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.
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

- Front Sight Assembly
- Rear Sight Windage Drum
- Charging Handle
- Bayonet Stud
- Ejection Port Cover
- Magazine Release Button
- Magazine
- Trigger
- Forward Assist Assembly
WHERE THEY ARE

- FLASH SUPPRESSOR
- SLING
- SLIP RING
- LOW LIGHT LEVEL SIGHT ASSEMBLY
- CARRYING HANDLE
- BOLT CATCH
- SELECTOR LEVER
- BUTT PLATE ASSEMBLY
- SEMI
- SAFE
- AUTO
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 STOWAGE BUTTSTOCK.

- 1/2 OZ LSA
  - 1005-00-242-5687
- BORE BRUSH
  - 1005-00-903-1295
- CHAMBER BRUSH
  - 1005-00-999-1435
- SMALL ARMS CLEANING ROD
  - M11E3-1005-00-089-3994

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

MAGAZINE ASSEMBLY
- 1005-00-050-2237 (20 RD)
- ISSUED UNTIL STOCK EXHAUSTED
- 1005-00-921-5004 (30 RD)

BUTTSTOCK STOWAGE ONLY

SMALL ARMS ACCESSORIES CASE
- 1005-00-403-5604
AUXILIARY EQUIPMENT

TOP SLING ADAPTER KIT

RIFLE BIPOD M3
1005-00-992-6676

Get your MUZZLE CAP
5340-00-880-7666
MAG BAG
1005-00-052-6942 (20 RD)
1005-00-193-8306 (30 RD)

CARRYING CASE
1005-00-999-2430

SCABBARD
M8A1-1095-00-508-0339

M7 BAYONET
1005-00-073-9238

from your UNIT SUPPLY
M15A2 Blank Firing Attachment (BFA)

WARNING: Use ONLY blank M200 with the BFA

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

1. Unscrew and slide all the way back

2. Hook behind first groove of flash suppressor

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.

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 cock 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 ensure 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

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

2 Remove sling

3 Remove handguards

HANDS POSITIONED FOR REMOVAL
PUSH SLIP RING DOWN
PUSH SLIP RING DOWN
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
9. Remove charging handle
10. Remove firing pin retaining pin

11. Put bolt assembly in lock position

12. Drop firing pin out rear of bolt carrier

13. Remove bolt cam pin

14. Remove bolt assembly from carrier
DISASSEMBLE STEPS 15 THRU 18 ONLY WHEN DIRTY OR DAMAGED

NOTE
Press top of extractor to check spring function.

See your ARMORER

DON'T SEPARATE SPRING FROM EXTRACTOR

Do not damage tip of firing pin.

15 Remove extractor pin

16 Remove extractor and spring

17 Press in buffer, depress retainer and release buffer

18 Remove buffer and spring

HALT

NO FURTHER DISASSEMBLY ALLOWED

15
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
GD 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
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

START AT RECEIVER

GO RIGHT THRU THE FLASH SUPPRESSOR

(DON'T REVERSE DIRECTIONS IN BORE)

BE SURE YOU LUBE LOCKING LUGS

FRONT SIGHT
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

ACTION SPRING
BUFFER

INSIDE LOWER RECEIVER EXTENSION

GENEROUSLY LUBE

TAKE DOWN AND PIVOT PINS

INSIDE PARTS LOWER RECEIVER
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

**FIRING PIN** - Bent, cracked or blunted end

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

IF PARTS ARE MISSING OR DEFECTIVE, SEE YOUR ARMorer
ASSEMBLY

1. Insert spring and buffer
2. Insert extractor and spring
3. Push in extractor pin
4. Slide bolt into carrier

WARNING
Don’t switch bolts between rifles

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 seal.

STAGGER RING GAPS TO STOP GAS LOSS
ASSEMBLY cont.

5. Replace bolt cam pin

6. Drop in and seat

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

7. Pull bolt back

8. Replace retaining pin
9 Engage, then push charging handle part way

10 Slide in bolt carrier group

BE SURE BOLT IS STILL UNLOCKED

11 Push in charging handle and bolt carrier group together

12 Join upper and lower receivers

13 Engage receiver pivot pin
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.

16 Snap on sling.

RELEASE SLIP RING

CHECK FOR FULL ENGAGEMENT

HOLD SLIP RING DOWN
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
- Remove base
- Jiggle spring and follower to remove

30 RD MAG
- Pry up, push out
- Release base catch

NOTE: Do not remove follower from spring
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

MAKE SURE PRINTING IS ON THE OUTSIDE
PMCS* before operation and...

1. Remove excessive oil
2. Retract bolt to assure free movement between bolt carrier and gas tube
3. Perform functional check to assure selector lever works properly
4. Mag secure?
5. 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 - Has two apertures for range.
Unmarked aperture - 0 - 300 meter range.
L under aperture - 300 - 460 meter range

FRONT SIGHT

NOTE 5 NOTCHES

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

- Depress upper portion of bolt catch
- TAP 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
- TAP forward assist to insure bolt is fully forward & locked
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.

<table>
<thead>
<tr>
<th>IMPACT</th>
<th>DISTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>STANDARD</td>
<td>LOW LIGHT LEVEL</td>
</tr>
<tr>
<td>0.7cm (11.02 mil)</td>
<td>0.8cm (21.02 mil)</td>
</tr>
<tr>
<td>2.8cm (11.02 mil)</td>
<td>3.5cm (21.02 mil)</td>
</tr>
<tr>
<td>5.6cm (12.13 mil)</td>
<td>7.0cm (21.02 mil)</td>
</tr>
<tr>
<td>25 meters</td>
<td>100 meters</td>
</tr>
<tr>
<td>100 meters</td>
<td>200 meters</td>
</tr>
</tbody>
</table>
USING LOW LIGHT LEVEL (PROMETHIUM) SIGHT SYSTEM
daylight firing

Use aperture marked L. Effective range is 250 meters (longest battle sight range) 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
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:
   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 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. Keep sand out of parts when inspecting, lubricating, or assembling rifle. Apply only a very light amount of lubrication on outside of rifle.
   c. Use magazine bag and muzzle cap for dust and sand protection.

CAUTION: Do not use magazine bag and muzzle cap on stored rifles.
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
<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CHECK FOR</th>
<th>WHAT TO DO</th>
</tr>
</thead>
<tbody>
<tr>
<td>WON'T FIRE</td>
<td>Selector lever on SAFE</td>
<td>Put it on SEMI or AUTO</td>
</tr>
<tr>
<td></td>
<td>Improper assembly of firing pin</td>
<td>Assemble correctly</td>
</tr>
<tr>
<td></td>
<td>Too much oil in firing pin recess</td>
<td>Wipe off</td>
</tr>
<tr>
<td></td>
<td>Defective ammo</td>
<td>Remove and discard</td>
</tr>
<tr>
<td></td>
<td>Too much carbon on firing pin</td>
<td>Clean</td>
</tr>
<tr>
<td>BOLT WON'T UNLOCK</td>
<td>Dirty or burred bolt</td>
<td>See your NCO or your unit ARMORER</td>
</tr>
</tbody>
</table>
## Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Check For</th>
<th>What To Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Won't Extract</td>
<td>Broken extractor spring</td>
<td>See your ARMORER</td>
</tr>
<tr>
<td></td>
<td>Dirty or corroded ammo</td>
<td>Remove. Push out stuck round with cleaning rod</td>
</tr>
<tr>
<td></td>
<td>Carbon in chamber</td>
<td>Clean chamber</td>
</tr>
<tr>
<td></td>
<td>Fouling or carbon in extractor recess or lip</td>
<td>Clean</td>
</tr>
<tr>
<td>Won't Feed</td>
<td>Dirty or corroded ammo</td>
<td>Clean</td>
</tr>
<tr>
<td></td>
<td>Dirty magazine</td>
<td>Clean</td>
</tr>
<tr>
<td></td>
<td>Defective magazine</td>
<td>Replace</td>
</tr>
<tr>
<td></td>
<td>Too many rounds in magazine</td>
<td>Take out excess</td>
</tr>
<tr>
<td></td>
<td>Restricted buffer assembly action</td>
<td>Take out the buffer and spring, and clean</td>
</tr>
<tr>
<td>PROBLEM</td>
<td>CHECK FOR</td>
<td>WHAT TO DO</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------</td>
<td>--------------------------------------</td>
</tr>
<tr>
<td>WON'T FEED</td>
<td>Magazine not fully seated</td>
<td>Adjust magazine catch</td>
</tr>
<tr>
<td></td>
<td></td>
<td>[Diagram: press button on right side, turn catch on opposite side]</td>
</tr>
<tr>
<td>DOUBLE FEED</td>
<td>Defective magazine</td>
<td>Replace</td>
</tr>
<tr>
<td></td>
<td>Defective magazine</td>
<td></td>
</tr>
</tbody>
</table>
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

Clean lugs
Remove and clean
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

<table>
<thead>
<tr>
<th>Problem</th>
<th>Check For</th>
<th>What To Do</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short Recoil</strong></td>
<td>Gaps in bolt rings</td>
<td>Stagger ring gaps</td>
</tr>
<tr>
<td></td>
<td>(not staggered)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carbon or dirt in carrier key or on outside of gas tube</td>
<td>Clean</td>
</tr>
<tr>
<td><strong>Bolt Fails to Lock After Last Round</strong></td>
<td>Dirty or corroded bolt latch</td>
<td>Clean</td>
</tr>
<tr>
<td></td>
<td>Faulty magazine</td>
<td>Replace</td>
</tr>
<tr>
<td><strong>Selector Lever Binds</strong></td>
<td>Needs oil</td>
<td>Lubricate with LSA</td>
</tr>
</tbody>
</table>
# Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Check For</th>
<th>What To Do</th>
</tr>
</thead>
</table>
| Bolt carrier | Round jammed between bolt and charging handle | 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

<table>
<thead>
<tr>
<th>Problem</th>
<th>Check For</th>
<th>What To Do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can't see Promethium</td>
<td>Check for alignment of luminous elements</td>
<td>Rotate front sight post up or down one click</td>
</tr>
<tr>
<td>Sight Post</td>
<td>Luminous element dirty</td>
<td>Clean with dry cleaning solvent</td>
</tr>
<tr>
<td></td>
<td>Luminous element broken or missing</td>
<td>Turn in to ARMORER</td>
</tr>
</tbody>
</table>

54
FOR LEFTYS'

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

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

write

COMMANDER
US ARMY ARMAMENT MATERIEL
READINESS COMMAND
ATTN: DRSAR-MAS
ROCK ISLAND, IL 61201