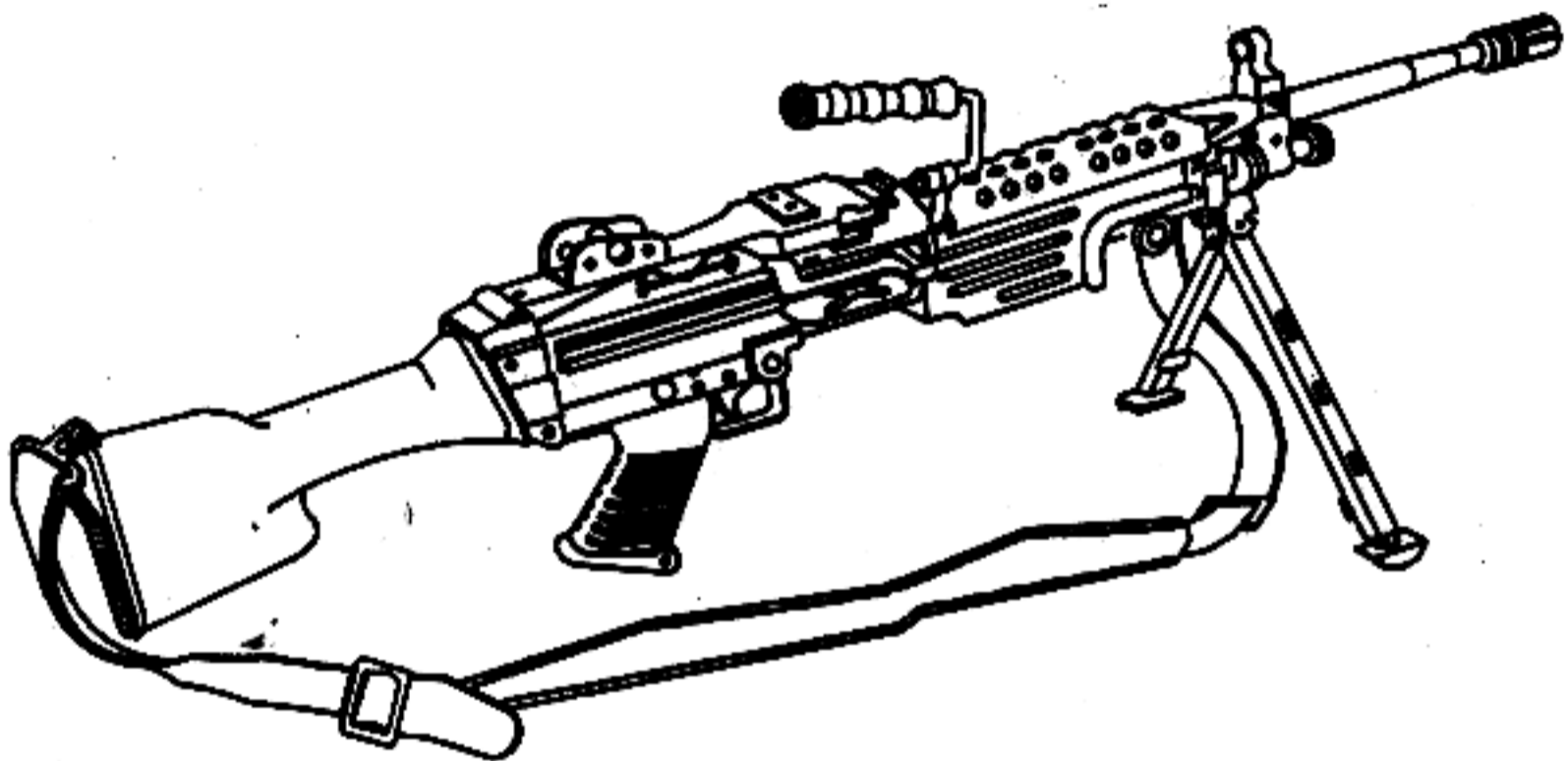


**ARMY TM 9-1005-201-23&P**  
**\*MARINE CORPS TM 08671A-23&P/2A**  
**AIR FORCE TO 11W3-5-5-52**  
Supersedes copy dated 1 April 1984

**TECHNICAL MANUAL**  
**UNIT AND DIRECT SUPPORT MAINTENANCE MANUAL**  
**(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST)**  
**FOR**

**MACHINE GUN, 5.56MM, M249 w/EQUIP**  
**(NSN 1005-01-127-7510) (EIC: 4BG)**



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**HEADQUARTERS, DEPARTMENT OF THE ARMY,**  
**U.S. MARINE CORPS AND AIR FORCE**

TECHNICAL MANUAL  
ARMY NO. 9-1005-201-23&P  
MARINE CORPS NO. 08671A-23&P/2A  
TECHNICAL ORDER  
AIR FORCE NO. 11W3-5-5-52

DEPARTMENTS OF ARMY,  
MARINE CORPS AND AIR FORCE  
Washington, D.C., 14 December 1990

**UNIT AND DIRECT SUPPORT  
MAINTENANCE MANUAL  
(Including Repair Parts and Special Tools List)  
for  
MACHINE GUN, 5.56MM, M249  
(1005-01-127-7510)**

**REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS**

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, U.S. Army Armament, Munitions and Chemical Command, ATTN: AMSMC-MAS, Rock Island, IL 61299-6000. A reply will be furnished to you.

Marine Corps users submit NAVMC Form 10772 to: Commander, Marine Corps Logistics Base (Code 850), Albany, GA 31704-5000. Marine Corps units should also submit a copy to MARCORSSYSCOM, ATTN: (CBG) Quantico, VA 22134-5080, of the NAVMC Form 10772 or via Naval message.

Air Force users submit AFTO Form 22, Technical Order System Publications Improvement Report, and reply to: WR-ALC/LZDTA, Robins AFB, GA 31098-5330.

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\*This manual supersedes Army TM 9-1005-201-23&P and Marine Corps TM 08671A-23&P/2, 1 April 1984, including all changes.

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CHAPTER 1  
INTRODUCTION

---

**CHAPTER OVERVIEW**

This chapter contains general information, and equipment description and data, of the Machine Gun.

**Section I. GENERAL INFORMATION**

**1-1. SCOPE.**

- a. **Type of Manual:** Unit and Direct Support Maintenance.

**NOTE**

**Army Direct Support Maintenance is Third Echelon for USMC Users.**

- b. **Model Number and Equipment Name:** M249 Machine Gun, w/Equip (Includes MWOs 9-1005-201-30-1, -2, -3, and -4.

**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. USMC users will refer to TM 4700-15/1 for applicable forms and records.

**1-3. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE.**

Procedures and materials used for the destruction of the machine gun to prevent enemy use will be found in TM 750-244-7.

**1-4. PREPARATION FOR STORAGE OR SHIPMENT.**

Requirements for storage and shipment are found in chapter 3.

**1-5. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR).**

If your machine gun needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about the design. Put it on an SF 368 (Product Quality Deficiency Report). Mail to Commander, AMCCOM, ATTN: AMSMC-QAD(R), Customer Feedback Center, Rock Island, IL 61299-6000. We'll send you a reply.

USMC users should submit SF 368 (QDR) in accordance with MCO 4855.10, to: Commander, Marine Corps Logistics Base (Code 808), Albany, GA 31704-5000.

Air Force users submit Materiel Deficiency Report (MDR) and Quality Deficiency Report (QDR) in accordance with TO 00-35D-54, TM, USAF, Materiel Deficiency Reporting and Investigating System, to WR-ALC/LZBS, Robins AFB, GA 31098-5330.

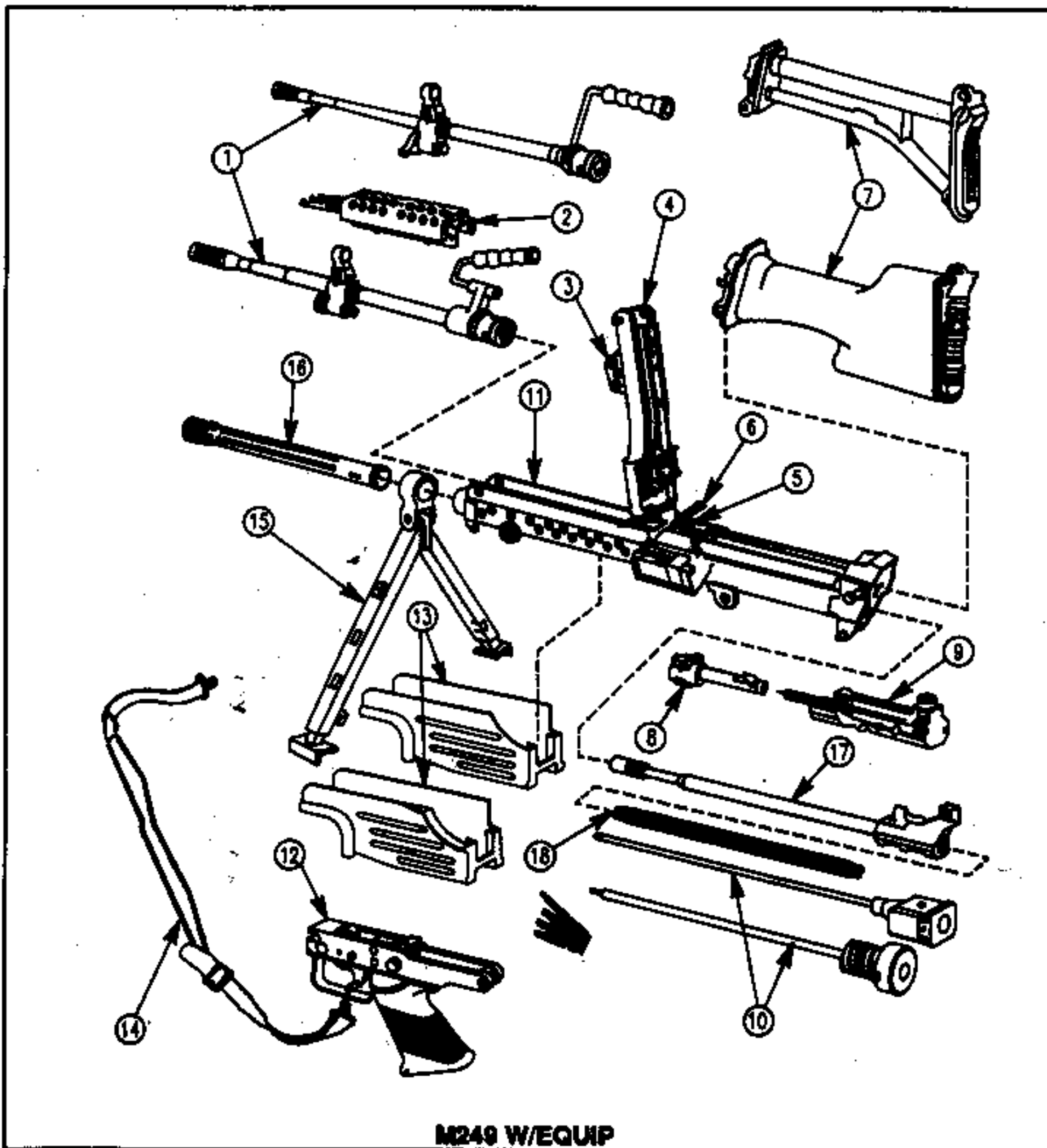
**NOTE**

**The illustrations show the latest configuration M249 Machine Gun w/Equip. The text covers both the new and old style components of the M249 Machine Gun.**

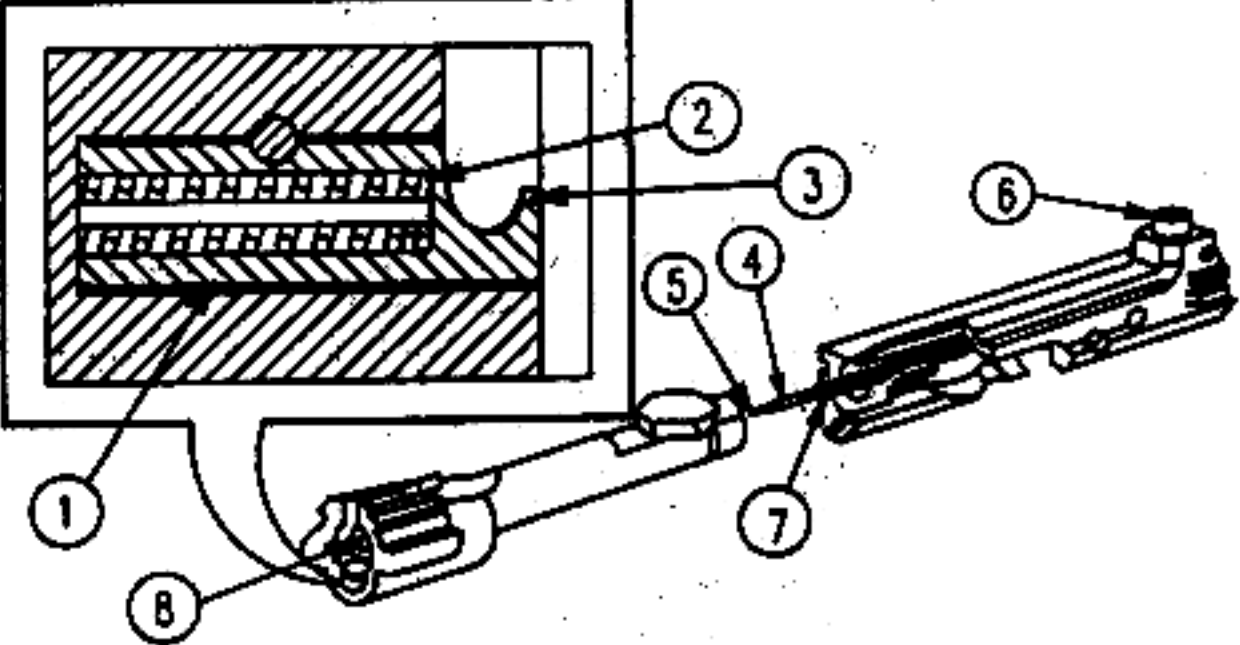
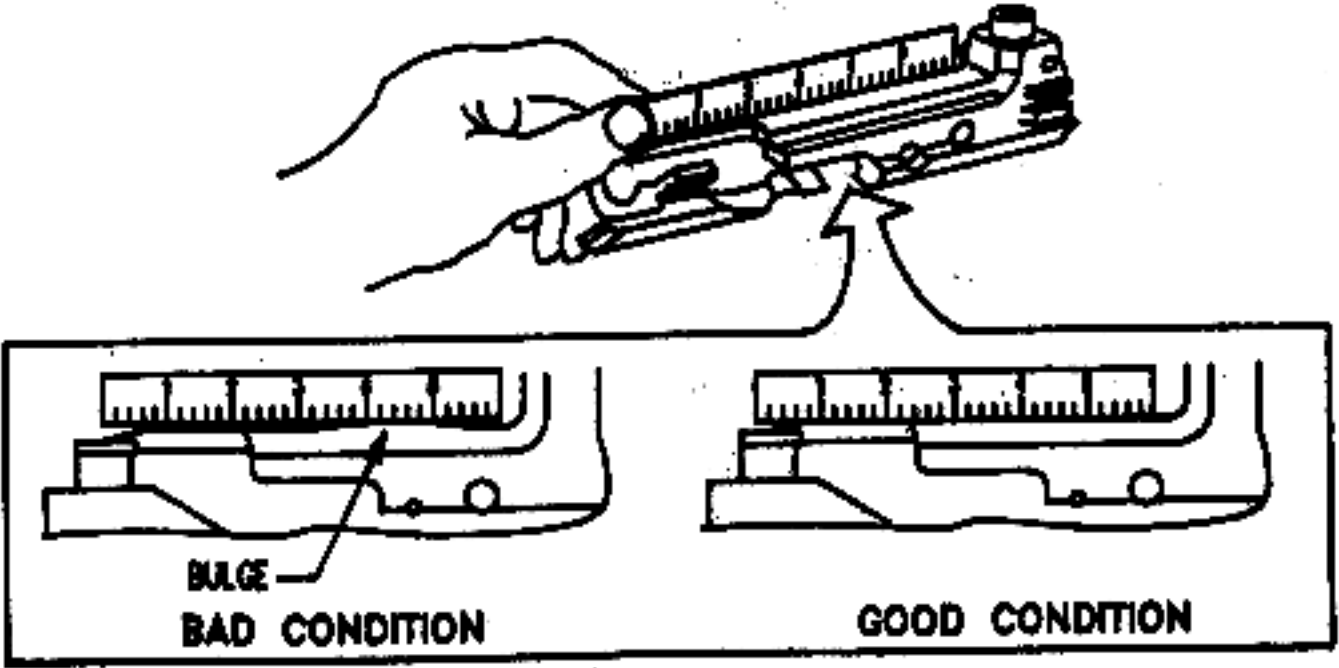
Section II. EQUIPMENT DESCRIPTION AND DATA

1-6. EQUIPMENT CHARACTERISTICS, CAPABILITIES AND FEATURES. See TM 9-1005-201-10/  
TM 08671A-10/1A.

1-7. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.

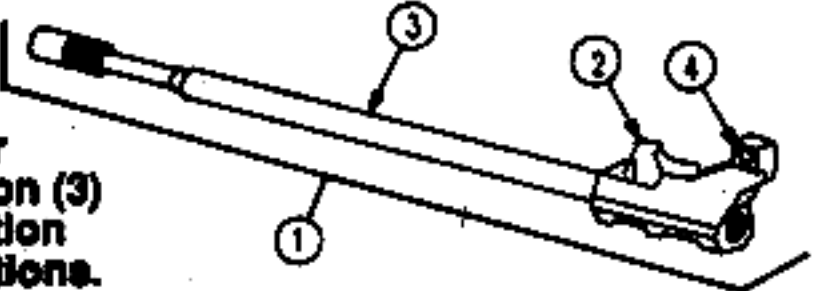
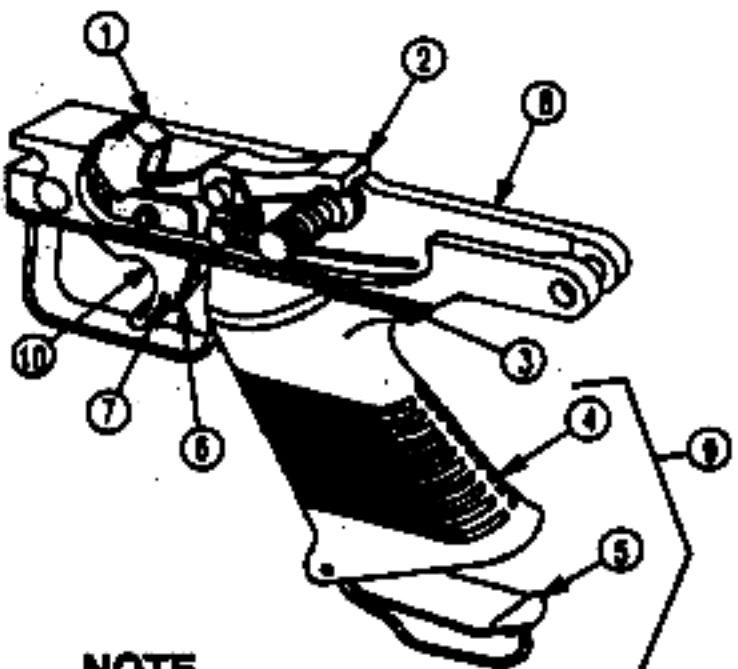


PREVENTIVE MAINTENANCE (Cont)

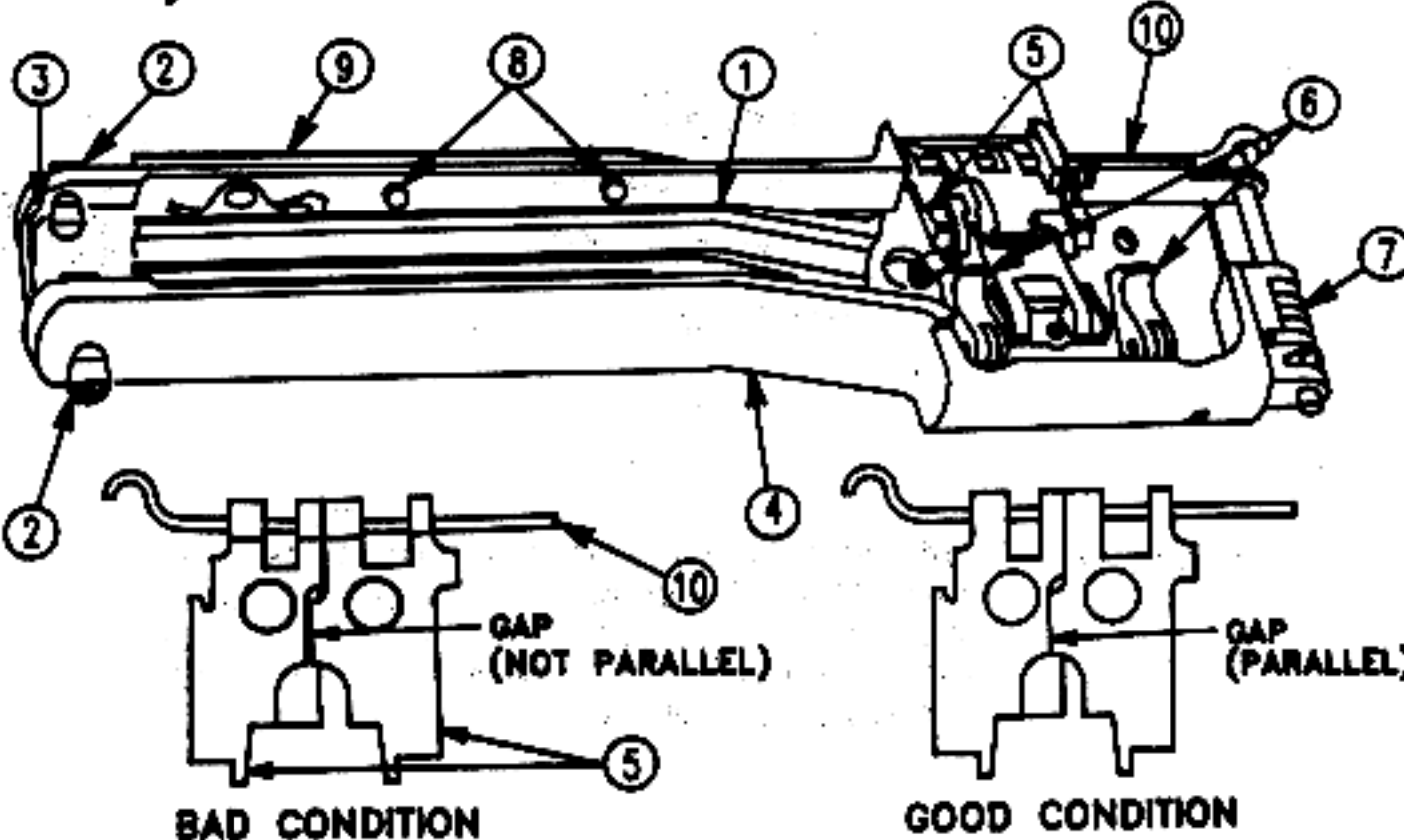
Item No.	Item To Be Inspected	Procedures
7.	Bolt and Slide Assembly	<p>Check Cartridge Extractor (1) for cracks or weak Extractor Spring (2).</p> <p><b>NOTE</b></p> <p>A chipped/broken Extractor Claw (3), weak Extractor Spring (2) or Impeded Extractor (1) can cause a weapon stoppage, more commonly referred to as a failure to extract malfunction.</p> <p>Check Firing Pin (4) for straightness and make sure the Tip (5) is completely rounded. Check Feed Roller (6) for spring tension when compressed. Check Firing Pin Spring (7) for kinks, breaks and retention capability. Inspect for pits on bolt face. Make sure that Firing Pin Hole (8) is round and not elongated.</p>  <p>Check for bulges on the top of slide assembly by placing a straight edge (such as a six inch steel rule) on the top and sighting across. If light is detected between the top of the slide assembly and the straight edge, a bulge exists.</p> 



## PREVENTIVE MAINTENANCE (Cont)

Item No.	Item To Be Inspected	Procedures
8.	Piston Assembly	<p>Inspect Piston Rod (1) for bends, breaks, burrs, or cracks. Inspect Tower Portion (2) and Tube Portion (3) for looseness. Inspect Hole (4) for cracks.</p> <p style="text-align: center;"><b>NOTE</b> Looseness between Tower Portion (2) and Tube Portion (3) can cause sluggish operation and contribute to malfunctions.</p> 
9.	Trigger Mechanism Assembly	<p>Inspect Tripping Lever (1) and Sear (2) for burrs on edges or shoulders. Push back on Tripping Lever (1) to raise Sear (2). Place Safety (3) in SAFE position (red band not visible). Pull Trigger (10), Sear (2) should not drop down far enough to lock in the downward position. Place Safety (3) in FIRE position (red band visible). Pull Trigger (10), Sear (2) should drop down and lock in the downward position. Check Grip Assembly (9) for cracks, and looseness between Pistol Grip (4) and Housing (8). Plate Assembly (5) should be present and functional. Check Sear Spring (6) to ensure the leg of spring is behind Trigger Pin (7) and not between the Trigger (10) and the Trigger Pin (7).</p>  <p style="text-align: center;"><b>NOTE</b> A bent or improperly installed Sear Spring (6) can cause the Trigger (10) to be extremely hard to pull. If this happens, the Sear (2) does not release the piston assembly and causes a weapon stoppage, more commonly referred to as a failure to fire malfunction. If the Sear Spring (6) is not bent or broken and is properly installed, but the Trigger (10) is hard to pull, the Tripping Lever (1) may be worn out.</p>
10.	Cover and Feed Mechanism Assembly (shown removed for clarity)	<p>Move Feed Lever (1) back and forth to make sure the feed mechanism operates smoothly without binding. Push in on the two Cover Latches (2) to make sure Retaining Clip (3) is not weak or missing and the Cover Latches (2) do not bind in Cover Assembly (4). Push on two Cartridge Guides (5) and two Feed Pawls (6) to make sure the springs are not weak, missing or improperly installed. <b>NOTE:</b> Weak or improperly installed springs under the feed pawls can allow the bolt to underide the cartridge base and cause a weapon stoppage, more commonly referred to as a failure to feed/strip malfunction.</p> <p style="text-align: center;"><b>NOTE</b> Weak or improperly installed springs under the cartridge guides, can allow uncontrolled/loose rounds in the receiver mechanism during the feeding cycle and cause a weapon stoppage, more commonly referred to as a failure to chamber.</p>

PREVENTIVE MAINTENANCE (Cont)

Item No.	Item To Be Inspected	Procedures
		<p>Ensure cover fully opens under spring tension.</p> <p style="text-align: center;"><b>NOTE</b></p> <p>It is extremely important that the Cover Spring (7) fully opens the cover and maintains it in the fully open position. This assures sufficient access to the feed tray during loading and clearing operations.</p> <p>Ensure two Pins (8) are in place and that Cover, Cocking Channel (9) functions properly under spring tension.</p> <p>Ensure Hinge Pin Retaining Pin (10) is not bent. This can be checked by rotating the Hinge Pin Retaining Pin (10) and observing any change in the parallel gap between the Cartridge Guides (5) during the rotation of the pin. It is not necessary to disassemble the cartridge guides and hinge pin retaining pin to perform this check.</p> <p style="text-align: center;"><b>NOTE</b></p> <p>Bent hinge pins can allow a spreading of the cartridge guides and cause a weapon stoppage, more commonly referred to as a failure to chamber malfunction.</p> <div style="text-align: center;">  </div> <p style="text-align: center;"><b>NOTE</b></p> <p>Cover assembly, cartridge guides and hinge pin retaining pin shown removed for clarity and exaggerated to show spread of guides when pin is bent.</p>