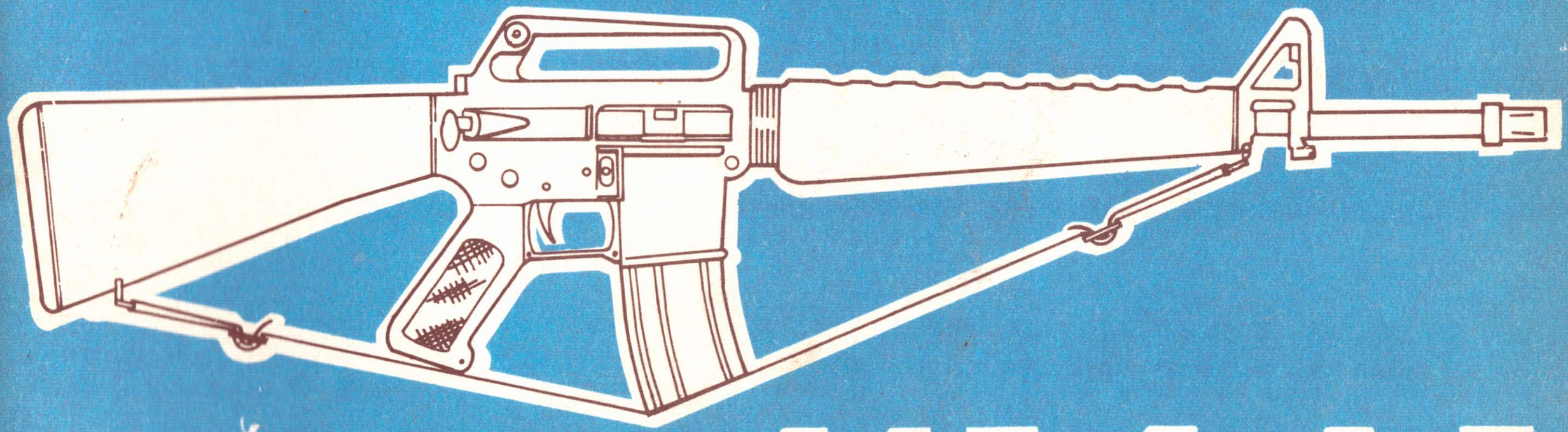
OPERATOR'S MANUAL



MAY
1975

M16A1
RIFLE

TM9-1005-249-10

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 explode, causing you harm**

- **If you're using the blank ammo attachment, don't use any other ammo except the blank round, M200**

- **Never exchange or switch bolts from one M16A1 to another yourself . . . It could cause damage to both you and the rifle**

- **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. Check for bullet in bore. Could result in the barrel exploding**

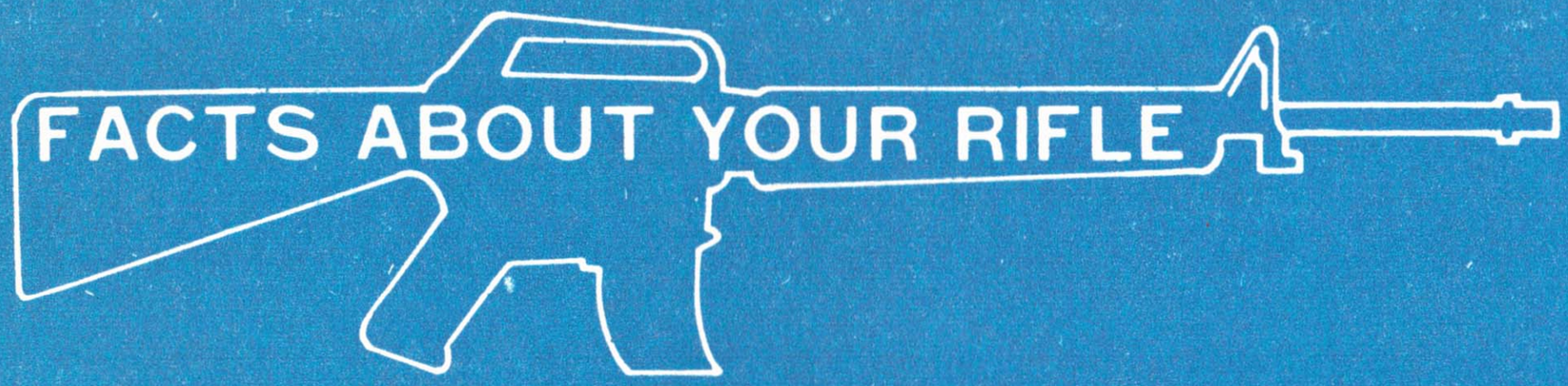
GUARANTEE

IF YOU GO BY ALL THE INSTRUCTIONS IN THIS BOOK, WE GUARANTEE YOUR M16A1 RIFLE TO 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

QUESTIONS??? Ask your NCO or try the company headquarters for more detailed manuals. TM 9-1005-249-20, the organizational M16A1 manual, has a complete listing of pubs

FACTS ABOUT YOUR RIFLE



* The M16A1 is composed of a rifle, one magazine and a sling. It is a light-weight, air-cooled, magazine fed, shoulder weapon that can fire either automatic or semi-automatic

Other added features:

* The barrel assembly has an adjustable sight and a flash suppressor
* Upper and lower receivers are designed to be easily opened for cleaning 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 w/the new Low Light Level Sight to increase effectiveness during time of limited visability

Weight

w/20 rd mag 3.44 Kg (7.6 lbs)

w/30 rd mag 3.6 Kg (7.9 lbs)

Max effective rate of fire:

Semi: 45 - 65 rd per min

Auto: 150 - 200 rd per min

Max effective range

460 meters

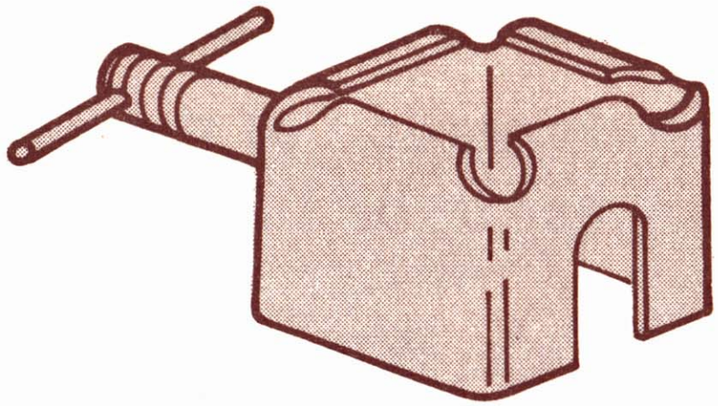
Max range

2650 meters

M15A2

BLANK

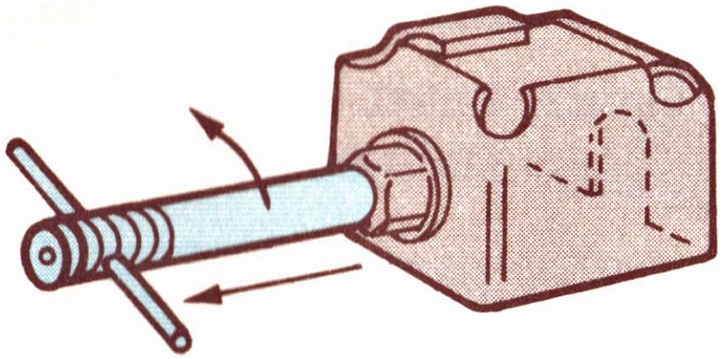
FIRING ATTACHMENT



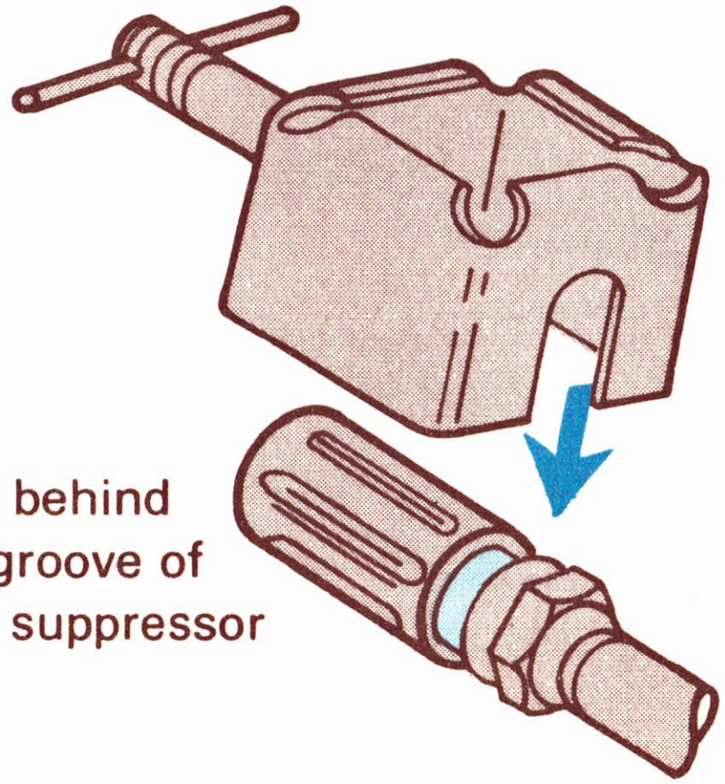
1005-00-078-1792

WARNING

Use ONLY blank M200 with the BFA



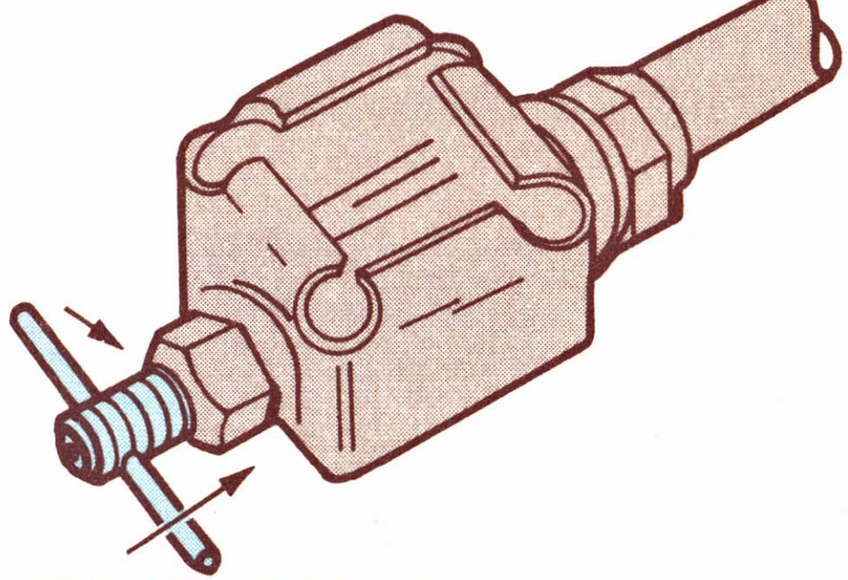
1. Unscrew and slide all the way back



2. Hook behind first groove of flash suppressor

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

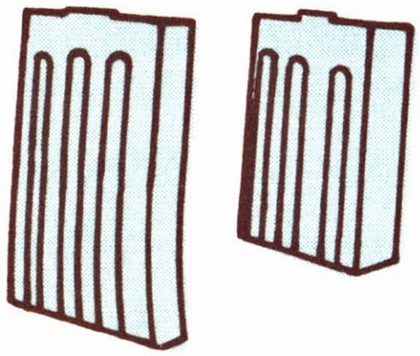
3. Slide into flash suppressor and HAND TIGHTEN



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

ITEMS TROOP INSTALLED OR AUTHORIZED

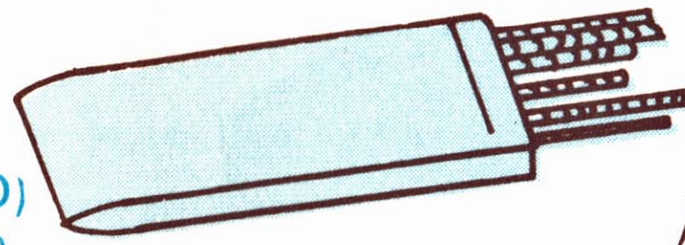
Items which, at the discretion of the unit CO, may accompany the M16A1 rifle but are not subject to be turned in with the rifle



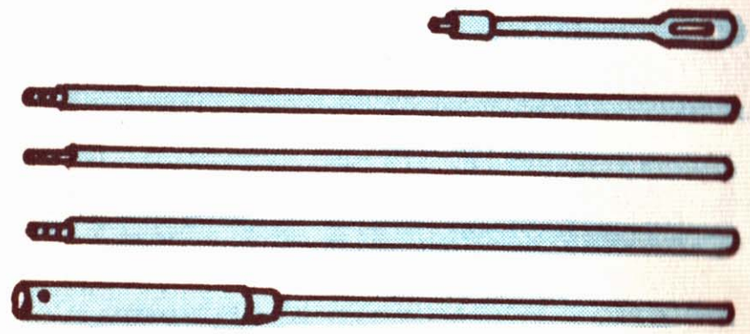
MAGAZINE ASSEMBLY
1005-00-056-2237 (20 RD)
1005-00-921-5004 (30 RD)



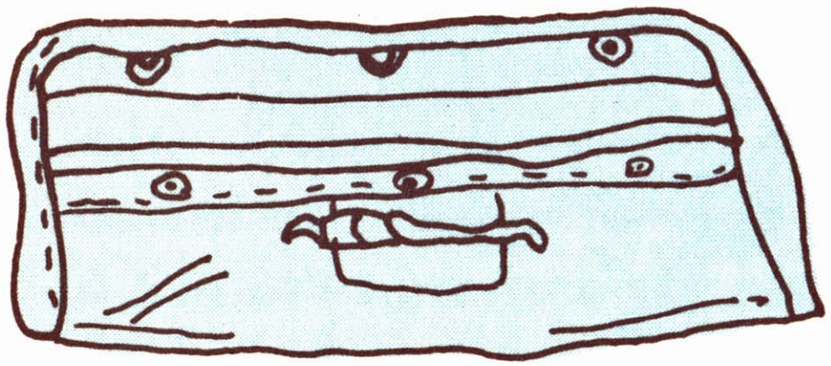
BRUSH (TOOTH)
1005-00-494-6602



PIPE CLEANERS
9920-00-292-9946



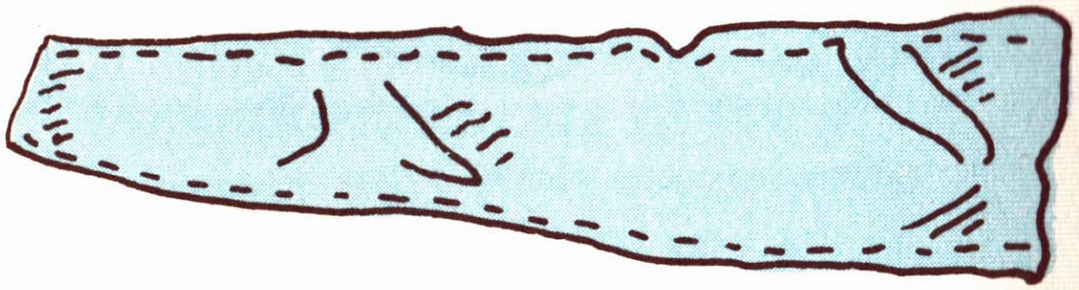
SMALL ARMS CLEANING ROD
M11E3-1005-00-089-3994



SMALL ARMS MAINTENANCE
EQUIPMENT CASE 845-00-781-9564



5 OZ (RBC)
1005-00-242-5687



COVER, PROTECTIVE, RIFLE
1005-00-403-5804

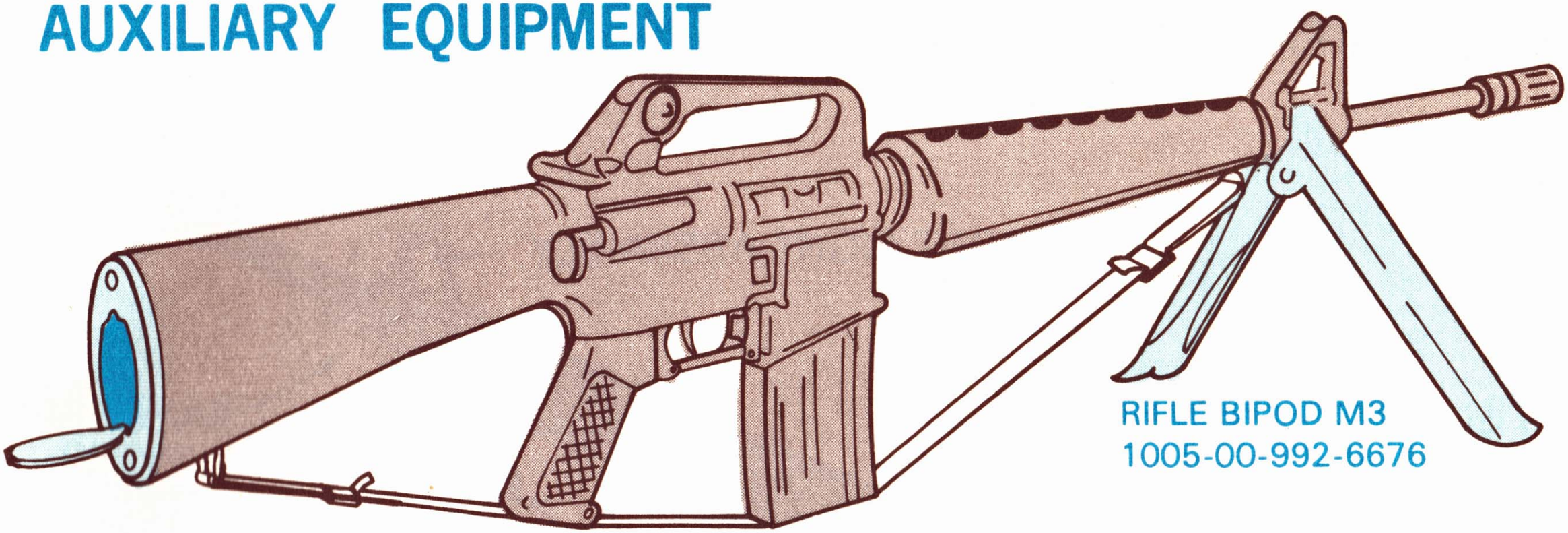


BORE BRUSH
1005-00-903-1296



CHAMBER BRUSH
1005-00-999-1435

AUXILIARY EQUIPMENT

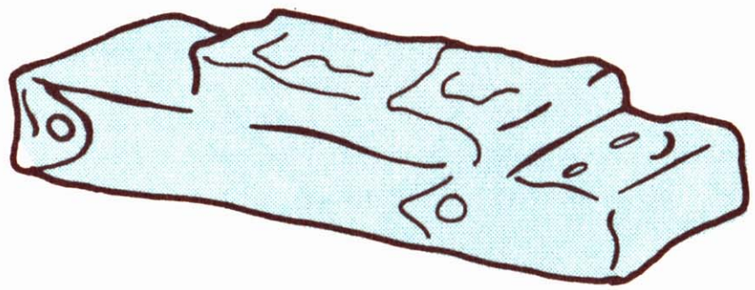


RIFLE BIPOD M3
1005-00-992-6676

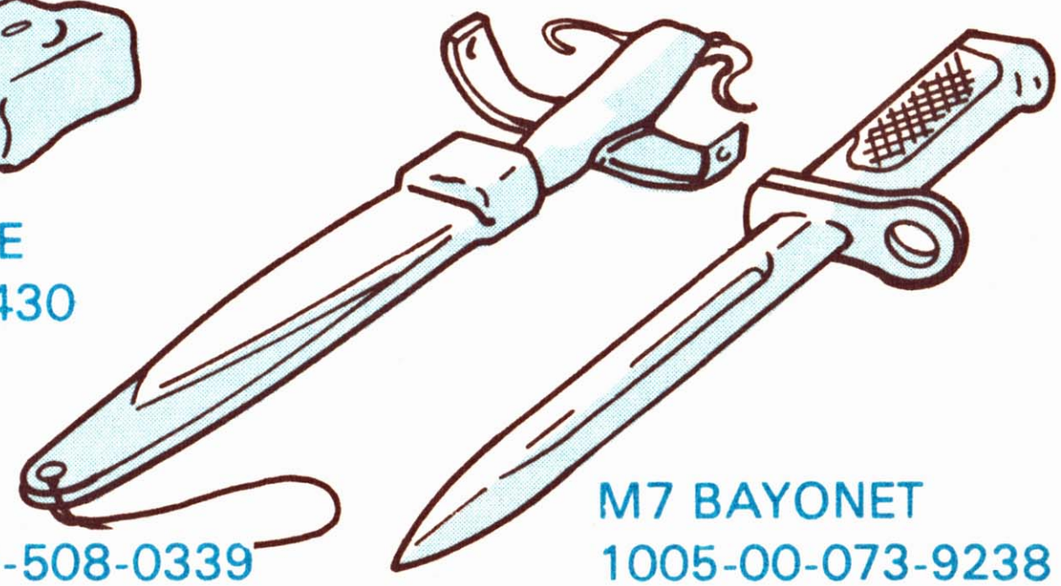
New Stock Assembly
(Stowage for Cleaning Gear)

Get your MUZZLE CAP
5340-00-880-7666

MAG BAG
1005-00-052-6942 (20 RD)
1005-00-193-8306 (30 RD)
from your ARMORER



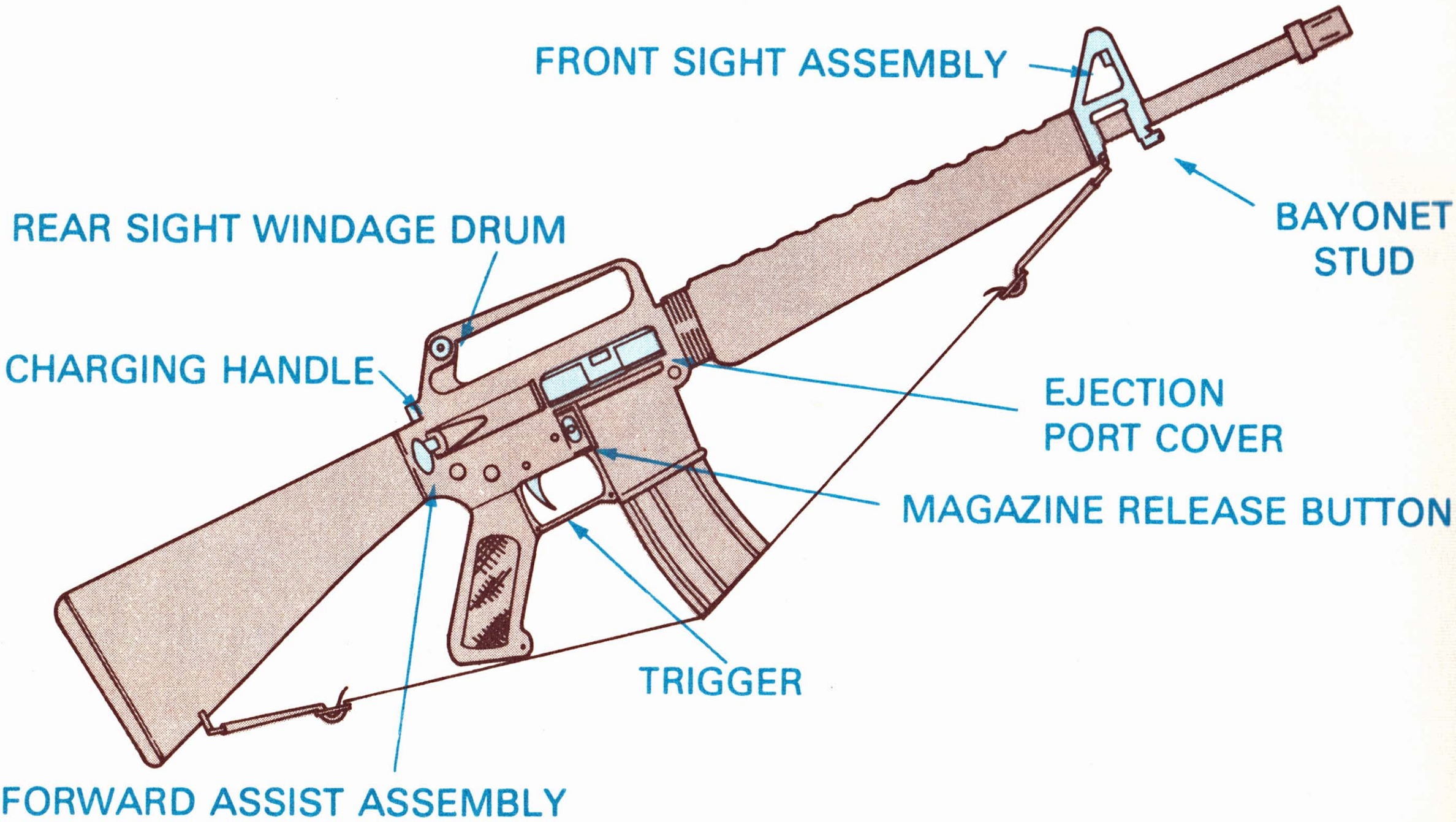
CARRYING CASE
1005-00-999-2430



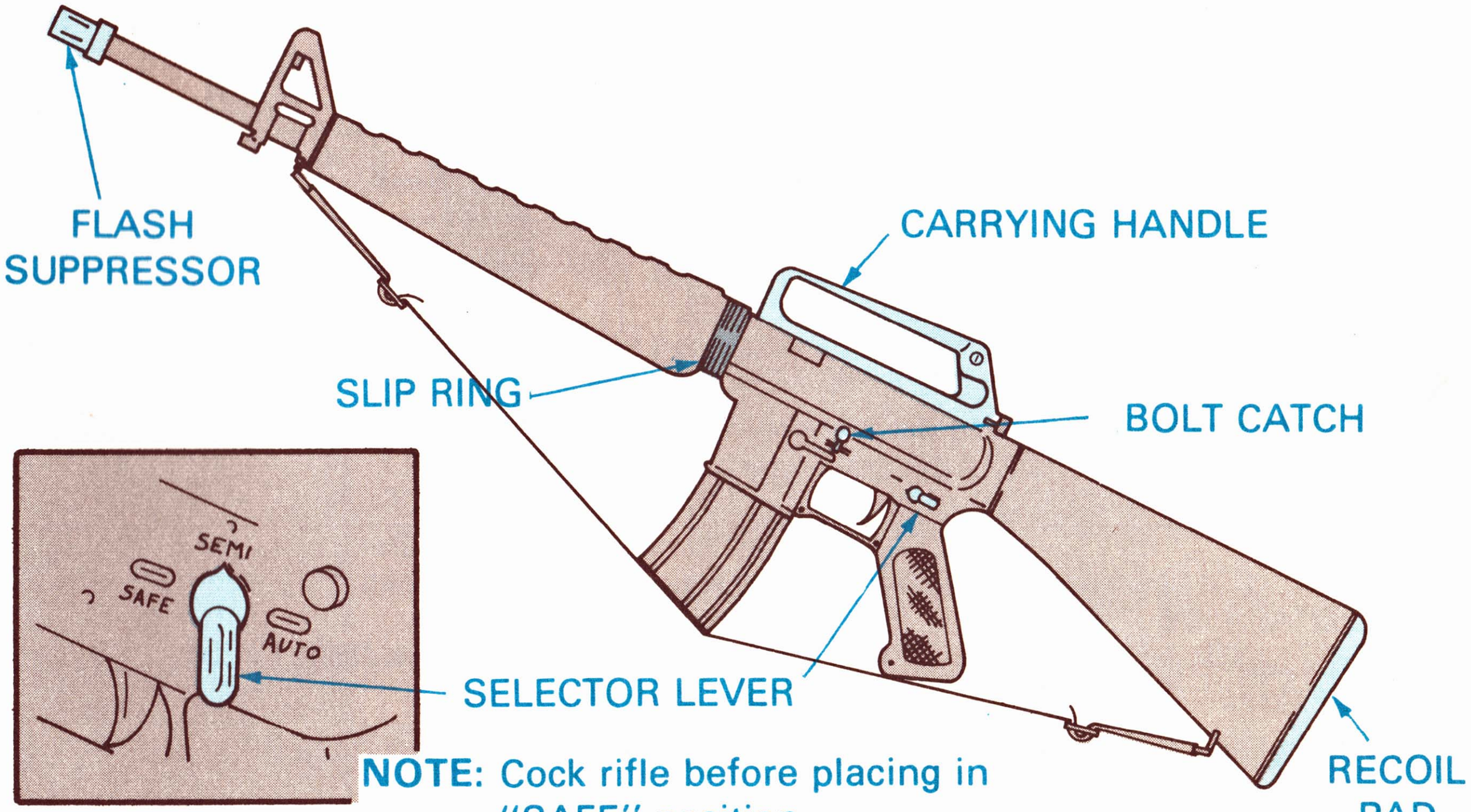
SCABBARD
M8A1-1095-00-508-0339

M7 BAYONET
1005-00-073-9238

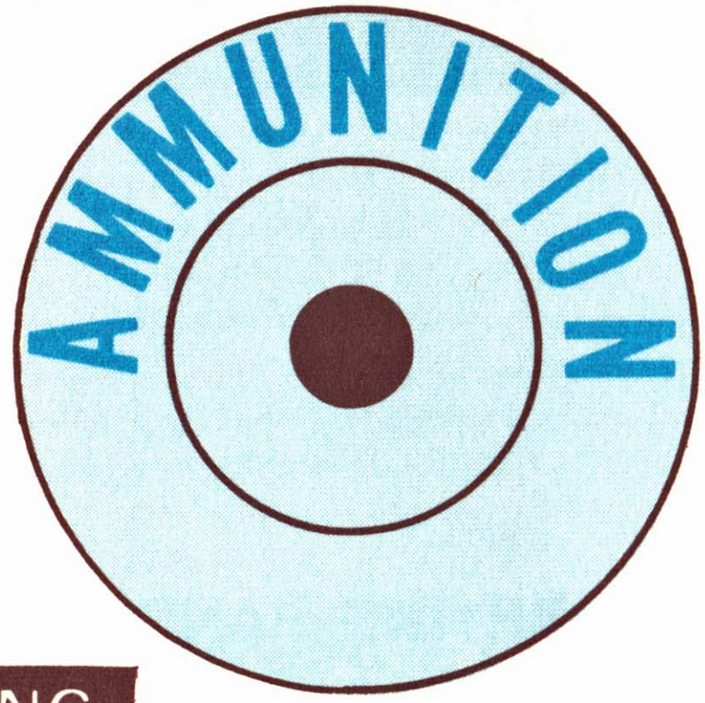
EXTERIOR PARTS AND



WHERE TO FIND THEM

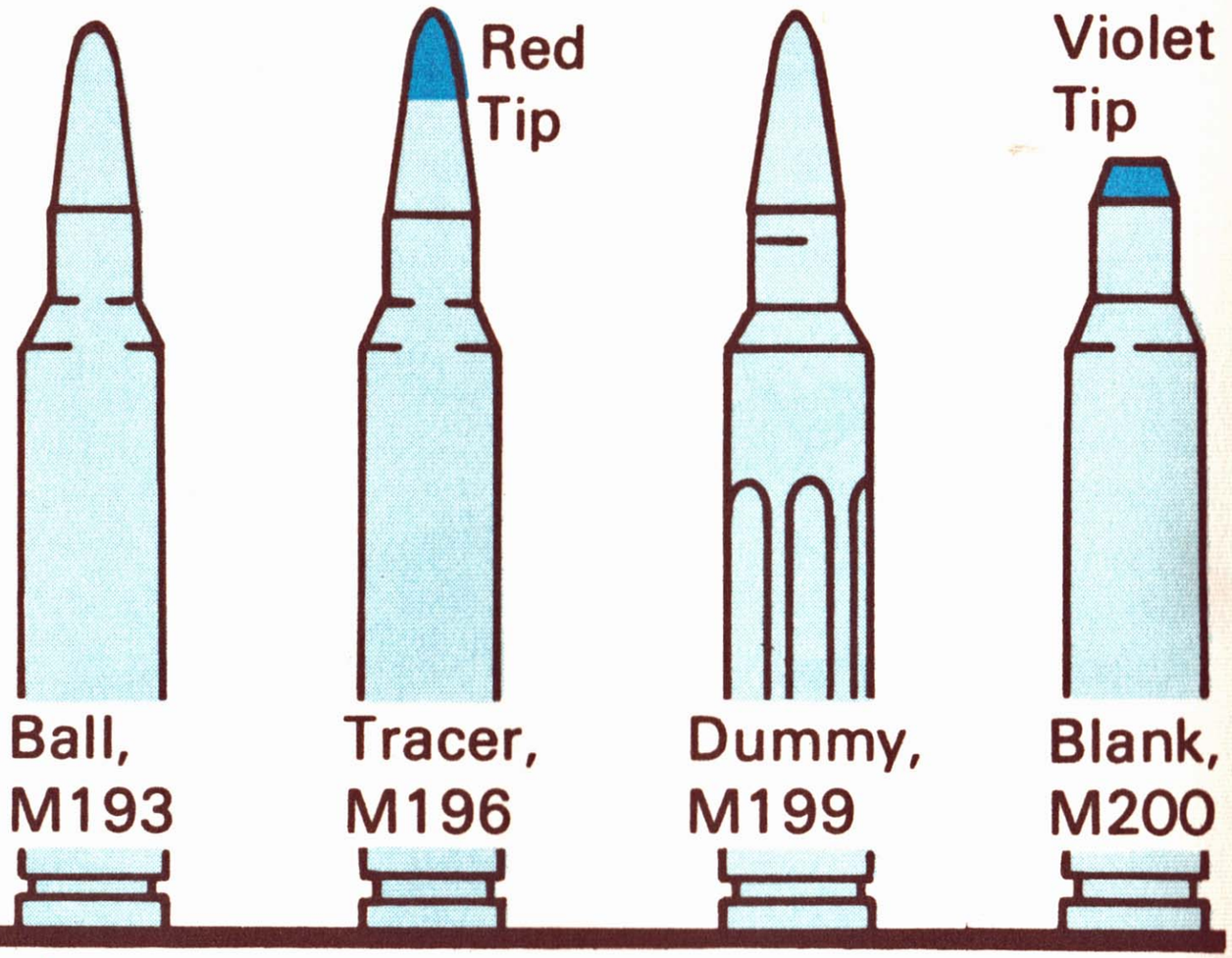


NOTE: Cock rifle before placing in "SAFE" position



WARNING:

Use only certified ammo that is manufactured to U.S. specs



DO NOT FIRE . . . * Seriously corroded ammunition

* Dented cartridges

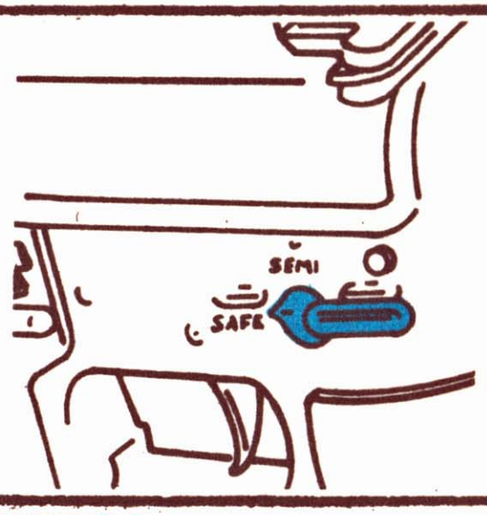
* Cartridges with loose bullets

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

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

CLEAR YOUR RIFLE

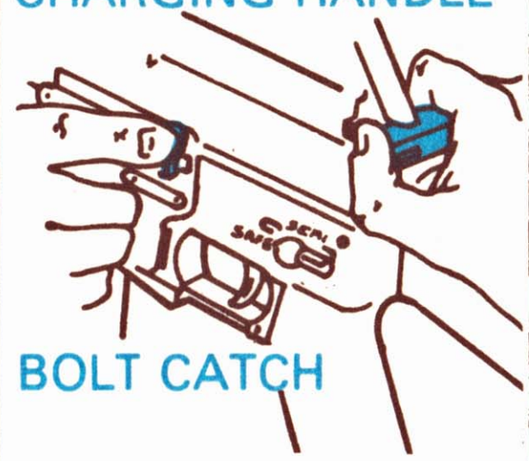
1 Place selector on SAFE. If weapon is not cocked, lever cannot be pointed toward SAFE.



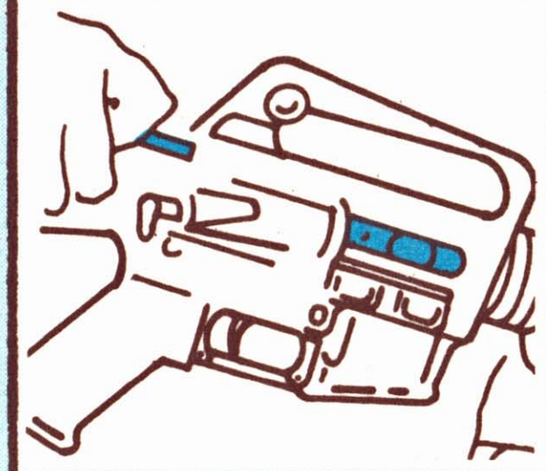
2 Remove magazine



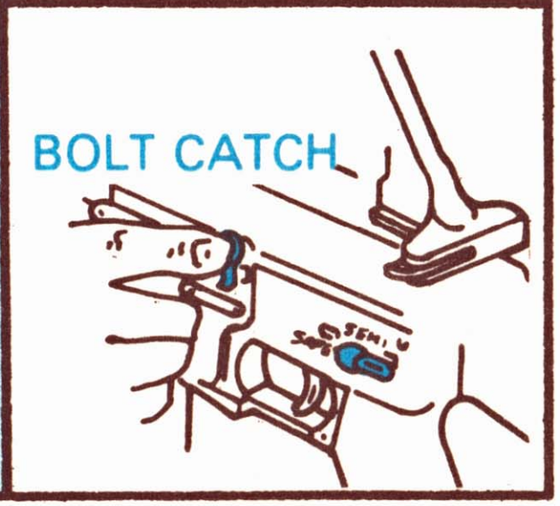
3 To lock bolt open, pull charging handle rearward, press bottom of bolt catch, allow bolt to move forward until it engages bolt catch. Return charging handle to forward. If you haven't before, place on SAFE



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

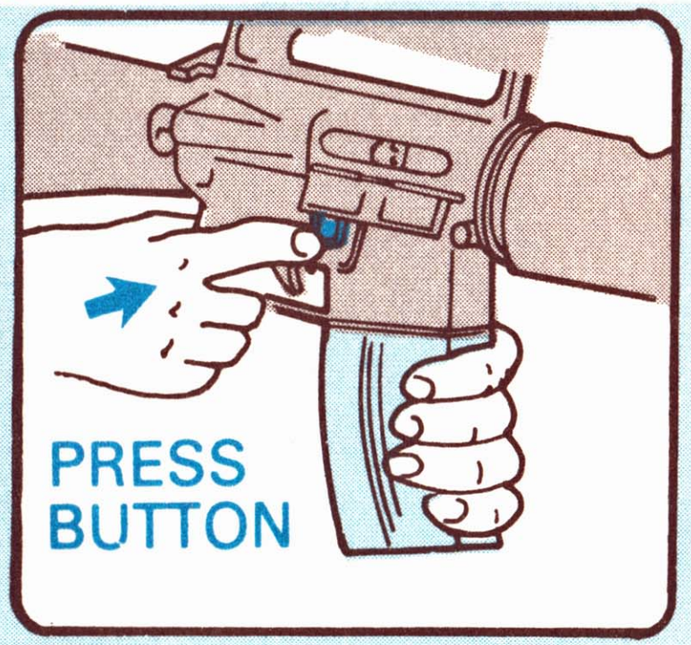


5 With selector lever pointing toward SAFE, allow bolt to go forward by pressing upper portion of bolt catch

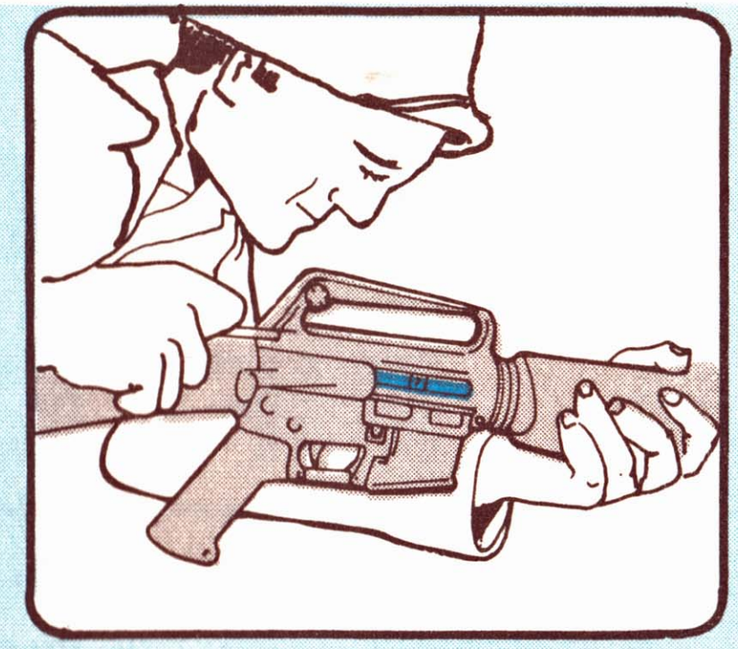


FIELD STRIPPING

START WITH SELECTOR ON SAFE



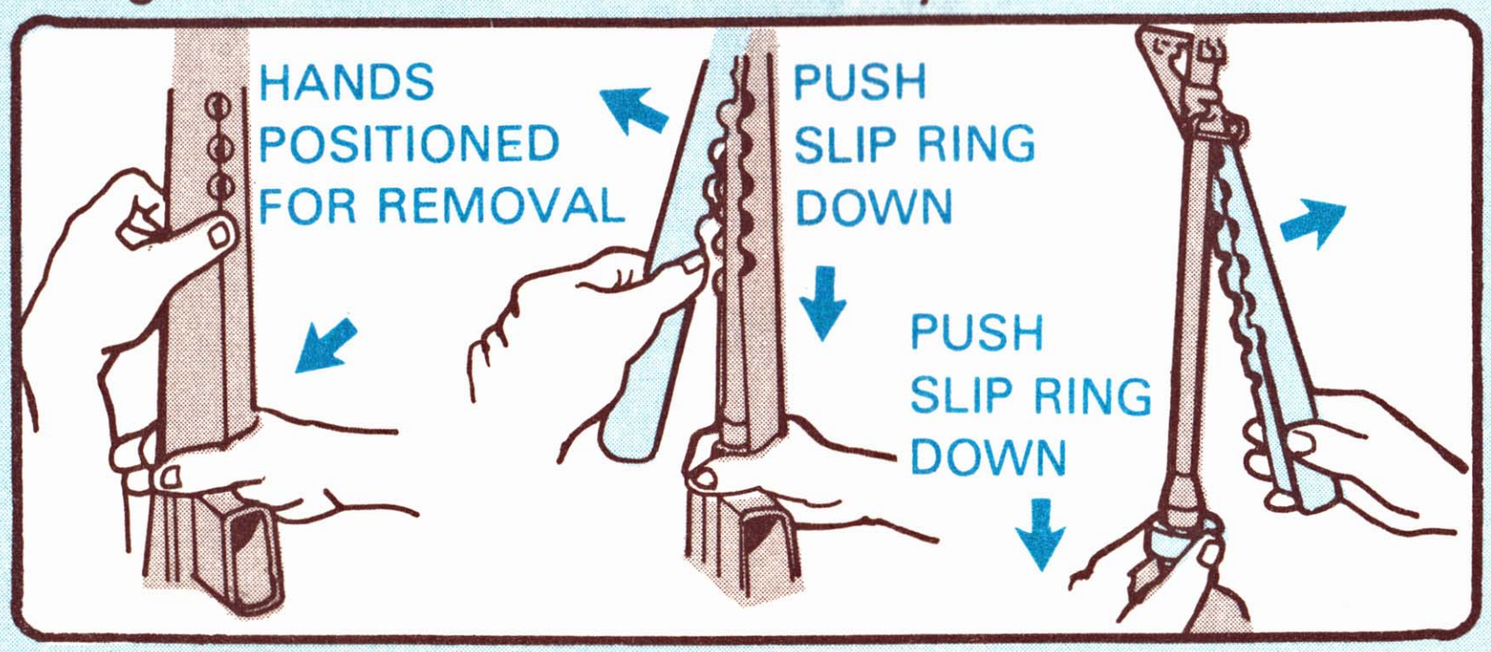
1 Remove magazine



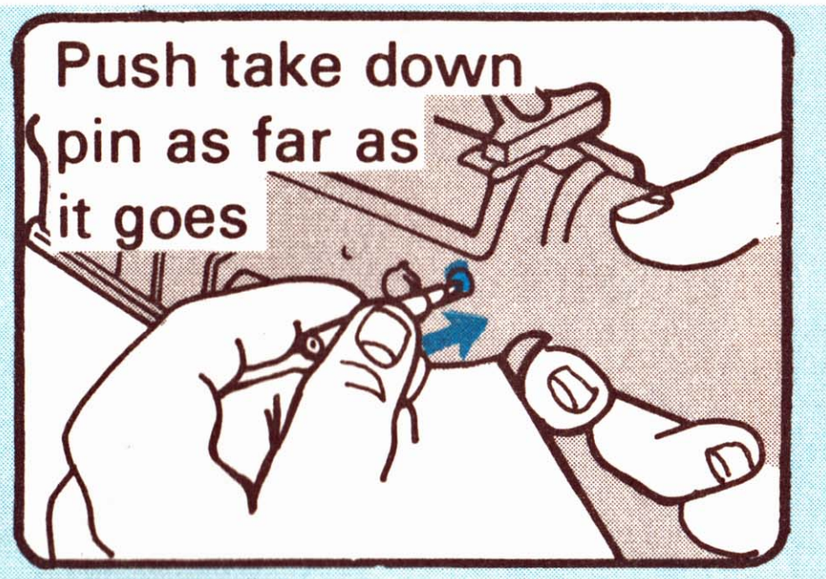
2 Open bolt and eyeball chamber

NOTE

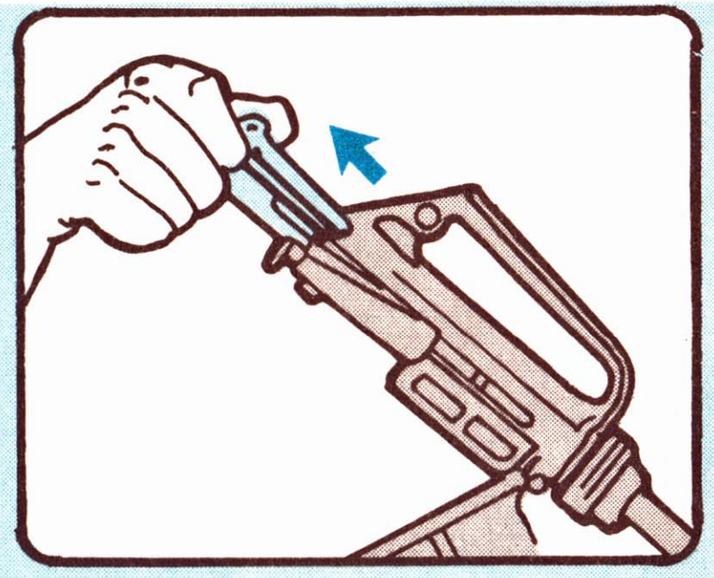
Remove & clean only if dirt & corrosion can be seen through vent holes



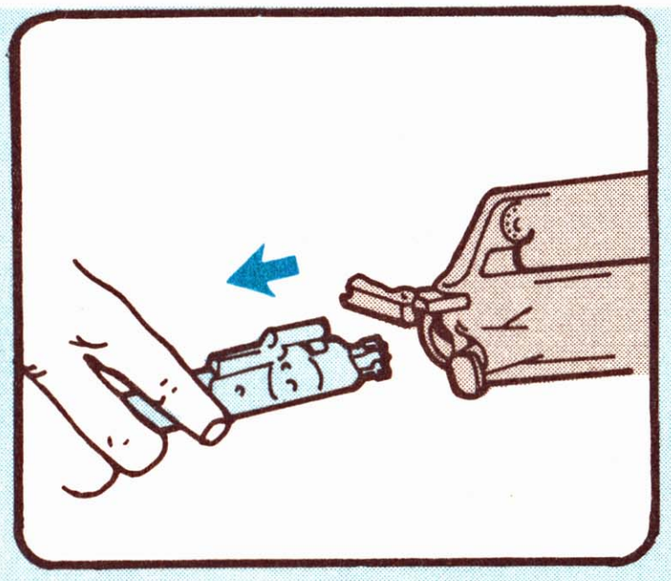
3 Remove handguards



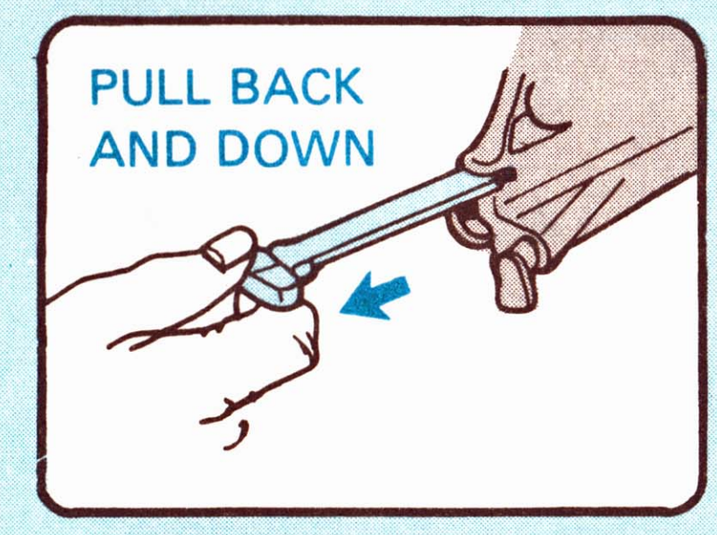
4 Pivot upper receiver from lower receiver



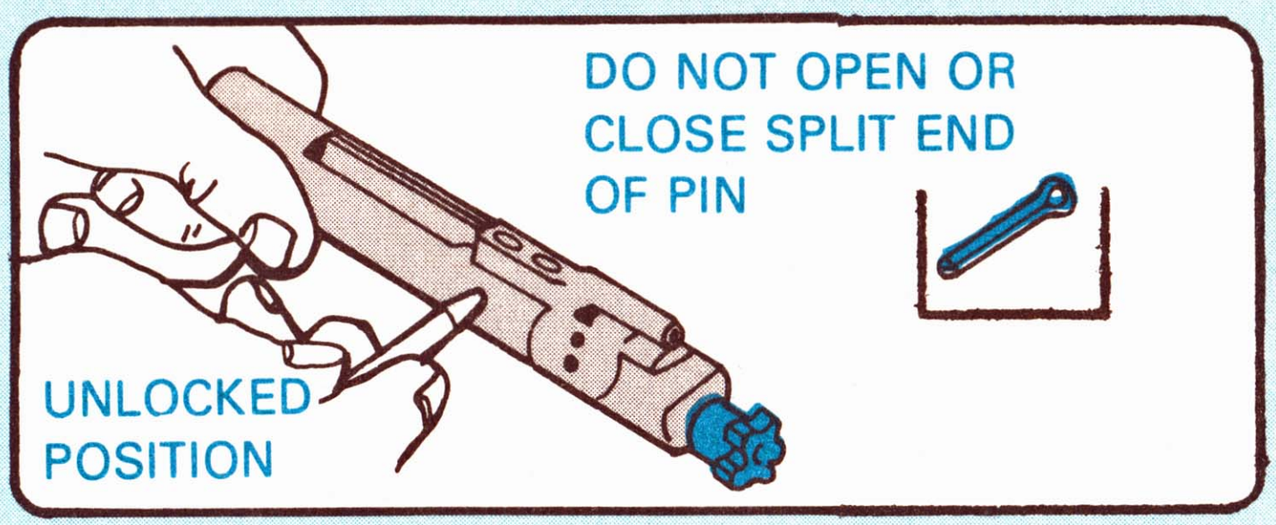
5 Pull back charging handle and bolt carrier



6 Remove bolt carrier and bolt

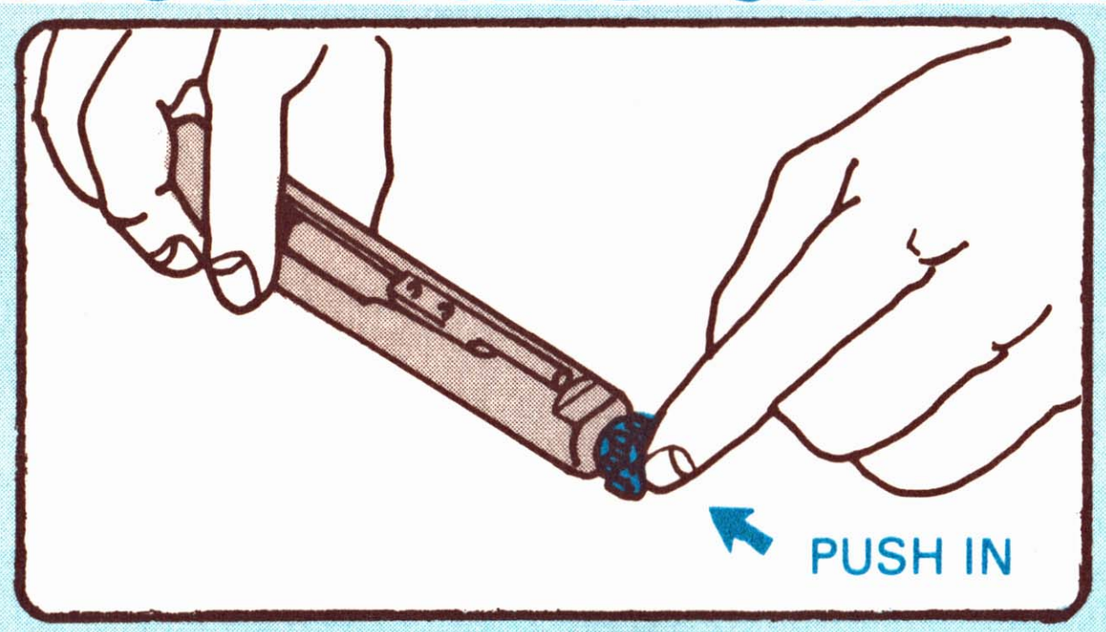


7 Remove charging handle

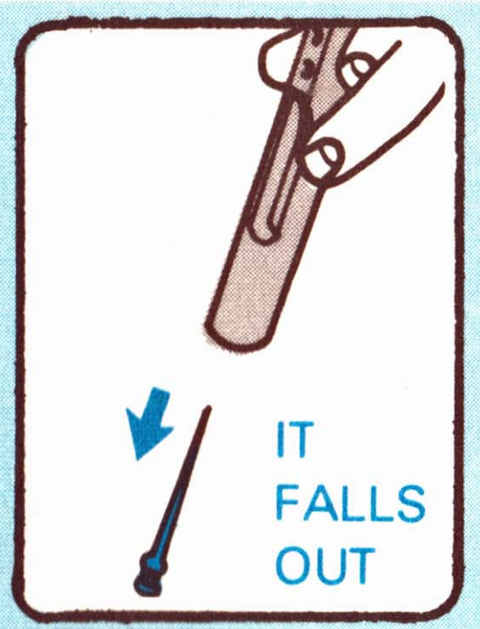


8 Remove firing pin retaining pin

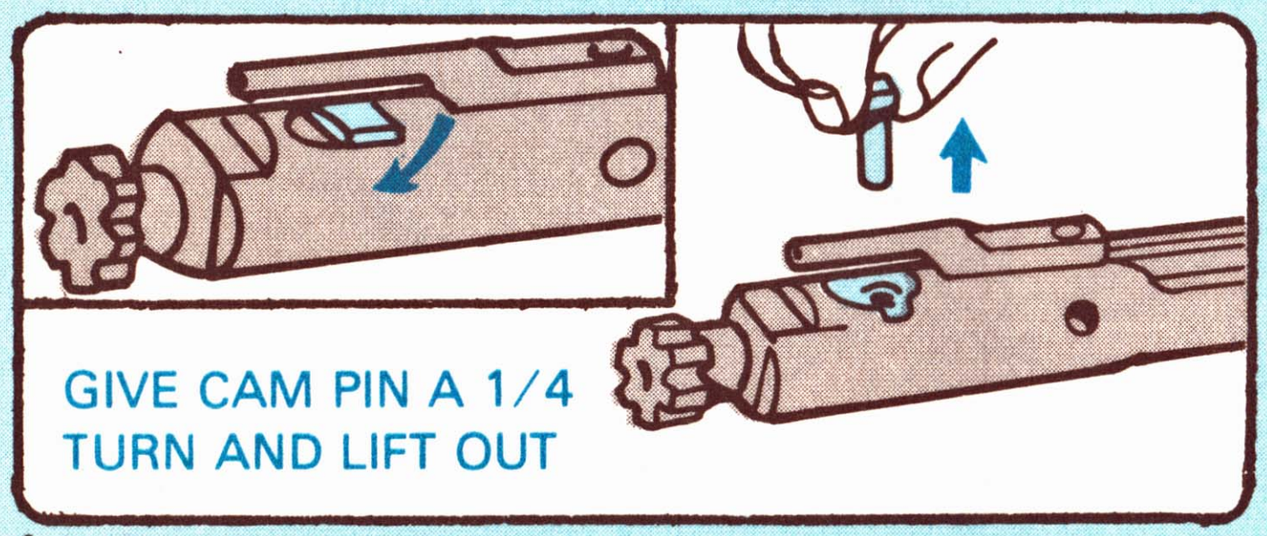
MORE FIELD STRIPPING



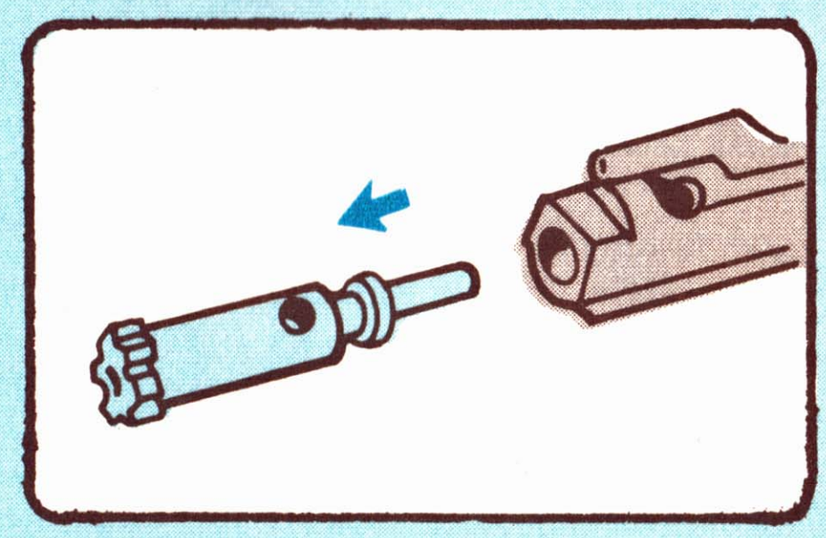
9 Put bolt assembly in lock position



10 Remove firing pin through rear of bolt carrier

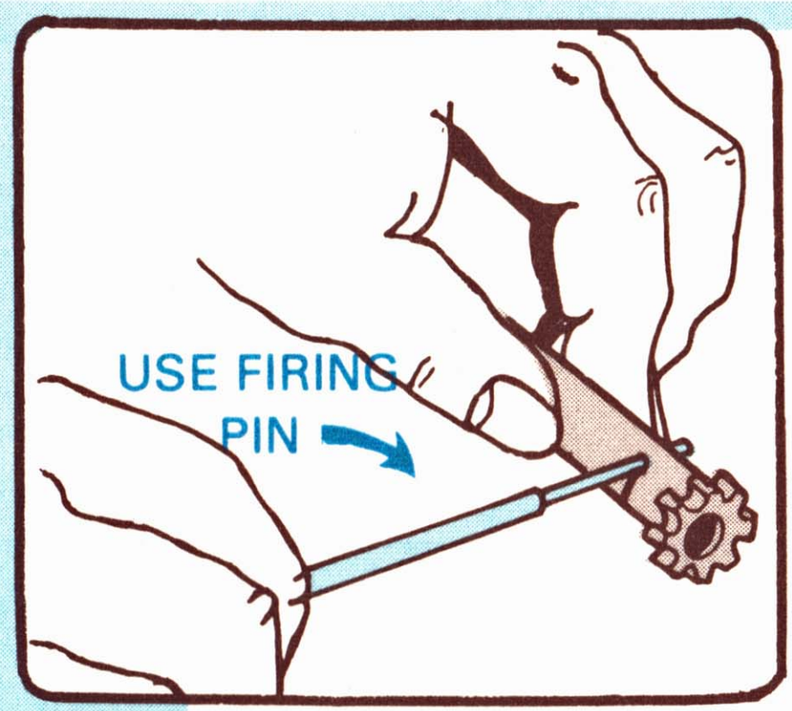


11 Remove bolt cam pin



12 Remove bolt assembly from carrier

NOTE →
Be careful not
to damage the tip

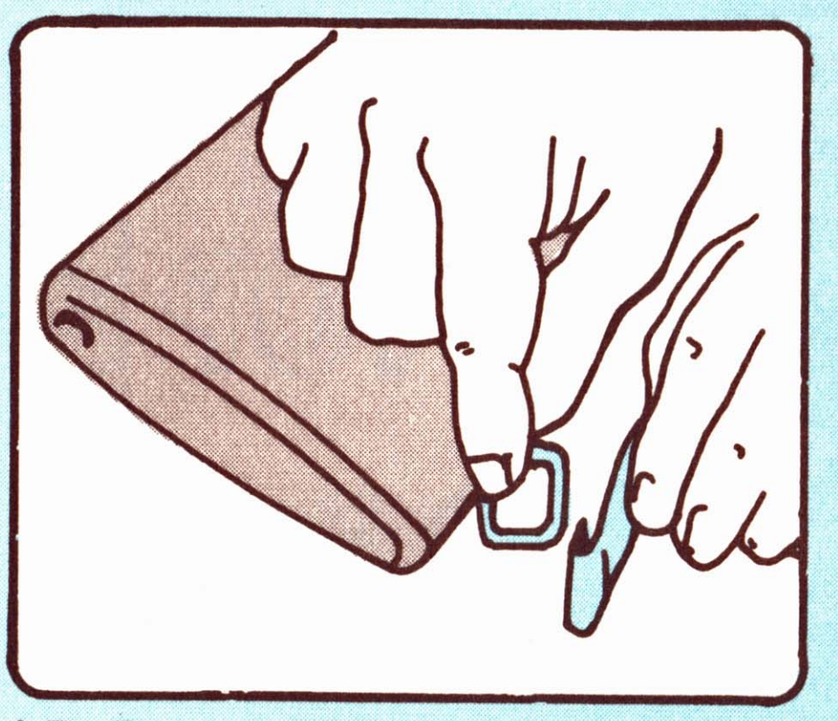


13 Remove
extractor pin



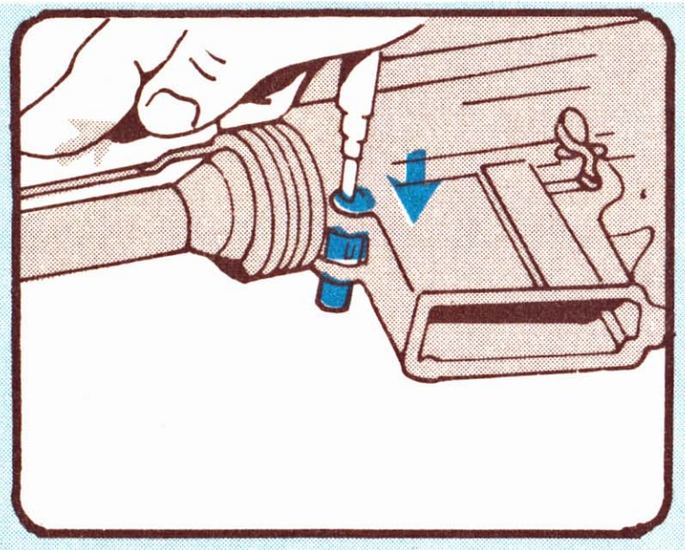
14 Remove extractor
and spring

NOTE
Remove only when dirty or damaged.
Press top of extractor to test
spring. Weak? **See your ARMORER**

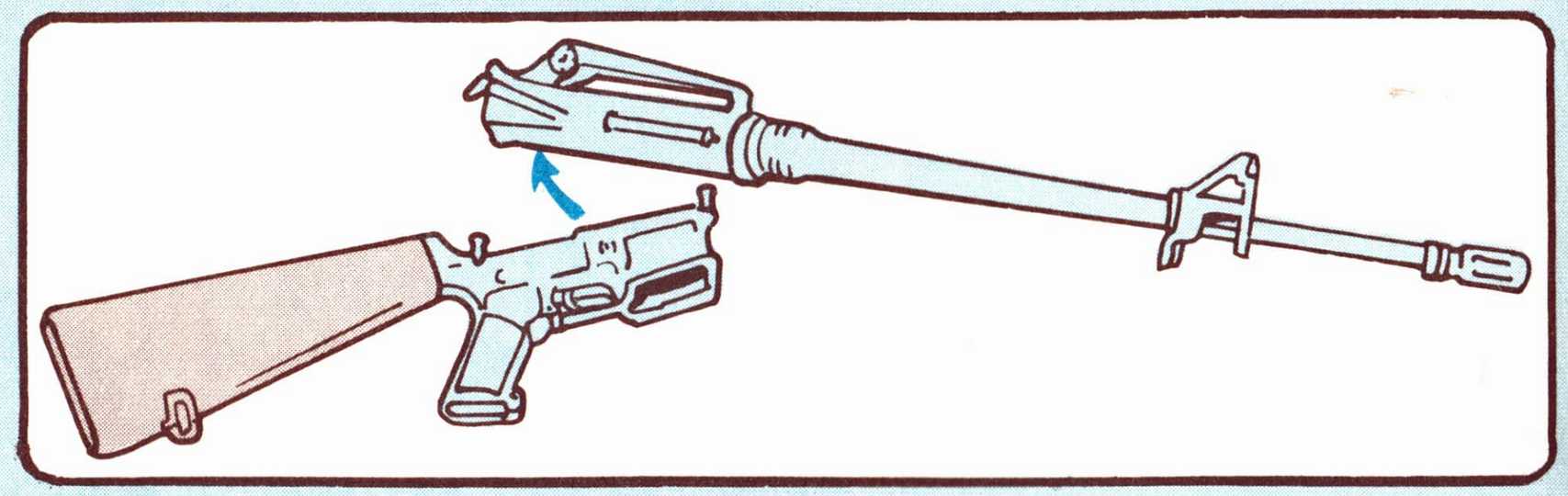


15 Remove sling

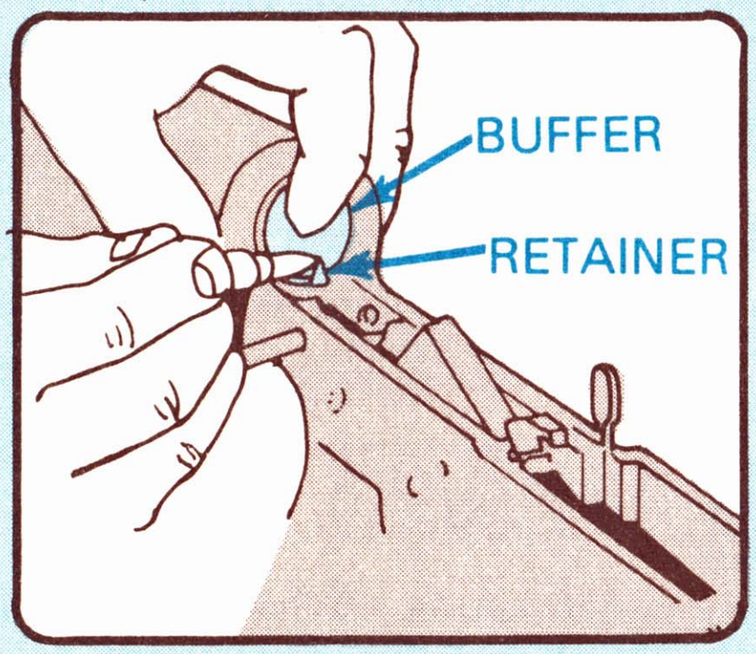
MORE FIELD STRIPPING



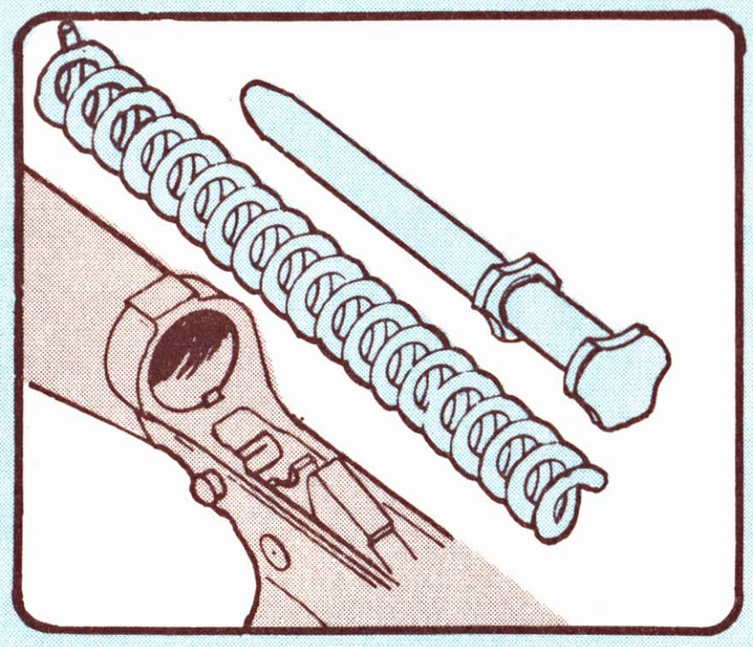
16 Push receiver pivot pin



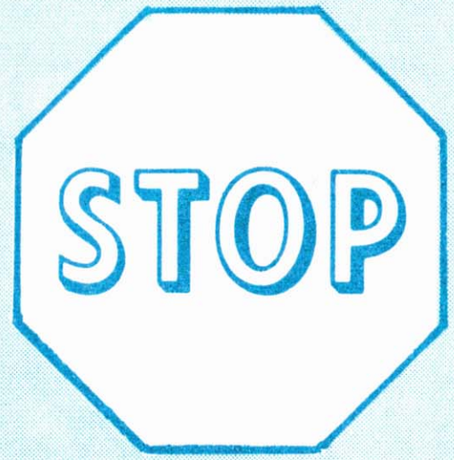
17 Separate upper and lower receivers



18 Press in buffer, depress retainer and release buffer



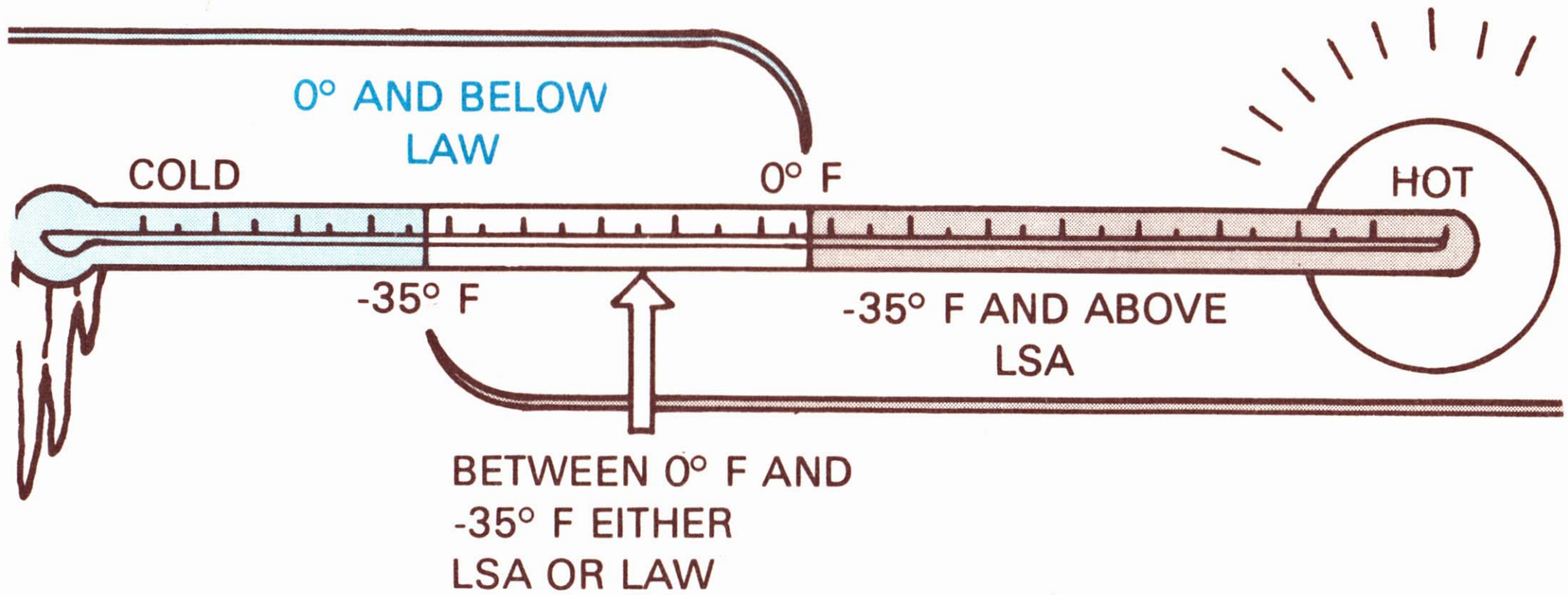
19 Remove buffer and spring



L S A and L A W LUBE GUIDE

LSA—Lubricating oil, semifluid weapons (4 oz 9150-00-889-3599)

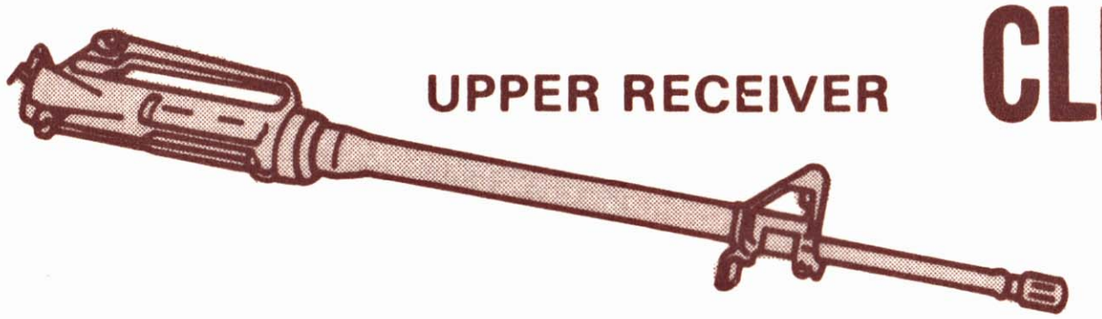
LAW—Lubricating oil, Arctic weapons (1 qt 9150-00-292-6989)



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

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

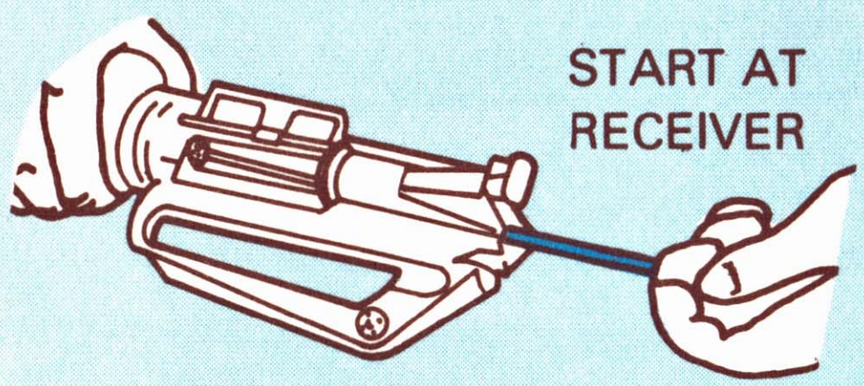
FIELD STRIP CLEANING



CLEAN WITH RBC

6850-00-224-6656

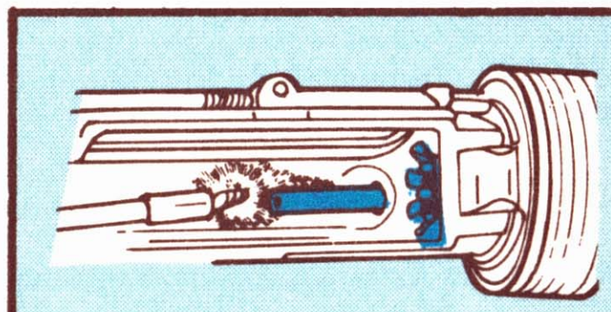
BORE AND CHAMBER



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)

All Areas of Powder Fouling, Corrosion, Dirt

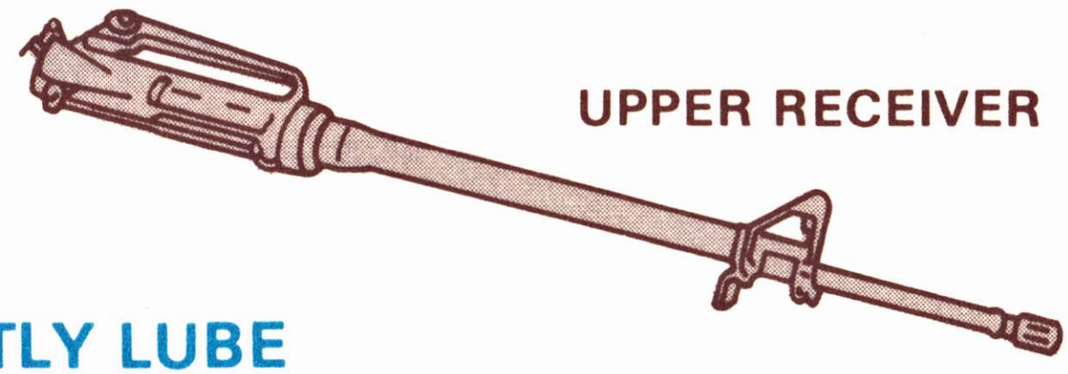
Bore & Chamber

Locking Lugs

Gas Tube

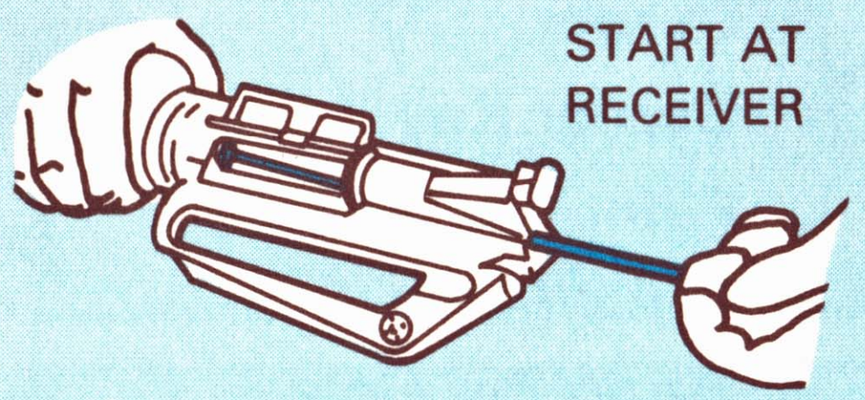
AND LUBRICATING

LUBE WITH LSA



UPPER RECEIVER

BORE AND CHAMBER



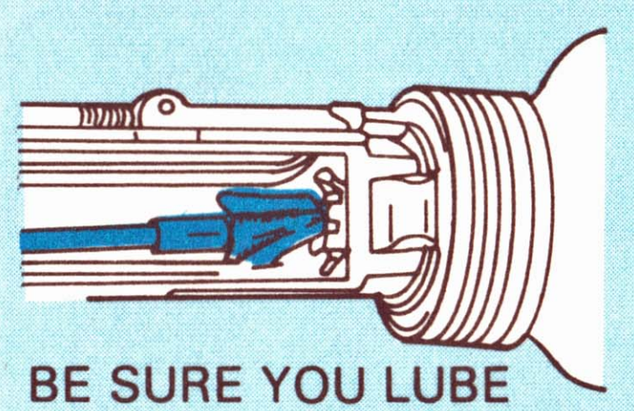
GO RIGHT THRU THE
FLASH SUPPRESSOR



SWAB 1005-00-912-9248
(DON'T REVERSE DIRECTIONS
IN BORE)

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



BE SURE YOU LUBE
LOCKING LUGS



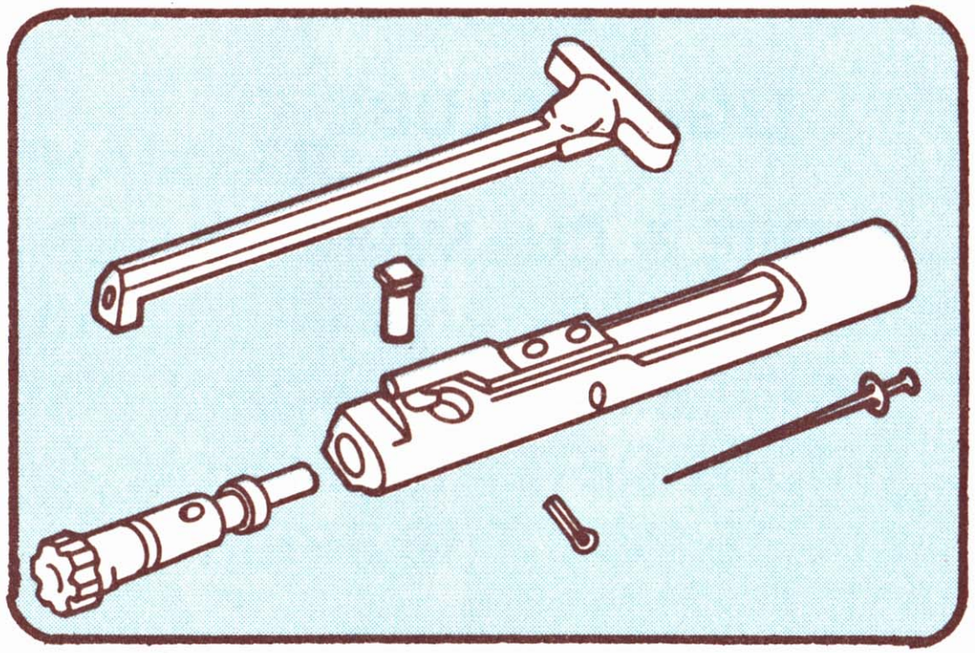
FRONT SIGHT

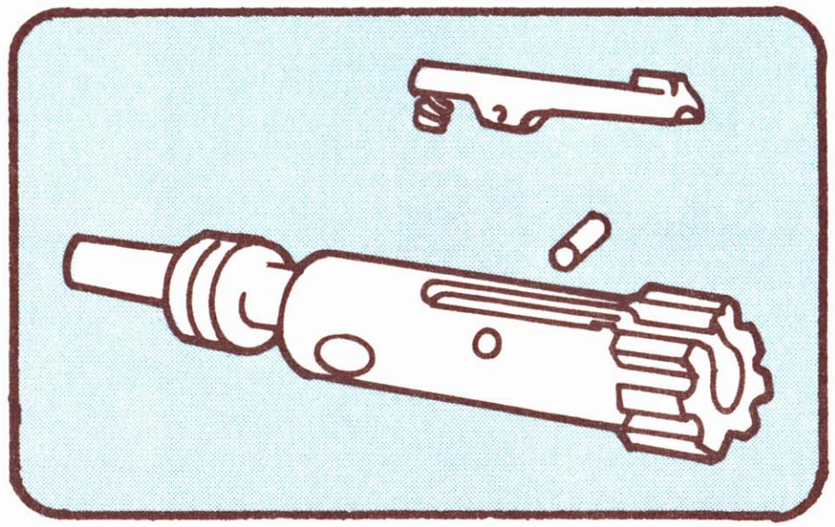
FIELD STRIP CLEANING

ATTACK ALL PARTS AND CLEAN WITH RBC

BOLT CARRIER GROUP







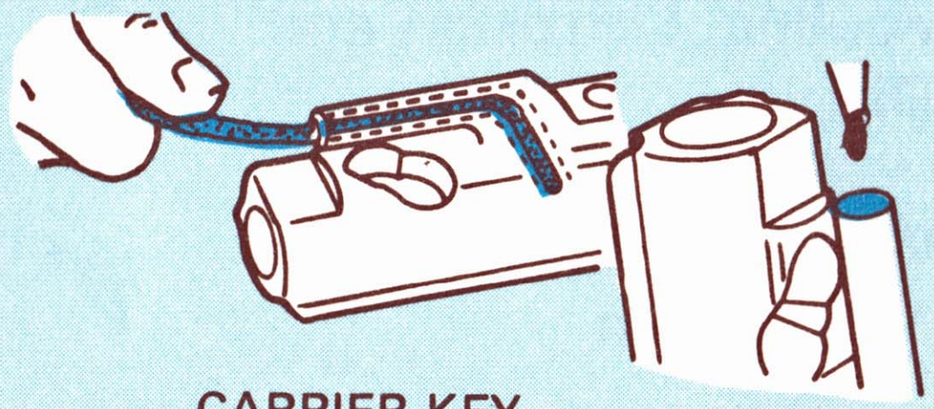
- Outer & Inner Surfaces of Bolt Carrier
- Carrier Key
- Firing Pin Recess and Firing Pin
- Firing Pin Hole (Use Pipe Cleaner There)
- Carbon Deposits & Dirt from Locking Lugs
- Areas Behind Bolt Ring and Under Lip of Extractor

AND LUBRICATING

BOLT CARRIER GROUP

LUBE WITH LSA

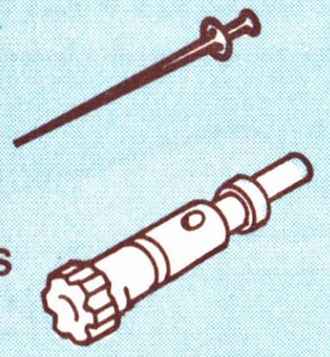
DRY WITH PIPE CLEANER,
THEN PLACE ONE DROP LSA

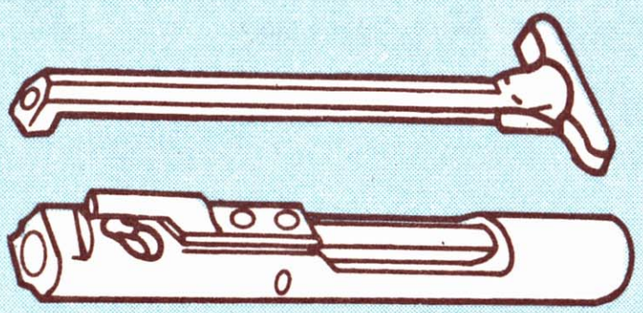


CARRIER KEY

CAUTION

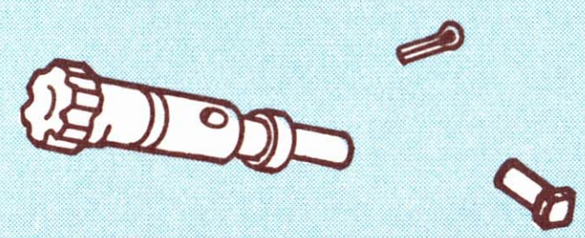
Lightly lube
firing pin and
firing pin recess
in bolt





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

GENEROUSLY LUBE OUTSIDE OF THESE PARTS

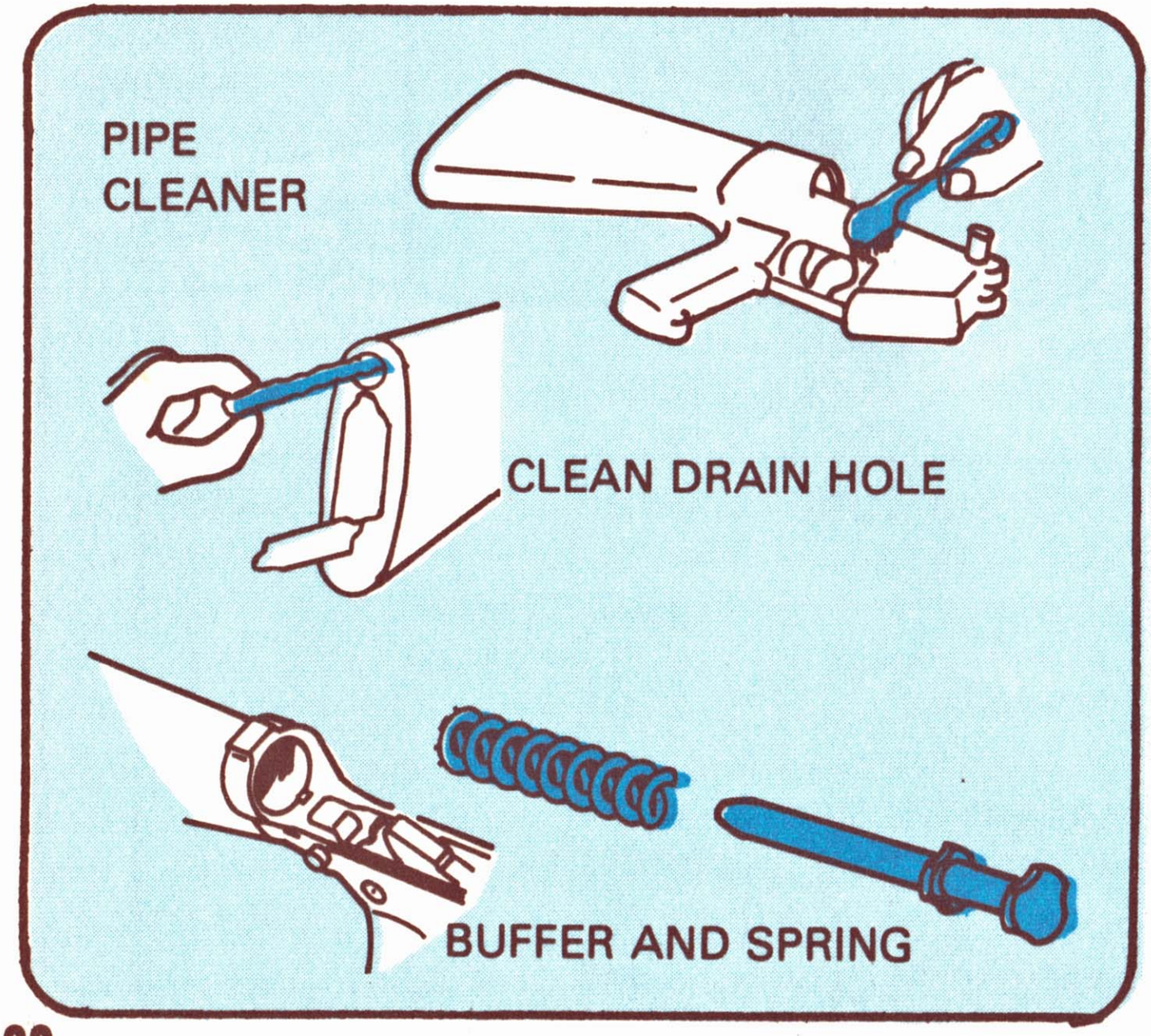


MAKE CERTAIN TO GET CAM PIN AREA, PISTON RINGS, AND OUTSIDE OF THE BOLT BODY

FIELD STRIP CLEANING

CLEAN WITH RBC

LOWER RECEIVER GROUP



All Areas of Powder Fouling, Corrosion and Dirt ✓

Wipe Dirt from Trigger Mechanism ✓

Clean Buffer and Inside Lower Receiver Extension ✓

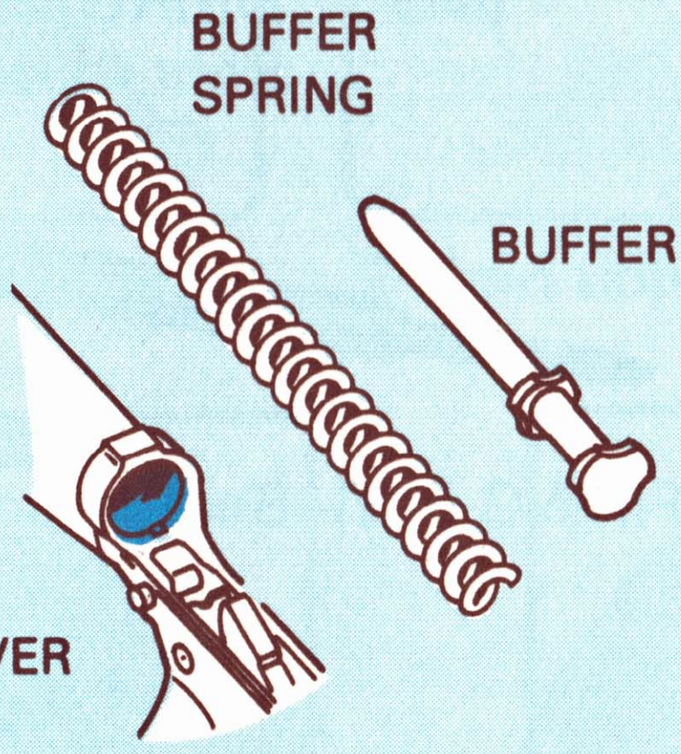
CAUTION

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

AND LUBRICATING

LUBE WITH LSA

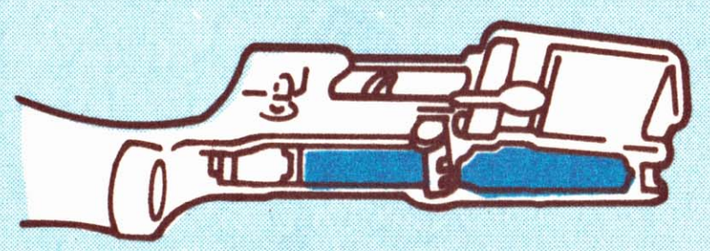
LOWER RECEIVER GROUP



INSIDE
LOWER RECEIVER
EXTENSION

GENEROUSLY LUBE

INSIDE PARTS LOWER RECEIVER
TAKE DOWN AND PIVOT PINS



INSIDE PARTS LOWER RECEIVER

INSPECT and REPLACE Before Putting It Back Together

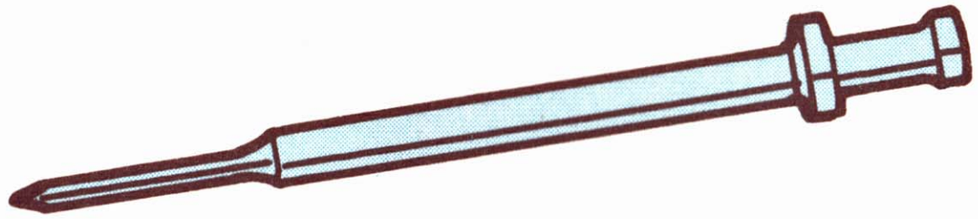
Parts As Needed



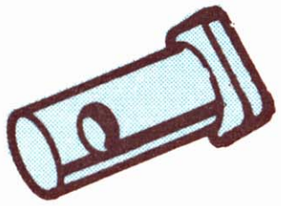
BOLT - Cracks or fractures, especially in the cam pin hole area



FIRING PIN RETAINING PIN
Bent, busted, badly worn



FIRING PIN - Bent, cracked or blunted end

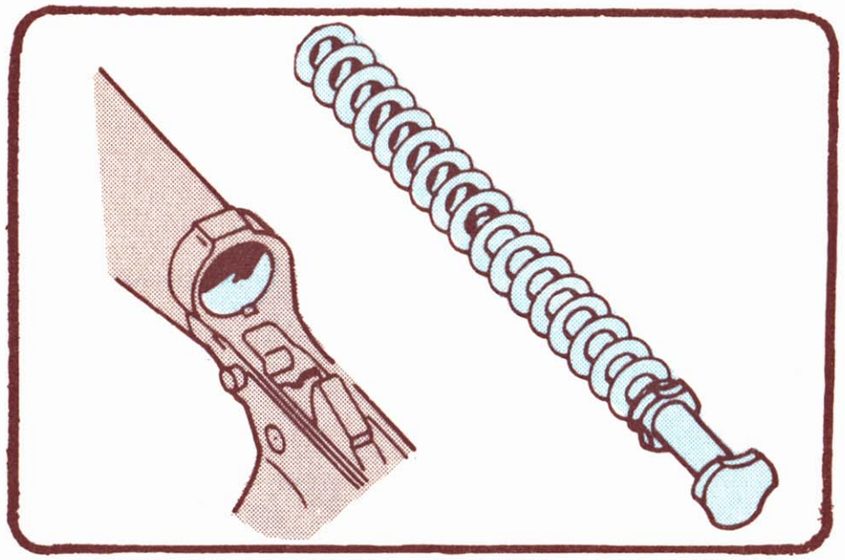


CAM PIN - Cracked, chipped or missing

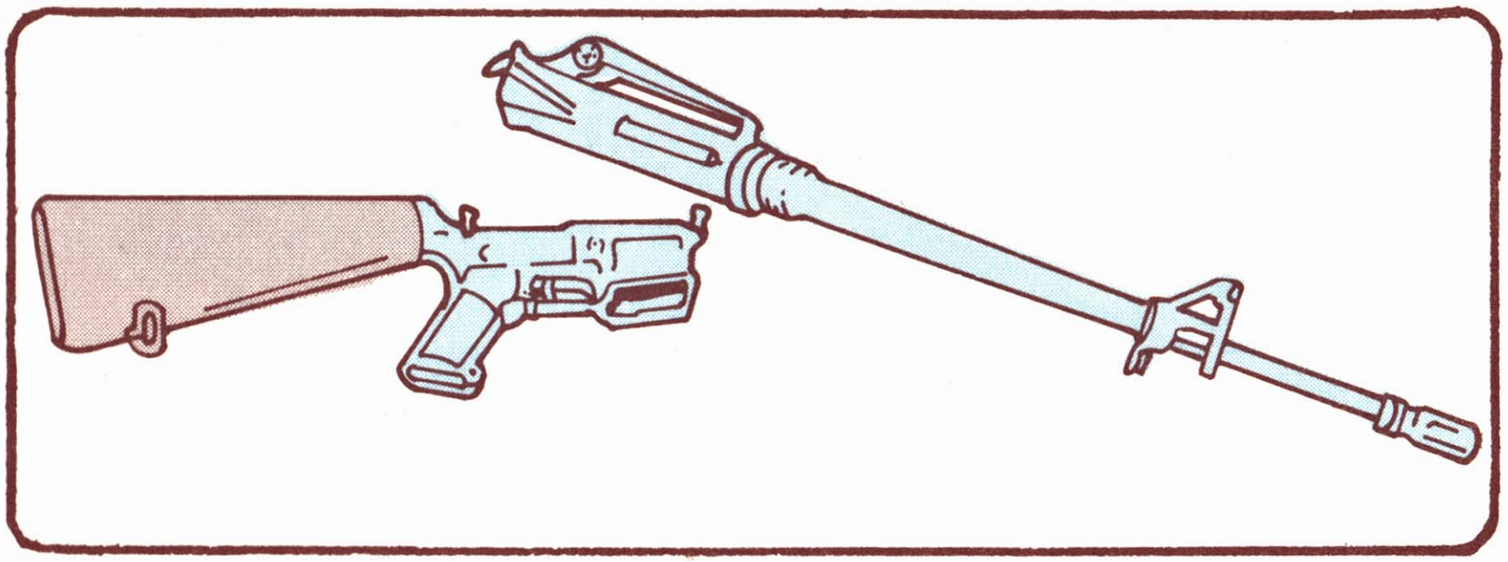


EXTRACTOR AND EXTRACTOR SPRING- Check extractor for chipped or broken edges in the area of the lip that engages the cartridge rim. Test spring. Weak? Replace

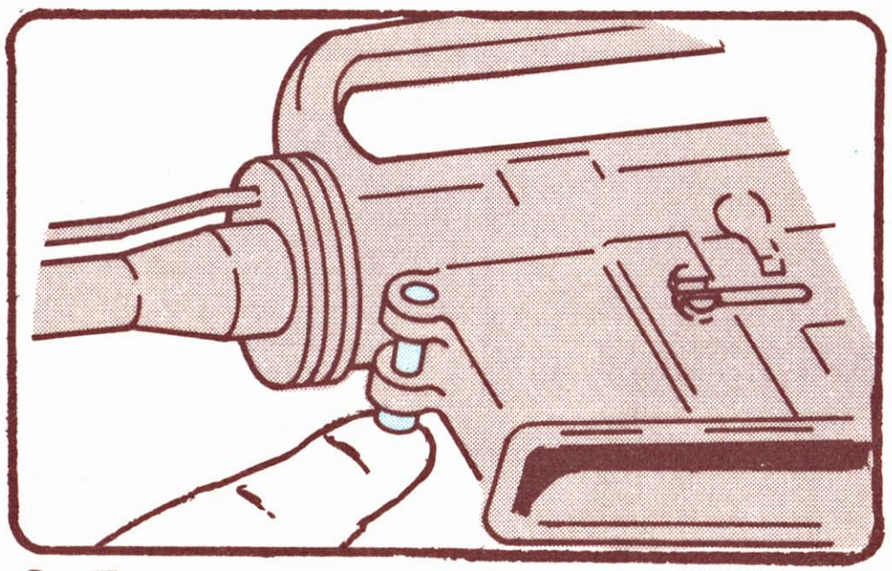
PUTTING IT BACK TOGETHER



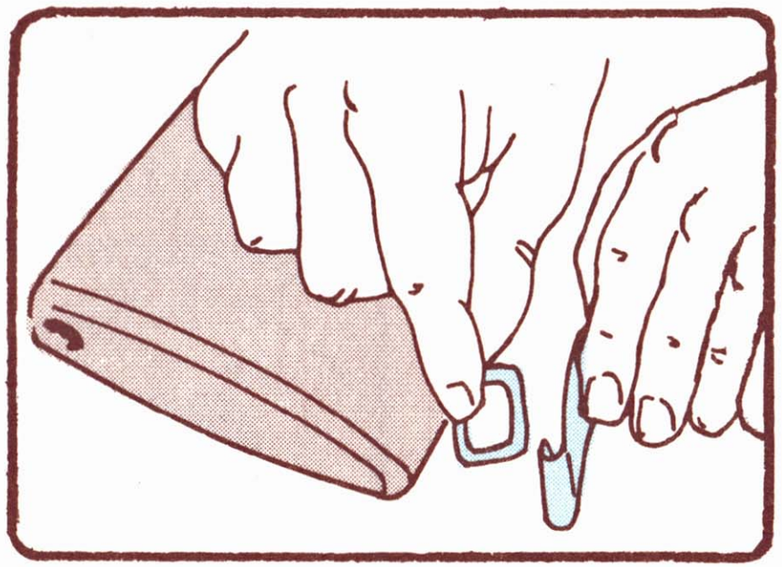
1 Insert spring and buffer



2 Join upper and lower receivers



3 Engage receiver pivot pin

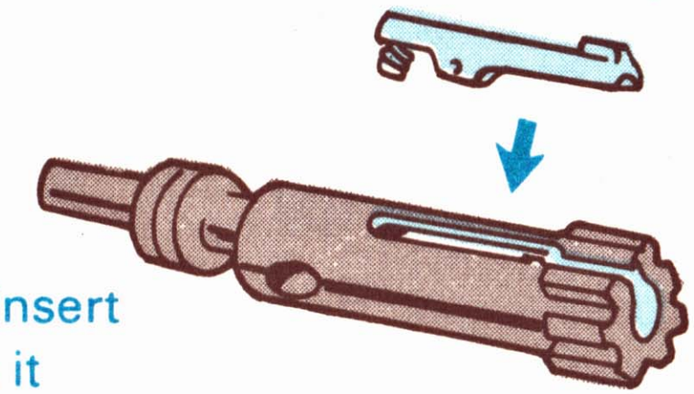


4 Snap on sling

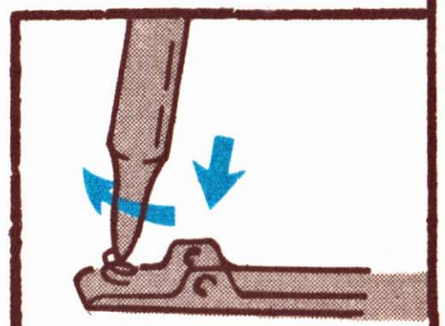
PUTTING IT BACK TOGETHER



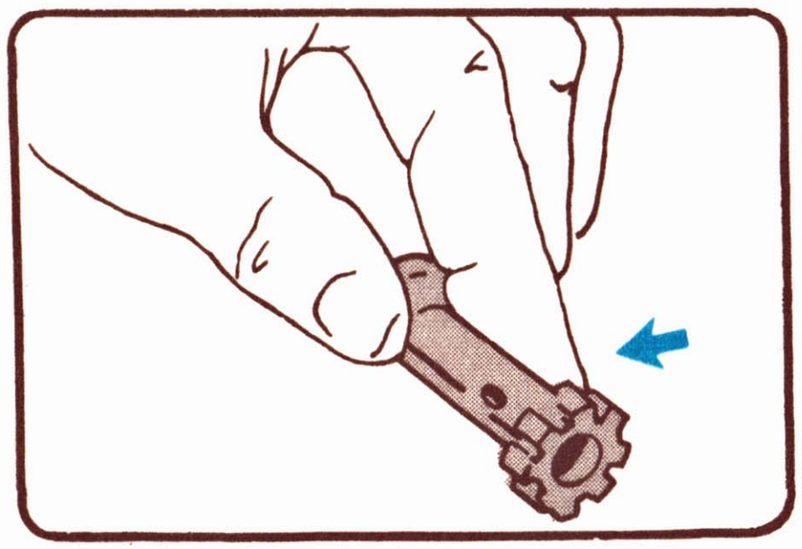
New extractor has a silicone insert w/spring. Be sure not to lose it



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



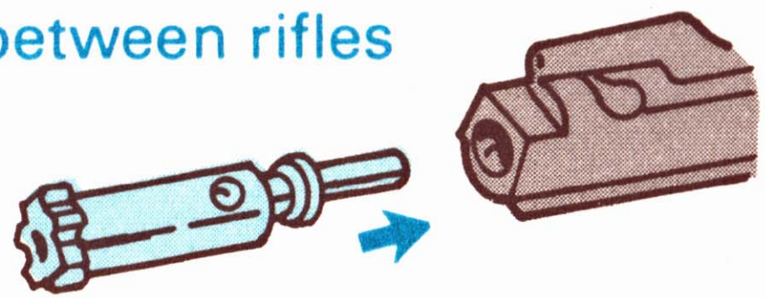
5 Insert extractor and spring

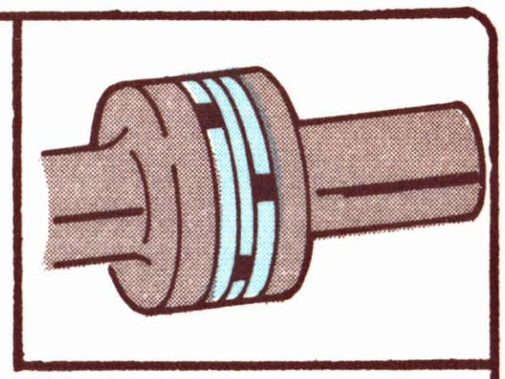


6 Push in extractor pin

CAUTION

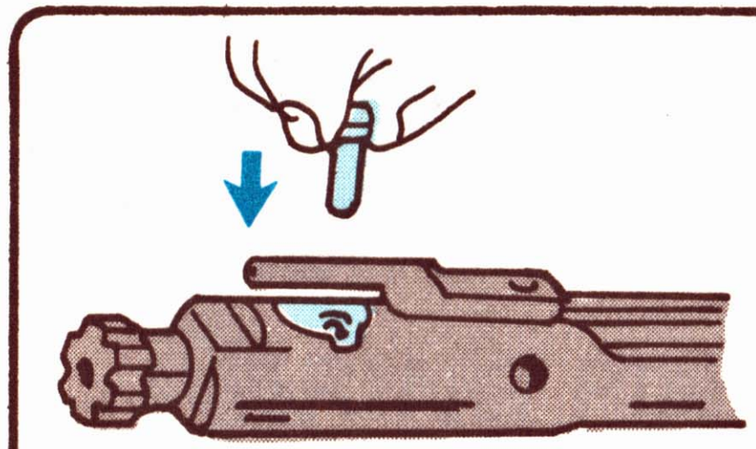
Don't switch bolts between rifles

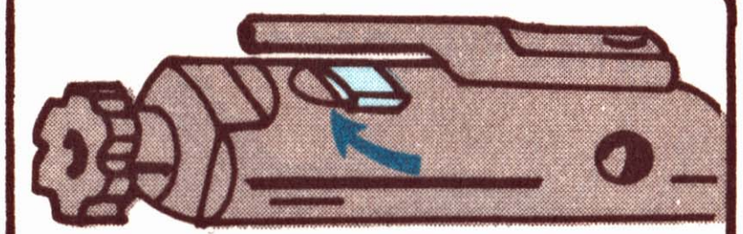




STAGGER RING GAPS TO STOP GAS LOSS

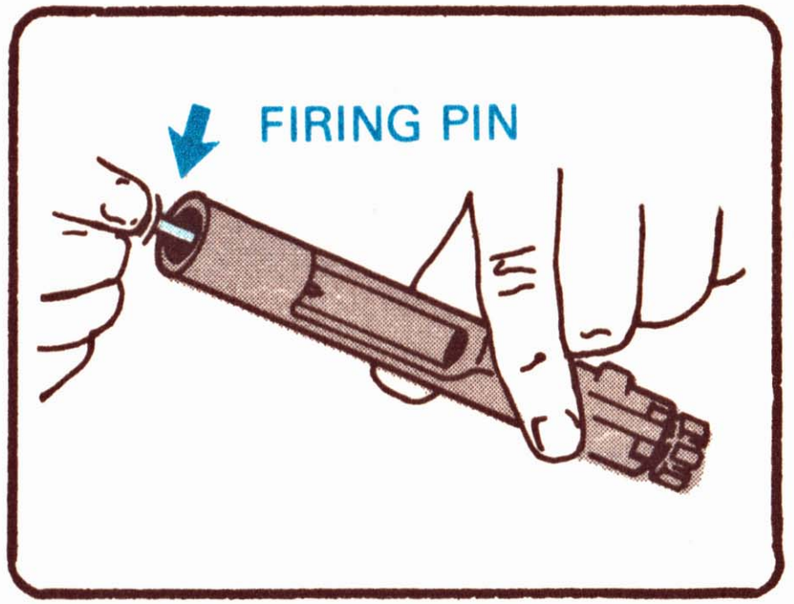
7 Slide bolt into carrier



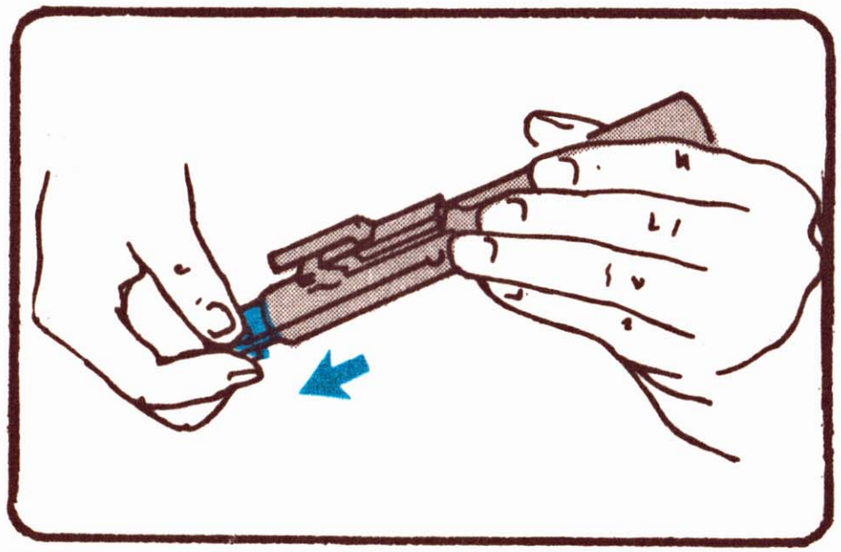


GIVE CAM PIN A 1/4
TURN AFTER ASSEMBLY

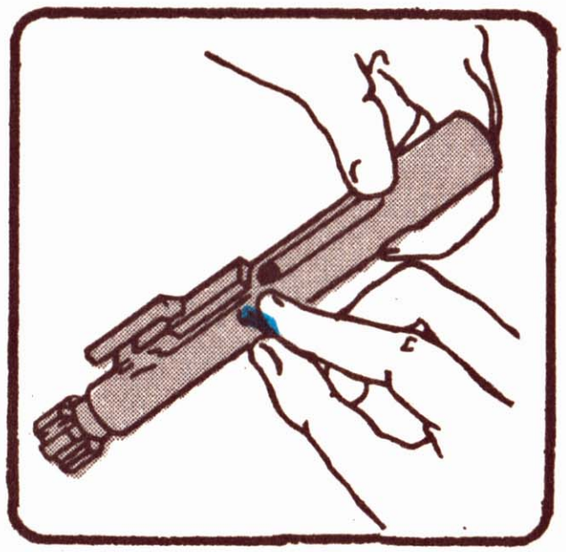
8 Replace bolt cam pin



9 Drop in and seat



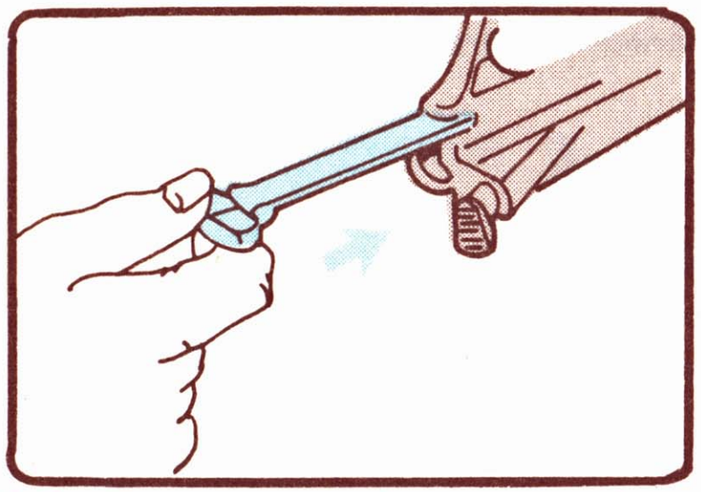
10 Pull bolt back



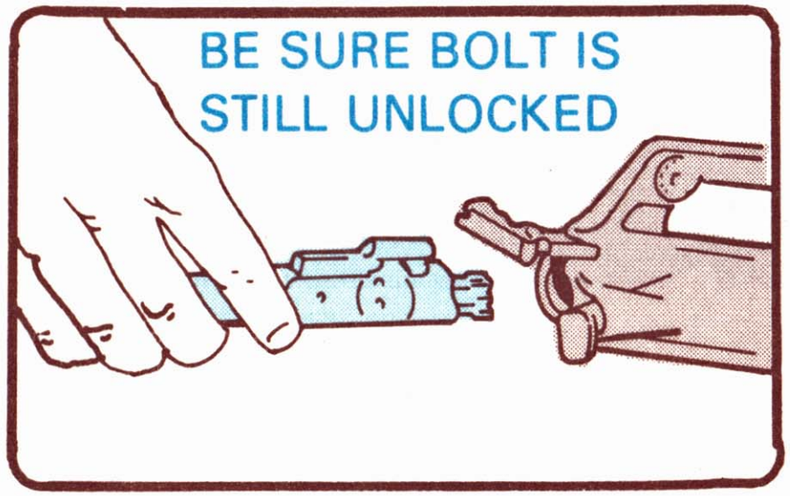
11 Replace retaining pin

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

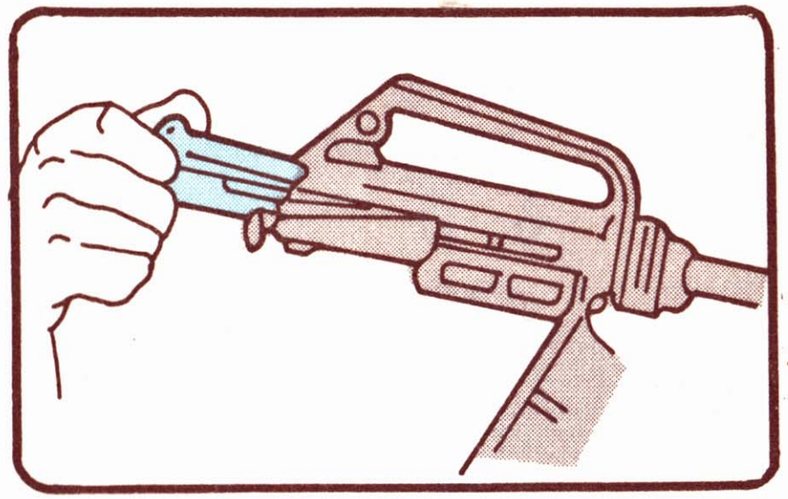
PUTTING IT BACK TOGETHER



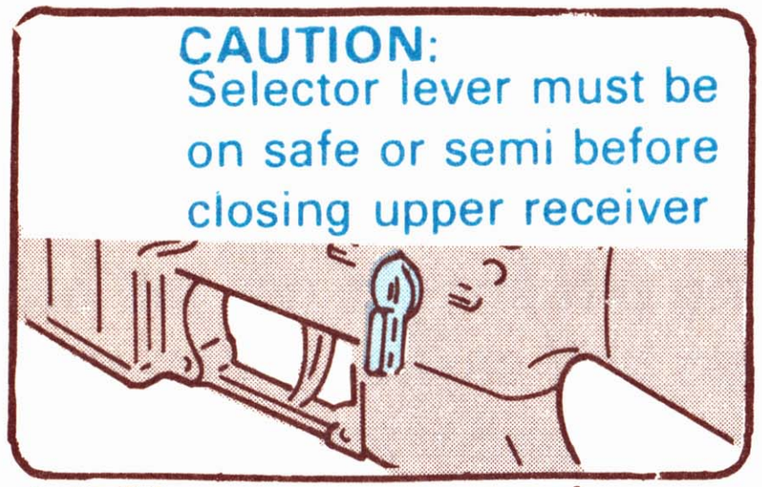
12 Engage, then push charging handle part way



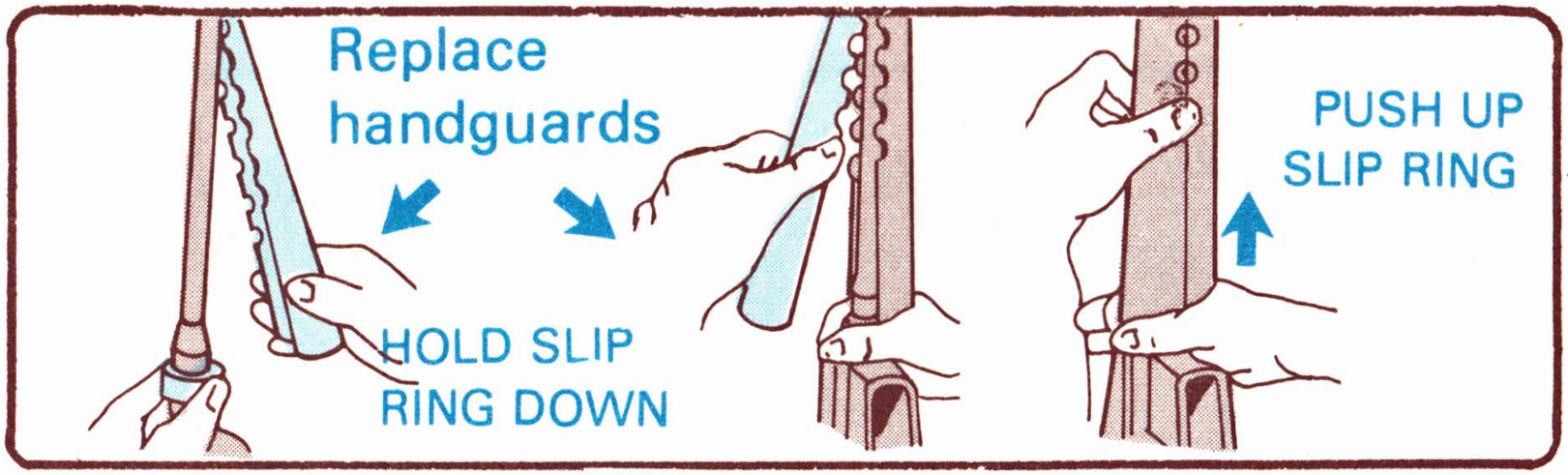
13 Slide in bolt carrier group



14 Push in charging handle and bolt carrier group together



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



16 PUT HANDGUARDS IN PLACE

DID YOU INSTALL EVERYTHING?

- ✓ CAM PIN
- ✓ RETAINING PIN
- ✓ FIRING PIN
- ✓ BOLT
- ✓ EXTRACTOR PIN

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

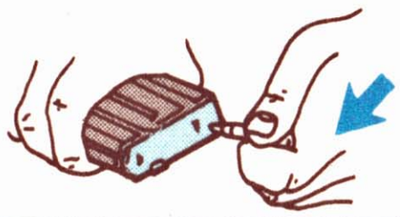
Place selector in semi. Pull trigger and hold to rear. Hammer should fall. Pull charging handle to rear and release. Release trigger and pull again. Hammer should fall

AUTO

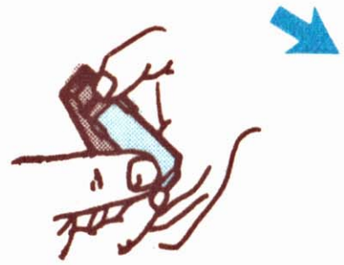
Place selector in auto. Pull charging handle to rear and release. Pull trigger and hold to rear, hammer should fall. Pull charging handle to rear and release. Release trigger and pull again. Hammer should not fall

TAKING YOUR MAGAZINE APART (20 RD MAG)

PUSH DOWN ON INTERNAL SPRING AND SLIDE OUT

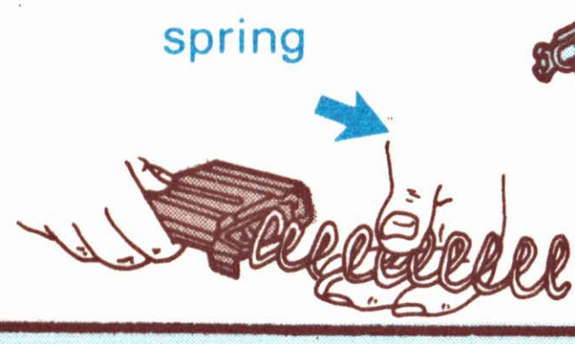


Release base catch



Remove base

NOTE: Do not remove follower from spring



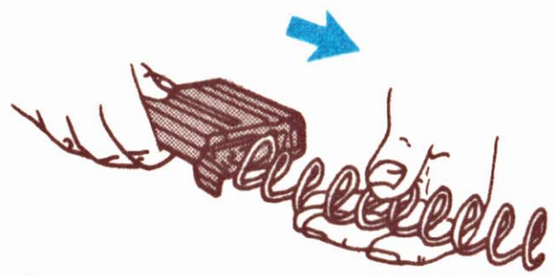
Jiggle spring and follower to remove

PUTTING YOUR MAGAZINE TOGETHER

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

CLEAN & LUBE

Wipe dirt from tube, spring, and follower, then lightly lube spring



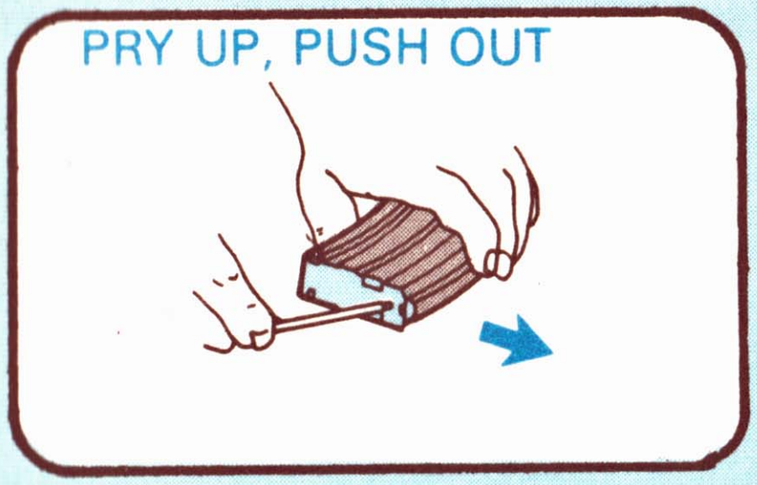
Jiggle spring and follower to install

MAKE SURE PRINTING IS ON THE OUTSIDE

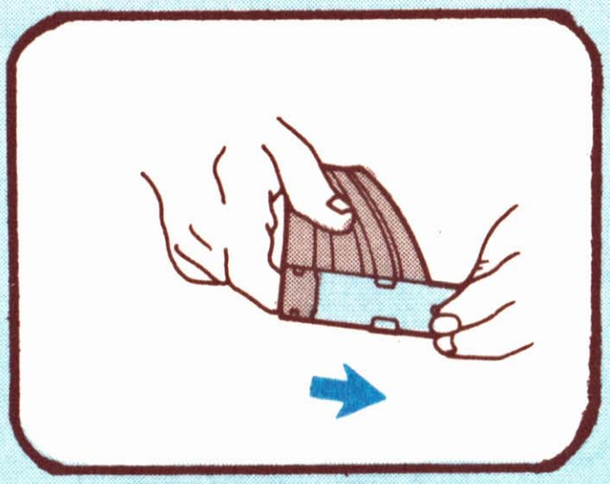


Slide the base under all four tabs

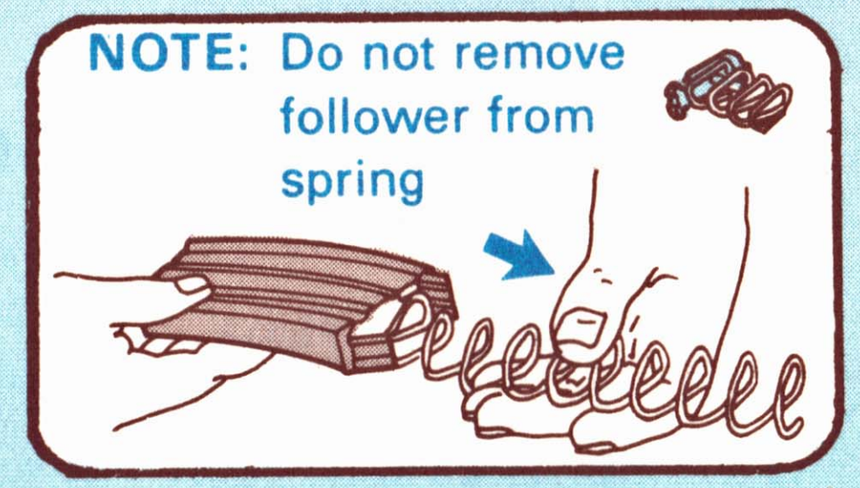
TAKING YOUR MAGAZINE APART (30 RD MAG)



Release base catch



Remove base

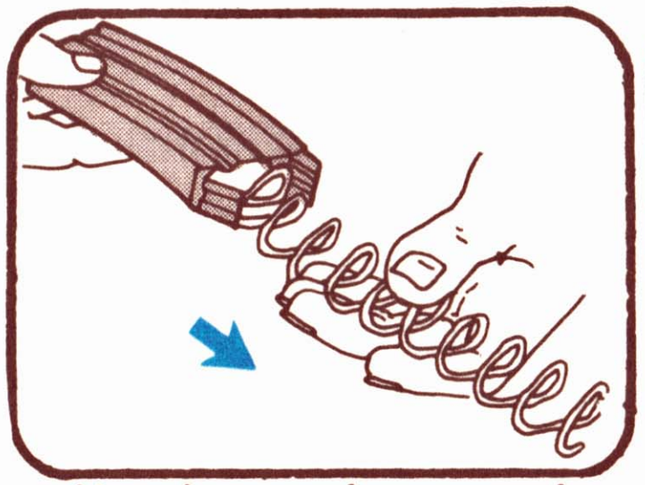


Jiggle spring and follower to remove

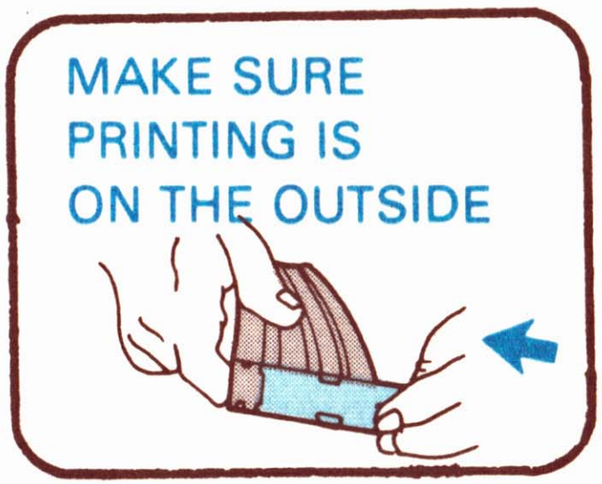
PUTTING YOUR MAGAZINE TOGETHER

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

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



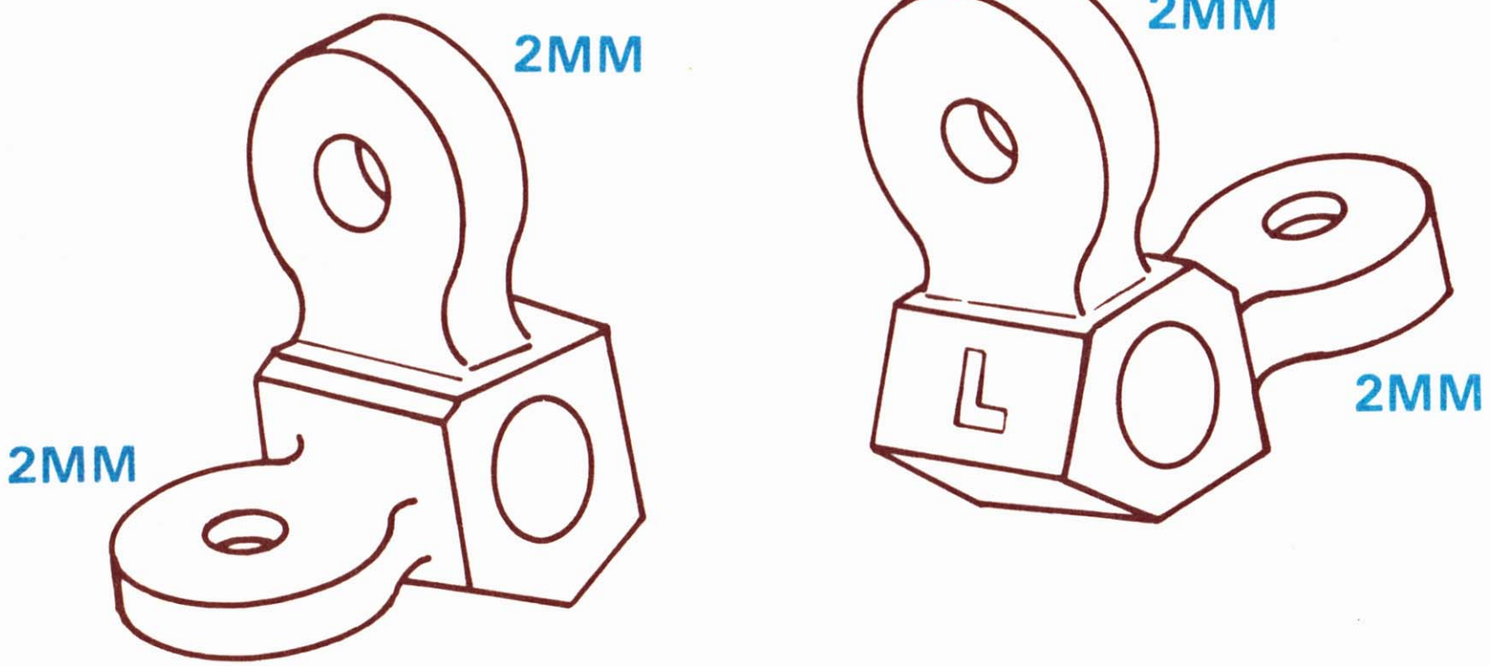
Jiggle spring and follower to install



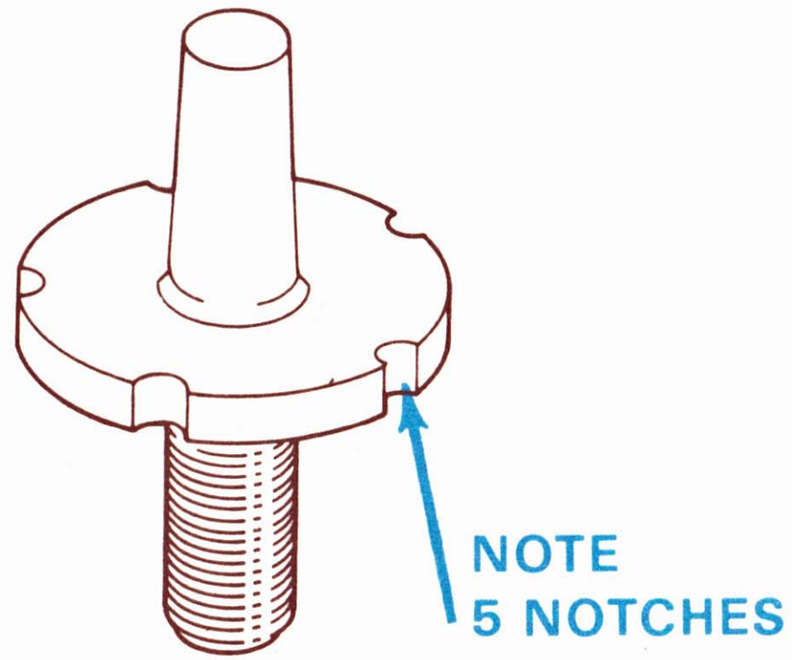
Slide the base under all four tabs

STANDARD DAYLIGHT SIGHT

REAR SIGHT



FRONT SIGHT

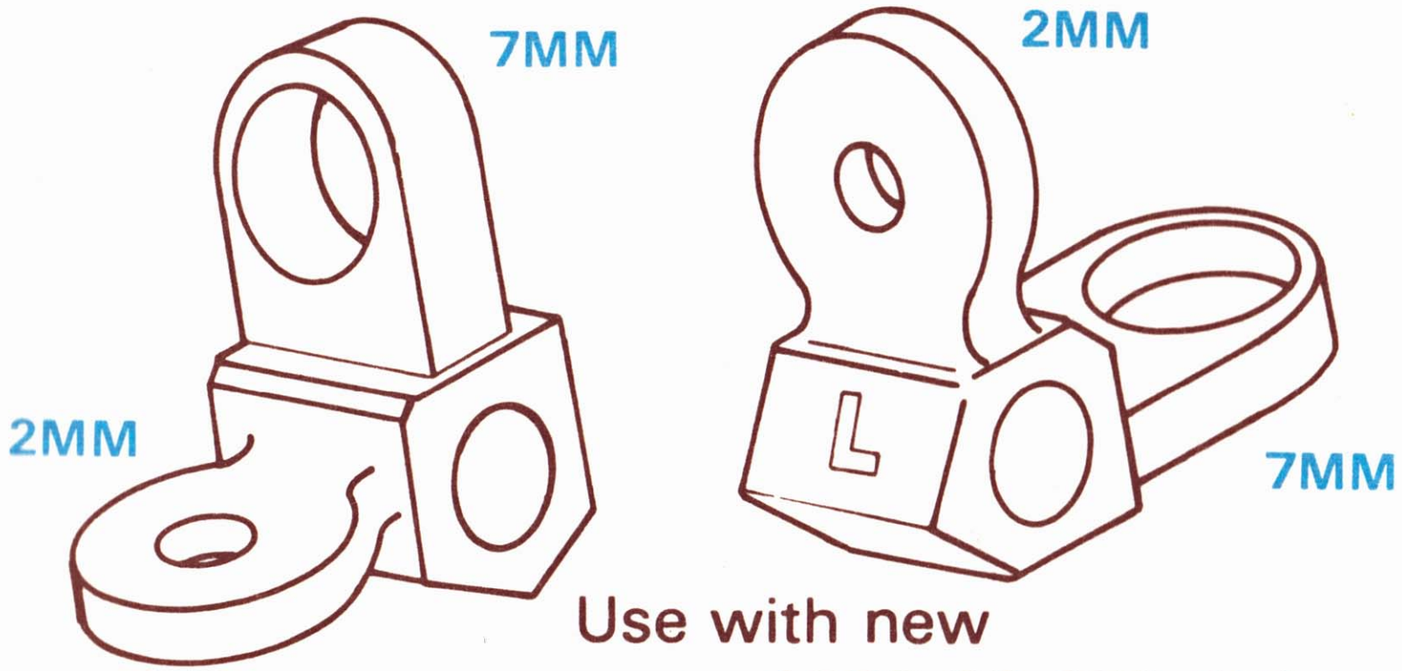


REAR SIGHT - Has two apertures for range. Unmarked aperture - 0 - 300 meter range. L under aperture- 300-460 meter range

LOW LIGHT LEVEL SIGHT

NOTE: Not every rifle will have this sight

REAR SIGHT



Use with new
post - 1005-00-071-8015

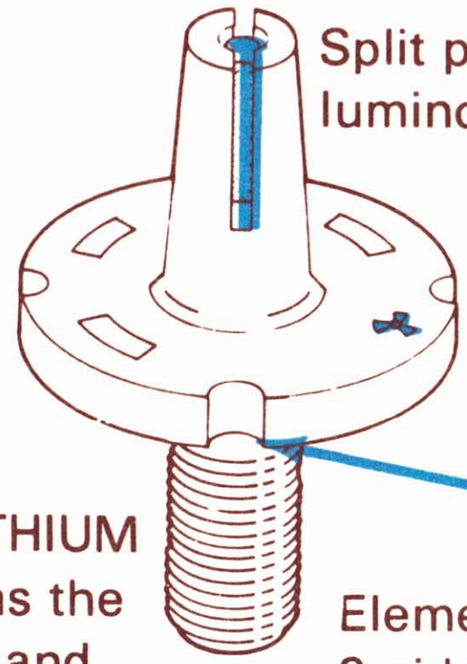
PURPOSE:

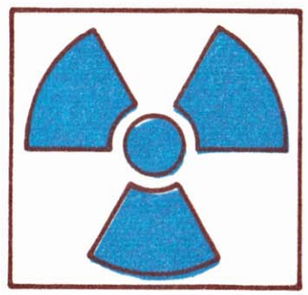
Used during limited visibility. A weapon equipped with the PROMETHIUM front sight has only 4 "notches" of elevation per revolution, whereas the original sight had 5. The 7mm rear sight aperture is for night firing and limited visibility. The 2mm aperture is used to zero the weapon and engage targets to 460 m under normal conditions (see page 51 for sight usage)

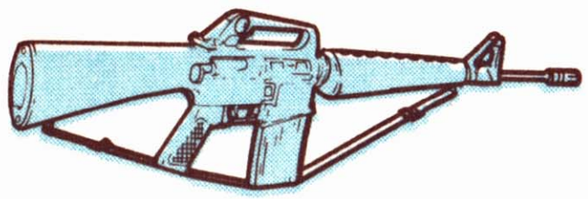
CAUTION: The low light level sight post is not to be abused, tampered with or altered in any manner

NOTE: Clean with
DRY CLEANING SOLVENT
6850-00-281-1985.
You can use RBC
in a pinch

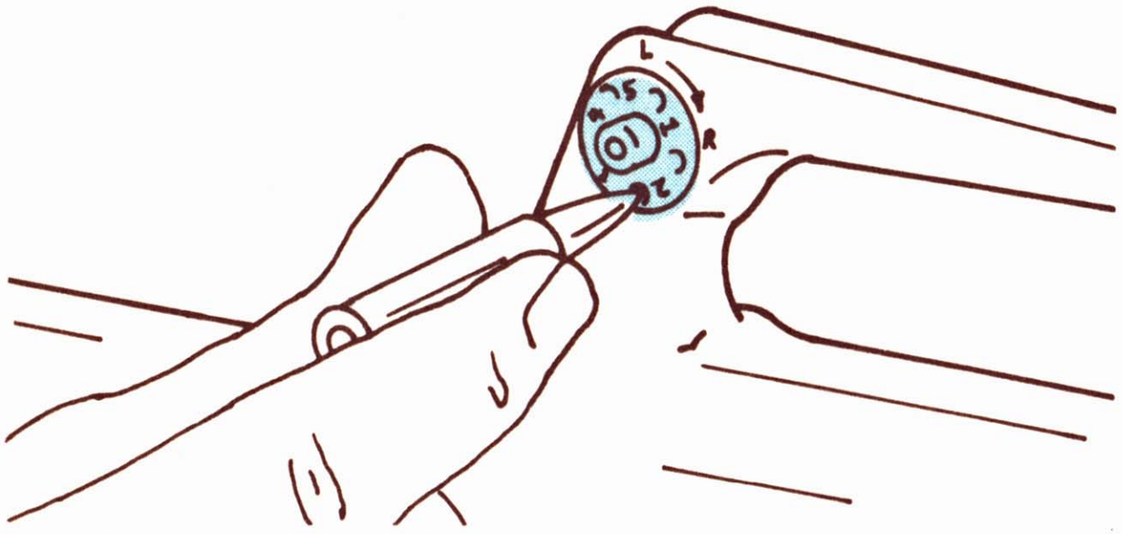
FRONT SIGHT



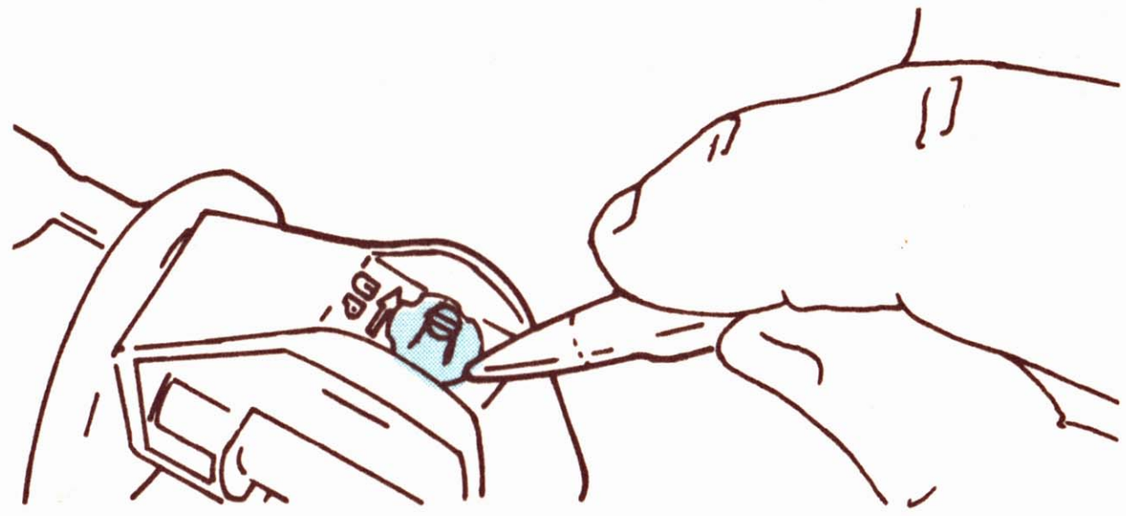




LOW LIGHT & STANDARD SIGHT ADJUSTMENT



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.

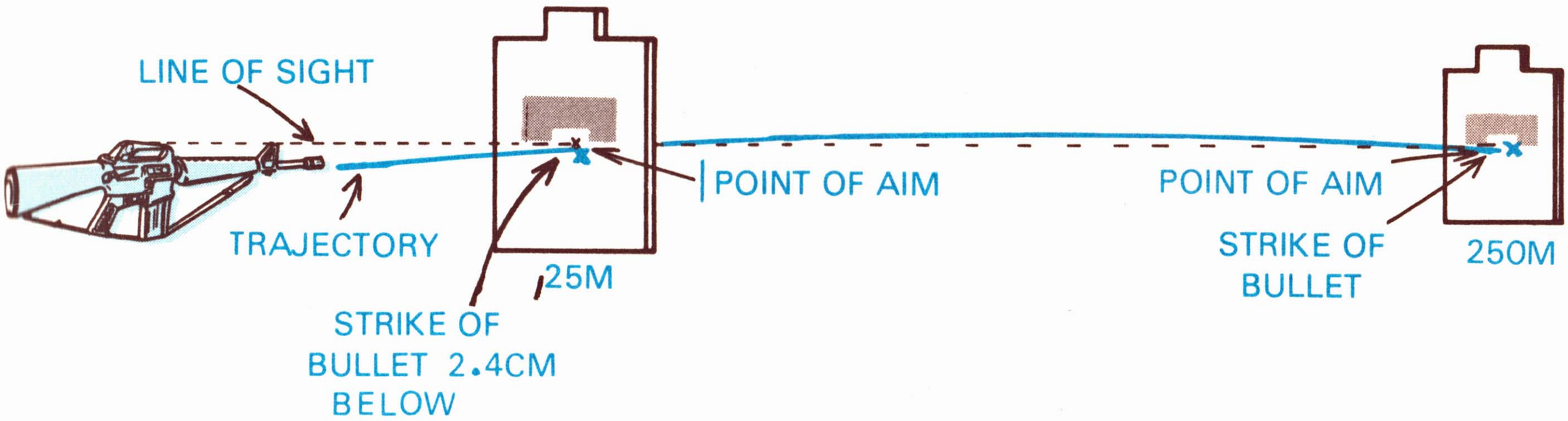


FRONT SIGHT - To adjust elevation, depress detent, rotate post. To raise strike of bullet, rotate post in the direction of arrow marked up. Reverse the direction of rotation to lower strike of bullet. Each graduation (notch) moves the point of impact of bullet as indicated in chart.

IMPACT		DISTANCE
STANDARD	LOW LIGHT LEVEL	
0.7cm (17/64in)	0.9cm (23/64in)	25 meters
2.8cm (1-3/32in)	3.5cm (1-3/4in)	100 meters
5.6cm (2-13/64in)	7.0cm (2-3/4in)	200 meters

BATTLESIGHT ZERO

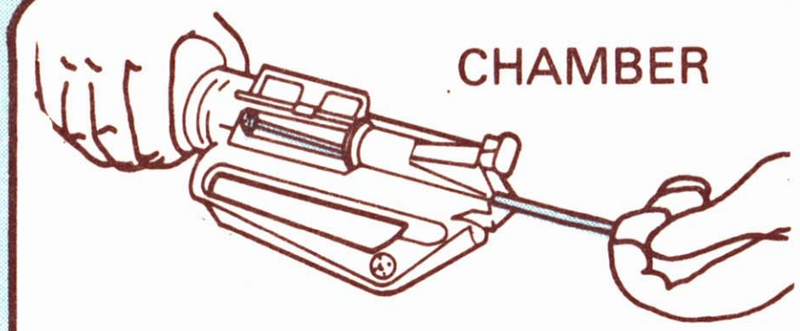
TO ZERO THE RIFLE, YOU MUST HAVE THE FRONT SIGHT (ELEVATION) AND THE REAR SIGHT (WINDAGE) ADJUSTED SO THAT IT CAN HIT YOUR POINT OF AIM AT A GIVEN RANGE



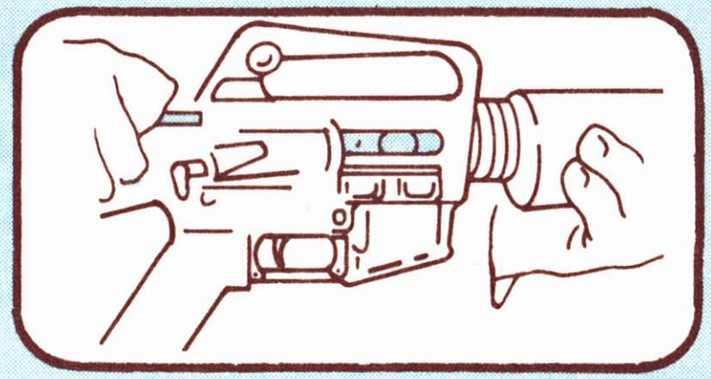
NOTE:

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 (up or down) for use during periods of visibility

PM BEFORE OPERATION



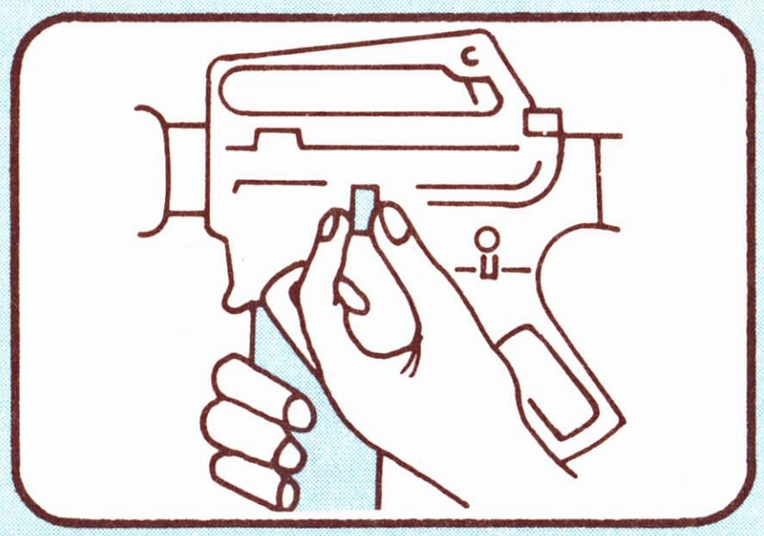
1 Remove excessive oil



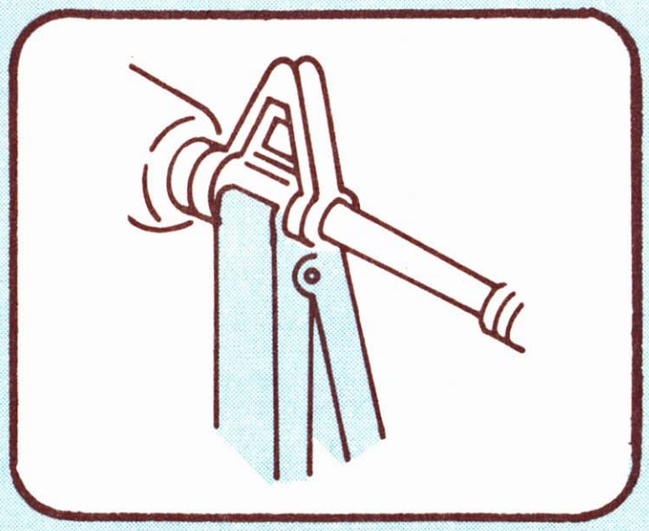
2 Retract bolt to assure free movement between bolt carrier and gas tube

Perform functional check to assure proper operation see page 27

3



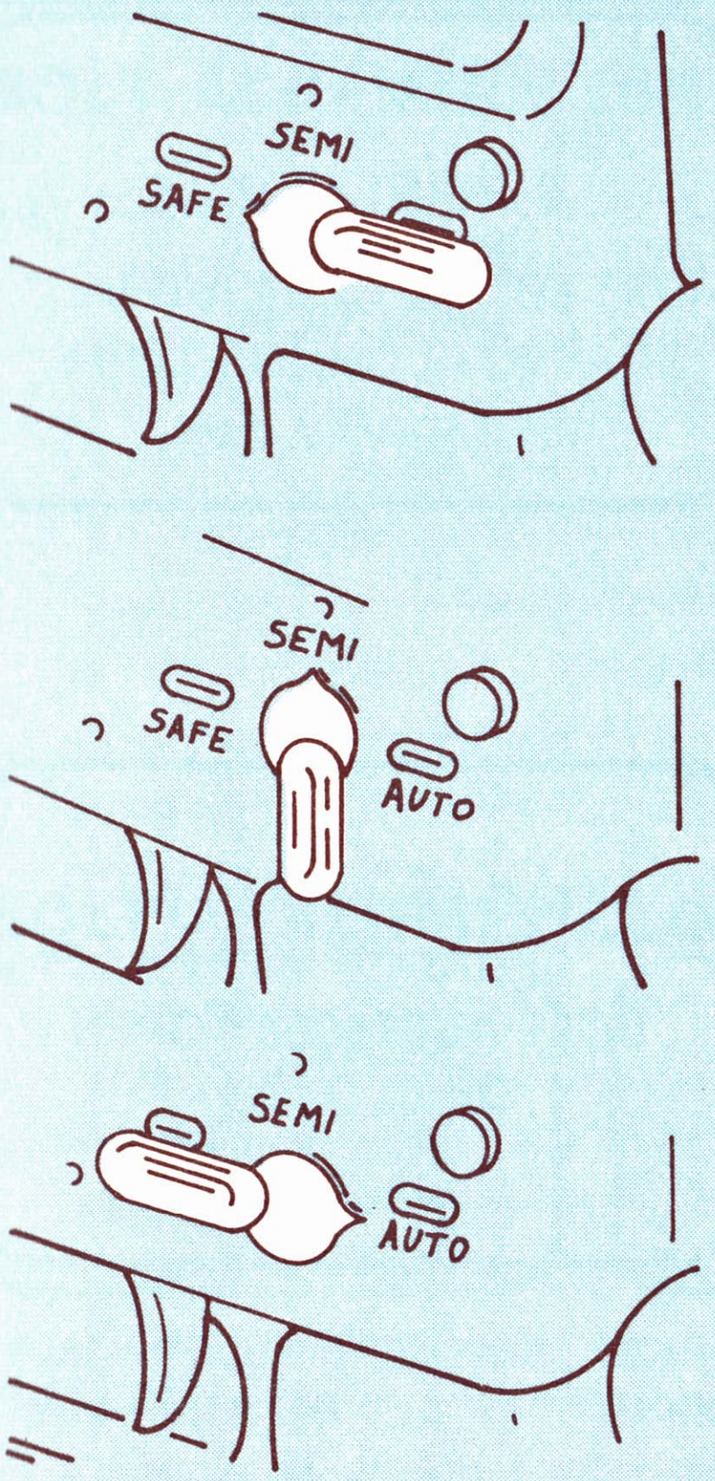
4 Mag secure?



5 Proper tension?

Make sure selector lever works properly

6



AND USE OF SELECTOR LEVER

SELECTOR LEVER ON:

★ 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

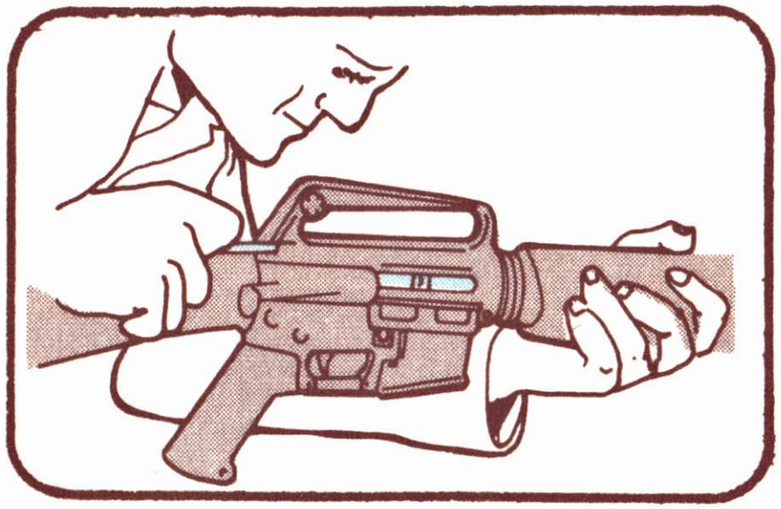
★ AUTOMATIC - Rifle will continue to fire until the magazine is empty or the trigger is released

DURING OPERATION

LOADING

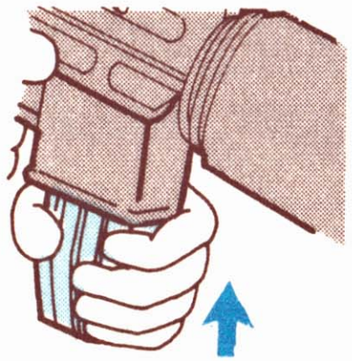


1 With hammer cocked, place selector lever on SAFE

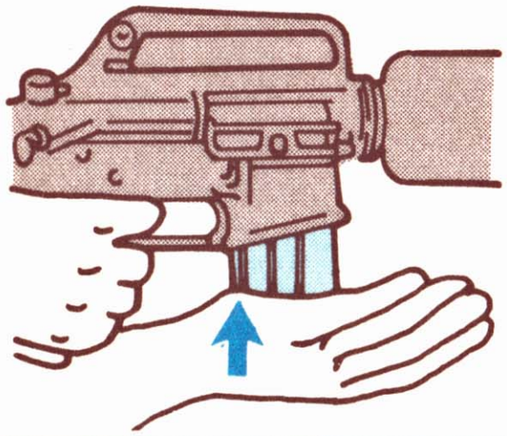


2 Open bolt and eyeball chamber. Clear?

3 POINT MUZZLE IN SAFE DIRECTION



4 Push upward until magazine catch engages and holds magazine



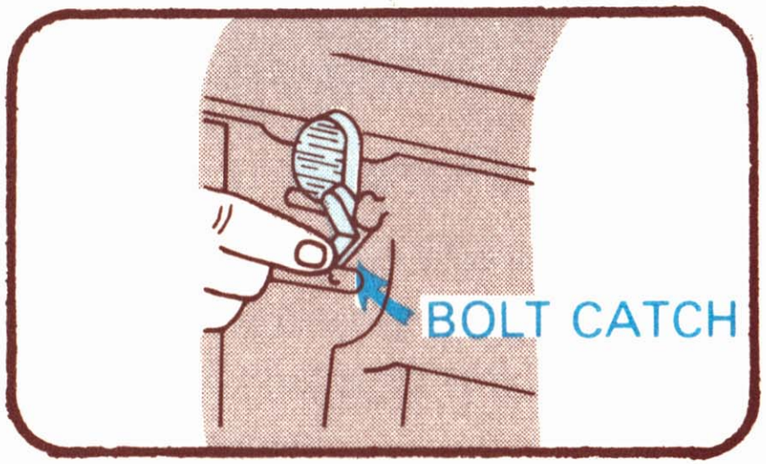
5 Tap upward to make sure it's seated right

MAGAZINE MAY BE LOADED WITH BOLT ASSEMBLY OPEN OR CLOSED

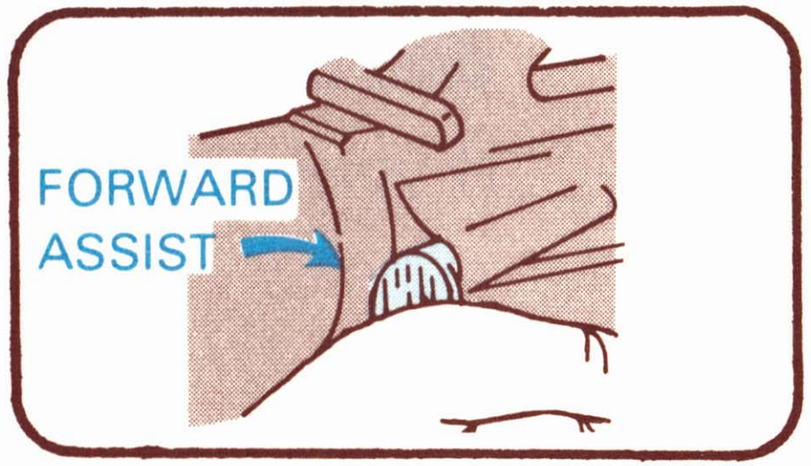
AND CHAMBERING A ROUND

BOLT ASSEMBLY OPEN

REDUCES CHANCES OF FIRST ROUND STOPPAGE AND SAVES TIME

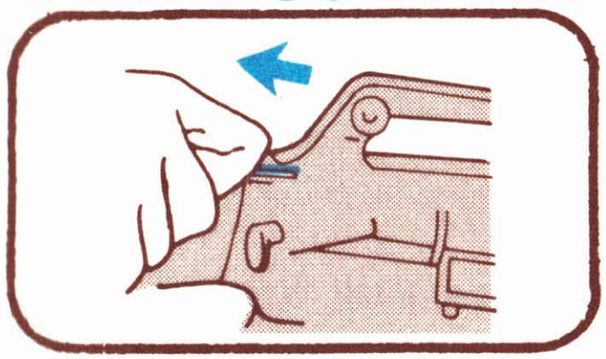


Depress upper portion of bolt catch

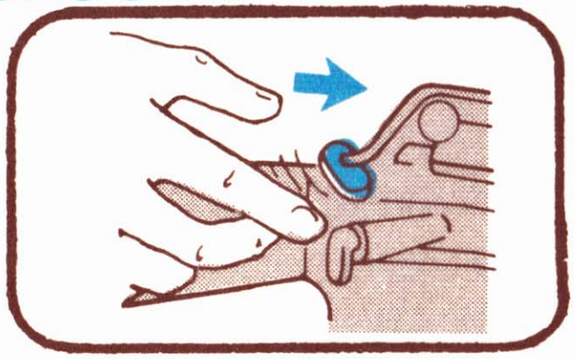


Strike forward assist to insure bolt is fully forward & locked

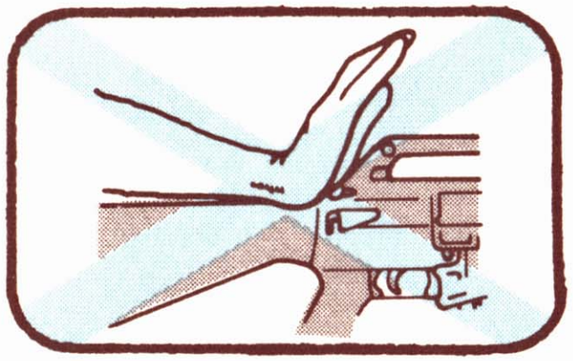
BOLT ASSEMBLY CLOSED



Pull charging handle fully rearward



Release the charging handle



Never "ride" the charging handle Let it go on its own



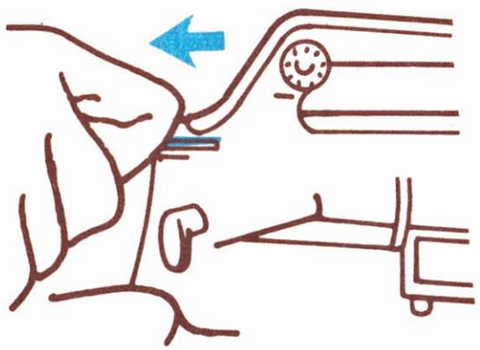
Strike forward assist to insure bolt is fully forward & locked

IMMEDIATE ACTION

If your rifle stops firing before you do . . .



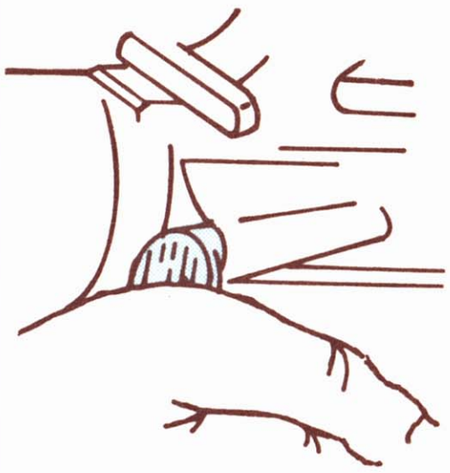
1 Tap upward on the magazine to make sure it's properly seated



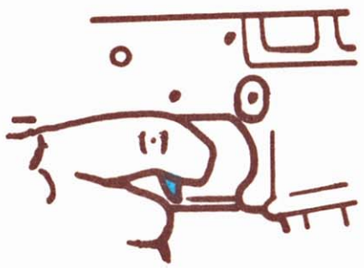
2 Pull charging handle all the way back. Watch for ejection of cartridge or case. Eyeball chamber



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

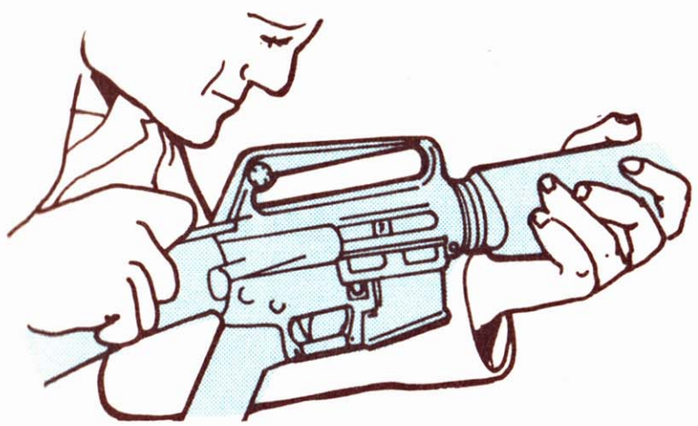


4 Strike forward assist

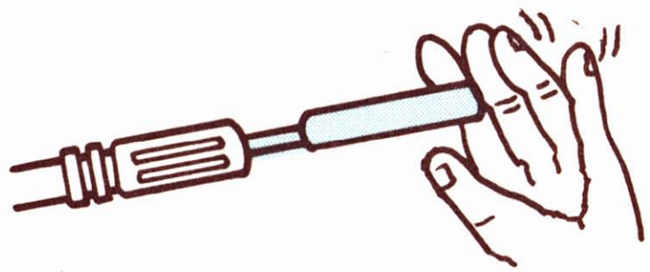


5 Now pull trigger. If it won't fire, look for trouble and apply remedial action

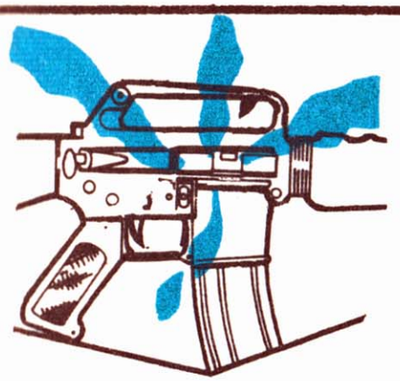
REMEDIAL ACTION



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



If a round is in the chamber, insert cleaning rod into the muzzle end and tap cartridge for removal



COOKOFF -

A cartridge in chamber of very hot weapon.

OBSERVE WARNING

IF YOUR RIFLE STILL FAILS TO FIRE, CHECK WITH TROUBLESHOOTING (PAGES 44-50)

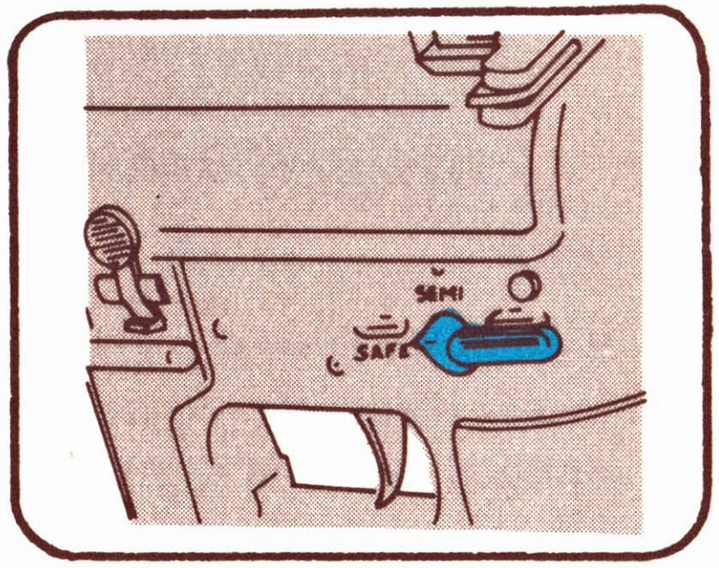
A cookoff can occur 10 seconds after contact in chamber of hot barrel. Remove cartridge within 10 seconds or . . . If cartridge can't be removed, remove magazine. Only operator will stay with the rifle for 15 min . . . Keep rifle aimed in a safe direction

DURING OPERATION

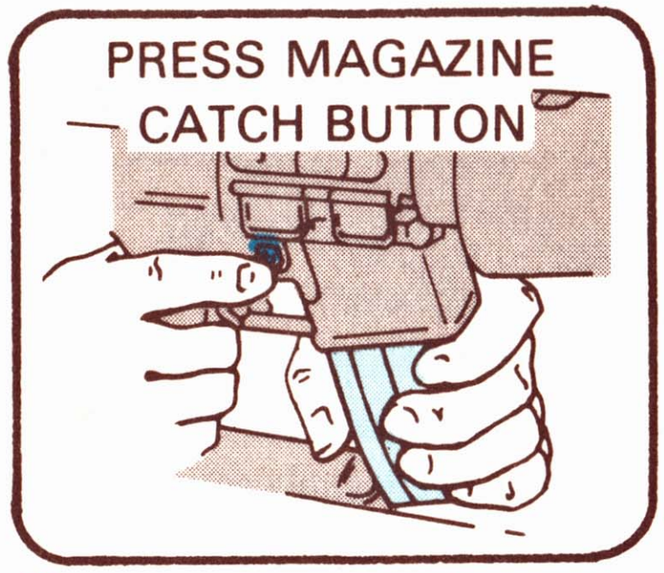
NOTE

Selector lever cannot be placed on SAFE unless rifle is cocked

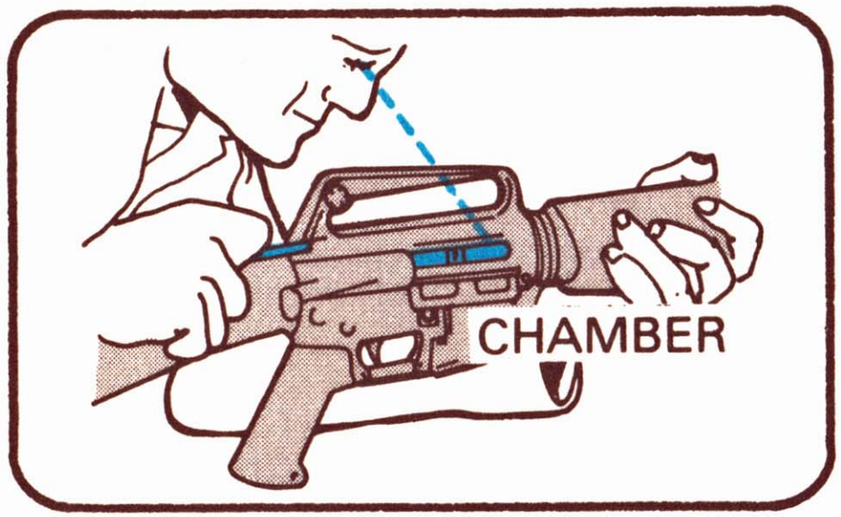
UNLOADING



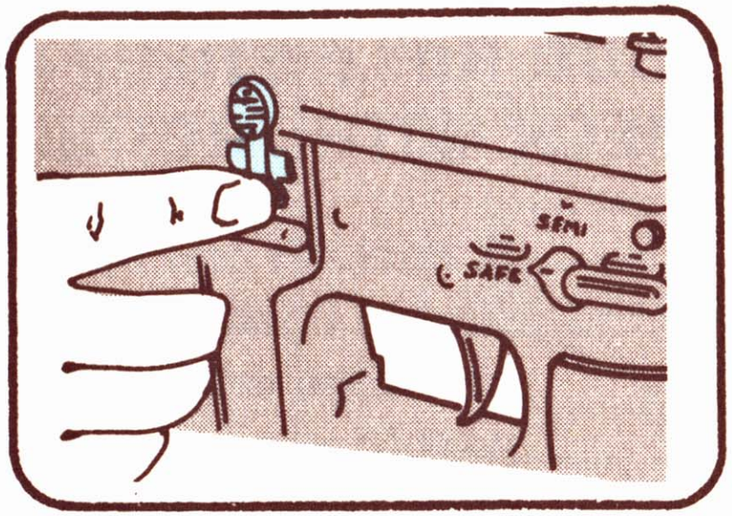
1 Place selector lever on SAFE



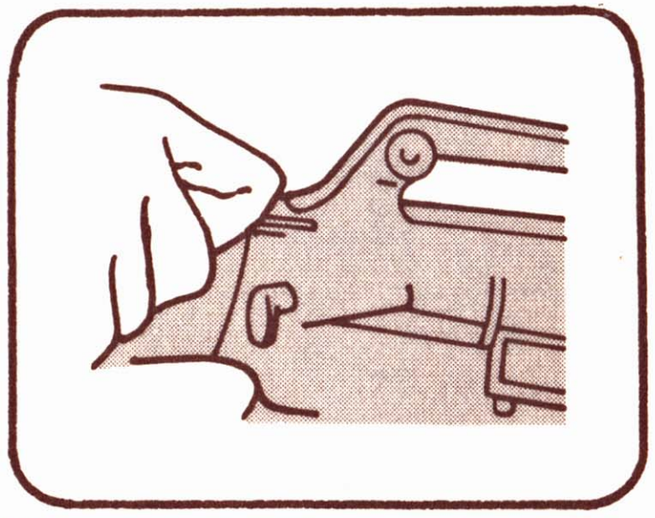
2 Remove magazine



3 Pull charging handle rearward
Inspect chamber and receiver to insure they are clear

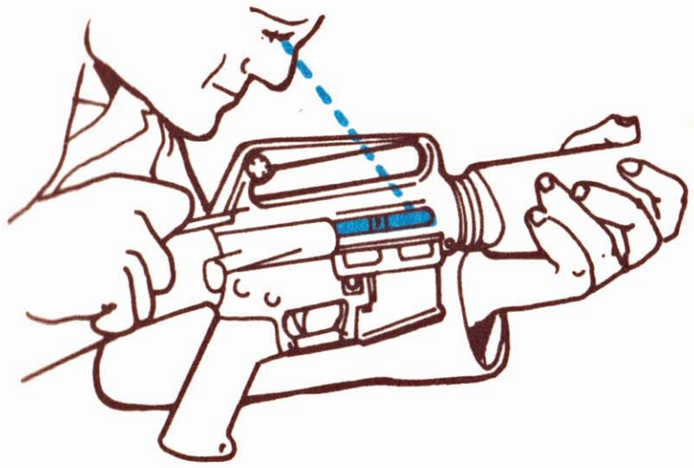


4 Lock the bolt carrier to the rear by depressing the lower portion of the bolt catch



5 Return charging handle forward

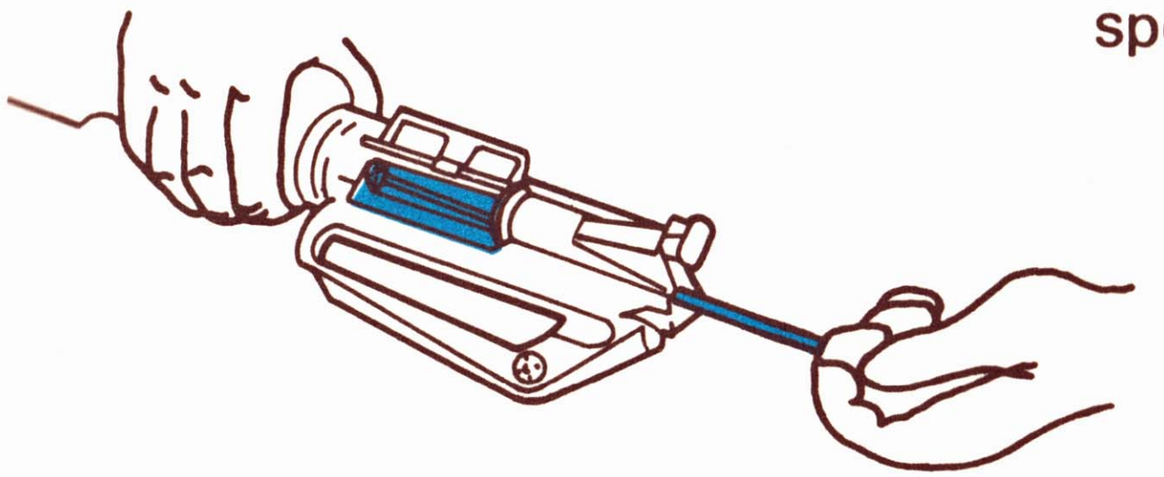
MINI-CLEANING



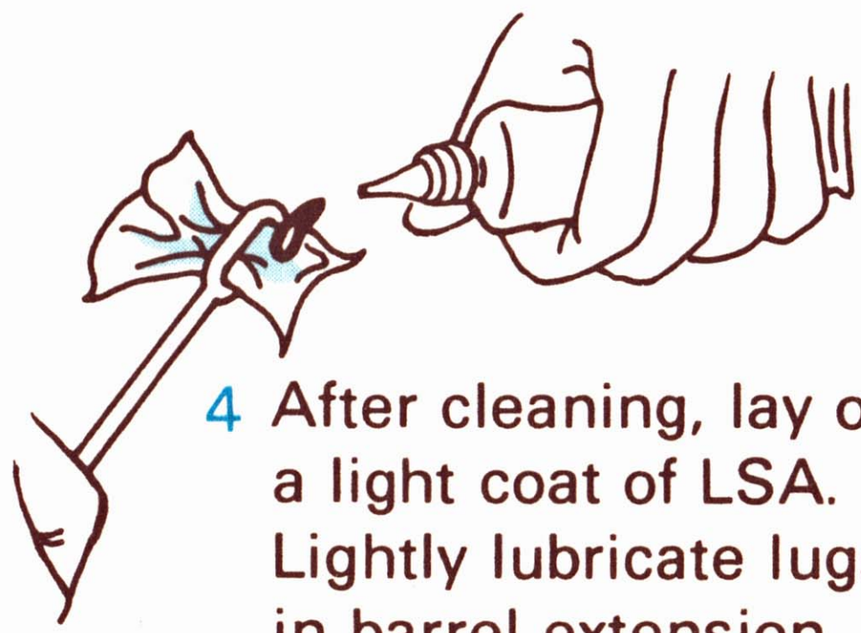
1 Look for fouling in bore and chamber



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, lay on a light coat of LSA. Lightly lubricate lugs in barrel extension

UNUSUAL CONDITIONS

EXTREME COLD -

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

HOT CLIMATES -

a. 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
b. When handling, make certain to wipe dry, as moisture could cause corrosion. After drying, lubricate with LSA

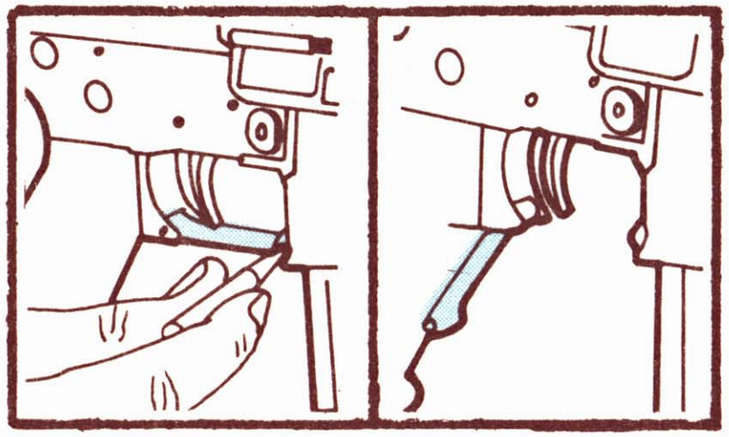
HOT, DRY CLIMATES -

Clean and oil rifle more frequently with LSA

DUSTY AND SANDY AREAS -

a. Clean and lubricate your rifle more frequently
b. Make certain to keep sand out of parts when inspecting and lubricating the rifle. Shield components from sand during disassembly of rifle
c. Use magazine bag to protect the mag and protective cap for muzzle
NOTE: Magazine bag and cap should not be used on stored rifles

WINTER FIRING



WHEN USING ARCTIC MITTENS
Depress pin and open trigger guard

AFTER FORDING

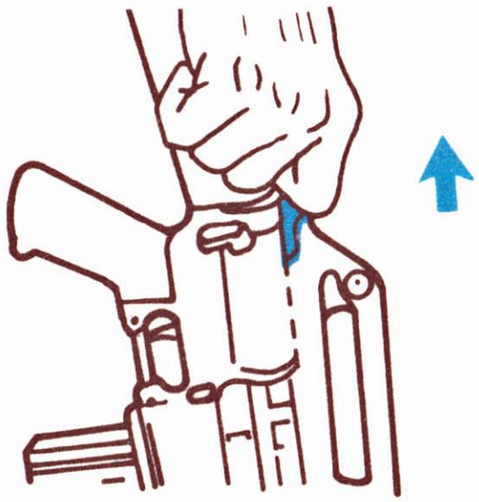
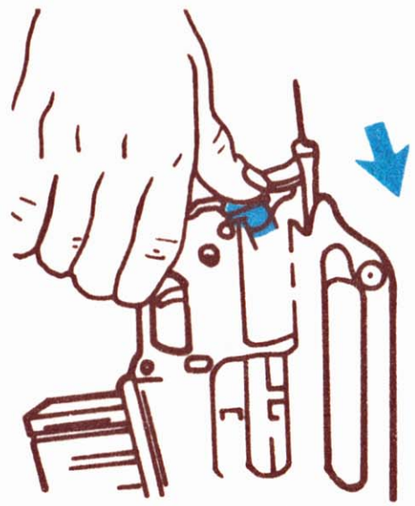
WARNING DO NOT FIRE RIFLE IF WATER IS PRESENT IN BARREL

HERE'S WHAT YOU DO!

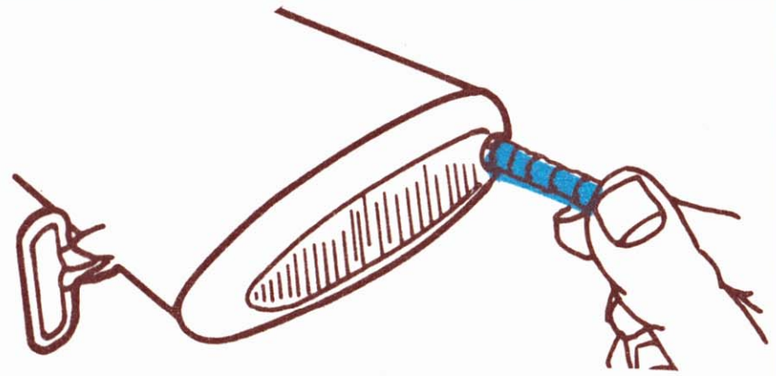


REMOVE MUZZLE CAP

. . AFTER YOU REMOVE THE CAP

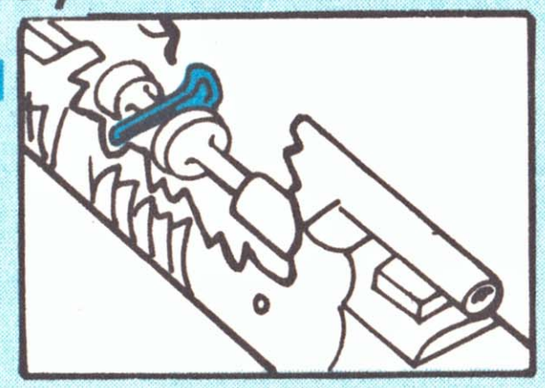
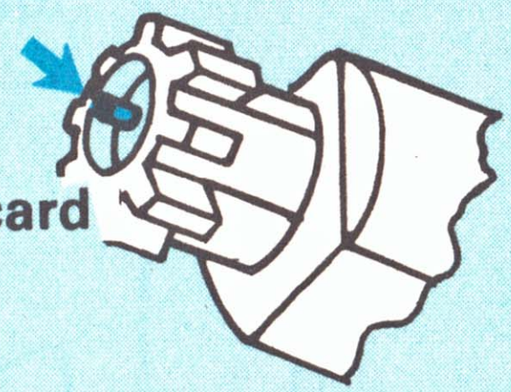
POINT THE MUZZLE DOWN	PULL CHARGING HANDLE 2 TO 3 INCHES REARWARD AND ALLOW WATER TO DRAIN	RELEASE CHARGING HANDLE AND STRIKE FORWARD ASSIST TO SEAT ROUND AND LOCK BOLT
		

WATCH YOUR BUTT, TOO!



CLEAR THE DRAIN HOLE WITH A PIPE CLEANER AND DRAIN

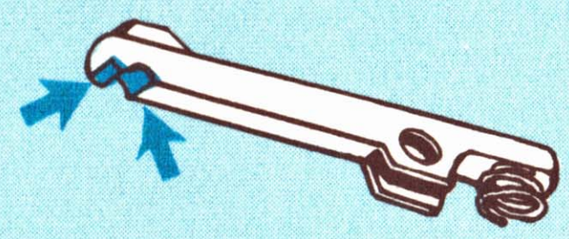
TROUBLESHOOTING 1

PROBLEM	CHECK FOR	HOW TO FIX IT
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 
	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 2

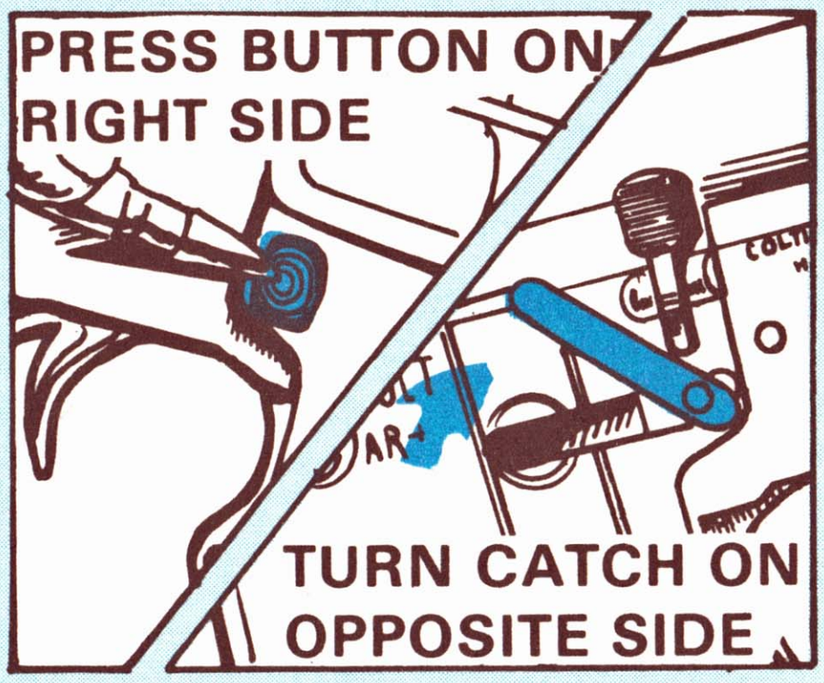
PROBLEM	CHECK FOR	HOW TO FIX IT
WON'T EXTRACT	Broken extractor spring	See your ARMORER
	Dirty or corroded ammo	Remove. Push out stuck round with cleaning rod
	Carbon in chamber	Clean chamber
	Fouling or carbon in extractor recess or lip	Clean
	Dirty or corroded ammo	Clean
	Dirty magazine	Clean
	Defective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



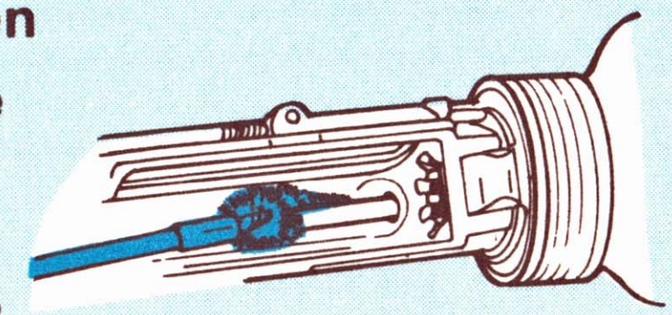


TROUBLESHOOTING 3

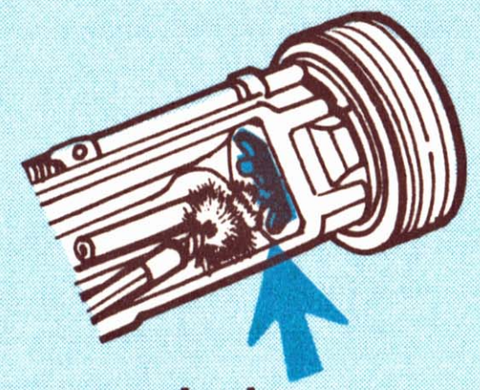
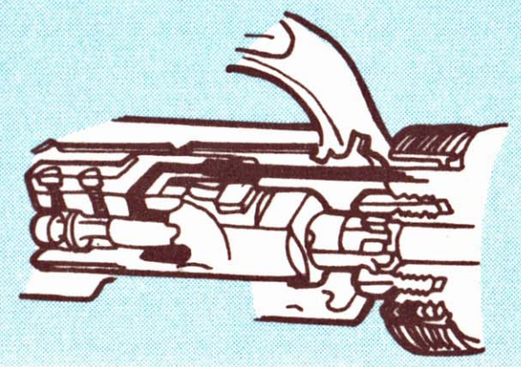
PROBLEM	CHECK FOR	HOW TO FIX IT
WON'T FEED	Magazine not fully seated	Adjust magazine catch
DOUBLE FEED WON'T CHAMBER	Defective magazine	Replace
	Dirty or corroded ammo	Clean
	Damaged ammo	Replace
	Carbon in chamber	Clean



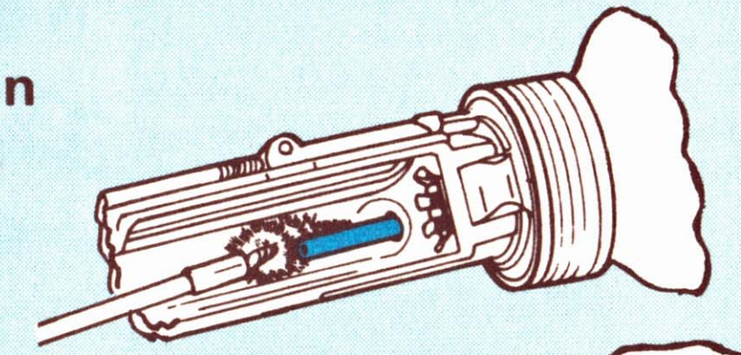
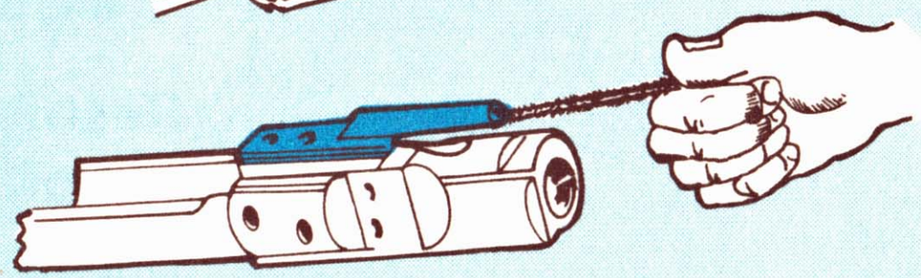
Turn catch clockwise to tighten and counterclockwise to loosen



TROUBLESHOOTING 4

PROBLEM	CHECK FOR	HOW TO FIX IT
WON'T LOCK	Dirt, corrosion, or carbon buildup in barrel locking lugs	Clean lugs 
	Frozen extractor	Remove and clean
	Restricted buffer assembly	Remove and clean
	Restricted movement of bolt carrier group	Remove, clean, and lube. (When putting bolt back in, make sure gas tube fits into carrier key and moves freely) 

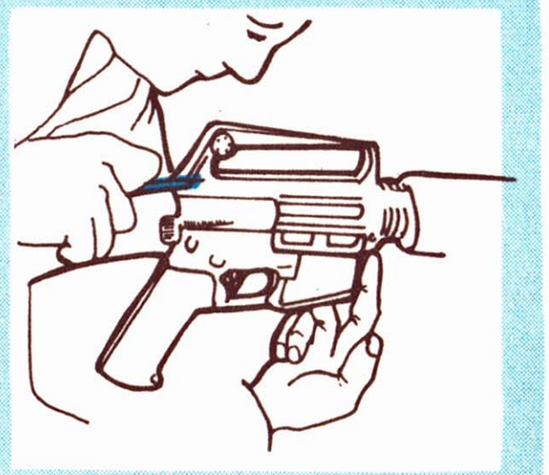
TROUBLESHOOTING 5

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

TROUBLESHOOTING 6

PROBLEM	CHECK FOR	HOW TO FIX IT
BOLT CARRIER "HUNG UP"	Round jammed between bolt and charging handle	1 Remove magazine 2 Push rearward on the face of the bolt with a bayonet or piece of metal (do not pull on the charging handle) 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





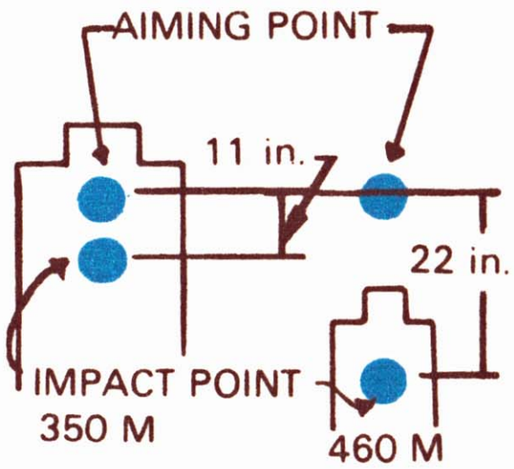
TROUBLESHOOTING 7

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

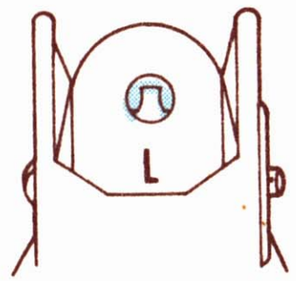
USING LOW LIGHT LEVEL SIGHT SYSTEM

DAYLIGHT FIRING (PROMETHIUM)

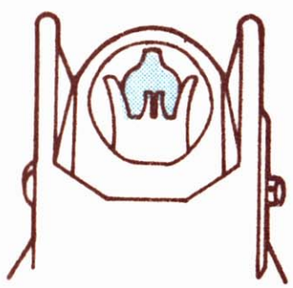




Use aperture marked L. Effective range is 250 meters (original battle sight zero) beyond which "Hold-Off" (aiming above desired point of impact) must be used. Aim about 11 in. at 350 meters, 22 in. at 460 meters. To become and remain proficient, practice "Hold-Off"



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 (View A), 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

SARGE'S CHECKLIST

FOR CLEANLINESS OF

BORE & FLASH SUPPRESSOR

GAS TUBE & PORTS

CHARGING HANDLE

BOLT

RECEIVER

DRAIN STOCK HOLE

MAGAZINE CATCH

MAGAZINE WELL

SIGHTS

HANDGUARDS

FOR OVERALL CONDITION OF

SIGHTS

HANDGUARDS

BIPOD

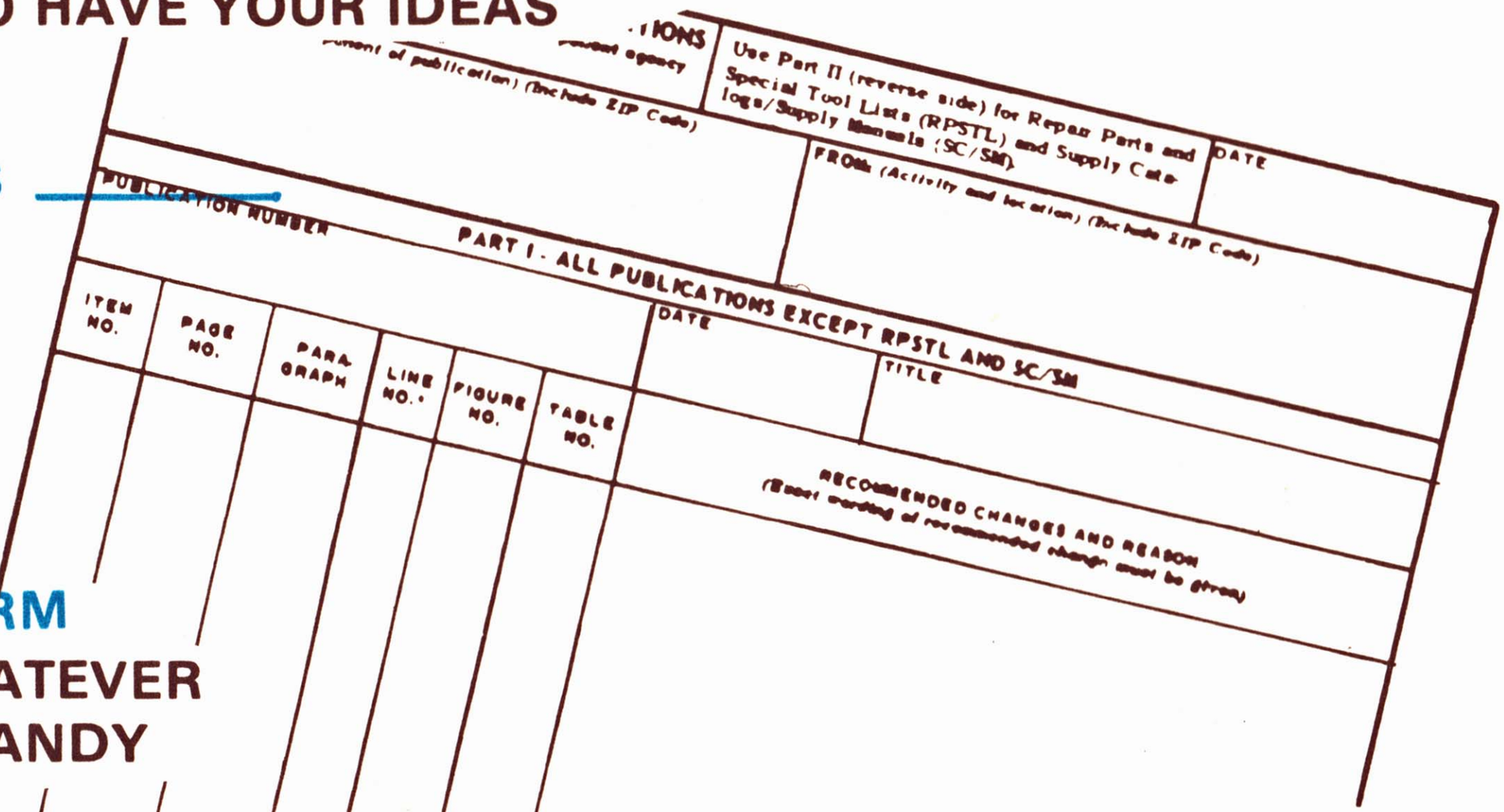
STOCK

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

WRITE TO US

USE D.A. FORM 2028 OR WHATEVER YOU HAVE HANDY



COMMANDER
U.S. ARMY ARMAMENT COMMAND
ATTN: AMSAR-MAS-T
ROCK ISLAND, ILLINOIS 61201

TM 9-1005-249-10
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By Order of the Secretary of the Army:

FRED C. WEYAND
General, United States Army
Chief of Staff

Official:

VERNE L. BOWERS
Major General, United States Army
The Adjutant General

Distribution:

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M16A1