

OPERATOR'S MANUAL



M16A1 RIFLE

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TM 9-1005-249-10

APRIL 1977

TM 9-1005-249-10

C1

HEADQUARTERS

DEPARTMENT OF THE ARMY

WASHINGTON, DC *20 March 1979*

CHANGE }
NO. 1 }

OPERATOR'S MANUAL M16A1 RIFLE

TM 9-1005-249-10, April 1977, is changed as follows:

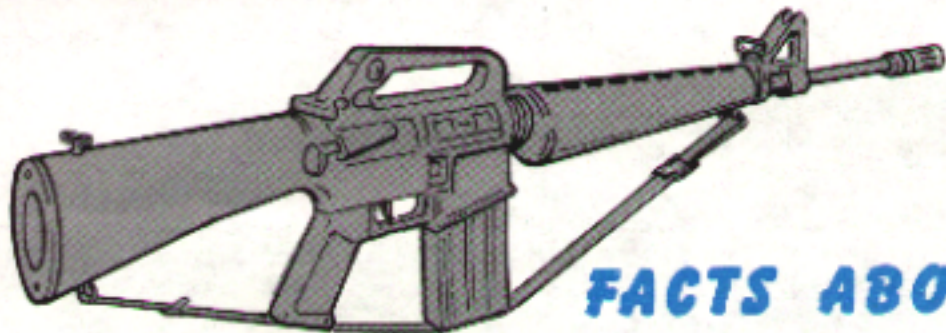
WARNING

DANGEROUS PROCEDURES

- Be sure the cam pin is installed in the bolt group. If it isn't, your rifle can still fire, but it could possibly explode, causing you harm.
- If you're using the blank ammo attachment, don't use any other ammo except the blank round, M200.
- DO NOT exchange or switch bolt assemblies from one M16A1 to another...It could cause damage to both you and the rifle.
- If your rifle stops firing with a live round in the chamber of a hot barrel, remove the round fast. However, during training, if you cannot remove it within 10 seconds, wait 15 minutes with the rifle pointing in a safe direction. This way you won't get hurt by a possible ammo cook-off, which could happen 10 seconds after contact with a hot chamber.
- Use only authorized ammo that is manufactured to U.S. specs.

- If your bolt fails to unlock and you try to free it by banging the butt stock on the ground, keep yourself clear of the muzzle.
- If there's water in the barrel, don't fire the rifle. It could explode.
- If a noticeable difference in sound or recoil is experienced, STOP FIRING. Either condition could indicate an incomplete propellant burn and a bullet still in the bore. Retract bolt slowly and remove fired cartridge case. Clear weapon and check for unburned powder grains in the receiver or bore and for a bullet in the bore. Remove unburned propellant or bullet from bore before resuming firing, or barrel could explode. If bullet is lodged in bore, turn in rifle to direct support maintenance.

IF YOU GO BY ALL THE INSTRUCTIONS IN THIS BOOK, AND PERFORM PREVENTIVE MAINTENANCE (PM), YOUR M16A1 RIFLE WILL SHOOT, AND SHOOT AND SHOOT. IF YOU'VE DONE YOUR PART AND IT STOPS SHOOTING, TAKE YOUR M16A1 RIFLE TO YOUR SERGEANT. HE HAS THE ANSWERS.



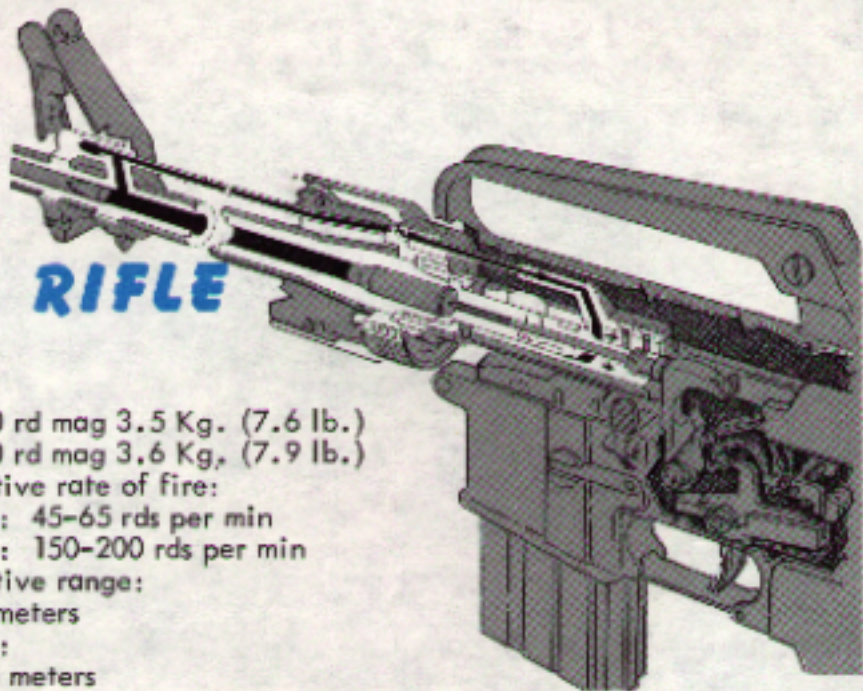
FACTS ABOUT

The M16A1 rifle system consists of a rifle, one magazine and a sling. It is a lightweight, gas operated, air cooled, magazine fed, shoulder fired weapon that can be fired either automatic or semi-automatic.

Other features:

- The barrel assembly has an adjustable sight and a flash suppressor.
- Upper and lower receivers are easily opened for cleaning and inspection.
- Bolt group and barrel extension designed with locking lugs that lock bolt group to barrel extension.
- An aluminum receiver reduces the weight of the rifle.
- Some rifles are equipped with the Low Light Level Sight to increase effectiveness during periods of limited visibility.

YOUR RIFLE



Weight:

w/20 rd mag 3.5 Kg. (7.6 lb.)

w/30 rd mag 3.6 Kg. (7.9 lb.)

Max effective rate of fire:

Semi: 45-65 rds per min

Auto: 150-200 rds per min

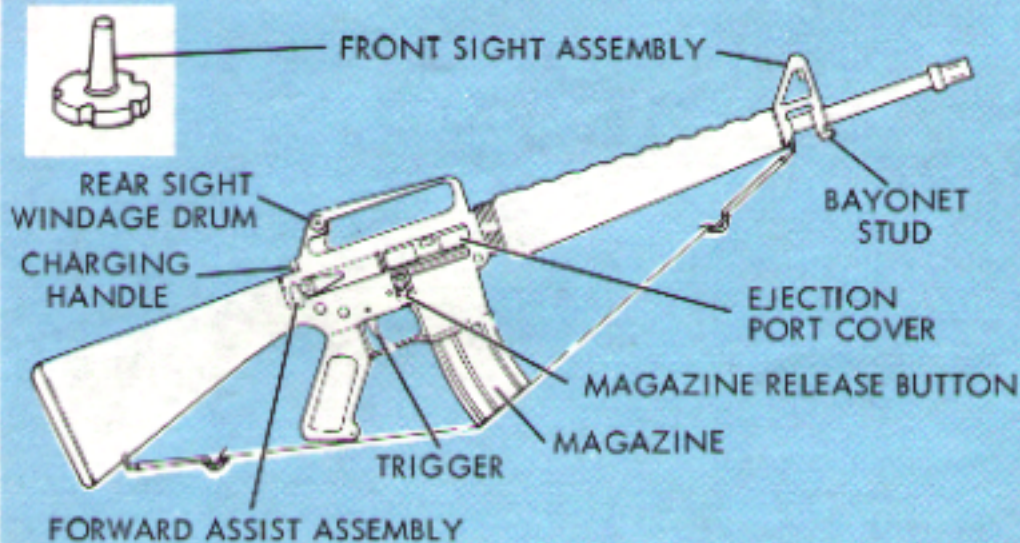
Max effective range:

460 meters

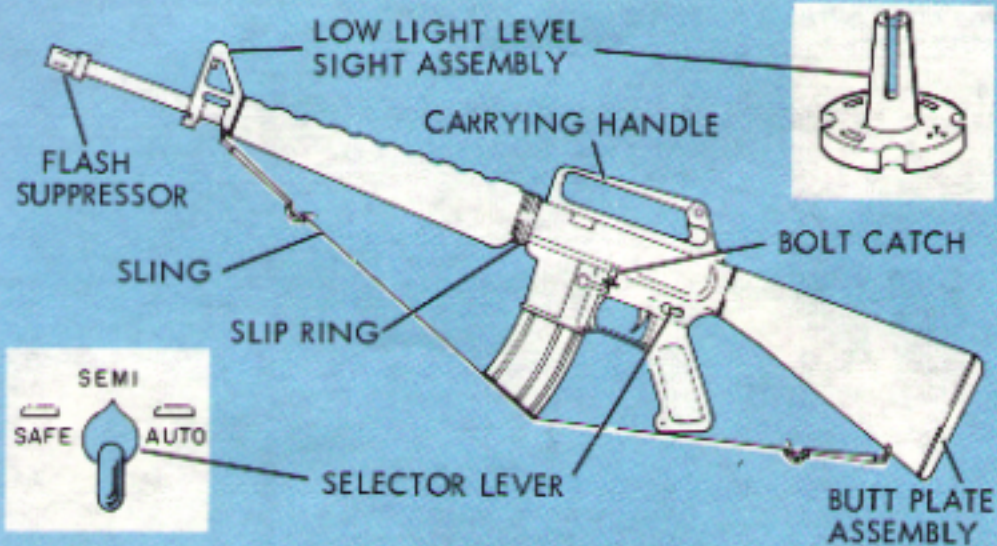
Max range:

2653 meters

RIFLE PARTS AND



WHERE THEY ARE



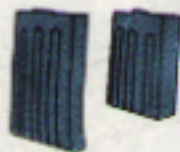
ITEMS TROOP INSTALLED OR AUTHORIZED

Items which, at the discretion of the unit CO, may accompany the M16A1 rifle but are not subject to be turned in with the rifle

FOR RIFLE WITHOUT STORAGE BUTTSTOCK.



SMALL ARMS MAINTENANCE
EQUIPMENT CASE 8465-00-781-9564



MAGAZINE ASSEMBLY
1005-00-056-2237 (20 RD)
**(ISSUED UNTIL STOCK
EXHAUSTED)**
1005-00-921-5004 (30 RD)

1/2 OZ LSA
1005-00-242-5687



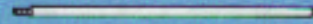
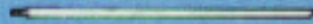
BORE BRUSH
1005-00-903-1296



CHAMBER BRUSH
1005-00-999-1435



BRUSH - TOOTH
1005-00-494-6602

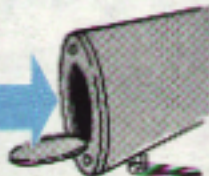


SMALL ARMS CLEANING ROD
M11E3-1005-00-089-3994

BUTTSTOCK STORAGE ONLY



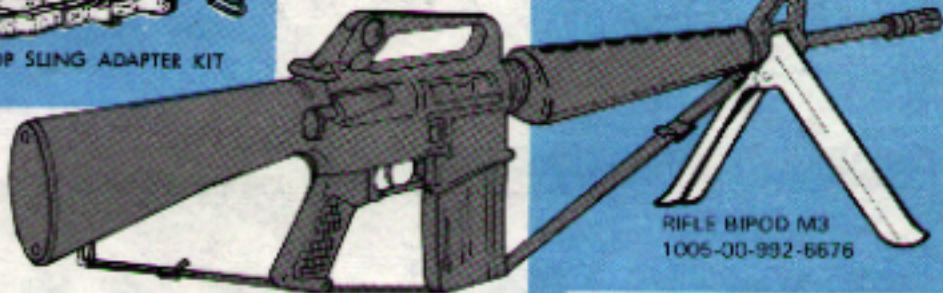
SMALL ARMS ACCESSORIES CASE
1005-00-403-5804



AUXILIARY EQUIPMENT



TOP SLING ADAPTER KIT



RIFLE BIPOD M3
1005-00-992-6676

Get your MUZZLE CAP

5340-00-880-7666

MAG BAG

1005-00-052-8942 (20 RD)

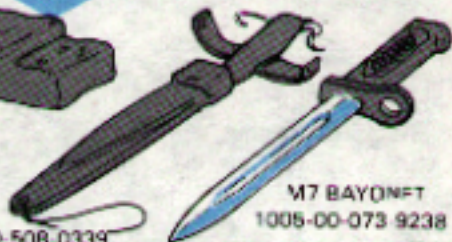
1005-00-193-8306 (30 RD)

from your
UNIT SUPPLY



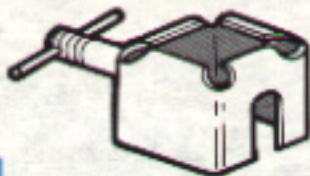
CARRYING CASE
1005-00-999-2430

SCABBARD
M8A1-1095-00-508-0339



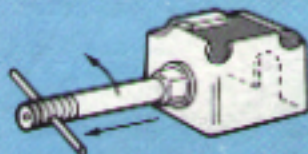
M7 BAYONET
1005-00-073-9238

M15A2 BLANK FIRING ATTACHMENT (BFA)



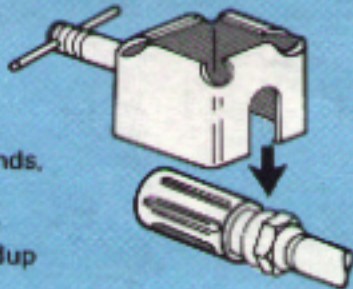
WARNING Use ONLY blank M200 with the BFA

1005-00-118-6192



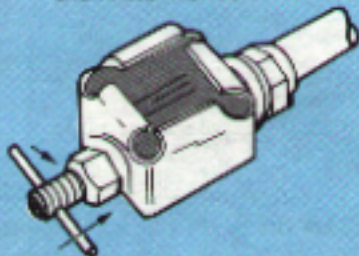
1. Unscrew and slide all the way back

2. Hook behind first groove of flash suppressor



CAUTION: Do not use tools to tighten attachment, **HANDS ONLY**

3. Slide into flash suppressor and **HAND TIGHTEN**



NOTE: After 50 rounds, check to see if it is still tight. Make sure to clean carbon buildup after each use



AMMUNITION

WARNING

DO NOT FIRE . . .

- Seriously corroded ammunition
- Dented cartridges
- Cartridges with loose bullets
- Cartridges exposed to extreme heat (135°) until they have cooled

Use only authorized ammo that is manufactured to US specs.



Ball,
M193



Tracer
M196



Dummy,
M199



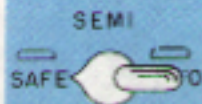
Blank,
M200

Red
Tip

Violet
Tip

KEEP DRY, CLEAN, AND FREE OF CRUD
YOUR LIFE DEPENDS ON IT!

USE OF SELECTOR LEVER



safe

Rifle will not fire. Selector lever cannot be on safe unless rifle is cocked. Always place in SAFE, when loading and unloading



semi-automatic

Rifle will fire one round each time the trigger is pulled



automatic

Rifle will continue to fire until the magazine is empty or the trigger is released

CLEAR YOUR RIFLE

- 1 Place selector on SAFE. If weapon is not cocked, lever cannot be pointed toward SAFE.

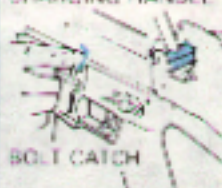


- 2 Remove magazine

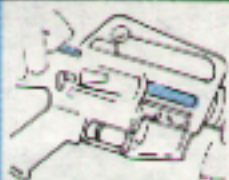


- 3 To lock bolt open, pull charging handle rearward, press bottom of bolt catch, allow bolt to move forward until it engages bolt catch. Return charging handle to forward if you haven't before, place on SAFE.

PULL
CHARGING HANDLE



- 4 Eyeball receiver and chamber to insure these areas contain no ammo.



- 5 With selector lever pointing toward SAFE, allow bolt to go forward by pressing upper portion of bolt catch.

BOLT CATCH



DISASSEMBLY

first

**CLEAR
YOUR
RIFLE**



2 Remove sling

NOTE →

Remove & clean
only if dirt &
corrosion can be
seen through vent
holes

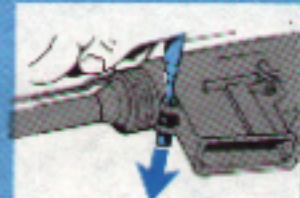


3 Remove handguards

Push take down pin as far as it goes



4 Pivot upper receiver from lower receiver



5 Push receiver pivot pin



6 Separate upper and lower receivers



7 Pull back charging handle and bolt carrier



8 Remove bolt carrier and bolt

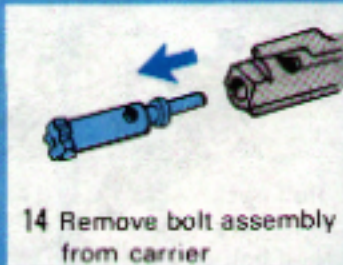
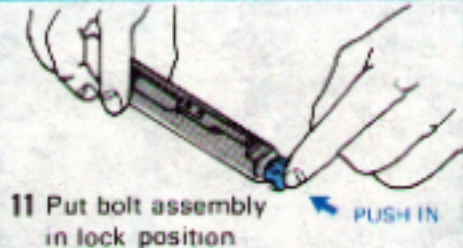


PULL BACK AND DOWN

9 Remove charging handle



DISASSEMBLY *cont.*



DISASSEMBLE STEPS 15 THRU 18 ONLY WHEN DIRTY OR DAMAGED



NOTE

Press top of extractor to check spring function.

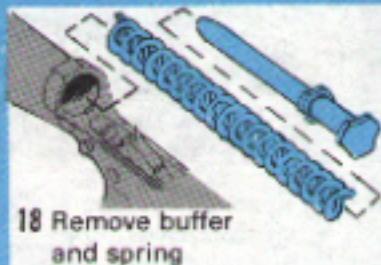
See your **ARMORER**

Do not damage tip of firing pin.

DON'T SEPARATE SPRING FROM EXTRACTOR



16 Remove extractor and spring



NO FURTHER
DISASSEMBLY
ALLOWED

CLEAN...INSPECT...LUBE

With the rifle disassembled, thoroughly clean, inspect and lube, so you have a reliable weapon you can always depend on.

After firing, clean your weapon for 3 consecutive days with Rifle Bore Cleaner (RBC). Wipe dry and lube according to lubrication instructions.



Cleaning materials: swabs, pipe cleaners and RBC are expendable items that are available from Company Supply.

If any parts are missing or defective see your ARMORER.

THOROUGH CLEANING

upper receiver



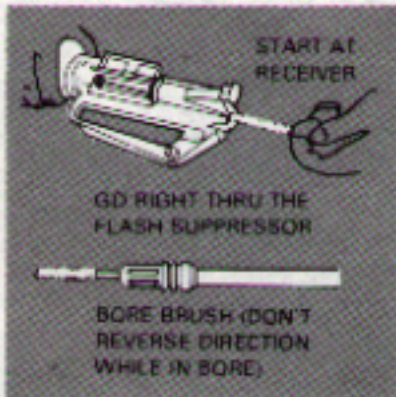
CLEAN WITH RBC

- All Areas of Powder Fouling, Corrosion, Dirt & RUST

- Bore & Chamber

- Locking Lugs

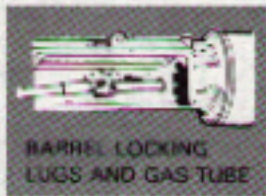
- Gas Tube



START AT
RECEIVER

GO RIGHT THRU THE
FLASH SUPPRESSOR

BORE BRUSH (DON'T
REVERSE DIRECTION
WHILE IN BORE)



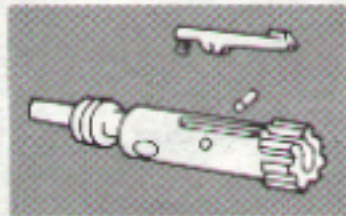
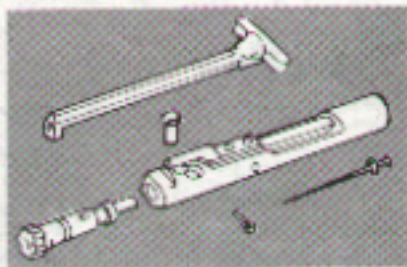
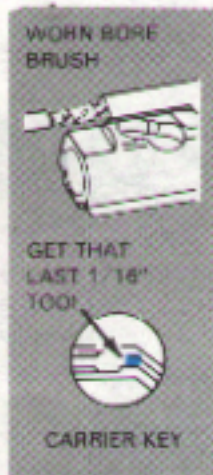
BARREL LOCKING
LUGS AND GAS TUBE

Use a worn bore brush to get outside surface of protruding gas tube (get sides and bottom from bottom of receiver)

THOROUGH CLEANING

bolt carrier group

- Outer & Inner Surfaces of Bolt Carrier
- Carrier Key
- Firing Pin Recess and Firing Pin
- Firing Pin Hole (Use Pipe Cleaner There)
- Carbon Deposits & Dirt from Locking Lugs
- Areas Behind Bolt Ring and Under Lip of Extractor



THOROUGH CLEANING

lower receiver group

- All Areas of Powder Fouling, Corrosion and Dirt
- Wipe Dirt from Trigger Mechanism
- Clean Buffer and Inside Lower Receiver Extension

CAUTION

Do not use wire brush or any type of abrasive material to clean aluminum surfaces



LUBE GUIDE

Under all but the coldest arctic conditions, LSA is the lubricant to use on your rifle. Remember to remove excessive oil from the bore before firing.

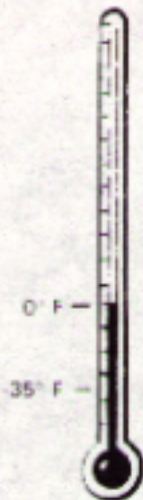
LSA—Lubricating oil, semifluid weapons

BETWEEN 0° F AND
-35° F EITHER
LSA OR LAW

LAW—Lubricating oil, Arctic weapons

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

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



LUBRICATING

upper receiver



LIGHTLY LUBE

BORE & CHAMBER, OUTER SURFACES OF BARREL AND FRONT SIGHT, SURFACES UNDER HANDGUARD, DEPRESS FRONT SIGHT DETENT SEVERAL TIMES TO WORK LUBE INTO THE SPRING



LUBRICATING

bolt carrier group

CAUTION

Lightly lube
firing pin and
firing pin recess
in bolt

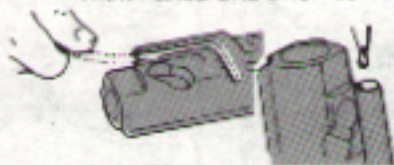


GENEROUSLY LUBE OUTSIDE OF THESE PARTS

MAKE CERTAIN TO GET
CAM PIN AREA, PISTON
RINGS, AND OUTSIDE OF
THE BOLT BODY



DRY WITH PIPE CLEANER,
THEN PLACE ONE DROP LSA



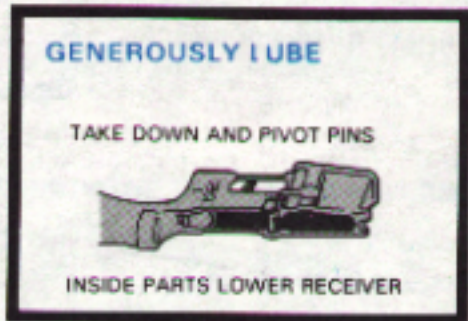
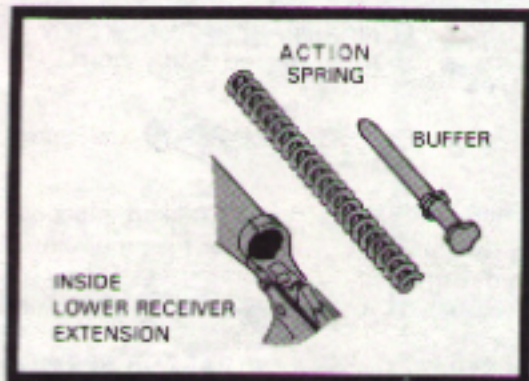
CARRIER KEY



LIGHTLY LUBE CHARGING HANDLE,
INNER AND OUTER SURFACES OF
BOLT CARRIER. GENEROUSLY
LUBE SLIDE AND CAM PIN AREA OF BOLT

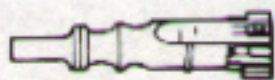
LUBRICATING

lower receiver group



INSPECT-before assembly

WARNING DO NOT interchange bolts between rifles



BOLT - Cracks or fractures, especially in the cam pin hole area. Bolts that contain pits extending into the firing pin hole need replacing.



FIRING PIN RETAINING PIN - Bent, busted, badly worn



CAM PIN - Cracked, chipped or missing



EXTRACTOR AND EXTRACTOR SPRING - Check extractor for chipped or broken edges in the area of the lip that engages the cartridge rim.



FIRING PIN - Bent, cracked or blunted end

IF PARTS ARE MISSING OR DEFECTIVE, SEE YOUR ARMORER

ASSEMBLY



1 Insert spring and buffer



New extractor has a silicone insert w/ spring. Be sure not to lose it!



2 Insert extractor and spring

If the spring comes loose, put the large end of spring in the extractor and seat.



3 Push in extractor pin

WARNING

Don't switch bolts between rifles



4 Slide bolt into carrier



STAGGER RING GAPS TO STOP GAS LOSS

ASSEMBLY cont.



5 Replace bolt cam pin



GIVE CAM PIN A 1/4
TURN AFTER ASSEMBLY



6 Drop in and seat



7 Pull bolt back



8 Replace retaining pin

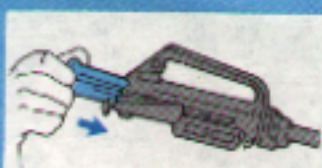
NOTE
Firing pin should not fall out
when bolt carrier group is
turned upside down



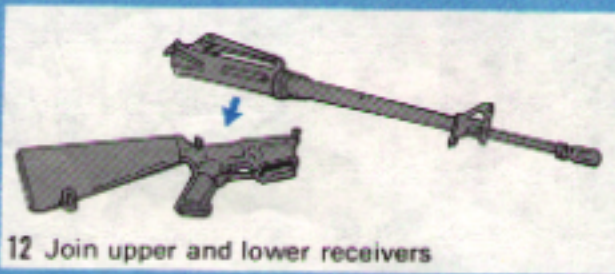
9 Engage, then push charging handle part way



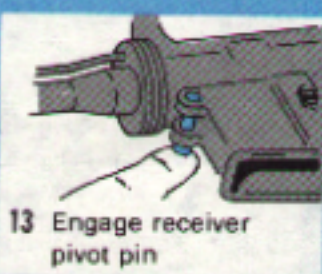
10 Slide in bolt carrier group



11 Push in charging handle and bolt carrier group together



12 Join upper and lower receivers

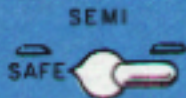


13 Engage receiver pivot pin

ASSEMBLY cont.

CAUTION:

Selector lever must be on safe or semi before closing upper receiver



14 Close upper and lower receiver groups. Push in takedown pin



15 PUT HANDGUARDS IN PLACE



CHECK FOR FULL ENGAGEMENT



16 Snap on sling

DID YOU INSTALL EVERYTHING?

- ***extractor & spring***
- ***extractor pin***
- ***bolt***
- ***cam pin***
- ***firing pin***
- ***retaining pin***

EVERYTHING WILL
WORK SLICK IF YOU
HAVE ASSEMBLED
ALL THE PARTS
CORRECTLY

CHECK THE

selector lever

BY PERFORMING THE

FUNCTIONAL

CHECK

SEE PAGE 33

MAGAZINE DISASSEMBLY

20 RD MAG

PUSH DOWN ON
INTERNAL SPRING AND
SLIDE OUT

Release base catch



30 RD MAG

PRY UP, PUSH OUT

Release base catch



Remove base



Jiggle spring and
follower to remove



NOTE: Do not remove
follower from
spring

MAGAZINE ASSEMBLY

IF THE SPRING COMES
LOOSE FROM THE
FOLLOWER, TURN IN
THE PIECES. DON'T
TRY TO FIX IT YOUR-
SELF.

CLEAN & LUBE
Wipe dirt from
tube, spring, and
follower, then
lightly lube spring

Jiggle spring and
follower to install



Slide the base
under all four tabs



MAKE SURE
PRINTING IS
ON THE OUTSIDE

PMCS* *before operation and..*



1 Remove excessive oil



Retract bolt to assure free movement between bolt carrier and gas tube

3 Perform functional check to assure selector lever works properly

next page

then back to step 4



Mag secure?



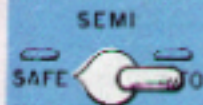
Proper tension?

* Preventive Maintenance Checks and Services

FUNCTIONAL CHECK

(REMOVE MAG . . . CHECK CHAMBER)

SELECTOR LEVER ON:



safe

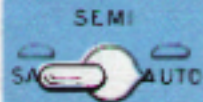
Pull charging handle to rear and release. Place on safe. Pull trigger. Hammer should not fall.



semi

Place selector in semi. Pull trigger and hold to rear. Hammer should fall. Pull charging

handle to rear and release. Release trigger and pull again. Hammer should fall.



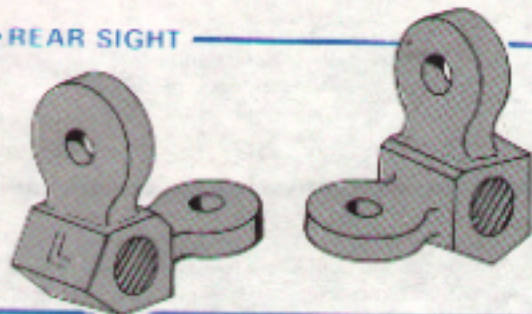
auto

Place selector in auto. Pull charging handle to rear and release. Pull trigger and hold to rear, hammer should fall. Pull

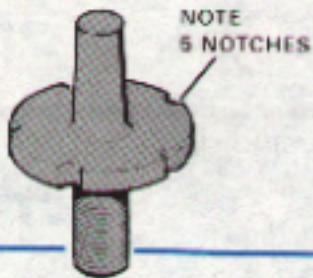
charging handle to rear and release. Release trigger and pull again. Hammer should not fall.

STANDARD DAYLIGHT SIGHT

REAR SIGHT



FRONT SIGHT



REAR SIGHT - Has two apertures for range

Unmarked aperture - 0 - 300 meter range.

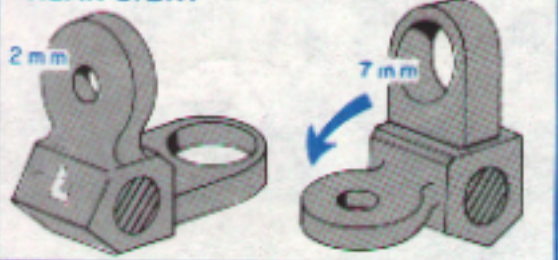
L under aperture - 300 - 460 meter range

See page 39 for sight usage

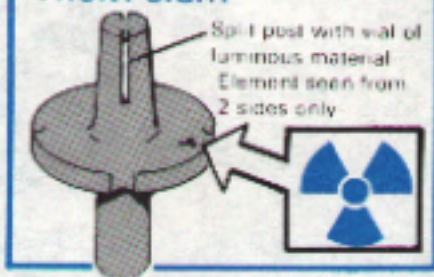
LOW LIGHT LEVEL SIGHT SYSTEM (Promethium Sight)

NOTE: Not every rifle will have this sight

REAR SIGHT



FRONT SIGHT



PURPOSE:

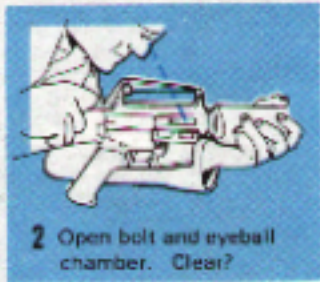
Used during limited visibility. A weapon equipped with the PROMETHIUM front sight has only 4 "notches" of elevation per revolution, whereas the original sight had 5. The 7mm rear sight aperture is for night firing and limited visibility. The 2mm aperture is used to zero the weapon and engage targets to 460 M under normal conditions (see page 40 for sight usage).

CAUTION: The front sight post contains a small glass vial of radioactive Promethium 147. Take care not to bump, abuse, tamper or alter the post in any manner. DO NOT blacken or soot-up the front sight.

OPERATION - loading and



- 1 With hammer cocked, place selector lever on SAFE



- 2 Open bolt and eyeball chamber. Clear?



- 3 Push upward until magazine catch engages and holds magazine

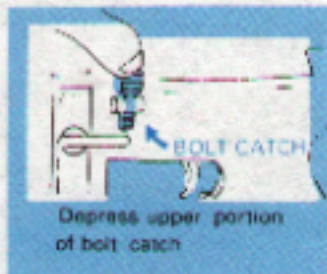


- 4 Tap upward to make sure it's seated right

MAGAZINE MAY BE
LOADED WITH
BOLT ASSEMBLY OPEN
OR CLOSED

chambering a round

BOLT ASSEMBLY OPEN

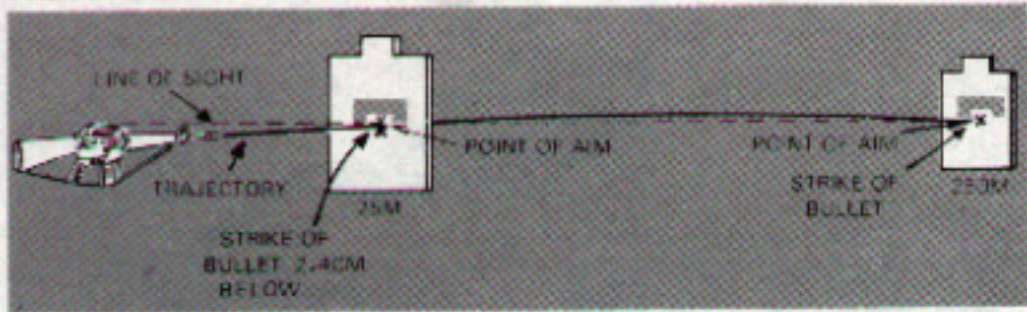


BOLT ASSEMBLY CLOSED



BATTLESIGHT ZERO

TO ZERO THE RIFLE, YOU MUST HAVE THE FRONT SIGHT (ELEVATION) AND THE REAR SIGHT (WINDAGE) ADJUSTED SO THAT IT CAN HIT YOUR POINT OF AIM AT A GIVEN RANGE



NOTE.

In order to battlesight zero you adjust your sights so you can hit an aiming point at 250 meters. Zeroing can also be accomplished on a 25 meter range by adjusting the sights so that the bullet will strike 2.4 centimeters below the point of aim. If M16A1 has "promethium" sight and you can't see the vial after zeroing, turn front sight post one click down for use during periods of limited visibility

SIGHT ADJUSTMENT

LOW LIGHT & STANDARD



REAR SIGHT To adjust windage, depress detent and rotate drum to desired direction. To move point of impact to right, turn drum clockwise in direction of arrow and letter R. To move left, move drum counterclockwise. Each graduation (notch) moves the point of impact of bullet as indicated in chart.



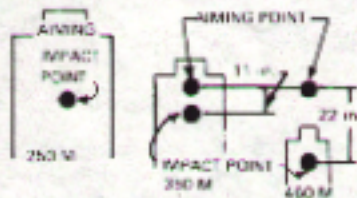
FRONT SIGHT To adjust elevation, depress detent, rotate post. To raise strike of bullet, rotate post in the direction of arrow marked up. Reverse the direction of rotation to lower strike of bullet. Each graduation (notch) moves the point of impact of bullet as indicated in chart.

IMPACT		DISTANCE
STANDARD	LOW LIGHT LEVEL	
0.7cm (1/4- 64in)	0.5cm (2/1- 64in)	25 meters
2.8cm (1- 3/32in)	3.5cm (1- 3/4in)	100 meters
5.6cm (2- 1/8in)	7.1cm (2- 3/4in)	200 meters

USING LOW LIGHT LEVEL (PROMETHIUM) SIGHT SYSTEM daylight firing



Use aperture marked L. Effective range is 250 meters (original battle sight zeroed beyond which "Hold-Off" (aiming above desired point of impact) must be used. Aim about 11 in. at 350 meters, 22 in. at 460 meters. To become and remain proficient, practice "Hold-Off"



night and limited visibility



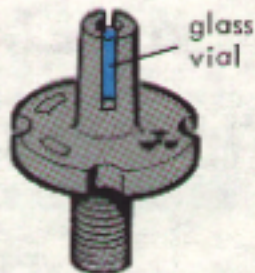
Use unmarked (7mm) aperture. Obtain good sight picture using daylight hours procedure. After target detection, obtain good sight alignment by centering top of luminous portion of front sight post within 7mm aperture on target, and fire. Under certain

light conditions, front sight post can be seen, but you can't determine whether you are looking through, above, or to the side of rear sight aperture. Practice positioning stock against shoulder and looking through rear aperture.

CARE & CLEANING of PROMETHIUM SIGHT

handling and care

- The front post has a small glass vial containing radioactive Promethium 147.
- Take care when handling, not to bump the front sight post. DO NOT abuse, tamper or alter the post in any manner.
- Frequently check the sight post for damage. If damage is evident or suspected, have it checked by your unit armorer.



cleaning of front sight post

CAUTION: DO NOT use a wire brush to clean the sight.

Clean with toothbrush, bore swabs and Rifle Bore Cleaner (RBC), then dry.

IMMEDIATE ACTION

If your rifle stops firing before you do . . . **S.P.O.R.T.S.**
S.P.O.R.T.S. is an acronym* to help you remember the following actions — **Slap, Pull, Observe, Release, Tap, Shoot.**

*ac-ro-nym: a word formed from the initial letters of each word in a group of words that convey a meaning or action.



1 **SLAP** upward on magazine to make sure it's properly seated.



2 **PULL** charging handle all the way back. **OBSERVE** ejection of case or cartridge. Eyeball chamber and check for obstruction.



3 If cartridge or case is ejected or chamber is clear, **RELEASE** charging handle to feed new round (Don't ride the charging handle)



4 **TAP** forward assist



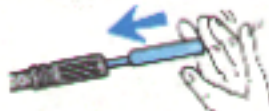
5 Now **SHOOT** if it won't fire, look for trouble and apply remedial action

REMEDIAL ACTION

WARNING

If your rifle stops firing with a live round in the chamber of a hot barrel, remove the round fast. However, during training, if you cannot remove it within 10 seconds, wait 15 minutes with the rifle pointing in a safe direction. This way you won't get hurt by a possible ammo cook-off, which could happen 10 seconds after contact with a hot chamber.

If your rifle fails to fire after performing steps 1 thru 5, check again for jammed cartridge case



If a cartridge case is in the chamber, tap out with a cleaning rod.

IF YOUR RIFLE STILL FAILS TO FIRE, CHECK TROUBLESHOOTING

PROJECTILE LODGED IN BORE

WARNING

If an audible "POP" or reduced RECOIL is experienced during firing, immediately **CEASE FIRE**, remove the magazine (1), lock the bolt to the rear (2), and place the selector lever on the "SAFE" position (3). Visually inspect and/or insert a cleaning rod into the bore to insure there is not a projectile lodged in the bore (4).

DO NOT APPLY IMMEDIATE ACTION.



If a projectile is lodged in the barrel of the weapon, **DO NOT** attempt to remove it. Turn the weapon in to the armorer.

LIMITED PM CLEANING

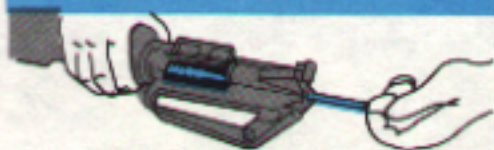
CLEAR YOUR RIFLE



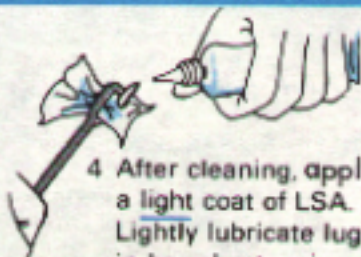
- 1 Look for fouling in bore and chamber



- 2 Remove bolt carrier group and clean carbon and oil from firing pin and all surfaces of bolt/bolt carrier with dry swabs. Clean firing pin hole and bolt carrier key with pipe cleaner. Apply light coating of LSA paying special attention to slide and cam pin area



- 3 "Swab out" (from chamber to muzzle)
CAUTION: Don't bend or flex cleaning rod.
Oh yeah, make sure swab goes clear through flash suppressor



- 4 After cleaning, apply a light coat of LSA. Lightly lubricate lugs in barrel extension

UNUSUAL CONDITIONS

EXTREME COLD -

- Clean and lubricate rifle with LAW. Keep it moisture free
- Operate controls thru their entire range at intervals, to keep them from freezing up
- When your rifle is not being used and kept outside, protect it with a cover

HOT CLIMATES

- Inspect rifle and bipod more frequently, especially the hidden surfaces of bolt carrier group, forward assist assembly and lower receiver components. Make certain they are lubricated using LSA
- When handling, make certain to wipe dry, as moisture could cause corrosion. After drying, lubricate with LSA

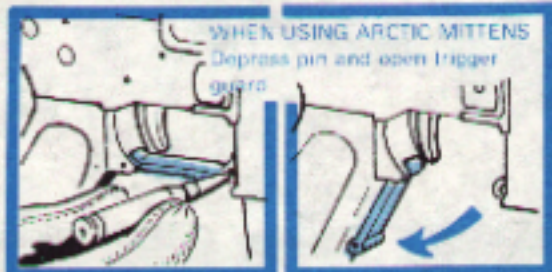
HOT, DRY CLIMATES -

Clean and oil rifle more frequently with LSA

DUSTY AND SANDY AREAS

- Clean and lubricate your rifle more frequently
- Keep sand out of parts when inspecting, lubricating, or assembling rifle. Apply only a very light amount of lubrication on outside of rifle.
- Use magazine bag and muzzle cap for dust and sand protection

CAUTION: Do not use magazine bag and muzzle cap on stored rifles.



AFTER FORDING

WARNING DO NOT FIRE RIFLE IF
WATER IS PRESENT IN BARREL

HERE'S WHAT YOU DO! ●●●

●●● AFTER YOU REMOVE THE CAP



POINT THE
MUZZLE
DOWN



PULL CHARGING
HANDLE 2 TO 3
INCHES REARWARD
AND ALLOW WATER
TO DRAIN





RELEASE CHARGING
HANDLE AND
STRIKE FORWARD
ASSIST TO SEAT
ROUND AND LOCK
BOLT





CLEAR THE DRAIN HOLE WITH
A PIPE CLEANER AND
DRAIN



TROUBLESHOOTING

PROBLEM	CHECK FOR	WHAT TO DO
WON'T FIRE	Selector lever on SAFE	Put it on SEMI or AUTO
	Improper assembly of firing pin	Assemble correctly RETAINING PIN GOES IN BACK OF LARGE SHOULDER OF FIRING PIN 
BOLT WON'T UNLOCK	Too much oil in firing pin recess	Wipe off
	Defective ammo	Remove and discard
	Too much carbon on firing pin	Clean 
BOLT WON'T UNLOCK	Dirty or burred bolt	See your NCO or your unit ARMORER

TROUBLESHOOTING

PROBLEM	CHECK FOR	WHAT TO DO
WON'T EXTRACT	Broken extractor spring	See your ARMORER 
	Dirty or corroded ammo	Remove. Push out stuck round with cleaning rod
	Carbon in chamber Fouling or carbon in extractor recess or lip	Clean chamber Clean
WON'T FEED	Dirty or corroded ammo	Clean 
	Dirty magazine	Clean
	Defective magazine	Replace
	Too many rounds in magazine	Take out excess
	Restricted buffer assembly action	Take out the buffer and spring, and clean

TROUBLESHOOTING

PROBLEM

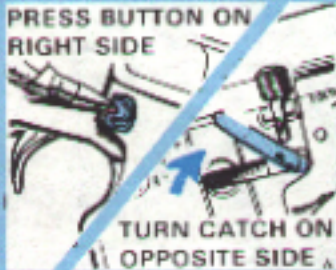
CHECK FOR

WHAT TO DO

WON'T FEED

Magazine not fully seated.

Adjust magazine catch



Turn catch clockwise to tighten and counterclockwise to loosen

Replace

Replace

DOUBLE FEED

Defective magazine

Defective magazine

TROUBLESHOOTING

WON'T CHAMBER

Dirty or corroded
ammo
Damaged ammo
Carbon in chamber

Clean

Replace

Clean



WON'T LOCK

Dirt, corrosion, or
carbon buildup in
barrel locking lugs

Frozen extractor

Restricted buffer
assembly

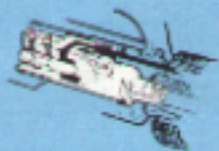
Restricted movement
of bolt carrier
group

Clean lugs

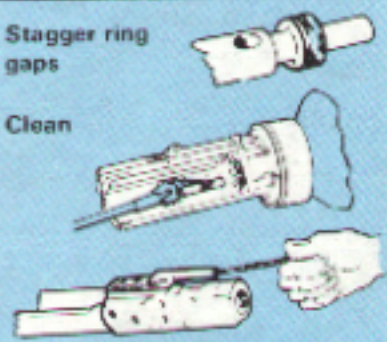
Remove and clean

Remove and clean

Remove, clean, and lube.
(When putting bolt back in,
make sure gas tube fits into
carrier key and moves freely)



TROUBLESHOOTING

PROBLEM	CHECK FOR	WHAT TO DO
SHORT RECOIL	Gaps in bolt rings (not staggered) Carbon or dirt in carrier key or on outside of gas tube	Stagger ring gaps Clean 
BOLT FAILS TO LOCK AFTER LAST ROUND	Dirty or corroded bolt latch Faulty magazine	Clean Replace
SELECTOR LEVER BINDS	Needs oil	Lubricate with LSA

TROUBLESHOOTING

PROBLEM

BOLT CARRIER
"HUNG UP"

CHECK FOR

Round jammed between bolt and charging handle

WHAT TO DO

- 1 Remove magazine
- 2 Hold charging handle back and bang rifle butt on ground.
KEEP CLEAR OF MUZZLE



CAUTION After round is removed, bolt is under tension

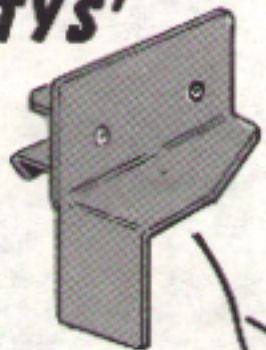
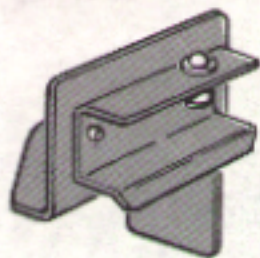
- 3 While bolt is held to rear, push charging handle forward. Round should fall through magazine well



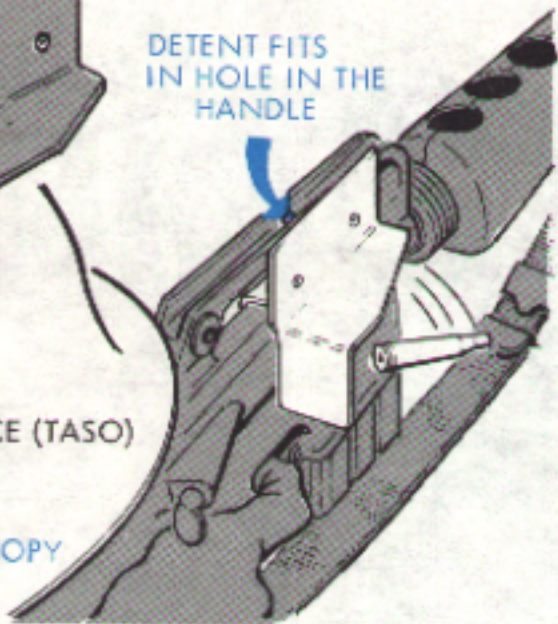
TROUBLESHOOTING

PROBLEM	CHECK FOR	WHAT TO DO
CAN'T SEE PROMETHIUM SIGHT POST	Check for alignment of luminous elements Luminous element dirty Luminous element broken or missing	Rotate front sight post up or down one click Clean with dry cleaning solvent Turn in to ARMORER

FOR LEFTYS'



DETENT FITS
IN HOLE IN THE
HANDLE



There is a cartridge deflector,
for left hand shooters,
available from:

TRAINING AIDS SERVICE OFFICE (TASO)
ATTN: ATZJ-DPTA
FORT JACKSON, S C 29207

SEND ONE BUCK (\$1.00) PER COPY

SARGE'S INSPECTION

Sarge'll gig ya if the following items are not clean....

BOLT,
SIGHTS,
RECEIVER,
CHARGING HANDLE,
HANDGUARDS,
GAS TUBE & PORTS,
STOCK DRAIN HOLE,
BORE & FLASH SUPPRESSOR,
MAGAZINE CATCH &
MAGAZINE WELL

He'll also check the overall condition of the
SIGHTS, BIPOD, STOCK, & HANDGUARDS
So, be prepared, keep it clean and lubed.



DID WE GOOF?
 DO YOU KNOW A BETTER WAY?
 DON'T KEEP THOSE GRIPES TO YOURSELF
 WE'D LIKE TO HAVE YOUR IDEAS

PART 1: ALL PUBLICATIONS EXCEPT PERIODICALS AND SERIALS
 TITLE _____

ISSUE NO.	PAGE NO.	ORIGIN NUMBER	LINE NO.	NUMBER NO.	PUBLIC NO.

RECOMMENDED CHANGES AND REASONS
 (SUGGEST CHANGES OR RECOMMENDATIONS ONLY TO BE PRINTED)

USE D.A. FORM
 0228 OR WHATEVER
 YOU HAVE HANDY

write

COMMANDER
 US ARMY ARMAMENT MATERIEL
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 ROCK ISLAND, IL 61201