Manual

TO USE THIS MANUAL YOU MUST BE ABLE TO:

1. Aim and fire the M60 machine gun (See TM 9-1005-224-10)
2. Prepare the M60 for blank-fire operation (See TM 9-1005-224-10)
3. Set up a TOW weapon system for firing (See TM 9-1425-470-12)
4. Aim, fire, and track a TOW.
5. Complete DA Form 2404



IF YOU CAN NOT DO THESE TASKS, ASK YOUR NCO OR INSTRUCTOR TO SHOW YOU HOW. WHEN YOU CAN DO ALL THESE TASKS, GO ON WITH THIS MANUAL.



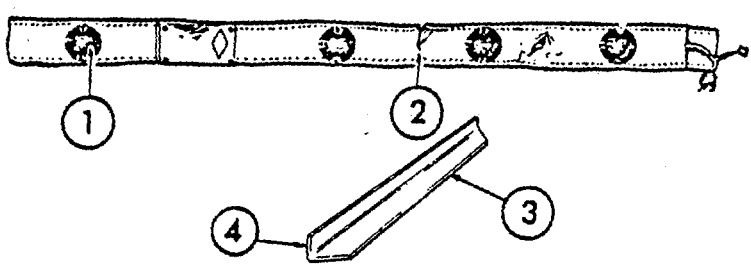
How To Use This Manual

Before you use any M901 ITV/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 M901 ITV/MILES equipment.

TASK
3
OUTSIDE

**Inspect & Service Detector
Belt Segments & Brush Guards**



CHECK ALL (4) BELT SEGMENTS:

1. Wipe detectors clean (clean all detectors).
2. Inspect harness for damage which would prevent normal operation

CHECK ALL (12) BRUSH GUARDS:

3. Inspect (12) brush guards for bends that would prevent them from being securely fastened to the vehicle.
4. Make sure Velcro is securely mounted on the rear of the brush guards. If Velcro is missing report on DA 2404 and replace brush guard.
- Report any damage on DA Form 2404. Replace belt segments or brush guards 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 of the steps in that 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.

- 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 2404. To get a replacement, turn in the faulty equipment and the completed DA Form 2404 to your NCOIC.
- In the back of this manual is a list of abbreviations and an explanation of terms (Glossary) used in this manual. If you read a word you don't understand, check the list of abbreviations and glossary.



General Information

This manual shows you how to operate and maintain the M901 ITV/MILES laser simulator equipment. The operator and organizational maintenance tasks are listed in the Table of Contents. The transit case containing the system components also contains items that allow this equipment to be used on an M113 APC. If you are installing this equipment on an M113 APC, refer to TM 9-1265370-10-3 also contained in the transit case.

Purpose of Equipment:

MILES equipment for the M901 ITV consists of a laser transmitter and a laser detector system. The simulator system allows 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 directly 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 Authorizational List (AAL) items are published in a Hand Receipt manual, TM 9-1265-202-10-HR. This manual is published to aid in property accountability and is available through: Commander, the U.S. Army Adjutant General Publications Center, 2800 Eastern Boulevard, Baltimore, MD 21220.



Equipment Description

Capabilities and Features:

Major components of the M901/MILES System consist of:

1. Laser transmitter mounted on barrel of M60 machine gun, and activated by sound of blank cartridges being fired.
2. Detector belt segments mounted on all four sides of the vehicle hull and one belt segment mounted on the two sides and rear of the TOW launcher.
3. A Combat Vehicle Kill Indicator (CVKI) mounted on the engine cover lifting eye. The CVKI is a light which flashes to indicate laser hits on the vehicle.
4. A TOW laser daysight tracker simulator attached in place of the actual TOW daysight tracker.
5. Man Worn Laser Detector (MWLD) Assemblies, consisting of:

- * • Helmet Harness
- * • Torso Harness

The M901/MILES system can be operated in temperatures from -350C (-310F) to 620C (1440F). It permits tactical skills to be practiced under realistic conditions.

The laser transmitters send harmless invisible laser (light) beams toward targets. If the laser beam hits the target, a detector assembly on the target senses the beam, causes an alarm to sound in the intercom of the target vehicle, and causes the externally-mounted CVKI light to flash. If the laser beam hits a soldier, an alarm buzzer sounds on the man-worn laser detector harness.

Battery Information:

The M901/MILES system uses BA-200/U, 6-volt carbon-zinc batteries, and BA3090/U, 9-volt alkaline batteries. These batteries provide approximately 100 hours of power to the system.

LOCATION OF COMPONENTS:

