

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

FIELD AND DEPOT MAINTENANCE MANUAL

PERISCOPE M37

Headquarters, Department of the Army, Washington , D.C.

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1. Scope

a. This manual contains instructions for the field and depot maintenance of periscope M37.

b. These instructions are used in conjunction with and are supplementary to those in the operator's or organizational maintenance manual. Instructions for operation, lubrication, and operator's maintenance are in TM 9-2350-215-10. Instructions for maintenance including installation and removal procedures, as well as tests and adjustments after installation, are in TM 9-2350-215-20. It may be necessary to refer to these manuals for complete procedures.

c. A description of the item, inspection procedures, and repair and overhaul operations are presented in this manual.

d. The appendix contains a list of current references, including supply and technical manuals, forms, and other available publications applicable to periscope M37.

e. This first edition is being published in advance of complete technical review. Any errors or omissions will be forwarded on DA Form 2028 direct to the Commanding Officer, Frankford Arsenal, ATTN: SMUFA-3100, Philadelphia 37, Pa.

2. Maintenance Allocation and Parts

a. Field and depot maintenance responsibilities are limited to those specified in the maintenance allocation chart in TM 9-2350-215-20.

b. Repair parts authorized to field and depot maintenance units are listed in TM 9-1240-315-35P. Unlisted parts will be supplied, if available, when complete justification is included.

3. Maintenance Techniques

a. The maintenance technique, IROAN (Inspect and Repair Only As Necessary) will be used to restore this materiel to serviceable condition.

b. IROAN is the systematic isolation and remedy of a malfunction or defective component through tests, diagnosis, and singular repair. No segment of the materiel is disassembled before the definite need for disassembly has been established.

4. Forms, Records, and Reports

a. *General.* Responsibility for the proper execution of forms, records, and reports rests upon the commanding officers of all units maintaining this equipment. However, the value of accurate records must be fully appreciated by all persons responsible for their compilation, maintenance, and use. Records, reports, and authorized forms are normally utilized to indicate the type, quantity, and condition of materiel to be inspected, to be repaired, or to be used in repair. Properly executed forms convey authorization and serve as a record of work performed. The forms, records, and reports establish the work required, the progress of the work, and the status of the materiel upon completion of its repair.

b. *Authorized Forms.* The forms generally applicable to units maintaining this materiel are listed in the appendix. For instructions on use of these forms, refer to FM 9-3 and 9-4. For a listing of all forms, refer to DA Pam 310-2.

c. *Field Report of Accidents.* The reports necessary to comply with the requirements of the Army safety program are prescribed in detail in AR 385-40. These reports are required whenever accidents involving injury to personnel or damage to materiel occur.

d. *Equipment Improvements Recommendations (EIR's) (formerly Unsatisfactory Equipment Reports).* All EIR's will be in accordance with TM 38-750.

e. *Reporting Receipt of Defective Material.* All reports will be in accordance with TM 38-750.

Section II. DESCRIPTION AND DATA

5. Description

a. Periscope M37 (fig. 1) is used as a vision device in 105-mm gun full tracked combat tank M60A1. The pins, on either side of the housing near the cover, act as trunnions for mounting it in the vehicle.

b. A segment attached on the right side of the housing (fig. 2) is secured by a knob. Loosening the knob permits the periscope to be tilted in elevation or depression. Two windows and two mirrors are bonded to the plastic body. A housing containing the body has a crash pad secured to the lower end.

6. Data

a. *Physical Characteristics.*

Length (including crash pad). 15-1/2 in.
Width (including crash pad) 8-3/4 in.
Depth (including crash pad) 3- 1/8 in.
Weight 16 lb

b. *Optical Characteristics.* This periscope is of the solid plastic type, single power of magnification. Field of view 26 degrees vertical and 72 degrees horizontal. The optical characteristics are not considered pertinent beyond the inspection of the materiel at time of manufacture, in accordance with MIL-P-46329 (ORD) dated 30 January 1962 and/or the amendment which is to include periscope M37.

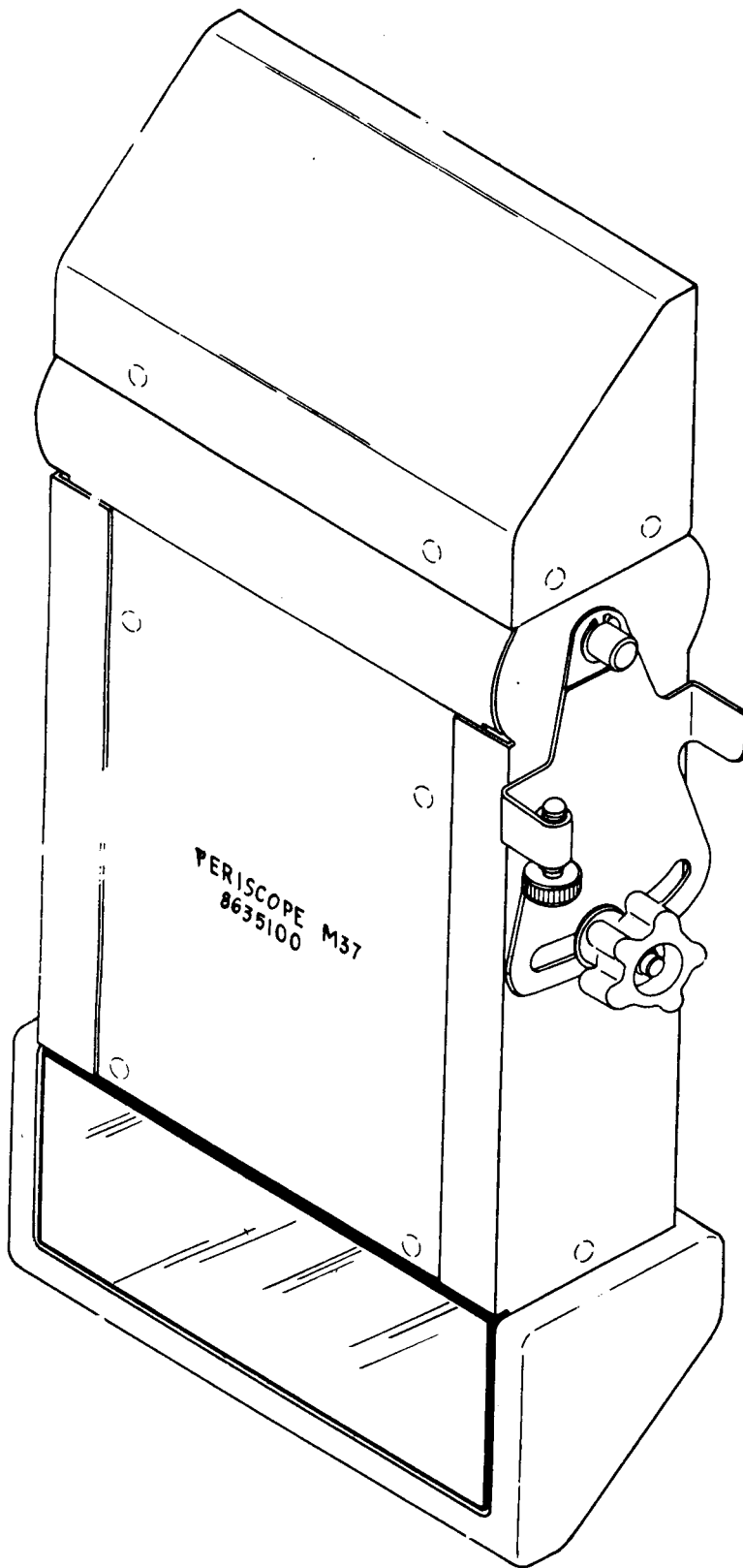


Figure 1. Periscope M37.

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