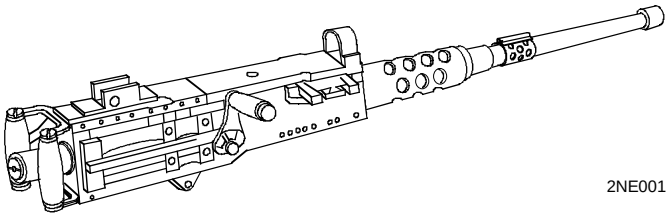
TECHNICAL MANUAL

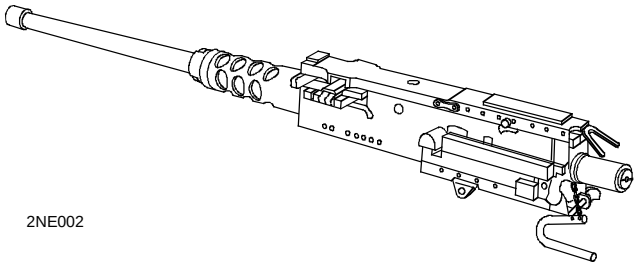
UNIT AND DIRECT SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST) FOR MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL

FLEXIBLE, W/E (1005-00-322-9715) (EIC: 4AG)
M48 TURRET TYPE (1005-00-957-3893) (EIC: 4AB)
SOFT MOUNT (1005-01-343-0747) (NAVY)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) (NAVY)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368) (NAVY)



2NE001

M2 MACHINE GUN, FLEX (7265636)



2NE002

M2 MACHINE GUN, M48 (12002953)

SUPERSEDURE NOTICE: This manual supersedes TM 9-1005-213-23, dated 30 August 1994; TM 9-1005-213-23P, dated 30 August 1994; and TM 9-1005-213-25, dated 8 July 1968, including all changes.

DISCLOSURE NOTICE: This information is furnished upon the condition that it will not be released to another nation without the specific authority of the Department of the Army of the United States, that it will be used for military purposes only, that individual or corporate rights originating in the information, whether patented or not, will be respected, that the recipient will report promptly to the United States any known or suspected compromise, and that the information will be provided substantially the same degree of security afforded it by the Department of Defense of the United States. Also, regardless of any other markings on the document, it will not be downgraded or declassified without written approval of the originating United States agency.

DISTRIBUTION STATEMENT C: Distribution authorized to U.S. Government agencies and their contractors. This publication is required for administration and operational purposes, as determined on 16 September 1994. Other requests for this document shall be referred to: ATTN: AMSTA-LC-LPIT, TACOM-ROCK ISLAND, 1 Rock Island Arsenal, Rock Island, Il 61299-7630. AIR FORCE ONLY: Requests for this document shall be referred to Warner-Robins Air Force Base 584 CBSS/GBMUDE, 380 Richard Ray Blvd, Suite 104, Robins AFB, GA, 31098-1640.

DESTRUCTION NOTICE: For unclassified, limited documents, destroy by any method that will prevent disclosure of contents or reconstruction of the document.

DEPARTMENTS OF THE ARMY, AIR FORCE, MARINE CORPS, AND NAVY
CHANGE 2 FEBRUARY 2007 **15 MARCH 2002**

Publication Control Number 184 024982 02

WARNING SUMMARY

All M2 machine guns must be inspected and gaged at least once annually for safety and serviceability. Air Force users refer will refer to the inspection requirements in Air Force Instruction (AFI) 36-2226.

All Army Reserve and National Guard M2 machine guns must be inspected and gaged at least once every two years, after the initial inspection/gaging procedures have been accomplished. This two year interval may be maintained unless preventive maintenance checks and services (PMCS) or other physical evidence indicates that an individual unit's M2 machine guns require inspection/ gaging at a more frequent interval. If it is determined that a yearly inspection is necessary for an individual unit, only that unit will be affected. This will not affect other units in regard to the interval of inspection.

To avoid personnel injury, do not remove cover assembly from weapon.

Be sure to clear weapon before disassembling, cleaning, inspecting, transporting, or storing. Clearing consists of unloading the machine gun and visually inspecting weapon and chamber to ensure all rounds have been removed. Do not release the bolt or press the trigger.

Headspace and timing **MUST** be checked and adjusted before firing weapon, after assembling weapon, and after removing/replacing barrel.

DO NOT keep live ammunition near work/maintenance area.

Dry cleaning solvent (SD) is flammable and should not be used near an open flame. Use only in well-ventilated areas. This solvent evaporates quickly and has a drying effect on the skin. When used without gloves, it may cause cracks in the skin and, in some cases, mild irritation or inflammation.

Avoid skin contact with carbon removing compound (CRC). The compound should be washed off thoroughly with running water if it comes in contact with the skin. A good lanolin base cream, after exposure to compound, is helpful. Use of chemical resistant gloves and protective equipment is required.

Never remove the backplate assembly from any weapon until the chamber has been cleared and the bolt is in forward position. Stand to one side when removing backplate assembly.

Ensure bolt is in the forward position before removing backplate assembly. Stand to the side of the weapon when removing the backplate assembly.

Do not remove the backplate unless the bolt is in the forward position.

Do not stand behind weapon while removing backplate assembly.

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

Carefully remove bolt latch assembly; the spring is under heavy compression and could cause injury if released accidentally.

WARNING SUMMARY - Continued

Carefully install bolt latch assembly in receiver assembly. The spring is under heavy compression and could cause injury if released accidentally.

Machining operations are an eye hazard. Eye injury is possible; wear adequate eye protection.

Ensure cocking lever is in the rearward position.

After firing, ensure that sufficient time is allowed for weapon to cool before performing inspection or cleaning procedures.

Maintain thumb pressure on buffer accelerator while installing barrel buffer assembly and barrel extension assembly into receiver.

Do not attempt to charge machine gun without the backplate assembled to machine gun. Stand to one side when removing backplate.

Do not attempt to remove backplate assembly unless the bolt is in the forward position.

FIRST AID

For information on FIRST AID, see FM 4-25.11.
Air Force users refer to Air Force manual (AFMAN) 44-163(I)

ARMY TM 9-1005-213-23&P
AIR FORCE TO 11W2-6-3-172
MARINE CORPS TM 02498A-23/2
NAVY SW 361-AC-MMM-010

CHANGE
NO. 2

HEADQUARTERS
DEPARTMENTS OF THE ARMY,
MARINE CORPS, AIR FORCE, AND NAVY
WASHINGTON, D.C., 28 FEBRUARY 2007

TECHNICAL MANUAL
UNIT AND DIRECT SUPPORT MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST)
FOR
MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL

FLEXIBLE, W/E (1005-00-322-9715) (EIC: 4AG)
FIXED M48 TURRET TYPE (1005-00-957-3893) (EIC: 4BB)
SOFT MOUNT (1005-01-343-0747) (NAVY)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) (NAVY)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368) (NAVY)

DISTRIBUTION STATEMENT C. Distribution authorized to U.S. Government agencies and their contractors. This publication is required for administration and operational purposes, as determined 16 September 1994. Other requests for this document shall be referred to: ATTN: AMSTA-LC-LPIT, TACOM-ROCK ISLAND, 1 Rock Island Arsenal, Rock Island, IL 61299-7630.

TM 9-1005-213-23&P, 15 March 2002, is changed as follows:

1. This change is the result of adoption of approved DA Form 2028 material, addition of a new trigger block, and incorporation of other new information.

2. File this sheet in the front of the manual for reference purposes.

3. New or changed material is indicated by a vertical bar in the margin of the page.

4. Added or revised illustrations are indicated by a vertical bar adjacent to the illustration or miniature pointing hands in the affected areas.

5. Remove old pages and insert new pages as indicated below.

Remove Pages	Insert Pages
Front cover	Front cover
a and b	a and b
A/(B blank)	A/(B blank)
i through iv	i through iv
Index-1 through Index-6	Index-1 through Index-6
None	FP-1/(FP-2 blank)

Marine Corps Publication Control Number 184 024982 02

6. Replace the following work packages with their revised version.

Work Package Number
WP 0001 00
WP 0002 00
WP 0003 00
WP 0005 00
WP 0007 00
WP 0008 00
WP 0009 00
WP 0010 00
WP 0011 00
WP 0013 00
WP 0017 00
WP 0018 02
WP 0020 00
WP 0021 00
WP 0022 00
WP 0024 00
WP 0027 00
WP 0034 00
WP 0035 00
WP 0036 00
WP 0037 00
WP 0039 00
WP 0041 00
WP 0042 00
WP 0044 00
WP 0045 00
WP 0046 00
WP 0058 00
WP 0059 00
WP 0060 00

7. Delete the following work package:

Work Package Number
WP 0023 00

By Order of the Secretary of the Army:

PETER J. SCHOOMAKER
General, United States Army
Chief of Staff

Official:

JOYCE E. MORROW
Administrative Assistant to the
Secretary of the Army
0701002

By Order of the Secretary of the Air Force:

T. Michael Moseley
General, United States Air Force
Chief of Staff

Bruce Carlson
General, United States Air Force
Commander, AFMC

By Order of the Secretary of the Marine Corps:

T. J. Tafolla
Program Manager, Infantry Weapons
Marine Corps System Command

By Order of the Secretary of the Navy:

Jerry Gaskill
Small Arms Program Manager
Naval Sea Systems Command

DISTRIBUTION: To be distributed in accordance with the Initial Distribution Number (IDN) 401181 requirements for TM 9-1005-213-23&P.

MARINE CORPS DISTRIBUTION PCN 184 024982 02

CHANGE
NO. 1

HEADQUARTERS
DEPARTMENTS OF THE ARMY,
MARINE CORPS, AIR FORCE, AND NAVY
WASHINGTON, D.C., 17 FEBRUARY 2006

TECHNICAL MANUAL
UNIT AND DIRECT SUPPORT MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST)
FOR
MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL

FLEXIBLE, W/E (1005-00-322-9715) (EIC: 4AG)
FIXED M48 TURRET TYPE (1005-00-957-3893) (EIC: 4AB)
SOFT MOUNT (1005-01-343-0747 (NAVY)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) (NAVY)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368) (NAVY)

TM 9-1005-213-23&P, 15 March 2002, is changed as follows:

1. File this sheet in the front of the manual for reference purposes.

2. New or changed material is indicated by a vertical bar in the margin of the page.

3. Added or revised illustrations are indicated by a vertical bar adjacent to the illustration or miniature pointing hands in the affected areas.

4. Remove old pages and insert new pages as indicated below.

Remove Pages	Insert Pages
a and b	a and b
A/(B blank)	A/(B blank)
i through vi	i through vi
Index-1 through Index-6	Index-1 through Index-6

5. Replace the following work packages with their revised version.

Work Package Number
WP 0001 00
WP 0007 00
WP 0010 00
WP 0011 00
WP 0013 00
WP 0020 00
WP 0025 00
WP 0026 00

Work Package Number
WP 0027 00
WP 0028 00
WP 0034 00
WP 0039 00
WP 0040 00
WP 0041 00
WP 0042 00
WP 0044 00
WP 0045 00
WP 0046 00
WP 0047 00
WP 0048 00
WP 0049 00
WP 0050 00
WP 0051 00
WP 0052 00
WP 0053 00
WP 0054 00
WP 0055 00
WP 0056 00
WP 0057 00
WP 0058 00
WP 0059 00

6. Add the following new work packages.

Work Package Number
WP 0018 01
WP 0018 02

7. Change all occurrences of "M48" to read "Fixed, M48".

By Order of the Secretary of the Army:

PETER J. SCHOOMAKER
General, United States Army
Chief of Staff

Official:

SANDRA R. RILEY
Administrative Assistant to the Secretary of the Army
0604701

DISTRIBUTION: To be distributed in accordance with the Initial Distribution Number (IDN) 401181 requirements for TM 9-1005-213-23&P.

INSERT LATEST CHANGED PAGES/WORK PACKAGES. DESTROY SUPERSEDED DATA.

LIST OF EFFECTIVE PAGES/WORK PACKAGES

NOTE: The portion of text affected by the changes is indicated by a vertical line in the outer margins of the page. Changes to illustrations are indicated by miniature pointing hands. Changes to wiring diagrams are indicated by shaded areas.

Dates of issue for original and changed pages/work packages are:

Original ..... 0 ..... 15 March 2002
Change ..... 1 ..... 17 February 2006
Change ..... 2 ..... 28 February 2007

TOTAL NUMBER OF PAGES FOR FRONT AND REAR MATTER IS 34 AND TOTAL NUMBER OF WORK PACKAGES IS 62 CONSISTING OF THE FOLLOWING:

Page /WP No.	*Change No.
Front Cover	2
a	2
b	2
A	2
B Blank	0
i	1
ii - iii	2
iv - vi	1
WP 0001 00 - WP 0003 00	2
WP 0004 00	0
WP 0005 00	2
WP 0006 00	0
WP 0007 00 - WP 0011 00	2
WP 0012 00	0
WP 0013 00	2
WP 0014 00 - WP0016 00	0
WP 0017 00	2
WP 0018 00	1
WP 0018 01	1
WP 0018 02	2
WP 0019 00	0
WP 0020 00 – WP 0022 00	2
WP 0023 00 deleted	2
WP 0024 00	2
WP 0025 00 - WP 0026 00	1
WP 0027 00	2
WP 0028 00	1
WP 0029 00 - WP 0033 00	0
WP 0034 00 - WP 0037 00	2
WP 0038 00	0
WP 0039 00	2
WP 0040 00	1
WP 0041 00 - WP 0042 00	2
WP 0043 00	0
WP 0044 00 - WP 0046 00	2
WP 0047 00 - WP 0057 00	1
WP 0058 00 - WP 0060 00	2
Index-1 - Index-3	2
Index-4	1
Index-5 - Index-6	2
FP-1	2
FP-2 Blank	2
DA Form 2028	0
Metric Chart	0
Back Cover	0

*Zero in this column indicates an original page or work package.

HEADQUARTERS,
DEPARTMENTS OF THE ARMY,
AIR FORCE, MARINE CORPS, AND NAVY
Washington, D.C., *15 March 2002*

TECHNICAL MANUAL

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

FOR

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL

FLEXIBLE, W/E (1005-00-322-9715) (EIC: 4AG)
FIXED M48 TURRET TYPE (1005-00-957-3893) (EIC: 4AB)
SOFT MOUNT (1005-01-343-0747) (NAVY)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) (NAVY)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368) (NAVY)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this publication. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Submit your DA Form 2028 (Recommended Changes to Publications and Blank Forms), through the Internet, on the Army Electronic Product Support (AEPS) website. The Internet address is https://aeps.ria.army.mil. The DA Form 2028 is located under the Public Applications section of the AEPS Public Home Page. Fill out the form and click on SUBMIT. Using this form on the AEPS will enable us to respond quicker to your comments and better manage the DA Form 2028 program. You may also mail, fax, or email your letter or DA Form 2028 direct to: AMSTA-LC-LPIT / TECH PUBS, TACOM-RI, 1 Rock Island Arsenal, Rock Island, IL 61299-7630. The email address is ROCK-TACOM-TECH-PUBS@conus.army.mil. The fax number is DSN 793-0726 or Commercial (309) 782-0726.

*This manual supersedes TM 9-1005-213-23, dated 30 August 1994; TM 9-1005-213-23P, dated 30 August 1994; and TM 9-1005-213-25, dated 8 July 1968, including all changes.

TABLE OF CONTENTS

TABLE OF CONTENTS - CONTINUED

TABLE OF CONTENTS - CONTINUED

HOW TO USE THIS MANUAL

GENERAL

This manual has been prepared and illustrated to provide unit and direct support maintenance all the information required to support the M2 machine gun. To locate a work package (WP) of the manual quickly, check the Table of Contents in the front of the manual or the alphabetical index in the back of the manual.

a. References are to work packages in this manual or to other publications.

b. Throughout this manual, text is keyed to the illustrations by use of numbered callouts. When an item is called out in a work package, a number in parentheses in the text corresponds with a number on the illustration.

c. Each task begins with an initial setup. It tells you what you need to do the task: tools, materials, parts, and other publications. It tells you what must be done to the equipment before you begin the task and provides general safety instructions.

INDEXES

This manual is organized to help you quickly find the information you need. There are several useful indexes:

a. Table of Contents. The table of contents lists, in the order of presentation, all chapters, work packages, and alphabetical index and gives the work package sequence numbers.

b. Alphabetical Index. This index, located at the back of the book, is an extensive subject index for the entire manual. The page numbers following each entry tell you where to find a particular subject in the manual.

LISTS

a. Metric/US Customary Measurement Chart. Measurements in this manual are given in both metric and US customary units. The table inside the back cover compares metric measurements to their equivalent US customary units. Also provided are conversion factors to convert metric units to US customary units.

b. Nomenclature Cross-Reference List. Throughout this manual, most items are referred to by their official nomenclature. In the list, the items referred to by their common names are listed alphabetically, followed by their official nomenclature.

c. List of Abbreviations. An alphabetical list of uncommon abbreviations used in the manual is located in WP 0001 00.

MAINTENANCE PROCEDURES

a. Initial Setup. Initial Setup is a list of everything needed in order to do maintenance on one part of the weapon.

Tools and Special Tools—Lists tools needed to perform maintenance.

Materials/Parts—Lists expendable/durable materials and 100% replaceable parts. Each material or part is followed by a part number or work package reference. If more than one part is needed, the quantity needed precedes the part number or reference.

Personnel Required—Lists the number of personnel needed when more than one person is required.

References—Lists other publications containing necessary information.

Equipment Conditions—Lists conditions to be met before starting the procedure. The reference on the right of the condition is a work package reference to instructions for setting up the condition.

b. Step-By-Step Procedures. Step-by-step procedures are illustrated procedures for maintenance authorized in the maintenance allocation chart (MAC). For replacement of parts, see WP 0044 00 through WP 0055 00.

c. WARNINGS and CAUTIONS. Throughout the manual you will see WARNING and CAUTION data that must be followed.

(1) WARNING. A warning is used to alert the user of hazardous operating and maintenance procedures, practices, conditions, statements, etc., that may result in injury to or death of personnel if not strictly observed.

(2) CAUTION. A caution is used to alert the user of hazardous operating or maintenance procedures, practices, conditions, statements, etc., that may result in damage to or destruction of equipment or of mission effectiveness if not strictly observed.

d. Callouts. A dashed callout arrow in an illustration indicates the part being called out is hidden, i.e., you can't see it on the illustration.

SUPPORTING INFORMATION

a. References. Contains a list of other manuals you might need to do your job.

b. Maintenance Allocation Chart. Contains equipment group number, component or assembly name, maintenance function (service, repair, replacement, inspection, or tests), maintenance level (Unit, Direct Support, and General Support maintenance), tools and equipment, and remarks (any helpful information to help you get the job done right).

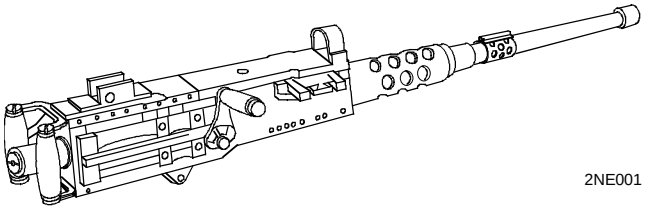
c. Repair Parts and Special Tools List. Contains assembly breakdown (figure), assembly repair parts list, National Stock Number index, and Part Number index.

d. Expendable and Durable Items List. Contains a list of expendable/durable supplies and materials you will need to operate and maintain the M2 machine gun.

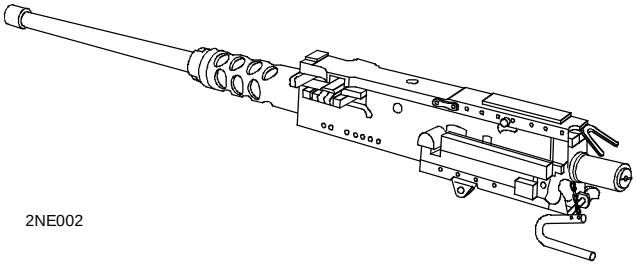
UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

GENERAL INFORMATION



M2 MACHINE GUN, FLEX
(7265636)



M2 MACHINE GUN, FIXED, M48
(12002953)

SCOPE

a. Type of Manual. This technical manual includes Unit and Direct Support Maintenance; a Repair Parts and Special Tools List (RPSTL) for use by Army, Air Force, Marine Corps, and Navy; and a Maintenance Allocation Chart (MAC).

b. Equipment Name and Model Number. Machine Gun, Caliber .50; M2 barrel, flexible type, and fixed M48 turret type, soft mount, and fixed type machine guns. For application and use of gun mounts, refer to TM 9-1005-245-13&P. Marine Corps users refer to TM 08686A-13&P/1 for use of MK64 mount. Navy users refer to SW 361-AO-MMO-010 for gun mounts.

c. Purpose of Equipment. To provide automatic weapon suppression fire for offensive and defensive purposes. This weapon can be used effectively against personnel; light armored vehicles; low, slow flying aircraft; and small boats. The caliber .50 M2 flexible version is used as a ground gun on the M3 tripod mount or various Naval mounts. The caliber .50 M2, fixed M48 turret type, fixed type, and soft mount are fixed installed on mounts of several different types of combat vehicles and ships.

MAINTENANCE FORMS, RECORDS, AND REPORTS

Department of Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 750-8, Functional Users Manual for the Army Maintenance Management System (TAMMS). Navy users refer to the applicable Maintenance Requirement Card (MRC) under the Planned Maintenance System. Marine Corps forms and procedures for equipment maintenance will be those prescribed by TM 4700-15/1. Air Force users refer to TO 11W-1-10 for appropriate forms and records.

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your M2 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 your equipment. Let us know why you don't like the design or performance. Put it on an SF 368 (Product Quality Deficiency Report). Army users mail it to us at: ATTN: AMSTA-LC-QAW-C, TACOM-ARDEC, 1 Rock Island Arsenal, Rock Island, IL 61299-7300. We will send you a reply. Air Force users submit Materiel Deficiency Report (MDR) and Quality Deficiency Report (QDR) in accordance with TO 00-35D-54, USAF, Materiel Deficiency Reporting and Investigating System. Marine Corps personnel, submit SF 368 in accordance with MCO 4855.10 (Product Quality Deficiency Report) to Commander, Marine Corps Logistics Bases, (Code 808-1), 814 Radford Blvd, Albany, GA 31704-1128. Navy users submit SF 368 (Product Quality Deficiency Report) to Commander, Code 20, NAVSURWARCENDIV, 300 Highway 361, Crane, IN 47522-5001.

CORROSION PREVENTION AND CONTROL (CPC)

Corrosion Prevention and Control (CPC) of materiel is a continuing concern. It is important that any corrosion problems with this item be reported so that the problem can be corrected and improvements can be made to prevent the problem in future items.

While corrosion is typically associated with rusting of metals, it can also include deterioration of other materials such as rubber and plastic. Unusual cracking, softening, swelling, or breaking of these materials may be a corrosion problem.

If a corrosion problem is identified, it can be reported using SF 368, Product Quality Deficiency Report. Use of key words such as, "corrosion", "rust", "deterioration", or "cracking" will ensure that the information is identified as a CPC problem.

For Army, the form should be submitted to: ATTN: AMSTA-AR-QAW-C, TACOM-ARDEC, 1 Rock Island Arsenal, Rock Island, IL 61299-7300. Air Force users submit Materiel Deficiency Report (MDR) and Quality Deficiency Report (QDR) to: Director Material Management, Robins AFB, GA. Marine Corps personnel submit Product Quality Deficiency Report, SF 368, in accordance with MCO 4855.10 to Commander (Code 808-1), Marine Corps Logistics Bases, Albany, GA 31704-1128. Navy users submit SF 368 to: Commander, Code 20, NAVSURFWARCENDIV, 300 Highway 361, Crane, IN 47522-5001.

DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Refer to TM 750-244-7 for procedures concerning destruction of material to prevent enemy use.
Air Force users refer to Air Force Pamplet 10-219, Vol 3.

PREPARATION FOR STORAGE OR SHIPMENT

Refer to WP 0036 00 and WP 0037 00.
Air Force will follow the guidance in Special Packaging Instruction F003229715 for long term storage of Air Force weapons.

NOMENCLATURE CROSS-REFERENCE LIST

Common Name	Official Nomenclature
Accelerator pin assembly	Spring pin
Backplate latch	Manual control lever (6008949)
Barrel assembly	Machine gun barrel
Barrel buffer assembly	Recoil mechanism buffer
Barrel carrier assembly	Barrel manual control handle (5504080)
Barrel locking spring	Flat spring (7266134)
Bolt latch	Manual control lever (5504060)
Bolt latch release	Manual control lever (5504071)
Bolt stud	Headless shoulder pin
Bolt switch	Alternate feed knob
Breech lock pin	Spring pin
Buffer body lock	Buffer body stock
Buffer tube	Metallic tube
Cable	Wire rope assembly
Frame	Upper manual control handle (6008937)
M10 lock selector	Slide lock catch
M10 manual charger	Caliber .50 gun charger
M10 manual charger cover	Access cover
Plunger	Headless shoulder pin
Retaining pin	Headless straight pin
Safety wire	Non-electrical wire
Sear slide	Sear
Timing adjustment nut	Knurled plain nut
Trigger block	Small arms safety
Trigger lever	Lock-release lever
Trunnion block shim	Plate spacer

LIST OF ABBREVIATIONS

CPC ..... Corrosion Prevention and Control
HB ..... Heavy Barrel
HMMWV ..... High Mobility Multipurpose Wheeled Vehicle
MAC ..... Maintenance Allocation Chart
MDR ..... Materiel Deficiency Report
PMCS ..... Preventive Maintenance Checks and Services
QDR ..... Quality Deficiency Report
RPSTL ..... Repair Parts and Special Tools List

SAFETY, CARE, AND HANDLING OF AMMUNITION

Refer to TM 9-1300-206 for general ammunition safety, care, and handling.
Air Force Users will refer to AFMAN 91-201 for general ammunition safety, care and handling.

END OF WORK PACKAGE

CHAPTER 1

DESCRIPTION AND THEORY OF OPERATION FOR MACHINE GUN, M2

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715) FIXED M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

EQUIPMENT DESCRIPTION AND DATA

EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

The caliber .50 machine gun, M2, Barrel, Flexible: Is a link-belt fed, recoil-operated, air-cooled, crew-served machine gun. The machine gun is capable of firing single-shot and automatic, is capable of right-hand or left-hand feed, and includes a backplate small arms safety. It is used as a ground gun mounted on M3 tripod mount, MK 26 MOD 0-14, MK 64 mount, MK93 mount or is installed on M66 ring mount of several types of combat vehicles.

The caliber .50 machine gun, M2, Barrel, Fixed M48 Turret type: Is a link-belt fed, recoil-operated, air-cooled, crew-served machine gun. The machine gun is capable of firing automatic only; is capable of right-hand or left-hand feed. Is mounted on the M1, M1A1, or M1A2 Abrams main battles tank commander's station.

The caliber .50 machine gun, M2, Barrel, Soft Mount type (Navy): Is a link belt fed, recoil-operated air cooled, crew-served machine gun; is capable of right-hand or left-hand feed. Is mounted on the MK 26 MOD 15, 16, or 17 gun mount.

The caliber .50 machine gun, M2, Barrel, Fixed type (Navy): Is a link-belt fed, recoil-operated, air-cooled, crew-served machine gun. Is capable of right-hand or left-hand feed. Is mounted on the MK 56 MOD 0 or 4 gun mount. Is primarily fired by a firing solenoid and requires a 24-28 Vdc power source. Refer to TM 9-1005-213-10 for adjusting timing top plate solenoid (Fixed only).

The M3 tripod mount is a portable, folding mount which permits a high degree of accuracy and control of fire. For use of M3 tripod mount, refer to TM-9-1005-245-13&P. Air Force users refer to Technical Order 11W2-8-1-322.

The MK93 mount is a universal machine gun mount for ground deployment. Army users refer to TM 9-1010-231-13&P. Air Force users refer to TO 11W2-8-1-322 and TO 11W2—8-32-4.

MK64/MK 93 MOD 1 is a component assembly designed as a defensive ground mount for the MK19 MOD 3 and M2 HB machine guns onto the HMMWV ring assembly. Composed of MK 93 MOD 0 machine gun mount, .50 caliber ammo holder assembly, mounting bracket, catch bag assembly, universal pintle adapter (UPA), and traverse and elevation mechanism (T&E).

Navy users refer to SW 361-AO-MMO-010 for applicable gun mounts.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

Refer to TM 9-1005-213-10. Air Force users refer to TO 11W2-6-3-161.

DIFFERENCES BETWEEN MODELS

Table 1. Differences Between Models.

COMPONENT NOMENCLATURE	COMPONENT PART NUMBER	FLEX	SOFT MOUNT	M48 TURRET TYPE	FIXED TYPE
Machine Gun Barrel	7266131	X	X	X	X
Backplate Assembly	6535477	X			
Backplate Assembly	5564311			X	
Backplate Assembly	5985102		X		
Backplate Assembly	2866381		X		
Breech Bolt Assembly	6528322				X
Barrel Extension Assembly	5504082	X	X	X	X
Retracting Slide Assembly	11010439	X	X		X
Cover Assembly	6528309	X	X	X	X
Receiver Assembly	6535480	X	X	X	X
M10 Manual Charger	726798			X	X
Rear Sight Assembly	12003047	X			
Barrel Carrier Assembly	5504080	X			
Top Cover Plate	6085990		X	X	
Front Sight Assembly	6085990		X		
Electrical Solenoid Assembly	See Vehicle TM				X
Trigger Block	1968	X			
Shoulder Screw	1994	X			
Flat Spring	1969	X			

Work packages in this manual pertain to all models unless specified in the Applicable Configurations portion of the Initial Setups. Where work packages pertain to all models, the Flex type only is illustrated.

EQUIPMENT DATA

Weight of gun (approx)	84 lb (38.10 kg)
Weight of barrel	26 lb (11.79 kg)
Length of gun	65.13 in. (165.43 cm)
Length of barrel	45 in. (114.30 cm)
Length of rifling (approx)	41.88 in. (106.38 cm)
Number of lands and grooves	8
Twist, right-hand	one turn in 15 in. (38.10 cm)
Feed	link-belt
Operation	short recoil
Cooling	air
Muzzle velocity (approx)	3,050 fps (929.64 mps)
Maximum range (approx)	7,400 yd (6,767 m)
Maximum effective range (approx)	2,000 yd (1,829 m)
Cyclic Rate	450 - 600 rounds per minute

RATES OF FIRE

NOTE

For Abrams series tanks, refer to FM 17-12-1.

SINGLE SHOT - Place gun in single shot mode and engage target with well-aimed shots. The caliber .50 machine gun is extremely accurate and can effectively engage targets out to 2,000 yd (1,829 m).

SLOW FIRE - Slow fire is less than 40 rounds per minute, fired in bursts of six to nine rounds, at 10-15 second intervals.

RAPID FIRE - Rapid fire is greater than 40 rounds per minute, fired in bursts of six to nine rounds, at 5-10 second intervals.

CYCLIC RATE - This rate represents the maximum amount of ammunition that can be expended by a gun without a break in firing. The cyclic rate of this caliber .50 machine gun is 450 to 600 rounds per minute. Cook-off rate – 100 rounds per minute.

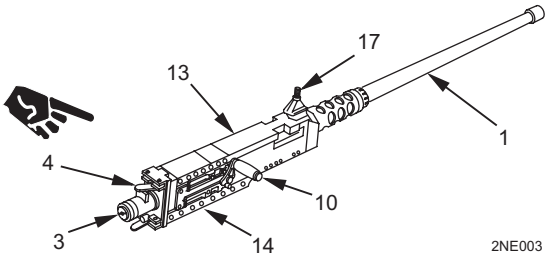
END OF WORK PACKAGE

UNIT AND DIRECT SUPPORT

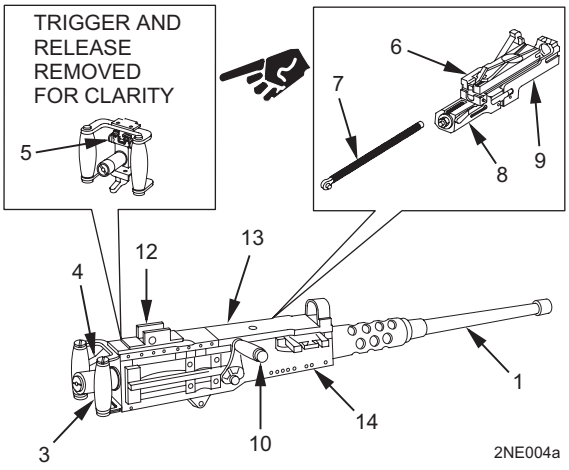
MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715) FIXED M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

THEORY OF OPERATION

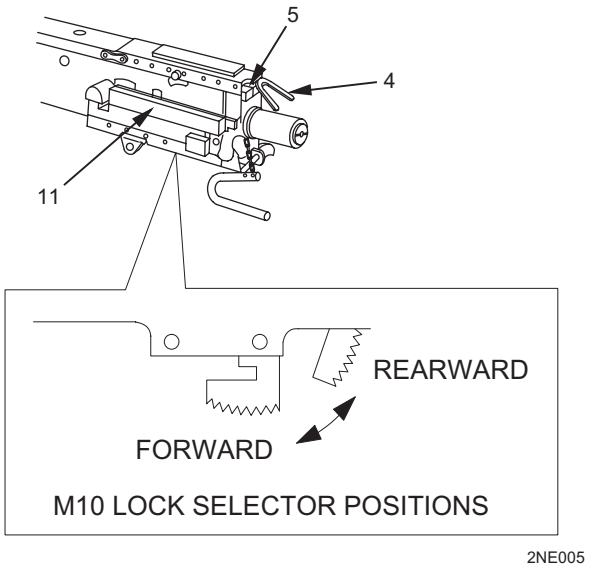
PRINCIPLES OF OPERATION



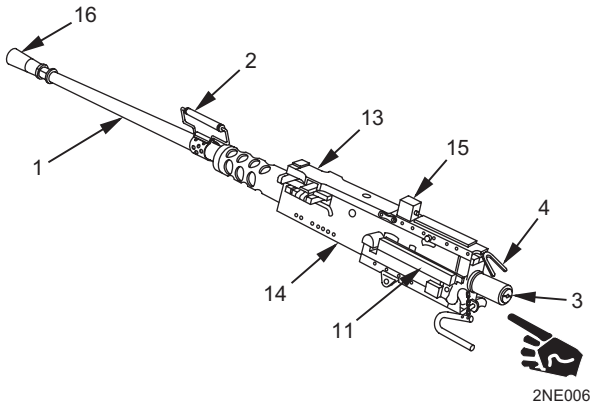
SOFT MOUNT (NAVY)



FLEX



FIXED M48



FIXED TYPE (NAVY)

Barrel Assembly (1). Composed of barrel (1) and barrel carrier assembly (2). Barrel carrier assembly permits quick removal or installation of barrel and is secured to locking and retaining grooves of barrel.

Backplate Assembly (3). Houses the trigger (4) and buffer tube. The trigger safety acts as a positive block for manual operation of the trigger. The backplate assembly is located at the rear portion of the receiver assembly. The safety and trigger block (5) are located at the top of the backplate assembly (Fixed M48, Flex, and Fixed type only).

Bolt Assembly (6) and Driving Spring Rod Assembly (7). The bolt assembly is located on top of the barrel extension assembly inside the receiver assembly. The driving spring rod assembly, installed into bolt assembly, is secured to the right receiver side plate by the retaining pin. It absorbs recoil shock and provides the energy for the bolt assembly to feed, strip, chamber, and fire the following round in the belted ammunition.

Barrel Buffer Assembly (8). Part of the action group of the weapon. Buffers and stops the rearward movement of the barrel assembly and barrel extension assembly by action of helical compression spring. Located to the rear of the barrel extension assembly inside the receiver assembly.

Barrel Extension Assembly (9). Recoiling groups/parts of the weapon are locked completely together during recoil for 0.75 in. (1.91 cm) after firing. During recoil, the barrel extension assembly causes tips of the accelerator to rotate rearward. Located in the forward area inside the receiver assembly.

Retracting Slide Assembly (10). Secured to and operated from the right or left side of receiver assembly. Manually charges or recharges the weapon in case of a malfunction or stoppage. Used with bolt stud.

M10 Manual Charger (11). Secured to and operated from the right or left side of receiver assembly. Manually charges or recharges the weapon in case of a malfunction or stoppage. Used with bolt stud.

Rear Sight Assembly (12). Composed of windage screw, scale dial, and leaf assembly. Windage screw permits deflection changes of 5 mil right or left of center. Located on the top rear area of receiver assembly and used with blade-type front sight (Flex type only).

Cover Assembly (13). Located on top of receiver assembly. Feeds the cartridge belt and positions and holds the cartridges for chambering. The feed mechanism, actuated by the bolt assembly, brings the belted cartridge against the cartridge stops. The feed mechanism must be repositioned when converting the M2 machine gun from left-hand to right-hand feed.

Receiver Assembly (14). Houses the action groups of the weapon and, through a series of cams and levers, controls functioning of the internal groups of receiver assembly. Serves as support for all major groups and assemblies of the M2 machine gun. Serial number is located on the right side of the receiver assembly.

Solenoid Assembly (15). Operates on a 24-28 Vdc power source to fire the gun (Fixed type only).

Flash Suppressor (16). Reduces muzzle flash when firing. Installed on the muzzle end of barrel.

Front Sight (17). Fixed post, adjustable for windage (Soft mount only).

END OF WORK PACKAGE

CHAPTER 2

UNIT
TROUBLESHOOTING PROCEDURES
FOR
MACHINE GUN, M2

UNIT

**MACHINE GUNS, CALIBER .50: M2, BARREL
FLEXIBLE, W/E (1005-00-322-9715)
M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)**

TROUBLESHOOTING INDEX

GENERAL

a. Troubleshooting procedures are limited to those listed in the troubleshooting symptom index. Common malfunctions are listed in cycle of function order with a page number reference to the symptom table where a test or inspection and corrective action are provided.

b. This manual cannot list all malfunctions that may occur, nor all tests or inspections and corrective actions. If a malfunction is not listed or is not corrected by listed corrective actions, notify Direct Support Maintenance.

SYMPTOM INDEX

NOTE

Refer to operator's manual (TM 9-1005-213-10) for disassembly and assembly.

Check headspace and timing BEFORE beginning troubleshooting procedures.

END OF WORK PACKAGE

UNIT

**MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)**

TROUBLESHOOTING PROCEDURES

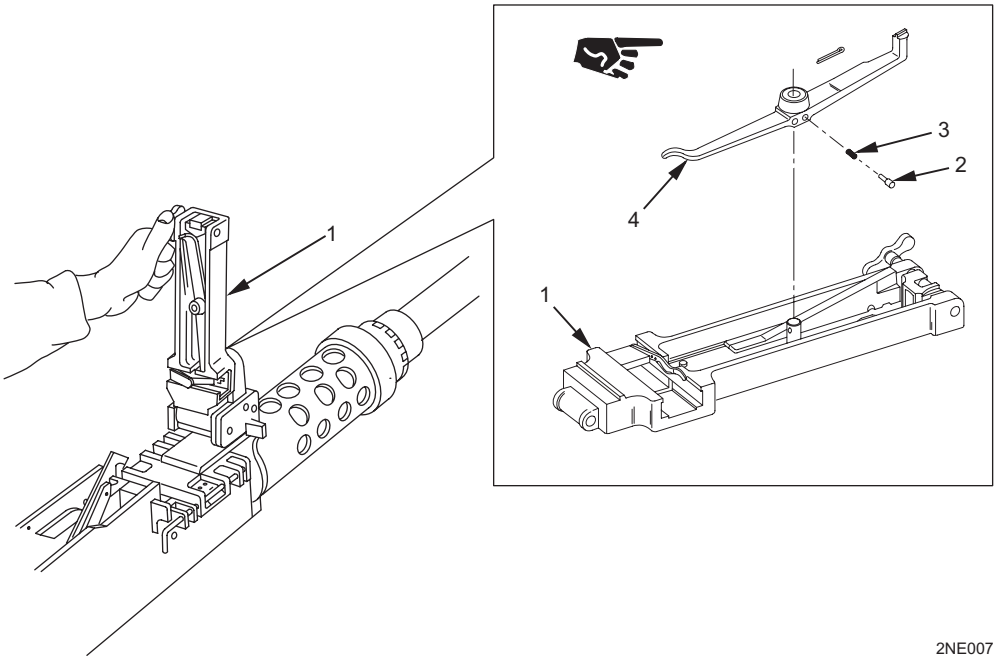
MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

1. WEAPON WILL NOT FEED.

WARNING

To avoid personnel injury, do not remove cover assembly from weapon.

Step 1. Check cover assembly (1) for defective shoulder pin (2); spring (3); or burred, broken, or bent belt feed lever (4).



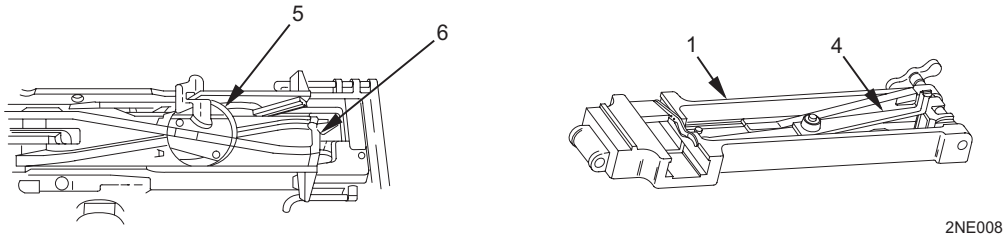
Replace defective shoulder pin (2), spring (3), and/or belt feed lever (4) (WP 0017 00).

TROUBLESHOOTING PROCEDURES – Continued

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

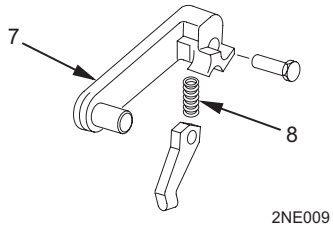
1. WEAPON WILL NOT FEED - Continued.

Step 2. Check bolt switch (5) in bolt assembly (6) or belt feed lever (4) in cover assembly (1) for improper assembly.



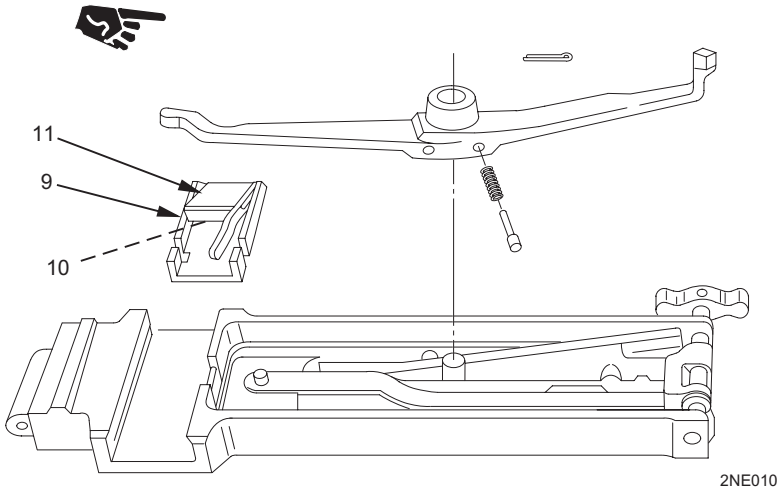
Reassemble bolt switch (1) (TM 9-1005-213-10) or belt feed lever (4) (WP 0017 00).

Step 3. Check for defective cartridge extractor (7) and deformed, collapsed, elongated, or incorrectly installed ejector spring (8).



Notify Direct Support Maintenance.

Step 4. Check belt feed slide assembly (9) for defective spring (10) under belt feed pawl (11).



Replace defective spring (10) (WP 0017 00).

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

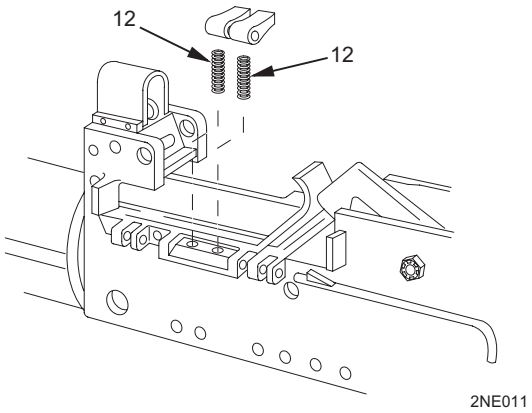
Step 5. Check for defective belt feed pawl (11). See PMCS (WP 0010 00, item 4).

Replace defective belt feed pawl (11) (WP 0017 00).

Step 6. Check for defective belt feed slide assembly (9). See PMCS (WP 0010 00, item 4).

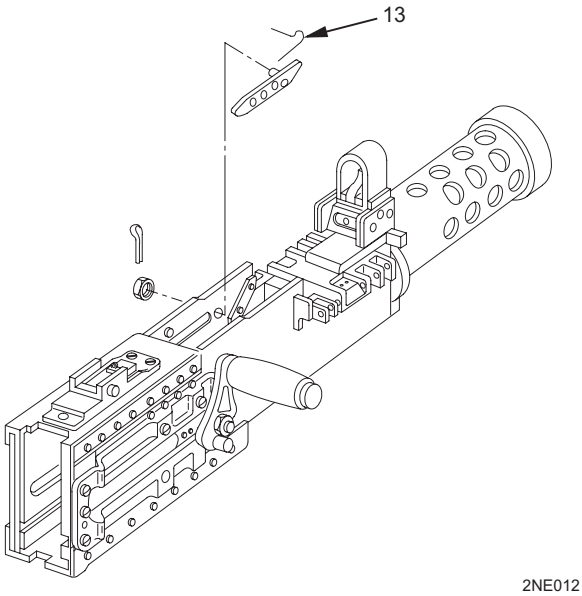
Replace defective belt feed slide assembly (9) (WP 0017 00).

Step 7. Check for defective belt holding pawl springs (12).



Replace defective belt holding pawl springs (12) (WP 0013 00).

Step 8. Check for defective (deformed) extractor switch spring (13). Check for proper (crisp) spring action.



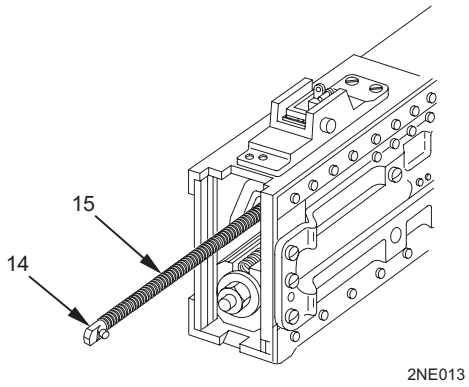
Notify Direct Support Maintenance.

TROUBLESHOOTING PROCEDURES – Continued

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

1. WEAPON WILL NOT FEED - Continued.

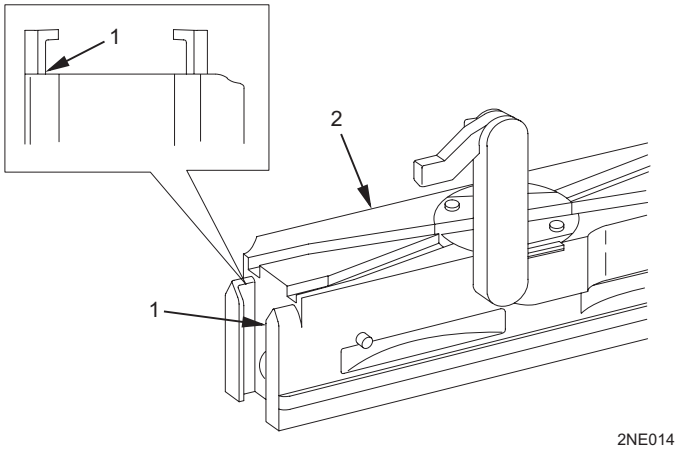
Step 9. Check drive spring rod assembly (14) for defective rod and springs (15). See PMCS (WP 0010 00, item 5).



Replace defective drive spring rod assembly (14) (WP 0013 00).

2. ROUND WILL NOT CHAMBER.

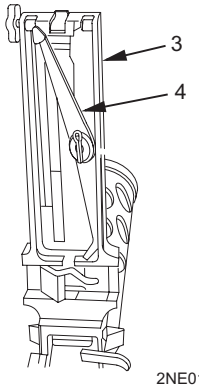
Step 1. Check for defective T-slot (1) in bolt (2). See PMCS (WP 0010 00, item 5).



Notify Direct Support Maintenance.

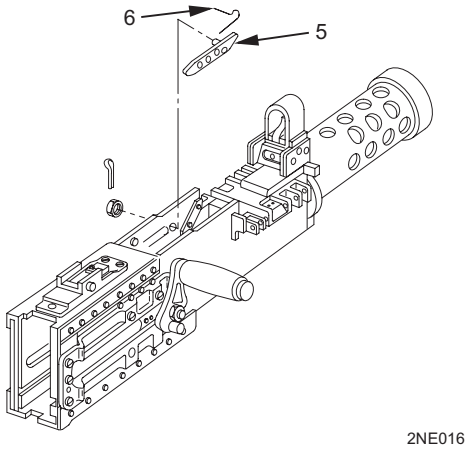
MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

Step 2. Check top cover assembly (3) for bent or broken belt feed lever (4). See PMCS (WP 0010 00, item 4).



Replace defective belt feed lever (4) (WP 0017 00).

Step 3. Check for defective extractor switch (5) or deformed extractor switch spring (6). Check for proper (crisp) spring action.



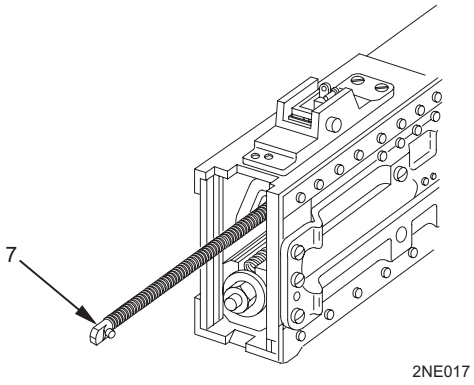
Notify Direct Support Maintenance.

TROUBLESHOOTING PROCEDURES – Continued

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

2. ROUND WILL NOT CHAMBER – Continued.

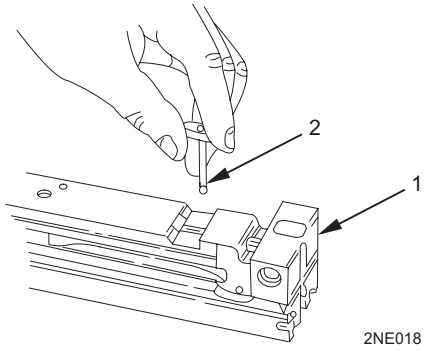
Step 4. Check for defective drive spring rod assembly (7). See PMCS (WP 0010 00, item 5).



Replace drive spring rod assembly (7) (WP 0013 00).

3. BOLT WILL NOT LOCK.

Step 1. Check bolt assembly (1) for excessively worn, broken, or improperly assembled accelerator stop (2).



Replace broken, excessively worn accelerator stop (2) (TM 9-1005-213-10) or install accelerator stop properly.

Step 2. Check bolt assembly bottom slot that matches up with the breech lock in barrel extension. Check for burrs, cracks, or chipping.

Replace accelerator stop (2) (TM 9-1005-213-10).

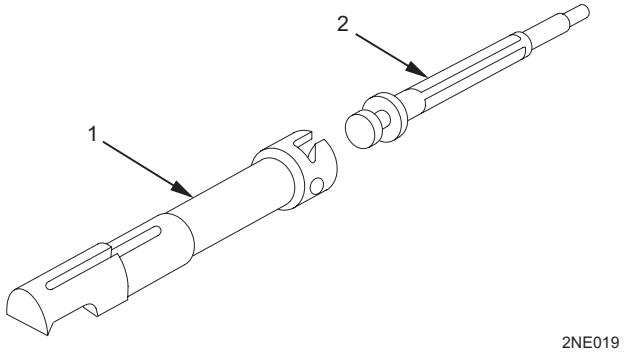
Step 3. Check for proper operation of bolt assembly (1).

Notify Direct Support Maintenance.

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

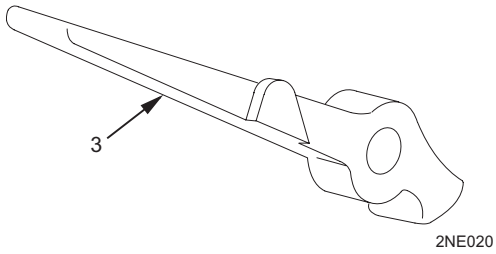
4. WEAPON WILL NOT FIRE.

Step 1. Check for defective firing pin extension assembly (1) and firing pin (2). See PMCS (WP 0010 00, item 6).



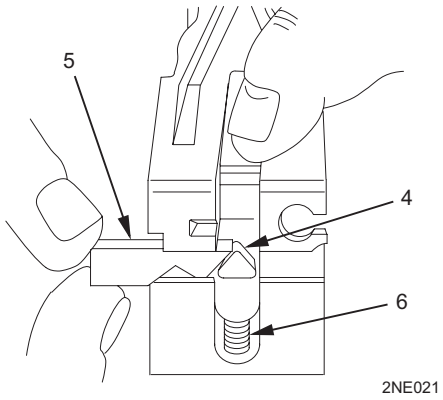
Notify Direct Support Maintenance.

Step 2. Check cocking lever (3) of bolt assembly for defects or improper assembly. See PMCS (WP 0010 00, item 6).



Replace defective cocking lever (3) (TM 9-1005-213-10) or install cocking lever properly.

Step 3. Check bolt assembly for defective sear (4) or improper assembly of sear slide (5). See PMCS (WP 0010 00, item 6).



Replace defective sear (4) (TM 9-1005-213-10) or install sear slide (5) properly.

TROUBLESHOOTING PROCEDURES – Continued

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

4. WEAPON WILL NOT FIRE - Continued.

Step 4. Check bolt assembly for defective (collapsed, elongated, or incorrectly installed) sear spring (6). Check for proper (crisp) spring action.

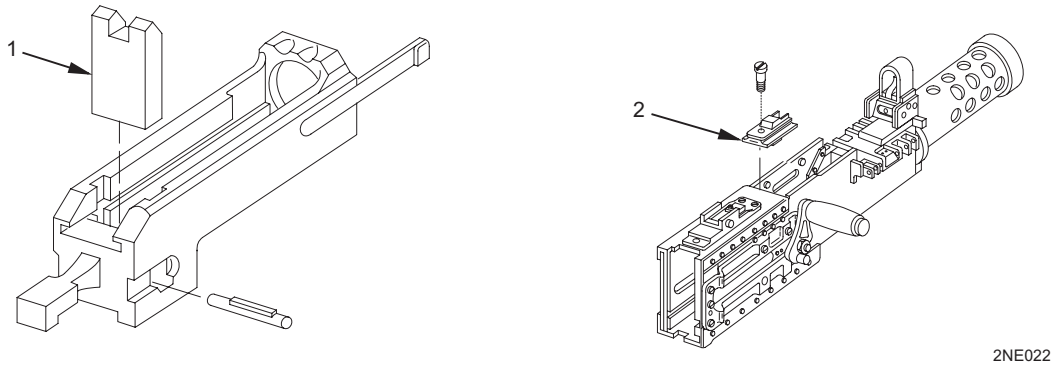
Replace defective sear spring (6) (TM 9-1005-213-10).

5. WEAPON WILL NOT UNLOCK.

Step 1. Check for obstruction in receiver group.

Remove obstruction.

Step 2. Check for damaged breech lock (1) or breech lock cam (2). Check for improper assembly of breech lock. See PMCS (WP 0010 00, items 3 and 15).



Replace defective breech lock (1) (WP 0013 00) or install breech lock properly. Notify Direct Support Maintenance if breech lock cam (2) is damaged.

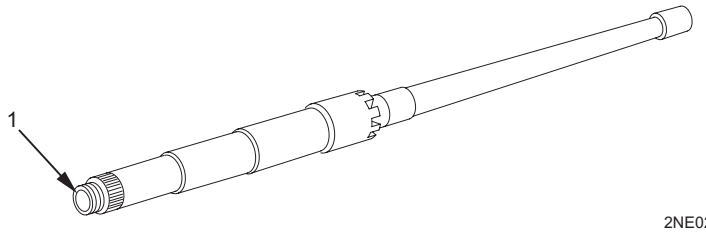
Step 3. Check bolt assembly bottom slot that matches up with the breech lock (1) in barrel extension for burrs, cracks, and chipping.

Bolt assembly with minor gouging and/or imperfections in locking lug(s) causing no degradation in performance is acceptable. Remove the minor gouging/imperfection by stoning.

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

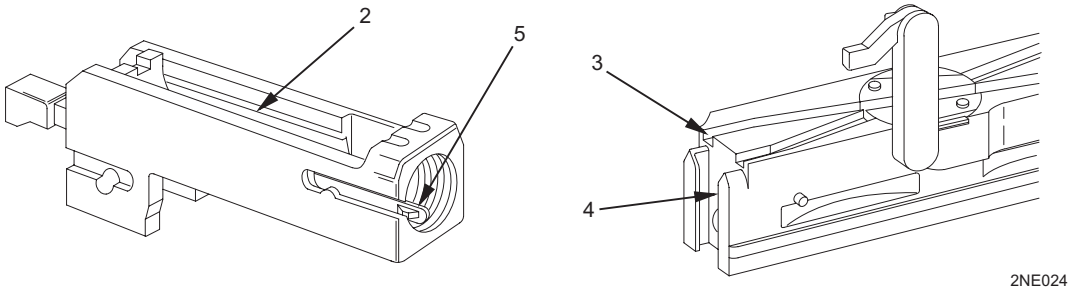
6. WEAPON WILL NOT EXTRACT.

Step 1. Check for defective (pitted) chamber (1) and burred or chipped threads and locking lugs.



Replace barrel assembly (WP 0013 00).

Step 2. Check for burrs on rails (2) of barrel extension assembly.



Remove burrs.

Step 3. Check for burrs on rails (3) of bolt assembly.

Remove burrs.

Step 4. Check for broken T-slot (4) in bolt.

Notify Direct Support Maintenance.

Step 5. Check barrel locking spring (5). See PMCS (WP 0010 00, item 3).

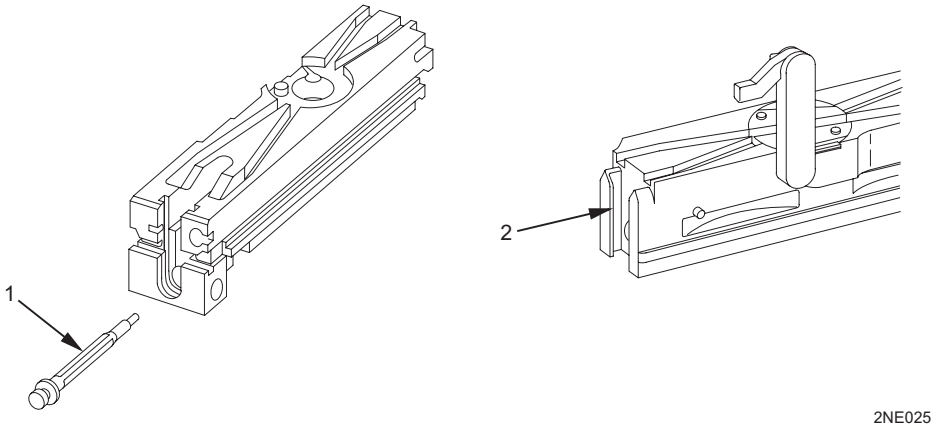
Notify Direct Support Maintenance.

TROUBLESHOOTING PROCEDURES – Continued

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

7. WEAPON WILL NOT EJECT.

Step 1. Check for defective firing pin (1). See PMCS (WP 0010 00, item 6).

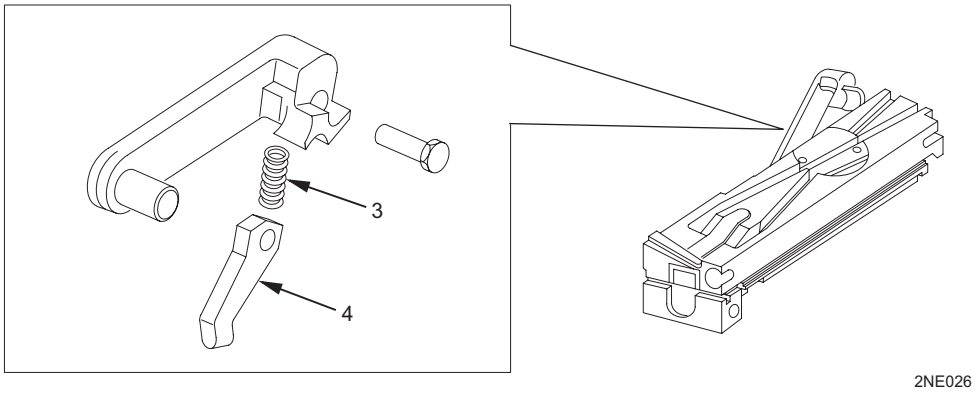


Notify Direct Support Maintenance.

Step 2. Check for burrs in T-slot (2). See PMCS (WP 0010 00, item 5).

Notify Direct Support Maintenance.

Step 3. Check for defective ejector spring (3).



Notify Direct Support Maintenance.

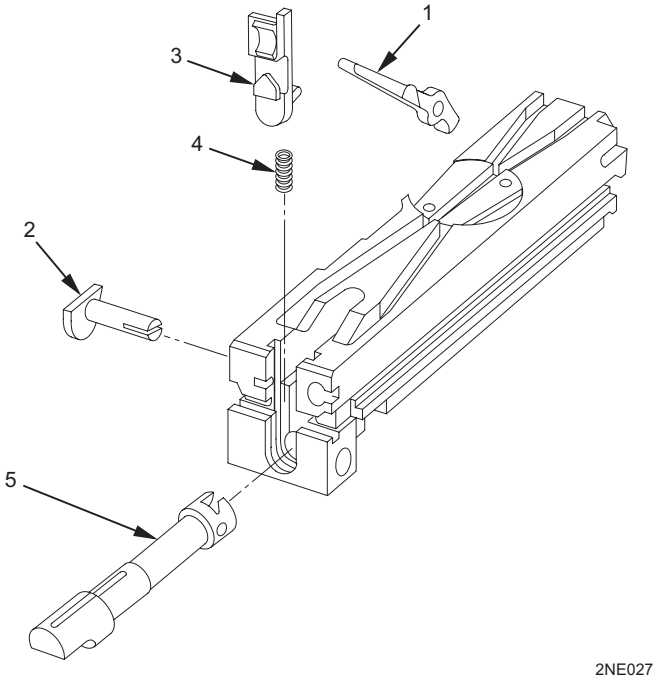
Step 4. Check for defective bolt ejector (4). See PMCS (WP 0010 00, item 6).

Notify Direct Support Maintenance.

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

8. WEAPON WILL NOT COCK.

Step 1. Check bolt for defective cocking lever (1). See PMCS (WP 0010 00, item 6).



Replace defective cocking lever (1) (TM 9-1005-213-10).

Step 2. Check bolt for defective cocking lever pin (2). See PMCS (WP 0010 00, item 6).

Replace defective cocking lever pin (2) (TM 9-1005-213-10).

Step 3. Check bolt assembly for defective sear (3). See PMCS (WP 0010 00, item 6).

Replace defective sear (3) (TM 9-1005-213-10).

Step 4. Check bolt assembly for defective sear spring (4). See PMCS (WP 0010 00, item 6).

Replace defective sear spring (4) (TM 9-1005-213-10).

Step 5. Check for defective firing pin extension assembly (5). See PMCS (WP 0010 00, item 6).

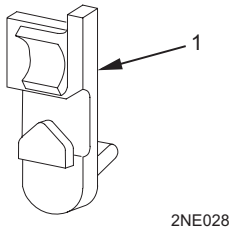
Notify Direct Support Maintenance.

TROUBLESHOOTING PROCEDURES – Continued

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

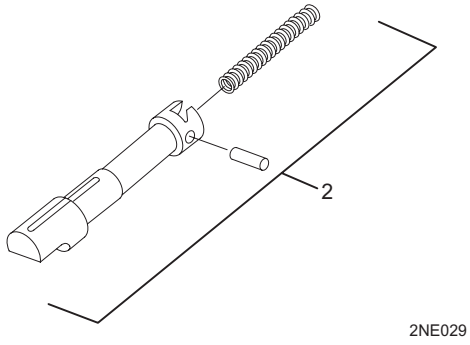
9. WEAPON HAS UNCONTROLLED FIRE.

Step 1. Check bolt assembly for defective sear (1). See PMCS (WP 0010 00, item 6).



Replace defective sear (1) (TM 9-1005-213-10).

Step 2. Check for defective firing pin extension assembly (2). See PMCS (WP 0010 00, item 6).

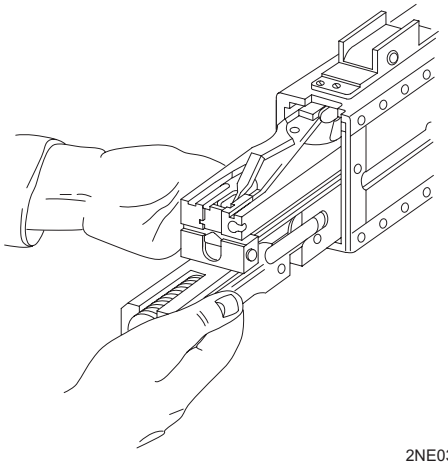


Notify Direct Support Maintenance.

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

10. BOLT ASSEMBLY IS IMPROPERLY INSTALLED.

Check for proper installation of bolt assembly.



2NE030

Reassemble components and/or notify Direct Support Maintenance.

END OF WORK PACKAGE

CHAPTER 3

DIRECT SUPPORT TROUBLESHOOTING PROCEDURES FOR MACHINE GUN, M2

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715) M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

TROUBLESHOOTING INDEX

GENERAL

a. Troubleshooting procedures are limited to those listed in the troubleshooting symptom index. Common malfunctions are listed in cycle of function order with a page number reference to the symptom table where a test or inspection and corrective action are provided.

b. This manual cannot list all malfunctions that may occur, nor all tests or inspections and corrective actions. If a malfunction is not listed or is not corrected by listed corrective actions, notify your supervisor.

SYMPTOM INDEX

NOTE

Refer to operator's manual (TM 9-1005-213-10) for disassembly and assembly.

Check headspace and timing BEFORE beginning troubleshooting procedures.

END OF WORK PACKAGE

DIRECT SUPPORT

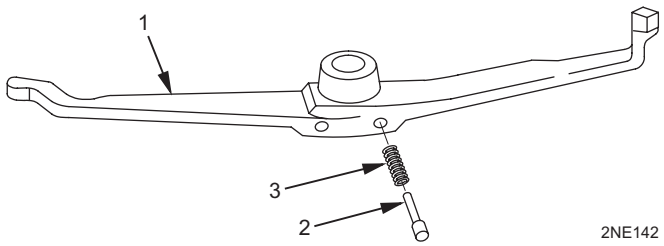
**MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)**

TROUBLESHOOTING PROCEDURES

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

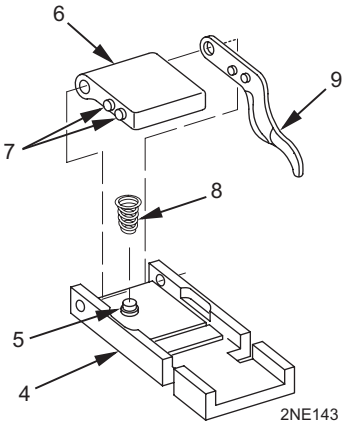
1. WEAPON WILL NOT FEED.

Step 1. Check for burred, broken, or bent belt feed lever (1), broken or bent shoulder pin (2), or broken or collapsed coils on spring (3).



Replace defective belt feed lever (1), shoulder pin (2), or spring (3) on cover assembly (WP 0017 00).

Step 2. Check for burred, broken, or bent belt feed slide assembly (4); broken or bent stud (5); burred, broken, or cracked belt feed pawl (6); bent or missing pins (7); broken or collapsed coils on spring (8); or broken or cracked belt feed pawl arm (9).



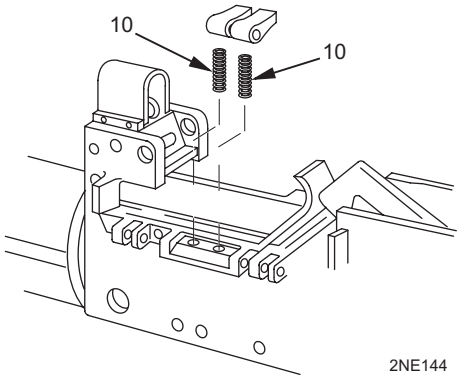
Replace defective belt feed slide assembly (4), belt feed pawl (6), belt feed pawl arm (9), or spring (8) (WP 0017 00).

TROUBLESHOOTING PROCEDURES – Continued

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

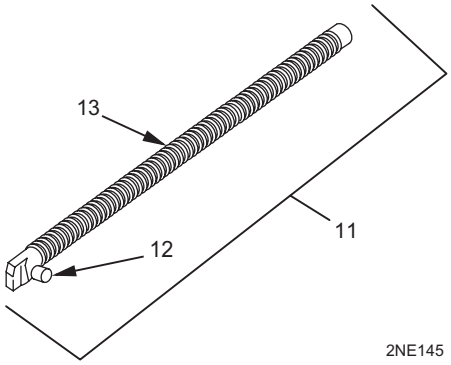
1. WEAPON WILL NOT FEED - Continued.

Step 3. Check for broken or collapsed coils on belt holding pawl springs (10).



Replace defective belt holding pawl springs (10) (WP 0013 00).

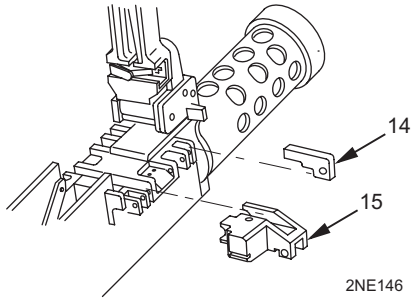
Step 4. Check for bent/cracked drive spring rod assembly (11) and/or broken/cracked pin (12). Check for broken/cracked or collapsed coils on rod springs (13).



Replace defective drive spring rod assembly (11) (WP 0013 00).

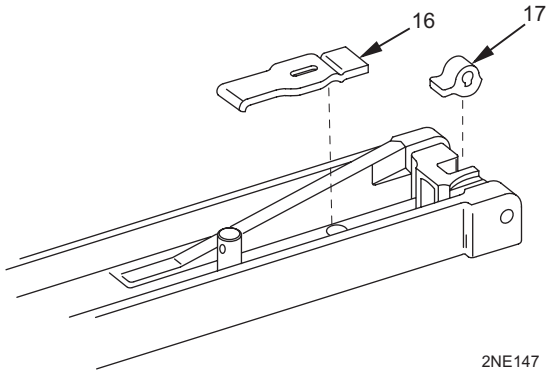
MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

Step 5. Check for burred, broken, or cracked front cartridge stop (14) or rear cartridge stop assembly (15).



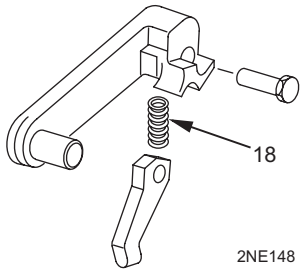
Repair (WP 0033 00) or replace (WP 0013 00) defective rear cartridge stop assembly (15). Replace defective front cartridge stop (14) (WP 0013 00).

Step 6. Check for broken flat spring (16). Ensure flat spring has retained its tension. Check for burred or broken cover latch (17).



Replace defective flat spring (16) or cover latch (17) on cover assembly (WP 0027 00).

Step 7. Check for broken or collapsed coils on spring (18) in cartridge extractor.



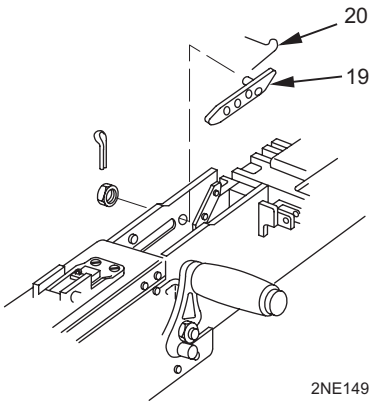
Replace defective spring (18) (WP 0025 00).

TROUBLESHOOTING PROCEDURES – Continued

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

1. WEAPON WILL NOT FEED - Continued.

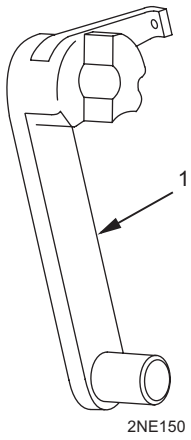
Step 8. Check for burred, cracked, or broken extractor switch (19) or broken extractor switch spring (20).



Replace defective extractor switch spring (20) (WP 0021 00).

2. ROUND WILL NOT CHAMBER.

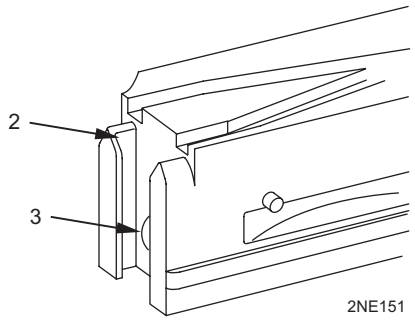
Step 1. Check for burred, broken, or bent cartridge extractor (1).



Replace defective cartridge extractor (1) (WP 0025 00).

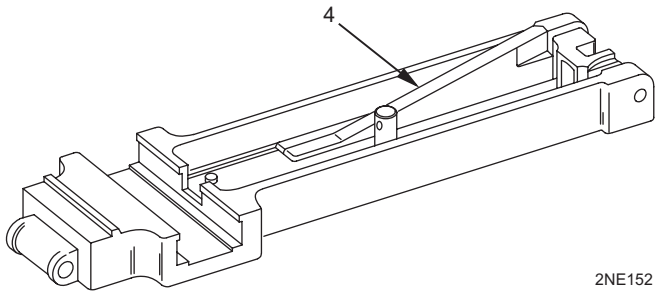
MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

Step 2. Check for bent, broken, or cracked T-slot (2), or cracked, broken, or pitted recoil plate (3).



Replace defective bolt subassembly (WP 0025 00).

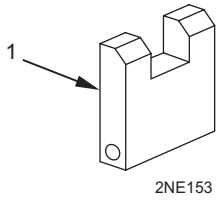
Step 3. Check for burred, scored, loose, or deformed cam (4).



Replace defective subassembly cover (WP 0027 00).

3. BOLT WILL NOT LOCK.

Step 1. Check for chipped, cracked, broken, or improperly assembled breech lock (1).



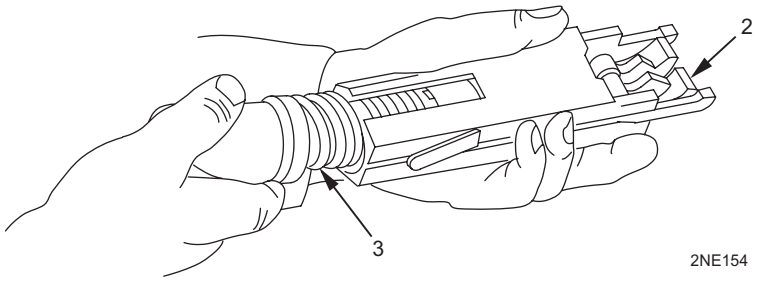
Replace defective breech lock (1) (WP 0013 00) or install properly.

TROUBLESHOOTING PROCEDURES – Continued

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

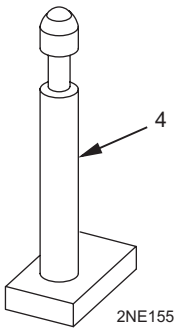
3. BOLT WILL NOT LOCK - Continued.

Step 2. Check for burred, cracked, chipped, or broken buffer accelerator (2) or broken or collapsed coils on spring (3).



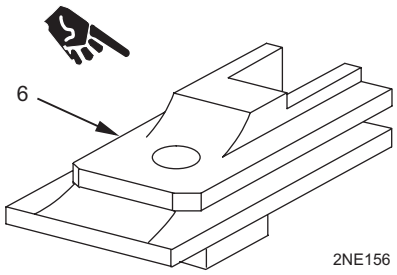
Replace defective buffer accelerator (2) or spring (3) (WP 0026 00).

Step 3. Check for burred, broken, or bent accelerator stop (4).



Replace defective accelerator stop (4) (TM 9-1005-213-10).

Step 4. Adjust breech lock cam (5) (WP 0034 00), if required, and/or check for burred, scored, or deformed breech lock cam.

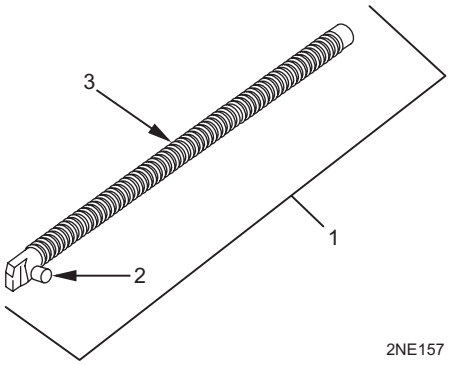


Replace defective breech lock cam (5) (WP 0034 00).

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

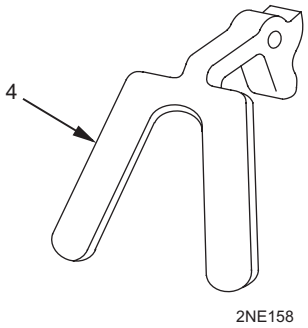
4. WEAPON WILL NOT FIRE.

Step 1. Check for bent/cracked drive spring rod assembly (1), broken/cracked pin (2), broken/cracked or collapsed coils on rod springs (3).



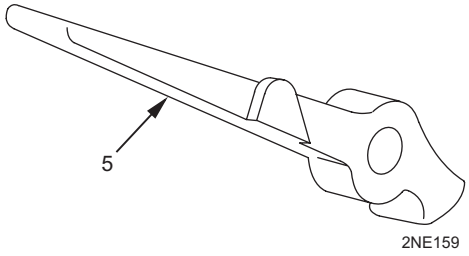
Replace defective drive spring rod assembly (1) (WP 0013 00).

Step 2. Check for bent/cracked or broken trigger (4).



Replace defective trigger (4) (WP 0022 00 (Flex) or WP 0024 00 (Fixed M48)).

Step 3. Check for burred, broken/cracked, or bent cocking lever (5).



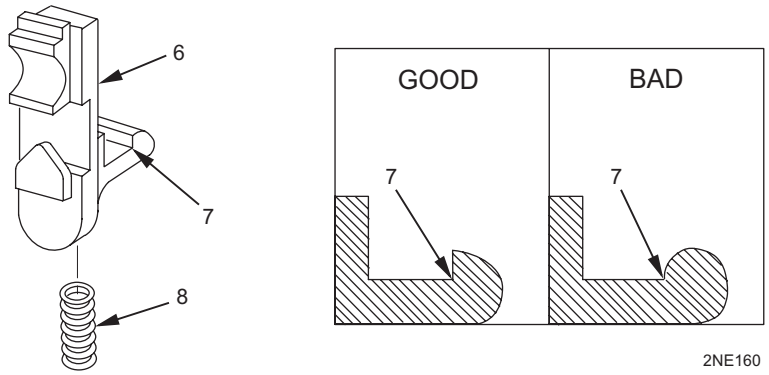
Replace defective cocking lever (5) (WP 0016 00).

TROUBLESHOOTING PROCEDURES – Continued

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

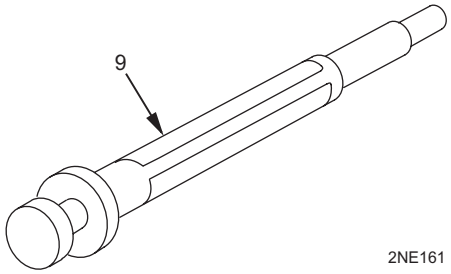
4. WEAPON WILL NOT FIRE - Continued.

Step 4. Check for burred or broken sear (6). Ensure sear notch (7) has a sharp edge and is not chipped or broken. Check for elongated, broken, or collapsed coils on sear spring (8).



Replace defective sear (6) or sear spring (8) (WP 0016 00).

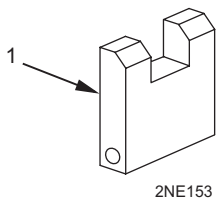
Step 5. Check for burred, broken, cracked, or bent firing pin (9).



Replace defective firing pin (WP 0025 00).

5. WEAPON WILL NOT UNLOCK.

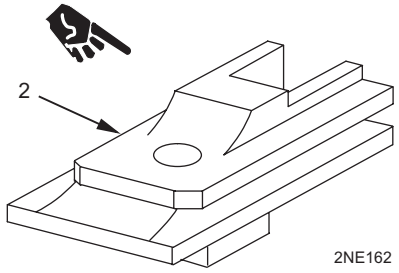
Step 1. Check for chipped, cracked, broken, or improperly assembled breech lock (1).



Replace defective breech lock (1) (WP 0013 00) or install properly.

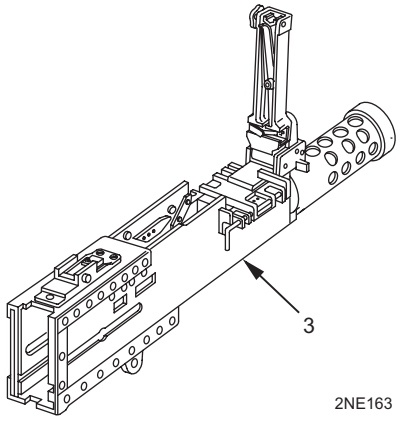
MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

Step 2. Adjust breech lock cam (2) (WP 0034 00), if required, and/or check for burred, scored, or deformed breech lock cam.



Replace defective breech lock cam (2) (WP 0034 00).

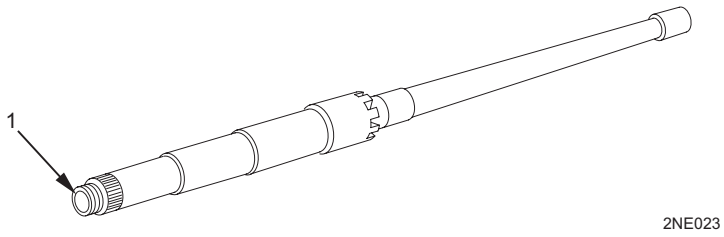
Step 3. Check for any obstruction in receiver (3).



Remove obstruction.

6. WEAPON WILL NOT EXTRACT.

Step 1. Check for pitted chamber (1) and burred or chipped threads.



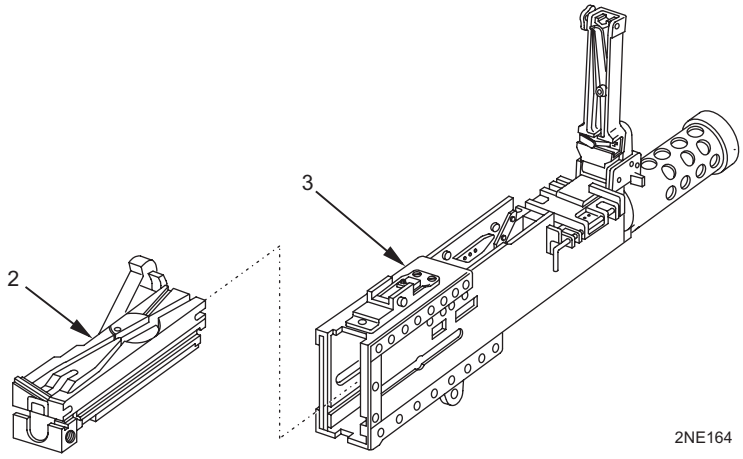
Replace barrel (WP 0013 00).

TROUBLESHOOTING PROCEDURES – Continued

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

6. WEAPON WILL NOT EXTRACT - Continued.

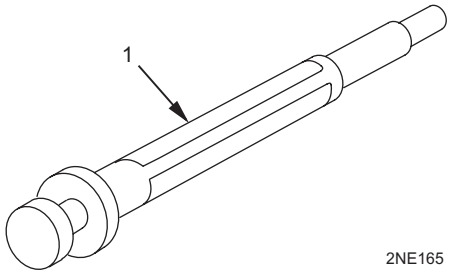
Step 2. Check for burrs on bolt assembly (2) and inside of receiver (3) which may cause insufficient recoil.



Remove burrs and reassemble (WP 0013 00).

7. WEAPON WILL NOT EJECT.

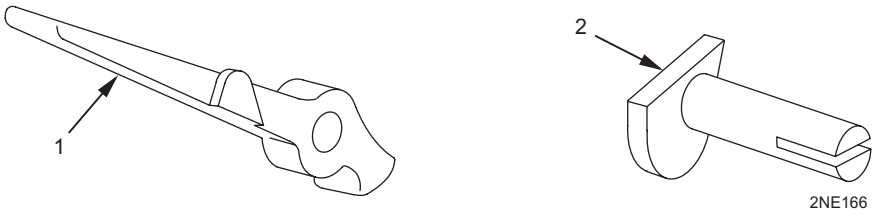
Check for burred, broken/cracked, or bent firing pin (1).



Replace defective firing pin (1) (WP 0025 00).

8. WEAPON WILL NOT COCK.

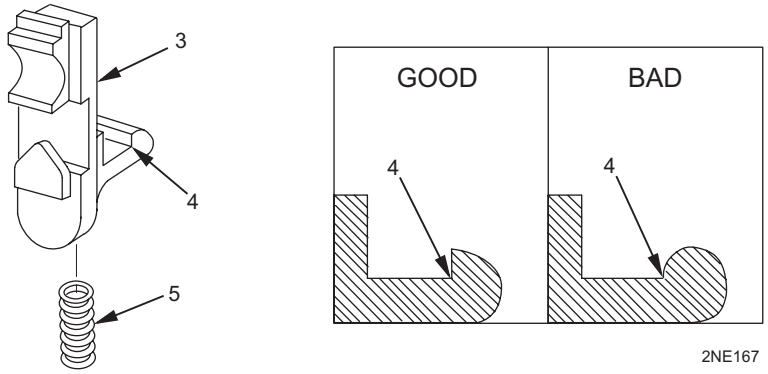
Step 1. Check for burred, bent, or broken cocking lever (1) or cocking lever pin (2).



Replace defective cocking lever (1) or cocking lever pin (2) (WP 0016 00).

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

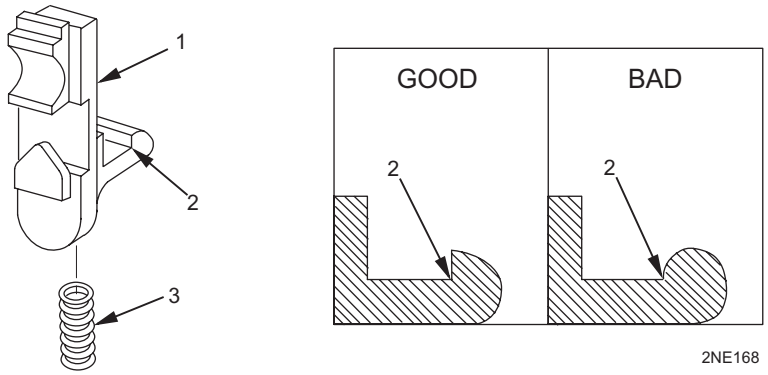
Step 2. Check for broken sear (3). Ensure sear notch (4) is not rounded as shown below or cracked, chipped, or broken. Check sear spring (5) for broken or collapsed coils.



Replace defective sear (3) or sear spring (5) (WP 0016 00).

9. WEAPON HAS UNCONTROLLED FIRE.

Step 1. Check for broken sear (1). Ensure sear notch (2) is not rounded as shown below or cracked, chipped, or broken. Check sear spring (3) for broken or collapsed coils.



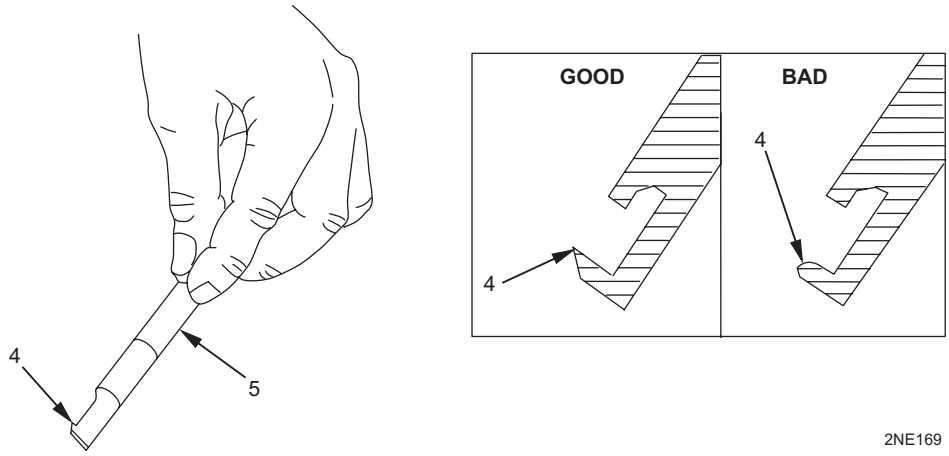
Replace defective sear (1) or sear spring (3) (WP 0016 00).

TROUBLESHOOTING PROCEDURES – Continued

MALFUNCTION
TEST OR INSPECTION
CORRECTIVE ACTION

9. WEAPON HAS UNCONTROLLED FIRE - Continued.

Step 2. Check for broken notch (4) on firing pin extension assembly (5).



Replace defective firing pin extension assembly (WP 0025 00).

10. BOLT ASSEMBLY IS IMPROPERLY INSTALLED.

Check for improper assembly of components.

Reassemble components correctly (WP 0013 00).

END OF WORK PACKAGE

CHAPTER 4

UNIT MAINTENANCE INSTRUCTIONS
FOR
MACHINE GUN, M2

UNIT

**MACHINE GUNS, CALIBER .50: M2, BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)**

SERVICE UPON RECEIPT

Inspect the equipment for damage incurred during shipment. If the equipment has been damaged, report the damage on SF 364, Report of Discrepancy (ROD). Marine Corps personnel use MCO P4610.19. Air Force personnel use Materiel Deficiency Report (MDR).

Check the equipment against the packing slip to see if the shipment is complete. Report all discrepancies in accordance with the instructions in DA PAM 750-8.

ARMY

Army users report discrepancies in accordance with DA PAM 750-8.

AIR FORCE

Air Force users submit Material Deficiency Report (MDR) and Quality Deficiency Report (QDR) in accordance with the guidance contained in TO 00-35D-54 and AFI 21-115.

MARINE CORPS

Marine Corps users submit SF 368 in accordance with MCO 4855.10, Product Quality Deficiency Report (QDR) to: Commander, Marine Corps Logistics Bases (Code 856), 814 Radford Blvd, Albany, GA 31704-1128.

NAVY

Navy users submit SF 368, Quality Deficiency Report (QDR) to: Commander, Code 20, NAVSURFWARCENDIV, 300 Highway 361, Crane, IN 47522-5001.

Check to see whether the equipment has been modified. Refer to authorized equipment configuration changes listed in DA PAM 25-30.

WARNING

DO NOT keep live ammunition near work/maintenance area.

Be sure to clear weapon before disassembling, cleaning, inspecting, transporting, or storing. Clearing consists of unloading the machine gun and visually inspecting weapon and chamber to ensure all rounds have been removed. Do not release the bolt or press the trigger.

Table 1. Service Upon Receipt.

Location	Item	Action	Remarks
Container	Machine Gun	Remove machine gun from container.	
		Inspect the equipment for damage incurred during shipment.	If the equipment has been damaged, report the damage on SF 364, Report of Discrepancy (ROD).
		Check the equipment against the packing list to see if the shipment is complete.	Report all discrepancies in accordance with instructions in DA PAM 750-8.
	Basic Issue Items	Check for missing parts.	Refer to operator's manual, TM 9-1005-213-10. AF TO 11W2-6-3-161.
Machine Gun	Barrel/Spare Barrel Assembly	Remove volatile corrosion inhibitor (VCI) bore tube from barrel and discard.	
	All parts	Field strip machine gun and inspect for missing parts, damaged parts, and rusted or corroded parts.	Refer to operator's manual, TM 9-1005-213-10. AF TO 11W2-6-3-161.
		Clean and lubricate.	Refer to operator's manual, TM 9-1005-213-10. AF TO 11W2-6-3-161.
		Reassemble.	Refer to operator's manual, TM 9-1005-213-10. AF TO 11W2-6-3-161.
		Test/adjust headspace.	Refer to operator's manual, TM 9-1005-213-10. AF TO 11W2-6-3-161.
		Test/adjust timing.	Refer to operator's manual, TM 9-1005-213-10. AF TO 11W2-6-3-161.
		Function by hand using linked belted dummy cartridges.	Refer to operator's manual, TM 9-1005-213-10. AF TO 11W2-6-3-161.
		Check to see whether the equipment has been modified.	Army users see DA PAM 25-30. Marine Corps personnel use SL 1-2/SL 1-3. Air Force users see AFTO Form 105.

END OF WORK PACKAGE

UNIT

**MACHINE GUNS, CALIBER .50: M2, BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)**

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) INTRODUCTION

INITIAL SETUP:

References
DA Form 2404
TM 9-1005-213-10, AF TO 11W2-6-3-161
WP 0010 00

GENERAL

This section contains the procedures and instructions necessary to perform preventive maintenance checks. These checks are to be performed by maintenance personnel with assistance, where practical, of the operator/crew who will clean and lubricate in accordance with operator's manual, TM 9-1005-213-10.

The PMCS procedures are contained in the table of WP 0010 00. They are arranged in logical sequence requiring a minimum amount of time and motion on the part of the persons performing them.

EXPLANATION OF COLUMNS

Item No. Column. This column specifies the logical order of performance. Numbers in this column are for reference. When completing DA Form 2404, Equipment Inspection and Maintenance Worksheet, include the item number for the check/service indicating a fault.

Interval Column. This column gives the designated interval when each check is to be performed.

Man-Hours Column. This column lists the man-hours required to complete all prescribed procedures (to the nearest tenth of an hour).

Item To Be Checked or Serviced Column. This column lists the items to be checked or serviced.

Procedure Column. This column contains a brief description of the procedure by which the check is to be performed. It contains all the information required to accomplish the checks and services.

EXPLANATION OF COLUMNS - Continued

Equipment Not Ready/Available If: Column. This column lists information which tells you what faults will keep your equipment from being capable of performing its primary mission. If check and service procedures show faults listed in this column, do not operate the equipment. Follow standard operating procedures for maintaining the equipment or reporting equipment failure.

WARNING

Be sure to clear weapon before disassembling, cleaning, inspecting, transporting, or storing. Clearing consists of unloading the machine gun and visually inspecting weapon and chamber to ensure all rounds have been removed. Do not release the bolt or press the trigger.

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

NOTE

Unless otherwise stated, maintenance is to be performed as indicated by PMCS.

An inactive machine gun (M.G.) is a M.G. which has been stored in an arms room for a period of 90 days without use. The M.G. may or may not have been assigned to an individual.

An inactive M.G. shall receive quarterly PMCS unless inspection reveals more frequent servicing is necessary.

Normal cleaning (PMCS) of an inactive M.G. will be performed every 90 days.

Should the unit armorer detect corrosion on a M.G. prior to the end of the 90-day period, the PMCS should be performed immediately.

Solid film lubricant (SFL) is the authorized touch up of the M.G. and may be used on up to one third (1/3) of the exterior finish of the M.G. receiver.

For Army CONUS use only and Air Force training M.G. only: Solid film lubricant (SFL) may be used as a touch up without limitation on the barrel assembly. This is to say that units which do not fall under the category of divisional combat units or rapid deployment type units may have up to 100 percent of the exterior surface of the barrel assembly protected with SFL. Prior to application of SFL, the surface must be thoroughly cleaned and inspected for corrosion and/or damage. If corroded or damaged, the part must be repaired or replaced prior to application of SFL. Continued use under combat conditions would result in an unprotected surface when SFL wears off. This would result in a large light reflecting surface and accelerated deterioration of the unprotected surface. Therefore, divisional combat units and units which fall under the definition of rapid deployment type must adhere to the limitation of not over one third (1/3) of the exterior surface of the receiver covered by SFL; if over one third (1/3) of the M.G. receiver finish is worn off, the weapon must be turned in for a new one.

When determining mission capability, deadline if it is a deficiency.

END OF WORK PACKAGE

UNIT

MACHINE GUNS, CALIBER .50: M2, BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MACHINE GUN, M2
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS), INCLUDING LUBRICATION INSTRUCTIONS

WARNING

DO NOT keep live ammunition near work/maintenance area.

Be sure to clear weapon before disassembling, cleaning, inspecting, transporting, or storing. Clearing consists of unloading the machine gun and visually inspecting weapon and chamber to ensure all rounds have been removed. Do not release the bolt or press the trigger.

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

NOTE

All unit PMCS checks and services will be completed before operation of the weapon. Inactive weapons, those not used for firing for three months or longer, will have those PMCS tasks listed as quarterly, semiannually, or annually completed as they are due.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2.

ITEM NO.	INTERVAL	MAN-HOUR	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
1	Quarterly		Annual DS safety and service-ability inspection and gaging	Check to ensure annual DS safety and serviceability inspection and gaging has been done on both barrels and that the next gaging and inspection is scheduled. If annual gaging has not been performed in the last year, notify Direct Support Maintenance.	Annual gaging has not been performed or fails one or more checks.
1.1	Before		Headspace & Timing Gage	Ensure gages are present serviceable and calibrated. **NOTE** Ensure both barrels are gaged. Ensure both barrels are tagged with serial number of receiver (near muzzle of barrel). Use brass tag (NSN 9905-00-473-6336). Tag is to be painted black and wired (NSN 9905-11-293-4208).	Gages are not present serviceable and calibrated.
2	Before		Barrel Assembly	Check barrel locking notches (1) for wear. Check threads (2) for burrs, cracks, or binding.	Barrel can be turned in either direction when in the locked position, following headspacing and timing (refer to TM 9-1005-213-10).

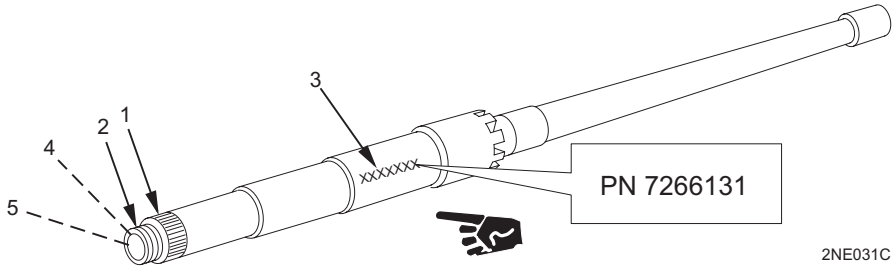


Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
2 (Cont)	Before (Cont)		Barrel Assembly (Cont)	**NOTE** The part number 7266131 (3) will appear on lined barrels. If SLAP ammunition is being used, barrel life will be reduced.	
			Bore	Check bore (4) for pits, bulges, metal fouling, and rings. **NOTE** There is a gap which allows for expansion (when the barrel gets hot from firing) of the stellite liner (lined barrel PN 7266131).	Pits, bulges, metal fouling, or rings are present.
			Chamber	Check chamber (5) for pits, bulges, metal fouling, and rings.	Pits, bulges, metal fouling, or rings are present.
3	Before		Barrel Extension Assembly	Check for chipped or cracked metal (including threaded area). Check shaft for cracks or looseness. **NOTE** All locations taken from gunner's perspective.	Loose, chipped or cracked metal.
				Check first (partial) thread (bolt side) for chipped or cracked metal. Chips or cracks may be removed by hand stoning, provided chip or crack does not visibly extend beyond the root of the thread.	Chip or crack on the last (partial) thread (bolt side) visibly extends beyond the root of the thread.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

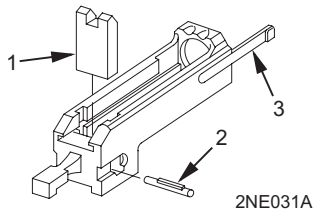
ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
3 (Cont)	Before (Cont)		Barrel Extension Assembly (Cont)	Check last (partial) thread (barrel side) for chipped or cracked metal. Chips or cracks may be removed by hand stoning, provided chip or crack does not visibly extend beyond the root of the thread.	Chip or crack on the last (partial) thread (barrel side) visibly extends beyond the root of the thread.
				Check remaining full threads in the barrel extension for chips or cracks. Chips or cracks 1/2 linear inch in length or less shall be smoothed or repaired by hand stoning.	Remaining full threads in the barrel extension exhibit more than one chip or crack total. If only one chip or crack, it exceeds 1/2 linear inch in length and visibly extends into the barrel extension beyond the root of the thread. If repaired, the repaired surface exceeds 1/2 linear inch in length.
				Check slot in breech lock barrel extension for chipping.	Slot in breech lock barrel extension is chipped.
			Breech Lock	Check breech lock (1) for burrs, cracks, or binding. Ensure breech block is installed correctly. 	Breech lock is burred, cracked, binds, or is installed incorrectly.
				Check breech lock (1) beveled edges for rolled back, broken, or chipped edges.	Breech lock beveled edges are rolled back, broken, or chipped.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

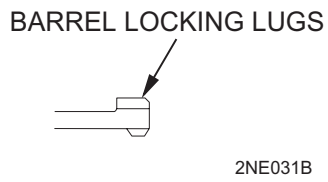
ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
3 (Cont)	Before (Cont)		Barrel Extension Assembly (Cont)		
			Breech Lock Pin	Check breech lock pin (2) for looseness and wear; broken, not set, or missing spring.	Breech lock pin is loose, worn, broken, not set, or spring is missing.
			Barrel Locking Spring	Check barrel locking spring (3) for retention; check locking spring for looseness and correct installation (spring locking lugs pointed towards barrel locking lugs).	Barrel locking spring is loose or not staked; barrel assembly can be unscrewed.
				Check locking lugs for weakness and/or crisp spring action. Check for wear (rounded) spring locking lug.	Locking spring is rounded on lug area.
					
4	Quarterly		Top Cover Assembly	Check cover latch (1) and cover latch lever (2) to see if broken or missing. Check cover for more than slight movement.	Cover latch is broken or missing; cover has more than slight movement.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

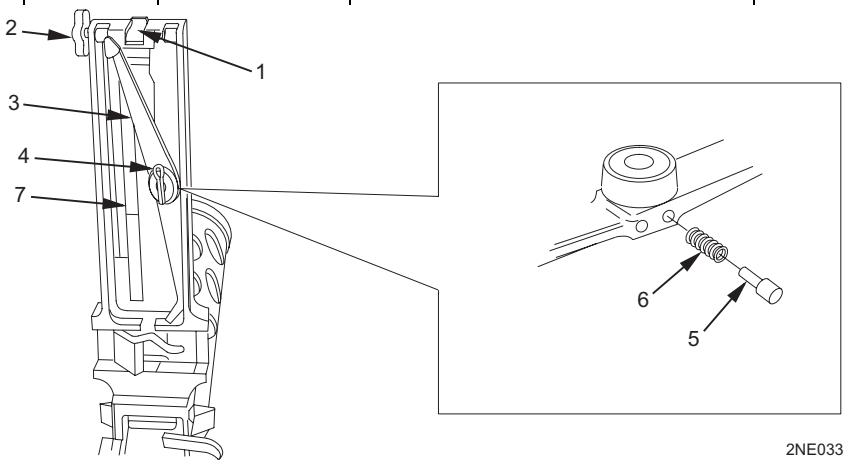
ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
4 (Cont)	Quarterly (Cont)		Top Cover Assembly (Cont)	Check belt feed lever (3) for cracks, breaks, or bends.	Belt feed lever is cracked, broken, or bent.
					
			Lock Pin	NOTE Do NOT use a cotter pin in place of lock pin.	
				Check for missing lock pin (4).	Lock pin is missing.
			Spring	Check for burred, bent, or missing shoulder pin (5). Check spring (6) for missing, cracked, elongated, or collapsed spring coils. Check belt feed lever for proper (crisp) spring action.	Shoulder pin is bent, burred, or missing; spring coils are missing, cracked, elongated, or collapsed.
			Belt Feed Lever	Check belt feed lever (3) for the correct direction of feed (left or right).	Direction of feed is incorrect.
			Cover Extractor Spring	Check cover extractor spring (7) to see if burred or broken.	Cover extractor spring is burred or broken.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
4 (Cont)	Quarterly (Cont)		Top Cover Assembly (Cont)		
			Belt Feed Slide	Check belt feed slide assembly (8) for burrs, cracks, and binding.	Belt feed slide assembly is burred, cracked, or binds.
			Belt Feed Pawl	Check belt feed pawl (9) for binding in belt feed slide assembly.	Belt feed pawl binds.
			Spring Pin	Check spring pin (10) for looseness. Check if spring wire is broken, coil collapsed or missing.	Spring pin is loose, spring wire is broken, or coil collapsed or missing.
			Spring	Check for weak, broken, cracked, elongated, or collapsed coils or missing spring (11).	Spring is missing; coils are weak, broken, cracked, elongated, or collapsed.
				Check spring (11) for correct installation (oval/large end should be in belt feed pawl (9) with loop pointing down and away from pawl arm (12)). Check for collapsed spring.	Spring incorrectly installed or spring collapsed.

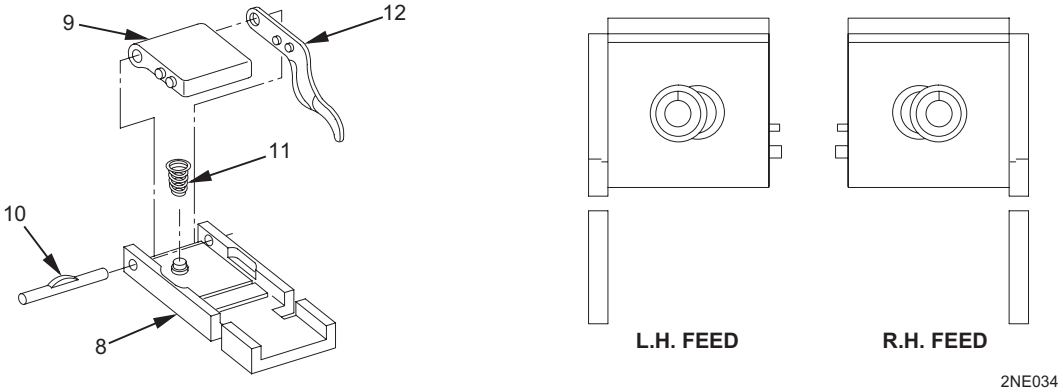


Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
4 (Cont)	Quarterly (Cont)		Top Cover Assembly (Cont)		
			Pawl	Check for bent or broken pawl arm (12).	Pawl arm is bent or broken.
			Pins	Check for bent or broken pins (13).	Pins are bent or broken.
			Flat Spring	Check if flat spring (14) is weak, broken, or not seated over cover latch.	Flat spring is weak, broken, or not properly seated.
			Cover Grooves	Check cover grooves (15) for burrs, cracks, or damage.	Cover grooves are burred, cracked, or damaged.
			Cover Pin	Check for burred, bent, worn, or missing cover pin (16).	Cover pin is burred, bent, worn, or missing.

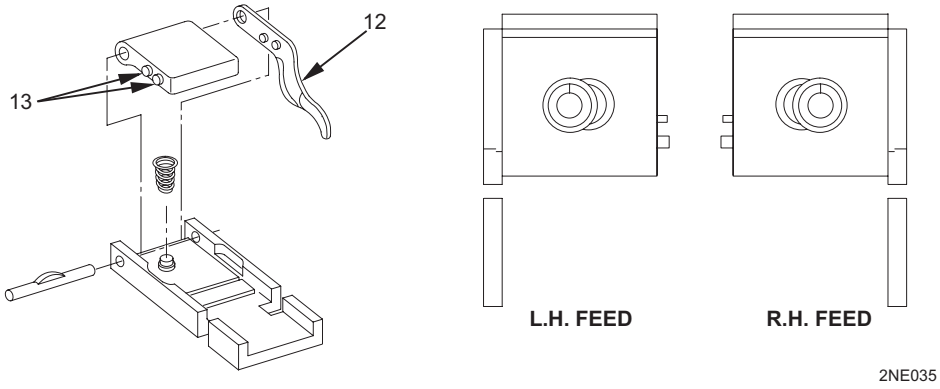
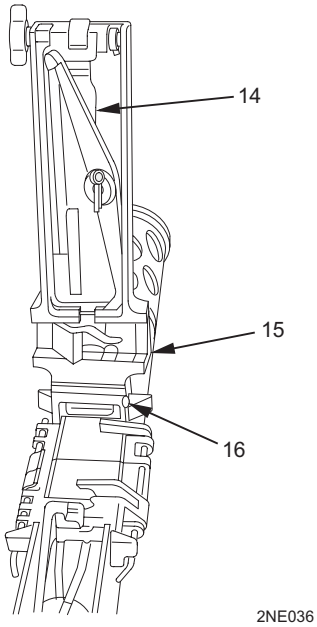


Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
4 (Cont)	Quarterly (Cont)		Top Cover Assembly (Cont)		



CAUTION

If the bolt is retracted with the cover up and then cover is closed and the bolt released, the belt feed lever tang will not seat in the bolt groove. This results in a battered tang and a burred bolt body.

5	Before		Bolt Assembly		

NOTE

Bolt assembly with minor gouging and/or imperfections in locking lug(s) causing no degradation in performance is acceptable. The minor gouging/imperfection can be removed by stoning.

			Bolt	Check bolt alternate feed area, cam grooves (1), and T-slot (2) for burrs or cracks. Check for chipped T-slot.	Bolt alternate feed area, cam grooves, or T-slot are burred, cracked, or chipped.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

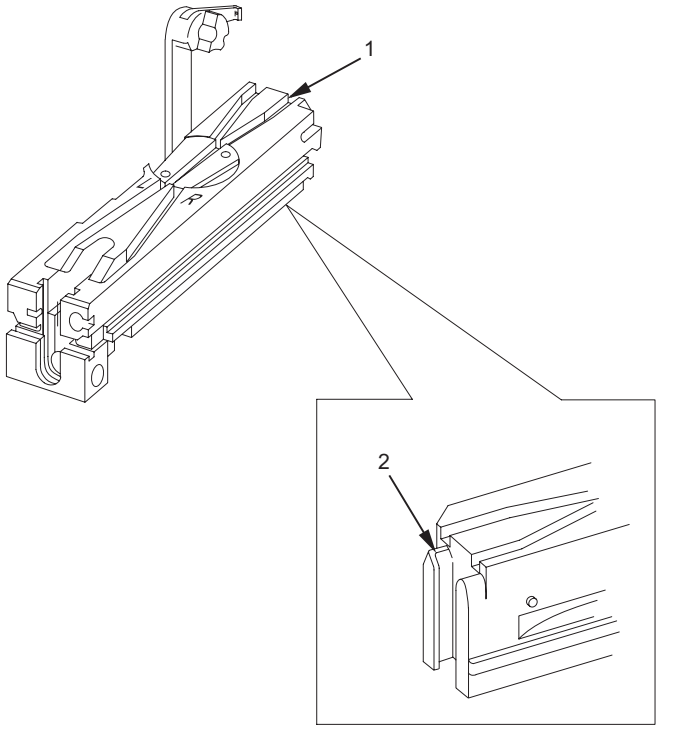
ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
5 (Cont)	Before (Cont)		Bolt Assembly (Cont)		
			Bolt	Check bolt bottom slot for burrs or cracks.	Bolt bottom slot is burred or cracked.
				 2NE037b	
			Drive Spring Rod Assembly	Check drive spring rod assembly (3) for broken or cracked springs, collapsed coils, flat spots on coils, or deformed, cracked, or broken rod.	Drive spring rod assembly springs are broken or cracked, coils have flat spots, coils are collapsed, or drive spring rod is deformed, cracked, or broken.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

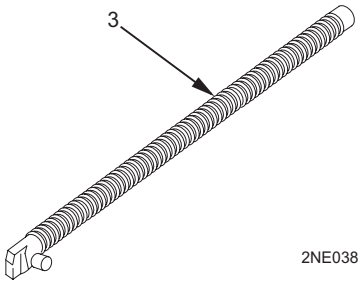
ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
5 (Cont)	Before (Cont)		Bolt Assembly (Cont) Drive Spring Rod Assembly (Cont)		
					
6	Before		Bolt Assembly Sear Spring	Check bolt body for burrs and failure to slide freely. Check sear spring (1) for deformity, collapsed coils, weakness, elongation, crisp spring action, and/or correct installation (**must be in sear hole and recess in bottom of the bolt**). Spring should not be able to be compressed fully with fingers.	Bolt body has burrs or fails to slide freely. Sear spring is deformed, weak, or incorrectly installed; sear spring can be compressed fully with fingers.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
6 (Cont)	Before (Cont)		Bolt Assembly (Cont)		
			Cocking Lever Pin	Check cocking lever pin (2) for burrs or breaks.	Cocking lever pin is burred or broken.
			Sear	Check sear (3) for burrs. Ensure sear notch has a sharp edge and is not chipped or broken.	Sear has burrs or sear notch is dull, chipped, or broken.
			Sear Slide	Check sear slide (4) for free movement in guide grooves.	Sear slide binds.
				Check for distorted notch (5) and proper installation, enters from left to right (for left hand feed).	Notch is distorted or improperly installed.
			Accelerator Stop	Check accelerator stop (6) and accelerator stop lock (7) for bends or breaks.	Accelerator stop or accelerator stop lock is broken, flat, or twisted.

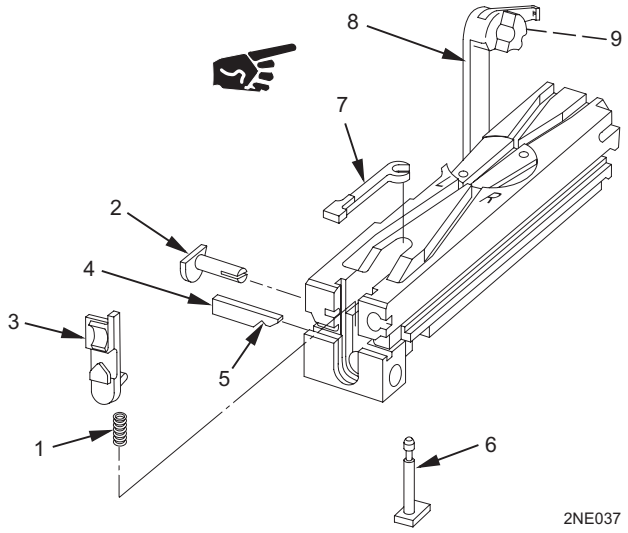


Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
6 (Cont)	Before (Cont)		Bolt Assembly (Cont)		
			Cartridge Extractor	Check cartridge extractor (8) and spring (9) for burrs or breaks.	Cartridge extractor is burred or broken.
			Bolt Switch	**CAUTION** Incorrect installation of bolt switch (1) can lead to battered belt feed lever if cover is closed and an attempt is made to function test the weapon. **NOTE** Bolt assembly with minor gouging and/or imperfections in locking lug(s) causing no degradation in performance is acceptable. The minor gouging/ imperfection can be removed by stoning. Correct installation of bolt switch (1) for left-hand feed is shown below.	

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

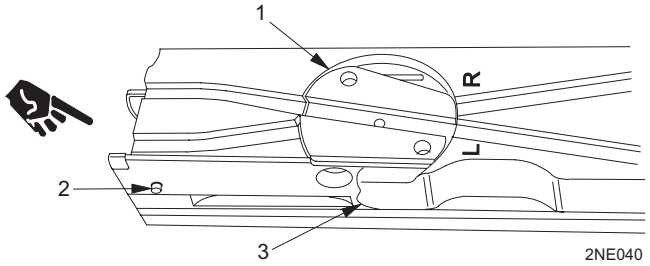
ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
6 (Cont)	Before (Cont)		Bolt Assembly (Cont)		
			Bolt Switch (Cont)	Check bolt switch (1) for burrs, looseness, and incorrect installation.	Bolt switch is burred, loose, or installed incorrectly.
					
				Check for deformed, broken or missing extractor stop pin (2).	Extractor stop pin is missing, deformed, or broken.
				Check bolt extractor mounting arm support (3) for chips and burrs.	Bolt extractor mounting arm support is chipped or burred.
7	Quarterly		Back Plate Assembly	Check upper (1) and lower (2) handle frames for bends, cracks, or breaks.	Handle frames are bent, cracked, or broken.
			Buffer Tube	Check back plate buffer tube (3) for any fluids (oil, solvent, or water) coming from the inside of the buffer tube. Do not submerge in water.	Buffer tube leaks.
			Handles	Check handle grips (4) for cracks or missing screws (5).	Handle grips are cracked or missing screws.
			Bolt Latch Release Lock	Check bolt latch release lock (6) for breaks or failure to hold bolt latch release (7) completely down.	Bolt latch release lock is broken or fails to hold bolt latch release completely down.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

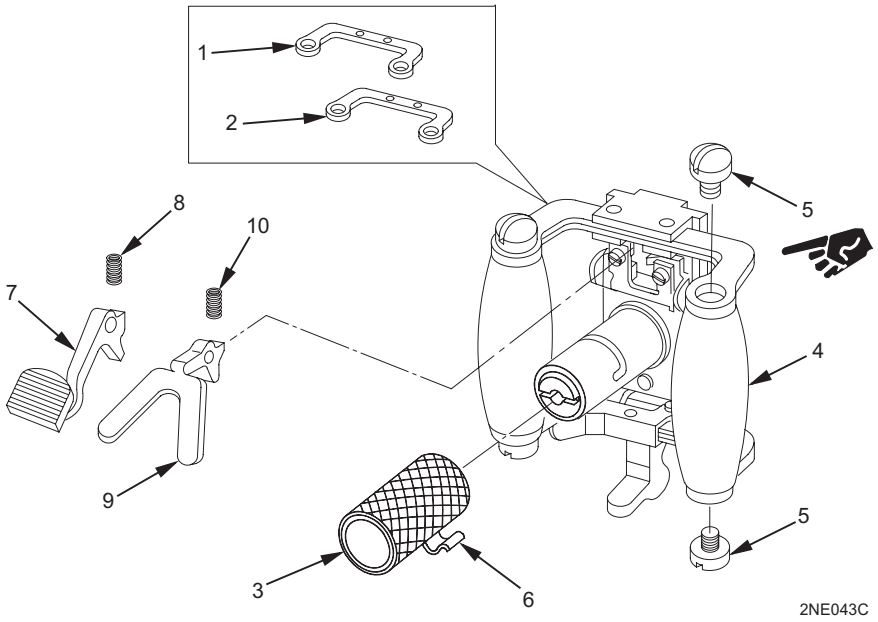
ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
7 (Cont)	Quarterly (Cont)		Back Plate Assembly (Cont) Bolt Latch Release Lock (Cont)		
					
			Bolt Latch Release	Check bolt latch release (7) and spring (8) for cracks, collapsed spring, or breaks. Check if spring is broken or missing. Check for proper (crisp) spring action by pressing on and releasing bolt latch release.	Bolt latch release is cracked, broken; or spring is missing or collapsed.
			Trigger and Spring	Check trigger (9) and spring (10) for cracks or breaks; broken, collapsed, or missing spring. Check for proper (crisp) spring action by pressing on and releasing trigger.	Trigger is cracked or broken; or spring is missing or collapsed.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

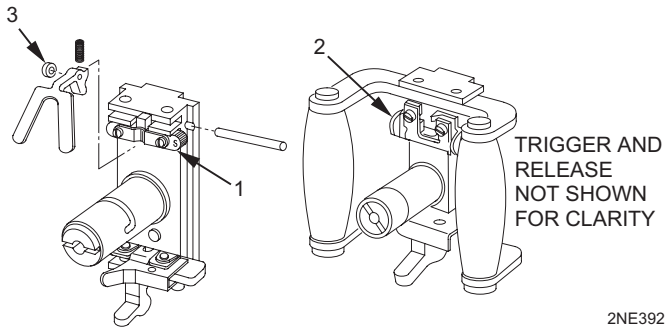
ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
8	Quarterly		Safety (Fixed M48 and Flex only)	Place safety (1) in S (safe) position and attempt to fire.	Fires on S (safe).
				Attempt to place trigger block (2) in SAFE mode.	Trigger block cannot be placed in SAFE mode.
			Backplate	Check for missing sleeve spacer (3). Check for proper (crisp) spring action by pressing on and releasing lock latch, manual lever, and trigger.	Sleeve spacer is missing. Spring action is weak. Spring is collapsed or broken.
					
9	Before		Trigger Lever Stop Assembly	Check if adjustable stop (1) is missing or broken, or has stripped screw threads (2).	Adjustable stop is broken, missing, or threads are stripped.
			Timing Adjustment Nut	Check for loose, stripped, or missing timing adjustment nut (3). Check installation (ensure notch is on top).	Timing adjustment nut is loose, stripped, missing, or incorrectly installed.
			Flat Spring	Check for weak, collapsed, cracked, or broken flat spring (4). When timing adjustment nut (3) is assembled, nut should be very hard to turn with one finger. Check flat spring for bends, cracks, collapse, or breaks. Ensure correct installation.	Flat spring is weak (easy to turn with one finger), cracked, collapsed, broken, bent, or improperly installed.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

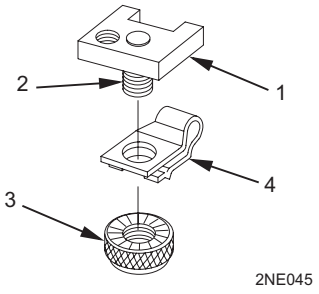
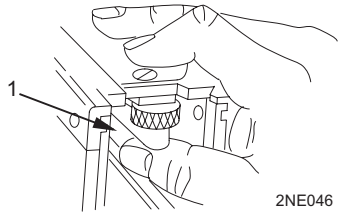
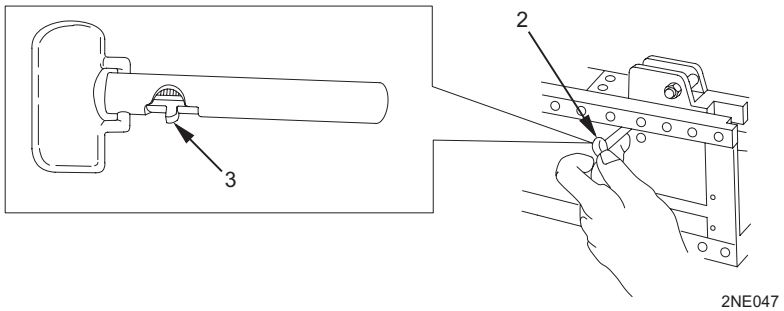
ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
			Flat Spring (Cont)		
10	Before		Trigger Lever	Check trigger lever (1) for binding, bends, cracks, or breaks. 	Trigger lever binds, is bent, cracked, or broken.
10 (Cont)	Before (Cont)		Trigger Lever Pin	Check for bent or missing trigger lever pin (2) and for a broken lock (3). 	Trigger lever pin is bent or missing; or lock is broken.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
11	Before		Headspace and Timing	WARNING Headspace **MUST** be checked and adjusted before firing weapon, after assembling weapon, and after removing/replacing barrel. NOTE Ensure handle is retracted during headspacing. Check and adjust headspace. (refer to TM 9-1005-213-10).	
12	Before		Front RH/LH Cartridge Stops	NOTE Cartridge stop (1) for blank ammo is different (longer) than cartridge stop for live ammo. Ensure cartridge stop is changed when firing blank or live ammo. Rear cartridge stop will not replace front cartridge stop. Check if front cartridge stop (1) (RH feed)/front cartridge stop (1) (LH feed) is broken, tight fitting, or incorrectly assembled.	Either front cartridge stop is broken, tight fitting, or incorrectly assembled.
			Link Stripper	Check if link stripper (2) (RH feed only) is broken, tight fitting, or incorrectly assembled.	RH feed link stripper is broken, tight fitting, or incorrectly assembled.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

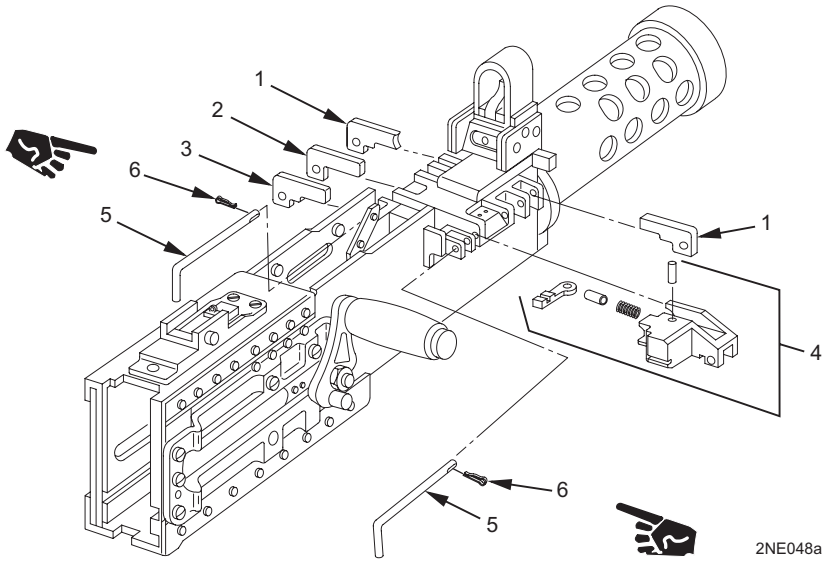
ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
12	Before (Cont)		Rear Cartridge Stops	Check if rear cartridge stop (3) (RH feed only)/rear cartridge stop assembly (4) (LH feed only) is broken, tight fitting, or incorrectly assembled. Rear cartridge stop will not replace front cartridge stop.	Rear cartridge stop is broken, tight fitting, or incorrectly assembled.
			Pin	Check for broken or missing lock pin (6).	Lock pin is broken or missing.
					
13	Quarterly		Retracting Slide Assembly (Flex Only)	Check bolt stud (1) for burrs or breaks.	Bolt stud is burred or broken.
				Check retracting slide handle (2) and spring (3) for cracks. Check for spring tension and proper assembly.	Retracting slide handle or spring is cracked; or has improper spring tension or assembly.
			Retracting Slide	Check retracting slide (4) for burrs and binding in bracket (5).	Retracting slide is burred or binds.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
13 (Cont)	Quarterly (Cont)		Retracting Slide Assembly (Flex Only) (Cont)		
			Cotter Pins	Check for missing or broken cotter pins (6).	Cotter pins are missing or broken.
			Shoulder Pin	Check for loose or broken shoulder pin (7), stud (8), or shoulder screw (9).	Shoulder pin, stud, or shoulder screw is loose or broken.
			Safety Wire	Check for broken or missing safety wires (10).	Safety wires are broken or missing.
			Plunger	Check plunger (11) for proper assembly with bracket (5) and spring (12). Check for spring pressure when plunger is depressed. Check for collapsed spring.	Plunger is broken, missing, or incorrectly assembled. Spring is collapsed.

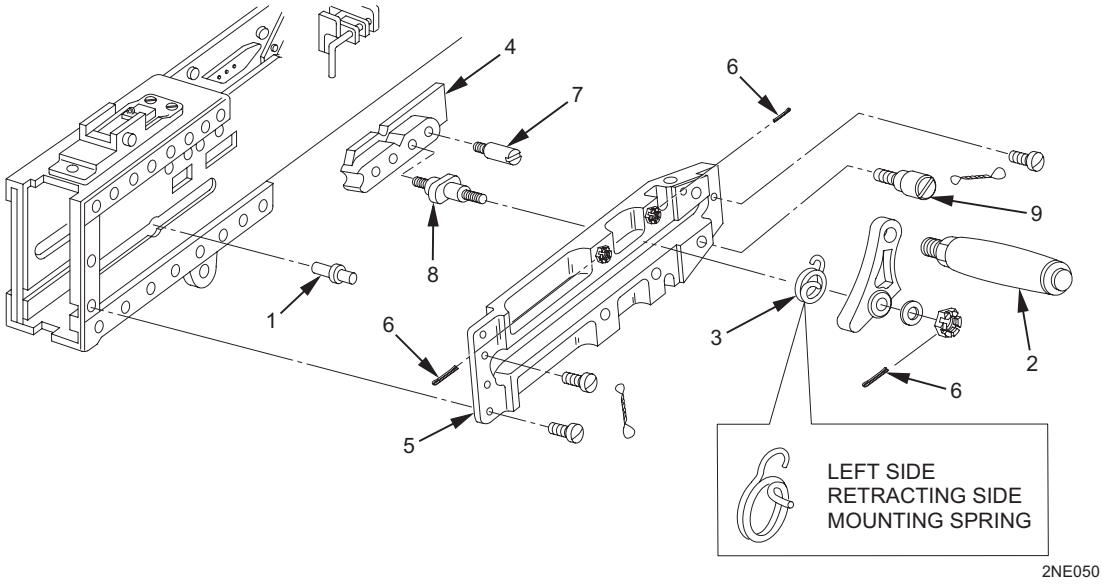


Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

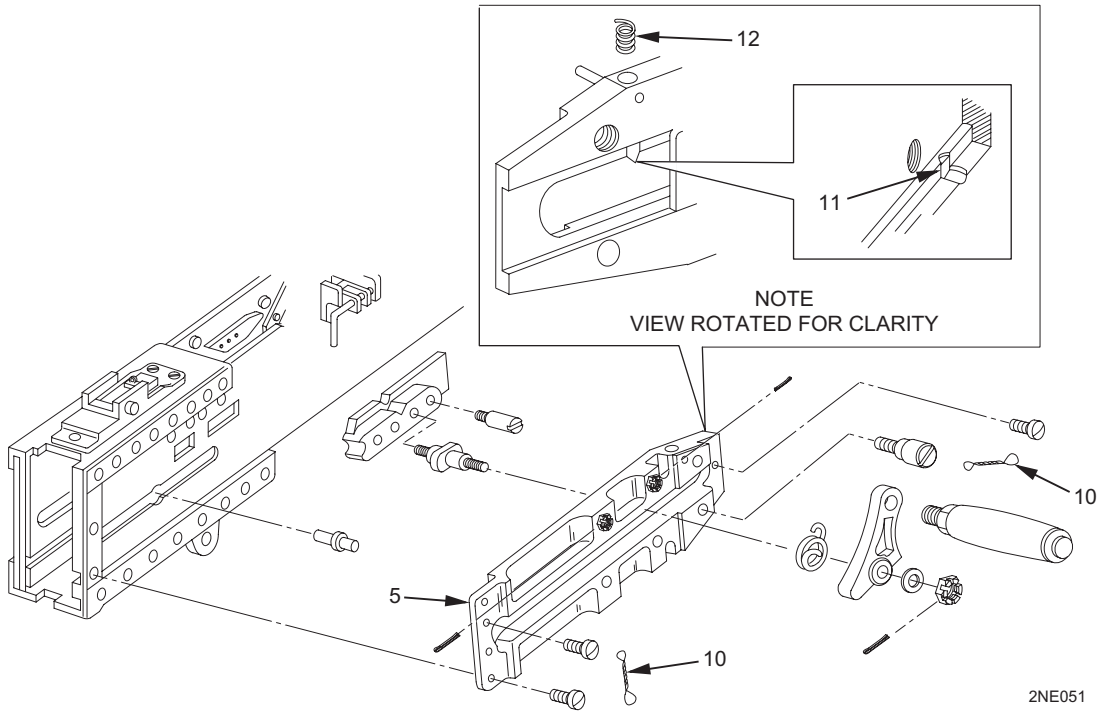
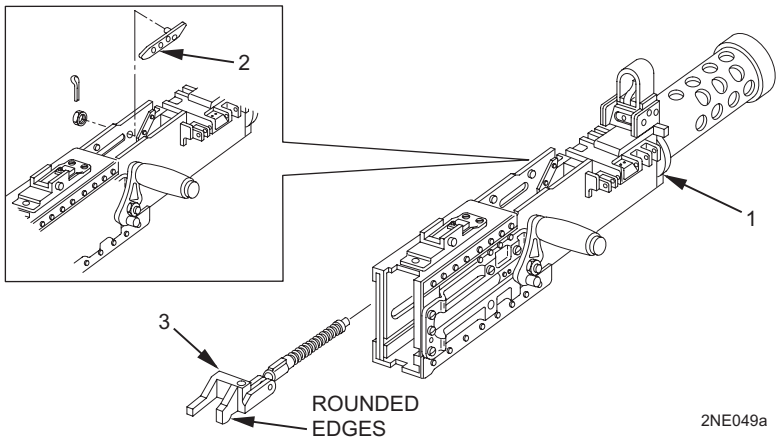
ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
					
14	Quarterly		Receiver Assembly	**NOTE** Procedure applies to all configurations of barrel support.	
			Barrel Support	Check barrel support (1) for burrs, cracks, or looseness.	Barrel support is burred, cracked, or loose.
					

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
14 (Cont)	Quarterly (Cont)		Receiver Assembly (Cont)		
			Extractor Switch	Check extractor switch (2) for spring tension and incorrect installation and presence of cotter pin. Check extractor switch for looseness.	Extractor switch is improperly installed; or has a weak or missing spring; or cotter pin is missing. Extractor switch is loose.
			Bolt Latch	Check bolt latch (3) for spring tension and freedom of movement. Check bolt latch bolt catch for rounded edges.	Bolt latch binds or bolt latch bolt catch has rounded edges.
			Breechlock Cam	Check breechlock cam (4) for up and down movement. Cam MUST have minimal movement. Check cam for wear in channel (rail) area.	Cam does not move or has wear in channel (rail) area.
			Safety Wire	Check for safety wire (5) through slotted nut and flat spring (flex only).	Safety wire is missing.
			Cotter Pin	Check for cotter pin (6) through slotted nut (Fixed M48 only).	Cotter pin is missing.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

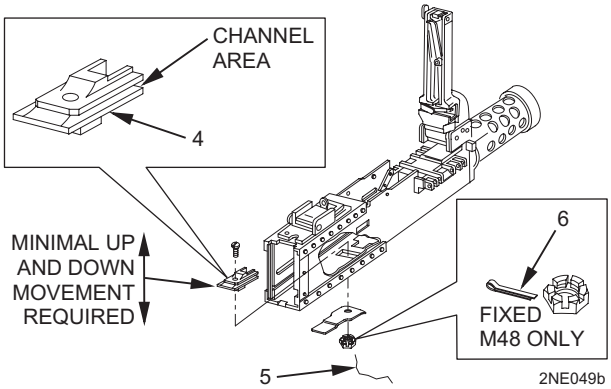
ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
14 (Cont)	Quarterly (Cont)		Receiver Assembly (Cont)		
					
			M10 Manual Charger	Check slot where M10 manual charger is mounted on left side of receiver, where bolt stud moves forward and back, for wear.	Upper part of slot is worn.
			Receiver	Check receiver for cracks/ movement of riveted components. Check for rivets that have relative movement under finger pressure. If there are more than a total of eight loose rivets on the receiver or more than six loose rivets on the top plate, bottom plate, or trunnion block, send to Direct Support Maintenance.	Receiver is cracked. There is movement of riveted parts. There are more than a total of eight loose rivets on the receiver or more than six total loose rivets on the top plate, bottom plate, or trunnion block. Loose rivets cannot be side by side and there can be no more than three on either side of the riveted component.
15	Quarterly		M10 Manual Charger (Fixed M48 Only)	Check channel housing (1) for dents, twists, or cracks.	Channel housing is dented, twisted, or cracked.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
15 (Cont)	Quarterly (Cont)		M10 Manual Charger (Fixed M48 Only) (Cont)		
			Charger Bolt	Check charger bolt cover (2) for dents, twists, or cracks.	Charger bolt cover is dented, twisted, or cracked.
			Swivel Pulley	Check swivel pulley plate (3) for damage.	Swivel pulley plate is damaged.
			Charger Cable Assembly	Check charger cable assembly (4) for broken strands; or if cable is kinked, twisted, or missing.	Strands are broken; or cable is kinked (enough to adversely affect smooth operation), twisted, or missing.
			Swivel and Pulley	Check swivel (5) and pulley (6) for burrs and binding.	Swivel or pulley is burred or is binding.
			Safety Wire	Check for broken or missing safety wires (7).	Safety wires are broken or missing.

Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
15 (Cont)	Quarterly (Cont)		M10 Manual Charger (Fixed M48 Only) (Cont)		
			M10 Manual Charger	Check for looseness (when mounted on gun).	M10 manual charger is loose when mounted on gun.

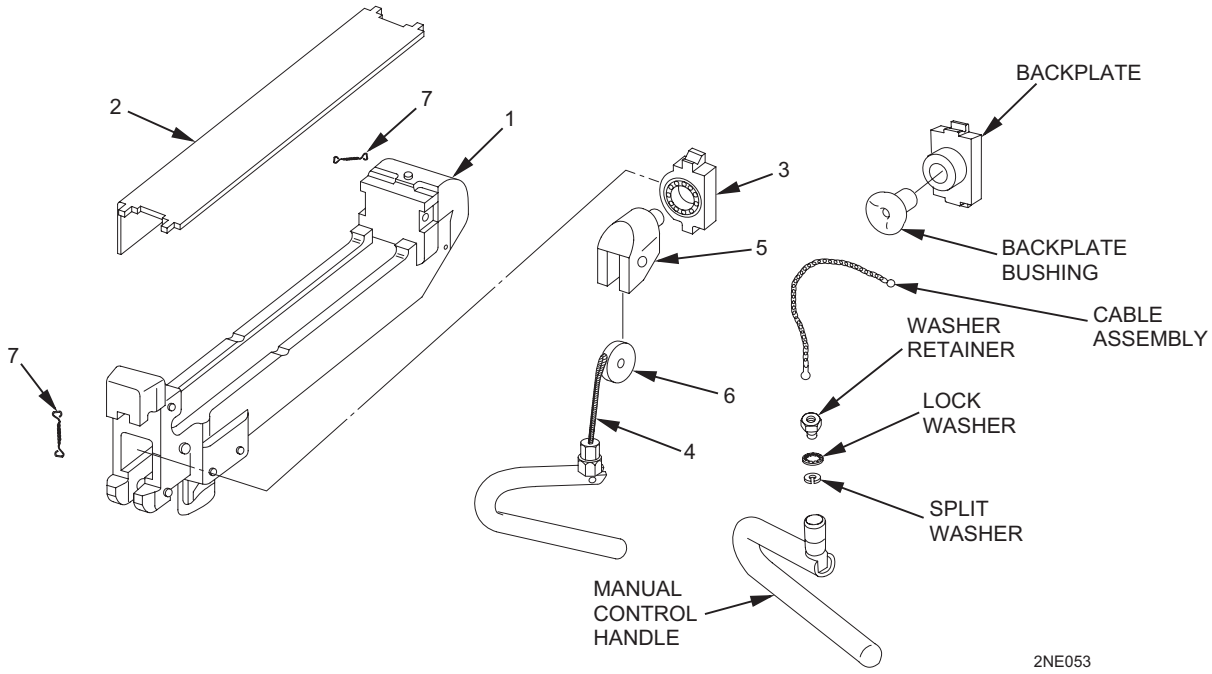
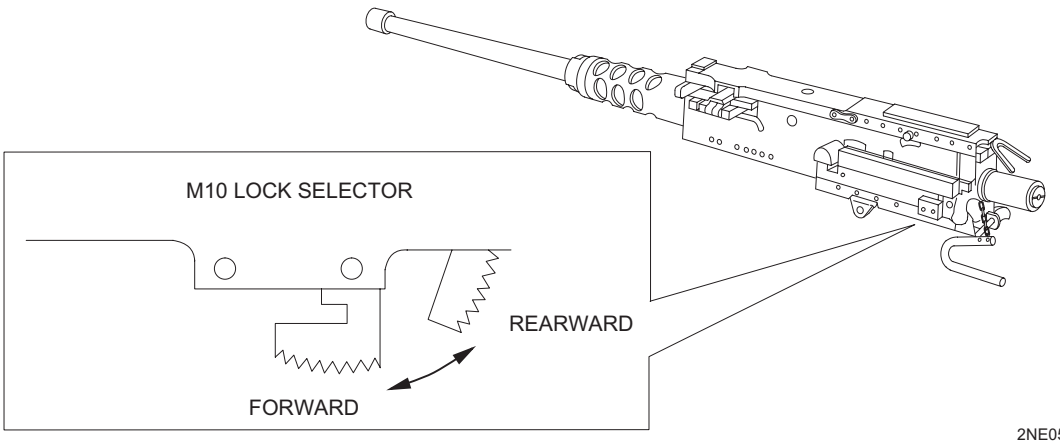


Table 1. Unit Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
15 (Cont)	Quarterly (Cont)		M10 Manual Charger (Fixed M48 Only) (Cont) M10 Charger	**NOTE** Slide lock pawl lever will engage and disengage the M10 lock selector when the selector is manually operated. When lever is disengaged from the selector, the side lock pawl will lock in rearward position. When the selector is engaged, the slide lock pawl will return to the forward position as the handle is moved toward lever. Check M10 charger for proper functioning. Ensure slide lock pawl and lock selector is functioning properly.	M10 charger malfunctions.



END OF WORK PACKAGE

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

GENERAL MAINTENANCE
GENERAL, CLEANING, DISASSEMBLY AND ASSEMBLY, FINISHED SURFACES, UNIT MAINTENANCE, DIRECT SUPPORT MAINTENANCE, INITIAL SETUP

INITIAL SETUP:

Materials/Parts
- Carbon removing compound (CRC) (item 9, WP 0060 00)
- Chemical resistant gloves (item 18, WP 0060 00)
- Dry cleaning solvent (SD) (item 16, WP 0060 00)
- Lubricating oil (LSA) (item 21, WP 0060 00)
- Rifle bore cleaning compound (RBC) (item 12, WP 0060 00)
- Small arms bore cleaning brush (item 7, WP 0060 00)

Materials/Parts - Continued
- Small arms chamber cleaning brush (item 8, WP 0060 00)
- Small arms cleaning cotton swab (item 27, WP 0060 00)
- Solid film lubricant (SFL) (item 20, WP 0060 00)

References
- TM 9-1005-213-10, AF TO 11W2-6-3-161
- WP 0020 00

GENERAL

Refer to TM 9-1005-213-10 for general cleaning and lubricating instructions. Detailed cleaning procedures are provided in this work package. Dry cleaning solvent (item 16, WP 0060 00) may be used to clean and/or wash grease and oil from the machine gun. Moving surfaces should be cleaned frequently to ensure proper functioning. Navy users refer to the applicable Maintenance Requirement Card (MRC).

WARNING

After firing, ensure that sufficient time is allowed for weapon to cool before performing inspection or cleaning procedures.

Be sure to clear weapon before disassembling, cleaning, inspecting, transporting, or storing. Clearing consists of unloading the machine gun and visually inspecting weapon and chamber to ensure all rounds have been removed. Do not release the bolt or press the trigger.

CAUTION

The use of gasoline; kerosene; benzene (benzol); household cleaners; or high pressure water, steam, or air for cleaning the weapon is prohibited. Use only authorized cleaning materials (WP 0060 00).

Immediately after firing (or as soon as possible) thoroughly clean and lubricate the weapon to maintain reliability and combat effectiveness. Follow procedures in this work package.

GENERAL - Continued

NOTE

Do not dilute rifle bore cleaning compound (RBC) (item 12, WP 0060 00). Do not add antifreeze. Shake well before using.

CLEANING

1. Disassemble the machine gun into groups and assemblies (TM 9-1005-213-10).

2. Clean bore and chamber with cleaning brushes (items 7 and 8, WP 0060 00) and cotton swab (item 27, WP 0060 00) saturated with RBC (item 12, WP 0060 00) until a clean cotton swab can be run through the barrel without detecting any decontamination. Wipe dry and lubricate (TM 9-1005-213-10).

3. Clean all metal surfaces that are subject to powder fouling with RBC (item 12, WP 0060 00), wipe dry, and lubricate (TM 9-1005-213-10).

WARNING

Dry cleaning solvent (SD) (item 16, WP 0060 00) is flammable and should not be used near an open flame. Use only in well-ventilated areas. This solvent evaporates quickly and has a drying effect on the skin. When used without gloves, it may cause cracks in the skin and, in some cases, mild irritation or inflammation.

CAUTION

The back plate assembly will not be submerged in solvents or other cleaning fluids. Use oily cloth on exterior surfaces to prevent corrosion.

4. Clean all other surfaces not covered in above paragraphs with SD (item 16, WP 0060 00) or RBC (item 12, WP 0060 00), wipe dry, and lubricate.

WARNING

Avoid skin contact with carbon removing compound (CRC) (item 9, WP 0060). The compound should be washed off thoroughly with running water if it comes in contact with the skin. A good lanolin base cream, after exposure to compound, is helpful. Use of chemical resistant gloves (item 18, WP 0060 00) and protective equipment is required.

5. On component parts that have a hard carbon residue, it may be necessary to clean those parts with CRC (item 9, WP 0060 00). Depending on the amount of carbon residue, soak 2 to 16 hours, rinse with water and SD (item 16, WP 0060 00), brush with a stiff bristle brush, wipe the parts dry, and lubricate.

DISASSEMBLY AND ASSEMBLY

Complete disassembly of a weapon is not always necessary in order to make a required replacement or repair. Good judgment should be used to keep disassembly and reassembly operations to a minimum.

During reassembly, subassemblies should be assembled first, and then assembled to form a complete weapon.

Lubricate frictional sliding surfaces before reassembly with LSA (item 21, WP 0060 00).

FINISHED SURFACES

All exposed areas, which reflect light, will be refinished to match the appearance of new parts. Use solid film lubricant (item 20, WP 0060 00).

NOTE

An inactive machine gun (M.G.) is a M.G. which has been stored in an arms room for a period of 90 days without use. The M.G. may or may not have been assigned to an individual.

An inactive M.G. shall receive quarterly PMCS unless inspection reveals more frequent servicing is necessary.

Normal cleaning (PMCS) of an inactive M.G. will be performed every 90 days. Should the unit armorer detect corrosion on a M.G. prior to the end of the 90-day period, the PMCS should be performed immediately.

Solid film lubricant (SFL) (item 20, WP 0060 00) is the authorized touch up of the M.G. and may be used on up to one third (1/3) of the exterior finish of the M.G. receiver.

For Army CONUS use only and Air Force training M.G. only: SFL may be used as a touch up without limitation on the barrel assembly. This is to say that units which do not fall under the category of divisional combat units or rapid deployment type units may have up to 100 percent of the exterior surface of the barrel assembly protected with SFL. Prior to application of SFL, the surface must be thoroughly cleaned and inspected for corrosion and/or damage. If corroded or damaged, the part must be repaired or replaced prior to application of SFL. Continued use under combat conditions would result in an unprotected surface when SFL wears off. This would result in a large light reflecting surface and accelerated deterioration of the unprotected surface. Therefore, divisional combat units and units which fall under the definition of rapid deployment type must adhere to the limitation of not over one third (1/3) of their exterior surface of the receiver covered by SFL. If over one third (1/3) of the M.G. receiver finish is worn off, the weapon must be turned in for a new one.

When determining mission capability, deadline if it is a deficiency.

UNIT MAINTENANCE

Unit maintenance is limited to replacement of common hardware and minor components, and to checking and adjusting headspace and timing.

DIRECT SUPPORT MAINTENANCE

Direct support repairs assemblies/subassemblies of the machine gun and performs the annual gaging/ inspection requirements (WP 0020 00).

INITIAL SETUP

In order to reduce the space required for the initial setup portion of the work packages, the following data is standard for all initial setups:

Materials/Parts - Includes only items applicable to the work package.

Tools and Special Tools - Includes only the standard tool set applicable to the work package.

Personnel Required - Includes the following designated joint service descriptions that are applicable to all unit maintenance work packages:

Army - Military Occupational Specialty (MOS) 92Y Supply Clerk/Unit Armorer for Unit Maintenance and MOS45B Small Arms Repairman for Direct Support Maintenance.

Air Force - Air Force Specialty Code (AFSC) 3P1XX Combat Arms Training and Maintenance Journeyman, Craftsman, Gunsmith and civilian equivalents.

Navy - Gunner's Mate Guns (GMG).

Marine Corps - Military Occupational Specialty (MOS) 2111 Unit Armorer (Infantry Weapon Repairer).

References - Includes the operator's manual for joint service use:

NASM35540. ARMY TM 9-1005-213-10, AF TO 11W2-6-3-161. Operator's Manual. Installation of Safety Wire and Cotter Pins.

Equipment Condition - Is listed as applicable to the work package.

END OF WORK PACKAGE

UNIT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715) M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

IMPROPERLY INSTALLED BOLT ASSEMBLY REMOVAL

INITIAL SETUP:

Tools and Special Tools

Removal tool for improperly installed bolt
(Figure 1, WP 0038 00)

REMOVAL

If the bolt assembly is installed in the receiver with the cocking lever improperly positioned (not pointed towards the barrel assembly), the following two procedures can be used to free the bolt assembly without damaging components.

WARNING

Be sure to clear weapon before disassembling, cleaning, inspecting, transporting, or storing. Clearing consists of unloading the machine gun and visually inspecting weapon and chamber to ensure all rounds have been removed. Do not release the bolt or press the trigger.

Do not remove the backplate unless the bolt is in the forward position.

Do not attempt to charge machine gun without the backplate assembled to machine gun. Stand to one side when removing backplate.

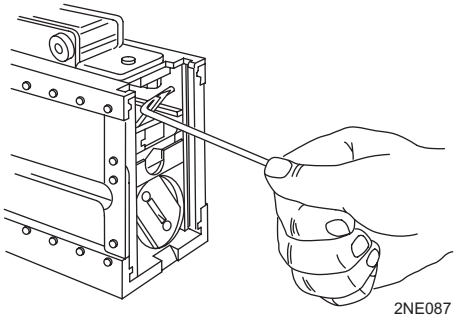
NOTE

For both procedures, ensure backplate, drive spring rod assembly, and bolt stud are removed.

First procedure is contained in steps 1 and 2. Second procedure is contained in steps 3 through 6.

REMOVAL – Continued

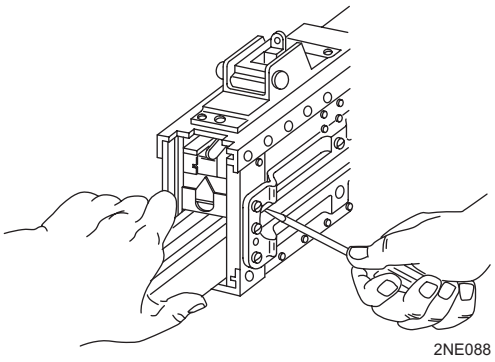
1. Fabricate a hook-shaped piece of brass rod (Figure 1, WP 0038 00). Place metal hook around the cocking lever, halfway up the cocking lever. If placed higher, the cocking lever will jam.



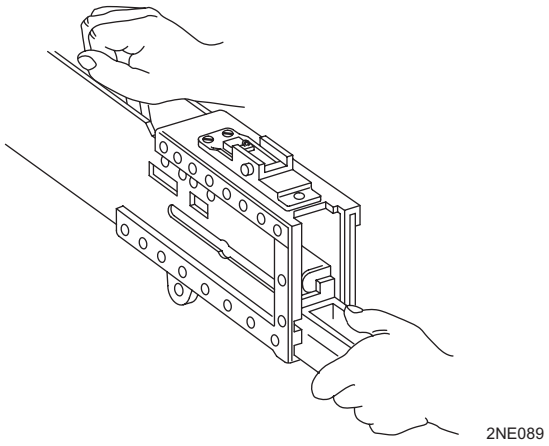
2. Press down hard on the cocking lever and pull back with several hard pulls of the tool. The bolt should come free of the receiver assembly.

3. Ensure backplate, drive spring rod assembly, and bolt stud are removed.

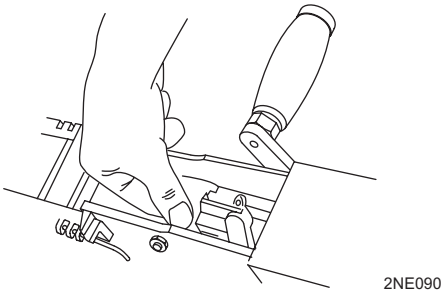
4. Depress buffer body lock with a pointed object and slide the buffer assembly out about 2.00 in. (5.08 cm).



5. Slide the bolt assembly forward and pull the buffer assembly to the rear. The bolt forces the accelerator down and allows the buffer assembly to be moved. It may be necessary to slide the bolt assembly back and forth several times before the buffer assembly can be removed.



6. Push down on the front of the barrel extension assembly. Slide the bolt assembly out of the receiver. If the bolt hangs up, pull the barrel extension forward and up until the bolt assembly slides out.



END OF WORK PACKAGE

UNIT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN, FIXED M48 AND FLEX DISASSEMBLY, INSPECT/REPAIR, ASSEMBLY

INITIAL SETUP:

Tools and Special Tools
Small arms repairman tool kit
(item 11, WP 0042 00)

Materials/Parts
Cotter pin (item 8, WP 0044 00)
Dummy rounds

Personnel Required
Two

References
TM 9-1005-213-10
WP 0014 00
WP 0015 00

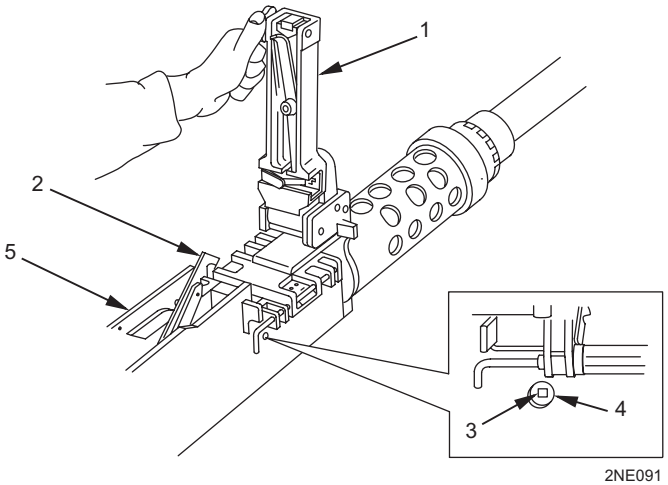
Equipment Conditions
M2 machine gun removed/dismounted
(TM 9-1005-213-10, AF TO 11W2-6-3-161)

DISASSEMBLY

WARNING

Be sure to clear weapon before disassembling, cleaning, inspecting, transporting, or storing. Cleaning consists of unloading the machine gun and visually inspecting weapon and chamber to ensure all rounds have been removed. Do not release the bolt or press the trigger.

1. Raise cover assembly (1) all the way up. Retract bolt assembly (2) far enough for barrel locking spring lug (3) to center in barrel locking spring hole (4) on right hand side of receiver (5).

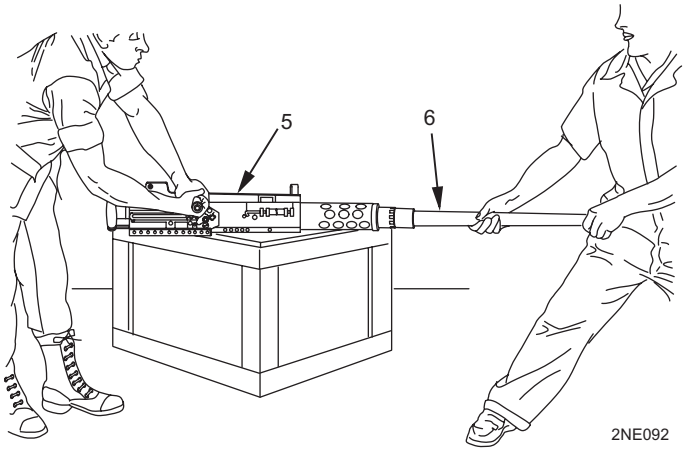


DISASSEMBLY - Continued

NOTE

For repair/replacement of flash suppressor, refer to WP 0014 00. For repair/replacement of barrel carrier assembly, refer WP 0015 00.

2. Unscrew and remove barrel assembly (6) from receiver (5).

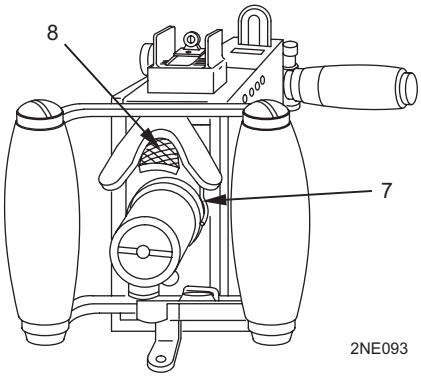


WARNING

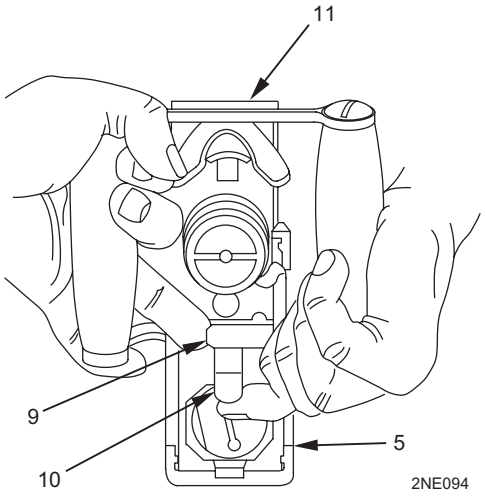
Do not attempt to remove backplate assembly unless the bolt is in the forward position.

Do not stand behind weapon while removing backplate assembly.

3. Ensure bolt latch release lock (7) is in unlocked (semi-automatic) position. The bolt latch release (8) must be in the up position (not locked down) (Flex machine gun only).



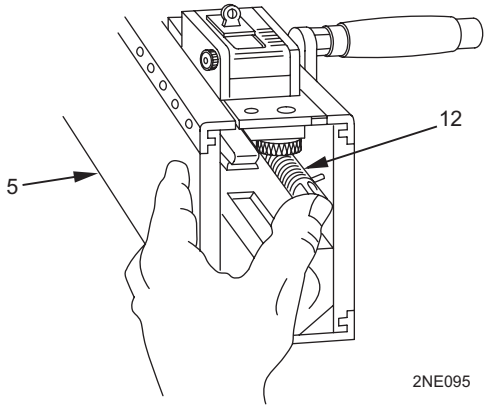
4. Pull back plate latch lock (9) straight back, lifting up on backplate latch (10). Raise backplate assembly (11) straight up and remove from receiver (5).



WARNING

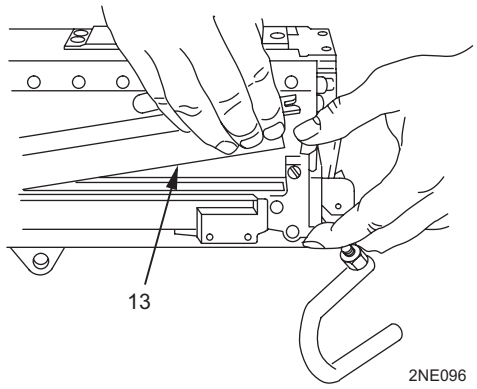
To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

5. Push rear of drive spring rod assembly (12) forward and to the left until free from the side of receiver (5). Remove drive spring rod assembly.



DISASSEMBLY - Continued

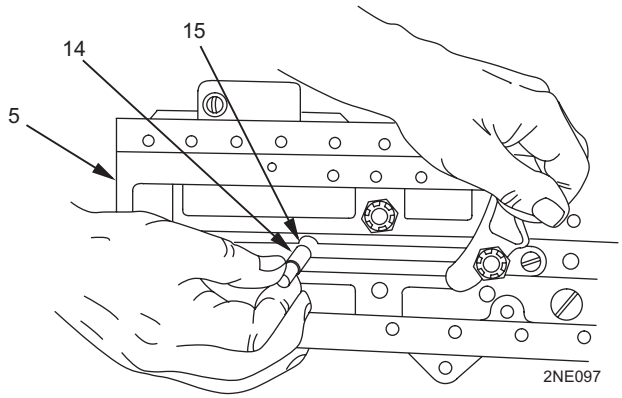
6. Remove M10 manual charger cover (13) (fixed M48 only).



NOTE

Bolt stud is removed from right side of flex and left side of fixed M48 machine gun.

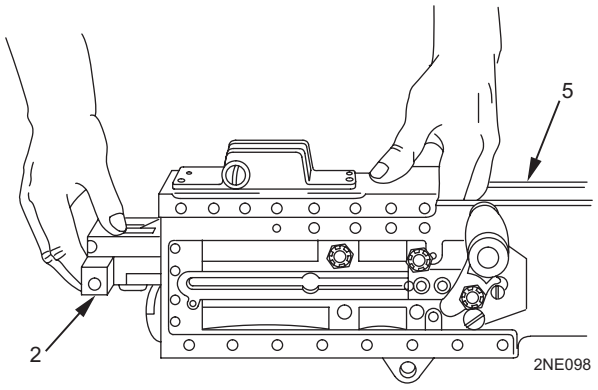
7. Retract bolt assembly far enough to align bolt stud (14) with (enlarged) bolt stud (15) in receiver (5). Remove bolt stud.



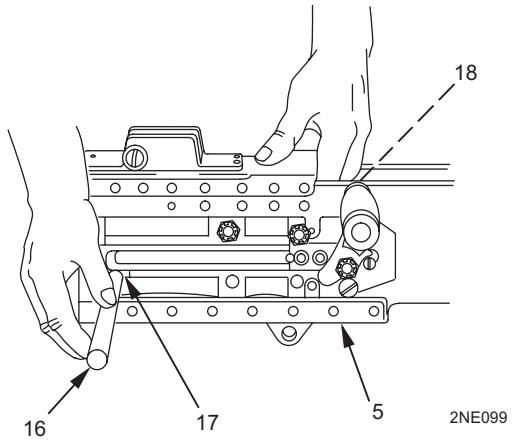
NOTE

Bolt latch must be pushed up to remove bolt assembly (Flex only).

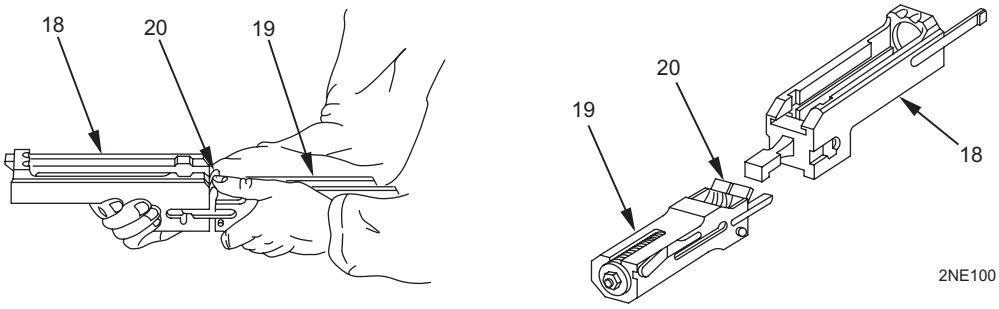
8. Remove bolt assembly (2) from receiver (5).



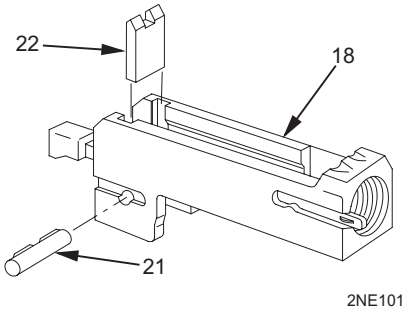
9. Install pointed end of punch (16) into hole (17) in receiver (5) and depress buffer body lock while applying rearward pressure on barrel extension assembly (18).



10. Remove barrel buffer assembly (19) and barrel extension assembly (18) together. Separate the assemblies by pushing forward on tips of buffer accelerator (20).

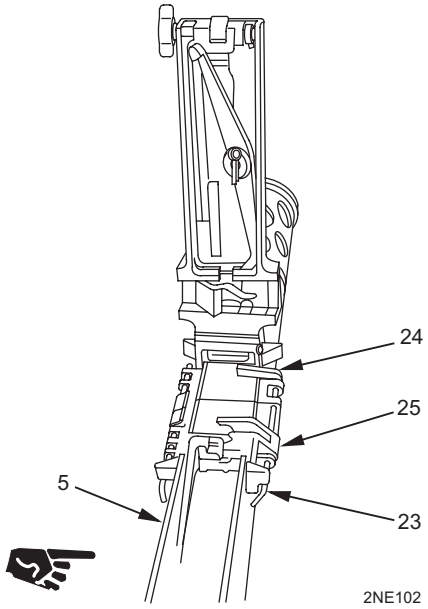


11. Use pointed end of punch to remove breech lock pin assembly (21) and breech lock (22) from barrel extension assembly (18).

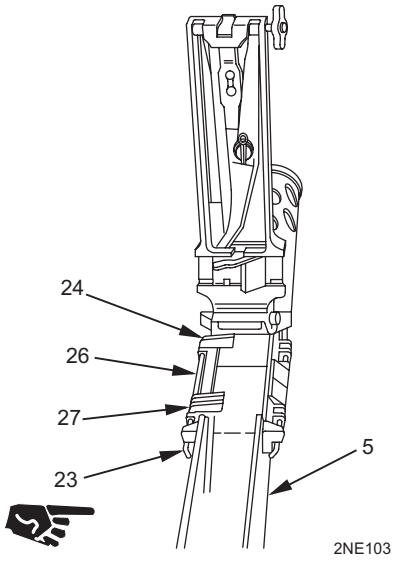


DISASSEMBLY - Continued

12. Remove belt holding pawl pin (23) attaching front cartridge stop (24) and rear cartridge stop assembly (25) to receiver (5). Remove front cartridge stop and rear cartridge stop assembly (left-hand feed only).



13. Remove belt holding pawl pin (23) attaching front cartridge stop (24), link stripper (26), and rear cartridge stop (27) to receiver (5). Remove front cartridge stop, link stripper, and rear cartridge stop (right-hand feed only).



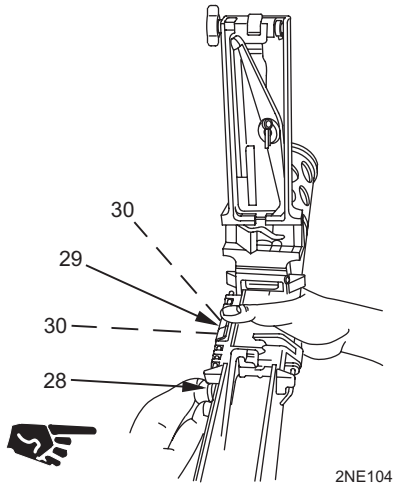
WARNING

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

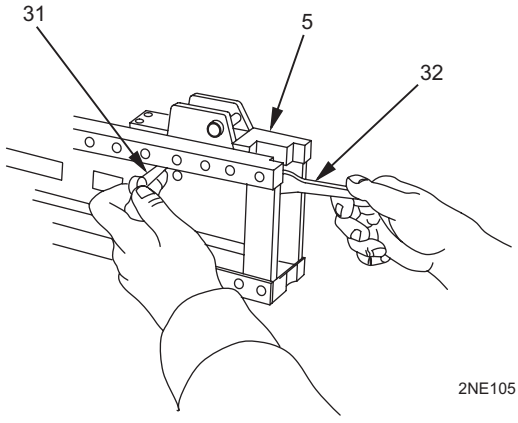
NOTE

Hold down on belt holding pawl assembly to prevent loss of springs.

14. Remove belt holding pawl pin (28), belt holding pawl assembly (29), and two belt holding pawl springs (30).

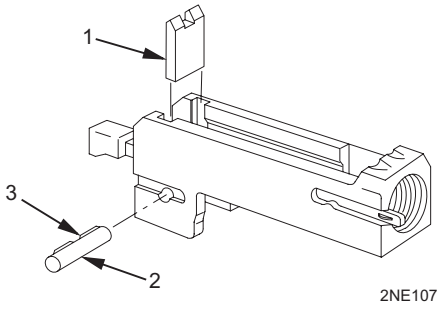


15. Raise loop of trigger lever pin (31) and rotate trigger lever pin until loop is in vertical position. Reach inside receiver (5) and hold trigger lever (32) while removing trigger lever pin. Remove trigger lever.



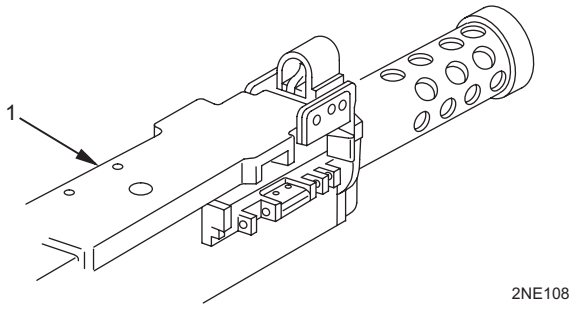
INSPECT/REPAIR

1. Check for missing, damaged, or worn parts.
2. Check barrel support for cracks. No cracks are allowed. Original surface imperfections are permitted. If damaged, notify Direct Support Maintenance.
3. Check breech lock (1) beveled edges for rolled back, broken, or chipped edges. Replace breech lock if edges are rolled back, broken, or chipped.
4. Check breech lock pin (2) for broken, not set, collapsed, or missing spring (3), or damage to breech lock pin. Replace breech lock pin if spring is broken or missing or pin is damaged.
5. Repair is by replacement of authorized parts.



ASSEMBLY

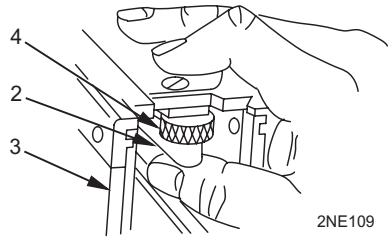
1. Open cover assembly (1) all the way up.



2. Install trigger lever (2) in receiver (3).

NOTE

Ensure trigger lever is aligned directly under timing nut (4).



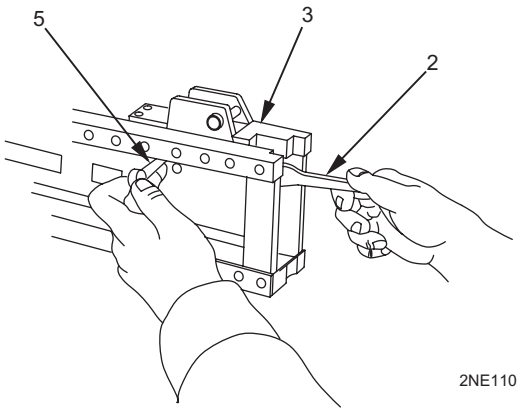
3. Align hole in trigger lever (2) with mounting hole in receiver (3).

4. Place trigger lever pin (5), loop end vertical, in assembly hole on left side plate of receiver (3).

5. Match key on trigger lever pin (5) with keyway in side plate of receiver (3) and install trigger lever pin completely.

6. Rotate trigger lever pin (5) 90 degrees to lock securely in place, and fold down out of the way.

7. Check that trigger lever (2) moves freely.



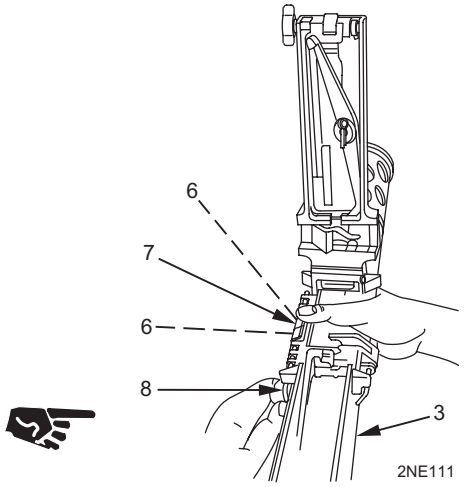
ASSEMBLY - Continued

WARNING

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

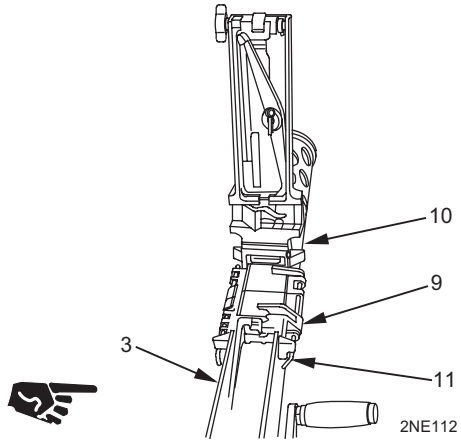
8. Seat two belt holding pawl springs (6) in place on receiver (3).

9. Place belt holding pawl assembly (7) on belt holding pawl springs (6). Compress belt holding pawl springs and insert belt holding pawl pin (8).



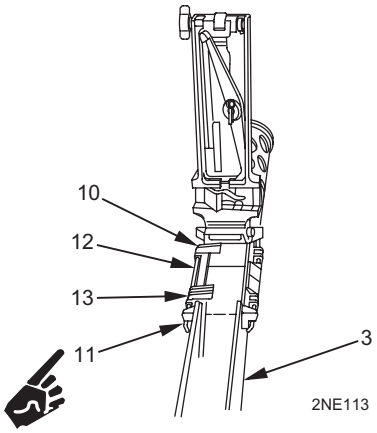
10. Place rear cartridge stop assembly (9) and front cartridge stop (10) on receiver (3) (left-hand feed only).

11. Install belt holding pawl pin (11) with hooked end to rear (left-hand feed only).



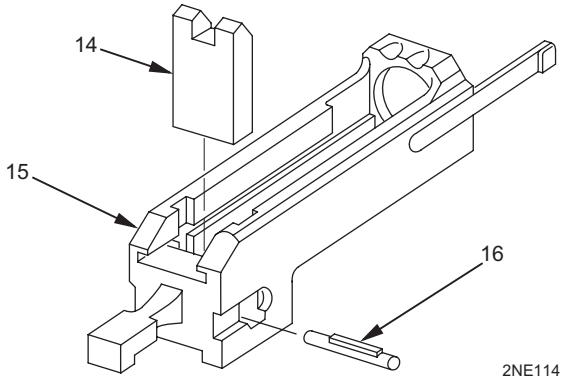
12. Place front cartridge stop (10), link stripper (12), and rear cartridge stop (13) on receiver (3) (right-hand feed only).

13. Install belt holding pawl pin (11) with hooked end to rear (right-hand feed only).



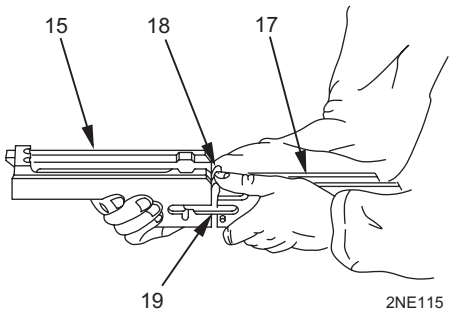
14. Install breech lock (14) in barrel extension assembly (15) with double beveled edge up and to the front of barrel extension assembly.

15. Install breech lock pin (16) in barrel extension assembly (15). Ensure both ends of breech lock pin are flush with sides of barrel extension assembly.



16. Hold barrel buffer assembly (17) with buffer accelerator (18) up and engage notch on shank of barrel extension assembly (15) with cross groove in piston rod of barrel buffer assembly.

17. Align breech lock depressors (19) in grooves of barrel extension assembly (15) and push barrel buffer assembly (17) forward.

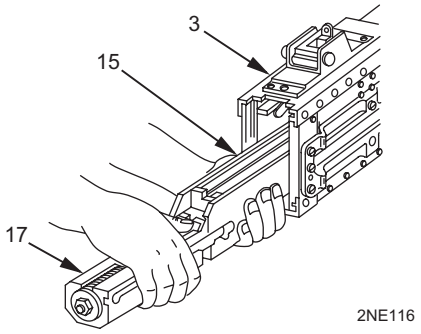


ASSEMBLY - Continued

WARNING

Maintain thumb pressure on buffer accelerator while installing barrel buffer assembly and barrel extension assembly into receiver.

18. Install barrel buffer assembly (17) and barrel extension assembly (15) in receiver (3).



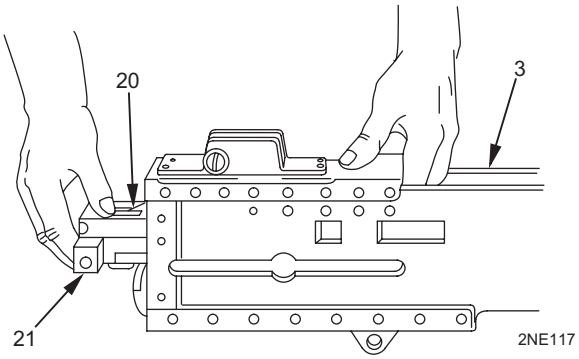
CAUTION

When installing bolt assembly, do not trip buffer accelerator.

NOTE

Ensure cocking lever (20) is forward before installing bolt assembly (21) into receiver (3).

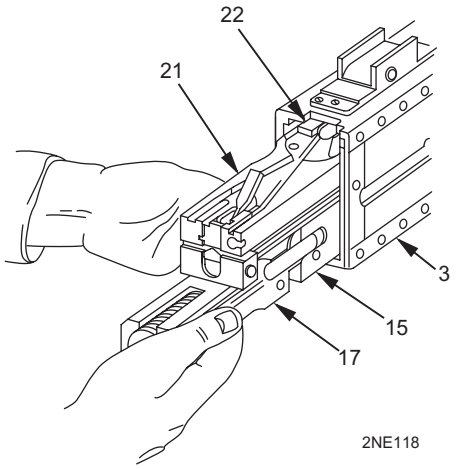
19. Push bolt assembly (21) forward into receiver (3) until bolt latch engages notches in top of bolt assembly.



NOTE

If unable to install by performing the previous step, perform steps 20 and 21.

20. Remove barrel extension assembly (15) and barrel buffer assembly (17) from the receiver (3). Install bolt assembly (21) into the barrel extension assembly and barrel buffer assembly and then install into the receiver.

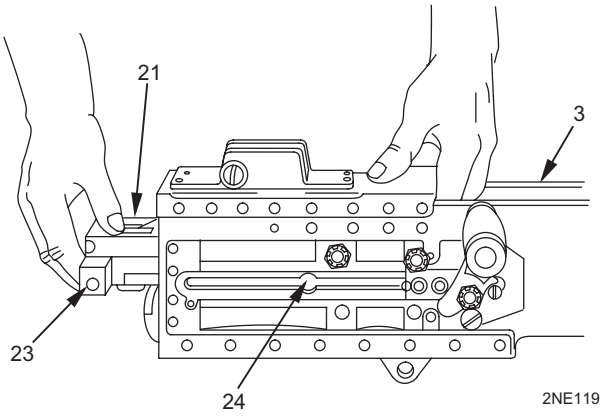


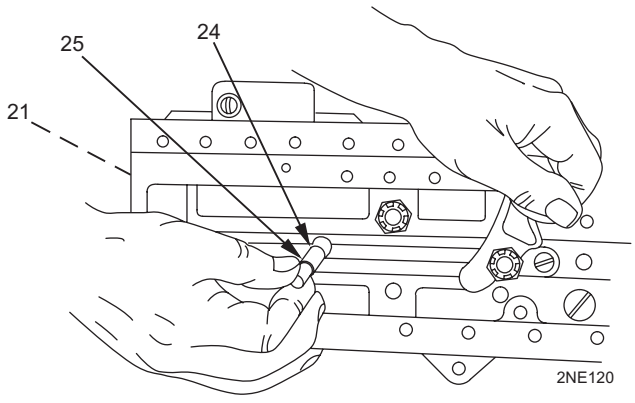
21. Raise bolt latch (22) and push bolt assembly (21) into receiver (3).

NOTE

The bolt stud is installed in the bolt stud hole on the right side of the receiver and bolt assembly for the flex and in the left side of the receiver and bolt assembly for the fixed M48.

22. Align hole (23) in bolt assembly (21) with bolt stud hole (24) in receiver (3) and install bolt stud (25) in hole in bolt assembly.

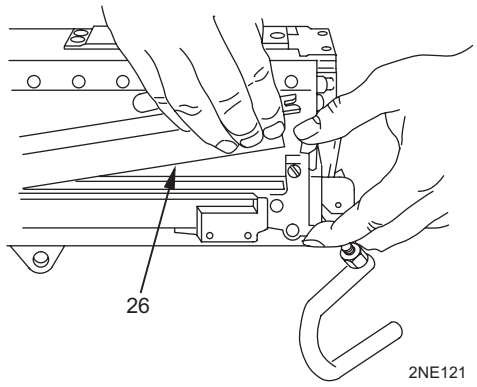




23. Place bolt assembly (21) in forward position.

ASSEMBLY - Continued

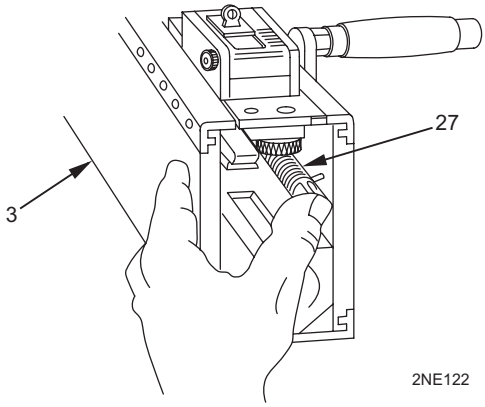
24. Replace M10 manual charger cover (26) (fixed M48 only).



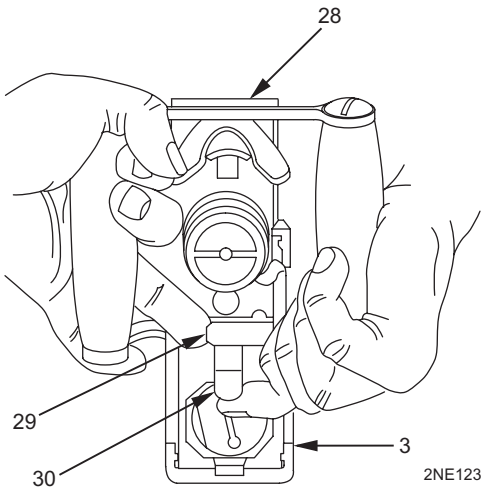
WARNING

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

25. Install drive spring rod assembly (27) in upper right hand corner of bolt assembly. Push forward and to the right until drive spring rod assembly engages in hole in side plate of receiver (3) and not in the groove for the backplate.



26. Install backplate assembly (28) in grooves of receiver (3). Pull backplate latch lock (29) while lifting up on backplate latch (30). Lower backplate assembly down until engaged in receiver (Flex and Fixed M48).

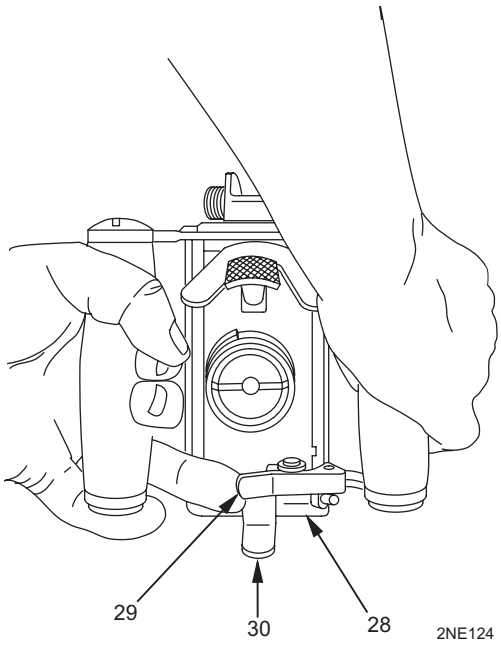


NOTE

Test for proper locking of backplate assembly (28) by pulling up on the backplate assembly.

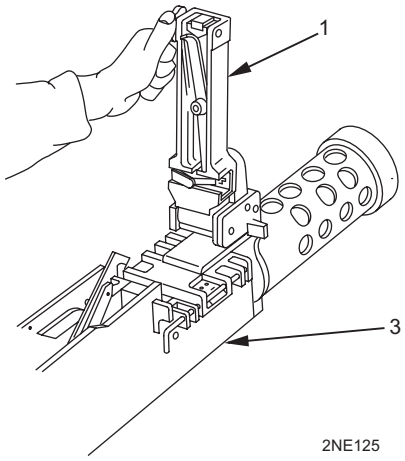
27. Pull backplate latch lock (29) back and pull up on backplate assembly (28) to ensure proper locking.

28. Lift backplate latch (30) up and pull up on backplate assembly (28) to ensure proper locking.

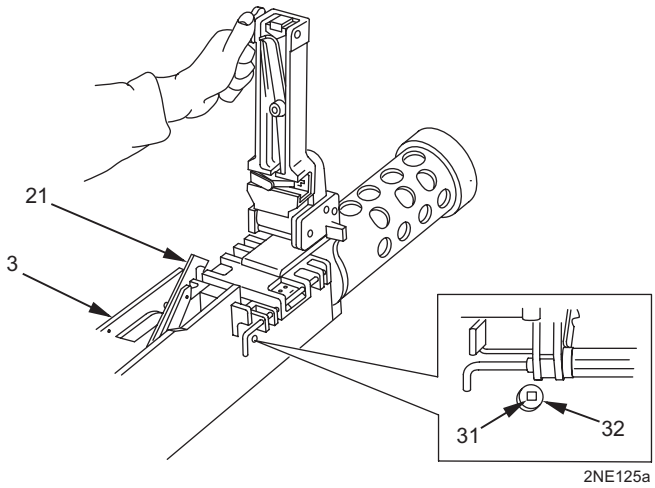


ASSEMBLY - Continued

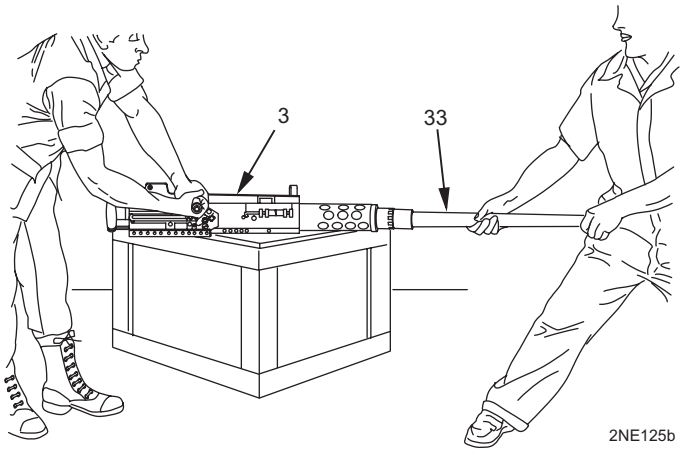
29. Close cover assembly (1), making sure it latches securely to receiver (3). Reopen cover assembly.



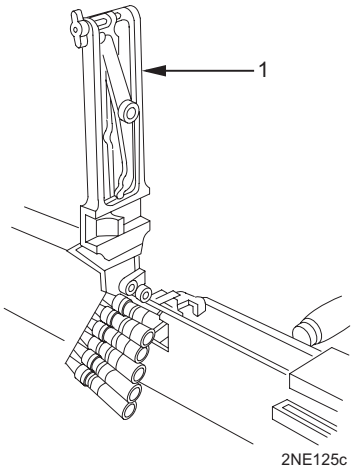
30. Retract bolt assembly (21) far enough for barrel locking spring lug (31) to center in barrel locking spring hole (32) on right hand side of receiver (3).



31. Install and screw barrel assembly (33) completely into receiver (3). Unscrew barrel assembly until two clicks are heard and check headspace and timing in accordance with (IAW) TM 9-1005-213-10.



32. Load five or more linked dummy rounds (use links from expended ammunition), close cover assembly (1), and hand operate weapon to ensure all components are functioning properly. Weapon should function through a complete cycle.



END OF WORK PACKAGE

UNIT

**MACHINE GUNS, CALIBER .50: M2, BARREL
FLEXIBLE, W/E (1005-00-322-9715)
M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)**

**MAINTENANCE OF M2 MACHINE GUN – FLASH SUPPRESSOR
REMOVAL, INSPECT/REPAIR, INSTALLATION**

INITIAL SETUP:

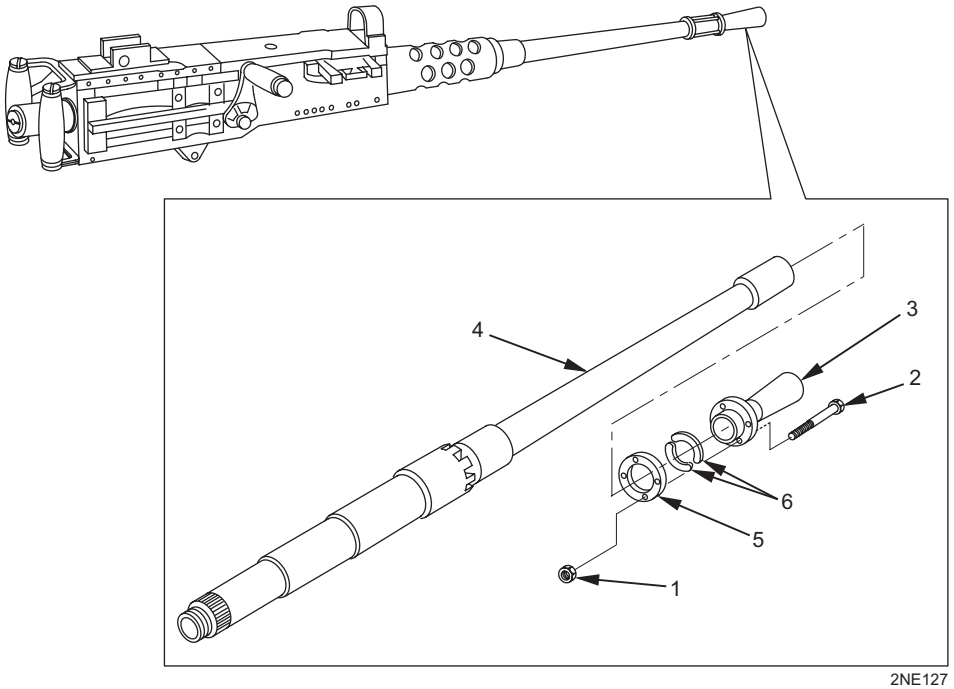
Tools and Special Tools
Small arms repairman tool set
(item 11, WP 0042 00)

Equipment Conditions
M2 machine gun removed/dismounted
(TM 9-1005-213-10)

Materials/Parts
Self-locking nut (4) (item 19, WP 0044 00)

REMOVAL

1. Remove four self-locking nuts (1) and four hexagon cap screws (2). Discard self-locking nuts.
2. Remove cone (3) from barrel assembly (4) and ring (5).
3. Remove two ring spacers (6) and ring (5) from barrel assembly (4).

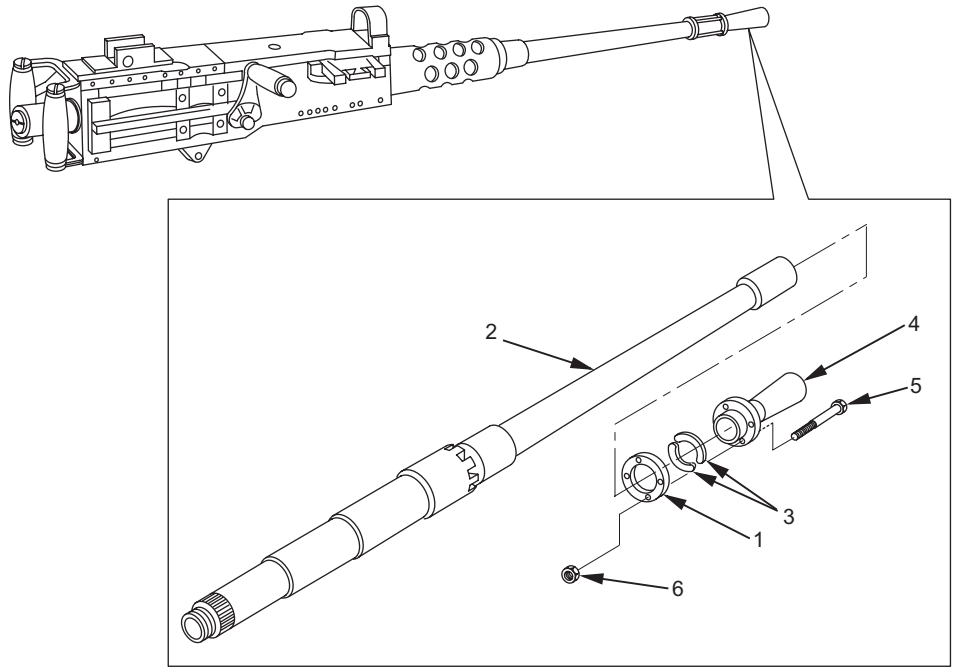


INSPECT/REPAIR

1. Check for missing, damaged, or worn parts.
2. Repair is by replacement of authorized parts.

INSTALLATION

1. Install ring (1) on barrel assembly (2) so ring counter bore faces muzzle end of barrel assembly.
2. Install two ring spacers (3) in ring (1) counter bore.
3. Install cone (4) on end of muzzle.
4. Secure cone (4) to end of barrel assembly (2) and ring (1) with four hexagon cap screws (5) and four new self-locking nuts (6).



2NE128

END OF WORK PACKAGE

UNIT

**MACHINE GUNS, CALIBER .50: M2, BARREL
FLEXIBLE, W/E (1005-00-322-9715)
M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)**

MAINTENANCE OF M2 MACHINE GUN – BARREL CARRIER ASSEMBLY REMOVAL, INSPECT/REPAIR, INSTALLATION

INITIAL SETUP:

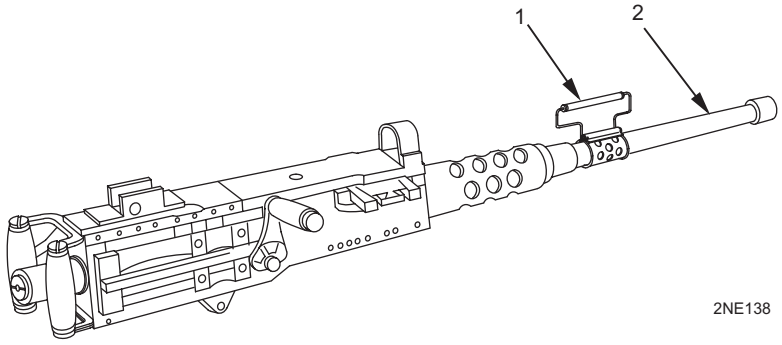
Tools and Special Tools
Small arms repairman tool set
(item 11, WP 0042 00)

Materials/Parts
Headed straight pin (item 7, WP 0055 00)

Equipment Conditions
M2 machine gun removed/dismounted
(TM 9-1005-213-10)
Flash suppressor removed (WP 0014 00)

REMOVAL

1. Place barrel carrier assembly (1) in the unlocked position and remove from barrel assembly (2).

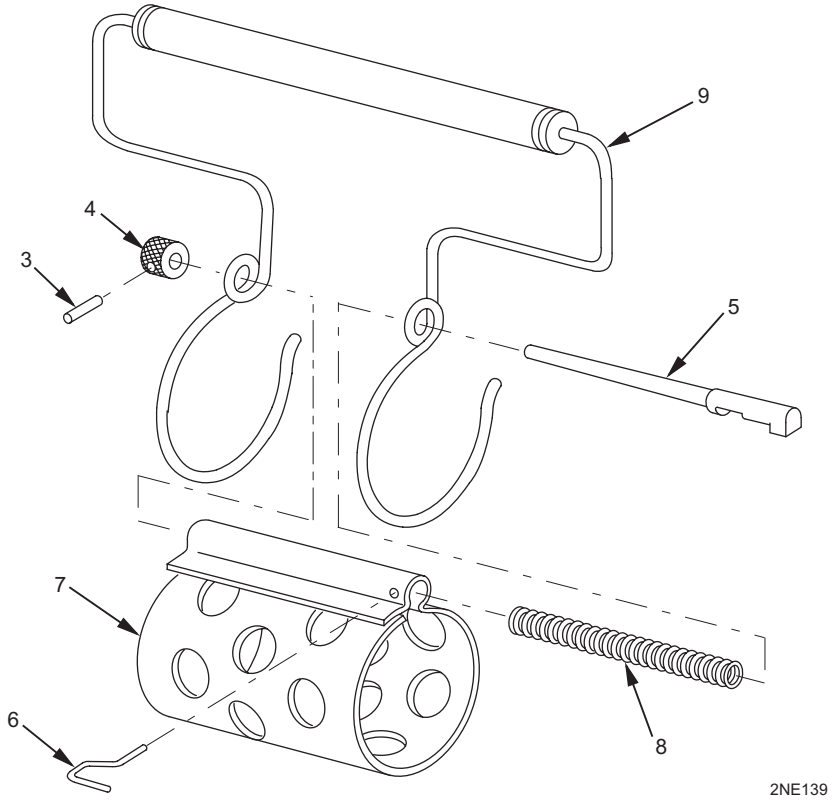


REMOVAL - Continued

2. Using punch, remove spring pin (3) from knob (4) on bolt (5). Remove knob.

3. Remove and discard headed straight pin (6) from sleeve assembly (7). Remove helical compression spring (8) and bolt (5).

4. Remove sleeve assembly (7) from handle (9).



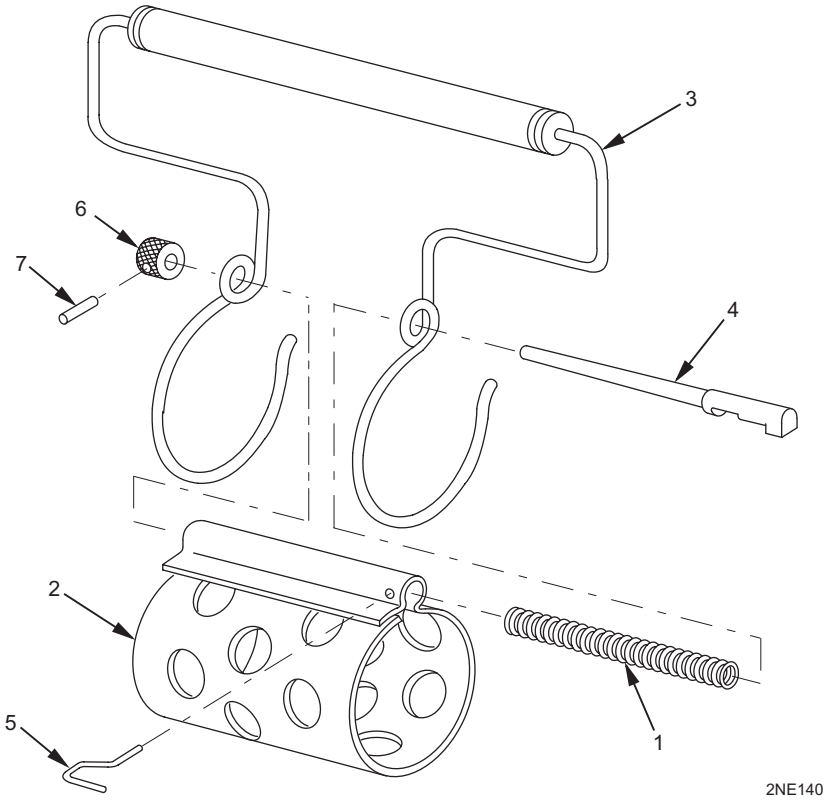
INSPECT/REPAIR

1. Check for missing, damaged, or worn parts.

2. Repair is by replacement of authorized parts.

INSTALLATION

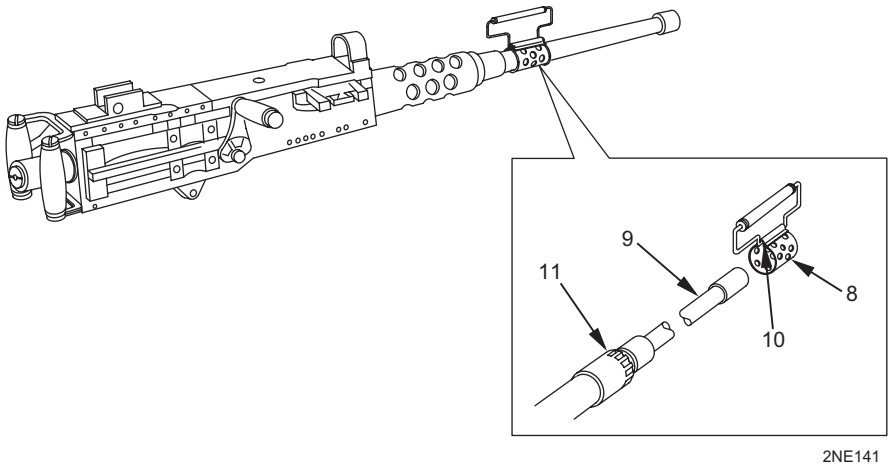
1. Install helical compression spring (1) in sleeve assembly (2).



2. Position sleeve assembly (2) in handle (3), aligning sleeve assembly with small loops of handle.
3. Install bolt (4) in sleeve assembly (2).
4. Install new headed straight pin (5) in sleeve assembly (2). Bend headed straight pin to secure.
5. Install knob (6) on bolt (4) and install spring pin (7) in knob.

INSTALLATION - Continued

6. Install barrel carrier assembly (8) on barrel assembly (9). Ensure bolt head (10) is engaged in barrel notch (11).



END OF WORK PACKAGE

UNIT

**MACHINE GUNS, CALIBER .50: M2, BARREL
FLEXIBLE, W/E (1005-00-322-9715)
M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)**

MAINTENANCE OF M2 MACHINE GUN – BOLT ASSEMBLY INSPECT/REPAIR, ADJUSTMENT

INITIAL SETUP:

Tools and Special Tools
Small arms repairman tool set
(item 11, WP 0042 00)

Equipment Conditions
Bolt assembly removed/disassembled
(TM 9-1005-213-10)

References
TM 9-1005-213-10
WP 0010 00

INSPECT/REPAIR

1. Check for missing, damaged, or worn parts (refer to items 5 and 6, WP 0010 00).
2. Repair is by replacement of authorized parts.

ADJUSTMENT

1. Assemble bolt assembly (TM 9-1005-213-10).
2. Check and adjust headspace and timing (TM 9-1005-213-10).
3. Install bolt assembly (TM 9-1005-213-10).

END OF WORK PACKAGE

UNIT

**MACHINE GUNS, CALIBER .50: M2, BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)**

MAINTENANCE OF M2 MACHINE GUN – COVER ASSEMBLY REMOVAL, INSPECT/REPAIR, INSTALLATION

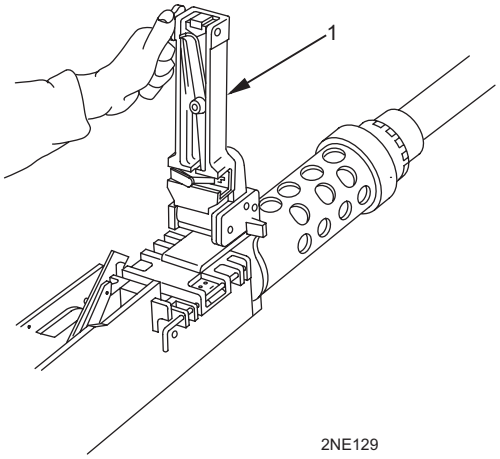
INITIAL SETUP:

Tools and Special Tools
Small arms repairman tool set (item 11, WP 0042 00)

Materials/Parts
Cotter pin (item 12, WP 0050 00)

REMOVAL

1. Raise cover assembly (1) all the way up.



REMOVAL - Continued

NOTE

For clarity, illustrations show cover assembly removed from receiver.

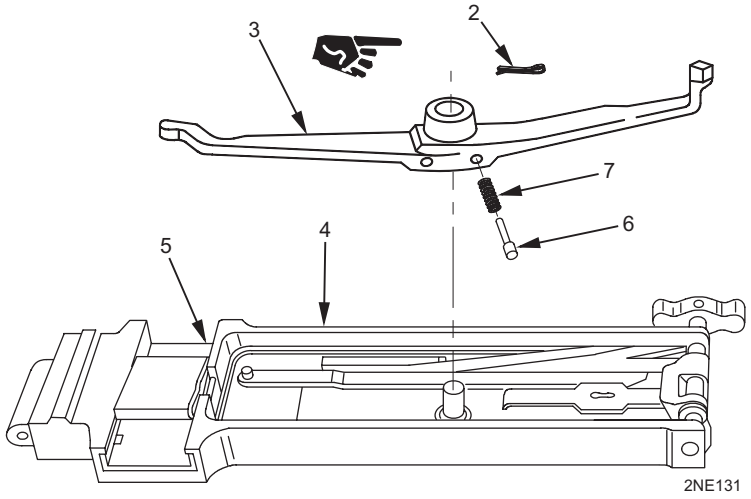
2. Remove lock pin (2) from belt feed lever (3).

WARNING

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

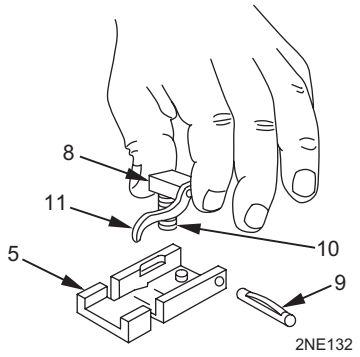
3. Push belt feed lever (3) from left to right until toe end is aligned with slot in subassembly cover (4) and slot in belt feed slide assembly (5). Remove belt feed lever, shoulder pin (6), and helical compression spring (7).

4. Pull out belt feed slide assembly (5) from subassembly cover (4).

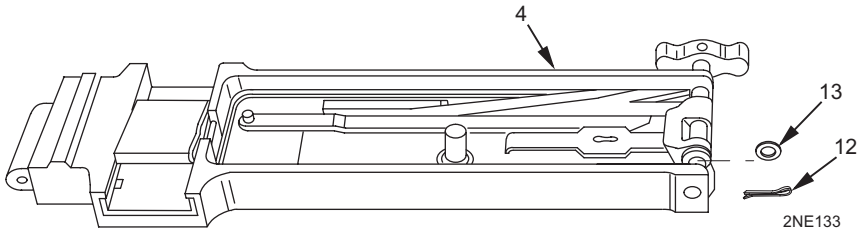


5. Hold belt feed pawl (8) down while removing spring pin (9) from belt feed slide assembly (5).

6. Slowly let belt feed pawl (8) rise to control helical compression spring (10). Remove belt feed pawl from belt feed slide assembly (5). Remove helical compression spring and belt feed pawl arm (11) from belt feed pawl.



7. If damaged, remove cotter pin (12) and flat washer (13) from subassembly cover (4). Discard cotter pin.



INSPECT/REPAIR

1. Inspect for damaged, missing, or worn parts. Check springs for collapsed coils and elongated springs. Check belt feed lever for proper (crisp) spring action.

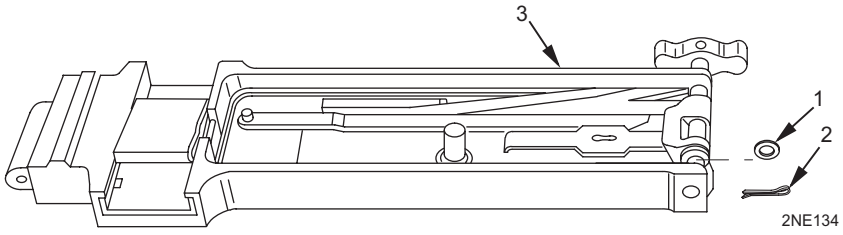
2. Repair is by replacement of authorized parts.

INSTALLATION

NOTE

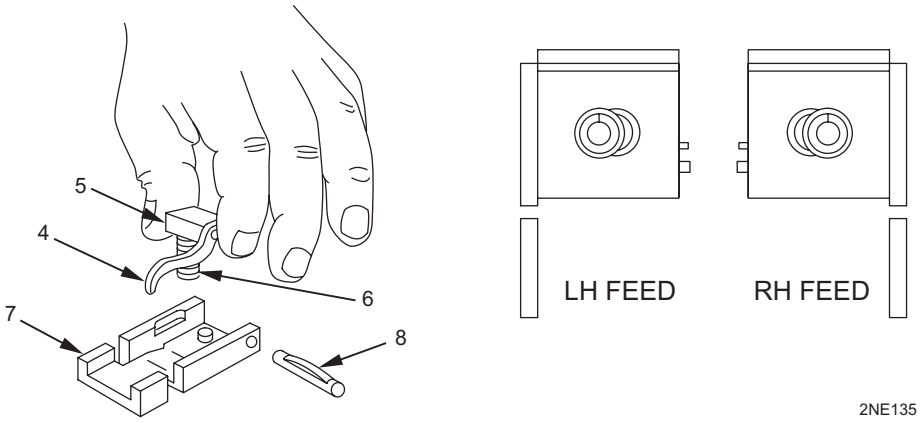
For clarity, illustrations show cover assembly removed from receiver.

1. If removed, install flat washer (1) and new cotter pin (2) on subassembly cover (3).



INSTALLATION - Continued

2. Assemble belt feed pawl arm (4) on belt feed pawl (5).



WARNING

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

NOTE

Refer to illustration for correct position of helical compression spring (6) for left- or right-hand feed.

3. Assemble large end of helical compression spring (6) in hole in belt feed pawl (5) with the foot of the spring in the side opposite the belt feed pawl arm (4).

4. Install belt feed pawl (5) with attached parts on belt feed slide assembly (7), aligning helical compression spring (6) on pin of belt feed slide assembly. Secure with spring pin (8).

5. Push belt feed slide assembly (7) into subassembly cover (3).

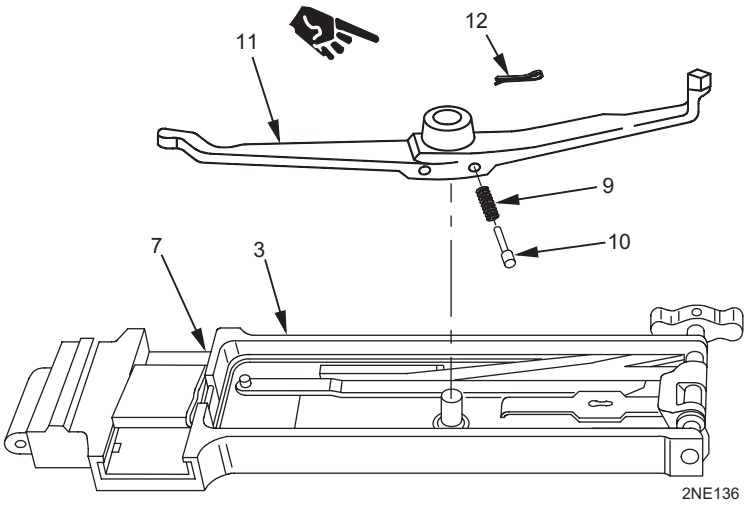
NOTE

Be sure helical compression spring and shoulder pin are installed in the correct hole of belt feed lever. The upper hole of belt feed lever is for left-hand feed; the lower hole is for right-hand feed.

6. Install helical compression spring (9) and shoulder pin (10) in belt feed lever (11).

7. Depress shoulder pin (10) and align belt feed lever (11) with slot in subassembly cover (3) and slot in belt feed slide assembly (7). Install belt feed lever in cover.

8. Install lock pin (12) to secure belt feed lever (11).



END OF WORK PACKAGE

UNIT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715) M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MARKING OF SMALL ARMS, PRE-EMBARKATION INSPECTION OF MATERIEL IN UNITS ALERTED FOR OVERSEAS MOVEMENT

INITIAL SETUP:

Materials/Parts
Fiberboard box (item 4, WP 0060 00)

References
TB 9-1000-247-34
WP 0020 00

MARKING OF SMALL ARMS

NOTE

The marking of small arms by use of permanent etching, painting (oil or latex), stamping, or burning on metal, rubber-coated material synthetic material, or wood components is strictly forbidden. However, the use of white tape, masking tape, embossed tape, bar codes, or tags is permissible.

1. Serial number is required and shall be listed on the packing list. Packing list shall be put inside of the fiberboard box (item 4, WP 0060 00).

2. Apply the following marking on the outside of each fiberboard box:
   a. National Stock Number.
   b. Federal Item Name.
   c. One Each.
   d. Date.
   e. Weight: Cube.

3. Only the following markings shall be applied by stencil or label to exterior of shipping box:

   a. Address of Destination.
   b. Weight and Cube.

PRE-EMBARKATION INSPECTION OF MATERIEL IN UNITS ALERTED FOR OVERSEAS MOVEMENT

Refer to TB 9-1000-247-34.

Air Force users use annual gaging procedures (WP 0020 00).

END OF WORK PACKAGE

CHAPTER 5

DIRECT SUPPORT MAINTENANCE INSTRUCTIONS FOR MACHINE GUN, M2

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715) FIXED M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) INTRODUCTION

INITIAL SETUP:

References
DA Form 2404
TM 9-1005-213-10
WP 0018 02

GENERAL

This section contains the procedures and instructions necessary to perform preventive maintenance checks. These checks are to be performed by maintenance personnel with assistance, where practical, of the operator/crew who will clean and lubricate in accordance with operator's manual, TM 9-1005-213-10.

The PMCS procedures are contained in the table of WP 0018 02. They are arranged in logical sequence requiring a minimum amount of time and motion on the part of the persons performing them.

EXPLANATION OF COLUMNS

Item No. Column. This column specifies the logical order of performance. Numbers in this column are for reference. When completing DA Form 2404, Equipment Inspection and Maintenance Worksheet, include the item number for the check/service indicating a fault.

Interval Column. This column gives the designated interval when each check is to be performed.

Man-Hours Column. This column lists the man-hours required to complete all prescribed procedures (to the nearest tenth of an hour).

Item To Be Checked or Serviced Column. This column lists the items to be checked or serviced.

Procedure Column. This column contains a brief description of the procedure by which the check is to be performed. It contains all the information required to accomplish the checks and services.

EXPLANATION OF COLUMNS - Continued

Equipment Not Ready/Available If: Column. This column lists information which tells you what faults will keep your equipment from being capable of performing its primary mission. If check and service procedures show faults listed in this column, do not operate the equipment. Follow standard operating procedures for maintaining the equipment or reporting equipment failure.

WARNING

Be sure to clear weapon before disassembling, cleaning, inspecting, transporting, or storing. Clearing consists of unloading the machine gun and visually inspecting weapon and chamber to ensure all rounds have been removed. Do not release the bolt or press the trigger.

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

NOTE

Unless otherwise stated, maintenance is to be performed on a quarterly basis.

An inactive machine gun (M.G.) is a M.G. which has been stored in an arms room for a period of 90 days without use. The M.G. may or may not have been assigned to an individual.

An inactive M.G. shall receive quarterly PMCS unless inspection reveals more frequent servicing is necessary.

Normal cleaning (PMCS) of an inactive M.G. will be performed every 90 days.

Should the unit armorer detect corrosion on a M.G. prior to the end of the 90-day period, the PMCS should be performed immediately.

Solid film lubricant (SFL) is the authorized touch up of the M.G. and may be used on up to one third (1/3) of the exterior finish of the M.G. receiver.

For Army CONUS use only and Air Force training M.G. only: Solid film lubricant (SFL) may be used as a touch up without limitation on the barrel assembly. This is to say that units which do not fall under the category of divisional combat units or rapid deployment type units may have up to 100 percent of the exterior surface of the barrel assembly protected with SFL. Prior to application of SFL, the surface must be thoroughly cleaned and inspected for corrosion and/or damage. If corroded or damaged, the part must be repaired or replaced prior to application of SFL. Continued use under combat conditions would result in an unprotected surface when SFL wears off. This would result in a large light reflecting surface and accelerated deterioration of the unprotected surface. Therefore, divisional combat units and units which fall under the definition of rapid deployment type must adhere to the limitation of not over one third (1/3) of the exterior surface of the receiver covered by SFL; if over one third (1/3) of the M.G. receiver finish is worn off, the weapon must be turned in for a new one.

When determining mission capability, deadline if it is a deficiency.

END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MACHINE GUN, M2
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS), INCLUDING LUBRICATION INSTRUCTIONS

WARNING

DO NOT keep live ammunition near work/maintenance area.

Be sure to clear weapon before disassembling, cleaning, inspecting, transporting, or storing. Clearing consists of unloading the machine gun and visually inspecting weapon and chamber to ensure all rounds have been removed. Do not release the bolt or press the trigger.

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

NOTE

All Direct Support PMCS checks and services will be completed annually during gaging unless forwarded for repair.

Table 1. Direct Support Preventive Maintenance Checks and Services for Machine Gun, M2.

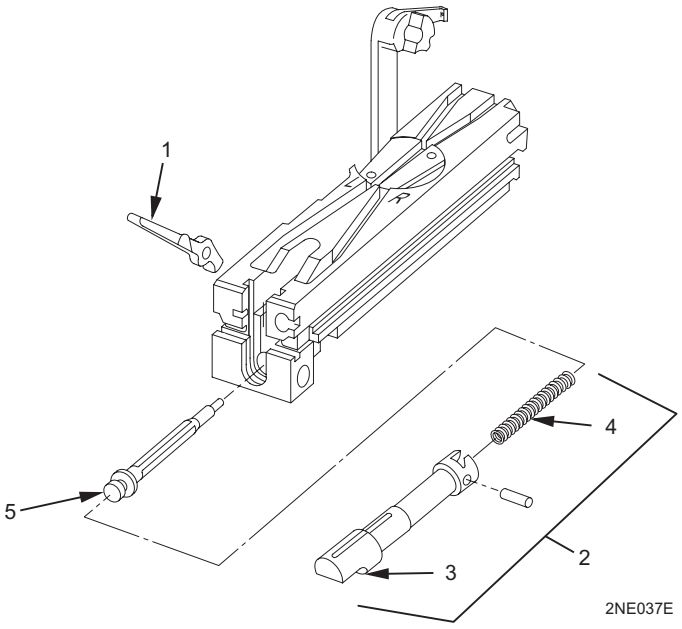
ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
1	Annually		Bolt Assembly		
			Cocking Lever	Check cocking lever (1) for burrs or bends (especially where the lever cams).	Cocking lever has burrs or is bent.
			Firing Pin Extension Assembly	Check if firing pin extension assembly (2) binds, is bent or cracked.	Firing pin extension assembly binds, is bent or cracked.
				Check for distorted notch (3).	Notch is distorted.
			Firing Pin Spring	Check for weak, broken, deformed, or collapsed coils on firing pin spring (4).	Firing pin spring coils are weak, broken, deformed, or collapsed.
					
			Firing Pin	Check firing pin (5) for cracks, chipped or sharp tip. Tip should be smooth and well rounded.	Firing pin is cracked, bent, or broken.

Table 1. Direct Support Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

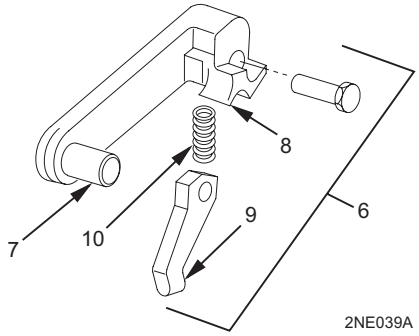
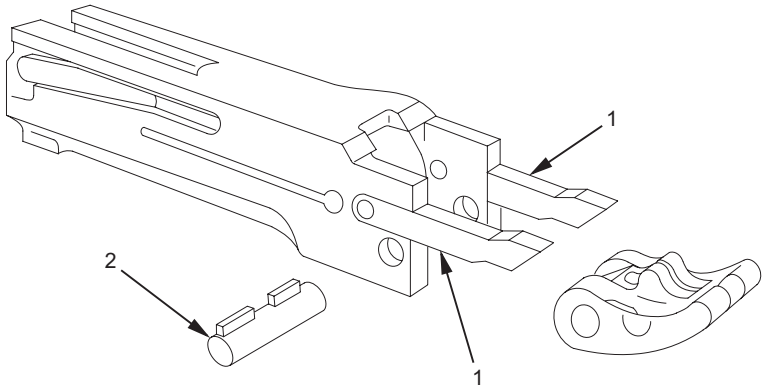
ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
1 (Cont)	Annually (Cont)		Bolt Assembly (Cont)		
			Cartridge Extractor	Check cartridge extractor (6) for bent arm and/or chipping on shank (7) in area where shank is inserted in bolt.	Cartridge extractor arm is bent or cracked.
			Extractor	Check for chipped claw (8).	Claw is chipped.
			Cartridge Ejector	Check for broken bolt ejector (9) and staking.	Bolt ejector is broken or not staked.
					
			Cartridge Spring	Check for deformed, collapsed cartridge spring (10) coils. Check cartridge extractor for crisp spring action.	Cartridge spring is broken, has collapsed coils, or weak spring action.
2	Annually		Barrel Buffer Body Assembly	Check for missing, damaged, or worn parts.	Parts are missing, damaged, or worn.

Table 1. Direct Support Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
2 (Cont)	Annually (Cont)		Barrel Buffer Body Assembly (Cont)		
			Lock Depressors	Check lock depressors (1) for cracks or breaks.	Lock depressors are cracked or broken.
				NOTE Lock depressors may have movement (side to side or up/down) as long as the movement does not cause the weapon to malfunction.	
				Check lock depressors (1) for failure to stay in barrel buffer body. Lock depressors may have a tendency to move (slight up and down or side to side movement).	Lock depressors can be pulled out of slot or separated more than 0.020 in. (0.051 cm); excessive movement is present.



2NE041

Table 1. Direct Support Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
2 (Cont)	Annually (Cont)		Barrel Buffer Body Assembly (Cont)	**NOTE** Staking or swaging of the buffer body to secure or limit the movement of the lock depressors in their recesses is not required nor is it desirable. However, marks derived from previous unauthorized staking or swaging on buffer are acceptable as long as the staking/swaging does not interfere with the functioning of the weapon. Check rivets on lock depressors (1) to ensure depressors are securely retained in barrel buffer body and rivets are not loose. The rivets should not be staked or swaged in a manner which precludes slight movement of the lock depressors. The center of the rivets may be center punched if tightening of the lock depressors is required.	Rivets interfere with proper functioning of the weapon or are loose or missing from lock depressor.

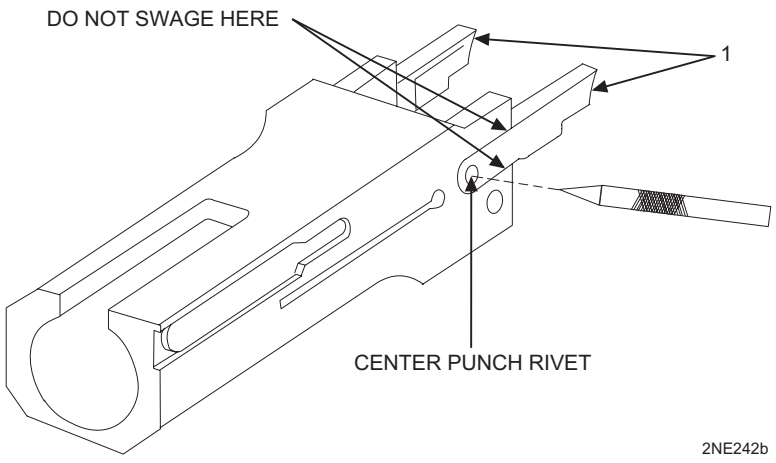


Table 1. Direct Support Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

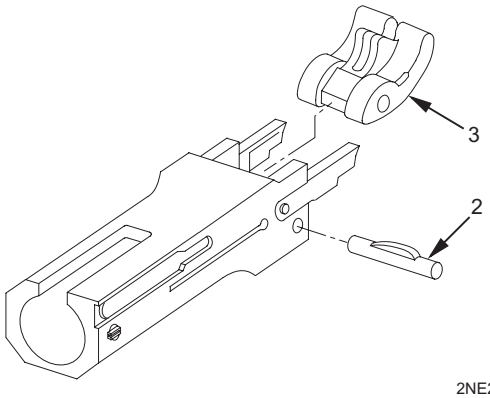
ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
2 (Cont)	Annually (Cont)		Barrel Buffer Body Assembly (Cont)		
			Accelerator Pin	Check accelerator pin (2) for burrs, looseness or wear, and for broken, not set, collapsed or missing spring. **NOTE** Ensure buffer accelerator (3) is secured in barrel buffer body with accelerator pin assembly (2).	Accelerator pin is burred, loose or worn. Spring is broken, not set, collapsed, or missing.
				 2NE243A	
			Buffer Body Lock	**NOTE** Swage the buffer body by using a blunt punch in the area around the lock groove in one or more places along the groove as required to retain the buffer body lock (1) so that it cannot be removed by hand.	

Table 1. Direct Support Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
2 (Cont)	Annually (Cont)		Barrel Buffer Body Assembly (Cont)		
			Buffer Body Lock (Cont)	Check retention of the buffer body lock (1). Buffer body assembly is serviceable as long as the lock cannot be removed by hand and/or can be secured by punching per following assembly directions. Previous swaging that does not damage, prevent assembly, or impair normal operation of the buffer body and lock is acceptable.	Buffer body lock can be removed by hand.

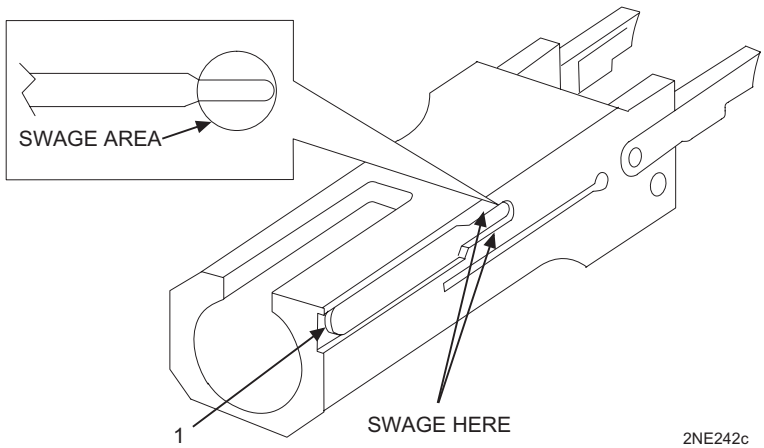


Table 1. Direct Support Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
3	Annually		Buffer Assembly	Check that cotter pin (1) is present.	Cotter pin is missing.
				Check that rod and engaging notch (2) are not damaged.	Rod and/or engaging notch are damaged.
			Buffer Spring	Check that buffer spring (3) is not broken, deformed, or coils collapsed.	Buffer spring is broken, deformed, or coils are collapsed.

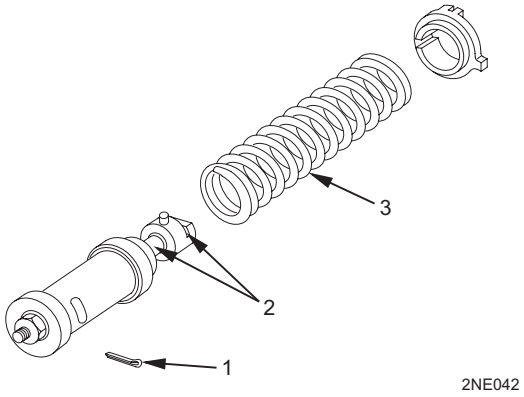
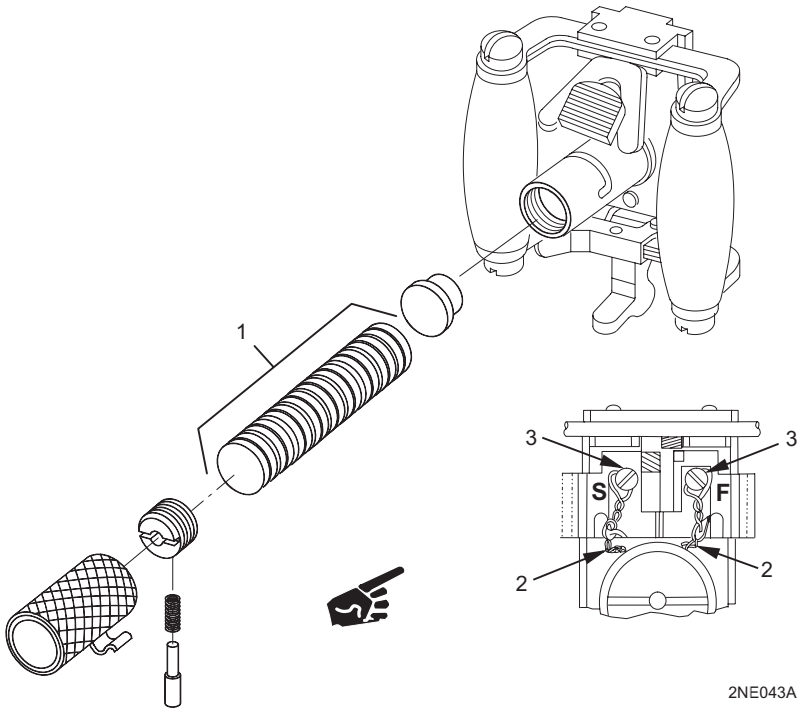


Table 1. Direct Support Preventive Maintenance Checks and Services for Machine Gun, M2 – Continued.

ITEM NO.	INTERVAL	MAN-HOURS	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
4	Annually		Buffer Tube/Back Plate Assembly	Disassemble buffer tube components from back plate assembly. Check if disks (1) are deformed, cracked, or collapsed.	Disks are deformed, cracked, or collapsed.
			Trigger Block	Check trigger block for worn or damaged lockwire (2) or shoulder screws (3).	Lockwire or shoulder screws are damaged or worn.



END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715) M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

CHANGING MACHINE GUN FROM LEFT HAND FEED TO RIGHT HAND FEED DISASSEMBLY, REPAIR OR REPLACEMENT, ASSEMBLY (NAVY AND MARINE CORPS USE ONLY)

INITIAL SETUP:

Tools and Special Tools
Small arms repairman tool kit (item 11, WP 0042 00)

References
TM 9-1005-213-10

Materials/Parts
Cotter pin (item 12, WP 0050 00)
Cotter pin (3) (item 9, WP 0051 00)
Stop cartridge (item 76, WP 0044 00)
Stripper link (item 77, WP 0044 00)

WARNING

DO NOT keep live ammunition near work/maintenance area.

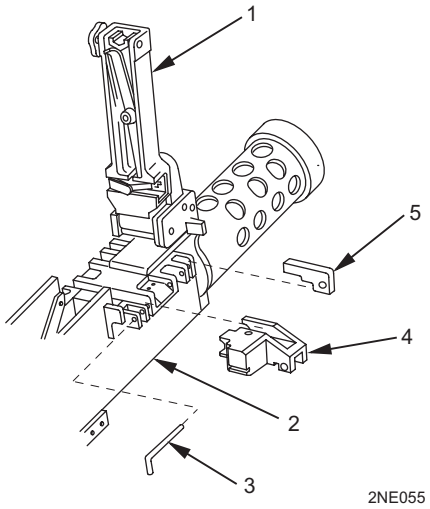
Be sure to clear weapon before disassembling, cleaning, inspecting, transporting, or storing. Clearing consists of unloading the machine gun and visually inspecting weapon and chamber to ensure all rounds have been removed. Do not release the bolt or press the trigger.

NOTE

Procedures on cover latch and retracting slide assembly may vary depending on gun mount used.

DISASSEMBLY

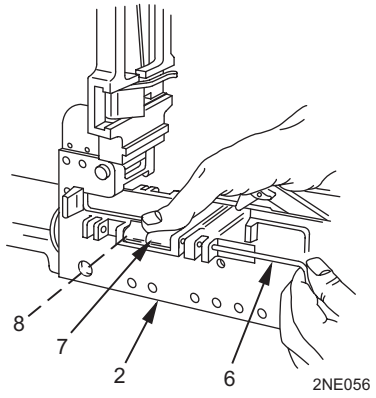
1. Raise cover assembly (1) on receiver (2) and remove belt holding pawl pin (3), rear cartridge stop assembly (4), and front cartridge stop (5) from right side of receiver. Set rear cartridge stop assembly aside.



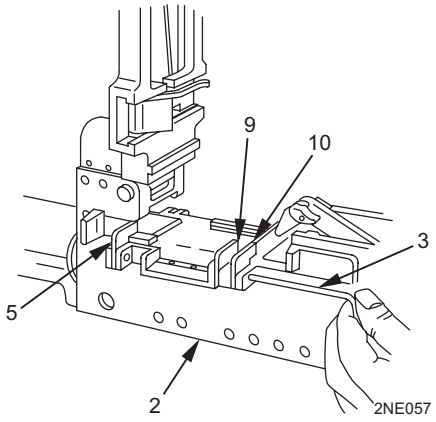
WARNING

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

2. Remove belt holding pawl pin (6), belt holding pawl assembly (7), and belt holding pawl springs (8) from left side of receiver (2) and install belt holding pawl springs, belt holding pawl assembly, and belt holding pawl pin on right side of receiver.



3. Install front cartridge stop (5), link stripper (9), and cartridge stop (10) to left side of receiver (2), and secure with belt holding pawl pin (3).



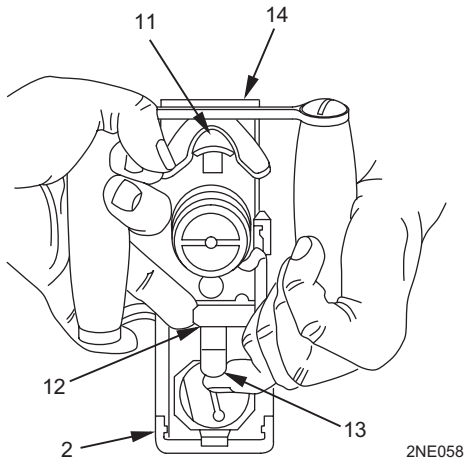
WARNING

Ensure bolt is in the forward position before removing backplate assembly. Stand to the side of the weapon when removing the backplate assembly.

NOTE

Ensure that bolt latch release (11) is in the up position (single-shot mode).

4. Pull backplate latch lock (12) straight back, while lifting up on backplate latch (13). Raise backplate assembly (14) straight up and remove from receiver (2).

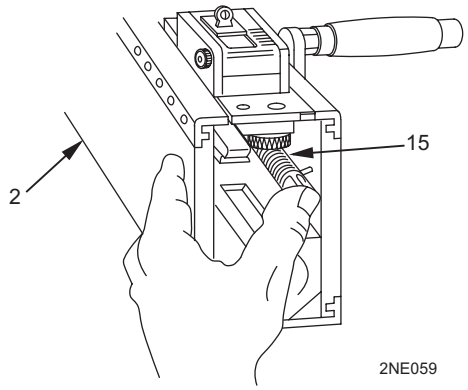


DISASSEMBLY - Continued

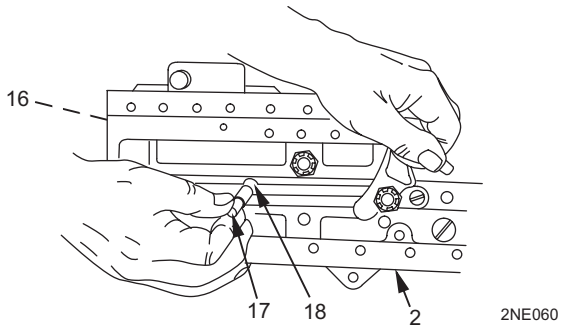
WARNING

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

5. Push rear of drive spring rod assembly (15) forward and to the left until free from side of receiver (2). Remove drive spring rod assembly from receiver.



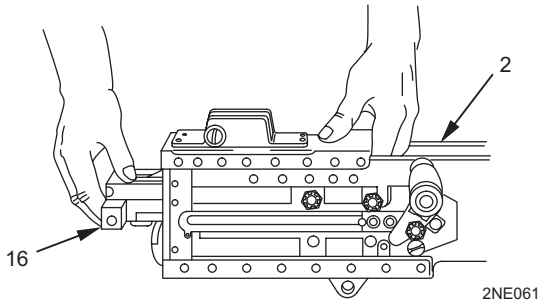
6. Retract bolt assembly (16) far enough to align bolt stud (17) with enlarged bolt stud hole (18) in receiver (2). Remove bolt stud from right side of receiver.



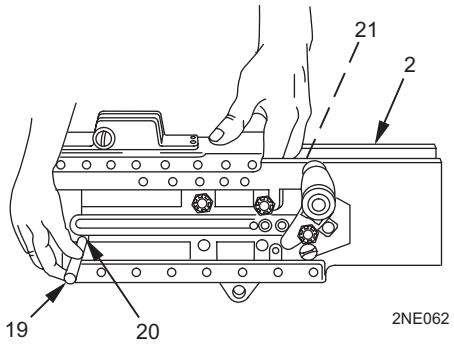
NOTE

Bolt latch must be pushed up to remove bolt assembly (Flex only).

7. Remove bolt assembly (16) from receiver (2).



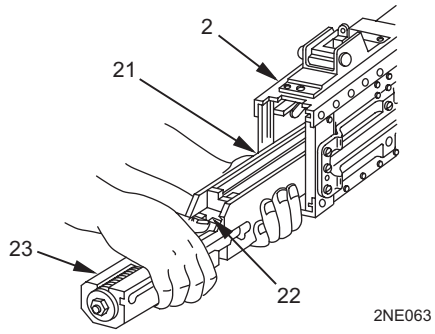
8. Install pointed end of punch (19) into hole (20) in receiver (2) and depress buffer body lock while applying rearward pressure on barrel extension assembly (21).



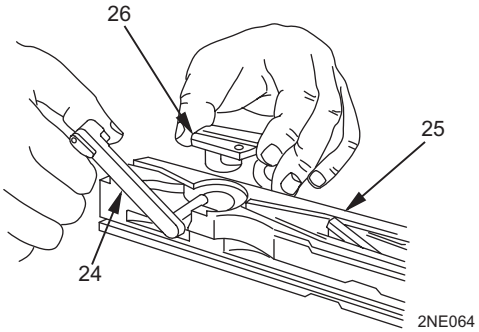
WARNING

Maintain thumb pressure on buffer accelerator while removing barrel buffer assembly and barrel extension assembly from receiver.

9. Maintain thumb pressure on buffer accelerator (22). Remove barrel buffer assembly (23) and barrel extension assembly (21) from receiver (2).



10. Rotate cartridge extractor (24) upward and remove from left side of bolt subassembly (25). Lift out bolt switch (26). Install bolt switch with narrow end forward for right-hand feed. Install cartridge extractor. Set bolt subassembly aside.



DISASSEMBLY - Continued

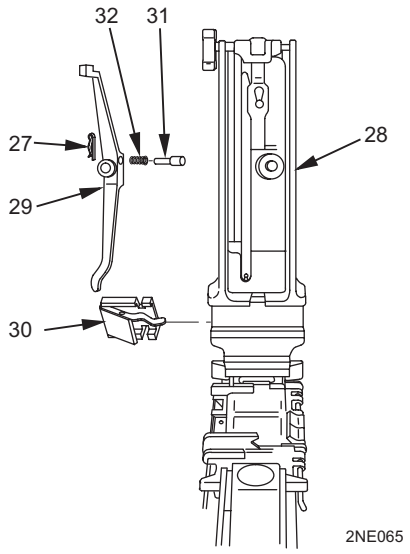
11. Remove lock pin (27) from underside of subassembly cover (28).

WARNING

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

12. Push belt feed lever (29) to the right until toe end is in line with the slot in the subassembly cover (28) and the belt feed slide assembly (30). Remove belt feed lever, shoulder pin (31), and helical compression spring (32).

13. Remove belt feed slide assembly (30) from subassembly cover (28).

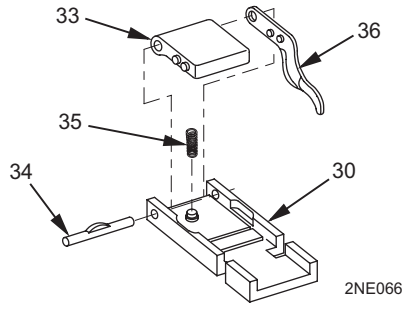


WARNING

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

14. Hold belt feed pawl (33) while removing spring pin (34) from belt feed slide assembly (30).

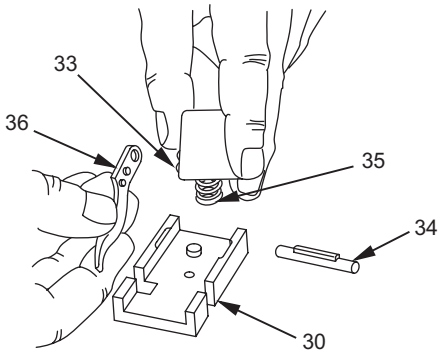
15. Slowly let belt feed pawl (33) rise to control helical compression spring (35). Remove belt feed pawl from belt feed slide assembly (30). Remove helical compression spring and belt feed pawl arm (36) from belt feed pawl.

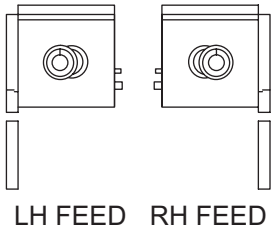


WARNING

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

16. Assemble belt feed pawl arm (36) and helical compression spring (35) on belt feed pawl (33). Install large end of helical compression spring in hole in belt feed pawl with the foot of the helical compression spring opposite the belt feed pawl as illustrated. Ensure helical compression spring is installed correctly.



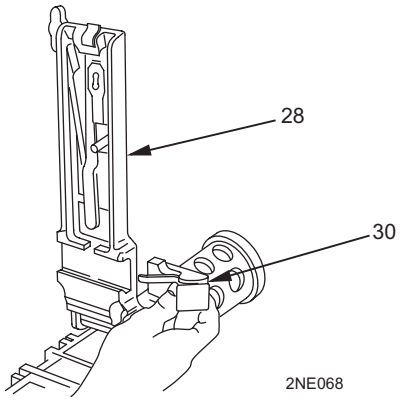


Position of helical compression spring and belt feed pawl arm showing left-hand and right-hand feed.

2NE067

17. Install belt feed pawl (33) on belt feed slide assembly (30), aligning helical compression spring (35) on pin of belt feed slide assembly and secure with spring pin (34).

18. Push belt feed slide assembly (30) into subassembly cover (28) as shown.

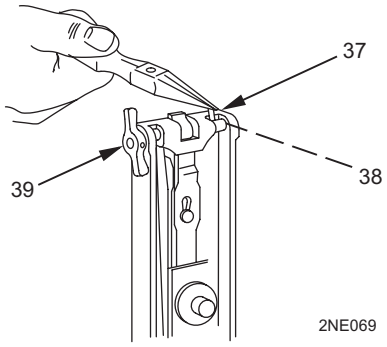


DISASSEMBLY - Continued

NOTE

Next three steps are optional for operator convenience.

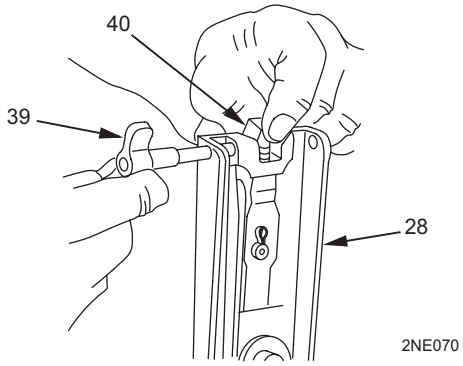
19. Remove cotter pin (37) and flat washer (38) from cover latch lever (39). Discard cotter pin.



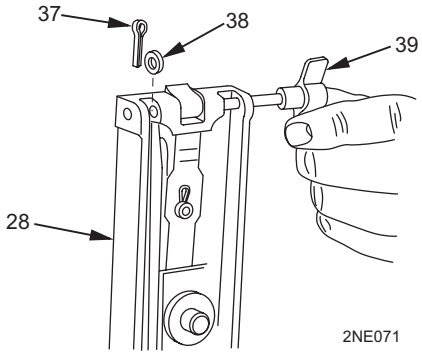
NOTE

Make sure that cover latch (40) stays installed when performing this step.

20. Remove cover latch lever (39) from subassembly cover (28).



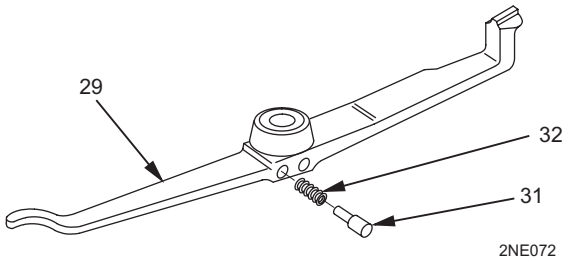
21. Install cover latch lever (39) in subassembly cover (28) as illustrated. Install flat washer (38) and new cotter pin (37).



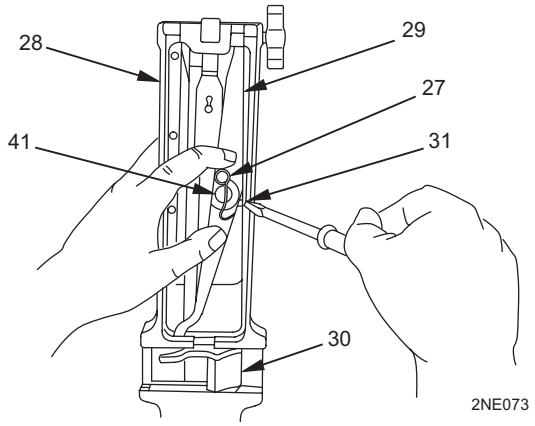
WARNING

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

22. Install helical compression spring (32) and shoulder pin (31) into bottom hole of belt feed lever (29) for right-hand feed operation.



23. Position belt feed lever (29) so toe end is aligned with slots of subassembly cover (28) and belt feed slide assembly (30). Using screwdriver, press in on shoulder pin (31) and install belt feed lever on pivot stud (41). Install lock pin (27) to secure.

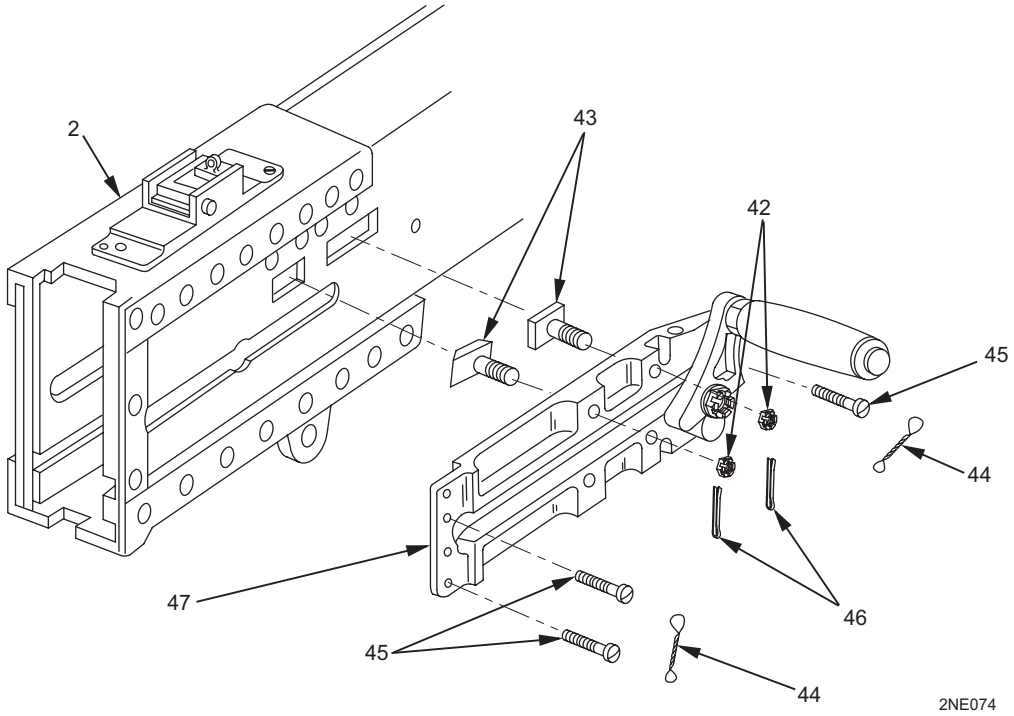


DISASSEMBLY - Continued

NOTE

Removal of two plain slotted nuts (42) will cause two shoulder bolts (43) to drop into interior of receiver (2).

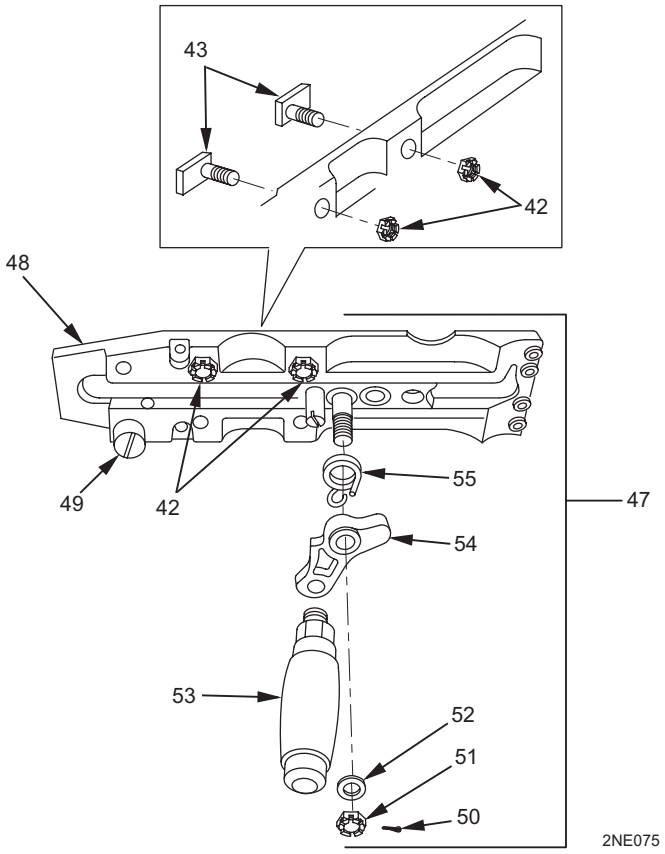
24. Cut safety wires (44) and remove three machine screws (45). Remove two cotter pins (46) and two plain slotted nuts (42). Remove retracting slide assembly (47) from right side of receiver (2). Retrieve two shoulder bolts (43). Discard cotter pins.



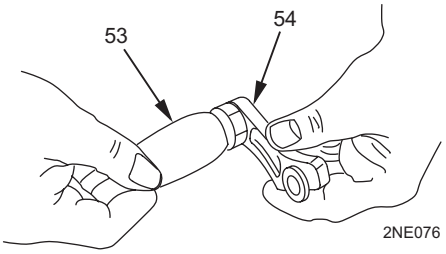
25. Rotate retracting slide assembly (47) as shown and position beveled edges of two shoulder bolts (43) to the outside and install the two shoulder bolts into the top holes in the retracting slide bracket (48). Loosely install two plain slotted nuts (42) on the two shoulder bolts.

26. Remove shoulder screw (49) from top hole in retracting slide bracket (48) and install in lower hole in retracting slide bracket.

27. Remove cotter pin (50), plain slotted nut (51), flat washer (52), retracting slide handle (53), lever (54), and helical torsion spring (55) from retracting slide bracket (48). Maintain spring in unit arms room. Discard cotter pin.



28. Reinstall retracting slide handle (53) to lever (54) on opposite side of lever.



DISASSEMBLY - Continued

WARNING

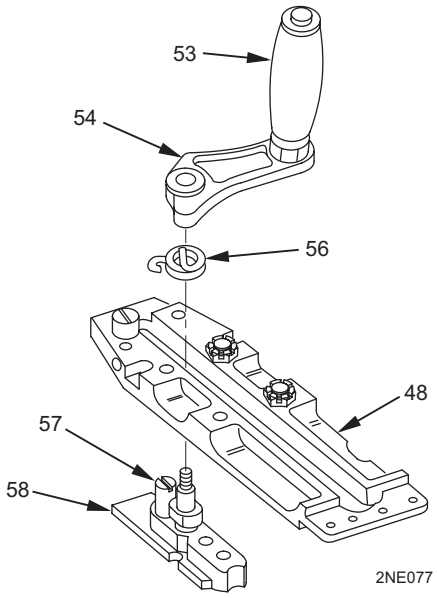
To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

29. Acquire helical torsion spring (56) (used for left side mounting of retracting slide) and align helical torsion spring, retracting slide handle (53), and lever (54).

NOTE

Ensure tang of helical torsion spring (56) is inserted in hole in lever (54) and loop of helical torsion spring is positioned correctly over shoulder pin (57) of retracting slide (58).

30. Install retracting slide (58) into the retracting slide bracket (48). Position helical torsion spring (56), lever (54), and retracting slide handle (53) on retracting slide. Position helical torsion spring over shoulder pin (57).

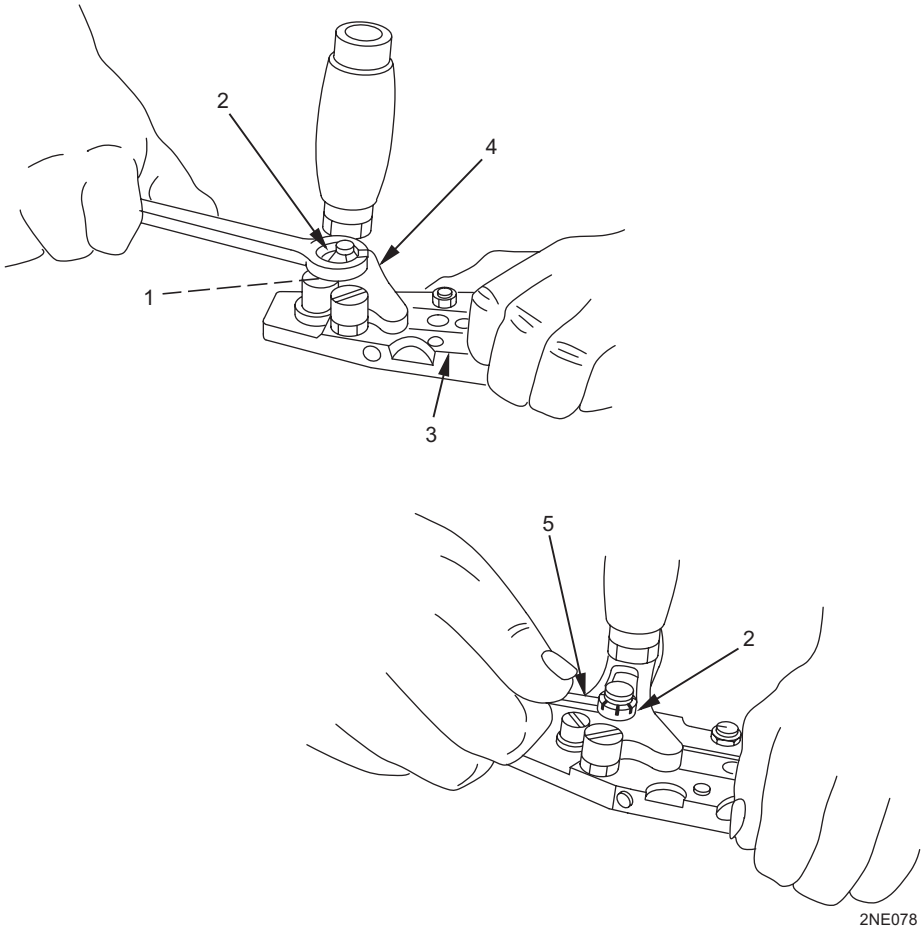


REPAIR OR REPLACEMENT

Repair by replacing all authorized parts that do not meet inspection criteria.

ASSEMBLY

1. Install flat washer (1) and plain slotted nut (2) on retracting slide (3). Align nut slot with hole in stud. Ensure plain slotted nut is not tightened to restrict movement of lever (4). Install new cotter pin (5) in plain slotted nut to secure.

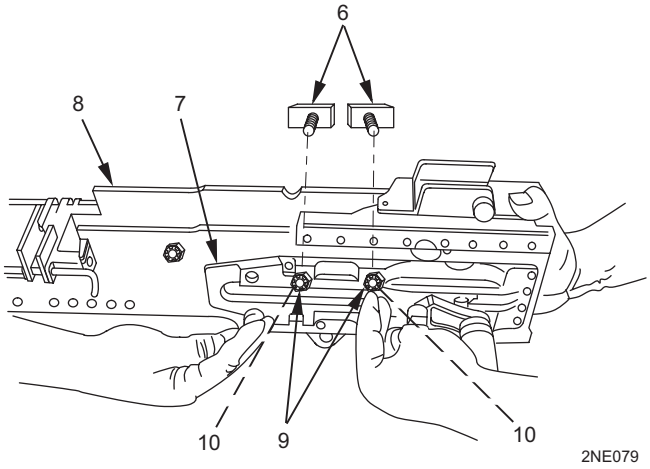


ASSEMBLY - Continued

NOTE

Ensure beveled edges of shoulder bolts (6) face out in opposite directions.

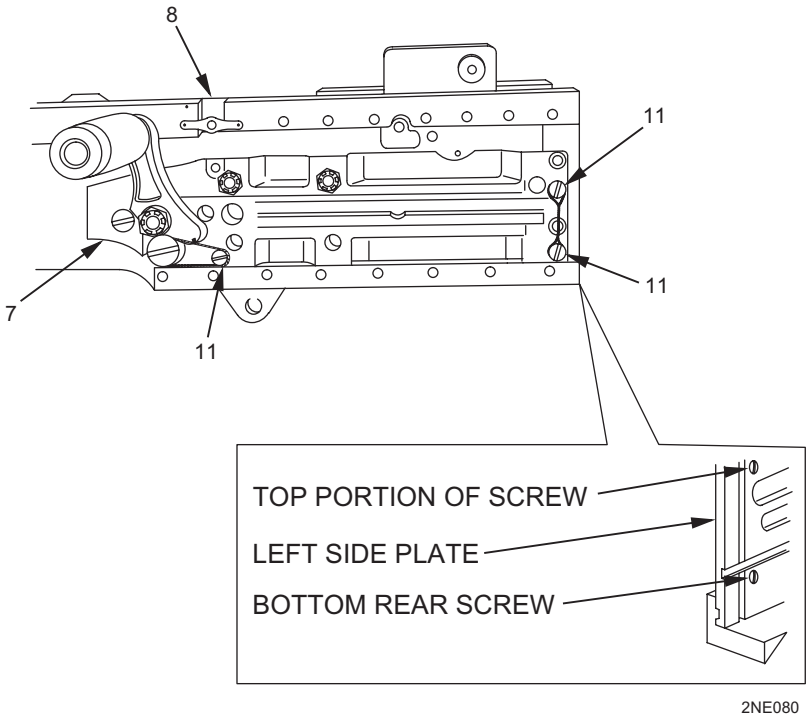
2. Install retracting slide assembly (7) to the left side of receiver (8) and tighten two plain slotted nuts (9). Secure plain slotted nuts with two new cotter pins (10).



CAUTION

Reduce length of bottom rear screw (with file or stone) as required to avoid interference with functioning of weapon. The screw should not protrude into side plate slot as illustrated.

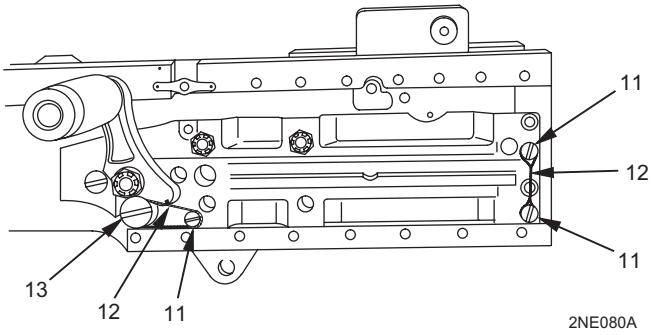
3. Install three machine screws (11) on retracting slide assembly (7), securing it to receiver (8).



NOTE

Safety wire (12) must be installed on shank of shoulder screw (13) and machine screw (11).

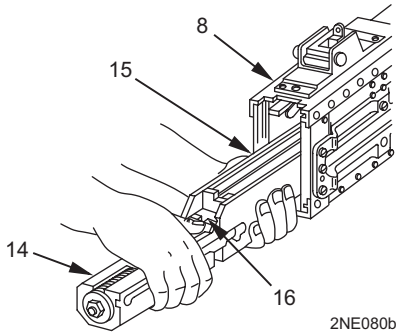
4. Install safety wire (12) on shoulder screw (13) and machine screw (11) and between two machine screws (11).



CAUTION

When installing barrel buffer assembly (14) and barrel extension assembly (15) into receiver (8), maintain thumb pressure on buffer accelerator (16).

5. Maintain thumb pressure on buffer accelerator (16). Install barrel buffer assembly (14) and barrel extension assembly (15) in receiver (8).



ASSEMBLY - Continued

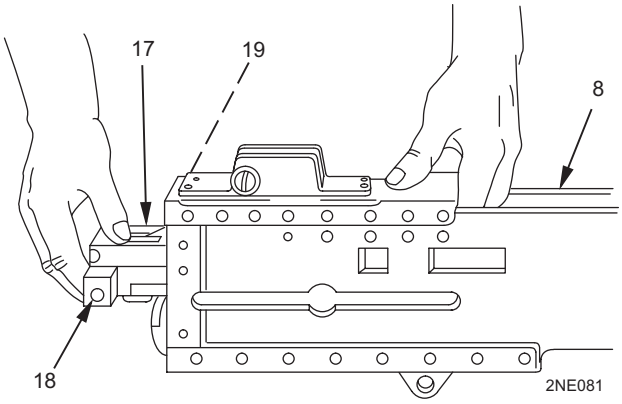
CAUTION

When installing bolt assembly, do not trip buffer accelerator.

NOTE

Ensure cocking lever (17) is forward before installing bolt assembly (18) into receiver (8).

6. Push bolt assembly (18) forward into receiver (8) until bolt latch (19) engages notches in tip of bolt assembly.

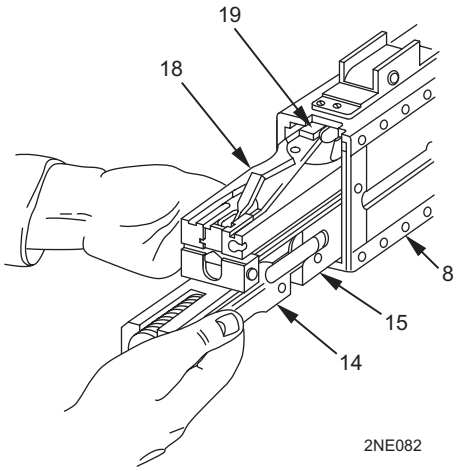


NOTE

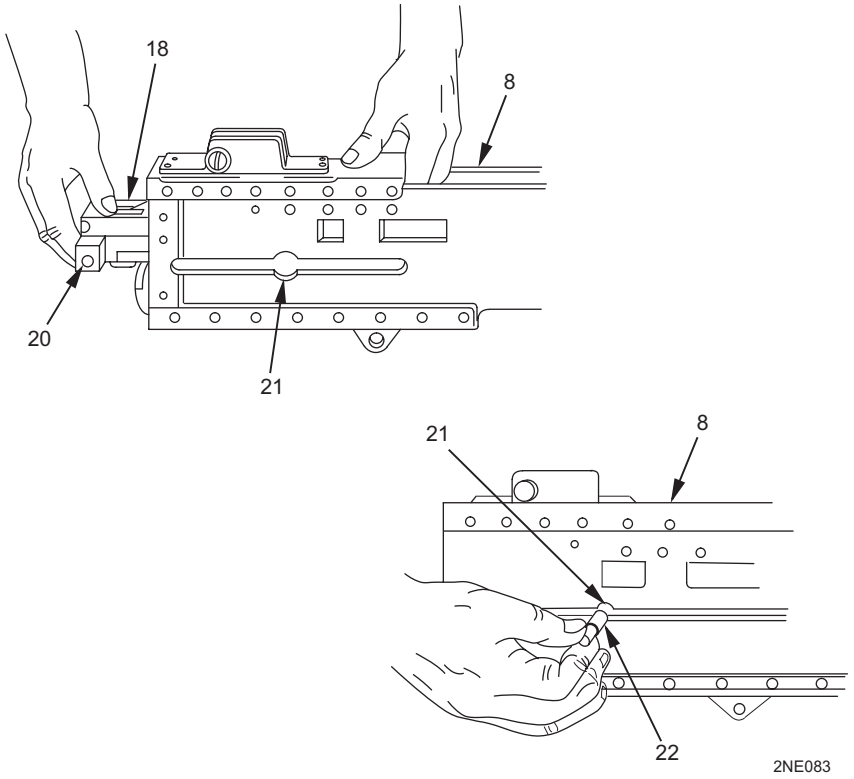
If unable to install bolt assembly (18), perform the next step.

7. Remove barrel extension assembly (15) and barrel buffer assembly (14) from the receiver (8). Install bolt assembly (18) into barrel extension assembly and barrel buffer assembly; then install into the receiver.

8. Raise bolt latch (19) and push bolt assembly (18) into receiver (8).



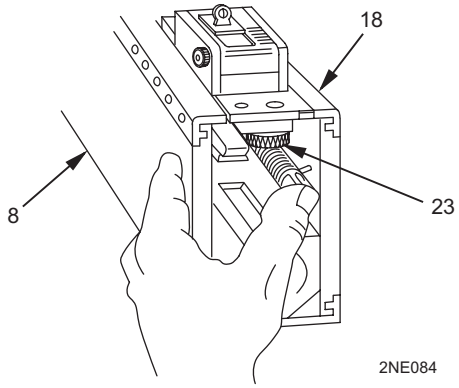
9. Align hole (20) in bolt assembly (18) with bolt stud hole (21) in receiver (8) and install bolt stud (22) in hole in bolt assembly.



WARNING

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

10. Install drive spring rod assembly (23) in upper right-hand corner hole in bolt assembly (18). Push forward and to the right until drive spring rod assembly tang engages in hole in side plate of receiver (8).



ASSEMBLY - Continued

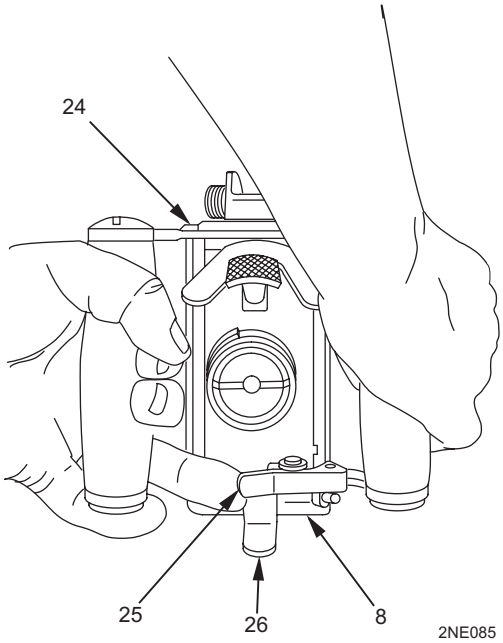
11. Install backplate assembly (24) in receiver grooves. Pull backplate latch lock (25) straight back, while lifting up on backplate latch (26). Lower backplate assembly down until engaged in receiver (8).

NOTE

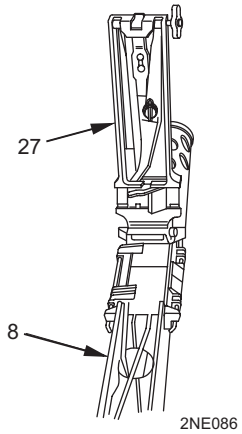
Test for proper locking of backplate assembly (24) by pulling up on the backplate assembly.

12. Pull backplate latch lock (25) back and pull up on backplate assembly (24) to ensure proper locking.

13. Lift backplate latch (26) up and pull up on backplate assembly (24) to ensure proper locking.



14. Close cover assembly (27) making sure it latches securely to receiver (8).



NOTE

Ensure barrel is installed properly (TM 9-1005-213-10).

15. Load five or more linked dummy rounds and hand operate weapon with feed tray in the closed position to ensure all components are functioning properly. Weapon should function through a complete cycle.

END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL FLEXIBLE, W/E (1005-00-322-9715) FIXED M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

ANNUAL GAGING AND SPRING REPLACEMENT OF M2 MACHINE GUN

INITIAL SETUP:

Tools and Special Tools
- Barrel erosion gage (item 1, WP 0042 00)
- Barrel support special plug gage (item 7, WP 0042 00)
- Brass bushing plug gage (item 2, WP 0042 00)
- Cleaning rod (item 24, WP 0060 00)
- Feeler gage (item 0.4, WP 0042 00)
- Field maintenance small arms shop set (item 6, WP 0042 00)
- Firing pin hole plug gage (item 3, WP 0042 00)
- Firing pin protrusion gage (item 4, WP 0042 00)
- Oil buffer rod gage (item 5, WP 0042 00)
- Wear check gage (item 5, WP 0057 00)

Materials/Parts
- Cleaner, lubricant, and preservative (CLP) (item 11, WP 0060 00)

Materials/Parts - Cont
- Dry cleaning solvent (item 16, WP 0060 00)
- Wiping rag (item 23, WP 0060 00)

Personnel Required
- Two

References
- NASM 33540
- TB 43-0240
- TB 43-180
- TM 9-1005-213-10
- TM 9-4933-208-34
- WP 0011 00
- WP 0013 00
- WP 0019 00
- WP 0026 00

Equipment Conditions
- M2 machine gun removed/dismounted (TM 9-1005-213-10, AF TO 11W2-6-3-161)

WARNING

All M2 machine guns must be inspected and gaged at least once annually for safety and serviceability. Air Force users refer to inspection requirements in Air Force Regulation (AFR) 50-36 and Air Force Pamphlet (AFP) 50-63, Volume 1.

All Army Reserve and National Guard M2 machine guns must be inspected and gaged at least once every two years, after the initial inspection/gaging procedures have been accomplished. This two year interval may be maintained unless preventive maintenance checks and services (PMCS) or other physical evidence indicates that an individual unit's M2 machine guns require inspection/gaging at a more frequent interval. If it is determined that a yearly inspection is necessary for an individual unit, only that unit will be affected. This will not affect other units in regard to the interval of inspection.

ANNUAL GAGING AND SPRING REPLACEMENT OF M2 MACHINE GUN

Annual Spring Replacement

NOTE

The following springs and/or parts will be replaced during annual inspection and/or gaging for the M2 Machine Gun.

Table 1. Annual Gaging and Spring Replacement Parts List For M2 Machine Gun.

PART NUMBER	NATIONAL STOCK NUMBER	NOMENCLATURE	QTY PER GUN
7312029	5360-00-731-2029	Lever Stop Nut Flat Spring	1
5009524	5360-00-209-8720	Helical Spring (Sear)	1

General

WARNING

Be sure to clear weapon before disassembling, cleaning, inspecting, transporting, or storing. Clearing consists of unloading the machine gun and visually inspecting the weapon and chamber to ensure all rounds have been removed. Do not release the bolt or press the trigger.

Never remove the backplate assembly from any weapon until the chamber has been cleared and the bolt is in forward position. Stand to one side when removing backplate assembly.

NOTE

Small arms gages will be inspected and certified annually. The gages will not be used unless they are accompanied with the appropriate gage record. Refer to TB 43-0240 for requirements.

Small arms gages are precision tools used to quickly and economically inspect dimensions and interface points on small arms weaponry. The gages are made of tool steel and are machined to extremely tight tolerances.

Gages are susceptible to corrosion. To decrease the frequency and severity of corrosion, small arms gages should be periodically degreased with dry cleaning solvent (item 16, WP 0060 00), allowed to dry, and then given a light coating of CLP (item 11, WP 0060 00) or similar preservative oil. Wipe the preservative off each gage with a soft cloth (item 23, WP 0060 00) before use.

Annual Gaging must be documented on Weapon Record Data - DA Form 2408-4, listed in the rear of TM 9-1005-213-23 & P, after DA 2028 form.

NOTE

When using small arms gages, carefully follow the instructions. Never force a gage! This will cause excessive wear and will decrease the serviceable life of the gage.

Small arms gages are susceptible to material displacement as a result of impact. Impact causes the gage to be out of tolerance. To prevent this, perform gaging on tables or workbenches that are padded or covered with vinyl or rubber whenever possible.

To ensure gages are serviceable, have them calibrated every 360 days as required by TB 43-180, Calibration and Repair Requirements for the Maintenance of Army Materiel. Only the Test, Maintenance, and Diagnostic Equipment Laboratories listed in TB 43-180 are authorized and equipped to perform this calibration.

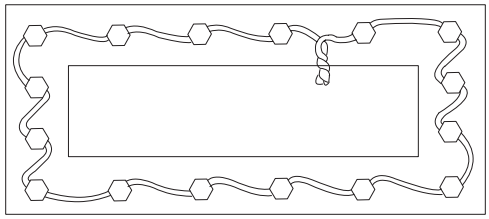
Relative movement of riveted receiver components is defined as horizontal and/or vertical movement.

If SLAP ammunition is being used, barrel life will be reduced.

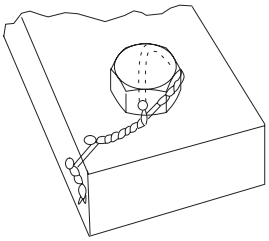
1. Refer to WP 0011 00 and TM 9-1005-213-10 for general maintenance procedures.

2. The following procedure should be used to check for a loose receiver: With the receiver lying on a table in a normal upright position, stand to the rear of the receiver (normal firing position). Using hands only, try to move riveted components forward and to the rear, and up or down. If all components are secure, the receiver has passed the loose receiver test; continue inspection.

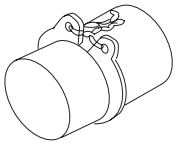
3. For installation of safety wire and cotter pins, refer to NASM 33540 and the following safety wire diagram.



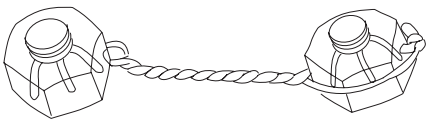
SMALL SCREWS IN CLOSELY SPACED, CLOSED GEOMETRICAL PATTERN SINGLE WIRE METHOD



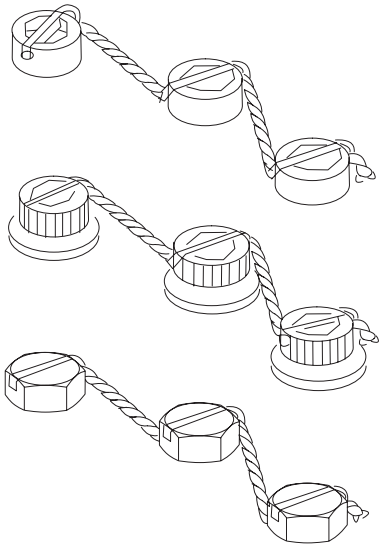
SINGLE FASTENER APPLICATION DOUBLE TWIST METHOD



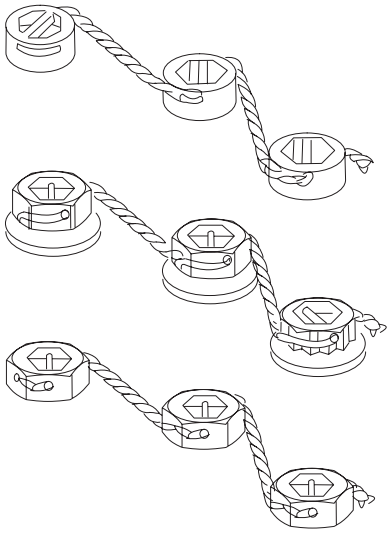
EXTERNAL SNAP RING SINGLE WIRE METHOD



CASTELLATED NUTS ON UNDRILLED STUDS DOUBLE TWIST METHOD



MULTIPLE FASTENER APPLICATION ALTERNATE DOUBLE TWISTED METHOD-SINGLE HOLE.



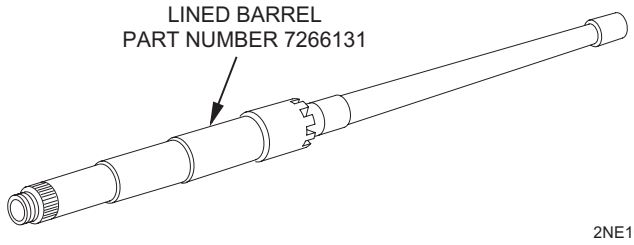
MULTIPLE FASTENER APPLICATION DOUBLE TWISTED MULTIPLE HOLE.

THE FIGURES SHOWN ARE FOR RIGHT HANDED THREAD APPLICATION. LOCKING FOR LEFT HANDED THREADS WILL BE OPPOSITE.

2NE313

Barrel Erosion Check

Inspect barrel to determine if barrel is lined or unlined. Lined barrel part number (7266131) is engraved on the outside of the barrel. Unlined barrels are not gaged.



CAUTION

The unlined barrel is to be discarded. It is not to be fired with Saboted Light Armor Penetrating (SLAP) ammunition. Firing SLAP ammo from the unlined barrel will significantly degrade operational effectiveness and possibly remove the M2 weapon totally from engagement.

NOTE

The breech bore gage NSN 5120-00-731-9900 that is used for determining the serviceability and remaining life of the unlined barrel is no longer available.

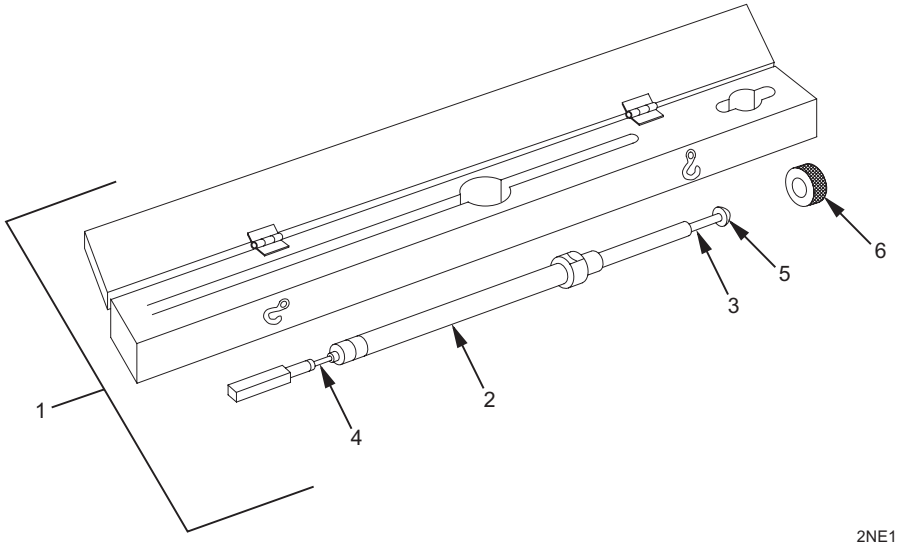
Lined Barrel Erosion Check

NOTE

Barrel erosion gage must be pre-checked before using it.

1. Test for barrel erosion with M6A1 gage kit (1).

2. Pre-check barrel erosion gage (2) by retracting tapered rod (3). Set reject ring (4) flush with rear face of gage tube, thus expanding collet (5) to indicate a reject condition. Insert collet of gage into wear check gage (6). Collet should contact inside diameter of check gage and produce a slight drag. Check gage is worn when the collet fails to produce contact. Turn in worn or damaged gages for calibration or disposal.



Lined Barrel Erosion Check - Continued

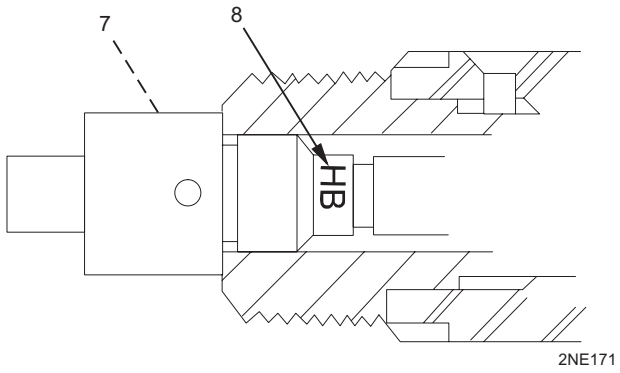
CAUTION

Retract tapered rod before inserting or removing barrel erosion gage into, or from, the barrel to avoid unnecessary wear or damage.

NOTE

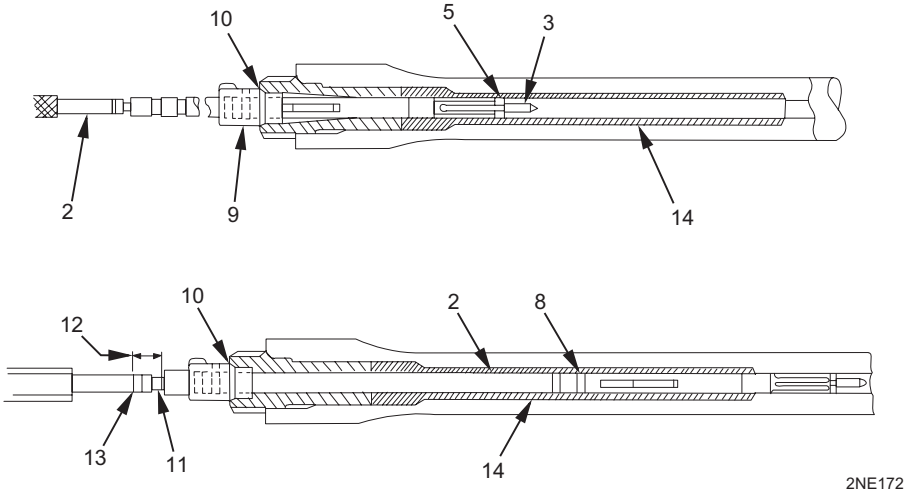
False readings may be obtained if the chamber and barrel are not thoroughly cleaned.

3. For checking M2 heavy barrels, measure wear in the barrel liner by first engaging breech stop detent ball (7) into most forward groove so that the letters HB on gage tube (8) are immediately to the FRONT of the stop.



4. Retract the tapered rod (3) and insert barrel erosion gage (2) into barrel until stop (9) is seated flush against the breech end of barrel (10).

5. Tapered rod (3) is pushed gently, but firmly, into the gage tube (8) until it is stopped by the collet (5) engaging the bore.



6. The reading is taken from the rod at the end of the gage tube (8). The recessed portion (11) of the rod indicates that the barrel is new or has no appreciable wear. Barrels within serviceable range (12) are usable. The REJECT line (13) indicates an unserviceable barrel. To measure wear ahead of liner (14), move stop (9) to proper rearward groove. Use of gage is same as above.

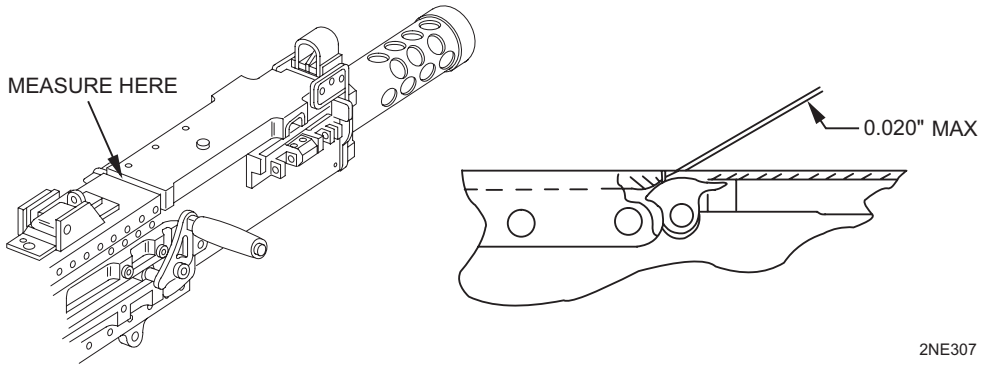
7. Remove gage and store in the M6A1 gage kit case.

Inspect Receiver Rivets

Attempt to move riveted components forward and to the rear, and up and down. Receiver components must not move. Check for rivets that have relative movement under finger pressure. A total of eight loose rivets on the receiver are allowed but no more than six total loose rivets on the top plate, bottom plate, or trunnion block. Loose rivets cannot be side by side and there can be no more than three on either side of the riveted component. No missing rivets allowed.

Cover Latch - Top Plate Clearance Check

Check clearance between cover latch and notch in top plate with a feeler gage. MAXIMUM CLEARANCE is 0.020 in. (0.0508 cm). The check must be performed any time the cover is removed.



Breechlock Cam – Bottom Plate Clearance Check

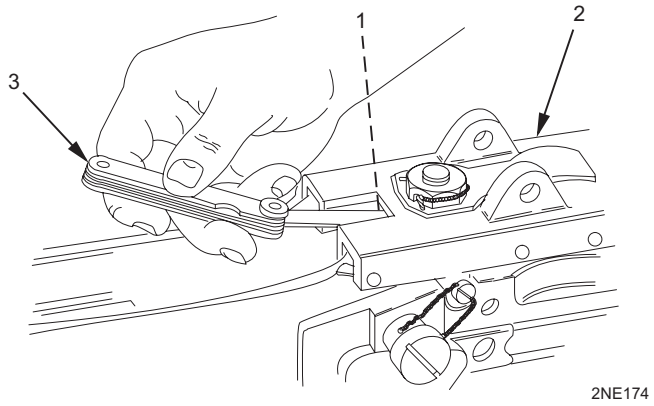
NOTE

Recoil mechanism buffer, barrel extension assembly, and bolt assembly must be removed before clearance check is done. Refer to WP 0019 00.

When measuring for maximum clearance, the feeler gage SHALL NOT penetrate to breechlock cam screw. When measuring for minimum clearance, the feeler gage SHALL penetrate to breechlock cam screw.

Breechlock Cam – Bottom Plate Clearance Check - Continued

Check clearance between breechlock cam (1) and bottom plate (2) with a feeler gage (3). Maximum clearance is 0.008 in. (0.020 cm) and minimum clearance is 0.001 in. (0.003 cm).

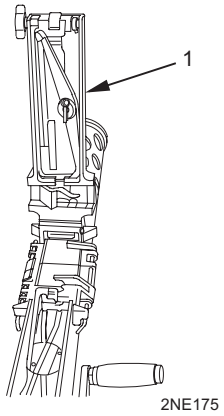


Headspace/Timing Adjustment

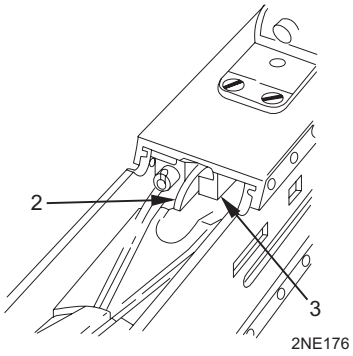
Refer to operator's manual (TM 9-1005-213-10).

Trigger Lever Clearance Check

1. Open top cover (1).



2. Check for binding/lack of clearance between trigger lever (2) and top plate bracket (3).



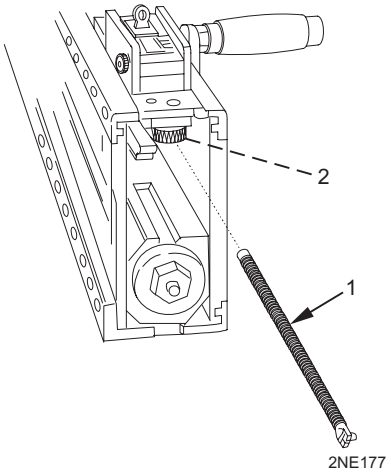
Trigger Lever - Bolt Clearance Check

WARNING

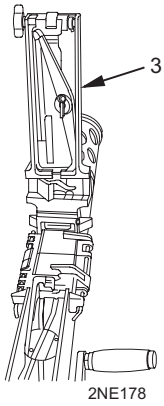
Never remove the backplate assembly from any weapon until the chamber has been cleared and the bolt is in forward position. Stand to one side when removing backplate assembly.

1. Remove backplate assembly from receiver (WP 0013 00).

2. Remove drive spring rod assembly (1) from bolt assembly (2).

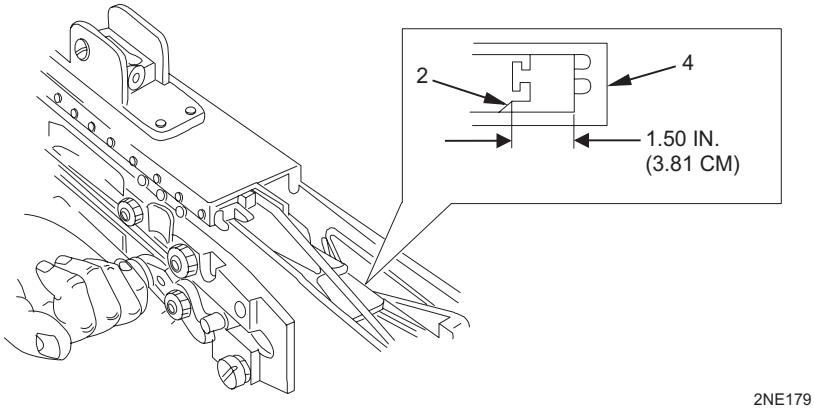


3. Raise cover (3).



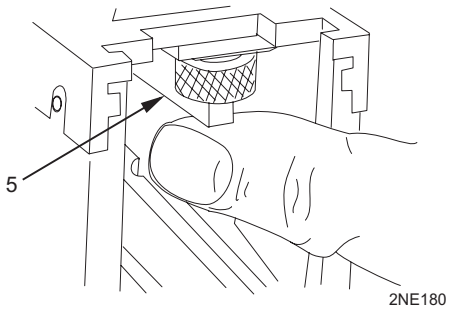
Trigger Lever - Bolt Clearance Check - Continued

4. Retract bolt assembly (2) rearward until face of bolt assembly is 1.50 in. (3.81 cm) from inside edge of barrel extension assembly (4).



5. Push up on trigger lever (5).

6. Trigger lever (5) should not drag on bolt group when trigger is depressed.



7. Check for looseness of barrel support.

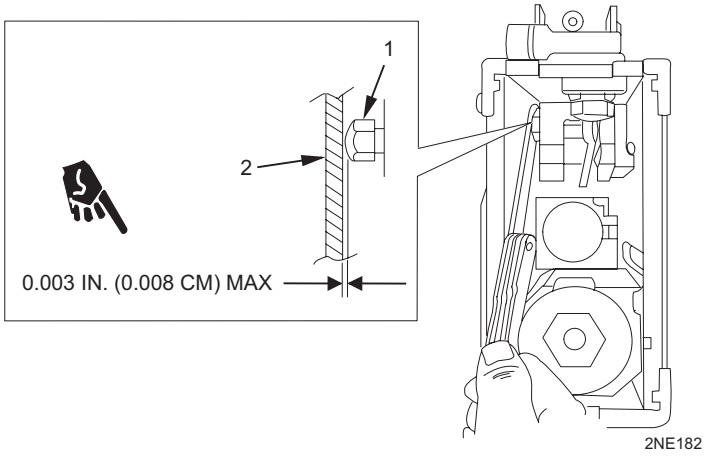
8. Check for cracks between holes.

Bolt Latch Assembly – Receiver Sideplate Clearance Check

NOTE

Check is not required when alternate bolt latch with flange is installed.

Check clearance between bolt latch assembly (1) and receiver sideplate (2). Clearance is 0.003 in. (0.008 cm) maximum. No binding allowed.



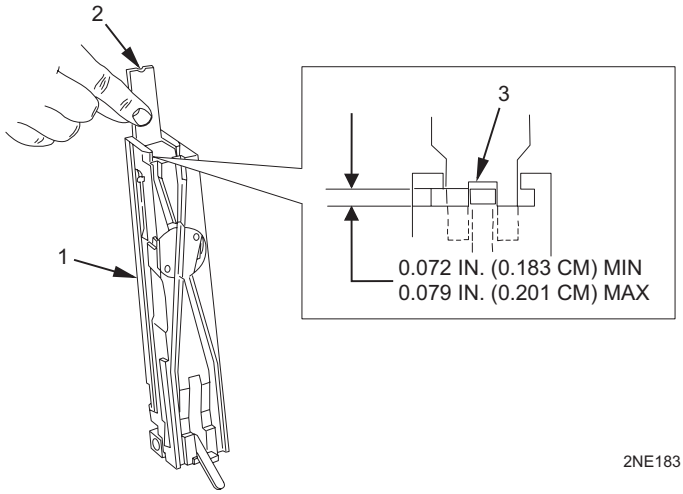
Firing Pin Protrusion Gage

1. Remove bolt assembly (WP 0013 00).

WARNING

Ensure cocking lever is in the rearward position.

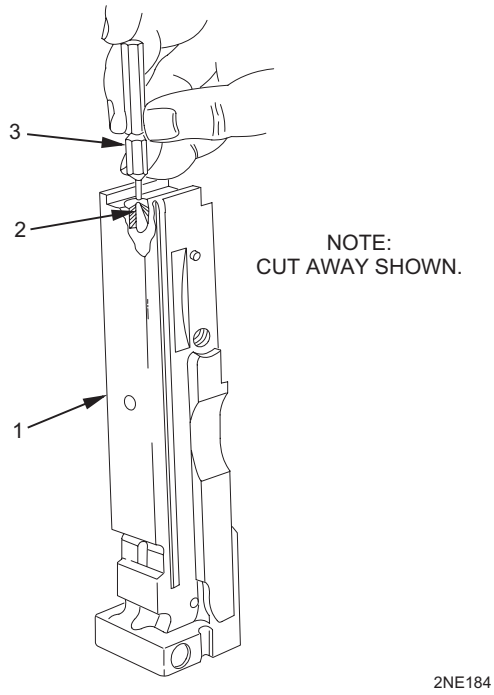
2. Check firing pin protrusion through face of fully assembled bolt assembly (1) by using firing pin protrusion gage (2). Release sear and allow firing pin (3) to extend through bolt face hole. Check that firing pin protrusion is within 0.079 inch (0.201 cm) maximum and 0.072 in. (0.183 cm) minimum from bolt assembly face.



Firing Pin Hole Check

1. Remove bolt assembly components from bolt (1) (TM 9-1005-213-10).

2. Check firing pin hole (2) in bolt using plug gage (3). Hole tolerance is 0.084 in. (0.213 cm) maximum. Plug gage entering firing pin hole all the way and elongation of firing pin hole (2) are causes for rejection.



3. Assemble components of bolt assembly (TM 9-1005-213-10).

4. Using firing pin protrusion gage, check firing pin protrusion.

   a. Remove bolt assembly (TM 9-1005-213-10).

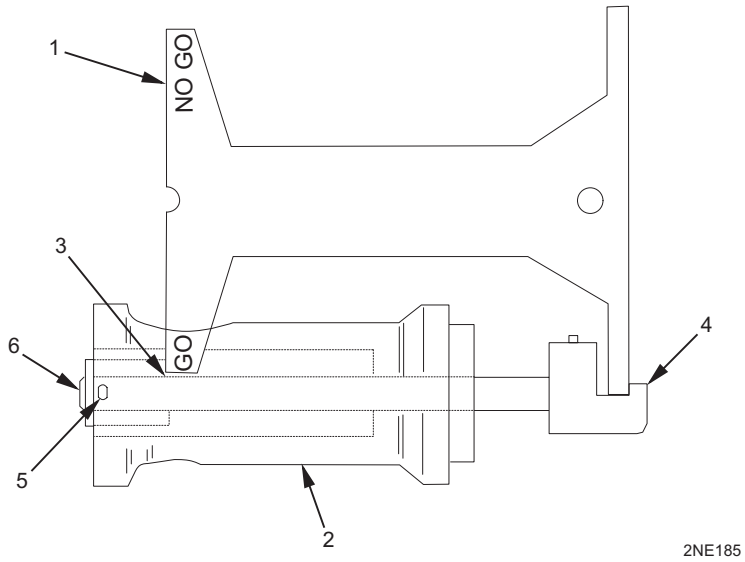
   b. Release sear and allow firing pin to extend through bolt face hole. Check that firing pin protrusion is within 0.072 in. (0.183 cm) minimum to 0.079 in. (0.201 cm) maximum from bolt face.

Buffer Rod Assembly Check

Remove buffer assembly, spring, and buffer guide from body assembly (WP 0026 00).

1. New style buffer assembly gaging:

   a. Using oil buffer rod gage (1), measure overall length of buffer assembly (2). Measurement of rear face of tube (3) to forward inside face of engaging notch (4) must be between 3.976 and 3.990 in. (10.099 and 10.134 cm).



   b. If out of adjustment, remove and discard cotter pin (5) from nut (6). Adjust nut in accordance with oil buffer rod gage (1).

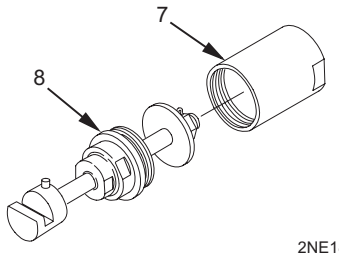
   c. Install a new cotter pin (5) into nut (6).

   d. Refer to WP 0026 00 for reassembly of buffer assembly, buffer guide, and spring.

2. Old style buffer assembly gaging:

   a. Remove buffer assembly, spring, and buffer guide from body assembly (WP 0026 00).

   b. Remove oil buffer tube (7) from buffer assembly (8).

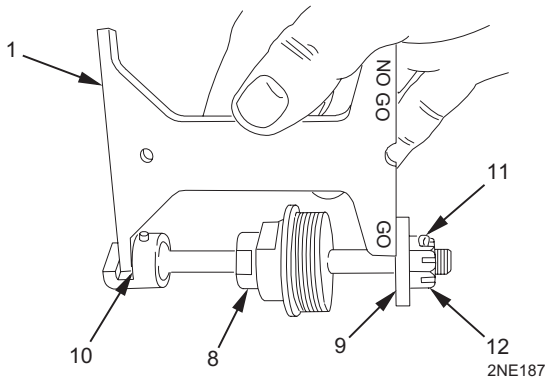


   c. Using oil buffer rod gage (1), measure overall length of buffer assembly (8). Measurement of rear face of tube (9) to forward inside face of engaging notch (10) must be between 3.976 and 3.990 in. (10.099 and 10.134 cm).

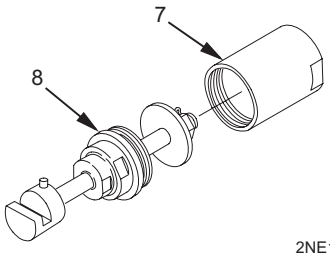
Buffer Rod Assembly Check - Continued

d. If out of adjustment, remove and discard cotter pin (11) from nut (12). Adjust nut in accordance with oil buffer rod gage (1).

e. Install a new cotter pin (11) into nut (12).



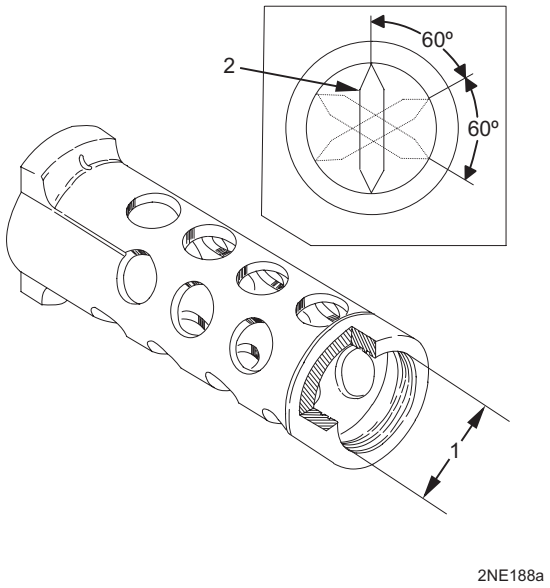
f. Install oil buffer tube (7) onto buffer assembly (8).



g. Refer to WP 0026 00 for reassembly of buffer assembly, buffer guide, and spring.

Barrel Support and Machine Thread Bushing Check

1. Check the diameter of the barrel bearing surface (1) using barrel support plug (2) (PN 7799775). The gage should be inserted into the support approximately the depth of the threaded area. Gage the diameter in three positions, 60° apart. Maximum allowable diameter is 2.330 in. (5.918 cm). If the gage can be inserted into the barrel support for the depth of the thread area, replacement of the barrel support is necessary.

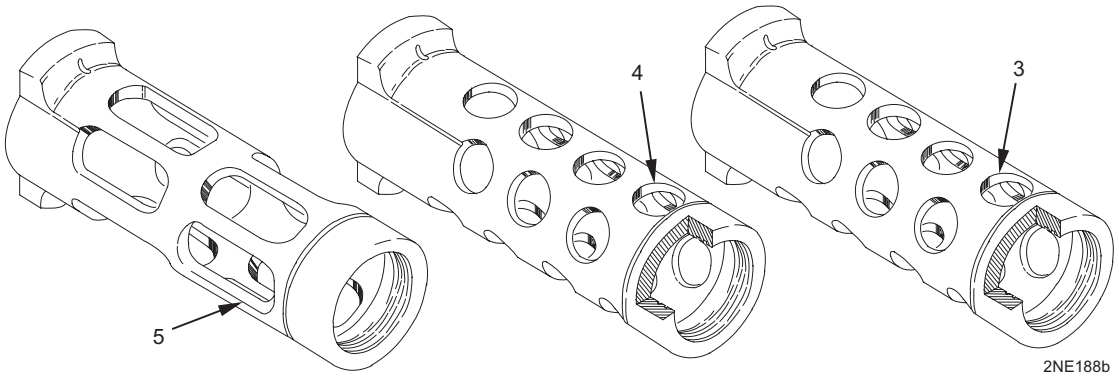


2NE188a

NOTE

Barrel supports that have the three cooling holes closest to the muzzle end of the machine gun smaller than 1.1775 in. (2.9901 cm) in diameter are preferred.

2. Cooling holes are at the muzzle end of the barrel support and are used when either the M3 amplifier or the blank firing attachment (BFA) are installed on the weapon. The cooling hole size on the proper barrel support (3) is smaller than 1.1775 inches and can support both the M3 amplifier and the BFA. Cooling holes larger than 1.1775 inches on the barrel support (4) will support the BFA but will not support the attachment of the M3 amplifier. Rectangular cooling holes (5) cannot be used with the BFA or M3 amplifier.

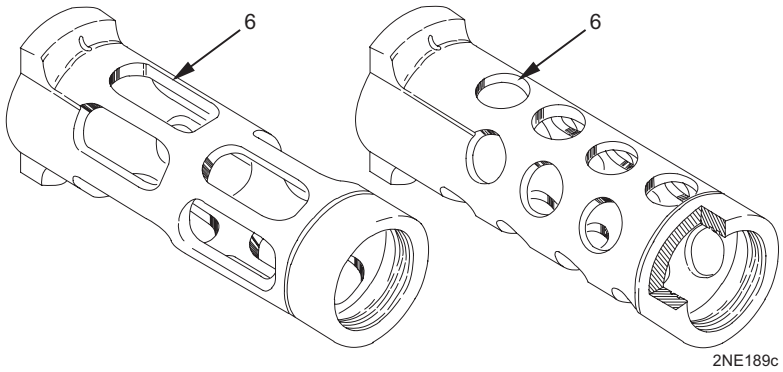


2NE188b

Not Authorized for BFA/M3 Amplifier | BFA Only | BFA/M3 Amplifier

Barrel Support and Machine Thread Bushing Check - Continued

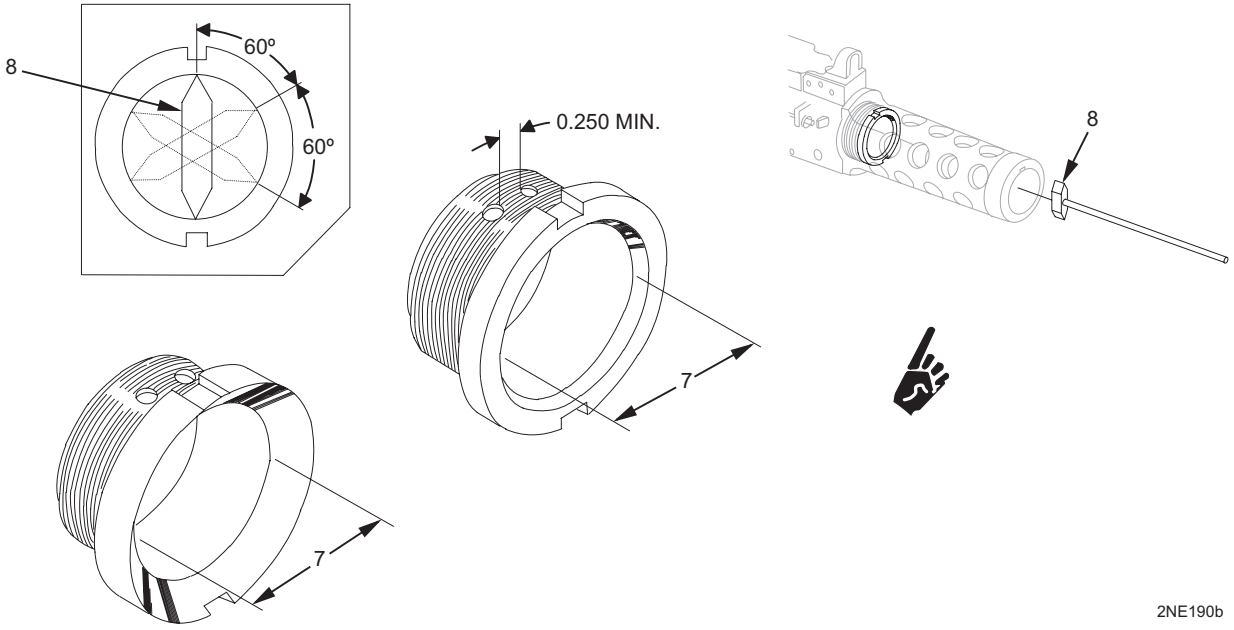
3. Check cooling holes (6) for cracks. Cracks up to 0.0250 in. (0.635 mm) (maximum) in length are permitted at holes. No more than four cracks allowed per support. No more than two cracks allowed in succession in any direction. Original surface imperfections are permitted.



NOTE

By attaching a cleaning rod to the bushing plug gage, removal of the barrel support is not required to gage the barrel support bushing.

4. Check the diameter of the machine thread bushing (7) using threaded brass bushing plug gage (8) (PN 7799808). Gage the diameter in three positions, 60º apart. Cause for rejection will be when gage penetrates 1/2 its width, in two or more places. Penetration at only one of the three points is not cause for rejection.



NOTE

Additional set-screw holes are acceptable. A minimum of 0.250 in. (6.35 mm) of solid material shall be between any two holes.

5. Check threads of machine thread bushing (7) for cracks and deformity.

END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL FLEXIBLE, W/E (1005-00-322-9715) FIXED M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN DISASSEMBLY, INSPECT/REPAIR, ASSEMBLY

INITIAL SETUP:

Tools and Special Tools
- Bolt latch spring tool assembly (item 12, WP 0056 00)
- Field maintenance small arms shop set (item 6, WP 0042 00)
- Spanner wrench (item 12, WP 0042 00)

Materials/Parts
- Cotter pin (2) (item 9, WP0051 00)
- Cotter pin (item 48, WP 0044 00)
- Cotter pin (item 37, WP 0044 00)
- Nonelectrical wire (2) (item 3, WP 0052 00)
- Nonelectrical wire (2) (item 11, WP 0044 00)

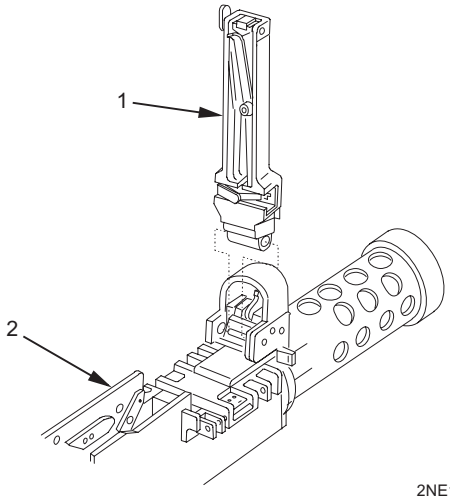
Personnel Required
- Two

References
- WP 0013 00
- WP 0022 00
- WP 0024 00
- WP 0025 00
- WP 0026 00
- WP 0027 00
- WP 0028 00
- WP 0029 00
- WP 0030 00
- WP 0031 00
- WP 0032 00
- WP 0033 00
- WP 0034 00

Equipment Conditions
- M2 machine gun partially disassembled (WP 0013 00)

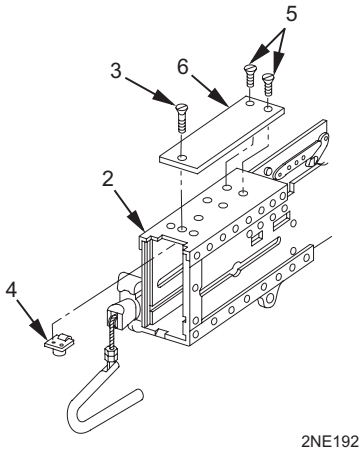
DISASSEMBLY

1. Refer to WP 0027 00 for removal of cover assembly (1) from receiver (2).



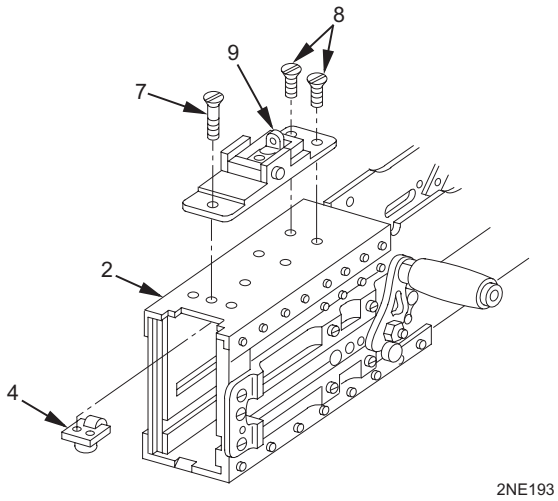
2. Remove externally relieved screw (3) and remove adjustable trigger lever stop assembly (4) from inside receiver (2) (fixed M48 only).

3. Remove two machine screws (5) and cover plate (6) from top of receiver (2) (fixed M48 only).

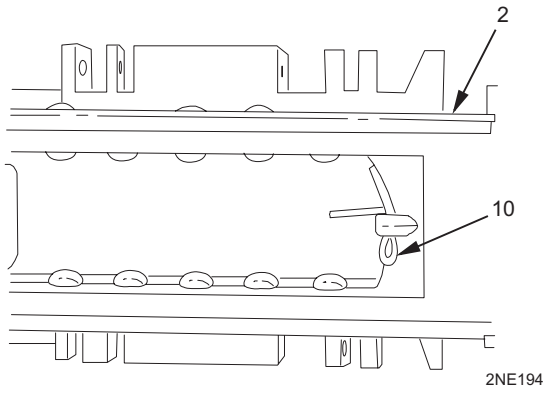


4. Remove externally relieved screw (7) and remove adjustable trigger lever stop assembly (4) from inside receiver (2) (Flex only).

5. Remove two machine screws (8) and rear sight assembly (9) from top of receiver (2) (Flex only).



6. If damaged, remove cotter pin (10) from lock located at front of receiver (2).



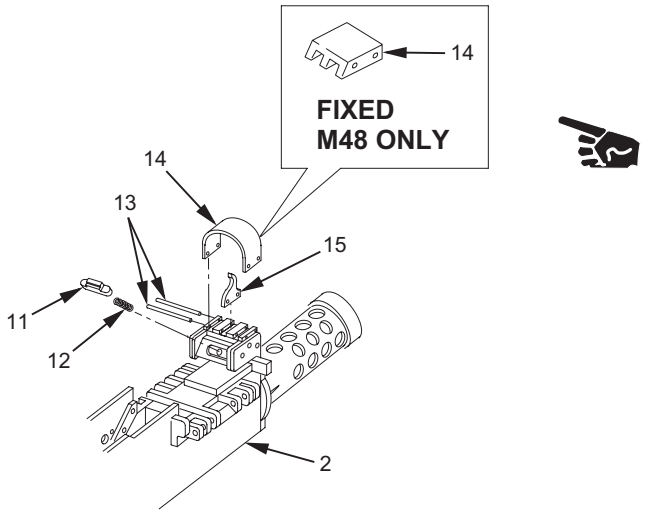
DISASSEMBLY - Continued

WARNING

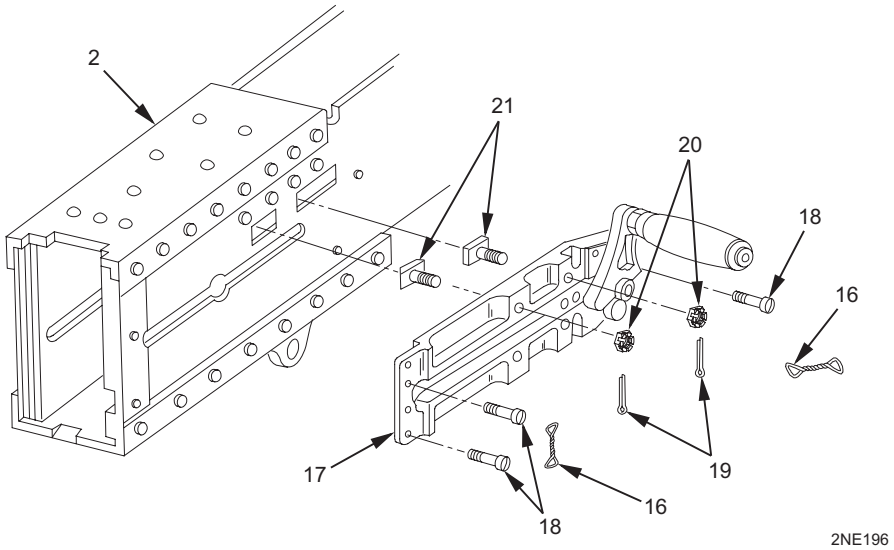
To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

7. Remove cover detent pawl (11) and helical compression spring (12) from receiver (2).

8. Remove two headed straight pins (13), gunsight cover (14), and front sight (Flex only) (15) from receiver (2).

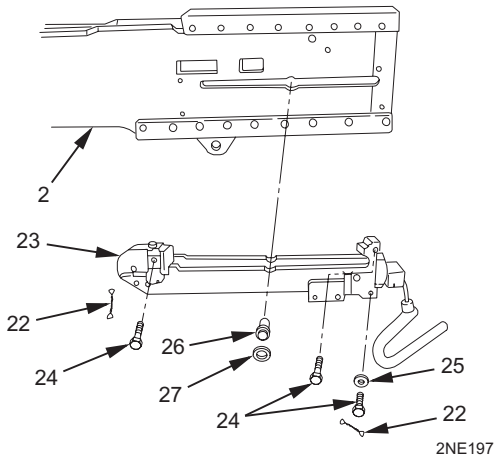


9. Remove two sets of safety wires (16) from mounting hardware for retracting slide assembly (17). Remove three machine screws (18), two cotter pins (19), and two slotted plain nuts (20). Discard cotter pins; retrieve two tee-head shoulder bolts (21) that fell into the receiver (2). Remove retracting slide assembly from receiver (Flex only). Discard safety wires.

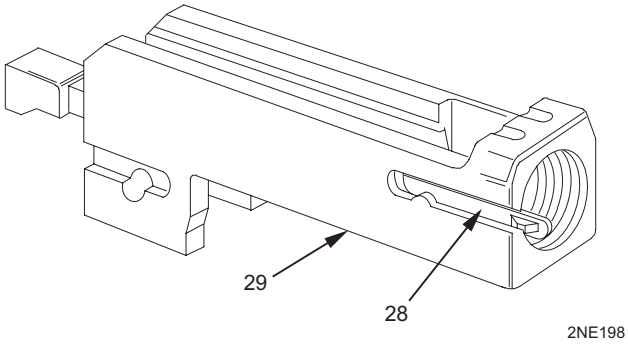


10. Remove two sets of safety wires (22) from mounting hardware for M10 charger (23). Remove three machine screws (24), flat washer (25), and M10 charger (23) from receiver (2) (Fixed M48 only). Discard safety wires.

11. Remove bolt charger stud assembly (26) from receiver (2). If damaged or worn, remove and discard retaining ring (27) (Fixed M48 only).

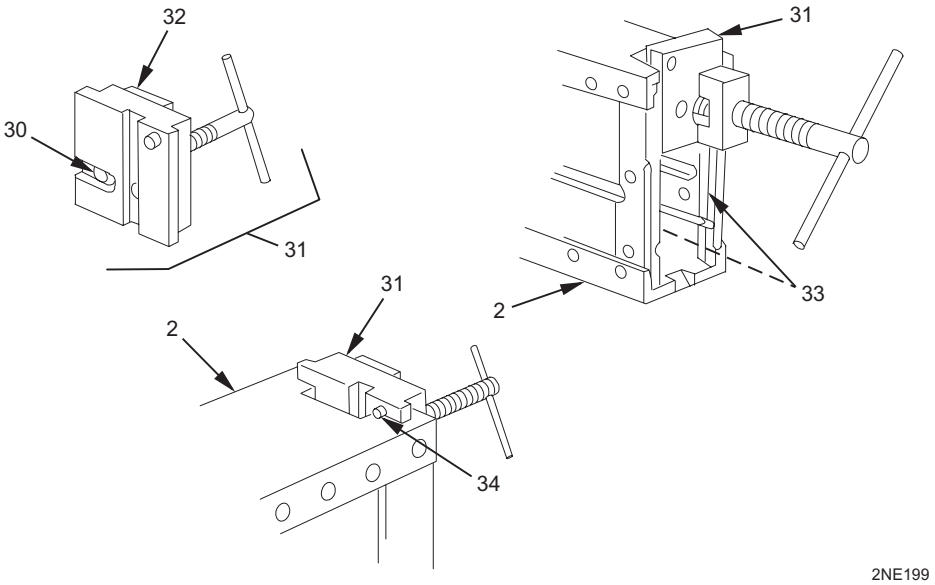


12. If damaged, remove barrel locking spring (28) from barrel extension assembly (29).



DISASSEMBLY - Continued

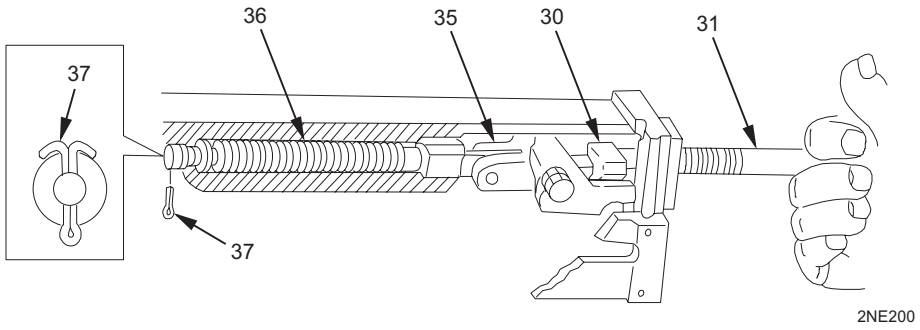
13. Ensure operating head (30) of bolt latch spring tool assembly (31) is screwed counterclockwise into bracket (32) before sliding into backplate grooves (33) on receiver (2). Slide bolt latch spring tool assembly into receiver until stop (34) is in contact with top of receiver (Flex only).



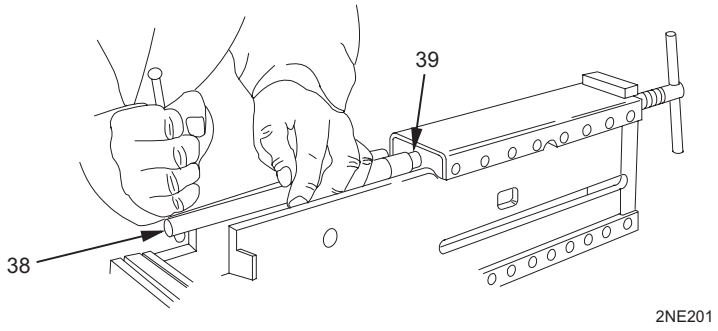
WARNING

Carefully remove bolt latch assembly; the spring is under heavy compression and could cause injury if released accidentally.

14. Turn bolt latch spring tool assembly (31) clockwise until operating head (30) contacts bolt latch assembly (35) and compresses helical compression spring (36). Remove and discard cotter pin (37) from bolt latch assembly (Flex only).



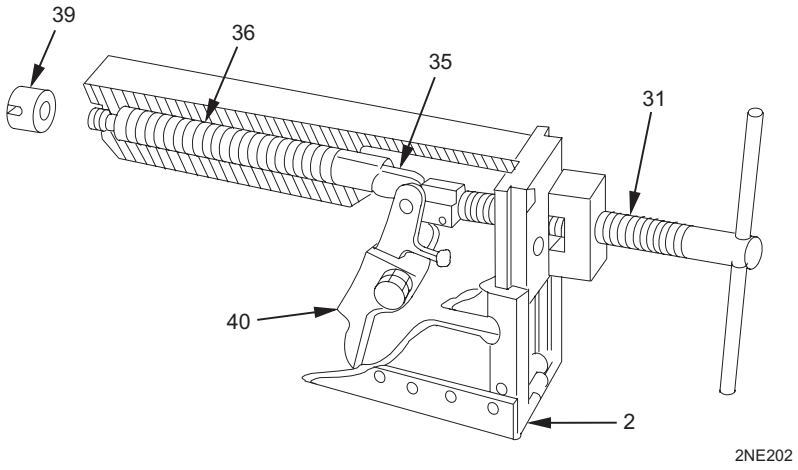
15. Install spanner wrench (38) on plain round nut (39). Turn spanner wrench counterclockwise and remove plain round nut (Flex only).



16. Install plain round nut (39) back on bolt latch assembly (35) and screw plain round nut two turns onto bolt latch assembly threads (Flex only).

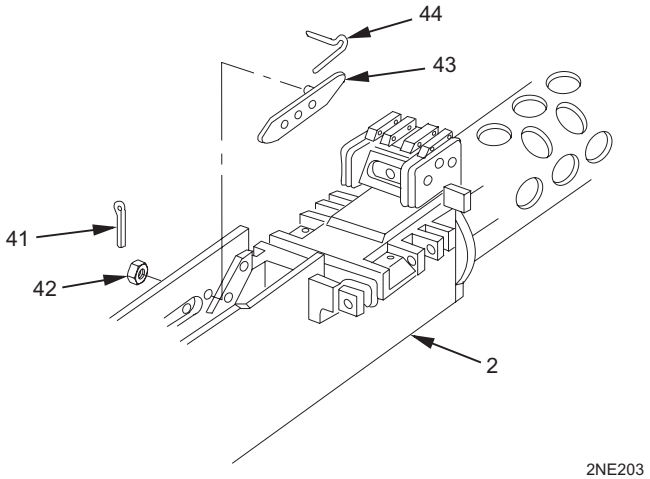
17. Unscrew bolt latch spring tool assembly (31) counterclockwise until manual control lever (40) drops down. Screw bolt latch spring tool assembly clockwise and compress helical compression spring (36) until plain round nut (39) can be removed from bolt latch assembly (35) (Flex only).

18. Remove plain round nut (39). Unscrew bolt latch spring tool assembly (31) counterclockwise and remove from receiver (2). Remove bolt latch assembly (35) (Flex only).



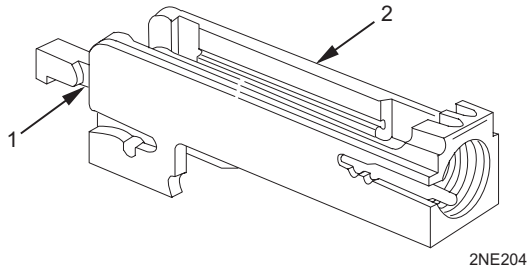
DISASSEMBLY - Continued

19. Remove cotter pin (41), plain slotted nut (42), extractor switch (43), and extractor switch tension spring (44) from receiver (2). Discard cotter pin.

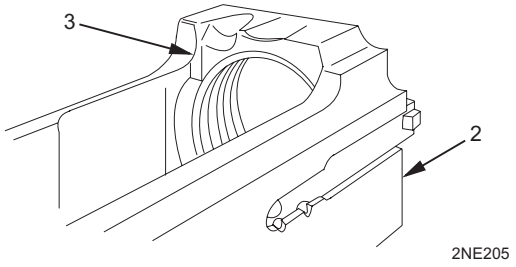


INSPECT/REPAIR

1. Check shaft (1) on barrel extension assembly (2) for any movement. Check for broken or chipped edges. Replace barrel extension assembly if any movement is present or if edges are broken or chipped.



2. Check upper left hand corner (3) of barrel extension assembly (2) for any broken or sharp edges. Stone area and edges smooth. Screw barrel completely into barrel extension assembly. Replace barrel extension assembly if barrel cannot be screwed completely into the barrel extension assembly. Inspect barrel locking threads for cracks, chips, and deformation of threads.



NOTE

All locations taken from gunner's perspective.

3. Chipped or cracked metal on the first (partial) thread (bolt side) may be removed by hand stoning provided the chip or crack does not visibly extend beyond the root of the thread.

4. Chipped or cracked metal on the last (partial) thread (barrel side) may be removed by hand stoning provided the chip or crack does not visibly extend beyond the root of the thread.

5. The remaining full threads in the barrel extension shall exhibit not more than one chip or crack total. The single chip or crack permitted shall not exceed 1/2 linear inch in length and shall not visibly extend into the barrel extension beyond the root of the thread. Such chips or cracks shall be smoothed/repaired by hand stoning. The repaired surface shall not exceed 1/2 linear inch in length.

6. Chips or cracks not in accordance with the above or not in accordance with the applicable Technical Manual shall be cause for rejection.

7. Check for missing, damaged, or worn parts.

8. Backplate assembly is a reparable assembly (WP 0022 00 and WP 0024 00).

9. Bolt assembly is a reparable assembly (WP 0025 00).

10. Barrel buffer assembly is a reparable assembly (WP 0026 00).

11. Cover assembly is a reparable assembly (WP 0027 00).

12. Retracting slide assembly is a reparable assembly (WP 0028 00).

13. M10 manual charger is a reparable assembly (WP 0029 00).

14. Rear sight assembly is a reparable assembly (WP 0030 00).

15. Trigger lever stop assembly is a reparable assembly (WP 0031 00).

16. Bolt latch assembly is a reparable assembly (WP 0032 00).

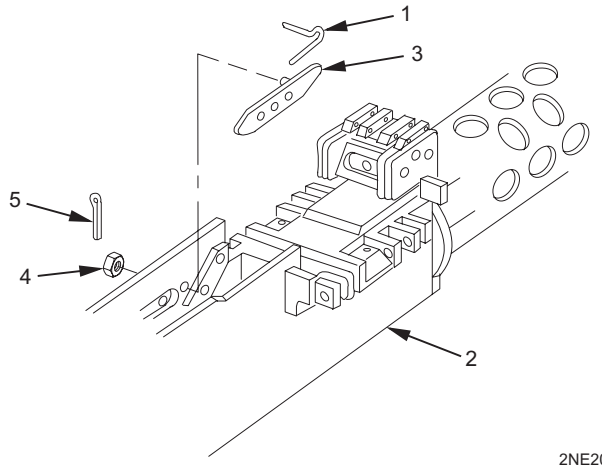
17. Rear cartridge stop assembly is a reparable assembly (WP 0033 00).

18. Cartridge receiver is a reparable assembly (WP 0034 00).

19. Repair is by replacement of authorized parts.

ASSEMBLY

1. Install extractor switch tension spring (1) in recess inside receiver (2). Install extractor switch (3) through receiver and secure with plain slotted nut (4). Install new cotter pin (5).

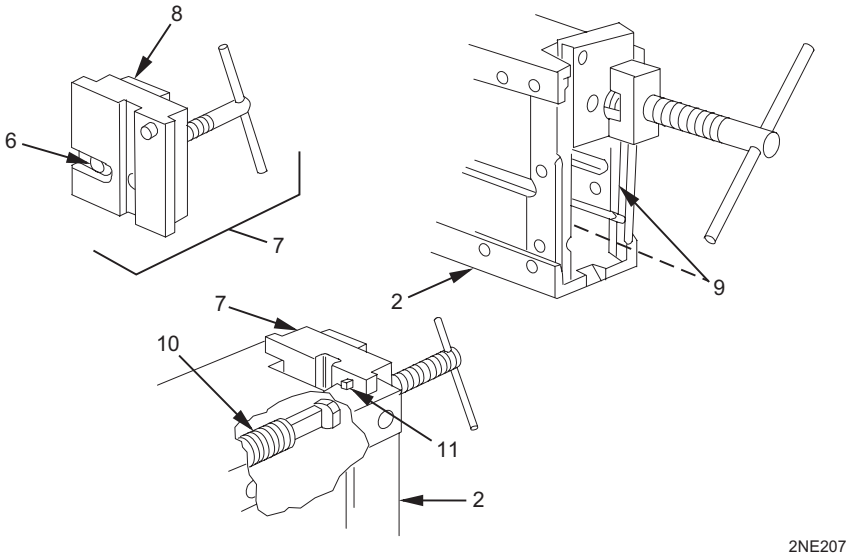


WARNING

Carefully install bolt latch assembly in receiver assembly. The spring is under heavy compression and could cause injury if released accidentally.

2. Ensure operating head (6) of bolt latch spring tool assembly (7) is screwed counterclockwise into bracket (8) before sliding it into backplate grooves (9) in receiver (2) (Flex only).

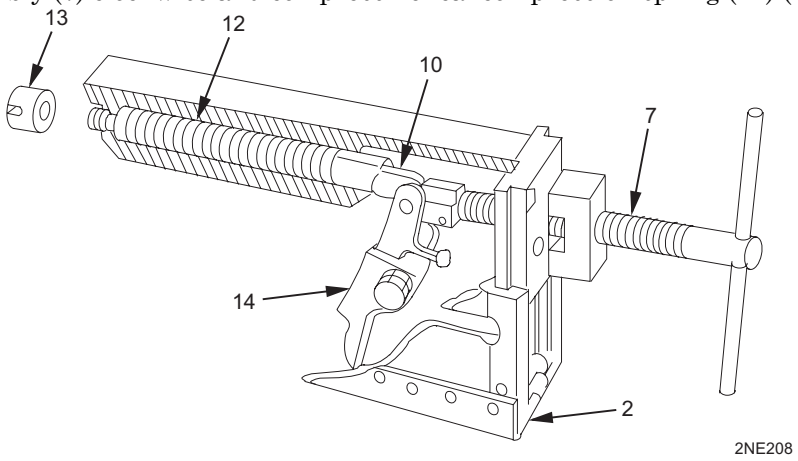
3. Install bolt latch assembly (10) in receiver (2). Slide bolt latch spring tool assembly (7) into backplate grooves (9) until stop (11) contacts top of receiver. (Flex only).



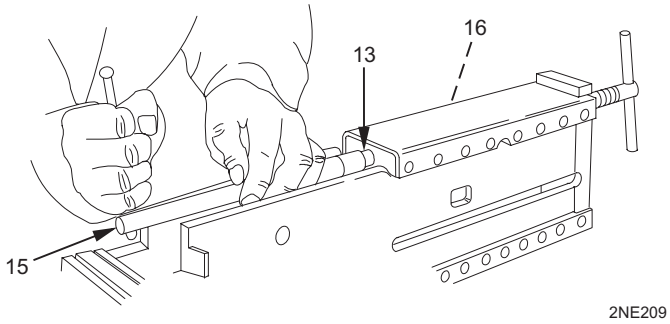
4. Screw in bolt latch spring tool assembly (7) clockwise, compressing helical compression spring (12) so that plain round nut (13) can be installed on bolt latch assembly (10). Screw plain round nut two turns on to bolt latch assembly threads (Flex only).

5. Unscrew bolt latch spring tool assembly (7) counterclockwise. Ensure bolt latch assembly (10) is held on by plain round nut (13) (Flex only).

6. Lift up on manual control lever (14) until it is level with top of receiver (2). Screw in on bolt latch spring tool assembly (7) clockwise and compress helical compression spring (12) (Flex only).

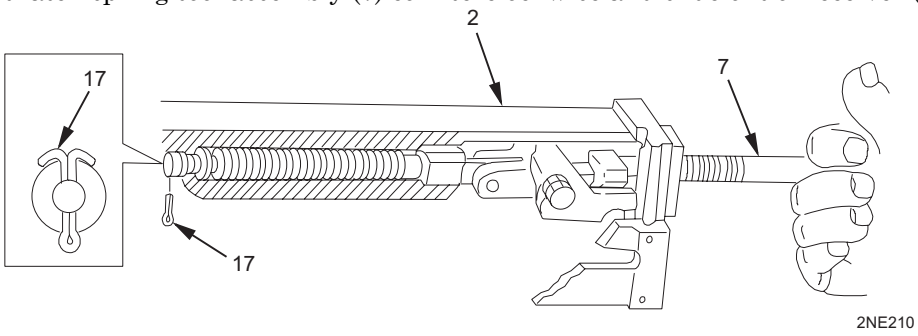


7. Tighten plain round nut (13) with spanner wrench (15). Line up slot in plain round nut with hole in bolt latch assembly eccentric pin (16) (Flex only).



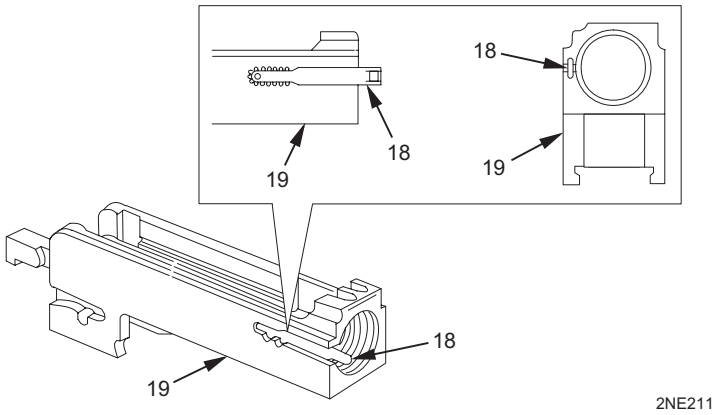
8. Install new cotter pin (17) and spread ends to secure. Ensure cotter pin is installed from the bottom, as shown (Flex only).

9. Unscrew bolt latch spring tool assembly (7) counterclockwise and slide out of receiver (2) (Flex only).

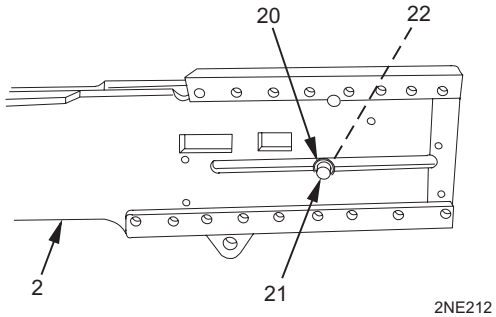


ASSEMBLY - Continued

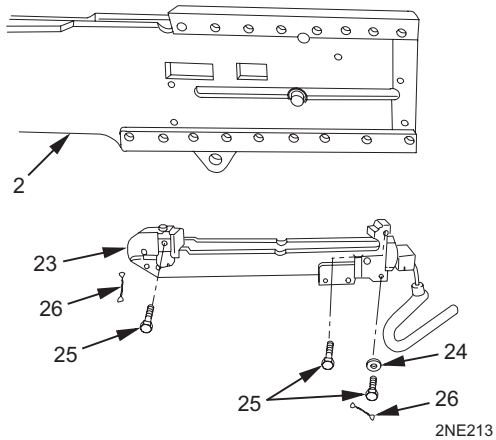
10. If removed, install new barrel locking spring (18) in barrel extension assembly (19) until it reaches the end of its grooves. Swage barrel extension assembly into notch of spring in one place only. Barrel extension is acceptable with up to 4 swages per side. **Swaging that does not damage, prevent assembly, or impair normal operation is acceptable.**



11. If removed, install new retaining ring (20). Install bolt charger stud assembly (21) in receiver (2) through bolt stud assembly hole (22) (Fixed M48 only).



12. Install M10 manual charger (23) on left side of receiver (2) and secure with flat washer (24) and three machine screws (25). Using nonelectrical wire (item 3, WP 0052 00), install two sets of new safety wires (26) to M10 manual charger mounting hardware (Fixed M48 only).

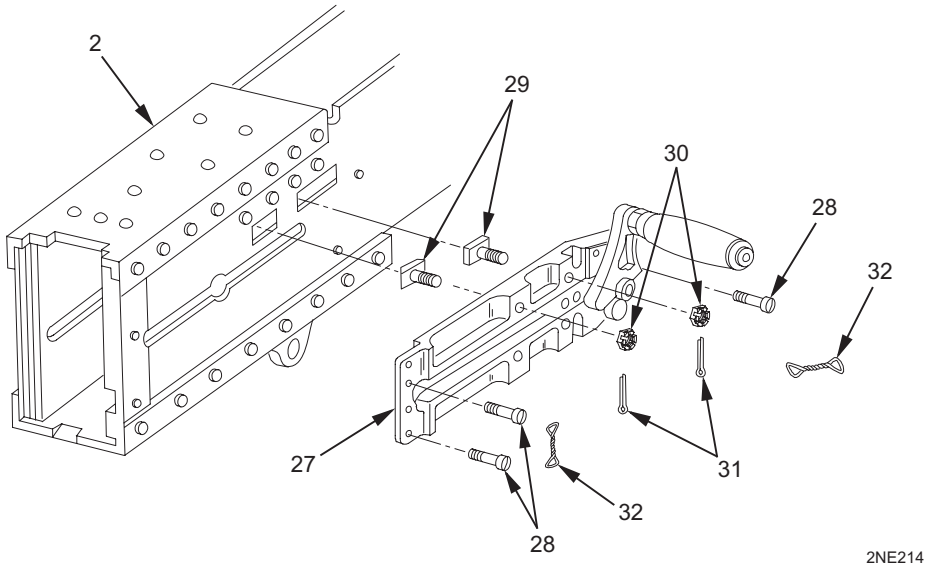


CAUTION

Reduce length of bottom rear screw (with file or stone) as required to avoid interference with functioning of weapon. Screw should not protrude into sideplate slot.

13. Install retracting slide assembly (27) into receiver (2) and secure with three machine screws (28). From inside receiver, install two tee-head shoulder bolts (29). Ensure that beveled edges of tee-head shoulder bolts face out in opposite directions. Tighten two slotted plain nuts (30) and install two new cotter pins (31) (Flex only).

14. Using nonelectrical wire (item 11, WP 0044 00), install two new safety wires (32) to mounting hardware (Flex only).



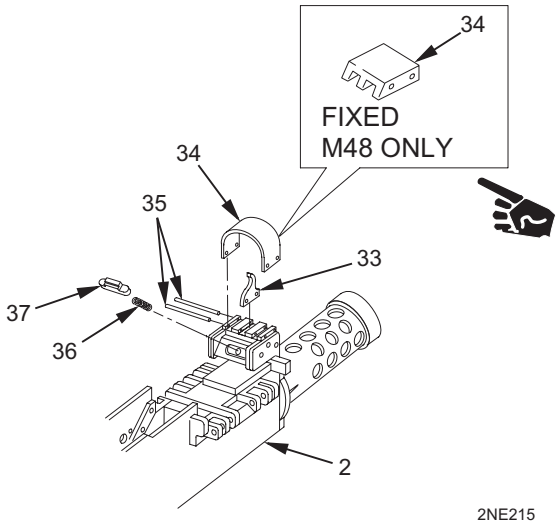
ASSEMBLY - Continued

15. Install front sight (Flex only) (33) and gunsight cover (34) to receiver (2) and secure with two straight headed pins (35).

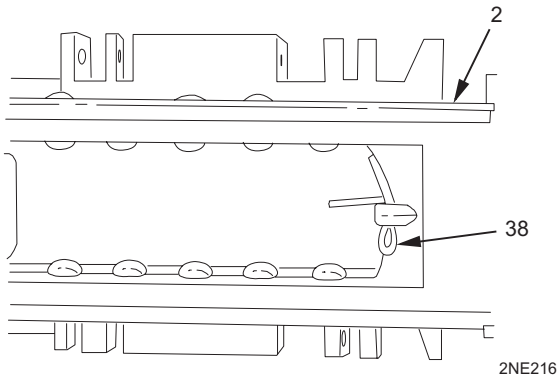
WARNING

To avoid injury to your eyes, use care when removing or installing spring-loaded parts.

16. Install helical compression spring (36) and cover detent pawl (37) on receiver (2).

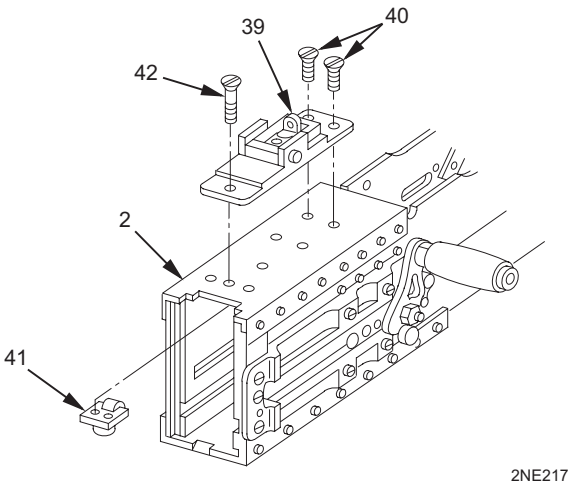


17. If removed, install new cotter pin (38) in lock located at front of receiver (2).



18. Install rear sight assembly (39) on top of receiver (2) and secure front end with two machine screws (40) (Flex only).

19. Install adjustable trigger lever stop assembly (41) inside receiver (2) and align locating holes in receiver and rear sight assembly (39). Install externally relieved screw (42) to secure rear sight assembly and adjustable trigger lever stop assembly to receiver (Flex only).

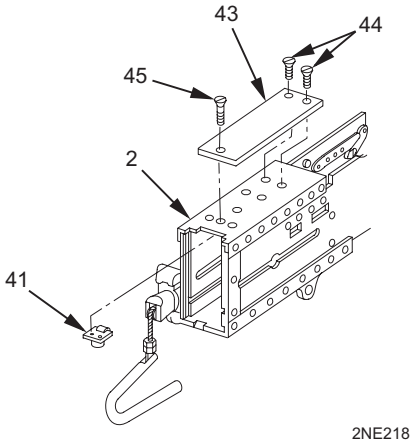


20. Stake two machine screws (40) and externally relieved screw (42) (Flex only).

21. Install cover plate (43) on top of receiver (2) and secure front end with two machine screws (44) (Fixed M48 only).

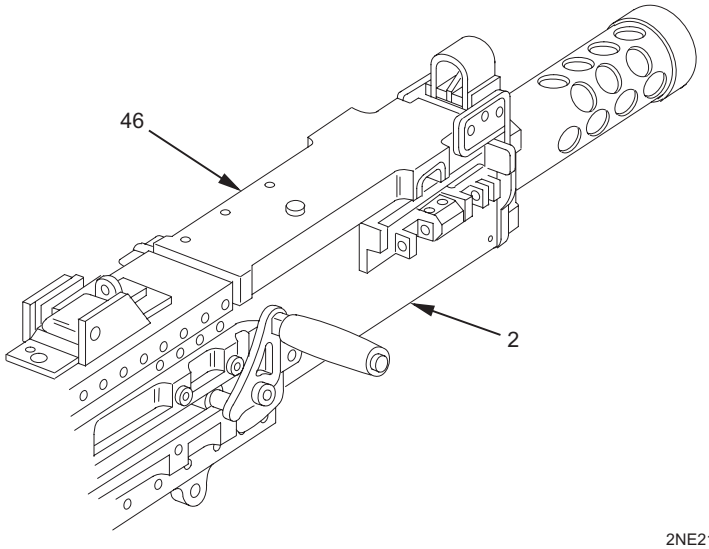
22. Install adjustable trigger lever stop assembly (41) inside receiver (2) and align locating holes in receiver and cover plate (43). Install externally relieved screw (45) to secure cover plate and adjustable trigger lever stop assembly to receiver (Fixed M48 only).

23. Stake two machine screws (44) and externally relieved screw (45) (Fixed M48 only).



ASSEMBLY - Continued

24. Install cover assembly (46) on receiver (2) (WP 0027 00) and latch front to secure.



25. Complete reassembly of weapon (WP 0013 00).

26. Function test weapon (WP 0013 00).

END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL FLEXIBLE, W/E (1005-00-322-9715) FIXED M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN - BACK PLATE ASSEMBLY, SPADE GRIP WITH TRIGGER BLOCK, AND BACK PLATE ASSEMBLY WITHOUT LATCH DISASSEMBLY, INSPECT/REPAIR, ASSEMBLY

This work package applies only to the flexible type.

INITIAL SETUP:

Tools and Special Tools
Field maintenance small arms shop set (item 6, WP 0042 00)

Materials/Parts
Headed straight pin (4) (item 8, WP 0045 00)
Lock pin (4) (item 9, WP 0045 00)
Nonelectrical wire (2) (item 28, WP 0045 00)
Woodruff key (item 15, WP 0046 00)

References
TM 9-1005-213-10, AF TO 11W2-6-3-161
WP 0013 00
WP 0020 00

Equipment Conditions
Backplate assembly removed (WP 0013 00)

DISASSEMBLY

WARNING

To avoid injury to your eyes, use care when removing or installing spring-loaded parts. Ensure drive spring rod is removed from receiver.

CAUTION

Do not clean solid plain disks with oil or solvent; check for wetness or swelling due to solvents, oil, or water. Use oily cloth on exterior surfaces to prevent corrosion.

DISASSEMBLY – Continued

1. Remove machine thread plug (1) from backplate (2). Remove headless shoulder pin (3) and helical compression spring (4) from machine thread plug.

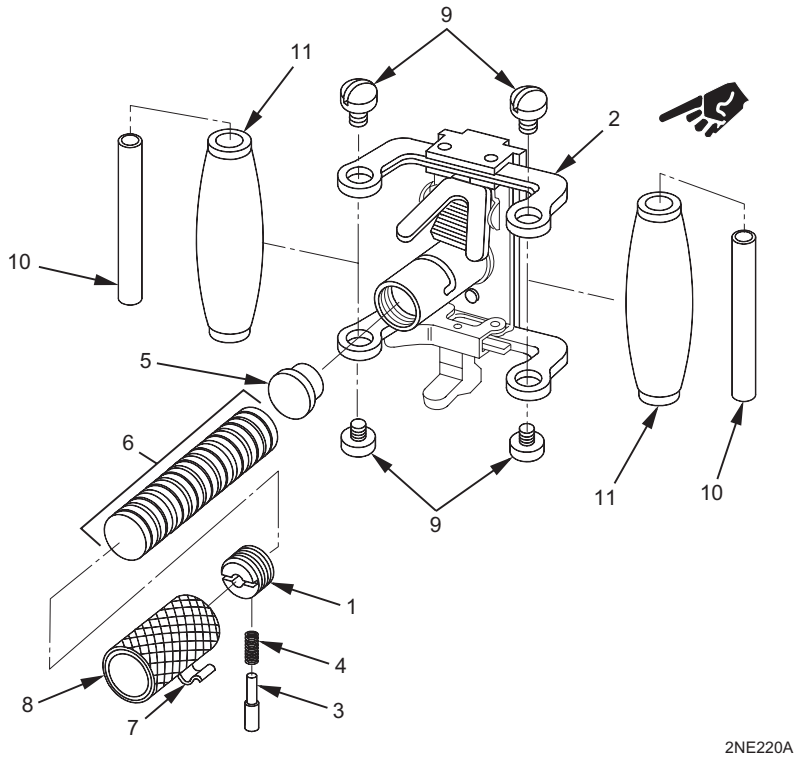
NOTE

There are approximately 22 solid plain disks.

2. Push out recoil mechanism buffer (5); remove solid plain disks (6) and recoil mechanism buffer. If solid plain disks are deformed, wet, or swollen, discard and replace.

3. Lift up on bolt latch release lock (7) and pull buffer tube (8) from backplate (2).

4. Remove four machine screws (9), two handle grip tubes (10), and two machine gun handle grips (11).

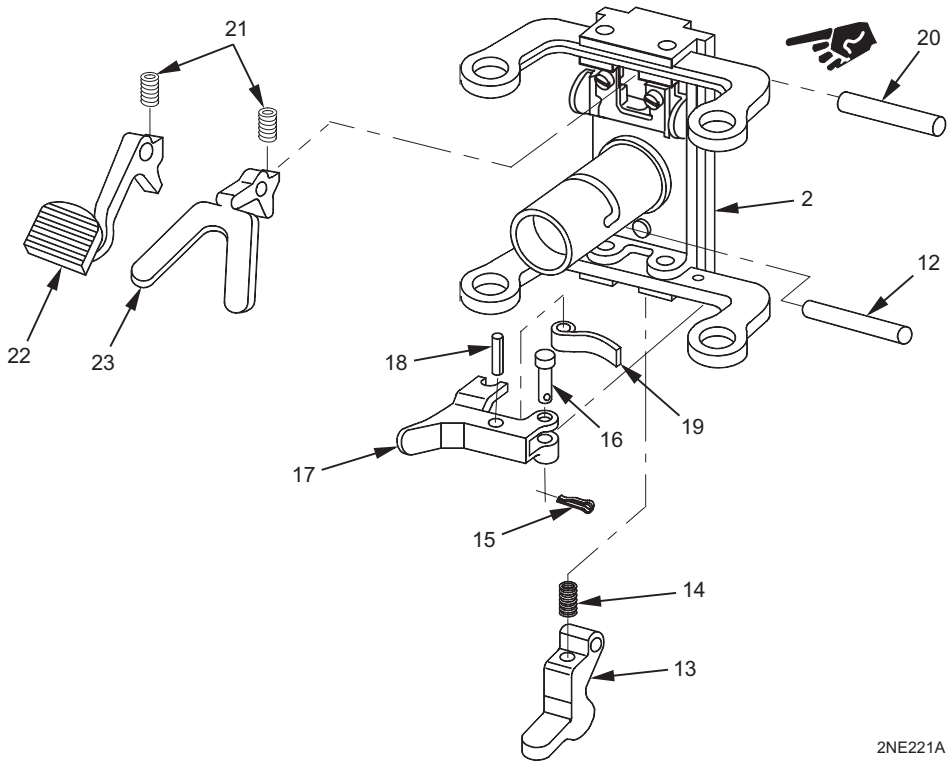


5. Remove headless straight pin (12), backplate latch (13), and helical compression spring (14).

6. Remove lock pin (15), straight headed pin (16), and backplate latch lock (17).

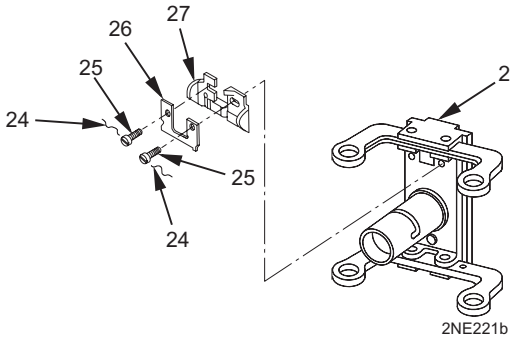
7. Remove and discard woodruff key (18). Remove flat spring (19) from backplate latch lock (17).

8. Remove headless straight pin (20), two helical compression springs (21), bolt latch release (22), and trigger (23) from backplate (2).



9. Remove and discard two lockwires (24) securing two shoulder screws (25).

10. Remove two shoulder screws (25), flat spring (26), and trigger block (27) from backplate (2).

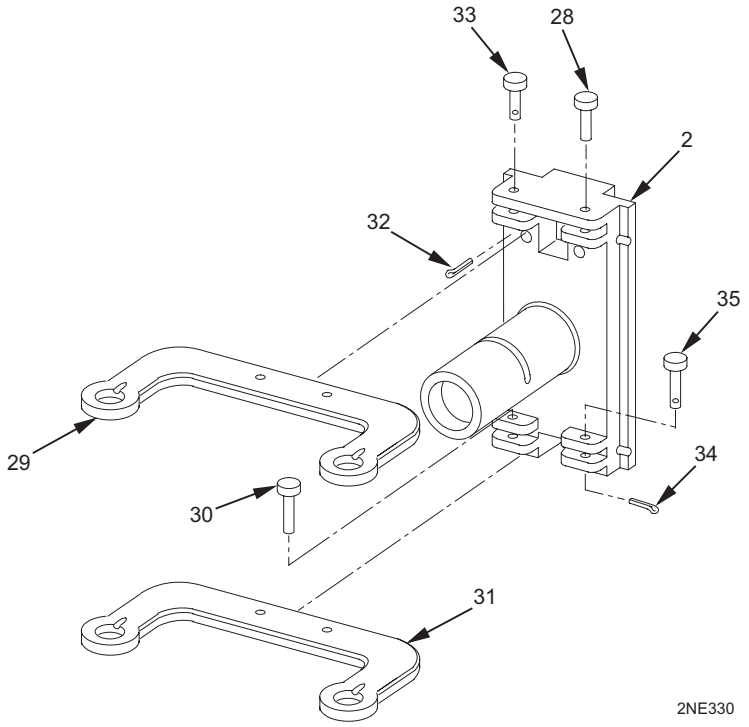


DISASSEMBLY – Continued

NOTE

Steps 11 and 12 are for riveted backplates only. Rivets will be replaced by headed pins and lock pins at assembly.

11. Remove two solid rivets (28) and frame (29) from backplate (2). Discard solid rivets.
12. Remove two solid rivets (30) and frame (31) from backplate (2). Discard solid rivets.
13. Remove two lock pins (32), two headed straight pins (33), and frame (29) from backplate (2).
14. Remove two lock pins (34), two headed straight pins (35), and frame (31) from backplate (2).



INSPECT/REPAIR

1. Check for out-of-round holes.
2. Check for collapsed springs and missing, damaged, or worn parts.
3. Repair is by replacement of authorized parts.
4. Backplate is a reparable assembly.

CAUTION

If solid plain disks are deformed, wet, or swollen, check receiver backplate slot for cracks or damage.

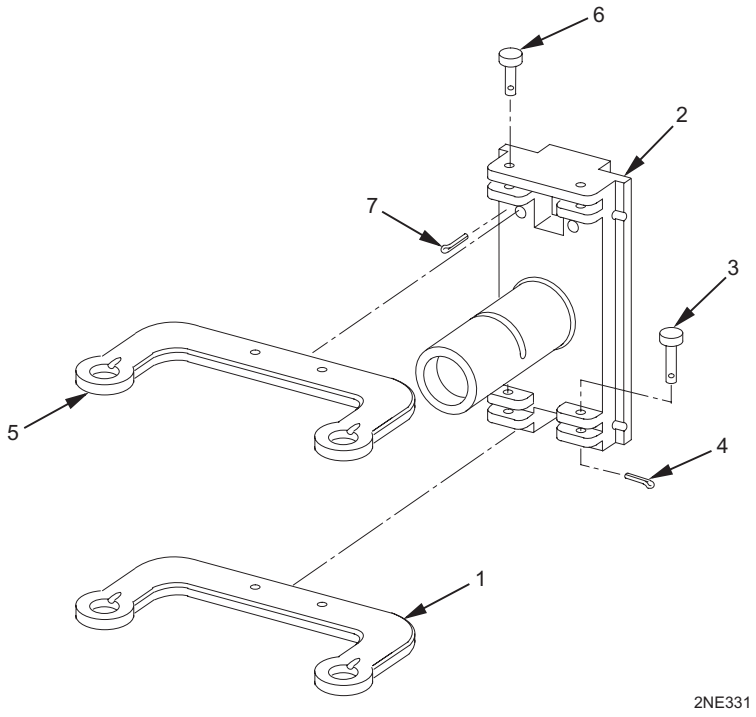
5. Inspect solid plain disks for contamination by fluids (e.g., oil, solvent, or water), cracks, deformation, or collapsed disks.

6. Replace all contaminated solid plain disks.

ASSEMBLY

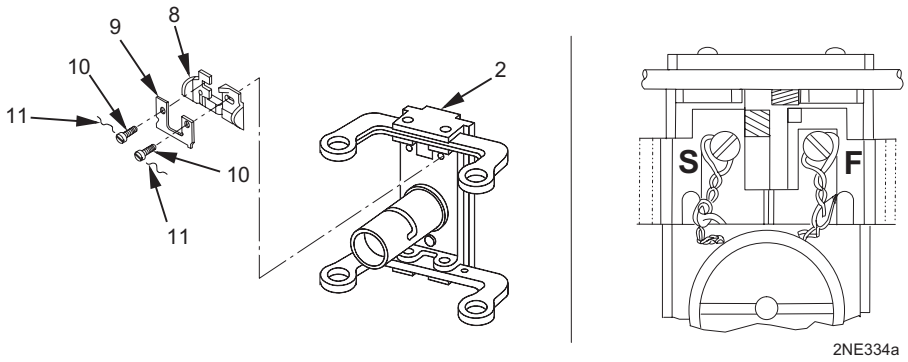
1. Position frame (1) in backplate (2) and secure with two new headed straight pins (3) and two new lock pins (4).

2. Position frame (5) in backplate (2) and secure with two new headed straight pins (6) and two new lock pins (7).



ASSEMBLY - CONTINUED

3. Secure backplate (2) in a suitable vise taking care not to damage any surfaces and place trigger block (8) against backplate.



4. Place flat spring (9) against trigger block (8) aligning holes and slots and insert two shoulder screws (10) through holes and into backplate (2).

5. Tighten two shoulder screws (10), ensuring that trigger block (8) slides easily back and forth while locking positively in both FIRE and SAFE positions. It may be necessary to back off the shoulder screws slightly to allow smooth operation.

6. Install new lockwires (11) (item 28, WP 0045 00) through two shoulder screws (10) as shown. Refer to WP 0020 00. Ensure ends of lockwires will not injure the operator.

WARNING

To avoid injury to your eyes, use care when removing or installing spring-loaded parts.

NOTE

Ensure helical compression springs are in recesses of bolt latch release, backplate latch, and trigger.

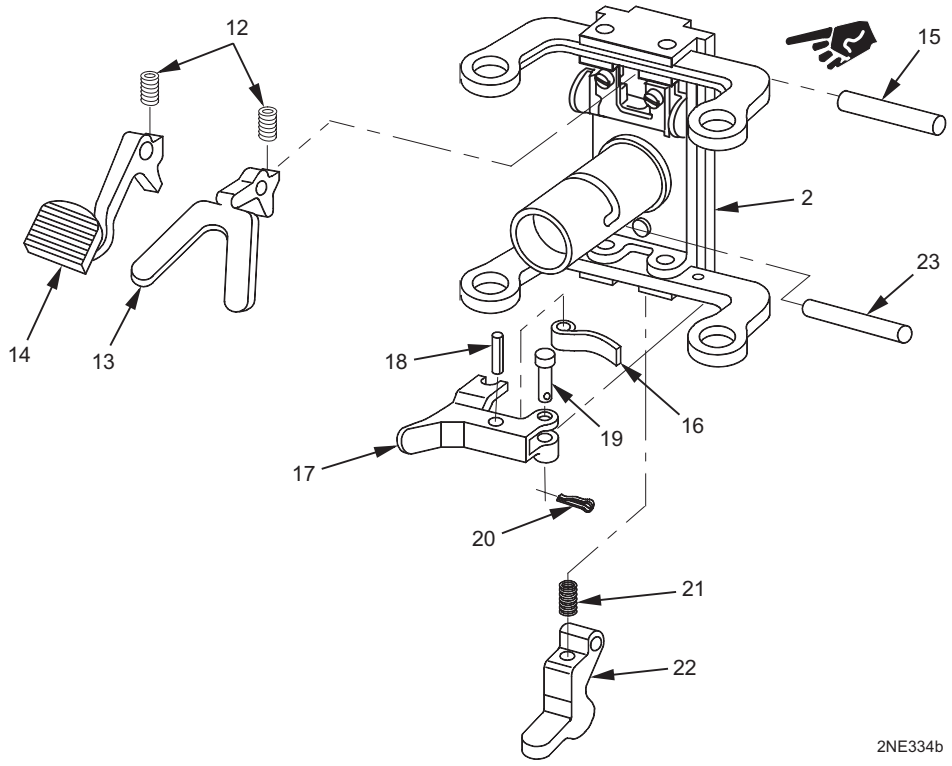
7. Install two helical compression springs (12), trigger (13), bolt latch release (14), and headless straight pin (15) in backplate (2). Peen metal of backplate over both ends of headless straight pin.

8. Check for interference with bolt latch release (14) and trigger (13) while placing trigger block on both FIRE and SAFE modes.

9. Assemble flat spring (16) to backplate latch lock (17) and secure with new woodruff key (18) by staking over ends of woodruff key.

10. Position backplate latch lock (17) on backplate (2) and secure with straight headed pin (19) and lock pin (20).

11. Install helical compression spring (21) in backplate latch (22) and secure in backplate (2) with headless straight pin (23). Stake metal of backplate over both ends of headless straight pin.



12. Install two handle grip tubes (24) into two machine gun handle grips (25). Position machine gun handle grips in backplate (2) and secure with four machine screws (26). Machine gun handle grips must not rotate after assembly. After tightening, stake metal of machine screws in slots in backplate frames.

13. Install buffer tube (27) in backplate (2) making sure that the latch release lock (28) enters grooves in backplate.

CAUTION

Do not clean solid plain disks with oil or solvent; check for deformation, wetness, or swelling due to solvents, oil, or water.

NOTE

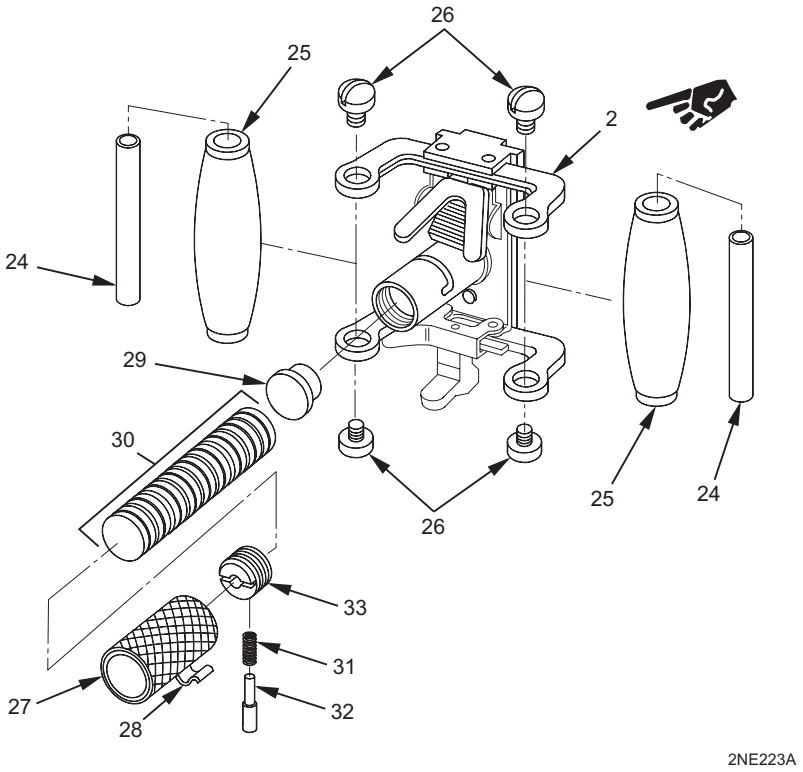
There are approximately 22 solid plain disks.

14. Install recoil mechanism buffer (29) and solid plain disks (30) in backplate.

NOTE

Machine thread plug must not protrude more than one thread or below flush. Verify that not more than one thread is showing on the weapon.

15. Install helical compression spring (31) and headless shoulder pin (32) in machine thread plug (33). Screw machine thread plug into backplate (2). Tighten plug. Back off only until headless shoulder pin is aligned in notch.



16. Install backplate assembly on weapon (see WP 0013 00). Charge weapon and verify SAFE and FIRE modes function correctly by performing Safety/Function check (refer to TM 9-1005-213-10, AF TO 11W2-6-3-161).

END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN – BACKPLATE ASSEMBLY (FIXED M48) DISASSEMBLY, INSPECT/REPAIR, ASSEMBLY

This work package applies only to the Fixed M48 type.

INITIAL SETUP:

Tools and Special Tools
Combination wrench and gage (item 13, WP 0042 00)
Field maintenance small arms shop set (item 6, WP 0042 00)

Material/Parts
Woodruff key (item 15, WP 0046 00)

Equipment Conditions
Backplate assembly removed (WP 0013 00)

DISASSEMBLY

WARNING

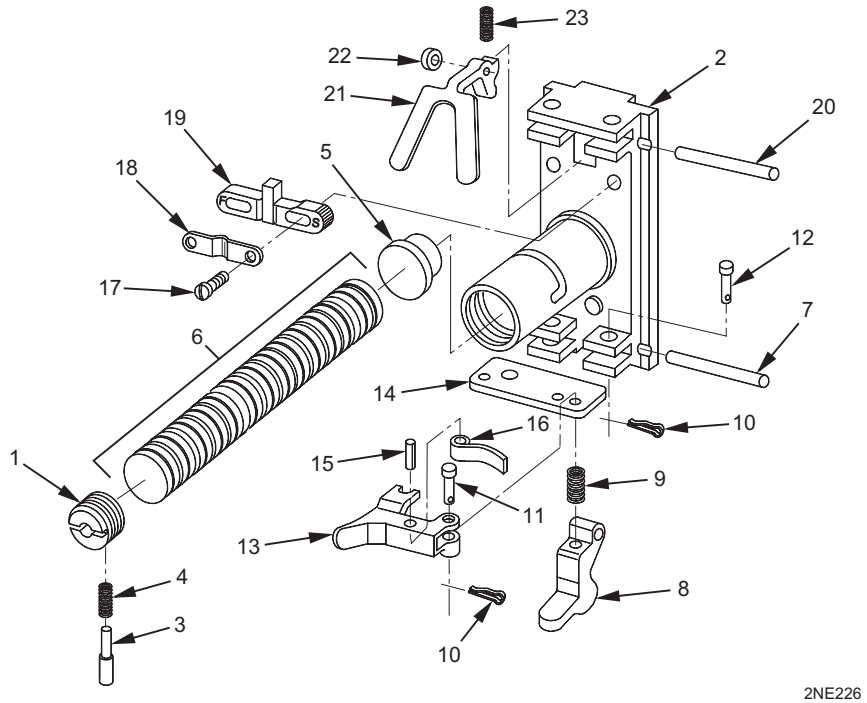
To avoid injury to your eyes, use care when removing or installing spring-loaded parts.

1. Using combination wrench and gage (item 13, WP 0042 00), remove machine thread plug (1) from backplate (2). Remove headless shoulder pin (3) and helical compression spring (4) from machine thread plug.

NOTE

There are approximately 22 solid plain disks.

2. Push out recoil mechanism buffer (5); remove solid plain disks (6) and recoil mechanism buffer.
3. Remove headless straight pin (7), backplate latch (8), and helical compression spring (9).
4. Remove three lock pins (10), headed straight pin (11), two headed straight pins (12), backplate latch lock (13), and plate spacer (14) from backplate (2).
5. Remove and discard woodruff key (15). Remove flat spring (16) from backplate latch lock (13).
6. Remove two shoulder screws (17), flat spring (18), and safety (19) from backplate (2).
7. Remove headless straight pin (20), trigger (21), sleeve spacer (22), and helical compression spring (23) from backplate (2).



INSPECT/REPAIR

1. Check for collapsed spring and missing, damaged, or worn parts.
2. Inspect solid plain disks for contamination by fluids (e.g., oil, solvent, or water), cracks, deformation, or collapsed disks.
3. Repair is by replacement of authorized parts.

ASSEMBLY

WARNING

To avoid injury to your eyes, use care when removing or installing spring-loaded parts.

NOTE

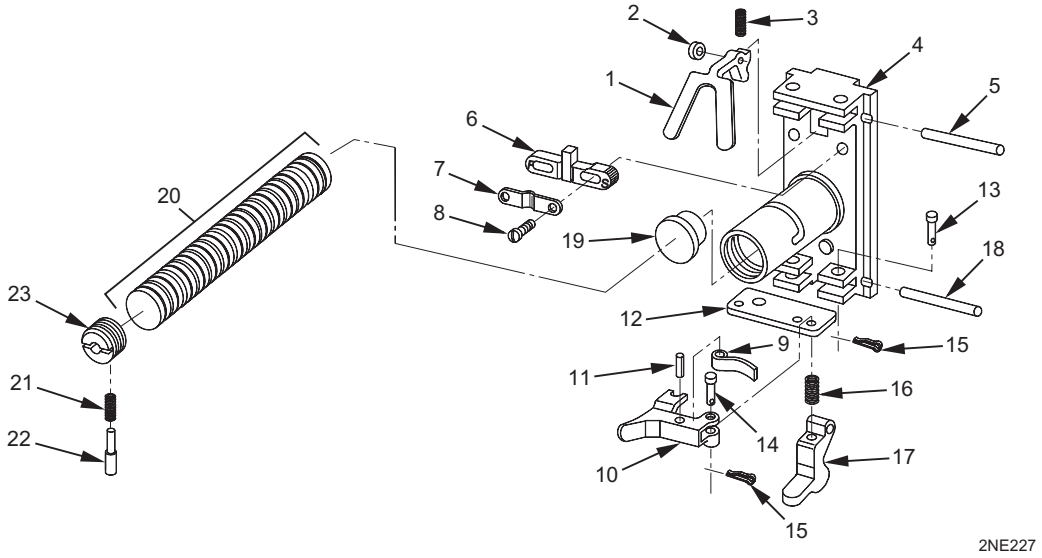
Ensure helical compression springs are in recesses of backplate latch and trigger.

1. Position trigger (1), sleeve spacer (2), and helical compression spring (3) on backplate (4) and secure with headless straight pin (5).
2. Install safety (6) and flat spring (7), with notch on top, on backplate (4) and secure with two shoulder screws (8). Stake shoulder screws on inside of backplate. Safety should slide freely to "F" or "S" positions and shall be held in either position by the flat spring.
3. Assemble flat spring (9) to backplate latch lock (10) and secure with new woodruff key (11); stake over ends of woodruff key.
4. Install plate spacer (12), backplate latch lock (10), two headed straight pins (13), headed straight pin (14), and three lock pins (15).
5. Install helical compression spring (16), backplate latch (17), and headless straight pin (18). Peen metal of backplate (4) over both ends of headless straight pin.
6. Install recoil mechanism buffer (19) and approximately 22 solid plain disks (20) in backplate (4).

NOTE

Machine thread plug must not protrude more than one thread or below flush.

7. Install helical compression spring (21) and headless shoulder pin (22) in machine thread plug (23). Using combination wrench and gage (item 13, WP 0042 00), screw machine thread plug into backplate (4). Tighten plug until tight. Back off only until headless shoulder pin is aligned in notch.



END OF WORK PACKAGE

DIRECT SUPPORT

**MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)**

MAINTENANCE OF M2 MACHINE GUN – BREECH BOLT ASSEMBLY, CARTRIDGE EXTRACTOR, FIRING PIN EXTENSION ASSEMBLY, AND ALTERNATE FEED BOLT SUBASSEMBLY DISASSEMBLY, INSPECT/REPAIR, ASSEMBLY

INITIAL SETUP:

Tools and Special Tools
Field maintenance small arms shop set (item 6, WP 0042 00)
Firing pin tool assembly (item 6, WP 0057 00)

Materials/Parts
Headed pin (item 3, WP 0047 00)

References
TM 9-1005-213-10

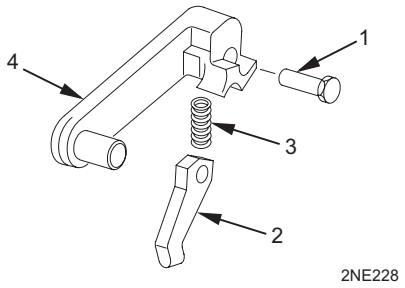
Equipment Conditions
Bolt assembly removed (WP 0013 00)
Bolt assembly partially disassembled (WP 0016 00)

DISASSEMBLY

WARNING

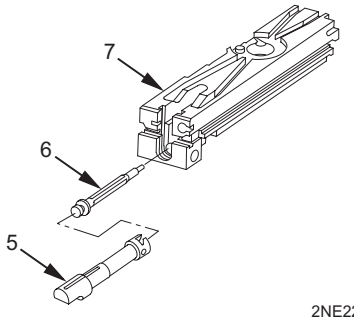
To avoid injury to your eyes, use care when removing or installing spring-loaded parts.

1. Drive out headed pin (1) and remove cartridge bolt ejector (2) and helical compression spring (3) from extractor (4). Discard headed pin.

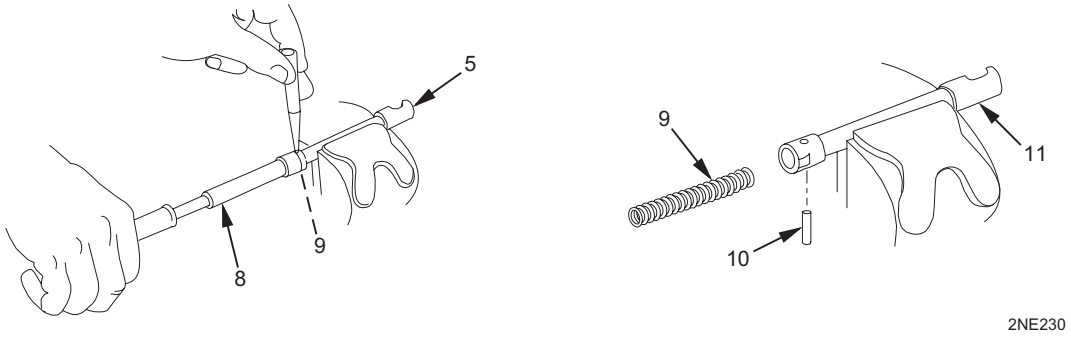


DISASSEMBLY – Continued

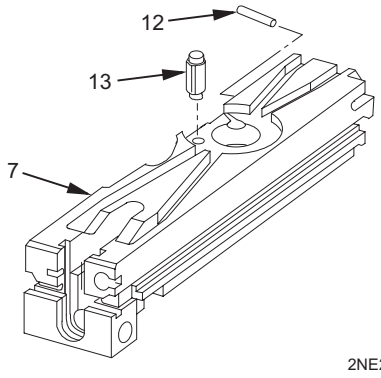
2. Remove firing pin extension assembly (5) and firing pin (6) from bolt subassembly (7). Separate firing pin from firing pin extension assembly.



3. Place firing pin extension assembly (5) in vise. Use firing pin tool assembly (8) to compress helical compression spring (9). Drive out headless straight pin (10) and remove helical compression spring from firing pin extension (11).

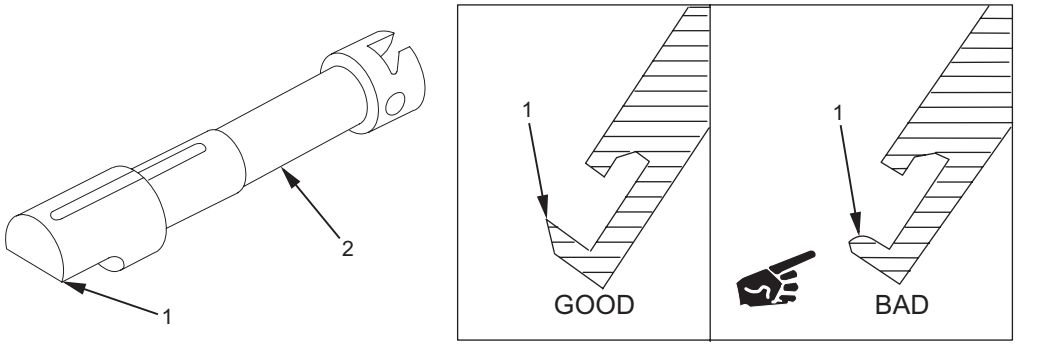


4. If damaged, drive out headless straight pin (12) and shoulder pin (13) from bolt subassembly (7).



INSPECT/REPAIR

1. Check that notch angle (1) of firing pin extension assembly (2) is not rounded as shown below.



2. Inspect bolt face for pits and/or eroded areas up to a maximum 0.062 in. (0.157 cm) long or wide, 0.031 in. (0.079 cm) deep in scattered or random patterns, or rings 0.031 in. (0.079 cm) deep and 0.062 in. (0.157 cm) wide.

3. Check for missing, damaged, or worn parts.

4. Inspect springs for collapsed coils or deformation.

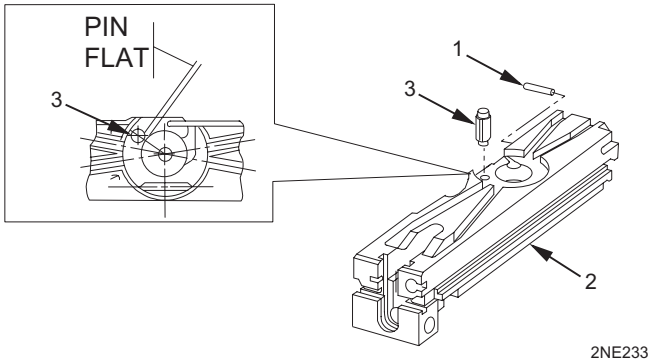
5. If recoil plate is damaged, repair is by replacement of next higher assembly.

6. Repair is by replacement of authorized parts.

ASSEMBLY

1. If removed, press fit new headless straight pin (1) in bolt subassembly (2). Headless straight pin should protrude no more than 0.078 in. (0.198 cm) maximum. If necessary, stone or file top and bottom of headless straight pin to meet assembly dimensions.

2. If removed, press fit new shoulder pin (3) in bolt subassembly (2) with flat of shoulder pin facing as shown.

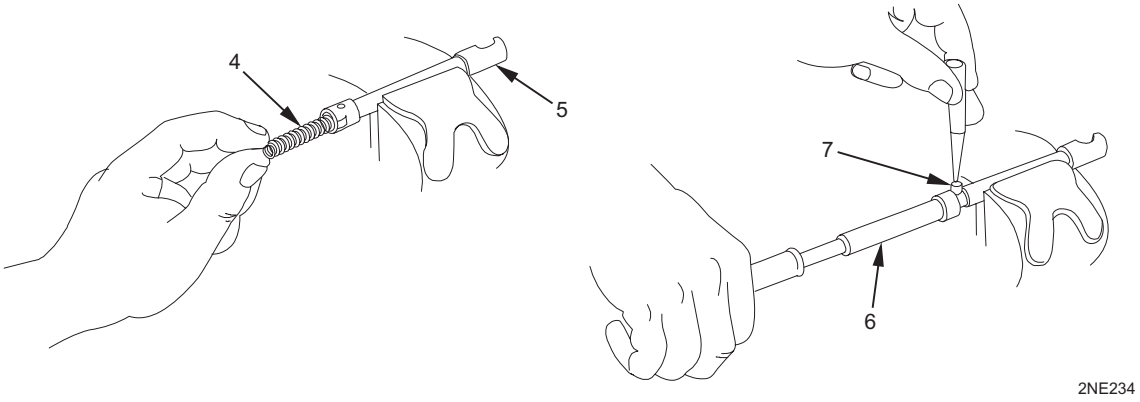


ASSEMBLY - Continued

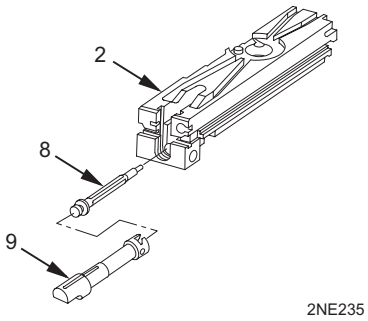
WARNING

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

3. Install helical compression spring (4) into firing pin extension (5). Use firing pin tool assembly (6) to compress helical compression spring. Drive in headless straight pin (7) to secure helical compression spring. Stake pin hole area to prevent loss of headless straight pin.



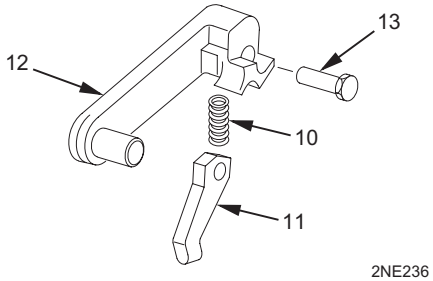
4. Position firing pin (8) in slot in firing pin extension assembly (9). Install firing pin extension assembly in bolt subassembly (2) with notch downward.



NOTE

Ensure helical compression spring is in recess of extractor.

5. Install helical compression spring (10) and cartridge bolt ejector (11) in extractor (12) and secure with new headed pin (13). Cartridge bolt ejector must pivot freely. Peen metal of headed pin to secure cartridge bolt ejector.



6. Refer to operator's manual (TM 9-1005-213-10) for further reassembly of bolt assembly.

END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN – RECOIL MECHANISM BUFFER DISASSEMBLY, INSPECT/REPAIR, ASSEMBLY

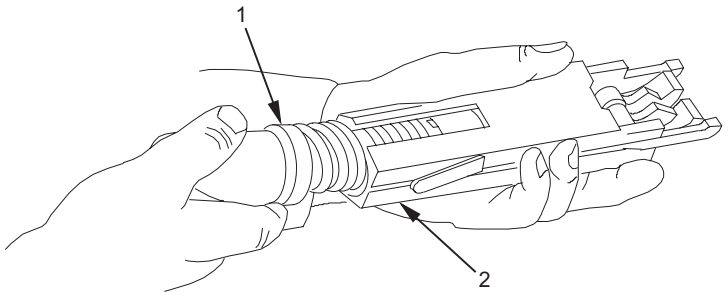
INITIAL SETUP:

Tools and Special Tools
Field maintenance small arms shop set (item 6, WP 0042 00)
Oil buffer tool assembly (item 11, WP 0057 00)

Equipment Conditions
Recoil mechanism buffer (barrel buffer assembly) removed (WP 0013 00)

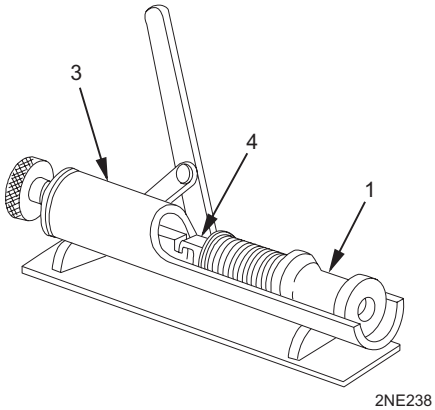
DISASSEMBLY

1. Remove buffer assembly (1) with attached parts from barrel buffer body (2).



2NE237

2. Place buffer assembly (1) in oil buffer tool assembly (3), with buffer assembly mating with tool assembly latch (4).



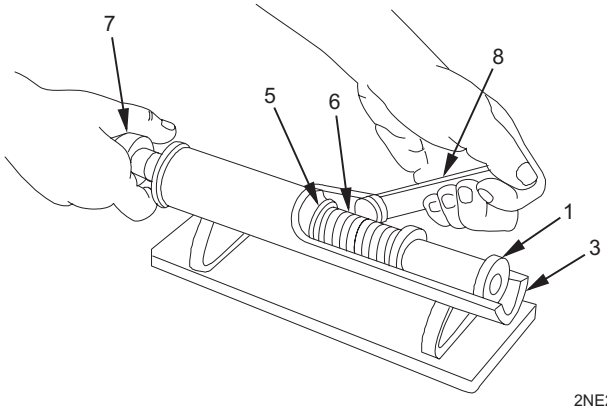
2NE238

DISASSEMBLY - Continued

WARNING

To avoid injury to your eyes, use care when removing or installing spring-loaded parts.

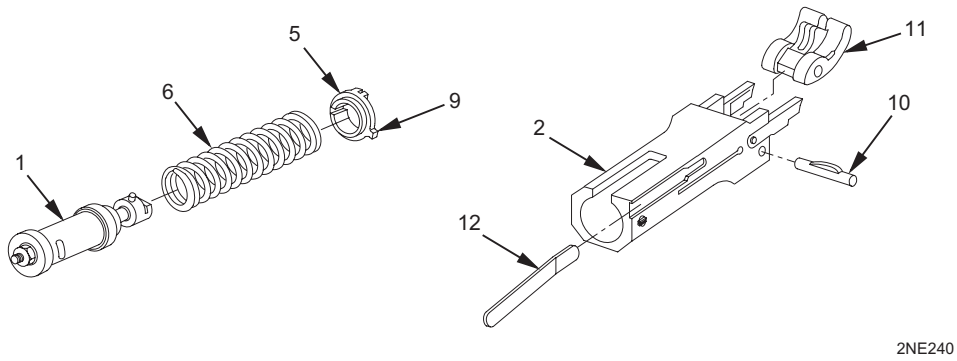
3. Squeeze buffer spring guide (5) and helical compression spring (6) together. Turn knob (7) 1/4 turn to release buffer spring guide from buffer assembly (1). Slowly release handle (8) and remove buffer assembly, helical compression spring, and buffer spring guide from oil buffer tool assembly (3).



4. Remove buffer spring guide (5) with attached key (9) and helical compression spring (6) from buffer assembly (1).

5. Remove accelerator spring pin (10) and buffer machine accelerator (11) from barrel buffer body (2).

6. If damaged, drive out buffer body lock (12) to remove.

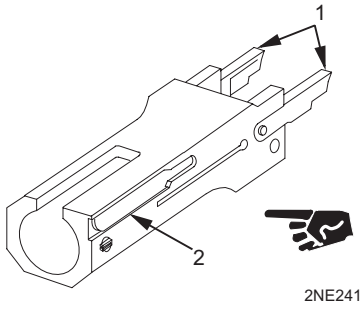


INSPECT/REPAIR

1. Check rivet on lock depressors (1) to ensure lock depressors are securely retained in barrel buffer body. Up and down movement of the lock depressors is acceptable as long as the movement does not interfere with proper functioning of the weapon. Center punch the center of the rivet if retightening of the lock depressors is required.

2. Staking or swaging of the buffer body to secure or limit the movement of the lock depressors (1) in their recesses is not required nor is it desirable. However, marks derived from previous unauthorized staking or swaging on buffer are acceptable as long as the staking/swaging does not interfere with the functioning of the weapon.

3. Check retention of the buffer body lock (2). Lock/buffer is serviceable as long as the lock cannot be removed by hand and/or can be secured by center punching per following assembly instructions. Previous swaging that does not damage, prevent assembly, or impair normal operation of the lock/buffer body is acceptable.



4. Check accelerator spring pin for burrs and collapsed spring. Ensure spring is not broken.

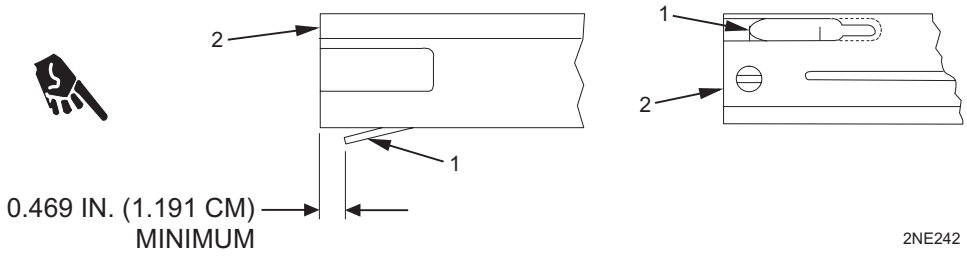
5. Check for missing, damaged, or worn parts.

6. Check spring for broken or collapsed coils or deformations.

7. Repair is by replacement of authorized parts.

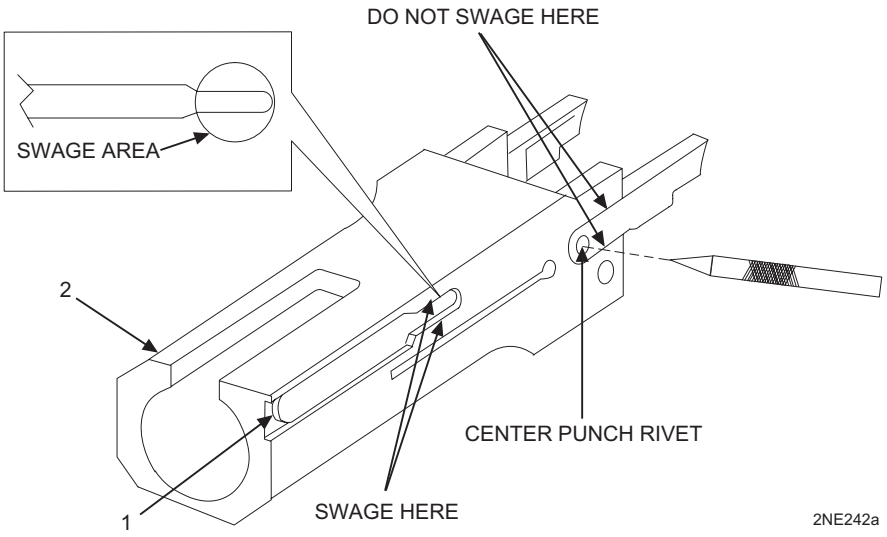
ASSEMBLY

1. If removed, slide new buffer body lock (1) into groove in barrel buffer body (2) until it reaches the end. To ensure the lock is fully seated in the groove, there should be a minimum of 0.469 in. (1.191 cm) clearance between edge of barrel buffer body and the end of buffer body lock as shown.

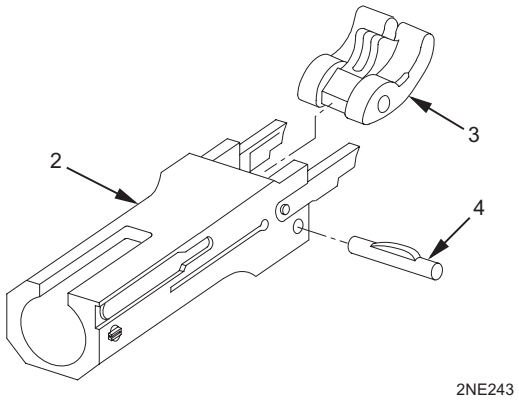


ASSEMBLY - Continued

2. Swage the barrel buffer body (2) by using a **blunt punch**, in one or more places along the lock groove as required, to retain the buffer body lock (1) so that it cannot be removed by hand.



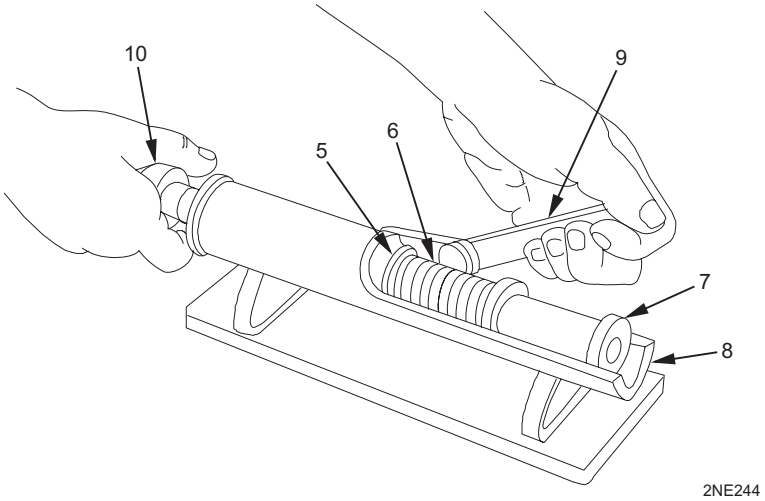
3. Position buffer machine accelerator (3) in barrel buffer body (2) and secure with accelerator spring pin (4).



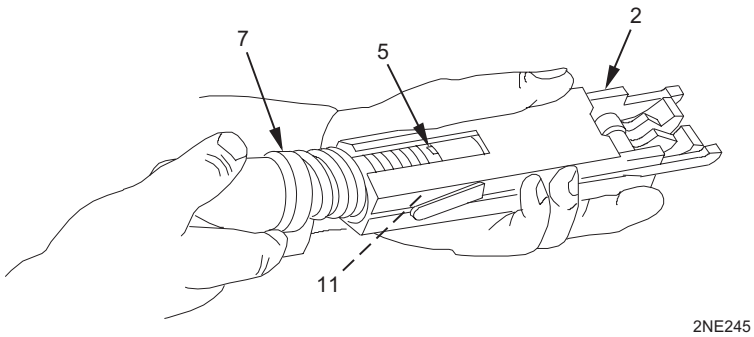
WARNING

To avoid injury to your eyes, use care when removing or installing spring-loaded parts.

4. Position buffer spring guide (5), helical compression spring (6), and buffer assembly (7) in oil buffer tool assembly (8). Compress helical compression spring using handle (9). Turn knob (10) 1/4 turn to lock buffer spring guide to buffer assembly. Release handle and remove assembled buffer assembly from oil buffer tool assembly.



5. Install buffer assembly (7) in barrel buffer body (2) while aligning key (11) of buffer spring guide (5) with slot in barrel buffer body.

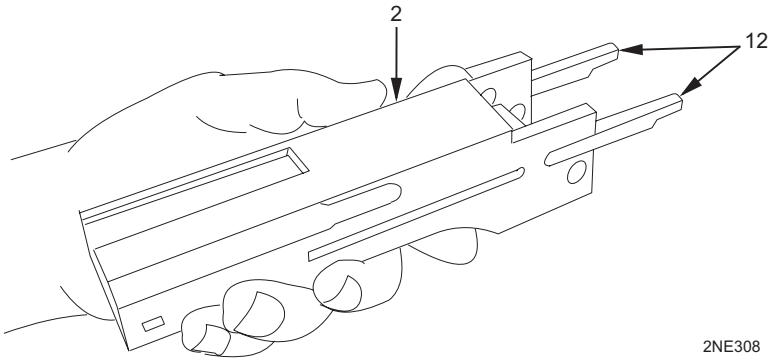


ASSEMBLY - Continued

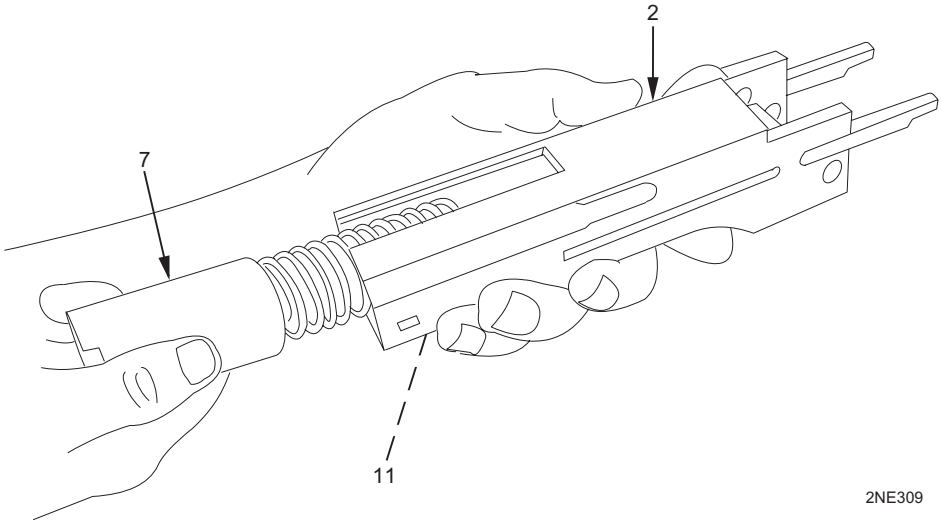
NOTE

Some barrel buffer body assemblies have been issued with a 0.129 in. wide slot on both sides of the barrel buffer body rather than on one side only. If you have the configuration with two slots, you must perform steps 6 thru 8 to ensure correct installation of the buffer assembly.

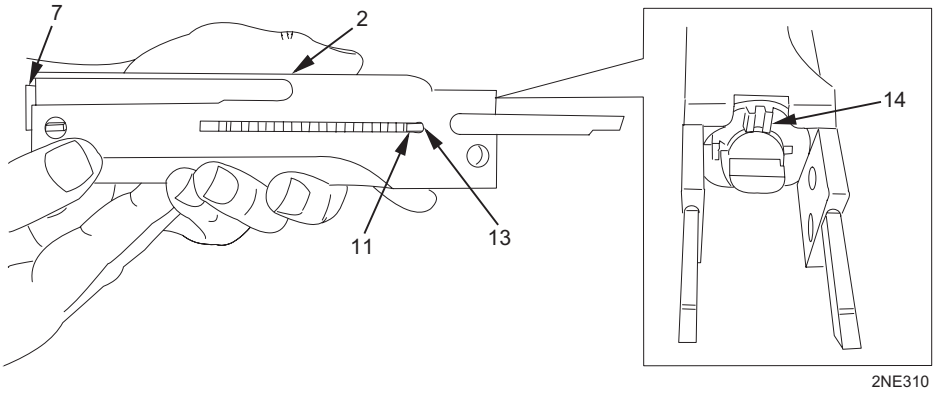
6. Position barrel buffer body (2) so that two lock depressors (12) are pointed away from assembler and are closest to top of barrel buffer body.



7. Grasp buffer assembly (7) and partially insert spring end first into large diameter bore of barrel buffer body (2). Align key (11) of buffer spring guide to engage in 0.129 in. wide slot located on right hand side of barrel buffer body.



8. Slide buffer assembly (7) into barrel buffer body (2) until buffer spring guide (11) contacts far end of slot (13). When correctly assembled, hooked end of rod (14) in buffer assembly is pointed upward.



END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN – COVER ASSEMBLY REMOVAL, DISASSEMBLY, INSPECT/REPAIR, ASSEMBLY, INSTALLATION

INITIAL SETUP:

Tools and Special Tools
Field maintenance small arms shop set (item 6, WP 0042 00)

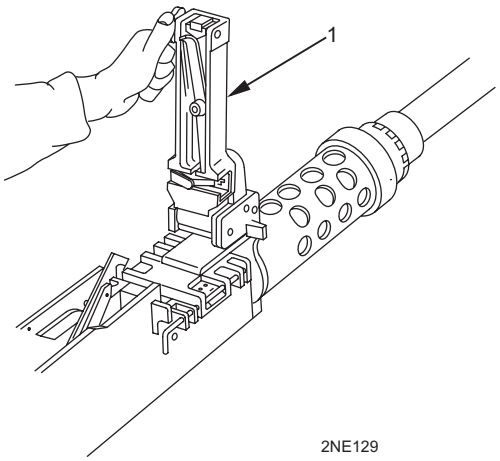
Materials/Parts
Cotter pin (item 8, WP 0044 00)
Cotter pin (item 12, WP 0050 00)

References
WP 0020 00

Equipment Conditions
Cover assembly partially disassembled (WP 0017 00)

REMOVAL

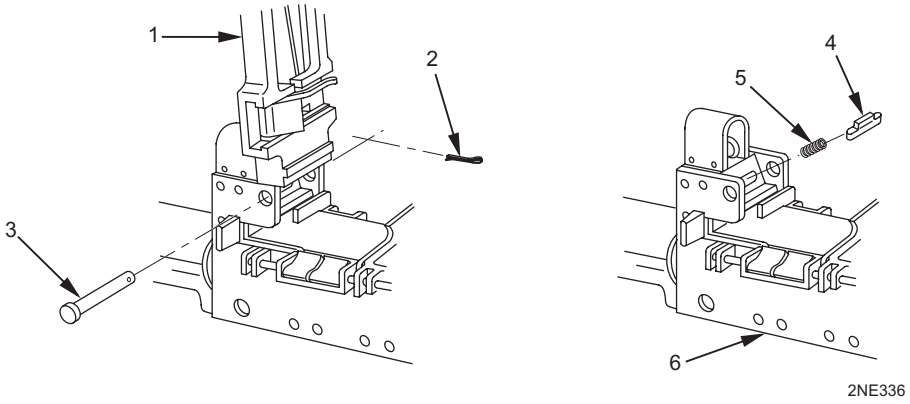
1. Raise cover assembly (1) all the way up.



REMOVAL - Continued

2. Remove and discard cotter pin (2). Using punch, drive out and remove headed straight pin (3). Remove cover assembly (1).

3. Remove cover detent pawl (4) and spring (5) from receiver (6).



DISASSEMBLY

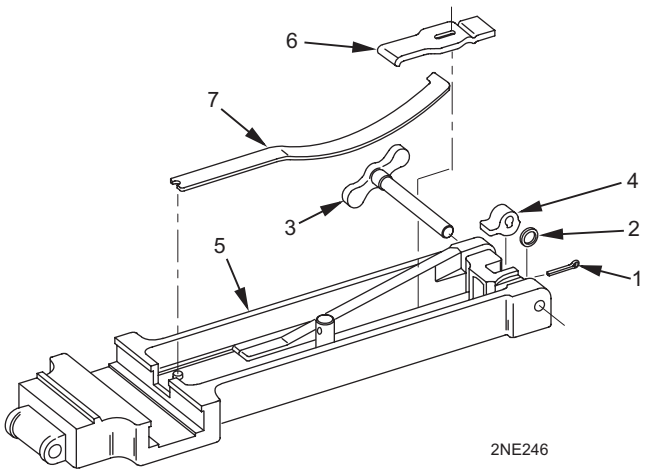
1. Remove cotter pin (1), flat washer (2), cover latch lever (3), and cover latch (4) from subassembly cover (5). Discard cotter pin.

WARNING

To avoid injury to your eyes, use care when removing or installing spring-loaded parts.

2. Pull down on cover latch flat spring (6) until it can be lifted off stud in subassembly cover (5).

3. Pry cover extractor flat spring (7) from subassembly cover (5); let cover extractor flat spring rise slowly to remove.



INSPECT/REPAIR

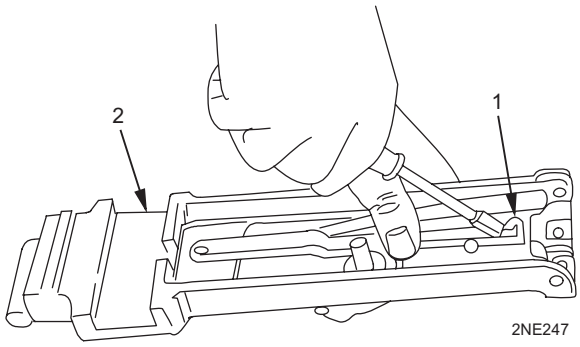
1. Check for missing, damaged, or worn parts. Ensure all parts are present and installed.
2. If subassembly cover is damaged, repair is by replacement of next higher assembly.
3. Repair is by replacement of authorized parts.

ASSEMBLY

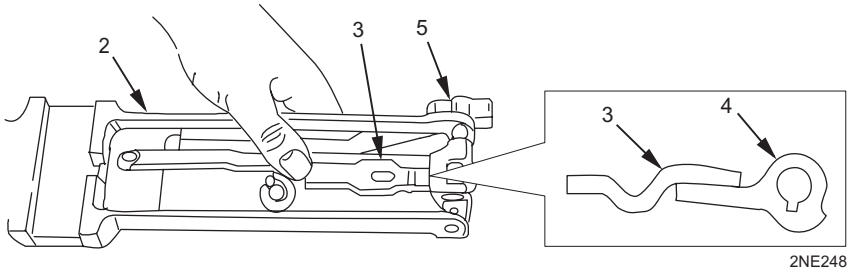
WARNING

To avoid injury to your eyes, use care when removing or installing spring-loaded parts.

1. Place forked end of cover extractor flat spring (1) under stud in subassembly cover (2) and push lip of cover extractor flat spring into slot of cover to install cover extractor flat spring in cover.

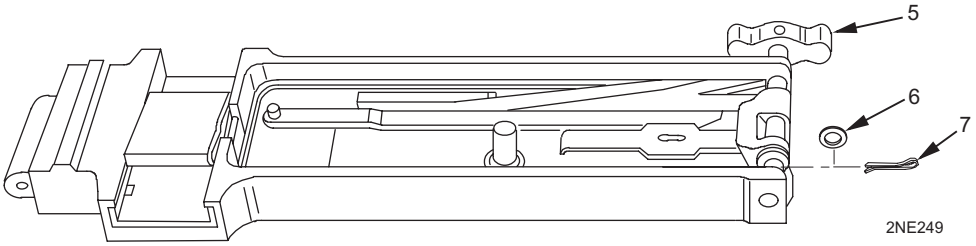


2. Position large end of slot in flat spring (3) over stud in subassembly cover (2). Push flat spring up until stud in cover is in small end of flat spring slot.
3. Install cover latch (4) and cover latch lever (5) in subassembly cover (2). Be sure cover latch is under lip on flat spring (3).



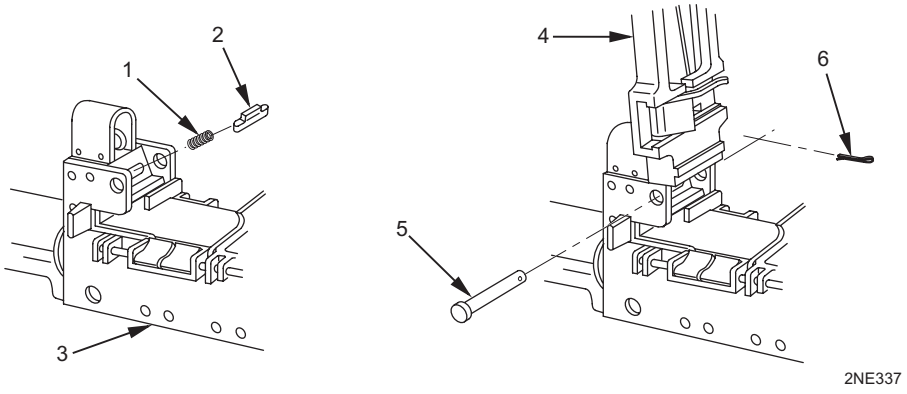
ASSEMBLY - Continued

4. Install flat washer (6) and new cotter pin (7) (item 12, WP 0050 00) on cover latch lever (5).
5. Refer to WP 0020 00 for inspection when cover assembly is fitted to receiver assembly.



INSTALLATION

1. Place spring (1) and cover detent pawl (2) on receiver (3).
2. Position cover assembly (4) against cover detent pawl (2) on receiver (3). Close cover assembly.
3. Install headed straight pin (5) and new cotter pin (6) (item 8, WP 0044 00).



4. Perform top cover clearance check (WP 0020 00).

END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715) FIXED M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN – RETRACTING SLIDE ASSEMBLY DISASSEMBLY, INSPECT/REPAIR, ASSEMBLY

This work package applies only to the flexible type.

INITIAL SETUP:

Tools and Special Tools
Field maintenance small arms shop set (item 6, WP 0042 00)

Materials/Parts
Cotter pin (item 9, WP 0051 00)

References
WP 0021 00

Equipment Conditions
Retracting slide assembly removed (WP 0021 00)

DISASSEMBLY

1. Remove two plain slotted nuts (1) and two tee-head shoulder bolts (2) from retracting slide bracket (3).

2. Remove and discard cotter pin (4). Remove plain slotted nut (5), flat thrust washer (6), retracting slide lever (7), and helical torsion spring (8) from retracting slide shouldered stud (9). Remove retracting slide (10) and shoulder screw (11) from retracting slide bracket (3).

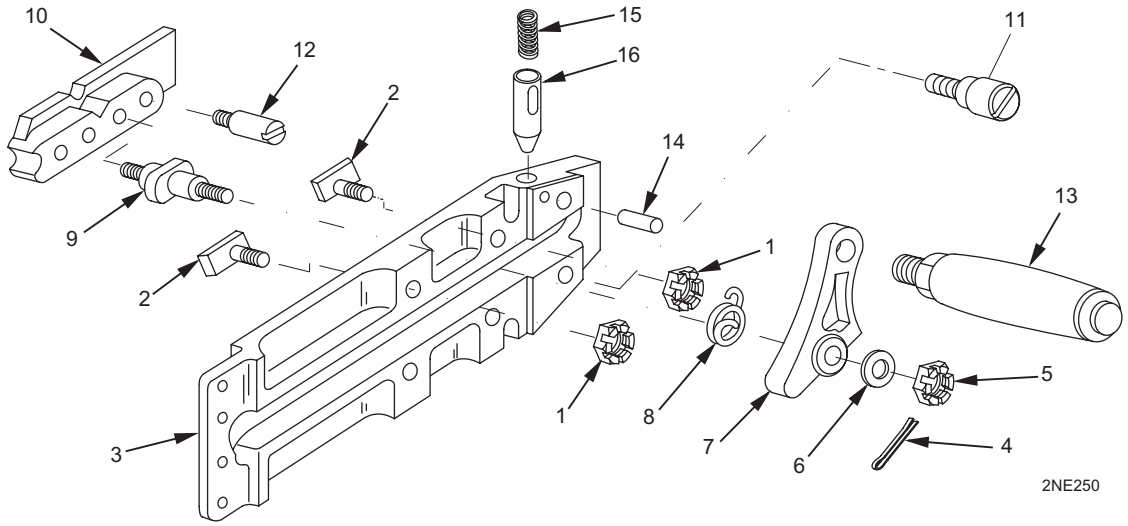
3. Remove headless shoulder pin (12) and shouldered stud (9) from retracting slide (10).

4. Remove retracting slide handle (13) from retracting slide lever (7).

WARNING

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

5. Remove headless straight pin (14), helical compression spring (15), and retracting slide plunger (16) from retracting slide bracket (3).



INSPECT/REPAIR

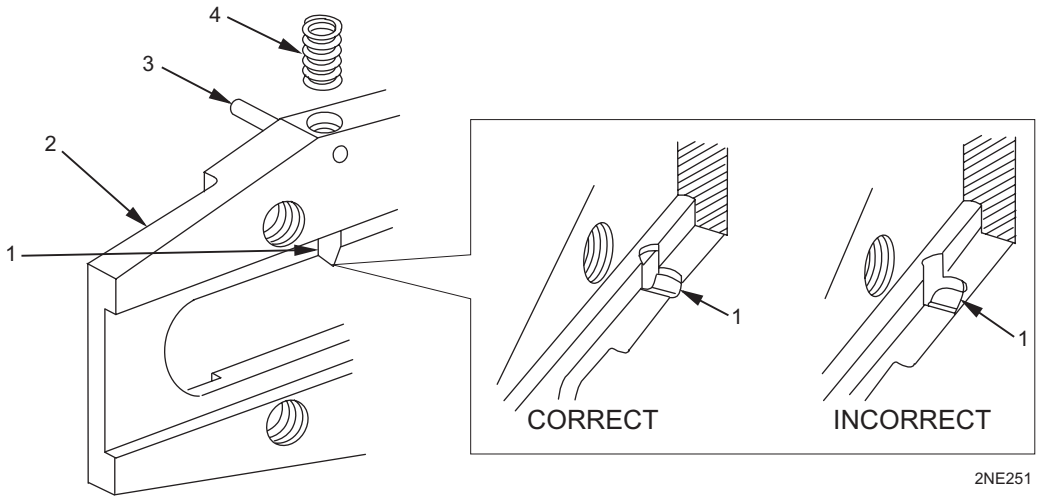
1. Check for collapsed spring coil and missing, damaged, or worn parts.
2. If retracting slide bracket is damaged, repair is by replacement of next higher assembly.
3. Repair is by replacement of authorized parts.

ASSEMBLY

WARNING

To avoid injury to your eyes, use care when removing and installing spring-loaded parts.

1. Position retracting slide plunger (1) so that flat side is flush with track in retracting slide bracket (2) and straight headless pin (3) can be partially installed.
2. Place helical compression spring (4) in retracting slide plunger (1) and push down on helical compression spring to complete installation of headless straight pin (3). Headless straight pin should be flush with retracting slide bracket (2).



ASSEMBLY - Continued

3. Install retracting slide handle (5) on retracting slide lever (6).

4. Install and stake retracting slide shouldered stud (7) and headless shoulder pin (8) on retracting slide (9), and position retracting slide into retracting slide bracket (2).

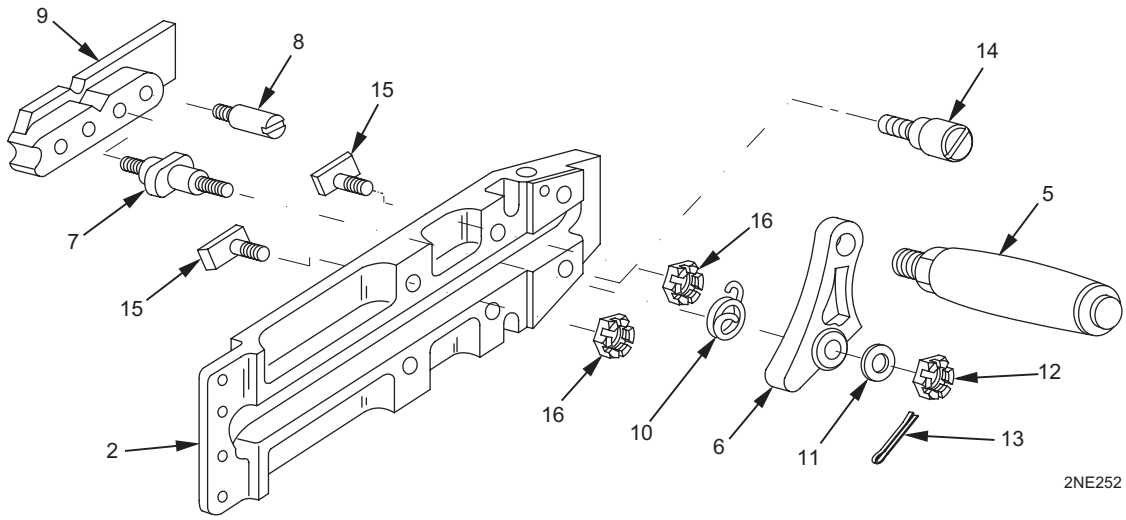
5. Install helical torsion spring (10), retracting slide lever (6), flat thrust washer (11), plain slotted nut (12), and new cotter pin (13) on shouldered stud (7).

6. Install and stake retracting slide shoulder screw (14) on retracting slide bracket (2).

7. Position two tee-head shoulder bolts (15) through retracting slide bracket (2) and loosely install two plain slotted nuts (16).

NOTE

Tee-head shoulder bolts and plain slotted nuts will be repositioned and tightened when retracting slide assembly is installed on receiver (WP 0021 00).



END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715) M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN – M10 CALIBER .50 GUN CHARGER DISASSEMBLY, INSPECT/REPAIR, ASSEMBLY

This work package applies only to the M48 type.

INITIAL SETUP:

Tools and Special Tools

Field maintenance small arms shop set (item 6, WP 0042 00)

Materials/Parts

Automotive and artillery grease (GAA) (item 19, WP 0060 00)
Lock washer (item 12, WP 0052 00)

Equipment Conditions

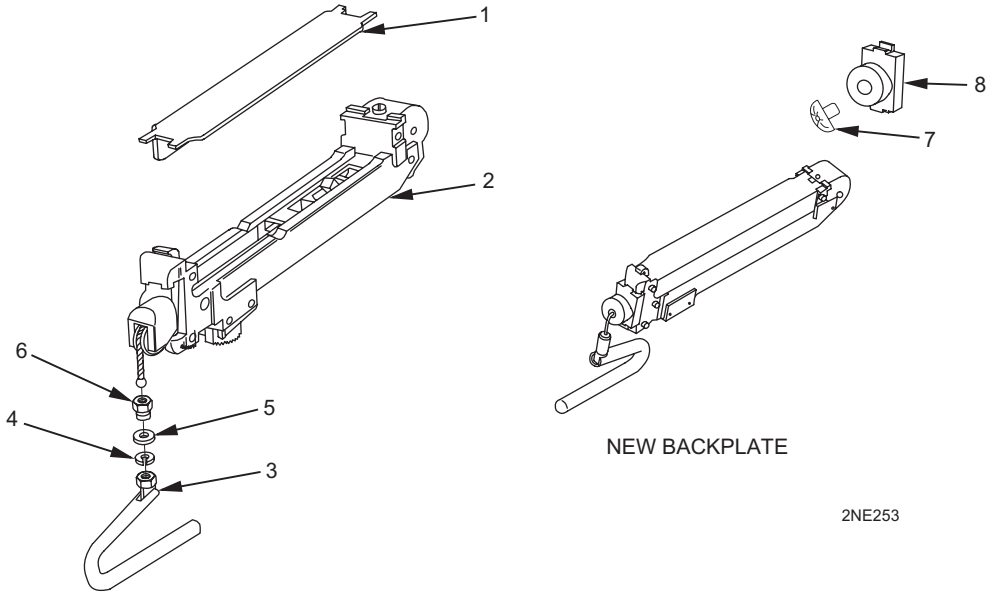
M10 caliber .50 gun charger (M10 manual charger) removed (WP 0021 00)

DISASSEMBLY

1. Remove charger bolt cover (1) from channel housing (2).

2. Remove manual control handle (3), split washer (4), and lock washer (5) from machine bushing (6). Discard lock washer. Remove machine bushing.

3. Using pliers, separate backplate bushing (7) from backplate (8) (new configuration only).

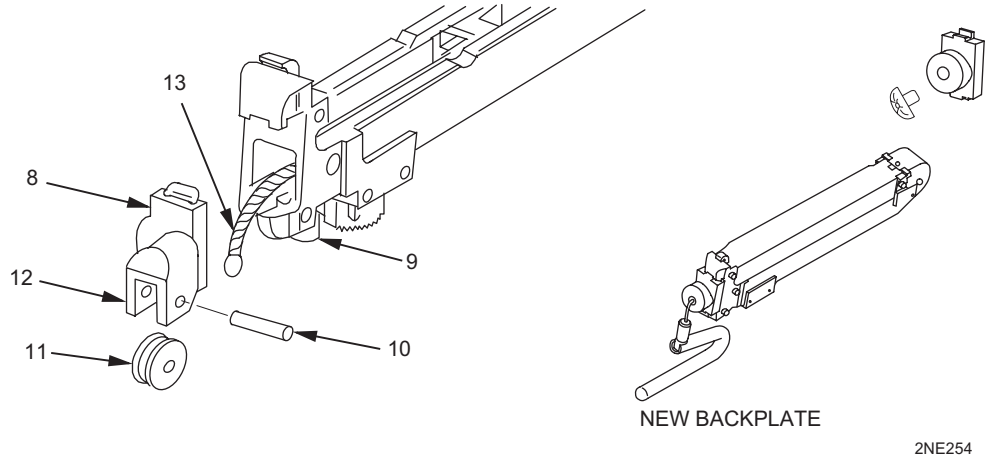


4. Depress lock-release lever (9) and pull out backplate (8) with attached parts.

NOTE

Items 10, 11, and 12 are not part of new backplate configuration.

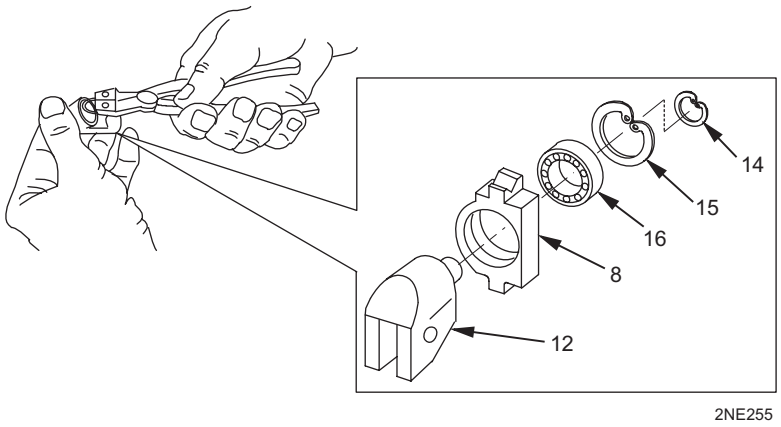
5. Remove spring pin (10) and pulley (11) from swivel (12). Remove swivel and attached parts from charger cable assembly (13).



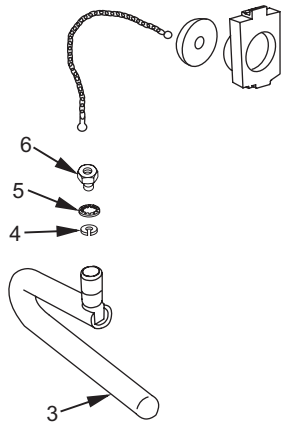
NOTE

Items 14, 15, and 16 are not part of new backplate configuration.

6. Using retaining ring pliers, remove external retaining ring (14) and internal retaining ring (15). Remove ball bearing (16) and backplate (8) from swivel (12).



OLD BACKPLATE CONFIGURATION

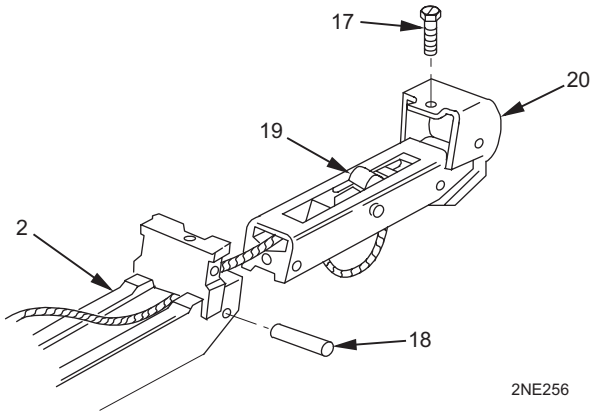


NEW BACKPLATE CONFIGURATION

2NE255a

7. Remove machine screw (17) and spring pin (18).

8. Press down on lock-release lever (19) and remove spring return holder (20) with attached parts from channel housing (2).

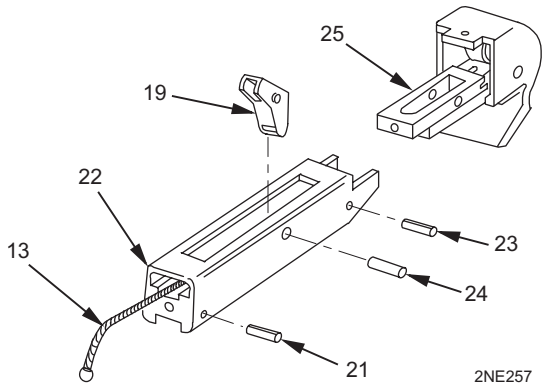


DISASSEMBLY - Continued

9. Remove spring pin (21). Remove ball end of charger cable assembly (13) from socket of cable guide slide (22) and pull out charger cable assembly to remove from cable guide slide.

10. Remove spring pin (23). Align locking release lever straight pin (24) with clearance hole in cable guide slide (22). Remove locking release lever straight pin and locking release lever (19).

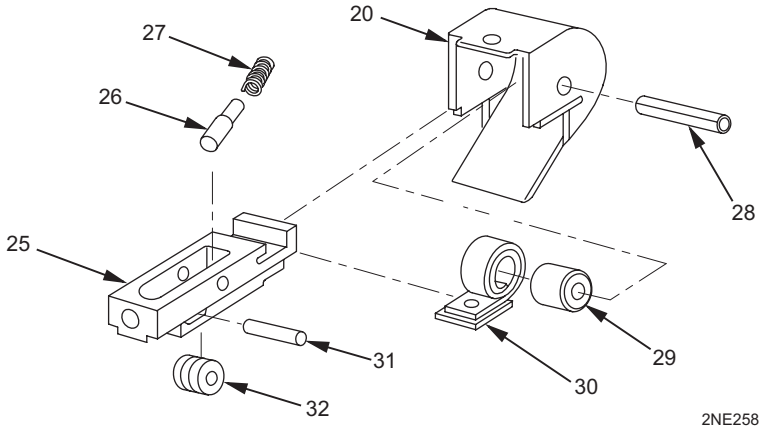
11. Pull pulley retainer slide (25) with attached parts out of cable guide slide (22).



WARNING

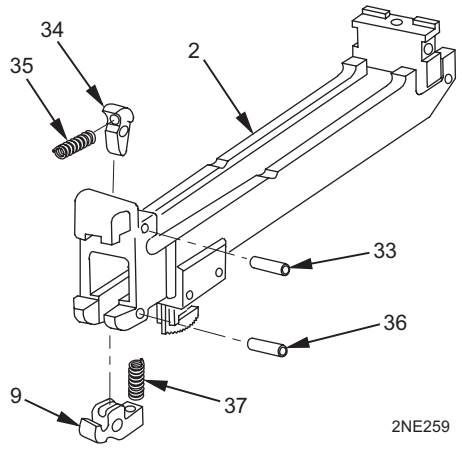
To avoid injury to your eyes, use care when removing or installing spring-loaded parts.

12. Remove headless shoulder pin (26), helical compression spring (27), spring pin (28), spring return holder (20), sleeve bearing (29), torsion spiral spring assembly (30), headless straight pin (31), and groove pulley (32) from pulley retainer slide (25).



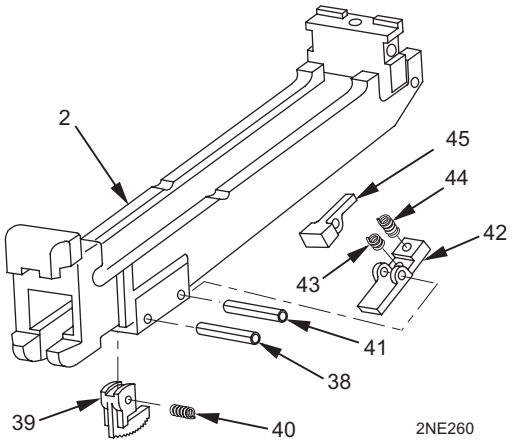
13. Remove sleeve bearing (33), release lever (34), and helical compression spring (35) from channel housing (2).

14. Remove sleeve bearing (36), lock-release lever (9), and helical compression spring (37) from channel housing (2).



15. Remove spring pin (38), slide lock catch (39), and helical compression spring (40) from channel housing (2).

16. Remove spring pin (41), slide lock pawl lever (42), two helical compression springs (43 and 44), and slide lock pawl (45) from channel housing (2).



INSPECT/REPAIR

1. Check for missing, damaged, or worn parts.

2. Check springs for collapsed coils.

3. If channel housing is damaged, repair is by replacement of next higher assembly.

4. Repair is by replacement of authorized parts.

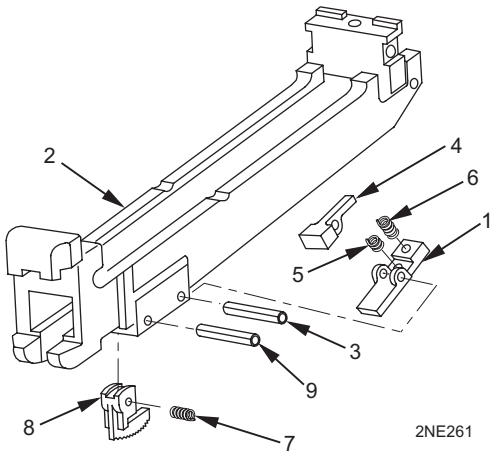
ASSEMBLY

WARNING

To avoid injury to your eyes, use care when removing or installing spring-loaded parts.

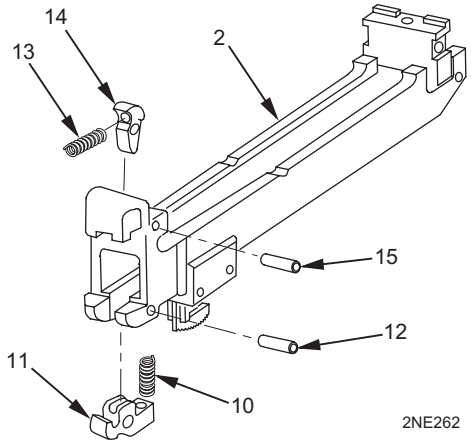
1. Install slide lock pawl lever (1) in channel housing (2). Position spring pin (3) through one side of both channel housing and slide lock pawl lever. Install slide lock pawl (4) and helical compression spring (5). Drive spring pin through, securing to channel housing. Install helical compression spring (6).

2. Install helical compression spring (7) and slide lock catch (8) in channel housing (2) and secure with spring pin (9).



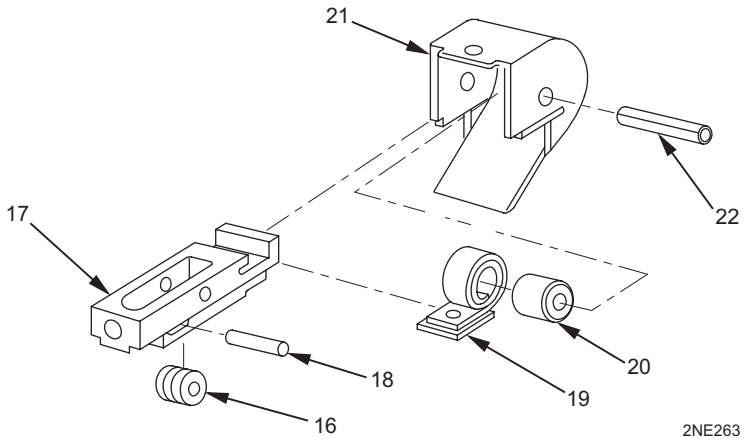
3. Install helical compression spring (10) and lock-release lever (11) in channel housing (2) and secure with sleeve bearing (12).

4. Install helical compression spring (13) and release lever (14) in channel housing (2) and secure with sleeve bearing (15).



5. Install groove pulley (16) in pulley retainer slide (17) and secure with headless straight pin (18).

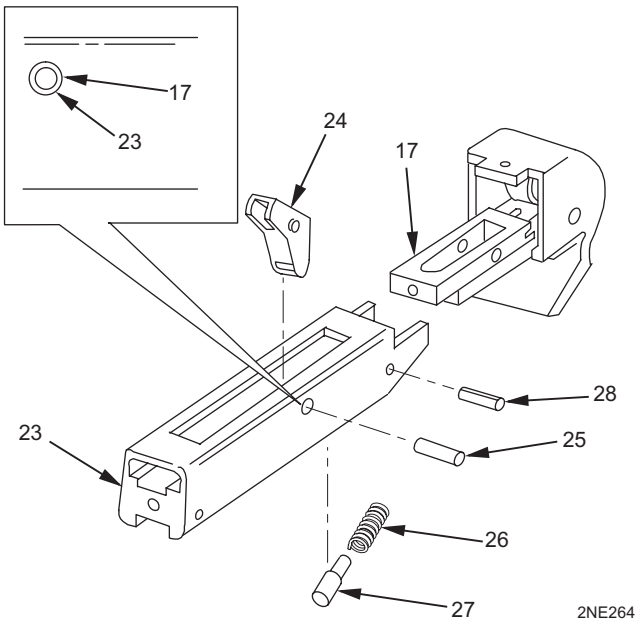
6. Install torsion spiral spring assembly (19), sleeve bearing (20), and spring return holder (21) on pulley retainer slide (17), and secure with spring pin (22).



7. Install assembled pulley retainer slide (17) into cable guide slide (23).

8. Align holes in cable guide slide (23) and pulley retainer slide (17) as shown. Install lock release lever (24) and secure with straight pin (25). Install helical compression spring (26) and headless shoulder pin (27) as shown.

9. Secure pulley retainer slide (17) and cable guide slide (23) with spring pin (28).



ASSEMBLY – Continued

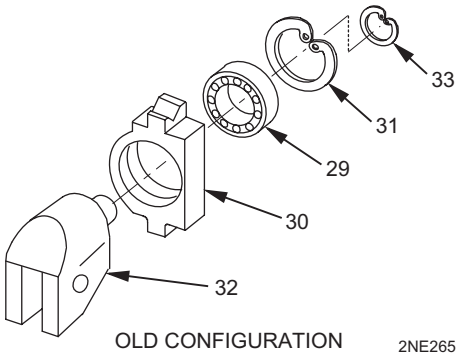
NOTE

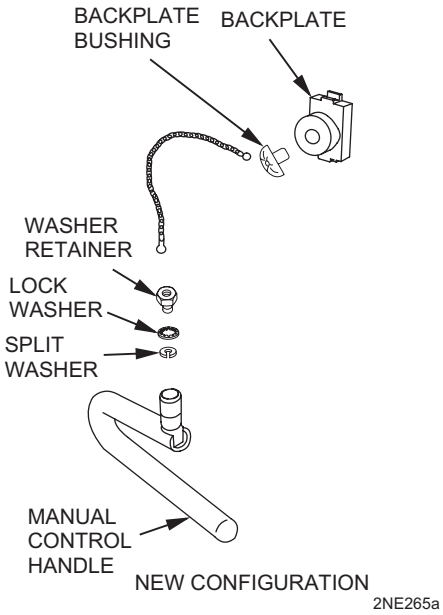
Items 29, 31, 32, and 33 are not part of new backplate configuration.

10. Pack ball bearing (29) with GAA (item 19, WP 0060 00). Install squarely in backplate (30) and secure with internal retaining ring (31).

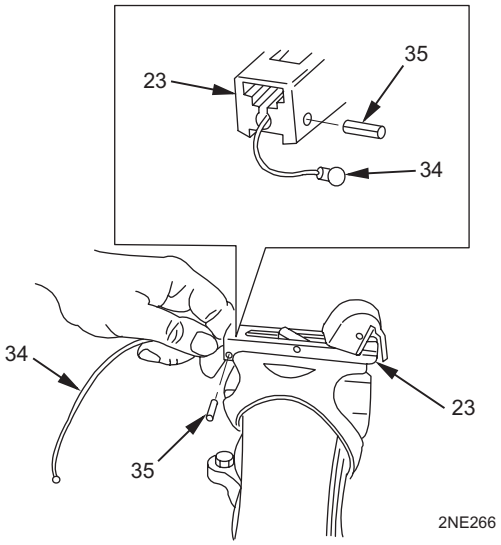
11. Install swivel (32) on backplate (30) through ball bearing (29) and secure with external retaining ring (33).

12. Install backplate bushing into backplate (press fit) (new configuration only).

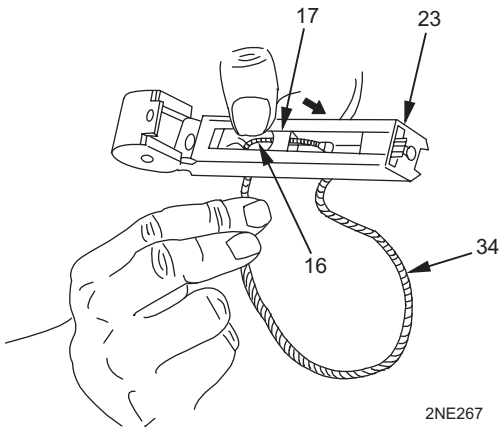




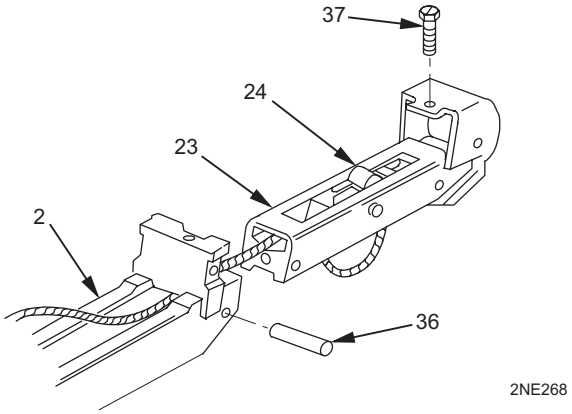
13. Position ball end of charger cable assembly (34) in socket in cable guide slide (23) and secure with spring pin (35).



14. Thread charger cable assembly (34) through groove pulley (16), cable guide slide (23), and pulley retainer slide (17). Be sure charger cable assembly seats in groove in groove pulley; pull charger cable assembly tight.



15. Press down on lock-release lever (24) and install assembled cable guide slide (23) in channel housing (2). Secure with spring pin (36) and machine screw (37).



ASSEMBLY – Continued

NOTE

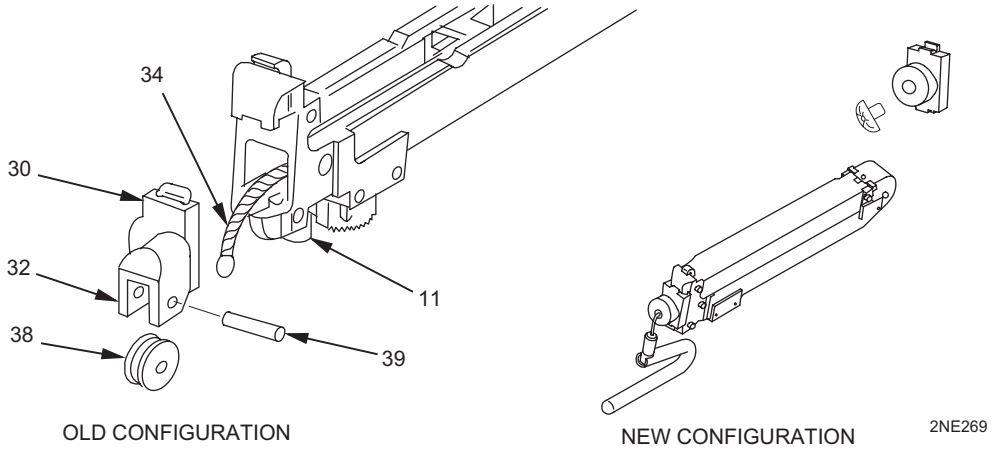
Items 32, 38, and 39 are not part of new backplate configuration.

16. Position charger cable assembly (34) into swivel (32). Install pulley (38) in swivel and secure with spring pin (39).

NOTE

Be sure the assembled backplate is installed to the channel housing in the correct position for mounting to the machine gun.

17. Install assembled backplate (30) into channel housing (2). Be sure lock-release lever (11) secures backplate.



18. Install machine bushing (40), new lock washer (41), and split washer (42) on charger cable assembly (34).

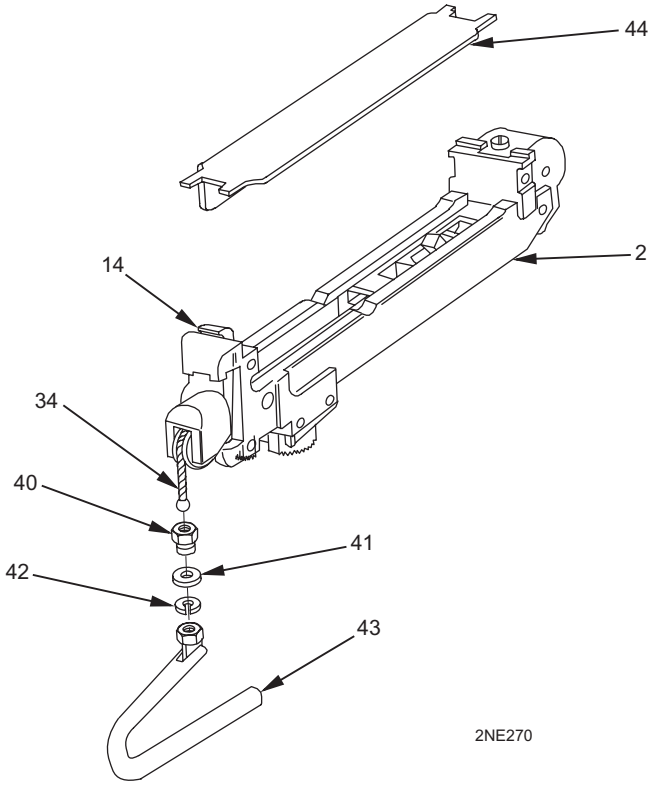
19. Install manual control handle (43) on machine bushing (40).

20. Install M10 manual charger on receiver and perform function test (WP 0010 00, item 16).

NOTE

Be sure charger bolt cover is installed to the channel housing in the correct position for mounting to the machine gun.

21. Install charger bolt cover (44) on channel housing (2), aligning forks of charger bolt cover with channel housing (2) and release lever (14).



END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715) M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN – REAR SIGHT ASSEMBLY DISASSEMBLY, INSPECT/REPAIR, ASSEMBLY

This work package applies only to the flexible type.

INITIAL SETUP:

Tools and Special Tools
Field maintenance small arms shop set (item 6, WP 0042 00)

References
TM 9-1005-213-10

Equipment Conditions
Rear sight assembly removed (WP 0021 00)

DISASSEMBLY

1. Remove two machine screws (1) and rear sight scale dial (2).

2. Remove two machine screws (3) and riser (4) from base (5).

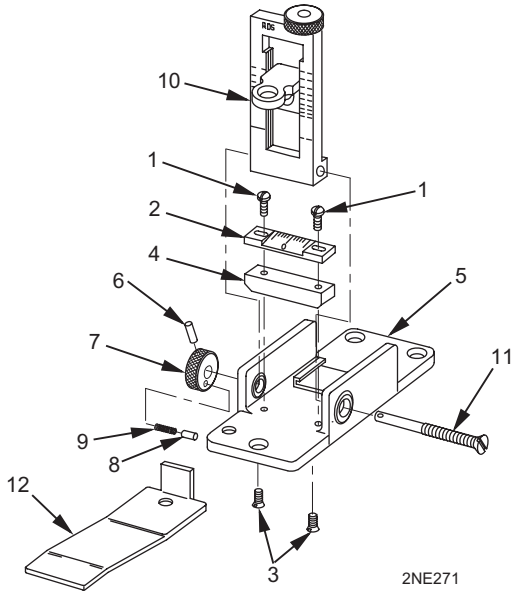
WARNING

To avoid injury to your eyes, use care when removing or installing spring-loaded parts.

3. Remove spring pin (6) and rear sight windage screw knob (7). Remove detent windage plunger (8) and helical compression spring (9) from rear sight windage screw knob.

4. Lift folding rear sight assembly leaf (10) to vertical position and push down to remove setscrew (11). Lift out folding rear sight assembly leaf to remove.

5. Remove flat spring (12) from base (5).



INSPECT/REPAIR

1. Check for missing, damaged, or worn parts.

2. If the base is damaged, repair is by replacement of next higher assembly.

3. Repair is by replacement of authorized parts.

ASSEMBLY

1. Install flat spring (1) into base (2).

2. Position folding rear sight assembly leaf (3) on flat spring (1). Align folding rear sight assembly leaf with holes in base (2) and install setscrew (4) from the right side.

WARNING

To avoid injury to your eyes, use care when removing or installing spring-loaded parts.

3. Install helical compression spring (5) and detent windage plunger (6) in rear sight windage screw knob (7).

4. Install rear sight windage screw knob (7) on setscrew (4) and secure with spring pin (8) installed flush or below surface. If new setscrew was installed, drill 0.062 + 0.003 in. (0.157 + 0.008 cm) hole through setscrew using rear sight windage screw knob as a template.

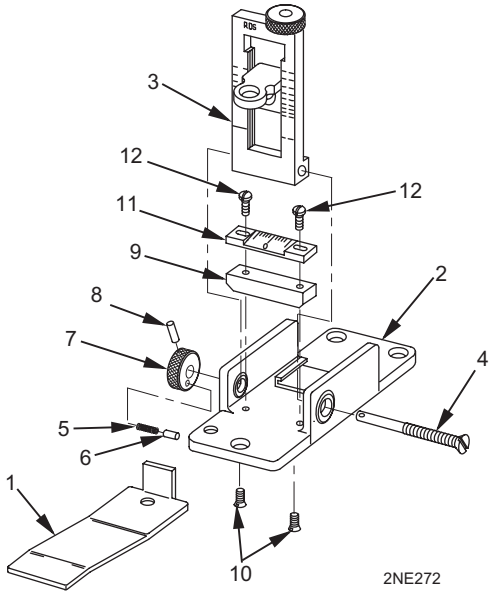
NOTE

With rear sight windage screw knob (7) installed, there should be no noticeable lateral movement of setscrew (4). Folding rear sight assembly leaf (3) must be capable of full lateral adjustment without binding.

5. Install riser (9) and secure with two machine screws (10).

6. Install rear sight scale dial (11) and secure with two machine screws (12).

7. Perform functional check (TM 9-1005-213-10).



END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL
FLEXIBLE, W/E (1005-00-322-9715)
M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN – TRIGGER LEVER STOP ASSEMBLY DISASSEMBLY, INSPECT/REPAIR, ASSEMBLY

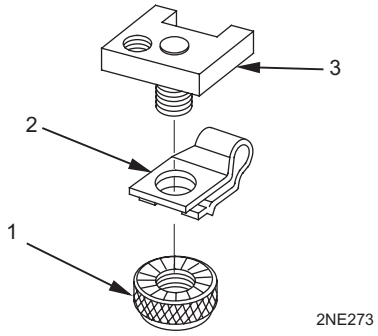
INITIAL SETUP:

Tools and Special Tools
Field maintenance small arms shop set (item 6, WP 0042 00)

Equipment Conditions
Backplate and trigger lever removed (WP 0013 00)
Trigger lever stop assembly removed (WP 0021 00)

DISASSEMBLY

Unscrew and remove timing adjustment nut (1) and flat spring (2) from adjustable trigger lever stop (3).



INSPECT/REPAIR

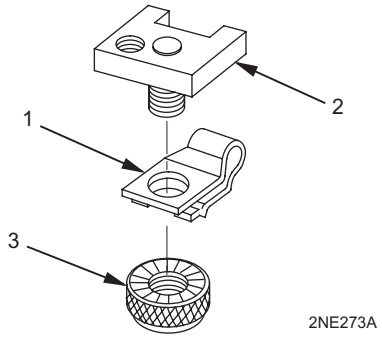
1. Check for missing, damaged, or worn parts.
2. Check flat spring for deformation, cracked, or collapsed spring. Ensure notch on spring is not worn.
3. If the adjustable trigger lever stop is damaged, repair is by replacement of next higher assembly.
4. Repair is by replacement of authorized parts.

ASSEMBLY

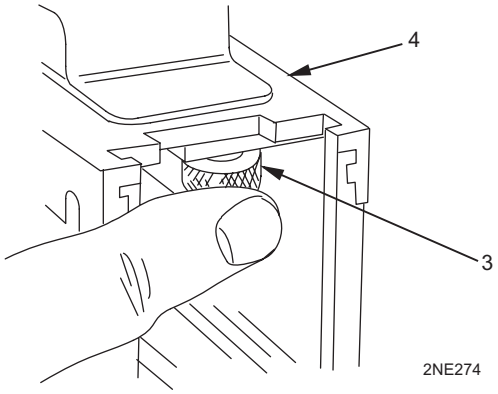
NOTE

When installing flat spring, be sure that V-notch is pointed down toward the timing adjustment nut.

1. Install flat spring (1) on adjustable trigger lever stop (2) and secure with timing adjustment nut (3).



2. Perform function test after installation into receiver (4). The timing adjustment nut (3) shall screw into the adjustable trigger lever stop (2) and shall be held in any position by the flat spring (1). A distinct audible click should be heard each time the timing adjustment nut is turned. If click is not heard, replace the flat spring and/or the timing adjustment nut.



END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL
FLEXIBLE, W/E (1005-00-322-9715)
M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN – BOLT LATCH ASSEMBLY DISASSEMBLY, INSPECTION, REPAIR OR REPLACEMENT, ASSEMBLY

This work package applies only to the flexible type.

INITIAL SETUP:

Tools and Special Tools
Field maintenance small arms shop set (item 6, WP 0042 00)

Materials/Parts
Cotter pin (item 48, WP 0044 00)

References
TM 9-1005-213-10
WP 0020 00
WP 0021 00

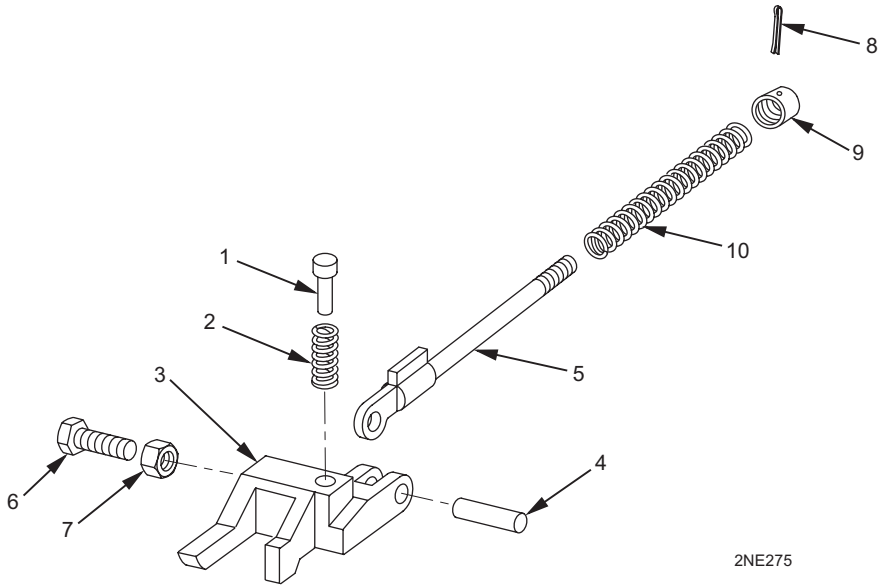
Equipment Conditions
Backplate and trigger lever removed (WP 0013 00)
Bolt latch and trigger lever stop assembly removed (WP 0021 00)

DISASSEMBLY

1. Remove headless shoulder pin (1) and helical spring (2) from manual control lever (3).
2. Remove straight pin (4) to remove eccentric pin (5) from manual control lever (3).
3. Remove machine bolt (6) and hexagon plain nut (7) from manual control lever (3).
4. If present, remove cotter pin (8) and plain round nut (9). Discard cotter pin.
5. Remove helical compression spring (10) from eccentric pin (5).

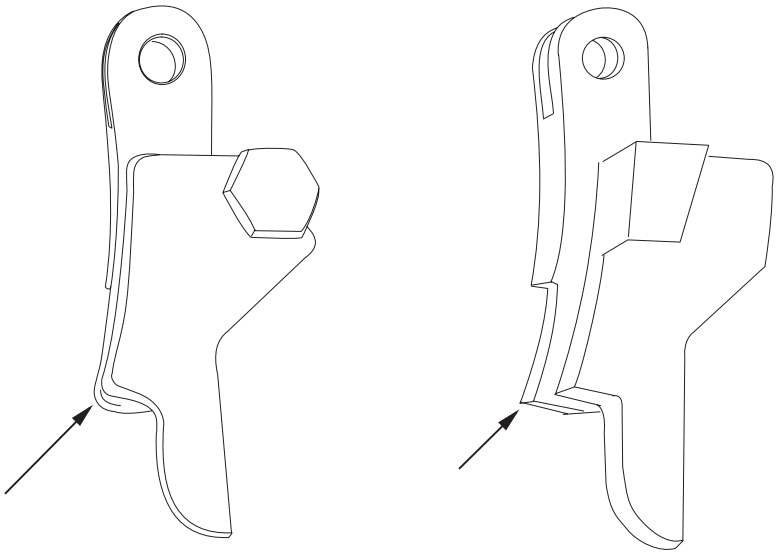
NOTE

Newly designed bolt latch does not have machine bolt (6) and hexagon plain nut (7).



INSPECTION

1. Remove barrel assembly, backplate assembly, bolt assembly, buffer assembly, and barrel extension assembly IAW TM 9-1005-213-10.
2. Visually inspect manual control lever.
3. The curved/rounded edge is a nonconforming/defective manual control lever. The sharp edge is a serviceable manual control lever.
4. If the manual control lever exhibits rounded edge(s) or excessive wear, replace it with a manual control lever with a sharp edge. A QDR should not be submitted against any manual control lever exhibiting rounded edge due to excessive wear.



A B

EITHER OF THE ABOVE DESIGNS ARE ACCEPTABLE: HOWEVER, THE ROUNDED EDGE IDENTIFIED BY THE ARROW IN PICTURE A IS UNACCEPTABLE WHILE THE SHARP EDGE IDENTIFIED BY THE ARROW IN PICTURE B IS ACCEPTABLE.

2NE275A

REPAIR OR REPLACEMENT

1. Check for missing, damaged, or worn parts.
2. Check springs for collapsed coils.
3. Repair is by replacement of authorized parts.

ASSEMBLY

1. Screw hexagon plain nut (1) onto machine bolt (2) and tighten. Install machine bolt (2) in manual control lever (3) and tighten.

2. Position eccentric pin (4) in manual control lever (3) and secure with straight pin (5).

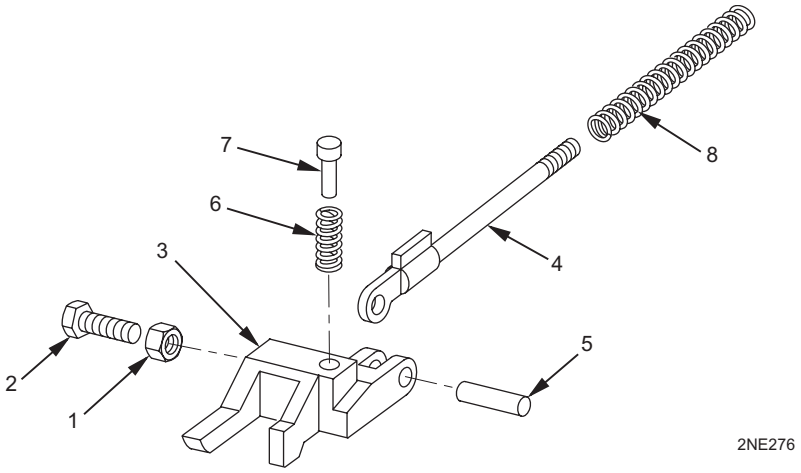
3. Install helical spring (6) and headless shoulder pin (7) in manual control lever (3).

4. Install helical compression spring (8) on eccentric pin (4).

NOTE

Plain round nut and cotter pin will be installed when bolt latch assembly is installed.

Refer to WP 0021 00 for installation of bolt latch assembly and WP 0020 00 for inspection of bolt latch assembly clearance between machine bolt (2) head and left side plate of receiver.



END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715)
M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN – REAR CARTRIDGE STOP ASSEMBLY DISASSEMBLY, INSPECT/REPAIR, ASSEMBLY

This work package applies only to the left hand feed flexible type.

INITIAL SETUP:

Tools and Special Tools
Field maintenance small arms shop set (item 6, WP 0042 00)

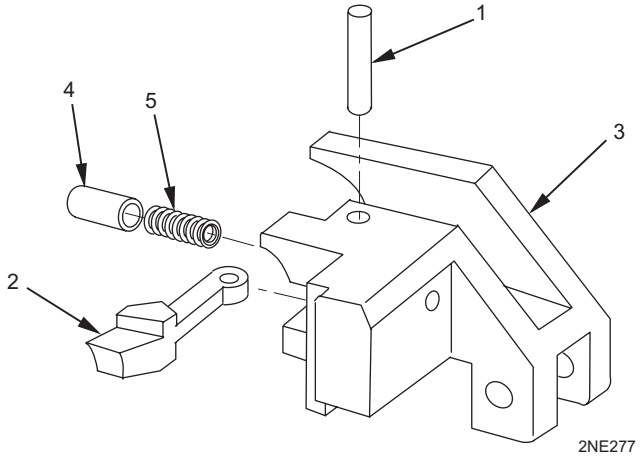
Equipment Conditions
Rear cartridge stop assembly removed (WP 0013 00)

DISASSEMBLY

WARNING

To avoid injury to your eyes, use care when removing or installing spring-loaded parts.

1. Drive out and remove headless straight pin (1) and cartridge aligning pawl (2) from stop (3).
2. Remove aligning pawl detent plunger (4) and helical compression spring (5).

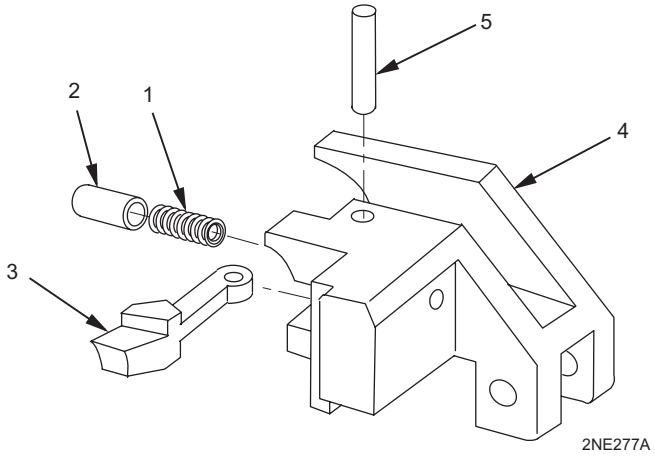


INSPECT/REPAIR

1. Check for missing, damaged, and worn parts.
2. Check spring for collapsed coils.
3. Check cartridge aligning pawl for signs of wear.
4. If the stop is damaged, repair is by replacement of next higher assembly.
5. Repair is by replacement of authorized parts.

ASSEMBLY

1. Position helical compression spring (1), aligning pawl detent plunger (2), and cartridge aligning pawl (3) in stop (4) and secure with headless straight pin (5).
2. Peen edge of hole in stop (4) to hold headless straight pin (5) in place.



END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715) FIXED M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN – CARTRIDGE RECEIVER DISASSEMBLY, INSPECT/REPAIR, ASSEMBLY

INITIAL SETUP:

Tools and Special Tools
Feeler gage (tem 0.4, WP 0042 00)
Field maintenance small arms shop set (item 6, WP 0042 00)

Materials/Parts
Cotter pin (item 7, WP 0054 00)
Safety wire (item 5, WP 0054 00)

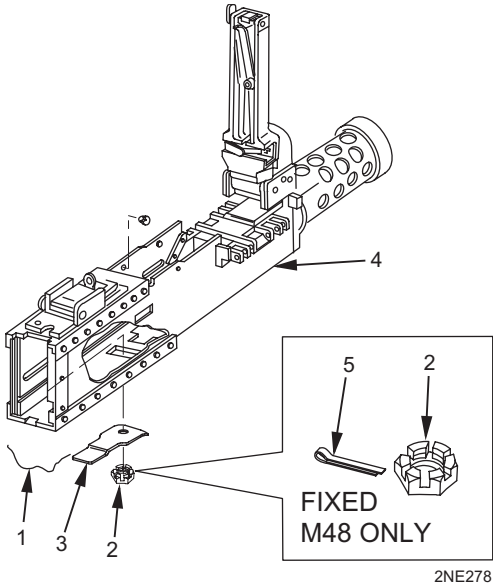
References
WP 0035 00

Equipment Conditions
Machine gun field stripped (TM 9-1005-213-10)

DISASSEMBLY

1. Remove and discard safety wire (1). Remove slotted nut (2) and flat spring (3) from bottom plate of receiver (4) (Flex only).

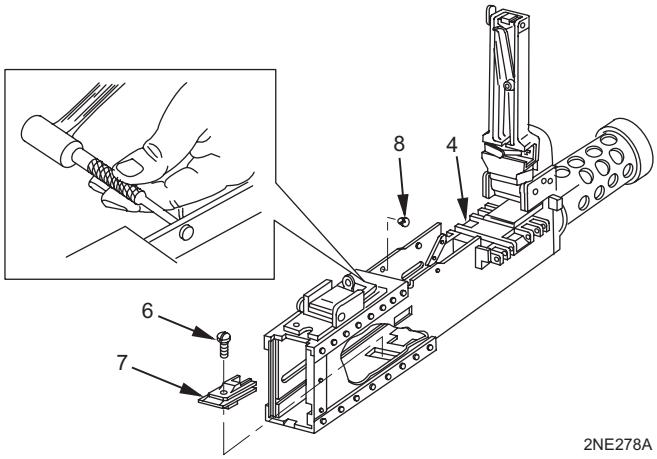
2. Remove and discard cotter pin (5). Remove slotted nut (2) (Fixed M48 only).



DISASSEMBLY - Continued

3. Remove machine screw (6) and breechlock cam (7).

4. If damaged, remove bolt stop (8) from left side plate of receiver (4).



NOTE

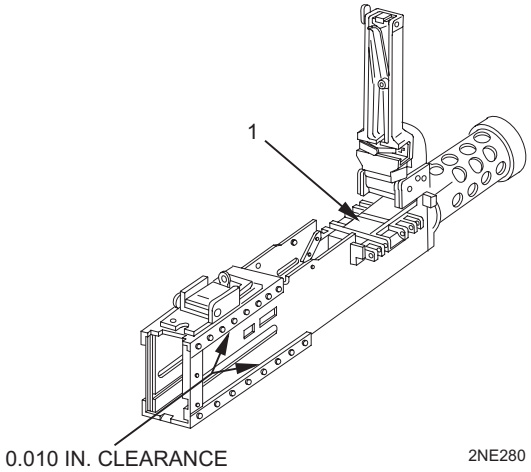
Remove barrel support and/or machine thread bushing and shim only if repair or replacement is required.

5. If required, remove barrel support and/or machine thread bushing, and shim (WP 0035 00).

INSPECT/REPAIR

1. Check for missing, damaged, or worn parts.

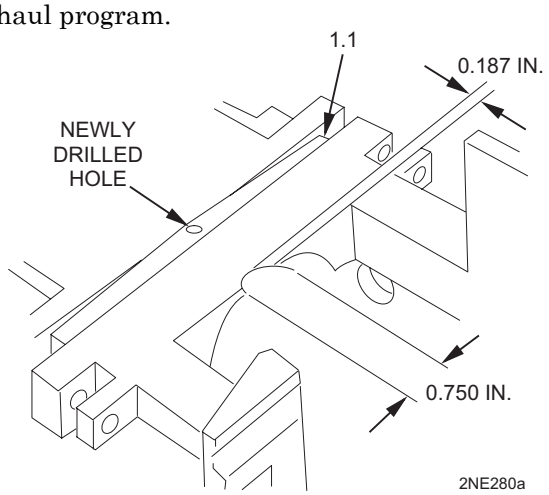
2. Check trunnion block (1) for cracks or wear. Trunnion block is unserviceable if cracked or worn beyond repair areas.



NOTE

Trunnion blocks exhibiting grooves or wear in the feedway area measuring 0.020 in. (0.050 cm) in depth are considered to have reached the permissible wear limitations and will be turned in as unserviceable.

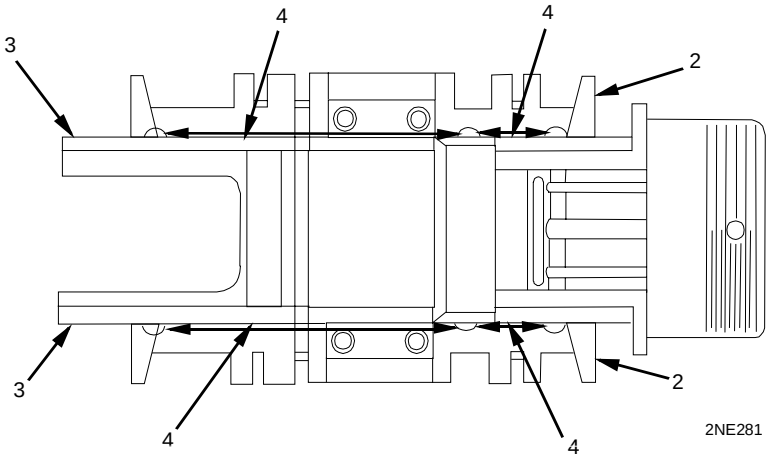
3. A receiver assembly with a hole broken through the feedway of the trunnion block stripper slot (1.1) may be repaired by drilling a 0.198 to 0.203 in. (0.503 to 0.516 cm) diameter hole, centered in the slot to include the damaged area. The trunnion hole has a maximum size of 0.250 in. (0.635 cm) in weapons coming from the depot overhaul program.



NOTE

A ten thousandths inch (0.010) feeler gage must go between the riveted components for the entire length of the riveted area before the components are considered loose. Weapons thus found to be unserviceable will be turned in for overhaul.

4. Inspect looseness of rivets holding the feed pawl brackets. The maximum allowable looseness or gap permitted between the belt holding (ammo) brackets (2) and side plates (3) is 0.010 in. (0.025 cm). The gage must go between the components for the entire length (rivet to rivet) of the riveted area. The gage and the measurement must fail at all Inspection points indicated at (4) per each side. The receiver is unserviceable if a ten thousandths inch (0.010 in.) feeler gage (item 0.4, WP 0042 00) passes through the area between the rivets (rivet to rivet). Movement of brackets is allowed. Rivets are allowed to turn.

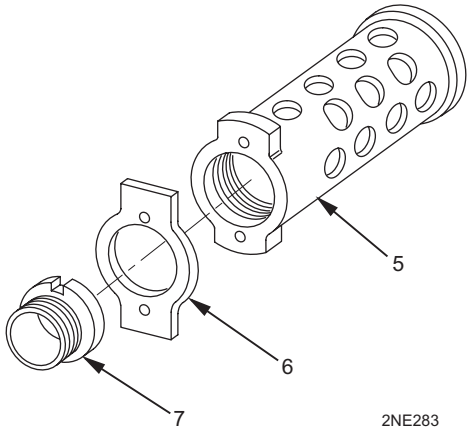


The gage must go between the components for the entire length (rivet to rivet) of the riveted area. If the gage, or the measurement fails at all Inspection points indicated (Item 4) on either side, the weapon must be condemned.

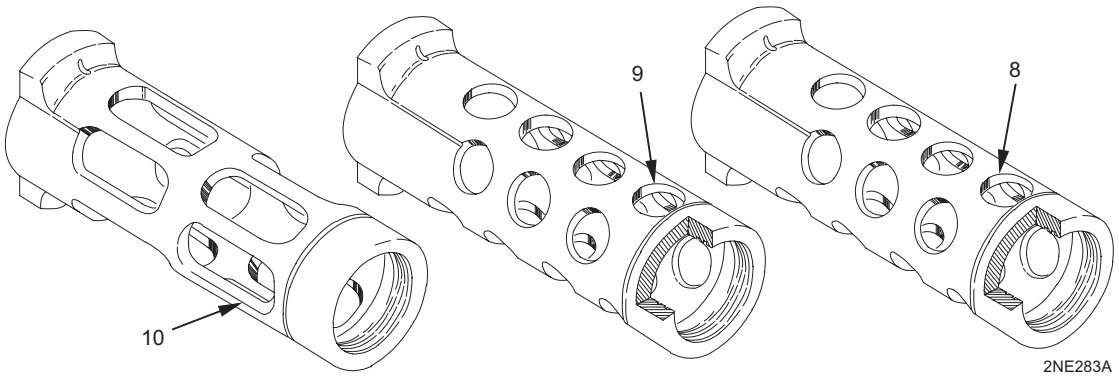
INSPECT/REPAIR - Continued

5. Inspect/verify that there is no movement of riveted components **(with the exception of feed pawl brackets where movement is allowed)**. Attempt to move riveted components forward and to the rear, and up or down. **Receiver components must not move.** Rivets may have relative movement under finger pressure. No missing rivets are allowed. If there is movement of riveted components, **other than the feed pawl brackets,** the receiver is unserviceable and should be turned in for overhaul.

6. Check barrel support (5), spacer plate (6), and machine thread bushing (7) for cracks or burrs. Check barrel support for looseness (WP 0020 00). Maximum allowable looseness is 0.0025 in. (0.0635 mm). A spacer plate thickness is selected that requires a torque over and above hand tight. Select a spacer plate thickness to attain a hand tight position between 20º and 55º from the locked position.



7. Cooling holes at the muzzle end of the barrel support are used when either the M3 amplifier or the blank firing attachment (BFA) are installed on the weapon. The hole size on the proper barrel support (8) is smaller than 1.1775 in. Holes larger than 1.1775 in. on the barrel supports (9 and 10) will not support the attachment of the M3 amplifier or BFA.



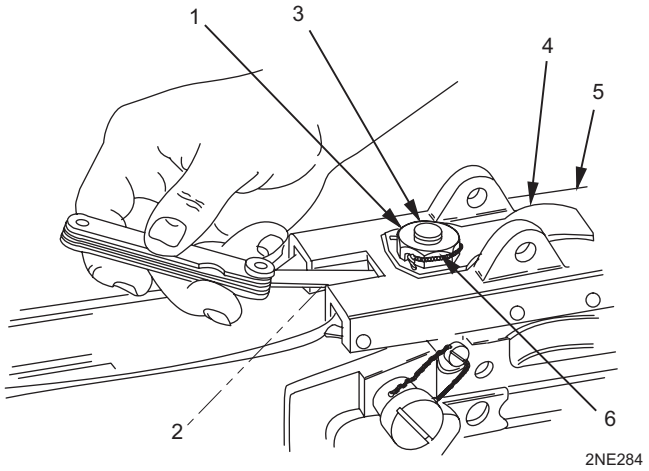
8. Repair is by replacement of authorized parts.

ASSEMBLY

NOTE

Ensure slotted nut (1) is positioned with slots next to receiver for both types (Flex and Fixed M48).

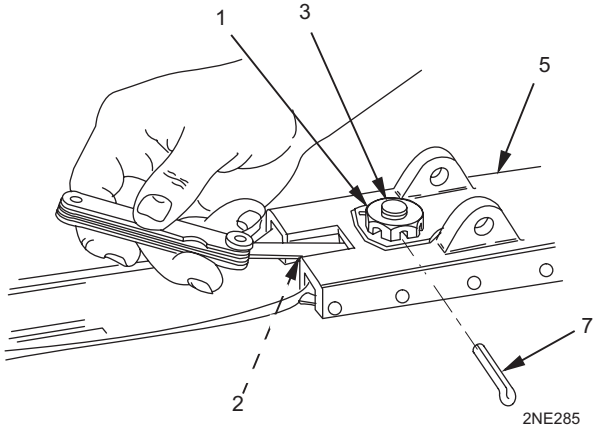
1. Position breechlock cam (2), machine screw (3), and flat spring (4) on bottom plate of receiver (5) and secure with slotted nut (1). Using a feeler gage (item 0.4, WP 0042 00), check clearance between breechlock cam and bottom plate of receiver. Maximum clearance is 0.008 in. (0.020 cm) and minimum clearance is 0.001 in. (0.003 cm). Secure slotted nut, machine screw, and flat spring together with new safety wire (6) (item 5, WP 0054 00) (Flex only).



NOTE

When measuring for maximum clearance, the feeler gage SHALL NOT penetrate to breechlock cam screw. When measuring for minimum clearance, the feeler gage SHALL penetrate to breechlock cam screw.

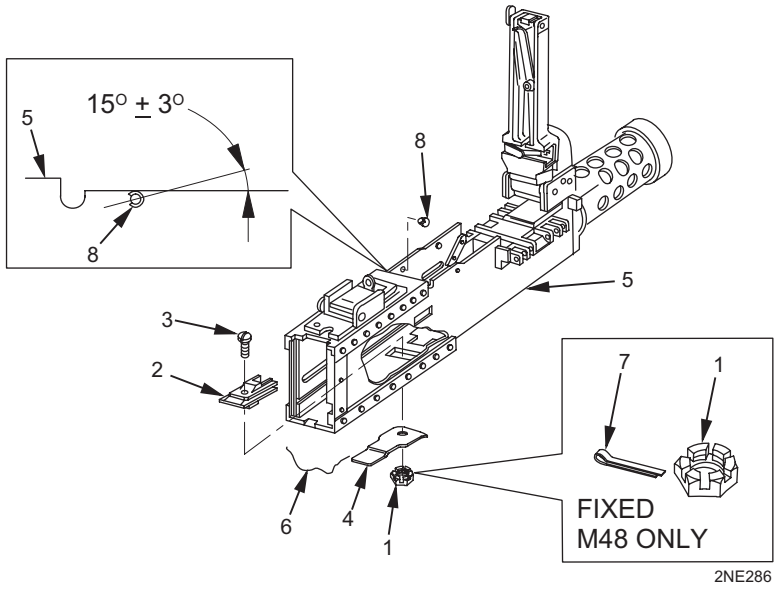
2. Position breechlock cam (2) and machine screw (3) on bottom plate of receiver (5) and secure with slotted nut (1). Using a feeler gage(item 0.4, WP 0042 00), check clearance between breechlock cam and bottom plate of receiver. Maximum clearance is 0.008 in. (0.020 cm) and minimum clearance is 0.001 in. (0.003 cm). Secure slotted nut and machine screw together with new cotter pin (7) (item 7, WP 0054 00) (Fixed M48 only).



ASSEMBLY - Continued

3. If removed, install bolt stop (8) in left inside plate of receiver (5) as shown.

4. Refer to WP 0020 00 for inspection of fit of breechlock cam (2) with receiver (5).



5. If removed, install barrel support and/or machine thread bushing, and spacer plate (WP 0035 00).

END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715) FIXED M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN – BARREL SUPPORT REMOVAL, INSPECT/REPAIR, INSTALLATION

INITIAL SETUP:

Tools and Special Tools

Field maintenance small arms shop set (item 6, WP 0042 00)

Materials/Parts

Cotter pin (item 62, WP 0044 00)
Helical compression spring (item 63, WP 0044 00)
Setscrew (item 60, WP 0044 00)

Equipment Conditions

Machine gun field stripped (TM 9-1005-213-10)
AF TO 11W2-6-3-161

REMOVAL

NOTE

Remove barrel support and/or machine thread bushing only if repair or replacement is required.

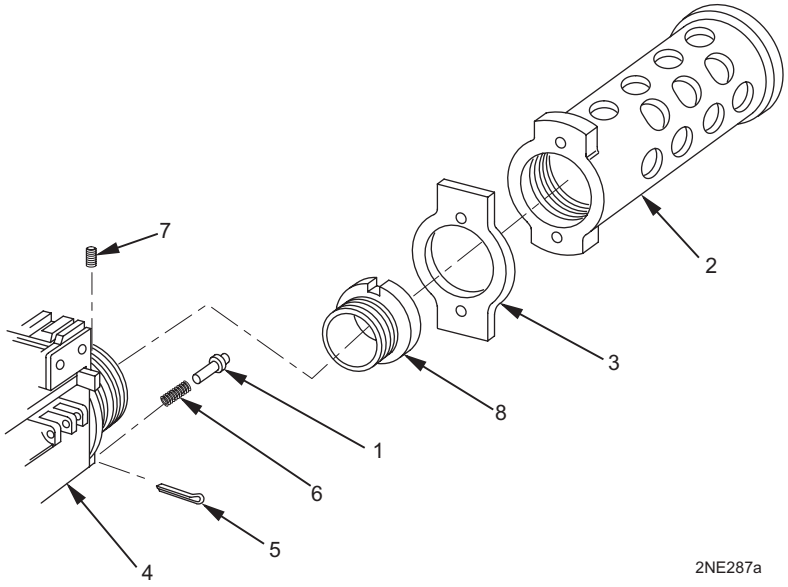
Barrel support with cooling holes larger than 1.17795 in. should not be used with M3 amplifier or BFA.

1. Pull and rotate headless shoulder pin (1) one-quarter turn, out of engagement of barrel support (2).

NOTE

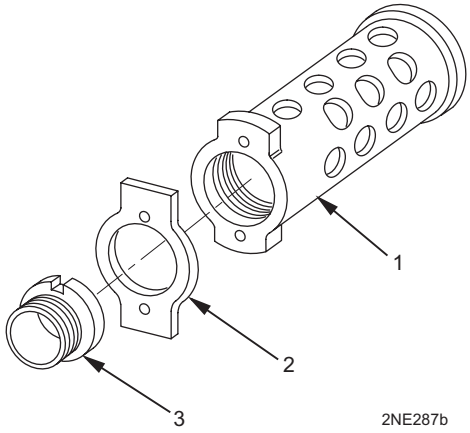
The barrel support has a left hand thread.

2. Remove barrel support (2) and trunnion block shim (3) from receiver (4).
3. Remove cotter pin (5), releasing headless shoulder pin (1) and helical compression spring (6). Discard cotter pin and helical compression spring.
4. Remove setscrew (7) and machine thread bushing (8) from receiver (4). Discard setscrew.



INSPECT/REPAIR

1. Check for missing, damaged, or worn parts.
2. Check barrel support (1), trunnion block shim (2), and machine thread bushing (3) for cracks or burrs.



3. Check barrel support (1) for looseness (WP 0020 00). Maximum allowable looseness is 0.0025 in. (0.0635 mm). A shim thickness is selected that requires a torque over and above hand tight. Select a shim thickness to attain a hand tight position between 20º and 55º degrees from the locked position.

4. Repair is by replacement of authorized parts.

INSTALLATION

WARNING

Machining operations are an eye hazard. Eye injury is possible; wear adequate eye protection.

NOTE

Reinstall barrel support and/or machine thread bushing, and shim only if repair or replacement is required.

1. Install old machine thread bushing (1) on receiver (2) (15 foot-pound minimum) while orienting holes; secure with new setscrew (3). If old machine thread bushing and setscrew holes will not align, a new hole must be drilled. A minimum of 0.250 in. of solid material must be present between any two holes.

2. If new machine thread bushing (1) is being installed, screw it tightly in place (15 foot-pound minimum). Drill hole for setscrew (3) by drilling down through the hole in the trunnion block (4) with a No. 7 drill. Install new setscrew.

3. Place new helical compression spring (5) over headless shoulder pin (6) and insert into recess at bottom front of receiver (2). Ensure headless shoulder pin manually actuates.

4. Press headless shoulder pin (6) rearward and insert new cotter pin (7), giving headless shoulder pin 1/4 turn right or left, to hold out of engagement.

NOTE

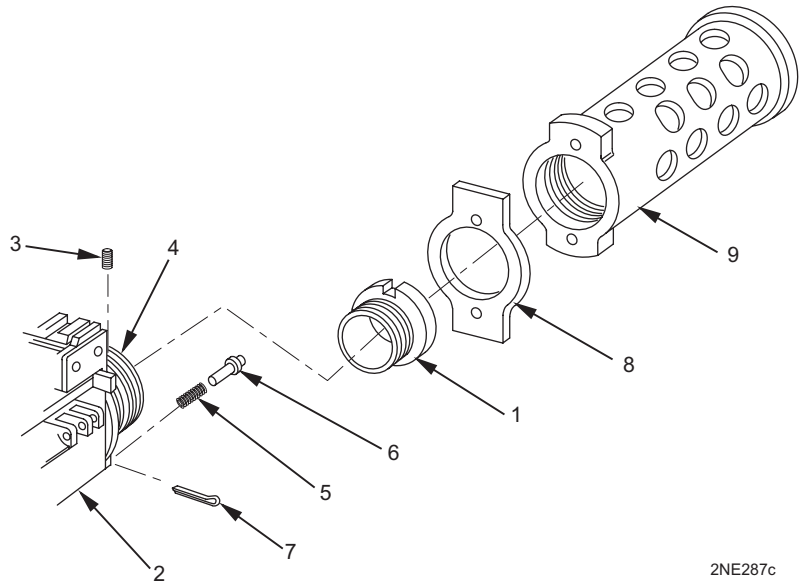
Select trunnion block shim thickness to attain a handtight position between 20º to 55º from the locked position.

5. Select trunnion block shim (8) and slide onto trunnion block of receiver (2). Screw on barrel support (9) and draw tight.

INSTALLATION - Continued

6. If parts are not in alignment when screwed tightly together, disassemble and reassemble. Use trunnion block shim (8) of correct thickness until proper alignment is obtained.

7. Engage headless shoulder pin (6).



END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715) M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN PREPARATION FOR STORAGE OR SHIPMENT

INITIAL SETUP:

Materials/Parts
- Barrier material (item 2, WP 0060 00)
- Cleaner, Lubricant, and Preservative (CLP) (item 11, WP 0060 00)
- Cushioning material (item 15, WP 0060 00)
- Fiberboard (item 17, WP 0060 00)
- Fiberboard box (item 3, WP 0060 00)
- Fiberboard box (ASTM D-5118) (item 4, WP 0060 00)
- Paper tape (item 29, WP 0060 00)
- Sleeve and tubing bag (item 1, WP 0060 00)
- Solvent cleaning compound (item 13, WP 0060 00)
- Steel strap (item 26, WP 0060 00)
- Wooden box (PPP-B-601) (item 5, WP 0060 00)
- Wooden box (PPP-B-621) (item 6, WP 0060 00)

References
- MIL-STD-129
- MIL-STD-1186
- TM 9-1005-213-10
- AF TO 11W2-6-3-161

CLEANING, DRYING, AND PRESERVATION

The M2 machine gun shall be disassembled as necessary to accomplish the cleaning. All surfaces shall be cleaned with solvent cleaning compound (item 13, WP 0060 00).

Preserve all surfaces of the M2 machine gun with CLP (item 11, WP 0060 00).

PACKAGING

Packaging, if required, for shipping/storage that will not exceed 90 days shall be as follows:

Clean IAW TM 9-1005-213-10.

Wrap with barrier material (item 2, WP 0060 00).

Place in sleeve and tubing bag (item 1, WP 0060 00) or wrap with barrier material (item 2, WP 0060 00) and seal with paper tape (item 29, WP 0060 00).

Place one or more of item in minimum size container. Block and brace in accordance with MIL-STD-1186. Cushion the M2 with cushioning material (item 15, WP 0060 00) and use fiberboard (item 17, WP 0060 00) as filler to create a tight pack.

PACKAGING - Continued

Fiberboard containers shall be in accordance with ASTM D-5118 (item 4, WP 0060 00) and may be Class Domestic. Gross weight and size of the material shall determine grade of fiberboard container. Fiberboard boxes (item 3, WP 0060 00) may also be used.

Wooden boxes shall be in accordance with PPP-B-601 (item 5, WP 0060 00) or PPP-B-621 (item 6, WP 0060 00).

Equivalent materials may be used.

Mark in accordance with MIL-STD-129.

An alternate method that may be used for preserving and packaging the M2 machine gun is by use of very thick plastic VCI bags that have the corrosion inhibitors impregnated into the bag. The bags may be gusseted at the bottom and, depending on the size, may be able to line a box of the required length and width. The bags can be closed by heat sealing, by folding and taping the seam, or by twisting and tying the neck of the bag. VCI bags may be ordered with 24 hour delivery by contacting Ms. Shelly at (309) 782-9544.

Air Force users will package their weapons for long term storage and shipping in accordance with Specialized Packaging Instruction (SPI) 00-322-9715.

PACKING

The unit container shall be packed in a wooden box (item 5, WP 0060 00).

Nail top to shipping box.

Secure box with steel straps (item 26, WP 0060 00).

MARKING

Serial number is required and shall be listed on the packing list. Packing list shall be put inside the shipping box.

Apply following marking on the outside of each fiberboard box:

National Stock Number
Federal Item Name
One Each
Date
Weight: Cube

Only the following markings shall be applied by stencil or label to exterior of shipping box:

Address of Destination
Weight and Cube

END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN
PREPARATION FOR OVERSEAS SHIPMENT

INITIAL SETUP:

Materials/Parts
Barrier material (item 2, WP 0060 00)
Cleaner, Lubricant, and Preservative (CLP) (item 11, WP 0060 00)
Corrosion inhibitor cubes (item 14.1, WP 0060 00)
Cushioning material (item 15, WP 0060 00)

Materials/Parts - Continued
Fiberboard box (item 4,WP 0060 00)
Fiberboard (item 17, WP 0060 00)
Paper tape (item 29, WP 0060 00)

References
TB 9-1000-247-34
WP 0020 00

Refer to TB 9-1000-247-34.

Air Force users use annual gaging procedures (WP 0020 00).

ISSUE

When the M2 machine gun is not properly preserved and packaged, extensive damage can occur to the weapon due to effects of moisture/humidity.

USER ACTION

CAUTION

Do not use plain bubble wrap. Some bubble wraps contain a chloride that forms an acid when combined with moisture, thus rusting the weapon. Plain bubble wrap should not be placed next to the metallic surface of a weapon.

In order to prevent extensive damage due to preservation and packaging problems, the following instructions are provided:

NOTE

Weapons must not be steam cleaned or shipped dry of preservatives.

a. Completely clean the weapon (see WP 0036 00).

b. Apply CLP (item 11, WP 0060 00) generously to all inside and outside surfaces of the M2 machine gun when preparing to ship.

USER ACTION - Continued

c. Vapor Corrosion Inhibitor (VCI) barrier paper will keep foreign matter out and keep the lubricant in. Wrap with barrier paper (item 2, WP 0060 00), place 4 Corrosion Inhibitor cubes (item 14.1, WP 0060 00) inside the barrier paper wrap with the M2 machine gun, and apply tape (item 29, WP 0060 00) as required. Barrier paper is coated on one side and the coated side is placed against the weapon.

d. Once the weapon is wrapped, place into a weather resistant fiberboard box (item 4, WP 0060 00). Include cushioning material (item 15, WP 0060 00) to prevent shifting of the weapon. Tape all open seams and edges to prevent the corrosion inhibitor from escaping and to prevent foreign object infiltration.

e. An alternate method that may be used for preserving and packaging the M2 machine gun is by use of very thick plastic VCI bags that have the corrosion inhibitors impregnated into the bag. The bags may be gusseted at the bottom and, depending on the size, may be able to line a box of the required length and width. The bags can be closed by heat sealing, by folding and taping the seam, or by twisting and tying the neck of the bag. VCI bags may be ordered with 24 hour delivery by contacting Ms. Shelly at (309) 782-9544.

A bag 31 in. x 21 in. x 51 in. will enclose an M2 machine gun without the barrel. The barrel can be angled into the bag.
A bag 42 in. x 36 in. x 58 in. may line a container and can accommodate a few weapons.
A bag 58 in. x 48 in. x 90 in. may line a container and can be used for several weapons.
(The 40 in. x 48 in. tri-wall containers that contain spare parts from DLA depots can be reutilized with this size bag or even a 42 in. x 36 in. x 90 in. size. When layering weapons, sandwich a sheet of corrugated fiberboard (item 17, WP 0060 00) between two sheets of barrier paper (item 2, WP 0060 00) between layers of weapons, or use at least one sheet of barrier paper between layers of weapons).
A bag 40 in. x 28 in. x 60 in. can accommodate the M2 machine gun and other machine guns as well.

f. Heavy duty fiberboard boxes may be used when preserving and packaging the weapons.

A 48 in. x 40 in. x 36 in. box will accommodate several guns per box. Blocking material should be utilized to immobilize the guns.
A 48 in. x 24 in. x 24 in. box will accommodate one gun per box. Blocking material should be utilized to immobilize the gun.

g. Plastic containers can be used when preserving and packaging the weapons, and may provide additional security by allowing use of a padlock.

A 40 in. x 24.5 in. x 19.5 in. container will accommodate one M2 machine gun.
A 37 in. x 21 in. x 20 in. container will accommodate one M2 machine gun.

h. Other containers that may be used and their on-post source are:
An AT4 box from the ammunition refuge yard.
A spare parts tri-wall consolidation container from the Director of Logistics (DOL) receiving area.

END OF WORK PACKAGE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, BARREL FLEXIBLE, W/E (1005-00-322-9715) M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE OF M2 MACHINE GUN ILLUSTRATED LIST OF MANUFACTURED ITEMS

INTRODUCTION

Scope

This work package includes complete instructions for making items authorized to be manufactured or fabricated at unit and direct support maintenance.

How To Use the Index of Manufactured Items

A part number index in alphanumeric order is provided for cross-referencing the part number of the item to be manufactured to the page which covers the fabrication criteria.

Explanation of the Illustrations of Manufactured Items

All instructions needed by maintenance personnel to manufacture the item are included on the illustrations. All bulk materials needed for manufacture of an item are listed by part number or specification number in a tabular list on the illustration.

INDEX OF MANUFACTURED ITEMS

ILLUSTRATIONS OF MANUFACTURED ITEMS

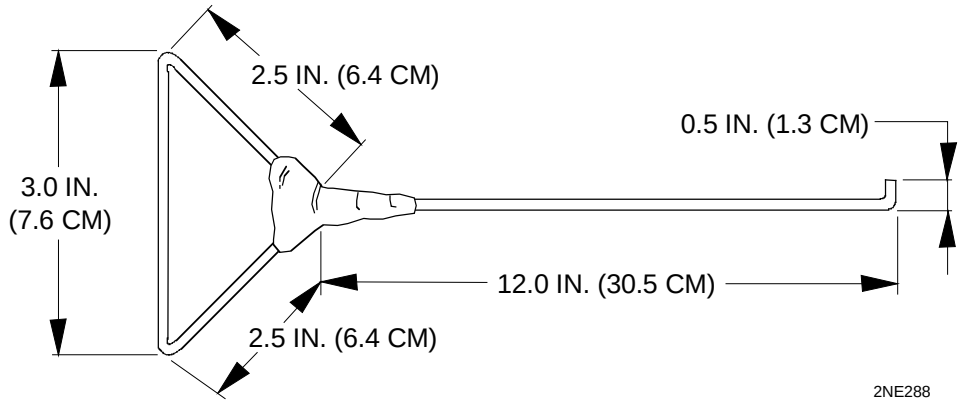


Figure 1. Removal Tool for Improperly Installed Bolt.

NOTES:

Fabricate from 20.5 in. (52.1 cm) long rod of 3/8 in. diameter brass alloy NSN 9525-00-249-7441.

Wrap paper tape (item 29, WP 0060 00) where triangle joins.

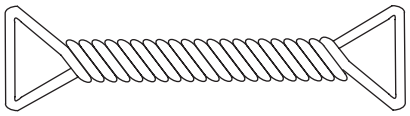


Figure 2. Safety Wire

Table 1. List of Materials.

Nomenclature	Part Number	Figure
Wire, Non-electrical	NASM20995-C41	2
Wire, Non-electrical	NASM20095-F41	2
Wire, Non-electrical	MS52005C017	2

NOTES:

Fabricate wire from part number found in Table 1.

Cut wire to necessary length.

Refer to NASM 33540 for illustration of safety wire.

END OF WORK PACKAGE

CHAPTER 6

SUPPORTING INFORMATION FOR MACHINE GUN, M2

UNIT AND DIRECT SUPPORT

**MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)**

REFERENCES

SCOPE

This work package lists all field manuals, forms, technical manuals/technical orders, miscellaneous publications, and pamphlets referenced in this manual.

FIELD MANUALS

FM 17-12-1	Tank Combat Tables
FM 4-25.11	First Aid
FM 23-65	Machine Gun Caliber .50, HB, M2

FORMS

AFTO Form 22	Technical Order System Publication Improvement Report and Reply
AFTO Form 105	Inspection, Maintenance, and Firing Data for Ground Weapons
DA Form 2028	Recommended Changes to Publications and Blank Forms
DA Form 2404	Equipment Inspection and Maintenance Work Sheet
NAVMC 10722	Marine Corps Recommended Changes to Publications
SF 364	Report of Discrepancy
SF 368	Product Quality Deficiency Report (Category II)
TMDER NAVSEA 9086/10	Publication Improvement Report (Navy)

RELATED PUBLICATIONS

DOD 4160.21-M-1	Defense Demilitarization Manual
DOD 6055.9-STD	DOD ammunition and explosives safety standards

TECHNICAL BULLETINS

TB 9-1000-247-34	Standards for Overseas Shipment of Small Arms and Fire Control Materials
TB 43-0240	Inspection and Calibration of Small Arms Gages
TB 43-180	Calibration and Repair Requirements for the Maintenance of Army Materiel

TECHNICAL MANUALS/TECHNICAL ORDERS

SW 361-AO-MMO-010	Small Arms Machine Gun Mounts MK26, MK46, MK58, MK78, and MK82 Description, Operation, Maintenance and Illustrated Parts Breakdown
TM 9-1005-203-12&P	Operator's and Unit Maintenance Manual (Including Repair Parts and Special Tools List) for Recoil Amplifier, M3 (NSN 1005-01-323-5406) for Machine Gun, Caliber .50, M2, HB, Flexible
TM 9-1005-213-10 AF TO 11W2-6-3-161 TM 02498A-10/1 SW361-AB-MMO-010	Operator's Manual for Machine Gun, Caliber .50, M2, Heavy Barrel, Flexible and Turret Type
TM 9-1005-213-23&P	Unit and Direct Support Maintenance Repair Parts and Special Tools List (Including Depot Repair Parts and Special Tools List) for Machine Gun, Caliber .50, M2, Heavy Barrel, Flexible and Turret Type
TM 9-1005-314-12&P	Operator's and Organizational Maintenance Manual (Including Repair Parts and Special Tools List) for Blank Firing Attachment (BFA) M19 (NSN 1005-01-09-7510) for Cal. .50 M2 Heavy Barrel Machine Gun
TM 9-1005-245-13&P TM 9-1005-245-13&P/1 TO 11W2-8-1-322	Operator's, Unit, and Direct Support Maintenance Manual with Repair Parts and Special Tools List (RPSTL) for Machine Gun Mounts and Combinations for Tactical/Armored Vehicles and Ground Mounting
TM 9-1010-231-13&P TM 08686A-13&P/1 TO 11W2-8-32-4	Operator's, Unit, and Direct Support Maintenance Manual with Repair Parts and Special Tools List (RPSTL) for Mount, Machine Gun, MK64

TM 9-1300-206 AFMAN 91-201	Ammunition and Explosive Standards
TM 9-4933-208-34	Operator's, Unit, and Direct Support Maintenance Manual for Kits, Barrel and Breechblock Gage M8, M6A1
TM 750-244-7	Procedures for Destruction of Equipment in Federal Supply Classifications 1000, 1005, 1010, 1020, 1025, 1030, 1055, 1090, and 1095 to Prevent Enemy Use
TM 4700-15/1	Equipment Record Procedures
TO 00-35D-54	Air Force Material Deficiency Reporting and Investigating System
TO 11W-1-10	Historical Date Recording of Inspection, Maintenance, and Firing Data for Ground Weapons
TO 11W2-6-3-172	TBD

MISCELLANEOUS PUBLICATIONS

AFI 36-2226	USAF Combat Arms Program
AR 750-1	Army Material Maintenance Policies
CTA 8-100	Army Medical Department Expendable/Durable Items
CTA 50-970	Expendable/Durable Items (Except: Medical, Class V Repair Parts, and Heraldic Items)
MCO 4855.10	Product Quality Deficiency Report
MCO P4610.19	Transportation and Travel Record of Transportation Discrepancies
MIL-STD-129	Marking for Shipment and Storage
MIL-STD-1186	Cushioning, Anchoring, Bracing, Blocking and Waterproofing; with Appropriated Test Methods
NASM 33540	General Practices for Safety Wiring and Cotter Pinning

MISCELLANEOUS PUBLICATIONS - CONTINUED

SL 1-2/SL 1-3	Publications Stocked by USMC (INDEX) Program Training and Management and Range Operations
Unknown (https://www.us.army.mil/suite/folder/4718898)	Small Arms Integration Booklet

PAMPHLETS

DA PAM 25-30	Consolidated Index of Army Publications and Blank Forms
DA PAM 750-8	The Army Maintenance Management System (TAMMS)

END OF WORK PACKAGE

UNIT AND DIRECT SUPPORT

**MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)**

INTRODUCTION FOR STANDARD FORMAT MAINTENANCE ALLOCATION CHART (MAC)

INTRODUCTION

The Army Maintenance System MAC

This introduction provides a general explanation of all maintenance and repair functions authorized at various maintenance levels under the standard Army Maintenance System concept.

The MAC (immediately following the introduction) designates overall authority and responsibility for the performance of maintenance functions on the identified end item or component. The application of the maintenance functions to the end item or component shall be consistent with the capacities and capabilities of the designated maintenance levels, which are shown on the MAC in column (4) as:

Field – Includes two subcolumns, Unit (C (Crew/Operator) and O (Unit)) and Direct Support (F) maintenance.

Sustainment – Includes two subcolumns, General Support (H) and Depot (D) maintenance.

The tools and test equipment requirements (immediately following the MAC) list the tools and test equipment (both special tools and common tool sets) required for each maintenance function as referenced from the MAC.

The remarks (immediately following the tools and test equipment requirements) contain supplemental instructions and explanatory notes for a particular maintenance function.

Maintenance Functions

Maintenance functions are limited to and defined as follows:

1. Inspect. To determine the serviceability on an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination (e.g., by sight, sound, or feel). This includes inspection and gagings and evaluation of cannon tubes.

2. Test. To verify serviceability by measuring the mechanical, pneumatic, hydraulic, or electrical characteristics of an item and comparing those characteristics with prescribed standards on a scheduled basis, i.e., load testing of lift devices and hydrostatic testing of pressure hoses.

Maintenance Functions - Continued

3. Service. Operations required periodically to keep an item in proper operating condition; e.g., to clean (includes decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases. This includes scheduled exercising and purging of recoil mechanisms.

4. Adjust. To maintain or regulate, within prescribed limits, by bringing into proper position, or by setting the operating characteristics to specified parameters.

5. Align. To adjust specified variable elements of an item to bring about optimum or desired performance.

6. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments of test, measuring, and diagnostic equipment used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

7. Remove/Install. To remove and install the same item when required to perform service or other maintenance functions. Install may be the act of emplacing, seating, or fixing into position a spare, repair part, or module (component or assembly) in a manner to allow the proper functioning of an equipment or system.

8. Replace. To remove an unserviceable item and install a serviceable counterpart in its place. "Replace" is authorized by the MAC and assigned maintenance level is shown as the third position code of the Source, Maintenance and Recoverability (SMR) code.

9. Repair. The application of maintenance services, including fault location/troubleshooting, removal/installation, disassembly/assembly procedures, and maintenance actions to identify troubles and restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

NOTE

The following definitions are applicable to the "repair" maintenance function:

Services – Inspect, test, service, adjust, align, calibrate, and/or replace.

Fault location/troubleshooting – The process of investigating and detecting the cause of equipment malfunctioning; the act of isolating a fault within a system or Unit Under Test (UUT).

Disassembly/assembly – The step-by-step breakdown (taking apart) of a spare/ functional group coded item to the level of its least component, that is assigned an SMR code for the level of maintenance under consideration (i.e., identified as maintenance significant).

Actions – Welding, grinding, riveting, straightening, facing, machining, and/or resurfacing.

10. Overhaul. That maintenance effort (service/action) prescribed to restore an item to a completely serviceable/operational condition as required by maintenance standards in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.

11. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of materiel maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (e.g., hours/miles) considered in classifying Army equipment/ components.

Explanation of Columns in the MAC

Column (1) – Group Number. Column (1) lists FGC numbers, the purpose of which is to identify maintenance significant components, assemblies, subassemblies, and modules with the Next Higher Assembly (NHA).

Column (2) – Component/Assembly. Column (2) contains the item names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

Column (3) – Maintenance Function. Column (3) lists the functions to be performed on the item listed in column (2). (For a detailed explanation of these functions refer to "Maintenance Functions" outlined above.)

Column (4) – Maintenance Level. Column (4) specifies each level of maintenance authorized to perform each function listed in column (3), by indicating work time required (expressed as manhours in whole hours or decimals) in the appropriate subcolumn. This work time figure represents the active time required to perform the maintenance function at the indicated level of maintenance. If the number or complexity of the tasks within the listed maintenance function varies at different maintenance levels, appropriate work time figures are to be shown for each level. The work time figure represents the average time required to restore an item (assembly, subassembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time (including any necessary disassembly/assembly time), troubleshooting/fault location time, and quality assurance time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the MAC. The symbol designations for the various maintenance levels are as follows:

Field:
- C – Operator or Crew maintenance
- O – Unit maintenance
- F – Direct Support maintenance

Sustainment:
- L – Specialized repair activity (SRA)
- H – General Support maintenance
- D – Depot maintenance

Explanation of Columns in the MAC - Continued

NOTE

The "L" maintenance level is not included in column (4) of the MAC. Functions to this level of maintenance are identified by a work time figure in the "H" column of column (4), and an associated reference code is used in the REMARKS column (6). This code is keyed to the remarks and the SRA complete repair application is explained there.

Column (5) – Tools and Equipment Reference Code. Column (5) specifies, by code, those common tool sets (not individual tools), common Test, Measurement and Diagnostic Equipment (TMDE), and special tools, special TMDE and special support equipment required to perform the designated function. Codes are keyed to the entries in the tools and test equipment table.

Column (6) – Remarks Code. When applicable, this column contains a letter code, in alphabetical order, which is keyed to the remarks table entries.

END OF WORK PACKAGE

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL FLEXIBLE, W/E (1005-00-322-9715) FIXED M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

MAINTENANCE ALLOCATION CHART (MAC)

Table 1. MAC for M2 Machine Gun.

(1)	(2)	(3)	(4) MAINTENANCE LEVEL					(5)	(6)
			FIELD			SUSTAINMENT			
GROUP NUMBER	COMPONENT/ASSEMBLY	MAINTENANCE FUNCTION	UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT	TOOLS AND EQUIPMENT REF CODE	REMARKS CODE
			C	O	F	H	D		
01	Machine Gun, Flex (7265636) and Machine Gun, M48 Turret Type (12002953)	Inspect	0.2	0.2	0.4			1 thru 5, 11	
		Test	0.1						
		Service	0.2	0.2	0.2				
		Replace		0.3					
		Repair		0.1	1.2		*	6,7,10,11	
0101	Flash Suppressor (7162072)	Inspect		0.1					
		Service		0.1					
		Replace		0.1				10	
		Repair		0.1				10	
0102	Back Plate Assembly, Spade Grip (6535477)	Inspect	0.1	0.1	0.1				
		Service	0.1	0.1					
		Replace			0.1				
		Repair			0.4			6	
010201	Back Plate Assembly (Without Latch) (5564307)	Inspect		0.1	0.1				
		Service	0.1	0.1					
		Replace			0.1			6	
		Repair			0.2			6	
0103	Backplate Assembly (12937677)	Inspect	0.1	0.1	0.1				
		Service	0.1	0.1					
		Replace			0.1				
		Repair			0.2			6	
0104	Bolt Assembly, Breech (6528322)	Inspect	0.1	0.1	0.1				
		Service	0.1	0.1					
		Replace			0.1				
		Repair		0.1	0.1			6,8,10	
010401	Extractor, Cartridge (6008959)	Inspect	0.1	0.1	0.1				
		Service	0.1	0.1					
		Replace			0.1			6	
		Repair			0.1			6	

Table 1. MAC for M2 Machine Gun - Continued.

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REF CODE	(6) REMARKS CODE
			FIELD			SUSTAINMENT			
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT		
			C	O	F	H	D		
010402	Extension Assembly, Firing Pin (6008976)	Inspect	0.1	0.1	0.1				
		Service	0.1	0.1					
		Replace			0.1			6	
		Repair			0.1			6	
010403	Bolt Subassembly (6147463)	Inspect	0.1	0.1	0.1				
		Service	0.1	0.1					
		Replace			0.1			6	
		Repair			0.1			6	
0105	Buffer, Recoil Mechanism (7266821)	Inspect	0.1	0.1	0.1				
		Service	0.1						
		Replace			0.1				
		Repair			0.1			6,9	
0106	Cover Assembly (6528309)	Inspect	0.1	0.1	0.1				
		Service	0.1	0.1					
		Replace			0.1			10	
		Repair		0.1	0.1			6,10	
0107	Slide Assembly, Retracting (11010439)	Inspect	0.1	0.1	0.1				
		Service	0.1	0.1					
		Replace			0.1			6	
		Repair			0.1			6	
0108	Charger, Gun, Caliber .50, M10 (7267982)	Inspect	0.1	0.1	0.1				
		Service	0.1	0.1					
		Replace			0.1			6	
		Repair			0.4			6	
010801	Stud Assembly, Bolt Charger (7268490)	Inspect	0.1	0.1	0.1				
		Service	0.1	0.1					
		Replace			0.1			6	
		Repair			0.1			6	
010802	Backplate Assembly (12012077)	Inspect	0.1	0.1					
		Service	0.1	0.1					
		Replace		0.1				6	
		Repair		0.1				6	
0109	Sight Assembly, Rear (12003047)	Inspect	0.1	0.1	0.1				
		Service	0.1	0.1					
		Replace			0.2			6	
		Repair			0.1			6	
0110	Stop Assembly, Adjustable, Trigger Lever (7265212)	Inspect	0.1	0.1	0.1				
		Service	0.1	0.1					
		Replace			0.1			6	
		Repair			0.1			6	

Table 1. MAC for M2 Machine Gun - Continued.

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REF CODE	(6) REMARKS CODE
			FIELD			SUSTAINMENT			
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT		
			C	O	F	H	D		
0111	Latch Assembly, Bolt (8448125)	Inspect	0.1	0.1	0.1				
		Service	0.1	0.1					
		Replace			0.1			6	
		Repair			0.1			6	
0112	Stop Assembly, Cartridge, Rear (5577409)	Inspect	0.1	0.1	0.1				
		Service	0.1	0.1					
		Replace			0.1			6	
		Repair			0.1			6	
0113	Receiver, Cartridge (6535480)	Inspect	0.1	0.1	0.1				
		Service	0.1	0.1					
		Replace					0.1		
		Repair		0.1	0.1			6,10	
		Overhaul					*		
0114	Handle, Manual Control, Barrel (5504080)	Inspect	0.1	0.1					
		Service	0.1	0.1					
		Replace		0.1					
		Repair		0.1				10	
0115	Barrel Support	Inspect			0.5			6,7,11	
		Service			0.1				
		Replace			0.5				
		Repair			0.1				

***** Work times are included in DMWR.

END OF WORK PACKAGE

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

TOOLS AND TEST EQUIPMENT REQUIREMENTS

TOOLS AND TEST EQUIPMENT REQUIREMENTS

Table 1 lists all tools and test equipment, both special and common, required for maintaining the M2 machine gun. Common tools are not included in this table when they are part of an existing set, kit, or outfit authorized to the intended user; however, the authorized set, kit, or outfit which contains the prescribed common tools is listed.

Explanation of Columns in the Tools and Test Equipment Requirements

Column (1) – Tool or Test Equipment Reference Code. The tool or test equipment reference code correlates with a code used in column (5) of the MAC.

Column (2) – Maintenance Level. The lowest level of maintenance authorized to use the tool or test equipment.

Column (3) – Nomenclature. Name or identification of the tool or test equipment.

Column (4) – National Stock Number. The NSN of the tool or test equipment.

Column (5) – Tool Number. The manufacturer's part number, model number, or type number.

Explanation of Columns in the Remarks

Column (1) – Remarks Code. The code recorded in column (6) of the MAC.

Column (2) – Remarks. This column lists information pertinent to the maintenance function being performed as indicated in the MAC.

Table 1. Tools and Test Equipment for M2 Machine Gun.

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE LEVEL	NOMENCLATURE	NATIONAL STOCK NUMBER	TOOL NUMBER
0.1	F	Adapter, boresight	4933-01-251-9703	12561298
0.2	F	Boresight kit	4933-00-930-1957	11686583
0.3	F	Combination tool	5210-00-398-4080	7160900
0.4	F	Feeler gage	5210-00-221-1999	599-647
1	F	Gage, barrel erosion	5210-00-317-2502	7274725
1.1	O	Handle, auxiliary bolt	5240-00-600-8583	6008583
1.2	O	Linker-Delinker	4925-00-299-1268	7160003
2	F	Plug gage, brass bushing	5220-00-930-1859	7799808
3	F	Plug gage, firing pin hole	5220-00-507-7200	5077200
4	F	Protrusion gage, firing pin	5220-00-197-4421	7799739
5	F	Rod gage, oil buffer	5220-00-710-6326	7106326
6	F	Shop set, small arms: field maintenance, basic less power	4933-00-754-0664	SC 4933-95-A11
7	F	Special plug gage, barrel support	5220-00-930-1845	7799775
8	F	Tool assembly, bolt latch assembly	4933-00-718-5892	7185892
9	F	Tool assembly, firing pin	4933-00-624-3646	6243646
10	F	Tool assembly, oil buffer rod assembly	4933-00-731-9903	7319903
11	O	Tool kit, small arms repairman	5180-01-462-4254	SC 5180-95-B71
12	DELETED			
13	F	Wrench and gage, combination	6695-00-716-0900	7160900

REMARKS

Not applicable.

END OF WORK PACKAGE

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

INTRODUCTION TO REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)

INTRODUCTION

SCOPE

This RPSTL lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of unit and direct support maintenance of the M2 machine gun. It authorizes the requisitioning, issue, and disposition of spares, repair parts, and special tools as indicated by the source, maintenance, and recoverability (SMR) codes.

GENERAL

In addition to the Introduction work package, this RPSTL is divided into the following work packages.

1. Repair Parts List Work Packages. Work packages containing lists of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. These work packages also include parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Sending units, brackets, filters, and bolts are listed with the component they mount on. Bulk materials are listed by item name in FIG. BULK at the end of the work packages. Repair parts kits are listed separately in their own functional group and work package. Repair parts for reparable special tools are also listed in a separate work package. Items listed are shown on the associated illustrations.

2. Special Tools List Work Packages. Work packages containing lists of special tools, special TMDE, and special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in the DESCRIPTION AND USABLE ON CODE (UOC) column). Tools that are components of common tool sets and/or Class VII are not listed.

3. Cross-Reference Indexes Work Packages. There are two cross-reference indexes work packages in this RPSTL: the National Stock Number (NSN) Index work package and the Part Number (P/N) Index work package. The National Stock Number Index work package refers you to the figure and item number. The Part Number Index work package refers you to the figure and item number.

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES

ITEM NO. (Column (1)). Indicates the number used to identify items called out in the illustration.

SMR CODE (Column (2)). The SMR code containing supply/requisitioning information, maintenance level authorization criteria, and disposition instruction, as shown in the following breakout:

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES - Continued

Source Code	Maintenance Code		Recoverability Code
___ xx ___	___ xx ___		___ x ___
1st two positions: How to get an item.	3rd position: Who can install, replace, or use the item.	4th position: Who can do complete repair* on the item.	5th position: Who determines disposition action on unserviceable items.

*Complete Repair: Maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

Source Code. The source code tells you how to get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follow:

Source Code	Application/Explanation
PA PB PC PD PE PF PG	Stock items; use the applicable NSN to requisition/request items with these source codes. They are authorized to the level indicated by the code entered in the 3rd position of the SMR code. **NOTE** Items coded PC are subject to deterioration.
KD KF KB	Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance level indicated in the 3rd position of the SMR code. The complete kit must be requisitioned and applied.

MO-	Made at unit/ AVUM level	Items with these codes are not to be requisitioned/requested individually. They must be made from bulk material which is identified by the P/N in the DESCRIPTION AND USABLE ON CODE (UOC) column and listed in the bulk material group work package of the RPSTL. If the item is authorized to you by the 3rd position code of the SMR code, but the source code indicates it is made at higher level, order the item from the higher level of maintenance.
MF-	Made at DS/ AVIM level	
MH-	Made at GS level	
ML-	Made at SRA	
MD-	Made at depot	
AO-	Assembled by unit/AVUM level	Items with these codes are not to be requested/requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the 3rd position code of the SMR code authorizes you to replace the item, but the source code indicates the item is assembled at a higher level, order the item from the higher level of maintenance.
AF-	Assembled by DS/AVIM level	
AH-	Assembled by GS level	
AL-	Assembled by SRA	
AD-	Assembled by depot	
XA		Do not requisition an "XA" coded item. Order the next higher assembly. (Refer to NOTE below.)
XB		If an item is not available from salvage, order it using the CAGEC and P/N.
XC		Installation drawings, diagrams, instruction sheets, field service drawings; identified by manufacturer's P/N.
XD		Item is not stocked. Order an "XD" coded item through normal supply channels using the CAGEC and P/N given, if no NSN is available.

NOTE

Cannibalization or controlled exchange, when authorized, may be used as a source of supply for items with the above source codes, except for those items source coded "XA" or those aircraft support items restricted by requirements of AR 750-1.

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES - Continued

Maintenance Code. Maintenance codes tell you the level(s) of maintenance authorized to use and repair support items. The maintenance codes are entered in the third and fourth positions of the SMR code as follows:

Third Position. The maintenance code entered in the third position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to the following levels of maintenance:

Maintenance Code		Application/Explanation
C	-	Crew or operator maintenance done within unit/AVUM maintenance.
O	-	Unit level/AVUM maintenance can remove, replace, and use the item.
F	-	Direct support/AVIM maintenance can remove, replace, and use the item.
H	-	General support maintenance can remove, replace, and use the item.
L	-	Specialized repair activity can remove, replace, and use the item.
D	-	Depot can remove, replace, and use the item.

Fourth Position. The maintenance code entered in the fourth position tells you whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (perform all authorized repair functions).

NOTE

Some limited repair may be done on the item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes.

Maintenance Code		Application/Explanation
O	-	Unit/AVUM is the lowest level that can do complete repair of the item.
F	-	Direct support/AVIM is the lowest level that can do complete repair of the item.
H	-	General support is the lowest level that can do complete repair of the item.
L	-	Specialized repair activity is the lowest level that can do complete repair of the item.
D	-	Depot is the lowest level that can do complete repair of the item.
Z	-	Nonreparable. No repair is authorized.
B	-	No repair is authorized. No parts or special tools are authorized for the maintenance of "B" coded item. However, the item may be reconditioned by adjusting, lubricating, etc., at the user level.

Recoverability Code. Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is shown in the fifth position of the SMR code as follows:

Recoverability Code		Application/Explanation
Z	-	Nonreparable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in the third position of the SMR code.
O	-	Reparable item. When uneconomically reparable, condemn and dispose of the item at the unit level.
F	-	Reparable item. When uneconomically reparable, condemn and dispose of the item at the direct support level.
H	-	Reparable item. When uneconomically reparable, condemn and dispose of the item at the general support level.
D	-	Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item are not authorized below depot level.
L	-	Reparable item. Condemnation and disposal not authorized below Specialized Repair Activity (SRA).
A	-	Item requires special handling or condemnation procedures because of specific reasons (such as precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions.

NSN (Column (3)). The NSN for the item is listed in this column.

CAGEC (Column (4)). The Commercial and Government Entity Code (CAGEC) is a five-digit code which is used to identify the manufacturer, distributor, or Government agency/activity that supplies the item.

PART NUMBER (Column (5)). Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

NOTE

When you use an NSN to requisition an item, the item you receive may have a different P/N from the number listed.

DESCRIPTION AND USABLE ON CODE (UOC) (Column (6)). This column includes the following information:

1. The federal item name and, when required, a minimum description to identify the item.
2. P/Ns of bulk materials are referenced in this column in the line entry to be manufactured or fabricated.
3. Hardness Critical Item (HCI). A support item that provides the equipment with special protection from electromagnetic pulse (EMP) damage during a nuclear attack.

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES - Continued

4. The statement END OF FIGURE appears just below the last item description in column (6) for a given figure in both the repair parts list and special tools list work packages.

QTY (Column (7)). The QTY (quantity per figure) column indicates the quantity of the item used in the breakout shown on the illustration/figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column instead of a quantity indicates that the quantity is variable and quantity may change from application to application.

EXPLANATION OF CROSS-REFERENCE INDEXES WORK PACKAGES FORMAT AND COLUMNS

1. National Stock Number (NSN) Index Work Package.

STOCK NUMBER Column. This column lists the NSN in National item identification number (NIIN) sequence. The NIIN consists of the last nine digits of the NSN.

NSN (e.g., 5385-01-574-1476). NIIN	When using this column to locate an item, ignore the first four digits of the NSN. However, the complete NSN should be used when ordering items by stock number.

FIG. Column. This column lists the number of the figure where the item is identified/located. The figures are in numerical order in the repair parts list and special tools list work packages.

ITEM Column. The item number identifies the item associated with the figure listed in the adjacent FIG. column. This item is also identified by the NSN listed on the same line.

2. Part Number (P/N) Index Work Package. P/Ns in this index are listed in ascending alphanumeric sequence (vertical arrangement of letter and number combinations which places the first letter or digit of each group in order A through Z, followed by the numbers 0 through 9 and each following letter or digit in like order).

PART NUMBER Column. Indicates the P/N assigned to the item.

FIG. Column. This column lists the number of the figure where the item is identified/located in the repair parts list and special tools list work packages.

ITEM Column. The item number is the number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

SPECIAL INFORMATION

UOC. The UOC appears in the lower left corner of the Description Column heading. Usable on codes are shown as "UOC:..." in the Description Column (justified left) on the first line under the applicable item/nomenclature. Uncoded items are applicable to all models. Identification of the UOCs used in the RPSTL are:

Code	Used On
W08	Flex M2 Machine Gun
775	M48 Turret M2 Machine Gun

Fabrication Instructions. Bulk materials required to manufacture items are listed in the bulk material functional group of this RPSTL. Part numbers for bulk material are also referenced in the Description Column of the line item entry for the item to be manufactured/fabricated. Detailed fabrication instructions for items source coded to be manufactured or fabricated are found in WP 0038 00.

Index Numbers. Items which have the work BULK in the figure column will have an index number shown in the item number column. This index number is a cross-reference between the NSN and P/N index work packages and the bulk material list in the repair parts list work package.

HOW TO LOCATE REPAIR PARTS

1. When NSN or P/Ns Are Not Known.

First. Using the table of contents, determine the assembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and lists are divided into the same groups.

Second. Find the figure covering the functional group or the subfunctional group to which the item belongs.

Third. Identify the item on the figure and note the number(s).

Fourth. Look in the repair parts list work packages for the figure and item numbers. The NSNs and part numbers are on the same line as the associated item numbers.

2. When NSN Is Known.

First. If you have the NSN, look in the STOCK NUMBER column of the NSN index work package. The NSN is arranged in NIIN sequence. Note the figure and item number next to the NSN.

Second. Turn to the figure and locate the item number. Verify that the item is the one you are looking for.

3. When P/N Is Known.

First. If you have the P/N and not the NSN, look in the PART NUMBER column of the P/N index work package. Identify the figure and item number.

Second. Look up the item on the figure in the applicable repair parts list work package.

END OF WORK PACKAGE

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

FLEX MACHINE GUN, PN 7265636 AND FIXED M48 TURRET TYPE MACHINE GUN, PN 12002953

REPAIR PARTS LIST

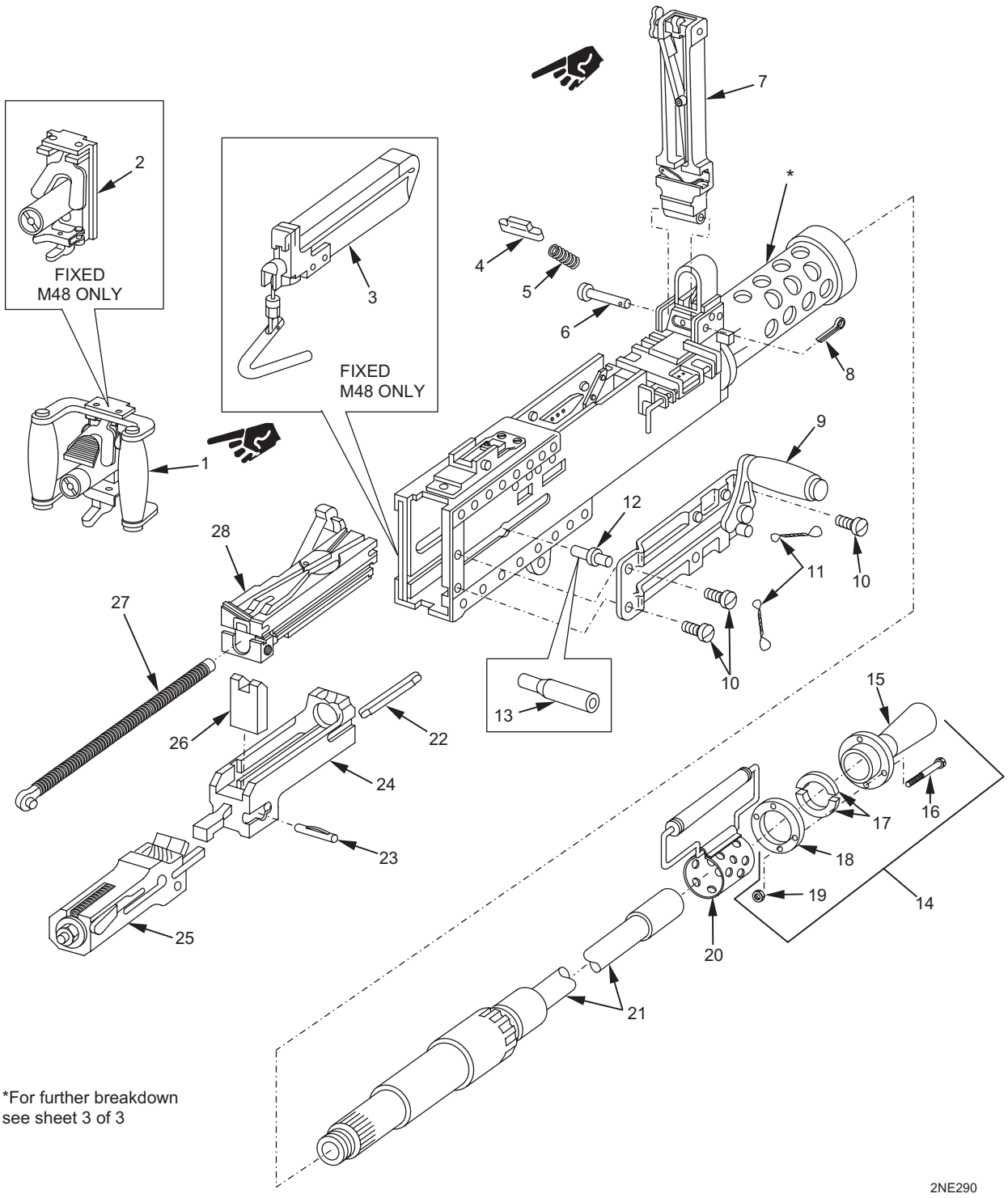


Figure 1. Flex and Fixed M48 Turret Type Caliber .50 M2 Machine Gun 7265636 and 12002953; Flash Suppressor 7162072; Adjustable Trigger Lever Stop Assembly 7265212; Bolt Latch Assembly 8448125; and Rear Right Hand Cartridge Stop Assembly 5577409 (Sheet 1 of 3).

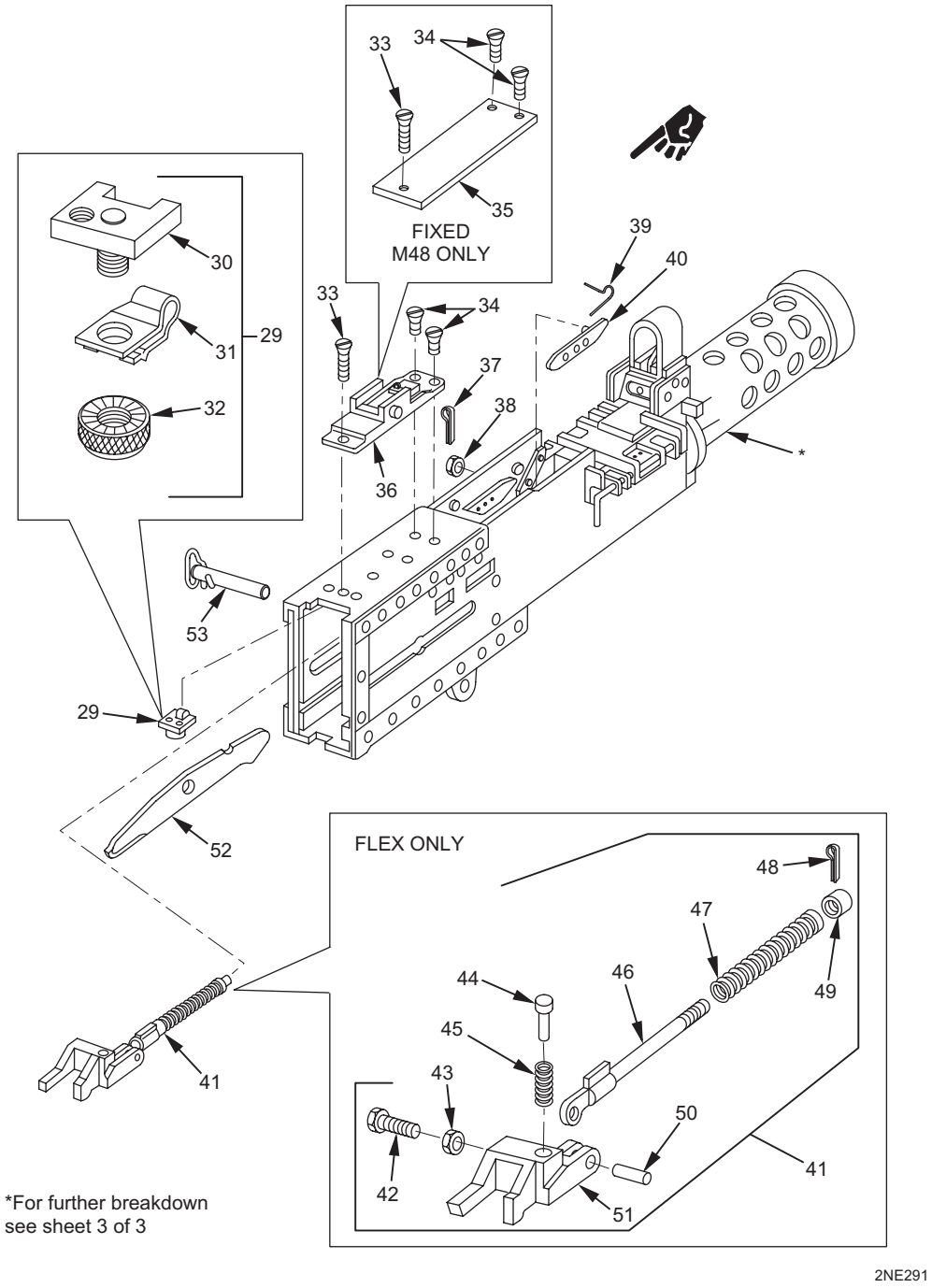


Figure 1. Flex and Fixed M48 Turret Type Caliber .50 M2 Machine Gun 7265636 and 12002953; Flash Suppressor 7162072; Adjustable Trigger Lever Stop Assembly 7265212; Bolt Latch Assembly 8448125; and Rear Right Hand Cartridge Stop Assembly 5577409 (Sheet 2 of 3).

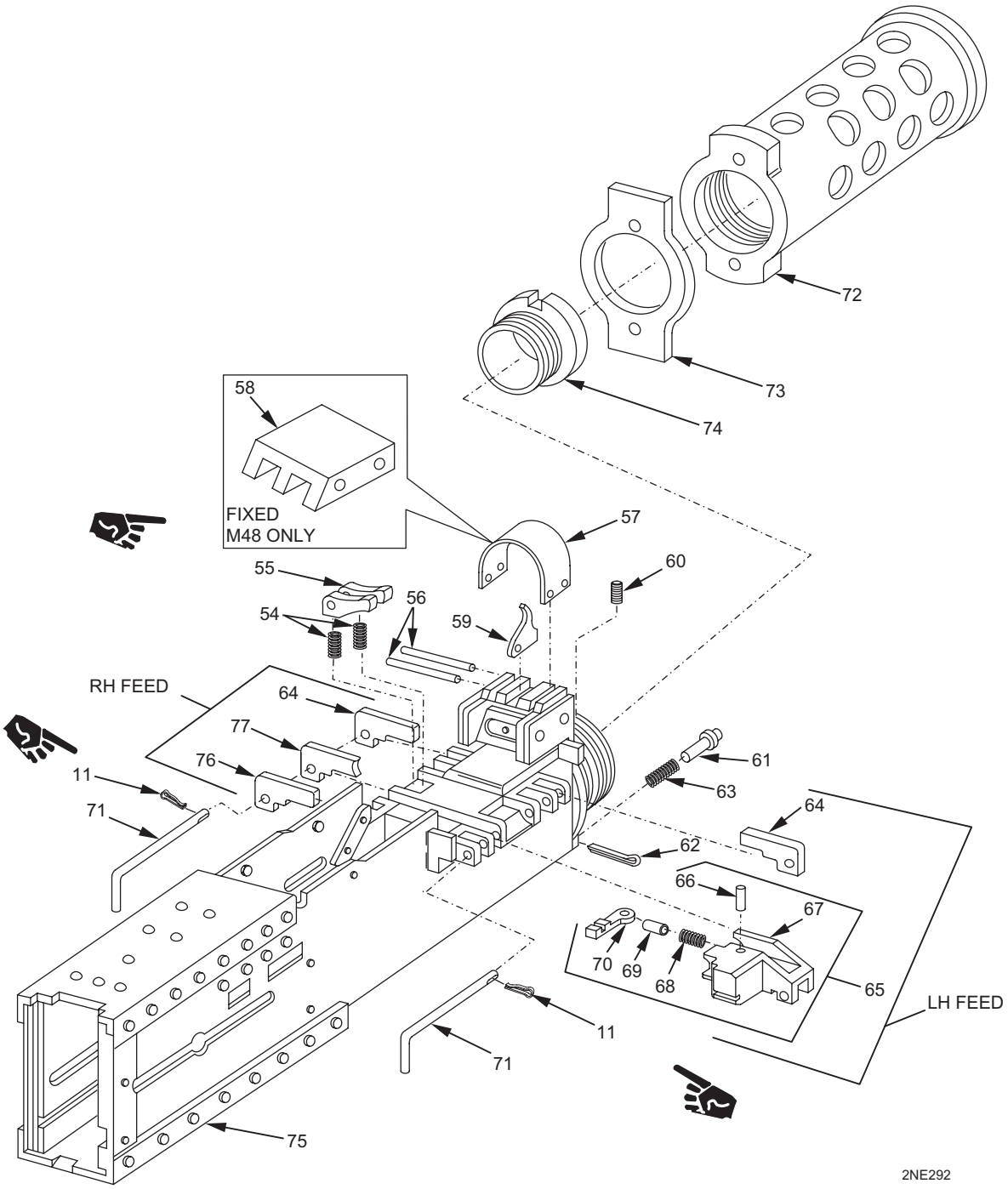


Figure 1. Flex and Fixed M48 Turret Type Caliber .50 M2 Machine Gun 7265636 and 12002953; Flash Suppressor 7162072; Adjustable Trigger Lever Stop Assembly 7265212; Bolt Latch Assembly 8448125; and Rear Right Hand Cartridge Stop Assembly 5577409 (Sheet 3 of 3).

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 01; 0101; 0110; 0111; 0112	
					FIG. 1 MACHINE GUN, CAL. .50, M2, FLEX AND FIXED M48 TURRET TYPE 7265636 AND 12002953; SUPPRESSOR, FLASH 7162072; STOP ASSEMBLY, ADJUSTABLE TRIGGER LEVER 7265212; LATCH ASSEMBLY, BOLT 8448125; AND STOP ASSEMBLY, CARTRIDGE, RH, REAR 5577409	
*1	PAFFF	1005-01-547-6523	19200	13016070	PLATE ASSEMBLY, BACK, SPADE GRIP SEE FIG. 2 FOR BREAKDOWN UOC: W08	1
2	AFFFF		19200	12937677	BACKPLATE ASSEMBLY SEE FIG. 3 FOR BREAKDOWN UOC: 775	1
3	PAFFF	1005-00-348-8653	19200	7267982	CHARGER, GUN CALIBER .50 SEE FIG. 9 FOR BREAKDOWN UOC: 775	1
4	PAFZZ	3040-00-731-3069	19200	7313069	PAWL, COVER DETENT	1
5	PAFZZ	5360-00-597-1201	19204	7313068	SPRING, HELICAL, COMPRESSION	1
6	PAFZZ	5315-00-500-9271	19205	5009271	PIN, STRAIGHT, HEADED	1
7	PBFFF	1005-01-453-9290	19204	6528309	COVER ASSEMBLY SEE FIG. 7 FOR BREAKDOWN	1
8	PAOZZ	5315-01-063-6872	19200	12003201	PIN, COTTER	1
9	PAFFF	1005-00-657-3953	19200	11010439	SLIDE ASSEMBLY, RETRACTING SEE FIG. 8 FOR BREAKDOWN UOC: W08	1
10	PAOZZ	5305-01-372-8426	19205	7265596	SCREW, MACHINE UOC: W08	3
*11	PAOZZ	5315-00-731-2517	19204	7312517	LOCK PIN UOC: W08	2
12	PAOZZ	5315-00-501-3424	19207	5013424	PIN, SHOULDER, HEADLESS UOC: W08	1
13	PAOZZ	5340-00-600-8583	19200	6008583	HANDLE, MANUAL CONTROL AUXILIARY USE ONLY	1
14	PAOOO	1005-00-716-2072	19204	7162072	SUPPRESSOR, FLASH	1
15	XAOZZ		19204	7162254	**..**CONE	1
16	PAOZZ	5306-00-716-1255	19204	7162255	**..**SCREW, CAP, HEXAGON	4

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
17	PAOZZ	5365-00-629-8825	19200	7162326	..SPACER, RING	2
18	XAOZZ		19204	7162325	..RING	1
19	PAOZZ	5310-01-374-0508	96906	M45913/3-5CG8P	..NUT, SELF-LOCKING	4
20	PAOOO	5340-00-550-4080	19200	5504080	HANDLE, MANUAL CONTROL BARREL SEE FIG. 12 FOR BREAKDOWN UOC: W08	1
21	PAOBZ	1005-00-726-6131	19204	7266131	BARREL, MACHINE GUN STL, PHOS-CTD, 45 IN. LOA GAGE AND CONDEMN AT DS	2
22	PAFZZ	5360-00-726-6134	19200	7266134	SPRING, FLAT	1
23	PAOZZ	5315-00-600-8784	19204	6008784	PIN, SPRING	1
24	PAFZZ	1005-00-550-4082	19200	5504082	EXTENSION ASSEMBLY, BARREL	1
25	AFFFF	1005-01-453-9289	19204	7266821	BUFFER, RECOIL MECHANISM SEE FIG. 6 FOR BREAKDOWN	1
26	PAOZZ	1005-00-716-1302	19200	7161302	LOCK, BREECH, MACHINE	1
27	PAOZZ	1005-00-556-4305	19200	5564305	ROD ASSEMBLY, DRIVE	1
28	AFFFF		19204	6528322	BOLT ASSEMBLY, BREECH SEE FIG. 4 FOR BREAKDOWN	1
29	PAFFF	1005-00-726-5212	19200	7265212	STOP ASSEMBLY, ADJUSTABLE TRIGGER LEVER	1
30	XAFZZ		19205	7312030	..STOP, ADJUSTABLE TRIGGER LEVER	1
31	PAFZZ	5360-00-731-2029	19204	7312029	..SPRING, FLAT, ADJUSTABLE TRIGGER LEVER STOP NUT	1
32	PAFZZ	5310-00-731-2027	19200	7312027	..NUT, PLAIN, KNURLED	1
33	PAFZZ	5305-00-731-2028	19204	7312028	SCREW, EXTERNALLY RELIEVED BODY FL-CK-HD	2
34	PAFZZ	5305-00-637-9395	19200	5153191	SCREW, MACHINE	4
35	PAFZZ	1005-00-600-8939	19200	6008939	PLATE, COVER UOC: 775	1
36	PAFFF	1005-01-003-5475	19200	12003047	SIGHT ASSEMBLY, REAR SEE FIG. 10 FOR BREAKDOWN UOC: W08	1
37	PAFZZ	5315-00-013-7137	80205	MS24665-814	PIN, COTTER	1
38	PAFZZ	5310-00-501-3556	19205	5013556	NUT, PLAIN, SLOTTED	1
39	PAFZZ	5360-00-600-8943	19204	6008943	SPRING, TENSION EXTRACTOR SWITCH	1

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
40	PAFZZ	5930-00-614-7461	19200	6147461	SWITCH, EXTRACTOR	1
41	AFFFF		19204	8448125	LATCH ASSEMBLY, BOLT UOC: W08	1
42	PAFZZ	5306-00-501-3622	19200	5013622	..BOLT, MACHINE UOC: W08	1
43	PAFZZ	5310-00-501-3623	19204	5013623	..NUT, PLAIN, HEXAGON UOC: W08	1
44	PAFZZ	5315-00-501-3524	19204	5013524	..PIN, SHOULDER, HEADLESS UOC: W08	1
45	PAFZZ	5360-00-299-1192	19204	5013525	..SPRING, HELICAL UOC: W08	1
46	PAFZZ	5315-00-600-8919	19200	6008919	..PIN, ECCENTRIC UOC: W08	1
47	PAFZZ	5360-00-501-3527	19200	5013527	..SPRING, HELICAL, COMPRESSION UOC: W08	1
48	PAFZZ	5315-00-234-1861	94135	12Z5056-35	..PIN, COTTER UOC: W08	1
*49	PAFZZ	5310-00-501-3526	19200	5013526	..NUT, PLAIN, ROUND 2 DRIVE POINTS UOC: W08	1
50	PAFZZ	5315-00-501-3523	19204	5013523	..PIN, STRAIGHT UOC: W08	1
51	PAFZZ	1005-00-550-4060	19200	5504060	..LEVER, MANUAL CONTROL RECEIVER ASSEMBLY UOC: W08	1
52	PAFZZ	5340-00-625-7592	19200	6257592	LEVER, LOCK-RELEASE	1
53	PAFZZ	5315-00-731-3106	19200	7313106	PIN, STRAIGHT, HEADED TRIGGER LEVER	1
54	PAOZZ	5360-00-209-9691	19204	7160628	SPRING, HELICAL COMPRESSION	2
55	PAOZZ	1005-00-731-3083	19200	7313083	PAWL ASSEMBLY, BELT HOLDING RH AND LH, W/SLEEVE GROUP ASSEMBLY	1
56	PAFZZ	5315-00-501-3546	19204	5013546	PIN, STRAIGHT, HEADED	2
57	PAFZZ	1005-00-600-8935	19200	6008935	COVER, GUNSIGHT UOC: W08	1
58	PAFZZ	1005-00-501-3588	19204	5013588	COVER, GUN UOC: 775	1
59	PAFZZ	1005-00-600-8934	19204	6008934	SIGHT, FRONT BLADE TYPE UOC: W08	1
*60	PAFZZ	5305-00-299-1193	19200	5013530	SETSCREW	1

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION ANDUSABLE ON CODE (UOC)	(7) QTY
61	PAFZZ	5315-00-501-3565	19200	5013565	PIN, SHOULDER, HEADLESS	1
62	PAFZZ	5315-00-842-3044	80205	MS24665-283	PIN, COTTER	1
63	PAFZZ	5360-00-501-3566	19200	5013566	SPRING, HELICAL, COMPRESSION	1
64	PAOZZ	1005-00-501-3539	19200	5013539	STOP, CARTRIDGE, RH AND LH FEED	1
65	PAFFF	1005-00-557-7409	19200	5577409	STOP ASSEMBLY, CARTRIDGE, REAR, RH (LEFT HAND FEED ONLY)	1
66	PAFZZ	5315-00-501-3612	19204	5013612	..PIN, STRAIGHT, HEADLESS	1
67	XAFZZ		19204	5577408	..STOP	1
68	PAFZZ	5360-00-501-3613	19200	5013613	..SPRING, HELICAL, COMPRESSION	1
69	PAFZZ	5340-00-501-3611	19200	5013611	..PLUNGER, DETENT, ALIGNING PAWL	1
70	PAFZZ	3040-00-600-8975	19204	6008975	..PAWL, CARTRIDGE ALIGNING	1
71	PAOZZ	5315-00-716-2872	19200	7162872	PIN, GROOVED, HEADLESS PAWL	2
72	PAFZZ	1005-00-550-4091	19204	5504091	SUPPORT, BARREL	1
73	PAFZZ	5365-00-726-5580	19200	7265580	SPACER, PLATE .0585	1
	PAFZZ	5365-00-726-5581	19200	7265581	SPACER, PLATE .0610	1
	PAFZZ	5365-00-726-5582	19200	7265582	SPACER, PLATE .0635	1
	PAFZZ	5365-00-726-5583	19204	7265583	SPACER, PLATE .0660	1
	PAFZZ	5365-00-726-5584	19200	7265584	SPACER, PLATE .0685	1
	PAFZZ	5365-00-726-5585	19200	7265585	SPACER, PLATE .0710	1
	PAFZZ	5365-00-726-5586	19200	7265586	SPACER, PLATE .0735	1
	PAFZZ	5365-00-726-5587	19200	7265587	SPACER, PLATE .0760	1
	PAFZZ	5365-00-726-5588	19200	7265588	SPACER, PLATE .0785	1
	PAFZZ	5365-00-726-5589	19204	7265589	SPACER, PLATE .0810	1
	PAFZZ	5365-00-726-5590	19200	7265590	SPACER, PLATE .0835	1
	PAFZZ	5365-00-726-5591	19200	7265591	SPACER, PLATE .0860	1
74	PAFZZ	5365-00-600-8920	19204	6008920	BUSHING, MACHINE THREAD	1
75	PAFDA	1005-01-172-7725	19200	6535480	RECEIVER, CARTRIDGE SEE FIG. 11 FOR BREAKDOWN	1
76	PAOZZ	1005-00-501-3540	19200	5013540	STOP, CARTRIDGE (RH ONLY)	1
77	PAOZZ	1005-00-501-3541	19200	5013541	STRIPPER, LINK (RH ONLY)	1

END OF FIGURE

UNIT AND DIRECT SUPPORT

**MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)**

BACK PLATE ASSEMBLY (SPADE GRIP, WITH TRIGGER BLOCK, FLAT SPRING, AND SHOULDER SCREW) 6535477 AND BACK PLATE ASSEMBLY (WITHOUT LATCH) 5564307

REPAIR PARTS LIST

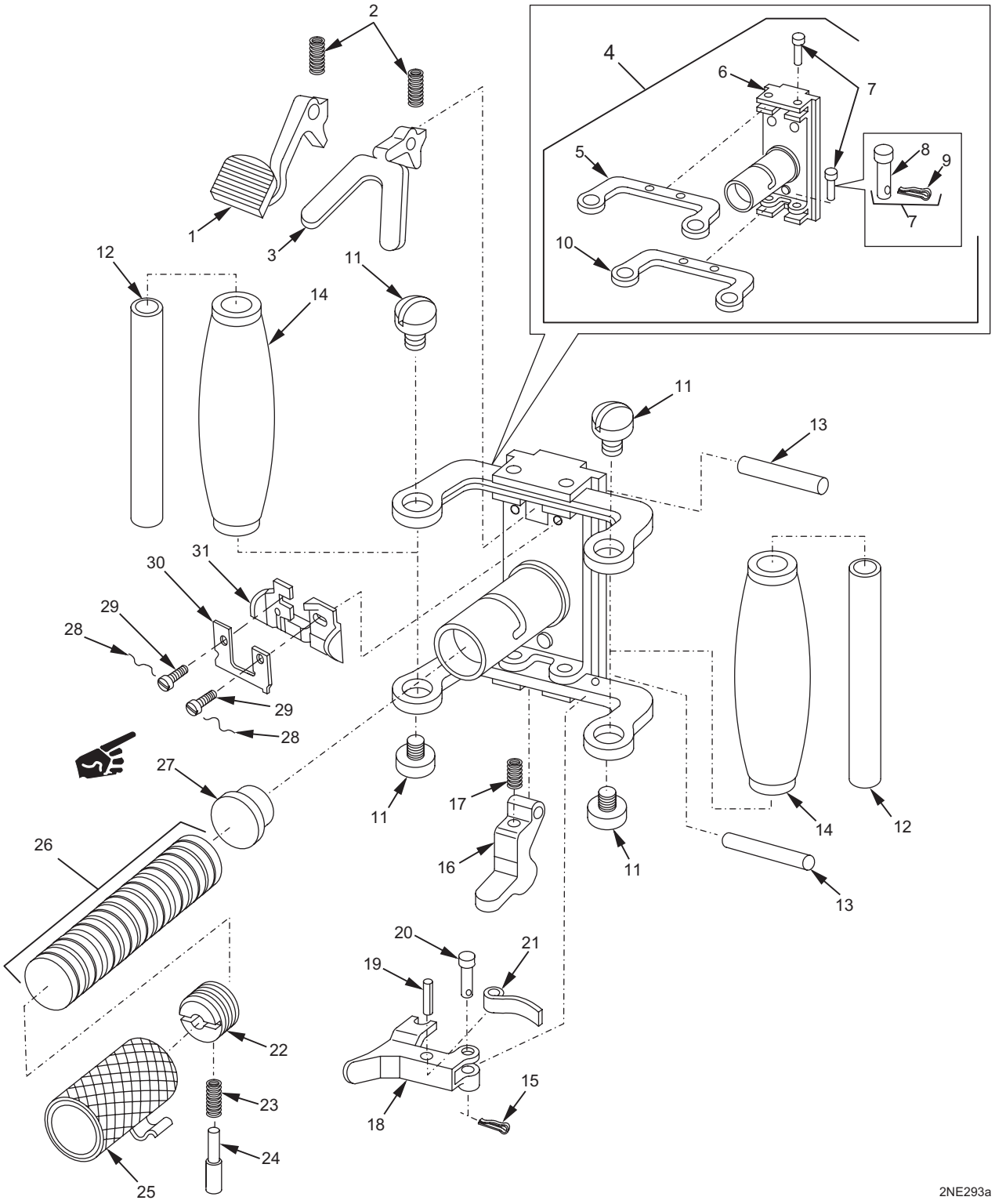


Figure 2. Back Plate Assembly (Spade Grip, with Trigger Block 1968, Flat Spring 1969, and Shoulder Screw 1994) 6535477, and Back Plate Assembly (Without Latch) 5564307.

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 0102 AND 010201	
					FIG. 2 PLATE ASSEMBLY, BACK, (SPADE GRIP, WITH SMALL ARMS SAFETY, FLAT SPRING, AND SHOULDER SCREW) 6535477; AND PLATE ASSEMBLY, BACK (WITHOUT LATCH) 5564307	
1	PAFZZ	5340-00-550-4071	19200	5504071	LEVER, MANUAL CONTROL UOC: W08.....	1
2	PAFZZ	5360-00-500-9352	19200	5009352	SPRING, HELICAL, COMPRESSION UOC: W08.....	2
3	PAFZZ	1005-01-547-6524	19200	13016069	TRIGGER UOC: W08.....	1
4	AFFFF		19204	5564307	PLATE ASSEMBLY, BACK W/O LATCH UOC: W08.....	1
5	PAFZZ	5340-00-600-8937	19200	6008937	..HANDLE, MANUAL CONTROL UPPER UOC: W08.....	1
6	PAFZZ	1005-00-918-2618	19204	6535475	..PLATE, BACK UOC: W08.....	1
7	PAFZZ	5320-00-471-5099	19204	5009287	..RIVET, SOLID 0.188 X 0.623 (FOR REPLACEMENT SEE PN 5152854) UOC: W08 (USE WITH PN 7312517).....	4
8	PAFZZ	5315-00-515-2854	19204	5152854	..PIN, STRAIGHT, HEADED UOC: W08.....	4
9	PAFZZ	5315-00-731-2517	19204	7312517	..PIN, LOCK UOC: W08.....	4
10	PAFZZ	1005-00-600-8936	19204	6008936	..FRAME, HANDLE, LOWER UOC: W08.....	1
11	PAFZZ	5305-00-500-9394	19200	5009394	SCREW, MACHINE UOC: W08.....	4
12	PAFZZ	1005-00-918-2617	19200	5009369	TUBE, HANDLE GRIP PLATE ASSEMBLY, BACK UOC: W08.....	2
13	PAFZZ	5315-00-500-9275	19204	5009275	PIN, STRAIGHT, HEADLESS UOC: W08.....	2
14	PAFZZ	1005-00-726-5561	19200	7265561	GRIP, MACHINE GUN HANDLE, PLASTIC UOC: W08.....	2
15	PAOZZ	5315-00-731-2517	19204	7312517	PIN, LOCK UOC: W08 (USE WITH PN 5152854).....	1

1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
16	PAFZZ	3040-00-600-8949	19200	6008949	LEVER, MANUAL CONTROL UOC: W08	1
17	PAFZZ	5360-00-500-9356	19200	5009356	SPRING, HELICAL COMPRESSION UOC: W08	1
18	PAFZZ	1005-00-927-7273	19200	11010453	LOCK, BACK PLATE LATCH UOC: W08	1
19	PAFZZ	5315-00-526-2799	19200	5262799	KEY, WOODRUFF UOC: W08	1
20	PAFZZ	5315-00-501-3581	19200	5013581	PIN, STRAIGHT, HEADED UOC: W08 (USE WITH PN 7312517)	1
21	PAFZZ	5360-00-624-3607	19204	6243607	SPRING, FLAT BACK PLATE, LATCH LOCK UOC: W08	1
22	PAFZZ	5365-00-515-2834	19205	5152834	PLUG, MACHINE THREAD UOC: W08	1
23	PAFZZ	5360-00-500-9300	19200	5009300	SPRING, HELICAL COMPRESSION UOC: W08	1
24	PAFZZ	5315-00-515-2839	19204	5152839	PIN, SHOULDER, HEADLESS UOC: W08	1
25	PAFZZ	1005-00-550-4094	19204	5504094	TUBE, METALLIC UOC: W08	1
26	PAFZZ	5340-00-515-2835	19200	5152835	DISK, SOLID, PLAIN RED FBR, 1-3/32 OD, 0.127 MAX THK APPROX 22 PER ASSY NSN PROVIDES 1 EACH UOC: W08	V
27	PAFZZ	1005-00-515-2869	19200	5152869	BUFFER, RECOIL MECHANISM UOC: W08	1
*28	MOOZZ	9505-00-684-4843	96906	MS20995F41-8	WIRE, NON-ELEC MFD FROM NSN 9505-00-684-4843 UOC: BNO	V
*29	PAFZZ	5305-01-415-3269	26978	1994 (MB3955)	SCREW, SHOULDER (PART OF KIT P/N 2038) UOC: BNO	2
*30	PAFZZ	5360-01-415-3267	26978	1969	SPRING, FLAT (PART OF KIT P/N 2038) UOC: BNO	1

1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
*31	XAFFF		26978	1968	TRIGGER BLOCK (PART OF KIT P/N 2038) UOC: BNO	1
*K	PAFFF	1010-01-414-9706	26978	2038	TRIGGER BLOCK KIT	1
					SCREW, SHOULDER (2) 2-29	
					SPRING, FLAT (1) 2-30	
					TRIGGER BLOCK (1) 2-31	

END OF FIGURE

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

BACKPLATE ASSEMBLY 12937677

REPAIR PARTS LIST

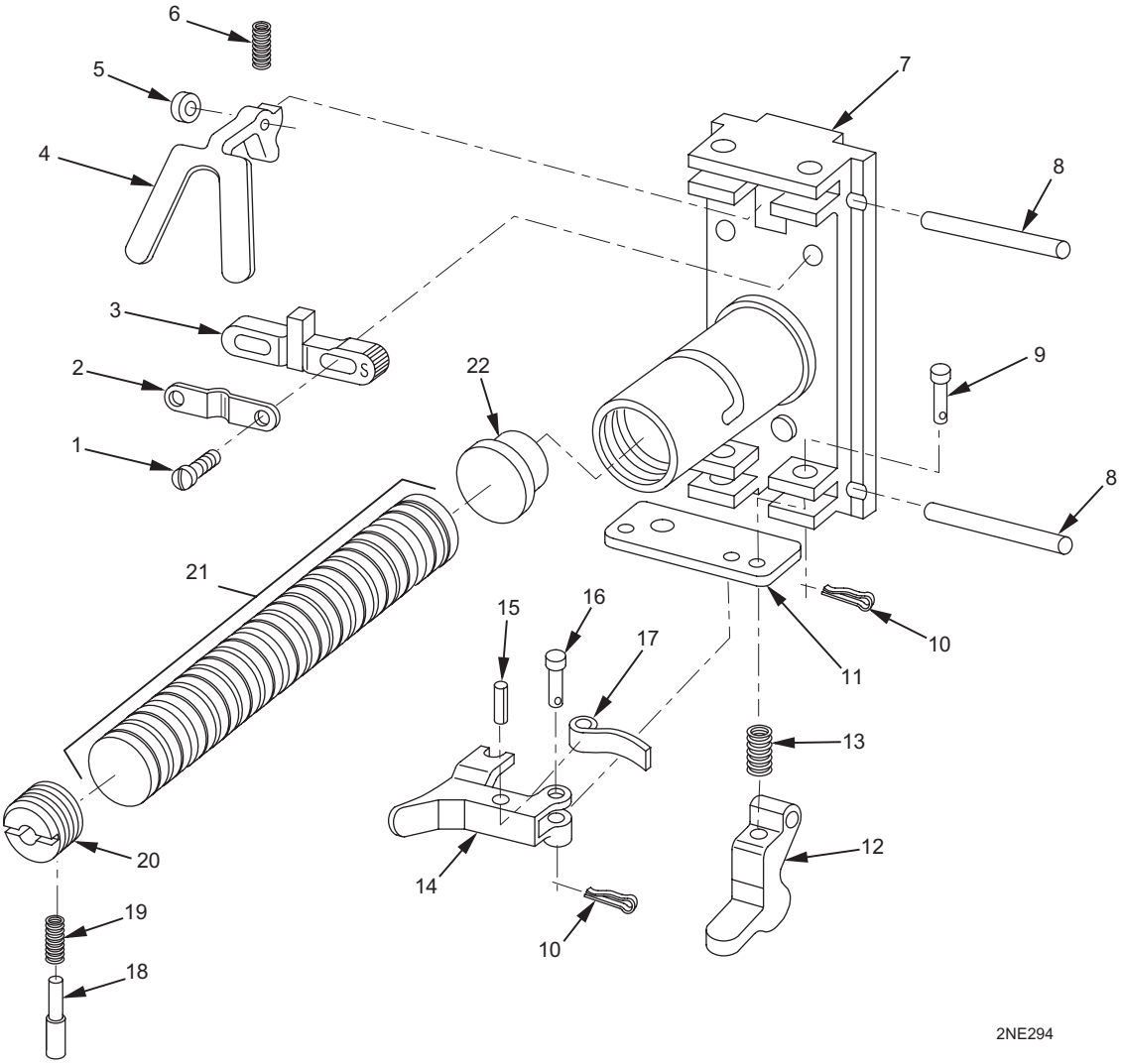


Figure 3. Backplate Assembly 12937677.

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 0103 FIG. 3 BACKPLATE ASSEMBLY 12937677	
1	PAFZZ	5305-00-515-2897	19204	5152897	SCREW, SHOULDER UOC: 775	2
2	PAFZZ	5360-00-515-2896	19204	5152896	SPRING, FLAT UOC: 775	1
3	PAFZZ	1005-00-614-7511	19205	6147511	SAFETY, SMALL ARMS UOC: 775	1
4	PAFZZ	1005-00-600-8918	19204	6008918	TRIGGER UOC: 775	1
5	PAFZZ	5365-00-501-3583	19204	5013583	SPACER, SLEEVE UOC: 775	1
6	PAFZZ	5360-00-500-9352	19200	5009352	SPRING, HELICAL, COMPRESSION UOC: 775	1
*7	XAFZZ	1005-00-918-2618	19204	6535475	PLATE, BACK UOC: 775	1
8	PAFZZ	5315-00-500-9275	19204	5009275	PIN, STRAIGHT, HEADLESS UOC: 775	2
9	PAFZZ	5315-00-515-2854	19204	5152854	PIN, STRAIGHT, HEADED UOC: 775	4
10	PAOZZ	5315-00-731-2517	19204	7312517	PIN, LOCK UOC: 775	3
11	PAFZZ	5365-00-515-2750	19200	5152750	SPACER, PLATE UOC: 775	1
12	PAFZZ	3040-00-600-8949	19200	6008949	LEVER, MANUAL CONTROL UOC: 775	1
13	PAFZZ	5360-00-500-9356	19200	5009356	SPRING, HELICAL, COMPRESSION UOC: 775	1
14	PAFZZ	1005-00-927-7273	19200	11010453	LOCK, BACK PLATE LATCH ASSEMBLY UOC: 775	1
15	PAOZZ	5315-00-526-2799	19200	5262799	KEY, WOODRUFF UOC: 775	1
16	PAFZZ	5315-00-501-3581	19200	5013581	PIN, STRAIGHT, HEADED UOC: 775	1
17	PAFZZ	5360-00-624-3607	19204	6243607	SPRING, FLAT BACK PLATE LATCH LOCK UOC: 775	1
18	PAFZZ	5315-00-515-2839	19204	5152839	PIN, SHOULDER, HEADLESS UOC: 775	1

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
19	PAFZZ	5360-00-500-9300	19200	5009300	SPRING, HELICAL, COMPRESSION UOC: 775	1
20	PAFZZ	5365-00-515-2834	19205	5152834	PLUG, MACHINE THREAD UOC: 775	1
21	PAFZZ	5340-00-515-2835	19200	5152835	DISK, SOLID, PLAIN RED FBR, 1-3/32 OD, 0.127 MAX THK APPROX 22 PER ASSY NSN PROVIDES 1 EACH UOC: 775	V
22	PAFZZ	1005-00-515-2869	19200	5152869	BUFFER, RECOIL MECHANISM UOC: 775	1

END OF FIGURE

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

BREECH BOLT ASSEMBLY 6528322, CARTRIDGE EXTRACTOR 6008959,
AND FIRING PIN EXTENSION ASSEMBLY 6008976

REPAIR PARTS LIST

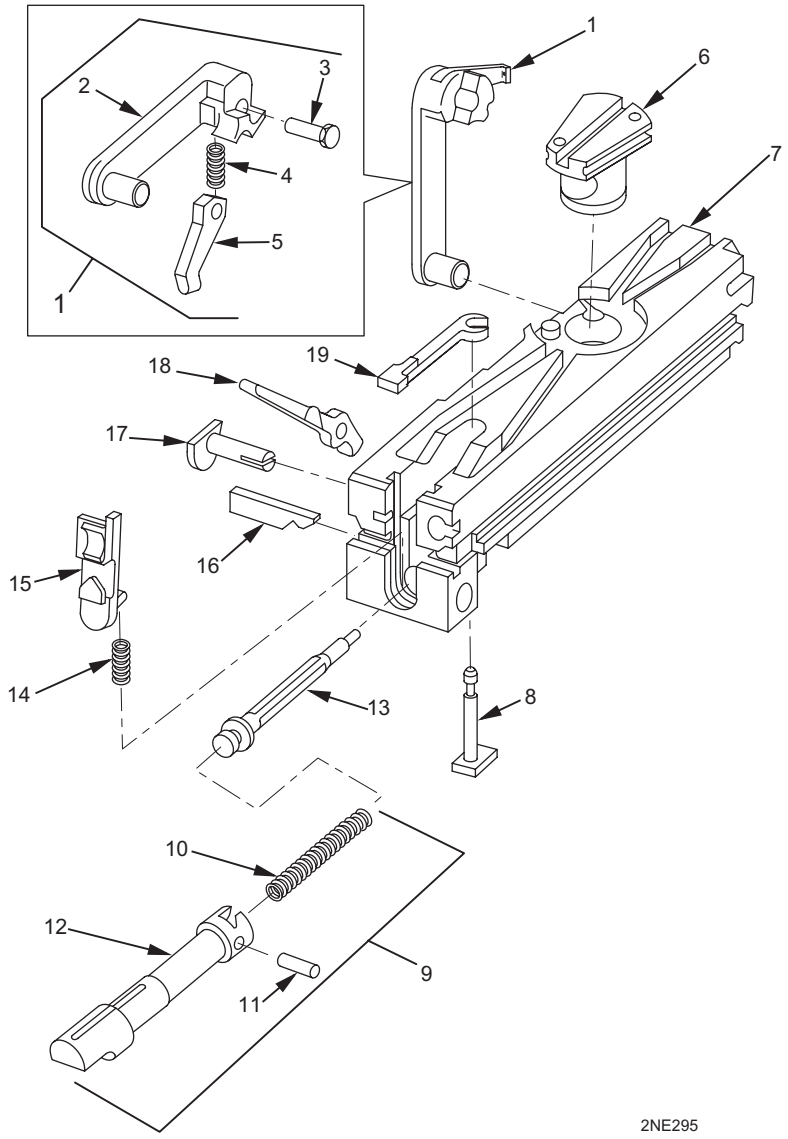


Figure 4. Breech Bolt Assembly 6528322, Cartridge Extractor 6008959, and Firing Pin Extension Assembly 6008976.

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 0104; 010401; 010402	
					FIG. 4 BOLT ASSEMBLY, BREECH 6528322; EXTRACTOR, CARTRIDGE 6008959; AND EXTENSION ASSEMBLY, FIRING PIN 6008976	
1	PAFFF	1005-00-600-8959	19204	6008959	EXTRACTOR, CARTRIDGE	1
2	XAFZZ		19204	5504065	..EXTRACTOR	1
*3	PAFZZ	5315-00-500-9273	19200	5009273	..PIN, HEADED	1
*4	PAFZZ	5360-00-500-9523	19200	5009523	..SPRING, HELICAL, COMPRESSION	1
5	PAFZZ	1005-00-600-9732	19204	6009732	..EJECTOR, CARTRIDGE BOLT	1
6	PAOZZ	5355-00-550-4062	19200	5504062	KNOB ALTERNATE FEED	1
7	PAFFF	1005-00-614-7463	19204	6147463	BOLT, SUB-ASSEMBLY ALTERNATE FEED SEE FIG. 5 FOR BREAKDOWN	1
8	PAOZZ	1005-00-716-1301	19200	7161301	STOP, GUN, AUTOMATIC (STOP, ACCELERATOR)	1
9	PAFFF	1005-00-600-8976	19200	6008976	EXTENSION ASSEMBLY, FIRING PIN	1
10	PAFZZ	5360-00-500-9353	19200	5009353	..SPRING, HELICAL, COMPRESSION	1
11	PAFZZ	5315-00-500-9382	19200	5009382	..PIN, STRAIGHT, HEADLESS	1
12	XAFZZ		19204	6008946	..EXTENSION, FIRING PIN	1
*13	PAFZZ	1005-00-731-0080	19200	7310080	PIN, FIRING	1
*14	PAOZZ	5360-00-209-8720	19200	5009524	SPRING, HELICAL	1
15	PAOZZ	1005-00-550-4067	19204	5504067	SEAR	1
16	PAOZZ	1005-00-535-1220	19200	5351220	SLIDE, SEAR	1
17	PAOZZ	5315-00-731-2078	19204	7312078	PIN, STRAIGHT, HEADED	1
18	PAOZZ	1005-00-600-9718	19200	6009718	LEVER, BREECHLOCK (LEVER, COCKING)	1
19	PAOZZ	1005-00-716-1300	19200	7161300	LOCK, ACCELERATOR STOP	1

END OF FIGURE

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL FLEXIBLE, W/E (1005-00-322-9715) FIXED M48 TURRET TYPE (1005-00-957-3893) SOFT MOUNT (1005-01-343-0747) FIXED TYPE RIGHT HAND FEED (1005-00-122-9339) FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

ALTERNATE FEED BOLT SUBASSEMBLY 6147463

REPAIR PARTS LIST

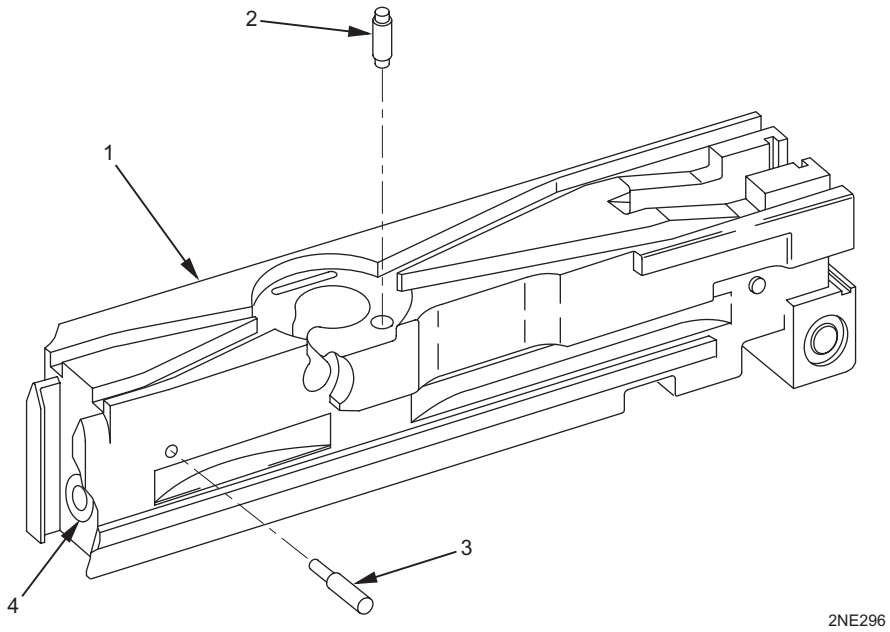


Figure 5. Alternate Feed Bolt Subassembly 6147463.

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 010403	
					FIG. 5 BOLT SUBASSEMBLY 6147463	
1	XAFZZ		19204	6528256	BOLT	1
*2	PAFZZ	5315-00-501-3529	19200	5013529	PIN, SHOULDER	1
*3	PAFZZ	5315-00-500-9385	19200	5009385	PIN, STRAIGHT, HEADLESS	1
4	XAFZZ		19204	5152858	PLATE, RECOIL	1
					END OF FIGURE	

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

RECOIL MECHANISM BUFFER 7266821

REPAIR PARTS LIST

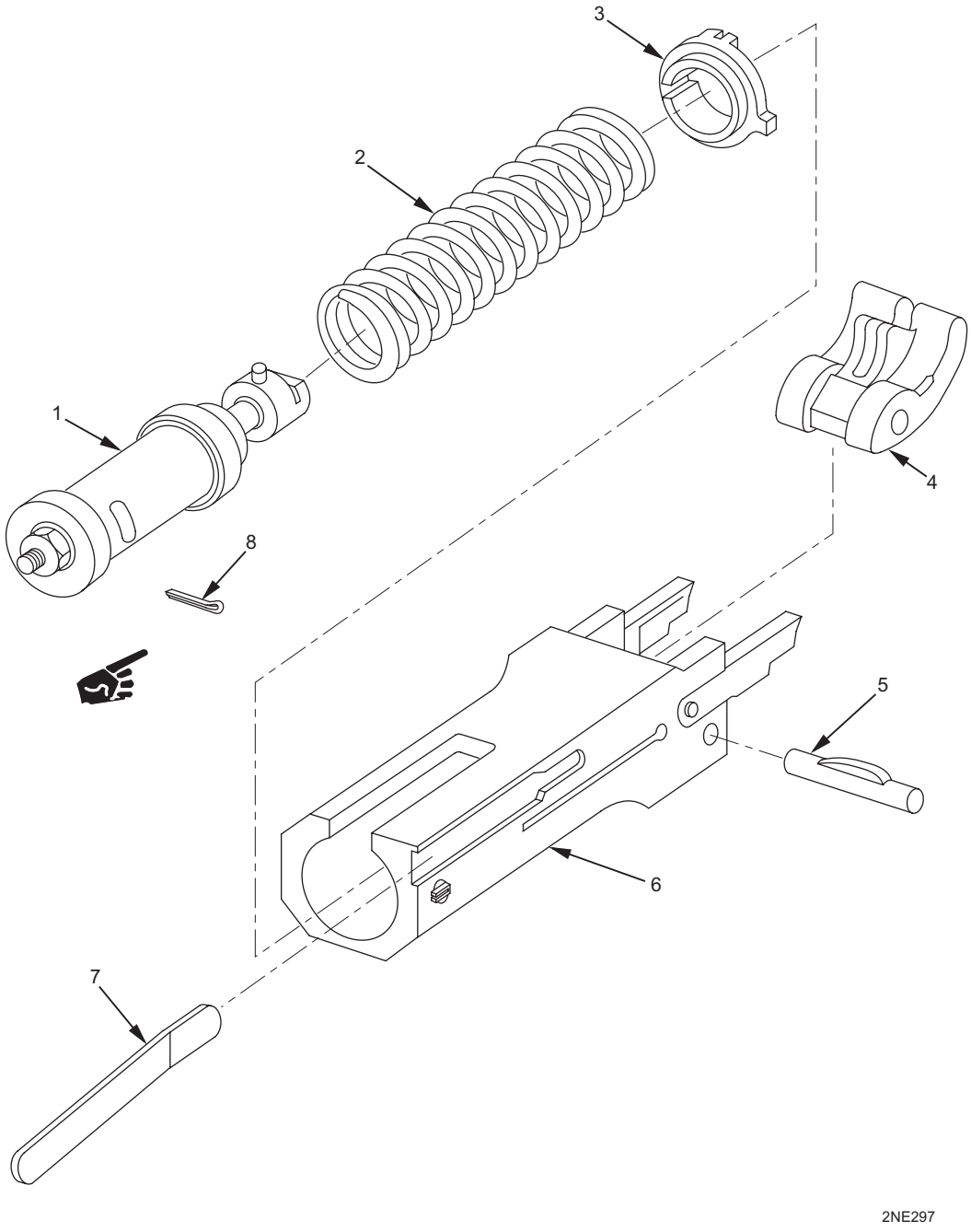


Figure 6. Recoil Mechanism Buffer 7266821.

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 0105	
					FIG. 6 BUFFER, RECOIL MECHANISM 7266821	
*1	PAFZZ	1005-01-141-1235	19200	9340487	BUFFER ASSEMBLY, BARREL	1
*2	PAFZZ	5360-00-200-5800	19200	6009832	SPRING, HELICAL, COMPRESSION	1
3	PAFZZ	1005-00-600-8782	19200	6008782	GUIDE, BUFFER SPRING	1
*4	PAFZZ	1005-00-550-8141	19204	5508141	ACCELERATOR, MACHINE, BUFFER	1
5	PAFZZ	5315-00-600-8790	19204	6008790	PIN, SPRING	1
*6	PAFZZ	1005-00-726-6835	19200	7266835	BODY ASSEMBLY, BARREL BUFFER	1
*7	PAFZZ	5342-00-500-9266	19200	5009266	BUFFER BODY, LOCK	1
*8	PAFZZ	5315-00-234-1861	80205	MS24665-298	PIN, COTTER	1

END OF FIGURE

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

COVER ASSEMBLY 6528309

REPAIR PARTS LIST

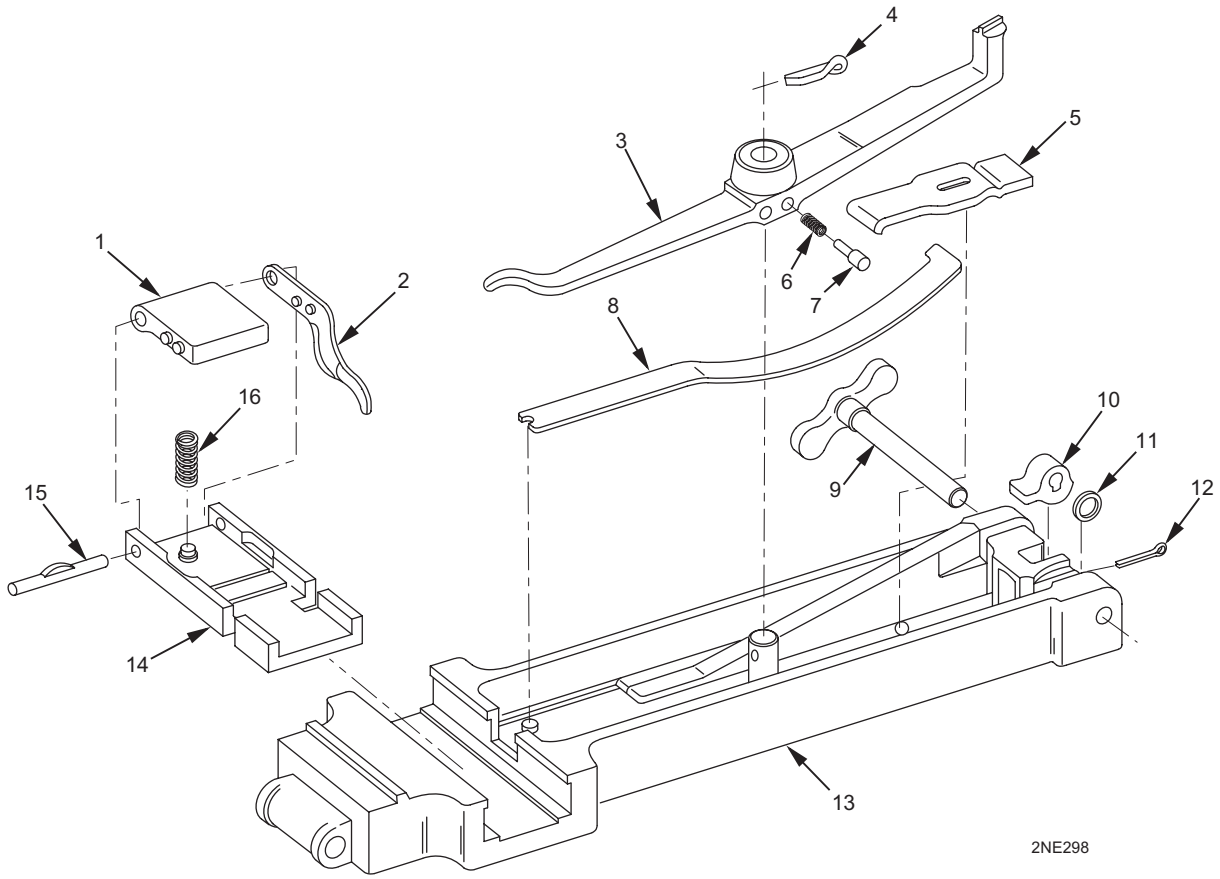


Figure 7. Cover Assembly 6528309.

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 0106	
					FIG. 7 COVER ASSEMBLY 6528309	
1	PAOZZ	3040-00-600-8961	19204	6008961	PAWL, BELT, FEED	1
2	PAOZZ	3040-00-600-8914	19200	6008914	PAWL, BELT FEED ARM	1
3	PAOZZ	5340-00-556-4278	19200	5564278	LEVER	1
4	PAOZZ	5315-00-731-2970	19204	7312970	PIN, LOCK RETAINING, BELT FEED LEVER	1
5	PAFZZ	5360-00-600-8931	19204	6008931	SPRING, FLAT COVER LATCH	1
6	PAOZZ	5360-00-501-3516	19200	5013516	SPRING, HELICAL, COMPRESSION	1
7	PAOZZ	5315-00-299-1191	19204	5013515	PIN, SHOULDER, HEADLESS	1
*8	PAFZZ	5360-00-600-9741	19200	6009741	SPRING, FLAT, COVER EXTRACTOR	1
9	PAFZZ	5340-00-731-2723	19200	7312723	LEVER, MANUAL CONTROL COVER LATCH	1
10	PAFZZ	5340-00-600-8928	19200	6008928	LATCH	1
*11	PAOZZ	5310-00-800-3218	19204	5013545	WASHER, FLAT	1
*12	PAOZZ	5315-00-013-7137	80206	MS24665-814	PIN, COTTER	1
13	XAFZZ	1005-00-550-4081	19200	5504081	COVER, SUBASSEMBLY	1
14	PAOZZ	1005-00-626-1110	19200	6261110	SLIDE ASSEMBLY, BELT FEED	1
*15	PAOZZ	1005-00-600-8962	19204	6008962	PIN, SPRING	1
16	PAOZZ	5360-00-500-9351	19200	5009351	SPRING, HELICAL COMPRESSION	1

END OF FIGURE

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

RETRACTING SLIDE ASSEMBLY 11010439

REPAIR PARTS LIST

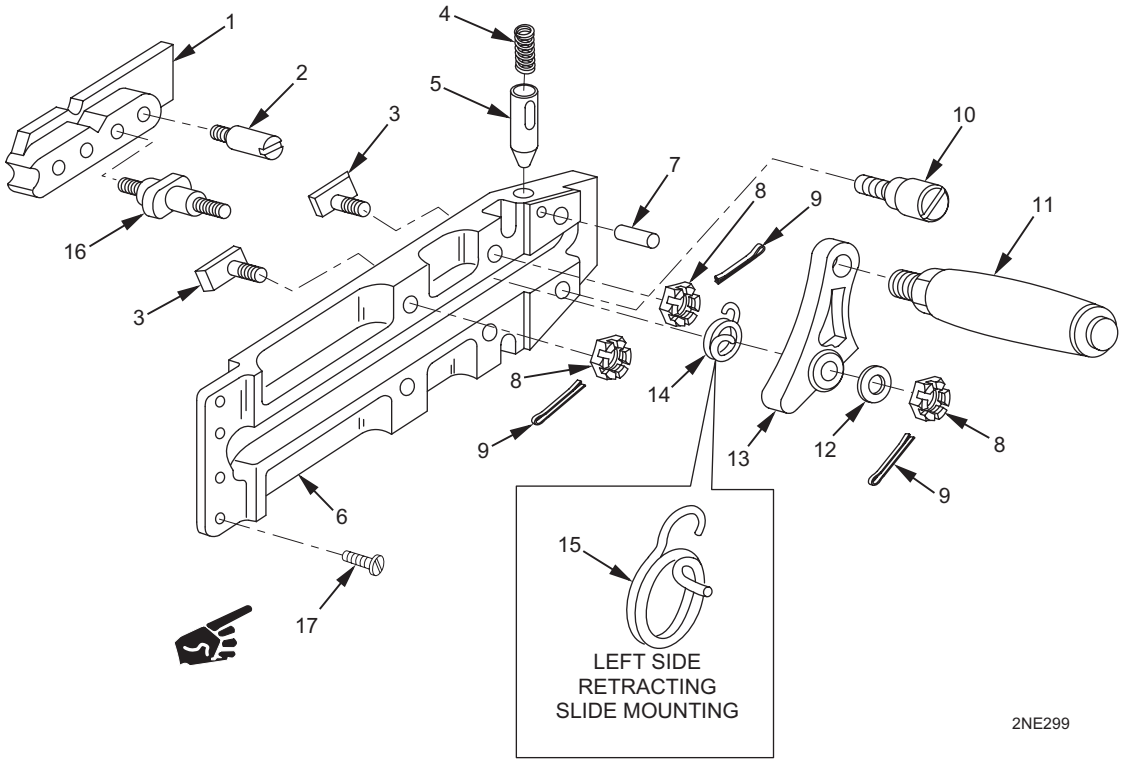


Figure 8. Retracting Slide Assembly 11010439.

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 0107	
					FIG. 8 SLIDE ASSEMBLY, RETRACTING 11010439	
1	PAFZZ	1005-00-614-7893	19200	6147893	SLIDE, RETRACTING UOC: W08	1
*2	PAFZZ	5315-00-501-3694	19200	5013694	PIN, SHOULDER, HEADLESS UOC: W08	1
*3	PAFZZ	5306-00-501-3681	19200	5013681	BOLT, TEE HEAD SHOULDER UOC: W08	2
4	PAFZZ	5360-00-501-3693	19200	5013693	SPRING, HELICAL, COMPRESSION UOC: W08	1
5	PAFZZ	1005-00-600-8990	19200	6008990	PLUNGER, RETRACTING SLIDE UOC: W08	1
6	XAFZZ		19200	11010440	BRACKET, RETRACTING SLIDE UOC: W08	1
*7	PAFZZ	5315-00-501-3687	19200	5013687	PIN, STRAIGHT, HEADLESS UOC: W08	1
*8	PAFZZ	5310-00-501-3686	19200	5013686	NUT, PLAIN, SLOTTED UOC: W08	3
*9	PAOZZ	5315-00-013-7146	80205	MS24665-816	PIN, COTTER UOC: W08	3
*10	PAFZZ	5305-00-600-8993	19205	6008993	SCREW, SHOULDER UOC: W08	1
11	PAOZZ	1005-00-631-3800	19200	6313800	HANDLE, RETRACTING SLIDE UOC: W08	1
12	PAFZZ	5310-00-501-3697	19200	5013697	WASHER, FLAT, THRUST UOC: W08	1
13	PAFZZ	3040-00-614-7085	19200	6147085	LEVER, REMOTE CONTROL SLIDE UOC: W08	1
14	PAFZZ	5360-00-501-3692	19204	5013692	SPRING, HELICAL TORSION (USED WHEN SLIDE IS MOUNTED ON RIGHT SIDE OF RECEIVER) UOC: W08	1
15	PAFZZ	5360-00-501-3691	19204	5013691	SPRING, HELICAL TORSION (USED WHEN SLIDE IS MOUNTED ON LEFT SIDE OF RECEIVER) UOC: W08	1
16	PAFZZ	5307-00-631-3822	19200	6313822	STUD, SHOULDERED UOC: W08	1
*17	PAFZZ	5305-01-372-8426	19205	7265596	SCREW, MACHINE UOC: W08	4

END OF FIGURE

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

M10 CALIBER .50 GUN CHARGER 7267982, BOLT CHARGER STUD ASSEMBLY 7268490, AND BACKPLATE ASSEMBLY 12012077

REPAIR PARTS LIST

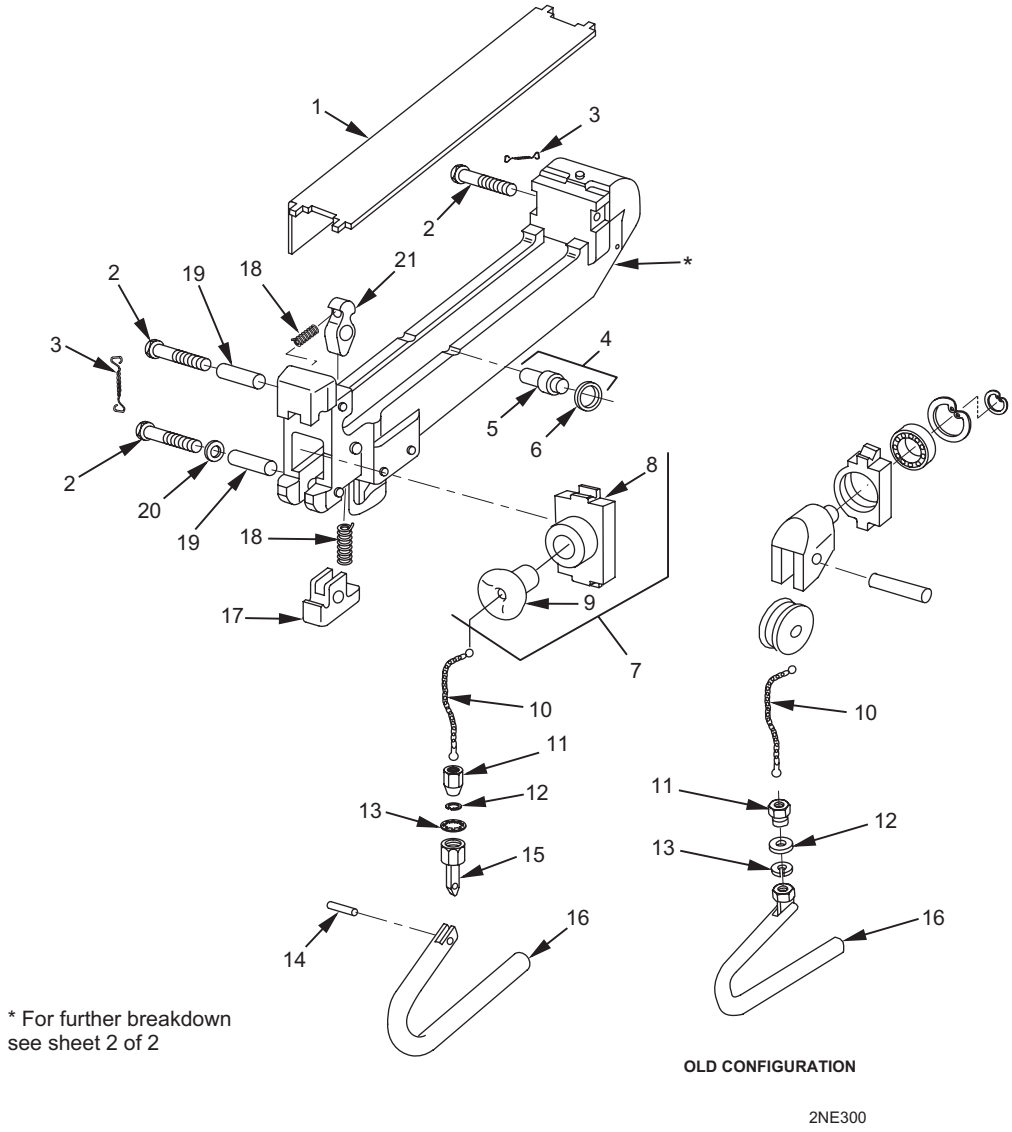


Figure 9. M10 Caliber .50 Gun Charger 7267982, Bolt Charger Stud Assembly 7268490, and Backplate Assembly 12012077 (Sheet 1 of 2).

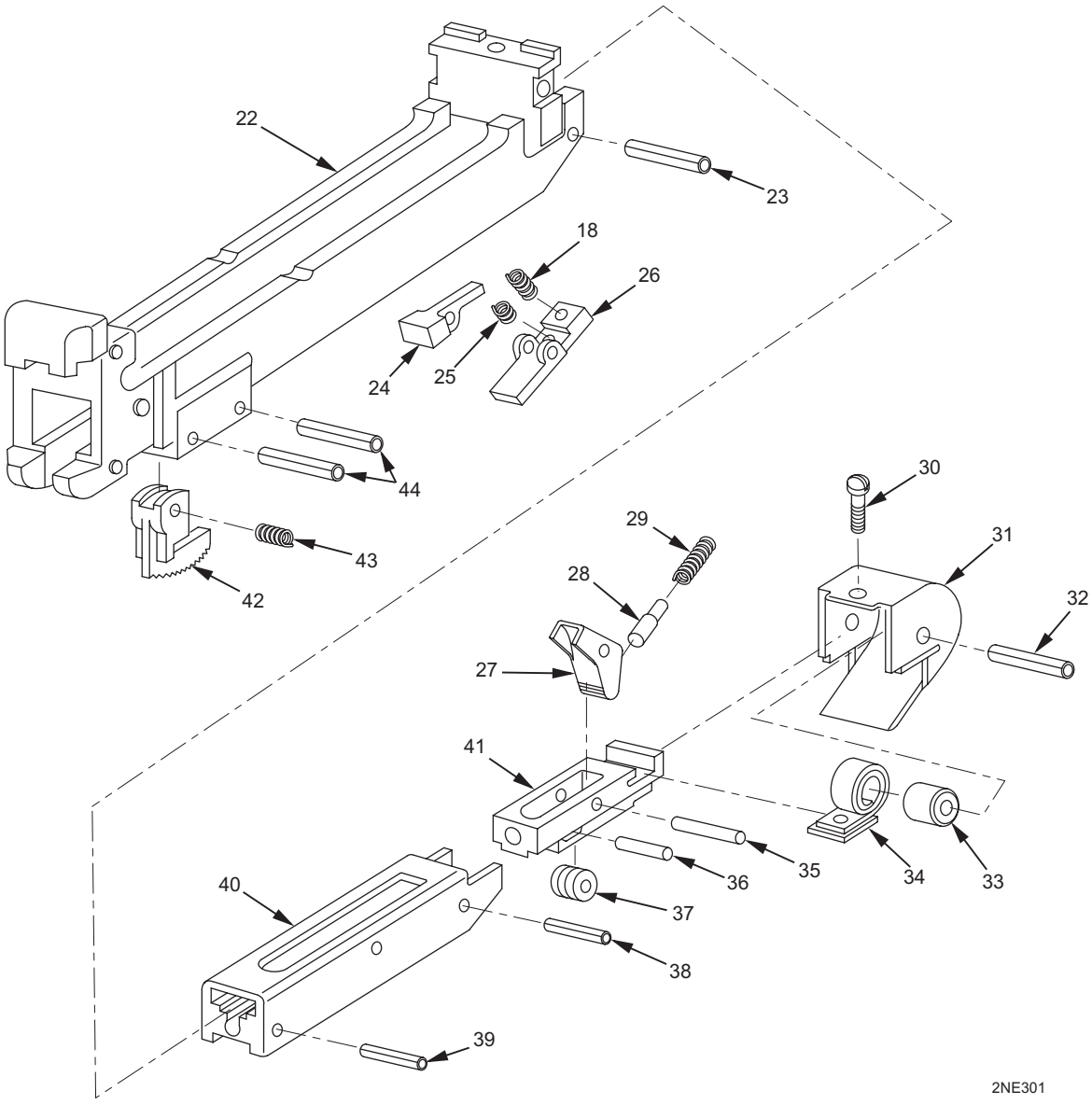


Figure 9. M10 Caliber .50 Gun Charger 7267982, Bolt Charger Stud Assembly 7268490, and Backplate Assembly 12012077 (Sheet 2 of 2).

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 0108; 010801; 010802	
					FIG. 9 CHARGER, GUN, CALIBER .50, M10, 7267982; STUD ASSEMBLY, BOLT CHARGER 7268490; BACKPLATE ASSEMBLY 12012077	
1	PAOZZ	5340-00-511-9054	19200	7268276	COVER, ACCESS UOC: 775	1
*2	PAOZZ	5305-00-622-9486	96906	MS35266-68	SCREW, MACHINE UOC: 775	3
3	MOOZZ		81348		WIRE, NONELECTRICAL MFD FROM NSN 9505-00-684-4843 UOC: 775	V
4	PAOOO	1005-00-602-5284	19204	7268490	STUD ASSEMBLY, BOLT CHARGER UOC: 775	1
5	XAOZZ		19204	7268488	**..**STUD, BOLT UOC: 775	1
6	PAOZZ	5365-00-604-4226	19205	7268489	**..**RING, RETAINING UOC: 775	1
7	PAOOO	1005-01-454-8486	19200	12012077	BACKPLATE ASSEMBLY UOC: 775	1
8	XAOZZ		19200	12012078	..BACKPLATE UOC: 775	1
9	PAOZZ	5365-01-454-8487	19200	12012079	..BACKPLATE BUSHING UOC: 775	1
*10	PAOZZ	4010-01-495-9557	19200	12999071	WIRE ROPE ASSEMBLY, SINGLE LG UOC: 775	1
11	PAOZZ	5365-00-602-5285	19200	7268491	BUSHING, MACHINE UOC: 775	1
*12	PAOZZ	5310-00-167-0721	80205	MS35333-41	WASHER, LOCK UOC: 775	1
13	PAOZZ	5310-00-323-3838	19205	7268107	WASHER, SPLIT UOC: 775	1
*14	PAOZZ	5315-00-812-1008	80205	MS39086-90	PIN, SPRING UOC: 775	1
15	PAOZZ	5340-00-759-2801	19200	11010042	SWIVEL, CHARGER HANDLE: HANDLE ASSEMBLY UOC: 775	1
16	PAOZZ	5340-00-796-7038	19200	7790951	HANDLE, MANUAL CONTROL UOC: 775	1
17	PAFZZ	5340-00-586-7774	19204	7268362	LEVER, LOCK-RELEASE, SWIVEL BEARING RETAINING PLATE UOC: 775	1

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
18	PAFZZ	5360-00-508-2586	19200	7268250	SPRING, HELICAL COMPRESSION UOC: 775	3
19	PAFZZ	3120-00-034-8040	19204	8715581	BEARING, SLEEVE UOC: 775	2
*20	PAFZZ	5310-00-167-0818	80205	NAS1149F0363P	WASHER, FLAT UOC: 775	1
*21	PAFZZ	5340-00-329-5872	19204	7268051	LEVER, RELEASE UOC: 775	1
22	XAFZZ		19204	7267994	HOUSING, CHANNEL, ASSEMBLY UOC: 775	1
*23	PAOZZ	5315-00-701-7719	96906	MS39086-97	PIN, SPRING UOC: 775	1
24	PAFZZ	3040-00-329-5828	19204	7267985	PAWL, SLIDE LOCK UOC: 775	1
25	PAFZZ	5360-00-034-8013	19204	8710154	SPRING, HELICAL COMPRESSION UOC: 775	1
*26	PAFZZ	1005-00-329-5835	19200	7267986	LEVER, SLIDE LOCK PAWL UOC: 775	1
27	PAFZZ	5340-00-329-5842	19204	7267987	LEVER, LOCK-RELEASE, CHARGER STUD UOC: 775	1
28	PAFZZ	5315-00-034-8042	19204	8715584	PIN, SHOULDER, HEADLESS UOC: 775	1
29	PAFZZ	5360-00-034-8051	19205	8715751	SPRING, HELICAL COMPRESSION UOC: 775	1
*30	PAOZZ	5305-00-582-5807	96906	MS35265-28	SCREW, MACHINE UOC: 775	1
31	PAFZZ	5340-00-508-0421	19200	7268228	HOLDER, SPRING RETURN UOC: 775	1
*32	PAFZZ	5315-00-081-6829	96906	MS171563	PIN, SPRING UOC: 775	1
33	PAFZZ	3120-00-034-8044	19207	8715586	BEARING, SLEEVE UOC: 775	1
34	PAFZZ	1005-00-034-8034	19204	8715571	SPRING ASSEMBLY, TORSION SPIRAL, CHARGER ASSEMBLY UOC: 775	1
35	PAFZZ	5315-00-034-8041	19207	8715582	PIN, STRAIGHT, HEADLESS UOC: 775	1
36	PAFZZ	5315-00-034-8030	19207	8715567	PIN, STRAIGHT, HEADLESS UOC: 775	1

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
37	PAFZZ	3020-00-034-8029	19207	8715566	PULLEY, GROOVE UOC: 775	1
38	PAFZZ	5315-00-506-5544	19200	7268114	PIN, SPRING UOC: 775	1
*39	PAOZZ	5315-00-829-1767	96906	MS9047-011	PIN, SPRING UOC: 775	1
40	PAFZZ	1005-00-329-5847	19200	7267991	SLIDE, CHARGER AND CABLE GUIDE UOC: 775	1
41	PAFZZ	1005-00-329-5853	19204	7267992	SLIDE, CHARGER CATCH AND PULLEY RETAINER UOC: 775	1
42	PAFZZ	1005-00-329-5858	19200	7267993	CATCH, SLIDE LOCK UOC: 775	1
43	PAFZZ	5360-00-034-8053	19204	8715827	SPRING, HELICAL COMPRESSION UOC: 775	1
*44	PAFZZ	5315-00-058-9770	80205	NAS561C5-18	PIN, SPRING UOC: 775	2

END OF FIGURE

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

REAR SIGHT ASSEMBLY 12003047

REPAIR PARTS LIST

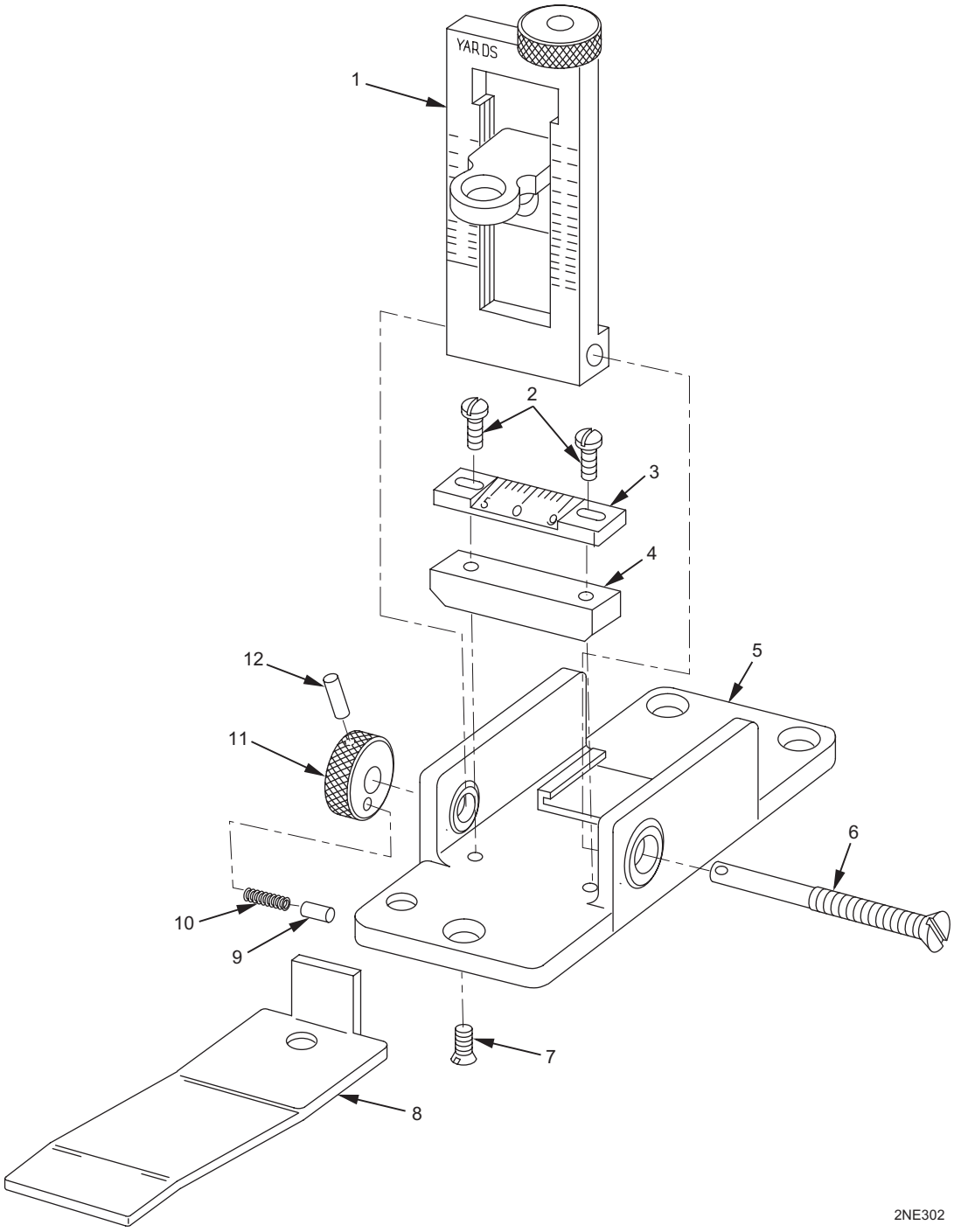


Figure 10. Rear Sight Assembly 12003047.

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 0109	
					FIG. 10 SIGHT ASSEMBLY, REAR 12003047	
*1	PAFZZ	1005-00-336-8608	19200	7267936	LEAF, REAR SIGHT ASSEMBLY, REAR FOLDING UOC: W08	1
*2	PAFZZ	5305-00-501-3167	19200	5013167	SCREW, MACHINE REAR SIGHT, WINDAGE SCALE UOC: W08	2
3	PAFZZ	5355-00-501-3607	19200	5013607	DIAL, SCALE, REAR SIGHT UOC: W08	1
4	PAFZZ	1005-01-048-8572	19204	12003051	RISER, REAR SIGHT UOC: W08	1
5	XAFZZ		19204	12003056	BASE, REAR SIGHT ASSEMBLY UOC: W08	1
*6	PAFZZ	5305-00-501-3160	19200	5013160	SETSCREW UOC: W08	1
7	PAFZZ	5305-00-958-9642	80204	MS35191-216	SCREW, MACHINE, RISER BLOCK UOC: W08	2
8	PAFZZ	5360-01-003-5476	19200	12003052	SPRING, FLAT, REAR SIGHT BASE UOC: W08	1
9	PAFZZ	5340-00-501-3155	19200	5013155	PLUNGER, DETENT WINDAGE UOC: W08	1
10	PAFZZ	5360-00-501-3154	19200	5013154	SPRING, HELICAL, COMPRESSION UOC: W08	1
*11	PAFZZ	5355-00-600-8809	19200	6008809	KNOB, REAR SIGHT, WINDAGE SCREW UOC: W08	1
*12	PAFZZ	5315-00-845-4231	96906	MS39086-56	PIN, SPRING UOC: W08	1
					END OF FIGURE	

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

CARTRIDGE RECEIVER 6535480

REPAIR PARTS LIST

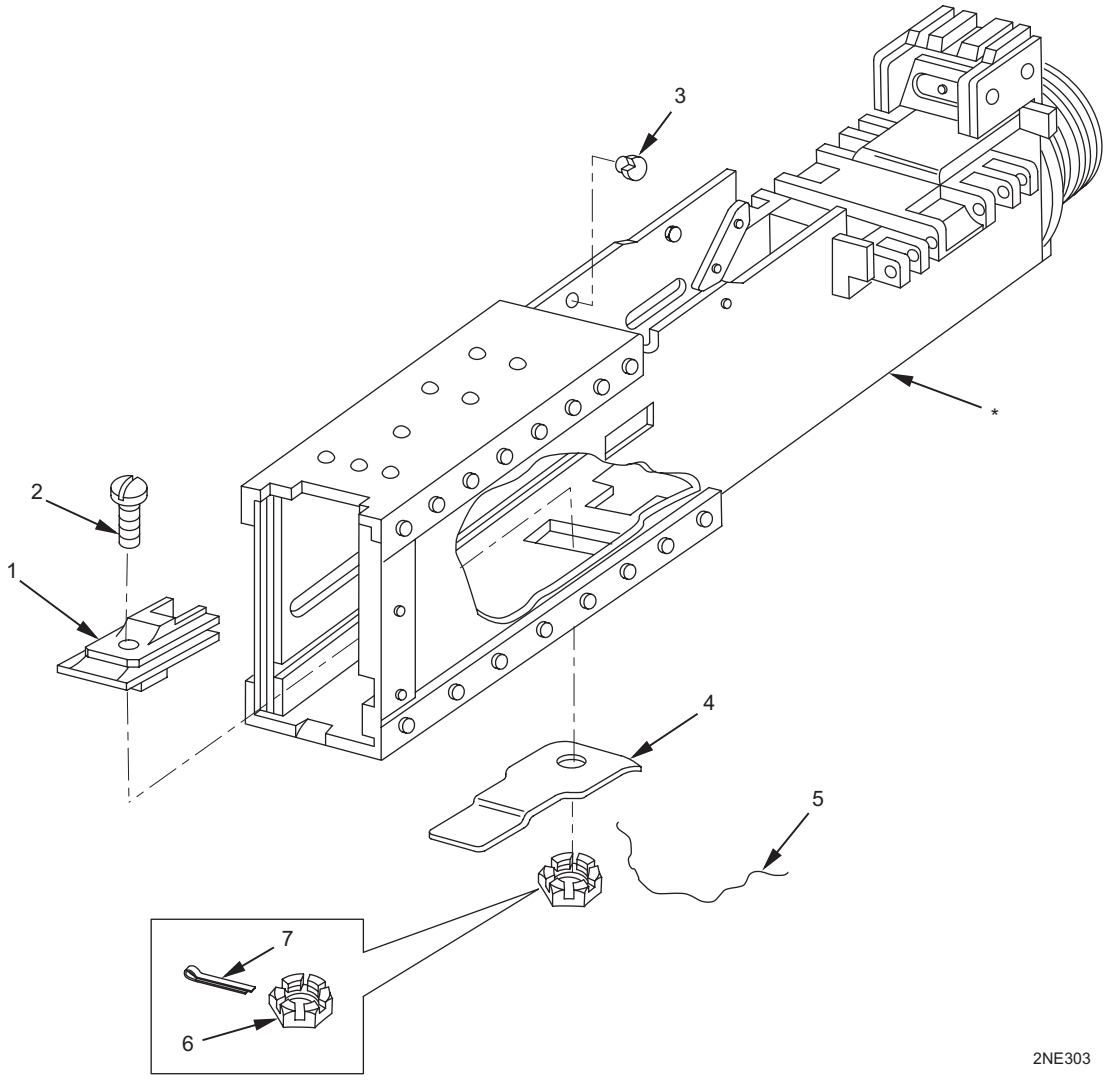


Figure 11. Cartridge Receiver 6535480.

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 0113	
					FIG. 11 RECEIVER, CARTRIDGE 6535480	
1	PAFZZ	1005-00-614-7583	19200	6147583	CAM, BREECHLOCK	1
2	PAFZZ	5305-00-515-2938	19204	5152938	SCREW, MACHINE	1
3	PAFZZ	5315-00-500-9392	19200	5009392	STOP, BOLT	1
*4	PAFZZ	5360-00-514-0428	19200	5140428	SPRING, FLAT UOC: W08 (FLEX ONLY)	1
5	MOOZZ		80204	NASM20995-C41	WIRE, NONELECTRICAL MFD FROM NSN 9505-00-076-8640 UOC: W08 (FLEX ONLY)	V
6	PAFZZ	5310-00-515-2939	19204	5152939	NUT, PLAIN, SLOTTED HEXAGON	1
*7	PAFZZ	5315-00-298-1481	80205	MS24665-357	PIN, COTTER UOC: 775	1

END OF FIGURE

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

BARREL MANUAL CONTROL HANDLE 5504080 AND BARREL BAGS

REPAIR PARTS LIST

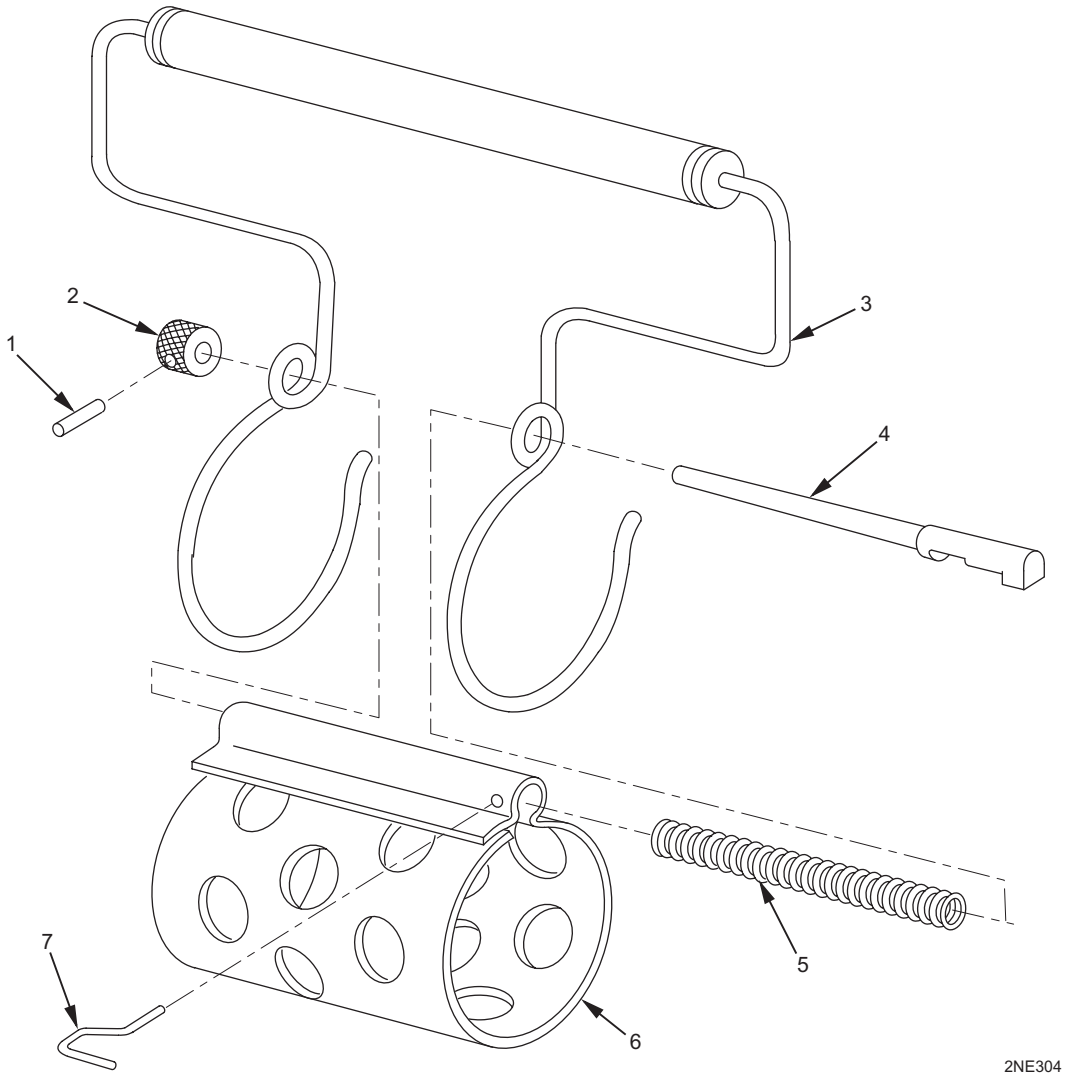


Figure 12. Barrel Manual Control Handle 5504080 and Barrel Bags (Sheet 1 of 2).

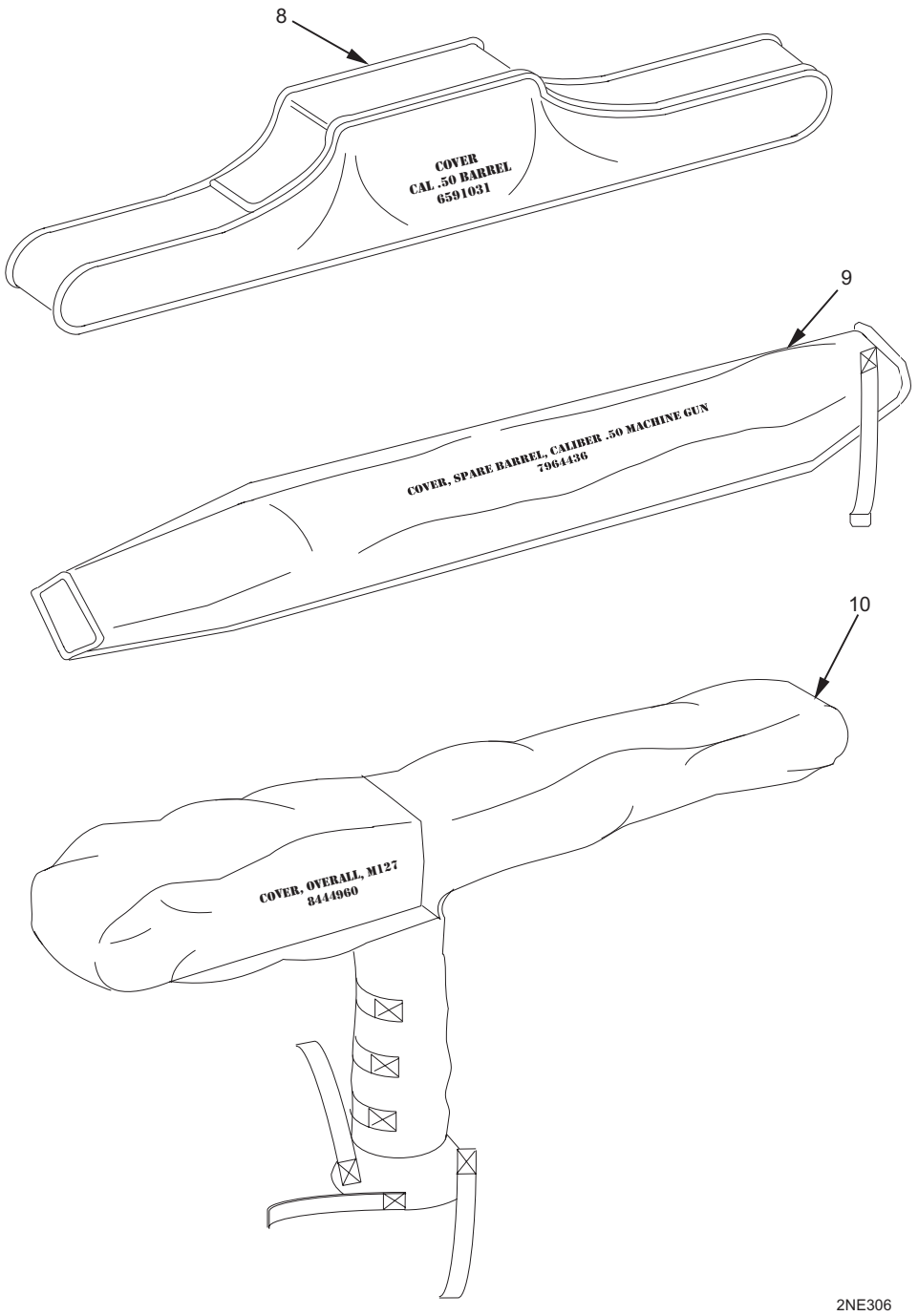


Figure 12. Barrel Manual Control Handle 5504080 and Barrel Bags (Sheet 2 of 2).

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 0114	
					FIG. 12 HANDLE, MANUAL CONTROL, BARREL 5504080 AND BARREL BAGS	
*1	PAOZZ	5315-00-846-1790	80205	MS16562-108	PIN, SPRING UOC: W08	1
2	PAOZZ	5355-00-501-3504	19200	5013504	KNOB UOC: W08	1
3	XAOZZ		19204	NPN	HANDLE UOC: W08	1
4	PAOZZ	1005-00-501-3503	19204	5013503	BOLT, BARREL CARRIER UOC: W08	1
5	PAOZZ	5360-00-941-9334	19200	6008902	SPRING, HELICAL, COMPRESSION UOC: W08	1
6	XAOZZ		19204	5204093	SLEEVE ASSEMBLY UOC: W08	1
7	PAOZZ	5315-00-501-3507	19200	5013507	PIN, STRAIGHT, HEADED UOC: W08	1
*8	PAOZZ	1005-00-659-1031	19200	6591031	COVER, CALIBER .50 BARREL UOC: W08	1
*9	PAOZZ	1005-00-796-4436	19207	7964436	COVER ASSEMBLY, SPARE BARREL, CALIBER .50 MACHINE GUN	1
*10	PAOZZ	1005-00-781-9108	19204	8444960	COVER, OVERALL, M127 UOC: W08	1
					END OF FIGURE	

UNIT AND DIRECT SUPPORT

**MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)**

BULK MATERIAL

REPAIR PARTS LIST

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 9999	
					FIG. BULK MATERIAL	
*1	PAFZZ	9505-00-076-8640	96906	MS20995C41-56	WIRE, NONELECTRICAL CORROSION RESISTANCE STEEL (ESML)	V
2	PAFZZ	9505-00-684-4843	80204	NASM20995-F41	WIRE, NONELECTRICAL CARBON STEEL ZINC COATED (ESML)	V

END OF FIGURE

DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

SPECIAL TOOLS

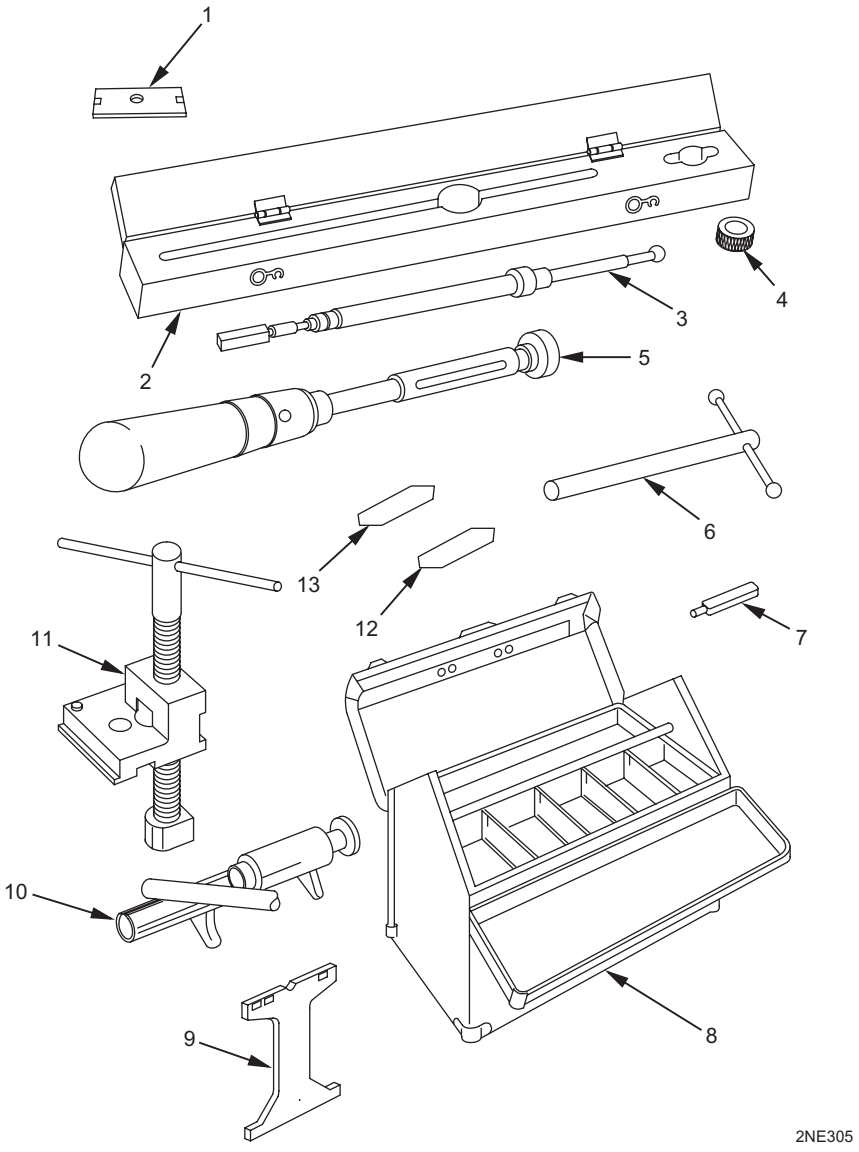


Figure 13. Special Tools/Direct Support Tool Set 7265830.

(1) ITEM NO	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 9999	
					FIG. 13 SPECIAL TOOLS/TOOL SET, DIRECT SUPPORT 7265830	
1	PAFZZ	5220-00-197-4421	19205	7799739	GAGE, FIRING PIN, PROTRUSION BOI: TWO AUTHORIZED PER DS UNIT	
2	PAFZZ	5140-00-313-9487	19205	7319997	..CASE, CARRYING, GAGE BOI: ONE AUTHORIZED PER DS UNIT	
3	PAFZZ	5210-00-317-2502	19204	7274725	..GAGE, BORE EROSION, MACHINE GUN BOI: TWO AUTHORIZED PER DS UNIT	
4	PAFZZ	5220-00-317-2503	19205	7274730	..GAGE, WEAR CHECK BOI: TWO AUTHORIZED PER DS UNIT	
5	PAFZZ	4933-00-624-3646	19205	6243646	TOOL ASSEMBLY, FIRING PIN BOI: ONE AUTHORIZED PER DS UNIT	
6	PAFZZ	5120-00-718-8742	19204	7188742	WRENCH, SPANNER BOI: ONE AUTHORIZED PER DS UNIT	
7	PAFZZ	5220-00-507-7200	19200	5077200	GAGE, PLUG, FIRING PIN HOLE BOI: TWO AUTHORIZED PER DS UNIT	
*8	PAFZZ	5140-00-473-6260	80244	5140-00-473-6260	TOOL BOX, PORTABLE BOI: ONE AUTHORIZED PER DS UNIT	
*9	PAFZZ	5220-00-710-6326	19200	7106326	GAGE, OIL BUFFER ROD BOI: TWO AUTHORIZED PER DS UNIT	
10	PAFZZ	4933-00-731-9903	19205	7319903	TOOL ASSEMBLY, OIL BUFFER ROD ASSEMBLY BOI: ONE AUTHORIZED PER DS UNIT	
11	PAFZZ	4933-00-718-5892	19204	7185892	TOOL ASSEMBLY, BOLT LATCH ASSEMBLY BOI: ONE AUTHORIZED PER DS UNIT	
*12	PAFZZ	5220-00-930-1845	19200	7799775	BARREL SUPPORT, PLUG, SPECIAL GAGE	
*13	PAFZZ	5220-00-930-1859	19200	7799808	BUSHING, BRASS, THREADED, PLUG, SPECIAL GAGE	

END OF FIGURE

UNIT AND DIRECT SUPPORT

**MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)**

NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIGURE	ITEM
5315-00-013-7137	1	37
	7	12
5315-00-013-7146	8	9
5360-00-034-8013	9	25
3020-00-034-8029	9	37
5315-00-034-8030	9	36
1005-00-034-8034	9	34
3120-00-034-8040	9	19
5315-00-034-8041	9	35
5315-00-034-8042	9	28
3120-00-034-8044	9	33
5360-00-034-8051	9	29
5360-00-034-8053	9	43
5315-00-058-9770	9	44
9505-00-076-8640	Bulk	1
5315-00-081-6829	9	32
5310-00-167-0721	9	12
5310-00-167-0818	9	20
5220-00-197-4421	13	1
5360-00-200-5800	6	2
5360-00-209-8720	4	14
5360-00-209-9691	1	54
5315-00-234-1861	1	48
	6	8
5315-00-298-1481	11	7
5315-00-299-1191	7	7
5360-00-299-1192	1	45
5305-00-299-1193	1	60
5140-00-313-9487	13	2
5210-00-317-2502	13	3
5220-00-317-2503	13	4
5310-00-323-3838	9	13
3040-00-329-5828	9	24
1005-00-329-5835	9	26
5340-00-329-5842	9	27
1005-00-329-5847	9	40
1005-00-329-5853	9	41
1005-00-329-5858	9	42
5340-00-329-5872	9	21
1005-00-336-8608	10	1
1005-00-348-8653	1	3
5320-00-471-5099	2	7
5140-00-473-6260	13	8
5342-00-500-9266	6	7
5315-00-500-9271	1	6
5315-00-500-9273	4	3
5315-00-500-9275	2	13
	3	8
5360-00-500-9300	2	23
	3	19
5360-00-500-9351	7	16
5360-00-500-9352	2	2
	3	6
5360-00-500-9353	4	10
5360-00-500-9356	2	17
	3	13
5315-00-500-9382	4	11
5315-00-500-9385	5	3
5315-00-500-9392	11	3
5305-00-500-9394	2	11
5360-00-500-9523	4	4
5360-00-501-3154	10	10

STOCK NUMBER	FIGURE	ITEM
5340-00-501-3155	10	9
5305-00-501-3160	10	6
5305-00-501-3167	10	2
5315-00-501-3424	1	12
1005-00-501-3503	12	4
5355-00-501-3504	12	2
5315-00-501-3507	12	7
5360-00-501-3516	7	6
5315-00-501-3523	1	50
5315-00-501-3524	1	44
5310-00-501-3526	1	49
5360-00-501-3527	1	47
5315-00-501-3529	5	2
1005-00-501-3539	1	64
1005-00-501-3540	1	76
1005-00-501-3541	1	77
5315-00-501-3546	1	56
5310-00-501-3556	1	38
5315-00-501-3565	1	61
5360-00-501-3566	1	63
5315-00-501-3581	2	20
	3	16
5365-00-501-3583	3	5
1005-00-501-3588	1	58
5355-00-501-3607	10	3
5340-00-501-3611	1	69
5315-00-501-3612	1	66
5360-00-501-3613	1	68
5306-00-501-3622	1	42
5310-00-501-3623	1	43
5306-00-501-3681	8	3
5310-00-501-3686	8	8
5315-00-501-3687	8	7
5360-00-501-3691	8	15
5360-00-501-3692	8	14
5360-00-501-3693	8	4
5315-00-501-3694	8	2
5310-00-501-3697	8	12
5315-00-506-5544	9	38
5220-00-507-7200	13	7
5340-00-508-0421	9	31
5360-00-508-2586	9	18
5340-00-511-9054	9	1
5360-00-514-0428	11	4
5365-00-515-2750	3	11
5365-00-515-2834	2	22
	3	20
5340-00-515-2835	2	26
	3	21
5315-00-515-2839	2	24
	3	18
5315-00-515-2854	2	8
	3	9
1005-00-515-2869	2	27
	3	22
5360-00-515-2896	3	2
5305-00-515-2897	3	1
5305-00-515-2938	11	2
5310-00-515-2939	11	6
5315-00-526-2799	2	19
	3	15
1005-00-535-1220	4	16
1005-00-550-4060	1	51
5355-00-550-4062	4	6
1005-00-550-4067	4	15
5340-00-550-4071	2	1
5340-00-550-4080	1	20
1005-00-550-4081	7	13
1005-00-550-4082	1	24
1005-00-550-4091	1	72
1005-00-550-4094	2	25
1005-00-550-8141	6	4
5340-00-556-4278	7	3
1005-00-556-4305	1	27
1005-00-557-7409	1	65
5305-00-582-5807	9	30
5340-00-586-7774	9	17
5360-00-597-1201	1	5
5340-00-600-8583	1	13
1005-00-600-8782	6	3
5315-00-600-8784	1	23
5315-00-600-8790	6	5
5355-00-600-8809	10	11
3040-00-600-8914	7	2

STOCK NUMBER	FIGURE	ITEM
1005-00-600-8918	2	3
	3	4
5315-00-600-8919	1	46
5365-00-600-8920	1	74
5340-00-600-8928	7	10
5360-00-600-8931	7	5
1005-00-600-8934	1	59
1005-00-600-8935	1	57
1005-00-600-8936	2	10
5340-00-600-8937	2	5
1005-00-600-8939	1	35
5360-00-600-8943	1	39
3040-00-600-8949	2	16
	3	12
1005-00-600-8959	4	1
3040-00-600-8961	7	1
1005-00-600-8962	7	15
3040-00-600-8975	1	70
1005-00-600-8976	4	9
1005-00-600-8990	8	5
5305-00-600-8993	8	10
1005-00-600-9718	4	18
1005-00-600-9732	4	5
5360-00-600-9741	7	8
1005-00-602-5284	9	4
5365-00-602-5285	9	11
5365-00-604-4226	9	6
3040-00-614-7085	8	13
5930-00-614-7461	1	40
1005-00-614-7463	4	7
1005-00-614-7511	3	3
1005-00-614-7583	11	1
1005-00-614-7893	8	1
5306-00-716-1255	1	16
5305-00-622-9486	9	2
5360-00-624-3607	2	21
	3	17
4933-00-624-3646	13	5
5340-00-625-7592	1	52

STOCK NUMBER	FIGURE	ITEM
1005-00-626-1110	7	14
5365-00-629-8825	1	17
1005-00-631-3800	8	11
5307-00-631-3822	8	16
5305-00-637-9395	1	34
1005-00-653-5477	1	1
1005-00-657-3953	1	9
1005-00-659-1031	12	8
9505-00-684-4843	Bulk	2
	2	28
5315-00-701-7719	9	23
5220-00-710-6326	13	9
1005-00-716-1300	4	19
1005-00-716-1301	4	8
1005-00-716-1302	1	26
1005-00-716-2072	1	14
5315-00-716-2872	1	71
4933-00-718-5892	13	8
5120-00-718-8742	13	6
1005-00-726-5212	1	29
1005-00-726-5561	2	14
5365-00-726-5580	1	73
365-00-726-5581	1	73
5365-00-726-5582	1	73
5365-00-726-5583	1	73
5365-00-726-5584	1	73
5365-00-726-5585	1	73
5365-00-726-5586	1	73
5365-00-726-5587	1	73
5365-00-726-5588	1	73
5365-00-726-5589	1	73
5365-00-726-5590	1	73
5365-00-726-5591	1	73
1005-00-726-6131	1	21
5360-00-726-6134	1	22
1005-00-726-6835	6	6
1005-00-731-0080	4	13
5310-00-731-2027	1	32
5305-00-731-2028	1	33

STOCK NUMBER	FIGURE	ITEM
5360-00-731-2029	1	31
5315-00-731-2078	4	17
5315-00-731-2517	1	11
	2	9
	2	15
	3	10
5340-00-731-2723	7	9
5315-00-731-2970	7	4
3040-00-731-3069	1	4
1005-00-731-3083	1	55
5315-00-731-3106	1	53
4933-00-731-9903	13	10
5340-00-759-2801	9	15
1005-00-781-9108	12	10
1005-00-796-4436	12	9
5340-00-796-7038	9	16
5310-00-800-3218	7	11
5315-00-812-1008	9	14
5315-00-829-1767	9	39
5315-00-842-3044	1	62
5315-00-845-4231	10	12
5315-00-846-1790	12	1
1005-00-918-2617	2	12
1005-00-918-2618	2	6
	3	7
1005-00-927-7273	2	18
	3	14
5220-00-930-1845	13	12
5220-00-930-1859	13	13
5360-00-941-9334	12	5
5305-00-958-9642	10	7
1005-01-003-5475	1	36
5360-01-003-5476	10	8
1005-01-048-8572	10	4
5315-01-063-6872	1	8
1005-01-141-1235	6	1
1005-01-172-7725	1	75
5305-01-372-8426	1	10
5305-01-372-8426	8	17
5310-01-374-0508	1	19
1010-01-414-9706	2	K
5360-01-415-3267	2	30
5305-01-415-3269	2	29
1005-01-453-9289	1	25
1005-01-453-9290	1	7
1005-01-454-8486	9	7
5365-01-454-8487	9	9
4010-01-495-9557	9	10

END OF WORK PACKAGE

UNIT AND DIRECT SUPPORT

**MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)**

PART NUMBER INDEX

PART NUMBER	FIGURE	ITEM
5013525	1	45
5013526	1	49
5013527	1	47
5013529	5	2
5013530	1	60
5013539	1	64
5013540	1	76
5013541	1	77
5013545	7	11
5013546	1	56
5013556	1	38
5013565	1	61
5013566	1	63
5013581	2	20
	3	16
5013583	3	5
5013588	1	58
5013607	10	3
5013611	1	69
5013612	1	66
5013613	1	68
5013622	1	42
5013623	1	43
5013681	8	3
5013686	8	8
5013687	8	7
5013691	8	15
5013692	8	14
5013693	8	4
5013694	8	2
5013697	8	12
5077200	13	7
5140-00-473-6260	13	8
5140428	11	4
5152750	3	11
5152834	2	22
	3	20
5152835	2	26
	3	21
5152839	2	24
5152839	3	18
5152854	2	8
	3	9
5152858	5	4
5152869	2	27
5152869	3	22
5152896	3	2
5152897	3	1
5152938	11	2
5152939	11	6
5153191	1	34
5204093	12	6
5262799	2	19
	3	15
5351220	4	16
5504060	1	51
5504062	4	6
5504065	4	2
5504067	4	15
5504071	2	1
5504080	1	20
5504081	7	13
5504082	1	24
5504091	1	72
5504094	2	25
5508141	6	4
5564278	7	3
5564305	1	27
5564307	2	4
5577408	1	67
5577409	1	65
6008583	1	13
6008782	6	3
6008784	1	23
6008790	6	5
6008809	10	11
6008902	12	5
6008914	7	2
13016069	2	3
13016069	3	4

PART NUMBER	FIGURE	ITEM
6008919	1	46
6008920	1	74
6008928	7	10
6008931	7	5
6008934	1	59
6008935	1	57
6008936	2	10
6008937	2	5
6008939	1	35
6008943	1	39
6008946	4	12
6008949	2	16
	3	12
6008959	4	1
6008961	7	1
6008962	7	15
6008975	1	70
6008976	4	9
6008990	8	5
6008993	8	10
6009718	4	18
6009732	4	5
6009741	7	8
6009832	6	2
6147085	8	13
6147461	1	40
6147463	4	7
6147511	3	3
6147583	11	1
6147893	8	1
6243607	2	21
	3	17
6243646	13	5
6257592	1	52
6261110	7	14
6313800	8	11
6313822	8	16
6528256	5	1
6528309	1	7
6528322	1	28

PART NUMBER	FIGURE	ITEM
6535475	2	6
	3	7
13016070	1	1
6535480	1	75
6591031	12	8
7106326	13	9
7160628	1	54
7161300	4	19
7161301	4	8
7161302	1	26
7162072	1	14
7162254	1	15
7162255	1	16
7162325	1	18
7162326	1	17
7162872	1	71
7185892	13	11
7188742	13	6
7265212	1	29
7265561	2	14
7265580	1	73
7265581	1	73
7265582	1	73
7265583	1	73
7265584	1	73
7265585	1	73
7265586	1	73
7265587	1	73
7265588	1	73
7265589	1	73
7265590	1	73
7265591	1	73
7265596	1	10
	8	17
7266131	1	21
7266134	1	22
7266821	1	25
7266835	6	6
7267936	10	1
7267982	1	3

PART NUMBER	FIGURE	ITEM
7267985	9	24
7267986	9	26
7267987	9	27
7267991	9	40
7267992	9	41
7267993	9	42
7267994	9	22
7268051	9	21
7268107	9	13
7268114	9	38
7268228	9	31
7268250	9	18
7268276	9	1
7268362	9	17
7268488	9	5
7268489	9	6
7268490	9	4
7268491	9	11
7274725	13	3
7274730	13	4
7310080	4	13
7312027	1	32
7312028	1	33
7312029	1	31
7312030	1	30
7312078	4	17
7312517	1	11
	2	9
	2	15
	3	10
7312723	7	9
7312970	7	4
7313068	1	5
7313069	1	4
7313083	1	55
7313106	1	53
7319903	13	10
7319997	13	2

PART NUMBER	FIGURE	ITEM
7790951	9	16
7799739	13	1
7799775	13	12
7799808	13	13
7964436	12	9
8444960	12	10
8448125	1	41
8710154	9	25
8715566	9	37
8715567	9	36
8715571	9	34
8715581	9	19
8715582	9	35
8715584	9	28
8715586	9	33
8715751	9	29
8715827	9	43
9340487	6	1
11010042	9	15
11010439	1	9
11010440	8	6
11010453	2	18
	3	14
12003047	1	36
12003051	10	4
12003052	10	8
12003056	10	5
12003201	1	8
12012077	9	7
12012078	9	8
12012079	9	9
12937677	1	2
12999071	9	10

END OF WORK PACKAGE

UNIT AND DIRECT SUPPORT

MACHINE GUNS, CALIBER .50: M2, HEAVY BARREL
FLEXIBLE, W/E (1005-00-322-9715)
FIXED M48 TURRET TYPE (1005-00-957-3893)
SOFT MOUNT (1005-01-343-0747)
FIXED TYPE RIGHT HAND FEED (1005-00-122-9339)
FIXED TYPE LEFT HAND FEED (1005-00-122-9368)

EXPENDABLE AND DURABLE ITEMS LIST

INTRODUCTION

Scope

This work package lists expendable and durable items that you will need to operate and maintain the M2 Machine Gun. This list is for information only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, Expendable/Durable Items (Except Medical, Class V Repair Parts, and Heraldic Items), or CTA 8-100, Army Medical Department Expendable/Durable Items.

Explanation of Columns in the Expendable/Durable Items List

Column (1) – Item Number. This number is assigned to the entry in the list and is referenced in the narrative instructions to identify the item (e.g., Use cleaning compound (item 12, WP 0060 00).).

Column (2) – Level. This column identifies the lowest level of maintenance that requires the listed item (C = Operator/Crew, O = Unit/AVUM, F = Direct Support Maintenance/AVIM).

Column (3) – National Stock Number (NSN). This is the NSN assigned to the item which you can use to requisition it.

Column (4) – Item Name, Description, Commercial and Government Entity Code (CAGEC), and Part Number (P/N). This column provides the other information you need to identify the item.

Column (5) – Unit of Measure (U/M). This code shows the physical measurement or count of an item, such as gallon, dozen, gross, etc.

EXPENDABLE AND DURABLE ITEMS

Table 1. Expendable and Durable Items List.

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) ITEM NAME, DESCRIPTION, CAGEC, PART NUMBER	(5) U/M
1	F	8135-00-543-6574	Bag, Sleeve and Tubing: interior packaging (81349) MIL-B-117	EA
2	F	8035-00-753-4661	Barrier Material: grease-proofed, waterproofed, flexible (81349) MIL-B-121	YD/RO
2.1	F	8135-00-233-3871	Barrier Material: grease-proof, non-stretchable (81349) MIL-B-121	RO
2.2	F	8135-00-292-9719	Barrier Material: grease-proof, non-stretchable (81349) MIL-B-121	RO
3	F		Box, Fiberboard: corrugated, triple-wall (81348) PPP-B-640	EA
4	F	8115-00-190-5002	Box, Fiberboard: weather resistant (81346) ASTM D-5118	EA
5	F		Box, Wooden: cleated plywood (81348) PPP-B-601	EA
6	F		Box, Wooden: nailed and locked, corner (81348) PPP-B-621	EA
7	O	1005-00-550-4037	Brush, Cleaning, Small Arms Bore (19204) 5504037	EA
8	O	1005-00-766-0915	Brush, Cleaning, Small Arms Chamber (19204) 7790737	EA
9	O	6850-00-965-2332	Carbon Removing Compound (CRC): dip type, rinsing required (81348) P-C-111	GL
10	O	DODAC 1305-A560	Cartridge, .50 Caliber, Dummy M2	AR
10.1	C	1005-00-556-4274	Cleaning Case (19204) 5564274	EA
11	F	9150-01-054-6453	Cleaner, Lubricant, and Preservative (CLP) (81349) MIL-PRF-63460 1-pt (0.47-l) bottle with trigger sprayer	PT

Table 1. Expendable and Durable Items List – Continued.

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) ITEM NAME, DESCRIPTION, CAGEC, PART NUMBER	(5) U/M
12	O	6850-00-224-6657	Cleaning Compound, Rifle Bore (RBC) (81349) MIL-PRF-372 8-oz (237-ml) can	OZ
13	F	6850-00-224-6663	Cleaning Compound, Solvent: 1-gal (3.79-l) can (81349) MIL-PRF-372	GL
14	C	5350-00-221-0872	Cloth, Abrasive (80204) ANSI B74.18	EA/PG
14.1	F	6850-01-470-2737	Corrosion Inhibitor Packet (44695) 1-MUL Pouch	EA
15	F		Cushioning Material: cellulosic (81348) PPP-C-843	AR
16	O	6850-00-281-1985	Dry Cleaning Solvent: type 1, 1-gal (3.79-l) can (58536) A-A-59601	GL
17	F		Fiberboard: corrugated and solid sheet stock (container grade), and cut shapes (81348) PPP-F-320	AR
18	O	8415-00-823-7460	Gloves, Chemical Resistant: (81349) MIL-DTL-32066	PR
19	F	9150-01-197-7689	Grease, Automotive and Artillery (GAA): -65 to +225 °F (-54 to +107 °C) effective temperature range 5-lb (2.27-kg) can (81349) M-10924-D	CN
20	O	9150-00-754-0064	Lubricant, Solid Film (81349) MIL-L-46147	CN
21	O	9150-00-687-4241	Lubricating Oil (LSA): 1-qt (0.95-l) can (81349) MILL46000	QT
22			Lubricating Oil, General Purpose (PL-S): noncorrosive, low temperature	
	F	9150-00-231-6689	1-qt (0.95-l) can	QT
	F	9150-00-231-9062	5-gal (18.93-l) can (81349) MIL-PRF-32033	GL
23	F	7920-00-205-1711	Rag, Wiping: cotton (80244) 7920-00-205-1711	LB

EXPENDABLE AND DURABLE ITEMS - CONTINUED

Table 1. Expendable and Durable Items List – Continued.

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) ITEM NAME, DESCRIPTION, CAGEC, PART NUMBER	(5) U/M
24	C	1005-00-653-5441	Rod, Cleaning, Small Arms (19204) 6535441	EA
25	C	1005-00-556-4102	Rod, Cleaning, Small Arms: set (19204) 5564102	EA
25.1	C	8105-00-921-5821	Small Arms Accessory Kit (19204) 11686430	EA
26	F	8135-00-286-8565	Strap, Steel (81346) ASTM D-3953-87	LB
27	C	1005-00-716-2704	Swab Holder Section (19200) 7162704	EA
28	C	1005-00-288-3565	Swab, Small Arms Cleaning Cotton, 2-1/2 in. sq. 200 in bundle (19204) 5019316	EA/PG
29	F	7510-00-297-6655	Tape, Paper: opaque, water-resistant (81346) ASTM D5486/D5486M	YD
29.1	F	8135-00-810-0481	VCI Paper, Non-greaseproof (81349) MIL-B-121	RO
29.2	F	8135-00-985-7212	VCI Wrap, Greaseproof, Moldable 36 in. x 100 ft (81349) MIL-B-121	RO
29.3	F	8135-00-664-0015	VCI Wrap, Greaseproof, Moldable 36 in. x 600 ft (81349) MIL-B-121	RO

END OF WORK PACKAGE

INDEX

Subject **WP Sequence No. – Page No.**

A

B

INDEX - Continued

INDEX - Continued

INDEX - Continued

INDEX - Continued

Subject **WP Sequence No. – Page No.**

R - Continued

S

INDEX - Continued

PIN: 078655-001

US ARMY M2 .50 CAL MG
M2 HEADSPACE & TIMING ADJUSTMENT PROCEDURE

M2 MG - HEADSPACE ADJUSTMENT

WARNING - Weapon may explode if not properly headspaced!
NOTE - Ensure charging handle is retracted before inserting barrel.
NOTE - Headspace and timing must be performed each time the barrel is installed.
NOTE - Ensure barrel is a lined barrel (PN 7266131).

1. Raise cover all the way up; retract bolt to align barrel locking spring lug with 3/8 in. hole in right side of receiver.
2. With bolt retracted, screw barrel completely into barrel extension; then unscrew barrel two clicks. Allow bolt to go forward; barrel should not rotate.
3. Charge the weapon and allow the bolt to go forward. (Do not slam).
4. Retract the bolt until the barrel extension begins to separate (but not more than 1/16 in.) from the trunnion block. **(DO NOT INSERT ANY OBJECT BETWEEN THE BARREL EXTENSION AND TRUNNION BLOCK)**. Hold in this position until gage check is completed.
5. Raise cartridge extractor; push in on alignment guide to insert gage. (Apply slight pressure on gage). Attempt to insert "**GO**" end of headspace gage in the T-slot between the face of bolt and rear of barrel all the way up to the ring. If "**GO**" end of headspace gage enters down to the ring, attempt to insert the "**NO GO**" end of headspace gage; if "**NO GO**" end does not enter, **headspace is set**. If "**NO GO**" end enters T-slot or "**GO**" end does not enter, retract bolt to align barrel locking spring lug with 3/8 in. hole in right side of receiver.
6. Screw barrel in/out one click at a time rechecking after each click starting from **step 4 above.**
7. Repeat until "**GO**" end can enter T-slot and "**NO GO**" end will not enter T-slot.
CAUTION - Do not unscrew barrel more than a total of seven clicks. If condition occurs, turn in machine gun for next echelon inspection.
Reference TM 9-1005-213-10 WP 0005 00.

Attempt to fire by

Reinstalling the backplate. (Do not push up on trigger by hand.)

M2 MG - TIMING ADJUSTMENT

WARNING - Never charge gun with back plate off. Do not stand directly behind gun while removing backplate.
NOTE - Gun must be in single shot mode before removing backplate.
NOTE - Ensure proper headspace is set before attempting to adjust timing. Barrel must be installed.

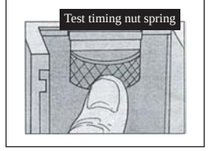
1. Raise cover all the way up. (Do not hold barrel while charging weapon). Charge the weapon and allow the bolt to go forward. (Do not slam).
2. Retract bolt just enough to insert "**FIRE**" gage with beveled edge against barrel notches.
3. Remove backplate. (Pull backplate latch lock straight back, while lifting up on backplate latch. Raise backplate assembly straight up and remove from receiver).
4. Turn timing adjustment nut all the way down (to the left), but not completely off the timing stud.
5. Remove "**FIRE**" gage. Reinstall backplate. Insert "**FIRE**" gage and attempt to fire by pressing butterfly trigger; gun should not fire (firing pin not released).
6. Remove "**FIRE**" gage. Remove backplate, screw timing adjustment nut up one click. Reinstall backplate. Insert "**FIRE**" gage and attempt to fire by pressing on butterfly trigger (repeat procedure, turning timing adjustment nut one click at a time, until the gun fires (firing pin releases).
7. After the gun fires, remove backplate, turn timing adjustment nut up two more clicks. Reinstall backplate, charge the weapon and allow the bolt to go forward. (Do not slam).
8. Retract bolt just enough to insert "**NO FIRE**" gage with beveled edge against barrel notches. Attempt to fire by pushing on the butterfly trigger; machine gun should not fire.
9. Retract bolt just enough to remove **"NO FIRE**" gage and insert "**FIRE**" gage with beveled edge against barrel notches. Attempt to fire by pushing on butterfly trigger; machine gun should fire. (Remove "**FIRE**" gage). **Timing adjustment is complete**.
Reference TM 9-1005-213-10 WP 0006 00.

Pre-check Checks

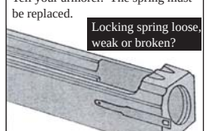
If your M2 is in bad shape now, you won't be able to headspace and time it later. So before you go to the field, do these checks:

Gauges. If the headspace and timing gauges are bent, rusted or pitted, you can't acurately gauge, so get good gauges from your armorer. He can order new gauges with NSN 5220-00-535-1217.

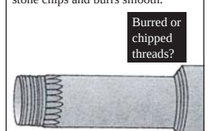
Timing nut. If the timing nut can be easily moved with one finger or it doesn't click as you move it, its spring is weak and it won't hold timing. Tell your armorer. The spring must be replaced.



Barrel locking spring. If the spring can't hold the barrel in place, the barrel can turn during firing and headspace is lost. So test the spring by getting the correct headspace and then trying to unscrew the barrel. If the barrel turns, the spring is weak or loose. Tell your armorer. The spring must be replaced.

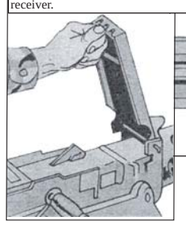


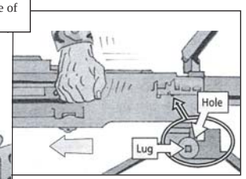
Barrel and barrel extension threads. If the threads are chipped or burred, it will be difficult to screw in the barrel. What's worse, you may think you've completely screwed in the barrel, but you haven't. Result: bad headspace. Your armorer can usually stone chips and burrs smooth.



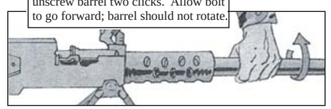
How to Headspace

1. Raise cover all the way up. Retract bolt to align barrel locking spring lug with 3/8" hole in right side of receiver.

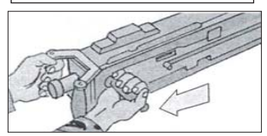




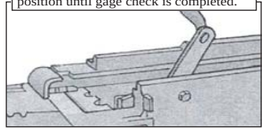
2. With bolt retracted, screw barrel completely into barrel extension; then unscrew barrel two clicks. Allow bolt to go forward; barrel should not rotate.



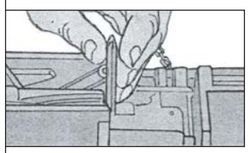
3. Charge the weapon and allow the bolt to go forward. (Do not slam)



4. Retract the bolt until the barrel extension begins to separate (but not more than 1/16 inch) from the trunnion block. **(DO NOT INSERT ANY OBJECT BETWEEN THE BARREL EXTENSION AND TRUNNION BLOCK)**. Hold in this position until gage check is completed.

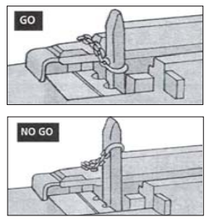


5. Raise cartridge extractor; Push in on alignment guide to insert gage. (Apply slight pressure on gage). Attempt to insert "**GO**" end of headspace gage in the T-slot between the face of bolt and rear of barrel all the way up to the ring. If "**GO**" end of headspace gage enters down to the ring, attempt to insert the "**NO GO**" end of headspace gage; if "**NO GO**" end does not enter, **headspace is se**t. If "**NO GO**" end enters T-slot or "**GO**" end does not enter, retract bolt to align barrel locking spring lug with 3/8" hole in right side of receiver.



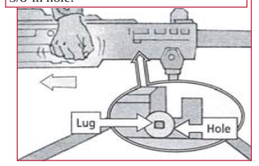
6. Screw barrel in one click at a time (if "**NO GO**" end enters slot) or one click out at a time (if "**GO**" end does not enter) rechecking after each click starting from **Step 4 above** .

7. Repeat until "**GO**" end can enter T-slot and "**NO GO**" will not enter T-slot.

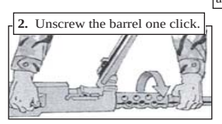


Headspace Too Tight

1. Pull back the charging handle until the barrel-locking spring lug is centered in the 3/8-in hole.

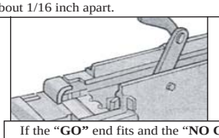


2. Unscrew the barrel one click.

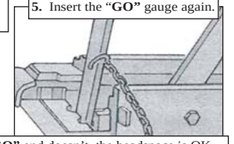


3. Ease the bolt forward.

4. Pull back the charging handle until the barrel extension and trunnion block are about 1/16 inch apart.



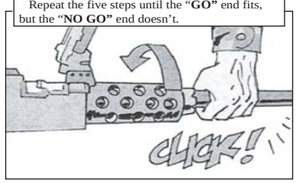
5. Insert the "**GO"** gauge again.



If the "**GO"** end fits and the "**NO GO"** end doesn't, the headspace is OK. If the "**GO**" end still won't fit, repeat these last five steps until it does.
Do not unscrew the barrel more than five clicks beyond the first two clicks in steps 1-5. If you turn the barrel more than seven clicks, something's wrong. Tell your armorer.

Headspace Too Loose

If the "**NO GO"** end of the gauge fits into the T-slot, the headspace is too loose. To fix loose headspace, do the same five steps you did for tight headspace, except screw the barrel in one click.
Repeat the five steps until the "**GO"** end fits, but the "**NO GO"** end doesn't.



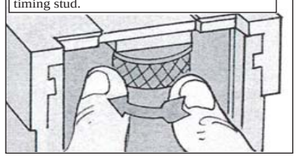
How To Time

1. Raise cover all the way up. (Do not hold barrel while charging weapon). Charge the weapon and allow the bolt to go forward. (Do not slam).

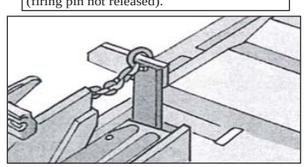
2. Retract bolt just enough to insert "**FIRE**" gage with beveled edge against barrel notches.

3. Remove backplate (Pull backplate latch lock straight back, while lifting up on back-plate latch. Raise backplate assembly straight up and remove from receiver).

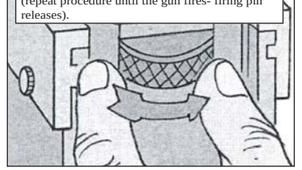
4. Turn timing adjustment nut all the way down (to the left) but not completely off the timing stud.



5. Remove "**FIRE**" gage. Reinstall backplate. Insert "**FIRE**" gage and attempt to fire by pressing butterfly trigger; gun should not fire (firing pin not released).



6. Remove backplate, screw nut up one click at a time. Reinstall backplate. Insert "**FIRE**" gage and attempt to fire by pressing on butterfly trigger (repeat procedure until the gun fires- firing pin releases).



7. After the gun fires, remove backplate, turn nut up two more clicks. Reinstall backplate, charge the weapon and allow the bolt to go forward. (Do not slam).

8. Retract bolt just enough to insert **"NO FIRE**" gage with beveled edge against barrel notches. Attempt to fire by pushing on the butterfly trigger; machine gun should not fire.

9. Retract bolt just enough to remove "**NO FIRE**" gage and insert "**FIRE**" gage with beveled edge against barrel notches. Attempt to fire by pushing butterfly trigger; machine gun should fire. (Remove "**FIRE**" gage). **Timing adjustment is complete.**

2ne406

By Order of the Secretary of the Army:

ERIC K. SHINSEKI
General, United States Army
Chief of Staff

R. P. SHOCKEY
Director, Program Support
Marine Corps Systems Command

Official:

JOEL B. HUDSON
Administrative Assistant to the Secretary of the Army
0034726

DISTRIBUTION: To be distributed in accordance with the Initial Distribution Number (IDN) 401181 requirements for TM 9-1005-213-23&P.

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25-30; the proponent agency is ODISC4.	Use Part II *(reverse)* for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE **Date you filled out this form.**
TO: *(Forward to proponent of publication or form) (Include ZIP Code)* AMSTA-LC-LPIT / TECH PUBS, TACOM-RI 1 Rock Island Arsenal Rock Island, IL 61299-7630	FROM: *(Activity and location) (Include ZIP Code)* **Your mailing address**	

PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS

PUBLICATION/FORM NUMBER	DATE	TITLE
TM 9-1005-213-23&P		Unit and Direct Support Maintenance Manual for Machine Guns, Caliber .50: M2 Heavy Barrel

ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON *(Provide exact wording of recommended changes, if possible).*
1	0047 00-3					Part number for cartridge extractor is incorrect. It should be 6008959.

**Reference to line numbers within the paragraph or subparagraph.*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
Your Name		Your Signature

TO: (*Forward direct to addressee listed in publication)*	FROM: (*Activity and location) (Include ZIP Code)*	*DATE*
AMSTA-LC-LPIT / TECH PUBS, TACOM-RI 1 Rock Island Arsenal Rock Island, IL 61299-7630	Your address	Date you filled out this form

PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER	DATE	TITLE
TM 9-1005-213-23&P		Unit and Direct Support Maintenance Manual for Machine Guns, Caliber .50: M2 Heavy Barrel

PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION

PART III – REMARKS (*Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
Your Name		Your Signature

UASPPC V3.00

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25-30; the proponent agency is ODISC4.	Use Part II *(reverse)* for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE
TO: *(Forward to proponent of publication or form) (Include ZIP Code)* AMSTA-LC-LPIT / TECH PUBS, TACOM-RI 1 Rock Island Arsenal Rock Island, IL 61299-7630	FROM: *(Activity and location) (Include ZIP Code)*	

PART I- ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS

PUBLICATION/FORM NUMBER	DATE	TITLE
TM 9-1005-213-23&P		Unit and Direct Support Maintenance Manual for Machine Guns, Caliber .50: M2 Heavy Barrel

ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO.*	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON *(Provide exact wording of recommended changes, if possible).*

**Reference to line numbers within the paragraph or subparagraph.*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE

TO: (*Forward direct to addressee listed in publication)*	FROM: (*Activity and location) (Include ZIP Code)*	*DATE*

PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER	DATE	TITLE
TM 9-1005-213-23&P		Unit and Direct Support Maintenance Manual for Machine Guns, Caliber .50: M2 Heavy Barrel

PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION

PART III – REMARKS (*Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25-30; the proponent agency is ODISC4.	Use Part II *(reverse)* for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE
TO: *(Forward to proponent of publication or form) (Include ZIP Code)* AMSTA-LC-LPIT / TECH PUBS, TACOM-RI 1 Rock Island Arsenal Rock Island, IL 61299-7630	FROM: *(Activity and location) (Include ZIP Code)*	

PART I- ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS

PUBLICATION/FORM NUMBER	DATE	TITLE
TM 9-1005-213-23&P		Unit and Direct Support Maintenance Manual for Machine Guns, Caliber .50: M2 Heavy Barrel

ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO.*	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON *(Provide exact wording of recommended changes, if possible).*

**Reference to line numbers within the paragraph or subparagraph.*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE

TO: (*Forward direct to addressee listed in publication*)	FROM: (*Activity and location) (Include ZIP Code)*	*DATE*

PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER	DATE	TITLE
TM 9-1005-213-23&P		Unit and Direct Support Maintenance Manual for Machine Guns, Caliber .50: M2 Heavy Barrel

PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION

PART III – REMARKS (*Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25-30; the proponent agency is ODISC4.	Use Part II *(reverse)* for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE
TO: *(Forward to proponent of publication or form) (Include ZIP Code)* AMSTA-LC-LPIT/ TECH PUBS, TACOM-RI 1 Rock Island Arsenal Rock Island, IL 61299-7630	FROM: *(Activity and location) (Include ZIP Code)*	

PART I- ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS

PUBLICATION/FORM NUMBER	DATE	TITLE
TM 9-1005-213-23&P		Unit and Direct Support Maintenance Manual for Machine Guns, Caliber .50: M2 Heavy Barrel

ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO.*	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON *(Provide exact wording of recommended changes, if possible).*

**Reference to line numbers within the paragraph or subparagraph.*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE

DA FORM 2028, FEB 74 REPLACES DA FORM 2028, 1 DEC 68, WHICH WILL BE USED. USAPPC V3.00

TO: (*Forward direct to addressee listed in publication)*	FROM: (*Activity and location) (Include ZIP Code)*	*DATE*

PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER	DATE	TITLE
TM 9-1005-213-23&P		Unit and Direct Support Maintenance Manual for Machine Guns, Caliber .50: M2 Heavy Barrel

PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION

PART III – REMARKS (*Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE

UASPPC V3.00

WEAPON RECORD DATA

For use of this form, see DA PAMs 738-750 and 738-751; the proponent agency is DSCLOG

REQUIREMENT CONTROL SYMBOL
CSGLD--1051

1. TUBE SERIAL NO.	2. CANNON TYPE, MODEL OR SERIES	3. ORGANIZATION *(UIC)*	4. SPECIAL LIFE DATA
5. END ITEM IDENTIFICATION		6. RDS/EFC COMPUTATION	
7. CANNON SERIAL NO.	8. RETUBINGS / 9. REBUSHINGS		

10. Date *a*	Projectile Type *b*	Zone or Charge *c*	Rounds Fired *d*	EFC RDS Fired *e*	Cumulative RDS Fired *f*	Cumulative EFC RDS *g*	Remaining Life (EFC RDS) *h*	Remarks: Recoil Exercise (RE), Gage or Velocity Reading, Safety Inspection (SI) *i*	Signature *j*
	(Previous DA Form 2408-4 final entries)								

CONTINUE ON REVERSE

10. Date *a*	Projectile Type *b*	Zone or Charge *c*	Rounds Fired *d*	EFC RDS Fired *e*	Cumulative RDS Fired *f*	Cumulative EFC RDS *g*	Remaining Life (EFC RDS) *h*	Remarks: Recoil Exercise (RE), Gage or Velocity Reading, Safety Inspection (SI) *i*	Signature *j*

NOTE: START A NEW FORM BEFORE MAILING THIS ONE

THE METRIC SYSTEM AND EQUIVALENTS

LINEAR MEASURE

1 Centimeter = 10 Millimeters = 0.01 Meter = 0.3937 Inch
1 Decimeter = 10 Centimeters = 3.94 Inches
1 Meter =10 Decimeters = 100 Centimeters
= 1000 Millimeters = 39.37 Inches.
1 Dekameter = 10 Meters = 32.8 Feet
1 Hectometer =10 Dekameters = 328.08 Feet
1 Kilometer =10 Hectometers = 1000 Meters
= 0.621 Mile = 3,280.8 Feet
Millimeters = Inches times 25.4
Inches = Millimeters divided by 25.4

WEIGHTS

1 Centigram = 10 Milligrams = 0.154 Grain
1 Decigram = 10 Centigrams = 1.543 Grains
1 Gram = 0.001 Kilogram = 10 Decigrams
=1000 Milligrams = 0.035 Ounce
1 Dekagram = 10 Grams = 0.353 Ounce
1 Hectogram = 10 Dekagrams = 3.527 Ounces
1 Kilogram = 10 Hectograms = 1000 Grams
= 2.205 Pounds
1 Quintal = 100 Kilograms = 220.46 Pounds
1 Metric Ton = 10 Quintals = 1000 Kilograms
= 1.1 Short Tons

LIQUID MEASURE

1 Milliliter = 0.001 Liter = 0.034 Fluid Ounce
1 Centiliter = 10 Milliliters = 0.34 Fluid Ounce
1 Deciliter = 10 Centiliters = 3.38 Fluid Ounces
1 Liter = 10 Deciliters = 1000 Milliliters
= 33.82 Fluid Ounces
1 Dekaliter = 10 Liters = 2.64 Gallons
1 Hectoliter = 10 Dekaliters = 26.42 Gallons
1 Kiloliter = 10 Hectoliters = 264.18 Gallons

SQUARE MEASURE

1 Sq Centimeter = 100 Sq Millimeters = 0.155 Sq Inch
1 Sq Decimeter = 100 Sq Centimeters = 15.5 Sq Inches
1 Sq Meter (Centare) = 10 Sq Decimeters
= 10,000 Sq Centimeters = 10.764 Sq Feet
1 Sq Dekameter (Are) = 100 Sq Meters = 1,076.4 Sq Feet
1 Sq Hectometer (Hectare) = 100 Sq Dekameters
= 2.471 Acres
1 Sq Kilometer = 100 Sq Hectometers
= 1,000,000 Sq Meters = 0.386 Sq Mile

CUBIC MEASURE

1 Cu Centimeter = 1000 Cu Millimeters = 0.061 Cu Inch
1 Cu Decimeter = 1000 Cu Centimeters = 61.02 Cu Inches
1 Cu Meter = 1000 Cu Decimeters
= 1,000,000 Cu Centimeters= 35.31 Cu Feet

TEMPERATURE

5/9 (°F - 32°) = °C
9/5 (°C+ 32°) = °F
-35° Fahrenheit is equivalent to -37° Celsius
0° Fahrenheit is equivalent to -18° Celsius
32° Fahrenheit is equivalent to 0° Celsius
90° Fahrenheit is equivalent to 32.2° Celsius
100° Fahrenheit is equivalent to 38° Celsius
212° Fahrenheit is equivalent to 100° Celsius

APPROXIMATE CONVERSION FACTORS

TO CHANGE	TO	MULTIPLY BY
Inches	Centimeters	2.540
Feet	Meters	0.305
Yards	Meters	0.914
Miles	Kilometers	1.609
Square Inches	Square Centimeters	6.451
Square Feet	Square Meters	0.093
Square Yards	Square Meters	0.836
Square Miles	Square Kilometers	2.590
Acres	Square Hectometers	0.405
Cubic Feet	Cubic Meters	0.028
Cubic Yards	Cubic Meters	0.765
Fluid Ounces	Milliliters	29.573
Pints	Liters	0.473
Quarts	Liters	0.946
Gallons	Liters	3.785
Ounces	Grams	28.349
Pounds	Kilograms	0.454
Short Tons	Metric Tons	0.907
Pound-Feet	Newton-Meters	1.356
Pounds-Inches	Newton-Meters	0.11375
Pounds per Square Inch	Kilopascals	6.895
Ounce-Inches	Newton-Meters	0.007062
Miles per Gallon	Kilometers per Liter	0.425
Miles per Hour	Kilometers per Hour	1.609

TO CHANGE	TO	MULTIPLY BY
Centimeters	Inches	0.394
Meters	Feet	3.280
Meters	Yards	1.094
Kilometers	Miles	0.621
Square Centimeters	Square Inches	0.155
Square Meters	Square Feet	10.764
Square Meters	Square Yards	1.196
Square Kilometers	Square Miles	0.386
Square Hectometers	Acres	2.471
Cubic Meters	Cubic Feet	35.315
Cubic Meters	Cubic Yards	1.308
Milliliters	Fluid Ounces	0.034
Liters	Pints	2.113
Liters	Quarts	1.057
Liters	Gallons	0.264
Grams	Ounces	0.035
Kilograms	Pounds	2.205
Metric Tons	Short Tons	1.102
Newton-Meters	Pound-Feet	0.738
Kilopascals	Pounds per Square Inch	0.145
Kilometers per Liter	Miles per Gallon	2.354
Kilometers per Hour	Miles per Hour	0.621
°Fahrenheit	°Celsius	°C = (°F-32)x5/9
°Celsius	°Fahrenheit	°F = (9/5x°C)+32

PIN: 078655-000