

# **TM 9-1240-381-24&P**

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**ORGANIZATIONAL, DIRECT SUPPORT AND  
GENERAL SUPPORT MAINTENANCE MANUAL  
(INCLUDING REPAIR PARTS AND  
SPECIAL TOOLS LIST AND DEPOT  
MAINTENANCE REPAIR PARTS AND  
SPECIAL TOOLS)  
BINOCULAR M19 W / E  
(1240-00-930-3833)**

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**31 OCTOBER 1978**

TECHNICAL MANUAL }  
TM 9-1240-381-24&P }

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
WASHINGTON, D.C., 31 October 1978

ORGANIZATIONAL, DIRECT SUPPORT AND  
GENERAL SUPPORT MAINTENANCE MANUAL  
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST  
AND DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS)

**BINOCULAR M19 (W/E)**  
**(1240-00-930-3833)**  
**Current as of 6 July 1978**

**REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS**

You can help improve this manual. If you find any mistake or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publication and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, US Army Armament Materiel Readiness Command, ATTN: DRSAR-MAS, Rock Island, IL 61299. A reply will be furnished to you.

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# CHAPTER 1

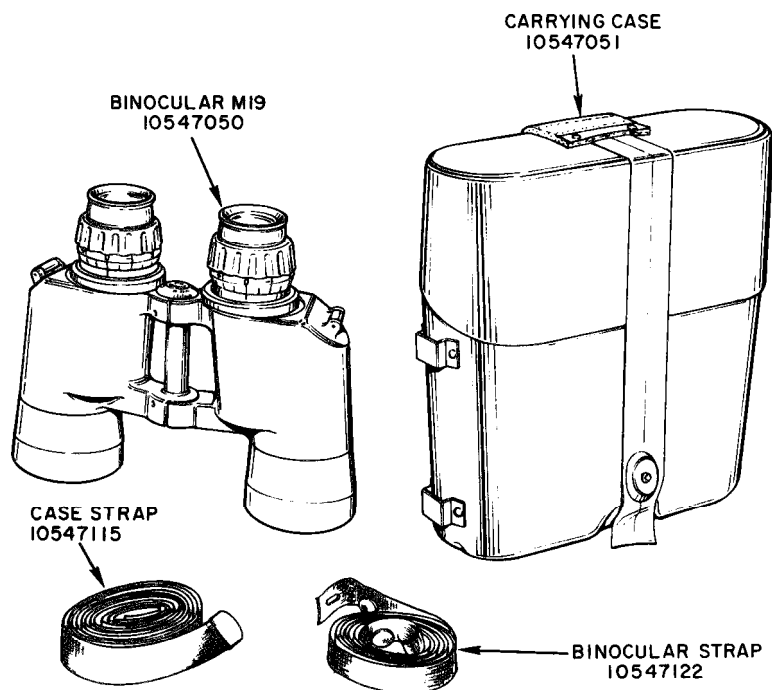
## INTRODUCTION

### Section I. GENERAL

#### 1-1. Scope.

a. This technical manual contains instructions for organizational, direct support and general

support maintenance of Binocular M19 with Equipment (fig. 1-1).



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Figure 1-1. Binocular M19 with Equipment.

b. Appendix A contains a listing of current references which are applicable to Binocular M19. Appendix B contains the Maintenance Allocation Chart (MAC). Appendix C lists all repair parts, special tools and equipment which are available to organizational, direct support, general support, and depot maintenance personnel.

#### 1-2. Maintenance Forms and Records.

Equipment maintenance forms and procedures for their use are contained in TM 38--750, The Army Maintenance Management System

(TAMMS).

#### 1-3. Reporting of Equipment Improvement Recommendations (EIR).

EIR's will be prepared on SF 368. Instructions for preparing EIR's are provided in TM 38-750, The Army Maintenance Management System (TAMMS). EIR's should be mailed directly to Commander, U.S. Army Armament Materiel Readiness Command, ATTN: DRSAR-MAO, Rock Island, IL 61299. A reply will be furnished directly to you.

**1-4. Administrative Storage.** Refer to TM 740-90-1.

**1-5. Destruction of Army Materiel to Prevent Enemy Use.** Refer to FM 5-25.

## Section II. DESCRIPTION AND DATA

### 1-6. Description of Binocular M19.

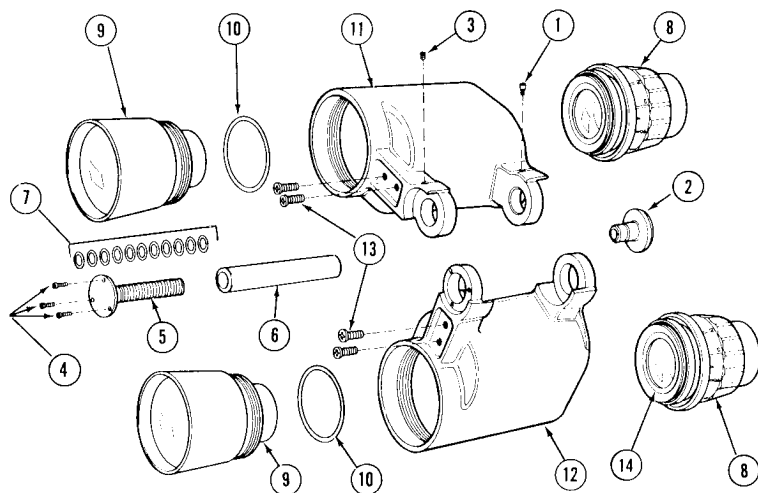
a. *General.* The 7x50 Binocular M19 is a lightweight, compact instrument intended for use in general field observation and fire direction. The left ocular contains a graduated angular mil scale reticle for estimating the range. The modular design features precollimated, fully interchangeable eyepieces, prism housings, and objective assemblies to facilitate easy replacement in the event of damage to any component. All optics are fully antireflection coated.

#### b. Major Components.

(1) Each ocular, or telescope, of Binocular M19 consists of three major assemblies: the objective assembly, the housing assembly, and the eyepiece assembly (fig. 1-2). These modular assemblies are precollimated and prefocused and, therefore, are completely interchangeable with the

equivalent assemblies of any other Binocular M19. After each ocular is assembled, it is purged with nitrogen to remove air and to insure a dry internal atmosphere; then sealed to retain the purged condition. A hinge shaft and sleeve arrangement joins the two ocular assemblies at the front and rear hinge points. Friction for holding the binocular at the proper interpupillary setting is provided by a clutch consisting of eleven O-rings installed in grooves of the hinge shaft. The interpupillary scale is graduated in millimeters. Once the binocular is set for a particular eye spacing, note the reading on the scale for future reference.

(2) A diopter scale is located between each eyepiece and its ocular, or housing assembly (fig. 1-2). Once you have set each eyepiece to obtain the sharpest possible focus for your eyes, note the diopter reading on each scale for future reference.



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1. Screw 10547104
2. Interpupillary scale 10547103-1
3. Setscrew MS51963-21
4. Screw MS51957-2B
5. Shaft 10547101
6. Hinge sleeve 10547102
7. Preformed packing MS9021-010

8. Eyepiece assembly 10547083
9. Objective assembly 10547054
10. Preformed packing MS9021-031
11. Housing assembly R.H. 10547071
12. Housing assembly L.H. 10547079-1
13. Screw MS3212-21
14. Eyepiece bellows

Figure 1-2. Binocular M19

### 1-7. Description of Carrying Case.

a. The plastic carrying case is designed specifically to hold Binocular M19 and provides ample protection against rough handling. The binocular must be inserted into the carrying case eyepieces down. The objective housings project

slightly above the top of the case. When the lid is closed, it presses down on the objective housings to firmly hold the binocular. The lid is held shut by a nylon strap which is fastened by a snap catch.