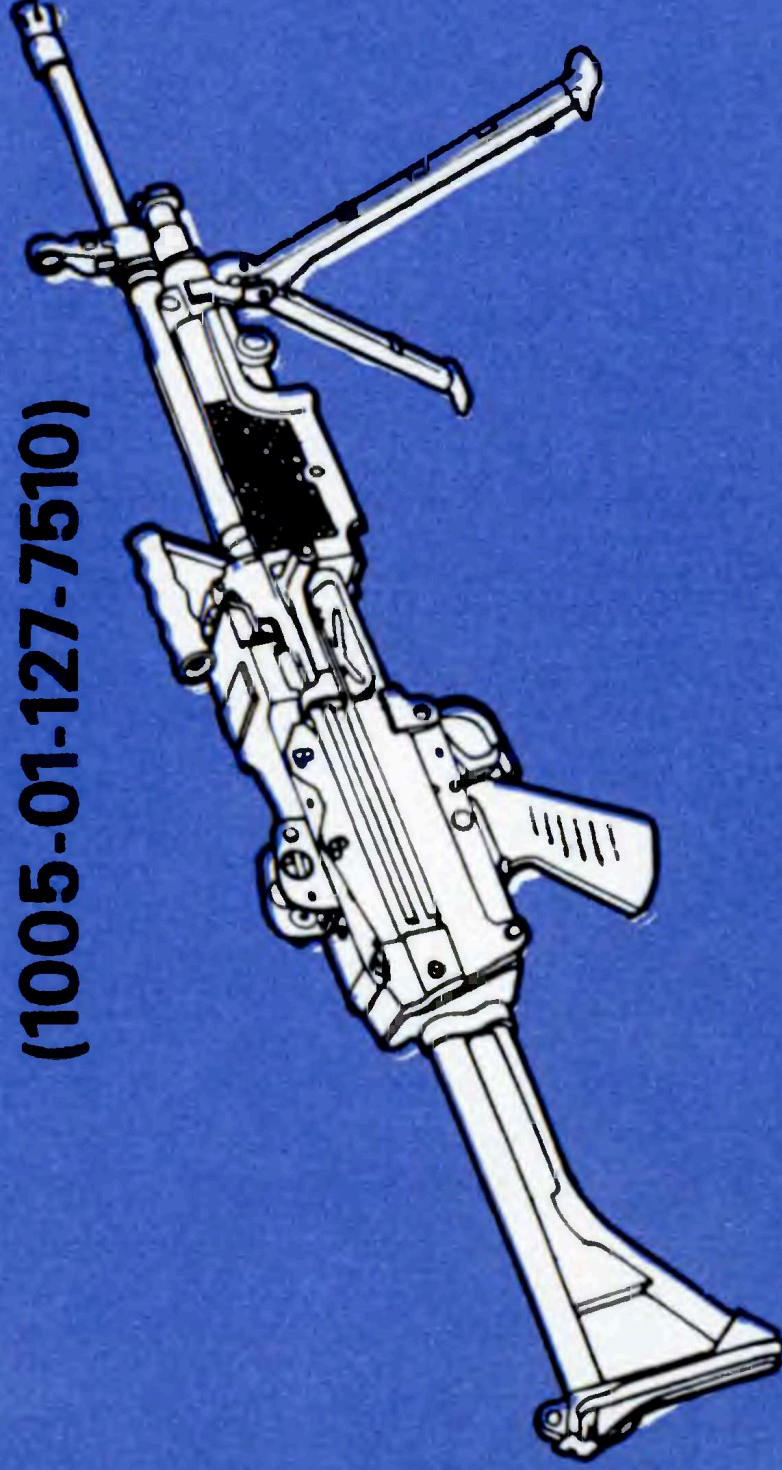


OPERATOR'S MANUAL

MACHINE GUN, 5.56MM, M249

(1005-01-127-7510)



This copy is a reprint which includes current
pages from Changes 1 and 2.

SEPTEMBER 1983
TM 9-1005-201-10
TM 08671A-10/1

WARNING

Keep safety on until you're ready to fire.

Before firing, make sure the barrel is locked tightly.

Hot fired cartridge cases may strike right arm as they are ejected from the machine gun when firing left-handed. Operators firing left-handed should not roll up right arm sleeve or clothing.

Never open the cover of your machine gun if the barrel is hot and you suspect there is a live round in the chamber.

Always look into chamber after clearing machine gun.

Always keep machine gun pointed downrange.

FIRST AID

For information on first aid, see FM 21-11.

Stay clear of muzzle. Do not allow round to hit any hard surface or it may fire. Dispose of live round in accordance with local regulations.

TM 9-1005-201-10
TM 08611A-10/1
C2

Changes in Force: C1 and C2

CHANGE
NO. 2

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC,

2 June 1986

Operator's Manual
MACHINE GUN, 5.56MM, M249
(1005-01-127-7510)

TM 9-1005-201-10/TM 08671A-10/1, 9 September 1983, is changed
as follows:

Inside Front Cover. Add the following warnings:

Do not use M200 blank cartridges in the M16A1 magazine.

Do not interchange barrel assembly(s) or bolt assembly(s) from one machine gun to another without having headspace checked. Doing so may result in injury to personnel or damage to gun.

Page 1-1, Maintenance Forms, Records, and Reports paragraph, line 2, "TM 38-750" is changed to "DA PAM 738-750".

Page 1-2, Reporting Equipment Improvement Recommendations (EIR) paragraph, line 6, "DRSMC-MAF/AA" is changed to "AMSMC-QAD".

Page 1-5, Add the following components at bottom of page:

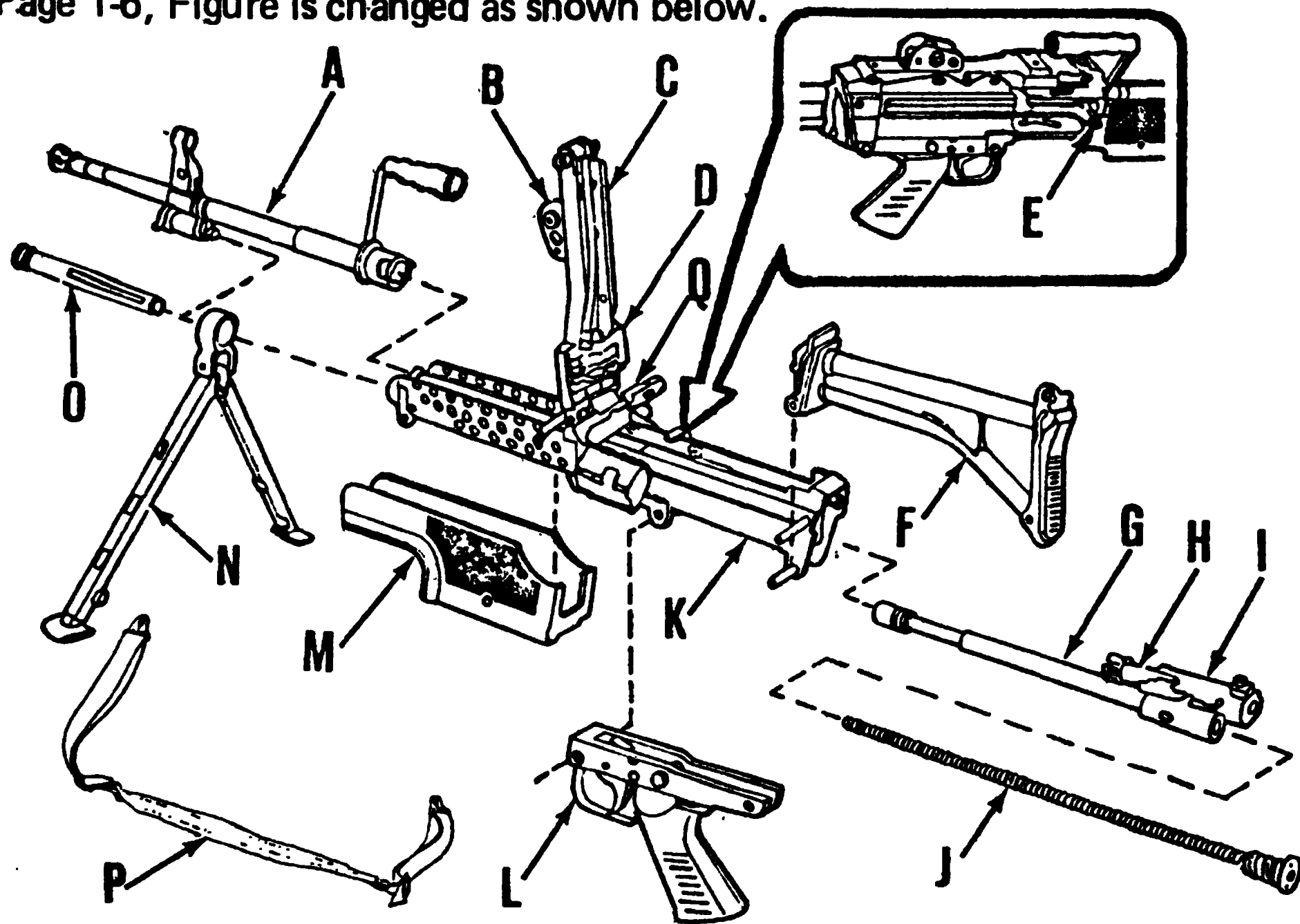
**Sling and snap
hook assembly**

Means to carry weapon.

**Feed Tray
assembly**

**Serves as a guide for
positioning cartridges,
to assist in chambering.**

Page 1-6, Figure is changed as shown below.



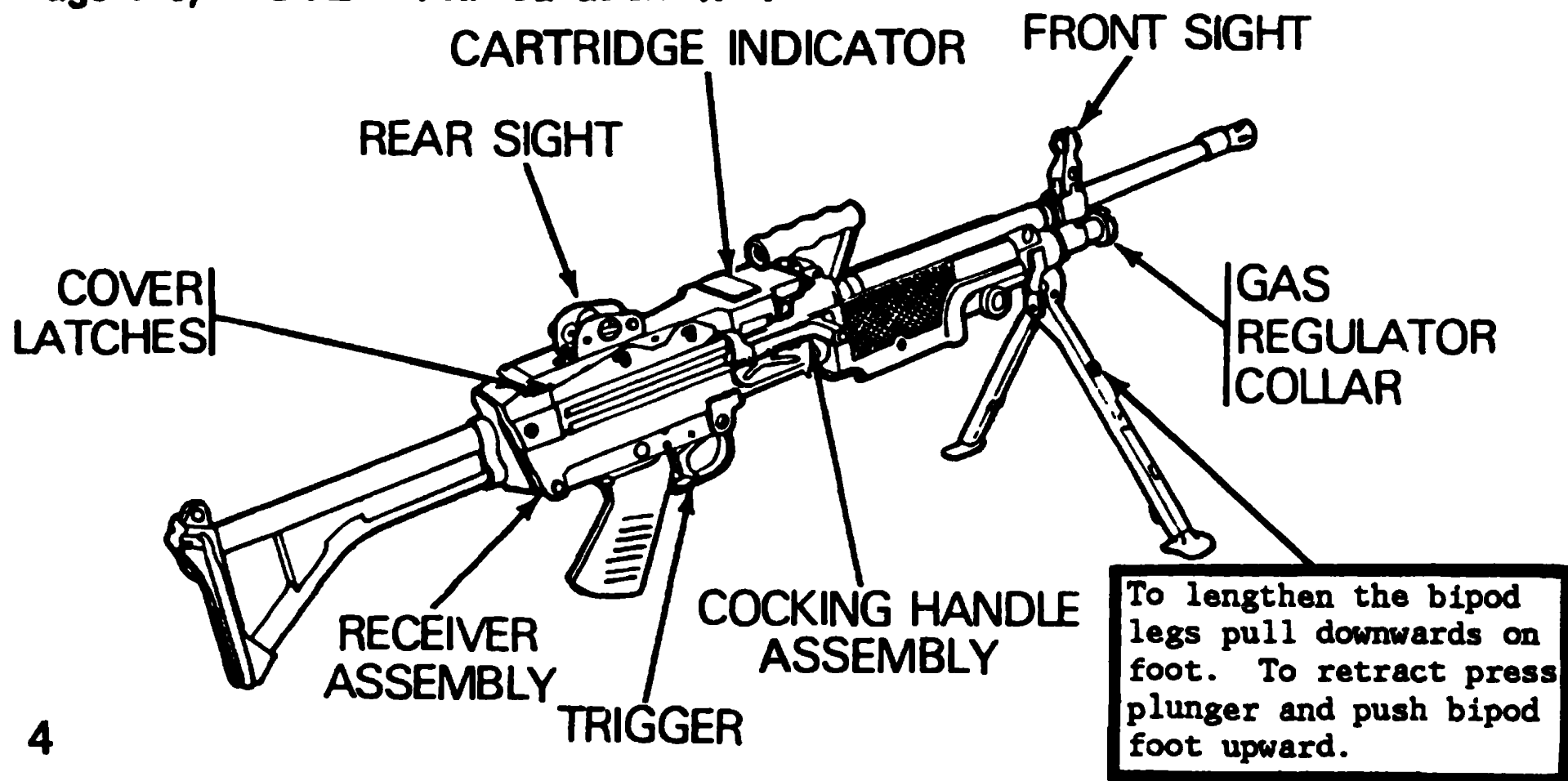
Page 1-7, Add the following statement at bottom of page:

P- SLING AND SNAP HOOK ASSEMBLY.

Q- FEED TRAY ASSEMBLY

Page 1-8, "SLING ASSEMBLY" is changed to "SLING AND SNAP HOOK ASSEMBLY".

Page 1-9, NOTE is Added as shown.



Page 1-10, under “Rate of Fire”, “max setting” is changed to “adverse setting”.

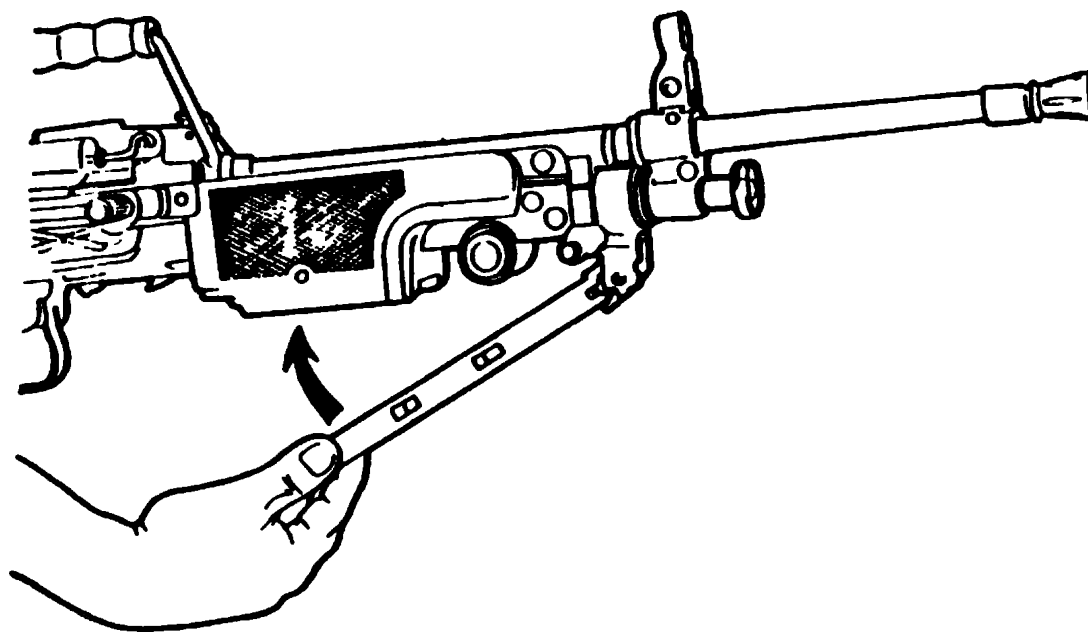
Page 1-10, “Cyclic rated at 70⁰F (21⁰C) when set at MAX position.” is changed to “Cyclic rated at 70⁰F (21⁰C) when set at ADVERSE position.”

Page 1-11, under NOTE, change to read “ADVERSE position to be used ONLY when weapon will not function properly in NORMAL position.

Page 1-11, figure in bottom right corner, change “MAX POSITION” to “ADVERSE POSITION.”

Page 1-12 is added as shown.

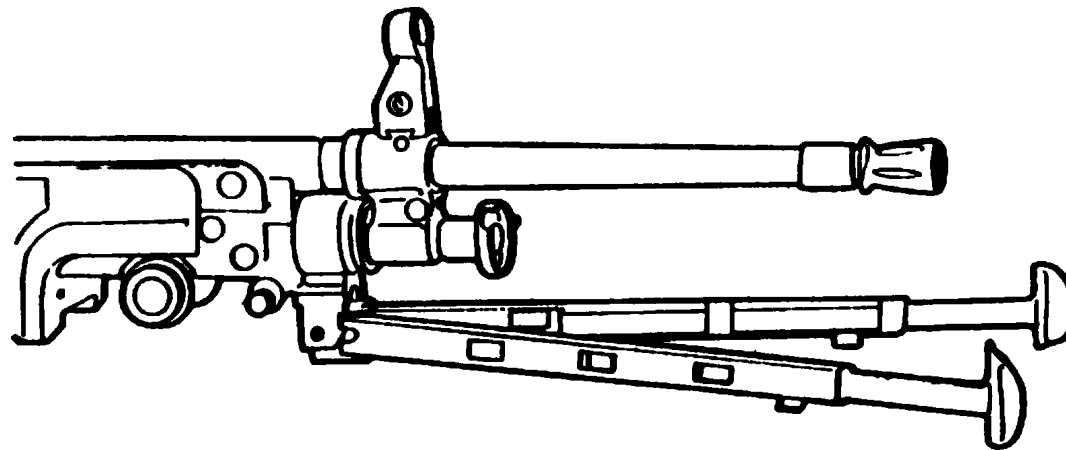
The bipod can be folded for transport or when firing from the hip. Holding the two legs together, bring them back under the handguard and release them so that the hooks on the legs grip the handguard. The bipod can only be folded when the legs are in the closed position.



Folding of bipod under the handguard

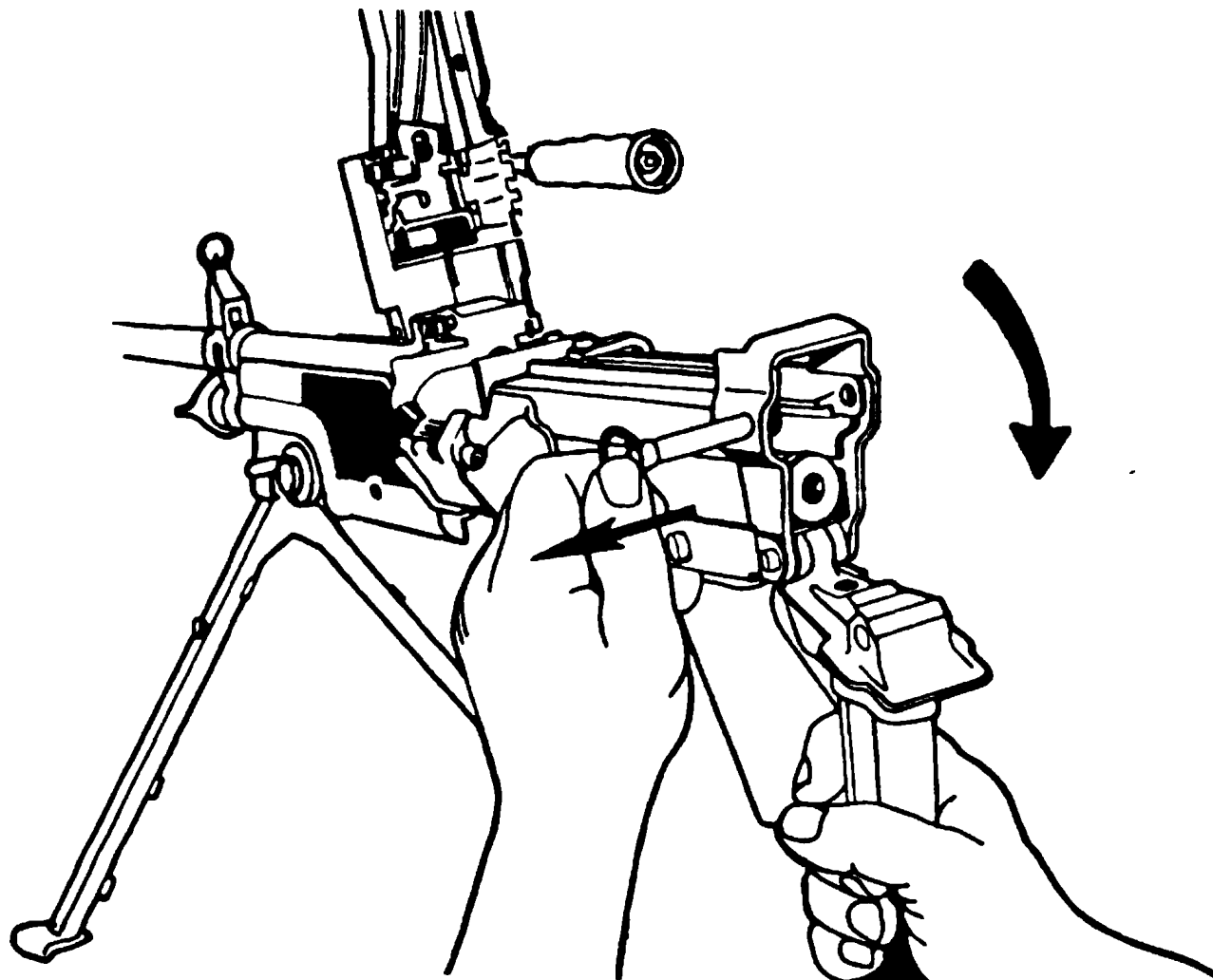
Page 1-13 is added as shown.

To fold the bipod forwards, hold the two legs together and bring them up under the barrel. When released they will lock into position. The purpose of positioning the legs forward is to allow the M249 to be used on tripods and mountings.



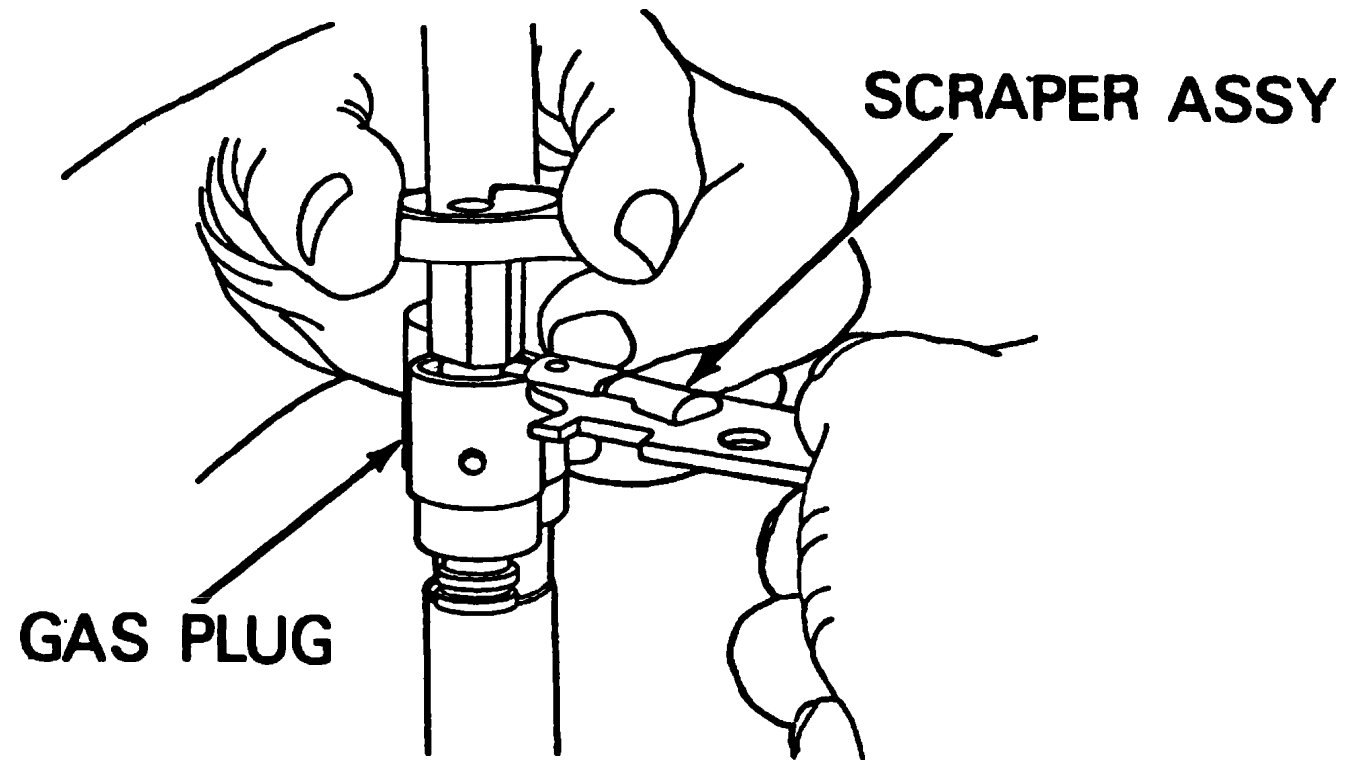
Positioning of the legs forward

Page 2-1 Changed as shown below.



Page 2-6, third sentence, “spring guide rod” is changed to “scraper assy”.

Page 2-6, Figure is changed as shown below:



Page 2-7, first sentence, “guide rod” is changed to “scraper assembly”.

Page 2-13, before the NOTE, add the following warning:

WARNING

Do not interchange barrel assembly(s) or bolt assembly(s) from one machine gun to another without having headspace checked. Doing so may result in injury to personnel or damage to gun.

**Page 2-20, after sentence, add following sentence
"Pull outward on ammo box to ensure that the
aligning box latch is engaged."**

**Page 2-21, add the following sentence at the end of the paragraph:
“If loose or partial ammunition belt is being loaded, hold belt in
place while closing cover.” (Refer to figure on page 2-24.)**

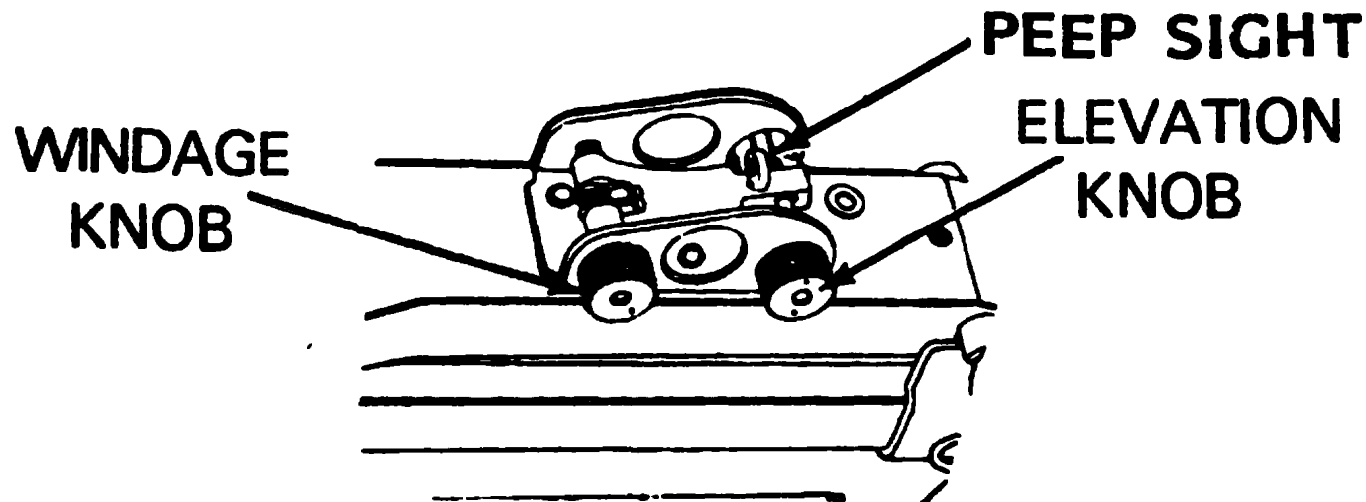
Page 2-26, page is changed as shown below.

FIELD ZERO

NOTE

Each click of the windage knob or the peep moves the group on the target ½ mil, 6 inches at 300 meters or 10 inches at 500 meters. To make the peep sight easier to grasp, rotate the elevation knob to the 1000m mark. After you make your adjustment, move the elevation knob back to where you started.

To field zero your machine gun, you must first center your rear sight. Rotate the windage knob all the way to the right, then rotate the knob backwards 12 clicks. Center your peep sight vertically by screwing it down as far as it goes, then back it out 7 clicks.



Rotate the elevation knob to the desired range. Fire a 3-5 round burst on the center of your target.

Page 2-27, page is changed as shown below.

Make windage and elevation corrections as follows:

- o Move group to right: Turn windage knob forward.**
- o Move group to left: Turn windage knob backwards.**
- o Raise the group: Turn peep sight counter-clockwise (left).**
- o Lower the group: Turn peep sight clockwise (right).**

Fire another group. Repeat above procedures until zeroed.

NOTE

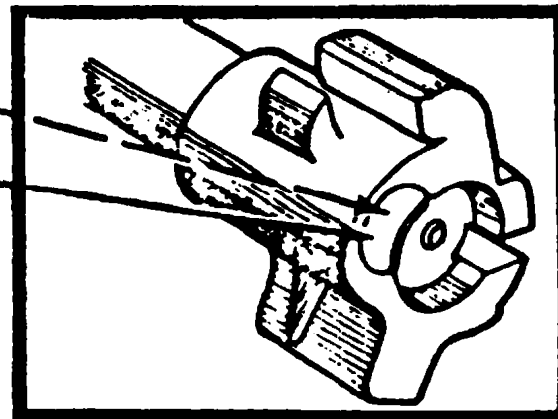
If the weapon cannot be zeroed, and the peep sight is screwed all the way in or out notify your unit armorer for a front sight post adjustment. Center your rear peep sight and fire a burst of 3-5 rounds for a shot group. Tell your unit armorer the estimated adjustment required to bring the weapon on target. Unit armorers have a special wrench that will screw the front sight post down to raise the group or unscrew the sight post to lower the group. One half turn of the sight post will move the group 1 mil on the target, about 12 inches at 300 meters or 20 inches at 500 meters.

Page 2-40, add after last sentence, "Pull lightly on magazine to ensure it is locked in weapon."

Add, NOTE: Avoid magazines with defects.

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
FAILURE TO EXTRACT	Inspect and thoroughly clean weapon as soon as possible. Dirty chamber/bolt and slide assy. Carbon buildup in gas system Damaged extractor/spring	FOR EMERGENCY USE ONLY: Switch gas regulator to ADVERSE setting and continue to fire. Clean chamber and/or clean bolt and slide assembly. If problem still exists notify organizational maintenance. Clean gas regulator, cylinder, and piston Notify organizational maintenance

SPRING
EXTRACTOR

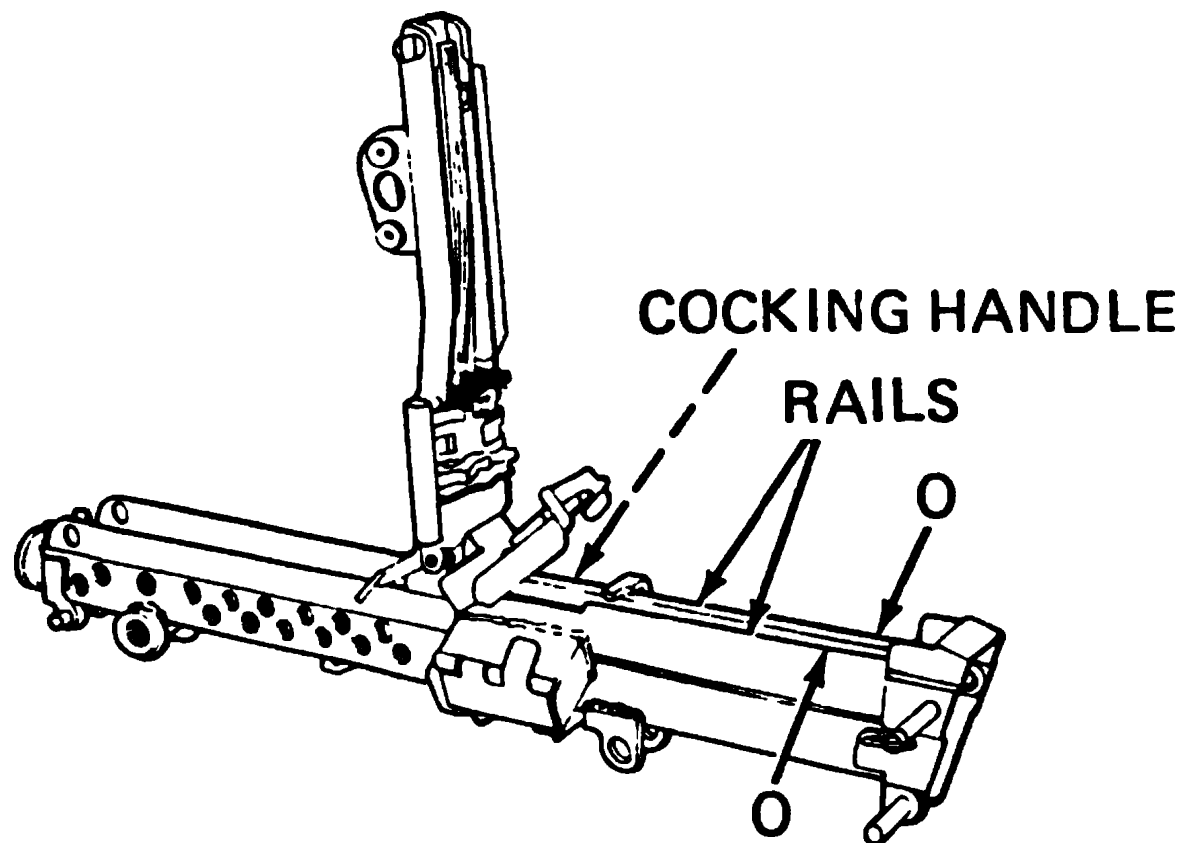


Page 3-15, after "CAUTION", add the following note:

NOTE

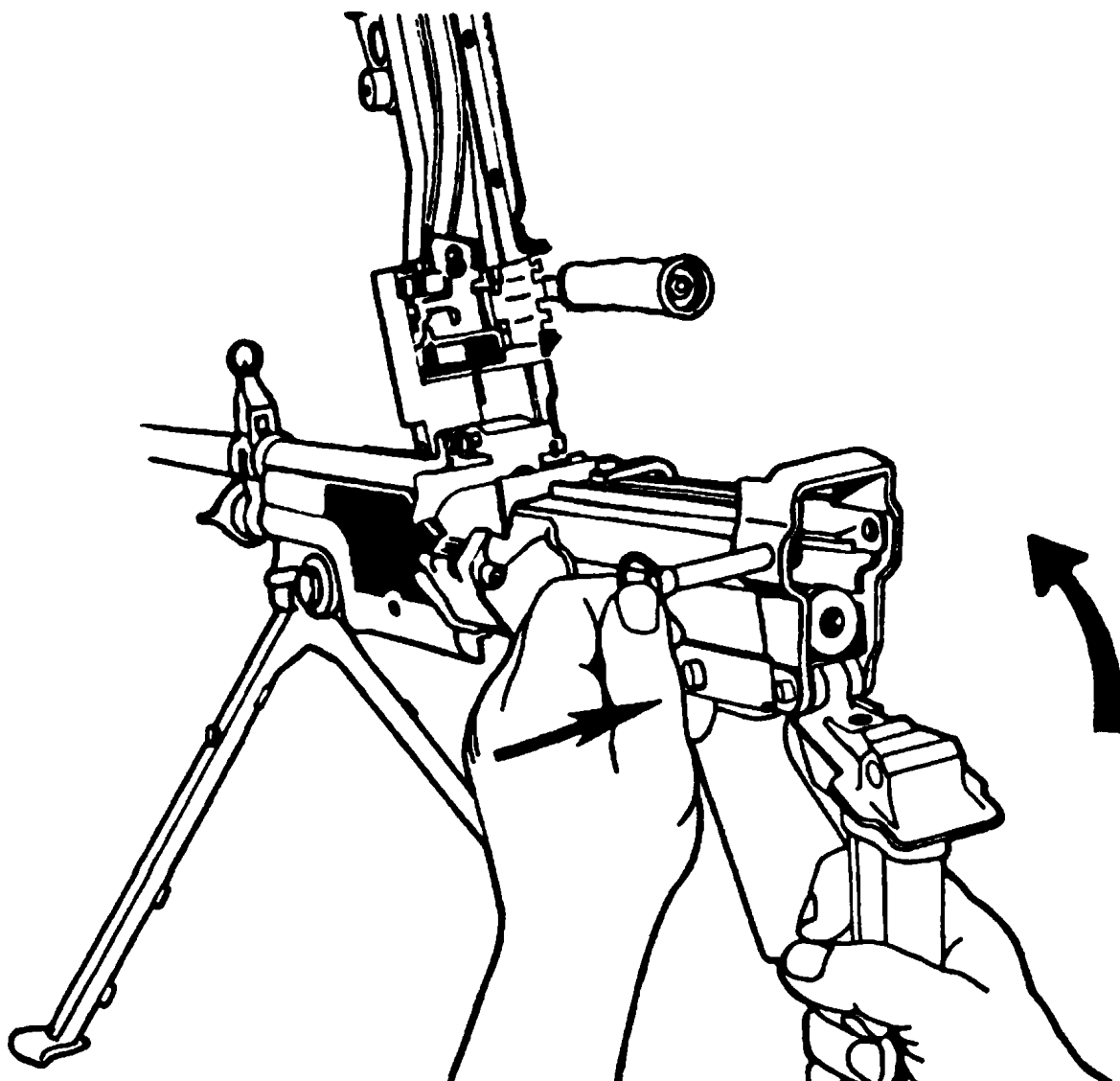
DO NOT REMOVE EXTRACTOR OR EXTRACTOR PIN DURING CLEANING.

Page 3-19, Change as shown below.



Page 3-23, delete “(be sure to oil knob).” Should read “lightly oil detent.”

Page 3-43, Change as shown below.



Page 4-0, is changed as follows:

**CHAPTER 4
AMMUNITION
WARNING**

DO NOT FIRE. . . .

Seriously corroded ammunition.

Dented cartridges.

Cartridges with loose bullets.

Cartridges exposed to extreme heat (135°F) until they have cooled.

Cartridges with pushed-in (short) bullets.

CAUTION

If ammunition is wet or dirty, wipe it off with a dry rag prior to use. Do not lubricate. Dust and other abrasives that collect on oily ammunition are damaging to operating parts of the gun. Lubricated cartridges produce excessive chamber pressure.

Page 4-1, "M199" is changed to "M199/M232".

Page B-3/B-4 Blank is changed as follows:

Section II. COMPONENTS OF END ITEM

(1) ILLUS No.	(2) NATIONAL Stock No.	(3) DESCRIPTION FSCM & Part No.	(4) U/M	(5) QTY RQR
1	1005-00-312-7177	SLING SMALL ARMS (19204) 12002983	EA	1
2	1005-01-138-0134	HOOK, SNAP (19200) 9348468	EA	2

By Order of the Secretary of the Army and the Navy:

JOHN A. WICKHAM, JR.
General, United States Army
Chief of Staff

Official:

R. L. DILWORTH
Brigadier General, United States Army
The Adjutant General

J.J. WENT
Lieutenant General, USMC
Deputy Chief of Staff for Installations and Logistics

DISTRIBUTION:

To be distributed in accordance with DA Form 12-40,
Operator maintenance requirements for Machine Gun, 5.56-MM,
M249.

Marine Corps:

MARCORPS CODE: B1/BN

Changes in force: C1

TM 9-1005-201-10

TM 08671A-10/1

C1

**CHANGE
NO. 1**

**HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, *14 February 1985***

Operator's Manual

MACHINE GUN, 5.56MM, M249

(1005-01-127-7510)

**TM 9-1005-201-10/TM 08671A-10/1, 9 September 1983, is changed
as follows:**

Inside Front Cover. Add the following warnings:

Do not interchange barrel assembly(s) or bolt assembly(s) from one machine gun to another without having headspace checked.

Use only blank M200 with the BFA and do not fire directly at anyone less than 20 feet away.

Page 3-45. Add the following paragraph:

OPERATION OF AUXILIARY EQUIPMENT

M15A2 BLANK FIRING ATTACHMENT (BFA)

WARNING

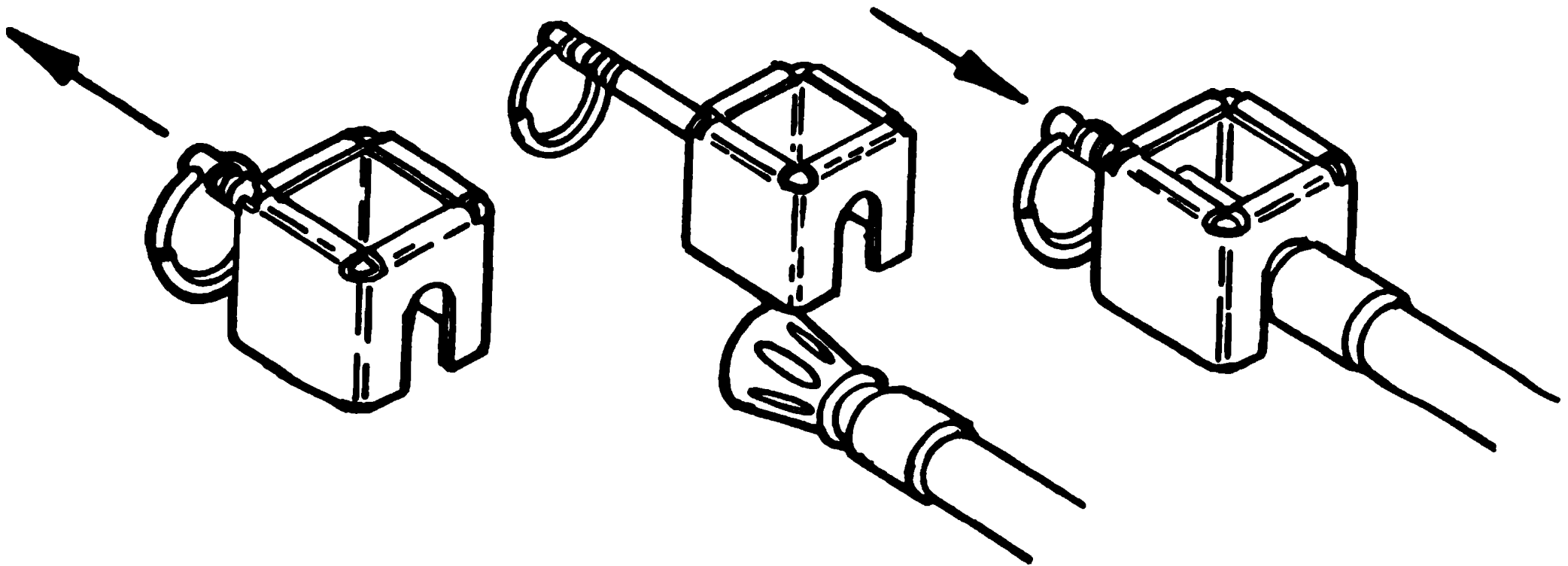
Use only blank M200 with the BFA and do not fire directly at anyone less than 20 feet away.

CAUTION

Do not use tools to tighten attachment; HANDS ONLY.

NOTE

After 50 rounds, check to see if BFA is still tight. Make sure to clean carbon buildup after each training exercise.



**1 Unscrew and
slide all the
way back.**

**2 Hook behind
first groove
of flash
suppressor.**

**3 Slide into flash
suppressor and
hand tighten.**

By Order of the Secretary of the Army:

JOHN A. WICKHAM, JR.
General, United States Army
Chief of Staff

Official:

DONALD J. DELANDRO
Brigadier General, United States Army
The Adjutant General

H.A. HATCH
Lieutenant General, Marine Corps
Deputy Chief of Staff, Installation and Logistics Command

Distribution:

**Army: To be distributed in accordance with DA Form 12-40A, Operator and Crew
Maintenance requirements for Gun, Machine, 5.56MM, M249.**

Marine Corps: BI/BN

TM 9-1005-201-10
TM 08671A-10/1

TECHNICAL MANUAL
No. 9-1005-201-10
No. 08671A-10/1

HEADQUARTERS
Department of the Army
US MARINE CORPS.
WASHINGTON, DC,
9 SEPTEMBER 83

Operator's Manual

MACHINE GUN, 5.56MM, M249
(1005-01-127-7510)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your DA Form 2028 (Recommended Changes to Publications and Blank Forms) direct to: Commander, US Army Armament, Munitions and Chemical Command, ATTN: DRSMC-MAS, Rock Island, IL 61299. A reply will be furnished to you. USMC users submit NAVMC Form 10722 to: Commandant of Marine Corps, ATTN: Code LMA-1, Washington, DC 20380.

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CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

SCOPE.

Type of Manual: Operator's manual

Model Number and Equipment Name: M249 5.56mm Machine Gun.

Purpose of Equipment: Designed as a fire team automatic weapon; for rear area security/special missions.

Maintenance Forms, Records, and Reports.

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750, The Army Maintenance Management System (TAMMS).

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

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your machine gun needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design. Tell us why a procedure is hard to perform. Put it on an SF 368 (Quality Deficiency Report). Mail it to us at Commander, US Army Armament Munitions and Chemical Command, ATTN: DRSMC-MAF/AA Rock Island, IL 61299. A reply will be furnished directly to you.

USMC users should submit SF 368 to: Marine Corps Logistics Base Albany, ATTN: Code P840 Albany, GA. 31704.

Section II. EQUIPMENT DESCRIPTION

Equipment Purpose, Capabilities, and Features.

Purpose of Equipment: Designed as a fire team automatic weapon; for rear area security/special missions.

Capabilities and Features:

The machine gun is gas-operated, air-cooled and fires from the open bolt position. It has a regulator for selecting normal or max rate of fire. Use of the max rate is authorized only in the event that the weapon firing rate slows down (weapon becomes sluggish). It also has an alternative 30-round magazine feeding provision. Use of the 30-round magazine is authorized only in an emergency situation. Use of the magazine reduces performance.

The major components of the machine gun are:

Barrel assembly	Houses cartridge for firing, directs projectile, and supports fixed front sight.
Rear sight assembly	Rear sight is adjustable for both windage and elevation.
Cover/feed mechanism assembly	Provides support for rear sight and means for gaining access to feed tray. By means of cam and lever action, feeds linked belt ammo and holds cartridges in position for stripping, feeding, and chambering.

Feed pawl assembly	Feeds linked belt ammo, positions and holds cartridges in position for stripping, feeding and chambering.
Cocking handle assembly	Pulls the moving parts rearward. Moves in a guide rail fixed to the right side of the receiver.
Butt stock and shoulder assembly	Serves as a shoulder support for aiming and firing machine gun. Contains a folding shoulder rest.
Piston assembly	Transfers power from propelling gases to bolt and slide assemblies to function the machine gun (move recoiling parts rearward).
Bolt assembly	Provides feeding, stripping, chambering, firing, and extraction, using the propellant gases and recoil spring for power.
Slide assembly	Houses firing pin and roller assembly.

Rod buffer and spring assembly

Absorbs recoil from bolt and operating rod assembly at the end of recoil movement.

Receiver assembly

Serves as a support for all major components. Houses action of weapon and through a series of cam ways, controls functioning of weapon.

Trigger mechanism assembly

Controls the firing of the machine gun.

Guard assembly, hand gun

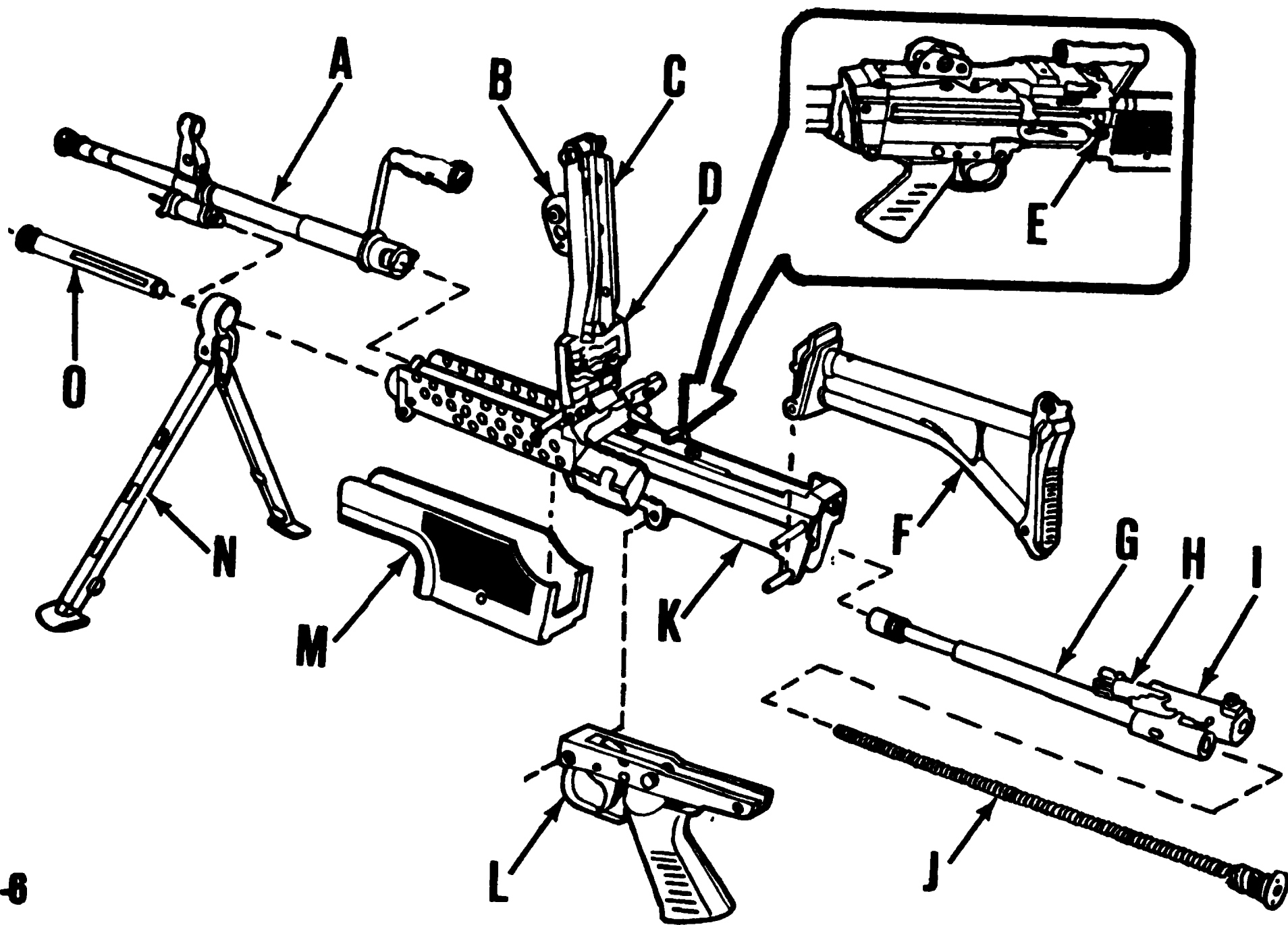
Provides thermal insulation to protect the operator's hands from heat, and houses cleaning equipment.

Bipod machine gun

Supports machine gun in prone/sitting position. The telescopic legs can be individually adjusted to three different lengths.

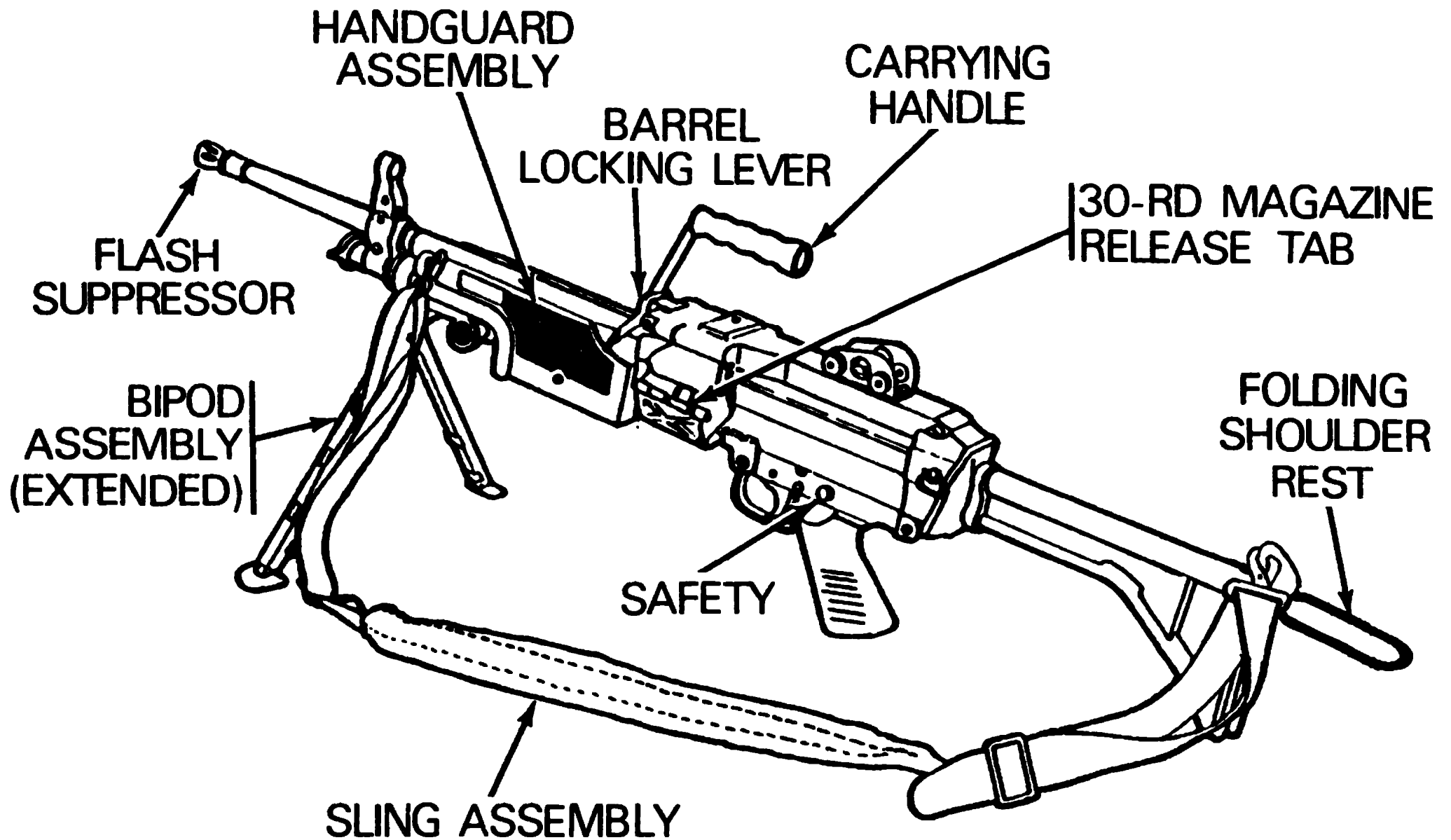
Gas cylinder assembly

Lock bipod in place on receiver and provides passage-way for operating gases

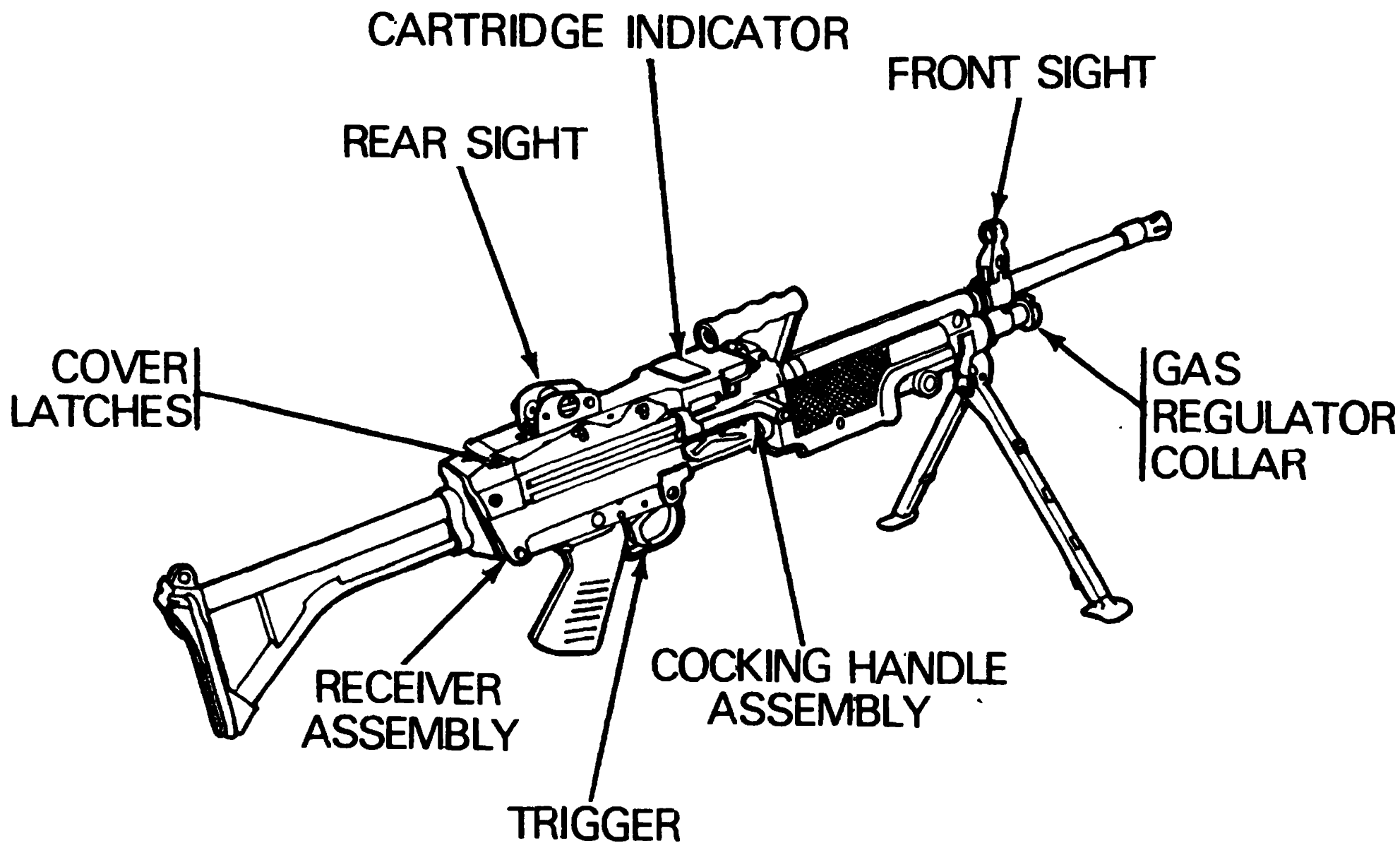


LOCATION OF MAJOR COMPONENTS

- A — BARREL ASSEMBLY**
- B — REAR SIGHT ASSEMBLY**
- C — COVER AND FEED MECHANISM ASSEMBLY**
- D — FEED PAWL ASSEMBLY**
- E — COCKING HANDLE ASSEMBLY**
- F — BUTT STOCK AND SHOULDER ASSEMBLY**
- G — PISTON ASSEMBLY**
- H — BOLT ASSEMBLY**
- I — SLIDE ASSEMBLY**
- J — OPERATING ROD ASSEMBLY**
- K — RECEIVER ASSEMBLY**
- L — TRIGGER MECHANISM ASSEMBLY**
- M — HAND GUARD ASSEMBLY**
- N — BIPOD MACHINE GUN**
- O — GAS CYLINDER ASSEMBLY**



M249



EQUIPMENT DATA

Weight

Weapon (with bipod and tools)	6.875 kg	15.16 lbs
200 round box (filled)	3.140 kg	6.92 lbs
30 round magazine (filled)	0.485 kg	1.07 lbs

Length

Overall weapon	1.038 mm	40.87 in.
Barrel w/o extension	466 mm	18.35 in.
Rifling	424 mm	16.69 in
Rifling Twist	1 Turn in 7 inches	

Rate of Fire

Cyclic	725 rds/min (normal setting)
	1000 rds/min (max setting) *
Sustained	85 rds/min

Range

Maximum	3600 M
Maximum Effective	1000 M (area tgt)

***Cyclic rated at 70°F (21°C) when set at MAX position.**

Sights

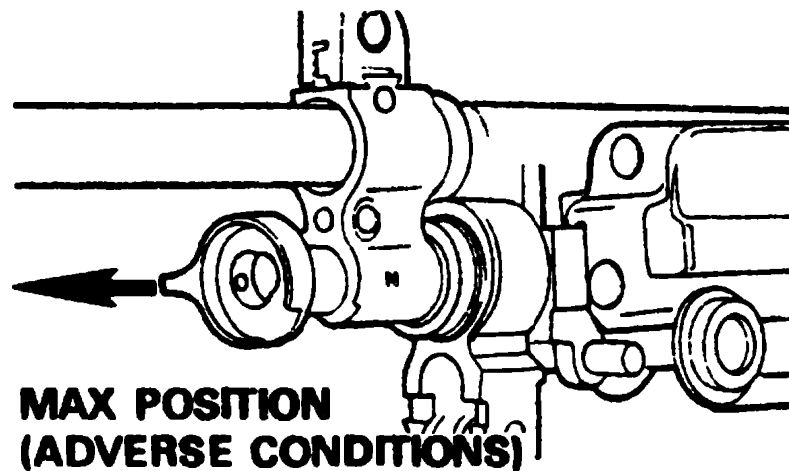
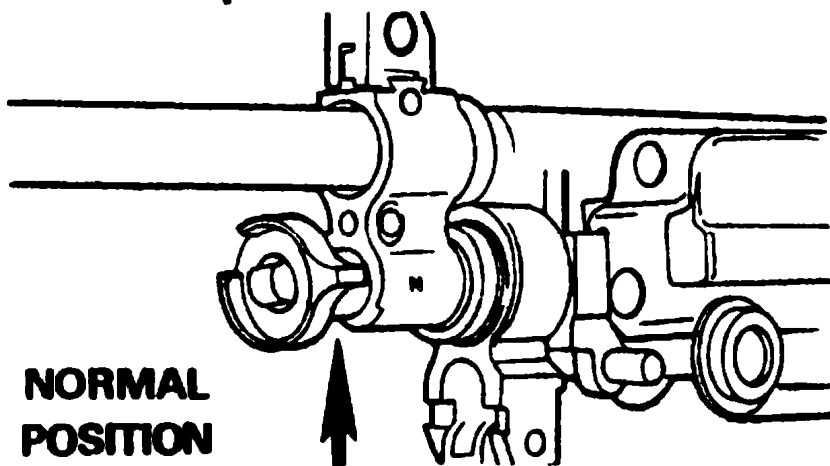
Front: Semi-fixed hooded post type
Rear: Fully adjustable peep type

Section III. TECHNICAL PRINCIPLES OF OPERATION

FACTS ABOUT YOUR MACHINE GUN. The barrel is air cooled and has a fixed head space. Gas is taken from the barrel acting on a piston directly fixed to the bolt carrier (slide). The gas pressure is controlled by a two position regulator one for normal conditions the other delivering additional power for adverse conditions. The regulator is based on the gas exhaust system. The bolt is a multiple-lug type which rotates into a positive locked position in the barrel extension prior to firing.

NOTE

MAX position to be used **ONLY** when weapon will not function properly in **NORMAL** position.



CHAPTER 2

OPERATING INSTRUCTIONS

Section I. FIELD STRIP

Clear the weapon (p 2-23).

OPERATING ROD ASSEMBLY REMOVAL

WARNING

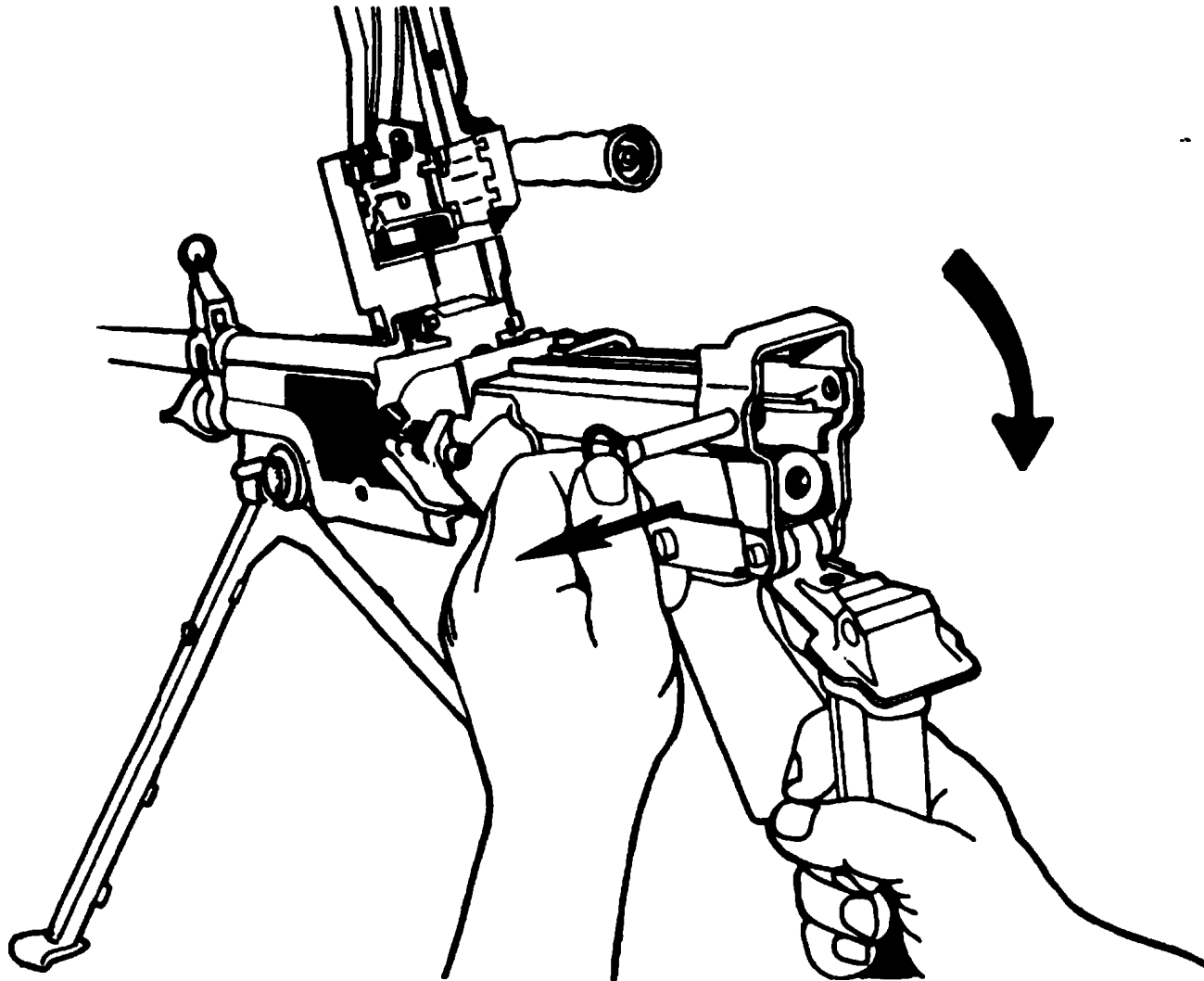
Be sure bolt is in forward position before removing return spring.

If the moving parts are situated at the rear, put safety on fire (red is fire) hold the cocking handle with one hand; press trigger and let moving parts come slowly forward.

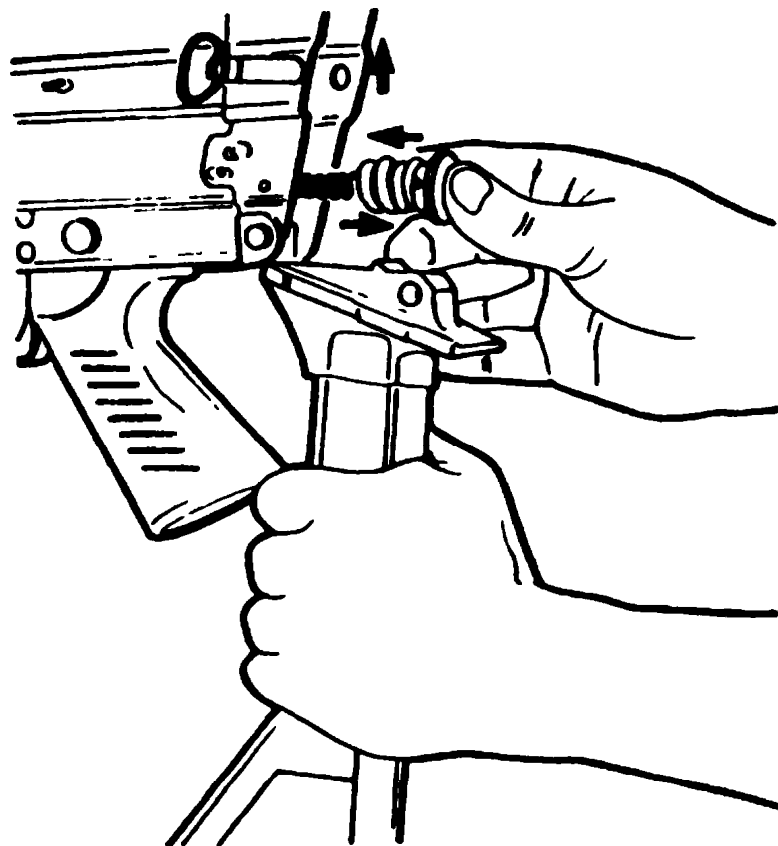
OPERATING ROD ASSEMBLY REMOVAL (Cont)

Raise cover assembly. Pull the upper retaining pin at the rear of receiver to left.

Let the butt pivot downward so that the rear opening on receiver is completely free.

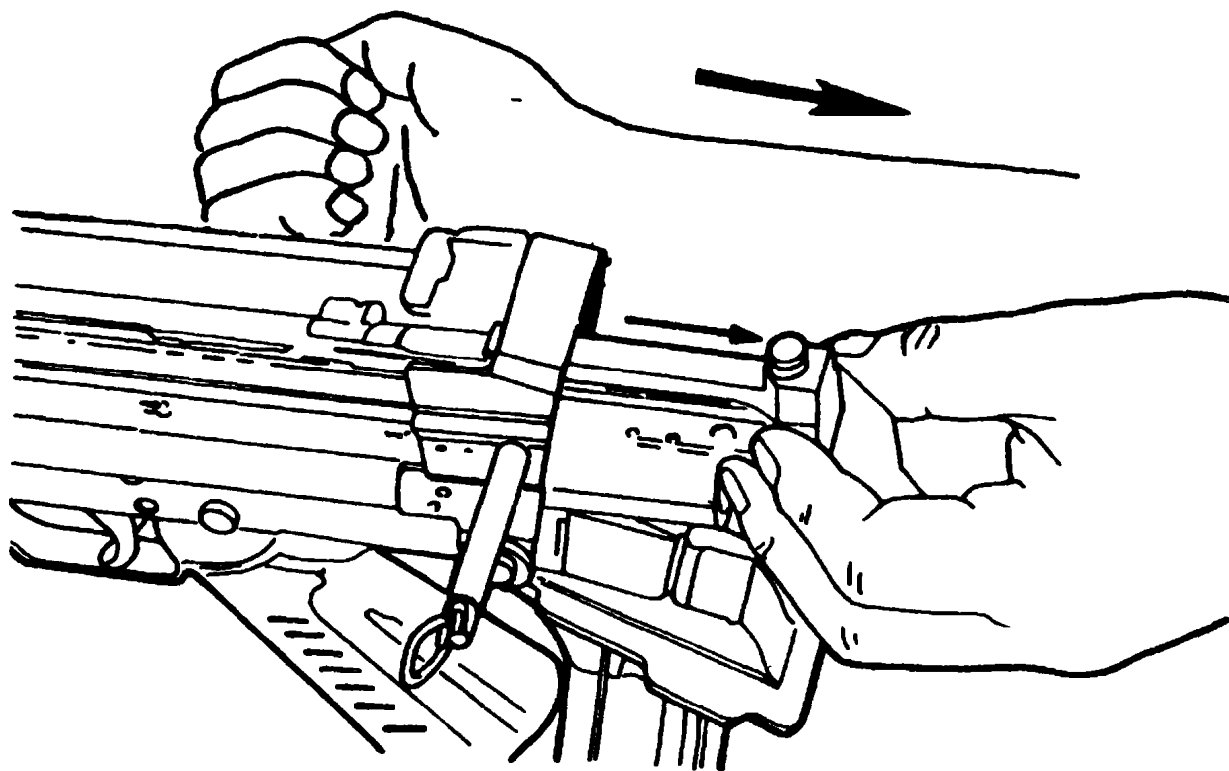


By holding weapon with one hand on the butt stock, simultaneously push in and upward the rear end of operating rod assembly with thumb of other hand. The operating rod assembly is now released from positioning groove inside receiver. Withdraw the operating rod assembly (spring, guide rod and buffer).

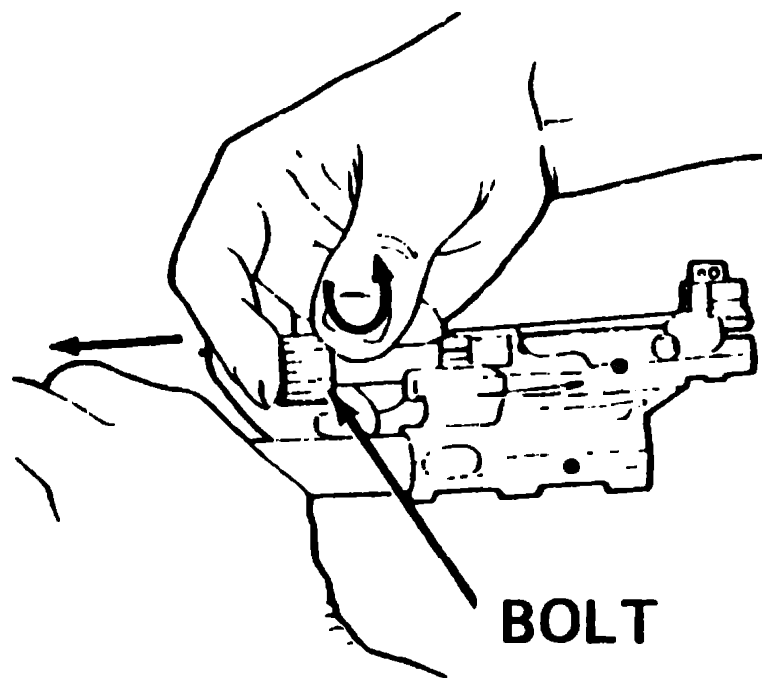


MOVING PARTS REMOVAL

Pull the cocking handle to rear.
Slide the moving parts out of the rear of the receiver.



Rotate the bolt to disengage the lug and pull it out of the slide assembly.

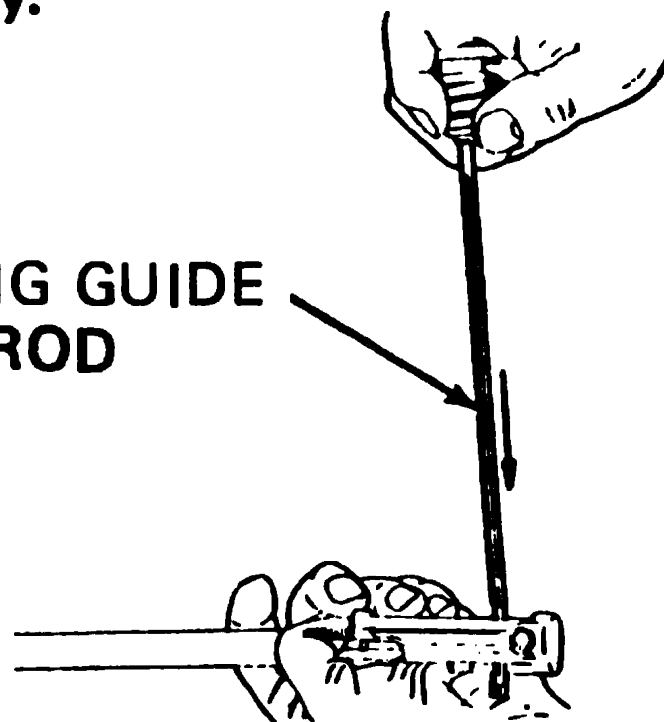


CAUTION:

When bolt is removed the firing pin spring is free. Make sure not to lose it.

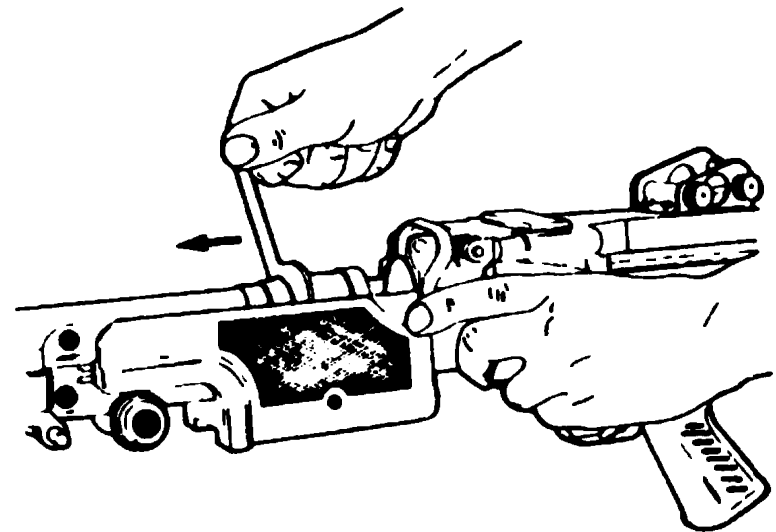
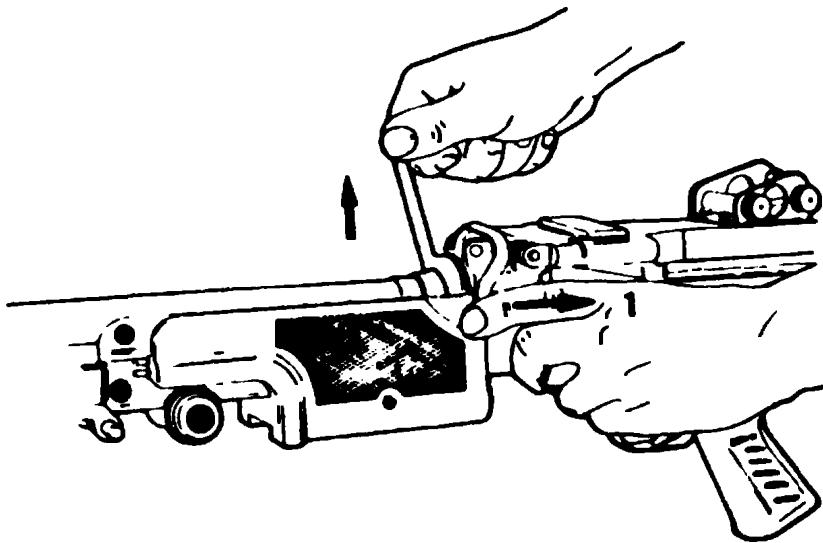
To separate slide assembly from the piston, press the retaining pin at the rear to the left and lift off slide assembly.

**SPRING GUIDE
ROD**



BARREL REMOVAL

Close cover. Depress the locking lever of the barrel with left hand. Hold the carrying handle with the right hand, lift it up and push the barrel forward.

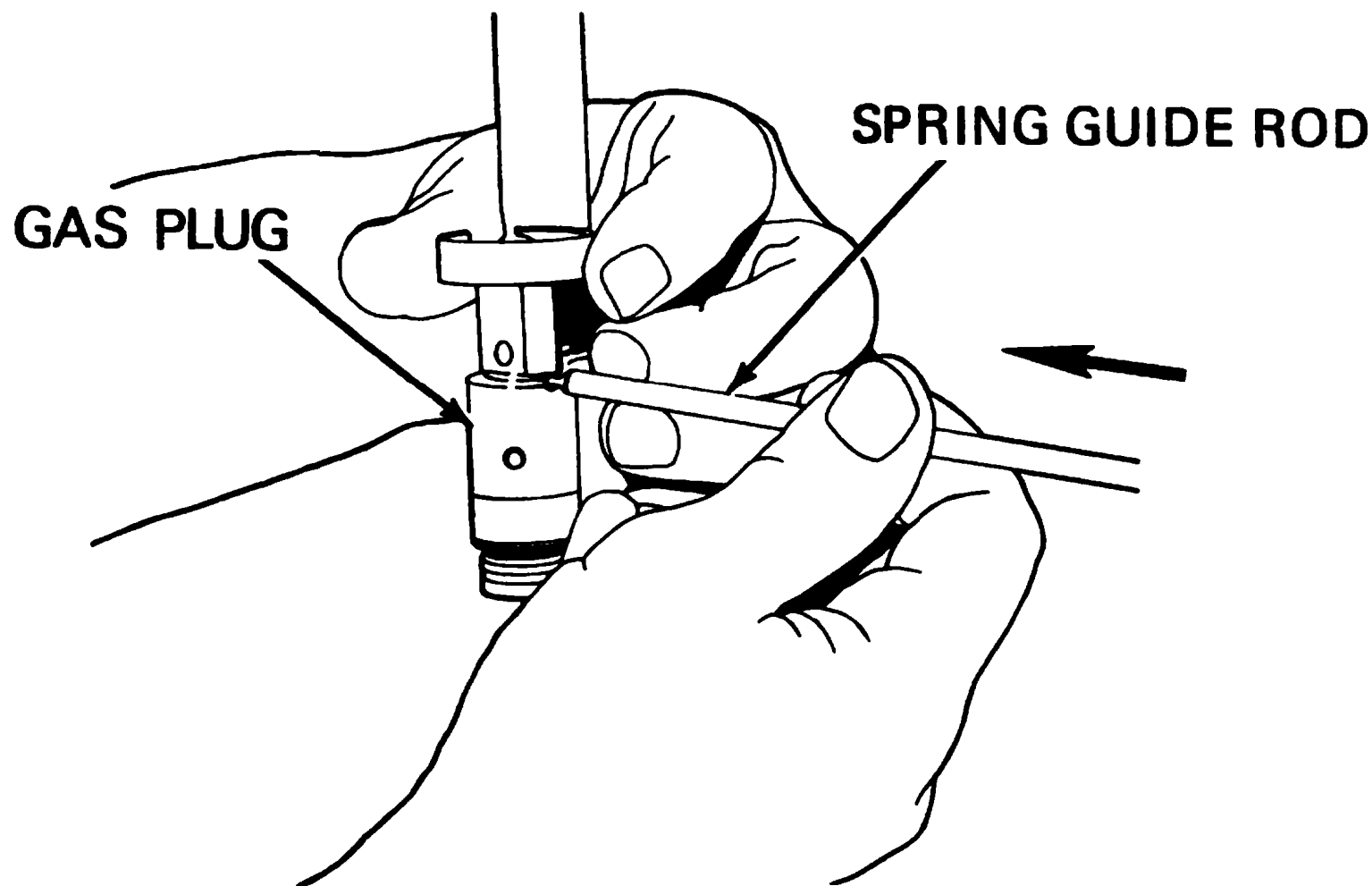


GAS REGULATOR REMOVAL

Remove the barrel.

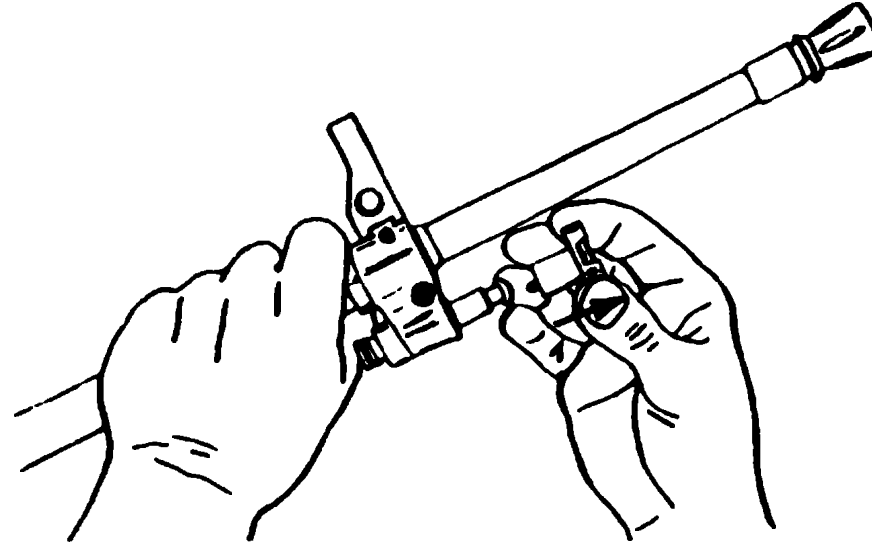
Position the gas regulator lever between NORMAL and MAX.

Place the tip of the spring guide rod in the notch in the front left of gas block (NORMAL position of lever) and hold guide firmly in notch.



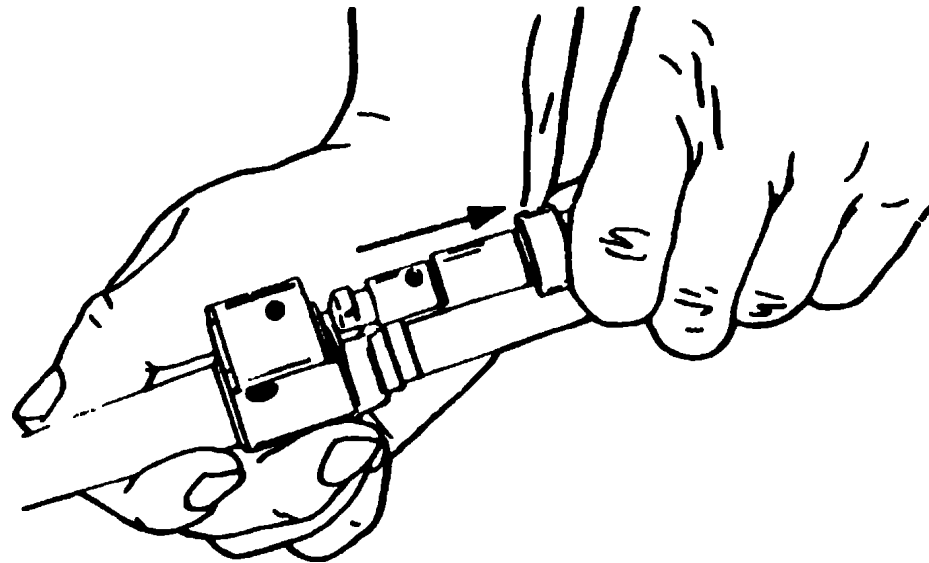
GAS REGULATOR REMOVAL (Cont)

Holding the guide rod in position, turn the collar back and beyond the **NORMAL** position until the collar can be removed.



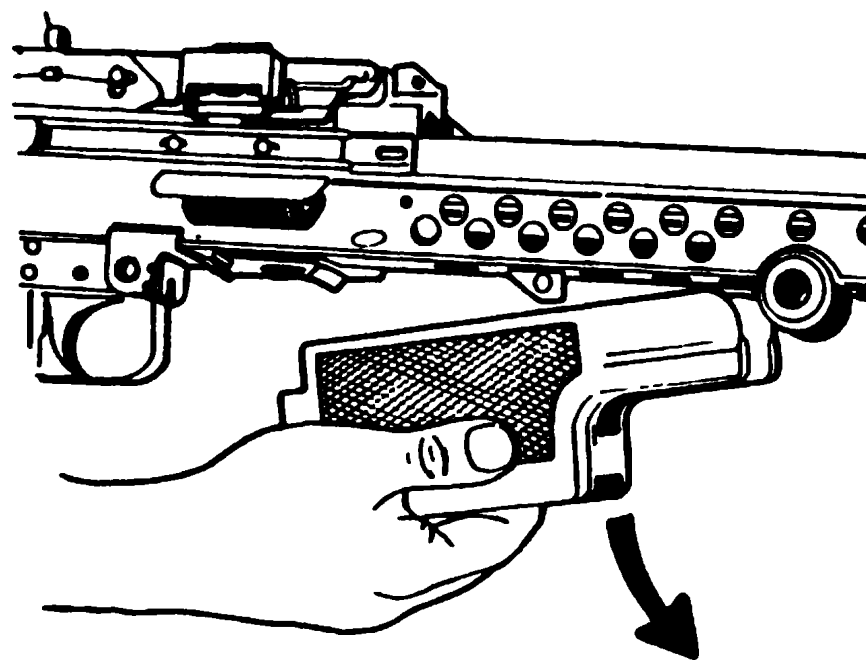
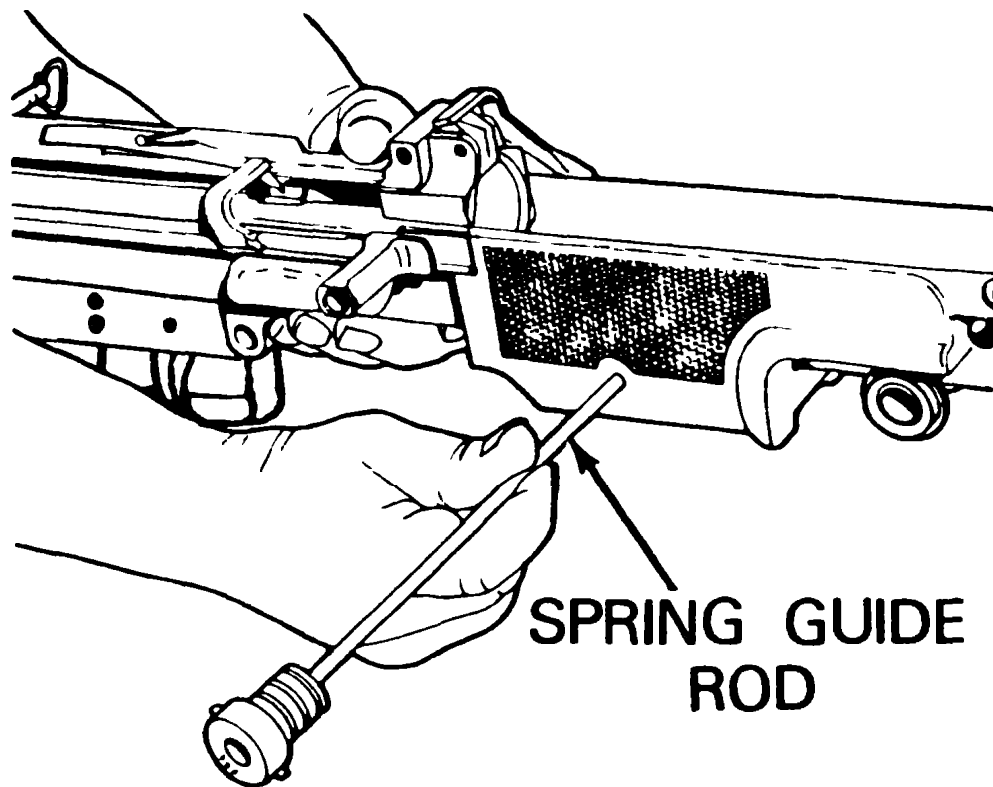
NOTE
Position of hand
supporting gas
regulator.

Remove the gas regulator from the gas block.



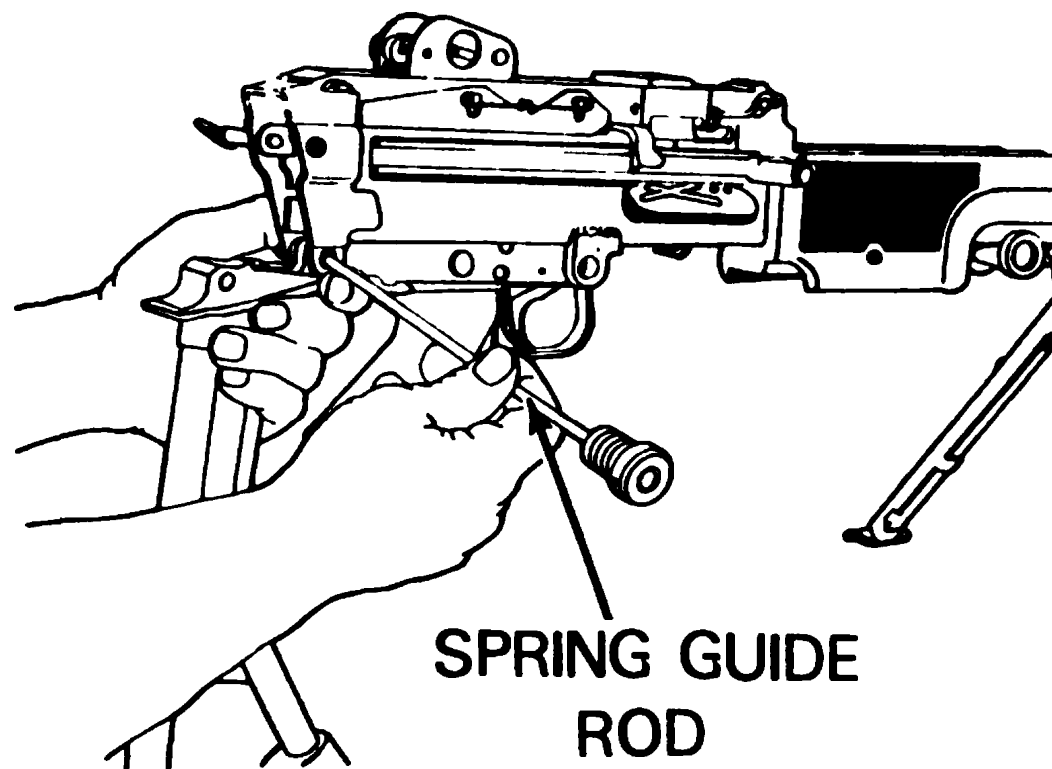
HANDGUARD REMOVAL

Push handguard retaining pin to the left using spring guide rod, then remove handguard downward.



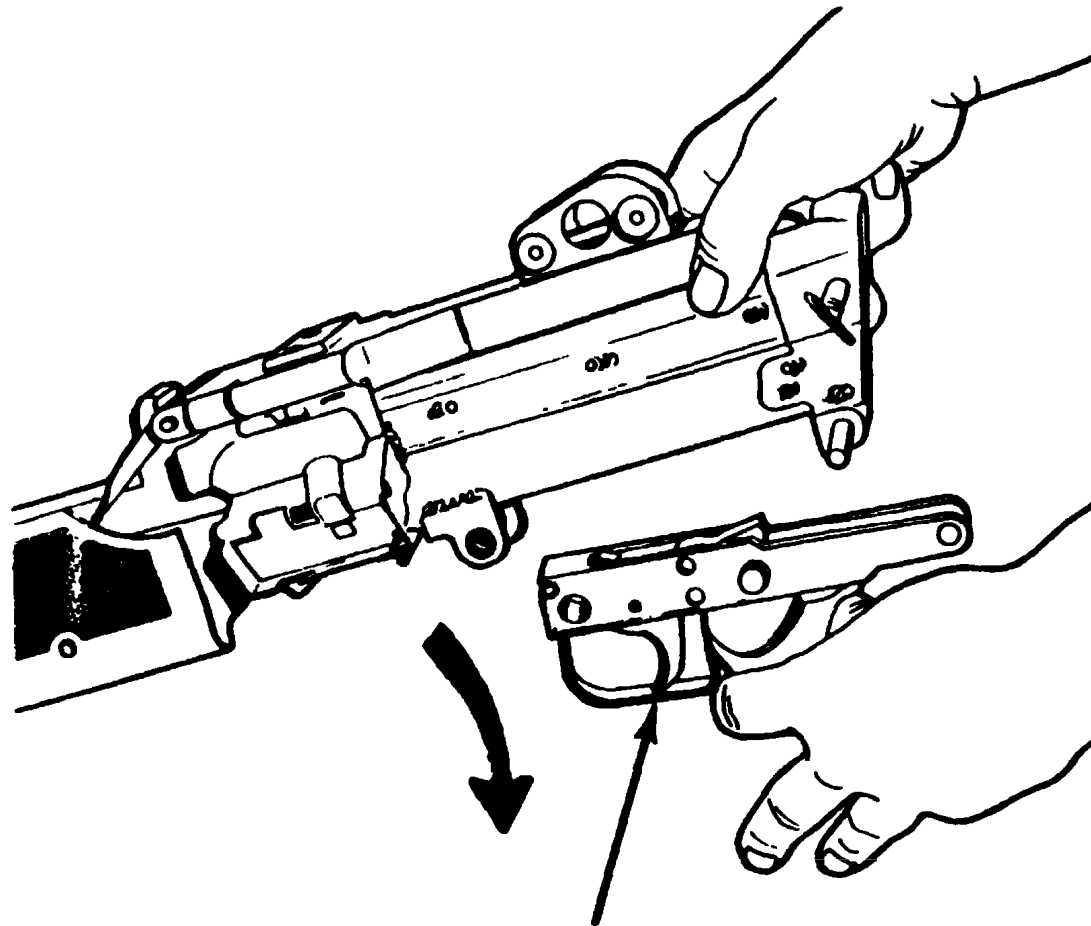
BUTT STOCK AND SHOULDER ASSEMBLY REMOVAL

Using spring guide rod, push lower most retaining pin to the left. Remove butt stock and shoulder assembly pulling it rearward, while supporting trigger mechanism.



TRIGGER MECHANISM REMOVAL

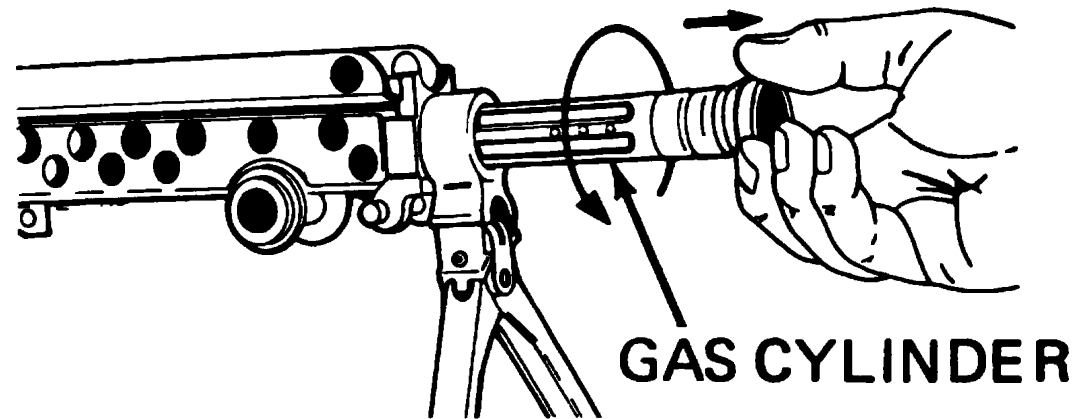
Remove trigger mechanism downward.



TRIGGER MECHANISM

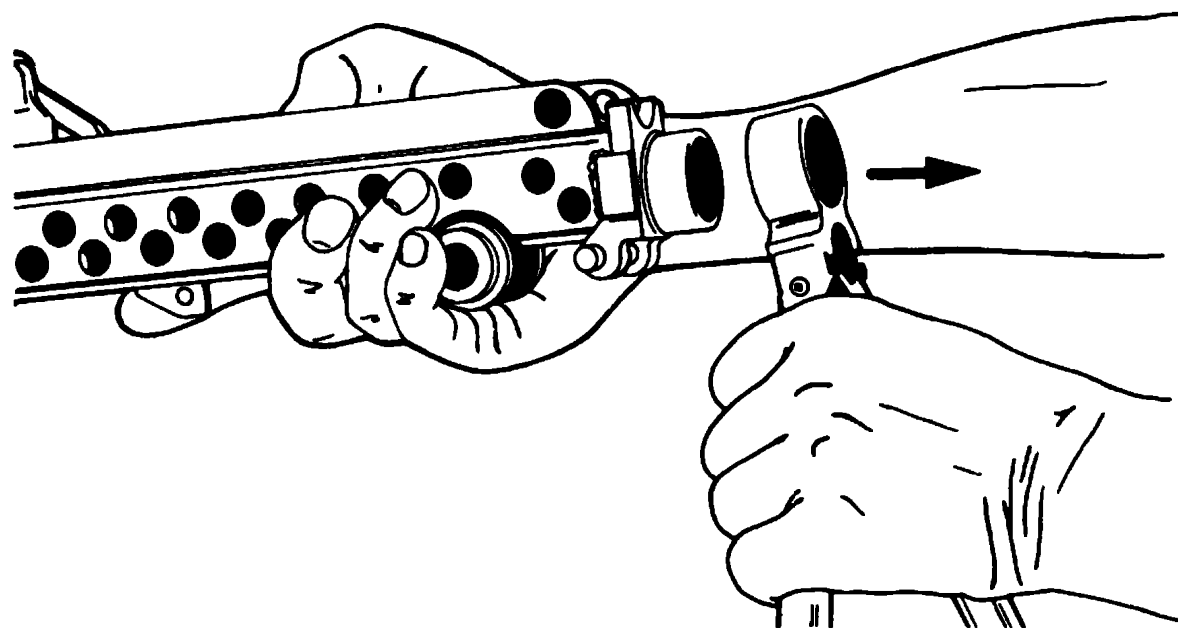
GAS CYLINDER REMOVAL

Turn gas cylinder to the left or right to release the locking spring, then pull forward.



BIPOD REMOVAL

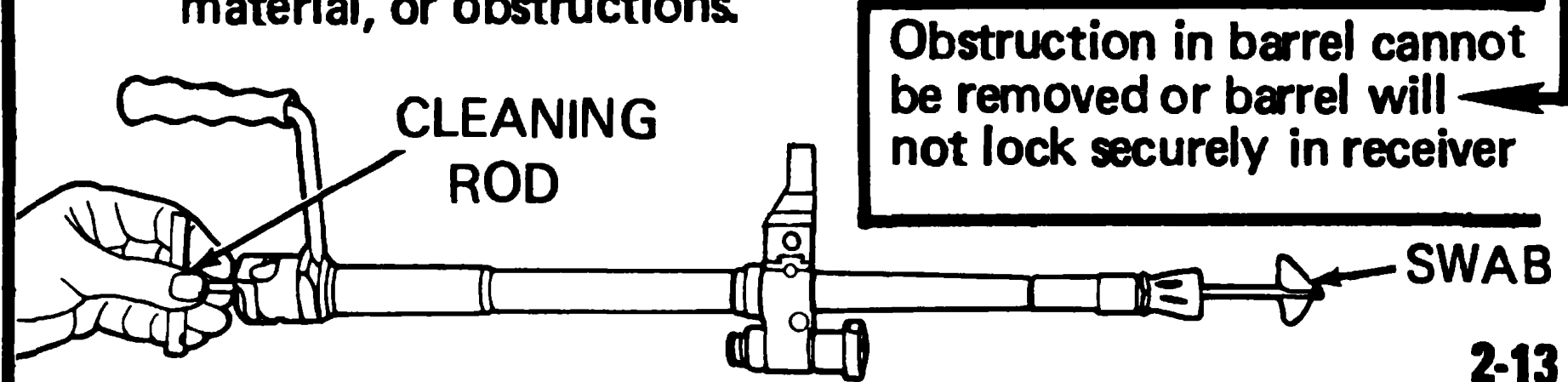
After removal of gas cylinder, the bipod can be removed from the receiver.



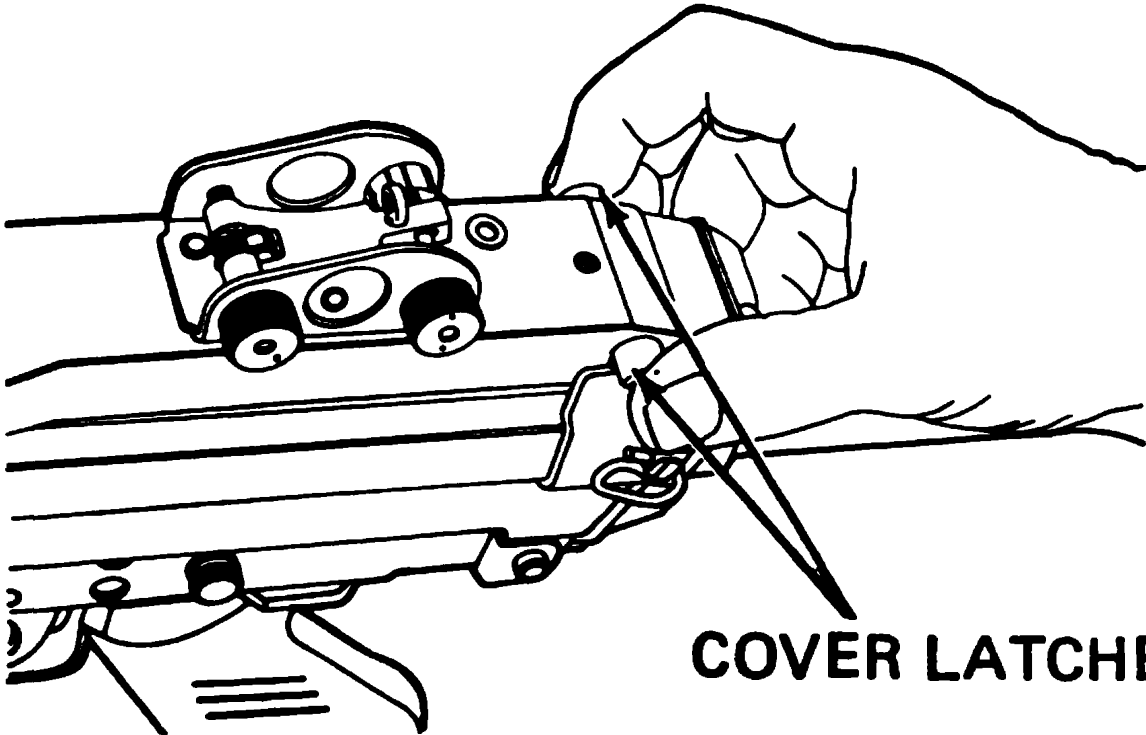
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

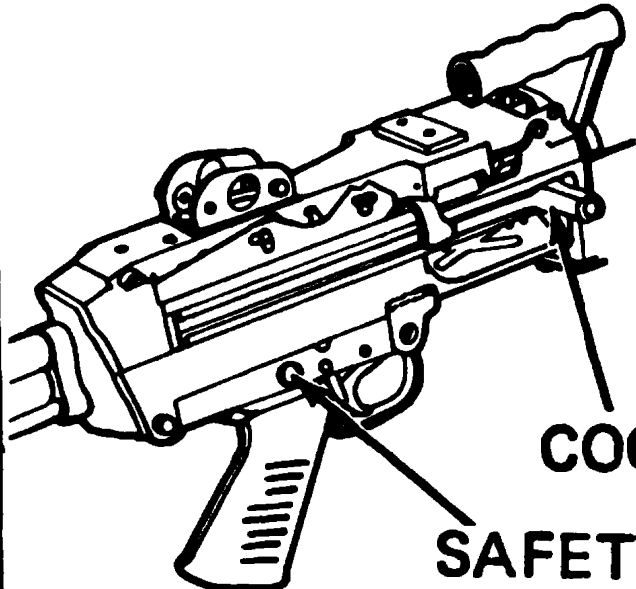
Always keep in mind the CAUTIONS and WARNINGS. The numbers in the item number column shall be used for the "TM Number" column on DA FORM 2404, Equipment Inspection and Maintenance Worksheet, in recording results of PMCS.

Perform PMCS if; (1) you are the assigned operator and the machine gun has been stored and not used for a period of 90 days, or (2) you have been issued the machine gun for the first time.

ITEM No	ITEMS TO BE INSPECTED PROCEDURES	EQUIPMENT IS NOT READY/AVAILABLE IF:
1	BEFORE OPERATION TOOLS AND EQUIPMENT Visually check for missing or damaged tools and equipment.	
	NOTE When barrel is removed/installed the bolt must be locked to rear with safety on. Barrel assembly Remove barrel (p 2-5) and check bore and chamber. Using cleaning rod and swab (item 3, app D), remove oil, foreign material, or obstructions.	
		

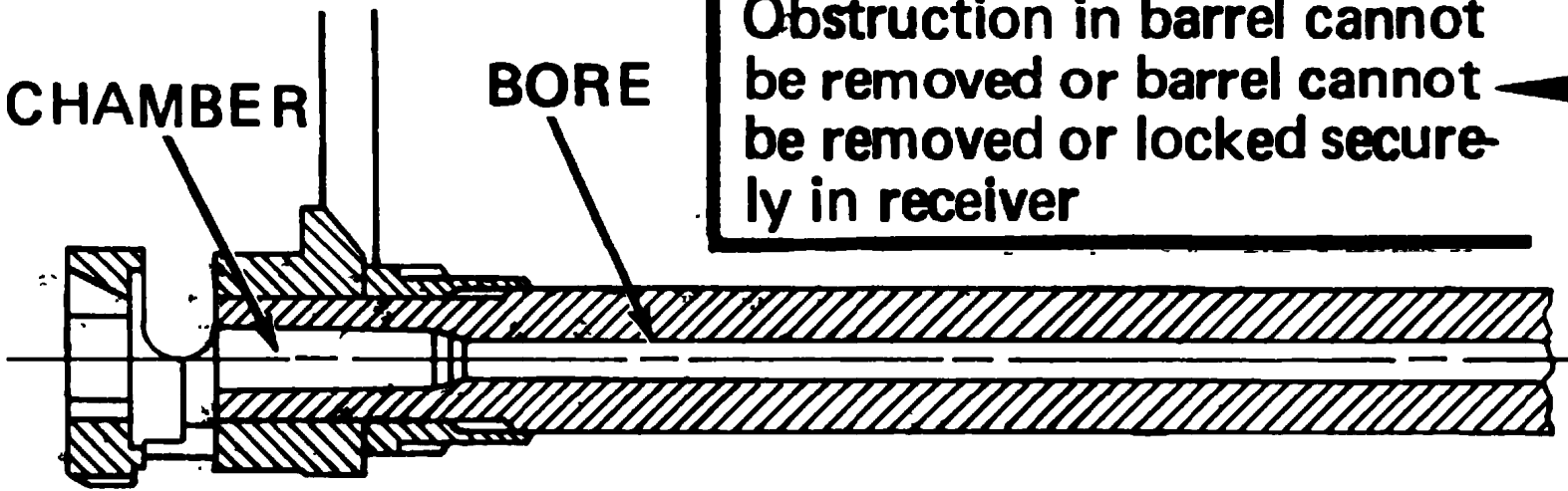
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (Cont)

ITEM No.	ITEMS TO BE INSPECTED PROCEDURES	EQUIPMENT IS NOT READY/AVAILABLE IF:
2	Cover assembly Squeeze cover latches and raise cover. Let go of latches and close cover. Make sure latches hold cover shut. Latches fail to hold cover shut.  COVER LATCHES	EQUIPMENT IS NOT READY/AVAILABLE IF:

ITEM No.	ITEMS TO BE INSPECTED PROCEDURES	EQUIPMENT IS NOT READY/AVAILABLE IF:
3	Cocking Handle Assembly, Safety, and Bolt Assembly WITH PALM UP pull cocking handle to make sure bolt assembly moves freely without binding and locks to rear. Push safety to safe (red ring not visible). Pull trigger. Bolt assembly should not move forward. Push safety to fire (red ring visible). Hold cocking handle to rear and pull trigger. Ride bolt assembly forward.  COCKING HANDLE SAFETY	Bolt assembly binds in receiver or fails to lock in rear position. Bolt assembly moves forward with safety engaged.

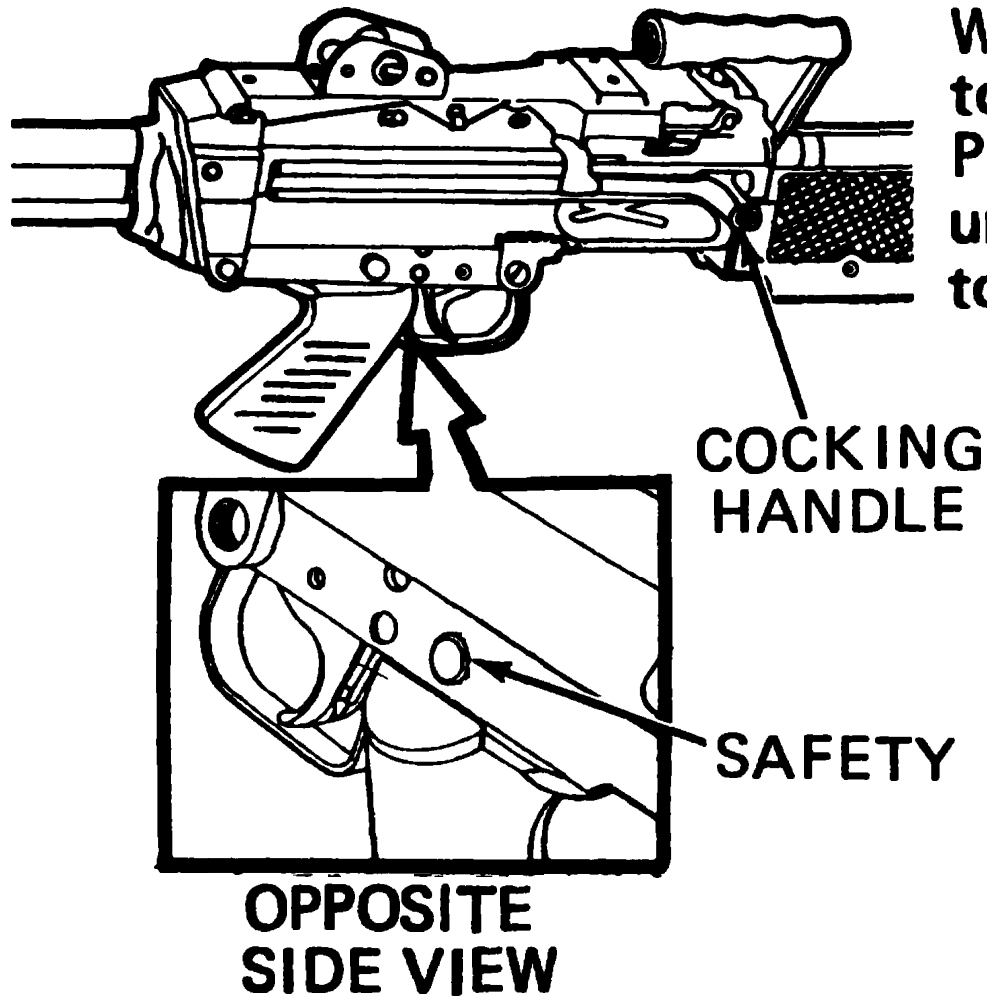
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (Cont)

ITEM No	ITEMS TO BE INSPECTED PROCEDURES	EQUIPMENT IS NOT READY/AVAILABLE IF:
4.	Gas Regulator Collar Be sure that collar is in NORMAL (N) position. DURING OPERATION Always keep in mind the CAUTIONS AND WARNINGS	
5.	Machine Gun (Firing Cycle) Note machine gun-firing rate. If firing cycle slows down or becomes sluggish on NORMAL rate of fire, move regulator collar to MAX position. If sluggishness continues, clean and oil machine gun. Notify organizational maintenance as soon as possible if machine gun does not function properly. AFTER OPERATION Always keep in mind the CAUTIONS and WARNINGS	

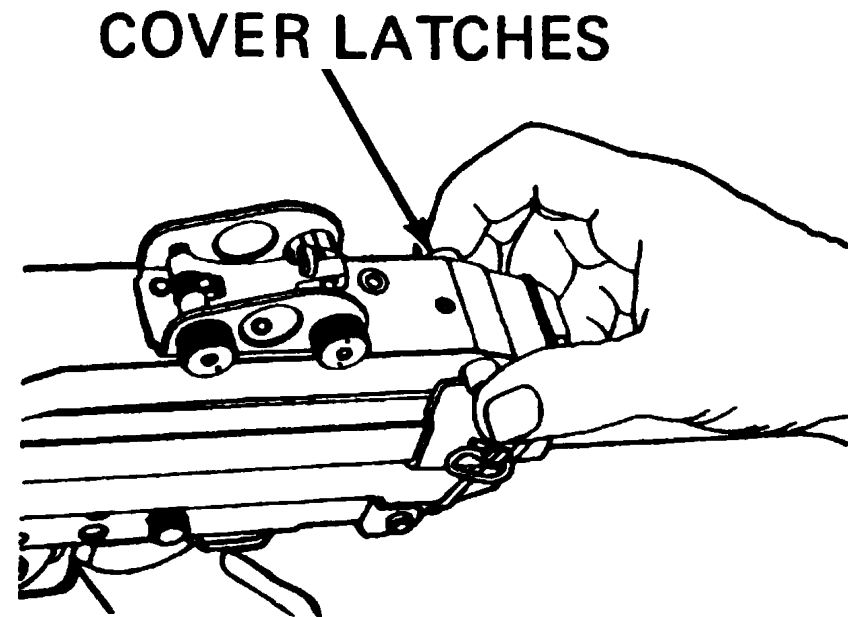
ITEM No.	ITEMS TO BE INSPECTED PROCEDURES	EQUIPMENT IS NOT READY/AVAILABLE IF:
6	Barrel Assembly Clear gun (p 2-23), check chamber and bore for obstructions 	Obstruction in barrel cannot be removed or barrel cannot be removed or locked securely in receiver
7	Machine Gun Disassemble, clean, inspect, lubricate, and reassemble gun (p 2-0 through 3-44)	Any part is broken, missing, or damaged to the extent that it could cause gun to malfunction

Section II. OPERATION UNDER USUAL CONDITIONS

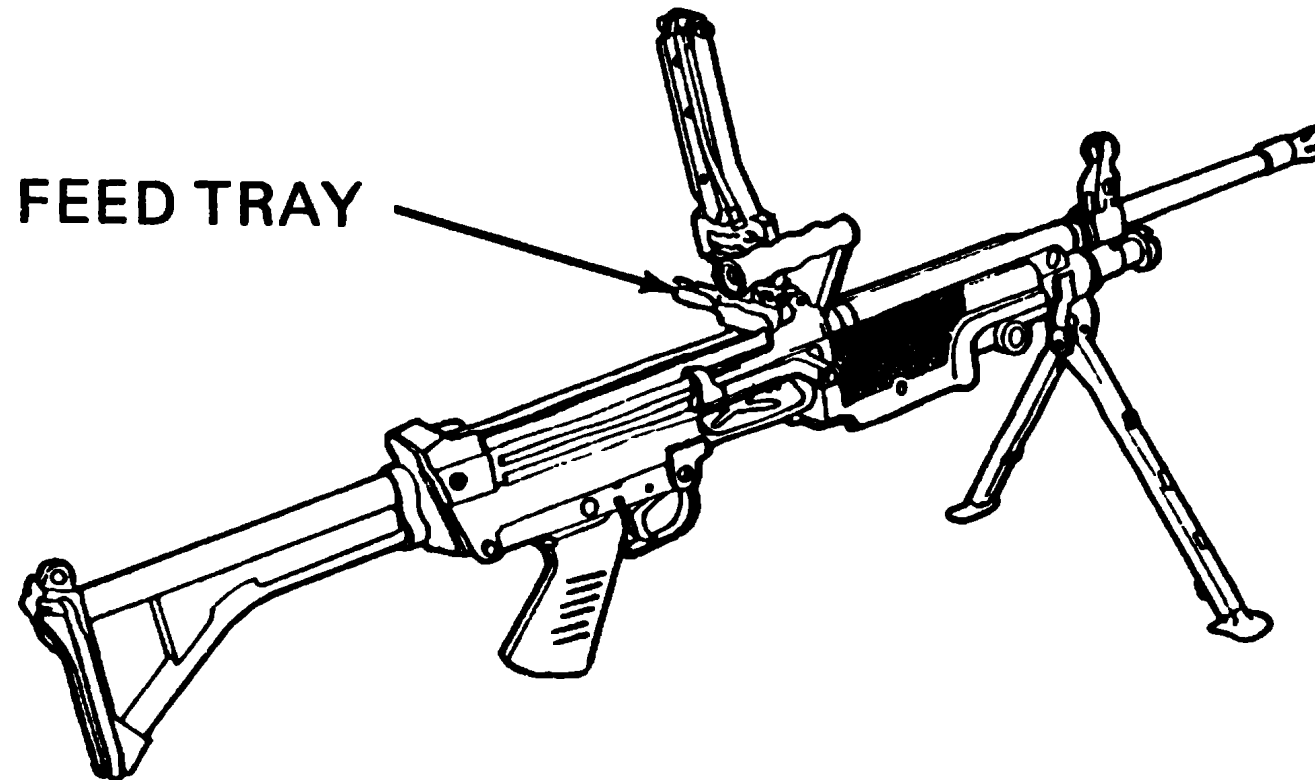
LOADING



With palm up, pull cocking handle to rear to lock bolt (charge weapon). Push cocking handle back forward until you hear it click. Push safety to right (red ring not visible).



Squeeze latches to open cover assembly.

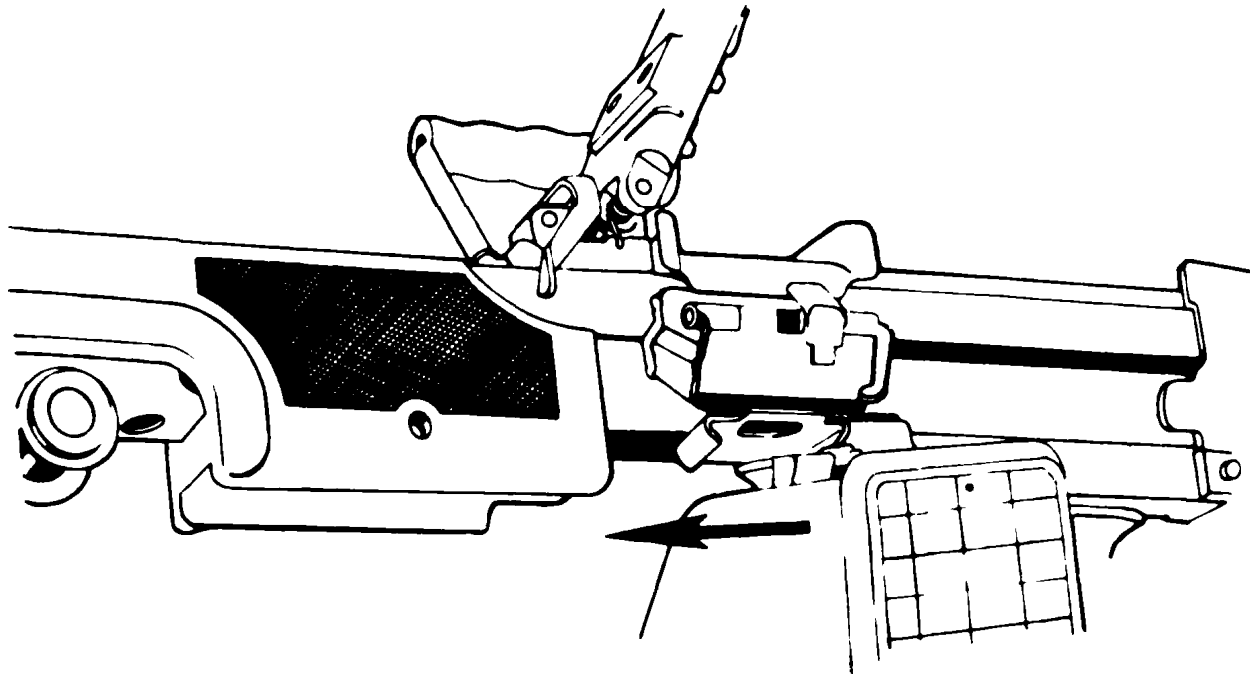


Raise feed tray

**Look into chamber to make
sure there is no round cham-
bered.**

Lower feed tray.

MORE LOADING

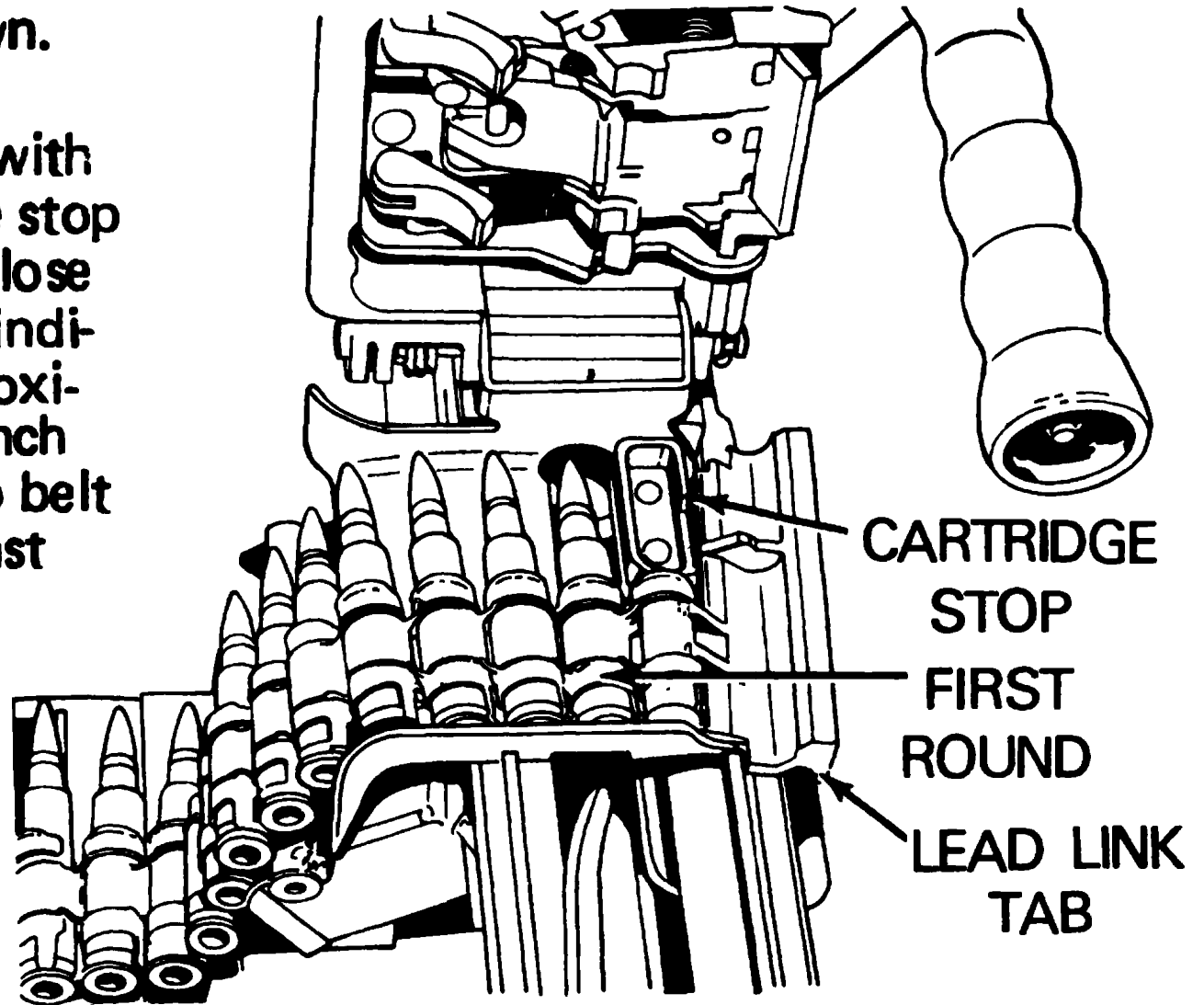


Attach 200-round ammo box containing link belt to underside of receiver after aligning box latch with receiver dovetail.

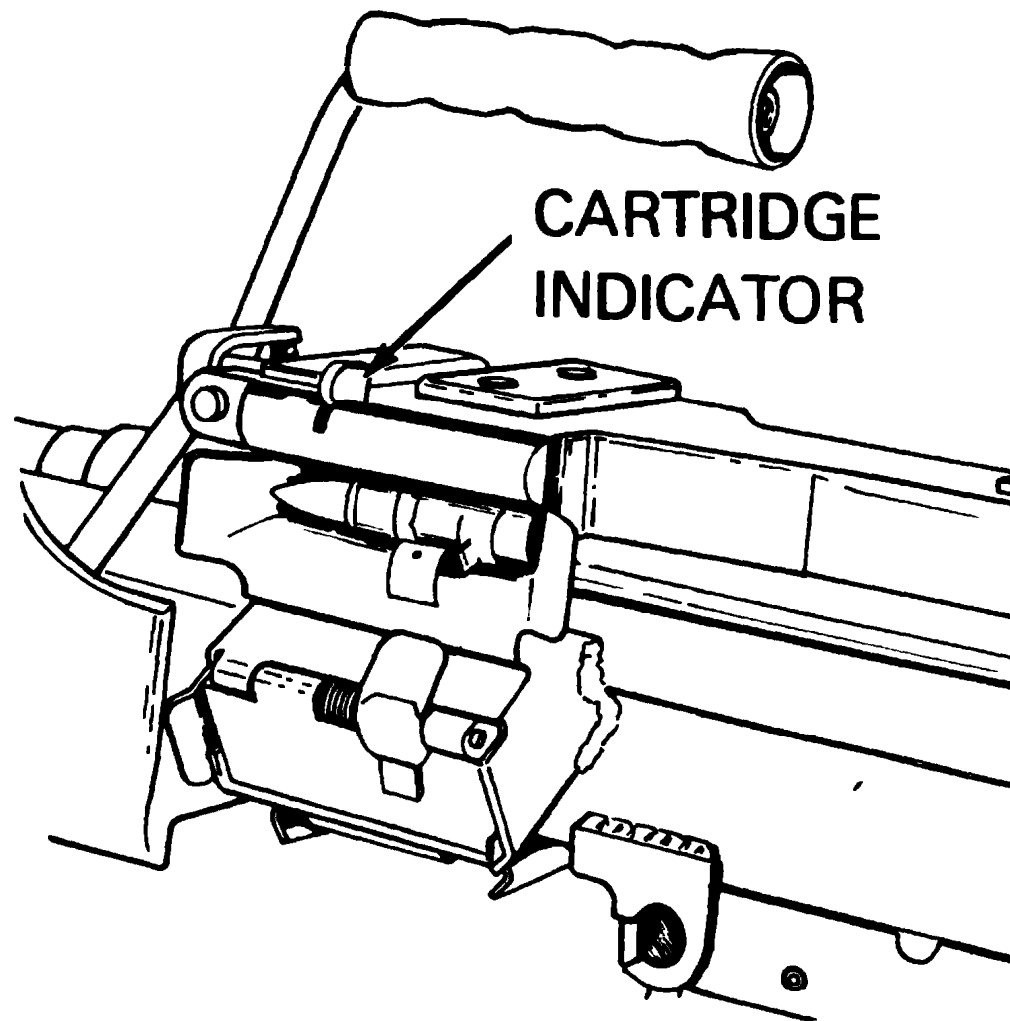
NOTE

Open side of links are down.

Place link belt in feed tray with first round against cartridge stop and hold belt in position. Close cover assembly. (Cartridge indicator should protrude approximately 13MM or one-half inch above top of cover if ammo belt is properly positioned against cartridge stop).



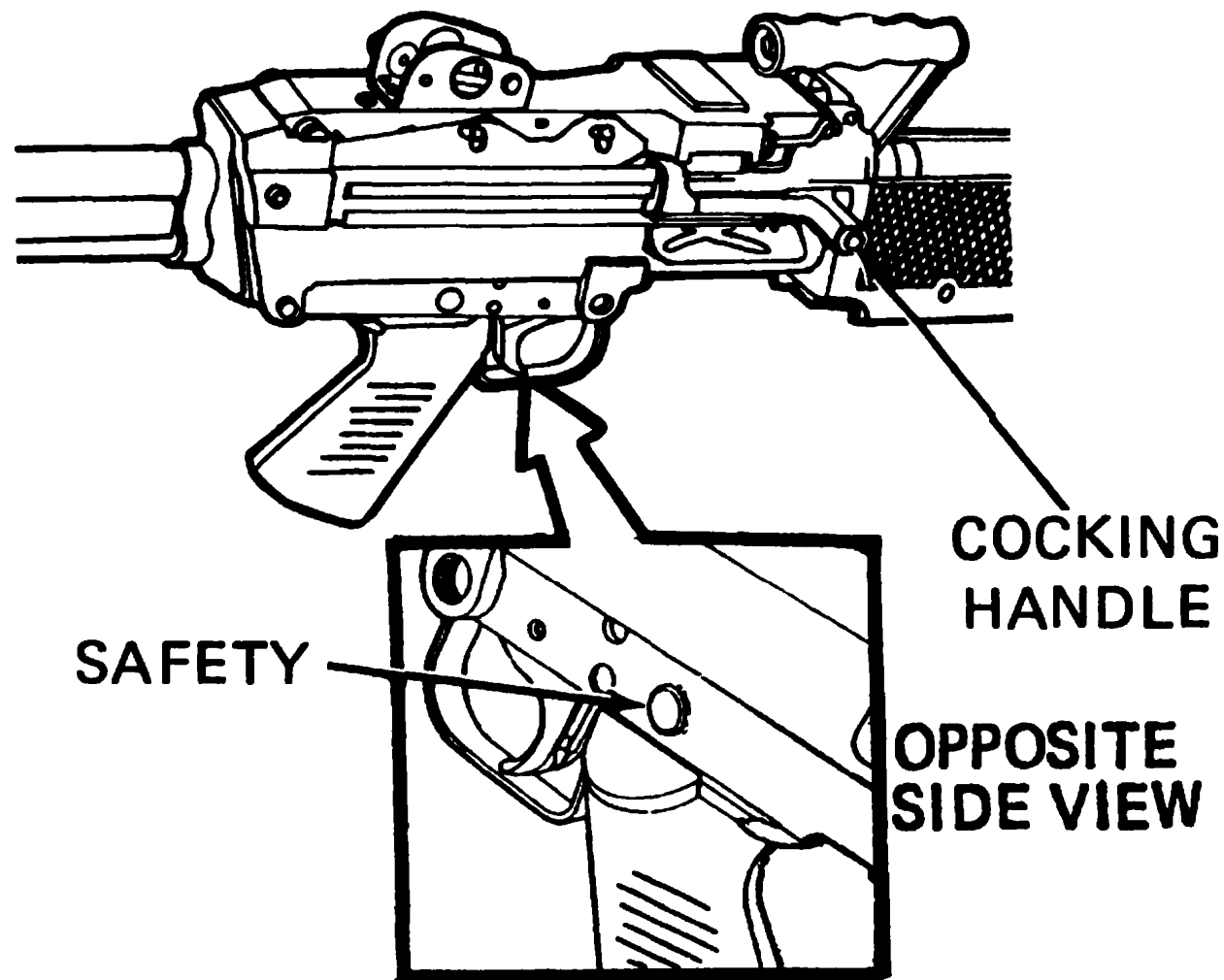
MORE LOADING



If link belt is properly positioned cartridge indicator sticks up above top of left side of cover.

CLEARING

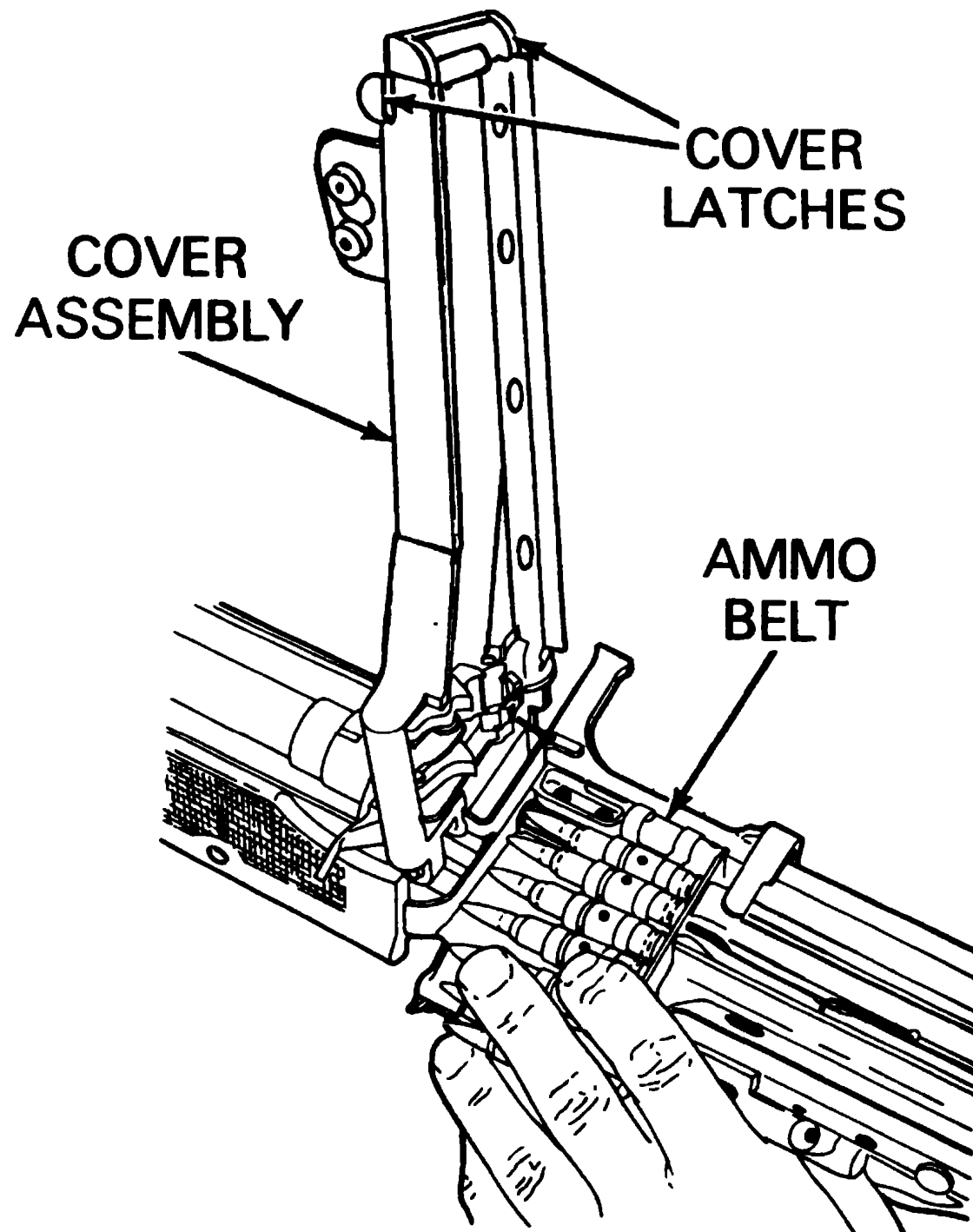
Charge weapon (pull cocking handle to rear). Be sure bolt is locked in rear position. Push charging handle forward until you hear it click .



Push safety to right (red ring not visible).

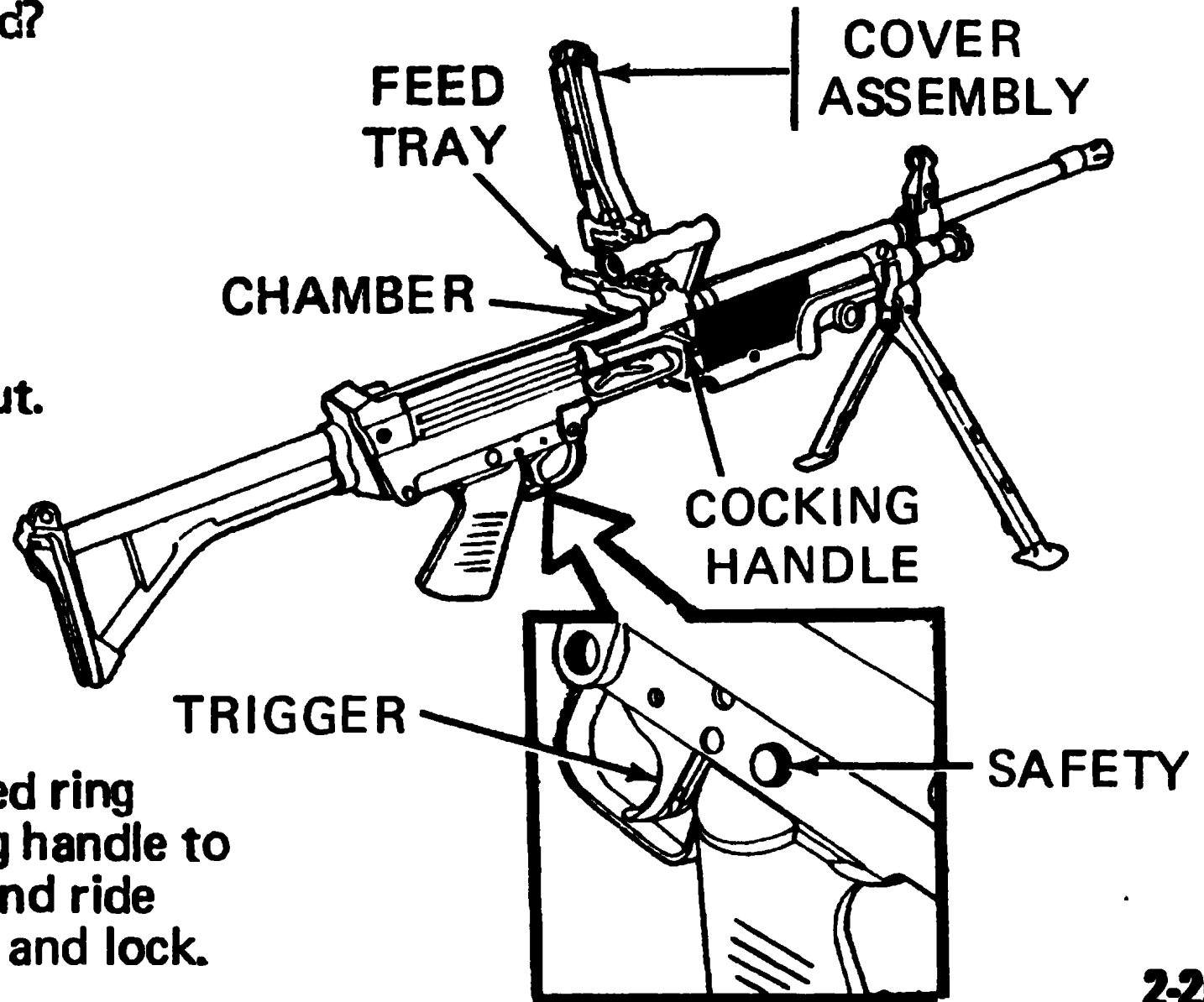
MORE CLEARING

If belt feed is used,
squeeze latches to open
cover assembly.
Remove ammo belt
and loose links.



**Raise feed tray.
Look into chamber.
Round still chambered?
Remove it (p 2-31)**

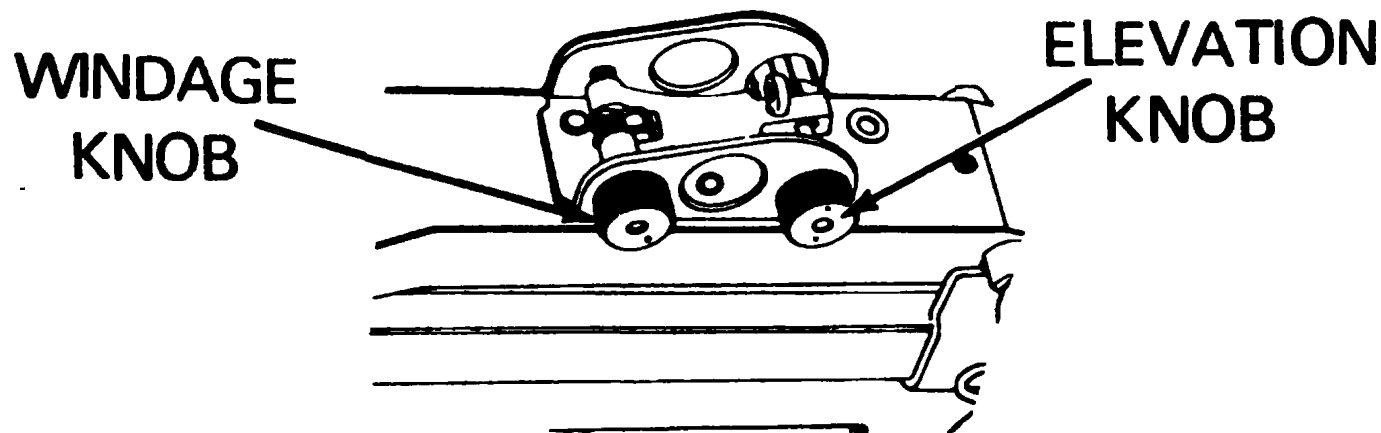
**Chamber empty?
Lower feed tray.
Close cover assembly.
Make sure it locks shut.**



Push safety to left (red ring visible). Hold cocking handle to rear depress trigger, and ride bolt forward to close and lock.

FIELD ZERO

To field zero your machine gun, you must first center your rear sight. Rotate the windage knob (front knob) until the peep sight is completely to the right. Rotate the windage knob backwards 12 clicks.



NOTE: Each sight may vary as to how many clicks are needed to center the sight. To check your sight, start with the sight all the way to the right, rotate the windage knob backwards until it stops on the left side - count the clicks - divide this number by two - example: 24 clicks = 12 to center; example: 23 clicks = 12 to center (11 + 12 = 23, use larger figure).

Rotate the elevation knob to the desired range. Fire a 3-5 round burst on the center of your target.

Make fine windage changes as follows:

- Forward moves the impact to the right
- Backward moves the impact to the left

NOTE: Each click = 1/2 mil which moves the impact 1/2 meter at 1000 meters. To change the elevation of the impact:

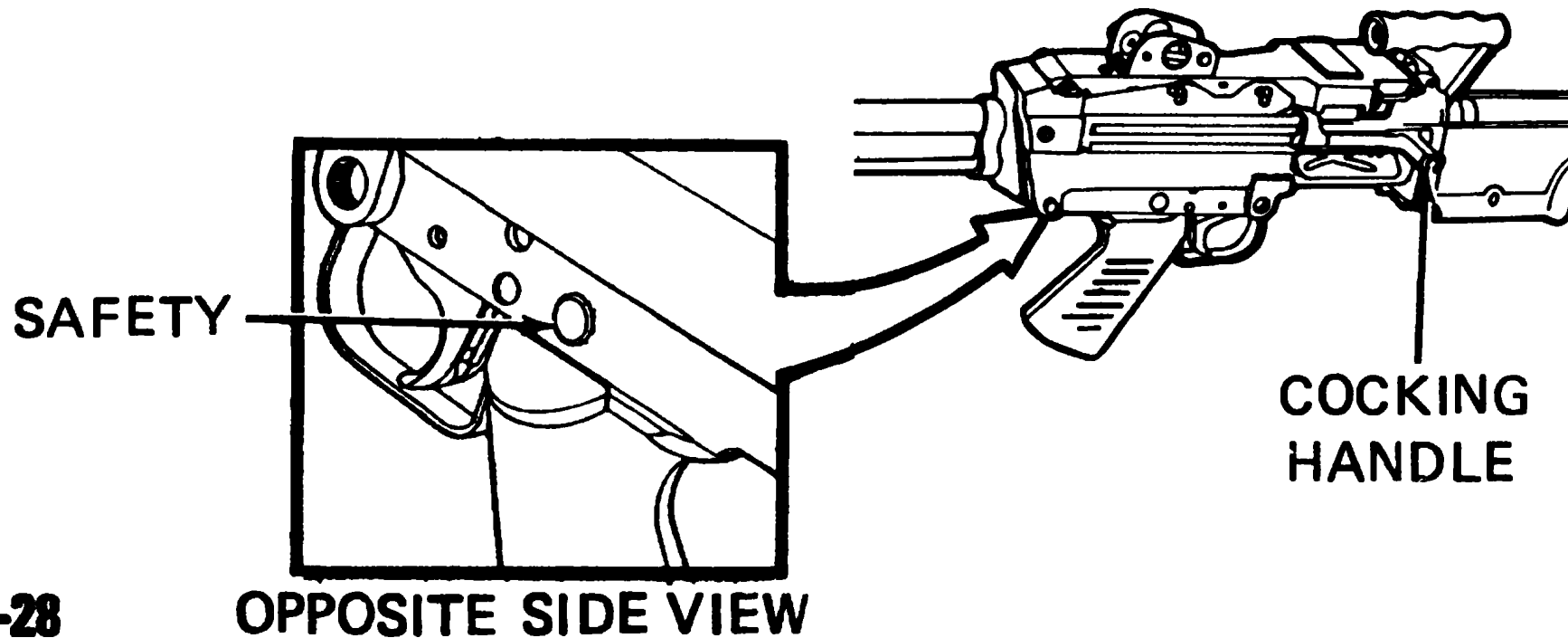
- Rotate the peep sight clockwise to lower the impact
- Rotate the peep sight counter-clockwise to raise the impact

NOTE: Each click of the peep sight = 1/2 mil change in elevation. To make the peep sight easier to grasp, rotate the elevation knob to the 1000m mark. After you make your fine adjustment, move the elevation knob back to where you started.

IMMEDIATE ACTION

If the weapon stops firing before you do, take immediate action. Charge weapon and push cocking handle forward until you hear it click.

If a round is ejected - FIRE AGAIN



WARNING

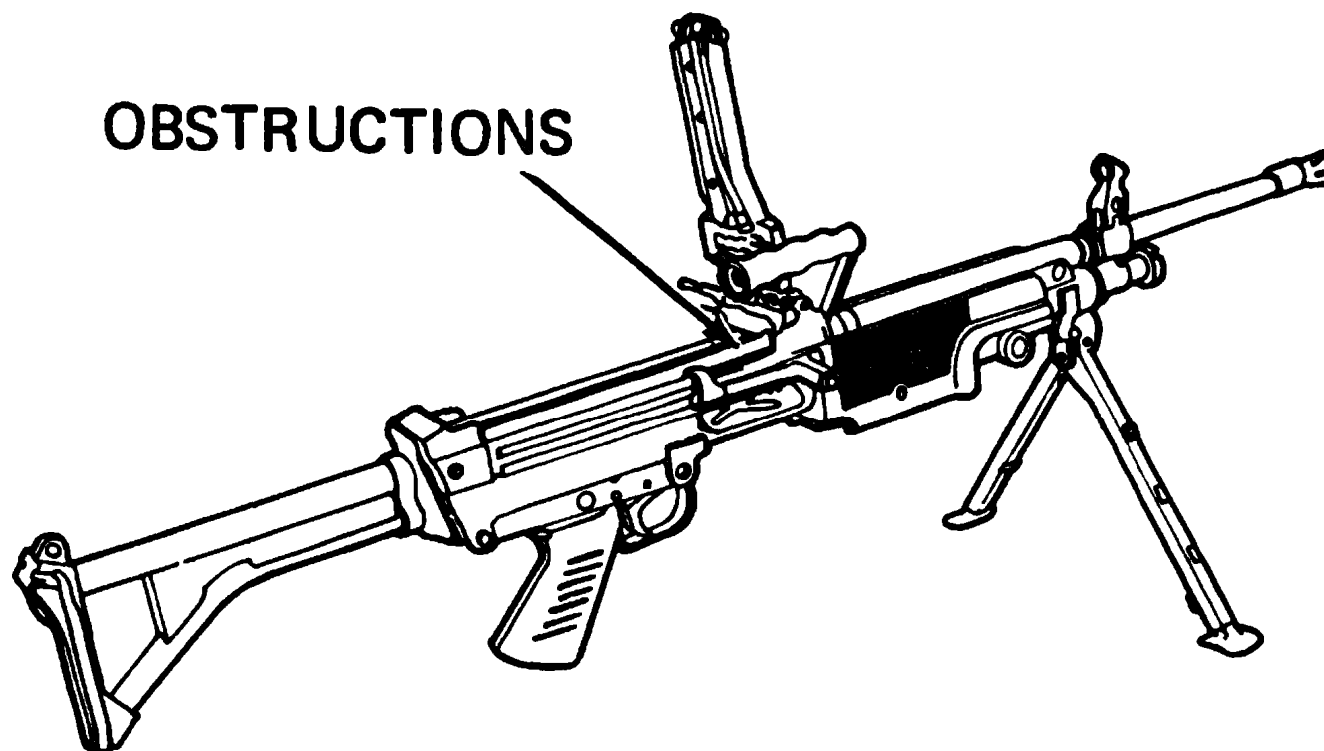
IF NOTHING IS EJECTED AND BARREL IS HOT (200 ROUNDS FIRED WITHIN A 2 MINUTE PERIOD), DO NOT OPEN THE COVER, PUSH SAFETY TO RIGHT (RED RING NOT VISIBLE). KEEP MACHINE GUN POINTED DOWNRANGE, AND REMAIN CLEAR FOR 15 MINUTES. AFTER 15 MINUTES CLEAR YOUR MACHINE GUN (p 2-23).

If nothing is ejected, and belted ammo is being used, look to see if cartridge indicator is in lower (down) position. If it is, no rounds remain on feed tray and you have run out of belted ammo. If cartridge indicator is in up position and barrel is not hot, clear weapon. If nothing is ejected and alternate magazine feed is being used, and barrel is not hot, clear weapon.

IF IMMEDIATE ACTION DOESN'T WORK

Be sure weapon is cleared.
Check for:

Obstructions
Lubrication
Dirt

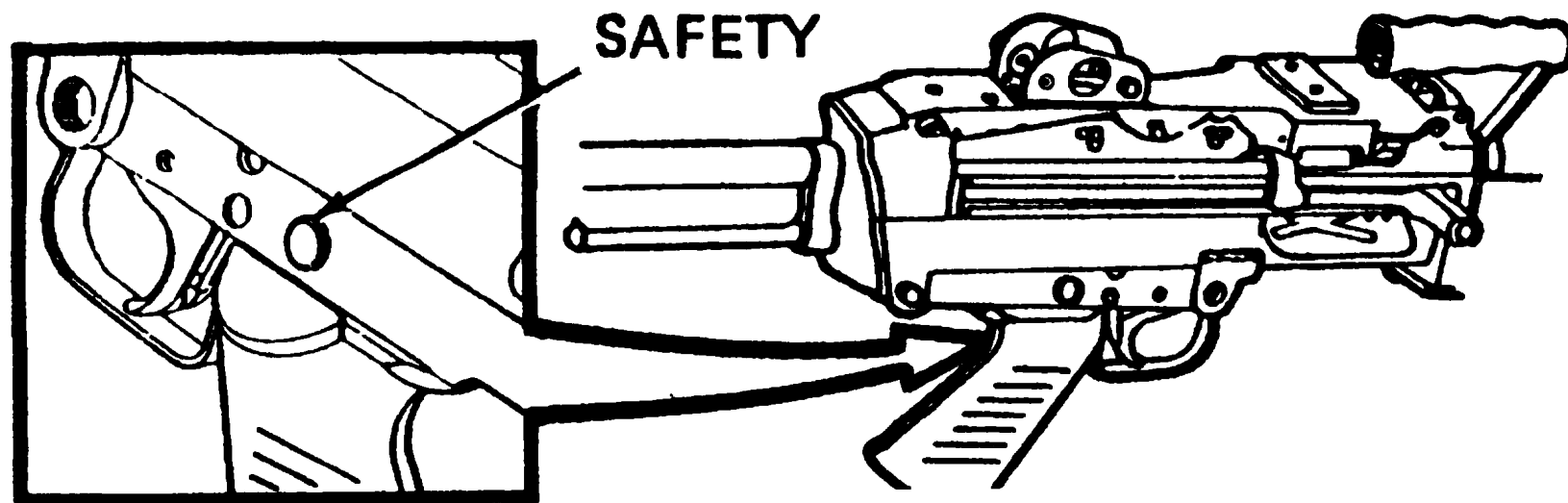


Reload, and fire again.

STUCK CARTRIDGE CASE OR LIVE ROUND

WARNING

STAY CLEAR OF MUZZLE. DO NOT ALLOW ROUND TO HIT ANY HARD SURFACE OR IT MAY FIRE. DISPOSE OF LIVE ROUND IN ACCORDANCE WITH LOCAL REGULATIONS.

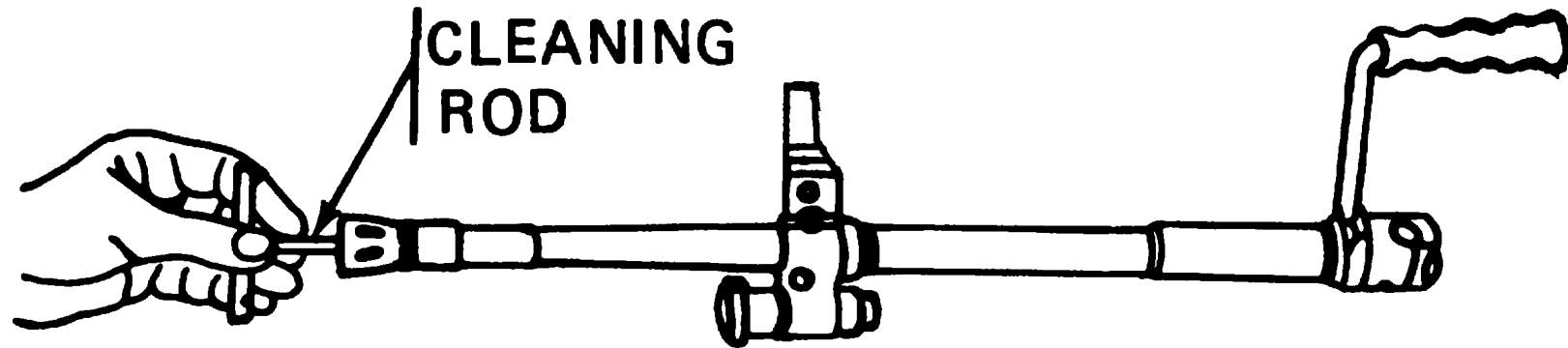


OPPOSITE SIDE VIEW

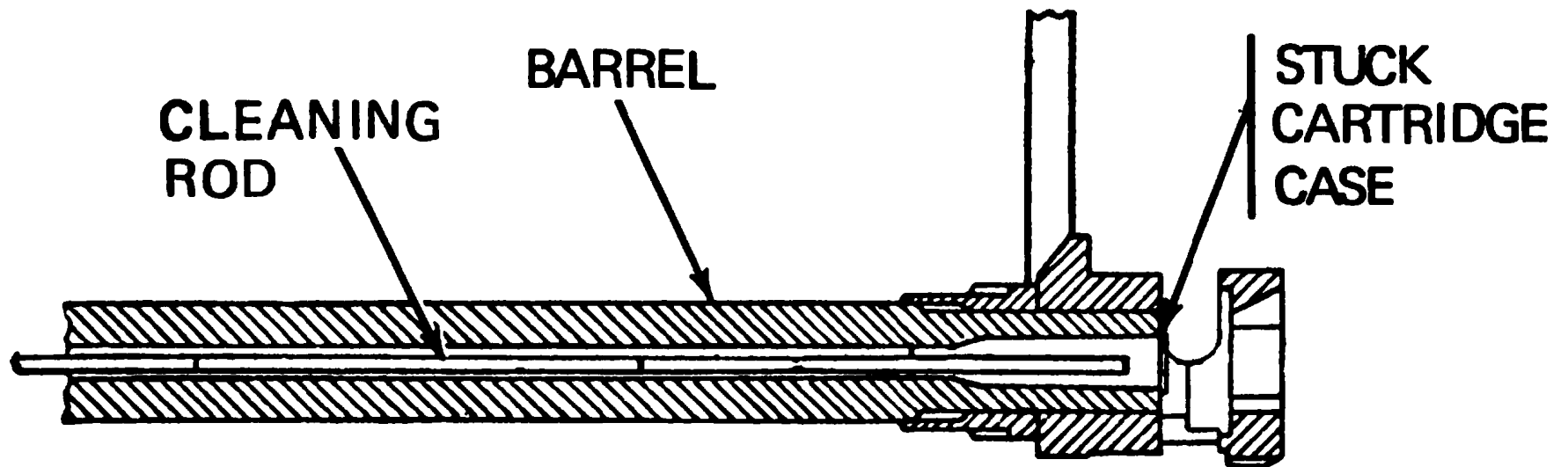
If it did fire and didn't extract, you have a stuck cartridge case. If it didn't fire and didn't extract, you have a stuck live round. Charge weapon. Push safety to left (red ring visible).

Pull trigger; if it still doesn't fire, wait until barrel is cool (approximate 15 min.). Charge weapon and place safety on safe (p 2-29). Remove barrel (p 2-5).

MORE STUCK CARTRIDGE CASE OR LIVE ROUND



Assemble cleaning rod without swab holder.
Insert rod through muzzle end of barrel.



Gently tap out case/round.

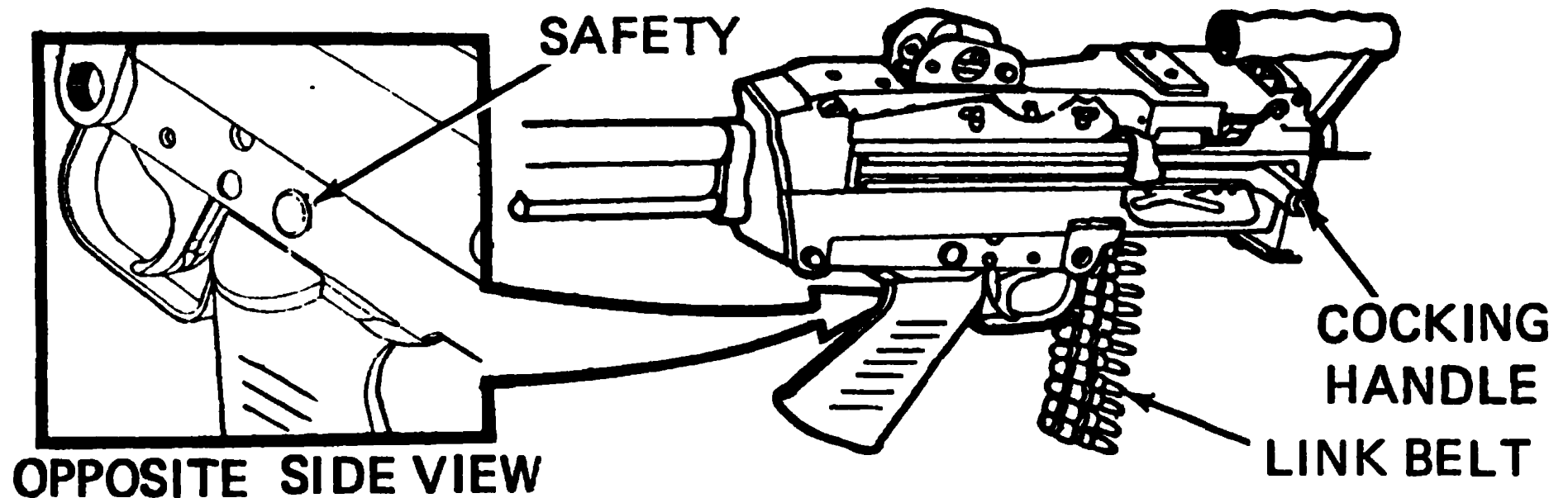
RUNAWAY MACHINE GUN

If runaway occurs (machine gun won't stop firing), take action to correct it quickly.

WARNING

ALWAYS KEEP MACHINE GUN POINTED DOWNRANGE

Take either of the following actions (p 2-34).



MORE RUNAWAY MACHINE GUN

1. Let machine gun fire if near end of link belt or magazine capacity.
2. Grab cocking handle (palm up), pull all the way back and hold. Push safety to right (red ring not visible); raise cover, remove link belt or magazine.

WARNING

NEVER RELOAD A RUNAWAY MACHINE GUN UNTIL IT IS REPAIRED. BE SURE MACHINE GUN IS CLEARED.

Notify organizational maintenance for repairs.

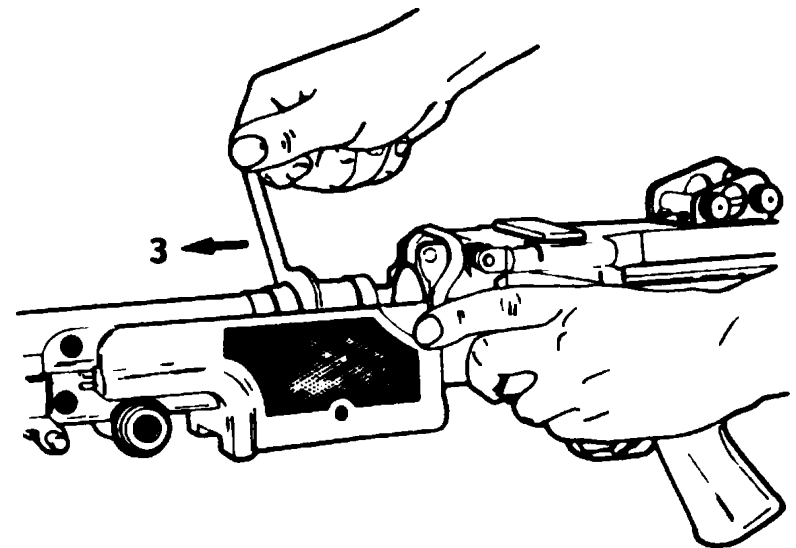
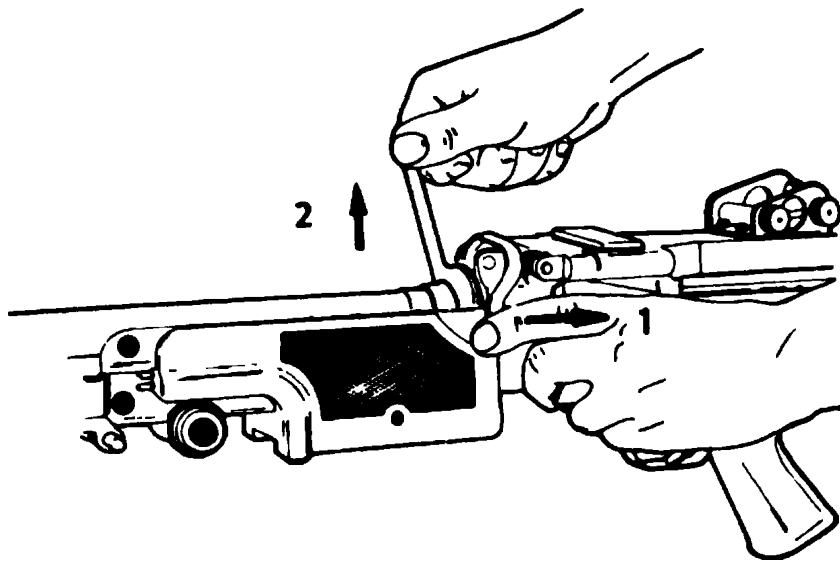
(FOR USMC USE ONLY)

QUICK CHANGE BARREL PROCEDURES

NOTE

When barrel is removed/installed the bolt must be locked to rear with safety on.

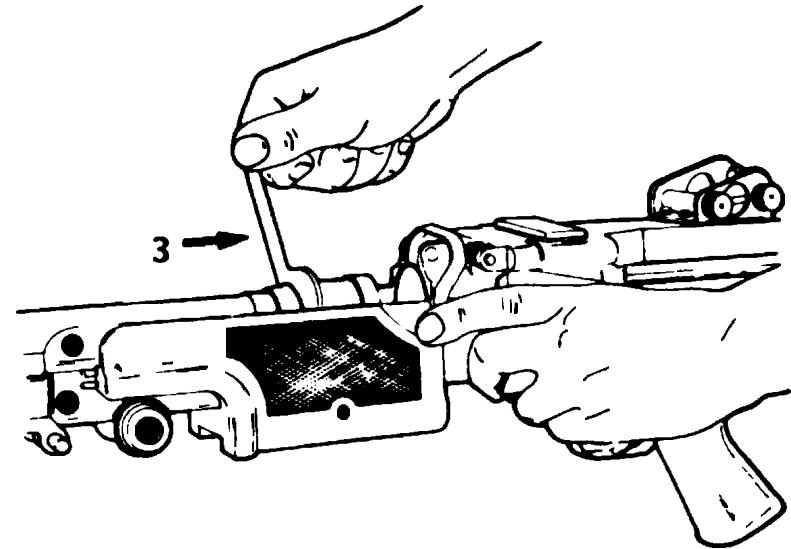
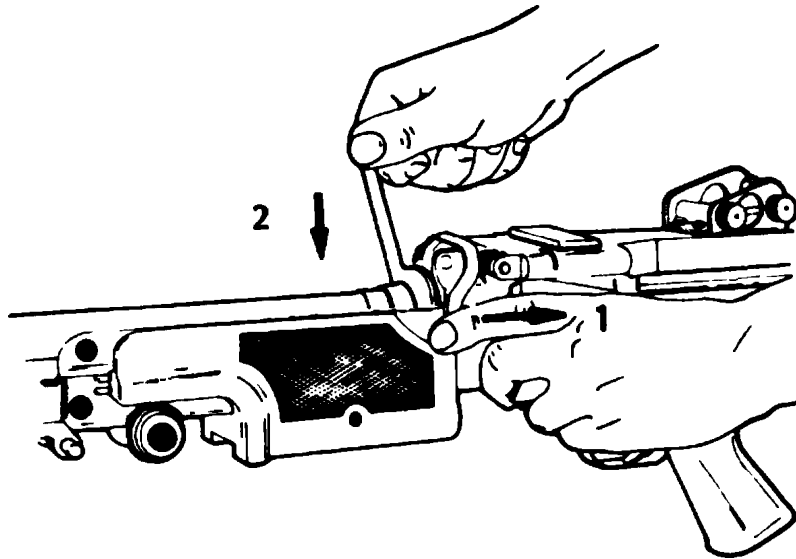
Remove: Clear weapon. Depress the locking lever of the barrel with left hand. Hold the carrying handle with the right hand, lift it up and push the barrel forward. If barrel is hot, handle carefully.



MORE QUICK CHANGE BARREL PROCEDURES

Install:

Depress the locking lever of the barrel backwards with left hand. Holding the carrying handle with the right hand, pull the barrel rearward, push downward and lock by releasing locking lever. Reload.



(FOR USMC USE ONLY)

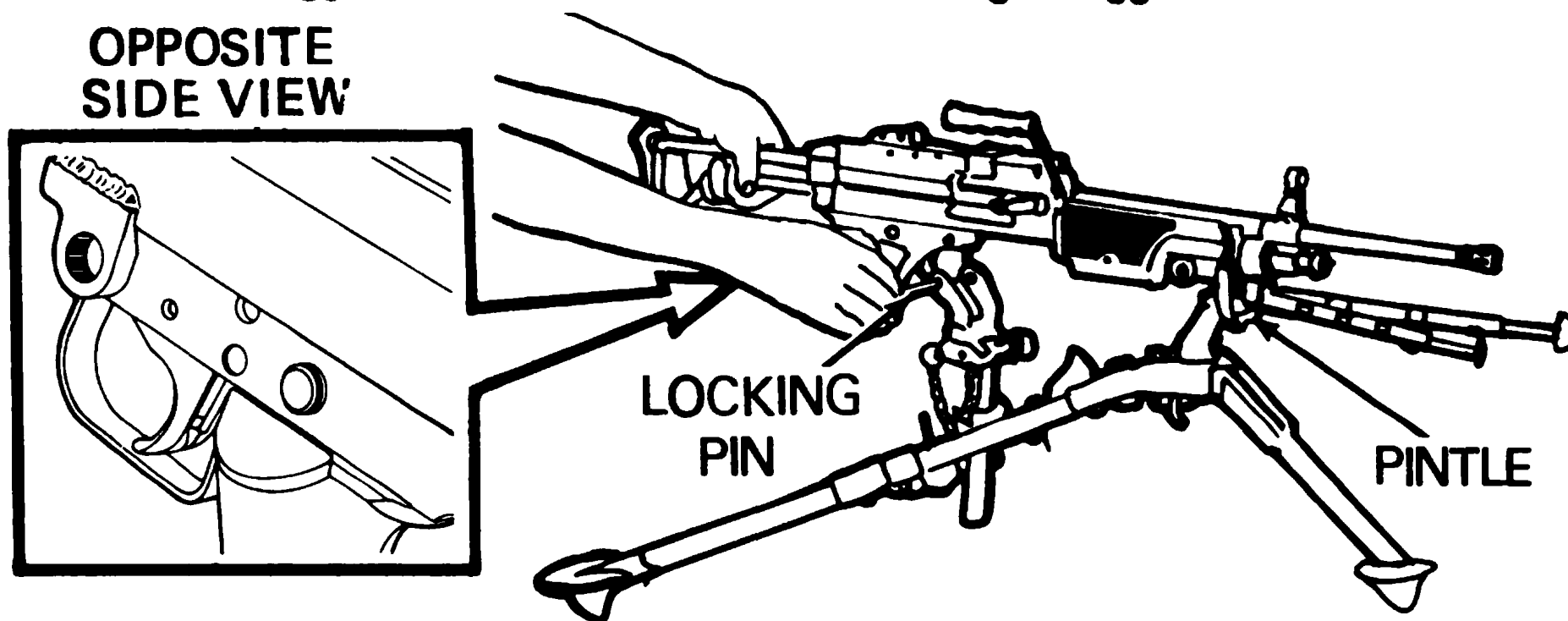
TRIPOD MOUNT

The weapon can be fitted on the tripod mount M122, by means of a special adapter.

Extend bipod forward.

Engage the front axis of the gun into the front pintle of the tripod by squeezing the locking lever of the pintle.

Above the trigger guard there is a hole through trigger mechanism.

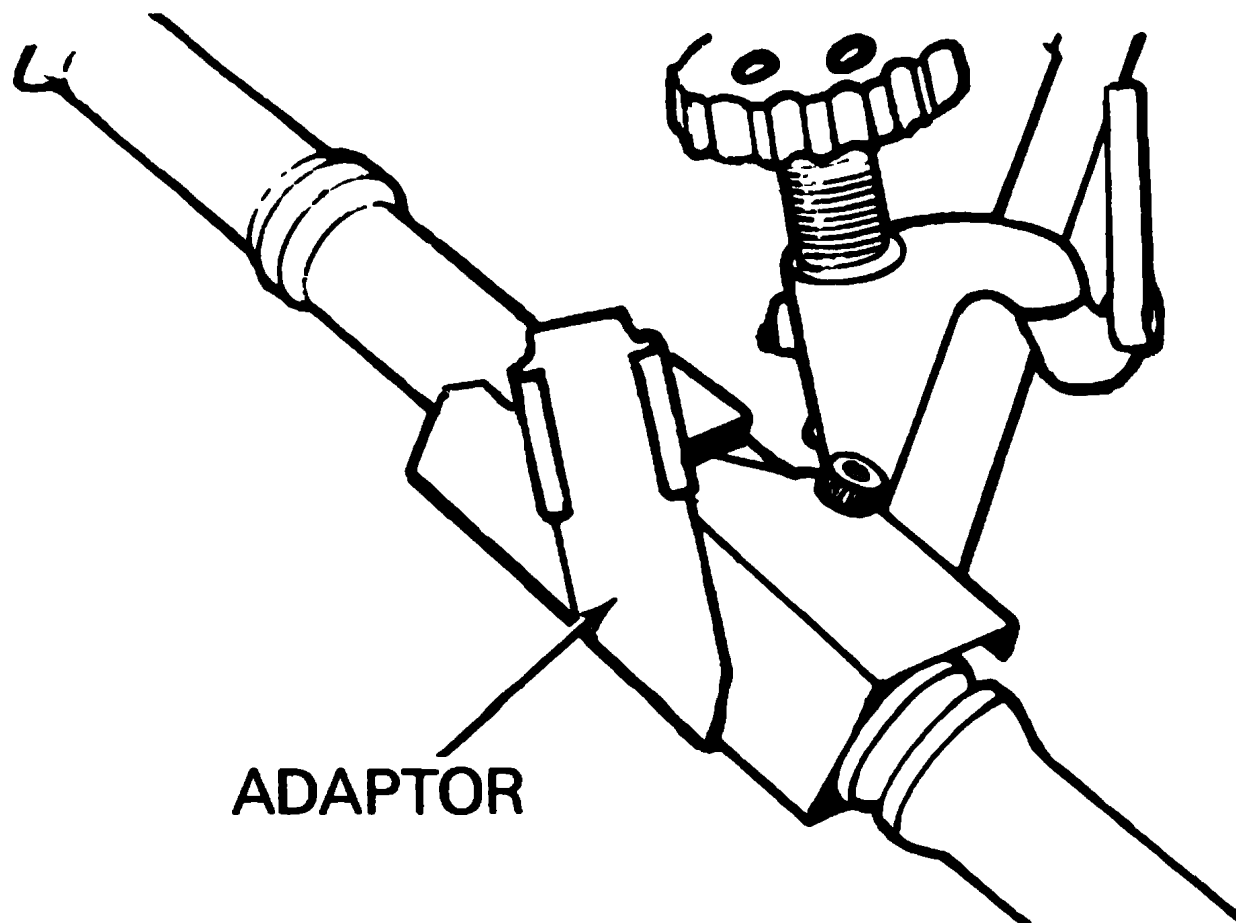


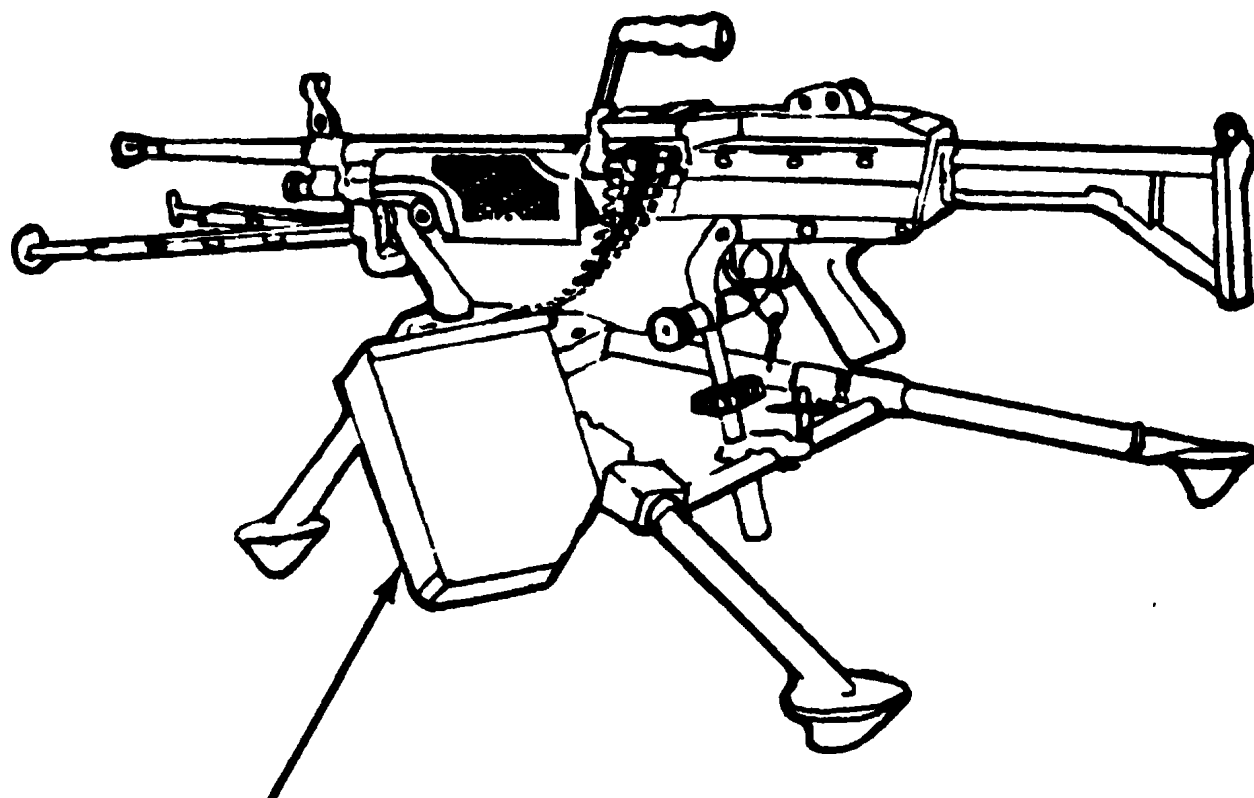
MORE TRIPOD MOUNT

Engage this part of the gun into the rear yoke of traversing mechanism and push in the locking pin.

INSTALLATION OF THE AMMO BOX ON THE TRIPOD

Attach ammo box to the adaptor on the left rear leg of the tripod.





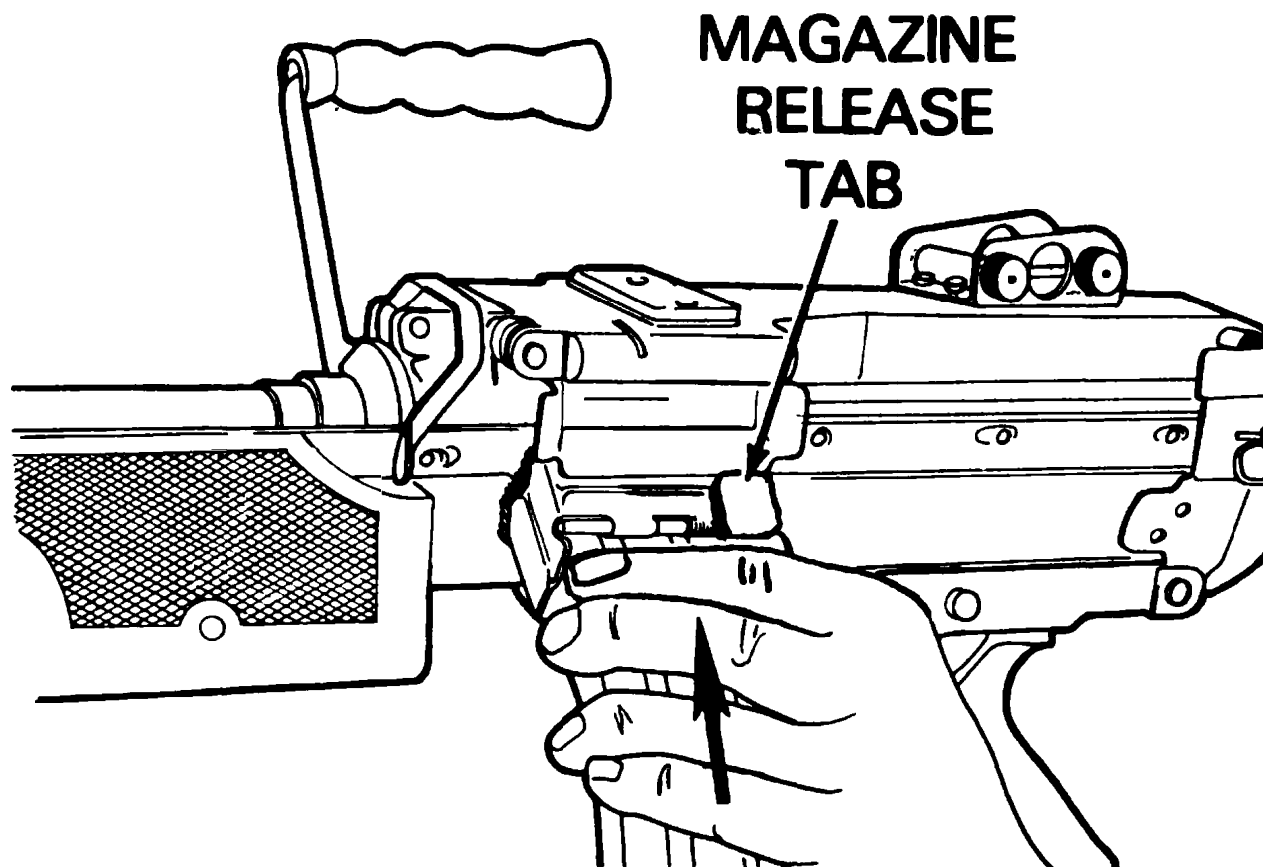
AMMO BOX
ON TRIPOD

Section III. UNUSUAL CONDITION

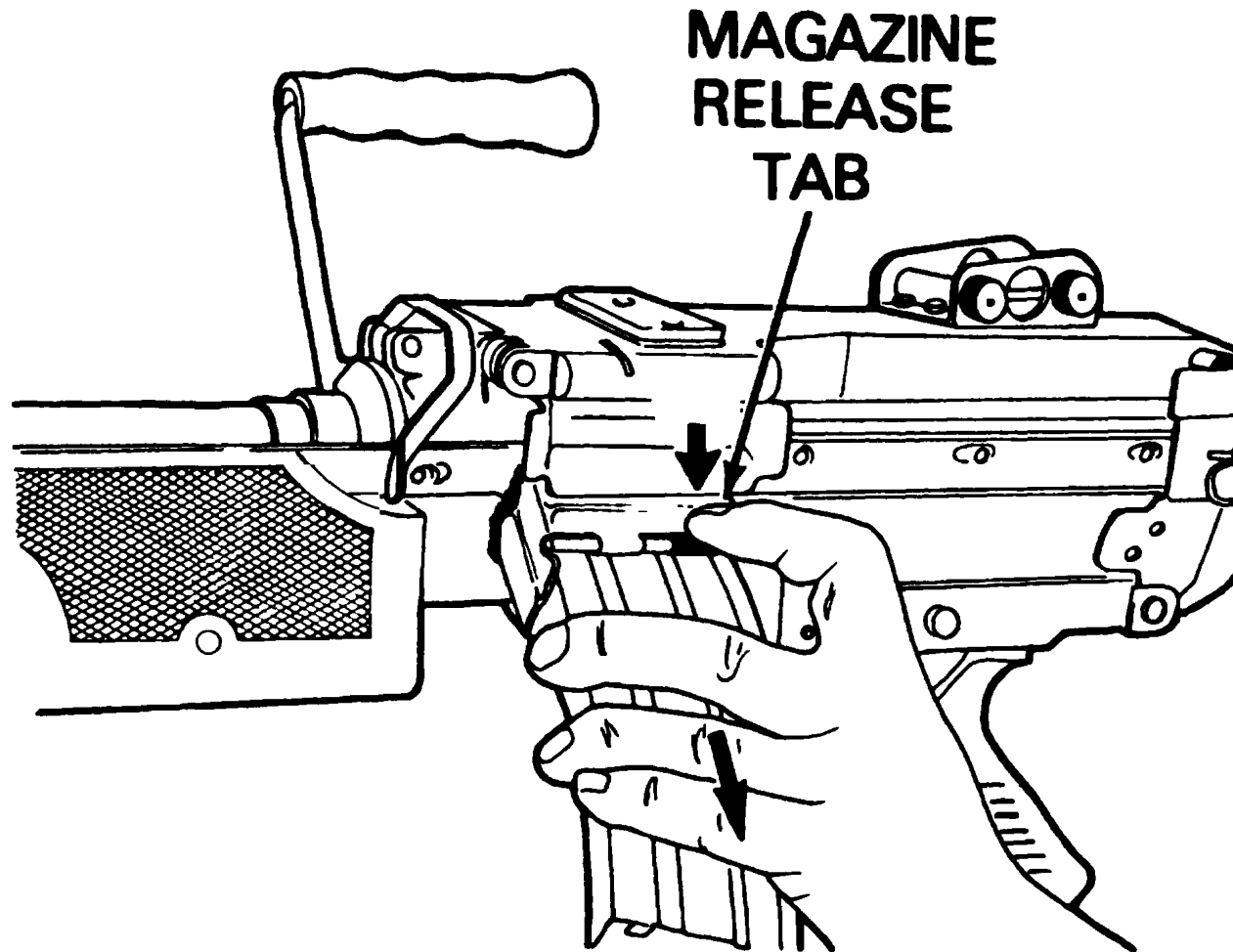
NOTE

Emergency situation exists when linked ammo is not available.

In an emergency the 30-round magazine may be loaded by inserting it into the magazine well on the left side of the receiver and pushing it firmly to the right until it bottoms in the well and release tab 'clicks' into recess in magazine.



If alternate (emergency) magazine feed is used: Push down on magazine release tab and pull out magazine. Raise cover assembly.



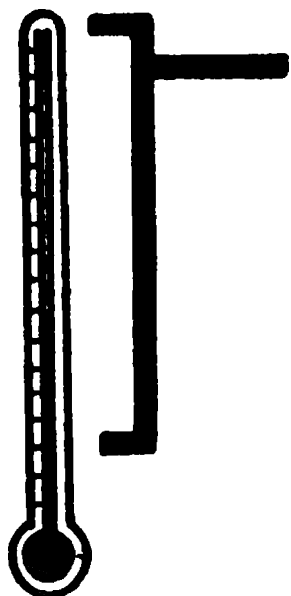
CHAPTER 3

MAINTENANCE INSTRUCTIONS

Section I. LUBRICATION INSTRUCTIONS

LUBE GUIDE

CLP is the only lubricant to use on your machine gun.
Remember to remove excessive oil from the bore before firing.



CLP-Cleaner. lubricant and preservative, Grade 2,
is used for all temperatures.

Lightly Lube-A film of oil barely visible to the eye.

Generously Lube-Heavy enough so that it can be
spread with finger.

NOTE

Although CLP will provide required lubrication at temperatures between 0°F and -35°F, it will not flow from 1/2 oz bottle at temperatures below 0°F.

LUBRICATION INSTRUCTIONS (Cont)

HOT, DUSTY, AND SANDY AREAS:

Clean often.

Wipe oil from exposed surfaces
with clean wiping rag (item 2,
app D).

Keep sand out of parts.

AFTER EXPOSURE TO WATER:

Make sure it's dry before lubri-
cating. Disassemble, clean, lightly
oil and assemble as soon as
possible

EXTREMELY COLD CLIMATE:

Use CLP (item 1, app D).

Keep dry.

Use CLP lightly.

HOT, WET CLIMATE:

Use CLP and inspect often.

Use CLP lightly.

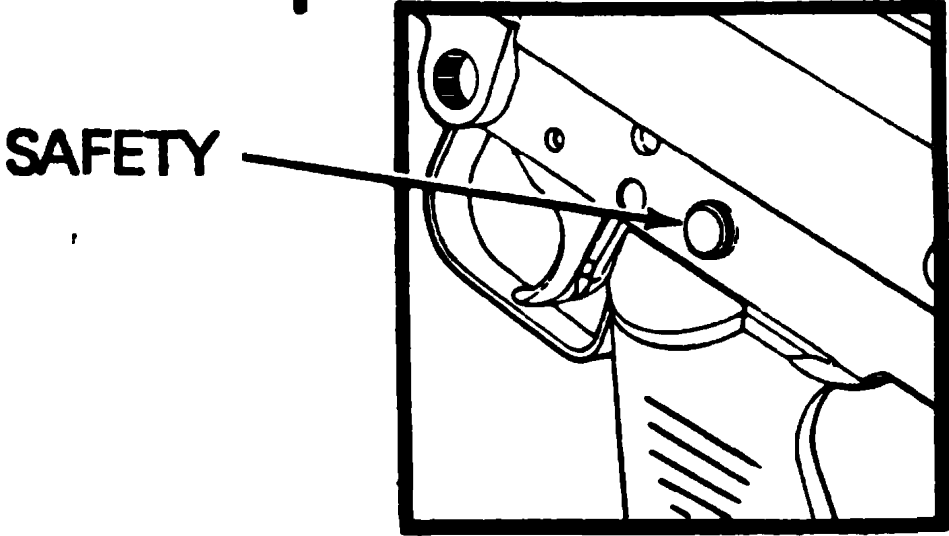
Keep machine gun dry.

Section II. TROUBLESHOOTING PROCEDURES

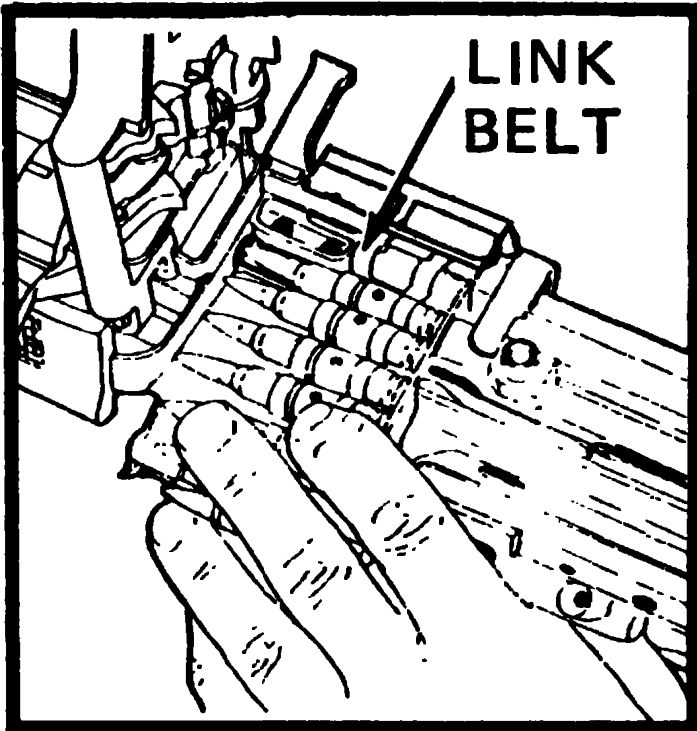
The table lists the common malfunctions which you may find during the operation or maintenance of the machine gun or its components. You should perform the tests/inspections and corrective actions in the order listed.

This manual can not 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 organizational maintenance.

TROUBLESHOOTING TABLE

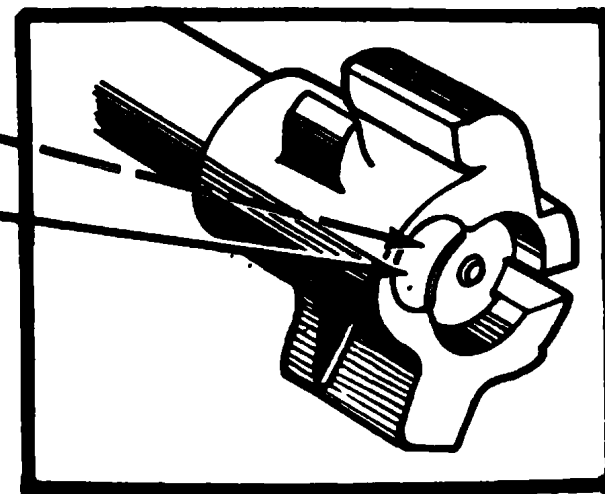
MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
FAILS TO FIRE	Safety on	Push SAFETY to left exposing RED ring "RED IS FIRE". 

TROUBLESHOOTING TABLE (cont)

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
FAILS TO FIRE (cont)	Link belt improperly loaded Defective ammo	Remove and reinstall link belt properly  Eject round

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
FAILURE TO EXTRACT	Dirty chamber/bolt and slide assy.	Clean chamber and/or clean bolt and slide assembly. If problem still exists notify organizational maintenance.
	Carbon buildup in gas system	Clean gas regulator, cylinder, and piston
	Damaged extractor/spring	Notify organizational maintenance

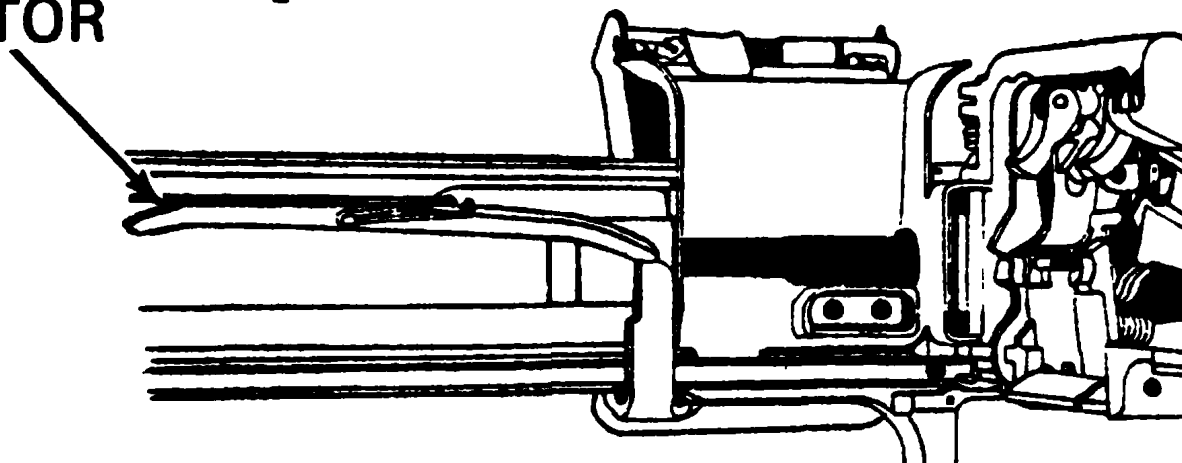
SPRING
EXTRACTOR



TROUBLESHOOTING TABLE (cont)

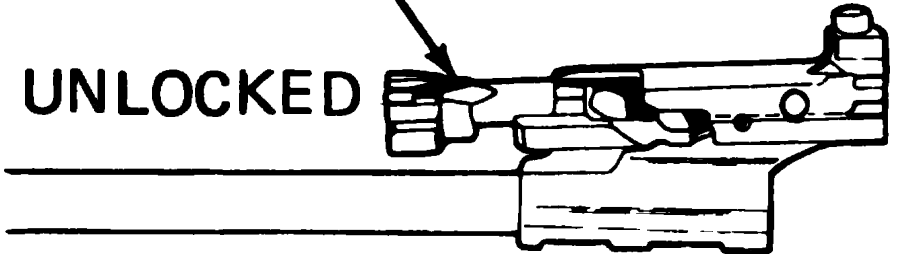
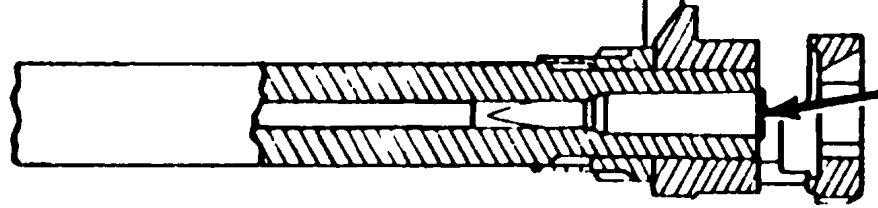
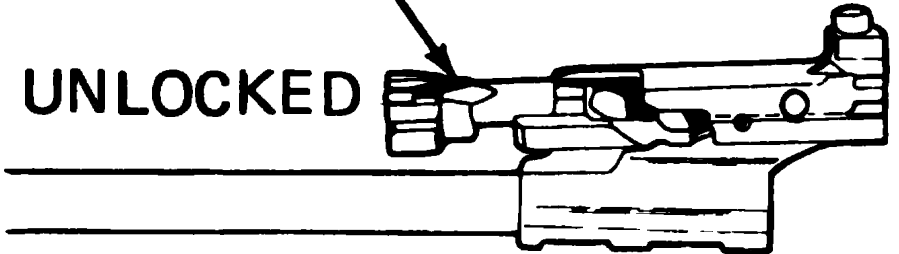
MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
FAILURE TO EJECT	Short recoil	Clean and lubricate bolt and slide assembly. If problem still exists notify Organizational maintenance.
	Damaged ejector/spring	Notify organizational maintenance
	Carbon buildup in gas system	Clean gas regulator, piston, and cylinder

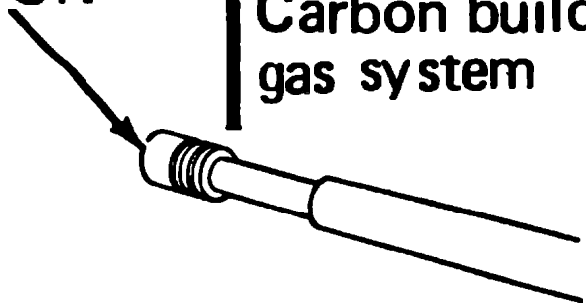
EJECTOR



MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
FAILURE TO COCK OR RUNAWAY WEAPON	Broken, worn, or burred sear	Notify organizational maintenance
	A line drawing of a handgun's trigger assembly. An arrow labeled 'SEAR' points to the sear on the slide. Another arrow points to the notch on the trigger, which is labeled 'Piston assembly sear notch' in the text below. Piston assembly sear notch worn Sear stuck in trigger housing Short recoil Carbon buildup in gas system	Notify organizational maintenance Notify organizational maintenance Clean and lube bolt and slide assembly Clean gas regulator, piston and cylinder

TROUBLESHOOTING TABLE (cont)

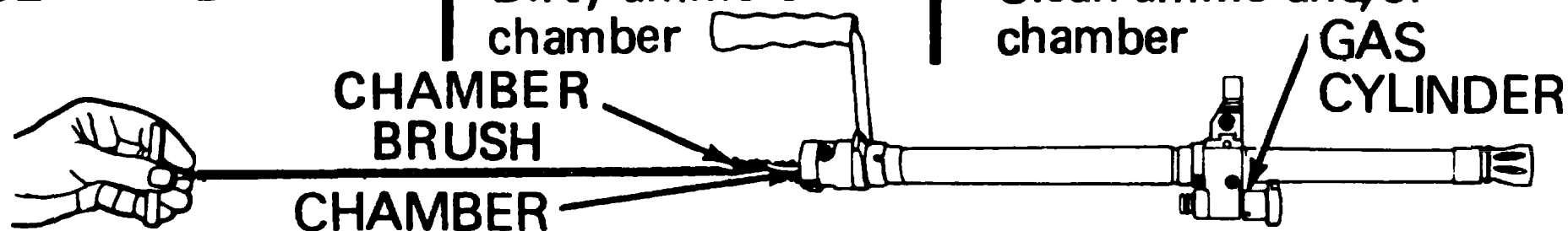
MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
STOPS FIRING	Defective round in chamber	Eject round.
BOLT MECHANISM UNLOCKED 	 Bolt and slide assembly not forward and locked	Remove obstruction or clean and lubricate as required.
UNLOCKED 	LOCKED Primer dented but not fired	*Eject round.. Notify organizational maintenance.

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
STOPS FIRING (cont) PISTON  Carbon buildup in gas system Short recoil	Sticking feed mechanism	Clean and lubricate feed mechanism. If problems still exist, notify organizational maintenance. Clean gas regulator, piston, and cylinder. If problems still exist notify organizational maintenance. Clean and lubricate gas regulator bolt and piston assembly. If problems still exist, notify organizational maintenance.

* If this occurs more than once, it is caused by faulty ammunition or worn firing pin.

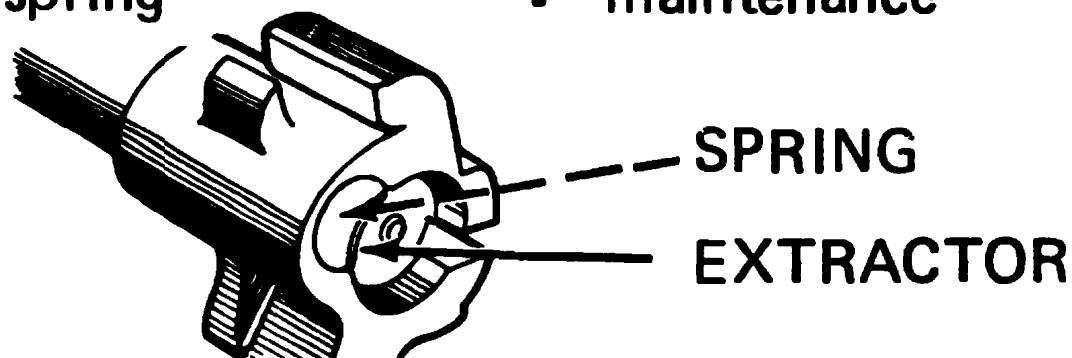
TROUBLESHOOTING TABLE (cont)

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
SLUGGISH OPERATION	Dirty receiver Lack of lubricant Carbon buildup in gas system	Clean and lubricate Lubricate Clean gas regulator piston, and cylinder
DOUBLE FEED	Dirty ammo or chamber	Clean ammo and/or chamber



Broken extractor/
spring

Notify organizational
maintenance



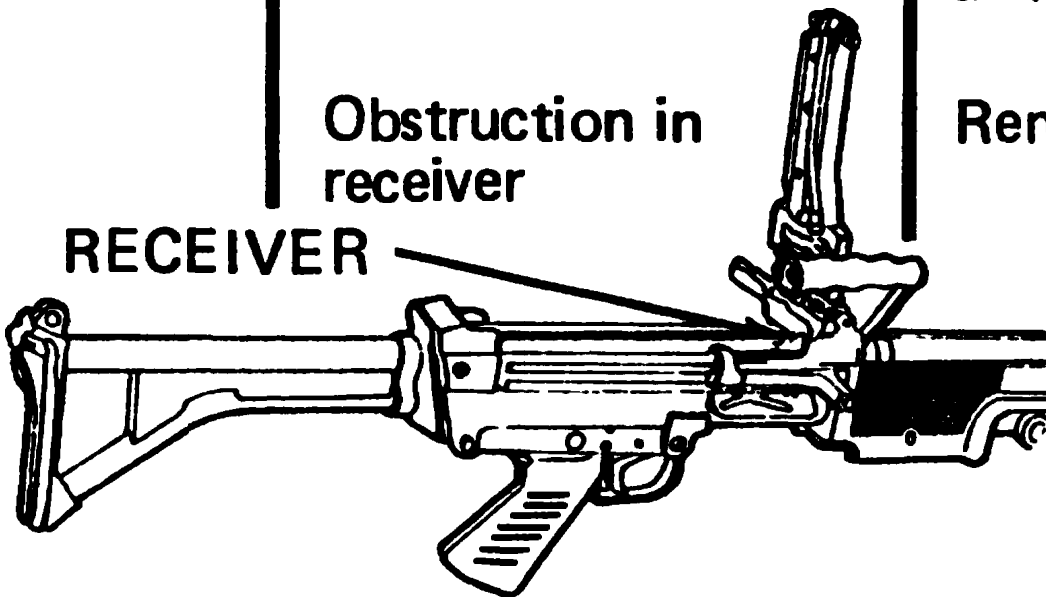
MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
FAILURE TO CHAMBER	Dirty ammunition	Clean ammunition
	Carbon build up in gas cylinder	Clean gas cylinder
	Carbon build up in receiver	Clean receiver
	Damaged round	Remove round and recharge weapon
	Damaged or weak driving spring	Notify organizational maintenance
	DRIVING SPRING 	

TROUBLESHOOTING (cont)

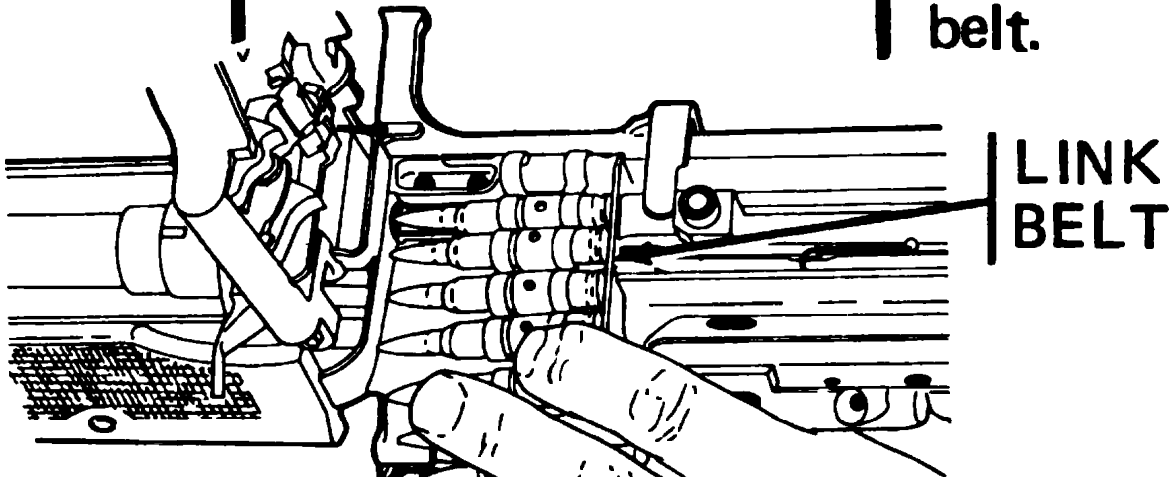
MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
FAILURE TO CHAMBER (Cont)	Dirty chamber Damaged gas regulator	Clean chamber Notify organizational maintenance
FAILURE TO FIRE	Faulty ammo	Replace ammo
	Broken or damaged firing pin	Notify organizational maintenance
	Broken or weak driving spring	Notify organizational maintenance

**DRIVING
SPRING**



MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
FAILURE TO FEED	Insufficient lubrication Defective ammo links Obstruction in receiver	Lube as required Remove defective ammo, install new ammo. Remove obstruction
	 Insufficient gas pressure Unlatched cover	Clean gas regulator, piston and cylinder Latch cover

TROUBLESHOOTING (cont)

MALFUNCTION	TEST OR INSPECTION	CORRECTIVE ACTION
FAILURE TO FEED (Cont) 	Long/short rounds Inverted link belt Damaged, weak, or worn operating parts.	Align rounds in link belt. Reinstall link belt with open end of link facing down. Notify organizational maintenance

Section III MAINTENANCE PROCEDURES

CLEANING, INSPECTION, AND REPAIR

WARNING

USING GASOLINE, KEROSENE, HYDRAULIC OIL, BENZENE, BEN-SOL, HIGH-PRESSURE WATER, STEAM, OR COMPRESSED AIR FOR CLEANING IS PROHIBITED.

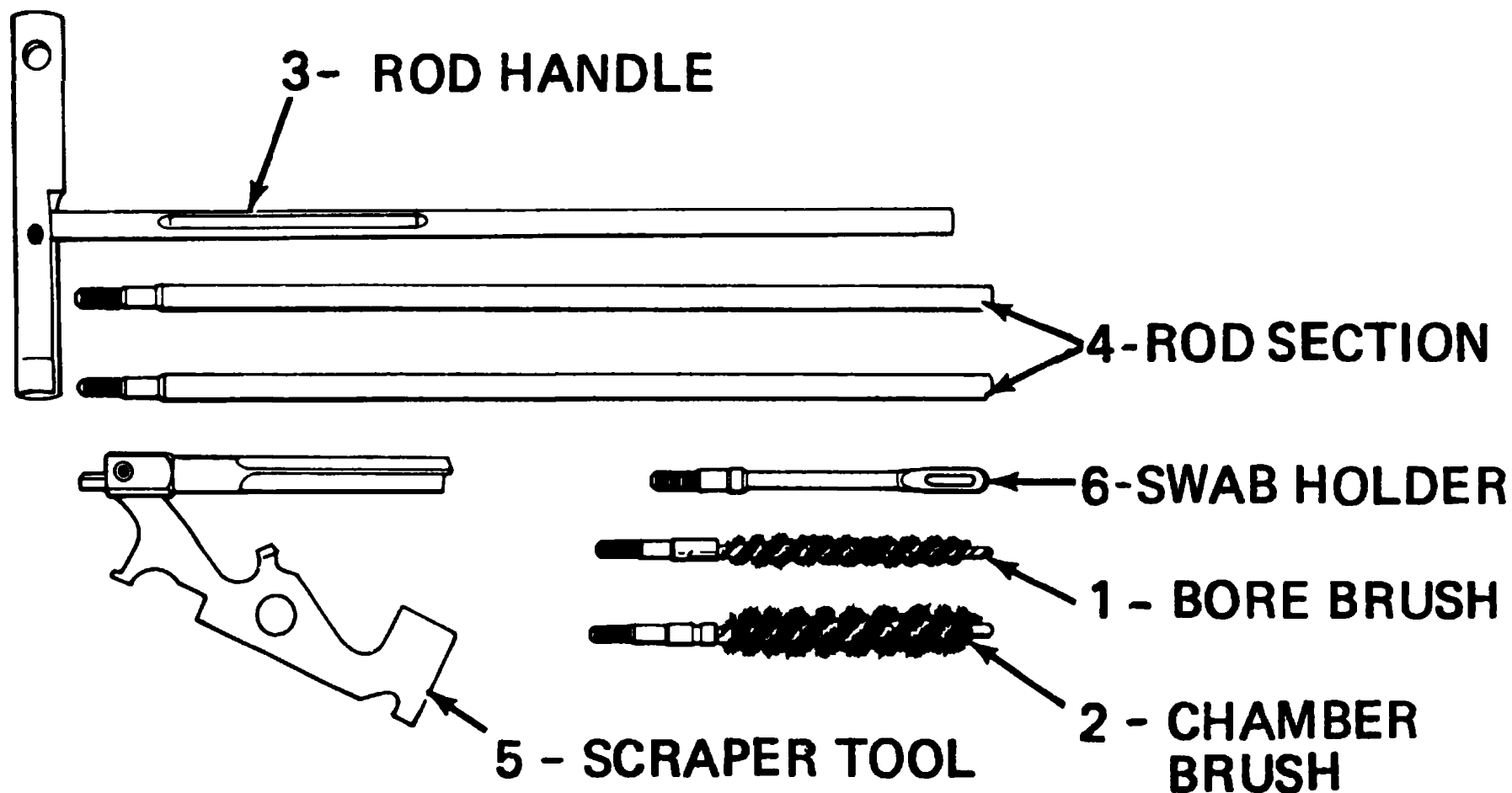
CAUTION

DO NOT USE ABRASIVES TO CLEAN THE BORE, PISTON, GAS CYLINDER, OR GAS REGULATOR PLUG.

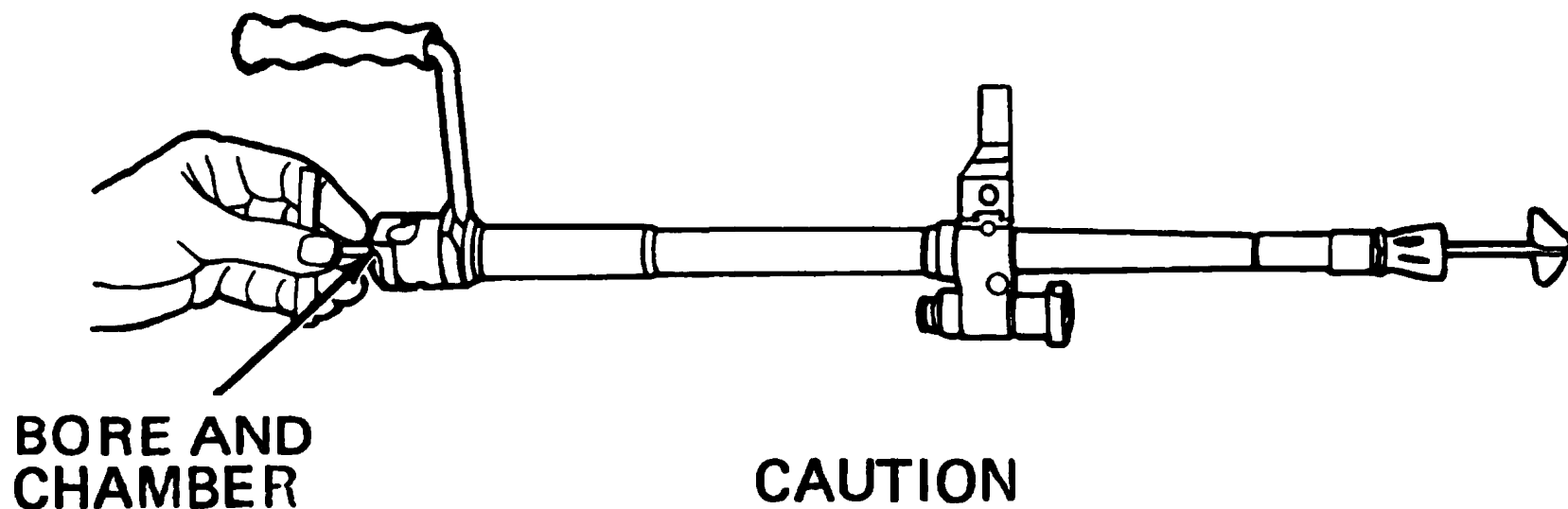
CLEANING, INSPECTION, AND REPAIR (Cont)

CLEANING TOOLS

The cleaning tools are housed inside the handguard (p-1-6).
See Page 3-44 for tool stowage locations.



CLEANING



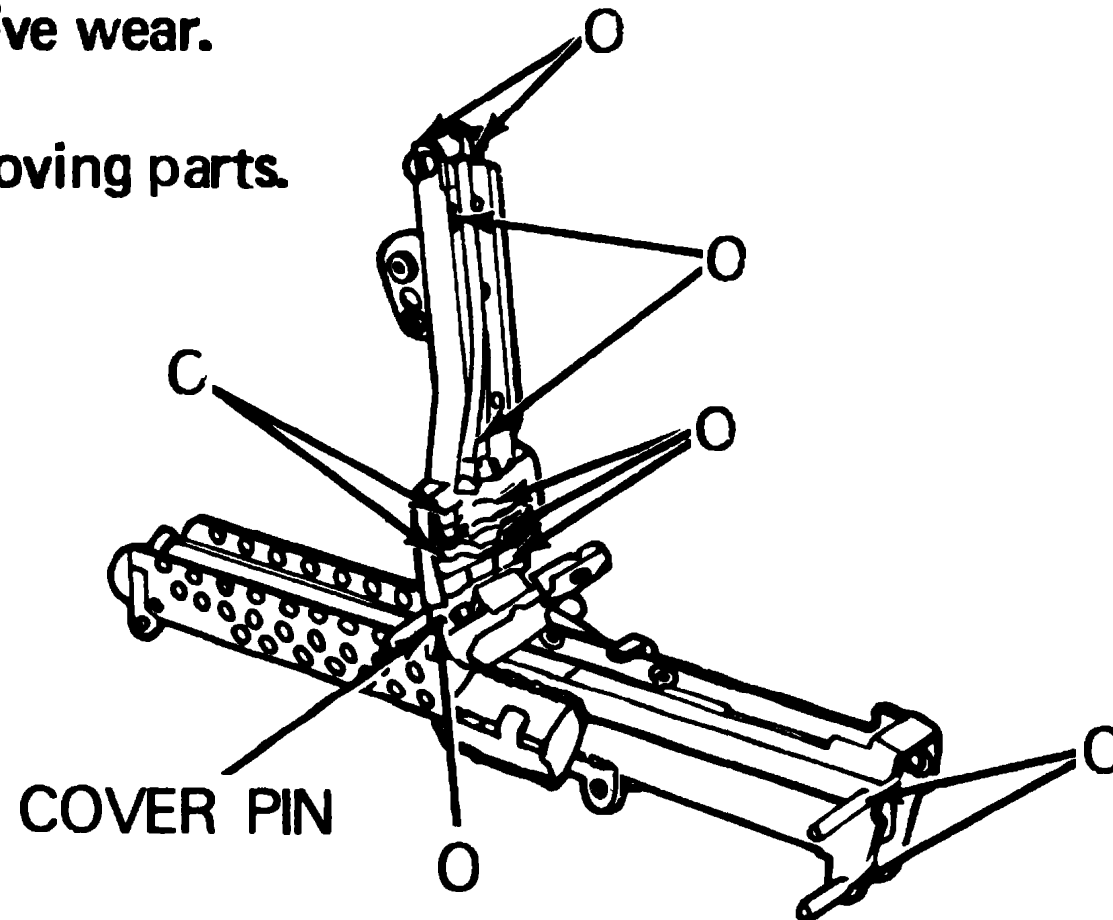
**Do not oil gas regulator or recess in barrel
for gas regulator.
Do not use abrasives to clean gas regulator.**

- 1. Inspect bore and chamber.**
- 2. Wipe outside of barrel with lightly oiled rag (item 2, app D). If heavy bore and/or chamber deposits are present, clean bore/chamber with bore brush (item 1, app C)/chamber brush (item 2, app C).**

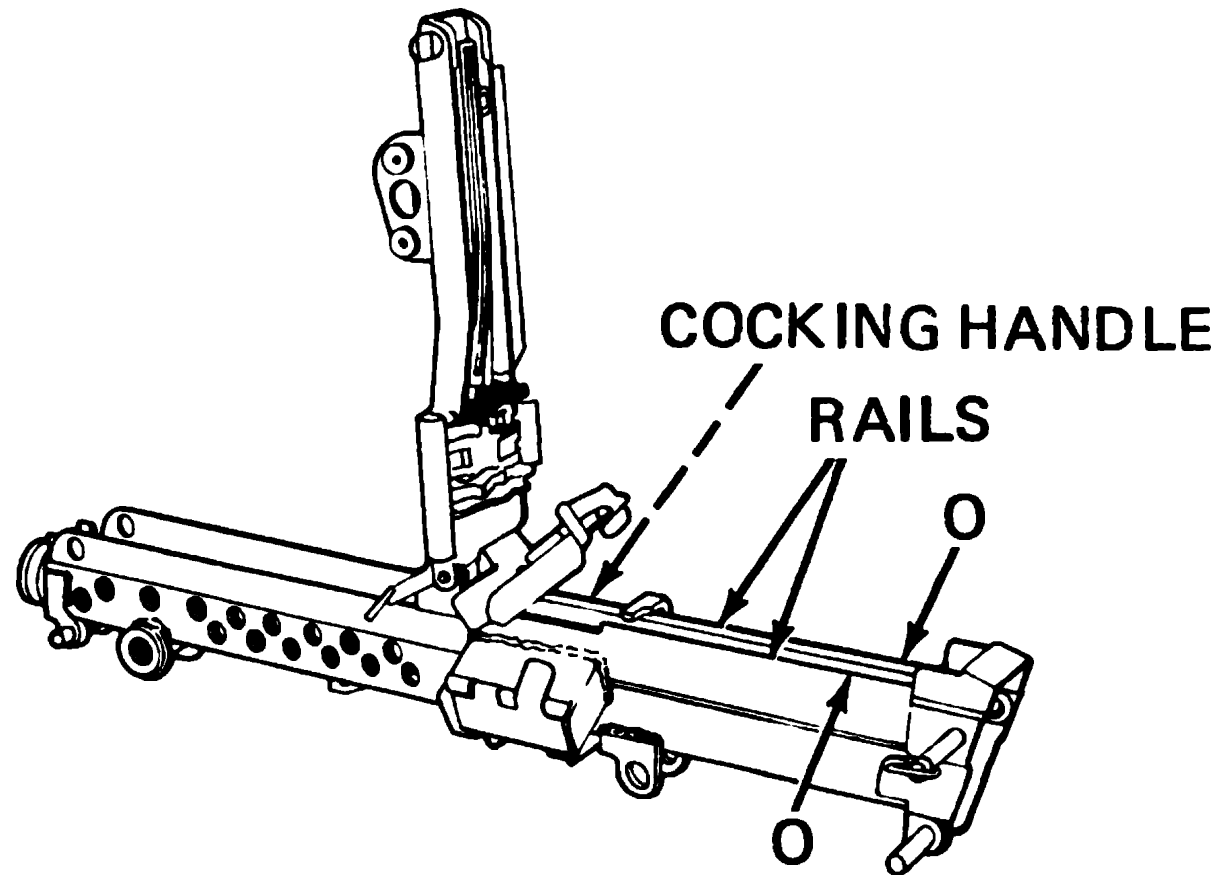
CLEANING, INSPECTION, AND REPAIR (Cont)

3. Inspect for cracks, dents, burrs, or other damage on flash hider, barrel extension, and barrel release. Check front sight for looseness; if loose, notify organizational maintenance.
4. Check cover assembly for smooth operation, spring tension, bent parts, or excessive wear.

*O-Lightly oil moving parts.

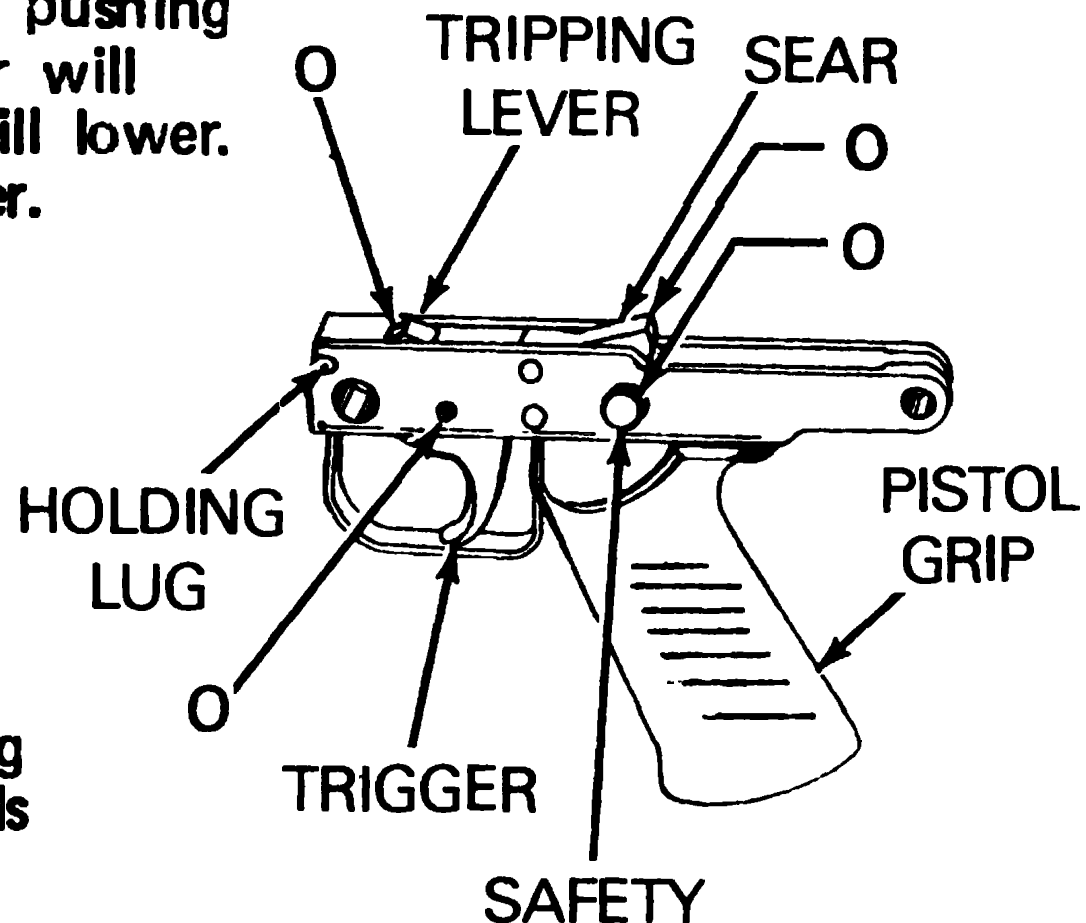


5. Check for bends and cracks, free movement of cocking assembly, and excessively worn, burred, or chipped rails. Check barrel locking latch and cover detent springs for spring tension. Lightly oil all rails.



CLEANING, INSPECTION, AND REPAIR (Cont)

6. Check for broken pistol grip, and chipped or cracked trigger housing holding lug.
7. Check tripping lever and sear for burrs, cracks, chips, and wear.
8. Notify organizational maintenance if problem exists.
9. Check cocking action by pushing back on tripping lever; sear will raise. Pull trigger; sear will lower. Push back on tripping lever.
10. Check safety function. When safety is pushed to right pull trigger; sear will not lower. When safety is pushed to left (red ring visible) pull trigger, sear lowers.
11. ○ Lightly lubricate tripping lever and sear surfaces, ends of trigger pin, safety shaft, and sear pivot pin.

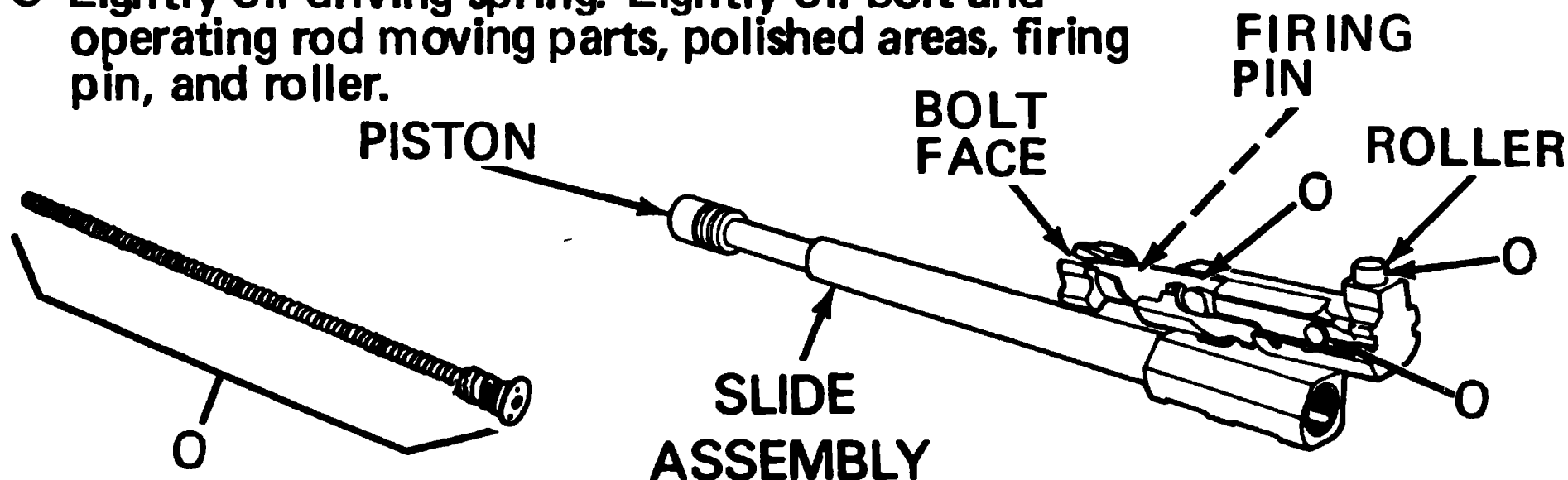


- 12. Check bolt and operating rod for burrs, cracks, broken pins, or frozen roller. Push down on roller to make sure it will retract. Check driving spring for broken strands. Notify organizational maintenance if more than one broken strand is found on same coil or if more than two strands are broken regardless of location on entire spring.**

NOTE

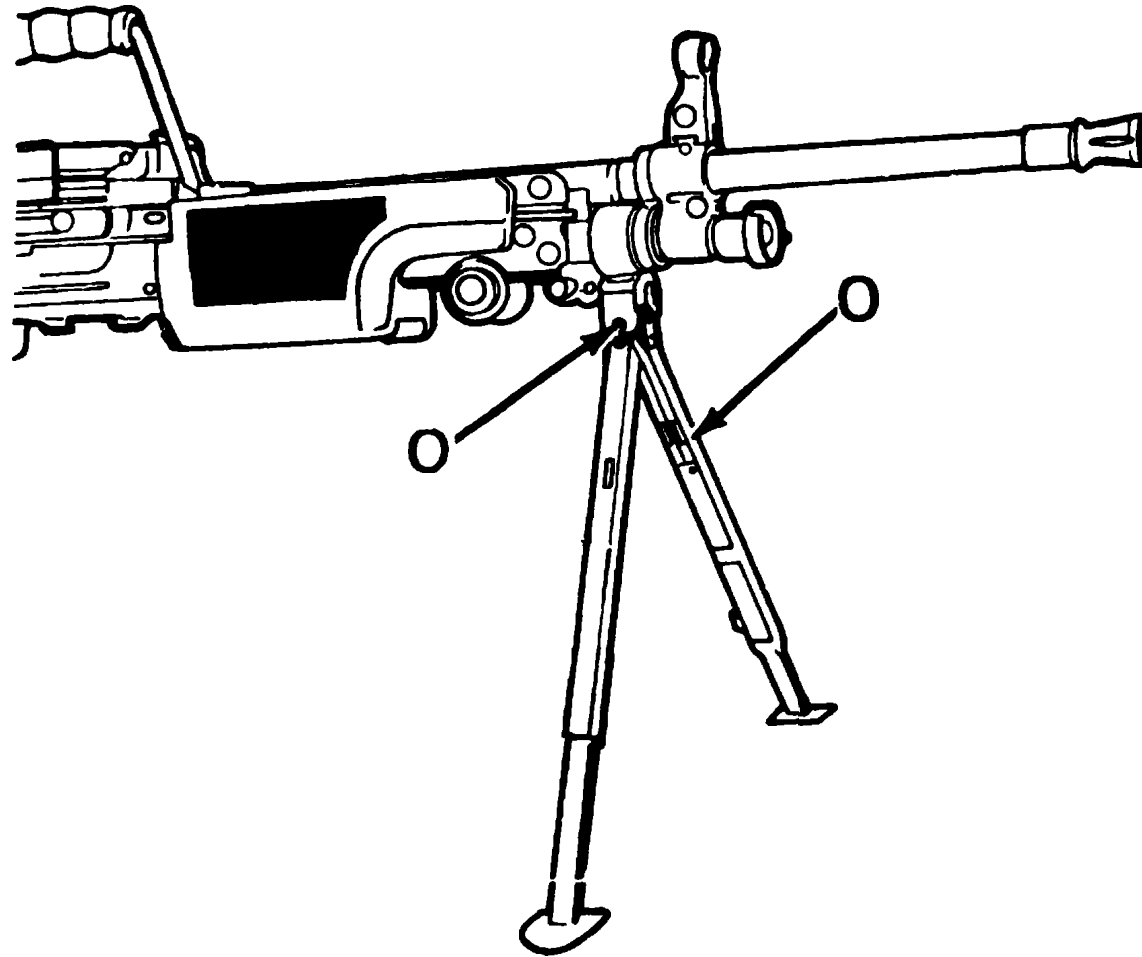
Do not lubricate top or face of bolt. Do not oil piston. Notify organizational maintenance if heavy carbon deposits cannot be removed.

O-Lightly oil driving spring. Lightly oil bolt and operating rod moving parts, polished areas, firing pin, and roller.

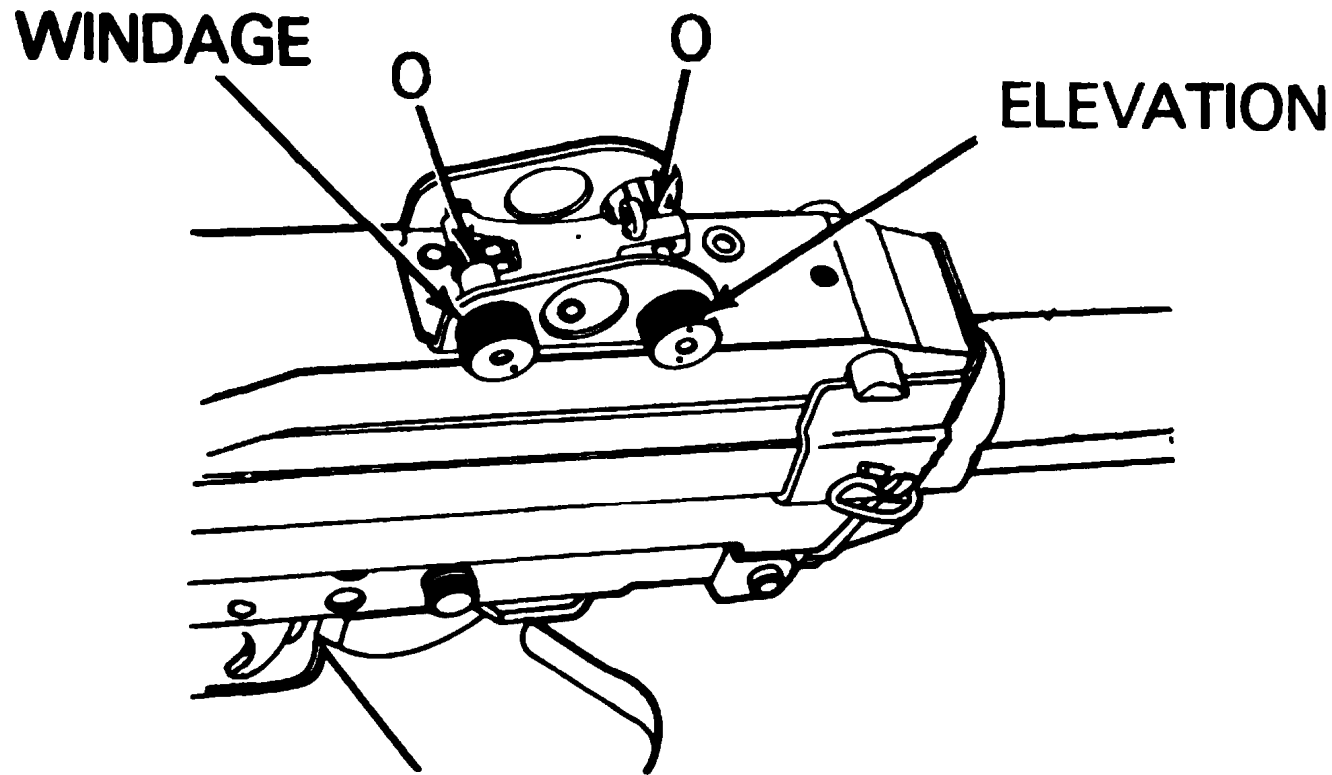


CLEANING, INSPECTION, AND REPAIR (Cont)

13. Clean and check bipod legs for operation; O-lightly lubricate. Notify organizational maintenance if problem exists.



14. Clean and check the rear sight assembly for azimuth and elevation; O-lightly oil (be sure to oil knob detent). If rear sight does not function properly, notify organizational maintenance.

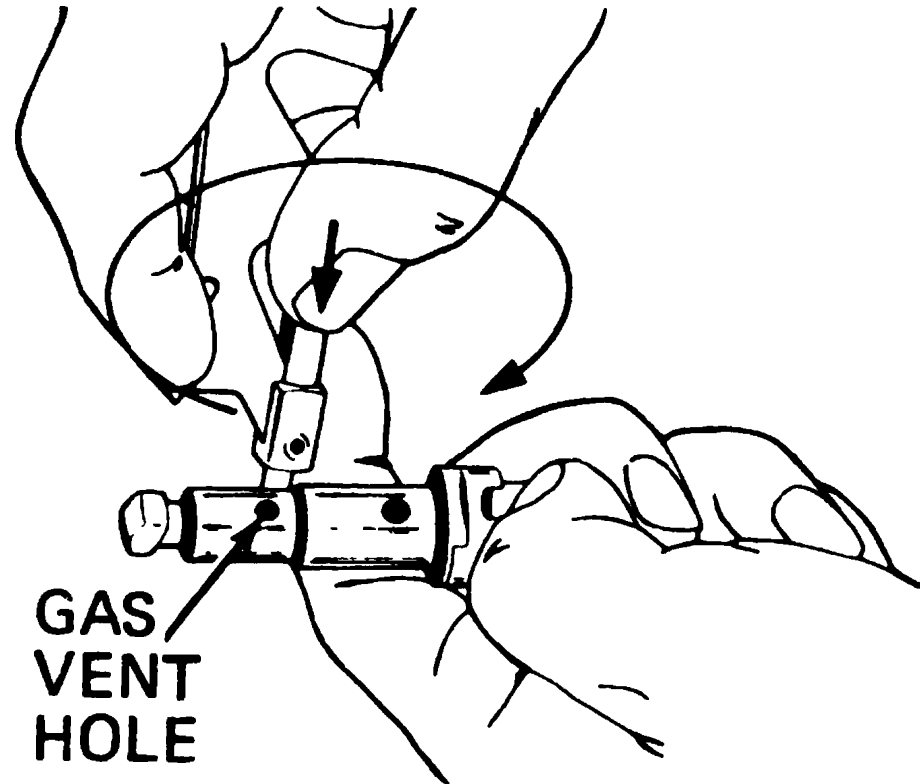


CLEANING, INSPECTION, AND REPAIR (Cont)

REGULATOR

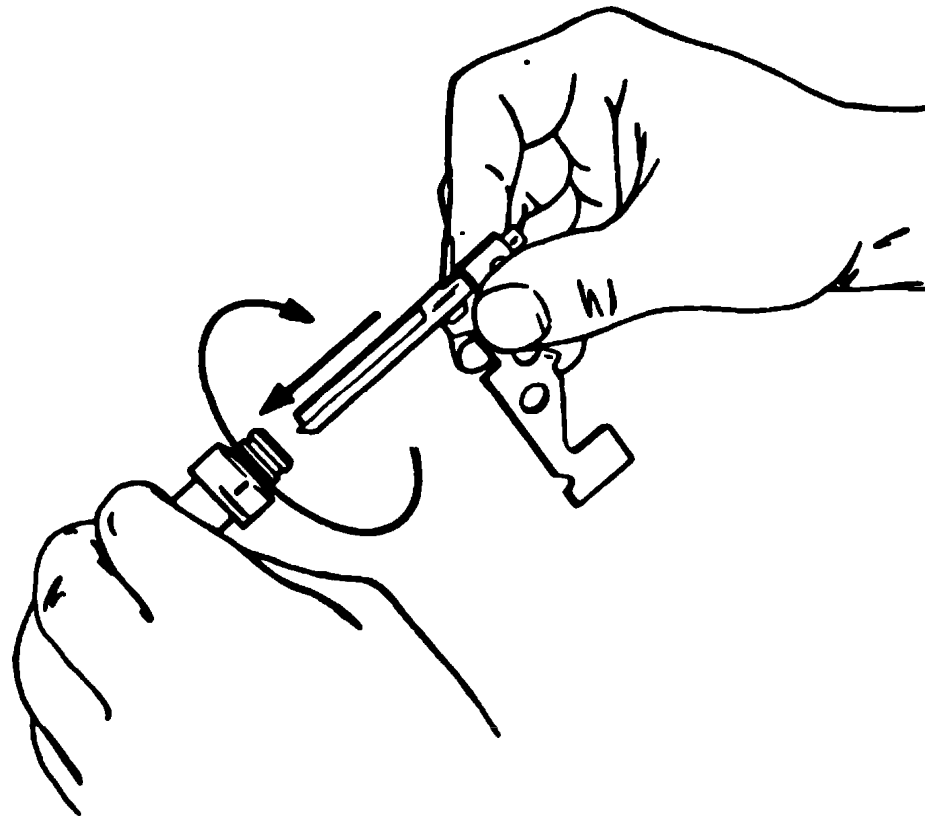
The regulator must be cleaned with the special tool (scraper).

Clean the gas vent hole of the regulator body as indicated.



The regulator body can be heavily fouled and will require more thorough cleaning.

Clean the central hole of the regulator (p 3-24) with the appropriate part of the scraper by turning it clockwise and pushing it inward to the bottom of the housing.

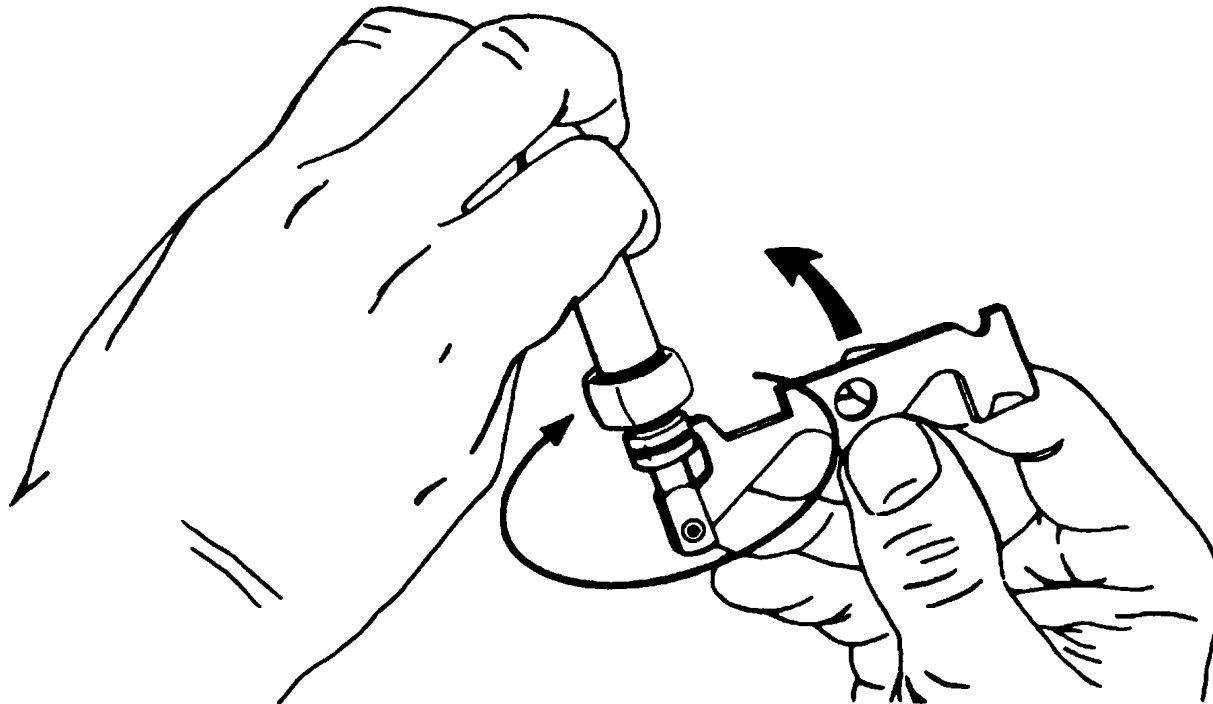


CLEANING, INSPECTION, AND REPAIR (Cont)

REGULATOR (Cont)

Use the protruding tips of the scraper to clean the two grooves of the regulator body.

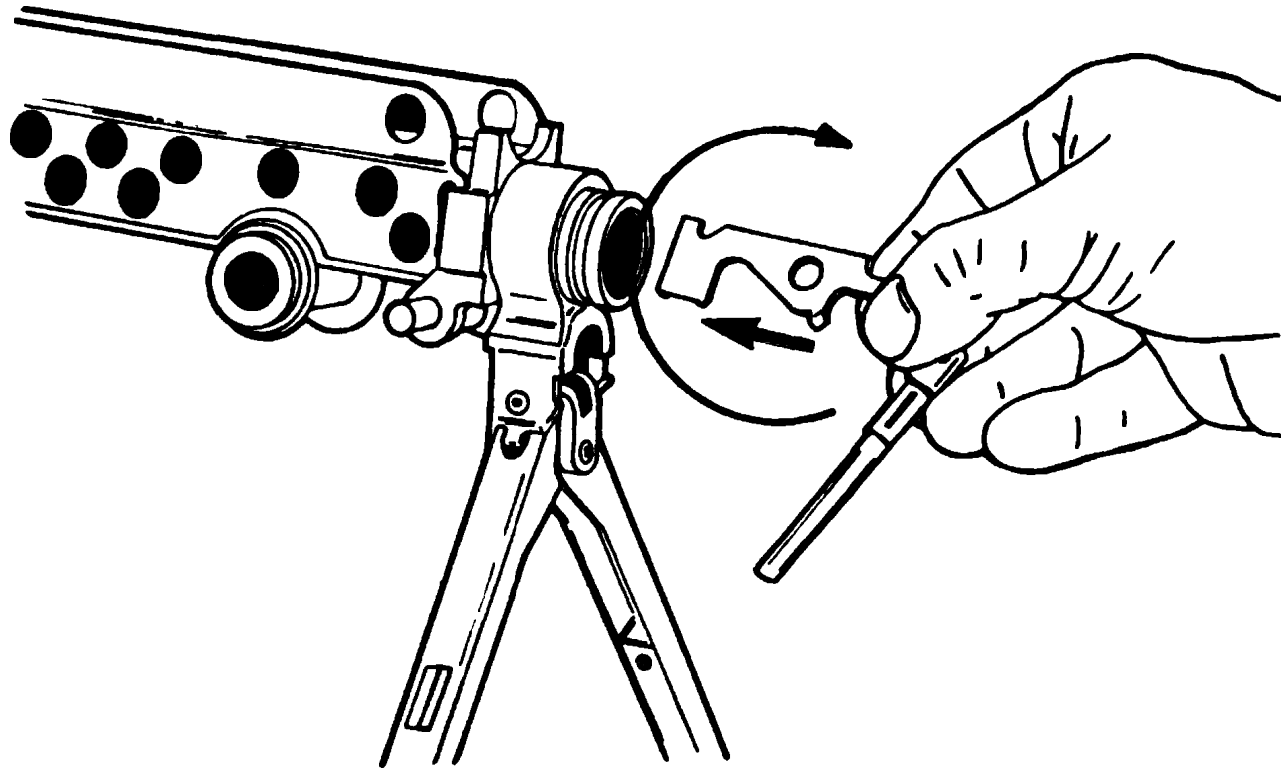
(Typical cleaning of one of two grooves).



The regulator sleeve is generally not heavily fouled and can be easily cleaned with a rag.

GAS CYLINDER AND PISTON

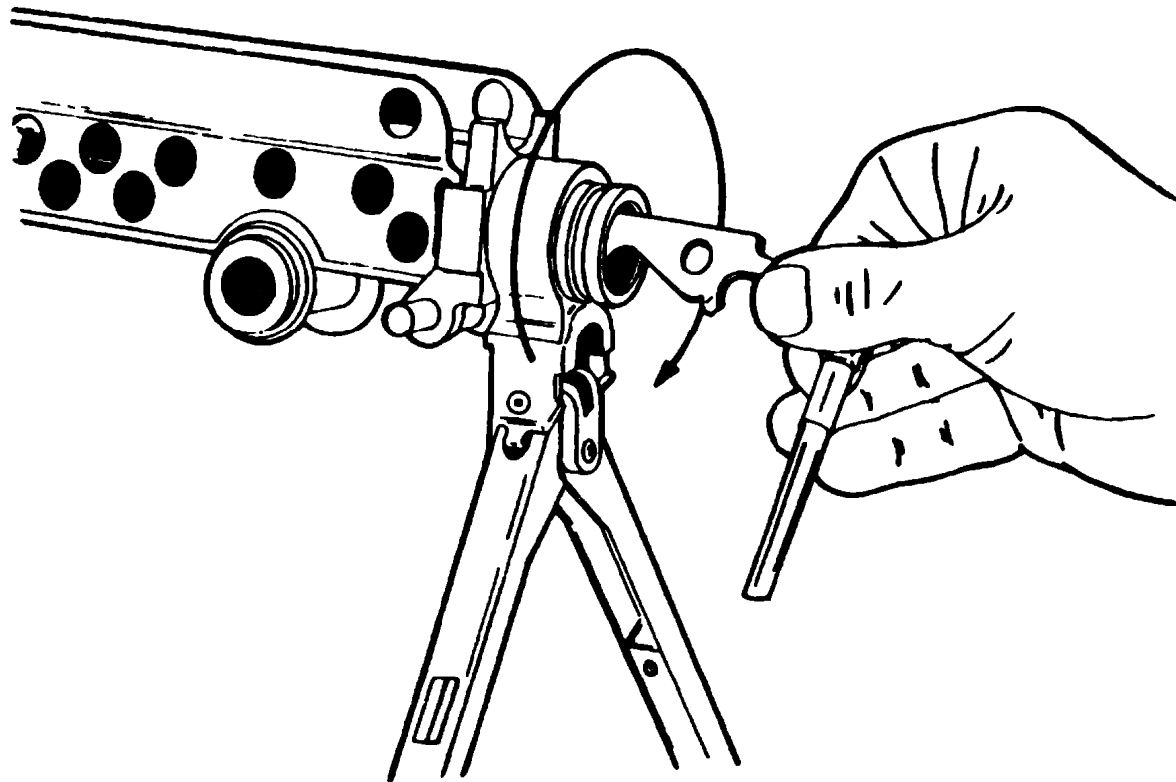
Clean the front of the gas cylinder (internal diameter) by inserting and turning the flat side of the scraper in the hole.



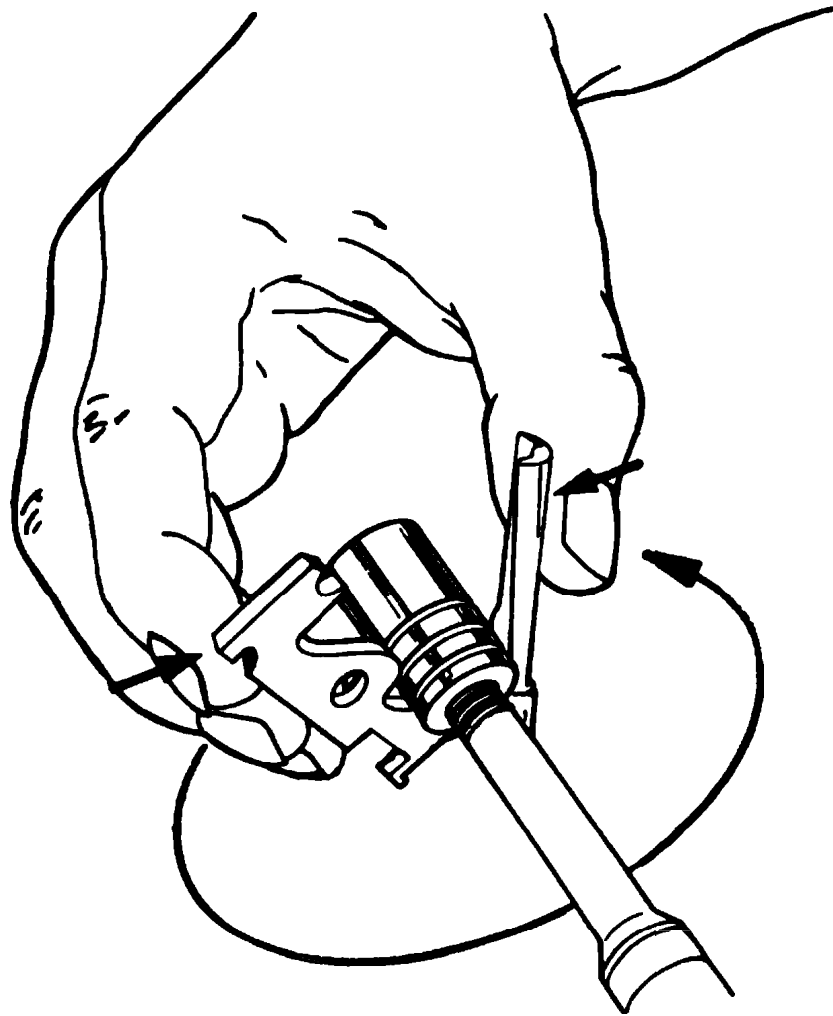
CLEANING, INSPECTION, AND REPAIR (Cont)

GAS CYLINDER AND PISTON (Cont)

Clean the internal grooves of the front side of the gas cylinder using the flat side of the scraper.



The grooves of the piston will be cleaned as shown.

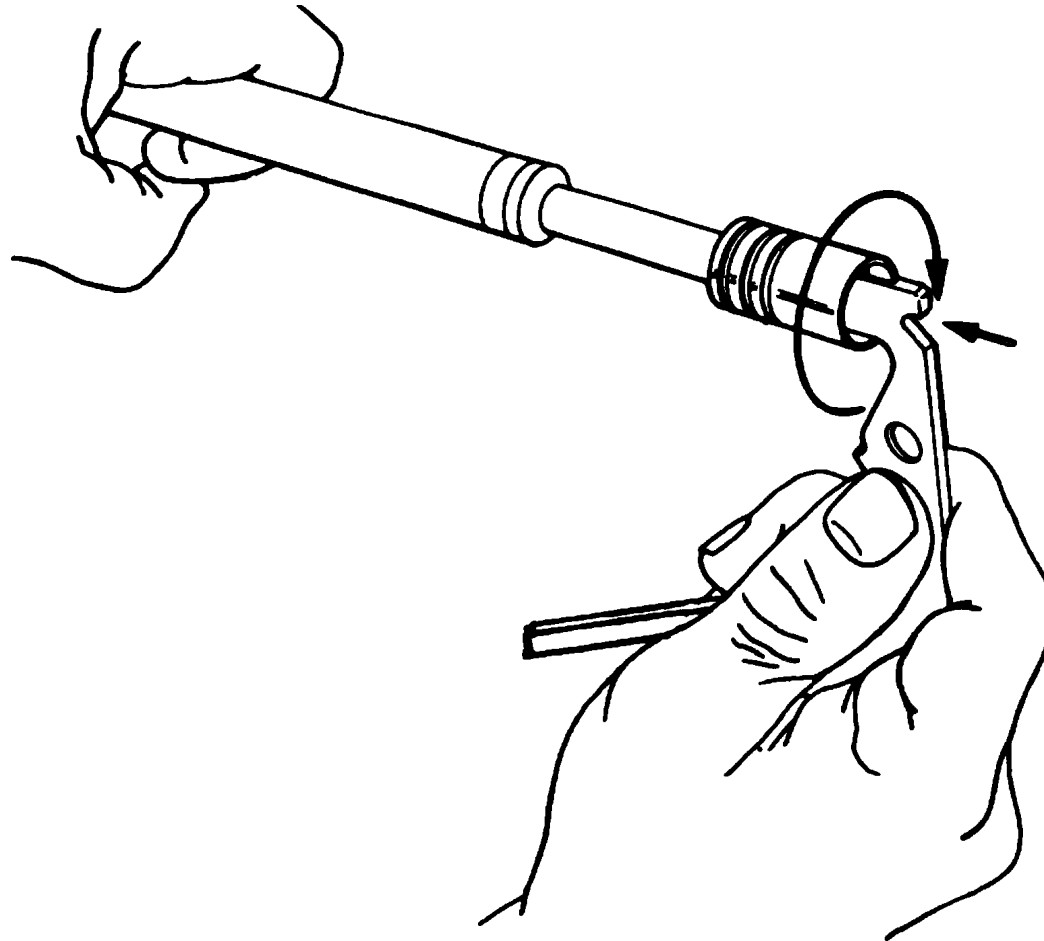


(Typical cleaning of one of three grooves)

CLEANING, INSPECTION, AND REPAIR (Cont)

GAS CYLINDER AND PISTON (Cont)

Clean the hole on the front of piston with the same scraper part as the front hole of the gas cylinder.



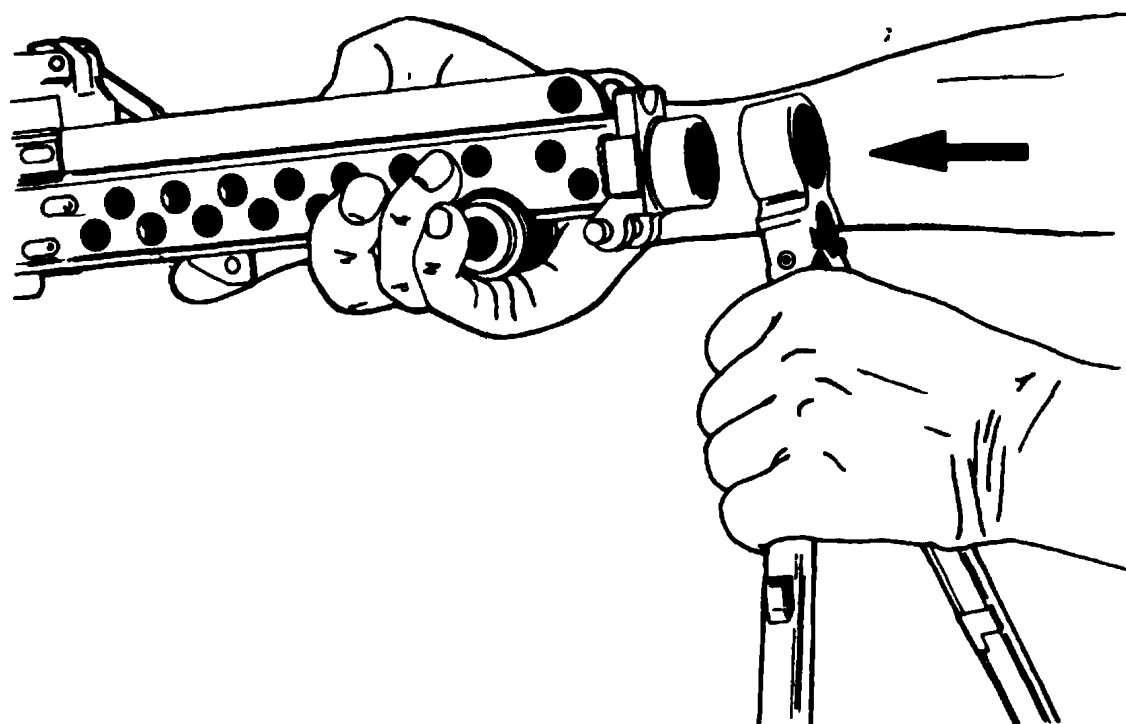
HOW TO PUT IT TOGETHER

BIPOD AND GAS CYLINDER

Place the bipod on the receiver.

NOTE

The receiver and bipod legs should be positioned as shown below.



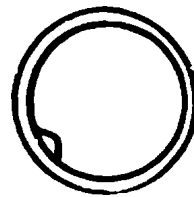
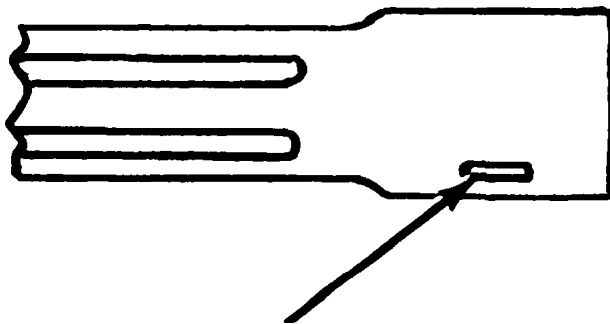
HOW TO PUT IT TOGETHER (Cont)

BIPOD AND GAS CYLINDER (Cont)

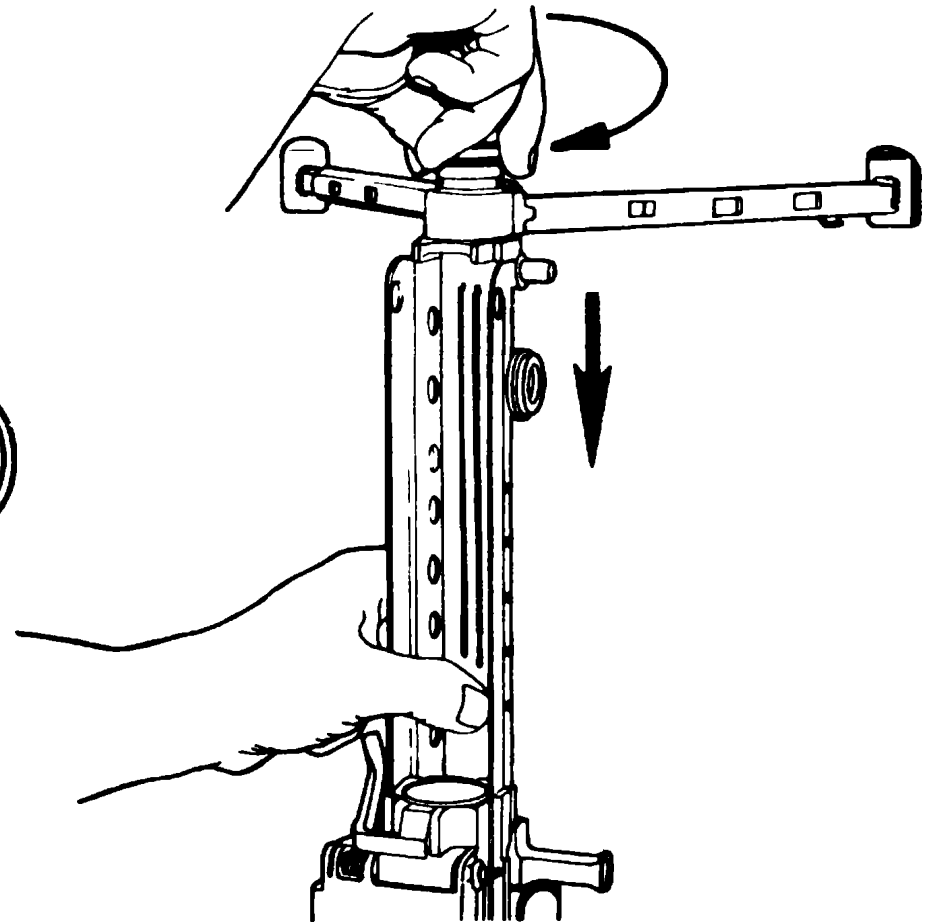
Push the gas cylinder through the bipod yoke into the receiver.

Push the cylinder to the rear while countering the pressure of the locking spring and guiding the end of the cylinder into receiver with the other hand.

Turn the cylinder until the spring clicks into the recess at the rear of the gas cylinder.



Position recess in cylinder near spring.



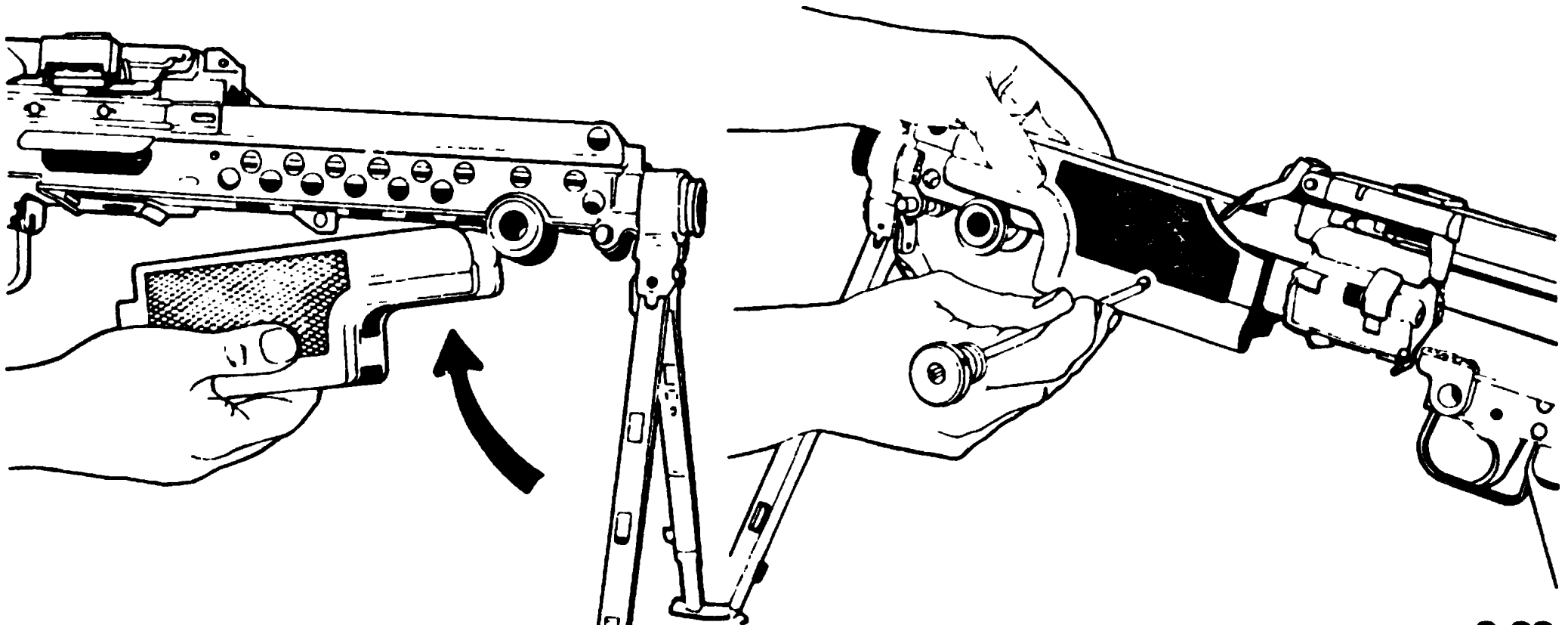
HANDGUARD

Replace all cleaning equipment removed from stowage areas (p 3-44).

Replace the handguard on the receiver and slide it backwards until it stops.

With the help of a cartridge or the spring guide rod push the handguard retaining pin to the right.

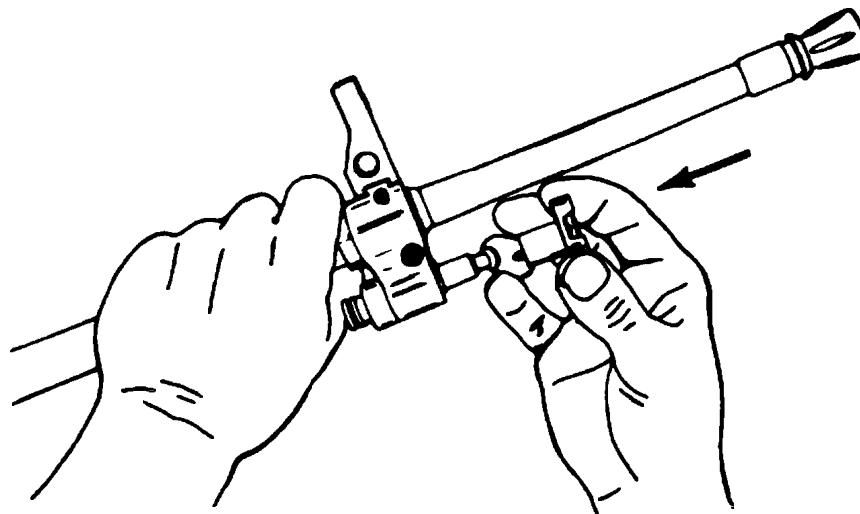
Pull the handguard downward to check that it is assembled correctly.



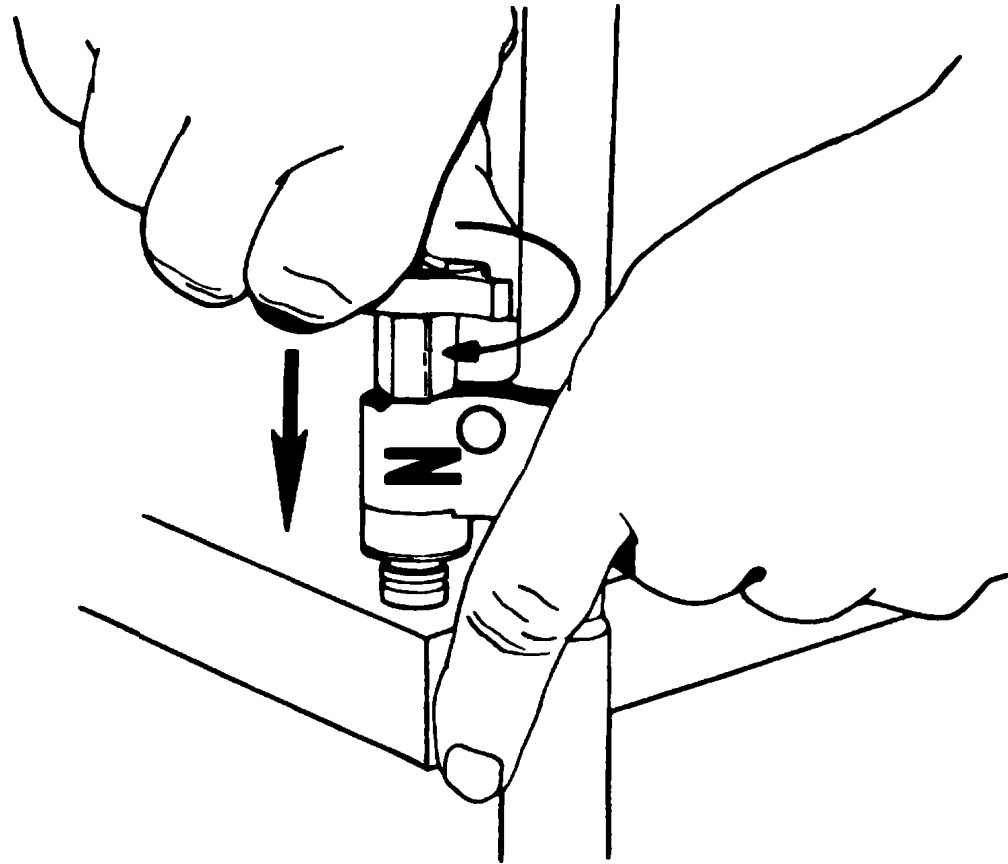
HOW TO PUT IT TOGETHER (Cont)

GAS REGULATOR

Holding barrel in one hand with muzzle up, insert gas regulator body into lower end of gas block hole being careful to align notch in regulator body with notch in gas block.



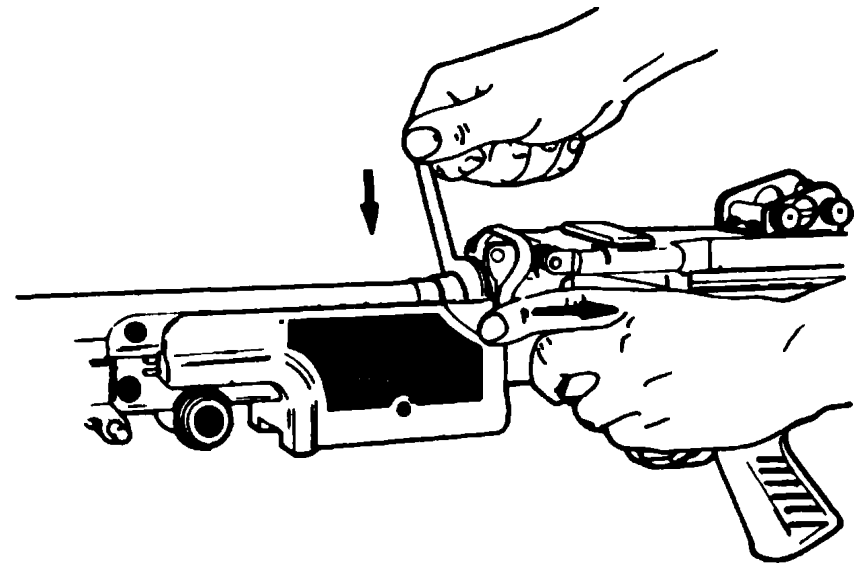
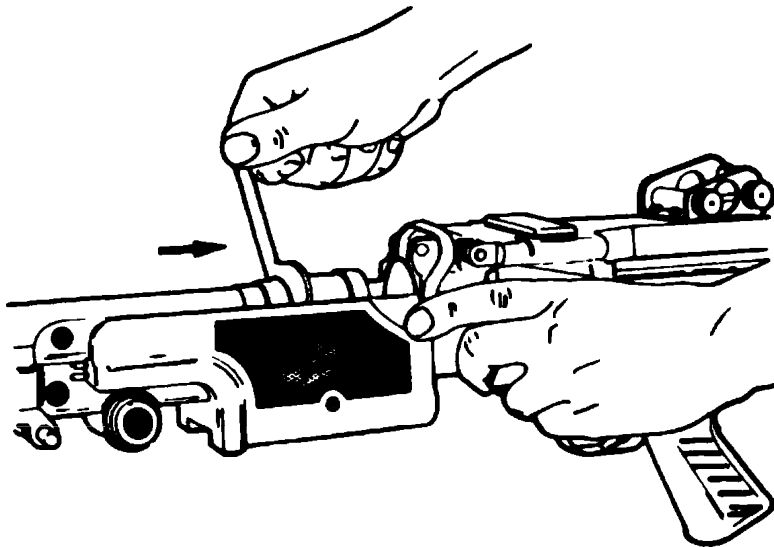
With regulator body installed and supported on firm surface, place the gas collar regulator lever on the protruding end of the body and align spring with stud. Firmly push downward and rotate the collar clockwise into the "N" position.



HOW TO PUT IT TOGETHER (Cont)

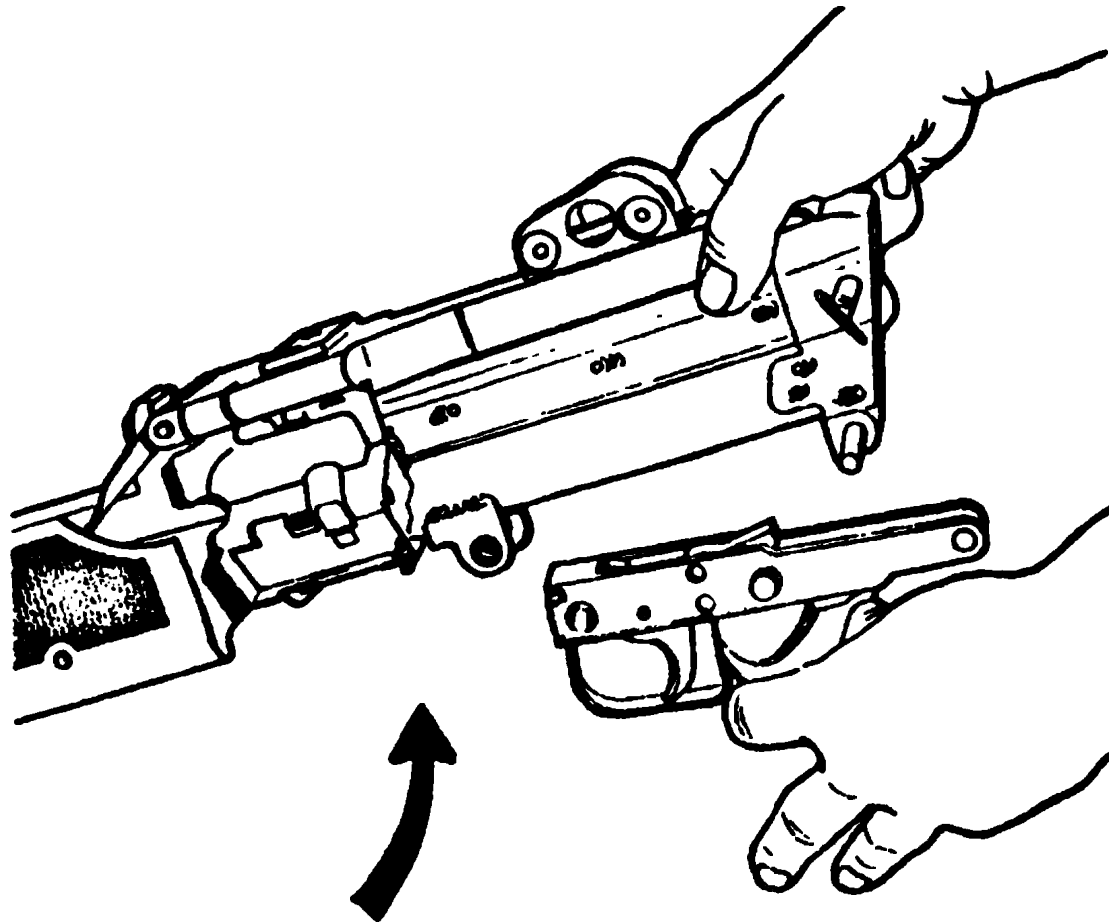
BARREL

Depress the locking lever of the barrel backward with left hand. Holding the carrying handle with the right hand, pull the barrel rearward, push downward and lock by releasing locking lever.



TRIGGER MECHANISM

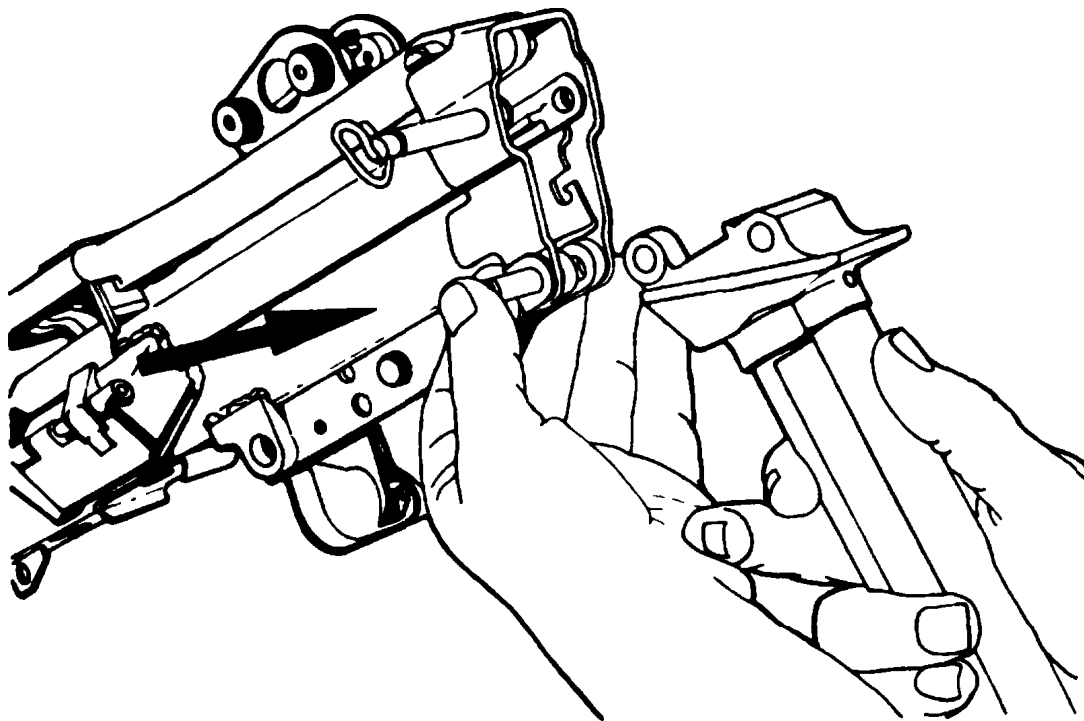
Push retaining pins to the left. Install trigger mechanism.



HOW TO PUT IT TOGETHER (Cont)

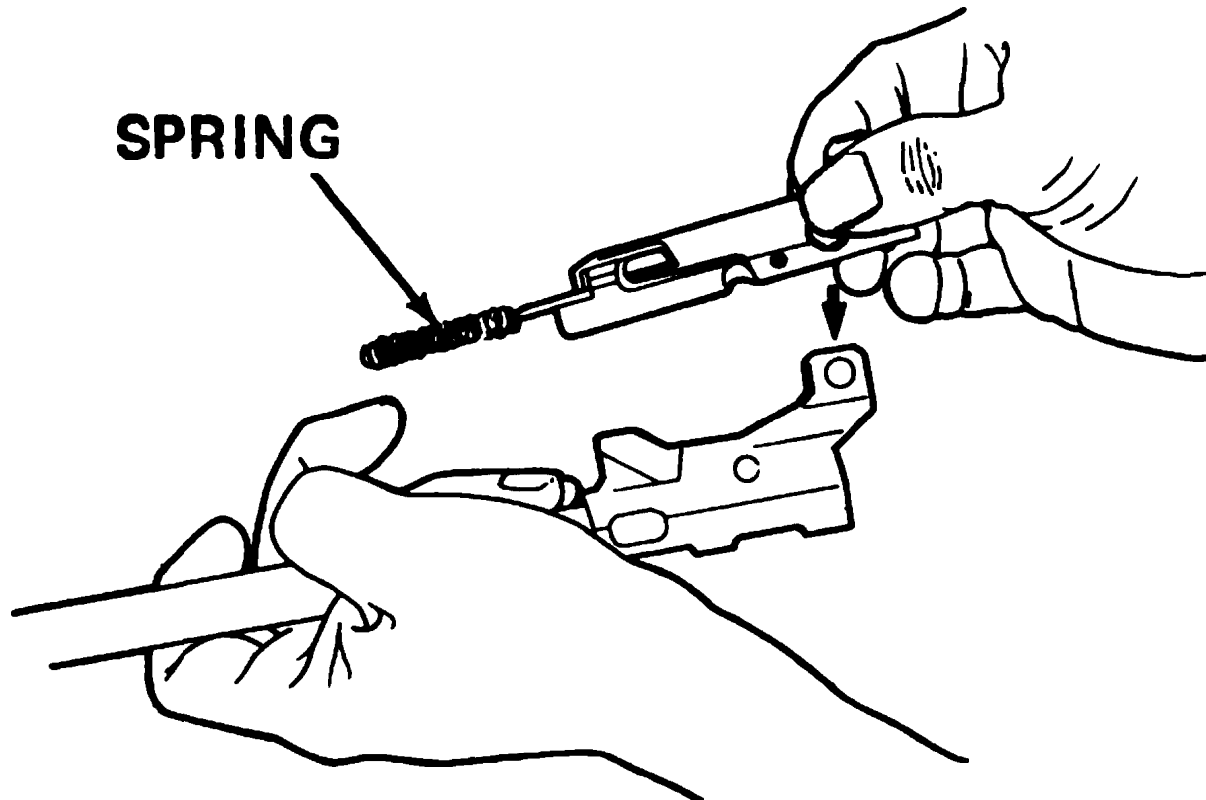
BUTT STOCK AND SHOULDER ASSEMBLY

Align lower hole in butt stock and shoulder assembly with rear hole in trigger mechanism and push lower pin to right.



MOVING PARTS MECHANISM

Assemble the bolt carrier (slide) to the piston, and secure by pushing retaining pin from left to right. Place the spring on the firing pin.



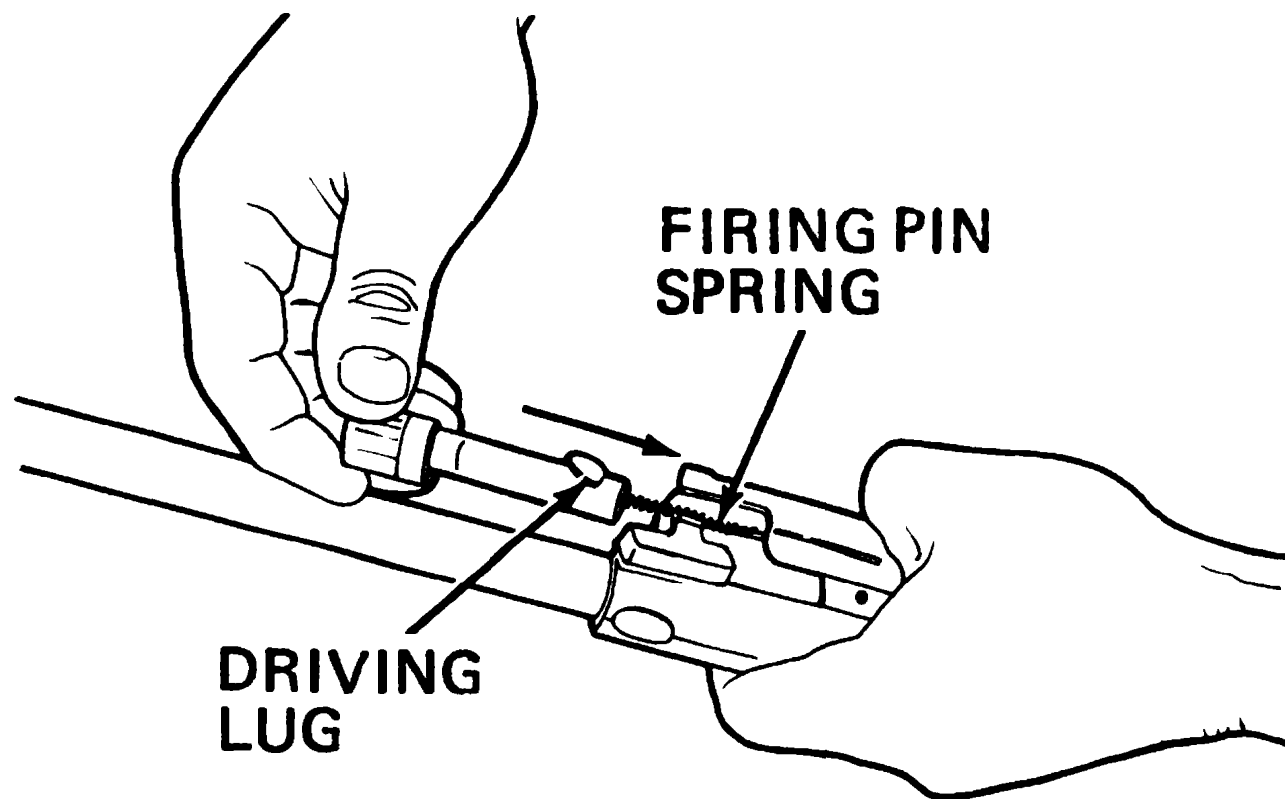
HOW TO PUT IT TOGETHER (Cont)

MOVING PARTS (Cont)

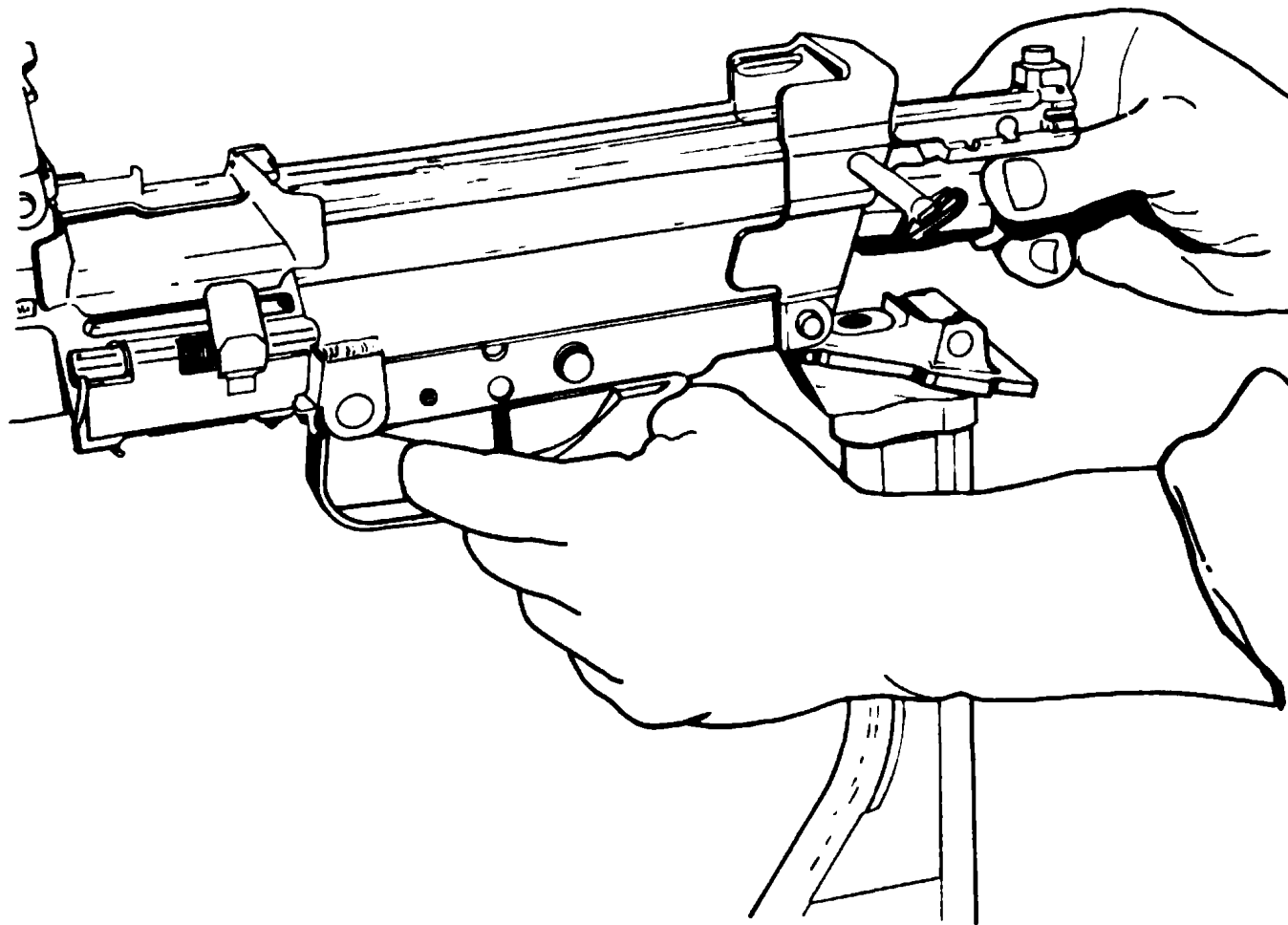
NOTE

Be sure firing pin spring is on firing pin.

Put the bolt into the bolt carrier (slide), pressing in order to compress the firing pin spring. Rotate the bolt and hook its driving lug into the bolt carrier (slide).



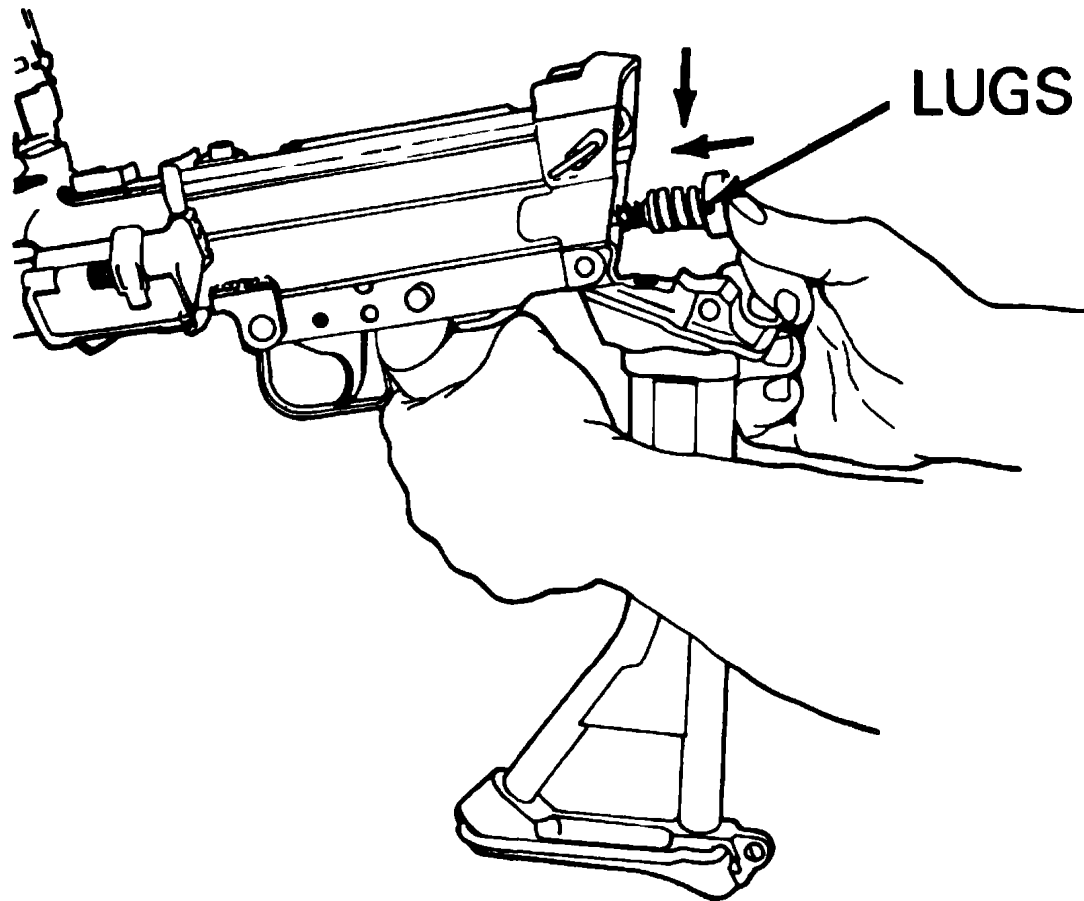
Put the moving parts into the receiver with the feed cover open. Locate the bolt lugs carefully in the rails. At the same time locate the piston into the rear of the gas cylinder. Press the trigger with the forefinger of the other hand so that the sear does not prevent the moving parts from going forward.



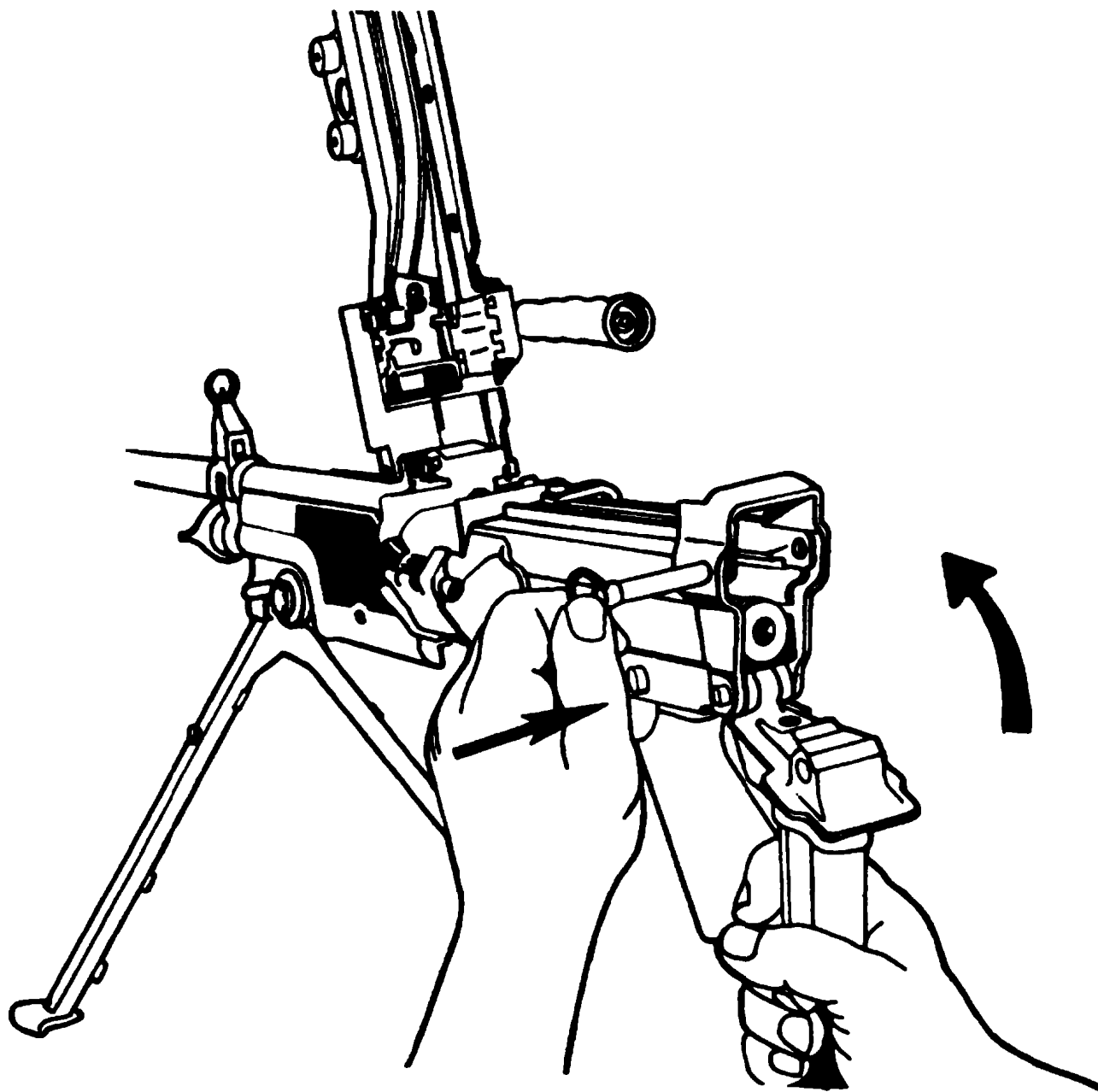
HOW TO PUT IT TOGETHER (Cont)

OPERATING ROD ASSEMBLY

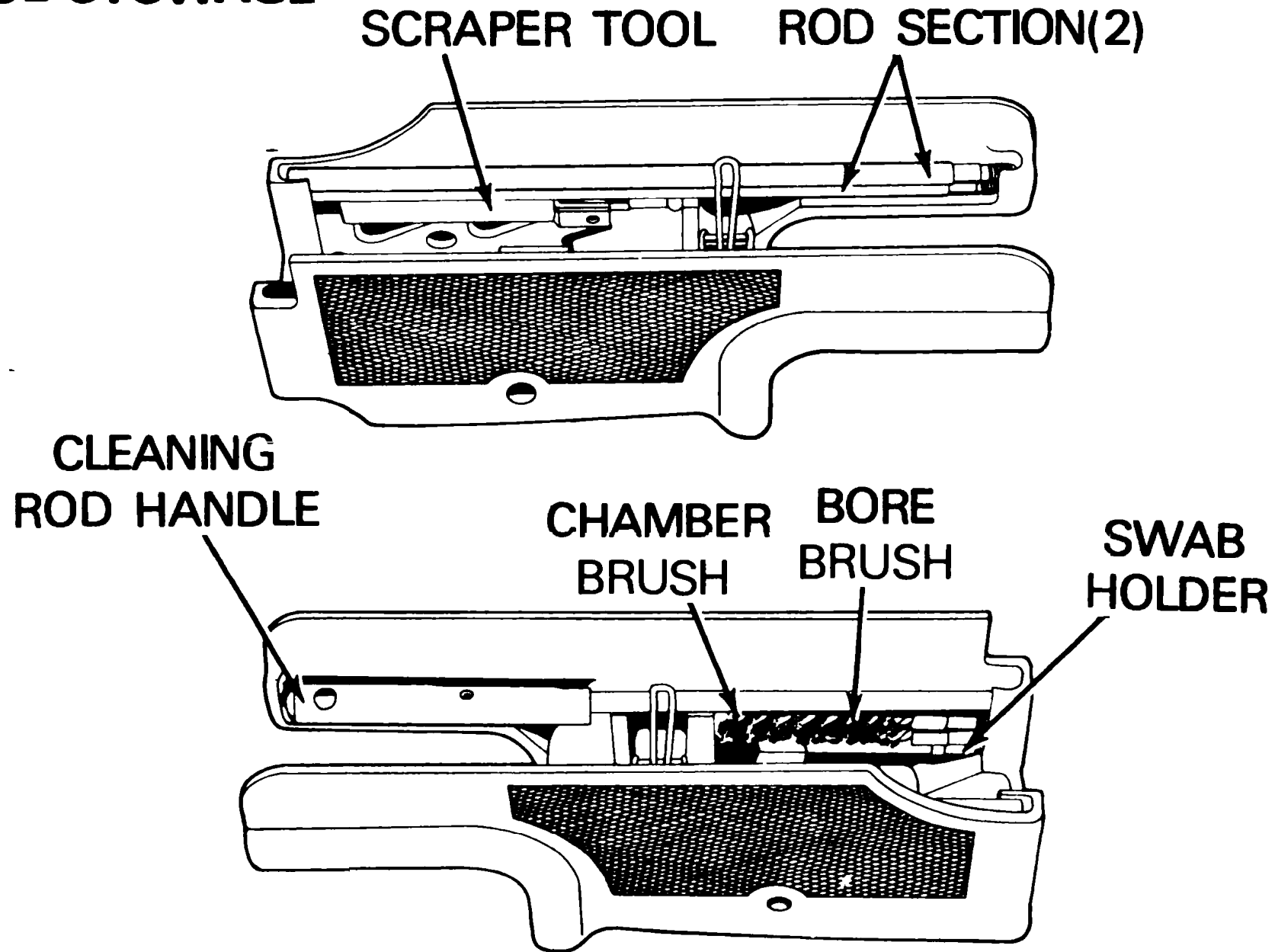
Hold the pistol grip with one hand and push the operating rod assembly into its housing in the rear of the piston with the other. With the thumb of that hand, press in and down on the rear of the operating rod assembly until its two lugs are positioned in the receiver grooves.



Pivot the butt upward into position and push the retaining pin to the right; close the cover assembly.



TOOL STOWAGE



3-44 / 3-45 BLANK

CHAPTER 4

AMMUNITION

WARNING

DO NOT FIRE.....

Seriously corroded ammunition

Dented cartridges

Cartridges with loose bullets

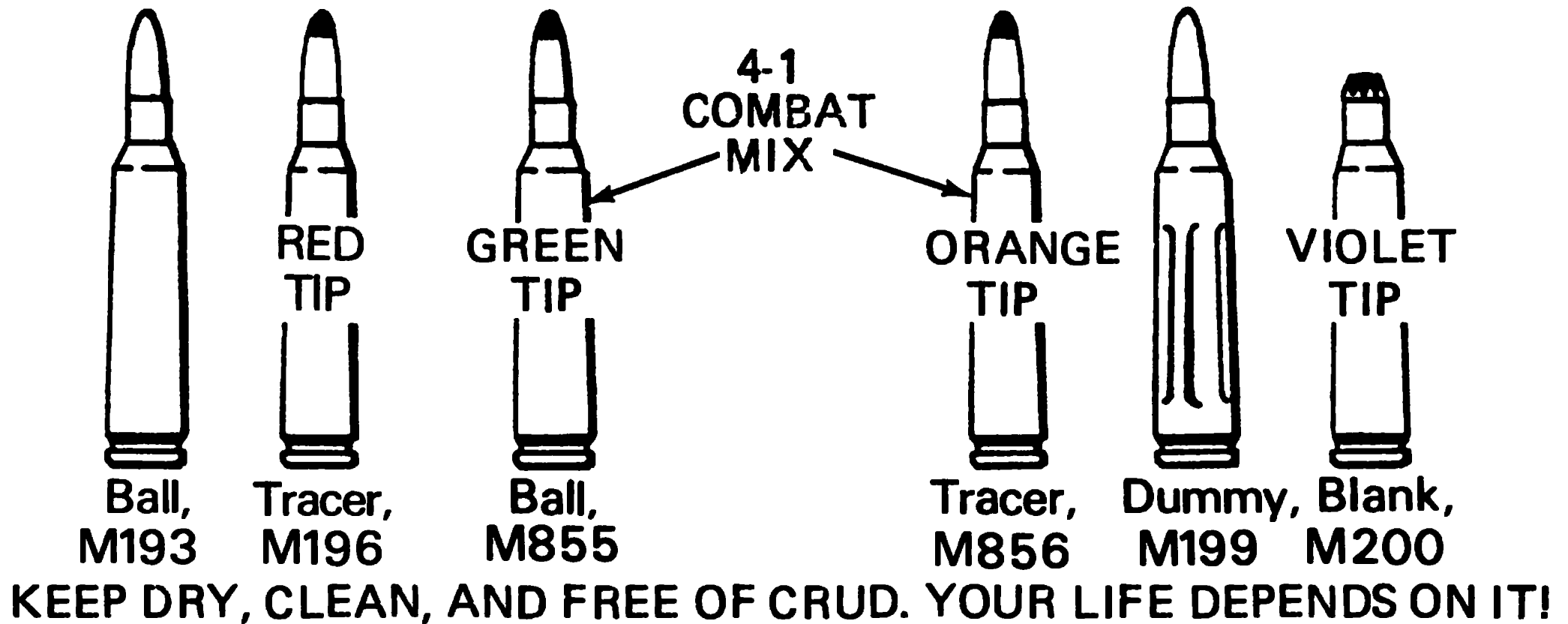
Cartridges exposed to extreme heat (135°F) until they have cooled

Cartridges with pushed in (short) bullets.

NOTE

**If ammunition is wet or dirty, wipe it off with a dry rag prior to use.
Do not lubricate.**

Use only authorized ammo that is manufactured to US specs.



WARNING

Safety in Firing Blank Cartridges

Blank Ammunition should not be fired toward personnel within 20 feet or less from the muzzle, because fragments of a closure wad or particles of unburned propellant might inflict injury within that range.

APPENDIX A

REFERENCES

TM 9-107	Operation and Maintenance of Ordnance Material in Cold Weather
TM 38-750	The Army Maintenance Management System (TAMMS)
TM 9-1005-201-23&P	Org & Dir Spt Maint w/RPSTL
FM 21-11	First Aid for Soldiers
FM 31-70	Basic Cold Weather Manual
FM 31-71	Northern Operations
FM 90-3	Desert Operations

APPENDIX B

COMPONENTS OF END ITEM AND BASIC ISSUE ITEMS LIST

Section 1. INTRODUCTION

SCOPE. This appendix lists components of end item for the machine gun to help you inventory items required for safe and effective operation.

GENERAL. The components of the End Item and Basic Issue Items List are divided into the following sections:

Section I Components of End Item. This listing is for informational purposes only and is not authority to requisition replacements. These items are part of the end item, but are removed and separately packaged for transportation or shipment. As part of the end item, these items must be with the end item, whenever it is issued or transferred between property accounts. The illustration will assist you in identifying the item.

Section II. Basic Issue Items. There are no basic issue items.

EXPLANATION OF COLUMNS

The following provides an explanation of columns found in the tabular listing:

Column (1) - Illustration Number (Illus No.). This column indicates the number of the illustration in which the item is shown.

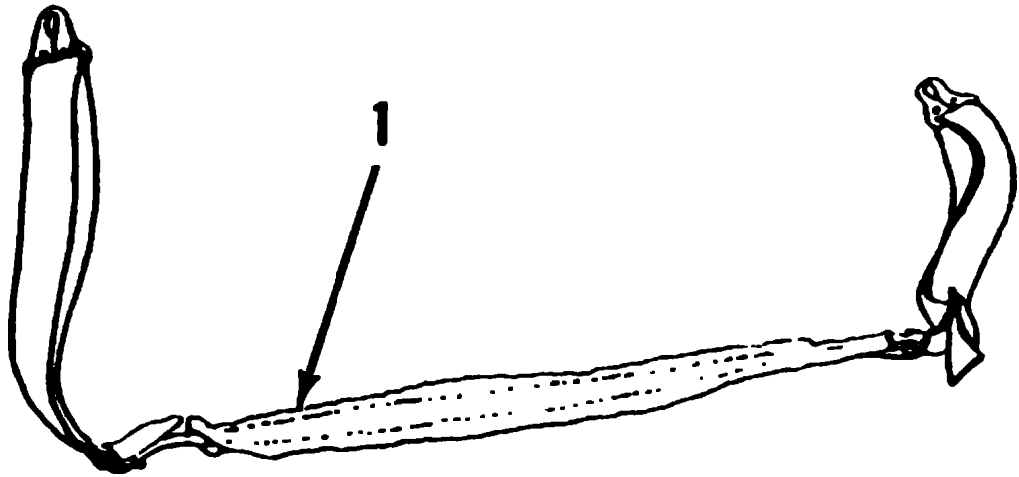
Column (2) - National Stock Number. Indicates the National stock number assigned to the item and will be used for requisitioning purposes.

Column (3) - Description. Indicates the Federal item name and, if required, a minimum description to identify and locate the item. The last line for each item indicates the FSCM (in parentheses) followed by the part number.

Column (4) - Unit of Measure (U/M). Indicates the measure used in performing the actual operational/maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in., pr).

Column (5) - Quantity required (Qty rqr). Indicates the quantity of the item authorized to be used with/on the equipment.

Section II. COMPONENTS OF END ITEM

(1) ILLUS No.	(2) NATIONAL STOCK No.	(3) DESCRIPTION FSCM & PART No.	(4) U/M	(5) QTY RQR
1	1005-01-131-1913	SLING AND SNAP HOOKS ASSEMBLY (19200) 9348467 	EA	1

B-3/B-4 BLANK

APPENDIX C

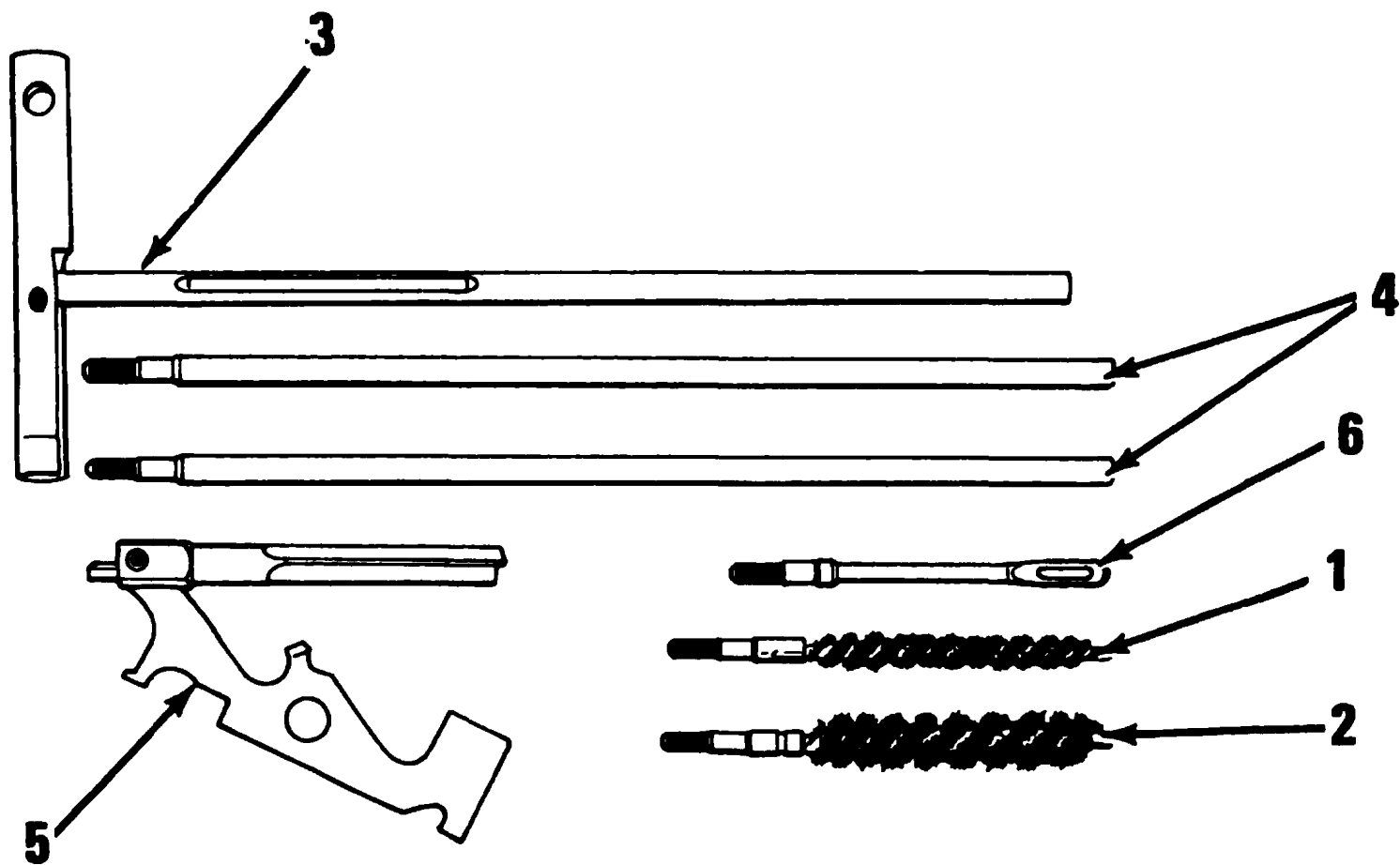
ADDITIONAL AUTHORIZATION LIST

Section I. INTRODUCTION

SCOPE. This appendix lists additional items you are authorized for the support of the machine gun.

GENERAL. This list identifies items that do not have to accompany the machine gun and that do not have to be turned in with it. These items are all authorized to you by CTA, MTOE, TDA, or JTA.

EXPLANATION OF LISTING. National stock numbers, descriptions, and quantities are provided to help you identify and request the additional items you require to support this equipment. The items are listed in alphabetical sequence by item name under the type document (i.e., CTA, MTOE, TDA, or JTA) which authorizes the item(s) to you.



Section II. ADDITIONAL AUTHORIZATION LIST

(1)	(2)	(3)	(4)	(5)
ILLUS No.	NATIONAL STOCK No.	DESCRIPTION FSCM & PART No.	U/M	QTY AUTH
1	1005-00-903-1296	BRUSH,CLEANING,SMALL ARMS BORE (19204) 11686340	EA	1
2	1005-01-131-2121	BRUSH,CLEANING,SMALL ARMS CHAMBER (19200) 9348462	EA	1
3	1005-01-113-0321	HANDLE ASSEMBLY (19204) 8436776	EA	1
4	1005-00-050-6357	ROD SECTION,SMALL ARMS (19204) 8436775	EA	2

(1) ILLUS No.	(2) NATIONAL STOCK No.	(3) DESCRIPTION FSCM & PART No.	(4) U/M	(5) QTY AUTH
5	1005-01-131-1914	SCRAPER ASSEMBLY (19200) 9348463	EA	1
6	1005 00-937-2250	SWAB HOLDER SECTION, SMALL ARMS (19204) 11686327	EA	1

APPENDIX D

EXPENDABLE SUPPLIES AND MATERIALS LIST

Section I. INTRODUCTION

SCOPE. This appendix lists expendable supplies and materials you will need to operate and maintain the machine gun. These items are authorized to you by CTA 50-970. Expendable Items (Except Medical, Class V, Repair Parts, and Heraldic Items).

EXPLANATION OF COLUMNS.

Column (1) - Item Number. This number is assigned to the entry in the listing and is referenced in the narrative instructions to identify the material (e.g., "Use cleaning compound, item 2, app D").

Column (2) - Level. This column identifies the lowest level of maintenance that requires the listed items.

C - OPERATOR/CREW

Column (3) - National Stock Number. This is the National stock number assigned to the item: use it to request or requisition the item.

Column (4) - Description FSCM & PART Number. Indicates the Federal item name and, if required, a description to identify the item. The last line for each item indicates the Federal Supply Code to Manufacturer (FSCM) in parentheses followed by the part number.

Column (5) - Unit of Measure (U/M). Indicates the measure used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in, pr). If the unit of measure differs from the unit of issue, requisition the lowest unit of issue that will satisfy your requirements.

Section II. EXPENDABLE SUPPLIES AND MATERIALS LIST

(1) ITEM No.	(2) LEVEL	(3) NATIONAL STOCK No.	(4) DESCRIPTION FSCM & PART No.	(5) U/M
1	C	9150-01-079-6124	CLEANER,LUBRICANT AND PRESERVATIVE Grade 2 (27412) CLP-4 1/2 oz btl	EA
2	C	7920-00-205-1711	RAG,WIPING: Cotton (58536) A-A-351 50 lb. bdl	EA
3	C	1005-00-912-4248	SWAB,SMALL ARMS CLEANING: COTTON (19204) 11686408 1 Pkg (1000 per pkg)	EA

D-3/D-4 BLANK

By Order of the Secretary of the Army:

Official:

JOHN A. WICKHAM, JR.
General, United States Army
Chief of Staff

ROBERT M. JOYCE
Major General, United States Army
The Adjutant General

H. A. HATCH
Lieutenant General, USMC
Deputy Chief of Staff for Installations and Logistics

Distribution:

To be distributed in accordance with DA Form 12-40A, Operator Maintenance requirements for Gun, Machine, 5.56MM, M249.