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TECHNICAL MANUAL
DIRECT SUPPORT AND GENERAL SUPPORT
MAINTENANCE MANUAL

PERISCOPE, TANK
M35E1
(1240-00-348-8442)

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**DIRECT SUPPORT AND GENERAL SUPPORT
MAINTENANCE MANUAL
PERISCOPE, TANK: R3tE1
NSNI 12441 341 I44**

REPORTING ERRORS AND RECOMMENDING IMPROVEMENT

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 the 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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HOW TO USE THIS MANUAL

This manual provides information on how to perform direct and general support maintenance on the M35E1 Tank Periscope. A chapter overview describes briefly the information or instructions included in each chapter.

This manual consists of:

1. Chapter 1 is an introductory chapter.
 - a. Section I. General Information. Explains the scope of the manual and identifies other manuals to be used in conjunction with this manual.
 - b. Section II Equipment Description and Data. Describes the physical makeup and function of each of the three major assemblies that comprise the periscope, and their relationship to each other.
 - c. Section III. Repair Parts, Special Tools, TMDE and Support Equipment. Refers to TM 9-1240-382-34P for information pertaining to spare parts and special tools, and lists those special tools and equipment necessary to perform the maintenance instructions contained in this manual.
2. Chapter 2. This chapter contains maintenance instructions authorized to be performed by direct and general support maintenance personnel.
 - a. Section I. Service Upon Receipt of Materiel. Refers to TM 9-2350-253-20-2 for service instructions upon receipt of a new or overhauled periscope.
 - b. Section II. Troubleshooting. This section contains a symptom index, and an illustrated trouble shooting guide.
 - c. Section III. Maintenance Procedures.
 - (1) A list of tasks to be performed with the maintenance instructions contained in each paragraph is included at the beginning of each paragraph.
 - (2) An initial Setup section is also included at the beginning of each paragraph and covers the following items.
 - (a) Applicable Configuration. Indicates when there is more than one model of a periscope to which the paragraph or section applies. There is only one model of this periscope currently in use.
 - (b) Test Equipment. Test equipment required to perform specific tasks are listed.
 - (c) Special Tools. All special tools required to perform specific tasks are listed.

(d) Materials/Parts. Listed are materials necessary to effect repairs, or to use during reassembly. If the maintenance procedure is directed toward replacement of a specific part, the part is also listed.

(e) Procedures. Procedures to be performed by general support are indicated by a GS following the procedure.

(f) Personnel Required. Only one fire control repairman is required to perform direct and general support maintenance.

(g) References. Other publications that should be available when performing the maintenance task are listed.

(h) Troubleshooting References. References that should be available to the fire control repairman when he is troubleshooting the periscope are the Operator's manual TM 9-2350-253-10 and the organizational Maintenance Manual TM 9-2350-253-20-2

(i) Equipment Condition. States whether or not the periscope is assembled or disassembled. If partially disassembled, lists components that are removed.

(j) Special Environmental Conditions. The normal clean environment for servicing optical equipment is required.

(k) General Safety Instructions. There are no general safety instructions necessary for performing maintenance of the periscope.

(l) Approximate Time Required. Time required to perform each maintenance task is listed in the Maintenance Allocation Chart (MAC) in TM 9-2350-253-20-2

(3) Use the following procedures as applicable for each major component in accordance with the Maintenance Allocation Chart (MAC). The procedures are removal, disassembly, cleaning, inspection, repair, reassembly, adjustment, and installation.

3. Chapter 3. This chapter contains the inspections to be performed after the periscope has been repaired, and preembarkation inspection of materiel in units alerted for overseas movement.

4. Appendices. The appendices contain the following information.

a. Appendix A. Contains a list of references.

b. Appendix B. A list of expendable supplies and materials.

c. Appendix C. Schematic Diagram.

d. Appendix D. Illustrations of spanner wrenches.

5. Index. An index is included in the back of this manual.

CHAPTER 1

INTRODUCTION

CHAPTER OVERVIEW

This chapter contains a. general information, b. equipment description and data, c. repair parts, special tools, TMDE and support equipment for the periscope.

SECTION I. GENERAL INFORMATION**1-1. SCOPE**

Type of Manual: Type-34 Direct Support and General Support Maintenance Manual

Model Number and Equipment Name:

M35E1 - Periscope. Tank

Purpose of Equipment: Daylight and night sighting as part of tank fire control systems.

1-2 MAINTENANCE FORMS, RECORDS, AND REPORTS. 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.

on SF form 368, duality Deficiency Report for preparing EIR's are provided in DA PAM 738-750, The Army Maintenance Management System. EIR's should be mailed directly to Commander, US Army Armament, Munitions and Chemical Command, ATTN: AMSMC-QAD, Rock Island, IL -61299-6000. A reply will be furnished directly to you.

1-3 REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR'S). EIR's will be prepared

SECTION II. EQUIPMENT DESCRIPTION AND DATA**1-4. PURPOSE OF THE M35E1 PERISCOPE, TANK**

Designed for daylight and night sighting and observing as part of the fire control system in the Tank, Combat, Full Tracked 105MM Gun, M60A3.

1-5. CAPABILITIES AND FEATURES**a. Optical capability**

(1) Unity power system (1x) for wide and close in vision of terrain.

(2) Eight power system (8x) for visible light sighting of targets

(3) Image intensifier system (7.1x)... for night sighting of targets

b. Major Components

(1) Head Assembly

(2) Daylight Body Assembly

(3) Elbow Assembly

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1-6 LOCATION AND DESCRIPTION OF MAJOR COMPONENTS. The following illustration shows the location, identification, and relative position of the major components of the M35E1 Periscope.

Head Assembly (1)
Daylight Body Assembly (2)
Passive Elbow Assembly (3)

