

TM 9-1240-285-35

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

FIELD AND DEPOT MAINTENANCE MANUAL

TELESCOPE MOUNT M114 (T199)

HEADQUARTERS, DEPARTMENT OF THE ARMY

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TECHNICAL MANUAL

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CHAPTER 1

INTRODUCTION

Section I. GENERAL

1. Scope

a. This manual is published for the information of personnel responsible for field and depot maintenance of telescope mount M114 (T199). These instructions contain information on maintenance 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 M114 (T199). It also specifies troubleshooting procedures, disassembly, rebuild procedures, and assembly of telescope mount M114 (T199) 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 appendix contains a list of current references, including supply and technical manuals, forms, and other available publications applicable to telescope mount M114 (T199). The maintenance allocation chart is included in TM 9-2350-215-20. TM 9-1240-285-35P lists repair parts and special tools authorized to field and depot maintenance personnel.

d. Operation, lubrication, and all maintenance operations allocated to the operators in performing maintenance work within their scope for telescope mount M114 (T199) are contained in TM 9-2350-215-10. Organizational maintenance operations allocated to the organizational mechanic are contained in TM 9-2350-215-20.

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, 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 9-2350-

215-20 and as reflected by the allocation of repair parts and tools listed in TM 9-1240-285-35P.

b. Depot maintenance responsibilities will provide for complete rebuild of telescope mount M114 (T199) as reflected by the rebuild procedures prescribed in this manual for the purpose of rebuilding an unserviceable item.

c. The average time required to rebuild telescope mount M114 (T199) to place it in a serviceable condition is 7.0 man-hours of labor.

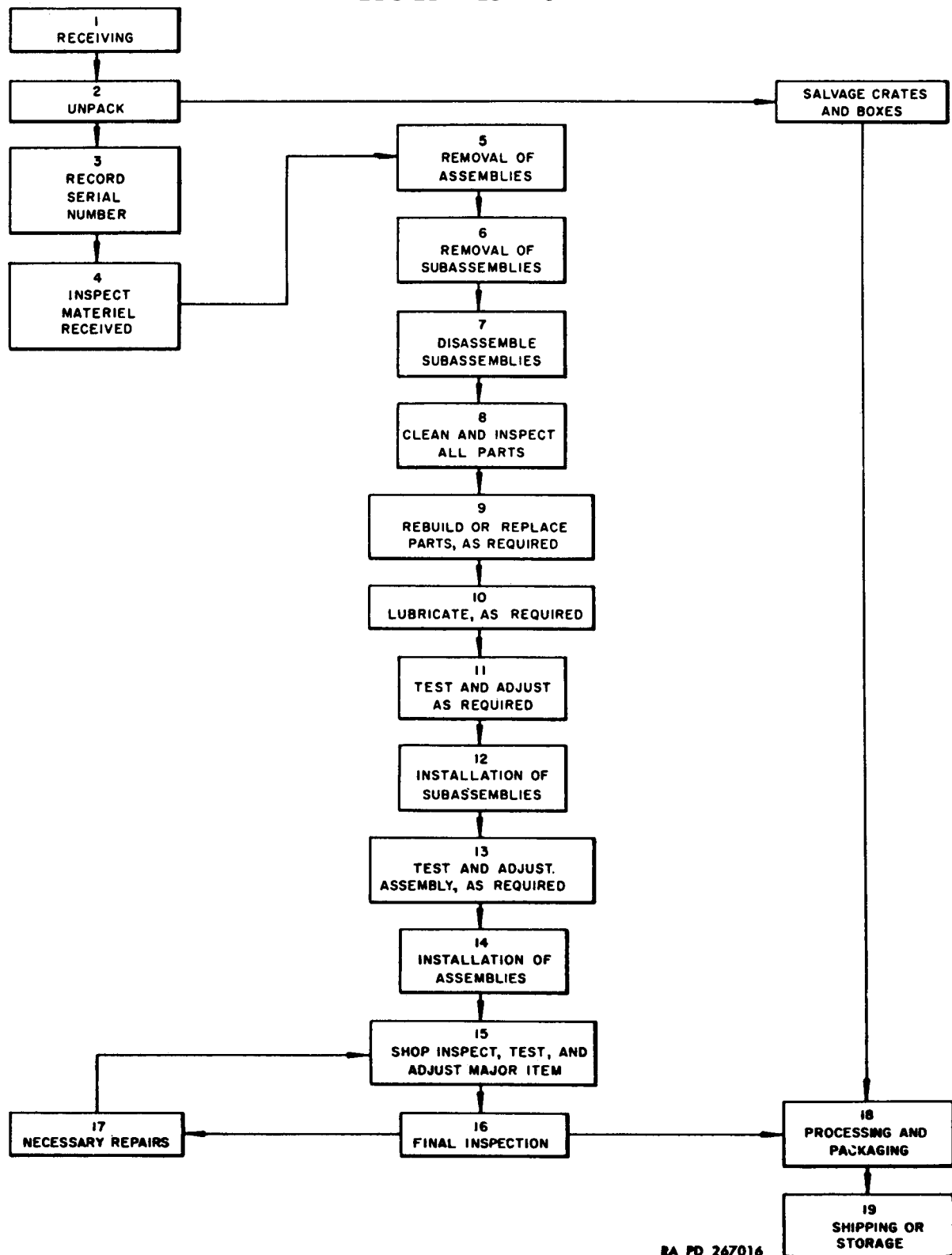
d. Depot maintenance parts are listed in TM 9-1240-285-35P, which is the authority for requisitioning replacements. Parts not listed therein but required by depot shops may be requisitioned and will be supplied, if available, when the need is substantiated. Requisitions for parts not listed in TM 9-1240-285-35P will contain a complete justification of requirements. Requisitions for assemblies will be held to a minimum. Whenever possible, rebuild of assemblies will be accomplished. When feasible, local fabrication may be required for those parts which cannot 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 this 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

REBUILD FLOW CHART



RA PD 267016

Figure 1. Rebuild flow chart

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 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. *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.

4. Rebuild Flow Chart and Operations Route Sheet

a. *Rebuild Flow Chart.* The rebuild flow chart shown in figure 1 is to be used as a guide by depot maintenance organizations to assist in establishing a proper flow of work to assure most economical shop operation.

b. *Operations Route Sheet.* Table I, Operations Route Sheet for Telescope Mount M114 (T199), supplements the rebuild flow chart (fig. 1). The operation number corresponds to the number on the chart. Special tools and fixtures required for an operation are indicated opposite the operation. Detailed instructions for each of the operations are contained in the pertinent sections covering the specific operation.

Table 1. Operations Route Sheet for Telescope Mount M114 (T199)

Operation No.	Operation	Fixture	Tool
1	Receiving.		
2	Unpack.		
3	Record serial number.		
4	Inspect material received.		
5	Removal of assemblies.....		Spanner wrench (fig. 5)
6	Removal of subassemblies.		
7	Disassemble subassemblies.		
8	Clean and inspect all parts.		
9	Rebuild or replace parts, as required.		
10	Lubricate, as required.		
11	Test and adjust, as required.		
12	Installation of subassemblies.		Spring wrench (fig. 4)
13	Test and adjust assembly, as required.		
14	Installation of assemblies.		Spanner wrench (fig. 5)
15	Shop, inspect, test, and adjust major item.		
16	Final inspection.....	Improvised testing device	Adapter torque wrench (fig. 6)
17	Necessary repairs.		
18	Processing and packaging.		
19	Shipping or storage.		

Section II. DESCRIPTION AND DATA

5. 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 M114 (T199). The assemblies listed in table II constitute the major units of telescope mount M114 (T199).

Table II. Main Assemblies of Telescope Mount M114 (T199)

Identifying No.	Description
8574691	Base housing assembly
8574694	Holder assembly

6. Description

a. *General.* Telescope mount M114 (T199) (figs. 2 and 3) supports articulated telescope M105C for use as the secondary direct fire control system in the 105-mm gun full-tracked combat tank M60.

b. *Main Assemblies.* Telescope mount M114 (T199) consists of a base housing assembly, which is attached to the mounting of the tank and forms the basic structure, an adjustable slide assembly supported horizontally in the housing, and an adjustable holder assembly capable of vertical movement within the slide. Boresight knobs and scale dials for adjusting the telescope in deflection and elevation, and

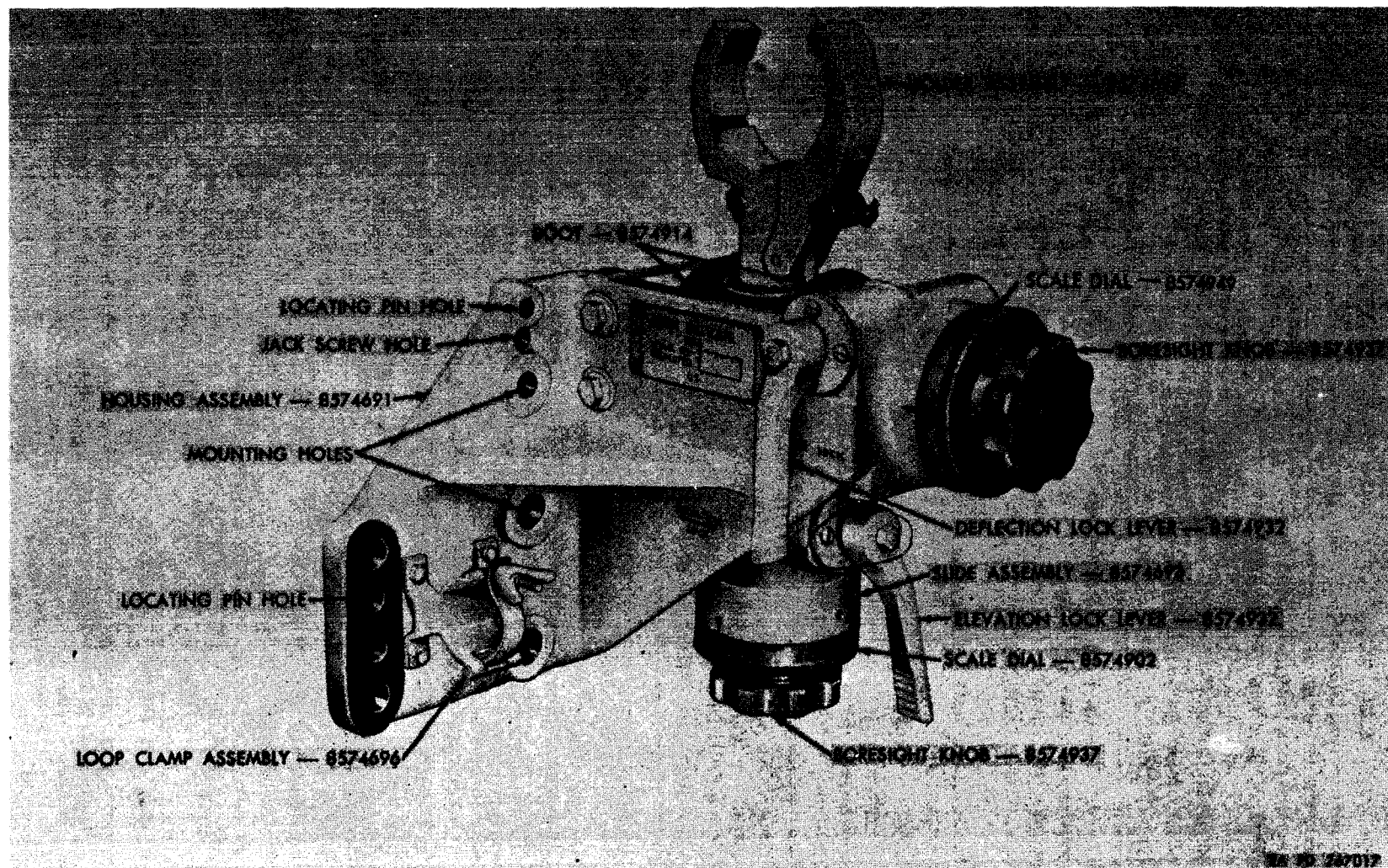


Figure 2. Telescope mount M114 (T199)
— front view.

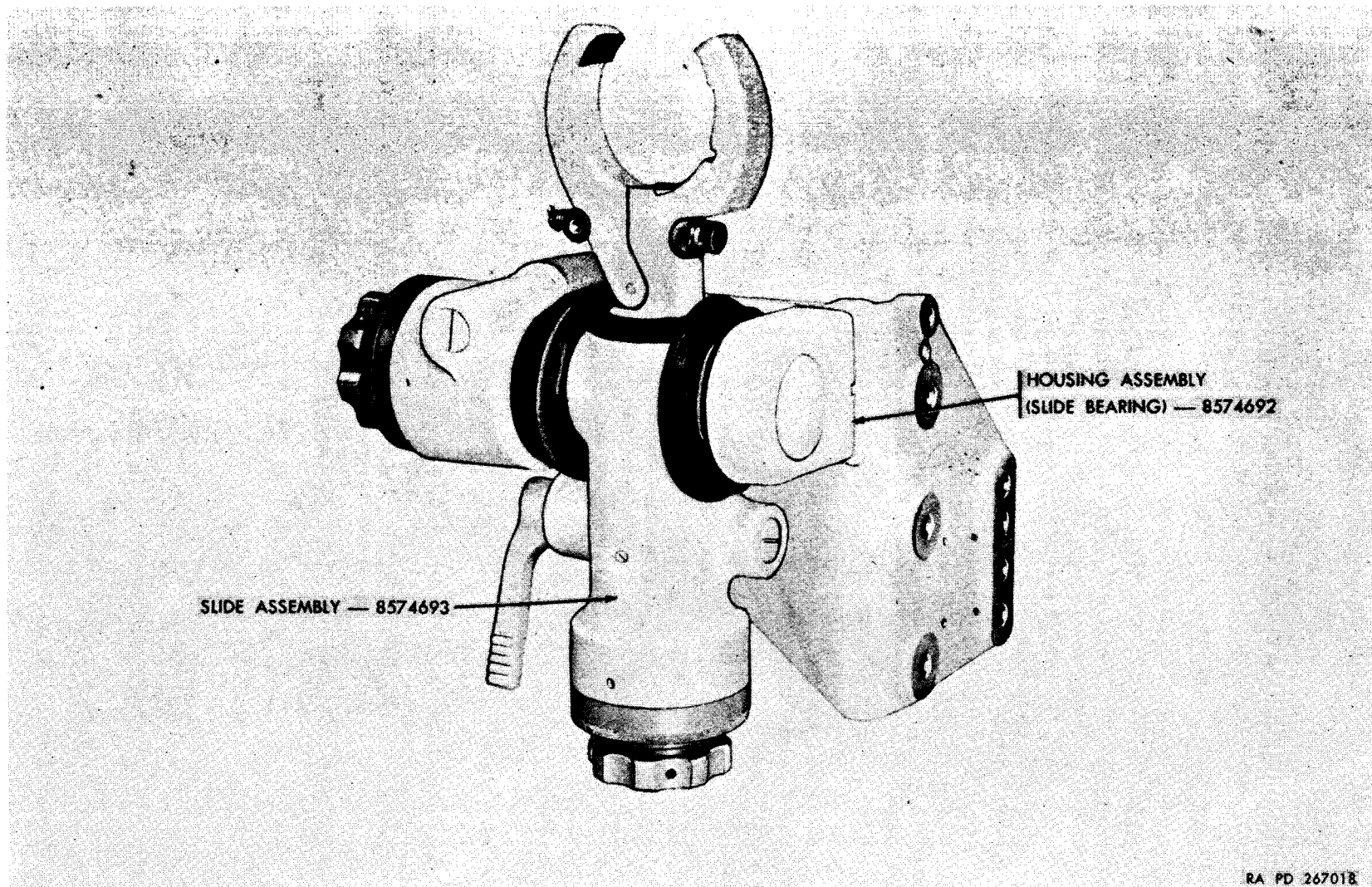


Figure 3. Telescope mount M114 (T199)
— rear view.