

TM 9-1240-297-35

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

FIELD AND DEPOT MAINTENANCE MANUAL

TELESCOPE MOUNT M110

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Technical Manual }
 No. 9-1240-297-35 }

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 DEPARTMENT OF THE ARMY
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TELESCOPE MOUNT M110

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1. Scope

a. This manual contains instructions for the information of personnel responsible for field and depot maintenance of telescope mount M110, which is beyond the scope of the tools, equipment, or supplies normally available to using organizations.

b. This manual contains a description of telescope mount M110. It also specifies troubleshooting procedures, disassembly, repair and overhaul, and assembly of telescope mount M110 peculiar to field and depot maintenance. The instructions in this manual are intended for maintenance specialists who have been thoroughly trained in maintenance practices.

c. The maintenance functions contained in this manual describes the concept of IROAN (Inspect and Repair Only as Necessary). This technique is applicable to the maintenance of telescope mount M110, at all echelons of maintenance. It does not change or lower the required quality of maintenance or prescribed serviceability standards.

d. The appendix contains a list of current references, including supply and technical manuals, forms, and other available publications applicable to telescope mount M110. The maintenance allocation chart is included in TM 9-1015-223-12. TM 9-1240-297-35P lists repair parts and special tools authorized to field and depot personnel.

e. Operation, lubrication, and all maintenance operations allocated to using organizations in performing maintenance work within their scope for the telescope mount M110 are contained in TM 9-1015-223-12.

f. *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, Raritan Arsenal, Metuchen, New Jersey, ATTN: ORDJR-OPRA.

2. Maintenance Allocation and Parts

a. Field maintenance responsibilities prescribed in this manual will apply as reflected in the maintenance allocation chart in TM 9-1015-223-12 and as reflected by the allocation of repair parts and tools listed in TM 9-1240-297-35P.

b. Depot maintenance responsibilities will provide for complete overhaul of telescope mount M110 as reflected by the IROAN concept for the purpose of repairing or overhauling an unserviceable item.

c. Depot maintenance parts are listed in TM 9-1240-297-35P, which is the authority for requisitioning replacements. Parts not listed therein but required by depot shops may be requisitioned and will be supplied, if available, when the need is substantiated. Requisitions for parts not listed in TM 9-1240-297-35P will contain a complete justification of requirements. Requisitions for assemblies will be held to a minimum. Whenever possible, overhaul of assemblies will be accomplished. When feasible, local fabrication maybe required for those parts unable to be supplied.

3. 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 records 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 in the use of these forms, refer to FM 9-3 and FM 9-4. For a listing of all forms, refer to DA Pam 310-2.

c. Field Reports of Accidents. The re-

ports 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. Reports of Unsatisfactory Equipment or Materials. Any deficiencies detected in the equipment covered herein, which occur under the circumstances indicated in AR 700-38, should be immediately reported in accordance with the applicable instructions in cited regulation.

Section II. DESCRIPTION AND DATA

4. General

This section provides an overall description of the major item and includes a reference to the materiel with which it is used. It also describes the main components and how they tie into the complete telescope mount M110.

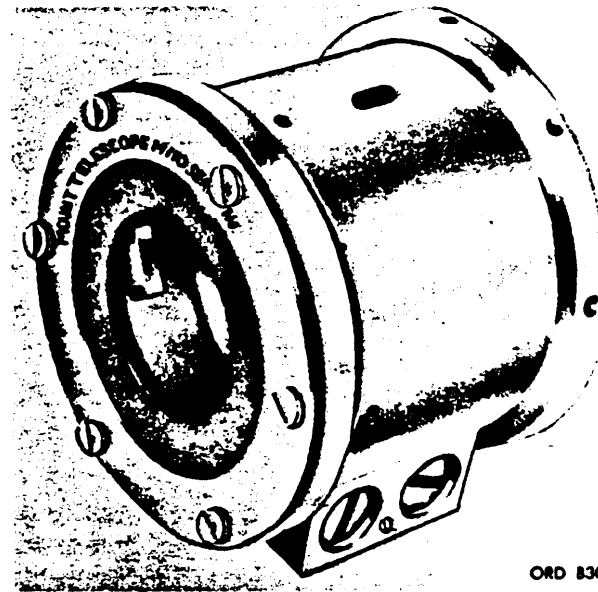
5. Description

a. Telescope mount M110 (fig. 1) holds telescope M103 to the 90-mm rifle M67. It is designed so that the telescope can be inserted and seated rapidly and with assured replacement accuracy.

b. The parts and mechanism of telescope mount M110 are contained in a steel housing. A retaining ring which threads onto the outside of the telescope mount housing holds the mount to the front bracket assembly of the weapon. Four nylon pins in the ring grip the threads on the housing and prevent the ring from loosening.

c. A cylindrically-shaped flange on a gimbal tube fits snugly into the bore of telescope mount M110. The gimbal tube has three segments of a helical-pitch left-handed thread machined at one end of the internal bore, to engage mating threads on

the telescope M103. A conically-shaped shoulder at the other end of the bore of the tube matches the shoulder on the telescope. Telescope mount M110 also features a device which enables boresight adjustments.



ORD 83035

Figure 1. Telescope mount M110.

6. Data

Length	-----	-1-11/16 in.
Diameter	-----	-2-3/16 in.
Weight	-----	-15 oz