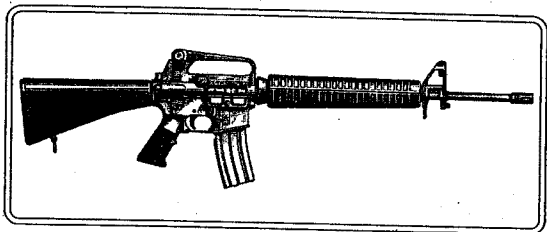


AR-15 M-16



DO EVERYTHING MANUAL
ASSEMBLY
DISASSEMBLY
LUBRICATION
AMMUNITION
MAINTENANCE
STORAGE

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WARNING

We have strived to give you the safest AR-15 / M-16 Manual possible! Please be advised however, that the entity performing any operations assumes all risk associated, including any legal responsibilities concerning devices or instructions detailed in this manual.

This manual is Presented for Your Enjoyment, Information, Educational, or Investment Purposes Only.

The purchase or ownership of this manual constitutes a release of M&M ENGINEERING's responsibility for injuries, property damage, or legalities incurred. Due to the wide variations in the operations detailed here and the testing procedures used in this manual, it would clearly be impossible to maintain control over any operations detailed, or their use.

Therefore M&M ENGINEERING nor the AUTHOR cannot and Will not accept any responsibility for any instructions, devices or modifications as detailed in this manual.



MY RIFLE

THE CREED OF ALL UNITED STATES MARINES

This is my rifle. There are many like it but this one is mine.

My rifle is my best friend. It is my life. I must master it as I master my life.

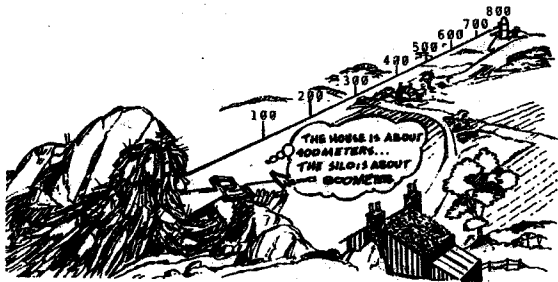
My rifle, without me is useless. Without my rifle, I am useless. I must fire my rifle true. I must shoot straighter than my enemy who is trying to kill me. I must shoot him before he shoots me. I will. . . .

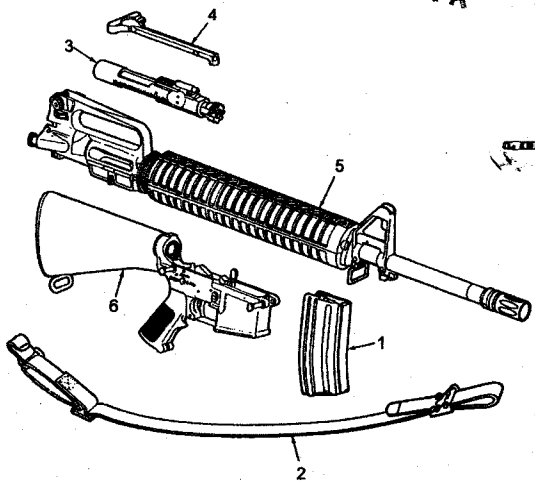
My rifle and myself know that what counts in this war is not the rounds we fire, the noise of our burst, nor the smoke we make. We know that it is the hits that count. We will hit. . . .

My rifle is human, even as I, because it is my life. Thus I will learn it as a brother. I will learn its weakness, its strength, its parts, its accessories, its sights, and its barrel. I will keep my rifle clean and ready, even as I am clean and ready. We will become part of each other. We will. . . .

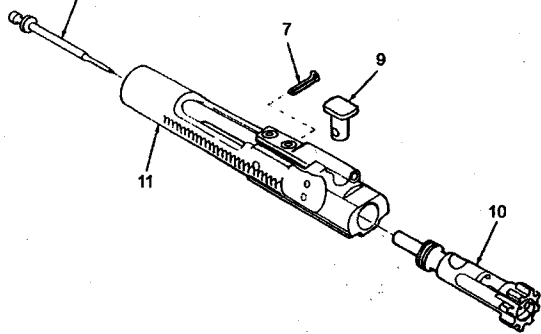
Before GOD I swear this creed. My rifle and myself are the defenders of my country. We are the masters of our enemy. We are the saviors of my life.

So be it, until victory is America's and there is no enemy, but peace!



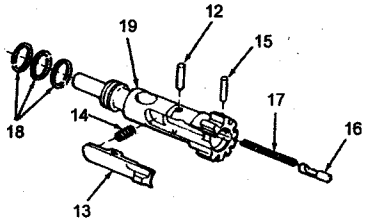


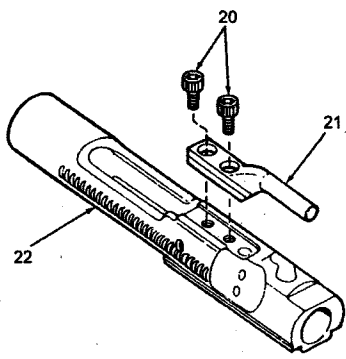
- 1 _____ MAGAZINE
- 2 _____ SLING
- 3 _____ BOLT CARRIER ASSEMBLY
- 4 _____ HANDLE ASSEMBLY
- 5 _____ UPPER RECEIVER AND BARREL ASSEMBLY
- 6 _____ LOWER RECEIVER AND BUTTSTOCK ASSEMBLY



- 7 _____ FIRING PIN RETAINER
- 8 _____ FIRING PIN
- 9 _____ BOLT CAM PIN
- 10 _____ BOLT ASSEMBLY
- 11 _____ KEY AND BOLT CARRIER ASSEMBLY

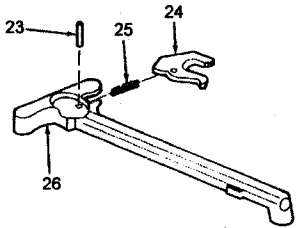
- 12 _____ EXTRACTOR PIN
- 13 _____ CARTRIDGE EXTRACTOR
- 14 _____ SPRING ASSEMBLY
- 15 _____ PIN SPRING
- 16 _____ CARTRIDGE EJECTOR
- 17 _____ HELICAL SPRING
- 18 _____ BOLT RING
- 19 _____ BOLT

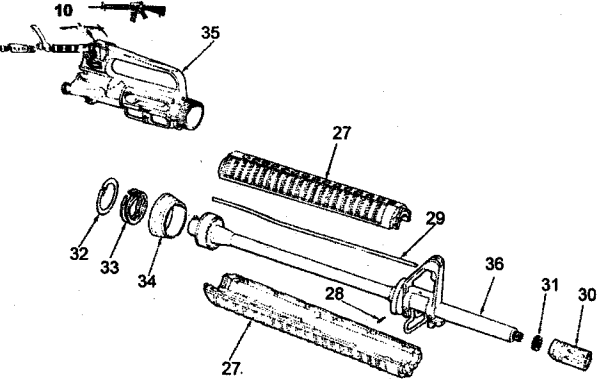




- 20 _____ CARRIER KEY AND SCREW
- 21 _____ KEY
- 22 _____ BOLT CARRIER

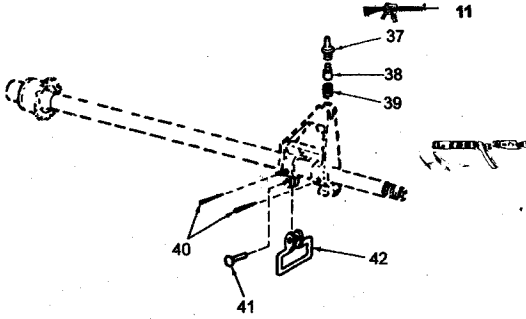
- 23 _____ PIN SPRING
- 24 _____ CHARGING LATCH HANDLE
- 25 _____ HELICAL SPRING
- 26 _____ HANDLE



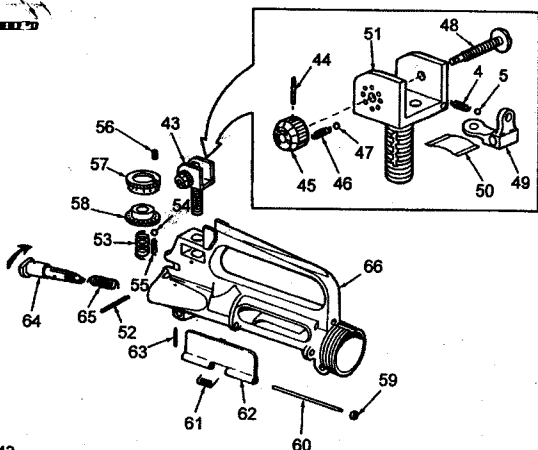


- 27 _____ HANDGUARD 2 PCS
 28 _____ SPRING PIN
 29 _____ GAS TUBE
 30 _____ COMPENSATOR
 31 _____ SHIM
 32 _____ RETAINING RING
 33 _____ HANDGUARD UPPER RECEIVER SPRING AND SLIP RING
 34 _____ HANDGUARD AND SLIP RING
 35 _____ UPPER RECEIVER ASSEMBLY
 36 _____ BARREL ASSEMBLY

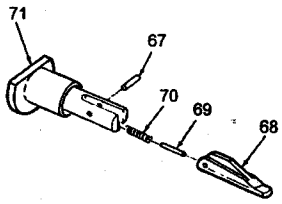




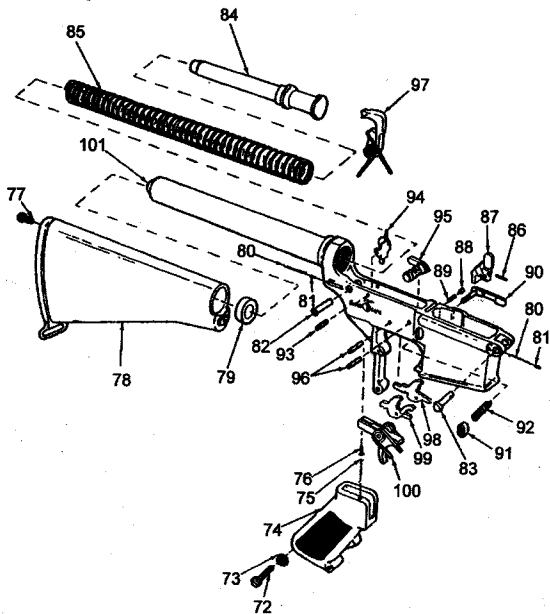
- 37 _____ FRONT SIGHT POST
- 38 _____ FRONT SIGHT DETENT
- 39 _____ HELICAL SPRING
- 40 _____ FRONT SIGHT PIN
- 41 _____ TUBULAR RIVET
- 42 _____ SLING SMALL SWIVEL



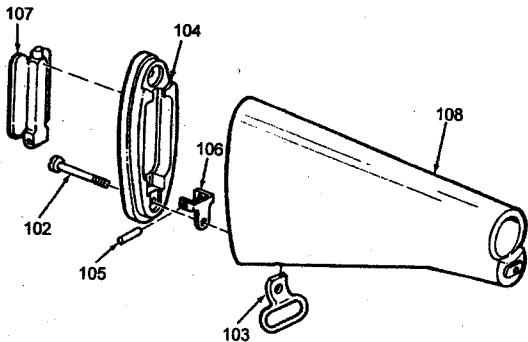
- | | | |
|----|-------|----------------------------|
| 43 | _____ | REAR SIGHT ASSEMBLY |
| 44 | _____ | SPRING PIN |
| 45 | _____ | WINDAGE KNOB |
| 46 | _____ | HELICAL SPRING |
| 47 | _____ | BALL BEARING |
| 48 | _____ | WINDAGE SCREW |
| 49 | _____ | SIGHT APERTURE |
| 50 | _____ | FLAT SPRING |
| 51 | _____ | REAR SIGHT BASE |
| 52 | _____ | SPRING PIN |
| 53 | _____ | HELICAL SPRING |
| 54 | _____ | BALL BEARING |
| 55 | _____ | HELICAL SPRING |
| 56 | _____ | INDEX SCREW |
| 57 | _____ | ELEVATION INDEX |
| 58 | _____ | ELEVATION KNOB |
| 59 | _____ | RETAINING RING |
| 60 | _____ | EJECTION PORT COVER PIN |
| 61 | _____ | HELICAL SPRING |
| 62 | _____ | EJECTION PORT |
| 63 | _____ | SPRING PIN |
| 64 | _____ | FORWARD ASSIST ASSEMBLY |
| 65 | _____ | COMPRESSION HELICAL SPRING |
| 66 | _____ | RECEIVER CARTRIDGE |



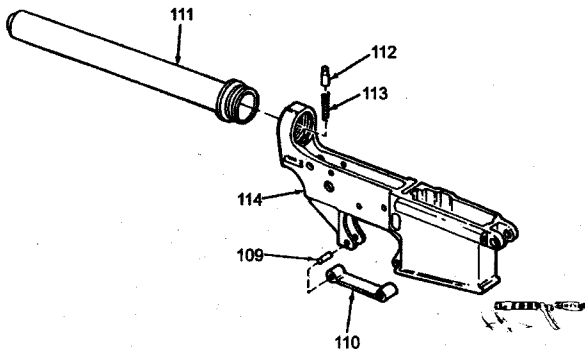
- 67 _____ PIN SPRING
- 68 _____ FORWARD ASSIST PAWL
- 60 _____ DETENT PAWL
- 70 _____ COMPRESSION HELICAL SPRING
- 71 _____ PLUNGER ASSEMBLY



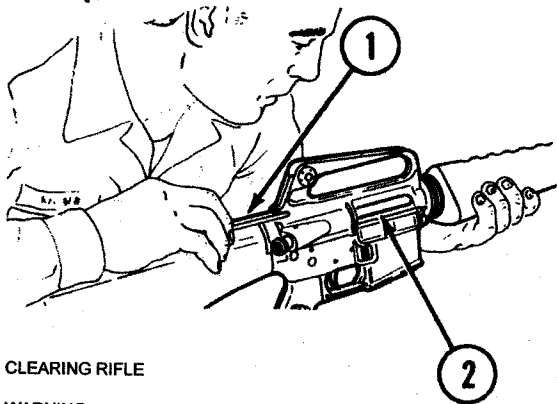
- 72 _____ MACHINE SCREW
73 _____ LOCK WASHER
74 _____ BLACK PLASTIC GRIP
75 _____ COMPRESSION HELICAL SPRING
76 _____ SAFETY DETENT
77 _____ SELF LOCKING SCREW
78 _____ BUTTSTOCK ASSEMBLY
79 _____ STEPPED SPACER
80 _____ COMPRESSION HELICAL SPRING
81 _____ DETENT TAKEDOWN PIN
82 _____ TAKEDOWN PIN
83 _____ PIVOT PIN
84 _____ BUFFER ASSEMBLY
85 _____ COMPRESSION HELICAL SPRING
86 _____ SPRING PIN
87 _____ BOLT CATCH
88 _____ BOLT CATCH PLUNGER
89 _____ COMPRESSION HELICAL SPRING
90 _____ MAGAZINE CATCH
91 _____ MAGAZINE CATCH BUTTON
92 _____ COMPRESSION HELICAL SPRING
93 _____ AUTOMATIC SPRING PIN
94 _____ SEAR
95 _____ SELECTOR LEVER
96 _____ TRIGGER AND HAMMER PIN
97 _____ HAMMER ASSEMBLY
98 _____ LOCK RELEASE LEVER
99 _____ LOCK RELEASE LEVER
100 _____ TRIGGER ASSEMBLY
101 _____ LOWER RECEIVER ASSEMBLY AND EXTENSION ASSEMBLY



- 102 _____ SELF LOCKING SCREW
 103 _____ SLING SWIVEL
 104 _____ SHOULDER BUTT PLATE
 105 _____ HEADLESS STRAIGHT PIN
 106 _____ ACCESS BUTT PLATE DOOR WITH HINGE
 107 _____ DOOR ASSEMBLY
 108 _____ BUTTSTOCK



- 109 _____ SPRING PIN
- 110 _____ TRIGGER GUARD
- 111 _____ LOWER RECEIVER EXTENSION
- 112 _____ BUFFER RETAINER
- 113 _____ COMPRESSION HELICAL SPRING
- 114 _____ LOWER RECEIVER



CLEARING RIFLE

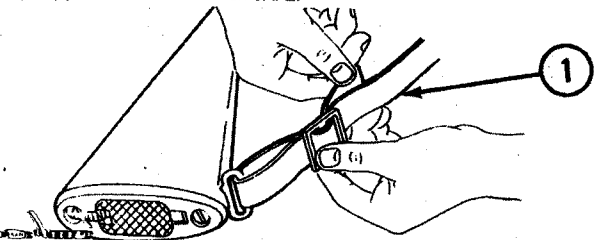
WARNING

To avoid accidental firing, be sure rifle is clear, to clear place selector on safe (if rifle is not cocked the safety can not be positioned).

(1) Pull back charging handle.

(2) Check chamber to be sure no cartridges are visible.

(3) Place selector lever on SAFE.



Remove sling (1).

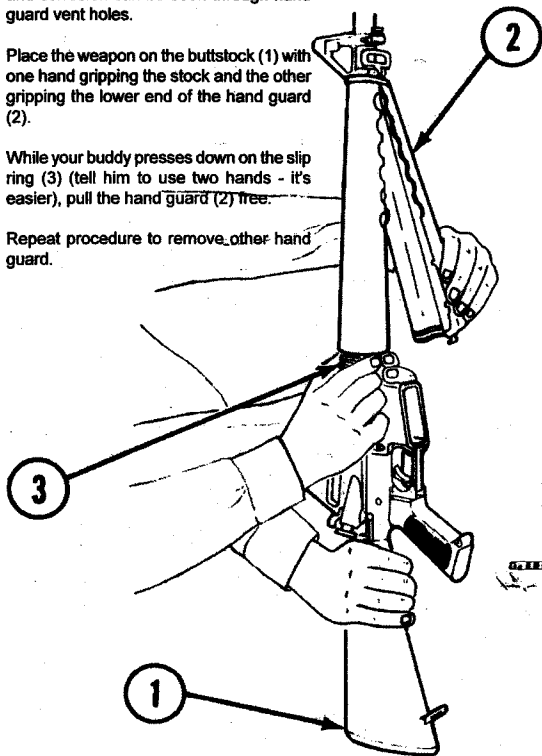
HAND GUARDS USING THE "BUDDY SYSTEM"

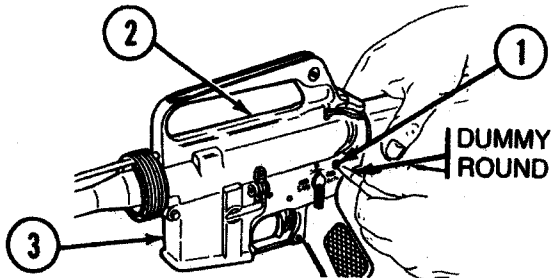
Remove and clean hand guards only if dirt and corrosion can be seen through hand guard vent holes.

Place the weapon on the buttstock (1) with one hand gripping the stock and the other gripping the lower end of the hand guard (2).

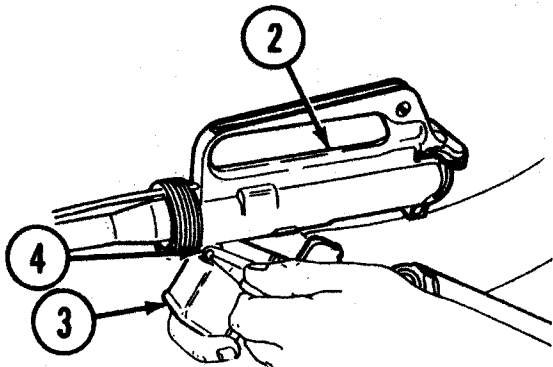
While your buddy presses down on the slip ring (3) (tell him to use two hands - it's easier), pull the hand guard (2) free.

Repeat procedure to remove other hand guard.

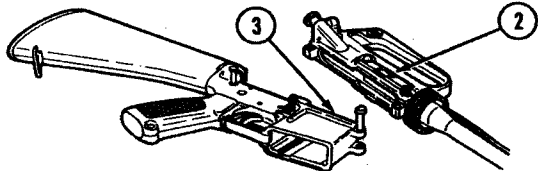




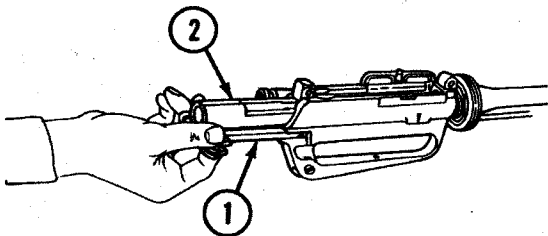
Push take down pin (1) as far as it goes.



Pivot upper receiver (2) from lower receiver (3).
Push receiver pivot pin (4).



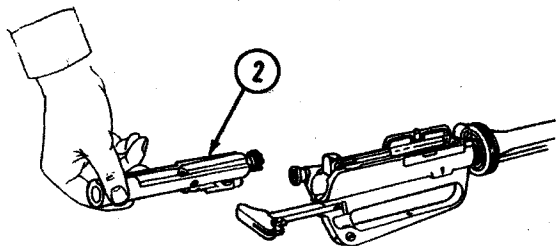
Separate upper (2) and lower (3) receivers.



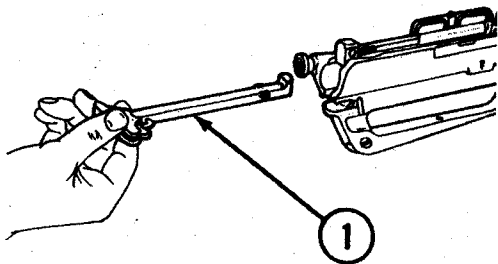
CHARGING HANDLE ASSEMBLY AND BOLT CARRIER ASSEMBLY

With the rifle inverted upside down as shown above.

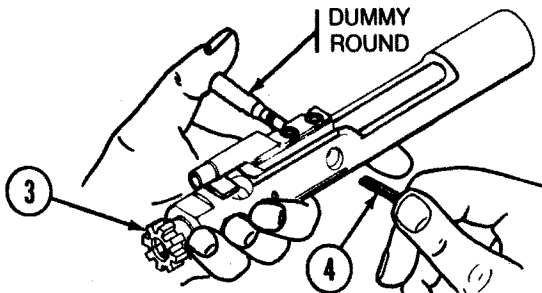
Pull back charging handle assembly (1) and bolt carrier assembly (2).



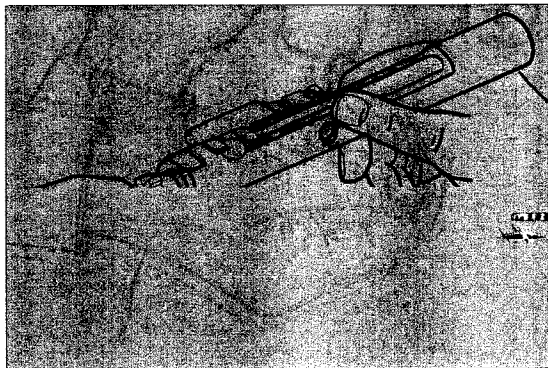
Remove bolt carrier assembly (2). by pulling straight out from the upper receiver.



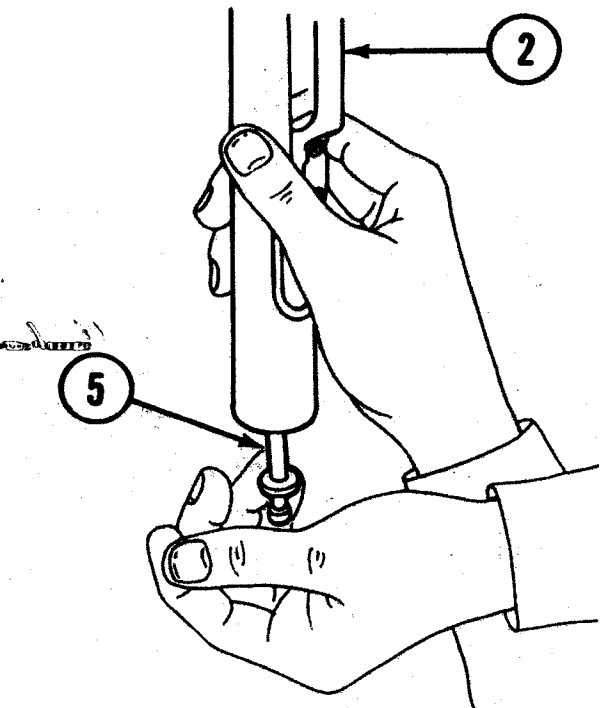
Pull charging handle assembly (1) back and down and remove it.



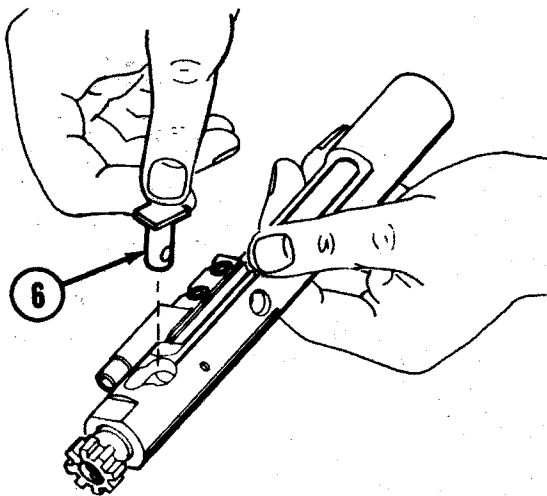
Move bolt assembly (3) forward to unlocked position and remove firing pin retaining pin (4). Do not open or close split end of firing pin retaining pin (4).



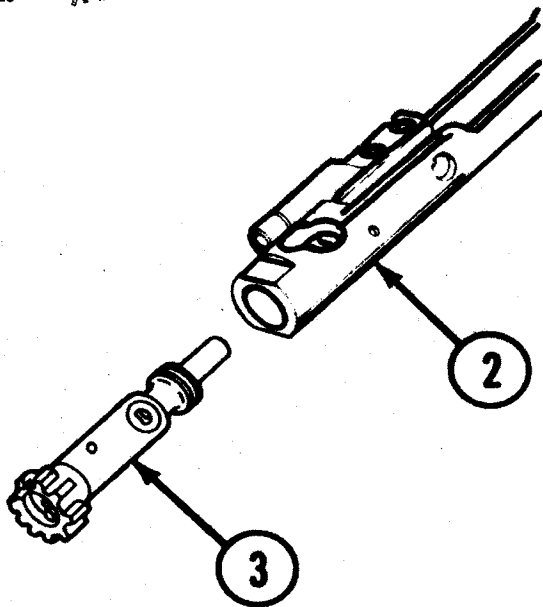
Push in on bolt assembly (3) to put in locked position.



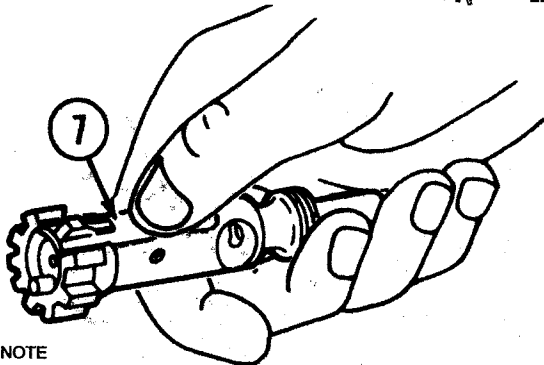
Catch firing pin (5) as it drops out of rear of bolt carrier assembly (2).



Give bolt cam pin (6) a 1/4 turn and lift out.

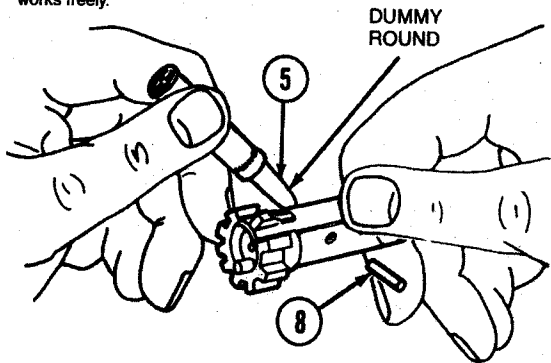


Remove the bolt assembly (3) from the bolt carrier assembly (2).

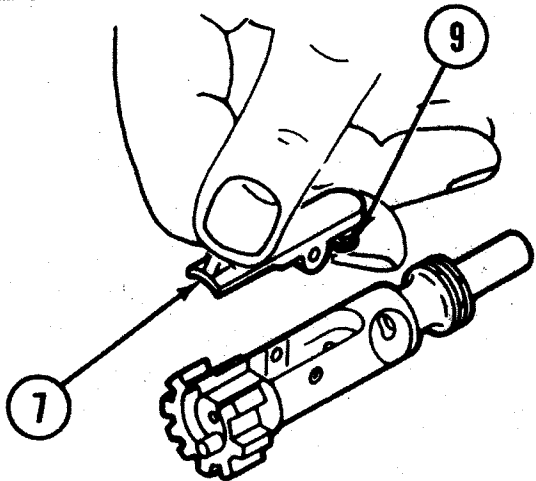
**NOTE**

Disassemble the extractor and spring assembly is necessary only when dirty or if damaged.

Press top of extractor (7) to check that the spring works freely.



Use round (5) to remove extractor pin (8).

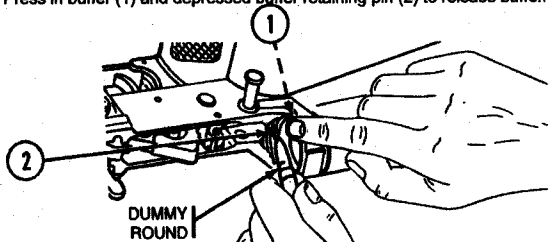


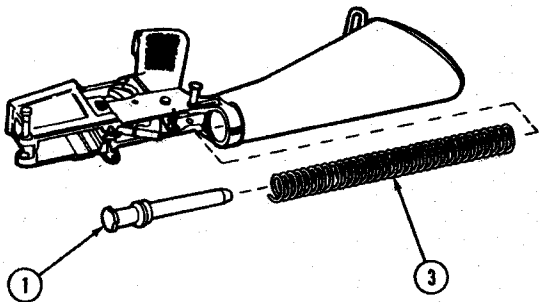
CAUTION

Do not separate the insert from the spring assembly (9).

Remove the extractor (7) and spring assembly (9). Do not remove spring assembly (9) from the extractor (7).

Press in buffer (1) and depressed buffer retaining pin (2) to release buffer.

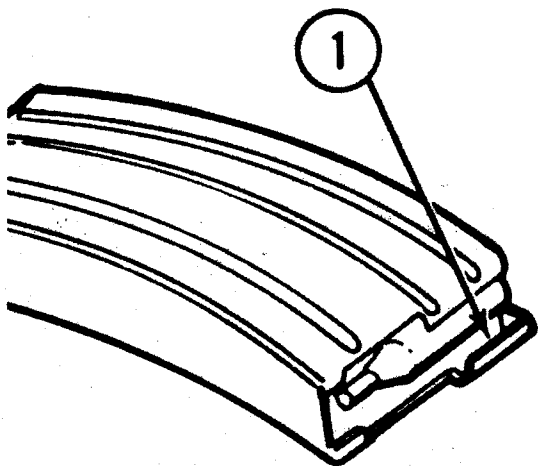




Remove buffer (1) and spring (3).

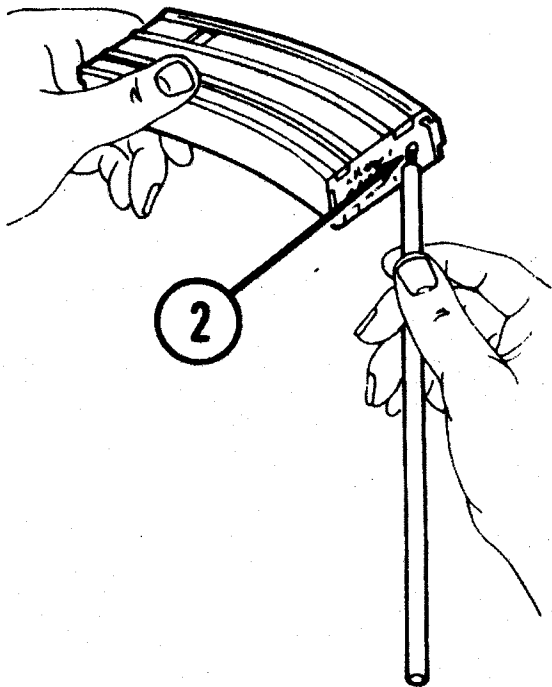
CAUTION

No further disassembly is allowed or needed for "Field Stripping".

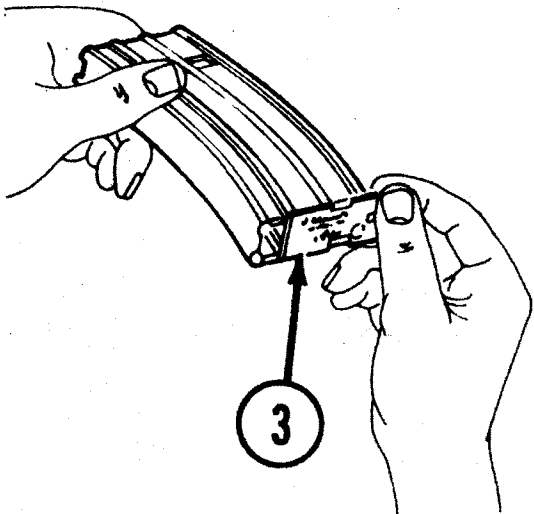
**NOTE**

Disassemble only if cartridge magazine is dirty.

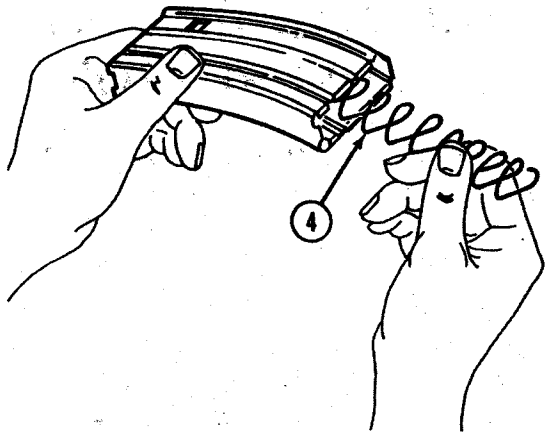
Inspect feeder lips (1) for wear or damage. If worn or 2 damaged, replace magazine.



Use cleaning rod section to 3 pry up, push out, and release base catch (2).



Slide base (3) from cartridge magazine.

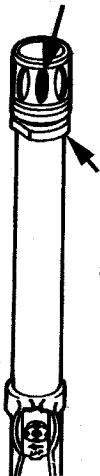


NOTE Do not remove follower from spring. If the spring comes loose from the follower, don't try to fix it yourself.

Jiggle spring (4) and follower to remove.

CRITICAL ALIGNMENT OF SUPPRESSOR

CALLED THE "THIRD SLOT" MUST
BE STRAIGHT UP AS SHOWN



**DO NOT OVER TIGHTEN
THE SUPPRESSOR TO
ACHIEVE ALIGNMENT! THIS
MAY PERMANENTLY
"STRETCH" THE
BARREL, DISTORTING
THE RIFLING,
AFFECTING LONG
RANGE ACCURACY**

Never over tighten the suppressor to achieve alignment! The force acting against the threads and the washer shoulder on the end of the barrel will cause a stretching of the metal. This will disturb rifling at a critical point in the barrel. This critical alignment was set at the factory using washers of various thickness to achieve proper alignment. Removal of the suppressor is not recommended for any reason! If removed (during barrel replacement or due to a damaged suppressor) it is required that the suppressor must be torqued to 18 to 24 foot pounds (20 is optimal), using a factory wrench designed for this purpose.

LUBRICATION

Important advice on the proper cleaning and lubrication of the AR-15 / M-16 rifle and the use of CLP "CLEANER LUBRICANT NAD PRESERVATIVE"

FIRST-It contains solvents to dissolve the powder residue and carbon deposits. The removal of this "DIRT" is critical to the longevity of the soft, light weight alloys used throughout the construction of the AR-15 M-16 rifle.

SECOND-It lays down a layer of TEFLON as it dries to provide lubrication. TEFLON is the all important barrier of lubrication needed to prevent dirt from becoming imbedded (like sandpaper) in the micro pores of the soft metal alloys.

THIRD-It prevents corrosion from forming. The teflon has a high surface tension allowing it to spread out and cling to the soft metal alloys preventing environmental and powder damage.

The AR-15 / M-16 has been the standard issue of American Military small arms for over 30 years! Extensive research and development has gone into its design, operation, care and maintenance. It is today, the most reliable and effective small arm ever issued to American Military personnel. Care for it and it will not let you down!

PROPER USE OF "CLP"

Always shake the bottle well before use as the teflon will separate from the cleaning fluids.

Place enough to wet your cleaning rag, not saturated and dripping.

Clean your rifle thoroughly until the patches and rags come out clean.

Finally, using a clean rag, coat your rifle with a light coating of "CLP" to prevent corrosion and provide the necessary lubrication barrier.

MOST IMPORTANT! Do not "dry clean" your rifle! Do not use hot water or other solvents or you will wash away the impeded Teflon lubricant that has been building up as a result of the use of "CLP". The .223 cartridge is a very fast moving bullet, if excessive "CLP" is left in the barrel's bore a damaging process known as HYDROLICKING will take place causing deformed rifling and bulging the barrel.





Start at the receiver and drop rod through



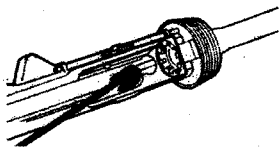
Go right through the compensator. Never reverse direction in the bore



Lightly lube the inside of upper receiver, bore and chamber, the outer surfaces of barrel and front sight, and the surfaces under hand and surfaces under hand guard. Depress the front sight detent and apply two or three drops of CLP to front sight detent. Depress several times to work the CLP into the spring.

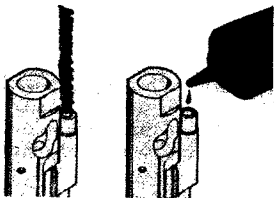


Be sure you lube locking lugs.



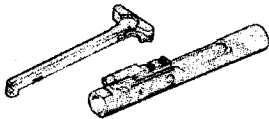
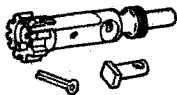
CAUTION

Use only a light coating of CLP on firing pin and firing pin recess in the bolt.

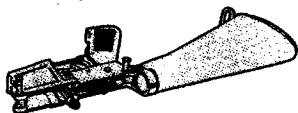


Dry with a clean pipe cleaner, then place one drop of CLP.

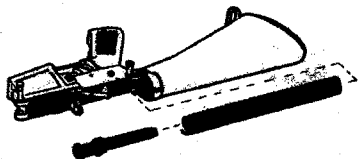
Generously lube outside of these parts. Make certain to get cam pin area, bolt rings, and outside of the bolt body. Put a light coat on the extractor and pin.



Lightly lube charging handle and inner and outer surfaces of bolt carrier. Generously lube slide and cam pin area of bolt carrier.

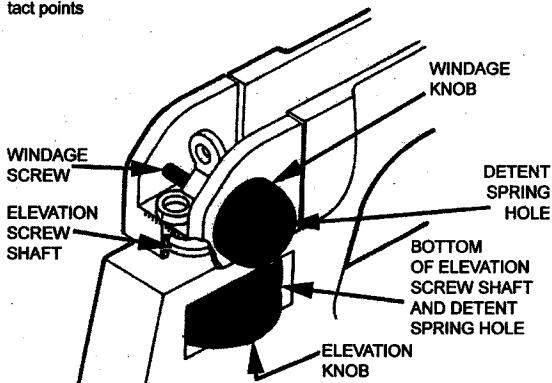


Lightly lube inside of the lower receiver extension



Generously lube take down pins and detents and moving parts inside of the lower receiver and all their pins

Keep rear sight extra clean! Lightly lubricate all moving parts at their contact points



TYPES OF AMMUNITION

STANDARD BALL



M193

GREEN TIP BALL



M855

INERT DUMMY



M199

RED TIP TRACER



M196 & M856

VIOLET TIP EXPLODING BLANK



M200



PROPER LOADING OF SPECIAL AMMUNITION

THREE

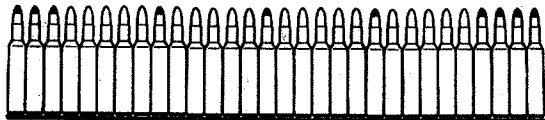
TOP
TRACER

SINGLE TRACER

SINGLE TRACER

SINGLE TRACER

BOTTOM FOUR TRACER



TOP OF MAGAZINE

The top three tracers
help you get on target

The tracers in between
help you stay on target.

The bottom four let you
know when to change
magazines.

BOTTOM OF MAGAZINE

Storage

Check function by dry firing without ammunition.

SAFETY

Place the selector on safe. Depress the trigger, the hammer should not fall. Dry firing is not recommended.

TEST FIRING

Place 2 cartridges into the magazine, chamber a cartridge. Move the selector to the fire position. Aim the firearm in a safe direction and depress the trigger, one cartridge should fire, loading the 2nd cartridge. Repeat as necessary.

IF IN DOUBT

Have the firearm checked by a competent, Federally licensed gunsmith

Anytime you put away your AR-15 / M-16 it should be cleaned and coated with a thin layer of gun oil. Long term storage (which I will consider over 1 year), should be preserved with a thorough cleaning followed by a thick coating of 80 weight (+or-) gear oil as used in automobile rear ends and manual transmissions. If underground burial is intended a suitable tube can be manufactured from 6" PVC plumbing pipe with end caps. Or use the military surplus sonar buoy shown below for underground use, with 4 1/2 gallons of gear oil. Everything will be like new! Put the pistol/rifle, some ammo, clips and fill it up to the top with gear oil. Then use a whole tube of silicon sealer around the screw on cap.



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FN 49 _____	5036
AK-47 & MAC 90 _____	5038
SKS (ALL VERSIONS) _____	5039
30-4- KRAG _____	5046
FN FAL _____	5047
MOSIN NAGANT _____	5048
BRITISH .303 _____	5049
THOMPSON _____	5050
STEN _____	5051
H&H G3 .308 _____	5052
AR-15 M-16 _____	5053
TOKAREV _____	5054
MARLIN LEVER ACTIONS _____	5055
COBRAY-INGRAM-MAC _____	5056
MAUSER BOLT ACTIONS (MILITARY VERSIONS) _____	5057
WINCHESTER LEVER ACTIONS _____	5058
RUGER .22 MK PISTOLS _____	5059
GLOCK PISTOLS _____	5060
BARETTA 92 PISTOLS _____	5061
M-14 _____	5062
M-1 GARAND _____	5063
P-14 & P-17 ENFIELDS _____	5064
UZI CARBINE _____	5065
LUGER 9MM _____	5066
H&K MP-5 _____	5067
WALTHER PP & PPK _____	5068
MINI 14 _____	5069
WALTHER P-38 _____	5072
HIGH-POINT MODEL 995 CARBINES _____	5074
H&K P9 PISTOLS _____	5075
RESING _____	5076
WINCHESTER MODEL 12 _____	5077
WINCHESTER MODEL 88 _____	5078
WINCHESTER MODEL 50 _____	5079
H&K 33 .223 _____	5080
DAWOO .223 _____	5081
SIG SAUER PISTOLS _____	5082
COLT .45 & .38 PISTOLS _____	5083
SMITH & WESSON PISTOLS _____	5084
RUGER PISTOLS _____	5085
M-1 CARBINE _____	5086
WINCHESTER M-63-.22LR _____	5087
KBI PA-63 _____	5088
CALICO M-100 _____	5089
AR-7 SURVIVAL RIFLE _____	5090
RUGER 10 / 22 _____	5091



SALES AGREEMENT

I _____ AM PURCHASING THIS FIREARM

MAKE _____

MODEL _____

SERIAL # _____

ON ___ / ___ / ___ IN GOOD FAITH THAT IT IS NOT MISREPRESENTED BY THE SELLER (STATE SPECIAL TERMS BELOW) AND THAT IT IS ALSO IN GOOD WORKING ORDER BUT I UNDERSTAND THAT IT IS MY (THE BUYER) RESPONSIBILITY TO HAVE IT CHECKED BY A LICENSED GUNSMITH BEFORE USE.

I ALSO AGREE TO USE IT IN COMPLIANCE WITH ALL LAWS, REGULATIONS AND RULINGS IN MY AREA IF RESIDENCE WHERE THE FIREARM WILL BE STORED AND OR USED NOW AND IN THE FUTURE.

I HOLD THE SELLER FREE OF ALL LEGAL, FINICAL, OR ANY RESPONSIBILITIES OF ANY KIND NOW OR IN THE FUTURE AS TO ITS FITNESS FOR USE OR IT'S LEGAL STANDING.

BUYER _____

SIGNED _____

SELLER _____

SIGNED _____

DATE ___ / ___ / ___

IF TRANSFERRED BY A LICENSED FFL HOLDER

LICENSE # _____

NAME _____

STATE _____

ADDRESS _____

SPECIAL TERMS